FINAL

GROUNDWATER SAMPLING REPORT
SECOND QUARTER 2014

FTMM-22, FTMM-53 and FTMM-68

FORT MONMOUTH, OCEANPORT, MONMOUTH COUNTY, NEW JERSEY

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FINAL
GROUNDWATER SAMPLING REPORT
SECOND QUARTER 2014

Project Title:	**Remedial Investigation/Feasibility Study/Decision Documents, Fort Monmouth, Oceanport, Monmouth County, New Jersey**
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LIST OF ACRONYMS

ACRONYM	DEFINITION
Accutest	Accutest Laboratories
BRAC	Base Realignment and Closure
CWA	Charles Wood Area
DOD	Department of Defense
ELAP	Environmental Laboratory Accreditation Program
FTMM	Fort Monmouth
FS	Feasibility Study
FSPM	Field Sampling Procedures Manual
GWQS	Ground Water Quality Standards
HASP	Health and Safety Plan
LFPS	Low-Flow Purging and Sampling
MCL	Maximum Contaminant Level
MP	Main Post
MTBE	methyl tert-butyl ether
NELAP	National Environmental Laboratory Accreditation Program
NJDEP	New Jersey Department of Environmental Protection
Parsons	Parsons Government Services, Inc.
PDB	Passive Diffusion Bag
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RI	Remedial Investigation
QSM	Quality Systems Manual
SAP	Sampling Analysis Plan
TCL	Target Compound List
TO	Task Order
TRSR	Technical Requirements for Site Remediation
USAESCH	United States Army Engineering & Support Center, Huntsville
USEPA	United States Environmental Protection Agency
VOC + TICs	Volatile Organic Compound and tentatively identified compounds
WERS	Worldwide Environmental Restoration Services

1.0 INTRODUCTION

This report presents the results for the Groundwater Sampling Second Quarter 2014 Event performed at three sites within Fort Monmouth (FTMM) by Parsons Government Services, Inc. (Parsons) to support the Remedial Investigation (RI), Feasibility Study (FS), and Decision Documents project at FTMM, Oceanport, Monmouth County, New Jersey. The three sites are as follows:

1. FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1);
2. FTMM-53 Former Gas Station at Building 699; and
3. FTMM-68 Former Dry Cleaners UST at Building 700.

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

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

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

1.1 PURPOSE AND SCOPE

Groundwater sampling was conducted between May and July 2014, and the sampling program is consistent with the recommendations for quarterly sampling made in the Baseline Groundwater Sampling Report (August 2013).

1.2 REPORT ORGANIZATION

This Groundwater Sampling Second Quarter 2014 Report includes the following sections:

- Section 1 provides an introduction and organization to the report;
- Section 2 presents general information on the second quarter 2014 groundwater sampling event, a description of any significant deviations or events that may have impacted results, and the usability of laboratory analytical data;
- Section 3 provides the applicable remedial standards for FTMM;
- Section 4 presents the references used in preparation of this report;
- Appendices A through C provide the groundwater analytical results for the second quarter 2014;
- Appendix D provides a memorandum regarding data validation for the second quarter 2014 sampling event; and
- Appendix E provides the laboratory analytical package, which is included on a CD.

2.0 GROUNDWATER SAMPLING PROGRAM

2.1 INTRODUCTION

The work performed for the groundwater sampling program was conducted as outlined in the project's Sampling and Analysis Plan (SAP) dated March 2013, and Health and Safety Plan (HASP) dated February 2013. The groundwater sampling event included measurements of the depth to water in the wells at the three FTMM sites and the collection of groundwater samples from 14 selected monitoring wells at the three sites, consistent with previous quarterly groundwater sampling programs. The monitoring wells are located at three sites within two areas of FTMM, the Main Post (MP) area and Charles Wood Area (CWA). The three sites are as follows: FTMM-22, FTMM-53 and FTMM-68. A summary of the total number wells at each site and the number of wells sampled for this quarterly event is provided in **Table 1**. The locations of the three sites discussed in this report are provided in **Figure 1**, **Figure 2**, and **Figure 3**.

The subsections below provide a description of the general activities conducted to complete the quarterly event. Further details regarding groundwater sampling activities and results for each individual site are provided in **Appendices A** through **C**.

2.2 SUMMARY OF FIELD AND LABORATORY WORK

2.2.1 Water Level Measurements

On May 8 and May 9 of 2014, depth-to-water measurements were made in monitoring wells at the three FTMM sites prior to initiating groundwater sampling activities. The measurements were obtained with an electronic oil water interface meter from the top of the inner casing of the well. The meter was decontaminated during the measurement event in accordance with the SAP. Water level measurements were used to prepare the groundwater elevation maps, and confirm the previously determined groundwater flow directions.

2.2.2 Monitoring Well Assessment

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

2.2.3 Groundwater Sampling

Groundwater samples were collected from 14 monitoring wells on May 8 and July 1 of 2014, using either low-flow purging and sampling (LFPS) or passive diffusion bag (PDB) sampling methods. NJDEP approved the use of PDB sampling in a letter dated July 29, 2013 at FTMM-22 and FTMM-68, and at the time FTMM-53 was not approved for PBDs because of the historical presence of methyl tert-butyl ether (MTBE) in groundwater. However, the August 2013 baseline and first quarter 2014 groundwater sampling results demonstrated that MTBE was no longer present in the wells or detected at very low concentrations (just above the detection limit) on the site, so this site was deemed eligible for sampling using PDBs. Groundwater

sampling by PDB was conducted in accordance with the FSPM and the SAP. PDBs were filled with laboratory-grade de-ionized water, deployed in monitoring wells and allowed to equilibrate for a minimum of two weeks prior to retrieving and collecting groundwater samples. Groundwater sampling activities using both LFPS and PDBs were performed in accordance with the NJDEP FSPM (NJDEP 2009), the USEPA Low-Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (USEPA 2010) (if applicable), and the SAP. Vertical profiling of well screens for each fully saturated five foot interval was performed, where required, during the quarterly sampling program. If vertical profiling had previously been performed on a particular well it was not repeated.

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

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

Purge water generated during the groundwater sampling was passed through portable granular activated carbon buckets and discharged to the ground surface adjacent to the well sampled. Groundwater sampling pump tubing was left in its respective monitoring well for re-use in future sample events.

2.2.4 QA/QC Sampling

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

2.3 DEVIATIONS FROM QAPP AND SAP

Deviations from the SAP are summarized in **Table 3**. There were no significant deviations that could have adversely affected the sampling procedures or the groundwater analytical results presented in this report.

2.4 USABILITY OF LABORATORY ANALYTICAL DATA

A Level IV validation was performed on one analytical data set collected during the 2014 second quarter groundwater sampling event. Verification was performed on the remaining data sets. Consistent with the project QAPP, the validation for long term monitoring data includes a minimum of one report per sampling event or 33% of the data throughout the project, whichever is less. The data submitted by the laboratory has been reviewed and validated as per the SAP and was found to be usable for the purposes of this project. The Data Validation and the Data Verification Summary Reports are provided in **Appendix D** and complete laboratory analytical

reports for the groundwater samples collected for this quarterly event are provided in **Appendix E** (on CD).

3.0 APPLICABLE REMEDIAL STANDARDS

For the FTMM sites, groundwater results were compared to NJDEP Ground Water Quality Standards (GWQS) for Class IIA waters and the USEPA Maximum Contaminant Levels (MCLs) for drinking water. Analytical results for each site are provided in the respective appendices.

3.1 ANOMALOUS RESULTS

An anomaly is an exceedance of the applicable standard or criteria that is not attributable to background concentrations and/or Site contamination. It typically succeeds and precedes non-exceedance sample results and is not representative of historical data for that location. Anomalies can be caused by sample equipment, laboratory equipment, seasonal changes, etc. No anomalous results were reported during this quarterly sampling event.

4.0 REFERENCES

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

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

New Jersey Department of Environmental Protection. *Technical Requirements for Site Remediation*, July 2013.

Parsons. *Accident Prevention Plan*. February 2013.

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

Parsons, *Baseline Groundwater Sampling Report (August 2013),* March 2014.

USEPA, *List of Contaminants and their (mcls).* Retrieved from USEPA Drinking Water Contaminants, website: http://water.epa.gov/drink/contaminants/#List. June 2013

TABLES

Table 1 Summary of Monitoring Wells at Selected FTMM Sites
Table 2 Groundwater Sampling Summary
Table 3 Groundwater Sampling Deviations

Table 1
Summary of Monitoring Wells at Selected FTMM Sites
Groundwater Sampling Report - Second Quarter 2014 FTMM-22, FTMM-53 and FTMM-68
Fort Monmouth, New Jersey

Site	Area	Total Number of Wells	Number of Wells Sampled in 2nd Quarter 2014
FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)	CW	17	4
FTMM-53: Former Gas Station at Building 699	MP	14	8
FTMM-68: Former Dry Cleaners UST at Building 700	MP	2	2
Totals:		33	14

Notes:

1) MP - Main Post

2) CW - Charles Wood

Table 2
Groundwater Sampling Summary
Groundwater Sampling Report - Second Quarter 2014 FTMM-22, FTMM-53 and FTMM-68
Fort Monmouth, New Jersey

Site / Well ID	Analytical Analysis	Sampling Method	Sample Date
FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)			
CW1MW27	VOCs & TICs-EPA Method 8260C	LFPS	5/8/14
CW1MW29			5/8/14
CW1MW31			5/8/14
CW1MW281			5/8/14
FTMM-53: Former Gas Station at Building 699			
699MW01	VOCs & TICs-EPA Method 8260C	PDB	5/9/14, 7/1/14
699MW04			5/9/14, 7/1/14
699MW06			5/9/14, 7/1/14
699MW09			5/9/14, 7/1/14
699MW16			5/9/14, 7/1/14
699RW03			5/9/14, 7/1/14
699RW05			5/9/14, 7/1/14
699RW11			5/9/14, 7/1/14
FTMM-68: Former Dry Cleaners UST at Building 700			
565MW01	VOCs & TICs-EPA Method 8260C	PDB	5/9/14, 7/1/14
565MW01D			5/9/14, 7/1/14

Notes:
1) LFPS = Low-Flow Purging and Sampling
2) PDB = Passive Diffusion Bag
3) VOCs = Volatile Organic Compounds
4) TICs = Tentatively Identified Compounds

Table 3
Groundwater Sampling Deviations
Groundwater Sampling Report - Second Quarter 2014 FTMM-22, FTMM-53 and FTMM-68
Fort Monmouth, New Jersey

Well	Site	Sampling Method	Deviation/Comments
N/A	N/A	N/A	None

Notes:

1) N/A = not applicable

2) LFPS = Low-Flow Purging and Sampling

3) PDB = Passive Diffusion Bag

FIGURES

Figure 1 Fort Monmouth Location
Figure 2 Main Post Layout and FTMM-53, FTMM-68 Locations
Figure 3 Charles Wood Layout Area and FTMM-22 Location

Legend

Installation Boundary

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

N

1 inch = 2,500 feet

0 0.5 1 Miles

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

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Fort Monmouth Location	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.03000	FILE: Figure1_Location.mxd

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Little Silver Borough
Shrewsbury Borough
Oceanport Borough
Eatontown Borough
Tinton Falls Borough
West Long Branch Borough
Parkers Creek
North Branch Parkers Creek
Oceanport Creek
Lafetra Creek
Mill Creek
Wampum Lake
Husky Brook
Turtle Mill Brook
FTMM-68 (Former Dry Cleaner UST at Building 700)
FTMM-53 (Former Gas Station at Building 699)

Legend
- Surface Water Feature
- Municipal Boundary
- Installation Boundary

N

1 inch = 1,000 feet

0 250 500 1,000 1,500 2,000 2,500 Feet

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

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Main Post Layout and FTMM-53, FTMM-68 locations	
CREATED BY: TS	REVIEWED BY: ME
DATE: August 2014	FIGURE NUMBER: Figure 2
PROJECT NUMBER: 748810.02040	FILE: Figure2_MP_Layout.mxd

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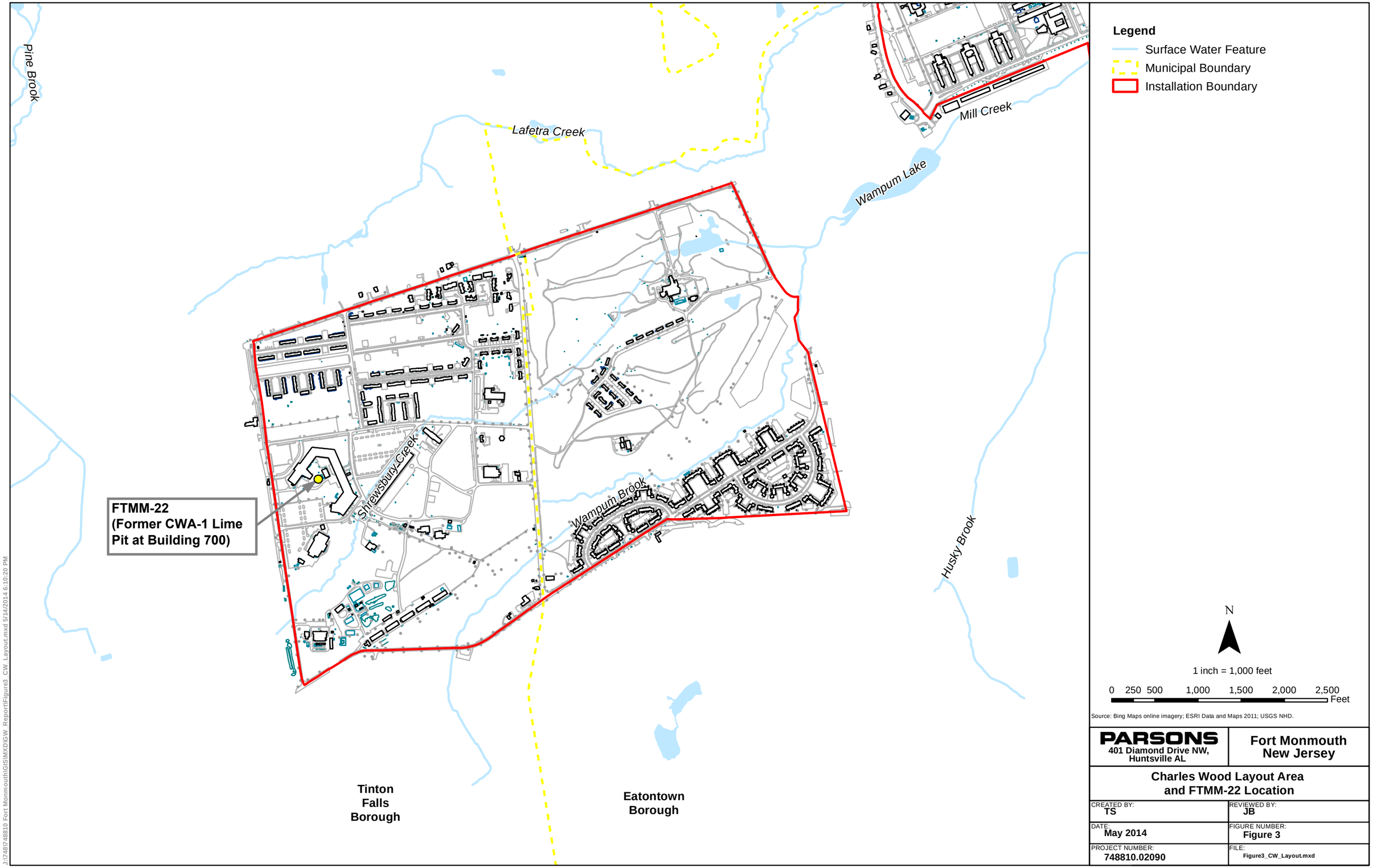

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APPENDICES

Appendix A FTMM-22: Former Wastewater Treatment Lime Pit (CWA-1)
Appendix B FTMM-53: Former Gas Station at Building 699
Appendix C FTMM-68: Former Dry Cleaners UST at Building 700
Appendix D Data Validation Memorandum
Appendix E Laboratory Analytical Results (CD)

APPENDIX A

FTMM-22: FORMER WASTEWATER TREATMENT LIME PIT (CWA-1)

APPENDIX A: FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1)

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2	Groundwater Analytical Results Second Quarter 2014

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2	FTMM-22 Shallow Groundwater Contours May 8, 2014
3	FTMM-22 Deep Groundwater Contours May 8, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-22 were gauged on May 8, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 49.46 (CW1MW39) to 52.90 (CW1MW30) feet above mean sea level (amsl). The inferred shallow and deep groundwater flow directions are to the east, as shown in **Figures 2 and 3**, respectively.

During the groundwater gauging, the physical condition of FTMM-22 monitoring wells were assessed. The site monitoring wells were found to be in good condition. However, three wells (CW1MW35, CW1MW36 and CW1MW37) were found to have significant accumulations of silt within the well.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from four monitoring wells located at the FTMM-22 as part of the second quarter 2014 groundwater sampling event. The quarterly groundwater sampling program included measuring the depth to groundwater in the FTMM-22 monitoring wells prior to sampling, and collection of groundwater samples using low-flow purging and sampling (LFPS) methodology, in four selected wells. Groundwater samples were collected on May 8, 2014. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

As part of this quarterly sampling event, additional samples were collected for a remedial investigation (RI) and feasibility study (FS) at FTMM-22. The additional samples were analyzed for 1,4 Dioxane, total chromium and hexavalent chromium. The analytical results from this additional sampling are presented in the RI/FS Report for Site FTMM-22.

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

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

3.0 GROUNDWATER RESULTS SECOND QUARTER 2014

Several VOCs were detected in groundwater during this quarterly event. Trichloroethene (TCE) was detected in FTMM-22 monitoring wells CW1MW29, CW1MW31, and CW1MW281 above its NJDEP Ground Water Quality Standard (GWQS) of 1 µg/L. Six other VOCs were detected in groundwater but all detections for these VOCs were below their respective NJDEP GWQS. Groundwater analytical results from samples collected during the first and second quarter 2014 groundwater sampling event are presented in **Table 2**.

TABLES

Table 1 Groundwater Gauging Data and Elevations (May 8, 2014)

Table 2 Groundwater Analytical Results Second Quarter 2014

Table 1
Groundwater Gauging Data and Elevations (May 8, 2014)
FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1)
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft TOC)	Gauged Depth to Bottom (ft TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
CW1MW26	12/19/1994	29-32590	532932.46	607087.71	15.0	5.0	10.0	60.81	923	0.0	8.35	17.15	52.46
CW1MW27	12/19/1994	29-32591	532942.54	607079.91	15.0	5.0	10.0	60.85	925	0.0	8.02	17.10	52.83
CW1MW28	12/19/1994	29-32592	532962.81	607087.57	15.0	5.0	10.0	59.09	1009	0.0	6.31	14.90	52.78
CW1MW29	12/19/1994	29-32593	532952.80	607110.86	15.0	5.0	10.0	58.40	933	0.0	6.09	14.71	52.31
CW1MW30	7/13/2000	29-43188	532932.46	607094.40	17.0	7.0	10.0	61.93	942	0.0	9.03	21.61	52.90
CW1MW31	7/17/2000	29-43189	532952.95	607141.85	19.0	4.0	15.0	61.47	935	0.0	9.59	21.80	51.88
CW1MW32	7/17/2000	29-43190	532953.17	607188.33	22.0	7.0	15.0	62.18	951	0.0	10.91	22.04	51.27
CW1MW33	7/17/2000	29-43191	532902.61	607196.32	20.0	5.0	15.0	62.27	954	0.0	10.38	23.57	51.89
CW1MW34	7/17/2000	29-43192	533014.20	607257.78	20.0	5.0	15.0	58.63	1006	0.0	8.32	19.65	50.31
CW1MW35	7/18/2000	29-43193	532973.91	607296.71	20.0	5.0	15.0	58.09	958	0.0	8.19	16.71	49.90
CW1MW36	7/18/2000	29-43194	533014.49	607319.77	20.0	5.0	15.0	58.70	1003	0.0	8.80	16.51	49.90
CW1MW37	7/18/2000	29-43195	532953.85	607335.55	20.0	5.0	15.0	59.21	1000	0.0	8.52	13.71	50.69
CW1MW282	5/2/1996	29-35313	533064.25	607141.33	16.0	6.0	10.0	60.29	948	0.0	7.84	18.20	52.45
CW1MW291	5/3/1996	29-35314	532993.64	607188.15	16.0	6.0	10.0	62.21	949	0.0	10.81	18.35	51.40
Deep Monitoring Wells													
CW1MW25	10/12/2010	E201010535	533033.51	607133.86	48.0	38.0	10.0	61.82	940	0.0	11.96	50.35	49.86
CW1MW38	7/11/2000	29-43186	532922.20	607056.76	50.0	30.0	20.0	61.93	926	0.0	11.56	51.80	50.37
CW1MW39	7/10/2000	29-43185	533064.22	607133.58	48.0	28.0	20.0	61.51	944	0.0	12.05	49.79	49.46
CW1MW40	7/14/2000	29-43187	532973.22	607149.50	50.0	30.0	20.0	62.35	938	0.0	12.67	49.00	49.68
CW1MW281	5/2/1996	29-35312	532962.89	607103.06	41.0	31.0	10.0	58.20	929	0.0	8.18	40.60	50.02

Notes:
1) The synoptic round of water levels in the wells was collected on May 8, 2014
2) ft = feet
3) bgs = below ground surface
4) ppm = parts per million (of VOCs)
5) TOC = Top of Casing
6) Elevation = feet above mean sea level
7) - information not available

Table 2
Groundwater Analytical Results First and Second Quarter 2014
FTMM-22 - Former Wastewater Treatment Lime Pit (CWA-1)
Fort Monmouth, New Jersey

Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	CW1MW27		CW1MW281			CW1MW29		
Sample ID			FTMM-22-GW-CW1MW27-11.9	FTMM-22-GW-CW1MW27-11.52	FTMM-22-GW-CW1MW281-33.5	FTMM-22-GW-CW1MW281-38.5	FTMM-22-GW-CW1MW281-35.8	FTMM-22-GW-CW1MW29-10.9	FTMM-22-GW-CW1MW129-10.4	FTMM-22-GW-CW1MW29-10.4
Sample Date			1/24/2014	5/8/2014	1/24/2014	1/24/2014	5/8/2014	1/24/2014	5/8/2014	5/8/2014
Sample Method			LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Filtered			Total	Total	Total	Total	Total	Total	Total	Total
Volatile Organic Compounds (µg/l)										
1,1,1,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	200	30	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	5	3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	NLE	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	7	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	NLE	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	70	9	< 1	< 1	< 1	< 1	< 1	**0.41 J**	**0.54 J**	**0.46 J**
1,2,4-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.2	0.02	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.05	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	5	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	NLE	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	NLE	6,000	< 5	**2 J**	< 5	< 5	< 5	< 5	< 5	< 5
Benzene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	80	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	80	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	100	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	80	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	NLE	5	< 1	< 1	< 1	< 1	< 1	**0.33 J**	< 1	< 1
Chloroform	80	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	**2.6 J**	**2.4 J**	**3.4 J**	**6.5**	**0.59 J**	**0.55 J**
Cis-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	NLE	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	NLE	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	NLE	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	NLE	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	NLE	300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	NLE	300	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	NLE	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	5	3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	NLE	300	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	NLE	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	1,000	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	10,000	1,000	< 3	NA	< 3	< 3	NA	< 3	NA	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	**0.99 J**	< 1	< 1
Trans-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	1	**0.45 J**	**0.99 J**	**8.9**	**8.6**	**14**	**7.4**	**13**	**13**
Trichlorofluoromethane	NLE	2,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	2	1	< 1	< 1	< 1	< 1	**0.52 J**	**0.78 J**	< 1	< 1
TIC VOCs (µg/l)										
Total TICs	NLE	500	ND	ND	ND	ND	ND	ND	ND	ND

Table 2
Groundwater Analytical Results First and Second Quarter 2014
FTMM-22 - Former Wastewater Treatment Lime Pit (CWA-1)
Fort Monmouth, New Jersey

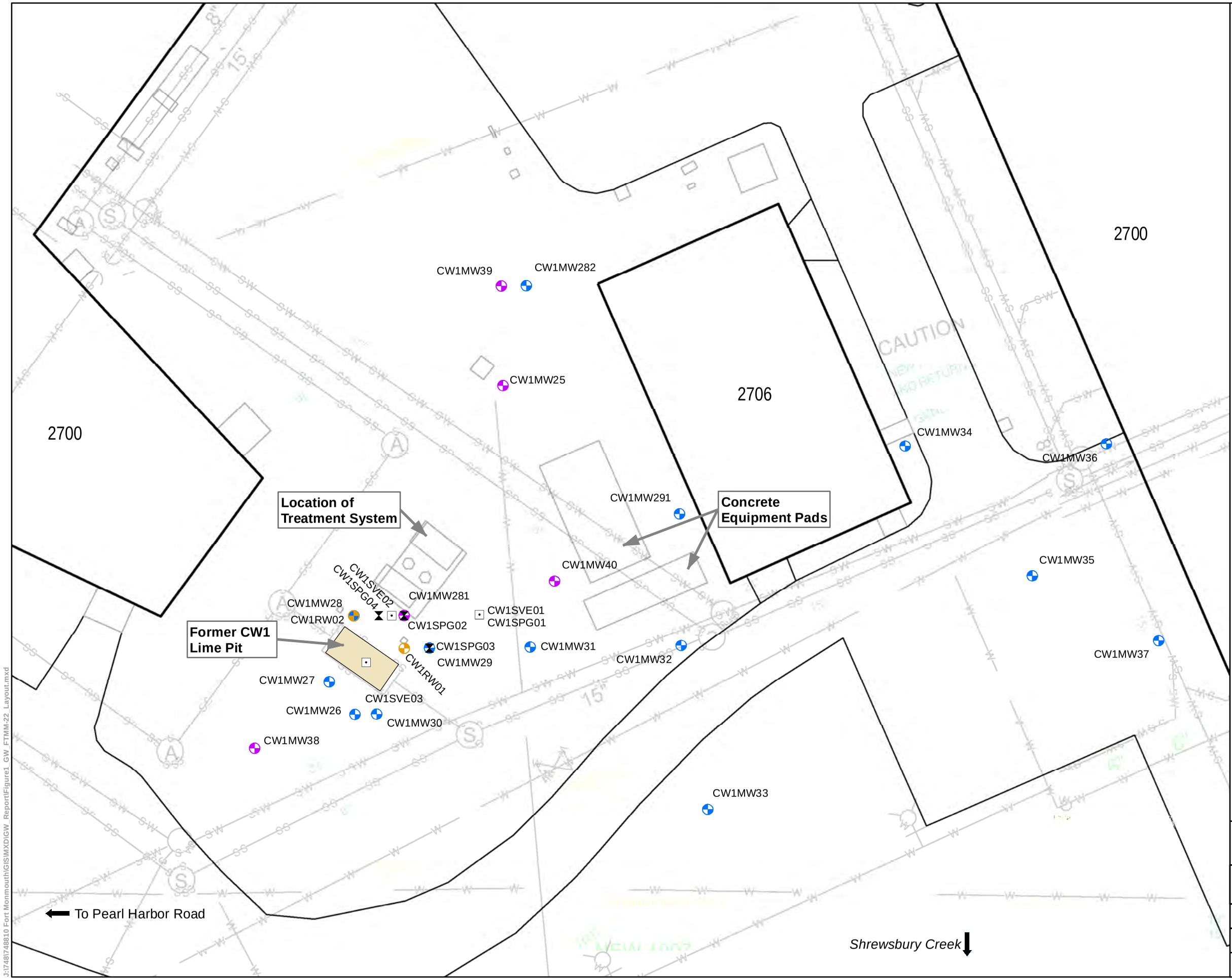
Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	CW1MW31				
Sample ID			FTMM-22-GW-CW1MW131-13	FTMM-22-GW-CW1MW31-13	FTMM-22-GW-CW1MW31-18.7	FTMM-22-GW-CW1MW31-14.3-Q	FTMM-22-GW-CW1MW31-14.3
Sample Date			1/24/2014	1/24/2014	1/24/2014	5/8/2014	5/8/2014
Sample Method			LFPS	LFPS	LFPS	LFPS	LFPS
Filtered			Total	Total	Total	Total	Total
Volatile Organic Compounds (µg/l)							
1,1,1,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 0.5	< 1
1,1,1-Trichloroethane	200	30	< 1	< 1	< 1	< 0.5	< 1
1,1,2,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 0.5	< 1
1,1,2-Trichloroethane	5	3	< 1	< 1	< 1	< 0.5	< 1
1,1-Dichloroethane	NLE	50	< 1	< 1	< 1	< 0.5	< 1
1,1-Dichloroethene	7	1	< 1	< 1	< 1	< 0.5	< 1
1,1-Dichloropropene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
1,2,3-Trichlorobenzene	NLE	100	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	NLE	0.03	< 1	< 1	< 1	< 2	< 1
1,2,4-Trichlorobenzene	70	9	**0.32 J**	**0.3 J**	**0.37 J**	< 0.5	< 1
1,2,4-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.2	0.02	< 1	< 1	< 1	< 2	< 1
1,2-Dibromoethane	0.05	0.03	< 1	< 1	< 1	< 0.5	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 0.5	< 1
1,2-Dichloroethane	5	2	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	5	1	< 1	< 1	< 1	< 0.5	< 1
1,3,5-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
1,3-Dichlorobenzene	NLE	600	< 1	< 1	< 1	< 0.5	< 1
1,3-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 0.5	< 1
2,2-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
2-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
Acetone	NLE	6,000	< 5	< 5	< 5	< 5	< 5
Benzene	5	1	< 1	< 1	< 1	< 0.35	< 1
Bromobenzene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
Bromochloromethane	NLE	100	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	80	1	< 1	< 1	< 1	< 0.5	< 1
Bromoform	80	4	< 1	< 1	< 1	< 0.5	< 1
Carbon tetrachloride	5	1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	100	50	< 1	< 1	< 1	< 0.5	< 1
Chlorodibromomethane	80	1	< 1	< 1	< 1	< 0.5	< 1
Chloroethane	NLE	5	< 1	< 1	< 1	< 1	< 1
Chloroform	80	70	< 1	< 1	< 1	< 0.5	< 1
Cis-1,2-Dichloroethene	70	70	**2.7 J**	**2.9 J**	**2.6 J**	< 0.5	< 1
Cis-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 0.5	< 1
Dichlorodifluoromethane	NLE	1,000	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 0.25	< 1
Hexachlorobutadiene	NLE	1	< 1	< 1	< 1	< 0.5	< 1
Isopropylbenzene	NLE	700	< 1	< 1	< 1	< 0.5	< 1
Meta & Para Xylenes	NLE	NLE	< 2	< 2	< 2	NA	< 2
Methyl bromide	NLE	10	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	NLE	300	< 5	< 5	< 5	< 2	< 5
Methyl chloride	NLE	100	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	NLE	300	< 1	< 1	< 1	< 5	< 1
Methyl isobutyl ketone	NLE	100	< 1	< 1	< 1	< 5	< 1
Methyl Tertbutyl Ether	NLE	70	< 1	< 1	< 1	< 0.5	< 1
Methylene chloride	5	3	< 1	< 1	< 1	< 1	< 1
Naphthalene	NLE	300	< 1	< 1	< 1	< 2	< 1
n-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	NLE	1,000	< 1	< 1	< 1	< 0.5	< 1
p-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
p-Isopropyltoluene	NLE	NLE	< 1	< 1	< 1	NA	< 1
Propylbenzene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
sec-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
Styrene	100	100	< 1	< 1	< 1	< 0.5	< 1
tert-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 0.5	< 1
Tetrachloroethene	5	1	< 1	< 1	< 1	< 0.5	< 1
Toluene	1,000	600	< 1	< 1	< 1	< 0.5	< 1
Total Xylenes	10,000	1,000	< 3	< 3	< 3	< 0.19	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 0.5	< 1
Trans-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 0.5	< 1
Trichloroethene	5	1	**5.2**	**5.1**	**5.2**	**7.3**	**6.8**
Trichlorofluoromethane	NLE	2,000	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	2	1	< 1	< 1	< 1	< 0.5	< 1
TIC VOCs (µg/l)							
Total TICs	NLE	500	ND	ND	ND	ND	ND

FIGURES

Figure 1 Layout of FTMM-22 (Former Wastewater Treatment Lime Pit [CWA-1])

Figure 2 FTMM-22 Shallow Groundwater Contours May 8, 2014

Figure 3 FTMM-22 Deep Groundwater Contours May 8, 2014



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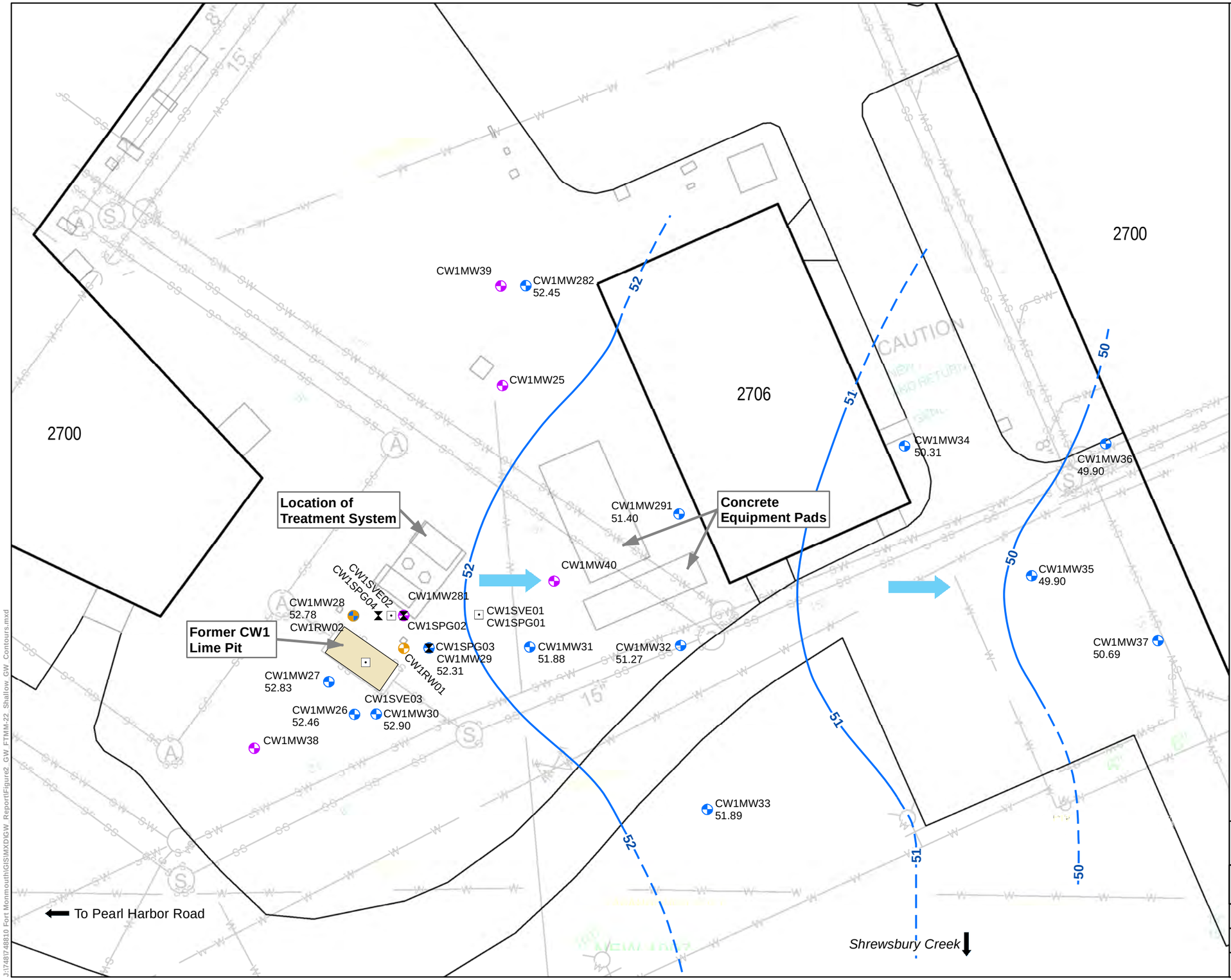
PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Layout of FTMM-22 Former Wastewater Treatment Lime Pit (CWA-1)	
CREATED BY: TS	REVIEWED BY: ME
DATE: August 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.03000	FILE: Figure1_GW_FTMM-22_Layout.mxd



Legend

- Groundwater Contour
- Inferred Groundwater Contour
- Shallow Monitoring Well
- Deep Monitoring Well
- Recovery Well
- Air Sparge Well
- SVE Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Inferred Groundwater Flow Direction

Note: The elevation value at CW1MW37 is anomalous and was not used to draw contours.

N

1 inch = 30 feet

0 12.5 25 50 Feet

Source: FTMM Supplied CAD

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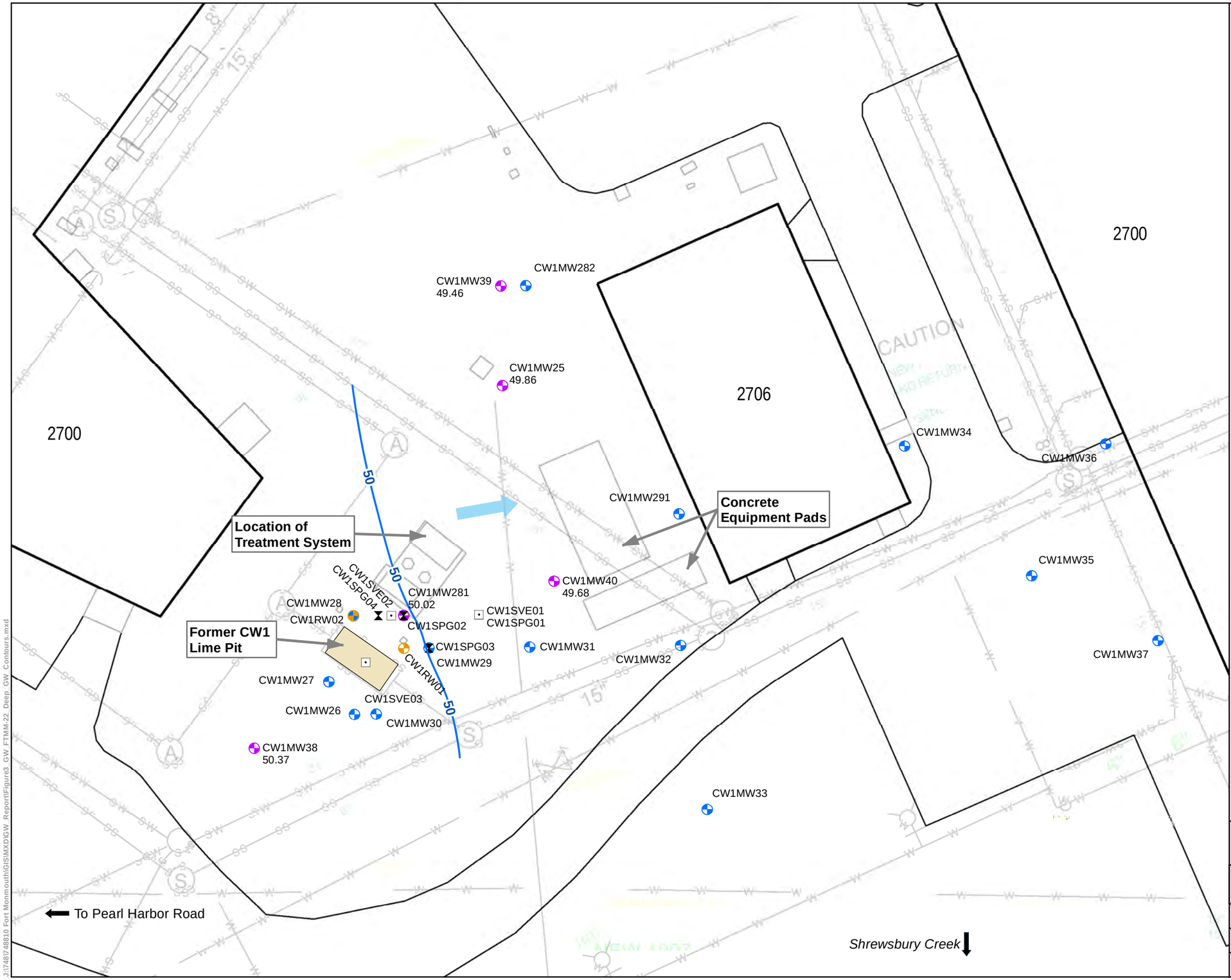
PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
FTMM-22 Shallow Groundwater Contours **May 8, 2014**	
CREATED BY: **TS**	REVIEWED BY: **ME**
DATE: **August 2014**	FIGURE NUMBER: **Figure 2**
PROJECT NUMBER: **748810.03000**	FILE: **Figure2_GW_FTMM-22_Shallow_GW_Contours.mxd**



Legend

- Groundwater Contour
- Shallow Monitoring Well
- Deep Monitoring Well
- Recovery Well
- Air Sparge Well
- SVE Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Inferred Groundwater Flow Direction

N

1 inch = 30 feet

0 12.5 25 50 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
FTMM-22 Deep Groundwater Contours **May 8, 2014**	
CREATED BY: **TS**	REVIEWED BY: **ME**
DATE: **August 2014**	FIGURE NUMBER: **Figure 3**
PROJECT NUMBER: **748810.03000**	FILE: Figure3_GW_FTMM-22_Deep_GW_Contours.mxd

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ATTACHMENTS

Attachment A LFPS Field Sheets

ATTACHMENT A
LFPS FIELD SHEETS

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: USACE | WELL #: CW1MW27

PROJECT: Fort Monmouth 2014 Q2 Groundwater Sampling
AOC # (AREA): FTMM-27
SCREENED INTERVAL (TOC): 5-15
WELL DIAMETER (in.): 4

WELL PERMIT #: 09-32591
DATE: 5/8/14
SAMPLING PERSONNEL NAME: Chris Watson
SAMPLING PERSONNEL NAME: S

BOREHOLE DIAMETER FACTORS

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

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 17.10
FEET OF WATER IN WELL (ft): 9.08
FEET OF SATURATED SCREEN (ft): 6.98
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 8.02
PUMP INTAKE DEPTH (ft below TOC): 11.52

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1205	X		6.04	NA	0.271	NA	210.7	NA	8.02	NA	1.7	NA	13.66	NA	210	8.02
1210	X		4.34	1.7	0.258	0.013	302.3	91.6	7.72	0.3	7.2	5.5	13.19	0.47	210	8.04
1215	X		4.29	0.05	0.256	0.002	308.5	6.2	7.75	0.03	4.8	2.4	12.67	0.52	210	8.04
1220	X		4.21	0.08	0.255	0.001	313.5	5.0	7.79	0.04	4.1	0.7	12.57	0.10	210	8.04
1225	X		4.19	0.02	0.251	0.004	314.5	1.0	7.82	0.03	5.4	1.3	12.57	Ø	210	8.04
1230	X		4.19	Ø	0.251	Ø	316.2	1.7	7.80	0.02	5.6	0.2	12.55	0.02	210	8.04
1235	X	X	4.19	Ø	0.250	0.001	316.7	0.5	7.80	Ø	5.4	0.2	12.54	0.01	210	8.04

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

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LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: USACE	WELL #: CW1MW3881

PROJECT: Fort Monmouth 2014 Q2 Groundwater Sampling
AOC # (AREA): SWMM-22
SCREENED INTERVAL (TOC): 31-41
WELL DIAMETER (in.): 4
WELL PERMIT #: 29-35317
DATE: 5/8/14
SAMPLING PERSONNEL NAME: Chris Watson
SAMPLING PERSONNEL NAME: ~~5/8/14~~

BOREHOLE DIAMETER FACTORS

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

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 40.60
FEET OF WATER IN WELL (ft): 32.48
FEET OF SATURATED SCREEN (ft): 9.6
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 8.16
PUMP INTAKE DEPTH (ft below TOC): 35.8

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1510	X		5.54	NA	0.906	NA	93.9	NA	2.81	NA	88.7	NA	13.68	NA	250	8.26
1515	X		5.49	0.05	1.117	0.24	79.9	14.0	2.02	0.82	69.4	19.3	13.76	0.08	250	8.28
1520	X		5.48	0.01	1.328	0.211	60.1	19.8	1.66	0.36	57.5	11.9	13.78	0.02	250	8.29
1525	X		5.50	0.02	1.406	0.078	46.5	13.6	1.61	0.05	47.1	10.4	13.94	0.16	250	8.29
1530	X		5.50	Q	1.509	0.103	45.0	1.5	1.56	0.05	40.8	6.3	13.97	0.03	250	8.30
1535	X		5.50	Q	1.515	0.006	43.7	1.3	1.64	0.08	36.4	4.4	14.04	0.07	250	8.30
1540	X		5.49	0.01	1.519	0.004	41.6	2.1	1.64	Q	35.9	0.5	14.09	0.05	250	8.30
1545	X		5.49	0.00	1.522	0.003	39.9	1.7	1.63	0.01	34.7	1.2	14.13	0.04	250	8.30
1550		X	5.49	Q	1.520	0.002	37.7	2.2	1.63	Q	35.6	0.9	14.15	0.02	250	8.30

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

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LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: USACE | WELL #: CWIMW29

PROJECT: Fort Monmouth 2014 Q2 Groundwater Sampling
AOC # (AREA): FTMM-22
SCREENED INTERVAL (TOC): 5-15
WELL DIAMETER (in.): 4

WELL PERMIT #: 29-32593
DATE: 5/8/14
SAMPLING PERSONNEL NAME: Chris Watson
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

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

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 14.71
FEET OF WATER IN WELL (ft): 8.62

FEET OF SATURATED SCREEN (ft): 8.62
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 6.09
PUMP INTAKE DEPTH (ft below TOC): 10.4

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1325	X		6.28	NA	0.678	NA	274.4	NA	4.52	NA	49.4	NA	11.34	NA	275	6.12
1330	X		6.26	0.02	0.667	0.011	278.4	4.0	4.51	0.03	47.4	2.0	11.29	0.05	275	6.15
1335	X		6.26	Ø	0.663	0.004	275.9	2.5	4.56	0.05	46.3	1.1	11.34	0.05	275	6.17
1340	X		6.30	0.04	0.662	0.001	273.4	2.5	4.53	0.03	40.7	5.6	11.27	0.07	275	6.17
1345	X		6.33	0.03	0.656	0.006	271.8	1.6	4.54	0.01	37.6	3.1	11.26	0.01	275	6.17
1350	X		6.33	Ø	0.657	0.001	270.8	1.0	4.53	0.01	37.9	0.3	11.25	0.01	275	6.17
1355		X	6.33	Ø	0.656	0.001	270.9	0.1	4.53	Ø	37.8	0.1	11.25	Ø	275	6.17

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

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LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** USACE | **WELL #:** CWIMW31

PROJECT: Fort Monmouth 2014 Q2 Groundwater Sampling
AOC # (AREA): ETMM-22
SCREENED INTERVAL (TOC): 4-19
WELL DIAMETER (in.): 4

WELL PERMIT #: 39-03189
DATE: 5/8/14
SAMPLING PERSONNEL NAME: Nick Volcos
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

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

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 21.80
FEET OF WATER IN WELL (ft): 12.21

FEET OF SATURATED SCREEN (ft): 9.41
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 9.59
PUMP INTAKE DEPTH (ft below TOC): 14.3

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1210	X		4.90	NA	.211	NA	311.1	NA	6.99	NA	3.1	NA	12.09	NA	225	9.64
1215	X		4.74	0.16	0.206	005	336.8	25.7	6.47	52	3.0	0.1	11.79	0.3	225	9.65
1220	X		4.77	.03	.204	.002	344.0	7.2	6.38	.09	2.4	.6	11.75	.04	225	9.65
1225	X		4.80	.03	.204	0	348.6	4.6	6.39	.01	2.9	.5	11.67	.13	225	9.65
1230	X		4.84	.04	.203	.001	351.8	3.2	6.38	.01	2.3	.6	11.56	.06	225	9.66
1235	X	X	4.87	.03	.202	.001	352.4	0.6	6.37	.01	2.5	.2	11.57	.01	225	9.66

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

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APPENDIX B

FTMM-53: FORMER GAS STATION AT BUILDING 699

APPENDIX B:
FTMM-53 Former Gas Station at Building 699

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2	PDB Sampling Summary
3	Groundwater Analytical Results Second Quarter 2014

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2	FTMM-53 Groundwater Contours May 9, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	NJDEP PDB Checklists

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within the FTMM-53 site were gauged on May 9, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1.** Groundwater elevations in monitoring wells ranged from 10.30 (699RW11) to 14.81 (616MW01) feet above mean sea level (amsl) and the inferred groundwater flow direction is to the southeast (**Figure 2**).

During the groundwater gauging, the physical condition of FTMM-53 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater sampling was conducted at eight monitoring wells located in FTMM-53 as part of the second quarter 2014 groundwater sampling event. The groundwater sampling program included measuring the depths to water in monitoring wells at FTMM-53, and sample collection in selected wells using passive diffusion bags (PDBs). PDBs were deployed May 9, 2014 and samples were retrieved on July 1, 2014. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

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

Completed NJDEP PDB checklists for each well sampled are provided in **Attachment A**.

3.0 GROUNDWATER RESULTS SECOND QUARTER 2014

Several VOCs were detected in groundwater during this quarterly event. However, benzene was the only VOC detected at FTMM-53 above its NJDEP GWQS of 1 µg/L (monitoring well 699RW11). Groundwater analytical detections from samples collected during the first and second quarter 2014 groundwater sampling event are presented in **Table 3**.

TABLES

Table 1 Groundwater Gauging Data and Elevations (May 9, 2014)

Table 2 PDB Sampling Summary

Table 3 Groundwater Analytical Results Second Quarter 2014

Table 1
Groundwater Gauging Data and Elevations (May 9, 2014)
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Site/Well ID	Intallation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft TOC)	Gauged Depth to Bottom (ft TOC)	Calculated Groundwater Elevation (ft)
616MW01	8/17/1995	29-33760	539282.814	618630.807	14	4	10	17.64	1013	0	2.83	16.55	14.81
699MW01	11/2/1989	29-23677-1	539094.956	618689.924	15	2	13	14.48	1026	0	2.22	13.31	12.26
699MW02	11/2/1989	29-23678-9	539212.459	618724.121	17	2	15	15.13	1016	0	1.41	16.55	13.72
699MW03	11/2/1989	29-23679	539127.360	618797.755	15	2	14	15.80	1035	0	2.47	12.03	13.33
699MW04	11/2/1989	29-23680-7	539111.313	618732.386	20	2	18	15.03	0953	0	2.24	17.41	12.79
699MW05	11/30/1989	29-23808	539142.503	618894.896	15	3	12	13.22	1021	0	2.21	14.85	11.01
699MW06	12/1/1989	29-23809-1	539071.235	618810.053	15	2	13	16.75	0944	0	3.83	14.90	12.92
699MW08	12/1/1989	29-23811	539060.005	618593.218	15	2	13	14.88	1029	0	2.74	13.24	12.14
699MW09	5/1/1990	29-24639	538950.010	618849.406	15	2	13	14.70	0940	0	2.00	12.25	12.70
699MW12	10/14/1992	29-28907	538918.899	618702.388	15	5	10	15.50	1050	0	3.34	14.79	12.16
699MW15	8/17/1995	29-33753	539404.555	618692.152	14	4	10	15.70	1014	0	1.01	13.79	14.69
699MW16	8/17/1995	29-33757	538859.181	618896.350	14	4	10	15.27	0943	0	1.49	14.09	13.78
699RW03	10/26/2000	29-43891	539070.639	618693.863	20	5	15	14.87	1027	0	1.91	17.70	12.96
699RW04	10/26/2000	29-43892	538969.453	618694.382	19	4	15	15.38	1010	0	2.86	13.04	12.52
699RW05	9/18/2007	29-56509	539121.709	618786.556	15	5	10	13.91	0948	0	1.19	12.23	12.72
699RW11	5/20/1992	29-28031	539063.440	618770.989	20	5	15	13.13	1058	0	2.83	16.90	10.30
600MW01	7/8/1994	29-30968	539100.480	618593.011	15	2	13	15.27	1041	0	2.39	4.35	12.88

Notes:
1) The synoptic round of water levels in the wells was collected on May 9, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) DTW = depth to water (measured from the top of well casing)
4) DTB = depth to bottom of well (measured from the top of well casing)
5) TOC = Top of Casing
6) ft. AMSL = feet above mean sea level

Table 2
PDB Sampling Summary
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Site/Well ID	Depth (ft)	Screen Length (ft)	Screen Interval (ft)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft) TOC	Gauged DTB (ft) TOC	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Interval 1 (ft. below TOC)	PDB Interval 2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
699MW01	15.0	13.0	2-15	14.48	5-9-14	1026	0	2.22	13.31	12.26	11.1	7.5	NA	5/9/2014	1105	7/1/2014	1210
699MW04	20.0	18.0	2-20	15.03	5-9-14	0953	0	2.24	17.41	12.79	15.2	6.85	NA	5/9/2014	1111	7/1/2014	1205
699MW06	15.0	13.0	2-15	16.75	5-9-14	0944	0	3.83	14.90	12.92	11.1	10.2	NA	5/9/2014	1224	7/1/2014	1150
699MW09	15.0	13.0	2-15	14.70	5-9-14	0940	0	2.00	12.25	12.70	10.3	7.75	NA	5/9/2014	1239	7/1/2014	1125
699MW16	13.5	10.0	3.50-13.5	15.27	5-9-14	0943	0	1.49	14.09	13.78	10.0	6.5	NA	5/9/2014	1247	7/1/2014	1115
699RW03	20.0	15.0	5-20	14.87	5-9-14	1027	0	1.91	17.70	12.96	15.0	8.2	NA	5/9/2014	1121	7/1/2014	1215
699RW05	15.0	10.0	5-15	13.91	5-9-14	0948	0	1.19	12.23	12.72	10.0	4.8	NA	5/9/2014	1218	7/1/2014	1155
699RW11	20.0	15.0	5-20	13.13	5-9-14	1058	0	2.83	16.90	10.30	14.1	8.3	NA	5/9/2014	1135	7/1/2014	1220

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

Table 3
Groundwater Analytical Results First and Second Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	699MW01					699MW04			
Sample ID			FTMM-53-GW-699MW01-7.5	FTMM-53-GW-699MW101-10.5	FTMM-53-GW-699MW01-10.55	FTMM-53-GW-699MW01-12.5	FTMM-53-GW-699MW01-7.5_20140701	FTMM-53-GW-699MW04-10.3	FTMM-53-GW-699MW04-13.85	FTMM-53-GW-699MW04-6.85	FTMM-53-GW-699MW04-6.85_20140701
Sample Date			3/31/2014	3/12/2014	3/12/2014	3/31/2014	7/1/2014	3/12/2014	3/31/2014	3/31/2014	7/1/2014
Sample Round			PDB	LFPS	PDB	PDB	PDB	LFPS	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)											
1,1,1,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	200	30	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	5	3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	NLE	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	7	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	NLE	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	70	9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	NLE	NLE	< 1	**0.26 J**	**0.31 J**	< 1	**0.3 J**	< 1	**1.9 J**	**2.3 J**	< 1
1,2-Dibromo-3-chloropropane	0.2	0.02	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.05	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	5	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	**0.78 J**	**0.99 J**	< 1
1,3-Dichlorobenzene	NLE	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	NLE	6,000	< 5	< 5	< 5	< 5	**1.7 J**	**1.5**	< 5	< 5	**2.2 B**
Benzene	5	1	< 1	< 1	< 1	< 1	**0.31 J**	< 1	**0.23 J**	**0.23 J**	< 1
Bromobenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	80	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	80	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	100	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	80	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	NLE	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	80	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	NLE	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	**0.59 J**	**0.55 J**	< 1	**0.27 J**	< 1	**0.87 J**	**1.1 J**	< 1
Hexachlorobutadiene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	NLE	700	< 1	**0.28 J**	**0.25 J**	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	NLE	NLE	< 2	< 2	< 2	< 2	< 2	< 2	**3 J**	**3.4 J**	< 2
Methyl bromide	NLE	10	< 1	< 1	< 1	**0.32 J**	< 1	< 1	**0.33 J**	**0.47 J**	< 1
Methyl butyl ketone	NLE	300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	NLE	300	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	NLE	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	5	3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	NLE	300	< 1	< 1	< 1	< 1	**0.3 J**	< 1	**1.5 J**	**0.52 J**	< 1
n-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	NLE	1,000	< 1	< 1	< 1	< 1	< 1	< 1	**2.4 J**	**2.5 J**	< 1
p-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	NLE	NLE	< 1	**0.43 J**	**0.42 J**	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	1,000	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	10,000	1,000	< 3	< 3	< 3	< 3	NA	< 3	**5.4 J**	**5.9 J**	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	NLE	2,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	2	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)											
Total TICs	NLE	500	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Analytical Results First and Second Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	699MW06			699MW09			699MW16			
Sample ID			FTMM-53-GW-699MW06-10	FTMM-53-GW-699MW06-10.20	FTMM-53-GW-699MW06-10.2	FTMM-53-GW-699MW09-8	FTMM-53-GW-699MW09-7.70	FTMM-53-GW-699MW09-7.75	FTMM-53-GW-699MW16-8.5	FTMM-53-GW-699MW16-11.5	FTMM-53-GW-699MW16-6.5	FTMM-53-GW-699MW16-6.5_20140701
Sample Date			3/12/2014	3/31/2014	7/1/2014	3/12/2014	3/31/2014	7/1/2014	3/12/2014	3/31/2014	3/31/2014	7/1/2014
Sample Round			LFPS	PDB	PDB	LFPS	PDB	PDB	LFPS	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	200	30	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	5	3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	NLE	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	7	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	NLE	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	70	9	< 1	**0.26 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	NLE	NLE	**0.8 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.2	0.02	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.05	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	5	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	NLE	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	NLE	6,000	< 5	**2.2 J**	**2.6 B**	< 5	**1.5 J**	**1.4 B**	< 5	**1.7 J**	**1.4 J**	**2.2 B**
Benzene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	80	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	80	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	100	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	80	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	NLE	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	80	70	< 1	< 1	< 1	< 1	**0.25 J**	< 1	**5.2**	**8**	**7.7**	**3.1 B**
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	NLE	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	**1.5 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	NLE	700	**0.23 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	NLE	NLE	**1.2 J**	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	NLE	10	< 1	**0.43 J**	< 1	< 1	**0.34 J**	< 1	< 1	**0.34 J**	< 1	< 1
Methyl butyl ketone	NLE	300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	NLE	300	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	NLE	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	NLE	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	5	3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	NLE	300	**0.23 J**	< 1	< 1	**0.26 J**	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	NLE	1,000	**0.31 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	NLE	NLE	**0.24 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	**0.9 J**	**0.47 J**	**0.34 J**	**0.48 J**
Toluene	1,000	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	10,000	1,000	**1.51 J**	< 3	NA	< 3	< 3	NA	< 3	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	5	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	NLE	2,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	2	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)												
Total TICs	NLE	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Analytical Results First and Second Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	699RW03				699RW05			
Sample ID			FTMM-53-GW-699RW03-11.4	FTMM-53-GW-699RW03-8.20	FTMM-53-GW-699RW03-14.59	FTMM-53-GW-699RW03-8.2_20140701	FTMM-53-GW-699RW05-8.6	FTMM-53-GW-699RW05-4.8	FTMM-53-GW-699RW05-9.80	FTMM-53-GW-699RW05-4.8_20140701
Sample Date			3/12/2014	3/31/2014	3/31/2014	7/1/2014	3/12/2014	3/31/2014	3/31/2014	7/1/2014
Sample Round			LFPS	PDB	PDB	PDB	LFPS	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)										
1,1,1,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,1,1-Trichloroethane	200	30	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,1,2,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,1,2-Trichloroethane	5	3	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,1-Dichloroethane	NLE	50	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,1-Dichloroethene	7	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,1-Dichloropropene	NLE	NLE	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2,3-Trichlorobenzene	NLE	100	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2,3-Trichloropropane	NLE	0.03	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2,4-Trichlorobenzene	70	9	< 1	**0.27 J**	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2,4-Trimethylbenzene	NLE	NLE	**130**	**110**	**120**	**42**	**790**	**150**	**130**	**7.8**
1,2-Dibromo-3-chloropropane	0.2	0.02	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2-Dibromoethane	0.05	0.03	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2-Dichloroethane	5	2	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,2-Dichloropropane	5	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,3,5-Trimethylbenzene	NLE	NLE	**32**	**16**	**17**	**3.1 J**	**160**	**30**	**23**	**3.9 J**
1,3-Dichlorobenzene	NLE	600	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,3-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
2,2-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
2-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Acetone	NLE	6,000	< 5	< 5	< 5	< 5	< 25	< 10	< 13	< 5
Benzene	5	1	**4.8 J**	**3.5 J**	**3.7 J**	**0.88 J**	**7.2 J**	**2.8 J**	**3.1 J**	**0.21 J**
Bromobenzene	NLE	NLE	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Bromochloromethane	NLE	100	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Bromodichloromethane	80	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Bromoform	80	4	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Carbon tetrachloride	5	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Chlorobenzene	100	50	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Chlorodibromomethane	80	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Chloroethane	NLE	5	**0.47 J**	< 1	< 1	< 1	**1.6 J**	< 2	< 2.5	< 1
Chloroform	80	70	< 1	< 1	< 1	**0.28 B**	< 5	< 2	< 2.5	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Cis-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Dichlorodifluoromethane	NLE	1,000	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Ethyl benzene	700	700	**50**	**46**	**49**	**17**	**700**	**150**	**160**	**0.74 J**
Hexachlorobutadiene	NLE	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Isopropylbenzene	NLE	700	**21**	**13**	**14**	**7**	**52**	**7.4 J**	**8.1 J**	**0.45 J**
Meta & Para Xylenes	NLE	NLE	**71**	**59**	**62**	**9.8 J**	**1,600**	**430**	**390**	**6.3 J**
Methyl bromide	NLE	10	< 1	**0.33 J**	< 1	< 1	< 5	< 2	**0.88 J**	< 1
Methyl butyl ketone	NLE	300	< 5	< 5	< 5	< 5	< 25	< 10	< 13	< 5
Methyl chloride	NLE	100	**0.29 J**	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Methyl ethyl ketone	NLE	300	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Methyl isobutyl ketone	NLE	100	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Methyl Tertbutyl Ether	NLE	70	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Methylene chloride	5	3	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Naphthalene	NLE	300	**29**	**15**	**19**	**6.5 J**	**270**	**60**	**54**	**7.6 J**
n-Butylbenzene	NLE	NLE	**12**	< 1	< 1	**0.9 J**	< 5	< 2	< 2.5	< 1
Ortho Xylene	NLE	1,000	**90**	**76**	**78**	**14**	**810**	**290**	**270**	**16**
p-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
p-Isopropyltoluene	NLE	NLE	**3.2 J**	**0.8 J**	**0.91 J**	**0.59 J**	**3.7 J**	< 2	< 2.5	< 1
Propylbenzene	NLE	NLE	**34**	**16**	**18**	**12**	**100**	**8.9 J**	**9.7 J**	< 1
sec-Butylbenzene	NLE	NLE	**7.4**	**1.6 J**	**1.9 J**	**1.3 J**	**6.3 J**	< 2	< 2.5	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
tert-Butylbenzene	NLE	NLE	**0.68 J**	**0.29 J**	**0.26 J**	< 1	< 5	< 2	< 2.5	< 1
Tetrachloroethene	5	1	< 1	< 1	< 1	< 1	< 5	< 2	**0.8 J**	< 1
Toluene	1,000	600	**1.7 J**	**1.3 J**	**1.4 J**	**0.22 B**	**23 J**	**7.1 J**	**7 J**	**0.46 B**
Total Xylenes	10,000	1,000	**161**	**135**	**140**	NA	**2,410**	**720**	**660**	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Trans-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Trichloroethene	5	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Trichlorofluoromethane	NLE	2,000	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
Vinyl chloride	2	1	< 1	< 1	< 1	< 1	< 5	< 2	< 2.5	< 1
TIC VOCs (µg/l)										
Total TICs	NLE	500	**813**	**302**	**362**	**7**	**2,338**	**418**	**369**	ND

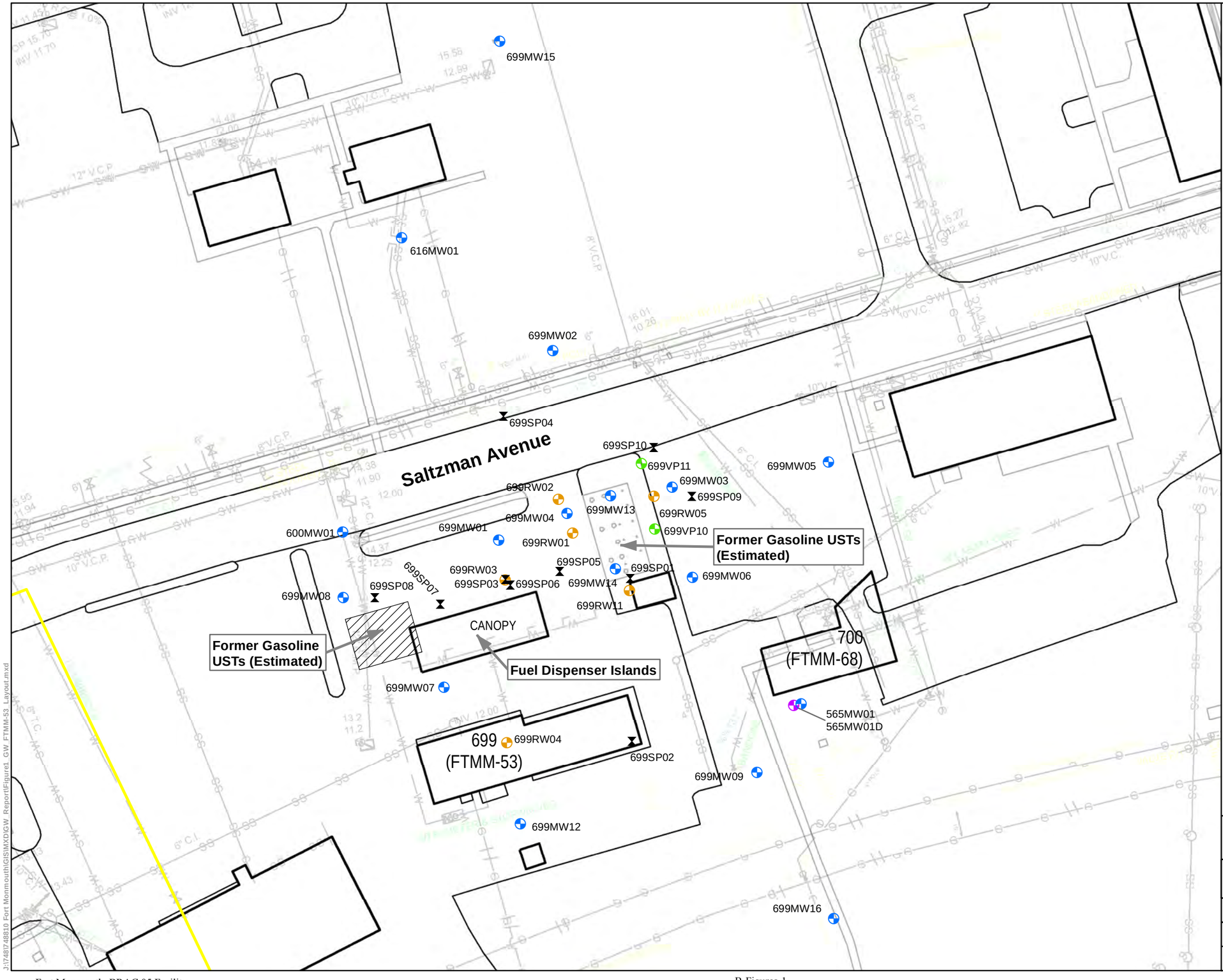
Table 3
Groundwater Analytical Results First and Second Quarter 2014
FTMM-53 Former Gas Station at Building 699
Fort Monmouth, New Jersey

Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	699RW11			
Sample ID			FTMM-53-GW-699RW11-11.1	FTMM-53-GW-699RW11-14.08	FTMM-53-GW-699RW11-8.03	FTMM-53-GW-699RW11-8.3_20140701
Sample Date			3/12/2014	3/31/2014	3/31/2014	7/1/2014
Sample Round			LFPS	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)						
1,1,1,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	200	30	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	NLE	1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	5	3	< 1	< 1	< 1	< 1
1,1-Dichloroethane	NLE	50	< 1	< 1	< 1	< 1
1,1-Dichloroethene	7	1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	NLE	NLE	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	NLE	100	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	NLE	0.03	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	70	9	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	NLE	NLE	**0.24 J**	< 1	< 1	**0.21 J**
1,2-Dibromo-3-chloropropane	0.2	0.02	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.05	0.03	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1
1,2-Dichloroethane	5	2	< 1	< 1	< 1	< 1
1,2-Dichloropropane	5	1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	NLE	NLE	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	NLE	600	< 1	< 1	< 1	< 1
1,3-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1
2,2-Dichloropropane	NLE	NLE	< 1	< 1	< 1	< 1
2-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1
Acetone	NLE	6,000	< 5	< 5	< 5	< 5
Benzene	5	1	**11**	**6.5**	**6.5**	**2.7 J**
Bromobenzene	NLE	NLE	< 1	< 1	< 1	< 1
Bromochloromethane	NLE	100	< 1	< 1	< 1	< 1
Bromodichloromethane	80	1	< 1	< 1	< 1	< 1
Bromoform	80	4	< 1	< 1	< 1	< 1
Carbon tetrachloride	5	1	< 1	< 1	< 1	< 1
Chlorobenzene	100	50	< 1	< 1	< 1	< 1
Chlorodibromomethane	80	1	< 1	< 1	< 1	< 1
Chloroethane	NLE	5	< 1	< 1	< 1	< 1
Chloroform	80	70	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	NLE	1,000	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	**0.45 J**	**0.26 J**	**0.25 J**	**0.28 J**
Hexachlorobutadiene	NLE	1	< 1	< 1	< 1	< 1
Isopropylbenzene	NLE	700	**8.9**	**1.2 J**	**1.2 J**	**4.3 J**
Meta & Para Xylenes	NLE	NLE	**0.45 J**	**0.33 J**	**0.35 J**	< 2
Methyl bromide	NLE	10	< 1	**0.35 J**	**0.29 J**	< 1
Methyl butyl ketone	NLE	300	< 5	< 5	< 5	< 5
Methyl chloride	NLE	100	**0.23 J**	< 1	< 1	< 1
Methyl ethyl ketone	NLE	300	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	NLE	100	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	NLE	70	< 1	< 1	< 1	< 1
Methylene chloride	5	3	< 1	< 1	< 1	< 1
Naphthalene	NLE	300	**1.5 J**	**0.61 J**	**0.75 J**	**0.74 J**
n-Butylbenzene	NLE	NLE	< 1	< 1	< 1	< 1
Ortho Xylene	NLE	1,000	< 1	< 1	< 1	< 1
p-Chlorotoluene	NLE	NLE	< 1	< 1	< 1	< 1
p-Isopropyltoluene	NLE	NLE	< 1	< 1	< 1	< 1
Propylbenzene	NLE	NLE	**9.4**	**0.71 J**	**0.68 J**	**5.1**
sec-Butylbenzene	NLE	NLE	**1.6 J**	< 1	< 1	**0.33 J**
Styrene	100	100	< 1	< 1	< 1	< 1
tert-Butylbenzene	NLE	NLE	**0.36 J**	< 1	< 1	< 1
Tetrachloroethene	5	1	< 1	< 1	< 1	< 1
Toluene	1,000	600	**0.37 J**	**0.3 J**	**0.36 J**	**0.22 B**
Total Xylenes	10,000	1,000	**0.45 J**	**0.33 J**	**0.35 J**	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	NLE	1	< 1	< 1	< 1	< 1
Trichloroethene	5	1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	NLE	2,000	< 1	< 1	< 1	< 1
Vinyl chloride	2	1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)						
Total TICs	NLE	500	**123**	ND	ND	ND

FIGURES

Figure 1 Layout of FTMM-53 (Former Gas Station at Building 699)

Figure 2 FTMM-53 Groundwater Contours May 9, 2014



Legend

- Shallow Monitoring Well
- Deep Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- Municipal Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 60 feet

0 12.5 25 50 75 100 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
Layout of FTMM-53 **Former Gas Station at Building 699**	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.01000	FILE: Figure1_GW_FTMM-53_Layout.mxd

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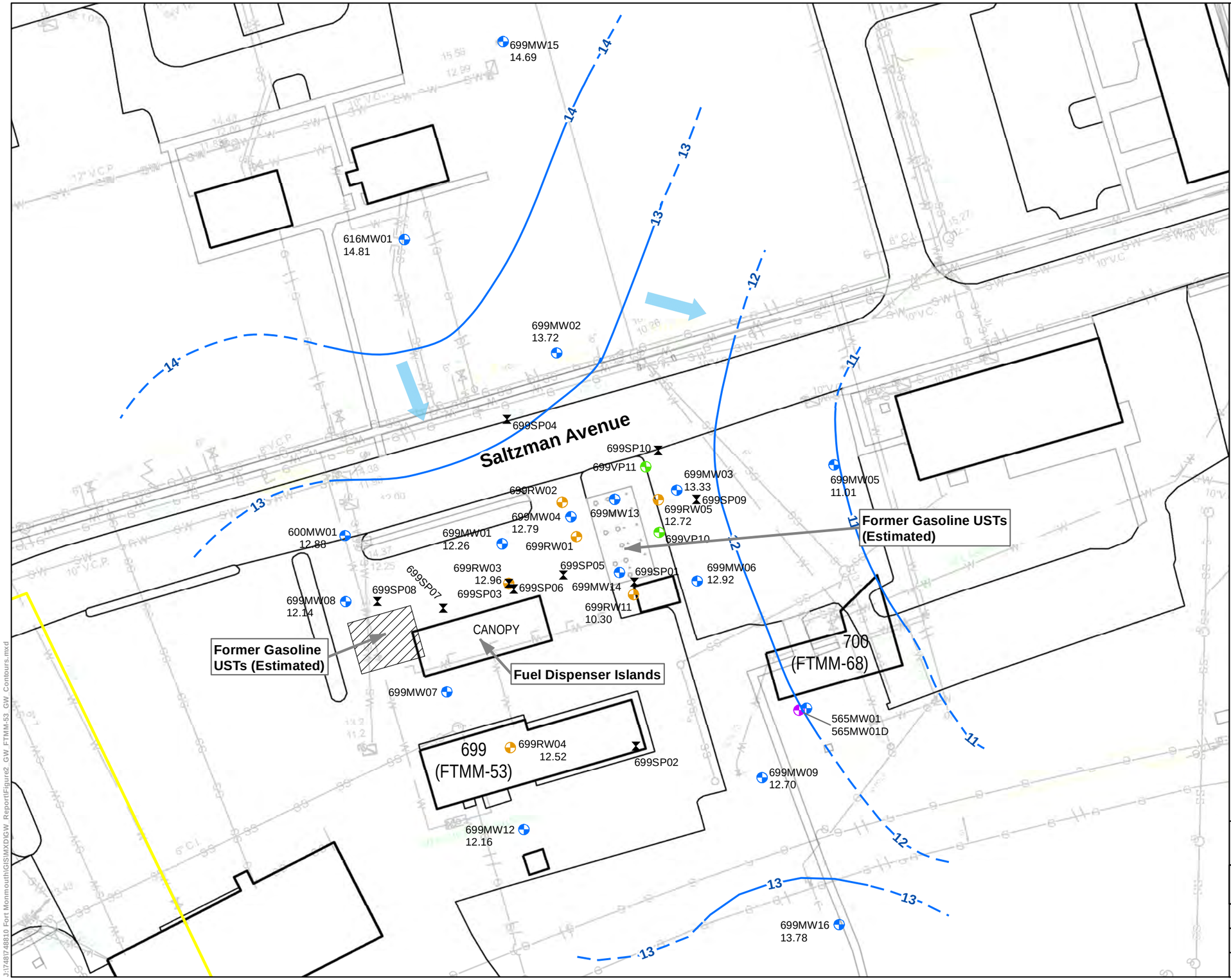

Legend

- Groundwater Contour
- Inferred Groundwater Contour
- Shallow Monitoring Well
- Deep Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- Municipal Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Inferred Groundwater Flow Direction

Note: Groundwater elevations in monitoring wells 699MW03 and 699RW11 were considered anomalous compared to fluid levels at neighboring wells.

N

1 inch = 60 feet

0 12.5 25 50 75 100 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-53 Groundwater Contours May 9, 2014	
CREATED BY: TS	REVIEWED BY: ME
DATE: August 2014	FIGURE NUMBER: Figure 2
PROJECT NUMBER: 748810.03000	FILE: Figure2_GW_FTMM-53_GW_Contours.mxd

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ATTACHMENTS

Attachment A NJDEP PDB Checklists

ATTACHMENT A
NJDEP PDB CHECKLISTS

PARSONS

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

1. Site: Fort Monmouth
2. Location: M-53
3. Well Designation: 699MW16
4. Well Permit Number: 29-33767

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

6 Well Surface Finish ☐Stick Up ☒Flush Mount

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

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

Distance between measuring point and ground surface (ft.) -0.65

9 Total Well Depth (fbgs) 14.74

10 Screened interval/open hole (fbgs) 4.74 - 14.74

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

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

13 Screen Size (slot) Screen Slot Size 0.02

14 Date and Time of Deployment Date: 5/9/14 Time: 1247

15 Depth to Ground Water Depth to ground water at time of deployment 1.49

16 Date and Time of Retrieval Date: 7/1/14 Time: 1115

17 Depth to Ground Water Depth to ground water at time of retrieval 5.08

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

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

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

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

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
6.5			

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

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

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

26. Weather Conditions During Deployment Temp. 55± Wind 2-5mph ☐Sunny ☒Overcast ☒Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5 mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

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

Name	Company
Chris Watson	PARSONS
Nick Voizos	

PARSONS

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

1. Site: Fourth Monmouth
2. Location: M-53
3. Well Designation: 699MW09
4. Well Permit Number: 29-24639

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

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

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

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

Distance between measuring point and ground surface (ft.) -0.3

9 Total Well Depth (fbgs): 12.55

10 Screened interval/open hole (fbgs): 0.55 - 12.55

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

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

13 Screen Slot Size: Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 5/9/14 Time: 1239

15. Depth to Ground Water: Depth to ground water at time of deployment 2.00

16. Date and Time of Retrieval: Date: 7/1/14 Time: 1125

17. Depth to Ground Water: Depth to ground water at time of retrieval 4.97

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

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

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

21 Dimensions of PDBS: Length (in.) 1' Diameter (in.) 1.5 Filled 1.5

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.75			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: 5/31/14

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

26. Weather Conditions During Deployment: Temp. 55's Wind 2-5mph ☐Sunny ☒Overcast ☒Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 90° Wind 0-5mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

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

Name	Company
Chris Watson	PARSONS
Nick Lorenz	

PARSONS

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

1. Site: Fort Monmouth
2. Location: M-53
3. Well Designation: G99MW06
4. Well Permit Number: 29-23809-1

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

6 Well Surface Finish ☑ Stick Up ☐ Flush Mount

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

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

Distance between measuring point and ground surface (ft.) 1.04

9 Total Well Depth (fbgs) 13.86

10 Screened interval/open hole (fbgs) 3.86 - 13.86

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

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

13 Screen Size (slot) Screen Slot Size 0.02

14. Date and Time of Deployment Date: 5/9/14 Time: 1224

15. Depth to Ground Water Depth to ground water at time of deployment 3.83

16. Date and Time of Retrieval Date: 7/1/14 Time: 1150

17. Depth to Ground Water Depth to ground water at time of retrieval 6.69

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

19 Material and Mass (oz.) of PDBS Weight Stainless Steel 20.2 (stainless steel recommended)

20 Type of PDBS Used ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)

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

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

22 Position of PDBS Weight ☐ Attached to bottom of PDBS and suspended in well

☐ Attached to bottom of deployment line and suspended in well

☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10.2			

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?

☐ No, this well is being profiled during this sampling round

☑ Yes, this well was profiled already. Date when well was profiled: 5/3/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?

☑ No, flow testing has not been conducted in this well

☐ Yes, flow testing of this well was conducted. Date of testing: _____

Type of flow meter used: _____

Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment Temp. 55°F Wind 2-5 mph ☐ Sunny ☑ Overcast ☑ Raining ☐ Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

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

Name	Company
Chris Wintner	PARSONS
Nick Lorenz	

PARSONS

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

1. Site: Ft Monmouth
2. Location: M-53
3. Well Designation: 699 RW05
4. Well Permit Number: 29-5Ca509

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

6 Well Surface Finish: ☐ Stick Up ☑ Flush Mount

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

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

Distance between measuring point and ground surface (ft.) -1.15

9 Total Well Depth (fbgs): 13.38

10 Screened interval/open hole (fbgs): 3.38-13.38

11 Well Casing: Diameter 6 Material ☐ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 6 Material ☐ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 5/9/14 Time: 1218

15. Depth to Ground Water: Depth to ground water at time of deployment 1.19

16. Date and Time of Retrieval: Date: 7/1/14 Time: 1165

17. Depth to Ground Water: Depth to ground water at time of retrieval 3.55

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

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 32 oz (stainless steel recommended)

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

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

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
4.8			

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☑ Yes, this well was profiled already. Date when well was profiled: 5/31/14

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

26. Weather Conditions During Deployment: Temp. 55°F Wind 2-5 mph ☐ Sunny ☑ Overcast ☑ Raining ☐ Snowing

27. Weather Conditions During Retrieval: Temp. 90° Wind 0-5 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

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

Name	Company
Chris Watson	PARSONS
Nick Hoag	

PARSONS

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

1. Site: Ft Monmouth
2. Location: M-53
3. Well Designation: 699MW01
4. Well Permit Number: 29-23677-1

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

6 Well Surface Finish: ~~☐Stick Up~~ ☒Flush Mount

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

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

Distance between measuring point and ground surface (ft.) -0.75

9 Total Well Depth (fbgs): 14.06

10 Screened interval/open hole (fbgs): 1.06-14.06

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

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

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 5/9/14 Time: 1105

15. Depth to Ground Water: Depth to ground water at time of deployment 2.22

16. Date and Time of Retrieval: Date: 7/1/14 Time: 1210

17. Depth to Ground Water: Depth to ground water at time of retrieval 3.96

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

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 2.0oz (stainless steel recommended)

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

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

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.5			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐**No**, this well is being profiled during this sampling round
☐**Yes**, this well was profiled already. Date when well was profiled: 5/31/14

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

26. Weather Conditions During Deployment: Temp. 55°F Wind 2-5mph ☐Sunny ☒Overcast ☒Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 90° Wind 0-5 mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

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

Name	Company
Chris Watson	PARSONS
Nick Loizos	

PARSONS

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

1. Site: Fort Monmouth
2. Location: M-53
3. Well Designation: 699MW04
4. Well Permit Number: 29-23680-7

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

6 Well Surface Finish ☐ Stick Up ☑ Flush Mount

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

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

Distance between measuring point and ground surface (ft) -.31

9 Total Well Depth (fbgs) 17.72

10 Screened interval/open hole (fbgs) 0.12-17.72

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

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

13 Screen Size (slot) Screen Slot Size .002

14. Date and Time of Deployment Date: 5/8/14 Time: 1111

15. Depth to Ground Water Depth to ground water at time of deployment 2.24

16. Date and Time of Retrieval Date: 5/14/14 Time: 1205

17. Depth to Ground Water Depth to ground water at time of retrieval 4.40

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

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

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

21 Dimensions of PDBS Length (in) 1.25 Diameter (in) 1.5 Filled 1.5

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
6.85			

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☑ Yes, this well was profiled already. Date when well was profiled: 5/31/14

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

26. Weather Conditions During Deployment Temp. 55°F Wind 2.5 mph ☐ Sunny ☑ Overcast ☑ Raining ☐ Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

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

Name	Company
Alexis Hamilton	PARSONS
Nick Laizos	

PARSONS

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

1. Site: Lot Monmouth
2. Location: M-53
3. Well Designation: 699MW03
4. Well Permit Number: 2914/3891

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

6 Well Surface Finish ☐Stick Up ☒Flush Mount

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

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

Distance between measuring point and ground surface (ft.) -0.9

9 Total Well Depth (fbgs) 18.6

10 Screened interval/open hole (fbgs) 3.6 - 18.6

11 Well Casing Diameter 6 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter 6 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size .001

14. Date and Time of Deployment Date: 5/9/14 Time: 1121

15. Depth to Ground Water Depth to ground water at time of deployment 1.91

16. Date and Time of Retrieval Date: 7/1/14 Time: 1215

17. Depth to Ground Water Depth to ground water at time of retrieval 4.54

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

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

20 Type of PDBS Used ☐Lab Filled (Modified Trip Blank must be taken at time of deployment)

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

21 Dimensions of PDBS Length (in.) 13 Diameter (in.) 1.5 Filled 1.5

22 Position of PDBS Weight

☒Attached to bottom of PDBS and suspended in well

☐Attached to bottom of deployment line and suspended in well

☐Attached to bottom of deployment line and resting on bottom of well (preferred)

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
8.2			

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?

☐No, this well is being profiled during this sampling round

☒Yes, this well was profiled already. Date when well was profiled: 5/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?

☒No, flow testing has not been conducted in this well

☐Yes, flow testing of this well was conducted. Date of testing: _____

Type of flow meter used: _____

Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment Temp. 55°F Wind 25mph ☐Sunny ☒Overcast ☒Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

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

Name	Company
Chris Watson	PARSONS
Nick Loizos	

PARSONS

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

1. Site: Fort Monmouth
2. Location: M-53
3. Well Designation: 699 RWU
4. Well Permit Number: 29-28031

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

6 Well Surface Finish ☐ Stick Up ☑ Flush Mount

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

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

Distance between measuring point and ground surface (ft.) -0.58

9 Total Well Depth (fbgs) 17.48

10 Screened interval/open hole (fbgs) 2.48 - 17.48

11 Well Casing Diameter 1" Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter) Diameter 1" Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot) Screen Slot Size 0.02

14. Date and Time of Deployment Date: 5/9/14 Time: 2:23

15. Depth to Ground Water Depth to ground water at time of deployment 11.35

16. Date and Time of Retrieval Date: 5/14/14 Time: 1220

17. Depth to Ground Water Depth to ground water at time of retrieval 5.01

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

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

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

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

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
8.3			

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☑ Yes, this well was profiled already. Date when well was profiled: 5/31/14

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

26. Weather Conditions During Deployment Temp. 55°F Wind 25 mph ☐ Sunny ☑ Overcast ☑ Raining ☐ Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

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

Name	Company
Chris Watson	PARSONS
Nick Loizos	

APPENDIX C

FTMM-68: FORMER DRY CLEANERS UST AT BUILDING 700

APPENDIX C:
FTMM-68 Former Dry Cleaners UST at Building 700

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1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT C-1
2.0 GROUNDWATER SAMPLING..... C-1
3.0 GROUNDWATER RESULTS – SECOND QUARTER 2014 ..... C-1

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1	Groundwater Gauging Data and Elevations (May 9, 2014)
2	PDB Sampling Summary
3	Groundwater Analytical Results Second Quarter 2014

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-68 (Former Dry Cleaners UST at Building 700)

LIST OF ATTACHMENTS

Attachment	Title
A	NJDEP PDB Checklists

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-68 were gauged on May 9, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. The depth to groundwater measured from the top of well casing in monitoring wells 565MW01 and 565MW01D was 4.95 and 5.99 feet, respectively. Well details, including the top of well casing elevations, could not be confirmed at the time of this report and therefore groundwater elevation could not be calculated. Groundwater is expected to flow towards the southeast based on groundwater elevations calculated in nearby monitoring wells at FTMM-53.

Additionally, monitoring wells were inspected for their physical condition during the groundwater gauging. FTMM-68 monitoring wells were found to be in good condition upon inspection.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from two monitoring wells located within FTMM-68 as part of the second quarter 2014 groundwater sampling event. The groundwater sampling program included measuring the depth to groundwater in the two FTMM-68 monitoring wells prior to sampling and collection of groundwater samples using passive diffusion bags (PDBs) methodology. PDBs were deployed in FTMM-68 monitoring wells on May 9, 2014 and samples were retrieved on July 1, 2014. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

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

Completed NJDEP PDB checklists for each well sampled can be found in **Attachment A**.

3.0 GROUNDWATER RESULTS – SECOND QUARTER 2014

Five chlorinated VOCs were detected in groundwater during this quarterly event. Groundwater analytical detections from samples collected during the first and second quarter 2014 groundwater sampling event are presented in **Table 3**. 1,1 DCE, cis-1,2 DCE, PCE, TCE, and vinyl chloride were detected in exceedance of their respective NJDEP GWQS in FTMM-68 monitoring well 565MW01. Additionally, PCE and TCE were detected in 565MW01D exceeding their respective NJDEP GWQS. The detection of TCE degradation byproducts (eg. 1,1 DCE, cis-1,2 DCE and vinyl chloride) indicates that natural attenuation is taking place at both of the wells.

TABLES

Table 1 Groundwater Gauging Data and Elevations (May 9, 2014)

Table 2 PDB Sampling Summary

Table 3 Groundwater Analytical Results – Second Quarter 2014

Table 1
Groundwater Gauging Data and Elevations (May 9, 2014)
FTMM-68 Former UST at Dry Cleaners at Building 700
Fort Monmouth, New Jersey

Site/Well ID	Intallation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft TOC)	Gauged Depth to Bottom (ft TOC)	Calculated Groundwater Elevation
565MW01	8/16/2011	-	-	-	15.0	5.0	10.0	-	0920	0	4.95	17.1	-
565MW01D	8/16/2011	-	-	-	23.0	18.0	5.0	-	0921	0	5.99	25.35	-

Notes:
1) The synoptic round of water levels in the wells was collected on May 9, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) DTW = depth to water (measured from the top of well casing)
4) DTB = depth to bottom of well (measured from the top of well casing)
5) TOC = Top of Casing
6) ft. AMSL = feet above means sea level
7) - information not available

Table 2
PDB Sampling Summary
FTMM-68 Former UST at Dry Cleaners at Building 700
Fort Monmouth, New Jersey

Site	Depth (ft)	Screen Length (ft)	Screen Interval (ft)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft) TOC	Gauged DTB (ft) TOC	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Interval 1 (ft. below TOC)	PDB Interval 2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
565MW01	15.0	10.0	5-15	N/A	5-9-14	0920	0	4.95	17.10	N/A	10.0	11.99	N/R	5/9/2014	1235	7/1/2014	1135
565MW01D	23.0	5.0	18-23	N/A	5-9-14	0921	0	5.99	25.35	N/A	5.0	22.31	N/R	5/9/2014	1229	7/1/2014	1140

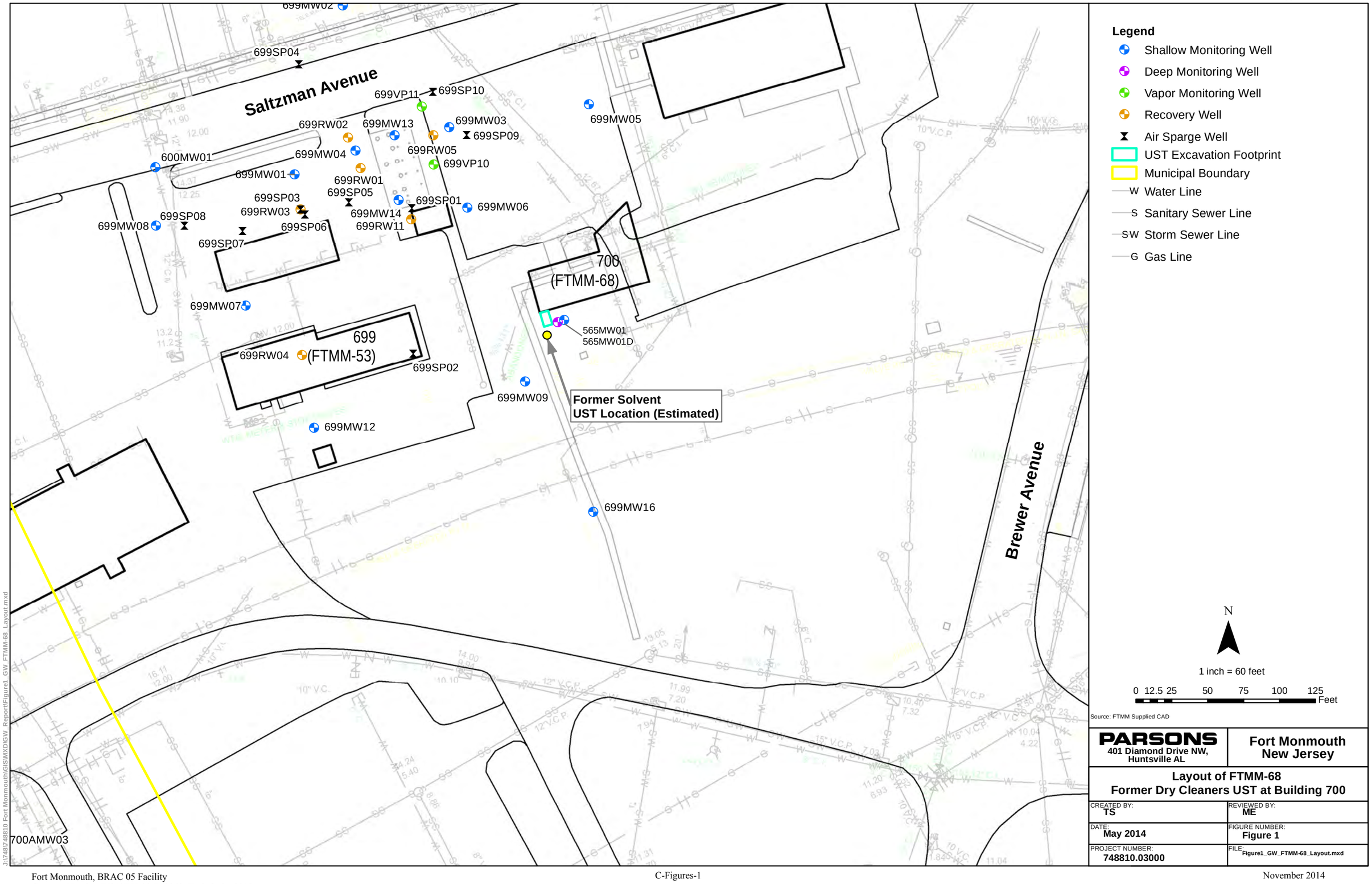
Notes:
Information on well permit number, X and Y coordinates, depth, screen length, and TOC elevation were provided by FTMM in a table in June 2013.
DTW = depth to water (measured from the top of well casing)
DTB = depth to bottom of well (measured from the top of well casing)
TOC= Top of Casing
ft. AMSL = feet above means sea level
LFPS = low flow purging and sampling
PDB = Passive Diffusion Bag
N/A = not available
N/R = not relevant

Table 3
Groundwater Analytical Results First and Second Quarter 2014
FTMM-68 Former Dry Cleaners UST at Building 700
Fort Monmouth, New Jersey

Loc ID	2014-05 USEPA MCL	NJ Ground Water Quality Criteria	565MW01		565MW01D		
Sample ID			FTMM-68-GW-565MW01-11.99_20140331	FTMM-68-GW-565MW01-11.99_20140701	FTMM-68-GW-565MW01D-22.31_20140331	FTMM-68-GW-565MW101D-22.31	M-68-GW-565MW01D-22.31_20140
Sample Date			3/31/2014	7/1/2014	3/31/2014	3/31/2014	7/1/2014
Sample Round			2		2	2	
Filtered			Total	Total	Total	Total	Total
Volatile Organic Compounds (µg/l)							
1,1,1,2-Tetrachloroethane	NLE	1	< 2.5	< 2.5	< 1	< 10	< 10
1,1,1-Trichloroethane	200	30	< 2.5	< 2.5	< 1	< 10	< 10
1,1,2,2-Tetrachloroethane	NLE	1	< 2.5	< 2.5	< 1	< 10	< 10
1,1,2-Trichloroethane	5	3	< 2.5	< 2.5	< 1	< 10	< 10
1,1-Dichloroethane	NLE	50	< 2.5	< 2.5	< 1	< 10	< 10
1,1-Dichloroethene	7	1	**2 J**	**2.1 J**	**0.67 J**	< 10	< 10
1,1-Dichloropropene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
1,2,3-Trichlorobenzene	NLE	100	< 2.5	< 2.5	< 1	< 10	< 10
1,2,3-Trichloropropane	NLE	0.03	< 2.5	< 2.5	< 1	< 10	< 10
1,2,4-Trichlorobenzene	70	9	< 2.5	< 2.5	< 1	< 10	< 10
1,2,4-Trimethylbenzene	NLE	NLE	**0.83 J**	< 2.5	< 1	**4.6 J**	< 10
1,2-Dibromo-3-chloropropane	0.2	0.02	< 2.5	< 2.5	< 1	< 10	< 10
1,2-Dibromoethane	0.05	0.03	< 2.5	< 2.5	< 1	< 10	< 10
1,2-Dichlorobenzene	600	600	< 2.5	< 2.5	< 1	< 10	< 10
1,2-Dichloroethane	5	2	< 2.5	< 2.5	< 1	< 10	< 10
1,2-Dichloropropane	5	1	< 2.5	< 2.5	< 1	< 10	< 10
1,3,5-Trimethylbenzene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
1,3-Dichlorobenzene	NLE	600	< 2.5	< 2.5	< 1	< 10	< 10
1,3-Dichloropropane	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
1,4-Dichlorobenzene	75	75	< 2.5	< 2.5	< 1	< 10	< 10
2,2-Dichloropropane	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
2-Chlorotoluene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
Acetone	NLE	6,000	< 13	**3.2 B**	**1.5 J**	< 50	< 50
Benzene	5	1	< 2.5	< 2.5	< 1	< 10	< 10
Bromobenzene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
Bromochloromethane	NLE	100	< 2.5	< 2.5	< 1	< 10	< 10
Bromodichloromethane	80	1	< 2.5	< 2.5	< 1	< 10	< 10
Bromoform	80	4	< 2.5	< 2.5	< 1	< 10	< 10
Carbon tetrachloride	5	1	< 2.5	< 2.5	< 1	< 10	< 10
Chlorobenzene	100	50	< 2.5	< 2.5	< 1	< 10	< 10
Chlorodibromomethane	80	1	< 2.5	< 2.5	< 1	< 10	< 10
Chloroethane	NLE	5	< 2.5	< 2.5	< 1	< 10	< 10
Chloroform	80	70	**0.85 J**	< 2.5	< 1	**2.7 J**	< 10
Cis-1,2-Dichloroethene	70	70	**270**	**190**	**140**	**120**	**34 J**
Cis-1,3-Dichloropropene	NLE	1	< 2.5	< 2.5	< 1	< 10	< 10
Dichlorodifluoromethane	NLE	1,000	< 2.5	< 2.5	< 1	< 10	< 10
Ethyl benzene	700	700	< 2.5	< 2.5	< 1	< 10	< 10
Hexachlorobutadiene	NLE	1	< 2.5	< 2.5	< 1	< 10	< 10
Isopropylbenzene	NLE	700	< 2.5	< 2.5	< 1	< 10	< 10
Meta & Para Xylenes	NLE	NLE	< 5	< 5	< 2	< 20	< 20
Methyl bromide	NLE	10	< 2.5	< 2.5	**0.33 J**	< 10	< 10
Methyl butyl ketone	NLE	300	< 13	< 13	< 5	< 50	< 50
Methyl chloride	NLE	100	< 2.5	< 2.5	< 1	< 10	< 10
Methyl ethyl ketone	NLE	300	< 2.5	< 2.5	< 1	< 10	< 10
Methyl isobutyl ketone	NLE	100	< 2.5	< 2.5	< 1	< 10	< 10
Methyl Tertbutyl Ether	NLE	70	< 2.5	< 2.5	< 1	< 10	< 10
Methylene chloride	5	3	< 2.5	< 2.5	< 1	< 10	< 10
Naphthalene	NLE	300	**4.8 J**	< 2.5	< 1	**12 J**	< 10
n-Butylbenzene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
Ortho Xylene	NLE	1,000	**0.58 J**	< 2.5	< 1	< 10	< 10
p-Chlorotoluene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
p-Isopropyltoluene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
Propylbenzene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
sec-Butylbenzene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
Styrene	100	100	< 2.5	< 2.5	< 1	< 10	< 10
tert-Butylbenzene	NLE	NLE	< 2.5	< 2.5	< 1	< 10	< 10
Tetrachloroethene	5	1	**440**	**350**	**1,500**	**1,500**	**1,800**
Toluene	1,000	600	< 2.5	< 2.5	< 1	< 10	< 10
Total Xylenes	10,000	1,000	**0.58 J**	NA	< 3	< 30	NA
Trans-1,2-Dichloroethene	100	100	**1.9 J**	**1.3 J**	**1.4 J**	< 10	< 10
Trans-1,3-Dichloropropene	NLE	1	< 2.5	< 2.5	< 1	< 10	< 10
Trichloroethene	5	1	**230**	**160**	**110**	**96**	**42 J**
Trichlorofluoromethane	NLE	2,000	< 2.5	< 2.5	< 1	< 10	< 10
Vinyl chloride	2	1	**18**	**13**	**6.1**	**5.5 J**	< 10
TIC VOCs (µg/l)							
Total TICs	NLE	500	ND	ND	ND	ND	ND

FIGURES

Figure 1 Layout of FTMM-68 Former Dry Cleaners UST at Building 700



J:\748\748810 Fort Monmouth\GIS\MXD\GW_Report\Figure1_GW_FTMM-68_Layout.mxd

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Layout of FTMM-68 Former Dry Cleaners UST at Building 700	
CREATED BY: TS	REVIEWED BY: ME
DATE: May 2014	FIGURE NUMBER: Figure 1
PROJECT NUMBER: 748810.03000	FILE: Figure1_GW_FTMM-68_Layout.mxd

ATTACHMENTS

Attachment A NJDEP PDB Checklists

ATTACHMENT A
NJDEP PDB CHECKLISTS

PARSONS

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

1. Site: Ft. Monmouth
2. Location: M-68
3. Well Designation: 565MW01
4. Well Permit Number: N/A

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

6 Well Surface Finish ☑ Stick Up ☐ Flush Mount

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

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

Distance between measuring point and ground surface (ft.) 1.79

9 Total Well Depth (fbgs) 15.31

10 Screened interval/open hole (fbgs) 5.31-15.31

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

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

13 Screen Size (slot) Screen Slot Size _____

14. Date and Time of Deployment Date: 5/9/14 Time: 1235

15. Depth to Ground Water Depth to ground water at time of deployment 4.95

16. Date and Time of Retrieval Date: 7/1/14 Time: ~~1235~~ CW 1135

17. Depth to Ground Water Depth to ground water at time of retrieval 7.94

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

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

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

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

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
11.99	—	—	—

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☑ Yes, this well was profiled already. Date when well was profiled: 3/31/14 8/29/13

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

26. Weather Conditions During Deployment Temp. 69° Wind 2-5 mph ☐ Sunny ☑ Overcast ☑ Raining ☐ Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

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

Name	Company
Chris Watson	Parsons
Nick Loizos	

PARSONS

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

1. Site: Lot 14 Monmouth
2. Location: M-68
3. Well Designation: 565 MW01D
4. Well Permit Number: N/A

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

6 Well Surface Finish ☑Stick. Up ☐Flush Mount

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

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

Distance between measuring point and ground surface (ft.) 1.89

9 Total Well Depth (fbgs) 23.46

10 Screened interval/open hole (fbgs) 18.16 - 23.46

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

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

13 Screen Size (slot) Screen Slot Size 0.01

14 Date and Time of Deployment Date: 5/9/14 Time: 1229

15 Depth to Ground Water Depth to ground water at time of deployment 5.99

16 Date and Time of Retrieval Date: 7/1/14 Time: 1140

17 Depth to Ground Water Depth to ground water at time of retrieval 8.19

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

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

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

21 Dimensions of PDBS Length (in.) 18 Diameter (in.) 3.5 Filled 1.5

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

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

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
22.31			

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

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☑Yes, this well was profiled already. Date when well was profiled: 8/29/13

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

26. Weather Conditions During Deployment Temp. 55F Wind 2-5 mph ☐Sunny ☑Overcast ☑Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 90° Wind 0-5 mph ☑Sunny ☐Overcast ☐Raining ☐Snowing

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

Name	Company
Chris Watson	PARSONS
NICK LOILOS	

APPENDIX D

DATA VALIDATION AND DATA VERIFICATION SUMMARY REPORTS

DATA VALIDATION SUMMARY REPORT

for samples collected from

FORT MONMOUTH

OCEANPORT, NEW JERSEY

Data Validation by: Sandra de las Fuentes

Date: July 10, 2014

Parsons - Austin

INTRODUCTION

The following data validation summary report covers water samples and the associated field quality control (QC) samples collected from Fort Monmouth in Oceanport, New Jersey on May 8 and May 9, 2014. Samples were logged in under the following Sample Delivery Groups (SDGs):

R1403442;

R1403443;

R1403443-SIM

The samples in this SDG were analyzed for some or all of the following: volatile organic compounds (VOCs) plus tentatively identified compounds (TICs by 8260C), 1,4-Dioxane (by 8260CSIM), Chromium (total and/or dissolved by 6010C), and Hexavalent Chromium (total and/or dissolved by 7199). The field QC samples collected included a field duplicate (FD) sample and a matrix spike/matrix spike duplicate (MS/MSD) pair. The following table details the samples included in these SDGs and the associated parameters.

All samples were collected by Parsons and shipped to ALS Environmental in Rochester, New York. There were two coolers shipped and received by the laboratory at temperatures of 4.7°C and 3.0°C, which were within the 2-6°C range recommended by the project-specific UFP-QAPP.

The laboratory is DOD ELAP and NELAP certified. All samples were prepared and analyzed following the procedures outlined in the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2, and the procedures outlined in the Standard Subcontract and the project-specific Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP).

SAMPLE IDs AND REQUESTED PARAMETERS

Sample ID	SDG	Matrix	VOCs, plus TICs	1,4-Dioxane *	Total Chromium	Total Hexavalent Chromium	Comments
FTMM-22-GW-CW1MW31-14.3	R1403442/ R1403443	W	X	X	X	X	
FTMM-22-GW-CW1MW40-39.5	R1403442/ R1403443	W		X	X	X	
FTMM-22-GW-CW1MW32-16.45	R1403442/ R1403443	W		X	X	X	
FTMM-22-GW-CW1MW37-11.11	R1403442/ R1403443	W		X	X	X	
FTMM-22-GW-CW1MW29-10.4	R1403442/ R1403443	W	X	X	X	X	MS/MSD
FTMM-22-GW-CW1MW129-10.4	R1403442/ R1403443	W	X	X	X	X	FD of FTMM-22-GW-CW1MW29-10.4
FTMM-22-GW-CW1MW281-35.8	R1403442/ R1403443	W	X	X	X	X	
FTMM-22-GW-CW1MW27-11.52	R1403443	W	X				
FTMM-22-GW-CW1MW28-10.6	R1403442/ R1403443	W	X	X	X	X	
FTMM-22-GW-CW1MW28-10.6 Dissolved	R1403442				X	X	Dissolved Cr and Cr-6
FTMM-EB-05082014	R1403442/ R1403443	W	X	X	X	X	
FTMM-TB-05082014	R1403443	W	X				
FTMM-DI-05092014	R1403443	W	X				
FTMM-EB-05092014	R1403443	W	X				
FTMM-TB-05092014	R1403443	W	X				

W = Water
* = Analyses were reported in R1403443-SIM

EXTRACTION AND ANALYTICAL METHODS:

PARAMETER	MATRIX	EXTRACTION METHOD	ANALYTICAL METHOD	UNITS	DRY WT. VS. WET WT
VOCs	W	5030	8260C	µg/L	NA
1,4-Dioxane	W	5030	8260CSIM	µg/L	NA
Chromium	W	3010A	6010C	µg/L	NA
Hexavalent Chromium	W	7199	7199	µg/L	NA

EVALUATION CRITERIA

The data submitted by the laboratory has been validated following the guidelines outlined in the project-specific UFP-QAPP. A "Level IV" validation was performed and the information reviewed in the data packages included sample results; field and laboratory quality control results; calibrations; case narratives; raw data; cooler receipt forms; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the UFP-QAPP were met.

The precision criterion for the relative percent difference (RPD) of the field duplicate samples is RPD $\leq$ 40 for water VOCs and VOC-SIMs and 20% for chromium and hexavalent chromium, as per the project-specific UFP-QAPP.

VOLATILE ORGANIC COMPOUNDS

General

The VOC portion of SDG R1403443 consisted of eleven water samples, including one field duplicate sample, two equipment blanks, two trip blanks and a source water blank. The samples were collected on May 8 and May 9, 2014 and were analyzed for the full list of VOCs plus TICs as specified in the project-specific UFP-QAPP.

The VOCs analyses were performed according to USEPA SW846 Method 8260C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

There were no TICs detected in any of the samples in this SDG.

The samples for VOCs were analyzed in a single batch (#393182) under a single ICAL. All analyses were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, the MS/MSD samples, and the surrogate spikes.

The LCS, MS, MSD and surrogate spike recoveries were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte results.

All MS/MSD RPDs were within acceptance criteria.

All target VOCs were non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate samples, except as follows:

Parent	SDG	Analyte	Parent (µg/kg)	FD (µg/kg)	RPD	Criteria
FTMM-22-GW-CW1MW29-10.4	R1403443	Trichloroethene	13	13	0	RPD ≤ 40

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- GC/MS tuning criteria for BFB were within QC criteria for all batches.
- All CCV criteria were met, except bromomethane was -20.7% D, which is slightly greater than the 20% D allowed by the method. Since the percent difference is only slightly out of acceptance criteria (<1%), corrective action was deemed unnecessary. Bromomethane was not detected in any of the associated samples.
- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

Two equipment blanks, a water source blank and two trip blanks were analyzed for VOCs. The trip blanks were both non-detect. The field and source blanks had detections of one or more of the following analytes: Acetone, methylene chloride, toluene and/or chloroform. All of these analytes reported concentrations of less than one-half the LOQs, as required by the project-specific UFP-QAPP, so no corrective action was required.

The associated method lab blank contained low concentrations (less than 0.89 µg/L) of 1,2,4-trichlorobenzene, hexachlorobutadiene, and naphthalene. All of these analytes had reported LOQs of 5.0 µg/L. Since the contamination noted above was less than one-half the LOQ, as required by the project-specific QAPP, no corrective action was required. At the time of sample analyses, ALS did not consider any of these analytes as common laboratory contaminants.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

1,4-DIOXANE (SIM)

General

The 1,4-Dioxane portion of SDG R1403443SIM consisted of nine water samples, including one field duplicate sample and one equipment blank sample. The samples were collected on May 8 and May 9, 2014 and were analyzed for 1,4-Dioxane only.

The 1,4-Dioxane analyses was performed according to USEPA SW846 Method 8260CSIM. All samples in this SDG were analyzed following the procedures outlined in the addendum to the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

The samples for 1,4-Dioxane were analyzed in a single batch (#393515) under a single ICAL. All analyses were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, the MS/MSD samples, and the surrogate spikes.

The LCS, MS, MSD and surrogate spike recoveries were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentration for 1,4-Dioxane. Precision was further evaluated by comparing the field duplicate analyte results.

All MS/MSD RPD was within acceptance criteria.

1,4-Dioxane was non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;

- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- GC/MS tuning criteria for BFB were within QC criteria for all batches.
- All CCV criteria were met, except 1,4-Dioxane was +23.5% D, which is slightly greater than the 20% D allowed by the method. Since the percent difference is only slightly above acceptance criteria (<4%) and there were no detects for 1,4-Dioxane in any of the associated water samples, corrective action was deemed unnecessary.
- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

Two method blanks were analyzed for 1,4-Dioxane. Neither method blank contained 1,4-dioxane at or above the MDL.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

TOTAL and DISSOLVED CHROMIUM

General

The total chromium portion of SDG R1403442 consisted of nine water samples, including a total chromium equipment blank. In addition, one sample was also analyzed as dissolved chromium. The samples were collected on May 8 and May 9, 2014.

The chromium analyses were performed using USEPA SW846 Method 6010C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

The samples for chromium analyses were digested in a single batch (#208432). The samples were analyzed in a single batch under one ICAL. All samples were performed undiluted.

It should be noted that chromium was reported at a different LOQ and LOD than as stated in the UFP-QAPP. The LOQ and LOD in the QAPP were listed at 1 µg/L each, while the current report has limits of 10 µg/L and 5.0 µg/L (LOQ/LOD). Since the revised limits remain significantly lower than the NJ Groundwater Quality Limit (Specific Ground Water Quality Criteria - Class IIA and Practical Quantitation Levels) for chromium at 70 µg/L, no request was made to ALS to reprocess the chromium report.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, MS, and MSD samples.

The LCS, MS, and MSD spike recoveries were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentration for chromium. Precision was further evaluated by comparing the field duplicate analyte results.

The chromium MS/MSD RPD was within acceptance criteria.

Chromium was within acceptance criteria for the parent and field duplicate, as follows:

FTMM-22-GW-CW1MW29-10.4

Analyte	Parent µg/L	FD µg/L	RPD	Criteria
Chromium	2.9	3.4	16	20%

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating preservation and holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. The samples were prepared and analyzed within the holding times required by the method.

- All instrument calibration criteria were met.
- All second source criteria were met. The ICV samples were prepared using a secondary source.
- All continuing calibration verification (CCV) criteria were met.
- All interference check (ICSA/ICSAB) criteria were met.
- The MDLs met the requirements listed in the DoD QSM version 4.2.
- The dilution test (DT) was performed on sample FTMM-22-GW-CW1MW29-10.4. The DT was not applicable for chromium since the concentration of chromium in the parent sample was not greater than 50 times the method detection limit (MDL).
- The post digestion spike (PDS) was performed on the same sample as the DT. The PDS was applicable for chromium and met criteria as follows:

Metal	%R	Criteria
Chromium	105	75 – 125%

There was one method blank, one equipment blank and several calibration blanks associated with the metals analyses in this SDG. All blanks were compliant.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All metals results for the samples in this SDG were considered usable. Therefore, the completeness for the metals portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

TOTAL AND DISSOLVED HEXAVALENT CHROMIUM

General

The total hexavalent chromium portion of SDG R1403442 consisted of nine water samples, including a total hexavalent chromium equipment blank. In addition, one sample was also analyzed as dissolved hexavalent chromium. The samples were collected on May 8 and May 9, 2014.

The hexavalent chromium analyses were performed using USEPA SW846 Method 7199. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. Samples analyzed for hexavalent chromium by method 7199 are required by the method to be injected two times within 24 hours of sample collection. All samples were prepared and analyzed within the holding time required by

the method for the first injection, and the following samples missed the hold time for the second injection:

FTMM-22-GW-CW1MW129-10.4
FTMM-22-GW-CW1MW31-14.3
FTMM-22-GW-CW1MW40-39.5
FTMM-22-GW-CW1MW29-10.4

All results with a missed HT were marked in the data report with an "*". ALS reported both injections in the hard copy report and EDDs. For conservative purposes, Parsons will use the highest result as final, and if the results are the same, the first injection will be used as final. Non-detects are reported to the limit of detection (LOD). The following table details which of the two injections will be reported as final:

Sample ID	1st Injection µg/L	2nd Injection µg/L	Final Reported µg/L
FTMM-22-GW-CW1MW31-14.3	0.3 J	0.3 J	1st: 0.3 J
FTMM-22-GW-CW1MW32-16.45	10 U	10 U	1st: 10 U
FTMM-22-GW-CW1MW40-39.5	10 U	10 U	1st: 10 U
FTMM-22-GW-CW1MW37-11.11	10 U	10 U	1st: 10 U
FTMM-22-GW-CW1MW29-10.4	2 J	2 J	1st: 2 J
FTMM-22-GW-CW1MW129-10.4	2 J	2 J	1st: 2 J
FTMM-22-GW-CW1MW281-35.8	10 U	10 U	1st: 10 U
FTMM-22-GW-CW1MW28-10.6	10 U	0.3 J	2nd: 0.3 J
FTMM-22-GW-CW1MW28-10.6 Dissolved	10 U	0.3 J	2nd: 0.3 J
FTMM-EB-05082014	10 U	10 U	1st: 10 U

U - Analyte was not detected above the indicated limit of detection (LOD).
J - Analyte detected, estimated concentration.

The samples for hexavalent chromium analyses were digested in a single batch (# 392439). The samples were analyzed in a single batch under one ICAL. All samples were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, MS, and MSD samples.

The LCS, MS, and MSD spike recoveries were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentration for hexavalent chromium. Precision was further evaluated by comparing the field duplicate analyte results.

The hexavalent chromium MS/MSD RPD was within acceptance criteria.

Hexavalent chromium was non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating preservation and holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. The samples were prepared and analyzed within the holding times required by the method, except as noted above.

- All instrument calibration criteria were met.
- All second source criteria were met. The ICV samples were prepared using a secondary source.
- All continuing calibration verification (CCV) criteria were met.
- All interference check (ICSA/ICSAB) criteria were met.
- The MDLs met the requirements listed in the DoD QSM version 4.2.

There was one method blank, one equipment blank and several calibration blanks associated with the metals analyses in this SDG. All blanks were compliant.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All metals results for the samples in this SDG were considered usable. Therefore, the completeness for the metals portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

DATA USABILITY

The purpose of this data validation report is to ensure the integrity and reliability of analytical laboratory data. The data quality is evaluated based on precision, accuracy, representativeness, comparability, and completeness (PARCC) characteristics of the data. The validated data indicated that the laboratory correctly performed the analyses. Based on the data quality assessment, none of the data were qualified as rejected.

All data in this SDG are considered usable for the purposes of this project. All sample LODs and LOQs met the requirements listed in the project QAPP. All Method Quality Objectives have been met.

DATA VERIFICATION SUMMARY REPORT

for samples collected from

FORT MONMOUTH

OCEANPORT, NEW JERSEY

Data Verification by: Sandra de las Fuentes

Date: July 29, 2014

Parsons - Austin

INTRODUCTION

The following data verification summary report covers water samples and the associated field quality control (QC) samples collected from Fort Monmouth in Oceanport, New Jersey on July 1 and July 2, 2014 as part of the 2nd Groundwater Quarterly Event. Samples were logged in under the following Sample Delivery Group (SDG):

R1405048

This verification report covers all of the analyses in the SDG listed above. A separate validation report was completed for the samples collected as part of the 2nd Groundwater Quarterly Event in R1403442, R1403443 and R1403443-SIM.

The samples in this SDG were analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs). The table below lists all samples associated with this SDG. The QC samples collected including an equipment blank, two trip blanks and a source blank (DI water blank).

All samples were collected by Parsons and shipped to ALS Environmental in Rochester, New York in two coolers. All coolers were received by the laboratory at temperatures of 5.2°C and 3.0°C, which were within the 2-6°C range recommended by the project-specific UFP-QAPP.

The laboratory is DOD ELAP and NELAP certified. All samples were prepared and analyzed following the procedures outlined in the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2, and the procedures outlined in the Standard Subcontract and the project-specific Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP).

QC IDENTIFICATION TABLE:

Sample ID	SDG	Matrix	VOCs, plus TICS	Comments
FTMM-53-GW-699MW16-6.5	R1405048	W	X	
FTMM-53-GW-699MW09-7.75	R1405048	W	X	
FTMM-53-GW-699MW06-10.2	R1405048	W	X	
FTMM-53-GW-699RW05-4.8	R1405048	W	X	
FTMM-53-GW-699MW01-7.5	R1405048	W	X	
FTMM-53-GW-699MW04-6.85	R1405048	W	X	
FTMM-53-GW-699RW03-8.2	R1405048	W	X	
FTMM-53-GW-699RW11-8.3	R1405048	W	X	
FTMM-68-GW-565MW01-11.99	R1405048	W	X	Equipment Blank 070114
FTMM-68-GW-565MW01D-22.31	R1405048	W	X	
FTMM-TB-070114	R1405048	W	X	Trip Blank for 070114
FTMM-EB-070114	R1405048	W	X	Equipment Blank
FTMM-DI-070214	R1405048	W	X	DI water
FTMM-TB-070214	R1405048	W	X	Trip Blank for 070214

W = Water

EXTRACTION AND ANALYTICAL METHODS:

PARAMETER	MATRIX	EXTRACTION METHOD	ANALYTICAL METHOD	UNITS	DRY WT. VS. WET WT
VOCs	W	5030	8260C	µg/L	NA

EVALUATION CRITERIA

The data submitted by the laboratory has been verified following the guidelines outlined in the project-specific UFP-QAPP. A verification was performed and the information reviewed in the data packages included sample results; field and laboratory quality control results; case narratives; cooler receipt forms; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the UFP-QAPP were met.

This verification report discusses only the non-compliant QC issues that required qualifying the data. All other QC not detailed in this report was either compliant or did not require flagging (i.e., high biased QC associated with non-detected results).

The precision criterion for the relative percent difference (RPD) of the field duplicate samples is RPD $\leq$ 40 for water, as per the project-specific UFP-QAPP.

VOLATILE ORGANIC COMPOUNDS

General

The VOC analyses were performed according to USEPA SW846 Method 8260C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

All analyses were performed undiluted, except as follows:

FTMM-68-GW-565MW01-11.99 at 2.5x all VOCs;
FTMM-68-GW-565MW01D-22.31 at 10x for all VOCs

There were TICs detected in samples:

FTMM-53-GW-699RW05-4.8;
FTMM-53-GW-699RW03-8.2;
FTMM-53-GW-699RW11-8.36

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCSs and the surrogate spikes.

All LCS recoveries were within acceptance criteria, except as follows:

LCS ID	Analyte	%R	Criteria
Batch #401024	Acetone	153	40-140%
Batch #401710	1,2,3-Trichlorobenzene	131	75-125%

All Acetone detections in the associated samples for batch # 401024 were previously flagged "J" since the detections were below the limit of detection (LOQ); therefore no further action was required due to the high recovery of acetone in the LCS. There were no detections of 1,2,3-Trichlorobenzene in the associated samples for batch # 701710; therefore no action was required.

All surrogate spike recoveries were within acceptance criteria for VOCs.

Precision

Precision is generally evaluated using the RPDs obtained from the MS/MSD and field duplicate concentrations. Since these samples were not collected in association with this SDG, precision could not be evaluated.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;

- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- GC/MS tuning criteria for BFB were within QC criteria for all batches.
- All CCV criteria were met, with the following exceptions:

Inst #, CCV Date	Analyte	%R	Criteria
MSVOA10, 7/10/14 10:03	Naphthalene	120.9	80-120%
MSVOA10, 7/15/14 10:52	Naphthalene	124.8	

Samples FTMM-53-GW-699RW05-4.8 (7.6µg/L) and FTMM-53-GW-699-RW03-8.2 (6.5µg/L) were "J" flagged due to the possibility of a high biased as indicated in the associated CCVs.

- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

There were two method blanks, two trip blanks, one equipment blank and a DI water blank analyzed for VOCs. See below for details.

Method Blanks:

There were no detections above the MDL in either of the two method blanks.

Trip Blanks:

There were no detections above the MDL in either of the two trip blanks.

Equipment Blanks:

The equipment blank was non-detect for all target analytes, except for the following:

EB ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-EB-070114	Acetone	7.0	5.0

	Chloroform	0.65J	
	Toluene	0.22J	

DI Water Blank:

The DI water blank, FTMM-DI-070214 was non-detect for all target analytes, except for the following:

EB ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-DI-070214	Acetone	8.1	5.0
	Chloroform	0.86J	
	Toluene	0.35J	

Since the detections were the same in both the EB and DI blanks, the samples listed below were "B" flagged due to possible high bias in both EB and DI blanks. Only sample concentrations of less than 10x the contamination of the EB and DI blanks required "B" flags.

FTMM-53-GW-699MW16-6.5 for Acetone and Chloroform
FTMM-53-GW-699MW09-7.75 for Acetone
FTMM-53-GW-699MW06-10.2 for Acetone
FTMM-53-GW-699RW05-4.8 for Toluene
FTMM-53-GW-699MW01-7.5 for Acetone
FTMM-53-GW-699MW04-6.85 for Acetone
FTMM-53-GW-699RW03-8.2 for Chloroform and Toluene
FTMM-53-GW-699RW11-8.3 for Toluene
FTMM-68-GW-565MW01-11.99 for Acetone

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

DATA USABILITY

The purpose of this data validation report is to ensure the integrity and reliability of analytical laboratory data. The data quality is evaluated based on precision, accuracy, representativeness, comparability, and completeness (PARCC) characteristics of the data.

The validated data indicated that the laboratory correctly performed the analyses. Based on the data quality assessment, none of the data were qualified as rejected.
All data in this SDG are considered usable for the purposes of this project. All sample LODs and LOQs met the requirements listed in the project QAPP. All Method Quality Objectives have been met.

APPENDIX E

LABORATORY ANALYTICAL RESULTS

(Appendix E is included separately on the CD of this Report)

June 02, 2014 Service Request No: R1403443

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 2Q2014 GW/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory between May 9, 2014 and May 10, 2014. For your reference, these analyses have been assigned our service request number **R1403443.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC-failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 FAX 585-288-8475
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1403443
Project:	FTMM 2Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	5/09-10/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 5/08-09/14 and received in good condition at cooler temperatures of 3.1-4.9°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Fourteen water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":
- 5/20/14: Bromomethane and 1,2,3-Trichloropropane were >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-22-GW-CW1MW29-10.4 as requested. All MS/MSD recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination except the 05/20/14 blank had low level detections for 1,2,4-Trichlorobenzsene, Hexachlorobutadiene and Naphthalene. All affected data has been flagged with a "B".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

00002

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1403443	Diskette Requested: No	Date Due: 6/3/14
Client: Parsons Engineering Science	Date: 5/12/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 2Q2014 GW	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1403443-001	FTMM-22-GW-CW1MW31-14.3	Water	8260C	5/8/14	5/9/14			
R1403443-002	FTMM-22-GW-CW1MW40-39.5	Water	8260C	5/8/14	5/9/14			
R1403443-003	FTMM-22-GW-CW1MW32-16.45	Water	8260C	5/8/14	5/9/14			
R1403443-004	FTMM-22-GW-CW1MW37-11.11	Water	8260C	5/8/14	5/9/14			
R1403443-005QC	FTMM-22-GW-CW1MW29-10.4	Water	8260C	5/8/14	5/9/14			
R1403443-006	FTMM-22-GW-CW1MW129-10.4	Water	8260C	5/8/14	5/9/14			
R1403443-007	FTMM-22-GW-CW1MW281-35.8	Water	8260C	5/8/14	5/9/14			
R1403443-008	FTMM-22-GW-CW1MW27-11.52	Water	8260C	5/8/14	5/9/14			
R1403443-009	FTMM-22-GW-CW1MW28-10.6	Water	8260C	5/8/14	5/9/14			
R1403443-010	FTMM-EB-05082014	Water	8260C	5/8/14	5/9/14			
R1403443-011	FTMM-TB-05082014	Water	8260C	5/8/14	5/9/14			
R1403443-012	FTMM-DI-05092014	Water	8260C	5/9/14	5/10/14			
R1403443-013	FTMM-EB-05092014	Water	8260C	5/9/14	5/10/14			
R1403443-014	FTMM-TB-05092014	Water	8260C	5/9/14	5/10/14			

Folder Comments:

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

15238 Appendix E

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Project Name: FTMM 2Q2014 GW	Project Number: 7466810-03000
Project Manager: Chris Grill	Report CC:
Company/Address: Parsons, 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: chris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Leizos, Chris Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 1 | 2 | 0

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs + TIC ○ 8260 ○ 624 ○ CLP	GCMS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Dissolved 6020 SIM Chromium	6010C Hex Chromium	7199	REMARKS/ ALTERNATE DESCRIPTION
FTMM-22-GW-CW1MW31-14.3		5/8/14	1235	W	6	X						X				
FTMM-22-GW-CW1MW40-39.45			1355		3							X				
FTMM-22-GW-CW1MW32-16.45			1455									X				
FTMM-22-GW-CW1MW37-11.11			1540									X				
FTMM-22-GW-CW1MW29-10.4			1355		6	X						X				
FTMM-22-GW-CW1MW129-10.4			1415		9	X						X	X	X		
FTMM-22-GW-CW1MW29-10.4-MS			1355			X						X	X	X		
FTMM-22-GW-CW1MW29-10.4-MSD			1355			X						X	X	X		
FTMM-22-GW-CW1MW28I-35.8			1550		6	X						X				
FTMM-22-GW-CW1MW27-11.58			1235		3	X										
FTMM-22-GW-CW1MW28-10.6			1650		6	X						X		X		

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature						
Printed Name	Chris Watson	Gregory O. Emerigan				
Firm	PARSONS	ALS				
Date/Time	5/8/14	5-9-14 9:45				

R1403443 5
Parsons, Inc.
FTMM 2Q2014 GW

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

15237

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PAGE 3 OF 3

Project Name: FTMM 2Q2014 GW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02110	
Phone #: 617-449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Loiacono, Chris Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TIC ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Barium 6010 SIM	Chromium 6020 SIM	Hex Chromium 7199					
FTMM-EB-05052014		5/6/14	1620	W	8	X							X	X	X					
FTMM-TB-05052014		"	—	"	3	X														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature						
Printed Name	Chris Watson	Gregory O. Esmerian				
Firm	Parsons	A2S				
Date/Time	5/8/14	5-9-14 9:45				

R1403443 5
Parsons, Inc.
FTMM 2Q2014 GW

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number 814-3443

Cooler received on 5-9-14 by: ME

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) (NA) ME 5-9-14
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (**Wet Ice**) **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 5-9-14 Time: 10:57 ID: (IR#3) IR#4 From (Temp Blank) Sample Bottle

Observed Temp (°C)	4.7[A]						
Correction Factor (°C)	+0.2						
Corrected Temp (°C)	4.9						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by ME on 5-9-14 at 11:05
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 5/9/14

Cooler Breakdown: Date: 5/9/14 Time: 1944 by: ah

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411210	4/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-003
Other Comments:

PC Secondary Review: JMS 5/14/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

15235 Appendix E

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Project Name: FTMM 2Q2014 GW	Project Number: 744881O-03000
Project Manager: Chris Grill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: chris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: N. Lojos, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ◦ 8260 ◦ 624 ◦ CLP + TIC	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-DI-05092014		5/9/14	1330	W	3	X							
FTMM-EB-05092014		5/9/14	1330	W	3	X							
FTMM-TB-05092014		5/9/14	-	W	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
As per SOW
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature	Signature	Signature	Signature
Printed Name: Chris Watson	Printed Name:	Printed Name	Printed Name	Printed Name	
Firm: PARSONS	Firm: ALS	Firm	Firm	Firm	
Date/Time: 5/9/14	Date/Time: 5/10/14 0845	Date/Time	Date/Time	Date/Time	

R1403443 5
Parsons, Inc.
FTMM 2Q2014 GW

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-3443.

Cooler received on 5/10/14 by: (illegible)

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 5/10/14 Time: 0848 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.0°						
Correction Factor (°C)	+0.1°						
Corrected Temp (°C)	3.1°						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by (illegible) on 5/10/14 at 0849
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: (illegible) 5/12/14

Cooler Breakdown: Date: 5/12/14 Time: 1210 by: (illegible)

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4112120	4/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-003

Other Comments:

headspace: Trip Blank (1 vial)

PC Secondary Review: (illegible) 5/14/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 20:45

Sample Name: FTMM-22-GW-CW1MW31-14.3
Lab Code: R1403443-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 20:45

Sample Name: FTMM-22-GW-CW1MW31-14.3
Lab Code: R1403443-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**6.8**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1235
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 20:45
Sample Name:	FTMM-22-GW-CW1MW31-14.3	**Units:**	µg/L
Lab Code:	R1403443-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 20:45	
Dibromofluoromethane	98	85-115	5/20/14 20:45	
Toluene-d8	96	85-120	5/20/14 20:45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2045

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW31-14.3	**Units:**	µg/L
Lab Code:	R1403443-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 23:27

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\U5784.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.46**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 23:27

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**13**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.55**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1355
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 23:27
Sample Name:	FTMM-22-GW-CW1MW29-10.4	**Units:**	µg/L
Lab Code:	R1403443-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 23:27	
Dibromofluoromethane	99	85-115	5/20/14 23:27	
Toluene-d8	96	85-120	5/20/14 23:27	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2327

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW29-10.4	**Units:**	µg/L
Lab Code:	R1403443-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1415
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:17

Sample Name: FTMM-22-GW-CW1MW129-10.4
Lab Code: R1403443-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.54**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1415
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:17

Sample Name: FTMM-22-GW-CW1MW129-10.4
Lab Code: R1403443-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**13**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.59**	**J**	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1415
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 21:17
Sample Name:	FTMM-22-GW-CW1MW129-10.4	**Units:**	µg/L
Lab Code:	R1403443-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 21:17	
Dibromofluoromethane	99	85-115	5/20/14 21:17	
Toluene-d8	96	85-120	5/20/14 21:17	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2117

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW129-10.4	**Units:**	µg/L
Lab Code:	R1403443-006	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1550
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:49

Sample Name: FTMM-22-GW-CW1MW281-35.8
Lab Code: R1403443-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1550
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:49

Sample Name: FTMM-22-GW-CW1MW281-35.8
Lab Code: R1403443-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\U5781.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**14**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**0.52**	J	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**3.4**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1550
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 21:49
Sample Name:	FTMM-22-GW-CW1MW281-35.8	**Units:**	µg/L
Lab Code:	R1403443-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 21:49	
Dibromofluoromethane	100	85-115	5/20/14 21:49	
Toluene-d8	94	85-120	5/20/14 21:49	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2149

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW281-35.8	**Units:**	µg/L
Lab Code:	R1403443-007	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:22

Sample Name: FTMM-22-GW-CW1MW27-11.52
Lab Code: R1403443-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.0	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1235
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 22:22
Sample Name:	FTMM-22-GW-CW1MW27-11.52	**Units:**	µg/L
Lab Code:	R1403443-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.99**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:22

Sample Name: FTMM-22-GW-CW1MW27-11.52
Lab Code: R1403443-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 22:22	
Dibromofluoromethane	101	85-115	5/20/14 22:22	
Toluene-d8	94	85-120	5/20/14 22:22	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 2222

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW27-11.52
Lab Code: R1403443-008

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1650
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:54

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1650
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:54

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**2.8**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1650
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:54

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 22:54	
Dibromofluoromethane	100	85-115	5/20/14 22:54	
Toluene-d8	95	85-120	5/20/14 22:54	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 2254

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1620
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:04

Sample Name: FTMM-EB-05082014
Lab Code: R1403443-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.6**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1620
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:04

Sample Name: FTMM-EB-05082014
Lab Code: R1403443-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	**0.37**	**J**	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**2.1**	**J**	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1620
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 18:04
Sample Name:	FTMM-EB-05082014	**Units:**	µg/L
Lab Code:	R1403443-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 18:04	
Dibromofluoromethane	98	85-115	5/20/14 18:04	
Toluene-d8	96	85-120	5/20/14 18:04	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 1804

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-05082014	**Units:**	µg/L
Lab Code:	R1403443-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:36

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:36

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:36

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	5/20/14 18:36	
Dibromofluoromethane	99	85-115	5/20/14 18:36	
Toluene-d8	98	85-120	5/20/14 18:36	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 1836

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 20:13

Sample Name: FTMM-DI-05092014
Lab Code: R1403443-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.8**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 20:13

Sample Name: FTMM-DI-05092014
Lab Code: R1403443-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.92**	**J**	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14 1330
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 20:13
Sample Name:	FTMM-DI-05092014	**Units:**	µg/L
Lab Code:	R1403443-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	5/20/14 20:13	
Dibromofluoromethane	98	85-115	5/20/14 20:13	
Toluene-d8	94	85-120	5/20/14 20:13	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 2013

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-DI-05092014	**Units:**	µg/L
Lab Code:	R1403443-012	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:08

Sample Name: FTMM-EB-05092014
Lab Code: R1403443-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\U5776.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14 1330
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 19:08
Sample Name:	FTMM-EB-05092014	**Units:**	µg/L
Lab Code:	R1403443-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.81**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14 1330
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 19:08
Sample Name:	FTMM-EB-05092014	**Units:**	µg/L
Lab Code:	R1403443-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 19:08	
Dibromofluoromethane	98	85-115	5/20/14 19:08	
Toluene-d8	96	85-120	5/20/14 19:08	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 1908

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-05092014	**Units:**	µg/L
Lab Code:	R1403443-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:40

Sample Name: FTMM-TB-05092014
Lab Code: R1403443-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\U5777.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:40

Sample Name: FTMM-TB-05092014
Lab Code: R1403443-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 19:40
Sample Name:	FTMM-TB-05092014	**Units:**	µg/L
Lab Code:	R1403443-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	5/20/14 19:40	
Dibromofluoromethane	97	85-115	5/20/14 19:40	
Toluene-d8	96	85-120	5/20/14 19:40	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 1940

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-05092014	**Units:**	µg/L
Lab Code:	R1403443-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/14 16:28

Sample Name: Method Blank
Lab Code: RQ1405286-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\052014\J5771.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.37	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	5/20/14 16:28
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1405286-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\msvoa12\Data\052014\J5771.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.89**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.32**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	5/20/14 16:28
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1405286-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\msvoa12\Data\052014\J5771.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	5/20/14 16:28	
Dibromofluoromethane	95	85-115	5/20/14 16:28	
Toluene-d8	96	85-120	5/20/14 16:28	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	5/20/14 1628

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1405286-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 - 5/21/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-22-GW-CW1MW29-10.4MS Matrix Spike RQ1405286-05 Result	Spike Amount	% Rec	FTMM-22-GW-CW1MW29-10.4DMS Duplicate Matrix Spike RQ1405286-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	50.9	50.0	102	48.5	50.0	97	80 - 130	5	30
1,1,1-Trichloroethane (TCA)	ND	48.1	50.0	96	46.5	50.0	93	65 - 130	3	30
1,1,2,2-Tetrachloroethane	ND	43.2	50.0	86	40.9	50.0	82	65 - 130	6	30
1,1,2-Trichloroethane	ND	47.7	50.0	95	45.0	50.0	90	75 - 125	6	30
1,1-Dichloroethane (1,1-DCA)	ND	46.8	50.0	94	44.4	50.0	89	70 - 135	5	30
1,1-Dichloroethene (1,1-DCE)	ND	56.0	50.0	112	54.1	50.0	108	70 - 130	4	30
1,1-Dichloropropene	ND	56.4	50.0	113	52.7	50.0	105	75 - 130	7	30
1,2,3-Trichlorobenzene	ND	48.4	50.0	97	48.6	50.0	97	75 - 125	<1	30
1,2,3-Trichloropropane	ND	43.0	50.0	86	40.7	50.0	81	75 - 125	5	30
1,2,4-Trichlorobenzene	0.46	50.4	50.0	100	48.7	50.0	96	65 - 135	3	30
1,2,4-Trimethylbenzene	ND	45.7	50.0	91	42.5	50.0	85	75 - 130	7	30
1,2-Dibromo-3-chloropropane (DBC	ND	51.1	50.0	102	49.8	50.0	100	50 - 130	3	30
1,2-Dibromoethane	ND	49.6	50.0	99	47.1	50.0	94	80 - 120	5	30
1,2-Dichlorobenzene	ND	49.8	50.0	100	46.6	50.0	93	70 - 120	6	30
1,2-Dichloroethane	ND	45.8	50.0	92	43.9	50.0	88	70 - 130	4	30
1,2-Dichloropropane	ND	47.3	50.0	95	44.4	50.0	89	75 - 125	6	30
1,3,5-Trimethylbenzene	ND	46.8	50.0	94	43.3	50.0	86	75 - 130	8	30
1,3-Dichlorobenzene	ND	50.8	50.0	102	48.4	50.0	97	75 - 125	5	30
1,3-Dichloropropane	ND	45.7	50.0	91	44.1	50.0	88	75 - 125	4	30
1,4-Dichlorobenzene	ND	48.3	50.0	97	45.8	50.0	92	75 - 125	5	30
2,2-Dichloropropane	ND	42.2	50.0	84	40.1	50.0	80	70 - 135	5	30
2-Butanone (MEK)	ND	39.8	50.0	80	43.7	50.0	87	30 - 150	9	30
2-Chlorotoluene	ND	47.9	50.0	96	45.6	50.0	91	75 - 125	5	30
2-Hexanone	ND	43.6	50.0	87	45.2	50.0	90	55 - 130	4	30
tert-Butyl Alcohol	ND	934	1000	93	922	1000	92	50 - 150	1	30
4-Chlorotoluene	ND	48.2	50.0	96	45.7	50.0	91	75 - 130	5	30
p-Isopropyltoluene	ND	51.2	50.0	102	48.2	50.0	96	75 - 130	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 - 5/21/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-22-GW-CW1MW29-10.4MS Matrix Spike RQ1405286-05 Result	Spike Amount	% Rec	FTMM-22-GW-CW1MW29-10.4DMS Duplicate Matrix Spike RQ1405286-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND	45.4	50.0	91	46.0	50.0	92	60 - 135	1	30
Acetone	ND	37.8	50.0	76	38.1	50.0	76	40 - 140	<1	30
Benzene	ND	48.7	50.0	97	46.7	50.0	93	80 - 120	4	30
Bromobenzene	ND	47.2	50.0	94	44.5	50.0	89	75 - 125	6	30
Bromochloromethane	ND	47.1	50.0	94	44.4	50.0	89	65 - 130	6	30
Bromodichloromethane	ND	49.5	50.0	99	47.6	50.0	95	75 - 120	4	30
Bromoform	ND	43.0	50.0	86	40.4	50.0	81	70 - 130	6	30
Bromomethane	ND	26.3	50.0	53	33.6	50.0	67	30 - 145	24	30
Carbon Tetrachloride	ND	46.1	50.0	92	45.2	50.0	90	65 - 140	2	30
Chlorobenzene	ND	50.5	50.0	101	47.2	50.0	94	80 - 120	7	30
Chloroethane	ND	56.2	50.0	112	53.2	50.0	106	60 - 135	5	30
Chloroform	ND	47.3	50.0	95	44.7	50.0	89	65 - 135	6	30
Chloromethane	ND	47.6	50.0	95	45.4	50.0	91	40 - 125	5	30
Dibromochloromethane	ND	46.9	50.0	94	45.7	50.0	91	60 - 135	3	30
Dichlorodifluoromethane (CFC 12)	ND	47.5	50.0	95	44.9	50.0	90	30 - 155	6	30
Methylene Chloride	ND	46.8	50.0	94	44.9	50.0	90	55 - 140	4	30
Ethylbenzene	ND	51.1	50.0	102	48.8	50.0	98	75 - 125	5	30
Hexachlorobutadiene	ND	43.9	50.0	88	43.6	50.0	87	50 - 140	<1	30
Isopropylbenzene (Cumene)	ND	50.1	50.0	100	47.0	50.0	94	75 - 125	6	30
Methyl tert-Butyl Ether	ND	47.1	50.0	94	44.7	50.0	89	65 - 125	5	30
Naphthalene	ND	51.7	50.0	103	51.3	50.0	103	55 - 140	<1	30
Styrene	ND	47.4	50.0	95	43.5	50.0	87	65 - 135	9	30
Tetrachloroethene (PCE)	ND	51.6	50.0	103	49.4	50.0	99	45 - 150	4	30
Toluene	ND	50.7	50.0	101	47.6	50.0	95	75 - 120	6	30
Trichloroethene (TCE)	13	66.3	50.0	106	63.8	50.0	101	70 - 125	4	30
Trichlorofluoromethane (CFC 11)	ND	51.3	50.0	103	48.3	50.0	97	60 - 145	6	30
Vinyl Chloride	ND	56.3	50.0	113	54.7	50.0	109	50 - 145	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 - 5/21/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-22-GW-CW1MW29-10.4MS Matrix Spike RQ1405286-05 Result	Spike Amount	% Rec	FTMM-22-GW-CW1MW29-10.4DMS Duplicate Matrix Spike RQ1405286-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.55	49.3	50.0	97	46.7	50.0	92	70 - 125	5	30
cis-1,3-Dichloropropene	ND	46.9	50.0	94	44.2	50.0	88	70 - 130	6	30
m,p-Xylenes	ND	105	100	105	99.0	100	99	75 - 130	6	30
n-Butylbenzene	ND	49.6	50.0	99	46.7	50.0	93	70 - 135	6	30
n-Propylbenzene	ND	49.0	50.0	98	46.3	50.0	93	70 - 130	6	30
o-Xylene	ND	50.4	50.0	101	47.6	50.0	95	80 - 120	6	30
sec-Butylbenzene	ND	50.0	50.0	100	46.8	50.0	94	70 - 125	7	30
tert-Butylbenzene	ND	49.4	50.0	99	46.8	50.0	94	70 - 130	5	30
trans-1,2-Dichloroethene	ND	49.9	50.0	100	48.0	50.0	96	60 - 140	4	30
trans-1,3-Dichloropropene	ND	48.2	50.0	96	46.2	50.0	92	55 - 140	4	30

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Analyzed: 5/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 393182

Lab Control Sample
RQ1405286-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.7	20.0	99	80 - 130
1,1,1-Trichloroethane (TCA)	18.6	20.0	93	65 - 130
1,1,2,2-Tetrachloroethane	16.4	20.0	82	65 - 130
1,1,2-Trichloroethane	17.8	20.0	89	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.8	20.0	94	70 - 135
1,1-Dichloroethene (1,1-DCE)	22.3	20.0	112	70 - 130
1,1-Dichloropropene	21.5	20.0	107	75 - 130
1,2,3-Trichlorobenzene	20.8	20.0	104	75 - 125
1,2,3-Trichloropropane	16.2	20.0	81	75 - 125
1,2,4-Trichlorobenzene	20.6	20.0	103	65 - 135
1,2,4-Trimethylbenzene	20.8	20.0	104	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	19.4	20.0	97	50 - 130
1,2-Dibromoethane	18.1	20.0	90	80 - 120
1,2-Dichlorobenzene	19.4	20.0	97	70 - 120
1,2-Dichloroethane	16.7	20.0	83	70 - 130
1,2-Dichloropropane	18.6	20.0	93	75 - 125
1,3,5-Trimethylbenzene	20.9	20.0	104	75 - 130
1,3-Dichlorobenzene	20.6	20.0	103	75 - 125
1,3-Dichloropropane	17.7	20.0	89	75 - 125
1,4-Dichlorobenzene	19.4	20.0	97	75 - 125
2,2-Dichloropropane	18.9	20.0	95	70 - 135
2-Butanone (MEK)	16.9	20.0	84	30 - 150
2-Chlorotoluene	20.2	20.0	101	75 - 125
2-Hexanone	17.5	20.0	88	55 - 130
tert-Butyl Alcohol	334	400	83	50 - 150
4-Chlorotoluene	20.2	20.0	101	75 - 130
p-Isopropyltoluene	21.8	20.0	109	75 - 130
4-Methyl-2-pentanone	17.3	20.0	87	60 - 135
Acetone	16.1	20.0	81	40 - 140
Benzene	19.2	20.0	96	80 - 120
Bromobenzene	19.1	20.0	96	75 - 125
Bromochloromethane	18.7	20.0	94	65 - 130
Bromodichloromethane	19.7	20.0	98	75 - 120

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ALS Group USA, Corp. dba ALS Environmental

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Analyzed: 5/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 393182

Lab Control Sample
RQ1405286-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.9	20.0	94	70 - 130
Bromomethane	16.5	20.0	82	30 - 145
Carbon Tetrachloride	18.1	20.0	90	65 - 140
Chlorobenzene	19.7	20.0	99	80 - 120
Chloroethane	22.7	20.0	113	60 - 135
Chloroform	18.5	20.0	92	65 - 135
Chloromethane	19.5	20.0	98	40 - 125
Dibromochloromethane	19.2	20.0	96	60 - 135
Dichlorodifluoromethane (CFC 12)	18.0	20.0	90	30 - 155
Methylene Chloride	19.0	20.0	95	55 - 140
Ethylbenzene	20.3	20.0	102	75 - 125
Hexachlorobutadiene	21.7	20.0	108	50 - 140
Isopropylbenzene (Cumene)	21.0	20.0	105	75 - 125
Methyl tert-Butyl Ether	17.8	20.0	89	65 - 125
Naphthalene	21.4	20.0	107	55 - 140
Styrene	20.7	20.0	103	65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99	45 - 150
Toluene	20.1	20.0	101	75 - 120
Trichloroethene (TCE)	21.0	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	23.5	20.0	117	50 - 145
cis-1,2-Dichloroethene	19.3	20.0	97	70 - 125
cis-1,3-Dichloropropene	18.7	20.0	93	70 - 130
m,p-Xylenes	42.6	40.0	106	75 - 130
n-Butylbenzene	21.2	20.0	106	70 - 135
n-Propylbenzene	20.7	20.0	104	70 - 130
o-Xylene	20.3	20.0	101	80 - 120
sec-Butylbenzene	21.5	20.0	107	70 - 125
tert-Butylbenzene	20.6	20.0	103	70 - 130
trans-1,2-Dichloroethene	19.5	20.0	98	60 - 140
trans-1,3-Dichloropropene	19.0	20.0	95	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

June 02, 2014 Service Request No: R1403443

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 2Q2014 GW/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory between May 9, 2014 and May 10, 2014. For your reference, these analyses have been assigned our service request number **R1403443**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 FAX 585-288-8475
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Parsons, Inc.
R1403443

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SDG NARRATIVE

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1403443
Project:	FTMM 2Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	5/09-10/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 5/08-09/14 and received in good condition at cooler temperatures of 3.1-4.9°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Fourteen water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":
- 5/20/14: Bromomethane and 1,2,3-Trichloropropane were >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-22-GW-CW1MW29-10.4 as requested. All MS/MSD recoveries and RPD's were acceptable.

The Method Blanks associated with these samples were free of contamination except the 05/20/14 blank had low level detections for 1,2,4-Trichlorobenzsene, Hexachlorobutadiene and Naphthalene. All affected data has been flagged with a "B".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

00003

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1403443	Diskette Requested: No	Date Due: 6/3/14
Client: Parsons Engineering Science	Date: 5/12/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 2Q2014 GW	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1403443-001	FTMM-22-GW-CW1MW31-14.3	Water	8260C	5/8/14	5/9/14			
R1403443-002	FTMM-22-GW-CW1MW40-39.5	Water	8260C	5/8/14	5/9/14			
R1403443-003	FTMM-22-GW-CW1MW32-16.45	Water	8260C	5/8/14	5/9/14			
R1403443-004	FTMM-22-GW-CW1MW37-11.11	Water	8260C	5/8/14	5/9/14			
R1403443-005QC	FTMM-22-GW-CW1MW29-10.4	Water	8260C	5/8/14	5/9/14			
R1403443-006	FTMM-22-GW-CW1MW129-10.4	Water	8260C	5/8/14	5/9/14			
R1403443-007	FTMM-22-GW-CW1MW281-35.8	Water	8260C	5/8/14	5/9/14			
R1403443-008	FTMM-22-GW-CW1MW27-11.52	Water	8260C	5/8/14	5/9/14			
R1403443-009	FTMM-22-GW-CW1MW28-10.6	Water	8260C	5/8/14	5/9/14			
R1403443-010	FTMM-EB-05082014	Water	8260C	5/8/14	5/9/14			
R1403443-011	FTMM-TB-05082014	Water	8260C	5/8/14	5/9/14			
R1403443-012	FTMM-DI-05092014	Water	8260C	5/9/14	5/10/14			
R1403443-013	FTMM-EB-05092014	Water	8260C	5/9/14	5/10/14			
R1403443-014	FTMM-TB-05092014	Water	8260C	5/9/14	5/10/14			

Folder Comments:

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAINS OF CUSTODY

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

15238

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Project Name: FTMM 2Q2014 GW	Project Number: 7488810-03000
Project Manager: Chris Grill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: chris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Dick Loizeaux, Chris Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 1 | 2 | 0

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TIC. • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	1,4-Dioxane 8260-SIM	Chromium 6010C	Hex Chromium 7199					
FTMM-22-GW-CW1MW31-14.3		5/6/14	1335	W	6	X							X							
FTMM-22-GW-CW1MW40-39.5			1355		3								X							
FTMM-22-GW-CW1MW32-16.45			1455		↓								X							
FTMM-22-GW-CW1MW37-11.11			1540		↓								X							
FTMM-22-GW-CW1MW29-10.4			1355		6	X							X							
FTMM-22-GW-CW1MW129-10.4			1415		9	X							X	X	X					
FTMM-22-GW-CW1MW29-10.4-MS			1355		↓	X							X	X	X					
FTMM-22-GW-CW1MW29-10.4-MSD			1355		↓	X							X	X	X					
FTMM-22-GW-CW1MW28I-35.8			1550		6	X							X							
FTMM-22-GW-CW1MW27-11.58		↓	1235	↓	3	X														
FTMM-22-GW-CW1MW26-10.6			1650		6	X							X		X					

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Chris Watson	Printed Name: Gregory O. Emerian	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 5/8/14	Date/Time: 5/9/14 9:45	Date/Time	Date/Time	Date/Time	Date/Time

R1403443 5
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FTMM 2Q2014 GW

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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Project Name: FTMM 2Q2014 GW	Project Number: 748510-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02110	
Phone #: 617-449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Loicos, Cris Watson

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TIC ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Barium 8260 SIM	Chromium 6Q4 Hex Chromium 7199						
FTMM-EB-05052014		5/5/14	1620	W	8	X							X	X	X					
FTMM-TB-05052014		↓	—	~	3	X														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Cris Watson	Printed Name: Gregory O. Esmerian	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 5/8/14	Date/Time: 5-9-14 9:45	Date/Time	Date/Time	Date/Time	Date/Time

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FTMM 2Q2014 GW

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-3443

Cooler received on 5-9-14 by: ME

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) (NA) ME 5-9-14
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (**Wet Ice**) **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 5-9-14 Time: 10:57 ID: (IR#3) IR#4 From (Temp Blank) Sample Bottle

Observed Temp (°C)	4.7[B]						
Correction Factor (°C)	+0.2[B]						
Corrected Temp (°C)	4.9[B]						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by ME on 5-9-14 at 11:05
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 5/9/14

Cooler Breakdown: Date: 5/9/14 Time: 1944 by: ah

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411220	4/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-003

Other Comments:

PC Secondary Review: JMS 5/14/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 1

Project Name: FTMM 2Q2014 GW	Project Number: 744810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: Cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: N. Lozos, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TIC ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-DI-05092014		5/9/14	1330	W	3	X							
FTMM-EB-05092014		5/9/14	1330	W	3	X							
FTMM-TB-05092014		5/9/14	-	W	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 1 day ___ 2 day ___ 3 day
___ 4 day ___ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
As per SOW
Edata ___ Yes ___ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature	Signature	Signature	Signature
Printed Name: Chris Watson	Printed Name:	Printed Name	Printed Name	Printed Name	Printed Name
Firm: PARSONS	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 5/9/14	Date/Time: 5/10/14 0845	Date/Time	Date/Time	Date/Time	Date/Time

R1403443 5
Parsons, Inc.
FTMM 2Q2014 GW

Distribution: White, Lab Copy; Yellow, Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-3443.

Cooler received on 5/10/14 by: (R)

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 5/10/14 Time: 0848 ID: IR#3 (IR#4) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.0°						
Correction Factor (°C)	+0.1°						
Corrected Temp (°C)	3.1°						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by (R) on 5/10/14 at 0849
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 5/12/14

Cooler Breakdown: Date: 5/12/14 Time: 1210 by: (R)

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4112120 1:1 4/15					

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-003 MS

Other Comments: 5/1/14 CH.

headspace: Trip Blank (1 vial)

PC Secondary Review: JMS 5/14/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1403443-001.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1419	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-001.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-001.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-001.04					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1712	R-001-S07 / BWOJTASIEWICZ	
R1403443-001.05					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-001.06					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-002.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1712	R-001-S07 / BWOJTASIEWICZ	
R1403443-002.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-002.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-003.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	

Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/21/14	1713	R-001-S07 / BWOJTASIEWICZ	
R1403443-003.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-003.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-004.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1713	R-001-S07 / BWOJTASIEWICZ	
R1403443-004.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-004.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.01					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.04					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.05					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.06					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.07					

Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.08					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.09					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1713	R-001-S07 / BWOJTASIEWICZ	
R1403443-005.10					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.11					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.12					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.13					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.14					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.15					
	8260C				
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1419	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-005.16					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.17					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-005.18					
		5/9/14	1946	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	

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Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1403443-006.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1419	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-006.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-006.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-006.04					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1713	R-001-S07 / BWOJTASIEWICZ	
R1403443-006.05					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-006.06					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-007.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-007.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-007.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-007.04					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	

Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/21/14	1713	R-001-S07 / BWOJTASIEWICZ	
R1403443-007.05					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-007.06					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-008.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-008.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-008.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-009.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-009.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-009.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-009.04					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1713	R-001-S07 / BWOJTASIEWICZ	
R1403443-009.05					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	

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ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1403443-009.06					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-010.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-010.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-010.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-010.04					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/21/14	1102	In Lab / BWOJTASIEWICZ	
		5/21/14	1712	R-001-S07 / BWOJTASIEWICZ	
R1403443-010.05					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-010.06					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-011.01					
	8260C				
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-011.02					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-011.03					
		5/9/14	1944	SMO / ROCHESTER SMO	
		5/9/14	1947	R-001 / ROCHESTER SMO	
R1403443-012.01					
	8260C				

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ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-012.02					
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
R1403443-012.03					
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
R1403443-013.01					
	8260C				
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-013.02					
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
R1403443-013.03					
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
R1403443-014.01					
	8260C				
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
		5/19/14	1420	In Lab / KRUEST	
		5/19/14	1422	R-001-S12 / KRUEST	
R1403443-014.02					
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	
R1403443-014.03					
		5/10/14	1239	SMO / GLAFORCE	
		5/12/14	1201	R-001 / GLAFORCE	

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ALS Environmental

VOLATILE ORGANICS QC SUMMARY

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Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 - 5/21/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-22-GW-CW1MW29-10.4MS Matrix Spike RQ1405286-05 Result	Spike Amount	% Rec	FTMM-22-GW-CW1MW29-10.4DMS Duplicate Matrix Spike RQ1405286-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	50.9	50.0	102	48.5	50.0	97	80 - 130	5	30
1,1,1-Trichloroethane (TCA)	ND	48.1	50.0	96	46.5	50.0	93	65 - 130	3	30
1,1,2,2-Tetrachloroethane	ND	43.2	50.0	86	40.9	50.0	82	65 - 130	6	30
1,1,2-Trichloroethane	ND	47.7	50.0	95	45.0	50.0	90	75 - 125	6	30
1,1-Dichloroethane (1,1-DCA)	ND	46.8	50.0	94	44.4	50.0	89	70 - 135	5	30
1,1-Dichloroethene (1,1-DCE)	ND	56.0	50.0	112	54.1	50.0	108	70 - 130	4	30
1,1-Dichloropropene	ND	56.4	50.0	113	52.7	50.0	105	75 - 130	7	30
1,2,3-Trichlorobenzene	ND	48.4	50.0	97	48.6	50.0	97	75 - 125	<1	30
1,2,3-Trichloropropane	ND	43.0	50.0	86	40.7	50.0	81	75 - 125	5	30
1,2,4-Trichlorobenzene	0.46	50.4	50.0	100	48.7	50.0	96	65 - 135	3	30
1,2,4-Trimethylbenzene	ND	45.7	50.0	91	42.5	50.0	85	75 - 130	7	30
1,2-Dibromo-3-chloropropane (DBC	ND	51.1	50.0	102	49.8	50.0	100	50 - 130	3	30
1,2-Dibromoethane	ND	49.6	50.0	99	47.1	50.0	94	80 - 120	5	30
1,2-Dichlorobenzene	ND	49.8	50.0	100	46.6	50.0	93	70 - 120	6	30
1,2-Dichloroethane	ND	45.8	50.0	92	43.9	50.0	88	70 - 130	4	30
1,2-Dichloropropane	ND	47.3	50.0	95	44.4	50.0	89	75 - 125	6	30
1,3,5-Trimethylbenzene	ND	46.8	50.0	94	43.3	50.0	86	75 - 130	8	30
1,3-Dichlorobenzene	ND	50.8	50.0	102	48.4	50.0	97	75 - 125	5	30
1,3-Dichloropropane	ND	45.7	50.0	91	44.1	50.0	88	75 - 125	4	30
1,4-Dichlorobenzene	ND	48.3	50.0	97	45.8	50.0	92	75 - 125	5	30
2,2-Dichloropropane	ND	42.2	50.0	84	40.1	50.0	80	70 - 135	5	30
2-Butanone (MEK)	ND	39.8	50.0	80	43.7	50.0	87	30 - 150	9	30
2-Chlorotoluene	ND	47.9	50.0	96	45.6	50.0	91	75 - 125	5	30
2-Hexanone	ND	43.6	50.0	87	45.2	50.0	90	55 - 130	4	30
tert-Butyl Alcohol	ND	934	1000	93	922	1000	92	50 - 150	1	30
4-Chlorotoluene	ND	48.2	50.0	96	45.7	50.0	91	75 - 130	5	30
p-Isopropyltoluene	ND	51.2	50.0	102	48.2	50.0	96	75 - 130	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 - 5/21/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-22-GW-CW1MW29-10.4MS Matrix Spike RQ1405286-05 Result	Spike Amount	% Rec	FTMM-22-GW-CW1MW29-10.4DMS Duplicate Matrix Spike RQ1405286-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND	45.4	50.0	91	46.0	50.0	92	60 - 135	1	30
Acetone	ND	37.8	50.0	76	38.1	50.0	76	40 - 140	<1	30
Benzene	ND	48.7	50.0	97	46.7	50.0	93	80 - 120	4	30
Bromobenzene	ND	47.2	50.0	94	44.5	50.0	89	75 - 125	6	30
Bromochloromethane	ND	47.1	50.0	94	44.4	50.0	89	65 - 130	6	30
Bromodichloromethane	ND	49.5	50.0	99	47.6	50.0	95	75 - 120	4	30
Bromoform	ND	43.0	50.0	86	40.4	50.0	81	70 - 130	6	30
Bromomethane	ND	26.3	50.0	53	33.6	50.0	67	30 - 145	24	30
Carbon Tetrachloride	ND	46.1	50.0	92	45.2	50.0	90	65 - 140	2	30
Chlorobenzene	ND	50.5	50.0	101	47.2	50.0	94	80 - 120	7	30
Chloroethane	ND	56.2	50.0	112	53.2	50.0	106	60 - 135	5	30
Chloroform	ND	47.3	50.0	95	44.7	50.0	89	65 - 135	6	30
Chloromethane	ND	47.6	50.0	95	45.4	50.0	91	40 - 125	5	30
Dibromochloromethane	ND	46.9	50.0	94	45.7	50.0	91	60 - 135	3	30
Dichlorodifluoromethane (CFC 12)	ND	47.5	50.0	95	44.9	50.0	90	30 - 155	6	30
Methylene Chloride	ND	46.8	50.0	94	44.9	50.0	90	55 - 140	4	30
Ethylbenzene	ND	51.1	50.0	102	48.8	50.0	98	75 - 125	5	30
Hexachlorobutadiene	ND	43.9	50.0	88	43.6	50.0	87	50 - 140	<1	30
Isopropylbenzene (Cumene)	ND	50.1	50.0	100	47.0	50.0	94	75 - 125	6	30
Methyl tert-Butyl Ether	ND	47.1	50.0	94	44.7	50.0	89	65 - 125	5	30
Naphthalene	ND	51.7	50.0	103	51.3	50.0	103	55 - 140	<1	30
Styrene	ND	47.4	50.0	95	43.5	50.0	87	65 - 135	9	30
Tetrachloroethene (PCE)	ND	51.6	50.0	103	49.4	50.0	99	45 - 150	4	30
Toluene	ND	50.7	50.0	101	47.6	50.0	95	75 - 120	6	30
Trichloroethene (TCE)	13	66.3	50.0	106	63.8	50.0	101	70 - 125	4	30
Trichlorofluoromethane (CFC 11)	ND	51.3	50.0	103	48.3	50.0	97	60 - 145	6	30
Vinyl Chloride	ND	56.3	50.0	113	54.7	50.0	109	50 - 145	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 - 5/21/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-22-GW-CW1MW29-10.4MS Matrix Spike RQ1405286-05 Result	Spike Amount	% Rec	FTMM-22-GW-CW1MW29-10.4DMS Duplicate Matrix Spike RQ1405286-06 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.55	49.3	50.0	97	46.7	50.0	92	70 - 125	5	30
cis-1,3-Dichloropropene	ND	46.9	50.0	94	44.2	50.0	88	70 - 130	6	30
m,p-Xylenes	ND	105	100	105	99.0	100	99	75 - 130	6	30
n-Butylbenzene	ND	49.6	50.0	99	46.7	50.0	93	70 - 135	6	30
n-Propylbenzene	ND	49.0	50.0	98	46.3	50.0	93	70 - 130	6	30
o-Xylene	ND	50.4	50.0	101	47.6	50.0	95	80 - 120	6	30
sec-Butylbenzene	ND	50.0	50.0	100	46.8	50.0	94	70 - 125	7	30
tert-Butylbenzene	ND	49.4	50.0	99	46.8	50.0	94	70 - 130	5	30
trans-1,2-Dichloroethene	ND	49.9	50.0	100	48.0	50.0	96	60 - 140	4	30
trans-1,3-Dichloropropene	ND	48.2	50.0	96	46.2	50.0	92	55 - 140	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Analyzed: 5/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 393182

Lab Control Sample
RQ1405286-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.7	20.0	99	80 - 130
1,1,1-Trichloroethane (TCA)	18.6	20.0	93	65 - 130
1,1,2,2-Tetrachloroethane	16.4	20.0	82	65 - 130
1,1,2-Trichloroethane	17.8	20.0	89	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.8	20.0	94	70 - 135
1,1-Dichloroethene (1,1-DCE)	22.3	20.0	112	70 - 130
1,1-Dichloropropene	21.5	20.0	107	75 - 130
1,2,3-Trichlorobenzene	20.8	20.0	104	75 - 125
1,2,3-Trichloropropane	16.2	20.0	81	75 - 125
1,2,4-Trichlorobenzene	20.6	20.0	103	65 - 135
1,2,4-Trimethylbenzene	20.8	20.0	104	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	19.4	20.0	97	50 - 130
1,2-Dibromoethane	18.1	20.0	90	80 - 120
1,2-Dichlorobenzene	19.4	20.0	97	70 - 120
1,2-Dichloroethane	16.7	20.0	83	70 - 130
1,2-Dichloropropane	18.6	20.0	93	75 - 125
1,3,5-Trimethylbenzene	20.9	20.0	104	75 - 130
1,3-Dichlorobenzene	20.6	20.0	103	75 - 125
1,3-Dichloropropane	17.7	20.0	89	75 - 125
1,4-Dichlorobenzene	19.4	20.0	97	75 - 125
2,2-Dichloropropane	18.9	20.0	95	70 - 135
2-Butanone (MEK)	16.9	20.0	84	30 - 150
2-Chlorotoluene	20.2	20.0	101	75 - 125
2-Hexanone	17.5	20.0	88	55 - 130
tert-Butyl Alcohol	334	400	83	50 - 150
4-Chlorotoluene	20.2	20.0	101	75 - 130
p-Isopropyltoluene	21.8	20.0	109	75 - 130
4-Methyl-2-pentanone	17.3	20.0	87	60 - 135
Acetone	16.1	20.0	81	40 - 140
Benzene	19.2	20.0	96	80 - 120
Bromobenzene	19.1	20.0	96	75 - 125
Bromochloromethane	18.7	20.0	94	65 - 130
Bromodichloromethane	19.7	20.0	98	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Analyzed: 5/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 393182

Lab Control Sample
RQ1405286-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.9	20.0	94	70 - 130
Bromomethane	16.5	20.0	82	30 - 145
Carbon Tetrachloride	18.1	20.0	90	65 - 140
Chlorobenzene	19.7	20.0	99	80 - 120
Chloroethane	22.7	20.0	113	60 - 135
Chloroform	18.5	20.0	92	65 - 135
Chloromethane	19.5	20.0	98	40 - 125
Dibromochloromethane	19.2	20.0	96	60 - 135
Dichlorodifluoromethane (CFC 12)	18.0	20.0	90	30 - 155
Methylene Chloride	19.0	20.0	95	55 - 140
Ethylbenzene	20.3	20.0	102	75 - 125
Hexachlorobutadiene	21.7	20.0	108	50 - 140
Isopropylbenzene (Cumene)	21.0	20.0	105	75 - 125
Methyl tert-Butyl Ether	17.8	20.0	89	65 - 125
Naphthalene	21.4	20.0	107	55 - 140
Styrene	20.7	20.0	103	65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99	45 - 150
Toluene	20.1	20.0	101	75 - 120
Trichloroethene (TCE)	21.0	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	23.5	20.0	117	50 - 145
cis-1,2-Dichloroethene	19.3	20.0	97	70 - 125
cis-1,3-Dichloropropene	18.7	20.0	93	70 - 130
m,p-Xylenes	42.6	40.0	106	75 - 130
n-Butylbenzene	21.2	20.0	106	70 - 135
n-Propylbenzene	20.7	20.0	104	70 - 130
o-Xylene	20.3	20.0	101	80 - 120
sec-Butylbenzene	21.5	20.0	107	70 - 125
tert-Butylbenzene	20.6	20.0	103	70 - 130
trans-1,2-Dichloroethene	19.5	20.0	98	60 - 140
trans-1,3-Dichloropropene	19.0	20.0	95	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Analyzed: 5/20/14 16:28

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1405286-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\052014\J5771.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1405286-03	I:\ACQUDATA\msvoa12\Data\052014\J5769.D\	5/20/14 15:25
FTMM-EB-05082014	R1403443-010	I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\	5/20/14 18:04
FTMM-TB-05082014	R1403443-011	I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\	5/20/14 18:36
FTMM-EB-05092014	R1403443-013	I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\	5/20/14 19:08
FTMM-TB-05092014	R1403443-014	I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\	5/20/14 19:40
FTMM-DI-05092014	R1403443-012	I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\	5/20/14 20:13
FTMM-22-GW-CW1MW31-14.3	R1403443-001	I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\	5/20/14 20:45
FTMM-22-GW-CW1MW129-10.4	R1403443-006	I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\	5/20/14 21:17
FTMM-22-GW-CW1MW281-35.8	R1403443-007	I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\	5/20/14 21:49
FTMM-22-GW-CW1MW27-11.52	R1403443-008	I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\	5/20/14 22:22
FTMM-22-GW-CW1MW28-10.6	R1403443-009	I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\	5/20/14 22:54
FTMM-22-GW-CW1MW29-10.4	R1403443-005	I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D\	5/20/14 23:27
FTMM-22-GW-CW1MW29-10.4MS	RQ1405286-05	I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D\	5/20/14 23:59
FTMM-22-GW-CW1MW29-10.4DMS	RQ1405286-06	I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D\	5/21/14 00:32

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443
Date Analyzed: 3/12/14 09:41

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\031214\U3873.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 215801

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.96	83285	Pass
75	95	30	60	49.54	217600	Pass
95	95	100	100	100.00	439232	Pass
96	95	5	9	6.84	30035	Pass
173	174	0	2	1.18	3907	Pass
174	95	50	120	75.24	330475	Pass
175	174	5	9	7.57	25003	Pass
176	174	95	101	100.37	331712	Pass
177	176	5	9	6.54	21696	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3875.D\	3/12/14 10:45	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3876.D\	3/12/14 11:17	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3877.D\	3/12/14 11:49	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3878.D\	3/12/14 12:21	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3879.D\	3/12/14 12:53	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3880.D\	3/12/14 13:26	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3881.D\	3/12/14 13:58	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa12\Data\031214\U3882.D\	3/12/14 14:30	

BFB

```
Data Path : I:\ACQUDATA\msvoa12\Data\031214\
Data File : J3873.D
Acq On    : 12 Mar 2014    9:41 am
Operator  : K.Ruest
Sample    : TUNE
Misc      :
ALS Vial  : 1   Sample Multiplier: 1

Integration File: INTP60.P

Method    : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title     : MS#12 - 8260B WATERS 10mL Purge
Last Update  : Thu Jan 16 12:02:56 2014
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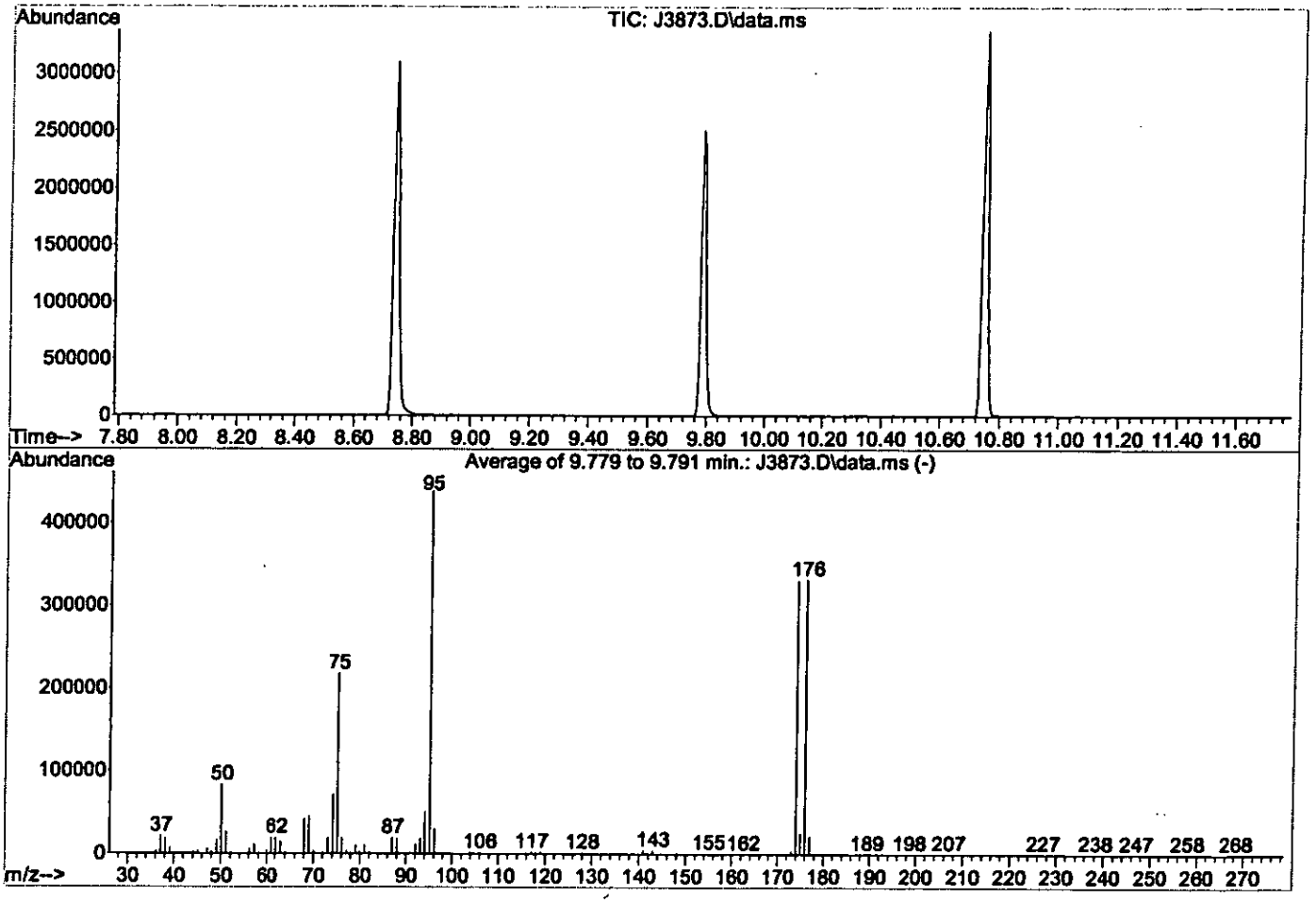
KR 3/12/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	83285	PASS
75	95	30	60	49.5	217600	PASS
95	95	100	100	100.0	439232	PASS
96	95	5	9	6.8	30035	PASS
173	174	0.00	2	1.2	3907	PASS
174	95	50	120	75.2	330475	PASS
175	174	5	9	7.6	25003	PASS
176	174	95	101	100.4	331712	PASS
177	176	5	9	6.5	21696	PASS

W031214.M Wed Mar 12 10:00:02 2014 Page: 1

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443
Date Analyzed: 5/20/14 14:21

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\052014\J5767.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 393182

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.70	80019	Pass
75	95	30	60	45.94	220096	Pass
95	95	100	100	100.00	479125	Pass
96	95	5	9	6.43	30824	Pass
173	174	0	2	0.97	4073	Pass
174	95	50	120	87.81	420715	Pass
175	174	5	9	7.18	30208	Pass
176	174	95	101	96.74	407019	Pass
177	176	5	9	6.71	27291	Pass

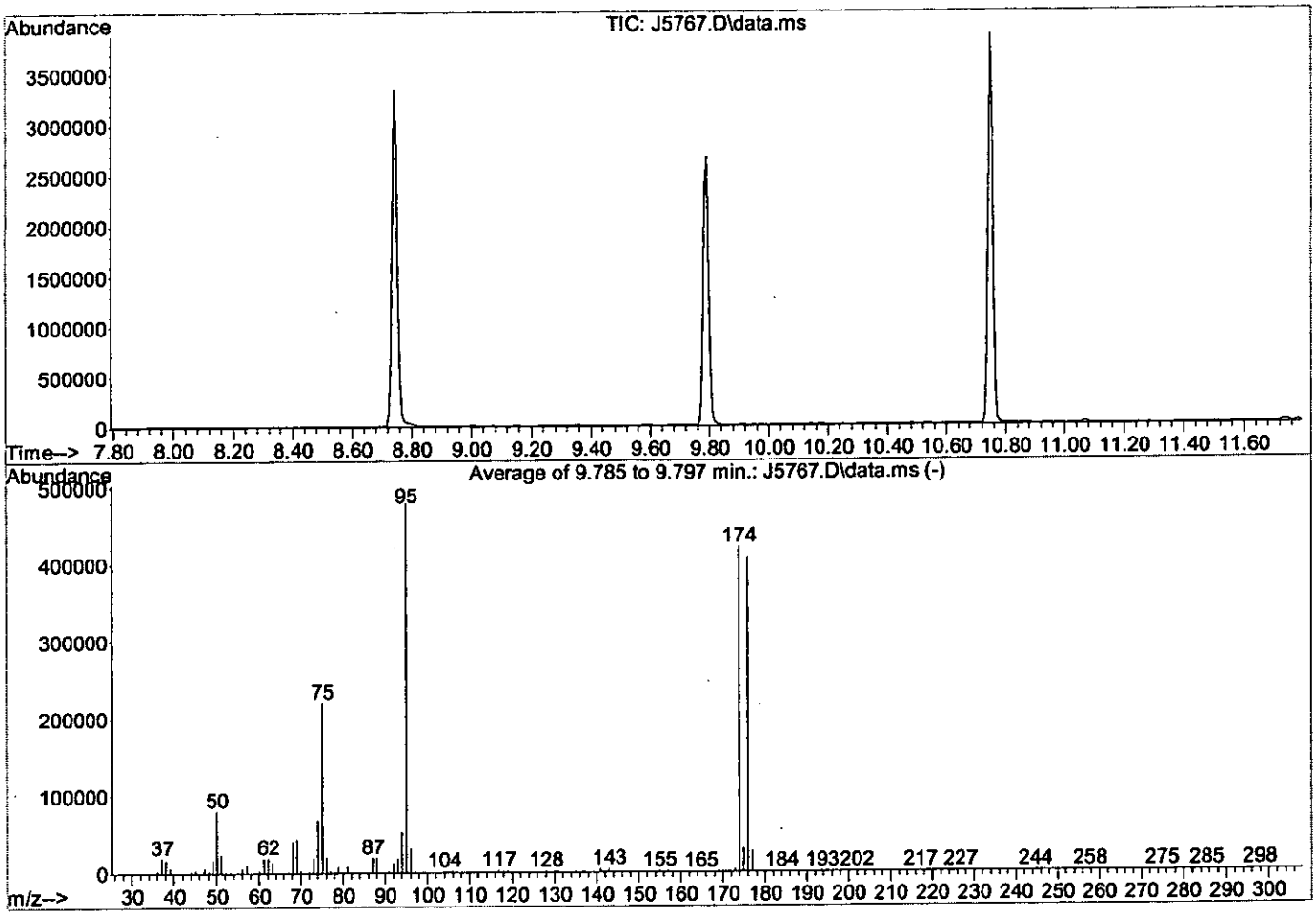
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1405286-02	I:\ACQUDATA\msvoa12\Data\052014\J5768.D\	5/20/14 14:53	
Lab Control Sample	RQ1405286-03	I:\ACQUDATA\msvoa12\Data\052014\J5769.D\	5/20/14 15:25	
Method Blank	RQ1405286-04	I:\ACQUDATA\msvoa12\Data\052014\J5771.D\	5/20/14 16:28	
FTMM-EB-05082014	R1403443-010	I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\	5/20/14 18:04	
FTMM-TB-05082014	R1403443-011	I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\	5/20/14 18:36	
FTMM-EB-05092014	R1403443-013	I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\	5/20/14 19:08	
FTMM-TB-05092014	R1403443-014	I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\	5/20/14 19:40	
FTMM-DI-05092014	R1403443-012	I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\	5/20/14 20:13	
FTMM-22-GW-CW1MW31-14.3	R1403443-001	I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\	5/20/14 20:45	
FTMM-22-GW-CW1MW129-10.4	R1403443-006	I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\	5/20/14 21:17	
FTMM-22-GW-CW1MW281-35.8	R1403443-007	I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\	5/20/14 21:49	
FTMM-22-GW-CW1MW27-11.52	R1403443-008	I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\	5/20/14 22:22	
FTMM-22-GW-CW1MW28-10.6	R1403443-009	I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\	5/20/14 22:54	
FTMM-22-GW-CW1MW29-10.4	R1403443-005	I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D\	5/20/14 23:27	
FTMM-22-GW-CW1MW29-10.4MS	RQ1405286-05	I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D\	5/20/14 23:59	
FTMM-22-GW-CW1MW29-10.4DMS	RQ1405286-06	I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D\	5/21/14 00:32	

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5767.D
Acq On : 20 May 2014 2:21 pm
Operator : K.Ruest
Sample : TUNE RQM052486-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

KR 5/20/14

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon May 19 11:05:50 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	80019	PASS
75	95	30	60	45.9	220096	PASS
95	95	100	100	100.0	479125	PASS
96	95	5	9	6.4	30824	PASS
173	174	0.00	2	1.0	4073	PASS
174	95	50	120	87.8	420715	PASS
175	174	5	9	7.2	30208	PASS
176	174	95	101	96.7	407019	PASS
177	176	5	9	6.7	27291	PASS

W031214.M Tue May 20 14:46:08 2014 Page: 1

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443
Date Analyzed: 5/20/14 14:53

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\052014\J5768.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1405286-02
Analysis Lot: 393182
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		781,841	10.75	1,578,743	5.45	1,500,658	8.74
Upper Limit ==>		1,563,682	11.25	3,157,486	5.95	3,001,316	9.24
Lower Limit ==>		390,921	10.25	789,372	4.95	750,329	8.24
ICAL Result ==>		670,106	10.75	1,455,324	5.45	1,331,361	8.74
Associated Analyses							
Lab Control Sample	RQ1405286-03	769,037	10.75	1,620,876	5.45	1,494,414	8.74
Method Blank	RQ1405286-04	757,186	10.75	1,622,016	5.45	1,483,109	8.74
FTMM-EB-05082014	R1403443-010	723,436	10.75	1,573,987	5.45	1,469,899	8.74
FTMM-TB-05082014	R1403443-011	738,937	10.75	1,551,541	5.45	1,451,131	8.74
FTMM-EB-05092014	R1403443-013	724,677	10.75	1,551,660	5.45	1,443,544	8.74
FTMM-TB-05092014	R1403443-014	724,000	10.75	1,553,410	5.45	1,435,264	8.74
FTMM-DI-05092014	R1403443-012	727,758	10.75	1,537,454	5.45	1,424,011	8.74
FTMM-22-GW-CW1MW31-14.3	R1403443-001	727,178	10.75	1,508,481	5.45	1,396,623	8.74
FTMM-22-GW-CW1MW129-10.4	R1403443-006	715,502	10.75	1,517,122	5.45	1,409,257	8.74
FTMM-22-GW-CW1MW281-35.8	R1403443-007	720,348	10.75	1,473,385	5.45	1,373,507	8.74
FTMM-22-GW-CW1MW27-11.52	R1403443-008	712,158	10.75	1,480,124	5.45	1,366,181	8.74
FTMM-22-GW-CW1MW28-10.6	R1403443-009	701,266	10.75	1,463,863	5.45	1,362,363	8.74
FTMM-22-GW-CW1MW29-10.4	R1403443-005	702,146	10.75	1,457,750	5.45	1,353,541	8.74
FTMM-22-GW-CW1MW29-10.4MS	RQ1405286-05	746,416	10.75	1,455,814	5.45	1,368,835	8.74
FTMM-22-GW-CW1MW29-10.4DMS	RQ1405286-06	761,207	10.75	1,481,585	5.45	1,389,839	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443
Date Analyzed: 5/20/14 14:53

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\052014\J5768.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1405286-02
Analysis Lot: 393182
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	1,034,921	4.25
	Upper Limit ==>	2,069,842	4.75
	Lower Limit ==>	517,461	3.75
	ICAL Result ==>	937,657	4.25
Associated Analyses			
Lab Control Sample	RQ1405286-03	1,039,917	4.25
Method Blank	RQ1405286-04	1,037,138	4.25
FTMM-EB-05082014	R1403443-010	1,018,751	4.25
FTMM-TB-05082014	R1403443-011	1,012,574	4.25
FTMM-EB-05092014	R1403443-013	1,007,392	4.25
FTMM-TB-05092014	R1403443-014	1,010,393	4.25
FTMM-DI-05092014	R1403443-012	987,147	4.25
FTMM-22-GW-CW1MW31-14.3	R1403443-001	984,933	4.25
FTMM-22-GW-CW1MW129-10.4	R1403443-006	967,545	4.25
FTMM-22-GW-CW1MW281-35.8	R1403443-007	970,480	4.25
FTMM-22-GW-CW1MW27-11.52	R1403443-008	969,613	4.25
FTMM-22-GW-CW1MW28-10.6	R1403443-009	967,559	4.25
FTMM-22-GW-CW1MW29-10.4	R1403443-005	936,454	4.25
FTMM-22-GW-CW1MW29-10.4MS	RQ1405286-05	954,515	4.25
FTMM-22-GW-CW1MW29-10.4DMS	RQ1405286-06	967,373	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00032

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 20:45

Sample Name: FTMM-22-GW-CW1MW31-14.3
Lab Code: R1403443-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 20:45

Sample Name: FTMM-22-GW-CW1MW31-14.3
Lab Code: R1403443-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**6.8**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1235
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 20:45
Sample Name:	FTMM-22-GW-CW1MW31-14.3	**Units:**	µg/L
Lab Code:	R1403443-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 20:45	
Dibromofluoromethane	98	85-115	5/20/14 20:45	
Toluene-d8	96	85-120	5/20/14 20:45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2045

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW31-14.3	**Units:**	µg/L
Lab Code:	R1403443-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 8:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 21:00:33 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	984933	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1508481	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1396623	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	727178	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	428460	49.06	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.12%			
48) surr1,1,2-dichloroetha...	4.664	65	456481	45.89	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.78%			
65) SURR3,Toluene-d8	7.322	98	1753786	47.79	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.58%			
70) SURR2,BFB	9.791	95	677720	49.50	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.00%			
Target Compounds						Qvalue
12) Acrolein	1.939	56	203	Below Cal	#	17
15) Acetone	2.048	43	1193	0.61	ppb	87
16) 2-Propanol	2.134	45	243	0.77	ppb #	55
19) Acetonitrile	2.170	40	543	1.70	ppb #	6
20) Allyl Chloride	2.207	76	1735	0.35	ppb #	1
54) Trichloroethene	5.828	130	60962	6.78	ppb	94
90) Cyclohexanone	9.791	55	1338	2.29	ppb #	29

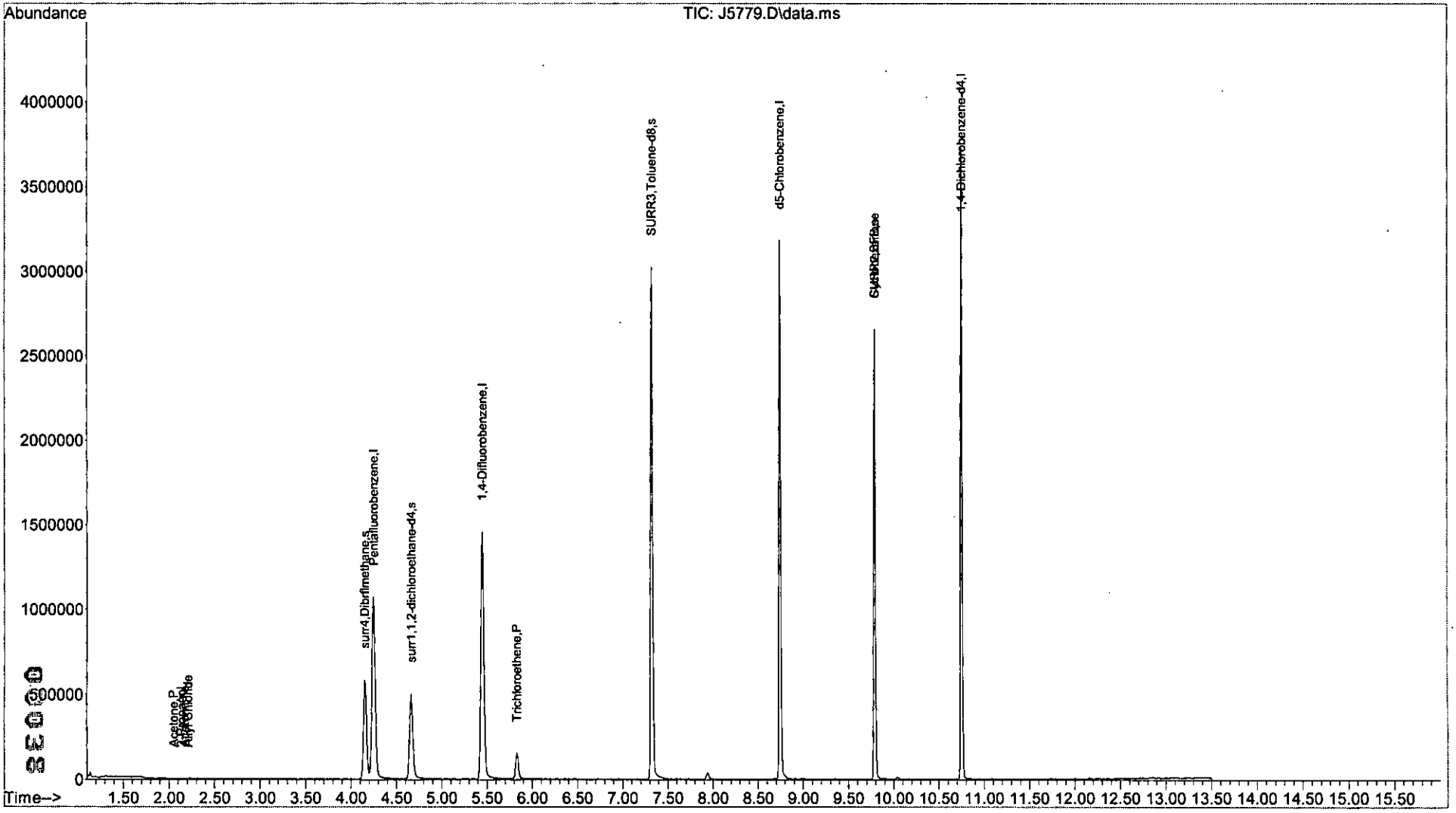
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 5/21/14

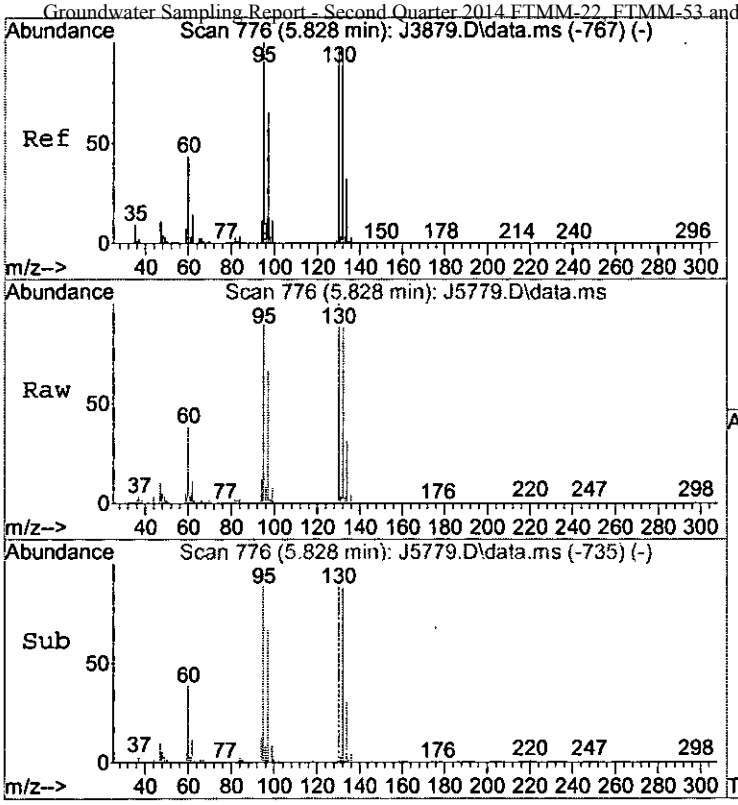
Quantitation Report (Not Reviewed)

Sample : R1403443-001|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5779.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 8:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 21:00:33 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



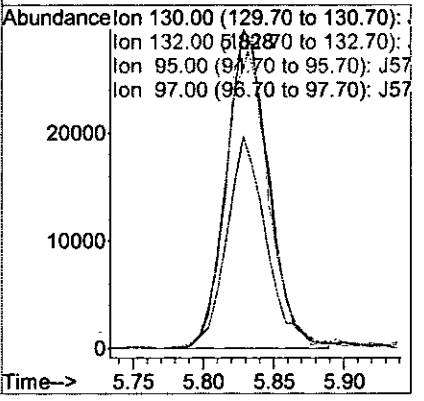
W031214.M Tue May 20 21:00:36 2014 Page: 2



#54
Trichloroethene
Concen: 6.78 ppb
RT: 5.828 min Scan# 776
Delta R.T. -0.000 min
Lab File: J5779.D
Acq: 20 May 2014 8:45 pm

Tgt Ion:130 Resp: 60962

Ion	Ratio	Lower	Upper
130	100		
132	88.0	78.3	118.3
95	97.8	83.0	123.0
97	66.7	47.3	87.3



J5779.D W031214.M Wed May 21 17:48:32 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5779.D
Acq On : 20 May 2014 8:45 pm
Operator : K.Ruest
Sample : R1403443-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5779.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	580198	1376184	30.24%	5.467%
2	4.249	509	517	531	rVB	1060939	2631395	57.83%	10.454%
3	4.664	576	585	603	rBV	497354	1263646	27.77%	5.020%
4	5.450	702	714	728	rBV	1456956	3366564	73.98%	13.374%
5	5.828	767	776	785	rBV2	152690	335702	7.38%	1.334%
6	7.322	1013	1021	1037	rBV	3021069	4550370	100.00%	18.077%
7	7.938	1117	1122	1130	rVB3	38181	71779	1.58%	0.285%
8	8.742	1249	1254	1271	rBV	3177012	4091078	89.91%	16.253%
9	9.791	1421	1426	1438	rBV	2653533	3213137	70.61%	12.765%
10	10.748	1578	1583	1592	rBV	3722625	4271937	93.88%	16.971%

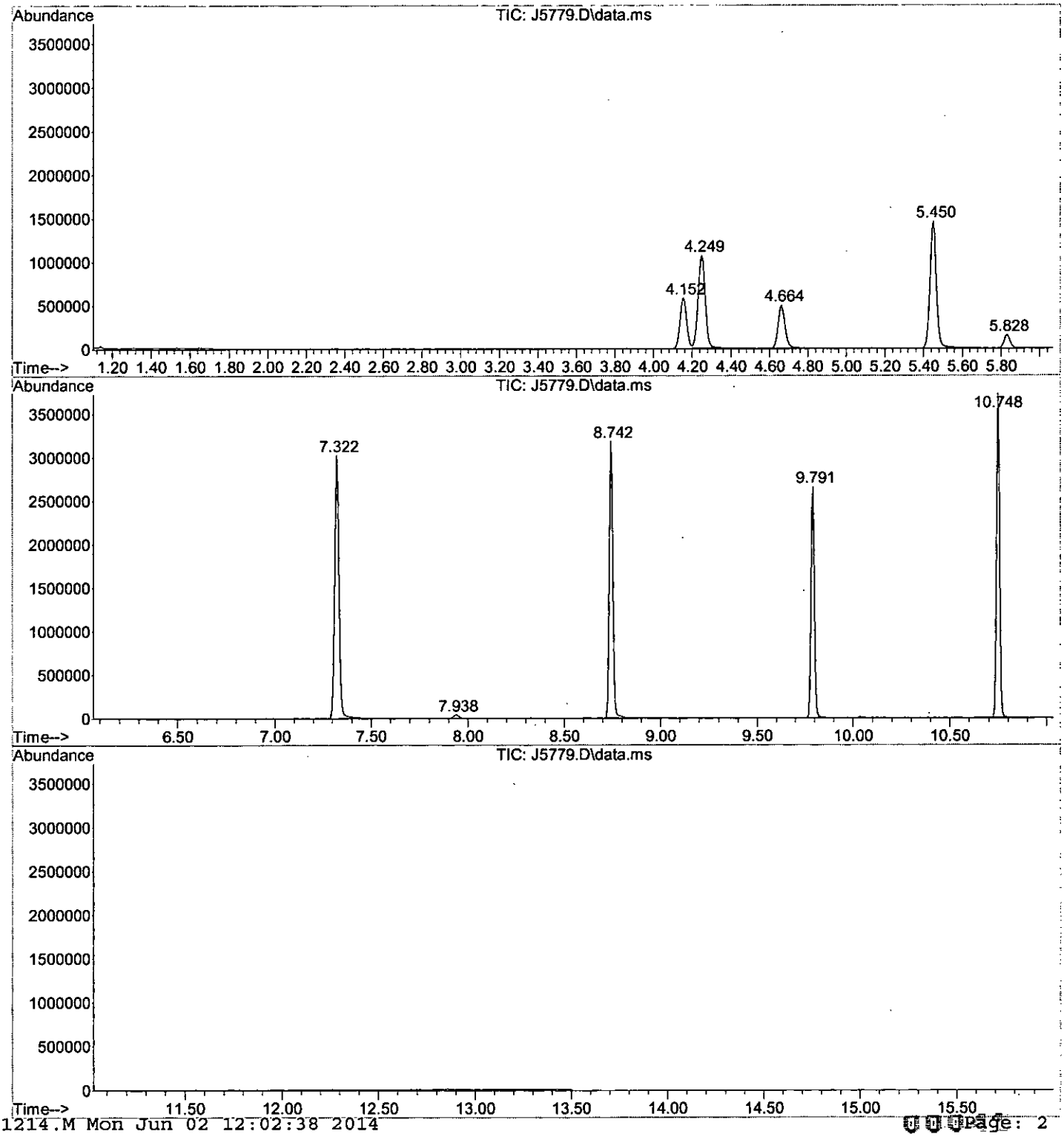
Sum of corrected areas: 25171792

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5779.D
Acq On : 20 May 2014 8:45 pm
Operator : K.Ruest
Sample : R1403443-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:02:38 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5779.D
Acq On : 20 May 2014 8:45 pmm
Operator : K.Ruestt
Sample : R1403443-001|1.00
Misc : PARSONS 11603 T44
ALS Vial : 8 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 23:27

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.46**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 23:27

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**13**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.55**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1355
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 23:27
Sample Name:	FTMM-22-GW-CW1MW29-10.4	**Units:**	µg/L
Lab Code:	R1403443-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\U5784.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 23:27	
Dibromofluoromethane	99	85-115	5/20/14 23:27	
Toluene-d8	96	85-120	5/20/14 23:27	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 2327

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: R1403443-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:27 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 23:42:24 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	936454	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1457750	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1353541	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	702146	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	417665	49.49	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.98%				
48) surr1,1,2-dichloroetha...	4.664	65	438849	45.65	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.30%				
65) SURR3,Toluene-d8	7.322	98	1695169	47.80	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.60%				
70) SURR2,BFB	9.791	95	653625	49.40	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.80%				
Target Compounds							Qvalue
15) Acetone	2.042	43	1416	0.76	ppb	#	55
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1334~~	~~0.29~~	~~ppb~~	~~#~~	~~1~~
34) cis-1,2-Dichloroethene	3.542	96	5210	0.55	ppb		89
54) Trichloroethene	5.834	130	116479	13.40	ppb		93
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1514~~	~~2.69~~	~~ppb~~	~~#~~	~~28~~
115) 1,2,4-Tcbenzene	12.162	180	4711	0.46	ppb	#	64

(#) = qualifier out of range (m) = manual integration (+) = signals summed

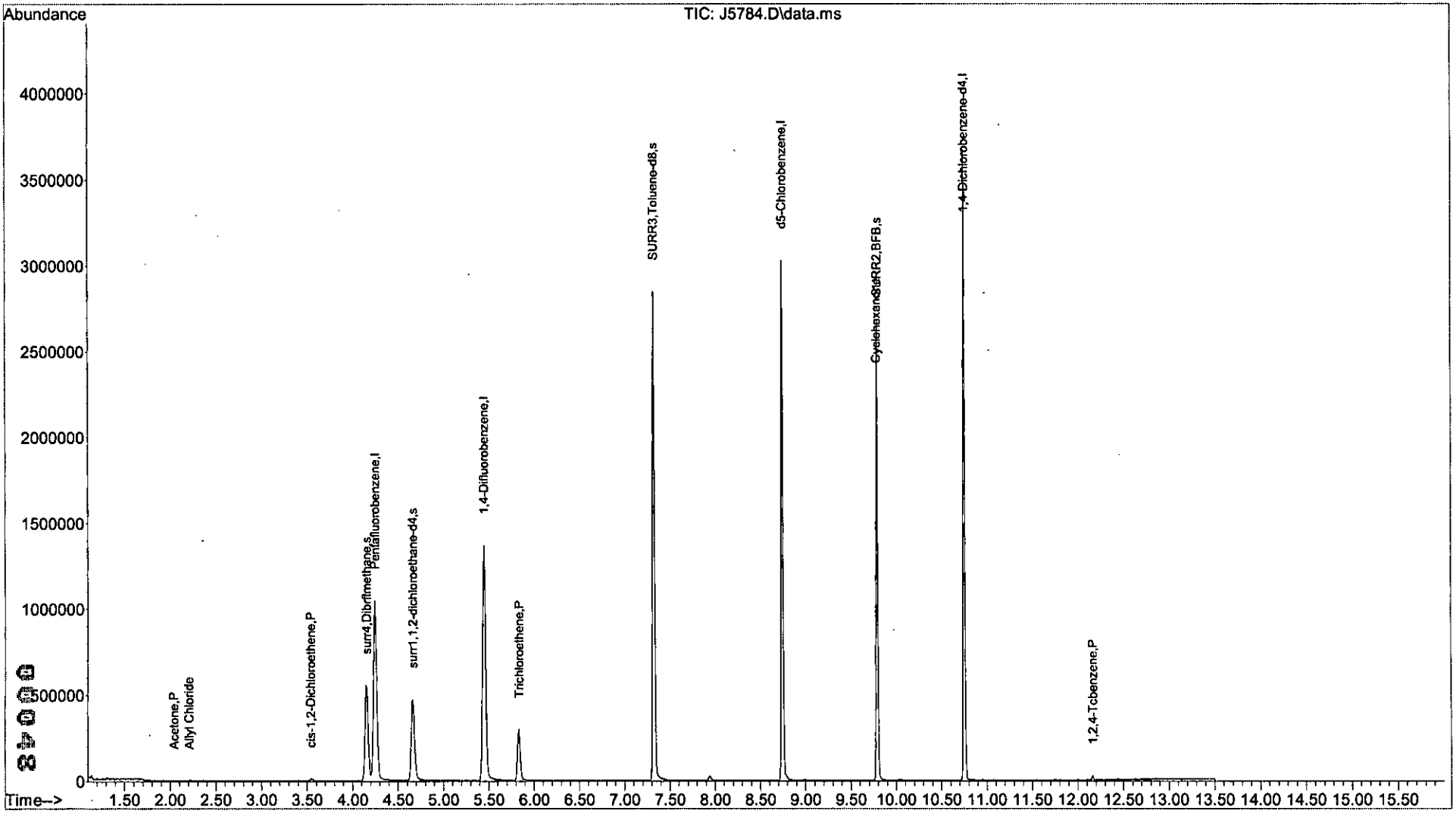
KR 5/22/14

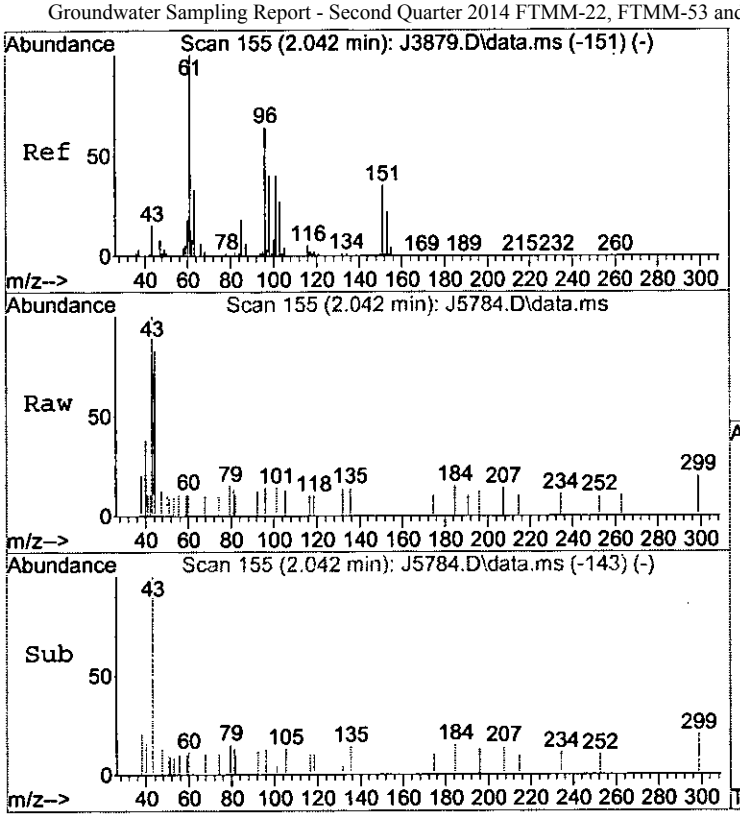
EL 5/24/14

Quantitation Report (Not Reviewed)

Sample : R1403443-005|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5784.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:27 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 23:42:24 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

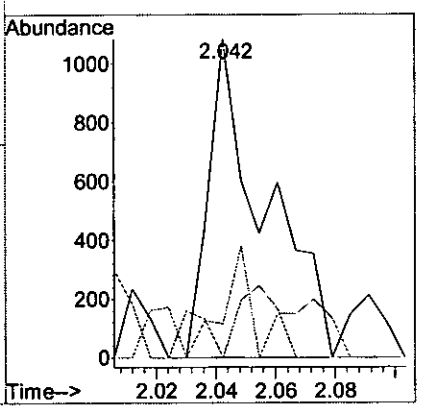


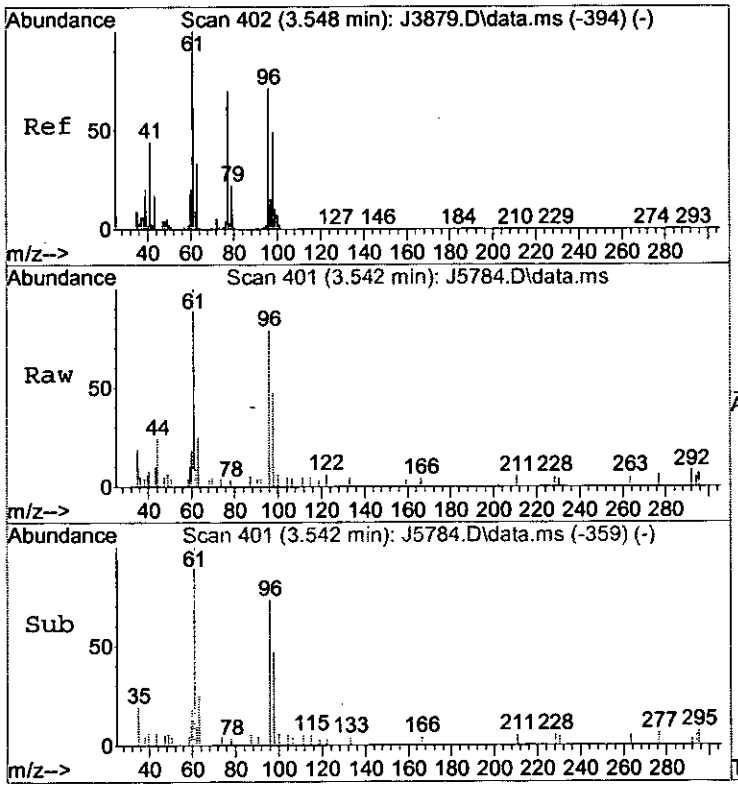


#15
Acetone
Concen: 0.76 ppb
RT: 2.042 min Scan# 155
Delta R.T. 0.000 min
Lab File: J5784.D
Acq: 20 May 2014 11:27 pm

Tgt Ion: 43 Resp: 1416

Ion	Ratio	Lower	Upper
43	100		
58	0.0	9.7	49.7#
42	10.7	0.0	27.9

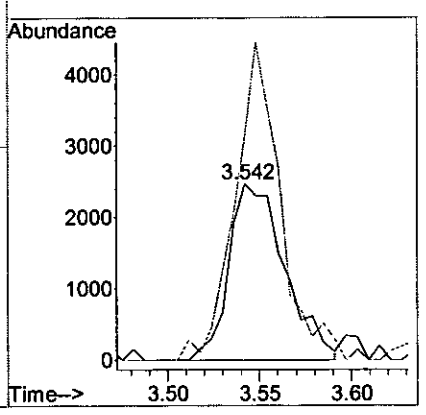


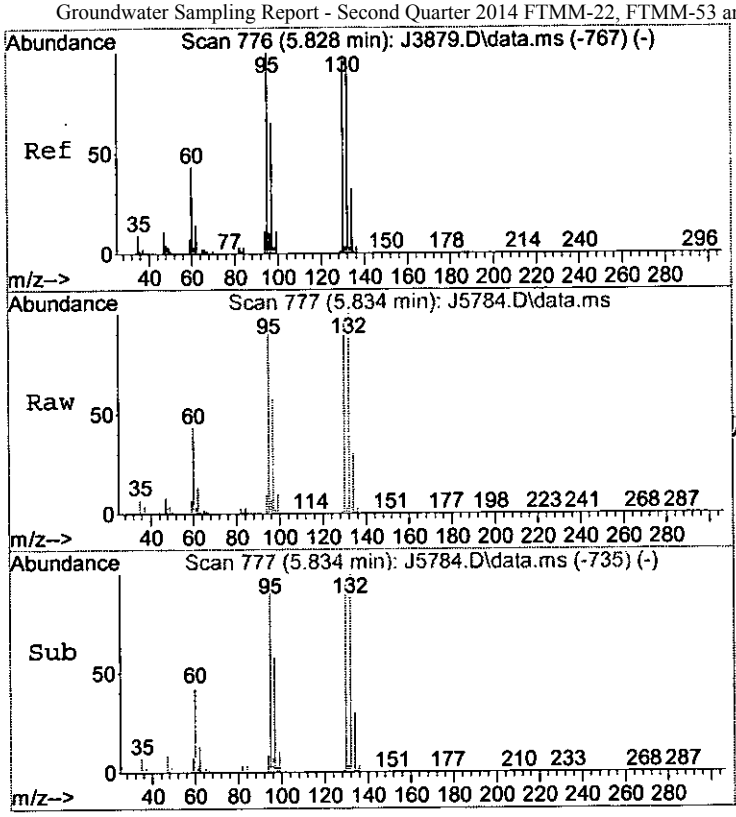


#34
cis-1,2-Dichloroethene
Concen: 0.55 ppb
RT: 3.542 min Scan# 401
Delta R.T. 0.000 min
Lab File: J5784.D
Acq: 20 May 2014 11:27 pm

Tgt Ion: 96 Resp: 5210

Ion	Ratio	Lower	Upper
96	100		
61	126.9	120.1	160.1

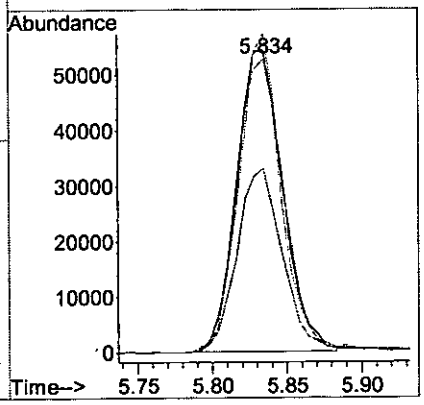


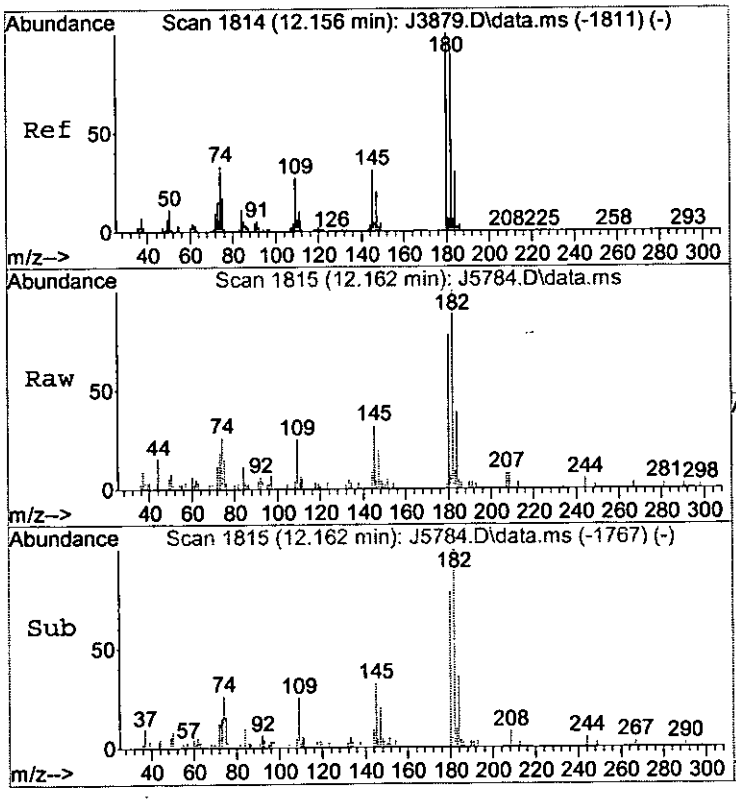


#54
Trichloroethene
Concen: 13.40 ppb
RT: 5.834 min Scan# 777
Delta R.T. 0.006 min
Lab File: J5784.D
Acq: 20 May 2014 11:27 pm

Tgt Ion:130 Resp: 116479

Ion	Ratio	Lower	Upper
130	100		
132	105.3	78.3	118.3
95	97.0	83.0	123.0
97	60.9	47.3	87.3

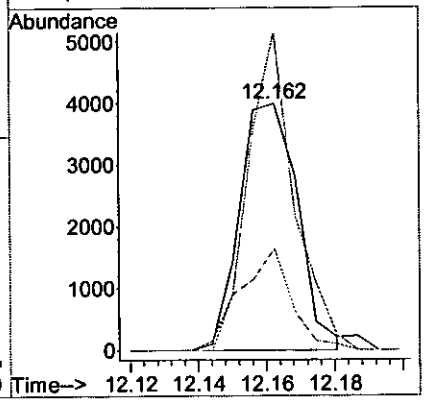




#115
1,2,4-Tcbenzene
Concen: 0.46 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: J5784.D
Acq: 20 May 2014 11:27 pm

Tgt Ion:180 Resp: 4711

Ion	Ratio	Lower	Upper
180	100		
182	129.0	72.2	112.2#
145	46.3	11.4	51.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5784.D
Acq On : 20 May 2014 11:27 pm
Operator : K.Ruest
Sample : R1403443-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5784.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	554454	1332178	30.72%	5.429%
2	4.249	509	517	534	rVB	1039053	2557991	58.99%	10.425%
3	4.664	573	585	598	rBV2	468443	1224258	28.23%	4.989%
4	5.450	704	714	727	rBV	1370021	3213538	74.10%	13.097%
5	5.834	769	777	788	rBV	298889	634312	14.63%	2.585%
6	7.322	1015	1021	1030	rBV	2843428	4336558	100.00%	17.673%
7	7.944	1117	1123	1132	rVB3	25402	48491	1.12%	0.198%
8	8.742	1249	1254	1270	rBV	3024528	3941440	90.89%	16.063%
9	9.791	1421	1426	1436	rBV	2630262	3123500	72.03%	12.730%
10	10.748	1578	1583	1595	rBV	3668938	4125081	95.12%	16.811%

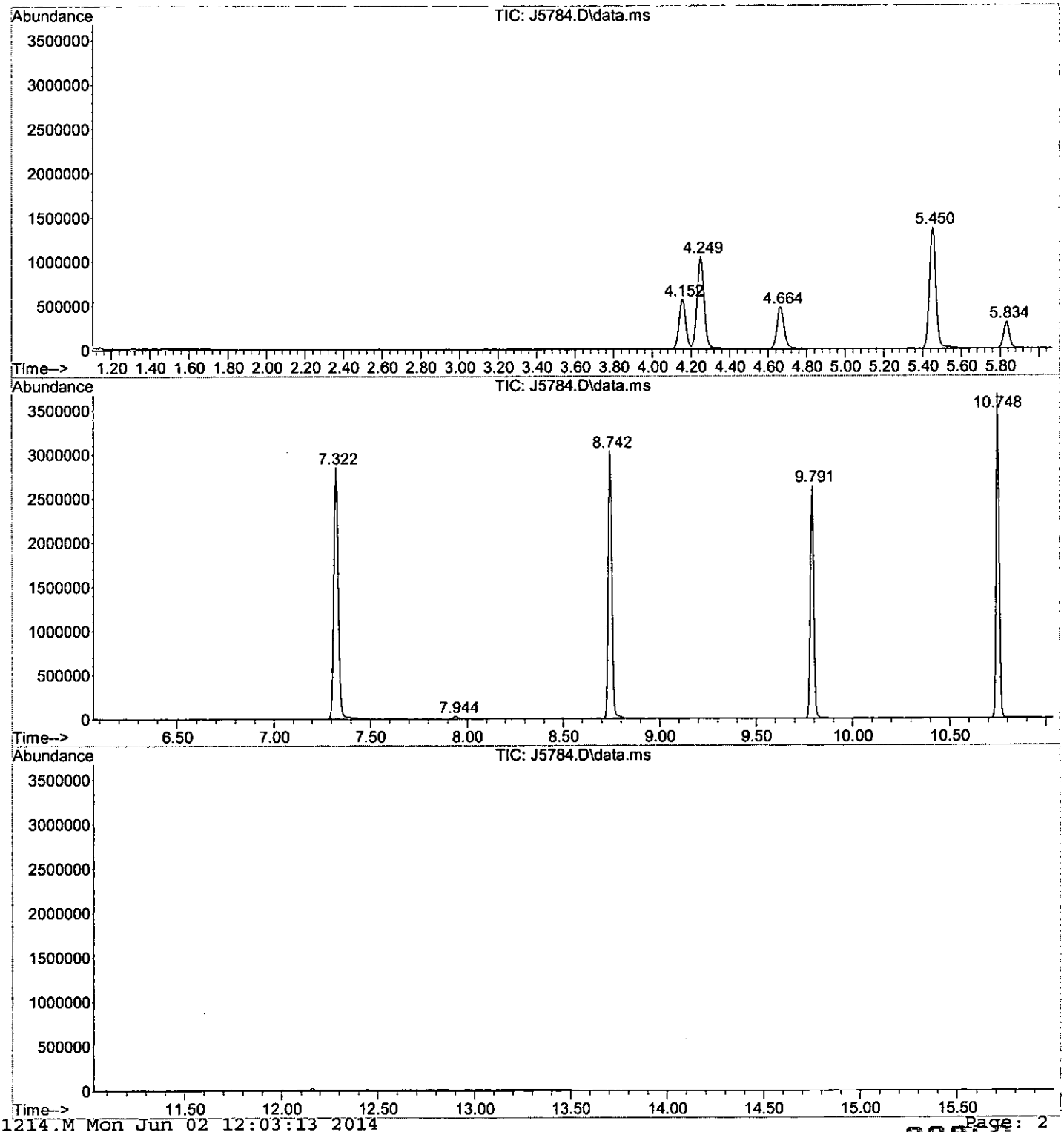
Sum of corrected areas: 24537347

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5784.D
Acq On : 20 May 2014 11:27 pm
Operator : K.Ruest
Sample : R1403443-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:03:13 2014 Page: 2

00051

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5784.D
Acq On : 20 May 2014 11:27 pmm
Operator : K.Ruestt
Sample : R1403443-005|1.00
Misc : PARSONS 11603 T44
ALS Vial : 13 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

W031214.M Mon Jun 02 12:03:13 2014 Page: 3

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1415
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:17

Sample Name: FTMM-22-GW-CW1MW129-10.4
Lab Code: R1403443-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.54**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1415
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:17

Sample Name: FTMM-22-GW-CW1MW129-10.4
Lab Code: R1403443-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**13**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.59**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1415
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 21:17
Sample Name:	FTMM-22-GW-CW1MW129-10.4	**Units:**	µg/L
Lab Code:	R1403443-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 21:17	
Dibromofluoromethane	99	85-115	5/20/14 21:17	
Toluene-d8	96	85-120	5/20/14 21:17	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/8/14
Date Received: 5/9/14
Date Analyzed: 5/20/14 2117

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW129-10.4
Lab Code: R1403443-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-006|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 9:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 21:32:42 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	967545	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1517122	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1409257	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	715502	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	436289	49.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.36%				
48) surr1,1,2-dichloroetha...	4.658	65	456602	45.64	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.28%				
65) SURR3,Toluene-d8	7.322	98	1773601	48.06	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.12%				
70) SURR2,BFB	9.791	95	680959	49.46	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.92%				
Target Compounds							Qvalue
~~15) Acetone~~	~~2.012~~	~~43~~	~~448~~	~~0.23~~	~~ppb~~		~~84~~
~~16) 2-Propanol~~	~~2.030~~	~~45~~	~~264~~	~~0.85~~	~~ppb~~		~~64~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1771~~	~~0.37~~	~~ppb~~	~~#~~	~~1~~
34) cis-1,2-Dichloroethene	3.548	96	5823	0.59	ppb	#	79
54) Trichloroethene	5.828	130	119179	13.17	ppb		92
~~90) Cyclohexanone~~	~~9.724~~	~~55~~	~~269~~	~~0.47~~	~~ppb~~	~~#~~	~~14~~
115) 1,2,4-Tcbenzene	12.156	180	9674 ~~5157~~	0.54 ~~0.49~~	ppb	m	90

KR 5/21/14

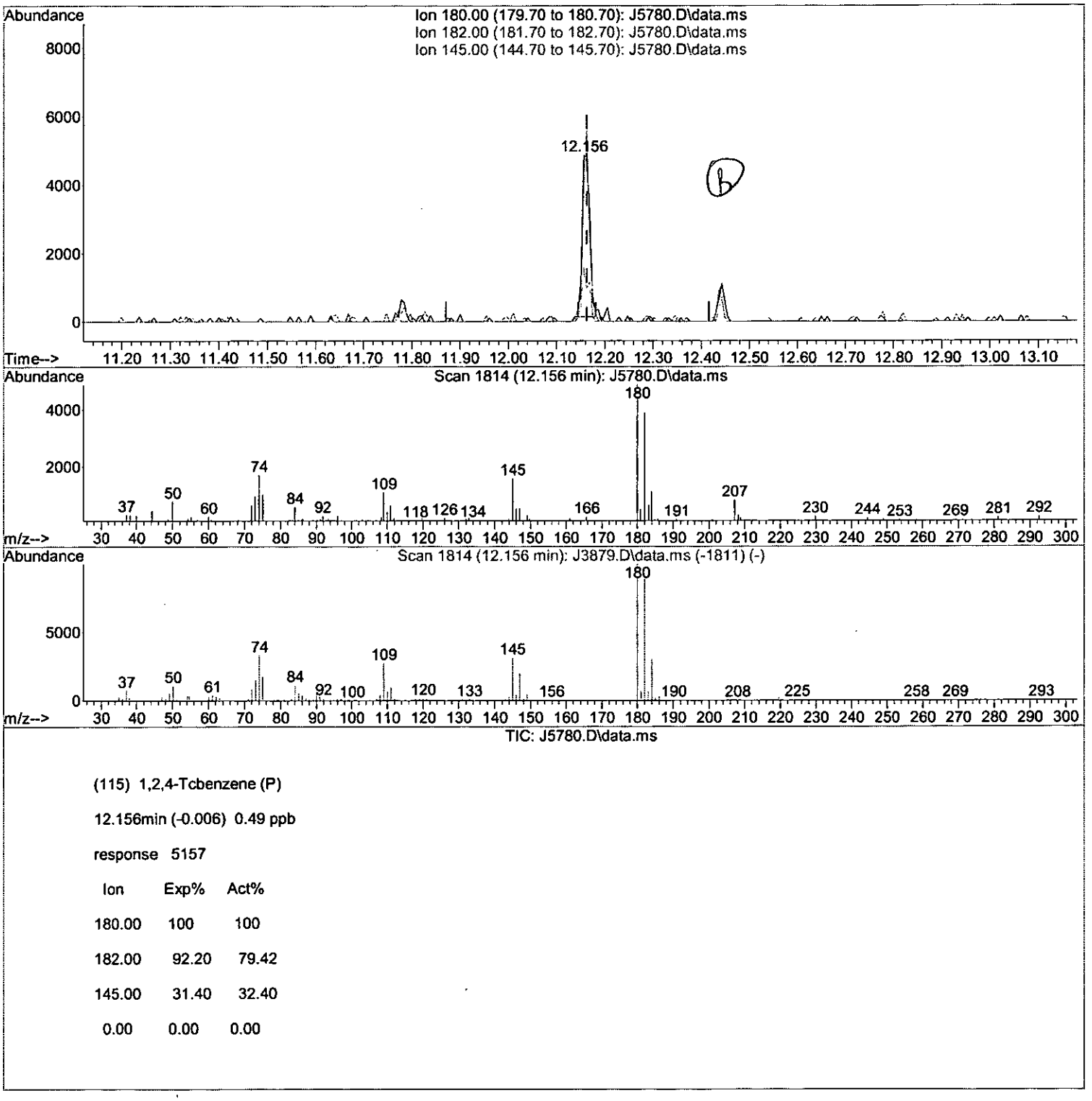
(#) = qualifier out of range (m) = manual integration (+) = signals summed

00958

Quantitation Report (Qedit)

Sample : R1403443-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5780.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 9:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 21:32:42 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



TIC: J5780.D\data.ms

(115) 1,2,4-Tcbenzene (P)

12.156min (-0.006) 0.49 ppb

response 5157

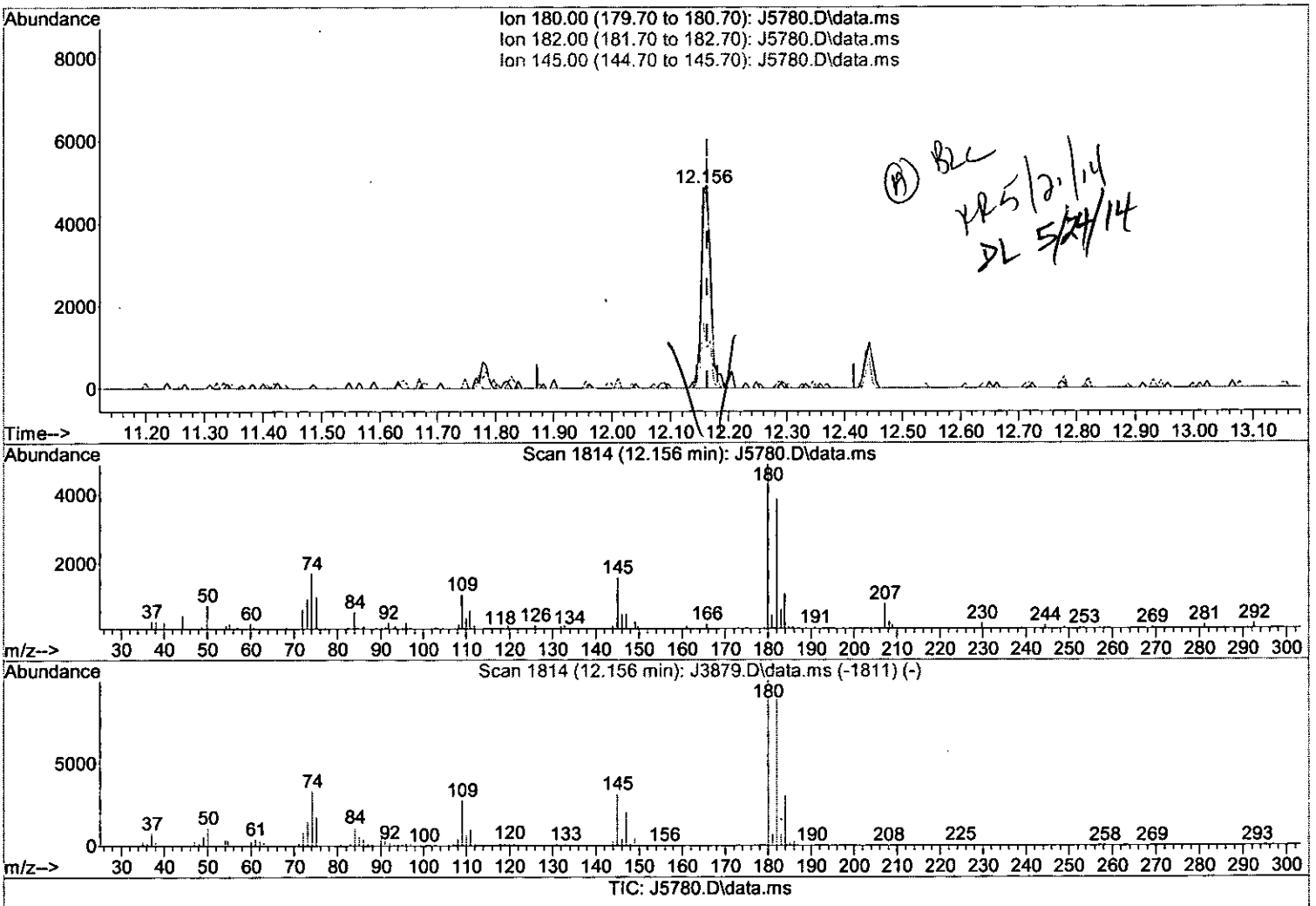
Ion	Exp%	Act%
180.00	100	100
182.00	92.20	79.42
145.00	31.40	32.40
0.00	0.00	0.00

W031214.M Wed May 21 17:49:38 2014 Page: 1

Quantitation Report (Qedit)

Sample : R1403443-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5780.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 9:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 21:32:42 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



TIC: J5780.D\data.ms

(115) 1,2,4-Tcbenzene (P)

12.156min (-0.006) 0.54 ppb m

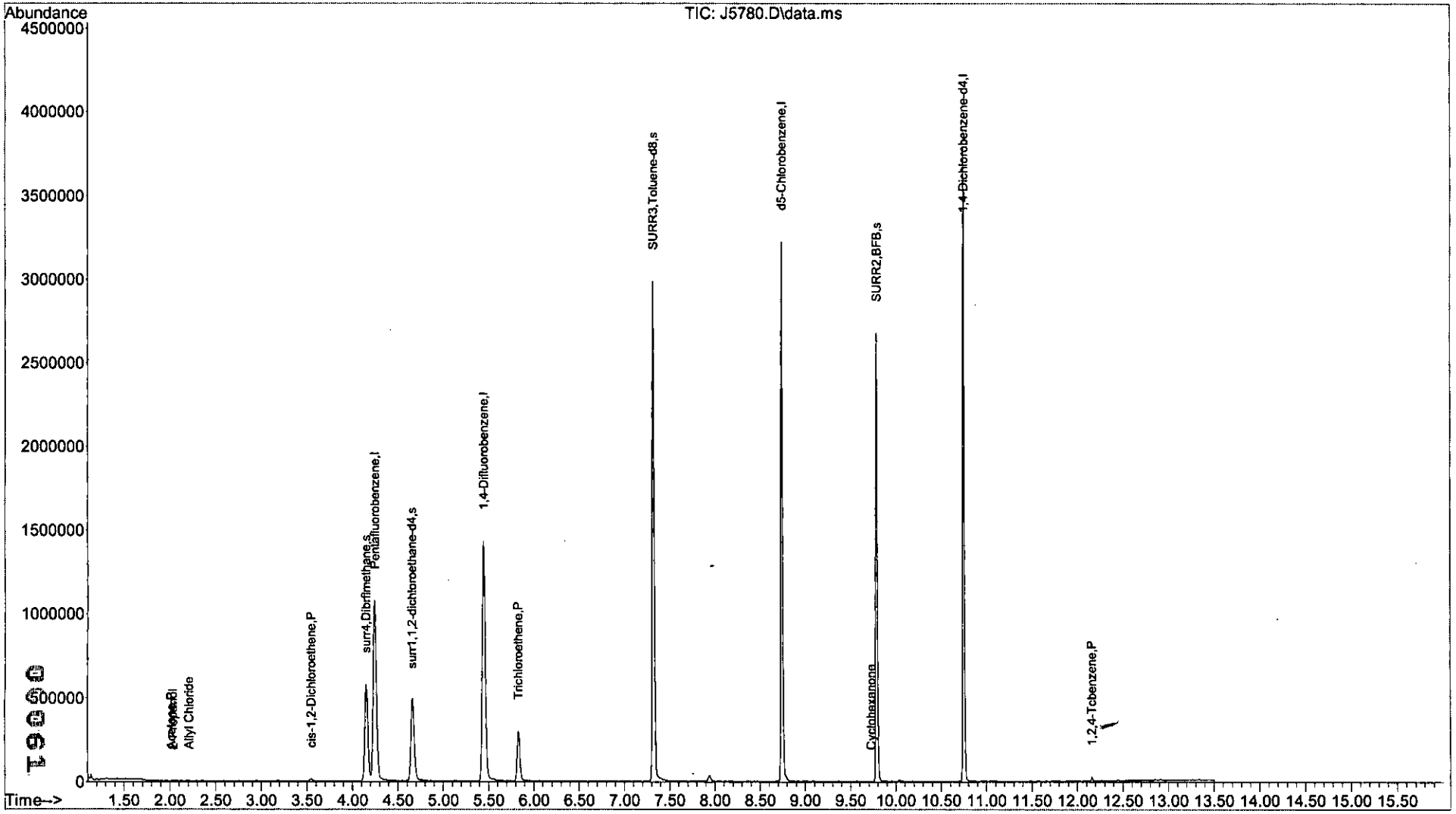
response 5674

Ion	Exp%	Act%
180.00	100	100
182.00	92.20	79.42
145.00	31.40	32.40
0.00	0.00	0.00

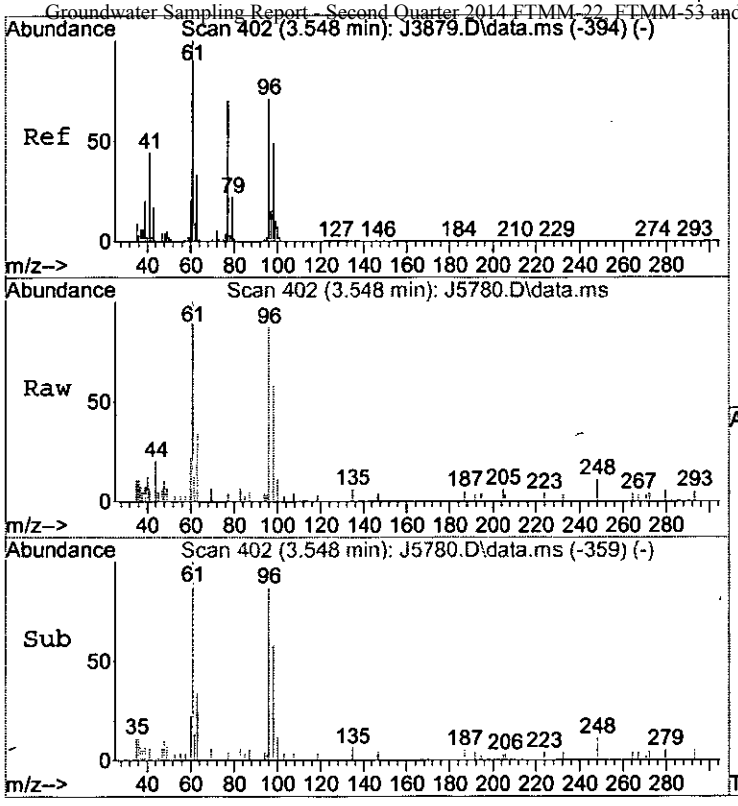
Quantitation Report (Not Reviewed)

Sample : R1403443-006|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5780.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 9:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 21:32:42 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



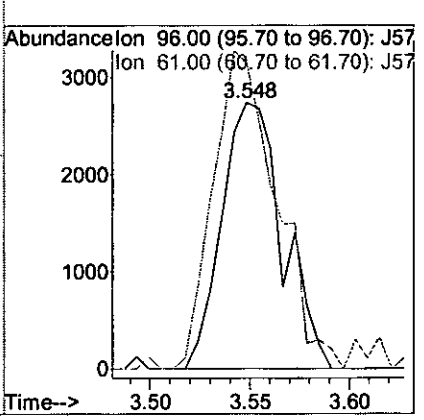
W031214.M Tue May 20 21:32:47 2014 Page: 2



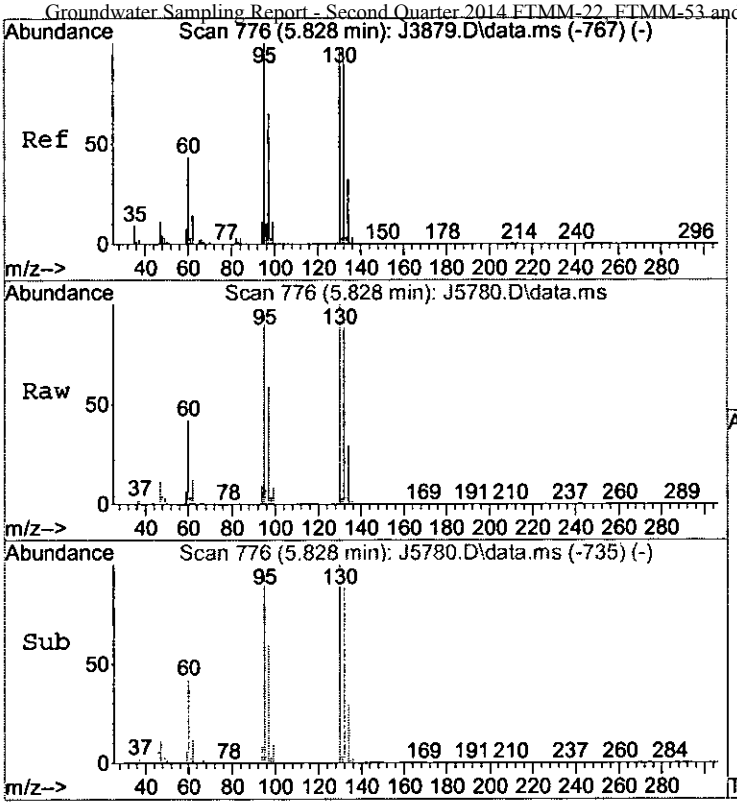
#34
cis-1,2-Dichloroethene
Concen: 0.59 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.006 min
Lab File: J5780.D
Acq: 20 May 2014 9:17 pm

Tgt Ion: 96 Resp: 5823

Ion	Ratio	Lower	Upper
96	100		
61	114.8	120.1	160.1#



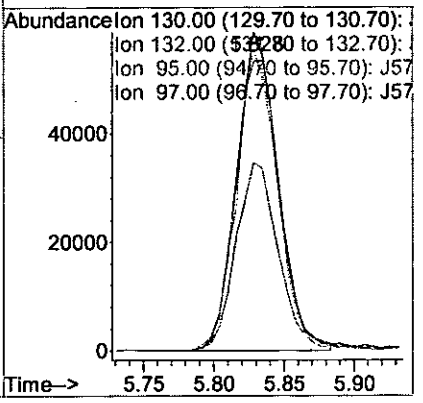
J5780.D W031214.M Wed May 21 17:56:38 2014 0006 Page 1



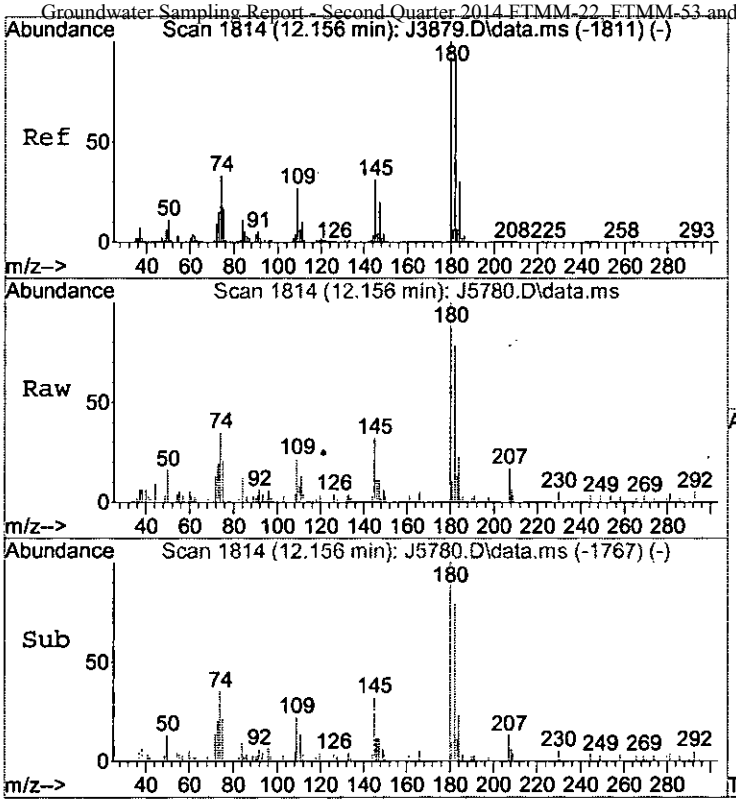
#54
Trichloroethene
Concen: 13.17 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: J5780.D
Acq: 20 May 2014 9:17 pm

Tgt Ion:130 Resp: 119179

Ion	Ratio	Lower	Upper
130	100		
132	90.5	78.3	118.3
95	95.0	83.0	123.0
97	59.0	47.3	87.3



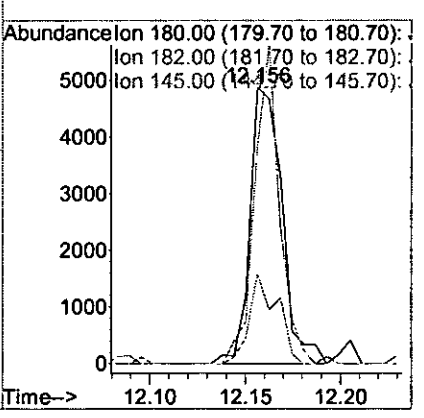
J5780.D W031214.M Wed May 21 17:56:22 2014 00067 Page 1



#115
1,2,4-Tcbenzene
Concen: 0.54 ppb m
RT: 12.156 min Scan# 1814
Delta R.T. -0.006 min
Lab File: J5780.D
Acq: 20 May 2014 9:17 pm

Tgt Ion:180 Resp: 5674

Ion	Ratio	Lower	Upper
180	100		
182	79.4	72.2	112.2
145	32.4	11.4	51.4



J5780.D W031214.M Wed May 21 17:56:30 2014 00064 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5780.D
Acq On : 20 May 2014 9:17 pm
Operator : K.Ruest
Sample : R1403443-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5780.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV2	575239	1374476	29.84%	5.384%
2	4.249	509	517	539	rVB	1073413	2685570	58.30%	10.520%
3	4.664	575	585	597	rBV	491884	1250668	27.15%	4.899%
4	5.450	704	714	730	rBV	1429870	3339174	72.48%	13.080%
5	5.828	768	776	786	rBV	299619	638005	13.85%	2.499%
6	7.322	1014	1021	1040	rBV	2985651	4606825	100.00%	18.046%
7	7.944	1117	1123	1132	rVB	36449	71416	1.55%	0.280%
8	8.742	1249	1254	1269	rBV	3219274	4094315	88.87%	16.039%
9	9.791	1421	1426	1436	rBV	2675704	3225693	70.02%	12.636%
10	10.748	1578	1583	1593	rBV	3774603	4241788	92.08%	16.616%

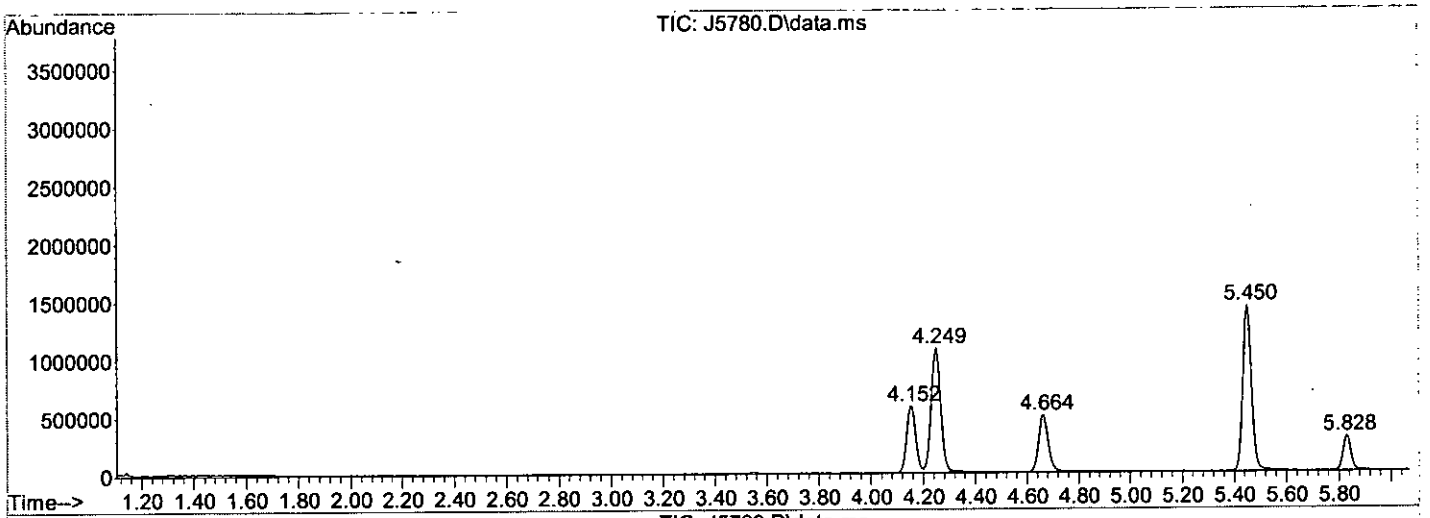
Sum of corrected areas: 25527930

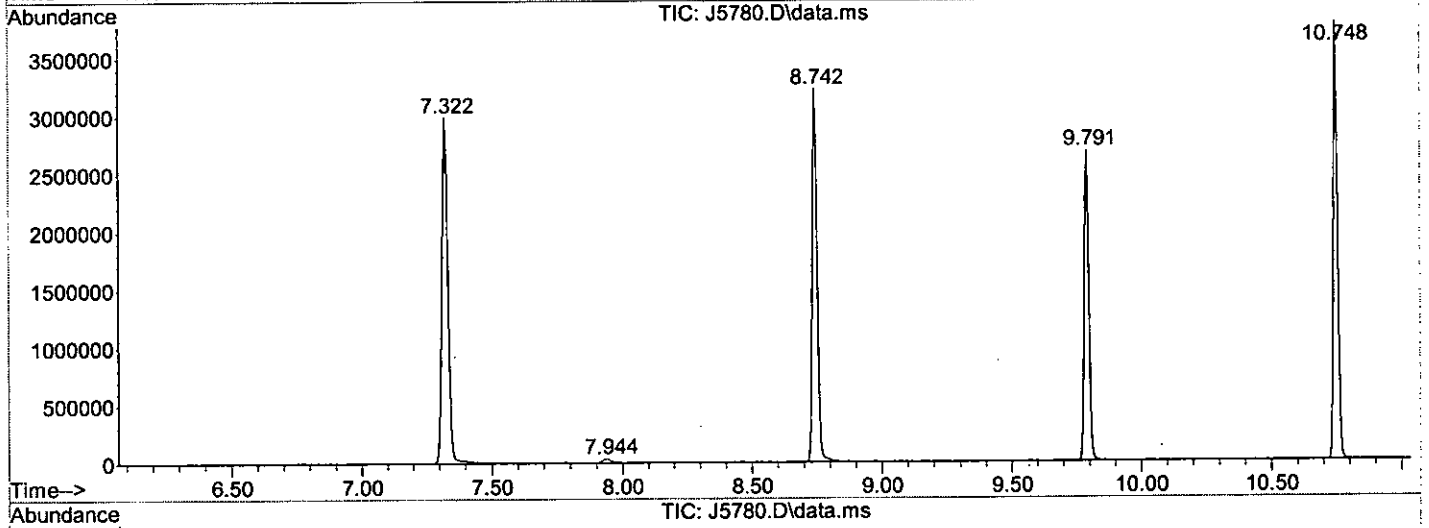
LSC Report - Integrated Chromatogram

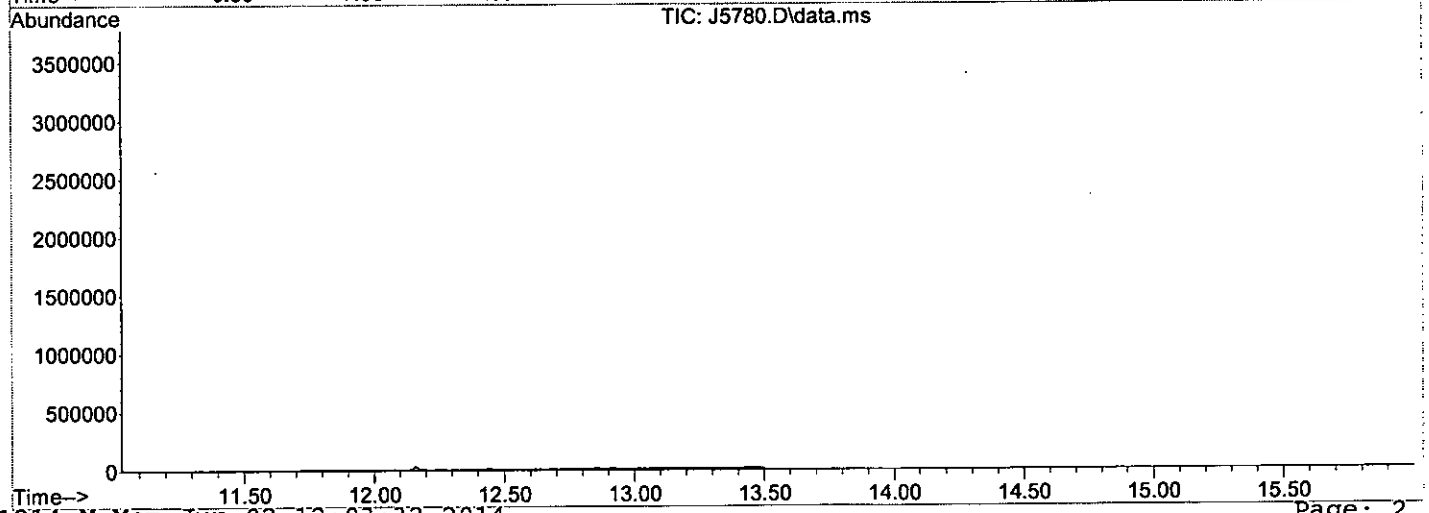
Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5780.D
Acq On : 20 May 2014 9:17 pm
Operator : K.Ruest
Sample : R1403443-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 9 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P







W031214.M Mon Jun 02 12:03:32 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5780.D
Acq On : 20 May 2014 9:17 pmm
Operator : K.Ruestt
Sample : R1403443-006|1.00
Misc : PARSONS 11603 T44
ALS Vial : 9 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

W031214.M Mon Jun 02 12:03:33 2014 Page: 3

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1550
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:49

Sample Name: FTMM-22-GW-CW1MW281-35.8
Lab Code: R1403443-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1550
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:49

Sample Name: FTMM-22-GW-CW1MW281-35.8
Lab Code: R1403443-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**14**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**0.52**	**J**	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**3.4**	**J**	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1550
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 21:49

Sample Name: FTMM-22-GW-CW1MW281-35.8
Lab Code: R1403443-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 21:49	
Dibromofluoromethane	100	85-115	5/20/14 21:49	
Toluene-d8	94	85-120	5/20/14 21:49	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2149

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW281-35.8	**Units:**	µg/L
Lab Code:	R1403443-007	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-007|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 9:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 22:05:01 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	970480	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1473385	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1373507	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	720348	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	427212	50.09	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.18%				
48) surr1,1,2-dichloroetha...	4.664	65	456962	47.03	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.06%				
65) SURR3,Toluene-d8	7.322	98	1685535	47.03	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.06%				
70) SURR2,BFB	9.791	95	661463	49.47	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.94%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	4837	0.52	ppb		99
13) 1,1-Diclethene	2.042	96	1747	0.25	ppb	#	56
15) Acetone	2.042	43	1519	0.79	ppb		67
~~16) 2-Propanol~~	~~2.201~~	~~45~~	~~233~~	~~0.75~~	~~ppb~~	~~#~~	~~55~~
18) Carbon Disulfide	2.207	76	5129	0.21	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	33783	3.43	ppb		90
~~39) Tetrahydrofuran~~	~~3.932~~	~~42~~	~~485~~	~~0.26~~	~~ppb~~	~~#~~	~~45~~
54) Trichloroethene	5.834	130	119607	13.61	ppb		93
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1844~~	~~3.19~~	~~ppb~~	~~#~~	~~14~~

(#) = qualifier out of range (m) = manual integration (+) = signals summed

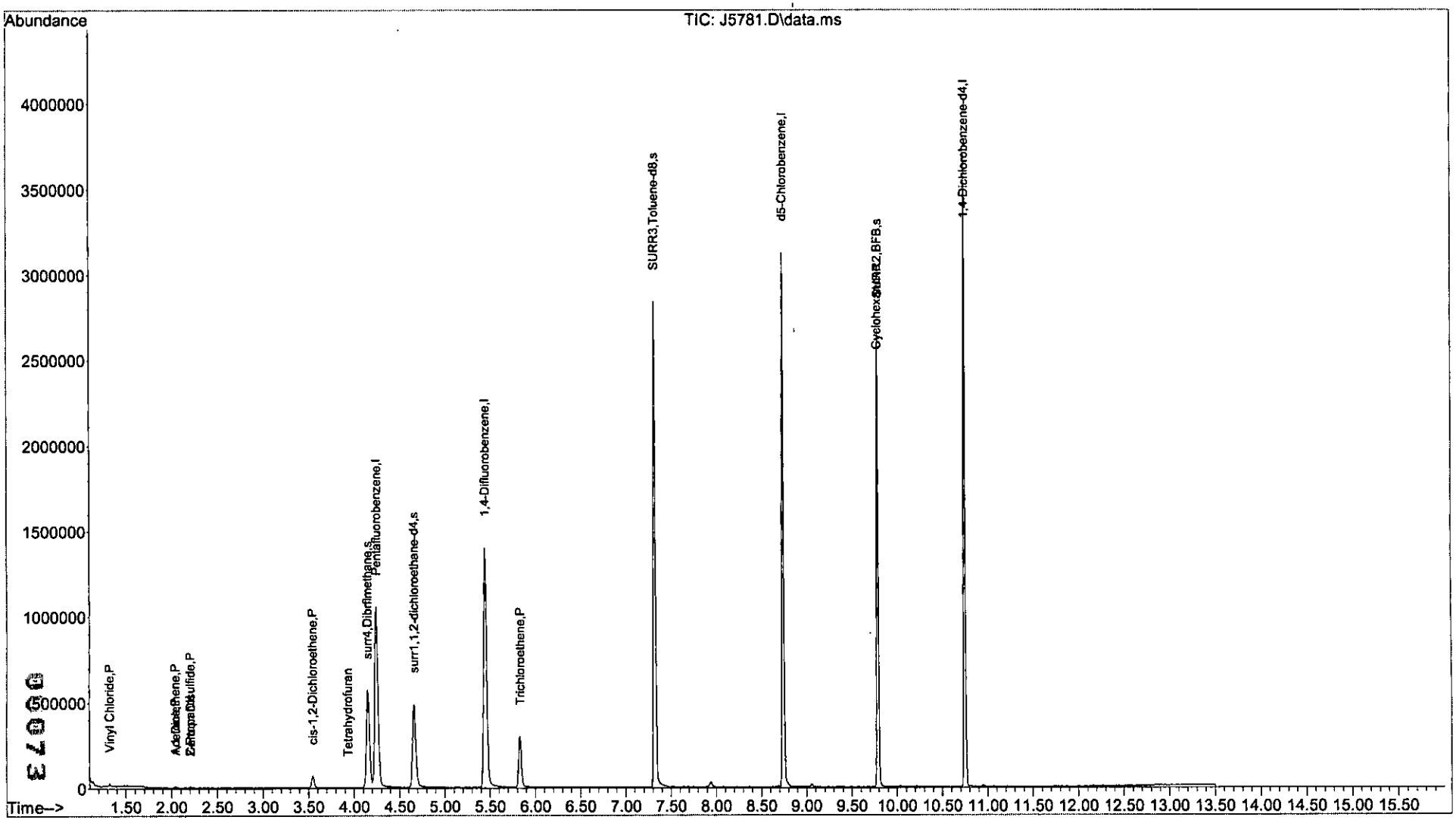
KR 5/21/14
RL 5/24/14

W031214.M Tue May 20 22:05:04 2014 Page: 1

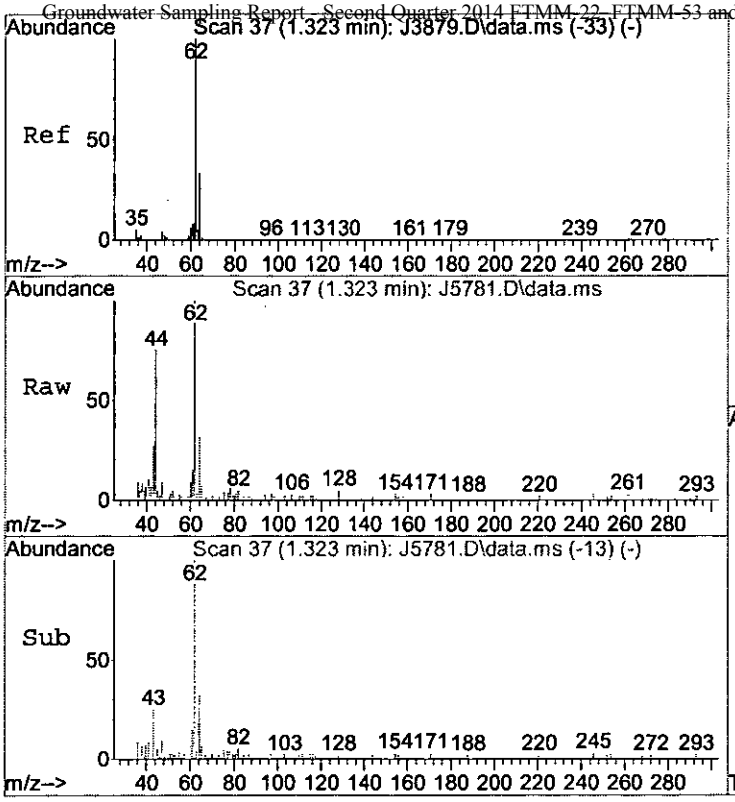
Quantitation Report (Not Reviewed)

Sample : R1403443-007|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5781.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 9:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 22:05:01 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



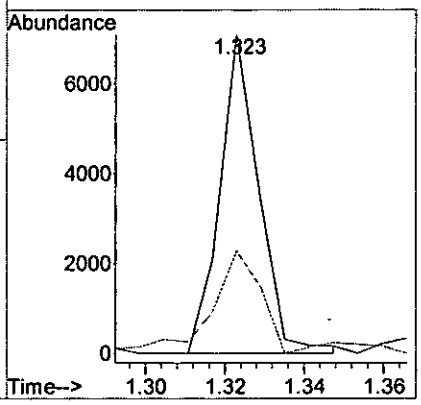
W031214.M Tue May 20 22:05:07 2014 Page: 2

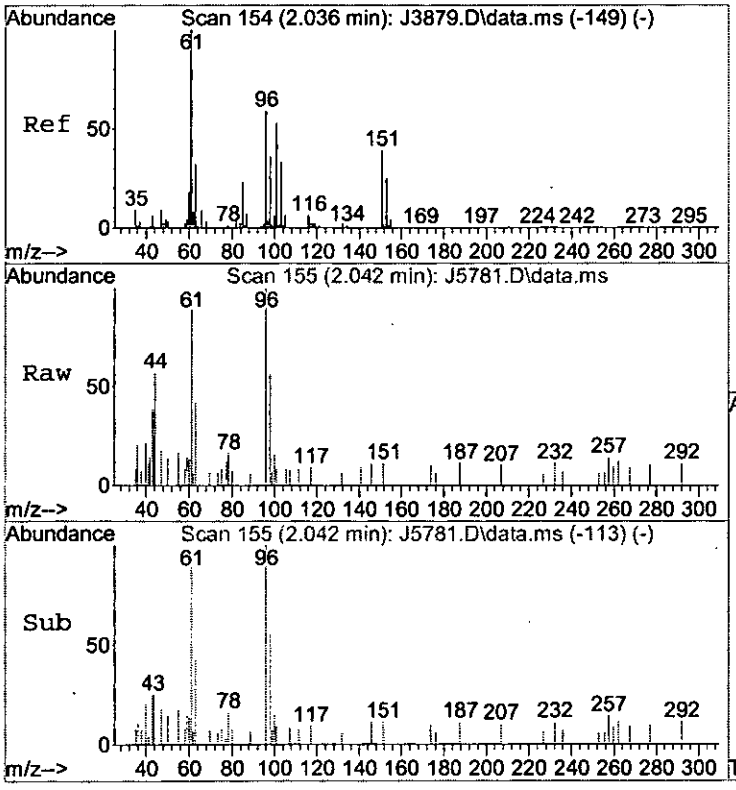


#4
Vinyl Chloride
Concen: 0.52 ppb
RT: 1.323 min Scan# 37
Delta R.T. -0.000 min
Lab File: J5781.D
Acq: 20 May 2014 9:49 pm

Tgt Ion: 62 Resp: 4837

Ion	Ratio	Lower	Upper
62	100		
64	32.1	12.9	52.9

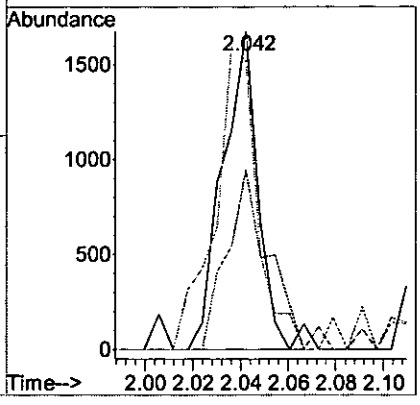




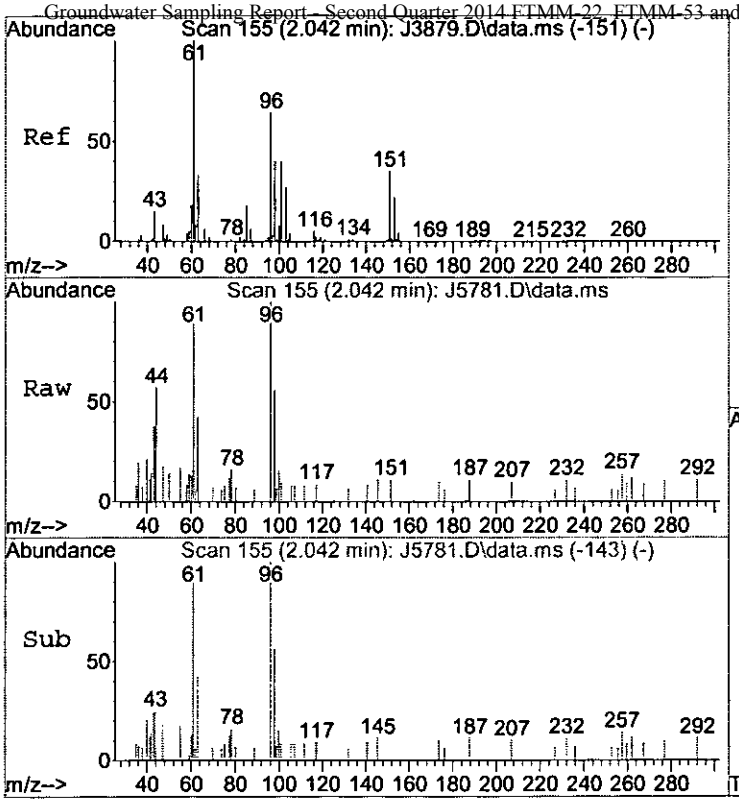
#13
1,1-Diclethene
Concen: 0.25 ppb
RT: 2.042 min Scan# 155
Delta R.T. 0.006 min
Lab File: J5781.D
Acq: 20 May 2014 9:49 pm

Tgt Ion: 96 Resp: 1747

Ion	Ratio	Lower	Upper
96	100		
98	56.3	40.7	80.7
61	90.7	150.5	190.5#



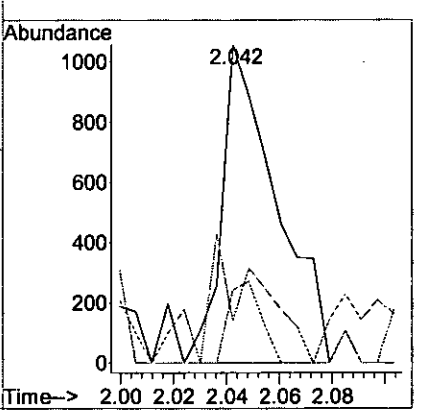
J5781.D W031214.M Wed May 21 17:58:44 2014 00074 Page 3

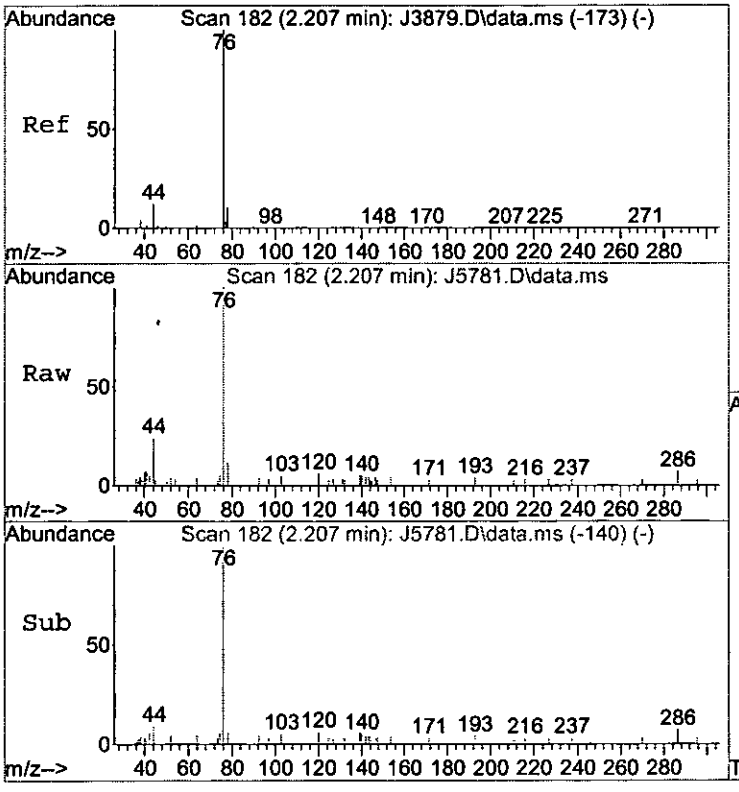


#15
Acetone
Concen: 0.79 ppb
RT: 2.042 min Scan# 155
Delta R.T. -0.000 min
Lab File: J5781.D
Acq: 20 May 2014 9:49 pm

Tgt Ion: 43 Resp: 1519

Ion	Ratio	Lower	Upper
43	100		
58	13.2	9.7	49.7
42	22.9	0.0	27.9

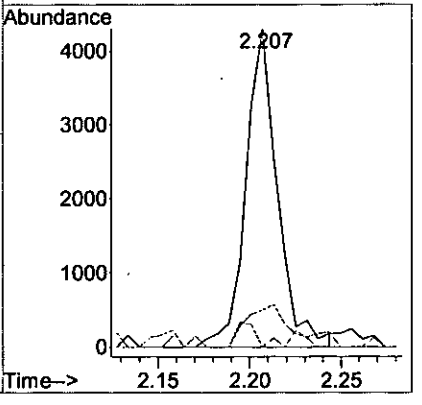


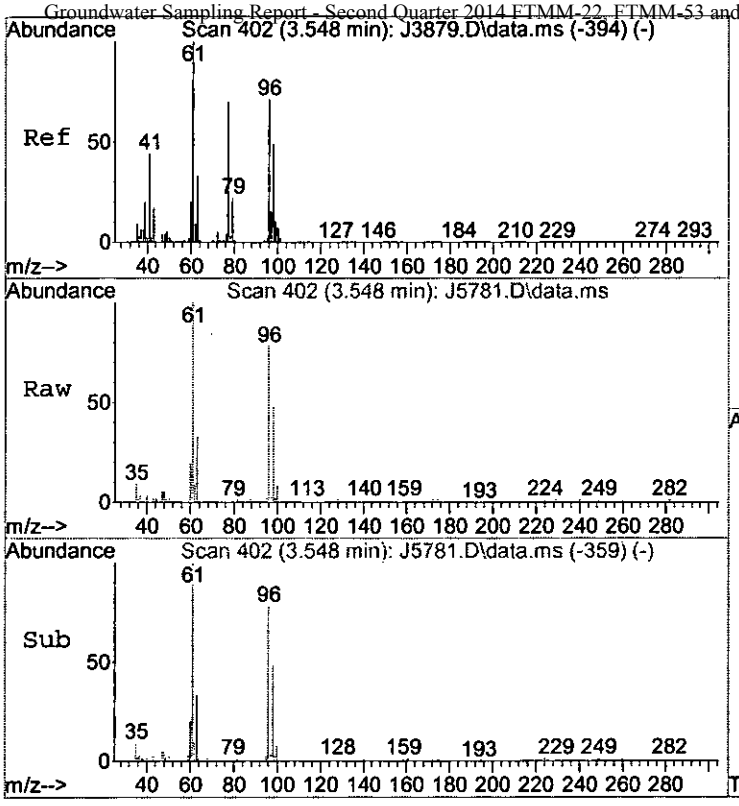


#18
Carbon Disulfide
Concen: 0.21 ppb
RT: 2.207 min Scan# 182
Delta R.T. -0.000 min
Lab File: J5781.D
Acq: 20 May 2014 9:49 pm

Tgt Ion: 76 Resp: 5129

Ion	Ratio	Lower	Upper
76	100		
78	11.6	0.0	29.6
77	0.0	0.0	22.6

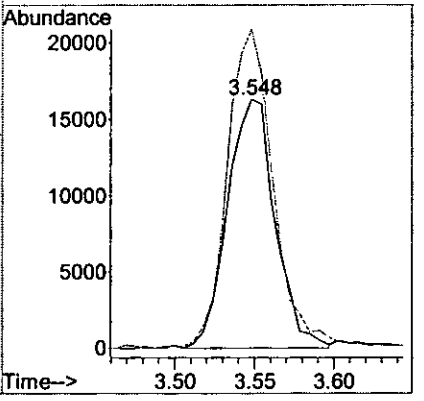


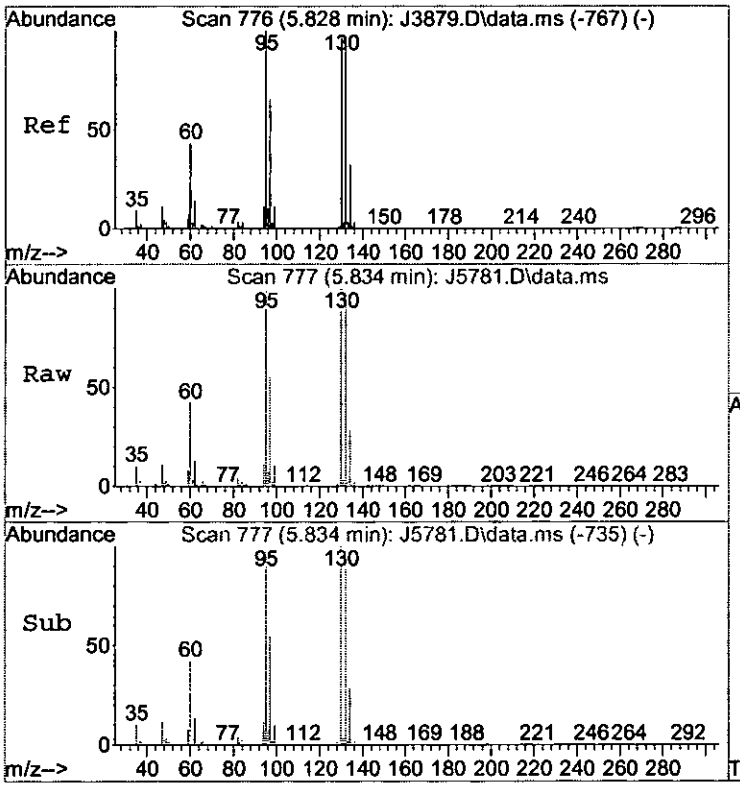


#34
cis-1,2-Dichloroethene
Concen: 3.43 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.006 min
Lab File: J5781.D
Acq: 20 May 2014 9:49 pm

Tgt Ion: 96 Resp: 33783

Ion	Ratio	Lower	Upper
96	100		
61	128.0	120.1	160.1

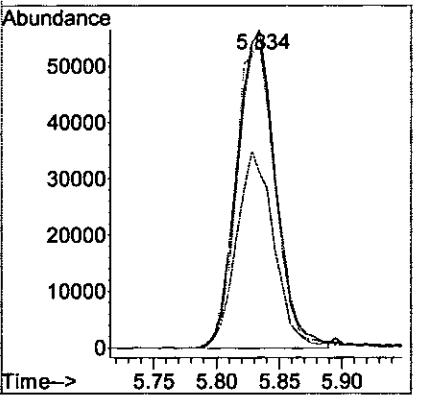




#54
Trichloroethene
Concen: 13.61 ppb
RT: 5.834 min Scan# 777
Delta R.T. 0.006 min
Lab File: J5781.D
Acq: 20 May 2014 9:49 pm

Tgt Ion:130 Resp: 119607

Ion	Ratio	Lower	Upper
130	100		
132	94.5	78.3	118.3
95	99.2	83.0	123.0
97	55.3	47.3	87.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5781.D
Acq On : 20 May 2014 9:49 pm
Operator : K.Ruest
Sample : R1403443-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5781.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.548	395	402	411	rVB2	70554	142785	3.28%	0.570%
2	4.158	492	502	509	rBV	567581	1357353	31.16%	5.416%
3	4.249	509	517	531	rVB	1047559	2603234	59.77%	10.387%
4	4.664	576	585	599	rBV	485256	1250776	28.72%	4.991%
5	5.450	703	714	728	rBV	1400059	3274102	75.17%	13.064%
6	5.828	769	776	790	rBV	298337	642501	14.75%	2.564%
7	7.322	1015	1021	1038	rBV	2838812	4355567	100.00%	17.380%
8	7.944	1114	1123	1128	rBV2	26546	52521	1.21%	0.210%
9	8.742	1249	1254	1267	rBV	3123307	4019723	92.29%	16.040%
10	9.791	1421	1426	1436	rVB	2672540	3154367	72.42%	12.587%
11	10.748	1578	1583	1591	rBV	3693127	4208303	96.62%	16.792%

Sum of corrected areas: 25061232

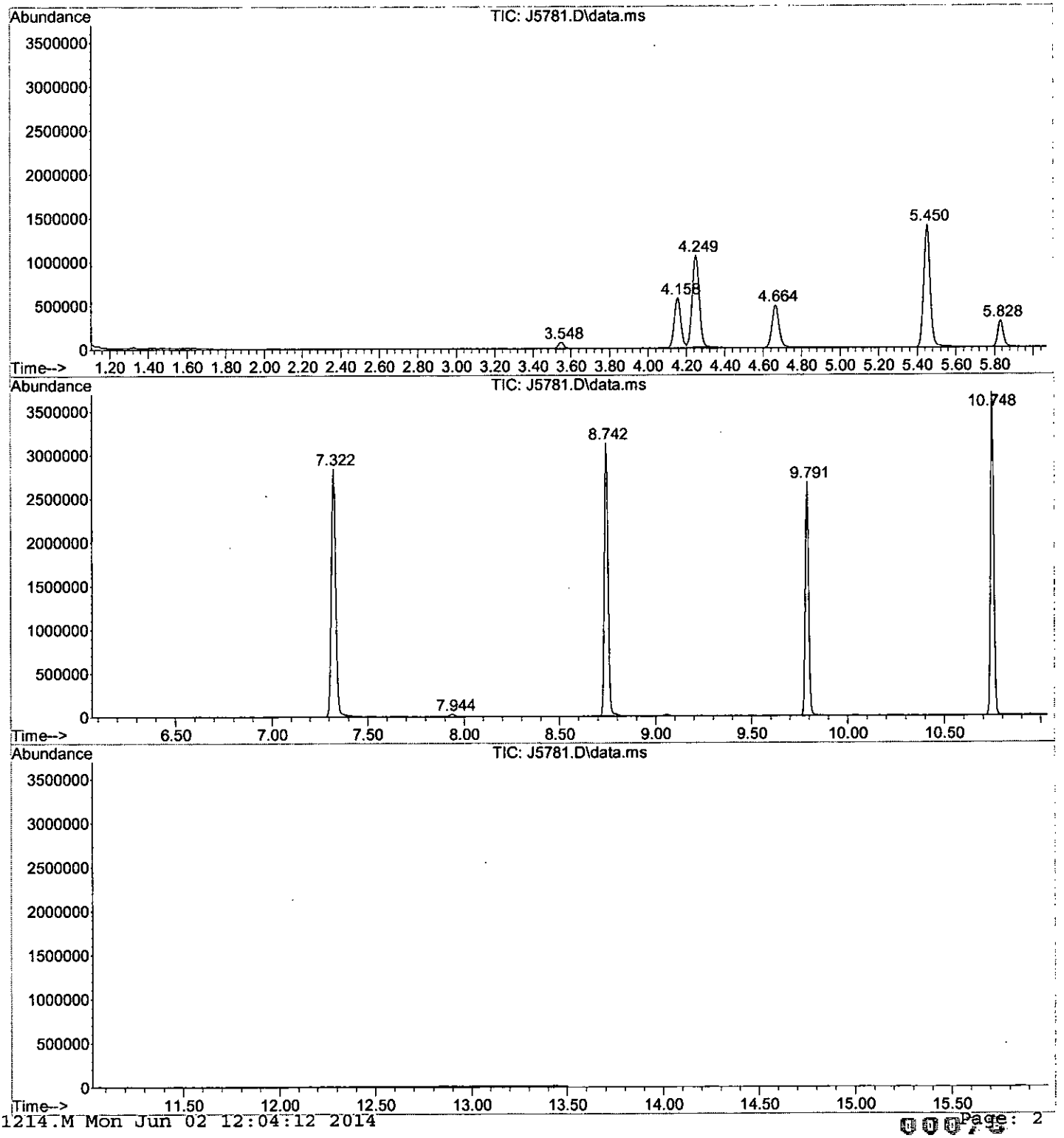
W031214.M Mon Jun 02 12:04:11 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5781.D
Acq On : 20 May 2014 9:49 pm
Operator : K.Ruest
Sample : R1403443-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:04:12 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5781.D
Acq On : 20 May 2014 9:49 pmm
Operator : K.Ruestt
Sample : R1403443-007|1.00
Misc : PARSONS 11603 T44
ALS Vial : 10 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:22

Sample Name: FTMM-22-GW-CW1MW27-11.52
Lab Code: R1403443-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:22

Sample Name: FTMM-22-GW-CW1MW27-11.52
Lab Code: R1403443-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.99**	**J**	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1235
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:22

Sample Name: FTMM-22-GW-CW1MW27-11.52
Lab Code: R1403443-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 22:22	
Dibromofluoromethane	101	85-115	5/20/14 22:22	
Toluene-d8	94	85-120	5/20/14 22:22	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2222

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW27-11.52	**Units:**	µg/L
Lab Code:	R1403443-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Sample : R1403443-008|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 10:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 22:37:28 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	969613	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1480124	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1366181	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	712158	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	430879	50.29	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.58%			
48) surr1,1,2-dichloroetha...	4.664	65	448630	45.96	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.92%			
65) SURR3,Toluene-d8	7.322	98	1683167	46.75	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 93.50%			
70) SURR2,BFB	9.791	95	664787	49.49	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.98%			
Target Compounds						Qvalue
~~12) Acrolein~~	~~1.963~~	~~56~~	~~446~~	~~1.61~~	~~ppb #~~	~~56~~
15) Acetone	2.054	43	3898	2.03	ppb	73
~~16) 2-Propanol~~	~~2.091~~	~~45~~	~~228~~	~~0.73~~	~~ppb #~~	~~1~~
~~19) Acetonitrile~~	~~2.213~~	~~40~~	~~612~~	~~1.95~~	~~ppb #~~	~~1~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1529~~	~~0.32~~	~~ppb #~~	~~1~~
54) Trichloroethene	5.834	130	8724	0.99	ppb	87
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1623~~	~~2.84~~	~~ppb #~~	~~14~~

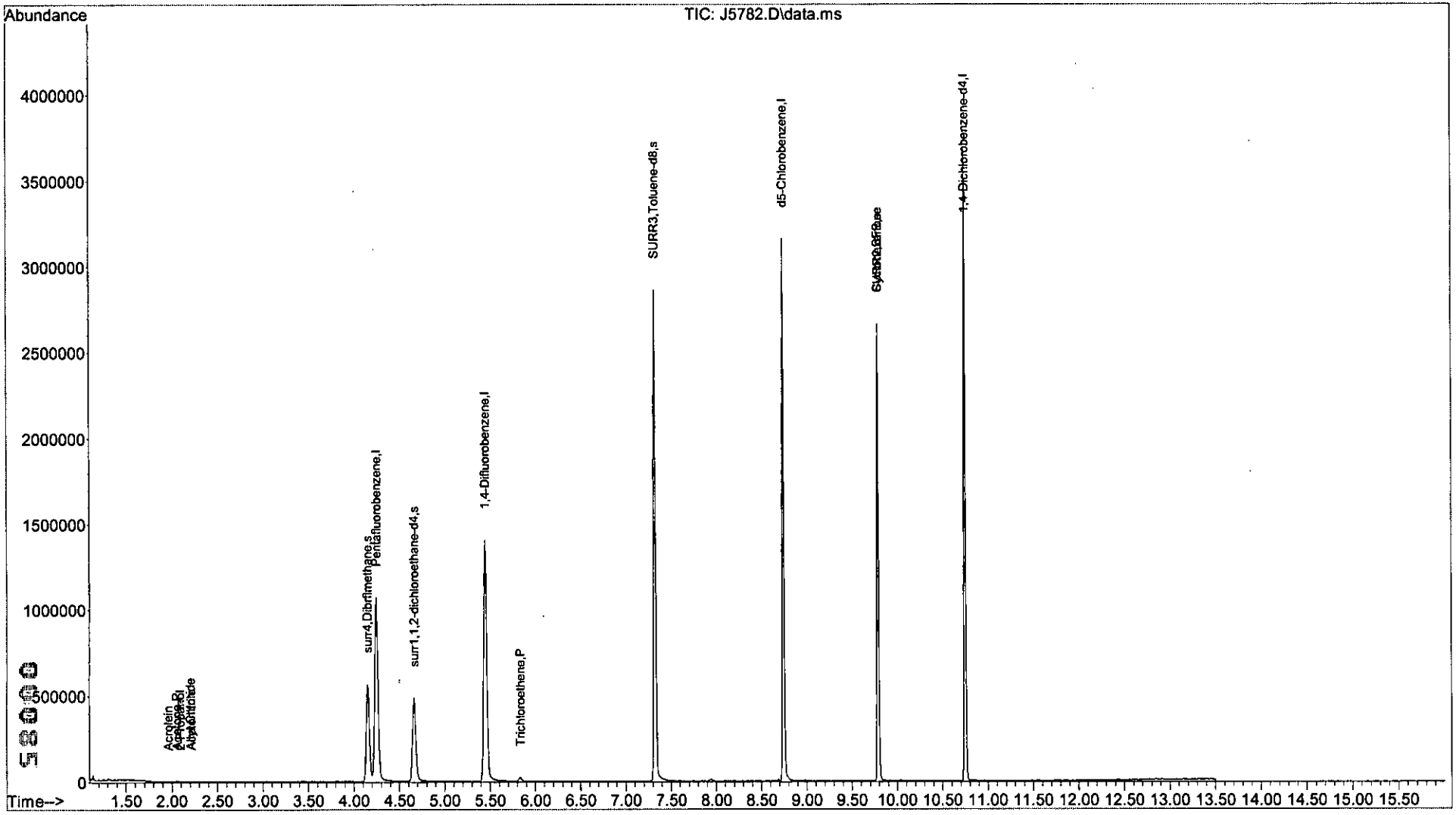
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 5/21/14

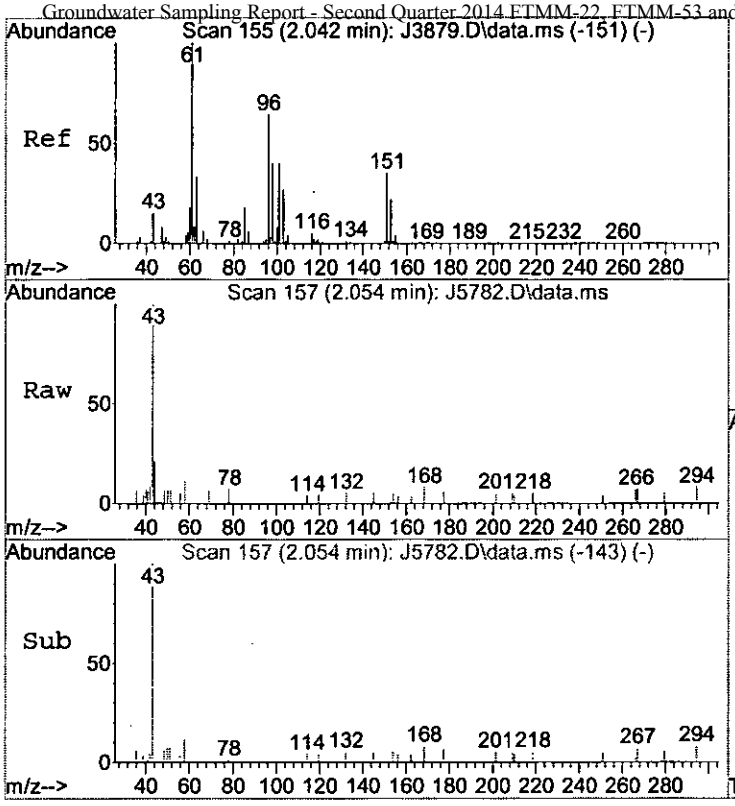
Quantitation Report (Not Reviewed)

Sample : R1403443-008|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5782.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 10:22 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 22:37:28 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



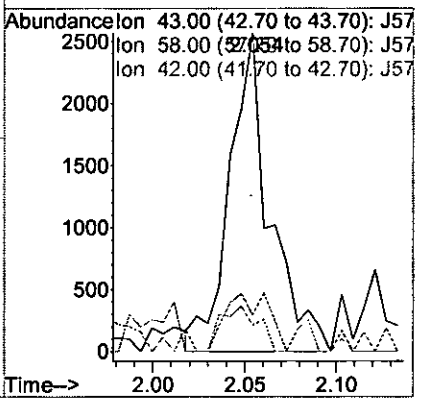
W031214.M Tue May 20 22:37:34 2014 Page: 2



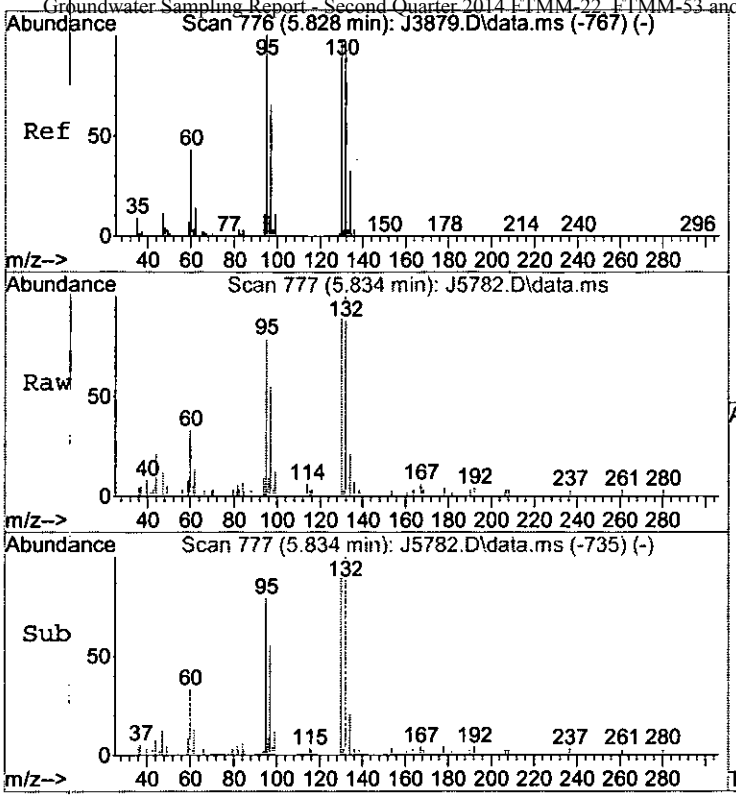
#15
Acetone
Concen: 2.03 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.012 min
Lab File: J5782.D
Acq: 20 May 2014 10:22 pm

Tgt Ion: 43 Resp: 3898

Ion	Ratio	Lower	Upper
43	100		
58	11.5	9.7	49.7
42	8.3	0.0	27.9



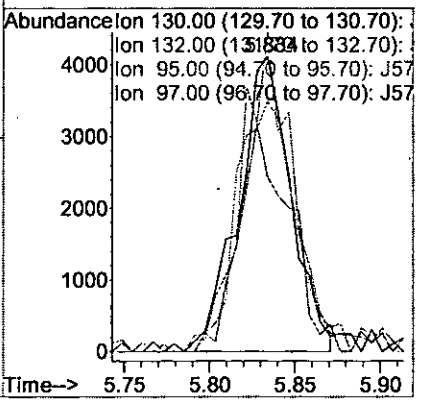
J5782.D W031214.M Wed May 21 18:01:08 2014 Page 1



#54
Trichloroethene
Concen: 0.99 ppb
RT: 5.834 min Scan# 777
Delta R.T. 0.006 min
Lab File: J5782.D
Acq: 20 May 2014 10:22 pm

Tgt Ion:130 Resp: 8724

Ion	Ratio	Lower	Upper
130	100		
132	108.0	78.3	118.3
95	84.9	83.0	123.0
97	59.3	47.3	87.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5782.D
Acq On : 20 May 2014 10:22 pm
Operator : K.Ruest
Sample : R1403443-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5782.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	566978	1359469	31.17%	5.595%
2	4.249	509	517	532	rVB	1062405	2612621	59.91%	10.753%
3	4.664	573	585	598	rBV	484619	1250057	28.67%	5.145%
4	5.450	705	714	732	rBV	1404347	3287985	75.40%	13.533%
5	5.834	769	777	785	rVB4	22666	51077	1.17%	0.210%
6	7.322	1014	1021	1037	rBV	2859254	4360815	100.00%	17.949%
7	8.742	1249	1254	1268	rBV	3157802	4000487	91.74%	16.466%
8	9.791	1421	1426	1436	rBV	2660491	3156620	72.39%	12.992%
9	10.748	1578	1583	1592	rBV	3677287	4217028	96.70%	17.357%

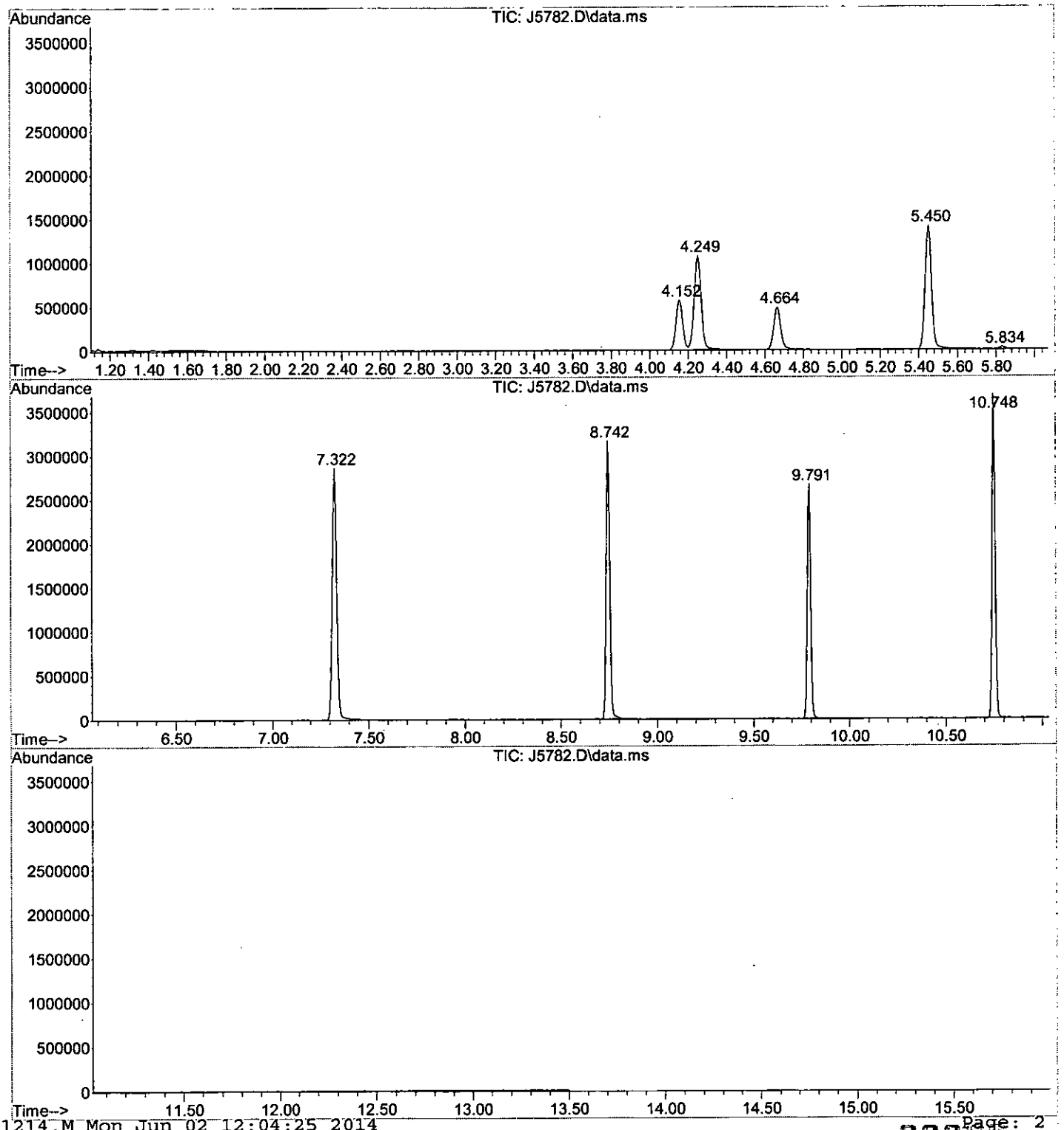
Sum of corrected areas: 24296159

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5782.D
Acq On : 20 May 2014 10:22 pm
Operator : K.Ruest
Sample : R1403443-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:04:25 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5782.D
Acq On : 20 May 2014 10:22 pmm
Operator : K.Ruestt
Sample : R1403443-008|1.00
Misc : PARSONS 11603 T44
ALS Vial : 11 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1650
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:54

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1650
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:54

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**2.8**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1650
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 22:54

Sample Name: FTMM-22-GW-CW1MW28-10.6
Lab Code: R1403443-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\U5783.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 22:54	
Dibromofluoromethane	100	85-115	5/20/14 22:54	
Toluene-d8	95	85-120	5/20/14 22:54	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 2254

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW28-10.6	**Units:**	µg/L
Lab Code:	R1403443-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-009|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 10:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 23:09:54 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	967559	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1463863	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1362363	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	701266	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	421903	49.79	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.58%			
48) surr1,1,2-dichloroetha...	4.664	65	451976	46.82	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.64%			
65) SURR3,Toluene-d8	7.322	98	1691900	47.51	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.02%			
70) SURR2,BFB	9.791	95	657930	49.52	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.04%			
Target Compounds						Qvalue
15) Acetone	2.048	43	1224	0.64	ppb	82
~~16) 2-Propanol~~	~~2.115~~	~~45~~	~~262~~	~~0.84~~	~~ppb #~~	~~21~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1488~~	~~0.31~~	~~ppb #~~	~~1~~
54) Trichloroethene	5.828	130	24245	2.78	ppb	95
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1541~~	~~2.74~~	~~ppb #~~	~~25~~

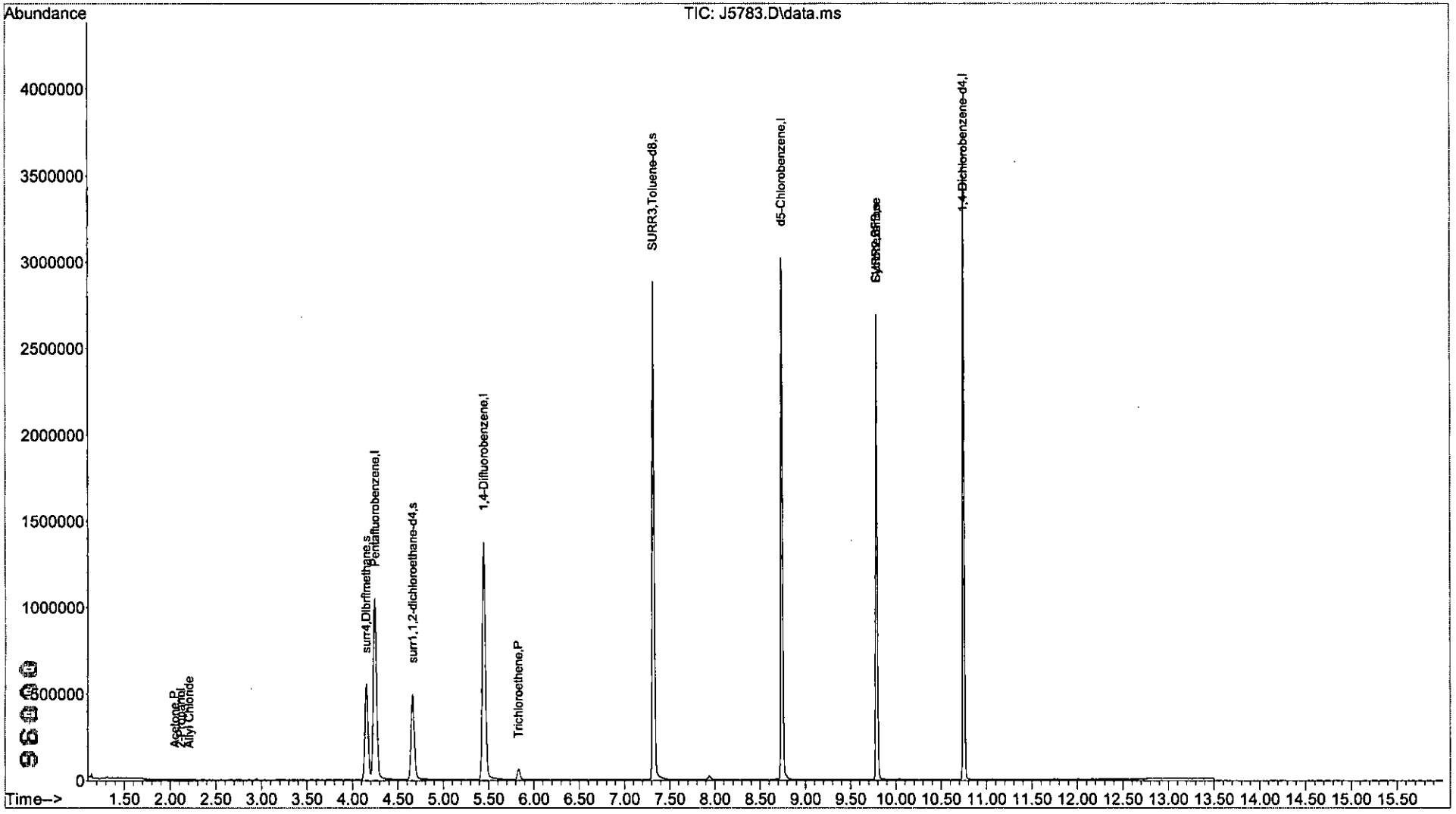
KP 5/22/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

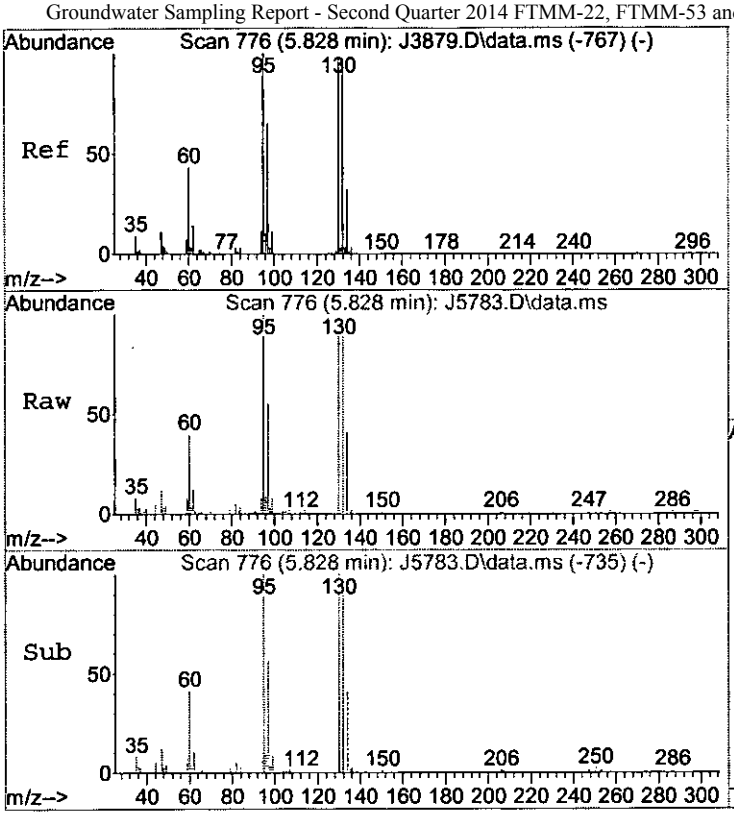
Quantitation Report (Not Reviewed)

Sample : R1403443-009|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5783.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 10:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 23:09:54 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



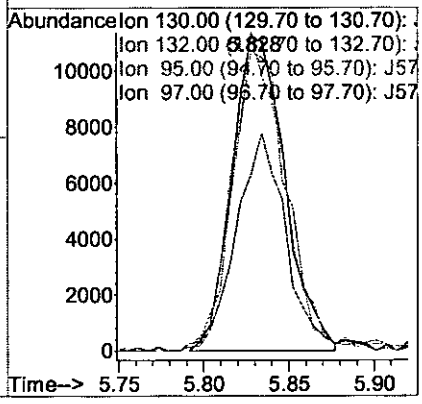
W031214.M Tue May 20 23:10:00 2014 Page: 2



#54
Trichloroethene
Concen: 2.78 ppb
RT: 5.828 min Scan# 776
Delta R.T. -0.000 min
Lab File: J5783.D
Acq: 20 May 2014 10:54 pm

Tgt Ion:130 Resp: 24245

Ion	Ratio	Lower	Upper
130	100		
132	95.5	78.3	118.3
95	101.5	83.0	123.0
97	56.3	47.3	87.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5783.D
Acq On : 20 May 2014 10:54 pm
Operator : K.Ruest
Sample : R1403443-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5783.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	492	502	509	rBV2	554514	1336993	30.82%	5.506%
2	4.249	509	517	535	rVB	1044362	2620294	60.40%	10.791%
3	4.664	574	585	597	rBV	493376	1242271	28.64%	5.116%
4	5.450	705	714	725	rBV	1374651	3220655	74.24%	13.264%
5	5.834	768	777	785	rBV4	61754	139666	3.22%	0.575%
6	7.322	1015	1021	1039	rBV	2881019	4338127	100.00%	17.866%
7	7.937	1116	1122	1127	rBV2	25168	44413	1.02%	0.183%
8	8.742	1249	1254	1267	rBV	3017011	3979679	91.74%	16.390%
9	9.791	1421	1426	1437	rBV	2690604	3148942	72.59%	12.968%
10	10.748	1578	1583	1594	rBV	3651739	4210722	97.06%	17.341%

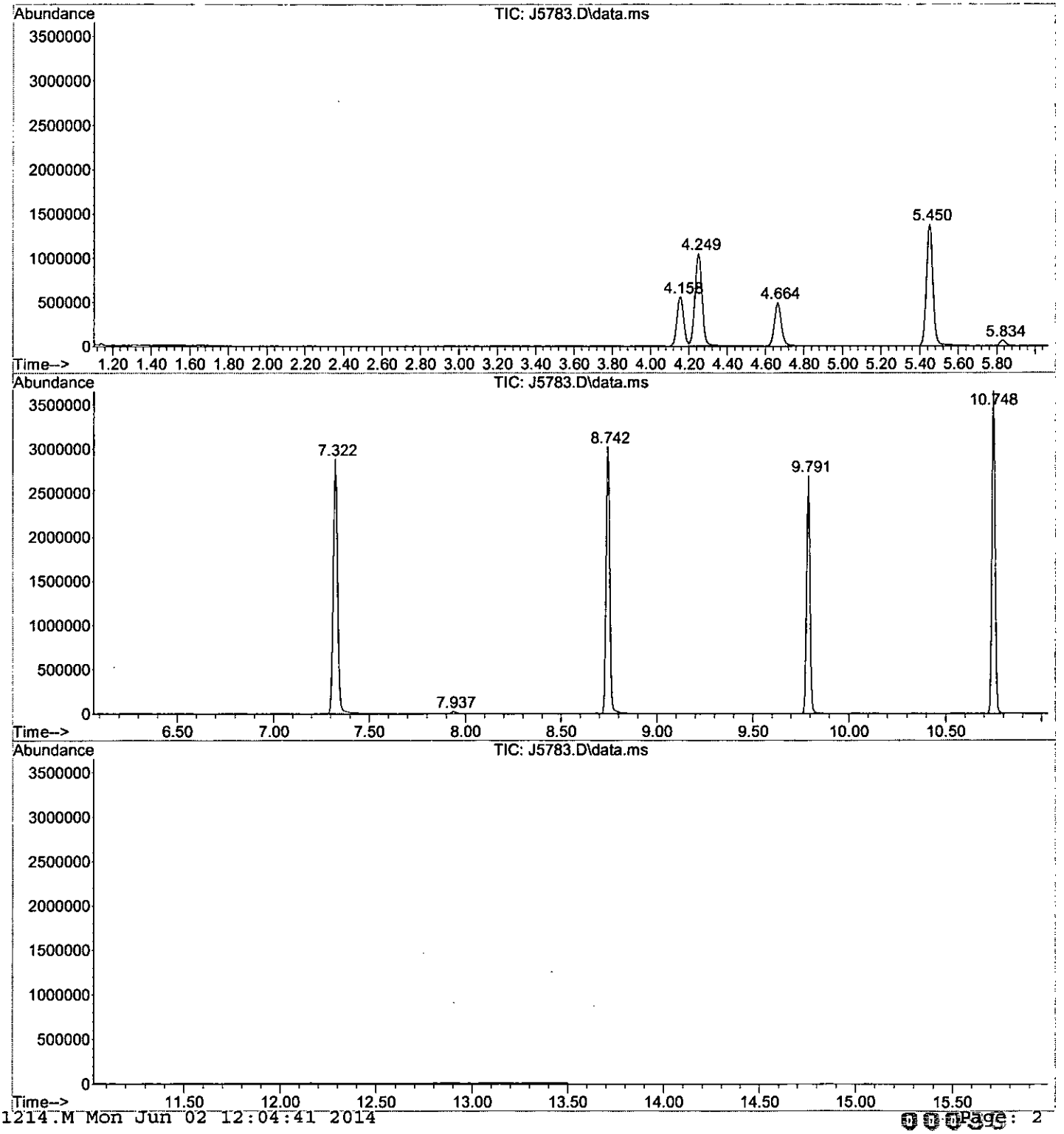
Sum of corrected areas: 24281762

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5783.D
Acq On : 20 May 2014 10:54 pm
Operator : K.Ruest
Sample : R1403443-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:04:41 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5783.D
Acq On : 20 May 2014 10:54 pmm
Operator : K.Ruestt
Sample : R1403443-009|1.00
Misc : PARSONS 11603 T44
ALS Vial : 12 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

W031214.M Mon Jun 02 12:04:41 2014 Page: 3

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1620
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:04

Sample Name: FTMM-EB-05082014
Lab Code: R1403443-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\U5774.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.6**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1620
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:04

Sample Name: FTMM-EB-05082014
Lab Code: R1403443-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	**0.37**	J	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**2.1**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1620
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:04

Sample Name: FTMM-EB-05082014
Lab Code: R1403443-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 18:04	
Dibromofluoromethane	98	85-115	5/20/14 18:04	
Toluene-d8	96	85-120	5/20/14 18:04	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 1804

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-05082014	**Units:**	µg/L
Lab Code:	R1403443-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 6:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 18:19:07 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1018751	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1573987	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1469899	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	723436	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	447599	49.12	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.24%				
48) surr1,1,2-dichloroetha...	4.664	65	461130	44.42	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.84%				
65) SURR3,Toluene-d8	7.322	98	1840124	48.06	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.12%				
70) SURR2,BFB	9.791	95	708846	49.62	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.24%				
Target Compounds							Qvalue
15) Acetone	2.049	43	3164	1.57	ppb		85
~~16) 2-Propanol~~	~~2.134~~	~~45~~	~~258~~	~~0.79~~	~~ppb~~	~~#~~	~~1~~
~~19) Acetonitrile~~	~~2.237~~	~~40~~	~~583~~	~~1.76~~	~~ppb~~	~~#~~	~~1~~
22) Methylene Chloride	2.366	84	3605	0.37	ppb	#	68
66) Toluene	7.395	91	81947	2.05	ppb		95
~~90) Cyclohexanone~~	~~9.724~~	~~55~~	~~323~~	~~0.56~~	~~ppb~~	~~#~~	~~63~~
112) Trielution Dichlorotol...	11.736	125	2760	0.20	ppb	#	81 NT
116) Hexachlorobt	12.266	225	935	0.20	ppb		88 <
119) 2,4,5-Trichlorotolene	12.851	159	2714	0.47	ppb		95 NT
120) 2,3,6-Trichlorotoluene	12.918	159	2227	0.42	ppb	#	81 NT

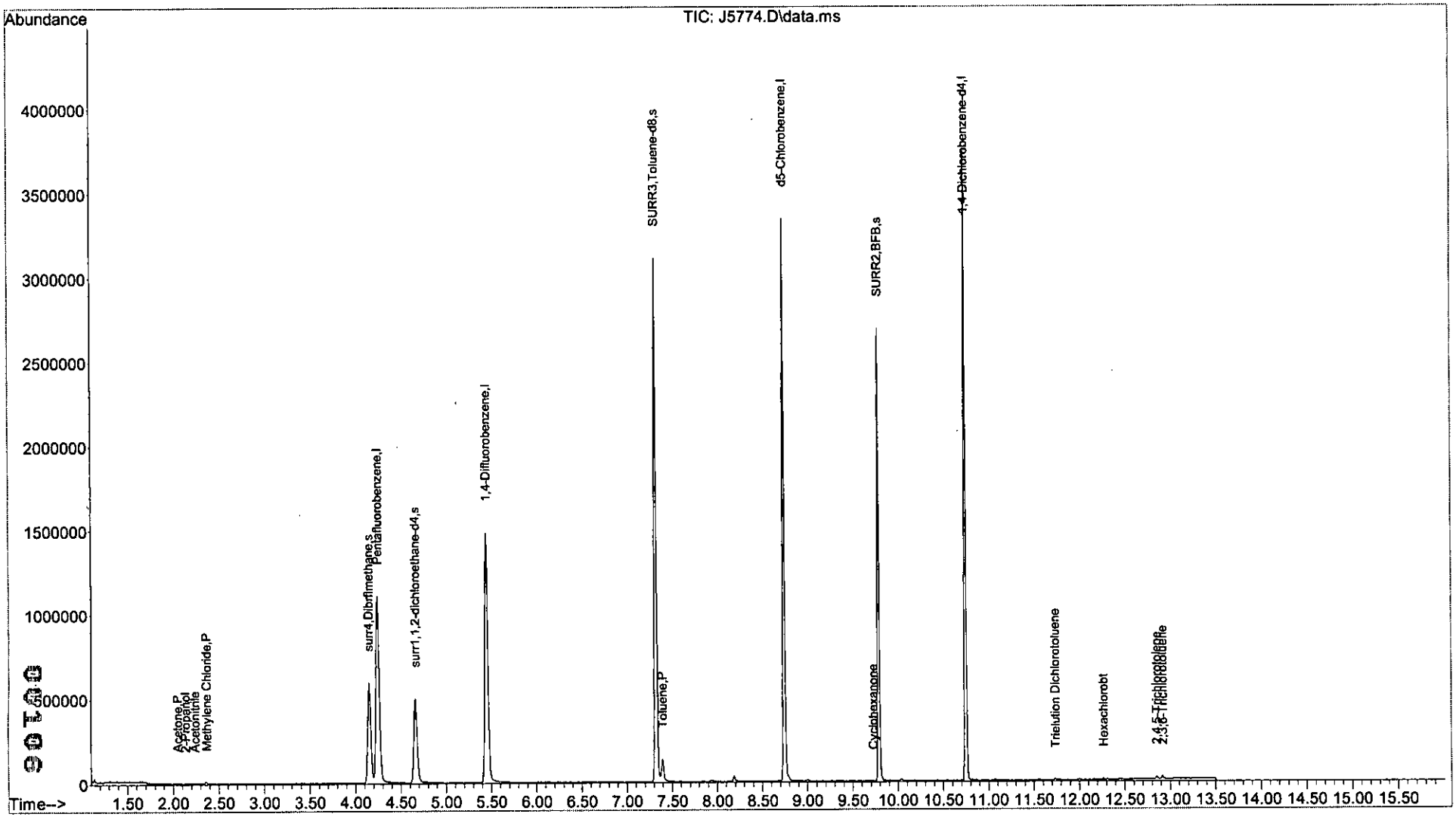
KR 5/21/14

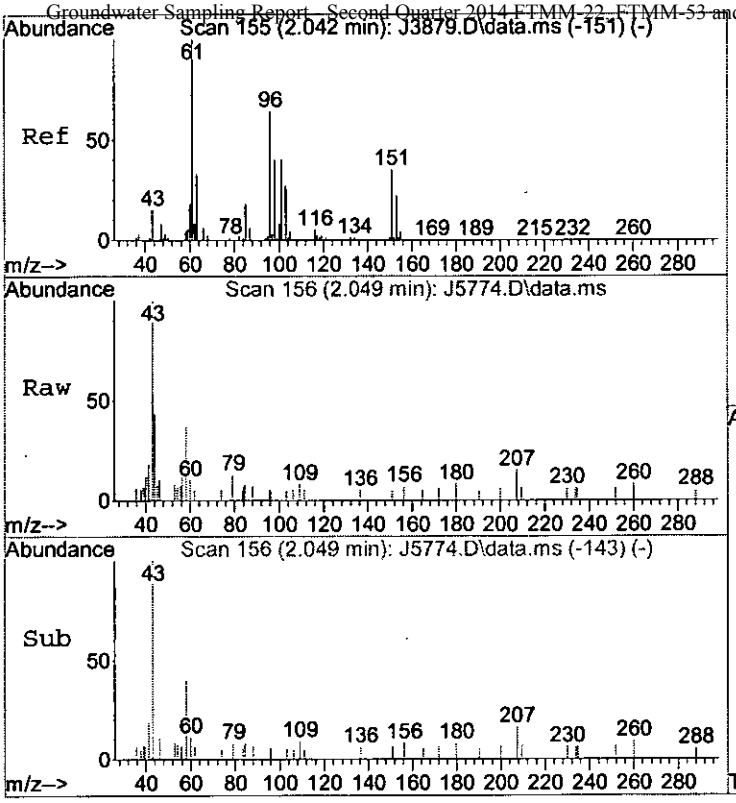
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : R1403443-010|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5774.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 6:04 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 18:19:07 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

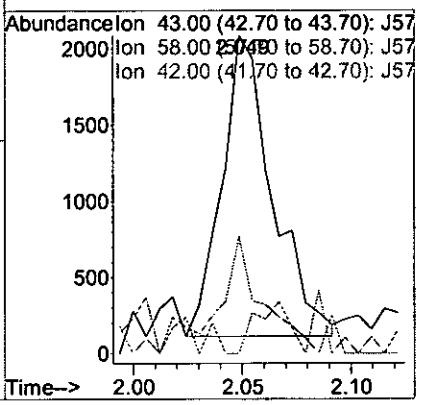




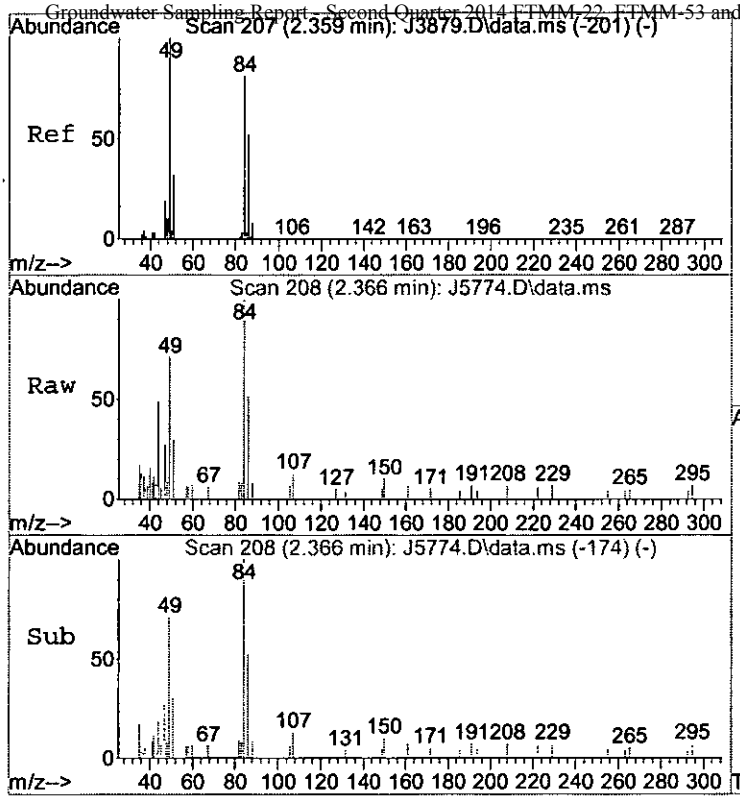
#15
Acetone
Concen: 1.57 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.006 min
Lab File: J5774.D
Acq: 20 May 2014 6:04 pm

Tgt Ion: 43 Resp: 3164

Ion	Ratio	Lower	Upper
43	100		
58	36.8	9.7	49.7
42	0.0	0.0	27.9



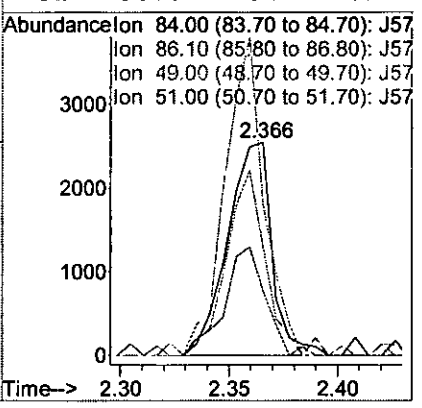
J5774.D W031214.M Wed May 21 17:33:43 2014 0010 Page 1



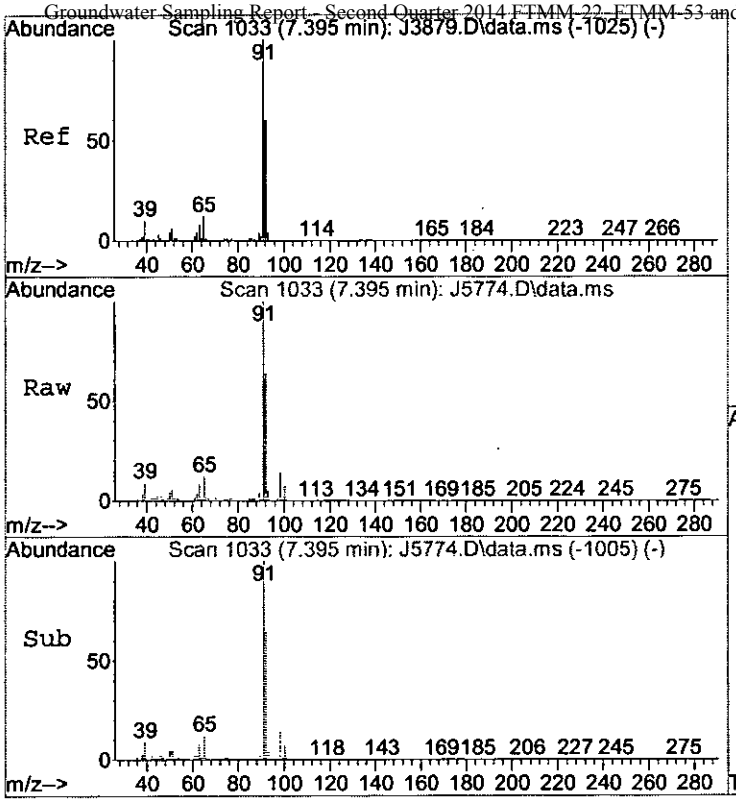
#22
Methylene Chloride
Concen: 0.37 ppb
RT: 2.366 min Scan# 208
Delta R.T. 0.006 min
Lab File: J5774.D
Acq: 20 May 2014 6:04 pm

Tgt Ion: 84 Resp: 3605

Ion	Ratio	Lower	Upper
84	100		
86	51.6	44.0	84.0
49	71.5	102.8	142.8#
51	30.5	19.2	59.2



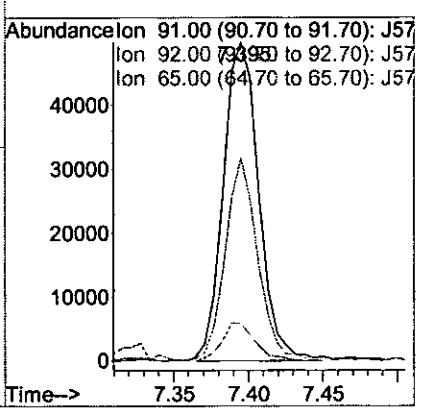
J5774.D W031214.M Wed May 21 17:33:50 2014 Page 1



#66
Toluene
Concen: 2.05 ppb
RT: 7.395 min Scan# 1033
Delta R.T. 0.000 min
Lab File: J5774.D
Acq: 20 May 2014 6:04 pm

Tgt Ion: 91 Resp: 81947

Ion	Ratio	Lower	Upper
91	100		
92	63.8	39.9	79.9
65	11.6	0.0	32.3



J5774.D W031214.M Wed May 21 17:33:59 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5774.D
Acq On : 20 May 2014 6:04 pm
Operator : K.Ruest
Sample : R1403443-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5774.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	593407	1422610	30.29%	5.526%
2	4.249	509	517	531	rVB	1099925	2727884	58.07%	10.596%
3	4.664	575	585	599	rBV	497134	1282592	27.31%	4.982%
4	5.450	704	714	730	rBV	1484122	3497609	74.46%	13.586%
5	7.322	1014	1021	1029	rBV	3110903	4697185	100.00%	18.246%
6	7.395	1029	1033	1045	rVB	133676	243143	5.18%	0.944%
7	8.181	1158	1162	1169	rBV2	33446	50836	1.08%	0.197%
8	8.742	1249	1254	1268	rBV	3341354	4258446	90.66%	16.542%
9	9.791	1421	1426	1439	rVB	2688479	3293113	70.11%	12.792%
10	10.748	1578	1583	1592	rBV	3738777	4270021	90.91%	16.587%

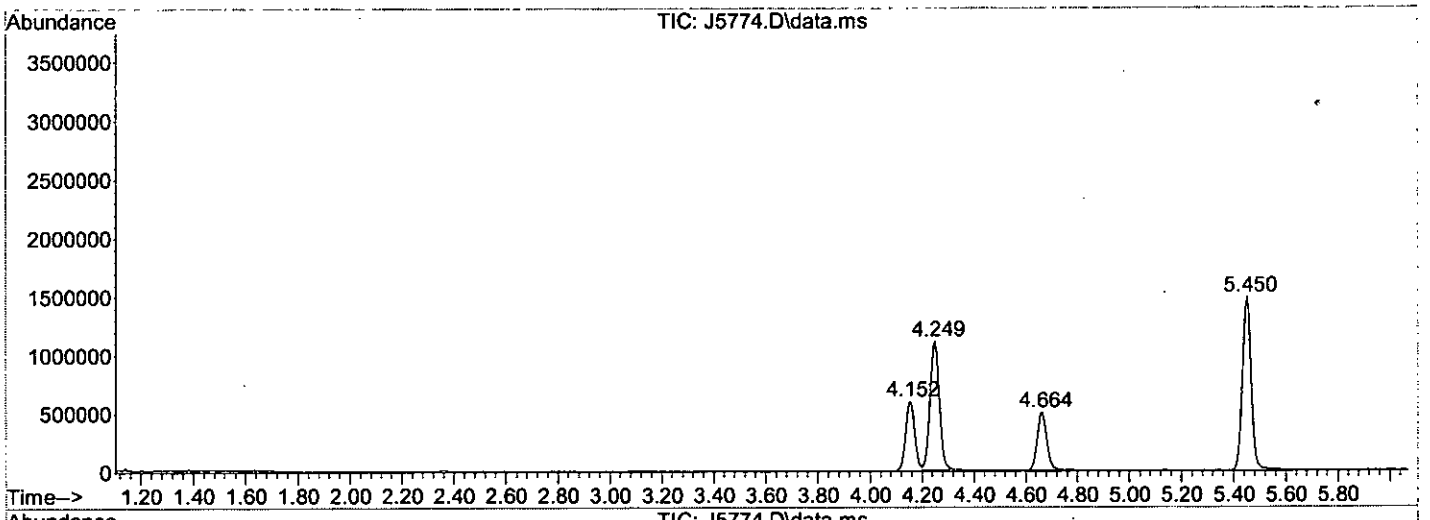
Sum of corrected areas: 25743439

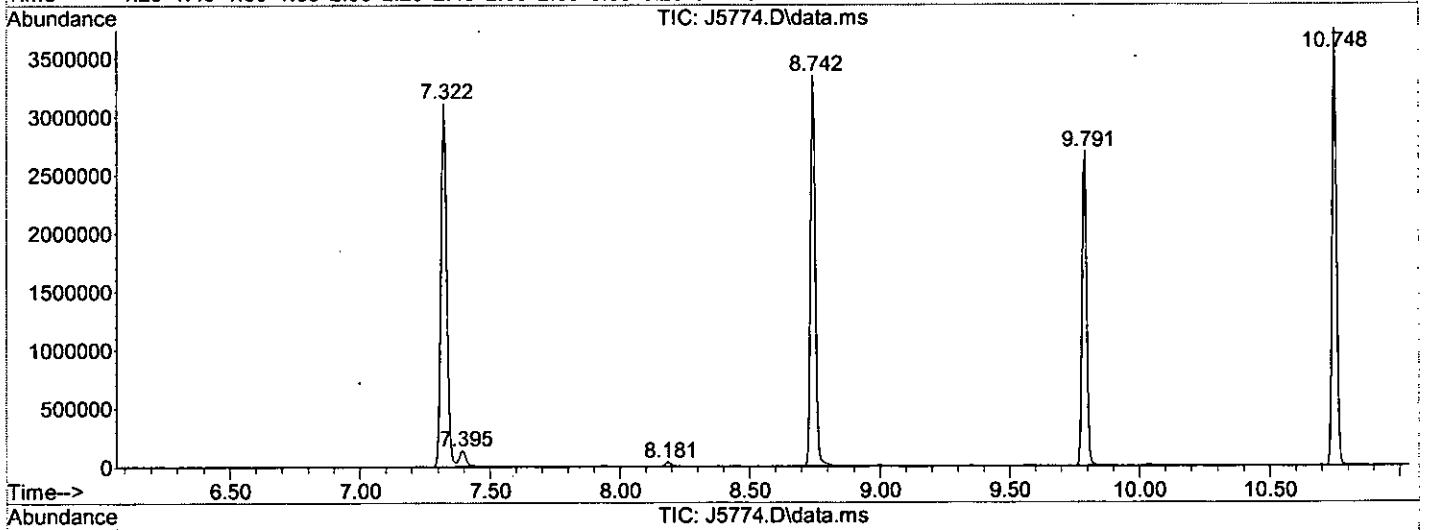
LSC Report - Integrated Chromatogram

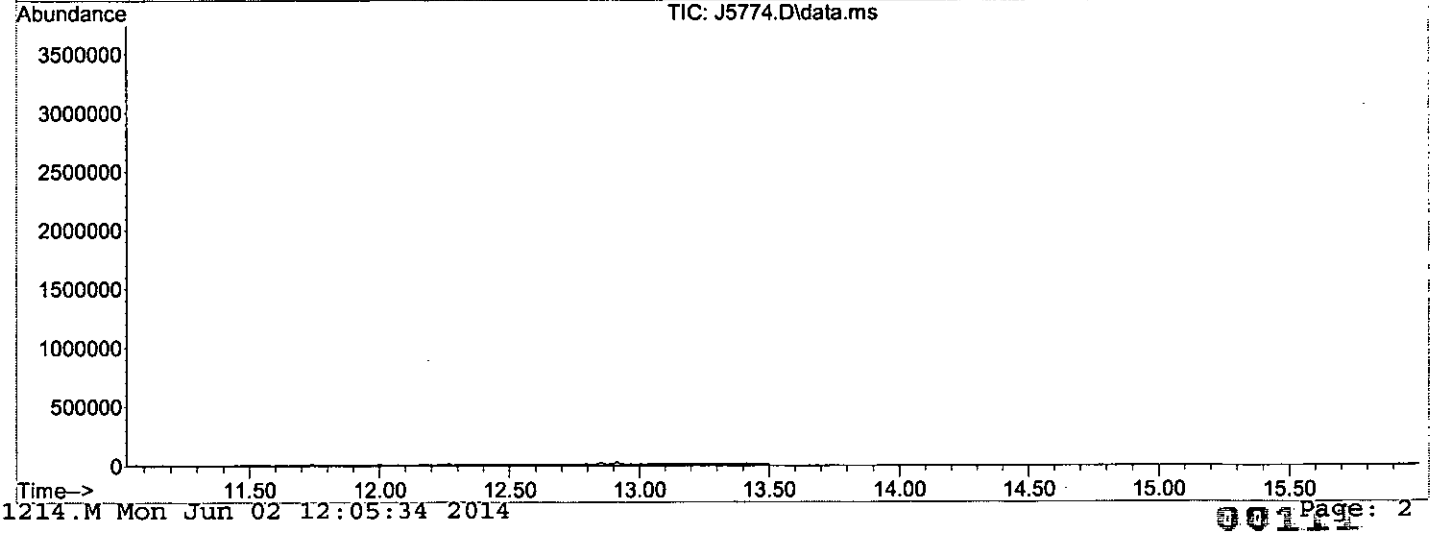
Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5774.D
Acq On : 20 May 2014 6:04 pm
Operator : K.Ruest
Sample : R1403443-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P







W031214.M Mon Jun 02 12:05:34 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5774.D
Acq On : 20 May 2014 6:04 pmm
Operator : K.Ruestt
Sample : R1403443-010|1.00
Misc : PARSONS 11603 T44
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:36

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:36

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 18:36

Sample Name: FTMM-TB-05082014
Lab Code: R1403443-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	5/20/14 18:36	
Dibromofluoromethane	99	85-115	5/20/14 18:36	
Toluene-d8	98	85-120	5/20/14 18:36	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/8/14
Sample Matrix:	Water	**Date Received:**	5/9/14
		Date Analyzed:	5/20/14 1836

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-05082014	**Units:**	µg/L
Lab Code:	R1403443-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-011|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 6:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 18:51:38 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1012574	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1551541	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1451131	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	738937	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	444960	49.54	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.08%				
48) surr1,1,2-dichloroetha...	4.664	65	454390	44.41	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.82%				
65) SURR3,Toluene-d8	7.322	98	1844917	48.88	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.76%				
70) SURR2,BFB	9.791	95	702002	49.85	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.70%				
Target Compounds							Qvalue
12) Acrolein	1.957	56	221	Below Cal			~~91~~
15) Acetone	2.006	43	~~440~~	~~0.22~~	ppb		86
16) 2-Propanol	~~2.115~~	~~45~~	212	0.65	ppb	#	16
19) Acetonitrile	2.286	40	744	2.26	ppb	#	10
~~90) Cyclohexanone~~	~~9.736~~	~~55~~	~~261~~	~~0.44~~	~~ppb~~	~~#~~	~~14~~
119) 2,4,5-Trichlorotolene	12.851	159	2120	0.36	ppb	#	86
120) 2,3,6-Trichlorotoluene	12.851	159	2120	0.39	ppb		90

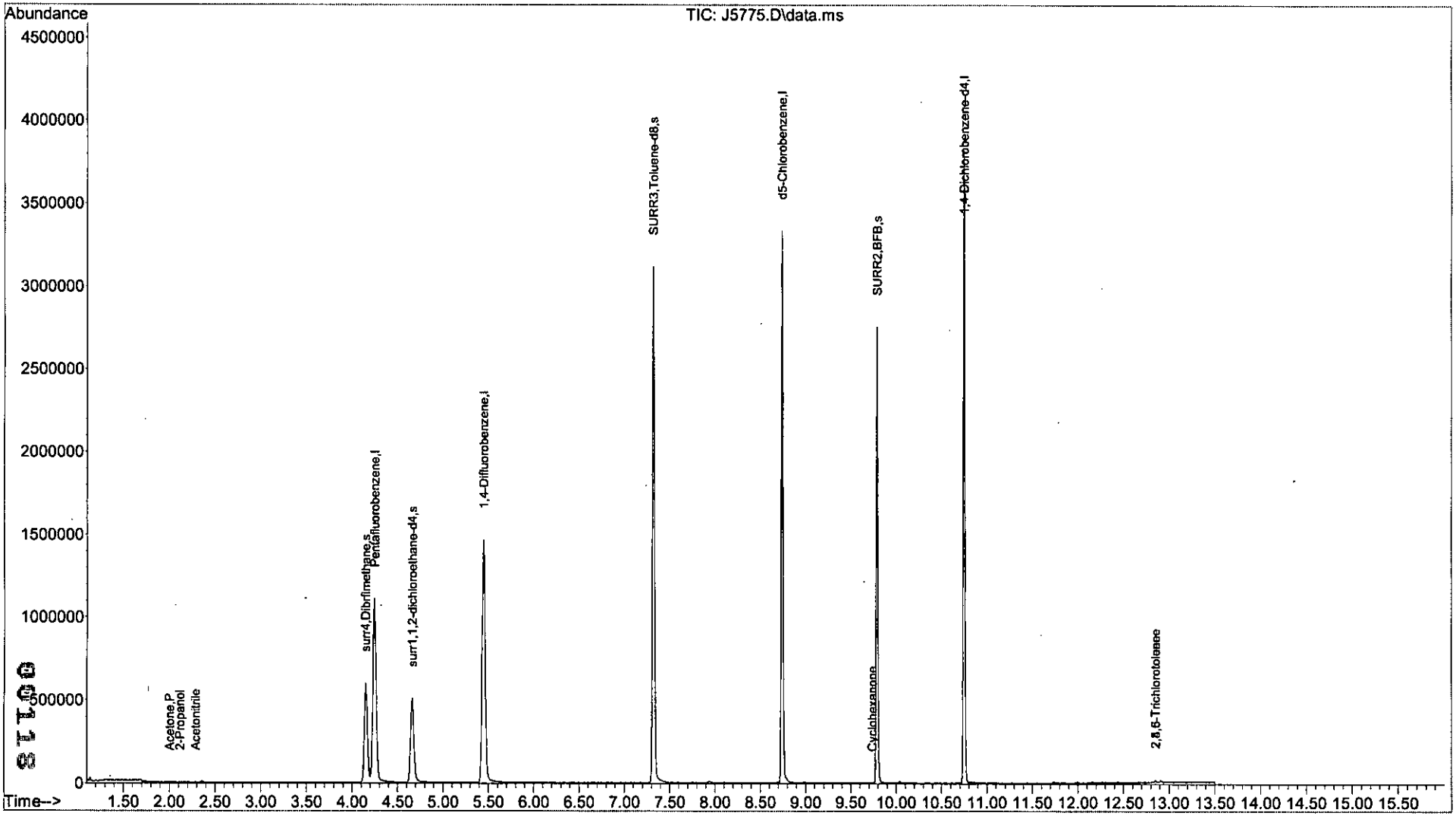
MT/WP 5/21/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : R1403443-011|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5775.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 6:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 18:51:38 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



W031214.M Tue May 20 18:51:43 2014 Page: 2

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5775.D
Acq On : 20 May 2014 6:36 pm
Operator : K.Ruest
Sample : R1403443-011|1.0
Misc : PARSONS 11603 T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5775.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	596192	1409288	29.70%	5.524%
2	4.249	509	517	533	rVB	1102841	2728481	57.50%	10.695%
3	4.664	574	585	600	rBV	506419	1305641	27.51%	5.118%
4	5.450	704	714	729	rBV	1464315	3456268	72.84%	13.548%
5	7.322	1014	1021	1040	rBV	3117403	4745252	100.00%	18.600%
6	8.742	1249	1254	1268	rBV	3330518	4235968	89.27%	16.604%
7	9.791	1421	1426	1436	rBV	2753729	3311277	69.78%	12.979%
8	10.748	1578	1583	1592	rBV	3818369	4319462	91.03%	16.931%

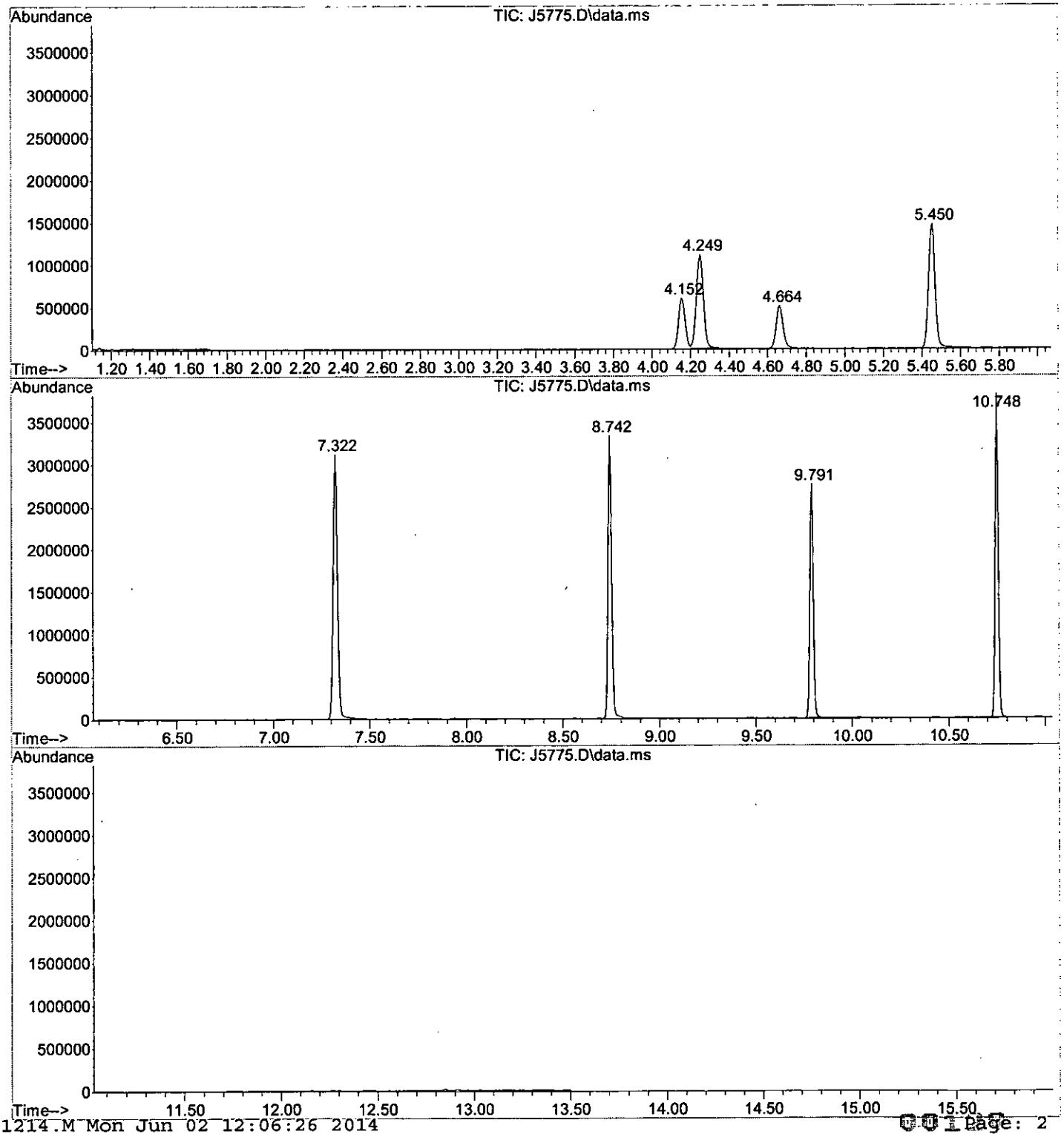
Sum of corrected areas: 25511637

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5775.D
Acq On    : 20 May 2014    6:36 pm
Operator  : K.Ruest
Sample    : R1403443-011|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 4   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W031214.M Mon Jun 02 12:06:26 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5775.D
Acq On : 20 May 2014 6:36 pmm
Operator : K.Ruestt
Sample : R1403443-011|1.00
Misc : PARSONS 11603 T44
ALS Vial : 4 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

W031214.M Mon Jun 02 12:06:26 2014 Page: 3

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 20:13

Sample Name: FTMM-DI-05092014
Lab Code: R1403443-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.8**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 20:13

Sample Name: FTMM-DI-05092014
Lab Code: R1403443-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.92**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14 1330
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 20:13
Sample Name:	FTMM-DI-05092014	**Units:**	µg/L
Lab Code:	R1403443-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	5/20/14 20:13	
Dibromofluoromethane	98	85-115	5/20/14 20:13	
Toluene-d8	94	85-120	5/20/14 20:13	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 2013

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-DI-05092014	**Units:**	µg/L
Lab Code:	R1403443-012	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-012|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 8:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 20:28:11 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	987147	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1537454	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1424011	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	727758	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	436849	49.08	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.16%				
48) surr1,1,2-dichloroetha...	4.664	65	451394	44.52	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.04%				
65) SURR3,Toluene-d8	7.322	98	1762450	47.12	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.24%				
70) SURR2,BFB	9.791	95	684395	49.05	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.10%				
Target Compounds							Qvalue
15) Acetone	2.048	43	3589	1.83	ppb		81
~~16) 2-Propanol~~	~~2.134~~	~~45~~	~~290~~	~~0.91~~	~~ppb~~		~~65~~
~~19) Acetonitrile~~	~~2.250~~	~~40~~	~~572~~	~~1.79~~	~~ppb~~	~~#~~	~~15~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1975~~	~~0.40~~	~~ppb~~	~~#~~	~~1~~
22) Methylene Chloride	2.359	84	2260	0.24	ppb	#	79
40) Chloroform	3.944	83	15001	0.92	ppb		91
~~90) Cyclohexanone~~	~~9.791~~	~~55~~	~~1465~~	~~2.51~~	~~ppb~~	~~#~~	~~14~~

(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 5/21/14

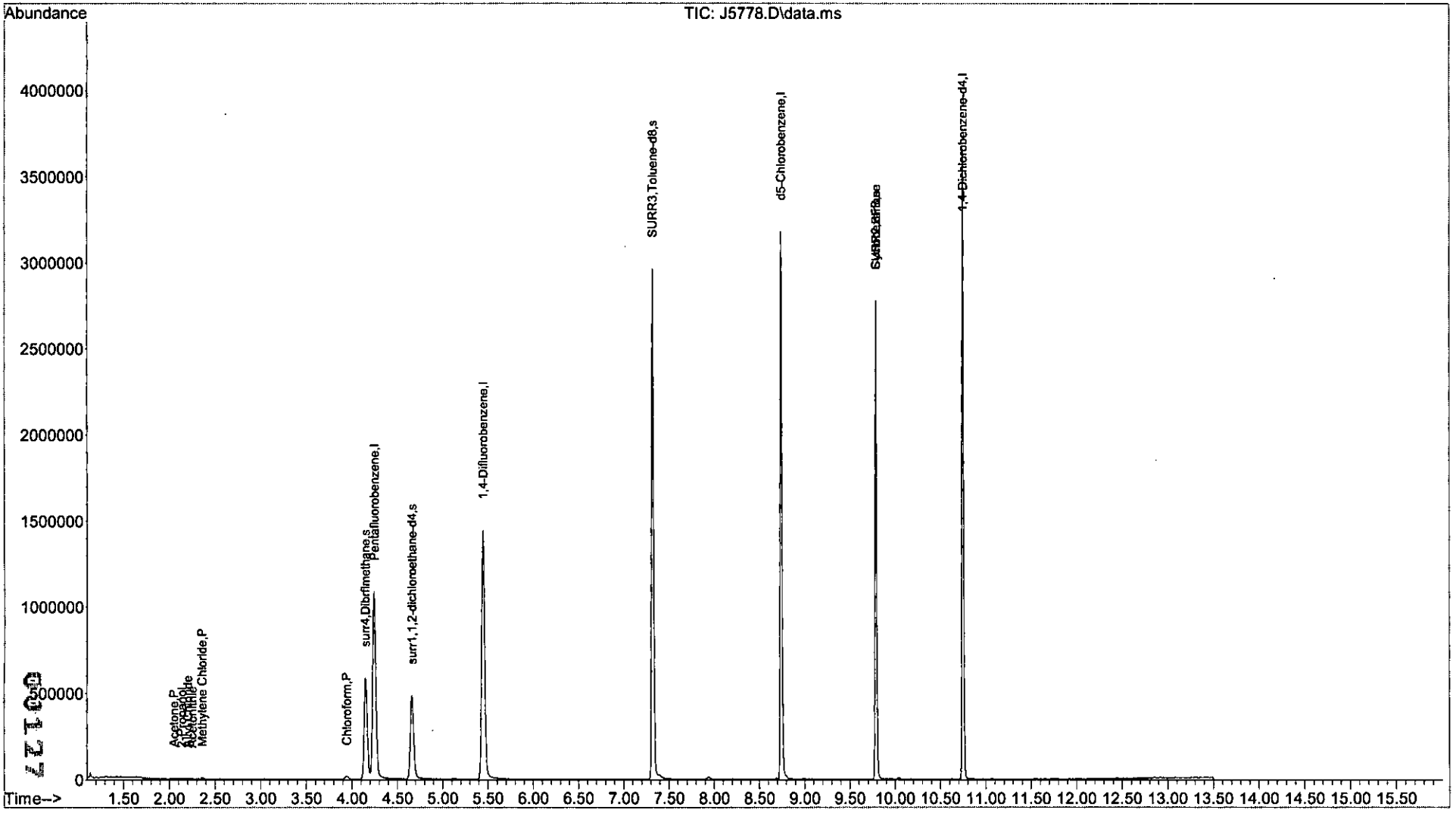
W031214.M Tue May 20 20:28:13 2014 Page: 1

00126

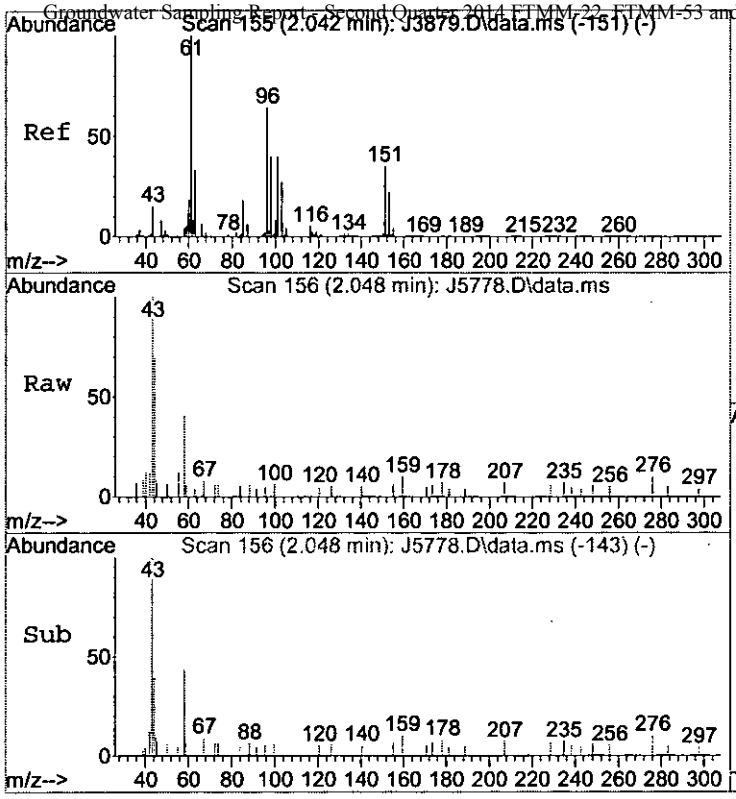
Quantitation Report (Not Reviewed)

Sample : R1403443-012|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5778.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 8:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 20:28:11 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



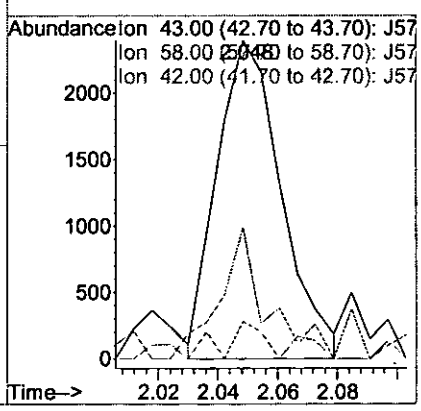
W031214.M Tue May 20 20:28:16 2014 Page: 2



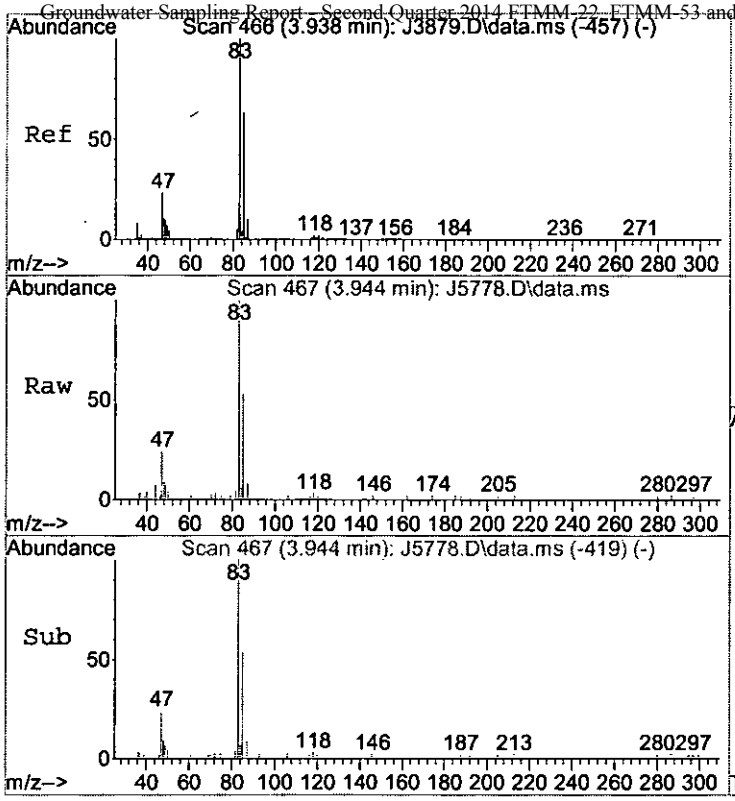
#15
Acetone
Concen: 1.83 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: J5778.D
Acq: 20 May 2014 8:13 pm

Tgt Ion: 43 Resp: 3589

Ion	Ratio	Lower	Upper
43	100		
58	41.3	9.7	49.7
42	11.8	0.0	27.9



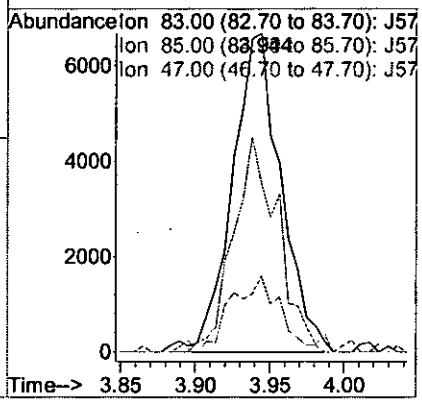
J5778.D W031214.M Wed May 21 17:43:38 2014 Page 1



#40
Chloroform
Concen: 0.92 ppb
RT: 3.944 min Scan# 467
Delta R.T. 0.006 min
Lab File: J5778.D
Acq: 20 May 2014 8:13 pm

Tgt Ion: 83 Resp: 15001

Ion	Ratio	Lower	Upper
83	100		
85	52.8	42.6	82.6
47	23.8	3.4	43.4



J5778.D W031214.M Wed May 21 17:43:32 2014 00128 Page 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5778.D
Acq On : 20 May 2014 8:13 pm
Operator : K.Ruest
Sample : R1403443-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

TW 6-2-14.

Quant Time: May 21 17:42:10 2014
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

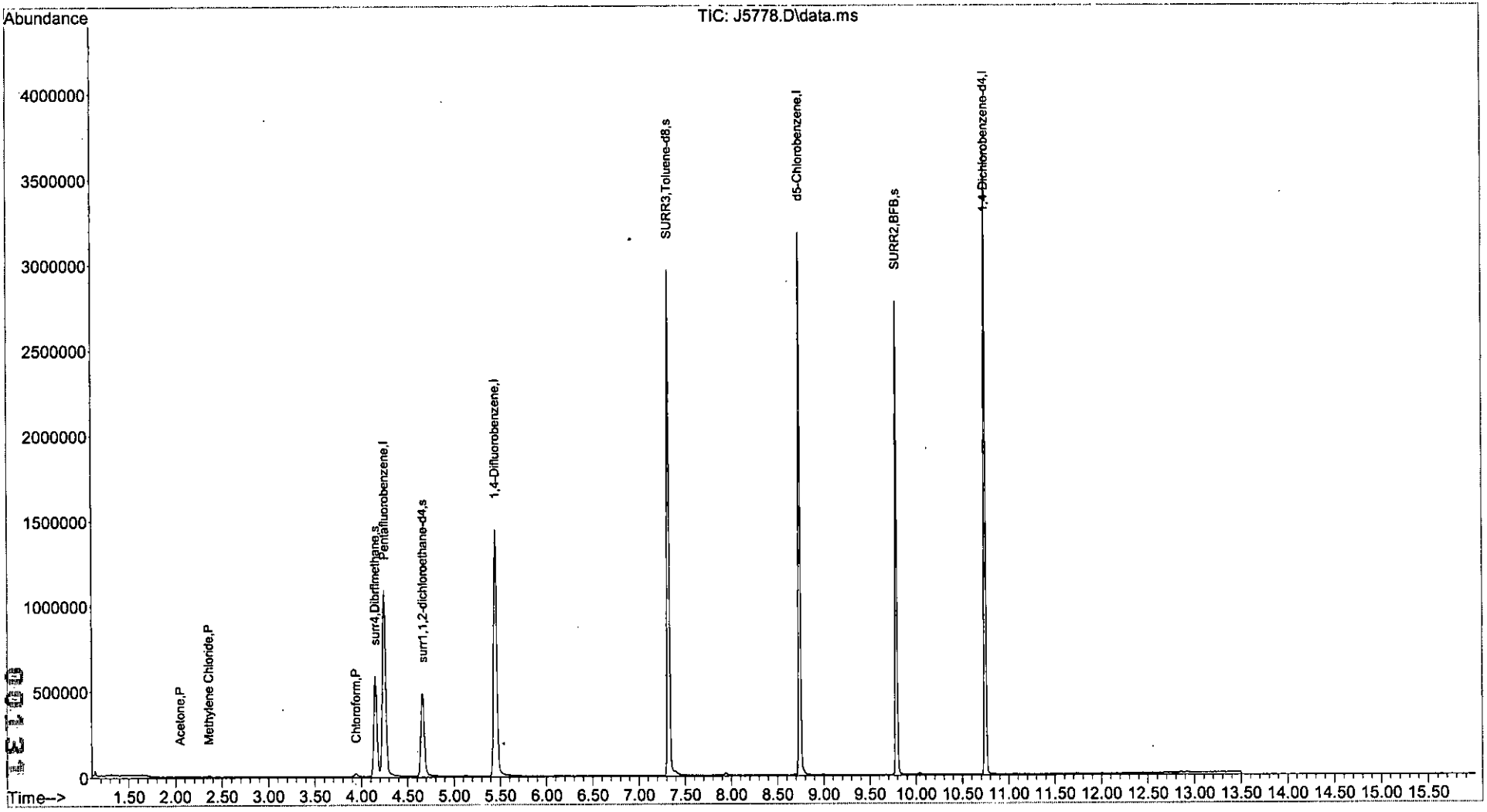
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	987147	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1537454	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1424011	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	727758	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	436849	49.08	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.16%				
48) surr1,1,2-dichloroetha...	4.664	65	451394	44.52	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.04%				
65) SURR3,Toluene-d8	7.322	98	1762450	47.12	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.24%				
70) SURR2,BFB	9.791	95	684395	49.05	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.10%				
Target Compounds							Qvalue
15) Acetone	2.048	43	3589	1.83	ppb		81
22) Methylene Chloride	2.359	84	2260	0.24	ppb	#	79
40) Chloroform	3.944	83	15001	0.92	ppb		91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

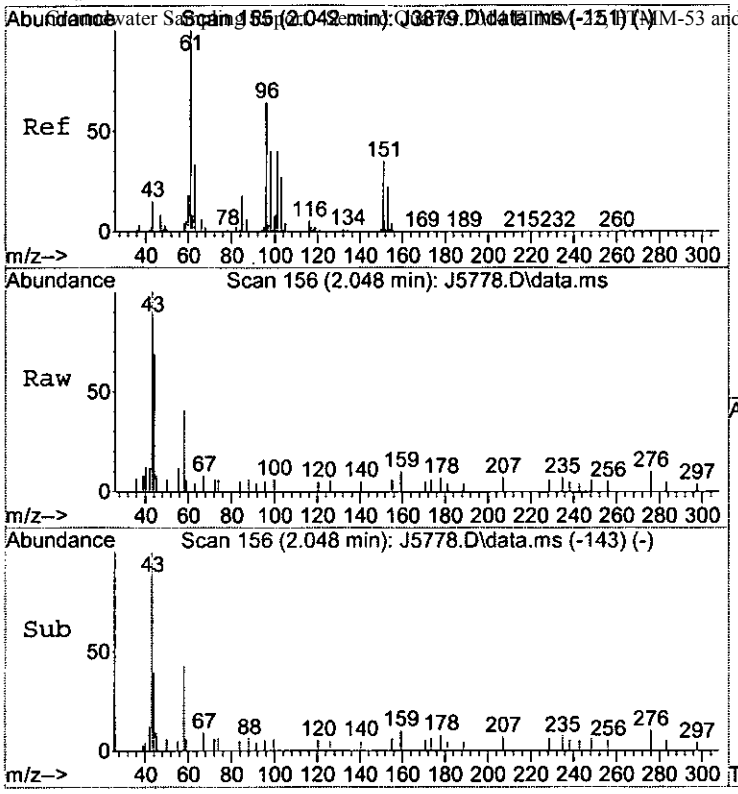
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5778.D
Acq On : 20 May 2014 8:13 pm
Operator : K.Ruest
Sample : R1403443-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:42:10 2014
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



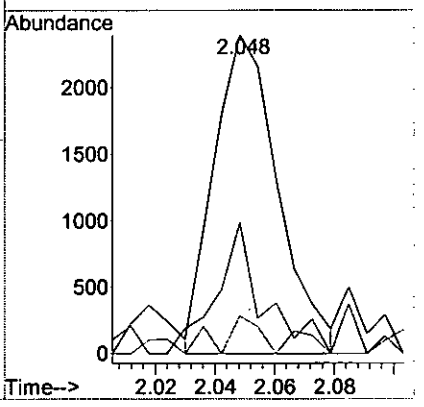
W031214.M Mon Jun 02 12:33:08 2014 Page: 2

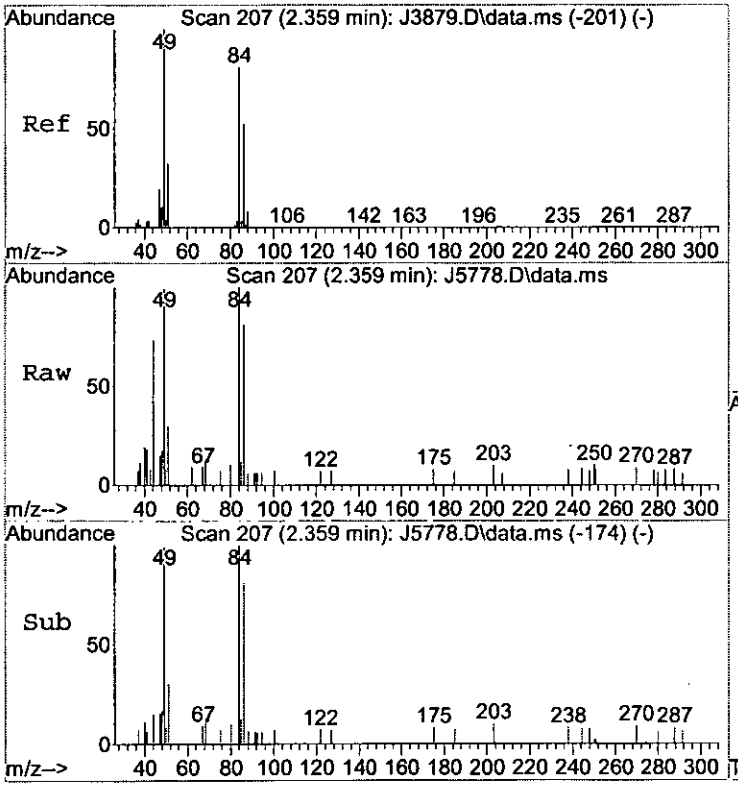


#15
Acetone
Concen: 1.83 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: J5778.D
Acq: 20 May 2014 8:13 pm

Tgt Ion: 43 Resp: 3589

Ion	Ratio	Lower	Upper
43	100		
58	41.3	9.7	49.7
42	11.8	0.0	27.9

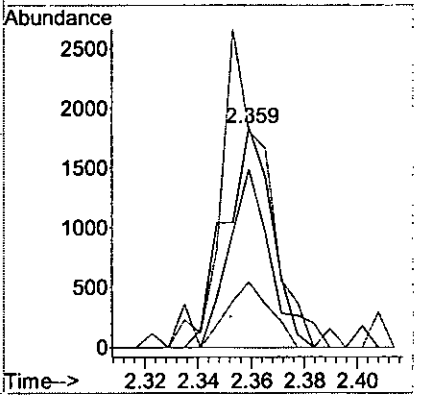




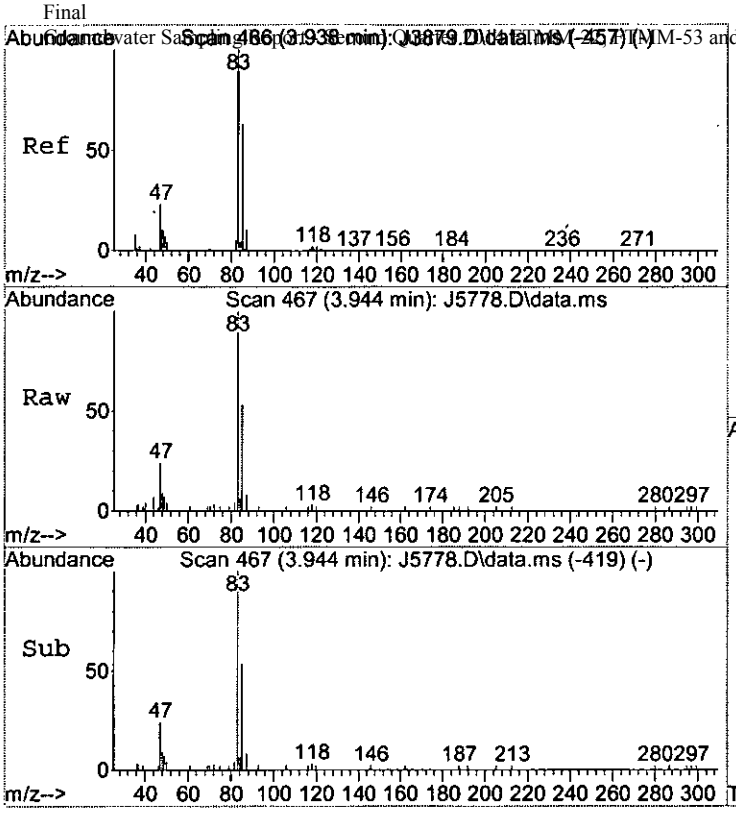
#22
Methylene Chloride
Concen: 0.24 ppb
RT: 2.359 min Scan# 207
Delta R.T. -0.000 min
Lab File: J5778.D
Acq: 20 May 2014 8:13 pm

Tgt Ion: 84 Resp: 2260

Ion	Ratio	Lower	Upper
84	100		
86	81.1	44.0	84.0
49	98.6	102.8	142.8#
51	29.7	19.2	59.2



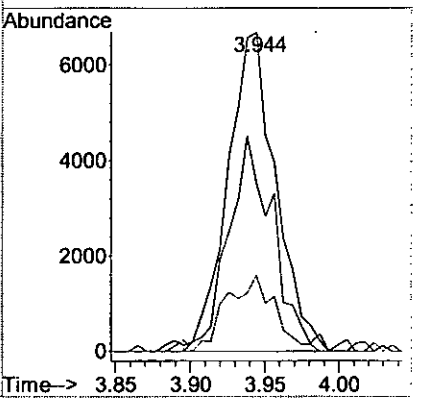
J5778.D W031214.M Mon Jun 02 12:33:08 2014 Page 3



#40
Chloroform
Concen: 0.92 ppb
RT: 3.944 min Scan# 467
Delta R.T. 0.006 min
Lab File: J5778.D
Acq: 20 May 2014 8:13 pm

Tgt Ion: 83 Resp: 15001

Ion	Ratio	Lower	Upper
83	100		
85	52.8	42.6	82.6
47	23.8	3.4	43.4



J5778.D W031214.M Mon Jun 02 12:33:08 2014 Page 4

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:08

Sample Name: FTMM-EB-05092014
Lab Code: R1403443-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:08

Sample Name: FTMM-EB-05092014
Lab Code: R1403443-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.81**	**J**	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14 1330
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:08

Sample Name: FTMM-EB-05092014
Lab Code: R1403443-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	5/20/14 19:08	
Dibromofluoromethane	98	85-115	5/20/14 19:08	
Toluene-d8	96	85-120	5/20/14 19:08	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/9/14
Date Received: 5/10/14
Date Analyzed: 5/20/14 1908

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-EB-05092014
Lab Code: R1403443-013

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-013|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 7:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 19:23:45 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1007392	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1551660	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1443544	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	724677	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	441720	49.17	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.34%				
48) surr1,1,2-dichloroetha...	4.664	65	457865	44.74	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.48%				
65) SURR3,Toluene-d8	7.322	98	1821015	48.24	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.48%				
70) SURR2,BFB	9.791	95	693854	49.27	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.54%				
Target Compounds							Qvalue
15) Acetone	2.049	43	3322	1.66	ppb		77
~~16) 2-Propanol~~	~~2.146~~	~~45~~	~~242~~	~~0.75~~	~~ppb~~		~~85~~
~~20) Allyl Chloride~~	~~2.201~~	~~76~~	~~1961~~	~~0.39~~	~~ppb~~	~~#~~	~~1~~
22) Methylene Chloride	2.359	84	2539	0.27	ppb	#	71
~~39) Tetrahydrofuran~~	~~3.926~~	~~42~~	~~473~~	~~0.24~~	~~ppb~~	~~#~~	~~50~~
40) Chloroform	3.944	83	13483	0.81	ppb		94
~~90) Cyclohexanone~~	~~9.736~~	~~55~~	~~226~~	~~0.39~~	~~ppb~~	~~#~~	~~14~~
119) 2,4,5-Trichlorotolene	12.857	159	1271	0.22	ppb	#	82
120) 2,3,6-Trichlorotoluene	12.912	159	1256	0.24	ppb		92

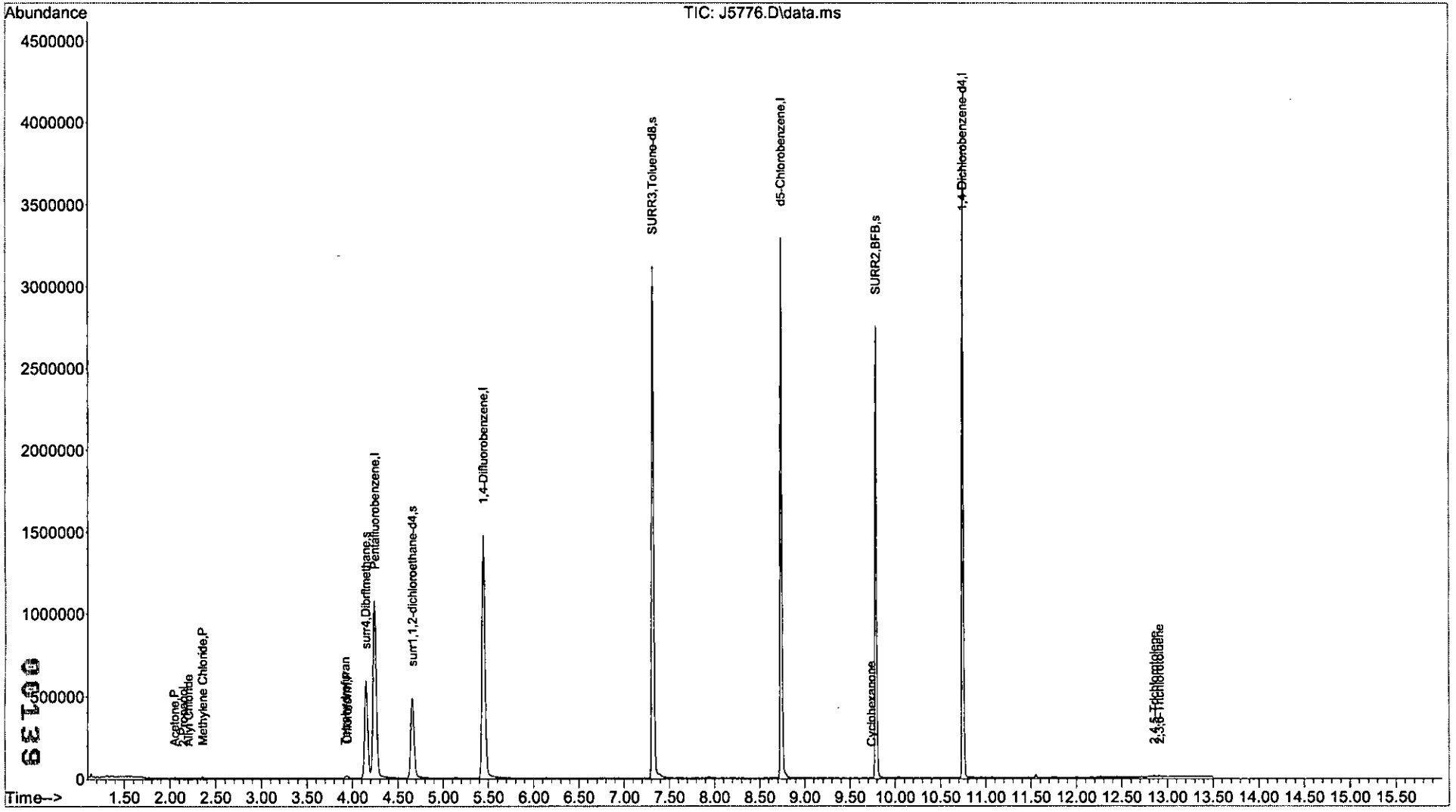
(#) = qualifier out of range (m) = manual integration (+) = signals summed

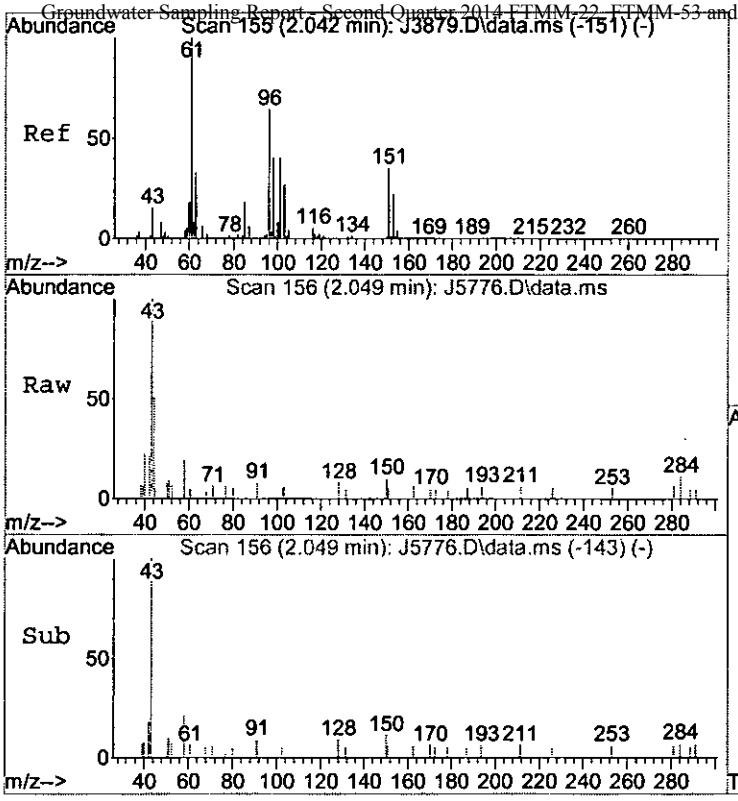
5/21/14

Quantitation Report (Not Reviewed)

Sample : R1403443-013|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5776.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 7:08 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 19:23:45 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

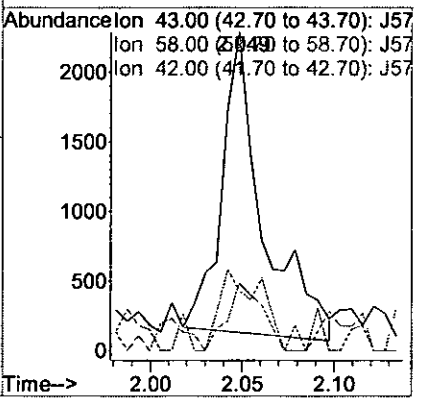




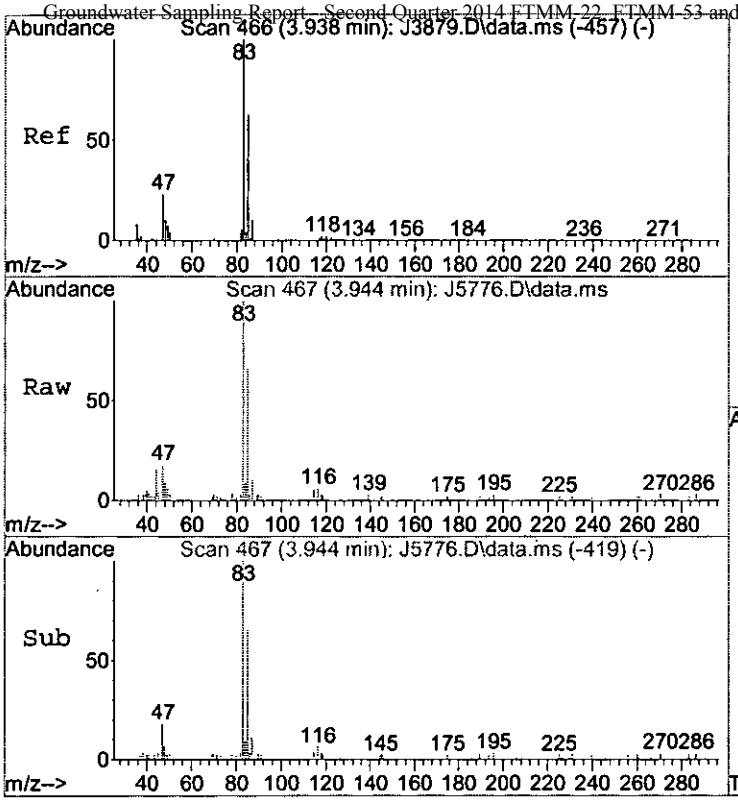
#15
Acetone
Concen: 1.66 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.006 min
Lab File: J5776.D
Acq: 20 May 2014 7:08 pm

Tgt Ion: 43 Resp: 3322

Ion	Ratio	Lower	Upper
43	100		
58	19.1	9.7	49.7
42	21.3	0.0	27.9



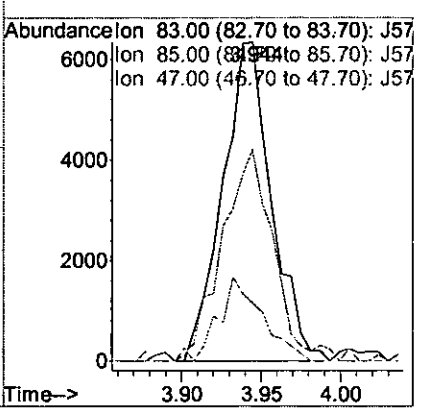
J5776.D W031214.M Wed May 21 17:39:21 2014 Page 1



#40
Chloroform
Concen: 0.81 ppb
RT: 3.944 min Scan# 467
Delta R.T. 0.006 min
Lab File: J5776.D
Acq: 20 May 2014 7:08 pm

Tgt Ion: 83 Resp: 13483

Ion	Ratio	Lower	Upper
83	100		
85	66.3	42.6	82.6
47	18.2	3.4	43.4



J5776.D W031214.M Wed May 21 17:39:27 2014 00141 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5776.D
Acq On : 20 May 2014 7:08 pm
Operator : K.Ruest
Sample : R1403443-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5776.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	490	501	509	rBV	593161	1410624	30.21%	5.608%
2	4.249	509	517	530	rVB	1067658	2678791	57.38%	10.649%
3	4.664	575	585	595	rBV	487111	1254503	26.87%	4.987%
4	5.450	702	714	725	rBV	1476301	3407084	72.98%	13.544%
5	7.322	1014	1021	1032	rBV	3123450	4668677	100.00%	18.559%
6	8.742	1249	1254	1271	rBV	3293283	4204465	90.06%	16.714%
7	9.791	1421	1426	1438	rVB	2755042	3271307	70.07%	13.004%
8	10.748	1578	1583	1592	rBV	3841637	4260408	91.26%	16.936%

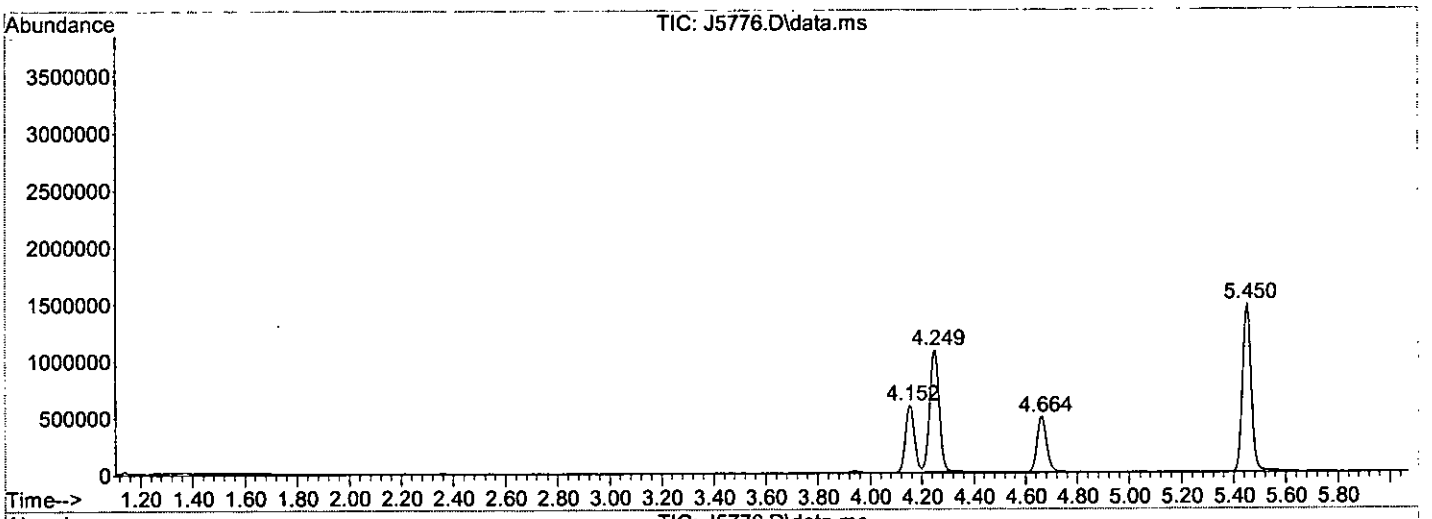
Sum of corrected areas: 25155859

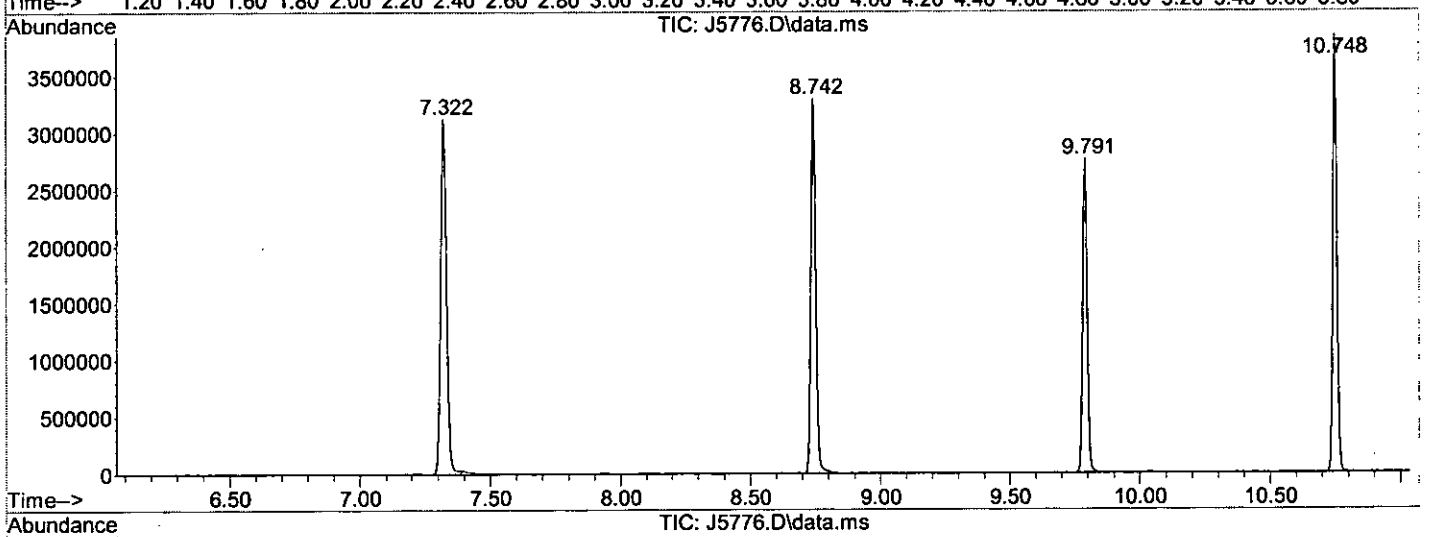
LSC Report - Integrated Chromatogram

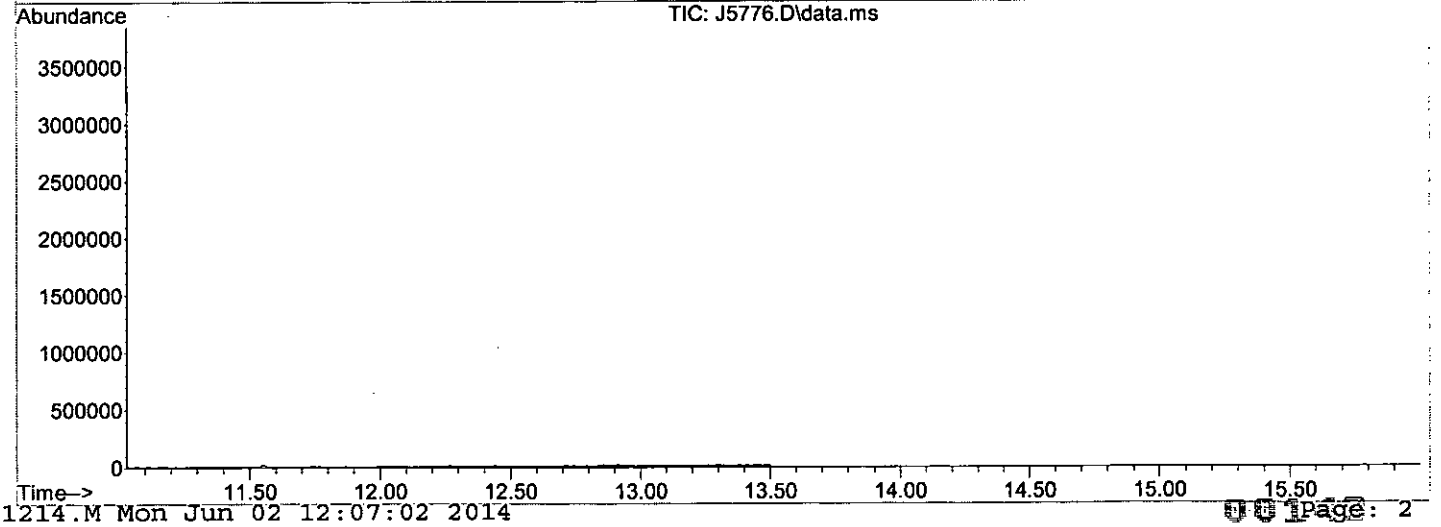
Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5776.D
Acq On : 20 May 2014 7:08 pm
Operator : K.Ruest
Sample : R1403443-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P







W031214.M Mon Jun 02 12:07:02 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5776.D
Acq On : 20 May 2014 7:08 pmm
Operator : K.Ruestt
Sample : R1403443-013|1.00
Misc : PARSONS 11603 T44
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 9/14
Date Received: 5/10/14
Date Analyzed: 5/20/14 19:40

Sample Name: FTMM-TB-05092014
Lab Code: R1403443-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 19:40
Sample Name:	FTMM-TB-05092014	**Units:**	µg/L
Lab Code:	R1403443-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 9/14
Sample Matrix:	Water	**Date Received:**	5/10/14
		Date Analyzed:	5/20/14 19:40
Sample Name:	FTMM-TB-05092014	**Units:**	µg/L
Lab Code:	R1403443-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	5/20/14 19:40	
Dibromofluoromethane	97	85-115	5/20/14 19:40	
Toluene-d8	96	85-120	5/20/14 19:40	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/9/14
Date Received: 5/10/14
Date Analyzed: 5/20/14 1940

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-TB-05092014
Lab Code: R1403443-014

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1403443-014|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 7:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 19:55:50 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	1010393	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1553410	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1435264	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	724000	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	436924	48.59	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.18%			
48) surr1,1,2-dichloroetha...	4.658	65	465114	45.40	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 90.80%			
65) SURR3,Toluene-d8	7.322	98	1814597	48.02	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.04%			
70) SURR2,BFB	9.791	95	691464	49.05	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.10%			
Target Compounds						Qvalue
~~16) 2-Propanol~~	~~2.116~~	~~45~~	~~185~~	~~0.57~~	~~ppb~~	~~# 55~~
~~20) Allyl Chloride~~	~~2.207~~	~~76~~	~~1302~~	~~0.26~~	~~ppb~~	~~# 1~~
~~90) Cyclohexanone~~	~~9.785~~	~~55~~	~~1559~~	~~2.68~~	~~ppb~~	~~# 14~~
119) 2,4,5-Trichlorotolene	12.912	159	1242	0.22	ppb	91
120) 2,3,6-Trichlorotoluene	12.912	159	1242	0.24	ppb	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

m/wp

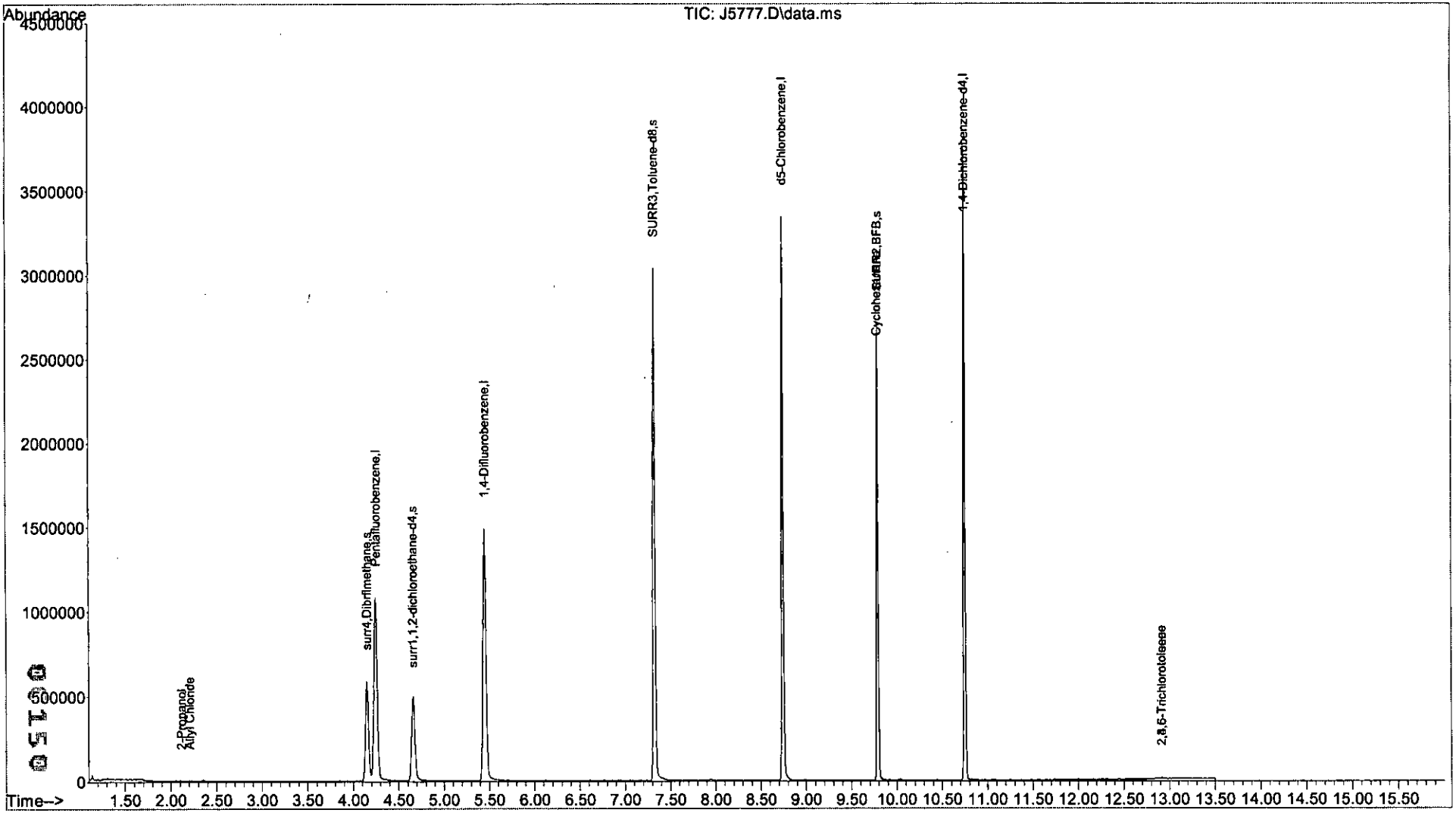
KP 5/20/14

00149

Quantitation Report (Not Reviewed)

Sample : R1403443-014|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5777.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 7:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 19:55:50 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5777.D
Acq On : 20 May 2014 7:40 pm
Operator : K.Ruest
Sample : R1403443-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5777.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	586232	1393081	29.76%	5.526%
2	4.249	509	517	534	rVB	1074153	2702173	57.73%	10.718%
3	4.664	575	585	601	rBV	493424	1270328	27.14%	5.039%
4	5.450	704	714	731	rBV	1487294	3437041	73.43%	13.633%
5	7.322	1013	1021	1038	rBV	3038382	4680763	100.00%	18.566%
6	8.742	1249	1254	1269	rBV	3343047	4198632	89.70%	16.653%
7	9.791	1421	1426	1436	rVB	2716302	3266069	69.78%	12.955%
8	10.748	1578	1583	1591	rBV	3744552	4263666	91.09%	16.911%

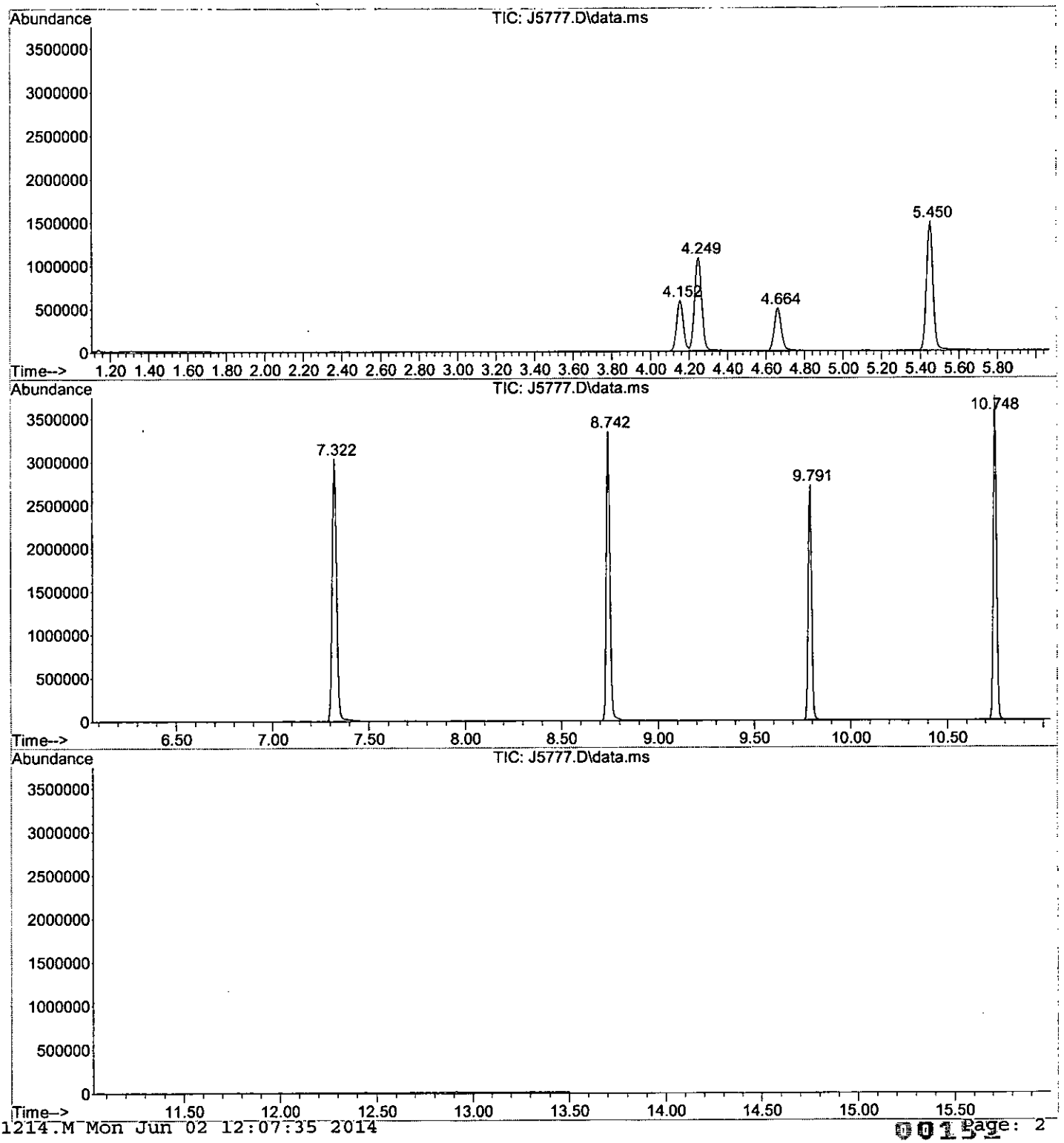
Sum of corrected areas: 25211753

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5777.D
Acq On : 20 May 2014 7:40 pm
Operator : K.Ruest
Sample : R1403443-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:07:35 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5777.D
Acq On : 20 May 2014 7:40 pmm
Operator : K.Ruestt
Sample : R1403443-014|1.00
Misc : PARSONS 11603 T44
ALS Vial : 6 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

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ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

3/13/14

Initial Calibration - Summary Report

Calibration ID: RC1400023 W031214 8260 Waters
Instrument ID: R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3058	<=20	7.3
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7112	<=20	2.2
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5726	<=20	5.4
1,1,2-Trichloroethane	T	Average RF		0.100	0.2220	<=20	5.6
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3971	<=20	1.9
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8461	<=20	3.1
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3628	<=20	3.7
1,1-Dichloropropene	T	Average RF			0.3693	<=20	4.9
1,2,3-Trichlorobenzene	T	Average RF			0.6036	<=20	8.2
1,2,3-Trichloropropane	T	Average RF			0.1713	<=20	7.2
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7372	<=20	6.4
1,2,4-Trimethylbenzene	T	Average RF			2.167	<=20	7.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08773	<=20	12.9
1,2-Dibromoethane	T	Average RF		0.100	0.2312	<=20	5.1
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5388	<=20	4.7
1,2-Dichlorobenzene	T	Average RF		0.400	1.206	<=20	3.3
1,2-Dichloroethane	T	Average RF		0.100	0.3737	<=20	3.9
1,2-Dichloropropane	T	Average RF		0.100	0.3148	<=20	4.5
1,3,5-Trichlorobenzene	T	Average RF			0.8315	<=20	4.0
1,3,5-Trimethylbenzene	T	Average RF			2.106	<=20	6.0
1,3-Dichlorobenzene	T	Average RF		0.600	1.252	<=20	4.2
1,3-Dichloropropane	T	Average RF			0.4501	<=20	2.3
1,4-Dichlorobenzene	T	Average RF		0.500	1.332	<=20	8.0
1,4-Dioxane	T	Average RF			0.002062	<=20	6.8
1-Butanol	T	Average RF			0.004645	<=20	18.2
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.3856	<=20	7.0
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6154	<=20	3.4
2,2-Dichloropropane	T	Average RF			0.6713	<=20	3.9
2,3,6-Trichlorotoluene	T	Average RF			0.3641	<=20	7.5
2,4,5-Trichlorotoluene	T	Average RF			0.3978	<=20	7.2
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.9535	<=20	5.8
2,4-Dichlorobenzotrifluoride	T	Average RF			0.5359	<=20	4.0
2,5-Dichlorobenzotrifluoride	T	Average RF			0.6128	<=20	3.4
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1390	<=20	1.9
2-Chloro-1,3-butadiene	T	Average RF			0.7288	<=20	7.9
2-Chlorobenzotrifluoride	T	Average RF			0.8330	<=20	4.8
2-Chloroethyl Vinyl Ether	T	Average RF			0.1412	<=20	5.8
2-Chlorotoluene	T	Average RF			1.896	<=20	5.7
2-Hexanone	T	Average RF		0.05	0.1416	<=20	9.6
2-Methyl-1-propanol	T	Average RF			0.008458	<=20	8.6
2-Methyl-2-propanol	T	Average RF			0.02773	<=20	8.6
2-Nitropropane	T	Average RF			0.03954	<=20	10.8
2-Propanol	T	Average RF			0.01610	<=20	13.7
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.010	<=20	7.1
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6160	<=20	4.0
3-Chloro-1-propene	T	Average RF			0.2488	<=20	4.3
3-Chlorobenzotrifluoride	T	Average RF			0.4304	<=20	7.2
3-Chlorotoluene	T	Average RF			1.973	<=20	5.3
4-Chlorotoluene	T	Average RF			2.236	<=20	8.4
4-Isopropyltoluene	T	Average RF			2.086	<=20	6.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.1899	<=20	6.0

Initial Calibration - Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.09920	<=20	6.0
Acetonitrile	T	Average RF			0.01622	<=20	13.2
Acrolein	T	Quadratic	1/X2		0.01717	>=0.99	0.9978
Acrylonitrile	T	Average RF			0.1111	<=20	5.0
Benzene	T	Average RF		0.500	1.231	<=20	2.6
Bromobenzene	T	Average RF			0.7355	<=20	3.3
Bromochloromethane	T	Average RF			0.2832	<=20	8.2
Bromodichloromethane	T	Average RF		0.200	0.3677	<=20	5.4
Bromoform	T	Average RF		0.100	0.2840	<=20	15.6
Bromomethane	T	Average RF		0.100	0.2881	<=20	6.8
Carbon Disulfide	T	Average RF		0.100	1.262	<=20	4.8
Carbon Tetrachloride	T	Average RF		0.05	0.1199	<=20	6.9
Chlorobenzene	T	Average RF		0.500	0.8701	<=20	2.8
Chloroethane	T	Average RF		0.100	0.2851	<=20	8.6
Chloroform	T	Average RF		0.200	0.8292	<=20	4.7
Chloromethane	T	Average RF		0.100	0.5146	<=20	2.8
Cyclohexane	T	Average RF		0.100	0.2705	<=20	5.1
Cyclohexanone	T	Average RF			0.04011	<=20	5.9
Dibromochloromethane	T	Average RF		0.100	0.2588	<=20	11.9
Dibromomethane	T	Average RF			0.1497	<=20	3.1
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5939	<=20	7.1
Dichlorofluoromethane (CFC 21)	T	Average RF			0.7211	<=20	4.4
Dichloromethane	T	Average RF		0.100	0.4753	<=20	5.4
Diethyl Ether	T	Average RF			0.3614	<=20	6.8
Diisopropyl Ether	T	Average RF			1.648	<=20	5.1
Ethyl Methacrylate	T	Average RF			0.2861	<=20	15.5
Ethyl tert-Butyl Ether	T	Average RF			1.379	<=20	4.3
Ethylbenzene	T	Average RF		0.100	0.4636	<=20	3.9
Hexachlorobutadiene	T	Average RF			0.3218	<=20	5.3
Iodomethane	T	Average RF			0.4820	<=20	15.6
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.581	<=20	6.3
Methacrylonitrile	T	Average RF			0.1295	<=20	10.3
Methyl Acetate	T	Average RF		0.100	0.2234	<=20	6.0
Methyl Methacrylate	T	Average RF			0.1481	<=20	9.0
Methyl tert-Butyl Ether	T	Average RF		0.100	1.153	<=20	3.5
Methylcyclohexane	T	Average RF		0.100	0.3206	<=20	5.3
Naphthalene	T	Average RF			1.327	<=20	6.2
Propionitrile	T	Average RF			0.04013	<=20	8.9
Styrene	T	Average RF		0.300	0.8888	<=20	9.8
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2583	<=20	7.1
Tetrahydrofuran (THF)	T	Average RF			0.09716	<=20	4.0
Toluene	T	Average RF		0.400	1.269	<=20	4.0
Trichloroethene (TCE)	T	Average RF		0.200	0.2982	<=20	2.1
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7340	<=20	4.6
Vinyl Acetate	T	Average RF			0.07534	<=20	7.4
Vinyl Chloride	T	Average RF		0.100	0.4781	<=20	2.7
cis-1,2-Dichloroethene	T	Average RF		0.100	0.5073	<=20	2.9
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4363	<=20	8.8
m,p-Xylenes	T	Average RF		0.100	0.5448	<=20	5.7
n-Butyl Acetate	T	Average RF			0.3502	<=20	8.0
n-Butylbenzene	T	Average RF			1.881	<=20	7.7
n-Heptane	T	Average RF			0.3075	<=20	4.6

Initial Calibration - Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.020	<=20	7.6
o-Xylene	T	Average RF		0.300	0.5559	<=20	4.6
sec-Butylbenzene	T	Average RF			2.467	<=20	7.2
tert-Amyl Methyl Ether	T	Average RF			1.164	<=20	4.4
tert-Butylbenzene	T	Average RF			1.773	<=20	4.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4546	<=20	2.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3517	<=20	12.9
trans-1,4-Dichloro-2-butene	T	Average RF			0.1346	<=20	13.1
1,2-Dichloroethane-d4	S	Average RF			0.3297	<=20	1.6
4-Bromofluorobenzene	S	Average RF			0.4538	<=20	1.8
Dibromofluoromethane	S	Average RF			0.2895	<=20	0.8
Toluene-d8	S	Average RF			1.216	<=20	0.5

KR 3/13/14

Initial Calibration - Detailed Report

Calibration ID:	RC1400023 WOB1214 8260 waters	**Instrument ID:**	R-MS-12
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400023-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\031214\U3875.D	3/12/14 10:45
02	RC1400023-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\031214\U3876.D	3/12/14 11:17
03	RC1400023-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\031214\U3877.D	3/12/14 11:49
04	RC1400023-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\031214\U3878.D	3/12/14 12:21
05	RC1400023-05	20ppb	I:\ACQUDATA\msvoa12\Data\031214\U3879.D	3/12/14 12:53
06	RC1400023-06	50ppb	I:\ACQUDATA\msvoa12\Data\031214\U3880.D	3/12/14 13:26
07	RC1400023-07	100ppb	I:\ACQUDATA\msvoa12\Data\031214\U3881.D	3/12/14 13:58
08	RC1400023-08	200ppb	I:\ACQUDATA\msvoa12\Data\031214\U3882.D	3/12/14 14:30

Analyte **Curve Fit** Average RF **Weighting** 1/RF

1,1,1,2-Tetrachloroethane Average RF RSD = 7.3 Average RF = 0.3058

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2983	02	1.000	0.2715	03	2.000	0.2857	04	5.000	0.2953
05	20.000	0.3181	06	50.000	0.3125	07	100.000	0.3237	08	200.000	0.3409

1,1,1-Trichloroethane (TCA) Average RF RSD = 2.2 Average RF = 0.7112

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7063	02	1.000	0.6868	03	2.000	0.7026	04	5.000	0.7079
05	20.000	0.7266	06	50.000	0.7019	07	100.000	0.7348	08	200.000	0.7228

1,1,2,2-Tetrachloroethane Average RF RSD = 5.4 Average RF = 0.5726

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5677	02	1.000	0.6326	03	2.000	0.5516	04	5.000	0.5900
05	20.000	0.5885	06	50.000	0.5657	07	100.000	0.5510	08	200.000	0.5336

1,1,2-Trichloroethane Average RF RSD = 5.6 Average RF = 0.2220

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2390	02	1.000	0.2102	03	2.000	0.2004	04	5.000	0.2220
05	20.000	0.2356	06	50.000	0.2226	07	100.000	0.2210	08	200.000	0.2255

1,1,2-Trichlorotrifluoroethane Average RF RSD = 1.9 Average RF = 0.3971

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3985	02	1.000	0.4016	03	2.000	0.3970	04	5.000	0.3992
05	20.000	0.4053	06	50.000	0.3807	07	100.000	0.4011	08	200.000	0.3932

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 3.1 Average RF = 0.8461

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8237	02	1.000	0.8387	03	2.000	0.8602	04	5.000	0.8635
05	20.000	0.8933	06	50.000	0.8250	07	100.000	0.8497	08	200.000	0.8151

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 3.7 Average RF = 0.3628

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3377	02	1.000	0.3500	03	2.000	0.3712	04	5.000	0.3711
05	20.000	0.3724	06	50.000	0.3567	07	100.000	0.3750	08	200.000	0.3686

1,1-Dichloropropene Average RF RSD = 4.9 Average RF = 0.3693

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3820	02	1.000	0.3361	03	2.000	0.3482	04	5.000	0.3787
05	20.000	0.3890	06	50.000	0.3660	07	100.000	0.3762	08	200.000	0.3780

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: I

Analyte **Curve Fit** **Weighting**

1,2,3-Trichlorobenzene Average RF RSD = 8.2 Average RF = 0.6036

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7120	02	1.000	0.5898	03	2.000	0.6049	04	5.000	0.6154
05	20.000	0.6087	06	50.000	0.5765	07	100.000	0.5812	08	200.000	0.5407

1,2,3-Trichloropropane Average RF RSD = 7.2 Average RF = 0.1713

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1594	02	1.000	0.1952	03	2.000	0.1804	04	5.000	0.1712
05	20.000	0.1757	06	50.000	0.1662	07	100.000	0.1640	08	200.000	0.1587

1,2,4-Trichlorobenzene Average RF RSD = 6.4 Average RF = 0.7372

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8384	02	1.000	0.7195	03	2.000	0.7193	04	5.000	0.7561
05	20.000	0.7459	06	50.000	0.7248	07	100.000	0.7187	08	200.000	0.6751

1,2,4-Trimethylbenzene Average RF RSD = 7.0 Average RF = 2.167

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.954	02	1.000	2.105	03	2.000	2.150	04	5.000	2.333
05	20.000	2.369	06	50.000	2.219	07	100.000	2.224	08	200.000	1.979

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 12.9 Average RF = 0.08773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08527	03	2.000	0.06938	04	5.000	0.07609	05	20.000	0.09250
06	50.000	0.09478	07	100.000	0.09971	08	200.000	0.09639			

1,2-Dibromoethane Average RF RSD = 5.1 Average RF = 0.2312

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2119	02	1.000	0.2166	03	2.000	0.2300	04	5.000	0.2285
05	20.000	0.2450	06	50.000	0.2376	07	100.000	0.2391	08	200.000	0.2411

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 4.7 Average RF = 0.5388

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5609	02	1.000	0.5284	03	2.000	0.5735	04	5.000	0.5565
05	20.000	0.5532	06	50.000	0.5082	07	100.000	0.5150	08	200.000	0.5148

1,2-Dichlorobenzene Average RF RSD = 3.3 Average RF = 1.206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.165	02	1.000	1.167	03	2.000	1.163	04	5.000	1.250
05	20.000	1.266	06	50.000	1.199	07	100.000	1.231	08	200.000	1.203

1,2-Dichloroethane Average RF RSD = 3.9 Average RF = 0.3737

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3944	02	1.000	0.3897	03	2.000	0.3680	04	5.000	0.3712
05	20.000	0.3872	06	50.000	0.3620	07	100.000	0.3583	08	200.000	0.3591

1,2-Dichloroethane-d4 Average RF RSD = 1.6 Average RF = 0.3297

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	50.000	0.3313	01	50.000	0.3343	04	50.000	0.3305	02	50.000	0.3375
03	50.000	0.3311	08	50.000	0.3218	06	50.000	0.3278	07	50.000	0.3236

1,2-Dichloropropane Average RF RSD = 4.5 Average RF = 0.3148

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3353	02	1.000	0.2940	03	2.000	0.3243	04	5.000	0.3023
05	20.000	0.3306	06	50.000	0.3099	07	100.000	0.3114	08	200.000	0.3104

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,3,5-Trichlorobenzene Average RF RSD = 4.0 Average RF = 0.8315

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8430	02	1.000	0.8020	03	2.000	0.8458	04	5.000	0.8426
05	20.000	0.8737	06	50.000	0.8561	07	100.000	0.8199	08	200.000	0.7691

1,3,5-Trimethylbenzene Average RF RSD = 6.0 Average RF = 2.106

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.951	02	1.000	2.012	03	2.000	2.092	04	5.000	2.238
05	20.000	2.297	06	50.000	2.125	07	100.000	2.170	08	200.000	1.961

1,3-Dichlorobenzene Average RF RSD = 4.2 Average RF = 1.252

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.191	02	1.000	1.211	03	2.000	1.210	04	5.000	1.307
05	20.000	1.338	06	50.000	1.240	07	100.000	1.287	08	200.000	1.232

1,3-Dichloropropane Average RF RSD = 2.3 Average RF = 0.4501

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4445	02	1.000	0.4607	03	2.000	0.4426	04	5.000	0.4577
05	20.000	0.4682	06	50.000	0.4441	07	100.000	0.4414	08	200.000	0.4419

1,4-Dichlorobenzene Average RF RSD = 8.0 Average RF = 1.332

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.577	02	1.000	1.283	03	2.000	1.282	04	5.000	1.332
05	20.000	1.369	06	50.000	1.267	07	100.000	1.303	08	200.000	1.246

1,4-Dioxane Average RF RSD = 6.8 Average RF = 0.002062

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.001810	04	100.000	0.002154	05	400.000	0.002159	06	1000.000	0.001977
07	2000.000	0.002122	08	4000.000	0.002147						

1-Butanol Average RF RSD = 18.2 Average RF = 0.004645

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.003924	03	100.000	0.003663	04	250.000	0.003764	05	1000.000	0.004882
06	2500.000	0.005182	07	5000.000	0.005452	08	10000.000	0.005652			

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 7.0 Average RF = 0.3856

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4167	02	1.000	0.3463	03	2.000	0.3464	04	5.000	0.3768
05	20.000	0.4086	06	50.000	0.3969	07	100.000	0.3909	08	200.000	0.4026

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 3.4 Average RF = 0.6154

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6207	02	1.000	0.6330	03	2.000	0.6327	04	5.000	0.6228
05	20.000	0.6351	06	50.000	0.5779	07	100.000	0.5931	08	200.000	0.6081

2,2-Dichloropropane Average RF RSD = 3.9 Average RF = 0.6713

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6675	02	1.000	0.6452	03	2.000	0.6422	04	5.000	0.6446
05	20.000	0.6968	06	50.000	0.6701	07	100.000	0.7082	08	200.000	0.6961

2,3,6-Trichlorotoluene Average RF RSD = 7.5 Average RF = 0.3641

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3875	03	2.000	0.3415	04	5.000	0.3913	05	20.000	0.3742
06	50.000	0.3804	07	100.000	0.3565	08	200.000	0.3172			

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2,4,5-Trichlorotoluene Average RF RSD = 7.2 Average RF = 0.3978

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4329	03	2.000	0.3944	04	5.000	0.4078	05	20.000	0.4165
06	50.000	0.4041	07	100.000	0.3861	08	200.000	0.3424			

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 5.8 Average RF = 0.9535

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.9770	02	3.000	0.9010	03	6.000	0.9234	04	15.000	0.9868
05	60.000	1.023	06	150.000	0.9986	07	300.000	0.9600	08	600.000	0.8584

2,4-Dichlorobenzotrifluoride Average RF RSD = 4.0 Average RF = 0.5359

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5110	02	1.000	0.5339	03	2.000	0.5084	04	5.000	0.5409
05	20.000	0.5693	06	50.000	0.5540	07	100.000	0.5471	08	200.000	0.5228

2,5-Dichlorobenzotrifluoride Average RF RSD = 3.4 Average RF = 0.6128

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5718	02	1.000	0.6247	03	2.000	0.6037	04	5.000	0.6225
05	20.000	0.6361	06	50.000	0.6241	07	100.000	0.6228	08	200.000	0.5964

2-Butanone (MEK) Average RF RSD = 1.9 Average RF = 0.1390

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1352	04	5.000	0.1415	05	20.000	0.1414	06	50.000	0.1412
07	100.000	0.1376	08	200.000	0.1370						

2-Chloro-1,3-butadiene Average RF RSD = 7.9 Average RF = 0.7288

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6913	02	1.000	0.6222	03	2.000	0.7311	04	5.000	0.7347
05	20.000	0.8048	06	50.000	0.7974	07	100.000	0.7220	08	200.000	0.7268

2-Chlorobenzotrifluoride Average RF RSD = 4.8 Average RF = 0.8330

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9100	02	1.000	0.7769	03	2.000	0.8291	04	5.000	0.8420
05	20.000	0.8570	06	50.000	0.8319	07	100.000	0.8212	08	200.000	0.7957

2-Chloroethyl Vinyl Ether Average RF RSD = 5.8 Average RF = 0.1412

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1322	03	2.000	0.1312	04	5.000	0.1351	05	20.000	0.1468
06	50.000	0.1488	07	100.000	0.1433	08	200.000	0.1509			

2-Chlorotoluene Average RF RSD = 5.7 Average RF = 1.896

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.848	02	1.000	1.801	03	2.000	1.996	04	5.000	2.046
05	20.000	1.995	06	50.000	1.865	07	100.000	1.892	08	200.000	1.729

2-Hexanone Average RF RSD = 9.6 Average RF = 0.1416

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1254	04	5.000	0.1240	05	20.000	0.1460	06	50.000	0.1528
07	100.000	0.1465	08	200.000	0.1549						

2-Methyl-1-propanol Average RF RSD = 8.6 Average RF = 0.008458

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.008567	03	40.000	0.007652	04	100.000	0.007321	05	400.000	0.008520
06	1000.000	0.008757	07	2000.000	0.009084	08	4000.000	0.009309			

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Methyl-2-propanol Average RF RSD = 8.6 Average RF = 0.02773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02497	02	20.000	0.02534	03	40.000	0.02495	04	100.000	0.02725
05	400.000	0.03012	06	1000.000	0.02929	07	2000.000	0.03011	08	4000.000	0.02980

2-Nitropropane Average RF RSD = 10.8 Average RF = 0.03954

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.03696	03	4.000	0.03746	04	10.000	0.03400	05	40.000	0.03718
06	100.000	0.04155	07	200.000	0.04375	08	400.000	0.04587			

2-Propanol Average RF RSD = 13.7 Average RF = 0.01610

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01427	03	40.000	0.01247	04	100.000	0.01533	05	400.000	0.01663
06	1000.000	0.01714	07	2000.000	0.01837	08	4000.000	0.01848			

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 7.1 Average RF = 1.010

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9169	02	2.000	1.022	03	4.000	1.034	04	10.000	1.049
05	40.000	1.078	06	100.000	1.071	07	200.000	1.025	08	400.000	0.8819

3,4-Dichlorobenzotrifluoride Average RF RSD = 4.0 Average RF = 0.6160

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6560	02	1.000	0.5832	03	2.000	0.5958	04	5.000	0.5956
05	20.000	0.6406	06	50.000	0.6265	07	100.000	0.6205	08	200.000	0.6097

3-Chloro-1-propene Average RF RSD = 4.3 Average RF = 0.2488

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2545	02	1.000	0.2473	03	2.000	0.2453	04	5.000	0.2512
05	20.000	0.2640	06	50.000	0.2506	07	100.000	0.2510	08	200.000	0.2265

3-Chlorobenzotrifluoride Average RF RSD = 7.2 Average RF = 0.4304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4930	02	1.000	0.4036	03	2.000	0.3943	04	5.000	0.4118
05	20.000	0.4381	06	50.000	0.4241	07	100.000	0.4325	08	200.000	0.4460

3-Chlorotoluene Average RF RSD = 5.3 Average RF = 1.973

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.001	02	1.000	1.930	03	2.000	1.972	04	5.000	2.097
05	20.000	2.101	06	50.000	1.984	07	100.000	1.919	08	200.000	1.777

4-Bromofluorobenzene Average RF RSD = 1.8 Average RF = 0.4538

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4590	03	50.000	0.4407	08	50.000	0.4674	07	50.000	0.4608
04	50.000	0.4514	05	50.000	0.4534	02	50.000	0.4484	01	50.000	0.4493

4-Chlorotoluene Average RF RSD = 8.4 Average RF = 2.236

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.971	02	1.000	2.210	03	2.000	2.368	04	5.000	2.461
05	20.000	2.434	06	50.000	2.215	07	100.000	2.253	08	200.000	1.976

4-Isopropyltoluene Average RF RSD = 6.7 Average RF = 2.086

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.941	02	1.000	1.967	03	2.000	2.058	04	5.000	2.230
05	20.000	2.299	06	50.000	2.107	07	100.000	2.167	08	200.000	1.919

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: I

Analyte	Curve Fit	Weighting										
4-Methyl-2-pentanone	Average RF			RSD = 6.0			Average RF = 0.1899					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
03	2.000	0.1760	04	5.000	0.1760	05	20.000	0.1895	06	50.000	0.2006	
07	100.000	0.1966	08	200.000	0.2005							
Acetone	Average RF			RSD = 6.0			Average RF = 0.09920					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
04	5.000	0.1085	05	20.000	0.09976	06	50.000	0.09387	07	100.000	0.09976	
08	200.000	0.09415										
Acetonitrile	Average RF			RSD = 13.2			Average RF = 0.01622					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
03	10.000	0.01228	04	25.000	0.01658	05	100.000	0.01837	06	250.000	0.01583	
07	500.000	0.01782	08	1000.000	0.01645							
Acrolein	Quadratic	1/X2		COD = 0.9978			Y = 0.001887 X^2 + 0.006327 X + 2.544E-4					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
02	5.000	0.009244	03	10.000	0.007990	04	25.000	0.006781	05	100.000	0.01026	
06	250.000	0.01513	07	500.000	0.02775	08	1000.000	0.04302				
Acrylonitrile	Average RF			RSD = 5.0			Average RF = 0.1111					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	2.500	0.1077	02	5.000	0.1122	03	10.000	0.1002	04	25.000	0.1111	
05	100.000	0.1195	06	250.000	0.1138	07	500.000	0.1144	08	1000.000	0.1102	
Benzene	Average RF			RSD = 2.6			Average RF = 1.231					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	1.221	02	1.000	1.217	03	2.000	1.225	04	5.000	1.254	
05	20.000	1.300	06	50.000	1.211	07	100.000	1.224	08	200.000	1.195	
Bromobenzene	Average RF			RSD = 3.3			Average RF = 0.7355					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.7129	02	1.000	0.7415	03	2.000	0.7707	04	5.000	0.7655	
05	20.000	0.7457	06	50.000	0.7029	07	100.000	0.7271	08	200.000	0.7180	
Bromochloromethane	Average RF			RSD = 8.2			Average RF = 0.2832					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.3308	02	1.000	0.2864	03	2.000	0.2904	04	5.000	0.2917	
05	20.000	0.2808	06	50.000	0.2647	07	100.000	0.2644	08	200.000	0.2567	
Bromodichloromethane	Average RF			RSD = 5.4			Average RF = 0.3677					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.3523	02	1.000	0.3364	03	2.000	0.3520	04	5.000	0.3636	
05	20.000	0.3899	06	50.000	0.3744	07	100.000	0.3831	08	200.000	0.3898	
Bromoform	Average RF			RSD = 15.6			Average RF = 0.2840					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.2211	02	1.000	0.2672	03	2.000	0.2277	04	5.000	0.2700	
05	20.000	0.3081	06	50.000	0.3125	07	100.000	0.3291	08	200.000	0.3360	
Bromomethane	Average RF			RSD = 6.8			Average RF = 0.2881					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF	
01	0.500	0.3114	02	1.000	0.3113	03	2.000	0.3091	04	5.000	0.2746	
05	20.000	0.2750	06	50.000	0.2618	07	100.000	0.2769	08	200.000	0.2848	

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Disulfide Average RF RSD = 4.8 Average RF = 1.262

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.321	02	1.000	1.229	03	2.000	1.255	04	5.000	1.251
05	20.000	1.345	06	50.000	1.316	07	100.000	1.214	08	200.000	1.165

Carbon Tetrachloride Average RF RSD = 6.9 Average RF = 0.1199

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1354	02	1.000	0.1124	03	2.000	0.1161	04	5.000	0.1107
05	20.000	0.1197	06	50.000	0.1149	07	100.000	0.1233	08	200.000	0.1266

Chlorobenzene Average RF RSD = 2.8 Average RF = 0.8701

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8993	02	1.000	0.8337	03	2.000	0.8881	04	5.000	0.8811
05	20.000	0.8966	06	50.000	0.8431	07	100.000	0.8626	08	200.000	0.8563

Chloroethane Average RF RSD = 8.6 Average RF = 0.2851

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3345	02	1.000	0.2800	03	2.000	0.3023	04	5.000	0.2604
05	20.000	0.2953	06	50.000	0.2692	07	100.000	0.2737	08	200.000	0.2659

Chloroform Average RF RSD = 4.7 Average RF = 0.8292

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9097	02	1.000	0.8178	03	2.000	0.8517	04	5.000	0.8211
05	20.000	0.8358	06	50.000	0.7809	07	100.000	0.8189	08	200.000	0.7975

Chloromethane Average RF RSD = 2.8 Average RF = 0.5146

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4949	02	1.000	0.4996	03	2.000	0.5223	04	5.000	0.5099
05	20.000	0.5393	06	50.000	0.5065	07	100.000	0.5248	08	200.000	0.5198

Cyclohexane Average RF RSD = 5.1 Average RF = 0.2705

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2907	02	1.000	0.2754	03	2.000	0.2782	04	5.000	0.2787
05	20.000	0.2755	06	50.000	0.2513	07	100.000	0.2524	08	200.000	0.2620

Cyclohexanone Average RF RSD = 5.9 Average RF = 0.04011

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03932	02	20.000	0.04338	03	40.000	0.03616	04	100.000	0.04035
05	400.000	0.04332	06	1000.000	0.03960	07	2000.000	0.03940	08	4000.000	0.03932

Dibromochloromethane Average RF RSD = 11.9 Average RF = 0.2588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2176	02	1.000	0.2186	03	2.000	0.2418	04	5.000	0.2536
05	20.000	0.2761	06	50.000	0.2780	07	100.000	0.2876	08	200.000	0.2973

Dibromofluoromethane Average RF RSD = 0.8 Average RF = 0.2895

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	0.2865	04	50.000	0.2929	05	50.000	0.2925	03	50.000	0.2876
07	50.000	0.2897	06	50.000	0.2889	02	50.000	0.2871	08	50.000	0.2905

Dibromomethane Average RF RSD = 3.1 Average RF = 0.1497

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1523	02	1.000	0.1548	03	2.000	0.1407	04	5.000	0.1454
05	20.000	0.1530	06	50.000	0.1495	07	100.000	0.1494	08	200.000	0.1529

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte	Curve Fit	Weighting									
Dichlorodifluoromethane (CFC 12)	Average RF			RSD = 7.1		Average RF = 0.5939					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6564	02	1.000	0.5571	03	2.000	0.5697	04	5.000	0.5297
05	20.000	0.6394	06	50.000	0.6016	07	100.000	0.6140	08	200.000	0.5832
Dichlorofluoromethane (CFC 21)	Average RF			RSD = 4.4		Average RF = 0.7211					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7556	02	1.000	0.6951	03	2.000	0.7583	04	5.000	0.7429
05	20.000	0.7444	06	50.000	0.6873	07	100.000	0.6945	08	200.000	0.6902
Dichloromethane	Average RF			RSD = 5.4		Average RF = 0.4753					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5085	02	1.000	0.5094	03	2.000	0.4869	04	5.000	0.4756
05	20.000	0.4769	06	50.000	0.4443	07	100.000	0.4568	08	200.000	0.4445
Diethyl Ether	Average RF			RSD = 6.8		Average RF = 0.3614					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4086	02	1.000	0.3830	03	2.000	0.3609	04	5.000	0.3461
05	20.000	0.3686	06	50.000	0.3426	07	100.000	0.3471	08	200.000	0.3343
Diisopropyl Ether	Average RF			RSD = 5.1		Average RF = 1.648					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.729	02	1.000	1.591	03	2.000	1.636	04	5.000	1.690
05	20.000	1.772	06	50.000	1.654	07	100.000	1.605	08	200.000	1.507
Ethyl Methacrylate	Average RF			RSD = 15.5		Average RF = 0.2861					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2214	02	1.000	0.2595	03	2.000	0.2383	04	5.000	0.2676
05	20.000	0.3183	06	50.000	0.3215	07	100.000	0.3296	08	200.000	0.3324
Ethyl tert-Butyl Ether	Average RF			RSD = 4.3		Average RF = 1.379					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.331	02	1.000	1.327	03	2.000	1.322	04	5.000	1.427
05	20.000	1.484	06	50.000	1.412	07	100.000	1.390	08	200.000	1.339
Ethylbenzene	Average RF			RSD = 3.9		Average RF = 0.4636					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4482	02	1.000	0.4359	03	2.000	0.4451	04	5.000	0.4764
05	20.000	0.4791	06	50.000	0.4624	07	100.000	0.4794	08	200.000	0.4820
Hexachlorobutadiene	Average RF			RSD = 5.3		Average RF = 0.3218					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3384	02	1.000	0.3239	03	2.000	0.3162	04	5.000	0.3323
05	20.000	0.3461	06	50.000	0.3150	07	100.000	0.3098	08	200.000	0.2924
Iodomethane	Average RF			RSD = 15.6		Average RF = 0.4820					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3823	03	2.000	0.4095	04	5.000	0.4186	05	20.000	0.5370
06	50.000	0.5636	07	100.000	0.5381	08	200.000	0.5244			
Isopropylbenzene (Cumene)	Average RF			RSD = 6.3		Average RF = 2.581					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.502	02	1.000	2.497	03	2.000	2.636	04	5.000	2.757
05	20.000	2.786	06	50.000	2.599	07	100.000	2.599	08	200.000	2.274

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: I

Analyte **Curve Fit** Average RF **Weighting** 1/X

Methacrylonitrile Average RF RSD = 10.3 Average RF = 0.1295

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1006	03	2.000	0.1396	04	5.000	0.1260	05	20.000	0.1361
06	50.000	0.1347	07	100.000	0.1355	08	200.000	0.1337			

Methyl Acetate Average RF RSD = 6.0 Average RF = 0.2234

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2217	03	2.000	0.2075	04	5.000	0.2513	05	20.000	0.2242
06	50.000	0.2221	07	100.000	0.2205	08	200.000	0.2164			

Methyl Methacrylate Average RF RSD = 9.0 Average RF = 0.1481

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1473	02	1.000	0.1523	03	2.000	0.1206	04	5.000	0.1367
05	20.000	0.1542	06	50.000	0.1553	07	100.000	0.1575	08	200.000	0.1609

Methyl tert-Butyl Ether Average RF RSD = 3.5 Average RF = 1.153

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.207	02	1.000	1.153	03	2.000	1.131	04	5.000	1.188
05	20.000	1.196	06	50.000	1.120	07	100.000	1.134	08	200.000	1.097

Methylcyclohexane Average RF RSD = 5.3 Average RF = 0.3206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3497	02	1.000	0.3166	03	2.000	0.3314	04	5.000	0.3258
05	20.000	0.3280	06	50.000	0.2955	07	100.000	0.3050	08	200.000	0.3126

Naphthalene Average RF RSD = 6.2 Average RF = 1.327

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.282	02	1.000	1.208	03	2.000	1.290	04	5.000	1.337
05	20.000	1.433	06	50.000	1.412	07	100.000	1.404	08	200.000	1.252

Propionitrile Average RF RSD = 8.9 Average RF = 0.04013

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.03731	02	5.000	0.03607	03	10.000	0.03612	04	25.000	0.03788
05	100.000	0.04399	06	250.000	0.04311	07	500.000	0.04402	08	1000.000	0.04254

Styrene Average RF RSD = 9.8 Average RF = 0.8888

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7897	02	1.000	0.7703	03	2.000	0.8089	04	5.000	0.8868
05	20.000	0.9769	06	50.000	0.9522	07	100.000	0.9751	08	200.000	0.9503

Tetrachloroethene (PCE) Average RF RSD = 7.1 Average RF = 0.2583

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2988	02	1.000	0.2495	03	2.000	0.2623	04	5.000	0.2415
05	20.000	0.2595	06	50.000	0.2416	07	100.000	0.2508	08	200.000	0.2622

Tetrahydrofuran (THF) Average RF RSD = 4.0 Average RF = 0.09716

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1013	04	5.000	0.09869	05	20.000	0.1010	06	50.000	0.09666
07	100.000	0.09237	08	200.000	0.09300						

Toluene Average RF RSD = 4.0 Average RF = 1.269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.205	02	1.000	1.271	03	2.000	1.311	04	5.000	1.307
05	20.000	1.336	06	50.000	1.268	07	100.000	1.262	08	200.000	1.193

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Toluene-d8 Average RF RSD = 0.5 Average RF = 1.216

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	1.204	06	50.000	1.220	08	50.000	1.221	07	50.000	1.213
05	50.000	1.220	03	50.000	1.218	02	50.000	1.221	04	50.000	1.214

Trichloroethene (TCE) Average RF RSD = 2.1 Average RF = 0.2982

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2923	02	1.000	0.2995	03	2.000	0.3063	04	5.000	0.2926
05	20.000	0.3006	06	50.000	0.2890	07	100.000	0.2996	08	200.000	0.3055

Trichlorofluoromethane (CFC 11) Average RF RSD = 4.6 Average RF = 0.7340

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7891	02	1.000	0.6969	03	2.000	0.7375	04	5.000	0.7530
05	20.000	0.7674	06	50.000	0.7080	07	100.000	0.7178	08	200.000	0.7019

Vinyl Acetate Average RF RSD = 7.4 Average RF = 0.07534

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.07194	03	2.000	0.06926	04	5.000	0.07091	05	20.000	0.07224
06	50.000	0.08228	07	100.000	0.07850	08	200.000	0.08228			

Vinyl Chloride Average RF RSD = 2.7 Average RF = 0.4781

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4876	02	1.000	0.4588	03	2.000	0.4759	04	5.000	0.4785
05	20.000	0.5000	06	50.000	0.4710	07	100.000	0.4854	08	200.000	0.4672

cis-1,2-Dichloroethene Average RF RSD = 2.9 Average RF = 0.5073

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5046	02	1.000	0.5269	03	2.000	0.4837	04	5.000	0.5042
05	20.000	0.5261	06	50.000	0.4971	07	100.000	0.5129	08	200.000	0.5029

cis-1,3-Dichloropropene Average RF RSD = 8.8 Average RF = 0.4363

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4197	02	1.000	0.3855	03	2.000	0.3916	04	5.000	0.4116
05	20.000	0.4720	06	50.000	0.4630	07	100.000	0.4716	08	200.000	0.4751

m,p-Xylenes Average RF RSD = 5.7 Average RF = 0.5448

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5131	02	2.000	0.4867	03	4.000	0.5378	04	10.000	0.5580
05	40.000	0.5792	06	100.000	0.5587	07	200.000	0.5735	08	400.000	0.5512

n-Butyl Acetate Average RF RSD = 8.0 Average RF = 0.3502

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3279	03	2.000	0.3075	04	5.000	0.3315	05	20.000	0.3613
06	50.000	0.3756	07	100.000	0.3653	08	200.000	0.3822			

n-Butylbenzene Average RF RSD = 7.7 Average RF = 1.881

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.692	02	1.000	1.717	03	2.000	1.958	04	5.000	1.989
05	20.000	2.081	06	50.000	1.909	07	100.000	1.964	08	200.000	1.737

n-Heptane Average RF RSD = 4.6 Average RF = 0.3075

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3265	02	1.000	0.3132	03	2.000	0.3120	04	5.000	0.2963
05	20.000	0.3264	06	50.000	0.2915	07	100.000	0.2994	08	200.000	0.2950

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

n-Propylbenzene Average RF RSD = 7.6 Average RF = 3.020

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.002	02	1.000	2.968	03	2.000	3.195	04	5.000	3.243
05	20.000	3.234	06	50.000	3.001	07	100.000	2.987	08	200.000	2.527

o-Xylene Average RF RSD = 4.6 Average RF = 0.5559

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5120	02	1.000	0.5633	03	2.000	0.5236	04	5.000	0.5596
05	20.000	0.5829	06	50.000	0.5560	07	100.000	0.5740	08	200.000	0.5761

sec-Butylbenzene Average RF RSD = 7.2 Average RF = 2.467

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.329	02	1.000	2.417	03	2.000	2.554	04	5.000	2.693
05	20.000	2.671	06	50.000	2.428	07	100.000	2.485	08	200.000	2.157

tert-Amyl Methyl Ether Average RF RSD = 4.4 Average RF = 1.164

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.073	02	1.000	1.129	03	2.000	1.131	04	5.000	1.168
05	20.000	1.233	06	50.000	1.200	07	100.000	1.201	08	200.000	1.179

tert-Butylbenzene Average RF RSD = 4.3 Average RF = 1.773

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.737	02	1.000	1.773	03	2.000	1.823	04	5.000	1.856
05	20.000	1.857	06	50.000	1.734	07	100.000	1.773	08	200.000	1.627

trans-1,2-Dichloroethene Average RF RSD = 2.9 Average RF = 0.4546

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4714	02	1.000	0.4543	03	2.000	0.4433	04	5.000	0.4407
05	20.000	0.4725	06	50.000	0.4404	07	100.000	0.4632	08	200.000	0.4510

trans-1,3-Dichloropropene Average RF RSD = 12.9 Average RF = 0.3517

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2943	02	1.000	0.3052	03	2.000	0.3144	04	5.000	0.3292
05	20.000	0.3845	06	50.000	0.3833	07	100.000	0.3985	08	200.000	0.4039

trans-1,4-Dichloro-2-butene Average RF RSD = 13.1 Average RF = 0.1346

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1173	02	1.000	0.1068	03	2.000	0.1274	04	5.000	0.1249
05	20.000	0.1488	06	50.000	0.1511	07	100.000	0.1497	08	200.000	0.1507

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.89	-11.2	03	2.000	1.87	-6.5
04	5.000	4.83	-3.4	05	20.000	20.81	4.1	06	50.000	51.10	2.2
07	100.000	105.88	5.9	08	200.000	223.01	11.5				

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.7	02	1.000	0.97	-3.4	03	2.000	1.98	-1.2
04	5.000	4.98	-0.5	05	20.000	20.43	2.2	06	50.000	49.34	-1.3
07	100.000	103.32	3.3	08	200.000	203.25	1.6				

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	1.10	10.5	03	2.000	1.93	-3.7
04	5.000	5.15	3.0	05	20.000	20.56	2.8	06	50.000	49.40	-1.2
07	100.000	96.23	-3.8	08	200.000	186.37	-6.8				

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.6	02	1.000	0.95	-5.3	03	2.000	1.81	-9.7
04	5.000	5.00	0.0	05	20.000	21.22	6.1	06	50.000	50.13	0.3
07	100.000	99.52	-0.5	08	200.000	203.16	1.6				

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.01	1.1	03	2.000	2.00	0.0
04	5.000	5.03	0.5	05	20.000	20.41	2.1	06	50.000	47.94	-4.1
07	100.000	101.02	1.0	08	200.000	198.05	-1.0				

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.6	02	1.000	0.99	-0.9	03	2.000	2.03	1.7
04	5.000	5.10	2.0	05	20.000	21.11	5.6	06	50.000	48.75	-2.5
07	100.000	100.42	0.4	08	200.000	192.67	-3.7				

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.96	-3.5	03	2.000	2.05	2.3
04	5.000	5.11	2.3	05	20.000	20.53	2.6	06	50.000	49.15	-1.7
07	100.000	103.36	3.4	08	200.000	203.15	1.6				

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.91	-9.0	03	2.000	1.89	-5.7
04	5.000	5.13	2.5	05	20.000	21.07	5.4	06	50.000	49.56	-0.9
07	100.000	101.88	1.9	08	200.000	204.71	2.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.9	02	1.000	0.98	-2.3	03	2.000	2.00	0.2
04	5.000	5.10	1.9	05	20.000	20.17	0.8	06	50.000	47.75	-4.5
07	100.000	96.28	-3.7	08	200.000	179.15	-10.4				

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-7.0	02	1.000	1.14	13.9	03	2.000	2.11	5.3
04	5.000	5.00	-0.1	05	20.000	20.51	2.5	06	50.000	48.51	-3.0
07	100.000	95.69	-4.3	08	200.000	185.19	-7.4				

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	0.98	-2.4	03	2.000	1.95	-2.4
04	5.000	5.13	2.6	05	20.000	20.24	1.2	06	50.000	49.15	-1.7
07	100.000	97.49	-2.5	08	200.000	183.13	-8.4				

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.8	02	1.000	0.97	-2.9	03	2.000	1.98	-0.8
04	5.000	5.38	7.7	05	20.000	21.87	9.3	06	50.000	51.22	2.4
07	100.000	102.65	2.7	08	200.000	182.67	-8.7				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-2.8	03	2.000	1.58	-20.9	04	5.000	4.34	-13.3
05	20.000	21.09	5.4	06	50.000	54.02	8.0	07	100.000	113.65	13.7
08	200.000	219.74	9.9								

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.3	02	1.000	0.94	-6.3	03	2.000	1.99	-0.5
04	5.000	4.94	-1.2	05	20.000	21.19	5.9	06	50.000	51.38	2.8
07	100.000	103.39	3.4	08	200.000	208.54	4.3				

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	0.98	-1.9	03	2.000	2.13	6.4
04	5.000	5.16	3.3	05	20.000	20.53	2.7	06	50.000	47.16	-5.7
07	100.000	95.58	-4.4	08	200.000	191.07	-4.5				

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.3	02	1.000	0.97	-3.2	03	2.000	1.93	-3.5
04	5.000	5.18	3.7	05	20.000	21.00	5.0	06	50.000	49.72	-0.6
07	100.000	102.13	2.1	08	200.000	199.61	-0.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	1.04	4.3	03	2.000	1.97	-1.5
04	5.000	4.97	-0.7	05	20.000	20.72	3.6	06	50.000	48.43	-3.1
07	100.000	95.88	-4.1	08	200.000	192.18	-3.9				

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
05	50.000	50.24	0.5	01	50.000	50.69	1.4	04	50.000	50.11	0.2
02	50.000	51.17	2.3	03	50.000	50.20	0.4	08	50.000	48.80	-2.4
06	50.000	49.71	-0.6	07	50.000	49.07	-1.9				

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	0.93	-6.6	03	2.000	2.06	3.0
04	5.000	4.80	-4.0	05	20.000	21.01	5.0	06	50.000	49.23	-1.5
07	100.000	98.93	-1.1	08	200.000	197.23	-1.4				

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.4	02	1.000	0.96	-3.5	03	2.000	2.03	1.7
04	5.000	5.07	1.3	05	20.000	21.02	5.1	06	50.000	51.48	3.0
07	100.000	98.60	-1.4	08	200.000	184.97	-7.5				

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.4	02	1.000	0.96	-4.5	03	2.000	1.99	-0.7
04	5.000	5.31	6.3	05	20.000	21.82	9.1	06	50.000	50.45	0.9
07	100.000	103.05	3.1	08	200.000	186.29	-6.9				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.97	-3.3	03	2.000	1.93	-3.3
04	5.000	5.22	4.4	05	20.000	21.37	6.9	06	50.000	49.50	-1.0
07	100.000	102.83	2.8	08	200.000	196.81	-1.6				

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.3	02	1.000	1.02	2.3	03	2.000	1.97	-1.7
04	5.000	5.08	1.7	05	20.000	20.80	4.0	06	50.000	49.33	-1.3
07	100.000	98.06	-1.9	08	200.000	196.34	-1.8				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.4	02	1.000	0.96	-3.7	03	2.000	1.92	-3.8
04	5.000	5.00	0.0	05	20.000	20.55	2.7	06	50.000	47.54	-4.9
07	100.000	97.81	-2.2	08	200.000	187.07	-6.5				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	35.12	-12.2	04	100.000	104.49	4.5	05	400.000	418.98	4.7
06	1000.000	959.13	-4.1	07	2000.000	2,058.38	2.9	08	4000.000	4,165.10	4.1

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	42.23	-15.5	03	100.000	78.84	-21.2	04	250.000	202.55	-19.0
05	1000.000	1,050.85	5.1	06	2500.000	2,788.88	11.6	07	5000.000	5,867.93	17.4
08	10000.000	12,167.14	21.7								

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.90	-10.2	03	2.000	1.80	-10.2
04	5.000	4.89	-2.3	05	20.000	21.19	5.9	06	50.000	51.46	2.9
07	100.000	101.37	1.4	08	200.000	208.77	4.4				

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.9	02	1.000	1.03	2.9	03	2.000	2.06	2.8
04	5.000	5.06	1.2	05	20.000	20.64	3.2	06	50.000	46.95	-6.1
07	100.000	96.38	-3.6	08	200.000	197.61	-1.2				

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.96	-3.9	03	2.000	1.91	-4.3
04	5.000	4.80	-4.0	05	20.000	20.76	3.8	06	50.000	49.91	-0.2
07	100.000	105.49	5.5	08	200.000	207.38	3.7				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	6.4	03	2.000	1.88	-6.2	04	5.000	5.37	7.5
05	20.000	20.56	2.8	06	50.000	52.24	4.5	07	100.000	97.93	-2.1
08	200.000	174.22	-12.9								

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.09	8.8	03	2.000	1.98	-0.8	04	5.000	5.13	2.5
05	20.000	20.94	4.7	06	50.000	50.79	1.6	07	100.000	97.07	-2.9
08	200.000	172.15	-13.9								

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.54	2.5	02	3.000	2.84	-5.5	03	6.000	5.81	-3.2
04	15.000	15.52	3.5	05	60.000	64.35	7.3	06	150.000	157.11	4.7
07	300.000	302.05	0.7	08	600.000	540.19	-10.0				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
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Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.00	-0.4	03	2.000	1.90	-5.1
04	5.000	5.05	0.9	05	20.000	21.25	6.2	06	50.000	51.68	3.4
07	100.000	102.08	2.1	08	200.000	195.09	-2.5				

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	1.02	1.9	03	2.000	1.97	-1.5
04	5.000	5.08	1.6	05	20.000	20.76	3.8	06	50.000	50.93	1.9
07	100.000	101.64	1.6	08	200.000	194.66	-2.7				

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.95	-2.7	04	5.000	5.09	1.8	05	20.000	20.35	1.7
06	50.000	50.79	1.6	07	100.000	99.04	-1.0	08	200.000	197.13	-1.4

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.1	02	1.000	0.85	-14.6	03	2.000	2.01	0.3
04	5.000	5.04	0.8	05	20.000	22.09	10.4	06	50.000	54.71	9.4
07	100.000	99.07	-0.9	08	200.000	199.45	-0.3				

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	0.93	-6.7	03	2.000	1.99	-0.5
04	5.000	5.05	1.1	05	20.000	20.58	2.9	06	50.000	49.93	-0.1
07	100.000	98.59	-1.4	08	200.000	191.05	-4.5				

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.3	03	2.000	1.86	-7.1	04	5.000	4.78	-4.3
05	20.000	20.79	4.0	06	50.000	52.70	5.4	07	100.000	101.53	1.5
08	200.000	213.74	6.9								

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.95	-5.0	03	2.000	2.10	5.2
04	5.000	5.39	7.9	05	20.000	21.04	5.2	06	50.000	49.16	-1.7
07	100.000	99.77	-0.2	08	200.000	182.32	-8.8				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.77	-11.4	04	5.000	4.38	-12.4	05	20.000	20.62	3.1
06	50.000	53.96	7.9	07	100.000	103.46	3.5	08	200.000	218.80	9.4

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	20.26	1.3	03	40.000	36.19	-9.5	04	100.000	86.55	-13.5
05	400.000	402.89	0.7	06	1000.000	1,035.32	3.5	07	2000.000	2,147.81	7.4
08	4000.000	4,402.14	10.1								

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.01	-9.9	02	20.000	18.28	-8.6	03	40.000	35.99	-10.0
04	100.000	98.27	-1.7	05	400.000	434.45	8.6	06	1000.000	1,056.46	5.6
07	2000.000	2,171.61	8.6	08	4000.000	4,298.58	7.5				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	1.87	-6.5	03	4.000	3.79	-5.3	04	10.000	8.60	-14.0
05	40.000	37.61	-6.0	06	100.000	105.09	5.1	07	200.000	221.31	10.7
08	400.000	464.07	16.0								

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.73	-11.3	03	40.000	30.98	-22.6	04	100.000	95.25	-4.8
05	400.000	413.14	3.3	06	1000.000	1,064.76	6.5	07	2000.000	2,281.69	14.1
08	4000.000	4,592.40	14.8								

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.91	-9.2	02	2.000	2.02	1.2	03	4.000	4.10	2.4
04	10.000	10.39	3.9	05	40.000	42.72	6.8	06	100.000	106.06	6.1
07	200.000	203.02	1.5	08	400.000	349.39	-12.7				

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	0.95	-5.3	03	2.000	1.93	-3.3
04	5.000	4.83	-3.3	05	20.000	20.80	4.0	06	50.000	50.85	1.7
07	100.000	100.73	0.7	08	200.000	197.96	-1.0				

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.3	02	1.000	0.99	-0.6	03	2.000	1.97	-1.4
04	5.000	5.05	1.0	05	20.000	21.22	6.1	06	50.000	50.37	0.7
07	100.000	100.89	0.9	08	200.000	182.08	-9.0				

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.5	02	1.000	0.94	-6.2	03	2.000	1.83	-8.4
04	5.000	4.78	-4.3	05	20.000	20.35	1.8	06	50.000	49.26	-1.5
07	100.000	100.49	0.5	08	200.000	207.26	3.6				

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.4	02	1.000	0.98	-2.2	03	2.000	2.00	0.0
04	5.000	5.31	6.3	05	20.000	21.30	6.5	06	50.000	50.29	0.6
07	100.000	97.29	-2.7	08	200.000	180.14	-9.9				

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.57	1.1	03	50.000	48.55	-2.9	08	50.000	51.50	3.0
07	50.000	50.78	1.6	04	50.000	49.74	-0.5	05	50.000	49.96	-0.1
02	50.000	49.40	-1.2	01	50.000	49.50	-1.0				

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.8	02	1.000	0.99	-1.2	03	2.000	2.12	5.9
04	5.000	5.50	10.1	05	20.000	21.77	8.8	06	50.000	49.53	-0.9
07	100.000	100.78	0.8	08	200.000	176.70	-11.6				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.94	-5.7	03	2.000	1.97	-1.3
04	5.000	5.34	6.9	05	20.000	22.04	10.2	06	50.000	50.51	1.0
07	100.000	103.87	3.9	08	200.000	184.01	-8.0				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.85	-7.3	04	5.000	4.63	-7.3	05	20.000	19.96	-0.2
06	50.000	52.83	5.7	07	100.000	103.54	3.5	08	200.000	211.20	5.6

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.47	9.3	05	20.000	20.11	0.6	06	50.000	47.31	-5.4
07	100.000	100.57	0.6	08	200.000	189.81	-5.1				

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	7.57	-24.3	04	25.000	25.55	2.2	05	100.000	113.23	13.2
06	250.000	244.00	-2.4	07	500.000	549.38	9.9	08	1000.000	1,014.22	1.4

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	5.14	2.8	03	10.000	10.02	0.2	04	25.000	21.92	-12.3
05	100.000	100.21	0.2	06	250.000	243.13	-2.7	07	500.000	528.00	5.6
08	1000.000	986.83	-1.3								

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.42	-3.1	02	5.000	5.05	1.0	03	10.000	9.02	-9.8
04	25.000	24.98	-0.1	05	100.000	107.48	7.5	06	250.000	256.05	2.4
07	500.000	514.53	2.9	08	1000.000	991.85	-0.8				

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.99	-1.1	03	2.000	1.99	-0.5
04	5.000	5.09	1.9	05	20.000	21.13	5.6	06	50.000	49.18	-1.6
07	100.000	99.46	-0.5	08	200.000	194.13	-2.9				

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	1.01	0.8	03	2.000	2.10	4.8
04	5.000	5.20	4.1	05	20.000	20.28	1.4	06	50.000	47.78	-4.4
07	100.000	98.85	-1.1	08	200.000	195.22	-2.4				

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.8	02	1.000	1.01	1.1	03	2.000	2.05	2.5
04	5.000	5.15	3.0	05	20.000	19.83	-0.9	06	50.000	46.72	-6.6
07	100.000	93.36	-6.6	08	200.000	181.24	-9.4				

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.2	02	1.000	0.91	-8.5	03	2.000	1.91	-4.3
04	5.000	4.94	-1.1	05	20.000	21.21	6.0	06	50.000	50.92	1.8
07	100.000	104.18	4.2	08	200.000	212.04	6.0				

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.1	02	1.000	0.94	-5.9	03	2.000	1.60	-19.8
04	5.000	4.75	-4.9	05	20.000	21.70	8.5	06	50.000	55.02	10.0
07	100.000	115.90	15.9	08	200.000	236.66	18.3				

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	1.08	8.0	03	2.000	2.15	7.3
04	5.000	4.77	-4.7	05	20.000	19.09	-4.5	06	50.000	45.43	-9.1
07	100.000	96.11	-3.9	08	200.000	197.68	-1.2				

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	0.97	-2.6	03	2.000	1.99	-0.6
04	5.000	4.96	-0.9	05	20.000	21.31	6.6	06	50.000	52.12	4.2
07	100.000	96.23	-3.8	08	200.000	184.69	-7.7				

Initial Calibration - Detailed Report

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Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.9	02	1.000	0.94	-6.3	03	2.000	1.94	-3.1
04	5.000	4.62	-7.7	05	20.000	19.97	-0.1	06	50.000	47.92	-4.2
07	100.000	102.86	2.9	08	200.000	211.15	5.6				

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.96	-4.2	03	2.000	2.04	2.1
04	5.000	5.06	1.3	05	20.000	20.61	3.0	06	50.000	48.45	-3.1
07	100.000	99.14	-0.9	08	200.000	196.84	-1.6				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.3	02	1.000	0.98	-1.8	03	2.000	2.12	6.0
04	5.000	4.57	-8.7	05	20.000	20.71	3.6	06	50.000	47.20	-5.6
07	100.000	95.98	-4.0	08	200.000	186.51	-6.7				

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.7	02	1.000	0.99	-1.4	03	2.000	2.05	2.7
04	5.000	4.95	-1.0	05	20.000	20.16	0.8	06	50.000	47.09	-5.8
07	100.000	98.76	-1.2	08	200.000	192.36	-3.8				

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.97	-2.9	03	2.000	2.03	1.5
04	5.000	4.95	-0.9	05	20.000	20.96	4.8	06	50.000	49.21	-1.6
07	100.000	101.97	2.0	08	200.000	201.99	1.0				

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	1.02	1.8	03	2.000	2.06	2.9
04	5.000	5.15	3.0	05	20.000	20.37	1.8	06	50.000	46.44	-7.1
07	100.000	93.29	-6.7	08	200.000	193.68	-3.2				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.80	-2.0	02	20.000	21.63	8.2	03	40.000	36.06	-9.9
04	100.000	100.61	0.6	05	400.000	432.04	8.0	06	1000.000	987.46	-1.3
07	2000.000	1,964.96	-1.8	08	4000.000	3,921.50	-2.0				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-15.9	02	1.000	0.84	-15.6	03	2.000	1.87	-6.6
04	5.000	4.90	-2.0	05	20.000	21.34	6.7	06	50.000	53.71	7.4
07	100.000	111.12	11.1	08	200.000	229.69	14.8				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	50.000	49.49	-1.0	04	50.000	50.59	1.2	05	50.000	50.53	1.1
03	50.000	49.68	-0.6	07	50.000	50.04	0.1	06	50.000	49.90	-0.2
02	50.000	49.59	-0.8	08	50.000	50.18	0.4				

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	1.03	3.3	03	2.000	1.88	-6.0
04	5.000	4.86	-2.9	05	20.000	20.44	2.2	06	50.000	49.91	-0.2
07	100.000	99.77	-0.2	08	200.000	204.16	2.1				

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.5	02	1.000	0.94	-6.2	03	2.000	1.92	-4.1
04	5.000	4.46	-10.8	05	20.000	21.53	7.7	06	50.000	50.65	1.3
07	100.000	103.38	3.4	08	200.000	196.42	-1.8				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.8	02	1.000	0.96	-3.6	03	2.000	2.10	5.2
04	5.000	5.15	3.0	05	20.000	20.65	3.2	06	50.000	47.66	-4.7
07	100.000	96.32	-3.7	08	200.000	191.44	-4.3				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	7.0	02	1.000	1.07	7.2	03	2.000	2.05	2.4
04	5.000	5.00	0.1	05	20.000	20.07	0.3	06	50.000	46.73	-6.5
07	100.000	96.09	-3.9	08	200.000	187.03	-6.5				

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.1	02	1.000	1.06	6.0	03	2.000	2.00	-0.1
04	5.000	4.79	-4.2	05	20.000	20.40	2.0	06	50.000	47.40	-5.2
07	100.000	96.03	-4.0	08	200.000	184.99	-7.5				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.9	02	1.000	0.97	-3.4	03	2.000	1.99	-0.7
04	5.000	5.13	2.6	05	20.000	21.50	7.5	06	50.000	50.17	0.3
07	100.000	97.38	-2.6	08	200.000	182.91	-8.5				

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.6	02	1.000	0.91	-9.3	03	2.000	1.67	-16.7
04	5.000	4.68	-6.5	05	20.000	22.25	11.3	06	50.000	56.19	12.4
07	100.000	115.22	15.2	08	200.000	232.41	16.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.5	02	1.000	0.96	-3.8	03	2.000	1.92	-4.2
04	5.000	5.17	3.4	05	20.000	21.53	7.6	06	50.000	51.19	2.4
07	100.000	100.82	0.8	08	200.000	194.19	-2.9				

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.3	02	1.000	0.94	-6.0	03	2.000	1.92	-4.0
04	5.000	5.14	2.8	05	20.000	20.67	3.4	06	50.000	49.88	-0.2
07	100.000	103.42	3.4	08	200.000	207.95	4.0				

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.2	02	1.000	1.01	0.7	03	2.000	1.97	-1.7
04	5.000	5.16	3.3	05	20.000	21.51	7.6	06	50.000	48.95	-2.1
07	100.000	96.30	-3.7	08	200.000	181.73	-9.1				

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.79	-20.7	03	2.000	1.70	-15.0	04	5.000	4.34	-13.2
05	20.000	22.28	11.4	06	50.000	58.48	17.0	07	100.000	111.66	11.7
08	200.000	217.63	8.8								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.1	02	1.000	0.97	-3.3	03	2.000	2.04	2.1
04	5.000	5.34	6.8	05	20.000	21.58	7.9	06	50.000	50.35	0.7
07	100.000	100.68	0.7	08	200.000	176.21	-11.9				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.78	-22.3	03	2.000	2.16	7.8	04	5.000	4.87	-2.7
05	20.000	21.02	5.1	06	50.000	52.02	4.0	07	100.000	104.67	4.7
08	200.000	206.57	3.3								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.99	-0.8	03	2.000	1.86	-7.1	04	5.000	5.62	12.5
05	20.000	20.07	0.4	06	50.000	49.71	-0.6	07	100.000	98.72	-1.3
08	200.000	193.74	-3.1								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.03	2.8	03	2.000	1.63	-18.6
04	5.000	4.62	-7.7	05	20.000	20.83	4.1	06	50.000	52.44	4.9
07	100.000	106.30	6.3	08	200.000	217.30	8.7				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.7	02	1.000	1.00	0.0	03	2.000	1.96	-1.9
04	5.000	5.15	3.0	05	20.000	20.75	3.7	06	50.000	48.54	-2.9
07	100.000	98.35	-1.7	08	200.000	190.27	-4.9				

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.1	02	1.000	0.99	-1.2	03	2.000	2.07	3.4
04	5.000	5.08	1.6	05	20.000	20.46	2.3	06	50.000	46.09	-7.8
07	100.000	95.15	-4.8	08	200.000	195.02	-2.5				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.91	-9.0	03	2.000	1.94	-2.8
04	5.000	5.04	0.8	05	20.000	21.59	7.9	06	50.000	53.18	6.4
07	100.000	105.76	5.8	08	200.000	188.67	-5.7				

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.32	-7.0	02	5.000	4.49	-10.1	03	10.000	9.00	-10.0
04	25.000	23.60	-5.6	05	100.000	109.63	9.6	06	250.000	268.54	7.4
07	500.000	548.49	9.7	08	1000.000	1,059.97	6.0				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.1	02	1.000	0.87	-13.3	03	2.000	1.82	-9.0
04	5.000	4.99	-0.2	05	20.000	21.98	9.9	06	50.000	53.57	7.1
07	100.000	109.72	9.7	08	200.000	213.85	6.9				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	15.7	02	1.000	0.97	-3.4	03	2.000	2.03	1.6
04	5.000	4.67	-6.5	05	20.000	20.09	0.5	06	50.000	46.76	-6.5
07	100.000	97.11	-2.9	08	200.000	203.04	1.5				

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.08	4.2	04	5.000	5.08	1.6	05	20.000	20.78	3.9
06	50.000	49.74	-0.5	07	100.000	95.07	-4.9	08	200.000	191.44	-4.3

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.0	02	1.000	1.00	0.1	03	2.000	2.07	3.3
04	5.000	5.15	3.0	05	20.000	21.05	5.3	06	50.000	49.96	-0.1
07	100.000	99.46	-0.5	08	200.000	187.96	-6.0				

Initial Calibration - Detailed Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	50.000	49.50	-1.0	06	50.000	50.17	0.3	08	50.000	50.19	0.4
07	50.000	49.84	-0.3	05	50.000	50.14	0.3	03	50.000	50.08	0.2
02	50.000	50.18	0.4	04	50.000	49.89	-0.2				

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	1.00	0.4	03	2.000	2.05	2.7
04	5.000	4.91	-1.9	05	20.000	20.16	0.8	06	50.000	48.46	-3.1
07	100.000	100.49	0.5	08	200.000	204.93	2.5				

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	0.95	-5.0	03	2.000	2.01	0.5
04	5.000	5.13	2.6	05	20.000	20.91	4.6	06	50.000	48.23	-3.5
07	100.000	97.79	-2.2	08	200.000	191.27	-4.4				

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.95	-4.5	03	2.000	1.84	-8.1	04	5.000	4.71	-5.9
05	20.000	19.18	-4.1	06	50.000	54.60	9.2	07	100.000	104.19	4.2
08	200.000	218.41	9.2								

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.0	02	1.000	0.96	-4.0	03	2.000	1.99	-0.4
04	5.000	5.00	0.1	05	20.000	20.92	4.6	06	50.000	49.26	-1.5
07	100.000	101.54	1.5	08	200.000	195.46	-2.3				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.04	3.9	03	2.000	1.91	-4.7
04	5.000	4.97	-0.6	05	20.000	20.74	3.7	06	50.000	49.00	-2.0
07	100.000	101.10	1.1	08	200.000	198.26	-0.9				

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.88	-11.6	03	2.000	1.80	-10.2
04	5.000	4.72	-5.7	05	20.000	21.64	8.2	06	50.000	53.07	6.1
07	100.000	108.11	8.1	08	200.000	217.79	8.9				

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.94	-5.8	02	2.000	1.79	-10.7	03	4.000	3.95	-1.3
04	10.000	10.24	2.4	05	40.000	42.53	6.3	06	100.000	102.56	2.6
07	200.000	210.55	5.3	08	400.000	404.74	1.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.94	-6.4	03	2.000	1.76	-12.2	04	5.000	4.73	-5.3
05	20.000	20.64	3.2	06	50.000	53.63	7.3	07	100.000	104.33	4.3
08	200.000	218.28	9.1								

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.1	02	1.000	0.91	-8.7	03	2.000	2.08	4.1
04	5.000	5.29	5.8	05	20.000	22.12	10.6	06	50.000	50.75	1.5
07	100.000	104.42	4.4	08	200.000	184.71	-7.6				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	1.02	1.8	03	2.000	2.03	1.5
04	5.000	4.82	-3.6	05	20.000	21.23	6.1	06	50.000	47.40	-5.2
07	100.000	97.34	-2.7	08	200.000	191.82	-4.1				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.98	-1.7	03	2.000	2.12	5.8
04	5.000	5.37	7.4	05	20.000	21.42	7.1	06	50.000	49.69	-0.6
07	100.000	98.92	-1.1	08	200.000	167.40	-16.3				

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	1.01	1.3	03	2.000	1.88	-5.8
04	5.000	5.03	0.7	05	20.000	20.97	4.8	06	50.000	50.01	0.0
07	100.000	103.24	3.2	08	200.000	207.27	3.6				

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.6	02	1.000	0.98	-2.0	03	2.000	2.07	3.5
04	5.000	5.46	9.2	05	20.000	21.65	8.3	06	50.000	49.21	-1.6
07	100.000	100.74	0.7	08	200.000	174.91	-12.5				

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	0.97	-3.0	03	2.000	1.94	-2.8
04	5.000	5.02	0.3	05	20.000	21.17	5.9	06	50.000	51.52	3.0
07	100.000	103.19	3.2	08	200.000	202.60	1.3				

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	1.00	0.0	03	2.000	2.06	2.8
04	5.000	5.23	4.7	05	20.000	20.95	4.8	06	50.000	48.91	-2.2
07	100.000	100.05	0.1	08	200.000	183.63	-8.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	1.00	-0.1	03	2.000	1.95	-2.5
04	5.000	4.85	-3.1	05	20.000	20.79	3.9	06	50.000	48.44	-3.1
07	100.000	101.89	1.9	08	200.000	198.42	-0.8				

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.3	02	1.000	0.87	-13.2	03	2.000	1.79	-10.6
04	5.000	4.68	-6.4	05	20.000	21.87	9.3	06	50.000	54.50	9.0
07	100.000	113.32	13.3	08	200.000	229.69	14.8				

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.8	02	1.000	0.79	-20.6	03	2.000	1.89	-5.3
04	5.000	4.64	-7.2	05	20.000	22.12	10.6	06	50.000	56.13	12.3
07	100.000	111.21	11.2	08	200.000	223.88	11.9				

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	911333	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1438759	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1294400	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	612947	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	412193	49.49	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	98.98%			
48) surr1,1,2-dichloroetha...	4.664	65	480981	50.69	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery =	101.38%			
65) SURR3,Toluene-d8	7.322	98	1732405	49.50	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	99.00%			
70) SURR2,BFB	9.791	95	646398	49.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	99.00%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	5982	0.55	ppb		93
3) Chloromethane	1.262	50	4510	0.48	ppb		84
4) Vinyl Chloride	1.323	62	4444	0.51	ppb		74
5) Bromomethane	1.512	94	2838	0.54	ppb		85
6) Chloroethane	1.567	64	3048m	0.56	ppb		
7) Freon 21	1.664	67	6886	0.52	ppb		94
8) Trichlorofluoromethane	1.719	101	7191	0.54	ppb		85
9) Diethyl Ether	1.884	59	3724	0.57	ppb		89
10) Freon 123a	1.866	67	5112	0.52	ppb		94
11) Freon 123	1.902	83	5657	0.50	ppb		98
13) 1,1-Diclethene	2.036	96	3078	0.47	ppb	#	80
14) Freon 113	2.036	101	3632	0.50	ppb		84
16) 2-Propanol	2.116	45	3340m	11.20	ppb		
17) Iodomethane	2.146	142	3362	0.38	ppb		92
18) Carbon Disulfide	2.207	76	12036	0.52	ppb		99
19) Acetonitrile	2.231	40	1554	5.26	ppb	#	32
20) Allyl Chloride	2.274	76	2319	0.51	ppb	#	84
21) Methyl Acetate	2.274	43	2240	0.55	ppb		93
22) Methylene Chloride	2.359	84	4634	0.53	ppb	#	76
23) TBA	2.408	59	4551	9.01	ppb		73
24) Acrylonitrile	2.530	53	4907	2.42	ppb	#	76
25) Methyl-t-Butyl Ether	2.579	73	11002	0.52	ppb		96
26) trans-1,2-Dichloroethene	2.585	96	4296	0.52	ppb	#	89
28) 1,1-Diclethane	2.939	63	7507	0.49	ppb		88
29) Vinyl Acetate	2.981	86	707	0.51	ppb	#	1
30) DIPE	3.018	45	15755	0.52	ppb		78
31) 2-Chloro-1,3-Butadiene	3.042	53	6300	0.47	ppb		99
32) ETBE	3.402	59	12134	0.48	ppb		89
33) 2,2-Dichloropropane	3.554	77	6083	0.50	ppb		92
34) cis-1,2-Dichloroethene	3.548	96	4599	0.50	ppb		92
36) Propionitrile	3.609	54	1700m	2.39	ppb		
37) Bromochloromethane	3.829	130	3015	0.58	ppb	#	73
38) Methacrylonitrile	3.810	67	1375	0.58	ppb	#	74
39) Tetrahydrofuran	3.932	42	1275	0.72	ppb		97
40) Chloroform	3.938	83	8290	0.55	ppb		93

KR 3/13/14

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	1,1,1-Trichloroethane	4.207	97	6437	0.50	ppb	#	1
42)	TAME	5.036	73	9777	0.46	ppb		89
44)	Cyclohexane	4.310	41	4183	0.54	ppb		90
46)	Carbontetrachloride	4.463	121	1948m	0.56	ppb		
47)	1,1-Dichloropropene	4.463	75	5496m	0.52	ppb		
49)	Benzene	4.780	78	17569m	0.50	ppb		
50)	1,2-Dichloroethane	4.792	62	5674	0.53	ppb		88
52)	n-Heptane	5.328	43	4698	0.53	ppb		96
53)	1-Butanol	5.792	56	3060m	22.75	ppb		
54)	Trichloroethene	5.828	130	4205m	0.49	ppb		
55)	Methylcyclohexane	6.109	55	5031	0.55	ppb		94
56)	1,2-Diclpropane	6.121	63	4824	0.53	ppb		74
57)	Dibromomethane	6.261	93	2191	0.51	ppb	#	84
59)	Methyl Methacrylate	6.340	69	2120m	0.50	ppb		
60)	Bromodichloromethane	6.474	83	5069	0.48	ppb		92
62)	2-Chloroethylvinyl Ether	6.889	63	1661m	0.41	ppb		
63)	cis-1,3-Dichloropropene	7.029	75	6038	0.48	ppb		88
66)	Toluene	7.395	91	17343	0.47	ppb		88
67)	trans-1,3-Dichloropropene	7.639	75	4234	0.42	ppb	#	48
68)	Ethyl Methacrylate	7.779	69	3186	0.39	ppb		99
69)	1,1,2-Trichloroethane	7.810	97	3438	0.54	ppb		91
72)	Tetrachloroethene	7.962	164	3868	0.58	ppb		88
74)	1,3-Dichloropropane	7.974	76	5753	0.49	ppb		90
75)	Dibromochloromethane	8.188	129	2817	0.42	ppb		89
76)	N-Butyl Acetate	8.255	43	3648m	0.40	ppb		
77)	1,2-Dibromoethane	8.291	107	2743	0.46	ppb		94
78)	Chlorobenzene	8.773	112	11641	0.52	ppb		92
79)	3-CBTF	8.785	180	6381	0.57	ppb	#	93
80)	4-CBTF	8.840	180	5394	0.54	ppb		89
81)	1,1,1,2-Tetrachloroethane	8.852	131	3861	0.49	ppb		97
82)	Ethylbenzene	8.889	106	5801	0.48	ppb		91
83)	(m+p)Xylene	8.998	106	13282	0.94	ppb		98
84)	o-Xylene	9.346	106	6627	0.46	ppb	#	70
85)	Styrene	9.358	104	10222	0.44	ppb		98
87)	Bromoform	9.498	173	1355	0.39	ppb		78
88)	2-CBTF	9.578	180	5578	0.55	ppb	#	90
89)	Isopropylbenzene	9.675	105	15336	0.48	ppb		98
90)	Cyclohexanone	9.724	55	4820	9.81	ppb		81
91)	trans-1,4-Dichloro-2-B...	9.962	53	719	0.44	ppb	#	58
92)	1,1,2,2-Tetrachloroethane	9.913	83	3480	0.50	ppb		84
93)	Bromobenzene	9.913	156	4370	0.48	ppb		93
94)	1,2,3-Trichloropropane	9.943	110	977	0.47	ppb	#	55
95)	n-Propylbenzene	10.023	91	18398	0.50	ppb		95
96)	2-Chlorotoluene	10.084	91	11329	0.49	ppb		92
97)	3-Chlorotoluene	10.132	91	12265	0.51	ppb		98
98)	4-Chlorotoluene	10.175	91	12083	0.44	ppb		91
99)	1,3,5-Trimethylbenzene	10.169	105	11958	0.46	ppb		96
100)	tert-Butylbenzene	10.443	119	10646	0.49	ppb		98
101)	1,2,4-Trimethylbenzene	10.480	105	11976	0.45	ppb		81
102)	3,4-DCBTF	10.535	214	4021	0.53	ppb	#	89
103)	sec-Butylbenzene	10.620	105	14277	0.47	ppb		96
104)	p-Isopropyltoluene	10.742	119	11898	0.47	ppb		78

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

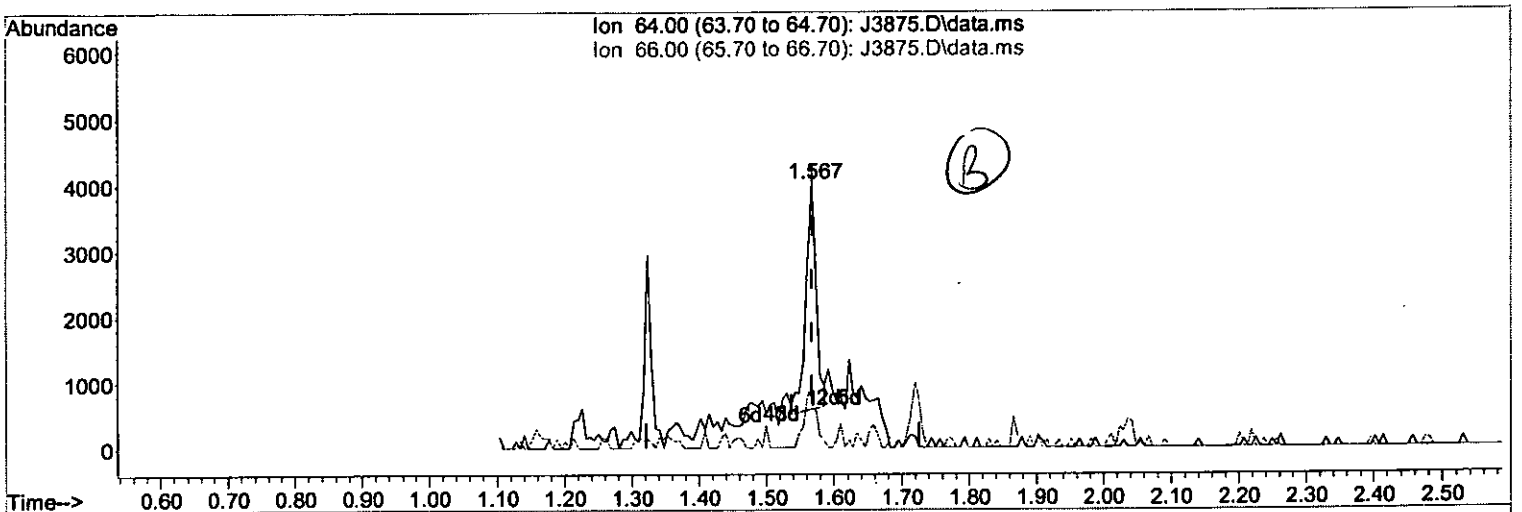
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

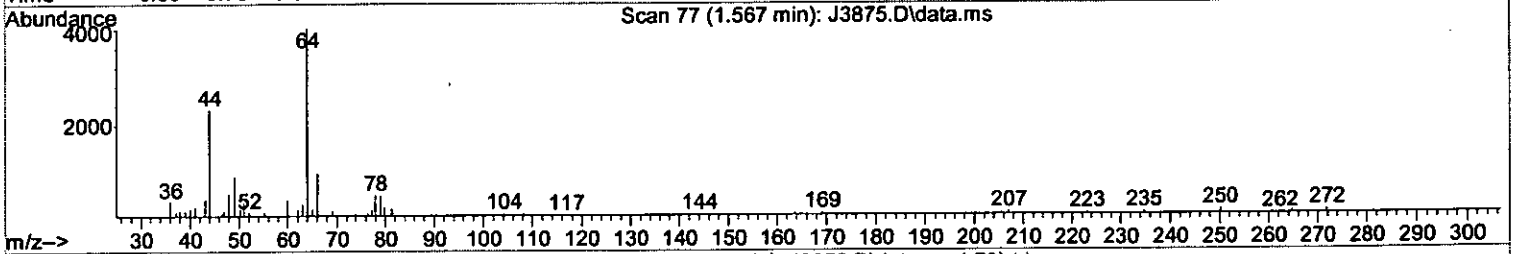
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) 1,3-Dclbenz	10.699	146	7301	0.48	ppb		80
106) 1,4-Dclbenz	10.766	146	9668	0.59	ppb		95
107) 2,4-DCBTF	10.821	214	3132	0.48	ppb	#	74
108) 2,5-DCBTF	10.864	214	3505	0.47	ppb		90
109) n-Butylbenzene	11.071	91	10369	0.45	ppb		96
110) 1,2-Dclbenz	11.065	146	7143	0.48	ppb		99
111) 1,2-Dibromo-3-chloropr...	11.626	157	705	0.66	ppb	#	83
112) Trielution Dichlorotol...	11.736	125	17965	1.54	ppb		99
113) 1,3,5 Trichlorobenzene	11.778	180	5167	0.51	ppb		95
114) Coelution Dichlorotoluene	11.998	125	11240	0.91	ppb		97
115) 1,2,4-Tcbenzene	12.162	180	5139	0.57	ppb		96
116) Hexachlorobt	12.266	225	2074	0.53	ppb		95
117) Naphthalen	12.303	128	7858	0.48	ppb		93
118) 1,2,3-Tclbenzene	12.443	180	4364	0.59	ppb		80
119) 2,4,5-Trichlorotolene	12.851	159	2375m	0.49	ppb		
120) 2,3,6-Trichlorotoluene	12.912	159	2541	0.57	ppb	#	87

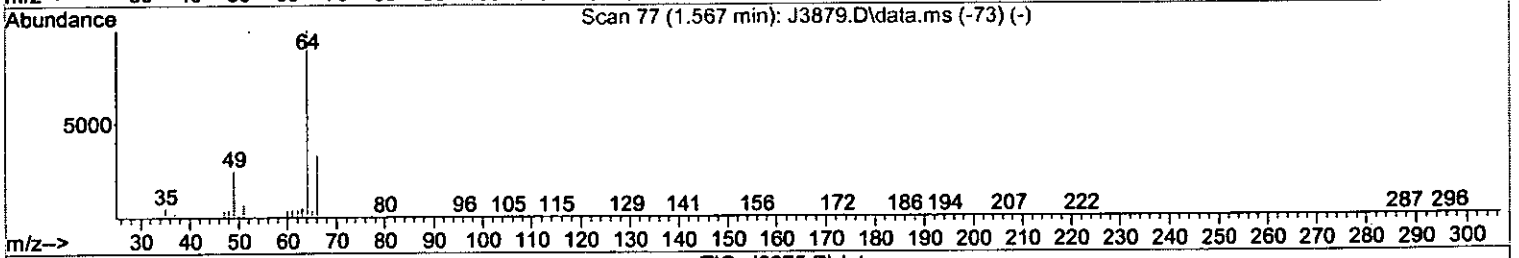
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(6) Chloroethane (P)

1.567min (+0.000) 0.66 ppb

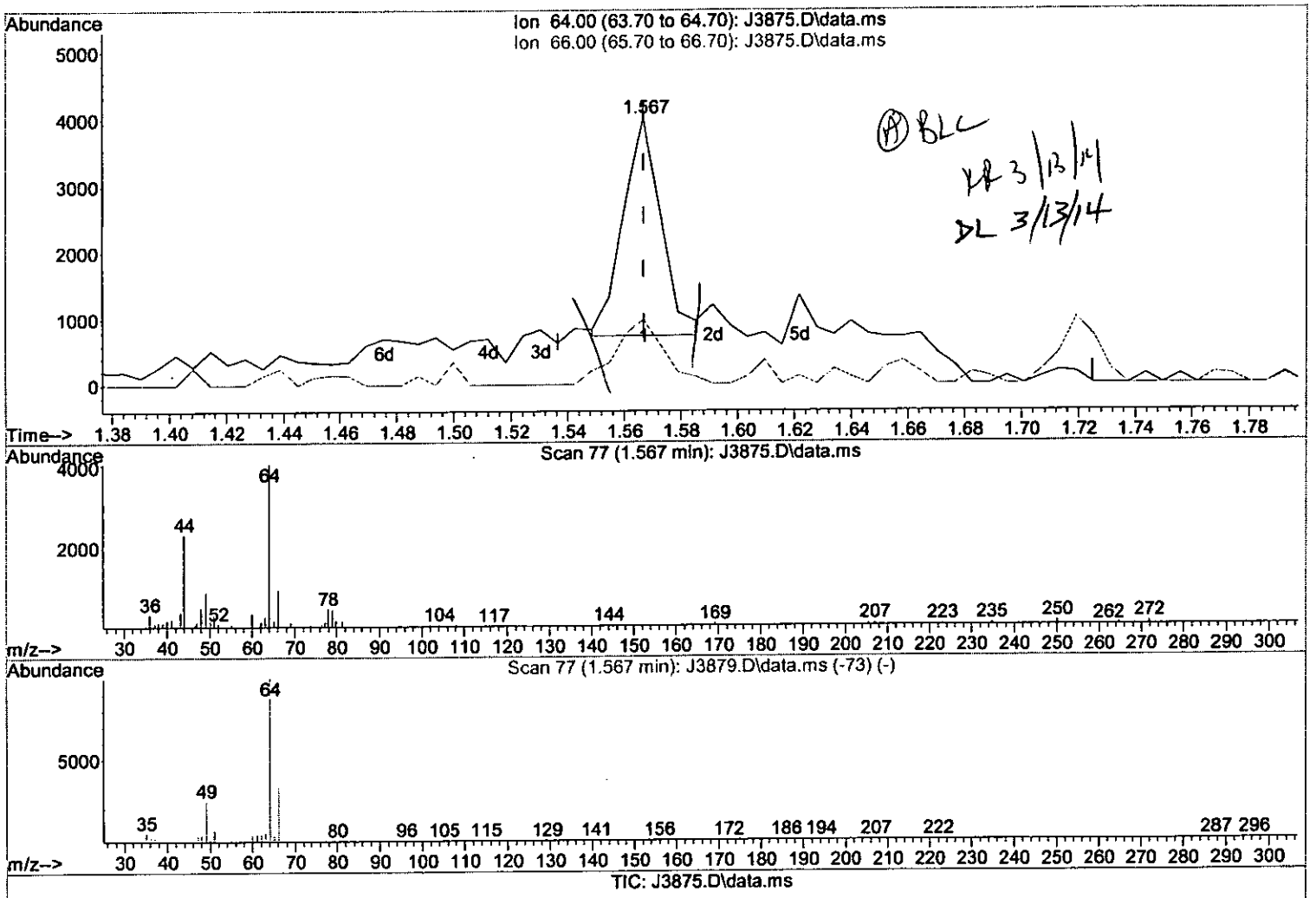
response 3602

Ion	Exp%	Act%
64.00	100	100
66.00	32.20	24.20
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:04:32 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(6) Chloroethane (P)

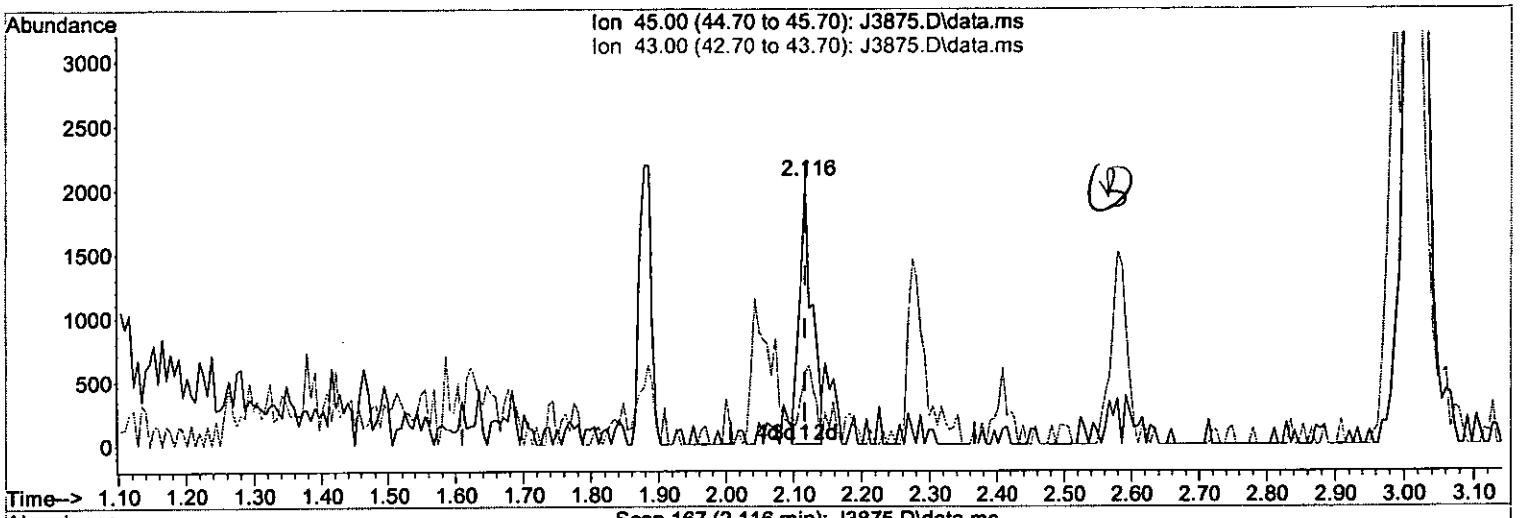
1.567min (+0.000) 0.56 ppb m

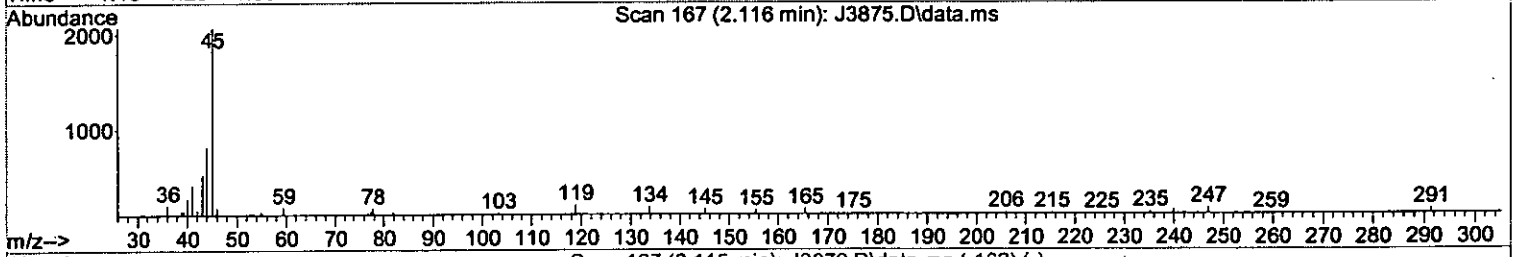
response 3048

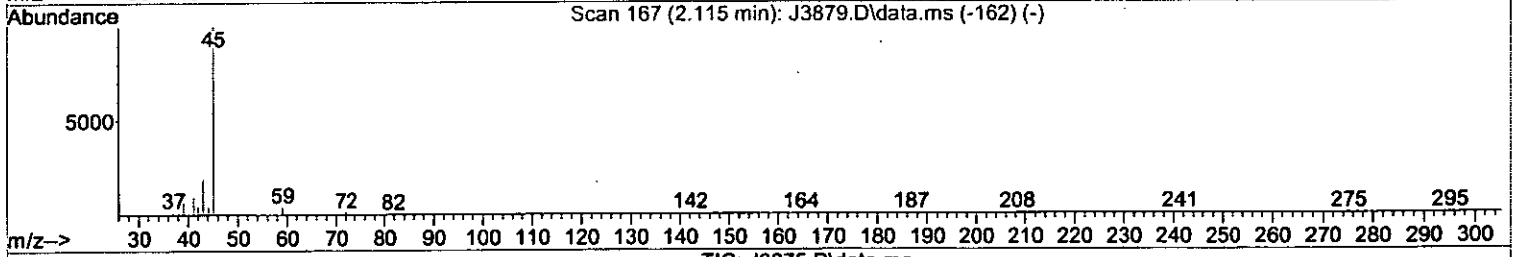
Ion	Exp%	Act%
64.00	100	100
66.00	32.20	24.20
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(16) 2-Propanol

2.116min (+0.000) 8.89 ppb

response 2651

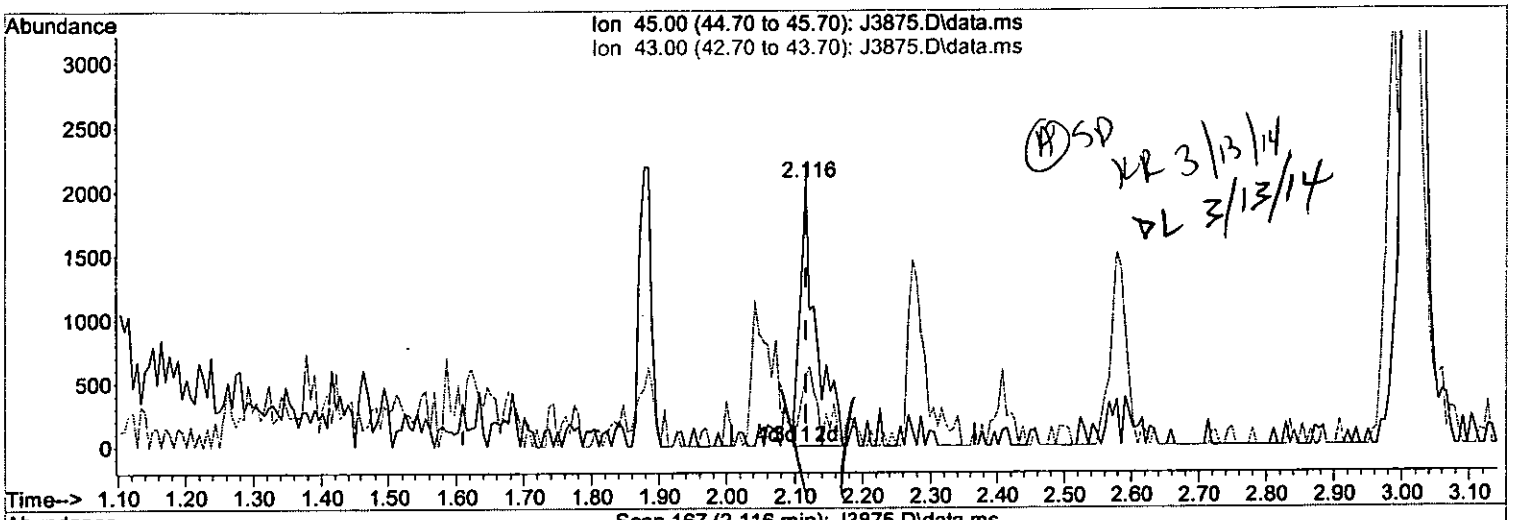
Ion	Exp%	Act%
45.00	100	100
43.00	21.30	25.30
0.00	0.00	0.00
0.00	0.00	0.00

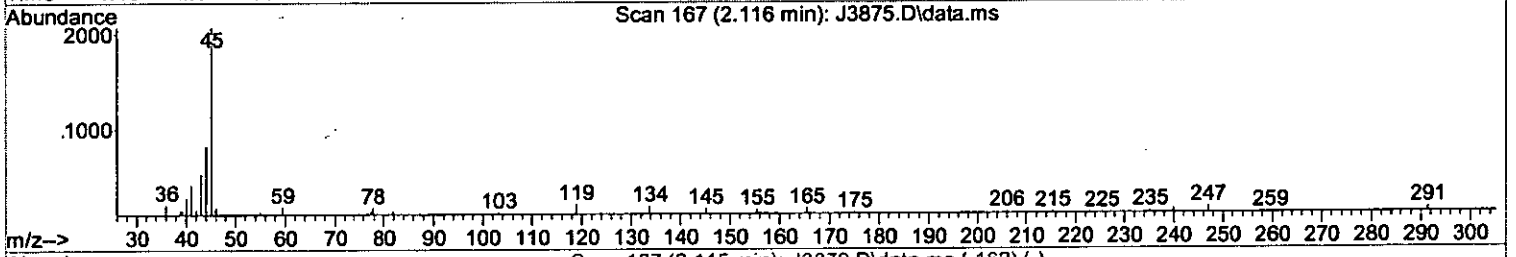
W031214.M Thu Mar 13 10:05:14 2014 Page: 1

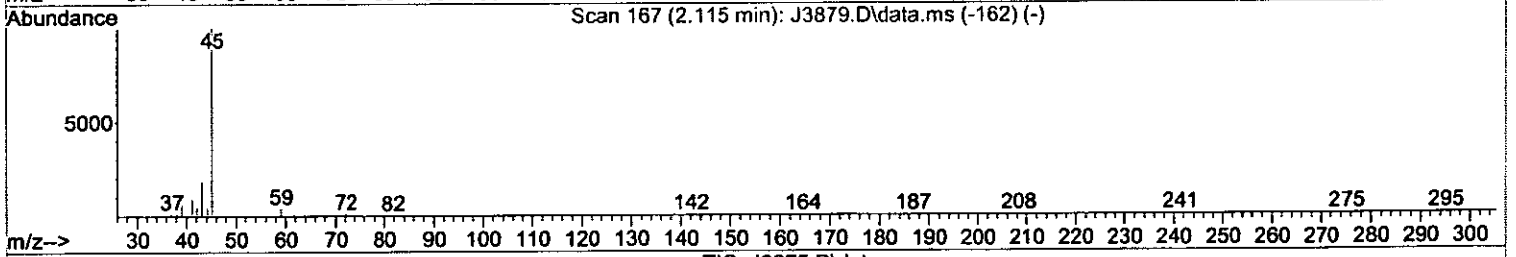
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(16) 2-Propanol

2.116min (+0.000) 11.20 ppb m

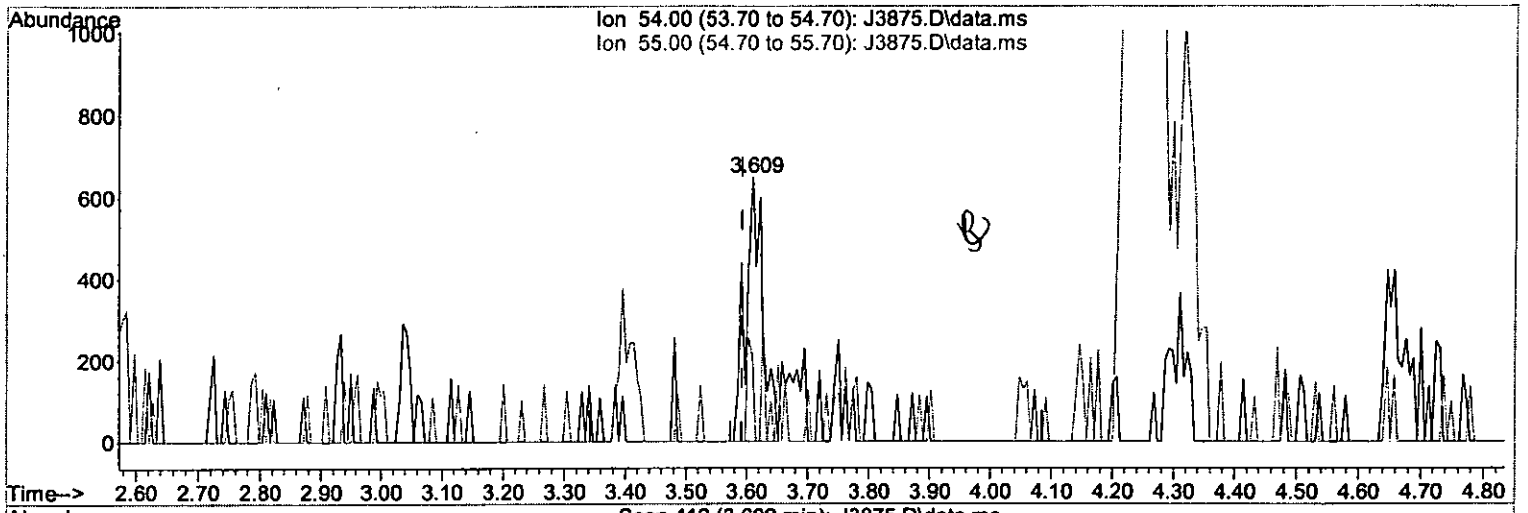
response 3340

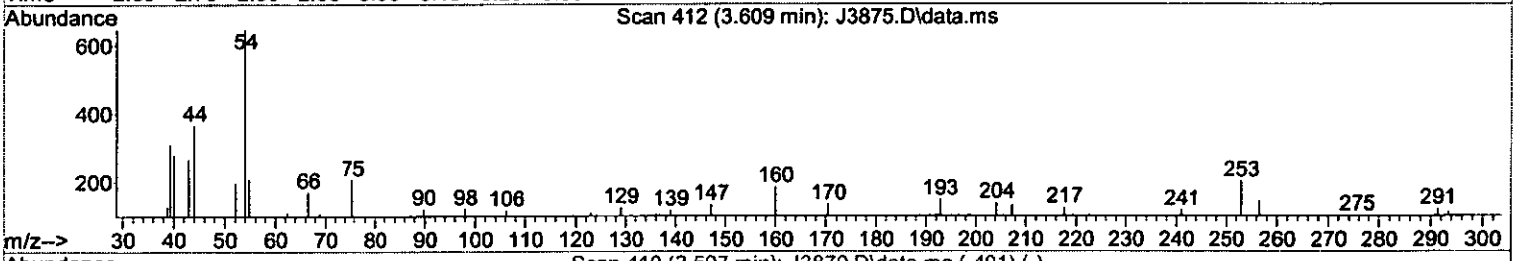
Ion	Exp%	Act%
45.00	100	100
43.00	21.30	25.30
0.00	0.00	0.00
0.00	0.00	0.00

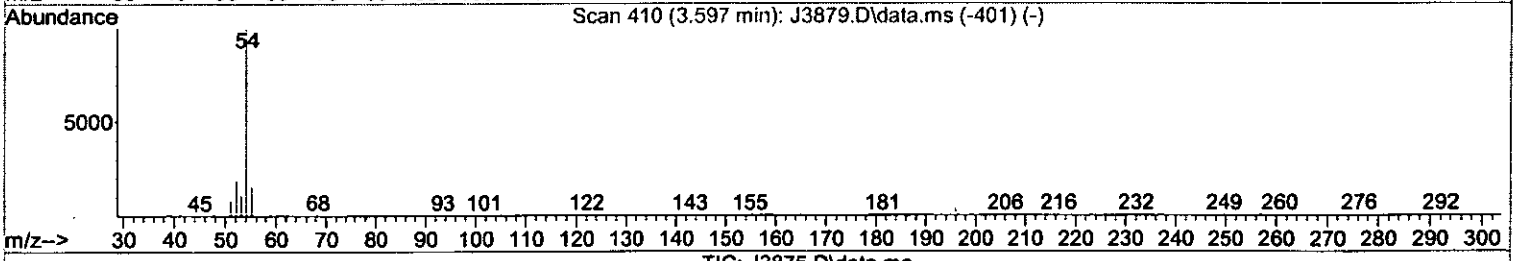
W031214.M Thu Mar 13 10:05:23 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(36) Propionitrile

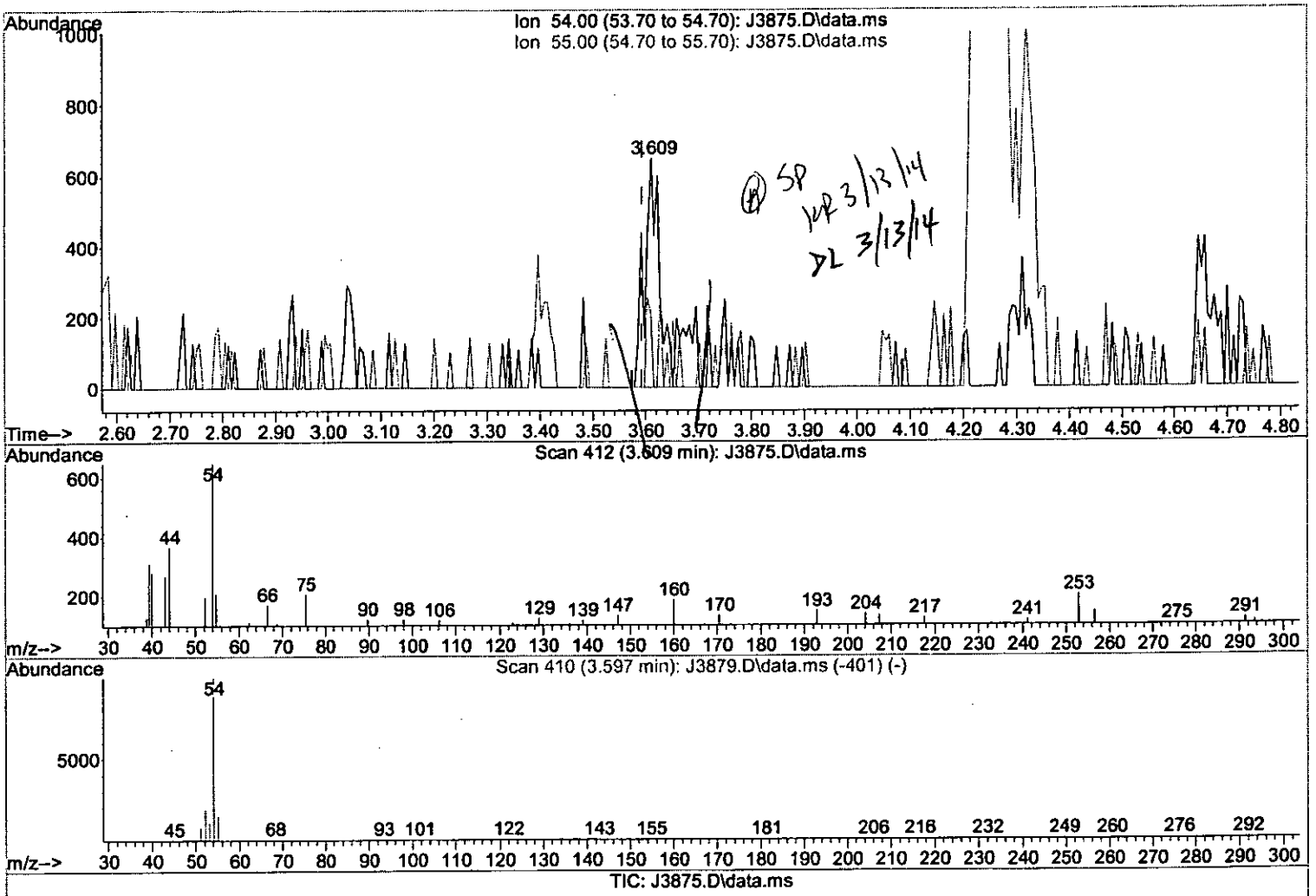
3.609min (+0.018) 1.79 ppb

response 1271

Ion	Exp%	Act%
54.00	100	100
55.00	16.00	32.10
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(36) Propionitrile

3.609min (+0.018) 2.39 ppb m

response 1700

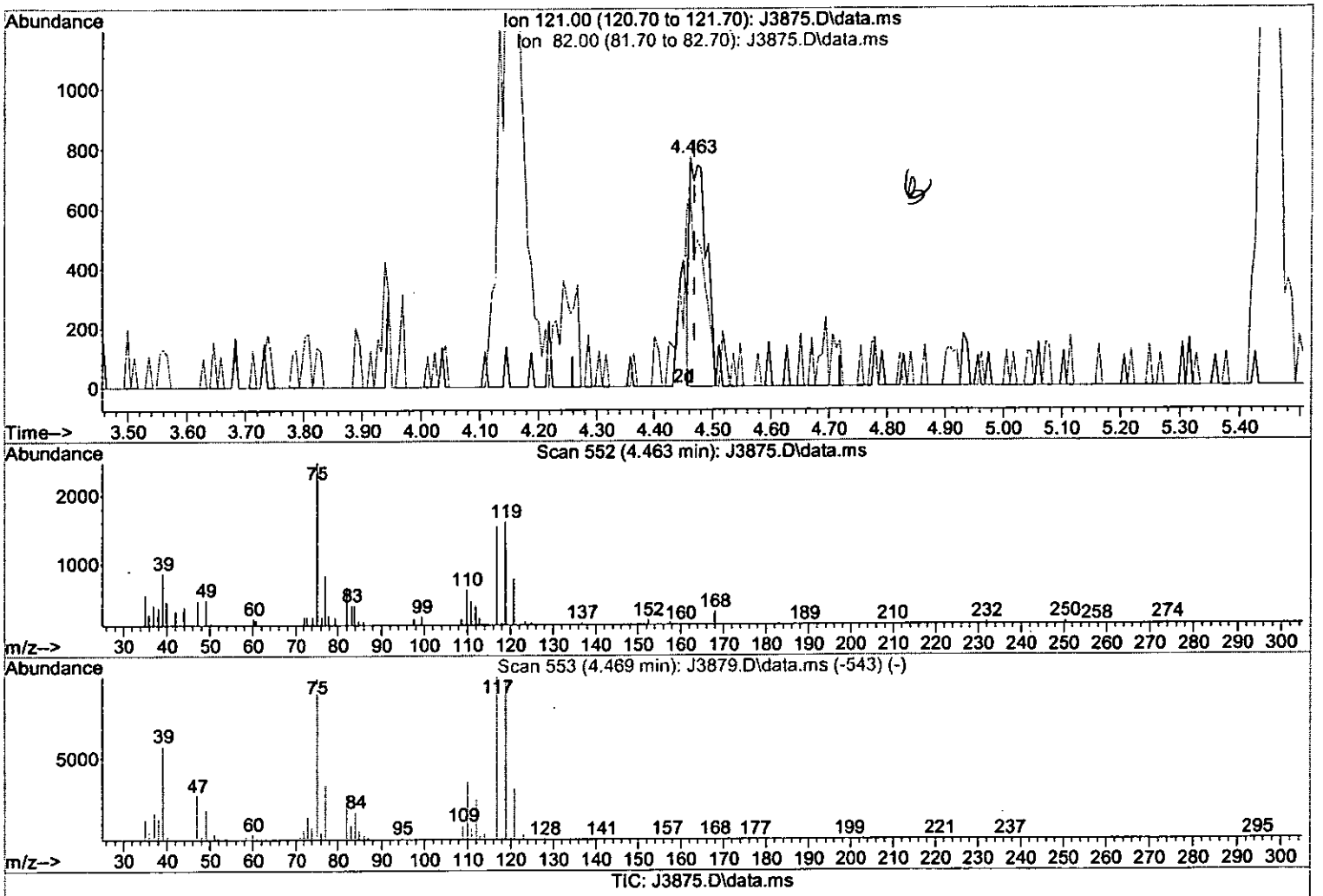
Ion	Exp%	Act%
54.00	100	100
55.00	16.00	32.10
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:06:10 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(46) Carbontetrachloride (P)

4.463min (-0.006) 0.43 ppb

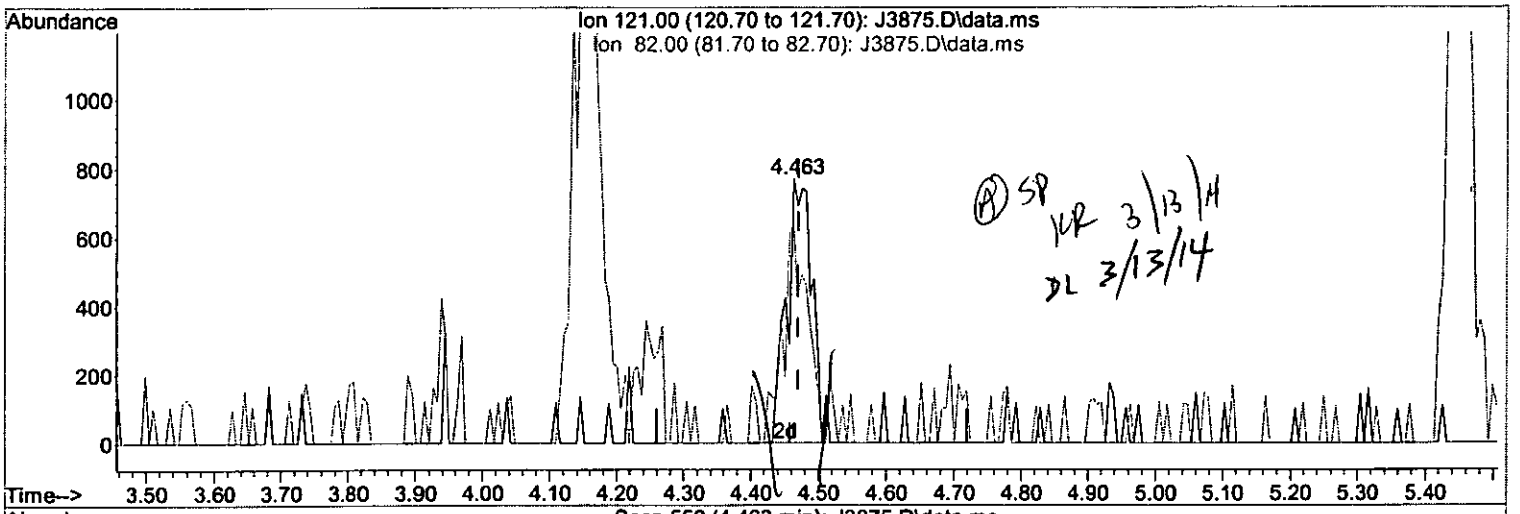
response 1497

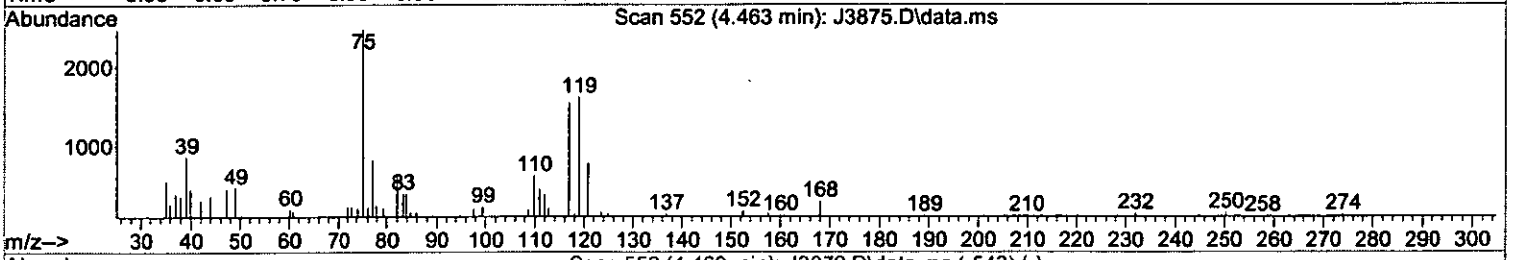
Ion	Exp%	Act%
121.00	100	100
82.00	87.50	83.12
0.00	0.00	0.00
0.00	0.00	0.00

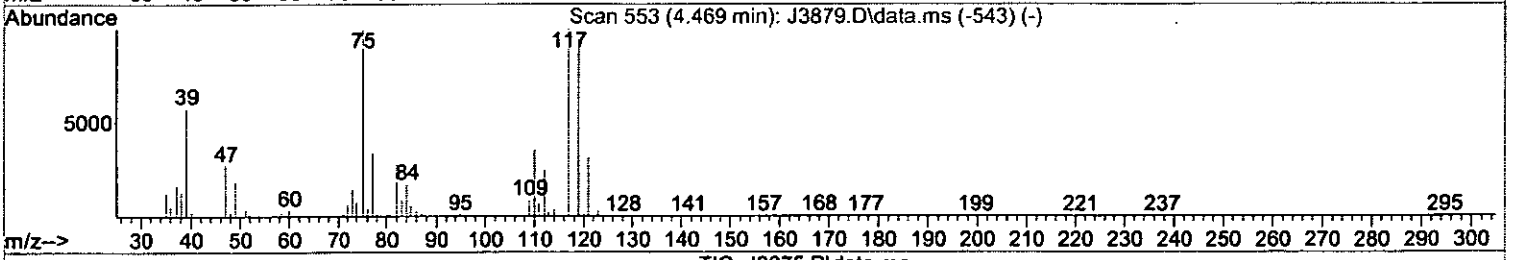
W031214.M Thu Mar 13 10:06:29 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(46) Carbontetrachloride (P)

4.463min (-0.006) 0.56 ppb m

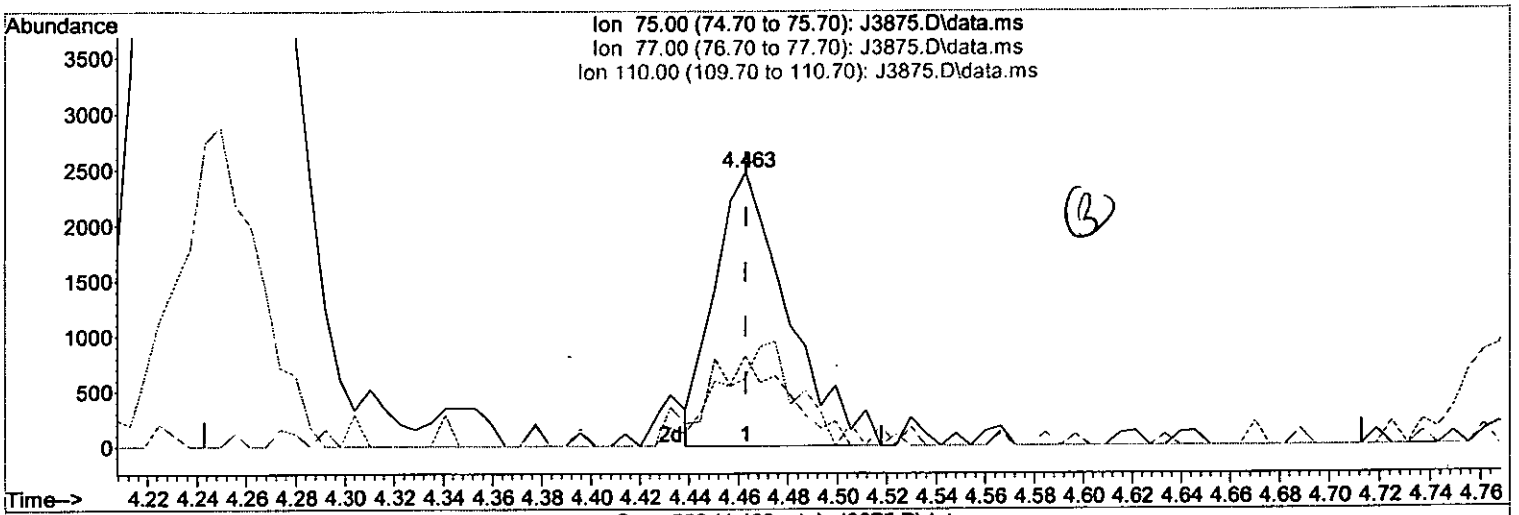
response 1948

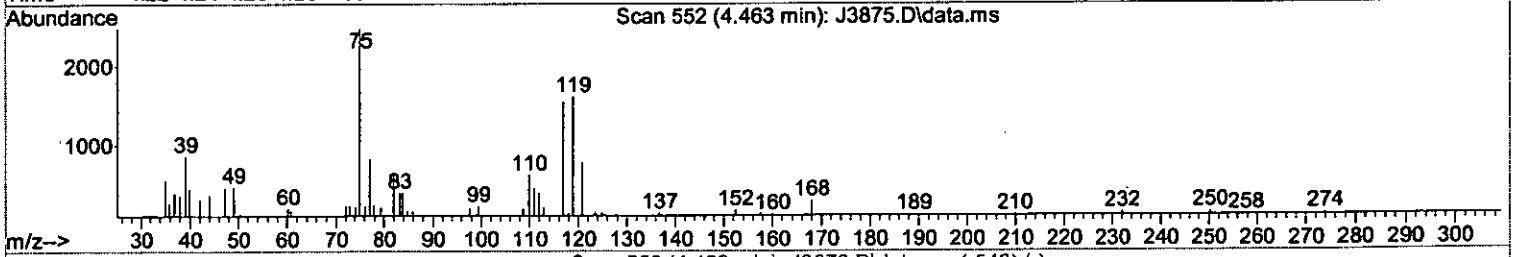
Ion	Exp%	Act%
121.00	100	100
82.00	87.50	83.12
0.00	0.00	0.00
0.00	0.00	0.00

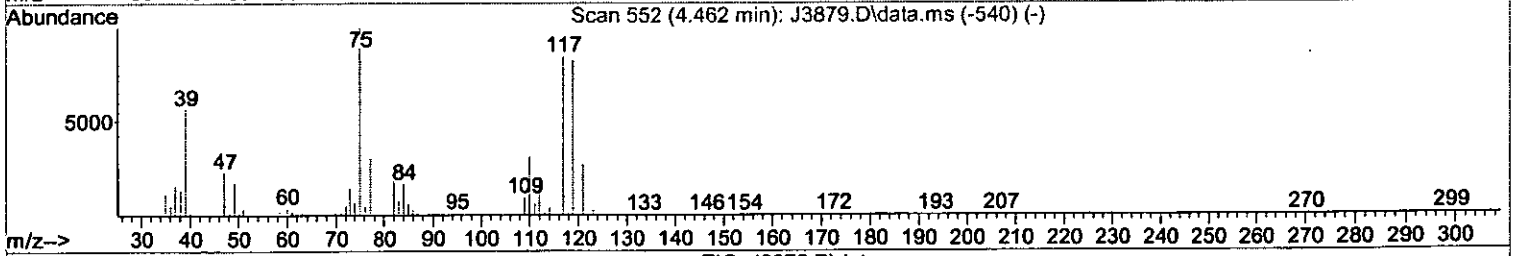
W031214.M Thu Mar 13 10:06:38 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(47) 1,1-Dichloropropene

4.463min (+0.000) 0.49 ppb

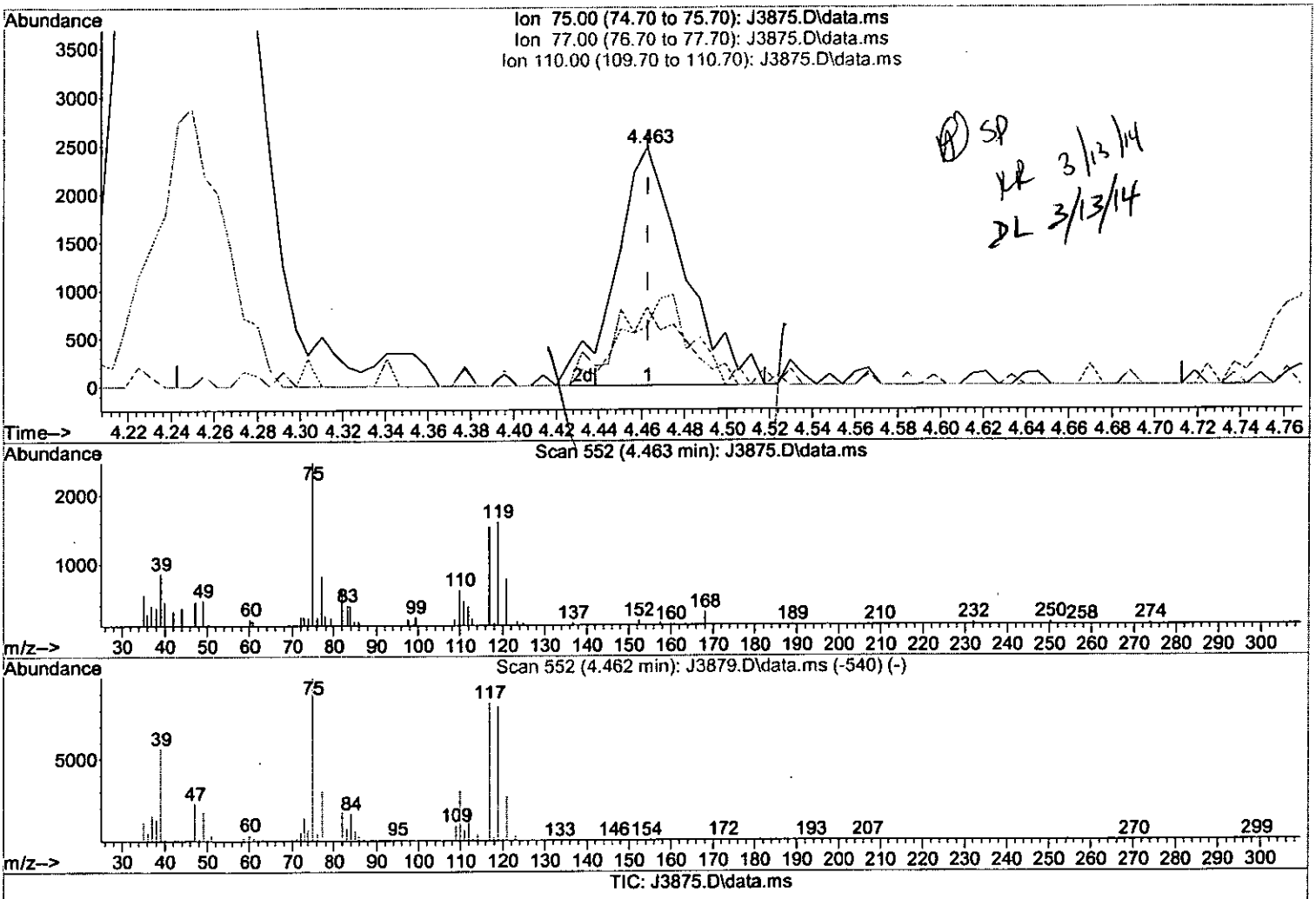
response 5116

Ion	Exp%	Act%
75.00	100	100
77.00	29.90	32.96
110.00	30.90	24.83
0.00	0.00	0.00

W031214.M Thu Mar 13 10:06:58 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(47) 1,1-Dichloropropene

4.463min (+0.000) 0.52 ppb m

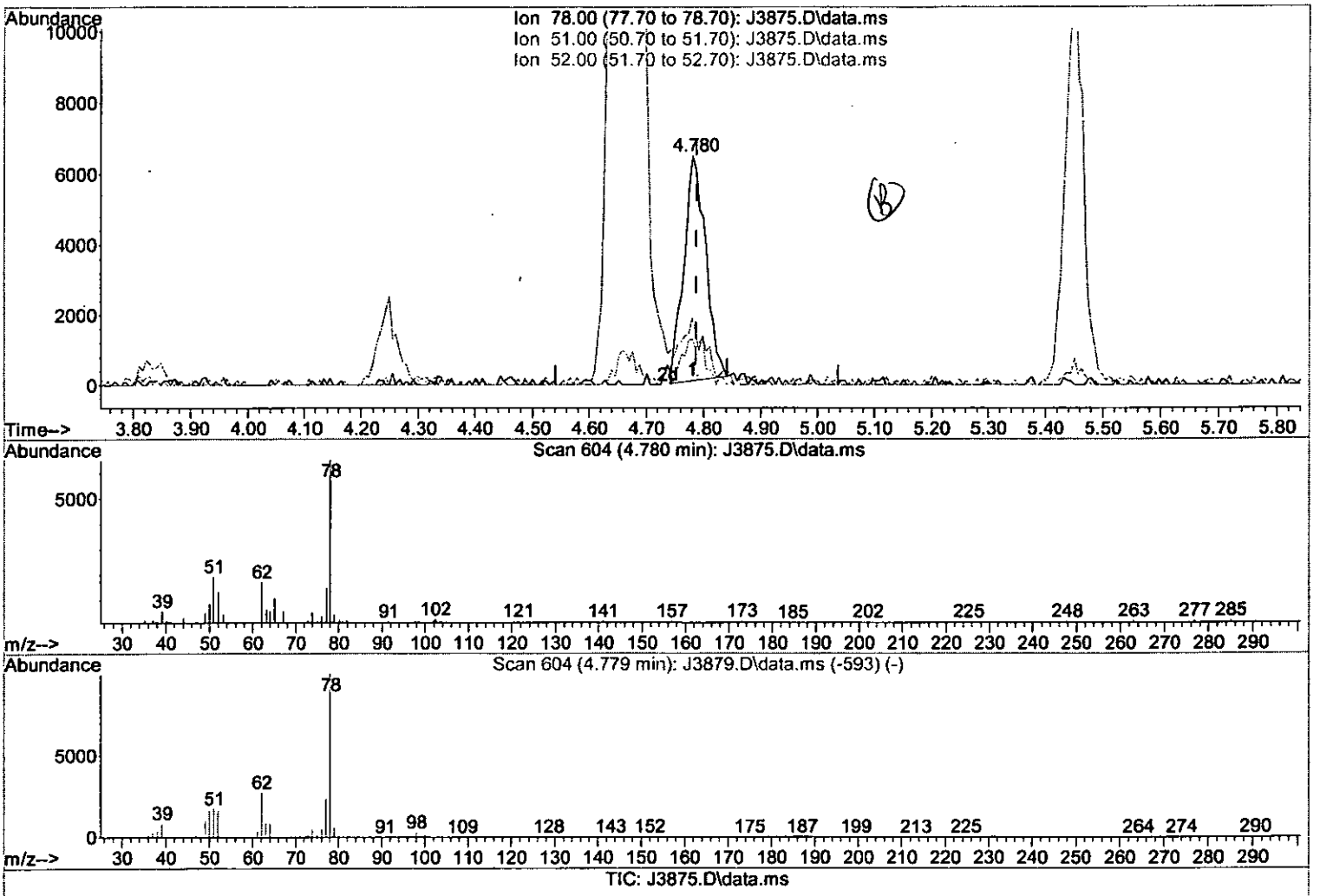
response 5496

Ion	Exp%	Act%
75.00	100	100
77.00	29.90	32.96
110.00	30.90	24.83
0.00	0.00	0.00

W031214.M Thu Mar 13 10:07:07 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(49) Benzene (P)

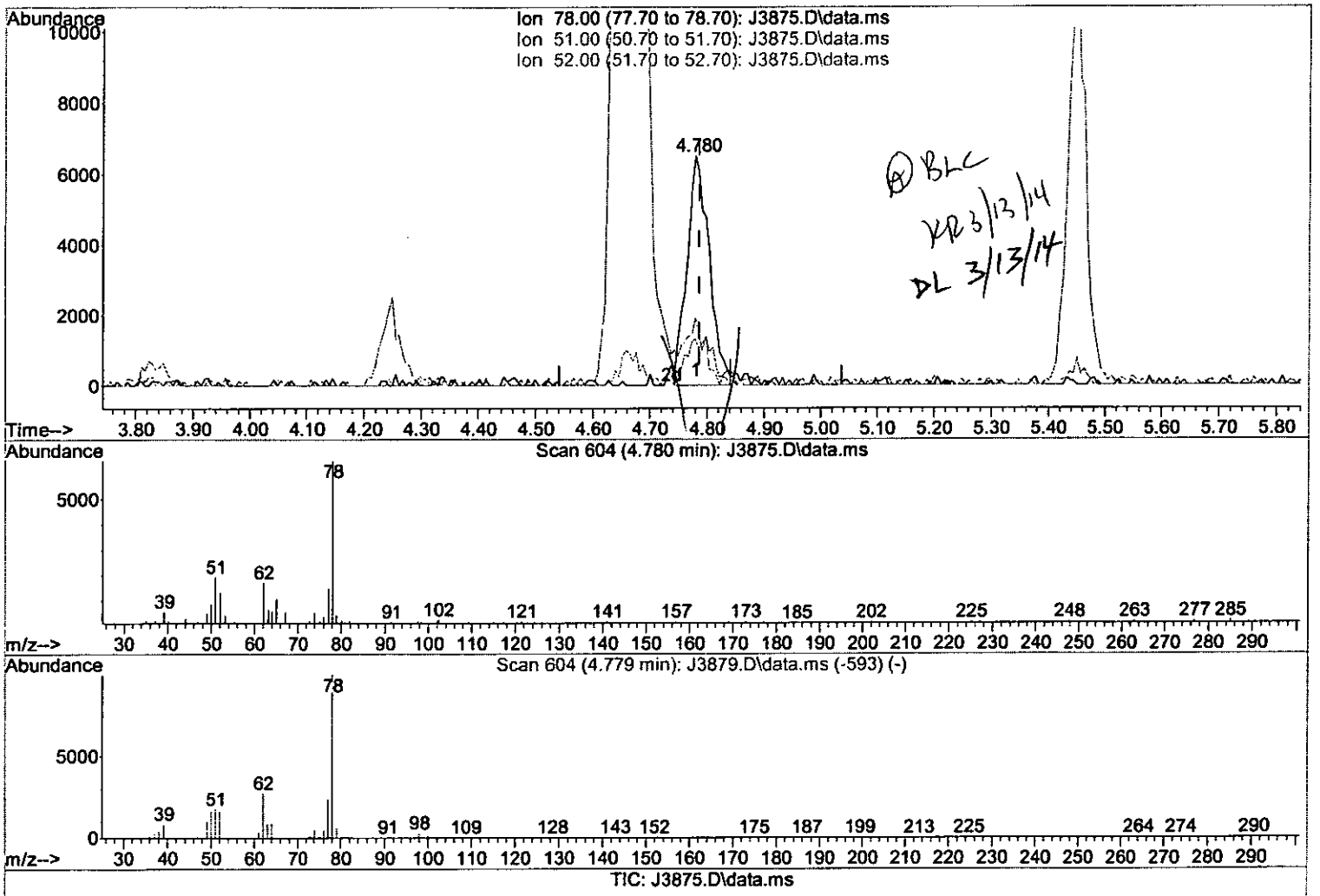
4.780min (-0.006) 0.47 ppb

response 16749

Ion	Exp%	Act%
78.00	100	100
51.00	18.20	29.35
52.00	16.10	20.11
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(49) Benzene (P)

4.780min (-0.006) 0.50 ppb m

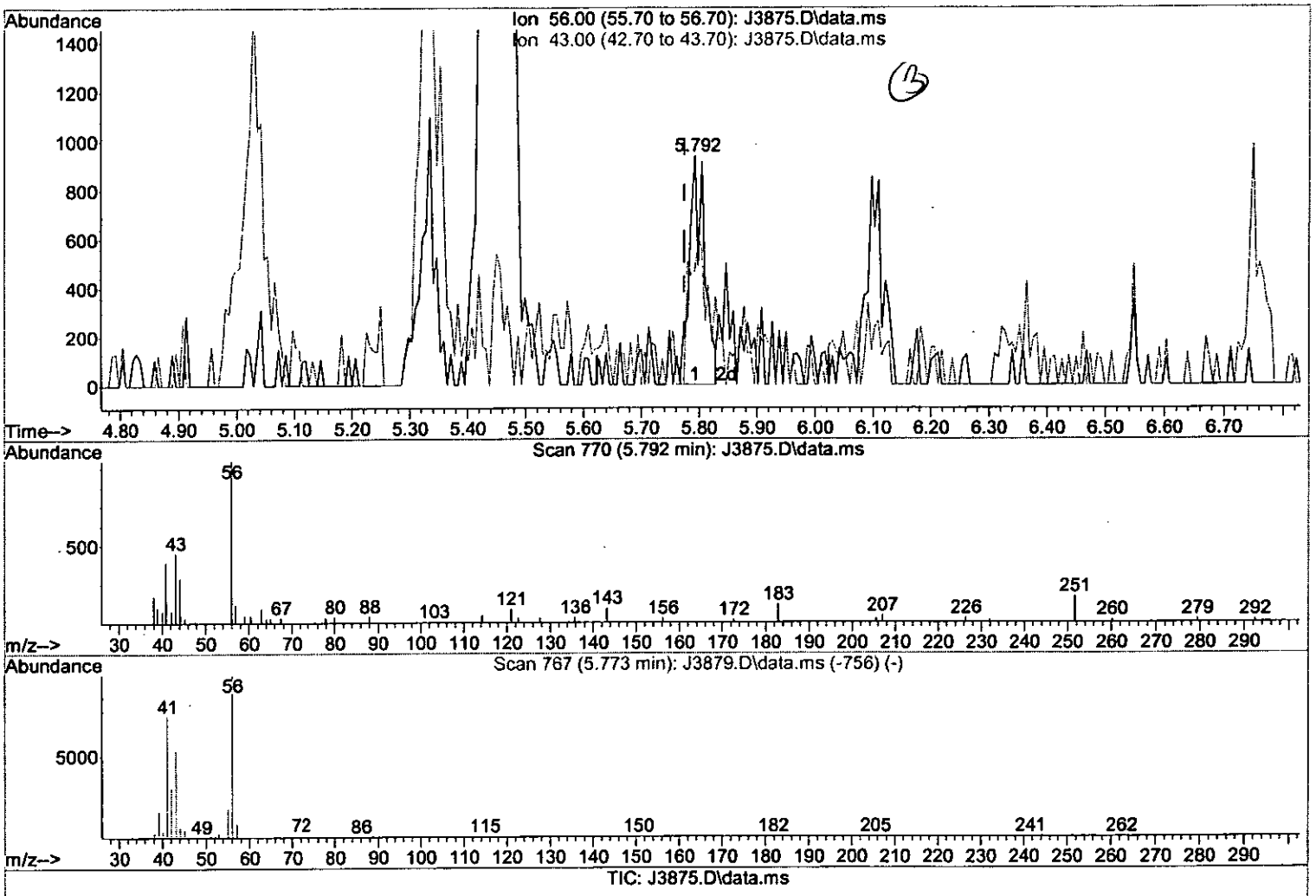
response 17569

Ion	Exp%	Act%
78.00	100	100
51.00	18.20	29.35
52.00	16.10	20.11
0.00	0.00	0.00

W031214.M Thu Mar 13 10:07:24 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(53) 1-Butanol

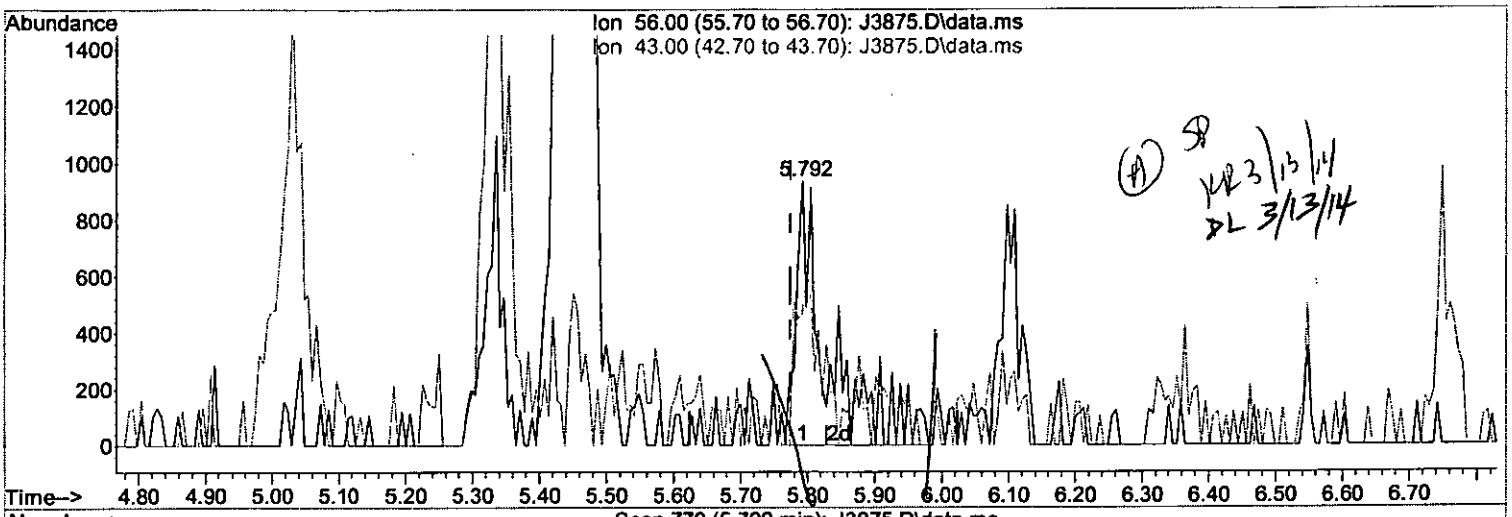
5.792min (+0.018) 12.55 ppb

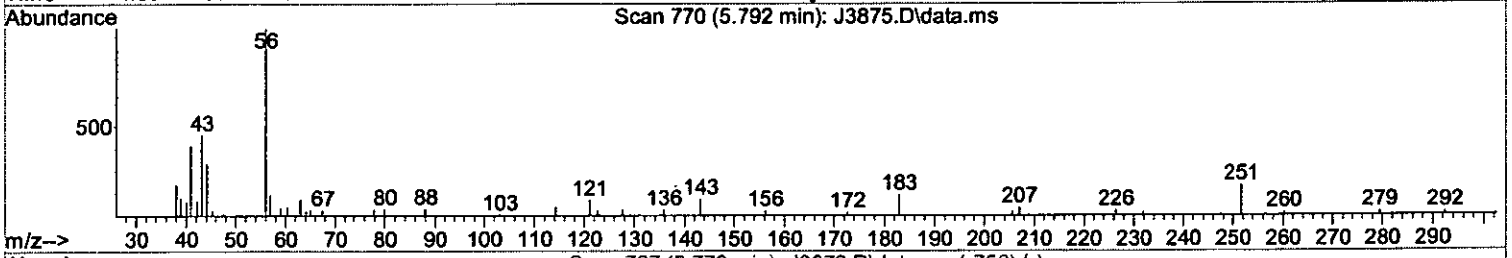
response 1688

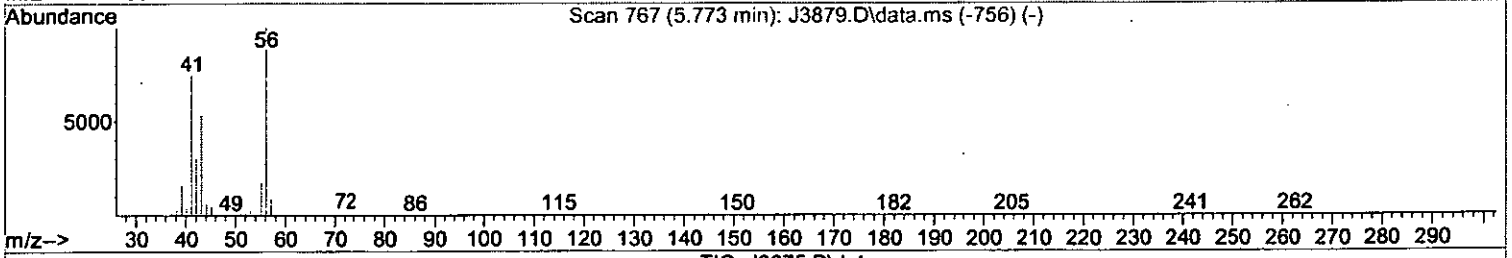
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	90.17#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(53) 1-Butanol

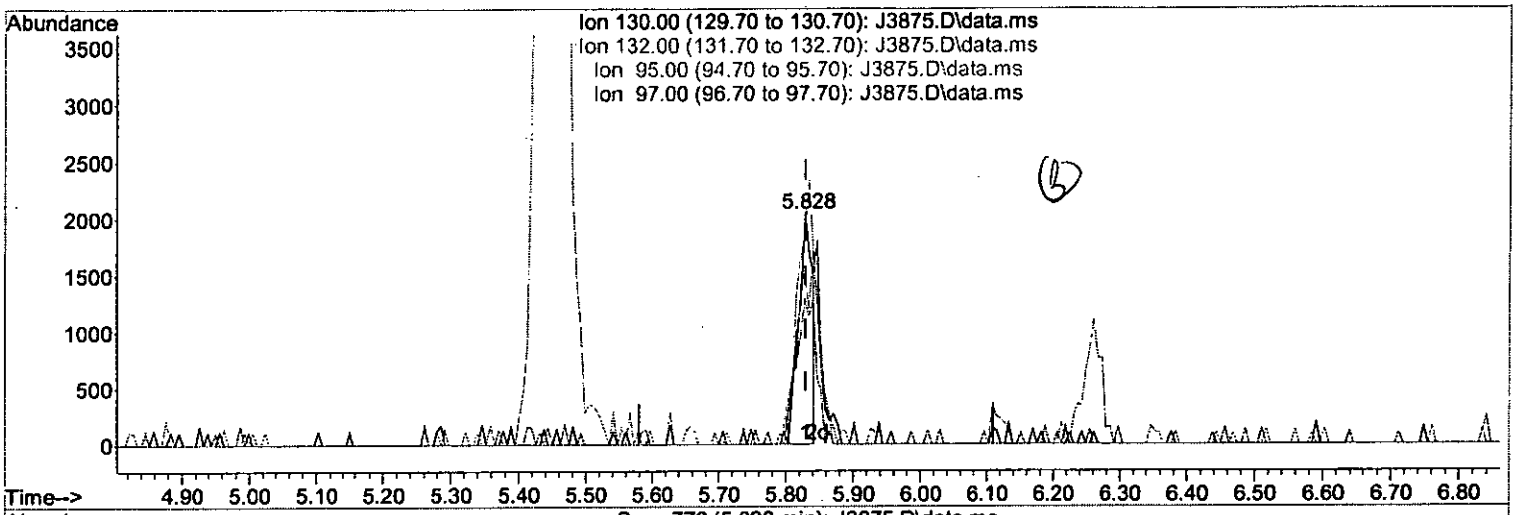
5.792min (+0.018) 22.75 ppb m

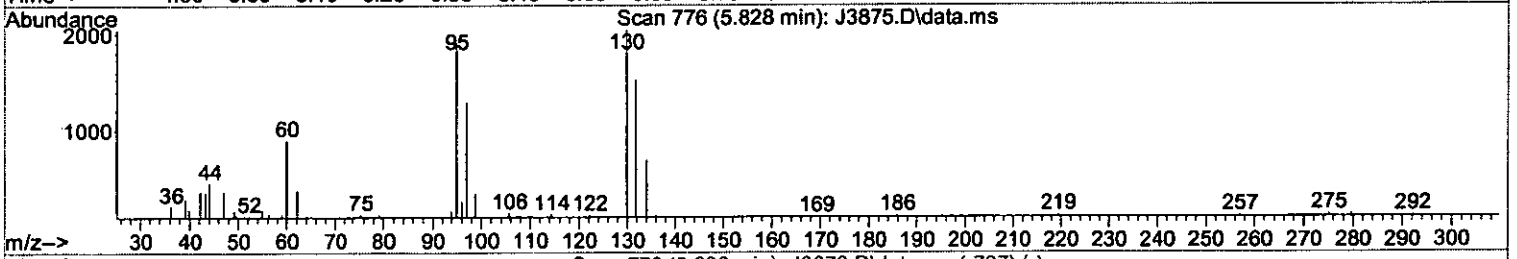
response 3060

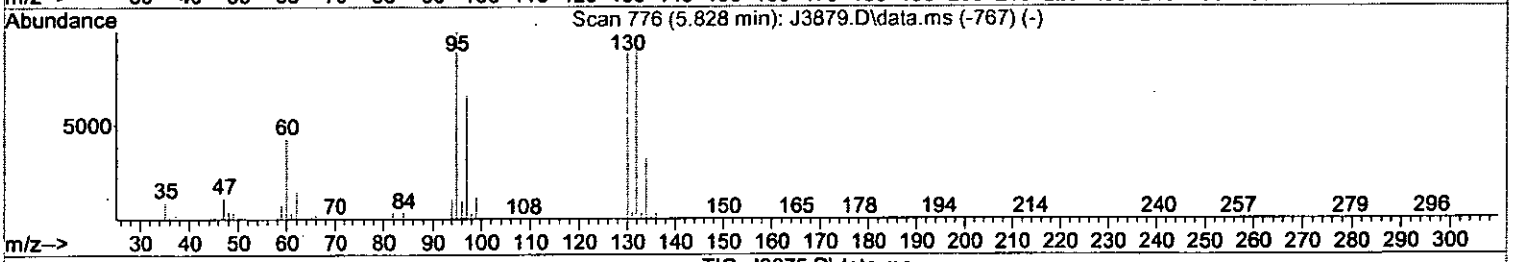
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	49.74
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(54) Trichloroethene (P)

5.828min (+0.000) 0.34 ppb

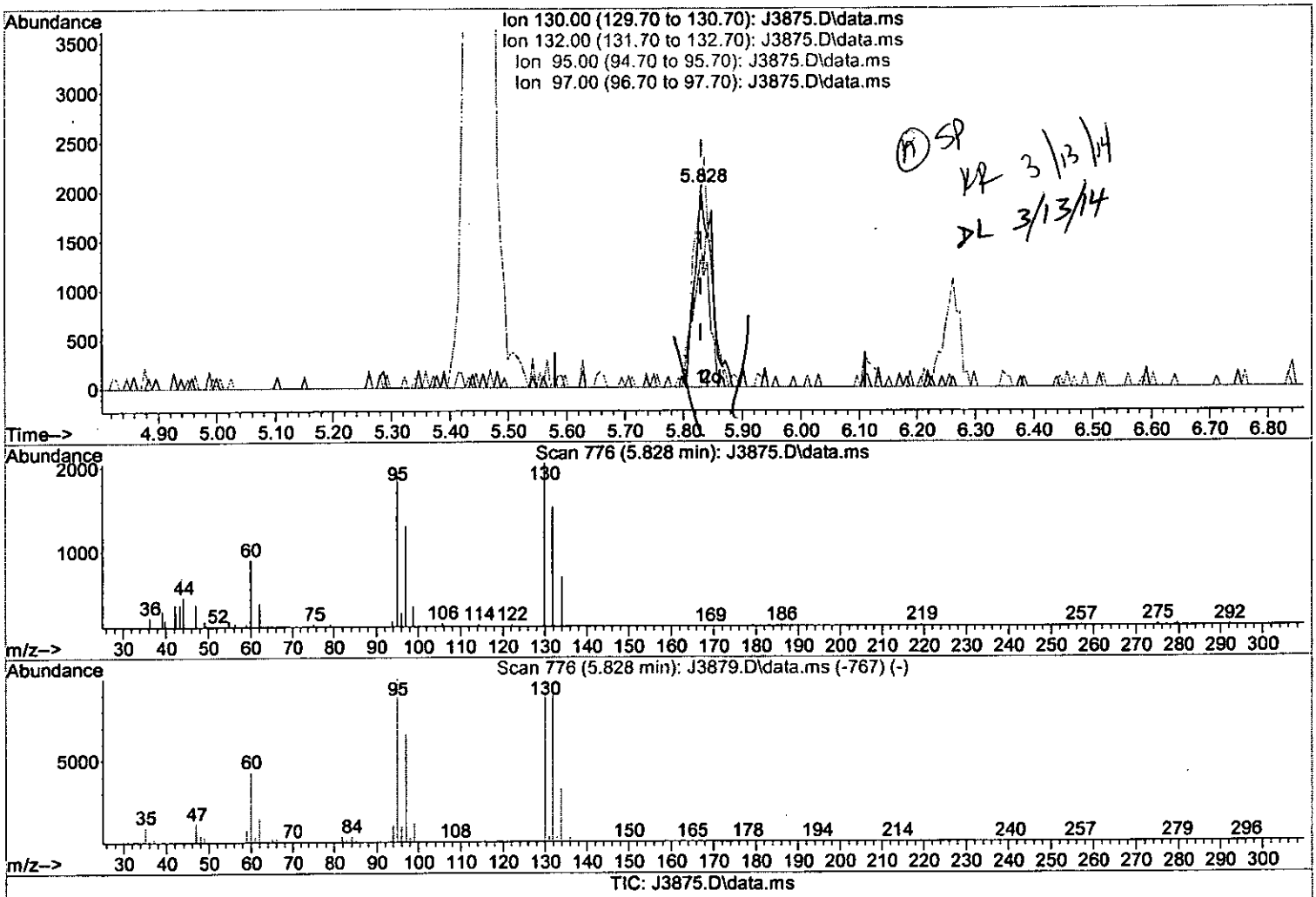
response 2913

Ion	Exp%	Act%
130.00	100	100
132.00	98.30	74.47#
95.00	103.00	93.24
97.00	67.30	63.20

W031214.M Thu Mar 13 10:09:10 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(54) Trichloroethene (P)

5.828min (+0.000) 0.49 ppb m

response 4205

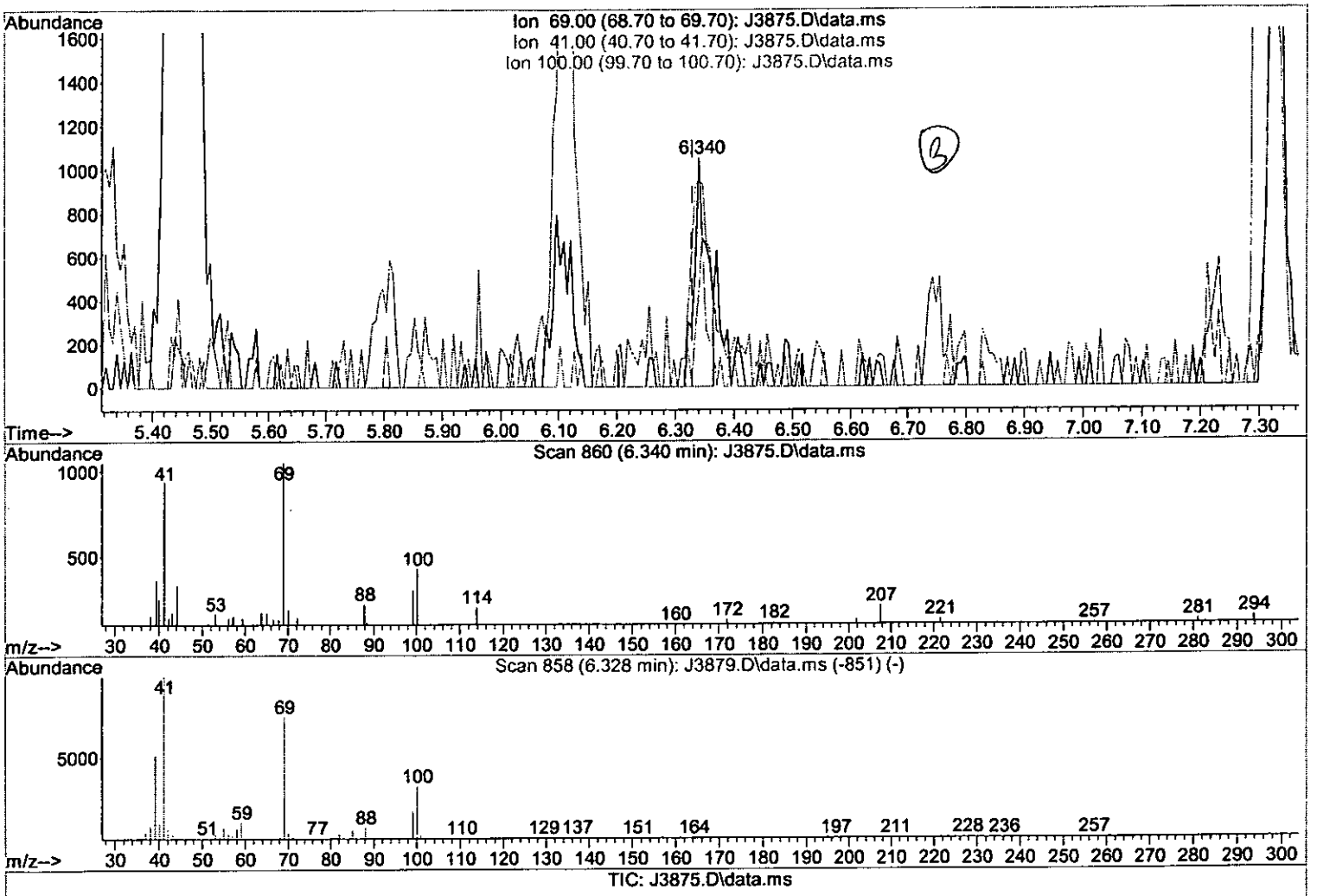
Ion	Exp%	Act%
130.00	100	100
132.00	98.30	74.47#
95.00	103.00	93.24
97.00	67.30	63.20

W031214.M Thu Mar 13 10:09:18 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.38 ppb

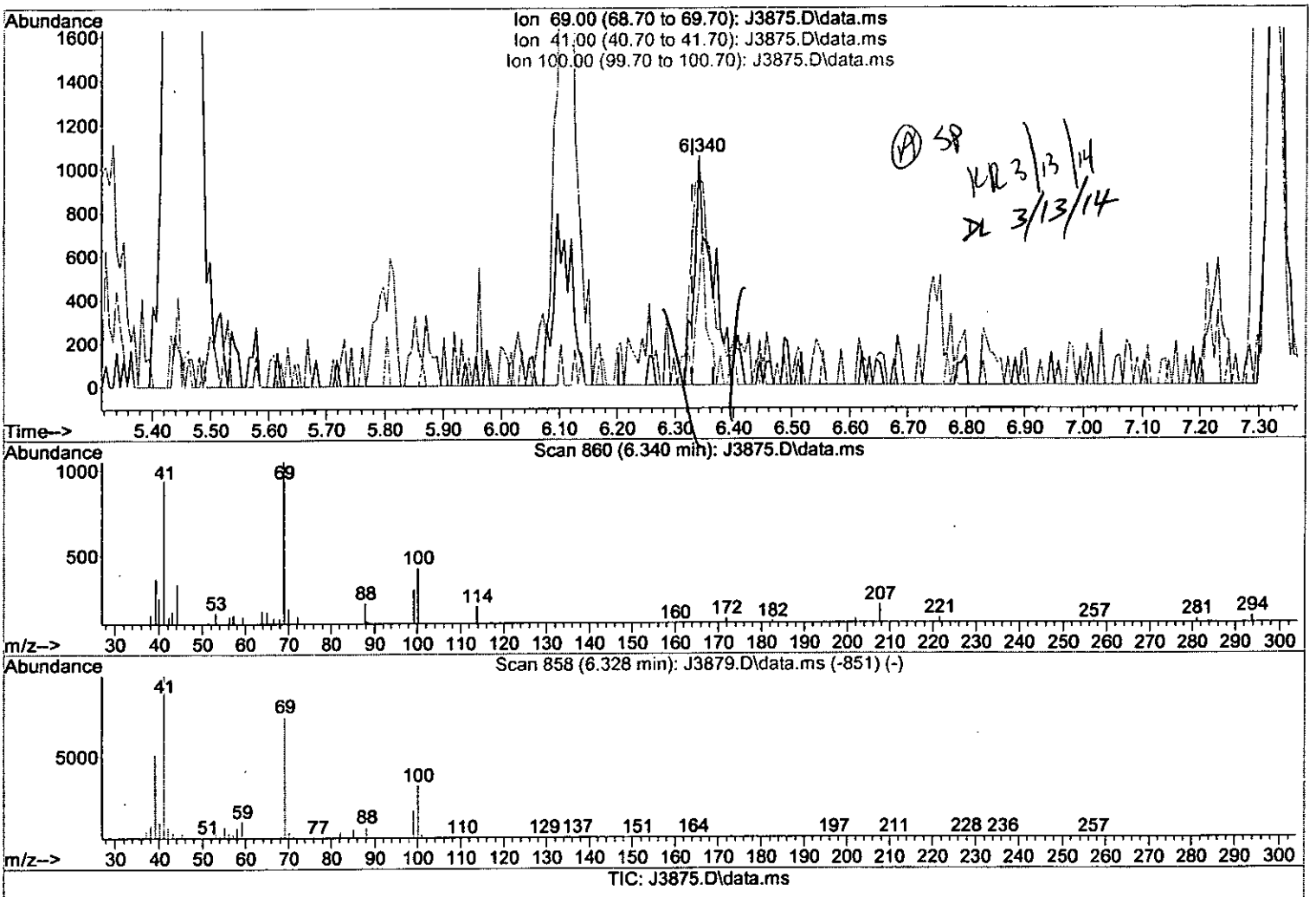
response 1630

Ion	Exp%	Act%
69.00	100	100
41.00	134.40	89.33#
100.00	42.90	40.48
0.00	0.00	0.00

W031214.M Thu Mar 13 10:09:46 2014 Page: 1

```
Sample     : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  10:45 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
```



TIC: J3875.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.50 ppb m

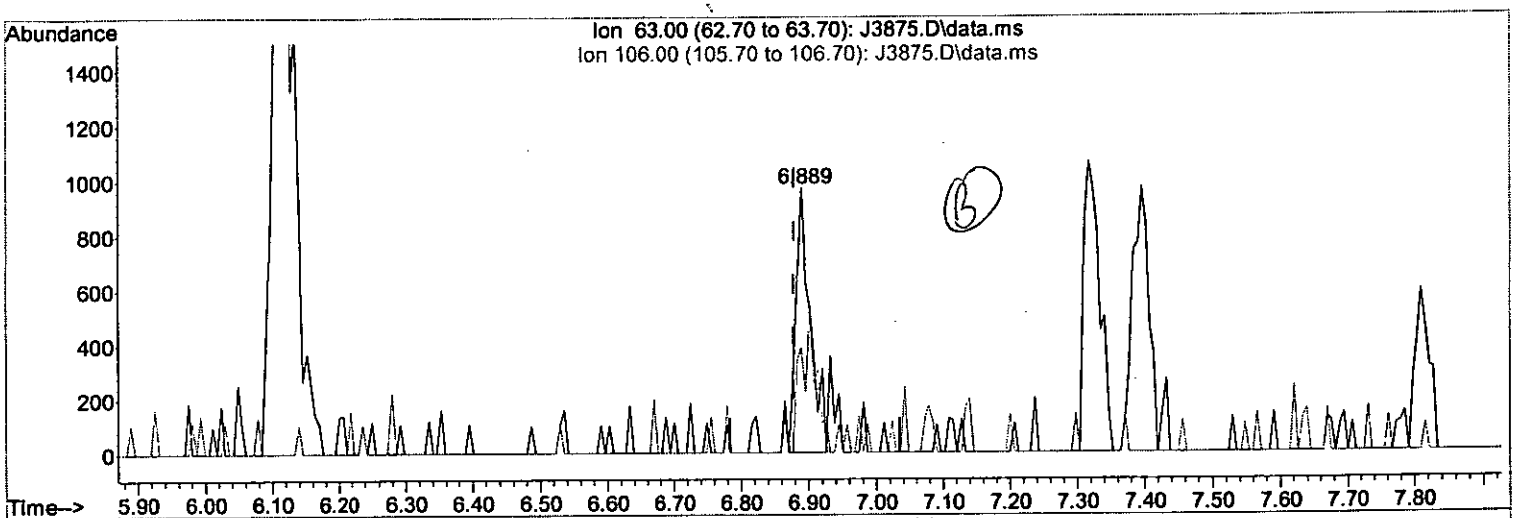
response 2120

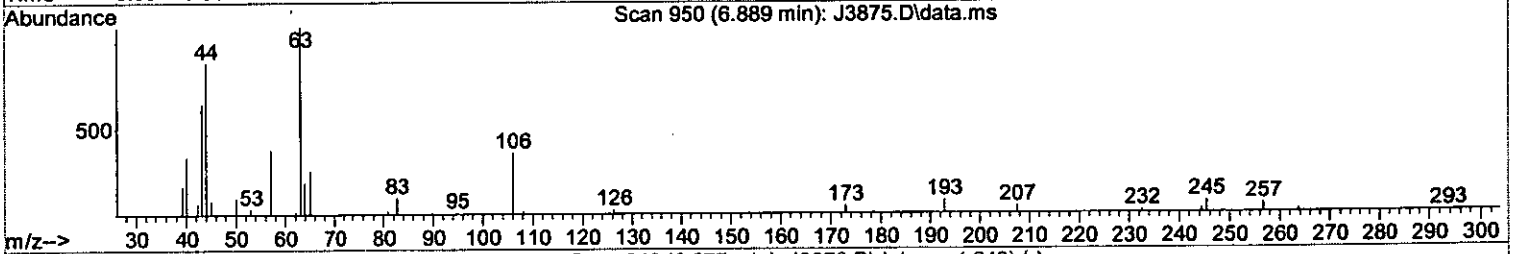
Ion	Exp%	Act%
69.00	100	100
41.00	134.40	89.33#
100.00	42.90	40.48
0.00	0.00	0.00

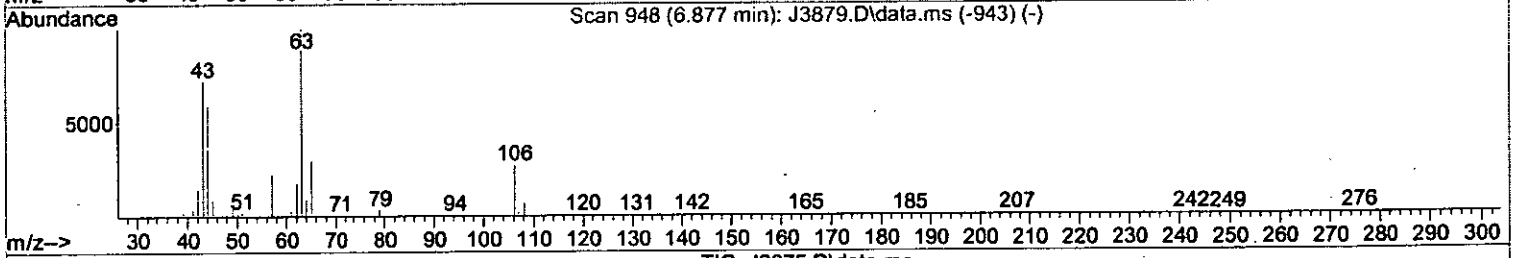
W031214.M Thu Mar 13 10:09:55 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.012) 0.35 ppb

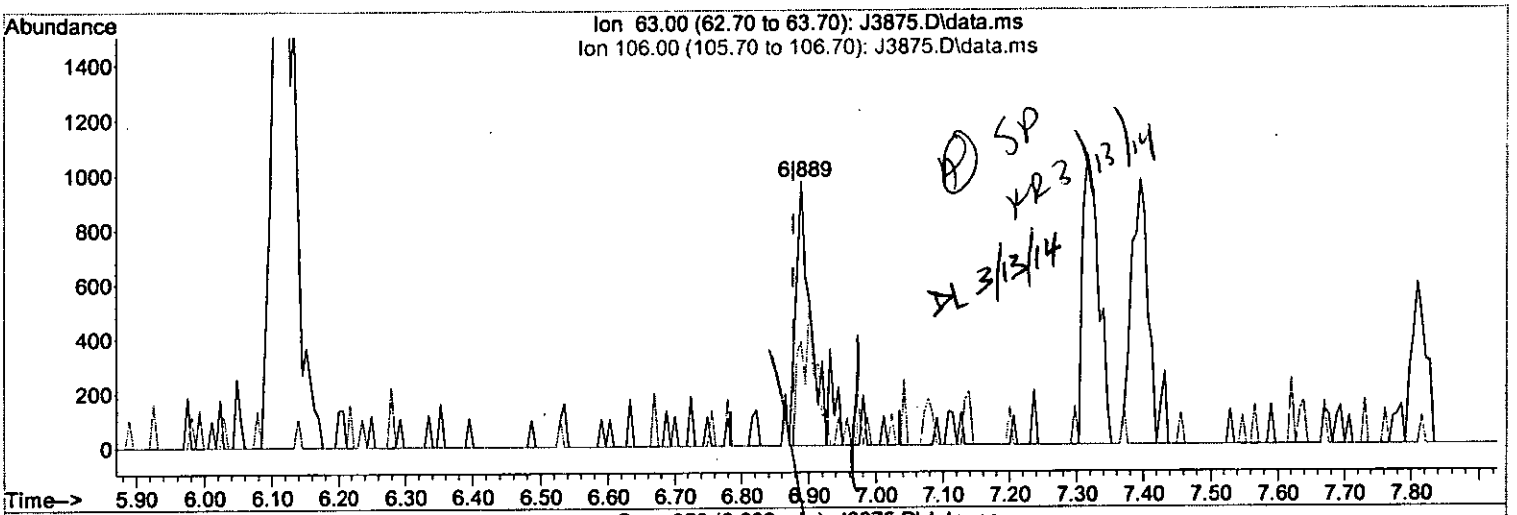
response 1414

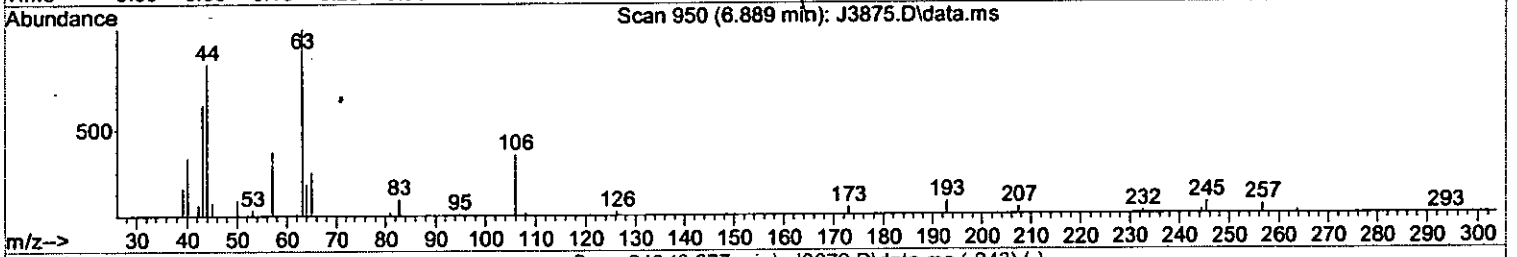
Ion	Exp%	Act%
63.00	100	100
106.00	27.00	39.53
0.00	0.00	0.00
0.00	0.00	0.00

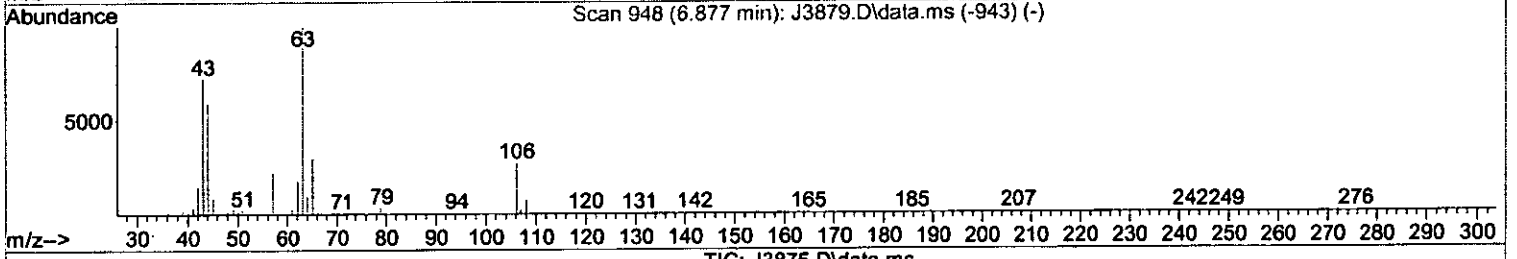
W031214.M Thu Mar 13 10:10:25 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3875.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.012) 0.41 ppb m

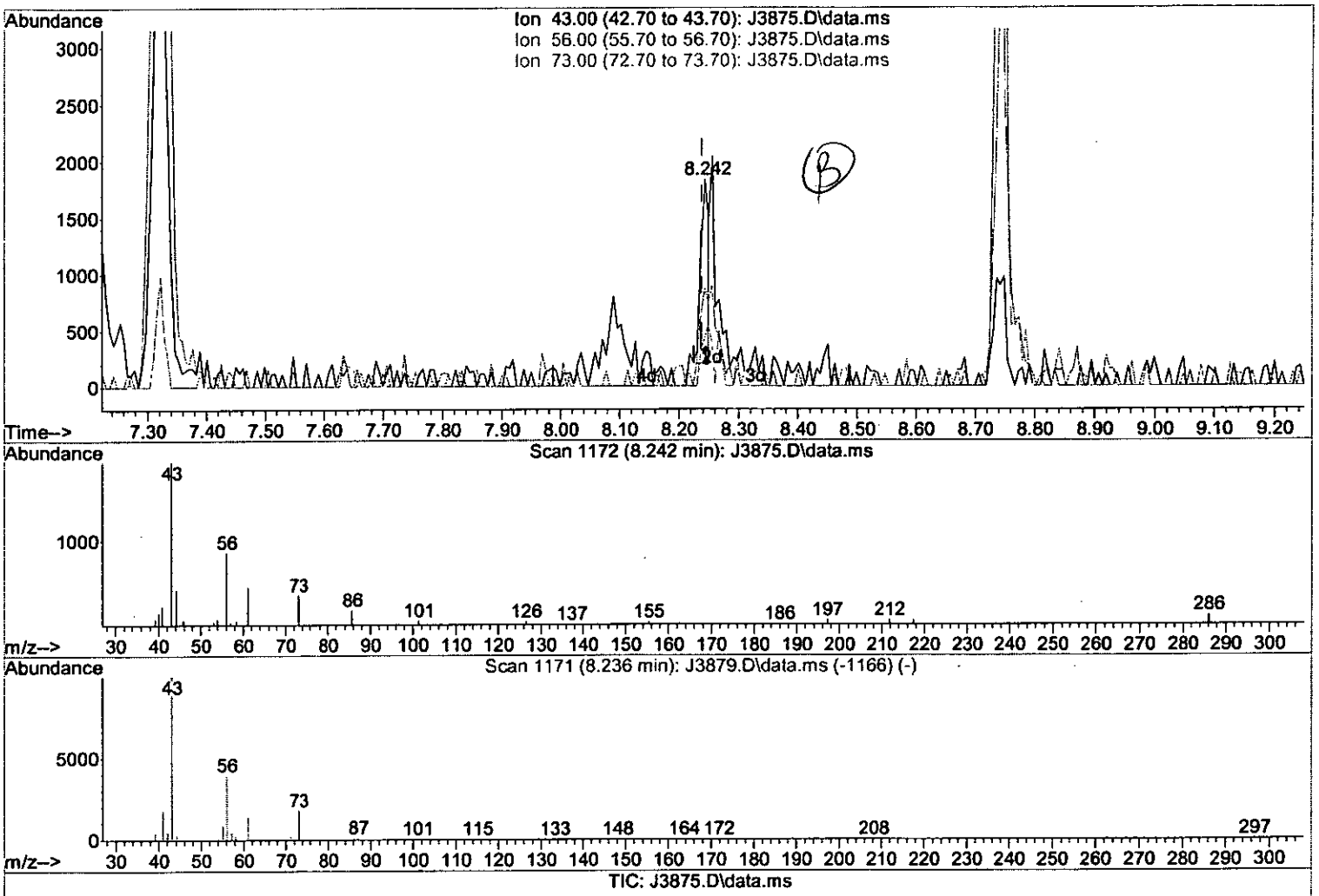
response 1661

Ion	Exp%	Act%
63.00	100	100
106.00	27.00	39.53
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:10:32 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(76) N-Butyl Acetate

8.242min (+0.006) 0.17 ppb

response 1498

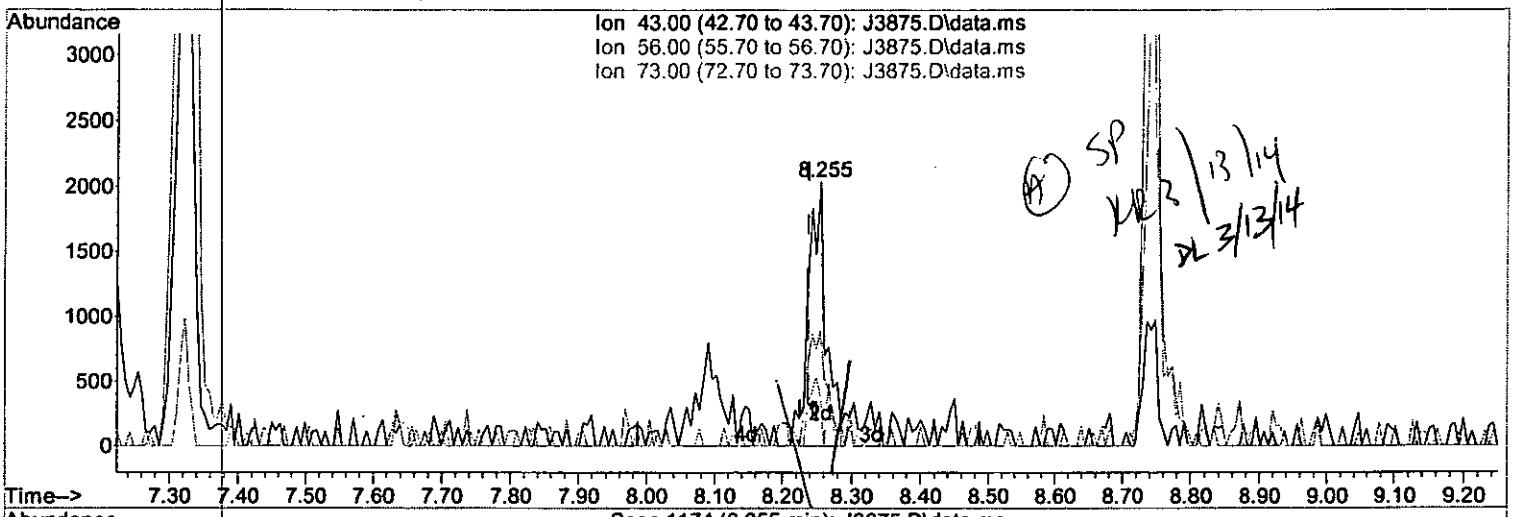
Ion	Exp%	Act%
43.00	100	100
56.00	39.70	47.57
73.00	17.70	22.56
0.00	0.00	0.00

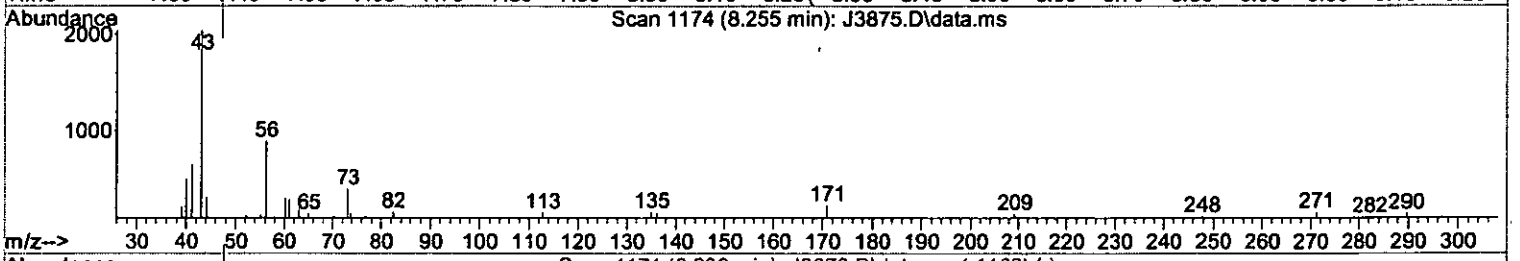
W031214.M Thu Mar 13 10:11:09 2014 Page: 1

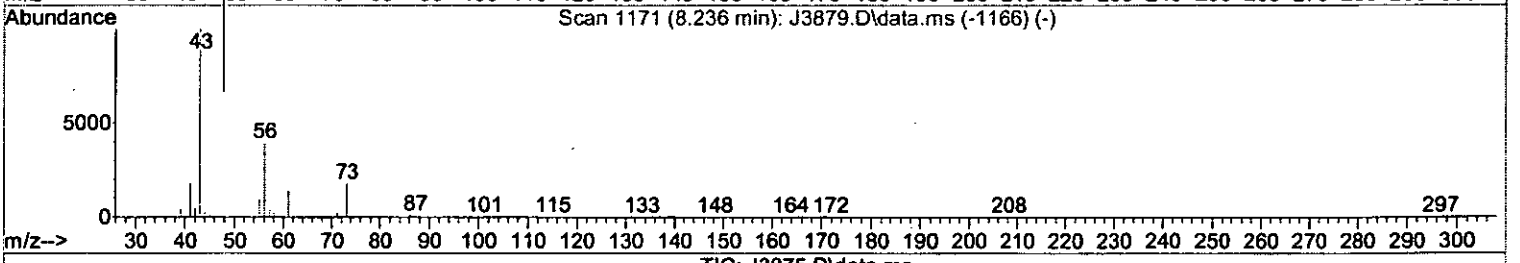
Quantitation Report (Qedit)

```
Sample     : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  10:45 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
```







TIC: J3875.D\data.ms

(76) N-Butyl Acetate

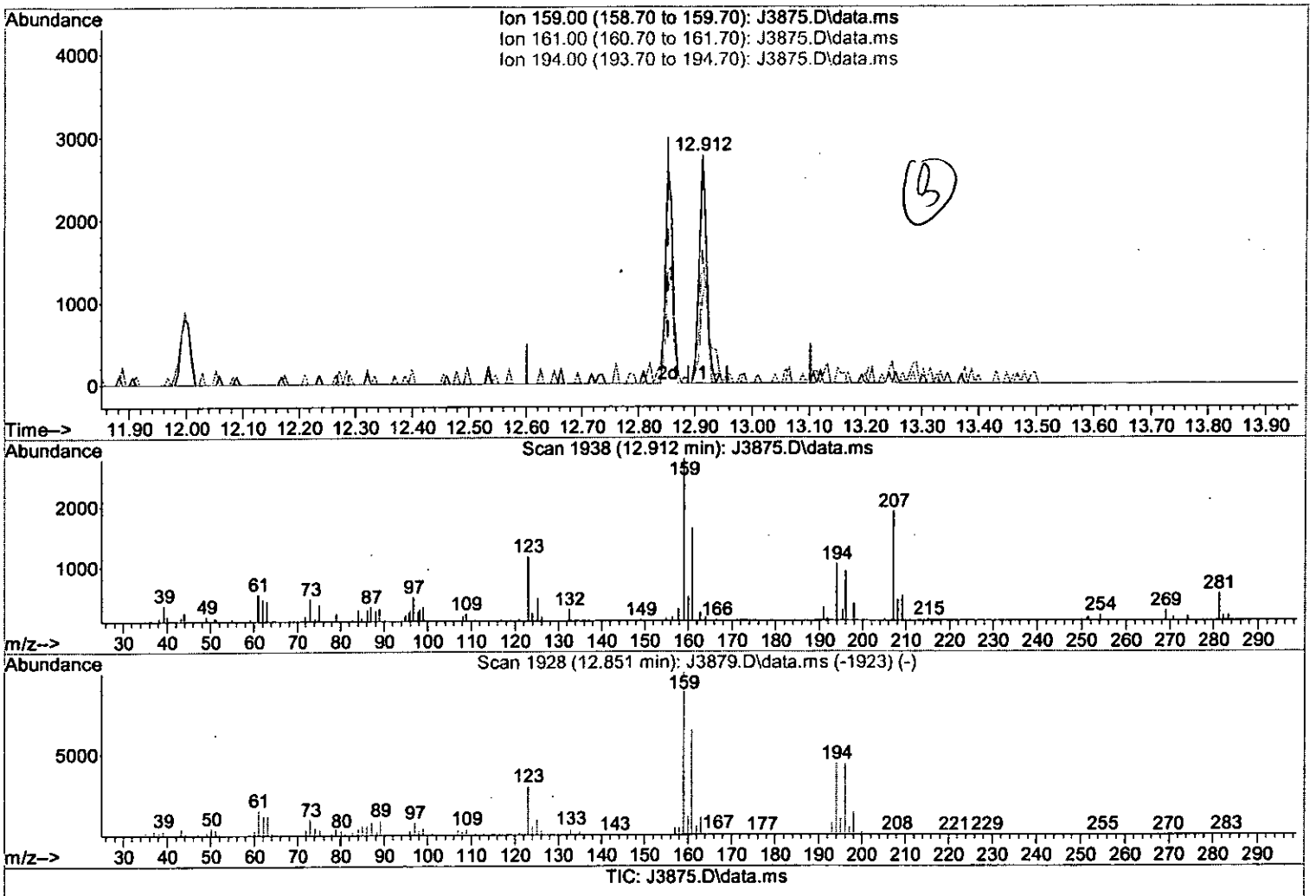
8.255min (+0.018) 0.40 ppb m

response 3648

Ion	Exp%	Act%
43.00	100	100
56.00	39.70	43.69
73.00	17.70	19.34
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(119) 2,4,5-Trichlorotolene

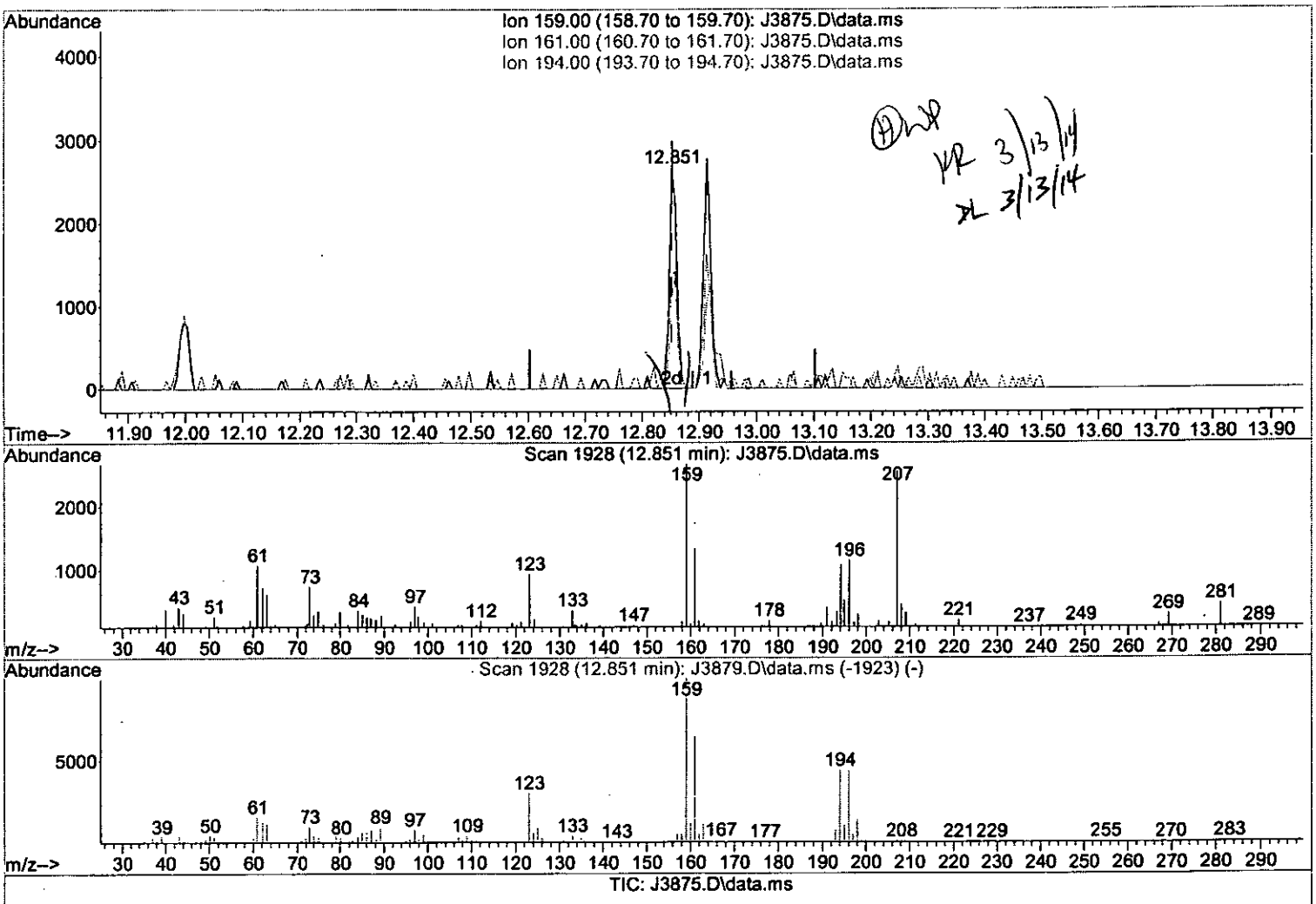
12.912min (+0.061) 0.52 ppb

response 2541

Ion	Exp%	Act%
159.00	100	100
161.00	64.60	58.59
194.00	43.80	37.34
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:35 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3875.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (+0.000) 0.49 ppb m

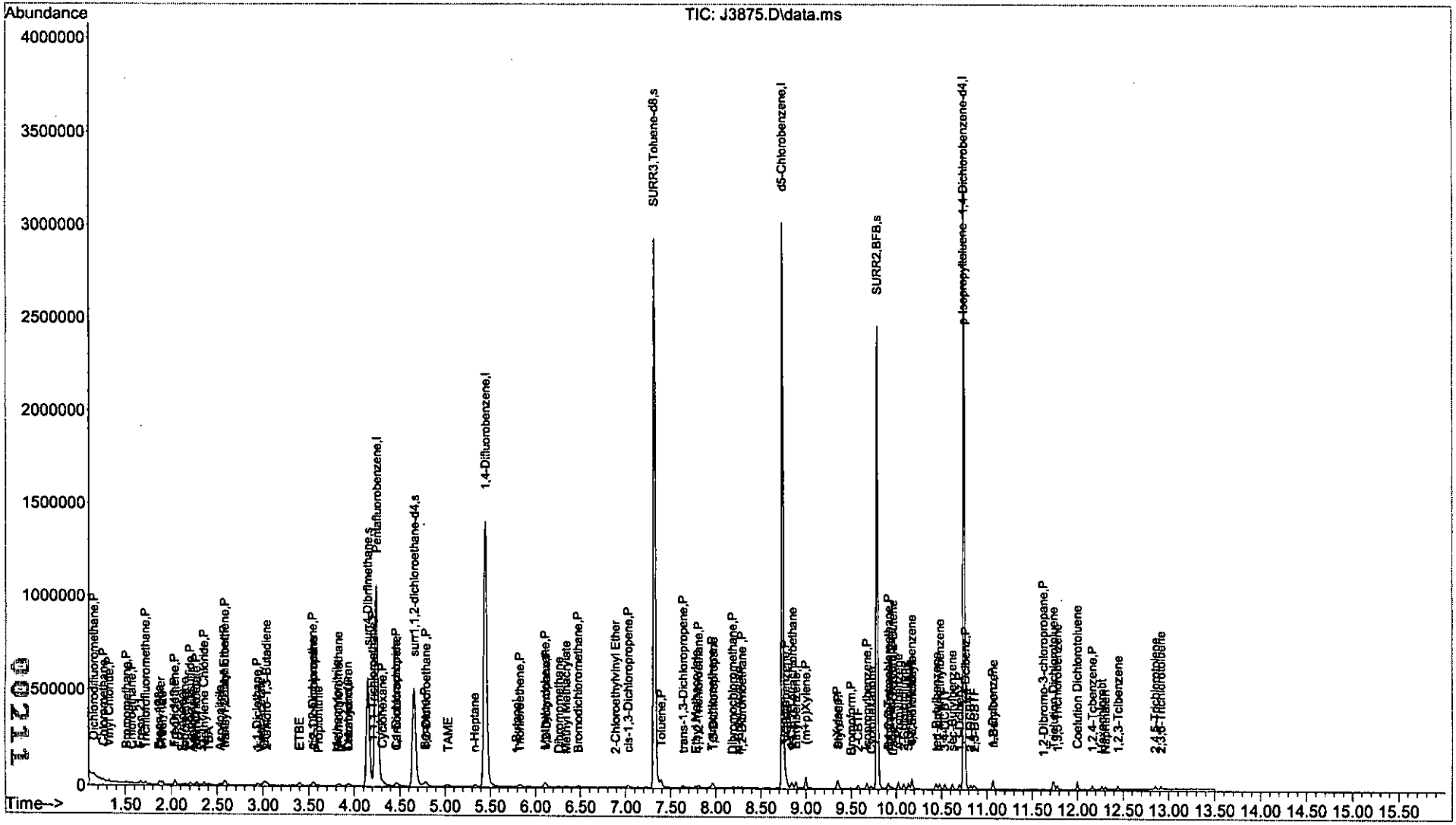
response 2375

Ion	Exp%	Act%
159.00	100	100
161.00	64.60	49.83#
194.00	43.80	40.46
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3875.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:11:48 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:12:09 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909776	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1428738	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1289121	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	616857	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	410160	49.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.18%				
48) surr1,1,2-dichloroetha...	4.664	65	482134	51.17	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 102.34%				
65) SURR3,Toluene-d8	7.322	98	1743990	50.18	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.36%				
70) SURR2,BFB	9.785	95	640602	49.40	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	10136	0.94	ppb		93
3) Chloromethane	1.256	50	9090	0.97	ppb		98
4) Vinyl Chloride	1.323	62	8349	0.96	ppb		100
5) Bromomethane	1.512	94	5664	1.08	ppb		100
6) Chloroethane	1.567	64	5094m KR	0.94	ppb		
7) Freon 21	1.664	67	12648	0.96	ppb		93
8) Trichlorofluoromethane	1.719	101	12681	0.95	ppb		98
9) Diethyl Ether	1.884	59	6969	1.06	ppb		94
10) Freon 123a	1.872	67	9615	0.98	ppb		89
11) Freon 123	1.902	83	11518 KR	1.03	ppb		92
12) Acrolein	1.957	56	841m KR	2.67	ppb		
13) 1,1-Diclethene	2.042	96	6368	0.96	ppb		94
14) Freon 113	2.036	101	7307	1.01	ppb		93
15) Acetone	2.048	43	2625	1.45	ppb		79
16) 2-Propanol	2.109	45	5194	17.45	ppb		82
17) Iodomethane	2.146	142	6957	0.79	ppb		89
18) Carbon Disulfide	2.207	76	22369	0.97	ppb		97
19) Acetonitrile	2.225	40	879	2.98	ppb	#	80
20) Allyl Chloride	2.274	76	4499	0.99	ppb	#	82
21) Methyl Acetate	2.280	43	4034	0.99	ppb		84
22) Methylene Chloride	2.359	84	9268	1.07	ppb		89
23) TBA	2.408	59	9223	18.28	ppb		98
24) Acrylonitrile	2.530	53	10212	5.05	ppb		83
25) Methyl-t-Butyl Ether	2.579	73	20977	1.00	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	8267	1.00	ppb		95
28) 1,1-Diclethane	2.945	63	15260	0.99	ppb		94
29) Vinyl Acetate	2.987	86	1309m KR	0.95	ppb		
30) DIPE	3.018	45	28957	0.97	ppb		90
31) 2-Chloro-1,3-Butadiene	3.042	53	11321	0.85	ppb		98
32) ETBE	3.396	59	24145	0.96	ppb		95
33) 2,2-Dichloropropane	3.554	77	11739	0.96	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	9588	1.04	ppb		85
36) Propionitrile	3.609	54	3282	4.63	ppb		92
37) Bromochloromethane	3.835	130	5212	1.01	ppb	#	77
38) Methacrylonitrile	3.810	67	1831	0.78	ppb	#	52

KR 3/18/14

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Tetrahydrofuran	3.914	42	2184	1.24	ppb	#	49
40) Chloroform	3.944	83	14880	0.99	ppb		89
41) 1,1,1-Trichloroethane	4.213	97	12496	0.97	ppb	#	1
42) TAME	5.023	73	20545	0.97	ppb		95
44) Cyclohexane	4.316	41	7870	1.02	ppb		97
46) Carbontetrachloride	4.463	121	3211	0.94	ppb		79
47) 1,1-Dichloropropene	4.463	75	9605	0.92	ppb		77
49) Benzene	4.786	78	34783	0.99	ppb		96
50) 1,2-Dichloroethane	4.792	62	11135	1.04	ppb		90
51) Iso-Butyl Alcohol	4.645	43	4896m	20.70	ppb		
52) n-Heptane	5.334	43	8949	1.02	ppb		89
53) 1-Butanol	5.785	56	5606m	41.98	ppb		
54) Trichloroethene	5.828	130	8557	1.00	ppb	#	77
55) Methylcyclohexane	6.109	55	9048	0.99	ppb		93
56) 1,2-Diclpropane	6.115	63	8401	0.93	ppb		94
57) Dibromomethane	6.255	93	4422	1.03	ppb		82
59) Methyl Methacrylate	6.346	69	4351m	1.03	ppb		
60) Bromodichloromethane	6.480	83	9613	0.91	ppb		96
61) 2-Nitropropane	6.743	41	2112	1.87	ppb		91
62) 2-Chloroethylvinyl Ether	6.889	63	3778	0.94	ppb		100
63) cis-1,3-Dichloropropene	7.029	75	11016	0.88	ppb		93
64) 4-Methyl-2-pentanone	7.218	43	4894	0.90	ppb		88
66) Toluene	7.395	91	36309	1.00	ppb		97
67) trans-1,3-Dichloropropene	7.633	75	8721	0.87	ppb		99
68) Ethyl Methacrylate	7.773	69	7414m	0.92	ppb		
69) 1,1,2-Trichloroethane	7.809	97	6006	0.95	ppb		94
72) Tetrachloroethene	7.962	164	6434	0.97	ppb		90
73) 2-Hexanone	8.096	43	3196	0.88	ppb		99
74) 1,3-Dichloropropane	7.974	76	11877	1.02	ppb		88
75) Dibromochloromethane	8.187	129	5635	0.84	ppb		87
76) N-Butyl Acetate	8.242	43	8454	0.94	ppb		93
77) 1,2-Dibromoethane	8.291	107	5584	0.94	ppb		98
78) Chlorobenzene	8.773	112	21495	0.96	ppb		93
79) 3-CBTF	8.785	180	10407	0.94	ppb		96
80) 4-CBTF	8.834	180	8928	0.90	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	6999	0.89	ppb		97
82) Ethylbenzene	8.889	106	11238	0.94	ppb		95
83) (m+p)Xylene	8.998	106	25096	1.79	ppb		95
84) o-Xylene	9.346	106	14523	1.01	ppb	#	81
85) Styrene	9.358	104	19861	0.87	ppb		90
87) Bromoform	9.498	173	3297	0.94	ppb		100
88) 2-CBTF	9.577	180	9585	0.93	ppb		91
89) Isopropylbenzene	9.669	105	30809	0.97	ppb		98
90) Cyclohexanone	9.724	55	10704	21.64	ppb		87
91) trans-1,4-Dichloro-2-B...	9.962	53	1318	0.79	ppb		95
92) 1,1,2,2-Tetrachloroethane	9.913	83	7805	1.10	ppb		96
93) Bromobenzene	9.907	156	9148	1.01	ppb		96
94) 1,2,3-Trichloropropane	9.943	110	2408	1.14	ppb	#	71
95) n-Propylbenzene	10.022	91	36616	0.98	ppb		97
96) 2-Chlorotoluene	10.083	91	22220	0.95	ppb		99
97) 3-Chlorotoluene	10.132	91	23805	0.98	ppb		92
98) 4-Chlorotoluene	10.175	91	27266	0.99	ppb		95

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

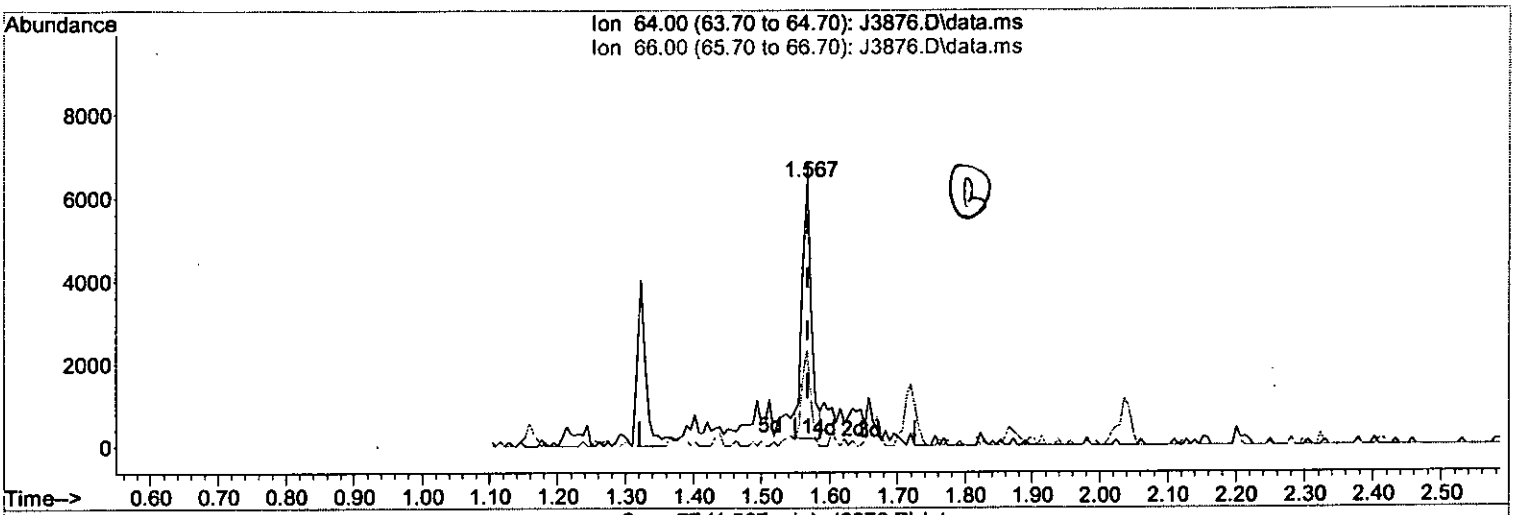
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

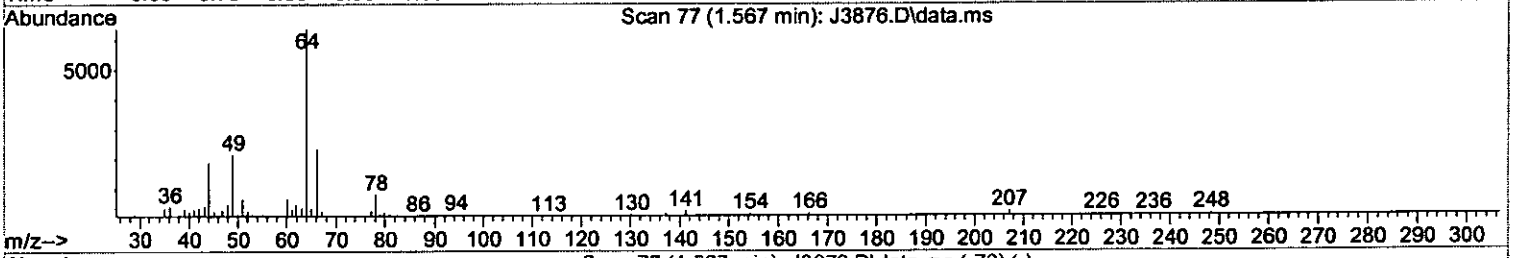
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	1,3,5-Trimethylbenzene	10.169	105	24817	0.96	ppb		92
100)	tert-Butylbenzene	10.437	119	21877	1.00	ppb		90
101)	1,2,4-Trimethylbenzene	10.480	105	25964	0.97	ppb		100
102)	3,4-DCBTF	10.535	214	7195	0.95	ppb		94
103)	sec-Butylbenzene	10.620	105	29824	0.98	ppb		97
104)	p-Isopropyltoluene	10.742	119	24266	0.94	ppb		84
105)	1,3-Dclbenz	10.699	146	14936	0.97	ppb		90
106)	1,4-Dclbenz	10.766	146	15823	0.96	ppb		94
107)	2,4-DCBTF	10.821	214	6587	1.00	ppb	#	70
108)	2,5-DCBTF	10.858	214	7707	1.02	ppb	#	77
109)	n-Butylbenzene	11.071	91	21185	0.91	ppb		97
110)	1,2-Dclbenz	11.065	146	14396	0.97	ppb		97
111)	1,2-Dibromo-3-chloropr...	11.626	157	1052	0.97	ppb	#	55
112)	Trielution Dichlorotol...	11.742	125	33349	2.84	ppb		93
113)	1,3,5 Trichlorobenzene	11.778	180	9895	0.96	ppb	#	93
114)	Coelution Dichlorotoluene	11.998	125	25211	2.02	ppb		96
115)	1,2,4-Tcbenzene	12.162	180	8877	0.98	ppb		93
116)	Hexachlorobt	12.266	225	3996	1.01	ppb		88
117)	Naphthalen	12.303	128	14907	0.91	ppb		96
118)	1,2,3-Tclbenzene	12.443	180	7276	0.98	ppb		91
119)	2,4,5-Trichlorotolene	12.851	159	5341	1.09	ppb	#	79
120)	2,3,6-Trichlorotoluene	12.912	159	4781	1.06	ppb	#	91

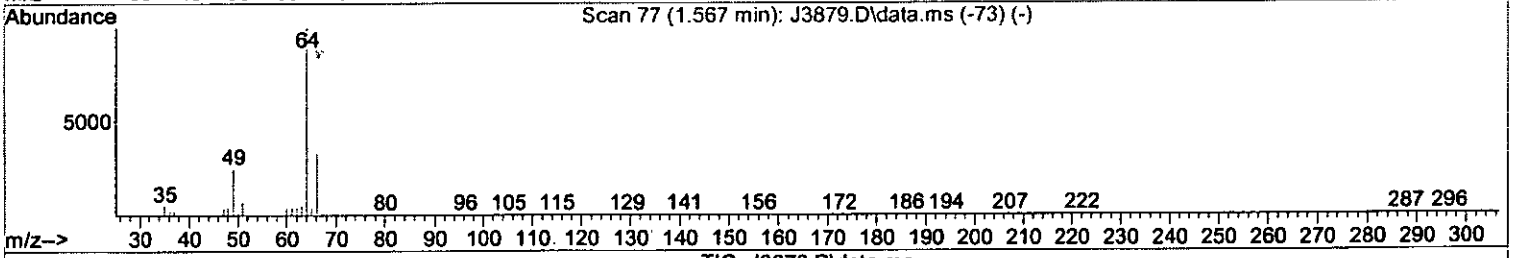
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(6) Chloroethane (P)

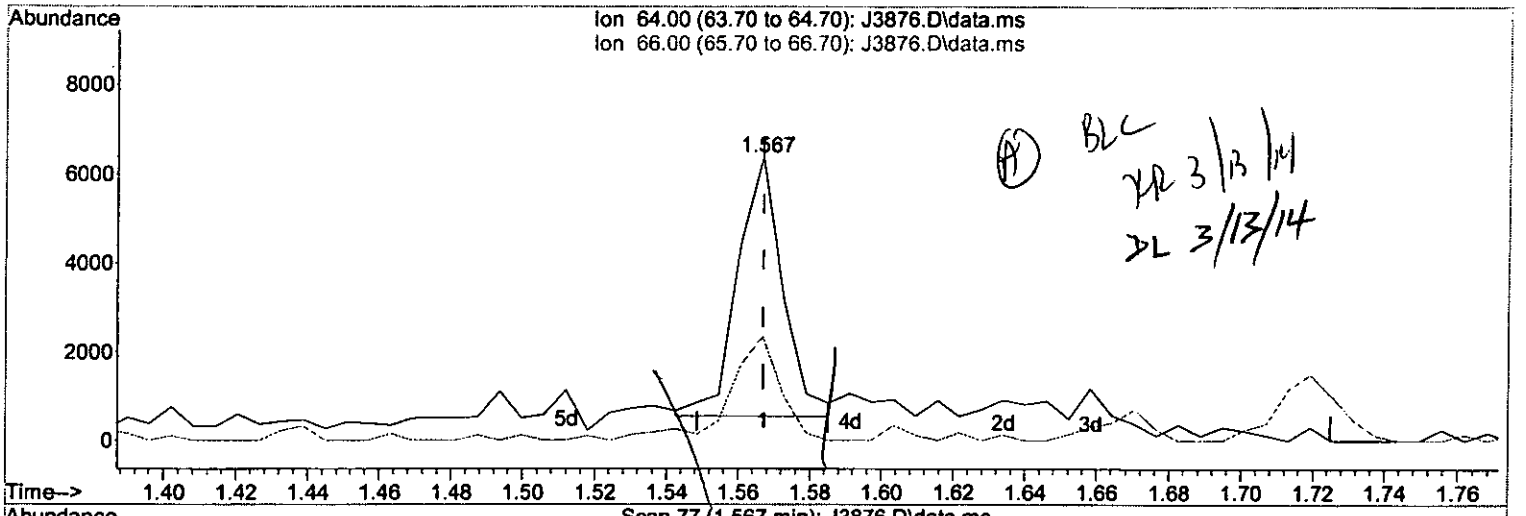
1.567min (-0.000) 1.07 ppb

response 5774

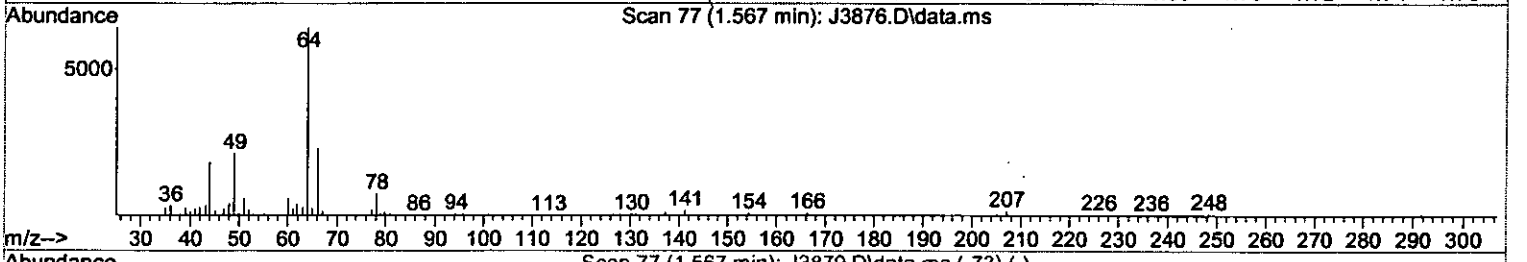
Ion	Exp%	Act%
64.00	100	100
66.00	32.20	36.64
0.00	0.00	0.00
0.00	0.00	0.00

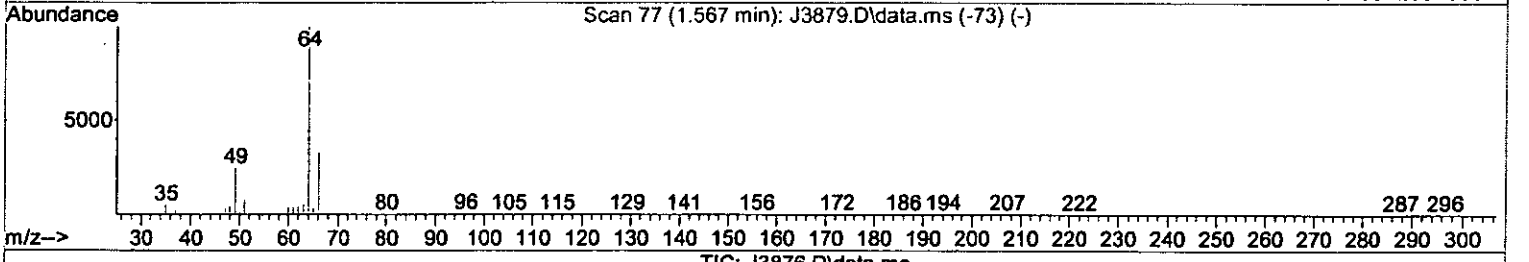
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



BLC 3/13/14
JL 3/13/14





TIC: J3876.D\data.ms

(6) Chloroethane (P)

1.567min (-0.000) 0.94 ppb m

response 5094

Ion	Exp%	Act%
64.00	100	100
66.00	32.20	36.64
0.00	0.00	0.00
0.00	0.00	0.00

```
Sample     : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  11:17 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
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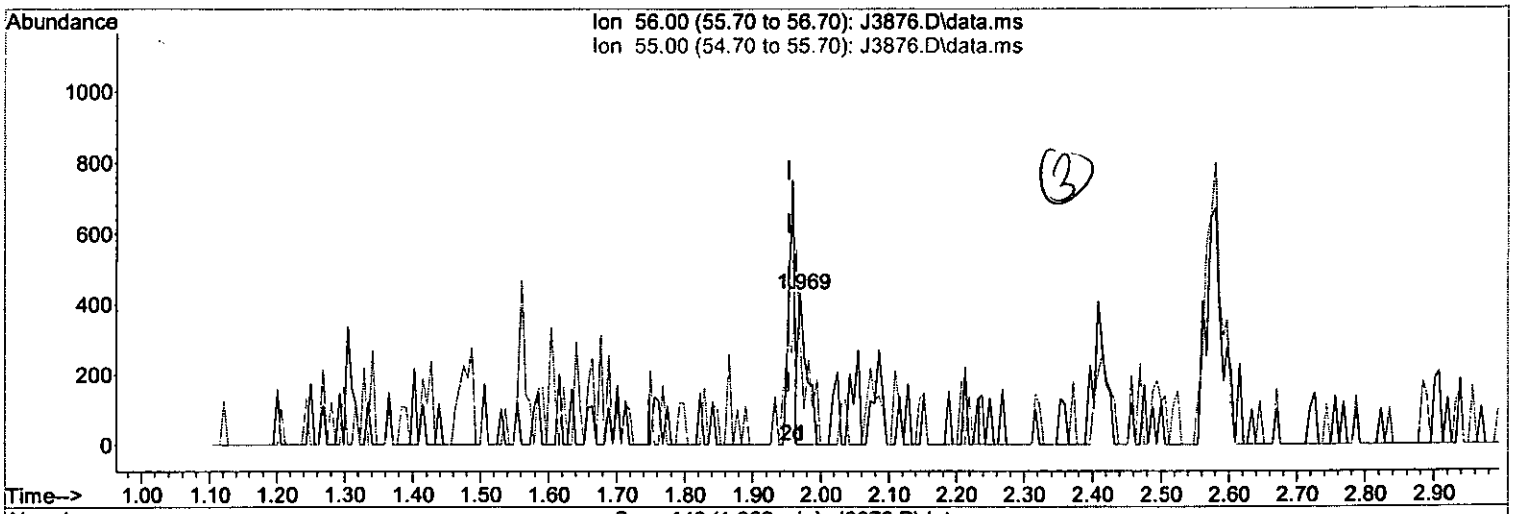
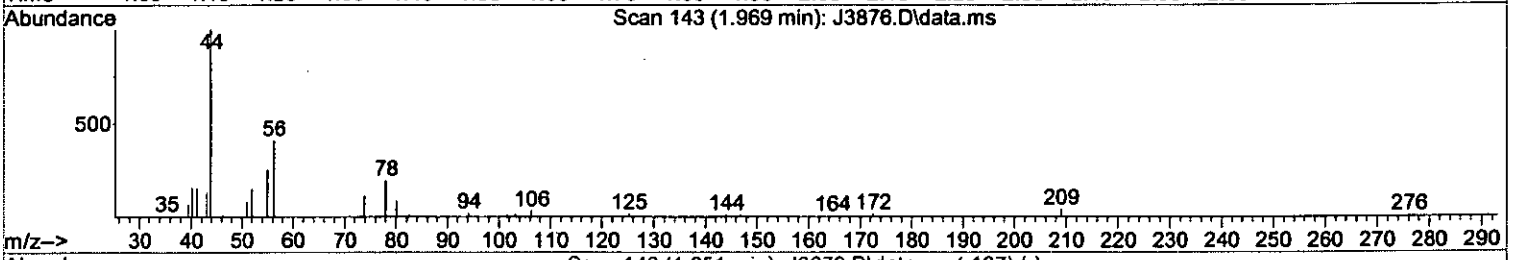
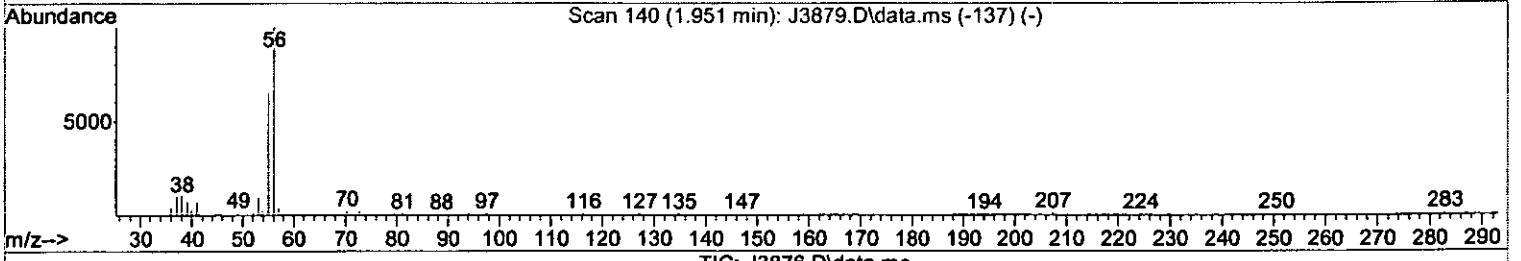






TIC: J3876.D\data.ms

(12) Acrolein

1.969min (+0.018) 1.19 ppb

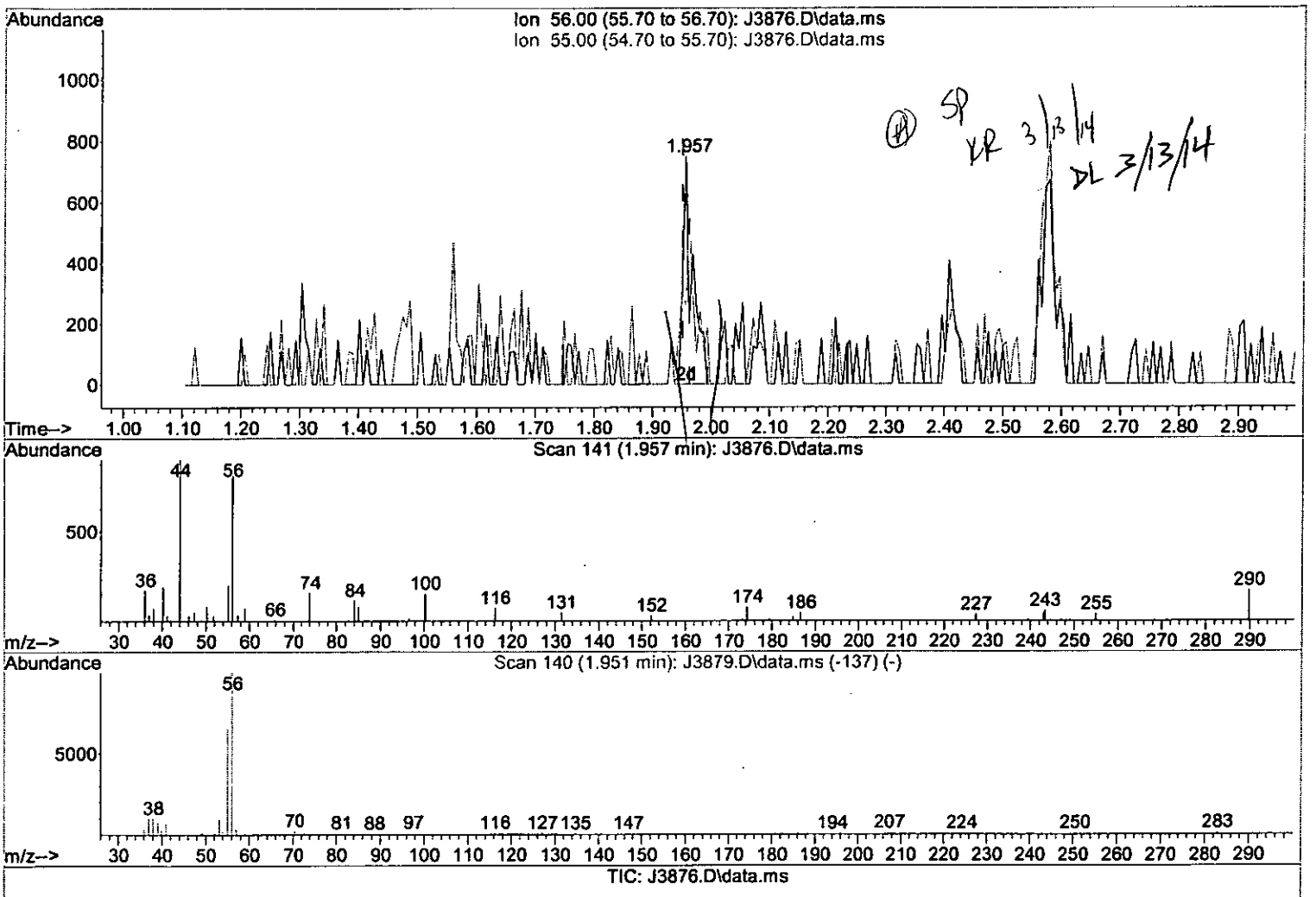
response 373

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	70.63
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:13:19 2014 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(12) Acrolein

1.957min (+0.006) 2.67 ppb m

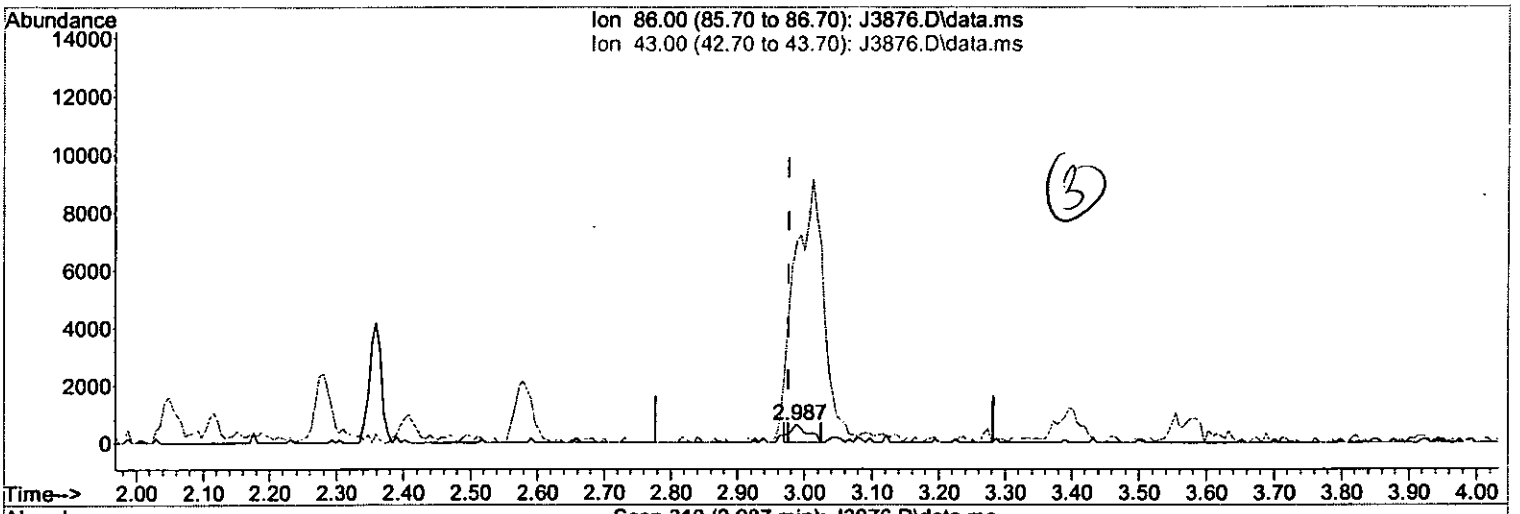
response 841

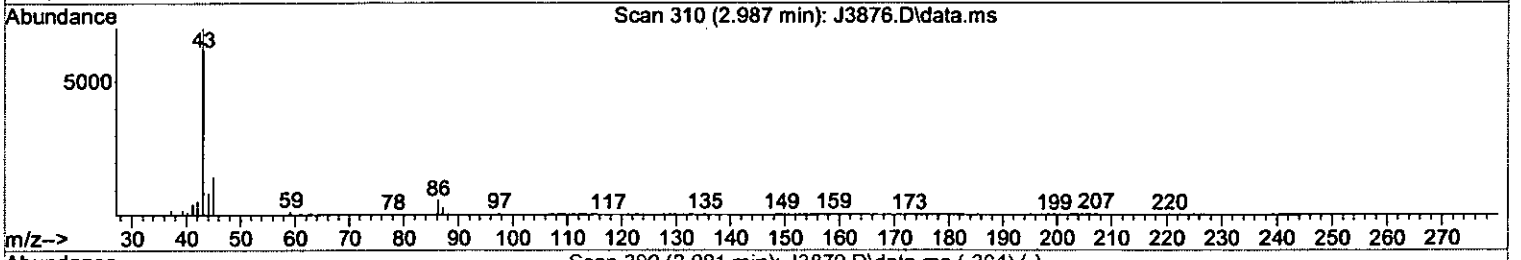
Ion	Exp%	Act%
56.00	100	100
55.00	66.20	34.53#
0.00	0.00	0.00
0.00	0.00	0.00

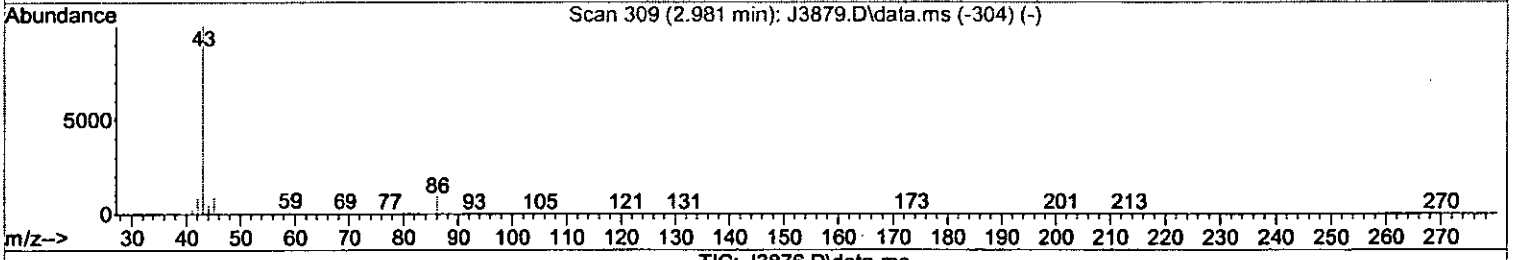
W031214.M Thu Mar 13 10:13:28 2014 Page: 1

```
Sample     : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  11:17 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
```







TIC: J3876.D\data.ms

(29) Vinyl Acetate

2.987min (+0.012) 0.82 ppb

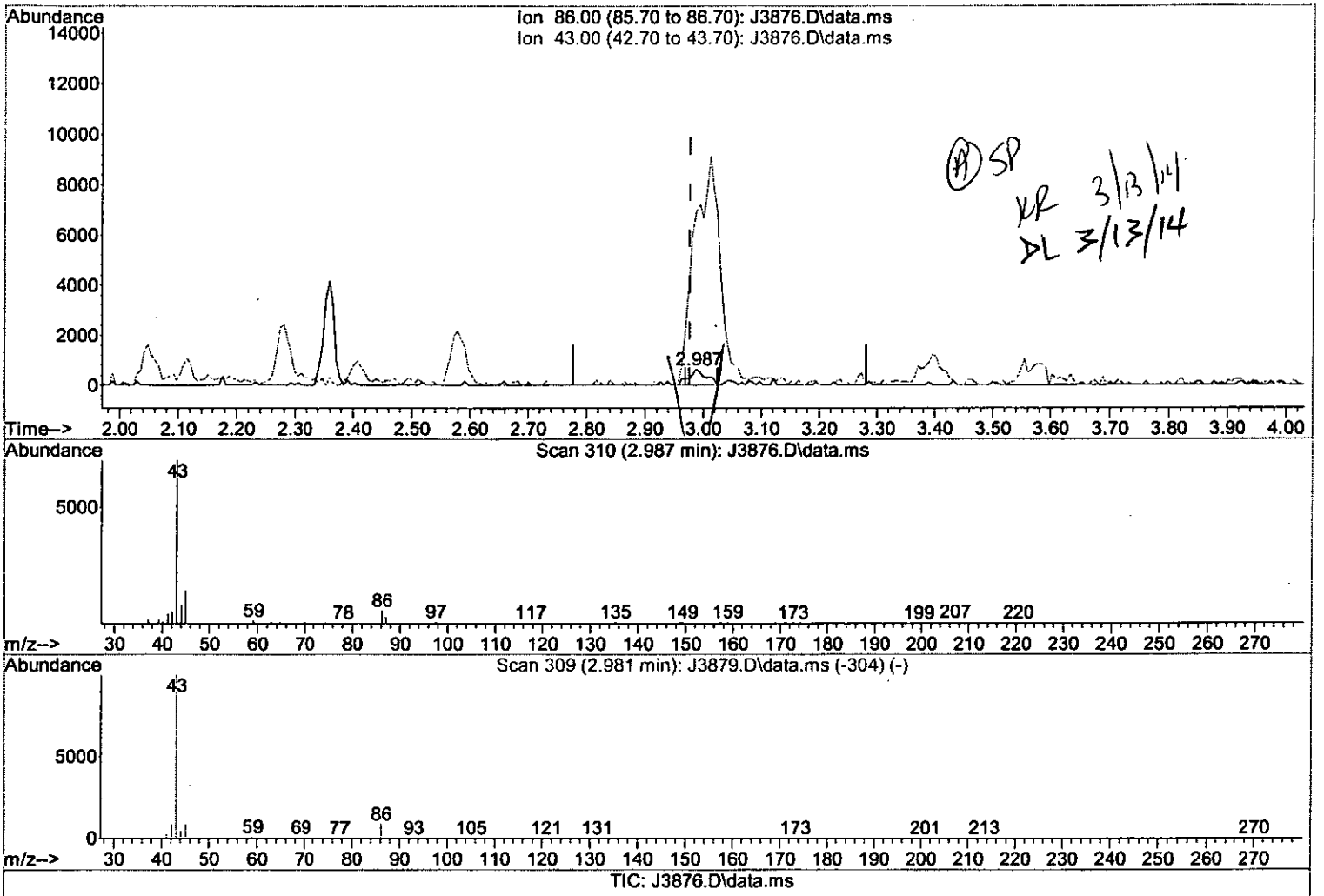
response 1125

Ion	Exp%	Act%
86.00	100	100
43.00	1138.10	1111.02#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:14:12 2014 002 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(29) Vinyl Acetate

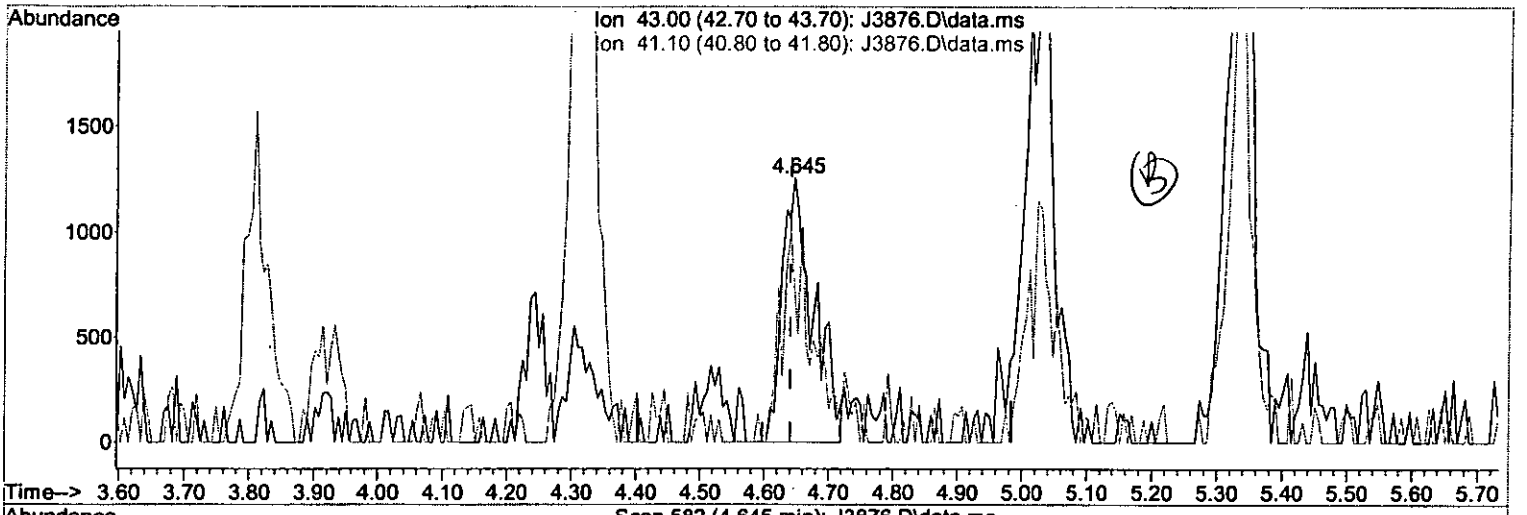
2.987min (+0.012) 0.95 ppb m

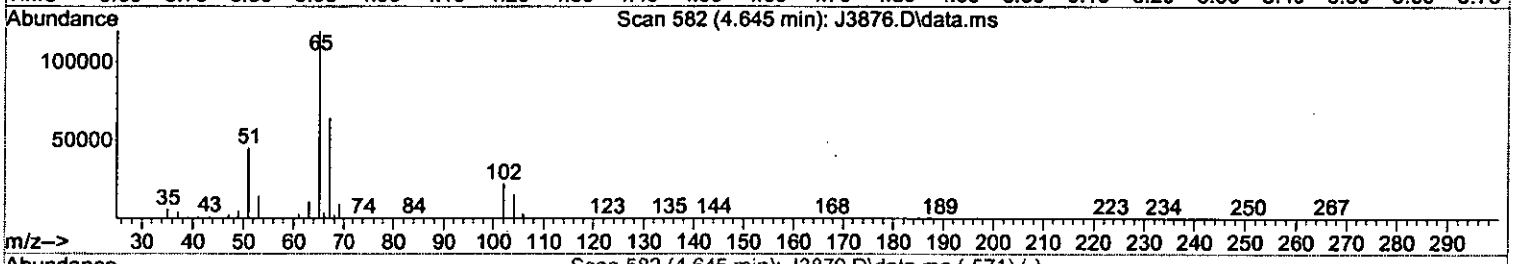
response 1309

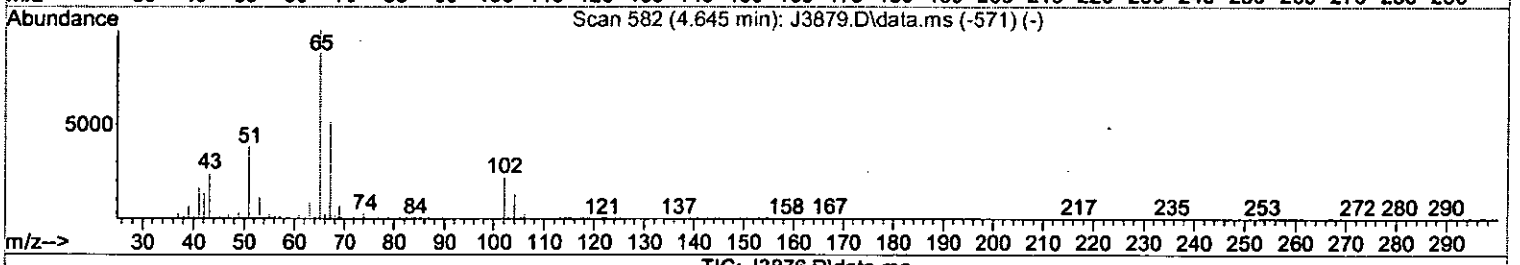
Ion	Exp%	Act%
86.00	100	100
43.00	1138.10	1111.02#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 17.90 ppb

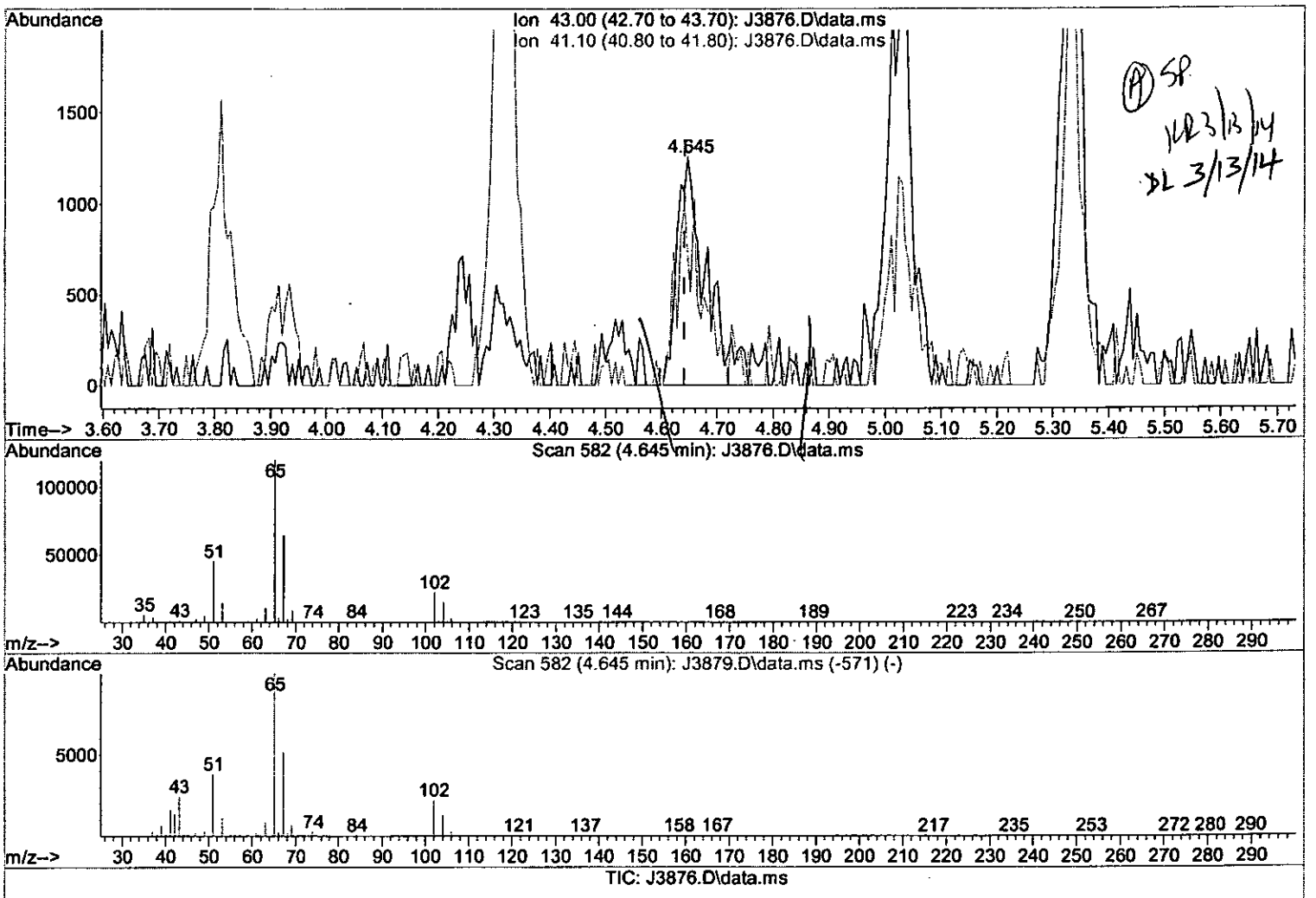
response 4235

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	60.99
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:15:02 2014 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(51) Iso-Butyl Alcohol

4.645min (+0.006) 20.70 ppb m

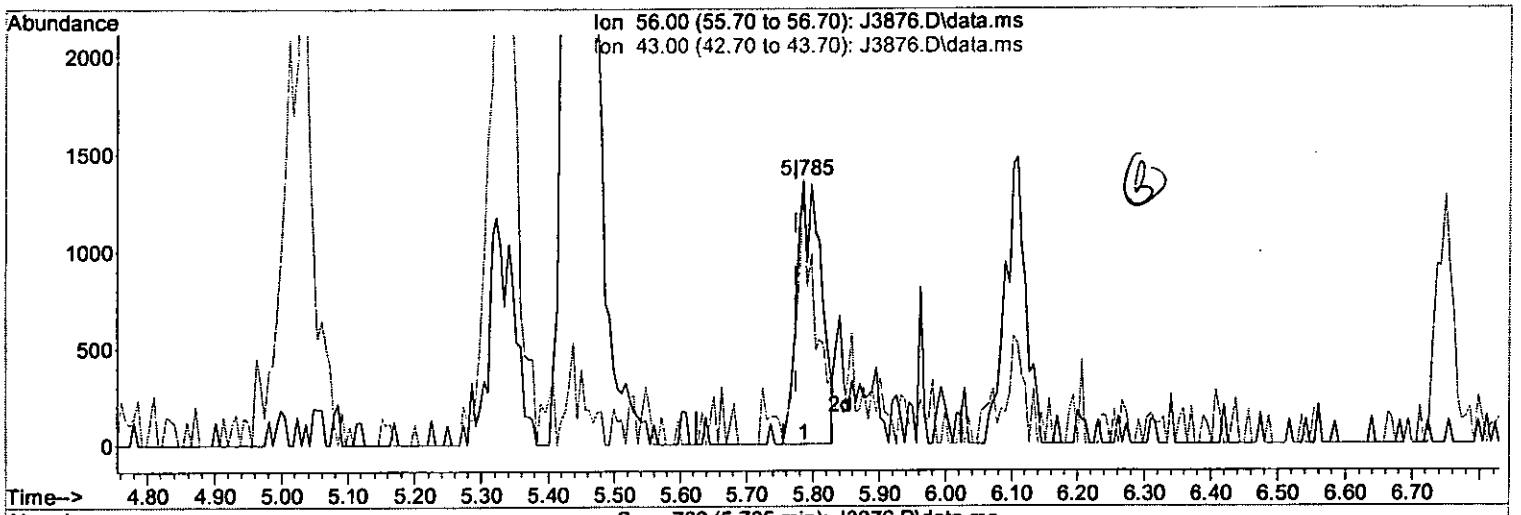
response 4896

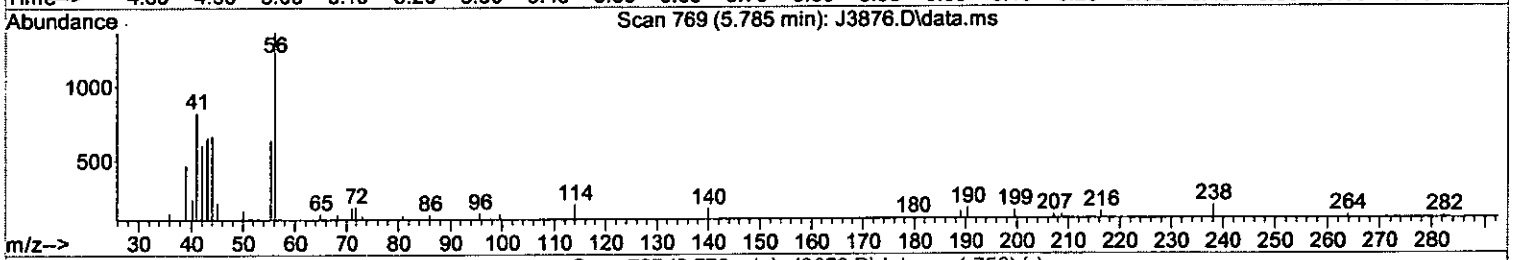
Ion	Exp%	Act%
43.00	100	100
41.10	68.40	60.99
0.00	0.00	0.00
0.00	0.00	0.00

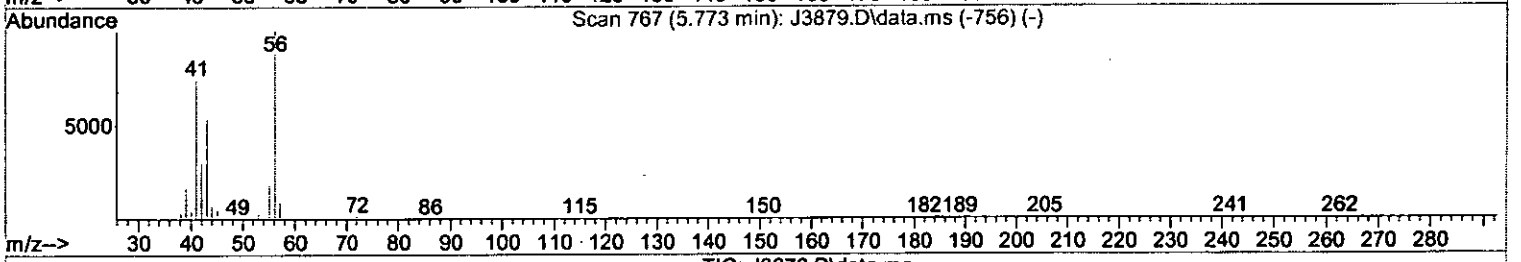
W031214.M Thu Mar 13 10:15:12 2014 002 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(53) 1-Butanol

5.785min (+0.012) 25.83 ppb

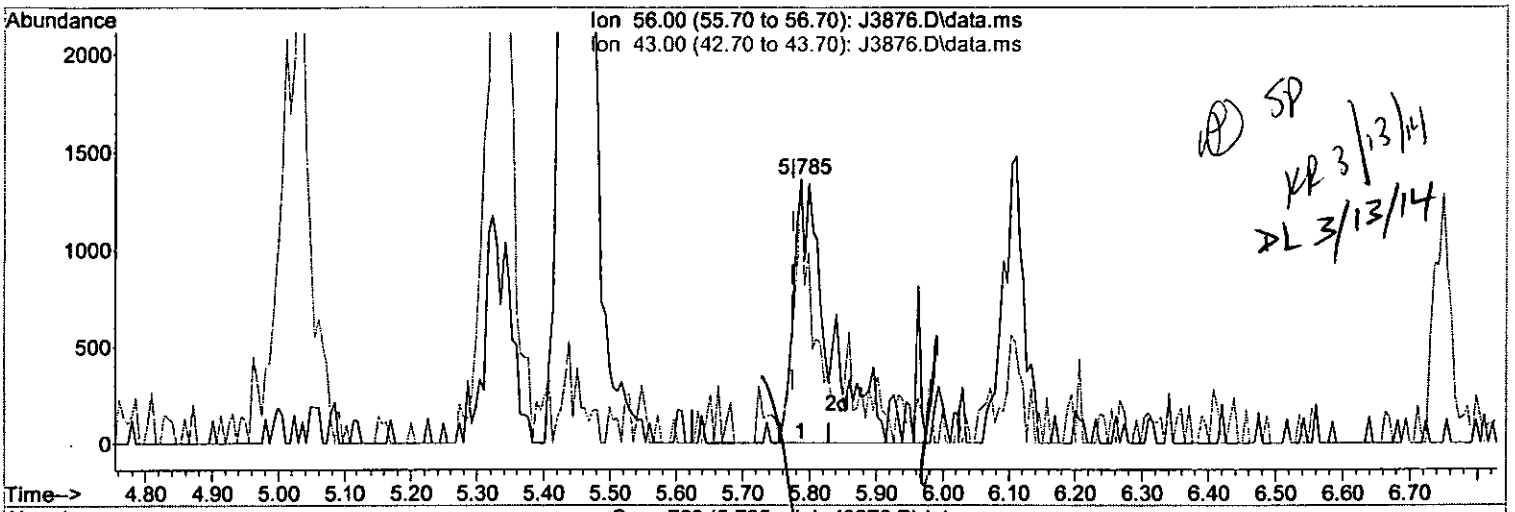
response 3450

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	81.22#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:15:20 2014 Page: 1

```
Sample     : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  11:17 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
```



TIC: J3876.D\data.ms

(53) 1-Butanol

5.785min (+0.012) 41.98 ppb m

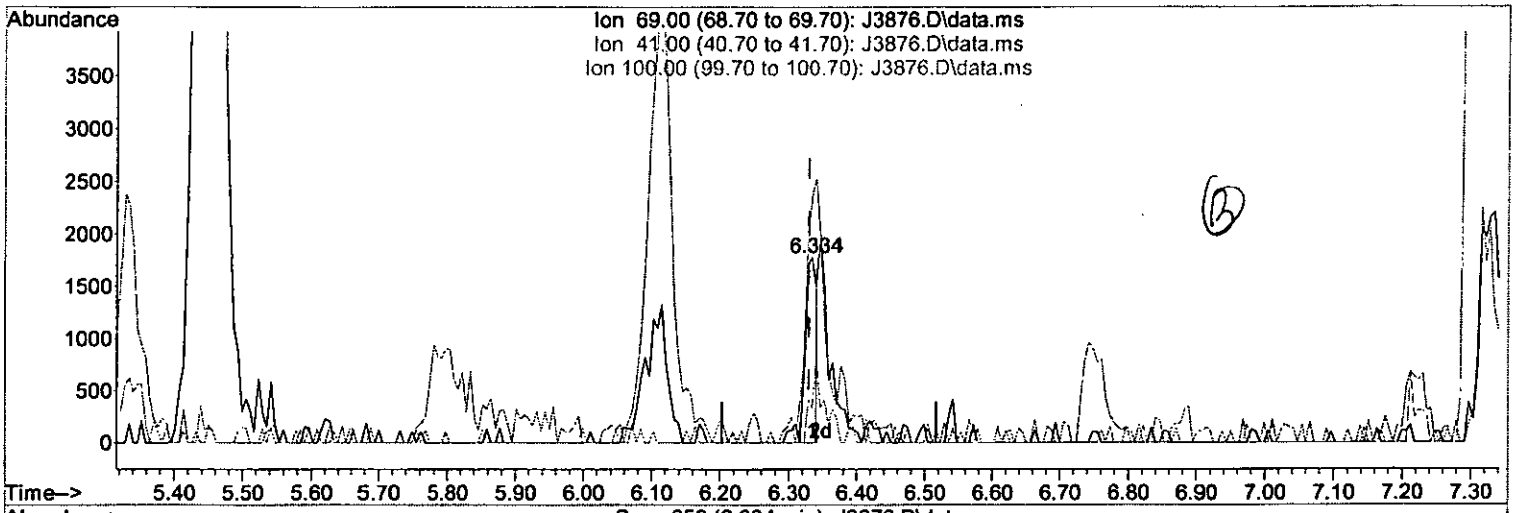
response 5606

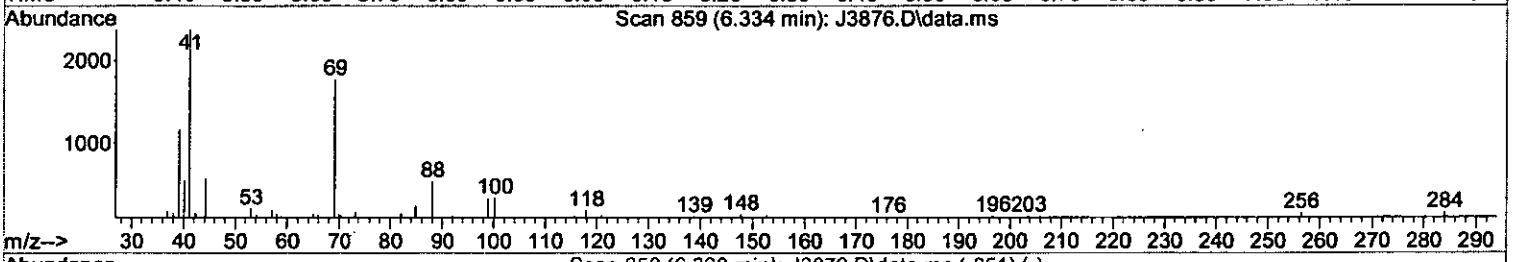
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	49.98
0.00	0.00	0.00
0.00	0.00	0.00

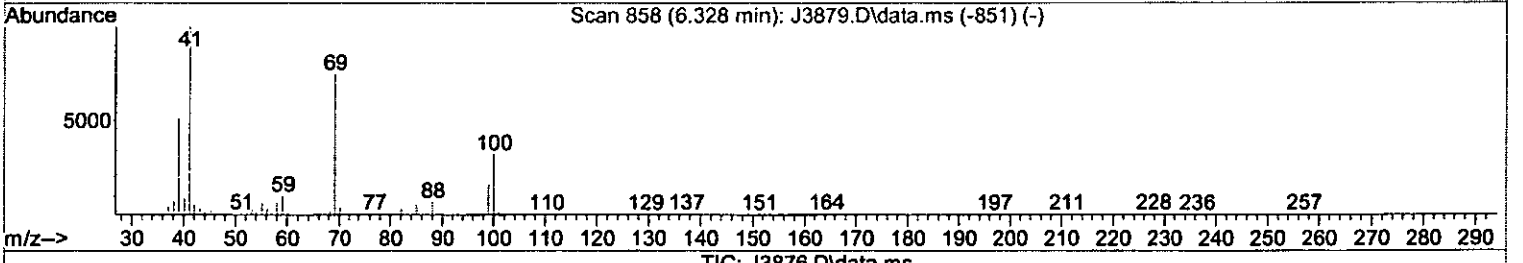
W031214.M Thu Mar 13 10:15:32 2014 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(59) Methyl Methacrylate

6.334min (+0.006) 0.49 ppb

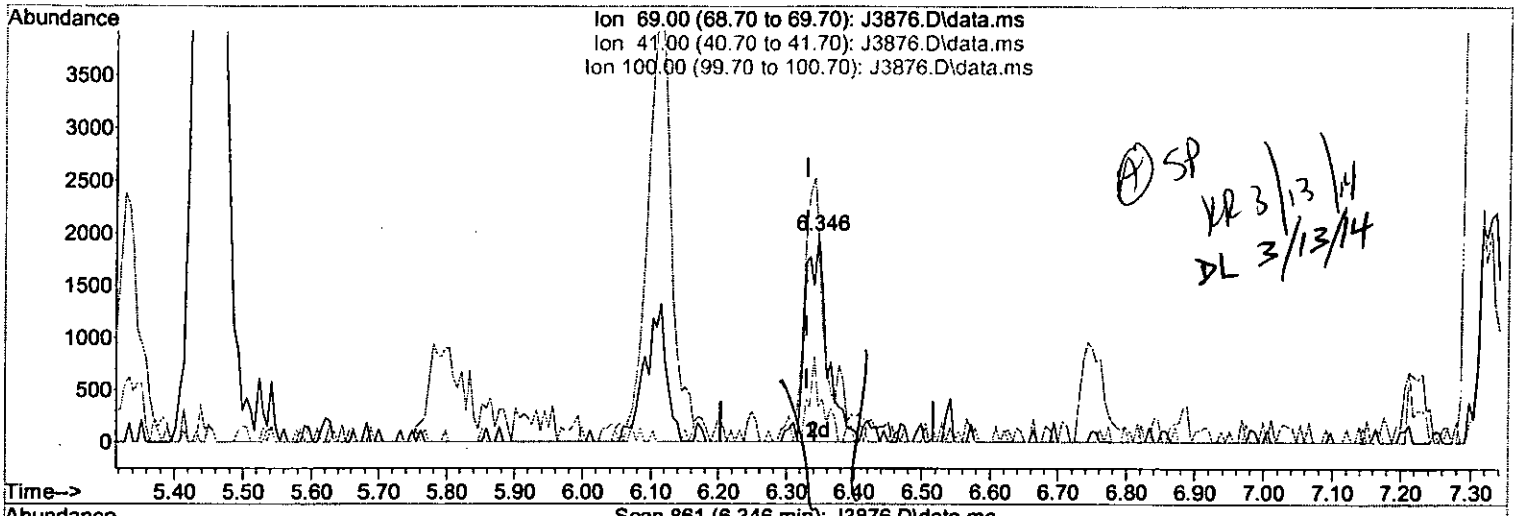
response 2074

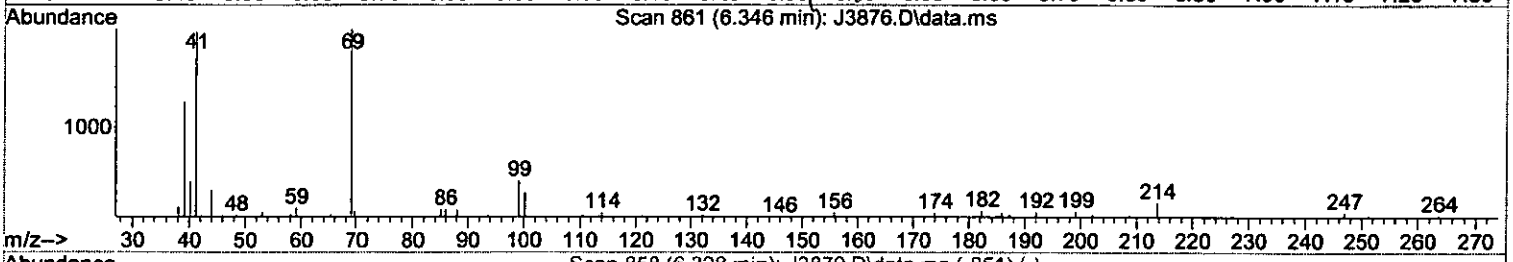
Ion	Exp%	Act%
69.00	100	100
41.00	134.40	133.56
100.00	42.90	18.84#
0.00	0.00	0.00

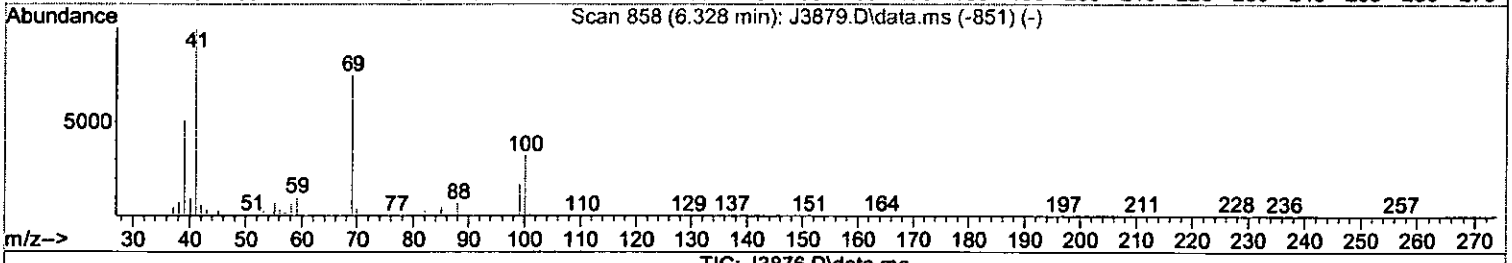
W031214.M Thu Mar 13 10:15:55 2014 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3876.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.018) 1.03 ppb m

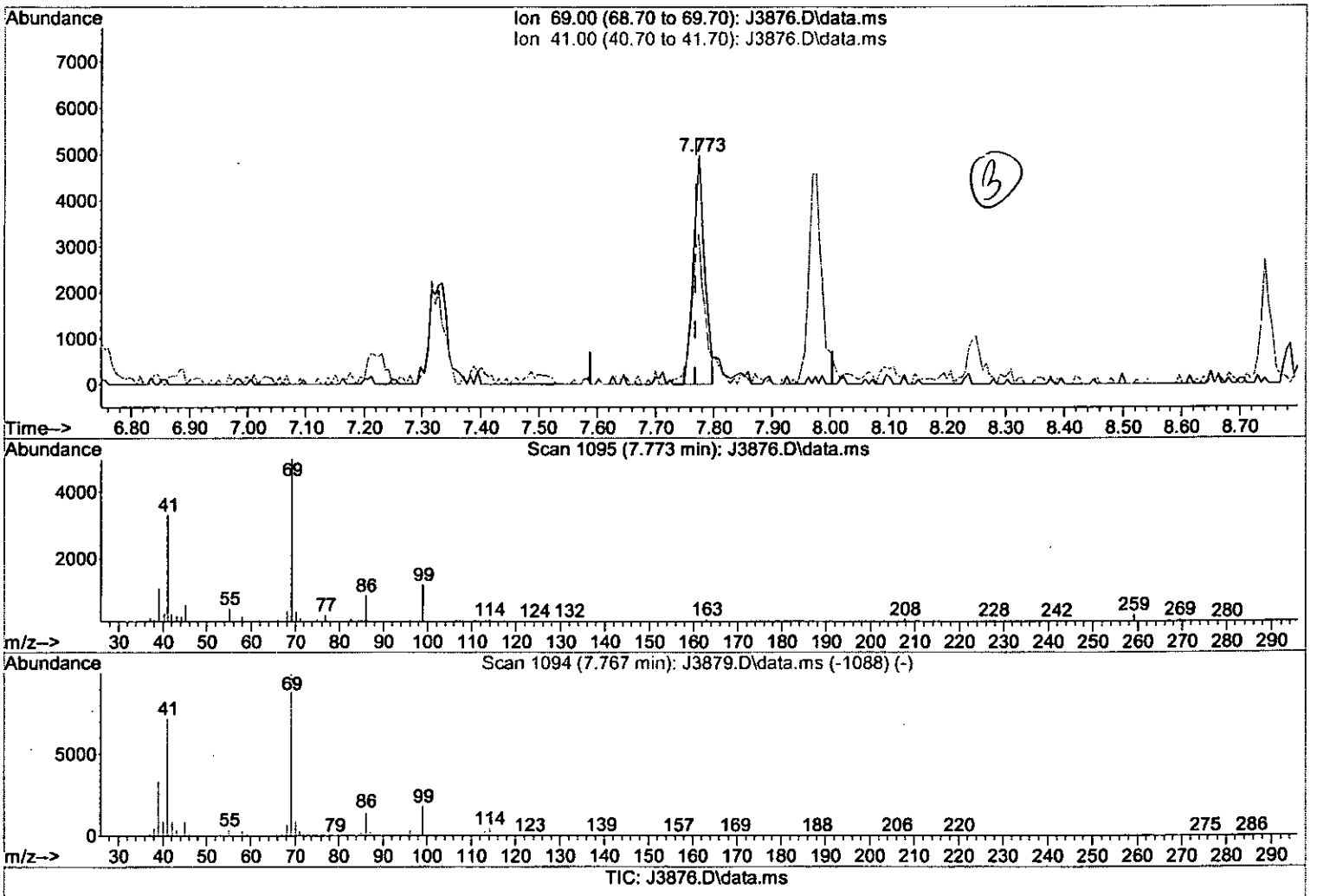
response 4351

Ion	Exp%	Act%
69.00	100	100
41.00	134.40	98.68#
100.00	42.90	16.94#
0.00	0.00	0.00

W031214.M Thu Mar 13 10:16:03 2014 Page: 1

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3876.D\data.ms

(68) Ethyl Methacrylate

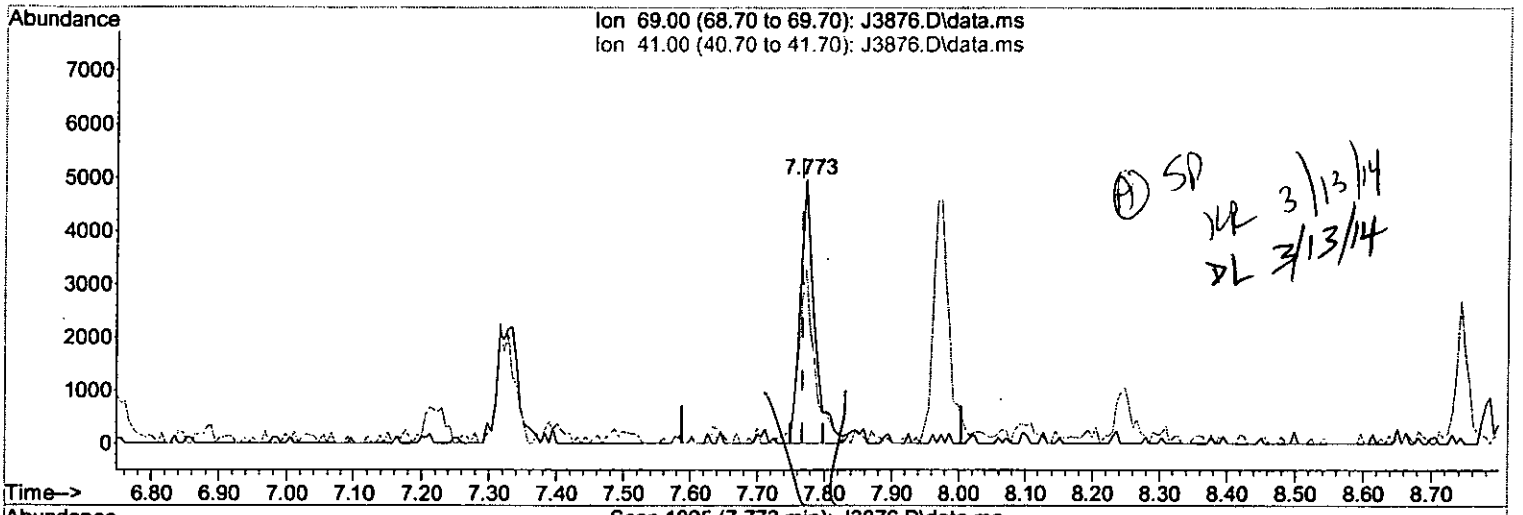
7.773min (+0.006) 0.84 ppb

response 6810

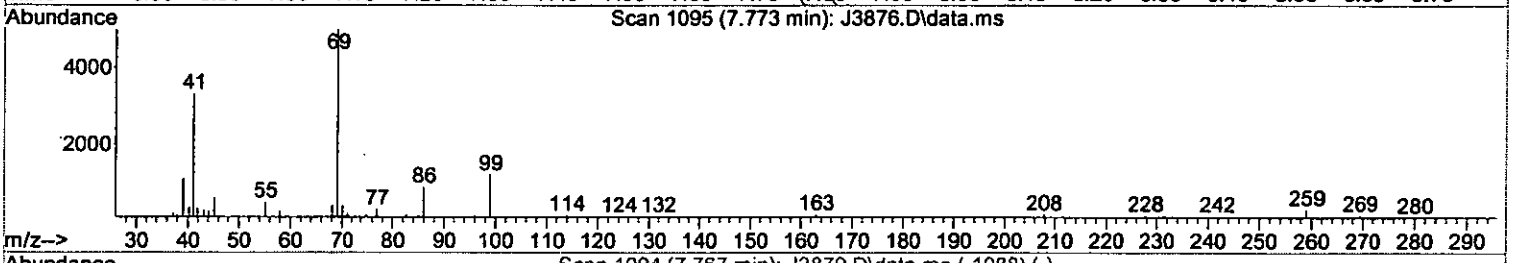
Ion	Exp%	Act%
69.00	100	100
41.00	72.10	66.39
0.00	0.00	0.00
0.00	0.00	0.00

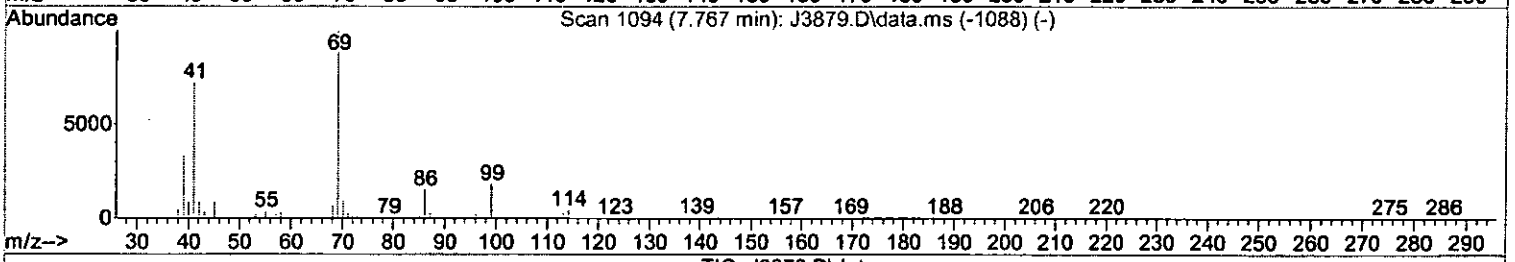
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:40 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) SP KR 3/13/14 DL 3/13/14





TIC: J3876.D\data.ms

(68) Ethyl Methacrylate

7.773min (+0.006) 0.92 ppb m

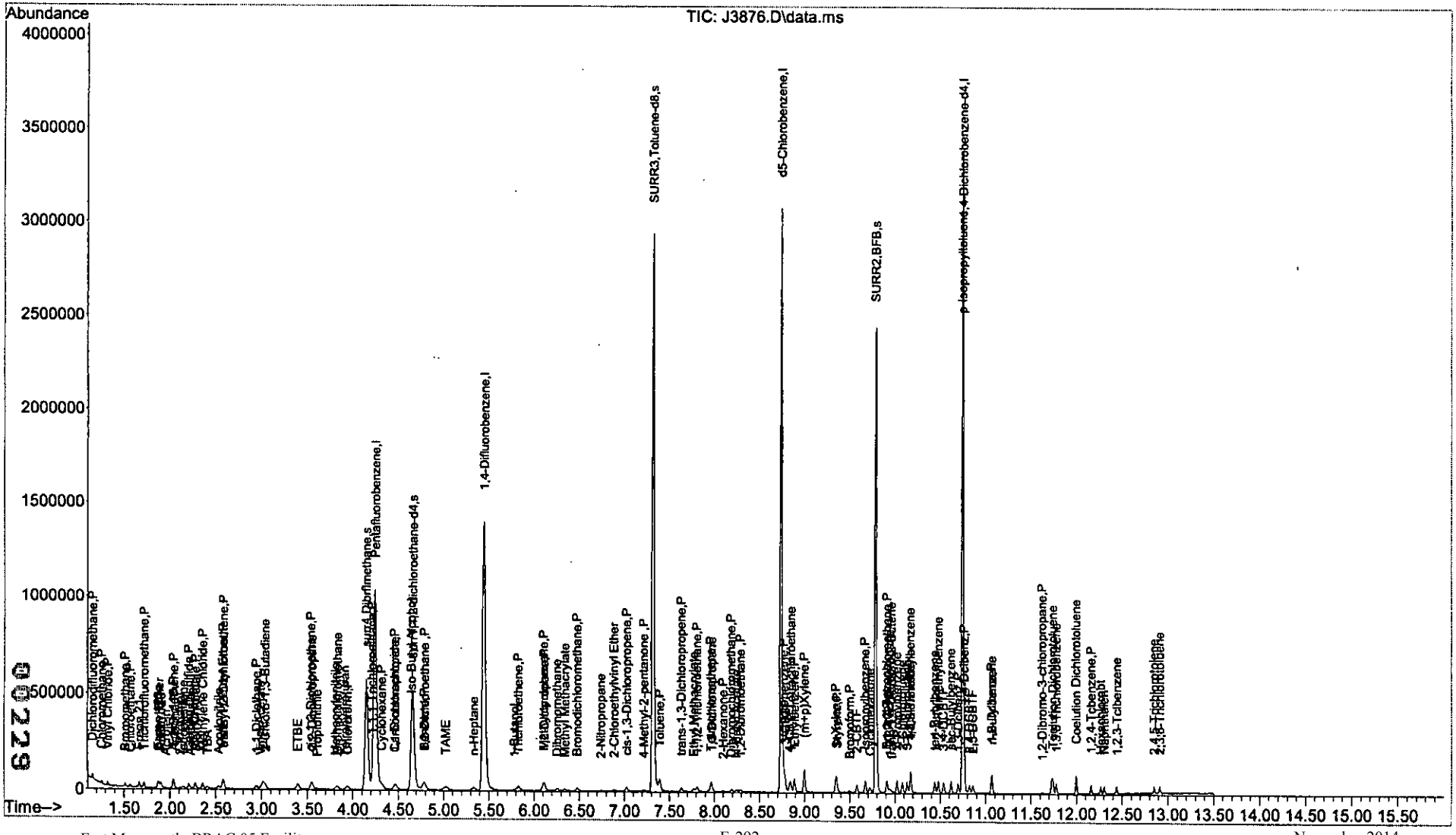
response 7414

Ion	Exp%	Act%
69.00	100	100
41.00	72.10	66.39
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3876.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:16:19 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:17:23 2014 Page: 4

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909918	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1430134	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1288124	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	610738	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	411288	49.68	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.36%				
48) surr1,1,2-dichloroetha...	4.658	65	473496	50.20	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.40%				
65) SURR3,Toluene-d8	7.322	98	1742443	50.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.16%				
70) SURR2,BFB	9.785	95	630193	48.55	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.10%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	20735	1.92	ppb		98
3) Chloromethane	1.262	50	19011	2.03	ppb		95
4) Vinyl Chloride	1.323	62	17323	1.99	ppb		99
5) Bromomethane	1.512	94	11249	2.15	ppb		92
6) Chloroethane	1.567	64	11004	2.03	ppb		97
7) Freon 21	1.664	67	27600	2.10	ppb		100
8) Trichlorofluoromethane	1.719	101	26842	2.01	ppb		99
9) Diethyl Ether	1.878	59	13135	2.00	ppb		98
10) Freon 123a	1.872	67	20874	2.13	ppb		96
11) Freon 123	1.902	83	23028	2.06	ppb		97
12) Acrolein	1.957	56	1454m	4.62	ppb		
13) 1,1-Diclethene	2.036	96	13512	2.05	ppb		92
14) Freon 113	2.036	101	14449	2.00	ppb		95
15) Acetone	2.048	43	4756	2.63	ppb	#	65
16) 2-Propanol	2.115	45	9075	30.48	ppb		94
17) Iodomethane	2.146	142	14905	1.70	ppb		93
18) Carbon Disulfide	2.207	76	45666	1.99	ppb		97
19) Acetonitrile	2.225	40	2234	7.57	ppb		96
20) Allyl Chloride	2.274	76	8927	1.97	ppb	#	88
21) Methyl Acetate	2.280	43	7554	1.86	ppb		94
22) Methylene Chloride	2.359	84	17720	2.05	ppb		92
23) TBA	2.408	59	18160	35.99	ppb		100
24) Acrylonitrile	2.524	53	18242	9.02	ppb		94
25) Methyl-t-Butyl Ether	2.585	73	41163	1.96	ppb		95
26) trans-1,2-Dichloroethene	2.585	96	16136	1.95	ppb		99
28) 1,1-Diclethane	2.938	63	31309	2.03	ppb		93
29) Vinyl Acetate	2.987	86	2521	1.84	ppb	#	27
30) DIPE	3.012	45	59555	1.99	ppb		87
31) 2-Chloro-1,3-Butadiene	3.042	53	26608	2.01	ppb		92
32) ETBE	3.396	59	48108	1.92	ppb		99
33) 2,2-Dichloropropane	3.560	77	23375	1.91	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	17604	1.91	ppb		85
35) 2-Butanone	3.566	43	4922	1.95	ppb		85
36) Propionitrile	3.597	54	6574	9.27	ppb		90
37) Bromochloromethane	3.835	130	10569	2.05	ppb		90

KR 3/13/14

W031214.M Thu Mar 13 10:28:44 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	5081	2.16	ppb	#	58
39) Tetrahydrofuran	3.914	42	3686	2.08	ppb		80
40) Chloroform	3.938	83	30998	2.05	ppb		98
41) 1,1,1-Trichloroethane	4.219	97	25573	1.98	ppb	#	1
42) TAME	5.023	73	41178	1.94	ppb		98
44) Cyclohexane	4.316	41	15916m	2.06	ppb		
46) Carbontetrachloride	4.469	121	6643m	1.94	ppb		
47) 1,1-Dichloropropene	4.462	75	19919	1.90	ppb		95
49) Benzene	4.786	78	70084	1.99	ppb		91
50) 1,2-Dichloroethane	4.792	62	21052	1.97	ppb		90
51) Iso-Butyl Alcohol	4.645	43	8755m	36.97	ppb		
52) n-Heptane	5.334	43	17849	2.03	ppb		94
53) 1-Butanol	5.779	56	10476m	78.36	ppb		
54) Trichloroethene	5.834	130	17521	2.05	ppb		84
55) Methylcyclohexane	6.108	55	18955	2.07	ppb		86
56) 1,2-Diclpropane	6.115	63	18552	2.04	ppb		98
57) Dibromomethane	6.255	93	8051	1.88	ppb		94
58) 1,4-Dioxane	6.328	88	2071m	36.08	ppb		
59) Methyl Methacrylate	6.340	69	6901	1.63	ppb		90
60) Bromodichloromethane	6.480	83	20138	1.91	ppb		95
61) 2-Nitropropane	6.743	41	4286m	3.79	ppb		
62) 2-Chloroethylvinyl Ether	6.889	63	7503	1.86	ppb		88
63) cis-1,3-Dichloropropene	7.023	75	22401	1.80	ppb		94
64) 4-Methyl-2-pentanone	7.212	43	10071	1.85	ppb		89
66) Toluene	7.395	91	74992	2.07	ppb		97
67) trans-1,3-Dichloropropene	7.633	75	17986	1.79	ppb		96
68) Ethyl Methacrylate	7.767	69	13634	1.68	ppb		94
69) 1,1,2-Trichloroethane	7.809	97	11464	1.81	ppb		99
72) Tetrachloroethene	7.962	164	13515	2.03	ppb		96
73) 2-Hexanone	8.090	43	6463	1.77	ppb	#	74
74) 1,3-Dichloropropane	7.974	76	22806	1.97	ppb		93
75) Dibromochloromethane	8.193	129	12460	1.87	ppb		99
76) N-Butyl Acetate	8.242	43	15842	1.76	ppb		98
77) 1,2-Dibromoethane	8.291	107	11853	1.99	ppb		91
78) Chlorobenzene	8.767	112	45758	2.04	ppb		100
79) 3-CBTF	8.785	180	20314	1.83	ppb		98
80) 4-CBTF	8.840	180	17849	1.80	ppb		91
81) 1,1,1,2-Tetrachloroethane	8.852	131	14723	1.87	ppb		92
82) Ethylbenzene	8.888	106	22933	1.92	ppb		91
83) (m+p)Xylene	8.998	106	55419	3.95	ppb		96
84) o-Xylene	9.346	106	26979	1.88	ppb		97
85) Styrene	9.358	104	41678	1.82	ppb		92
87) Bromoform	9.492	173	5562	1.60	ppb		83
88) 2-CBTF	9.577	180	20255	1.99	ppb		98
89) Isopropylbenzene	9.675	105	64407	2.04	ppb		98
90) Cyclohexanone	9.718	55	17665	36.07	ppb		96
91) trans-1,4-Dichloro-2-B...	9.967	53	3112	1.89	ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	13476	1.93	ppb		95
93) Bromobenzene	9.913	156	18829	2.10	ppb	#	77
94) 1,2,3-Trichloropropane	9.943	110	4408	2.11	ppb	#	80
95) n-Propylbenzene	10.022	91	78055	2.12	ppb		95
96) 2-Chlorotoluene	10.083	91	48755	2.10	ppb		98

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

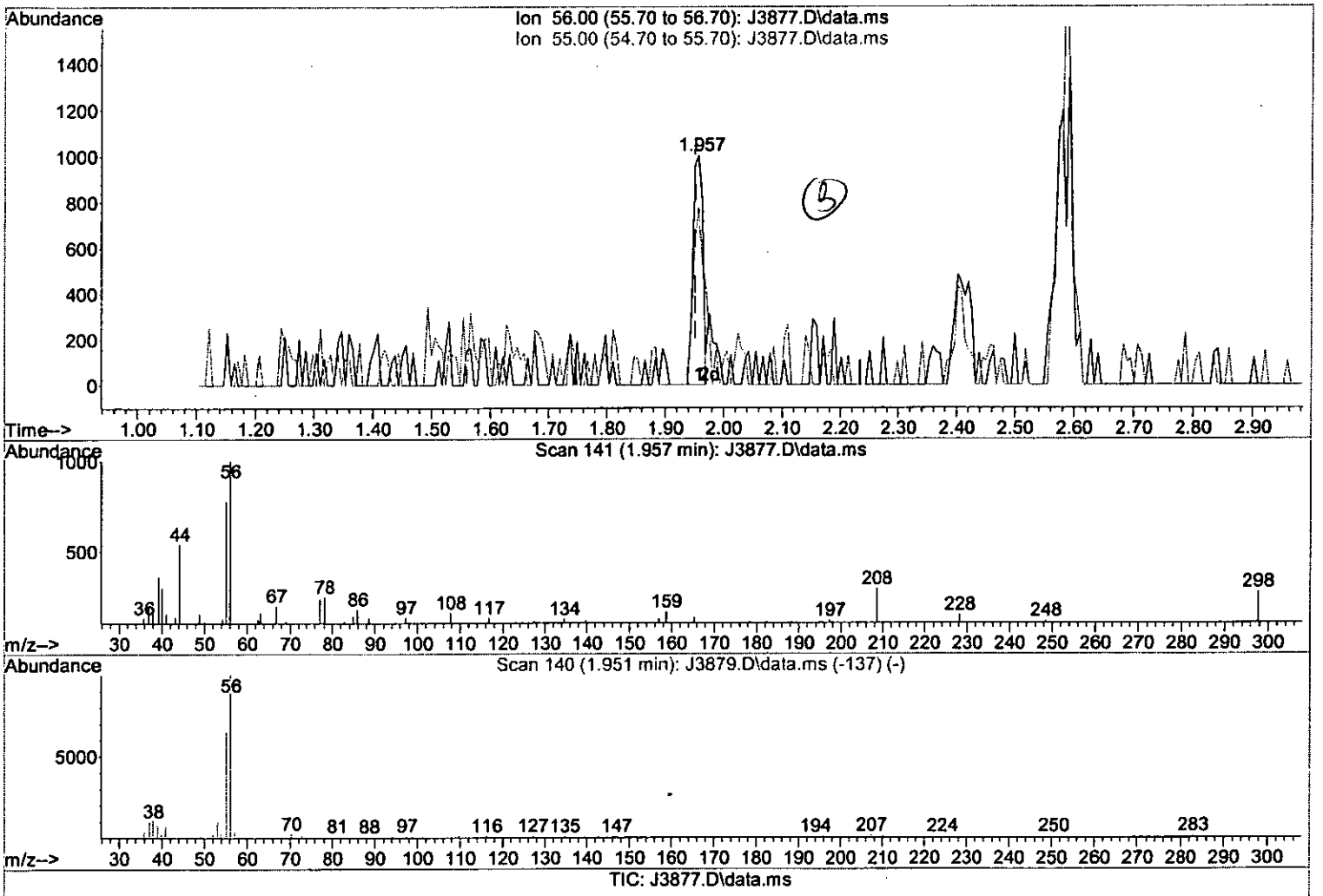
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	48185	2.00	ppb		97
98)	4-Chlorotoluene	10.175	91	57852	2.12	ppb		96
99)	1,3,5-Trimethylbenzene	10.169	105	51100	1.99	ppb		94
100)	tert-Butylbenzene	10.437	119	44524	2.06	ppb		97
101)	1,2,4-Trimethylbenzene	10.480	105	52516	1.98	ppb		100
102)	3,4-DCBTF	10.534	214	14555	1.93	ppb		96
103)	sec-Butylbenzene	10.620	105	62384	2.07	ppb		98
104)	p-Isopropyltoluene	10.742	119	50277	1.97	ppb		97
105)	1,3-Dclbenz	10.699	146	29567	1.93	ppb		95
106)	1,4-Dclbenz	10.766	146	31312	1.92	ppb		90
107)	2,4-DCBTF	10.821	214	12420	1.90	ppb	#	88
108)	2,5-DCBTF	10.864	214	14748	1.97	ppb		98
109)	n-Butylbenzene	11.065	91	47827	2.08	ppb		93
110)	1,2-Dclbenz	11.065	146	28414	1.93	ppb		99
111)	1,2-Dibromo-3-chloropr...	11.626	157	1695	1.58	ppb	#	67
112)	Trielution Dichlorotol...	11.729	125	67672	5.81	ppb		97
113)	1,3,5 Trichlorobenzene	11.778	180	20663	2.03	ppb		97
114)	Coelution Dichlorotoluene	11.998	125	50516	4.10	ppb		96
115)	1,2,4-Tcbenzene	12.162	180	17573	1.95	ppb		95
116)	Hexachlorobt	12.266	225	7725	1.97	ppb		97
117)	Naphthalen	12.302	128	31525	1.94	ppb		99
118)	1,2,3-Tclbenzene	12.437	180	14777	2.00	ppb		97
119)	2,4,5-Trichlorotolene	12.851	159	9636m	1.98	ppb		
120)	2,3,6-Trichlorotoluene	12.912	159	8342	1.88	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(12) Acrolein

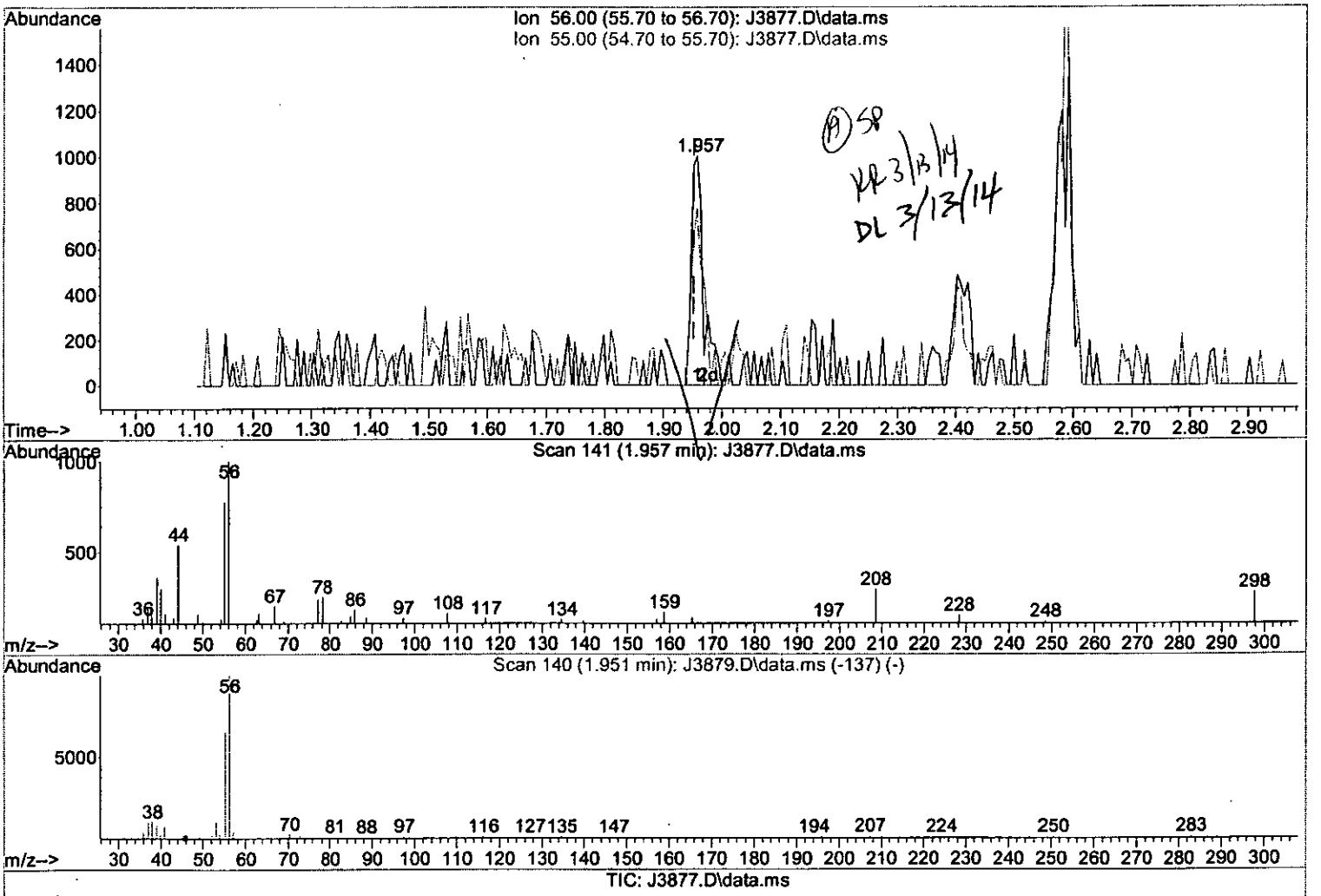
1.957min (+0.006) 3.70 ppb

response 1163

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	77.47
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(12) Acrolein

1.957min (+0.006) 4.62 ppb m

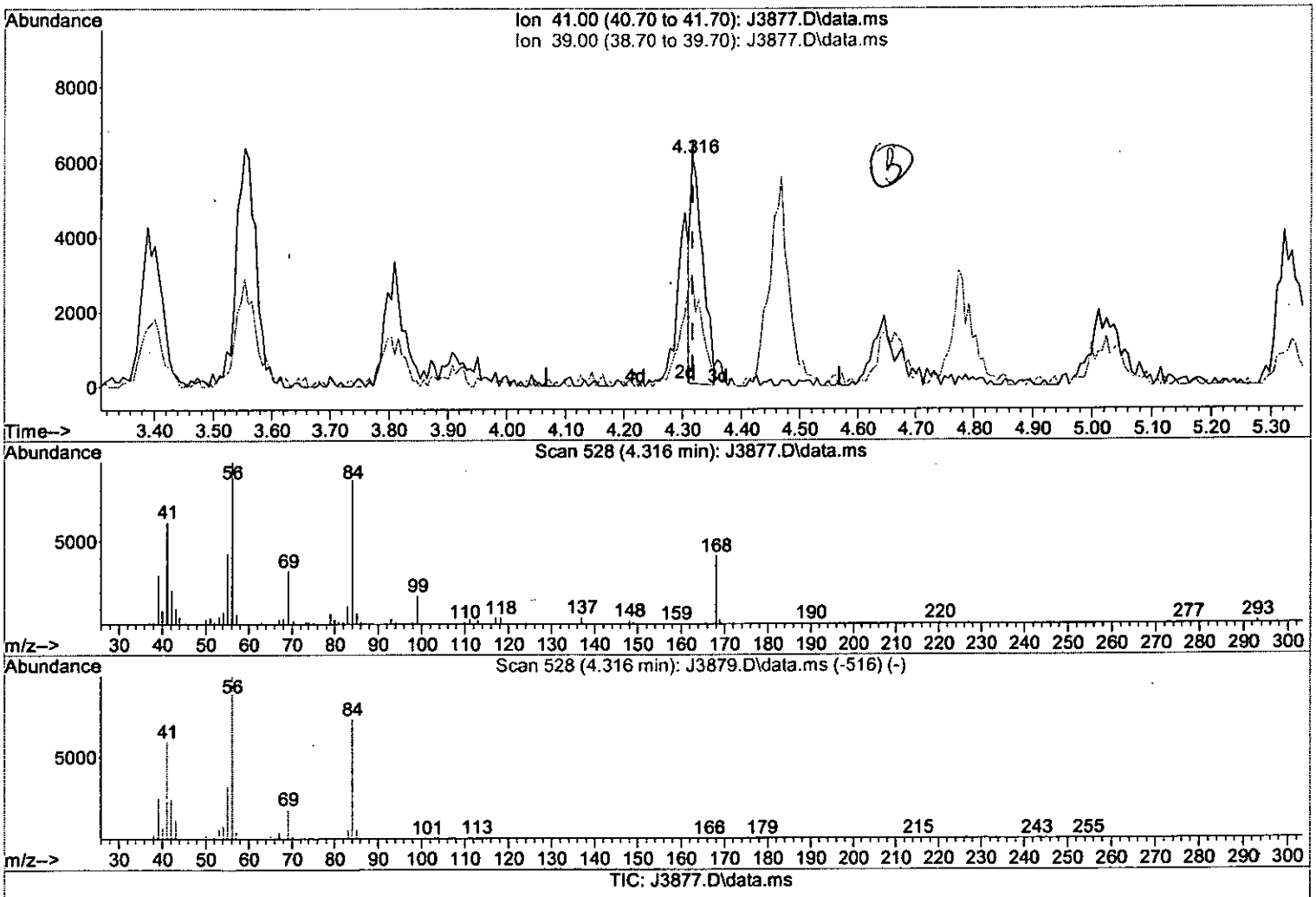
response 1454

Ion	Exp%	Act%
56.00	100	100
55.00	66.20	77.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 1.12 ppb

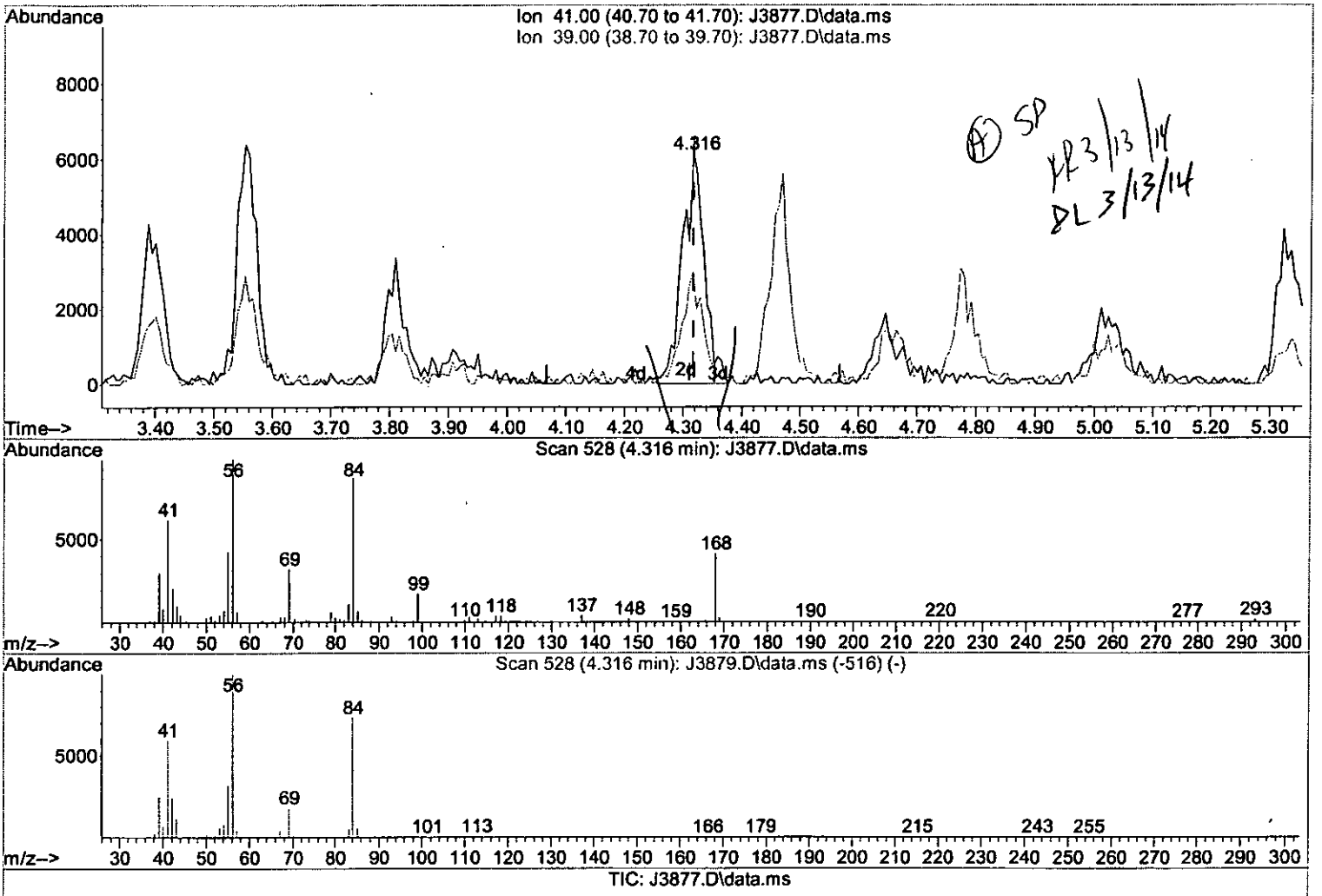
response 8699

Ion	Exp%	Act%
41.00	100	100
39.00	41.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:25:25 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 2.06 ppb m

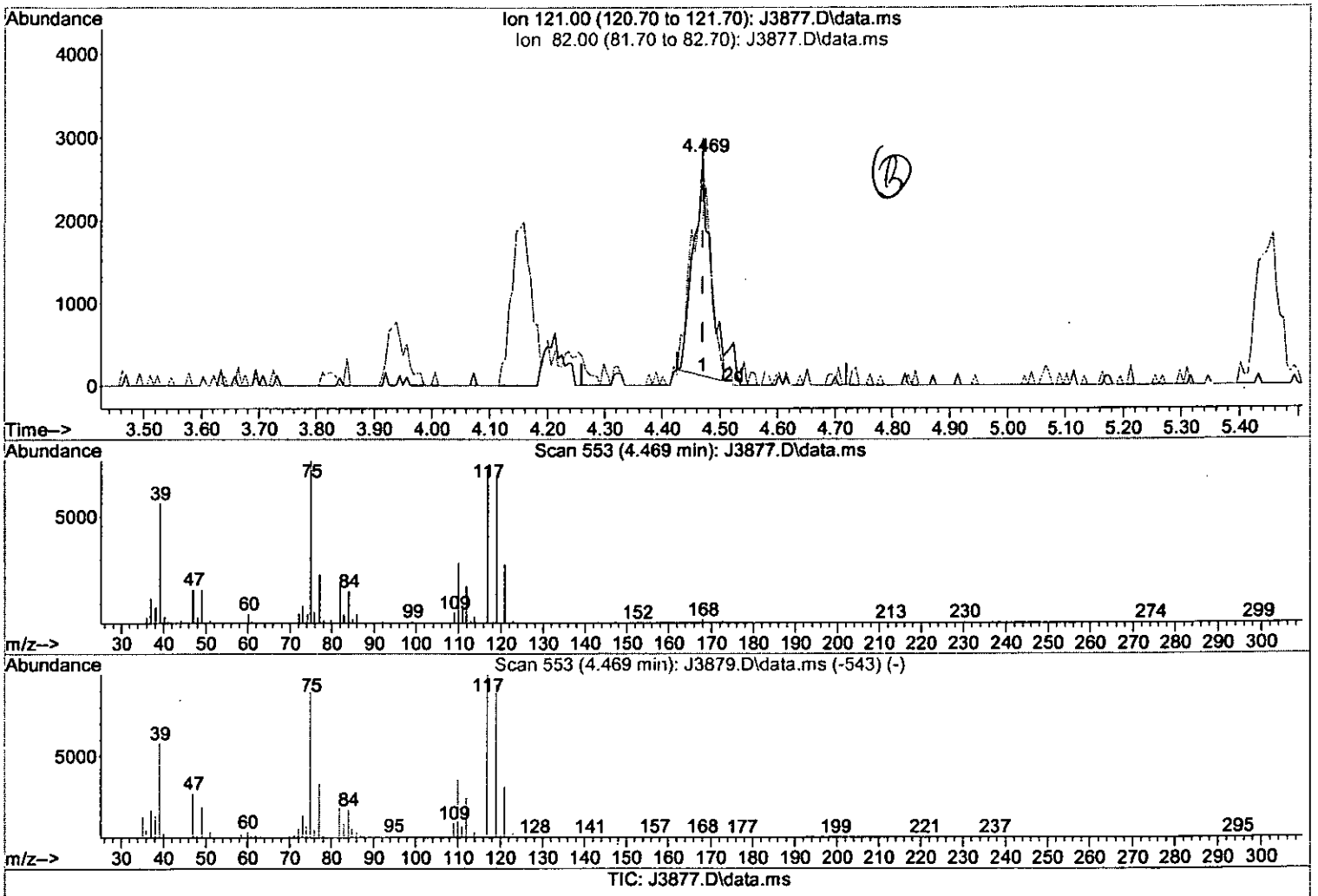
response 15916

Ion	Exp%	Act%
41.00	100	100
39.00	41.90	48.62
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.57 ppb

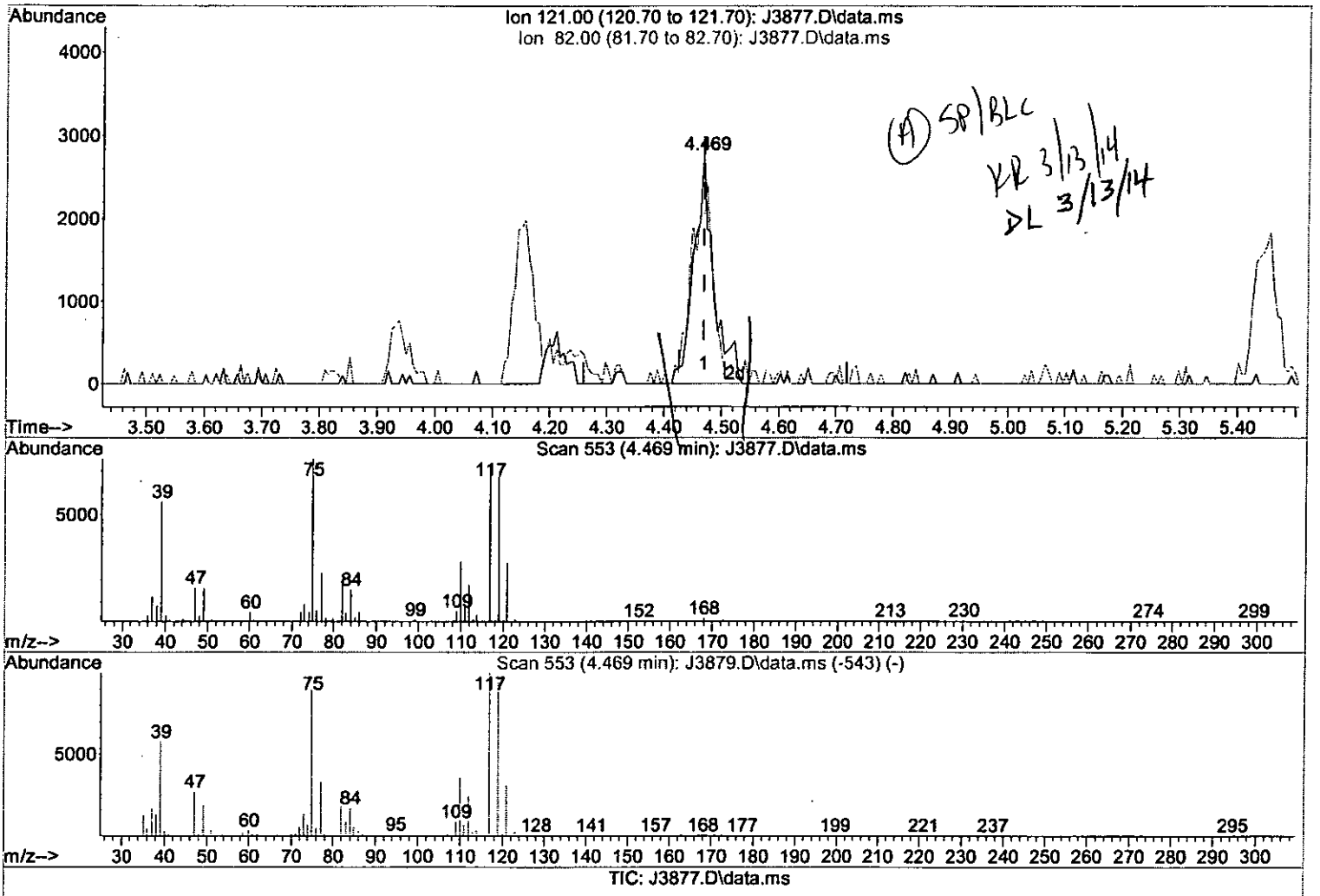
response 5374

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	72.27
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:25:42 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(A) SP/BLC KR 3/13/14 DL 3/13/14

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.94 ppb m

response 6643

Ion	Exp%	Act%
121.00	100	100
82.00	87.50	72.27
0.00	0.00	0.00
0.00	0.00	0.00

```
Sample     : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  11:49 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
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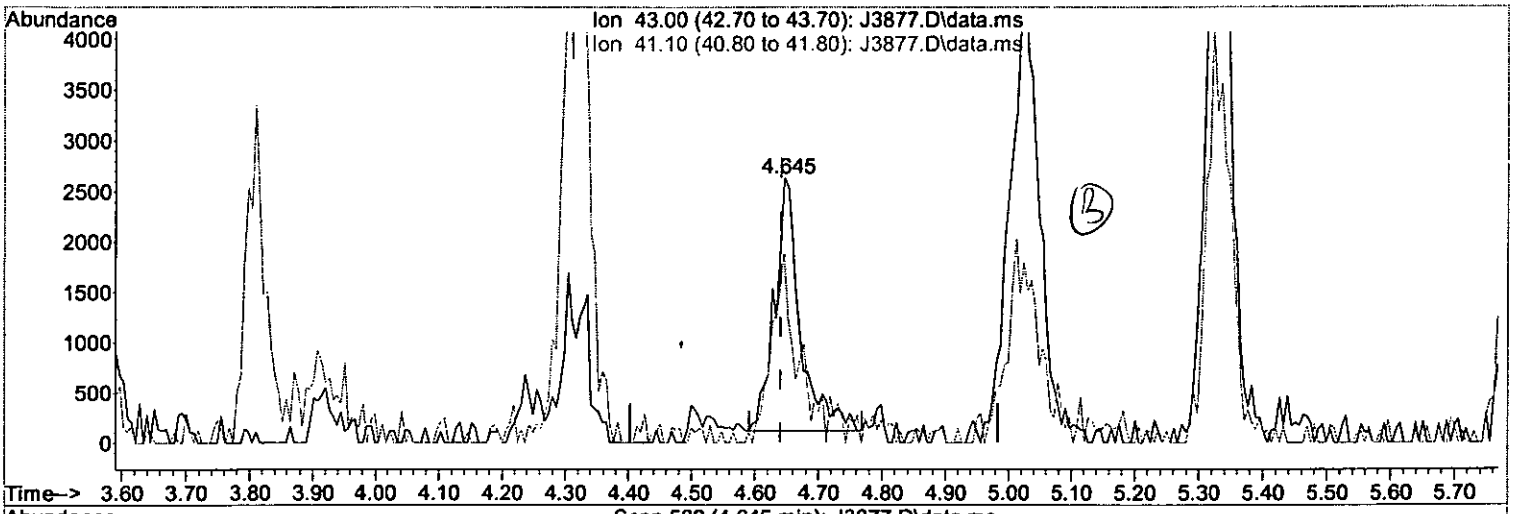
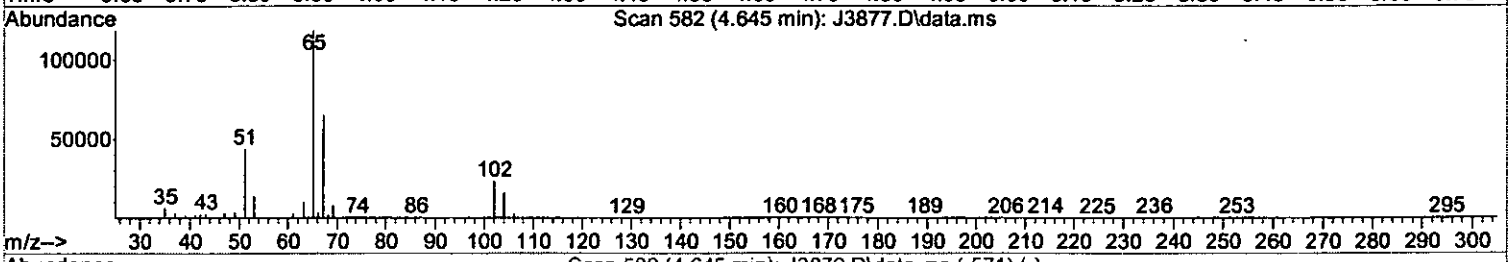
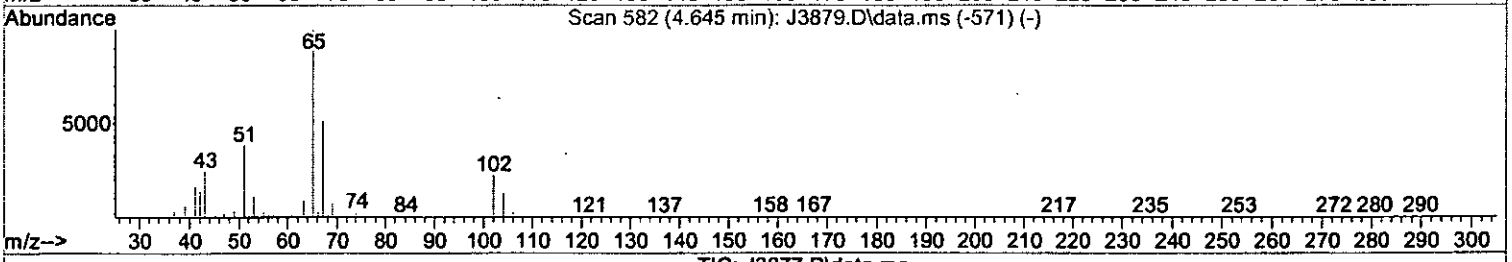






TIC: J3877.D\data.ms

(51) Iso-Butyl Alcohol

4.645min (+0.006) 29.57 ppb

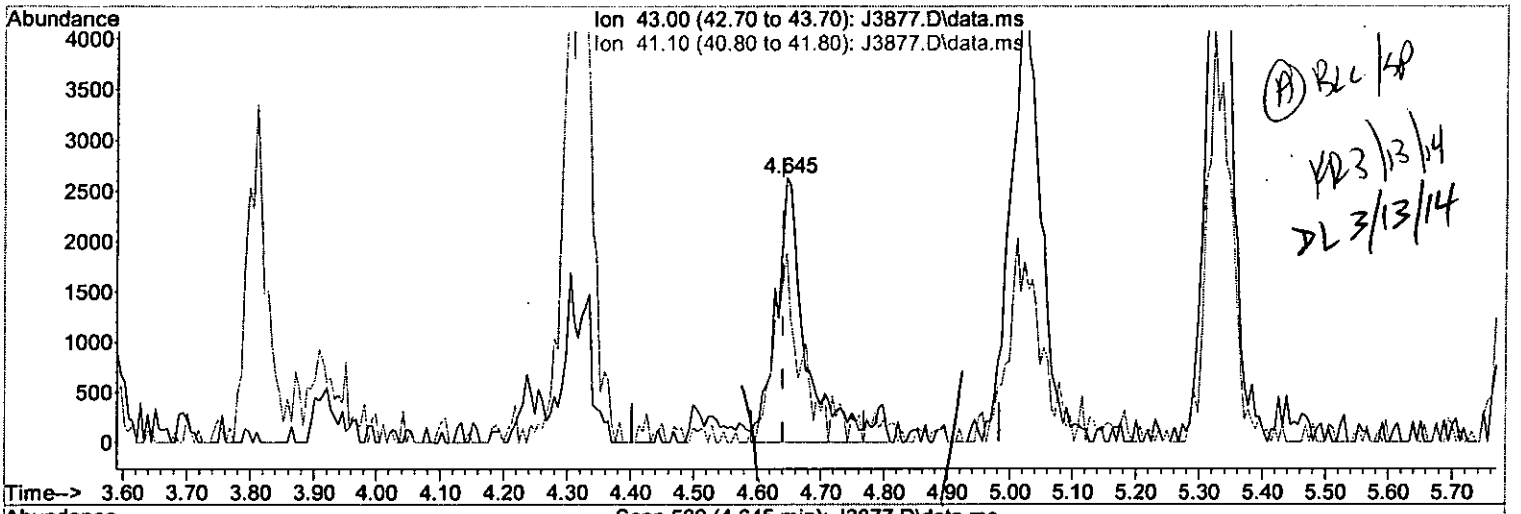
response 7003

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	71.74
0.00	0.00	0.00
0.00	0.00	0.00

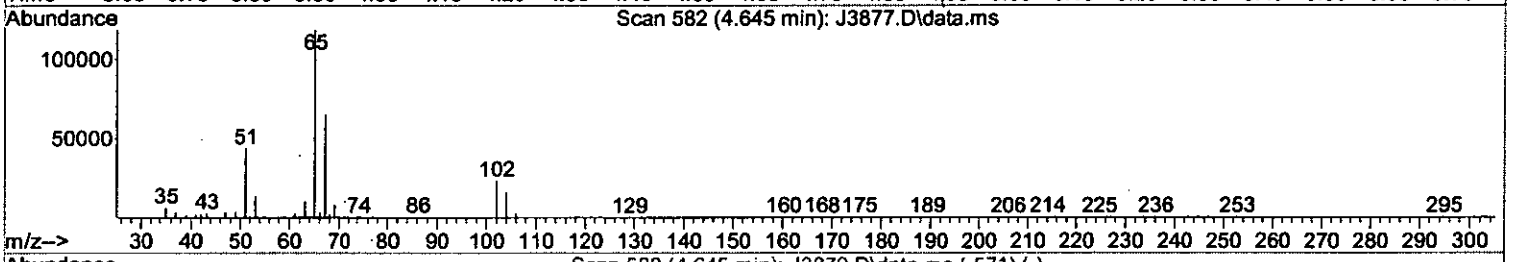
W031214.M Thu Mar 13 10:26:19 2014 Page: 1

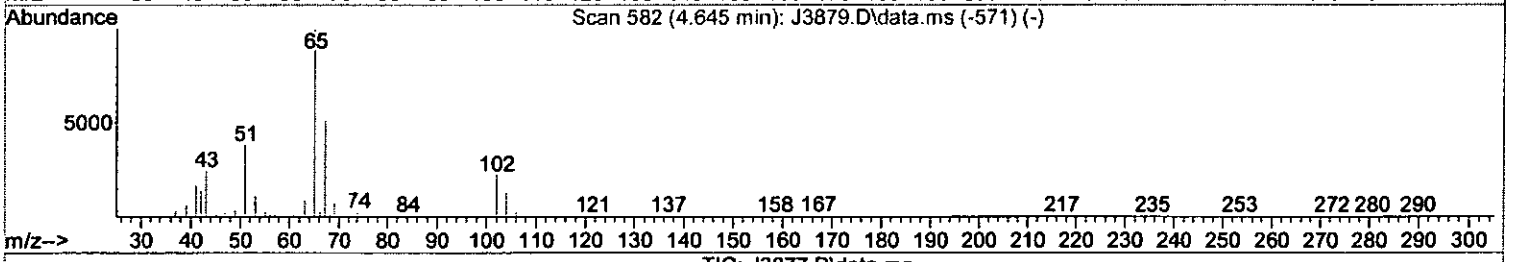
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) RLC 3/13/14
KR 3/13/14
DL 3/13/14





TIC: J3877.D\data.ms

(51) Iso-Butyl Alcohol

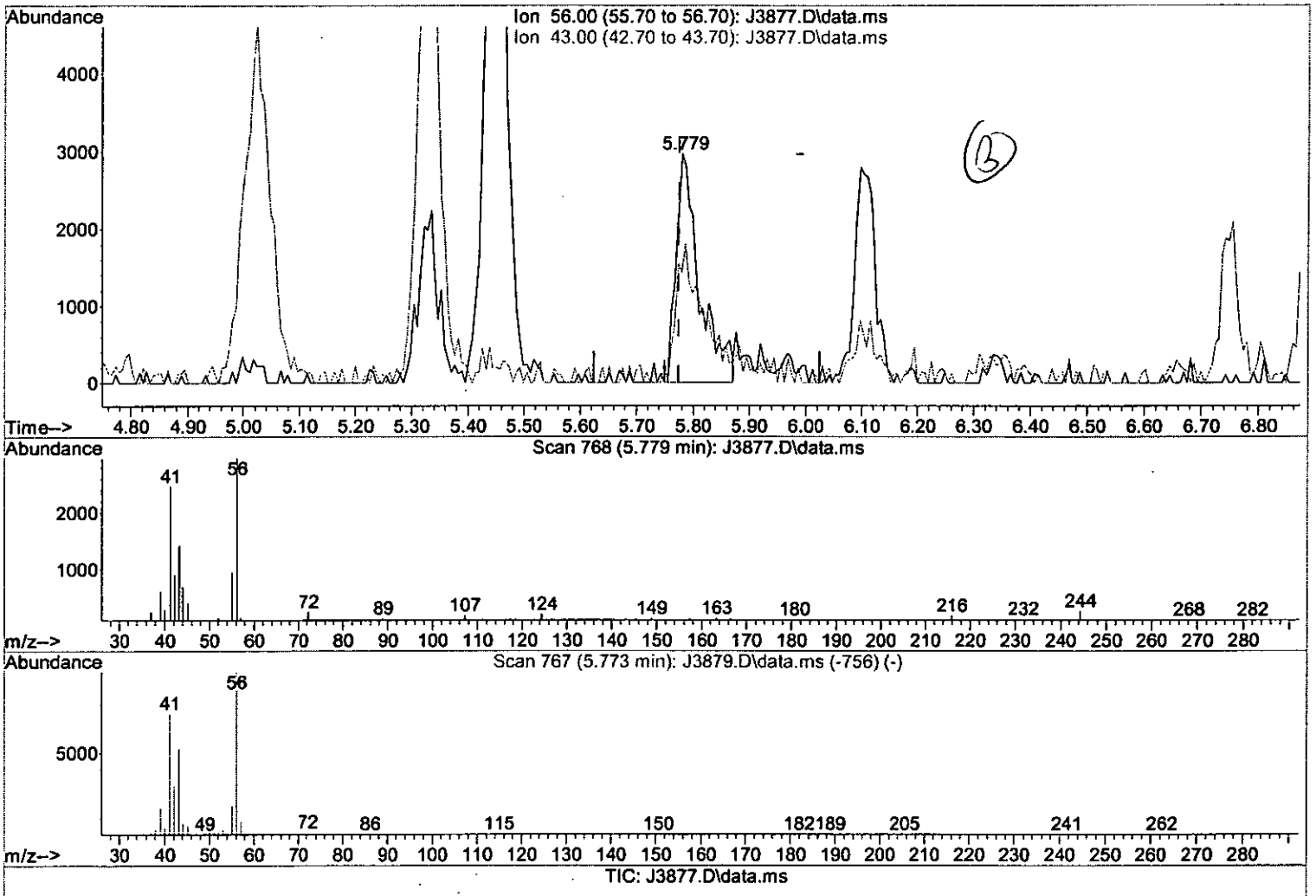
4.645min (+0.006) 36.97 ppb m

response 8755

Ion	Exp%	Act%
43.00	100	100
41.10	68.40	71.74
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(53) 1-Butanol

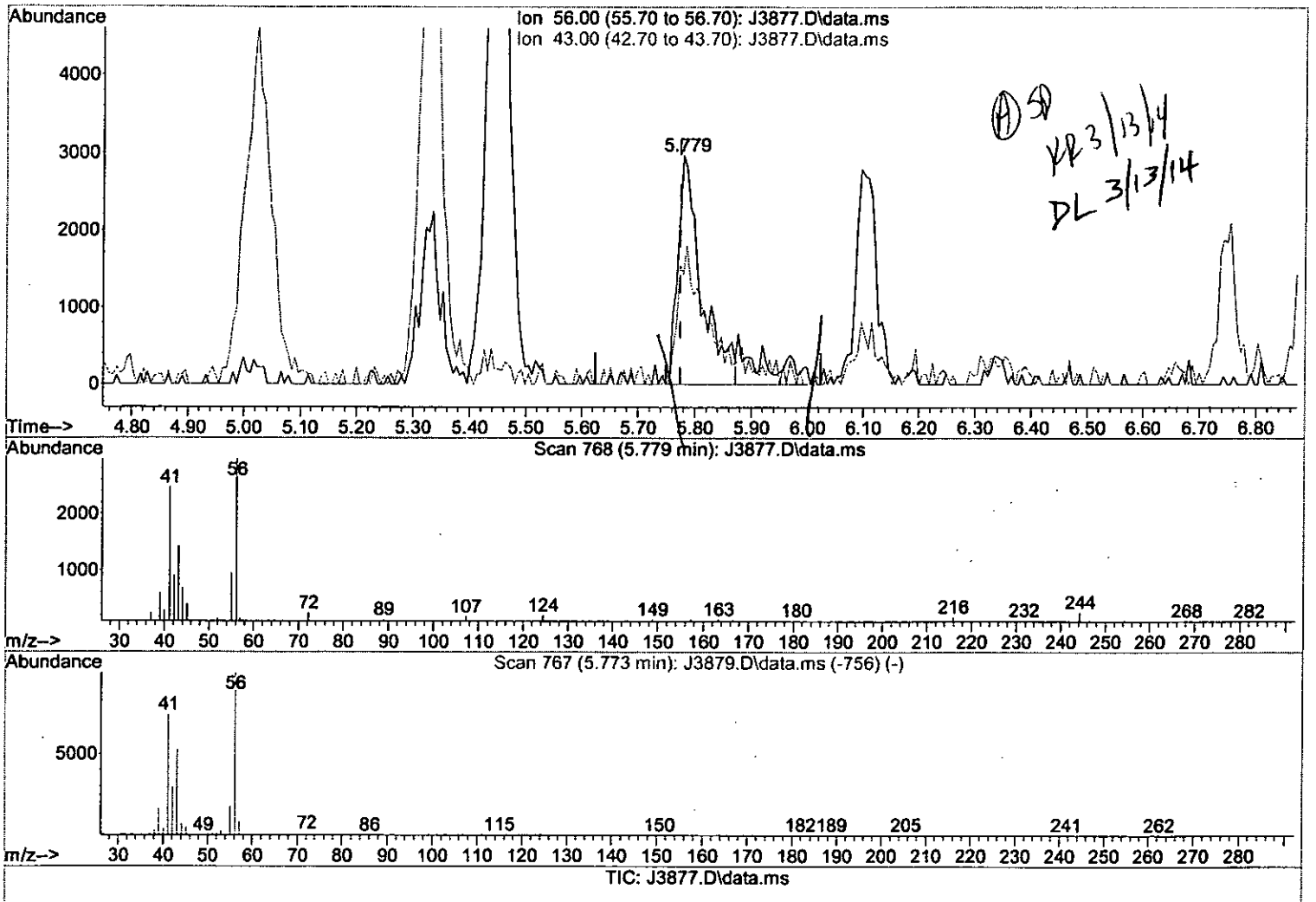
5.779min (+0.006) 63.08 ppb

response 8433

Ion	Exp%	Act%
56.00	100	100
43.00	55.80	71.53
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(53) 1-Butanol

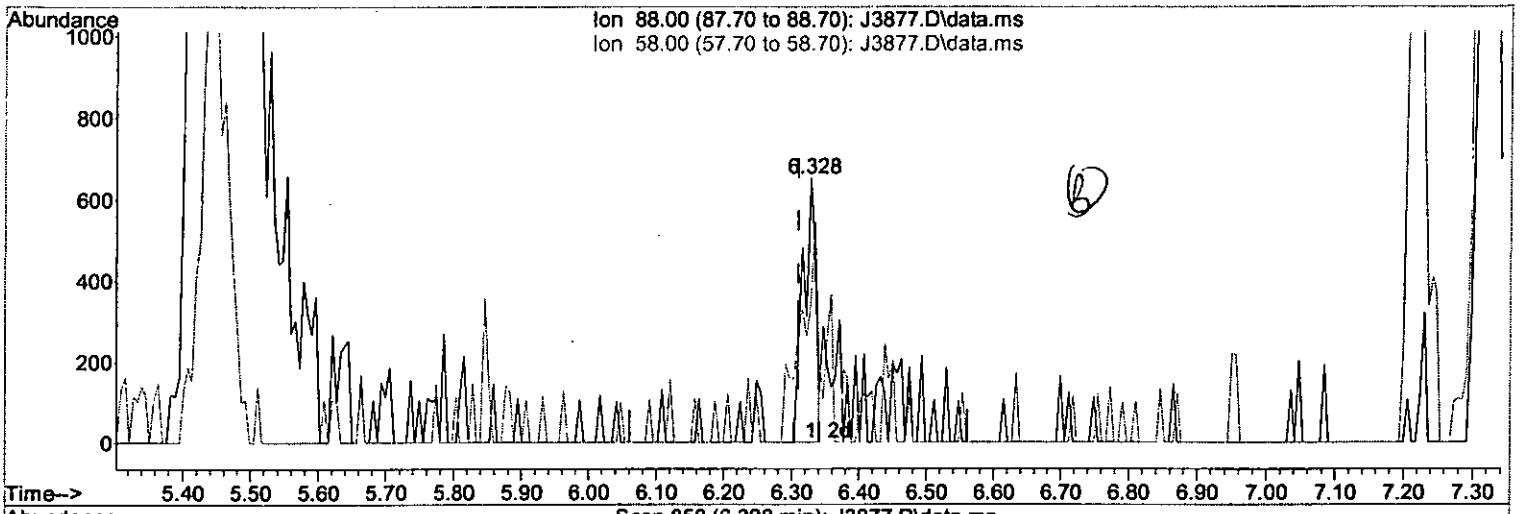
5.779min (+0.006) 78.36 ppb m

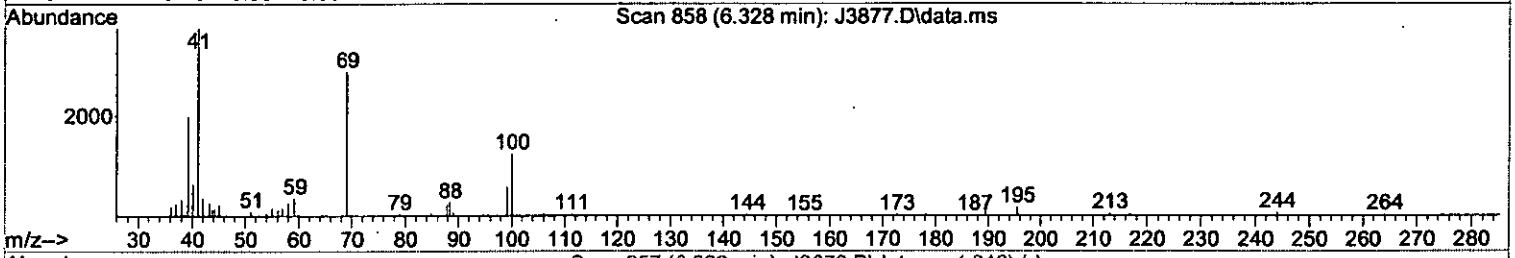
response 10476

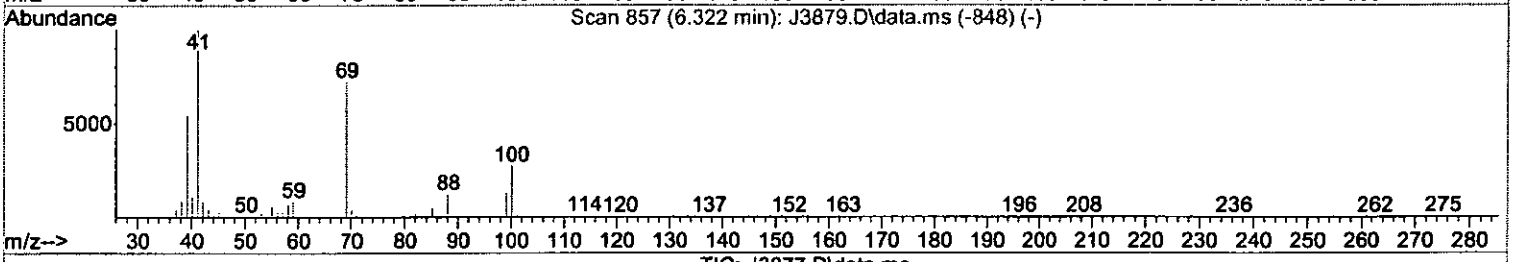
Ion	Exp%	Act%
56.00	100	100
43.00	55.80	57.58
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3877.D\data.ms

(58) 1,4-Dioxane

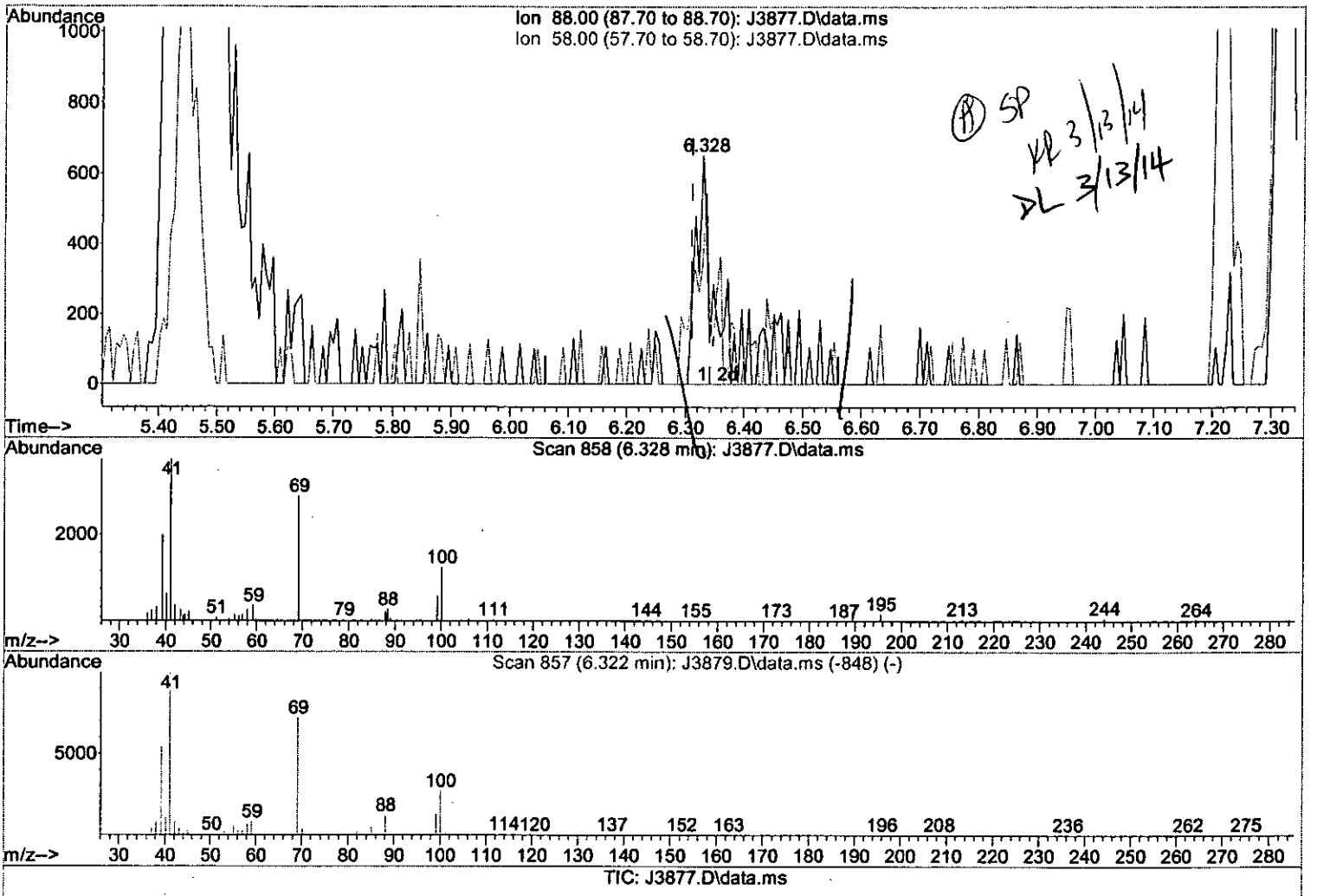
6.328min (+0.018) 14.23 ppb

response 817

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	51.84
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(58) 1,4-Dioxane

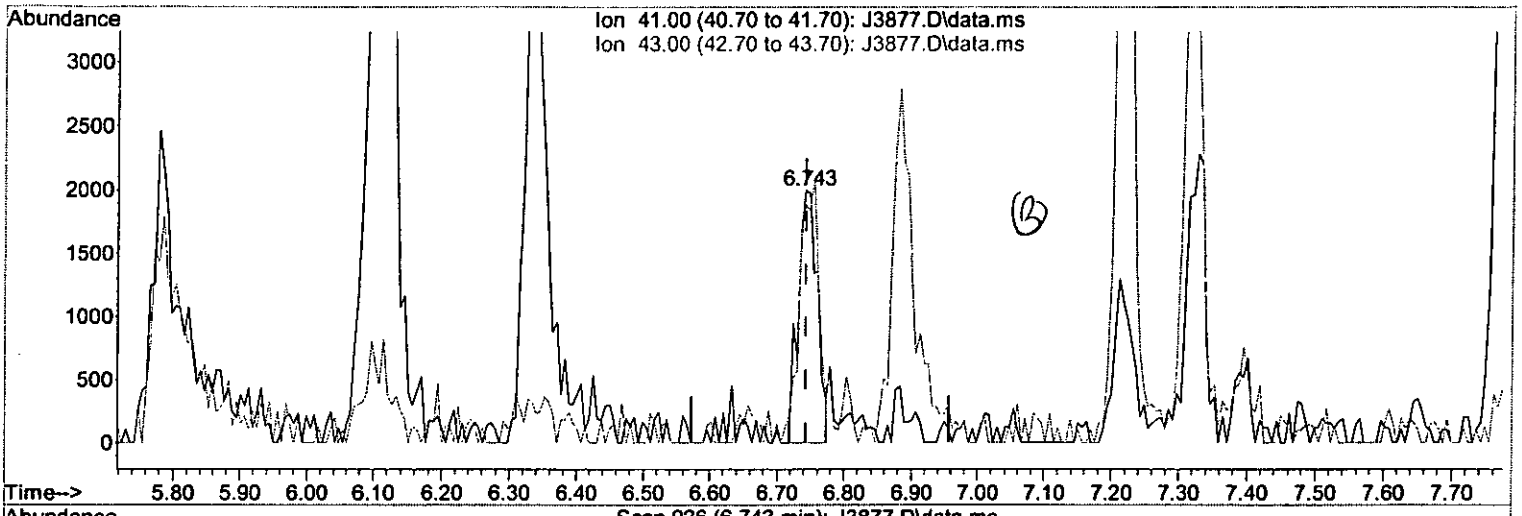
6.328min (+0.018) 36.08 ppb m

response 2071

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	96.57#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(61) 2-Nitropropane

6.743min (-0.000) 3.49 ppb

response 3946

Ion	Exp%	Act%
41.00	100	100
43.00	105.30	93.94
0.00	0.00	0.00
0.00	0.00	0.00

```
Sample     : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc       : 8260 WATER ICAL
Acq On     : 12 Mar 2014  11:49 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration
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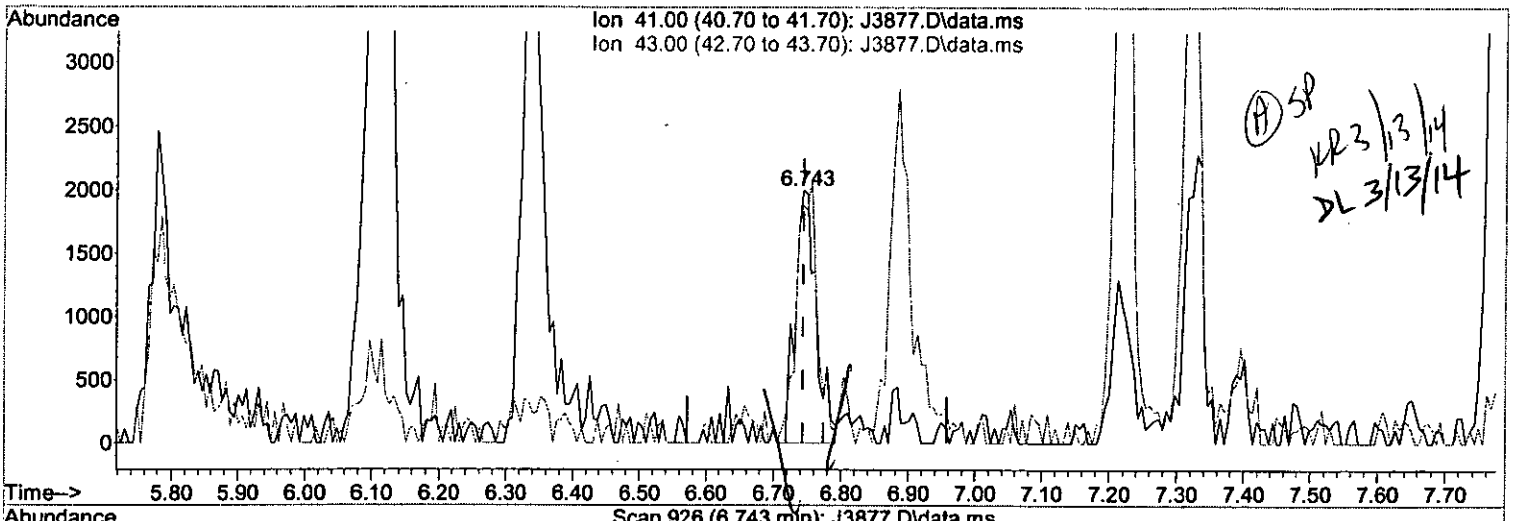


TIC: J3877.D\data.ms

(61) 2-Nitropropane

6.743min (-0.000) 3.79 ppb m

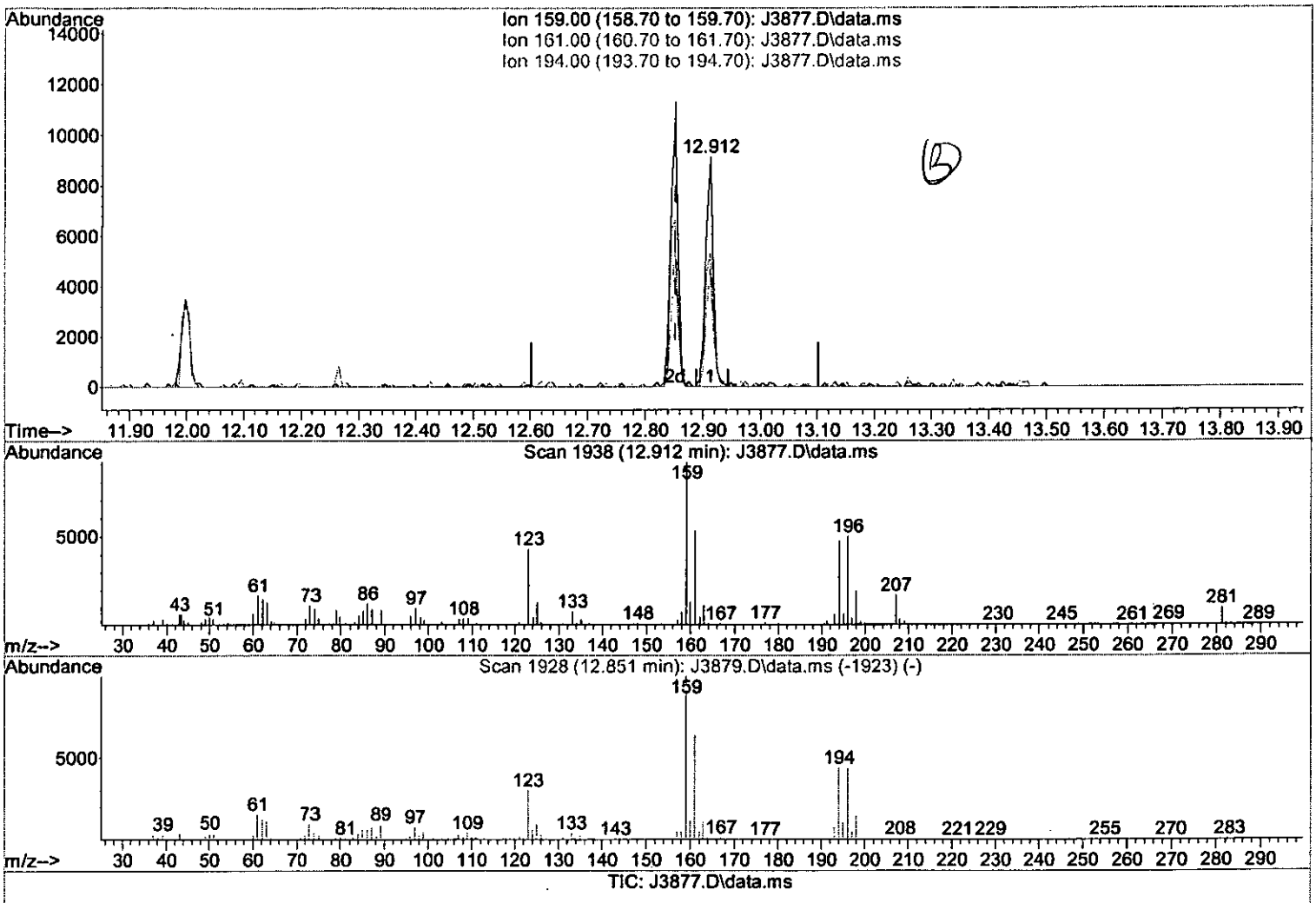
response 4286

Ion	Exp%	Act%
41.00	100	100
43.00	105.30	93.94
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:27:41 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 1.71 ppb

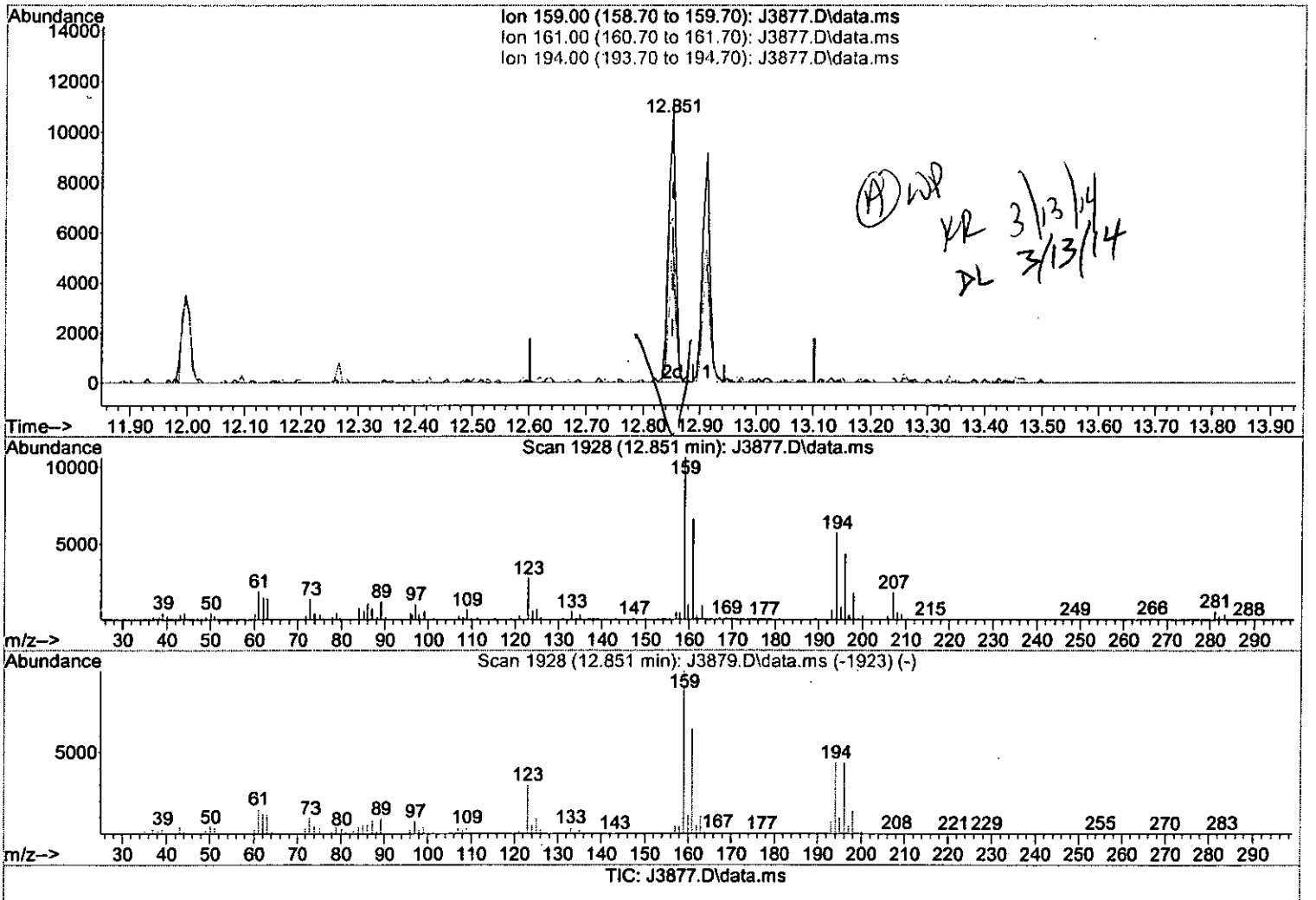
response 8342

Ion	Exp%	Act%
159.00	100	100
161.00	64.60	58.14
194.00	43.80	51.93
0.00	0.00	0.00

W031214.M Thu Mar 13 10:28:23 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:45 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3877.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (-0.000) 1.98 ppb m

response 9636

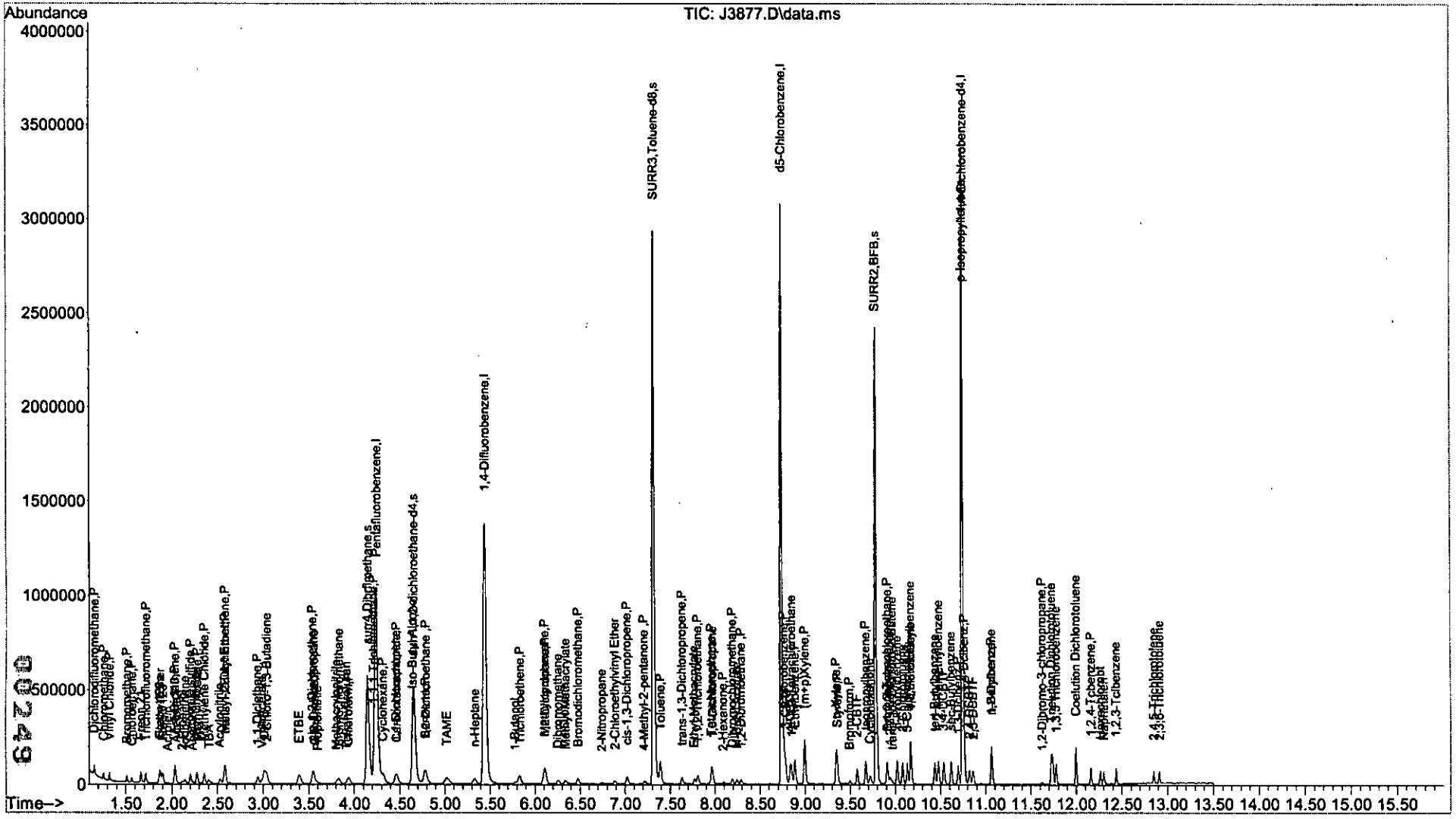
Ion	Exp%	Act%
159.00	100	100
161.00	64.60	62.31
194.00	43.80	53.92#
0.00	0.00	0.00

W031214.M Thu Mar 13 10:28:31 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3877.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 11:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:28:27 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:28:48 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	909636	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1434063	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1295117	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	613774	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419968	50.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.18%				
48) surr1,1,2-dichloroetha...	4.658	65	473956	50.11	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.22%				
65) SURR3,Toluene-d8	7.322	98	1740484	49.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.78%				
70) SURR2,BFB	9.785	95	647335	49.74	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	48185	4.46	ppb		99
3) Chloromethane	1.256	50	46384	4.94	ppb		94
4) Vinyl Chloride	1.323	62	43530	5.00	ppb		99
5) Bromomethane	1.512	94	24980	4.77	ppb		95
6) Chloroethane	1.567	64	23684	4.38	ppb		92
7) Freon 21	1.664	67	67580	5.15	ppb		100
8) Trichlorofluoromethane	1.719	101	68500	5.13	ppb		98
9) Diethyl Ether	1.878	59	31483	4.79	ppb		92
10) Freon 123a	1.866	67	50620	5.16	ppb		91
11) Freon 123	1.902	83	56653	5.06	ppb		97
12) Acrolein	1.951	56	3084	9.81	ppb		98
13) 1,1-Diclethene	2.036	96	33755	5.11	ppb		95
14) Freon 113	2.036	101	36313	5.03	ppb		92
15) Acetone	2.048	43	9867	5.47	ppb		81
16) 2-Propanol	2.116	45	27896	93.73	ppb		91
17) Iodomethane	2.146	142	38074	4.34	ppb		95
18) Carbon Disulfide	2.207	76	113819	4.96	ppb		98
19) Acetonitrile	2.225	40	7540	25.55	ppb		96
20) Allyl Chloride	2.274	76	22847	5.05	ppb		98
21) Methyl Acetate	2.274	43	22856	5.62	ppb		99
22) Methylene Chloride	2.353	84	43263	5.00	ppb		98
23) TBA	2.408	59	49570	98.27	ppb		96
24) Acrylonitrile	2.524	53	50514	24.98	ppb		93
25) Methyl-t-Butyl Ether	2.579	73	108080	5.15	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	40087	4.85	ppb		93
28) 1,1-Diclethane	2.939	63	78544	5.10	ppb		98
29) Vinyl Acetate	2.975	86	6450	4.71	ppb	#	57
30) DIPE	3.018	45	153755	5.13	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	66829	5.04	ppb		89
32) ETBE	3.396	59	129769	5.17	ppb		96
33) 2,2-Dichloropropane	3.560	77	58638	4.80	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	45860	4.97	ppb		95
35) 2-Butanone	3.554	43	12867	5.09	ppb		92
36) Propionitrile	3.591	54	17228	24.31	ppb		96
37) Bromochloromethane	3.835	130	26538	5.15	ppb	#	73

KR 3/13/14

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	11464	4.87	ppb		95
39) Tetrahydrofuran	3.908	42	8977	5.08	ppb		87
40) Chloroform	3.938	83	74686	4.95	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	64390	4.98	ppb	#	37
42) TAME	5.023	73	106230	5.02	ppb		98
44) Cyclohexane	4.310	41	39966	5.15	ppb		94
46) Carbontetrachloride	4.469	121	15872	4.62	ppb		90
47) 1,1-Dichloropropene	4.463	75	54305	5.17	ppb		93
49) Benzene	4.780	78	179829	5.09	ppb		95
50) 1,2-Dichloroethane	4.780	62	53239	4.97	ppb		94
51) Iso-Butyl Alcohol	4.633	43	20997	88.43	ppb		94
52) n-Heptane	5.322	43	42494	4.82	ppb		93
53) 1-Butanol	5.773	56	26987	201.32	ppb		95
54) Trichloroethene	5.828	130	41962	4.91	ppb		92
55) Methylcyclohexane	6.103	55	46721	5.08	ppb		91
56) 1,2-Diclpropane	6.115	63	43350	4.76	ppb		100
57) Dibromomethane	6.261	93	20852	4.86	ppb		93
58) 1,4-Dioxane	6.322	88	6178m	107.34	ppb		
59) Methyl Methacrylate	6.334	69	19608	4.62	ppb		98
60) Bromodichloromethane	6.474	83	52141	4.94	ppb		95
61) 2-Nitropropane	6.743	41	9752	8.60	ppb		93
62) 2-Chloroethylvinyl Ether	6.877	63	19373	4.78	ppb		94
63) cis-1,3-Dichloropropene	7.023	75	59020	4.72	ppb		92
64) 4-Methyl-2-pentanone	7.218	43	25233	4.63	ppb		94
66) Toluene	7.389	91	187487	5.15	ppb		93
67) trans-1,3-Dichloropropene	7.633	75	47205	4.68	ppb		99
68) Ethyl Methacrylate	7.767	69	38371	4.72	ppb		95
69) 1,1,2-Trichloroethane	7.803	97	31839	5.00	ppb		94
72) Tetrachloroethene	7.962	164	31272	4.67	ppb		93
73) 2-Hexanone	8.090	43	16065	4.38	ppb		94
74) 1,3-Dichloropropane	7.974	76	59278	5.08	ppb		96
75) Dibromochloromethane	8.188	129	32842	4.90	ppb		93
76) N-Butyl Acetate	8.236	43	42929	4.73	ppb		94
77) 1,2-Dibromoethane	8.285	107	29591	4.94	ppb		94
78) Chlorobenzene	8.767	112	114107	5.06	ppb		95
79) 3-CBTF	8.785	180	53330	4.78	ppb		96
80) 4-CBTF	8.834	180	48803	4.89	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.846	131	38239	4.83	ppb		94
82) Ethylbenzene	8.889	106	61699	5.14	ppb		98
83) (m+p)Xylene	8.998	106	144528	10.24	ppb		98
84) o-Xylene	9.346	106	72480	5.03	ppb		100
85) Styrene	9.358	104	114854	4.99	ppb		92
87) Bromoform	9.492	173	16573	4.75	ppb		96
88) 2-CBTF	9.577	180	51681	5.05	ppb		95
89) Isopropylbenzene	9.669	105	169239	5.34	ppb		96
90) Cyclohexanone	9.718	55	49534	100.63	ppb		97
91) trans-1,4-Dichloro-2-B...	9.962	53	7667	4.64	ppb		92
92) 1,1,2,2-Tetrachloroethane	9.913	83	36213	5.15	ppb		98
93) Bromobenzene	9.913	156	46987	5.20	ppb	#	86
94) 1,2,3-Trichloropropane	9.943	110	10506	5.00	ppb	#	86
95) n-Propylbenzene	10.023	91	199054	5.37	ppb		99
96) 2-Chlorotoluene	10.083	91	125591	5.39	ppb		97

W031214.M Thu Mar 13 10:36:04 2014 Page: 2

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

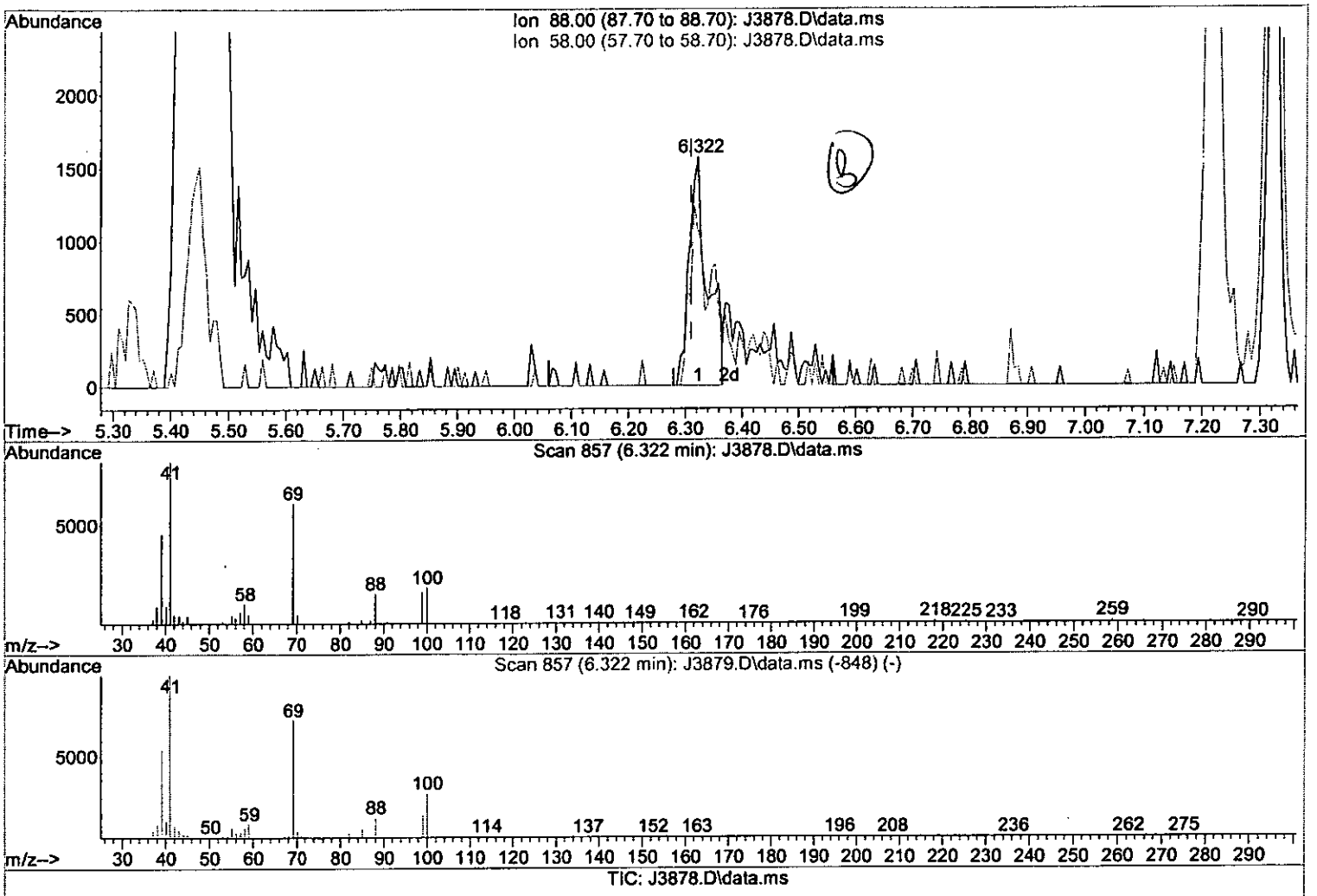
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	128681	5.31	ppb		97
98)	4-Chlorotoluene	10.169	91	151049	5.50	ppb		96
99)	1,3,5-Trimethylbenzene	10.169	105	137380	5.31	ppb		99
100)	tert-Butylbenzene	10.437	119	113901	5.23	ppb		99
101)	1,2,4-Trimethylbenzene	10.474	105	143214	5.38	ppb		98
102)	3,4-DCBTF	10.535	214	36559	4.83	ppb		98
103)	sec-Butylbenzene	10.620	105	165306	5.46	ppb		97
104)	p-Isopropyltoluene	10.742	119	136851	5.34	ppb		97
105)	1,3-Dclbenz	10.693	146	80200	5.22	ppb		99
106)	1,4-Dclbenz	10.766	146	81727	5.00	ppb		90
107)	2,4-DCBTF	10.821	214	33202	5.05	ppb		98
108)	2,5-DCBTF	10.864	214	38208	5.08	ppb		97
109)	n-Butylbenzene	11.065	91	122103	5.29	ppb		96
110)	1,2-Dclbenz	11.065	146	76727	5.18	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	4670	4.34	ppb	#	79
112)	Trielution Dichlorotol...	11.730	125	181694	15.52	ppb		99
113)	1,3,5 Trichlorobenzene	11.778	180	51719	5.07	ppb		96
114)	Coelution Dichlorotoluene	11.998	125	128721	10.39	ppb		98
115)	1,2,4-Tcbenzene	12.162	180	46406	5.13	ppb		98
116)	Hexachlorobt	12.266	225	20395	5.16	ppb		96
117)	Naphthalen	12.303	128	82080	5.04	ppb		98
118)	1,2,3-Tclbenzene	12.437	180	37771	5.10	ppb		96
119)	2,4,5-Trichlorotolene	12.851	159	25032	5.12	ppb		96
120)	2,3,6-Trichlorotoluene	12.912	159	24018	5.37	ppb		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:50 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3878.D\data.ms

(58) 1,4-Dioxane

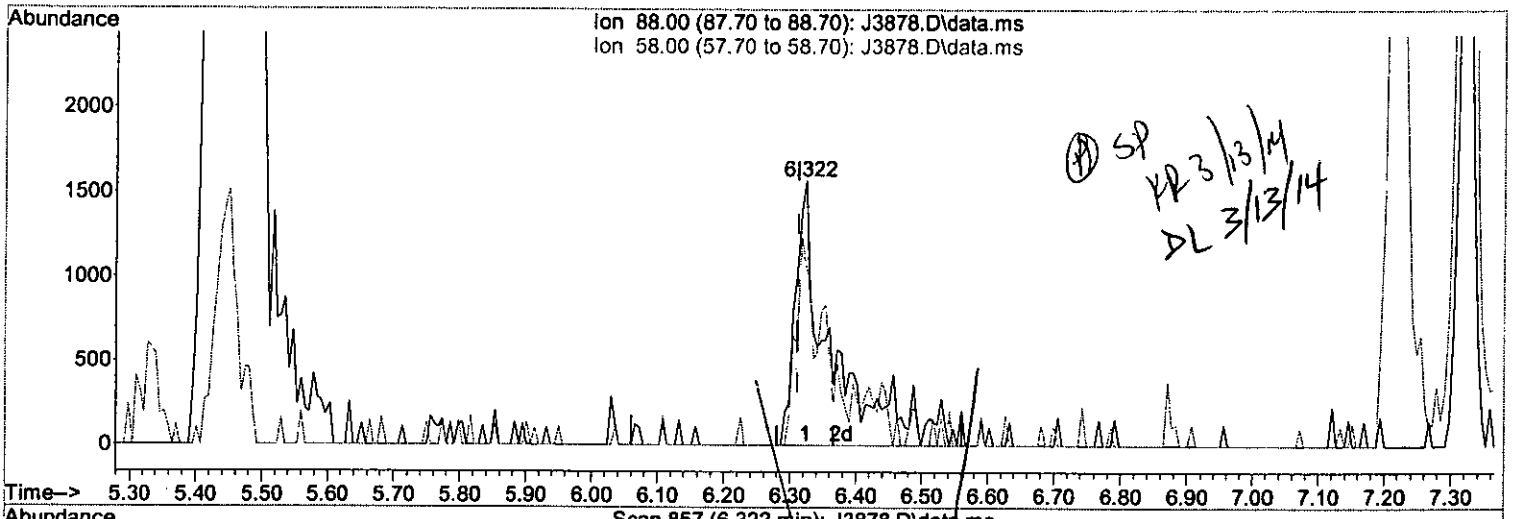
6.322min (+0.012) 61.75 ppb

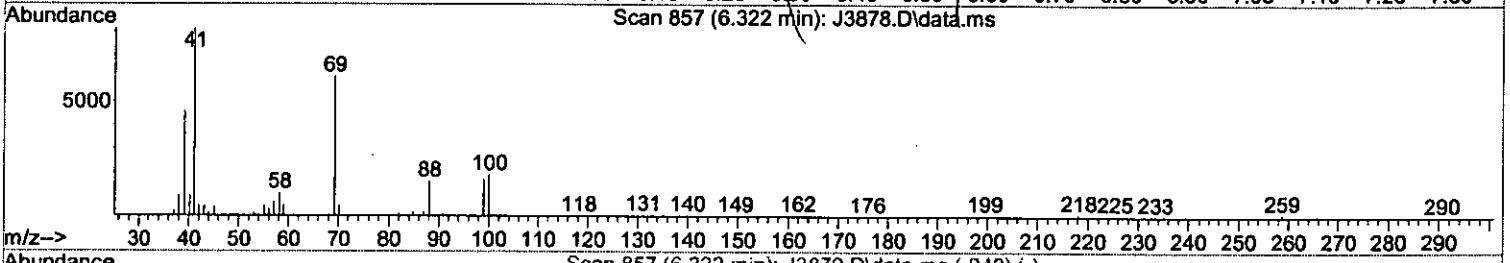
response 3554

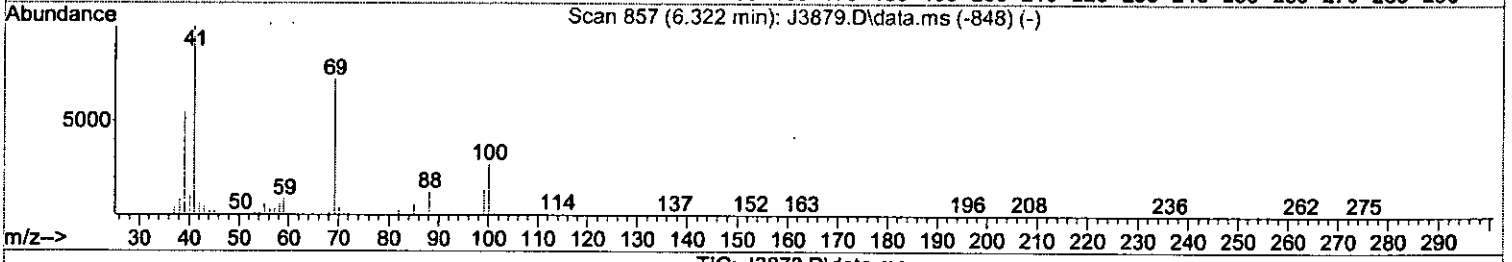
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.98
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:50 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3878.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 107.34 ppb m

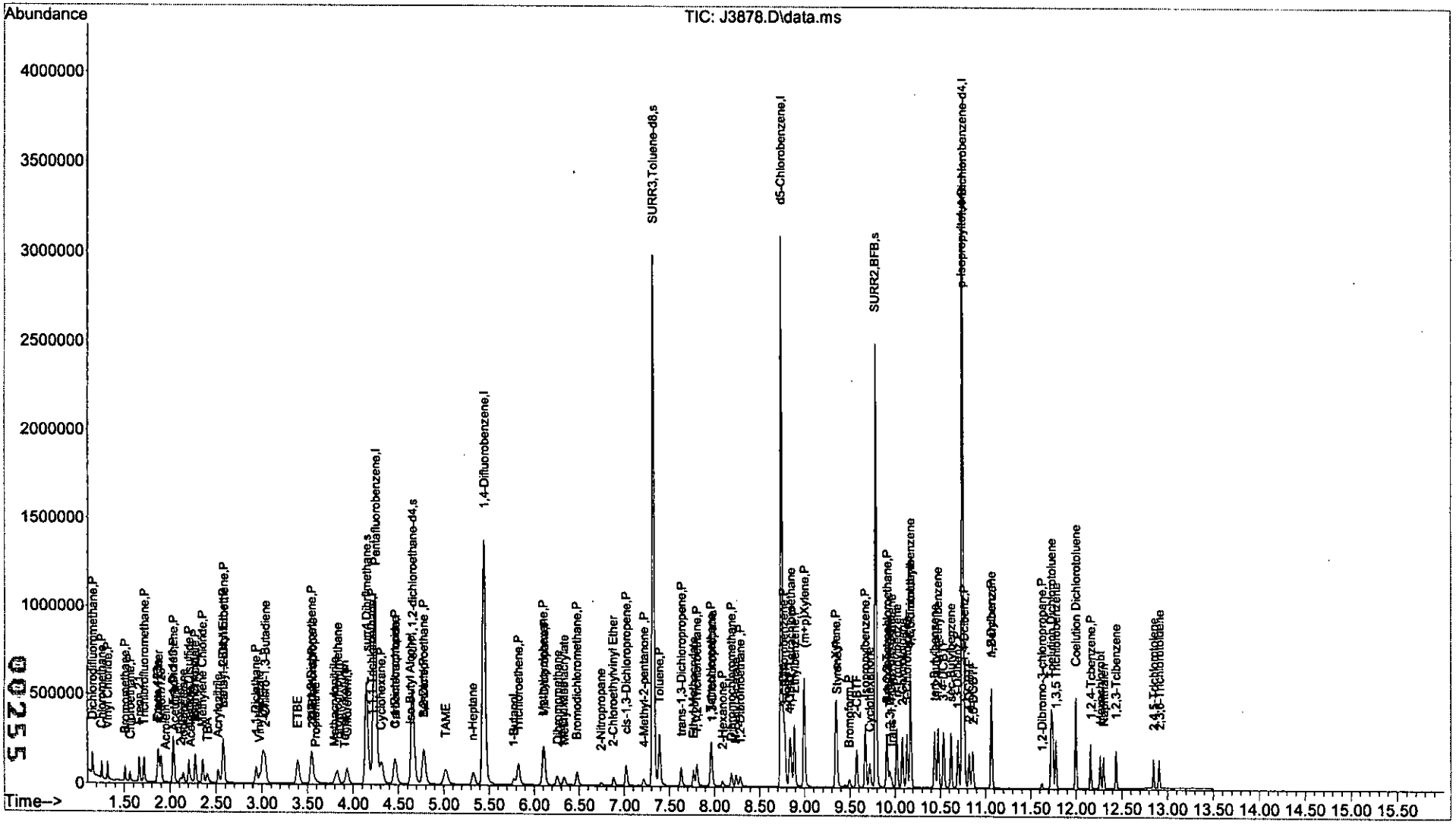
response 6178

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3878.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:34:30 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:36:07 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	922799	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1437195	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1313495	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	644479	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	420420	50.53	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.06%			
48) surr1,1,2-dichloroetha...	4.664	65	476208	50.24	ppb	0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 100.48%			
65) SURR3,Toluene-d8	7.322	98	1753103	50.14	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.28%			
70) SURR2,BFB	9.785	95	651604	49.96	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.158	85	236007	21.53	ppb	100
3) Chloromethane	1.262	50	199071	20.91	ppb	100
4) Vinyl Chloride	1.323	62	184578	20.92	ppb	100
5) Bromomethane	1.512	94	101510	19.09	ppb	100
6) Chloroethane	1.567	64	108989	19.86	ppb	100
7) Freon 21	1.664	67	274791	20.65	ppb	100
8) Trichlorofluoromethane	1.719	101	283252	20.91	ppb	100
9) Diethyl Ether	1.878	59	136065	20.40	ppb	100
10) Freon 123a	1.865	67	204196	20.53	ppb	100
11) Freon 123	1.902	83	234424	20.64	ppb	100
12) Acrolein	1.951	56	18931	59.34	ppb	100
13) 1,1-Diclethene	2.036	96	137460	20.53	ppb	100
14) Freon 113	2.036	101	149593	20.41	ppb	100
15) Acetone	2.042	43	36823	20.11	ppb	100
16) 2-Propanol	2.115	45	122751	406.54	ppb	100
17) Iodomethane	2.146	142	198218	22.28	ppb	100
18) Carbon Disulfide	2.207	76	496357	21.31	ppb	100
19) Acetonitrile	2.225	40	33901	113.23	ppb	100
20) Allyl Chloride	2.274	76	97449	21.22	ppb	100
21) Methyl Acetate	2.274	43	82752	20.07	ppb	100
22) Methylene Chloride	2.359	84	176046	20.07	ppb	100
23) TBA	2.408	59	222324	434.45	ppb	100
24) Acrylonitrile	2.524	53	220459	107.48	ppb	100
25) Methyl-t-Butyl Ether	2.579	73	441594	20.75	ppb	100
26) trans-1,2-Dichloroethene	2.585	96	174413	20.79	ppb	100
28) 1,1-Diclethane	2.938	63	329721	21.11	ppb	100
29) Vinyl Acetate	2.981	86	26664	19.18	ppb	100
30) DIPE	3.012	45	654075	21.50	ppb	100
31) 2-Chloro-1,3-Butadiene	3.042	53	297059	22.09	ppb	100
32) ETBE	3.396	59	547952	21.53	ppb	100
33) 2,2-Dichloropropane	3.554	77	257201	20.76	ppb	100
34) cis-1,2-Dichloroethene	3.548	96	194189	20.74	ppb	100
35) 2-Butanone	3.548	43	52188	20.35	ppb	100
36) Propionitrile	3.597	54	81195	112.94	ppb	100
37) Bromochloromethane	3.828	130	103638	19.83	ppb	100

KP 3/13/14

W031214.M Thu Mar 13 10:46:01 2014

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Methacrylonitrile	3.798	67	50231	21.02	ppb	100
39)	Tetrahydrofuran	3.908	42	37265	20.78	ppb	100
40)	Chloroform	3.938	83	308523	20.16	ppb	100
41)	1,1,1-Trichloroethane	4.213	97	268217	20.43	ppb	100
42)	TAME	5.023	73	454949	21.17	ppb	100
44)	Cyclohexane	4.316	41	158361	20.37	ppb	100
46)	Carbontetrachloride	4.469	121	68823	19.97	ppb	100
47)	1,1-Dichloropropene	4.462	75	223653	21.26	ppb	100
49)	Benzene	4.779	78	747584	21.13	ppb	100
50)	1,2-Dichloroethane	4.786	62	222596	20.72	ppb	100
51)	Iso-Butyl Alcohol	4.645	43	97955	411.63	ppb	100
52)	n-Heptane	5.328	43	187647	21.23	ppb	100
53)	1-Butanol	5.773	56	140316	1044.44	ppb	100
54)	Trichloroethene	5.828	130	172802	20.16	ppb	100
55)	Methylcyclohexane	6.102	55	188533	20.46	ppb	100
56)	1,2-Diclpropane	6.115	63	190060	20.83	ppb	100
57)	Dibromomethane	6.255	93	87964	20.44	ppb	100
58)	1,4-Dioxane	6.322	88	24827m	430.43	ppb	
59)	Methyl Methacrylate	6.328	69	88674	20.83	ppb	100
60)	Bromodichloromethane	6.474	83	224153	21.21	ppb	100
61)	2-Nitropropane	6.742	41	42750	37.61	ppb	100
62)	2-Chloroethylvinyl Ether	6.877	63	84368	20.79	ppb	100
63)	cis-1,3-Dichloropropene	7.023	75	271354	21.64	ppb	100
64)	4-Methyl-2-pentanone	7.212	43	108953	19.96	ppb	100
66)	Toluene	7.395	91	768079	21.05	ppb	100
67)	trans-1,3-Dichloropropene	7.626	75	221059	21.87	ppb	100
68)	Ethyl Methacrylate	7.767	69	182991	22.46	ppb	100
69)	1,1,2-Trichloroethane	7.803	97	135446	21.22	ppb	100
72)	Tetrachloroethene	7.962	164	136336	20.09	ppb	100
73)	2-Hexanone	8.084	43	76704	20.62	ppb	100
74)	1,3-Dichloropropane	7.968	76	246006	20.80	ppb	100
75)	Dibromochloromethane	8.187	129	145086	21.34	ppb	100
76)	N-Butyl Acetate	8.236	43	189825	20.64	ppb	100
77)	1,2-Dibromoethane	8.285	107	128698	21.19	ppb	100
78)	Chlorobenzene	8.767	112	471085	20.61	ppb	100
79)	3-CBTF	8.785	180	230152	20.35	ppb	100
80)	4-CBTF	8.840	180	214655	21.19	ppb	100
81)	1,1,1,2-Tetrachloroethane	8.852	131	167154	20.81	ppb	100
82)	Ethylbenzene	8.888	106	251722	20.67	ppb	100
83)	(m+p)Xylene	8.998	106	608659	42.53	ppb	100
84)	o-Xylene	9.346	106	306257	20.97	ppb	100
85)	Styrene	9.352	104	513247	21.98	ppb	100
87)	Bromoform	9.492	173	79425	21.70	ppb	100
88)	2-CBTF	9.577	180	220924	20.58	ppb	100
89)	Isopropylbenzene	9.669	105	718183	21.58	ppb	100
90)	Cyclohexanone	9.718	55	223344	432.11	ppb	100
91)	trans-1,4-Dichloro-2-B...	9.961	53	38370	22.12	ppb	100
92)	1,1,2,2-Tetrachloroethane	9.913	83	151723	20.56	ppb	100
93)	Bromobenzene	9.907	156	192228	20.28	ppb	100
94)	1,2,3-Trichloropropane	9.943	110	45293	20.51	ppb	100
95)	n-Propylbenzene	10.022	91	833670	21.42	ppb	100
96)	2-Chlorotoluene	10.083	91	514264	21.04	ppb	100

W031214.M Thu Mar 13 10:46:01 2014 Page: 2

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

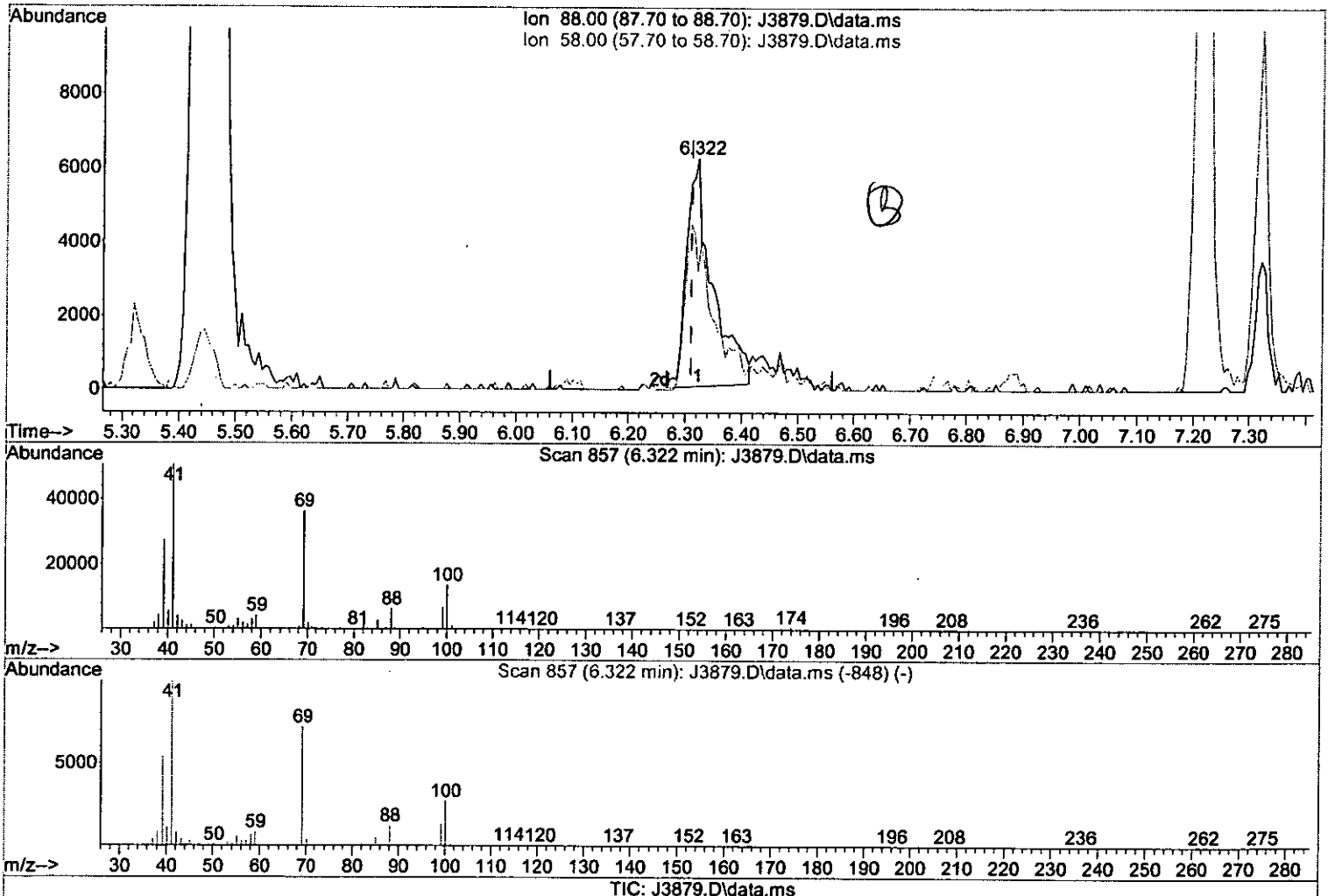
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	541594	21.30	ppb	100
98)	4-Chlorotoluene	10.175	91	627344	21.77	ppb	100
99)	1,3,5-Trimethylbenzene	10.169	105	592216	21.82	ppb	100
100)	tert-Butylbenzene	10.437	119	478689	20.95	ppb	100
101)	1,2,4-Trimethylbenzene	10.473	105	610669	21.87	ppb	100
102)	3,4-DCBTF	10.534	214	165151	20.80	ppb	100
103)	sec-Butylbenzene	10.620	105	688491	21.65	ppb	100
104)	p-Isopropyltoluene	10.742	119	592664	22.04	ppb	100
105)	1,3-Dclbenz	10.699	146	344896	21.37	ppb	100
106)	1,4-Dclbenz	10.766	146	352806	20.55	ppb	100
107)	2,4-DCBTF	10.821	214	146766	21.25	ppb	100
108)	2,5-DCBTF	10.864	214	163981	20.76	ppb	100
109)	n-Butylbenzene	11.065	91	536348	22.12	ppb	100
110)	1,2-Dclbenz	11.065	146	326326	21.00	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	23847	21.09	ppb	100
112)	Trielution Dichlorotol...	11.729	125	790878	64.35	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	225244	21.02	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	555902	42.72	ppb	100
115)	1,2,4-Tcbenzene	12.156	180	192297	20.24	ppb	100
116)	Hexachlorobt	12.266	225	89220	21.51	ppb	100
117)	Naphthalen	12.302	128	369318	21.59	ppb	100
118)	1,2,3-Tclbenzene	12.437	180	156926	20.17	ppb	100
119)	2,4,5-Trichlorotolene	12.851	159	107382	20.90	ppb	100
120)	2,3,6-Trichlorotoluene	12.912	159	96471	20.56	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:55 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3879.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 345.93 ppb

response 19953

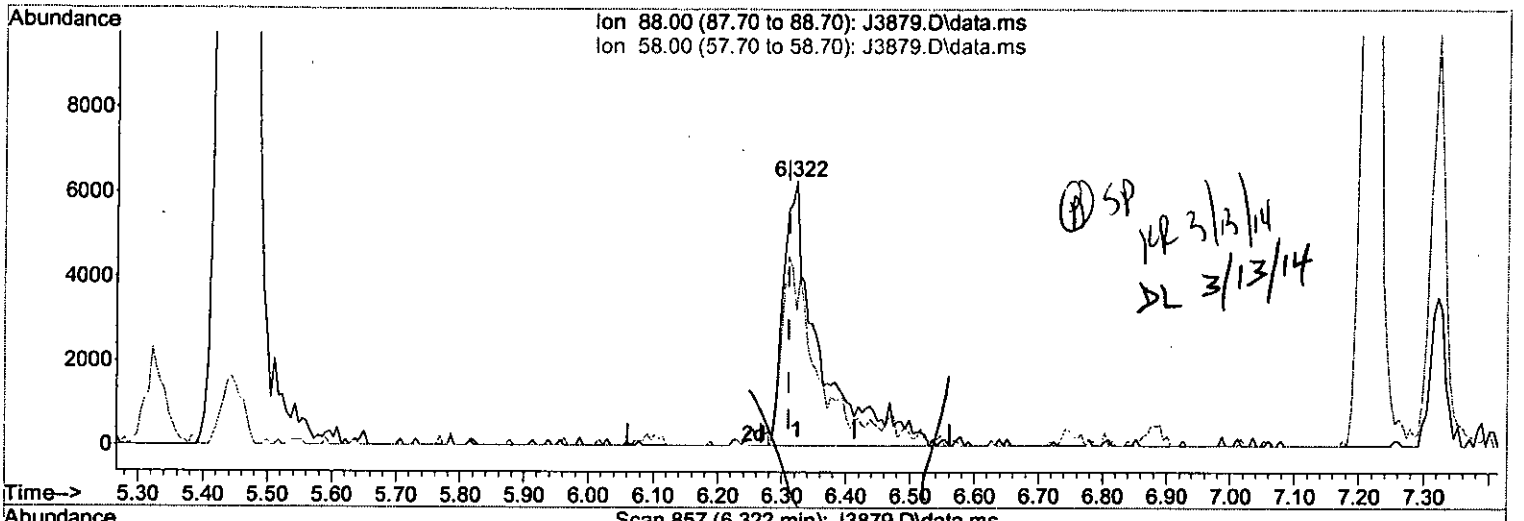
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.82
0.00	0.00	0.00
0.00	0.00	0.00

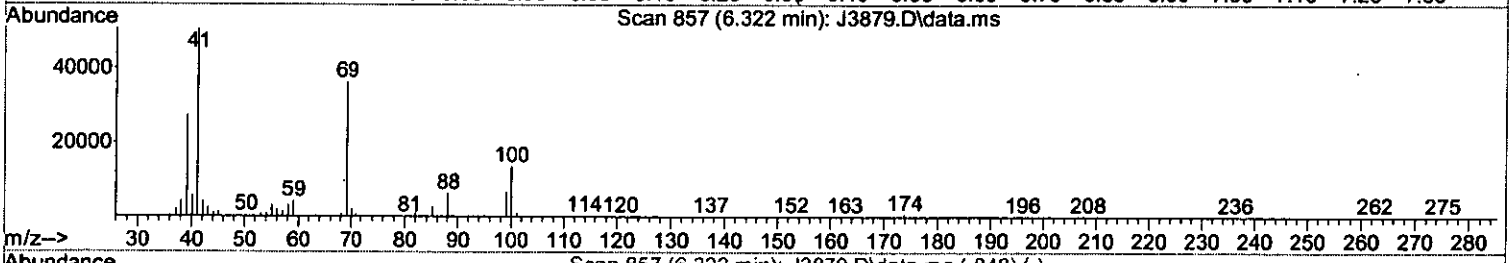
W031214.M Thu Mar 13 10:45:00 2014 Page: 1

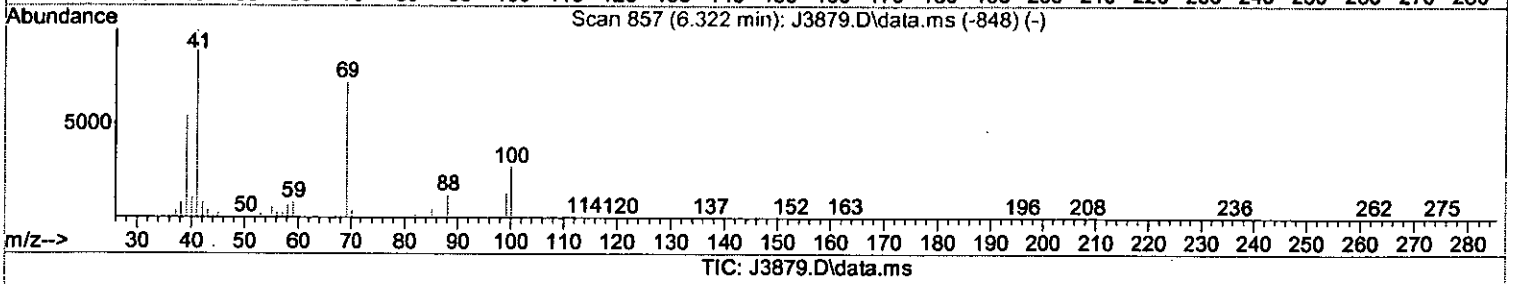
Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:55 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3879.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 430.43 ppb m

response 24827

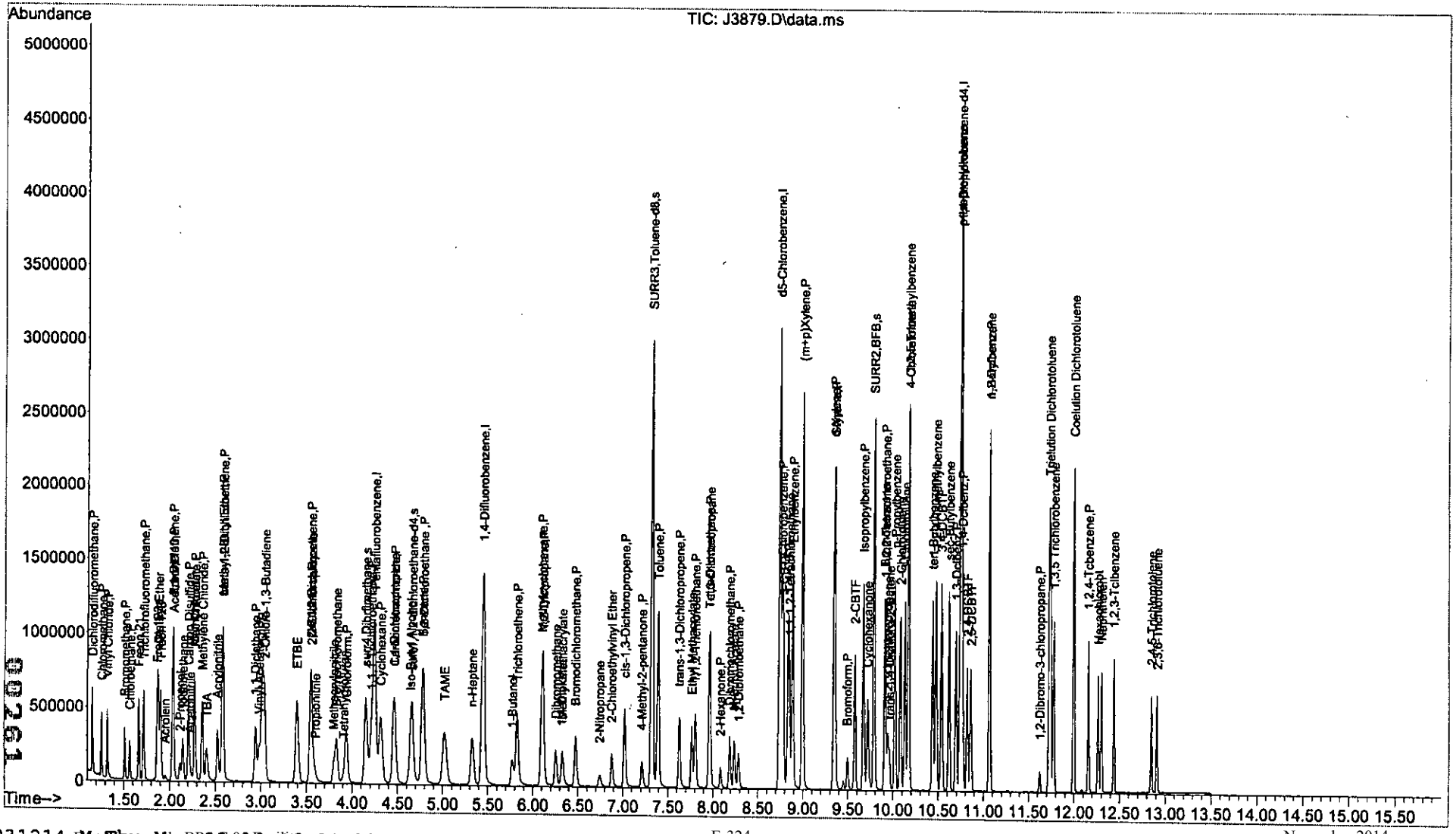
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	50.82
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:45:09 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3879.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:45:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:46:04 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	937657	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1455324	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1331361	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	670106	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	420448	49.90	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.80%				
48) surr1,1,2-dichloroetha...	4.658	65	477074	49.71	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 99.42%				
65) SURR3,Toluene-d8	7.322	98	1776183	50.17	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.34%				
70) SURR2,BFB	9.785	95	667990	50.57	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	564076	50.65	ppb		100
3) Chloromethane	1.262	50	474968	49.11	ppb		99
4) Vinyl Chloride	1.323	62	441606	49.26	ppb		99
5) Bromomethane	1.512	94	245467	45.43	ppb		99
6) Chloroethane	1.567	64	252379	45.25	ppb		98
7) Freon 21	1.664	67	644488	47.66	ppb		100
8) Trichlorofluoromethane	1.719	101	663901	48.23	ppb		100
9) Diethyl Ether	1.878	59	321286	47.40	ppb		97
10) Freon 123a	1.866	67	476539	47.15	ppb		97
11) Freon 123	1.902	83	541833	46.95	ppb		97
12) Acrolein	1.951	56	70930	218.82	ppb		93
13) 1,1-Diclethene	2.036	96	334465	49.15	ppb		97
14) Freon 113	2.036	101	357010	47.94	ppb		89
15) Acetone	2.042	43	88018	47.31	ppb		95
16) 2-Propanol	2.109	45	321452	1047.74	ppb		94
17) Iodomethane	2.146	142	528506	58.48	ppb		99
18) Carbon Disulfide	2.207	76	1233537	52.12	ppb		99
19) Acetonitrile	2.219	40	74229	244.00	ppb		95
20) Allyl Chloride	2.274	76	235013	50.37	ppb		98
21) Methyl Acetate	2.274	43	208249	49.71	ppb		98
22) Methylene Chloride	2.359	84	416569	46.73	ppb		97
23) TBA	2.402	59	549332	1056.46	ppb		100
24) Acrylonitrile	2.524	53	533681	256.05	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	1049984	48.54	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	412950	48.44	ppb		96
28) 1,1-Diclethane	2.939	63	773535	48.75	ppb		99
29) Vinyl Acetate	2.975	86	77152	54.60	ppb	#	88
30) DIPE	3.012	45	1550730	50.17	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	747718	54.71	ppb		95
32) ETBE	3.396	59	1323915	51.19	ppb		98
33) 2,2-Dichloropropane	3.554	77	628304	49.91	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	466155	49.00	ppb		98
35) 2-Butanone	3.542	43	132381	50.79	ppb		99
36) Propionitrile	3.591	54	202098	276.65	ppb		99
37) Bromochloromethane	3.829	130	248184	46.72	ppb		96

KR 3/13/14

W031214.M Thu Mar 13 10:48:05 2014 Page: 1

00252

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	126313	52.02	ppb	94
39) Tetrahydrofuran	3.902	42	90635	49.74	ppb	78
40) Chloroform	3.938	83	732190	47.09	ppb	98
41) 1,1,1-Trichloroethane	4.213	97	658125	49.34	ppb	90
42) TAME	5.023	73	1124934	51.52	ppb	99
44) Cyclohexane	4.316	41	365658	46.46	ppb	97
46) Carbontetrachloride	4.475	121	167213	47.92	ppb	94
47) 1,1-Dichloropropene	4.463	75	532677	50.00	ppb	97
49) Benzene	4.780	78	1762037	49.18	ppb	98
50) 1,2-Dichloroethane	4.786	62	526829	48.43	ppb	97
51) Iso-Butyl Alcohol	4.639	43	254891	1057.77	ppb	94
52) n-Heptane	5.328	43	424272	47.40	ppb	99
53) 1-Butanol	5.773	56	377086	2771.88	ppb	95
54) Trichloroethene	5.828	130	420559	48.46	ppb	98
55) Methylcyclohexane	6.103	55	430078	46.09	ppb	97
56) 1,2-Diclpropane	6.109	63	451018	48.80	ppb	99
57) Dibromomethane	6.255	93	217523	49.91	ppb	97
58) 1,4-Dioxane	6.316	88	57551m	985.34	ppb	
59) Methyl Methacrylate	6.328	69	226083	52.44	ppb	93
60) Bromodichloromethane	6.474	83	544940	50.92	ppb	97
61) 2-Nitropropane	6.743	41	120948	105.09	ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	216563	52.70	ppb	94
63) cis-1,3-Dichloropropene	7.023	75	673884	53.07	ppb	97
64) 4-Methyl-2-pentanone	7.212	43	291984	52.83	ppb	96
66) Toluene	7.389	91	1845581	49.96	ppb	98
67) trans-1,3-Dichloropropene	7.627	75	557858	54.50	ppb	97
68) Ethyl Methacrylate	7.767	69	467885	56.71	ppb	99
69) 1,1,2-Trichloroethane	7.810	97	323984	50.13	ppb	98
72) Tetrachloroethene	7.962	164	321606	46.76	ppb	100
73) 2-Hexanone	8.084	43	203476	53.96	ppb	99
74) 1,3-Dichloropropane	7.974	76	591305	49.33	ppb	97
75) Dibromochloromethane	8.187	129	370150	53.71	ppb	97
76) N-Butyl Acetate	8.236	43	500003	53.63	ppb	96
77) 1,2-Dibromoethane	8.285	107	316309	51.38	ppb	99
78) Chlorobenzene	8.767	112	1122450	48.45	ppb	99
79) 3-CBTF	8.785	180	564574	49.26	ppb	94
80) 4-CBTF	8.840	180	528416	51.46	ppb	99
81) 1,1,1,2-Tetrachloroethane	8.852	131	415996	51.10	ppb	96
82) Ethylbenzene	8.889	106	615664	49.88	ppb	98
83) (m+p)Xylene	8.998	106	1487671	102.56	ppb	95
84) o-Xylene	9.346	106	740250	50.01	ppb	97
85) Styrene	9.352	104	1267657	53.57	ppb	98
87) Bromoform	9.492	173	209385	55.02	ppb	98
88) 2-CBTF	9.577	180	557431	49.93	ppb	98
89) Isopropylbenzene	9.669	105	1741830	50.35	ppb	98
90) Cyclohexanone	9.718	55	530771	987.62	ppb	99
91) trans-1,4-Dichloro-2-B...	9.962	53	101239	56.13	ppb	89
92) 1,1,2,2-Tetrachloroethane	9.913	83	379084	49.40	ppb	99
93) Bromobenzene	9.907	156	470985	47.78	ppb	96
94) 1,2,3-Trichloropropane	9.943	110	111383	48.51	ppb	97
95) n-Propylbenzene	10.023	91	2010813	49.69	ppb	100
96) 2-Chlorotoluene	10.083	91	1249532	49.16	ppb	98

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

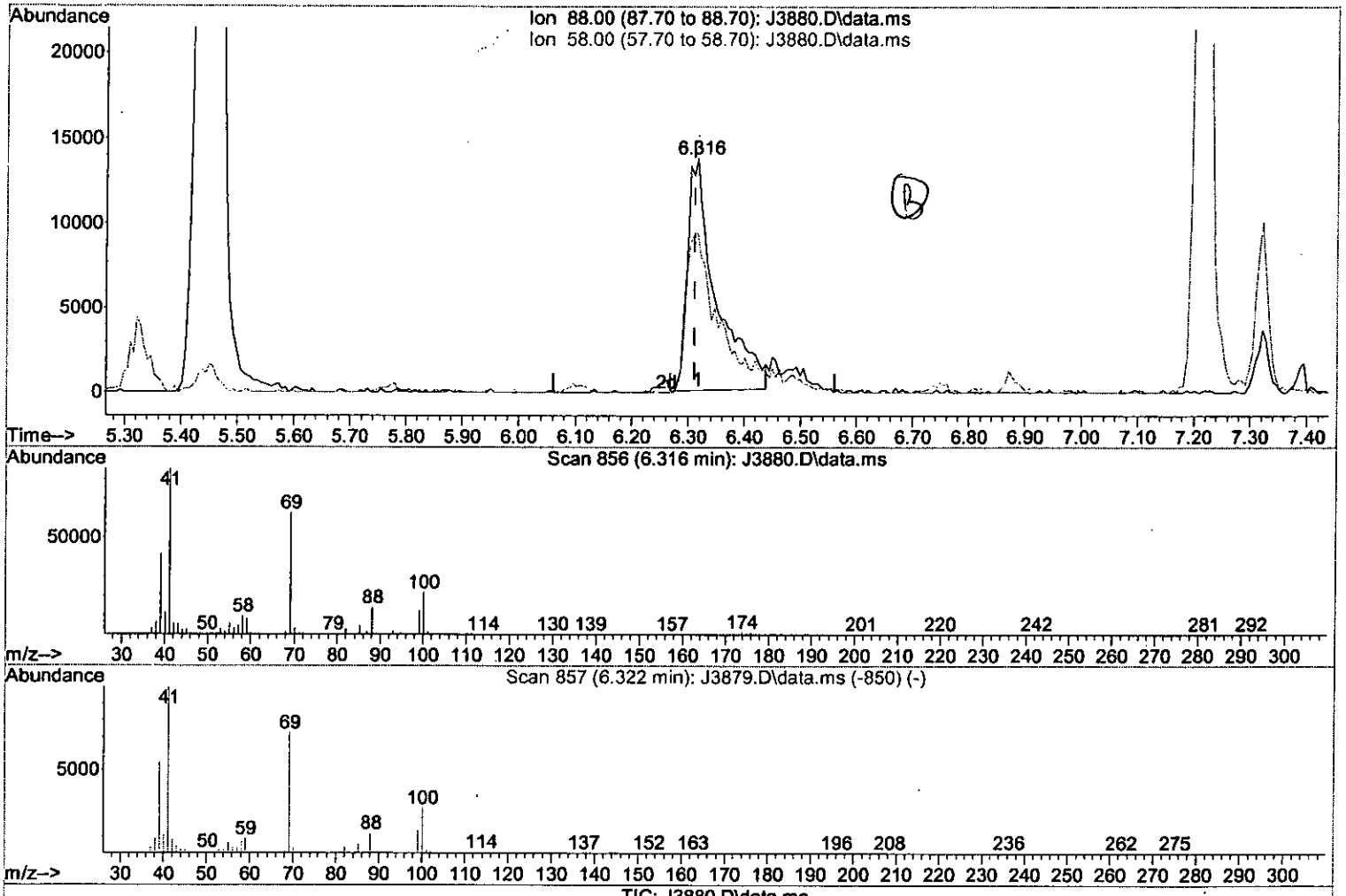
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1329412	50.29	ppb	98
98)	4-Chlorotoluene	10.169	91	1484176	49.53	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	1423846	50.45	ppb	99
100)	tert-Butylbenzene	10.437	119	1162005	48.91	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	1487149	51.22	ppb	100
102)	3,4-DCBTF	10.535	214	419830	50.85	ppb	98
103)	sec-Butylbenzene	10.620	105	1626721	49.21	ppb	99
104)	p-Isopropyltoluene	10.742	119	1412183	50.51	ppb	99
105)	1,3-Dclbenz	10.693	146	830616	49.50	ppb	98
106)	1,4-Dclbenz	10.766	146	848800	47.54	ppb	97
107)	2,4-DCBTF	10.821	214	371206	51.68	ppb	95
108)	2,5-DCBTF	10.858	214	418243	50.93	ppb	98
109)	n-Butylbenzene	11.065	91	1279244	50.75	ppb	98
110)	1,2-Dclbenz	11.065	146	803257	49.72	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	63513	54.02	ppb	96
112)	Trielution Dichlorotol...	11.729	125	2007597	157.11	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	573684	51.48	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1435061	106.06	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	485670	49.15	ppb	96
116)	Hexachlorobt	12.266	225	211082	48.95	ppb	98
117)	Naphthalen	12.303	128	946078	53.18	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	386312	47.75	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	270768	50.69	ppb	97
120)	2,3,6-Trichlorotoluene	12.912	159	254890	52.24	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:59 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



TIC: J3880.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 841.01 ppb

response 49121

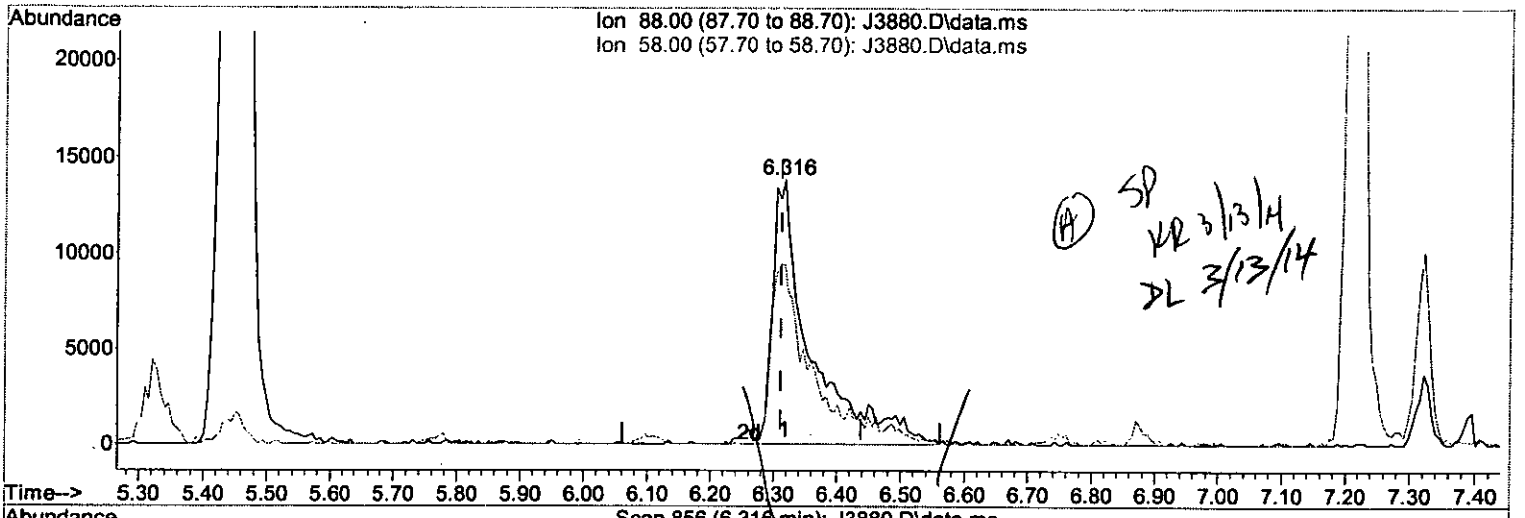
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.82
0.00	0.00	0.00
0.00	0.00	0.00

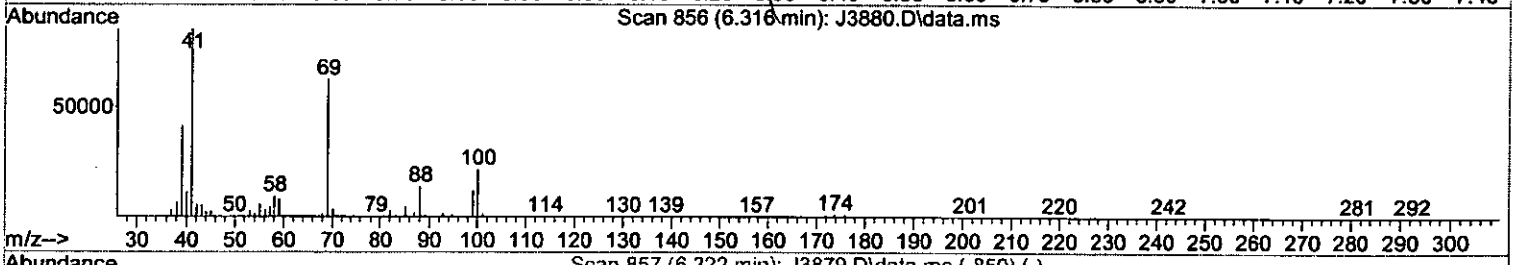
W031214.M Thu Mar 13 10:47:19 2014 Page: 1

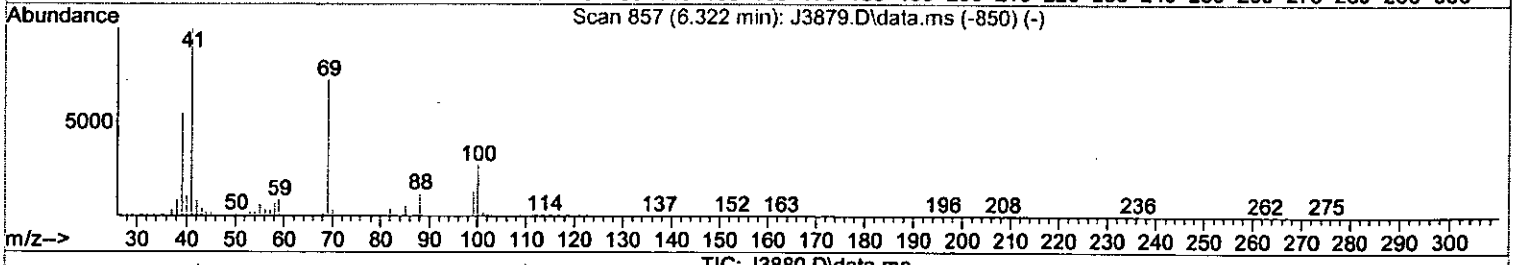
Quantitation Report (Qedit)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 09:59:59 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3880.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 985.34 ppb m

response 57551

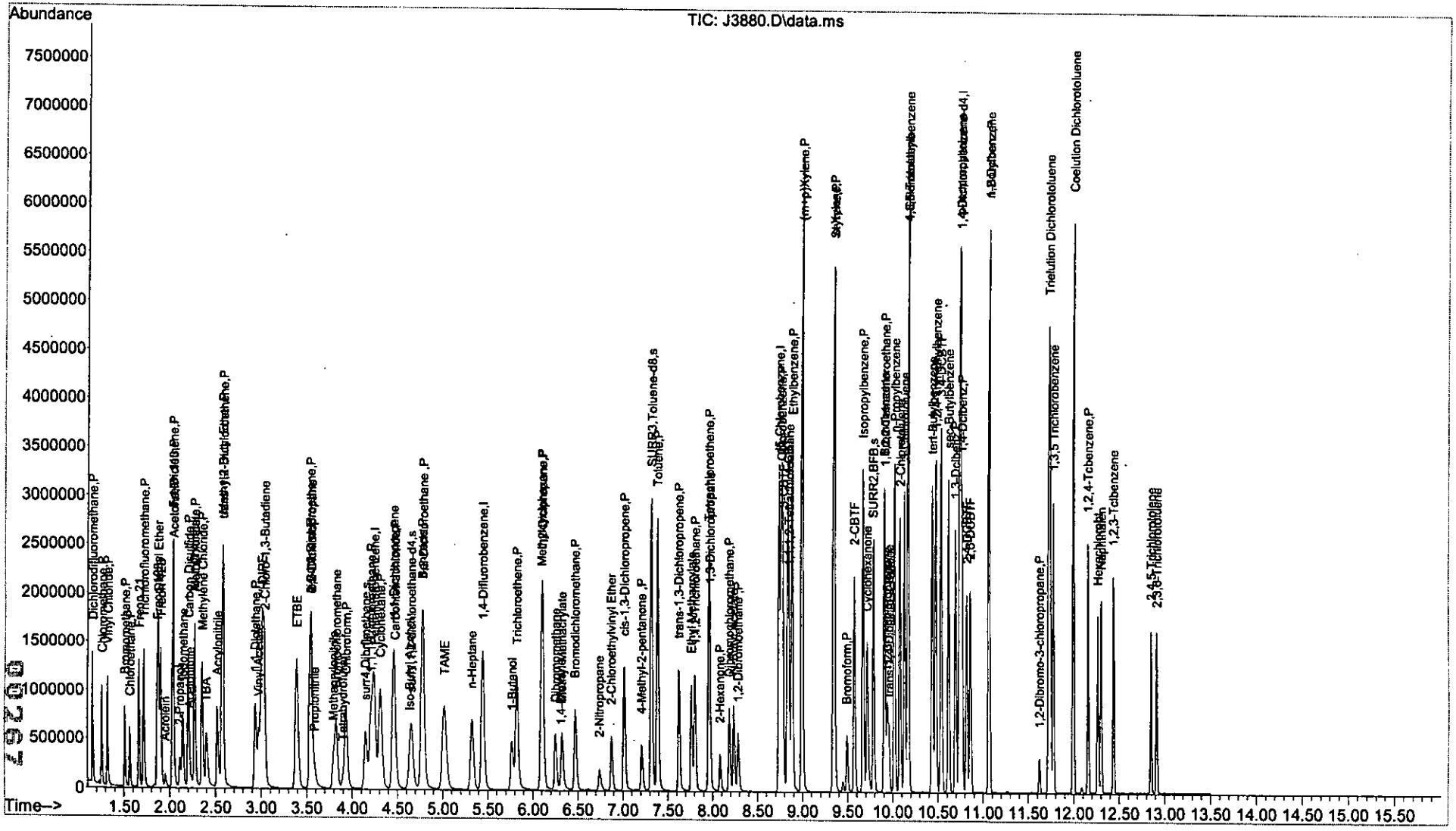
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	67.82
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:47:26 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3880.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:47:22 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	937973	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1484441	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1370021	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	701019	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	430044	50.04	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.08%				
48) surr1,1,2-dichloroetha...	4.658	65	480420	49.07	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 98.14%				
65) SURR3,Toluene-d8	7.322	98	1799950	49.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.68%				
70) SURR2,BFB	9.791	95	684103	50.78	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.56%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	1151799	103.38	ppb		98
3) Chloromethane	1.262	50	984445	101.75	ppb		98
4) Vinyl Chloride	1.323	62	910676	101.54	ppb		98
5) Bromomethane	1.512	94	519455	96.11	ppb		99
6) Chloroethane	1.567	64	513409	92.02	ppb		99
7) Freon 21	1.664	67	1302870	96.32	ppb		98
8) Trichlorofluoromethane	1.719	101	1346481	97.79	ppb		100
9) Diethyl Ether	1.878	59	651078	96.03	ppb		97
10) Freon 123a	1.872	67	966134	95.56	ppb		88
11) Freon 123	1.902	83	1112658	96.38	ppb		98
12) Acrolein	1.951	56	260329	802.83	ppb		93
13) 1,1-Diclethene	2.042	96	703538	103.36	ppb		91
14) Freon 113	2.036	101	752470	101.02	ppb		93
15) Acetone	2.042	43	187153	100.57	ppb		98
16) 2-Propanol	2.115	45	689079	2245.24	ppb		95
17) Iodomethane	2.146	142	1009536	111.66	ppb		98
18) Carbon Disulfide	2.207	76	2278103	96.23	ppb		99
19) Acetonitrile	2.219	40	167185	549.38	ppb		99
20) Allyl Chloride	2.274	76	470843	100.89	ppb		99
21) Methyl Acetate	2.274	43	413689	98.72	ppb		100
22) Methylene Chloride	2.359	84	856870	96.09	ppb		99
23) TBA	2.408	59	1129564	2171.61	ppb		99
24) Acrylonitrile	2.524	53	1072759	514.53	ppb		96
25) Methyl-t-Butyl Ether	2.579	73	2127883	98.35	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	868915	101.89	ppb		99
28) 1,1-Diclethane	2.945	63	1593999	100.42	ppb		99
29) Vinyl Acetate	2.981	86	147267	104.19	ppb	#	78
30) DIPE	3.018	45	3010668	97.38	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	1354355	99.07	ppb		98
32) ETBE	3.396	59	2608434	100.82	ppb		99
33) 2,2-Dichloropropane	3.554	77	1328467	105.49	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	962108	101.10	ppb		96
35) 2-Butanone	3.542	43	258220	99.04	ppb		96
36) Propionitrile	3.591	54	412919	565.06	ppb		94
37) Bromochloromethane	3.829	130	496052	93.36	ppb		95

KR 3/13/14

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.798	67	254231	104.67	ppb		98
39)	Tetrahydrofuran	3.908	42	173277	95.07	ppb		76
40)	Chloroform	3.938	83	1536180	98.76	ppb		96
41)	1,1,1-Trichloroethane	4.213	97	1378473	103.32	ppb		86
42)	TAME	5.023	73	2253915	103.19	ppb		99
44)	Cyclohexane	4.316	41	749224	93.33	ppb		99
46)	Carbontetrachloride	4.475	121	366099	102.86	ppb		97
47)	1,1-Dichloropropene	4.463	75	1116976	102.80	ppb		94
49)	Benzene	4.780	78	3634712	99.46	ppb		98
50)	1,2-Dichloroethane	4.786	62	1063848	95.88	ppb		95
51)	Iso-Butyl Alcohol	4.639	43	539363	2194.40	ppb		98
52)	n-Heptane	5.328	43	888766	97.34	ppb		98
53)	1-Butanol	5.767	56	809280	5832.15	ppb		99
54)	Trichloroethene	5.828	130	889519	100.49	ppb		98
55)	Methylcyclohexane	6.103	55	905575	95.15	ppb		98
56)	1,2-Diclpropane	6.115	63	924592	98.08	ppb		94
57)	Dibromomethane	6.255	93	443550	99.77	ppb		98
58)	1,4-Dioxane	6.310	88	125980m	2114.61	ppb		
59)	Methyl Methacrylate	6.328	69	467460	106.30	ppb		94
60)	Bromodichloromethane	6.480	83	1137327	104.18	ppb		97
61)	2-Nitropropane	6.749	41	259802	221.31	ppb		90
62)	2-Chloroethylvinyl Ether	6.877	63	425533	101.53	ppb		100
63)	cis-1,3-Dichloropropene	7.023	75	1400196	108.11	ppb		99
64)	4-Methyl-2-pentanone	7.212	43	583711	103.54	ppb		98
66)	Toluene	7.395	91	3748008	99.46	ppb		99
67)	trans-1,3-Dichloropropene	7.627	75	1183119	113.32	ppb		98
68)	Ethyl Methacrylate	7.767	69	978589	116.29	ppb		98
69)	1,1,2-Trichloroethane	7.809	97	656030	99.52	ppb		98
72)	Tetrachloroethene	7.962	164	687266	97.11	ppb		98
73)	2-Hexanone	8.084	43	401480	103.46	ppb		98
74)	1,3-Dichloropropane	7.974	76	1209458	98.06	ppb		98
75)	Dibromochloromethane	8.187	129	788086	111.12	ppb		98
76)	N-Butyl Acetate	8.236	43	1000972	104.33	ppb		96
77)	1,2-Dibromoethane	8.285	107	655010	103.39	ppb		98
78)	Chlorobenzene	8.767	112	2363650	99.14	ppb		99
79)	3-CBTF	8.785	180	1185107	100.49	ppb		96
80)	4-CBTF	8.840	180	1071141	101.37	ppb		98
81)	1,1,1,2-Tetrachloroethane	8.852	131	887066	105.88	ppb		97
82)	Ethylbenzene	8.889	106	1313617	103.42	ppb	#	90
83)	(m+p)Xylene	8.998	106	3142865	210.55	ppb	#	87
84)	o-Xylene	9.346	106	1572694	103.24	ppb		92
85)	Styrene	9.358	104	2671945	109.72	ppb		95
87)	Bromoform	9.492	173	461418	115.90	ppb		98
88)	2-CBTF	9.577	180	1151393	98.59	ppb		99
89)	Isopropylbenzene	9.675	105	3644119	100.68	ppb		95
90)	Cyclohexanone	9.718	55	1104912	1965.28	ppb		99
91)	trans-1,4-Dichloro-2-B...	9.961	53	209847	111.21	ppb		88
92)	1,1,2,2-Tetrachloroethane	9.913	83	772541	96.23	ppb		99
93)	Bromobenzene	9.913	156	1019396	98.85	ppb	#	85
94)	1,2,3-Trichloropropane	9.943	110	229868	95.69	ppb		99
95)	n-Propylbenzene	10.022	91	4188003	98.92	ppb		97
96)	2-Chlorotoluene	10.083	91	2652958	99.77	ppb		99

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

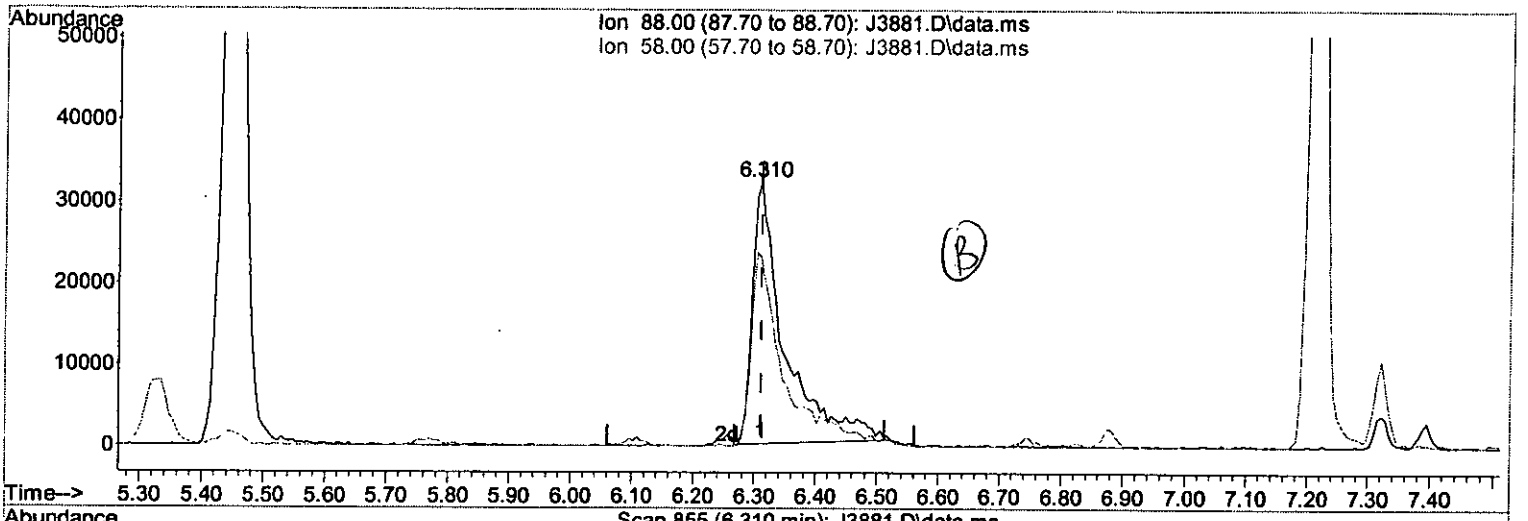
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	2690681	97.29	ppb	97
98)	4-Chlorotoluene	10.175	91	3159334	100.78	ppb	95
99)	1,3,5-Trimethylbenzene	10.175	105	3042400	103.05	ppb	95
100)	tert-Butylbenzene	10.437	119	2486489	100.05	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	3118106	102.65	ppb	97
102)	3,4-DCBTF	10.535	214	869988	100.73	ppb	97
103)	sec-Butylbenzene	10.620	105	3484191	100.74	ppb	97
104)	p-Isopropyltoluene	10.742	119	3038002	103.87	ppb	98
105)	1,3-Dclbenz	10.699	146	1804895	102.83	ppb	97
106)	1,4-Dclbenz	10.766	146	1826800	97.81	ppb	96
107)	2,4-DCBTF	10.821	214	767048	102.08	ppb	95
108)	2,5-DCBTF	10.864	214	873255	101.64	ppb	98
109)	n-Butylbenzene	11.065	91	2753475	104.42	ppb	98
110)	1,2-Dclbenz	11.065	146	1726213	102.13	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	139798	113.65	ppb	94
112)	Trielution Dichlorotol...	11.729	125	4037789	302.05	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	1149549	98.60	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	2873775	203.02	ppb	97
115)	1,2,4-Tcbenzene	12.162	180	1007657	97.49	ppb	95
116)	Hexachlorobt	12.266	225	434402	96.30	ppb	99
117)	Naphthalen	12.303	128	1968108	105.76	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	814869	96.28	ppb	99
119)	2,4,5-Trichlorotolene	12.851	159	541327	96.87	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	499889	97.93	ppb	97

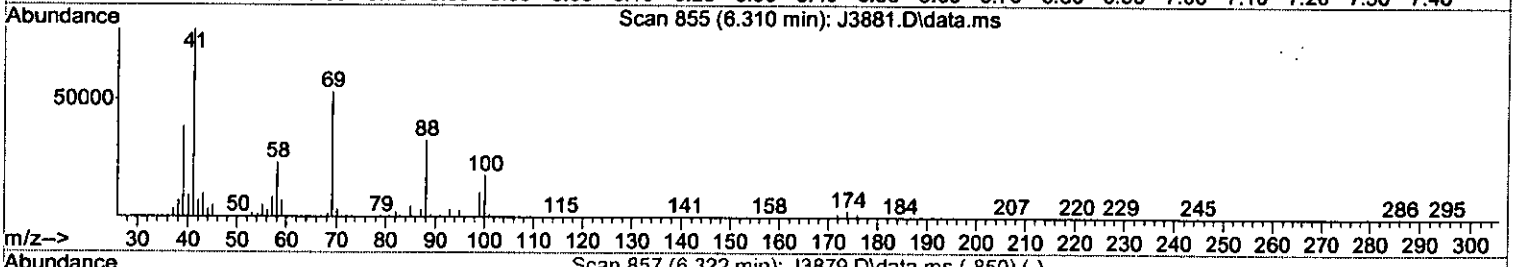
(#) = qualifier out of range (m) = manual integration (+) = signals summed

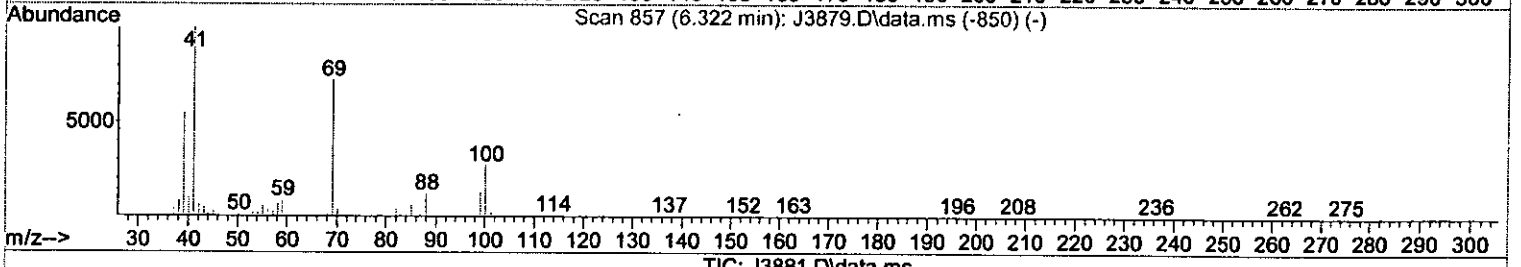
Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3881.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 1971.52 ppb

response 117455

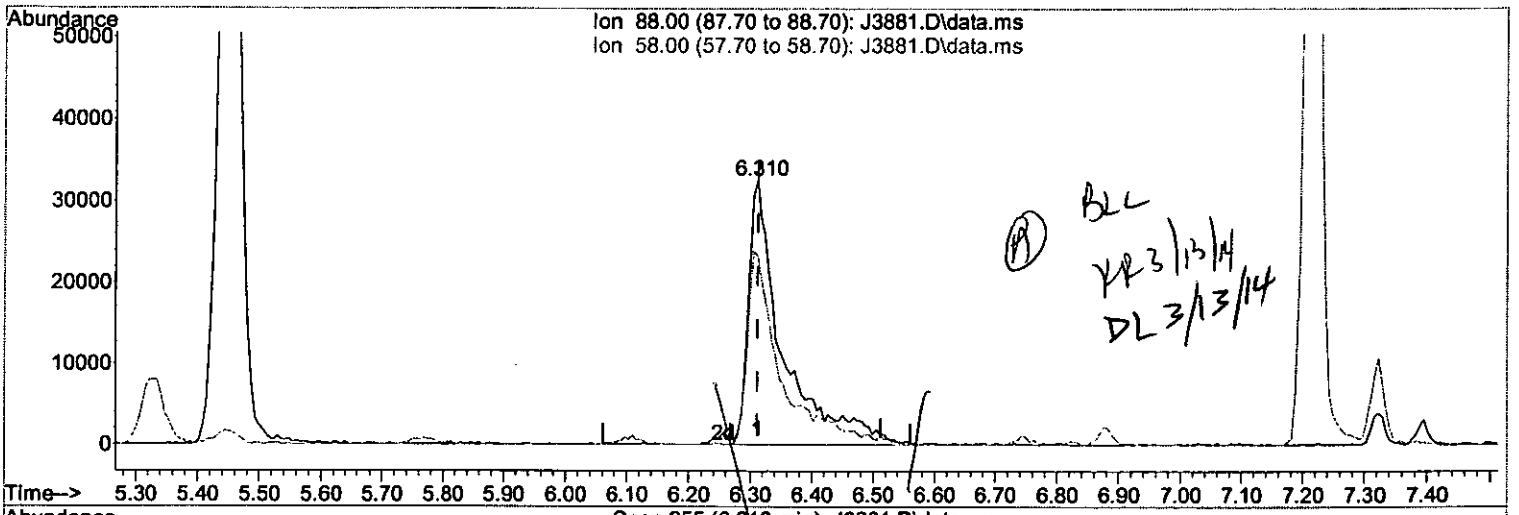
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	71.24#
0.00	0.00	0.00
0.00	0.00	0.00

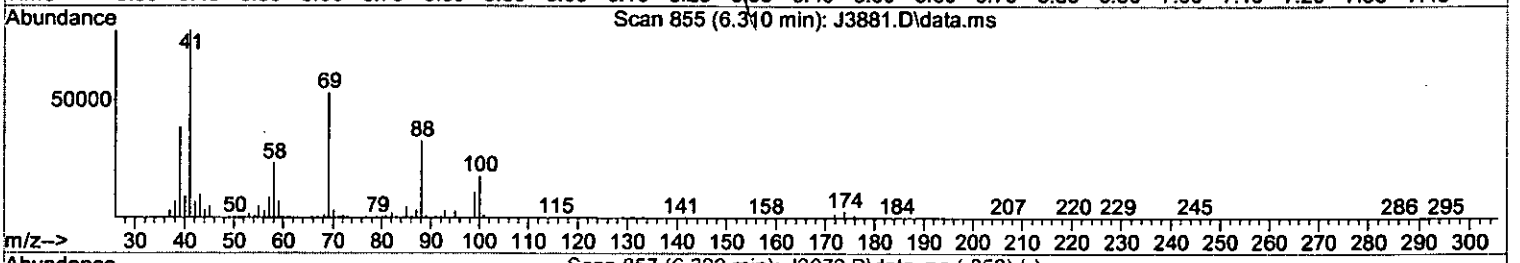
W031214.M Thu Mar 13 10:49:11 2014 Page: 1

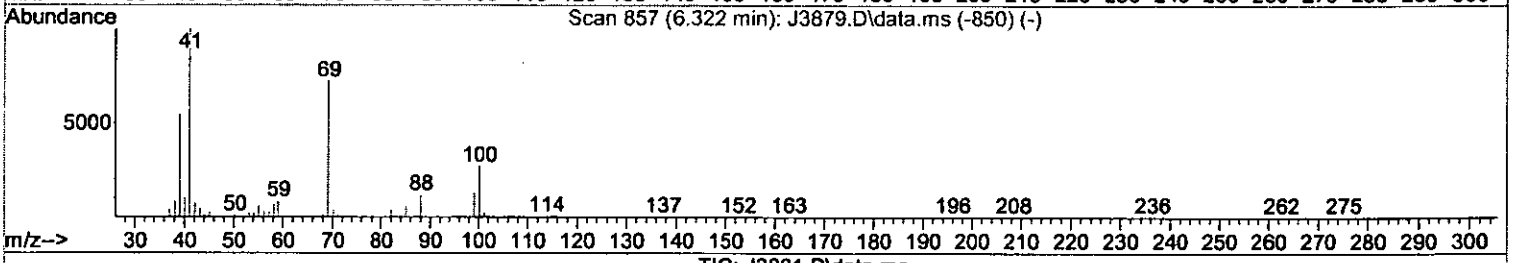
Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:04 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3881.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 2114.61 ppb m

response 125980

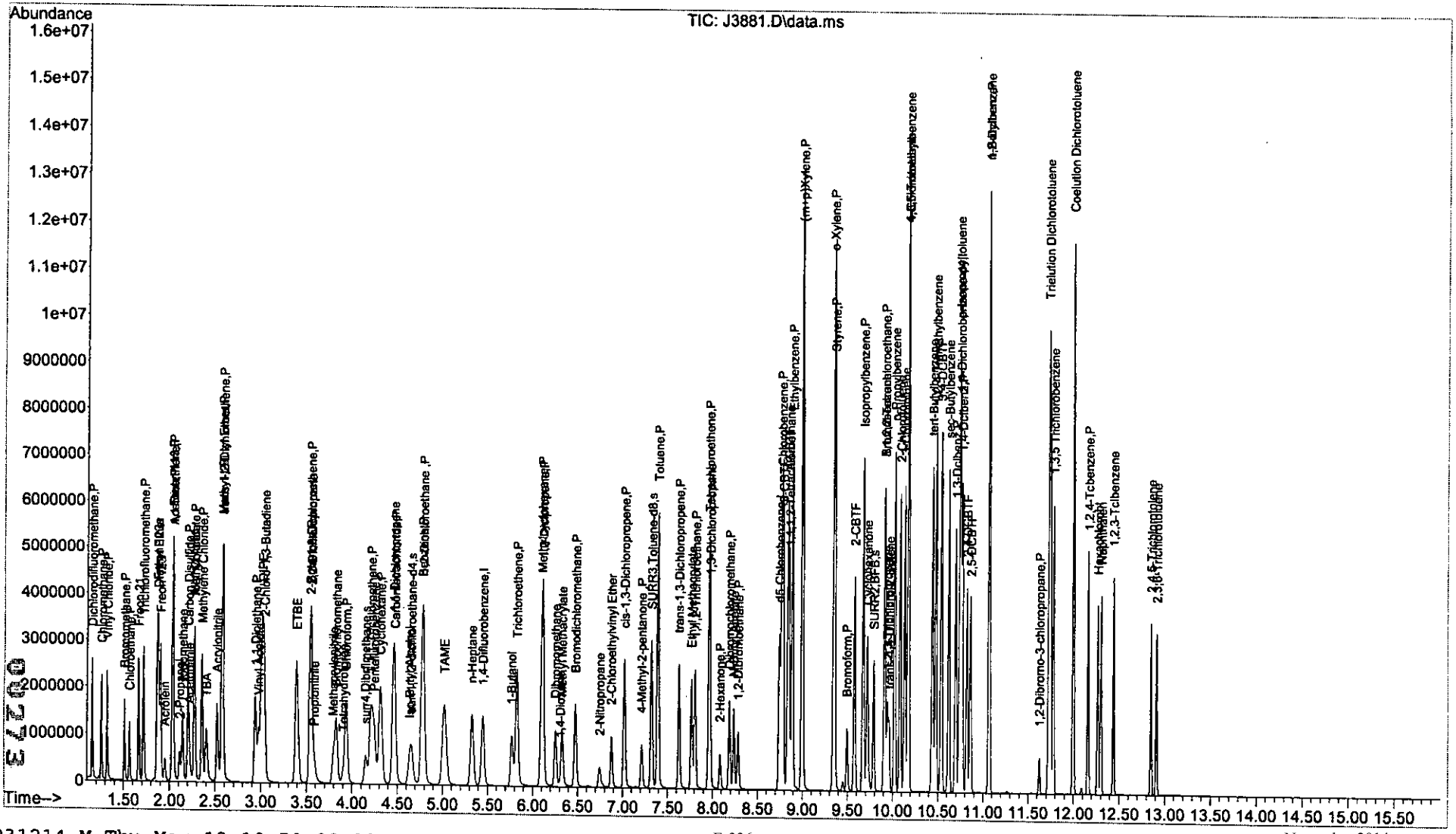
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	71.24#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:49:19 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3881.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 1:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:49:15 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:50:00 2014 Page: 4

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	979999	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1518459	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1407424	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	759863	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	441101	50.18	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.36%				
48) surr1,1,2-dichloroetha...	4.664	65	488656	48.80	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 97.60%				
65) SURR3,Toluene-d8	7.322	98	1853938	50.19	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.38%				
70) SURR2,BFB	9.791	95	709699	51.50	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	2286283	196.42	ppb		96
3) Chloromethane	1.262	50	2037500	201.56	ppb		96
4) Vinyl Chloride	1.323	62	1831559	195.46	ppb		98
5) Bromomethane	1.512	94	1116290	197.68	ppb		99
6) Chloroethane	1.567	64	1042363	178.82	ppb		100
7) Freon 21	1.664	67	2705583	191.44	ppb		96
8) Trichlorofluoromethane	1.719	101	2751491	191.27	ppb		98
9) Diethyl Ether	1.878	59	1310397	184.99	ppb		96
10) Freon 123a	1.872	67	2017900m	191.04	ppb		
11) Freon 123	1.902	83	2383673	197.61	ppb		95
12) Acrolein	1.951	56	843142	2488.67	ppb		96
13) 1,1-Diclethene	2.036	96	1444716	203.15	ppb		95
14) Freon 113	2.036	101	1541423	198.05	ppb		90
15) Acetone	2.042	43	369068	189.81	ppb		99
16) 2-Propanol	2.116	45	1449061	4519.02	ppb		95
17) Iodomethane	2.146	142	2055775	217.63	ppb		96
18) Carbon Disulfide	2.207	76	4568264	184.69	ppb		98
19) Acetonitrile	2.219	40	322471	1014.22	ppb		94
20) Allyl Chloride	2.274	76	887879	182.08	ppb		95
21) Methyl Acetate	2.274	43	848257	193.74	ppb		99
22) Methylene Chloride	2.359	84	1742532	187.03	ppb		99
23) TBA	2.408	59	2336094	4298.58	ppb		95
24) Acrylonitrile	2.524	53	2160614	991.85	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	4301170	190.27	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	1768019	198.42	ppb		96
28) 1,1-Diclethane	2.939	63	3195225	192.67	ppb		100
29) Vinyl Acetate	2.975	86	322532	218.41	ppb	#	80
30) DIPE	3.018	45	5908636	182.91	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	2848864	199.45	ppb		97
32) ETBE	3.396	59	5248916	194.19	ppb		99
33) 2,2-Dichloropropane	3.554	77	2728713	207.38	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	1971351	198.26	ppb		97
35) 2-Butanone	3.548	43	536985	197.13	ppb		97
36) Propionitrile	3.591	54	833731	1091.99	ppb		98
37) Bromochloromethane	3.829	130	1006153	181.24	ppb		94

KR 3/13/14

W031214.M Thu Mar 13 10:52:01 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.798	67	524188	206.57	ppb		97
39)	Tetrahydrofuran	3.902	42	364546	191.44	ppb		74
40)	Chloroform	3.938	83	3126159	192.36	ppb		98
41)	1,1,1-Trichloroethane	4.213	97	2833193	203.25	ppb	#	84
42)	TAME	5.023	73	4623300	202.60	ppb		99
44)	Cyclohexane	4.316	41	1591117	193.76	ppb		99
46)	Carbontetrachloride	4.469	121	768760	211.15	ppb		100
47)	1,1-Dichloropropene	4.463	75	2295867	206.56	ppb		94
49)	Benzene	4.786	78	7257077	194.13	ppb		96
50)	1,2-Dichloroethane	4.792	62	2181265	192.18	ppb		97
51)	Iso-Butyl Alcohol	4.639	43	1130810	4497.64	ppb		98
52)	n-Heptane	5.328	43	1791526	191.82	ppb		97
53)	1-Butanol	5.773	56	1716496	12092.96	ppb		100
54)	Trichloroethene	5.828	130	1855685	204.93	ppb		96
55)	Methylcyclohexane	6.109	55	1898582	195.02	ppb		96
56)	1,2-Diclpropane	6.115	63	1885412	195.53	ppb		97
57)	Dibromomethane	6.255	93	928427	204.16	ppb		97
58)	1,4-Dioxane	6.310	88	260761m	4278.89	ppb		
59)	Methyl Methacrylate	6.328	69	977496	217.30	ppb		92
60)	Bromodichloromethane	6.474	83	2367789	212.04	ppb		97
61)	2-Nitropropane	6.743	41	557263	464.07	ppb		83
62)	2-Chloroethylvinyl Ether	6.877	63	916396	213.74	ppb		100
63)	cis-1,3-Dichloropropene	7.023	75	2885488	217.79	ppb		99
64)	4-Methyl-2-pentanone	7.212	43	1217857	211.20	ppb		97
66)	Toluene	7.395	91	7245118	187.96	ppb		93
67)	trans-1,3-Dichloropropene	7.633	75	2452963	229.69	ppb		95
68)	Ethyl Methacrylate	7.767	69	2019211	234.58	ppb		100
69)	1,1,2-Trichloroethane	7.810	97	1369904	203.16	ppb		97
72)	Tetrachloroethene	7.962	164	1476158	203.04	ppb		98
73)	2-Hexanone	8.084	43	872249	218.80	ppb		99
74)	1,3-Dichloropropane	7.974	76	2487765	196.34	ppb		98
75)	Dibromochloromethane	8.188	129	1673461	229.69	ppb		99
76)	N-Butyl Acetate	8.236	43	2151476	218.28	ppb		97
77)	1,2-Dibromoethane	8.285	107	1357253	208.54	ppb		97
78)	Chlorobenzene	8.773	112	4820919	196.84	ppb		95
79)	3-CBTF	8.785	180	2511010	207.26	ppb		95
80)	4-CBTF	8.840	180	2266329	208.77	ppb		97
81)	1,1,1,2-Tetrachloroethane	8.852	131	1919375	223.01	ppb		96
82)	Ethylbenzene	8.889	106	2713368	207.95	ppb	#	70
83)	(m+p)Xylene	8.998	106	6206404	404.74	ppb	#	67
84)	o-Xylene	9.346	106	3243504	207.27	ppb	#	81
85)	Styrene	9.358	104	5349928	213.85	ppb		99
87)	Bromoform	9.498	173	1021268	236.66	ppb		99
88)	2-CBTF	9.577	180	2418474	191.05	ppb		98
89)	Isopropylbenzene	9.675	105	6913118	176.21	ppb		86
90)	Cyclohexanone	9.724	55	2390191	3922.16	ppb		97
91)	trans-1,4-Dichloro-2-B...	9.962	53	457912	223.88	ppb		86
92)	1,1,2,2-Tetrachloroethane	9.913	83	1621835	186.37	ppb		98
93)	Bromobenzene	9.913	156	2182175	195.22	ppb	#	82
94)	1,2,3-Trichloropropane	9.943	110	482217	185.19	ppb		97
95)	n-Propylbenzene	10.023	91	7682061	167.40	ppb		87
96)	2-Chlorotoluene	10.083	91	5254597	182.32	ppb		93

W031214.M Thu Mar 13 10:52:01 2014 Page: 2

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	5400136	180.14	ppb		92
98)	4-Chlorotoluene	10.175	91	6004495	176.70	ppb		84
99)	1,3,5-Trimethylbenzene	10.175	105	5961721	186.29	ppb		86
100)	tert-Butylbenzene	10.443	119	4946458	183.63	ppb		93
101)	1,2,4-Trimethylbenzene	10.480	105	6014450	182.67	ppb		88
102)	3,4-DCBTF	10.535	214	1853237	197.96	ppb		96
103)	sec-Butylbenzene	10.620	105	6557013	174.91	ppb		91
104)	p-Isopropyltoluene	10.742	119	5833378	184.01	ppb		90
105)	1,3-Dclbenz	10.699	146	3744521	196.81	ppb		96
106)	1,4-Dclbenz	10.772	146	3787265	187.07	ppb		95
107)	2,4-DCBTF	10.821	214	1588956	195.09	ppb		96
108)	2,5-DCBTF	10.864	214	1812827	194.66	ppb		98
109)	n-Butylbenzene	11.071	91	5279444	184.71	ppb		91
110)	1,2-Dclbenz	11.065	146	3657071	199.61	ppb		98
111)	1,2-Dibromo-3-chloropr...	11.626	157	292980	219.74	ppb		96
112)	Trielution Dichlorotol...	11.736	125	7827531	540.19	ppb	#	90
113)	1,3,5 Trichlorobenzene	11.778	180	2337530	184.97	ppb		99
114)	Coelution Dichlorotoluene	11.998	125	5360706	349.39	ppb	#	87
115)	1,2,4-Tcbenzene	12.162	180	2051796	183.13	ppb		94
116)	Hexachlorobt	12.266	225	888614	181.73	ppb		99
117)	Naphthalen	12.303	128	3805658	188.67	ppb		98
118)	1,2,3-Tclbenzene	12.437	180	1643433	179.15	ppb		99
119)	2,4,5-Trichlorotolene	12.851	159	1040596	171.79	ppb		97
120)	2,3,6-Trichlorotoluene	12.912	159	963982	174.22	ppb		97

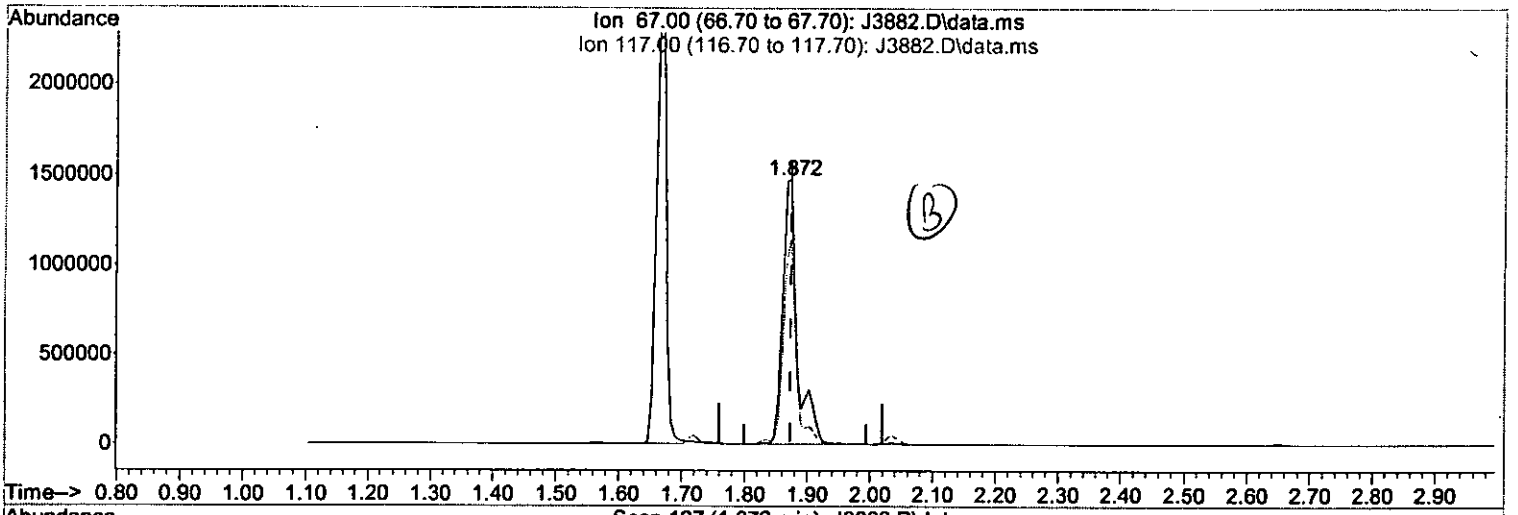
(#) = qualifier out of range (m) = manual integration (+) = signals summed

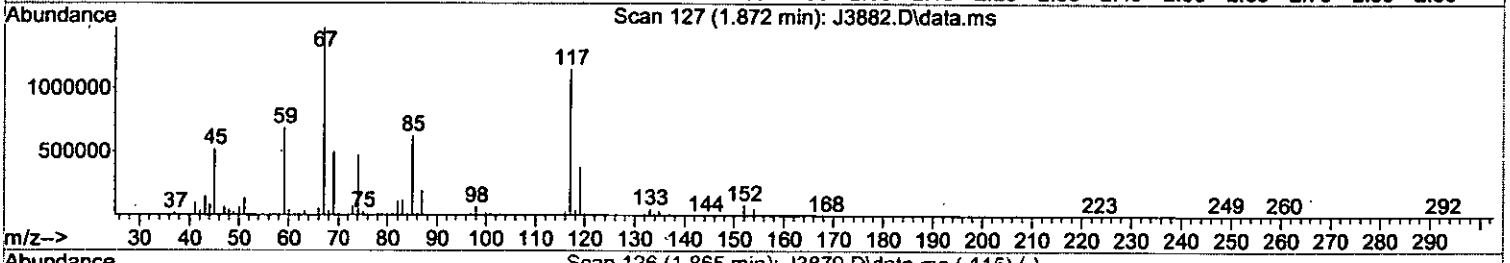
W031214.M Thu Mar 13 10:52:01 2014 Page: 3

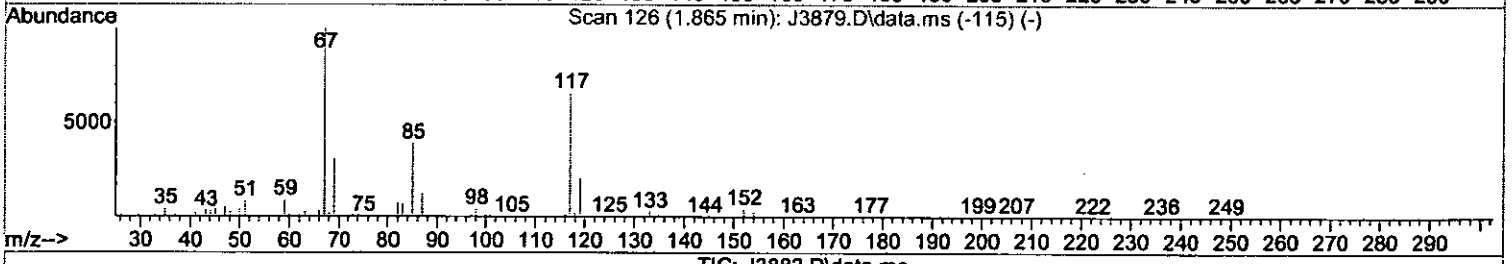
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3882.D\data.ms

(10) Freon 123a

1.872min (0.000) 225.75 ppb

response 2384527

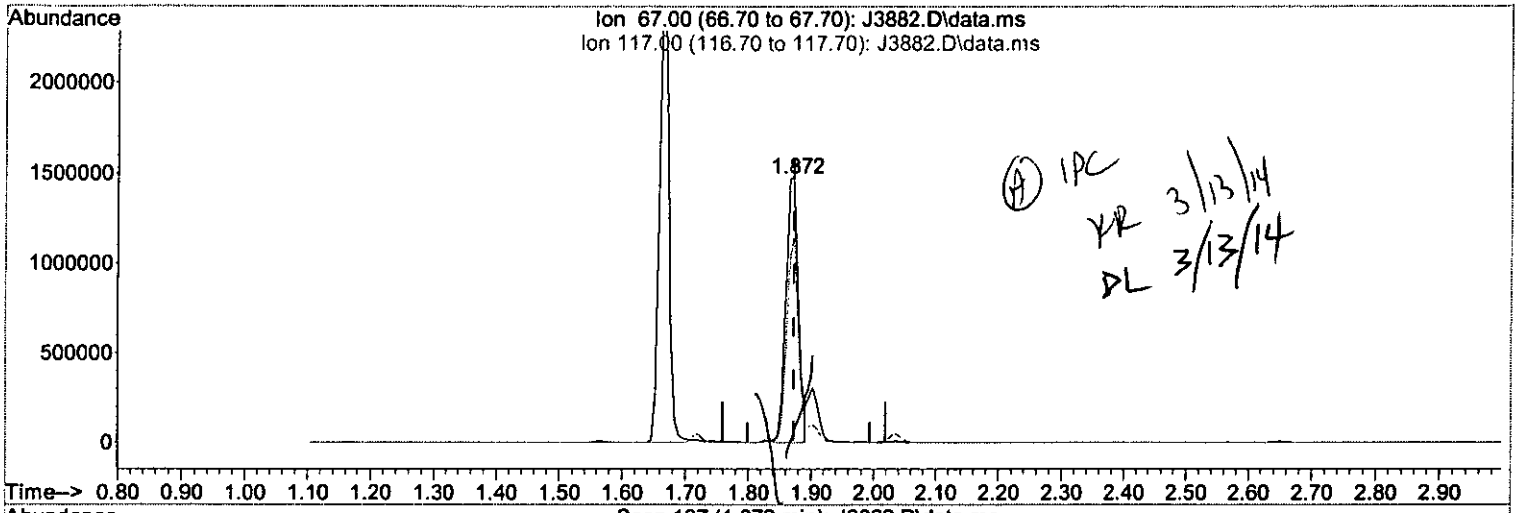
Ion	Exp%	Act%
67.00	100	100
117.00	65.90	77.87
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:50:34 2014 Page: 1

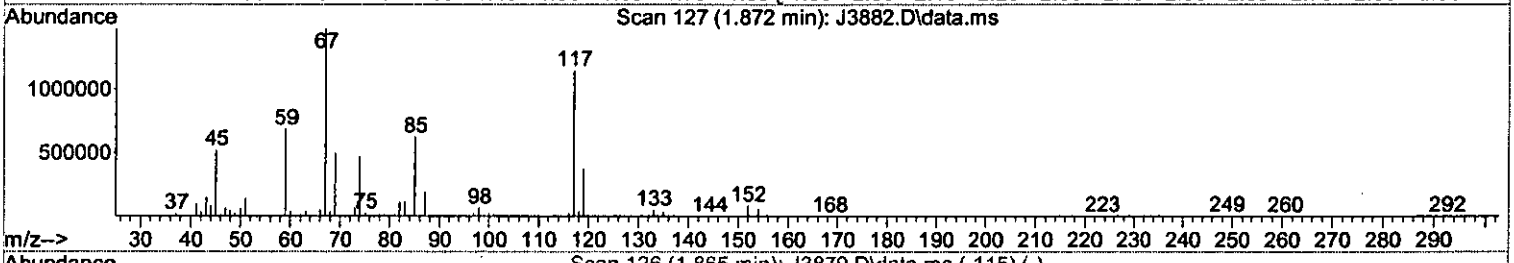
Quantitation Report (Qedit)

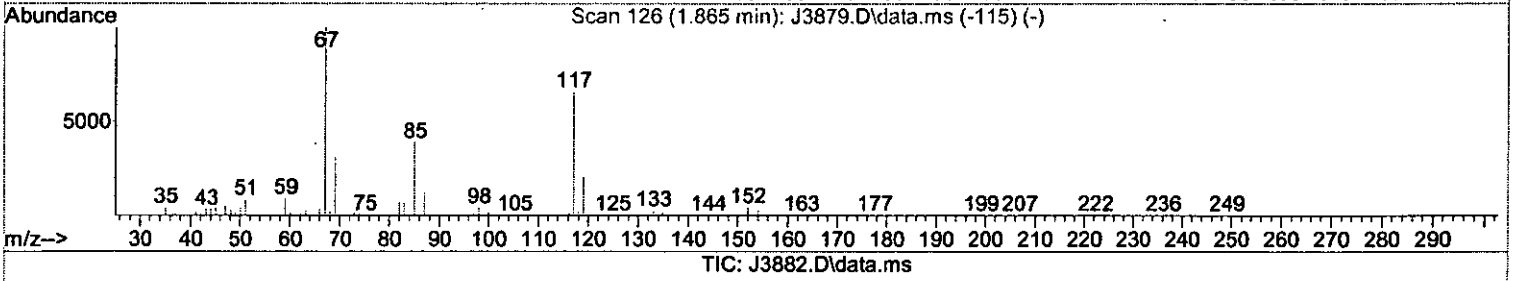
Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



(A) IPC 3/13/14
KR 3/13/14
DL 3/13/14





TIC: J3882.D\data.ms

(10) Freon 123a

1.872min (0.000) 191.04 ppb m

response 2017900

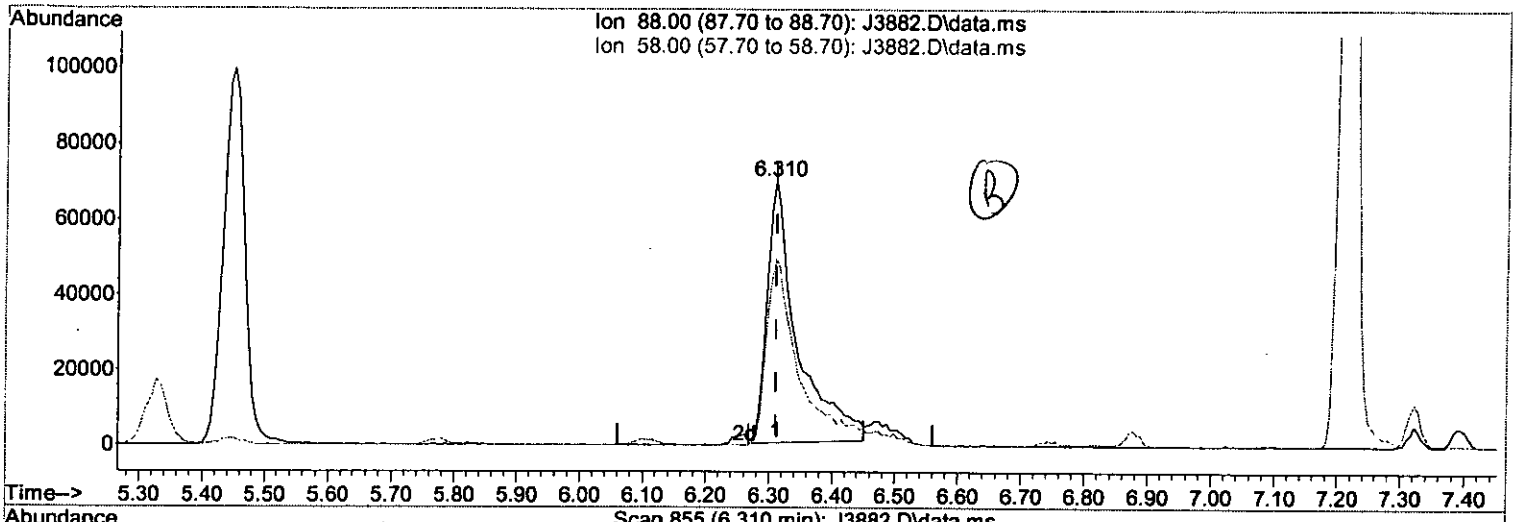
Ion	Exp%	Act%
67.00	100	100
117.00	65.90	77.87
0.00	0.00	0.00
0.00	0.00	0.00

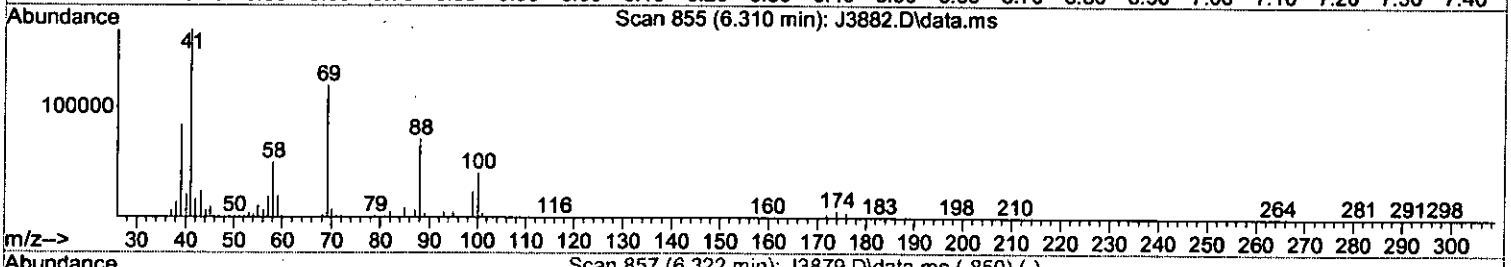
W031214.M Thu Mar 13 10:50:42 2014 Page: 1

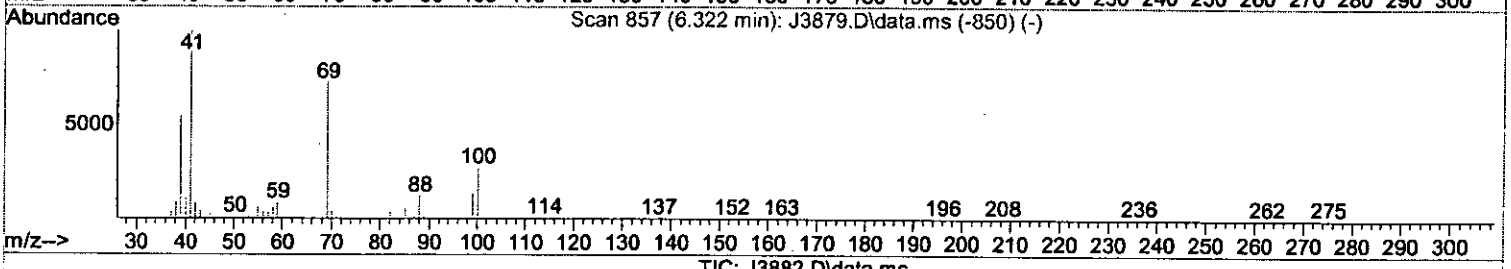
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3882.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 3786.68 ppb

response 230765

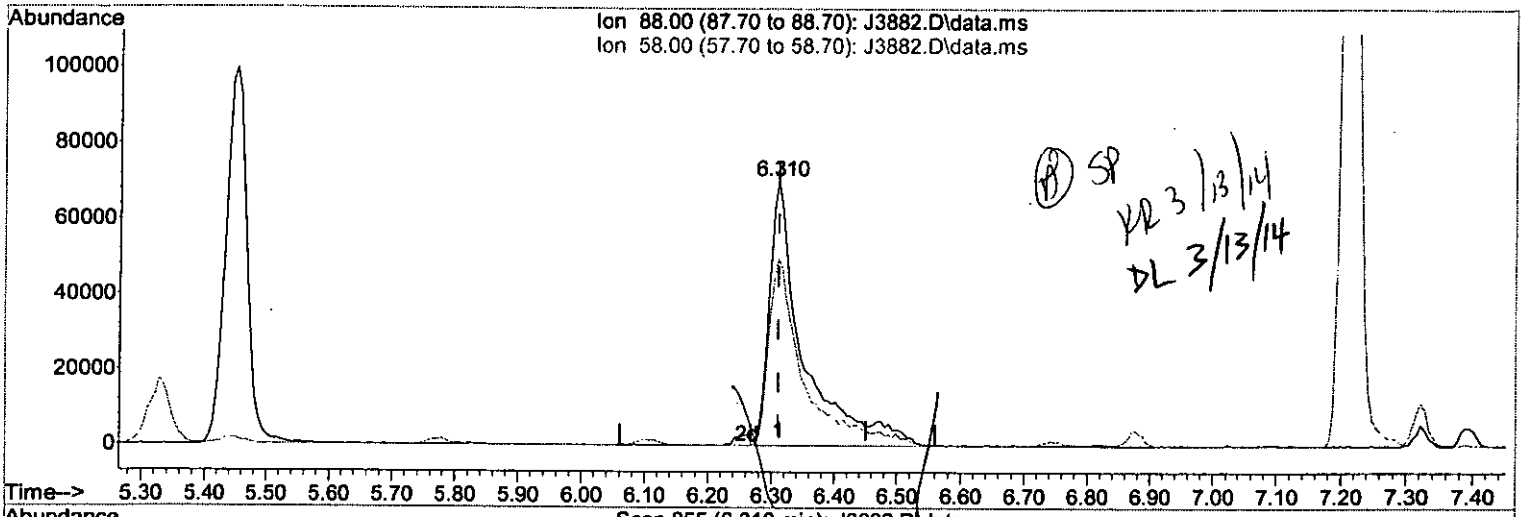
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	70.35
0.00	0.00	0.00
0.00	0.00	0.00

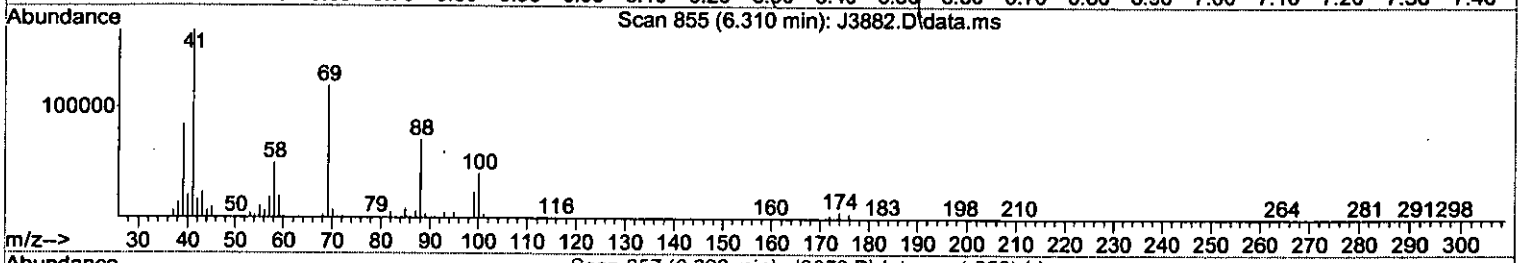
W031214.M Thu Mar 13 10:51:10 2014 Page: 1

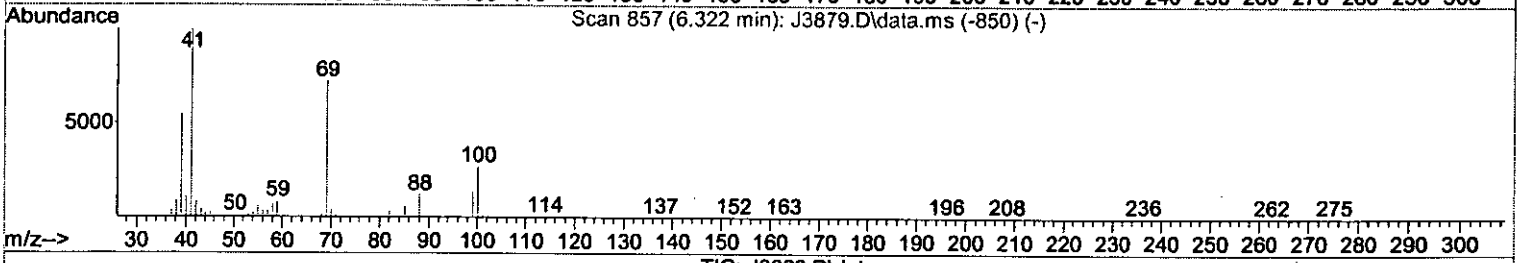
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:00:09 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration







TIC: J3882.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 4278.89 ppb m

response 260761

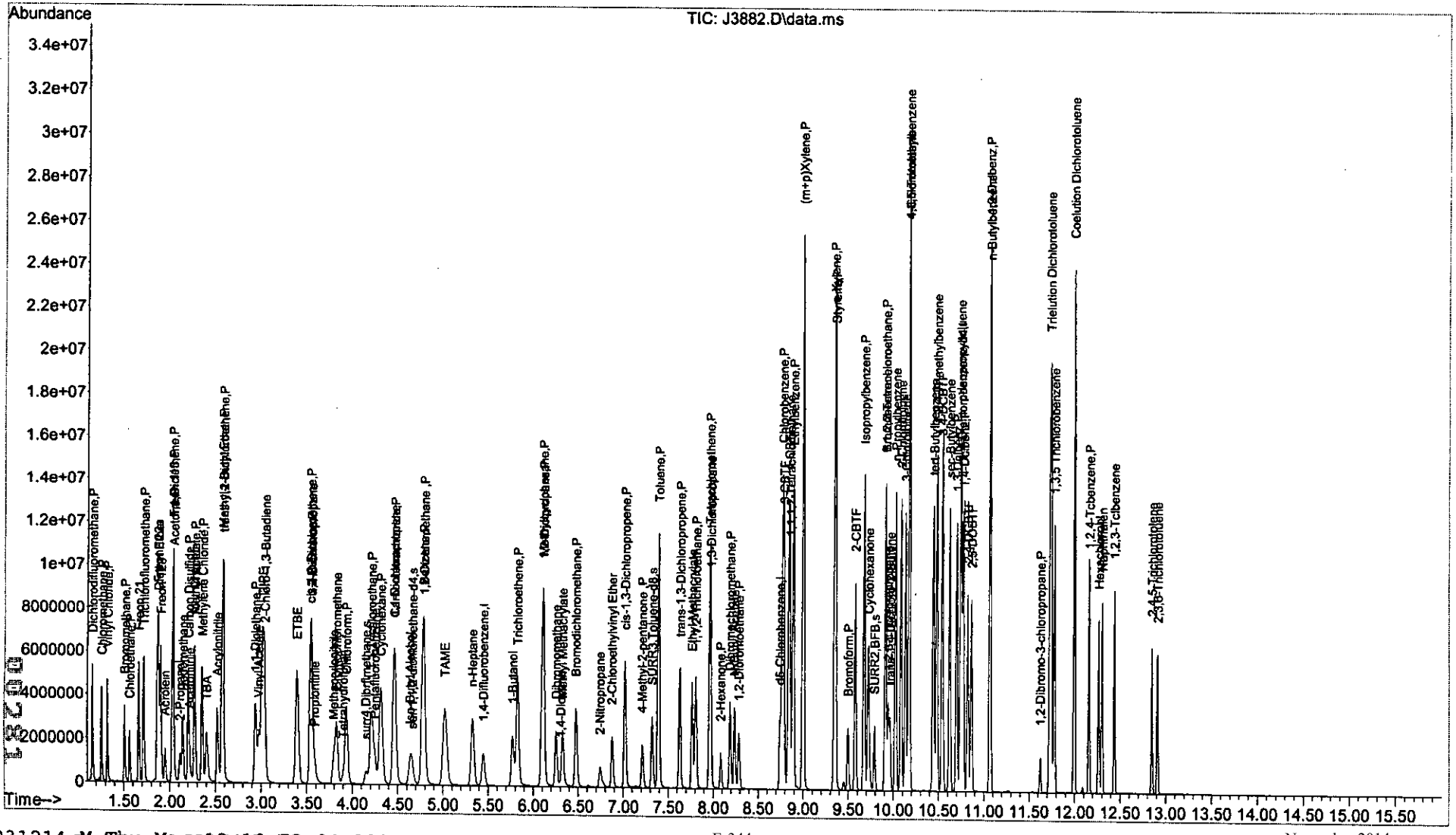
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	70.35
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 10:51:18 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\031214\J3882.D
Misc : 8260 WATER ICAL
Acq On : 12 Mar 2014 2:30 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 10:51:14 2014
QLast Update : Thu Mar 13 09:53:09 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 10:52:04 2014 Page: 4

Initial Calibration Verification Summary Report

KR 3/13/14

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
W031214 8260 waters **Column Name:** 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400023-09	T	Average RF	50	52.81	ppm	5.6	<=30
1,1,1-Trichloroethane (TCA)	RC1400023-09	T	Average RF	50	49.84	ppm	-0.3	<=30
1,1,2,2-Tetrachloroethane	RC1400023-09	T	Average RF	50	48.43	ppm	-3.1	<=30
1,1,2-Trichloroethane	RC1400023-09	T	Average RF	50	48.84	ppm	-2.3	<=30
1,1,2-Trichlorotrifluoroethane	RC1400023-09	T	Average RF	50	50.03	ppm	0.1	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400023-09	T	Average RF	50	48.94	ppm	-2.1	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400023-09	T	Average RF	50	57.52	ppm	15.0	<=30
1,1-Dichloropropene	RC1400023-09	T	Average RF	50	56.55	ppm	13.1	<=30
1,2,3-Trichlorobenzene	RC1400023-09	T	Average RF	50	50.70	ppm	1.4	<=30
1,2,3-Trichloropropane	RC1400023-09	T	Average RF	50	48.79	ppm	-2.4	<=30
1,2,4-Trichlorobenzene	RC1400023-09	T	Average RF	50	51.43	ppm	2.9	<=30
1,2,4-Trimethylbenzene	RC1400023-09	T	Average RF	50	52.17	ppm	4.3	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400023-09	T	Average RF	50	55.67	ppm	11.3	<=30
1,2-Dibromoethane	RC1400023-09	T	Average RF	50	52.14	ppm	4.3	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400023-09	T	Average RF	50	51.68	ppm	3.4	<=30
1,2-Dichlorobenzene	RC1400023-09	T	Average RF	50	50.95	ppm	1.9	<=30
1,2-Dichloroethane	RC1400023-09	T	Average RF	50	46.09	ppm	-7.8	<=30
1,2-Dichloropropane	RC1400023-09	T	Average RF	50	48.94	ppm	-2.1	<=30
1,3,5-Trichlorobenzene	RC1400023-09	T	Average RF	50	49.97	ppm	-0.1	<=30
1,3,5-Trimethylbenzene	RC1400023-09	T	Average RF	50	52.32	ppm	4.6	<=30
1,3-Dichlorobenzene	RC1400023-09	T	Average RF	50	51.41	ppm	2.8	<=30
1,3-Dichloropropane	RC1400023-09	T	Average RF	50	48.78	ppm	-2.4	<=30
1,4-Dichlorobenzene	RC1400023-09	T	Average RF	50	49.93	ppm	-0.1	<=30
1,4-Dioxane	RC1400023-09	T	Average RF	1000	938.8	ppm	-6.1	<=30
1-Butanol	RC1400023-09	T	Average RF	2500	2756	ppm	10.2	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400023-09	T	Average RF	50	51.02	ppm	2.0	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400023-09	T	Average RF	50	51.23	ppm	2.5	<=30
2,2-Dichloropropane	RC1400023-09	T	Average RF	50	53.03	ppm	6.1	<=30
2,3,6-Trichlorotoluene	RC1400023-09	T	Average RF	50	52.46	ppm	4.9	<=30
2,4,5-Trichlorotoluene	RC1400023-09	T	Average RF	50	53.89	ppm	7.8	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400023-09	T	Average RF	150	151.4	ppm	0.9	<=30
2,4-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.93	ppm	1.9	<=30
2,5-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.16	ppm	0.3	<=30
2-Butanone (MEK)	RC1400023-09	T	Average RF	50	45.55	ppm	-8.9	<=30
2-Chloro-1,3-butadiene	RC1400023-09	T	Average RF	50	49.33	ppm	-1.3	<=30
2-Chlorobenzotrifluoride	RC1400023-09	T	Average RF	50	50.08	ppm	0.2	<=30
2-Chloroethyl Vinyl Ether	RC1400023-09	T	Average RF	50	52.52	ppm	5.0	<=30
2-Chlorotoluene	RC1400023-09	T	Average RF	50	50.46	ppm	0.9	<=30
2-Hexanone	RC1400023-09	T	Average RF	50	49.41	ppm	-1.2	<=30
2-Methyl-1-propanol	RC1400023-09	T	Average RF	1000	1010	ppm	1.0	<=30
2-Methyl-2-propanol	RC1400023-09	T	Average RF	1000	978.2	ppm	-2.2	<=30
2-Nitropropane	RC1400023-09	T	Average RF	100	102.0	ppm	2.0	<=30
2-Propanol	RC1400023-09	T	Average RF	1000	1025	ppm	2.5	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400023-09	T	Average RF	100	103.6	ppm	3.6	<=30
3,4-Dichlorobenzotrifluoride	RC1400023-09	T	Average RF	50	49.78	ppm	-0.4	<=30
3-Chloro-1-propene	RC1400023-09	T	Average RF	50	50.79	ppm	1.6	<=30
3-Chlorobenzotrifluoride	RC1400023-09	T	Average RF	50	49.64	ppm	-0.7	<=30
3-Chlorotoluene	RC1400023-09	T	Average RF	50	48.80	ppm	-2.4	<=30
4-Chlorotoluene	RC1400023-09	T	Average RF	50	51.03	ppm	2.1	<=30
4-Isopropyltoluene	RC1400023-09	T	Average RF	50	53.38	ppm	6.8	<=30
4-Methyl-2-pentanone	RC1400023-09	T	Average RF	50	50.35	ppm	0.7	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400023 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400023-09	T	Average RF	50	39.48	ppm	-21.0	<=30
Acetonitrile	RC1400023-09	T	Average RF	250	225.5	ppm	-9.8	<=30
Acrolein	RC1400023-09	T	Quadratic	100	208.5	ppm	108.5	<=30
Acrylonitrile	RC1400023-09	T	Average RF	250	246.3	ppm	-1.5	<=30
Benzene	RC1400023-09	T	Average RF	50	49.93	ppm	-0.1	<=30
Bromobenzene	RC1400023-09	T	Average RF	50	49.66	ppm	-0.7	<=30
Bromochloromethane	RC1400023-09	T	Average RF	50	47.83	ppm	-4.3	<=30
Bromodichloromethane	RC1400023-09	T	Average RF	50	51.35	ppm	2.7	<=30
Bromoform	RC1400023-09	T	Average RF	50	54.02	ppm	8.0	<=30
Bromomethane	RC1400023-09	T	Average RF	50	47.24	ppm	-5.5	<=30
Carbon Disulfide	RC1400023-09	T	Average RF	50	47.03	ppm	-5.9	<=30
Carbon Tetrachloride	RC1400023-09	T	Average RF	50	50.06	ppm	0.1	<=30
Chlorobenzene	RC1400023-09	T	Average RF	50	50.84	ppm	1.7	<=30
Chloroethane	RC1400023-09	T	Average RF	50	45.68	ppm	-8.6	<=30
Chloroform	RC1400023-09	T	Average RF	50	48.21	ppm	-3.6	<=30
Chloromethane	RC1400023-09	T	Average RF	50	44.02	ppm	-12.0	<=30
Cyclohexane	RC1400023-09	T	Average RF	50	43.66	ppm	-12.7	<=30
Cyclohexanone	RC1400023-09	T	Average RF	1000	614.2	ppm	-38.6	<=30
Dibromochloromethane	RC1400023-09	T	Average RF	50	53.83	ppm	7.7	<=30
Dibromomethane	RC1400023-09	T	Average RF	50	49.61	ppm	-0.8	<=30
Dichlorodifluoromethane (CFC 12)	RC1400023-09	T	Average RF	50	38.90	ppm	-22.2	<=30
Dichlorofluoromethane (CFC 21)	RC1400023-09	T	Average RF	50	48.36	ppm	-3.3	<=30
Dichloromethane	RC1400023-09	T	Average RF	50	48.52	ppm	-3.0	<=30
Diethyl Ether	RC1400023-09	T	Average RF	50	49.25	ppm	-1.5	<=30
Diisopropyl Ether	RC1400023-09	T	Average RF	50	45.55	ppm	-8.9	<=30
Ethyl Methacrylate	RC1400023-09	T	Average RF	50	54.92	ppm	9.8	<=30
Ethyl tert-Butyl Ether	RC1400023-09	T	Average RF	50	47.03	ppm	-5.9	<=30
Ethylbenzene	RC1400023-09	T	Average RF	50	51.98	ppm	4.0	<=30
Hexachlorobutadiene	RC1400023-09	T	Average RF	50	52.06	ppm	4.1	<=30
Iodomethane	RC1400023-09	T	Average RF	50	55.23	ppm	10.5	<=30
Isopropylbenzene (Cumene)	RC1400023-09	T	Average RF	50	52.49	ppm	5.0	<=30
Methacrylonitrile	RC1400023-09	T	Average RF	50	49.67	ppm	-0.7	<=30
Methyl Acetate	RC1400023-09	T	Average RF	50	48.18	ppm	-3.6	<=30
Methyl Methacrylate	RC1400023-09	T	Average RF	50	50.68	ppm	1.4	<=30
Methyl tert-Butyl Ether	RC1400023-09	T	Average RF	50	49.16	ppm	-1.7	<=30
Methylcyclohexane	RC1400023-09	T	Average RF	50	44.63	ppm	-10.7	<=30
Naphthalene	RC1400023-09	T	Average RF	50	56.07	ppm	12.1	<=30
Propionitrile	RC1400023-09	T	Average RF	250	258.3	ppm	3.3	<=30
Styrene	RC1400023-09	T	Average RF	50	55.20	ppm	10.4	<=30
Tetrachloroethene (PCE)	RC1400023-09	T	Average RF	50	50.19	ppm	0.4	<=30
Tetrahydrofuran (THF)	RC1400023-09	T	Average RF	50	46.06	ppm	-7.9	<=30
Toluene	RC1400023-09	T	Average RF	50	50.32	ppm	0.6	<=30
Trichloroethene (TCE)	RC1400023-09	T	Average RF	50	51.42	ppm	2.8	<=30
Trichlorofluoromethane (CFC 11)	RC1400023-09	T	Average RF	50	45.53	ppm	-8.9	<=30
Vinyl Acetate	RC1400023-09	T	Average RF	50	47.09	ppm	-5.8	<=30
Vinyl Chloride	RC1400023-09	T	Average RF	50	46.08	ppm	-7.8	<=30
cis-1,2-Dichloroethene	RC1400023-09	T	Average RF	50	50.33	ppm	0.7	<=30
cis-1,3-Dichloropropene	RC1400023-09	T	Average RF	50	50.69	ppm	1.4	<=30
m,p-Xylenes	RC1400023-09	T	Average RF	100	107.8	ppm	7.8	<=30
n-Butyl Acetate	RC1400023-09	T	Average RF	50	52.20	ppm	4.4	<=30
n-Butylbenzene	RC1400023-09	T	Average RF	50	53.27	ppm	6.5	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400023	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400023-09	T	Average RF	50	47.14	ppm	-5.7	<=30
n-Propylbenzene	RC1400023-09	T	Average RF	50	51.09	ppm	2.2	<=30
o-Xylene	RC1400023-09	T	Average RF	50	52.18	ppm	4.4	<=30
sec-Butylbenzene	RC1400023-09	T	Average RF	50	51.80	ppm	3.6	<=30
tert-Amyl Methyl Ether	RC1400023-09	T	Average RF	50	49.25	ppm	-1.5	<=30
tert-Butylbenzene	RC1400023-09	T	Average RF	50	50.94	ppm	1.9	<=30
trans-1,2-Dichloroethene	RC1400023-09	T	Average RF	50	51.22	ppm	2.4	<=30
trans-1,3-Dichloropropene	RC1400023-09	T	Average RF	50	53.39	ppm	6.8	<=30
trans-1,4-Dichloro-2-butene	RC1400023-09	T	Average RF	50	50.06	ppm	0.1	<=30
1,2-Dichloroethane-d4	RC1400023-09	S	Average RF	50	47.74	ppm	-4.5	<=30
4-Bromofluorobenzene	RC1400023-09	S	Average RF	50	50.03	ppm	0.1	<=30
Dibromofluoromethane	RC1400023-09	S	Average RF	50	50.20	ppm	0.4	<=30
Toluene-d8	RC1400023-09	S	Average RF	50	49.47	ppm	-1.1	<=30

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Acrolein	Percent Difference	<= 30	108.48
Cyclohexanone	Percent Difference	<= 30	-38.58

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	929881	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1444154	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1310348	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	668032	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419672	50.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.40%				
48) surr1,1,2-dichloroetha...	4.658	65	454641	47.74	ppb		0.00
Spiked Amount 50.000	Range 65 - 130		Recovery = 95.48%				
65) SURR3,Toluene-d8	7.322	98	1737832	49.47	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.94%				
70) SURR2,BFB	9.785	95	655712	50.03	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	429607	38.90	ppb		99
3) Chloromethane	1.262	50	421317	44.02	ppb		97
4) Vinyl Chloride	1.323	62	409710	46.08	ppb		99
5) Bromomethane	1.512	94	253110	47.24	ppb		100
6) Chloroethane	1.567	64	242226	45.68	ppb		100
7) Freon 21	1.664	67	648556	48.36	ppb		99
8) Trichlorofluoromethane	1.719	101	621513	45.53	ppb		100
9) Diethyl Ether	1.878	59	331013	49.25	ppb		95
10) Freon 123a	1.866	67	517883	51.68	ppb		97
11) Freon 123	1.902	83	586378	51.23	ppb		97
12) Acrolein	1.951	56	55280	208.48	ppb		86
13) 1,1-Diclethene	2.036	96	388120	57.52	ppb		94
14) Freon 113	2.036	101	369435	50.03	ppb		94
15) Acetone	2.042	43	72835	39.48	ppb		96
16) 2-Propanol	2.109	45	306969	1025.29	ppb		98
17) Iodomethane	2.146	142	495062	55.23	ppb		95
18) Carbon Disulfide	2.207	76	1103871	47.03	ppb		99
19) Acetonitrile	2.225	40	68032	225.50	ppb		97
20) Allyl Chloride	2.274	76	234992	50.79	ppb		98
21) Methyl Acetate	2.274	43	200165	48.18	ppb		99
22) Methylene Chloride	2.353	84	428950	48.52	ppb		97
23) TBA	2.402	59	504436	978.23	ppb		98
24) Acrylonitrile	2.524	53	509123	246.31	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	1054535	49.16	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	433069	51.22	ppb		97
28) 1,1-Diclethane	2.938	63	770101	48.94	ppb		99
29) Vinyl Acetate	2.975	86	65986	47.09	ppb	#	71
30) DIPE	3.012	45	1396139	45.55	ppb		98
31) 2-Chloro-1,3-Butadiene	3.036	53	668588	49.33	ppb		95
32) ETBE	3.396	59	1206134	47.03	ppb		98
33) 2,2-Dichloropropane	3.554	77	662135	53.03	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	474863	50.33	ppb		97
35) 2-Butanone	3.548	43	117744	45.55	ppb		98
36) Propionitrile	3.591	54	192749	258.26	ppb		100
37) Bromochloromethane	3.829	130	251979	47.83	ppb		89

3/13/14

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	119599	49.67	ppb	98
39) Tetrahydrofuran	3.902	42	83220	46.06	ppb	78
40) Chloroform	3.938	83	743487	48.21	ppb	95
41) 1,1,1-Trichloroethane	4.213	97	659281	49.84	ppb	90
42) TAME	5.017	73	1066399	49.25	ppb	100
44) Cyclohexane	4.316	41	341159	43.66	ppb	98
46) Carbontetrachloride	4.469	121	173353	50.06	ppb	97
47) 1,1-Dichloropropene	4.463	75	603211	56.55	ppb	93
49) Benzene	4.780	78	1775123	49.93	ppb	100
50) 1,2-Dichloroethane	4.786	62	497561	46.09	ppb	96
51) Iso-Butyl Alcohol	4.639	43	246703	1009.81	ppb	98
52) n-Heptane	5.328	43	418693	47.14	ppb	98
53) 1-Butanol	5.767	56	369742	2755.71	ppb	98
54) Trichloroethene	5.828	130	442862	51.42	ppb	96
55) Methylcyclohexane	6.103	55	413194	44.63	ppb	96
56) 1,2-Diclpropane	6.115	63	444936	48.94	ppb	96
57) Dibromomethane	6.255	93	214572	49.61	ppb	97
58) 1,4-Dioxane	6.310	88	55901m	938.84	ppb	
59) Methyl Methacrylate	6.328	69	216807	50.68	ppb	99
60) Bromodichloromethane	6.474	83	545381	51.35	ppb	98
61) 2-Nitropropane	6.743	41	116523	102.03	ppb	89
62) 2-Chloroethylvinyl Ether	6.877	63	214137	52.52	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	638673	50.69	ppb	98
64) 4-Methyl-2-pentanone	7.212	43	276149	50.35	ppb	96
66) Toluene	7.395	91	1844775	50.32	ppb	98
67) trans-1,3-Dichloropropene	7.627	75	542305	53.39	ppb	96
68) Ethyl Methacrylate	7.767	69	453829	54.92	ppb	98
69) 1,1,2-Trichloroethane	7.809	97	313249	48.84	ppb	98
72) Tetrachloroethene	7.962	164	339703	50.19	ppb	100
73) 2-Hexanone	8.084	43	183408	49.41	ppb	96
74) 1,3-Dichloropropane	7.968	76	575463	48.78	ppb	100
75) Dibromochloromethane	8.187	129	365103	53.83	ppb	96
76) N-Butyl Acetate	8.236	43	479039	52.20	ppb	97
77) 1,2-Dibromoethane	8.285	107	315951	52.14	ppb	97
78) Chlorobenzene	8.767	112	1159324	50.84	ppb	96
79) 3-CBTF	8.785	180	559968	49.64	ppb	98
80) 4-CBTF	8.840	180	515676	51.02	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.846	131	423150	52.81	ppb	97
82) Ethylbenzene	8.889	106	631469	51.98	ppb	96
83) (m+p)Xylene	8.998	106	1538701	107.78	ppb	93
84) o-Xylene	9.346	106	760185	52.18	ppb	94
85) Styrene	9.352	104	1285835	55.20	ppb	97
87) Bromoform	9.492	173	204953	54.02	ppb	97
88) 2-CBTF	9.577	180	557312	50.08	ppb	96
89) Isopropylbenzene	9.669	105	1810564	52.49	ppb	98
90) Cyclohexanone	9.718	55	329122	614.21	ppb	98
91) trans-1,4-Dichloro-2-B...	9.961	53	90008	50.06	ppb	80
92) 1,1,2,2-Tetrachloroethane	9.913	83	370514	48.43	ppb	99
93) Bromobenzene	9.907	156	488033	49.66	ppb	97
94) 1,2,3-Trichloropropane	9.943	110	111696	48.79	ppb	97
95) n-Propylbenzene	10.022	91	2061187	51.09	ppb	99
96) 2-Chlorotoluene	10.077	91	1278494	50.46	ppb	97

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration

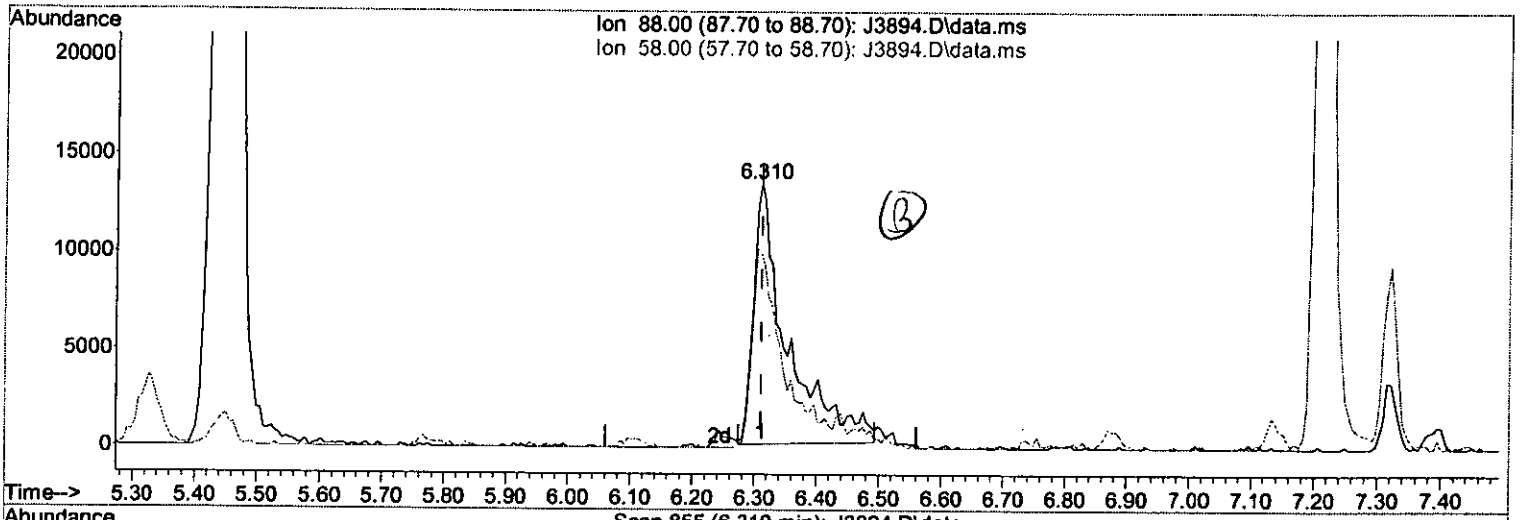
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1285999	48.80	ppb	98
98)	4-Chlorotoluene	10.169	91	1524341	51.03	ppb	99
99)	1,3,5-Trimethylbenzene	10.169	105	1471871	52.32	ppb	98
100)	tert-Butylbenzene	10.437	119	1206430	50.94	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	1510183	52.17	ppb	98
102)	3,4-DCBTF	10.535	214	409731	49.78	ppb	96
103)	sec-Butylbenzene	10.620	105	1707185	51.80	ppb	98
104)	p-Isopropyltoluene	10.742	119	1487810	53.38	ppb	98
105)	1,3-Dclbenz	10.693	146	859962	51.41	ppb	98
106)	1,4-Dclbenz	10.766	146	888598	49.93	ppb	98
107)	2,4-DCBTF	10.821	214	364683	50.93	ppb	96
108)	2,5-DCBTF	10.864	214	410704	50.16	ppb	97
109)	n-Butylbenzene	11.065	91	1338607	53.27	ppb	99
110)	1,2-Dclbenz	11.065	146	820587	50.95	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	65258	55.67	ppb	96
112)	Trielution Dichlorotol...	11.729	125	1928109	151.35	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	555108	49.97	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1397381	103.59	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	506622	51.43	ppb	99
116)	Hexachlorobt	12.266	225	223796	52.06	ppb	97
117)	Naphthalen	12.303	128	994268	56.07	ppb	97
118)	1,2,3-Tclbenzene	12.437	180	408897	50.70	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	286396	53.89	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	255170	52.46	ppb	98

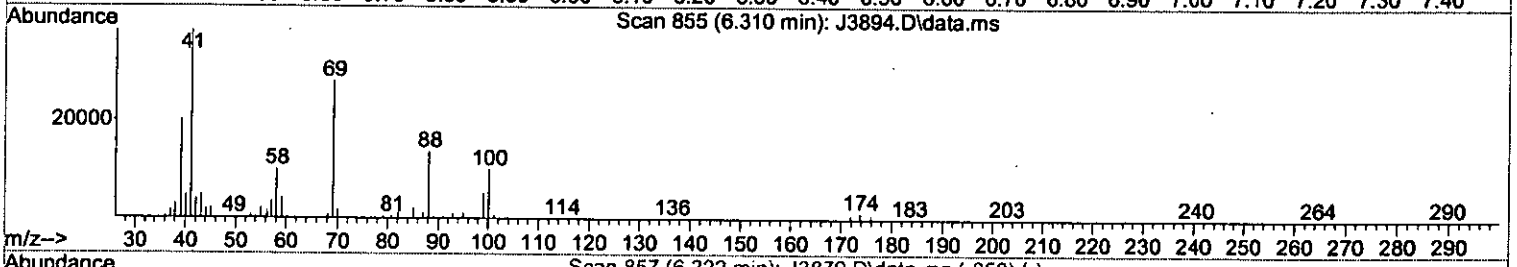
(#) = qualifier out of range (m) = manual integration (+) = signals summed

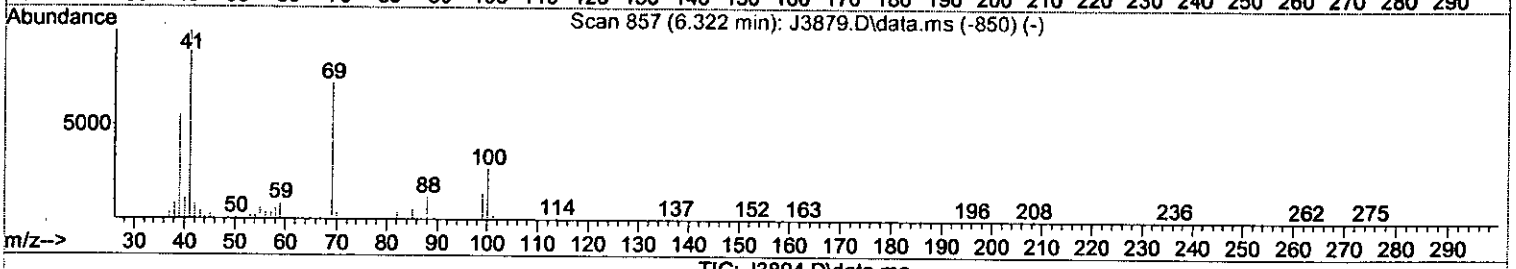
Quantitation Report (Qedit)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:12:46 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration







TIC: J3894.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 853.79 ppb

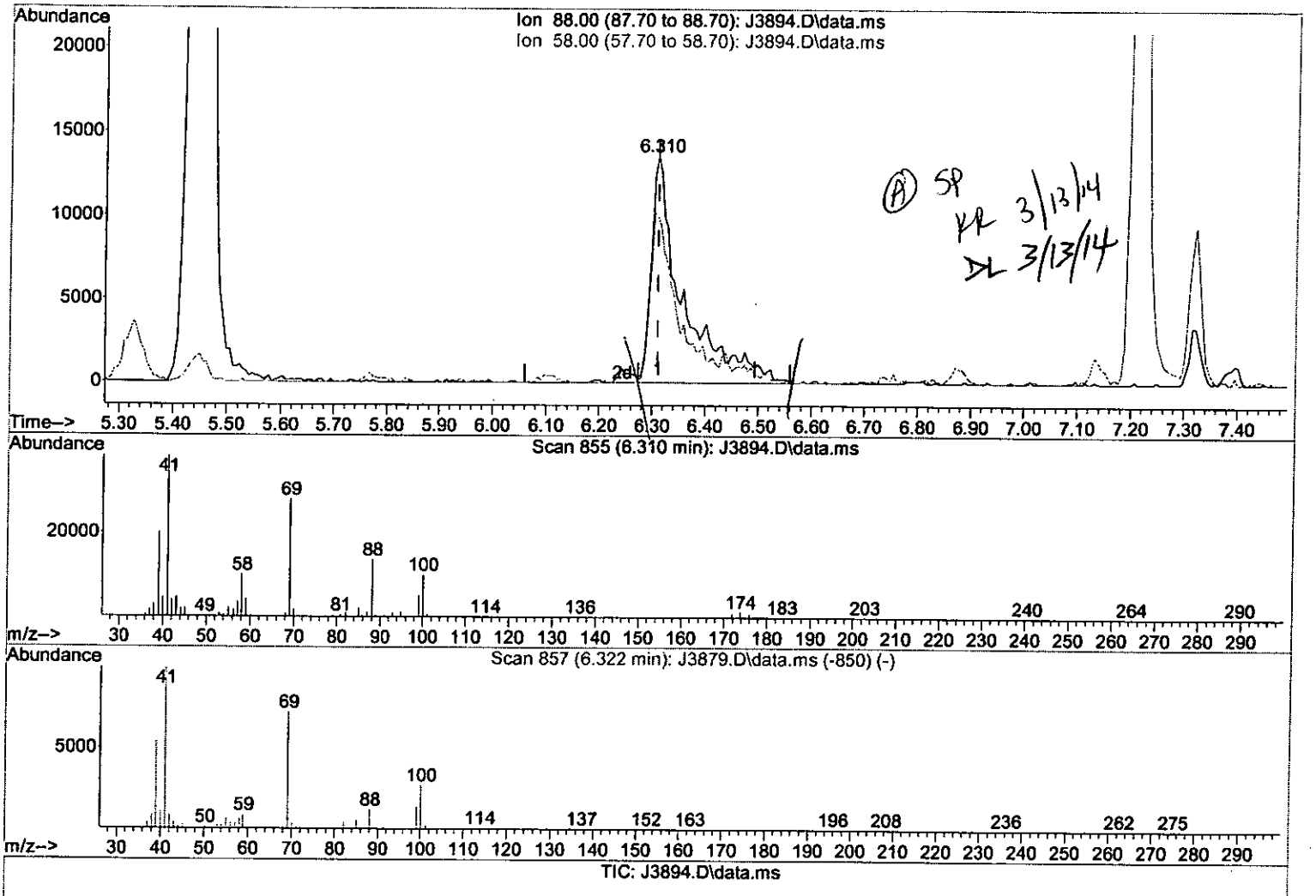
response 50837

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	73.63#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu Mar 13 12:14:44 2014 Page: 1

```
Sample     : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc       : 50ppb
Acq On     : 13 Mar 2014  11:57 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:12:46 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration
```



TIC: J3894.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 938.84 ppb m

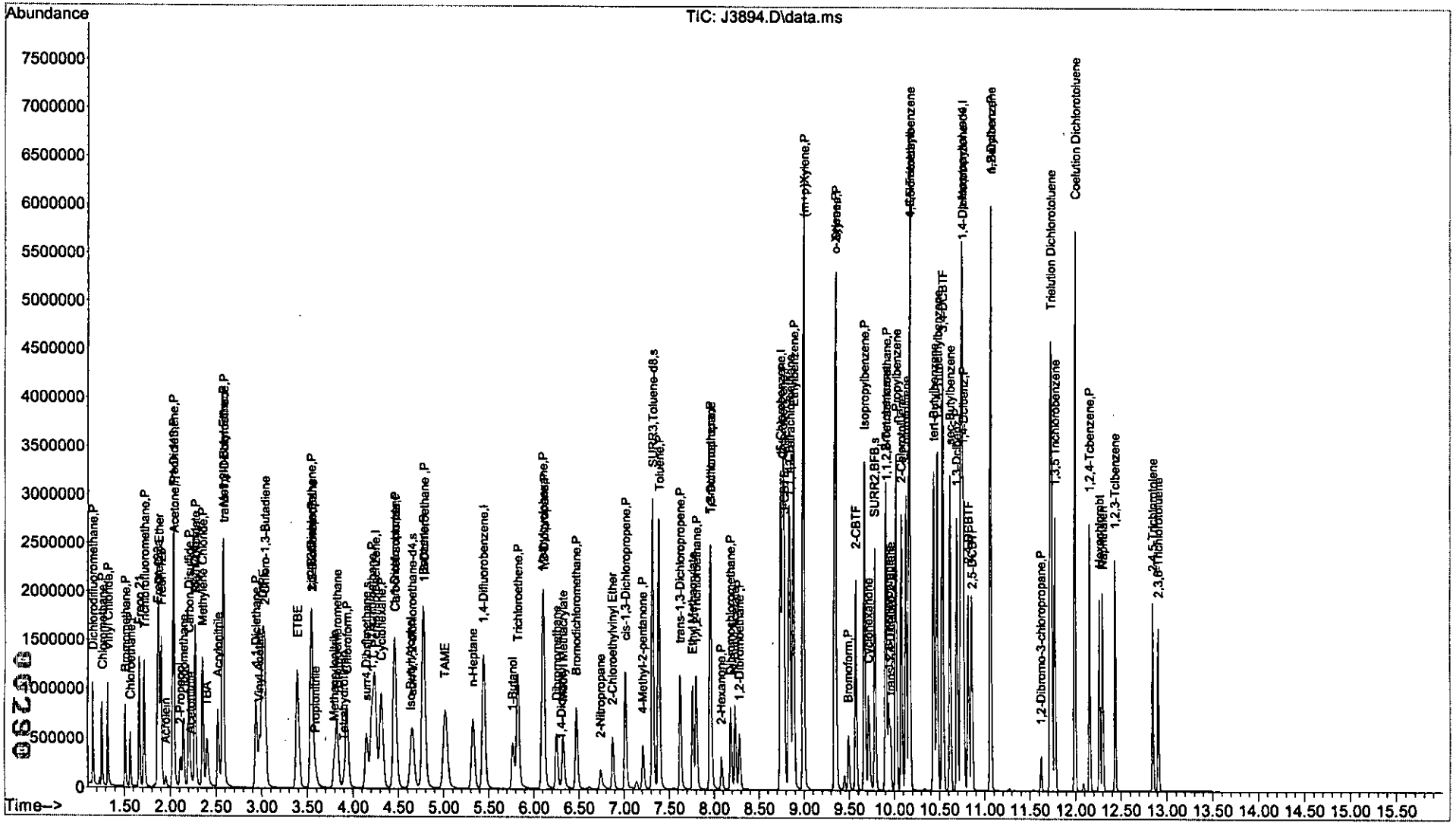
response 55901

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	73.63#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\031314\J3894.D
Misc : 50ppb
Acq On : 13 Mar 2014 11:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Mar 13 12:14:48 2014
QLast Update : Thu Mar 13 11:21:13 2014
Response via : Initial Calibration



W031214.M Thu Mar 13 12:15:34 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443
Date Analyzed: 5/20/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\052014\J5768.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 393182
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	49.7	0.3058	0.3042	-0.5	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	46.3	0.7112	0.6588	-7.4	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	41.2	0.5726	0.4720	-17.6	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	47.3	0.2220	0.2098	-5.5	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	46.4	0.8461	0.7849	-7.2	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.9	0.3628	0.3618	-0.3	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	48.7	0.3693	0.3594	-2.7	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	44.9	0.6036	0.5421	-10.2	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	39.8	0.1713	0.1364	-20.4 *	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	47.0	0.7372	0.6928	-6.0	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	51.2	2.167	2.218	2.4	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	48.6	0.08773	0.08525	-2.8	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	47.1	0.2312	0.2177	-5.8	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	49.3	1.206	1.189	-1.4	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	42.8	0.3737	0.3196	-14.5	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	46.9	0.3148	0.2952	-6.2	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	51.2	2.106	2.157	2.4	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	50.8	1.252	1.272	1.6	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	44.7	0.4501	0.4024	-10.6	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	47.7	1.332	1.270	-4.7	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	48.2	0.6713	0.6473	-3.6	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	48.8	0.1390	0.1358	-2.3	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	48.6	1.896	1.843	-2.8	NA	± 20 %	Average RF
2-Hexanone	50.0	46.7	0.1416	0.1322	-6.7	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	832	0.02773	0.02308	-16.8	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	49.4	2.236	2.207	-1.3	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	51.5	2.086	2.149	3.0	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	42.8	0.1899	0.1625	-14.4	NA	± 20 %	Average RF
Acetone	50.0	56.5	0.09920	0.1121	13.0	NA	± 20 %	Average RF
Benzene	50.0	48.8	1.231	1.202	-2.4	NA	± 20 %	Average RF
Bromobenzene	50.0	46.6	0.7355	0.6861	-6.7	NA	± 20 %	Average RF
Bromochloromethane	50.0	46.3	0.2832	0.2624	-7.4	NA	± 20 %	Average RF
Bromodichloromethane	50.0	49.5	0.3677	0.3640	-1.0	NA	± 20 %	Average RF
Bromoform	50.0	52.1	0.2840	0.2960	4.3	NA	± 20 %	Average RF
Bromomethane	50.0	39.6	0.2881	0.2284	-20.7 *	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	46.7	0.1199	0.1120	-6.6	NA	± 20 %	Average RF
Chlorobenzene	50.0	49.0	0.8701	0.8531	-2.0	NA	± 20 %	Average RF
Chloroethane	50.0	53.6	0.2851	0.3055	7.1	NA	± 20 %	Average RF
Chloroform	50.0	45.6	0.8292	0.7564	-8.8	NA	± 20 %	Average RF
Chloromethane	50.0	45.3	0.5146	0.4664	-9.4	NA	± 20 %	Average RF

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000

Service Request: R1403443
Date Analyzed: 5/20/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\052014\J5768.D\

Calibration Date: 3/12/14
Calibration ID: RC1400023
Analysis Lot: 393182
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dibromochloromethane	50.0	51.1	0.2588	0.2645	2.2	NA	± 20 %	Average RF
Dichlorodifluoromethane (CFC 12)	50.0	41.5	0.5939	0.4934	-16.9	NA	± 20 %	Average RF
Methylene Chloride	50.0	45.6	0.4753	0.4332	-8.9	NA	± 20 %	Average RF
Ethylbenzene	50.0	49.7	0.4636	0.4604	-0.7	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	43.6	0.3218	0.2808	-12.7	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	50.1	2.581	2.588	0.2	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	43.9	1.153	1.012	-12.3	NA	± 20 %	Average RF
Naphthalene	50.0	47.2	1.327	1.253	-5.6	NA	± 20 %	Average RF
Styrene	50.0	53.7	0.8888	0.9537	7.3	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	48.7	0.2583	0.2517	-2.5	NA	± 20 %	Average RF
Toluene	50.0	51.0	1.269	1.294	1.9	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	51.8	0.2982	0.3088	3.6	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.0	0.7340	0.6749	-8.0	NA	± 20 %	Average RF
Vinyl Chloride	50.0	54.3	0.4781	0.5187	8.5	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	48.9	0.5073	0.4963	-2.2	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	51.5	0.4363	0.4495	3.0	NA	± 20 %	Average RF
m,p-Xylenes	100	104	0.5448	0.5690	4.5	NA	± 20 %	Average RF
n-Butylbenzene	50.0	51.3	1.881	1.930	2.6	NA	± 20 %	Average RF
n-Propylbenzene	50.0	49.8	3.020	3.009	-0.3	NA	± 20 %	Average RF
o-Xylene	50.0	50.2	0.5559	0.5585	0.5	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	50.8	2.467	2.505	1.6	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	49.4	1.773	1.751	-1.2	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	49.3	0.4546	0.4481	-1.4	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	51.8	0.3517	0.3645	3.7	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	50.8	0.4538	0.4606	1.5	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.4	0.2895	0.2917	0.8	NA	± 20 %	Average RF
Toluene-d8	50.0	50.0	1.216	1.216	0.0	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:13:22 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

KP 5/30/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	110	0.00
2	P	Dichlorodifluoromethane	0.5939	0.4934	16.9	91	0.00
3	P	Chloromethane	0.5146	0.4664	9.4	102	0.00
4	P	Vinyl Chloride	0.4781	0.5187	-8.5	122	0.00
5	P	Bromomethane	0.2881	0.2284	20.7#	96	0.00
6	P	Chloroethane	0.2851	0.3055	-7.2	125	0.00
7		Freon 21	0.7211	0.8465	-17.4	136	0.00
8	P	Trichlorofluoromethane	0.7340	0.6749	8.1	105	0.00
9		Diethyl Ether	0.3614	0.3175	12.1	102	0.00
10		Freon 123a	0.5388	0.5480	-1.7	119	0.00
11		Freon 123	0.6154	0.6485	-5.4	124	0.00
12		Acrolein	0.0172	0.0067 42.93	~~61.0#~~	49#	0.00
13	P	1,1-Diclethene	0.3628	0.3618	0.3	112	0.00
14	P	Freon 113	0.3971	0.3929	1.1	114	0.00
15	P	Acetone	0.0992	0.1121	-13.0	132	0.00
16		2-Propanol	0.0161	0.0137	14.9	88	0.00
17		Iodomethane	0.4820	0.3803	21.1#	74	0.00
18	P	Carbon Disulfide	1.2620	1.2961	-2.7	109	0.00
19		Acetonitrile	0.0162	0.0128	21.0#	89	0.00 3429
20		Allyl Chloride	0.2488	0.2565	-3.1	113	0.00
21	P	Methyl Acetate	0.2234	0.1942	13.1	97	0.00
22	P	Methylene Chloride	0.4753	0.4332	8.9	108	0.00
23		TBA	0.0277	0.0231	16.6	87	0.00
24		Acrylonitrile	0.1111	0.1028	7.5	100	0.00
25	P	Methyl-t-Butyl Ether	1.1534	1.0120	12.3	100	0.00
26	P	trans-1,2-Dichloroethene	0.4546	0.4481	1.4	112	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.8461	0.7849	7.2	105	0.00
29		Vinyl Acetate	0.0753	0.0682	9.4	91	0.00
30		DIPE	1.6481	1.5042	8.7	100	0.00
31		2-Chloro-1,3-Butadiene	0.7288	0.6538	10.3	90	0.00
32		ETBE	1.3791	1.2842	6.9	100	0.00
33		2,2-Dichloropropane	0.6713	0.6473	3.6	107	0.00
34	P	cis-1,2-Dichloroethene	0.5073	0.4963	2.2	110	0.00
35	P	2-Butanone	0.1390	0.1358	2.3	106	0.00
36		Propionitrile	0.0401	0.0350	12.7	90	0.00
37		Bromochloromethane	0.2832	0.2624	7.3	109	0.00
38		Methacrylonitrile	0.1295	0.1164	10.1	95	0.00
39		Tetrahydrofuran	0.0972	0.0707	27.3#	81	0.00 3429
40	P	Chloroform	0.8292	0.7564	8.8	107	0.00
41	P	1,1,1-Trichloroethane	0.7112	0.6588	7.4	104	0.00
42		TAME	1.1643	1.0833	7.0	100	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	108	0.00
44	P	Cyclohexane	0.2705	0.2811	-3.9	121	0.00
45	s	surr4,Dibrflmethane	0.2895	0.2917	-0.8	110	0.00
46	P	Carbontetrachloride	0.1199	0.1120	6.6	106	0.00
47		1,1-Dichloropropene	0.3693	0.3594	2.7	107	0.00

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:13:22 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	s	surr1,1,2-dichloroethane-d4	0.3297	0.2905	11.9	96	0.00
49	P	Benzene	1.2310	1.2018	2.4	108	0.00
50	P	1,2-Dichloroethane	0.3737	0.3196	14.5	96	0.00
51		Iso-Butyl Alcohol	0.0085	0.0062	27.1#	77	0.00
52		n-Heptane	0.3075	0.2848	7.4	106	0.00
53		1-Butanol	0.0046	0.0038	17.4	79	0.00
54	P	Trichloroethene	0.2982	0.3088	-3.6	116	0.00
55	P	Methylcyclohexane	0.3206	0.3581	-11.7	131	0.00
56	P	1,2-Diclpropane	0.3148	0.2952	6.2	103	0.00
57		Dibromomethane	0.1497	0.1382	7.7	100	0.00
58		1,4-Dioxane	0.0021	0.0016	23.8#	87	0.00
59		Methyl Methacrylate	0.1481	0.1350	8.8	94	0.00
60	P	Bromodichloromethane	0.3677	0.3640	1.0	105	0.00
61		2-Nitropropane	0.0395	0.0271	31.4#	71	0.00
62		2-Chloroethylvinyl Ether	0.1412	0.0977	30.8#	71	0.00
63	P	cis-1,3-Dichloropropene	0.4363	0.4495	-3.0	105	0.00
64	P	4-Methyl-2-pentanone	0.1899	0.1625	14.4	88	0.00
65	s	SURR3,Toluene-d8	1.2163	1.2160	0.0	108	0.00
66	P	Toluene	1.2692	1.2936	-1.9	111	0.00
67	P	trans-1,3-Dichloropropene	0.3517	0.3645	-3.6	103	0.00
68		Ethyl Methacrylate	0.2861	0.2825	1.3	95	0.00
69	P	1,1,2-Trichloroethane	0.2220	0.2098	5.5	102	0.00
70	s	SURR2,BFB	0.4538	0.4606	-1.5	109	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	113	0.00
72	P	Tetrachloroethene	0.2583	0.2517	2.6	117	0.00
73	P	2-Hexanone	0.1416	0.1322	6.6	98	0.00
74		1,3-Dichloropropane	0.4501	0.4024	10.6	102	0.00
75	P	Dibromochloromethane	0.2588	0.2645	-2.2	107	0.00
76		N-Butyl Acetate	0.3502	0.3245	7.3	97	0.00
77	P	1,2-Dibromoethane	0.2312	0.2177	5.8	103	0.00
78	P	Chlorobenzene	0.8701	0.8531	2.0	114	0.00
79		3-CBTF	0.4304	0.4469	-3.8	119	0.00
80		4-CBTF	0.3856	0.4057	-5.2	115	0.00
81		1,1,1,2-Tetrachloroethane	0.3058	0.3042	0.5	110	0.00
82	P	Ethylbenzene	0.4636	0.4604	0.7	112	0.00
83	P	(m+p)Xylene	0.5448	0.5690	-4.4	115	0.00
84	P	o-Xylene	0.5559	0.5585	-0.5	113	0.00
85	P	Styrene	0.8888	0.9537	-7.3	113	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	117	0.00
87	P	Bromoform	0.2840	0.2960	-4.2	111	0.00
88		2-CBTF	0.8330	0.8269	0.7	116	0.00
89	P	Isopropylbenzene	2.5815	2.5879	-0.2	116	0.00
90		Cyclohexanone	0.0401	0.0413	-3.0	122	0.00
91		trans-1,4-Dichloro-2-Butene	0.1346	0.1231	8.5	95	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5726	0.4720	17.6	97	0.00
93		Bromobenzene	0.7355	0.6861	6.7	114	0.00

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:13:22 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1713	0.1364	20.4#	96	0.00
95		n-Propylbenzene	3.0196	3.0094	0.3	117	0.00
96		2-Chlorotoluene	1.8965	1.8433	2.8	115	0.00
97		3-Chlorotoluene	1.9725	1.9209	2.6	113	0.00
98		4-Chlorotoluene	2.2360	2.2073	1.3	116	0.00
99		1,3,5-Trimethylbenzene	2.1057	2.1571	-2.4	118	0.00
100		tert-Butylbenzene	1.7725	1.7512	1.2	118	0.00
101		1,2,4-Trimethylbenzene	2.1665	2.2182	-2.4	117	0.00
102		3,4-DCBTF	0.6160	0.6002	2.6	112	0.00
103		sec-Butylbenzene	2.4668	2.5053	-1.6	120	0.00
104		p-Isopropyltoluene	2.0860	2.1490	-3.0	119	0.00
105	P	1,3-Dclbenz	1.2519	1.2720	-1.6	120	0.00
106	P	1,4-Dclbenz	1.3322	1.2697	4.7	117	0.00
107		2,4-DCBTF	0.5359	0.5301	1.1	112	0.00
108		2,5-DCBTF	0.6128	0.6039	1.5	113	0.00
109		n-Butylbenzene	1.8808	1.9297	-2.6	118	0.00
110	P	1,2-Dclbenz	1.2055	1.1887	1.4	116	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0877	0.0852	2.9	105	0.00
112		Trielution Dichlorotoluene	0.9535	0.9765	-2.4	114	0.00
113		1,3,5 Trichlorobenzene	0.8315	0.8421	-1.3	115	0.00
114		Coelution Dichlorotoluene	1.0096	1.0286	-1.9	112	0.00
115	P	1,2,4-Tcbenzene	0.7372	0.6928	6.0	112	0.00
116		Hexachlorobt	0.3218	0.2808	12.7	104	0.00
117		Naphthalen	1.3273	1.2534	5.6	104	0.00
118		1,2,3-Tclbenzene	0.6036	0.5421	10.2	110	0.00
119		2,4,5-Trichlorotolene	0.3978	0.3653	8.2	105	0.00
120		2,3,6-Trichlorotoluene	0.3641	0.3394	6.8	104	0.00

(X) 3443

(#) = Out of Range SPCC's out = 0 CCC's out = 0

W031214.M Tue May 20 15:14:07 2014 Page: 3

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12 LQ1405286-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:08:41 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1034921	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1578743	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1500658	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	781841	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	460447	50.38	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.76%				
48) surr1,1,2-dichloroetha...	4.658	65	458655	44.05	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.10%				
65) SURR3,Toluene-d8	7.322	98	1919757	49.99	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.98%				
70) SURR2,BFB	9.791	95	727185	50.75	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	510601	41.54	ppb		99
3) Chloromethane	1.256	50	482718	45.32	ppb		99
4) Vinyl Chloride	1.323	62	536803	54.25	ppb		100
5) Bromomethane	1.512	94	236353	39.63	ppb		95
6) Chloroethane	1.567	64	316161	53.57	ppb		98
7) Freon 21	1.664	67	876071	58.70	ppb		98
8) Trichlorofluoromethane	1.719	101	698462	45.98	ppb		99
9) Diethyl Ether	1.878	59	328592	43.93	ppb		94
10) Freon 123a	1.865	67	567139	50.85	ppb		94
11) Freon 123	1.902	83	671100	52.68	ppb		97
12) Acrolein	1.951	56	34849	142.67	ppb		89
13) 1,1-Diclethene	2.036	96	374484	49.86	ppb		92
14) Freon 113	2.036	101	406604	49.47	ppb		89
15) Acetone	2.042	43	115991	56.49	ppb		92
16) 2-Propanol	2.109	45	283033	849.39	ppb		93
17) Iodomethane	2.146	142	393604	39.46	ppb		89
18) Carbon Disulfide	2.207	76	1341395	51.35	ppb		99
19) Acetonitrile	2.219	40	66324	197.53	ppb		96
20) Allyl Chloride	2.274	76	265462	51.55	ppb	#	88
21) Methyl Acetate	2.274	43	201010	43.47	ppb		96
22) Methylene Chloride	2.359	84	448366	45.57	ppb		96
23) TBA	2.408	59	477775	832.49	ppb		100
24) Acrylonitrile	2.524	53	532075	231.29	ppb		95
25) Methyl-t-Butyl Ether	2.579	73	1047312	43.87	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	463799	49.29	ppb		92
28) 1,1-Diclethane	2.938	63	812312	46.38	ppb		98
29) Vinyl Acetate	2.975	86	70594	45.27	ppb	#	58
30) DIPE	3.012	45	1556692	45.63	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	676619	44.86	ppb		99
32) ETBE	3.396	59	1329039	46.56	ppb		98
33) 2,2-Dichloropropane	3.554	77	669891	48.21	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	513623	48.91	ppb		91
35) 2-Butanone	3.542	43	140503	48.84	ppb		98
36) Propionitrile	3.591	54	181271	218.23	ppb		92
37) Bromochloromethane	3.828	130	271552	46.32	ppb		89

KR 5/20/14

W031214.M Tue May 20 15:08:43 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:08:41 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	120432	44.94	ppb	#	80
39) Tetrahydrofuran	3.908	42	73177	36.39	ppb		80
40) Chloroform	3.938	83	782839	45.61	ppb		96
41) 1,1,1-Trichloroethane	4.213	97	681784	46.31	ppb		91
42) TAME	5.023	73	1121169	46.52	ppb		97
44) Cyclohexane	4.316	41	443712	51.95	ppb		96
46) Carbontetrachloride	4.469	121	176858	46.72	ppb		97
47) 1,1-Dichloropropene	4.463	75	567334	48.66	ppb		91
49) Benzene	4.779	78	1897258	48.81	ppb		99
50) 1,2-Dichloroethane	4.786	62	504636	42.76	ppb		96
51) Iso-Butyl Alcohol	4.639	43	195981	733.80	ppb		97
52) n-Heptane	5.328	43	449565	46.30	ppb		98
53) 1-Butanol	5.767	56	299392	2041.16	ppb		100
54) Trichloroethene	5.828	130	487502	51.78	ppb		96
55) Methylcyclohexane	6.109	55	565332	55.85	ppb		95
56) 1,2-Diclpropane	6.115	63	466060	46.89	ppb		98
57) Dibromomethane	6.255	93	218152	46.14	ppb		93
58) 1,4-Dioxane	6.316	88	~~45086~~	~~692.65~~	ppb		74
59) Methyl Methacrylate	6.328	69	213103	45.56	ppb		92
60) Bromodichloromethane	6.474	83	574664	49.50	ppb		97
61) 2-Nitropropane	6.743	41	85632	68.59	ppb		92
62) 2-Chloroethylvinyl Ether	6.877	63	154259	34.61	ppb		98
63) cis-1,3-Dichloropropene	7.023	75	709679	51.52	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	256504	42.78	ppb		93
66) Toluene	7.395	91	2042214	50.96	ppb		98
67) trans-1,3-Dichloropropene	7.633	75	575511	51.83	ppb		95
68) Ethyl Methacrylate	7.767	69	445920	49.37	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	331278	47.25	ppb		98
72) Tetrachloroethene	7.962	164	377732	48.73	ppb		98
73) 2-Hexanone	8.084	43	198400	46.67	ppb		93
74) 1,3-Dichloropropane	7.974	76	603814	44.69	ppb		94
75) Dibromochloromethane	8.193	129	396955	51.10	ppb		94
76) N-Butyl Acetate	8.242	43	487001	46.34	ppb		97
77) 1,2-Dibromoethane	8.285	107	326755	47.09	ppb		98
78) Chlorobenzene	8.773	112	1280261	49.02	ppb		93
79) 3-CBTF	8.785	180	670620	51.91	ppb		96
80) 4-CBTF	8.840	180	608875	52.60	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.852	131	456468	49.74	ppb		93
82) Ethylbenzene	8.888	106	690868	49.66	ppb		98
83) (m+p)Xylene	8.998	106	1707799	104.45	ppb		94
84) o-Xylene	9.346	106	838088	50.23	ppb		98
85) Styrene	9.358	104	1431210	53.65	ppb		92
87) Bromoform	9.498	173	231464	52.13	ppb		98
88) 2-CBTF	9.577	180	646507	49.64	ppb		95
89) Isopropylbenzene	9.675	105	2023334	50.12	ppb		96
90) Cyclohexanone	9.718	55	646261	1030.49	ppb		96
91) trans-1,4-Dichloro-2-B...	9.961	53	96257	45.74	ppb		85
92) 1,1,2,2-Tetrachloroethane	9.913	83	368992	41.21	ppb		95
93) Bromobenzene	9.913	156	536454	46.64	ppb	#	85
94) 1,2,3-Trichloropropane	9.943	110	106674	39.82	ppb		100
95) n-Propylbenzene	10.022	91	2352844	49.83	ppb		99
96) 2-Chlorotoluene	10.083	91	1441143	48.60	ppb		97

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

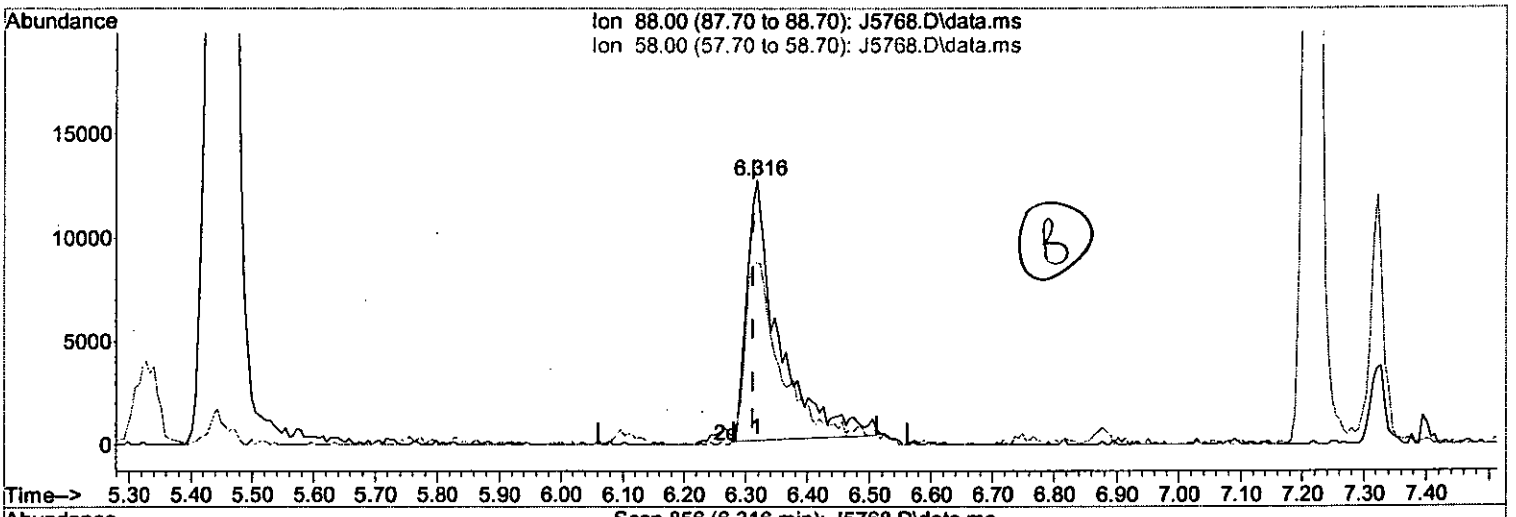
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:08:41 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

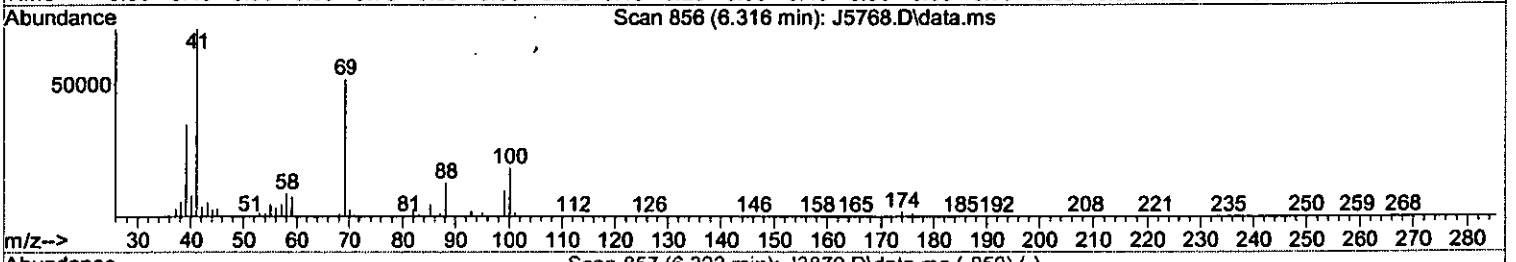
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1501817	48.69	ppb	96
98)	4-Chlorotoluene	10.175	91	1725783	49.36	ppb	94
99)	1,3,5-Trimethylbenzene	10.175	105	1686481	51.22	ppb	95
100)	tert-Butylbenzene	10.443	119	1369166	49.40	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	1734281	51.19	ppb	98
102)	3,4-DCBTF	10.534	214	469249	48.72	ppb	97
103)	sec-Butylbenzene	10.620	105	1958720	50.78	ppb	98
104)	p-Isopropyltoluene	10.742	119	1680173	51.51	ppb	98
105)	1,3-Dclbenz	10.699	146	994504	50.80	ppb	97
106)	1,4-Dclbenz	10.766	146	992726	47.66	ppb	96
107)	2,4-DCBTF	10.821	214	414437	49.45	ppb	95
108)	2,5-DCBTF	10.864	214	472150	49.27	ppb	96
109)	n-Butylbenzene	11.065	91	1508713	51.30	ppb	98
110)	1,2-Dclbenz	11.065	146	929376	49.30	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	66649	48.58	ppb	94
112)	Trielution Dichlorotol...	11.729	125	2290427	153.62	ppb	96
113)	1,3,5 Trichlorobenzene	11.778	180	658398	50.64	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1608436	101.88	ppb	98
115)	1,2,4-Tcbenzene	12.162	180	541670	46.99	ppb	94
116)	Hexachlorobt	12.266	225	219505	43.63	ppb	99
117)	Naphthalen	12.302	128	979966	47.22	ppb	99
118)	1,2,3-Tclbenzene	12.443	180	423819	44.90	ppb	99
119)	2,4,5-Trichlorotolene	12.857	159	285639	45.93	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	265326	46.60	ppb	94

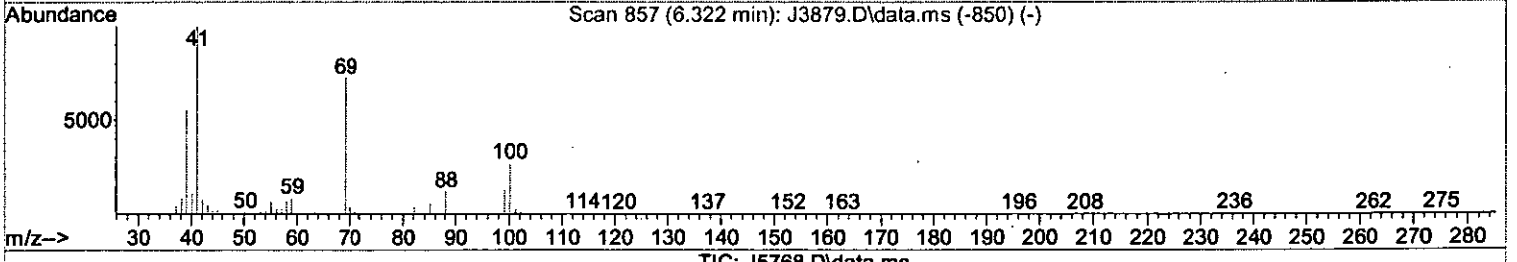
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:08:41 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5768.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 692.65 ppb

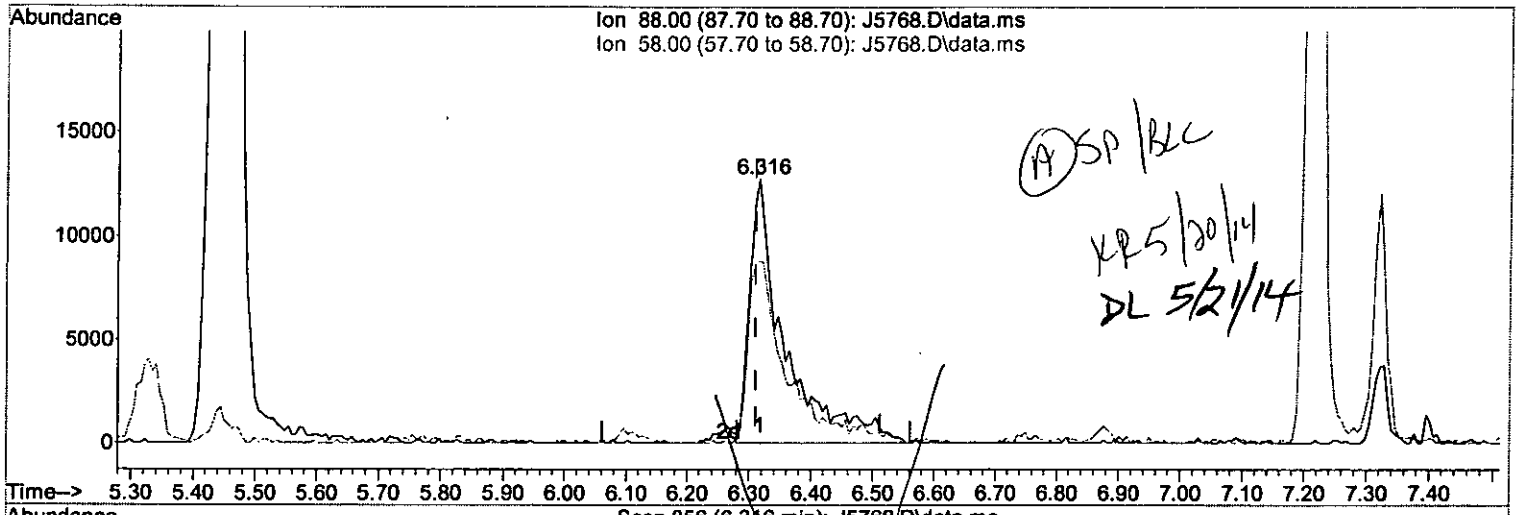
response 45086

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	68.81
0.00	0.00	0.00
0.00	0.00	0.00

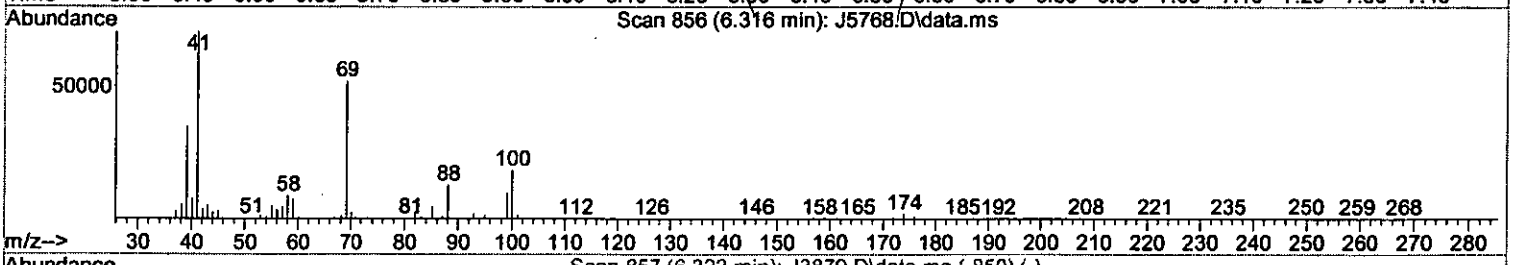
Quantitation Report (Qedit)

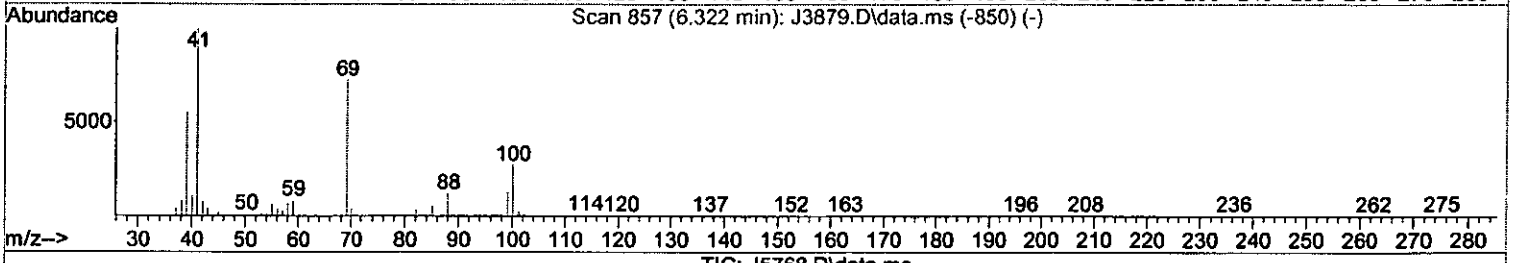
Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:08:41 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



(A) SP/BLC
KR 5/20/14
DL 5/21/14





TIC: J5768.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 768.56 ppb m

response 50027

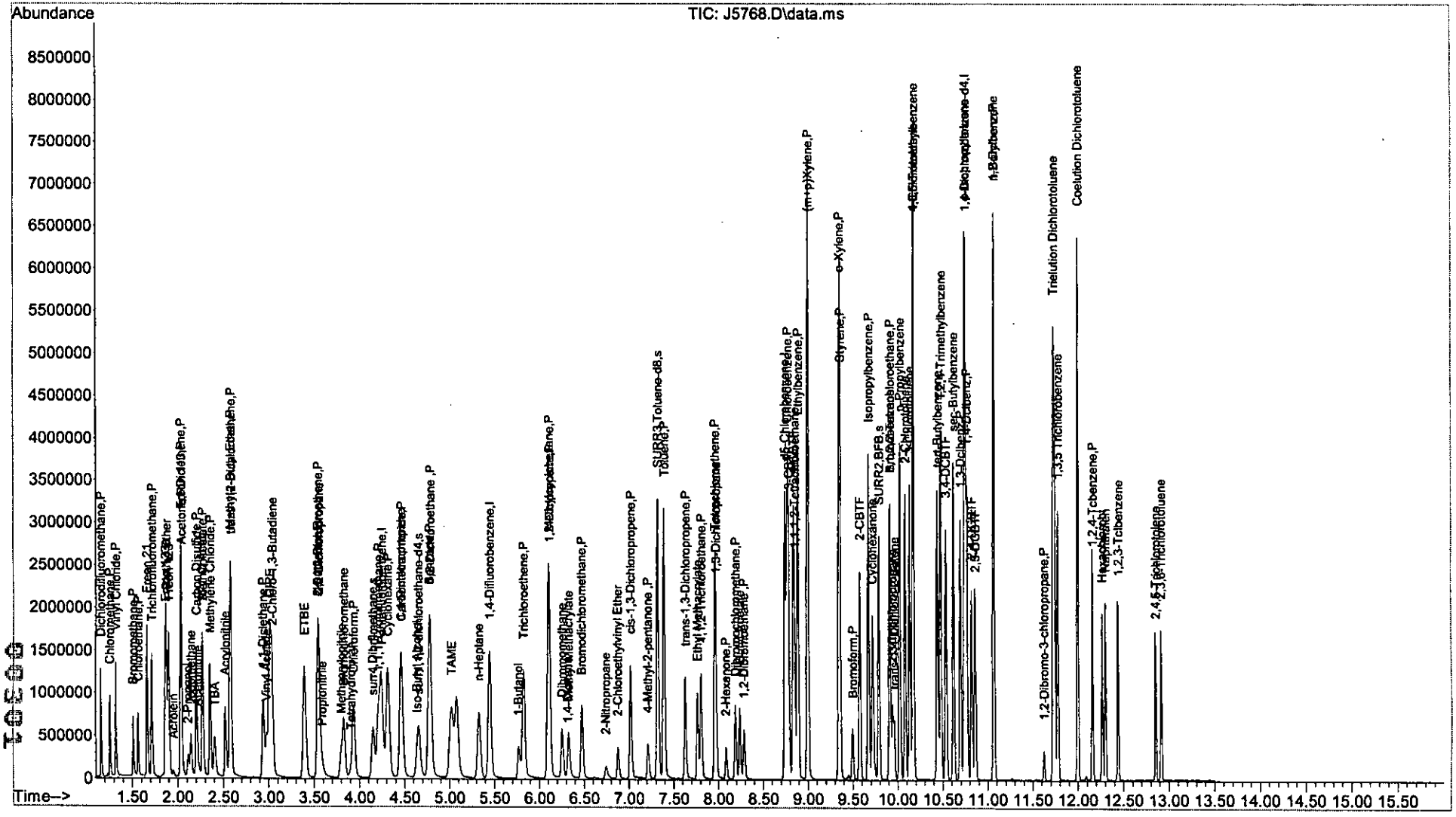
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	68.81
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue May 20 15:13:26 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5768.D
Misc :
Acq On : 20 May 2014 2:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:08:41 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



W031214.M Tue May 20 15:08:48 2014 Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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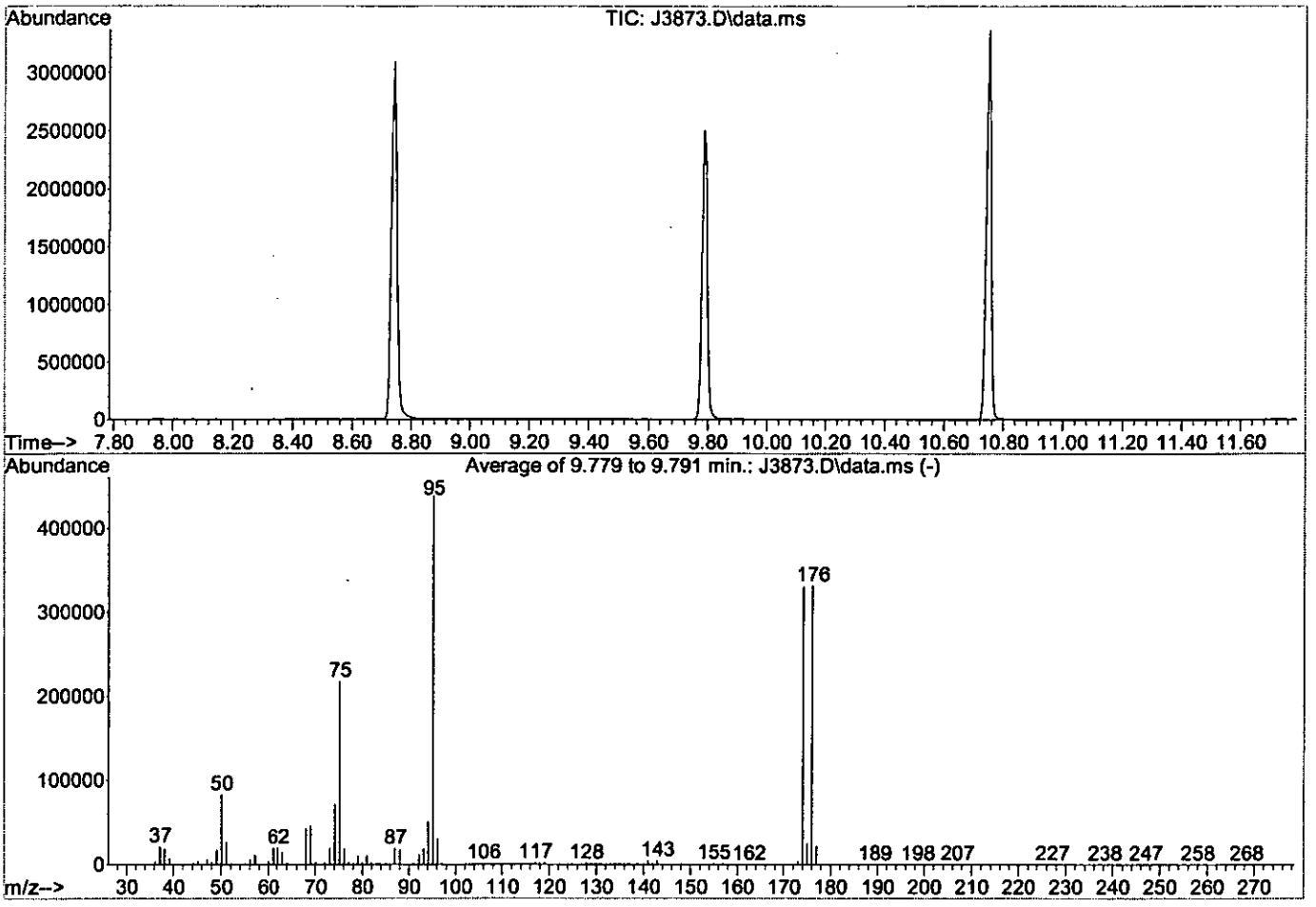
```
Data Path : I:\ACQUDATA\msvoa12\Data\031214\
Data File : J3873.D
Acq On    : 12 Mar 2014    9:41 am
Operator  : K.Ruest
Sample    : TUNE
Misc      :
ALS Vial  : 1   Sample Multiplier: 1

Integration File: INTP60.P

Method    : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title     : MS#12 - 8260B WATERS 10mL Purge
Last Update  : Thu Jan 16 12:02:56 2014
```

KR 3/12/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	83285	PASS
75	95	30	60	49.5	217600	PASS
95	95	100	100	100.0	439232	PASS
96	95	5	9	6.8	30035	PASS
173	174	0.00	2	1.2	3907	PASS
174	95	50	120	75.2	330475	PASS
175	174	5	9	7.6	25003	PASS
176	174	95	101	100.4	331712	PASS
177	176	5	9	6.5	21696	PASS

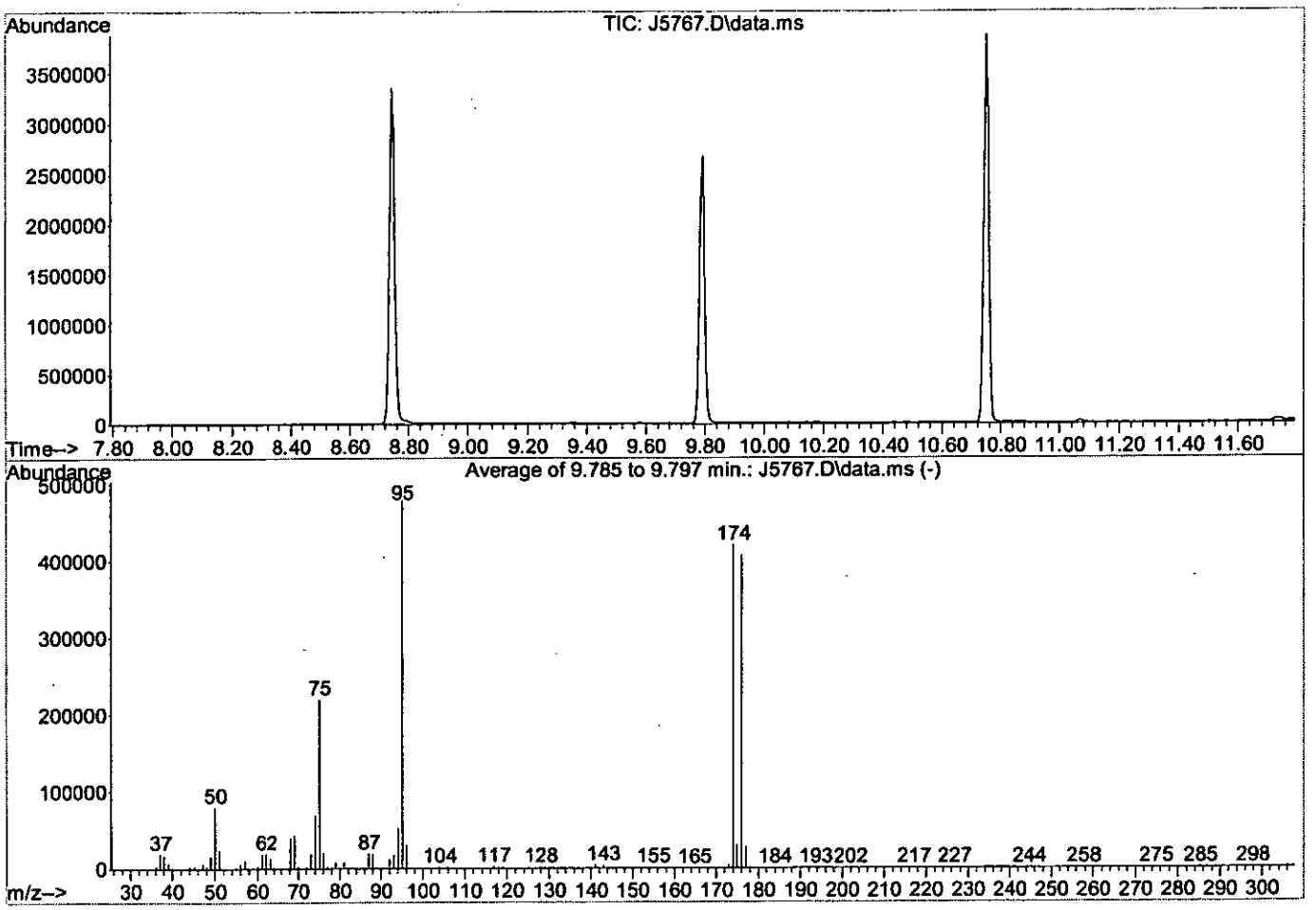
W031214.M Wed Mar 12 10:00:02 2014 003 Page: 1

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5767.D
Acq On : 20 May 2014 2:21 pm
Operator : K.Ruest
Sample : TUNE RQM052686-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

KR 5/20/14

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon May 19 11:05:50 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	80019	PASS
75	95	30	60	45.9	220096	PASS
95	95	100	100	100.0	479125	PASS
96	95	5	9	6.4	30824	PASS
173	174	0.00	2	1.0	4073	PASS
174	95	50	120	87.8	420715	PASS
175	174	5	9	7.2	30208	PASS
176	174	95	101	96.7	407019	PASS
177	176	5	9	6.7	27291	PASS

W031214.M Tue May 20 14:46:08 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/14 16:28

Sample Name: Method Blank
Lab Code: RQ1405286-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\052014\J5771.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.37	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/14 16:28

Sample Name: Method Blank
Lab Code: RQ1405286-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\052014\J5771.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.89**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.32**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	5/20/14 16:28
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1405286-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\msvoa12\Data\052014\J5771.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	5/20/14 16:28	
Dibromofluoromethane	95	85-115	5/20/14 16:28	
Toluene-d8	96	85-120	5/20/14 16:28	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	5/20/14 1628

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1405286-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5771.D
Misc :
Acq On : 20 May 2014 4:28 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1405286-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 16:43:31 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1037138	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1622016	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1483109	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	757186	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	448299	47.74	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 95.48%				
48) surr1,1,2-dichloroetha...	4.658	65	473487	44.26	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.52%				
65) SURR3,Toluene-d8	7.322	98	1900131	48.16	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.32%				
70) SURR2,BFB	9.791	95	721396	49.00	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.00%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1690	0.28	ppb		96
~~12) Acrolein~~	~~1.951~~	~~56~~	~~404~~	~~1.06~~	~~ppb~~	~~#~~	~~70~~
15) Acetone	2.042	43	767	0.37	ppb	#	47
16) 2-Propanol	2.103	45	406	1.22	ppb		92
19) Acetonitrile	2.231	40	603	1.79	ppb	#	31
20) Allyl Chloride	2.207	76	1987	0.39	ppb	#	1
~~58) 1,4-Dioxane~~	~~6.352~~	~~88~~	~~208~~	~~3.11~~	~~ppb~~	~~#~~	~~27~~
90) Cyclohexanone	9.724	55	765	1.26	ppb	#	53 NT
112) Trielution Dichlorotol...	11.729	125	8763	0.61	ppb		93
113) 1,3,5 Trichlorobenzene	11.778	180	2665	0.21	ppb	#	97
114) Coelution Dichlorotoluene	11.998	125	6240	0.41	ppb	#	90
115) 1,2,4-Tcbenzene	12.162	180	4142	0.37	ppb		89 J
116) Hexachlorobt	12.266	225	4336	0.89	ppb	#	84 J
117) Naphthalen	12.303	128	6498	0.32	ppb		95 J
118) 1,2,3-Tclbenzene	12.443	180	4374	0.48	ppb		97
119) 2,4,5-Trichlorotolene	12.912	159	10434	1.73	ppb		98 NT/WP
120) 2,3,6-Trichlorotoluene	12.912	159	10434	1.89	ppb	#	90 NT

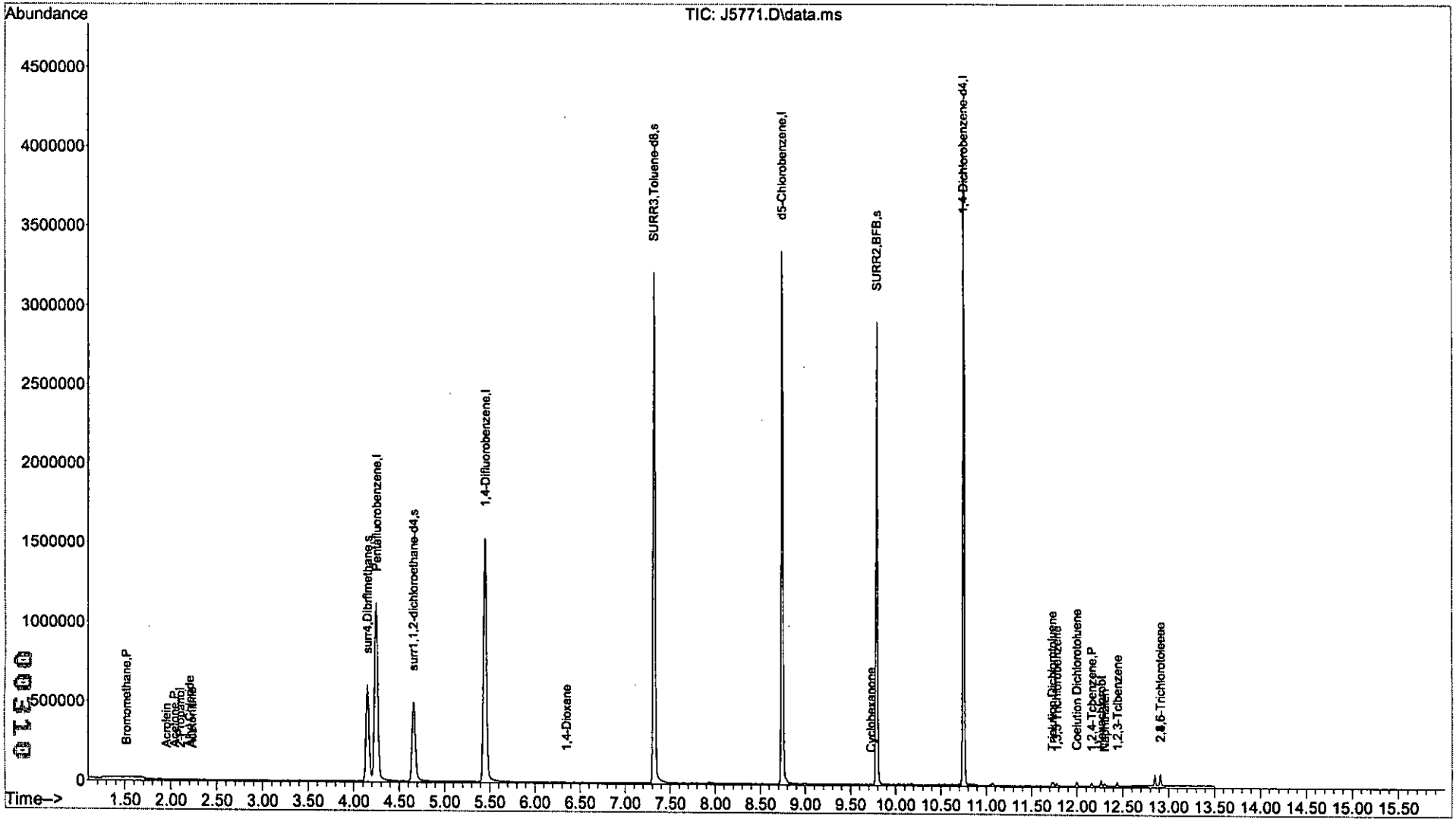
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 5/20/14

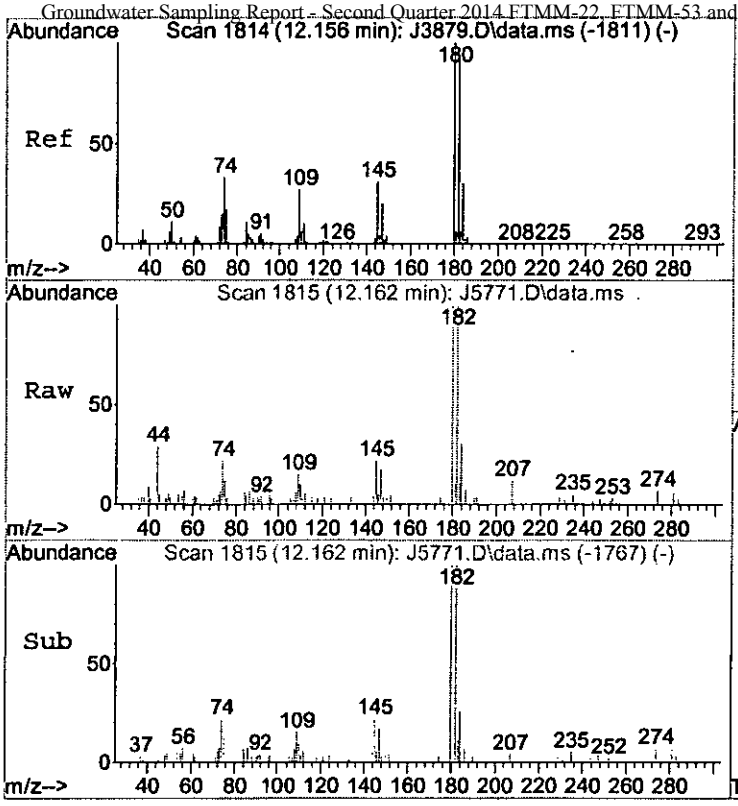
Quantitation Report (Not Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5771.D
Misc :
Acq On : 20 May 2014 4:28 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 16:43:31 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



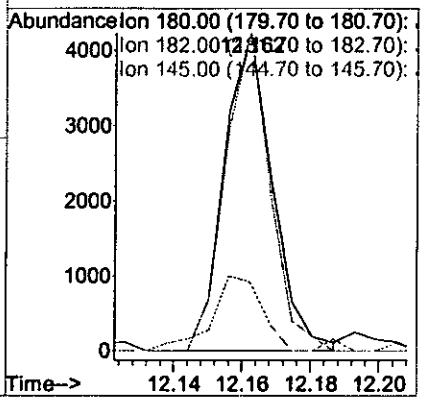
W031214.M Tue May 20 16:43:35 2014 Page: 2



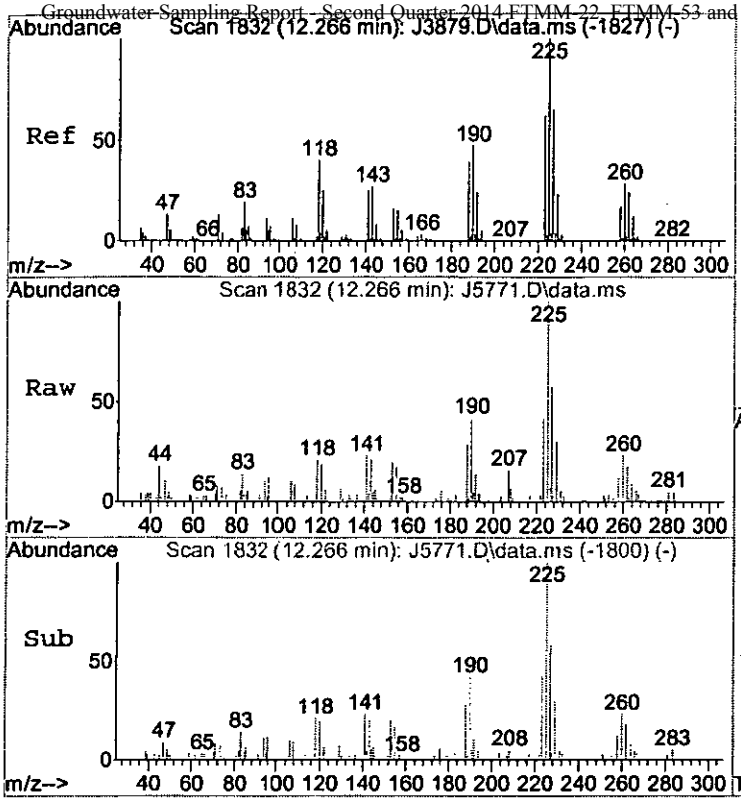
#115
1,2,4-Tcbenzene
Concen: 0.37 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: J5771.D
Acq: 20 May 2014 4:28 pm

Tgt Ion:180 Resp: 4142

Ion	Ratio	Lower	Upper
180	100		
182	100.5	72.2	112.2
145	21.9	11.4	51.4



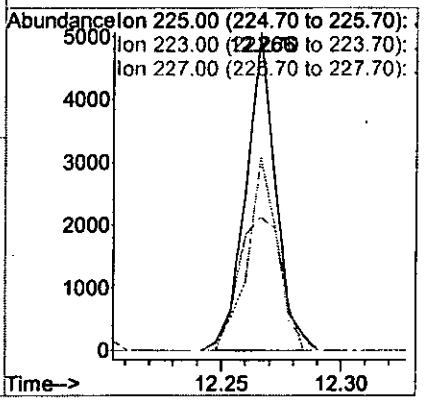
J5771.D W031214.M Tue May 20 17:05:49 2014 Page 1



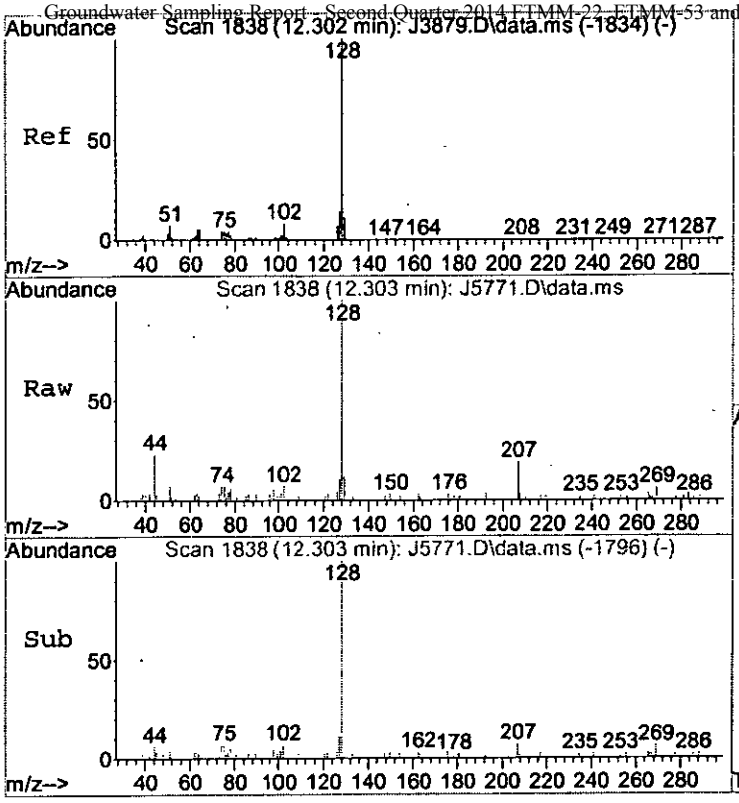
#116
Hexachlorobt
Concen: 0.89 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: J5771.D
Acq: 20 May 2014 4:28 pm

Tgt Ion:225 Resp: 4336

Ion	Ratio	Lower	Upper
225	100		
223	42.0	42.4	82.4#
227	60.8	44.9	84.9



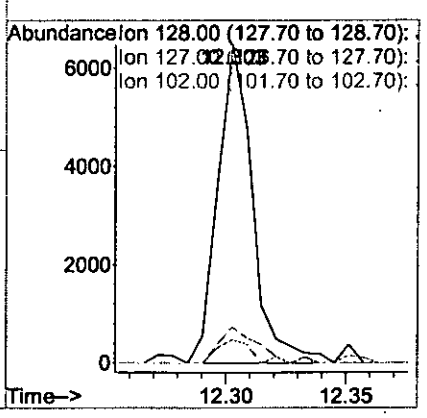
J5771.D W031214.M Tue May 20 17:05:56 2014 Page 1



#117
Naphthalen
Concen: 0.32 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: J5771.D
Acq: 20 May 2014 4:28 pm

Tgt Ion:128 Resp: 6498

Ion	Ratio	Lower	Upper
128	100		
127	11.3	0.0	33.8
102	7.3	0.0	28.5



J5771.D W031214.M Tue May 20 17:06:05 2014 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5771.D
Acq On : 20 May 2014 4:28 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 200 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: J5771.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	603207	1421895	29.06%	5.413%
2	4.249	509	517	532	rVB	1113254	2780883	56.83%	10.587%
3	4.658	575	584	600	rBV	497568	1315596	26.89%	5.009%
4	5.450	704	714	733	rBV	1527845	3554336	72.64%	13.532%
5	7.322	1014	1021	1037	rBV	3202292	4893112	100.00%	18.629%
6	8.742	1249	1254	1268	rBV	3334025	4295035	87.78%	16.352%
7	9.791	1421	1426	1436	rVB	2894325	3377516	69.03%	12.859%
8	10.748	1578	1583	1592	rBV	3972029	4435752	90.65%	16.888%
9	11.736	1738	1745	1750	rBV3	24661	50427	1.03%	0.192%
10	12.851	1925	1928	1932	rBV	68360	68447	1.40%	0.261%
11	12.912	1934	1938	1944	rVB2	74571	73165	1.50%	0.279%

Sum of corrected areas: 26266164

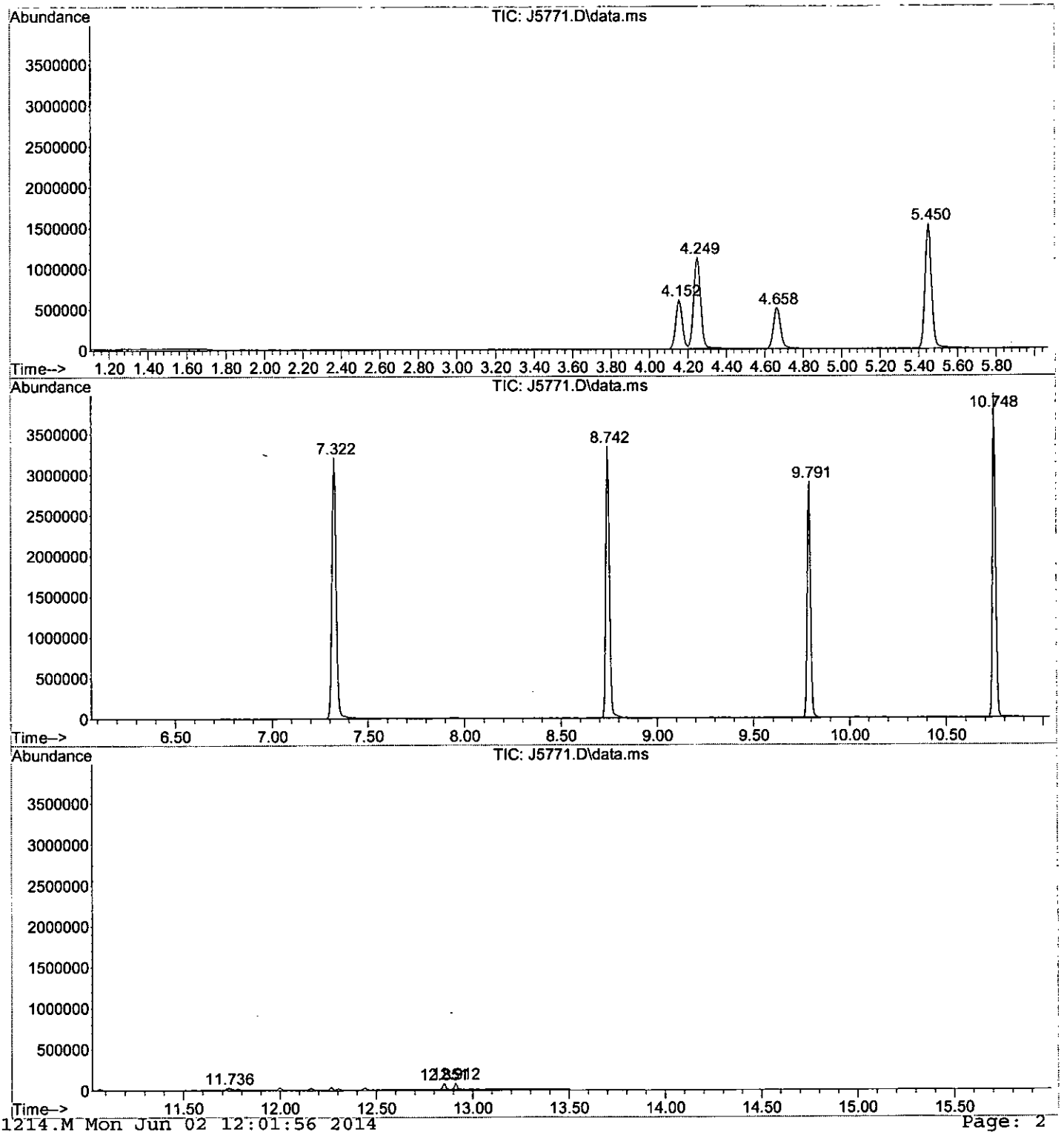
W031214.M Mon Jun 02 12:01:55 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\052014\
Data File : J5771.D
Acq On : 20 May 2014 4:28 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W031214.M Mon Jun 02 12:01:56 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\052014\\
Data File : J5771.D
Acq On : 20 May 2014 4:28 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/14 15:25

Sample Name: Lab Control Sample
Lab Code: RQ1405286-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\052014\J5769.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	19.7		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	18.6		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	16.4		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	17.8		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	18.8		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	22.3		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	21.5		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	20.8		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	16.2		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	20.6		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	20.8		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	19.4		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	18.1		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	19.4		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	16.7		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	18.6		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	20.9		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	20.6		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	17.7		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	19.4		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	18.9		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	16.9		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	20.2		5.0	1.0	0.20	
591-78-6	2-Hexanone	17.5		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	334		100	20	11	
106-43-4	4-Chlorotoluene	20.2		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	21.8		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	17.3		5.0	1.0	0.67	
67-64-1	Acetone	16.1		5.0	5.0	1.3	
71-43-2	Benzene	19.2		5.0	1.0	0.20	
108-86-1	Bromobenzene	19.1		5.0	1.0	0.28	
74-97-5	Bromochloromethane	18.7		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	19.7		5.0	1.0	0.32	
75-25-2	Bromoform	18.9		5.0	1.0	0.42	
74-83-9	Bromomethane	16.5		5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/14 15:25

Sample Name: Lab Control Sample
Lab Code: RQ1405286-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\052014\J5769.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**18.1**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**19.7**		5.0	1.0	0.29	
75-00-3	Chloroethane	**22.7**		5.0	1.0	0.24	
67-66-3	Chloroform	**18.5**		5.0	1.0	0.25	
74-87-3	Chloromethane	**19.5**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**19.2**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**18.0**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**19.0**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**20.3**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**21.7**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**17.8**		5.0	1.0	0.29	
91-20-3	Naphthalene	**21.4**		5.0	1.0	0.20	
100-42-5	Styrene	**20.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.8**		5.0	1.0	0.30	
108-88-3	Toluene	**20.1**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.0**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**23.5**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**19.3**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**18.7**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**42.6**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.2**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.3**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.5**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.6**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.5**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**19.0**		5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: NA
Date Received: NA
Date Analyzed: 5/20/14 15:25

Sample Name: Lab Control Sample
Lab Code: RQ1405286-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\052014\J5769.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	5/20/14 15:25	
Dibromofluoromethane	96	85-115	5/20/14 15:25	
Toluene-d8	99	85-120	5/20/14 15:25	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5769.D
Misc :
Acq On : 20 May 2014 3:25 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1405286-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:40:40 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1039917	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1620876	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1494414	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	769037	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	451673	48.14	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.28%				
48) surr1,1,2-dichloroetha...	4.658	65	457244	42.78	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 85.56%				
65) SURR3,Toluene-d8	7.322	98	1943302	49.28	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.56%				
70) SURR2,BFB	9.791	95	733984	49.89	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.78%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	222349	18.00	ppb		96
3) Chloromethane	1.256	50	208878	19.51	ppb		98
4) Vinyl Chloride	1.323	62	233611	23.49	ppb		99
5) Bromomethane	1.512	94	98647	16.46	ppb		96
6) Chloroethane	1.567	64	134447	22.67	ppb		98
7) Freon 21	1.664	67	300266	20.02	ppb		97
8) Trichlorofluoromethane	1.719	101	298638	19.56	ppb		97
9) Diethyl Ether	1.878	59	132978	17.69	ppb		95
10) Freon 123a	1.865	67	251741	22.46	ppb		88
11) Freon 123	1.902	83	266003	20.78	ppb		96
12) Acrolein	1.951	56	20458	97.15	ppb		89
13) 1,1-Diclethene	2.036	96	168495	22.33	ppb	#	88
14) Freon 113	2.036	101	167044	20.23	ppb		93
15) Acetone	2.042	43	33292	16.14	ppb		87
16) 2-Propanol	2.115	45	110546	330.16	ppb		98
17) Iodomethane	2.146	142	162051	16.17	ppb		88
18) Carbon Disulfide	2.207	76	576167	21.95	ppb		99
19) Acetonitrile	2.225	40	25709	76.20	ppb		98
20) Allyl Chloride	2.274	76	103362	19.98	ppb		95
21) Methyl Acetate	2.274	43	79269	17.06	ppb		97
22) Methylene Chloride	2.359	84	187945	19.01	ppb		93
23) TBA	2.408	59	192387	333.61	ppb		96
24) Acrylonitrile	2.524	53	192010	83.07	ppb		95
25) Methyl-t-Butyl Ether	2.579	73	425723	17.75	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	184742	19.54	ppb		95
28) 1,1-Diclethane	2.938	63	331237	18.82	ppb		99
29) Vinyl Acetate	2.975	86	25912	16.54	ppb	#	73
30) DIPE	3.012	45	572842	16.71	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	309105	20.39	ppb		99
32) ETBE	3.396	59	499782	17.42	ppb		95
33) 2,2-Dichloropropane	3.554	77	264136	18.92	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	203941	19.33	ppb		92
35) 2-Butanone	3.548	43	48706	16.85	ppb		91
36) Propionitrile	3.591	54	69494	83.26	ppb		95
37) Bromochloromethane	3.828	130	110342	18.73	ppb		88

KP 5/20/14

W031214.M Tue May 20 15:40:43 2014 Page: 1

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5769.D
Misc :
Acq On : 20 May 2014 3:25 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:40:40 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
38)	Methacrylonitrile	3.798	67	44176	16.41	ppb	#	83	
39)	Tetrahydrofuran	3.908	42	31697	15.69	ppb		87	
40)	Chloroform	3.938	83	318708	18.48	ppb		98	
41)	1,1,1-Trichloroethane	4.213	97	274498	18.56	ppb		98	
42)	TAME	5.023	73	424590	17.53	ppb		97	
44)	Cyclohexane	4.310	41	167649	19.12	ppb		96	
46)	Carbontetrachloride	4.462	121	70168	18.06	ppb		98	
47)	1,1-Dichloropropene	4.462	75	257074	21.47	ppb		94	
49)	Benzene	4.779	78	767699	19.24	ppb		99	
50)	1,2-Dichloroethane	4.786	62	201819	16.66	ppb		98	
51)	Iso-Butyl Alcohol	4.645	43	80729	294.41	ppb		100	
52)	n-Heptane	5.334	43	188008	18.86	ppb		96	
53)	1-Butanol	5.779	56	115389	766.24	ppb		97	
54)	Trichloroethene	5.828	130	202680	20.97	ppb		91	
55)	Methylcyclohexane	6.102	55	214526	20.64	ppb		98	
56)	1,2-Diclpropane	6.115	63	190237	18.64	ppb		96	
57)	Dibromomethane	6.255	93	88908	18.32	ppb		93	
58)	1,4-Dioxane	6.316	88	~~18913~~	~~283.01~~	ppb	#	56	343.18
59)	Methyl Methacrylate	6.328	69	83367	17.36	ppb		92	
60)	Bromodichloromethane	6.480	83	234326	19.66	ppb		99	
61)	2-Nitropropane	6.742	41	32058	25.01	ppb		84	
62)	2-Chloroethylvinyl Ether	6.883	63	78885	17.24	ppb		93	
63)	cis-1,3-Dichloropropene	7.023	75	264386	18.69	ppb		97	
64)	4-Methyl-2-pentanone	7.212	43	106708	17.34	ppb		95	
66)	Toluene	7.395	91	827714	20.12	ppb		98	
67)	trans-1,3-Dichloropropene	7.633	75	216273	18.97	ppb		96	
68)	Ethyl Methacrylate	7.767	69	172471	18.60	ppb		91	
69)	1,1,2-Trichloroethane	7.809	97	128395	17.84	ppb		97	
72)	Tetrachloroethene	7.962	164	152902	19.81	ppb		96	
73)	2-Hexanone	8.090	43	74073	17.50	ppb		97	
74)	1,3-Dichloropropane	7.974	76	238602	17.73	ppb		95	
75)	Dibromochloromethane	8.187	129	148777	19.23	ppb		97	
76)	N-Butyl Acetate	8.242	43	181817	17.37	ppb		95	
77)	1,2-Dibromoethane	8.285	107	124935	18.08	ppb		99	
78)	Chlorobenzene	8.773	112	513252	19.74	ppb		92	
79)	3-CBTF	8.785	180	281992	21.92	ppb		96	
80)	4-CBTF	8.834	180	255624	22.18	ppb		97	
81)	1,1,1,2-Tetrachloroethane	8.852	131	180137	19.71	ppb		91	
82)	Ethylbenzene	8.888	106	281304	20.30	ppb		97	
83)	(m+p)Xylene	8.998	106	692964	42.56	ppb		98	
84)	o-Xylene	9.346	106	337056	20.28	ppb		98	
85)	Styrene	9.358	104	548628	20.65	ppb		91	
87)	Bromoform	9.498	173	82514	18.89	ppb		99	
88)	2-CBTF	9.577	180	270588	21.12	ppb		99	
89)	Isopropylbenzene	9.675	105	832791	20.97	ppb		97	
90)	Cyclohexanone	9.718	55	226050	366.45	ppb		99	
91)	trans-1,4-Dichloro-2-B...	9.961	53	32593	15.75	ppb		89	
92)	1,1,2,2-Tetrachloroethane	9.913	83	144575	16.42	ppb		96	
93)	Bromobenzene	9.913	156	216115	19.10	ppb	#	84	
94)	1,2,3-Trichloropropane	9.943	110	42670	16.19	ppb		96	
95)	n-Propylbenzene	10.022	91	962651	20.73	ppb		100	
96)	2-Chlorotoluene	10.083	91	590475	20.24	ppb		99	

W031214.M Tue May 20 15:40:43 2014 003 Page: 2

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5769.D
Misc :
Acq On : 20 May 2014 3:25 pm
Operator : K.Ruest
InstName : MSVOA-12

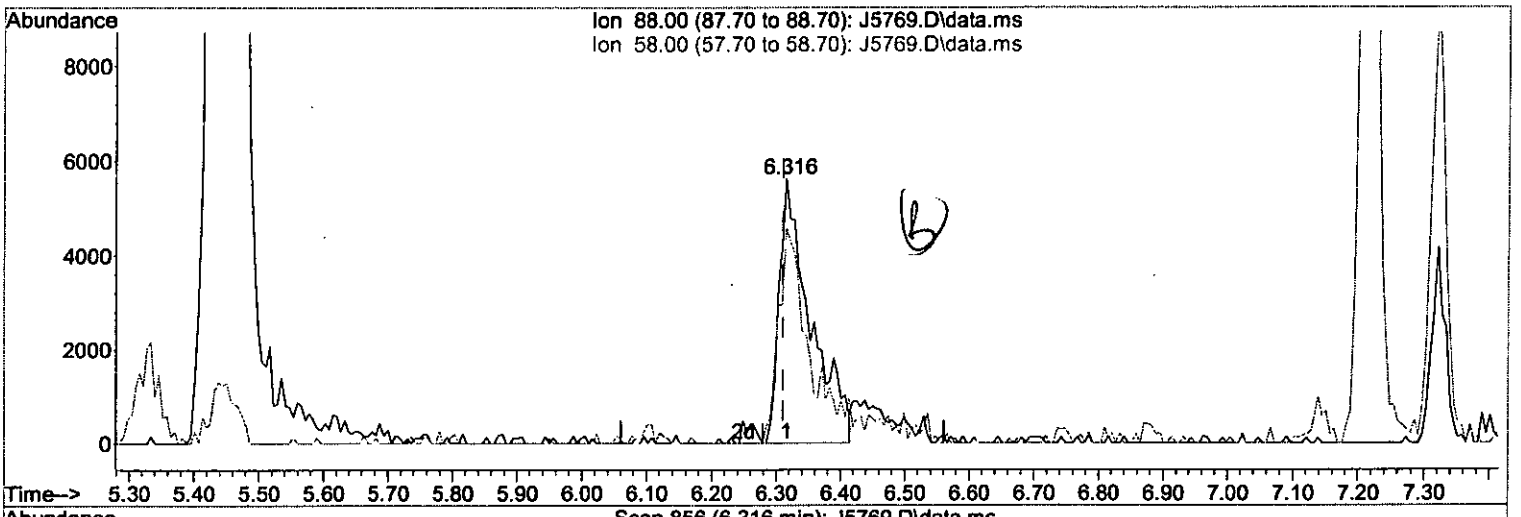
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:40:40 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

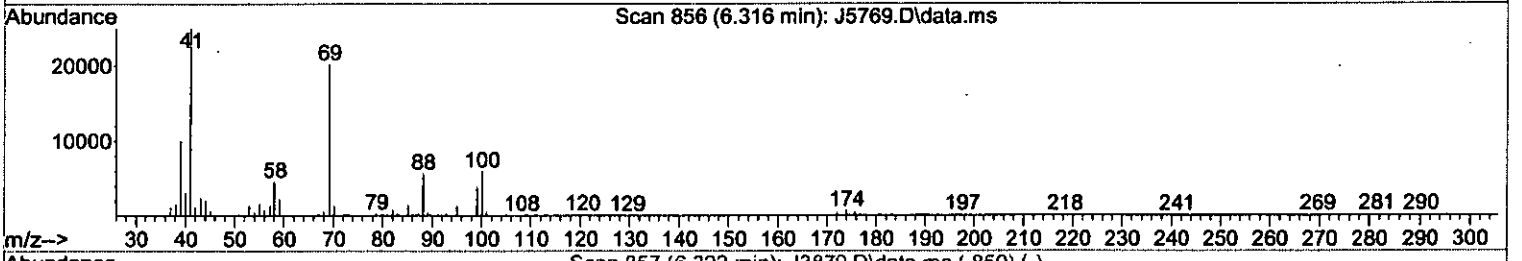
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	631914	20.83	ppb	95
98)	4-Chlorotoluene	10.175	91	693899	20.18	ppb	95
99)	1,3,5-Trimethylbenzene	10.169	105	675247	20.85	ppb	99
100)	tert-Butylbenzene	10.437	119	561366	20.59	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	691663	20.76	ppb	97
102)	3,4-DCBTF	10.534	214	196018	20.69	ppb	99
103)	sec-Butylbenzene	10.620	105	813703	21.45	ppb	97
104)	p-Isopropyltoluene	10.742	119	697882	21.75	ppb	98
105)	1,3-Dclbenz	10.693	146	396421	20.59	ppb	100
106)	1,4-Dclbenz	10.766	146	397044	19.38	ppb	97
107)	2,4-DCBTF	10.821	214	175539	21.30	ppb	97
108)	2,5-DCBTF	10.864	214	199664	21.18	ppb	95
109)	n-Butylbenzene	11.065	91	614511	21.24	ppb	99
110)	1,2-Dclbenz	11.065	146	360219	19.43	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	26237	19.44	ppb	98
112)	Trielution Dichlorotol...	11.729	125	999455	68.15	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	282239	22.07	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	703708	45.32	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	233828	20.62	ppb	93
116)	Hexachlorobt	12.266	225	107214	21.66	ppb	96
117)	Naphthalen	12.302	128	436160	21.36	ppb	97
118)	1,2,3-Tclbenzene	12.443	180	193475	20.84	ppb	97
119)	2,4,5-Trichlorotolene	12.857	159	169237	27.66	ppb	96
120)	2,3,6-Trichlorotoluene	12.918	159	148305	26.48	ppb	96

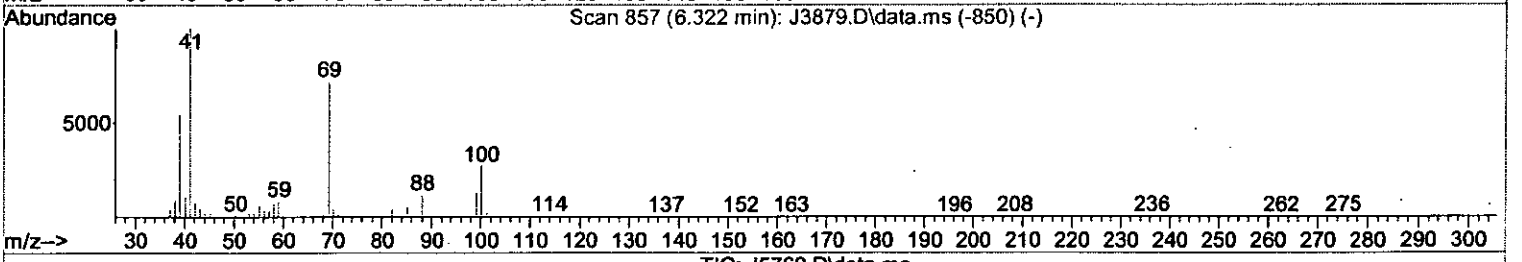
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5769.D
Misc :
Acq On : 20 May 2014 3:25 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:40:40 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5769.D\data.ms

(58) 1,4-Dioxane

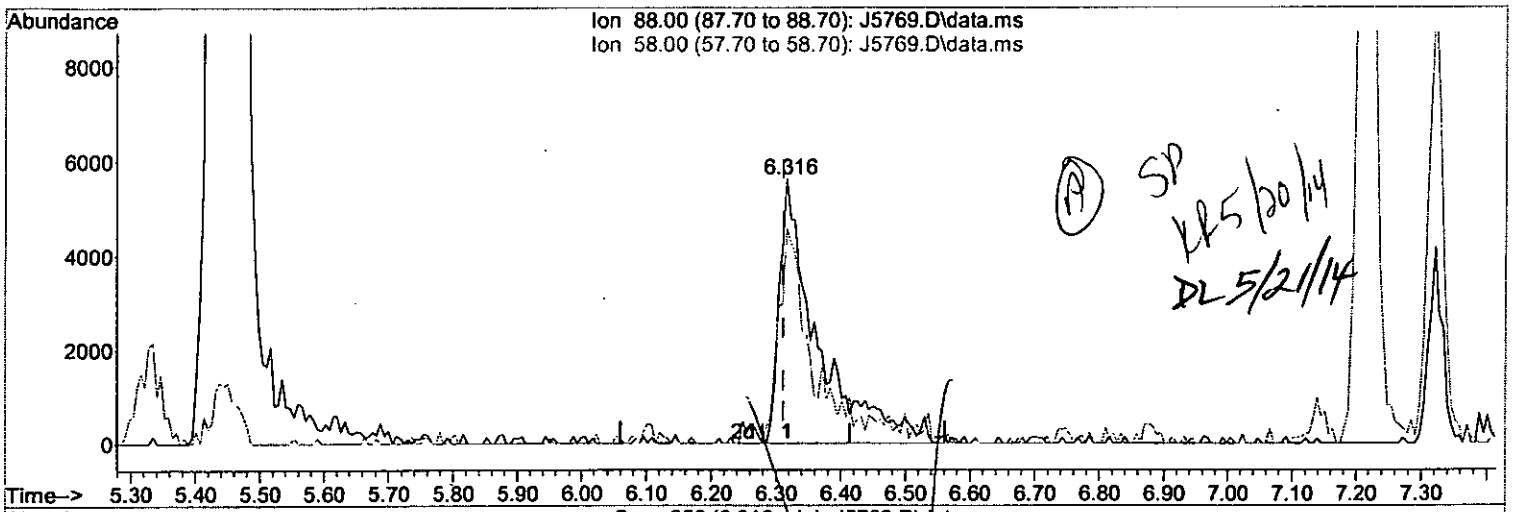
6.316min (+0.006) 283.01 ppb

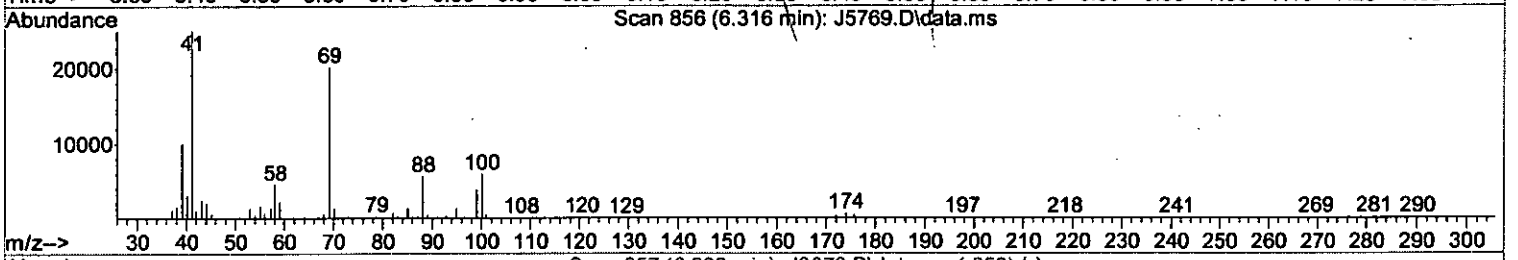
response 18913

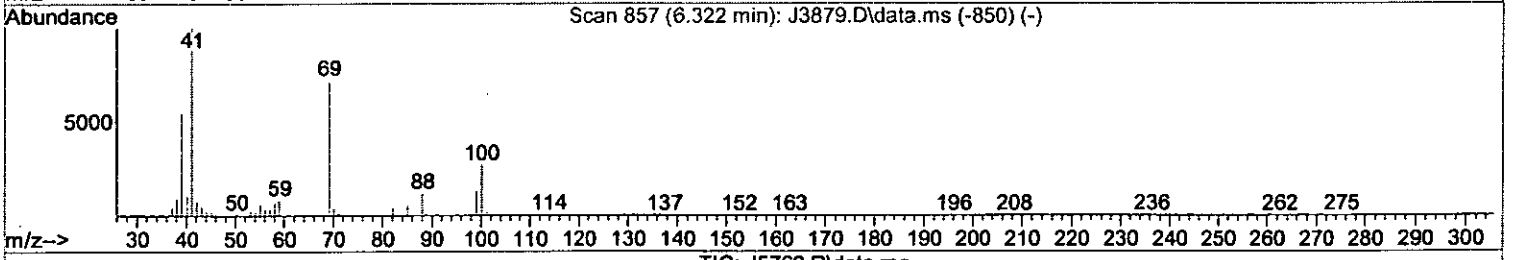
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	81.44#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5769.D
Misc :
Acq On : 20 May 2014 3:25 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:40:40 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5769.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 343.18 ppb m

response 22934

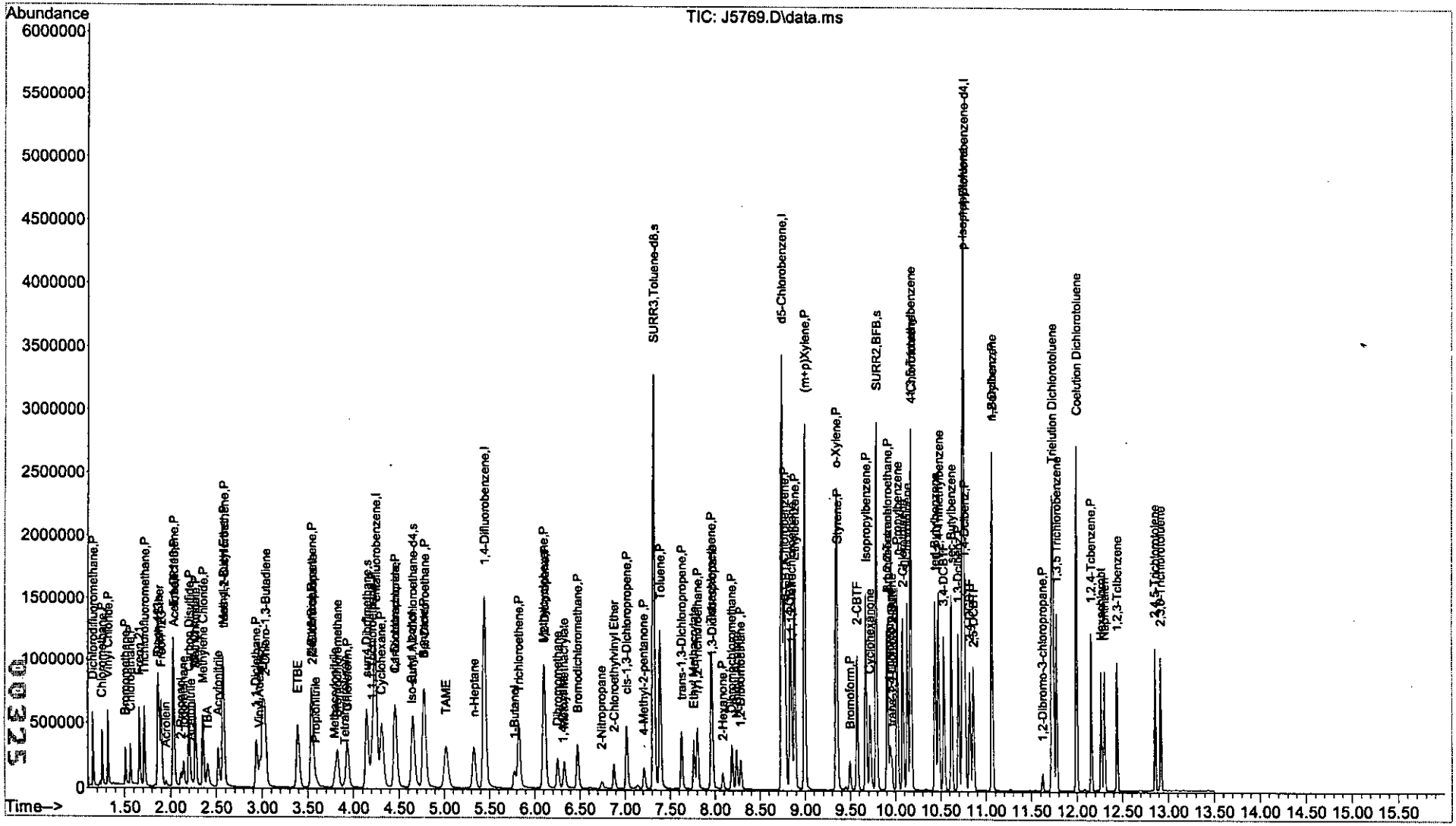
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	81.44#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Tue May 20 16:03:39 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5769.D
Misc :
Acq On : 20 May 2014 3:25 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 20 15:40:40 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



W031214.M Tue May 20 15:40:47 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/20/14 23:59

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: RQ1405286-05
Run Type: Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**50.9**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.1**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**43.2**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**47.7**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**46.8**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**56.0**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**56.4**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**48.4**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**43.0**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**50.4**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**45.7**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**51.1**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**49.6**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**49.8**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**45.8**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**47.3**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**46.8**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**50.8**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**45.7**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**48.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**42.2**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**39.8**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**47.9**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**43.6**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**934**		100	20	11	
106-43-4	4-Chlorotoluene	**48.2**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**51.2**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**45.4**		5.0	1.0	0.67	
67-64-1	Acetone	**37.8**		5.0	5.0	1.3	
71-43-2	Benzene	**48.7**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**47.2**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**47.1**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**49.5**		5.0	1.0	0.32	
75-25-2	Bromoform	**43.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**26.3**		5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1355
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 23:59
Sample Name:	FTMM-22-GW-CW1MW29-10.4	**Units:**	µg/L
Lab Code:	RQ1405286-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**46.1**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**50.5**		5.0	1.0	0.29	
75-00-3	Chloroethane	**56.2**		5.0	1.0	0.24	
67-66-3	Chloroform	**47.3**		5.0	1.0	0.25	
74-87-3	Chloromethane	**47.6**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**46.9**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**47.5**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**46.8**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**51.1**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**43.9**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**50.1**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**47.1**		5.0	1.0	0.29	
91-20-3	Naphthalene	**51.7**		5.0	1.0	0.20	
100-42-5	Styrene	**47.4**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**51.6**		5.0	1.0	0.30	
108-88-3	Toluene	**50.7**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**66.3**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**51.3**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**56.3**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**49.3**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**46.9**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**105**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**49.6**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**49.0**		5.0	1.0	0.20	
95-47-6	o-Xylene	**50.4**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**50.0**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**49.4**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**49.9**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**48.2**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1355
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/20/14 23:59
Sample Name:	FTMM-22-GW-CW1MW29-10.4	**Units:**	µg/L
Lab Code:	RQ1405286-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	75-120	5/20/14 23:59	
Dibromofluoromethane	100	85-115	5/20/14 23:59	
Toluene-d8	99	85-120	5/20/14 23:59	

Quantitation Report (Not Reviewed)

Sample : R1403443-005MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:59 pm
Operator : K.Ruest
InstName : MSVOA-12 HQ1405286-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:14:48 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	954515	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1455814	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1368835	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	746416	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	422508	50.13	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.26%				
48) surr1,1,2-dichloroetha...	4.664	65	441232	45.96	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.92%				
65) SURR3,Toluene-d8	7.322	98	1754266	49.53	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.06%				
70) SURR2,BFB	9.791	95	684758	51.83	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.66%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	538134	47.47	ppb		96
3) Chloromethane	1.262	50	467379	47.57	ppb		99
4) Vinyl Chloride	1.323	62	513874	56.30	ppb		99
5) Bromomethane	1.512	94	144434	26.26	ppb		99
6) Chloroethane	1.567	64	306075	56.23	ppb		98
7) Freon 21	1.664	67	680398	49.43	ppb		98
8) Trichlorofluoromethane	1.719	101	718555	51.28	ppb		100
9) Diethyl Ether	1.884	59	322941	46.81	ppb		90
10) Freon 123a	1.872	67	597383	58.08	ppb		85
11) Freon 123	1.902	83	602748	51.30	ppb		96
12) Acrolein	1.951	56	41892	170.79	ppb		94
13) 1,1-Diclethene	2.042	96	388038	56.02	ppb		88
14) Freon 113	2.036	101	393145	51.86	ppb		89
15) Acetone	2.048	43	71625	37.82	ppb		94
16) 2-Propanol	2.115	45	304689	991.41	ppb		99
17) Iodomethane	2.146	142	262746	28.56	ppb		91
18) Carbon Disulfide	2.207	76	827617	34.35	ppb		99
19) Acetonitrile	2.225	40	69322	223.85	ppb		93
20) Allyl Chloride	2.274	76	194968	41.05	ppb		95
21) Methyl Acetate	2.274	43	164770	38.64	ppb		97
22) Methylene Chloride	2.359	84	424439	46.77	ppb		96
23) TBA	2.408	59	494309	933.85	ppb		98
24) Acrylonitrile	2.524	53	473871	223.34	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	1036691	47.08	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	432602	49.85	ppb		96
28) 1,1-Diclethane	2.945	63	755405	46.77	ppb		99
29) Vinyl Acetate	2.981	86	51128	35.55	ppb	#	72
30) DIPE	3.018	45	984171	31.28	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	676434	48.62	ppb		95
32) ETBE	3.396	59	861422	32.72	ppb		98
33) 2,2-Dichloropropane	3.560	77	540307	42.16	ppb		99
34) cis-1,2-Dichloroethene	3.548	96	477224	49.28	ppb		95
35) 2-Butanone	3.548	43	105539	39.78	ppb		98
36) Propionitrile	3.591	54	178547	233.06	ppb		98
37) Bromochloromethane	3.835	130	254845	47.13	ppb	#	83

KR 5/22/14

Quantitation Report (Not Reviewed)

Sample : R1403443-005MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:14:48 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	
38) Methacrylonitrile	3.804	67	113008	45.72	ppb	#	82	
39) Tetrahydrofuran	3.908	42	76276	41.12	ppb		74	
40) Chloroform	3.938	83	748284	47.27	ppb		96	
41) 1,1,1-Trichloroethane	4.219	97	652949	48.09	ppb		91	
42) TAME	5.023	73	757506	34.08	ppb		97	
44) Cyclohexane	4.316	41	372192	47.25	ppb		97	
46) Carbontetrachloride	4.475	121	160866	46.09	ppb		97	
47) 1,1-Dichloropropene	4.463	75	606197	56.38	ppb		93	
49) Benzene	4.786	78	1746401	48.73	ppb		99	
50) 1,2-Dichloroethane	4.792	62	497802	45.75	ppb		95	
51) Iso-Butyl Alcohol	4.645	43	203195	825.06	ppb		91	
52) n-Heptane	5.334	43	377969	42.21	ppb		96	
53) 1-Butanol	5.773	56	226008	1670.96	ppb		96	
54) Trichloroethene	5.828	130	575604	66.30	ppb		96	
55) Methylcyclohexane	6.109	55	474883	50.88	ppb		92	
56) 1,2-Diclpropane	6.115	63	433195	47.27	ppb		95	
57) Dibromomethane	6.255	93	208356	47.79	ppb		95	
58) 1,4-Dioxane	6.310	88	~~5852730034~~	~~833.58~~	ppb	#	69	975.07
59) Methyl Methacrylate	6.334	69	203052	47.08	ppb		95	
60) Bromodichloromethane	6.480	83	530143	49.52	ppb		97	
61) 2-Nitropropane	6.743	41	79651	69.19	ppb		89	
63) cis-1,3-Dichloropropene	7.023	75	595126	46.85	ppb		97	
64) 4-Methyl-2-pentanone	7.212	43	251211	45.44	ppb		96	
66) Toluene	7.395	91	1871875	50.65	ppb		99	
67) trans-1,3-Dichloropropene	7.633	75	493443	48.19	ppb		95	
68) Ethyl Methacrylate	7.767	69	427470	51.32	ppb		95	
69) 1,1,2-Trichloroethane	7.809	97	308063	47.65	ppb		98	
72) Tetrachloroethene	7.962	164	364922	51.61	ppb		98	
73) 2-Hexanone	8.084	43	169043	43.60	ppb		95	
74) 1,3-Dichloropropane	7.974	76	562988	45.68	ppb		98	
75) Dibromochloromethane	8.194	129	332614	46.94	ppb		99	
76) N-Butyl Acetate	8.242	43	390272	40.71	ppb		96	
77) 1,2-Dibromoethane	8.285	107	314134	49.63	ppb		95	
78) Chlorobenzene	8.773	112	1202004	50.46	ppb		94	
79) 3-CBTF	8.785	180	600023	50.92	ppb		96	
80) 4-CBTF	8.840	180	543745	51.50	ppb		97	
81) 1,1,1,2-Tetrachloroethane	8.852	131	426178	50.91	ppb		93	
82) Ethylbenzene	8.889	106	648176	51.08	ppb		98	
83) (m+p)Xylene	8.998	106	1570585	105.31	ppb		94	
84) o-Xylene	9.346	106	767221	50.41	ppb		98	
85) Styrene	9.358	104	1153214	47.40	ppb		95	
87) Bromoform	9.498	173	182332	43.01	ppb		97	
88) 2-CBTF	9.577	180	583588	46.93	ppb		95	
89) Isopropylbenzene	9.675	105	1929439	50.07	ppb		96	
90) Cyclohexanone	9.718	55	159848	266.98	ppb		97	
91) trans-1,4-Dichloro-2-B...	9.961	53	63758	31.73	ppb		92	
92) 1,1,2,2-Tetrachloroethane	9.913	83	369274	43.20	ppb		99	
93) Bromobenzene	9.913	156	517904	47.17	ppb	#	83	
94) 1,2,3-Trichloropropane	9.943	110	109949	42.99	ppb		99	
95) n-Propylbenzene	10.022	91	2209024	49.00	ppb		98	
96) 2-Chlorotoluene	10.083	91	1356837	47.93	ppb		97	
97) 3-Chlorotoluene	10.132	91	1310213	44.50	ppb		97	

Quantitation Report (Not Reviewed)

Sample : R1403443-005MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:14:48 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

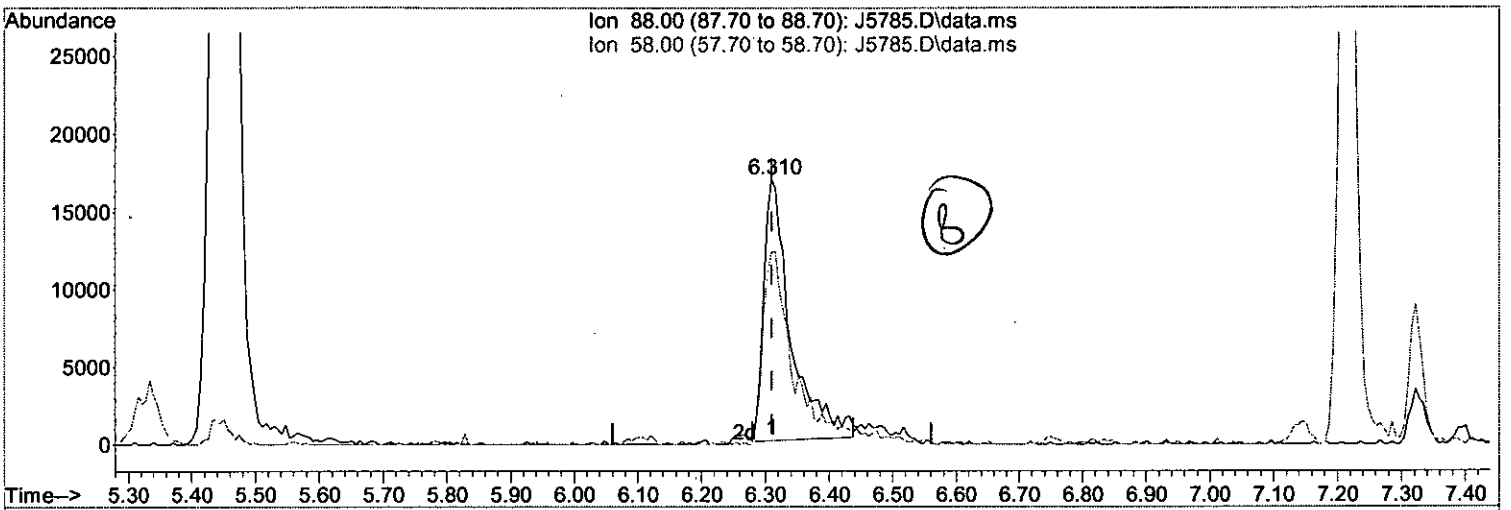
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.175	91	1610017	48.23	ppb	94
99)	1,3,5-Trimethylbenzene	10.175	105	1471658	46.82	ppb	96
100)	tert-Butylbenzene	10.437	119	1307340	49.41	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	1477372	45.68	ppb	97
102)	3,4-DCBTF	10.535	214	412058	44.81	ppb	97
103)	sec-Butylbenzene	10.620	105	1839904	49.96	ppb	97
104)	p-Isopropyltoluene	10.742	119	1592800	51.15	ppb	98
105)	1,3-Dclbenz	10.699	146	949245	50.79	ppb	96
106)	1,4-Dclbenz	10.766	146	959983	48.27	ppb	99
107)	2,4-DCBTF	10.821	214	376315	47.04	ppb	97
108)	2,5-DCBTF	10.864	214	424329	46.39	ppb	98
109)	n-Butylbenzene	11.071	91	1393034	49.61	ppb	96
110)	1,2-Dclbenz	11.065	146	895588	49.76	ppb	97
111)	1,2-Dibromo-3-chloropr...	11.626	157	66863	51.05	ppb	96
112)	Trielution Dichlorotol...	11.729	125	2036091	143.05	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	591293	47.63	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	1454317	96.49	ppb	98
115)	1,2,4-Tcbenzene	12.156	180	555109	50.44	ppb	100
116)	Hexachlorobt	12.266	225	210833	43.89	ppb	98
117)	Naphthalen	12.302	128	1024279	51.69	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	436458	48.43	ppb	97
119)	2,4,5-Trichlorotolene	12.851	159	264680	44.58	ppb	96
120)	2,3,6-Trichlorotoluene	12.912	159	222296	40.90	ppb	96

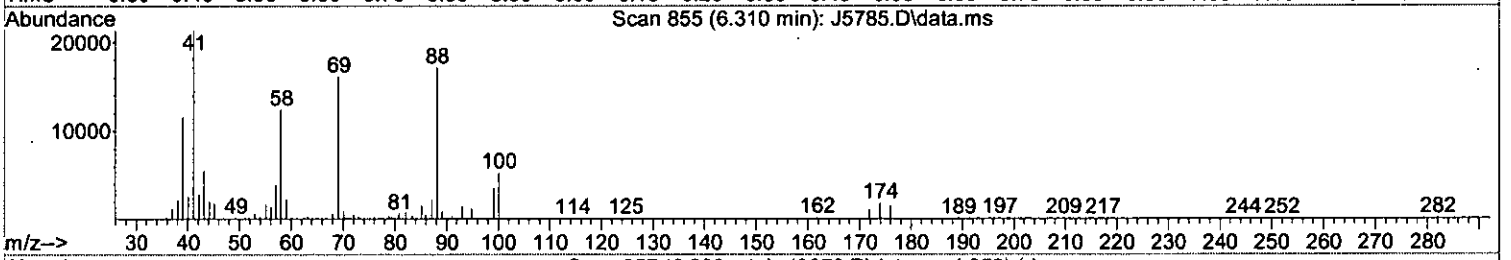
(#) = qualifier out of range (m) = manual integration (+) = signals summed

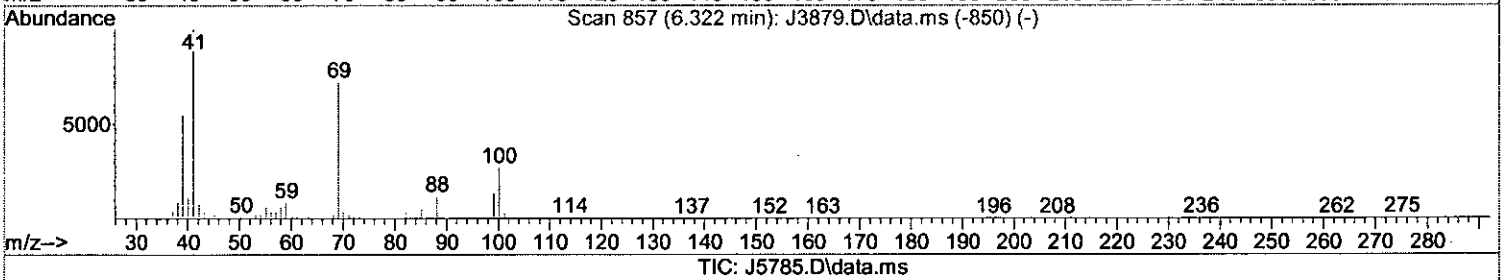
Quantitation Report (Qedit)

Sample : R1403443-005MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5785.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:14:48 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5785.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 833.58 ppb

response 50034

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	72.32#
0.00	0.00	0.00
0.00	0.00	0.00

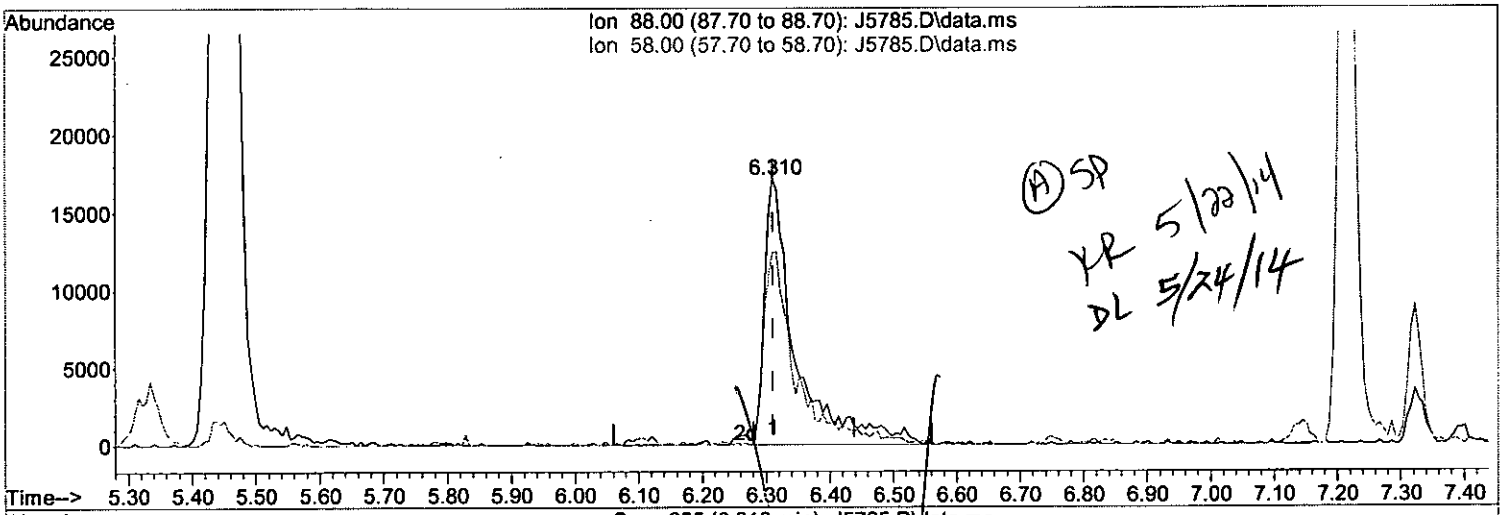
W031214.M Thu May 22 11:22:55 2014 Page: 1

00332

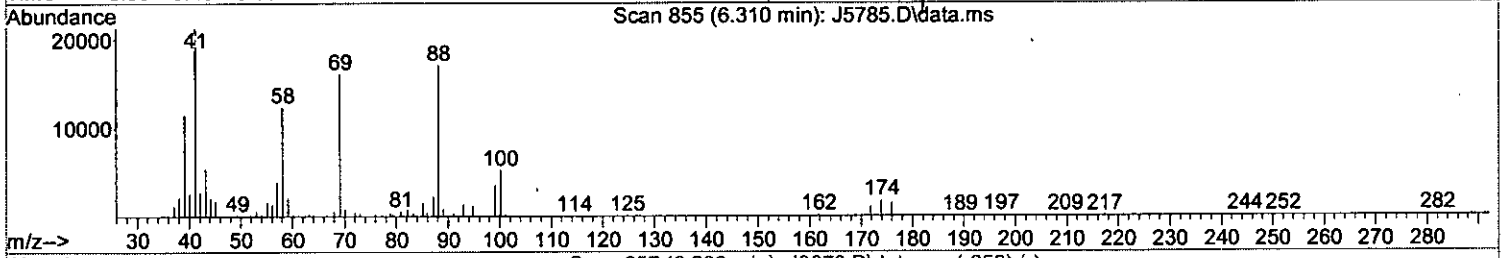
Quantitation Report (Qedit)

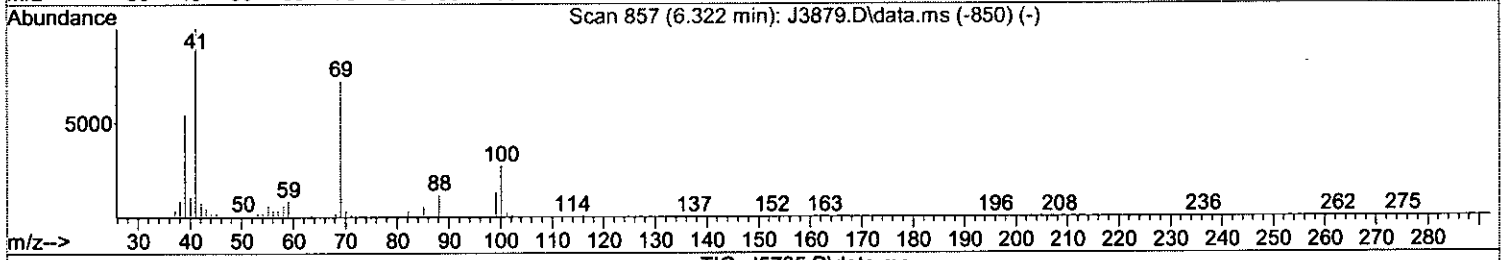
Sample : R1403443-005MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5785.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:14:48 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



(A) SP 5/22/14
KR 5/23/14
DL 5/24/14





TIC: J5785.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 975.07 ppb m

response 58527

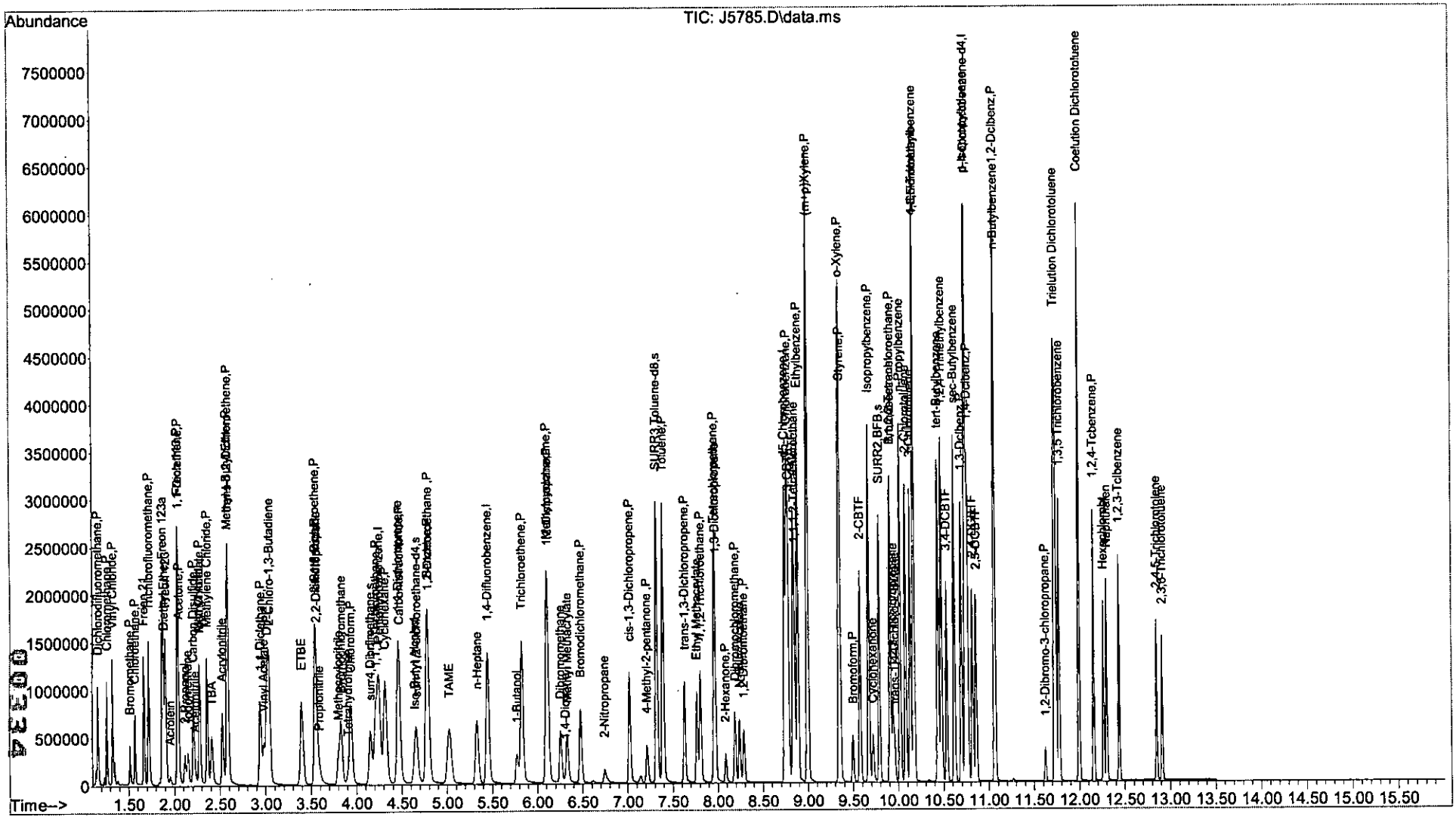
Ion	Exp%	Act%
88.00	100	100
58.00	50.80	72.32#
0.00	0.00	0.00
0.00	0.00	0.00

W031214.M Thu May 22 11:23:04 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1403443-005MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5785.D
Misc : PARSONS 11603 T4
Acq On : 20 May 2014 11:59 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:14:48 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



Client:	Parsons Engineering Science	**Service Request:**	R1403443
Project:	FTMM 2Q2014 GW/748810-03000	**Date Collected:**	5/ 8/14 1355
Sample Matrix:	Water	**Date Received:**	5/ 9/14
		Date Analyzed:	5/21/14 00:32
Sample Name:	FTMM-22-GW-CW1MW29-10.4	**Units:**	µg/L
Lab Code:	RQ1405286-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	393182
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**48.5**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**46.5**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**40.9**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**45.0**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**44.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**54.1**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**52.7**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**48.6**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**40.7**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**48.7**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**42.5**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**49.8**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**47.1**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**46.6**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**43.9**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**44.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**43.3**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**48.4**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**44.1**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**45.8**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**40.1**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**43.7**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**45.6**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**45.2**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**922**		100	20	11	
106-43-4	4-Chlorotoluene	**45.7**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**48.2**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**46.0**		5.0	1.0	0.67	
67-64-1	Acetone	**38.1**		5.0	5.0	1.3	
71-43-2	Benzene	**46.7**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**44.5**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**44.4**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**47.6**		5.0	1.0	0.32	
75-25-2	Bromoform	**40.4**		5.0	1.0	0.42	
74-83-9	Bromomethane	**33.6**		5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/21/14 00:32

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: RQ1405286-06
Run Type: Duplicate Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**45.2**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**47.2**		5.0	1.0	0.29	
75-00-3	Chloroethane	**53.2**		5.0	1.0	0.24	
67-66-3	Chloroform	**44.7**		5.0	1.0	0.25	
74-87-3	Chloromethane	**45.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**45.7**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**44.9**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**44.9**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**48.8**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**43.6**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**47.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**44.7**		5.0	1.0	0.29	
91-20-3	Naphthalene	**51.3**		5.0	1.0	0.20	
100-42-5	Styrene	**43.5**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**49.4**		5.0	1.0	0.30	
108-88-3	Toluene	**47.6**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**63.8**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**48.3**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**54.7**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**46.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**44.2**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**99.0**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**46.7**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**46.3**		5.0	1.0	0.20	
95-47-6	o-Xylene	**47.6**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**46.8**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**46.8**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**48.0**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**46.2**		5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 2Q2014 GW/748810-03000
Sample Matrix: Water

Service Request: R1403443
Date Collected: 5/ 8/14 1355
Date Received: 5/ 9/14
Date Analyzed: 5/21/14 00:32

Sample Name: FTMM-22-GW-CW1MW29-10.4
Lab Code: RQ1405286-06
Run Type: Duplicate Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D\

Analysis Lot: 393182
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	5/21/14 00:32	
Dibromofluoromethane	99	85-115	5/21/14 00:32	
Toluene-d8	98	85-120	5/21/14 00:32	

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12 LQ1405286-06

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	967373	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1481585	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1389839	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	761207	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	424818	49.53	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.06%				
48) surr1,1,2-dichloroetha...	4.664	65	455082	46.58	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.16%				
65) SURR3,Toluene-d8	7.322	98	1769710	49.10	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.20%				
70) SURR2,BFB	9.791	95	687756	51.15	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	515979	44.91	ppb		97
3) Chloromethane	1.262	50	451923	45.39	ppb		98
4) Vinyl Chloride	1.323	62	506370	54.74	ppb		100
5) Bromomethane	1.512	94	187231	33.59	ppb		99
6) Chloroethane	1.567	64	293691	53.24	ppb		98
7) Freon 21	1.664	67	700227	50.19	ppb		99
8) Trichlorofluoromethane	1.719	101	686122	48.32	ppb		99
9) Diethyl Ether	1.878	59	306844	43.88	ppb		96
10) Freon 123a	1.872	67	612068	58.71	ppb		83
11) Freon 123	1.902	83	614696	51.63	ppb		96
12) Acrolein	1.951	56	45369	178.51	ppb		84
14) Freon 113	2.036	101	378229	49.23	ppb		88
15) Acetone	2.048	43	73164	38.12	ppb		95
16) 2-Propanol	2.115	45	315855	1014.08	ppb		99
17) Iodomethane	2.146	142	386584	41.46	ppb		92
18) Carbon Disulfide	2.207	76	827829	33.90	ppb		99
19) Acetonitrile	2.225	40	66512	211.92	ppb		99
20) Allyl Chloride	2.280	76	190682	39.61	ppb	#	80
21) Methyl Acetate	2.274	43	168039	38.88	ppb		94
22) Methylene Chloride	2.359	84	412826	44.89	ppb		97
23) TBA	2.408	59	494507	921.80	ppb		97
24) Acrylonitrile	2.524	53	454115	211.19	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	997978	44.72	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	422223	48.00	ppb		96
28) 1,1-Diclethane	2.945	63	726298	44.37	ppb		99
29) Vinyl Acetate	2.981	86	58348	40.03	ppb	#	62
30) DIPE	3.018	45	1090266	34.19	ppb		95
31) 2-Chloro-1,3-Butadiene	3.042	53	661701	46.93	ppb		99
32) ETBE	3.396	59	954246	35.76	ppb		97
33) 2,2-Dichloropropane	3.560	77	521278	40.13	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	458173	46.68	ppb		97
35) 2-Butanone	3.548	43	117446	43.68	ppb		92
36) Propionitrile	3.597	54	170374	219.43	ppb		98
37) Bromochloromethane	3.835	130	243339	44.40	ppb	#	84
38) Methacrylonitrile	3.798	67	105541	42.13	ppb		91
13) Dichloroethene	2.042		379591	54.07	mke		

KR 5/22/14

Quantitation Report (Not Reviewed)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Tetrahydrofuran	3.908	42	75866	40.36	ppb		73
40) Chloroform	3.938	83	716666	44.67	ppb		98
41) 1,1,1-Trichloroethane	4.213	97	639121	46.45	ppb		89
42) TAME	5.030	73	839488	37.27	ppb		97
44) Cyclohexane	4.316	41	395756	49.37	ppb		98
46) Carbontetrachloride	4.469	121	160383	45.15	ppb		92
47) 1,1-Dichloropropene	4.463	75	577118	52.74	ppb		94
49) Benzene	4.786	78	1701599	46.65	ppb		99
50) 1,2-Dichloroethane	4.792	62	486486	43.93	ppb		96
51) Iso-Butyl Alcohol	4.639	43	196895	785.57	ppb		92
52) n-Heptane	5.328	43	358103	39.30	ppb		97
53) 1-Butanol	5.773	56	276028	2005.28	ppb		96
54) Trichloroethene	5.828	130	563580	63.79	ppb		93
55) Methylcyclohexane	6.109	55	484857	51.04	ppb		91
56) 1,2-Diclpropane	6.115	63	413736	44.36	ppb		94
57) Dibromomethane	6.255	93	205602	46.34	ppb		94
58) 1,4-Dioxane	6.310	88	~~48264~~	~~790.10~~	ppb	952.94	78
59) Methyl Methacrylate	6.328	69	193495	44.09	ppb		91
60) Bromodichloromethane	6.480	83	518218	47.56	ppb		97
61) 2-Nitropropane	6.749	41	83263	71.06	ppb		87
63) cis-1,3-Dichloropropene	7.023	75	570828	44.16	ppb		97
64) 4-Methyl-2-pentanone	7.212	43	258997	46.03	ppb		97
66) Toluene	7.395	91	1788753	47.56	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	481303	46.19	ppb		92
68) Ethyl Methacrylate	7.767	69	409640	48.32	ppb		93
69) 1,1,2-Trichloroethane	7.809	97	296260	45.03	ppb		97
72) Tetrachloroethene	7.962	164	354551	49.39	ppb		99
73) 2-Hexanone	8.084	43	178011	45.22	ppb		99
74) 1,3-Dichloropropane	7.974	76	551225	44.05	ppb		95
75) Dibromochloromethane	8.194	129	328547	45.67	ppb		97
76) N-Butyl Acetate	8.236	43	405333	41.64	ppb		97
77) 1,2-Dibromoethane	8.291	107	302596	47.08	ppb		98
78) Chlorobenzene	8.773	112	1141565	47.20	ppb		94
79) 3-CBTF	8.785	180	627609	52.46	ppb		98
80) 4-CBTF	8.840	180	581663	54.26	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	412001	48.48	ppb		96
82) Ethylbenzene	8.889	106	629127	48.82	ppb		98
83) (m+p)Xylene	8.998	106	1499292	99.01	ppb		95
84) o-Xylene	9.346	106	735743	47.61	ppb		94
85) Styrene	9.358	104	1074886	43.51	ppb		92
87) Bromoform	9.498	173	174828	40.44	ppb		97
88) 2-CBTF	9.577	180	621214	48.99	ppb		93
89) Isopropylbenzene	9.675	105	1848247	47.03	ppb		97
90) Cyclohexanone	9.718	55	155595	254.83	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	61423	29.98	ppb		93
92) 1,1,2,2-Tetrachloroethane	9.913	83	356083	40.85	ppb		98
93) Bromobenzene	9.913	156	497972	44.47	ppb	#	83
94) 1,2,3-Trichloropropane	9.943	110	106155	40.70	ppb		93
95) n-Propylbenzene	10.022	91	2127525	46.28	ppb		99
96) 2-Chlorotoluene	10.083	91	1315122	45.55	ppb		97
97) 3-Chlorotoluene	10.132	91	1384900	46.12	ppb		96
98) 4-Chlorotoluene	10.175	91	1555540	45.70	ppb		95

Quantitation Report (Not Reviewed)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration

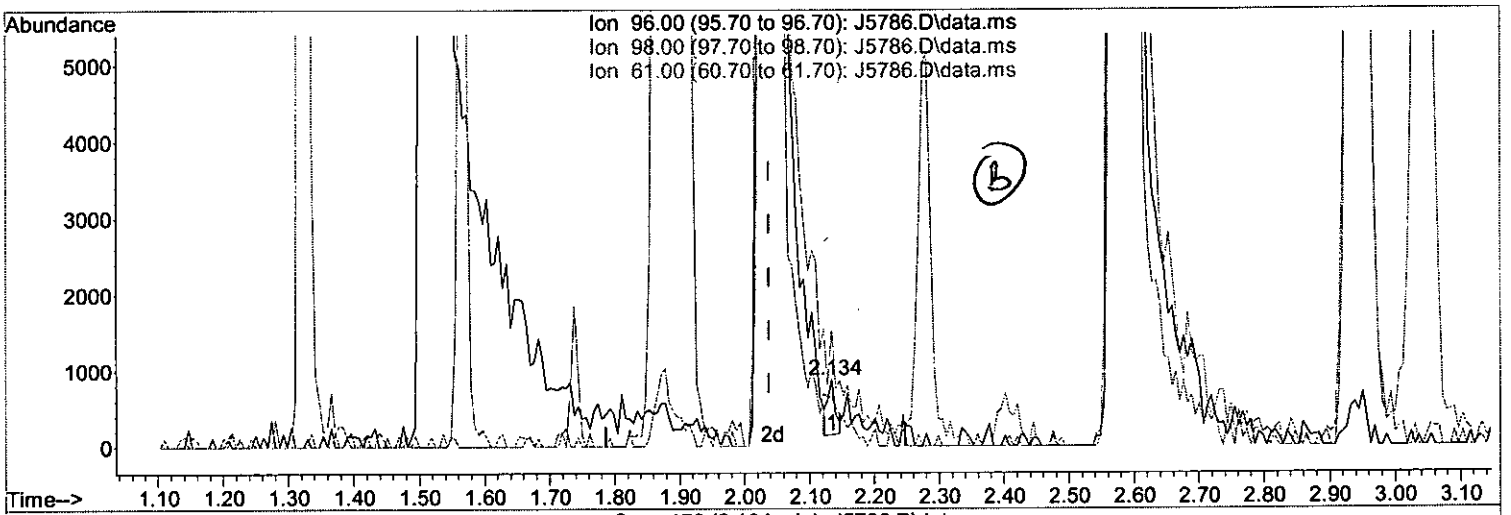
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	1,3,5-Trimethylbenzene	10.175	105	1386389	43.25	ppb	98
100)	tert-Butylbenzene	10.443	119	1262379	46.78	ppb	95
101)	1,2,4-Trimethylbenzene	10.480	105	1402497	42.52	ppb	98
102)	3,4-DCBTF	10.535	214	432045	46.07	ppb	98
103)	sec-Butylbenzene	10.620	105	1757044	46.79	ppb	97
104)	p-Isopropyltoluene	10.742	119	1529260	48.15	ppb	98
105)	1,3-Dclbenz	10.699	146	922417	48.40	ppb	98
106)	1,4-Dclbenz	10.766	146	928886	45.80	ppb	97
107)	2,4-DCBTF	10.821	214	393433	48.22	ppb	95
108)	2,5-DCBTF	10.864	214	444279	47.62	ppb	99
109)	n-Butylbenzene	11.065	91	1336393	46.67	ppb	97
110)	1,2-Dclbenz	11.065	146	855890	46.63	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	66481	49.77	ppb	93
112)	Trielution Dichlorotol...	11.729	125	2154235	148.41	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	629141	49.70	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	1547013	100.65	ppb	98
115)	1,2,4-Tcbenzene	12.162	180	546672	48.71	ppb	94
116)	Hexachlorobt	12.266	225	213512	43.59	ppb	98
117)	Naphthalen	12.302	128	1037352	51.34	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	446695	48.61	ppb	99
119)	2,4,5-Trichlorotolene	12.851	159	314873	52.00	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	268746	48.48	ppb	97

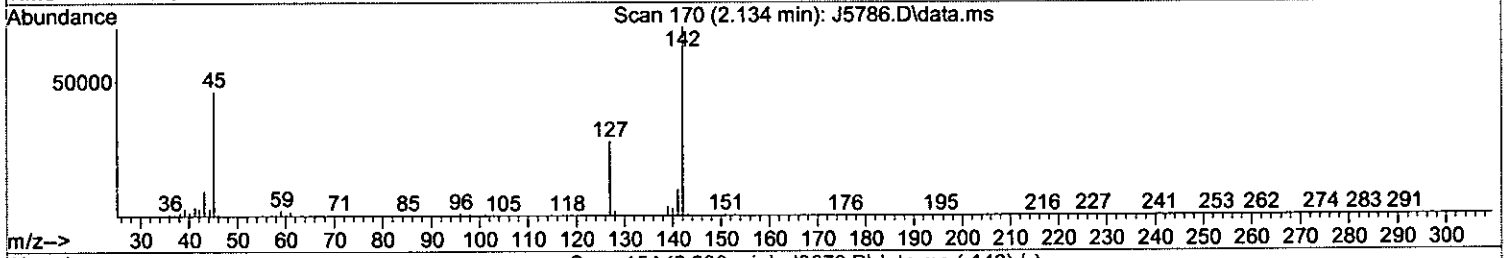
(#) = qualifier out of range (m) = manual integration (+) = signals summed

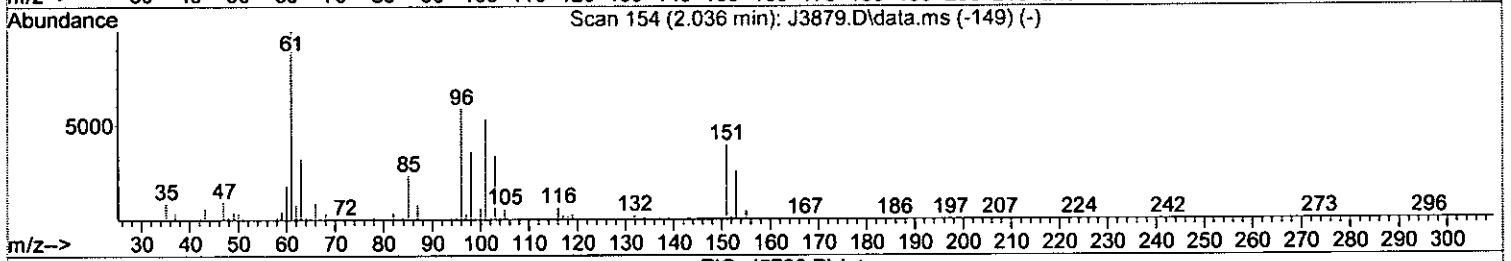
Quantitation Report (Qedit)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5786.D\data.ms

(13) 1,1-Diclethene (P)

2.134min (+0.097) 0.08 ppb

response 593

Ion	Exp%	Act%
96.00	100	100
98.00	60.70	75.09
61.00	170.50	175.09
0.00	0.00	0.00

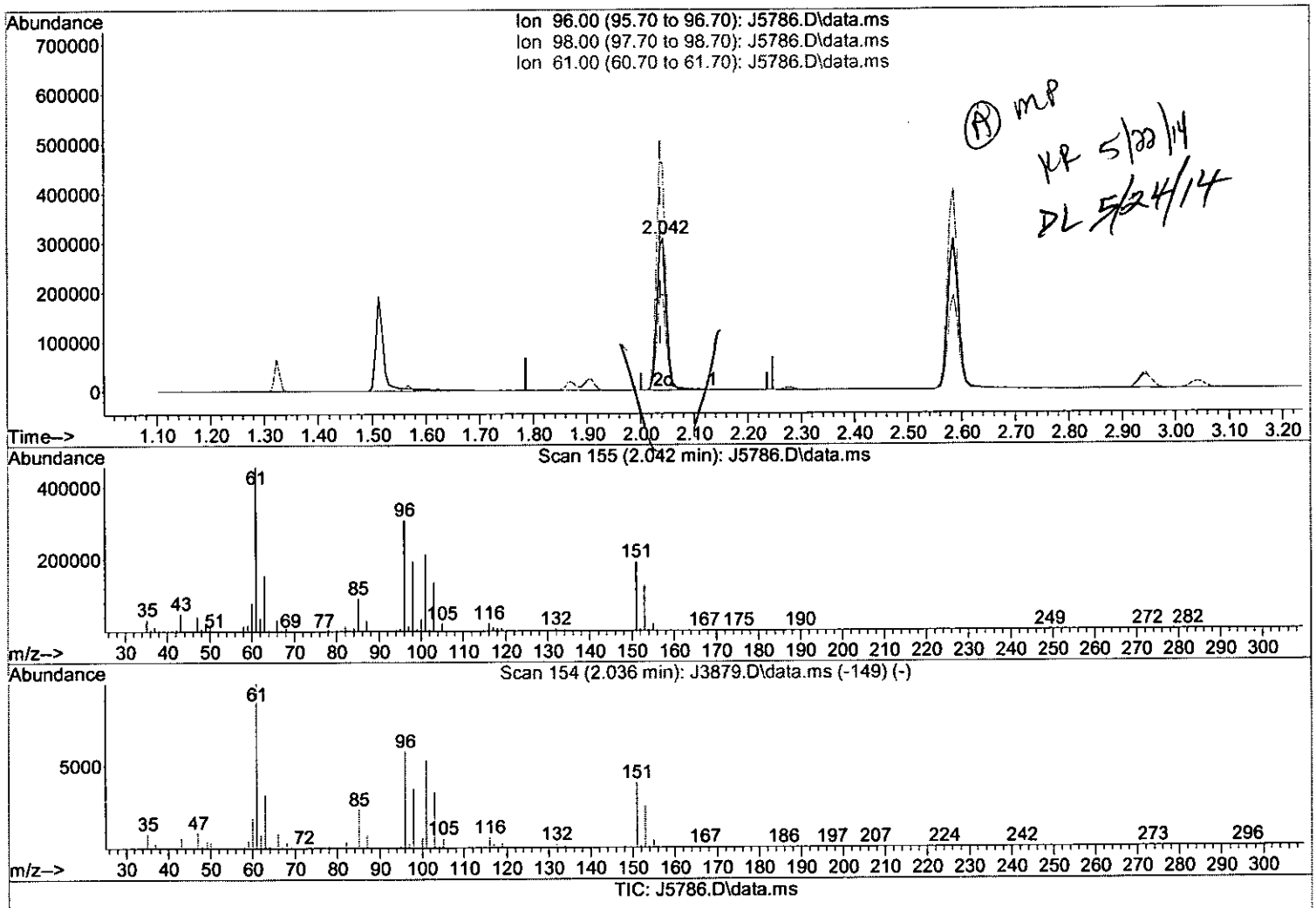
W031214.M Thu May 22 11:24:31 2014 Page: 1

00341

Quantitation Report (Qedit)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



TIC: J5786.D\data.ms

(13) 1,1-Diclethene (P)

2.042min (+0.006) 54.07 ppb m

response 379591

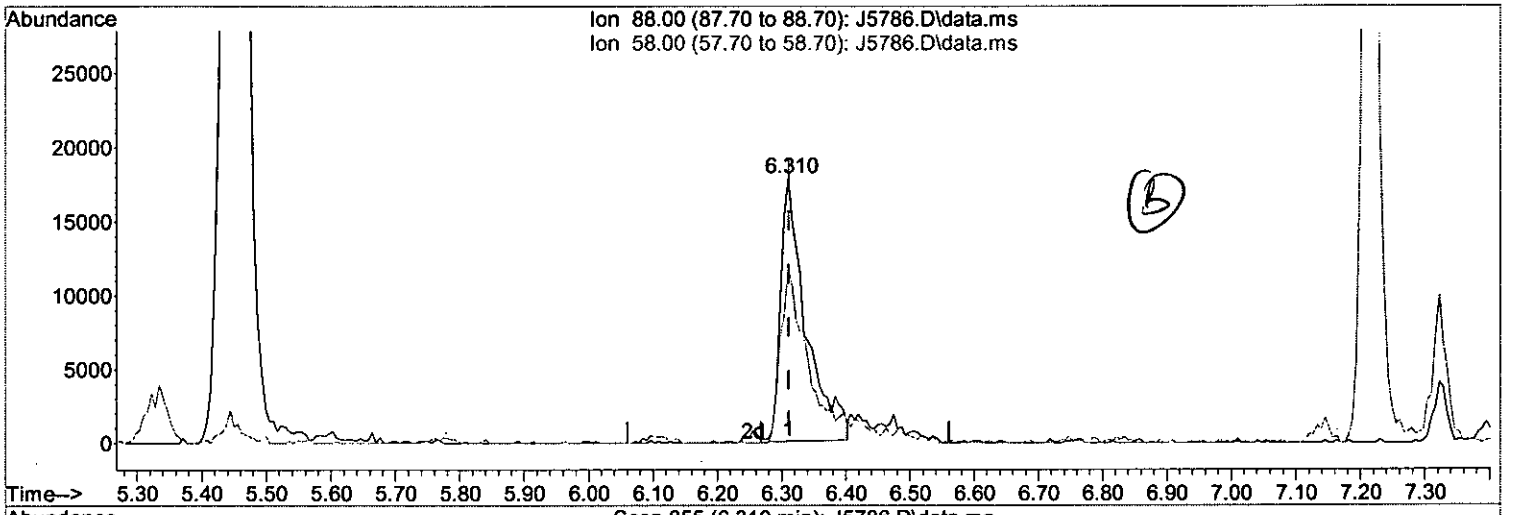
Ion	Exp%	Act%
96.00	100	100
98.00	60.70	62.70
61.00	170.50	148.09#
0.00	0.00	0.00

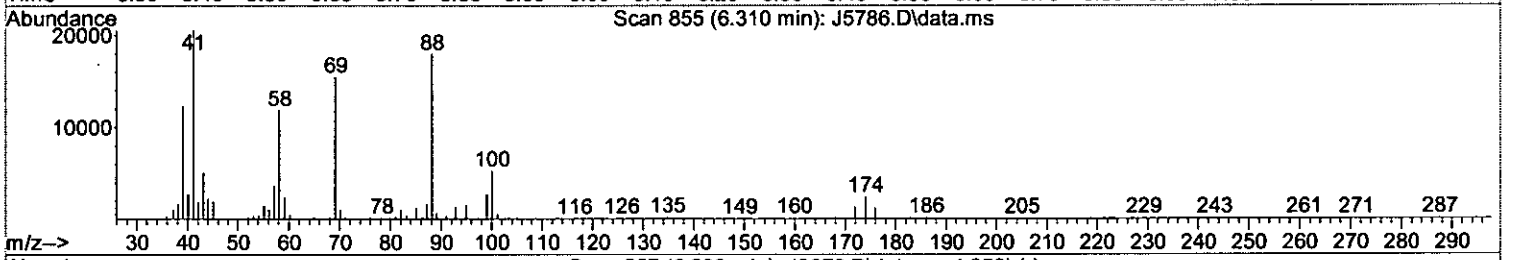
W031214.M Thu May 22 11:24:39 2014 Page: 1

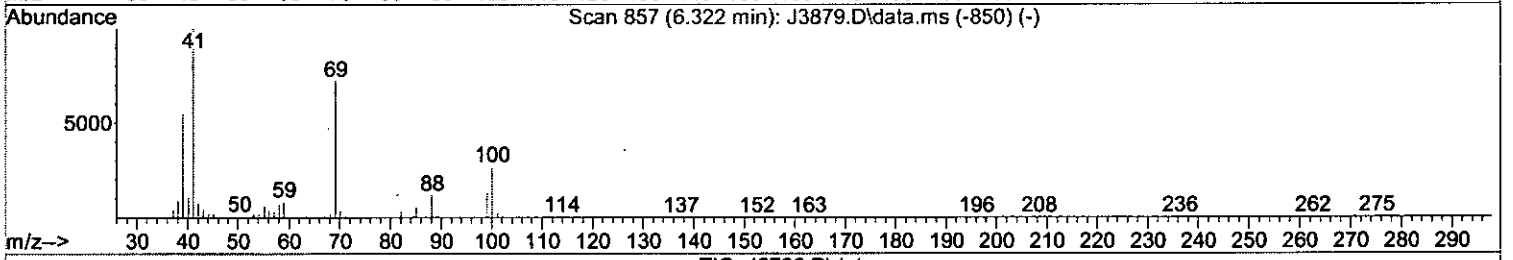
Quantitation Report (Qedit)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5786.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 790.10 ppb

response 48264

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	66.01
0.00	0.00	0.00
0.00	0.00	0.00

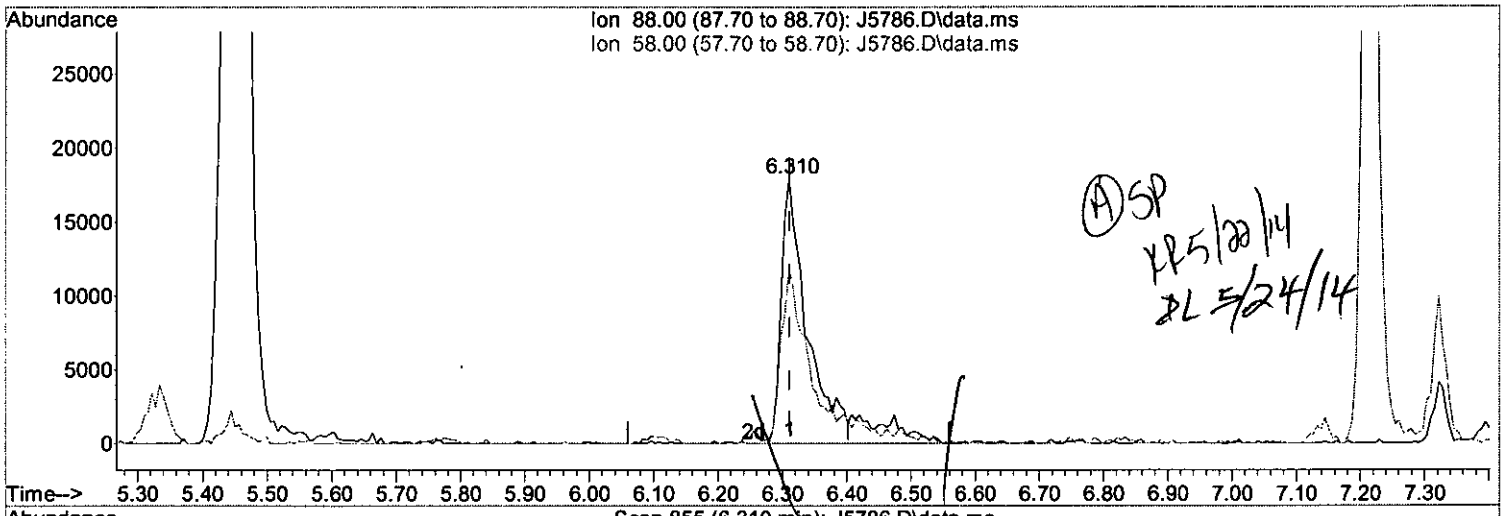
W031214.M Thu May 22 11:26:04 2014 Page: 1

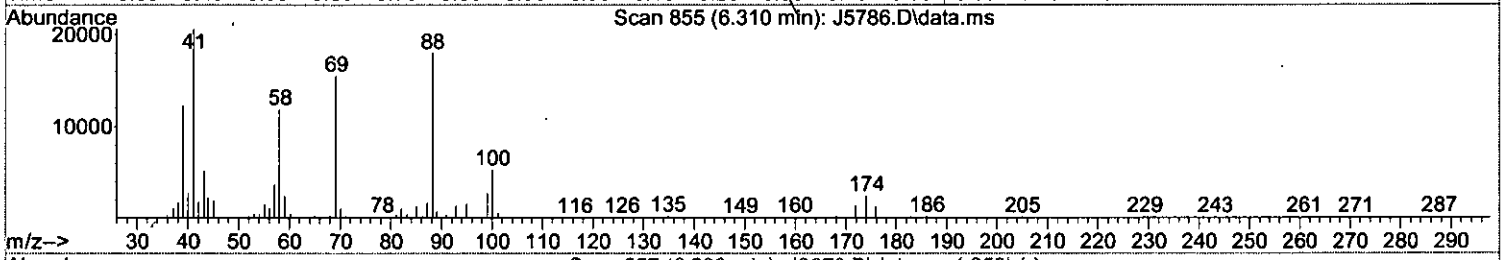
00343

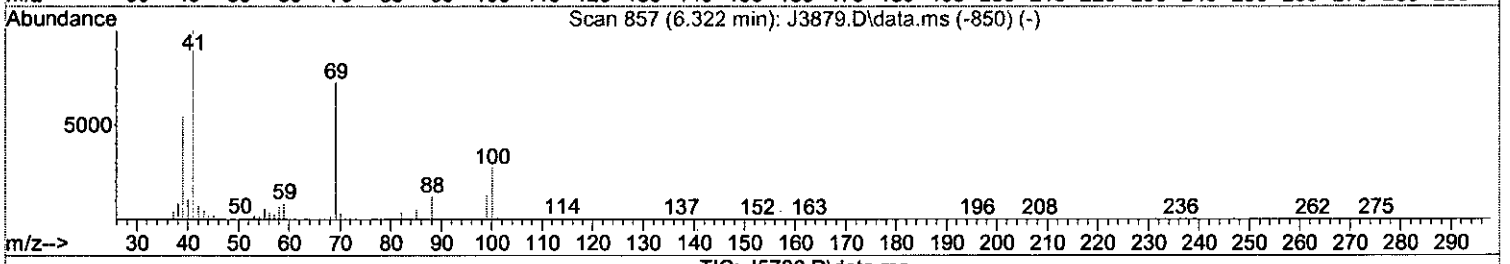
Quantitation Report (Qedit)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration







TIC: J5786.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 952.94 ppb m

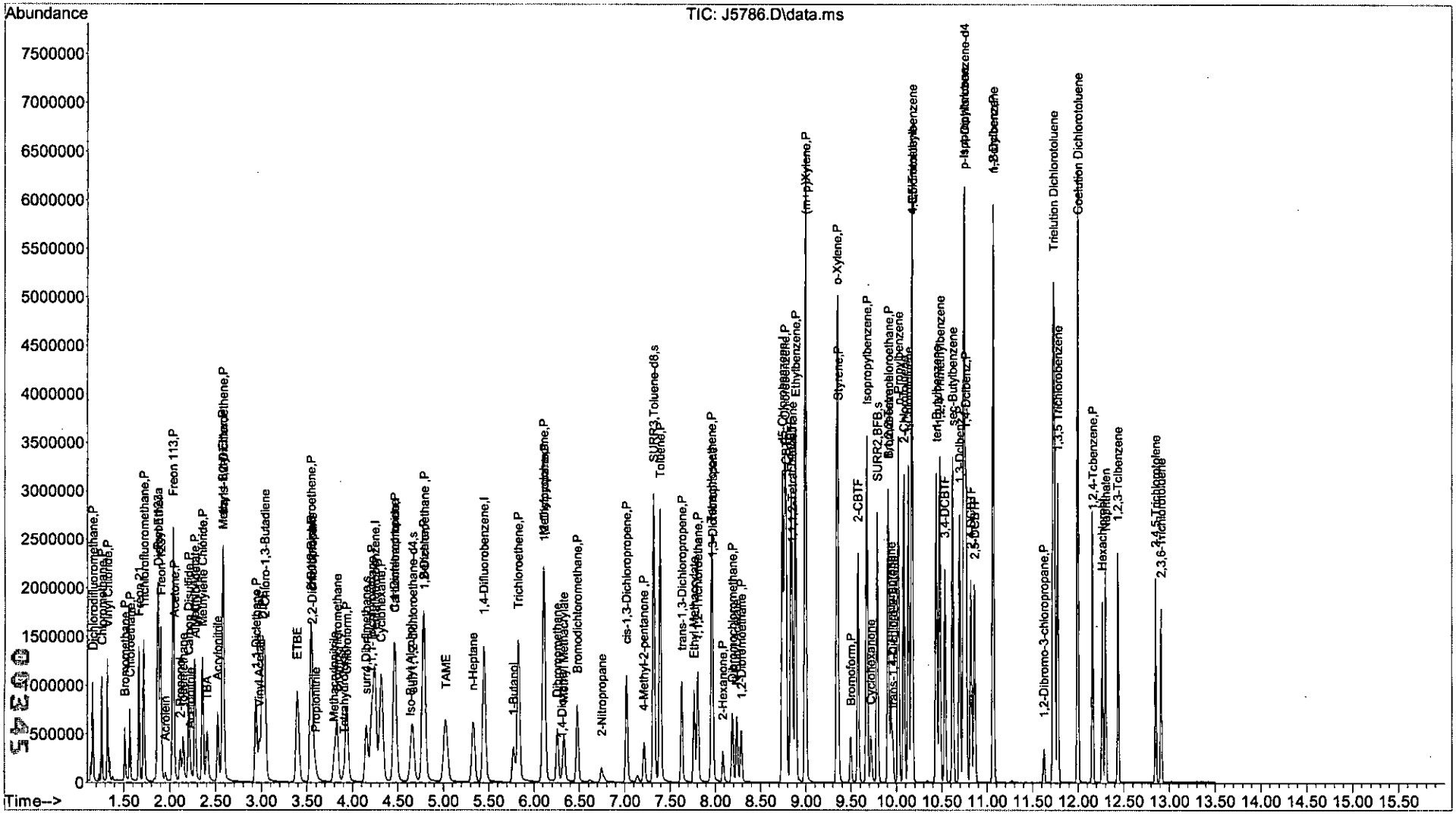
response 58211

Ion	Exp%	Act%
88.00	100	100
58.00	50.80	66.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : R1403443-005DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\052014\J5786.D
Misc : PARSONS 11603 T4
Acq On : 21 May 2014 12:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W031214.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: May 21 00:47:14 2014
QLast Update : Mon May 19 11:05:50 2014
Response via : Initial Calibration



Analysis: 8260 Waters Analyst: K. Priest Tune Method: W031214
Date: 3/12/14 Data Path: j:\acqudata\msvoa12\031214 Run Method: ↓
Instr.: 12 LIMS Run#: —ICAL—

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								53872		
(2) 1	TUNE								53873	YT	(auto) 9:41
2	1 BLK	5ppm	50ppm FV						53874	YB	
1	0.5	5ml	— 50mls						53875	Y	8260 water ICAL
2	1.0	10ml	—						53876	Y	
3	2.0	20ml	—						53877	Y	
4	5.0	50ml	—						53878	Y	
5	20	—	2ml						53879	Y	
6	50	—	5ml						53880	Y	
7	100	—	10ml						53881	Y	
8	200	—	20ml						53882	Y	
9	BLK								53883	—	
10									53884	—	
11									53885	—	
12									53886	—	
13	1.0 ppb LOD		R1401347-017						53887		
14	5.0 ppb LOQ								53888		
15	10 ppb LOQ								53889		

LOD
KR 3/12/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

50D Primary OCC : 67739
Primary HBD : 68188
Primary Fit : 67761 10ml → 1.0ml MeOH = 5ppm std
Primary HSL : 68234
TG 68233

Secondary :
Secondary :
Secondary :
Secondary :

Combined IS/Surr 50D : 68182
Surrogate :
Internal Std :

Runlog-MSVOAr1 12/5/12
Page 148

Analysis: 5030Waters Analyst: Kwest Tune Method: WOS1214
Date: 5/20/14 Data Path: j:\acqudata\msvoa2\052014 Run Method: ↓
Instr. 12 (power outage @ 12:15) LIMS Run#: 393182

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	HIGH GASES								J5761		
2	BLK								J5762		
(VB) 1	TUNE (carbon is/su)								J5763	YT	(auto) 11:35
1	CCV								J5764	Ⓐ	VC↑ not (high shoot)
2	CCV								J5765	Ⓐ	high (mixture)
1	BLK								J5766	—	
2	TUNE (carbon is/su)		RQ1405286-01						J5767	YT	(auto) (14:21)
1	CCV		02						J5768	YC	
2	LCS		03						J5769	YD	
1	VBLK		—						J5770	Ⓐ	not YD
2	↓		↓ 04						J5771	YB	
1	R1403705-001	1.0		[redacted]	1693	2	1	12	J5772	Y	
2	R1403429-001	1.0		[redacted]	9443	2	2	12	J5773	Y	
3	R1403443-010	1.0		[redacted]	11603	4	1	12	J5774	Y	
4	011	1.0					1	12	J5775	Y	
5	013	1.0					1	12	J5776	Y	
6	014	1.0					1	12	J5777	Y	
7	012	1.0					1	12	J5778	Y	
8	001	1.0					1	12	J5779	Y	
9	006	1.0					1	12	J5780	Y	
10	007	1.0					1	12	J5781	Y	
11	008	1.0					1	12	J5782	Y	
12	009	1.0					1	12	J5783	Y	
13	005	1.0					1	12	J5784	Y	
14	ms 005	1.0	RQ1405286-05				4	12	J5785	YD	
15	↓ msD005	1.0	↓ 06	↓	↓	↓	5	12	J5786	YB	00:32 ✓
16	BLK								J5787		

EOD KRS 5/20/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

SOD Primary OCC : 70136
Primary HBD : 70522
Primary HSL : 70460 5ml → 50mls
Primary TB : 70523 = CCV
Primary Fr+ : 70514

SOD Secondary Fr+ : 70519 -5ml
SOD Secondary OCC : 70137
Secondary HBD : 70520 2ml
Secondary TB : 70360
Secondary HSL : 70549
50mls = LCS

-10.6ml 4.2ml
Combined IS/Surr SOD : 70490
Surrogate :
Internal Std :

4.2ml vial = MS D

Runlog-MSVOAr2 9/20/13
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e-Hardcopy 2.0
Automated Report

New Jersey
ACCUTEST LABORATORIES

05/29/14

Technical Report for

Parsons Engineering Science

Fort Monmouth, Oceanport, Monmouth County, NJ

748810-03000

Accutest Job Number: JB66584

Sampling Date: 05/08/14

Report to:

Parsons Engineering Science

Sandra.delasFuentes@parsons.com

ATTN: Sandra de las Fuentes

Total number of pages in report: **344**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest Laboratories

Sample Summary

Parsons Engineering Science

Job No: JB66584

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: 748810-03000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB66584-1	05/08/14	12:35	NL	05/08/14	AQ	Ground Water	FTMM-22-GW-CWIMW31-14.3-QA
JB66584-2	05/08/14	12:35	NL	05/08/14	AQ	Trip Blank Water	FTMM-TB-05082014-QA

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Parsons Engineering Science	**Job No**	JB66584
Site:	Fort Monmouth, Oceanport,Monmouth County,NJ	**Report Date**	5/23/2014 5:45:35 PM

On 05/08/2014, 1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB66584 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V2E4603

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB66864-3MS, JB66864-3MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: AQ **Batch ID:** MP79488

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB66584-1MS, JB66584-1MSD, JB66584-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium are outside control limits for sample MP79488-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry By Method ASTM D1498-76

Matrix: AQ **Batch ID:** GN4574

- Sample(s) JB66584-1DUP were used as the QC samples for Redox Potential Vs H2.

Wet Chemistry By Method SM4500H+ B-11

Matrix: AQ **Batch ID:** GN4575

- Sample(s) JB66584-1DUP were used as the QC samples for pH.
- JB66584-1 for pH: Field analysis required. Received out of hold time and analyzed by request.

Wet Chemistry By Method SW846 7199

Matrix: AQ **Batch ID:** GP79977

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB66584-1DUP, JB66584-1MS were used as the QC samples for Chromium, Hexavalent.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JB66584
Account: Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Collected: 05/08/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JB66584-1	**FTMM-22-GW-CWIMW31-14.3-QA**					
Trichloroethene		7.3	1.0	0.50	ug/l	SW846 8260B
JB66584-2	**FTMM-TB-05082014-QA**					
No hits reported in this sample.						

New Jersey
ACCUTEST LABORATORIES

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Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-22-GW-CWIMW31-14.3-QA
Lab Sample ID: JB66584-1
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 05/08/14
Date Received: 05/08/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E102468.D	1	05/16/14	DR	n/a	n/a	V2E4603
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.35 U	0.50	0.35	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	2.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	2.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-22-GW-CWIMW31-14.3-QA		
Lab Sample ID:	JB66584-1	**Date Sampled:**	05/08/14
Matrix:	AQ - Ground Water	**Date Received:**	05/08/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.25 U	0.50	0.25	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
591-78-6	2-Hexanone	2.0 U	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	2.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
75-65-0	Tert Butyl Alcohol	10 U	25	10	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	7.3	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		79-120%
17060-07-0	1,2-Dichloroethane-D4	86%		72-123%
2037-26-5	Toluene-D8	103%		78-119%
460-00-4	4-Bromofluorobenzene	90%		74-119%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-22-GW-CWIMW31-14.3-QA		
Lab Sample ID:	JB66584-1	**Date Sampled:**	05/08/14
Matrix:	AQ - Ground Water	**Date Received:**	05/08/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-22-GW-CWIMW31-14.3-QA
Lab Sample ID: JB66584-1
Matrix: AQ - Ground Water
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 05/08/14
Date Received: 05/08/14
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	Units	DF	Prep	Analyzed	By	Method	Prep Method
Chromium	5.0 U	10	5.0	ug/l	1	05/14/14	05/20/14	AP	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA34046
(2) Prep QC Batch: MP79488

LOQ = Limit of Quantitation
LOD = Limit of Detection

U = Indicates a result < LOD
J = Indicates a result > = LOD but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-22-GW-CWIMW31-14.3-QA
Lab Sample ID: JB66584-1
Matrix: AQ - Ground Water
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Date Sampled: 05/08/14
Date Received: 05/08/14
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	0.0028 U	0.0055	0.0028	mg/l	1	05/09/14 10:30	CW	SW846 7199

LOQ = Limit of Quantitation
LOD = Limit of Detection

U = Indicates a result < LOD
J = Indicates a result > = LOD but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-TB-05082014-QA		
Lab Sample ID:	JB66584-2	**Date Sampled:**	05/08/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/08/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E102467.D	1	05/16/14	DR	n/a	n/a	V2E4603
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
67-64-1	Acetone	5.0 U	10	5.0	ug/l	
71-43-2	Benzene	0.35 U	0.50	0.35	ug/l	
108-86-1	Bromobenzene	0.50 U	5.0	0.50	ug/l	
74-97-5	Bromochloromethane	1.0 U	5.0	1.0	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	ug/l	
75-25-2	Bromoform	0.50 U	2.0	0.50	ug/l	
74-83-9	Bromomethane	1.0 U	2.0	1.0	ug/l	
78-93-3	2-Butanone (MEK)	5.0 U	10	5.0	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	2.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	2.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	1.0 U	1.0	1.0	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	ug/l	
75-00-3	Chloroethane	1.0 U	1.0	1.0	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	ug/l	
74-87-3	Chloromethane	1.0 U	1.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	5.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	1.0 U	1.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.50 U	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	2.0	0.50	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: FTMM-TB-05082014-QA
Lab Sample ID: JB66584-2
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Date Sampled: 05/08/14
Date Received: 05/08/14
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	2.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.25 U	0.50	0.25	ug/l	
87-68-3	Hexachlorobutadiene	0.50 U	2.0	0.50	ug/l	
591-78-6	2-Hexanone	2.0 U	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	5.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U	5.0	5.0	ug/l	
75-09-2	Methylene chloride	1.0 U	2.0	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	2.0	0.50	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
75-65-0	Tert Butyl Alcohol	10 U	25	10	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	5.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	ug/l	
127-18-4	Tetrachloroethene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.50 U	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	ug/l	
79-01-6	Trichloroethene	0.50 U	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	5.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	2.0 U	5.0	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	0.19 U	1.0	0.19 [a]	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		79-120%
17060-07-0	1,2-Dichloroethane-D4	86%		72-123%
2037-26-5	Toluene-D8	103%		78-119%
460-00-4	4-Bromofluorobenzene	90%		74-119%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FTMM-TB-05082014-QA		
Lab Sample ID:	JB66584-2	**Date Sampled:**	05/08/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	05/08/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Fort Monmouth, Oceanport,Monmouth County,NJ		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	Units	Q

(a) Value reported is laboratory DL (MDL).

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey
ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

E

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE 1 OF 1

WTB GW

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JB66584

Client / Reporting Information

Company Name: Parsons
Street Address: 100 High St
City: Boston State: MA Zip: 02110
Project Contact: iris.grill@parsons.com E-mail:
Phone #: 617-449-1563 Fax #:
Sampler(s) Name(s): Nick Loizos Phone #: (732) 763-1437

Project Information

Project Name: FTMM 2nd Quarter GW Sampling 2014
Street: Oceanport Ave
City: Oceanport State: NJ
Project #: 746810-03000
Client Purchase Order #:
Project Manager: Iris Grill

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOC 8260	Dioxane 8260	Chromium	Hex Chromium 7199	LAB USE ONLY
1	FTMM-22-GW-GWIMW31-14.3		5/6/14	1235	NL	W	8	3		1						X	X	X	X	A1 G26 ~~V2176~~ V245
2	FTMM-TB-05062014		"	—	NL	W	2	2								X				

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished By Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/6/14 @ 1947	1	2		2
3	Relinquished By Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ] On Ice [X] Cooler Temp: 3.5

2 Aqua

NB

JB66584: Chain of Custody
Page 1 of 4

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB66584 **Client:** **Project:**

Date / Time Received: 5/8/2014 **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (3.5/3.5); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB66584: Chain of Custody
Page 2 of 4

ACCUTEST LABORATORIES

Job Change Order: JB66584

Requested Date:	5/9/2014	**Received Date:**	5/8/2014
Account Name:	Parsons Engineering Science	**Due Date:**	5/22/2014
Project Description:	Fort Monmouth, Oceanport,Monmouth County,NJ	**Deliverable:**	FULT1
CSR:	sasham	**TAT (Days):**	14

Sample #: JB66584-1
Dept:

Change:
Please change client sample ID to FTMM-22-GW-CWIMW31-14.3-QA

FTMM-22-GW-CWIMW31-14.3

Sample #: JB66584-2
Dept:

Change:
Please change client sample ID to FTMM-TB-05082014-QA

FTMM-TB-05082014

Above Changes Per: Sandra De Las Fuentes **Date/Time:** 5/9/2014 10:28:00 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

JB66584: Chain of Custody
Page 3 of 4

ACCUTEST LABORATORIES

Job Change Order: JB66584

Requested Date:	5/20/2014	**Received Date:**	5/8/2014
Account Name:	Parsons Engineering Science	**Due Date:**	5/22/2014
Project Description:	Fort Monmouth, Oceanport,Monmouth County,NJ	**Deliverable:**	FULT1
CSR:	MattC	**TAT (Days):**	14

Sample #: JB66584-1

Dept:

Change:
Move V8260SIMDIOX to A job. Hold A job until notified to close.

FTMM-22-GW-CWIMW31-14.3-QA

Above Changes Per: Meghan Ehmert **Date/Time:** 5/20/2014 2:15:15 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

JB66584: Chain of Custody
Page 4 of 4

Accutest Laboratories

Internal Sample Tracking Chronicle

Parsons Engineering Science

Job No: JB66584

Fort Monmouth, Oceanport, Monmouth County, NJ
Project No: 748810-03000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB66584-1	Collected: 08-MAY-14 12:35 By: NL			Received: 08-MAY-14 By: MB		
FTMM-22-GW-CWIMW31-14.3-QA						
JB66584-1	SW846 7199	09-MAY-14 10:30	CW	09-MAY-14	CW	XCR7199
JB66584-1	SW846 8260B	16-MAY-14 13:42	DR			V8260SL
JB66584-1	SW846 6010C	20-MAY-14 03:24	AP	14-MAY-14	GM	CR
JB66584-2	Collected: 08-MAY-14 12:35 By: NL			Received: 08-MAY-14 By: MB		
FTMM-TB-05082014-QA						
JB66584-2	SW846 8260B	16-MAY-14 13:13	DR			V8260SL

Accutest Internal Chain of Custody

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Received: 05/08/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB66584-1.1	Secured Storage	Alfredo Crespo	05/14/14 07:08	Retrieve from Storage
JB66584-1.1	Alfredo Crespo	Secured Staging Area	05/14/14 07:09	Return to Storage
JB66584-1.1	Secured Staging Area	Amirah Hillman	05/14/14 08:39	Retrieve from Storage
JB66584-1.1	Amirah Hillman	Gina Montenegro	05/14/14 13:29	Custody Transfer
JB66584-1.1	Gina Montenegro	Secured Storage	05/14/14 15:30	Return to Storage
JB66584-1.1.1	Gina Montenegro	Metals Digestion	05/14/14 13:30	Digestate from JB66584-1.1
JB66584-1.1.1	Metals Digestion	Gina Montenegro	05/14/14 14:38	Digestate from JB66584-1.1
JB66584-1.1.1	Gina Montenegro	Metals Digestate Storage	05/14/14 14:38	Return to Storage
JB66584-1.2	Secured Storage	Donald Phelps	05/08/14 20:04	Retrieve from Storage
JB66584-1.2	Donald Phelps	Secured Staging Area	05/08/14 20:04	Return to Storage
JB66584-1.2	Secured Staging Area	Lucas Schneider	05/08/14 20:06	Retrieve from Storage
JB66584-1.2	Lucas Schneider	Secured Storage	05/08/14 23:55	Return to Storage
JB66584-1.2	Secured Storage	Gage Donahue	05/09/14 08:32	Retrieve from Storage
JB66584-1.2	Gage Donahue	Secured Staging Area	05/09/14 08:32	Return to Storage
JB66584-1.2	Secured Staging Area	Ching Wong	05/09/14 08:46	Retrieve from Storage
JB66584-1.2	Ching Wong	Lee Blair	05/09/14 08:46	Custody Transfer
JB66584-1.2	Lee Blair	Secured Storage	05/09/14 16:40	Return to Storage
JB66584-1.3	Secured Storage	Prashant Shukla	05/12/14 17:07	Retrieve from Storage
JB66584-1.3	Prashant Shukla	GCMS3C	05/12/14 17:07	Load on Instrument
JB66584-1.3	GCMS3C	Prashant Shukla	05/13/14 09:12	Unload from Instrument
JB66584-1.3	Prashant Shukla	Secured Storage	05/13/14 09:13	Return to Storage
JB66584-1.6	Secured Storage	Connie Xu	05/14/14 11:46	Retrieve from Storage
JB66584-1.6	Connie Xu	GCMSU	05/14/14 11:46	Load on Instrument
JB66584-1.6	GCMSU	Connie Xu	05/15/14 11:12	Unload from Instrument
JB66584-1.6	Connie Xu	Secured Storage	05/15/14 11:12	Return to Storage
JB66584-1.7	Secured Storage	Connie Xu	05/15/14 11:13	Retrieve from Storage
JB66584-1.7	Connie Xu	GCMSU	05/15/14 11:13	Load on Instrument
JB66584-1.7	GCMSU	Dixita Rana	05/16/14 11:36	Unload from Instrument
JB66584-1.7	Dixita Rana	GCMS2E	05/16/14 11:36	Load on Instrument
JB66584-1.7	GCMS2E	Dixita Rana	05/19/14 11:14	Unload from Instrument
JB66584-1.7	Dixita Rana	Secured Storage	05/19/14 11:15	Return to Storage
JB66584-2.1	Secured Storage	Connie Xu	05/14/14 11:46	Retrieve from Storage
JB66584-2.1	Connie Xu	GCMSU	05/14/14 11:46	Load on Instrument
JB66584-2.1	GCMSU	Connie Xu	05/15/14 11:12	Unload from Instrument
JB66584-2.1	Connie Xu	Secured Storage	05/15/14 11:12	Return to Storage
JB66584-2.2	Secured Storage	Connie Xu	05/15/14 11:13	Retrieve from Storage
JB66584-2.2	Connie Xu	GCMSU	05/15/14 11:13	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ
Received: 05/08/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB66584-2.2	GCMSU	Dixita Rana	05/16/14 11:36	Unload from Instrument
JB66584-2.2	Dixita Rana	GCMS2E	05/16/14 11:36	Load on Instrument
JB66584-2.2	GCMS2E	Dixita Rana	05/19/14 11:14	Unload from Instrument
JB66584-2.2	Dixita Rana	Secured Storage	05/19/14 11:15	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E4603-MB	2E102463.D	1	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	2.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.23	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E4603-MB	2E102463.D	1	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	0.50	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.32	ug/l	
100-42-5	Styrene	ND	2.0	0.30	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	1.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	79-120%
17060-07-0	1,2-Dichloroethane-D4	85%	72-123%
2037-26-5	Toluene-D8	104%	78-119%

Method Blank Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E4603-MB	2E102463.D	1	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	88%	74-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E4603-BS	2E102464.D	1	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	49.4	99	52-152
71-43-2	Benzene	50	49.1	98	80-121
108-86-1	Bromobenzene	50	47.4	95	81-121
74-97-5	Bromochloromethane	50	48.5	97	82-125
75-27-4	Bromodichloromethane	50	48.7	97	83-127
75-25-2	Bromoform	50	49.2	98	74-131
74-83-9	Bromomethane	50	48.8	98	45-155
78-93-3	2-Butanone (MEK)	50	43.8	88	67-136
104-51-8	n-Butylbenzene	50	50.5	101	79-126
135-98-8	sec-Butylbenzene	50	42.0	84	80-123
98-06-6	tert-Butylbenzene	50	44.4	89	81-126
56-23-5	Carbon tetrachloride	50	47.5	95	77-138
108-90-7	Chlorobenzene	50	48.0	96	82-119
75-00-3	Chloroethane	50	58.6	117	61-151
67-66-3	Chloroform	50	47.1	94	79-124
74-87-3	Chloromethane	50	50.4	101	48-148
95-49-8	o-Chlorotoluene	50	46.6	93	81-121
106-43-4	p-Chlorotoluene	50	44.9	90	79-118
96-12-8	1,2-Dibromo-3-chloropropane	50	43.5	87	66-137
124-48-1	Dibromochloromethane	50	48.8	98	81-127
106-93-4	1,2-Dibromoethane	50	49.8	100	79-122
95-50-1	1,2-Dichlorobenzene	50	46.7	93	81-121
541-73-1	1,3-Dichlorobenzene	50	45.3	91	81-119
106-46-7	1,4-Dichlorobenzene	50	43.7	87	80-116
75-71-8	Dichlorodifluoromethane	50	46.7	93	33-161
75-34-3	1,1-Dichloroethane	50	46.1	92	78-129
107-06-2	1,2-Dichloroethane	50	47.5	95	75-133
75-35-4	1,1-Dichloroethene	50	46.5	93	74-128
156-59-2	cis-1,2-Dichloroethene	50	45.9	92	78-123
156-60-5	trans-1,2-Dichloroethene	50	45.6	91	75-122
78-87-5	1,2-Dichloropropane	50	45.7	91	80-124
142-28-9	1,3-Dichloropropane	50	47.4	95	79-120
594-20-7	2,2-Dichloropropane	50	47.0	94	50-145
563-58-6	1,1-Dichloropropene	50	45.5	91	77-121
10061-01-5	cis-1,3-Dichloropropene	50	48.1	96	75-114
10061-02-6	trans-1,3-Dichloropropene	50	47.2	94	78-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E4603-BS	2E102464.D	1	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	47.5	95	82-120
87-68-3	Hexachlorobutadiene	50	53.9	108	69-134
591-78-6	2-Hexanone	50	43.9	88	65-135
98-82-8	Isopropylbenzene	50	49.8	100	80-124
99-87-6	p-Isopropyltoluene	50	42.6	85	83-127
1634-04-4	Methyl Tert Butyl Ether	100	90.2	90	74-123
108-10-1	4-Methyl-2-pentanone(MIBK)	50	48.7	97	68-135
75-09-2	Methylene chloride	50	45.6	91	75-121
91-20-3	Naphthalene	50	47.3	95	65-138
103-65-1	n-Propylbenzene	50	50.5	101	81-125
100-42-5	Styrene	50	49.4	99	81-123
75-65-0	Tert Butyl Alcohol	250	241	96	70-132
630-20-6	1,1,1,2-Tetrachloroethane	50	48.8	98	82-123
79-34-5	1,1,2,2-Tetrachloroethane	50	43.8	88	71-123
127-18-4	Tetrachloroethene	50	51.7	103	69-141
108-88-3	Toluene	50	48.2	96	80-122
87-61-6	1,2,3-Trichlorobenzene	50	47.5	95	71-138
120-82-1	1,2,4-Trichlorobenzene	50	46.3	93	77-132
71-55-6	1,1,1-Trichloroethane	50	48.0	96	80-132
79-00-5	1,1,2-Trichloroethane	50	48.3	97	80-127
79-01-6	Trichloroethene	50	49.0	98	82-126
75-69-4	Trichlorofluoromethane	50	50.7	101	63-141
96-18-4	1,2,3-Trichloropropane	50	43.2	86	74-125
95-63-6	1,2,4-Trimethylbenzene	50	49.5	99	81-122
108-67-8	1,3,5-Trimethylbenzene	50	50.0	100	80-122
75-01-4	Vinyl chloride	50	51.9	104	53-135
	m,p-Xylene	100	98.9	99	81-121
95-47-6	o-Xylene	50	48.8	98	82-121
1330-20-7	Xylene (total)	150	148	99	82-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	79-120%
17060-07-0	1,2-Dichloroethane-D4	96%	72-123%
2037-26-5	Toluene-D8	109%	78-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E4603-BS	2E102464.D	1	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	74-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB66864-3MS	2E102472.D	5	05/16/14	DR	n/a	n/a	V2E4603
JB66864-3MSD	2E102473.D	5	05/16/14	DR	n/a	n/a	V2E4603
JB66864-3	2E102471.D	5	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Compound	JB66864-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	242	97	250	248	99	2	44-160/20
71-43-2	Benzene	ND		250	237	95	250	239	96	1	50-136/12
108-86-1	Bromobenzene	ND		250	248	99	250	253	101	2	73-127/11
74-97-5	Bromochloromethane	ND		250	242	97	250	251	100	4	74-131/11
75-27-4	Bromodichloromethane	ND		250	246	98	250	247	99	0	74-132/11
75-25-2	Bromoform	ND		250	254	102	250	253	101	0	68-136/12
74-83-9	Bromomethane	ND		250	241	96	250	246	98	2	37-157/21
78-93-3	2-Butanone (MEK)	ND		250	225	90	250	230	92	2	60-145/15
104-51-8	n-Butylbenzene	ND		250	266	106	250	274	110	3	53-141/15
135-98-8	sec-Butylbenzene	ND		250	224	90	250	229	92	2	54-137/15
98-06-6	tert-Butylbenzene	ND		250	234	94	250	238	95	2	58-137/14
56-23-5	Carbon tetrachloride	ND		250	215	86	250	216	86	0	46-152/17
108-90-7	Chlorobenzene	ND		250	243	97	250	248	99	2	70-127/12
75-00-3	Chloroethane	ND		250	235	94	250	237	95	1	44-147/16
67-66-3	Chloroform	ND		250	228	91	250	225	91	1	67-129/12
74-87-3	Chloromethane	ND		250	236	94	250	242	97	3	40-149/19
95-49-8	o-Chlorotoluene	ND		250	248	99	250	231	92	7	67-129/12
106-43-4	p-Chlorotoluene	ND		250	227	91	250	227	91	0	68-125/12
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	224	90	250	227	91	1	61-144/14
124-48-1	Dibromochloromethane	ND		250	256	102	250	258	103	1	74-131/10
106-93-4	1,2-Dibromoethane	ND		250	260	104	250	259	104	0	74-129/10
95-50-1	1,2-Dichlorobenzene	ND		250	243	97	250	246	98	1	73-126/11
541-73-1	1,3-Dichlorobenzene	ND		250	240	96	250	238	95	1	71-124/12
106-46-7	1,4-Dichlorobenzene	ND		250	228	91	250	227	91	0	71-123/12
75-71-8	Dichlorodifluoromethane	ND		250	262	105	250	256	102	2	20-161/25
75-34-3	1,1-Dichloroethane	ND		250	219	88	250	219	88	0	61-134/12
107-06-2	1,2-Dichloroethane	ND		250	239	96	250	237	95	1	68-137/11
75-35-4	1,1-Dichloroethene	ND		250	212	85	250	215	86	1	40-143/17
156-59-2	cis-1,2-Dichloroethene	ND		250	232	93	250	231	92	0	59-133/12
156-60-5	trans-1,2-Dichloroethene	ND		250	220	88	250	224	90	2	55-132/14
78-87-5	1,2-Dichloropropane	ND		250	226	90	250	226	90	0	70-128/11
142-28-9	1,3-Dichloropropane	ND		250	247	99	250	248	99	0	73-125/10
594-20-7	2,2-Dichloropropane	ND		250	227	91	250	224	90	1	39-149/16
563-58-6	1,1-Dichloropropene	ND		250	217	87	250	221	88	2	50-141/16
10061-01-5	cis-1,3-Dichloropropene	ND		250	249	100	250	249	100	0	73-127/11
10061-02-6	trans-1,3-Dichloropropene	ND		250	253	101	250	253	101	0	72-128/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB66864-3MS	2E102472.D	5	05/16/14	DR	n/a	n/a	V2E4603
JB66864-3MSD	2E102473.D	5	05/16/14	DR	n/a	n/a	V2E4603
JB66864-3	2E102471.D	5	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Compound	JB66864-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	634		250	838	82	250	850	86	1	49-137/13
87-68-3	Hexachlorobutadiene	ND		250	289	116	250	290	116	0	44-145/17
591-78-6	2-Hexanone	ND		250	226	90	250	222	89	2	59-145/14
98-82-8	Isopropylbenzene	72.3		250	331	103	250	339	107	2	57-136/14
99-87-6	p-Isopropyltoluene	ND		250	225	90	250	229	92	2	58-135/14
1634-04-4	Methyl Tert Butyl Ether	ND		250	236	94	250	235	94	0	64-134/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	247	99	250	246	98	0	63-144/13
75-09-2	Methylene chloride	ND		250	229	92	250	235	94	3	64-128/11
91-20-3	Naphthalene	311		250	574	105	250	568	103	1	53-153/14
103-65-1	n-Propylbenzene	195		250	432	95	250	440	98	2	53-138/14
100-42-5	Styrene	ND		250	267	107	250	268	107	0	67-130/12
75-65-0	Tert Butyl Alcohol	ND		1250	1290	103	1250	1330	106	3	64-154/16
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	257	103	250	258	103	0	73-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	240	96	250	237	95	1	68-131/11
127-18-4	Tetrachloroethene	ND		250	251	100	250	253	101	1	48-143/15
108-88-3	Toluene	28.3		250	273	98	250	275	99	1	54-137/13
87-61-6	1,2,3-Trichlorobenzene	ND		250	261	104	250	259	104	1	62-143/13
120-82-1	1,2,4-Trichlorobenzene	ND		250	253	101	250	251	100	1	66-138/12
71-55-6	1,1,1-Trichloroethane	ND		250	224	90	250	226	90	1	52-145/16
79-00-5	1,1,2-Trichloroethane	ND		250	252	101	250	251	100	0	73-130/10
79-01-6	Trichloroethene	ND		250	232	93	250	238	95	3	54-141/13
75-69-4	Trichlorofluoromethane	ND		250	252	101	250	248	99	2	33-159/25
96-18-4	1,2,3-Trichloropropane	ND		250	228	91	250	229	92	0	70-133/11
95-63-6	1,2,4-Trimethylbenzene	1370	E	250	1580	84	250	1600	92	1	50-139/13
108-67-8	1,3,5-Trimethylbenzene	417		250	671	102	250	677	104	1	56-136/14
75-01-4	Vinyl chloride	ND		250	251	100	250	254	102	1	36-149/19
	m,p-Xylene	1040		500	1480	88	500	1510	94	2	50-137/12
95-47-6	o-Xylene	253		250	506	101	250	513	104	1	60-134/12
1330-20-7	Xylene (total)	1300		750	1990	92	750	2020	96	1	53-136/12

CAS No.	Surrogate Recoveries	MS	MSD	JB66864-3	Limits
1868-53-7	Dibromofluoromethane	96%	97%	95%	79-120%
17060-07-0	1,2-Dichloroethane-D4	96%	94%	87%	72-123%
2037-26-5	Toluene-D8	108%	110%	108%	78-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JB66864-3MS	2E102472.D	5	05/16/14	DR	n/a	n/a	V2E4603
JB66864-3MSD	2E102473.D	5	05/16/14	DR	n/a	n/a	V2E4603
JB66864-3	2E102471.D	5	05/16/14	DR	n/a	n/a	V2E4603

The QC reported here applies to the following samples: **Method:** SW846 8260B

JB66584-1, JB66584-2

CAS No.	Surrogate Recoveries	MS	MSD	JB66864-3	Limits
460-00-4	4-Bromofluorobenzene	94%	95%	91%	74-119%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample: V2E4568-BFB
Lab File ID: 2E101479.D
Instrument ID: GCMS2E
Injection Date: 04/14/14
Injection Time: 17:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16031	18.4		Pass
75	30.0 - 60.0% of mass 95	41336	47.4		Pass
95	Base peak, 100% relative abundance	87160	100.0		Pass
96	5.0 - 9.0% of mass 95	5677	6.51		Pass
173	Less than 2.0% of mass 174	372	0.43	(0.49) [a]	Pass
174	50.0 - 120.0% of mass 95	75197	86.3		Pass
175	5.0 - 9.0% of mass 174	6029	6.92	(8.02) [a]	Pass
176	95.0 - 101.0% of mass 174	72941	83.7	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	4842	5.56	(6.64) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E4568-IC4568	2E101480.D	04/14/14	17:44	00:33	Initial cal 0.2
V2E4568-IC4568	2E101481.D	04/14/14	18:13	01:02	Initial cal 0.5
V2E4568-IC4568	2E101482.D	04/14/14	18:42	01:31	Initial cal 1
V2E4568-IC4568	2E101483.D	04/14/14	19:10	01:59	Initial cal 2
V2E4568-IC4568	2E101484.D	04/14/14	19:39	02:28	Initial cal 5
V2E4568-IC4568	2E101485.D	04/14/14	20:08	02:57	Initial cal 10
V2E4568-IC4568	2E101486.D	04/14/14	20:37	03:26	Initial cal 20
V2E4568-ICC4568	2E101487.D	04/14/14	21:06	03:55	Initial cal 50
V2E4568-IC4568	2E101488.D	04/14/14	21:35	04:24	Initial cal 100
V2E4568-IC4568	2E101489.D	04/14/14	22:03	04:52	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Sample:	V2E4568-BFB	**Injection Date:**	04/15/14
Lab File ID:	2E101494.D	**Injection Time:**	11:05
Instrument ID:	GCMS2E		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15315	18.3		Pass
75	30.0 - 60.0% of mass 95	41250	49.2		Pass
95	Base peak, 100% relative abundance	83866	100.0		Pass
96	5.0 - 9.0% of mass 95	5748	6.85		Pass
173	Less than 2.0% of mass 174	468	0.56	(0.65) [a]	Pass
174	50.0 - 120.0% of mass 95	72378	86.3		Pass
175	5.0 - 9.0% of mass 174	5446	6.49	(7.52) [a]	Pass
176	95.0 - 101.0% of mass 174	69266	82.6	(95.7) [a]	Pass
177	5.0 - 9.0% of mass 176	4551	5.43	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E4568-ICV4568	2E101495.D	04/15/14	12:02	00:57	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2E4603-BFB
Lab File ID: 2E102460.D
Instrument ID: GCMS2E
Injection Date: 05/16/14
Injection Time: 08:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11868	17.5		Pass
75	30.0 - 60.0% of mass 95	31742	46.8		Pass
95	Base peak, 100% relative abundance	67859	100.0		Pass
96	5.0 - 9.0% of mass 95	4596	6.77		Pass
173	Less than 2.0% of mass 174	467	0.69	(0.82) [a]	Pass
174	50.0 - 120.0% of mass 95	56936	83.9		Pass
175	5.0 - 9.0% of mass 174	4411	6.50	(7.75) [a]	Pass
176	95.0 - 101.0% of mass 174	54565	80.4	(95.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3623	5.34	(6.64) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E4603-CC4568	2E102461.D	05/16/14	08:53	00:42	Continuing cal 20
V2E4603-MB	2E102463.D	05/16/14	10:22	02:11	Method Blank
V2E4603-BS	2E102464.D	05/16/14	10:56	02:45	Blank Spike
ZZZZZZ	2E102466.D	05/16/14	12:44	04:33	(unrelated sample)
JB66584-2	2E102467.D	05/16/14	13:13	05:02	FTMM-TB-05082014-QA
JB66584-1	2E102468.D	05/16/14	13:42	05:31	FTMM-22-GW-CWIMW31-14.3-QA
JB66864-3	2E102471.D	05/16/14	15:10	06:59	(used for QC only; not part of job JB66584)
JB66864-3MS	2E102472.D	05/16/14	15:39	07:28	Matrix Spike
JB66864-3MSD	2E102473.D	05/16/14	16:08	07:57	Matrix Spike Duplicate
ZZZZZZ	2E102475.D	05/16/14	17:05	08:54	(unrelated sample)
ZZZZZZ	2E102476.D	05/16/14	17:34	09:23	(unrelated sample)
ZZZZZZ	2E102477.D	05/16/14	18:03	09:52	(unrelated sample)
ZZZZZZ	2E102478.D	05/16/14	18:32	10:21	(unrelated sample)
ZZZZZZ	2E102479.D	05/16/14	19:00	10:49	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Check Std:	V2E4603-CC4568	**Injection Date:**	05/16/14
Lab File ID:	2E102461.D	**Injection Time:**	08:53
Instrument ID:	GCMS2E	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	259486	6.84	369881	9.02	524432	9.92	411306	13.12	245174	15.44
Upper Limit [a]	518972	7.34	739762	9.52	1048864	10.42	822612	13.62	490348	15.94
Lower Limit [b]	129743	6.34	184941	8.52	262216	9.42	205653	12.62	122587	14.94

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2E4603-MB	262681	6.82	376299	9.02	522064	9.92	418132	13.12	252326	15.44
V2E4603-BS	234728	6.83	348535	9.02	502651	9.92	399316	13.12	228947	15.44
ZZZZZZ	243579	6.83	352176	9.02	495357	9.92	397826	13.12	241142	15.44
JB66584-2	243574	6.82	347626	9.01	490696	9.92	395783	13.12	237081	15.44
JB66584-1	224450	6.83	357252	9.02	505380	9.92	406582	13.12	243683	15.44
JB66864-3	233339	6.81	349146	9.02	501739	9.92	403936	13.12	237773	15.44
JB66864-3MS	240710	6.84	356455	9.01	529997	9.92	421271	13.12	239318	15.44
JB66864-3MSD	255654	6.85	387561	9.02	576011	9.92	456745	13.12	257489	15.44
ZZZZZZ	257950	6.83	381412	9.02	546427	9.92	433755	13.12	261712	15.44
ZZZZZZ	250011	6.81	372585	9.02	539854	9.92	435584	13.12	261043	15.44
ZZZZZZ	240220	6.82	339873	9.01	490389	9.92	393521	13.12	233776	15.44
ZZZZZZ	245423	6.82	367474	9.02	520372	9.92	411413	13.12	247529	15.44
ZZZZZZ	241721	6.83	352323	9.02	500028	9.92	401599	13.12	237830	15.44

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JB66584-1	2E102468.D	96	86	103	90
JB66584-2	2E102467.D	97	86	103	90
JB66864-3MS	2E102472.D	96	96	108	94
JB66864-3MSD	2E102473.D	97	94	110	95
V2E4603-BS	2E102464.D	99	96	109	95
V2E4603-MB	2E102463.D	96	85	104	88

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-120%
S2 = 1,2-Dichloroethane-D4	72-123%
S3 = Toluene-D8	78-119%
S4 = 4-Bromofluorobenzene	74-119%

Initial Calibration Summary

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2E4568-ICC4568
Lab FileID: 2E101487.D

Response Factor Report ms2e

Method : C:\msdchem\1\METHODS\M2E4568.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
Last Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Calibration Files
5 =2E101484.D 2 =2E101483.D 0.5 =2E101481.D 50 =2E101487.D
100 =2E101488.D 1 =2E101482.D 200 =2E101489.D 20 =2E101486.D
10 =2E101485.D 0.2 =2E101480.D = =

Compound	5	2	0.5	50	100	1	200	20	10	0.2	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------												
2) 1,4-dioxane	0.106	0.125	0.090	0.098		0.098	0.091	0.093			0.100	11.99
3) tertiary butyl alcohol	1.124	1.619	0.945	0.995		0.961	0.996	1.122			1.109	21.33
----- Linear regression ----- Coefficient = 0.9996												
Response Ratio = 0.01093 + 0.95918 *A												
4) ethanol											0.000#	-1.00
5) I pentafluorobenzene ----------ISTD----------												
6) freon 143a											0.000#	-1.00
7) freon 142b											0.000#	-1.00
8) freon 141b											0.000#	-1.00
9) Propylene	0.859	0.858	1.327	1.567	0.784		0.892	0.867			1.022	29.39
----- Linear regression ----- Coefficient = 0.9909												
Response Ratio = -0.04887 + 1.57492 *A												
10) chlorodifluoromethane	0.885	0.857	0.694	0.834	0.901	0.716	0.926	0.825	0.906		0.838	9.88
11) dichlorodifluoromethane	1.155	0.975	0.847	1.029	1.069	0.768	1.050	1.044	1.115		1.006	12.41
12) chloromethane	0.857	0.806	0.947	0.899	0.970	0.693	1.069	0.859	0.930		0.892	11.95
13) vinyl chloride	1.066	0.905	1.041	1.138	0.749	1.206	1.004	1.084			1.024	13.91
14) bromomethane	0.554	0.431	0.443	0.503	0.521	0.439	0.507	0.509	0.565	0.581	0.505	10.56
15) chloroethane	0.418	0.377	0.415	0.372	0.371	0.287	0.324	0.393	0.439	0.328	0.372	12.76
16) trichlorofluoromethane	1.008	0.840	0.744	0.909	0.952	0.656	0.973	0.934	1.008		0.892	13.70
17) Pentane											0.000#	-1.00
18) ethyl ether	0.266	0.241	0.270	0.254	0.256	0.226	0.269	0.253	0.258		0.255	5.60
19) 2-chloropropane	1.032	0.996	1.113	0.939	0.944	1.059	1.021	0.928	1.025		1.007	6.07
20) acrolein												

Initial Calibration Summary

Job Number: JB66584 **Sample:** V2E4568-ICC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101487.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
      0.124 0.109       0.105       0.108       0.104 0.117         0.111    6.98
21)  1,1-dichloroethene
      0.462 0.444 0.479 0.442 0.460 0.476 0.480 0.453 0.487 0.443   0.463    3.69
22)  acetone
      0.048             0.050 0.050       0.055 0.050 0.053         0.051    4.94
23)  acetonitrile
      0.063 0.063       0.053 0.056       0.060 0.053 0.061         0.058    7.72
24)  allyl chloride
      0.226 0.216 0.288 0.246 0.255 0.193 0.272 0.236 0.261         0.244   12.07
25)  iodomethane
      0.894 0.746 0.784 0.836 0.857 0.807 0.911 0.858 0.916 0.655   0.826    9.85
26)  carbon disulfide
      1.972 1.597 1.877 1.864 1.874 1.792 1.986 1.867 2.010 1.746   1.858    6.67
27)  methylene chloride
      0.589 0.511 0.542 0.538 0.544 0.542 0.577 0.550 0.575         0.552    4.38
28)  methyl acetate
      0.352 0.294       0.324 0.347       0.379 0.327 0.334         0.337    7.85
29)  1-chloropropane
      0.269 0.210       0.220 0.237       0.237 0.223 0.283         0.240   11.16
30)  methyl tert butyl ether
      1.639 1.438 1.624 1.572 1.622 1.386 1.737 1.568 1.668 1.495   1.575    6.84
31)  trans-1,2-dichloroethene
      0.535 0.425 0.465 0.492 0.499 0.410 0.521 0.495 0.530         0.486    9.20
32)  di-isopropyl ether
      1.772 1.655       1.703 1.807 1.446 1.925 1.667 1.863         1.730    8.58
33)  ethyl tert-butyl ether
      1.706 1.655 1.364 1.631 1.753 1.433 1.895 1.613 1.763 1.498   1.631    9.94
34)  2-butanone
      0.028             0.050 0.057       0.064 0.040 0.050         0.048   26.61
           ----- Linear regression -----  Coefficient =  0.9966
             Response Ratio = -0.00839 + 0.06481 *A

35)  1,1-dichloroethane
      0.926 0.744 0.785 0.888 0.896 0.818 0.943 0.877 0.952         0.870    8.36
36)  chloroprene
      0.667 0.626       0.658 0.701 0.494 0.743 0.646 0.719         0.657   11.63
37)  acrylonitrile
      0.183 0.167       0.190 0.196 0.137 0.216 0.182 0.200         0.184   12.95
38)  vinyl acetate
      0.043             0.069 0.083       0.092 0.065 0.063         0.069   24.95
           ----- Linear regression -----  Coefficient =  0.9963
             Response Ratio = -0.01240 + 0.09367 *A

39)  ethyl acetate
      0.047             0.055 0.066       0.072 0.057 0.057         0.059   14.71
40)  2,2-dichloropropane
      0.858 0.707       0.819 0.835 0.778 0.857 0.801 0.869         0.815    6.57
41)  cis-1,2-dichloroethene
      0.537 0.486 0.477 0.520 0.534 0.461 0.566 0.527 0.568         0.520    7.28
42)  propionitrile
      0.063 0.047       0.075 0.081       0.090 0.070 0.071         0.071   19.48
           ----- Linear regression -----  Coefficient =  0.9969
             Response Ratio = -0.07224 + 0.09036 *A

43)  bromochloromethane
      0.255 0.213 0.217 0.251 0.253 0.198 0.267 0.248 0.254         0.240    9.91
44)  tetrahydrofuran
      0.157             0.156 0.172       0.192 0.154 0.157         0.165    9.05
45)  chloroform
      0.550 0.447 0.442 0.517 0.522 0.471 0.550 0.510 0.562 0.426   0.500    9.95
```

Initial Calibration Summary

Job Number: JB66584 **Sample:** V2E4568-ICC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101487.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
46)  t-butyl formate
      0.452 0.409       0.435 0.471 0.336 0.516 0.428 0.459        0.438   11.96
47)  dibromofluoromethane (s)
      0.471 0.419       0.398 0.412 0.399 0.431 0.389 0.474        0.424    7.68
48)  1,2-dichloroethane-d4 (s)
      0.579 0.476       0.484 0.467 0.481 0.504 0.442 0.538        0.496    8.80
49)  freon 113
      0.448 0.427 0.329 0.378 0.418 0.366 0.422 0.392 0.427        0.401    9.40
50)  methacrylonitrile
      0.106             0.225 0.253       0.301 0.184 0.165        0.206   33.44
            ----- Linear regression -----  Coefficient =  0.9941
              Response Ratio = -0.04927 + 0.30476 *A

51)  1,1,1-trichloroethane
      0.826 0.646 0.654 0.800 0.833 0.661 0.867 0.790 0.842        0.769   11.62
52)  Cyclohexane
      0.925 0.757 0.958 0.883 0.933 0.837 0.972 0.890 0.916        0.897    7.40
53)  iso-butyl alcohol
      0.016             0.016 0.017       0.020 0.014 0.014        0.016   12.79
54)  Tert Amyl Alcohol
                                                                   0.000#  -1.00
55)  2,2,4-trimethylpentane
      1.571 1.490       1.580 1.889 1.241 2.142 1.495 1.619        1.628   16.81
            ----- Linear regression -----  Coefficient =  0.9943
              Response Ratio = -0.17610 + 2.12639 *A

56)  tert-amyl methyl ether
      0.396 0.450 0.318 0.361 0.389 0.372 0.410 0.365 0.405        0.385    9.68

57) I   1,4-difluorobenzene   ----------------ISTD---------------------
58)  Di-isobutylene
                                                                   0.000#  -1.00
59)  epichlorohydrin
      0.019             0.026 0.029       0.033 0.023 0.024        0.025   19.16
            ----- Linear regression -----  Coefficient =  0.9960
              Response Ratio = -0.02042 + 0.03311 *A

60)  n-butyl alcohol
      0.009 0.011       0.010 0.011       0.012 0.010 0.011        0.011    8.93
61)  carbon tetrachloride
      0.496 0.436 0.546 0.447 0.448 0.458 0.447 0.461 0.484        0.469    7.37
62)  1,1-dichloropropene
      0.447 0.386 0.435 0.406 0.402 0.367 0.414 0.412 0.431 0.323  0.402    9.04
63)  hexane
      0.416 0.404 0.299 0.342 0.349 0.314 0.342 0.347 0.385        0.355   11.06
64)  benzene
      1.351 1.138 1.169 1.276 1.269 1.116 1.302 1.277 1.365 0.922  1.218   11.04
65)  heptane
      0.240 0.222       0.196 0.207 0.214 0.212 0.193 0.219        0.213    7.03
66)  isopropyl acetate
      0.404             0.502 0.524       0.573 0.519 0.524        0.508   11.05
67)  1,2-dichloroethane
      0.410 0.324       0.375 0.368 0.325 0.384 0.367 0.391        0.368    8.22
68)  ethyl acrylate
                                                                   0.000#  -1.00
69)  trichloroethene
      0.298 0.234 0.246 0.291 0.297 0.263 0.309 0.294 0.311 0.245  0.279   10.34
70)  Tert-amyl ethyl ether
                                                                   0.000#  -1.00
71)  2-nitropropane
```

Initial Calibration Summary

Job Number: JB66584 **Sample:** V2E4568-ICC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101487.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
      0.077             0.090 0.095       0.104 0.084 0.086        0.089   10.49
72)  2-chloroethyl vinyl ether
      0.154 0.147 0.118 0.147 0.157 0.139 0.167 0.143 0.155        0.147    9.51
73)  methyl methacrylate
      0.047             0.060 0.067       0.074 0.054 0.048        0.058   18.22
            ----- Linear regression -----  Coefficient =  0.9976
              Response Ratio = -0.00832 + 0.07450 *A

74)  1,2-dichloropropane
      0.369 0.323 0.351 0.328 0.331 0.333 0.348 0.319 0.352        0.339    4.86
75)  methylcyclohexane
      0.640 0.632 0.457 0.562 0.592 0.530 0.605 0.578 0.635        0.581   10.18
76)  dibromomethane
      0.175 0.162 0.140 0.165 0.172 0.150 0.183 0.169 0.169        0.165    7.87
77)  bromodichloromethane
      0.395 0.311 0.321 0.381 0.387 0.300 0.414 0.371 0.393        0.364   11.48
78)  cis-1,3-dichloropropene
      0.456 0.405 0.321 0.438 0.455 0.374 0.499 0.428 0.451        0.425   12.33
79)  toluene-d8 (s)
      1.128 0.935       0.953 0.996 0.913 1.035 0.911 1.062        0.992    7.90
80)  4-methyl-2-pentanone
      0.112             0.120 0.125       0.137 0.118 0.118        0.122    7.13
81)  toluene
      0.699 0.554       0.681 0.720 0.554 0.770 0.666 0.714        0.670   11.63
82)  3-methyl-1-butanol
      0.009 0.012       0.009 0.010       0.011 0.009 0.010        0.010    9.92
83)  trans-1,3-dichloropropene
      0.367 0.326 0.304 0.365 0.381 0.321 0.409 0.352 0.363        0.354    9.18
84)  ethyl methacrylate
      0.277 0.210       0.325 0.348       0.379 0.303 0.310        0.307   17.66
            ----- Linear regression -----  Coefficient =  0.9964
              Response Ratio = -0.00903 + 0.36439 *A

85)  1,1,2-trichloroethane
      0.195 0.174       0.190 0.199 0.146 0.212 0.188 0.206        0.189   10.96
86)  2-hexanone
      0.063             0.071 0.081       0.095 0.081 0.082        0.079   13.44

87) I   chlorobenzene-d5      ----------------ISTD--------------------
88)  tetrachloroethene
      0.362 0.292 0.281 0.363 0.380 0.291 0.379 0.372 0.374        0.344   12.34
89)  1,3-dichloropropane
      0.505 0.481 0.408 0.475 0.491 0.426 0.507 0.480 0.494        0.474    7.29
90)  butyl acetate
      0.116             0.179 0.201       0.209 0.163 0.148        0.169   20.41
            ----- Linear regression -----  Coefficient =  0.9979
              Response Ratio = -0.01169 + 0.20683 *A

91)  3,3-dimethyl-1-butanol
      0.062 0.082       0.049 0.050 0.077 0.050 0.052 0.058        0.060   21.29
            ----- Linear regression -----  Coefficient =  0.9990
              Response Ratio = 0.00878 + 0.04979 *A

92)  dibromochloromethane
      0.314 0.304 0.303 0.321 0.338 0.267 0.349 0.318 0.325 0.300  0.314    7.14
93)  1,2-dibromoethane
      0.260 0.248 0.198 0.266 0.279 0.222 0.281 0.271 0.277        0.256   11.24
94)  chlorobenzene
      0.898 0.785 0.821 0.863 0.894 0.794 0.917 0.876 0.934 0.801  0.858    6.34
95)  1,1,1,2-tetrachloroethane
```

Initial Calibration Summary

Job Number: JB66584 **Sample:** V2E4568-ICC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101487.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
      0.425 0.389 0.359 0.430 0.441 0.328 0.434 0.420 0.422        0.405    9.57
 96)  ethylbenzene
      1.597 1.381 1.331 1.628 1.692 1.328 1.704 1.604 1.681        1.549   10.14
 97)  m,p-xylene
      0.624 0.518 0.507 0.626 0.648 0.460 0.654 0.634 0.651        0.591   12.62
 98)  o-xylene
      0.646 0.543 0.555 0.694 0.717 0.524 0.723 0.687 0.712        0.645   12.62
 99)  styrene
      0.873 0.756       0.966 1.002 0.686 1.022 0.942 0.957        0.901   13.39
100)  bromoform
      0.219 0.221 0.179 0.214 0.226 0.175 0.227 0.214 0.217 0.238  0.213    9.50

101) I   1,4-dichlorobenzene-d ----------------ISTD--------------------
102)  isopropylbenzene
      3.107 2.436       3.369 3.660 2.511       3.178 3.302        3.081   14.63
103)  4-bromofluorobenzene (s)
      0.922 0.844       0.724 0.776       0.807 0.687 0.816        0.797    9.76
104)  bromobenzene
      0.703 0.617 0.576 0.681 0.719 0.529 0.764 0.666 0.721        0.664   11.45
105)  cyclohexanone
      0.040 0.054       0.066 0.051 0.048 0.038 0.060 0.054        0.051   18.38
         ----- Quadratic regression -----                Coefficient =  0.9973
           Response Ratio = -0.01092 + 0.06804 *A + -0.00075 *A^2

106)  1,1,2,2-tetrachloroethane
      0.790 0.842 0.794 0.796 0.834 0.719 0.908 0.754 0.812        0.805    6.70
107)  trans-1,4-dichloro-2-butene
      0.167 0.183       0.168 0.184 0.129 0.190 0.153 0.160        0.167   11.91
108)  1,2,3-trichloropropane
      0.214 0.247 0.233 0.197 0.205 0.201 0.216 0.188 0.194        0.211    9.22
109)  n-propylbenzene
      3.384 2.738 2.511 3.423 3.590 2.678 3.843 3.308 3.462        3.215   14.28
110)  p-Ethyltoluene
                                                                   0.000#  -1.00
111)  2-chlorotoluene
      0.674 0.598       0.705 0.757 0.515 0.826 0.672 0.717        0.683   13.90
112)  4-chlorotoluene
      2.059 1.888 1.975 1.993 2.038 1.779 2.193 1.920 2.092        1.993    6.11
113)  1,3,5-trimethylbenzene
      2.615 2.121       2.844 3.077 2.022       2.677 2.722        2.583   14.75
114)  tert-butylbenzene
      2.017 1.627       2.348 2.599 1.552       2.150 2.076        2.053   18.11
           ----- Linear regression -----  Coefficient =  0.9953
             Response Ratio = -0.03222 + 2.48530 *A

115)  pentachloroethane
      0.528 0.485 0.473 0.592 0.663 0.402       0.547 0.546 0.518  0.528   14.02
116)  1,2,4-trimethylbenzene
      2.509 2.068       2.671 2.851 2.001 3.101 2.559 2.672        2.554   14.50
117)  sec-butylbenzene
      3.355 2.774 2.784 3.774 4.099 2.645 4.383 3.519 3.512        3.427   17.75
           ----- Linear regression -----  Coefficient =  0.9955
             Response Ratio = -0.03474 + 4.17681 *A

118)  1,3-dichlorobenzene
      1.403 1.271 1.306 1.344 1.399 1.183 1.477 1.332 1.443 1.611  1.377    8.63
119)  p-isopropyltoluene
      2.793 2.255       3.042 3.318 2.170 3.562 2.870 2.933        2.868   16.60
           ----- Linear regression -----  Coefficient =  0.9960
             Response Ratio = -0.04577 + 3.40708 *A
```

Initial Calibration Summary

Job Number: JB66584 **Sample:** V2E4568-ICC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101487.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

```
120)  1,2,3-TRIMETHYLBENZENE
                                                                    0.000#  -1.00
121)  1,4-dichlorobenzene
       1.545 1.542 1.582 1.388 1.421 1.477 1.479 1.419 1.527        1.487    4.50
122)  p-Diethylbenzene
                                                                    0.000#  -1.00
123)  1,2-dichlorobenzene
       1.519 1.449 1.399 1.452 1.516 1.311 1.600 1.448 1.540        1.471    5.77
124)  n-butylbenzene
       1.441 1.236 1.146 1.446 1.521 1.144 1.658 1.403 1.495        1.388   12.73
125)  1,2,4,5-tetramethylbenzene
                                                                    0.000#  -1.00
126)  1,2-dibromo-3-chloropropane
       0.178 0.206       0.168 0.171 0.180 0.187 0.171 0.175        0.180    6.95
127)  1,3,5-trichlorobenzene
       1.436 1.403 1.371 1.396 1.462 1.263 1.576 1.392 1.461        1.418    5.94
128)  1,2,4-trichlorobenzene
       1.535 1.471 1.718 1.467 1.507 1.404 1.593 1.461 1.484        1.516    6.10
129)  hexachlorobutadiene
       0.598 0.508 0.548 0.584 0.645 0.498 0.705 0.567 0.580        0.581   11.11
130)  naphthalene
       3.642 3.776 4.477 3.730 3.819 3.536 3.934 3.604 3.636        3.795    7.47
131)  1,2,3-trichlorobenzene
       1.638 1.562 1.800 1.548 1.595 1.530 1.647 1.518 1.558        1.600    5.48
132)  hexachloroethane
       0.467 0.370       0.559 0.625 0.349 0.689 0.495 0.499        0.507   22.99
             ----- Linear regression -----  Coefficient =  0.9969
               Response Ratio = -0.05017 + 0.68704 *A

133)  Benzyl chloride
       1.452 1.921       1.296 1.400 1.942 1.456 1.323 1.457        1.531   16.63
             ----- Linear regression -----  Coefficient =  0.9978
               Response Ratio = 0.01052 + 1.40684 *A

 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2E4568.M         Wed Apr 16 15:37:38 2014   MS2E
```

Initial Calibration Verification

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Sample: V2E4568-ICV4568
Lab FileID: 2E101495.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2E101495.D Vial: 2
Acq On : 15 Apr 2014 12:02 pm Operator: DIXITAR
Sample : icv4568-50 Inst : ms2e
Misc : MS65848,V2E4568,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2E4568.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
Last Update : Wed Apr 16 15:36:21 2014
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	113	0.00	6.84
2	M	1,4-dioxane	0.100	0.090	10.0	112	0.00	10.66
		---------- True	Calc.	% Drift	----------			
3	M	tertiary butyl alcohol	250.000	236.130	5.5	111	0.02	6.97
		---------- AvgRF	CCRF	% Dev	----------			
4		ethanol		NA				
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	9.02
6		freon 143a		NA				
7		freon 142b		NA				
8		freon 141b		NA				
		---------- True	Calc.	% Drift	----------			
9		Propylene		NA				
		---------- AvgRF	CCRF	% Dev	----------			
10	M	chlorodifluoromethane	0.838	0.835	0.4	104	0.00	3.73
11	M	dichlorodifluoromethane	1.006	0.822	18.3	83	0.01	3.73
12	M	chloromethane	0.892	0.845	5.3	97	0.01	4.00
13	M	vinyl chloride	1.024	0.996	2.7	99	0.00	4.23
14	M	bromomethane	0.505	0.471	6.7	97	0.00	4.79
15	M	chloroethane	0.372	0.441	-18.5	123	0.00	4.95
16	M	trichlorofluoromethane	0.892	0.871	2.4	99	0.00	5.39
17		Pentane		NA				
18	M	ethyl ether	0.255	0.271	-6.3	111	0.00	5.76
19		2-chloropropane	1.007	0.911	9.5	100	0.00	5.93
20	M	acrolein	0.111	0.112	-0.9	110	0.00	5.99
21	M	1,1-dichloroethene	0.463	0.445	3.9	104	0.00	6.14
22	M	acetone	0.051	0.048	5.9	99	0.00	6.22
23		acetonitrile	0.058	0.060	-3.4	117	0.00	6.64
24	M	allyl chloride	0.244	0.282	-15.6	119	0.00	6.65
25	M	iodomethane	0.826	0.835	-1.1	103	0.00	6.40
26	M	carbon disulfide	1.858	1.837	1.1	102	0.00	6.52
27	M	methylene chloride	0.552	0.541	2.0	104	0.00	6.83
28	M	methyl acetate	0.337	0.345	-2.4	110	0.00	6.65
29		1-chloropropane	0.240	0.231	3.7	108	0.00	6.86
30	M	methyl tert butyl ether	1.575	1.566	0.6	103	0.01	7.15
31	M	trans-1,2-dichloroethene	0.486	0.468	3.7	98	0.00	7.20
32	M	di-isopropyl ether	1.730	1.811	-4.7	110	0.00	7.74
33	M	ethyl tert-butyl ether	1.631	1.677	-2.8	106	0.00	8.20

Initial Calibration Verification

Job Number: JB66584 **Sample:** V2E4568-ICV4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101495.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

			True	Calc.	% Drift			
34	M	2-butanone	50.000	48.245	3.5	113	0.00	8.49
			AvgRF	CCRF	% Dev			
35	M	1,1-dichloroethane	0.870	0.888	-2.1	104	0.00	7.75
36	M	chloroprene	0.657	0.643	2.1	101	0.00	7.86
37	M	acrylonitrile	0.184	0.199	-8.2	109	0.00	7.16
			True	Calc.	% Drift			
38	M	vinyl acetate	50.000	51.710	-3.4	127	0.00	7.77
			AvgRF	CCRF	% Dev			
39	M	ethyl acetate	0.059	0.064	-8.5	120	0.00	8.50
40	M	2,2-dichloropropane	0.815	0.831	-2.0	105	0.00	8.48
41	M	cis-1,2-dichloroethene	0.520	0.505	2.9	100	0.00	8.49
			True	Calc.	% Drift			
42	M	propionitrile	500.000	462.018	7.6	105	0.00	8.56
			AvgRF	CCRF	% Dev			
43	M	bromochloromethane	0.240	0.240	0.0	99	0.00	8.79
44	M	tetrahydrofuran	0.165	0.161	2.4	107	0.00	8.85
45	M	chloroform	0.500	0.492	1.6	99	0.00	8.85
46		t-butyl formate	0.438	0.482	-10.0	115	0.00	8.88
47	S	dibromofluoromethane (s)	0.424	0.375	11.6	97	0.00	9.05
48	S	1,2-dichloroethane-d4 (s)	0.496	0.460	7.3	98	0.00	9.47
49	M	freon 113	0.401	0.402	-0.2	110	0.00	6.12
			True	Calc.	% Drift			
50	M	methacrylonitrile	50.000	44.625	10.8	102	0.01	8.75
			AvgRF	CCRF	% Dev			
51	M	1,1,1-trichloroethane	0.769	0.786	-2.2	102	0.00	9.09
52		Cyclohexane	0.897	0.862	3.9	101	0.00	9.16
53		iso-butyl alcohol	0.016	0.017	-6.3	113	0.00	9.33
54		Tert Amyl Alcohol		----------NA----------				
			True	Calc.	% Drift			
55		2,2,4-trimethylpentane	50.000	48.925	2.2	125	0.00	9.53
			AvgRF	CCRF	% Dev			
56	M	tert-amyl methyl ether	0.385	0.360	6.5	103	0.00	9.58
57	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	9.92
58	M	Di-isobutylene		----------NA----------				
			True	Calc.	% Drift			
59	M	epichlorohydrin	250.000	231.189	7.5	107	0.00	11.21
			AvgRF	CCRF	% Dev			
60	M	n-butyl alcohol	0.011	0.011	0.0	112	0.00	10.09
61	M	carbon tetrachloride	0.469	0.441	6.0	101	0.00	9.30
62	M	1,1-dichloropropene	0.402	0.374	7.0	95	0.00	9.28
63	M	hexane	0.355	0.409	-15.2	123	0.00	7.49
64	M	benzene	1.218	1.232	-1.1	99	0.00	9.53
65	M	heptane	0.213	0.211	0.9	111	0.00	9.72
66	M	isopropyl acetate	0.508	0.597	-17.5	122	0.00	9.48
67	M	1,2-dichloroethane	0.368	0.362	1.6	99	0.00	9.56
68		ethyl acrylate		----------NA----------				

Initial Calibration Verification

Job Number: JB66584 **Sample:** V2E4568-ICV4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101495.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

69	M	trichloroethene	0.279	0.275	1.4	97	0.00	10.27
70		Tert-amyl ethyl ether		----------NA----------				
71	M	2-nitropropane	0.089	0.090	-1.1	103	-0.02	11.05
72	M	2-chloroethyl vinyl ether	0.147	0.147	0.0	103	0.00	11.08
		----------	True	Calc.	% Drift	----------		
73	M	methyl methacrylate	50.000	46.121	7.8	104	0.00	10.56
		----------	AvgRF	CCRF	% Dev	----------		
74	M	1,2-dichloropropane	0.339	0.324	4.4	102	0.00	10.53
75	M	methylcyclohexane	0.581	0.620	-6.7	114	0.00	10.47
76	M	dibromomethane	0.165	0.167	-1.2	104	0.00	10.69
77	M	bromodichloromethane	0.364	0.356	2.2	96	0.00	10.82
78	M	cis-1,3-dichloropropene	0.425	0.385	9.4	90	0.00	11.30
79	S	toluene-d8 (s)	0.992	0.874	11.9	94	0.00	11.59
80	M	4-methyl-2-pentanone	0.122	0.122	0.0	105	0.00	11.41
81	M	toluene	0.670	0.633	5.5	96	0.00	11.66
82	M	3-methyl-1-butanol	0.010	0.010#	0.0	108	0.00	11.45
83	M	trans-1,3-dichloropropene	0.354	0.345	2.5	97	0.00	11.88
		----------	True	Calc.	% Drift	----------		
84	M	ethyl methacrylate	50.000	42.438	15.1	95	0.00	11.88
		----------	AvgRF	CCRF	% Dev	----------		
85	M	1,1,2-trichloroethane	0.189	0.180	4.8	98	0.00	12.09
86	M	2-hexanone	0.079	0.070	11.4	100	0.00	12.29
87	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	13.12
88	M	tetrachloroethene	0.344	0.344	0.0	95	0.00	12.26
89	M	1,3-dichloropropane	0.474	0.461	2.7	97	0.00	12.27
		----------	True	Calc.	% Drift	----------		
90	M	butyl acetate	50.000	48.428	3.1	106	0.00	12.37
91		3,3-dimethyl-1-butanol	500.000	501.943	-0.4	104	0.00	12.45
		----------	AvgRF	CCRF	% Dev	----------		
92	M	dibromochloromethane	0.314	0.312	0.6	98	0.00	12.53
93	M	1,2-dibromoethane	0.256	0.257	-0.4	97	0.00	12.69
94	M	chlorobenzene	0.858	0.829	3.4	96	0.00	13.15
95	M	1,1,1,2-tetrachloroethane	0.405	0.404	0.2	94	0.00	13.21
96	M	ethylbenzene	1.549	1.532	1.1	94	0.00	13.21
97	M	m,p-xylene	0.591	0.602	-1.9	96	0.00	13.32
98	M	o-xylene	0.645	0.650	-0.8	94	0.00	13.73
99	M	styrene	0.901	0.916	-1.7	95	0.00	13.75
100	M	bromoform	0.213	0.209	1.9	98	0.00	14.01
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	15.44
102	M	isopropylbenzene	3.081	3.240	-5.2	96	0.00	14.08
103	S	4-bromofluorobenzene (s)	0.797	0.691	13.3	95	0.00	14.28
104	M	bromobenzene	0.664	0.643	3.2	94	0.00	14.47
		----------	True	Calc.	% Drift	----------		
105	M	cyclohexanone	500.000	730.179	-46.0#	125	0.00	14.24
		----------	AvgRF	CCRF	% Dev	----------		
106	M	1,1,2,2-tetrachloroethane	0.805	0.750	6.8	94	0.00	14.39
107	M	trans-1,4-dichloro-2-bute	0.167	0.188	-12.6	112	0.00	14.44
108	M	1,2,3-trichloropropane	0.211	0.185	12.3	94	0.00	14.46
109	M	n-propylbenzene	3.215	3.470	-7.9	101	0.00	14.49
110		p-Ethyltoluene		----------NA----------				

Initial Calibration Verification

Job Number: JB66584 **Sample:** V2E4568-ICV4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E101495.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

111	M	2-chlorotoluene	0.683	0.672	1.6	95	0.00	14.63
112	M	4-chlorotoluene	1.993	1.889	5.2	95	0.00	14.73
113	M	1,3,5-trimethylbenzene	2.583	2.681	-3.8	94	0.00	14.65
		----------	True	Calc.	% Drift	----------		
114	M	tert-butylbenzene	50.000	46.105	7.8	96	0.00	14.98
		----------	AvgRF	CCRF	% Dev	----------		
115	M	pentachloroethane	0.528	0.570	-8.0	96	0.00	15.07
116	M	1,2,4-trimethylbenzene	2.554	2.616	-2.4	98	0.00	15.03
		----------	True	Calc.	% Drift	----------		
117	M	sec-butylbenzene	50.000	43.139	13.7	94	0.00	15.20
		----------	AvgRF	CCRF	% Dev	----------		
118	M	1,3-dichlorobenzene	1.377	1.274	7.5	95	0.00	15.39
		----------	True	Calc.	% Drift	----------		
119	M	p-isopropyltoluene	50.000	44.030	11.9	97	0.00	15.32
		----------	AvgRF	CCRF	% Dev	----------		
120	m	1,2,3-TRIMETHYLBENZENE		----------NA----------				
121	M	1,4-dichlorobenzene	1.487	1.328	10.7	96	0.00	15.47
122		p-Diethylbenzene		----------NA----------				
123	M	1,2-dichlorobenzene	1.471	1.392	5.4	96	0.00	15.85
124	M	n-butylbenzene	1.388	1.452	-4.6	100	0.00	15.73
125		1,2,4,5-tetramethylbenzen		----------NA----------				
126	M	1,2-dibromo-3-chloropropa	0.180	0.168	6.7	100	0.00	16.59
127		1,3,5-trichlorobenzene	1.418	1.375	3.0	98	0.00	16.76
128	M	1,2,4-trichlorobenzene	1.516	1.387	8.5	94	0.00	17.34
129	M	hexachlorobutadiene	0.581	0.574	1.2	98	0.00	17.44
130	M	naphthalene	3.795	3.572	5.9	96	0.00	17.58
131	M	1,2,3-trichlorobenzene	1.600	1.478	7.6	95	0.00	17.79
		----------	True	Calc.	% Drift	----------		
132	M	hexachloroethane	50.000	43.002	14.0	97	0.00	16.10
133		Benzyl chloride	50.000	58.119	-16.2	127	0.00	15.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E101487.D M2E4568.M Wed Apr 16 15:40:18 2014 MS2E

Continuing Calibration Summary

Job Number: JB66584 **Sample:** V2E4603-CC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E102461.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2E\V2E4603\2E102461.D Vial: 2
Acq On : 16 May 2014 8:53 am Operator: DIXITAR
Sample : cc4568-20 Inst : ms2e
Misc : MS67471,V2E4603,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2E4568.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
Last Update : Wed Apr 16 15:36:21 2014
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	96	-0.01	6.84
2	M	1,4-dioxane	0.100	0.096	4.0	102	0.01	10.67
		---------- True	Calc.	% Drift	----------			
3	M	tertiary butyl alcohol	100.000	95.295	4.7	94	0.00	6.95
		---------- AvgRF	CCRF	% Dev	----------			
4		ethanol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	97	0.00	9.02
6		freon 143a		----------NA----------				
7		freon 142b		----------NA----------				
8		freon 141b		----------NA----------				
		---------- True	Calc.	% Drift	----------			
9		Propylene		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
10	M	chlorodifluoromethane	0.838	0.714	14.8	84	0.02	3.74
11	M	dichlorodifluoromethane	1.006	1.125	-11.8	105	0.02	3.74
12	M	chloromethane	0.892	0.904	-1.3	102	0.00	4.00
13	M	vinyl chloride	1.024	1.073	-4.8	104	0.00	4.23
14	M	bromomethane	0.505	0.526	-4.2	100	0.02	4.81
15	M	chloroethane	0.372	0.392	-5.4	97	0.00	4.95
16	M	trichlorofluoromethane	0.892	0.954	-7.0	99	0.00	5.39
17		Pentane		----------NA----------				
18	M	ethyl ether	0.255	0.246	3.5	95	0.00	5.76
19		2-chloropropane	1.007	0.820	18.6	86	0.00	5.93
20	M	acrolein	0.111	0.096	13.5	89	0.00	6.00
21	M	1,1-dichloroethene	0.463	0.459	0.9	98	0.00	6.14
22	M	acetone	0.051	0.064	-25.5#	125	0.03	6.24
23		acetonitrile	0.058	0.051	12.1	94	0.01	6.65
24	M	allyl chloride	0.244	0.217	11.1	89	0.01	6.66
25	M	iodomethane	0.826	0.857	-3.8	97	0.00	6.40
26	M	carbon disulfide	1.858	1.845	0.7	96	0.00	6.52
27	M	methylene chloride	0.552	0.526	4.7	93	0.01	6.83
28	M	methyl acetate	0.337	0.298	11.6	88	0.01	6.67
29		1-chloropropane	0.240	0.202	15.8	88	0.00	6.86
30	M	methyl tert butyl ether	1.575	1.472	6.5	91	0.00	7.15
31	M	trans-1,2-dichloroethene	0.486	0.473	2.7	93	0.00	7.20
32	M	di-isopropyl ether	1.730	1.537	11.2	90	0.00	7.75
33	M	ethyl tert-butyl ether	1.631	1.478	9.4	89	0.00	8.20

Continuing Calibration Summary

Job Number: JB66584 **Sample:** V2E4603-CC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E102461.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

			True	Calc.	% Drift			
34	M	2-butanone	20.000	22.373	-11.9	126	0.03	8.53
			AvgRF	CCRF	% Dev			
35	M	1,1-dichloroethane	0.870	0.823	5.4	91	0.00	7.75
36	M	chloroprene	0.657	0.577	12.2	87	0.01	7.87
37	M	acrylonitrile	0.184	0.177	3.8	94	0.02	7.18
			True	Calc.	% Drift			
38	M	vinyl acetate	20.000	20.046	-0.2	95	0.03	7.80
			AvgRF	CCRF	% Dev			
39	M	ethyl acetate	0.059	0.050	15.3	85	0.02	8.52
40	M	2,2-dichloropropane	0.815	0.803	1.5	97	0.00	8.48
41	M	cis-1,2-dichloroethene	0.520	0.494	5.0	91	0.00	8.49
			True	Calc.	% Drift			
42	M	propionitrile	200.000	179.789	10.1	88	0.02	8.57
			AvgRF	CCRF	% Dev			
43	M	bromochloromethane	0.240	0.237	1.3	93	0.00	8.79
44	M	tetrahydrofuran	0.165	0.143	13.3	90	0.02	8.86
45	M	chloroform	0.500	0.470	6.0	90	0.00	8.85
46		t-butyl formate	0.438	0.376	14.2	85	0.00	8.88
47	S	dibromofluoromethane (s)	0.424	0.415	2.1	104	0.00	9.05
48	S	1,2-dichloroethane-d4 (s)	0.496	0.443	10.7	97	0.00	9.47
49	M	freon 113	0.401	0.409	-2.0	101	0.02	6.13
			True	Calc.	% Drift			
50	M	methacrylonitrile	20.000	19.596	2.0	93	0.03	8.77
			AvgRF	CCRF	% Dev			
51	M	1,1,1-trichloroethane	0.769	0.759	1.3	93	0.00	9.09
52		Cyclohexane	0.897	0.905	-0.9	99	0.00	9.16
53		iso-butyl alcohol	0.016	0.013	18.8	90	0.02	9.35
54		Tert Amyl Alcohol		----------NA----------				
			True	Calc.	% Drift			
55		2,2,4-trimethylpentane	20.000	19.998	0.0	110	0.00	9.53
			AvgRF	CCRF	% Dev			
56	M	tert-amyl methyl ether	0.385	0.357	7.3	95	0.00	9.58
57	I	1,4-difluorobenzene	1.000	1.000	0.0	93	0.00	9.92
58	M	Di-isobutylene		----------NA----------				
			True	Calc.	% Drift			
59	M	epichlorohydrin	100.000	103.048	-3.0	96	0.02	11.23
			AvgRF	CCRF	% Dev			
60	M	n-butyl alcohol	0.011	0.010	9.1	96	0.03	10.12
61	M	carbon tetrachloride	0.469	0.470	-0.2	95	0.00	9.30
62	M	1,1-dichloropropene	0.402	0.396	1.5	89	0.00	9.28
63	M	hexane	0.355	0.375	-5.6	100	0.00	7.49
64	M	benzene	1.218	1.219	-0.1	89	0.00	9.54
65	M	heptane	0.213	0.213	0.0	103	0.00	9.73
66	M	isopropyl acetate	0.508	0.580	-14.2	104	0.02	9.50
67	M	1,2-dichloroethane	0.368	0.351	4.6	89	0.00	9.56
68		ethyl acrylate		----------NA----------				

Continuing Calibration Summary

Job Number: JB66584 **Sample:** V2E4603-CC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E102461.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

69	M	trichloroethene	0.279	0.277	0.7	88	0.01	10.27
70		Tert-amyl ethyl ether		----------NA----------				
71	M	2-nitropropane	0.089	0.074	16.9	83	0.00	11.08
72	M	2-chloroethyl vinyl ether	0.147	0.139	5.4	90	0.00	11.09
		----------	True	Calc.	% Drift	----------		
73	M	methyl methacrylate	20.000	20.292	-1.5	95	0.03	10.59
		----------	AvgRF	CCRF	% Dev	----------		
74	M	1,2-dichloropropane	0.339	0.303	10.6	88	0.00	10.53
75	M	methylcyclohexane	0.581	0.614	-5.7	99	0.01	10.48
76	M	dibromomethane	0.165	0.162	1.8	89	0.00	10.70
77	M	bromodichloromethane	0.364	0.339	6.9	85	0.00	10.83
78	M	cis-1,3-dichloropropene	0.425	0.406	4.5	88	0.00	11.30
79	S	toluene-d8 (s)	0.992	1.038	-4.6	106	0.00	11.59
80	M	4-methyl-2-pentanone	0.122	0.109	10.7	87	0.01	11.42
81	M	toluene	0.670	0.650	3.0	91	0.00	11.67
82	M	3-methyl-1-butanol	0.010	0.010#	0.0	98	0.00	11.45
83	M	trans-1,3-dichloropropene	0.354	0.352	0.6	93	0.01	11.89
		----------	True	Calc.	% Drift	----------		
84	M	ethyl methacrylate	20.000	17.079	14.6	89	0.01	11.89
		----------	AvgRF	CCRF	% Dev	----------		
85	M	1,1,2-trichloroethane	0.189	0.182	3.7	90	0.00	12.09
86	M	2-hexanone	0.079	0.082	-3.8	94	0.02	12.31
87	I	chlorobenzene-d5	1.000	1.000	0.0	94	0.00	13.12
88	M	tetrachloroethene	0.344	0.363	-5.5	92	0.00	12.26
89	M	1,3-dichloropropane	0.474	0.454	4.2	89	0.00	12.27
		----------	True	Calc.	% Drift	----------		
90	M	butyl acetate	20.000	18.633	6.8	94	0.02	12.38
91		3,3-dimethyl-1-butanol	200.000	196.553	1.7	92	0.00	12.46
		----------	AvgRF	CCRF	% Dev	----------		
92	M	dibromochloromethane	0.314	0.313	0.3	93	0.00	12.54
93	M	1,2-dibromoethane	0.256	0.261	-2.0	91	0.00	12.69
94	M	chlorobenzene	0.858	0.858	0.0	92	0.00	13.15
95	M	1,1,1,2-tetrachloroethane	0.405	0.400	1.2	90	0.00	13.21
96	M	ethylbenzene	1.549	1.527	1.4	90	0.00	13.21
97	M	m,p-xylene	0.591	0.602	-1.9	90	0.00	13.32
98	M	o-xylene	0.645	0.642	0.5	88	0.00	13.74
99	M	styrene	0.901	0.893	0.9	89	0.01	13.76
100	M	bromoform	0.213	0.209	1.9	92	0.00	14.01
101	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	15.44
102	M	isopropylbenzene	3.081	2.953	4.2	90	0.00	14.08
103	S	4-bromofluorobenzene (s)	0.797	0.734	7.9	103	0.00	14.28
104	M	bromobenzene	0.664	0.637	4.1	92	0.00	14.48
		----------	True	Calc.	% Drift	----------		
105	M	cyclohexanone	200.000	354.972	-77.5#	175	0.00	14.24
		----------	AvgRF	CCRF	% Dev	----------		
106	M	1,1,2,2-tetrachloroethane	0.805	0.710	11.8	91	0.00	14.39
107	M	trans-1,4-dichloro-2-bute	0.167	0.156	6.6	98	0.00	14.44
108	M	1,2,3-trichloropropane	0.211	0.182	13.7	93	0.00	14.46
109	M	n-propylbenzene	3.215	3.062	4.8	89	0.00	14.49
110		p-Ethyltoluene		----------NA----------				

Continuing Calibration Summary

Job Number: JB66584 **Sample:** V2E4603-CC4568
Account: PESNJP Parsons Engineering Science **Lab FileID:** 2E102461.D
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

111	M	2-chlorotoluene	0.683	0.642	6.0	92	0.00	14.64
112	M	4-chlorotoluene	1.993	1.830	8.2	92	0.00	14.74
113	M	1,3,5-trimethylbenzene	2.583	2.481	3.9	89	0.00	14.65
			True	Calc.	% Drift			
114	M	tert-butylbenzene	20.000	16.901	15.5	91	0.00	14.98
			AvgRF	CCRF	% Dev			
115	M	pentachloroethane	0.528	0.520	1.5	92	0.00	15.06
116	M	1,2,4-trimethylbenzene	2.554	2.357	7.7	89	0.00	15.03
			True	Calc.	% Drift			
117	M	sec-butylbenzene	20.000	16.347	18.3	91	0.00	15.20
			AvgRF	CCRF	% Dev			
118	M	1,3-dichlorobenzene	1.377	1.284	6.8	93	0.00	15.39
			True	Calc.	% Drift			
119	M	p-isopropyltoluene	20.000	16.851	15.7	93	0.00	15.32
			AvgRF	CCRF	% Dev			
120	m	1,2,3-TRIMETHYLBENZENE		----------NA----------				
121	M	1,4-dichlorobenzene	1.487	1.350	9.2	92	0.00	15.47
122		p-Diethylbenzene		----------NA----------				
123	M	1,2-dichlorobenzene	1.471	1.389	5.6	92	0.00	15.85
124	M	n-butylbenzene	1.388	1.352	2.6	93	0.00	15.73
125		1,2,4,5-tetramethylbenzen		----------NA----------				
126	M	1,2-dibromo-3-chloropropa	0.180	0.152	15.6	85	0.00	16.59
127		1,3,5-trichlorobenzene	1.418	1.366	3.7	95	0.00	16.76
128	M	1,2,4-trichlorobenzene	1.516	1.436	5.3	95	0.00	17.34
129	M	hexachlorobutadiene	0.581	0.630	-8.4	107	0.00	17.44
130	M	naphthalene	3.795	3.553	6.4	95	0.00	17.58
131	M	1,2,3-trichlorobenzene	1.600	1.545	3.4	98	0.00	17.79
			True	Calc.	% Drift			
132	M	hexachloroethane	20.000	17.346	13.3	92	0.00	16.10
133		Benzyl chloride	20.000	20.421	-2.1	107	0.00	15.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E101486.D M2E4568.M Fri May 16 15:07:14 2014 ACCNJ

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102468.D
Acq On : 16 May 2014 1:42 pm
Operator : DIXITAR
Sample : jb66584-1
Misc : MS67306,V2E4603,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 16 15:13:00 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

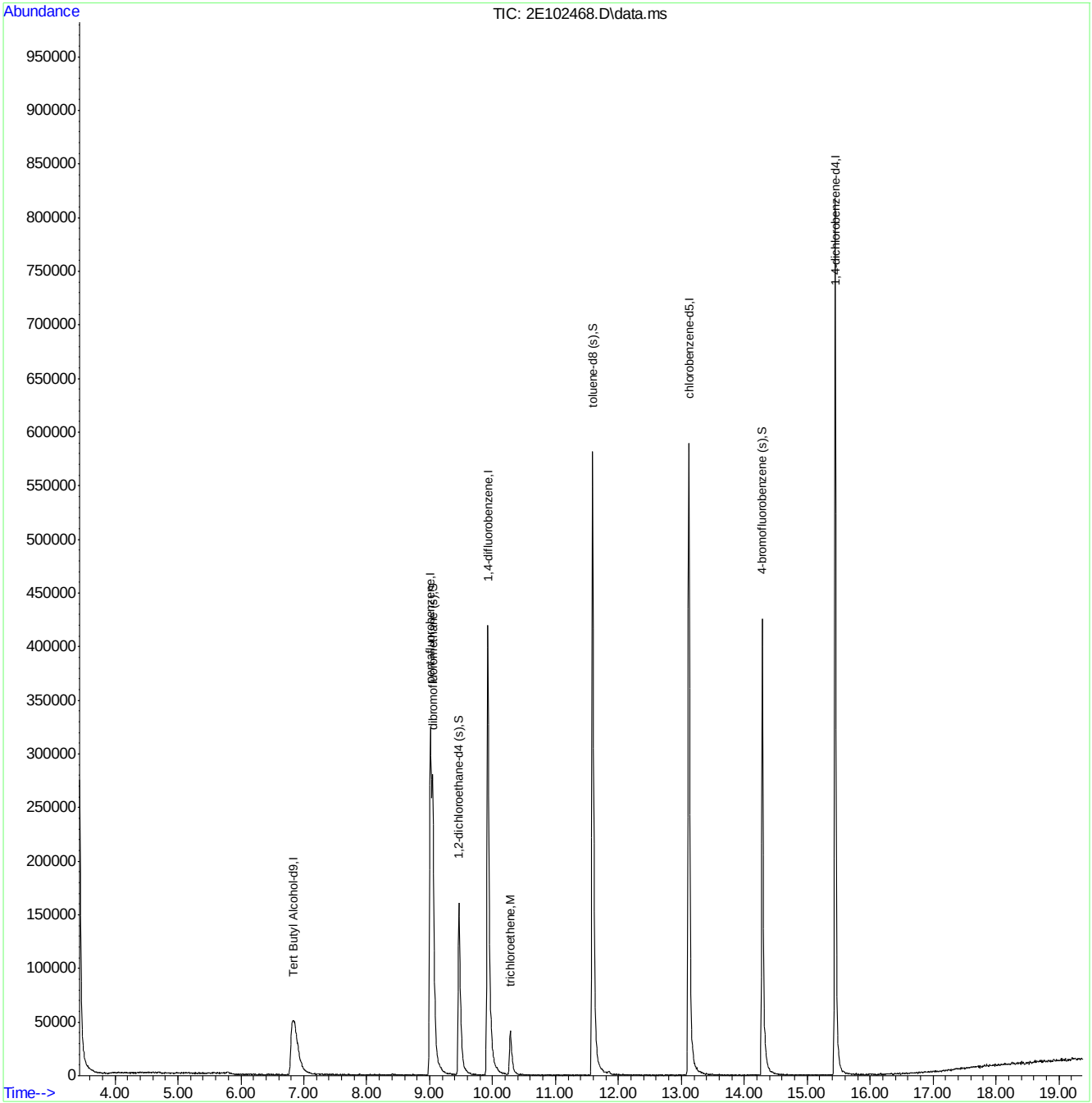
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.829	65	224450	500.00	ug/L	-0.02
5) pentafluorobenzene	9.015	168	357252	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	505380	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	406582	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	243683	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.047	113	145051	47.88	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 95.76%			
48) 1,2-dichloroethane-d4 (s)	9.466	65	152617	43.03	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 86.06%			
79) toluene-d8 (s)	11.590	98	514787	51.36	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 102.72%			
103) 4-bromofluorobenzene (s)	14.285	95	174047	44.83	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 89.66%			
Target Compounds						Qvalue
69) trichloroethene	10.284	95	20648	7.33	ug/L	92

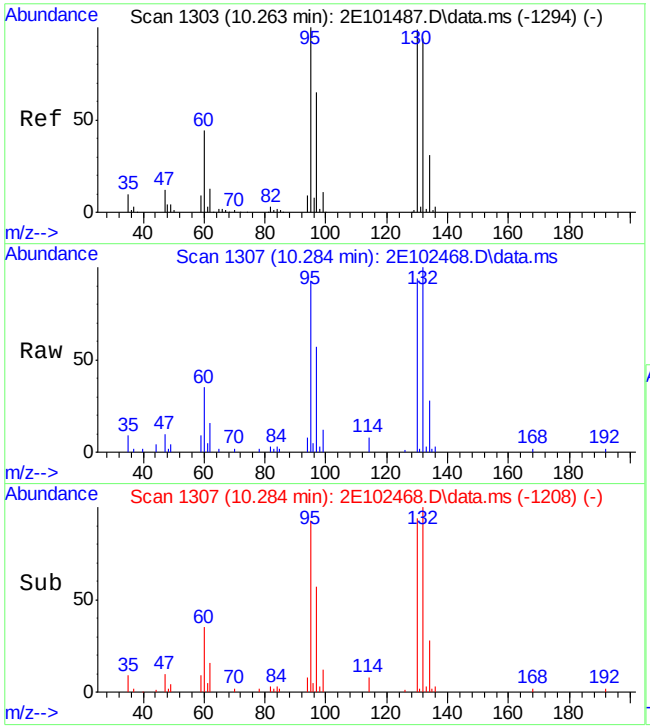
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102468.D
Acq On : 16 May 2014 1:42 pm
Operator : DIXITAR
Sample : jb66584-1
Misc : MS67306,V2E4603,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 16 15:13:00 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

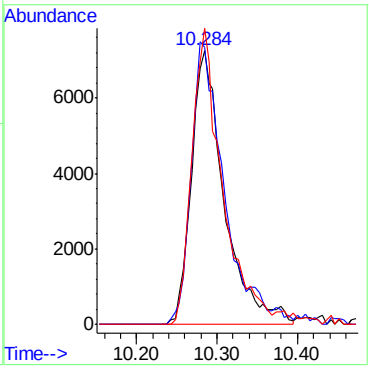




#69
trichloroethene
Concen: 7.33 ug/L
RT: 10.284 min Scan# 1307
Delta R.T. 0.021 min
Lab File: 2E102468.D
Acq: 16 May 2014 1:42 pm

Tgt Ion: 95 Resp: 20648

Ion	Ratio	Lower	Upper
95	100		
130	101.0	68.8	128.8
132	108.0	63.9	123.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102467.D
Acq On : 16 May 2014 1:13 pm
Operator : DIXITAR
Sample : jb66584-2
Misc : MS67306,V2E4603,W,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 15:12:34 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

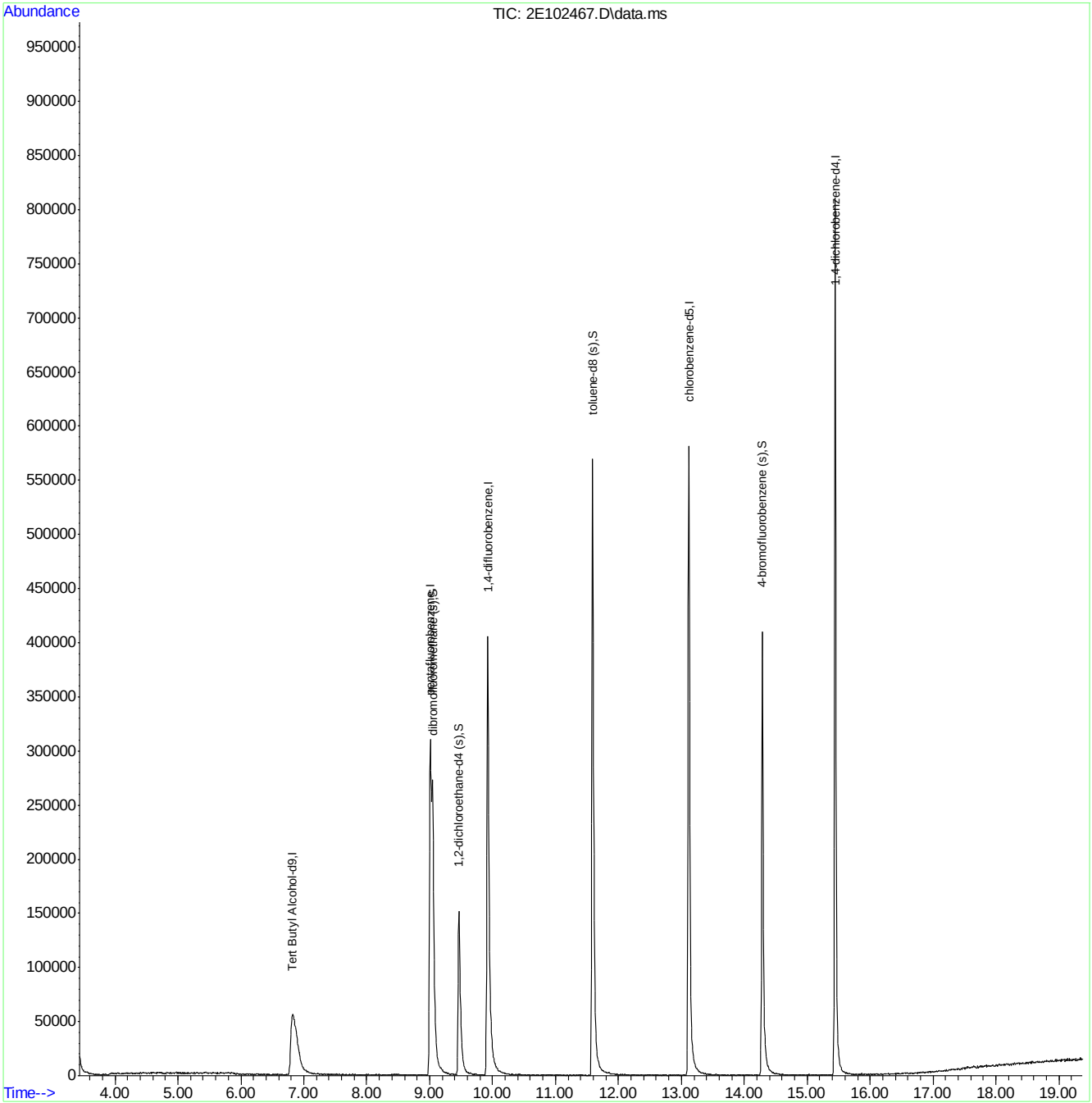
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.824	65	243574	500.00	ug/L	-0.03
5) pentafluorobenzene	9.010	168	347626	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	490696	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	395783	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	237081	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.047	113	142252	48.26	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 96.52%			
48) 1,2-dichloroethane-d4 (s)	9.461	65	148711	43.09	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 86.18%			
79) toluene-d8 (s)	11.590	98	501278	51.51	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 103.02%			
103) 4-bromofluorobenzene (s)	14.285	95	169731	44.94	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 89.88%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102467.D
Acq On : 16 May 2014 1:13 pm
Operator : DIXITAR
Sample : jb66584-2
Misc : MS67306,V2E4603,W,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 15:12:34 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102463.D
Acq On : 16 May 2014 10:22 am
Operator : DIXITAR
Sample : mb
Misc : MS67309,V2E4603,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 16 15:08:29 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

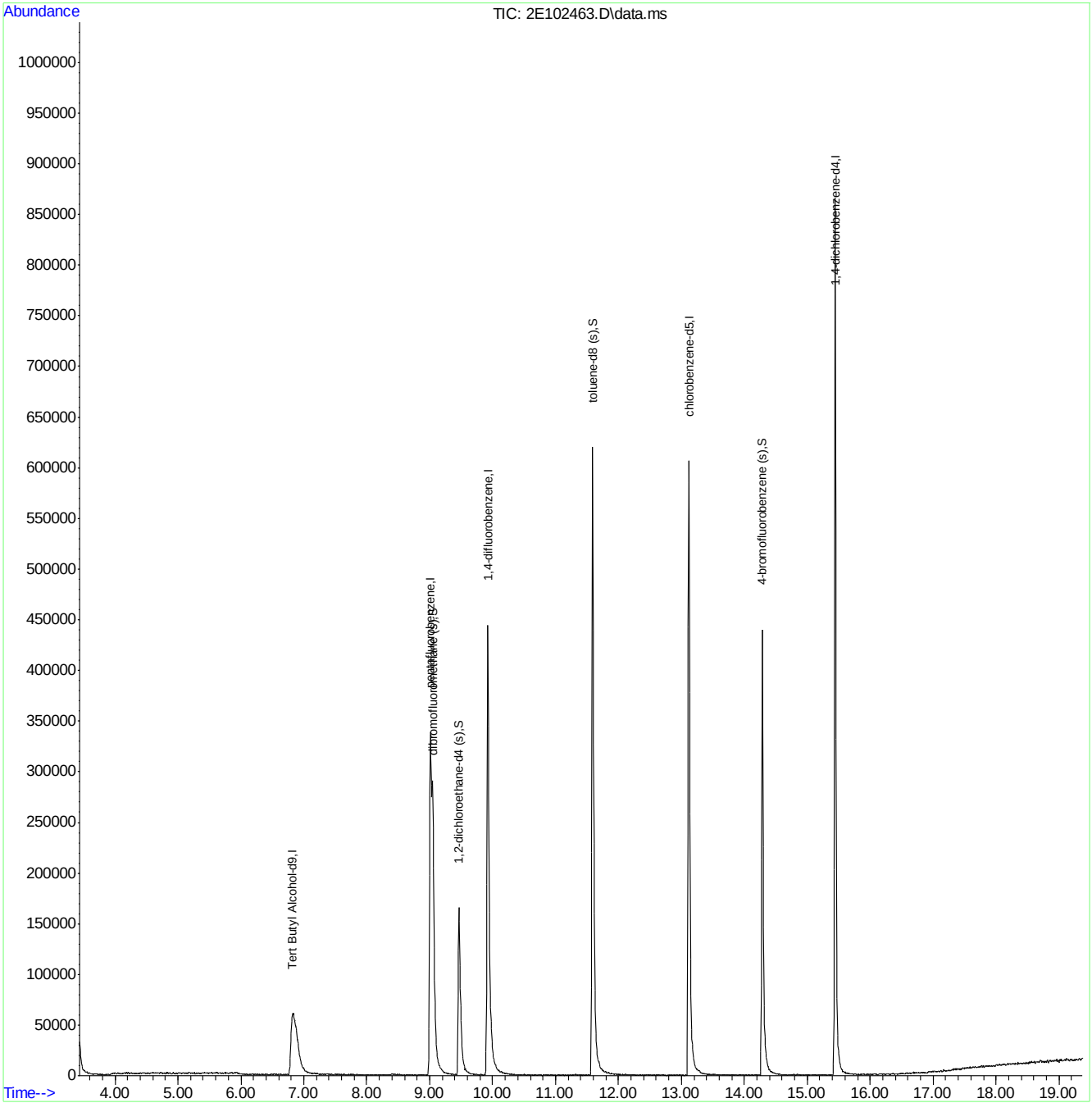
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.824	65	262681	500.00	ug/L	-0.03
5) pentafluorobenzene	9.015	168	376299	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	522064	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	418132	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	252326	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.052	113	153014	47.95	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 95.90%			
48) 1,2-dichloroethane-d4 (s)	9.466	65	158452	42.42	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 84.84%			
79) toluene-d8 (s)	11.590	98	540328	52.18	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 104.36%			
103) 4-bromofluorobenzene (s)	14.285	95	177668	44.20	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 88.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102463.D
Acq On : 16 May 2014 10:22 am
Operator : DIXITAR
Sample : mb
Misc : MS67309,V2E4603,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 16 15:08:29 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102464.D
Acq On : 16 May 2014 10:56 am
Operator : DIXITAR
Sample : bs
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 15:18:51 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	6.834	65	234728	500.00	ug/L		-0.02
5) pentafluorobenzene	9.015	168	348535	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	502651	50.00	ug/L		0.00
87) chlorobenzene-d5	13.115	117	399316	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	228947	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.047	113	146050	49.41	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 98.82%				
48) 1,2-dichloroethane-d4 (s)	9.466	65	166508	48.13	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 96.26%				
79) toluene-d8 (s)	11.590	98	542774	54.44	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 108.88%				
103) 4-bromofluorobenzene (s)	14.285	95	173808	47.65	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 95.30%				
Target Compounds							Qvalue
2) 1,4-dioxane	10.656	88	55773	1185.66	ug/L	#	97
3) tertiary butyl alcohol	6.944	59	111097	241.02	ug/L		94
10) chlorodifluoromethane	3.730	51	240680	41.19	ug/L		97
11) dichlorodifluoromethane	3.725	85	327173	46.66	ug/L		97
12) chloromethane	4.003	50	313498	50.40	ug/L		98
13) vinyl chloride	4.239	62	370220	51.86	ug/L		99
14) bromomethane	4.805	94	171876	48.80	ug/L		95
15) chloroethane	4.952	64	152181	58.64	ug/L		99
16) trichlorofluoromethane	5.382	101	315165	50.71	ug/L		93
18) ethyl ether	5.754	74	85047	47.91	ug/L	#	74
19) 2-chloropropane	5.927	43	280899	40.04	ug/L		98
20) acrolein	5.990	56	361678	467.53	ug/L		97
21) 1,1-dichloroethene	6.142	96	149907	46.48	ug/L		98
22) acetone	6.210	58	17590	49.37	ug/L	#	70
23) acetonitrile	6.635	40	183394	450.93	ug/L		99
24) allyl chloride	6.640	76	88364	51.97	ug/L		93
25) iodomethane	6.399	142	279971	48.61	ug/L		98
26) carbon disulfide	6.520	76	615757	47.53	ug/L		98
27) methylene chloride	6.829	84	175509	45.61	ug/L		99
28) methyl acetate	6.651	43	99462	42.35	ug/L		98
29) 1-chloropropane	6.860	41	69134	41.35	ug/L		91
30) methyl tert butyl ether	7.144	73	989946	90.17	ug/L		99
31) trans-1,2-dichloroethene	7.191	96	154442	45.61	ug/L		93
32) di-isopropyl ether	7.741	45	542873	45.03	ug/L		98
33) ethyl tert-butyl ether	8.192	59	515069	45.30	ug/L		98
34) 2-butanone	8.496	72	16876	43.83	ug/L		86
35) 1,1-dichloroethane	7.747	63	279733	46.14	ug/L		97
36) chloroprene	7.857	53	192539	42.06	ug/L		92
37) acrylonitrile	7.154	53	324349	253.32	ug/L		99
38) vinyl acetate	7.767	86	25220	45.24	ug/L		46
39) ethyl acetate	8.496	45	18324	44.53	ug/L		56
40) 2,2-dichloropropane	8.475	77	267100	46.99	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102464.D
Acq On : 16 May 2014 10:56 am
Operator : DIXITAR
Sample : bs
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 15:18:51 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	cis-1,2-dichloroethene	8.486	96	166156	45.88	ug/L		98
42)	propionitrile	8.554	54	248592	434.66	ug/L		99
43)	bromochloromethane	8.790	128	81075	48.55	ug/L		93
44)	tetrahydrofuran	8.842	42	51239	44.63	ug/L		98
45)	chloroform	8.848	85	164045	47.09	ug/L		96
46)	t-butyl formate	8.879	59	137608	45.07	ug/L	#	90
49)	freon 113	6.116	151	148509	53.16	ug/L		95
50)	methacrylonitrile	8.743	41	70954	41.48	ug/L		99
51)	1,1,1-trichloroethane	9.089	97	257256	48.01	ug/L		98
52)	Cyclohexane	9.162	84	298862	47.81	ug/L		93
53)	iso-butyl alcohol	9.325	41	58792	519.61	ug/L		96
55)	2,2,4-trimethylpentane	9.529	57	579113	43.21	ug/L	#	98
56)	tert-amyl methyl ether	9.571	87	114267	42.55	ug/L		98
59)	epichlorohydrin	11.212	57	63188	220.64	ug/L		99
60)	n-butyl alcohol	10.095	56	253462	2386.70	ug/L		97
61)	carbon tetrachloride	9.293	117	224135	47.53	ug/L		96
62)	1,1-dichloropropene	9.277	75	183830	45.47	ug/L		99
63)	hexane	7.495	57	139728	39.10	ug/L		97
64)	benzene	9.534	78	601306	49.09	ug/L		100
66)	isopropyl acetate	9.482	43	275651	54.01	ug/L		95
67)	1,2-dichloroethane	9.550	62	175680	47.47	ug/L		97
69)	trichloroethene	10.263	95	137337	49.01	ug/L		96
71)	2-nitropropane	11.071	41	43147	48.11	ug/L	#	89
72)	2-chloroethyl vinyl ether	11.076	63	393837	265.78	ug/L		99
73)	methyl methacrylate	10.567	100	29239	44.63	ug/L	#	82
74)	1,2-dichloropropane	10.520	63	155916	45.72	ug/L		97
75)	methylcyclohexane	10.473	83	300129	51.37	ug/L		98
76)	dibromomethane	10.688	93	81047	48.84	ug/L		98
77)	bromodichloromethane	10.824	83	178081	48.73	ug/L		96
78)	cis-1,3-dichloropropene	11.296	75	205551	48.07	ug/L		95
80)	4-methyl-2-pentanone	11.406	58	59601	48.75	ug/L		96
81)	toluene	11.663	92	324419	48.19	ug/L		100
82)	3-methyl-1-butanol	11.443	70	98148	974.87	ug/L		95
83)	trans-1,3-dichloropropene	11.878	75	168160	47.22	ug/L		96
84)	ethyl methacrylate	11.883	69	151428	42.58	ug/L		99
85)	1,1,2-trichloroethane	12.083	83	91755	48.33	ug/L		98
86)	2-hexanone	12.287	58	34811	43.92	ug/L	#	81
88)	tetrachloroethene	12.256	166	141888	51.68	ug/L		97
89)	1,3-dichloropropane	12.266	76	179384	47.38	ug/L		99
90)	butyl acetate	12.366	56	66444	43.05	ug/L		98
91)	3,3-dimethyl-1-butanol	12.450	57	191985	474.00	ug/L		99
92)	dibromochloromethane	12.533	129	122286	48.78	ug/L		99
93)	1,2-dibromoethane	12.680	107	101826	49.85	ug/L		97
94)	chlorobenzene	13.152	112	329008	48.00	ug/L		98
95)	1,1,1,2-tetrachloroethane	13.210	131	157787	48.76	ug/L		95
96)	ethylbenzene	13.210	91	588306	47.54	ug/L		99
97)	m,p-xylene	13.315	106	466898	98.87	ug/L		94
98)	o-xylene	13.734	106	251113	48.78	ug/L		97
99)	styrene	13.750	104	355703	49.45	ug/L		99
100)	bromoform	14.007	173	83713	49.23	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102464.D
Acq On : 16 May 2014 10:56 am
Operator : DIXITAR
Sample : bs
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 15:18:51 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

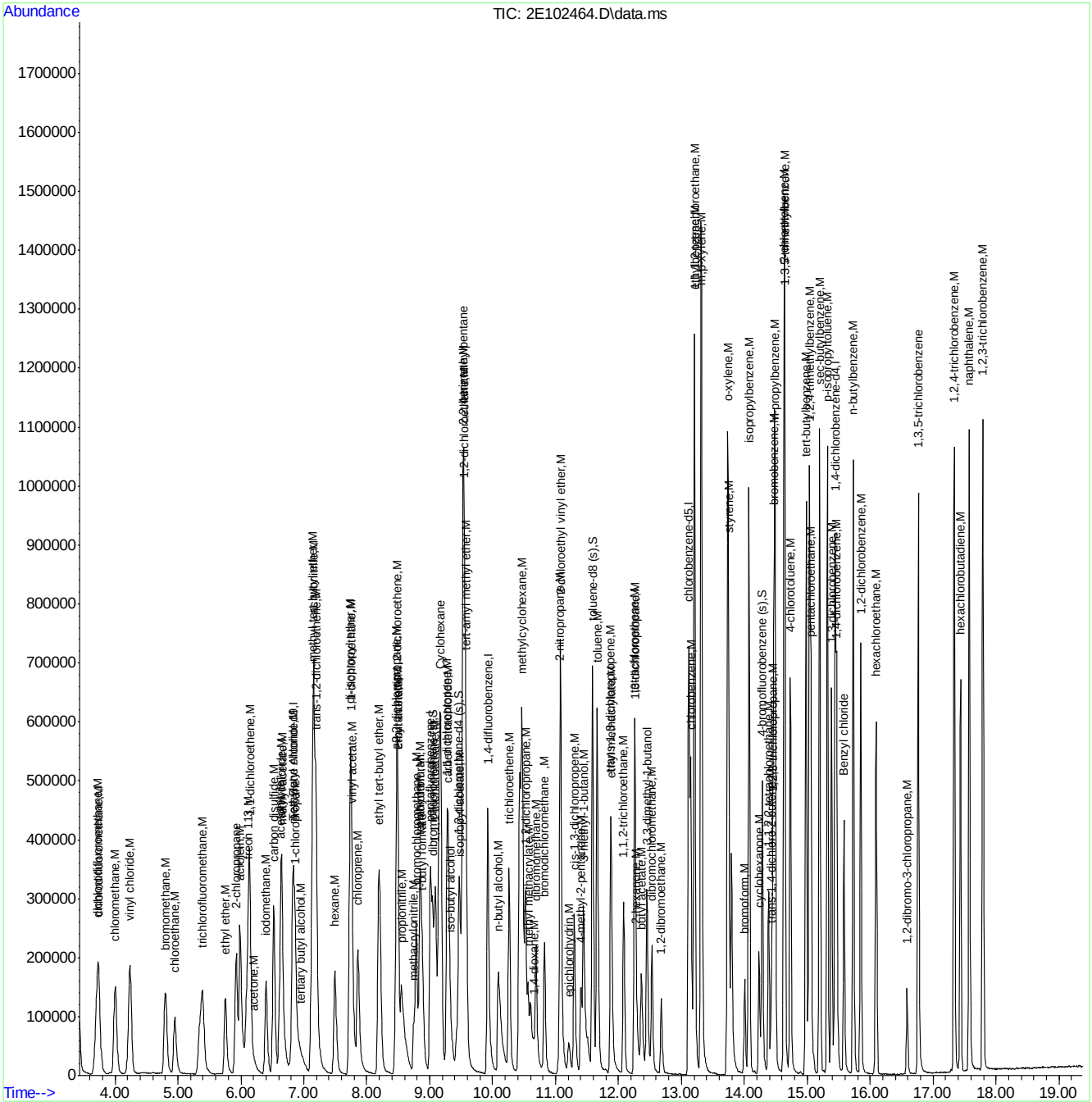
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) isopropylbenzene	14.075	105	702976	49.84	ug/L	100
104) bromobenzene	14.473	156	144138	47.41	ug/L	95
105) cyclohexanone	14.232	55	102811	367.84	ug/L	98
106) 1,1,2,2-tetrachloroethane	14.384	83	161664	43.84	ug/L	100
107) trans-1,4-dichloro-2-b...	14.431	53	37414	49.02	ug/L	85
108) 1,2,3-trichloropropane	14.452	110	41672	43.23	ug/L	98
109) n-propylbenzene	14.489	91	743763	50.52	ug/L	100
111) 2-chlorotoluene	14.631	126	145687	46.58	ug/L	98
112) 4-chlorotoluene	14.730	91	409414	44.87	ug/L	100
113) 1,3,5-trimethylbenzene	14.641	105	591435	50.01	ug/L	99
114) tert-butylbenzene	14.982	119	497533	44.37	ug/L	99
115) pentachloroethane	15.061	167	128345	53.06	ug/L	97
116) 1,2,4-trimethylbenzene	15.034	105	579405	49.55	ug/L	97
117) sec-butylbenzene	15.197	105	794419	41.95	ug/L	99
118) 1,3-dichlorobenzene	15.386	146	285887	45.35	ug/L	99
119) p-isopropyltoluene	15.323	119	654790	42.64	ug/L	99
121) 1,4-dichlorobenzene	15.470	146	297496	43.70	ug/L	98
123) 1,2-dichlorobenzene	15.852	146	314723	46.74	ug/L	98
124) n-butylbenzene	15.732	92	320788	50.48	ug/L	97
126) 1,2-dibromo-3-chloropr...	16.586	75	35808	43.55	ug/L	96
127) 1,3,5-trichlorobenzene	16.765	180	311955	48.05	ug/L	99
128) 1,2,4-trichlorobenzene	17.336	180	321287	46.30	ug/L	99
129) hexachlorobutadiene	17.436	225	143454	53.90	ug/L	95
130) naphthalene	17.572	128	821793	47.29	ug/L	99
131) 1,2,3-trichlorobenzene	17.792	180	347844	47.49	ug/L	100
132) hexachloroethane	16.093	119	117155	40.89	ug/L	95
133) Benzyl chloride	15.585	91	324723	50.03	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102464.D
Acq On : 16 May 2014 10:56 am
Operator : DIXITAR
Sample : bs
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 15:18:51 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102472.D
Acq On : 16 May 2014 3:39 pm
Operator : DIXITAR
Sample : jb66864-3ms
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 20 15:22:28 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	6.840	65	240710	500.00	ug/L		-0.01
5) pentafluorobenzene	9.010	168	356455	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	529997	50.00	ug/L		0.00
87) chlorobenzene-d5	13.115	117	421271	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	239318	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.047	113	145731	48.21	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 96.42%				
48) 1,2-dichloroethane-d4 (s)	9.461	65	168965	47.75	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 95.50%				
79) toluene-d8 (s)	11.584	98	568485	54.08	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 108.16%				
103) 4-bromofluorobenzene (s)	14.285	95	178851	46.91	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 93.82%				
Target Compounds							Qvalue
2) 1,4-dioxane	10.672	88	60816	1260.74	ug/L	#	95
3) tertiary butyl alcohol	6.929	59	121515	257.45	ug/L		73
10) chlorodifluoromethane	3.730	51	234611	39.26	ug/L		95
11) dichlorodifluoromethane	3.725	85	375181	52.31	ug/L		96
12) chloromethane	3.998	50	300664	47.26	ug/L		99
13) vinyl chloride	4.234	62	366361	50.18	ug/L		99
14) bromomethane	4.795	94	173871	48.27	ug/L		99
15) chloroethane	4.947	64	124829	47.03	ug/L		98
16) trichlorofluoromethane	5.377	101	319774	50.31	ug/L		97
18) ethyl ether	5.749	74	85161	46.91	ug/L	#	74
19) 2-chloropropane	5.922	43	250336	34.89	ug/L		99
20) acrolein	5.985	56	314674	397.73	ug/L		99
21) 1,1-dichloroethene	6.137	96	140164	42.50	ug/L		97
22) acetone	6.205	58	17660	48.46	ug/L		97
23) acetonitrile	6.619	40	171471	412.25	ug/L		98
24) allyl chloride	6.640	76	72665	41.79	ug/L		92
25) iodomethane	6.399	142	280977	47.70	ug/L		98
26) carbon disulfide	6.520	76	563962	42.57	ug/L		99
27) methylene chloride	6.824	84	180232	45.79	ug/L		97
28) methyl acetate	6.646	43	111134	46.27	ug/L		99
29) 1-chloropropane	6.850	41	53969	31.56	ug/L	#	86
30) methyl tert butyl ether	7.149	73	529686	47.18	ug/L		83
31) trans-1,2-dichloroethene	7.191	96	152044	43.90	ug/L		100
32) di-isopropyl ether	7.736	45	537256	43.57	ug/L		97
33) ethyl tert-butyl ether	8.192	59	533137	45.85	ug/L		98
34) 2-butanone	8.491	72	17770	44.93	ug/L		87
35) 1,1-dichloroethane	7.741	63	271627	43.81	ug/L		96
36) chloroprene	7.857	53	196172	41.90	ug/L		94
37) acrylonitrile	7.154	53	311462	237.85	ug/L		99
38) vinyl acetate	7.768	86	25980	45.52	ug/L		67
39) ethyl acetate	8.491	45	19905	47.29	ug/L		79
40) 2,2-dichloropropane	8.470	77	264374	45.48	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102472.D
Acq On : 16 May 2014 3:39 pm
Operator : DIXITAR
Sample : jb66864-3ms
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 20 15:22:28 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) cis-1,2-dichloroethene	8.481	96	171803	46.38	ug/L		98
42) propionitrile	8.549	54	244821	420.03	ug/L		95
43) bromochloromethane	8.785	128	82504	48.30	ug/L		99
44) tetrahydrofuran	8.848	42	48739	41.51	ug/L		85
45) chloroform	8.848	85	162714	45.67	ug/L		92
46) t-butyl formate	8.874	59	130163	41.68	ug/L		93
49) freon 113	6.111	151	134058	46.92	ug/L		96
50) methacrylonitrile	8.748	41	75445	42.81	ug/L		87
51) 1,1,1-trichloroethane	9.089	97	246058	44.90	ug/L		97
52) Cyclohexane	9.157	84	334037	52.25	ug/L		88
53) iso-butyl alcohol	9.330	41	55918	483.23	ug/L		98
55) 2,2,4-trimethylpentane	9.529	57	665241	48.02	ug/L	#	94
56) tert-amyl methyl ether	9.571	87	126149	45.93	ug/L	#	87
59) epichlorohydrin	11.212	57	73795	241.06	ug/L		96
60) n-butyl alcohol	10.085	56	291063	2599.35	ug/L		95
61) carbon tetrachloride	9.288	117	213410	42.92	ug/L		96
62) 1,1-dichloropropene	9.272	75	185329	43.48	ug/L		99
63) hexane	7.490	57	204316	54.23	ug/L		98
64) benzene	9.529	78	613375	47.49	ug/L		99
65) heptane	9.718	57	115950	51.38	ug/L		92
66) isopropyl acetate	9.477	43	344292	63.98	ug/L		98
67) 1,2-dichloroethane	9.550	62	186562	47.81	ug/L		95
69) trichloroethene	10.263	95	137238	46.45	ug/L		95
71) 2-nitropropane	11.050	41	43942	46.47	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.097	63	67189	43.00	ug/L		98
73) methyl methacrylate	10.567	100	32958	47.32	ug/L	#	78
74) 1,2-dichloropropane	10.520	63	162449	45.18	ug/L		97
75) methylcyclohexane	10.468	83	354756	57.58	ug/L		97
76) dibromomethane	10.688	93	86973	49.71	ug/L		95
77) bromodichloromethane	10.824	83	189441	49.16	ug/L		100
78) cis-1,3-dichloropropene	11.296	75	224375	49.77	ug/L		96
80) 4-methyl-2-pentanone	11.401	58	63757	49.46	ug/L		100
81) toluene	11.663	92	388216	54.69	ug/L		96
82) 3-methyl-1-butanol	11.438	70	123326	1161.75	ug/L		95
83) trans-1,3-dichloropropene	11.878	75	190198	50.66	ug/L		99
84) ethyl methacrylate	11.883	69	168759	44.93	ug/L		94
85) 1,1,2-trichloroethane	12.083	83	100951	50.43	ug/L		95
86) 2-hexanone	12.287	58	37815	45.24	ug/L		84
88) tetrachloroethene	12.256	166	145603	50.27	ug/L		98
89) 1,3-dichloropropane	12.266	76	197321	49.40	ug/L		99
90) butyl acetate	12.360	56	76933	46.97	ug/L		96
91) 3,3-dimethyl-1-butanol	12.450	57	223035	522.86	ug/L		98
92) dibromochloromethane	12.533	129	135142	51.10	ug/L		98
93) 1,2-dibromoethane	12.680	107	112276	52.10	ug/L		93
94) chlorobenzene	13.147	112	351829	48.65	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.205	131	175644	51.45	ug/L		98
96) ethylbenzene	13.205	91	2186961	167.52	ug/L		99
97) m,p-xylene	13.315	106	1474431	295.94	ug/L		95
98) o-xylene	13.729	106	549939	101.26	ug/L		99
99) styrene	13.750	104	405187	53.39	ug/L		99

M2E4568.M Tue May 20 15:22:35 2014 ACCNJ Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102472.D
Acq On : 16 May 2014 3:39 pm
Operator : DIXITAR
Sample : jb66864-3ms
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 20 15:22:28 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

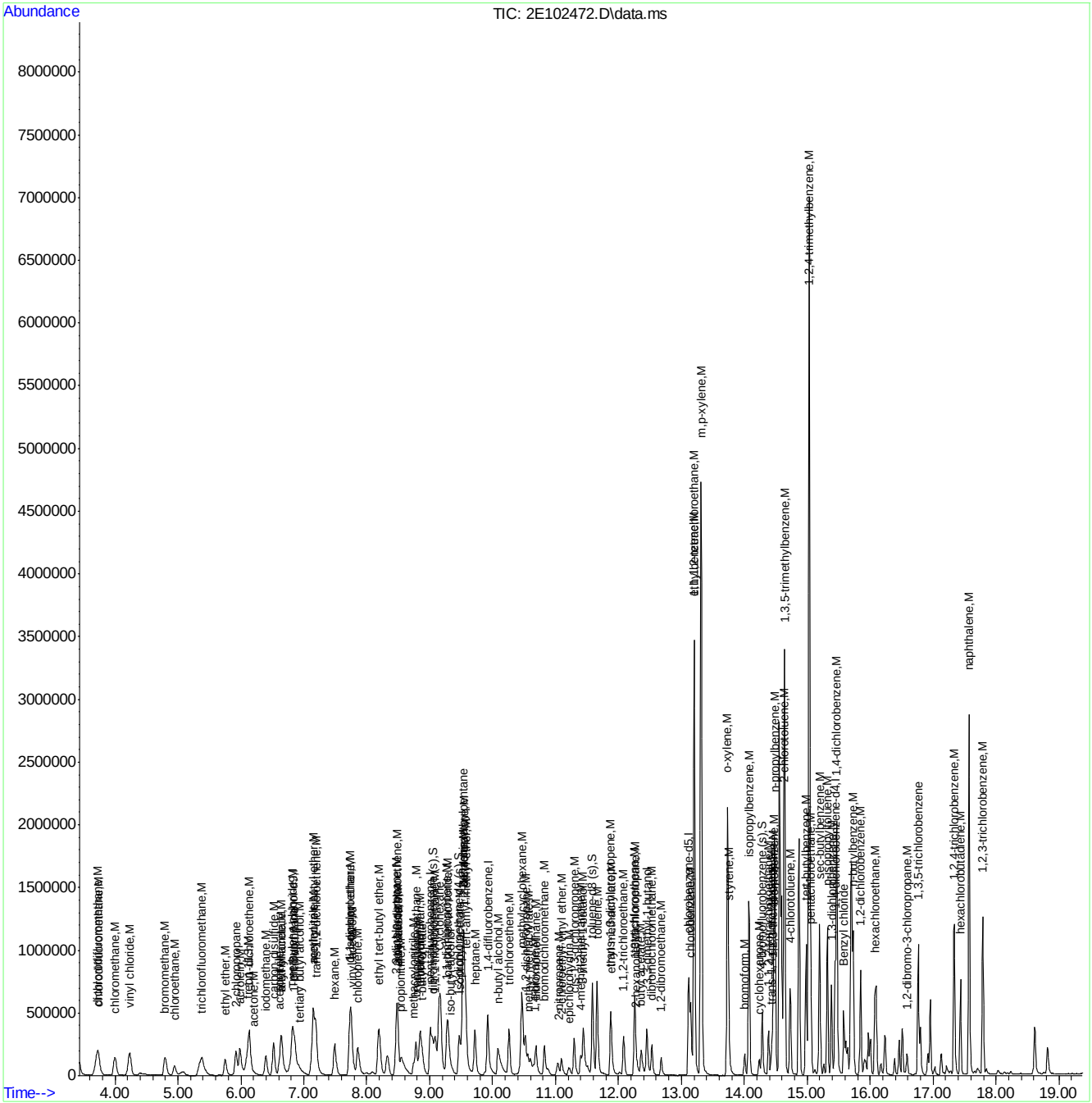
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) bromoform	14.007	173	91138	50.80	ug/L		97
102) isopropylbenzene	14.075	105	977281	66.28	ug/L		98
104) bromobenzene	14.468	156	157890	49.68	ug/L		99
105) cyclohexanone	14.237	55	68485	229.98	ug/L		97
106) 1,1,2,2-tetrachloroethane	14.384	83	184692	47.91	ug/L		98
107) trans-1,4-dichloro-2-b...	14.431	53	37209	46.64	ug/L		87
108) 1,2,3-trichloropropane	14.458	110	45941	45.59	ug/L		98
109) n-propylbenzene	14.484	91	1328825	86.34	ug/L		100
111) 2-chlorotoluene	14.625	126	162191	49.61	ug/L		90
112) 4-chlorotoluene	14.730	91	433051	45.40	ug/L		99
113) 1,3,5-trimethylbenzene	14.641	105	1657973	134.12	ug/L		100
114) tert-butylbenzene	14.982	119	548910	46.79	ug/L		98
115) pentachloroethane	15.061	167	146704	58.02	ug/L		97
116) 1,2,4-trimethylbenzene	15.029	105	3855576	315.42	ug/L		96
117) sec-butylbenzene	15.197	105	887725	44.82	ug/L		100
118) 1,3-dichlorobenzene	15.386	146	316110	47.97	ug/L		99
119) p-isopropyltoluene	15.323	119	724239	45.08	ug/L		98
121) 1,4-dichlorobenzene	15.470	146	325107	45.69	ug/L		97
123) 1,2-dichlorobenzene	15.847	146	341947	48.58	ug/L		99
124) n-butylbenzene	15.732	92	353931	53.28	ug/L		97
126) 1,2-dibromo-3-chloropr...	16.586	75	38590	44.90	ug/L		95
127) 1,3,5-trichlorobenzene	16.765	180	343464	50.61	ug/L		100
128) 1,2,4-trichlorobenzene	17.336	180	367653	50.68	ug/L		99
129) hexachlorobutadiene	17.436	225	160659	57.75	ug/L		92
130) naphthalene	17.572	128	2085998	114.85	ug/L		99
131) 1,2,3-trichlorobenzene	17.792	180	400394	52.30	ug/L		98
132) hexachloroethane	16.072	119	436287	136.32	ug/L	#	34
133) Benzyl chloride	15.580	91	404999	59.77	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102472.D
Acq On : 16 May 2014 3:39 pm
Operator : DIXITAR
Sample : jb66864-3ms
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 20 15:22:28 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102473.D
Acq On : 16 May 2014 4:08 pm
Operator : DIXITAR
Sample : jb66864-3msd
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 20 15:22:39 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	6.850	65	255654	500.00	ug/L	#	0.00
5) pentafluorobenzene	9.015	168	387561	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	576011	50.00	ug/L		0.00
87) chlorobenzene-d5	13.115	117	456745	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	257489	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.047	113	158692	48.29	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 96.58%				
48) 1,2-dichloroethane-d4 (s)	9.461	65	180636	46.95	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 93.90%				
79) toluene-d8 (s)	11.590	98	626533	54.84	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 109.68%				
103) 4-bromofluorobenzene (s)	14.285	95	194703	47.46	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 94.92%				
Target Compounds							Qvalue
2) 1,4-dioxane	10.651	88	68014	1327.54	ug/L	#	97
3) tertiary butyl alcohol	6.923	59	133074	265.64	ug/L		65
10) chlorodifluoromethane	3.736	51	253951	39.09	ug/L		96
11) dichlorodifluoromethane	3.730	85	399162	51.19	ug/L		97
12) chloromethane	4.003	50	335271	48.47	ug/L		98
13) vinyl chloride	4.239	62	402678	50.73	ug/L		99
14) bromomethane	4.805	94	192958	49.27	ug/L		95
15) chloroethane	4.947	64	136705	47.37	ug/L		99
16) trichlorofluoromethane	5.382	101	342447	49.55	ug/L		98
18) ethyl ether	5.754	74	94271	47.76	ug/L	#	73
19) 2-chloropropane	5.927	43	273834	35.10	ug/L		99
20) acrolein	5.990	56	346516	402.82	ug/L		97
21) 1,1-dichloroethene	6.142	96	154351	43.04	ug/L		96
22) acetone	6.221	58	19653	49.60	ug/L	#	82
23) acetonitrile	6.635	40	185434	410.03	ug/L		98
24) allyl chloride	6.645	76	78920	41.74	ug/L		98
25) iodomethane	6.399	142	310147	48.42	ug/L		99
26) carbon disulfide	6.520	76	620136	43.05	ug/L		99
27) methylene chloride	6.829	84	201015	46.98	ug/L		96
28) methyl acetate	6.651	43	125605	48.10	ug/L		99
29) 1-chloropropane	6.855	41	57345	30.85	ug/L	#	90
30) methyl tert butyl ether	7.143	73	573648	46.99	ug/L		85
31) trans-1,2-dichloroethene	7.196	96	168320	44.70	ug/L		100
32) di-isopropyl ether	7.736	45	595490	44.42	ug/L		98
33) ethyl tert-butyl ether	8.192	59	576938	45.63	ug/L		98
34) 2-butanone	8.491	72	19839	45.96	ug/L		79
35) 1,1-dichloroethane	7.746	63	295350	43.81	ug/L		96
36) chloroprene	7.862	53	213416	41.92	ug/L		95
37) acrylonitrile	7.154	53	338317	237.62	ug/L		100
38) vinyl acetate	7.773	86	25064	41.14	ug/L		66
39) ethyl acetate	8.496	45	19756	43.17	ug/L		55
40) 2,2-dichloropropane	8.475	77	283276	44.82	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102473.D
Acq On : 16 May 2014 4:08 pm
Operator : DIXITAR
Sample : jb66864-3msd
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 20 15:22:39 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) cis-1,2-dichloroethene	8.486	96	186052	46.20	ug/L		100
42) propionitrile	8.549	54	267551	421.98	ug/L		99
43) bromochloromethane	8.785	128	93387	50.29	ug/L		94
44) tetrahydrofuran	8.842	42	52514	41.14	ug/L		84
45) chloroform	8.847	85	173942	44.91	ug/L		99
46) t-butyl formate	8.879	59	132999	39.17	ug/L		97
49) freon 113	6.121	151	147464	47.47	ug/L		89
50) methacrylonitrile	8.748	41	83021	43.23	ug/L		90
51) 1,1,1-trichloroethane	9.089	97	269156	45.17	ug/L		97
52) Cyclohexane	9.157	84	364616	52.46	ug/L		90
53) iso-butyl alcohol	9.330	41	61716	490.53	ug/L		98
55) 2,2,4-trimethylpentane	9.529	57	728482	48.34	ug/L	#	95
56) tert-amyl methyl ether	9.566	87	136591	45.74	ug/L		91
59) epichlorohydrin	11.212	57	80025	240.60	ug/L		95
60) n-butyl alcohol	10.085	56	321676	2643.26	ug/L		100
61) carbon tetrachloride	9.293	117	233208	43.15	ug/L		96
62) 1,1-dichloropropene	9.277	75	204850	44.22	ug/L		96
63) hexane	7.490	57	221998	54.22	ug/L		98
64) benzene	9.534	78	670319	47.76	ug/L		99
65) heptane	9.718	57	127010	51.78	ug/L		90
66) isopropyl acetate	9.482	43	372190	63.64	ug/L		98
67) 1,2-dichloroethane	9.550	62	200852	47.36	ug/L		99
69) trichloroethene	10.263	95	152564	47.51	ug/L		94
71) 2-nitropropane	11.055	41	47661	46.37	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.112	63	20226	11.91	ug/L		97
73) methyl methacrylate	10.562	100	36231	47.80	ug/L		95
74) 1,2-dichloropropane	10.520	63	176710	45.22	ug/L		99
75) methylcyclohexane	10.468	83	391350	58.45	ug/L		97
76) dibromomethane	10.688	93	93313	49.07	ug/L		92
77) bromodichloromethane	10.824	83	207064	49.44	ug/L		99
78) cis-1,3-dichloropropene	11.296	75	244148	49.83	ug/L		95
80) 4-methyl-2-pentanone	11.401	58	69037	49.28	ug/L	#	52
81) toluene	11.658	92	424409	55.01	ug/L		97
82) 3-methyl-1-butanol	11.443	70	132630	1149.59	ug/L		92
83) trans-1,3-dichloropropene	11.873	75	206328	50.56	ug/L		95
84) ethyl methacrylate	11.878	69	185167	45.35	ug/L		96
85) 1,1,2-trichloroethane	12.082	83	109232	50.21	ug/L		95
86) 2-hexanone	12.287	58	40380	44.45	ug/L		87
88) tetrachloroethene	12.255	166	158768	50.55	ug/L		99
89) 1,3-dichloropropane	12.266	76	214395	49.51	ug/L		99
90) butyl acetate	12.360	56	85813	48.24	ug/L		99
91) 3,3-dimethyl-1-butanol	12.449	57	247460	535.26	ug/L		98
92) dibromochloromethane	12.533	129	148077	51.64	ug/L		99
93) 1,2-dibromoethane	12.680	107	121208	51.87	ug/L		96
94) chlorobenzene	13.147	112	389273	49.65	ug/L		98
95) 1,1,1,2-tetrachloroethane	13.204	131	190988	51.60	ug/L		97
96) ethylbenzene	13.204	91	2406087	169.99	ug/L		99
97) m,p-xylene	13.315	106	1631313	302.00	ug/L		94
98) o-xylene	13.729	106	604544	102.67	ug/L		99
99) styrene	13.750	104	441334	53.64	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102473.D
Acq On : 16 May 2014 4:08 pm
Operator : DIXITAR
Sample : jb66864-3msd
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 20 15:22:39 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

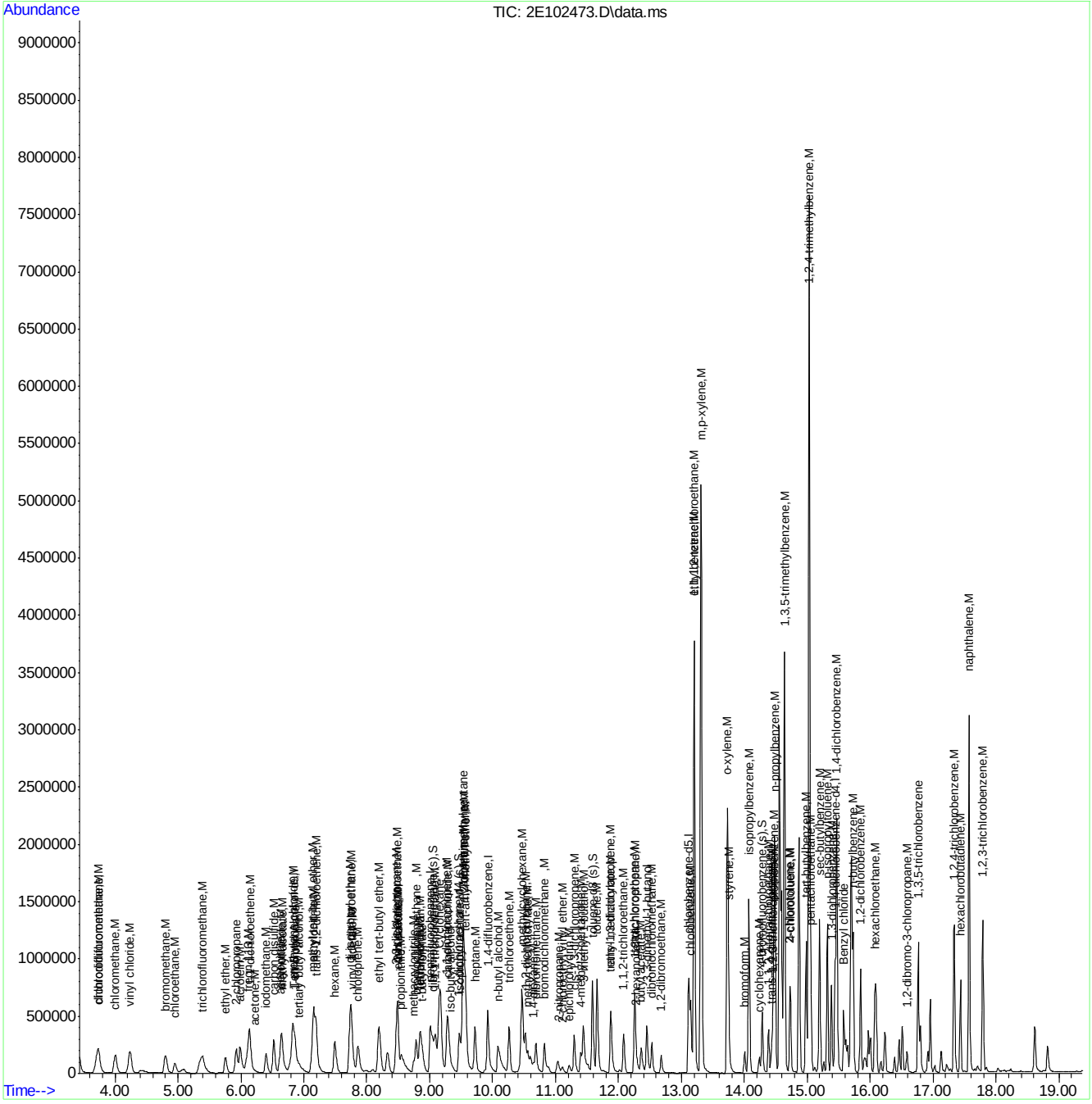
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) bromoform	14.007	173	98577	50.68	ug/L		96
102) isopropylbenzene	14.075	105	1077157	67.90	ug/L		99
104) bromobenzene	14.468	156	173072	50.62	ug/L		100
105) cyclohexanone	14.237	55	74267	231.83	ug/L		93
106) 1,1,2,2-tetrachloroethane	14.384	83	196884	47.47	ug/L		98
107) trans-1,4-dichloro-2-b...	14.431	53	41025	47.79	ug/L	#	79
108) 1,2,3-trichloropropane	14.452	110	49689	45.83	ug/L		97
109) n-propylbenzene	14.484	91	1458746	88.10	ug/L		99
111) 2-chlorotoluene	14.725	126	162709	46.26	ug/L		84
112) 4-chlorotoluene	14.730	91	466263	45.43	ug/L		100
113) 1,3,5-trimethylbenzene	14.641	105	1801952	135.48	ug/L		99
114) tert-butylbenzene	14.982	119	600376	47.56	ug/L		96
115) pentachloroethane	15.060	167	159610	58.67	ug/L		98
116) 1,2,4-trimethylbenzene	15.029	105	4199595	319.31	ug/L		96
117) sec-butylbenzene	15.197	105	975703	45.78	ug/L		99
118) 1,3-dichlorobenzene	15.386	146	337397	47.58	ug/L		99
119) p-isopropyltoluene	15.317	119	793235	45.88	ug/L		99
121) 1,4-dichlorobenzene	15.469	146	347806	45.43	ug/L		96
123) 1,2-dichlorobenzene	15.847	146	372146	49.14	ug/L		99
124) n-butylbenzene	15.732	92	392145	54.87	ug/L		96
126) 1,2-dibromo-3-chloropr...	16.586	75	42020	45.44	ug/L		93
127) 1,3,5-trichlorobenzene	16.764	180	366418	50.18	ug/L		99
128) 1,2,4-trichlorobenzene	17.336	180	392412	50.28	ug/L		99
129) hexachlorobutadiene	17.436	225	173413	57.93	ug/L		93
130) naphthalene	17.572	128	2219328	113.56	ug/L		98
131) 1,2,3-trichlorobenzene	17.792	180	427153	51.86	ug/L		97
132) hexachloroethane	16.072	119	469909	136.46	ug/L	#	34
133) Benzyl chloride	15.580	91	428007	58.70	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2E\V2E4603-04\
Data File : 2E102473.D
Acq On : 16 May 2014 4:08 pm
Operator : DIXITAR
Sample : jb66864-3msd
Misc : MS67529,V2E4603,W,,,,5
ALS Vial : 14 Sample Multiplier: 1

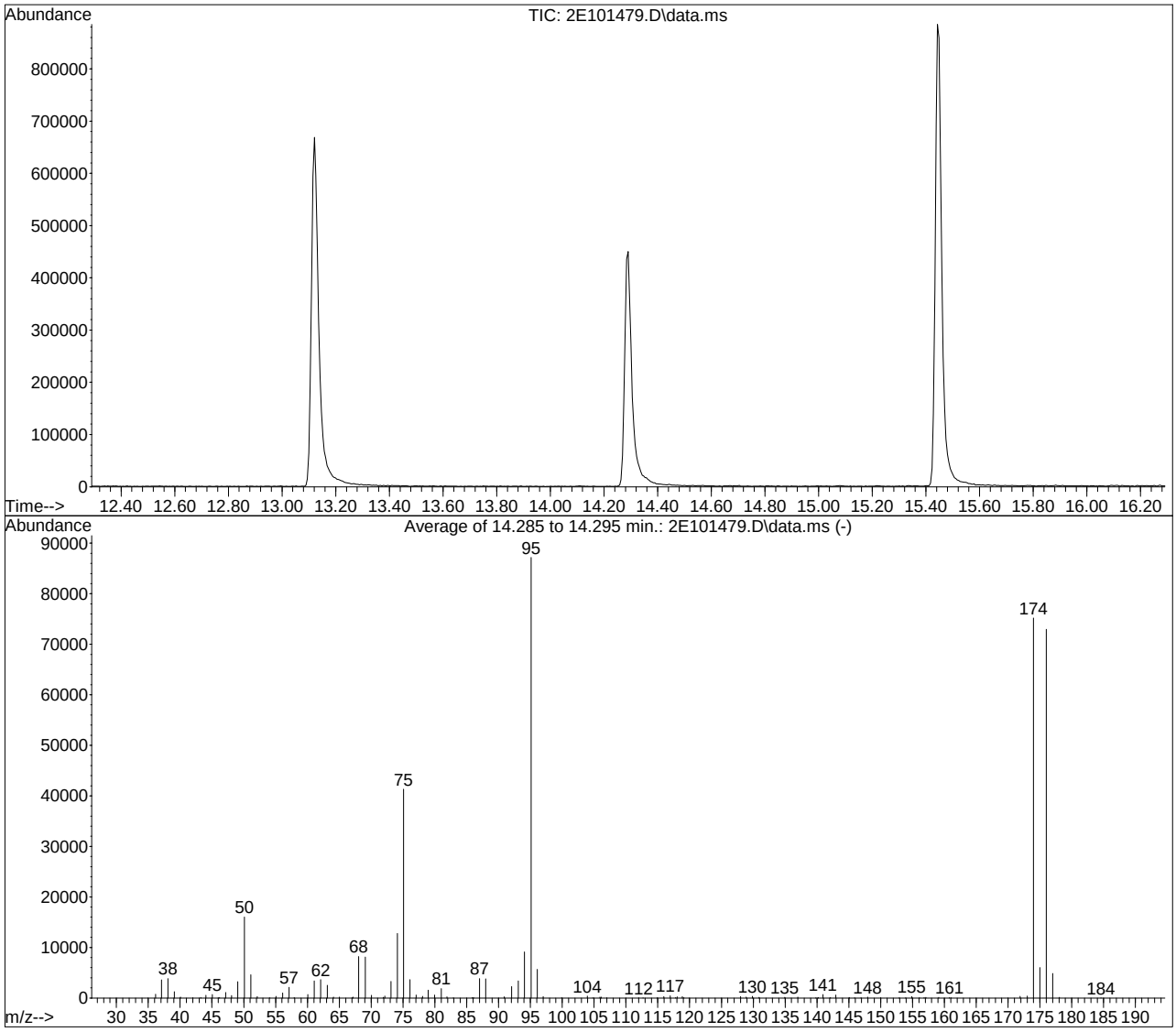
Quant Time: May 20 15:22:39 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



SW-846 Method 8260

Data File : C:\msdchem\1\DATA\2E101479.D Vial: 1
Acq On : 14 Apr 2014 5:11 pm Operator: DIXITAR
Sample : bfb Inst : ms2e
Misc : MS65848,V2E4568,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2E4568.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM



AutoFind: Scans 2070, 2071, 2072; Background Corrected with Scan 2062

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	16031	PASS
75	95	30	60	47.4	41336	PASS
95	95	100	100	100.0	87160	PASS
96	95	5	9	6.5	5677	PASS
173	174	0.00	2	0.5	372	PASS
174	95	50	120	86.3	75197	PASS
175	174	5	9	8.0	6029	PASS
176	174	95	101	97.0	72941	PASS
177	176	5	9	6.6	4842	PASS

2E101479.D M2E4568.M Tue Apr 15 18:34:59 2014 MS2E

Average of 14.285 to 14.295 min.: 2E101479.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.15	722	47.15	1093	60.05	695	71.90	117
37.10	3586	48.10	475	61.05	3384	72.15	369
38.10	3823	49.05	3229	62.05	3633	73.10	3300
39.10	1244	50.10	16031	63.10	2493	74.10	12772
40.05	188	51.10	4610	64.10	160	75.10	41336
42.00	42	52.10	295	65.00	194	76.10	3608
43.25	85	54.10	44	67.00	49	77.05	566
44.05	543	55.05	324	67.15	156	78.05	351
45.05	688	56.10	984	68.05	8231	78.95	1568
46.00	37	57.10	2129	69.10	8127	79.95	588
46.20	60	57.90	57	70.05	558	81.00	1848

Average of 14.285 to 14.295 min.: 2E101479.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.90	248	96.10	5677	115.95	259	137.00	174
82.90	47	97.00	265	116.95	418	139.80	46
85.90	87	99.90	34	117.80	79	140.20	86
86.10	78	103.95	361	118.05	221	140.95	699
87.00	3819	104.80	54	118.85	299	142.10	91
88.00	3788	105.90	182	119.10	101	142.95	609
90.90	254	106.10	174	128.00	286	145.10	64
92.05	2281	107.00	50	128.90	168	145.90	51
93.10	3371	112.00	47	129.85	324	146.90	49
94.05	9116	112.70	39	130.90	122	147.95	185
95.10	87160	114.90	45	134.95	113	150.00	45

Average of 14.285 to 14.295 min.: 2E101479.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.90	41	174.00	75197				
153.90	35	175.00	6029				
154.90	275	176.00	72941				
156.10	54	177.00	4842				
156.80	56	178.05	154				
157.10	121	184.60	37				
159.10	124						
160.80	72						
161.10	48						
171.90	311						
173.00	372						

SW-846 Method 8260

```
Data File : C:\msdchem\1\DATA\2E101494.D                Vial: 1
Acq On    : 15 Apr 2014  11:05 am                   Operator: DIXITAR
Sample    : bfb                                     Inst    : ms2e
Misc      : MS65848,V2E4568,W,,,,1                  Multiplr: 1.00
MS Integration Params: rteint.p

Method   : C:\msdchem\1\METHODS\M2E4568.M (RTE Integrator)
Title    : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
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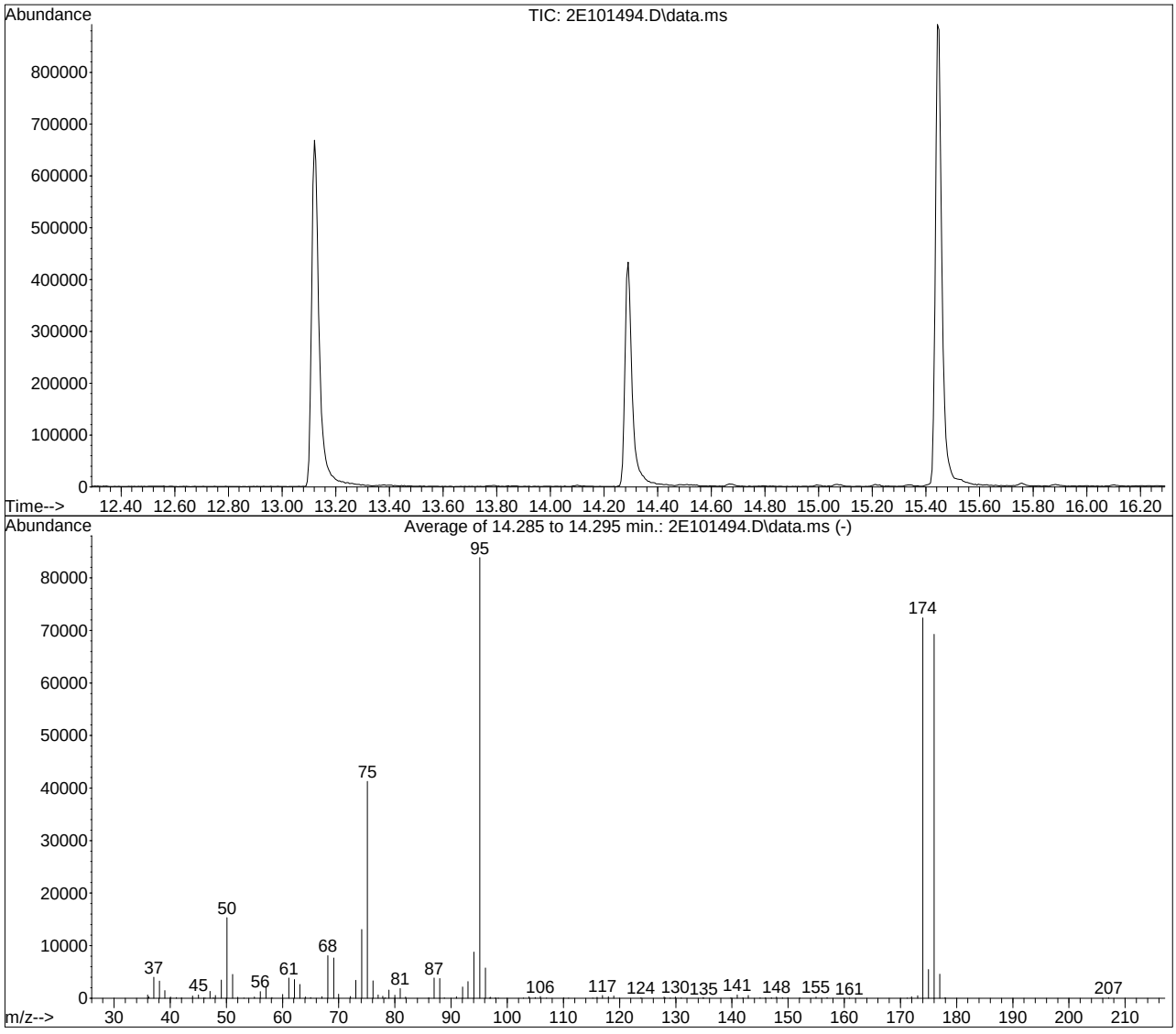


AutoFind: Scans 2070, 2071, 2072; Background Corrected with Scan 2062

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	15315	PASS
75	95	30	60	49.2	41250	PASS
95	95	100	100	100.0	83866	PASS
96	95	5	9	6.9	5748	PASS
173	174	0.00	2	0.6	468	PASS
174	95	50	120	86.3	72378	PASS
175	174	5	9	7.5	5446	PASS
176	174	95	101	95.7	69266	PASS
177	176	5	9	6.6	4551	PASS

2E101494.D M2E4568.M Tue Apr 15 18:38:04 2014 MS2E

Average of 14.285 to 14.295 min.: 2E101494.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	626	46.20	33	57.05	2108	70.00	736
36.20	275	47.10	1278	58.10	115	72.10	340
37.10	3987	47.70	96	60.00	692	73.05	3390
38.10	3241	48.05	501	61.10	3858	74.10	13095
39.05	1430	49.10	3437	62.10	3557	75.10	41250
40.05	217	50.10	15315	63.10	2626	76.10	3315
41.10	110	51.10	4502	64.10	209	77.00	632
42.00	92	52.00	165	65.00	135	77.85	383
44.00	409	53.10	38	67.00	266	78.30	75
45.05	612	55.00	224	68.05	8072	78.95	1552
46.00	56	56.05	1255	69.10	7643	80.00	548

Average of 14.285 to 14.295 min.: 2E101494.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.95	1844	96.10	5748	110.90	34	131.00	42
81.90	236	96.90	58	115.20	34	134.80	94
86.00	89	97.05	185	116.00	173	135.00	46
87.00	3852	97.90	76	116.95	496	139.80	72
88.00	3743	98.40	33	118.00	257	140.95	607
88.80	81	102.90	35	118.95	419	141.95	80
90.95	251	103.90	248	123.80	62	142.90	494
92.05	2143	105.00	142	127.90	207	145.00	52
93.00	3139	105.90	318	128.10	72	145.95	95
94.05	8797	107.00	36	129.00	45	147.00	91
95.10	83866	110.05	82	129.95	243	147.95	201

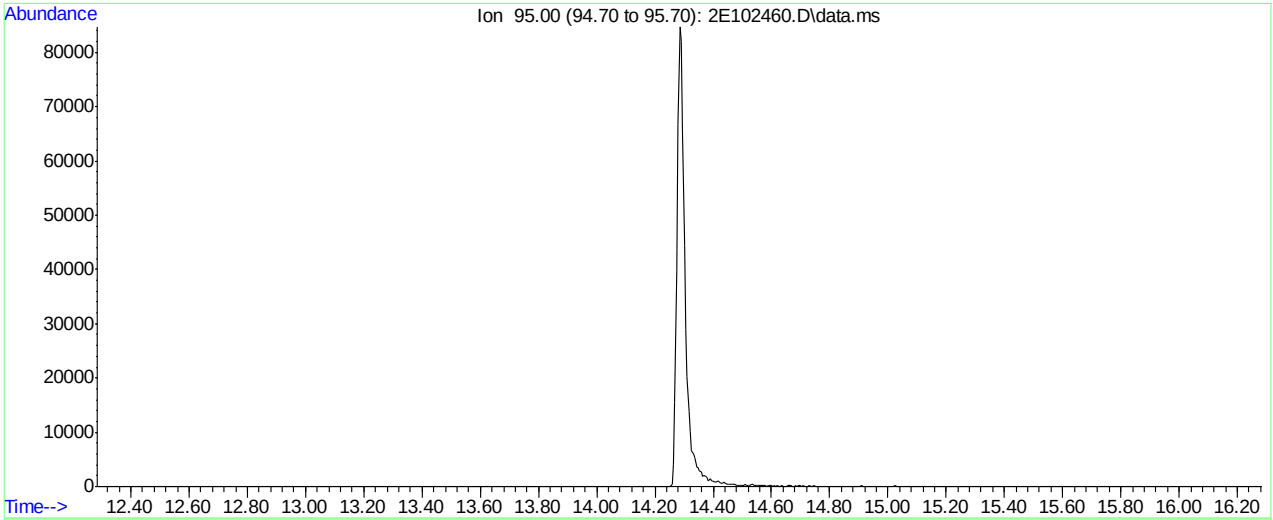
Average of 14.285 to 14.295 min.: 2E101494.D\data.ms
bfb
Modified:subtracted

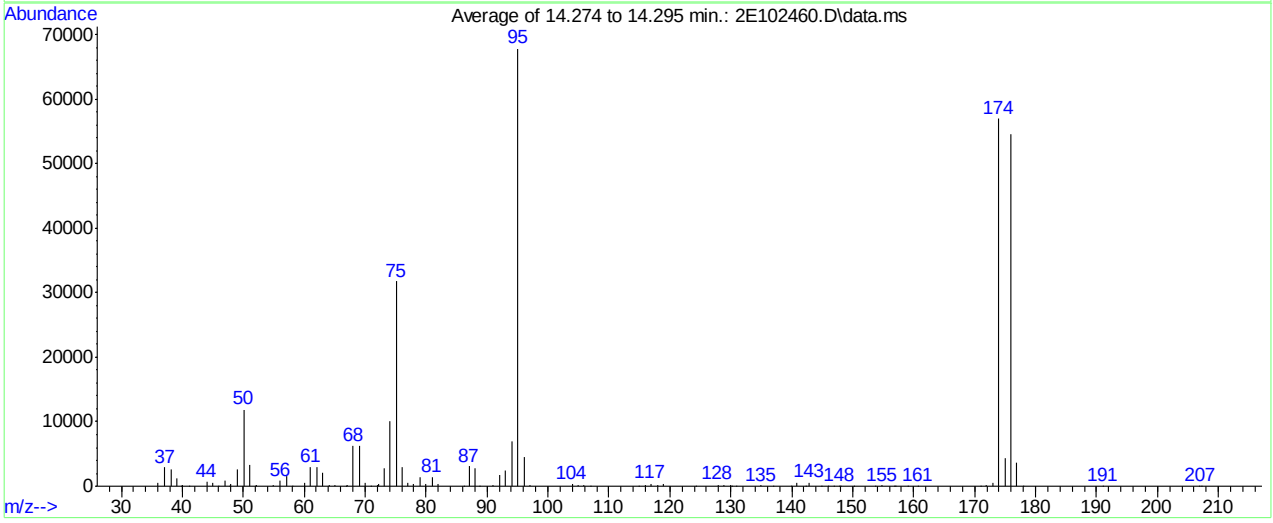
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.00	52	176.00	69266				
149.95	99	177.00	4551				
152.10	43	177.95	132				
154.95	246	207.05	99				
156.95	120						
160.90	34						
171.20	34						
171.95	273						
173.05	468						
174.00	72378						
175.00	5446						

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\2E\V2E4603\2E102460.D Vial: 1
Acq On : 16 May 2014 8:11 am Operator: DIXITAR
Sample : bfb Inst : ms2e
Misc : MS67471,V2E4603,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2E4568.M (RTE Integrator)
Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM





Spectrum Information: Average of 14.274 to 14.295 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	11868	PASS
75	95	30	60	46.8	31742	PASS
95	95	100	100	100.0	67859	PASS
96	95	5	9	6.8	4596	PASS
173	174	0.00	2	0.8	467	PASS
174	95	50	120	83.9	56936	PASS
175	174	5	9	7.7	4411	PASS
176	174	95	101	95.8	54565	PASS
177	176	5	9	6.6	3623	PASS

2E102460.D M2E4568.M Mon May 19 08:30:14 2014 ACCNJ

Average of 14.274 to 14.295 min.: 2E102460.D\data.ms
bfb

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	567	47.70	48	60.05	551.2	70.95	42.2
37.10	2939.8	48.00	359	61.05	3042.2	72.00	105.8
38.10	2562.6	49.10	2654.4	62.10	2994.4	72.15	286.2
39.05	1212.2	50.10	11867.8	63.10	2074.4	73.05	2738.4
39.90	33.6	51.10	3348.6	64.10	261.4	74.05	10099
40.05	126.2	51.90	21.4	65.05	133.4	75.10	31742.4
41.20	25.8	52.10	156.6	66.80	25	76.05	2884.2
44.05	628.2	54.95	184.8	67.10	174.8	77.05	449.6
45.05	550.6	56.05	864.6	68.05	6232.4	78.00	304.6
46.00	22	57.05	1570.8	69.05	6228.6	78.95	1412.2
47.05	935.2	58.10	68.6	70.05	471	79.95	388.8

Average of 14.274 to 14.295 min.: 2E102460.D\data.ms
bfb

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.95	1457	96.05	4595.8	124.20	26.4	142.90	601.4
81.95	354	96.95	105	127.90	217.6	144.90	48.2
86.10	60.6	103.95	282.6	128.95	97	145.90	53
87.05	3067	104.90	100.8	129.95	161.2	146.80	28.8
88.00	2853.4	105.90	231.2	130.20	48	147.80	23
88.70	39.8	107.00	27.8	130.90	20.6	147.95	85
91.05	247	114.80	20.4	135.00	117.8	150.15	46.8
92.00	1742.6	115.95	167	136.90	42	153.70	21.8
93.05	2457	116.90	366.8	139.90	22.2	154.85	110
94.05	6926	117.95	195.4	140.85	452	156.80	27.4
95.10	67859.2	118.90	306.4	142.30	28.4	157.00	40.8

Average of 14.274 to 14.295 min.: 2E102460.D\data.ms
bfb

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.05	51.4	206.90	28				
160.75	41.2	207.15	46.4				
171.00	20						
171.95	248.2						
173.00	466.8						
174.00	56936						
175.00	4410.6						
176.00	54564.8						
176.95	3623.2						
177.90	27.6						
191.10	23.6						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101480.D
Acq On : 14 Apr 2014 5:44 pm
Operator : DIXITAR
Sample : ic4568-0.2
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 15:32:06 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration

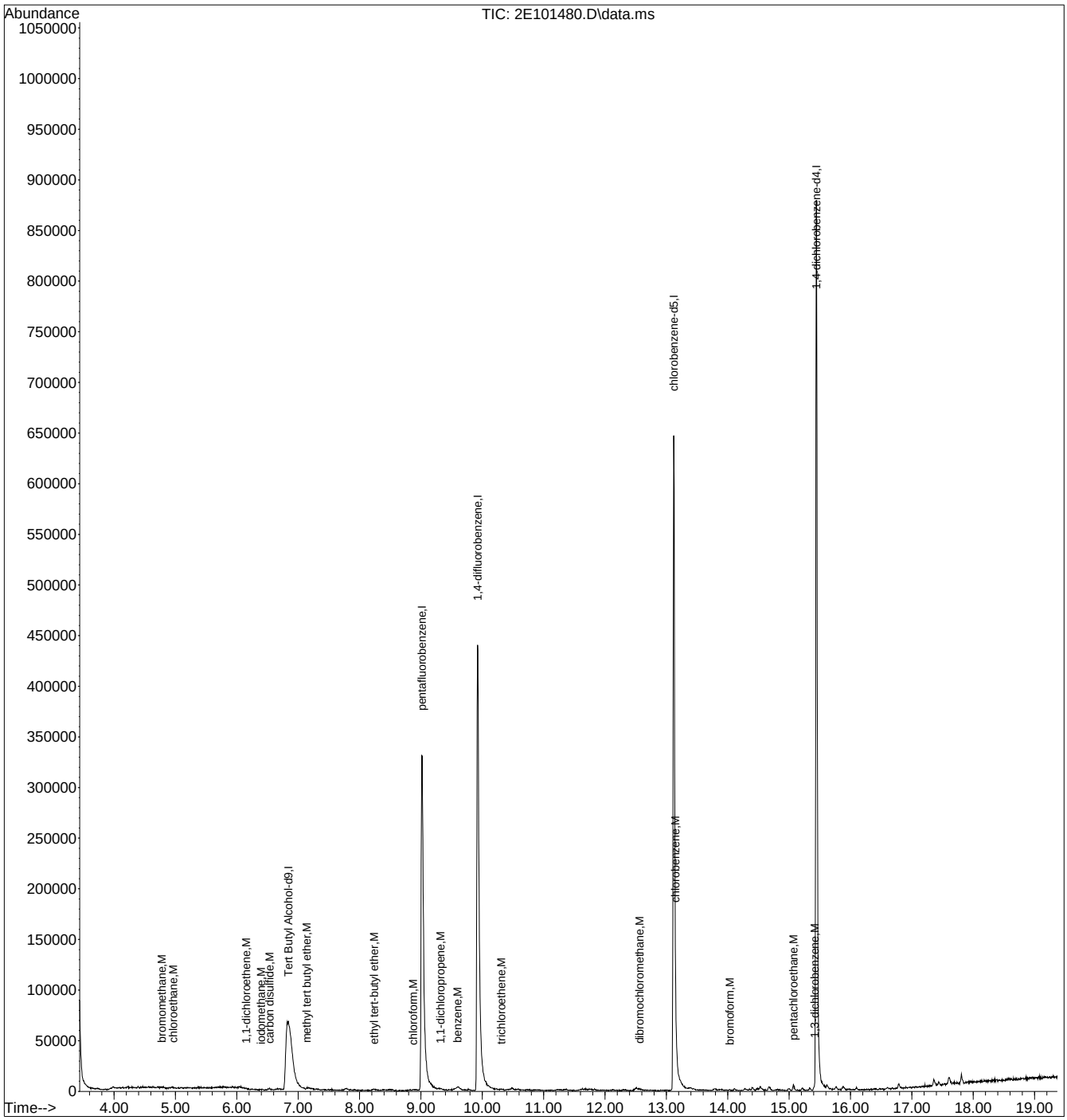
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	6.834	65	287365	500.00	ug/L		0.01
5) pentafluorobenzene	9.020	168	353026	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.928	114	516790	50.00	ug/L		0.00
87) chlorobenzene-d5	13.121	117	420284	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	250273	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	0.000	113	0d	0.00	ug/L		
Spiked Amount 50.000	Range 79 - 120		Recovery =	0.00%#			
48) 1,2-dichloroethane-d4 (s)	0.000	65	0	0.00	ug/L		
Spiked Amount 50.000	Range 72 - 123		Recovery =	0.00%#			
79) toluene-d8 (s)	0.000	98	0d	0.00	ug/L		
Spiked Amount 50.000	Range 78 - 119		Recovery =	0.00%#			
103) 4-bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L		
Spiked Amount 50.000	Range 74 - 119		Recovery =	0.00%#			
Target Compounds							Qvalue
14) bromomethane	4.779	94	820	0.33	ug/L		79
15) chloroethane	4.957	64	463	0.18	ug/L	#	48
21) 1,1-dichloroethene	6.158	96	625	0.23	ug/L	#	43
25) iodomethane	6.388	142	925	0.20	ug/L		79
26) carbon disulfide	6.530	76	2466	0.25	ug/L		88
30) methyl tert butyl ether	7.138	73	2111	0.25	ug/L		68
33) ethyl tert-butyl ether	8.234	59	2115	0.22	ug/L	#	62
45) chloroform	8.868	85	602	0.19	ug/L	#	36
62) 1,1-dichloropropene	9.319	75	668	0.18	ug/L	#	62
64) benzene	9.592	78	1905	0.17	ug/L		54
69) trichloroethene	10.305	95	506	0.18	ug/L	#	27
92) dibromochloromethane	12.565	129	505	0.22	ug/L		80
94) chlorobenzene	13.152	112	1346	0.19	ug/L	#	4
100) bromoform	14.028	173	400	0.26	ug/L		80
115) pentachloroethane	15.071	167	519	0.24	ug/L	#	68
118) 1,3-dichlorobenzene	15.412	146	1613	0.25	ug/L		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101480.D
Acq On : 14 Apr 2014 5:44 pm
Operator : DIXITAR
Sample : ic4568-0.2
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

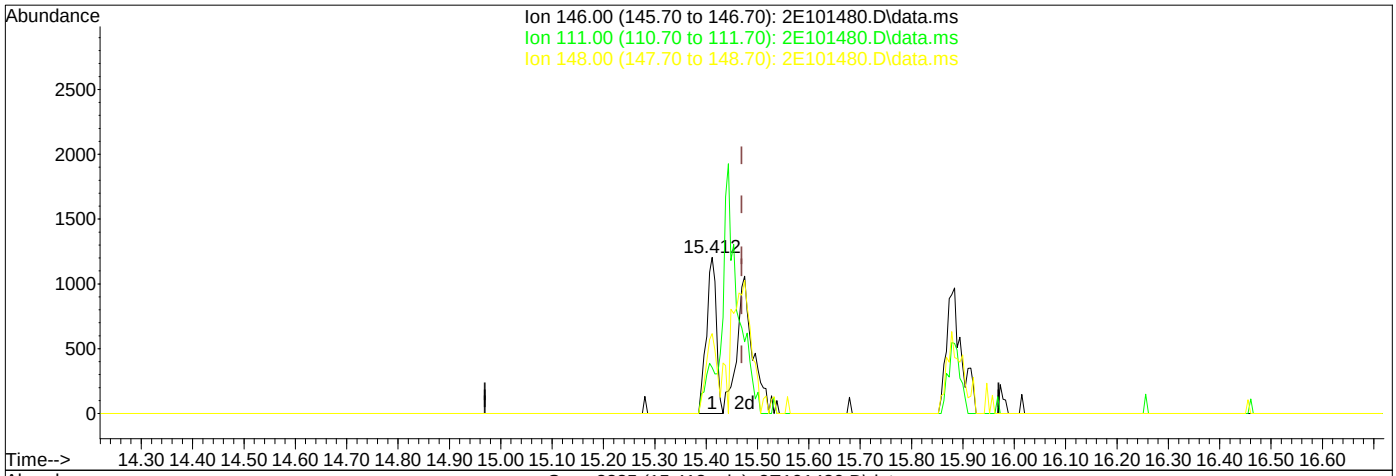
Quant Time: Apr 16 15:32:06 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration

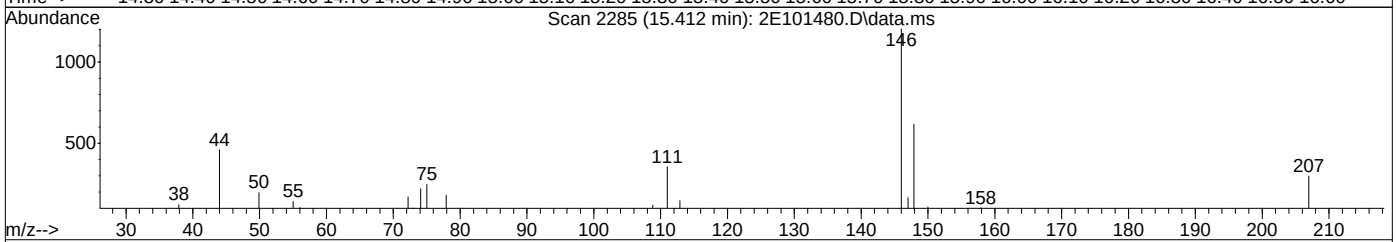


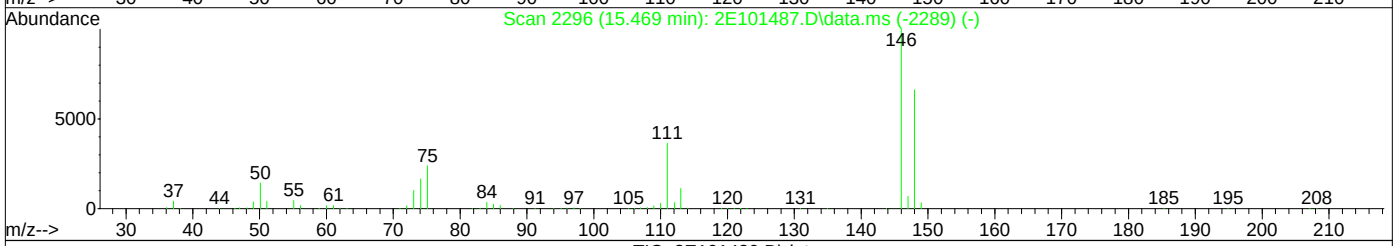
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101480.D
Acq On : 14 Apr 2014 5:44 pm
Operator : DIXITAR
Sample : ic4568-0.2
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 18:14:30 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration







TIC: 2E101480.D\data.ms

(121) 1,4-dichlorobenzene (M)

15.412min (-0.058) 0.23ug/L

response 1613

Ion	Exp%	Act%
146.00	100	100
111.00	36.50	29.57
148.00	63.90	51.25
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu
04/16/14 16:22

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101481.D
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 18:16:23 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.834	65	277988	500.00	ug/L	0.01
5) pentafluorobenzene	9.015	168	359635	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	519240	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	417242	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	249864	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	0.000	113	0d	0.00	ug/L	
Spiked Amount 50.000	Range 79 - 120		Recovery =	0.00%#		
48) 1,2-dichloroethane-d4 (s)	0.000	65	0d	0.00	ug/L	
Spiked Amount 50.000	Range 72 - 123		Recovery =	0.00%#		
79) toluene-d8 (s)	0.000	98	0d	0.00	ug/L	
Spiked Amount 50.000	Range 78 - 119		Recovery =	0.00%#		
103) 4-bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 74 - 119		Recovery =	0.00%#		
Target Compounds						Qvalue
10) chlorodifluoromethane	3.730	51	2495	0.71	ug/L	79
11) dichlorodifluoromethane	3.699	85	3047m	0.93	ug/L	
12) chloromethane	3.982	50	3406	0.75	ug/L	71
14) bromomethane	4.795	94	1594	0.63	ug/L #	59
15) chloroethane	4.957	64	1492	0.56	ug/L	83
16) trichlorofluoromethane	5.366	101	2674	0.66	ug/L	94
18) ethyl ether	5.781	74	970	0.55	ug/L	86
19) 2-chloropropane	5.933	43	4002	0.68	ug/L #	74
21) 1,1-dichloroethene	6.153	96	1724	0.61	ug/L #	69
24) allyl chloride	6.672	76	1037	0.62	ug/L #	33
25) iodomethane	6.404	142	2819	0.59	ug/L	95
26) carbon disulfide	6.535	76	6750	0.67	ug/L	89
27) methylene chloride	6.840	84	1948	0.56	ug/L	93
30) methyl tert butyl ether	7.154	73	5841	0.69	ug/L	95
31) trans-1,2-dichloroethene	7.217	96	1673	0.53	ug/L	83
33) ethyl tert-butyl ether	8.234	59	4907m	0.49	ug/L	
35) 1,1-dichloroethane	7.762	63	2822	0.51	ug/L	66
41) cis-1,2-dichloroethene	8.512	96	1714	0.52	ug/L #	36
43) bromochloromethane	8.821	128	780	0.52	ug/L #	77
45) chloroform	8.869	85	1588	0.50	ug/L #	73
49) freon 113	6.111	151	1182	0.58	ug/L #	48
51) 1,1,1-trichloroethane	9.105	97	2352	0.57	ug/L #	3
52) Cyclohexane	9.162	84	3444	0.71	ug/L #	70
56) tert-amyl methyl ether	9.592	87	1142	0.50	ug/L #	41
61) carbon tetrachloride	9.299	117	2834	0.85	ug/L	72
62) 1,1-dichloropropene	9.304	75	2257	0.60	ug/L	86
63) hexane	7.532	57	1550	0.42	ug/L	86
64) benzene	9.571	78	6068	0.53	ug/L	89
69) trichloroethene	10.310	95	1277	0.46	ug/L	87
72) 2-chloroethyl vinyl ether	11.218	63	3053	1.84	ug/L	61
74) 1,2-dichloropropane	10.552	63	1820	0.60	ug/L	93
75) methylcyclohexane	10.494	83	2374	0.47	ug/L	72
76) dibromomethane	10.704	93	728	0.50	ug/L #	59
77) bromodichloromethane	10.856	83	1666	0.48	ug/L	89
78) cis-1,3-dichloropropene	11.349	75	1669	0.36	ug/L	81
83) trans-1,3-dichloropropene	11.973	75	1581	0.41	ug/L #	56
88) tetrachloroethene	12.282	166	1174	0.45	ug/L #	55
89) 1,3-dichloropropane	12.303	76	1701	0.47	ug/L	94
92) dibromochloromethane	12.555	129	1266	0.54	ug/L	72
93) 1,2-dibromoethane	12.738	107	825	0.41	ug/L	91
94) chlorobenzene	13.163	112	3426	0.50	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101481.D
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 18:16:23 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration

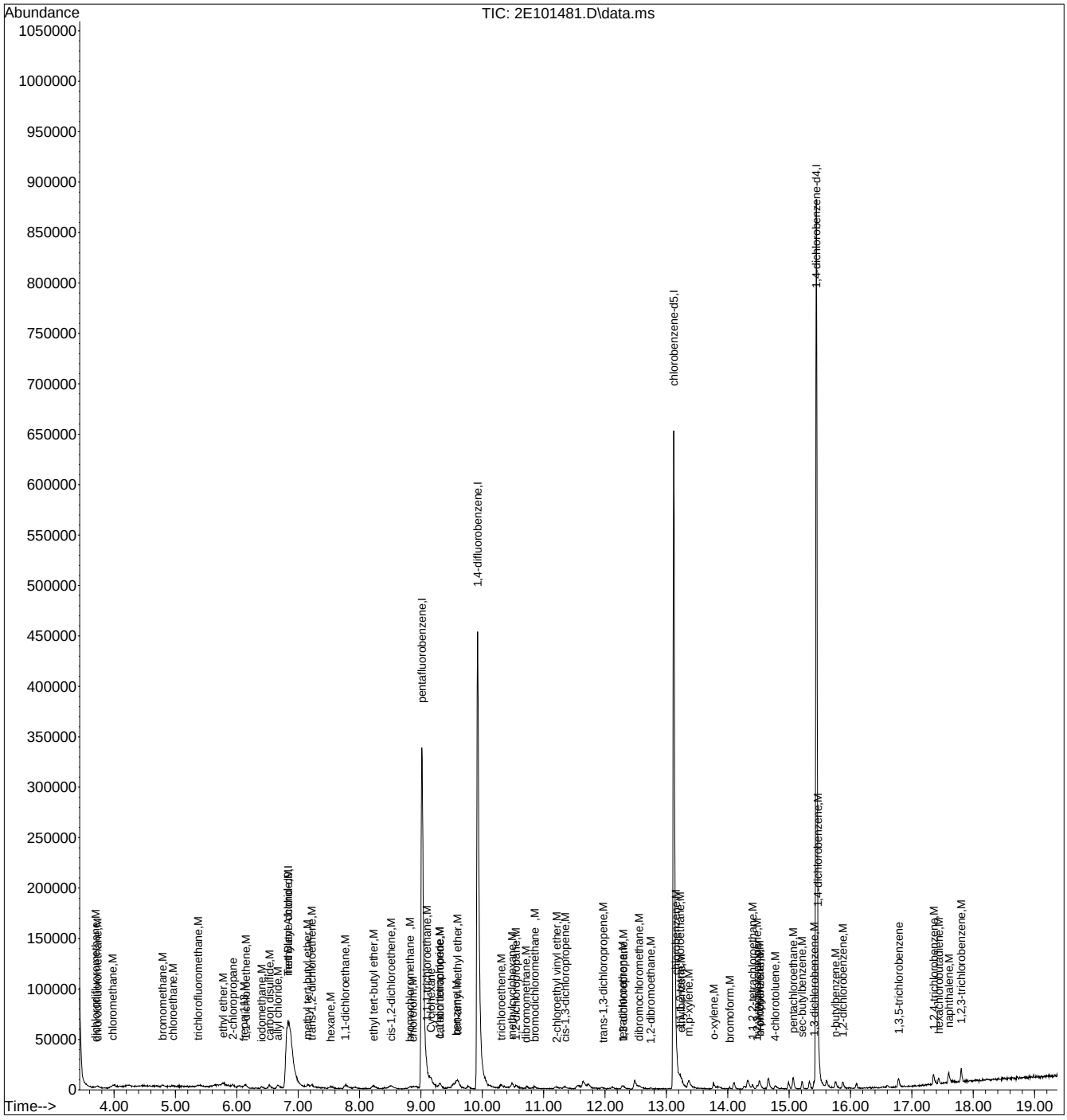
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
95) 1,1,1,2-tetrachloroethane	13.220	131	1496	0.60 ug/L	87
96) ethylbenzene	13.247	91	5555	0.48 ug/L	87
97) m,p-xylene	13.357	106	4229	0.89 ug/L #	53
98) o-xylene	13.776	106	2316	0.49 ug/L	97
100) bromoform	14.033	173	747	0.48 ug/L	87
104) bromobenzene	14.526	156	1439	0.44 ug/L #	50
106) 1,1,2,2-tetrachloroethane	14.405	83	1985	0.61 ug/L	79
108) 1,2,3-trichloropropane	14.479	110	583	0.75 ug/L	71
109) n-propylbenzene	14.510	91	6275	0.42 ug/L	92
112) 4-chlorotoluene	14.772	91	4935	0.51 ug/L	99
115) pentachloroethane	15.071	167	1182	0.55 ug/L	90
117) sec-butylbenzene	15.207	105	6955	0.48 ug/L	95
118) 1,3-dichlorobenzene	15.407	146	3262	0.50 ug/L	91
121) 1,4-dichlorobenzene	15.475	146	3952	0.56 ug/L	95
123) 1,2-dichlorobenzene	15.873	146	3495	0.54 ug/L	96
124) n-butylbenzene	15.753	92	2864	0.47 ug/L	83
127) 1,3,5-trichlorobenzene	16.786	180	3425	0.61 ug/L	98
128) 1,2,4-trichlorobenzene	17.352	180	4293	0.84 ug/L	93
129) hexachlorobutadiene	17.436	225	1369	0.58 ug/L	85
130) naphthalene	17.598	128	11187	1.01 ug/L	91
131) 1,2,3-trichlorobenzene	17.808	180	4498	0.98 ug/L	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101481.D
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 18:16:23 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration



Manual Integration Approval Summary

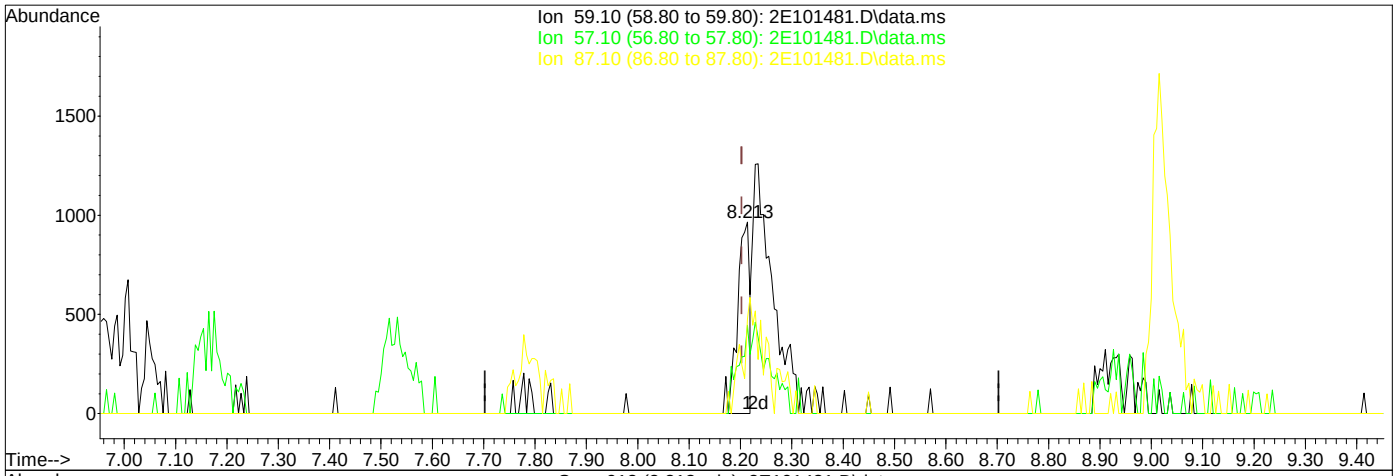
Sample Number: V2E4568-IC4568 **Method:** SW846 8260B
Lab FileID: 2E101481.D **Analyst approved:** 04/15/14 18:43 Dong, Mei
Injection Time: 04/14/14 18:13 **Supervisor approved:** 04/16/14 16:22 Jessica Reitan-Chu

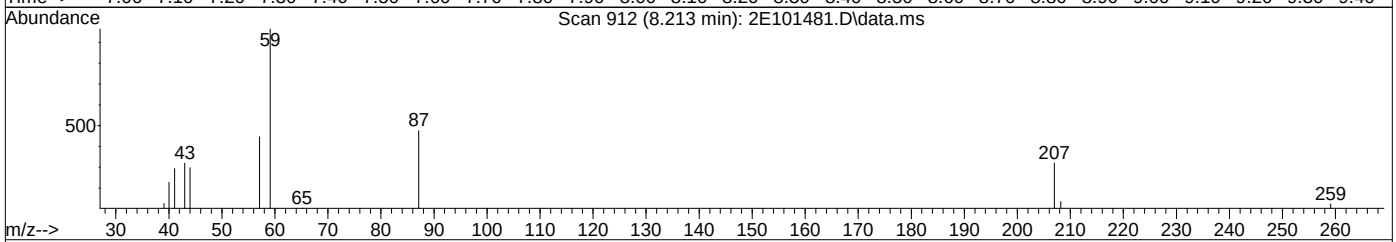
Parameter	CAS	Sig#	R.T. (min.)	Reason
Dichlorodifluoromethane	75-71-8		3.70	Poor instrument integration
tert-Butyl Ethyl Ether	637-92-3		8.23	Poor instrument integration

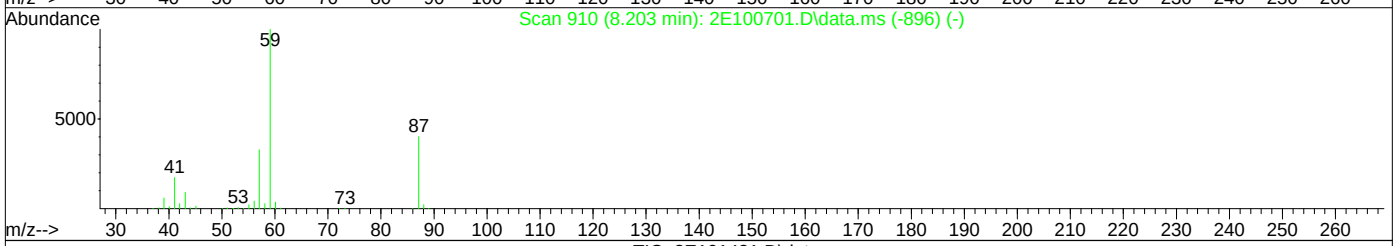
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101481.D
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 09:23:34 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration







TIC: 2E101481.D\data.ms

(33) ethyl tert-butyl ether (M)

8.213min (+0.011) 0.16ug/L

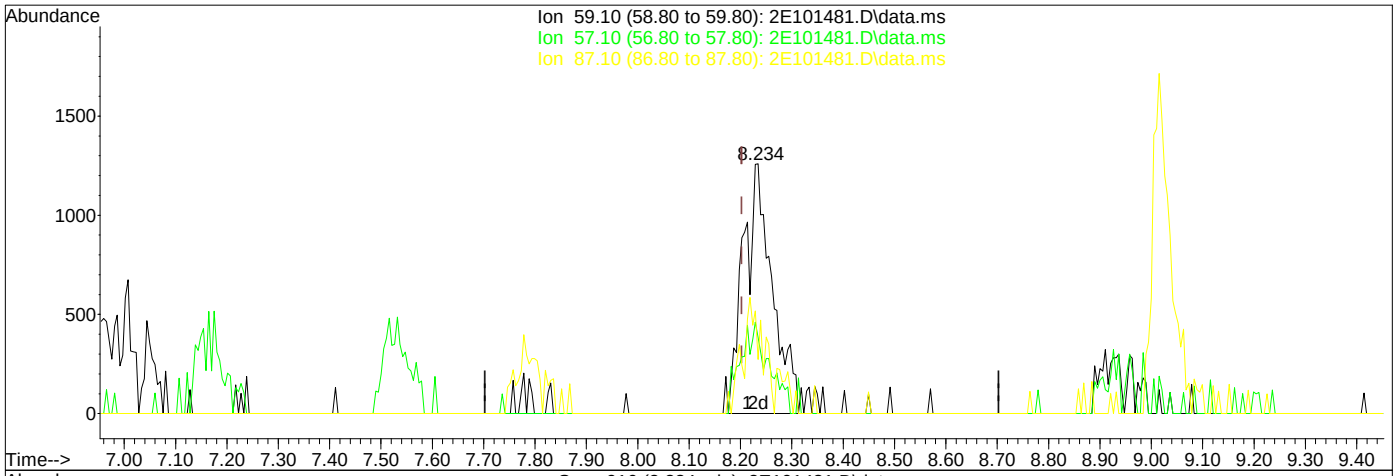
response 1599

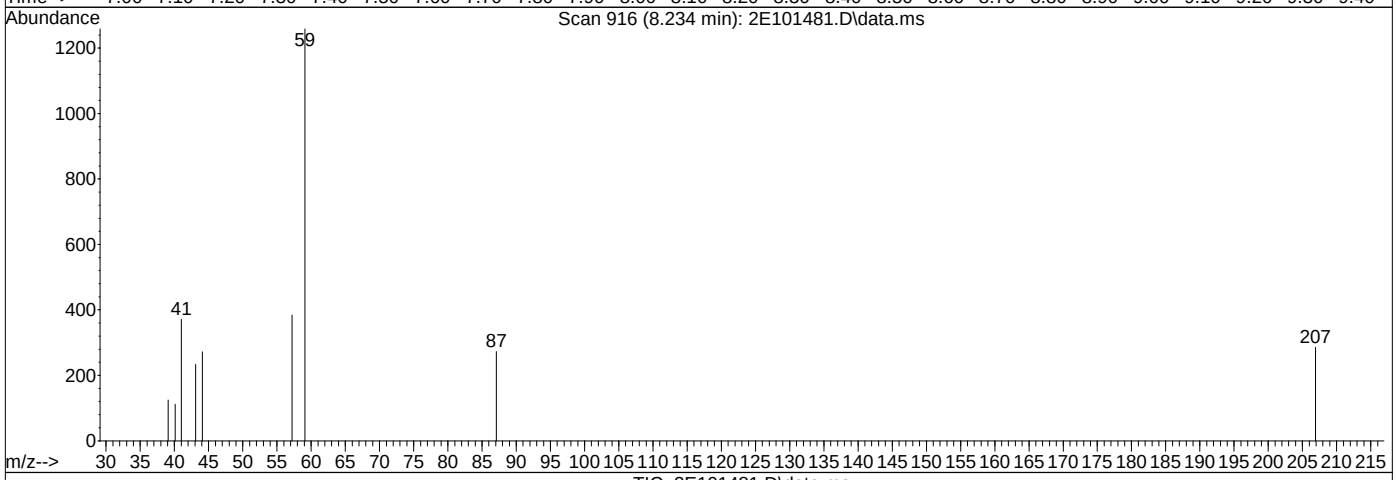
Ion	Exp%	Act%
59.10	100	100
57.10	32.80	46.22
87.10	40.10	49.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101481.D
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 18:16:23 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration





TIC: 2E101481.D\data.ms

(33) ethyl tert-butyl ether (M)

8.234min (+0.032) 0.49ug/L m

response 4907

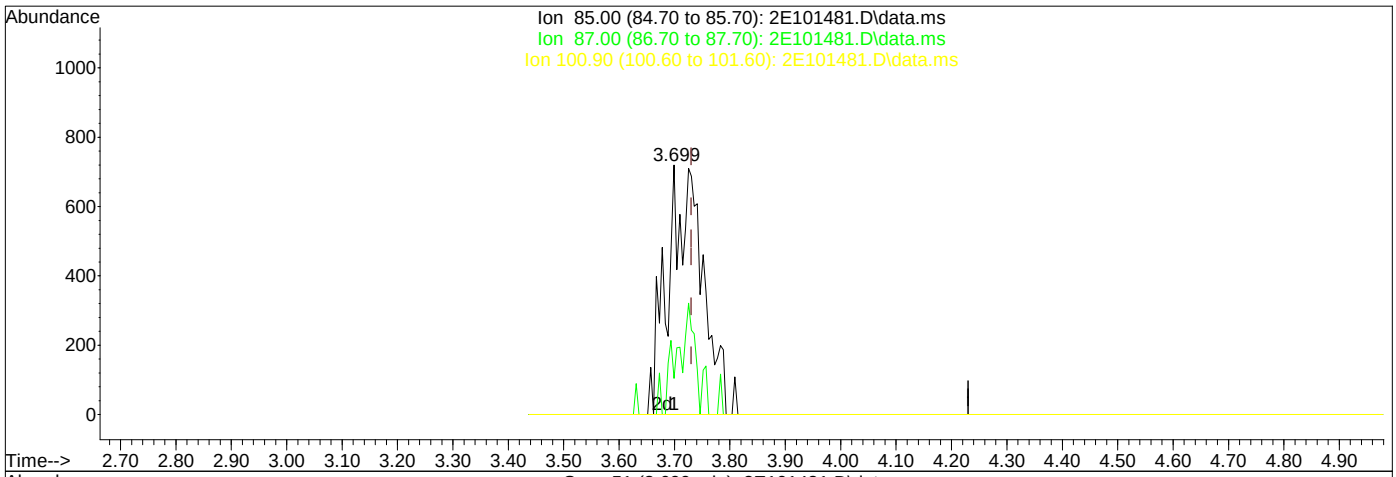
Ion	Exp%	Act%
59.10	100	100
57.10	32.80	30.50
87.10	40.10	21.68
0.00	0.00	0.00

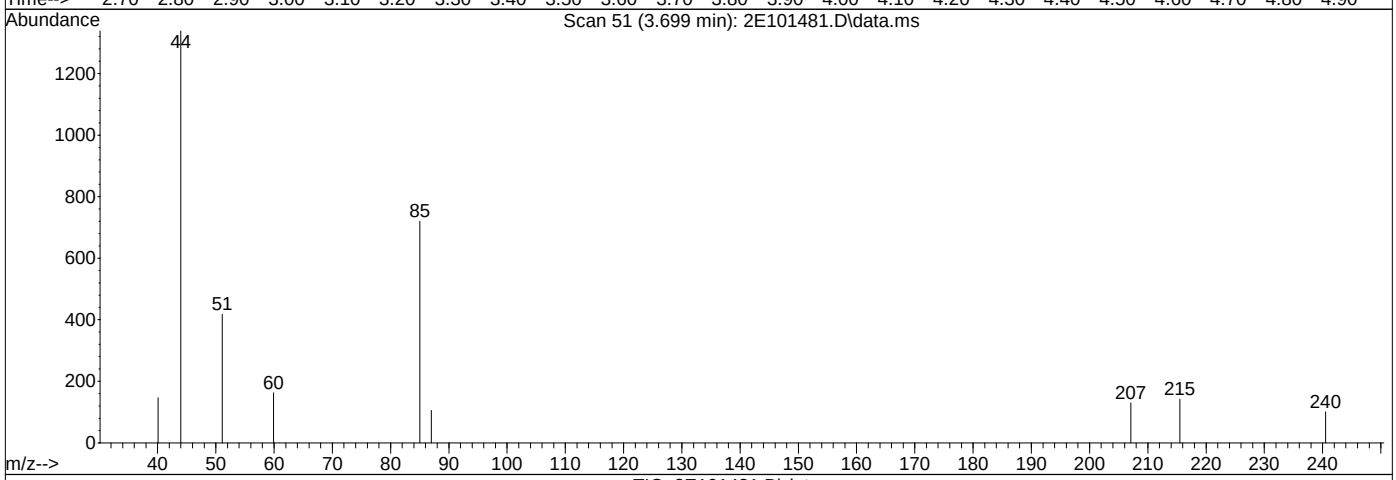
M2E4568.M Tue Apr 15 18:44:47 2014 MS2E

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101481.D
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 18:16:23 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:31 2014
Response via : Initial Calibration





TIC: 2E101481.D\data.ms

(11) dichlorodifluoromethane (M)

3.699min (-0.031) 0.93ug/L m

response 3047

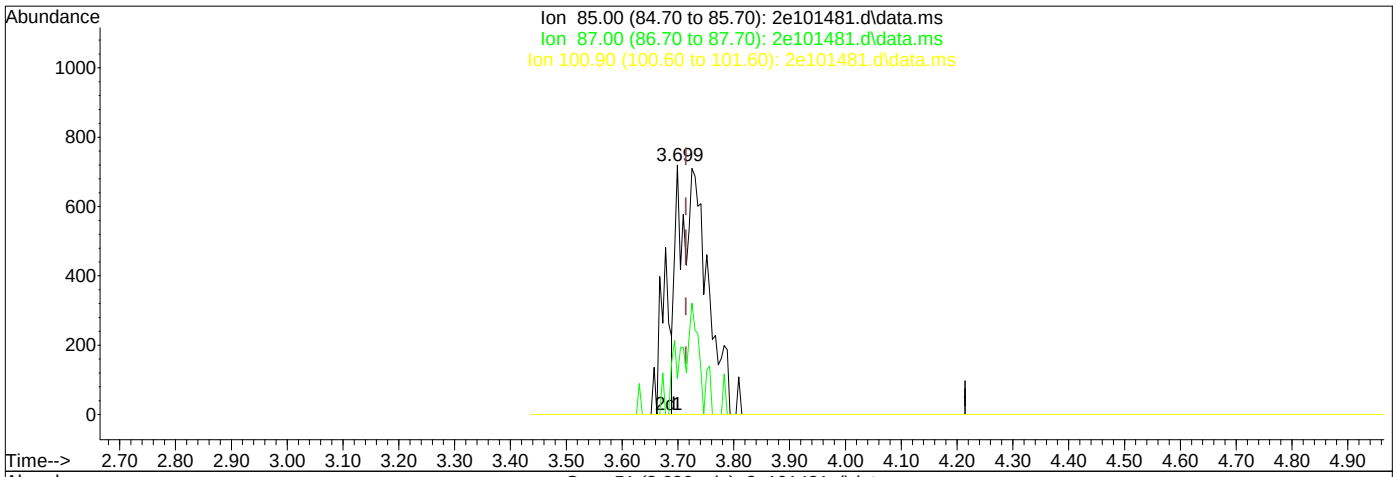
Ion	Exp%	Act%
85.00	100	100
87.00	33.60	14.58
100.90	9.20	0.00
0.00	0.00	0.00

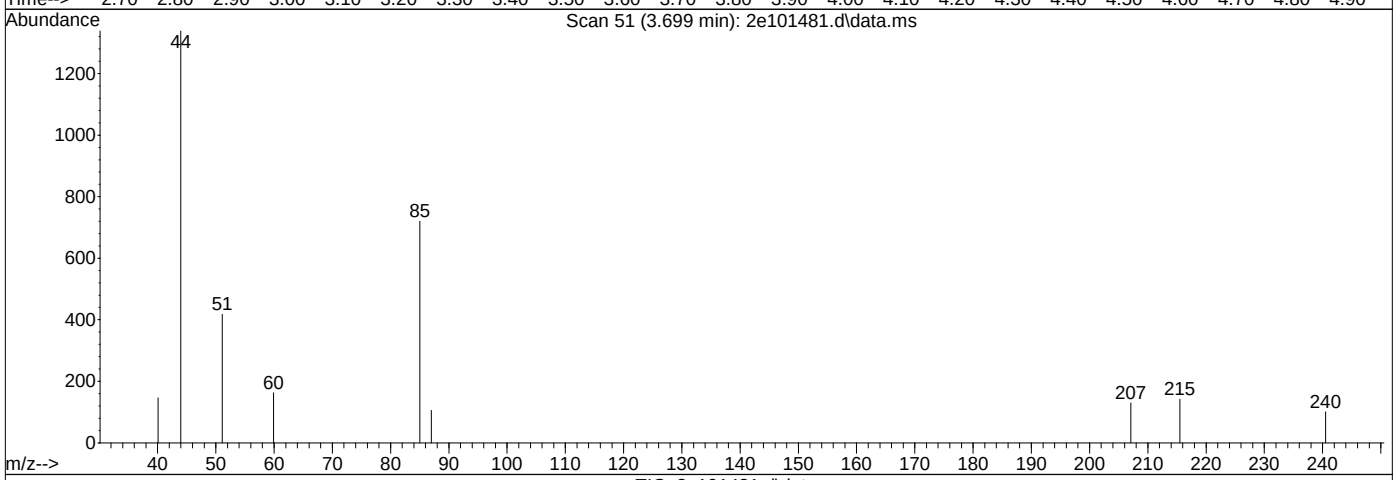
M2E4568.M Tue Apr 15 18:47:47 2014 MS2E Page: 1

Quantitation Report (Qedit)

Data Path : S:\
Data File : 2e101481.d
Acq On : 14 Apr 2014 6:13 pm
Operator : DIXITAR
Sample : ic4568-0.5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 18:48:20 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 18:32:44 2014
Response via : Initial Calibration





TIC: 2e101481.d\data.ms

(11) dichlorodifluoromethane (M)

3.699min (-0.015) 0.35ug/L

response 2533

Ion	Exp%	Act%
85.00	100	100
87.00	29.90	14.58
100.90	7.90	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu 04/16/14 16:10

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101482.D
Acq On : 14 Apr 2014 6:42 pm
Operator : DIXITAR
Sample : ic4568-1
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 16 15:33:48 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:14 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.845	65	268199	500.00	ug/L	0.02
5) pentafluorobenzene	9.015	168	376131	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	539613	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	431575	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	254373	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.068	113	3004	1.09	ug/L	0.01
Spiked Amount 50.000	Range 79 - 120		Recovery =	2.18%#		
48) 1,2-dichloroethane-d4 (s)	9.513	65	3617	1.23	ug/L	0.04
Spiked Amount 50.000	Range 72 - 123		Recovery =	2.46%#		
79) toluene-d8 (s)	11.637	98	9851	0.92	ug/L	0.05
Spiked Amount 50.000	Range 78 - 119		Recovery =	1.84%#		
103) 4-bromofluorobenzene (s)	0.000	95	0d	0.00	ug/L	
Spiked Amount 50.000	Range 74 - 119		Recovery =	0.00%#		
Target Compounds						Qvalue
10) chlorodifluoromethane	3.730	51	5383	1.46	ug/L	92
11) dichlorodifluoromethane	3.720	85	5780	1.69	ug/L	84
12) chloromethane	3.977	50	5216	1.10	ug/L	97
13) vinyl chloride	4.207	62	5633	1.18	ug/L	93
14) bromomethane	4.789	94	3305	1.25	ug/L	72
15) chloroethane	4.941	64	2162	0.78	ug/L	90
16) trichlorofluoromethane	5.377	101	4938	1.16	ug/L	79
18) ethyl ether	5.770	74	1697	0.92	ug/L	86
19) 2-chloropropane	5.922	43	7966	1.30	ug/L #	81
20) acrolein	5.985	56	1620646	2475.60	ug/L	99
21) 1,1-dichloroethene	6.147	96	3580	1.21	ug/L	93
24) allyl chloride	6.666	76	1451	0.83	ug/L	96
25) iodomethane	6.399	142	6068	1.21	ug/L	93
26) carbon disulfide	6.530	76	13483	1.29	ug/L	95
27) methylene chloride	6.829	84	4080	1.12	ug/L #	88
30) methyl tert butyl ether	7.159	73	10424	1.18	ug/L	98
31) trans-1,2-dichloroethene	7.222	96	3081	0.93	ug/L	88
32) di-isopropyl ether	7.783	45	10879	1.01	ug/L	95
33) ethyl tert-butyl ether	8.234	59	10780	1.03	ug/L	88
35) 1,1-dichloroethane	7.757	63	6150	1.06	ug/L	99
36) chloroprene	7.899	53	3718	0.81	ug/L	96
37) acrylonitrile	7.285	53	5141	4.93	ug/L	93
40) 2,2-dichloropropane	8.496	77	5852	1.26	ug/L	80
41) cis-1,2-dichloroethene	8.533	96	3468	1.02	ug/L #	58
43) bromochloromethane	8.816	128	1489	0.94	ug/L #	79
45) chloroform	8.874	85	3546	1.07	ug/L	86
46) t-butyl formate	8.921	59	2524	0.93	ug/L #	49
49) freon 113	6.111	151	2752	1.28	ug/L	86
51) 1,1,1-trichloroethane	9.104	97	4973	1.16	ug/L #	25
52) Cyclohexane	9.167	84	6298	1.25	ug/L #	88
55) 2,2,4-trimethylpentane	9.555	57	9338	0.83	ug/L #	68
56) tert-amyl methyl ether	9.592	87	2802	1.17	ug/L #	30
61) carbon tetrachloride	9.309	117	4938	1.43	ug/L	76
62) 1,1-dichloropropene	9.298	75	3960	1.01	ug/L	70
63) hexane	7.537	57	3386	0.87	ug/L	83
64) benzene	9.571	78	12044	1.01	ug/L	98
65) heptane	9.760	57	2310	1.08	ug/L #	79
67) 1,2-dichloroethane	9.608	62	3512	1.10	ug/L	66
69) trichloroethene	10.310	95	2835	0.98	ug/L	96
72) 2-chloroethyl vinyl ether	11.165	63	7512	4.35	ug/L	87
74) 1,2-dichloropropane	10.541	63	3592	1.13	ug/L	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101482.D
Acq On : 14 Apr 2014 6:42 pm
Operator : DIXITAR
Sample : ic4568-1
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 16 15:33:48 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:14 2014
Response via : Initial Calibration

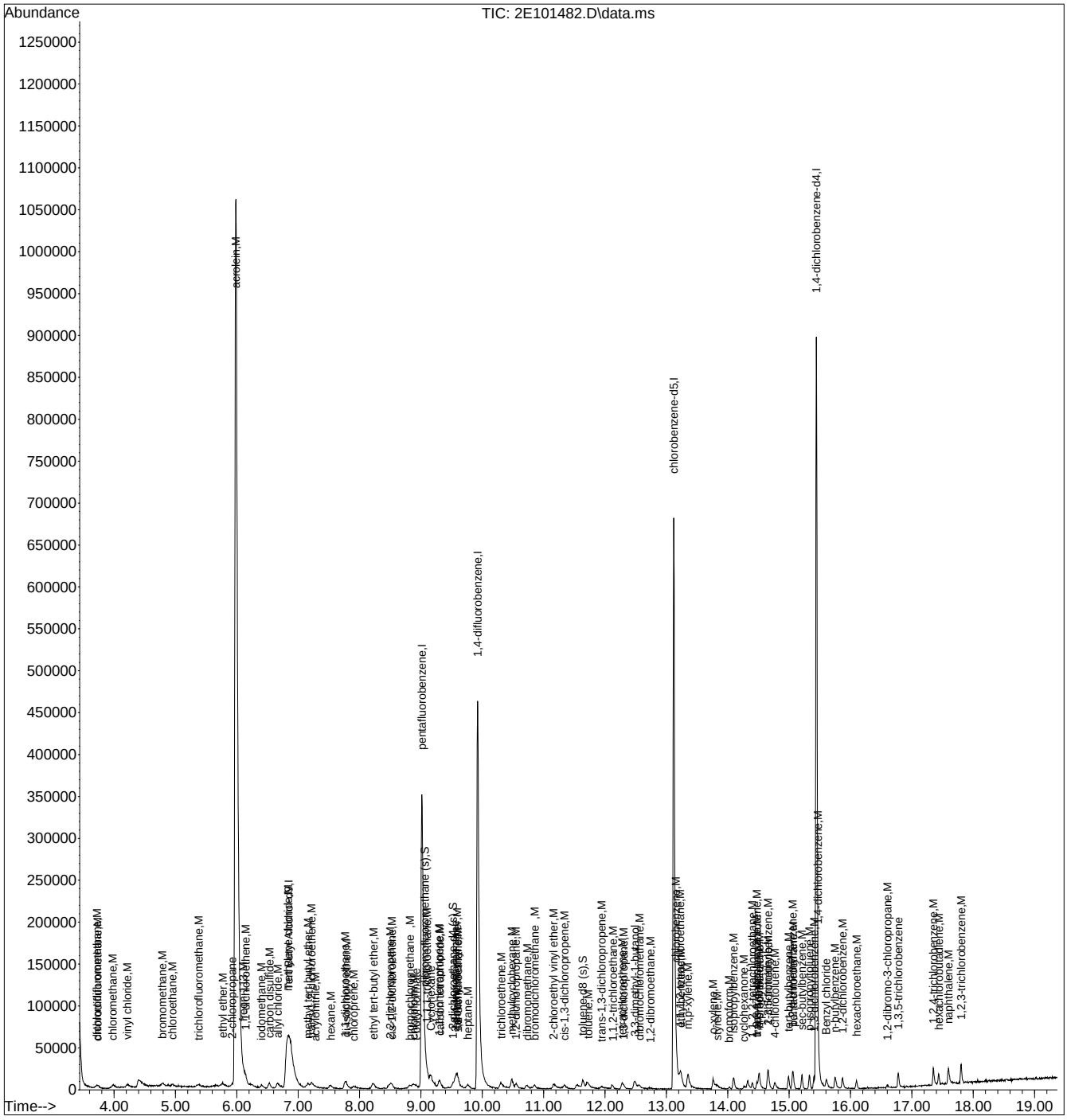
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
75) methylcyclohexane	10.483	83	5717	1.09 ug/L		88
76) dibromomethane	10.730	93	1621	1.07 ug/L	#	53
77) bromodichloromethane	10.856	83	3237	0.90 ug/L		93
78) cis-1,3-dichloropropene	11.343	75	4036	0.85 ug/L		94
81) toluene	11.731	92	5974	0.83 ug/L	#	66
83) trans-1,3-dichloropropene	11.951	75	3462	0.87 ug/L	#	69
85) 1,1,2-trichloroethane	12.135	83	1581m	0.81 ug/L		
88) tetrachloroethene	12.276	166	2511	0.92 ug/L		85
89) 1,3-dichloropropane	12.308	76	3675	0.99 ug/L		87
91) 3,3-dimethyl-1-butanol	12.486	57	6630	22.81 ug/L	#	76
92) dibromochloromethane	12.565	129	2308	0.96 ug/L		91
93) 1,2-dibromoethane	12.733	107	1912	0.91 ug/L		78
94) chlorobenzene	13.157	112	6850	0.96 ug/L		92
95) 1,1,1,2-tetrachloroethane	13.215	131	2831	1.10 ug/L		91
96) ethylbenzene	13.241	91	11466	0.95 ug/L		98
97) m,p-xylene	13.351	106	7940	1.61 ug/L		96
98) o-xylene	13.760	106	4523	0.92 ug/L		81
99) styrene	13.828	104	5922	0.74 ug/L		83
100) bromoform	14.017	173	1511	0.94 ug/L		73
102) isopropylbenzene	14.101	105	12777	0.94 ug/L		97
104) bromobenzene	14.505	156	2693	0.81 ug/L	#	80
105) cyclohexanone	14.264	55	2420	24.53 ug/L		85
106) 1,1,2,2-tetrachloroethane	14.405	83	3656	1.11 ug/L		98
107) trans-1,4-dichloro-2-b...	14.468	53	655	0.85 ug/L	#	51
108) 1,2,3-trichloropropane	14.473	110	1023	1.29 ug/L	#	58
109) n-propylbenzene	14.510	91	13625	0.90 ug/L		97
111) 2-chlorotoluene	14.662	126	2619	0.82 ug/L	#	79
112) 4-chlorotoluene	14.767	91	9049	0.92 ug/L		92
113) 1,3,5-trimethylbenzene	14.662	105	10286	0.89 ug/L		95
114) tert-butylbenzene	14.992	119	7896	0.83 ug/L		98
115) pentachloroethane	15.071	167	2043	0.94 ug/L		83
116) 1,2,4-trimethylbenzene	15.055	105	10178	0.91 ug/L		93
117) sec-butylbenzene	15.213	105	13454	0.90 ug/L		93
118) 1,3-dichlorobenzene	15.407	146	6021	0.91 ug/L		90
119) p-isopropyltoluene	15.333	119	11040	0.91 ug/L		90
121) 1,4-dichlorobenzene	15.475	146	7514	1.05 ug/L		94
123) 1,2-dichlorobenzene	15.873	146	6672	1.01 ug/L		97
124) n-butylbenzene	15.747	92	5822	0.94 ug/L		92
126) 1,2-dibromo-3-chloropr...	16.602	75	916	1.62 ug/L	#	63
127) 1,3,5-trichlorobenzene	16.780	180	6424	1.13 ug/L		95
128) 1,2,4-trichlorobenzene	17.352	180	7141	1.38 ug/L		88
129) hexachlorobutadiene	17.446	225	2533	1.05 ug/L		90
130) naphthalene	17.598	128	17991	1.60 ug/L		94
131) 1,2,3-trichlorobenzene	17.803	180	7783	1.67 ug/L		95
132) hexachloroethane	16.099	119	1777	0.79 ug/L		98
133) Benzyl chloride	15.606	91	9878	1.52 ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101482.D
Acq On : 14 Apr 2014 6:42 pm
Operator : DIXITAR
Sample : ic4568-1
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 16 15:33:48 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:14 2014
Response via : Initial Calibration



Manual Integration Approval Summary

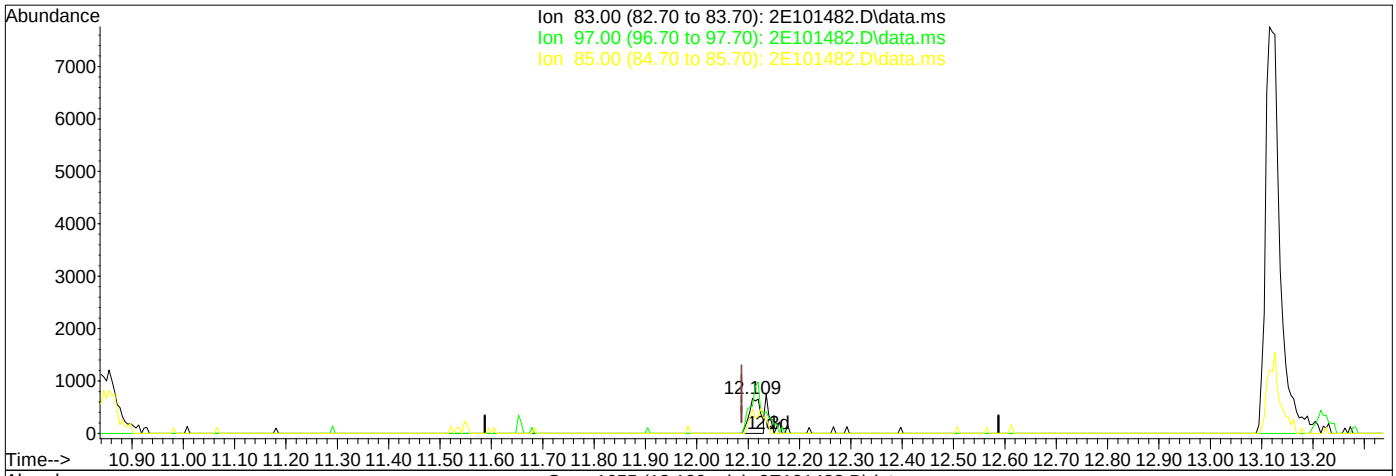
Sample Number: V2E4568-IC4568 **Method:** SW846 8260B
Lab FileID: 2E101482.D **Analyst approved:** 04/15/14 18:43 Dong, Mei
Injection Time: 04/14/14 18:42 **Supervisor approved:** 04/16/14 16:10 Jessica Reitan-Chu

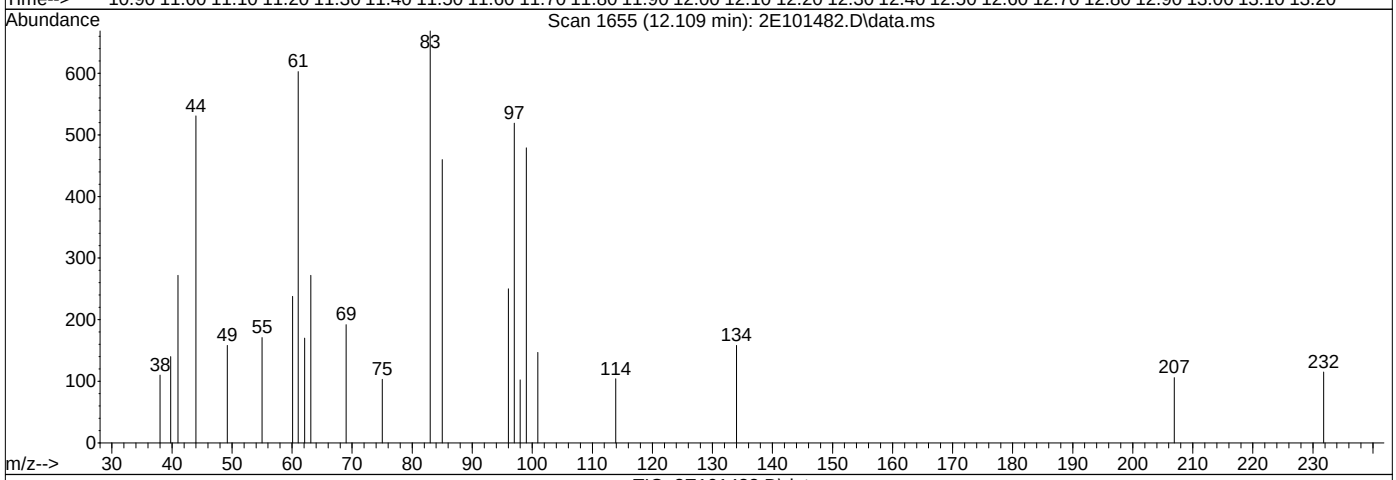
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethanol	64-17-5		5.75	Poor instrument integration
1,1,2-Trichloroethane	79-00-5		12.13	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101482.D
Acq On : 14 Apr 2014 6:42 pm
Operator : DIXITAR
Sample : ic4568-1
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 09:23:14 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:14 2014
Response via : Initial Calibration





TIC: 2E101482.D\data.ms

(85) 1,1,2-trichloroethane (M)

12.109min (+0.021) 0.54ug/L

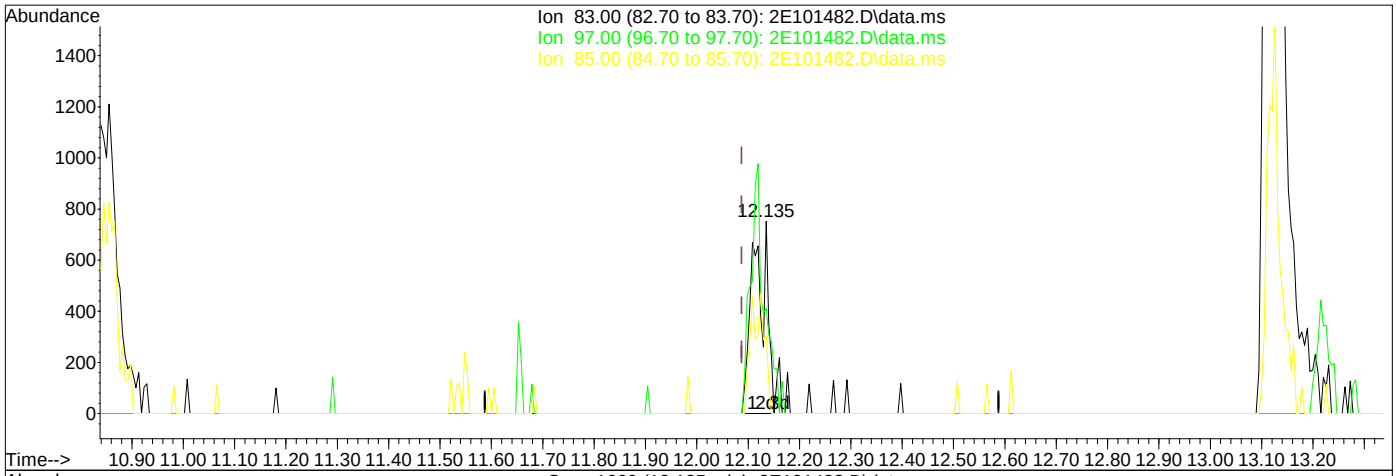
response 1056

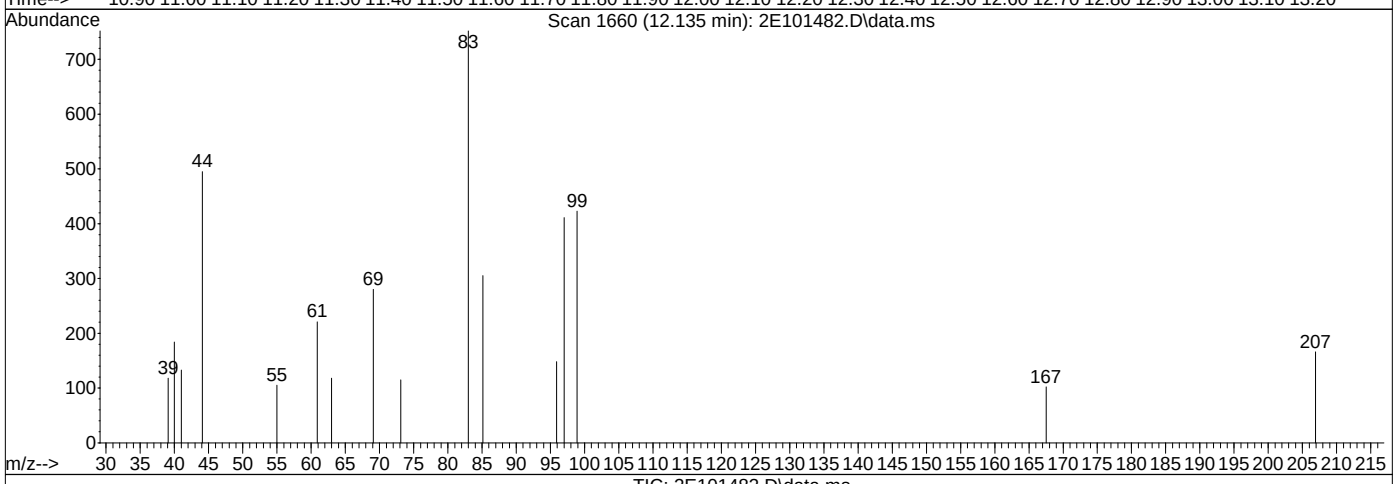
Ion	Exp%	Act%
83.00	100	100
97.00	115.90	77.58#
85.00	64.50	68.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101482.D
Acq On : 14 Apr 2014 6:42 pm
Operator : DIXITAR
Sample : ic4568-1
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 18:04:22 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:20:14 2014
Response via : Initial Calibration





TIC: 2E101482.D\data.ms

(85) 1,1,2-trichloroethane (M)

12.135min (+0.047) 0.81ug/L m

response 1581

Ion	Exp%	Act%
83.00	100	100
97.00	115.90	54.65#
85.00	64.50	40.56
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101483.D
Acq On : 14 Apr 2014 7:10 pm
Operator : DIXITAR
Sample : ic4568-2
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 15:34:05 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:16:21 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	6.839	65	283869	500.00	ug/L		0.02
5) pentafluorobenzene	9.015	168	390305	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	561818	50.00	ug/L		0.00
87) chlorobenzene-d5	13.120	117	454684	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	266974	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.068	113	6537	2.28	ug/L		0.01
Spiked Amount 50.000	Range 79 - 120		Recovery =	4.56%#			
48) 1,2-dichloroethane-d4 (s)	9.503	65	7429	2.44	ug/L		0.03
Spiked Amount 50.000	Range 72 - 123		Recovery =	4.88%#			
79) toluene-d8 (s)	11.626	98	21014	1.89	ug/L		0.04
Spiked Amount 50.000	Range 78 - 119		Recovery =	3.78%#			
103) 4-bromofluorobenzene (s)	14.316	95	9011	2.19	ug/L		0.03
Spiked Amount 50.000	Range 74 - 119		Recovery =	4.38%#			
Target Compounds							Qvalue
2) 1,4-dioxane	10.772	88	3537	81.08	ug/L	#	72
3) tertiary butyl alcohol	6.965	59	9193	17.52	ug/L		68
10) chlorodifluoromethane	3.720	51	13379	3.50	ug/L		87
11) dichlorodifluoromethane	3.709	85	15224	4.29	ug/L		81
12) chloromethane	3.987	50	12586	2.57	ug/L		91
13) vinyl chloride	4.207	62	14135	2.86	ug/L		93
14) bromomethane	4.784	94	6722	2.45	ug/L		86
15) chloroethane	4.947	64	5889	2.05	ug/L		87
16) trichlorofluoromethane	5.387	101	13117	2.98	ug/L		95
18) ethyl ether	5.770	74	3759	1.97	ug/L	#	80
19) 2-chloropropane	5.932	43	15543	2.45	ug/L	#	84
20) acrolein	5.985	56	847699	1247.87	ug/L		99
21) 1,1-dichloroethene	6.147	96	6934	2.27	ug/L		99
23) acetonitrile	6.661	40	9777	36.48	ug/L	#	100
24) allyl chloride	6.666	76	3378	1.87	ug/L	#	73
25) iodomethane	6.404	142	11654	2.24	ug/L		95
26) carbon disulfide	6.530	76	24927	2.29	ug/L		98
27) methylene chloride	6.834	84	7977	2.11	ug/L		87
28) methyl acetate	6.708	43	4597	2.21	ug/L		84
29) 1-chloropropane	6.876	41	3275	2.10	ug/L	#	1
30) methyl tert butyl ether	7.154	73	22458	2.44	ug/L		94
31) trans-1,2-dichloroethene	7.217	96	6628	1.94	ug/L		93
32) di-isopropyl ether	7.762	45	25844	2.31	ug/L		88
33) ethyl tert-butyl ether	8.218	59	25837	2.38	ug/L		86
35) 1,1-dichloroethane	7.762	63	11611	1.94	ug/L		98
36) chloroprene	7.904	53	9779	2.05	ug/L		97
37) acrylonitrile	7.254	53	13037	12.05	ug/L		75
40) 2,2-dichloropropane	8.480	77	11040	2.29	ug/L		97
41) cis-1,2-dichloroethene	8.517	96	7594	2.14	ug/L	#	59
42) propionitrile	8.722	54	7326	19.69	ug/L		91
43) bromochloromethane	8.816	128	3332	2.03	ug/L	#	79
45) chloroform	8.868	85	6976	2.02	ug/L		96
46) t-butyl formate	8.916	59	6382	2.28	ug/L	#	52
49) freon 113	6.116	151	6666	2.99	ug/L		96
51) 1,1,1-trichloroethane	9.099	97	10080	2.26	ug/L	#	40
52) Cyclohexane	9.162	84	11815	2.26	ug/L	#	85
55) 2,2,4-trimethylpentane	9.534	57	23256	1.99	ug/L	#	78
56) tert-amyl methyl ether	9.587	87	7032	2.82	ug/L		90
60) n-butyl alcohol	10.263	56	12509	178.61	ug/L		87
61) carbon tetrachloride	9.309	117	9801	2.72	ug/L		88
62) 1,1-dichloropropene	9.298	75	8664	2.12	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101483.D
Acq On : 14 Apr 2014 7:10 pm
Operator : DIXITAR
Sample : ic4568-2
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 15:34:05 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:16:21 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
63) hexane	7.526	57	9085	2.25	ug/L		95
64) benzene	9.560	78	25576	2.06	ug/L		89
65) heptane	9.744	57	4986	2.24	ug/L	#	80
67) 1,2-dichloroethane	9.592	62	7271	2.19	ug/L		92
69) trichloroethene	10.289	95	5268	1.75	ug/L		94
72) 2-chloroethyl vinyl ether	11.139	63	16487	9.18	ug/L		98
74) 1,2-dichloropropane	10.541	63	7257	2.20	ug/L		91
75) methylcyclohexane	10.478	83	14194	2.60	ug/L		87
76) dibromomethane	10.714	93	3650	2.30	ug/L		81
77) bromodichloromethane	10.845	83	6980	1.87	ug/L		94
78) cis-1,3-dichloropropene	11.333	75	9094	1.84	ug/L		91
81) toluene	11.705	92	12451	1.66	ug/L		82
82) 3-methyl-1-butanol	11.516	70	5253	81.61	ug/L		94
83) trans-1,3-dichloropropene	11.930	75	7324	1.76	ug/L	#	65
84) ethyl methacrylate	11.977	69	4709	1.38	ug/L		78
85) 1,1,2-trichloroethane	12.103	83	3908	1.93	ug/L		97
88) tetrachloroethene	12.276	166	5303	1.85	ug/L		90
89) 1,3-dichloropropane	12.292	76	8749	2.23	ug/L		89
91) 3,3-dimethyl-1-butanol	12.476	57	14938	48.77	ug/L		84
92) dibromochloromethane	12.554	129	5524	2.18	ug/L		87
93) 1,2-dibromoethane	12.722	107	4515	2.05	ug/L		92
94) chlorobenzene	13.157	112	14280	1.91	ug/L		88
95) 1,1,1,2-tetrachloroethane	13.220	131	7067	2.61	ug/L		89
96) ethylbenzene	13.231	91	25119	1.98	ug/L		92
97) m,p-xylene	13.341	106	18854	3.62	ug/L		99
98) o-xylene	13.755	106	9883	1.90	ug/L		82
99) styrene	13.792	104	13758	1.63	ug/L		92
100) bromoform	14.017	173	4024	2.38	ug/L		89
102) isopropylbenzene	14.090	105	26014	1.83	ug/L		98
104) bromobenzene	14.505	156	6585	1.88	ug/L	#	84
105) cyclohexanone	14.258	55	5764	55.67	ug/L		89
106) 1,1,2,2-tetrachloroethane	14.395	83	8989	2.60	ug/L		92
107) trans-1,4-dichloro-2-b...	14.452	53	1950	2.41	ug/L		86
108) 1,2,3-trichloropropane	14.473	110	2641	3.16	ug/L		86
109) n-propylbenzene	14.505	91	29241	1.84	ug/L		99
111) 2-chlorotoluene	14.646	126	6387	1.91	ug/L		98
112) 4-chlorotoluene	14.756	91	20160	1.95	ug/L		97
113) 1,3,5-trimethylbenzene	14.657	105	22649	1.87	ug/L		96
114) tert-butylbenzene	14.992	119	17372	1.73	ug/L		99
115) pentachloroethane	15.066	167	5184	2.27	ug/L		88
116) 1,2,4-trimethylbenzene	15.050	105	22085	1.88	ug/L		93
117) sec-butylbenzene	15.207	105	29619	1.90	ug/L		99
118) 1,3-dichlorobenzene	15.396	146	13572	1.96	ug/L		93
119) p-isopropyltoluene	15.328	119	24079	1.90	ug/L		98
121) 1,4-dichlorobenzene	15.475	146	16462	2.18	ug/L		91
123) 1,2-dichlorobenzene	15.863	146	15478	2.23	ug/L		93
124) n-butylbenzene	15.747	92	13194	2.03	ug/L		97
126) 1,2-dibromo-3-chloropr...	16.591	75	2205	3.72	ug/L	#	60
127) 1,3,5-trichlorobenzene	16.775	180	14987	2.50	ug/L		99
128) 1,2,4-trichlorobenzene	17.352	180	15714	2.89	ug/L		93
129) hexachlorobutadiene	17.436	225	5421	2.14	ug/L		99
130) naphthalene	17.588	128	40328	3.42	ug/L		96
131) 1,2,3-trichlorobenzene	17.803	180	16680	3.41	ug/L		94
132) hexachloroethane	16.099	119	3953	1.68	ug/L		93
133) Benzyl chloride	15.606	91	20510	3.01	ug/L		98

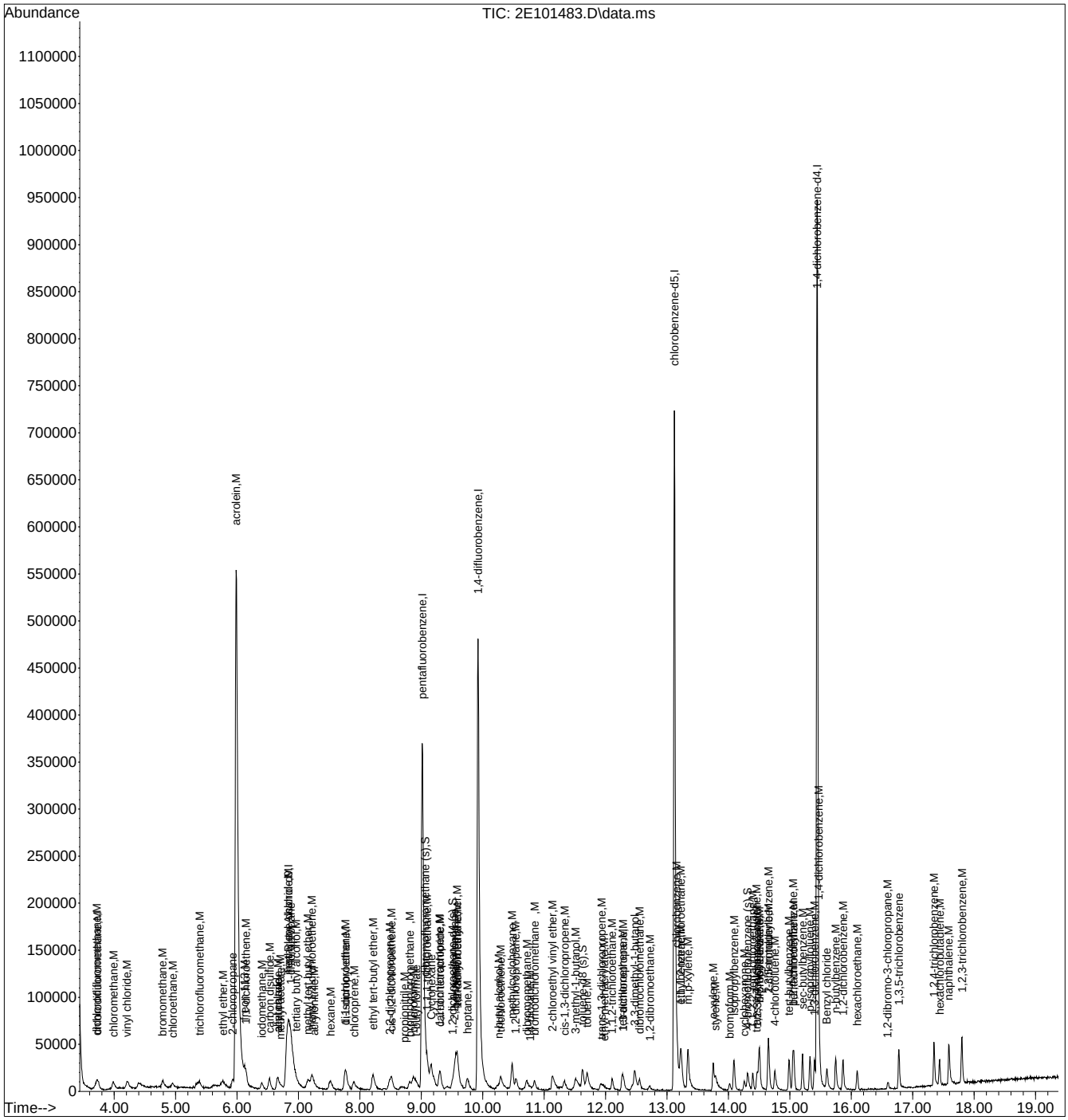
(#) = qualifier out of range (m) = manual integration (+) = signals summed

M2E4568.M Wed Apr 16 15:34:10 2014 MS2E

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101483.D
Acq On : 14 Apr 2014 7:10 pm
Operator : DIXITAR
Sample : ic4568-2
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 16 15:34:05 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:16:21 2014
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu 04/16/14 16:10

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 15:34:16 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:09:58 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	6.834	65	279476	500.00	ug/L		0.01
5) pentafluorobenzene	9.015	168	384651	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	551304	50.00	ug/L		0.00
87) chlorobenzene-d5	13.121	117	450934	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	256966	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.057	113	18098	6.42	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 12.84%#				
48) 1,2-dichloroethane-d4 (s)	9.487	65	22288	7.42	ug/L		0.02
Spiked Amount 50.000	Range 72 - 123		Recovery = 14.84%#				
79) toluene-d8 (s)	11.611	98	62205	5.71	ug/L		0.02
Spiked Amount 50.000	Range 78 - 119		Recovery = 11.42%#				
103) 4-bromofluorobenzene (s)	14.300	95	23700	5.98	ug/L		0.02
Spiked Amount 50.000	Range 74 - 119		Recovery = 11.96%#				
Target Compounds							Qvalue
2) 1,4-dioxane	10.693	88	7383	171.90	ug/L	#	82
3) tertiary butyl alcohol	6.965	59	15704	30.40	ug/L		90
10) chlorodifluoromethane	3.730	51	34025	9.03	ug/L		98
11) dichlorodifluoromethane	3.720	85	44426	12.71	ug/L		94
12) chloromethane	3.982	50	32982	6.83	ug/L		99
13) vinyl chloride	4.218	62	40991	8.42	ug/L		98
14) bromomethane	4.789	94	21304	7.88	ug/L		94
15) chloroethane	4.947	64	16073	5.68	ug/L		95
16) trichlorofluoromethane	5.387	101	38776	8.93	ug/L		90
18) ethyl ether	5.765	74	10237	5.45	ug/L	#	73
19) 2-chloropropane	5.932	43	39707	6.35	ug/L		94
20) acrolein	6.006	56	47679	71.22	ug/L		98
21) 1,1-dichloroethene	6.147	96	17790	5.90	ug/L		93
22) acetone	6.242	58	1861	7.53	ug/L	#	64
23) acetonitrile	6.651	40	24413	92.43	ug/L	#	100
24) allyl chloride	6.661	76	8706	4.89	ug/L	#	58
25) iodomethane	6.404	142	34376	6.70	ug/L		97
26) carbon disulfide	6.525	76	75857	7.09	ug/L		99
27) methylene chloride	6.834	84	22662	6.09	ug/L		89
28) methyl acetate	6.708	43	13541	6.60	ug/L	#	60
29) 1-chloropropane	6.871	41	10335	6.71	ug/L	#	26
30) methyl tert butyl ether	7.159	73	63034	6.96	ug/L		95
31) trans-1,2-dichloroethene	7.206	96	20595	6.11	ug/L		88
32) di-isopropyl ether	7.752	45	68150	6.19	ug/L		99
33) ethyl tert-butyl ether	8.213	59	65632	6.15	ug/L		96
34) 2-butanone	8.570	72	1074	3.75	ug/L	#	12
35) 1,1-dichloroethane	7.757	63	35630	6.03	ug/L		98
36) chloroprene	7.883	53	25652	5.46	ug/L		89
37) acrylonitrile	7.212	53	35168	32.98	ug/L		93
38) vinyl acetate	7.888	86	1647	3.17	ug/L	#	1
39) ethyl acetate	8.585	45	1816m	4.86	ug/L		
40) 2,2-dichloropropane	8.486	77	33005	6.94	ug/L		94
41) cis-1,2-dichloroethene	8.507	96	20663	5.92	ug/L		94
42) propionitrile	8.622	54	24120	65.77	ug/L		95
43) bromochloromethane	8.795	128	9804	6.07	ug/L		91
44) tetrahydrofuran	8.889	42	6052	6.70	ug/L		94
45) chloroform	8.863	85	21175	6.22	ug/L		96
46) t-butyl formate	8.895	59	17368	6.28	ug/L	#	70
49) freon 113	6.116	151	17230	7.84	ug/L		93
50) methacrylonitrile	8.806	41	4095	2.88	ug/L		69
51) 1,1,1-trichloroethane	9.099	97	31770	7.22	ug/L		85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 15:34:16 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:09:58 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Cyclohexane	9.157	84	35589	6.89	ug/L	#	86
53) iso-butyl alcohol	9.414	41	6293	87.58	ug/L		92
55) 2,2,4-trimethylpentane	9.534	57	60419	5.23	ug/L	#	91
56) tert-amyl methyl ether	9.587	87	15226	6.19	ug/L	#	79
59) epichlorohydrin	11.259	57	5185	22.78	ug/L		98
60) n-butyl alcohol	10.200	56	26080	379.49	ug/L		87
61) carbon tetrachloride	9.298	117	27359	7.75	ug/L		97
62) 1,1-dichloropropene	9.293	75	24656	6.14	ug/L		87
63) hexane	7.510	57	22927	5.79	ug/L		97
64) benzene	9.555	78	74485	6.12	ug/L		98
65) heptane	9.739	57	13229	6.05	ug/L		96
66) isopropyl acetate	9.534	43	22281	5.06	ug/L		94
67) 1,2-dichloroethane	9.571	62	22609	6.94	ug/L		94
69) trichloroethene	10.284	95	16416	5.57	ug/L		93
71) 2-nitropropane	11.076	41	4259	4.84	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.118	63	42450	24.09	ug/L		97
73) methyl methacrylate	10.651	100	2585m	3.91	ug/L		
74) 1,2-dichloropropane	10.536	63	20345	6.29	ug/L		87
75) methylcyclohexane	10.478	83	35294	6.60	ug/L		97
76) dibromomethane	10.704	93	9665	6.22	ug/L		92
77) bromodichloromethane	10.835	83	21758	5.95	ug/L		89
78) cis-1,3-dichloropropene	11.317	75	25120	5.17	ug/L		92
80) 4-methyl-2-pentanone	11.459	58	6157	6.00	ug/L	#	1
81) toluene	11.684	92	38546	5.24	ug/L		89
82) 3-methyl-1-butanol	11.495	70	10105	159.99	ug/L	#	86
83) trans-1,3-dichloropropene	11.904	75	20246	4.97	ug/L		88
84) ethyl methacrylate	11.920	69	15264	4.57	ug/L		94
85) 1,1,2-trichloroethane	12.093	83	10765	5.41	ug/L		90
86) 2-hexanone	12.397	58	3498	4.75	ug/L	#	60
88) tetrachloroethene	12.266	166	16326	5.75	ug/L		100
89) 1,3-dichloropropane	12.287	76	22787	5.86	ug/L		87
90) butyl acetate	12.439	56	5223	3.85	ug/L	#	31
91) 3,3-dimethyl-1-butanol	12.465	57	27882	91.79	ug/L		92
92) dibromochloromethane	12.549	129	14177	5.63	ug/L		93
93) 1,2-dibromoethane	12.701	107	11714	5.36	ug/L		90
94) chlorobenzene	13.152	112	40496	5.46	ug/L		100
95) 1,1,1,2-tetrachloroethane	13.215	131	19180	7.15	ug/L		96
96) ethylbenzene	13.225	91	72021	5.73	ug/L		99
97) m,p-xylene	13.330	106	56286	10.91	ug/L		95
98) o-xylene	13.744	106	29118	5.65	ug/L		97
99) styrene	13.776	104	39384	4.70	ug/L		94
100) bromoform	14.017	173	9873	5.89	ug/L		89
102) isopropylbenzene	14.085	105	79838	5.82	ug/L		97
104) bromobenzene	14.489	156	18053	5.36	ug/L		93
105) cyclohexanone	14.258	55	10200	102.36	ug/L		91
106) 1,1,2,2-tetrachloroethane	14.395	83	20300	6.10	ug/L		98
107) trans-1,4-dichloro-2-b...	14.452	53	4282	5.51	ug/L	#	20
108) 1,2,3-trichloropropane	14.468	110	5490	6.83	ug/L		89
109) n-propylbenzene	14.494	91	86960	5.68	ug/L		99
111) 2-chlorotoluene	14.636	126	17332	5.39	ug/L		87
112) 4-chlorotoluene	14.746	91	52905	5.33	ug/L		99
113) 1,3,5-trimethylbenzene	14.652	105	67206	5.75	ug/L		95
114) tert-butylbenzene	14.987	119	51834	5.36	ug/L		95
115) pentachloroethane	15.060	167	13564	6.18	ug/L		94
116) 1,2,4-trimethylbenzene	15.045	105	64476	5.69	ug/L		93
117) sec-butylbenzene	15.202	105	86224	5.74	ug/L		98
118) 1,3-dichlorobenzene	15.401	146	36058	5.40	ug/L		99
119) p-isopropyltoluene	15.323	119	71775	5.88	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 15:34:16 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:09:58 2014
Response via : Initial Calibration

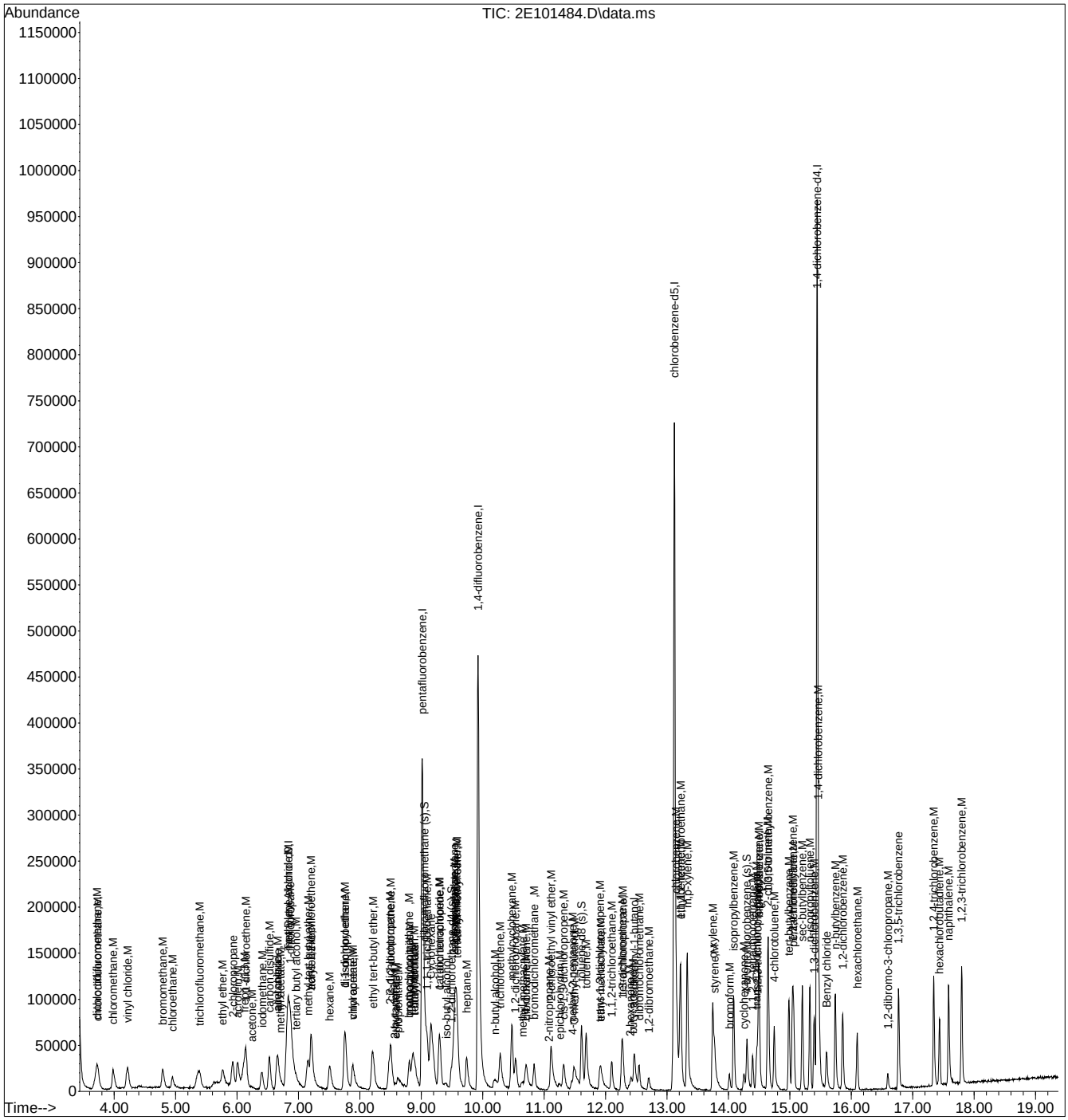
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
121) 1,4-dichlorobenzene	15.469	146	39699	5.47 ug/L	97
123) 1,2-dichlorobenzene	15.857	146	39028	5.84 ug/L	99
124) n-butylbenzene	15.742	92	37025	5.91 ug/L	96
126) 1,2-dibromo-3-chloropr...	16.597	75	4572	8.01 ug/L	77
127) 1,3,5-trichlorobenzene	16.770	180	36912	6.41 ug/L	98
128) 1,2,4-trichlorobenzene	17.341	180	39447	7.55 ug/L	96
129) hexachlorobutadiene	17.441	225	15357	6.28 ug/L	98
130) naphthalene	17.588	128	93597	8.24 ug/L	99
131) 1,2,3-trichlorobenzene	17.797	180	42103	8.94 ug/L	98
132) hexachloroethane	16.093	119	12009	5.31 ug/L	95
133) Benzyl chloride	15.595	91	37314	5.70 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 15:34:16 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:09:58 2014
Response via : Initial Calibration



Manual Integration Approval Summary

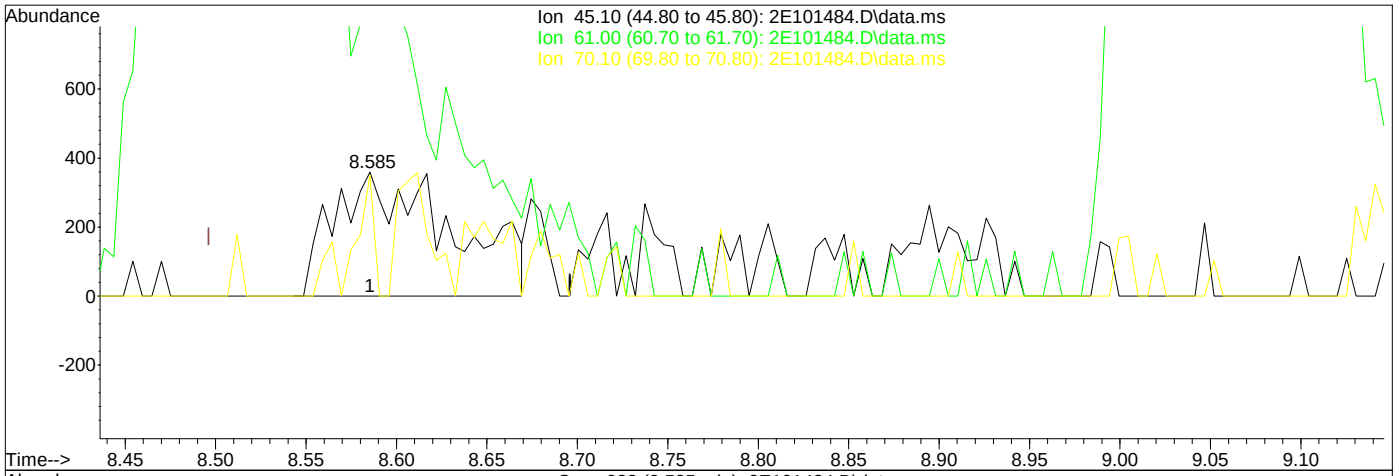
Sample Number: V2E4568-IC4568 **Method:** SW846 8260B
Lab FileID: 2E101484.D **Analyst approved:** 04/15/14 18:43 Dong, Mei
Injection Time: 04/14/14 19:39 **Supervisor approved:** 04/16/14 16:10 Jessica Reitan-Chu

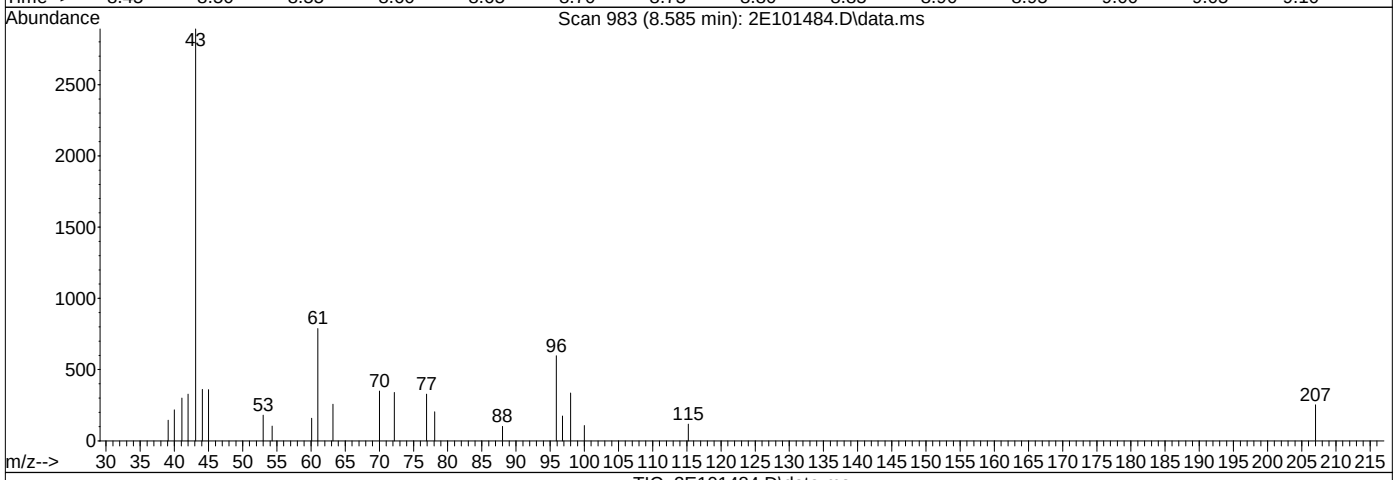
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Acetate	141-78-6		8.59	Poor instrument integration
Methyl methacrylate	80-62-6		10.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:01:26 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:01:22 2014
Response via : Initial Calibration





TIC: 2E101484.D\data.ms

(39) ethyl acetate (M)

8.585min (+0.089) 4.32ug/L

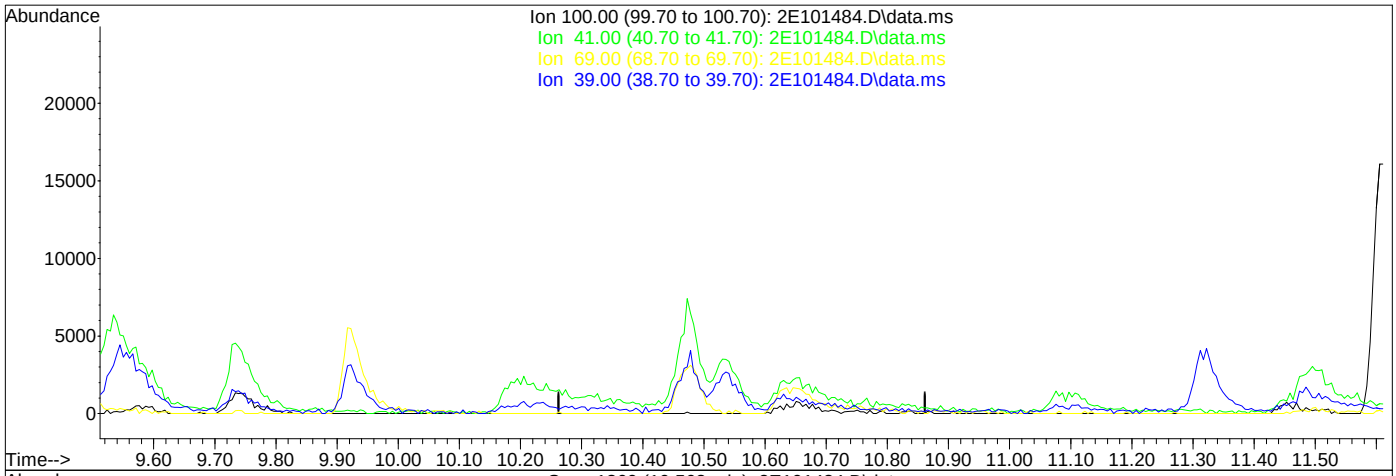
response 1614

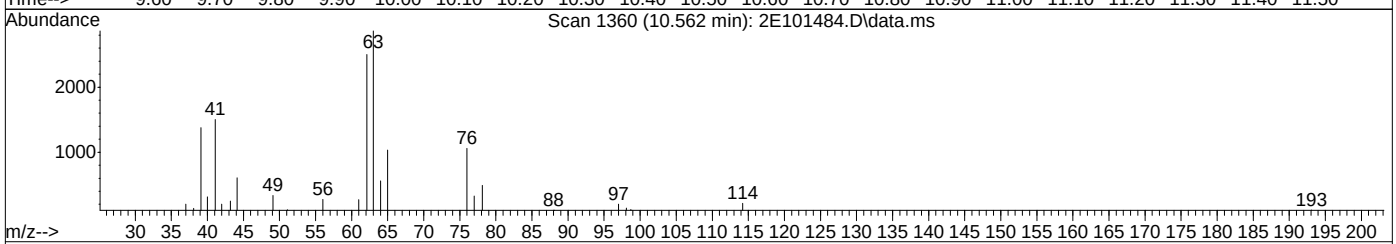
Ion	Exp%	Act%
45.10	100	100
61.00	1618.60	156.55#
70.10	77.80	97.49
0.00	0.00	0.00

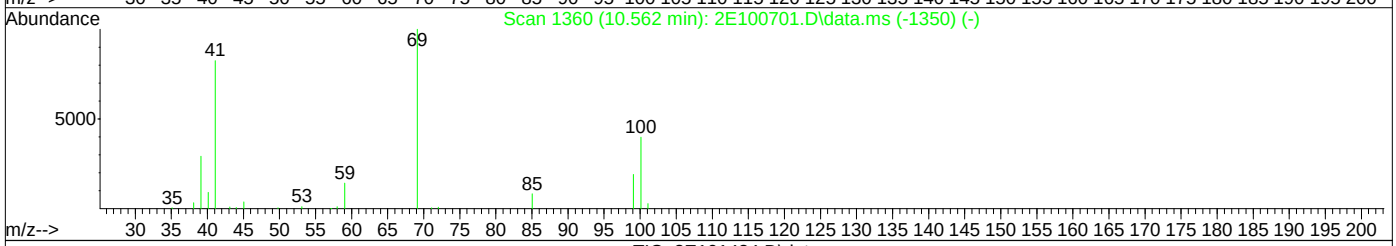
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:01:26 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:01:22 2014
Response via : Initial Calibration







TIC: 2E101484.D\data.ms

(73) methyl methacrylate (M)

10.562min (-10.562) 0.00ug/L

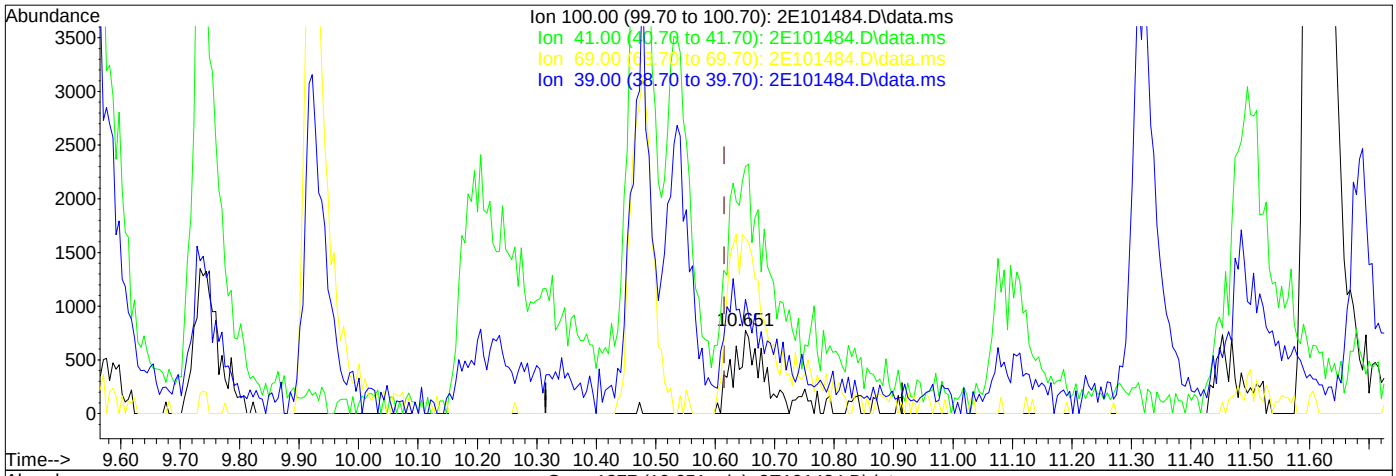
response 0

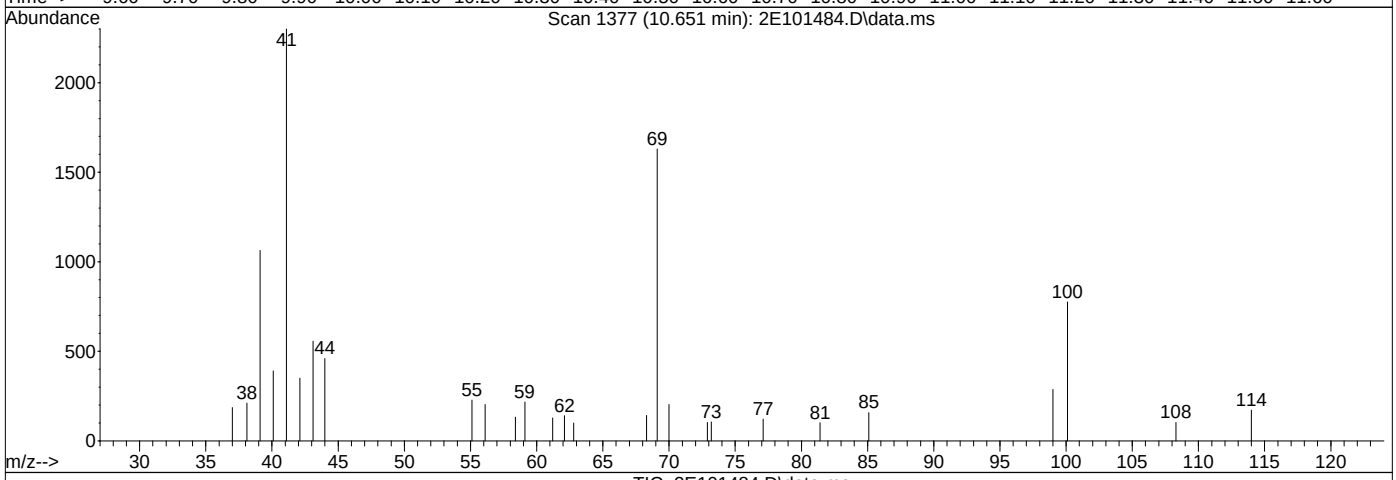
Ion	Exp%	Act%
100.00	100	0.00
41.00	371.10	0.00#
69.00	266.90	0.00#
39.00	183.00	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:12:06 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:09:58 2014
Response via : Initial Calibration





TIC: 2E101484.D\data.ms

(73) methyl methacrylate (M)

10.651min (+0.036) 3.91ug/L m

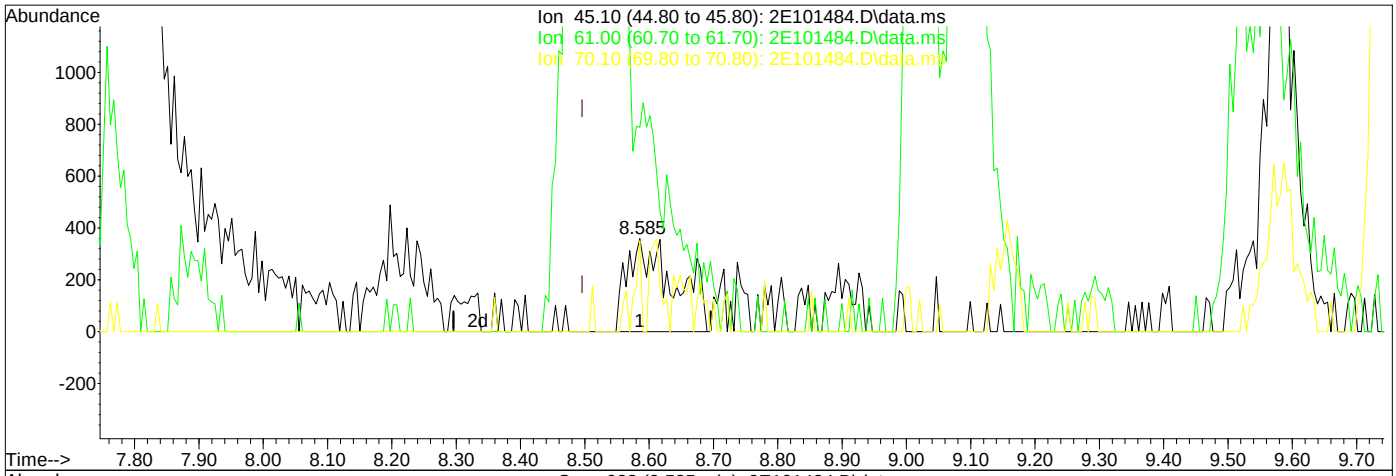
response 2585

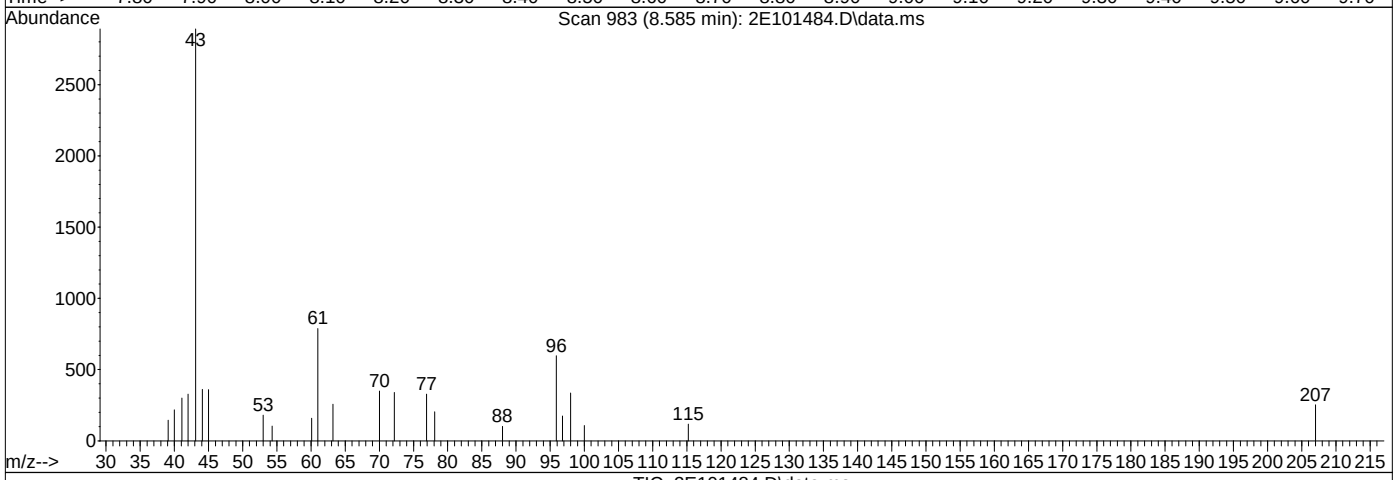
Ion	Exp%	Act%
100.00	100	100
41.00	371.10	296.52#
69.00	266.90	210.18#
39.00	183.00	137.11#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101484.D
Acq On : 14 Apr 2014 7:39 pm
Operator : DIXITAR
Sample : ic4568-5
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 16 15:34:16 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:09:58 2014
Response via : Initial Calibration





TIC: 2E101484.D\data.ms

(39) ethyl acetate (M)

8.585min (+0.089) 4.86ug/L m

response 1816

Ion	Exp%	Act%
45.10	100	100
61.00	1618.60	219.50#
70.10	77.80	97.49
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101485.D
Acq On : 14 Apr 2014 8:08 pm
Operator : DIXITAR
Sample : ic4568-10
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 16 15:34:33 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:37:30 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	6.845	65	269475	500.00	ug/L		0.02
5) pentafluorobenzene	9.015	168	368225	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	543656	50.00	ug/L		0.00
87) chlorobenzene-d5	13.121	117	427719	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	248912	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.057	113	34905	12.93	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 25.86%#				
48) 1,2-dichloroethane-d4 (s)	9.482	65	39619	13.78	ug/L		0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 27.56%#				
79) toluene-d8 (s)	11.600	98	115462	10.75	ug/L		0.01
Spiked Amount 50.000	Range 78 - 119		Recovery = 21.50%#				
103) 4-bromofluorobenzene (s)	14.295	95	40603	10.58	ug/L		0.01
Spiked Amount 50.000	Range 74 - 119		Recovery = 21.16%#				
Target Compounds							Qvalue
2) 1,4-dioxane	10.683	88	12540	302.80	ug/L	#	97
3) tertiary butyl alcohol	6.955	59	30232	60.70	ug/L		93
10) chlorodifluoromethane	3.725	51	66752	18.51	ug/L		94
11) dichlorodifluoromethane	3.720	85	82144	24.54	ug/L		95
12) chloromethane	3.993	50	68511	14.82	ug/L		99
13) vinyl chloride	4.223	62	79822	17.12	ug/L		98
14) bromomethane	4.789	94	41586	16.07	ug/L		99
15) chloroethane	4.947	64	32307	11.93	ug/L		95
16) trichlorofluoromethane	5.387	101	74250	17.87	ug/L		95
18) ethyl ether	5.765	74	18982	10.56	ug/L	#	72
19) 2-chloropropane	5.932	43	75513	12.61	ug/L		94
20) acrolein	6.006	56	85846	133.95	ug/L		91
21) 1,1-dichloroethene	6.147	96	35894	12.44	ug/L		92
22) acetone	6.231	58	3895	16.46	ug/L	#	45
23) acetonitrile	6.656	40	44762	177.03	ug/L	#	100
24) allyl chloride	6.661	76	19231	11.28	ug/L	#	73
25) iodomethane	6.404	142	67453	13.73	ug/L		92
26) carbon disulfide	6.525	76	148012	14.44	ug/L		96
27) methylene chloride	6.840	84	42382	11.89	ug/L		99
28) methyl acetate	6.682	43	24573	12.51	ug/L		94
29) 1-chloropropane	6.871	41	20842	14.14	ug/L		73
30) methyl tert butyl ether	7.149	73	122860	14.17	ug/L		98
31) trans-1,2-dichloroethene	7.207	96	39047	12.09	ug/L		96
32) di-isopropyl ether	7.747	45	137170	13.01	ug/L		98
33) ethyl tert-butyl ether	8.208	59	129847	12.70	ug/L		98
34) 2-butanone	8.549	72	3703	13.50	ug/L	#	72
35) 1,1-dichloroethane	7.752	63	70118	12.40	ug/L		98
36) chloroprene	7.878	53	52954	11.78	ug/L		95
37) acrylonitrile	7.196	53	73495	71.99	ug/L		92
38) vinyl acetate	7.899	86	4629	9.31	ug/L	#	1
39) ethyl acetate	8.554	45	4164	11.64	ug/L	#	1
40) 2,2-dichloropropane	8.481	77	63972	14.04	ug/L		90
41) cis-1,2-dichloroethene	8.496	96	41850	12.52	ug/L		95
42) propionitrile	8.596	54	51921	147.90	ug/L		99
43) bromochloromethane	8.806	128	18695	12.09	ug/L		97
44) tetrahydrofuran	8.863	42	11583	13.39	ug/L		96
45) chloroform	8.858	85	41386	12.70	ug/L		99
46) t-butyl formate	8.890	59	33769	12.76	ug/L		89
49) freon 113	6.126	151	31466	14.97	ug/L		80
50) methacrylonitrile	8.806	41	12130	8.91	ug/L		90
51) 1,1,1-trichloroethane	9.099	97	62038	14.73	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101485.D
Acq On : 14 Apr 2014 8:08 pm
Operator : DIXITAR
Sample : ic4568-10
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 16 15:34:33 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:37:30 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Cyclohexane	9.157	84	67434	13.64	ug/L	#	1
53) iso-butyl alcohol	9.367	41	10460	152.07	ug/L		83
55) 2,2,4-trimethylpentane	9.534	57	119231	10.79	ug/L	#	92
56) tert-amyl methyl ether	9.576	87	29841	12.68	ug/L	#	81
59) epichlorohydrin	11.233	57	12888	57.42	ug/L		95
60) n-butyl alcohol	10.153	56	57743	852.04	ug/L		96
61) carbon tetrachloride	9.293	117	52612	15.10	ug/L		97
62) 1,1-dichloropropene	9.288	75	46817	11.82	ug/L		92
63) hexane	7.505	57	41910	10.73	ug/L		96
64) benzene	9.550	78	148404	12.37	ug/L		98
65) heptane	9.734	57	23827	11.05	ug/L		96
66) isopropyl acetate	9.529	43	56977	13.12	ug/L		95
67) 1,2-dichloroethane	9.571	62	42555	13.25	ug/L		99
69) trichloroethene	10.274	95	33783	11.63	ug/L		89
71) 2-nitropropane	11.081	41	9312	10.74	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.097	63	84147	48.42	ug/L		98
73) methyl methacrylate	10.620	100	5255	8.05	ug/L	#	37
74) 1,2-dichloropropane	10.531	63	38271	12.00	ug/L		96
75) methylcyclohexane	10.473	83	69057	13.09	ug/L		98
76) dibromomethane	10.704	93	18341	11.96	ug/L		93
77) bromodichloromethane	10.835	83	42689	11.85	ug/L		94
78) cis-1,3-dichloropropene	11.307	75	49050	10.24	ug/L		97
80) 4-methyl-2-pentanone	11.432	58	12841	12.69	ug/L	#	1
81) toluene	11.674	92	77625	10.69	ug/L		89
82) 3-methyl-1-butanol	11.469	70	21002	337.20	ug/L		91
83) trans-1,3-dichloropropene	11.894	75	39416	9.81	ug/L		91
84) ethyl methacrylate	11.910	69	33658	10.22	ug/L		97
85) 1,1,2-trichloroethane	12.093	83	22429	11.44	ug/L		98
86) 2-hexanone	12.366	58	8899	12.24	ug/L		85
88) tetrachloroethene	12.261	166	31994	11.88	ug/L		96
89) 1,3-dichloropropane	12.277	76	42235	11.46	ug/L		98
90) butyl acetate	12.408	56	12703	9.88	ug/L	#	45
91) 3,3-dimethyl-1-butanol	12.460	57	50030	173.65	ug/L		94
92) dibromochloromethane	12.539	129	27790	11.64	ug/L		97
93) 1,2-dibromoethane	12.696	107	23734	11.46	ug/L		90
94) chlorobenzene	13.152	112	79923	11.36	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.210	131	36075	14.18	ug/L		98
96) ethylbenzene	13.215	91	143805	12.06	ug/L		96
97) m,p-xylene	13.325	106	111389	22.76	ug/L		98
98) o-xylene	13.739	106	60876	12.46	ug/L		91
99) styrene	13.760	104	81841	10.30	ug/L		99
100) bromoform	14.012	173	18546	11.66	ug/L		97
102) isopropylbenzene	14.080	105	164360	12.37	ug/L		96
104) bromobenzene	14.484	156	35914	11.00	ug/L		92
105) cyclohexanone	14.243	55	26747	277.10	ug/L		87
106) 1,1,2,2-tetrachloroethane	14.389	83	40435	12.54	ug/L		97
107) trans-1,4-dichloro-2-b...	14.447	53	7990	10.60	ug/L	#	64
108) 1,2,3-trichloropropane	14.463	110	9654	12.40	ug/L		98
109) n-propylbenzene	14.494	91	172367	11.62	ug/L		97
111) 2-chlorotoluene	14.636	126	35712	11.46	ug/L		99
112) 4-chlorotoluene	14.741	91	104125	10.82	ug/L		98
113) 1,3,5-trimethylbenzene	14.646	105	135517	11.97	ug/L		98
114) tert-butylbenzene	14.982	119	103334	11.04	ug/L		96
115) pentachloroethane	15.066	167	27166	12.78	ug/L		94
116) 1,2,4-trimethylbenzene	15.040	105	133004	12.12	ug/L		98
117) sec-butylbenzene	15.202	105	174822	12.02	ug/L		98
118) 1,3-dichlorobenzene	15.391	146	71821	11.11	ug/L		98
119) p-isopropyltoluene	15.328	119	145995	12.35	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101485.D
Acq On : 14 Apr 2014 8:08 pm
Operator : DIXITAR
Sample : ic4568-10
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 16 15:34:33 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:37:30 2014
Response via : Initial Calibration

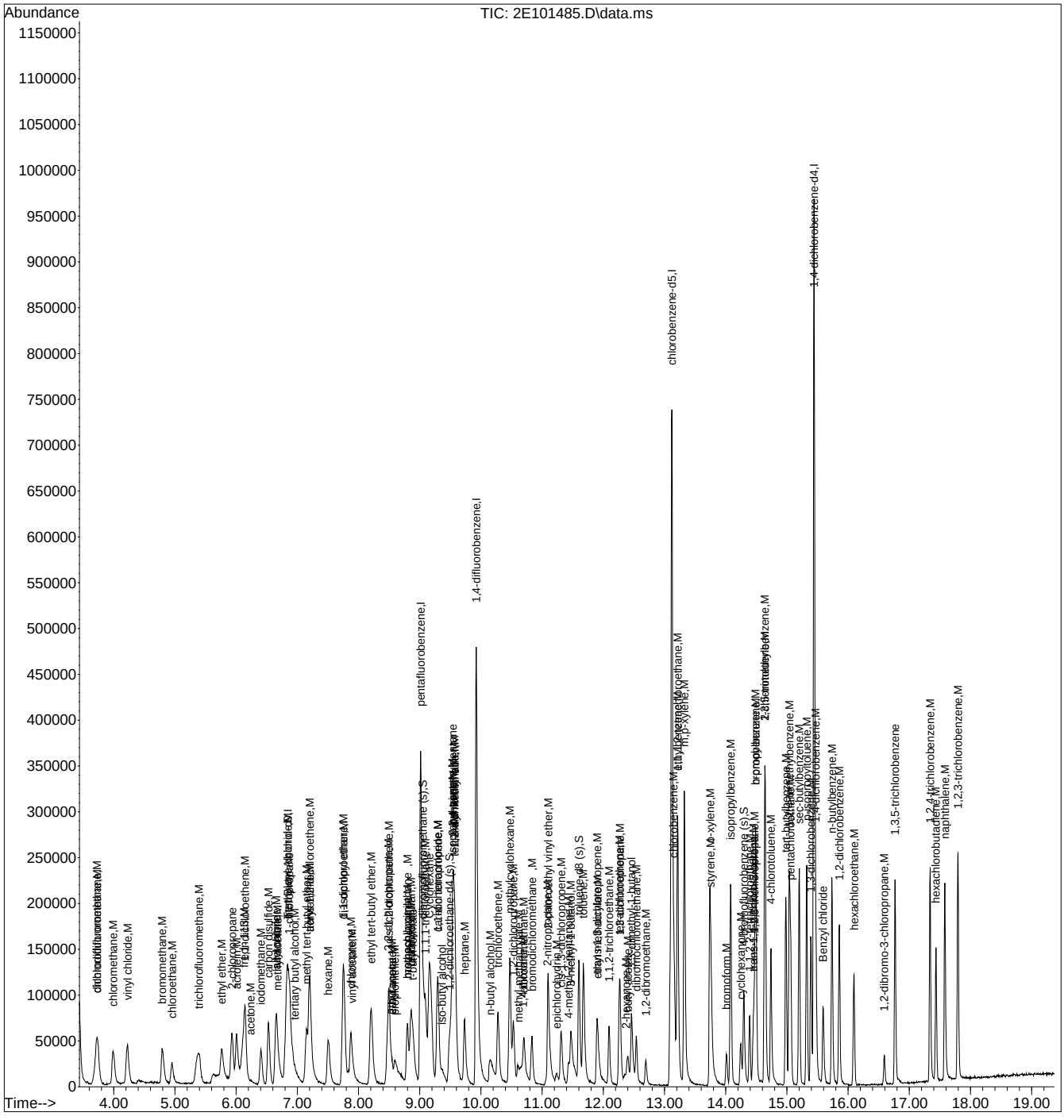
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,4-dichlorobenzene	15.475	146	76026	10.81	ug/L	99
123) 1,2-dichlorobenzene	15.858	146	76653	11.84	ug/L	96
124) n-butylbenzene	15.737	92	74428	12.27	ug/L	97
126) 1,2-dibromo-3-chloropr...	16.597	75	8688	15.71	ug/L	93
127) 1,3,5-trichlorobenzene	16.770	180	72732	13.04	ug/L	99
128) 1,2,4-trichlorobenzene	17.341	180	73877	14.59	ug/L	95
129) hexachlorobutadiene	17.436	225	28856	12.19	ug/L	97
130) naphthalene	17.582	128	180985	16.46	ug/L	98
131) 1,2,3-trichlorobenzene	17.797	180	77543	17.00	ug/L	96
132) hexachloroethane	16.093	119	24858	11.35	ug/L	95
133) Benzyl chloride	15.590	91	72518	11.43	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101485.D
Acq On : 14 Apr 2014 8:08 pm
Operator : DIXITAR
Sample : ic4568-10
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 16 15:34:33 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 09:37:30 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101486.D
Acq On : 14 Apr 2014 8:37 pm
Operator : DIXITAR
Sample : ic4568-20
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 16 15:34:44 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:47:01 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.834	65	269541	500.00	ug/L	0.01
5) pentafluorobenzene	9.015	168	380860	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	563278	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	436162	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	254509	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.052	113	147991	52.98	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 105.96%			
48) 1,2-dichloroethane-d4 (s)	9.466	65	168170	56.54	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 113.08%			
79) toluene-d8 (s)	11.590	98	513114	46.12	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 92.24%			
103) 4-bromofluorobenzene (s)	14.284	95	174835	44.57	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 89.14%			
Target Compounds						Qvalue
2) 1,4-dioxane	10.693	88	24530	592.18	ug/L #	96
3) tertiary butyl alcohol	6.939	59	53680	107.75	ug/L	98
10) chlorodifluoromethane	3.725	51	125754	33.72	ug/L	88
11) dichlorodifluoromethane	3.725	85	159057	45.95	ug/L	99
12) chloromethane	3.992	50	130900	27.38	ug/L	98
13) vinyl chloride	4.223	62	152990	31.73	ug/L	99
14) bromomethane	4.795	94	77513	28.97	ug/L	93
15) chloroethane	4.952	64	59825	21.36	ug/L	94
16) trichlorofluoromethane	5.382	101	142254	33.10	ug/L	100
18) ethyl ether	5.759	74	38530	20.72	ug/L #	84
19) 2-chloropropane	5.927	43	141407	22.83	ug/L	97
20) acrolein	6.000	56	158549	239.18	ug/L	92
21) 1,1-dichloroethene	6.142	96	68970	23.10	ug/L	93
22) acetone	6.221	58	7583	30.98	ug/L	85
23) acetonitrile	6.640	40	80494	307.78	ug/L #	100
24) allyl chloride	6.656	76	36007	20.42	ug/L #	71
25) iodomethane	6.399	142	130768	25.73	ug/L	98
26) carbon disulfide	6.525	76	284475	26.84	ug/L	96
27) methylene chloride	6.829	84	83742	22.71	ug/L	92
28) methyl acetate	6.672	43	49842	24.53	ug/L	95
29) 1-chloropropane	6.866	41	33928	22.25	ug/L	63
30) methyl tert butyl ether	7.149	73	238913	26.65	ug/L	99
31) trans-1,2-dichloroethene	7.201	96	75381	22.57	ug/L	97
32) di-isopropyl ether	7.741	45	253910	23.29	ug/L	97
33) ethyl tert-butyl ether	8.197	59	245771	23.24	ug/L	99
34) 2-butanone	8.528	72	6056	21.34	ug/L	91
35) 1,1-dichloroethane	7.752	63	133555	22.84	ug/L	98
36) chloroprene	7.867	53	98406	21.17	ug/L	91
37) acrylonitrile	7.175	53	138556	131.21	ug/L	97
38) vinyl acetate	7.809	86	9839	19.13	ug/L	29
39) ethyl acetate	8.528	45	8734	23.60	ug/L #	1
40) 2,2-dichloropropane	8.480	77	121997	25.89	ug/L	97
41) cis-1,2-dichloroethene	8.496	96	80213	23.20	ug/L	93
42) propionitrile	8.580	54	106117	292.25	ug/L	90
43) bromochloromethane	8.795	128	37779	23.61	ug/L	94
44) tetrahydrofuran	8.858	42	23468	26.23	ug/L	93
45) chloroform	8.853	85	77649	23.04	ug/L	98
46) t-butyl formate	8.884	59	65241	23.84	ug/L	92
49) freon 113	6.111	151	59697	27.45	ug/L	93
50) methacrylonitrile	8.774	41	28018	19.90	ug/L	97
51) 1,1,1-trichloroethane	9.094	97	120332	27.63	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101486.D
Acq On : 14 Apr 2014 8:37 pm
Operator : DIXITAR
Sample : ic4568-20
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 16 15:34:44 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:47:01 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Cyclohexane	9.162	84	135637	26.53	ug/L	#	87
53) iso-butyl alcohol	9.361	41	21617	303.85	ug/L		95
55) 2,2,4-trimethylpentane	9.534	57	227755	19.92	ug/L	#	94
56) tert-amyl methyl ether	9.571	87	55618	22.84	ug/L		93
59) epichlorohydrin	11.228	57	25996	111.79	ug/L		95
60) n-butyl alcohol	10.116	56	110425	1572.64	ug/L		95
61) carbon tetrachloride	9.298	117	103781	28.76	ug/L		92
62) 1,1-dichloropropene	9.283	75	92801	22.60	ug/L		97
63) hexane	7.500	57	78244	19.33	ug/L		97
64) benzene	9.540	78	287678	23.14	ug/L		98
65) heptane	9.728	57	43451	19.45	ug/L		93
66) isopropyl acetate	9.498	43	116973	26.00	ug/L		95
67) 1,2-dichloroethane	9.560	62	82739	24.87	ug/L		99
69) trichloroethene	10.268	95	66207	22.00	ug/L		92
71) 2-nitropropane	11.065	41	18856	20.99	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.086	63	161236	89.54	ug/L		97
73) methyl methacrylate	10.593	100	12092	17.88	ug/L	#	66
74) 1,2-dichloropropane	10.525	63	71819	21.73	ug/L		97
75) methylcyclohexane	10.473	83	130193	23.81	ug/L		96
76) dibromomethane	10.698	93	38131	24.01	ug/L		99
77) bromodichloromethane	10.829	83	83599	22.39	ug/L		98
78) cis-1,3-dichloropropene	11.306	75	96478	19.44	ug/L		96
80) 4-methyl-2-pentanone	11.417	58	26541	25.32	ug/L	#	37
81) toluene	11.668	92	150108	19.96	ug/L		98
82) 3-methyl-1-butanol	11.458	70	41740	646.81	ug/L		94
83) trans-1,3-dichloropropene	11.888	75	79410	19.08	ug/L		96
84) ethyl methacrylate	11.894	69	68201	19.99	ug/L		89
85) 1,1,2-trichloroethane	12.088	83	42448	20.89	ug/L		98
86) 2-hexanone	12.339	58	18266	24.25	ug/L		91
88) tetrachloroethene	12.261	166	64928	23.65	ug/L		97
89) 1,3-dichloropropane	12.271	76	83746	22.28	ug/L		92
90) butyl acetate	12.387	56	28510	21.74	ug/L	#	68
91) 3,3-dimethyl-1-butanol	12.460	57	91234	310.53	ug/L		97
92) dibromochloromethane	12.539	129	55402	22.76	ug/L		100
93) 1,2-dibromoethane	12.691	107	47310	22.39	ug/L		99
94) chlorobenzene	13.152	112	152820	21.29	ug/L		99
95) 1,1,1,2-tetrachloroethane	13.210	131	73223	28.23	ug/L		98
96) ethylbenzene	13.215	91	279757	23.02	ug/L		99
97) m,p-xylene	13.320	106	221096	44.30	ug/L		98
98) o-xylene	13.739	106	119869	24.07	ug/L		99
99) styrene	13.755	104	164396	20.30	ug/L		97
100) bromoform	14.012	173	37366	23.03	ug/L		97
102) isopropylbenzene	14.080	105	323562	23.82	ug/L		98
104) bromobenzene	14.478	156	67753	20.30	ug/L		90
105) cyclohexanone	14.237	55	60983	617.88	ug/L		97
106) 1,1,2,2-tetrachloroethane	14.389	83	76810	23.29	ug/L		99
107) trans-1,4-dichloro-2-b...	14.442	53	15613	20.27	ug/L		87
108) 1,2,3-trichloropropane	14.458	110	19128	24.02	ug/L		94
109) n-propylbenzene	14.489	91	336801	22.21	ug/L		100
111) 2-chlorotoluene	14.636	126	68413	21.47	ug/L		94
112) 4-chlorotoluene	14.735	91	195417	19.86	ug/L		97
113) 1,3,5-trimethylbenzene	14.646	105	272546	23.55	ug/L		100
114) tert-butylbenzene	14.982	119	218843	22.87	ug/L		97
115) pentachloroethane	15.060	167	55690	25.62	ug/L		92
116) 1,2,4-trimethylbenzene	15.034	105	260480	23.21	ug/L		97
117) sec-butylbenzene	15.202	105	358224	24.08	ug/L		99
118) 1,3-dichlorobenzene	15.391	146	135597	20.51	ug/L		95
119) p-isopropyltoluene	15.323	119	292215	24.17	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101486.D
Acq On : 14 Apr 2014 8:37 pm
Operator : DIXITAR
Sample : ic4568-20
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 16 15:34:44 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:47:01 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,4-dichlorobenzene	15.469	146	144508	20.09	ug/L	98
123) 1,2-dichlorobenzene	15.852	146	147451	22.28	ug/L	98
124) n-butylbenzene	15.737	92	142789	23.01	ug/L	99
126) 1,2-dibromo-3-chloropr...	16.591	75	17439	30.84	ug/L	87
127) 1,3,5-trichlorobenzene	16.764	180	141727	24.85	ug/L	98
128) 1,2,4-trichlorobenzene	17.341	180	148744	28.73	ug/L	96
129) hexachlorobutadiene	17.441	225	57677	23.83	ug/L	100
130) naphthalene	17.577	128	366875	32.62	ug/L	99
131) 1,2,3-trichlorobenzene	17.792	180	154551	33.13	ug/L	99
132) hexachloroethane	16.093	119	50364	22.48	ug/L	98
133) Benzyl chloride	15.590	91	134657	20.75	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

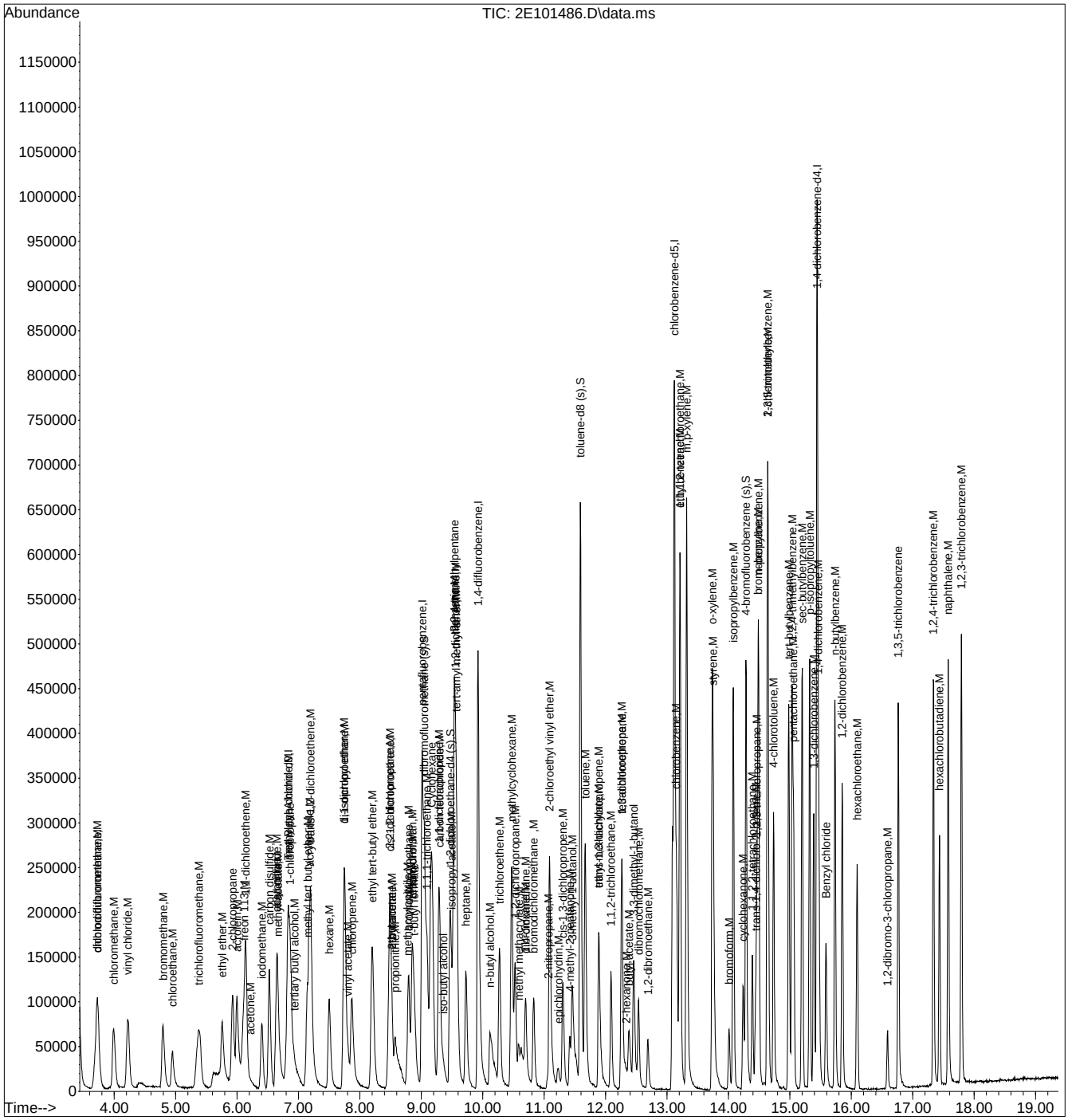
7.6.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101486.D
Acq On : 14 Apr 2014 8:37 pm
Operator : DIXITAR
Sample : ic4568-20
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 16 15:34:44 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:47:01 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101487.D
Acq On : 14 Apr 2014 9:06 pm
Operator : DIXITAR
Sample : icc4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 16 15:34:56 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:22:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.850	65	259572	500.00	ug/L	0.03
5) pentafluorobenzene	9.015	168	368194	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	559784	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	438424	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	246195	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.052	113	146581	54.28	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 108.56%			
48) 1,2-dichloroethane-d4 (s)	9.466	65	178298	62.01	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 124.02%#			
79) toluene-d8 (s)	11.590	98	533679	48.27	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 96.54%			
103) 4-bromofluorobenzene (s)	14.284	95	178205	46.97	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 93.94%			
Target Compounds						Qvalue
2) 1,4-dioxane	10.656	88	58597	1468.93	ug/L #	95
3) tertiary butyl alcohol	6.949	59	122592	255.54	ug/L	96
10) chlorodifluoromethane	3.725	51	307104	85.18	ug/L	96
11) dichlorodifluoromethane	3.714	85	378926	113.23	ug/L	94
12) chloromethane	3.992	50	330946	71.61	ug/L	98
13) vinyl chloride	4.228	62	383108	82.20	ug/L	99
14) bromomethane	4.789	94	185104	71.55	ug/L	96
15) chloroethane	4.947	64	136987	50.59	ug/L	98
16) trichlorofluoromethane	5.387	101	334673	80.56	ug/L	98
18) ethyl ether	5.754	74	93439	51.97	ug/L #	78
19) 2-chloropropane	5.927	43	345895	57.75	ug/L	97
20) acrolein	5.990	56	386477	603.08	ug/L	98
21) 1,1-dichloroethene	6.142	96	162887	56.44	ug/L	94
22) acetone	6.215	58	18478	78.09	ug/L	89
23) acetonitrile	6.635	40	193916	766.98	ug/L #	100
24) allyl chloride	6.645	76	90642	53.16	ug/L #	76
25) iodomethane	6.404	142	307778	62.64	ug/L	96
26) carbon disulfide	6.520	76	686231	66.96	ug/L	98
27) methylene chloride	6.824	84	198262	55.62	ug/L	96
28) methyl acetate	6.656	43	119473	60.83	ug/L	98
29) 1-chloropropane	6.860	41	81019	54.96	ug/L	73
30) methyl tert butyl ether	7.143	73	578850	66.79	ug/L	98
31) trans-1,2-dichloroethene	7.196	96	181131	56.10	ug/L	97
32) di-isopropyl ether	7.741	45	626975	59.48	ug/L	99
33) ethyl tert-butyl ether	8.197	59	600667	58.76	ug/L	98
34) 2-butanone	8.496	72	18229	66.45	ug/L	80
35) 1,1-dichloroethane	7.746	63	326795	57.81	ug/L	99
36) chloroprene	7.856	53	242162	53.89	ug/L	93
37) acrylonitrile	7.159	53	349216	342.08	ug/L	98
38) vinyl acetate	7.773	86	25317	50.92	ug/L	81
39) ethyl acetate	8.501	45	20402	57.02	ug/L	52
40) 2,2-dichloropropane	8.475	77	301512	66.19	ug/L	99
41) cis-1,2-dichloroethene	8.486	96	191587	57.31	ug/L	98
42) propionitrile	8.554	54	276202	786.84	ug/L	97
43) bromochloromethane	8.790	128	92413	59.74	ug/L	93
44) tetrahydrofuran	8.842	42	57276	66.21	ug/L	98
45) chloroform	8.847	85	190306	58.40	ug/L	99
46) t-butyl formate	8.879	59	160207	60.55	ug/L	93
49) freon 113	6.111	151	139308	66.26	ug/L	98
50) methacrylonitrile	8.743	41	82831	60.86	ug/L	93
51) 1,1,1-trichloroethane	9.094	97	294539	69.95	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101487.D
Acq On : 14 Apr 2014 9:06 pm
Operator : DIXITAR
Sample : icc4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 16 15:34:56 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:22:10 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Cyclohexane	9.162	84	325029	65.76	ug/L	#	90
53) iso-butyl alcohol	9.325	41	58604	852.08	ug/L		98
55) 2,2,4-trimethylpentane	9.529	57	581922	52.66	ug/L	#	95
56) tert-amyl methyl ether	9.571	87	133054	56.53	ug/L		96
59) epichlorohydrin	11.212	57	71404	308.97	ug/L		99
60) n-butyl alcohol	10.090	56	274571	3934.78	ug/L		98
61) carbon tetrachloride	9.293	117	250306	69.79	ug/L		96
62) 1,1-dichloropropene	9.277	75	227314	55.72	ug/L		97
63) hexane	7.495	57	191534	47.62	ug/L		98
64) benzene	9.534	78	714006	57.80	ug/L		99
65) heptane	9.723	57	109755	49.43	ug/L		92
66) isopropyl acetate	9.482	43	280951	62.83	ug/L		97
67) 1,2-dichloroethane	9.555	62	210187	63.57	ug/L		95
69) trichloroethene	10.263	95	162671	54.39	ug/L		95
71) 2-nitropropane	11.076	41	50199	56.23	ug/L	#	57
72) 2-chloroethyl vinyl ether	11.081	63	410117	229.18	ug/L		98
73) methyl methacrylate	10.562	100	33341	49.62	ug/L		98
74) 1,2-dichloropropane	10.520	63	183399	55.84	ug/L		97
75) methylcyclohexane	10.468	83	314496	57.88	ug/L		99
76) dibromomethane	10.693	93	92189	58.41	ug/L		98
77) bromodichloromethane	10.824	83	213249	57.47	ug/L		99
78) cis-1,3-dichloropropene	11.296	75	245313	49.73	ug/L		96
80) 4-methyl-2-pentanone	11.406	58	67062	64.38	ug/L	#	85
81) toluene	11.663	92	380958	50.96	ug/L		97
82) 3-methyl-1-butanol	11.448	70	102759	1602.31	ug/L		99
83) trans-1,3-dichloropropene	11.878	75	204117	49.34	ug/L		95
84) ethyl methacrylate	11.883	69	181960	53.66	ug/L		99
85) 1,1,2-trichloroethane	12.082	83	106165	52.57	ug/L		97
86) 2-hexanone	12.292	58	39937	53.35	ug/L		86
88) tetrachloroethene	12.255	166	159039	57.62	ug/L		98
89) 1,3-dichloropropane	12.266	76	208127	55.09	ug/L		96
90) butyl acetate	12.366	56	78271	59.38	ug/L		92
91) 3,3-dimethyl-1-butanol	12.455	57	215989	731.36	ug/L		99
92) dibromochloromethane	12.533	129	140592	57.45	ug/L		99
93) 1,2-dibromoethane	12.685	107	116666	54.94	ug/L		97
94) chlorobenzene	13.152	112	378540	52.48	ug/L		98
95) 1,1,1,2-tetrachloroethane	13.210	131	188322	72.24	ug/L		96
96) ethylbenzene	13.210	91	713606	58.41	ug/L		99
97) m,p-xylene	13.314	106	548519	109.33	ug/L		94
98) o-xylene	13.734	106	304399	60.80	ug/L		97
99) styrene	13.750	104	423717	52.05	ug/L		98
100) bromoform	14.007	173	93681	57.44	ug/L		97
102) isopropylbenzene	14.075	105	829554	63.12	ug/L		98
104) bromobenzene	14.473	156	167776	51.97	ug/L		96
105) cyclohexanone	14.237	55	161436	1690.92	ug/L		93
106) 1,1,2,2-tetrachloroethane	14.389	83	195865	61.39	ug/L		99
107) trans-1,4-dichloro-2-b...	14.437	53	41265	55.37	ug/L		98
108) 1,2,3-trichloropropane	14.457	110	48425	62.86	ug/L		97
109) n-propylbenzene	14.489	91	842784	57.45	ug/L		99
111) 2-chlorotoluene	14.630	126	173622	56.33	ug/L		97
112) 4-chlorotoluene	14.730	91	490764	51.56	ug/L		100
113) 1,3,5-trimethylbenzene	14.641	105	700229	62.55	ug/L		99
114) tert-butylbenzene	14.982	119	578148	62.46	ug/L		98
115) pentachloroethane	15.060	167	145797	69.34	ug/L		96
116) 1,2,4-trimethylbenzene	15.034	105	657546	60.57	ug/L		96
117) sec-butylbenzene	15.197	105	929069	64.57	ug/L		99
118) 1,3-dichlorobenzene	15.385	146	330888	51.75	ug/L		98
119) p-isopropyltoluene	15.323	119	748998	64.04	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101487.D
Acq On : 14 Apr 2014 9:06 pm
Operator : DIXITAR
Sample : icc4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 16 15:34:56 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:22:10 2014
Response via : Initial Calibration

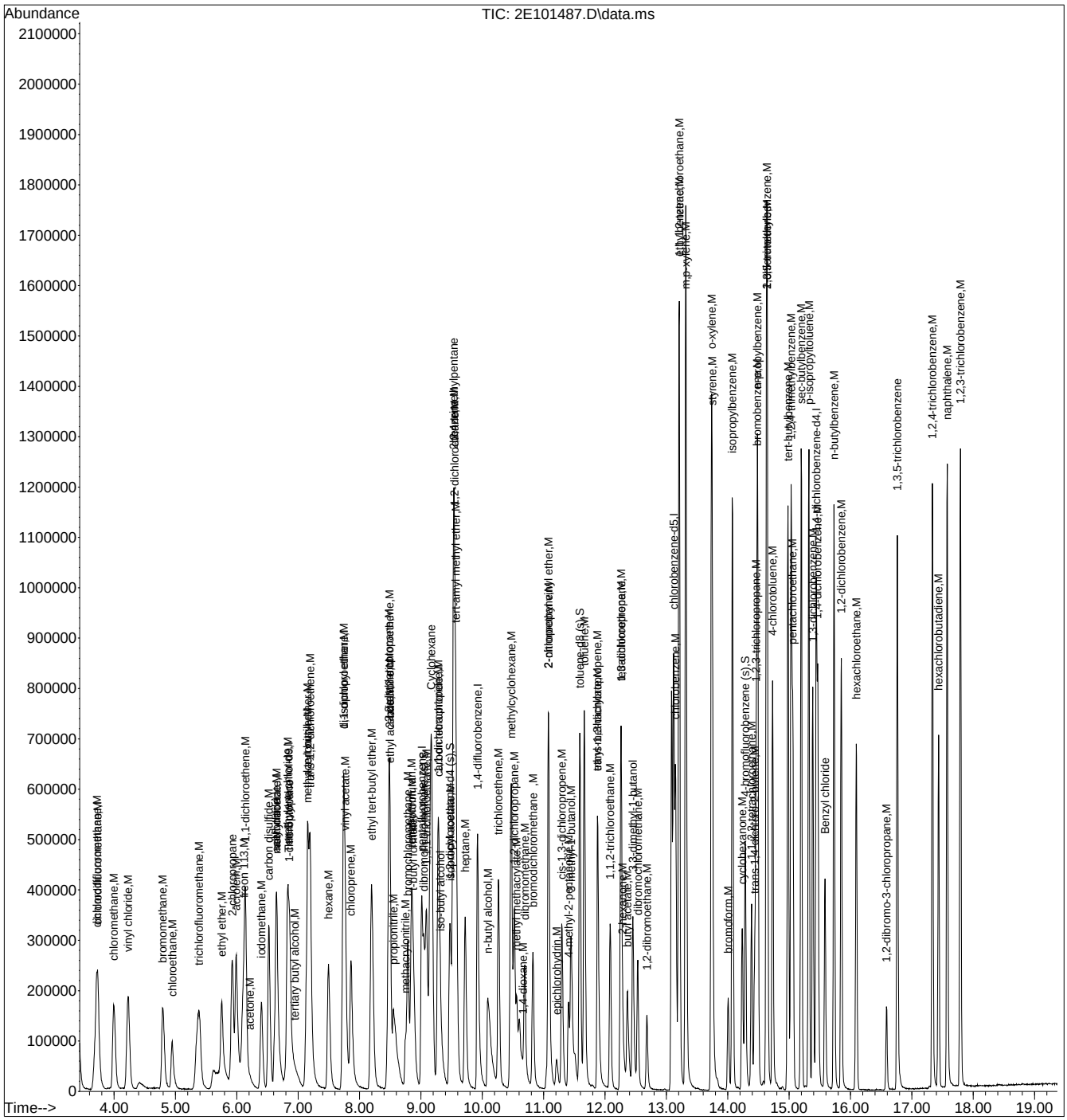
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,4-dichlorobenzene	15.469	146	341649	49.10	ug/L	98
123) 1,2-dichlorobenzene	15.852	146	357501	55.85	ug/L	99
124) n-butylbenzene	15.732	92	355976	59.31	ug/L	96
126) 1,2-dibromo-3-chloropr...	16.586	75	41319	75.55	ug/L	91
127) 1,3,5-trichlorobenzene	16.764	180	343714	62.30	ug/L	100
128) 1,2,4-trichlorobenzene	17.336	180	361060	72.09	ug/L	99
129) hexachlorobutadiene	17.436	225	143721	61.38	ug/L	96
130) naphthalene	17.577	128	918239	84.41	ug/L	98
131) 1,2,3-trichlorobenzene	17.792	180	381009	84.44	ug/L	100
132) hexachloroethane	16.093	119	137572	63.49	ug/L	99
133) Benzyl chloride	15.585	91	319186	50.86	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101487.D
Acq On : 14 Apr 2014 9:06 pm
Operator : DIXITAR
Sample : icc4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 16 15:34:56 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:22:10 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101488.D
Acq On : 14 Apr 2014 9:35 pm
Operator : DIXITAR
Sample : ic4568-100
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 16 15:35:07 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	6.855	65	278791	500.00	ug/L		0.03
5) pentafluorobenzene	9.010	168	396737	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	630447	50.00	ug/L		0.00
87) chlorobenzene-d5	13.115	117	496796	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	270424	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.047	113	326739	112.30	ug/L		-0.01
Spiked Amount 50.000	Range 79 - 120		Recovery = 224.60%#				
48) 1,2-dichloroethane-d4 (s)	9.461	65	370652	119.63	ug/L		-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 239.26%#				
79) toluene-d8 (s)	11.584	98	1255305	100.81	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 201.62%#				
103) 4-bromofluorobenzene (s)	14.279	95	419769	100.72	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 201.44%#				
Target Compounds							Qvalue
2) 1,4-dioxane	10.656	88	137196	3202.18	ug/L	#	97
3) tertiary butyl alcohol	6.950	59	277284	538.14	ug/L		96
10) chlorodifluoromethane	3.725	51	714649	183.96	ug/L		96
11) dichlorodifluoromethane	3.715	85	848588	235.33	ug/L		99
12) chloromethane	4.003	50	769929	154.61	ug/L		98
13) vinyl chloride	4.234	62	902938	179.79	ug/L		98
14) bromomethane	4.795	94	413290	148.27	ug/L		97
15) chloroethane	4.941	64	294145	100.81	ug/L		97
16) trichlorofluoromethane	5.371	101	755477	168.78	ug/L		99
18) ethyl ether	5.749	74	203121	104.85	ug/L	#	84
19) 2-chloropropane	5.922	43	749376	116.12	ug/L		95
21) 1,1-dichloroethene	6.142	96	364659	117.27	ug/L		100
22) acetone	6.200	58	39792	156.07	ug/L		85
23) acetonitrile	6.635	40	444022	1629.85	ug/L	#	100
24) allyl chloride	6.640	76	202537	110.24	ug/L	#	76
25) iodomethane	6.399	142	679638	128.37	ug/L		95
26) carbon disulfide	6.514	76	1486720	134.64	ug/L		98
27) methylene chloride	6.824	84	431601	112.38	ug/L		92
28) methyl acetate	6.645	43	275464	130.17	ug/L		97
29) 1-chloropropane	6.855	41	188201	118.47	ug/L		90
30) methyl tert butyl ether	7.144	73	1286913	137.80	ug/L		99
31) trans-1,2-dichloroethene	7.191	96	395932	113.80	ug/L		97
32) di-isopropyl ether	7.736	45	1433690	126.23	ug/L		94
33) ethyl tert-butyl ether	8.192	59	1391098	126.30	ug/L		99
34) 2-butanone	8.475	72	45610	154.29	ug/L		74
35) 1,1-dichloroethane	7.747	63	710766	116.69	ug/L		99
36) chloroprene	7.851	53	556353	114.90	ug/L		94
37) acrylonitrile	7.149	53	777666	706.96	ug/L		96
38) vinyl acetate	7.762	86	65941	123.08	ug/L		90
39) ethyl acetate	8.486	45	52040	134.97	ug/L		76
40) 2,2-dichloropropane	8.475	77	662558	134.98	ug/L		100
41) cis-1,2-dichloroethene	8.481	96	423744	117.63	ug/L		98
42) propionitrile	8.543	54	642040	1697.44	ug/L		87
43) bromochloromethane	8.785	128	200995	120.59	ug/L		94
44) tetrahydrofuran	8.837	42	136311	146.25	ug/L		95
45) chloroform	8.842	85	414397	118.02	ug/L		98
46) t-butyl formate	8.874	59	373337	130.96	ug/L		96
49) freon 113	6.111	151	331476	146.32	ug/L		98
50) methacrylonitrile	8.737	41	200964	137.04	ug/L		97
51) 1,1,1-trichloroethane	9.089	97	660952	145.68	ug/L		98
52) Cyclohexane	9.157	84	740293	139.00	ug/L	#	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101488.D
Acq On : 14 Apr 2014 9:35 pm
Operator : DIXITAR
Sample : ic4568-100
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 16 15:35:07 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
53) iso-butyl alcohol	9.319	41	134355	1812.93	ug/L		91
55) 2,2,4-trimethylpentane	9.534	57	1499171	125.90	ug/L	#	97
56) tert-amyl methyl ether	9.566	87	308668	121.70	ug/L		98
59) epichlorohydrin	11.202	57	182663	701.81	ug/L		96
60) n-butyl alcohol	10.074	56	692515	8811.83	ug/L		97
61) carbon tetrachloride	9.293	117	564580	139.77	ug/L		100
62) 1,1-dichloropropene	9.272	75	506603	110.25	ug/L		97
63) hexane	7.490	57	440353	97.22	ug/L		98
64) benzene	9.529	78	1600608	115.04	ug/L		98
65) heptane	9.718	57	261602	104.62	ug/L		98
66) isopropyl acetate	9.471	43	660101	131.07	ug/L		99
67) 1,2-dichloroethane	9.545	62	464401	124.72	ug/L		98
69) trichloroethene	10.258	95	374855	111.29	ug/L		99
71) 2-nitropropane	11.044	41	119862	119.22	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.076	63	990961	491.71	ug/L		98
73) methyl methacrylate	10.552	100	84406	111.53	ug/L		98
74) 1,2-dichloropropane	10.515	63	417751	112.94	ug/L		98
75) methylcyclohexane	10.468	83	746629	122.00	ug/L		99
76) dibromomethane	10.688	93	216622	121.86	ug/L		98
77) bromodichloromethane	10.824	83	488533	116.89	ug/L		97
78) cis-1,3-dichloropropene	11.291	75	573995	103.31	ug/L		96
80) 4-methyl-2-pentanone	11.396	58	158214	134.86	ug/L	#	84
81) toluene	11.658	92	907740	107.82	ug/L		99
82) 3-methyl-1-butanol	11.443	70	255691	3540.09	ug/L		97
83) trans-1,3-dichloropropene	11.873	75	480383	103.11	ug/L		93
84) ethyl methacrylate	11.878	69	439181	114.99	ug/L		99
85) 1,1,2-trichloroethane	12.083	83	250586	110.17	ug/L		98
86) 2-hexanone	12.277	58	101774	120.73	ug/L		94
88) tetrachloroethene	12.256	166	377488	120.70	ug/L		99
89) 1,3-dichloropropane	12.266	76	488272	114.05	ug/L		95
90) butyl acetate	12.355	56	199468	133.54	ug/L		99
91) 3,3-dimethyl-1-butanol	12.450	57	499700	1493.22	ug/L		100
92) dibromochloromethane	12.528	129	335449	120.97	ug/L		99
93) 1,2-dibromoethane	12.675	107	276985	115.10	ug/L		97
94) chlorobenzene	13.147	112	887880	108.62	ug/L		98
95) 1,1,1,2-tetrachloroethane	13.205	131	438316	148.38	ug/L		98
96) ethylbenzene	13.205	91	1680712	121.40	ug/L		99
97) m,p-xylene	13.315	106	1288573	226.65	ug/L		97
98) o-xylene	13.734	106	712436	125.58	ug/L		98
99) styrene	13.745	104	995694	107.94	ug/L		96
100) bromoform	14.007	173	224110	121.27	ug/L		95
102) isopropylbenzene	14.075	105	1979685	137.14	ug/L		98
104) bromobenzene	14.468	156	388645	109.60	ug/L		97
105) cyclohexanone	14.232	55	273602	2609.00	ug/L		93
106) 1,1,2,2-tetrachloroethane	14.384	83	450874	128.66	ug/L		99
107) trans-1,4-dichloro-2-b...	14.431	53	99350	121.37	ug/L		83
108) 1,2,3-trichloropropane	14.452	110	110733	130.87	ug/L		100
109) n-propylbenzene	14.484	91	1941376	120.49	ug/L		100
111) 2-chlorotoluene	14.631	126	409239	120.89	ug/L		99
112) 4-chlorotoluene	14.730	91	1102425	105.44	ug/L		98
113) 1,3,5-trimethylbenzene	14.641	105	1664416	135.35	ug/L		100
114) tert-butylbenzene	14.982	119	1405674	138.25	ug/L		99
115) pentachloroethane	15.061	167	358538	155.23	ug/L		94
116) 1,2,4-trimethylbenzene	15.034	105	1541714	129.29	ug/L		98
117) sec-butylbenzene	15.197	105	2216936	140.27	ug/L		99
118) 1,3-dichlorobenzene	15.386	146	756519	107.71	ug/L		98
119) p-isopropyltoluene	15.323	119	1794541	139.70	ug/L		99
121) 1,4-dichlorobenzene	15.470	146	768379	100.54	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101488.D
Acq On : 14 Apr 2014 9:35 pm
Operator : DIXITAR
Sample : ic4568-100
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 16 15:35:07 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration

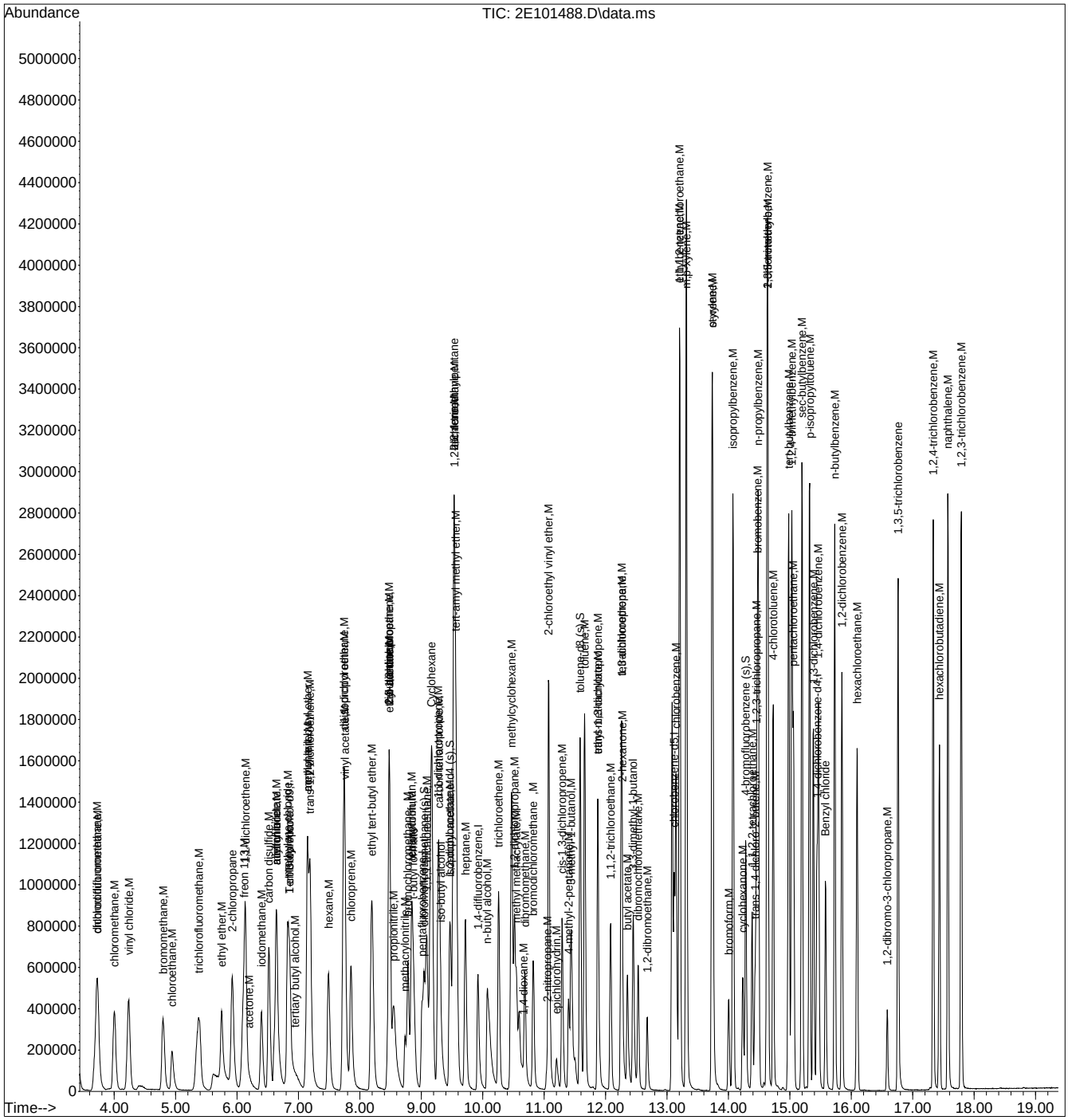
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
123) 1,2-dichlorobenzene	15.847	146	820182	116.66 ug/L	98
124) n-butylbenzene	15.732	92	822768	124.80 ug/L	98
126) 1,2-dibromo-3-chloropr...	16.586	75	92543	154.04 ug/L	95
127) 1,3,5-trichlorobenzene	16.765	180	790954	130.51 ug/L	99
128) 1,2,4-trichlorobenzene	17.336	180	815149	148.17 ug/L	98
129) hexachlorobutadiene	17.436	225	349067	135.73 ug/L	100
130) naphthalene	17.572	128	2065359	172.86 ug/L	99
131) 1,2,3-trichlorobenzene	17.792	180	862829	174.10 ug/L	97
132) hexachloroethane	16.093	119	337921	141.98 ug/L	99
133) Benzyl chloride	15.580	91	757023	109.81 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101488.D
Acq On : 14 Apr 2014 9:35 pm
Operator : DIXITAR
Sample : ic4568-100
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 16 15:35:07 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101489.D
Acq On : 14 Apr 2014 10:03 pm
Operator : DIXITAR
Sample : ic4568-200
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 16 15:35:19 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Tert Butyl Alcohol-d9	6.850	65	304643	500.00	ug/L		0.03
5) pentafluorobenzene	9.010	168	392256	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	650901	50.00	ug/L		0.00
87) chlorobenzene-d5	13.115	117	538671	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	274116	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.041	113	676342	235.11	ug/L		-0.02
Spiked Amount 50.000	Range 79 - 120		Recovery = 470.22%#				
48) 1,2-dichloroethane-d4 (s)	9.456	65	790354	258.00	ug/L		-0.02
Spiked Amount 50.000	Range 72 - 123		Recovery = 516.00%#				
79) toluene-d8 (s)	11.584	98	2695945	209.69	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 419.38%#				
103) 4-bromofluorobenzene (s)	14.279	95	885106	209.51	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 419.02%#				
Target Compounds							Qvalue
2) 1,4-dioxane	10.641	88	299570	6398.67	ug/L	#	97
3) tertiary butyl alcohol	6.944	59	585444	1039.79	ug/L		93
10) chlorodifluoromethane	3.730	51	1452885	378.27	ug/L		95
11) dichlorodifluoromethane	3.725	85	1647446	462.10	ug/L		97
12) chloromethane	4.013	50	1676962	340.59	ug/L		100
13) vinyl chloride	4.244	62	1892628	381.17	ug/L		99
14) bromomethane	4.800	94	796151	288.88	ug/L		97
15) chloroethane	4.941	64	507640	175.96	ug/L		96
16) trichlorofluoromethane	5.382	101	1526773	344.98	ug/L		100
18) ethyl ether	5.749	74	422667	220.67	ug/L		92
19) 2-chloropropane	5.917	43	1602754	251.20	ug/L		95
21) 1,1-dichloroethene	6.137	96	753074	244.94	ug/L		95
22) acetone	6.200	58	86795	344.32	ug/L		89
23) acetonitrile	6.630	40	942580	3499.40	ug/L	#	100
24) allyl chloride	6.640	76	427218	235.19	ug/L	#	76
25) iodomethane	6.399	142	1428929	272.98	ug/L		97
26) carbon disulfide	6.514	76	3115704	285.39	ug/L		98
27) methylene chloride	6.824	84	904926	238.31	ug/L		92
28) methyl acetate	6.635	43	595159	284.46	ug/L		98
29) 1-chloropropane	6.855	41	372508	237.17	ug/L		82
30) methyl tert butyl ether	7.149	73	2725142	295.13	ug/L		99
31) trans-1,2-dichloroethene	7.191	96	818133	237.83	ug/L		97
32) di-isopropyl ether	7.736	45	3020403	268.97	ug/L	#	55
33) ethyl tert-butyl ether	8.192	59	2972869	273.00	ug/L		98
34) 2-butanone	8.465	72	100208	342.86	ug/L		79
35) 1,1-dichloroethane	7.741	63	1479659	245.70	ug/L		100
36) chloroprene	7.851	53	1165567	243.47	ug/L		97
37) acrylonitrile	7.143	53	1692344	1556.06	ug/L		98
38) vinyl acetate	7.746	86	144820	273.40	ug/L		59
39) ethyl acetate	8.480	45	113203	296.96	ug/L		68
40) 2,2-dichloropropane	8.470	77	1343888	276.91	ug/L		99
41) cis-1,2-dichloroethene	8.475	96	887533	249.20	ug/L		94
42) propionitrile	8.538	54	1419346	3795.36	ug/L		60
43) bromochloromethane	8.779	128	418906	254.21	ug/L		85
44) tetrahydrofuran	8.832	42	301512	327.18	ug/L		95
45) chloroform	8.842	85	862715	248.50	ug/L		98
46) t-butyl formate	8.874	59	809553	287.21	ug/L		96
49) freon 113	6.111	151	662233	295.66	ug/L		99
50) methacrylonitrile	8.727	41	471640	325.29	ug/L		97
51) 1,1,1-trichloroethane	9.089	97	1360477	303.28	ug/L		98
52) Cyclohexane	9.157	84	1525505	289.71	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101489.D
Acq On : 14 Apr 2014 10:03 pm
Operator : DIXITAR
Sample : ic4568-200
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 16 15:35:19 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
53) iso-butyl alcohol	9.314	41	310465	4237.14	ug/L	96
55) 2,2,4-trimethylpentane	9.534	57	3361428	285.52	ug/L #	96
56) tert-amyl methyl ether	9.571	87	643708	256.71	ug/L	93
59) epichlorohydrin	11.196	57	426893	1588.63	ug/L	96
60) n-butyl alcohol	10.069	56	1579722	19469.35	ug/L	99
61) carbon tetrachloride	9.293	117	1163475	278.99	ug/L	99
62) 1,1-dichloropropene	9.267	75	1076817	226.98	ug/L	97
63) hexane	7.490	57	891519	190.64	ug/L	99
64) benzene	9.529	78	3390024	236.00	ug/L	98
65) heptane	9.713	57	551581	213.65	ug/L	94
66) isopropyl acetate	9.471	43	1492954	287.12	ug/L	99
67) 1,2-dichloroethane	9.545	62	998978	259.85	ug/L	100
69) trichloroethene	10.258	95	805217	231.54	ug/L	96
71) 2-nitropropane	11.044	41	270651	260.75	ug/L #	1
72) 2-chloroethyl vinyl ether	11.070	63	2180047	1047.73	ug/L	99
73) methyl methacrylate	10.546	100	191635	245.26	ug/L	93
74) 1,2-dichloropropane	10.520	63	906051	237.25	ug/L	99
75) methylcyclohexane	10.468	83	1575348	249.33	ug/L	99
76) dibromomethane	10.683	93	476458	259.60	ug/L	99
77) bromodichloromethane	10.819	83	1077405	249.69	ug/L	99
78) cis-1,3-dichloropropene	11.291	75	1300315	226.68	ug/L	97
80) 4-methyl-2-pentanone	11.396	58	356297	294.15	ug/L #	83
81) toluene	11.658	92	2005143	230.69	ug/L	99
82) 3-methyl-1-butanol	11.438	70	573461	7690.19	ug/L	92
83) trans-1,3-dichloropropene	11.867	75	1064815	221.38	ug/L	93
84) ethyl methacrylate	11.873	69	987053	250.33	ug/L	98
85) 1,1,2-trichloroethane	12.077	83	552184	235.15	ug/L	98
86) 2-hexanone	12.271	58	246488	283.20	ug/L	97
88) tetrachloroethene	12.255	166	817659	241.13	ug/L	98
89) 1,3-dichloropropane	12.261	76	1091978	235.24	ug/L	97
90) butyl acetate	12.350	56	450201	277.98	ug/L	96
91) 3,3-dimethyl-1-butanol	12.449	57	1076919	2967.91	ug/L	97
92) dibromochloromethane	12.528	129	751657	250.00	ug/L	99
93) 1,2-dibromoethane	12.675	107	606078	232.28	ug/L	99
94) chlorobenzene	13.147	112	1976074	222.96	ug/L	98
95) 1,1,1,2-tetrachloroethane	13.204	131	935485	292.07	ug/L	98
96) ethylbenzene	13.204	91	3670748	244.53	ug/L	99
97) m,p-xylene	13.315	106	2818613	457.24	ug/L	100
98) o-xylene	13.729	106	1557918	253.26	ug/L	100
99) styrene	13.744	104	2202202	220.17	ug/L	97
100) bromoform	14.001	173	488717	243.89	ug/L	98
104) bromobenzene	14.468	156	838004	233.14	ug/L	96
105) cyclohexanone	14.232	55	416018	3913.62	ug/L	95
106) 1,1,2,2-tetrachloroethane	14.384	83	995597	280.27	ug/L	99
107) trans-1,4-dichloro-2-b...	14.426	53	208700	251.53	ug/L #	74
108) 1,2,3-trichloropropane	14.452	110	237040	276.37	ug/L	94
109) n-propylbenzene	14.484	91	4213799	258.00	ug/L	99
111) 2-chlorotoluene	14.625	126	905256	263.80	ug/L	96
112) 4-chlorotoluene	14.725	91	2404295	226.86	ug/L	99
116) 1,2,4-trimethylbenzene	15.034	105	3400625	281.35	ug/L	99
117) sec-butylbenzene	15.197	105	4805903	299.98	ug/L	99
118) 1,3-dichlorobenzene	15.380	146	1619137	227.42	ug/L	97
119) p-isopropyltoluene	15.323	119	3905303	299.92	ug/L	98
121) 1,4-dichlorobenzene	15.464	146	1621708	209.35	ug/L	99
123) 1,2-dichlorobenzene	15.847	146	1754000	246.12	ug/L	99
124) n-butylbenzene	15.732	92	1818171	272.08	ug/L	98
126) 1,2-dibromo-3-chloropr...	16.586	75	205408	337.31	ug/L	96
127) 1,3,5-trichlorobenzene	16.764	180	1727599	281.22	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101489.D
Acq On : 14 Apr 2014 10:03 pm
Operator : DIXITAR
Sample : ic4568-200
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 16 15:35:19 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration

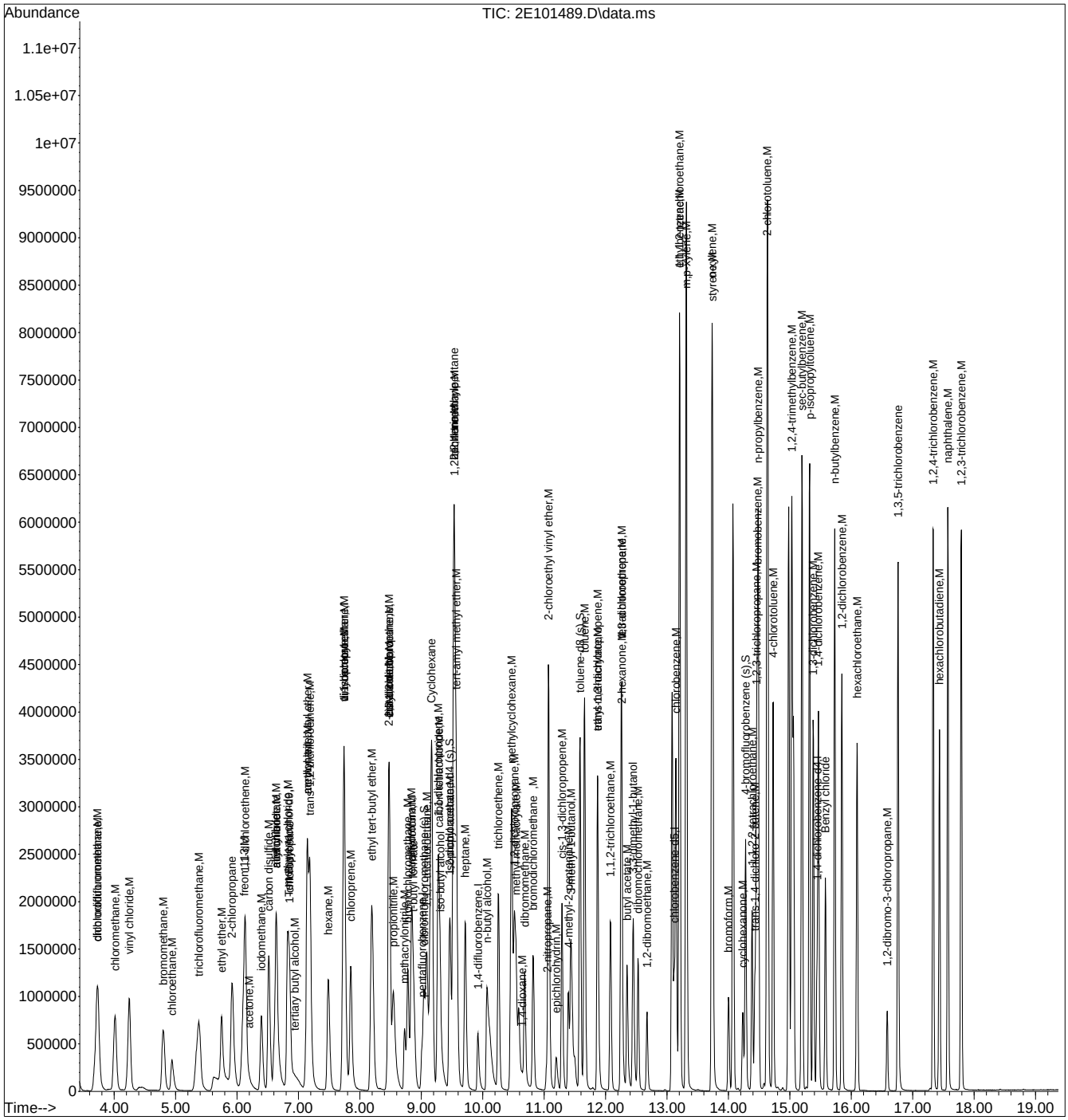
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
128) 1,2,4-trichlorobenzene	17.336	180	1746962	313.28	ug/L	98
129) hexachlorobutadiene	17.436	225	772856	296.46	ug/L	100
130) naphthalene	17.572	128	4313116	356.12	ug/L	99
131) 1,2,3-trichlorobenzene	17.792	180	1805841	359.46	ug/L	98
132) hexachloroethane	16.093	119	755307	313.08	ug/L	99
133) Benzyl chloride	15.580	91	1596464	228.46	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101489.D
Acq On : 14 Apr 2014 10:03 pm
Operator : DIXITAR
Sample : ic4568-200
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 16 15:35:19 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Tue Apr 15 08:40:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101495.D
Acq On : 15 Apr 2014 12:02 pm
Operator : DIXITAR
Sample : icv4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 15:38:49 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.845	65	292545	500.00	ug/L	0.00
5) pentafluorobenzene	9.015	168	380977	50.00	ug/L	0.00
57) 1,4-difluorobenzene	9.922	114	576027	50.00	ug/L	0.00
87) chlorobenzene-d5	13.121	117	439815	50.00	ug/L	0.00
101) 1,4-dichlorobenzene-d4	15.443	152	245795	50.00	ug/L	0.00
System Monitoring Compounds						
47) dibromofluoromethane (s)	9.052	113	142804	44.20	ug/L	0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 88.40%			
48) 1,2-dichloroethane-d4 (s)	9.466	65	175142	46.31	ug/L	0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 92.62%			
79) toluene-d8 (s)	11.590	98	503462	44.07	ug/L	0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 88.14%			
103) 4-bromofluorobenzene (s)	14.285	95	169732	43.35	ug/L	0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 86.70%			
Target Compounds						Qvalue
2) 1,4-dioxane	10.656	88	65746	1121.45	ug/L #	97
3) tertiary butyl alcohol	6.965	59	135715	236.13	ug/L	94
10) chlorodifluoromethane	3.730	51	318204	49.83	ug/L	99
11) dichlorodifluoromethane	3.725	85	313317	40.88	ug/L	98
12) chloromethane	4.003	50	322053	47.36	ug/L	98
13) vinyl chloride	4.229	62	379333	48.61	ug/L	97
14) bromomethane	4.795	94	179318	46.58	ug/L	94
15) chloroethane	4.947	64	167890	59.19	ug/L	97
16) trichlorofluoromethane	5.392	101	331740	48.83	ug/L	100
18) ethyl ether	5.760	74	103417	53.29	ug/L	91
19) 2-chloropropane	5.933	43	347122	45.26	ug/L	99
20) acrolein	5.990	56	425478	503.16	ug/L	94
21) 1,1-dichloroethene	6.142	96	169535	48.09	ug/L	95
22) acetone	6.221	58	18313	47.02	ug/L #	79
23) acetonitrile	6.640	40	227725	512.25	ug/L	98
24) allyl chloride	6.646	76	107596	57.90	ug/L	95
25) iodomethane	6.404	142	318199	50.54	ug/L	99
26) carbon disulfide	6.525	76	699777	49.42	ug/L	99
27) methylene chloride	6.829	84	206183	49.02	ug/L	93
28) methyl acetate	6.651	43	131375	51.18	ug/L	100
29) 1-chloropropane	6.861	41	87892	48.10	ug/L	88
30) methyl tert butyl ether	7.154	73	1193199	99.43	ug/L	98
31) trans-1,2-dichloroethene	7.196	96	178147	48.13	ug/L	98
32) di-isopropyl ether	7.741	45	689908	52.35	ug/L	99
33) ethyl tert-butyl ether	8.197	59	638872	51.40	ug/L	99
34) 2-butanone	8.491	72	20628	48.24	ug/L	93
35) 1,1-dichloroethane	7.752	63	338297	51.05	ug/L	99
36) chloroprene	7.862	53	244825	48.92	ug/L	96
37) acrylonitrile	7.159	53	379750	271.33	ug/L	100
38) vinyl acetate	7.773	86	32182	51.71	ug/L	61
39) ethyl acetate	8.496	45	24542	54.56	ug/L	75
40) 2,2-dichloropropane	8.481	77	316508	50.94	ug/L	97
41) cis-1,2-dichloroethene	8.486	96	192250	48.56	ug/L	90
42) propionitrile	8.559	54	290569	462.02	ug/L	99
43) bromochloromethane	8.790	128	91414	50.08	ug/L	92
44) tetrahydrofuran	8.848	42	61249	48.81	ug/L	97
45) chloroform	8.848	85	187456	49.23	ug/L	100
46) t-butyl formate	8.879	59	183511	54.98	ug/L	99
49) freon 113	6.116	151	153240	50.19	ug/L	98
50) methacrylonitrile	8.753	41	84854	44.62	ug/L	97
51) 1,1,1-trichloroethane	9.094	97	299390	51.11	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101495.D
Acq On : 15 Apr 2014 12:02 pm
Operator : DIXITAR
Sample : icv4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 15:38:49 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Cyclohexane	9.157	84	328571	48.09	ug/L		97
53) iso-butyl alcohol	9.330	41	65998	533.63	ug/L		82
55) 2,2,4-trimethylpentane	9.534	57	725599	48.93	ug/L	#	98
56) tert-amyl methyl ether	9.576	87	137108	46.71	ug/L		93
59) epichlorohydrin	11.212	57	76437	231.19	ug/L		95
60) n-butyl alcohol	10.085	56	308136	2531.93	ug/L		95
61) carbon tetrachloride	9.299	117	254017	47.00	ug/L		99
62) 1,1-dichloropropene	9.278	75	215323	46.48	ug/L		97
63) hexane	7.495	57	235852	57.60	ug/L		98
64) benzene	9.534	78	709414	50.54	ug/L		98
65) heptane	9.718	57	121415	49.50	ug/L		96
66) isopropyl acetate	9.482	43	343779	58.78	ug/L		97
67) 1,2-dichloroethane	9.555	62	208460	49.15	ug/L		95
69) trichloroethene	10.269	95	158577	49.38	ug/L		99
71) 2-nitropropane	11.055	41	51698	50.30	ug/L	#	1
72) 2-chloroethyl vinyl ether	11.081	63	422243	248.65	ug/L		99
73) methyl methacrylate	10.562	100	34788	46.12	ug/L		95
74) 1,2-dichloropropane	10.525	63	186898	47.82	ug/L		95
75) methylcyclohexane	10.473	83	357185	53.35	ug/L		97
76) dibromomethane	10.688	93	96124	50.55	ug/L		93
77) bromodichloromethane	10.824	83	205221	49.00	ug/L		98
78) cis-1,3-dichloropropene	11.301	75	221649	45.23	ug/L		99
80) 4-methyl-2-pentanone	11.406	58	70516	50.33	ug/L		99
81) toluene	11.663	92	364551	47.25	ug/L		98
82) 3-methyl-1-butanol	11.448	70	110784	960.21	ug/L		100
83) trans-1,3-dichloropropene	11.878	75	198489	48.64	ug/L		95
84) ethyl methacrylate	11.883	69	172954	42.44	ug/L		95
85) 1,1,2-trichloroethane	12.088	83	103876	47.74	ug/L		97
86) 2-hexanone	12.292	58	40080	44.12	ug/L		85
88) tetrachloroethene	12.256	166	151176	49.99	ug/L		99
89) 1,3-dichloropropane	12.271	76	202723	48.62	ug/L		99
90) butyl acetate	12.366	56	82966	48.43	ug/L		94
91) 3,3-dimethyl-1-butanol	12.455	57	223694	501.94	ug/L		99
92) dibromochloromethane	12.534	129	137132	49.67	ug/L		98
93) 1,2-dibromoethane	12.686	107	112976	50.21	ug/L		98
94) chlorobenzene	13.152	112	364414	48.27	ug/L		98
95) 1,1,1,2-tetrachloroethane	13.210	131	177708	49.86	ug/L		96
96) ethylbenzene	13.210	91	673724	49.43	ug/L		100
97) m,p-xylene	13.320	106	529164	101.73	ug/L		99
98) o-xylene	13.734	106	285967	50.44	ug/L		99
99) styrene	13.750	104	402958	50.86	ug/L		97
100) bromoform	14.007	173	92072	49.16	ug/L		99
102) isopropylbenzene	14.080	105	796359	52.59	ug/L		100
104) bromobenzene	14.473	156	158122	48.44	ug/L		96
105) cyclohexanone	14.237	55	202258	730.18	ug/L		97
106) 1,1,2,2-tetrachloroethane	14.390	83	184276	46.54	ug/L		98
107) trans-1,4-dichloro-2-b...	14.437	53	46321	56.53	ug/L		94
108) 1,2,3-trichloropropane	14.458	110	45572	44.03	ug/L		93
109) n-propylbenzene	14.489	91	852786	53.95	ug/L		100
111) 2-chlorotoluene	14.631	126	165058	49.16	ug/L		97
112) 4-chlorotoluene	14.730	91	464327	47.40	ug/L		98
113) 1,3,5-trimethylbenzene	14.646	105	658883	51.90	ug/L		99
114) tert-butylbenzene	14.982	119	555368	46.10	ug/L		100
115) pentachloroethane	15.066	167	140191	53.99	ug/L		97
116) 1,2,4-trimethylbenzene	15.034	105	643003	51.22	ug/L		99
117) sec-butylbenzene	15.202	105	877222	43.14	ug/L		99
118) 1,3-dichlorobenzene	15.386	146	313139	46.26	ug/L		98
119) p-isopropyltoluene	15.323	119	726200	44.03	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101495.D
Acq On : 15 Apr 2014 12:02 pm
Operator : DIXITAR
Sample : icv4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 15:38:49 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

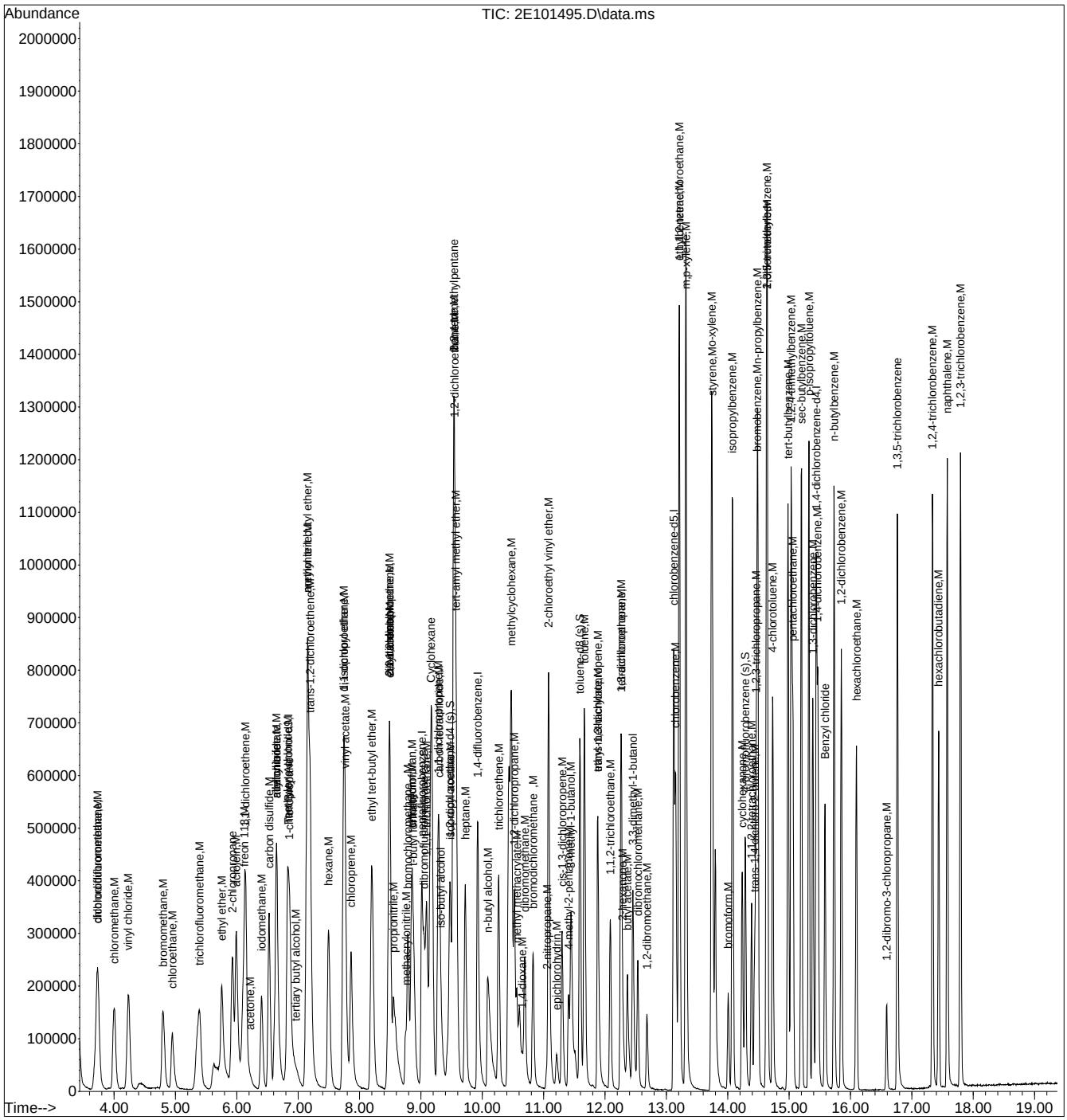
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) 1,4-dichlorobenzene	15.470	146	326481	44.68	ug/L	98
123) 1,2-dichlorobenzene	15.852	146	342139	47.33	ug/L	97
124) n-butylbenzene	15.732	92	356787	52.30	ug/L	97
126) 1,2-dibromo-3-chloropr...	16.592	75	41368	46.86	ug/L	98
127) 1,3,5-trichlorobenzene	16.765	180	338048	48.50	ug/L	99
128) 1,2,4-trichlorobenzene	17.336	180	340977	45.77	ug/L	99
129) hexachlorobutadiene	17.441	225	141029	49.36	ug/L	98
130) naphthalene	17.577	128	878067	47.07	ug/L	99
131) 1,2,3-trichlorobenzene	17.792	180	363257	46.20	ug/L	99
132) hexachloroethane	16.099	119	132904	43.00	ug/L	99
133) Benzyl chloride	15.585	91	404529	58.12	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2E101495.D
Acq On : 15 Apr 2014 12:02 pm
Operator : DIXITAR
Sample : icv4568-50
Misc : MS65848,V2E4568,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 16 15:38:49 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 05/19/14 02:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102461.D
Acq On : 16 May 2014 8:53 am
Operator : DIXITAR
Sample : cc4568-20
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 15:07:03 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Tert Butyl Alcohol-d9	6.840	65	259486	500.00	ug/L		-0.01
5) pentafluorobenzene	9.015	168	369881	50.00	ug/L		0.00
57) 1,4-difluorobenzene	9.922	114	524432	50.00	ug/L		0.00
87) chlorobenzene-d5	13.121	117	411306	50.00	ug/L		0.00
101) 1,4-dichlorobenzene-d4	15.443	152	245174	50.00	ug/L		0.00
System Monitoring Compounds							
47) dibromofluoromethane (s)	9.052	113	153596	48.97	ug/L		0.00
Spiked Amount 50.000	Range 79 - 120		Recovery = 97.94%				
48) 1,2-dichloroethane-d4 (s)	9.466	65	163714	44.59	ug/L		0.00
Spiked Amount 50.000	Range 72 - 123		Recovery = 89.18%				
79) toluene-d8 (s)	11.590	98	544405	52.34	ug/L		0.00
Spiked Amount 50.000	Range 78 - 119		Recovery = 104.68%				
103) 4-bromofluorobenzene (s)	14.285	95	179943	46.07	ug/L		0.00
Spiked Amount 50.000	Range 74 - 119		Recovery = 92.14%				
Target Compounds							Qvalue
2) 1,4-dioxane	10.667	88	24920	479.22	ug/L	#	93
3) tertiary butyl alcohol	6.955	59	50273	95.29	ug/L		95
10) chlorodifluoromethane	3.741	51	105568	17.03	ug/L		95
11) dichlorodifluoromethane	3.736	85	166515	22.38	ug/L		95
12) chloromethane	3.998	50	133698	20.25	ug/L		99
13) vinyl chloride	4.234	62	158814	20.96	ug/L		97
14) bromomethane	4.805	94	77860	20.83	ug/L		96
15) chloroethane	4.952	64	58010	21.06	ug/L		99
16) trichlorofluoromethane	5.392	101	141209	21.41	ug/L		97
18) ethyl ether	5.759	74	36456	19.35	ug/L	#	75
19) 2-chloropropane	5.933	43	121391	16.30	ug/L		98
20) acrolein	5.995	56	141639	172.52	ug/L		96
21) 1,1-dichloroethene	6.142	96	67928	19.85	ug/L		98
22) acetone	6.242	58	9496	25.11	ug/L		99
23) acetonitrile	6.646	40	75392	174.68	ug/L		94
24) allyl chloride	6.656	76	32063	17.77	ug/L		90
25) iodomethane	6.404	142	126724	20.73	ug/L		100
26) carbon disulfide	6.525	76	272975	19.86	ug/L		98
27) methylene chloride	6.834	84	77754	19.04	ug/L		99
28) methyl acetate	6.667	43	44071	17.68	ug/L		99
29) 1-chloropropane	6.861	41	29892	16.85	ug/L		89
30) methyl tert butyl ether	7.149	73	217782	18.69	ug/L		99
31) trans-1,2-dichloroethene	7.201	96	70024	19.49	ug/L		95
32) di-isopropyl ether	7.747	45	227453	17.78	ug/L		99
33) ethyl tert-butyl ether	8.203	59	218680	18.12	ug/L		99
34) 2-butanone	8.528	72	7624	22.37	ug/L		63
35) 1,1-dichloroethane	7.752	63	121829	18.94	ug/L		95
36) chloroprene	7.867	53	85415	17.58	ug/L		95
37) acrylonitrile	7.175	53	130856	96.30	ug/L		98
38) vinyl acetate	7.804	86	9304	20.05	ug/L		33
39) ethyl acetate	8.523	45	7433	17.02	ug/L	#	22
40) 2,2-dichloropropane	8.481	77	118858	19.71	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102461.D
Acq On : 16 May 2014 8:53 am
Operator : DIXITAR
Sample : cc4568-20
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 15:07:03 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	cis-1,2-dichloroethene	8.491	96	73129	19.03	ug/L		99
42)	propionitrile	8.570	54	93456	179.79	ug/L		95
43)	bromochloromethane	8.790	128	35071	19.79	ug/L		95
44)	tetrahydrofuran	8.858	42	21181	17.38	ug/L		98
45)	chloroform	8.853	85	69610	18.83	ug/L		90
46)	t-butyl formate	8.884	59	55684	17.18	ug/L	#	89
49)	freon 113	6.127	151	60441	20.39	ug/L		92
50)	methacrylonitrile	8.774	41	25955	19.60	ug/L		98
51)	1,1,1-trichloroethane	9.094	97	112241	19.74	ug/L		96
52)	Cyclohexane	9.162	84	133895	20.18	ug/L		89
53)	iso-butyl alcohol	9.346	41	19384	161.43	ug/L		89
55)	2,2,4-trimethylpentane	9.534	57	249440	20.00	ug/L	#	97
56)	tert-amyl methyl ether	9.576	87	52818	18.53	ug/L		91
59)	epichlorohydrin	11.228	57	25084	103.05	ug/L		96
60)	n-butyl alcohol	10.116	56	106228	958.74	ug/L		94
61)	carbon tetrachloride	9.299	117	98573	20.03	ug/L		98
62)	1,1-dichloropropene	9.283	75	83019	19.68	ug/L		98
63)	hexane	7.495	57	78583	21.08	ug/L		99
64)	benzene	9.540	78	255644	20.00	ug/L		100
65)	heptane	9.728	57	44617	19.98	ug/L		95
66)	isopropyl acetate	9.503	43	121719	22.86	ug/L		97
67)	1,2-dichloroethane	9.561	62	73727	19.09	ug/L		95
69)	trichloroethene	10.274	95	58041	19.85	ug/L		91
71)	2-nitropropane	11.081	41	15607	16.68	ug/L	#	57
72)	2-chloroethyl vinyl ether	11.086	63	145898	94.37	ug/L		100
73)	methyl methacrylate	10.588	100	11490	20.29	ug/L	#	74
74)	1,2-dichloropropane	10.525	63	63493	17.85	ug/L		96
75)	methylcyclohexane	10.478	83	128697	21.11	ug/L		96
76)	dibromomethane	10.698	93	34003	19.64	ug/L		93
77)	bromodichloromethane	10.829	83	71059	18.64	ug/L		96
78)	cis-1,3-dichloropropene	11.301	75	85164	19.09	ug/L		95
80)	4-methyl-2-pentanone	11.417	58	22964	18.00	ug/L	#	48
81)	toluene	11.668	92	136429	19.42	ug/L		99
82)	3-methyl-1-butanol	11.453	70	40811	388.52	ug/L		93
83)	trans-1,3-dichloropropene	11.889	75	73775	19.86	ug/L		90
84)	ethyl methacrylate	11.894	69	60541	17.08	ug/L		98
85)	1,1,2-trichloroethane	12.088	83	38220	19.30	ug/L		92
86)	2-hexanone	12.313	58	17148m	20.73	ug/L		
88)	tetrachloroethene	12.261	166	59724	21.12	ug/L		93
89)	1,3-dichloropropane	12.271	76	74700	19.16	ug/L		97
90)	butyl acetate	12.381	56	26895	18.63	ug/L	#	77
91)	3,3-dimethyl-1-butanol	12.460	57	84115	196.55	ug/L		95
92)	dibromochloromethane	12.539	129	51416	19.91	ug/L		98
93)	1,2-dibromoethane	12.691	107	42872	20.38	ug/L		97
94)	chlorobenzene	13.152	112	141128	19.99	ug/L		95
95)	1,1,1,2-tetrachloroethane	13.210	131	65868	19.76	ug/L		91
96)	ethylbenzene	13.210	91	251294	19.72	ug/L		98
97)	m,p-xylene	13.320	106	198182	40.74	ug/L		98
98)	o-xylene	13.739	106	105700	19.93	ug/L		100
99)	styrene	13.760	104	146881	19.82	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102461.D
Acq On : 16 May 2014 8:53 am
Operator : DIXITAR
Sample : cc4568-20
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 15:07:03 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration

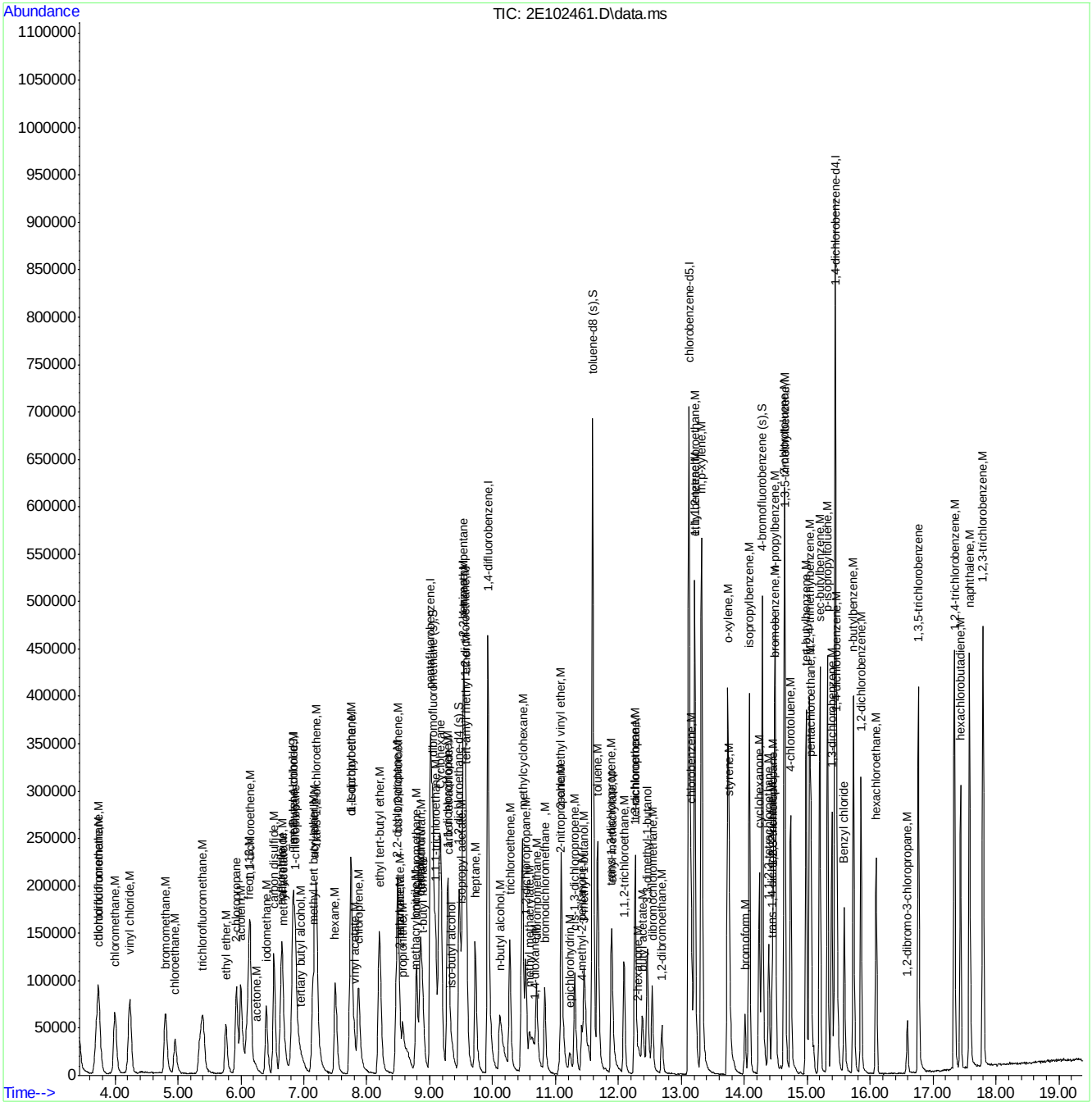
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
100) bromoform	14.012	173	34323	19.60	ug/L		96
102) isopropylbenzene	14.080	105	289636	19.17	ug/L		97
104) bromobenzene	14.479	156	62455	19.18	ug/L		96
105) cyclohexanone	14.237	55	106489	354.97	ug/L		97
106) 1,1,2,2-tetrachloroethane	14.390	83	69585	17.62	ug/L		99
107) trans-1,4-dichloro-2-b...	14.442	53	15277	18.69	ug/L	#	78
108) 1,2,3-trichloropropane	14.458	110	17880	17.32	ug/L		92
109) n-propylbenzene	14.489	91	300322	19.05	ug/L		99
111) 2-chlorotoluene	14.636	126	62932	18.79	ug/L		97
112) 4-chlorotoluene	14.736	91	179488	18.37	ug/L		98
113) 1,3,5-trimethylbenzene	14.646	105	243295	19.21	ug/L		98
114) tert-butylbenzene	14.982	119	198069	16.90	ug/L		98
115) pentachloroethane	15.061	167	50995	19.69	ug/L		97
116) 1,2,4-trimethylbenzene	15.034	105	231198	18.46	ug/L		96
117) sec-butylbenzene	15.202	105	326289	16.35	ug/L		98
118) 1,3-dichlorobenzene	15.391	146	125945	18.65	ug/L		99
119) p-isopropyltoluene	15.323	119	270305	16.85	ug/L		98
121) 1,4-dichlorobenzene	15.470	146	132427	18.17	ug/L		97
123) 1,2-dichlorobenzene	15.852	146	136257	18.90	ug/L		97
124) n-butylbenzene	15.732	92	132588	19.48	ug/L		99
126) 1,2-dibromo-3-chloropr...	16.592	75	14904	16.93	ug/L		95
127) 1,3,5-trichlorobenzene	16.765	180	133948	19.27	ug/L		100
128) 1,2,4-trichlorobenzene	17.341	180	140858	18.95	ug/L		100
129) hexachlorobutadiene	17.436	225	61791	21.68	ug/L		98
130) naphthalene	17.577	128	348431	18.72	ug/L		98
131) 1,2,3-trichlorobenzene	17.792	180	151537	19.32	ug/L		97
132) hexachloroethane	16.099	119	46138	17.35	ug/L		98
133) Benzyl chloride	15.585	91	143450	20.42	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\reprint\new\V2E4603\
Data File : 2E102461.D
Acq On : 16 May 2014 8:53 am
Operator : DIXITAR
Sample : cc4568-20
Misc : MS67471,V2E4603,W,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 15:07:03 2014
Quant Method : C:\msdchem\1\METHODS\M2E4568.M
Quant Title : SW-846 Method 8260B, ZB624 60Mx0.25MMx1.4UM
QLast Update : Wed Apr 16 15:36:21 2014
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V2E4603-CC4568 **Method:** SW846 8260B
Lab FileID: 2E102461.D **Analyst approved:** 05/16/14 15:17 Dong, Mei
Injection Time: 05/16/14 08:53 **Supervisor approved:** 05/19/14 02:02 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Hexanone	591-78-6		12.31	Poor instrument integration

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V224568

Print Analyst Name: Doug m Ea

Analyst Signature:

Date: 4/14/14

Columns: 20624

Method V2462B

Initial Cal. Method V224568

Standard Data

Lot #	Description	Conc.
V14-1522-	78 SMV	100 ppm
-	71 A	100
-	72 B	100
-	65 Ethanol	100
-	41 ACV	100

Standard Data

Lot #	Description	Conc.
V14-1422	-81 EK A	100 ppm
	-55 B	100
	-79 C	100
	-76 Acetone	100
	-16 EK Acr	100
	-38 EK Ethanol	100
	-52 mixing	250 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 4/18/14

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	2E101479	BFB													
	101480	IC4568-0.2	8260				5							2 ppm	
	101481	IC4568-0.5					5							0.5 µl/100 ml	
	101482	IC4568-1					5							1 µl/100 ml	
	101483	IC4568-2					5							2 µl/100 ml	
	101484 OR 483	IC4568-5					5							5 µl/100 ml	
	101485 OR 484	IC4568-10					5							10 µl/10 ml	
	101486 OR 485	IC4568-20					5							25 µl/5 ml 5 ml 10 µl/10 ml	
	101487 OR 486	IC4568-50					5							25 µl/5 ml	
	101488 OR 487	IC4568-100					5							50 µl/5 ml	
	101489 OR 488	IC4568-200					5							100 µl/5 ml	
	101490 OR 489	IB													
	101491 OR 490	IB													
	101492 OR 491	IC4568-50	8260				5						KH	25 µl/5 ml 2ppm (ADC	
	101493 OR 492	IB													
								4							

TX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
ample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result .

ll strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error;
= computer miscalculation; 4 = analyst's correction error
orm: OR001.0

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V22468

Date: 4/18/14

Print Analyst Name: DONG M2

Analyst Signature:

Columns: Z bb24

Method 8260B

Initial Cal. Method M2243bx

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	P 105	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 4/18/14

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	22404194	BT-13	8260				5						ok		
	22404195	2V4568 -50							4/18/14					Surr. 27/ppm 25ml/5ml Ex (DBC Dm) Hexan	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V2E4603

Print Analyst Name: DIANA

Analyst Signature:

Date: 05/16/14

Columns: ZB624

Method V8260

Initial Cal. Method M2E4568

Standard Data

Lot #	Description	Conc.
V0114-1822	- 118 A	100 ppm
	- 127 BFB 25 ml	
	- 04 C	↓
	5ml 04884 Acr	1000
	- 124 Int Std	250/250 ↓

Standard Data

Lot #	Description	Conc.
V0114-1822	-124 Ext A	100 ppm
	-128 B	
	-141 C	↓
	-05 ↓ Acr	1000
2 12 13	-143 8M Hexane 05/30/16	100 ↓

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 5/27/14

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	2E102460	BFB				1							ok	8:11 AM AVE 124,174 : 124,248	
	102461	CC4568-20				2							ok	10ML/50 A,B,C,Acr	
	102462	IB				3							ok		
	102463	MB				4							ok		
	102464	BS				5							ok	25ML/50 Ext.(A,B,C,Acr) Hexane	
	102465	IB				6							ok		
	102466	JB66541-11	MS67309 TCL+10,	GW	3	7	5		1X				ok	VMS+MTBE VMS+TBA	✓
	102467	JB66584-2	MS67306 SL VMS+TBA	WB	2	8	↓		1X				ok		✓
	102468	JB66584-1	↓	GW	7	9	↓		1X				ok		✓
R	102469	JB66864-3	MS67529 TCL11+, VMS+TBA		2	10	2.5/50		20X				ok DL	5x too diluted.	✓
	102470	JB66864-5	↓		1	11	5/50		10X				ok DL	2X too diluted.	✓
	102471	JB66864-3			2	12	10/50		5X				ok		✓
	102472	JB66864-3MS			2	13	↓		↓				ok		✓
	102473	JB66864-3MSD	↓		2	14	↓		↓				ok		
	102474	IB				15							ok		
R	102475	JB66541-12	MS67309 TCL+10,	GW	4	16	5		1X				ok	VMS+MTBE VMS+TBA	✓
R	102476	JB66541-14	↓	↓	3	17	↓		1X				ok	↓	✓

ITX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; = computer miscalculation; 4 = analyst's correction error

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ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: V2E4603

Print Analyst Name: DMH

Analyst Signature: [signature]

Date: 05/16/2014

Columns: ZB624

Method V8260

Initial Cal. Method M2E4568

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 259	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/24/14

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
R	2E102477	JB66541-15	MS6730g TCL+10	GW	3	18	5 OR 5 LX5m		1X					VMS+MTBE VMS+TBA	✓
	102478	JB66864-6	MS6759g TCL11+, VMS+TBA	GW	2	14	5		1X						✓
	102479	JB66864-7	↓	↓	2	20	5		1X					7:00 PM	✓
	102480	BFB				21								7:24 PM	
	102481	CC4568-5 50				22								2542150 A,B,C,ACY	
	102482	IB				23					✓				
	102483	MB2				24					✓				
	102484	JB66911-1	MS67534 PAL6x, VMS+MTBE	GW	5	25	5		1X		✓				✓
	102485	JB66911-2	↓	↓	5	26	↓		1X		✓				✓
	102486	JB66911-3			5	27			1X		✓				✓
	102487	JB66911-4			5	28			1X		✓				✓
	102488	JB66911-5			8	29			1X		✓				✓
	102489	JB66911-6			5	30			1X		✓				✓
	102490	JB66911-7			7	31			1X		✓				✓
	102491	JB66911-8			5	32			1X		✓				✓
	102492	JB66911-9			5	33			1X		✓				✓
	102493	JB66911-10	↓	↓	5	34	↓		1X		✓			1:43PM	✓

*TX = Matrix Designate W for water, S for soil, O for oil. ~~L+ = Library Search.~~ IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) ~~or Weight~~ (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.

05/16/14

All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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New Jersey
ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:49	MA34046-STD1	1		STDA
16:55	MA34046-STD2	1		STDB
17:01	ZZZZZZ	1		
17:07	ZZZZZZ	1		
17:15	MA34046-ICV1	1		
17:24	MA34046-ICB1	1		
17:31	MA34046-ICCV1	1		
17:43	MA34046-ICCV2	1		
17:55	MA34046-CCB1	1		
18:01	MA34046-CRI1	1		
18:07	MA34046-CRID1	1		
18:13	MA34046-CRIA1	1		
18:19	MA34046-CRID2	1		
18:26	MA34046-CRIA2	1		
18:32	MA34046-CRID3	1		
18:38	MA34046-ICSA1	1		
18:44	MA34046-ICSAB1	1		
18:50	ZZZZZZ	1		
18:56	ZZZZZZ	1		
19:02	MA34046-CCV1	1		
19:08	MA34046-CCB2	1		
19:14	ZZZZZZ	1		
19:20	MP79533-B1	1		
19:26	ZZZZZZ	2		
19:32	ZZZZZZ	2		
19:39	ZZZZZZ	5		
19:45	ZZZZZZ	1		
19:51	ZZZZZZ	1		
19:57	ZZZZZZ	3		
20:03	ZZZZZZ	1		
20:09	MA34046-CCV2	1		
20:15	MA34046-CCB3	1		
20:21	MP79532-MB1	1		batch to reanalyze for Mn, ICV out

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:27	MP79532-B1	1		
20:33	MP79532-S1	1		
20:39	MP79532-S2	1		
20:45	MP79532-S3	1		
20:51	JB67075-2	1		(sample used for QC only; not part of login JB66584)
20:57	MP79532-SD1	5		
21:03	ZZZZZZ	1		
21:09	JB67075-3	1		(sample used for QC only; not part of login JB66584)
21:15	MA34046-CCV3	1		
21:21	MA34046-CCB4	1		
21:27	ZZZZZZ	1		
21:33	ZZZZZZ	1		
21:39	ZZZZZZ	1		
21:45	ZZZZZZ	1		
21:51	ZZZZZZ	1		
21:57	ZZZZZZ	1		
22:03	ZZZZZZ	1		
22:09	ZZZZZZ	1		
22:15	ZZZZZZ	1		
22:21	MA34046-CCV4	1		
22:27	MA34046-CCB5	1		
22:33	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:45	ZZZZZZ	1		
22:51	ZZZZZZ	1		
22:57	ZZZZZZ	1		
23:03	ZZZZZZ	1		
23:09	ZZZZZZ	1		
23:15	ZZZZZZ	1		
23:21	MP79520-S1	1		As high. Needs post spike. Y 2243 out
23:27	MA34046-CCV5	1		
23:33	MA34046-CCB6	1		
23:39	MP79520-S2	1		AS high

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:45	JB66942-2	1		(sample used for QC only; not part of login JB66584)
23:51	MP79520-SD1	5		As high
23:57	ZZZZZZ	1		
00:03	MP79524-MB1	1		
00:10	ZZZZZZ	1		
00:16	MP79524-B1	1		
00:22	MP79524-S1	1		
00:28	MP79524-S2	1		
00:34	MA34046-CCV6	1		
00:40	MA34046-CCB7	1		
00:46	MA34046-CRI2	1		
00:52	MA34046-CRID4	1		
00:58	MA34046-CRIA3	1		
01:04	MA34046-ICSA2	1		
01:10	MA34046-ICSAB2	1		
01:16	ZZZZZZ	1		
01:23	ZZZZZZ	1		
01:29	ZZZZZZ	1		
01:35	MA34046-CCV7	1		
01:41	MA34046-CCB8	1		
01:47	JB66901-5A	1		(sample used for QC only; not part of login JB66584)
01:53	MP79524-SD1	5		
01:59	ZZZZZZ	1		
02:06	ZZZZZZ	1		
02:12	ZZZZZZ	1		
02:18	ZZZZZZ	1		
02:24	ZZZZZZ	1		
02:31	ZZZZZZ	1		
02:37	ZZZZZZ	1		
02:43	MA34046-CCV8	1		
02:49	MA34046-CCB9	1		
02:55	MP79488-MB1	1		
03:01	MP79488-LC1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	03:07	MP79488-B1	1		
	03:12	MP79488-S1	1		
	03:18	MP79488-S2	1		
	03:24	JB66584-1	1		
	03:30	MP79488-SD1	1		
---------->		Last reportable sample/prep for job JB66584			
	03:36	ZZZZZZ	1		
	03:42	ZZZZZZ	1		
	03:49	MA34046-CCV9	1		
	03:54	MA34046-CCB10	1		
	04:00	MP79505-MB1	1		
	04:07	MP79505-MB2	1		
	04:13	MP79505-LC1	1		
	04:18	MP79505-LC2	1		
	04:24	MP79505-S1	1		
	04:30	MP79505-S2	1		
	04:36	JB66824-2	1		(sample used for QC only; not part of login JB66584)
	04:42	MP79505-SD1	5		
	04:48	MP79505-S3	1		
	04:54	MP79505-S4	1		
	05:00	MA34046-CCV10	1		
	05:06	MA34046-CCB11	1		
	05:12	JB66824-2F	1		(sample used for QC only; not part of login JB66584)
	05:18	MP79505-SD2	5		
	05:24	ZZZZZZ	1		
	05:30	ZZZZZZ	1		
	05:36	ZZZZZZ	1		
	05:42	ZZZZZZ	1		
	05:48	ZZZZZZ	1		
	05:54	ZZZZZZ	1		
	06:00	ZZZZZZ	1		
	06:06	ZZZZZZ	1		
	06:12	MA34046-CCV11	1		
	06:18	MA34046-CCB12	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Dilution Factor	PS Recov	Comments
06:24	MA34046-CRI3	1		
06:31	ZZZZZZ	1		
06:37	ZZZZZZ	1		
06:43	ZZZZZZ	1		
06:49	ZZZZZZ	1		
06:55	ZZZZZZ	1		
07:01	ZZZZZZ	1		
07:07	ZZZZZZ	1		
07:14	MA34046-CCV12	1		
07:19	MA34046-CCB13	1		
---------->	Last reportable CCB for job JB66584			
07:26	MA34046-CRI4	1		
07:32	MA34046-CRID5	1		
07:38	MA34046-CRIA4	1		
07:43	MA34046-CCV13	1		
07:49	MA34046-CCB14	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:49	MA34046-STD1	1982 R	157710 R	34903 R	5698 R
16:55	MA34046-STD2	1811	146090	33822	5118
17:01	ZZZZZZ	1902	151750	34302	5356
17:07	ZZZZZZ	1979	153990	33241	5602
17:15	MA34046-ICV1	1891	151530	34272	5343
17:24	MA34046-ICB1	1943	156230	34563	5604
17:31	MA34046-ICCV1	No results reported for the elements associated with this internal standard.			
17:43	MA34046-ICCV2	1862	148890	33544	5264
17:55	MA34046-CCB1	1978	158760	35138	5690
18:01	MA34046-CRI1	1968	154710	33908	5577
18:07	MA34046-CRID1	No results reported for the elements associated with this internal standard.			
18:13	MA34046-CRIA1	No results reported for the elements associated with this internal standard.			
18:19	MA34046-CRID2	No results reported for the elements associated with this internal standard.			
18:26	MA34046-CRIA2	2016	160610	35361	5763
18:32	MA34046-CRID3	2014	157140	33992	5684
18:38	MA34046-ICSA1	1761	138520	31237	4726
18:44	MA34046-ICSAB1	1769	141090	32017	4781
18:50	ZZZZZZ	1928	153540	33624	5640
18:56	ZZZZZZ	1970	158950	34540	5732
19:02	MA34046-CCV1	1889	151450	33591	5315
19:08	MA34046-CCB2	1980	157870	34476	5688
19:14	ZZZZZZ	1963	157050	34294	5641
19:20	MP79533-B1	1910	152190	33894	5455
19:26	ZZZZZZ	1876	147480	33672	5083
19:32	ZZZZZZ	1942	153540	34029	5378
19:39	ZZZZZZ	1677	130670	32481	4375
19:45	ZZZZZZ	1800	141460	33487	4674
19:51	ZZZZZZ	1585	124760	32079	4132
19:57	ZZZZZZ	1760	134780	33188	4734
20:03	ZZZZZZ	1958	157080	33993	5642
20:09	MA34046-CCV2	1877	149100	33035	5273
20:15	MA34046-CCB3	1968	156330	33715	5637
20:21	MP79532-MB1	2037	162220	35558	5826

INTERNAL STANDARD SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
20:27	MP79532-B1	1918	152110	34033	5463
20:33	MP79532-S1	1839	148070	33638	5216
20:39	MP79532-S2	1857	148860	33864	5266
20:45	MP79532-S3	1843	148630	33681	5226
20:51	JB67075-2	1852	148760	33603	5312
20:57	MP79532-SD1	1907	152610	33418	5480
21:03	ZZZZZZ	1870	149990	34243	5279
21:09	JB67075-3	1867	149910	33627	5365
21:15	MA34046-CCV3	1881	148880	33108	5287
21:21	MA34046-CCB4	1964	155280	33485	5611
21:27	ZZZZZZ	1887	150320	33833	5354
21:33	ZZZZZZ	2007	158670	35179	5687
21:39	ZZZZZZ	1883	149320	33412	5338
21:45	ZZZZZZ	1871	148250	33491	5294
21:51	ZZZZZZ	1963	155200	34475	5533
21:57	ZZZZZZ	1939	153520	34027	5525
22:03	ZZZZZZ	1850	146990	32939	5217
22:09	ZZZZZZ	1983	156610	34129	5657
22:15	ZZZZZZ	1942	155380	34219	5528
22:21	MA34046-CCV4	1901	148310	32611	5290
22:27	MA34046-CCB5	1992	155700	33057	5637
22:33	ZZZZZZ	1970	152920	33863	5489
22:39	ZZZZZZ	1936	150990	33174	5434
22:45	ZZZZZZ	1971	153850	33670	5555
22:51	ZZZZZZ	1861	145260	32641	5126
22:57	ZZZZZZ	1974	155120	33442	5588
23:03	ZZZZZZ	2012	157570	34218	5687
23:09	ZZZZZZ	1973	154660	33345	5586
23:15	ZZZZZZ	1952	152810	32445	5528
23:21	MP79520-S1	1340 !a	117590	32427	4444
23:27	MA34046-CCV5	1929	155840	34311	5443
23:33	MA34046-CCB6	2020	159170	33901	5715
23:39	MP79520-S2	1416	116470	30904	4548

INTERNAL STANDARD SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
23:45	JB66942-2	1478	120250	31681	4736
23:51	MP79520-SD1	1895	151230	33374	5723
23:57	ZZZZZZ	1498	120250	31777	4771
00:03	MP79524-MB1	1731	136530	33443	4651
00:10	ZZZZZZ	1743	135500	33540	4662
00:16	MP79524-B1	1748	134640	32309	4614
00:22	MP79524-S1	1656	129640	31221	4379
00:28	MP79524-S2	1629	127640	30723	4301
00:34	MA34046-CCV6	1932	147530	31776	5316
00:40	MA34046-CCB7	1972	159530	34610	5717
00:46	MA34046-CRI2	1997	158220	34229	5687
00:52	MA34046-CRID4	1988	154300	32887	5619
00:58	MA34046-CRIA3	2035	156850	33263	5715
01:04	MA34046-ICSA2	1772	142510	31859	4781
01:10	MA34046-ICSAB2	1799	143260	32274	4847
01:16	ZZZZZZ	2084	151590	30778	5324
01:23	ZZZZZZ	1997	154090	32305	5641
01:29	ZZZZZZ	1965	159280	34682	5699
01:35	MA34046-CCV7	1929	152330	33223	5374
01:41	MA34046-CCB8	1995	154470	32259	5627
01:47	JB66901-5A	1614	126990	30542	4278
01:53	MP79524-SD1	1827	146960	34169	5100
01:59	ZZZZZZ	1709	134280	32073	4503
02:06	ZZZZZZ	1693	129990	31105	4434
02:12	ZZZZZZ	1630	133400	32992	4385
02:18	ZZZZZZ	1672	132530	32193	4408
02:24	ZZZZZZ	1702	131580	31382	4470
02:31	ZZZZZZ	1678	132940	32166	4485
02:37	ZZZZZZ	1736	136750	33445	4626
02:43	MA34046-CCV8	1916	149450	32447	5319
02:49	MA34046-CCB9	2028	158840	33276	5754
02:55	MP79488-MB1	1977	160950	35029	5748
03:01	MP79488-LC1	1992	158350	33750	5682

INTERNAL STANDARD SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	
03:07	MP79488-B1	1932	150440	32240	5430	
03:12	MP79488-S1	1871	152320	33818	5360	
03:18	MP79488-S2	1915	153280	33740	5435	
03:24	JB66584-1	1961	153450	32948	5554	
03:30	MP79488-SD1	1980	154880	32888	5655	
03:36	ZZZZZZ	1843	151810	34336	5339	
03:42	ZZZZZZ	1863	149250	32593	5284	
03:49	MA34046-CCV9	1913	148410	32098	5305	
03:54	MA34046-CCB10	1975	154810	32605	5626	
04:00	MP79505-MB1	1967	160150	34912	5706	
04:07	MP79505-MB2	1986	157830	33088	5692	
04:13	MP79505-LC1	1976	153220	32353	5592	
04:18	MP79505-LC2	1944	157650	33929	5660	
04:24	MP79505-S1	1931	154730	33908	5474	
04:30	MP79505-S2	1930	150460	32724	5403	
04:36	JB66824-2	1981	154300	32689	5635	
04:42	MP79505-SD1	1981	159450	34715	5717	
04:48	MP79505-S3	1928	152680	33186	5434	
04:54	MP79505-S4	1913	146980	32316	5356	
05:00	MA34046-CCV10	1911	150100	32486	5349	
05:06	MA34046-CCB11	1982	157940	34051	5675	
05:12	JB66824-2F	1981	155970	33146	5624	
05:18	MP79505-SD2	1985	153360	32299	5622	
05:24	ZZZZZZ	1690	134040	33682	4291	
05:30	ZZZZZZ	1946	150320	34481	4894	
05:36	ZZZZZZ	1538	118200	29731	3593	!a
05:42	ZZZZZZ	1970	157960	33646	5683	
05:48	ZZZZZZ	1866	148900	33168	5252	
05:54	ZZZZZZ	1881	147240	32156	5229	
06:00	ZZZZZZ	1973	152910	32439	5603	
06:06	ZZZZZZ	1964	158790	34612	5699	
06:12	MA34046-CCV11	1902	149020	32357	5297	
06:18	MA34046-CCB12	2008	154890	32430	5641	

INTERNAL STANDARD SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
Analyst: AP Run ID: MA34046
Parameters: Cr

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
06:24	MA34046-CRI3	1983	156650	33613	5680
06:31	ZZZZZZ	1681	130930	32493	4164
06:37	ZZZZZZ	1597	122590	30588	3758 !a
06:43	ZZZZZZ	2029	157650	33034	5731
06:49	ZZZZZZ	1850	144740	31669	5155
06:55	ZZZZZZ	1818	150460	34520	5206
07:01	ZZZZZZ	1970	157460	33873	5632
07:07	ZZZZZZ	1963	153920	32321	5571
07:14	MA34046-CCV12	1982	152950	32963	5484
07:19	MA34046-CCB13	2028	156540	32970	5713
07:26	MA34046-CRI4	1993	154430	32795	5611
07:32	MA34046-CRID5	1987	154520	32548	5606
07:38	MA34046-CRIA4	2009	156690	32775	5665
07:43	MA34046-CCV13	1925	149780	32329	5364
07:49	MA34046-CCB14	1974	160170	35040	5744

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			17:24		17:55		19:08		20:15	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.7	anr							
Antimony	6.0	1.3	anr							
Arsenic	3.0	1.2	anr							
Barium	200	.2	anr							
Beryllium	1.0	.04	anr							
Bismuth	20	1.2								
Boron	100	1.2	anr							
Cadmium	3.0	.2	anr							
Calcium	5000	8.7	anr							
Chromium	10	.3	0.0	<10	-0.10	<10	0.0	<10	0.20	<10
Cobalt	50	.4	anr							
Copper	10	.5	anr							
Iron	100	3.8	anr							
Lead	3.0	1.3	anr							
Lithium	20	.8								
Magnesium	5000	12	anr							
Manganese	15	.04	anr							
Molybdenum	20	.5								
Nickel	10	.7	anr							
Palladium	50	1								
Potassium	10000	17	anr							
Selenium	10	2	anr							
Silicon	200	8.4	anr							
Silver	10	.3	anr							
Sodium	10000	7.1	anr							
Sulfur	50	4.4								
Strontium	10	.09								
Thallium	2.0	1.4	anr							
Tin	10	.8	anr							
Titanium	10	.4								
Tungsten	50	11								
Vanadium	50	.3	anr							
Zinc	20	1.5	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			17:24		17:55		19:08		20:15	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.6								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			21:21		22:27		23:33		00:40	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.7	anr							
Antimony	6.0	1.3	anr							
Arsenic	3.0	1.2	anr							
Barium	200	.2	anr							
Beryllium	1.0	.04	anr							
Bismuth	20	1.2								
Boron	100	1.2	anr							
Cadmium	3.0	.2	anr							
Calcium	5000	8.7	anr							
Chromium	10	.3	-0.10	<10	0.40	<10	0.10	<10	0.10	<10
Cobalt	50	.4	anr							
Copper	10	.5	anr							
Iron	100	3.8	anr							
Lead	3.0	1.3	anr							
Lithium	20	.8								
Magnesium	5000	12	anr							
Manganese	15	.04	anr							
Molybdenum	20	.5								
Nickel	10	.7	anr							
Palladium	50	1								
Potassium	10000	17	anr							
Selenium	10	2	anr							
Silicon	200	8.4	anr							
Silver	10	.3	anr							
Sodium	10000	7.1	anr							
Sulfur	50	4.4								
Strontium	10	.09								
Thallium	2.0	1.4	anr							
Tin	10	.8	anr							
Titanium	10	.4								
Tungsten	50	11								
Vanadium	50	.3	anr							
Zinc	20	1.5	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			21:21		22:27		23:33		00:40	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.6								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			01:41		02:49		03:54		05:06	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.7	anr							
Antimony	6.0	1.3	anr							
Arsenic	3.0	1.2	anr							
Barium	200	.2	anr							
Beryllium	1.0	.04	anr							
Bismuth	20	1.2								
Boron	100	1.2	anr							
Cadmium	3.0	.2	anr							
Calcium	5000	8.7	anr							
Chromium	10	.3	0.10	<10	0.30	<10	0.10	<10	0.10	<10
Cobalt	50	.4	anr							
Copper	10	.5	anr							
Iron	100	3.8	anr							
Lead	3.0	1.3	anr							
Lithium	20	.8								
Magnesium	5000	12	anr							
Manganese	15	.04	anr							
Molybdenum	20	.5								
Nickel	10	.7	anr							
Palladium	50	1								
Potassium	10000	17	anr							
Selenium	10	2	anr							
Silicon	200	8.4	anr							
Silver	10	.3	anr							
Sodium	10000	7.1	anr							
Sulfur	50	4.4								
Strontium	10	.09								
Thallium	2.0	1.4	anr							
Tin	10	.8	anr							
Titanium	10	.4								
Tungsten	50	11								
Vanadium	50	.3	anr							
Zinc	20	1.5	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			01:41		02:49		03:54		05:06	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.6								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			06:18		07:19	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	6.7	anr			
Antimony	6.0	1.3	anr			
Arsenic	3.0	1.2	anr			
Barium	200	.2	anr			
Beryllium	1.0	.04	anr			
Bismuth	20	1.2				
Boron	100	1.2	anr			
Cadmium	3.0	.2	anr			
Calcium	5000	8.7	anr			
Chromium	10	.3	0.30	<10	0.40	<10
Cobalt	50	.4	anr			
Copper	10	.5	anr			
Iron	100	3.8	anr			
Lead	3.0	1.3	anr			
Lithium	20	.8				
Magnesium	5000	12	anr			
Manganese	15	.04	anr			
Molybdenum	20	.5				
Nickel	10	.7	anr			
Palladium	50	1				
Potassium	10000	17	anr			
Selenium	10	2	anr			
Silicon	200	8.4	anr			
Silver	10	.3	anr			
Sodium	10000	7.1	anr			
Sulfur	50	4.4				
Strontium	10	.09				
Thallium	2.0	1.4	anr			
Tin	10	.8	anr			
Titanium	10	.4				
Tungsten	50	11				
Vanadium	50	.3	anr			
Zinc	20	1.5	anr			

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA34046 Units: ug/l

Time:			06:18		07:19	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Zirconium	10	.6				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		17:43	
Sample ID:	ICCV	ICCV2	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Bismuth			
Boron	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	2090	104.5
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Lithium			
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Palladium			
Potassium	anr		
Selenium	anr		
Silicon	anr		
Silver	anr		
Sodium	anr		
Sulfur			
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Tungsten			
Vanadium	anr		
Zinc	anr		

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CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		17:43	
Sample ID:	ICCV	ICCV2	
Metal	True	Results	% Rec
Zirconium			

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		17:15			19:02			20:09	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2050	102.5	2000	2080	104.0	2000	2090	104.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	anr								
Silicon	anr								
Silver	anr								
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		17:15			19:02			20:09	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		21:15			22:21			23:27	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2070	103.5	2000	2120	106.0	2000	2000	100.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	anr								
Silicon	anr								
Silver	anr								
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		21:15			22:21			23:27	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

8.1.4
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CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		00:34			01:35			02:43	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2180	109.0	2000	2060	103.0	2000	2120	106.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	anr								
Silicon	anr								
Silver	anr								
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		00:34			01:35			02:43	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

8.1.4
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		03:49			05:00			06:12	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2120	106.0	2000	2100	105.0	2000	2110	105.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	anr								
Silicon	anr								
Silver	anr								
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		03:49			05:00			06:12	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

8.1.4
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		07:14	
Sample ID:	CCV	CCV12	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Bismuth			
Boron	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	2060	103.0
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Lithium			
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Palladium			
Potassium	anr		
Selenium	anr		
Silicon	anr		
Silver	anr		
Sodium	anr		
Sulfur			
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Tungsten			
Vanadium	anr		
Zinc	anr		

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA34046 Units: ug/l

Time:		07:14	
Sample ID:	CCV	CCV12	
Metal	True	Results	% Rec
Zirconium			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA34046 Units: ug/l

Time:				18:01		18:26		18:32	
Sample ID:	CRI	CRIA	CRID	CRI1		CRIA2		CRID3	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	anr					
Barium	200		4.0	anr					
Beryllium	2.0		1.0	anr					
Bismuth	20								
Boron	100		10	anr					
Cadmium	3.0		1.0	anr					
Calcium	5000		1000	anr					
Chromium	10		2.0	10.6	106.0			1.9	95.0
Cobalt	50		3.0	anr					
Copper	10		2.0	anr					
Iron	100	500		anr					
Lead	3.0	20	2.5	anr					
Lithium	20								
Magnesium	5000		100	anr					
Manganese	15		3.0	anr					
Molybdenum	20								
Nickel	10		4.0	anr					
Palladium	50								
Potassium	5000		2000	anr					
Selenium	10	20	5.0	anr					
Silicon	200			anr					
Silver	5.0		1.0	anr					
Sodium	5000		1000	anr					
Sulfur	50								
Strontium	10								
Thallium	10		2.0	anr					
Tin	10			anr					
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	anr					
Zinc	20		10	anr					

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA34046 Units: ug/l

Time:				18:01		18:26		18:32	
Sample ID:	CRI	CRIA	CRID	CRI1		CRIA2		CRID3	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10		5.0						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA34046 Units: ug/l

Time:				00:46		00:52		00:58	
Sample ID:	CRI	CRIA	CRID	CRI2		CRID4		CRIA3	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	anr					
Barium	200		4.0	anr					
Beryllium	2.0		1.0	anr					
Bismuth	20								
Boron	100		10	anr					
Cadmium	3.0		1.0	anr					
Calcium	5000		1000	anr					
Chromium	10		2.0	10.7	107.0	2.1	105.0		
Cobalt	50		3.0	anr					
Copper	10		2.0	anr					
Iron	100	500		anr					
Lead	3.0	20	2.5	anr					
Lithium	20								
Magnesium	5000		100	anr					
Manganese	15		3.0	anr					
Molybdenum	20								
Nickel	10		4.0	anr					
Palladium	50								
Potassium	5000		2000	anr					
Selenium	10	20	5.0	anr					
Silicon	200			anr					
Silver	5.0		1.0	anr					
Sodium	5000		1000	anr					
Sulfur	50								
Strontium	10								
Thallium	10		2.0	anr					
Tin	10			anr					
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	anr					
Zinc	20		10	anr					

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA34046 Units: ug/l

Time:				00:46		00:52		00:58	
Sample ID:	CRI	CRIA	CRID	CRI2		CRID4		CRIA3	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10		5.0						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA34046 Units: ug/l

Time:				06:24	
Sample ID:	CRI	CRIA	CRID	CRI3	
Metal	True	True	True	Results	% Rec
Aluminum	200	500	100	anr	
Antimony	6.0	20	3.0	anr	
Arsenic	8.0	20	3.0	anr	
Barium	200		4.0	anr	
Beryllium	2.0		1.0	anr	
Bismuth	20				
Boron	100		10	anr	
Cadmium	3.0		1.0	anr	
Calcium	5000		1000	anr	
Chromium	10		2.0	11.0	110.0
Cobalt	50		3.0	anr	
Copper	10		2.0	anr	
Iron	100	500		anr	
Lead	3.0	20	2.5	anr	
Lithium	20				
Magnesium	5000		100	anr	
Manganese	15		3.0	anr	
Molybdenum	20				
Nickel	10		4.0	anr	
Palladium	50				
Potassium	5000		2000	anr	
Selenium	10	20	5.0	anr	
Silicon	200			anr	
Silver	5.0		1.0	anr	
Sodium	5000		1000	anr	
Sulfur	50				
Strontium	10				
Thallium	10		2.0	anr	
Tin	10			anr	
Titanium	10				
Tungsten	50				
Vanadium	50		2.0	anr	
Zinc	20		10	anr	

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LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA34046 Units: ug/l

Time:				06:24	
Sample ID:	CRI	CRIA	CRID	CRI3	
Metal	True	True	True	Results	% Rec
Zirconium	10		5.0		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA34046 Units: ug/l

Time:			18:38		18:44		01:04		01:10	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	535000	107.0	508000	101.6	517000	103.4	489000	97.8
Antimony		1000	-0.40		1010	101.0	-0.80		987	98.7
Arsenic		1000	2.2		1050	105.0	1.6		1020	102.0
Barium		500	-0.30		504	100.8	-0.40		504	100.8
Beryllium		500	0.0		511	102.2	0.0		508	101.6
Bismuth		500	-1.3		491	98.2	-0.40		485	97.0
Boron			-1.0		-4.2		0.50		-3.3	
Cadmium		1000	-3.1		1010	101.0	-2.8		997	99.7
Calcium	400000	400000	388000	97.0	371000	92.8	386000	96.5	371000	92.8
Chromium		500	0.0		475	95.0	0.0		466	93.2
Cobalt		500	-0.30		486	97.2	-0.10		481	96.2
Copper		500	-1.1		516	103.2	-1.7		515	103.0
Iron	200000	200000	198000	99.0	192000	96.0	195000	97.5	191000	95.5
Lead		1000	-0.80		957	95.7	-3.8		948	94.8
Lithium		500	0.80		543	108.6	1.0		542	108.4
Magnesium	500000	500000	562000	112.4	538000	107.6	552000	110.4	531000	106.2
Manganese		500	-6.7		490	98.0	-5.5		484	96.8
Molybdenum		500	-3.9		469	93.8	-3.9		466	93.2
Nickel		1000	-0.90		963	96.3	-0.70		960	96.0
Palladium		500	-34		497	99.4	-34		498	99.6
Potassium			124		116		130		128	
Selenium		1000	-1.4		994	99.4	-8.4		985	98.5
Silicon			-170		-170		-170		-170	
Silver		1000	1.6		989	98.9	2.5		998	99.8
Sodium			12.8		18.2		26.5		24.4	
Sulfur		500	-62		403	80.6	-63		399	79.8*
Strontium			-5.7		-5.6		-5.7		-6.0	
Thallium		1000	0.70		1010	101.0	-3.0		1000	100.0
Tin			1.3		2.5		0.80		2.0	
Titanium			-0.10		0.10		0.0		0.10	
Tungsten		500	12.3		509	101.8	15.4		504	100.8
Vanadium		500	1.1		471	94.2	0.80		466	93.2
Zinc		1000	-0.10		935	93.5	0.30		931	93.1

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: SA051914M2.ICP Date Analyzed: 05/19/14 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA34046 Units: ug/l

Time:			18:38		18:44		01:04		01:10	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium		500	6.5		503	100.6	6.8		485	97.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	6.7	11		
Antimony	6.0	1.3	2.6		
Arsenic	3.0	1.2	2.6		
Barium	200	.2	1		
Beryllium	1.0	.04	.4		
Bismuth	20	1.2	2.4		
Boron	100	1.2	4.9		
Cadmium	3.0	.2	.7		
Calcium	5000	8.7	19		
Chromium	10	.3	.89	0.0	<10
Cobalt	50	.4	.83		
Copper	10	.5	1.2		
Iron	100	3.8	12		
Lead	3.0	1.3	1.3		
Lithium	20	.8	2.8		
Magnesium	5000	12	41		
Manganese	15	.04	.48		
Molybdenum	20	.5	1.1		
Nickel	10	.7	.75		
Palladium	50	1	3.2		
Potassium	10000	17	50		
Selenium	10	2	3.6		
Silicon	200	8.4	24		
Silver	10	.3	1.2		
Sodium	10000	7.1	19		
Sulfur	50	4.4	10		
Strontium	10	.09	.76		
Thallium	2.0	1.4	1.8		
Tin	10	.8	3.6		
Titanium	10	.4	.93		
Tungsten	50	11	14		
Vanadium	50	.3	.87		
Zinc	20	1.5	7.6		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	RL	IDL	MDL	MB raw	final
Zirconium	10	.6	1.9		

Associated samples MP79488: JB66584-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.2.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	JB66584-1 Original	MS	Spikelot MPIOW9	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Bismuth					
Boron	anr				
Cadmium					
Calcium					
Chromium	1.7	211	200	104.7	75-125
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Palladium					
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Sulfur					
Strontium					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					
Zinc					

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	JB66584-1 Original MS	Spikelot MPIOW9	% Rec	QC Limits
Zirconium				

Associated samples MP79488: JB66584-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	JB66584-1 Original	MSD	Spikelot MPIOW9	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Bismuth						
Boron	anr					
Cadmium						
Calcium						
Chromium	1.7	208	200	103.2	1.4	20
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Palladium						
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Sulfur						
Strontium						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	JB66584-1 Original MSD	Spikelot MPIOW9	% Rec	MSD RPD	QC Limit
Zirconium					

Associated samples MP79488: JB66584-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date:			05/14/14				05/14/14	
Metal	LCS Result	Spikelot MPLCW3	% Rec	QC Limits	BSP Result	Spikelot MPIOW9	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Bismuth								
Boron								
Cadmium								
Calcium								
Chromium	501	500	100.2	80-120	213	200	106.5	80-120
Cobalt								
Copper								
Iron								
Lead								
Lithium								
Magnesium								
Manganese								
Molybdenum								
Nickel								
Palladium								
Potassium								
Selenium								
Silicon								
Silver								
Sodium								
Sulfur								
Strontium								
Thallium								
Tin								
Titanium								
Tungsten								
Vanadium								
Zinc								

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date:		05/14/14				05/14/14		
Metal	LCS Result	Spikelot MPLCW3	% Rec	QC Limits	BSP Result	Spikelot MPIOW9	% Rec	QC Limits
Zirconium								

Associated samples MP79488: JB66584-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	JB66584-1 Original	SDL 1:1	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Bismuth				
Boron	anr			
Cadmium				
Calcium				
Chromium	1.70	0.300	82.4 (a)	0-10
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Palladium				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Sulfur				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

SERIAL DILUTION RESULTS SUMMARY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

QC Batch ID: MP79488 Methods: SW846 6010C
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/14/14

Metal	JB66584-1 Original SDL 1:1	%DIF	QC Limits
Zirconium			

Associated samples MP79488: JB66584-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Instrument Detection Limits

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Instrument ID: SSTRACE1 **Effective Date:** 03/20/14

Analyte	IDL ug/l
Aluminum	6.7
Antimony	1.3
Arsenic	1.2
Barium	.2
Beryllium	.04
Bismuth	1.2
Boron	1.2
Cadmium	.2
Calcium	8.7
Chromium	.3
Cobalt	.4
Copper	.5
Iron	3.8
Lead	1.3
Lithium	.8
Magnesium	12.3
Manganese	.04
Molybdenum	.5
Nickel	.7
Palladium	1
Potassium	16.5
Selenium	2
Silicon	8.4
Silver	.3
Sodium	7.1
Sulfur	4.4
Strontium	.09
Thallium	1.4
Tin	.8
Titanium	.4
Tungsten	10.6
Vanadium	.3
Zinc	1.5
Zirconium	.6

The above applies to the following instrument runs:
MA34046

Instrument Linear Ranges

Job Number: JB66584
Account: PESNJP Parsons Engineering Science
Project: Fort Monmouth, Oceanport, Monmouth County, NJ

Instrument ID: SSTRACE1 **Effective Date:** 03/25/14

Analyte	Linear Range ug/l
Aluminum	1000000
Antimony	50000
Arsenic	10000
Barium	50000
Beryllium	25000
Bismuth	50000
Boron	50000
Cadmium	10000
Calcium	500000
Chromium	50000
Cobalt	25000
Copper	25000
Iron	500000
Lead	25000
Lithium	50000
Magnesium	1000000
Manganese	10000
Molybdenum	50000
Nickel	25000
Palladium	50000
Potassium	1000000
Selenium	50000
Silicon	50000
Silver	2000
Sodium	1000000
Sulfur	100000
Strontium	25000
Thallium	25000
Tin	50000
Titanium	50000
Tungsten	25000
Vanadium	50000
Zinc	50000
Zirconium	50000

The above applies to the following instrument runs:
MA34046

New Jersey ACCUTEST LABORATORIES

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: STDA Acquired: 5/19/2014 16:49:40 Type: Cal
Method: Accutest1(v38) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0005**	**.0001**	**.0014**	**-.0007**	**.0000**	**.0036**	**.0001**	**.0018**	**.0000**
Stddev	.0001	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.000
%RSD	14.81	32.65	.7093	.4382	262.9	.0111	6.924	.2307	725.0
#1	.0005	.0001	.0014	-.0007	.0000	.0036	.0001	.0018	.0000
#2	.0006	.0001	.0014	-.0007	.0000	.0036	.0001	.0018	.0000

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**-.0001**	**-.0016**	**-.0006**	**-.0004**	**.0000**	**.0004**	**-.0001**	**.0051**
Stddev	.000	.0002	.0000	.0000	.0002	.000	.0002	.0000	.0001
%RSD	60.78	231.2	2.091	4.027	40.65	152.5	50.32	36.61	1.935
#1	-.0001	.0000	-.0016	-.0006	-.0003	.0000	.0002	-.0002	.0052
#2	.0000	-.0002	-.0016	-.0006	-.0005	.0000	.0005	-.0001	.0050

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0002**	**-.0001**	**.0003**	**.0005**	**.0009**	**.0016**	**-.0001**	**.0110**	**.0006**
Stddev	.0000	.0000	.0002	.0000	.0001	.0000	.0000	.0003	.0000
%RSD	6.305	6.289	73.20	4.262	9.741	1.836	1.351	3.135	.6338
#1	.0002	-.0001	.0001	.0005	.0010	.0016	-.0001	.0113	.0006
#2	.0002	-.0001	.0004	.0005	.0009	.0016	-.0001	.0108	.0006

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0003**	**-.0001**	**.0026**	**-.0001**	**-.0032**	**-.0049**	**-.0002**
Stddev	.0001	.0000	.0003	.0000	.0001	.0002	.0001
%RSD	22.46	6.552	11.59	22.81	3.159	4.476	26.56
#1	-.0004	-.0002	.0024	-.0001	-.0033	-.0051	-.0002
#2	-.0003	-.0001	.0028	-.0001	-.0032	-.0048	-.0002

Zoom In ▶ Zoom Out

Sample Name: STDA Acquired: 5/19/2014 16:49:40 Type: Cal
Method: Accutest1(v38) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**157710.**	**34903.**	**1981.7**	**5698.3**
Stddev	226.	79.	.7	2.4
%RSD	.14319	.22578	.03630	.04227
#1	157550.	34848.	1982.2	5696.6
#2	157870.	34959.	1981.2	5700.0

Zoom In ▶ Zoom Out

Sample Name: STDB Acquired: 5/19/2014 16:55:42 Type: Cal
Method: Accutest1(v38) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6.284**	**12.95**	**4.732**	**1.901**	**.3051**	**1.042**	**1.328**	**1.447**	**.0583**
Stddev	.005	.11	.010	.002	.0003	.003	.003	.001	.0001
%RSD	.0881	.8548	.2160	.0968	.1016	.3007	.2262	.0942	.1087
#1	6.280	13.03	4.739	1.900	.3049	1.044	1.326	1.446	.0583
#2	6.287	12.87	4.724	1.902	.3054	1.039	1.330	1.448	.0584

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5376**	**3.727**	**.7154**	**.1904**	**.5933**	**.5003**	**1.098**	**2.380**	**5.215**
Stddev	.0001	.006	.0023	.0004	.0005	.0026	.004	.002	.009
%RSD	.0211	.1548	.3200	.1932	.0803	.5223	.3523	.0882	.1696
#1	.5375	3.723	.7171	.1906	.5929	.5021	1.100	2.379	5.222
#2	.5377	3.731	.7138	.1901	.5936	.4984	1.095	2.382	5.209

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.783**	**.5095**	**1.340**	**5.532**	**1.224**	**4.611**	**.1972**	**3.582**	**.7979**
Stddev	.007	.0010	.001	.029	.004	.018	.0005	.015	.0019
%RSD	.1794	.2034	.0361	.5238	.2959	.3976	.2387	.4273	.2421
#1	3.788	.5102	1.340	5.552	1.227	4.624	.1975	3.593	.7993
#2	3.778	.5088	1.341	5.512	1.222	4.598	.1968	3.571	.7966

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11.67**	**.5502**	**2.063**	**1.163**	**.2689**	**1.511**	**2.361**
Stddev	.12	.0007	.000	.000	.0009	.009	.006
%RSD	.9856	.1248	.0103	.0235	.3302	.5807	.2581
#1	11.75	.5497	2.063	1.163	.2695	1.517	2.357
#2	11.59	.5507	2.062	1.163	.2683	1.505	2.366

Zoom In ▶ Zoom Out

Sample Name: STDB Acquired: 5/19/2014 16:55:42 Type: Cal
Method: Accutest1(v38) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**146090.**	**33822.**	**1810.5**	**5118.4**
Stddev	223.	17.	9.0	12.3
%RSD	.15292	.04985	.49513	.24017
#1	145930.	33810.	1804.2	5109.8
#2	146250.	33834.	1816.8	5127.1

Zoom In Zoom Out

Sample Name: ccvconf Acquired: 5/19/2014 17:01:52 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.978**	**2.051**	**2.004**	**2.031**	**2.056**	**1.943**	**2.087**	**2.041**	**.2412**
Stddev	.001	.001	.002	.005	.005	.002	.005	.005	.0002
%RSD	.0376	.0684	.0993	.2591	.2519	.0850	.2373	.2331	.0924
#1	1.979	2.050	2.003	2.028	2.059	1.942	2.090	2.038	.2414
#2	1.978	2.052	2.005	2.035	2.052	1.944	2.083	2.045	.2411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.022**	**2.060**	**1.996**	**2.067**	**2.044**	**1.957**	**1.974**	**39.17**	**39.89**
Stddev	.001	.010	.002	.005	.005	.007	.007	.11	.03
%RSD	.0406	.4936	.0838	.2511	.2612	.3610	.3324	.2697	.0845
#1	2.022	2.053	1.997	2.063	2.040	1.962	1.979	39.10	39.87
#2	2.021	2.068	1.995	2.071	2.047	1.952	1.970	39.25	39.92
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.08**	**39.38**	**39.16**	**39.30**	**1.981**	**2.012**	**1.932**	**4.925**	**2.024**
Stddev	.01	.03	.13	.14	.003	.003	.005	.008	.001
%RSD	.0292	.0689	.3385	.3604	.1273	.1533	.2704	.1712	.0692
#1	40.07	39.36	39.06	39.20	1.983	2.014	1.928	4.931	2.023
#2	40.09	39.40	39.25	39.40	1.979	2.010	1.936	4.919	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccvconf Acquired: 5/19/2014 17:01:52 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.023**	**2.032**	**1.959**	**2.020**	**1.951**	**1.972**	**1.949**
Stddev	.035	.000	.006	.001	.002	.009	.005
%RSD	1.736	.0172	.3081	.0690	.0860	.4307	.2805
#1	1.998	2.032	1.955	2.019	1.952	1.978	1.945
#2	2.048	2.032	1.963	2.021	1.949	1.966	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**151750.**	**34302.**	**1901.6**	**5355.9**
Stddev	130.	117.	6.1	4.2
%RSD	.08591	.34199	.32153	.07856
#1	151840.	34385.	1897.2	5352.9
#2	151660.	34219.	1905.9	5358.8

Zoom In Zoom Out

Sample Name: ccbconf Acquired: 5/19/2014 17:07:49 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0001**	**.0000**	**.0000**	**.0001**	**.0001**	**.0001**	**-.0001**
Stddev	.0001	.0000	.0000	.0001	.0001	.0000	.0000	.0001	.0002
%RSD	62.52	14.91	8.240	217.5	217.7	25.24	38.20	89.18	266.4
#1	.0001	.0002	.0001	.0001	.0000	.0000	.0001	.0000	-.0002
#2	.0002	.0001	.0001	.0000	.0001	.0001	.0001	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0001**	**.0008**	**-.0018**	**.0002**	**.0004**	**.0005**	**.0063**	**.0017**
Stddev	.0001	.0001	.0002	.0003	.0000	.0006	.0002	.0059	.0009
%RSD	204.9	58.67	27.94	16.45	9.467	133.1	33.07	92.31	52.60
#1	.0001	-.0001	.0009	-.0020	.0002	.0000	.0004	.0105	.0023
#2	.0000	-.0002	.0006	-.0016	.0002	.0008	.0006	.0022	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**.0129**	**.0224**	**.0076**	**.0012**	**.0008**	**.0001**	**.0016**	**.0003**
Stddev	.0010	.0044	.0066	.0016	.0004	.0001	.0010	.0002	.0004
%RSD	40.77	33.97	29.39	21.41	30.22	6.791	642.4	14.83	114.5
#1	.0033	.0160	.0271	.0087	.0015	.0009	-.0005	.0017	.0001
#2	.0018	.0098	.0178	.0064	.0010	.0008	.0008	.0014	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccbconf Acquired: 5/19/2014 17:07:49 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0145**	**.0007**	**-.0022**	**-.0016**	**.0001**
Stddev	.0001	.0001	.0002	.0000	.0019	.0010	.0004
%RSD	57.47	37.11	1.660	6.879	89.60	63.51	357.7
#1	.0002	.0002	.0147	.0007	-.0035	-.0009	.0004
#2	.0001	.0003	.0143	.0006	-.0008	-.0024	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**153990.**	**33241.**	**1979.2**	**5601.5**
Stddev	247.	83.	1.4	1.4
%RSD	.16028	.24824	.07037	.02576
#1	154170.	33299.	1978.2	5600.5
#2	153820.	33183.	1980.1	5602.6

Zoom In Zoom Out

Sample Name: icv Acquired: 5/19/2014 17:15:21 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.986**	**2.050**	**2.002**	**2.020**	**2.050**	**1.940**	**2.096**	**2.032**	**.2387**
Stddev	.003	.004	.003	.005	.008	.004	.009	.004	.0008
%RSD	.1703	.2216	.1241	.2547	.3927	.2044	.4478	.2150	.3465
#1	1.983	2.055	2.004	2.025	2.058	1.939	2.106	2.037	.2396
#2	1.985	2.048	2.004	2.019	2.051	1.937	2.096	2.029	.2382
#3	1.990	2.047	2.000	2.015	2.042	1.944	2.087	2.029	.2382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.017**	**2.041**	**2.010**	**2.071**	**2.033**	**1.973**	**1.985**	**40.01**	**39.42**
Stddev	.004	.005	.002	.009	.004	.004	.006	.12	.10
%RSD	.2255	.2297	.0905	.4272	.1890	.2248	.2877	.3100	.2516
#1	2.021	2.046	2.012	2.081	2.037	1.969	1.982	40.15	39.50
#2	2.017	2.037	2.009	2.065	2.030	1.978	1.991	39.98	39.45
#3	2.012	2.039	2.008	2.066	2.031	1.972	1.981	39.91	39.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.06**	**39.33**	**40.00**	**40.14**	**1.987**	**2.012**	**1.925**	**4.951**	**2.018**
Stddev	.13	.20	.06	.03	.006	.003	.002	.008	.002
%RSD	.3184	.5101	.1492	.0717	.2840	.1304	.1135	.1604	.0985
#1	40.20	39.53	40.07	40.17	1.981	2.009	1.926	4.948	2.018
#2	40.05	39.34	39.96	40.11	1.989	2.013	1.923	4.960	2.016
#3	39.94	39.13	39.97	40.13	1.992	2.014	1.927	4.945	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: icv Acquired: 5/19/2014 17:15:21 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.053**	**2.056**	**1.962**	**2.049**	**1.951**	**1.988**	**1.965**
Stddev	.019	.005	.005	.007	.004	.005	.001
%RSD	.9162	.2460	.2599	.3225	.1952	.2591	.0661
#1	2.036	2.061	1.957	2.056	1.947	1.982	1.963
#2	2.050	2.058	1.962	2.050	1.952	1.991	1.965
#3	2.074	2.051	1.967	2.042	1.954	1.990	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**151530.**	**34272.**	**1890.6**	**5342.6**
Stddev	114.	106.	5.5	3.7
%RSD	.07555	.30892	.29287	.06958
#1	151580.	34159.	1897.0	5346.8
#2	151400.	34286.	1887.8	5339.7
#3	151610.	34369.	1887.1	5341.5

Zoom In Zoom Out

Sample Name: icb Acquired: 5/19/2014 17:24:58 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0001**	**.0002**	**.0000**	**.0005**	**.0001**	**.0002**	**-.0001**
Stddev	.0001	.0000	.0001	.0001	.0001	.0000	.0000	.0000	.0001
%RSD	41.40	19.39	40.33	53.70	1185.	7.162	46.93	12.06	59.06
#1	.0001	.0002	.0002	.0003	.0001	.0004	.0001	.0002	-.0001
#2	.0002	.0002	.0001	.0001	-.0001	.0005	.0001	.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0001**	**.0006**	**-.0002**	**.0007**	**.0028**	**-.0005**	**.0046**	**.0042**
Stddev	.0001	.0001	.0009	.0006	.0003	.0007	.0000	.0048	.0004
%RSD	71.69	85.29	147.1	369.6	46.25	23.72	2.387	103.2	8.507
#1	.0000	-.0002	.0013	.0003	.0005	.0033	-.0005	.0013	.0039
#2	.0002	.0000	.0000	-.0006	.0010	.0024	-.0005	.0080	.0044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0025**	**.0101**	**.0033**	**.0088**	**.0013**	**.0004**	**.0000**	**.0007**	**.0003**
Stddev	.0001	.0040	.0076	.0017	.0004	.0001	.000	.0003	.0007
%RSD	4.360	40.05	230.2	19.64	28.28	22.37	267.4	47.72	228.0
#1	.0026	.0129	-.0021	.0100	.0016	.0005	.0000	.0009	-.0002
#2	.0024	.0072	.0086	.0076	.0011	.0003	.0000	.0005	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: icb Acquired: 5/19/2014 17:24:58 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0106**	**.0005**	**.0006**	**-.0002**	**.0011**
Stddev	.0000	.0000	.0003	.0001	.0009	.0001	.0003
%RSD	16.83	2.996	2.605	17.60	150.8	29.97	30.59
#1	.0001	.0001	.0108	.0006	.0000	-.0003	.0008
#2	.0002	.0001	.0104	.0005	.0012	-.0002	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**156230.**	**34563.**	**1943.3**	**5604.4**
Stddev	184.	3.	4.5	1.5
%RSD	.11799	.00772	.22938	.02704
#1	156360.	34561.	1940.2	5603.4
#2	156100.	34565.	1946.5	5605.5

Zoom In Zoom Out

Sample Name: iccv Acquired: 5/19/2014 17:31:27 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.974**	**2.062**	**2.016**	**2.047**	**2.075**	**1.928**	F **2.134**	**2.049**	**.2401**
Stddev	.003	.003	.004	.009	.009	.004	.009	.005	.0009
%RSD	.1317	.1592	.1986	.4463	.4337	.2126	.4182	.2433	.3610
#1	1.976	2.059	2.016	2.037	2.065	1.930	2.122	2.045	.2399
#2	1.973	2.060	2.012	2.042	2.079	1.927	2.137	2.046	.2403
#3	1.975	2.062	2.015	2.048	2.072	1.932	2.132	2.049	.2390
#4	1.970	2.066	2.022	2.059	2.086	1.923	2.143	2.056	.2411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							2.000		
Range							5.000%		

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.030**	**2.081**	**2.001**	**2.085**	**2.063**	**1.921**	**1.959**	**39.89**	**39.70**
Stddev	.005	.010	.007	.010	.009	.010	.004	.10	.08
%RSD	.2529	.4738	.3624	.4897	.4118	.5161	.1792	.2385	.2101
#1	2.024	2.073	1.996	2.078	2.054	1.936	1.963	39.84	39.60
#2	2.032	2.075	1.997	2.080	2.059	1.918	1.961	39.79	39.76
#3	2.028	2.083	2.001	2.081	2.066	1.914	1.956	39.94	39.66
#4	2.035	2.095	2.011	2.100	2.073	1.916	1.957	40.00	39.78
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: iccv Acquired: 5/19/2014 17:31:27 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.15**	**39.64**	**39.84**	**40.04**	**1.960**	**1.994**	**1.918**	**4.904**	**2.006**
Stddev	.09	.09	.12	.09	.005	.004	.005	.010	.005
%RSD	.2306	.2179	.2966	.2161	.2386	.1998	.2411	.1997	.2643
#1	40.05	39.53	39.73	40.01	1.967	1.999	1.915	4.918	2.010
#2	40.17	39.61	39.76	39.92	1.956	1.992	1.921	4.896	2.001
#3	40.12	39.68	39.87	40.11	1.957	1.990	1.923	4.899	2.001
#4	40.27	39.73	39.99	40.09	1.960	1.994	1.913	4.901	2.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.051**	**2.079**	**1.961**	**2.065**	**1.915**	**1.938**	**1.961**
Stddev	.018	.008	.006	.005	.005	.008	.003
%RSD	.8794	.3744	.2943	.2303	.2846	.4336	.1708
#1	2.062	2.069	1.958	2.060	1.917	1.949	1.964
#2	2.065	2.081	1.954	2.065	1.920	1.940	1.957
#3	2.025	2.080	1.963	2.066	1.907	1.931	1.963
#4	2.050	2.088	1.967	2.071	1.917	1.932	1.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: iccv Acquired: 5/19/2014 17:31:27 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**149970.**	**33717.**	**1914.8**	**5337.9**
Stddev	86.	116.	5.8	5.5
%RSD	.05750	.34296	.30069	.10310
#1	150090.	33840.	1906.6	5337.4
#2	149920.	33755.	1914.9	5342.3
#3	149890.	33710.	1919.3	5341.5
#4	149990.	33564.	1918.4	5330.3

Zoom In Zoom Out

Sample Name: iccv Acquired: 5/19/2014 17:43:00 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.019**	**2.087**	**2.025**	**2.045**	**2.091**	**1.968**	F **2.135**	**2.056**	**.2427**
Stddev	.005	.004	.007	.007	.010	.001	.011	.006	.0004
%RSD	.2361	.1987	.3678	.3286	.4973	.0509	.4953	.2953	.1661
#1	2.019	2.093	2.035	2.053	2.104	1.967	2.147	2.064	.2431
#2	2.022	2.083	2.025	2.048	2.087	1.969	2.130	2.058	.2425
#3	2.022	2.088	2.025	2.043	2.092	1.967	2.139	2.053	.2431
#4	2.012	2.084	2.017	2.037	2.079	1.968	2.123	2.050	.2423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							2.000		
Range							5.000%		

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.053**	**2.066**	**2.040**	**2.089**	**2.058**	**1.996**	**2.013**	**40.92**	**40.07**
Stddev	.006	.009	.007	.012	.009	.005	.005	.18	.11
%RSD	.2837	.4476	.3510	.5657	.4340	.2550	.2385	.4512	.2730
#1	2.061	2.078	2.049	2.106	2.066	2.004	2.019	41.13	40.11
#2	2.051	2.069	2.040	2.088	2.064	1.995	2.012	40.92	39.92
#3	2.052	2.060	2.037	2.079	2.052	1.994	2.013	40.95	40.06
#4	2.047	2.057	2.032	2.083	2.048	1.992	2.008	40.68	40.18
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: iccv Acquired: 5/19/2014 17:42:00 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.81**	**40.08**	**40.88**	**40.97**	**2.018**	**2.035**	**1.951**	**5.038**	**2.040**
Stddev	.10	.19	.13	.15	.002	.006	.002	.017	.005
%RSD	.2493	.4833	.3203	.3696	.0964	.2748	.1115	.3405	.2496
#1	40.95	40.34	41.02	41.09	2.020	2.042	1.951	5.058	2.048
#2	40.71	39.88	40.90	41.01	2.018	2.035	1.952	5.031	2.039
#3	40.79	40.00	40.89	41.04	2.019	2.035	1.952	5.044	2.036
#4	40.80	40.11	40.70	40.75	2.016	2.029	1.948	5.018	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.089**	**2.098**	**1.999**	**2.090**	**1.975**	**2.008**	**2.005**
Stddev	.013	.008	.005	.005	.008	.003	.009
%RSD	.6004	.3821	.2684	.2483	.3988	.1380	.4580
#1	2.079	2.109	2.005	2.098	1.985	2.010	2.006
#2	2.084	2.097	1.998	2.089	1.967	2.007	2.011
#3	2.107	2.097	2.001	2.090	1.971	2.011	2.012
#4	2.088	2.090	1.992	2.085	1.976	2.005	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: iccv Acquired: 5/19/2014 17:43:00 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	148890.	33544.	1862.1	5263.7
Stddev	365.	112.	3.1	12.1
%RSD	.24529	.33246	.16398	.22940
#1	148410.	33449.	1858.2	5248.8
#2	148940.	33699.	1863.7	5259.9
#3	148920.	33479.	1861.4	5269.9
#4	149300.	33549.	1865.1	5276.5

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 17:55:08 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0002**	**.0001**	**-.0001**	**.0005**	**.0002**	**.0001**	**-.0003**
Stddev	.0001	.0000	.0001	.0000	.0000	.0000	.0000	.0000	.0002
%RSD	94.82	18.60	26.23	9.770	42.30	10.34	1.036	24.03	74.72
#1	.0001	.0002	.0002	.0001	-.0001	.0005	.0002	.0002	-.0001
#2	.0000	.0002	.0003	.0001	-.0001	.0004	.0002	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0002**	**.0003**	**-.0011**	**.0008**	**.0008**	**-.0008**	**.0036**	**.0046**
Stddev	.0001	.0002	.0002	.0007	.0002	.0001	.0003	.0012	.0007
%RSD	134.7	136.8	63.81	59.33	28.78	11.43	43.20	32.48	14.38
#1	.0002	-.0003	.0001	-.0016	.0006	.0009	-.0005	.0028	.0050
#2	.0000	.0000	.0004	-.0006	.0010	.0008	-.0010	.0044	.0041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036**	**.0075**	**.0124**	**.0081**	**.0020**	**.0005**	**-.0004**	**.0000**	**.0004**
Stddev	.0003	.0101	.0105	.0028	.0001	.0002	.0005	.0008	.0005
%RSD	9.244	135.5	84.26	35.08	5.326	42.70	139.3	23740.	126.6
#1	.0039	.0003	.0198	.0101	.0019	.0007	.0000	.0005	.0007
#2	.0034	.0146	.0050	.0061	.0021	.0004	-.0008	-.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 17:55:08 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0113**	**.0006**	**-.0004**	**-.0005**	**.0008**
Stddev	.0000	.0000	.0017	.0000	.0005	.0003	.0001
%RSD	16.34	.7881	14.76	4.013	127.3	61.39	12.53
#1	.0002	.0002	.0125	.0006	-.0008	-.0008	.0009
#2	.0001	.0002	.0101	.0006	.0000	-.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	158760.	35138.	1977.6	5690.0
Stddev	238.	105.	1.8	4.4
%RSD	.15014	.29882	.09273	.07744
#1	158920.	35212.	1976.3	5693.1
#2	158590.	35064.	1978.9	5686.9

Zoom In Zoom Out

Sample Name: cri Acquired: 5/19/2014 18:01:21 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1967**	**.0023**	**.0034**	**.0519**	**.0106**	**.0093**	**.0167**	**.0106**
Stddev	.0008	.0000	.0001	.0001	.0002	.0001	.0001	.0001
%RSD	.4002	.9559	3.520	.1873	1.922	.7168	.4323	.8258
#1	.1972	.0023	.0035	.0520	.0104	.0094	.0166	.0105
#2	.1961	.0023	.0033	.0518	.0107	.0093	.0167	.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0045**	**.0535**	**.0233**	W **.0097**	**.0101**	**.0036**	**.0109**	**.0059**
Stddev	.0002	.0002	.0001	.0003	.0002	.0001	.0003	.0002
%RSD	4.950	.3287	.6031	3.240	2.088	2.916	2.457	2.727
#1	.0043	.0534	.0232	.0099	.0100	.0035	.0107	.0060
#2	.0046	.0536	.0234	.0095	.0103	.0036	.0111	.0058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0080				
Range				20.00%				

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2177**	**5.000**	**.1103**	**5.153**	**5.239**	**5.088**	**.1011**	**.0205**
Stddev	.0045	.007	.0009	.034	.007	.001	.0012	.0004
%RSD	2.063	.1427	.8332	.6636	.1438	.0185	1.167	1.921
#1	.2209	4.995	.1097	5.178	5.245	5.088	.1019	.0208
#2	.2145	5.005	.1110	5.129	5.234	5.089	.1002	.0202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: cri Acquired: 5/19/2014 18:01:21 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0500**	**.1978**	**.0104**	**.0108**	**.0112**	**.0560**	**.0116**	**.0467**
Stddev	.0001	.0002	.0005	.0000	.0004	.0003	.0001	.0012
%RSD	.1582	.1062	4.425	.0587	3.320	.5621	.5185	2.573
#1	.0499	.1979	.0107	.0108	.0115	.0562	.0116	.0459
#2	.0501	.1976	.0101	.0108	.0109	.0557	.0115	.0476
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**.0165**	**.0214**
Stddev	.0000	.0005
%RSD	.2792	2.454
#1	.0165	.0217
#2	.0164	.0210
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**154710.**	**33908.**	**1967.7**	**5577.4**
Stddev	92.	47.	3.0	1.9
%RSD	.05920	.13817	.15339	.03477
#1	154640.	33941.	1965.6	5576.0
#2	154770.	33875.	1969.8	5578.7

Zoom In Zoom Out

Sample Name: crid Acquired: 5/19/2014 18:07:21 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041**	F **.0016**	F **.0014**	**.0031**	**.0021**	**.0017**	**.0035**	**.0044**
Stddev	.0000	.0000	.0000	.0002	.0001	.0002	.0001	.0002
%RSD	.0115	.4961	1.614	4.796	5.455	8.597	1.941	5.463
#1	.0041	.0016	.0015	.0032	.0020	.0019	.0035	.0046
#2	.0041	.0016	.0014	.0030	.0021	.0016	.0034	.0043
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.0010	.0010					
Range		30.00%	30.00%					

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0022**	W **.0121**	**.0028**	**.0022**	W **.0031**	**.0043**	**.0028**
Stddev	.0003	.0001	.0002	.0006	.0007	.0007	.0004	.0001
%RSD	29.80	4.418	1.303	22.91	33.95	22.64	10.38	4.292
#1	.0008	.0022	.0122	.0033	.0027	.0026	.0046	.0029
#2	.0012	.0023	.0120	.0024	.0017	.0035	.0039	.0027
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
Value			.0100			.0025		
Range			20.00%			20.00%		

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1081**	**1.036**	**.0009**	**.1088**	**2.084**	**1.057**	**.0108**	**.0000**
Stddev	.0004	.002	.0001	.0018	.003	.004	.0003	.0000
%RSD	.3549	.1852	12.92	1.609	.1534	.4028	2.381	102.5
#1	.1083	1.035	.0010	.1101	2.086	1.060	.0110	.0000
#2	.1078	1.037	.0008	.1076	2.082	1.054	.0107	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Zoom In Zoom Out

Sample Name: crid Acquired: 5/19/2014 18:07:21 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0014**	**-.0002**	**.0000**	**.0002**	**.0047**	F **.0002**	F **.0001**
Stddev	.0006	.0001	.0000	.000	.0001	.0005	.0001	.0008
%RSD	737.5	8.813	11.00	13.10	88.78	10.82	29.13	1088.
#1	-.0005	-.0014	-.0002	.0000	.0003	.0043	.0002	.0006
#2	.0003	-.0013	-.0003	.0000	.0001	.0050	.0003	-.0005
Check ?	None	None	None	None	None	Chk Pass	Chk Fail	Chk Fail
Value							.0040	.0040
Range							-30.00%	-30.00%

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	F **-.0005**	F **.0006**
Stddev	.0010	.0001
%RSD	214.5	23.06
#1	-.0012	.0007
#2	.0002	.0005
Check ?	Chk Fail	Chk Fail
Value	.0040	.0040
Range	-30.00%	-30.00%

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**154690.**	**33368.**	**1988.1**	**5642.3**
Stddev	175.	62.	5.8	9.0
%RSD	.11344	.18576	.29050	.15938
#1	154820.	33412.	1992.2	5648.7
#2	154570.	33324.	1984.0	5635.9

Zoom In Zoom Out

Sample Name: cria Acquired: 5/19/2014 18:14:26 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**-.0001**	**.0001**	**.0000**	**.0000**	**.0000**	**.0001**	**-.0003**
Stddev	.0000	.0000	.0001	.0001	.000	.000	.0000	.0002	.0001
%RSD	98.62	62.36	105.6	216.7	432.5	284.7	309.5	171.9	45.30
#1	.0001	.0001	-.0001	.0001	-.0002	-.0001	.0000	.0000	-.0004
#2	.0000	.0000	.0000	.0000	.0001	.0000	.0000	.0002	-.0002
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0005**	**.0205**	**-.0018**	**.0212**	**.0220**	**.0189**	**.5072**	**.0030**
Stddev	.0000	.0001	.0009	.0002	.0002	.0001	.0008	.0001	.0005
%RSD	151.2	22.30	4.145	10.34	.8469	.2648	4.054	.0285	16.51
#1	.0000	.0005	.0211	-.0017	.0211	.0221	.0194	.5073	.0026
#2	.0001	.0004	.0199	-.0019	.0213	.0220	.0184	.5071	.0033
Check ?	None	None	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5265**	**.0080**	**-.0083**	**-.0033**	**.0006**	**.0001**	**-.0008**	**-.0001**	**.0002**
Stddev	.0014	.0023	.0016	.0016	.0001	.0002	.0005	.0002	.0005
%RSD	.2642	28.91	19.80	46.88	11.75	302.4	68.79	124.2	335.7
#1	.5255	.0096	-.0094	-.0022	.0005	-.0001	-.0012	-.0003	.0005
#2	.5275	.0063	-.0071	-.0044	.0006	.0003	-.0004	.0000	-.0002
Check ?	Chk Pass	None	None	None	None	None	None	None	None
Value									
Range									

Zoom In Zoom Out

Sample Name: cria Acquired: 5/19/2014 18:13:26 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0002**	**.0050**	**.0003**	**-.0003**	**-.0008**	**.0004**
Stddev	.000	.0002	.0001	.0000	.0008	.0005	.0000
%RSD	611.2	123.3	2.790	13.50	335.9	60.12	1.396
#1	.0000	.0003	.0049	.0002	-.0008	-.0012	.0004
#2	-.0001	.0000	.0051	.0003	.0003	-.0005	.0004
Check ?	None	None	None	None	None	None	None
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**158510.**	**34844.**	**1982.7**	**5680.7**
Stddev	688.	.	.6	1.9
%RSD	.43401	.00061	.03261	.03270
#1	159000.	34845.	1982.3	5682.0
#2	158030.	34844.	1983.2	5679.4

Zoom In Zoom Out

Sample Name: crid Acquired: 5/19/2014 18:19:31 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0040**	F **.0015**	F **.0016**	**.0032**	**.0018**	**.0022**	**.0032**	**.0042**
Stddev	.0000	.0000	.0001	.0000	.0001	.0002	.0000	.0000
%RSD	.8948	.6549	3.642	.5366	5.577	9.972	.6497	.7458
#1	.0039	.0015	.0016	.0032	.0018	.0023	.0032	.0042
#2	.0040	.0015	.0015	.0032	.0019	.0020	.0032	.0042
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.0010	.0010					
Range		30.00%	30.00%					

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0021**	**.0118**	**.0036**	F **.0028**	W **.0031**	W **.0064**	**.0027**
Stddev	.0002	.0001	.0002	.0003	.0003	.0000	.0006	.0004
%RSD	20.12	2.516	1.524	7.719	9.306	.0147	9.338	13.04
#1	.0012	.0021	.0117	.0038	.0026	.0031	.0060	.0030
#2	.0009	.0021	.0120	.0034	.0030	.0031	.0068	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Warn	Chk Pass
Value					.0020	.0025	.0050	
Range					30.00%	20.00%	20.00%	

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1026**	**1.020**	**.0004**	**.1110**	**1.985**	**1.003**	**.0105**	**.0000**
Stddev	.0021	.002	.0011	.0022	.013	.001	.0001	.000
%RSD	2.060	.2111	271.3	1.999	.6557	.0993	.6591	128.8
#1	.1011	1.019	-.0004	.1095	1.976	1.002	.0106	.0000
#2	.1041	1.022	.0011	.1126	1.995	1.004	.0105	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Zoom In Zoom Out

Sample Name: crid Acquired: 5/19/2014 18:19:31 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0024**	**.0001**	**.0000**	**.0001**	**.0038**	F **.0001**	F **.0021**
Stddev	.0006	.0004	.0002	.0000	.0002	.0008	.0000	.0015
%RSD	119.0	15.56	284.0	241.9	159.6	21.41	16.35	74.08
#1	-.0001	-.0022	.0002	.0000	.0000	.0044	.0001	.0010
#2	-.0009	-.0027	-.0001	.0000	.0002	.0032	.0001	.0032
Check ?	None	None	None	None	None	Chk Pass	Chk Fail	Chk Fail
Value							.0040	.0040
Range							-30.00%	-30.00%

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	F **-.0006**	F **.0003**
Stddev	.0004	.0005
%RSD	59.11	155.5
#1	-.0004	.0000
#2	-.0009	.0007
Check ?	Chk Fail	Chk Fail
Value	.0040	.0040
Range	-30.00%	-30.00%

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**158980.**	**35170.**	**1977.2**	**5693.6**
Stddev	220.	108.	6.8	9.3
%RSD	.13821	.30830	.34494	.16278
#1	158820.	35247.	1982.0	5700.1
#2	159130.	35093.	1972.3	5687.0

Zoom In Zoom Out

Sample Name: cria Acquired: 5/19/2014 18:26:06 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**-.0001**	**-.0001**	**-.0001**	**-.0002**	**.0000**	**-.0002**	**-.0001**
Stddev	.000	.0000	.0001	.0001	.0001	.0000	.000	.0001	.0004
%RSD	116.6	165.6	167.3	56.80	122.7	15.90	733.4	42.54	407.2
#1	.0000	.0000	-.0001	-.0001	-.0002	-.0002	.0000	-.0003	-.0003
#2	-.0001	.0000	.0000	-.0002	.0000	-.0001	.0000	-.0001	.0002
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0003**	**.0206**	**-.0001**	**.0209**	**.0210**	**.0189**	**.4912**	**.0056**
Stddev	.0001	.0002	.0001	.0006	.0010	.0007	.0000	.0030	.0021
%RSD	62.22	59.02	.6590	539.8	4.811	3.279	.0209	.6023	37.11
#1	-.0001	.0002	.0207	-.0005	.0202	.0214	.0189	.4891	.0041
#2	-.0001	.0005	.0205	.0003	.0216	.0205	.0189	.4933	.0071
Check ?	None	None	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5144**	**.0074**	**-.0184**	**-.0032**	**.0004**	**.0000**	**-.0001**	**-.0005**	**-.0002**
Stddev	.0012	.0011	.0123	.0036	.0001	.0002	.0004	.0004	.0000
%RSD	.2259	14.86	67.16	112.2	30.94	1988.	468.4	80.05	11.84
#1	.5136	.0067	-.0271	-.0007	.0003	-.0001	-.0004	-.0007	-.0002
#2	.5152	.0082	-.0097	-.0057	.0005	.0001	.0002	-.0002	-.0002
Check ?	Chk Pass	None	None	None	None	None	None	None	None
Value									
Range									

Zoom In Zoom Out

Sample Name: cria Acquired: 5/19/2014 18:26:06 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0001**	**.0026**	**.0002**	**.0017**	**.0002**	**.0002**
Stddev	.0000	.0003	.0005	.0001	.0031	.0003	.0001
%RSD	483.1	388.9	20.95	34.54	187.6	124.4	32.23
#1	.0000	-.0003	.0022	.0001	.0039	.0000	.0001
#2	.0000	.0001	.0030	.0002	-.0005	.0004	.0002
Check ?	None	None	None	None	None	None	None
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**160610.**	**35361.**	**2016.1**	**5763.0**
Stddev	292.	118.	7.1	20.9
%RSD	.18176	.33504	.35168	.36207
#1	160810.	35444.	2021.1	5777.8
#2	160400.	35277.	2011.1	5748.2

Zoom In Zoom Out

Sample Name: crid Acquired: 5/19/2014 18:32:11 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0040**	**.0011**	**.0010**	**.0032**	**.0019**	**.0017**	**.0033**	**.0042**
Stddev	.0000	.0000	.0002	.0000	.0001	.0000	.0000	.0002
%RSD	.2518	.7744	18.69	1.378	4.854	.8643	1.107	4.117
#1	.0040	.0011	.0009	.0032	.0018	.0016	.0033	.0040
#2	.0040	.0011	.0012	.0032	.0020	.0017	.0034	.0043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0023**	W **.0121**	W **.0036**	**.0016**	W **.0032**	F **.0066**	**.0030**
Stddev	.0001	.0000	.0000	.0002	.0001	.0000	.0013	.0006
%RSD	8.590	1.940	.2564	4.254	3.649	1.321	19.69	18.63
#1	.0009	.0023	.0121	.0035	.0017	.0031	.0076	.0026
#2	.0008	.0022	.0121	.0038	.0016	.0032	.0057	.0034
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Warn	Chk Fail	Chk Pass
Value			.0100	.0030		.0025	.0050	
Range			20.00%	20.00%		20.00%	30.00%	

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1028**	**1.027**	**.0008**	**.1087**	**2.063**	**1.032**	**.0101**	**-.0001**
Stddev	.0009	.003	.0002	.0116	.007	.001	.0002	.0002
%RSD	.8671	.2532	27.85	10.69	.3606	.1385	2.131	138.2
#1	.1022	1.026	.0010	.1170	2.058	1.031	.0103	.0000
#2	.1034	1.029	.0007	.1005	2.069	1.033	.0100	-.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Zoom In Zoom Out

Sample Name: crid Acquired: 5/19/2014 18:32:11 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0005**	**-.0001**	**.0000**	**-.0001**	F **.0009**	F **.0000**	F **.0000**
Stddev	.0000	.0000	.0003	.0000	.0001	.0001	.0000	.0011
%RSD	61.02	7.075	339.7	103.7	123.3	7.139	96.45	2263.
#1	.0000	-.0004	.0001	.0000	-.0002	.0008	.0001	.0008
#2	-.0001	-.0005	-.0003	.0000	.0000	.0009	.0000	-.0007
Check ?	None	None	None	None	None	Chk Fail	Chk Fail	Chk Fail
Value						.0040	.0040	.0040
Range						-30.00%	-30.00%	-30.00%

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	F **-.0007**	F **.0003**
Stddev	.0005	.0003
%RSD	77.63	95.80
#1	-.0010	.0001
#2	-.0003	.0005
Check ?	Chk Fail	Chk Fail
Value	.0040	.0040
Range	-30.00%	-30.00%

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**157140.**	**33992.**	**2014.3**	**5683.8**
Stddev	548.	5.	6.9	13.0
%RSD	.34846	.01553	.34204	.22919
#1	157520.	33988.	2019.1	5693.0
#2	156750.	33996.	2009.4	5674.6

Zoom In Zoom Out

Sample Name: icsa Acquired: 5/19/2014 18:38:16 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0000**	**-.0031**	**-.0003**	**.0000**	**-.0011**	**-.0067**	**-.0009**	**.0016**
Stddev	.0001	.000	.0001	.0001	.0001	.0003	.0002	.0003	.0010
%RSD	33.41	267.6	2.550	47.14	249.4	25.55	2.782	36.28	63.17
#1	-.0004	.0000	-.0031	-.0002	.0001	-.0013	-.0068	-.0007	.0009
#2	-.0003	.0000	-.0030	-.0004	.0000	-.0009	-.0066	-.0012	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0001**	**.0022**	**.0007**	**-.0008**	**-.0014**	**-.0004**	**535.4**	**387.8**
Stddev	.0002	.0001	.0002	.0025	.0005	.0060	.0004	5.3	1.7
%RSD	21.31	192.0	9.232	343.2	66.63	424.6	99.98	.9907	.4348
#1	.0012	-.0001	.0020	.0025	-.0011	-.0056	-.0001	531.6	386.6
#2	.0009	.0000	.0023	-.0011	-.0004	.0028	-.0006	539.1	389.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**197.7**	**562.1**	**.1242**	**.0128**	**-.0010**	**-.0039**	**-.0343**	**-.1697**	**.0013**
Stddev	1.6	1.8	.0172	.0028	.0001	.0000	.0009	.0007	.0019
%RSD	.8075	.3251	13.86	21.52	11.38	.7057	2.573	.4303	140.9
#1	196.6	560.8	.1121	.0148	-.0009	-.0039	-.0337	-.1692	.0000
#2	198.8	563.4	.1364	.0109	-.0011	-.0039	-.0349	-.1702	.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: icsa Acquired: 5/19/2014 18:38:16 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0057**	**-.0001**	**.0123**	**.0065**	**-.0616**	**-.0013**	**.0008**
Stddev	.0001	.0002	.0004	.0001	.0039	.0002	.0002
%RSD	2.336	216.0	3.203	2.112	6.373	13.68	22.19
#1	-.0056	.0001	.0126	.0064	-.0644	-.0012	.0007
#2	-.0058	-.0003	.0120	.0066	-.0588	-.0015	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**138520.**	**31237.**	**1761.3**	**4725.6**
Stddev	471.	176.	.2	2.4
%RSD	.33983	.56368	.01327	.05173
#1	138180.	31362.	1761.2	4723.9
#2	138850.	31113.	1761.5	4727.4

Zoom In Zoom Out

Sample Name: icsab Acquired: 5/19/2014 18:44:31 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5044**	**.5112**	**1.008**	**.4861**	**.4749**	**.5164**	**.4903**	**.9628**	**.9891**
Stddev	.0004	.0015	.001	.0013	.0028	.0004	.0001	.0019	.0002
%RSD	.0853	.2998	.0829	.2579	.5858	.0811	.0215	.1938	.0158
#1	.5041	.5122	1.008	.4852	.4730	.5167	.4904	.9615	.9890
#2	.5047	.5101	1.009	.4870	.4769	.5161	.4902	.9642	.9892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4714**	**.9351**	**1.048**	**1.012**	**.9568**	**.9935**	**1.007**	**507.8**	**371.4**
Stddev	.0001	.0019	.005	.000	.0034	.0002	.002	1.1	2.2
%RSD	.0240	.2037	.4751	.0346	.3578	.0212	.1511	.2159	.5955
#1	.4715	.9337	1.044	1.013	.9544	.9933	1.005	508.6	373.0
#2	.4713	.9364	1.051	1.012	.9592	.9936	1.008	507.1	369.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**192.4**	**538.2**	**.1159**	**.0182**	**-.0042**	**.4686**	**.4965**	**-.1745**	**.0025**
Stddev	.0	1.0	.0018	.0010	.0005	.0009	.0001	.0011	.0002
%RSD	.0015	.1789	1.544	5.466	12.53	.2004	.0250	.6381	6.978
#1	192.4	538.8	.1147	.0175	-.0038	.4679	.4966	-.1753	.0024
#2	192.4	537.5	.1172	.0189	-.0046	.4692	.4964	-.1737	.0027
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	None
Value									
Range									

Zoom In Zoom Out

Sample Name: icsab Acquired: 5/19/2014 18:44:31 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0056**	**.0001**	**.5092**	**.5027**	**.4027**	**.4906**	**.5425**
Stddev	.0001	.0004	.0002	.0006	.0034	.0005	.0006
%RSD	1.356	408.9	.0398	.1279	.8519	.1009	.1172
#1	-.0057	-.0002	.5090	.5032	.4003	.4902	.5420
#2	-.0056	.0003	.5093	.5023	.4052	.4909	.5429
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**141090.**	**32017.**	**1768.7**	**4780.5**
Stddev	36.	35.	5.9	13.9
%RSD	.02552	.10941	.33351	.29138
#1	141070.	32042.	1772.9	4790.4
#2	141120.	31993.	1764.5	4770.7

Zoom In Zoom Out

Sample Name: Feconf Acquired: 5/19/2014 18:50:39 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0002**	**.0001**	F **-.0042**	**-.0001**	**.0001**	**-.0017**	**-.0036**	**-.0004**
Stddev	.0001	.0000	.0001	.0000	.0001	.0002	.0001	.0002
%RSD	45.42	19.58	2.613	5.588	68.73	10.07	2.252	36.71
#1	.0001	.0001	-.0042	-.0001	.0002	-.0019	-.0035	-.0005
#2	.0002	.0001	-.0041	-.0001	.0001	-.0016	-.0036	-.0003

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0006**	**.0009**	**.0062**	**.0021**	**.0018**	**-.0006**	**-.0002**	**.0031**
Stddev	.0003	.0000	.0000	.0004	.0007	.0003	.0006	.0003
%RSD	41.51	2.811	.6998	19.85	41.45	44.84	300.8	9.875
#1	.0004	.0009	.0062	.0018	.0013	-.0008	-.0006	.0033
#2	.0008	.0010	.0062	.0024	.0023	-.0004	.0002	.0029

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0380**	**.0258**	**197.7**	**.0231**	**.1338**	**.0000**	**-.0014**	**.0002**
Stddev	.0105	.0043	.4	.0130	.0005	.0021	.0002	.0001
%RSD	27.51	16.51	.1988	56.17	.3384	16980.	11.47	40.59
#1	.0454	.0288	197.4	.0323	.1341	.0015	-.0013	.0001
#2	.0306	.0228	198.0	.0139	.1334	-.0015	-.0016	.0002

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0352**	**-.0237**	**-.0006**	**.0000**	**-.0002**	**.0092**	**.0085**	**-.0044**
Stddev	.0000	.0001	.0004	.000	.0004	.0000	.0000	.0010
%RSD	.1048	.3594	66.07	944.7	165.2	.4920	.0107	22.10
#1	-.0352	-.0238	-.0003	.0000	-.0005	.0092	.0085	-.0037
#2	-.0352	-.0237	-.0009	.0000	.0000	.0093	.0085	-.0051

Elem	Bi2230	Li6707
Avg	**.0032**	**-.0001**
Stddev	.0002	.0000
%RSD	6.676	29.53
#1	.0034	-.0001
#2	.0031	-.0001

Zoom In Zoom Out

Sample Name: Feconf Acquired: 5/19/2014 18:50:39 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153540.**	**33624.**	**1928.4**	**5640.4**
Stddev	208.	93.	5.4	2.4
%RSD	.13572	.27735	.28069	.04315
#1	153390.	33690.	1932.3	5642.1
#2	153680.	33558.	1924.6	5638.7

Zoom In Zoom Out

Sample Name: Crconf Acquired: 5/19/2014 18:56:46 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0004**	**.0001**	**-.0001**	**.0011**	**10.51**	**.0001**	**-.0004**	**.0000**	**-.0002**
Stddev	.0000	.0000	.0001	.0001	.01	.0002	.0000	.000	.0001
%RSD	12.28	16.95	135.4	11.29	.0607	160.5	3.511	150.4	83.27
#1	.0003	.0001	.0000	.0010	10.51	.0002	-.0004	-.0001	-.0003
#2	.0004	.0001	-.0002	.0012	10.50	.0000	-.0004	.0000	-.0001

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0035**	**.0039**	**.0017**	**.0009**	**.0004**	**.0020**	**-.0017**	**.0135**	**-.0071**
Stddev	.0001	.0002	.0011	.0003	.0003	.0006	.0001	.0015	.0004
%RSD	3.228	6.186	63.51	33.40	93.63	28.89	7.795	11.33	6.124
#1	.0034	.0037	.0025	.0011	.0001	.0016	-.0016	.0146	-.0068
#2	.0036	.0041	.0010	.0007	.0006	.0024	-.0018	.0125	-.0074

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0289**	**.0156**	**-.0125**	**.0051**	**.0006**	**.0006**	**-.0007**	**-.0096**	**-.0008**
Stddev	.0014	.0109	.0139	.0008	.0004	.0001	.0005	.0001	.0008
%RSD	4.869	69.76	111.5	14.72	64.77	16.91	82.03	1.113	95.39
#1	.0299	.0233	-.0026	.0046	.0009	.0007	-.0010	-.0095	-.0003
#2	.0279	.0079	-.0223	.0056	.0003	.0005	-.0003	-.0097	-.0014

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0001**	**.0004**	**.0013**	**-.0011**	**.0016**	**.0004**	**.0004**
Stddev	.0001	.0000	.0002	.0000	.0015	.0002	.0003
%RSD	88.22	1.883	16.47	2.225	94.67	42.84	69.28
#1	.0000	.0004	.0014	-.0011	.0005	.0006	.0002
#2	.0001	.0004	.0011	-.0011	.0027	.0003	.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**158950.**	**34540.**	**1969.9**	**5732.2**
Stddev	368.	12.	6.2	12.0
%RSD	.23122	.03576	.31432	.20903
#1	158690.	34531.	1965.5	5723.7
#2	159210.	34549.	1974.3	5740.7

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 19:02:49 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.001**	**2.073**	**2.021**	**2.056**	**2.081**	**1.955**	**2.094**	**2.062**	**.2426**
Stddev	.005	.003	.001	.003	.004	.006	.004	.003	.0001
%RSD	.2535	.1412	.0394	.1533	.1848	.3113	.2020	.1414	.0373
#1	1.998	2.071	2.021	2.058	2.084	1.951	2.097	2.064	.2427
#2	2.005	2.075	2.022	2.054	2.078	1.960	2.091	2.060	.2425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.042**	**2.078**	**2.024**	**2.086**	**2.065**	**1.981**	**2.001**	**39.93**	**40.38**
Stddev	.002	.007	.001	.003	.003	.002	.000	.09	.16
%RSD	.1150	.3221	.0419	.1203	.1425	.1015	.0067	.2164	.3899
#1	2.044	2.083	2.025	2.088	2.067	1.980	2.001	39.87	40.49
#2	2.040	2.073	2.024	2.084	2.063	1.983	2.001	39.99	40.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.74**	**39.98**	**40.15**	**40.14**	**2.001**	**2.029**	**1.944**	**5.005**	**2.037**
Stddev	.04	.08	.05	.17	.002	.001	.006	.003	.006
%RSD	.1104	.1889	.1168	.4334	.0758	.0250	.3035	.0636	.2854
#1	40.77	40.04	40.12	40.01	2.000	2.028	1.939	5.007	2.041
#2	40.71	39.93	40.19	40.26	2.002	2.029	1.948	5.003	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 19:02:49 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.049**	**2.062**	**1.953**	**2.053**	**1.958**	**1.989**	**1.980**
Stddev	.022	.005	.009	.000	.000	.001	.014
%RSD	1.082	.2442	.4794	.0093	.0143	.0602	.6900
#1	2.034	2.066	1.946	2.053	1.958	1.988	1.970
#2	2.065	2.059	1.960	2.053	1.958	1.990	1.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**151450.**	**33591.**	**1889.1**	**5314.8**
Stddev	254.	3.	3.7	9.6
%RSD	.16791	.00902	.19736	.18070
#1	151630.	33589.	1891.8	5321.6
#2	151270.	33593.	1886.5	5308.1

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 19:08:46 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0000**	**.0000**	**.0000**	**.0003**	**.0001**	**.0001**	**-.0003**
Stddev	.0001	.0000	.0001	.0000	.0004	.0000	.0001	.0000	.0002
%RSD	52.43	2.948	225.3	149.8	3636.	7.530	70.66	52.88	66.18
#1	.0001	.0002	.0001	.0001	-.0003	.0003	.0002	.0001	-.0005
#2	.0002	.0002	.0000	.0000	.0003	.0003	.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0009**	**-.0003**	**.0003**	**.0012**	**-.0001**	**.0066**	**.0032**
Stddev	.0002	.0000	.0002	.0001	.0011	.0000	.0002	.0011	.0014
%RSD	178.8	60.56	22.76	34.49	364.9	4.231	188.4	16.23	44.44
#1	.0000	.0001	.0011	-.0002	-.0005	.0011	-.0003	.0074	.0042
#2	.0003	.0000	.0008	-.0003	.0010	.0012	.0000	.0059	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036**	**.0083**	**.0064**	**-.0002**	**.0007**	**.0007**	**.0002**	**.0005**	**.0006**
Stddev	.0008	.0036	.0167	.0041	.0002	.0001	.0000	.0000	.0000
%RSD	22.44	43.72	261.6	2298.	34.51	11.31	2.045	6.874	3.186
#1	.0031	.0109	.0182	.0027	.0005	.0006	.0002	.0004	.0006
#2	.0042	.0057	-.0054	-.0031	.0009	.0007	.0002	.0005	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 19:08:46 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0099**	**.0006**	**-.0015**	**-.0004**	**.0006**
Stddev	.0000	.0002	.0017	.0001	.0024	.0004	.0003
%RSD	3.175	88.57	17.05	25.05	159.6	93.81	56.91
#1	.0001	.0001	.0111	.0007	-.0032	-.0007	.0004
#2	.0001	.0003	.0087	.0005	.0002	-.0001	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**157870.**	**34476.**	**1980.4**	**5688.3**
Stddev	437.	6.	.5	6.3
%RSD	.27680	.01881	.02735	.11144
#1	158180.	34480.	1980.8	5692.7
#2	157570.	34471.	1980.0	5683.8

Zoom In Zoom Out

Sample Name: mp79533-mb1conf Acquired: 5/19/2014 19:14:52 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: tomorrow due

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0001**	**.0001**	**.0000**	**-.0001**	**-.0001**	**.0007**	**.0001**	**.0000**	**-.0001**
Stddev	.0000	.0000	.0000	.0001	.0003	.0001	.0000	.0000	.0000
%RSD	23.56	14.36	93.72	117.6	235.2	12.04	32.44	27.19	66.94
#1	.0001	.0001	.0000	-.0001	-.0003	.0006	.0001	.0000	.0000
#2	.0001	.0001	.0000	.0000	.0001	.0007	.0001	.0000	-.0001

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0018**	**-.0003**	**-.0012**	**-.0006**	**.0007**	**.0002**	**.0001**	**.0213**
Stddev	.0001	.0001	.0003	.0004	.0001	.0001	.0002	.0040	.0002
%RSD	333.0	5.409	84.88	35.92	9.128	7.892	70.24	7112.	.9310
#1	.0000	.0017	-.0001	-.0009	-.0005	.0007	.0001	.0029	.0214
#2	.0001	.0019	-.0005	-.0015	-.0006	.0007	.0003	-.0028	.0212

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0036**	**.0129**	**.0030**	**.0035**	**.0007**	**.0001**	**-.0005**	**.0189**	**.0000**
Stddev	.0011	.0068	.0063	.0004	.0004	.0001	.0004	.0001	.0004
%RSD	29.80	52.80	212.6	10.49	50.89	63.48	86.68	.4136	876.4
#1	.0028	.0081	-.0015	.0038	.0010	.0001	-.0002	.0188	-.0002
#2	.0043	.0177	.0074	.0032	.0005	.0002	-.0008	.0189	.0003

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0000**	**.0001**	**.0063**	**.0006**	**.0024**	**-.0006**	**.0003**
Stddev	.0000	.0000	.0001	.0000	.0000	.0010	.0002
%RSD	55.44	30.15	2.102	7.175	.4534	176.7	52.64
#1	.0001	.0001	.0064	.0006	.0024	.0001	.0002
#2	.0000	.0002	.0062	.0006	.0024	-.0013	.0004

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157050.**	**34294.**	**1962.6**	**5640.6**
Stddev	215.	50.	7.4	20.8
%RSD	.13671	.14714	.37628	.36960
#1	156900.	34330.	1967.8	5655.3
#2	157200.	34259.	1957.3	5625.8

Sample Name: mp79533-BL2 Acquired: 5/19/2014 19:20:50 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.970**	**.0529**	**.0486**	**.4967**	**.2121**	**.2342**	**.5405**	**.5115**	**.0487**
Stddev	.006	.0001	.0005	.0042	.0003	.0002	.0008	.0047	.0002
%RSD	.2860	.1386	1.108	.8406	.1455	.0979	.1454	.9222	.4454
#1	1.974	.0529	.0482	.4937	.2119	.2341	.5400	.5082	.0488
#2	1.966	.0528	.0490	.4996	.2123	.2344	.5411	.5148	.0485

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5084**	**.5201**	**2.040**	**2.151**	**.5232**	**2.051**	**.4940**	**2.076**	**25.14**
Stddev	.0021	.0059	.015	.012	.0057	.013	.0040	.016	.12
%RSD	.4103	1.126	.7440	.5608	1.092	.6365	.8053	.7712	.4757
#1	.5070	.5160	2.029	2.142	.5192	2.042	.4912	2.088	25.23
#2	.5099	.5243	2.051	2.159	.5273	2.061	.4969	2.065	25.06

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.089**	**25.87**	**25.49**	**25.55**	**1.996**	**2.067**	**1.877**	**1.969**	**2.017**
Stddev	.007	.12	.12	.10	.016	.018	.005	.019	.021
%RSD	.6515	.4678	.4842	.3835	.7751	.8924	.2436	.9666	1.014
#1	1.094	25.96	25.58	25.62	1.986	2.054	1.874	1.956	2.002
#2	1.084	25.78	25.40	25.48	2.007	2.080	1.881	1.983	2.031

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.034**	**2.072**	**.0077**	**.0033**	**-.0060**	**-.0003**	**.0006**
Stddev	.020	.002	.0002	.0003	.0019	.0004	.0000
%RSD	.9987	.0797	2.717	9.463	32.37	128.3	1.637
#1	2.048	2.071	.0079	.0035	-.0074	-.0006	.0006
#2	2.019	2.073	.0076	.0030	-.0046	.0000	.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152190.**	**33894.**	**1909.5**	**5454.5**
Stddev	190.	168.	9.2	31.7
%RSD	.12462	.49516	.48229	.58104
#1	152330.	33776.	1916.1	5476.9
#2	152060.	34013.	1903.0	5432.1

Sample Name: jb67035-3 Acquired: 5/19/2014 19:26:54 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 2.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.6679**	**.0019**	**.0010**	**.0126**	**.1513**	**.3628**	**.2754**	**.0564**
Stddev	.0009	.0000	.0001	.0004	.0004	.0016	.0012	.0002
%RSD	.1326	2.185	8.597	3.272	.2847	.4455	.4528	.2992
#1	.6686	.0019	.0010	.0123	.1510	.3616	.2763	.0563
#2	.6673	.0020	.0009	.0129	.1516	.3639	.2745	.0565

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0060**	**.1561**	**1.088**	**.0470**	**F -.0162**	**.5817**	**.0034**	**.0021**
Stddev	.0006	.0008	.001	.0020	.0026	.0019	.0054	.0014
%RSD	9.356	.5350	.1265	4.151	16.07	.3317	161.0	67.51
#1	.0064	.1567	1.089	.0484	-.0180	.5803	-.0005	.0011
#2	.0056	.1555	1.087	.0456	-.0143	.5831	.0072	.0032

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**77.47**	**29.49**	**79.98**	**5.244**	**6.595**	**554.0**	**.0308**	**.0135**
Stddev	.17	.04	.15	.002	.047	2.9	.0007	.0000
%RSD	.2168	.1524	.1848	.0288	.7171	.5149	2.364	.0127
#1	77.59	29.53	80.09	5.243	6.629	552.0	.0313	.0135
#2	77.35	29.46	79.88	5.245	6.562	556.1	.0303	.0136

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0144**	**59.21**	**.0648**	**.3995**	**.8865**	**.0195**	**.0125**	**5.470**
Stddev	.0008	.07	.0006	.0012	.0037	.0000	.0002	.000
%RSD	5.502	.1177	.9574	.3051	.4214	.1738	1.461	.0071
#1	-.0138	59.26	.0644	.4004	.8892	.0195	.0126	5.470
#2	-.0149	59.17	.0652	.3987	.8839	.0196	.0123	5.469

Elem	Bi2230	Li6707
Avg	**-.0033**	**.0461**
Stddev	.0006	.0004
%RSD	17.15	.8018
#1	-.0029	.0458
#2	-.0037	.0463

Sample Name: jb67035-3 Acquired: 5/19/2014 19:26:54 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 2.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**147480.**	**33672.**	**1876.2**	**5082.8**
Stddev	168.	126.	.5	6.0
%RSD	.11418	.37395	.02500	.11754
#1	147360.	33583.	1876.5	5087.0
#2	147600.	33761.	1875.8	5078.6

Sample Name: jb67035-4 Acquired: 5/19/2014 19:32:58 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 2.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.1816**	**.0025**	**-.0003**	**.0121**	**.1754**	**.0665**	**.2114**	**.0396**
Stddev	.0004	.0001	.0003	.0001	.0009	.0006	.0005	.0001
%RSD	.2037	2.106	109.8	.6185	.5085	.8614	.2420	.2182
#1	.1814	.0025	-.0005	.0121	.1747	.0661	.2110	.0396
#2	.1819	.0026	-.0001	.0122	.1760	.0669	.2118	.0395

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0048**	**.1953**	**.2880**	**.0394**	**F -.0109**	**.1801**	**.0068**	**-.0011**
Stddev	.0002	.0014	.0001	.0017	.0021	.0017	.0017	.0003
%RSD	3.722	.7107	.0429	4.395	19.61	.9224	24.25	30.17
#1	.0050	.1943	.2879	.0381	-.0125	.1813	.0056	-.0013
#2	.0047	.1963	.2881	.0406	-.0094	.1790	.0080	-.0008

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**83.86**	**17.97**	**89.06**	**8.733**	**6.758**	**197.4**	**.0513**	**.0072**
Stddev	.05	.07	.27	.067	.037	.5	.0007	.0001
%RSD	.0559	.4147	.3087	.7694	.5430	.2438	1.287	1.435
#1	83.83	18.02	89.25	8.780	6.733	197.7	.0518	.0073
#2	83.89	17.92	88.86	8.685	6.784	197.0	.0509	.0071

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0146**	**57.16**	**.0065**	**.0851**	**.7754**	**.0131**	**.0147**	**3.103**
Stddev	.0023	.28	.0016	.0001	.0038	.0002	.0002	.020
%RSD	15.92	.4979	25.55	.0781	.4885	1.598	1.105	.6278
#1	-.0163	57.36	.0076	.0852	.7727	.0132	.0145	3.117
#2	-.0130	56.96	.0053	.0851	.7781	.0129	.0148	3.089

Elem	Bi2230	Li6707
Avg	**-.0035**	**.0281**
Stddev	.0014	.0003
%RSD	39.06	1.056
#1	-.0045	.0279
#2	-.0026	.0284

Zoom In Zoom Out

Sample Name: jb67035-4 Acquired: 5/19/2014 19:42:58 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 2.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153540.**	**34029.**	**1942.1**	**5377.5**
Stddev	690.	11.	11.4	25.9
%RSD	.44922	.03202	.58823	.48146
#1	154020.	34036.	1934.0	5359.2
#2	153050.	34021.	1950.1	5395.8

Zoom In Zoom Out

Sample Name: jb67035-3f Acquired: 5/19/2014 19:39:01 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**3.036**	**.0006**	**.0011**	**.0013**	**.0352**	**.1078**	**.4557**	**.0258**
Stddev	.018	.0000	.0005	.0001	.0012	.0011	.0014	.0004
%RSD	.5778	4.427	41.81	3.986	3.286	.9839	.3179	1.650
#1	3.048	.0006	.0015	.0014	.0360	.1086	.4546	.0261
#2	3.024	.0007	.0008	.0013	.0344	.1071	.4567	.0255

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0062**	**.0359**	**.2735**	**.0141**	F **-.0112**	**.1766**	**.0120**	**.0000**
Stddev	.0003	.0008	.0011	.0075	.0066	.0020	.0065	.0023
%RSD	5.314	2.156	.3963	53.44	59.42	1.146	54.02	5580.
#1	.0060	.0354	.2742	.0194	-.0065	.1752	.0074	.0017
#2	.0064	.0365	.2727	.0087	-.0158	.1781	.0166	-.0016

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**20.46**	**361.6**	**47.39**	**13.48**	**46.08**	F **6888.**	**.1099**	**.0212**
Stddev	.08	1.7	.22	.07	.19	132.	.0021	.0004
%RSD	.4141	.4742	.4633	.5424	.4203	1.910	1.911	2.123
#1	20.52	362.9	47.54	13.54	46.22	6981.	.1084	.0208
#2	20.40	360.4	47.23	13.43	45.94	6795.	.1114	.0215

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0088**	**25.84**	**.0168**	**5.566**	**.3204**	**.0135**	**.0033**	**46.65**
Stddev	.0011	.05	.0003	.026	.0002	.0014	.0000	.09
%RSD	13.10	.1969	1.953	.4717	.0636	10.52	.7486	.2022
#1	-.0079	25.87	.0165	5.585	.3206	.0125	.0033	46.71
#2	-.0096	25.80	.0170	5.547	.3203	.0145	.0033	46.58

Elem	Bi2230	Li6707
Avg	**-.0054**	**.0339**
Stddev	.0080	.0015
%RSD	146.5	4.568
#1	.0002	.0350
#2	-.0111	.0328

Zoom In Zoom Out

Sample Name: jb67035-3f Acquired: 5/19/2014 19:39:01 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**130670.**	**32481.**	**1676.6**	**4375.2**
Stddev	227.	14.	2.3	2.5
%RSD	.17401	.04220	.13536	.05631
#1	130510.	32472.	1678.2	4376.9
#2	130830.	32491.	1675.0	4373.4

Zoom In Zoom Out

Sample Name: jb67096-1 Acquired: 5/19/2014 19:45:07 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.7324**	**.0036**	**-.0010**	**.0136**	**.0762**	**.0660**	**.4325**	**.1034**	**.0041**
Stddev	.0015	.0000	.0001	.0001	.0000	.0002	.0014	.0001	.0001
%RSD	.2074	.4199	11.49	.9071	.0573	.3133	.3296	.1310	3.364
#1	.7335	.0036	-.0011	.0137	.0761	.0662	.4336	.1033	.0042
#2	.7313	.0036	-.0009	.0135	.0762	.0659	.4315	.1035	.0040

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5751**	**.1452**	**.3646**	**.0008**	**.1091**	**.0030**	**.0017**	**42.59**	**69.12**
Stddev	.0017	.0002	.0016	.0002	.0021	.0015	.0007	.08	.11
%RSD	.2950	.1707	.4354	25.73	1.898	49.29	42.39	.1936	.1646
#1	.5763	.1454	.3657	.0007	.1106	.0041	.0022	42.65	69.04
#2	.5739	.1450	.3634	.0010	.1077	.0020	.0012	42.53	69.20

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**58.91**	**16.81**	**9.479**	**779.0**	**.4448**	**.0133**	**-.0113**	**36.87**	**-.0020**
Stddev	.04	.03	.039	1.9	.0021	.0004	.0003	.14	.0002
%RSD	.0742	.1993	.4106	.2385	.4622	3.233	2.670	.3781	8.234
#1	58.94	16.79	9.507	780.3	.4463	.0136	-.0111	36.97	-.0021
#2	58.88	16.84	9.452	777.7	.4434	.0130	-.0115	36.77	-.0019

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**1.664**	**1.847**	**.0109**	**.0344**	**3.889**	**.0005**	**.0400**
Stddev	.004	.004	.0004	.0000	.015	.0008	.0005
%RSD	.2203	.2241	3.543	.0929	.3873	167.6	1.168
#1	1.667	1.850	.0112	.0344	3.900	-.0001	.0403
#2	1.662	1.845	.0106	.0345	3.878	.0011	.0397

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**141460.**	**33487.**	**1799.6**	**4673.6**
Stddev	105.	8.	7.2	15.7
%RSD	.07454	.02311	.39998	.33620
#1	141390.	33482.	1794.5	4662.4
#2	141530.	33493.	1804.7	4684.7

Zoom In Zoom Out

Sample Name: jb67096-1f Acquired: 5/19/2014 19:51:07 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.8642**	**.0001**	**.0015**	**-.0003**	**.0000**	**.0027**	**.5609**	**.0047**
Stddev	.0006	.0000	.0001	.0005	.0001	.0001	.0010	.0006
%RSD	.0726	37.82	8.367	159.0	848.5	3.702	.1710	12.96
#1	.8646	.0000	.0016	-.0006	.0000	.0027	.5616	.0051
#2	.8637	.0001	.0014	.0000	.0000	.0028	.5603	.0043

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0007**	**.0415**	**.0082**	**.5219**	F **-.0057**	**.0003**	**.0034**	**-.0010**
Stddev	.0000	.0001	.0001	.0027	.0004	.0016	.0022	.0009
%RSD	1.500	.1701	.6406	.5139	7.109	524.6	66.66	89.52
#1	-.0008	.0416	.0082	.5238	-.0054	.0014	.0018	-.0016
#2	-.0007	.0415	.0081	.5200	-.0059	-.0008	.0049	-.0004

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.2088**	**141.8**	**1.846**	**28.35**	**14.84**	*****	**.9476**	**.0205**
Stddev	.0080	.2	.006	.07	.03	-----	.0000	.0001
%RSD	3.835	.1587	.3126	.2303	.2178	-----	.0001	.3365
#1	.2031	141.7	1.842	28.30	14.82	-----	.9476	.0205
#2	.2144	142.0	1.850	28.40	14.86	-----	.9476	.0204

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0036**	**6.052**	**.0002**	**3.267**	**.0012**	**.0091**	**.0001**	**8.503**
Stddev	.0004	.001	.0007	.008	.0001	.0000	.0000	.002
%RSD	11.09	.0159	359.4	.2489	11.58	.0987	61.23	.0179
#1	-.0033	6.051	-.0003	3.261	.0011	.0091	.0001	8.504
#2	-.0039	6.052	.0007	3.273	.0013	.0091	.0000	8.501

Elem	Bi2230	Li6707
Avg	**-.0029**	**.0256**
Stddev	.0008	.0000
%RSD	26.69	.1315
#1	-.0023	.0256
#2	-.0034	.0256

Zoom In Zoom Out

Sample Name: jb67096-1f Acquired: 5/19/2014 19:51:07 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**124760.**	**32079.**	**1584.9**	**4132.4**
Stddev	112.	43.	1.4	3.1
%RSD	.08945	.13366	.08667	.07536
#1	124840.	32109.	1585.9	4134.6
#2	124680.	32048.	1584.0	4130.2

Zoom In Zoom Out

Sample Name: jb67096-1f Acquired: 5/19/2014 19:57:19 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 3.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.8914**	**.0001**	**-.0006**	**-.0007**	**-.0006**	**.0057**	**.6056**	**.0061**	**.0012**
Stddev	.0047	.0000	.0003	.0003	.0000	.0011	.0249	.0001	.0007
%RSD	.5271	37.23	59.81	52.06	7.515	19.97	4.106	1.028	58.85
#1	.8947	.0001	-.0008	-.0009	-.0005	.0065	.6232	.0061	.0017
#2	.8881	.0001	-.0003	-.0004	-.0006	.0049	.5880	.0060	.0007

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0456**	**.0062**	**.5161**	**-.0040**	**.0004**	**.0077**	**-.0008**	**.3395**	**154.0**
Stddev	.0008	.0001	.0026	.0043	.0001	.0002	.0018	.0006	.6
%RSD	1.716	1.160	.4957	108.2	32.36	2.218	232.2	.1729	.3941
#1	.0461	.0062	.5143	-.0009	.0005	.0076	-.0020	.3390	154.4
#2	.0450	.0063	.5180	-.0070	.0003	.0078	.0005	.3399	153.5

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.974**	**30.26**	**15.00**	**1920.**	**.9715**	**.0208**	**-.0021**	**5.973**	**-.0001**
Stddev	.021	.05	.08	3.	.0010	.0002	.0008	.011	.0016
%RSD	1.050	.1734	.5651	.1740	.0988	.9569	39.77	.1784	2489.
#1	1.989	30.30	15.06	1922.	.9708	.0206	-.0015	5.965	.0011
#2	1.960	30.23	14.94	1918.	.9722	.0209	-.0027	5.981	-.0012

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**3.434**	**-.0001**	**.0104**	**-.0011**	**8.383**	**-.0050**	**.0242**
Stddev	.022	.0002	.0023	.0008	.018	.0014	.0004
%RSD	.6439	227.3	21.89	69.56	.2186	28.98	1.583
#1	3.450	-.0002	.0088	-.0016	8.370	-.0039	.0244
#2	3.419	.0001	.0120	-.0006	8.396	-.0060	.0239

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**134780.**	**33188.**	**1759.8**	**4734.1**
Stddev	3647.	37.	4.8	8.3
%RSD	2.7060	.11259	.27421	.17508
#1	132200.	33214.	1763.2	4740.0
#2	137360.	33161.	1756.4	4728.2

Zoom In Zoom Out

Sample Name: jb67096-3f Acquired: 5/19/2014 20:03:23 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0001**	**.0000**	**.0000**	**-.0001**	**-.0001**	**.0004**	**.0001**	**-.0001**	**-.0002**
Stddev	.0001	.0000	.0000	.0001	.0001	.0003	.0000	.0001	.0001
%RSD	71.31	147.0	90.19	39.72	192.8	66.37	45.21	112.2	62.08
#1	.0001	.0000	.0001	-.0002	-.0001	.0006	.0001	.0000	-.0001
#2	.0000	.0000	.0000	-.0001	.0000	.0002	.0001	-.0002	-.0003

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0027**	**.0000**	**-.0011**	**.0007**	**.0017**	**-.0001**	**.0012**	**.0230**
Stddev	.0000	.0000	.0006	.0006	.0006	.0013	.0001	.0029	.0017
%RSD	194.1	.1569	5168.	51.22	88.84	77.21	83.61	247.1	7.484
#1	.0000	.0027	-.0004	-.0007	.0012	.0027	.0000	.0032	.0242
#2	.0000	.0027	.0005	-.0015	.0003	.0008	-.0001	-.0009	.0218

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0068**	**.0107**	**.0054**	**.2127**	**.0006**	**.0001**	**-.0001**	**.0183**	**.0007**
Stddev	.0014	.0105	.0224	.0210	.0003	.0000	.0001	.0001	.0004
%RSD	20.86	97.64	418.6	9.881	54.70	54.82	59.52	.6543	52.35
#1	.0058	.0182	.0212	.2276	.0004	.0000	-.0001	.0182	.0005
#2	.0077	.0033	-.0105	.1979	.0009	.0001	-.0001	.0184	.0010

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0002**	**.0001**	**-.0010**	**.0001**	**.0028**	**-.0009**	**.0005**
Stddev	.0000	.0000	.0004	.0001	.0011	.0000	.0000
%RSD	24.42	44.88	38.04	167.7	39.75	2.737	6.710
#1	.0002	.0001	-.0007	.0002	.0020	-.0009	.0005
#2	.0001	.0001	-.0012	.0000	.0036	-.0009	.0005

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157080.**	**33993.**	**1957.9**	**5641.6**
Stddev	2039.	146.	4.5	16.1
%RSD	1.2983	.43057	.22764	.28615
#1	155640.	34096.	1954.8	5630.2
#2	158520.	33889.	1961.1	5653.0

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 20:09:27 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.997**	**2.082**	**2.029**	**2.048**	**2.085**	**1.945**	**2.132**	**2.060**	**.2430**
Stddev	.003	.002	.001	.002	.005	.003	.004	.003	.0001
%RSD	.1405	.1116	.0477	.0774	.2402	.1531	.1683	.1557	.0579
#1	1.999	2.084	2.029	2.049	2.082	1.947	2.130	2.063	.2431
#2	1.995	2.080	2.030	2.047	2.089	1.943	2.135	2.058	.2429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.038**	**2.084**	**2.012**	**2.099**	**2.065**	**1.982**	**1.988**	**40.67**	**40.40**
Stddev	.003	.002	.004	.001	.004	.002	.004	.02	.06
%RSD	.1471	.0856	.2177	.0661	.1803	.1215	.1921	.0456	.1407
#1	2.036	2.085	2.009	2.100	2.067	1.981	1.986	40.69	40.36
#2	2.040	2.083	2.015	2.098	2.062	1.984	1.991	40.66	40.44
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.91**	**40.36**	**40.94**	**40.91**	**1.993**	**2.017**	**1.932**	**4.995**	**2.033**
Stddev	.02	.03	.09	.06	.004	.003	.001	.008	.003
%RSD	.0502	.0746	.2249	.1585	.2212	.1379	.0412	.1614	.1339
#1	40.92	40.38	41.01	40.95	1.990	2.015	1.933	4.989	2.031
#2	40.89	40.33	40.88	40.86	1.996	2.019	1.932	5.001	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 20:09:27 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.086**	**2.086**	**1.808**	**2.072**	**1.958**	**1.988**	**2.005**
Stddev	.002	.002	.032	.002	.002	.004	.003
%RSD	.1048	.0944	1.772	.0868	.1185	.1993	.1271
#1	2.088	2.085	1.785	2.073	1.957	1.985	2.007
#2	2.085	2.087	1.831	2.071	1.960	1.990	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**149100.**	**33035.**	**1876.8**	**5272.7**
Stddev	309.	3.	7.5	14.3
%RSD	.20699	.00888	.39952	.27037
#1	149320.	33033.	1882.1	5282.8
#2	148880.	33037.	1871.5	5262.6

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 20:15:18 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**.0001**	**.0002**	**.0002**	**.0003**	**.0002**	**.0000**	**.0000**
Stddev	.0001	.0000	.0002	.0002	.0003	.0000	.0000	.0003	.0000
%RSD	224.6	1.685	196.6	106.7	163.2	10.27	13.16	558.9	17.28
#1	.0002	.0002	.0000	.0001	.0003	.0003	.0002	.0002	.0001
#2	.0000	.0002	.0003	.0004	.0000	.0003	.0002	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0009**	**-.0019**	**-.0002**	**.0006**	**.0000**	**.0069**	**.0023**
Stddev	.0002	.000	.0001	.0009	.0013	.0010	.000	.0014	.0011
%RSD	101.7	571.1	6.653	46.87	724.3	183.7	1122.	19.61	49.56
#1	.0004	-.0001	.0009	-.0013	-.0011	.0013	.0001	.0060	.0031
#2	.0001	.0001	.0008	-.0025	.0007	-.0002	-.0001	.0079	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041**	**.0084**	**.0058**	**.0272**	**.0013**	**.0007**	**.0003**	**.0006**	**.0003**
Stddev	.0003	.0078	.0035	.0006	.0002	.0002	.0005	.0007	.0002
%RSD	6.567	92.62	59.96	2.076	16.95	29.15	151.5	120.3	58.14
#1	.0043	.0140	.0083	.0268	.0011	.0009	.0000	.0001	.0005
#2	.0039	.0029	.0033	.0276	.0014	.0006	.0007	.0011	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 20:15:18 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0149**	**.0010**	**-.0016**	**-.0004**	**-.0002**
Stddev	.0001	.0000	.0012	.0001	.0003	.0000	.0001
%RSD	34.19	37.42	8.053	6.334	15.46	9.653	49.65
#1	.0002	.0001	.0158	.0009	-.0018	-.0004	-.0002
#2	.0001	.0001	.0141	.0010	-.0015	-.0004	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**156330.**	**33715.**	**1967.8**	**5636.8**
Stddev	204.	93.	4.6	.1
%RSD	.13044	.27527	.23455	.00163
#1	156470.	33780.	1964.5	5636.9
#2	156180.	33649.	1971.0	5636.8

Zoom In Zoom Out

Sample Name: mp79532-mb1-1 Acquired: 5/19/2014 20:21:23 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: 2 ND CAL

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0001**	**.0001**	**.0000**	**.0003**	**-.0001**	**.0001**	**.0000**	**.0002**	**-.0004**
Stddev	.0001	.0000	.000	.0001	.0001	.0002	.000	.0003	.0001
%RSD	214.8	20.13	575.3	17.36	44.08	187.8	28.70	128.3	36.79
#1	.0002	.0000	.0001	.0003	-.0001	.0002	.0000	.0004	-.0005
#2	.0000	.0001	-.0001	.0003	-.0002	.0000	.0000	.0000	-.0003

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0002**	**.0050**	**.0022**	**.0023**	**.0006**	**.0018**	**-.0010**	**.0091**	**.0078**
Stddev	.0001	.0000	.0004	.0007	.0004	.0011	.0003	.0058	.0009
%RSD	40.91	.3361	18.32	28.31	67.20	59.72	31.40	63.41	11.11
#1	-.0001	.0050	.0025	.0019	.0009	.0010	-.0012	.0132	.0084
#2	-.0002	.0050	.0019	.0028	.0003	.0025	-.0008	.0050	.0071

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0034**	**.0131**	**.0086**	**.1423**	**.0005**	**-.0003**	**-.0008**	**.0019**	**.0000**
Stddev	.0012	.0042	.0200	.0017	.0000	.0000	.0002	.0008	.0003
%RSD	34.39	31.92	233.3	1.226	1.557	11.13	18.53	44.99	1306.
#1	.0026	.0102	-.0056	.1410	.0005	-.0003	-.0007	.0013	.0002
#2	.0043	.0161	.0227	.1435	.0005	-.0003	-.0009	.0025	-.0002

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0001**	**.0003**	**-.0004**	**.0002**	**.0066**	**.0012**	**.0003**
Stddev	.0000	.0002	.0001	.0000	.0014	.0005	.0004
%RSD	19.39	62.28	34.14	6.067	21.16	41.48	130.3
#1	.0001	.0004	-.0005	.0002	.0056	.0015	.0007
#2	.0000	.0002	-.0003	.0002	.0076	.0008	.0000

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	162220.	35558.	2037.0	5825.8
Stddev	695.	184.	7.5	30.2
%RSD	.42872	.51754	.37048	.51903
#1	162710.	35688.	2042.3	5847.2
#2	161730.	35428.	2031.7	5804.4

Zoom In Zoom Out

Sample Name: mp79532-b1-1 Acquired: 5/19/2014 20:27:26 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.998**	**.0529**	**.0511**	**.5107**	**.2156**	**.2369**	**.5482**	**.5281**	**.0510**
Stddev	.018	.0005	.0001	.0020	.0004	.0016	.0005	.0019	.0000
%RSD	.8862	.9436	.1993	.3833	.1939	.6721	.0987	.3597	.0279
#1	2.011	.0533	.0511	.5093	.2153	.2380	.5478	.5267	.0510
#2	1.986	.0526	.0512	.5121	.2159	.2357	.5485	.5294	.0510

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5142**	**.5457**	**2.131**	**2.275**	**.5491**	**2.238**	**.5135**	**2.120**	**25.48**
Stddev	.0008	.0008	.006	.010	.0018	.011	.0016	.029	.09
%RSD	.1492	.1536	.2938	.4343	.3223	.5108	.3098	1.383	.3545
#1	.5147	.5451	2.126	2.268	.5479	2.230	.5124	2.140	25.54
#2	.5137	.5463	2.135	2.282	.5504	2.246	.5146	2.099	25.41

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.104**	**26.41**	**26.23**	**26.12**	**2.097**	**2.058**	**1.899**	**2.073**	**2.076**
Stddev	.005	.12	.23	.29	.004	.008	.012	.005	.008
%RSD	.4187	.4700	.8689	1.099	.1902	.4091	.6083	.2247	.3911
#1	1.107	26.49	26.40	26.33	2.094	2.052	1.907	2.069	2.070
#2	1.101	26.32	26.07	25.92	2.100	2.064	1.891	2.076	2.082

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.059**	**2.098**	**.0036**	**.0015**	**-.0008**	**.0021**	**.0005**
Stddev	.026	.002	.0008	.0002	.0017	.0005	.0003
%RSD	1.269	.1047	20.90	10.68	206.2	22.80	52.98
#1	2.078	2.100	.0041	.0016	.0004	.0018	.0003
#2	2.041	2.097	.0031	.0014	-.0021	.0025	.0007

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	152110.	34033.	1917.5	5463.2
Stddev	376.	148.	7.4	20.2
%RSD	.24692	.43500	.38749	.37000
#1	151840.	33928.	1922.8	5477.5
#2	152370.	34138.	1912.3	5448.9

Zoom In Zoom Out

Sample Name: mp79532-s1 Acquired: 5/19/2014 20:33:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.036**	**.0533**	**.0521**	**.5174**	**.2239**	**.2458**	**.5514**	**.5556**	**.0532**
Stddev	.001	.0000	.0001	.0012	.0019	.0000	.0031	.0009	.0004
%RSD	.0533	.0490	.2411	.2317	.8308	.0083	.5623	.1568	.8301
#1	2.036	.0534	.0522	.5166	.2252	.2458	.5536	.5549	.0529
#2	2.037	.0533	.0521	.5183	.2226	.2458	.5492	.5562	.0535

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5218**	**.5425**	**2.187**	**2.280**	**.5547**	**2.278**	**.5276**	**2.286**	**92.28**
Stddev	.0018	.0015	.001	.002	.0020	.005	.0010	.004	.51
%RSD	.3531	.2777	.0380	.1045	.3634	.2181	.1847	.1846	.5505
#1	.5231	.5415	2.187	2.282	.5562	2.282	.5283	2.283	91.92
#2	.5205	.5436	2.188	2.278	.5533	2.275	.5270	2.289	92.63

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.393**	**41.26**	**27.76**	**41.94**	**2.380**	**2.109**	**1.948**	**11.48**	**2.103**
Stddev	.001	.08	.03	.01	.007	.001	.006	.03	.001
%RSD	.0907	.2038	.1179	.0305	.2943	.0387	.2902	.2345	.0409
#1	1.392	41.20	27.79	41.95	2.385	2.110	1.952	11.50	2.103
#2	1.394	41.32	27.74	41.94	2.375	2.109	1.944	11.46	2.104

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.409**	**2.105**	**.0054**	**-.0020**	**9.447**	**.0012**	**.0024**
Stddev	.032	.008	.0001	.0000	.013	.0002	.0002
%RSD	1.342	.3715	2.590	2.444	.1347	18.38	8.320
#1	2.387	2.110	.0055	-.0020	9.456	.0010	.0023
#2	2.432	2.099	.0053	-.0019	9.438	.0014	.0025

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	148070.	33638.	1838.9	5215.8
Stddev	17.	188.	5.7	7.2
%RSD	.01114	.55796	.30886	.13843
#1	148080.	33771.	1834.9	5210.7
#2	148060.	33506.	1842.9	5220.9

Zoom In Zoom Out

Sample Name: mp79532-s2 Acquired: 5/19/2014 20:39:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.005**	**.0525**	**.0515**	**.5095**	**.2213**	**.2411**	**.5472**	**.5462**	**.0522**
Stddev	.005	.0001	.0009	.0044	.0005	.0002	.0036	.0050	.0004
%RSD	.2359	.2022	1.791	.8711	.2127	.0863	.6592	.9102	.7369
#1	2.008	.0524	.0509	.5064	.2210	.2413	.5446	.5427	.0520
#2	2.001	.0526	.0522	.5126	.2216	.2410	.5497	.5497	.0525

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5156**	**.5336**	**2.159**	**2.257**	**.5443**	**2.241**	**.5188**	**2.251**	**90.60**
Stddev	.0027	.0054	.021	.012	.0033	.018	.0050	.001	1.03
%RSD	.5231	1.006	.9855	.5074	.6009	.8063	.9637	.0631	1.140
#1	.5137	.5298	2.144	2.248	.5420	2.228	.5153	2.250	91.33
#2	.5175	.5374	2.174	2.265	.5467	2.253	.5223	2.252	89.87

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.373**	**40.59**	**27.38**	**41.18**	**2.343**	**2.077**	**1.917**	**11.20**	**2.074**
Stddev	.002	.11	.03	.05	.019	.020	.001	.10	.022
%RSD	.1466	.2717	.1002	.1152	.8206	.9786	.0682	.8722	1.056
#1	1.371	40.51	27.40	41.21	2.330	2.063	1.916	11.13	2.059
#2	1.374	40.67	27.36	41.14	2.357	2.092	1.917	11.27	2.090

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.365**	**2.089**	**.0047**	**-.0024**	**9.204**	**.0008**	**.0027**
Stddev	.024	.008	.0008	.0001	.048	.0004	.0000
%RSD	1.020	.3649	16.89	2.678	.5257	53.28	1.030
#1	2.348	2.083	.0041	-.0025	9.170	.0011	.0027
#2	2.382	2.094	.0052	-.0024	9.238	.0005	.0027

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	148860.	33864.	1856.5	5266.0
Stddev	373.	4.	14.3	36.3
%RSD	.25026	.01066	.76870	.68988
#1	149130.	33861.	1866.5	5291.6
#2	148600.	33867.	1846.4	5240.3

Zoom In Zoom Out

Sample Name: mp79532-ss Acquired: 5/19/2014 20:45:20 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.031**	**.0529**	**.0521**	**.5158**	**.2449**	**.2433**	**.5848**	**.5833**	**.0525**
Stddev	.006	.0001	.0000	.0027	.0002	.0005	.0034	.0040	.0002
%RSD	.2967	.2740	.0194	.5165	.1002	.2154	.5773	.6926	.4072
#1	2.027	.0528	.0521	.5139	.2448	.2436	.5824	.5804	.0526
#2	2.035	.0530	.0521	.5176	.2451	.2429	.5872	.5861	.0523

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5167**	**.5399**	**2.183**	**2.283**	**.5528**	**2.273**	**.5248**	**2.451**	**88.70**
Stddev	.0003	.0032	.017	.022	.0032	.021	.0033	.001	.05
%RSD	.0526	.5909	.7754	.9822	.5739	.9382	.6264	.0465	.0512
#1	.5165	.5376	2.171	2.267	.5505	2.258	.5225	2.452	88.67
#2	.5169	.5421	2.195	2.299	.5550	2.288	.5271	2.450	88.74

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**2.949**	**36.26**	**27.09**	**39.36**	**2.269**	**2.099**	**1.931**	**12.92**	**2.092**
Stddev	.002	.00	.06	.05	.014	.014	.001	.07	.015
%RSD	.0640	.0110	.2308	.1323	.5941	.6471	.0456	.5190	.7309
#1	2.948	36.27	27.05	39.33	2.259	2.090	1.932	12.88	2.081
#2	2.951	36.26	27.14	39.40	2.278	2.109	1.931	12.97	2.103

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.213**	**2.103**	**.0048**	**-.0026**	**6.821**	**.0009**	**.0016**
Stddev	.005	.004	.0005	.0000	.059	.0006	.0004
%RSD	.2336	.1979	10.29	.7102	.8702	64.47	23.18
#1	2.209	2.100	.0044	-.0026	6.779	.0013	.0018
#2	2.216	2.106	.0051	-.0026	6.863	.0005	.0013

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**148630.**	**33681.**	**1843.3**	**5225.7**
Stddev	349.	61.	11.4	36.1
%RSD	.23492	.18183	.61887	.69123
#1	148870.	33724.	1851.4	5251.3
#2	148380.	33638.	1835.2	5200.2

Zoom In Zoom Out

Sample Name: jb67075-2 Acquired: 5/19/2014 20:51:15 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0122**	**.0000**	**.0004**	**.0010**	**.0096**	**.0029**	**.0082**	**.0235**	**.0007**
Stddev	.0000	.0000	.0001	.0001	.0002	.0001	.0000	.0001	.0002
%RSD	.3304	33.44	23.00	9.071	2.008	3.980	.2594	.5785	22.79
#1	.0122	.0000	.0003	.0011	.0097	.0029	.0082	.0234	.0009
#2	.0122	.0000	.0005	.0009	.0095	.0030	.0082	.0236	.0006

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0045**	**.0037**	**.0040**	**.0002**	**.0024**	**.0021**	**-.0008**	**.1600**	**68.14**
Stddev	.0002	.0000	.0007	.0001	.0009	.0014	.0004	.0009	.11
%RSD	4.475	.4618	18.74	31.12	38.35	69.07	55.00	.5375	.1541
#1	.0046	.0038	.0034	.0001	.0017	.0031	-.0011	.1594	68.21
#2	.0043	.0037	.0045	.0002	.0030	.0011	-.0005	.1606	68.06

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.2851**	**14.59**	**1.223**	**15.57**	**.2267**	**.0023**	**.0006**	**9.317**	**-.0020**
Stddev	.0000	.01	.031	.07	.0012	.0005	.0001	.036	.0001
%RSD	.0113	.1018	2.562	.4372	.5181	23.78	21.71	.3915	3.339
#1	.2851	14.58	1.200	15.52	.2259	.0027	.0005	9.291	-.0019
#2	.2851	14.60	1.245	15.62	.2276	.0019	.0007	9.343	-.0020

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.3218**	**.0009**	**-.0009**	**-.0016**	**9.406**	**.0000**	**.0025**
Stddev	.0016	.0001	.0001	.0002	.005	.0002	.0004
%RSD	.5075	8.778	12.11	10.72	.0567	16200.	14.04
#1	.3207	.0008	-.0009	-.0015	9.402	.0002	.0023
#2	.3230	.0009	-.0008	-.0017	9.410	-.0002	.0028

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**148760.**	**33603.**	**1852.0**	**5311.9**
Stddev	61.	36.	11.5	30.7
%RSD	.04081	.10573	.62332	.57711
#1	148720.	33629.	1860.1	5333.6
#2	148800.	33578.	1843.8	5290.2

Zoom In Zoom Out

Sample Name: mp79532-sd1 Acquired: 5/19/2014 20:57:16 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0118**	**.0002**	**.0009**	**.0006**	**.0085**	**.0043**	**.0081**	**.0242**	**-.0006**
Stddev	.0001	.0001	.0005	.0009	.0001	.0009	.0002	.0003	.0014
%RSD	1.197	28.02	53.44	143.9	.7515	20.17	2.130	1.081	227.9
#1	.0117	.0002	.0005	.0000	.0085	.0037	.0082	.0244	.0004
#2	.0119	.0003	.0012	.0013	.0085	.0049	.0080	.0240	-.0016

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0045**	**.0055**	**.0068**	**.0000**	**.0063**	**.0040**	**-.0029**	**.2051**	**67.62**
Stddev	.0001	.0001	.0033	.0024	.0022	.0054	.0027	.0273	.10
%RSD	3.316	1.274	48.84	7333.	35.20	136.0	94.71	13.32	.1513
#1	.0044	.0056	.0091	-.0017	.0079	.0078	-.0010	.2244	67.69
#2	.0046	.0055	.0044	.0018	.0047	.0002	-.0048	.1857	67.55

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.2948**	**14.42**	**1.238**	**15.23**	**.2174**	**.0034**	**.0000**	**8.869**	**-.0011**
Stddev	.0003	.01	.096	.04	.0021	.0010	.0020	.015	.0023
%RSD	.1014	.0483	7.728	.2721	.9662	30.44	8269.	.1698	202.0
#1	.2950	14.41	1.170	15.20	.2189	.0041	.0014	8.880	-.0028
#2	.2946	14.42	1.306	15.26	.2159	.0026	-.0014	8.859	.0005

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.3190**	**.0024**	**.0088**	**-.0003**	**8.710**	**-.0003**	**.0041**
Stddev	.0010	.0002	.0005	.0009	.057	.0031	.0035
%RSD	.3008	9.634	5.215	286.8	.6574	1026.	86.66
#1	.3184	.0026	.0085	.0003	8.750	-.0025	.0065
#2	.3197	.0022	.0092	-.0009	8.669	.0019	.0016

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152610.**	**33418.**	**1907.0**	**5480.4**
Stddev	187.	70.	3.7	5.2
%RSD	.12261	.20964	.19642	.09446
#1	152470.	33368.	1904.4	5476.7
#2	152740.	33467.	1909.7	5484.0

Zoom In Zoom Out

Sample Name: jb66995-1 Acquired: 5/19/2014 21:03:18 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.1331**	**.0000**	**.0002**	**.0011**	**.0005**	**.0146**	**.2902**	**.0029**	**.0009**
Stddev	.0000	.0000	.0000	.0001	.0001	.0000	.0004	.0003	.0000
%RSD	.0051	94.64	18.64	12.82	26.90	.0073	.1532	10.17	1.411
#1	.1331	.0000	.0002	.0012	.0004	.0146	.2905	.0031	.0008
#2	.1331	.0000	.0002	.0010	.0006	.0146	.2899	.0027	.0009

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0015**	**.0559**	**.0035**	**.0026**	**.0067**	**.0039**	**.0045**	**.3059**	**68.99**
Stddev	.0002	.0006	.0005	.0007	.0005	.0015	.0002	.0039	.14
%RSD	14.97	.9957	13.16	25.78	7.291	39.09	5.502	1.270	.1989
#1	.0014	.0555	.0032	.0022	.0070	.0028	.0043	.3031	69.09
#2	.0017	.0563	.0038	.0031	.0063	.0050	.0047	.3086	68.89

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.2534**	**28.29**	**7.239**	**86.18**	**.0808**	**.0020**	**.0001**	**4.676**	**-.0016**
Stddev	.0015	.04	.020	1.76	.0003	.0003	.0002	.013	.0002
%RSD	.6048	.1439	.2749	2.042	.3280	15.17	209.2	.2678	11.50
#1	.2544	28.32	7.225	87.43	.0810	.0022	.0003	4.667	-.0014
#2	.2523	28.26	7.253	84.94	.0806	.0018	-.0001	4.684	-.0017

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.3109**	**.0034**	**-.0009**	**-.0014**	**20.63**	**.0016**	**.0037**
Stddev	.0000	.0000	.0007	.0000	.07	.0006	.0001
%RSD	.0041	.4038	77.94	1.748	.3443	38.14	1.749
#1	.3109	.0034	-.0013	-.0013	20.58	.0012	.0037
#2	.3109	.0034	-.0004	-.0014	20.68	.0021	.0036

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**149990.**	**34243.**	**1870.3**	**5278.8**
Stddev	27.	109.	2.9	10.6
%RSD	.01823	.31837	.15391	.19995
#1	150010.	34321.	1872.3	5286.3
#2	149970.	34166.	1868.2	5271.4

Zoom In Zoom Out

Sample Name: jb67075-5 Acquired: 5/19/2014 21:15:24 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0119**	**.0000**	**.0003**	**.0013**	**.0435**	**.0027**	**.0445**	**.0538**	**.0008**
Stddev	.0000	.0000	.0001	.0001	.0002	.0001	.0001	.0007	.0001
%RSD	.1361	62.98	46.13	11.29	.4902	3.661	.1178	1.302	14.34
#1	.0119	.0000	.0004	.0014	.0434	.0028	.0444	.0533	.0009
#2	.0119	.0000	.0002	.0012	.0437	.0026	.0445	.0543	.0007

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0016**	**.0026**	**.0027**	**-.0012**	**.0030**	**.0007**	**-.0012**	**.3032**	**63.22**
Stddev	.0000	.0000	.0006	.0003	.0003	.0004	.0001	.0047	.22
%RSD	.0293	.7534	22.75	23.14	9.988	49.72	4.983	1.539	.3551
#1	.0016	.0026	.0023	-.0010	.0028	.0005	-.0013	.2999	63.06
#2	.0016	.0026	.0031	-.0014	.0032	.0010	-.0012	.3065	63.38

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.933**	**9.846**	**.6008**	**13.02**	**.1190**	**.0059**	**-.0006**	**10.45**	**-.0024**
Stddev	.001	.011	.0202	.05	.0004	.0001	.0004	.04	.0002
%RSD	.0345	.1159	3.357	.3828	.2976	1.184	66.19	.4232	7.891
#1	1.933	9.837	.6151	13.05	.1187	.0060	-.0009	10.42	-.0023
#2	1.934	9.854	.5865	12.98	.1192	.0059	-.0003	10.48	-.0025

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1267**	**.0049**	**-.0008**	**-.0015**	**6.720**	**.0005**	**.0018**
Stddev	.0004	.0000	.0006	.0001	.015	.0016	.0000
%RSD	.3195	.1010	74.84	5.245	.2298	299.6	2.079
#1	.1270	.0049	-.0004	-.0014	6.709	-.0006	.0017
#2	.1264	.0049	-.0012	-.0016	6.731	.0016	.0018

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**149910.**	**33627.**	**1867.4**	**5365.3**
Stddev	136.	100.	9.6	26.5
%RSD	.09039	.29589	.51279	.49378
#1	149810.	33697.	1874.2	5384.0
#2	150010.	33557.	1860.6	5346.5

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 21:15:23 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.997**	**2.081**	**2.022**	**2.045**	**2.071**	**1.949**	**2.130**	**2.054**	**.2415**
Stddev	.001	.001	.001	.002	.002	.000	.002	.003	.0005
%RSD	.0592	.0290	.0633	.0946	.0971	.0123	.0951	.1516	.2090
#1	1.998	2.081	2.023	2.046	2.069	1.950	2.128	2.056	.2412
#2	1.996	2.082	2.021	2.043	2.072	1.949	2.131	2.051	.2419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.034**	**2.076**	**2.017**	**2.090**	**2.061**	**1.976**	**1.991**	**40.29**	**39.78**
Stddev	.002	.005	.002	.009	.004	.001	.003	.03	.09
%RSD	.0962	.2320	.1005	.4074	.2004	.0491	.1483	.0757	.2340
#1	2.033	2.080	2.015	2.096	2.064	1.977	1.989	40.31	39.72
#2	2.036	2.073	2.018	2.084	2.058	1.976	1.993	40.27	39.85
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.61**	**39.91**	**40.71**	**40.66**	**1.997**	**2.016**	**1.938**	**4.982**	**2.028**
Stddev	.04	.04	.04	.06	.004	.002	.004	.004	.001
%RSD	.0923	.1018	.0994	.1374	.1855	.0005	.1102	.0732	.0356
#1	40.58	39.88	40.68	40.70	1.994	2.016	1.936	4.984	2.028
#2	40.63	39.93	40.74	40.62	1.999	2.016	1.939	4.979	2.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 21:15:23 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.061**	**2.080**	**1.889**	**2.063**	**1.948**	**1.979**	**2.002**
Stddev	.009	.005	.018	.005	.008	.002	.005
%RSD	.4417	.2536	.9476	.2485	.3923	.0843	.2612
#1	2.055	2.076	1.877	2.059	1.953	1.980	2.006
#2	2.068	2.084	1.902	2.066	1.942	1.978	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**148880.**	**33108.**	**1881.0**	**5286.9**
Stddev	78.	57.	3.1	2.3
%RSD	.05234	.17271	.16697	.04273
#1	148830.	33067.	1883.2	5288.5
#2	148940.	33148.	1878.8	5285.3

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 21:21:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0003**	**.0003**	**.0003**	**-.0001**	**.0004**	**.0002**	**.0000**
Stddev	.0001	.0000	.0002	.0000	.0001	.0001	.0000	.000
%RSD	46.12	11.57	90.28	9.261	85.56	27.99	10.00	1333.
#1	.0004	.0002	.0004	.0003	-.0002	.0005	.0003	.0002
#2	.0002	.0003	.0001	.0003	.0000	.0004	.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0004**	**.0001**	**.0014**	**-.0017**	**-.0002**	**-.0002**	**-.0001**
Stddev	.0003	.0001	.0000	.0004	.0006	.0003	.0013	.0002
%RSD	216.9	34.84	27.98	31.62	32.30	188.8	555.0	169.1
#1	-.0004	.0003	.0000	.0011	-.0013	.0001	-.0011	.0000
#2	.0001	.0005	.0001	.0017	-.0021	-.0004	.0007	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0060**	**.0065**	**.0051**	**.0141**	**.0267**	**.0065**	**.0013**	**.0011**
Stddev	.0005	.0003	.0007	.0084	.0054	.0062	.0004	.0003
%RSD	7.601	4.543	13.79	59.66	20.39	96.46	31.62	30.68
#1	.0057	.0067	.0046	.0082	.0306	.0109	.0016	.0013
#2	.0063	.0063	.0057	.0201	.0229	.0021	.0010	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 21:21:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0007**	**.0007**	**.0002**	**.0004**	**.0198**	W **.0012**	**-.0022**
Stddev	.0004	.0007	.0004	.0000	.0000	.0012	.0001	.0035
%RSD	265.0	99.11	52.67	18.48	.0003	6.077	6.658	160.1
#1	-.0001	.0013	.0010	.0002	.0004	.0207	.0013	-.0047
#2	.0005	.0002	.0005	.0002	.0004	.0190	.0012	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0011	
Low Limit							-.0011	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0002**	**.0009**
Stddev	.0004	.0003
%RSD	170.3	36.20
#1	.0000	.0012
#2	-.0005	.0007
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**155280.**	**33485.**	**1964.4**	**5611.2**
Stddev	116.	54.	7.0	10.6
%RSD	.07480	.16132	.35648	.18961
#1	155200.	33447.	1959.5	5603.7
#2	155360.	33523.	1969.4	5618.7

Zoom In Zoom Out

Sample Name: jb67075-4 Acquired: 5/19/2014 21:27:23 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0381**	**.0001**	**.0002**	**.0001**	**.0012**	**.0079**	**.1167**	**.0020**	**.0005**
Stddev	.0001	.0000	.0001	.0003	.0002	.0000	.0003	.0001	.0000
%RSD	.1692	20.60	23.04	179.2	18.30	.0157	.2898	6.432	7.874
#1	.0381	.0001	.0002	.0000	.0011	.0079	.1164	.0021	.0005
#2	.0382	.0001	.0003	.0003	.0014	.0079	.1169	.0019	.0005

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0007**	**.0266**	**.0035**	**-.0004**	**.0018**	**-.0002**	**-.0010**	**.1291**	**47.91**
Stddev	.0000	.0004	.0003	.0006	.0003	.0006	.0000	.0009	.04
%RSD	6.259	1.323	8.977	130.3	18.08	287.0	2.917	.7224	.0796
#1	.0007	.0263	.0033	.0000	.0020	.0002	-.0010	.1297	47.88
#2	.0008	.0268	.0037	-.0008	.0015	-.0007	-.0010	.1284	47.94

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.2915**	**9.165**	**1.697**	**58.04**	**.1032**	**.0001**	**.0003**	**7.481**	**-.0016**
Stddev	.0007	.027	.000	.06	.0005	.0003	.0006	.010	.0005
%RSD	.2407	.2994	.0071	.1069	.4843	365.9	208.2	.1290	29.59
#1	.2920	9.145	1.697	58.00	.1028	.0003	.0007	7.474	-.0013
#2	.2910	9.184	1.697	58.09	.1035	-.0001	-.0001	7.488	-.0020

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1616**	**.0010**	**.0034**	**-.0009**	**5.747**	**.0005**	**.0009**
Stddev	.0001	.0002	.0004	.0000	.014	.0001	.0004
%RSD	.0480	22.55	10.76	1.763	.2413	25.31	44.39
#1	.1615	.0009	.0036	-.0009	5.737	.0006	.0011
#2	.1616	.0012	.0031	-.0009	5.756	.0004	.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**150320.**	**33833.**	**1886.7**	**5353.8**
Stddev	153.	81.	2.9	14.8
%RSD	.10195	.23851	.15380	.27648
#1	150210.	33890.	1888.7	5364.3
#2	150430.	33776.	1884.6	5343.3

Zoom In Zoom Out

Sample Name: jb67075-5 Acquired: 5/19/2014 21:33:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0090**	**.0000**	**.0000**	**.0022**	**.3236**	**.0357**	**.0315**	**.2086**	**.0002**
Stddev	.0003	.0000	.000	.0002	.0002	.0002	.0000	.0004	.0001
%RSD	3.061	117.4	1221.	10.91	.0490	.5933	.0596	.2119	26.42
#1	.0088	.0000	.0001	.0023	.3235	.0358	.0315	.2082	.0002
#2	.0092	.0000	-.0001	.0020	.3238	.0355	.0315	.2089	.0002

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.1348**	**.0116**	**.0071**	**.0003**	**.0052**	**.0020**	**-.0006**	**.3771**	**9.139**
Stddev	.0004	.0001	.0009	.0007	.0011	.0009	.0008	.0080	.071
%RSD	.3005	.4891	12.52	275.4	21.51	42.66	127.0	2.110	.7736
#1	.1351	.0116	.0078	.0008	.0044	.0026	-.0001	.3827	9.189
#2	.1345	.0115	.0065	-.0003	.0060	.0014	-.0012	.3714	9.089

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**2.764**	**1.674**	**.6008**	**47.16**	**1.150**	**.0138**	**.0000**	**13.53**	**-.0020**
Stddev	.022	.011	.0121	.08	.003	.0001	.0002	.04	.0005
%RSD	.8067	.6349	2.010	.1786	.2813	1.069	510.5	.2931	26.19
#1	2.779	1.682	.6093	47.22	1.148	.0137	.0002	13.50	-.0024
#2	2.748	1.667	.5923	47.10	1.152	.0139	-.0001	13.56	-.0016

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0957**	**.0096**	**.0034**	**-.0018**	**9.087**	**.0010**	**.0039**
Stddev	.0002	.0003	.0003	.0001	.008	.0000	.0000
%RSD	.1820	3.343	9.844	3.730	.0910	2.863	.3554
#1	.0958	.0099	.0032	-.0017	9.081	.0010	.0039
#2	.0956	.0094	.0036	-.0018	9.092	.0010	.0039

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**158670.**	**35179.**	**2006.7**	**5686.7**
Stddev	217.	202.	6.1	16.2
%RSD	.13648	.57501	.30226	.28476
#1	158510.	35036.	2011.0	5698.2
#2	158820.	35322.	2002.4	5675.3

Zoom In Zoom Out

Sample Name: jb67075-6 Acquired: 5/19/2014 21:39:19 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0293**	**.0001**	**.0002**	**.0000**	**.0028**	**.0069**	**.0868**	**.0035**	**.0005**
Stddev	.0001	.0000	.0001	.0002	.0000	.0003	.0000	.0003	.0001
%RSD	.2590	18.79	28.02	358.0	1.353	4.235	.0300	7.865	26.81
#1	.0293	.0001	.0003	.0002	.0028	.0071	.0868	.0033	.0005
#2	.0294	.0000	.0002	-.0001	.0028	.0067	.0868	.0037	.0004

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0017**	**.0147**	**.0035**	**.0000**	**.0038**	**.0019**	**-.0015**	**.5872**	**35.90**
Stddev	.0002	.0003	.0010	.0001	.0003	.0007	.0002	.0005	.02
%RSD	8.924	1.717	28.46	294.7	8.999	39.69	14.85	.0812	.0446
#1	.0016	.0145	.0028	-.0001	.0036	.0024	-.0017	.5875	35.91
#2	.0018	.0149	.0042	.0001	.0040	.0013	-.0014	.5868	35.89

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.6413**	**9.865**	**2.211**	**42.15**	**.0650**	**-.0002**	**.0002**	**7.328**	**-.0016**
Stddev	.0011	.003	.029	.08	.0003	.0001	.0001	.038	.0000
%RSD	.1739	.0342	1.326	.1971	.4697	86.00	57.00	.5176	1.517
#1	.6405	9.863	2.232	42.21	.0652	-.0001	.0001	7.301	-.0015
#2	.6421	9.867	2.190	42.09	.0648	-.0003	.0002	7.355	-.0016

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1608**	**.0139**	**.0011**	**-.0010**	**10.08**	**.0004**	**.0022**
Stddev	.0002	.0001	.0006	.0001	.03	.0003	.0002
%RSD	.1427	.9337	53.41	10.97	.2755	75.90	7.132
#1	.1610	.0140	.0016	-.0010	10.06	.0002	.0023
#2	.1607	.0138	.0007	-.0011	10.10	.0006	.0020

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**149320.**	**33412.**	**1883.4**	**5338.1**
Stddev	153.	82.	8.2	19.7
%RSD	.10259	.24443	.43439	.36831
#1	149430.	33354.	1889.1	5352.0
#2	149210.	33469.	1877.6	5324.2

Zoom In Zoom Out

Sample Name: jb67075-7 Acquired: 5/19/2014 21:45:17 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.1274**	**.0000**	**.0002**	**.0004**	**.0131**	**.0081**	**.1121**	**.0091**	**.0016**
Stddev	.0011	.0000	.0000	.0001	.0001	.0001	.0006	.0002	.0002
%RSD	.8724	252.5	7.493	23.96	.9170	1.067	.4958	2.292	13.60
#1	.1266	.0000	.0002	.0003	.0132	.0080	.1125	.0090	.0014
#2	.1282	.0000	.0002	.0005	.0130	.0081	.1118	.0093	.0018

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0139**	**.0132**	**.0039**	**-.0009**	**.0042**	**.0019**	**-.0003**	**.3289**	**101.4**
Stddev	.0001	.0001	.0002	.0005	.0002	.0012	.0002	.0064	1.4
%RSD	.4248	.4294	4.188	55.29	4.499	64.79	75.12	1.934	1.426
#1	.0138	.0132	.0038	-.0013	.0041	.0010	-.0001	.3244	100.3
#2	.0139	.0132	.0040	-.0006	.0044	.0027	-.0004	.3334	102.4

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**16.99**	**16.47**	**1.393**	**26.94**	**.4764**	**.0000**	**-.0025**	**11.34**	**-.0025**
Stddev	.10	.07	.025	.20	.0024	.000	.0003	.06	.0001
%RSD	.5945	.4305	1.775	.7468	.5010	729.6	11.75	.4942	5.715
#1	16.92	16.42	1.410	26.80	.4747	-.0001	-.0023	11.30	-.0024
#2	17.06	16.52	1.375	27.08	.4780	.0001	-.0027	11.38	-.0026

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.3268**	**.0183**	**.0019**	**-.0008**	**7.648**	**.0002**	**.0042**
Stddev	.0023	.0001	.0001	.0000	.028	.0011	.0004
%RSD	.6939	.3666	7.518	1.037	.3656	520.4	10.05
#1	.3252	.0183	.0018	-.0008	7.629	.0010	.0045
#2	.3284	.0184	.0020	-.0008	7.668	-.0006	.0039

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**148250.**	**33491.**	**1870.5**	**5293.6**
Stddev	470.	239.	10.7	27.9
%RSD	.31723	.71393	.57140	.52723
#1	147910.	33660.	1878.0	5313.3
#2	148580.	33322.	1862.9	5273.9

Zoom In Zoom Out

Sample Name: jb67075-8 Acquired: 5/19/2014 21:51:21 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0738**	**.0000**	**.0001**	**.0000**	**.0006**	**.0046**	**.0056**	**.0026**	**.0004**
Stddev	.0015	.0000	.0002	.000	.0002	.0003	.0001	.0000	.0002
%RSD	2.067	760.2	149.9	285.3	37.85	6.899	1.693	1.460	39.90
#1	.0748	.0000	.0000	.0000	.0008	.0048	.0057	.0026	.0006
#2	.0727	.0000	.0003	.0000	.0004	.0044	.0056	.0026	.0003

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0004**	**.0224**	**.0032**	**.0017**	**.0034**	**.0013**	**-.0003**	**.1358**	**29.19**
Stddev	.0001	.0003	.0001	.0004	.0005	.0015	.0001	.0061	.20
%RSD	22.94	1.177	4.116	25.39	14.73	117.9	23.84	4.469	.6688
#1	.0003	.0222	.0033	.0014	.0037	.0002	-.0004	.1401	29.33
#2	.0004	.0225	.0031	.0020	.0030	.0024	-.0003	.1315	29.05

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.1068**	**8.973**	**4.749**	**57.17**	**.0565**	**-.0004**	**-.0003**	**6.110**	**-.0013**
Stddev	.0003	.035	.076	.92	.0004	.0001	.0007	.017	.0008
%RSD	.3126	.3876	1.595	1.610	.6921	14.51	249.9	.2792	67.40
#1	.1066	8.998	4.803	57.82	.0562	-.0003	.0002	6.098	-.0007
#2	.1071	8.949	4.695	56.52	.0568	-.0004	-.0008	6.122	-.0018

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1026**	**.0010**	**-.0002**	**-.0008**	**5.365**	**.0010**	**.0012**
Stddev	.0016	.0001	.0005	.0000	.021	.0002	.0001
%RSD	1.535	12.81	248.3	1.938	.3942	19.86	9.618
#1	.1037	.0009	.0001	-.0008	5.350	.0008	.0013
#2	.1015	.0011	-.0005	-.0008	5.380	.0011	.0012

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**155200.**	**34475.**	**1962.8**	**5533.1**
Stddev	2191.	342.	6.2	20.7
%RSD	1.4115	.99171	.31497	.37384
#1	153650.	34233.	1967.2	5547.8
#2	156740.	34716.	1958.4	5518.5

Zoom In Zoom Out

Sample Name: jb67075-9 Acquired: 5/19/2014 21:57:21 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0243**	**.0000**	**-.0009**	**.0027**	**.0206**	**.0120**	**.3668**	**.0574**	**.0003**
Stddev	.0002	.0000	.0000	.0004	.0001	.0002	.0003	.0001	.0004
%RSD	.6205	98.12	4.102	14.48	.6249	1.532	.0922	.1398	142.9
#1	.0242	.0000	-.0009	.0030	.0207	.0122	.3670	.0575	.0005
#2	.0244	.0000	-.0009	.0024	.0205	.0119	.3665	.0574	.0000

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0167**	**.0235**	**.0038**	**.0022**	**.0031**	**.0020**	**.0004**	**.2208**	**5.798**
Stddev	.0001	.0002	.0001	.0000	.0001	.0015	.0000	.0045	.028
%RSD	.5042	1.024	1.958	2.095	2.728	77.24	4.299	2.036	.4875
#1	.0166	.0233	.0038	.0023	.0032	.0031	.0004	.2239	5.778
#2	.0168	.0237	.0037	.0022	.0031	.0009	.0004	.2176	5.818

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**49.82**	**.6443**	**2.912**	**48.35**	**10.88**	**.0041**	**-.0098**	**3.997**	**.0000**
Stddev	.13	.0188	.000	.14	.02	.0000	.0010	.006	.0005
%RSD	.2535	2.925	.0101	.2878	.1832	.3919	9.835	.1506	1550.
#1	49.73	.6576	2.912	48.44	10.86	.0041	-.0105	3.993	.0004
#2	49.91	.6310	2.912	48.25	10.89	.0042	-.0091	4.001	-.0003

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1355**	**.0056**	**.0015**	**.0013**	**4.959**	**.0016**	**.0295**
Stddev	.0001	.0001	.0007	.0001	.007	.0004	.0000
%RSD	.0402	2.485	45.92	5.577	.1500	25.04	.0048
#1	.1356	.0055	.0010	.0013	4.954	.0013	.0295
#2	.1355	.0057	.0020	.0012	4.965	.0018	.0295

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153520.**	**34027.**	**1939.3**	**5525.1**
Stddev	346.	.	6.5	12.3
%RSD	.22567	.00061	.33279	.22185
#1	153770.	34027.	1943.8	5533.8
#2	153280.	34027.	1934.7	5516.5

Zoom In Zoom Out

Sample Name: jb67075-10 Acquired: 5/19/2014 22:03:19 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0804**	**.0000**	**.0002**	**-.0002**	**.0011**	**.0028**	**.0432**	**.0031**	**.0009**
Stddev	.0001	.0000	.0001	.0001	.0000	.0003	.0000	.0000	.0000
%RSD	.1658	5.101	38.14	57.38	4.378	10.85	.0494	.9962	.7534
#1	.0805	.0000	.0002	-.0003	.0011	.0030	.0432	.0031	.0009
#2	.0803	.0000	.0003	-.0001	.0010	.0026	.0433	.0031	.0009

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0014**	**.0015**	**.0027**	**-.0013**	**.0021**	**.0025**	**-.0001**	**.1880**	**86.76**
Stddev	.0001	.0001	.0003	.0007	.0002	.0013	.0000	.0041	.11
%RSD	3.946	5.720	10.87	55.07	8.290	52.41	21.96	2.195	.1286
#1	.0015	.0014	.0025	-.0008	.0020	.0034	-.0001	.1909	86.68
#2	.0014	.0016	.0029	-.0018	.0022	.0016	-.0001	.1851	86.84

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.140**	**14.95**	**1.350**	**55.81**	**.3655**	**-.0004**	**.0005**	**10.19**	**-.0029**
Stddev	.003	.07	.019	.06	.0006	.0001	.0008	.05	.0003
%RSD	.2370	.4631	1.422	.1076	.1773	31.60	145.8	.5180	9.595
#1	1.138	14.91	1.336	55.85	.3651	-.0005	.0000	10.16	-.0030
#2	1.142	15.00	1.363	55.76	.3660	-.0003	.0011	10.23	-.0027

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.3563**	**.0009**	**.0001**	**-.0016**	**9.068**	**.0001**	**.0240**
Stddev	.0001	.0001	.0008	.0000	.052	.0003	.0002
%RSD	.0161	11.90	1044.	.4359	.5794	506.3	.8615
#1	.3563	.0009	-.0005	-.0016	9.031	-.0002	.0239
#2	.3562	.0010	.0006	-.0016	9.105	.0003	.0241

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**146990.**	**32939.**	**1849.5**	**5216.9**
Stddev	145.	28.	11.0	27.0
%RSD	.09885	.08540	.59683	.51777
#1	146890.	32919.	1857.3	5236.0
#2	147090.	32958.	1841.7	5197.8

Zoom In Zoom Out

Sample Name: jb67075-11 Acquired: 5/19/2014 22:09:18 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0000**	**.0000**	**-.0001**	**.0001**	**-.0001**	**.0004**	**.0000**	**.0003**	**-.0004**
Stddev	.0001	.0000	.0000	.0004	.0003	.0002	.000	.0001	.0001
%RSD	200.3	157.3	29.17	280.3	227.8	40.67	230.7	18.62	28.30
#1	.0001	.0000	-.0002	.0004	.0001	.0003	.0000	.0004	-.0005
#2	.0000	.0000	-.0001	-.0001	-.0003	.0006	.0000	.0003	-.0004

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0014**	**.0022**	**.0015**	**.0013**	**.0008**	**-.0007**	**.0050**	**.0145**
Stddev	.000	.0002	.0004	.0002	.0010	.0000	.0004	.0021	.0036
%RSD	553.1	14.66	18.30	16.35	80.78	3.528	59.46	41.89	24.87
#1	.0001	.0013	.0019	.0017	.0005	.0008	-.0004	.0064	.0171
#2	-.0001	.0015	.0025	.0013	.0020	.0009	-.0010	.0035	.0120

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0016**	**.0070**	**-.0116**	**.0091**	**.0021**	**-.0004**	**-.0006**	**.0050**	**-.0001**
Stddev	.0005	.0013	.0091	.0001	.0006	.0000	.0005	.0003	.0002
%RSD	30.86	19.08	78.50	.8879	28.23	8.440	89.88	5.971	218.3
#1	.0012	.0061	-.0052	.0092	.0025	-.0004	-.0010	.0048	-.0002
#2	.0019	.0079	-.0181	.0090	.0017	-.0004	-.0002	.0052	.0000

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0001**	**.0002**	**-.0012**	**.0000**	**.0043**	**.0013**	**.0001**
Stddev	.0000	.0001	.0003	.0001	.0002	.0002	.0003
%RSD	12.43	36.99	28.57	326.7	5.740	15.23	221.0
#1	.0000	.0003	-.0014	.0001	.0041	.0012	-.0001
#2	.0001	.0002	-.0009	.0000	.0044	.0015	.0003

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**156610.**	**34129.**	**1983.4**	**5657.2**
Stddev	543.	73.	7.0	31.2
%RSD	.34643	.21382	.35353	.55208
#1	156230.	34181.	1988.3	5679.3
#2	156990.	34078.	1978.4	5635.1

Zoom In Zoom Out

Sample Name: jb67075-12 Acquired: 5/19/2014 22:15:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0259**	**.0000**	**.0002**	**.0003**	**.0018**	**.0395**	**.1018**	**.0033**	**.0002**
Stddev	.0000	.0000	.0000	.0001	.0003	.0001	.0005	.0003	.0003
%RSD	.1362	5.968	12.29	38.90	16.40	.1342	.4691	8.360	114.6
#1	.0259	.0000	.0002	.0003	.0020	.0395	.1015	.0031	.0000
#2	.0259	.0000	.0002	.0004	.0016	.0396	.1022	.0034	.0004

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0055**	**.0164**	**.0028**	**-.0003**	**.0052**	**.0003**	**-.0004**	**.2533**	**19.49**
Stddev	.0000	.0001	.0006	.0013	.0011	.0008	.0002	.0031	.01
%RSD	.6675	.8146	21.03	363.9	20.79	314.9	44.75	1.225	.0636
#1	.0055	.0163	.0032	.0005	.0060	-.0003	-.0003	.2555	19.48
#2	.0055	.0165	.0024	-.0012	.0045	.0009	-.0005	.2511	19.50

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.740**	**3.367**	**1.508**	**13.86**	**.3879**	**-.0003**	**-.0003**	**7.319**	**-.0001**
Stddev	.005	.015	.013	.02	.0035	.0002	.0005	.091	.0003
%RSD	.2965	.4393	.8613	.1121	.9059	58.02	189.8	1.243	295.0
#1	1.736	3.356	1.498	13.87	.3854	-.0002	.0001	7.255	.0001
#2	1.743	3.377	1.517	13.85	.3904	-.0005	-.0007	7.384	-.0003

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1066**	**.0065**	**-.0005**	**-.0009**	**3.324**	**.0003**	**.0018**
Stddev	.0001	.0000	.0005	.0000	.042	.0005	.0001
%RSD	.0935	.1027	104.9	2.732	1.275	150.2	7.376
#1	.1066	.0065	-.0009	-.0009	3.294	.0007	.0019
#2	.1067	.0064	-.0001	-.0008	3.354	.0000	.0017

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**155380.**	**34219.**	**1941.5**	**5527.5**
Stddev	167.	27.	23.4	58.5
%RSD	.10768	.07788	1.2032	1.0589
#1	155500.	34200.	1958.0	5568.8
#2	155260.	34237.	1925.0	5486.1

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 22:21:22 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.003**	**2.087**	**2.018**	**2.073**	**2.120**	**1.937**	**2.129**	**2.070**	**.2406**
Stddev	.003	.001	.002	.003	.002	.002	.000	.000	.0005
%RSD	.1620	.0608	.1004	.1479	.1031	.0823	.0150	.0184	.2032
#1	2.005	2.088	2.020	2.076	2.118	1.938	2.129	2.069	.2403
#2	2.001	2.086	2.017	2.071	2.121	1.936	2.130	2.070	.2410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.060**	**2.105**	**2.035**	**2.099**	**2.086**	**1.945**	**1.981**	**41.01**	**40.17**
Stddev	.004	.002	.002	.004	.001	.002	.003	.05	.13
%RSD	.1798	.0866	.0971	.1713	.0571	.1084	.1355	.1135	.3290
#1	2.057	2.106	2.037	2.101	2.086	1.947	1.983	41.04	40.07
#2	2.062	2.103	2.034	2.096	2.085	1.944	1.979	40.98	40.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.07**	**40.44**	**41.32**	**41.05**	**1.980**	**2.004**	**1.927**	**4.953**	**2.021**
Stddev	.07	.07	.01	.13	.002	.002	.002	.001	.004
%RSD	.1757	.1856	.0300	.3066	.0863	.0787	.1225	.0274	.1897
#1	41.02	40.39	41.33	41.14	1.981	2.005	1.926	4.954	2.024
#2	41.12	40.50	41.31	40.96	1.978	2.003	1.929	4.952	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 22:21:22 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.088**	**2.116**	**1.893**	**2.098**	**1.942**	**1.945**	**2.008**
Stddev	.022	.002	.016	.002	.005	.003	.008
%RSD	1.049	.1106	.8315	.0818	.2541	.1344	.3959
#1	2.104	2.117	1.882	2.099	1.946	1.947	2.013
#2	2.073	2.114	1.904	2.096	1.939	1.944	2.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**148310.**	**32611.**	**1901.1**	**5290.4**
Stddev	85.	110.	3.2	7.0
%RSD	.05740	.33806	.17005	.13317
#1	148250.	32689.	1898.8	5285.5
#2	148370.	32533.	1903.4	5295.4

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 22:27:14 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0004**	**.0002**	**.0002**	**.0004**	**.0001**	**.0004**	**.0001**
Stddev	.0001	.0001	.0001	.0001	.0001	.0001	.0000	.0002
%RSD	27.02	14.66	36.22	34.09	25.33	58.35	5.073	114.3
#1	.0003	.0004	.0002	.0003	.0004	.0001	.0004	.0000
#2	.0005	.0003	.0001	.0002	.0003	.0001	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0003**	**.0000**	**.0016**	**-.0018**	**.0006**	**.0006**	**.0003**
Stddev	.0001	.0001	.0001	.0006	.0004	.0010	.0011	.0003
%RSD	47.63	31.83	262.7	36.81	23.79	149.7	187.9	85.79
#1	-.0002	.0004	.0001	.0020	-.0021	.0000	.0013	.0001
#2	-.0004	.0002	.0000	.0012	-.0015	.0013	-.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0061**	**.0059**	**.0081**	**.0127**	**.0051**	**.0046**	**.0018**	**.0010**
Stddev	.0019	.0017	.0004	.0109	.0040	.0024	.0000	.0002
%RSD	31.40	28.85	4.824	86.24	77.34	51.49	1.371	23.88
#1	.0047	.0071	.0084	.0204	.0023	.0029	.0018	.0012
#2	.0074	.0047	.0078	.0050	.0079	.0063	.0018	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 22:27:14 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0014**	**.0005**	**.0004**	**.0001**	**.0179**	W **.0012**	**-.0018**
Stddev	.001	.0005	.0002	.0000	.0001	.0018	.0003	.0017
%RSD	7305.	39.23	30.89	7.307	44.52	10.13	26.32	92.86
#1	-.0008	.0017	.0006	.0004	.0001	.0192	.0014	-.0030
#2	.0008	.0010	.0004	.0003	.0002	.0166	.0010	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0011	
Low Limit							-.0011	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0019**	**.0004**
Stddev	.0001	.0002
%RSD	7.602	61.39
#1	-.0020	.0002
#2	-.0018	.0005
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**155700.**	**33057.**	**1991.6**	**5637.1**
Stddev	204.	24.	1.6	1.4
%RSD	.13127	.07339	.08128	.02553
#1	155550.	33040.	1990.4	5638.2
#2	155840.	33074.	1992.7	5636.1

Zoom In Zoom Out

Sample Name: jb67075-13 Acquired: 5/19/2014 22:33:20 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0490**	**.0001**	**.0002**	**.0006**	**.0011**	**.0428**	**.0463**	**.0044**	**.0005**
Stddev	.0001	.0000	.0001	.0001	.0002	.0002	.0003	.0001	.0004
%RSD	.2234	12.63	60.07	24.07	16.36	.4591	.6715	1.752	72.26
#1	.0491	.0002	.0003	.0005	.0012	.0427	.0466	.0044	.0002
#2	.0489	.0001	.0001	.0007	.0010	.0430	.0461	.0043	.0008

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0014**	**.0945**	**.0044**	**-.0013**	**.0058**	**-.0006**	**-.0004**	**.7108**	**56.02**
Stddev	.0000	.0009	.0009	.0007	.0001	.0000	.0011	.0023	.07
%RSD	2.548	.9064	20.17	58.48	1.721	4.546	316.5	.3200	.1183
#1	.0014	.0939	.0050	-.0007	.0057	-.0006	-.0012	.7092	55.97
#2	.0014	.0951	.0037	-.0018	.0059	-.0007	.0004	.7124	56.07

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.117**	**16.67**	**3.071**	**55.38**	**.0603**	**-.0005**	**-.0002**	**8.135**	**-.0012**
Stddev	.000	.03	.013	.18	.0001	.0002	.0007	.066	.0002
%RSD	.0350	.2022	.4257	.3163	.0987	43.56	334.6	.8164	18.67
#1	1.117	16.65	3.062	55.26	.0603	-.0003	.0003	8.088	-.0014
#2	1.118	16.70	3.080	55.50	.0602	-.0006	-.0007	8.182	-.0010

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.1547**	**.0089**	**.0459**	**-.0005**	**7.989**	**-.0005**	**.0016**
Stddev	.0004	.0001	.0009	.0000	.071	.0001	.0001
%RSD	.2475	1.523	2.032	4.407	.8938	13.58	3.113
#1	.1544	.0090	.0452	-.0005	7.939	-.0005	.0016
#2	.1549	.0088	.0466	-.0005	8.040	-.0005	.0017

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152920.**	**33863.**	**1970.4**	**5489.3**
Stddev	38.	4.	16.3	43.5
%RSD	.02479	.01163	.82747	.79304
#1	152890.	33860.	1981.9	5520.0
#2	152940.	33865.	1958.9	5458.5

Zoom In Zoom Out

Sample Name: jb67075-14 Acquired: 5/19/2014 22:39:19 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0142**	**.0000**	**.0001**	**.0011**	**.0015**	**.0123**	**.4384**	**.0022**	**.0000**
Stddev	.0001	.0000	.0001	.0001	.0000	.0000	.0012	.0002	.000
%RSD	.7445	51.44	74.61	4.676	3.149	.1557	.2659	9.971	4138.
#1	.0141	.0000	.0002	.0011	.0015	.0122	.4376	.0023	-.0002
#2	.0142	.0001	.0001	.0010	.0014	.0123	.4392	.0020	.0002

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0016**	**.0290**	**.0024**	**-.0004**	**.0031**	**-.0001**	**-.0001**	**.7080**	**10.68**
Stddev	.0001	.0001	.0003	.0002	.0009	.0005	.0002	.0007	.03
%RSD	8.905	.3326	13.01	45.88	28.24	355.5	270.8	.1022	.2797
#1	.0015	.0290	.0027	-.0005	.0025	-.0005	-.0002	.7075	10.70
#2	.0017	.0291	.0022	-.0002	.0037	.0002	.0001	.7085	10.66

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.963**	**2.417**	**1.336**	**50.73**	**.1212**	**-.0003**	**-.0004**	**6.817**	**-.0015**
Stddev	.004	.001	.012	.05	.0002	.0001	.0005	.026	.0003
%RSD	.1863	.0449	.9307	.0904	.1456	24.54	124.4	.3855	18.28
#1	1.966	2.418	1.327	50.76	.1214	-.0002	-.0007	6.799	-.0013
#2	1.961	2.417	1.345	50.70	.1211	-.0003	.0000	6.836	-.0017

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0481**	**.0200**	**.0020**	**-.0007**	**5.710**	**-.0005**	**.0007**
Stddev	.0001	.0003	.0003	.0000	.033	.0001	.0003
%RSD	.1328	1.257	16.64	1.849	.5857	13.42	33.83
#1	.0481	.0198	.0018	-.0007	5.686	-.0004	.0009
#2	.0482	.0201	.0023	-.0007	5.734	-.0005	.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**150990.**	**33174.**	**1936.0**	**5434.2**
Stddev	674.	90.	9.0	32.3
%RSD	.44608	.27184	.46238	.59448
#1	151470.	33110.	1942.3	5457.1
#2	150510.	33238.	1929.7	5411.4

Zoom In Zoom Out

Sample Name: jb67075-16 Acquired: 5/19/2014 22:45:16 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0188**	**-.0001**	**.0001**	**.0018**	**.0012**	**.0880**	**2.732**	**.0034**	**.0020**
Stddev	.0002	.0000	.0001	.0002	.0000	.0003	.002	.0001	.0001
%RSD	.8219	27.89	47.79	12.32	.4563	.3265	.0684	3.806	6.987
#1	.0189	-.0001	.0001	.0020	.0012	.0882	2.733	.0035	.0021
#2	.0187	-.0001	.0002	.0017	.0012	.0878	2.730	.0033	.0019

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0009**	**.4465**	**.0032**	**-.0013**	**.0073**	**.0017**	**-.0004**	**.3577**	**16.41**
Stddev	.0000	.0011	.0005	.0011	.0007	.0010	.0004	.0046	.07
%RSD	4.948	.2353	16.87	83.84	10.14	60.02	97.13	1.283	.3974
#1	.0010	.4457	.0029	-.0021	.0078	.0025	-.0001	.3545	16.46
#2	.0009	.4472	.0036	-.0005	.0068	.0010	-.0008	.3609	16.37

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**3.923**	**4.263**	**.9596**	**29.65**	**.1063**	**-.0001**	**-.0011**	**7.738**	**.0004**
Stddev	.001	.015	.0193	.01	.0000	.0001	.0007	.028	.0003
%RSD	.0328	.3483	2.006	.0362	.0418	90.07	61.66	.3663	71.04
#1	3.924	4.274	.9732	29.65	.1063	-.0001	-.0006	7.718	.0002
#2	3.922	4.253	.9460	29.66	.1063	-.0002	-.0016	7.758	.0006

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0752**	**.0108**	**.0029**	**-.0007**	**4.191**	**.0003**	**.0009**
Stddev	.0001	.0001	.0000	.0000	.002	.0006	.0001
%RSD	.1036	.7196	.3333	2.974	.0463	201.1	12.56
#1	.0751	.0109	.0029	-.0007	4.189	-.0001	.0010
#2	.0752	.0108	.0029	-.0007	4.192	.0007	.0008

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153850.**	**33670.**	**1971.3**	**5555.3**
Stddev	53.	24.	10.2	19.3
%RSD	.03466	.07208	.51506	.34671
#1	153880.	33653.	1978.5	5568.9
#2	153810.	33687.	1964.2	5541.7

Zoom In Zoom Out

Sample Name: jb67075-17 Acquired: 5/19/2014 22:51:15 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0710**	**-.0001**	**.0005**	**.0013**	**.0002**	**.0132**	**3.797**	**.0038**	**.0013**
Stddev	.0003	.0000	.0001	.0001	.0000	.0001	.017	.0000	.0002
%RSD	.4015	5.013	11.88	11.31	15.35	.5400	.4431	.7236	14.47
#1	.0708	-.0001	.0005	.0012	.0002	.0131	3.785	.0037	.0014
#2	.0712	-.0001	.0004	.0014	.0003	.0132	3.809	.0038	.0012

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0005**	**.0463**	**.0035**	**-.0007**	**.0041**	**.0003**	**-.0002**	**.1670**	**61.92**
Stddev	.0003	.0004	.0003	.0011	.0007	.0006	.0004	.0030	.41
%RSD	61.42	.9277	8.390	162.2	17.39	193.5	263.7	1.792	.6677
#1	-.0007	.0460	.0037	.0001	.0036	.0007	-.0005	.1649	62.21
#2	-.0003	.0466	.0033	-.0015	.0046	-.0001	.0001	.1691	61.63

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**5.623**	**12.86**	**2.941**	**155.0**	**.3230**	**-.0002**	**-.0014**	**7.928**	**-.0013**
Stddev	.012	.10	.021	2.6	.0029	.0002	.0002	.063	.0001
%RSD	.2146	.7933	.7315	1.676	.9001	73.37	15.45	.7932	10.05
#1	5.631	12.94	2.926	156.9	.3210	-.0001	-.0016	7.883	-.0013
#2	5.614	12.79	2.956	153.2	.3251	-.0003	-.0013	7.972	-.0012

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.2444**	**.0016**	**.0012**	**-.0011**	**6.447**	**-.0004**	**.0008**
Stddev	.0007	.0003	.0002	.0001	.054	.0001	.0004
%RSD	.3017	16.10	16.70	6.350	.8382	18.24	49.13
#1	.2439	.0018	.0013	-.0011	6.409	-.0004	.0005
#2	.2449	.0015	.0010	-.0012	6.486	-.0003	.0010

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**145260.**	**32641.**	**1860.5**	**5126.2**
Stddev	111.	123.	15.9	39.5
%RSD	.07644	.37754	.85213	.77104
#1	145180.	32554.	1871.8	5154.2
#2	145340.	32729.	1849.3	5098.3

Zoom In Zoom Out

Sample Name: jb67075-17 Acquired: 5/19/2014 22:57:24 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0072**	**.0001**	**.0001**	**.0000**	**.0002**	**.0670**	**.0122**	**.0019**	**.0002**
Stddev	.0000	.0000	.0000	.0000	.0001	.0002	.0001	.0003	.0004
%RSD	.1849	2.480	47.57	64.71	37.19	.2887	1.122	13.48	209.3
#1	.0072	.0001	.0001	.0000	.0001	.0668	.0121	.0017	-.0001
#2	.0071	.0001	.0001	.0000	.0002	.0671	.0123	.0021	.0005

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0005**	**.1009**	**.0032**	**-.0002**	**.0448**	**.0002**	**-.0002**	**.0752**	**18.89**
Stddev	.0000	.0001	.0002	.0009	.0003	.0012	.0002	.0004	.03
%RSD	8.127	.1006	4.730	431.0	.7534	514.9	112.7	.5030	.1453
#1	.0005	.1010	.0031	.0004	.0451	-.0006	.0000	.0749	18.91
#2	.0006	.1009	.0033	-.0008	.0446	.0011	-.0003	.0754	18.87

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.2145**	**4.148**	**.8716**	**11.58**	**.0364**	**-.0003**	**.0002**	**6.626**	**.0083**
Stddev	.0002	.008	.0126	.00	.0006	.0001	.0000	.020	.0005
%RSD	.0921	.1936	1.445	.0240	1.625	18.32	17.87	.2950	5.481
#1	.2146	4.153	.8627	11.58	.0369	-.0003	.0002	6.640	.0080
#2	.2143	4.142	.8805	11.58	.0360	-.0003	.0002	6.612	.0086

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0517**	**.0008**	**.0008**	**-.0010**	**4.822**	**.0003**	**.0005**
Stddev	.0000	.0000	.0003	.0000	.021	.0004	.0001
%RSD	.0048	1.813	37.62	.2291	.4246	118.6	22.99
#1	.0517	.0008	.0010	-.0010	4.836	.0006	.0006
#2	.0517	.0008	.0006	-.0010	4.807	.0001	.0004

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**155120.**	**33442.**	**1973.5**	**5587.8**
Stddev	384.	29.	2.7	10.2
%RSD	.24774	.08682	.13864	.18251
#1	155400.	33422.	1971.5	5580.6
#2	154850.	33463.	1975.4	5595.1

Zoom In Zoom Out

Sample Name: jb67075-18 Acquired: 5/19/2014 23:03:21 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0021**	**.0000**	**.0000**	**.0000**	**.0003**	**.0102**	**.0039**	**.0008**	**-.0001**
Stddev	.0001	.0000	.0001	.000	.0004	.0000	.0000	.0000	.0001
%RSD	5.297	18.58	408.3	119.5	115.3	.3036	.8583	.6477	167.5
#1	.0022	.0000	-.0001	-.0001	.0006	.0102	.0039	.0008	-.0001
#2	.0020	.0000	.0001	.0000	.0001	.0102	.0039	.0008	.0000

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0009**	**.0111**	**.0035**	**-.0001**	**.0015**	**.0021**	**-.0005**	**.0412**	**10.14**
Stddev	.0001	.0001	.0000	.0001	.0002	.0018	.0009	.0011	.08
%RSD	12.35	.8021	.5880	139.5	12.58	85.31	181.6	2.608	.8200
#1	.0008	.0112	.0035	-.0002	.0013	.0034	.0001	.0404	10.20
#2	.0010	.0110	.0036	.0000	.0016	.0008	-.0012	.0419	10.09

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0662**	**3.183**	**.2105**	**4.194**	**.0787**	**-.0006**	**-.0004**	**6.056**	**-.0012**
Stddev	.0021	.028	.0079	.009	.0002	.0000	.0003	.023	.0002
%RSD	3.207	.8870	3.768	.2141	.1905	1.352	75.01	.3771	18.78
#1	.0677	3.203	.2161	4.187	.0786	-.0006	-.0002	6.040	-.0010
#2	.0647	3.163	.2049	4.200	.0789	-.0006	-.0006	6.073	-.0013

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0205**	**.0005**	**-.0007**	**-.0006**	**3.083**	**-.0005**	**.0002**
Stddev	.0000	.0000	.0005	.0001	.004	.0002	.0001
%RSD	.1286	.4769	74.54	10.44	.1290	40.55	50.80
#1	.0205	.0005	-.0011	-.0006	3.085	-.0007	.0002
#2	.0205	.0005	-.0003	-.0005	3.080	-.0004	.0001

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157570.**	**34218.**	**2011.9**	**5687.2**
Stddev	166.	208.	7.9	20.7
%RSD	.10514	.60901	.39107	.36350
#1	157450.	34070.	2017.5	5701.8
#2	157680.	34365.	2006.3	5672.6

Zoom In Zoom Out

Sample Name: tc47989-1 Acquired: 5/19/2014 23:13:21 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0000**	**.0000**	**-.0001**	**.0000**	**-.0003**	**.0004**	**.0002**	**.0006**	**-.0004**
Stddev	.000	.000	.0001	.0001	.0000	.0001	.0000	.0001	.0001
%RSD	1456.	30.98	76.73	5527.	9.435	20.17	15.92	13.64	17.31
#1	.0000	.0000	.0000	-.0001	-.0003	.0003	.0002	.0005	-.0004
#2	.0000	.0000	-.0001	.0001	-.0003	.0004	.0002	.0007	-.0005

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0001**	**.0177**	**.0019**	**.0011**	**.0025**	**.0004**	**.0000**	**.0089**	**.0194**
Stddev	.0000	.0002	.0001	.0004	.0001	.0005	.001	.0047	.0003
%RSD	24.33	1.368	7.325	39.95	2.803	135.2	3195.	53.37	1.518
#1	.0001	.0179	.0020	.0014	.0025	.0000	-.0008	.0123	.0196
#2	.0002	.0175	.0018	.0008	.0024	.0008	.0007	.0055	.0192

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0079**	**.0081**	**-.0146**	**.0231**	**.0021**	**-.0005**	**-.0004**	**.0060**	**.0001**
Stddev	.0004	.0030	.0043	.0019	.0004	.0000	.0001	.0001	.0003
%RSD	4.458	36.57	29.67	8.192	18.86	4.967	30.39	1.164	560.4
#1	.0082	.0102	-.0176	.0217	.0018	-.0005	-.0004	.0059	.0003
#2	.0077	.0060	-.0115	.0244	.0023	-.0005	-.0003	.0060	-.0002

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0001**	**.0004**	**-.0004**	**-.0001**	**.0122**	**-.0008**	**.0000**
Stddev	.0000	.0002	.0005	.0001	.0008	.0002	.000
%RSD	8.389	67.65	127.6	60.49	6.446	29.72	706.2
#1	.0001	.0002	.0000	-.0001	.0128	-.0006	.0002
#2	.0001	.0005	-.0008	-.0001	.0117	-.0009	-.0002

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**154660.**	**33345.**	**1972.9**	**5585.6**
Stddev	500.	36.	7.0	14.1
%RSD	.32330	.10788	.35292	.25228
#1	154310.	33370.	1977.8	5595.5
#2	155020.	33319.	1967.9	5575.6

Zoom In Zoom Out

Sample Name: mp79520-mb1conf Acquired: 5/19/2014 23:15:23 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0000**	**.0000**	**.0001**	**-.0001**	**.0000**	**-.0001**	**.0001**	**.0001**
Stddev	.000	.0000	.0000	.0001	.0001	.0001	.0000	.0006
%RSD	855.1	126.7	55.37	89.44	2329.	57.15	26.28	491.6
#1	.0000	.0000	.0001	-.0001	.0001	-.0002	.0001	-.0003
#2	.0000	.0000	.0000	.0000	-.0001	-.0001	.0001	.0005

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0003**	**.0001**	**.0019**	**.0000**	F **-.0021**	**.0001**	**-.0011**	**.0008**
Stddev	.0002	.0000	.0003	.0005	.0005	.0009	.0007	.0000
%RSD	67.42	60.80	13.61	9866.	23.10	659.9	61.27	.3053
#1	-.0002	.0000	.0017	-.0004	-.0024	.0007	-.0006	.0008
#2	-.0005	.0001	.0021	.0004	-.0017	-.0005	-.0015	.0008

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0023**	**.0044**	**.0039**	**.0036**	**-.0089**	**.0092**	**.0012**	**.0000**
Stddev	.0022	.0014	.0001	.0076	.0124	.0005	.0001	.0001
%RSD	92.41	32.43	1.335	213.5	139.1	4.987	10.16	895.6
#1	.0039	.0054	.0039	.0090	-.0001	.0089	.0013	.0001
#2	.0008	.0034	.0038	-.0018	-.0176	.0096	.0011	-.0001

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0005**	**.0248**	**.0001**	**.0001**	**.0001**	**.0040**	**.0005**	**-.0013**
Stddev	.0007	.0014	.0003	.0000	.0004	.0008	.0001	.0007
%RSD	124.6	5.746	209.4	17.79	286.9	19.19	16.86	51.52
#1	-.0010	.0258	.0004	.0001	.0004	.0045	.0005	-.0009
#2	-.0001	.0238	-.0001	.0001	-.0001	.0035	.0004	-.0018

Elem	Bi2230	Li6707
Avg	**-.0023**	**.0007**
Stddev	.0008	.0002
%RSD	34.66	23.50
#1	-.0029	.0006
#2	-.0018	.0008

Zoom In Zoom Out

Sample Name: mp79520-mb1conf Acquired: 5/19/2014 23:15:23 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152810.**	**32445.**	**1952.4**	**5528.2**
Stddev	157.	152.	11.3	24.7
%RSD	.10249	.46880	.57697	.44683
#1	152920.	32337.	1944.4	5510.8
#2	152700.	32552.	1960.3	5545.7

Zoom In Zoom Out

Sample Name: mp79520-s1 2 Acquired: 5/19/2014 23:21:26 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**2.044**	**.0550**	**.0223**	**.4251**	**.2235**	**.6085**	**.5198**	**.4300**
Stddev	.006	.0002	.0023	.0013	.0006	.0017	.0007	.0018
%RSD	.2955	.4070	10.27	.3095	.2629	.2777	.1299	.4295
#1	2.048	.0551	.0207	.4261	.2239	.6097	.5194	.4313
#2	2.040	.0548	.0239	.4242	.2230	.6073	.5203	.4286

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0502**	**.5103**	**.7990**	F **25.90**	**1.534**	**.5097**	**4.111**	**.6142**
Stddev	.0003	.0001	.0013	.05	.007	.0043	.020	.0033
%RSD	.6434	.0260	.1605	.1875	.4306	.8365	.4808	.5294
#1	.0504	.5104	.7999	25.94	1.538	.5127	4.097	.6119
#2	.0499	.5102	.7981	25.87	1.529	.5067	4.125	.6165

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**1.947**	**25.57**	**1.488**	**21.08**	**912.3**	**164.9**	**12.57**	**.0096**
Stddev	.011	.01	.007	.07	6.5	.9	.05	.0002
%RSD	.5748	.0569	.4965	.3553	.7086	.5598	.3611	2.522
#1	1.955	25.58	1.494	21.14	916.8	165.6	12.54	.0095
#2	1.939	25.56	1.483	21.03	907.7	164.3	12.60	.0098

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0033**	**.6075**	**.2379**	**.0009**	**.0021**	F **-.0724**	**.0007**	**7.739**
Stddev	.0010	.0010	.0036	.0000	.0003	.0007	.0001	.034
%RSD	31.18	.1673	1.534	.3426	14.82	.9350	18.02	.4389
#1	-.0040	.6068	.2353	.0009	.0018	-.0719	.0008	7.715
#2	-.0026	.6082	.2405	.0009	.0023	-.0729	.0006	7.763

Elem	Bi2230	Li6707
Avg	**-.0050**	**.0011**
Stddev	.0003	.0002
%RSD	5.438	18.66
#1	-.0052	.0009
#2	-.0048	.0012

Zoom In Zoom Out

Sample Name: mp79520-s12 Acquired: 5/19/2014 23:25:26 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**117590.**	**32427.**	**1340.3**	**4444.4**
Stddev	68.	151.	6.5	2.5
%RSD	.05777	.46508	.48564	.05597
#1	117540.	32320.	1344.9	4446.2
#2	117640.	32534.	1335.7	4442.7

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 23:27:30 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.983**	**2.033**	**1.971**	**2.026**	**1.997**	**1.933**	**2.009**	**2.036**	**.2407**
Stddev	.003	.001	.006	.018	.007	.004	.007	.016	.0006
%RSD	.1334	.0513	.3041	.8851	.3420	.2036	.3703	.7808	.2492
#1	1.981	2.033	1.967	2.013	1.992	1.936	2.004	2.025	.2403
#2	1.985	2.034	1.976	2.038	2.002	1.930	2.015	2.047	.2412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.982**	**2.054**	**1.966**	**2.053**	**2.034**	**1.962**	**1.958**	**37.66**	**39.95**
Stddev	.004	.020	.008	.021	.021	.004	.002	.10	.14
%RSD	.2029	.9550	.4156	1.000	1.022	.1778	.1207	.2665	.3443
#1	1.979	2.040	1.960	2.039	2.020	1.964	1.960	37.59	40.05
#2	1.985	2.068	1.972	2.068	2.049	1.959	1.957	37.73	39.86
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**39.86**	**38.71**	**38.61**	**38.29**	**1.957**	**2.012**	**1.935**	**4.855**	**2.030**
Stddev	.06	.13	.09	.15	.003	.000	.002	.008	.008
%RSD	.1389	.3437	.2362	.3915	.1297	.0080	.0811	.1573	.4009
#1	39.90	38.80	38.54	38.18	1.959	2.012	1.936	4.850	2.025
#2	39.82	38.61	38.67	38.39	1.956	2.012	1.934	4.861	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/19/2014 23:27:30 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.969**	**1.938**	**1.893**	**1.925**	**1.939**	**1.964**	**1.942**
Stddev	.019	.006	.018	.002	.016	.009	.012
%RSD	.9512	.3044	.9447	.1223	.8130	.4561	.6003
#1	1.982	1.934	1.880	1.923	1.928	1.970	1.934
#2	1.956	1.942	1.905	1.926	1.950	1.958	1.951
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**155840.**	**34311.**	**1929.4**	**5443.2**
Stddev	68.	33.	6.6	8.2
%RSD	.04341	.09731	.34380	.15026
#1	155890.	34335.	1924.7	5448.9
#2	155790.	34288.	1934.1	5437.4

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 23:33:26 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0004**	**.0003**	**.0002**	**.0001**	**-.0001**	**.0002**	**.0003**
Stddev	.0001	.0000	.0000	.0000	.0002	.0000	.0000	.0001
%RSD	41.10	11.88	.3457	11.01	145.3	28.20	13.02	30.26
#1	.0005	.0004	.0003	.0001	.0002	-.0001	.0002	.0004
#2	.0002	.0003	.0003	.0002	.0000	-.0001	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0004**	**.0002**	**.0023**	**-.0019**	**.0015**	**.0003**	**.0016**
Stddev	.0002	.0002	.0000	.0002	.0009	.0003	.0007	.0004
%RSD	78.43	38.63	2.605	9.505	44.57	21.81	257.6	25.31
#1	-.0003	.0003	.0002	.0022	-.0025	.0018	-.0002	.0019
#2	-.0001	.0005	.0002	.0025	-.0013	.0013	.0008	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**.0045**	**.0075**	**.0155**	**.0987**	**.0190**	**.0037**	**.0008**
Stddev	.0037	.0011	.0017	.0075	.0033	.0055	.0001	.0003
%RSD	41.57	23.60	23.09	48.37	3.390	28.75	3.636	37.68
#1	.0063	.0053	.0087	.0208	.1010	.0228	.0036	.0010
#2	.0115	.0038	.0062	.0102	.0963	.0151	.0038	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/19/2014 23:33:26 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0018**	**.0008**	**.0004**	**.0006**	**.0170**	W **.0012**	**-.0015**
Stddev	.0002	.0000	.0003	.0001	.0001	.0017	.0000	.0028
%RSD	625.2	1.820	37.71	19.65	9.725	9.757	3.674	188.7
#1	.0002	.0019	.0010	.0005	.0006	.0181	.0013	-.0034
#2	-.0001	.0018	.0006	.0003	.0006	.0158	.0012	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0011	
Low Limit							-.0011	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0014**	**.0006**
Stddev	.0001	.0003
%RSD	4.816	47.29
#1	-.0014	.0004
#2	-.0013	.0008
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**159170.**	**33901.**	**2019.7**	**5714.5**
Stddev	321.	239.	2.3	6.5
%RSD	.20155	.70490	.11433	.11318
#1	159400.	34070.	2021.4	5719.1
#2	158940.	33732.	2018.1	5709.9

Zoom In Zoom Out

Sample Name: mp79520-s2 Acquired: 5/19/2014 23:39:30 Type: Unk1
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**2.047**	**.0572**	**.0142**	**.4502**	**.2373**	**.5905**	**.5617**	**.4529**
Stddev	.007	.0000	.0004	.0012	.0021	.0028	.0014	.0006
%RSD	.3434	.0724	3.022	.2691	.9008	.4815	.2528	.1301
#1	2.052	.0572	.0138	.4493	.2388	.5885	.5627	.4525
#2	2.042	.0572	.0145	.4510	.2358	.5925	.5607	.4533

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0504**	**.5307**	**.8467**	F **26.13**	**1.658**	**.5443**	**4.009**	**.5974**
Stddev	.0002	.0017	.0024	.07	.011	.0000	.014	.0018
%RSD	.3097	.3272	.2838	.2635	.6322	.0052	.3519	.2976
#1	.0503	.5320	.8450	26.08	1.651	.5442	3.999	.5962
#2	.0506	.5295	.8484	26.17	1.665	.5443	4.019	.5987

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**2.078**	**26.12**	**1.548**	**22.43**	**986.6**	**175.2**	**12.36**	**.0097**
Stddev	.002	.14	.003	.17	4.0	.2	.02	.0002
%RSD	.0935	.5308	.2201	.7481	.4060	.1243	.1388	2.543
#1	2.080	26.03	1.546	22.31	983.8	175.0	12.34	.0095
#2	2.077	26.22	1.550	22.55	989.4	175.3	12.37	.0098

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0026**	**.6132**	**.2199**	**.0010**	**.0018**	F **-.0603**	**.0006**	**7.579**
Stddev	.0003	.0019	.0007	.0000	.0000	.0001	.0001	.029
%RSD	11.64	.3164	.3336	1.204	.3533	.0833	21.78	.3794
#1	-.0028	.6119	.2194	.0009	.0018	-.0603	.0007	7.558
#2	-.0024	.6146	.2204	.0010	.0018	-.0603	.0005	7.599

Elem	Bi2230	Li6707
Avg	**-.0065**	**.0007**
Stddev	.0004	.0005
%RSD	5.530	65.07
#1	-.0068	.0011
#2	-.0063	.0004

Zoom In Zoom Out

Sample Name: mp79520-s2 Acquired: 5/19/2014 23:39:30 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**116470.**	**30904.**	**1416.3**	**4548.1**
Stddev	142.	21.	1.3	1.8
%RSD	.12191	.06758	.09009	.03869
#1	116570.	30919.	1417.2	4549.4
#2	116370.	30889.	1415.4	4546.9

Zoom In Zoom Out

Sample Name: jb66942-2 Acquired: 5/19/2014 23:45:33 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: qc

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0006**	**.0000**	F **-.0357**	**.0026**	**.0154**	**.3315**	**.0104**	**.0011**
Stddev	.0001	.0000	.0003	.0003	.0003	.0005	.0000	.0001
%RSD	24.69	19.05	.7060	12.80	2.195	.1419	.2606	6.589
#1	.0005	.0000	-.0355	.0029	.0156	.3319	.0104	.0011
#2	.0007	.0000	-.0359	.0024	.0151	.3312	.0104	.0010

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0003**	**.0022**	**.2464**	F **21.43**	F **-.0516**	**.1624**	**.4742**	**.0594**
Stddev	.0001	.0003	.0003	.00	.0019	.0012	.0001	.0005
%RSD	27.31	14.07	.1386	.0003	3.676	.7114	.0253	.8479
#1	-.0004	.0024	.2461	21.43	-.0529	.1616	.4741	.0598
#2	-.0003	.0020	.2466	21.43	-.0503	.1632	.4743	.0591

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0903**	**2.241**	**.4466**	**.0508**	**898.3**	**141.9**	**11.45**	**.0087**
Stddev	.0000	.011	.0025	.0038	2.7	1.0	.00	.0002
%RSD	.0407	.5042	.5580	7.447	.3048	.6699	.0289	2.612
#1	.0902	2.249	.4484	.0535	900.2	142.6	11.45	.0088
#2	.0903	2.233	.4449	.0481	896.3	141.2	11.46	.0085

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0019**	**.5789**	**.2011**	**.0012**	**.0005**	F **-.0621**	**.0006**	**7.036**
Stddev	.0000	.0000	.0012	.0000	.0000	.0002	.0000	.011
%RSD	.3663	.0047	.5866	.7709	4.801	.2453	6.839	.1605
#1	-.0019	.5789	.2002	.0012	.0005	-.0622	.0007	7.044
#2	-.0020	.5789	.2019	.0012	.0005	-.0620	.0006	7.029

Elem	Bi2230	Li6707
Avg	**-.0015**	**.0009**
Stddev	.0011	.0002
%RSD	72.29	20.33
#1	-.0022	.0010
#2	-.0007	.0008

Zoom In Zoom Out

Sample Name: jb66942-2 Acquired: 5/19/2014 23:45:59 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: qc

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**120250.**	**31681.**	**1478.4**	**4735.5**
Stddev	140.	134.	.6	4.3
%RSD	.11651	.42435	.03808	.09125
#1	120150.	31586.	1478.0	4738.5
#2	120350.	31776.	1478.8	4732.4

Zoom In Zoom Out

Sample Name: mp79520-sd1 Acquired: 5/19/2014 23:51:42 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0014**	**.0000**	F **-.0314**	**.0020**	**.0104**	**.3079**	**.0104**	**.0006**
Stddev	.0003	.0001	.0000	.0003	.0000	.0004	.0003	.0002
%RSD	18.51	366.5	.0166	16.41	.1767	.1379	3.046	28.10
#1	.0016	.0000	-.0314	.0022	.0105	.3076	.0102	.0005
#2	.0012	.0001	-.0314	.0018	.0104	.3082	.0106	.0007

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0019**	**.0022**	**.2235**	**17.14**	**.0910**	**.2114**	**.2955**	**.0610**
Stddev	.0010	.0007	.0013	.03	.0076	.0009	.0047	.0015
%RSD	52.30	34.31	.5657	.1843	8.389	.4058	1.607	2.509
#1	-.0026	.0016	.2244	17.17	.0964	.2120	.2922	.0621
#2	-.0012	.0027	.2226	17.12	.0856	.2108	.2989	.0600

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0707**	**2.399**	**.4826**	**.0852**	**1023.**	**153.3**	**10.73**	**.0081**
Stddev	.0140	.011	.0031	.0359	1.	.1	.02	.0006
%RSD	19.84	.4513	.6371	42.19	.0748	.0709	.1664	6.997
#1	.0608	2.407	.4848	.0598	1024.	153.4	10.74	.0085
#2	.0806	2.391	.4804	.1106	1023.	153.2	10.72	.0077

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0024**	**.6037**	**.1257**	**.0011**	**.0010**	**-.0253**	**.0042**	**6.832**
Stddev	.0010	.0057	.0056	.0001	.0013	.0002	.0002	.013
%RSD	42.56	.9403	4.431	5.305	126.9	.6434	5.612	.1881
#1	-.0017	.5997	.1297	.0011	.0001	-.0251	.0044	6.823
#2	-.0031	.6077	.1218	.0011	.0019	-.0254	.0041	6.841

Elem	Bi2230	Li6707
Avg	**-.0138**	**.0016**
Stddev	.0055	.0025
%RSD	40.09	161.9
#1	-.0177	.0033
#2	-.0099	-.0002

Zoom In Zoom Out

Sample Name: mp79520-sd1 Acquired: 5/19/2014 23:51:42 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**151230.**	**33374.**	**1895.2**	**5722.6**
Stddev	10.	39.	2.2	.6
%RSD	.00685	.11750	.11424	.01040
#1	151240.	33346.	1893.6	5723.1
#2	151220.	33401.	1896.7	5722.2

Zoom In Zoom Out

Sample Name: jb66942-1 Acquired: 5/19/2014 23:57:42 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0006**	**.0000**	F **-.0388**	**.0025**	**.0152**	**.3418**	**.0108**	**.0011**
Stddev	.0000	.0000	.0009	.0002	.0008	.0025	.0001	.0000
%RSD	5.370	53.01	2.346	8.980	5.001	.7317	.8962	.6511
#1	.0006	.0000	-.0382	.0026	.0146	.3401	.0107	.0011
#2	.0007	.0000	-.0395	.0023	.0157	.3436	.0108	.0011

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0004**	**.0020**	**.2455**	F **20.80**	F **-.0427**	**.1718**	**.4493**	**.0571**
Stddev	.0004	.0001	.0019	.04	.0027	.0022	.0030	.0007
%RSD	91.44	5.770	.7939	.1963	6.258	1.259	.6670	1.313
#1	-.0002	.0019	.2441	20.77	-.0446	.1702	.4514	.0576
#2	-.0007	.0020	.2469	20.83	-.0408	.1733	.4471	.0565

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0843**	**2.345**	**.4447**	**.0412**	**873.8**	**137.1**	**11.06**	**.0076**
Stddev	.0016	.018	.0015	.0042	3.0	.6	.00	.0002
%RSD	1.934	.7529	.3448	10.13	.3380	.4181	.0192	2.249
#1	.0832	2.357	.4458	.0441	875.9	137.5	11.06	.0075
#2	.0855	2.332	.4436	.0382	871.7	136.7	11.06	.0078

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0018**	**.5505**	**.1926**	**.0013**	**.0005**	F **-.0596**	**.0002**	**6.839**
Stddev	.0001	.0014	.0014	.0000	.0000	.0004	.0000	.031
%RSD	4.275	.2569	.7050	.5157	.0982	.6473	17.46	.4584
#1	-.0019	.5515	.1936	.0013	.0005	-.0599	.0002	6.817
#2	-.0018	.5495	.1917	.0013	.0005	-.0593	.0002	6.862

Elem	Bi2230	Li6707
Avg	**-.0025**	**.0008**
Stddev	.0012	.0008
%RSD	48.35	93.54
#1	-.0033	.0014
#2	-.0016	.0003

Zoom In Zoom Out

Sample Name: jb66942-1 Acquired: 5/19/2014 23:52:42 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**120250.**	**31777.**	**1498.1**	**4770.9**
Stddev	636.	131.	5.1	4.4
%RSD	.52909	.41255	.33914	.09210
#1	120700.	31685.	1494.5	4767.8
#2	119800.	31870.	1501.7	4774.0

Zoom In Zoom Out

Sample Name: mp79524-mb1 2 Acquired: 5/20/2014 0:03:52 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0062**	**.0000**	**.0003**	**.0004**	**.0031**	**.0080**	**.0061**	**.0037**
Stddev	.0000	.0000	.0002	.0001	.0001	.0001	.0001	.0000
%RSD	.6081	35.37	57.28	18.28	2.389	.7035	2.162	.5574
#1	.0063	.0000	.0002	.0003	.0030	.0079	.0062	.0037
#2	.0062	.0000	.0004	.0004	.0031	.0080	.0060	.0037

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0001**	**.0001**	**.0098**	**.0039**	F **-.0113**	**.0150**	**.0109**	**.0003**
Stddev	.0002	.0001	.0002	.0014	.0007	.0003	.0008	.0005
%RSD	161.4	180.8	2.206	36.60	5.872	1.747	7.285	156.1
#1	.0003	.0001	.0100	.0049	-.0108	.0151	.0104	.0006
#2	.0000	.0000	.0097	.0029	-.0117	.0148	.0115	.0000

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0868**	**1.868**	**.0372**	**.1164**	**1.117**	F **1133.**	**.0104**	**.0001**
Stddev	.0020	.001	.0006	.0077	.045	2.	.0001	.0002
%RSD	2.315	.0597	1.742	6.609	4.006	.1856	.9160	150.4
#1	.0882	1.867	.0367	.1110	1.149	1134.	.0105	.0000
#2	.0854	1.869	.0376	.1218	1.085	1131.	.0104	.0002

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0007**	**.4809**	**.0051**	**.0154**	**.0009**	**.0039**	**.0000**	**.0505**
Stddev	.0005	.0006	.0001	.0000	.0001	.0003	.0002	.0008
%RSD	63.54	.1346	1.602	.1490	10.89	7.611	362.8	1.487
#1	-.0004	.4814	.0050	.0154	.0008	.0037	.0002	.0500
#2	-.0011	.4805	.0052	.0155	.0010	.0041	-.0001	.0511

Elem	Bi2230	Li6707
Avg	**-.0019**	**.0015**
Stddev	.0002	.0003
%RSD	10.86	18.89
#1	-.0021	.0017
#2	-.0018	.0013

Zoom In Zoom Out

Sample Name: mp79524-mb1 2 Acquired: 5/20/2014 0:03:52 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**136530.**	**33443.**	**1730.9**	**4651.4**
Stddev	188.	138.	4.4	.5
%RSD	.13773	.41277	.25511	.01054
#1	136670.	33345.	1734.0	4651.7
#2	136400.	33541.	1727.7	4651.0

Zoom In Zoom Out

Sample Name: mp79524-mb2conf Acquired: 5/20/2014 0:10:00 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: conf

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0033**	**.0001**	**.0003**	**.0000**	**.0010**	**.0037**	**.0022**	**.0031**
Stddev	.0000	.0000	.0000	.000	.0003	.0000	.0000	.0004
%RSD	.8647	28.30	5.630	2633.	33.10	.6948	.4412	12.28
#1	.0032	.0000	.0003	.0003	.0008	.0037	.0022	.0034
#2	.0033	.0001	.0003	-.0003	.0012	.0037	.0022	.0028

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0002**	**.0001**	**.0012**	**.0024**	F **-.0096**	**.0005**	**.0093**	**-.0002**
Stddev	.0002	.0002	.0002	.0001	.0000	.0006	.0025	.0000
%RSD	103.4	312.8	17.41	5.415	.4703	117.6	26.63	20.20
#1	-.0001	.0002	.0014	.0023	-.0096	.0010	.0111	-.0002
#2	-.0004	-.0001	.0011	.0025	-.0096	.0001	.0076	-.0002

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0110**	**.1441**	**.0178**	**.0362**	**.6559**	F **1064.**	**.0077**	**.0002**
Stddev	.0054	.0023	.0012	.0107	.0248	5.	.0001	.0002
%RSD	49.44	1.598	6.907	29.56	3.787	.4879	1.779	112.8
#1	.0149	.1458	.0187	.0286	.6383	1068.	.0076	.0000
#2	.0072	.1425	.0169	.0438	.6734	1061.	.0078	.0003

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0009**	**.7693**	**.0033**	**.0091**	**.0001**	**.0023**	**.0005**	**.0234**
Stddev	.0001	.0050	.0003	.0000	.0003	.0001	.0000	.0028
%RSD	14.98	.6523	9.904	.0513	263.6	4.868	4.623	12.10
#1	-.0008	.7729	.0036	.0091	.0003	.0024	.0005	.0214
#2	-.0010	.7658	.0031	.0091	-.0001	.0022	.0005	.0254

Elem	Bi2230	Li6707
Avg	**-.0021**	**.0006**
Stddev	.0013	.0000
%RSD	60.60	2.648
#1	-.0012	.0006
#2	-.0030	.0006

Zoom In Zoom Out

Sample Name: mp79524-mb2conn Acquired: 5/20/2014 0:10:00 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: conf

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**135500.**	**33540.**	**1743.1**	**4661.7**
Stddev	97.	19.	12.9	21.1
%RSD	.07193	.05771	.74254	.45331
#1	135570.	33554.	1733.9	4646.7
#2	135430.	33527.	1752.2	4676.6

Zoom In Zoom Out

Sample Name: mp79524-b12 Acquired: 5/20/2014 0:16:08 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.962**	**.0506**	**.0496**	**.5164**	**.2127**	**.2430**	**.5218**	**.5215**	**.0513**
Stddev	.003	.0001	.0004	.0004	.0004	.0002	.0004	.0003	.0004
%RSD	.1377	.1276	.8941	.0774	.1713	.0931	.0671	.0496	.8264
#1	1.964	.0506	.0493	.5167	.2129	.2429	.5221	.5217	.0510
#2	1.960	.0505	.0499	.5161	.2124	.2432	.5216	.5213	.0516

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5013**	**.5710**	**2.259**	**2.000**	**2.063**	**2.276**	**.5005**	**2.005**	**.0800**
Stddev	.0010	.0015	.004	.003	.002	.000	.0006	.006	.0009
%RSD	.1933	.2563	.1900	.1561	.0783	.0089	.1227	.3075	1.169
#1	.5006	.5700	2.262	2.002	2.061	2.276	.5000	2.010	.0794
#2	.5019	.5720	2.256	1.998	2.064	2.276	.5009	2.001	.0807

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.059**	**.0294**	**.5163**	F **1113.**	**.0061**	**.0010**	**-.0014**	**.2673**	**.0042**
Stddev	.003	.0111	.0203	5.	.0003	.0001	.0007	.0001	.0005
%RSD	.2615	37.62	3.924	.4769	5.383	7.724	46.75	.0504	10.97
#1	1.061	.0373	.5020	1110.	.0064	.0011	-.0019	.2672	.0039
#2	1.057	.0216	.5306	1117.	.0059	.0010	-.0009	.2674	.0046

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0093**	**.0013**	**.0048**	**-.0012**	**.0213**	**-.0072**	**.0008**
Stddev	.0000	.0001	.0003	.0000	.0010	.0002	.0002
%RSD	.5134	8.589	5.370	.4437	4.530	2.951	29.41
#1	.0093	.0014	.0050	-.0012	.0220	-.0074	.0010
#2	.0092	.0013	.0047	-.0012	.0206	-.0071	.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**134640.**	**32309.**	**1748.4**	**4614.0**
Stddev	54.	29.	1.1	2.4
%RSD	.04017	.08863	.06028	.05129
#1	134680.	32329.	1749.1	4615.7
#2	134610.	32289.	1747.7	4612.3

Zoom In Zoom Out

Sample Name: mp79524-s1 Acquired: 5/20/2014 0:22:07 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.551**	**.0515**	**.0547**	**.5117**	**.2091**	**.2536**	**1.458**	**.6275**	**.0592**
Stddev	.004	.0000	.0004	.0009	.0002	.0008	.001	.0009	.0003
%RSD	.1666	.0316	.6984	.1773	.0933	.3297	.0317	.1464	.5610
#1	2.554	.0515	.0545	.5111	.2089	.2542	1.458	.6269	.0590
#2	2.548	.0515	.0550	.5123	.2092	.2530	1.458	.6282	.0594

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5543**	**.5257**	**2.353**	**1.968**	**1.947**	**2.356**	**.5341**	**2.633**	**473.5**
Stddev	.0002	.0013	.006	.019	.005	.005	.0002	.004	2.6
%RSD	.0427	.2392	.2377	.9790	.2517	.2072	.0414	.1689	.5394
#1	.5542	.5248	2.349	1.954	1.944	2.353	.5340	2.630	475.3
#2	.5545	.5266	2.357	1.982	1.951	2.359	.5343	2.636	471.7

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.106**	**15.50**	**8.508**	F **1115.**	**3.701**	**.0711**	**.0030**	**29.30**	**-.0013**
Stddev	.005	.02	.010	13.	.001	.0005	.0003	.03	.0013
%RSD	.5015	.1100	.1170	1.122	.0368	.6920	9.098	.0882	99.18
#1	1.110	15.51	8.515	1106.	3.700	.0708	.0032	29.28	-.0004
#2	1.102	15.49	8.501	1124.	3.702	.0715	.0028	29.32	-.0022

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**3.281**	**.0014**	**.0133**	**-.0050**	**32.68**	**-.0095**	**.0604**
Stddev	.043	.0001	.0004	.0002	.15	.0003	.0000
%RSD	1.327	3.805	3.098	4.001	.4492	3.305	.0318
#1	3.311	.0015	.0136	-.0051	32.57	-.0092	.0604
#2	3.250	.0014	.0130	-.0048	32.78	-.0097	.0604

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**129640.**	**31221.**	**1656.2**	**4378.8**
Stddev	50.	46.	1.0	6.6
%RSD	.03839	.14715	.05814	.15173
#1	129670.	31189.	1656.9	4383.5
#2	129600.	31254.	1655.6	4374.1

Zoom In Zoom Out

Sample Name: mp79524-s2 Acquired: 5/20/2014 0:28:14 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.627**	**.0526**	**.0552**	**.5263**	**.2142**	**.2608**	**1.479**	**.6430**	**.0601**
Stddev	.002	.0001	.0000	.0012	.0005	.0002	.002	.0019	.0002
%RSD	.0846	.0987	.0443	.2241	.2371	.0888	.1034	.2960	.2680
#1	2.626	.0526	.0552	.5255	.2146	.2606	1.478	.6416	.0599
#2	2.629	.0526	.0552	.5272	.2139	.2609	1.480	.6443	.0602

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5685**	**.5375**	**2.430**	**2.018**	**2.016**	**2.407**	**.5474**	**2.710**	**484.3**
Stddev	.0006	.0022	.001	.004	.009	.000	.0006	.004	1.4
%RSD	.0974	.4172	.0315	.2017	.4533	.0176	.1100	.1422	.2794
#1	.5689	.5359	2.429	2.021	2.009	2.407	.5469	2.707	483.4
#2	.5681	.5391	2.431	2.015	2.022	2.406	.5478	2.712	485.3

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.130**	**15.90**	**8.794**	F **1147.**	**3.800**	**.0730**	**.0032**	**30.20**	**-.0029**
Stddev	.002	.01	.050	5.	.002	.0001	.0001	.01	.0006
%RSD	.1623	.0819	.5727	.4332	.0504	.1584	3.918	.0245	19.46
#1	1.132	15.89	8.830	1151.	3.801	.0731	.0033	30.21	-.0025
#2	1.129	15.91	8.759	1144.	3.798	.0730	.0032	30.20	-.0033

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**3.365**	**.0012**	**.0115**	**-.0068**	**33.68**	**-.0111**	**.0627**
Stddev	.007	.0006	.0004	.0002	.05	.0001	.0001
%RSD	.2151	53.28	3.317	2.404	.1601	.6833	.2236
#1	3.370	.0016	.0112	-.0070	33.72	-.0110	.0628
#2	3.360	.0007	.0117	-.0067	33.65	-.0111	.0626

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**127640.**	**30723.**	**1629.2**	**4301.0**
Stddev	199.	12.	3.7	6.5
%RSD	.15580	.03859	.22889	.15030
#1	127780.	30732.	1626.6	4296.4
#2	127490.	30715.	1631.9	4305.6

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 0:34:24 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.027**	**2.119**	**2.025**	**2.117**	**2.176**	**1.948**	**2.153**	**2.098**	**.2423**
Stddev	.003	.001	.003	.000	.002	.004	.001	.000	.0003
%RSD	.1311	.0469	.1345	.0183	.1055	.2065	.0475	.0033	.1428
#1	2.029	2.119	2.023	2.117	2.178	1.950	2.153	2.098	.2426
#2	2.025	2.118	2.027	2.117	2.175	1.945	2.154	2.098	.2421
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.097**	**2.149**	**2.059**	**2.132**	**2.126**	**1.939**	**1.979**	**42.62**	**41.19**
Stddev	.001	.003	.001	.004	.002	.008	.001	.08	.09
%RSD	.0282	.1393	.0337	.1805	.0964	.4337	.0363	.1938	.2091
#1	2.097	2.147	2.059	2.134	2.127	1.933	1.978	42.68	41.13
#2	2.096	2.151	2.060	2.129	2.124	1.945	1.979	42.56	41.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**42.15**	**41.90**	**43.05**	**42.19**	**1.968**	**2.004**	**1.931**	**4.967**	**2.026**
Stddev	.05	.08	.07	.13	.004	.004	.001	.002	.006
%RSD	.1223	.1828	.1572	.3147	.2043	.2263	.0375	.0430	.2932
#1	42.12	41.84	43.10	42.28	1.965	2.001	1.931	4.966	2.022
#2	42.19	41.95	43.01	42.09	1.971	2.007	1.930	4.969	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 0:34:24 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.158**	**2.188**	**1.902**	**2.178**	**1.948**	**1.920**	**2.040**
Stddev	.003	.000	.021	.002	.003	.006	.009
%RSD	.1445	.0082	1.090	.0904	.1622	.3403	.4221
#1	2.160	2.188	1.887	2.177	1.946	1.915	2.046
#2	2.155	2.188	1.917	2.180	1.950	1.924	2.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**147530.**	**31776.**	**1932.1**	**5316.2**
Stddev	68.	25.	.2	8.2
%RSD	.04607	.07753	.01226	.15354
#1	147480.	31793.	1931.9	5310.5
#2	147580.	31758.	1932.3	5322.0

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 0:40:15 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0002**	**.0002**	**.0002**	**.0001**	**.0003**	**.0002**	**.0001**
Stddev	.0000	.0000	.0001	.0001	.0001	.0001	.0001	.0001
%RSD	8.276	7.755	34.35	51.86	104.1	22.29	26.33	104.7
#1	.0003	.0003	.0002	.0001	.0002	.0003	.0002	.0000
#2	.0003	.0002	.0003	.0003	.0000	.0003	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0002**	**.0001**	**.0015**	**-.0002**	**.0008**	**.0009**	**.0000**
Stddev	.0000	.0002	.0000	.0001	.0001	.0004	.0014	.0002
%RSD	21.24	97.52	20.82	8.488	76.85	54.10	155.9	451.3
#1	-.0002	.0003	.0001	.0016	-.0001	.0005	-.0001	-.0001
#2	-.0001	.0001	.0001	.0014	-.0002	.0011	.0019	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.0157**	**.0049**	**.0101**	**.0545**	**.0728**	**.0038**	**.0009**
Stddev	.0045	.0008	.0010	.0007	.0077	.0016	.0001	.0002
%RSD	137.7	4.792	21.06	6.704	14.12	2.209	3.001	22.05
#1	.0065	.0162	.0041	.0096	.0600	.0739	.0039	.0011
#2	.0001	.0151	.0056	.0106	.0491	.0716	.0037	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 0:40:15 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0015**	**.0007**	**.0003**	**.0003**	**.0174**	W **.0011**	**.0015**
Stddev	.0002	.0006	.0001	.0000	.0001	.0014	.0001	.0002
%RSD	37.63	40.24	22.02	16.67	47.36	7.778	7.251	16.49
#1	-.0004	.0011	.0008	.0003	.0003	.0183	.0012	.0016
#2	-.0007	.0020	.0005	.0002	.0002	.0164	.0011	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0011	
Low Limit							-.0011	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0006**	**.0006**
Stddev	.0003	.0004
%RSD	47.52	63.38
#1	-.0004	.0009
#2	-.0007	.0003
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**159530.**	**34610.**	**1971.9**	**5716.5**
Stddev	269.	49.	6.8	8.1
%RSD	.16861	.14171	.34625	.14165
#1	159340.	34575.	1976.8	5722.3
#2	159720.	34644.	1967.1	5710.8

Zoom In Zoom Out

Sample Name: cri Acquired: 5/20/2014 0:46:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1971**	**.0023**	**.0033**	**.0519**	**.0107**	**.0097**	**.0163**	**.0104**
Stddev	.0001	.0000	.0002	.0001	.0003	.0001	.0001	.0002
%RSD	.0606	.7304	5.159	.1858	2.472	1.267	.6010	1.881
#1	.1972	.0023	.0032	.0518	.0106	.0097	.0164	.0105
#2	.1970	.0023	.0034	.0519	.0109	.0096	.0162	.0102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0045**	**.0531**	**.0234**	W **.0098**	**.0110**	**.0033**	W **.0128**	**.0062**
Stddev	.0001	.0002	.0001	.0002	.0007	.0004	.0004	.0006
%RSD	1.859	.4104	.4768	1.544	6.432	11.94	3.281	9.138
#1	.0044	.0529	.0233	.0097	.0105	.0036	.0131	.0058
#2	.0045	.0532	.0234	.0099	.0115	.0031	.0125	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value				.0080			.0100	
Range				20.00%			20.00%	

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2076**	**5.068**	**.1106**	**5.070**	**5.166**	**4.994**	**.1033**	**.0206**
Stddev	.0053	.010	.0008	.003	.004	.004	.0004	.0002
%RSD	2.562	.1947	.7507	.0678	.0691	.0725	.3673	.7929
#1	.2114	5.061	.1100	5.072	5.164	4.992	.1036	.0208
#2	.2039	5.075	.1111	5.067	5.169	4.997	.1031	.0205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: cri Acquired: 5/20/2014 0:46:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0508**	**.1967**	**.0107**	**.0105**	**.0105**	**.0554**	**.0114**	**.0487**
Stddev	.0004	.0002	.0000	.0000	.0001	.0000	.0000	.0004
%RSD	.7920	.0958	.1025	.2564	1.402	.0779	.1011	.8816
#1	.0510	.1966	.0107	.0105	.0104	.0554	.0114	.0484
#2	.0505	.1968	.0107	.0105	.0106	.0554	.0114	.0490
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**.0177**	**.0208**
Stddev	.0007	.0001
%RSD	3.864	.6354
#1	.0182	.0209
#2	.0172	.0207
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**158220.**	**34229.**	**1996.9**	**5687.4**
Stddev	376.	51.	2.6	3.4
%RSD	.23771	.15003	.12828	.05980
#1	157960.	34265.	1995.1	5689.8
#2	158490.	34193.	1998.7	5685.0

Zoom In Zoom Out

Sample Name: crid Acquired: 5/20/2014 0:52:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041**	**.0011**	**.0011**	**.0032**	**.0021**	**.0017**	**.0034**	**.0042**
Stddev	.0000	.0000	.0000	.0003	.0001	.0002	.0000	.0001
%RSD	.5244	1.716	.7570	8.642	3.649	8.768	.9338	3.532
#1	.0041	.0011	.0011	.0034	.0021	.0018	.0034	.0041
#2	.0041	.0011	.0011	.0030	.0020	.0016	.0034	.0043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0022**	W **.0124**	W **.0036**	**.0021**	F **.0033**	**.0053**	W **.0036**
Stddev	.0004	.0000	.0002	.0003	.0003	.0001	.0004	.0003
%RSD	50.95	.4845	1.397	7.022	12.11	1.720	8.266	7.890
#1	.0005	.0022	.0123	.0038	.0019	.0032	.0056	.0034
#2	.0011	.0022	.0125	.0035	.0023	.0033	.0050	.0038
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Warn
Value			.0100	.0030		.0025		.0030
Range			20.00%	20.00%		30.00%		20.00%

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1060**	**1.056**	**.0003**	**.1182**	**2.174**	**1.086**	W **.0122**	**-.0002**
Stddev	.0037	.001	.0003	.0085	.003	.003	.0002	.0002
%RSD	3.493	.0985	83.27	7.186	.1307	.2534	1.709	70.59
#1	.1086	1.057	.0005	.1122	2.176	1.084	.0123	-.0003
#2	.1034	1.055	.0001	.1242	2.172	1.088	.0121	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None
Value							.0100	
Range							20.00%	

Zoom In Zoom Out

Sample Name: crid Acquired: 5/20/2014 0:52:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0012**	**.0001**	**.0001**	**.0002**	**.0037**	F **.0002**	F **-.0021**
Stddev	.0001	.0010	.0002	.0000	.0002	.0003	.0001	.0013
%RSD	62.99	82.25	185.8	27.70	120.0	8.898	32.32	61.11
#1	-.0001	.0019	.0000	.0000	.0003	.0035	.0003	-.0030
#2	-.0003	.0005	.0003	.0001	.0000	.0040	.0002	-.0012
Check ?	None	None	None	None	None	Chk Pass	Chk Fail	Chk Fail
Value							.0040	.0040
Range							-30.00%	-30.00%

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	F **-.0017**	F **.0005**
Stddev	.0002	.0002
%RSD	14.82	46.76
#1	-.0018	.0006
#2	-.0015	.0003
Check ?	Chk Fail	Chk Fail
Value	.0040	.0040
Range	-30.00%	-30.00%

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**154300.**	**32887.**	**1988.4**	**5619.4**
Stddev	219.	64.	4.8	8.2
%RSD	.14173	.19325	.24010	.14640
#1	154150.	32932.	1991.8	5625.2
#2	154460.	32842.	1985.1	5613.5

Zoom In Zoom Out

Sample Name: cria Acquired: 5/20/2014 0:58:25 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**.0001**	**.0000**	**.0001**	**-.0007**	**.0000**	**-.0001**	**-.0002**
Stddev	.0001	.000	.0000	.000	.0001	.0001	.0000	.0001	.0002
%RSD	283.7	115.7	78.24	189.9	122.8	14.26	31.78	89.04	86.22
#1	.0000	.0000	.0000	.0000	.0002	-.0007	.0000	-.0001	-.0003
#2	.0001	.0000	.0001	.0000	.0000	-.0008	.0000	.0000	-.0001
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0004**	**.0205**	**-.0017**	**.0224**	**.0198**	**.0199**	**.5244**	**.0008**
Stddev	.0002	.0003	.0006	.0003	.0002	.0009	.0002	.0011	.0008
%RSD	104.8	68.95	3.163	19.63	.9626	4.745	1.077	.2052	98.91
#1	.0000	.0006	.0201	-.0020	.0223	.0205	.0200	.5251	.0003
#2	.0003	.0002	.0210	-.0015	.0226	.0192	.0197	.5236	.0014
Check ?	None	None	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5328**	**.0049**	**.0016**	**.0126**	**.0020**	**-.0001**	**-.0005**	**.0011**	**.0000**
Stddev	.0035	.0098	.0191	.0004	.0001	.0002	.0008	.0006	.0002
%RSD	.6622	201.7	1207.	3.405	4.114	161.2	165.2	52.35	1025.
#1	.5353	-.0021	-.0119	.0129	.0019	.0000	.0001	.0007	.0002
#2	.5303	.0118	.0151	.0123	.0020	-.0002	-.0010	.0016	-.0001
Check ?	Chk Pass	None	None	None	None	None	None	None	None
Value									
Range									

Zoom In Zoom Out

Sample Name: cria Acquired: 5/20/2014 0:58:25 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**.0025**	**.0001**	**-.0009**	**-.0021**	**.0002**
Stddev	.000	.0002	.0005	.0000	.0002	.0001	.0008
%RSD	308.7	372.2	18.77	11.54	26.81	3.881	508.5
#1	.0000	-.0001	.0022	.0001	-.0007	-.0021	-.0004
#2	.0000	.0002	.0028	.0001	-.0011	-.0020	.0007
Check ?	None	None	None	None	None	None	None
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**156850.**	**33263.**	**2034.8**	**5715.4**
Stddev	51.	62.	5.7	7.8
%RSD	.03253	.18513	.28105	.13690
#1	156810.	33219.	2030.7	5709.9
#2	156890.	33306.	2038.8	5720.9

Zoom In Zoom Out

Sample Name: icsa Acquired: 5/20/2014 1:04:31 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0000**	**-.0028**	**-.0001**	**.0000**	**-.0017**	**-.0055**	**-.0007**	**.0025**
Stddev	.0000	.0000	.0000	.0003	.000	.0003	.0001	.0004	.0004
%RSD	11.23	129.2	1.063	392.6	1604.	16.21	1.685	67.88	15.97
#1	-.0004	.0000	-.0028	-.0002	.0002	-.0015	-.0054	-.0010	.0028
#2	-.0005	.0000	-.0028	.0001	-.0002	-.0019	-.0056	-.0003	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0003**	**.0016**	**-.0030**	**-.0038**	**-.0084**	**-.0008**	**516.8**	**385.6**
Stddev	.0001	.0002	.0029	.0003	.0001	.0049	.0012	3.2	3.2
%RSD	15.70	80.90	183.1	11.43	3.529	58.95	152.4	.6230	.8397
#1	.0009	.0001	.0037	-.0027	-.0037	-.0049	.0001	519.1	387.9
#2	.0007	.0005	-.0005	-.0032	-.0039	-.0118	-.0016	514.5	383.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**194.9**	**552.0**	**.1302**	**.0265**	**.0005**	**-.0039**	**-.0338**	**-.1674**	**.0008**
Stddev	1.7	3.9	.0006	.0028	.0005	.0001	.0006	.0014	.0001
%RSD	.8832	.7037	.4446	10.49	93.14	2.802	1.704	.8587	12.78
#1	196.2	554.7	.1306	.0245	.0002	-.0039	-.0334	-.1684	.0007
#2	193.7	549.2	.1298	.0284	.0009	-.0040	-.0342	-.1664	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: icsa Acquired: 5/20/2014 1:04:31 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0057**	**.0000**	**.0154**	**.0068**	**-.0625**	**-.0004**	**.0010**
Stddev	.0002	.000	.0015	.0001	.0012	.0003	.0003
%RSD	2.967	3029.	9.439	2.052	1.923	73.90	33.90
#1	-.0058	-.0002	.0144	.0069	-.0633	-.0006	.0013
#2	-.0056	.0002	.0164	.0067	-.0616	-.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**142510.**	**31859.**	**1772.2**	**4780.9**
Stddev	79.	242.	9.6	7.8
%RSD	.05538	.76073	.53955	.16292
#1	142460.	31688.	1779.0	4786.4
#2	142570.	32031.	1765.5	4775.3

Zoom In Zoom Out

Sample Name: icsab Acquired: 5/20/2014 1:10:47 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5037**	**.5080**	**.9974**	**.4805**	**.4655**	**.5146**	**.4839**	**.9596**	**.9983**
Stddev	.0000	.0005	.0018	.0027	.0012	.0019	.0015	.0034	.0009
%RSD	.0035	.1026	.1824	.5643	.2634	.3742	.3034	.3578	.0914
#1	.5036	.5077	.9961	.4786	.4647	.5159	.4829	.9572	.9977
#2	.5037	.5084	.9987	.4824	.4664	.5132	.4850	.9620	.9990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4658**	**.9311**	**1.017**	**1.000**	**.9477**	**.9849**	**.9865**	**488.9**	**371.2**
Stddev	.0003	.0041	.002	.008	.0045	.0007	.0033	3.6	1.3
%RSD	.0651	.4419	.1719	.8020	.4793	.0754	.3370	.7373	.3482
#1	.4660	.9282	1.016	.9944	.9445	.9854	.9888	491.4	372.1
#2	.4656	.9340	1.018	1.006	.9510	.9844	.9841	486.3	370.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**190.5**	**530.9**	**.1276**	**.0244**	**-.0033**	**.4660**	**.4984**	**-.1711**	**.0020**
Stddev	.9	.4	.0063	.0029	.0012	.0003	.0004	.0014	.0018
%RSD	.4487	.0778	4.941	12.06	35.62	.0726	.0728	.8165	88.17
#1	189.9	530.6	.1232	.0224	-.0041	.4657	.4987	-.1721	.0032
#2	191.1	531.2	.1321	.0265	-.0024	.4662	.4982	-.1701	.0008
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	None
Value									
Range									

Zoom In Zoom Out

Sample Name: icsab Acquired: 5/20/2014 1:10:47 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0060**	**.0001**	**.5038**	**.4853**	F **.3985**	**.4854**	**.5416**
Stddev	.0001	.0000	.0016	.0011	.0041	.0011	.0001
%RSD	1.398	72.54	.3243	.2172	1.020	.2237	.0098
#1	-.0061	.0001	.5027	.4846	.4014	.4862	.5415
#2	-.0059	.0000	.5050	.4861	.3957	.4847	.5416
Check ?	None	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value					.5000		
Range					-20.00%		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**143260.**	**32274.**	**1798.5**	**4847.0**
Stddev	101.	40.	1.0	8.5
%RSD	.07065	.12429	.05293	.17574
#1	143190.	32303.	1797.9	4853.0
#2	143330.	32246.	1799.2	4840.9

Zoom In Zoom Out

Sample Name: alconf Acquired: 5/20/2014 1:16:57 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0001**	**.0000**	**.0000**	**-.0002**	**-.0007**	**-.0009**	**-.0006**	**-.0023**
Stddev	.0001	.0000	.0001	.0002	.0000	.0000	.0000	.0003
%RSD	210.6	14.95	369.7	67.09	3.843	4.506	7.178	13.53
#1	.0000	.0000	.0000	-.0004	-.0007	-.0009	-.0007	-.0021
#2	.0002	.0000	.0001	-.0001	-.0007	-.0009	-.0006	-.0026

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0002**	**-.0002**	**-.0006**	**-.0011**	F **-.0024**	**.0005**	**.0032**	**-.0003**
Stddev	.0001	.0001	.0006	.0008	.0005	.0031	.0004	.0009
%RSD	43.42	31.52	86.96	73.08	21.21	573.6	12.10	365.8
#1	.0001	-.0002	-.0002	-.0017	-.0021	.0028	.0035	.0004
#2	.0002	-.0003	-.0010	-.0005	-.0028	-.0017	.0029	-.0009

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**551.0**	**.0233**	**.0083**	**.0291**	**-.0212**	**-.0125**	**.0014**	**-.0022**
Stddev	4.1	.0023	.0006	.0024	.0132	.0006	.0010	.0004
%RSD	.7504	10.07	7.735	8.118	62.57	4.670	73.14	16.83
#1	554.0	.0216	.0078	.0308	-.0118	-.0120	.0022	-.0019
#2	548.1	.0250	.0087	.0275	-.0305	-.0129	.0007	-.0024

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0006**	**-.0385**	**.0026**	**.0000**	**.0001**	**-.0006**	**.0015**	**-.0208**
Stddev	.0000	.0012	.0002	.0000	.0000	.0029	.0001	.0004
%RSD	3.673	3.172	7.577	50.75	32.83	502.0	8.020	2.063
#1	-.0006	-.0376	.0025	.0000	.0001	.0015	.0016	-.0205
#2	-.0006	-.0393	.0028	.0000	.0001	-.0027	.0014	-.0211

Elem	Bi2230	Li6707
Avg	**-.0018**	**-.0001**
Stddev	.0000	.0002
%RSD	2.609	238.2
#1	-.0018	-.0002
#2	-.0019	.0000

Zoom In Zoom Out

Sample Name: alconf Acquired: 5/20/2014 1:16:57 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**151590.**	**30778.**	**2083.8**	**5324.2**
Stddev	302.	158.	.1	6.0
%RSD	.19924	.51190	.00638	.11251
#1	151800.	30667.	2083.7	5328.4
#2	151370.	30889.	2083.9	5319.9

Zoom In Zoom Out

Sample Name: mnconf Acquired: 5/20/2014 1:23:08 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0002**	**-.0003**	**.0003**	**.0001**	**-.0012**	**.0003**	F **10.14**	**.0010**	**.0013**
Stddev	.0001	.0000	.0000	.0001	.0000	.0000	.06	.0000	.0002
%RSD	30.64	8.373	8.558	167.8	1.690	13.86	.5457	4.926	14.03
#1	.0002	-.0003	.0003	.0000	-.0012	.0003	10.10	.0009	.0012
#2	.0002	-.0003	.0003	.0001	-.0012	.0004	10.18	.0010	.0014

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0058**	**.0005**	**-.0011**	**-.0015**	**.0007**	**.0027**	**.0007**	**.0676**	**.0307**
Stddev	.0001	.0000	.0003	.0011	.0002	.0005	.0002	.0133	.0032
%RSD	1.736	3.122	23.55	73.27	30.73	17.87	20.33	19.63	10.56
#1	-.0059	.0005	-.0009	-.0007	.0009	.0030	.0009	.0770	.0330
#2	-.0057	.0005	-.0013	-.0023	.0006	.0023	.0006	.0582	.0284

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0258**	**.0530**	**-.0267**	**.0070**	**.0007**	**-.0003**	**-.0019**	**-.0072**	**.0001**
Stddev	.0006	.0014	.0069	.0018	.0000	.0000	.0007	.0003	.0000
%RSD	2.380	2.634	26.05	25.73	3.832	2.567	35.33	4.031	43.61
#1	.0262	.0520	-.0316	.0083	.0007	-.0003	-.0014	-.0074	.0001
#2	.0254	.0540	-.0217	.0057	.0008	-.0003	-.0023	-.0070	.0001

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0000**	**.0001**	**.0008**	**.0007**	**-.0013**	**-.0008**	**-.0003**
Stddev	.000	.0002	.0005	.0000	.0003	.0002	.0005
%RSD	86.72	112.2	59.29	4.783	20.38	24.71	178.3
#1	.0000	.0002	.0005	.0007	-.0011	-.0006	.0001
#2	.0000	.0000	.0012	.0007	-.0015	-.0009	-.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**154090.**	**32305.**	**1997.0**	**5640.6**
Stddev	410.	167.	2.5	7.6
%RSD	.26592	.51751	.12581	.13413
#1	153800.	32187.	1998.8	5635.3
#2	154380.	32424.	1995.2	5646.0

Zoom In Zoom Out

Sample Name: sconf Acquired: 5/20/2014 1:29:16 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0001**	**.0000**	**.0000**	**.0002**	**.0000**	**.0004**	**.0013**	**-.0002**	**-.0003**
Stddev	.0001	.0000	.000	.0000	.000	.0001	.0001	.0001	.0003
%RSD	67.77	177.3	21.77	7.653	148.1	16.79	11.03	90.76	104.3
#1	.0002	.0000	.0000	.0002	-.0001	.0004	.0014	-.0002	-.0001
#2	.0001	.0000	.0000	.0002	.0000	.0005	.0012	-.0001	-.0004

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0001**	**.0018**	**.0017**	**-.0003**	**.0002**	**.0017**	**-.0001**	**.0260**	**.0157**
Stddev	.0000	.0001	.0008	.0011	.0000	.0002	.0004	.0041	.0016
%RSD	42.15	2.990	46.61	350.3	18.08	9.752	290.8	15.69	10.21
#1	-.0001	.0017	.0011	-.0011	.0002	.0016	-.0004	.0231	.0169
#2	-.0001	.0018	.0023	.0005	.0002	.0018	.0001	.0289	.0146

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0064**	**.0061**	**.0114**	**.0037**	**.0009**	**.0004**	**.0002**	**.0019**	**.0005**
Stddev	.0009	.0050	.0151	.0046	.0007	.0000	.0001	.0002	.0002
%RSD	14.01	81.60	132.6	123.2	82.93	6.933	41.32	11.77	49.95
#1	.0071	.0096	.0007	.0005	.0014	.0004	.0002	.0021	.0006
#2	.0058	.0026	.0220	.0070	.0004	.0005	.0003	.0017	.0003

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0000**	**.0001**	**.0011**	**-.0004**	**24.03**	**.0007**	**.0005**
Stddev	.000	.0001	.0001	.0000	.06	.0006	.0003
%RSD	17.06	57.31	10.54	8.926	.2600	90.69	64.10
#1	.0000	.0002	.0012	-.0005	24.07	.0002	.0003
#2	.0000	.0001	.0011	-.0004	23.99	.0011	.0007

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**159280.**	**34682.**	**1964.6**	**5699.2**
Stddev	128.	58.	.1	2.5
%RSD	.08021	.16742	.00335	.04337
#1	159370.	34640.	1964.6	5700.9
#2	159190.	34723.	1964.5	5697.4

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 1:35:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.970**	**2.056**	**1.994**	**2.046**	**2.064**	**1.916**	**2.086**	**2.046**	**.2408**
Stddev	.003	.002	.002	.004	.002	.003	.006	.001	.0003
%RSD	.1677	.1012	.0922	.2211	.1174	.1437	.2879	.0309	.1382
#1	1.972	2.055	1.995	2.043	2.066	1.914	2.091	2.046	.2410
#2	1.967	2.058	1.993	2.049	2.063	1.918	2.082	2.047	.2406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.017**	**2.074**	**1.988**	**2.073**	**2.061**	**1.918**	**1.952**	**39.28**	**39.99**
Stddev	.000	.001	.006	.002	.004	.009	.001	.07	.06
%RSD	.0147	.0241	.2834	.0943	.1803	.4686	.0240	.1788	.1538
#1	2.016	2.074	1.984	2.075	2.058	1.925	1.952	39.23	39.95
#2	2.017	2.074	1.992	2.072	2.063	1.912	1.953	39.33	40.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.43**	**39.77**	**40.34**	**39.98**	**1.952**	**1.985**	**1.912**	**4.898**	**2.004**
Stddev	.05	.12	.07	.03	.001	.004	.003	.002	.005
%RSD	.1229	.2995	.1614	.0632	.0735	.1909	.1764	.0310	.2305
#1	40.40	39.69	40.29	40.00	1.951	1.988	1.910	4.899	2.007
#2	40.47	39.86	40.38	39.96	1.953	1.983	1.915	4.897	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 1:35:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.017**	**2.037**	**1.884**	**2.023**	**1.926**	**1.928**	**1.987**
Stddev	.021	.001	.014	.002	.004	.008	.001
%RSD	1.042	.0592	.7650	.0969	.2296	.4377	.0269
#1	2.032	2.036	1.874	2.022	1.929	1.934	1.986
#2	2.002	2.037	1.894	2.025	1.923	1.922	1.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**152330.**	**33223.**	**1928.8**	**5374.1**
Stddev	2.	68.	2.1	6.9
%RSD	.00133	.20464	.11110	.12855
#1	152330.	33271.	1927.3	5378.9
#2	152330.	33175.	1930.4	5369.2

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 1:41:14 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0004**	**.0003**	**.0002**	**.0001**	**-.0001**	**.0006**	**-.0001**
Stddev	.0000	.0000	.0000	.0001	.0003	.0003	.0001	.0001
%RSD	10.76	4.789	9.411	51.99	255.0	205.0	9.243	210.5
#1	.0005	.0004	.0003	.0001	.0004	.0001	.0005	-.0001
#2	.0004	.0005	.0003	.0003	-.0001	-.0003	.0006	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0003**	**.0001**	**.0012**	**-.0014**	**.0008**	**.0008**	**.0012**
Stddev	.0005	.0000	.0002	.0006	.0000	.0006	.0007	.0001
%RSD	309.8	6.368	269.4	54.12	2.864	80.59	78.19	11.95
#1	-.0005	.0003	.0002	.0007	-.0015	.0003	.0013	.0013
#2	.0002	.0003	-.0001	.0016	-.0014	.0013	.0004	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**.0099**	**.0081**	**.0282**	**.0445**	**.0120**	**.0023**	**.0009**
Stddev	.0016	.0011	.0006	.0023	.0006	.0010	.0001	.0001
%RSD	18.15	11.49	7.206	8.075	1.416	8.639	6.063	8.465
#1	.0078	.0107	.0077	.0298	.0441	.0112	.0024	.0009
#2	.0100	.0091	.0085	.0266	.0450	.0127	.0022	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 1:41:14 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0023**	**.0001**	**.0004**	**.0005**	**.0162**	W **.0012**	**-.0008**
Stddev	.0000	.0011	.0007	.0000	.0003	.0022	.0001	.0019
%RSD	2.318	48.29	479.0	10.48	61.62	13.30	7.961	247.3
#1	-.0002	.0031	-.0004	.0004	.0007	.0177	.0012	-.0021
#2	-.0002	.0015	.0007	.0004	.0003	.0147	.0011	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0011	
Low Limit							-.0011	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0022**	**.0006**
Stddev	.0001	.0001
%RSD	3.875	22.48
#1	-.0022	.0005
#2	-.0023	.0007
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**154470.**	**32259.**	**1994.8**	**5626.5**
Stddev	400.	22.	3.1	5.5
%RSD	.25897	.06925	.15582	.09708
#1	154190.	32275.	1992.6	5622.6
#2	154750.	32244.	1997.0	5630.4

Zoom In Zoom Out

Sample Name: jb66901-5a Acquired: 5/20/2014 1:47:20 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.5843**	**.0002**	**.0030**	**.0035**	**.0018**	**.0052**	**.9738**	**.1269**
Stddev	.0033	.0000	.0000	.0001	.0002	.0001	.0027	.0003
%RSD	.5666	7.501	.7739	3.565	12.19	1.391	.2757	.1999
#1	.5819	.0002	.0030	.0034	.0019	.0051	.9757	.1270
#2	.5866	.0002	.0030	.0036	.0016	.0052	.9719	.1267

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0063**	**.0574**	**.0158**	**.0443**	F **-.0121**	**.0037**	**.0208**	**.0097**
Stddev	.0004	.0002	.0000	.0006	.0016	.0008	.0001	.0001
%RSD	7.041	.3925	.1212	1.373	13.34	22.62	.4696	.8024
#1	.0066	.0575	.0159	.0439	-.0132	.0043	.0208	.0098
#2	.0060	.0572	.0158	.0448	-.0110	.0031	.0209	.0097

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.4936**	**497.9**	**.0620**	**16.33**	**8.962**	F **1187.**	**3.934**	**.0743**
Stddev	.0023	5.3	.0008	.23	.032	26.	.003	.0000
%RSD	.4745	1.064	1.311	1.415	.3533	2.154	.0791	.0187
#1	.4919	501.7	.0626	16.50	8.940	1205.	3.936	.0742
#2	.4952	494.2	.0615	16.17	8.984	1169.	3.932	.0743

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**.0037**	**31.17**	**-.0029**	**3.454**	**-.0001**	**.0209**	**-.0047**	**35.07**
Stddev	.0010	.08	.0008	.016	.0000	.0009	.0002	.05
%RSD	27.08	.2709	26.34	.4610	7.801	4.196	3.191	.1486
#1	.0044	31.23	-.0034	3.442	-.0001	.0203	-.0046	35.11
#2	.0030	31.11	-.0023	3.465	-.0001	.0215	-.0048	35.03

Elem	Bi2230	Li6707
Avg	**-.0048**	**.0647**
Stddev	.0005	.0003
%RSD	9.392	.4133
#1	-.0051	.0646
#2	-.0045	.0649

Zoom In Zoom Out

Sample Name: jb66901-5a Acquired: 5/20/2014 1:47:20 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**126990.**	**30542.**	**1613.5**	**4277.6**
Stddev	440.	318.	3.3	13.2
%RSD	.34629	1.0414	.20456	.30795
#1	126680.	30317.	1611.1	4268.3
#2	127310.	30767.	1615.8	4286.9

Zoom In Zoom Out

Sample Name: mp79524-sd1 Acquired: 5/20/2014 1:53:36 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.5658**	**.0004**	**.0027**	**.0029**	**.0010**	**.0084**	**.9399**	**.1261**
Stddev	.0008	.0000	.0001	.0009	.0012	.0007	.0004	.0005
%RSD	.1354	2.533	4.992	31.85	119.1	8.288	.0380	.3686
#1	.5663	.0004	.0028	.0035	.0019	.0089	.9396	.1258
#2	.5653	.0004	.0026	.0022	.0002	.0079	.9402	.1264

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0063**	**.0548**	**.0256**	**.0439**	F **-.0103**	**.0063**	**.0285**	**.0079**
Stddev	.0018	.0003	.0006	.0005	.0039	.0049	.0034	.0010
%RSD	27.84	.5519	2.533	1.206	37.58	77.81	12.06	12.86
#1	.0051	.0550	.0251	.0442	-.0076	.0028	.0261	.0072
#2	.0075	.0546	.0260	.0435	-.0131	.0098	.0309	.0086

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**1.010**	**496.1**	**.0654**	**15.44**	**7.949**	**1153.**	**3.882**	**.0759**
Stddev	.026	1.0	.0028	.17	.023	8.	.000	.0002
%RSD	2.568	.1972	4.302	1.113	.2887	.7303	.0063	.3158
#1	1.028	496.8	.0674	15.56	7.965	1147.	3.882	.0757
#2	.9912	495.4	.0634	15.31	7.932	1159.	3.883	.0761

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**.0009**	**29.21**	**-.0041**	**3.251**	**-.0013**	**.0276**	**-.0038**	**33.66**
Stddev	.0024	.02	.0028	.004	.0008	.0069	.0000	.05
%RSD	266.6	.0785	68.83	.1374	57.40	24.80	.6588	.1599
#1	-.0008	29.19	-.0061	3.254	-.0008	.0325	-.0038	33.62
#2	.0026	29.22	-.0021	3.248	-.0019	.0228	-.0038	33.70

Elem	Bi2230	Li6707
Avg	**-.0001**	**.0626**
Stddev	.0010	.0007
%RSD	1548.	1.094
#1	-.0007	.0631
#2	.0006	.0621

Zoom In Zoom Out

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**146960.**	**34169.**	**1827.2**	**5099.8**
Stddev	496.	33.	4.8	2.2
%RSD	.33719	.09674	.26289	.04222
#1	146610.	34146.	1823.8	5098.3
#2	147310.	34192.	1830.5	5101.3

Zoom In Zoom Out

Sample Name: jb66901-6a Acquired: 5/20/2014 1:59:48 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: tclp

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**3.352**	**.0010**	**.0273**	**.0254**	**.1840**	**.1162**	**4.573**	**1.461**
Stddev	.002	.0000	.0003	.0002	.0008	.0008	.004	.004
%RSD	.0674	1.736	1.107	.9157	.4562	.6907	.0768	.2931
#1	3.350	.0010	.0271	.0252	.1834	.1156	4.570	1.458
#2	3.353	.0010	.0276	.0256	.1846	.1167	4.575	1.464

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0036**	**-.0002**	**17.45**	**.0082**	F **-.0189**	**.0277**	**.0044**	**.0002**
Stddev	.0003	.0000	.08	.0001	.0003	.0010	.0013	.0002
%RSD	9.609	15.12	.4379	1.480	1.590	3.581	28.22	117.0
#1	.0038	-.0001	17.40	.0081	-.0191	.0284	.0053	.0003
#2	.0033	-.0002	17.50	.0082	-.0186	.0270	.0036	.0000

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**2.888**	**121.1**	**6.321**	**9.741**	**3.156**	F **1129.**	**.1056**	**.0818**
Stddev	.002	.6	.009	.007	.042	17.	.0004	.0004
%RSD	.0651	.4575	.1402	.0755	1.340	1.479	.3552	.5306
#1	2.887	120.7	6.314	9.747	3.126	1141.	.1054	.0815
#2	2.889	121.5	6.327	9.736	3.186	1117.	.1059	.0821

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0018**	**3.896**	**.0022**	**.3839**	**.0021**	**.0758**	**.0003**	**3.472**
Stddev	.0005	.019	.0009	.0008	.0003	.0016	.0002	.001
%RSD	28.76	.4876	42.55	.2010	12.45	2.138	56.46	.0165
#1	-.0014	3.883	.0028	.3834	.0022	.0747	.0004	3.472
#2	-.0022	3.909	.0015	.3845	.0019	.0769	.0002	3.473

Elem	Bi2230	Li6707
Avg	**-.0055**	**.0118**
Stddev	.0001	.0001
%RSD	1.522	.5993
#1	-.0054	.0118
#2	-.0055	.0117

Zoom In Zoom Out

Sample Name: jb66901-6a Acquired: 5/20/2014 1:59:48 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: tclp

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**134280.**	**32073.**	**1709.2**	**4503.1**
Stddev	79.	25.	3.3	11.0
%RSD	.05866	.07896	.19129	.24355
#1	134230.	32091.	1711.5	4510.9
#2	134340.	32055.	1706.9	4495.4

Zoom In Zoom Out

Sample Name: jb66901-7a Acquired: 5/20/2014 2:06:02 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**2.623**	**.0005**	**.0170**	**.0171**	**.0261**	**.0075**	**5.816**	**.2163**
Stddev	.006	.0000	.0002	.0002	.0000	.0000	.039	.0000
%RSD	.2455	3.747	.8873	1.065	.0115	.5790	.6769	.0126
#1	2.628	.0005	.0169	.0172	.0261	.0076	5.843	.2163
#2	2.619	.0005	.0171	.0170	.0261	.0075	5.788	.2163

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0026**	**-.0016**	**1.003**	**.0039**	F **-.0136**	**.0122**	**.0080**	**.0008**
Stddev	.0001	.0002	.000	.0009	.0024	.0014	.0007	.0011
%RSD	5.248	9.887	.0162	24.33	17.43	11.16	9.204	137.7
#1	.0027	-.0015	1.003	.0046	-.0119	.0132	.0075	.0000
#2	.0025	-.0017	1.003	.0032	-.0153	.0113	.0085	.0016

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.7501**	**140.7**	**8.798**	**20.75**	**3.883**	F **1147.**	**.0870**	**.2501**
Stddev	.0057	.3	.015	.03	.000	2.	.0004	.0003
%RSD	.7574	.2138	.1733	.1519	.0028	.1423	.4925	.1142
#1	.7461	140.5	8.787	20.73	3.883	1149.	.0873	.2499
#2	.7541	141.0	8.809	20.77	3.883	1146.	.0867	.2503

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0028**	**4.124**	**.0019**	**.3881**	**.0024**	**.0066**	**-.0015**	**3.701**
Stddev	.0008	.007	.0001	.0005	.0001	.0006	.0000	.011
%RSD	27.19	.1695	7.594	.1321	4.549	8.502	2.521	.2970
#1	-.0022	4.129	.0018	.3885	.0023	.0070	-.0015	3.693
#2	-.0033	4.119	.0020	.3877	.0025	.0062	-.0015	3.709

Elem	Bi2230	Li6707
Avg	**-.0050**	**.0196**
Stddev	.0006	.0001
%RSD	11.03	.4523
#1	-.0054	.0196
#2	-.0046	.0195

Zoom In Zoom Out

Sample Name: jb66901-7a Acquired: 5/20/2014 2:06:02 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**129990.**	**31105.**	**1693.1**	**4434.1**
Stddev	43.	24.	.5	4.9
%RSD	.03344	.07704	.03042	.10939
#1	129960.	31122.	1692.7	4430.7
#2	130030.	31088.	1693.4	4437.5

Zoom In Zoom Out

Sample Name: jb66901-8a Acquired: 5/20/2014 2:12:17 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.8707**	**.0003**	**.0055**	**.0307**	**.0088**	**.0149**	**4.745**	**.4390**
Stddev	.0020	.0000	.0002	.0002	.0000	.0006	.074	.0006
%RSD	.2321	6.392	2.819	.6798	.4517	3.830	1.560	.1308
#1	.8721	.0003	.0056	.0308	.0088	.0145	4.693	.4386
#2	.8693	.0003	.0054	.0305	.0088	.0154	4.797	.4394

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0033**	**-.0008**	**.7338**	**.0045**	F **-.0134**	**.1156**	**.0121**	**.0025**
Stddev	.0001	.0001	.0014	.0000	.0003	.0017	.0018	.0010
%RSD	2.151	16.76	.1908	1.068	2.103	1.485	15.29	41.37
#1	.0033	-.0009	.7328	.0045	-.0132	.1168	.0108	.0018
#2	.0032	-.0007	.7348	.0044	-.0136	.1143	.0134	.0032

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.6058**	**202.4**	**9.492**	**9.202**	**4.554**	F **1099.**	**.1124**	**.0010**
Stddev	.0049	.8	.008	.007	.007	1.	.0001	.0002
%RSD	.8043	.4052	.0814	.0720	.1641	.1357	.0843	22.78
#1	.6092	203.0	9.487	9.198	4.560	1100.	.1123	.0012
#2	.6023	201.8	9.498	9.207	4.549	1098.	.1124	.0008

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0025**	**7.001**	**.0015**	**.9128**	**.0012**	**.0073**	**-.0009**	**2.658**
Stddev	.0002	.018	.0005	.0040	.0001	.0009	.0000	.011
%RSD	7.681	.2622	36.14	.4345	10.17	12.52	3.538	.3948
#1	-.0026	6.988	.0018	.9156	.0011	.0066	-.0010	2.651
#2	-.0024	7.014	.0011	.9100	.0013	.0079	-.0009	2.666

Elem	Bi2230	Li6707
Avg	**-.0033**	**.0212**
Stddev	.0004	.0001
%RSD	13.08	.4934
#1	-.0030	.0212
#2	-.0036	.0211

Zoom In Zoom Out

Sample Name: jb66901-8a Acquired: 5/20/2014 2:12:17 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**133400.**	**32992.**	**1629.8**	**4385.4**
Stddev	1313.	15.	7.3	15.1
%RSD	.98444	.04568	.44497	.34472
#1	134330.	33003.	1634.9	4396.1
#2	132470.	32982.	1624.6	4374.7

Zoom In Zoom Out

Sample Name: jb66903-3a Acquired: 5/20/2014 2:18:31 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**1.246**	**.0011**	**.0054**	**.0453**	**.0122**	**.0168**	**4.544**	**.6282**
Stddev	.002	.0000	.0000	.0003	.0005	.0001	.019	.0011
%RSD	.1710	.7566	.6653	.5806	4.261	.6168	.4214	.1733
#1	1.244	.0011	.0055	.0451	.0118	.0167	4.530	.6274
#2	1.247	.0011	.0054	.0455	.0125	.0169	4.557	.6290

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0055**	**.0143**	**.7007**	**.0207**	F **-.0189**	**.0264**	**.0172**	**.0075**
Stddev	.0001	.0002	.0029	.0014	.0001	.0012	.0007	.0003
%RSD	1.899	1.238	.4175	6.797	.6144	4.648	4.330	3.520
#1	.0056	.0142	.6986	.0216	-.0188	.0256	.0178	.0073
#2	.0054	.0144	.7027	.0197	-.0190	.0273	.0167	.0077

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**1.244**	**342.8**	**.1404**	**26.00**	**6.139**	F **1129.**	**2.964**	**.0498**
Stddev	.010	1.3	.0008	.03	.014	17.	.002	.0000
%RSD	.7692	.3825	.5344	.1077	.2217	1.527	.0522	.0109
#1	1.237	341.9	.1409	26.02	6.149	1141.	2.965	.0498
#2	1.251	343.8	.1398	25.98	6.130	1116.	2.963	.0498

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**.0030**	**40.40**	**-.0035**	**2.529**	**-.0002**	**.0103**	**-.0071**	**38.63**
Stddev	.0004	.06	.0000	.012	.0001	.0005	.0000	.05
%RSD	13.50	.1566	1.268	.4873	33.37	5.214	.2041	.1251
#1	.0033	40.44	-.0034	2.520	-.0003	.0107	-.0071	38.60
#2	.0027	40.35	-.0035	2.537	-.0002	.0099	-.0071	38.67

Elem	Bi2230	Li6707
Avg	**-.0065**	**.0292**
Stddev	.0008	.0005
%RSD	11.83	1.595
#1	-.0060	.0296
#2	-.0071	.0289

Zoom In Zoom Out

Sample Name: jb66903-3a Acquired: 5/20/2014 2:18:31 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**132530.**	**32193.**	**1672.3**	**4408.4**
Stddev	31.	59.	3.1	.8
%RSD	.02356	.18288	.18752	.01783
#1	132510.	32151.	1670.1	4408.9
#2	132560.	32234.	1674.6	4407.8

Zoom In Zoom Out

Sample Name: jb66903-4a Acquired: 5/20/2014 2:24:52 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.4301**	**.0002**	**.0038**	**.0288**	**.1057**	**.0957**	**1.468**	**.7677**
Stddev	.0004	.0000	.0000	.0000	.0001	.0004	.006	.0007
%RSD	.0857	4.776	.4155	.0063	.0509	.3944	.4115	.0940
#1	.4298	.0002	.0038	.0288	.1057	.0959	1.464	.7672
#2	.4303	.0002	.0037	.0288	.1057	.0954	1.473	.7683

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0019**	**-.0001**	**.2089**	**.0035**	F **-.0120**	**.0087**	**.0102**	**.0014**
Stddev	.0000	.0002	.0007	.0010	.0011	.0008	.0001	.0000
%RSD	.4198	194.4	.3372	28.06	9.313	9.656	.4913	1.201
#1	.0019	-.0002	.2084	.0028	-.0112	.0092	.0102	.0014
#2	.0019	.0000	.2094	.0042	-.0128	.0081	.0102	.0014

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.6180**	**116.7**	**.2305**	**11.03**	**4.235**	F **1183.**	**.1825**	**.0011**
Stddev	.0004	.0	.0000	.00	.002	14.	.0004	.0000
%RSD	.0715	.0049	.0195	.0397	.0351	1.170	.2085	.7954
#1	.6177	116.7	.2306	11.03	4.234	1193.	.1827	.0011
#2	.6183	116.7	.2305	11.04	4.236	1173.	.1822	.0011

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0001**	**9.590**	**.0009**	**.5158**	**.0012**	**.0024**	**-.0011**	**3.774**
Stddev	.0005	.016	.0010	.0003	.0003	.0000	.0000	.008
%RSD	437.2	.1631	106.9	.0573	21.73	1.039	3.690	.2125
#1	-.0005	9.601	.0016	.5156	.0014	.0024	-.0011	3.780
#2	.0003	9.579	.0002	.5160	.0011	.0024	-.0011	3.769

Elem	Bi2230	Li6707
Avg	**-.0044**	**.0087**
Stddev	.0001	.0002
%RSD	2.176	1.849
#1	-.0045	.0088
#2	-.0043	.0086

Zoom In Zoom Out

Sample Name: jb66903-4a Acquired: 5/20/2014 2:24:52 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**131580.**	**31382.**	**1701.9**	**4470.0**
Stddev	31.	43.	2.9	1.1
%RSD	.02343	.13599	.16944	.02406
#1	131560.	31412.	1699.9	4470.8
#2	131600.	31352.	1703.9	4469.2

Zoom In Zoom Out

Sample Name: jb66920-2 Acquired: 5/20/2014 2:31:01 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.4924**	**.0001**	**.0105**	**.0012**	**.0008**	**.0392**	**.6429**	**.0199**
Stddev	.0002	.0000	.0001	.0000	.0001	.0001	.0008	.0000
%RSD	.0496	21.60	.7918	3.197	9.383	.3131	.1179	.1167
#1	.4926	.0001	.0105	.0012	.0007	.0392	.6434	.0199
#2	.4922	.0002	.0106	.0012	.0008	.0391	.6424	.0200

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0016**	**.0048**	**4.451**	**.0022**	F **-.0124**	**.0112**	**.0084**	**.0028**
Stddev	.0003	.0001	.029	.0012	.0015	.0004	.0004	.0003
%RSD	20.85	2.169	.6635	57.97	12.16	3.996	4.294	9.097
#1	.0014	.0047	4.472	.0013	-.0135	.0115	.0087	.0030
#2	.0018	.0049	4.431	.0030	-.0113	.0109	.0082	.0026

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.2722**	**95.33**	**.0465**	**29.89**	**2.611**	F **1111.**	**.1495**	**-.0005**
Stddev	.0046	.69	.0010	.20	.013	12.	.0004	.0001
%RSD	1.702	.7259	2.202	.6780	.5022	1.036	.2686	16.83
#1	.2689	94.84	.0458	30.03	2.620	1119.	.1493	-.0006
#2	.2755	95.82	.0472	29.74	2.601	1103.	.1498	-.0005

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**.0001**	**3.820**	**.0024**	**.4975**	**.0005**	**.0177**	**-.0006**	**.4215**
Stddev	.0004	.001	.0006	.0004	.0001	.0002	.0001	.0020
%RSD	483.6	.0370	25.29	.0720	10.70	1.016	9.468	.4698
#1	.0003	3.819	.0020	.4977	.0005	.0178	-.0007	.4201
#2	-.0002	3.821	.0029	.4972	.0006	.0175	-.0006	.4229

Elem	Bi2230	Li6707
Avg	**-.0032**	**.0036**
Stddev	.0010	.0002
%RSD	31.09	4.644
#1	-.0025	.0035
#2	-.0039	.0037

Zoom In Zoom Out

Sample Name: jb66920-2 Acquired: 5/20/2014 2:31:01 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**132940.**	**32166.**	**1678.0**	**4485.0**
Stddev	286.	173.	7.9	1.8
%RSD	.21510	.53759	.46784	.04097
#1	132740.	32044.	1683.6	4486.3
#2	133140.	32288.	1672.5	4483.7

Zoom In Zoom Out

Sample Name: jb66947-1 Acquired: 5/20/2014 2:37:09 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.3090**	**.0002**	**.0050**	**.0196**	**.0043**	**.0670**	**.7504**	**.0384**
Stddev	.0004	.0000	.0000	.0002	.0003	.0003	.0025	.0002
%RSD	.1288	3.400	.3854	.9126	7.342	.4993	.3313	.4916
#1	.3093	.0002	.0050	.0195	.0041	.0672	.7486	.0382
#2	.3087	.0002	.0050	.0197	.0045	.0667	.7521	.0385

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0004**	**.0083**	**1.815**	**.0072**	F **-.0105**	**.2227**	**.0083**	**.0015**
Stddev	.0001	.0001	.003	.0003	.0002	.0001	.0001	.0006
%RSD	18.85	1.475	.1546	3.687	1.675	.0378	1.229	40.41
#1	.0004	.0082	1.813	.0074	-.0104	.2228	.0082	.0011
#2	.0005	.0083	1.817	.0070	-.0106	.2227	.0084	.0019

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.7395**	**18.40**	**1.842**	**5.056**	**2.342**	F **1019.**	**.2773**	**.0001**
Stddev	.0001	.07	.006	.046	.021	8.	.0009	.0002
%RSD	.0168	.3790	.3506	.9160	.8832	.8120	.3354	184.7
#1	.7394	18.45	1.847	5.088	2.357	1014.	.2780	.0002
#2	.7396	18.35	1.837	5.023	2.328	1025.	.2767	.0000

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0011**	**4.394**	**.0031**	**.1544**	**.0120**	**.0063**	**.0002**	**.9768**
Stddev	.0001	.014	.0006	.0001	.0001	.0006	.0000	.0074
%RSD	10.73	.3251	17.88	.0480	.5156	9.392	2.300	.7525
#1	-.0010	4.405	.0027	.1544	.0120	.0067	.0002	.9820
#2	-.0012	4.384	.0035	.1543	.0121	.0058	.0002	.9716

Elem	Bi2230	Li6707
Avg	**-.0028**	**.0050**
Stddev	.0002	.0002
%RSD	6.894	3.234
#1	-.0029	.0049
#2	-.0027	.0051

Zoom In Zoom Out

Sample Name: jb66947-1 Acquired: 5/20/2014 2:37:09 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**136750.**	**33445.**	**1736.0**	**4625.6**
Stddev	225.	97.	8.9	8.9
%RSD	.16417	.28963	.51283	.19141
#1	136590.	33377.	1729.7	4619.3
#2	136910.	33514.	1742.3	4631.8

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 2:43:15 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.991**	**2.080**	**2.013**	**2.070**	**2.120**	**1.923**	**2.125**	**2.062**	**.2399**
Stddev	.001	.000	.004	.003	.010	.001	.011	.002	.0008
%RSD	.0624	.0030	.2102	.1320	.4669	.0560	.4948	.1019	.3129
#1	1.990	2.080	2.010	2.072	2.127	1.922	2.133	2.064	.2404
#2	1.992	2.080	2.016	2.068	2.113	1.923	2.118	2.061	.2393
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.053**	**2.101**	**2.021**	**2.087**	**2.081**	**1.926**	**1.962**	**40.81**	**40.38**
Stddev	.007	.001	.001	.005	.001	.000	.001	.05	.17
%RSD	.3627	.0299	.0424	.2612	.0656	.0097	.0260	.1128	.4286
#1	2.059	2.101	2.022	2.091	2.081	1.926	1.962	40.78	40.50
#2	2.048	2.102	2.020	2.083	2.080	1.926	1.962	40.84	40.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.13**	**40.64**	**41.89**	**41.10**	**1.958**	**1.993**	**1.911**	**4.947**	**2.008**
Stddev	.05	.11	.07	.00	.004	.002	.001	.002	.003
%RSD	.1177	.2768	.1632	.0010	.1794	.0988	.0579	.0379	.1223
#1	41.17	40.72	41.84	41.10	1.955	1.992	1.912	4.945	2.010
#2	41.10	40.56	41.94	41.10	1.960	1.995	1.911	4.948	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 2:43:15 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.086**	**2.121**	**1.893**	**2.108**	**1.919**	**1.924**	**2.023**
Stddev	.003	.009	.017	.004	.000	.000	.003
%RSD	.1620	.4126	.8705	.1936	.0115	.0212	.1373
#1	2.084	2.127	1.882	2.111	1.919	1.924	2.021
#2	2.089	2.114	1.905	2.105	1.919	1.924	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**149450.**	**32447.**	**1916.3**	**5318.9**
Stddev	419.	42.	.4	2.8
%RSD	.28049	.12908	.02156	.05214
#1	149150.	32418.	1916.0	5317.0
#2	149740.	32477.	1916.5	5320.9

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 2:49:05 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0005**	**.0004**	**.0002**	**.0003**	**-.0003**	**.0005**	**.0000**
Stddev	.0001	.0000	.0000	.0001	.0001	.0000	.0000	.000
%RSD	23.31	3.642	11.21	64.83	32.10	2.542	3.950	158.6
#1	.0006	.0005	.0004	.0003	.0003	-.0003	.0005	-.0001
#2	.0004	.0005	.0004	.0001	.0002	-.0003	.0004	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0005**	**.0002**	**.0019**	**-.0009**	**.0011**	**.0007**	**.0012**
Stddev	.0004	.0000	.0000	.0002	.0011	.0001	.0012	.0010
%RSD	363.5	4.743	11.62	9.449	115.5	12.77	169.2	89.59
#1	.0002	.0005	.0003	.0021	-.0002	.0012	-.0001	.0019
#2	-.0004	.0005	.0002	.0018	-.0017	.0010	.0015	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0098**	**.0094**	**.0098**	**.0251**	**.0294**	**.1140**	**.0017**	**.0010**
Stddev	.0024	.0026	.0002	.0093	.0180	.0049	.0001	.0003
%RSD	25.01	27.49	2.056	37.09	61.22	4.315	3.788	26.23
#1	.0115	.0112	.0100	.0317	.0421	.1174	.0017	.0012
#2	.0080	.0076	.0097	.0185	.0167	.1105	.0016	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 2:49:05 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0007**	**.0008**	**.0005**	**.0006**	**.0166**	W **.0012**	**.0011**
Stddev	.0003	.0006	.0004	.0000	.0002	.0015	.0001	.0010
%RSD	585.5	95.99	49.07	4.231	31.74	8.856	12.32	91.03
#1	.0003	.0011	.0010	.0005	.0005	.0177	.0013	.0004
#2	-.0002	.0002	.0005	.0005	.0008	.0156	.0011	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0011	
Low Limit							-.0011	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0003**	**.0007**
Stddev	.0003	.0004
%RSD	89.53	53.20
#1	-.0001	.0010
#2	-.0005	.0004
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**158840.**	**33276.**	**2027.8**	**5754.1**
Stddev	137.	186.	7.0	7.3
%RSD	.08617	.55936	.34333	.12714
#1	158750.	33145.	2032.7	5759.2
#2	158940.	33408.	2022.9	5748.9

Zoom In Zoom Out

Sample Name: mp79488-mb1-2 Acquired: 5/20/2014 2:53:10 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0000**	**.0000**	**.0000**	**.0002**	**.0000**	**.0006**	**.0000**	**-.0008**	**-.0003**
Stddev	.0000	.0000	.0001	.0004	.000	.0001	.0000	.0000	.0001
%RSD	31.56	24.89	559.8	225.9	179.5	13.46	116.1	4.697	31.08
#1	.0001	.0000	-.0001	-.0001	.0000	.0006	.0000	-.0008	-.0002
#2	.0000	.0000	.0001	.0004	-.0001	.0005	.0001	-.0008	-.0004

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0001**	**.0009**	**.0002**	**-.0006**	**.0002**	**.0007**	**-.0009**	**.0049**	**.0139**
Stddev	.0000	.0000	.0006	.0005	.0005	.0021	.0012	.0006	.0011
%RSD	24.29	1.989	256.2	86.47	218.2	317.2	126.3	11.87	7.631
#1	-.0001	.0009	-.0002	-.0002	.0006	.0022	-.0001	.0054	.0131
#2	.0000	.0009	.0006	-.0009	-.0001	-.0008	-.0018	.0045	.0146

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0045**	**.0077**	**.0104**	**.0384**	**.0018**	**.0003**	**.0003**	**.0215**	**.0009**
Stddev	.0006	.0064	.0080	.0041	.0000	.0001	.0001	.0004	.0005
%RSD	13.01	82.33	76.50	10.69	1.725	52.55	20.76	2.001	62.09
#1	.0049	.0122	.0048	.0413	.0018	.0004	.0002	.0218	.0005
#2	.0041	.0032	.0160	.0355	.0018	.0002	.0003	.0212	.0012

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0000**	**.0001**	**-.0079**	**.0008**	**.0028**	**-.0004**	**.0000**
Stddev	.0000	.0002	.0011	.0000	.0037	.0005	.0001
%RSD	135.0	210.8	13.56	2.933	130.6	137.0	386.4
#1	.0000	.0000	-.0086	.0008	.0002	-.0007	-.0001
#2	.0000	.0002	.0071	.0008	.0055	.0000	.0001

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**160950.**	**35029.**	**1977.4**	**5748.3**
Stddev	3.	45.	6.8	9.4
%RSD	.00210	.12947	.34489	.16436
#1	160950.	34997.	1972.6	5741.6
#2	160940.	35061.	1982.2	5754.9

Zoom In Zoom Out

Sample Name: mp79488-ic1-2 Acquired: 5/20/2014 3:01:14 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.4663**	**.4873**	**.4668**	**.4701**	**.5009**	**.4334**	**.5008**	**.4814**	**.1711**
Stddev	.0002	.0011	.0025	.0001	.0015	.0006	.0004	.0023	.0007
%RSD	.0400	.2215	.5375	.0156	.2971	.1323	.0804	.4820	.3875
#1	.4662	.4866	.4650	.4700	.5020	.4330	.5011	.4797	.1716
#2	.4665	.4881	.4685	.4701	.4999	.4338	.5006	.4830	.1707

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.4766**	**.4951**	**.4701**	**.5024**	**.4850**	**.4566**	**.4490**	**4.745**	**5.269**
Stddev	.0010	.0031	.0001	.0008	.0008	.0030	.0002	.004	.002
%RSD	.2034	.6282	.0317	.1598	.1615	.6652	.0480	.0812	.0362
#1	.4773	.4929	.4702	.5019	.4856	.4544	.4489	4.743	5.270
#2	.4760	.4973	.4700	.5030	.4845	.4587	.4492	4.748	5.268

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**5.437**	**5.201**	**9.838**	**9.669**	**-.0009**	**.4652**	**-.0004**	**-.0018**	**.0009**
Stddev	.014	.025	.007	.006	.0005	.0023	.0002	.0001	.0004
%RSD	.2602	.4790	.0684	.0608	53.86	.4858	42.88	6.792	38.04
#1	5.427	5.183	9.833	9.665	-.0005	.4636	-.0003	-.0019	.0012
#2	5.447	5.219	9.842	9.674	-.0012	.4668	-.0006	-.0017	.0007

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**-.0002**	**.4969**	**.0106**	**.0026**	**-.0015**	**-.0049**	**.0002**
Stddev	.0000	.0013	.0006	.0001	.0027	.0006	.0001
%RSD	3.295	.2558	5.715	3.698	181.0	12.52	60.22
#1	-.0002	.4960	.0110	.0027	.0004	-.0054	.0001
#2	-.0002	.4978	.0102	.0025	-.0034	-.0045	.0003

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**158350.**	**33750.**	**1991.7**	**5681.9**
Stddev	122.	49.	5.7	11.2
%RSD	.07690	.14557	.28406	.19767
#1	158270.	33785.	1995.7	5689.9
#2	158440.	33716.	1987.7	5674.0

Zoom In Zoom Out

Sample Name: mp79488-b1 Acquired: 5/20/2014 3:07:07 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.926**	**.0524**	**.0468**	**.4989**	**.2134**	**.2247**	**.5356**	**.5063**	**.0474**
Stddev	.001	.0001	.0003	.0015	.0007	.0011	.0000	.0001	.0001
%RSD	.0599	.1122	.6911	.2935	.3419	.5017	.0004	.0250	.1958
#1	1.927	.0524	.0470	.4978	.2129	.2254	.5356	.5063	.0475
#2	1.925	.0523	.0465	.4999	.2139	.2239	.5356	.5064	.0474

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5032**	**.5201**	**2.021**	**2.120**	**.5213**	**1.940**	**.4824**	**2.108**	**24.82**
Stddev	.0014	.0005	.002	.003	.0007	.002	.0008	.006	.02
%RSD	.2775	.0927	.0748	.1270	.1420	.0861	.1670	.2672	.0683
#1	.5022	.5205	2.022	2.118	.5208	1.941	.4818	2.104	24.83
#2	.5042	.5198	2.020	2.122	.5218	1.938	.4830	2.112	24.81

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.089**	**26.03**	**26.33**	**25.72**	**1.912**	**2.007**	**1.818**	**1.989**	**1.955**
Stddev	.000	.05	.00	.02	.000	.001	.004	.001	.001
%RSD	.0180	.1942	.0143	.0753	.0230	.0718	.1945	.0394	.0427
#1	1.089	26.00	26.33	25.70	1.912	2.008	1.820	1.990	1.955
#2	1.089	26.07	26.33	25.73	1.912	2.006	1.815	1.989	1.956

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.057**	**2.113**	**.0073**	**.0010**	**-.0036**	**-.0026**	**-.0001**
Stddev	.000	.001	.0004	.0003	.0027	.0009	.0000
%RSD	.0038	.0459	5.726	32.90	74.88	33.60	17.57
#1	2.057	2.114	.0070	.0012	-.0017	-.0032	-.0001
#2	2.057	2.112	.0076	.0008	-.0055	-.0020	-.0001

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**150440.**	**32240.**	**1932.0**	**5429.5**
Stddev	658.	43.	6.4	9.7
%RSD	.43753	.13385	.32968	.17880
#1	149970.	32271.	1927.5	5422.7
#2	150900.	32210.	1936.5	5436.4

Zoom In Zoom Out

Sample Name: mp79488-s1 Acquired: 5/20/2014 3:12:57 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.023**	**.0526**	**.0487**	**.4972**	**.2111**	**.2354**	**.5327**	**.5108**	**.0486**
Stddev	.000	.0001	.0001	.0017	.0013	.0012	.0008	.0009	.0002
%RSD	.0128	.2800	.1439	.3407	.5985	.4978	.1476	.1784	.4280
#1	2.022	.0527	.0487	.4984	.2120	.2346	.5333	.5114	.0484
#2	2.023	.0525	.0488	.4960	.2102	.2363	.5322	.5101	.0487

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5061**	**.5152**	**2.057**	**2.122**	**.5175**	**2.081**	**.5001**	**2.386**	**27.95**
Stddev	.0005	.0013	.005	.005	.0037	.004	.0009	.008	.04
%RSD	.1010	.2603	.2334	.2466	.7226	.1747	.1816	.3505	.1284
#1	.5064	.5161	2.060	2.126	.5202	2.078	.5008	2.392	27.97
#2	.5057	.5143	2.053	2.118	.5149	2.083	.4995	2.380	27.92

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.441**	**26.48**	**30.89**	**58.45**	**2.059**	**2.079**	**1.896**	**6.765**	**2.013**
Stddev	.002	.04	.10	.07	.005	.002	.001	.001	.004
%RSD	.1492	.1321	.3291	.1122	.2239	.0700	.0513	.0192	.1746
#1	1.442	26.50	30.96	58.50	2.056	2.078	1.896	6.766	2.011
#2	1.439	26.45	30.82	58.40	2.063	2.080	1.897	6.764	2.016

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.046**	**2.052**	**.0081**	**-.0013**	**15.87**	**-.0010**	**.0005**
Stddev	.002	.002	.0004	.0001	.04	.0004	.0009
%RSD	.1111	.0759	5.432	4.551	.2782	43.89	172.6
#1	2.048	2.053	.0085	-.0013	15.84	-.0013	-.0001
#2	2.045	2.051	.0078	-.0012	15.90	-.0007	.0012

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152320.**	**33818.**	**1871.2**	**5360.0**
Stddev	300.	39.	8.6	8.7
%RSD	.19722	.11603	.46166	.16241
#1	152530.	33790.	1877.3	5366.1
#2	152110.	33846.	1865.0	5353.8

Zoom In Zoom Out

Sample Name: mp79488-s2 Acquired: 5/20/2014 3:18:52 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.975**	**.0519**	**.0481**	**.4933**	**.2084**	**.2305**	**.5285**	**.5067**	**.0484**
Stddev	.006	.0000	.0001	.0016	.0006	.0004	.0005	.0018	.0000
%RSD	.2873	.0491	.1373	.3293	.2963	.1554	.0946	.3625	.0117
#1	1.979	.0519	.0480	.4921	.2079	.2308	.5289	.5054	.0484
#2	1.971	.0519	.0481	.4944	.2088	.2302	.5282	.5080	.0484

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.4981**	**.5165**	**2.001**	**2.095**	**.5156**	**2.009**	**.4844**	**2.318**	**27.33**
Stddev	.0001	.0011	.010	.004	.0008	.002	.0007	.004	.02
%RSD	.0179	.2198	.5088	.2101	.1479	.1209	.1446	.1506	.0819
#1	.4980	.5157	1.994	2.092	.5151	2.011	.4839	2.320	27.34
#2	.4981	.5173	2.009	2.098	.5162	2.007	.4849	2.315	27.31

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.409**	**25.75**	**29.52**	**56.25**	**2.008**	**2.040**	**1.864**	**6.599**	**1.985**
Stddev	.002	.01	.03	.18	.002	.004	.004	.018	.007
%RSD	.1181	.0545	.1177	.3157	.1052	.1811	.2302	.2704	.3708
#1	1.408	25.76	29.54	56.38	2.007	2.037	1.861	6.586	1.980
#2	1.410	25.74	29.49	56.13	2.010	2.043	1.867	6.611	1.990

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**2.002**	**2.003**	**.0064**	**-.0016**	**15.30**	**-.0007**	**.0010**
Stddev	.024	.001	.0007	.0000	.03	.0003	.0002
%RSD	1.180	.0246	10.23	.2479	.1976	50.07	22.31
#1	2.019	2.003	.0069	-.0016	15.28	-.0009	.0011
#2	1.986	2.003	.0059	-.0016	15.32	-.0004	.0008

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153280.**	**33740.**	**1914.5**	**5434.8**
Stddev	189.	14.	1.3	7.8
%RSD	.12301	.04122	.06612	.14438
#1	153140.	33730.	1915.4	5440.4
#2	153410.	33749.	1913.6	5429.3

Zoom In Zoom Out

Sample Name: jb66584-1 Acquired: 5/20/2014 3:24:45 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0308**	**.0001**	**.0001**	**.0009**	**.0017**	**.0006**	**.0056**	**.0009**	**-.0001**
Stddev	.0002	.0000	.0001	.0002	.0001	.0002	.0000	.0001	.0005
%RSD	.6437	1.858	70.94	18.17	3.765	41.01	.6969	12.77	632.3
#1	.0307	.0001	.0001	.0008	.0017	.0007	.0055	.0010	-.0005
#2	.0310	.0001	.0000	.0010	.0018	.0004	.0056	.0008	.0003

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0006**	**.0075**	**.0016**	**-.0009**	**.0015**	**.0014**	**.0006**	**.2678**	**2.587**
Stddev	.0001	.0001	.0002	.0004	.0002	.0007	.0002	.0009	.009
%RSD	12.44	1.186	11.84	38.54	11.44	53.95	33.88	.3283	.3598
#1	.0005	.0074	.0015	-.0012	.0014	.0009	.0004	.2672	2.593
#2	.0006	.0076	.0018	-.0007	.0016	.0019	.0007	.2684	2.580

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.3150**	**.5961**	**4.150**	**29.66**	**.0525**	**.0009**	**-.0002**	**3.846**	**-.0002**
Stddev	.0008	.0005	.002	.06	.0002	.0002	.0001	.009	.0004
%RSD	.2471	.0764	.0377	.1968	.4236	22.14	67.36	.2207	175.9
#1	.3155	.5964	4.149	29.62	.0527	.0010	-.0001	3.840	.0001
#2	.3144	.5958	4.151	29.70	.0524	.0007	-.0003	3.852	-.0005

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0137**	**.0034**	**.0012**	**-.0007**	**13.83**	**-.0026**	**.0004**
Stddev	.0000	.0002	.0000	.0001	.00	.0001	.0004
%RSD	.3430	6.786	2.662	16.79	.0223	4.761	93.77
#1	.0136	.0032	.0012	-.0008	13.83	-.0027	.0006
#2	.0137	.0036	.0012	-.0006	13.83	-.0026	.0001

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153450.**	**32948.**	**1961.1**	**5553.7**
Stddev	65.	11.	.5	2.7
%RSD	.04205	.03429	.02615	.04900
#1	153500.	32940.	1960.7	5555.7
#2	153410.	32956.	1961.4	5551.8

Zoom In Zoom Out

Sample Name: mp79488-sd1 Acquired: 5/20/2014 3:30:47 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0060**	**.0000**	**.0001**	**.0002**	**.0003**	**-.0001**	**.0011**	**.0001**	**-.0001**
Stddev	.0000	.0000	.0000	.0000	.0002	.0003	.0000	.0003	.0003
%RSD	.0978	236.5	43.75	24.47	57.72	286.1	3.529	235.7	281.4
#1	.0060	.0000	.0001	.0002	.0004	.0001	.0011	-.0001	-.0004
#2	.0060	.0000	.0001	.0002	.0002	-.0003	.0011	.0003	.0001

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0017**	**.0004**	**-.0003**	**.0002**	**.0017**	**-.0002**	**.0526**	**.5212**
Stddev	.0001	.0001	.0007	.0002	.0007	.0006	.0001	.0003	.0014
%RSD	874.3	6.474	183.9	77.74	298.3	36.75	45.68	.5616	.2662
#1	-.0001	.0017	.0008	-.0001	.0007	.0013	-.0002	.0524	.5202
#2	.0001	.0016	-.0001	-.0005	-.0002	.0022	-.0001	.0528	.5221

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0644**	**.1248**	**.8091**	**5.934**	**.0114**	**.0002**	**-.0008**	**.7685**	**.0004**
Stddev	.0002	.0102	.0151	.007	.0003	.0001	.0004	.0052	.0003
%RSD	.2872	8.203	1.870	.1125	2.209	30.98	48.35	.6771	73.99
#1	.0643	.1175	.8198	5.938	.0112	.0001	-.0005	.7648	.0007
#2	.0646	.1320	.7984	5.929	.0116	.0002	-.0011	.7721	.0002

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0027**	**.0008**	**-.0008**	**-.0001**	**2.763**	**-.0012**	**.0000**
Stddev	.0000	.0002	.0009	.0001	.026	.0003	.000
%RSD	.9557	22.69	113.8	90.69	.9598	22.75	1688.
#1	.0027	.0007	-.0002	.0000	2.744	-.0010	.0002
#2	.0028	.0009	-.0014	-.0002	2.782	-.0014	-.0003

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**154880.**	**32888.**	**1980.3**	**5654.5**
Stddev	811.	54.	12.6	10.2
%RSD	.52353	.16275	.63771	.18052
#1	154310.	32850.	1989.2	5661.7
#2	155460.	32926.	1971.4	5647.3

Zoom In Zoom Out

Sample Name: fa14791-1 Acquired: 5/20/2014 3:36:48 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: 21 due

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0658**	**.0000**	**.0020**	**-.0003**	**.0030**	**.0009**	**.0053**	**.0024**	**.0012**
Stddev	.0002	.0000	.0000	.0004	.0000	.0001	.0000	.0000	.0001
%RSD	.2565	19.41	2.071	130.2	.9381	7.343	.3581	1.603	5.438
#1	.0659	.0000	.0020	.0000	.0030	.0009	.0053	.0024	.0012
#2	.0657	.0000	.0021	-.0006	.0029	.0008	.0053	.0024	.0011

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0002**	**.0067**	**.0006**	**-.0014**	**.0010**	**.0025**	**-.0009**	**.2137**	**92.76**
Stddev	.0000	.0003	.0005	.0008	.0001	.0001	.0005	.0025	.61
%RSD	2.228	3.972	80.88	56.38	10.75	2.207	56.29	1.157	.6626
#1	.0002	.0065	.0003	-.0008	.0010	.0026	-.0006	.2154	92.32
#2	.0002	.0068	.0010	-.0019	.0009	.0025	-.0013	.2119	93.19

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.1057**	**23.64**	**1.448**	**22.09**	**.0165**	**.0008**	**.0003**	**6.239**	**-.0012**
Stddev	.0012	.29	.003	.11	.0002	.0001	.0001	.003	.0008
%RSD	1.140	1.212	.2225	.4923	1.130	8.376	21.91	.0531	64.47
#1	.1065	23.44	1.446	22.17	.0166	.0008	.0004	6.236	-.0007
#2	.1048	23.84	1.451	22.02	.0164	.0009	.0003	6.241	-.0018

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0982**	**.0015**	**.0027**	**-.0009**	**7.175**	**-.0005**	**.0027**
Stddev	.0004	.0001	.0010	.0001	.013	.0001	.0002
%RSD	.4221	4.075	36.23	15.85	.1763	17.77	7.944
#1	.0985	.0015	.0033	-.0009	7.166	-.0005	.0026
#2	.0979	.0016	.0020	-.0008	7.184	-.0004	.0029

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**151810.**	**34336.**	**1843.1**	**5338.7**
Stddev	76.	220.	3.7	.1
%RSD	.05018	.63994	.20101	.00146
#1	151860.	34491.	1840.5	5338.6
#2	151750.	34181.	1845.7	5338.7

Zoom In Zoom Out

Sample Name: fa14791-1f Acquired: 5/20/2014 3:42:54 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: 21 due

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0659**	**.0000**	**.0019**	**-.0005**	**.0005**	**.0006**	**.0012**	**.0017**
Stddev	.0002	.0000	.0000	.0001	.0001	.0001	.0000	.0004
%RSD	.2557	2.808	1.248	11.80	15.56	9.037	.7362	23.63
#1	.0658	.0000	.0019	-.0005	.0006	.0006	.0012	.0020
#2	.0660	.0000	.0019	-.0005	.0005	.0006	.0012	.0014

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0010**	**.0001**	**.0061**	**.0016**	F **-.0029**	**.0008**	**.0020**	**-.0004**
Stddev	.0004	.0001	.0000	.0001	.0010	.0002	.0012	.0000
%RSD	37.31	90.62	.3530	8.156	33.20	21.02	57.28	10.81
#1	.0007	.0002	.0061	.0017	-.0023	.0006	.0012	-.0003
#2	.0013	.0000	.0061	.0015	-.0036	.0009	.0029	-.0004

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.1777**	**96.80**	**.0167**	**24.83**	**1.496**	**22.77**	**.0172**	**.0006**
Stddev	.0064	.35	.0001	.01	.023	.03	.0004	.0000
%RSD	3.623	.3589	.6315	.0555	1.549	.1257	2.490	6.327
#1	.1822	96.56	.0166	24.82	1.513	22.75	.0175	.0006
#2	.1731	97.05	.0168	24.84	1.480	22.79	.0169	.0006

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0002**	**6.218**	**-.0014**	**.1005**	**-.0001**	**.0028**	**-.0010**	**7.256**
Stddev	.0006	.013	.0001	.0000	.0000	.0010	.0000	.012
%RSD	335.5	.2129	4.481	.0349	.1049	34.69	.0860	.1601
#1	.0002	6.209	-.0014	.1005	-.0001	.0021	-.0010	7.264
#2	-.0006	6.227	-.0013	.1004	-.0001	.0034	-.0010	7.247

Elem	Bi2230	Li6707
Avg	**-.0027**	**.0029**
Stddev	.0006	.0001
%RSD	20.40	3.501
#1	-.0031	.0029
#2	-.0023	.0030

Zoom In Zoom Out

Sample Name: fa14791-1f Acquired: 5/20/2014 3:42:54 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment: 21 due

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**149250.**	**32593.**	**1862.6**	**5283.7**
Stddev	226.	.	3.9	20.5
%RSD	.15143	.00061	.20999	.38858
#1	149090.	32593.	1865.4	5298.2
#2	149410.	32593.	1859.8	5269.2

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 3:49:02 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.984**	**2.085**	**2.015**	**2.064**	**2.115**	**1.916**	**2.147**	**2.056**	**.2397**
Stddev	.001	.003	.003	.002	.002	.000	.008	.003	.0001
%RSD	.0521	.1184	.1562	.0909	.1105	.0127	.3675	.1300	.0623
#1	1.983	2.083	2.017	2.062	2.116	1.917	2.152	2.055	.2396
#2	1.984	2.086	2.013	2.065	2.113	1.916	2.141	2.058	.2398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.046**	**2.096**	**2.012**	**2.084**	**2.077**	**1.908**	**1.957**	**41.60**	**40.41**
Stddev	.000	.002	.007	.006	.002	.005	.007	.01	.01
%RSD	.0188	.0783	.3449	.2860	.0806	.2715	.3669	.0181	.0329
#1	2.046	2.095	2.017	2.088	2.076	1.912	1.962	41.60	40.41
#2	2.046	2.097	2.007	2.080	2.078	1.904	1.952	41.59	40.40
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.35**	**41.08**	**42.60**	**41.86**	**1.952**	**1.986**	**1.907**	**4.924**	**2.000**
Stddev	.01	.02	.03	.07	.005	.004	.000	.018	.004
%RSD	.0133	.0441	.0771	.1561	.2551	.1826	.0186	.3600	.1757
#1	41.35	41.07	42.63	41.82	1.955	1.989	1.907	4.936	2.002
#2	41.36	41.09	42.58	41.91	1.948	1.984	1.907	4.911	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 3:49:02 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.111**	**2.141**	**1.901**	**2.135**	**1.905**	**1.927**	**2.025**
Stddev	.001	.004	.014	.002	.005	.009	.005
%RSD	.0558	.2083	.7363	.1049	.2751	.4675	.2587
#1	2.110	2.144	1.891	2.137	1.908	1.934	2.021
#2	2.112	2.138	1.911	2.134	1.901	1.921	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**148410.**	**32098.**	**1912.5**	**5305.0**
Stddev	219.	55.	8.2	4.9
%RSD	.14773	.17165	.42861	.09287
#1	148250.	32059.	1906.7	5301.6
#2	148560.	32137.	1918.3	5308.5

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 3:54:52 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0005**	**.0002**	**.0002**	**.0001**	**-.0001**	**.0004**	**-.0001**	**-.0002**
Stddev	.0001	.0001	.0001	.0001	.0001	.0001	.0000	.0004	.0001
%RSD	15.00	14.20	55.91	59.57	143.4	108.3	8.413	660.2	40.37
#1	.0006	.0005	.0003	.0004	.0000	-.0001	.0004	.0002	-.0002
#2	.0005	.0004	.0001	.0001	.0002	.0000	.0004	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0000**	**.0009**	**-.0006**	**-.0008**	**-.0011**	**.0001**	**.0082**	**.0114**
Stddev	.0002	.000	.0010	.0011	.0005	.0009	.0007	.0016	.0035
%RSD	59.04	2964.	113.9	193.9	69.27	86.36	498.5	19.46	30.17
#1	.0005	.0001	.0016	.0002	-.0011	-.0017	-.0004	.0094	.0139
#2	.0002	-.0001	.0002	-.0014	-.0004	-.0004	.0007	.0071	.0090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0100**	**.0114**	**.0000**	**.0160**	**.0014**	**.0011**	**-.0002**	**.0009**	**.0008**
Stddev	.0014	.0070	.008	.0028	.0002	.0002	.0002	.0008	.0003
%RSD	14.27	61.30	23870.	17.45	13.43	20.64	75.34	93.70	35.96
#1	.0111	.0164	.0053	.0179	.0015	.0012	-.0004	.0003	.0006
#2	.0090	.0065	-.0054	.0140	.0013	.0009	-.0001	.0014	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 3:54:52 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0003**	**.0179**	**.0011**	**-.0016**	**-.0006**	**.0004**
Stddev	.0001	.0003	.0010	.0001	.0018	.0006	.0001
%RSD	13.59	107.9	5.557	6.310	107.2	97.54	23.45
#1	.0006	.0004	.0186	.0012	-.0004	-.0010	.0005
#2	.0005	.0001	.0172	.0011	-.0029	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**154810.**	**32605.**	**1975.4**	**5626.2**
Stddev	190.	42.	.8	9.3
%RSD	.12288	.12825	.04274	.16475
#1	154670.	32575.	1976.0	5619.6
#2	154940.	32635.	1974.8	5632.7

Zoom In Zoom Out

Sample Name: mp79505-mb1 2 Acquired: 5/20/2014 4:00:57 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: na Custom ID2: fe Custom ID3:
Comment: cr

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0000**	**.0000**	**.0000**	**.0000**	**.0003**	**.0003**	**.0002**	**-.0004**	**-.0002**
Stddev	.000	.0000	.000	.0000	.0001	.0001	.0000	.0001	.0000
%RSD	151.6	209.4	614.7	39.60	36.91	24.44	18.69	39.57	.7183
#1	.0000	.0000	.0000	.0000	.0002	.0003	.0002	-.0003	-.0002
#2	-.0001	.0000	.0000	.0001	.0004	.0004	.0001	-.0005	-.0002

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0001**	**.0011**	**.0001**	**-.0004**	**.0000**	**.0004**	**-.0003**	**.0059**	**.0111**
Stddev	.0001	.0001	.0001	.0007	.001	.0020	.0006	.0006	.0008
%RSD	78.31	9.308	265.4	166.6	2514.	484.3	189.3	9.620	7.311
#1	-.0001	.0010	.0002	.0001	.0006	-.0010	-.0008	.0063	.0117
#2	-.0002	.0012	.0000	-.0009	-.0007	.0018	.0001	.0055	.0106

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0055**	**.0074**	**.0257**	**.0526**	**.0013**	**.0002**	**-.0004**	**.0363**	**.0011**
Stddev	.0004	.0119	.0100	.0021	.0005	.0001	.0005	.0011	.0002
%RSD	7.660	160.6	38.97	3.910	38.97	30.26	134.0	2.970	13.92
#1	.0052	-.0010	.0186	.0541	.0009	.0001	-.0008	.0356	.0012
#2	.0058	.0158	.0328	.0511	.0016	.0002	.0000	.0371	.0010

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0000**	**.0004**	**.0083**	**.0007**	**.0228**	**-.0006**	**.0006**
Stddev	.0001	.0001	.0007	.0000	.0008	.0002	.0002
%RSD	184.5	16.03	8.175	1.651	3.730	31.84	27.24
#1	.0001	.0004	.0087	.0007	.0222	-.0004	.0005
#2	.0000	.0003	.0078	.0007	.0234	-.0007	.0008

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**160150.**	**34912.**	**1966.8**	**5706.1**
Stddev	1.	97.	.8	6.6
%RSD	.00081	.27804	.04279	.11488
#1	160150.	34843.	1967.4	5710.7
#2	160150.	34980.	1966.2	5701.4

Zoom In Zoom Out

Sample Name: mp79505-mb2 2 Acquired: 5/20/2014 4:07:02 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0000**	**.0000**	**.0002**	**-.0002**	**-.0002**	**-.0003**	**.0001**	**-.0009**
Stddev	.0001	.0000	.0000	.0002	.0001	.0000	.0000	.0001
%RSD	788.4	7.618	7.537	108.1	46.55	1.640	13.25	8.311
#1	.0000	.0000	.0002	.0000	-.0003	-.0003	.0001	-.0009
#2	.0001	.0000	.0002	-.0003	-.0001	-.0003	.0001	-.0010

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0003**	**-.0001**	**.0008**	**-.0007**	F **-.0041**	**-.0007**	**.0005**	**.0015**
Stddev	.0000	.0001	.0000	.0005	.0002	.0003	.0019	.0007
%RSD	3.648	137.3	2.106	70.87	6.046	37.83	360.3	50.93
#1	-.0003	-.0001	.0008	-.0003	-.0043	-.0009	.0019	.0020
#2	-.0003	.0000	.0008	-.0010	-.0039	-.0005	-.0008	.0009

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.0075**	**.0064**	**.0052**	**.0035**	**.0023**	**.0169**	**.0016**	**.0003**
Stddev	.0035	.0004	.0007	.0012	.0025	.0009	.0003	.0001
%RSD	46.31	6.100	14.32	34.07	109.0	5.522	17.45	19.25
#1	.0100	.0067	.0047	.0043	.0005	.0163	.0014	.0003
#2	.0051	.0062	.0057	.0026	.0040	.0176	.0018	.0002

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0004**	**.0318**	**.0012**	**.0000**	**.0002**	**.0101**	**.0012**	**.0008**
Stddev	.0008	.0001	.0006	.000	.0000	.0003	.0000	.0002
%RSD	184.0	.2391	47.84	688.7	1.194	2.811	3.970	25.18
#1	.0001	.0319	.0016	.0000	.0002	.0103	.0012	.0007
#2	-.0010	.0317	.0008	.0000	.0002	.0099	.0011	.0010

Elem	Bi2230	Li6707
Avg	**-.0026**	**.0002**
Stddev	.0003	.0005
%RSD	12.29	233.9
#1	-.0024	-.0002
#2	-.0029	.0006

Zoom In Zoom Out

Sample Name: mp79505-mb2-2 Acquired: 5/20/2014 4:01:02 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157830.**	**33088.**	**1985.6**	**5692.3**
Stddev	93.	174.	8.9	8.6
%RSD	.05874	.52722	.44608	.15034
#1	157900.	33211.	1979.3	5686.2
#2	157770.	32965.	1991.9	5698.3

Zoom In Zoom Out

Sample Name: mp79505-lc1 Acquired: 5/20/2014 4:13:06 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.4807**	**.5166**	**.4898**	**.4958**	**.5338**	**.4506**	**.5434**	**.5028**	**.1766**
Stddev	.0001	.0010	.0015	.0000	.0007	.0005	.0005	.0015	.0005
%RSD	.0259	.1877	.2989	.0041	.1389	.1135	.0954	.3067	.2981
#1	.4806	.5173	.4888	.4958	.5333	.4503	.5437	.5017	.1762
#2	.4807	.5159	.4908	.4958	.5343	.4510	.5430	.5039	.1769

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5063**	**.5243**	**.4954**	**.5312**	**.5124**	**.4760**	**.4711**	**5.150**	**5.530**
Stddev	.0007	.0005	.0002	.0012	.0011	.0033	.0022	.008	.021
%RSD	.1361	.0864	.0379	.2261	.2146	.7009	.4633	.1505	.3799
#1	.5068	.5240	.4952	.5303	.5116	.4736	.4695	5.145	5.545
#2	.5058	.5247	.4955	.5320	.5131	.4784	.4726	5.156	5.515

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**5.751**	**5.550**	**10.59**	**10.41**	**-.0004**	**.4838**	**-.0012**	**.0165**	**.0001**
Stddev	.019	.014	.02	.01	.0002	.0005	.0003	.0000	.0007
%RSD	.3280	.2579	.1660	.0826	68.98	.1131	23.11	.3022	652.9
#1	5.764	5.540	10.60	10.40	-.0005	.4834	-.0010	.0164	-.0004
#2	5.738	5.560	10.57	10.42	-.0002	.4842	-.0014	.0165	.0006

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**-.0002**	**.5408**	**.0087**	**.0027**	**-.0035**	**-.0051**	**.0007**
Stddev	.0000	.0002	.0000	.0000	.0001	.0001	.0003
%RSD	12.26	.0407	.3826	.7608	3.846	2.184	36.87
#1	-.0002	.5409	.0086	.0027	-.0034	-.0051	.0005
#2	-.0002	.5406	.0087	.0027	-.0036	-.0052	.0009

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153220.**	**32353.**	**1975.5**	**5591.5**
Stddev	160.	86.	.2	1.4
%RSD	.10448	.26483	.00903	.02462
#1	153330.	32293.	1975.4	5590.5
#2	153110.	32414.	1975.6	5592.5

Zoom In Zoom Out

Sample Name: mp79505-lc2 Acquired: 5/20/2014 4:18:58 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.4638**	**.4809**	**.4525**	**.4506**	**.4869**	**.4323**	**.4958**	**.4660**	**.1661**
Stddev	.0008	.0002	.0006	.0005	.0015	.0001	.0002	.0004	.0008
%RSD	.1830	.0351	.1257	.1180	.3040	.0229	.0321	.0924	.4977
#1	.4644	.4807	.4521	.4510	.4858	.4323	.4957	.4657	.1655
#2	.4632	.4810	.4529	.4503	.4879	.4324	.4959	.4663	.1667

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.4687**	**.4768**	**.4544**	**.4779**	**.4589**	**.4548**	**.4429**	**4.645**	**5.148**
Stddev	.0004	.0001	.0005	.0014	.0011	.0008	.0002	.020	.021
%RSD	.0854	.0283	.1210	.2848	.2448	.1764	.0475	.4232	.3984
#1	.4684	.4769	.4540	.4789	.4597	.4543	.4431	4.659	5.133
#2	.4689	.4767	.4548	.4770	.4581	.4554	.4428	4.631	5.162

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**5.348**	**5.046**	**9.653**	**9.580**	**-.0014**	**.4671**	**-.0010**	**.0670**	**.0011**
Stddev	.001	.004	.025	.032	.0002	.0009	.0003	.0002	.0000
%RSD	.0260	.0888	.2561	.3381	14.84	.1901	35.46	.2984	3.280
#1	5.347	5.049	9.670	9.603	-.0016	.4664	-.0007	.0672	.0011
#2	5.349	5.043	9.635	9.557	-.0013	.4677	-.0012	.0669	.0010

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**-.0001**	**.4835**	**.0147**	**.0022**	**.0039**	**-.0047**	**.0006**
Stddev	.0000	.0009	.0003	.0001	.0003	.0002	.0000
%RSD	6.200	.1856	1.995	3.454	7.357	4.390	7.219
#1	-.0002	.4841	.0149	.0023	.0041	-.0048	.0006
#2	-.0001	.4829	.0145	.0022	.0037	-.0045	.0006

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157650.**	**33929.**	**1944.3**	**5660.0**
Stddev	196.	.	8.4	13.8
%RSD	.12450	.00062	.43313	.24325
#1	157510.	33929.	1950.2	5669.7
#2	157790.	33930.	1938.3	5650.2

Zoom In Zoom Out

Sample Name: mp79505-s1 Acquired: 5/20/2014 4:24:50 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.974**	**.0537**	**.0478**	**.5057**	**.2085**	**.2774**	**.5840**	**.5243**	**.0468**
Stddev	.002	.0003	.0002	.0024	.0007	.0009	.0023	.0014	.0000
%RSD	.1015	.6507	.3352	.4783	.3507	.3310	.4018	.2603	.0819
#1	1.972	.0540	.0479	.5040	.2080	.2781	.5823	.5234	.0467
#2	1.975	.0535	.0477	.5074	.2090	.2768	.5856	.5253	.0468

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.4940**	**.6505**	**2.023**	**2.092**	**.5117**	**2.001**	**.4865**	**2.583**	**27.51**
Stddev	.0006	.0021	.011	.004	.0029	.002	.0012	.002	.16
%RSD	.1273	.3158	.5472	.2173	.5719	.1086	.2371	.0724	.5660
#1	.4935	.6490	2.015	2.089	.5096	2.002	.4857	2.585	27.62
#2	.4944	.6520	2.031	2.096	.5138	1.999	.4873	2.582	27.40

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.142**	**25.71**	**25.77**	**37.34**	**.0574**	**.0011**	**-.0004**	**6.860**	**-.0001**
Stddev	.003	.20	.05	.01	.0001	.0001	.0001	.015	.0008
%RSD	.2827	.7711	.2046	.0387	.1254	8.847	15.97	.2108	1516.
#1	1.144	25.85	25.74	37.33	.0573	.0011	-.0004	6.850	.0005
#2	1.139	25.57	25.81	37.36	.0574	.0010	-.0003	6.870	-.0006

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0252**	**.0022**	**.0062**	**-.0019**	**10.14**	**-.0046**	**.0047**
Stddev	.0001	.0002	.0000	.0001	.00	.0002	.0001
%RSD	.3737	6.772	.0560	3.111	.0439	5.235	1.622
#1	.0251	.0021	.0062	-.0020	10.13	-.0048	.0048
#2	.0253	.0023	.0062	-.0019	10.14	-.0045	.0046

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**154730.**	**33908.**	**1931.0**	**5474.0**
Stddev	138.	74.	3.8	19.7
%RSD	.08943	.21934	.19854	.35960
#1	154830.	33855.	1933.7	5488.0
#2	154640.	33960.	1928.2	5460.1

Zoom In Zoom Out

Sample Name: mp79505-s2 Acquired: 5/20/2014 4:30:43 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.017**	**.0553**	**.0489**	**.5222**	**.2200**	**.2793**	**.6148**	**.5374**	**.0474**
Stddev	.001	.0001	.0002	.0018	.0004	.0001	.0004	.0006	.0002
%RSD	.0313	.1752	.4563	.3432	.1723	.0437	.0625	.1195	.4910
#1	2.016	.0554	.0488	.5210	.2202	.2792	.6146	.5370	.0476
#2	2.017	.0552	.0491	.5235	.2197	.2794	.6151	.5379	.0472

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5143**	**.6696**	**2.083**	**2.159**	**.5294**	**1.998**	**.4931**	**2.757**	**27.75**
Stddev	.0003	.0017	.006	.007	.0021	.001	.0002	.003	.09
%RSD	.0530	.2528	.2749	.3390	.3999	.0394	.0422	.1019	.3081
#1	.5141	.6684	2.079	2.154	.5279	1.998	.4933	2.759	27.81
#2	.5145	.6708	2.087	2.164	.5309	1.999	.4930	2.755	27.69

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.175**	**26.55**	**27.12**	**39.01**	**.0573**	**.0008**	**-.0003**	**6.840**	**-.0005**
Stddev	.001	.10	.04	.08	.0004	.0001	.0005	.001	.0003
%RSD	.0844	.3931	.1335	.2021	.6153	10.88	176.4	.0176	64.66
#1	1.174	26.63	27.10	38.95	.0570	.0009	.0001	6.839	-.0003
#2	1.176	26.48	27.15	39.06	.0575	.0007	-.0006	6.841	-.0007

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0262**	**.0021**	**.0061**	**-.0020**	**10.05**	**-.0070**	**.0051**
Stddev	.0000	.0002	.0000	.0001	.00	.0001	.0002
%RSD	.0426	10.93	.0202	5.907	.0417	1.177	4.194
#1	.0261	.0020	.0061	-.0019	10.04	-.0069	.0053
#2	.0262	.0023	.0061	-.0021	10.05	-.0071	.0050

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**150460.**	**32724.**	**1930.3**	**5403.1**
Stddev	236.	10.	1.4	4.0
%RSD	.15710	.03105	.07268	.07393
#1	150290.	32717.	1929.3	5406.0
#2	150630.	32731.	1931.3	5400.3

Zoom In Zoom Out

Sample Name: jb66824-2 Acquired: 5/20/2014 4:36:35 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0480**	**.0021**	**.0005**	**.0092**	**.0023**	**.0487**	**.0672**	**.0165**
Stddev	.0001	.0000	.0001	.0001	.0001	.0000	.0001	.0001
%RSD	.1641	1.314	16.27	1.479	2.496	.0793	.1294	.6580
#1	.0481	.0021	.0005	.0091	.0023	.0487	.0671	.0164
#2	.0480	.0021	.0004	.0093	.0023	.0487	.0673	.0166

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0002**	**.0001**	**.1603**	**.0012**	**F -.0025**	**.0033**	**.0014**	**.0003**
Stddev	.0003	.0001	.0014	.0003	.0007	.0003	.0006	.0004
%RSD	148.0	61.72	.8584	26.24	27.64	8.154	41.90	138.8
#1	.0004	.0002	.1613	.0010	-.0029	.0035	.0010	.0006
#2	.0000	.0001	.1594	.0014	-.0020	.0031	.0018	.0000

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.6366**	**2.843**	**.0856**	**.5785**	**.9760**	**13.44**	**.0557**	**-.0001**
Stddev	.0079	.010	.0009	.0069	.0147	.01	.0005	.0000
%RSD	1.233	.3492	1.097	1.199	1.508	.0470	.8638	39.64
#1	.6422	2.850	.0862	.5834	.9864	13.43	.0560	-.0002
#2	.6311	2.836	.0849	.5736	.9656	13.44	.0553	-.0001

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0003**	**6.735**	**-.0003**	**.0273**	**.0008**	**.0033**	**-.0010**	**9.877**
Stddev	.0000	.018	.0003	.0001	.0002	.0012	.0001	.027
%RSD	11.38	.2632	102.6	.3125	27.45	35.55	6.847	.2761
#1	-.0004	6.748	-.0001	.0272	.0009	.0024	-.0010	9.896
#2	-.0003	6.723	-.0005	.0273	.0006	.0041	-.0010	9.858

Elem	Bi2230	Li6707
Avg	**-.0018**	**.0048**
Stddev	.0010	.0008
%RSD	54.63	16.97
#1	-.0025	.0054
#2	-.0011	.0043

Zoom In Zoom Out

Sample Name: jb66824-2 Acquired: 5/20/2014 4:36:35 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**154300.**	**32689.**	**1981.1**	**5634.7**
Stddev	213.	78.	5.9	30.6
%RSD	.13781	.23750	.29719	.54271
#1	154450.	32634.	1976.9	5613.1
#2	154150.	32744.	1985.2	5656.4

Zoom In Zoom Out

Sample Name: mp79505-sd1 Acquired: 5/20/2014 4:42:35 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0491**	**.0022**	**.0008**	**.0087**	**.0016**	**.0507**	**.0660**	**.0143**	**-.0015**
Stddev	.0004	.0000	.0008	.0006	.0001	.0002	.0002	.0013	.0009
%RSD	.8584	.3812	100.7	7.318	5.036	.4922	.3745	8.864	62.14
#1	.0494	.0022	.0014	.0091	.0017	.0506	.0662	.0134	-.0021
#2	.0488	.0022	.0002	.0082	.0016	.0509	.0658	.0152	-.0008

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0008**	**.1647**	**.0058**	**-.0010**	**.0051**	**.0079**	**-.0016**	**.5888**	**2.952**
Stddev	.0008	.0015	.0008	.0037	.0017	.0084	.0008	.0093	.008
%RSD	95.58	.9133	13.28	368.8	33.93	105.2	52.74	1.574	.2583
#1	-.0003	.1636	.0063	-.0037	.0064	.0139	-.0022	.5954	2.958
#2	-.0014	.1658	.0052	.0016	.0039	.0020	-.0010	.5823	2.947

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0938**	**.5906**	**.9972**	**12.92**	**.0600**	**-.0010**	**.0000**	**6.955**	**.0004**
Stddev	.0025	.0319	.0216	.01	.0021	.0000	.0005	.006	.0002
%RSD	2.615	5.405	2.163	.0529	3.513	4.623	2560.	.0848	34.94
#1	.0921	.5680	1.012	12.92	.0586	-.0011	-.0003	6.951	.0005
#2	.0955	.6132	.9819	12.93	.0615	-.0010	.0004	6.960	.0003

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0263**	**.0000**	**.0052**	**-.0004**	**10.17**	**-.0004**	**.0041**
Stddev	.0002	.000	.0004	.0001	.01	.0009	.0003
%RSD	.7219	461.1	7.990	35.45	.1237	225.5	6.452
#1	.0264	.0001	.0055	-.0003	10.16	.0002	.0043
#2	.0261	-.0002	.0049	-.0005	10.18	-.0010	.0039

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**159450.**	**34715.**	**1980.5**	**5717.4**
Stddev	99.	6.	.4	4.3
%RSD	.06221	.01768	.02144	.07437
#1	159520.	34719.	1980.2	5720.4
#2	159380.	34710.	1980.8	5714.4

Zoom In Zoom Out

Sample Name: mp79505-35 Acquired: 5/20/2014 4:48:56 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**1.999**	**.0546**	**.0486**	**.5160**	**.2142**	**.2778**	**.5951**	**.5316**	**.0471**
Stddev	.003	.0001	.0001	.0005	.0000	.0005	.0023	.0013	.0001
%RSD	.1631	.1391	.2697	.1036	.0128	.1876	.3920	.2397	.1586
#1	1.997	.0547	.0487	.5156	.2142	.2774	.5968	.5307	.0470
#2	2.001	.0546	.0485	.5164	.2142	.2782	.5935	.5325	.0471

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5054**	**.6649**	**2.063**	**2.134**	**.5219**	**2.003**	**.4928**	**2.591**	**28.06**
Stddev	.0013	.0022	.008	.005	.0001	.002	.0006	.006	.08
%RSD	.2610	.3334	.3841	.2465	.0153	.0814	.1284	.2492	.2908
#1	.5063	.6634	2.058	2.130	.5218	2.004	.4924	2.596	28.12
#2	.5045	.6665	2.069	2.137	.5220	2.002	.4933	2.587	28.00

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.102**	**26.51**	**26.64**	**37.90**	**.0566**	**.0006**	**.0002**	**6.679**	**-.0002**
Stddev	.005	.02	.01	.01	.0006	.0001	.0005	.007	.0006
%RSD	.4287	.0933	.0397	.0301	1.043	12.27	241.7	.1078	318.7
#1	1.105	26.53	26.65	37.91	.0570	.0006	.0005	6.674	-.0006
#2	1.098	26.49	26.63	37.89	.0562	.0007	-.0001	6.684	.0002

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0259**	**.0013**	**.0056**	**-.0021**	**9.873**	**-.0056**	**.0047**
Stddev	.0000	.0002	.0001	.0000	.014	.0009	.0001
%RSD	.1133	14.80	2.504	1.498	.1448	15.53	1.160
#1	.0259	.0012	.0057	-.0021	9.883	-.0062	.0047
#2	.0260	.0014	.0055	-.0022	9.862	-.0050	.0047

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152680.**	**33186.**	**1927.8**	**5434.2**
Stddev	262.	93.	.3	9.7
%RSD	.17182	.28143	.01300	.17940
#1	152500.	33120.	1927.6	5441.1
#2	152870.	33252.	1928.0	5427.3

Zoom In Zoom Out

Sample Name: mp79505-34 Acquired: 5/20/2014 4:54:27 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**2.013**	**.0552**	**.0493**	**.5261**	**.2206**	**.2832**	**.6242**	**.5405**	**.0472**
Stddev	.014	.0002	.0002	.0010	.0024	.0023	.0092	.0020	.0003
%RSD	.6842	.3392	.3102	.1826	1.105	.8243	1.472	.3698	.6737
#1	2.023	.0554	.0492	.5254	.2188	.2816	.6177	.5391	.0470
#2	2.003	.0551	.0494	.5268	.2223	.2849	.6306	.5419	.0474

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.5196**	**.6816**	**2.101**	**2.176**	**.5317**	**2.009**	**.4973**	**2.700**	**27.85**
Stddev	.0062	.0028	.005	.005	.0013	.002	.0010	.008	.05
%RSD	1.190	.4132	.2330	.2376	.2475	.1185	.1940	.2853	.1919
#1	.5153	.6796	2.097	2.172	.5308	2.010	.4966	2.706	27.89
#2	.5240	.6836	2.104	2.179	.5327	2.007	.4980	2.695	27.81

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.112**	**26.79**	**27.68**	**39.54**	**.0590**	**.0008**	**-.0011**	**6.953**	**-.0007**
Stddev	.001	.07	.11	.14	.0001	.0000	.0001	.004	.0002
%RSD	.0551	.2775	.4059	.3482	.1856	5.990	5.323	.0578	22.42
#1	1.112	26.84	27.76	39.64	.0590	.0008	-.0011	6.950	-.0006
#2	1.111	26.74	27.60	39.45	.0589	.0008	-.0012	6.956	-.0008

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0275**	**.0015**	**.0055**	**-.0020**	**10.11**	**-.0071**	**.0046**
Stddev	.0002	.0002	.0007	.0000	.01	.0007	.0002
%RSD	.8955	12.00	13.44	1.516	.1095	10.38	4.817
#1	.0277	.0017	.0050	-.0020	10.10	-.0077	.0044
#2	.0274	.0014	.0060	-.0019	10.12	-.0066	.0048

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**146980.**	**32316.**	**1912.8**	**5355.7**
Stddev	1361.	72.	5.1	7.7
%RSD	.92602	.22241	.26652	.14428
#1	147950.	32367.	1909.2	5350.3
#2	146020.	32265.	1916.4	5361.2

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 5:00:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.988**	**2.087**	**2.008**	**2.043**	**2.101**	**1.931**	**2.132**	**2.054**	**.2410**
Stddev	.003	.010	.004	.009	.006	.000	.004	.003	.0001
%RSD	.1281	.4743	.1937	.4313	.2879	.0194	.1710	.1597	.0506
#1	1.986	2.094	2.011	2.049	2.105	1.931	2.135	2.056	.2411
#2	1.990	2.080	2.005	2.037	2.097	1.931	2.129	2.051	.2410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.043**	**2.071**	**2.011**	**2.078**	**2.058**	**1.968**	**1.981**	**41.33**	**40.62**
Stddev	.004	.013	.002	.004	.011	.012	.007	.10	.19
%RSD	.1931	.6278	.0767	.1933	.5320	.6274	.3572	.2510	.4554
#1	2.046	2.080	2.012	2.081	2.066	1.959	1.976	41.40	40.75
#2	2.040	2.061	2.010	2.075	2.050	1.977	1.986	41.25	40.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.48**	**41.15**	**42.42**	**41.61**	**1.976**	**2.005**	**1.922**	**4.945**	**2.022**
Stddev	.18	.29	.10	.06	.007	.005	.001	.006	.000
%RSD	.4310	.7027	.2317	.1354	.3802	.2514	.0308	.1207	.0222
#1	41.60	41.35	42.49	41.65	1.971	2.002	1.922	4.941	2.022
#2	41.35	40.94	42.35	41.57	1.982	2.009	1.923	4.950	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 5:00:20 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.106**	**2.112**	**1.898**	**2.106**	**1.949**	**1.976**	**2.016**
Stddev	.001	.002	.019	.001	.007	.013	.001
%RSD	.0242	.0922	.9946	.0374	.3372	.6415	.0404
#1	2.106	2.113	1.884	2.107	1.945	1.967	2.017
#2	2.106	2.111	1.911	2.106	1.954	1.985	2.016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**150100.**	**32486.**	**1910.5**	**5349.0**
Stddev	146.	159.	4.7	3.0
%RSD	.09758	.49010	.24496	.05592
#1	150210.	32373.	1913.8	5346.9
#2	150000.	32598.	1907.2	5351.1

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 5:06:12 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0006**	**.0003**	**.0002**	**.0001**	**.0007**	**.0004**	**-.0002**	**-.0002**
Stddev	.0003	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0003
%RSD	58.11	13.27	20.62	28.15	10.33	4.939	4.678	26.77	153.1
#1	.0003	.0005	.0004	.0002	.0001	.0007	.0004	-.0002	-.0004
#2	.0008	.0006	.0003	.0003	.0001	.0007	.0005	-.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0002**	**.0011**	**-.0014**	**-.0003**	**.0024**	**-.0003**	**.0118**	**.0159**
Stddev	.0001	.0000	.0002	.0002	.0010	.0017	.0006	.0004	.0037
%RSD	25.91	9.958	19.78	14.63	340.8	71.22	247.5	3.750	23.31
#1	.0002	.0002	.0009	-.0015	.0004	.0035	-.0007	.0115	.0133
#2	.0003	.0002	.0012	-.0013	-.0010	.0012	.0002	.0121	.0185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**.0158**	**.0299**	**.0127**	**.0013**	**.0011**	**.0001**	**.0011**	**.0000**
Stddev	.0023	.0073	.0153	.0029	.0003	.0003	.0001	.0002	.0003
%RSD	22.24	46.44	51.22	22.98	19.42	27.68	126.2	16.67	1390.
#1	.0087	.0210	.0191	.0106	.0011	.0013	.0002	.0010	-.0002
#2	.0119	.0106	.0408	.0147	.0015	.0009	.0000	.0013	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 5:06:12 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0006**	**.0150**	**.0011**	**-.0016**	**-.0008**	**.0007**
Stddev	.0001	.0000	.0019	.0000	.0001	.0003	.0003
%RSD	14.84	7.394	12.44	2.694	6.186	32.02	37.19
#1	.0004	.0007	.0163	.0011	-.0015	-.0010	.0005
#2	.0006	.0006	.0137	.0011	-.0016	-.0007	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**157940.**	**34051.**	**1981.6**	**5674.8**
Stddev	96.	133.	2.2	8.4
%RSD	.06078	.38950	.11351	.14886
#1	157870.	34145.	1983.1	5680.8
#2	158010.	33957.	1980.0	5668.8

Zoom In Zoom Out

Sample Name: jb66824-2f Acquired: 5/20/2014 5:12:17 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0477**	**.0021**	**.0006**	**.0094**	**.0019**	**.0460**	**.0669**	**.0158**
Stddev	.0003	.0000	.0001	.0000	.0002	.0003	.0003	.0004
%RSD	.6060	.5322	12.45	.1560	12.04	.6476	.5152	2.771
#1	.0475	.0021	.0005	.0094	.0021	.0462	.0667	.0161
#2	.0479	.0021	.0006	.0094	.0017	.0458	.0672	.0155

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0000**	**.0001**	**.1435**	**.0015**	F **-.0034**	**.0023**	**.0003**	**.0005**
Stddev	.0000	.0002	.0003	.0006	.0005	.0011	.0015	.0009
%RSD	86.01	368.2	.1976	38.97	13.46	49.67	537.1	162.1
#1	.0001	-.0001	.1437	.0020	-.0038	.0015	-.0008	-.0001
#2	.0000	.0002	.1433	.0011	-.0031	.0031	.0013	.0012

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.5502**	**2.876**	**.0228**	**.5766**	**.9533**	**12.91**	**.0568**	**.0002**
Stddev	.0029	.008	.0001	.0038	.0219	.01	.0001	.0000
%RSD	.5234	.2712	.2247	.6581	2.297	.0971	.1207	2.650
#1	.5482	2.870	.0228	.5739	.9688	12.90	.0569	.0002
#2	.5522	2.881	.0228	.5793	.9378	12.92	.0568	.0002

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**.0000**	**6.677**	**-.0005**	**.0273**	**-.0001**	**.0091**	**-.0001**	**9.751**
Stddev	.001	.020	.0000	.0000	.0001	.0020	.0001	.007
%RSD	174500.	.2940	6.412	.0319	43.72	21.88	75.79	.0733
#1	.0005	6.664	-.0004	.0273	-.0002	.0105	-.0001	9.756
#2	-.0005	6.691	-.0005	.0273	-.0001	.0077	-.0002	9.746

Elem	Bi2230	Li6707
Avg	**-.0022**	**.0047**
Stddev	.0002	.0003
%RSD	9.390	5.989
#1	-.0020	.0045
#2	-.0023	.0049

Zoom In Zoom Out

Sample Name: jb66824-2f Acquired: 5/20/2014 5:12:17 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**155970.**	**33146.**	**1980.9**	**5624.3**
Stddev	39.	8.	2.6	10.8
%RSD	.02495	.02268	.13293	.19167
#1	155940.	33141.	1982.7	5631.9
#2	155990.	33152.	1979.0	5616.7

Zoom In Zoom Out

Sample Name: mp79505-361 Acquired: 5/20/2014 5:18:18 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0499**	**.0024**	**.0007**	**.0091**	**.0014**	**.0483**	**.0717**	**.0164**	**-.0003**
Stddev	.0007	.0001	.0001	.0010	.0012	.0002	.0001	.0005	.0001
%RSD	1.359	2.812	18.26	10.60	87.67	.4398	.2073	3.182	26.92
#1	.0494	.0023	.0008	.0098	.0022	.0482	.0718	.0160	-.0002
#2	.0503	.0024	.0006	.0085	.0005	.0485	.0716	.0168	-.0003

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0001**	**.1583**	**.0034**	**-.0057**	**.0070**	**.0021**	**-.0027**	**.6045**	**3.134**
Stddev	.0005	.0009	.0019	.0004	.0031	.0003	.0015	.0189	.012
%RSD	609.1	.5547	57.12	6.363	43.85	15.59	55.36	3.127	.3914
#1	.0005	.1589	.0020	-.0060	.0048	.0024	-.0016	.5911	3.125
#2	-.0003	.1577	.0048	-.0055	.0091	.0019	-.0037	.6178	3.143

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0418**	**.6052**	**.9642**	**13.80**	**.0629**	**-.0003**	**-.0030**	**7.021**	**.0009**
Stddev	.0013	.0902	.0756	.04	.0000	.0004	.0038	.013	.0039
%RSD	3.024	14.90	7.843	.2710	.0158	134.6	125.9	.1905	453.6
#1	.0409	.6690	1.018	13.77	.0629	-.0005	-.0003	7.012	.0036
#2	.0427	.5414	.9107	13.82	.0629	.0000	-.0058	7.030	-.0019

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0293**	**.0010**	**.0187**	**.0001**	**10.23**	**-.0082**	**.0066**
Stddev	.0000	.0006	.0013	.0000	.06	.0005	.0023
%RSD	.1262	59.41	6.814	45.95	.5522	6.280	34.33
#1	.0293	.0006	.0196	.0001	10.19	-.0086	.0082
#2	.0293	.0015	.0178	.0001	10.27	-.0078	.0050

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153360.**	**32299.**	**1984.6**	**5621.7**
Stddev	95.	30.	4.7	3.5
%RSD	.06178	.09356	.23644	.06217
#1	153430.	32321.	1987.9	5624.2
#2	153290.	32278.	1981.3	5619.2

Zoom In Zoom Out

Sample Name: jb66824-1 Acquired: 5/20/2014 5:24:18 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0312**	**.0027**	**.0000**	**.0042**	**5.557**	**.1980**	**.0597**	**.0162**
Stddev	.0002	.0000	.0002	.0003	.017	.0015	.0002	.0000
%RSD	.6090	.1259	925.0	7.829	.3007	.7580	.3759	.2371
#1	.0313	.0027	.0001	.0040	5.569	.1990	.0598	.0161
#2	.0311	.0027	-.0001	.0045	5.546	.1969	.0595	.0162

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0186**	**.3510**	**.0316**	**.0867**	F **-.0130**	**.0164**	F **-.0104**	**-.0003**
Stddev	.0004	.0010	.0000	.0006	.0011	.0011	.0004	.0008
%RSD	2.160	.2829	.0160	.6937	8.609	6.715	3.631	238.2
#1	.0189	.3517	.0316	.0871	-.0137	.0157	-.0101	.0002
#2	.0183	.3503	.0316	.0863	-.0122	.0172	-.0106	-.0009

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**75.48**	**4.071**	**47.73**	**.8004**	**7.060**	*****	**.1648**	**.0356**
Stddev	.45	.018	.16	.0044	.044	-----	.0007	.0002
%RSD	.5992	.4355	.3440	.5537	.6267	-----	.4242	.5614
#1	75.80	4.083	47.84	.8035	7.092	-----	.1653	.0355
#2	75.16	4.058	47.61	.7972	7.029	-----	.1643	.0358

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0050**	**41.19**	**.0025**	**.0256**	**.3371**	**.0064**	**.0734**	F **865.2**
Stddev	.0006	.07	.0005	.0001	.0003	.0011	.0006	1.4
%RSD	11.59	.1716	18.23	.4312	.0955	17.37	.7631	.1612
#1	-.0054	41.24	.0029	.0257	.3373	.0072	.0738	864.2
#2	-.0046	41.14	.0022	.0255	.3368	.0056	.0730	866.2

Elem	Bi2230	Li6707
Avg	**-.0024**	**.0179**
Stddev	.0005	.0002
%RSD	19.23	1.275
#1	-.0027	.0181
#2	-.0021	.0178

Zoom In Zoom Out

Sample Name: jb66824-1 Acquired: 5/20/2014 5:24:18 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**134040.**	**33682.**	**1689.5**	**4290.8**
Stddev	441.	125.	4.9	2.6
%RSD	.32925	.37051	.28774	.06109
#1	133730.	33594.	1686.0	4289.0
#2	134350.	33771.	1692.9	4292.7

Zoom In Zoom Out

Sample Name: jb66824-3 Acquired: 5/20/2014 5:30:20 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0752**	**.0148**	**-.0019**	**.0087**	**.9464**	**.3722**	**.1588**	**.0276**
Stddev	.0001	.0000	.0002	.0001	.0017	.0003	.0008	.0004
%RSD	.1256	.2356	10.90	1.511	.1791	.0711	.5031	1.489
#1	.0753	.0148	-.0018	.0088	.9452	.3724	.1583	.0274
#2	.0752	.0148	-.0021	.0087	.9476	.3720	.1594	.0279

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0040**	**.2763**	**.0659**	**.0388**	F **-.0108**	**.0663**	**.0105**	**-.0002**
Stddev	.0002	.0001	.0007	.0012	.0006	.0011	.0007	.0004
%RSD	4.501	.0444	1.054	2.978	5.182	1.697	6.359	180.2
#1	.0041	.2762	.0654	.0379	-.0104	.0655	.0109	-.0005
#2	.0039	.2764	.0664	.0396	-.0112	.0671	.0100	.0001

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**53.83**	**2.385**	**110.8**	**2.054**	**6.497**	**784.0**	**.0650**	**.0078**
Stddev	.04	.001	.2	.012	.040	2.8	.0007	.0001
%RSD	.0763	.0215	.1900	.6021	.6111	.3572	1.081	1.295
#1	53.86	2.385	110.9	2.045	6.469	782.0	.0645	.0079
#2	53.80	2.386	110.6	2.062	6.525	786.0	.0655	.0078

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0156**	**39.26**	**-.0031**	**.0557**	**.4425**	**.0119**	**.0978**	F **207.3**
Stddev	.0001	.01	.0002	.0000	.0003	.0002	.0004	.4
%RSD	.7695	.0265	6.487	.0815	.0697	1.721	.4068	.1726
#1	-.0155	39.27	-.0030	.0557	.4423	.0121	.0975	207.5
#2	-.0156	39.26	-.0033	.0556	.4427	.0118	.0981	207.0

Elem	Bi2230	Li6707
Avg	**-.0080**	**.0261**
Stddev	.0006	.0001
%RSD	7.182	.4063
#1	-.0084	.0262
#2	-.0076	.0260

Zoom In Zoom Out

Sample Name: jb66824-3 Acquired: 5/20/2014 5:30:20 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**150320.**	**34481.**	**1945.6**	**4894.2**
Stddev	265.	59.	3.9	1.4
%RSD	.17601	.17087	.19989	.02843
#1	150500.	34439.	1942.8	4893.2
#2	150130.	34522.	1948.3	4895.2

Zoom In Zoom Out

Sample Name: jb66824-4 Acquired: 5/20/2014 5:36:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0172**	**.0016**	**.0013**	**.0022**	**11.72**	**.0209**	**.1782**	**.0123**
Stddev	.0001	.0000	.0001	.0002	.00	.0001	.0004	.0000
%RSD	.4743	2.381	9.348	8.705	.0003	.6998	.1976	.2897
#1	.0173	.0016	.0013	.0023	11.72	.0208	.1784	.0123
#2	.0171	.0016	.0014	.0021	11.72	.0210	.1779	.0123

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0041**	**.7584**	**.0037**	**.2924**	F **-.0115**	**.0382**	**.0242**	F **-.0105**
Stddev	.0001	.0003	.0001	.0013	.0030	.0016	.0014	.0014
%RSD	2.743	.0425	2.962	.4550	26.35	4.142	5.977	13.67
#1	.0042	.7582	.0036	.2915	-.0094	.0371	.0232	-.0115
#2	.0040	.7586	.0038	.2933	-.0136	.0393	.0253	-.0095

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**104.6**	**100.7**	**12.34**	**9.036**	**19.89**	*****	**1.199**	**.0651**
Stddev	.1	.0	.03	.002	.01	-----	.005	.0005
%RSD	.1404	.0062	.2268	.0258	.0365	-----	.3970	.7690
#1	104.5	100.7	12.32	9.037	19.89	-----	1.196	.0648
#2	104.7	100.7	12.36	9.034	19.90	-----	1.203	.0655

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0022**	**43.79**	**.0013**	**.4479**	**.0038**	**.0026**	**-.0002**	F **1405.**
Stddev	.0007	.12	.0000	.0001	.0001	.0000	.0000	2.
%RSD	32.70	.2818	3.473	.0254	1.430	.4561	12.31	.1524
#1	-.0027	43.71	.0013	.4478	.0038	.0026	-.0002	1404.
#2	-.0017	43.88	.0012	.4480	.0039	.0026	-.0002	1407.

Elem	Bi2230	Li6707
Avg	**-.0061**	**.0043**
Stddev	.0008	.0001
%RSD	13.10	3.004
#1	-.0067	.0044
#2	-.0056	.0042

Zoom In Zoom Out

Sample Name: jb66824-4 Acquired: 5/20/2014 5:36:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**118200.**	**29731.**	**1538.3**	**3592.9**
Stddev	280.	18.	1.1	3.4
%RSD	.23694	.06170	.07474	.09415
#1	118000.	29744.	1539.1	3595.3
#2	118400.	29718.	1537.5	3590.5

Zoom In Zoom Out

Sample Name: jb66824-5 Acquired: 5/20/2014 5:42:22 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0002**	**.0000**	**.0001**	**-.0001**	**.0004**	**.0020**	**.0003**	**-.0003**	**.0001**
Stddev	.0001	.0000	.0000	.0001	.0000	.0001	.0000	.0000	.0000
%RSD	29.49	451.6	11.94	129.6	8.452	3.660	.7995	7.829	34.91
#1	.0002	.0000	.0001	.0000	.0004	.0020	.0003	-.0003	.0002
#2	.0003	.0000	.0001	-.0002	.0004	.0019	.0003	-.0003	.0001

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0080**	**-.0003**	**-.0014**	**.0003**	**.0019**	**.0004**	**.0049**	**.0512**
Stddev	.0000	.0001	.0001	.0005	.0000	.0015	.0009	.0034	.0002
%RSD	197.4	1.788	29.04	35.58	17.35	76.01	214.9	70.23	.3548
#1	.0000	.0079	-.0004	-.0017	.0003	.0030	-.0002	.0073	.0513
#2	.0000	.0081	-.0003	-.0010	.0002	.0009	.0010	.0025	.0510

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0140**	**.0095**	**.0559**	**.3359**	**.0012**	**.0002**	**-.0012**	**.0412**	**.0009**
Stddev	.0003	.0018	.0093	.0079	.0002	.0000	.0000	.0014	.0004
%RSD	1.889	19.28	16.68	2.351	15.92	26.49	4.223	3.492	46.15
#1	.0142	.0108	.0625	.3415	.0014	.0001	-.0012	.0423	.0006
#2	.0138	.0082	.0493	.3303	.0011	.0002	-.0011	.0402	.0011

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0002**	**.0003**	**.0030**	**.0003**	**.1425**	**-.0014**	**.0006**
Stddev	.0000	.0000	.0004	.0001	.0143	.0008	.0002
%RSD	14.99	.1450	12.75	20.08	10.02	58.85	26.54
#1	.0001	.0003	.0032	.0003	.1324	-.0020	.0007
#2	.0002	.0003	.0027	.0004	.1526	-.0008	.0005

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157960.**	**33646.**	**1969.9**	**5682.5**
Stddev	94.	91.	15.6	14.4
%RSD	.05958	.27063	.79096	.25356
#1	157900.	33582.	1980.9	5692.7
#2	158030.	33711.	1958.9	5672.3

Zoom In Zoom Out

Sample Name: jb66824-5 Acquired: 5/20/2014 5:48:26 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0442**	**.0002**	**.0013**	**.0030**	**.0012**	**.0461**	**.0077**	**.0044**	**.0016**
Stddev	.0002	.0000	.0002	.0001	.0002	.0001	.0000	.0002	.0000
%RSD	.4059	12.34	11.60	3.546	15.05	.1119	.4076	3.655	3.085
#1	.0444	.0002	.0015	.0030	.0011	.0461	.0078	.0045	.0016
#2	.0441	.0002	.0012	.0029	.0013	.0460	.0077	.0043	.0016

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0016**	**.1909**	**.0062**	**.0012**	**.0026**	**.0046**	**.0007**	**.3547**	**106.5**
Stddev	.0001	.0011	.0004	.0003	.0015	.0014	.0002	.0056	.7
%RSD	7.476	.5558	6.299	24.42	58.48	31.47	22.92	1.568	.6759
#1	.0015	.1901	.0065	.0010	.0037	.0035	.0006	.3586	107.1
#2	.0017	.1916	.0059	.0014	.0015	.0056	.0008	.3507	106.0

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.2149**	**10.67**	**14.18**	**103.3**	**.3045**	**.0128**	**.0016**	**5.117**	**-.0009**
Stddev	.0012	.06	.09	1.4	.0004	.0001	.0012	.006	.0002
%RSD	.5776	.5942	.6193	1.371	.1160	.5341	75.23	.1202	17.08
#1	.2157	10.72	14.25	104.3	.3048	.0128	.0025	5.113	-.0008
#2	.2140	10.63	14.12	102.3	.3043	.0128	.0008	5.122	-.0010

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.6002**	**.0036**	**.0035**	**-.0040**	**99.32**	**-.0014**	**.0064**
Stddev	.0023	.0002	.0003	.0000	.09	.0002	.0002
%RSD	.3882	5.817	7.665	1.030	.0866	13.15	2.717
#1	.6018	.0038	.0036	-.0040	99.26	-.0012	.0065
#2	.5985	.0035	.0033	-.0039	99.39	-.0015	.0063

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**148900.**	**33168.**	**1866.2**	**5252.2**
Stddev	309.	208.	2.2	13.3
%RSD	.20771	.62847	.11554	.25390
#1	148680.	33020.	1864.7	5261.6
#2	149120.	33315.	1867.7	5242.8

Zoom In Zoom Out

Sample Name: jb66824-7 Acquired: 5/20/2014 5:54:38 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0413**	**.0006**	**.0015**	**.0029**	**.0035**	**.0597**	**.0193**	**.0053**	**.0032**
Stddev	.0004	.0000	.0002	.0000	.0001	.0001	.0001	.0000	.0002
%RSD	.8610	.2102	17.02	.6485	1.809	.2132	.5615	.1132	5.784
#1	.0415	.0006	.0016	.0029	.0035	.0597	.0194	.0053	.0034
#2	.0410	.0006	.0013	.0029	.0035	.0598	.0192	.0053	.0031

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0033**	**.2058**	**.0053**	**.0002**	**.0046**	**.0018**	**.0010**	**1.222**	**93.96**
Stddev	.0000	.0001	.0005	.0011	.0007	.0006	.0000	.003	.34
%RSD	1.438	.0309	8.871	458.5	14.62	34.06	1.354	.2080	.3631
#1	.0032	.2058	.0050	-.0005	.0051	.0023	.0010	1.220	94.20
#2	.0033	.2057	.0056	.0010	.0041	.0014	.0010	1.223	93.72

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**1.322**	**9.699**	**12.83**	**93.12**	**.2677**	**.0106**	**.0011**	**5.704**	**-.0009**
Stddev	.000	.001	.04	1.12	.0011	.0000	.0000	.011	.0005
%RSD	.0026	.0072	.2748	1.205	.4124	.2912	3.797	.1895	54.51
#1	1.322	9.699	12.85	93.91	.2685	.0107	.0011	5.711	-.0013
#2	1.322	9.698	12.80	92.32	.2669	.0106	.0012	5.696	-.0006

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.5299**	**.0271**	**.0016**	**-.0031**	**85.75**	**-.0030**	**.0058**
Stddev	.0025	.0002	.0002	.0001	.47	.0005	.0000
%RSD	.4653	.6790	10.23	1.739	.5456	16.07	.0906
#1	.5316	.0270	.0017	-.0031	86.08	-.0027	.0058
#2	.5281	.0272	.0015	-.0031	85.42	-.0034	.0058

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**147240.**	**32156.**	**1880.8**	**5229.0**
Stddev	209.	36.	3.3	8.2
%RSD	.14225	.11053	.17588	.15681
#1	147090.	32131.	1878.4	5223.2
#2	147390.	32181.	1883.1	5234.8

Zoom In Zoom Out

Sample Name: jb66824-8 Acquired: 5/20/2014 6:00:45 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0556**	**.0005**	**.0004**	**.0048**	**.0068**	**.0115**	**.1088**	**.0165**
Stddev	.0002	.0000	.0001	.0000	.0003	.0003	.0005	.0002
%RSD	.2776	6.894	17.69	.5308	4.001	2.330	.4944	1.337
#1	.0555	.0005	.0004	.0048	.0070	.0117	.1092	.0163
#2	.0557	.0004	.0003	.0048	.0066	.0113	.1084	.0166

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0002**	**.0084**	**.1615**	**.0019**	F **-.0030**	**.0033**	**-.0001**	**.0005**
Stddev	.0003	.0004	.0015	.0012	.0004	.0008	.0015	.0000
%RSD	123.0	4.525	.8996	62.51	13.55	22.87	1705.	7.365
#1	.0000	.0086	.1626	.0011	-.0027	.0038	-.0012	.0005
#2	.0004	.0081	.1605	.0028	-.0033	.0028	.0010	.0004

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**1.143**	**5.341**	**2.988**	**.8950**	**1.310**	**7.486**	**.0578**	**-.0001**
Stddev	.001	.014	.004	.0051	.003	.018	.0002	.0000
%RSD	.1228	.2591	.1170	.5667	.2100	.2462	.4082	27.28
#1	1.142	5.332	2.986	.8986	1.312	7.499	.0576	-.0001
#2	1.144	5.351	2.991	.8914	1.308	7.473	.0580	-.0001

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0009**	**6.980**	**-.0005**	**.0419**	**.0154**	**.0025**	**.0008**	**7.428**
Stddev	.0001	.009	.0008	.0001	.0000	.0003	.0000	.009
%RSD	13.38	.1290	175.4	.2683	.3071	14.18	1.701	.1231
#1	-.0009	6.986	.0001	.0420	.0155	.0022	.0008	7.434
#2	-.0008	6.974	-.0011	.0418	.0154	.0027	.0008	7.421

Elem	Bi2230	Li6707
Avg	**-.0020**	**.0026**
Stddev	.0004	.0006
%RSD	17.93	23.58
#1	-.0022	.0030
#2	-.0017	.0022

Zoom In Zoom Out

Sample Name: jb66824-8 Acquired: 5/20/2014 6:00:45 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**152910.**	**32439.**	**1973.3**	**5603.0**
Stddev	97.	10.	3.1	21.9
%RSD	.06337	.03119	.15930	.39129
#1	152850.	32432.	1971.1	5587.5
#2	152980.	32446.	1975.5	5618.5

Zoom In Zoom Out

Sample Name: jb66824-5 Acquired: 5/20/2014 6:06:41 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0001**	**.0000**	**.0001**	**.0000**	**.0001**	**.0011**	**.0002**	**-.0006**	**-.0005**
Stddev	.0001	.0000	.0001	.000	.0002	.0000	.0000	.0001	.0004
%RSD	98.66	2.142	63.74	481.4	218.4	.7468	21.60	13.10	76.64
#1	.0001	.0000	.0001	.0001	.0002	.0011	.0002	-.0007	-.0008
#2	.0000	.0000	.0001	-.0001	.0000	.0011	.0002	-.0006	-.0002

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0008**	**.0004**	**-.0009**	**.0003**	**.0018**	**-.0011**	**.0117**	**.0353**
Stddev	.0001	.0000	.0003	.0004	.0003	.0004	.0000	.0011	.0009
%RSD	290.8	4.769	87.54	48.80	92.44	24.11	2.279	9.345	2.541
#1	-.0001	.0008	.0002	-.0012	.0001	.0022	-.0012	.0125	.0346
#2	.0001	.0007	.0006	-.0006	.0005	.0015	-.0011	.0110	.0359

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0286**	**.0047**	**.0207**	**.0422**	**.0006**	**.0000**	**.0003**	**.0392**	**.0001**
Stddev	.0005	.0128	.0030	.0008	.0004	.000	.0002	.0003	.0002
%RSD	1.671	271.4	14.53	1.910	67.49	929.1	71.05	.8130	290.8
#1	.0289	-.0043	.0186	.0416	.0008	.0001	.0001	.0394	-.0001
#2	.0282	.0137	.0229	.0428	.0003	-.0002	.0004	.0389	.0002

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0003**	**.0001**	**.0010**	**.0002**	**.0219**	**-.0001**	**.0003**
Stddev	.0000	.0001	.0005	.0001	.0017	.0000	.0001
%RSD	7.946	94.71	48.87	37.19	7.823	14.22	35.69
#1	.0003	.0002	.0014	.0002	.0207	-.0002	.0002
#2	.0003	.0000	.0007	.0003	.0232	-.0001	.0003

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**158790.**	**34612.**	**1963.8**	**5698.7**
Stddev	342.	38.	5.1	4.0
%RSD	.21532	.10950	.25989	.06984
#1	158550.	34639.	1960.2	5695.8
#2	159030.	34585.	1967.4	5701.5

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 6:12:50 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.991**	**2.104**	**2.036**	**2.074**	**2.110**	**1.943**	**2.148**	**2.082**	**.2459**
Stddev	.002	.007	.001	.002	.004	.002	.001	.003	.0005
%RSD	.0758	.3178	.0331	.1163	.1680	.1257	.0600	.1350	.1955
#1	1.992	2.108	2.036	2.073	2.107	1.945	2.147	2.080	.2455
#2	1.990	2.099	2.037	2.076	2.112	1.941	2.149	2.084	.2462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.056**	**2.119**	**2.011**	**2.100**	**2.091**	**1.956**	**1.973**	**40.39**	**41.14**
Stddev	.002	.003	.002	.001	.001	.001	.002	.06	.14
%RSD	.0946	.1293	.0926	.0261	.0237	.0583	.0920	.1502	.3467
#1	2.055	2.121	2.010	2.100	2.092	1.957	1.975	40.43	41.24
#2	2.058	2.117	2.013	2.101	2.091	1.956	1.972	40.35	41.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.50**	**41.04**	**41.37**	**40.74**	**1.978**	**2.016**	**1.941**	**4.960**	**2.044**
Stddev	.14	.20	.04	.00	.004	.003	.002	.009	.001
%RSD	.3355	.4873	.1020	.0022	.1884	.1239	.0991	.1807	.0679
#1	41.59	41.18	41.40	40.74	1.975	2.014	1.942	4.954	2.045
#2	41.40	40.90	41.34	40.74	1.981	2.018	1.939	4.967	2.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 5/20/2014 6:12:50 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.069**	**2.084**	**1.932**	**2.071**	**1.963**	**1.966**	**2.016**
Stddev	.004	.000	.015	.000	.004	.001	.003
%RSD	.1826	.0089	.7540	.0078	.1997	.0726	.1332
#1	2.072	2.084	1.921	2.071	1.961	1.965	2.014
#2	2.067	2.084	1.942	2.071	1.966	1.967	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**149020.**	**32357.**	**1901.8**	**5296.6**
Stddev	262.	29.	2.6	13.1
%RSD	.17579	.08878	.13626	.24742
#1	148840.	32337.	1903.7	5305.8
#2	149210.	32377.	1900.0	5287.3

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 6:18:41 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0006**	**.0003**	**.0002**	**.0003**	**.0001**	**.0006**	**-.0003**
Stddev	.0001	.0000	.0001	.0000	.0001	.0001	.0000	.0003
%RSD	11.78	2.482	31.25	21.95	45.66	53.28	3.003	105.9
#1	.0006	.0006	.0004	.0002	.0002	.0002	.0006	-.0001
#2	.0007	.0006	.0002	.0002	.0003	.0001	.0006	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0004**	**.0001**	**.0010**	**-.0015**	**.0008**	**.0004**	**-.0001**
Stddev	.0004	.0000	.0000	.0001	.0003	.0002	.0019	.0004
%RSD	254.6	6.719	30.42	10.42	16.87	19.68	432.5	301.9
#1	.0001	.0004	.0001	.0009	-.0017	.0009	.0018	.0002
#2	-.0004	.0004	.0001	.0011	-.0014	.0007	-.0009	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087**	**.0122**	**.0122**	**.0187**	**.0254**	**.0297**	**.0014**	**.0008**
Stddev	.0049	.0020	.0014	.0016	.0283	.0018	.0005	.0003
%RSD	56.08	16.34	11.20	8.417	111.5	6.052	37.82	41.94
#1	.0122	.0137	.0131	.0176	.0454	.0310	.0017	.0011
#2	.0053	.0108	.0112	.0198	.0054	.0284	.0010	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 5/20/2014 6:15:41 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0026**	**.0004**	**.0007**	**.0007**	**.0131**	W **.0012**	W **.0070**
Stddev	.0001	.0000	.0001	.0000	.0000	.0014	.0000	.0009
%RSD	37.57	1.476	31.61	.9808	1.810	11.02	2.478	12.58
#1	.0002	.0026	.0003	.0007	.0008	.0142	.0011	.0064
#2	.0001	.0026	.0005	.0007	.0007	.0121	.0012	.0076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn
High Limit							.0011	.0050
Low Limit							-.0011	-.0050

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0019**	**.0007**
Stddev	.0005	.0002
%RSD	28.28	24.91
#1	-.0023	.0006
#2	-.0015	.0008
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**154890.**	**32430.**	**2008.3**	**5640.8**
Stddev	280.	9.	2.4	.7
%RSD	.18074	.02647	.11911	.01289
#1	154700.	32436.	2010.0	5641.4
#2	155090.	32424.	2006.6	5640.3

Zoom In Zoom Out

Sample Name: cri Acquired: 5/20/2014 6:24:46 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0506**	**.1989**	**.0102**	**.0111**	**.0113**	**.0570**	W **.0120**	**.0540**
Stddev	.0002	.0002	.0003	.0001	.0000	.0004	.0000	.0021
%RSD	.4272	.0929	3.251	.6077	.3671	.7851	.2099	3.957
#1	.0507	.1990	.0104	.0111	.0113	.0573	.0120	.0525
#2	.0504	.1988	.0099	.0110	.0113	.0567	.0120	.0555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value							.0100	
Range							20.00%	

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**.0188**	**.0210**
Stddev	.0012	.0004
%RSD	6.575	1.773
#1	.0180	.0213
#2	.0197	.0208
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**156650.**	**33613.**	**1982.8**	**5679.8**
Stddev	86.	64.	14.0	10.9
%RSD	.05485	.19045	.70521	.19222
#1	156590.	33568.	1992.7	5687.5
#2	156710.	33658.	1972.9	5672.0

Zoom In Zoom Out

Sample Name: CN Acquired: 5/20/2014 6:24:46 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1973**	W **.0024**	**.0036**	**.0513**	**.0110**	**.0093**	**.0170**	**.0105**
Stddev	.0003	.0000	.0000	.0002	.0003	.0001	.0001	.0002
%RSD	.1398	.4674	.4976	.3352	2.650	1.026	.6456	2.252
#1	.1975	.0024	.0036	.0514	.0112	.0094	.0170	.0103
#2	.1971	.0024	.0036	.0512	.0108	.0093	.0169	.0107
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.0020						
Range		20.00%						

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**.0540**	**.0232**	W **.0097**	**.0111**	**.0028**	F **.0132**	**.0053**
Stddev	.0001	.0001	.0003	.0007	.0005	.0005	.0001	.0003
%RSD	1.586	.2200	1.295	7.658	4.710	17.14	1.003	5.170
#1	.0047	.0540	.0234	.0092	.0108	.0025	.0132	.0051
#2	.0046	.0541	.0230	.0103	.0115	.0031	.0133	.0055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				.0080			.0100	
Range				20.00%			30.00%	

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2221**	**5.049**	**.1139**	**5.218**	**5.442**	**5.209**	**.1013**	**.0208**
Stddev	.0013	.002	.0003	.004	.013	.027	.0011	.0001
%RSD	.5652	.0384	.2900	.0725	.2435	.5226	1.053	.4188
#1	.2212	5.050	.1137	5.215	5.451	5.228	.1006	.0208
#2	.2230	5.048	.1141	5.221	5.433	5.190	.1021	.0209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: jb66824-1f Acquired: 5/20/2014 6:31:28 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0031**	**.0006**	**.0003**	**.0005**	**6.321**	**.0488**	**.0044**	**.0024**
Stddev	.0001	.0000	.0000	.0001	.001	.0003	.0001	.0000
%RSD	2.757	2.753	14.30	16.21	.0103	.6588	1.215	.2513
#1	.0030	.0006	.0003	.0005	6.321	.0486	.0043	.0025
#2	.0032	.0006	.0003	.0004	6.320	.0491	.0044	.0024

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0341**	**.3143**	**.0224**	**.0944**	F **-.0070**	F **-.0060**	**.0188**	**-.0019**
Stddev	.0001	.0004	.0002	.0006	.0020	.0007	.0027	.0001
%RSD	.2454	.1133	.7185	.6511	28.25	11.11	14.34	4.799
#1	.0340	.3141	.0225	.0948	-.0056	-.0056	.0207	-.0018
#2	.0341	.3146	.0223	.0940	-.0083	-.0065	.0169	-.0020

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**64.26**	**2.346**	**2.359**	**.0895**	**5.993**	*****	**.1721**	**.0364**
Stddev	.10	.002	.002	.0024	.008	-----	.0003	.0002
%RSD	.1598	.0795	.0771	2.693	.1354	-----	.2009	.6849
#1	64.19	2.345	2.361	.0913	5.987	-----	.1718	.0366
#2	64.34	2.348	2.358	.0878	5.999	-----	.1723	.0362

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0019**	**26.40**	**.0002**	**.0095**	**.0175**	**.0053**	**.0046**	F **971.0**
Stddev	.0001	.08	.0004	.0000	.0002	.0013	.0000	.3
%RSD	3.651	.2992	229.1	.2443	1.415	24.11	.8557	.0301
#1	-.0020	26.35	.0005	.0095	.0173	.0044	.0046	970.8
#2	-.0019	26.46	-.0001	.0095	.0177	.0062	.0045	971.2

Elem	Bi2230	Li6707
Avg	**-.0034**	**.0037**
Stddev	.0001	.0000
%RSD	2.872	.8198
#1	-.0034	.0037
#2	-.0033	.0037

Zoom In Zoom Out

Sample Name: jb66824-4f Acquired: 5/20/2014 6:38:28 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**130930.**	**32493.**	**1681.1**	**4163.6**
Stddev	147.	11.	.9	8.8
%RSD	.11197	.03413	.05467	.21247
#1	130820.	32500.	1680.5	4169.9
#2	131030.	32485.	1681.8	4157.4

Zoom In Zoom Out

Sample Name: jb66824-4f Acquired: 5/20/2014 6:37:31 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0008**	**.0007**	**.0006**	**.0002**	**8.992**	**.0071**	**.0016**	**.0065**
Stddev	.0000	.0000	.0001	.0002	.035	.0001	.0000	.0002
%RSD	1.932	3.048	19.11	80.84	.3924	2.009	1.276	3.806
#1	.0008	.0007	.0007	.0001	8.967	.0070	.0016	.0067
#2	.0008	.0007	.0005	.0003	9.017	.0072	.0016	.0063

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**.0042**	**.6197**	**.0006**	**.2099**	F **-.0107**	**.0003**	**.0246**	F **-.0078**
Stddev	.0004	.0010	.0001	.0004	.0011	.0005	.0007	.0005
%RSD	8.953	.1616	18.37	.1940	10.67	142.3	2.957	6.197
#1	.0040	.6190	.0005	.2096	-.0099	.0006	.0241	-.0075
#2	.0045	.6204	.0007	.2102	-.0115	.0000	.0252	-.0082

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**76.01**	**22.94**	**.0767**	**.0074**	**18.77**	*****	**1.165**	**.0556**
Stddev	.05	.01	.0012	.0048	.01	-----	.000	.0001
%RSD	.0684	.0494	1.580	64.45	.0276	-----	.0277	.1115
#1	76.04	22.94	.0758	.0041	18.77	-----	1.165	.0556
#2	75.97	22.95	.0776	.0108	18.78	-----	1.165	.0556

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**.0004**	**30.74**	**.0007**	**.1104**	**.0005**	**.0035**	**-.0007**	F **1298.**
Stddev	.0004	.02	.0002	.0003	.0002	.0001	.0002	
%RSD	111.7	.0521	30.62	.2660	46.70	1.973	33.35	.0147
#1	.0006	30.73	.0008	.1106	.0003	.0035	-.0005	1298.
#2	.0001	30.75	.0005	.1102	.0007	.0036	-.0008	1298.

Elem	Bi2230	Li6707
Avg	**-.0047**	**.0027**
Stddev	.0005	.0003
%RSD	10.35	11.07
#1	-.0044	.0029
#2	-.0051	.0025

Zoom In Zoom Out

Sample Name: jb66824-4f Acquired: 5/20/2014 6:37:31 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**122590.**	**30588.**	**1596.5**	**3757.5**
Stddev	190.	18.	1.6	3.4
%RSD	.15461	.05868	.10296	.09089
#1	122730.	30575.	1595.3	3755.1
#2	122460.	30601.	1597.6	3759.9

Zoom In Zoom Out

Sample Name: jb66824-5f Acquired: 5/20/2014 6:43:32 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0002**	**.0000**	**.0001**	**-.0001**	**.0002**	**.0007**	**.0004**	**-.0005**	**.0002**
Stddev	.0000	.000	.0001	.0001	.0001	.0002	.0000	.0001	.0002
%RSD	4.890	26.99	203.3	108.8	83.98	33.00	11.63	17.65	133.8
#1	.0002	.0000	.0000	.0000	.0001	.0009	.0004	-.0005	.0003
#2	.0003	.0000	.0001	-.0001	.0003	.0006	.0004	-.0006	.0000

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0000**	**.0026**	**-.0004**	**-.0018**	**.0003**	**.0005**	**-.0001**	**.0052**	**.0281**
Stddev	.000	.0001	.0009	.0001	.0003	.0008	.0001	.0013	.0000
%RSD	353.8	3.696	247.6	5.696	108.7	162.1	279.8	25.98	.0721
#1	.0000	.0026	-.0010	-.0018	.0001	.0011	.0000	.0042	.0280
#2	.0000	.0025	.0003	-.0017	.0006	-.0001	-.0002	.0061	.0281

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0051**	**-.0005**	**.0310**	**.2941**	**.0010**	**.0001**	**-.0004**	**.0363**	**.0001**
Stddev	.0004	.0034	.0050	.0044	.0005	.0001	.0005	.0003	.0002
%RSD	7.418	677.4	16.09	1.481	56.02	91.23	132.0	.7516	220.7
#1	.0048	-.0029	.0345	.2972	.0013	.0002	.0000	.0365	-.0001
#2	.0054	.0019	.0275	.2910	.0006	.0000	-.0007	.0361	.0003

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0001**	**.0002**	**.0020**	**.0003**	**.1148**	**-.0020**	**.0002**
Stddev	.0000	.0001	.0005	.0001	.0133	.0000	.0003
%RSD	22.63	80.72	26.03	22.55	11.55	.8917	186.6
#1	.0001	.0001	.0024	.0003	.1055	-.0020	.0004
#2	.0002	.0003	.0016	.0002	.1242	-.0019	.0000

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157650.**	**33034.**	**2028.5**	**5731.2**
Stddev	42.	41.	.7	9.8
%RSD	.02685	.12318	.03589	.17117
#1	157680.	33063.	2028.0	5724.3
#2	157620.	33006.	2029.0	5738.2

Zoom In Zoom Out

Sample Name: jb66824-8f Acquired: 5/20/2014 6:48:37 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0432**	**.0001**	**.0014**	**.0030**	**.0010**	**.0420**	**.0062**	**.0045**	**.0012**
Stddev	.0000	.0000	.0002	.0000	.0003	.0000	.0001	.0002	.0002
%RSD	.0763	17.93	16.41	.5555	33.94	.0850	1.579	3.789	16.99
#1	.0432	.0001	.0015	.0030	.0013	.0420	.0062	.0046	.0011
#2	.0432	.0001	.0012	.0030	.0008	.0420	.0063	.0044	.0013

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0010**	**.1896**	**.0046**	**.0004**	**.0019**	**.0029**	**.0011**	**.2013**	**108.6**
Stddev	.0001	.0006	.0009	.0008	.0004	.0012	.0011	.0081	.1
%RSD	5.131	.3049	18.93	196.2	23.34	43.05	97.20	4.042	.0654
#1	.0010	.1900	.0040	-.0002	.0016	.0037	.0019	.1955	108.6
#2	.0011	.1892	.0053	.0010	.0022	.0020	.0004	.2070	108.5

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0260**	**11.15**	**15.09**	**109.0**	**.3112**	**.0129**	**.0013**	**5.075**	**-.0005**
Stddev	.0002	.01	.01	.5	.0001	.0002	.0007	.000	.0003
%RSD	.9080	.1319	.0728	.4274	.0185	1.379	49.52	.0031	73.67
#1	.0261	11.14	15.08	109.3	.3111	.0130	.0018	5.075	-.0007
#2	.0258	11.16	15.10	108.7	.3112	.0127	.0009	5.074	-.0002

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.6294**	**.0002**	**.0032**	**-.0043**	F **100.9**	**-.0026**	**.0063**
Stddev	.0001	.0000	.0006	.0001	.0	.0003	.0002
%RSD	.0200	12.91	19.13	2.391	.0271	11.64	2.832
#1	.6294	.0002	.0027	-.0044	100.9	-.0024	.0065
#2	.6295	.0002	.0036	-.0042	100.9	-.0028	.0062

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**144740.**	**31669.**	**1850.4**	**5154.6**
Stddev	118.	26.	1.1	11.9
%RSD	.08165	.08275	.05781	.23089
#1	144820.	31650.	1849.6	5146.2
#2	144650.	31687.	1851.2	5163.0

Zoom In Zoom Out

Sample Name: jb66824-7f Acquired: 5/20/2014 6:55:48 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0411**	**.0001**	**.0014**	**.0028**	**.0005**	**.0378**	**.0095**	**.0040**	**.0012**
Stddev	.0001	.0000	.0000	.0002	.0000	.0006	.0001	.0001	.0001
%RSD	.2981	4.421	2.754	5.657	9.755	1.545	1.373	2.900	7.794
#1	.0412	.0001	.0013	.0029	.0005	.0382	.0096	.0039	.0012
#2	.0410	.0001	.0014	.0026	.0005	.0374	.0094	.0041	.0011

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**.0010**	**.1829**	**.0047**	**.0009**	**.0013**	**.0049**	**-.0002**	**.2030**	**99.79**
Stddev	.0001	.0025	.0013	.0003	.0005	.0001	.0014	.0077	.09
%RSD	7.030	1.378	28.46	29.23	40.71	1.548	588.6	3.799	.0906
#1	.0010	.1847	.0038	.0007	.0017	.0049	-.0012	.2084	99.85
#2	.0009	.1811	.0056	.0010	.0009	.0048	.0007	.1975	99.73

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0401**	**9.798**	**13.10**	**96.48**	**.3050**	**.0124**	**.0020**	**4.913**	**-.0003**
Stddev	.0017	.016	.00	.45	.0059	.0001	.0005	.072	.0006
%RSD	4.281	.1599	.0112	.4710	1.941	.5053	25.40	1.475	175.1
#1	.0413	9.809	13.10	96.16	.3092	.0124	.0017	4.965	-.0007
#2	.0389	9.787	13.10	96.80	.3008	.0125	.0024	4.862	.0001

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.5558**	**.0001**	**.0048**	**-.0039**	**97.03**	**-.0004**	**.0058**
Stddev	.0001	.0001	.0005	.0001	1.31	.0009	.0005
%RSD	.0244	151.4	10.95	2.270	1.346	236.8	8.018
#1	.5557	.0001	.0051	-.0040	97.96	-.0010	.0061
#2	.5559	.0000	.0044	-.0039	96.11	.0003	.0054

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**150460.**	**34520.**	**1818.2**	**5205.8**
Stddev	1525.	10.	20.9	55.5
%RSD	1.0134	.02834	1.1499	1.0665
#1	149380.	34527.	1803.5	5166.6
#2	151540.	34513.	1833.0	5245.1

Zoom In Zoom Out

Sample Name: jb66824-8f Acquired: 5/20/2014 7:01:58 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Avg	**.0586**	**.0004**	**.0004**	**.0052**	**.0021**	**.0086**	**.1136**	**.0177**
Stddev	.0002	.0000	.0001	.0001	.0001	.0000	.0007	.0001
%RSD	.2625	3.418	14.94	1.974	5.460	.4076	.6108	.3512
#1	.0584	.0004	.0005	.0051	.0022	.0086	.1131	.0176
#2	.0587	.0004	.0004	.0053	.0020	.0086	.1141	.0177

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Avg	**-.0001**	**.0000**	**.1710**	**.0015**	F **-.0044**	**.0008**	**.0015**	**.0007**
Stddev	.0001	.0001	.0004	.0003	.0009	.0007	.0001	.0008
%RSD	153.8	295.4	.2452	20.08	20.02	78.97	5.118	103.1
#1	-.0001	.0000	.1707	.0017	-.0037	.0013	.0014	.0002
#2	.0000	.0001	.1713	.0013	-.0050	.0004	.0015	.0013

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Avg	**.2284**	**5.667**	**.0148**	**.8833**	**1.296**	**7.642**	**.0634**	**.0000**
Stddev	.0069	.012	.0002	.0097	.004	.016	.0004	.000
%RSD	3.037	.2166	1.240	1.094	.3048	.2044	.7043	131.3
#1	.2235	5.676	.0149	.8901	1.298	7.631	.0631	-.0001
#2	.2333	5.659	.0146	.8765	1.293	7.653	.0637	.0000

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Avg	**-.0004**	**7.111**	**-.0006**	**.0430**	**-.0002**	**.0021**	**-.0011**	**8.139**
Stddev	.0007	.017	.0003	.0002	.0001	.0006	.0000	.031
%RSD	162.7	.2435	45.38	.3878	53.65	28.52	4.498	.3820
#1	.0001	7.099	-.0004	.0428	-.0003	.0025	-.0011	8.117
#2	-.0009	7.123	-.0007	.0431	-.0001	.0017	-.0010	8.161

Elem	Bi2230	Li6707
Avg	**-.0017**	**.0025**
Stddev	.0011	.0004
%RSD	64.20	16.91
#1	-.0010	.0022
#2	-.0025	.0028

Zoom In Zoom Out

Sample Name: jb66824-8f Acquired: 5/20/2014 7:01:58 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**157460.**	**33873.**	**1970.3**	**5632.0**
Stddev	865.	124.	2.1	19.9
%RSD	.54921	.36602	.10631	.35248
#1	158070.	33785.	1971.7	5646.0
#2	156840.	33961.	1968.8	5618.0

Sample Name: jb66824-sr Acquired: 5/20/2014 7:02:58 Type: Unk
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Avg	**.0002**	**.0000**	**.0000**	**-.0003**	**-.0001**	**.0015**	**.0003**	**-.0006**	**-.0001**
Stddev	.0000	.0000	.0000	.0000	.0000	.0000	.0001	.0001	.0000
%RSD	1.289	26.99	15.65	13.07	1.134	1.062	15.44	15.14	1.090
#1	.0002	.0000	.0000	-.0003	-.0001	.0015	.0004	-.0005	-.0001
#2	.0002	.0000	.0000	-.0003	-.0001	.0015	.0003	-.0007	-.0001

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Avg	**-.0001**	**.0033**	**-.0009**	**-.0017**	**.0003**	**.0014**	**.0002**	**.0053**	**.0245**
Stddev	.0002	.0000	.0003	.0005	.0009	.0015	.0000	.0020	.0014
%RSD	138.9	.7643	33.16	31.80	318.3	104.2	15.09	38.74	5.631
#1	.0000	.0032	-.0011	-.0013	-.0004	.0004	.0002	.0067	.0255
#2	-.0003	.0033	-.0007	-.0021	.0009	.0025	.0003	.0038	.0236

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Avg	**.0050**	**.0160**	**.0136**	**.0651**	**.0009**	**.0001**	**-.0006**	**.0445**	**.0002**
Stddev	.0005	.0035	.0050	.0058	.0001	.0001	.0001	.0000	.0004
%RSD	10.29	21.87	36.71	8.974	7.142	156.2	8.617	.0021	194.1
#1	.0047	.0184	.0171	.0693	.0009	.0002	-.0006	.0445	-.0001
#2	.0054	.0135	.0101	.0610	.0008	.0000	-.0005	.0445	.0005

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Avg	**.0002**	**.0002**	**.0013**	**.0002**	**.0270**	**-.0021**	**.0006**
Stddev	.0000	.0002	.0007	.0001	.0015	.0004	.0003
%RSD	7.256	64.12	52.48	48.50	5.698	20.40	53.32
#1	.0002	.0004	.0017	.0002	.0281	-.0024	.0009
#2	.0002	.0001	.0008	.0001	.0259	-.0018	.0004

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Avg	**153920.**	**32321.**	**1962.9**	**5571.3**
Stddev	54.	85.	2.1	5.1
%RSD	.03494	.26287	.10613	.09069
#1	153880.	32261.	1961.5	5574.9
#2	153960.	32381.	1964.4	5567.7

Sample Name: ccv Acquired: 5/20/2014 7:14:04 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.901**	**2.032**	**1.954**	**1.994**	**2.061**	**1.843**	**2.126**	**1.997**	**.2331**
Stddev	.005	.001	.005	.004	.003	.003	.003	.004	.0001
%RSD	.2462	.0599	.2636	.1775	.1432	.1829	.1164	.1921	.0583
#1	1.904	2.033	1.951	1.991	2.059	1.845	2.124	1.995	.2332
#2	1.897	2.031	1.958	1.996	2.063	1.840	2.128	2.000	.2330
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.987**	**2.039**	**1.933**	**2.019**	**2.013**	**1.863**	**1.886**	**40.00**	**39.30**
Stddev	.001	.005	.007	.004	.002	.004	.007	.03	.04
%RSD	.0290	.2587	.3799	.2235	.0918	.2359	.3917	.0727	.1091
#1	1.986	2.035	1.927	2.022	2.012	1.860	1.881	40.02	39.33
#2	1.987	2.042	1.938	2.016	2.014	1.866	1.891	39.97	39.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Pd3404	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.04**	**39.93**	**40.97**	**40.22**	**1.887**	**1.923**	**1.840**	**4.749**	**1.944**
Stddev	.07	.01	.04	.01	.005	.005	.000	.009	.004
%RSD	.1767	.0324	.0976	.0196	.2710	.2873	.0001	.1919	.2234
#1	40.09	39.92	41.00	40.22	1.883	1.919	1.840	4.743	1.941
#2	39.99	39.94	40.94	40.21	1.890	1.927	1.840	4.756	1.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ccv Acquired: 5/20/2014 7:14:04 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.031**	**2.071**	**1.844**	**2.055**	**1.873**	**1.868**	**1.945**
Stddev	.002	.001	.014	.002	.006	.004	.002
%RSD	.0949	.0493	.7462	.1072	.3452	.2391	.0974
#1	2.032	2.072	1.834	2.053	1.868	1.865	1.947
#2	2.030	2.070	1.853	2.056	1.877	1.871	1.944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**152950.**	**32963.**	**1981.9**	**5483.5**
Stddev	43.	11.	5.4	10.6
%RSD	.02779	.03229	.27317	.19255
#1	152920.	32971.	1985.7	5491.0
#2	152980.	32956.	1978.1	5476.1

Sample Name: ccb Acquired: 5/20/2014 7:19:56 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0008**	**.0004**	**.0003**	**.0004**	**.0004**	**.0007**	**.0002**
Stddev	.0000	.0000	.0001	.0001	.0000	.0001	.0000	.0002
%RSD	4.650	1.947	27.53	36.01	10.45	38.87	4.372	103.9
#1	.0008	.0008	.0005	.0004	.0003	.0003	.0008	.0003
#2	.0008	.0008	.0003	.0002	.0004	.0005	.0007	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0006**	**.0004**	**.0010**	**-.0008**	**.0014**	**.0012**	**.0007**
Stddev	.0002	.0001	.0000	.0003	.0006	.0012	.0010	.0004
%RSD	139.8	8.017	3.844	27.30	66.47	85.94	85.37	55.76
#1	-.0002	.0006	.0004	.0012	-.0012	.0023	.0005	.0010
#2	.0000	.0007	.0004	.0008	-.0004	.0006	.0019	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0131**	**.0159**	**.0147**	**.0224**	**.0230**	**.0382**	**.0013**	**.0011**
Stddev	.0008	.0000	.0020	.0053	.0110	.0022	.0000	.0002
%RSD	5.829	.1573	13.23	23.65	48.05	5.739	3.403	16.58
#1	.0136	.0159	.0161	.0261	.0152	.0398	.0012	.0012
#2	.0125	.0159	.0134	.0186	.0308	.0367	.0013	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In
Zoom Out

Sample Name: ccb Acquired: 5/20/2014 7:19:36 Type: QC
Method: Accutest1(v38) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pd3404	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0035**	**.0008**	**.0008**	**.0006**	**.0130**	W **.0013**	W **.0093**
Stddev	.0004	.0005	.0004	.0001	.0001	.0026	.0001	.0008
%RSD	46.09	15.29	50.78	9.297	12.09	20.06	7.055	8.887
#1	.0011	.0039	.0005	.0008	.0007	.0149	.0013	.0099
#2	.0006	.0031	.0011	.0007	.0006	.0112	.0012	.0087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn
High Limit							.0011	.0050
Low Limit							-.0011	-.0050

Elem	Bi2230	Li6707
Units	ppm	ppm
Avg	**-.0009**	**.0009**
Stddev	.0003	.0001
%RSD	35.22	15.27
#1	-.0011	.0008
#2	-.0007	.0010
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**156540.**	**32970.**	**2027.8**	**5713.3**
Stddev	474.	98.	15.9	41.8
%RSD	.30281	.29604	.78599	.73083
#1	156200.	33039.	2016.6	5683.8
#2	156870.	32901.	2039.1	5742.8

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NOTE: The remaining analytical data for this job is not relevant to this report.

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
	Ba 455.403 { 74}	☒	3	Mg	0.000001	0.000000	No
				Al	0.000000	0.000000	No
				Zr	0.001080	0.000000	No
	Be 313.042 {108}	☒	13	V	0.001049	0.000000	No
				Mo	-0.000037	0.000000	No
				Ti	-0.000287	0.000000	No
				Mn	0.000027	0.000000	No
				Ba	0.000015	0.000000	No
				Co	-0.000020	0.000000	No
				Ni	0.000004	0.000000	No
				Ca	0.000000	0.000000	No
				Cu	0.000034	0.000000	No
				Zn	-0.000010	0.000000	No
				Fe	0.000000	0.000000	No
				Cd	0.000050	0.000000	No
				W	0.000000	0.000000	No
	Cd 228.802 {448}	☒	13	As	0.004250	0.000000	No
				Ni	-0.000178	0.000000	No
				Fe	0.000010	0.000000	No
				V	0.000050	0.000000	No
				Ba	-0.000047	0.000000	No
				Co	-0.000950	0.000000	No
				Sr	0.000100	0.000000	No
				Ca	-0.000003	0.000000	No
				Mn	-0.000021	0.000000	No
				Cr	0.000025	0.000000	No
				Si	-0.000005	0.000000	No
				Cu	-0.000026	0.000000	No
				Al	0.000000	0.000000	No
	Co 228.616 {448}	☒	10	Fe	0.000006	0.000000	No
				Cr	-0.000100	0.000000	No
				Mo	-0.000300	0.000000	No
				Ni	0.000256	0.000000	No
				Ti	0.001639	0.000000	No
				Ba	0.000062	0.000000	No
				W	0.000000	0.000000	No
				Cd	-0.000060	0.000000	No
				Si	0.000000	0.000000	No
				Ca	0.000000	0.000000	No
	Cr 267.716 {126}	☒	15	Mn	0.000402	0.000000	No
				V	0.000080	0.000000	No
				Mo	0.000018	0.000000	No
				Fe	-0.000009	0.000000	No
				Cd	-0.000050	0.000000	No
				Al	0.000001	0.000000	No
				Ca	-0.000002	0.000000	No
				Mg	0.000000	0.000000	No
				Ti	0.000000	0.000000	No
				Sn	0.000000	0.000000	No
				Ba	-0.000005	0.000000	No
				Cu	0.000100	0.000000	No
				Sr	0.000000	0.000000	No
				W	0.004000	0.000000	No
				Zr	0.000280	0.000000	No
	Cu 324.754 {104}2	☒	22	Cr	0.000016	0.000000	No
				V	-0.000283	0.000000	No
				Mo	0.000406	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Ti	-0.000100	0.000000	No
				Fe	-0.000090	0.000000	No
				Al	0.000002	0.000000	No
				Sn	-0.000097	0.000000	No
				Zn	-0.000004	0.000000	No
				Co	-0.000317	0.000000	No
				Zr	0.000000	0.000000	No
				Si	0.000009	0.000000	No
				Mn	-0.000080	0.000000	No
				Se	0.000050	0.000000	No
				Ba	0.000100	0.000000	No
				Ag	-0.000077	0.000000	No
				Pb	0.000060	0.000000	No
				Sb	0.000000	0.000000	No
				Mg	0.000002	0.000000	No
				Ca	-0.000001	0.000000	No
				Bi	0.000000	0.000000	No
				W	0.000000	0.000000	No
				K	0.000000	0.000000	No
	Mn 257.610 {131}	☒	8	Fe	-0.000136	0.000000	No
				Si	0.000050	0.000000	No
				Ba	0.000100	0.000000	No
				As	0.000001	0.000000	No
				Ca	0.000000	0.000000	No
				Mg	0.000000	0.000000	No
				Al	-0.000001	0.000000	No
				Cr	-0.000100	0.000000	No
	Ni 231.604 {446}	☒	19	Fe	0.000017	0.000000	No
				Zn	0.000079	0.000000	No
				Be	0.000213	0.000000	No
				Co	0.000080	0.000000	No
				Tl	0.000209	0.000000	No
				Mg	0.000001	0.000000	No
				Mo	0.000485	0.000000	No
				V	0.000011	0.000000	No
				Cu	0.000050	0.000000	No
				Se	0.000100	0.000000	No
				Al	0.000003	0.000000	No
				Cr	0.000006	0.000000	No
				Si	-0.000030	0.000000	No
				Sn	0.000079	0.000000	No
				Ba	0.000000	0.000000	No
				Ca	-0.000002	0.000000	No
				Ti	-0.000040	0.000000	No
				Mn	-0.000080	0.000000	No
				W	0.000000	0.000000	No
	Ag 328.068 {103}	☒	14	Mn	0.000011	0.000000	No
				Mo	-0.000098	0.000000	No
				Ti	-0.000830	0.000000	No
				Fe	-0.000495	0.000000	No
				V	-0.000040	0.000000	No
				Zn	-0.000080	0.000000	No
				Ca	-0.000013	0.000000	No
				Al	-0.000001	0.000000	No
				Sr	-0.000024	0.000000	No
				Mg	0.000001	0.000000	No
				Zr	0.001800	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Si	-0.000021	0.000000	No
				Ba	0.000006	0.000000	No
				K	0.000000	0.000000	No
	V 292.402 {115}	☒	7	Ti	0.000630	0.000000	No
				Mo	-0.013100	0.000000	No
				Fe	0.000011	0.000000	No
				Sr	-0.000100	0.000000	No
				Cr	-0.002600	0.000000	No
				Mn	-0.000200	0.000000	No
				Zr	0.000170	0.000000	No
	Zn 206.200 {464}	☒	20	Cr	-0.001125	0.000000	No
				Mo	0.000260	0.000000	No
				Fe	-0.000008	0.000000	No
				Si	0.000065	0.000000	No
				Mn	0.000350	0.000000	No
				Ba	-0.000060	0.000000	No
				Na	0.000003	0.000000	No
				Ca	0.000000	0.000000	No
				Sr	0.000000	0.000000	No
				Sn	0.000255	0.000000	No
				Cu	-0.000774	0.000000	No
				As	0.000500	0.000000	No
				Be	0.000364	0.000000	No
				Pd	0.000280	0.000000	No
				Ti	-0.000080	0.000000	No
				Al	0.000005	0.000000	No
				Zr	0.000000	0.000000	No
				Bi	-0.003364	0.000000	No
				W	0.000000	0.000000	No
				K	0.000000	0.000000	No
	As 189.042 {478}	☒	23	Al	0.000013	0.000000	No
				Fe	-0.000013	0.000000	No
				Ca	0.000000	0.000000	No
				Mn	0.000090	0.000000	No
				Mo	0.003140	0.000000	No
				Cr	0.001050	0.000000	No
				V	0.000095	0.000000	No
				Co	-0.001500	0.000000	No
				Ba	-0.000067	0.000000	No
				Sn	-0.000037	0.000000	No
				Cd	-0.000228	0.000000	No
				Tl	0.000030	0.000000	No
				Be	-0.000007	0.000000	No
				Mg	-0.000000	0.000000	No
				Si	-0.000195	0.000000	No
				Zn	0.000115	0.000000	No
				Sr	0.000600	0.000000	No
				Pd	0.040260	0.000000	No
				Zr	-0.000411	0.000000	No
				Ti	-0.000070	0.000000	No
				W	0.000000	0.000000	No
				S	-0.000040	0.000000	No
				K	0.000000	0.000000	No
	Tl 190.856 {477}	☒	29	Cr	0.000221	0.000000	No
				Mo	-0.008000	0.000000	No
				Al	0.000004	0.000000	No
				Fe	-0.000122	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				V	-0.025500	0.000000	No
				Mn	0.001100	0.000000	No
				Ca	-0.000006	0.000000	No
				Ti	-0.001700	0.000000	No
				Mg	-0.000002	0.000000	No
				Co	0.003472	0.000000	No
				Sr	0.000000	0.000000	No
				B	-0.000025	0.000000	No
				Ba	0.001000	0.000000	No
				Zn	0.000100	0.000000	No
				As	-0.000020	0.000000	No
				W	0.040000	0.000000	No
				Ni	0.000090	0.000000	No
				Cu	-0.000125	0.000000	No
				Zr	0.000000	0.000000	No
				Pd	0.000185	0.000000	No
				Pb	0.000000	0.000000	No
				S	0.000010	0.000000	No
				Ag	0.000250	0.000000	No
				Be	0.000000	0.000000	No
				Sn	-0.000023	0.000000	No
				K	-0.000270	0.000000	No
				Cd	-0.000240	0.000000	No
				Si	0.000298	0.000000	No
				Na	0.000001	0.000000	No
	Pb 220.353 {453}	☒	23	Al	-0.000097	0.000000	No
				Fe	0.000060	0.000000	No
				Ca	0.000003	0.000000	No
				Mn	0.000033	0.000000	No
				Zn	-0.000036	0.000000	No
				Mo	-0.002850	0.000000	No
				Cu	-0.000031	0.000000	No
				V	0.000068	0.000000	No
				Co	0.000073	0.000000	No
				Ti	-0.000200	0.000000	No
				Si	-0.000042	0.000000	No
				Ba	-0.000010	0.000000	No
				Sb	0.000150	0.000000	No
				K	0.000000	0.000000	No
				Sr	0.000140	0.000000	No
				W	0.010000	0.000000	No
				Mg	0.000002	0.000000	No
				Cd	-0.000018	0.000000	No
				Pd	0.000560	0.000000	No
				Zr	-0.001000	0.000000	No
				Ni	0.000050	0.000000	No
				S	-0.000010	0.000000	No
				Bi	0.000000	0.000000	No
	Se 196.090 {472}	☒	22	Al	-0.000004	0.000000	No
				Ca	0.000002	0.000000	No
				Mn	0.000223	0.000000	No
				Mo	-0.000119	0.000000	No
				Fe	-0.000590	0.000000	No
				Co	-0.000330	0.000000	No
				V	-0.000200	0.000000	No
				Sr	-0.000258	0.000000	No
				Cu	-0.000007	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			W	0.060000	0.000000	No
			Si	0.000011	0.000000	No
			Tl	0.000204	0.000000	No
			Be	-0.000143	0.000000	No
			Zn	0.000100	0.000000	No
			B	0.000025	0.000000	No
			Pd	0.000700	0.000000	No
			Ti	-0.000017	0.000000	No
			Cd	0.000090	0.000000	No
			Zr	-0.004300	0.000000	No
			Ba	0.000040	0.000000	No
			Mg	-0.000002	0.000000	No
			S	-0.000010	0.000000	No
Sb 206.833 {463}	☒	14	Fe	0.000015	0.000000	No
			Al	0.000006	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000106	0.000000	No
			Cr	0.012000	0.000000	No
			V	-0.001130	0.000000	No
			Zn	0.000188	0.000000	No
			Mo	0.000250	0.000000	No
			Ti	0.000100	0.000000	No
			Sn	-0.015500	0.000000	No
			W	0.000000	0.000000	No
			Mg	0.000003	0.000000	No
			Zr	-0.000300	0.000000	No
			Sr	0.000031	0.000000	No
Al 396.152 { 85}	☒	4	Si	0.000350	0.000000	No
			Ca	-0.000265	0.000000	No
			Mo	0.039000	0.000000	No
			Zr	-0.008158	0.000000	No
Ca 317.933 {106}	☒	18	Fe	0.000120	0.000000	No
			Ti	0.000000	0.000000	No
			W	0.003960	0.000000	No
			Tl	0.004955	0.000000	No
			Be	0.001840	0.000000	No
			Ba	-0.001500	0.000000	No
			Cu	0.004200	0.000000	No
			Cd	0.003700	0.000000	No
			Ni	0.001859	0.000000	No
			Pd	0.004700	0.000000	No
			Mn	0.000000	0.000000	No
			B	-0.000210	0.000000	No
			Se	0.005000	0.000000	No
			Co	-0.000920	0.000000	No
			Cr	0.004000	0.000000	No
			Al	0.000026	0.000000	No
			As	0.010000	0.000000	No
			Pb	0.002000	0.000000	No
Fe 259.940 {130}	☒	13	Co	0.000200	0.000000	No
			Si	-0.001181	0.000000	No
			Tl	-0.002562	0.000000	No
			Se	0.000000	0.000000	No
			Cr	-0.000360	0.000000	No
			Mn	-0.002000	0.000000	No
			V	-0.000064	0.000000	No
			Cu	0.000085	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				K	-0.000200	0.000000	No
				Zn	0.000080	0.000000	No
				Ti	-0.000631	0.000000	No
				Ca	0.000020	0.000000	No
				Ba	0.001000	0.000000	No
	Mg 279.079 {121}	☒	3	Mo	-0.016250	0.000000	No
				W	0.000000	0.000000	No
				Mn	-0.005360	0.000000	No
	K 766.490 { 44}	☒	12	Fe	-0.000715	0.000000	No
				Al	0.000032	0.000000	No
				Ca	-0.000012	0.000000	No
				Mn	0.001430	0.000000	No
				Si	-0.003000	0.000000	No
				V	-0.002360	0.000000	No
				Pd	0.004000	0.000000	No
				Sn	-0.004700	0.000000	No
				Ba	-0.002700	0.000000	No
				Mo	-0.000850	0.000000	No
				Cu	-0.010000	0.000000	No
				Ni	-0.000500	0.000000	No
	Na 589.592 { 57}	☒	6	K	-0.000560	0.000000	No
				Ba	0.000900	0.000000	No
				Ca	-0.000034	0.000000	No
				Al	0.000040	0.000000	No
				V	0.000000	0.000000	No
				Cr	0.000000	0.000000	No
	B 208.959 {462}	☒	1	Mo	0.039950	0.000000	No
	Mo 202.030 {467}	☒	6	Co	0.000000	0.000000	No
				Al	0.000000	0.000000	No
				Fe	-0.000010	0.000000	No
				Mg	-0.000001	0.000000	No
				Ca	0.000003	0.000000	No
				W	0.000576	0.000000	No
	Pd 340.458 { 99}	☒	10	Ti	-0.000684	0.000000	No
				V	-0.000048	0.000000	No
				Sn	-0.000006	0.000000	No
				Fe	0.000130	0.000000	No
				Mo	-0.000320	0.000000	No
				Zr	-0.030200	0.000000	No
				Co	-0.005883	0.000000	No
				Ca	-0.000021	0.000000	No
				S	-0.000017	0.000000	No
				Si	-0.000040	0.000000	No
	Si 212.412 {459}	☒	19	Sr	0.000366	0.000000	No
				Ni	0.000106	0.000000	No
				Mo	0.027230	0.000000	No
				V	-0.000190	0.000000	No
				Ti	0.043950	0.000000	No
				Al	0.000049	0.000000	No
				Cd	0.008630	0.000000	No
				Ba	0.000000	0.000000	No
				Fe	0.000129	0.000000	No
				Sn	0.007000	0.000000	No
				Zn	0.000385	0.000000	No
				As	0.002500	0.000000	No
				Mg	0.000135	0.000000	No
				W	-0.007198	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Ca	0.000078	0.000000	No
			Cr	0.001600	0.000000	No
			Mn	0.001000	0.000000	No
			Zr	0.000540	0.000000	No
			B	0.001900	0.000000	No
Sn 189.989 {478}	☒	6	Ti	-0.002020	0.000000	No
			Mo	0.000011	0.000000	No
			Fe	0.000018	0.000000	No
			Mn	0.000001	0.000000	No
			Si	0.000131	0.000000	No
			Al	-0.000004	0.000000	No
Sr 407.771 { 83}	☒	2	Fe	0.000000	0.000000	No
			Ca	0.000047	0.000000	No
Ti 334.904 {101}	☒	4	Cr	0.000204	0.000000	No
			Mo	0.000870	0.000000	No
			Si	0.000035	0.000000	No
			Ca	0.000005	0.000000	No
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Y 224.306 {451}*	☒	None				
In 230.606 {446}*	☒	None				
W 207.911 {462}	☒	27	Al	0.000005	0.000000	No
			Si	-0.000117	0.000000	No
			Ca	-0.000004	0.000000	No
			Fe	-0.000039	0.000000	No
			As	-0.000220	0.000000	No
			Mg	-0.000005	0.000000	No
			Mn	-0.000070	0.000000	No
			Mo	0.000710	0.000000	No
			Ti	0.000000	0.000000	No
			Sr	0.000000	0.000000	No
			V	0.001000	0.000000	No
			Cd	-0.000650	0.000000	No
			Cr	-0.000001	0.000000	No
			Zn	0.009921	0.000000	No
			Pd	0.000000	0.000000	No
			Sn	-0.000500	0.000000	No
			Zr	-0.001000	0.000000	No
			B	0.000000	0.000000	No
			Sb	0.000000	0.000000	No
			Co	-0.002830	0.000000	No
			Ni	0.000000	0.000000	No
			Be	-0.001000	0.000000	No
			Se	0.000000	0.000000	No
			Cu	-0.002860	0.000000	No
			Ba	0.000000	0.000000	No
			Tl	0.000000	0.000000	No
			Pb	0.000000	0.000000	No
Zr 339.198 { 99}	☒	10	Mo	0.000250	0.000000	No
			Ti	0.000000	0.000000	No
			Fe	-0.000068	0.000000	No
			Si	0.000125	0.000000	No
			S	0.000039	0.000000	No
			Pd	0.000000	0.000000	No
			Be	-0.000500	0.000000	No
			Bi	0.000000	0.000000	No
			Ba	0.000700	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Ag	0.000000	0.000000	No
	S 182.034 {485}	☒	6	Ca	0.000065	0.000000	No
				Mo	0.000000	0.000000	No
				Al	-0.000129	0.000000	No
				Fe	-0.000043	0.000000	No
				Mn	0.003160	0.000000	No
				Mg	0.000004	0.000000	No
	Bi 223.061 {451}	☒	4	Fe	0.000035	0.000000	No
				Ti	-0.002890	0.000000	No
				V	-0.000680	0.000000	No
				Cr	0.001100	0.000000	No
	Li 670.784 { 50}	☒	1	Mg	0.000006	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ba 455.403 { 74}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000548	1.569020	0.000000	1.000000
Be 313.042 {108}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000096	3.234275	0.000000	1.000000
Cd 228.802 {448}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.001405	1.178639	0.000000	1.000000
Co 228.616 {448}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000713	0.474686	0.000000	1.000000
Cr 267.716 {126}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000006	0.075934	0.000000	1.000000
Cu 324.754 {104}2	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.003594	0.260037	0.000000	1.000000
Mn 257.610 {131}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000108	0.332805	0.000000	1.000000
Ni 231.604 {446}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.001776	0.360785	0.000000	1.000000
Ag 328.068 {103}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000006	0.126205	0.000000	1.000000
V 292.402 {115}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000040	0.136456	0.000000	1.000000
Zn 206.200 {464}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000069	0.934886	0.000000	1.000000
As 189.042 {478}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.001614	0.171953	0.000000	1.000000
Tl 190.856 {477}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000623	0.047582	0.000000	1.000000
Pb 220.353 {453}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000370	0.147498	0.000000	1.000000
Se 196.090 {472}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000015	0.119788	0.000000	1.000000
Sb 206.833 {463}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000359	0.275435	0.000000	1.000000
Al 396.152 { 85}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000128	0.029714	0.000000	1.000000
Ca 317.933 {106}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.005108	0.064978	0.000000	1.000000
Fe 259.940 {130}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000178	0.047313	0.000000	1.000000
Mg 279.079 {121}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000128	0.006377	0.000000	1.000000
K 766.490 { 44}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000268	0.016780	0.000000	1.000000
Na 589.592 { 57}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000477	0.069179	0.000000	1.000000
B 208.959 {462}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000926	0.294052	0.000000	1.000000
Mo 202.030 {467}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.001621	1.151902	0.000000	1.000000
Pd 340.458 { 99}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000082	0.051102	0.000000	1.000000
Si 212.412 {459}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.011034	0.343910	0.000000	1.000000
Sn 189.989 {478}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.000561	0.199623	0.000000	1.000000
Sr 407.771 { 83}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000303	2.914818	0.000000	1.000000
Ti 334.904 {101}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000148	0.137411	0.000000	1.000000
Y 360.073 { 94}*	10/25/2013 12:00:44	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	9/12/2013 9:42:19	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 224.306 {451}*	4/16/2014 11:15:37	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
In 230.606 {446}*	1/2/2014 9:54:11	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
W 207.911 {462}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	0.002621	0.514300	0.000000	1.000000
Zr 339.198 { 99}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000096	0.290983	0.000000	1.000000
S 182.034 {485}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.003227	0.067959	0.000000	1.000000
Bi 223.061 {451}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.004926	0.379592	0.000000	1.000000
Li 670.784 { 50}	5/19/2014 17:01:46	5/19/2014 17:01:46	Linear	1/Conc	-0.000194	0.590289	0.000000	1.000000

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JB66584

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ba 455.403 { 74}	1.000000	0.000000	0.000140	0.000466	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	1.000000	0.000000	0.000033	0.000110	OK.	1.000000	0.000000	1	0
	Cd 228.802 {448}	1.000000	0.000000	0.000177	0.000589	OK.	1.000000	0.000000	1	0
	Co 228.616 {448}	1.000000	0.000000	0.000251	0.000836	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	1.000000	0.000000	0.000300	0.001002	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}2	1.000000	0.000000	0.000211	0.000702	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	1.000000	0.000000	0.000059	0.000198	OK.	1.000000	0.000000	1	0
	Ni 231.604 {446}	1.000000	0.000000	0.000304	0.001015	OK.	1.000000	0.000000	1	0
	Ag 328.068 {103}	1.000000	0.000000	0.000349	0.001164	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	1.000000	0.000000	0.000218	0.000725	OK.	1.000000	0.000000	1	0
	Zn 206.200 {464}	1.000000	0.000000	0.000197	0.000656	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	1.000000	0.000000	0.001022	0.003405	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	1.000000	0.000000	0.001232	0.004106	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	1.000000	0.000000	0.001080	0.003599	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	1.000000	0.000000	0.001790	0.005967	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	1.000000	0.000000	0.000952	0.003173	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	1.000000	0.000000	0.005959	0.019864	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	1.000000	0.000000	0.001795	0.005983	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	1.000000	0.000000	0.001298	0.004326	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	1.000000	0.000000	0.012480	0.041599	OK.	1.000000	0.000000	1	0
	K 766.490 { 44}	1.000000	0.000000	0.021526	0.071754	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	1.000000	0.000000	0.004751	0.015837	OK.	1.000000	0.000000	1	0
	B 208.959 {462}	1.000000	0.000000	0.000571	0.001902	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	1.000000	0.000000	0.000199	0.000664	OK.	1.000000	0.000000	1	0
	Pd 340.458 { 99}	1.000000	0.000000	0.000803	0.002675	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	1.000000	0.000000	0.000756	0.002521	OK.	1.000000	0.000000	1	0
	Sn 189.989 {478}	1.000000	0.000000	0.000749	0.002497	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	1.000000	0.000000	0.000053	0.000177	OK.	1.000000	0.000000	1	0
	Ti 334.904 {101}	1.000000	0.000000	0.000306	0.001020	OK.	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 224.306 {451}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	W 207.911 {462}	1.000000	0.000000	0.000897	0.002990	OK.	1.000000	0.000000	1	0
	Zr 339.198 { 99}	1.000000	0.000000	0.000137	0.000458	OK.	1.000000	0.000000	1	0
	S 182.034 {485}	1.000000	0.000000	0.002817	0.009389	OK.	1.000000	0.000000	1	0
	Bi 223.061 {451}	1.000000	0.000000	0.000942	0.003140	OK.	1.000000	0.000000	1	0
	Li 670.784 { 50}	1.000000	0.000000	0.000576	0.001921	OK.	1.000000	0.000000	1	0

ACCUTEST LABORATORIES

Accutest Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP79488	5/14/2014	13:00	5/14/2014	18:00	JB66584-1	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	8	430	93	1	94
1	End	8	430	94	1	95
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-54	1312222	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP79488-MB1	N/A	N	50	50	A & B		
MP79488-B1	N/A	N	50	50	A & B	A,B,C	
MP79488-S1	1	Y	50	50	A & B	A,B,C	
MP79488-S2	1	Y	50	50	A & B	A,B,C	
MP79488-SD1	1	Y	50	50	A & B		
FA14791-1	1	Y	50	50	A & B		
FA14791-1F	2	Y	50	50	A & B		
JB66584-1	1	Y	50	50	A & B		TWO TUBES FOR EXTRA VOLUME.
MP79488-LC1	N/A	Y	50	50	A & B		

Reagents Groups

Group	Description	MLs Used
A	CONC HNO3	3
B	1:1 HCL	5
C		
D		
E		
F		
G		
H		

Spike Groups

Group	Description	MLs Used
A	SP	0.5
B	MIN1	0.5
C	ODD	1
D		
E		
F		
G		
H		

Comments: _____

Analyst AMIRAHH Approved by _____ Approved on _____

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

Document Control #: NJ-MET-PREP-AQ-01 (2456468.4378704432) Validated by: Validated on:

ACCUTEST.

Aqueous Digestion Reagent Information Log

Digestion Reagents Information Log

Digestion Batch ID: MP 79488
Matrix: AQ

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - Reg. Spike	10/30/14	MP-013-648 -SP
Spiking Solution - Min. Spike	10/18/14	MP-013-643 -MIN1
Spiking Solution - Odd Spike	10/11/14	MP-013-641 -ODD
Spiking Solution - Other		
Spiking Solution - Other		
Nitric Acid	05/2016	E0000050770 J.T. Baker
Nitric Acid (1:1)	/14	MP-013-20- -HNO3 (1:1)
Hydrochloric Acid	11/14/14	MP-013-20-183 -HCl (1:1)
Hydrogen Peroxide		Lot #: Mfg.
Lab Control	11/08/14	MP ~~0~~ 151 - 109 -LCW
Spike Blank		
Filter Lot (sample filtration)	N/A	Lot #: FC009746 Mfg. Fisher Scientific
Digestion Tubes Lot	N/A	Lot #: 1312222 Mfg. Environmental Express
pH Paper	N/A	Hydrion Paper 1 to 12, lot #228713

Form: AA014B-01
Rev. Date: 5/12/08

New Jersey
ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP79977/GN4573	0.0055	0.0	mg/l	0.0501	0.0495	98.9	90-110%

Associated Samples:
Batch GP79977: JB66584-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP79977/GN4573	JB66584-1	mg/l	0.0020 U	0.0	0.0	0-20%

Associated Samples:
Batch GP79977: JB66584-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP79977/GN4573	JB66584-1	mg/l	0.0020 U	0.0501	0.050	99.9	85-115%

Associated Samples:
Batch GP79977: JB66584-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: 714050901.TXT Date Analyzed: 05/09/14 Methods: SW846 7199
Analyst: CW Run ID: GN4573
Parameters: Chromium, Hexavalent

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:47	ZZZZZZ	1		
08:55	GN4573-STD1	1		STDA
09:02	GN4573-STD2	1		STDB
09:10	GN4573-STD3	1		STDC
09:18	GN4573-STD4	1		STDD
09:26	GN4573-STD5	1		STDE
09:34	GN4573-CCV1	1		
09:42	GN4573-CCB1	1		
09:50	GP79977-MB1	1		
09:58	GP79977-MB1	1		
10:06	GP79977-B1	1		
10:14	GP79977-B1	1		
10:22	JB66584-1	1		
10:30	JB66584-1	1		
10:37	GP79977-D1	1		
10:45	GP79977-D1	1		
10:53	ZZZZZZ	1		
11:01	ZZZZZZ	1		
11:09	GN4573-CCV2	1		
11:17	GN4573-CCB2	1		
11:31	GP79977-S1	1		
11:39	GP79977-S1	1		
11:47	ZZZZZZ	1		
11:55	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:19	ZZZZZZ	1		
12:26	ZZZZZZ	1		
12:34	ZZZZZZ	1		
12:42	ZZZZZZ	1		
12:50	ZZZZZZ	1		
12:58	ZZZZZZ	1		
13:06	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: 714050901.TXT Date Analyzed: 05/09/14 Methods: SW846 7199
Analyst: CW Run ID: GN4573
Parameters: Chromium, Hexavalent

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:14	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:30	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:54	GN4573-CCV3	1		
14:01	GN4573-CCB3	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JB66584
Account: PESNJP - Parsons Engineering Science
Project: Fort Monmouth, Oceanport,Monmouth County,NJ

File ID: 714050901.TXT Date Analyzed: 05/09/14 Methods: SW846 7199
Run ID: GN4573 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN4573-CCV1	Chromium, Hexavalent	0.25	0.0050	0.0018	.25	100.0	90-110
GN4573-CCB1	Chromium, Hexavalent	0.0018 U	0.0050	0.0018			
GN4573-CCV2	Chromium, Hexavalent	0.24	0.0050	0.0018	.25	96.0	90-110
GN4573-CCB2	Chromium, Hexavalent	0.0018 U	0.0050	0.0018			
GN4573-CCV3	Chromium, Hexavalent	0.24	0.0050	0.0018	.25	96.0	90-110
GN4573-CCB3	Chromium, Hexavalent	0.0018 U	0.0050	0.0018			

(!) Outside of QC limits

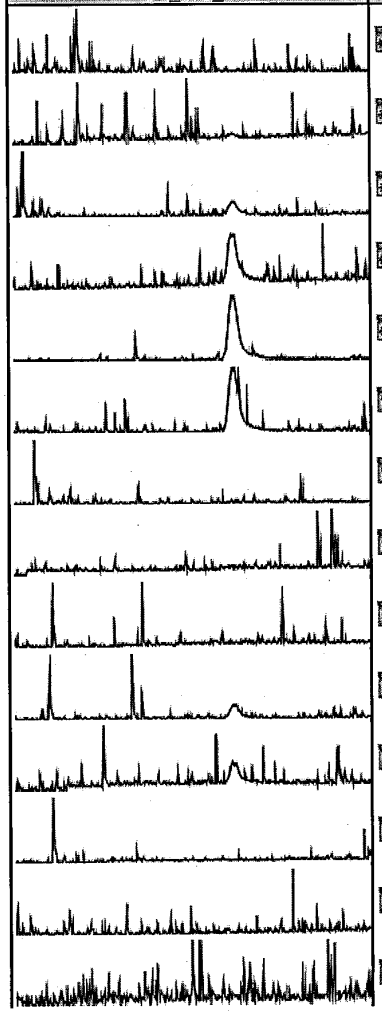
New Jersey
ACCUTEST LABORATORIES

General Chemistry

Raw Data

GN4573

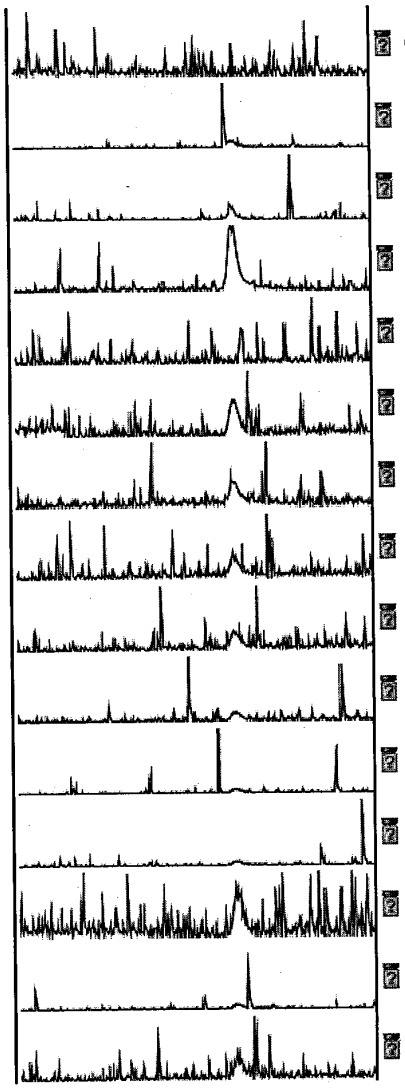
Sequence: 714050901
Last Update Operator: chemistry

UV_VIS_1	Name	Type	Level	Positio	Instrument	Processing Method	Status	Inject Time	Dilution
	STDA	Calibration Sta	01	2	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 8:55:05 AM	1.0000
	STDB	Calibration Sta	02	3	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:02:59 AM	1.0000
	STDC	Calibration Sta	03	4	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:10:54 AM	1.0000
	STDD	Calibration Sta	04	5	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:18:49 AM	1.0000
	STDE	Calibration Sta	05	6	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:26:44 AM	1.0000
	CCV	Unknown		7	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:34:38 AM	1.0000
	CCB	Unknown		8	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:42:32 AM	1.0000
	GP79977-MB1	Unknown		9	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:50:27 AM	1.0000
	GP79977-MB1	Unknown		10	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 9:58:21 AM	1.0000
	GP79977-B1	Unknown		11	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 10:06:16 AM	1.0000
	GP79977-B1	Unknown		12	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 10:14:11 AM	1.0000
	JB66584-1	Unknown		13	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 10:22:05 AM	1.0000
	JB66584-1	Unknown		14	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 10:30:00 AM	1.0000
	GP79977-D1	Unknown		15	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 10:37:54 AM	1.0000

5/13

GN4573

Sequence: 714050901
Last Update Operator: chemistry



GP79977-D1	Unknown	16	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 10:45:49 AM	1.0000
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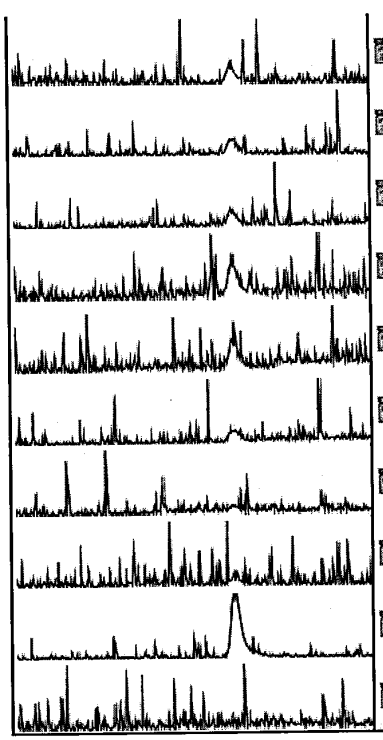
GP79977-S1CC	Unknown	18	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:01:38 AM	1.0000
CCV	Unknown	19	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:09:32 AM	1.0000
CCB	Unknown	20	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:17:26 AM	1.0000
GP79977-S1	Unknown	17	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:31:48 AM	1.0000
GP79977-S1	Unknown	18	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:39:29 AM	1.0000
JB56759-1	Unknown	21	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:47:25 AM	1.0000
JB56759-1	Unknown	22	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 11:55:20 AM	1.0000
JB56759-1	Unknown	23	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:03:15 PM	1.0000
JB56759-1	Unknown	24	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:11:09 PM	1.0000
JB56759-1	Unknown	25	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:19:04 PM	1.0000
JB56759-1	Unknown	26	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:26:58 PM	1.0000
JB56759-1	Unknown	27	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:34:53 PM	1.0000
JB56759-1	Unknown	28	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:42:48 PM	1.0000

Chromeleon 7,
Version 7.1.2.1478, Dionex Corporation

Printed by chemistry
09/05/14 17:41

GN4573

Sequence: 714050901
Last Update Operator: chemistry



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JB56759-1	Unknown	30	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 12:58:38 PM	1.0000
JB56759-1	Unknown	31	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:06:32 PM	1.0000
JB56759-1	Unknown	32	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:14:27 PM	1.0000
JB56759-1	Unknown	33	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:22:22 PM	1.0000
JB56759-1	Unknown	34	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:30:16 PM	1.0000
JB56759-2	Unknown	35	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:38:11 PM	1.0000
JB56759-2	Unknown	36	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:46:06 PM	1.0000
CCV	Unknown	37	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 1:54:00 PM	1.0000
CCB	Unknown	38	ChromeVI	Sushil ProcMethod	Finished	5/9/2014 2:01:54 PM	1.0000

Chromeleon 7,
Version 7.1.2.1478, Dionex Corporation

Printed by chemistry
09/05/14 17:41

ACCUTEST

Hexavalent Chromium pH Adjustment Log

Method: SW846 7199 Matrix: AQ

pH adj. start time: 8:40
pH adj. end time: 8:47

Autopipette ID: N/A
pH ID: 55
pH Adjust. Date: 5/9/14
GN Batch ID: GN4573

Bottle #	GP 79977 Sample ID	Initial Sample Volume (ml)	Final Volume (ml)	pH after buffer	Spike info	Comments
	CCV		100	9.04	2.50ml	of 10ppm Ultra
	CCV					
	CCV					
	CCV					
	CCB		100	9.05		
	CCB					
	CCB					
	CCB					
S1	MS JB66584-1	50	55	9.14	0.25ml	of 10ppm Absolute
D1	DUP ↓	50	55	9.12		
B1	SB	50	55	9.03	0.25ml	of 10ppm Absolute
MB1	PB	50	55	9.10		
	1. JB66584-1	↓	↓	9.12		
	2. JB56759-1	5	50	9.07	1.5-ml	of 1 ppm abs
	3. ↓ -2	—	50	9.07	0.5ml	of 1 ppm abs
	4.					
	5.					
	6.					
	7.					
	8.					
	9.					
	10.					
	11.					
	12.					
	13.					
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	PS					
	DIL					
	DIL					

Reagent Information: See attached.

Analyst: CKW Date: 5/9/14

Form: GN-206
Rev. Date: 9/19/07

ACCUTEST LABORATORIES

MDL Schedule Log

Product: XQR 7799

Matrix: Aq

Instrument: Icp

Sample #: JB56759-1 (MDL) or MDLVER x 7

Concentration: ppb (ug/L) ~~mg/L~~ or mg/kg or

Prep: 0.003 mg/L

1.5mL of 1ppm abschatC to 50mL Dilution H2O

Sample #: JB56759-2 MDL or (MDLVER) x 1

Concentration: ppb (ug/L) ~~mg/L~~ or mg/kg or

Prep: 0.001 mg/L

0.5mL of 1ppm abschatC to 50mL Dilution H2O

Date: 5/9/2014

Analyst: CKW

Batch #: GP79977

Form: GN278-02 Revised: 10/16/12

ACCUTEST

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: XCP7199-AQ

GN or GP Number: GN4573

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume or weight used with units	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
10.0 mg/L Absolute	Absolute 122012	1000 mg/L	2.0 mL	A	Dilution	200 mL	10.0 mg/L	12/20/2015	CKW	5/9/14
1.0 mg/ L Absolute	10.0 mg/L Absolute	10 mg/L	20 mL	A	Water	200 mL	1.0 mg/L	12/2/2015		
10.0 mg/L Ultra	Ultra L00439	1000 mg/L	2.0 mL	A	Dilution	200 mL	10.0 mg/L	7/31/2015		
					Water					

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
0.005 mgL	1.0 mg/ L Absolute	1.0 mg/L	0.50 mL	A	Dilution	100 mL	0.005 mgL	5/9/14	CKW	5/9/14
0.05 mg/L	1.0 mg/ L Absolute	1.0 mg/L	5.00 mL	A	Water	100 mL	0.05 mg/L			
0.100 mg/l	10.0 mg/L Absolute	10.0 mg/L	1.00 mL	A		100 mL	0.100 mg/l			
0.500 mg/L	10.0 mg/L Absolute	10.0 mg/L	5.00 mL	A		100 mL	0.500 mg/L			
0.250 mg/L - CCV	10 mg/L Ultra	10.0 mg/L	2.50 mL	A	Dilution	100 mL	0.250 mg/L	5/9/14	CKW	5/9/14
					Water					

* If Class A glass pipets are used, enter an A. For balances or autopipets, then enter the appropriate Accutest ID number.

All Standards prepared with dilution water pHed between 9 and 9.5 - No further pH adjustment necessary

Form: GN121-01
Rev. Date: 1/13/09

ACCUTEST.

Reagent Information Log - XCR - 7199 AQ

Reagent	EXP	Reagent # or Manufacturer/Lot
Calibration Source: Hexavalent Chromium, 1000 mg/L Stock	3/25/2016	Absolute Grade LOT 032513
Calibration Checks: Hexavalent Chromium, 1000 mg/L Stock	10/31/2019	ULTRA LOT P00986
Spiking Solution Source	3/25/2016	Absolute Grade LOT 032513
Post-column reagent	5/10/14	GNE5-40261-10XCR
Eluent	11/8/14	GNE5-40305-10XCR
Buffer Solution	10/28/14	GNE4-40185-10XCR
Dilution water	10/28/14	GNE4-40188-10XCR
Filter		130927033

All standards and stocks were made as described in the SOP for this method (circle one): (Y) or (N)
If no (N), see attached page for standards prep.

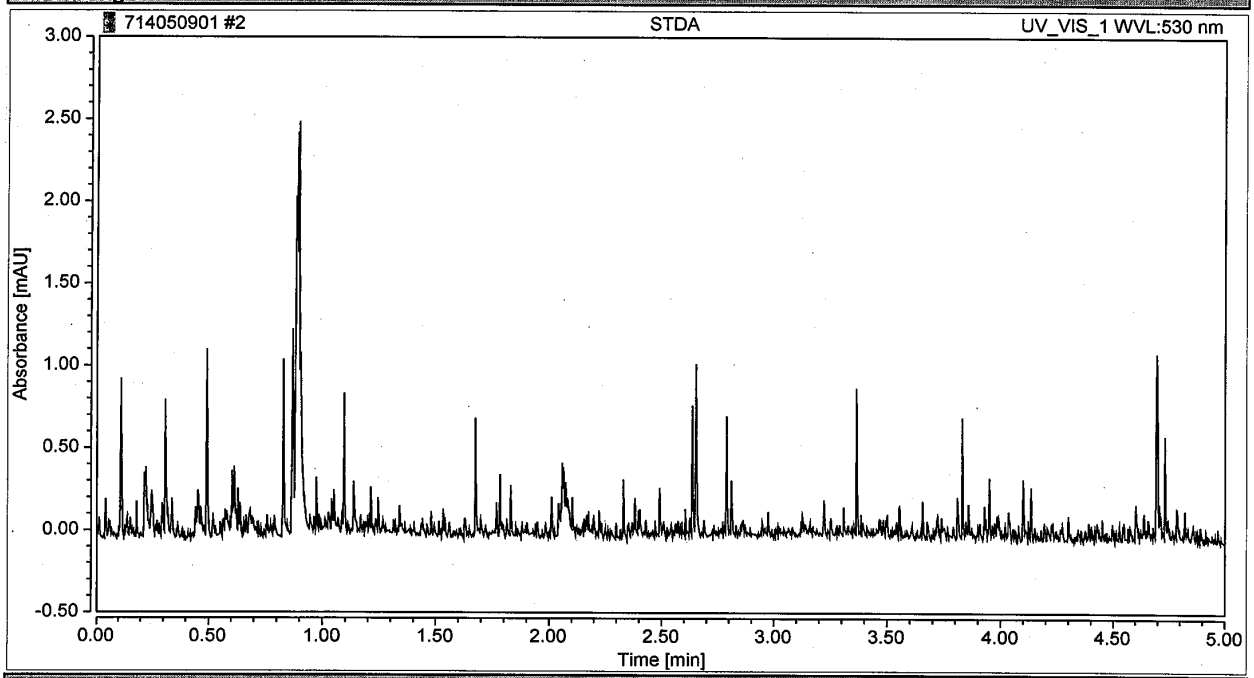
Form: GN087A-78
Rev. Date: 09/19/07

Chromatogram and Results

Injection Details

Injection Name:	**STDA**	*Run Time (min):*	**5.00**
Vial Number:	**2**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**01**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 08:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**	

Default/Integration

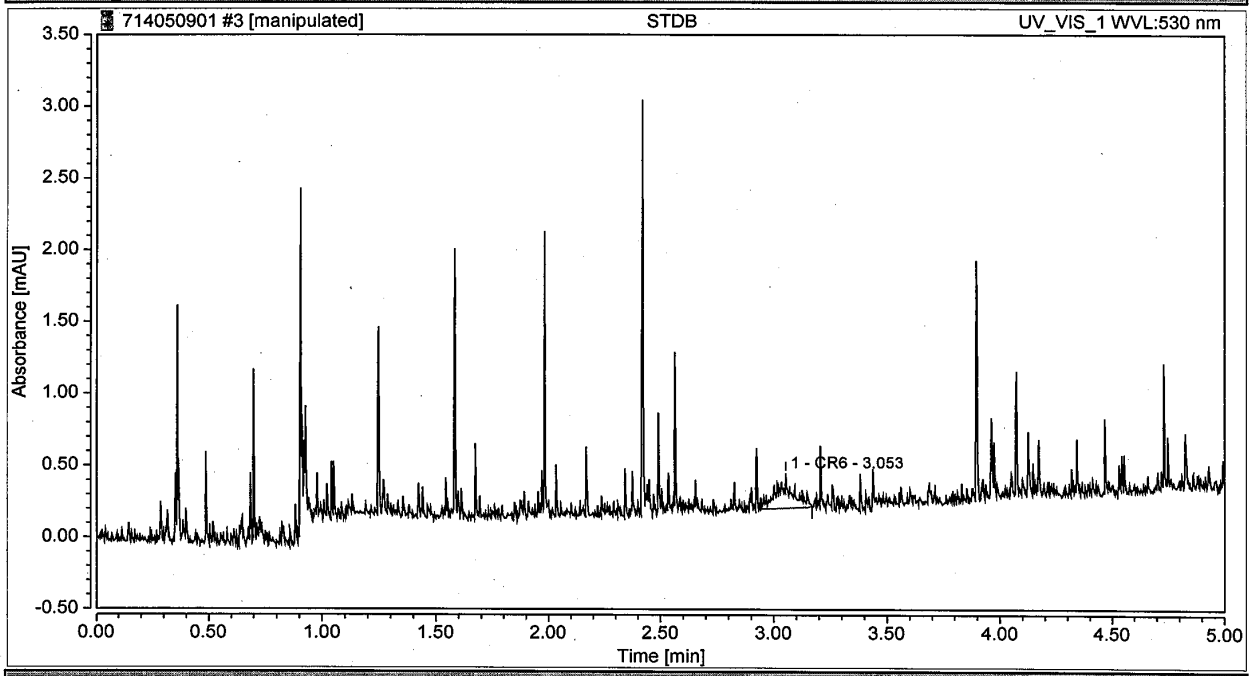
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDB**	*Run Time (min):*	**5.00**
Vial Number:	**3**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**02**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.053	0.018	0.241	100.00	100.00	0.00539
Total:			**0.018**	**0.241**	**100.00**	**100.00**	

MP NP 5/9/14

Default/Integration

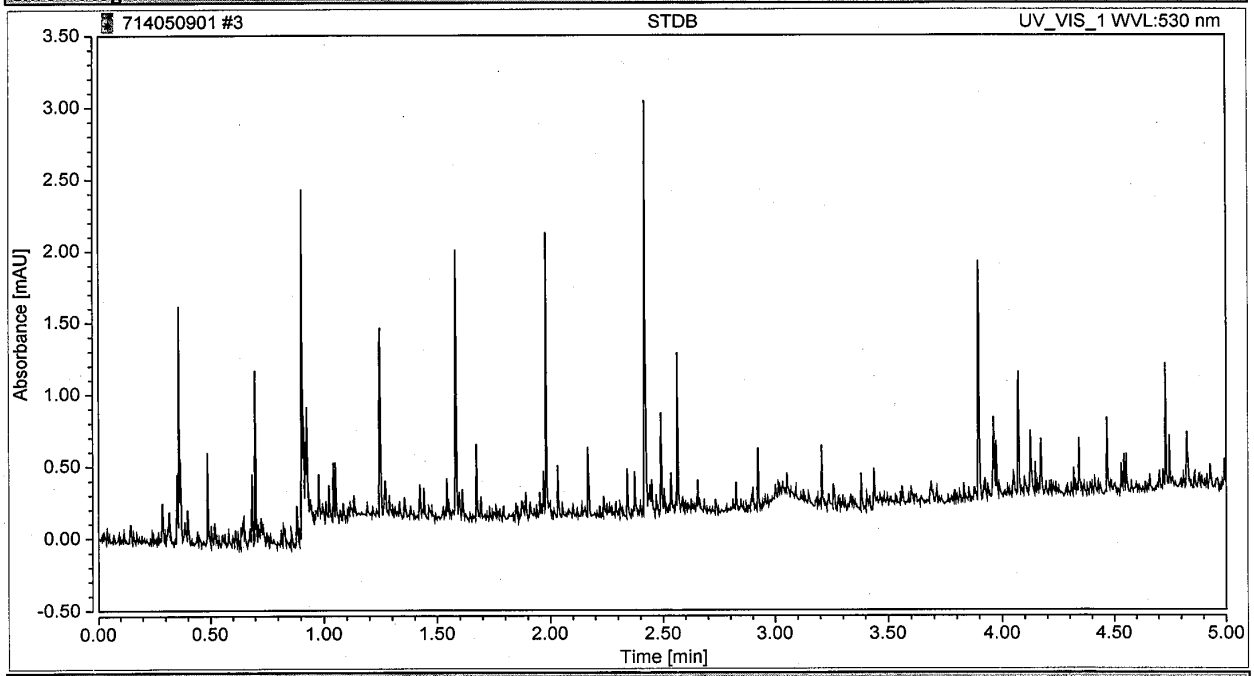
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDB**	*Run Time (min):*	**5.00**
Vial Number:	**3**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**02**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**	

Default/Integration

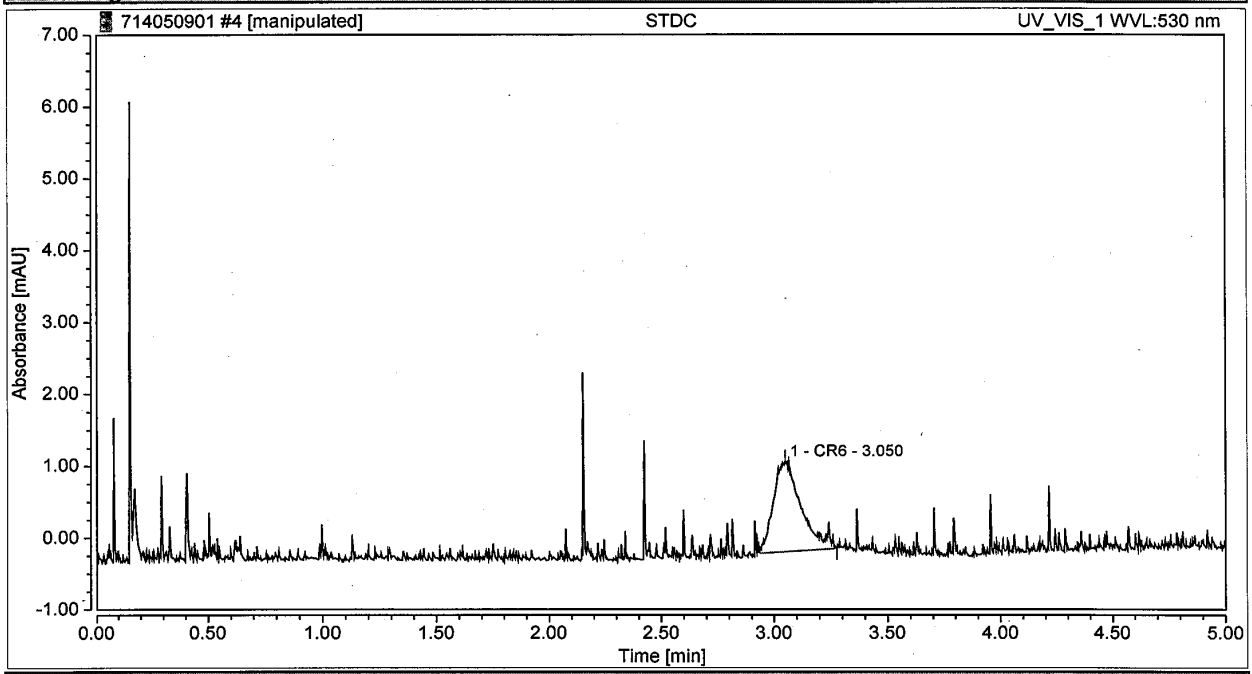
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDC**	*Run Time (min):*	**5.00**
Vial Number:	**4**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**03**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.050	0.177	1.256	100.00	100.00	0.04834
Total:			**0.177**	**1.256**	**100.00**	**100.00**	

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Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

11.1 11

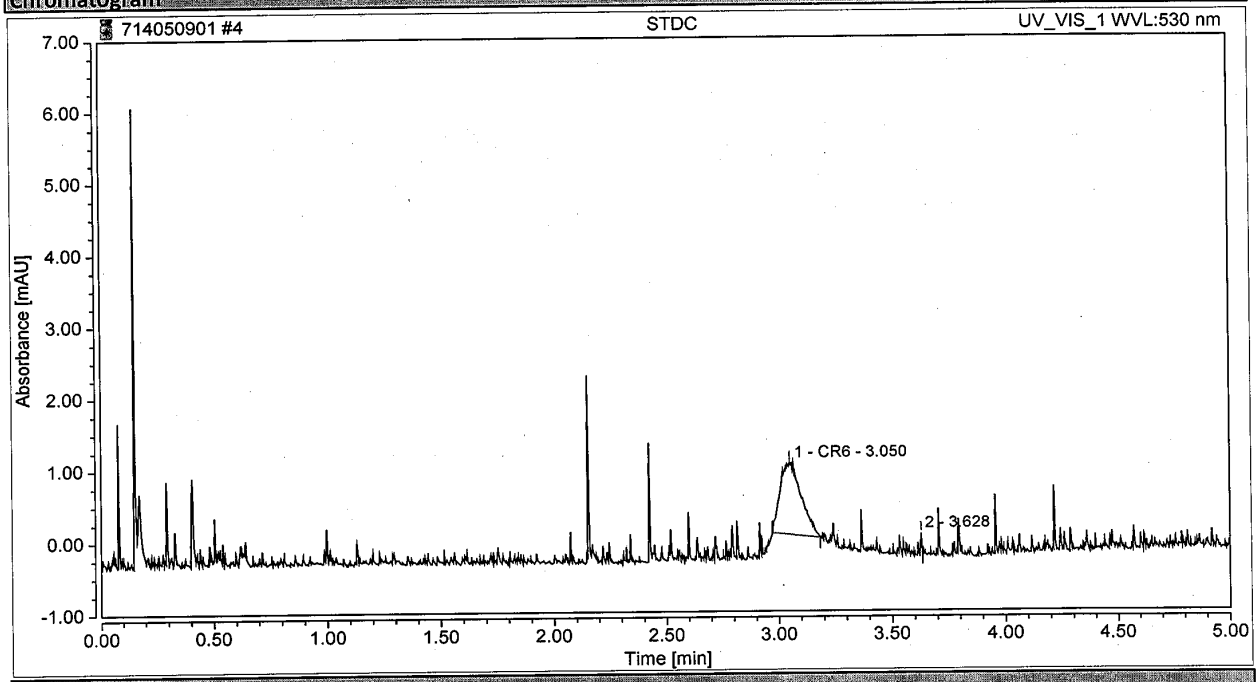
Instrument:ICS5000_2 Sequence:714050901

Chromatogram and Results

Injection Details

Injection Name:	**STDC**	*Run Time (min):*	**5.00**
Vial Number:	**4**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**03**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.050	0.106	0.993	98.89	79.11	0.05000
2		3.628	0.001	0.262	1.11	20.89	n.a.
Total:			**0.107**	**1.256**	**100.00**	**100.00**	

Default/Integration

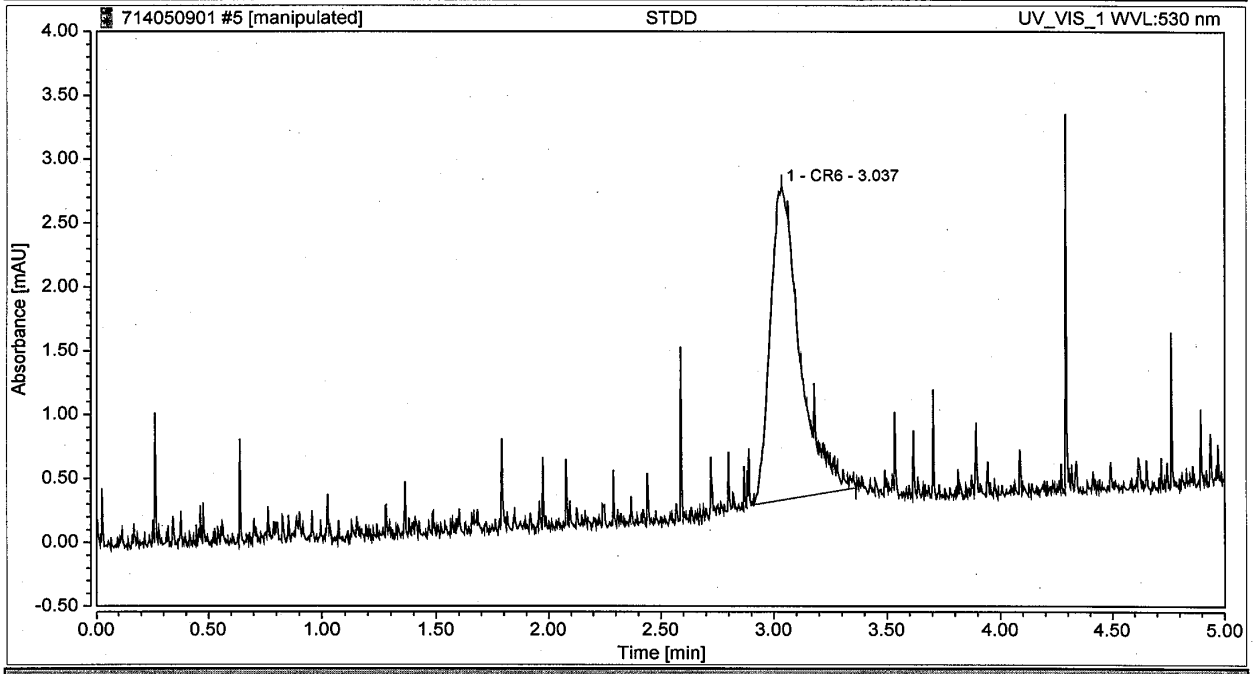
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDD**	*Run Time (min):*	**5.00**
Vial Number:	**5**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**04**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.037	0.373	2.455	100.00	100.00	0.10138
Total:			**0.373**	**2.455**	**100.00**	**100.00**	

PH NP 5/9/14

11.1 11

Default/Integration

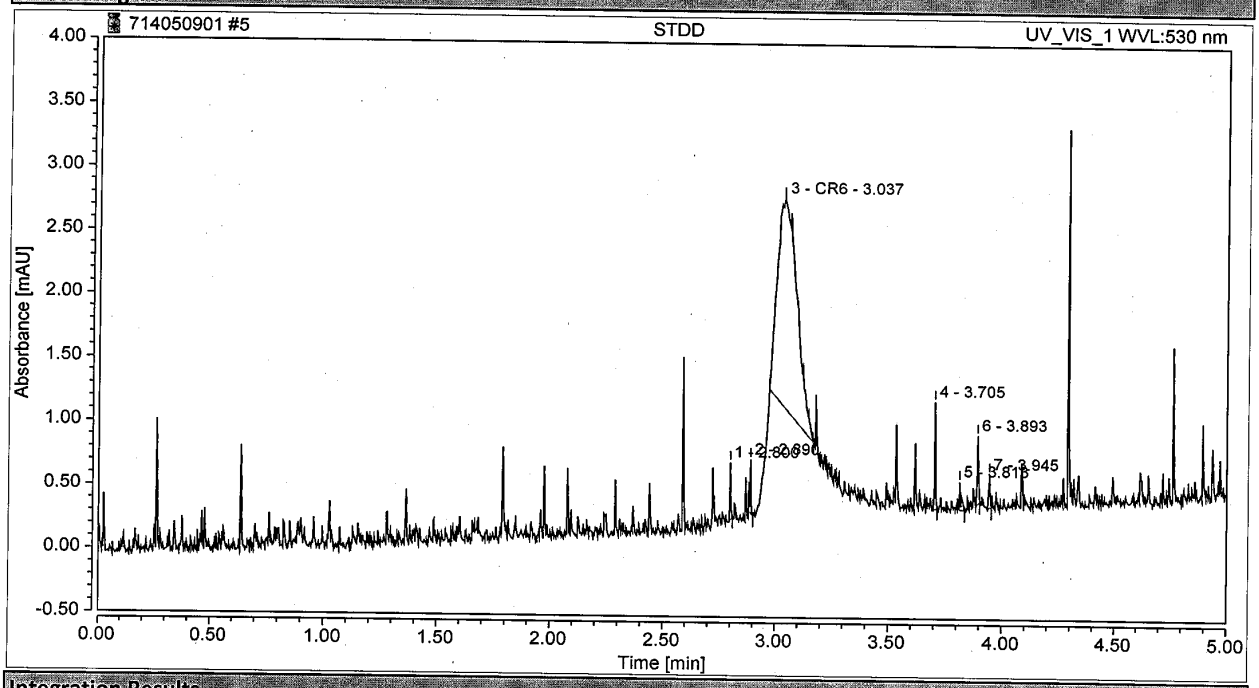
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDD**	*Run Time (min):*	**5.00**
Vial Number:	**5**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**04**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.800	0.001	0.448	0.78	10.26	n.a.
2		2.890	0.002	0.422	1.25	9.66	n.a.
3	CR6	3.037	0.167	1.641	92.07	37.58	0.08189
4		3.705	0.003	0.839	1.93	19.21	n.a.
5		3.813	0.002	0.217	1.09	4.96	n.a.
6		3.893	0.004	0.540	2.19	12.37	n.a.
7		3.945	0.001	0.261	0.69	5.97	n.a.
Total:			**0.181**	**4.368**	**100.00**	**100.00**	

Default/Integration

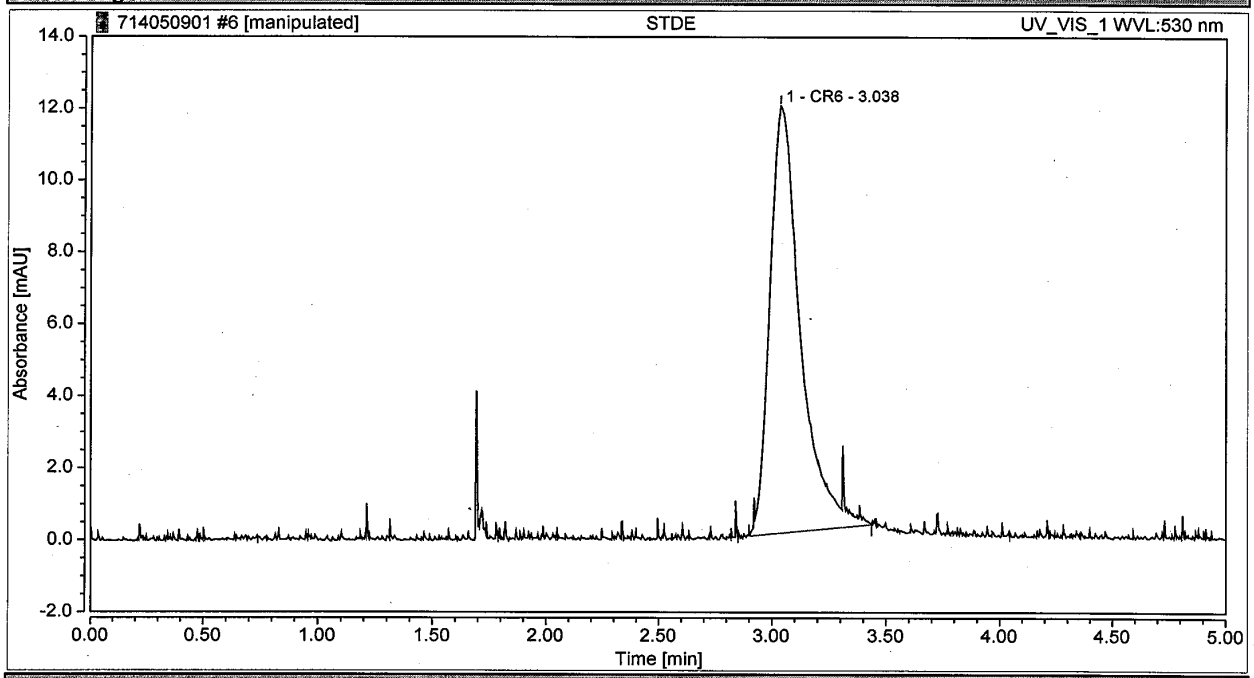
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDE**	*Run Time (min):*	**5.00**
Vial Number:	**6**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**05**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.038	1.848	11.851	100.00	100.00	0.49989
Total:			**1.848**	**11.851**	**100.00**	**100.00**	

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Default/Integration

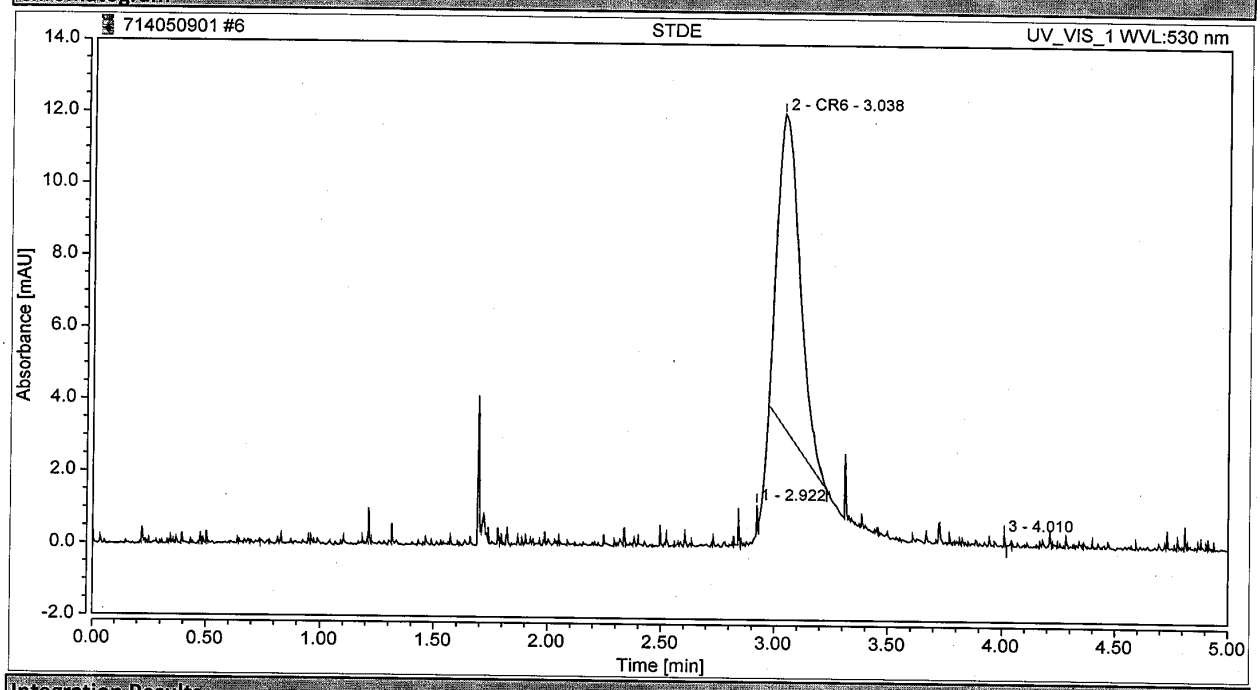
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**STDE**	*Run Time (min):*	**5.00**
Vial Number:	**6**	*Injection Volume:*	**5000.00**
Injection Type:	**Calibration Standard**	*Channel:*	**UV_VIS_1**
Calibration Level:	**05**	*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.922	0.003	0.749	0.26	7.70	n.a.
2	CR6	3.038	0.999	8.701	99.64	89.47	0.48984
3		4.010	0.001	0.275	0.10	2.83	n.a.
Total:			**1.003**	**9.726**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
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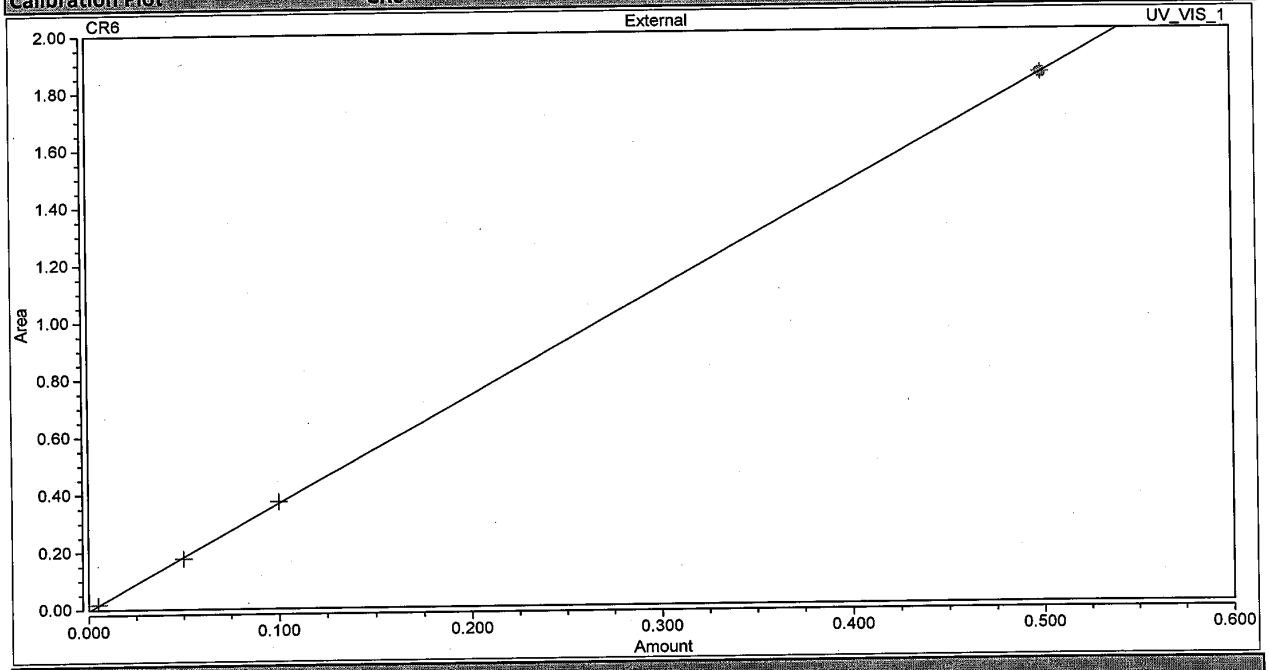
Calibration

Calibration Details	CR6		
Calibration Type	Lin, WithOffset	*Offset (C0)*	-0.0021
Evaluation Type	Area	*Slope (C1)*	3.7007
Number of Calibration Points	4	*Curve (C2)*	0.0000
Number of disabled Calibration Points	0	*R-Square*	1.0000

Calibration Plot CR6



Calibration Results CR6

No.	Injection Name	Calibration Level	X Value CR6 UV_VIS_1	Y Value CR6 UV_VIS_1	Y Value CR6 UV_VIS_1	Area mAU*min CR6 UV_VIS_1	Height mAU CR6 UV_VIS_1
2	STDA	01	0.0000	n.a.	n.a.	n.a.	n.a.
3	STDB	02	0.0050	0.0178	0.0178	0.018	0.241
4	STDC	03	0.0500	0.1768	0.1768	0.177	1.256
5	STDD	04	0.1000	0.3731	0.3731	0.373	2.455
6	STDE	05	0.5000	1.8478	1.8478	1.848	11.851

Default/Calibration

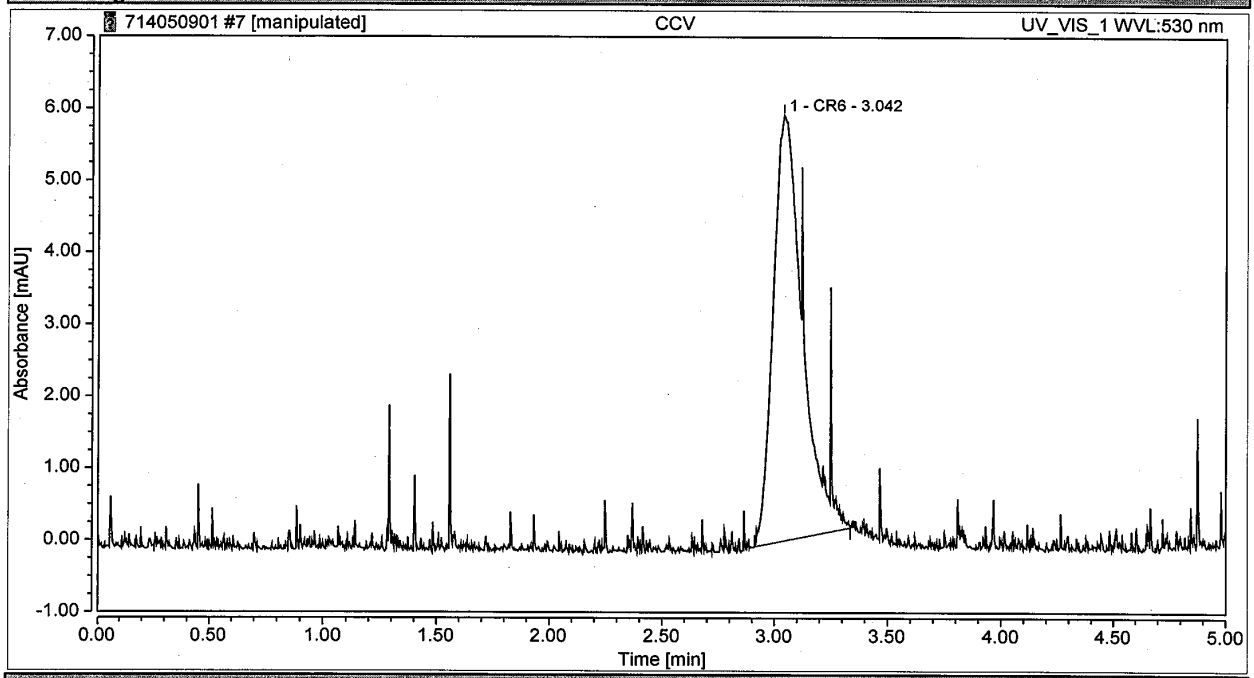
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**7**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.042	0.909	5.910	100.00	100.00	0.24627
Total:			**0.909**	**5.910**	**100.00**	**100.00**	

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Default/Integration

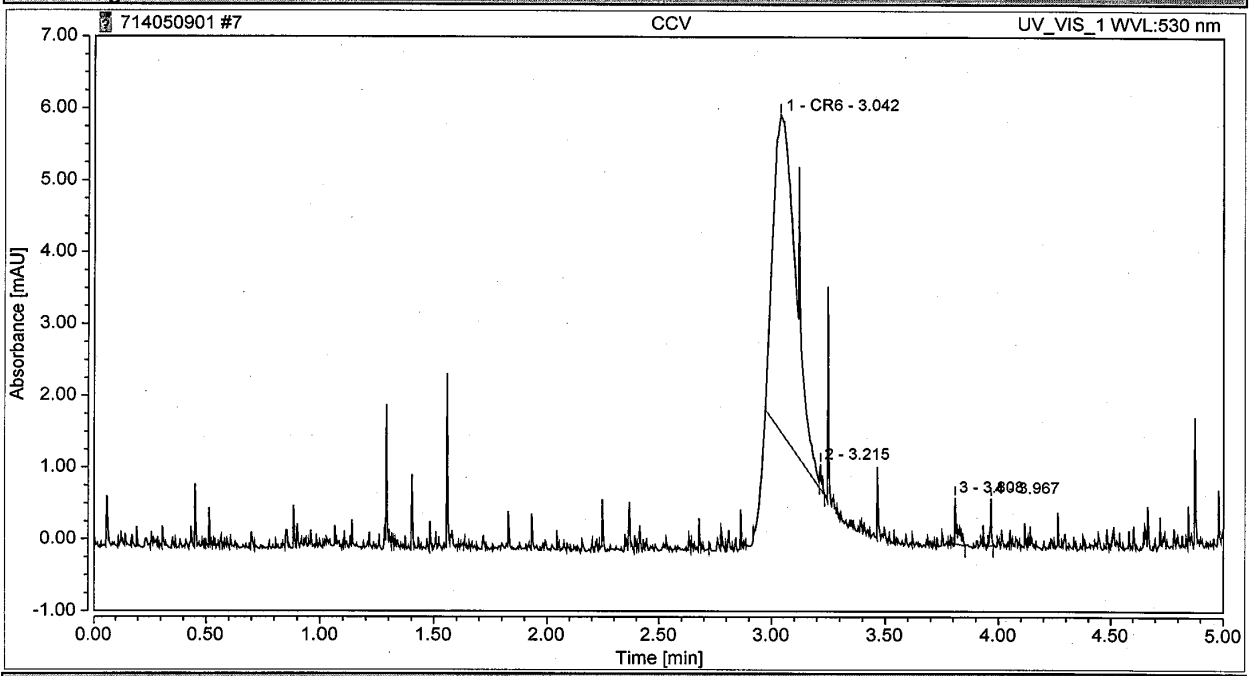
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**7**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.042	0.520	4.415	97.26	72.77	0.14096
2		3.215	0.003	0.347	0.53	5.71	n.a.
3		3.808	0.008	0.642	1.43	10.59	n.a.
4		3.967	0.004	0.663	0.77	10.92	n.a.
Total:			**0.534**	**6.067**	**100.00**	**100.00**	

Default/Integration

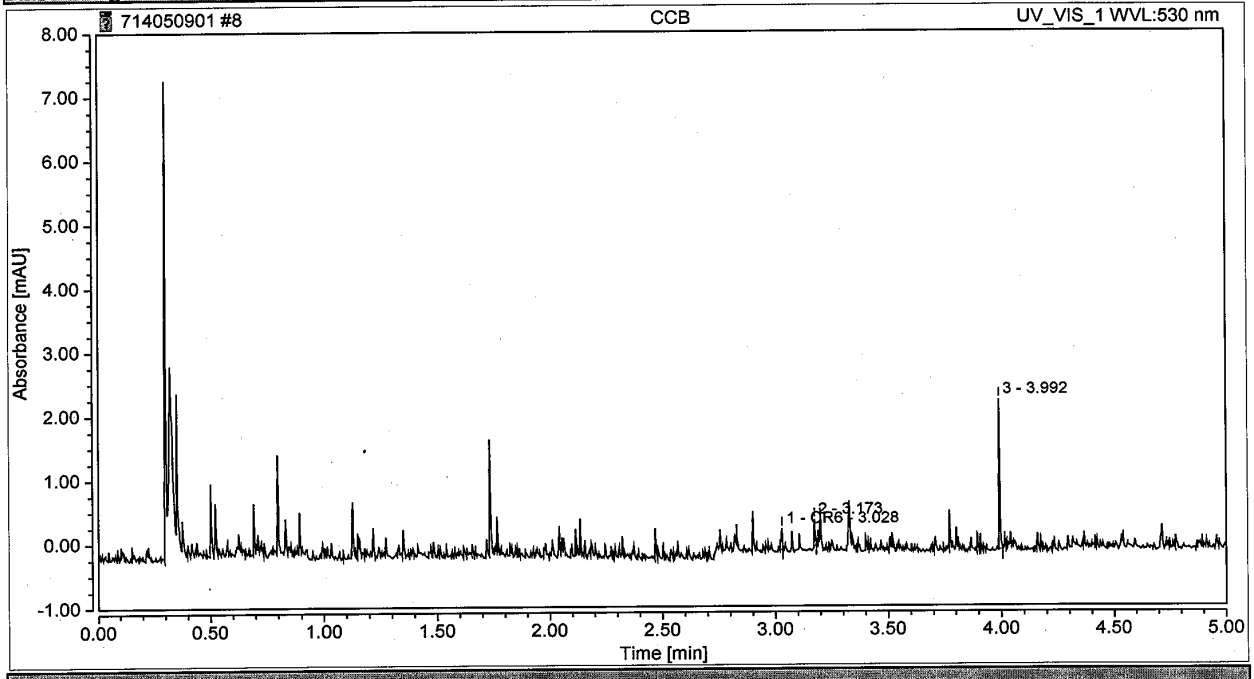
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**8**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.028	0.002	0.322	12.31	10.41	0.00108
2		3.173	0.002	0.427	13.70	13.78	n.a.
3		3.992	0.011	2.348	73.99	75.82	n.a.
Total:			**0.015**	**3.096**	**100.00**	**100.00**	

Default/Integration

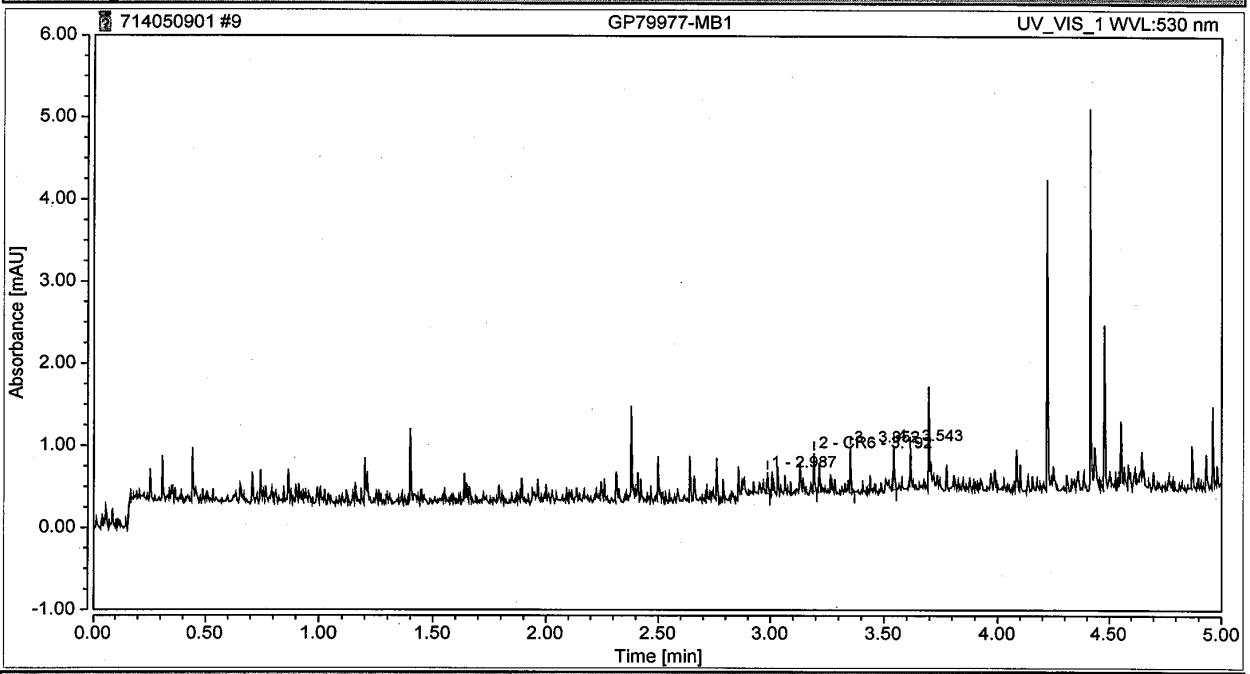
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-MB1**	*Run Time (min):*	**5.00**
Vial Number:	**9**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.987	0.001	0.253	16.29	14.07	n.a.
2	CR6	3.192	0.002	0.467	22.87	25.95	0.00110
3		3.352	0.003	0.554	29.71	30.79	n.a.
4		3.543	0.003	0.525	31.13	29.19	n.a.
Total:			**0.009**	**1.799**	**100.00**	**100.00**	

Default/Integration

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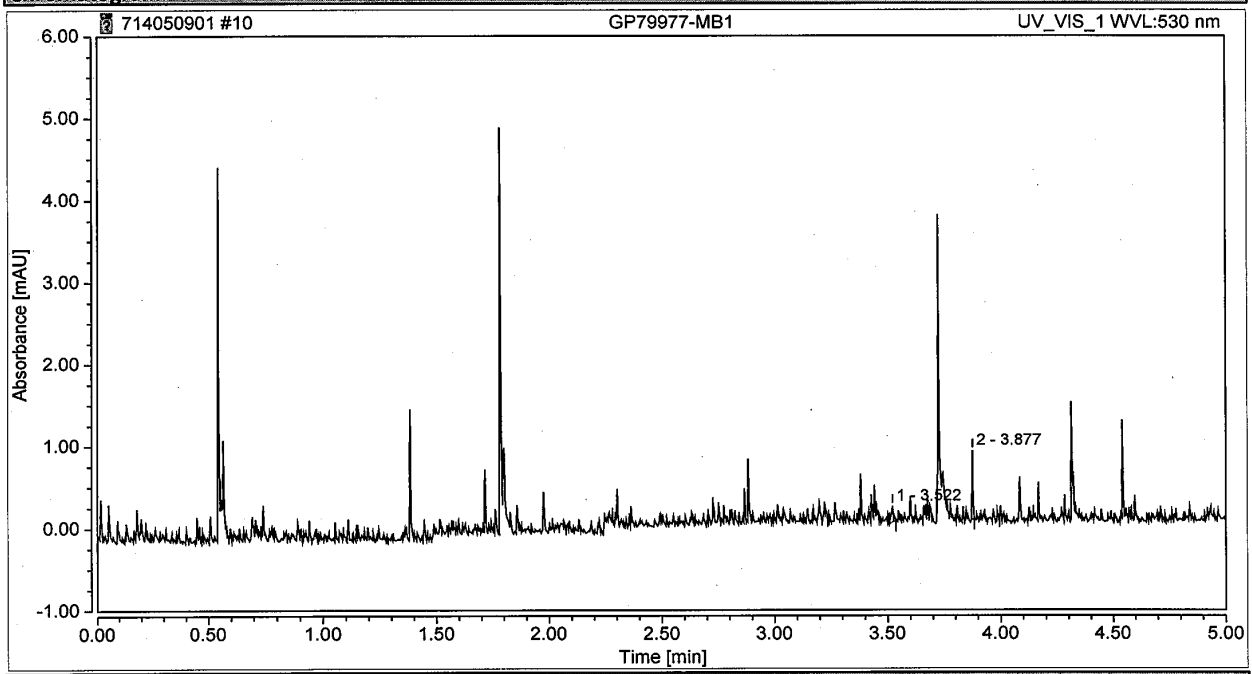
Chromatogram and Results

Injection Details

Injection Name:	**GP79977-MB1**	*Run Time (min):*	**5.00**
Vial Number:	**10**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 09:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.522	0.002	0.196	38.43	18.90	n.a.
2		3.877	0.003	0.839	61.57	81.10	n.a.
Total:			**0.005**	**1.035**	**100.00**	**100.00**	

Default/Integration

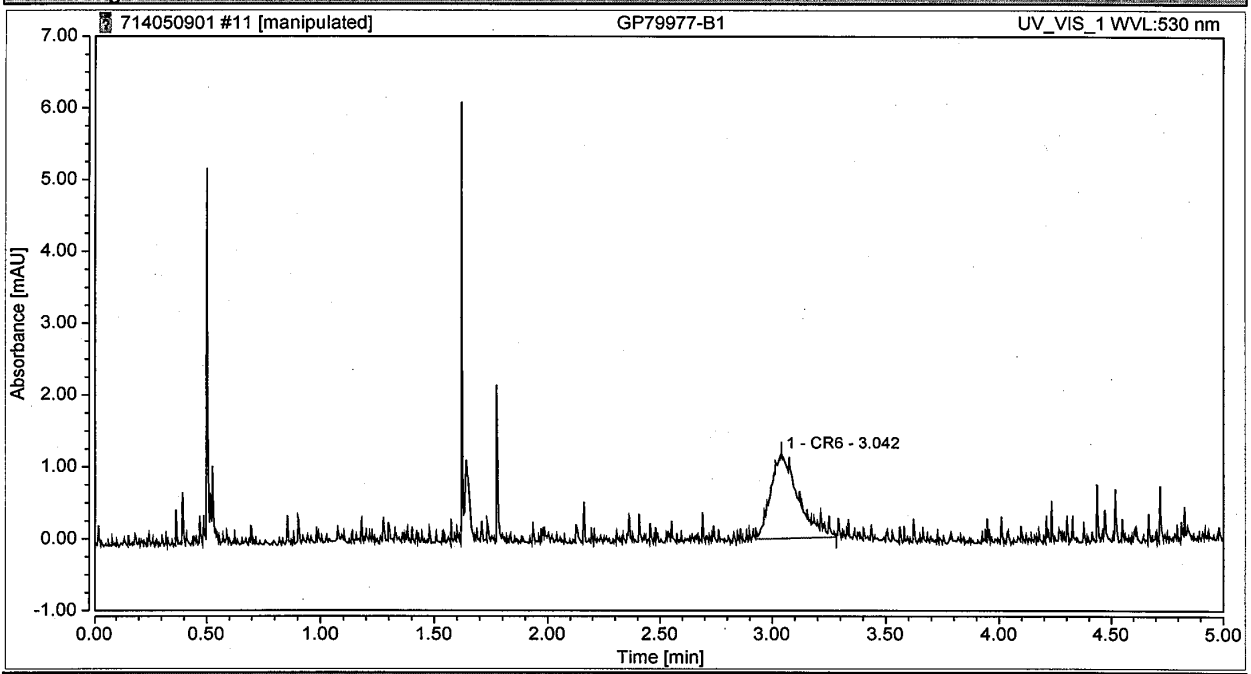
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-B1**	*Run Time (min):*	**5.00**
Vial Number:	**11**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.042	0.166	1.180	100.00	100.00	0.04533
Total:			**0.166**	**1.180**	**100.00**	**100.00**	

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Default/Integration

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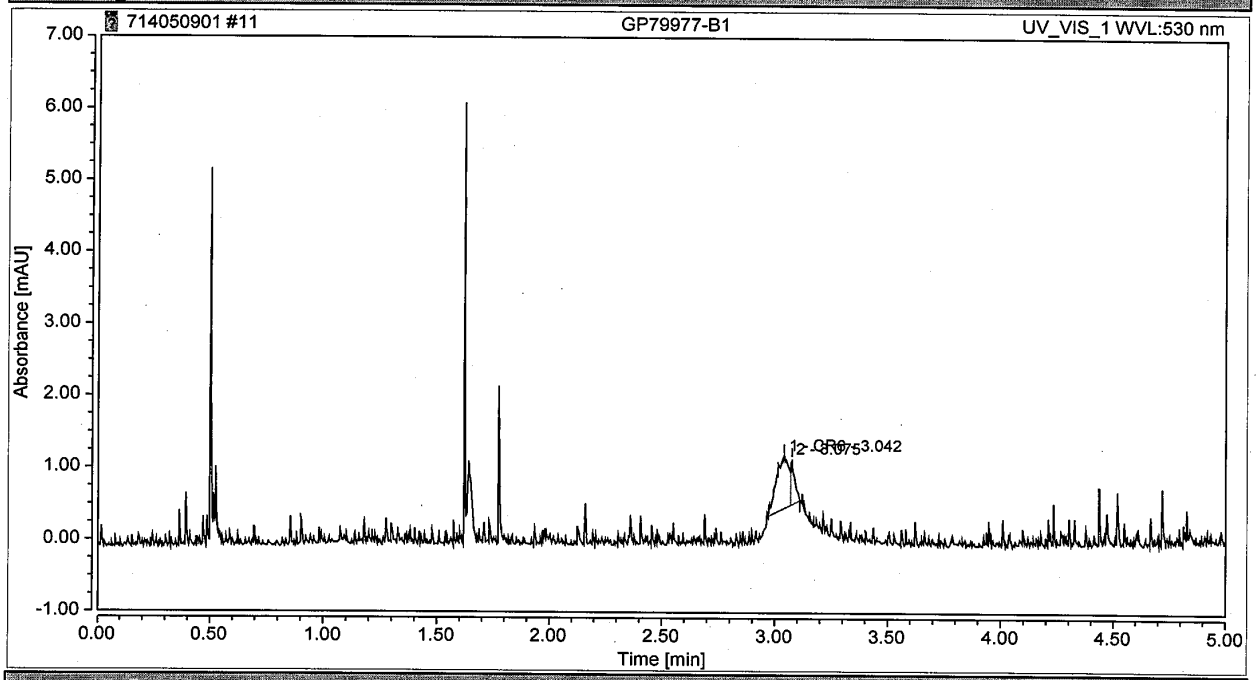
Chromatogram and Results

Injection Details

Injection Name:	**GP79977-B1**	*Run Time (min):*	**5.00**
Vial Number:	**11**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.042	0.046	0.727	80.33	53.71	0.01292
2		3.075	0.011	0.626	19.67	46.29	n.a.
Total:			**0.057**	**1.353**	**100.00**	**100.00**	

Default/Integration

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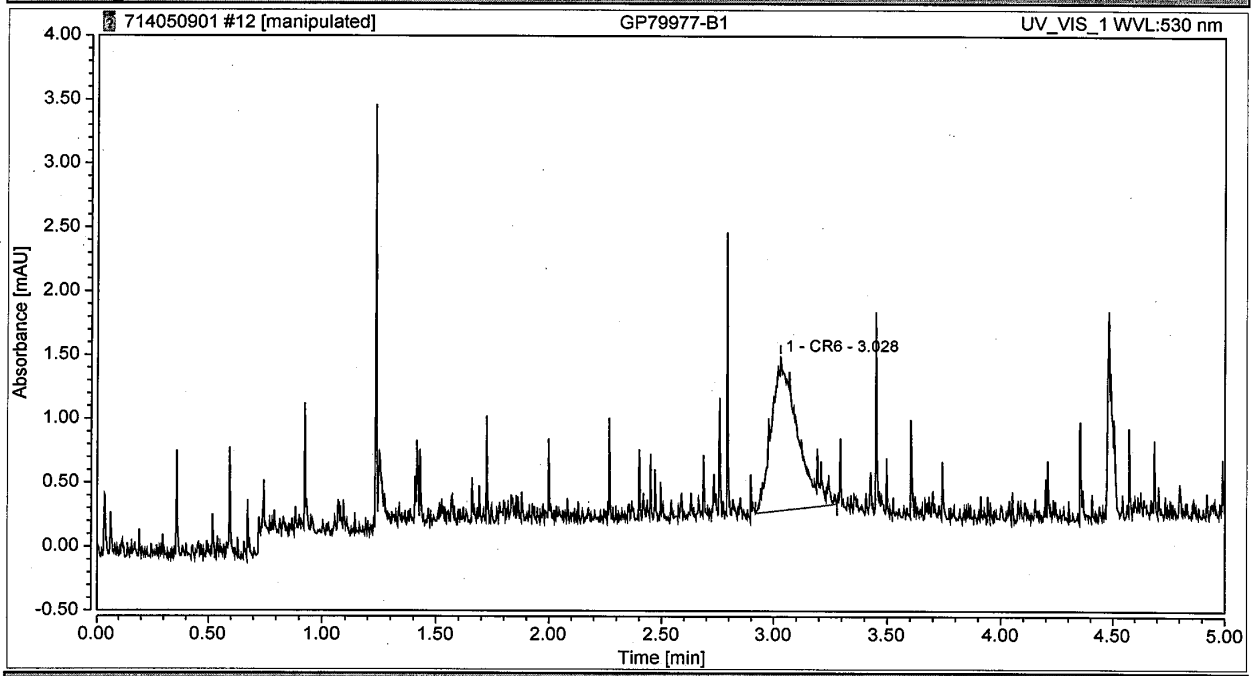
Chromatogram and Results

Injection Details

Injection Name:	**GP79977-B1**	*Run Time (min):*	**5.00**
Vial Number:	**12**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.028	0.162	1.206	100.00	100.00	0.04441
Total:			**0.162**	**1.206**	**100.00**	**100.00**	

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Default/Integration

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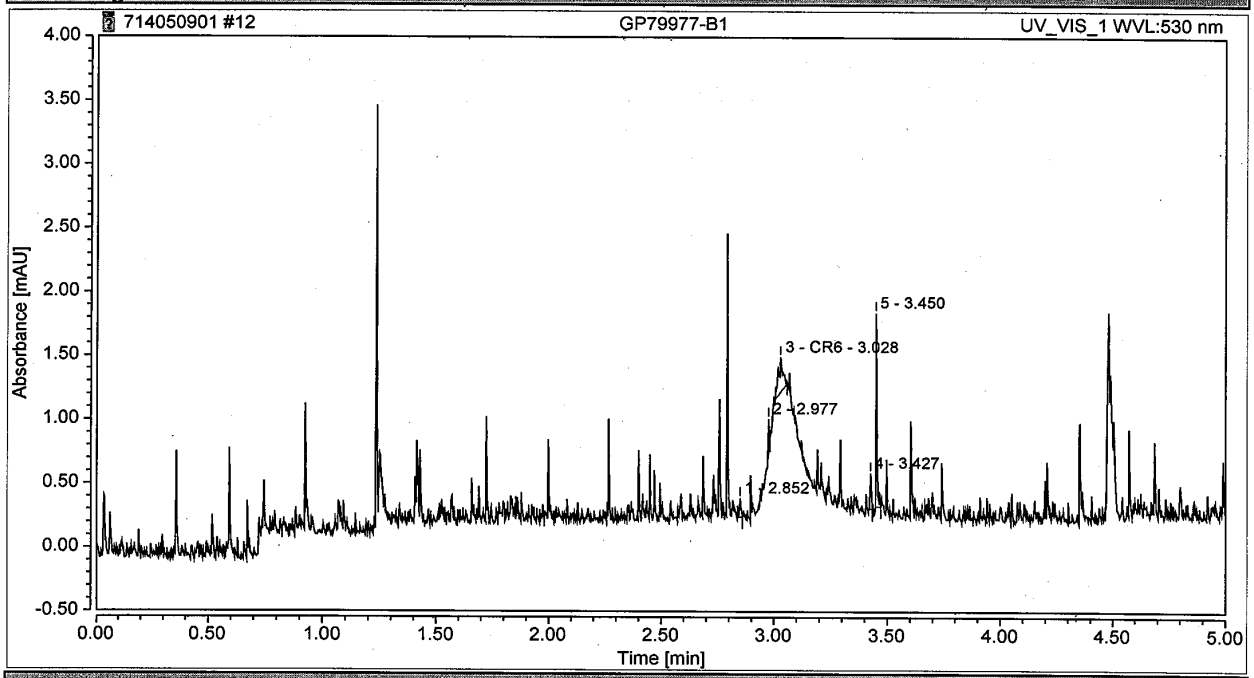
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-B1**	*Run Time (min):*	**5.00**
Vial Number:	**12**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.852	0.001	0.147	7.24	5.91	n.a.
2		2.977	0.001	0.271	6.36	10.90	n.a.
3	CR6	3.028	0.006	0.274	33.57	11.03	0.00212
4		3.427	0.001	0.279	8.40	11.20	n.a.
5		3.450	0.008	1.518	44.42	60.97	n.a.
Total:			**0.017**	**2.489**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
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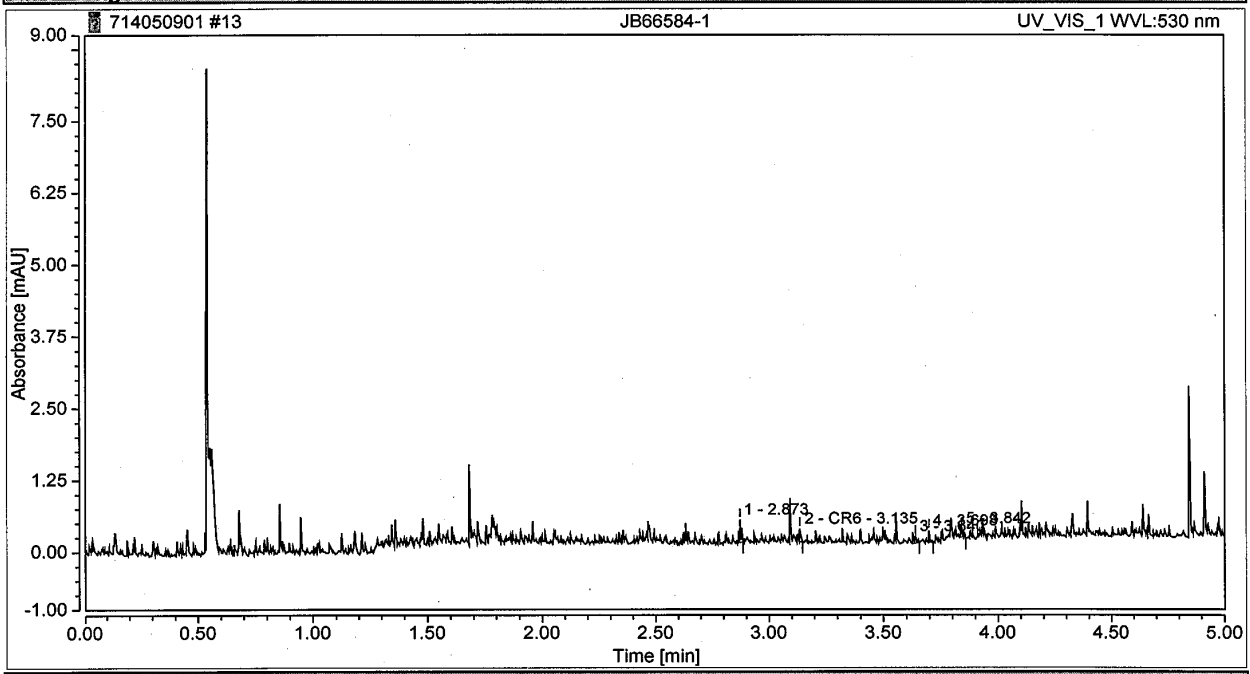
Chromatogram and Results

Injection Details

Injection Name:	**JB66584-1**	*Run Time (min):*	**5.00**
Vial Number:	**13**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.873	0.002	0.393	30.49	36.65	n.a.
2	CR6	3.135	0.001	0.219	16.79	20.43	0.00091
3		3.640	0.001	0.113	19.60	10.58	n.a.
4		3.698	0.001	0.204	15.46	19.00	n.a.
5		3.842	0.001	0.143	17.66	13.34	n.a.
Total:			**0.008**	**1.072**	**100.00**	**100.00**	

Default/Integration

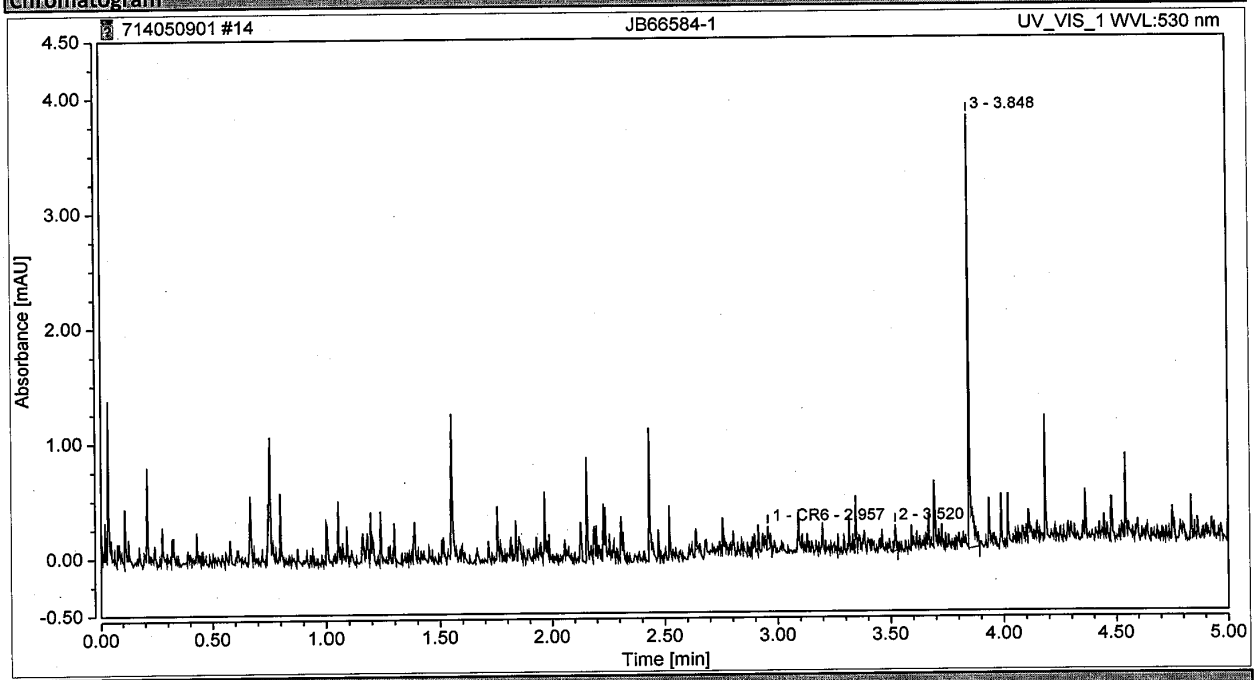
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB66584-1**	*Run Time (min):*	**5.00**
Vial Number:	**14**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	2.957	0.002	0.203	7.93	4.83	0.00112
2		3.520	0.002	0.225	6.31	5.35	n.a.
3		3.848	0.022	3.775	85.76	89.82	n.a.
Total:			**0.026**	**4.203**	**100.00**	**100.00**	

Default/Integration

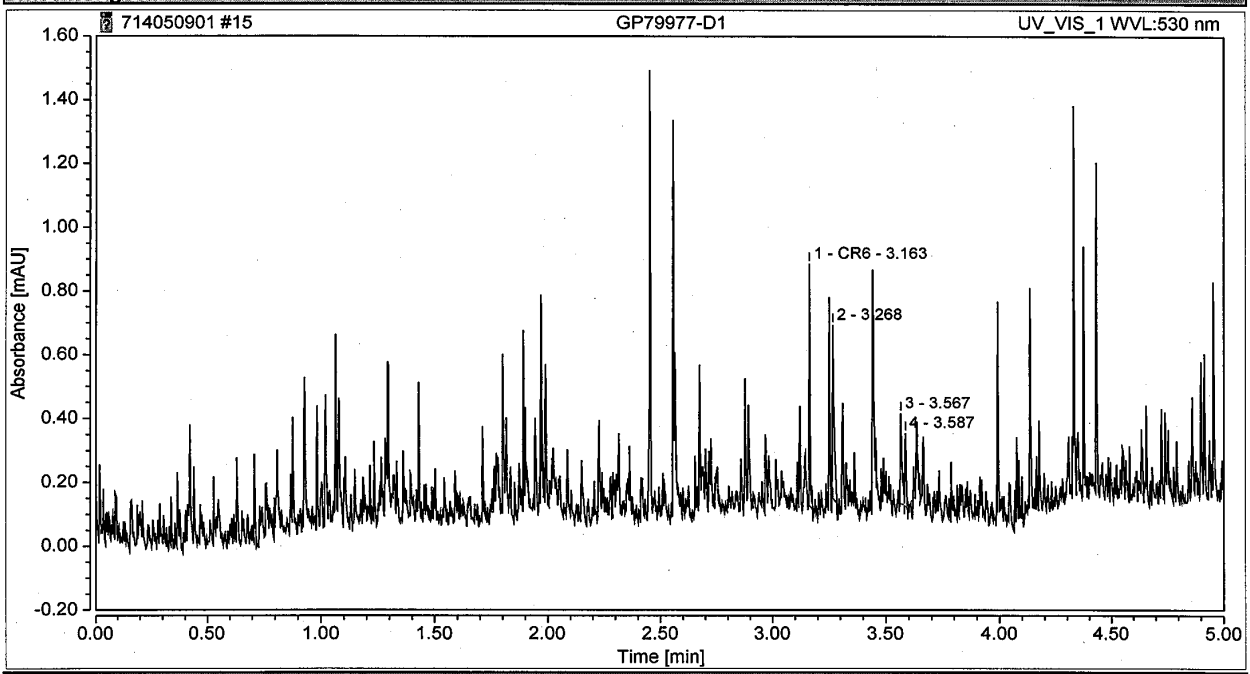
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-D1**	*Run Time (min):*	**5.00**
Vial Number:	**15**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.163	0.003	0.760	32.38	41.84	0.00147
2		3.268	0.003	0.545	32.40	30.03	n.a.
3		3.567	0.002	0.282	21.67	15.51	n.a.
4		3.587	0.001	0.229	13.55	12.63	n.a.
Total:			**0.010**	**1.816**	**100.00**	**100.00**	

Default/Integration

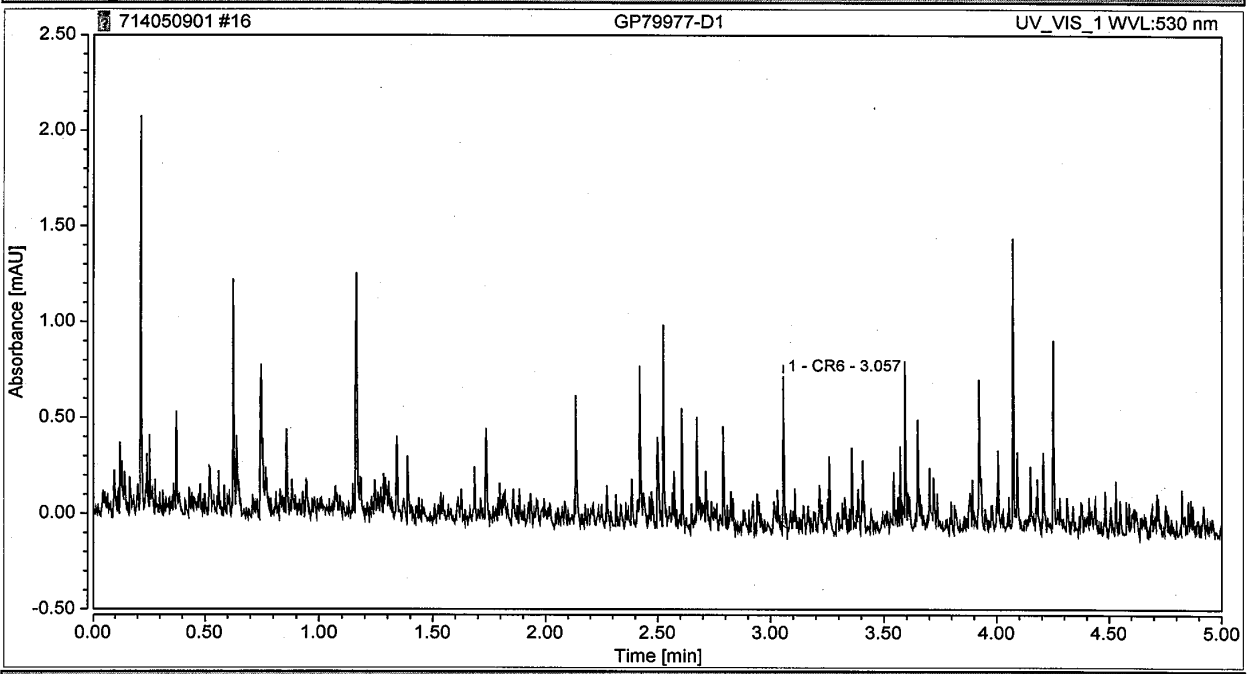
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-D1**	*Run Time (min):*	**5.00**
Vial Number:	**16**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.057	0.003	0.780	100.00	100.00	0.00145
Total:			**0.003**	**0.780**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
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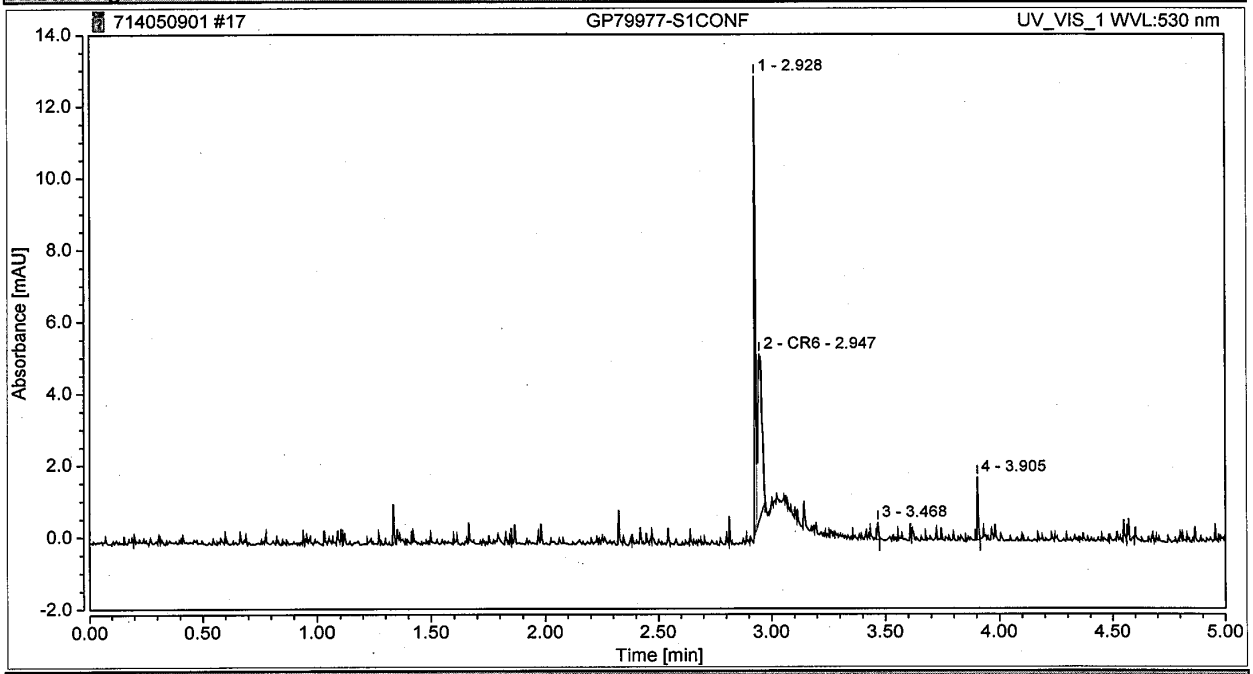
Chromatogram and Results

Injection Details

Injection Name:	**GP79977-S1CONF**	*Run Time (min):*	**5.00**
Vial Number:	**17**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 10:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.928	0.053	12.783	31.57	64.95	n.a.
2	CR6	2.947	0.104	4.666	61.86	23.71	0.02879
3		3.468	0.003	0.472	1.73	2.40	n.a.
4		3.905	0.008	1.761	4.84	8.95	n.a.
Total:			**0.169**	**19.683**	**100.00**	**100.00**	

Default/Integration

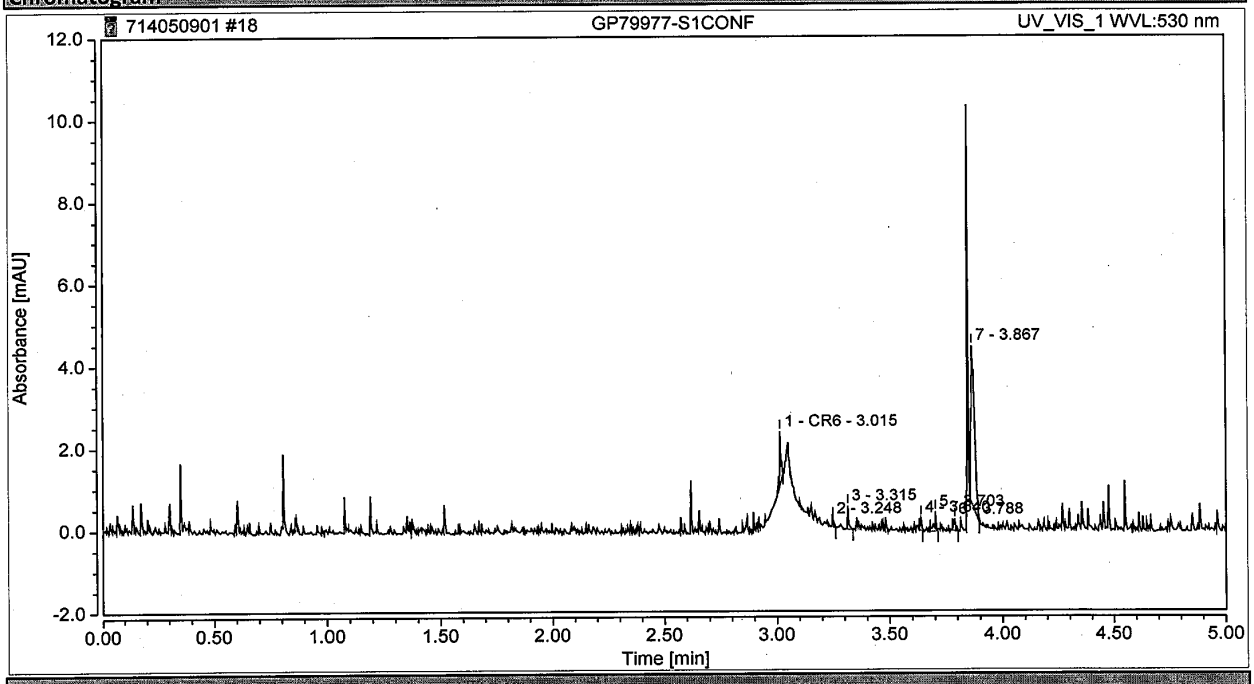
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-S1CONF**	*Run Time (min):*	**5.00**
Vial Number:	**18**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.015	0.008	1.334	8.88	19.08	0.00276
2		3.248	0.001	0.187	1.28	2.67	n.a.
3		3.315	0.003	0.558	3.36	7.98	n.a.
4		3.640	0.002	0.306	2.44	4.38	n.a.
5		3.703	0.004	0.468	3.89	6.70	n.a.
6		3.788	0.003	0.265	3.05	3.79	n.a.
7		3.867	0.070	3.872	77.10	55.39	n.a.
Total:			**0.091**	**6.990**	**100.00**	**100.00**	

Default/Integration

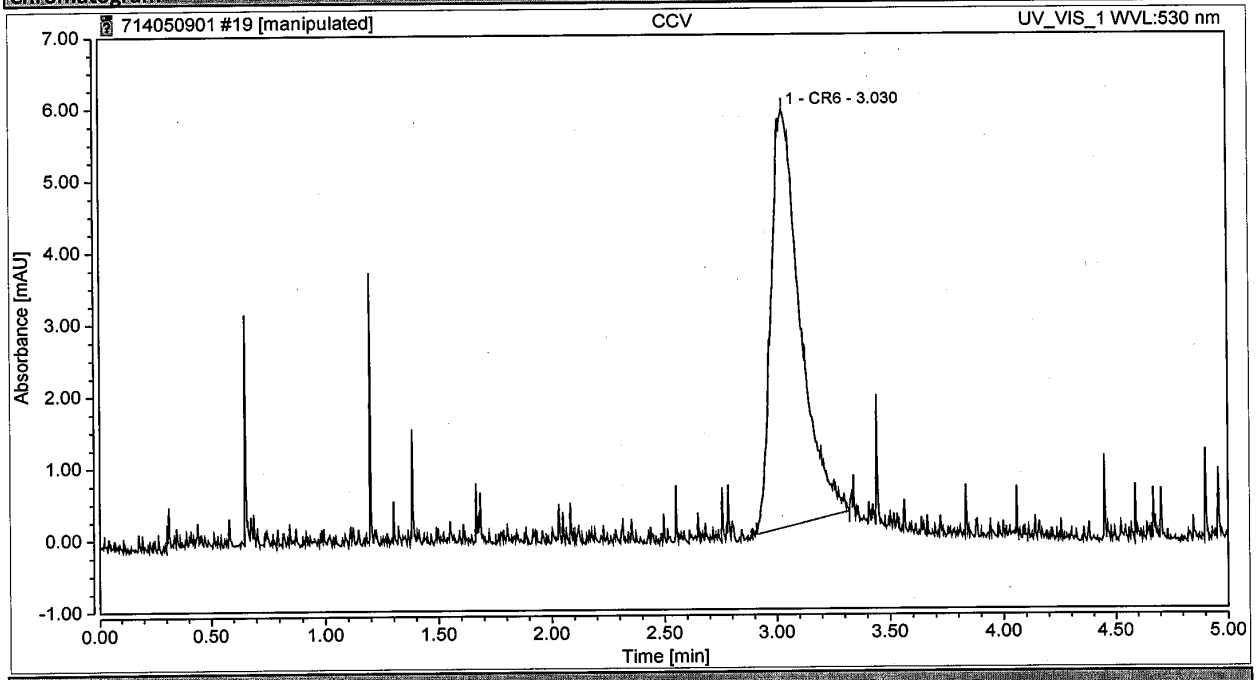
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**19**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.030	0.868	5.818	100.00	100.00	0.23499
Total:			**0.868**	**5.818**	**100.00**	**100.00**	

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Default/Integration

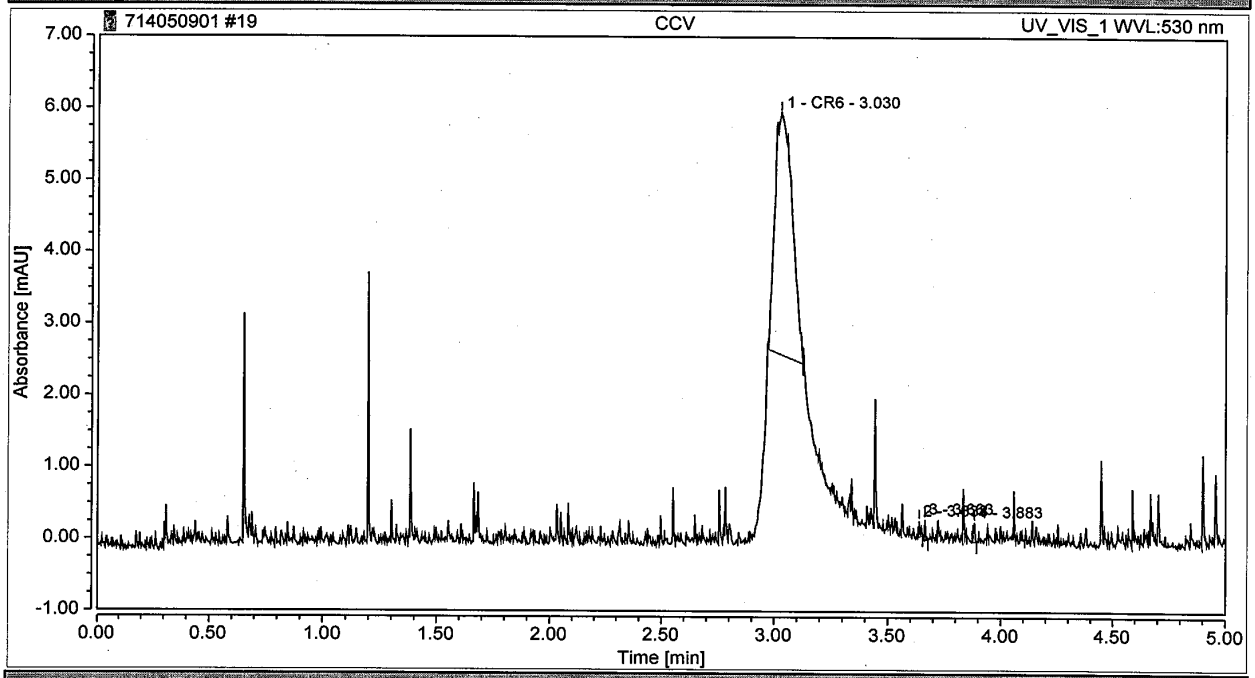
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**19**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.030	0.296	3.367	98.54	81.39	0.08048
2		3.638	0.001	0.219	0.40	5.29	n.a.
3		3.663	0.001	0.286	0.42	6.91	n.a.
4		3.883	0.002	0.265	0.64	6.41	n.a.
Total:			**0.300**	**4.137**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

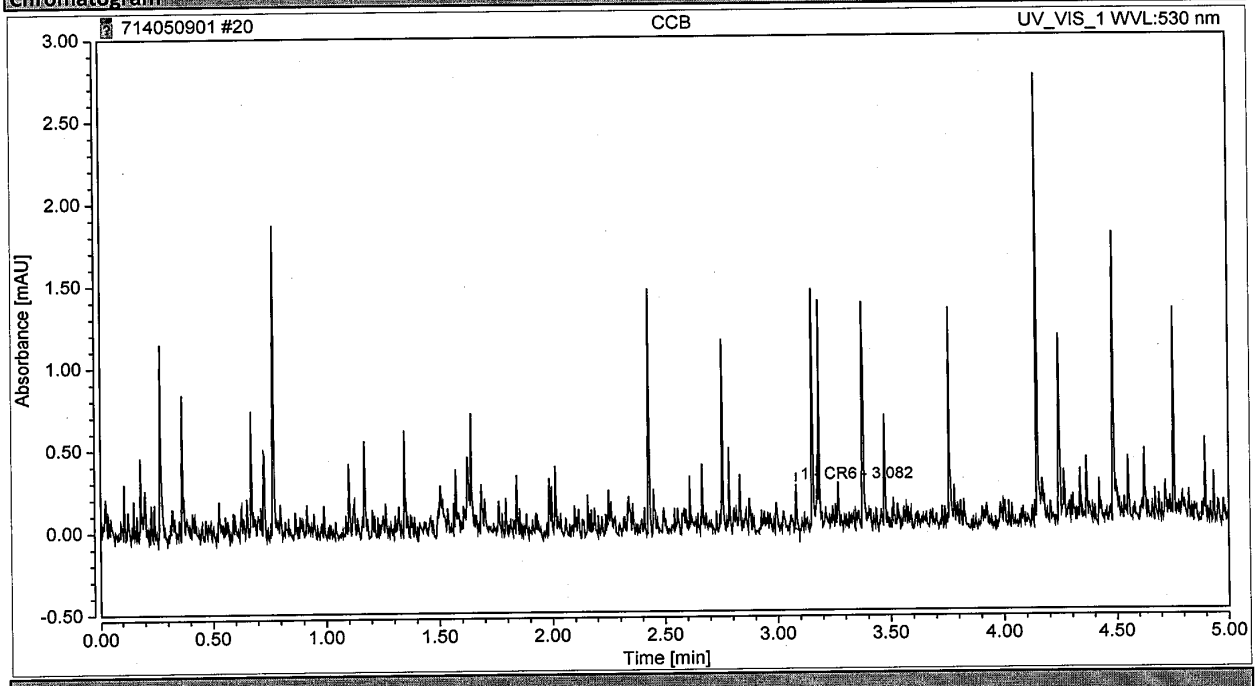
Instrument:ICS5000_2 Sequence:714050901

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**20**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.082	0.001	0.269	100.00	100.00	0.00089
Total:			**0.001**	**0.269**	**100.00**	**100.00**	

Default/Integration

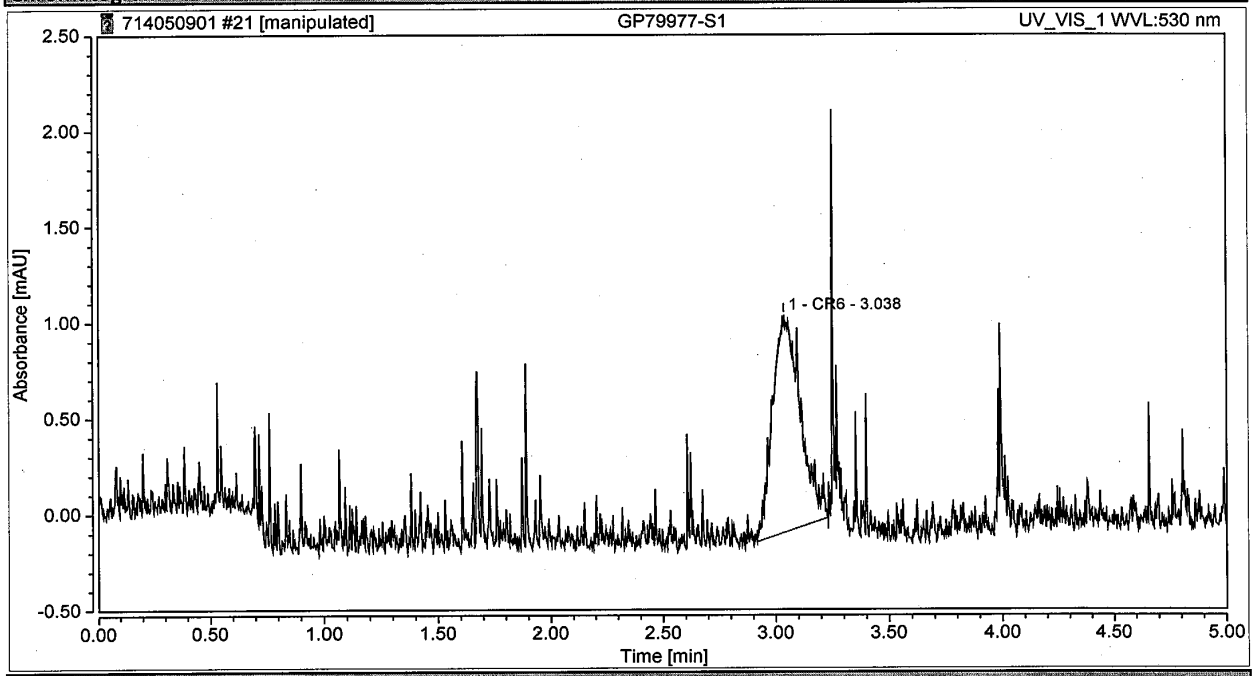
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-S1**	*Run Time (min):*	**5.00**
Vial Number:	**17**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.038	0.161	1.135	100.00	100.00	0.04418
Total:			**0.161**	**1.135**	**100.00**	**100.00**	

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Default/Integration

Chromeleon (c) Dionex
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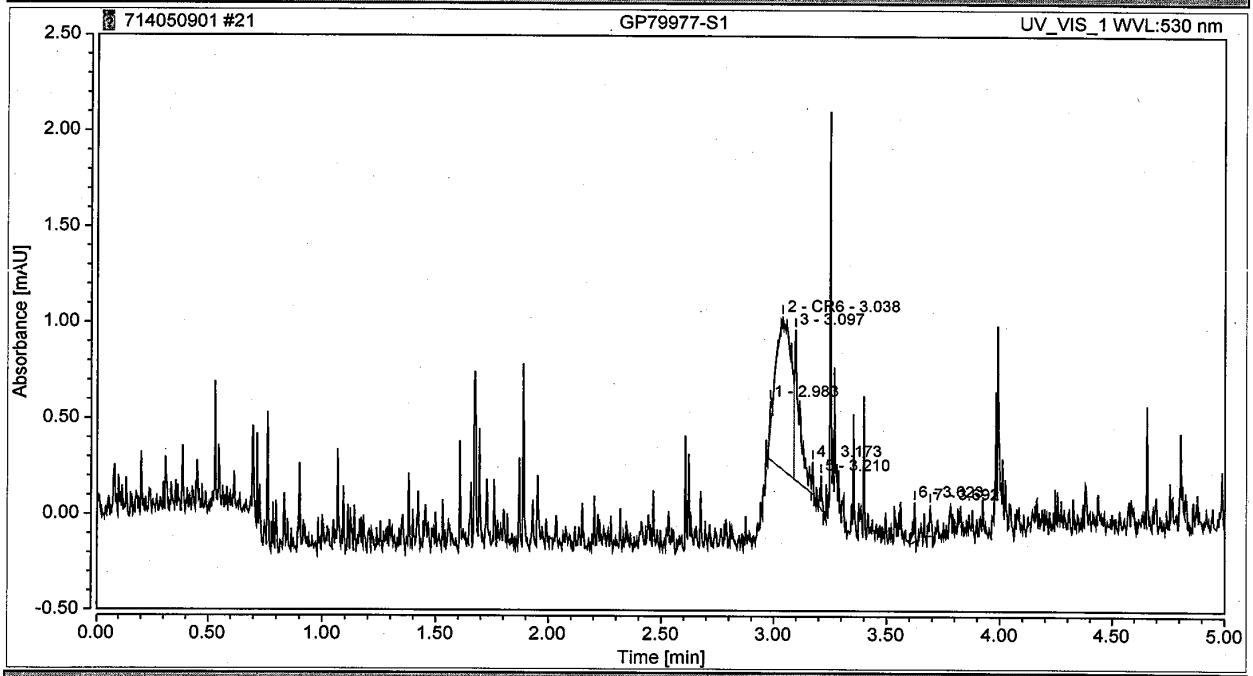
Chromatogram and Results

Injection Details

Injection Name:	**GP79977-S1**	*Run Time (min):*	**5.00**
Vial Number:	**17**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.983	0.001	0.145	1.06	5.95	n.a.
2	CR6	3.038	0.065	0.797	71.58	32.72	0.01811
3		3.097	0.019	0.783	21.34	32.16	n.a.
4		3.173	0.001	0.167	1.12	6.86	n.a.
5		3.210	0.001	0.176	1.47	7.22	n.a.
6		3.623	0.002	0.204	1.79	8.39	n.a.
7		3.692	0.001	0.163	1.64	6.69	n.a.
Total:			**0.091**	**2.435**	**100.00**	**100.00**	

Default/Integration

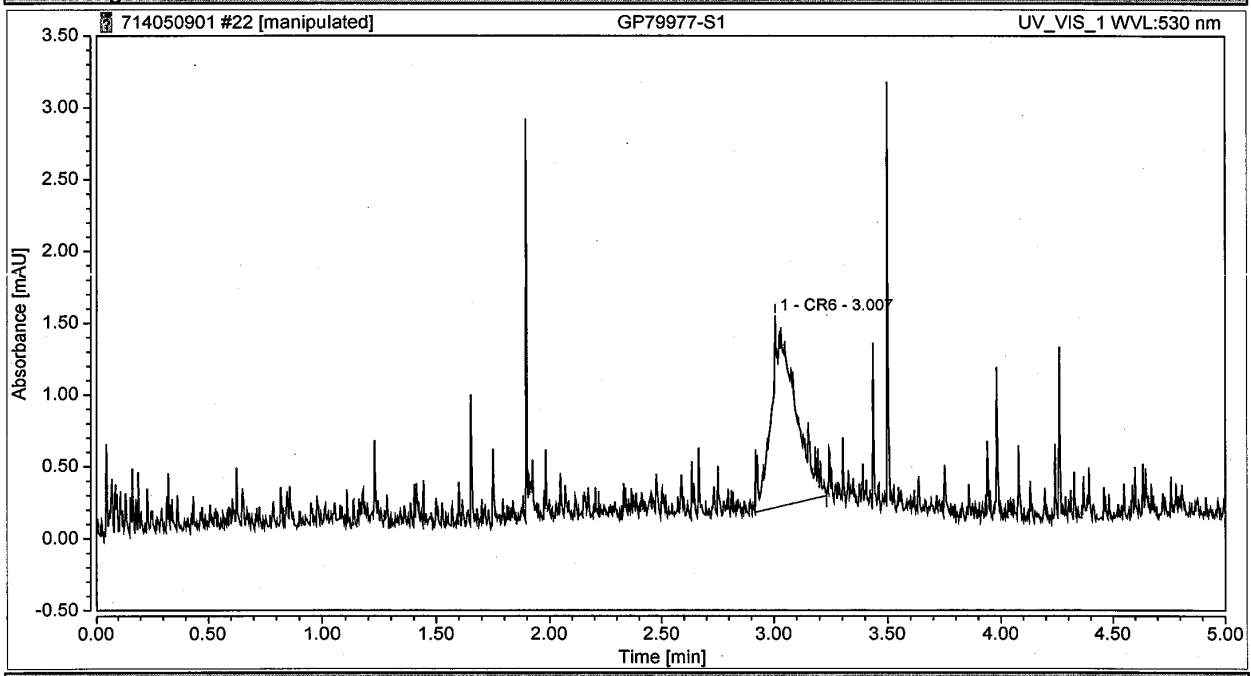
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**GP79977-S1**	*Run Time (min):*	**5.00**
Vial Number:	**18**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.007	0.163	1.336	100.00	100.00	0.04472
Total:			**0.163**	**1.336**	**100.00**	**100.00**	

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Default/Integration

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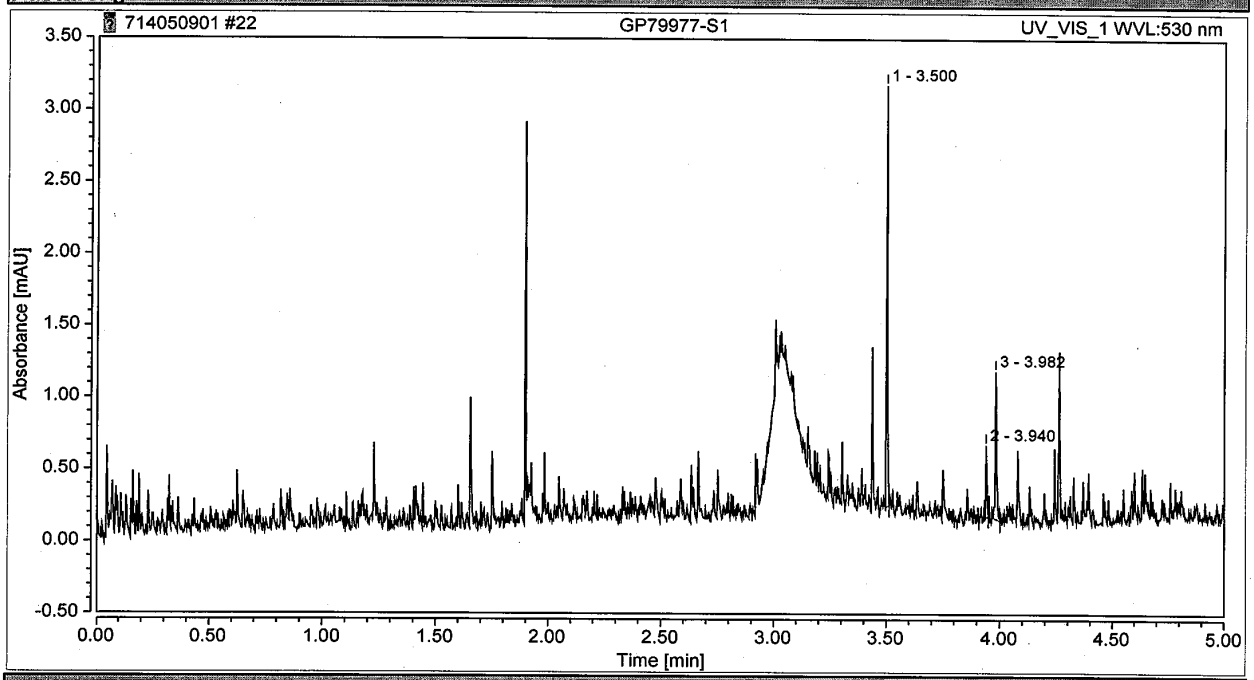
Chromatogram and Results

Injection Details

Injection Name:	**GP79977-S1**	*Run Time (min):*	**5.00**
Vial Number:	**18**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.500	0.012	2.934	60.04	65.68	n.a.
2		3.940	0.002	0.507	11.03	11.36	n.a.
3		3.982	0.006	1.026	28.93	22.96	n.a.
Total:			**0.020**	**4.466**	**100.00**	**100.00**	

Default/Integration

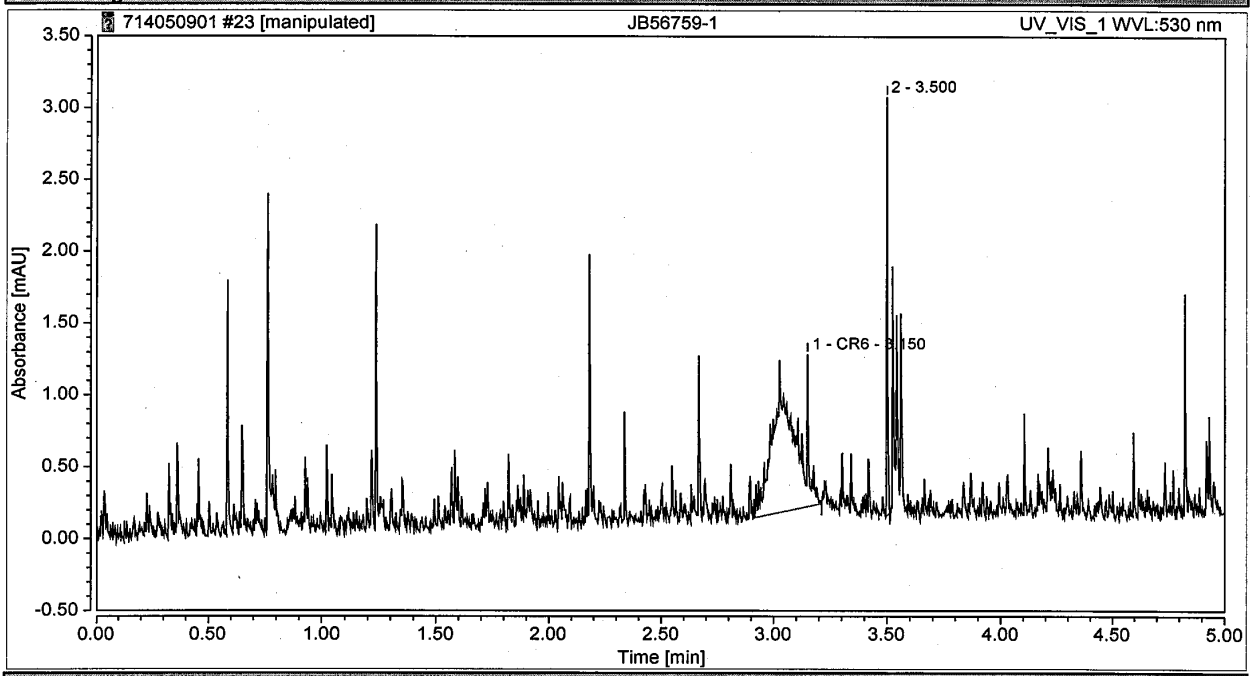
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**21**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.150	0.114	1.060	91.29	26.64	0.03147
2		3.500	0.011	2.917	8.71	73.36	n.a.
Total:			**0.125**	**3.977**	**100.00**	**100.00**	

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Default/Integration

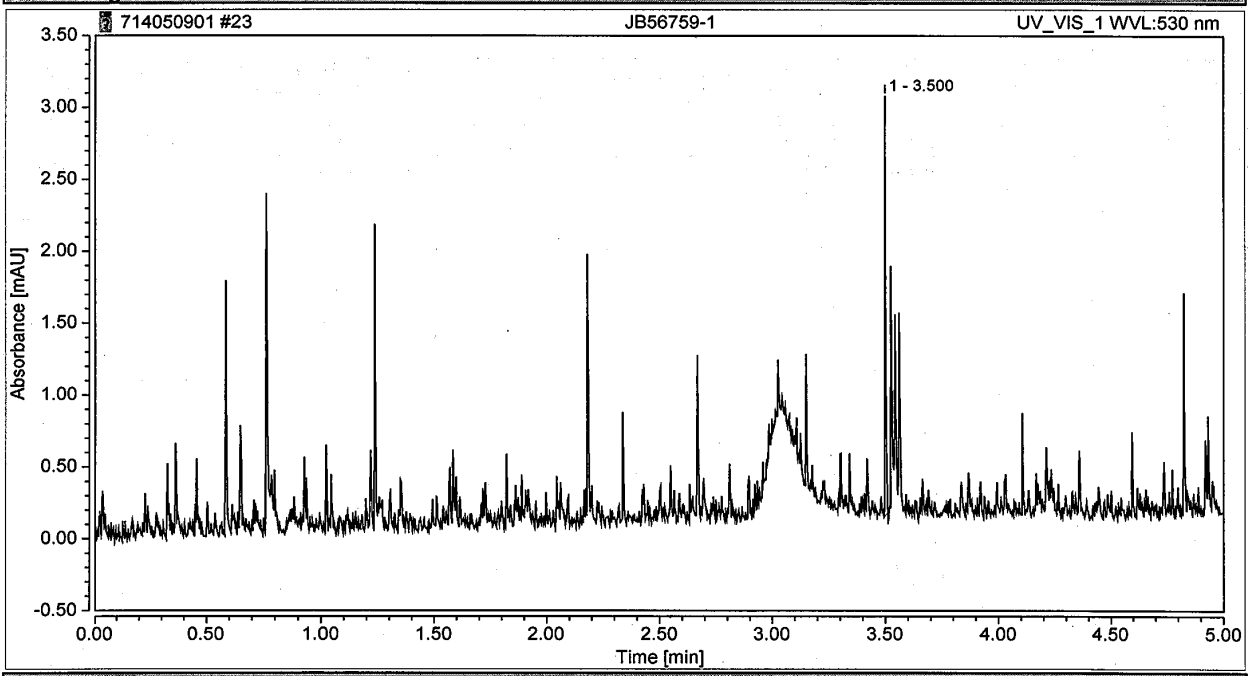
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**21**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.500	0.011	2.917	100.00	100.00	n.a.
Total:			**0.011**	**2.917**	**100.00**	**100.00**	

Default/Integration

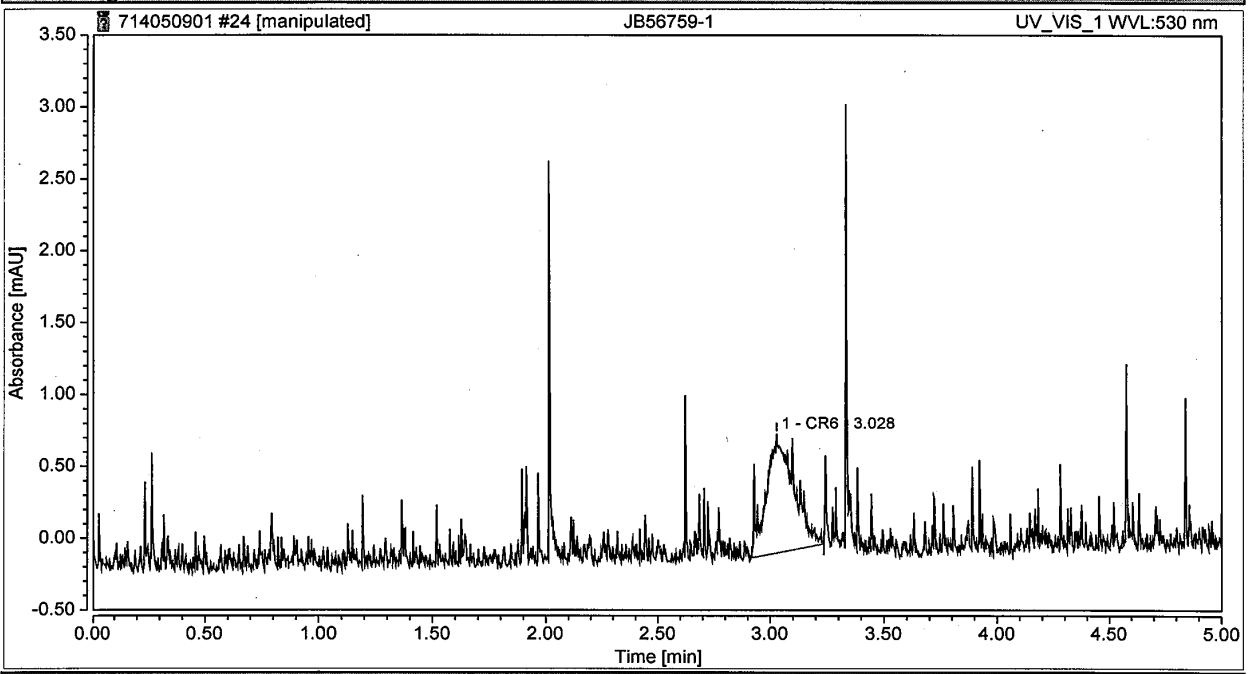
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**22**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.028	0.116	0.830	100.00	100.00	0.03194
Total:			**0.116**	**0.830**	**100.00**	**100.00**	

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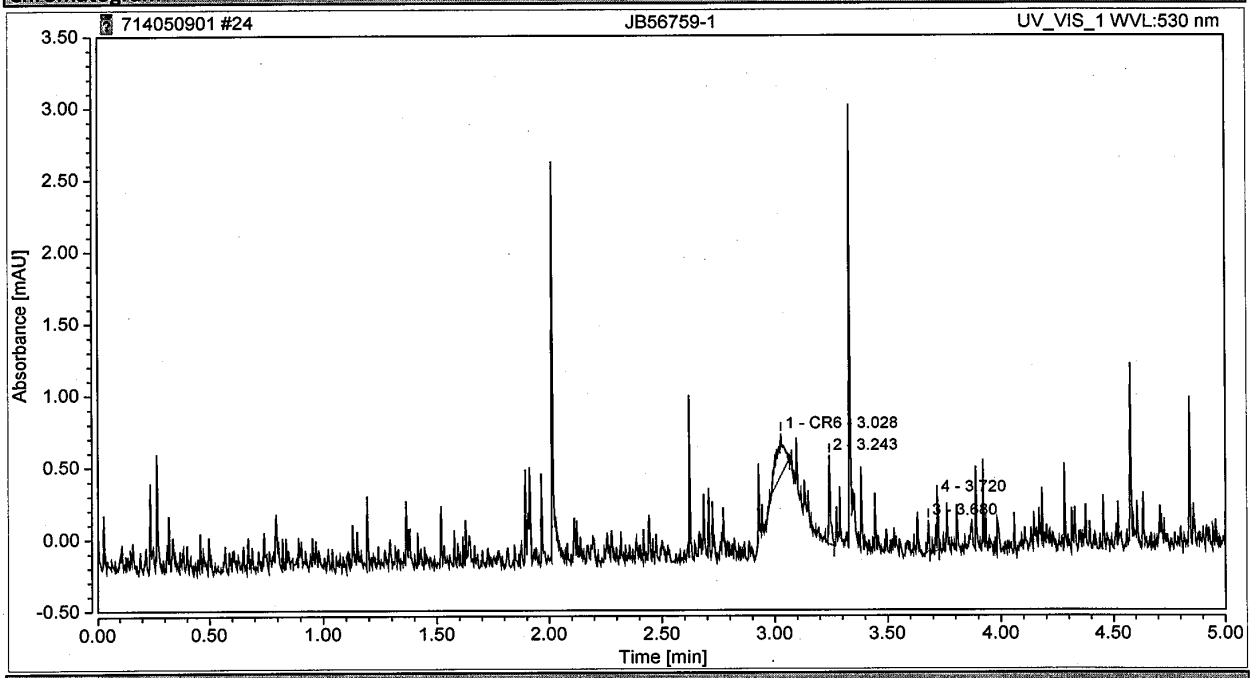
Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**22**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 11:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.028	0.011	0.291	56.56	19.52	0.00364
2		3.243	0.005	0.616	24.92	41.31	n.a.
3		3.680	0.001	0.216	5.69	14.46	n.a.
4		3.720	0.003	0.369	12.83	24.71	n.a.
Total:			**0.020**	**1.492**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
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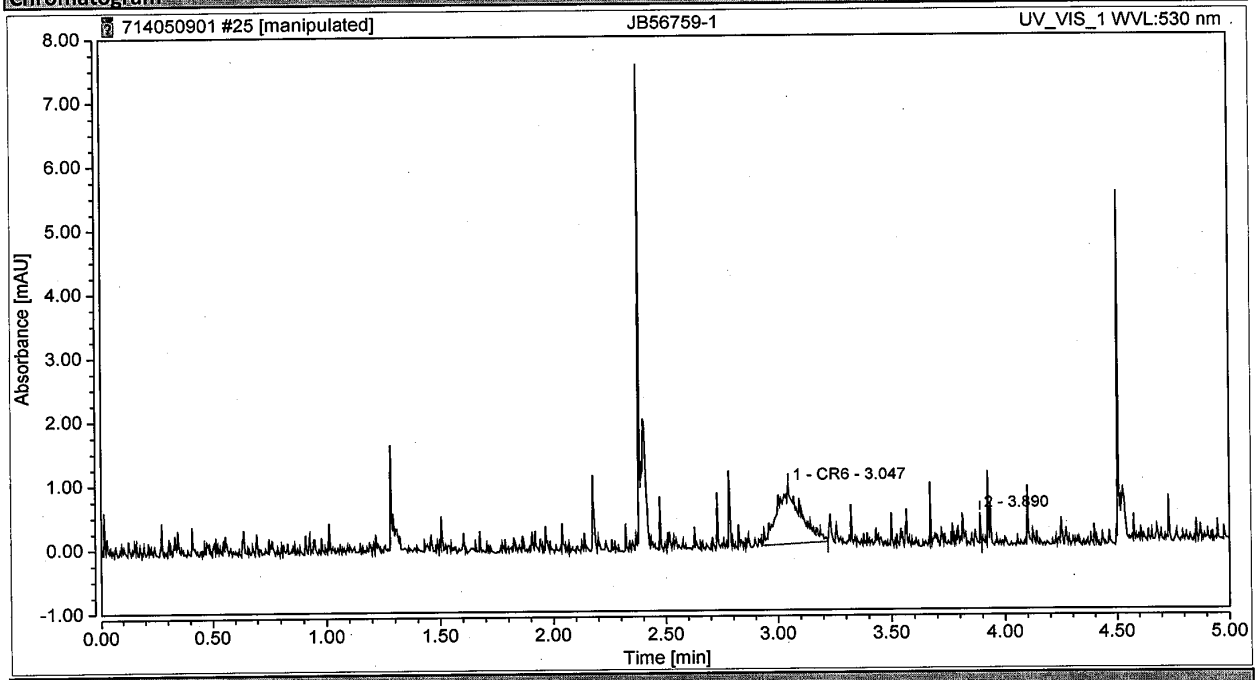
Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**23**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.047	0.108	0.920	98.64	66.30	0.02977
2		3.890	0.001	0.468	1.36	33.70	n.a.
Total:			**0.110**	**1.387**	**100.00**	**100.00**	

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Default/Integration

Chromeleon (c) Dionex
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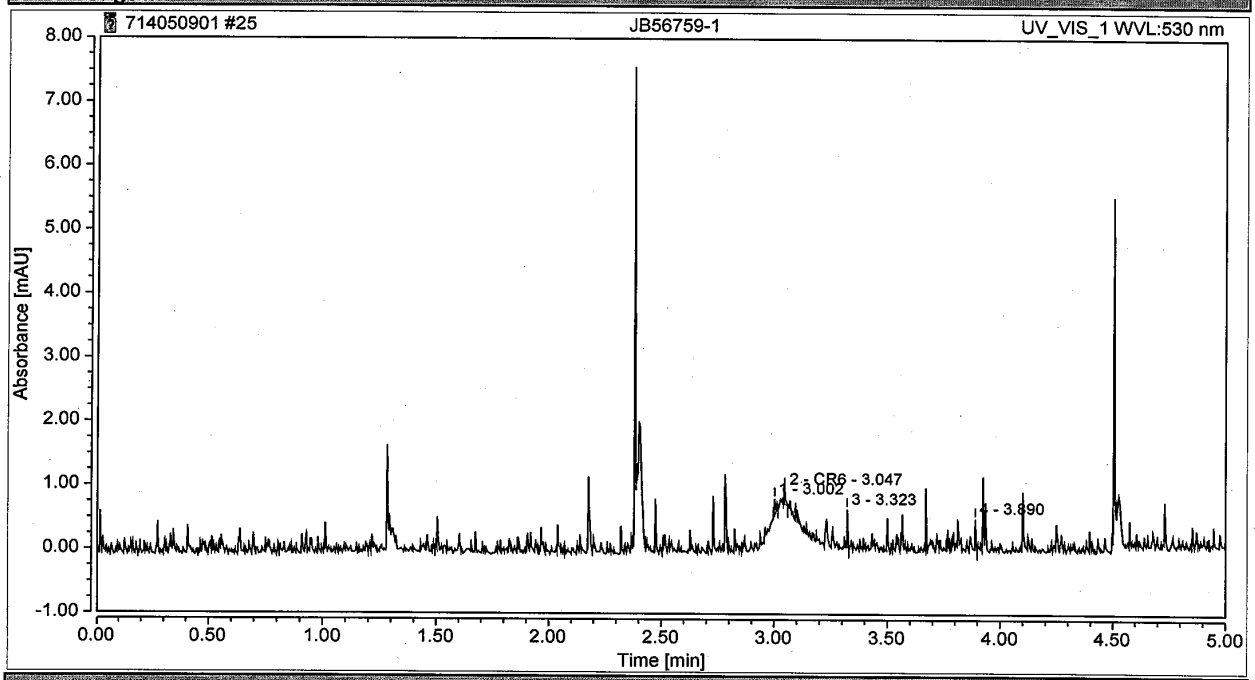
Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**23**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		3.002	0.002	0.257	24.12	16.76	n.a.
2	CR6	3.047	0.001	0.229	20.45	14.93	0.00096
3		3.323	0.002	0.582	34.00	37.87	n.a.
4		3.890	0.001	0.468	21.42	30.44	n.a.
Total:			**0.007**	**1.536**	**100.00**	**100.00**	

Default/Integration

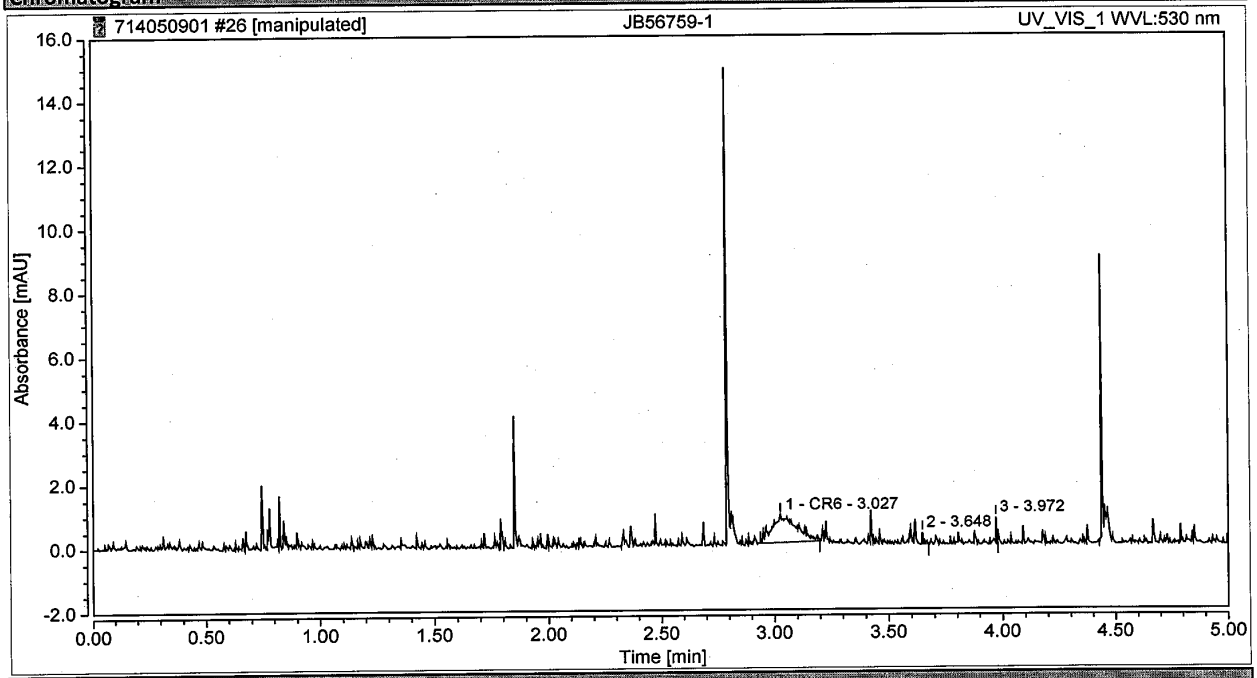
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**24**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.027	0.103	0.867	95.09	42.65	0.02850
2		3.648	0.002	0.370	2.24	18.22	n.a.
3		3.972	0.003	0.795	2.67	39.13	n.a.
Total:			**0.109**	**2.032**	**100.00**	**100.00**	

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Default/Integration

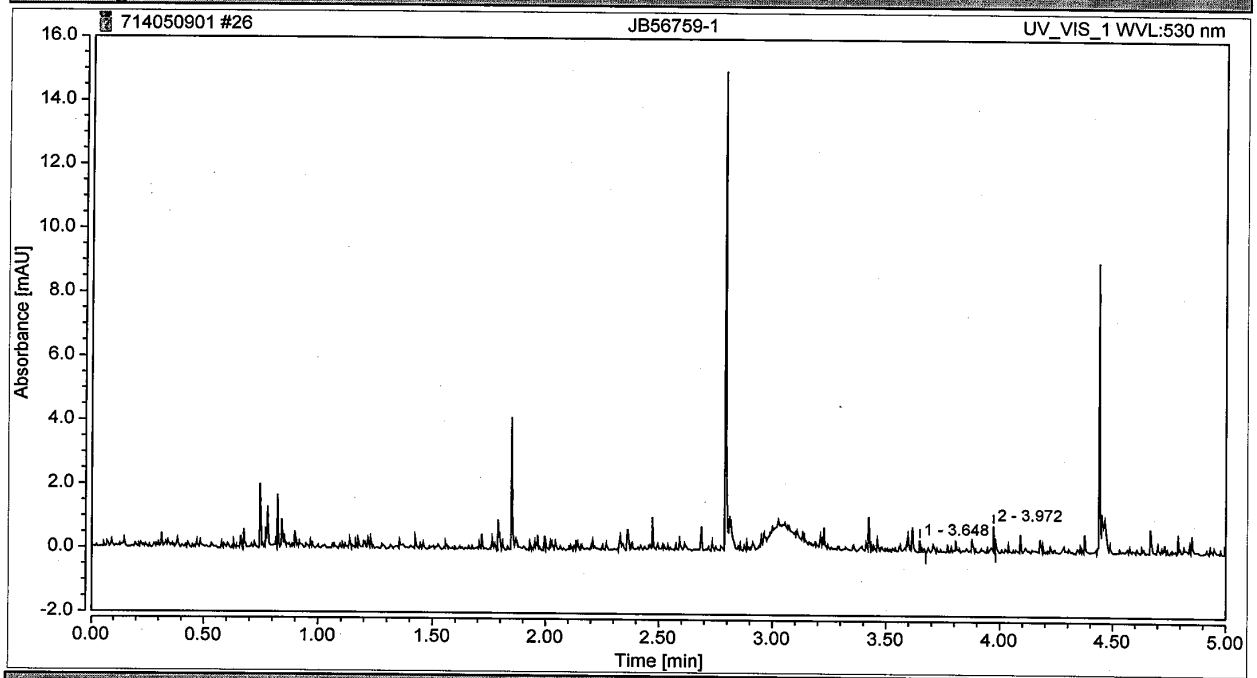
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**24**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.648	0.002	0.370	45.65	31.77	n.a.
2		3.972	0.003	0.795	54.35	68.23	n.a.
Total:			**0.005**	**1.165**	**100.00**	**100.00**	

Default/Integration

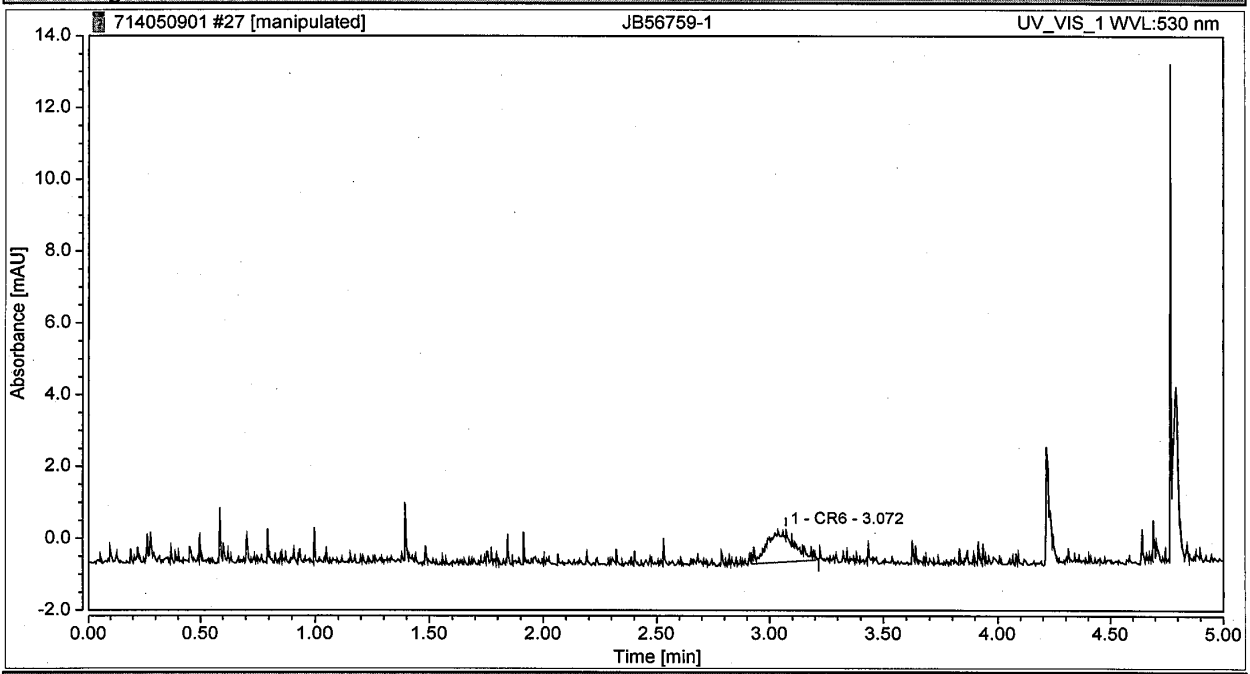
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**25**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.072	0.120	0.917	100.00	100.00	0.03306
Total:			**0.120**	**0.917**	**100.00**	**100.00**	

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Default/Integration

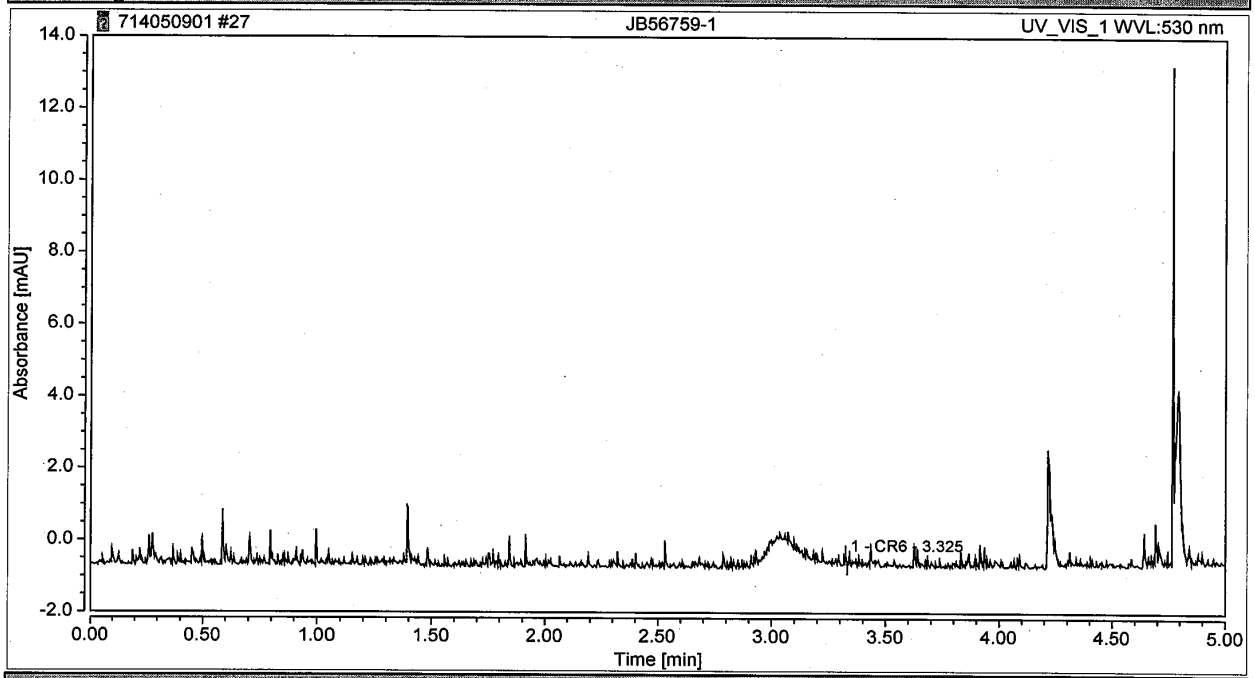
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**25**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.325	0.001	0.218	100.00	100.00	0.00084
Total:			**0.001**	**0.218**	**100.00**	**100.00**	

Default/Integration

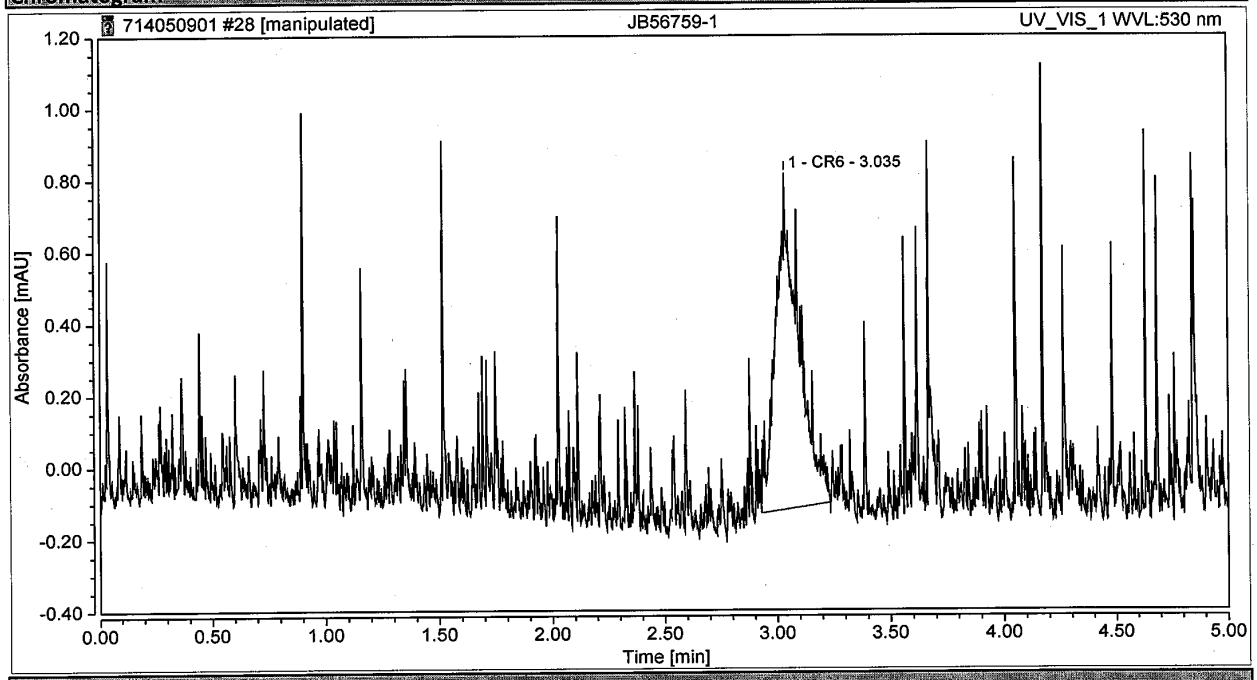
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**26**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.035	0.108	0.936	100.00	100.00	0.02972
Total:			**0.108**	**0.936**	**100.00**	**100.00**	

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Default/Integration

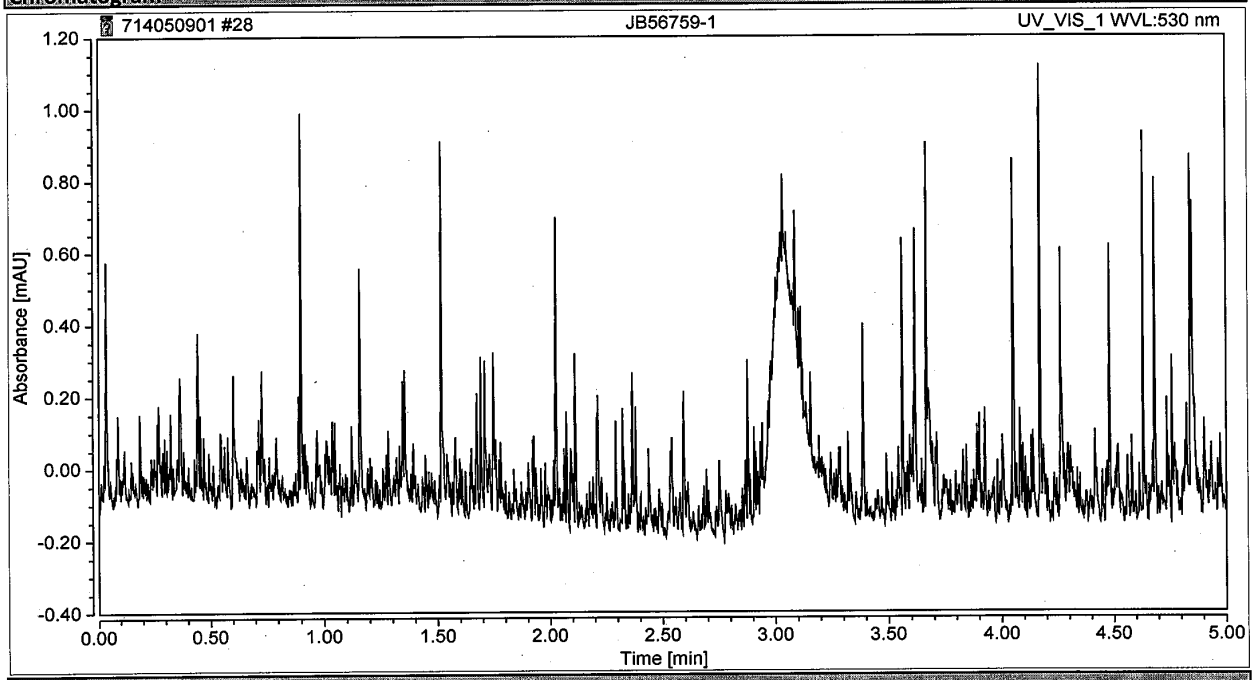
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**26**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**	

Default/Integration

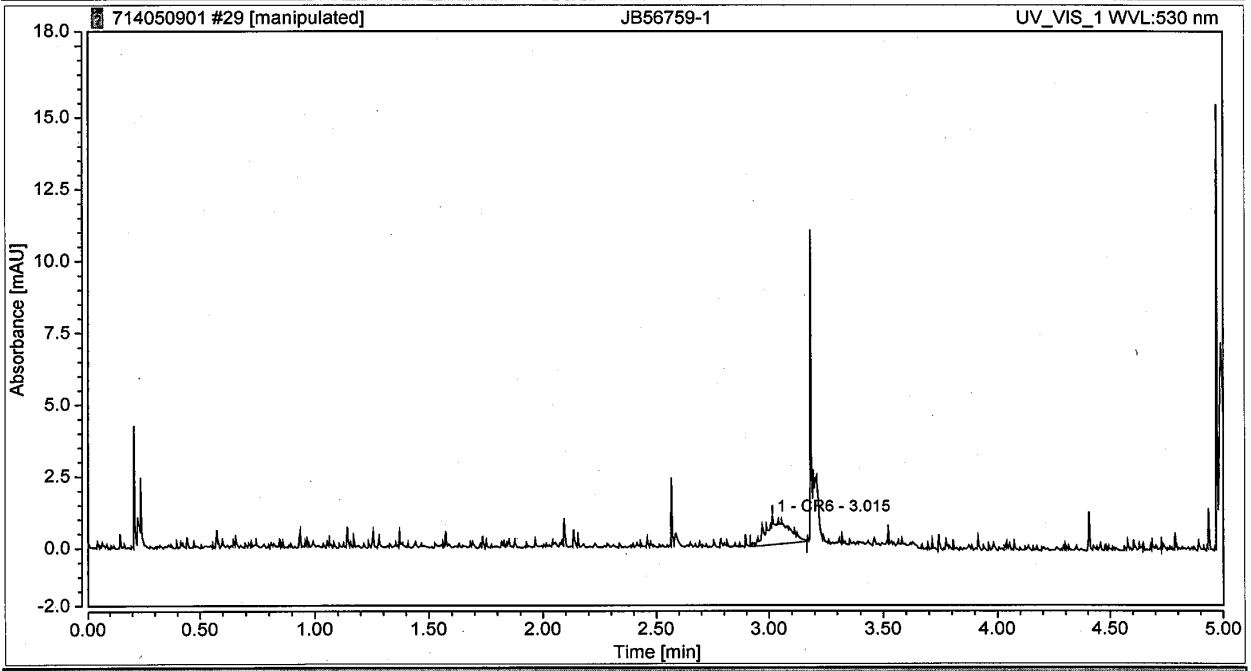
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**27**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.015	0.096	0.961	100.00	100.00	0.02645
Total:			**0.096**	**0.961**	**100.00**	**100.00**	

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Default/Integration

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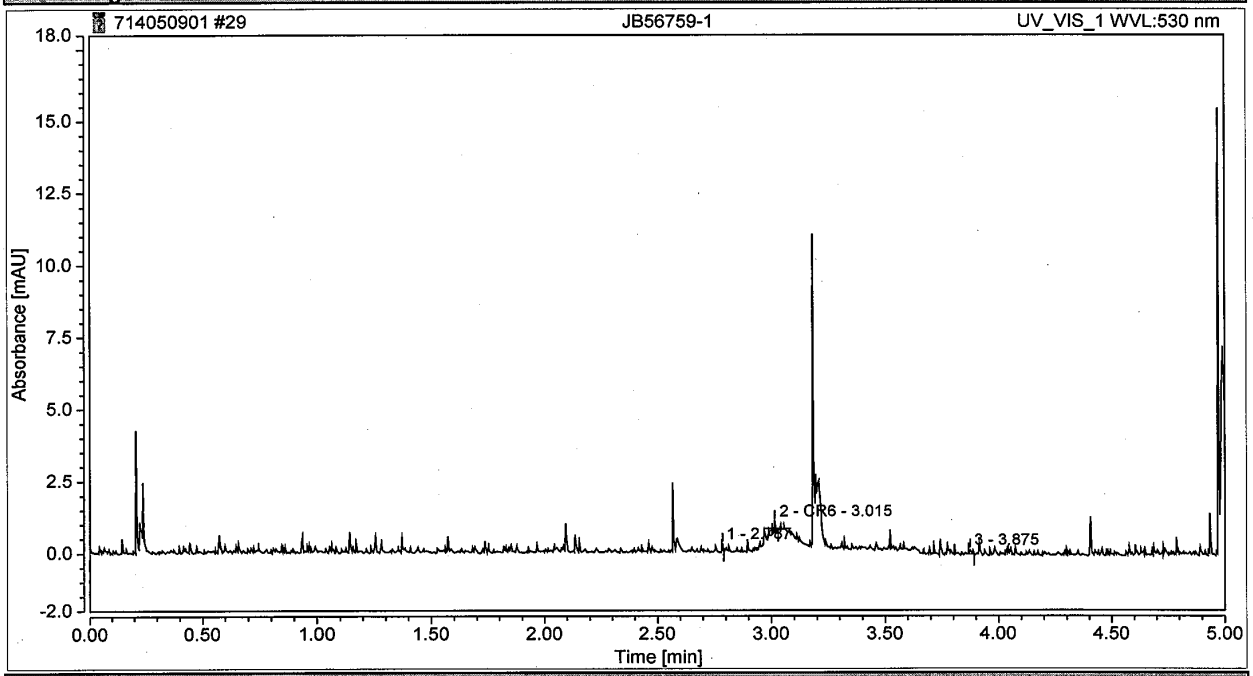
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**27**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.787	0.001	0.213	20.34	29.46	n.a.
2	CR6	3.015	0.003	0.378	54.92	52.36	0.00133
3		3.875	0.001	0.131	24.74	18.18	n.a.
Total:			**0.005**	**0.721**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

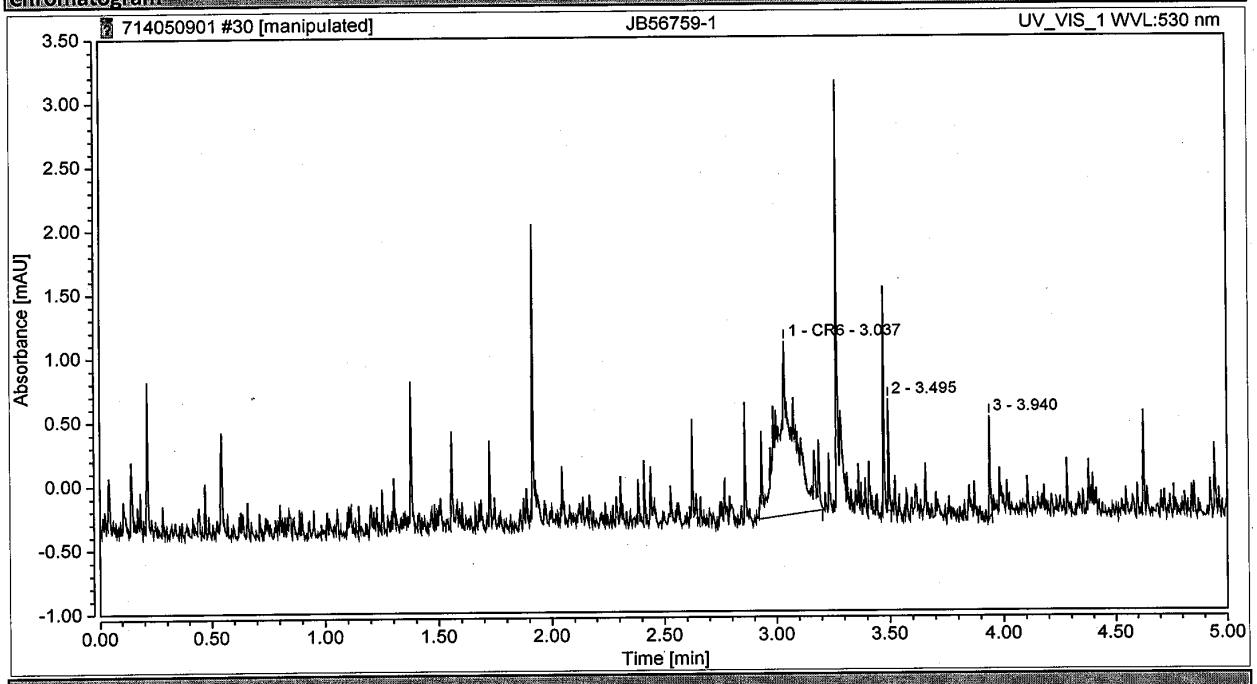
Instrument:ICS5000_2 Sequence:714050901

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**28**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.037	0.121	1.362	93.46	44.77	0.03313
2		3.495	0.004	0.875	3.33	28.75	n.a.
3		3.940	0.004	0.806	3.21	26.48	n.a.
Total:			**0.129**	**3.043**	**100.00**	**100.00**	

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Default/Integration

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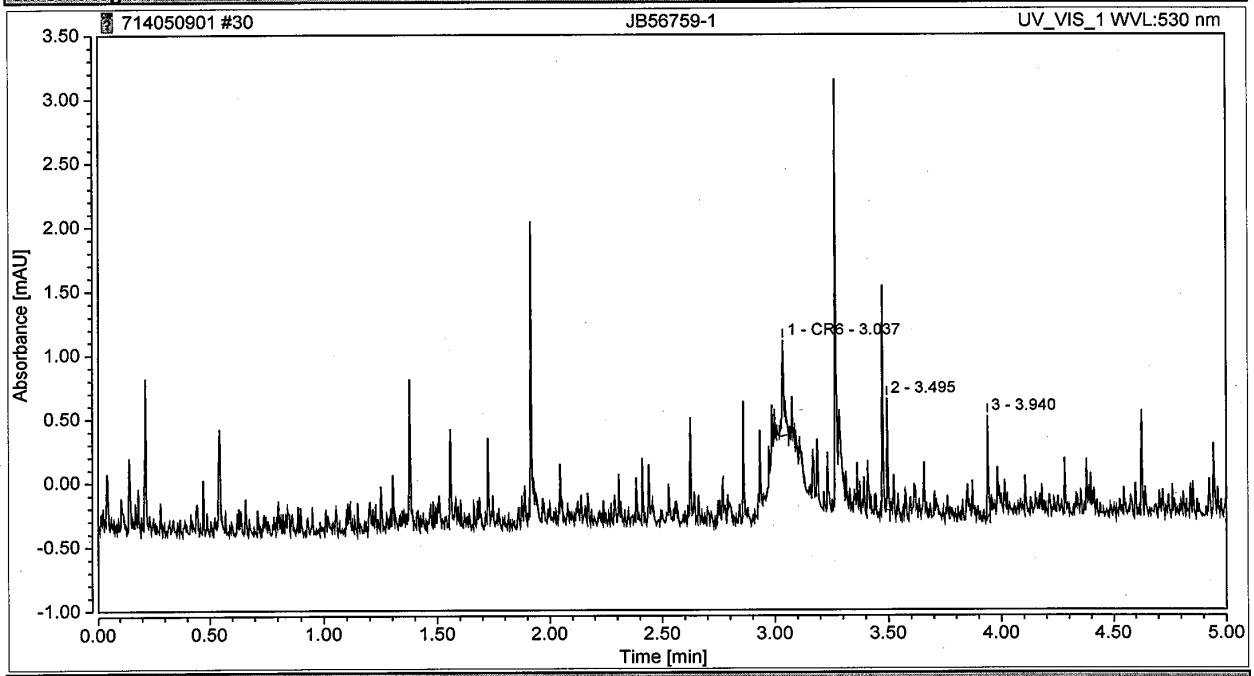
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**28**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.037	0.007	0.747	45.28	30.77	0.00246
2		3.495	0.004	0.875	27.89	36.03	n.a.
3		3.940	0.004	0.806	26.82	33.19	n.a.
Total:			**0.015**	**2.428**	**100.00**	**100.00**	

Default/Integration

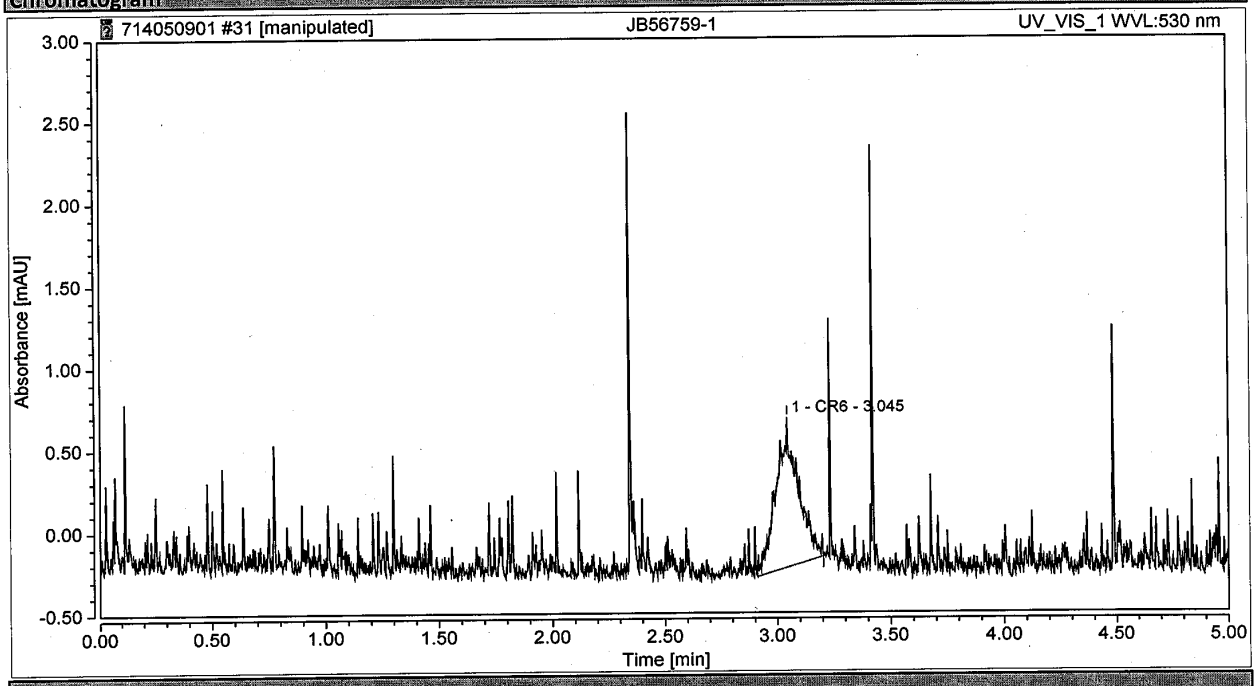
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**29**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.045	0.101	0.909	100.00	100.00	0.02797
Total:			**0.101**	**0.909**	**100.00**	**100.00**	

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Default/Integration

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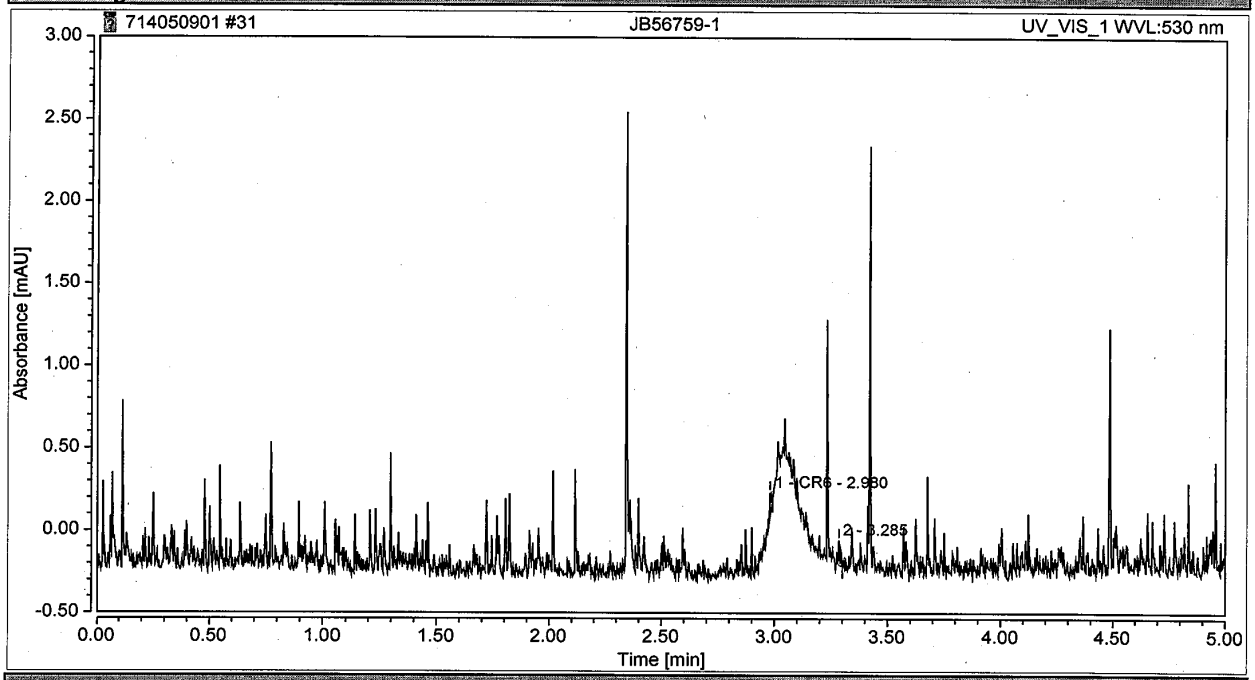
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**29**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	2.980	0.001	0.161	52.09	52.38	0.00087
2		3.285	0.001	0.146	47.91	47.62	n.a.
Total:			**0.002**	**0.307**	**100.00**	**100.00**	

Default/Integration

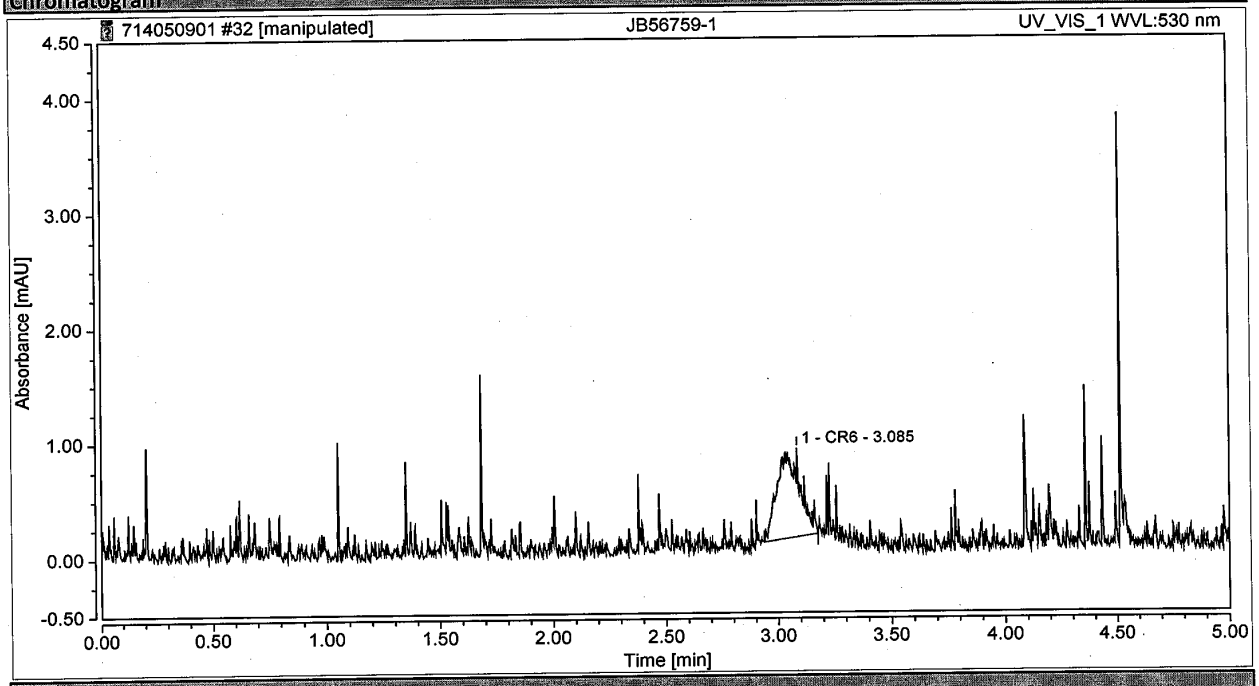
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**30**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.085	0.088	0.767	100.00	100.00	0.02441
Total:			**0.088**	**0.767**	**100.00**	**100.00**	

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Default/Integration

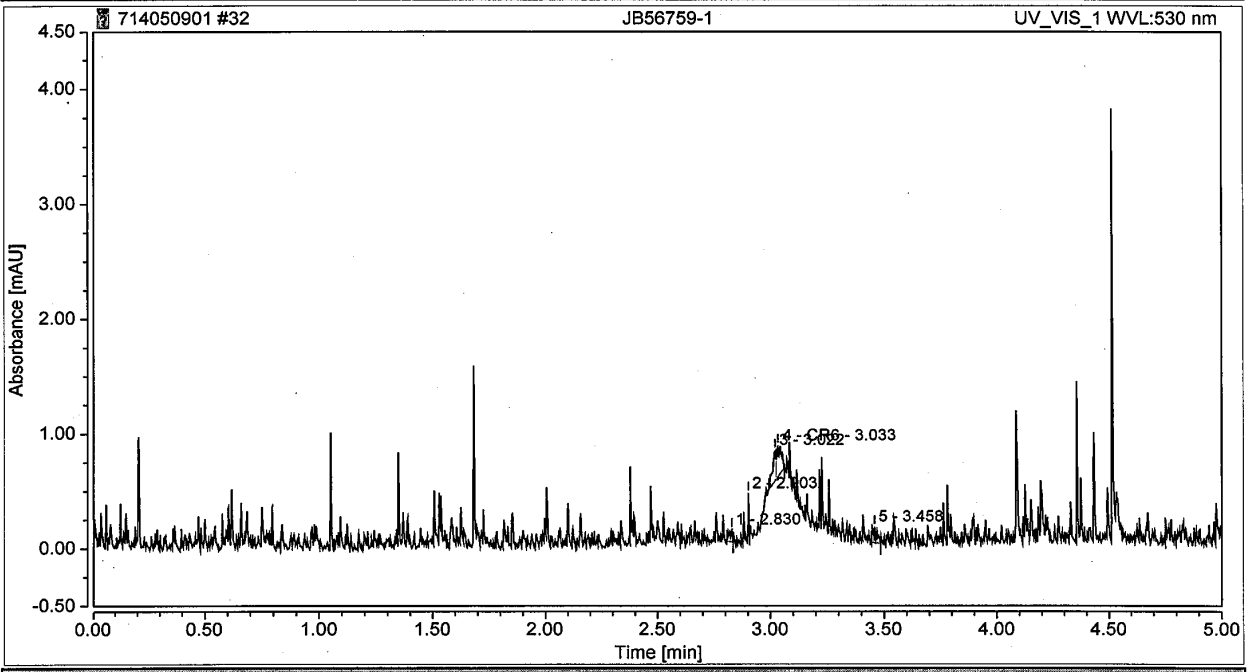
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**30**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 12:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.830	0.002	0.104	9.89	9.06	n.a.
2		2.903	0.001	0.366	6.80	31.88	n.a.
3		3.022	0.005	0.267	31.06	23.23	n.a.
4	CR6	3.033	0.006	0.275	36.55	23.96	0.00209
5		3.458	0.002	0.136	15.70	11.88	n.a.
Total:			**0.015**	**1.148**	**100.00**	**100.00**	

Default/Integration

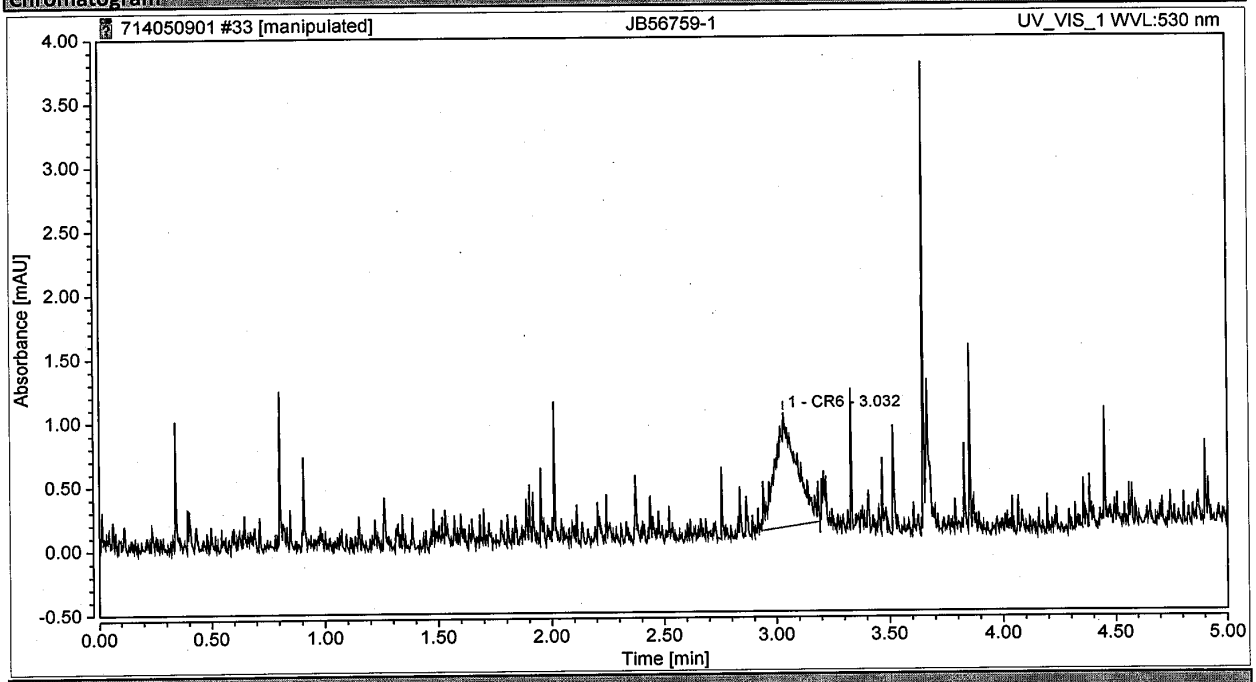
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**31**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.032	0.102	0.895	100.00	100.00	0.02810
Total:			**0.102**	**0.895**	**100.00**	**100.00**	

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Default/Integration

Chromeleon (c) Dionex
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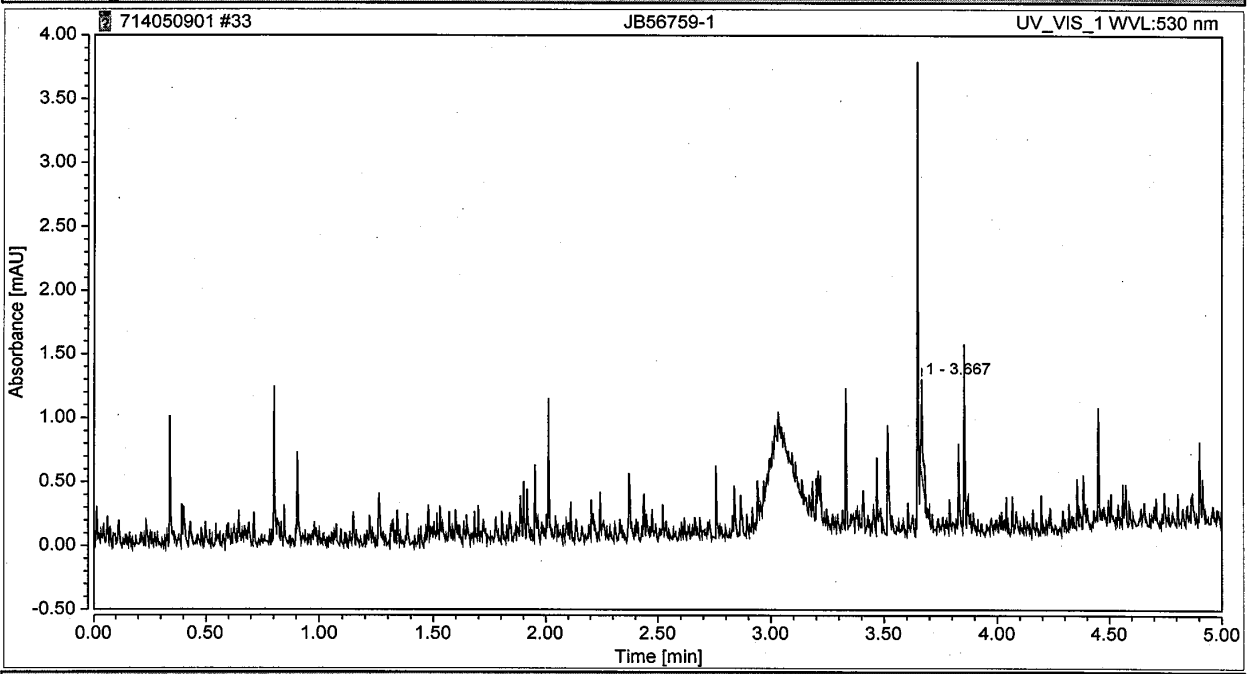
Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**31**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.667	0.006	0.748	100.00	100.00	n.a.
Total:			**0.006**	**0.748**	**100.00**	**100.00**	

Default/Integration

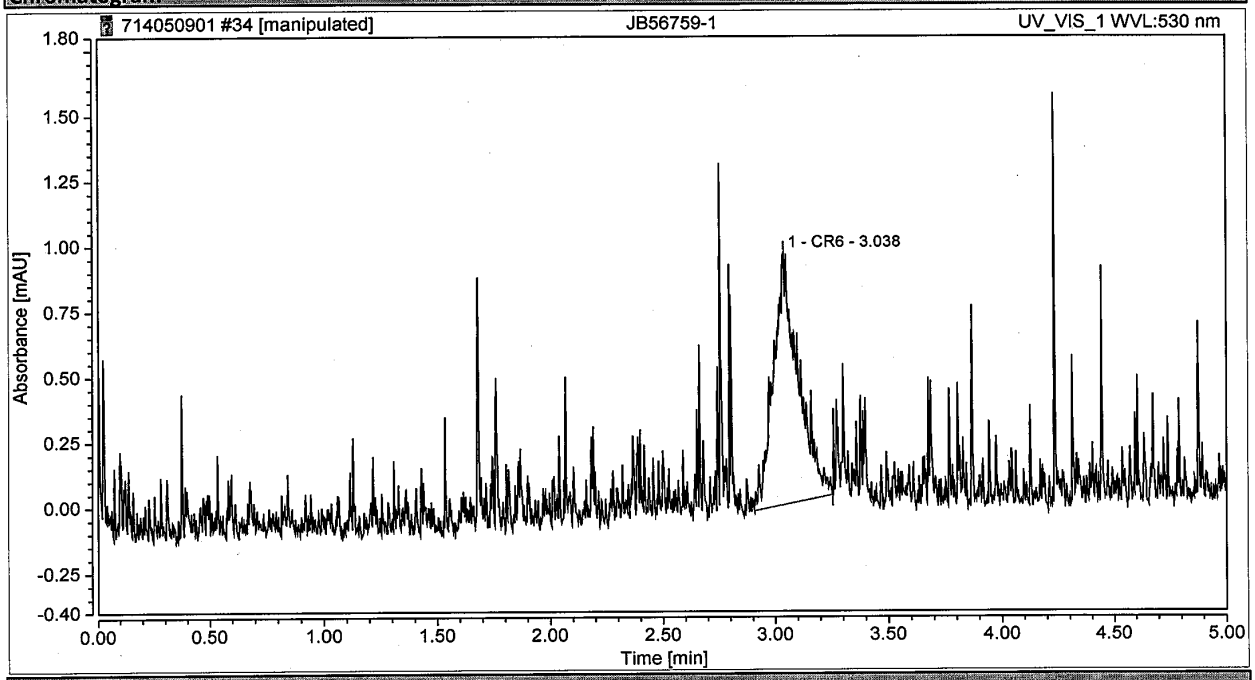
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**32**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.038	0.122	0.964	100.00	100.00	0.03348
Total:			**0.122**	**0.964**	**100.00**	**100.00**	

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Default/Integration

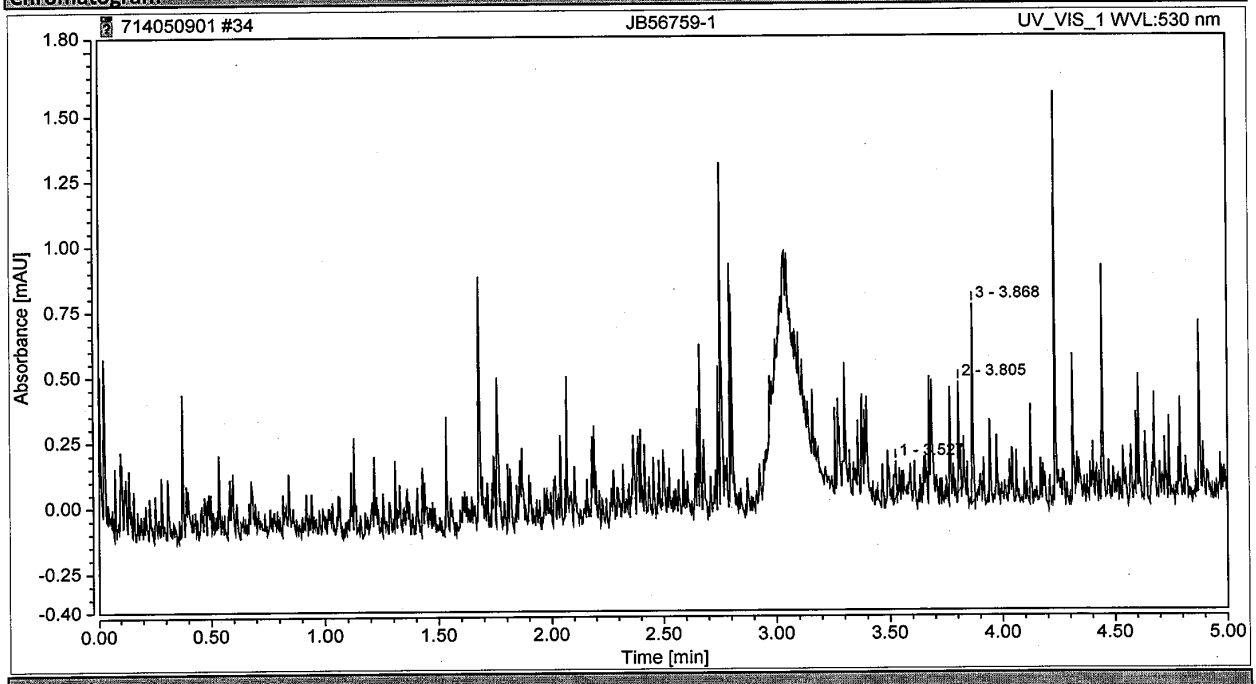
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**32**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		3.527	0.001	0.140	20.36	10.57	n.a.
2		3.805	0.002	0.422	30.16	31.86	n.a.
3		3.868	0.004	0.762	49.48	57.57	n.a.
Total:			**0.007**	**1.324**	**100.00**	**100.00**	

Default/Integration

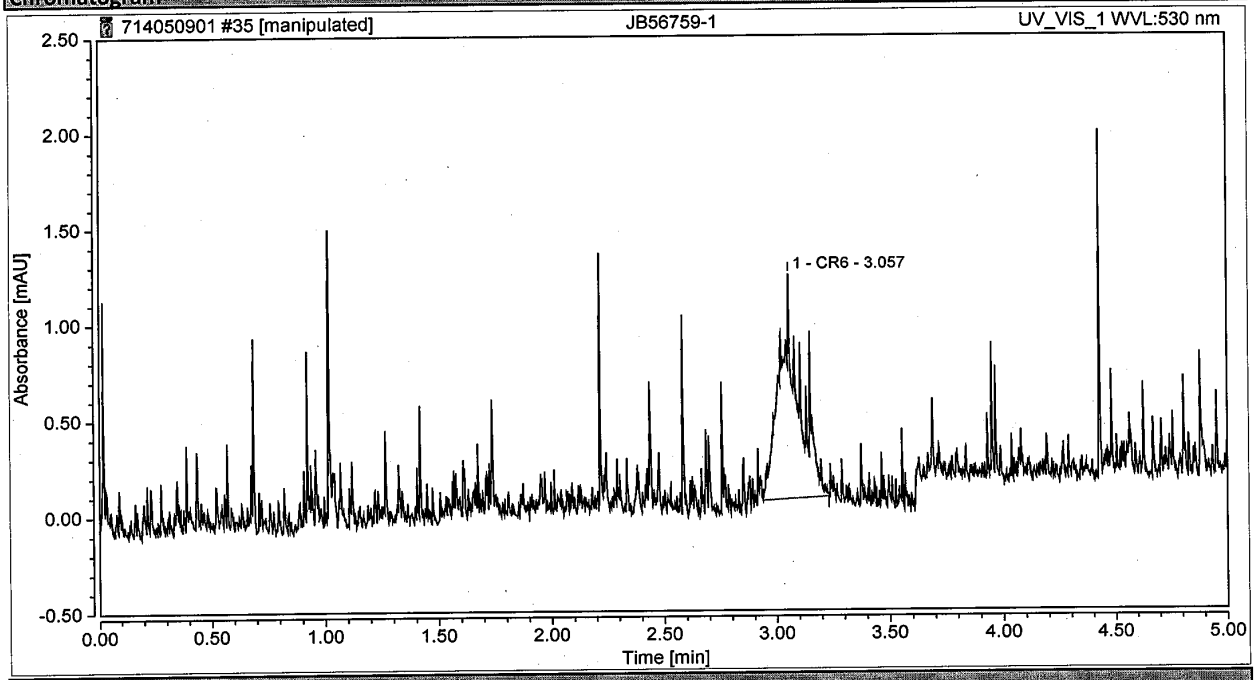
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**33**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.057	0.112	1.172	100.00	100.00	0.03090
Total:			**0.112**	**1.172**	**100.00**	**100.00**	

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Default/Integration

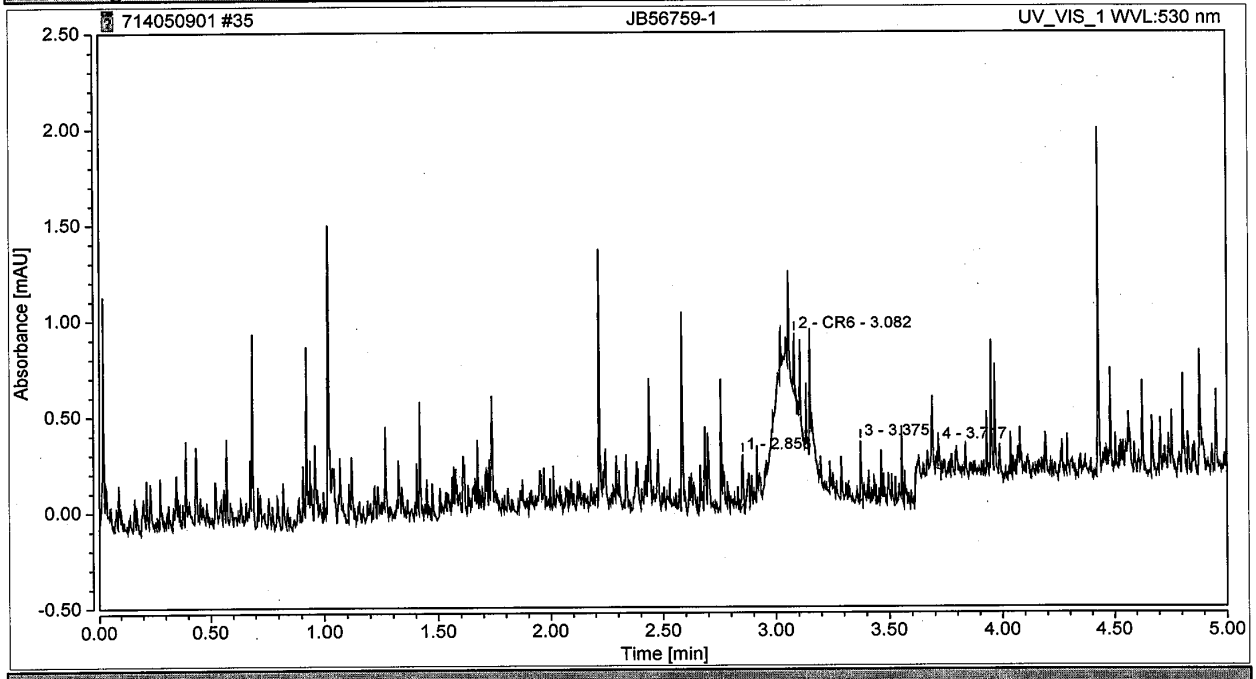
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**33**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.853	0.002	0.267	31.77	26.15	n.a.
2	CR6	3.082	0.001	0.314	24.62	30.73	0.00097
3		3.375	0.001	0.314	23.69	30.75	n.a.
4		3.717	0.001	0.126	19.91	12.37	n.a.
Total:			**0.006**	**1.022**	**100.00**	**100.00**	

Default/Integration

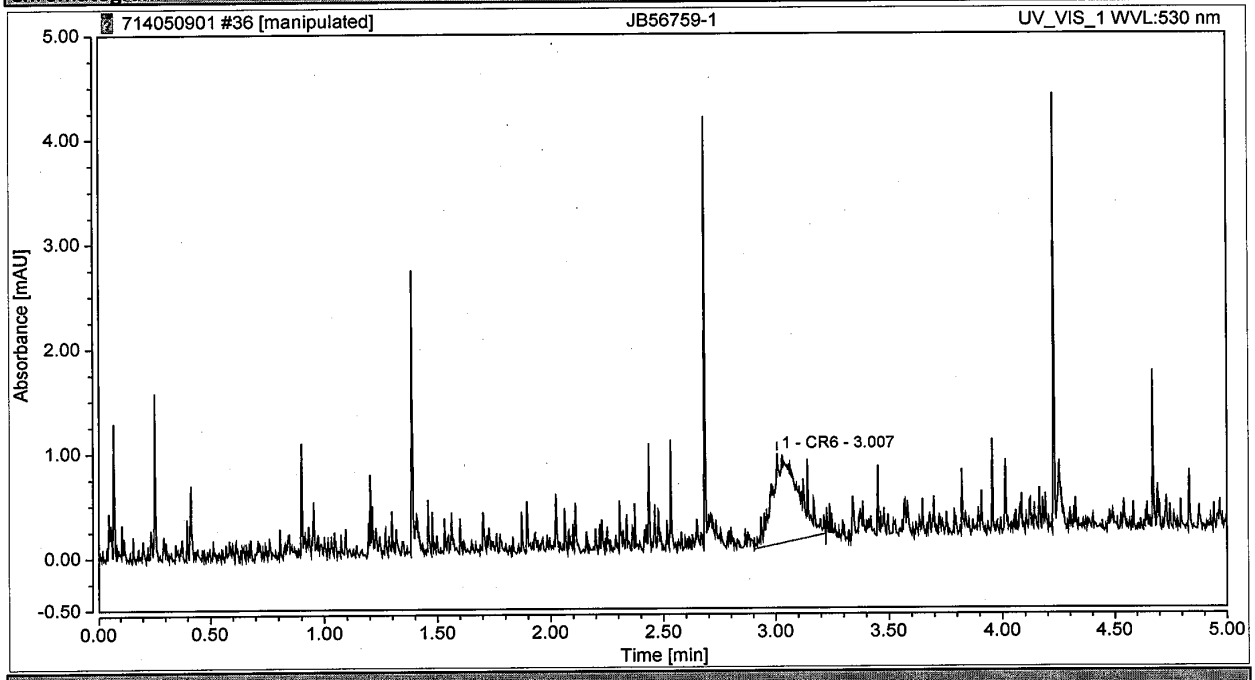
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**34**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.007	0.116	0.865	100.00	100.00	0.03186
Total:			**0.116**	**0.865**	**100.00**	**100.00**	

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Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

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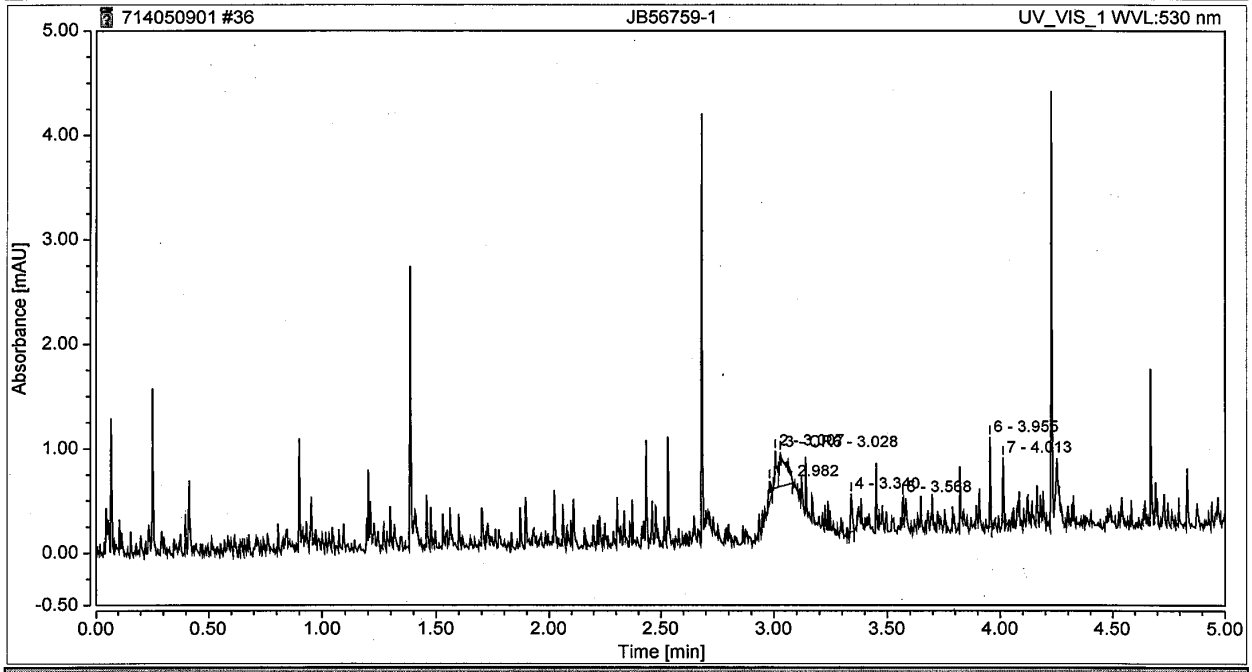
Chromatogram and Results

Injection Details

Injection Name:	**JB56759-1**	*Run Time (min):*	**5.00**
Vial Number:	**34**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.982	0.002	0.212	8.24	7.06	n.a.
2		3.007	0.004	0.357	13.88	11.91	n.a.
3	CR6	3.028	0.011	0.330	41.16	10.99	0.00352
4		3.340	0.003	0.366	10.09	12.20	n.a.
5		3.568	0.002	0.246	6.06	8.22	n.a.
6		3.955	0.003	0.865	11.25	28.84	n.a.
7		4.013	0.002	0.623	9.31	20.78	n.a.
Total:			**0.027**	**2.999**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

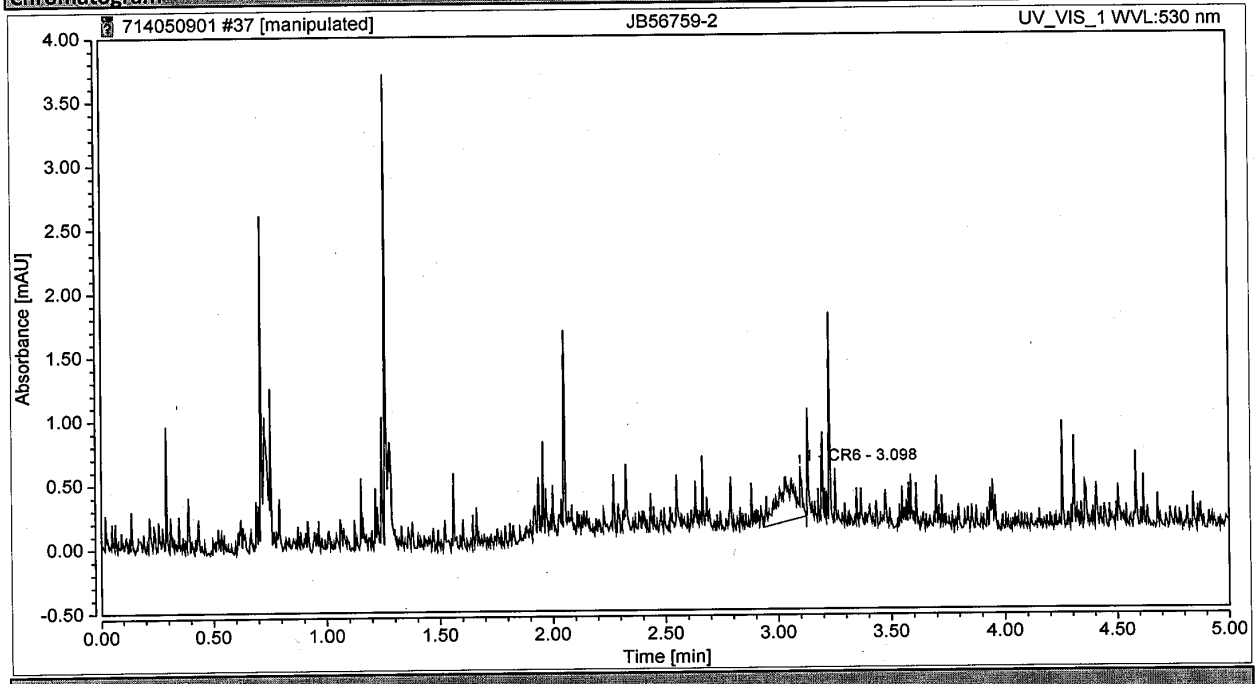
Instrument:ICS5000_2 Sequence:714050901

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-2**	*Run Time (min):*	**5.00**
Vial Number:	**35**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.098	0.032	0.398	100.00	100.00	0.00910
Total:			**0.032**	**0.398**	**100.00**	**100.00**	

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Default/Integration

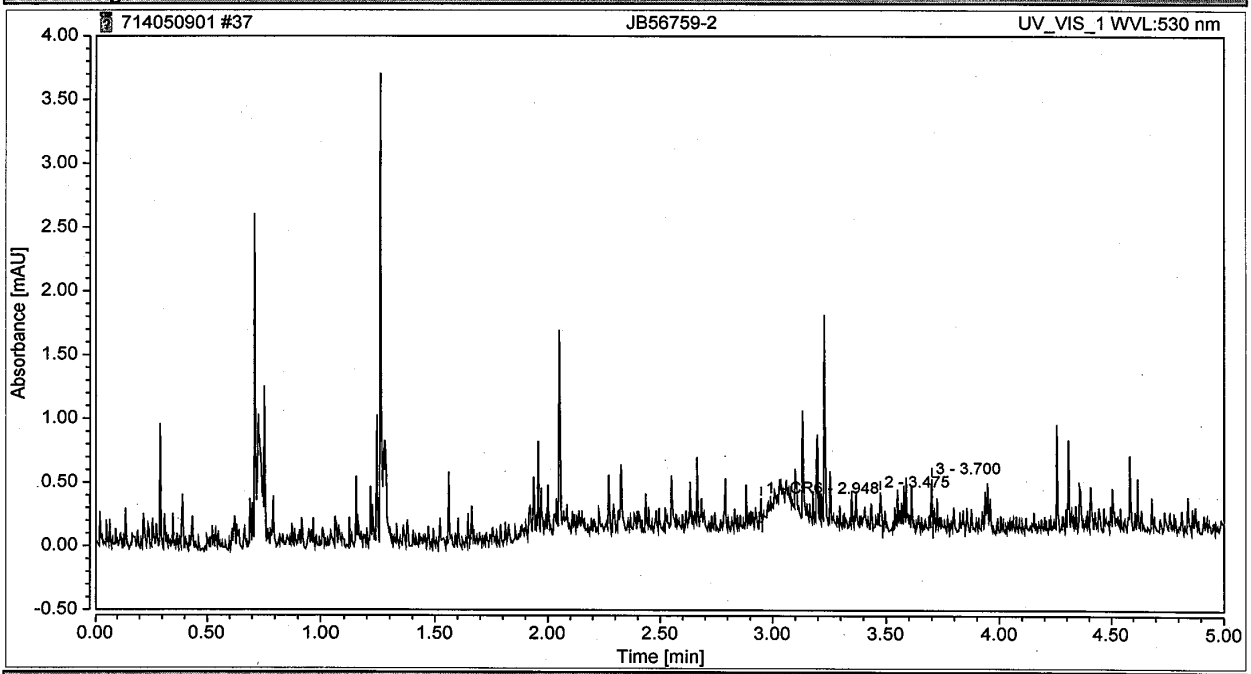
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-2**	*Run Time (min):*	**5.00**
Vial Number:	**35**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	2.948	0.001	0.184	19.49	22.38	0.00086
2		3.475	0.002	0.260	35.86	31.66	n.a.
3		3.700	0.002	0.377	44.65	45.96	n.a.
Total:			**0.005**	**0.820**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

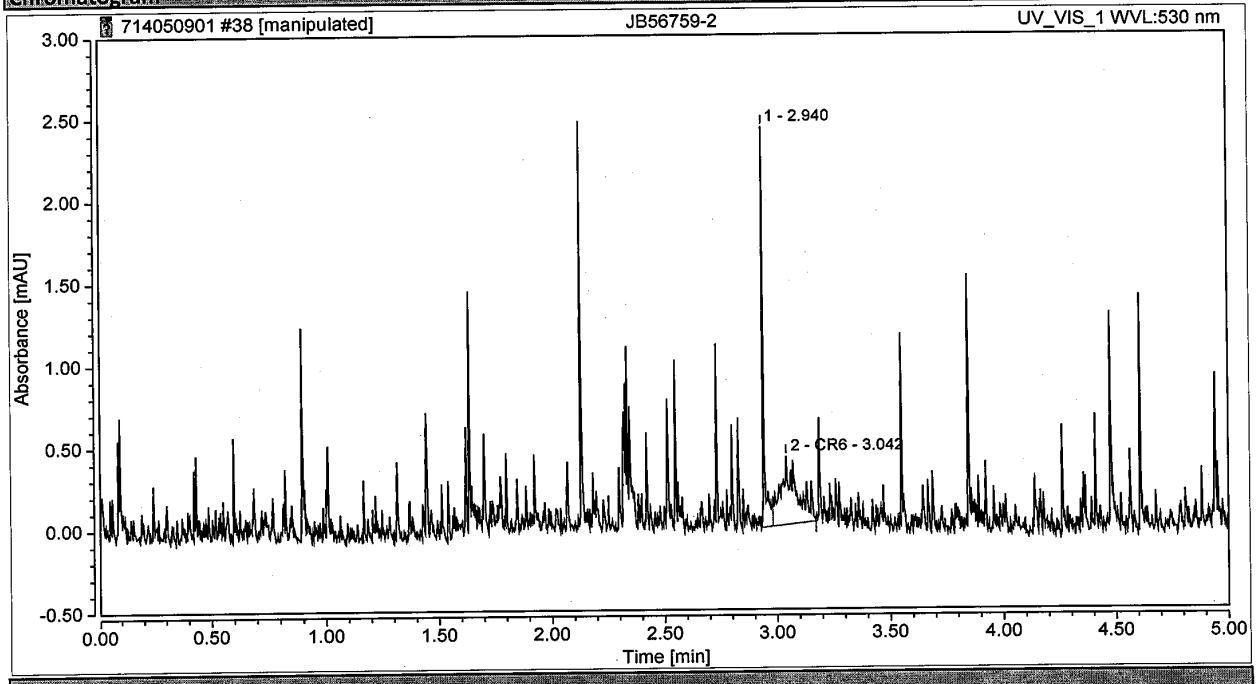
Instrument:ICS5000_2 Sequence:714050901

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-2**	*Run Time (min):*	**5.00**
Vial Number:	**36**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.940	0.015	2.438	31.84	85.47	n.a.
2	CR6	3.042	0.033	0.415	68.16	14.53	0.00946
Total:			**0.048**	**2.853**	**100.00**	**100.00**	

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Default/Integration

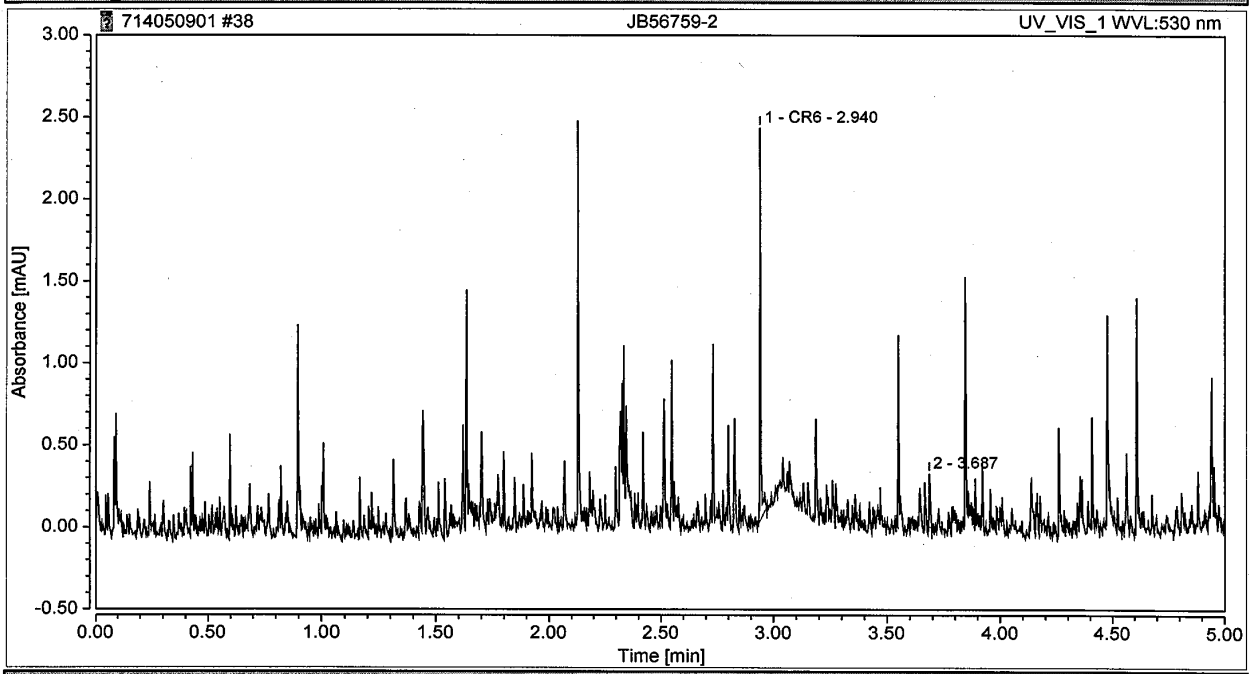
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**JB56759-2**	*Run Time (min):*	**5.00**
Vial Number:	**36**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	2.940	0.011	2.397	85.52	88.07	0.00358
2		3.687	0.002	0.325	14.48	11.93	n.a.
Total:			**0.013**	**2.722**	**100.00**	**100.00**	

Default/Integration

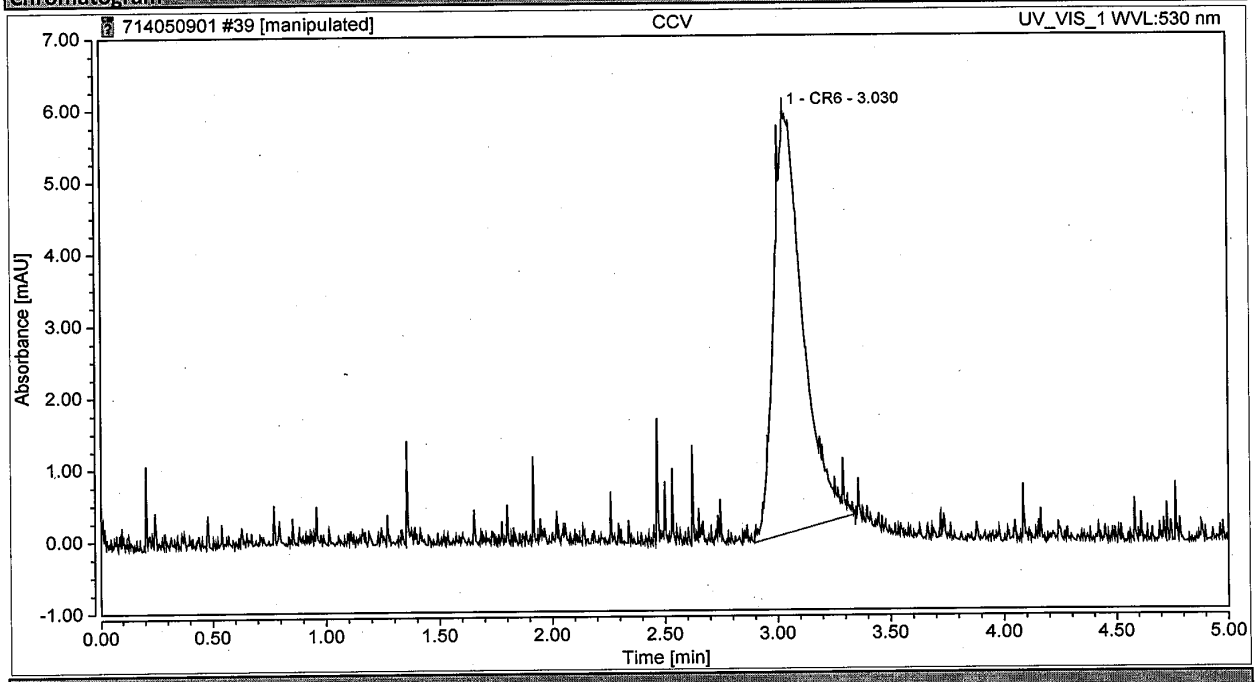
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**37**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.030	0.892	5.912	100.00	100.00	0.24174
Total:			**0.892**	**5.912**	**100.00**	**100.00**	

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Default/Integration

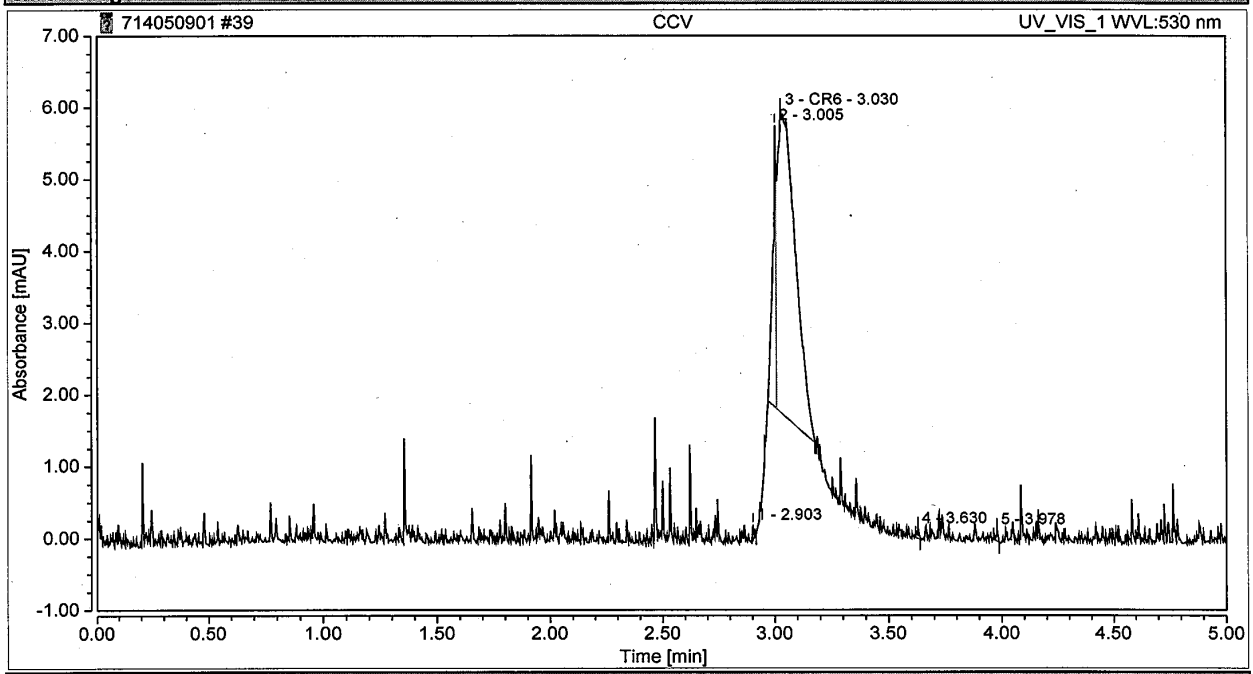
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**37**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 13:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1		2.903	0.001	0.210	0.30	2.43	n.a.
2		3.005	0.063	3.931	13.86	45.42	n.a.
3	CR6	3.030	0.391	4.219	85.30	48.75	0.10613
4		3.630	0.001	0.137	0.27	1.58	n.a.
5		3.978	0.001	0.158	0.27	1.83	n.a.
Total:			**0.458**	**8.654**	**100.00**	**100.00**	

Default/Integration

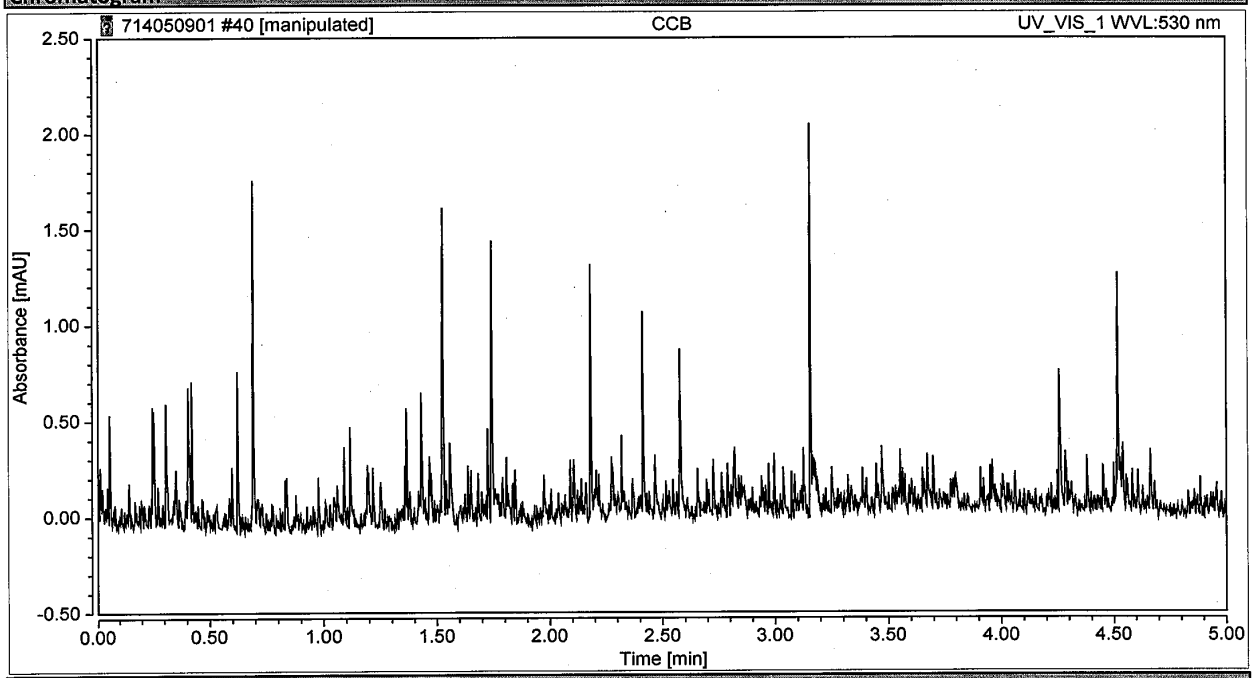
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**38**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 14:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
n.a.	CR6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**	

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Default/Integration

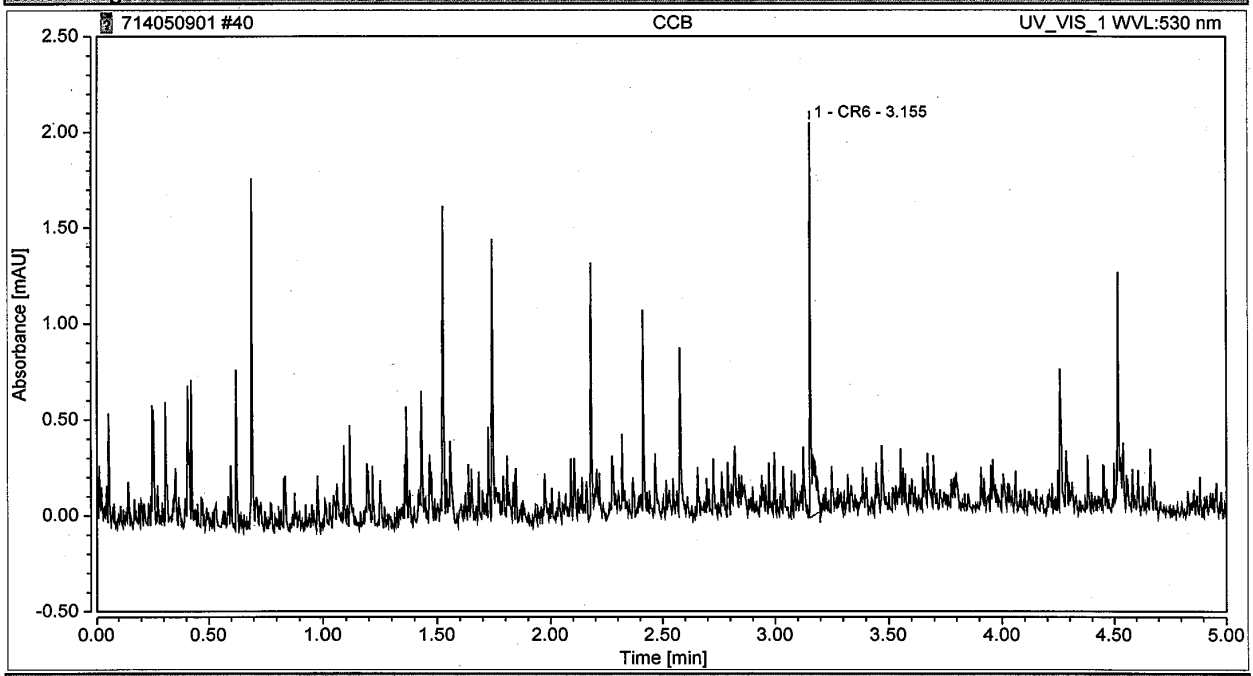
Chromeleon (c) Dionex
Version 7.1.2.1478

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**38**	*Injection Volume:*	**5000.00**
Injection Type:	**Unknown**	*Channel:*	**UV_VIS_1**
Calibration Level:		*Wavelength:*	**530.0**
Instrument Method:	**ChromeVI**	*Bandwidth:*	**n.a.**
Processing Method:	**Sushil ProcMethod**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/May/14 14:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount ppm
1	CR6	3.155	0.015	2.061	100.00	100.00	0.00454
Total:			**0.015**	**2.061**	**100.00**	**100.00**	

Default/Integration

Chromeleon (c) Dionex
Version 7.1.2.1478

July 23, 2014 Service Request No: R1405048

Sandra de las Fuentes
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 3Q2014/748810-03000

Dear Sandra:

Enclosed are the results of the sample(s) submitted to our laboratory between July 2, 2014 and July 3, 2014. For your reference, these analyses have been assigned our service request number **R1405048**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1405048
Project:	FTMM 3Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	7/02-03/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 7/01-02/14 and received in good condition at cooler temperatures of 3.0-5.2°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Fourteen water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":

- 7/10/14: Hexachlorobenzene and Naphthalene were >20% (<40%)
- 7/15/14: Naphthalene was >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable except Acetone was outside limits high on the 07/10/14 LCS and 1,2,4-Trichlorobenzene was outside limits high on the 07/15/14 LCS and have been flagged with an "*". All positive detection for these compounds on samples associated with these LCS' are possibly biased high.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was not requested on these samples.

The Method Blanks associated with these samples were free of contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1405048	Diskette Requested: No	Date Due: 7/24/14
Client: Parsons Engineering Science	Date: 7/8/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 3Q2014	Chain of Custody: Present/Absent:	SDG #: FTMM-53-GW-699MW16-6.5

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1405048-001	FTMM-53-GW-699MW16-6.5	Water	8260C	7/1/14	7/2/14			
R1405048-002	FTMM-53-GW-699WW09-7.75	Water	8260C	7/1/14	7/2/14			
R1405048-003	FTMM-53-GW-699MW06-10.2	Water	8260C	7/1/14	7/2/14			
R1405048-004	FTMM-53-GW-699RW05-4.8	Water	8260C	7/1/14	7/2/14			
R1405048-005	FTMM-53-GW-699MW01-7.5	Water	8260C	7/1/14	7/2/14			
R1405048-006	FTMM-53-GW-699MW04-6.85	Water	8260C	7/1/14	7/2/14			
R1405048-007	FTMM-53-GW-699RW03-8.2	Water	8260C	7/1/14	7/2/14			
R1405048-008	FTMM-53-GW-699RW11-8.3	Water	8260C	7/1/14	7/2/14			
R1405048-009	FTMM-53-GW-565MW01-11.99	Water	8260C	7/1/14	7/2/14			
R1405048-010	FTMM-53-GW-565MW01D-22.31	Water	8260C	7/1/14	7/2/14			
R1405048-011	FTMM-TB-070114	Water	8260C	7/1/14	7/2/14			
R1405048-012	FTMM-EB-070114	Water	8260C	7/1/14	7/3/14			
R1405048-013	FTMM-DI-070214	Water	8260C	7/2/14	7/3/14			
R1405048-014	FTMM-TB-070214	Water	8260C	7/2/14	7/3/14			

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to
http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

16693

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM 2014	Project Number: 74955.10 - 03000
Project Manager: Chris Grill	Report CC:
Company/Address: 100 High St., Boston, MA 02310	
Phone #: (617) 449-1583	Email: chris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lorizos, Chris Watson

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	VOC	REMARKS/ ALTERNATE DESCRIPTION
FTMM-53-GW-699MW16-6.5		7/1/14	1115	W	3	X								
FTMM-53-GW-699MW01-7.75			1175			X								
FTMM-53-GW-699MW06-10.7			1150			X								
FTMM-53-GW-699RW05-4.5			1155			X								
FTMM-53-GW-699MW01-7.5			1210			X								
FTMM-53-GW-699MW04-6.5			1205			X								
FTMM-53-GW-699RW03-8.3			1215			X								
FTMM-53-GW-699RW11-8.3			~~1345~~ 1135			X								
FTMM-65-GW-565MW01-11.5			1135			X								
FTMM-65-GW-565MW01D-22.3			1140			X								
FTMM-TB-070114			—			X								

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED NJ

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE _____

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO # _____
BILL TO: _____

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Nick Lorizos	Printed Name: Chris Wright	Printed Name	Printed Name	Printed Name	
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	
Date/Time: 7/4 @ 1400	Date/Time: 7/2/14 1000	Date/Time	Date/Time	Date/Time	

R1405048 5
Persons, Inc.
FTMM Baseline

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number 114-5048

Cooler received on 7/2/14 by: CW

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y)	N
2	**Custody papers** properly completed (ink, signed)?	(Y)	N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y)	N
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y)	N

5a	**Perchlorate** samples have required headspace?	Y	N	(NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y	(N)	NA
6	Where did the bottles originate?	(ALS/ROC)		CLIENT
7	Soil VOA received as: Bulk Encore 5035set			(NA)

8. Temperature Readings Date:_____ Time:_____ ID: (IR#3) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.4						
Correction Factor (°C)	-0.2						
Corrected Temp (°C)	5.2						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-001 by CW on 7/2/14 at 1016
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 7/2/14

Cooler Breakdown: Date: 7/2/14 Time: 1949 by: JMS

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (NA)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411570	5/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-052-005

Other Comments:

PC Secondary Review: JMS 7/2/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

16694

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM 3Q2014	Project Number: 745510-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA, 02110	
Phone #: (617) 449-1553	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lotos, Alex Dilonno

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: i

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-EB-070114		7/1/14	1300	EB	3	X							
FTMM-DI-070214		7/2/14	1010	DI	3	X							
FTMM-TB-070214		7/2/14	—	TB	3	X							

SPECIAL INSTRUCTIONS/COMMENTS
Metals

R1405048 5
Parsons, Inc.
FTMM 3Q2014

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature						
Printed Name	Nick Lotos	J. Stanford				
Firm	Parsons	ALS				
Date/Time	7/2/14 1400	7/3/14 1000				

Distribution: White-Lab Copy, Yellow-Retained by Originator, Pink-Client Copy

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number 224-52048

Cooler received on 7/3/14 by: JPS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y	N
2	**Custody papers** properly completed (ink, signed)?	Y	N
3	Did all bottles arrive in good **condition** (unbroken)?	Y	N
4	Circle: **Wet Ice Dry Ice Gel packs** present?	Y	N

5a	**Perchlorate** samples have required headspace?	Y	N	NA
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y	N	NA
6	Where did the bottles originate?	ALS/ROC	CLIENT	
7	Soil VOA received as:	Bulk	Encore	5035set NA

8. Temperature Readings Date: 7/3/14 Time: 1021 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	3.2						
Correction Factor (°C)	-0.2						
Corrected Temp (°C)	3.0						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: ROC by JPS on 7/3/14 at 1021
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 7/3/14

Cooler Breakdown: Date: 7/3/14 Time: 1140 by: [signature]

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4112120	6/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-003
Other Comments:

PC Secondary Review: JMS 7/8/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1115
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 14:14

Sample Name: FTMM-53-GW-699MW16-6.5
Lab Code: R1405048-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0230.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.2	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1115
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:14
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1405048-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0230.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**3.1**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.48**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1115
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:14
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1405048-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0230.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/10/14 14:14	
Dibromofluoromethane	105	85-115	7/10/14 14:14	
Toluene-d8	98	85-120	7/10/14 14:14	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1414

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW16-6.5
Lab Code: R1405048-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1125
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:44
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1405048-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.4**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1125
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:44
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1405048-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1125
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:44
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1405048-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	7/10/14 14:44	
Dibromofluoromethane	104	85-115	7/10/14 14:44	
Toluene-d8	97	85-120	7/10/14 14:44	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1444

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW09-7.75
Lab Code: R1405048-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1150
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 15:14

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1405048-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0232.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.6**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1150
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 15:14
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1405048-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0232.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1150
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 15:14
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1405048-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0232.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 15:14	
Dibromofluoromethane	106	85-115	7/10/14 15:14	
Toluene-d8	99	85-120	7/10/14 15:14	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1514

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1405048-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1155
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/15/14 14:06
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1405048-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**7.8**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**3.9**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.21**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1155
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/15/14 14:06
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1405048-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.74**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.45**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**7.6**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.46**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**6.3**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**16**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1155
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/15/14 14:06
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1405048-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/15/14 14:06	
Dibromofluoromethane	102	85-115	7/15/14 14:06	
Toluene-d8	98	85-120	7/15/14 14:06	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/15/14 1406

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-4.8
Lab Code: R1405048-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	1.66	**7.8**	J
000107-83-5	Pentane, 2-methyl-	2.46	**5.2**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**11.3**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.42	**11.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**13.6**	JN

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:14
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.30**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.7**	J	5.0	5.0	1.3	
71-43-2	Benzene	**0.31**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:14
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.27**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.30**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:14
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	7/10/14 16:14	
Dibromofluoromethane	105	85-115	7/10/14 16:14	
Toluene-d8	99	85-120	7/10/14 16:14	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1614

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1205
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:45
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1405048-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.2	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1205
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 16:45

Sample Name: FTMM-53-GW-699MW04-6.85
Lab Code: R1405048-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0235.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1205
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:45
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1405048-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	7/10/14 16:45	
Dibromofluoromethane	106	85-115	7/10/14 16:45	
Toluene-d8	99	85-120	7/10/14 16:45	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1645

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW04-6.85
Lab Code: R1405048-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1215
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:15
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1405048-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**42**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**3.1**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.59**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.88**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1215
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:15
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1405048-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.28**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**17**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**7.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**6.5**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.22**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**9.8**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.90**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**12**		5.0	1.0	0.20	
95-47-6	o-Xylene	**14**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.3**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1215
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:15
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1405048-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	7/10/14 17:15	
Dibromofluoromethane	103	85-115	7/10/14 17:15	
Toluene-d8	97	85-120	7/10/14 17:15	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1715

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-8.2
Lab Code: R1405048-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.66	**11.7**	JN
000079-29-8	Butane, 2,3-dimethyl-	2.44	**7.2**	JN
000096-14-0	Pentane, 3-methyl-	2.67	**8.2**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**10.3**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.18	**7.1**	JN
	unknown	10.20	**7.9**	J
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.41	**26.7**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**13.4**	JN
	unknown	11.05	**33.5**	J
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.34	**8.0**	JN
000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	11.41	**6.9**	JN
000768-49-0	Benzene, (2-methyl-1-propenyl)-	11.49	**13.2**	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	11.68	**9.0**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.72	**10.5**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**12.8**	JN

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1220
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:45
Sample Name:	FTMM-53-GW-699RW11-8.3	**Units:**	µg/L
Lab Code:	R1405048-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.21**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**2.7**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1220
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:45
Sample Name:	FTMM-53-GW-699RW11-8.3	**Units:**	µg/L
Lab Code:	R1405048-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.28**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**4.3**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.74**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.22**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**5.1**		5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.33**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1220
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:45
Sample Name:	FTMM-53-GW-699RW11-8.3	**Units:**	µg/L
Lab Code:	R1405048-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	7/10/14 17:45	
Dibromofluoromethane	106	85-115	7/10/14 17:45	
Toluene-d8	100	85-120	7/10/14 17:45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1745

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW11-8.3
Lab Code: R1405048-008

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000079-29-8	Butane, 2,3-dimethyl-	2.44	**6.3**	JN
	unknown	11.06	**5.1**	J
000767-58-8	Indan, 1-methyl-	11.49	**6.9**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**7.6**	JN

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1135
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:15
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**2.1**	J	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	ND	U	13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	ND	U	13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
75-65-0	tert-Butyl Alcohol	ND	U	250	50	27	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	ND	U	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	**3.2**	J	13	13	3.1	
71-43-2	Benzene	ND	U	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	ND	U	13	2.5	0.73	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1135
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:15
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	ND	U	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	0.80	
100-41-4	Ethylbenzene	ND	U	13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	ND	U	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	ND	U	13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**350**		13	2.5	0.75	
108-88-3	Toluene	ND	U	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	**160**		13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	**13**		13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	**190**		13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	ND	U	25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	ND	U	13	2.5	0.50	
95-47-6	o-Xylene	ND	U	13	2.5	0.50	
135-98-8	sec-Butylbenzene	ND	U	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	**1.3**	J	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1135
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:15
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 18:15	
Dibromofluoromethane	108	85-115	7/10/14 18:15	
Toluene-d8	100	85-120	7/10/14 18:15	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1815

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-68-GW-565MW01-11.99
Lab Code: R1405048-009

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1140
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1405048-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	50	10	2.2	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	50	10	3.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	50	10	2.5	
79-00-5	1,1,2-Trichloroethane	ND	U	50	10	3.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	50	10	2.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	50	10	5.7	
563-58-6	1,1-Dichloropropene	ND	U	50	10	2.9	
87-61-6	1,2,3-Trichlorobenzene	ND	U	50	10	8.2	
96-18-4	1,2,3-Trichloropropane	ND	U	50	10	7.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	50	10	2.4	
95-63-6	1,2,4-Trimethylbenzene	ND	U	50	10	2.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	10	7.4	
106-93-4	1,2-Dibromoethane	ND	U	50	10	2.4	
95-50-1	1,2-Dichlorobenzene	ND	U	50	10	2.1	
107-06-2	1,2-Dichloroethane	ND	U	50	10	3.6	
78-87-5	1,2-Dichloropropane	ND	U	50	10	2.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	50	10	2.0	
541-73-1	1,3-Dichlorobenzene	ND	U	50	10	2.0	
142-28-9	1,3-Dichloropropane	ND	U	50	10	2.7	
106-46-7	1,4-Dichlorobenzene	ND	U	50	10	2.0	
594-20-7	2,2-Dichloropropane	ND	U	50	10	2.7	
78-93-3	2-Butanone (MEK)	ND	U	50	10	8.2	
95-49-8	2-Chlorotoluene	ND	U	50	10	2.0	
591-78-6	2-Hexanone	ND	U	50	50	17	
75-65-0	tert-Butyl Alcohol	ND	U	1000	200	110	
106-43-4	4-Chlorotoluene	ND	U	50	10	2.4	
99-87-6	p-Isopropyltoluene	ND	U	50	10	2.0	
108-10-1	4-Methyl-2-pentanone	ND	U	50	10	6.7	
67-64-1	Acetone	ND	U	50	50	13	
71-43-2	Benzene	ND	U	50	10	2.0	
108-86-1	Bromobenzene	ND	U	50	10	2.9	
74-97-5	Bromochloromethane	ND	U	50	10	3.2	
75-27-4	Bromodichloromethane	ND	U	50	10	3.2	
75-25-2	Bromoform	ND	U	50	10	4.2	
74-83-9	Bromomethane	ND	U	50	10	2.9	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1140
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1405048-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	50	10	4.5	
108-90-7	Chlorobenzene	ND	U	50	10	2.9	
75-00-3	Chloroethane	ND	U	50	10	2.4	
67-66-3	Chloroform	ND	U	50	10	2.5	
74-87-3	Chloromethane	ND	U	50	10	2.1	
124-48-1	Dibromochloromethane	ND	U	50	10	3.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	50	10	4.7	
75-09-2	Methylene Chloride	ND	U	50	10	3.2	
100-41-4	Ethylbenzene	ND	U	50	10	2.0	
87-68-3	Hexachlorobutadiene	ND	U	50	10	6.2	
98-82-8	Isopropylbenzene (Cumene)	ND	U	50	10	2.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	50	10	2.9	
91-20-3	Naphthalene	ND	U	50	10	2.0	
100-42-5	Styrene	ND	U	50	10	2.0	
127-18-4	Tetrachloroethene (PCE)	**1800**		50	10	3.0	
108-88-3	Toluene	ND	U	50	10	2.0	
79-01-6	Trichloroethene (TCE)	**42**	J	50	10	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	50	10	2.0	
75-01-4	Vinyl Chloride	ND	U	50	10	3.2	
156-59-2	cis-1,2-Dichloroethene	**34**	J	50	10	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	50	10	2.4	
179601-23-1	m,p-Xylenes	ND	U	100	20	3.4	
104-51-8	n-Butylbenzene	ND	U	50	10	2.1	
103-65-1	n-Propylbenzene	ND	U	50	10	2.0	
95-47-6	o-Xylene	ND	U	50	10	2.0	
135-98-8	sec-Butylbenzene	ND	U	50	10	2.7	
98-06-6	tert-Butylbenzene	ND	U	50	10	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	50	10	3.4	
10061-02-6	trans-1,3-Dichloropropene	ND	U	50	10	2.0	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1140
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1405048-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 18:45	
Dibromofluoromethane	104	85-115	7/10/14 18:45	
Toluene-d8	98	85-120	7/10/14 18:45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1845

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-68-GW-565MW01D-22.31
Lab Code: R1405048-010

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 12:13
Sample Name:	FTMM-TB-070114	**Units:**	µg/L
Lab Code:	R1405048-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0226.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 0800
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 12:13

Sample Name: FTMM-TB-070114
Lab Code: R1405048-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0226.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 12:13
Sample Name:	FTMM-TB-070114	**Units:**	µg/L
Lab Code:	R1405048-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0226.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/10/14 12:13	
Dibromofluoromethane	105	85-115	7/10/14 12:13	
Toluene-d8	98	85-120	7/10/14 12:13	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1213

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-070114	**Units:**	µg/L
Lab Code:	R1405048-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1300
Date Received: 7/ 3/14
Date Analyzed: 7/15/14 13:05

Sample Name: FTMM-EB-070114
Lab Code: R1405048-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071514\A0367.D\

Analysis Lot: 401710
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	7.0		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1300
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:05
Sample Name:	FTMM-EB-070114	**Units:**	µg/L
Lab Code:	R1405048-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0367.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.65**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.22**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1300
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:05
Sample Name:	FTMM-EB-070114	**Units:**	µg/L
Lab Code:	R1405048-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0367.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	7/15/14 13:05	
Dibromofluoromethane	107	85-115	7/15/14 13:05	
Toluene-d8	97	85-120	7/15/14 13:05	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/3/14
Date Analyzed: 7/15/14 1305

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-EB-070114
Lab Code: R1405048-012

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:35
Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**8.1**		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:35
Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.86**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.35**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

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Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:35
Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	7/15/14 13:35	
Dibromofluoromethane	103	85-115	7/15/14 13:35	
Toluene-d8	98	85-120	7/15/14 13:35	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/2/14
Date Received: 7/3/14
Date Analyzed: 7/15/14 1335

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-DI-070214
Lab Code: R1405048-013

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 2/14 0800
Date Received: 7/ 3/14
Date Analyzed: 7/10/14 13:43

Sample Name: FTMM-TB-070214
Lab Code: R1405048-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0229.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/10/14 13:43
Sample Name:	FTMM-TB-070214	**Units:**	µg/L
Lab Code:	R1405048-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0229.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/10/14 13:43
Sample Name:	FTMM-TB-070214	**Units:**	µg/L
Lab Code:	R1405048-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0229.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/10/14 13:43	
Dibromofluoromethane	104	85-115	7/10/14 13:43	
Toluene-d8	98	85-120	7/10/14 13:43	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/2/14
Sample Matrix:	Water	**Date Received:**	7/3/14
		Date Analyzed:	7/10/14 1343

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-070214	**Units:**	µg/L
Lab Code:	R1405048-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: NA
Date Received: NA
Date Analyzed: 7/10/14 11:42

Sample Name: Method Blank
Lab Code: RQ1408064-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0225.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: NA
Date Received: NA
Date Analyzed: 7/10/14 11:42

Sample Name: Method Blank
Lab Code: RQ1408064-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0225.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 11:42
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408064-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0225.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	7/10/14 11:42	
Dibromofluoromethane	105	85-115	7/10/14 11:42	
Toluene-d8	97	85-120	7/10/14 11:42	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 1142

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408064-01	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: NA
Date Received: NA
Date Analyzed: 7/15/14 12:35

Sample Name: Method Blank
Lab Code: RQ1408240-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071514\A0366.D\

Analysis Lot: 401710
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 12:35
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408240-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0366.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 12:35
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408240-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0366.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	7/15/14 12:35	
Dibromofluoromethane	105	85-115	7/15/14 12:35	
Toluene-d8	99	85-120	7/15/14 12:35	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: NA
Date Received: NA
Date Analyzed: 7/15/14 1235

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1408240-01

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401024

Lab Control Sample
RQ1408064-02

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
1,1,1,2-Tetrachloroethane	19.1	20.0	96		80 - 130
1,1,1-Trichloroethane (TCA)	20.1	20.0	100		65 - 130
1,1,2,2-Tetrachloroethane	20.1	20.0	100		65 - 130
1,1,2-Trichloroethane	20.7	20.0	104		75 - 125
1,1-Dichloroethane (1,1-DCA)	20.8	20.0	104		70 - 135
1,1-Dichloroethene (1,1-DCE)	22.6	20.0	113		70 - 130
1,1-Dichloropropene	20.3	20.0	102		75 - 130
1,2,3-Trichlorobenzene	24.4	20.0	122		75 - 125
1,2,3-Trichloropropane	20.6	20.0	103		75 - 125
1,2,4-Trichlorobenzene	21.2	20.0	106		65 - 135
1,2,4-Trimethylbenzene	19.2	20.0	96		75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.1	20.0	110		50 - 130
1,2-Dibromoethane	19.8	20.0	99		80 - 120
1,2-Dichlorobenzene	20.5	20.0	102		70 - 120
1,2-Dichloroethane	20.6	20.0	103		70 - 130
1,2-Dichloropropane	20.4	20.0	102		75 - 125
1,3,5-Trimethylbenzene	19.2	20.0	96		75 - 130
1,3-Dichlorobenzene	20.1	20.0	101		75 - 125
1,3-Dichloropropane	18.6	20.0	93		75 - 125
1,4-Dichlorobenzene	20.2	20.0	101		75 - 125
2,2-Dichloropropane	18.9	20.0	95		70 - 135
2-Butanone (MEK)	24.7	20.0	123		30 - 150
2-Chlorotoluene	19.3	20.0	96		75 - 125
2-Hexanone	19.8	20.0	99		55 - 130
tert-Butyl Alcohol	373	400	93		50 - 150
4-Chlorotoluene	19.0	20.0	95		75 - 130
p-Isopropyltoluene	19.6	20.0	98		75 - 130
4-Methyl-2-pentanone	18.0	20.0	90		60 - 135
Acetone	30.5	20.0	153	*	40 - 140
Benzene	20.2	20.0	101		80 - 120
Bromobenzene	19.2	20.0	96		75 - 125
Bromochloromethane	22.7	20.0	113		65 - 130
Bromodichloromethane	20.5	20.0	103		75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401024

Lab Control Sample
RQ1408064-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.9	20.0	94	70 - 130
Bromomethane	22.8	20.0	114	30 - 145
Carbon Tetrachloride	19.0	20.0	95	65 - 140
Chlorobenzene	19.8	20.0	99	80 - 120
Chloroethane	20.1	20.0	100	60 - 135
Chloroform	20.9	20.0	105	65 - 135
Chloromethane	23.9	20.0	119	40 - 125
Dibromochloromethane	20.4	20.0	102	60 - 135
Dichlorodifluoromethane (CFC 12)	24.9	20.0	124	30 - 155
Methylene Chloride	22.2	20.0	111	55 - 140
Ethylbenzene	17.5	20.0	87	75 - 125
Hexachlorobutadiene	18.2	20.0	91	50 - 140
Isopropylbenzene (Cumene)	19.3	20.0	97	75 - 125
Methyl tert-Butyl Ether	20.1	20.0	101	65 - 125
Naphthalene	25.8	20.0	129	55 - 140
Styrene	19.1	20.0	95	65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99	45 - 150
Toluene	19.7	20.0	99	75 - 120
Trichloroethene (TCE)	21.1	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	22.0	20.0	110	60 - 145
Vinyl Chloride	20.6	20.0	103	50 - 145
cis-1,2-Dichloroethene	20.7	20.0	104	70 - 125
cis-1,3-Dichloropropene	19.4	20.0	97	70 - 130
m,p-Xylenes	39.0	40.0	98	75 - 130
n-Butylbenzene	19.1	20.0	96	70 - 135
n-Propylbenzene	19.7	20.0	98	70 - 130
o-Xylene	19.0	20.0	95	80 - 120
sec-Butylbenzene	19.4	20.0	97	70 - 125
tert-Butylbenzene	19.1	20.0	95	70 - 130
trans-1,2-Dichloroethene	21.5	20.0	108	60 - 140
trans-1,3-Dichloropropene	18.9	20.0	94	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/15/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401710

Lab Control Sample
RQ1408240-02

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
1,1,1,2-Tetrachloroethane	18.5	20.0	93		80 - 130
1,1,1-Trichloroethane (TCA)	19.8	20.0	99		65 - 130
1,1,2,2-Tetrachloroethane	20.9	20.0	104		65 - 130
1,1,2-Trichloroethane	20.0	20.0	100		75 - 125
1,1-Dichloroethane (1,1-DCA)	20.8	20.0	104		70 - 135
1,1-Dichloroethene (1,1-DCE)	22.9	20.0	114		70 - 130
1,1-Dichloropropene	19.5	20.0	98		75 - 130
1,2,3-Trichlorobenzene	26.2	20.0	131	*	75 - 125
1,2,3-Trichloropropane	21.3	20.0	106		75 - 125
1,2,4-Trichlorobenzene	22.9	20.0	114		65 - 135
1,2,4-Trimethylbenzene	19.8	20.0	99		75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	21.8	20.0	109		50 - 130
1,2-Dibromoethane	19.5	20.0	97		80 - 120
1,2-Dichlorobenzene	20.7	20.0	104		70 - 120
1,2-Dichloroethane	20.8	20.0	104		70 - 130
1,2-Dichloropropane	20.1	20.0	100		75 - 125
1,3,5-Trimethylbenzene	18.8	20.0	94		75 - 130
1,3-Dichlorobenzene	20.2	20.0	101		75 - 125
1,3-Dichloropropane	19.1	20.0	96		75 - 125
1,4-Dichlorobenzene	20.4	20.0	102		75 - 125
2,2-Dichloropropane	18.3	20.0	92		70 - 135
2-Butanone (MEK)	23.9	20.0	119		30 - 150
2-Chlorotoluene	19.2	20.0	96		75 - 125
2-Hexanone	17.8	20.0	89		55 - 130
tert-Butyl Alcohol	385	400	96		50 - 150
4-Chlorotoluene	19.2	20.0	96		75 - 130
p-Isopropyltoluene	19.6	20.0	98		75 - 130
4-Methyl-2-pentanone	17.1	20.0	86		60 - 135
Acetone	25.6	20.0	128		40 - 140
Benzene	19.2	20.0	96		80 - 120
Bromobenzene	19.4	20.0	97		75 - 125
Bromochloromethane	22.4	20.0	112		65 - 130
Bromodichloromethane	20.0	20.0	100		75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/15/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401710

Lab Control Sample
RQ1408240-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.5	20.0	92	70 - 130
Bromomethane	21.2	20.0	106	30 - 145
Carbon Tetrachloride	18.3	20.0	91	65 - 140
Chlorobenzene	19.4	20.0	97	80 - 120
Chloroethane	19.3	20.0	96	60 - 135
Chloroform	20.9	20.0	105	65 - 135
Chloromethane	24.3	20.0	122	40 - 125
Dibromochloromethane	20.3	20.0	101	60 - 135
Dichlorodifluoromethane (CFC 12)	22.5	20.0	112	30 - 155
Methylene Chloride	21.9	20.0	110	55 - 140
Ethylbenzene	17.3	20.0	86	75 - 125
Hexachlorobutadiene	18.0	20.0	90	50 - 140
Isopropylbenzene (Cumene)	18.6	20.0	93	75 - 125
Methyl tert-Butyl Ether	20.2	20.0	101	65 - 125
Naphthalene	27.2	20.0	136	55 - 140
Styrene	18.7	20.0	94	65 - 135
Tetrachloroethene (PCE)	19.0	20.0	95	45 - 150
Toluene	18.9	20.0	94	75 - 120
Trichloroethene (TCE)	20.0	20.0	100	70 - 125
Trichlorofluoromethane (CFC 11)	20.6	20.0	103	60 - 145
Vinyl Chloride	19.6	20.0	98	50 - 145
cis-1,2-Dichloroethene	21.0	20.0	105	70 - 125
cis-1,3-Dichloropropene	18.6	20.0	93	70 - 130
m,p-Xylenes	38.1	40.0	95	75 - 130
n-Butylbenzene	18.9	20.0	95	70 - 135
n-Propylbenzene	19.4	20.0	97	70 - 130
o-Xylene	18.4	20.0	92	80 - 120
sec-Butylbenzene	19.0	20.0	95	70 - 125
tert-Butylbenzene	19.0	20.0	95	70 - 130
trans-1,2-Dichloroethene	21.4	20.0	107	60 - 140
trans-1,3-Dichloropropene	18.6	20.0	93	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

July 23, 2014 Service Request No: R1405048

Sandra de las Fuentes
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 3Q2014/748810-03000

Dear Sandra:

Enclosed are the results of the sample(s) submitted to our laboratory between July 2, 2014 and July 3, 2014. For your reference, these analyses have been assigned our service request number **R1405048**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 FAX 585-288-8475
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ALS Environmental

SDG NARRATIVE

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1405048
Project:	FTMM 3Q 2014	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	7/02-03/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 7/01-02/14 and received in good condition at cooler temperatures of 3.0-5.2°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Fourteen water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes.

The following CCVs were >20 % and have been flagged with an "*":

- 7/10/14: Hexachlorobenzene and Naphthalene were >20% (<40%)
- 7/15/14: Naphthalene was >20% (<40%)

No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable except Acetone was outside limits high on the 07/10/14 LCS and 1,2,4-Trichlorobenzene was outside limits high on the 07/15/14 LCS and have been flagged with an "*". All positive detection for these compounds on samples associated with these LCS' are possibly biased high.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was not requested on these samples.

The Method Blanks associated with these samples were free of contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1405048	Diskette Requested: No	Date Due: 7/24/14
Client: Parsons Engineering Science	Date: 7/8/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 3Q2014	Chain of Custody: Present/Absent:	SDG #: FTMM-53-GW-699MW16-6.5

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1405048-001	FTMM-53-GW-699MW16-6.5	Water	8260C	7/1/14	7/2/14			
R1405048-002	FTMM-53-GW-699WW09-7.75	Water	8260C	7/1/14	7/2/14			
R1405048-003	FTMM-53-GW-699MW06-10.2	Water	8260C	7/1/14	7/2/14			
R1405048-004	FTMM-53-GW-699RW05-4.8	Water	8260C	7/1/14	7/2/14			
R1405048-005	FTMM-53-GW-699MW01-7.5	Water	8260C	7/1/14	7/2/14			
R1405048-006	FTMM-53-GW-699MW04-6.85	Water	8260C	7/1/14	7/2/14			
R1405048-007	FTMM-53-GW-699RW03-8.2	Water	8260C	7/1/14	7/2/14			
R1405048-008	FTMM-53-GW-699RW11-8.3	Water	8260C	7/1/14	7/2/14			
R1405048-009	FTMM-53-GW-565MW01-11.99	Water	8260C	7/1/14	7/2/14			
R1405048-010	FTMM-53-GW-565MW01D-22.31	Water	8260C	7/1/14	7/2/14			
R1405048-011	FTMM-TB-070114	Water	8260C	7/1/14	7/2/14			
R1405048-012	FTMM-EB-070114	Water	8260C	7/1/14	7/3/14			
R1405048-013	FTMM-DI-070214	Water	8260C	7/2/14	7/3/14			
R1405048-014	FTMM-TB-070214	Water	8260C	7/2/14	7/3/14			

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to
http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

16693

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM 2Q2014	Project Number: 748510 - 078000
Project Manager: ~~Chris Grill~~	Report CC:
Company/Address: 100 High St. Boston, MA 02210	
Phone#: (617) 449 - 1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lorzos, Chris Watson

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	VOC	REMARKS/ ALTERNATE DESCRIPTION
FTMM-53-GW-699MW16-6.5		7/1/14	1115	W	3	X								
FTMM-53-GW-699MW07-7.75			1125			X								
FTMM-53-GW-699MW06-10.8			1150			X								
FTMM-53-GW-699RW05-4.8			1155			X								
FTMM-53-GW-699MW01-7.5			1210			X								
FTMM-53-GW-699MW04-6.85			1205			X								
FTMM-53-GW-699RW03-8.3			1215			X								
FTMM-53-GW-699RW11-8.3			~~1225~~ 1220			X								
FTMM-68-GW-565MW01-11.7			1135			X								
FTMM-68-GW-565MW01-8231			1140			X								
FTMM-TB-070114			—			X								

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED VT

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Nick Lorzos	Printed Name: Chris Wright	Printed Name	Printed Name	Printed Name	
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	
Date/Time: 7/1/14 @ 1400	Date/Time: 7/2/14 1000	Date/Time	Date/Time	Date/Time	

Distribution: White - Lab Copy; Yellow - Return to Originator

R1405048 5
Parsons, Inc.
FTMM Baseline

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number 14-5048

Cooler received on 7/2/14 by: CW

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y)	N
2	**Custody papers** properly completed (ink, signed)?	(Y)	N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y)	N
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	(Y)	N

5a	**Perchlorate** samples have required headspace?	Y	N	(NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y	(N)	NA
6	Where did the bottles originate?	(ALS/ROC)	CLIENT	
7	Soil VOA received as:	Bulk	Encore	5035set (NA)

8. Temperature Readings Date:_____ Time:_____ ID: (IR#3) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.4						
Correction Factor (°C)	-0.2						
Corrected Temp (°C)	5.2						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-001 by CW on 7/2/14 at 1016
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 7/2/14

Cooler Breakdown: Date: 7/2/14 Time: 1949 by: JMS

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (NA)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411367U	5/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-052-005

Other Comments:

PC Secondary Review: JMS 7/8/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

(ALS) Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

16694

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM 3Q2014	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA, 02110	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lorizos, Alex Dilonno

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-EB-070114		7/1/14	1300	EB	3	X							
FTMM-DI-070214		7/2/14	1210	DI	3	X							
FTMM-TB-070214		7/2/14	—	TB	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

R1405048 5
Parsons, Inc.
FTMM 3Q2014

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Lorizos	Printed Name: J. Stewart	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 7/2/14 @ 1400	Date/Time: 7/3/14 1000	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number RLY-52048

Cooler received on 7/3/14 by: SMS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y N	5a	**Perchlorate** samples have required headspace?	Y N NA
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N NA
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	Y N	7	Soil VOA received as:	Bulk Encore 5035set NA

8. Temperature Readings Date: 7/3/14 Time: 1021 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	3.2						
Correction Factor (°C)	-0.2						
Corrected Temp (°C)	3.0						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: Lab by SMS on 7/3/14 at 1021
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMM 7/8/14

Cooler Breakdown: Date: 7/3/14 Time: 1140 by: AS

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411212O	6/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-002-003
Other Comments:

PC Secondary Review: JMM 7/8/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: Parsons, Inc.
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1405048-001.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1129	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-001.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-001.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-002.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1129	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-002.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-002.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-003.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1129	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-003.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-003.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-004.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1129	In Lab / FNAEGLER	

Client: Parsons, Inc.
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		7/10/14	1713	R-001-S10 / KRUEST	
		7/15/14	1104	In Lab / FNAEGLER	
		7/15/14	1729	R-001-S10 / FNAEGLER	
R1405048-004.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-004.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-005.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1129	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-005.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-005.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-006.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-006.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-006.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-007.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-007.02					
		7/2/14	1945	SMO / DWARD	

Client: Parsons, Inc.
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		7/2/14	1945	R-001 / DWARD	
R1405048-007.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-008.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-008.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-008.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-009.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-009.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-009.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-010.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-010.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-010.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	

Client: Parsons, Inc.
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1405048-011.01					
	8260C				
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-011.02					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-011.03					
		7/2/14	1945	SMO / DWARD	
		7/2/14	1945	R-001 / DWARD	
R1405048-012.01					
	8260C				
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
		7/15/14	1104	In Lab / FNAEGLER	
		7/15/14	1729	R-001-S10 / FNAEGLER	
R1405048-012.02					
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
R1405048-012.03					
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
R1405048-013.01					
	8260C				
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
		7/15/14	1104	In Lab / FNAEGLER	
		7/15/14	1729	R-001-S10 / FNAEGLER	
R1405048-013.02					
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
R1405048-013.03					
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
R1405048-014.01					
	8260C				

Client: Parsons, Inc.
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
		7/10/14	1130	In Lab / FNAEGLER	
		7/10/14	1713	R-001-S10 / KRUEST	
R1405048-014.02					
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	
R1405048-014.03					
		7/3/14	1140	SMO / JSEWARD	
		7/3/14	1140	R-001 / JSEWARD	

VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401024

Lab Control Sample
RQ1408064-02

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
1,1,1,2-Tetrachloroethane	19.1	20.0	96		80 - 130
1,1,1-Trichloroethane (TCA)	20.1	20.0	100		65 - 130
1,1,2,2-Tetrachloroethane	20.1	20.0	100		65 - 130
1,1,2-Trichloroethane	20.7	20.0	104		75 - 125
1,1-Dichloroethane (1,1-DCA)	20.8	20.0	104		70 - 135
1,1-Dichloroethene (1,1-DCE)	22.6	20.0	113		70 - 130
1,1-Dichloropropene	20.3	20.0	102		75 - 130
1,2,3-Trichlorobenzene	24.4	20.0	122		75 - 125
1,2,3-Trichloropropane	20.6	20.0	103		75 - 125
1,2,4-Trichlorobenzene	21.2	20.0	106		65 - 135
1,2,4-Trimethylbenzene	19.2	20.0	96		75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.1	20.0	110		50 - 130
1,2-Dibromoethane	19.8	20.0	99		80 - 120
1,2-Dichlorobenzene	20.5	20.0	102		70 - 120
1,2-Dichloroethane	20.6	20.0	103		70 - 130
1,2-Dichloropropane	20.4	20.0	102		75 - 125
1,3,5-Trimethylbenzene	19.2	20.0	96		75 - 130
1,3-Dichlorobenzene	20.1	20.0	101		75 - 125
1,3-Dichloropropane	18.6	20.0	93		75 - 125
1,4-Dichlorobenzene	20.2	20.0	101		75 - 125
2,2-Dichloropropane	18.9	20.0	95		70 - 135
2-Butanone (MEK)	24.7	20.0	123		30 - 150
2-Chlorotoluene	19.3	20.0	96		75 - 125
2-Hexanone	19.8	20.0	99		55 - 130
tert-Butyl Alcohol	373	400	93		50 - 150
4-Chlorotoluene	19.0	20.0	95		75 - 130
p-Isopropyltoluene	19.6	20.0	98		75 - 130
4-Methyl-2-pentanone	18.0	20.0	90		60 - 135
Acetone	30.5	20.0	153	*	40 - 140
Benzene	20.2	20.0	101		80 - 120
Bromobenzene	19.2	20.0	96		75 - 125
Bromochloromethane	22.7	20.0	113		65 - 130
Bromodichloromethane	20.5	20.0	103		75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/10/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401024

Analyte Name	Lab Control Sample RQ1408064-02 Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.9	20.0	94	70 - 130
Bromomethane	22.8	20.0	114	30 - 145
Carbon Tetrachloride	19.0	20.0	95	65 - 140
Chlorobenzene	19.8	20.0	99	80 - 120
Chloroethane	20.1	20.0	100	60 - 135
Chloroform	20.9	20.0	105	65 - 135
Chloromethane	23.9	20.0	119	40 - 125
Dibromochloromethane	20.4	20.0	102	60 - 135
Dichlorodifluoromethane (CFC 12)	24.9	20.0	124	30 - 155
Methylene Chloride	22.2	20.0	111	55 - 140
Ethylbenzene	17.5	20.0	87	75 - 125
Hexachlorobutadiene	18.2	20.0	91	50 - 140
Isopropylbenzene (Cumene)	19.3	20.0	97	75 - 125
Methyl tert-Butyl Ether	20.1	20.0	101	65 - 125
Naphthalene	25.8	20.0	129	55 - 140
Styrene	19.1	20.0	95	65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99	45 - 150
Toluene	19.7	20.0	99	75 - 120
Trichloroethene (TCE)	21.1	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	22.0	20.0	110	60 - 145
Vinyl Chloride	20.6	20.0	103	50 - 145
cis-1,2-Dichloroethene	20.7	20.0	104	70 - 125
cis-1,3-Dichloropropene	19.4	20.0	97	70 - 130
m,p-Xylenes	39.0	40.0	98	75 - 130
n-Butylbenzene	19.1	20.0	96	70 - 135
n-Propylbenzene	19.7	20.0	98	70 - 130
o-Xylene	19.0	20.0	95	80 - 120
sec-Butylbenzene	19.4	20.0	97	70 - 125
tert-Butylbenzene	19.1	20.0	95	70 - 130
trans-1,2-Dichloroethene	21.5	20.0	108	60 - 140
trans-1,3-Dichloropropene	18.9	20.0	94	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/15/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401710

Lab Control Sample
RQ1408240-02

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
1,1,1,2-Tetrachloroethane	18.5	20.0	93		80 - 130
1,1,1-Trichloroethane (TCA)	19.8	20.0	99		65 - 130
1,1,2,2-Tetrachloroethane	20.9	20.0	104		65 - 130
1,1,2-Trichloroethane	20.0	20.0	100		75 - 125
1,1-Dichloroethane (1,1-DCA)	20.8	20.0	104		70 - 135
1,1-Dichloroethene (1,1-DCE)	22.9	20.0	114		70 - 130
1,1-Dichloropropene	19.5	20.0	98		75 - 130
1,2,3-Trichlorobenzene	26.2	20.0	131	*	75 - 125
1,2,3-Trichloropropane	21.3	20.0	106		75 - 125
1,2,4-Trichlorobenzene	22.9	20.0	114		65 - 135
1,2,4-Trimethylbenzene	19.8	20.0	99		75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	21.8	20.0	109		50 - 130
1,2-Dibromoethane	19.5	20.0	97		80 - 120
1,2-Dichlorobenzene	20.7	20.0	104		70 - 120
1,2-Dichloroethane	20.8	20.0	104		70 - 130
1,2-Dichloropropane	20.1	20.0	100		75 - 125
1,3,5-Trimethylbenzene	18.8	20.0	94		75 - 130
1,3-Dichlorobenzene	20.2	20.0	101		75 - 125
1,3-Dichloropropane	19.1	20.0	96		75 - 125
1,4-Dichlorobenzene	20.4	20.0	102		75 - 125
2,2-Dichloropropane	18.3	20.0	92		70 - 135
2-Butanone (MEK)	23.9	20.0	119		30 - 150
2-Chlorotoluene	19.2	20.0	96		75 - 125
2-Hexanone	17.8	20.0	89		55 - 130
tert-Butyl Alcohol	385	400	96		50 - 150
4-Chlorotoluene	19.2	20.0	96		75 - 130
p-Isopropyltoluene	19.6	20.0	98		75 - 130
4-Methyl-2-pentanone	17.1	20.0	86		60 - 135
Acetone	25.6	20.0	128		40 - 140
Benzene	19.2	20.0	96		80 - 120
Bromobenzene	19.4	20.0	97		75 - 125
Bromochloromethane	22.4	20.0	112		65 - 130
Bromodichloromethane	20.0	20.0	100		75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/15/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 401710

Lab Control Sample
RQ1408240-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.5	20.0	92	70 - 130
Bromomethane	21.2	20.0	106	30 - 145
Carbon Tetrachloride	18.3	20.0	91	65 - 140
Chlorobenzene	19.4	20.0	97	80 - 120
Chloroethane	19.3	20.0	96	60 - 135
Chloroform	20.9	20.0	105	65 - 135
Chloromethane	24.3	20.0	122	40 - 125
Dibromochloromethane	20.3	20.0	101	60 - 135
Dichlorodifluoromethane (CFC 12)	22.5	20.0	112	30 - 155
Methylene Chloride	21.9	20.0	110	55 - 140
Ethylbenzene	17.3	20.0	86	75 - 125
Hexachlorobutadiene	18.0	20.0	90	50 - 140
Isopropylbenzene (Cumene)	18.6	20.0	93	75 - 125
Methyl tert-Butyl Ether	20.2	20.0	101	65 - 125
Naphthalene	27.2	20.0	136	55 - 140
Styrene	18.7	20.0	94	65 - 135
Tetrachloroethene (PCE)	19.0	20.0	95	45 - 150
Toluene	18.9	20.0	94	75 - 120
Trichloroethene (TCE)	20.0	20.0	100	70 - 125
Trichlorofluoromethane (CFC 11)	20.6	20.0	103	60 - 145
Vinyl Chloride	19.6	20.0	98	50 - 145
cis-1,2-Dichloroethene	21.0	20.0	105	70 - 125
cis-1,3-Dichloropropene	18.6	20.0	93	70 - 130
m,p-Xylenes	38.1	40.0	95	75 - 130
n-Butylbenzene	18.9	20.0	95	70 - 135
n-Propylbenzene	19.4	20.0	97	70 - 130
o-Xylene	18.4	20.0	92	80 - 120
sec-Butylbenzene	19.0	20.0	95	70 - 125
tert-Butylbenzene	19.0	20.0	95	70 - 130
trans-1,2-Dichloroethene	21.4	20.0	107	60 - 140
trans-1,3-Dichloropropene	18.6	20.0	93	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/10/14 11:42

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1408064-01
Instrument ID: R-MS-10
File ID: I:\ACQUDATA\msvoa10\data\071014\A0225.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1408064-02	I:\ACQUDATA\msvoa10\data\071014\A0223.D\	7/10/14 10:33
FTMM-TB-070114	R1405048-011	I:\ACQUDATA\msvoa10\data\071014\A0226.D\	7/10/14 12:13
FTMM-TB-070214	R1405048-014	I:\ACQUDATA\msvoa10\data\071014\A0229.D\	7/10/14 13:43
FTMM-53-GW-699MW16-6.5	R1405048-001	I:\ACQUDATA\msvoa10\data\071014\A0230.D\	7/10/14 14:14
FTMM-53-GW-699MW09-7.75	R1405048-002	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	7/10/14 14:44
FTMM-53-GW-699MW06-10.2	R1405048-003	I:\ACQUDATA\msvoa10\data\071014\A0232.D\	7/10/14 15:14
FTMM-53-GW-699MW01-7.5	R1405048-005	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	7/10/14 16:14
FTMM-53-GW-699MW04-6.85	R1405048-006	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	7/10/14 16:45
FTMM-53-GW-699RW03-8.2	R1405048-007	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	7/10/14 17:15
FTMM-53-GW-699RW11-8.3	R1405048-008	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	7/10/14 17:45
FTMM-68-GW-565MW01-11.99	R1405048-009	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	7/10/14 18:15
FTMM-68-GW-565MW01D-22.31	R1405048-010	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	7/10/14 18:45

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Analyzed: 7/15/14 12:35

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1408240-01
Instrument ID: R-MS-10
File ID: I:\ACQUDATA\msvoa10\data\071514\A0366.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1408240-02	I:\ACQUDATA\msvoa10\data\071514\A0364.D\	7/15/14 11:34
FTMM-EB-070114	R1405048-012	I:\ACQUDATA\msvoa10\data\071514\A0367.D\	7/15/14 13:05
FTMM-DI-070214	R1405048-013	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	7/15/14 13:35
FTMM-53-GW-699RW05-4.8	R1405048-004	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	7/15/14 14:06

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 6/11/14 15:27

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\061114\F9405.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 215799

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.14	104816	Pass
75	95	30	60	45.21	235313	Pass
95	95	100	100	100.00	520512	Pass
96	95	5	9	6.46	33616	Pass
173	174	0	2	0.00	0	Pass
174	95	50	120	83.11	432576	Pass
175	174	5	9	7.67	33184	Pass
176	174	95	101	95.32	412352	Pass
177	176	5	9	6.62	27280	Pass

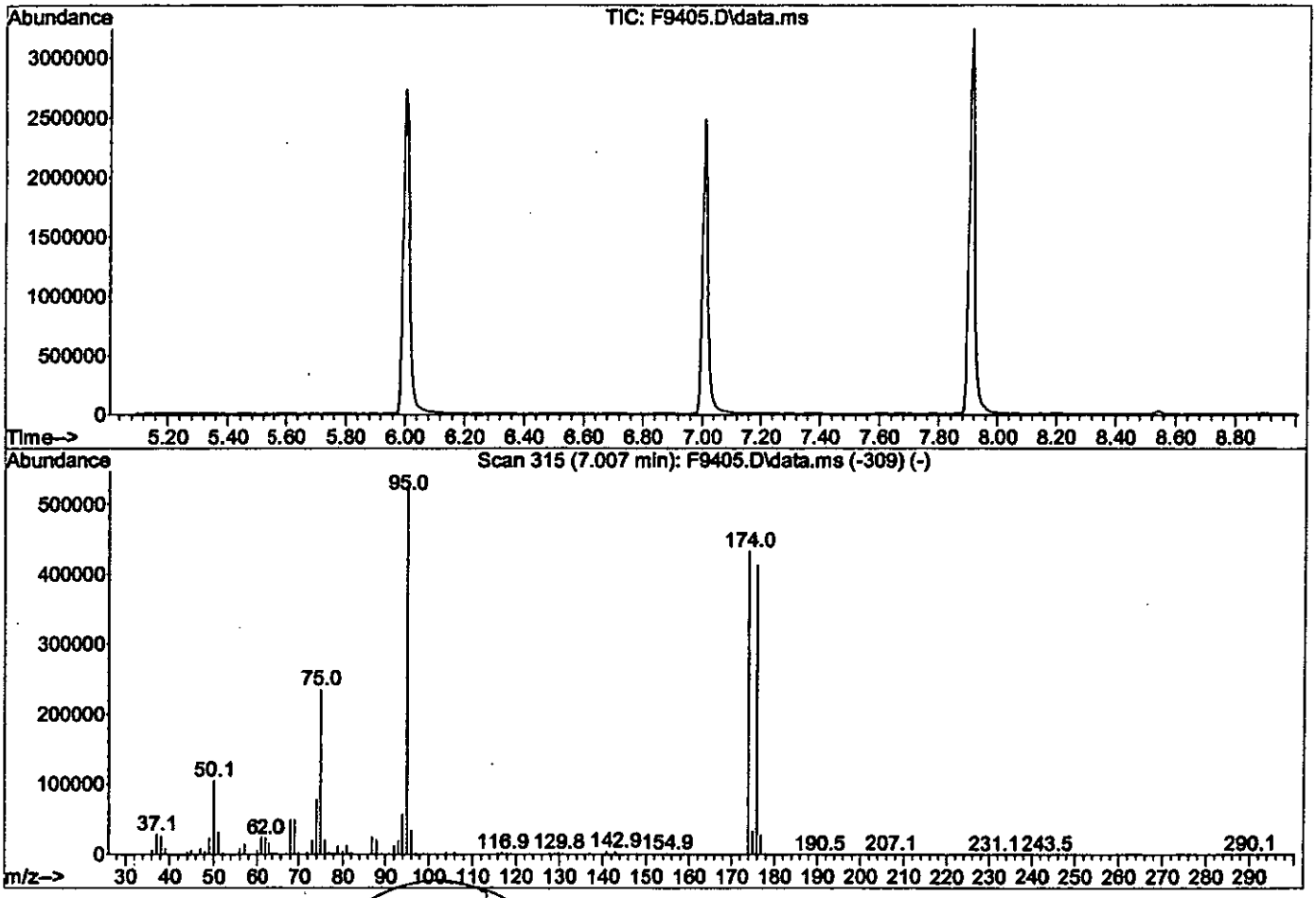
Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa10\data\061114\F9407.D\	6/11/14 16:24	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa10\data\061114\F9408.D\	6/11/14 16:54	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa10\data\061114\F9409.D\	6/11/14 17:25	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa10\data\061114\F9410.D\	6/11/14 17:55	
Initial CalibrationICAL	10 ppb	I:\ACQUDATA\msvoa10\data\061114\F9411.D\	6/11/14 18:25	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa10\data\061114\F9412.D\	6/11/14 18:56	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa10\data\061114\F9413.D\	6/11/14 19:26	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\msvoa10\data\061114\F9414.D\	6/11/14 19:56	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa10\data\061114\F9415.D\	6/11/14 20:27	

```
Data Path : I:\ACQUDATA\msvoa10\data\061114\
Data File : F9405.D
Acq On    : 11 Jun 2014    3:27 pm
Operator  : F.NAEGLER
Sample    : TUNE
Misc      :
ALS Vial  : 3   Sample Multiplier: 1

Integration File: CPD4.P

Method    : I:\ACQUDATA\MSVOA10\METHODS\T061114.M
Title     : 8260B WATERS
Last Update  : Wed Sep 27 14:33:13 2006
```

FJ 6/12/14



Spectrum Information: Scan 315

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	104816	PASS
75	95	30	60	45.2	235313	PASS
95	95	100	100	100.0	520512	PASS
96	95	5	9	6.5	33616	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.1	432576	PASS
175	174	5	9	7.7	33184	PASS
176	174	95	101	95.3	412352	PASS
177	176	5	9	6.6	27280	PASS

T061114.M Wed Jun 11 15:33:33 2014 MSVO10 Page: 1

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/10/14 09:36

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\071014\A0221.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 401024

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	22.36	90880	Pass
75	95	30	60	47.02	191061	Pass
95	95	100	100	100.00	406379	Pass
96	95	5	9	6.55	26624	Pass
173	174	0	2	0.68	2296	Pass
174	95	50	120	82.76	336303	Pass
175	174	5	9	7.96	26781	Pass
176	174	95	101	97.21	326912	Pass
177	176	5	9	6.93	22652	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1408064-04	I:\ACQUDATA\msvoa10\data\071014\A0222.D\	7/10/14 10:03	
Lab Control Sample	RQ1408064-02	I:\ACQUDATA\msvoa10\data\071014\A0223.D\	7/10/14 10:33	
Method Blank	RQ1408064-01	I:\ACQUDATA\msvoa10\data\071014\A0225.D\	7/10/14 11:42	
FTMM-TB-070114	R1405048-011	I:\ACQUDATA\msvoa10\data\071014\A0226.D\	7/10/14 12:13	
FTMM-TB-070214	R1405048-014	I:\ACQUDATA\msvoa10\data\071014\A0229.D\	7/10/14 13:43	
FTMM-53-GW-699MW16-6.5	R1405048-001	I:\ACQUDATA\msvoa10\data\071014\A0230.D\	7/10/14 14:14	
FTMM-53-GW-699MW09-7.75	R1405048-002	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	7/10/14 14:44	
FTMM-53-GW-699MW06-10.2	R1405048-003	I:\ACQUDATA\msvoa10\data\071014\A0232.D\	7/10/14 15:14	
FTMM-53-GW-699MW01-7.5	R1405048-005	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	7/10/14 16:14	
FTMM-53-GW-699MW04-6.85	R1405048-006	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	7/10/14 16:45	
FTMM-53-GW-699RW03-8.2	R1405048-007	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	7/10/14 17:15	
FTMM-53-GW-699RW11-8.3	R1405048-008	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	7/10/14 17:45	
FTMM-68-GW-565MW01-11.99	R1405048-009	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	7/10/14 18:15	
FTMM-68-GW-565MW01D-22.31	R1405048-010	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	7/10/14 18:45	

BFB

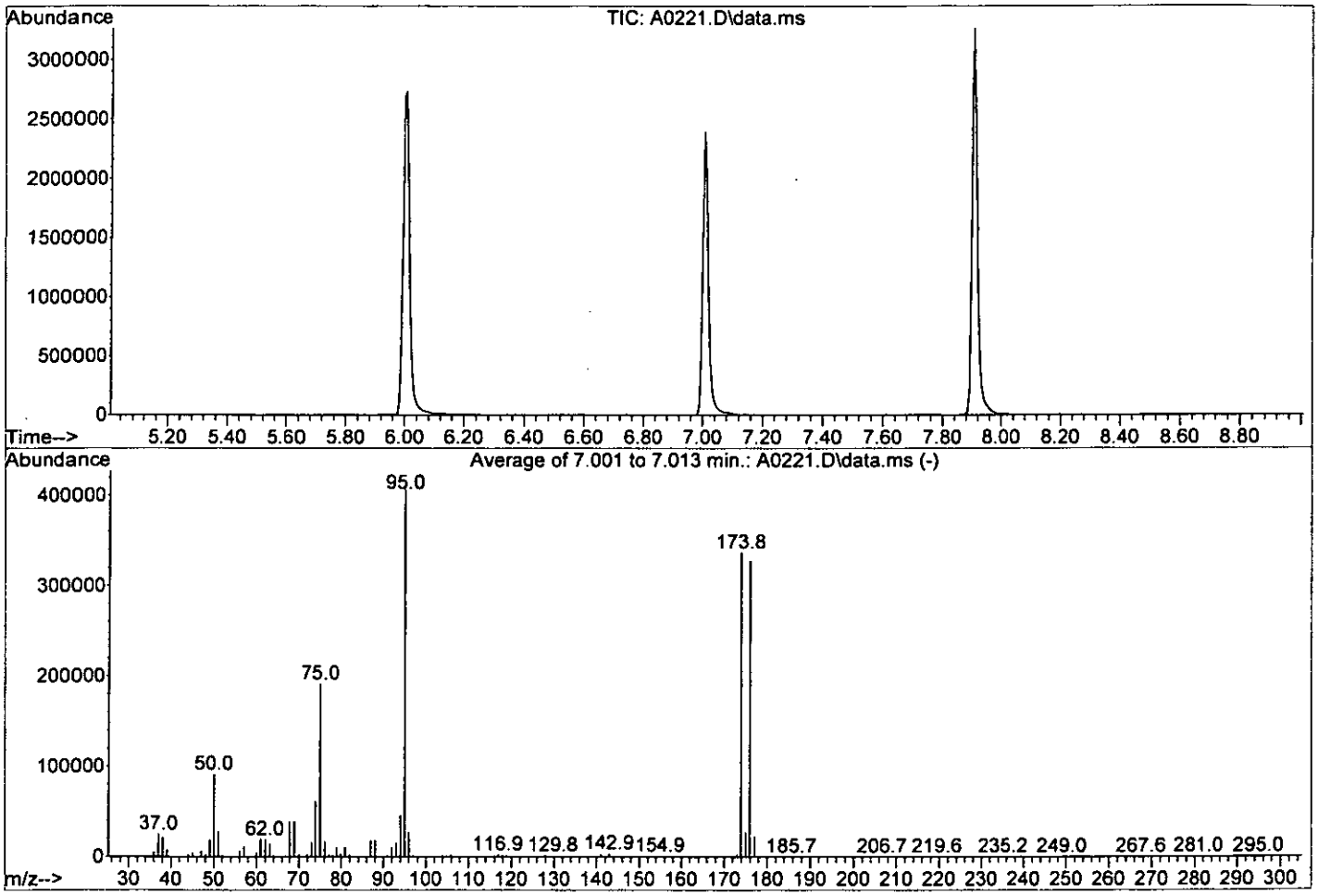
Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0221.D
Acq On : 10 Jul 2014 9:36 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

R2408064-03

FJ
7/14/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T061114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	90880	PASS
75	95	30	60	47.0	191061	PASS
95	95	100	100	100.0	406379	PASS
96	95	5	9	6.6	26624	PASS
173	174	0.00	2	0.7	2296	PASS
174	95	50	120	82.8	336303	PASS
175	174	5	9	8.0	26781	PASS
176	174	95	101	97.2	326912	PASS
177	176	5	9	6.9	22652	PASS

T061114.M Thu Jul 10 10:10:02 2014 MSVO10 Page: 1

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/15/14 10:22

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\071514\A0362.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 401710

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.55	93397	Pass
75	95	30	60	47.53	188523	Pass
95	95	100	100	100.00	396629	Pass
96	95	5	9	6.31	25013	Pass
173	174	0	2	0.72	2365	Pass
174	95	50	120	82.37	326699	Pass
175	174	5	9	7.72	25232	Pass
176	174	95	101	97.94	319957	Pass
177	176	5	9	6.37	20390	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1408240-04	I:\ACQUDATA\msvoa10\data\071514\A0363.D\	7/15/14 10:52	
Lab Control Sample	RQ1408240-02	I:\ACQUDATA\msvoa10\data\071514\A0364.D\	7/15/14 11:34	
Method Blank	RQ1408240-01	I:\ACQUDATA\msvoa10\data\071514\A0366.D\	7/15/14 12:35	
FTMM-EB-070114	R1405048-012	I:\ACQUDATA\msvoa10\data\071514\A0367.D\	7/15/14 13:05	
FTMM-DI-070214	R1405048-013	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	7/15/14 13:35	
FTMM-53-GW-699RW05-4.8	R1405048-004	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	7/15/14 14:06	

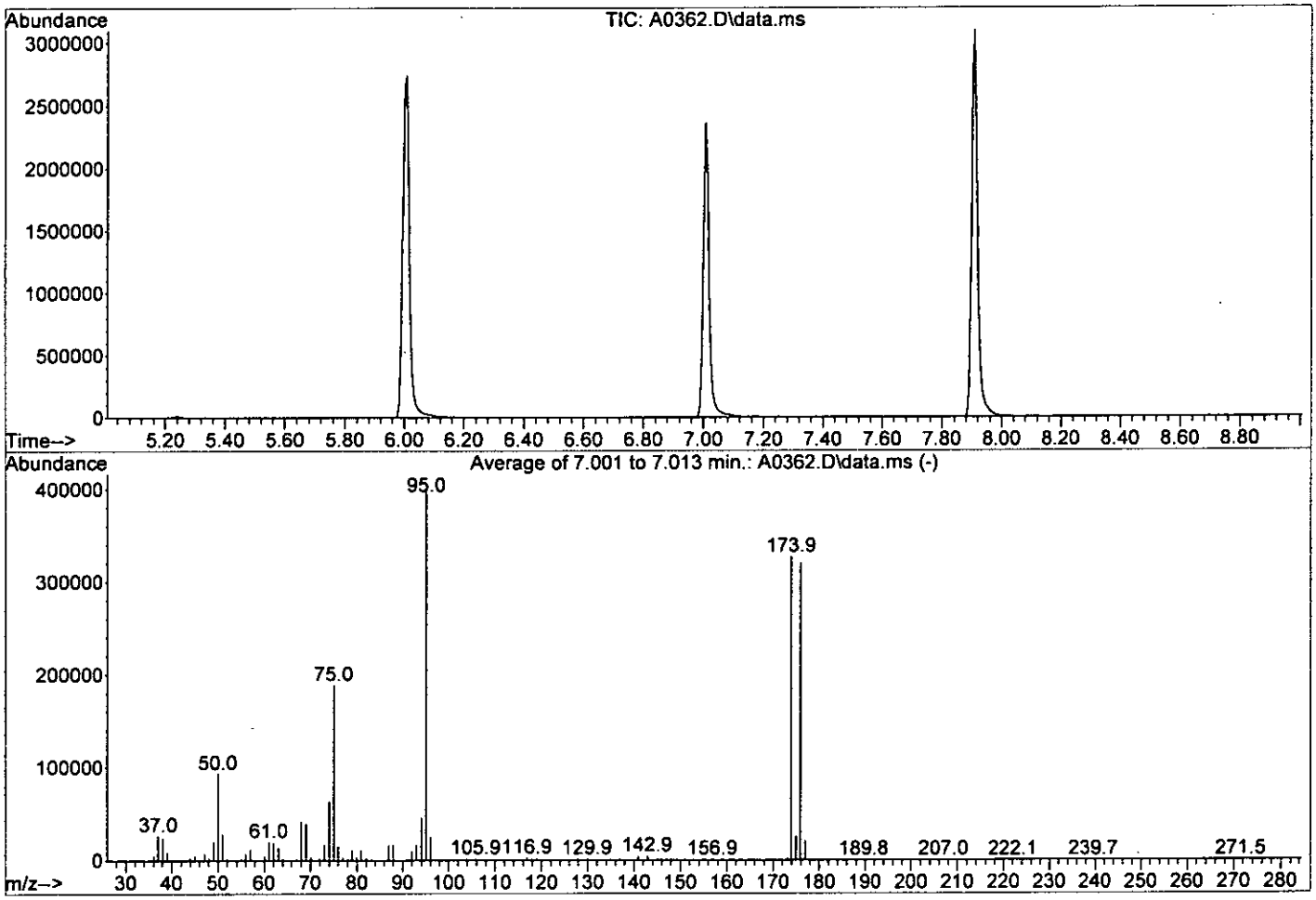
Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0362.D
Acq On : 15 Jul 2014 10:22 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

RQ1408240-031-09

FJ 7/15/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T061114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.5	93397	PASS
75	95	30	60	47.5	188523	PASS
95	95	100	100	100.0	396629	PASS
96	95	5	9	6.3	25013	PASS
173	174	0.00	2	0.7	2365	PASS
174	95	50	120	82.4	326699	PASS
175	174	5	9	7.7	25232	PASS
176	174	95	101	97.9	319957	PASS
177	176	5	9	6.4	20390	PASS

T061114.M Tue Jul 15 10:29:01 2014 MSVO10

ALS Group USA, Corp. dba ALS Environmental

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/10/14 10:03

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\071014\A0222.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1408064-04
Analysis Lot: 401024
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	639,151	10.84	1,273,995	5.61	1,155,627	8.84
	Upper Limit ==>	1,278,302	11.34	2,547,990	6.11	2,311,254	9.34
	Lower Limit ==>	319,576	10.34	636,998	5.11	577,814	8.34
	ICAL Result ==>	616,514	10.83	1,229,455	5.61	1,095,432	8.84
Associated Analyses							
Lab Control Sample	RQ1408064-02	627,832	10.84	1,232,347	5.61	1,155,323	8.84
Method Blank	RQ1408064-01	609,530	10.83	1,262,659	5.61	1,158,683	8.84
FTMM-TB-070114	R1405048-011	568,360	10.83	1,248,656	5.61	1,161,528	8.84
FTMM-TB-070214	R1405048-014	568,026	10.83	1,220,632	5.61	1,129,632	8.84
FTMM-53-GW-699MW16-6.5	R1405048-001	566,370	10.83	1,233,799	5.61	1,148,579	8.84
FTMM-53-GW-699MW09-7.75	R1405048-002	565,484	10.83	1,258,419	5.61	1,130,917	8.84
FTMM-53-GW-699MW06-10.2	R1405048-003	566,554	10.83	1,204,821	5.61	1,126,231	8.84
FTMM-53-GW-699MW01-7.5	R1405048-005	569,797	10.83	1,214,074	5.61	1,141,331	8.84
FTMM-53-GW-699MW04-6.85	R1405048-006	572,084	10.83	1,225,711	5.61	1,125,529	8.84
FTMM-53-GW-699RW03-8.2	R1405048-007	593,623	10.83	1,245,572	5.61	1,130,145	8.84
FTMM-53-GW-699RW11-8.3	R1405048-008	582,879	10.83	1,216,350	5.61	1,135,723	8.84
FTMM-68-GW-565MW01-11.99	R1405048-009	586,206	10.83	1,201,770	5.61	1,147,925	8.84
FTMM-68-GW-565MW01D-22.31	R1405048-010	572,687	10.83	1,218,822	5.61	1,124,885	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/10/14 10:03

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\071014\A0222.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1408064-04
Analysis Lot: 401024
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	879,282	4.41
	Upper Limit ==>	1,758,564	4.91
	Lower Limit ==>	439,641	3.91
	ICAL Result ==>	899,650	4.41
Associated Analyses			
Lab Control Sample	RQ1408064-02	862,963	4.41
Method Blank	RQ1408064-01	866,141	4.41
FTMM-TB-070114	R1405048-011	868,727	4.41
FTMM-TB-070214	R1405048-014	844,094	4.41
FTMM-53-GW-699MW16-6.5	R1405048-001	855,865	4.41
FTMM-53-GW-699MW09-7.75	R1405048-002	859,515	4.41
FTMM-53-GW-699MW06-10.2	R1405048-003	839,201	4.41
FTMM-53-GW-699MW01-7.5	R1405048-005	836,561	4.41
FTMM-53-GW-699MW04-6.85	R1405048-006	858,083	4.41
FTMM-53-GW-699RW03-8.2	R1405048-007	857,128	4.41
FTMM-53-GW-699RW11-8.3	R1405048-008	841,644	4.41
FTMM-68-GW-565MW01-11.99	R1405048-009	834,791	4.41
FTMM-68-GW-565MW01D-22.31	R1405048-010	832,148	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/15/14 10:52

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\071514\A0363.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1408240-04
Analysis Lot: 401710
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	612,532	10.83	1,240,269	5.61	1,125,475	8.84
	Upper Limit ==>	1,225,064	11.33	2,480,538	6.11	2,250,950	9.34
	Lower Limit ==>	306,266	10.33	620,135	5.11	562,738	8.34
	ICAL Result ==>	616,514	10.83	1,229,455	5.61	1,095,432	8.84
Associated Analyses							
Lab Control Sample	RQ1408240-02	608,930	10.84	1,260,011	5.61	1,149,884	8.84
Method Blank	RQ1408240-01	583,290	10.83	1,244,714	5.61	1,126,687	8.84
FTMM-EB-070114	R1405048-012	560,716	10.84	1,241,882	5.61	1,113,023	8.84
FTMM-DI-070214	R1405048-013	549,276	10.83	1,222,854	5.61	1,108,370	8.84
FTMM-53-GW-699RW05-4.8	R1405048-004	575,020	10.83	1,208,382	5.61	1,103,912	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/15/14 10:52

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\071514\A0363.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1408240-04
Analysis Lot: 401710
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	849,970	4.41
	Upper Limit ==>	1,699,940	4.91
	Lower Limit ==>	424,985	3.91
	ICAL Result ==>	899,650	4.41
Associated Analyses			
Lab Control Sample	RQ1408240-02	865,428	4.41
Method Blank	RQ1408240-01	855,461	4.41
FTMM-EB-070114	R1405048-012	850,198	4.41
FTMM-DI-070214	R1405048-013	832,205	4.41
FTMM-53-GW-699RW05-4.8	R1405048-004	823,328	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1115
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 14:14

Sample Name: FTMM-53-GW-699MW16-6.5
Lab Code: R1405048-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0230.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.2	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1115
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:14
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1405048-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0230.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**3.1**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.48**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1115
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:14
Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1405048-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0230.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/10/14 14:14	
Dibromofluoromethane	105	85-115	7/10/14 14:14	
Toluene-d8	98	85-120	7/10/14 14:14	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1414

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-6.5	**Units:**	µg/L
Lab Code:	R1405048-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-001|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0230.D Vial: 10
Acq On : 10 Jul 2014 2:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 14:27:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	855865	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1233799	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1148579	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	566370	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.324	113	386387	52.52 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.04%		
48) surr1,1,2-dichloroetha...	4.860	65	389241	52.72 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 105.44%		
65) SURR3,Toluene-d8	7.427	98	1396249	49.24 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.48%		
70) SURR2,BFB	9.878	95	548019	48.91 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.82%		
Target Compounds					Qvalue
15) Acetone	2.123	43	4241	2.20 ug/L	83
16) 2-Propanol	~~2.147~~	~~45~~	~~237~~	~~0.71 ug/L #~~	~~1~~
19) Acetonitrile	~~2.251~~	~~40~~	~~509~~	~~1.96 ug/L #~~	~~1~~
20) Allyl Chloride	~~2.275~~	~~76~~	~~1096~~	~~0.27 ug/L #~~	~~1~~
22) Methylene Chloride	2.440	84	1040	Below Cal #	60
40) Chloroform	4.092	83	41735	3.13 ug/L	98
44) Cyclohexane	4.440	41	2023	0.22 ug/L	94 NT(DAS)
72) Tetrachloroethene	8.061	164	3433	0.48 ug/L	86
89) Cyclohexanone	~~9.878~~	~~55~~	~~1558~~	~~1.74 ug/L #~~	~~36~~

(#) = qualifier out of range (m) = manual integration (+) = signals summed

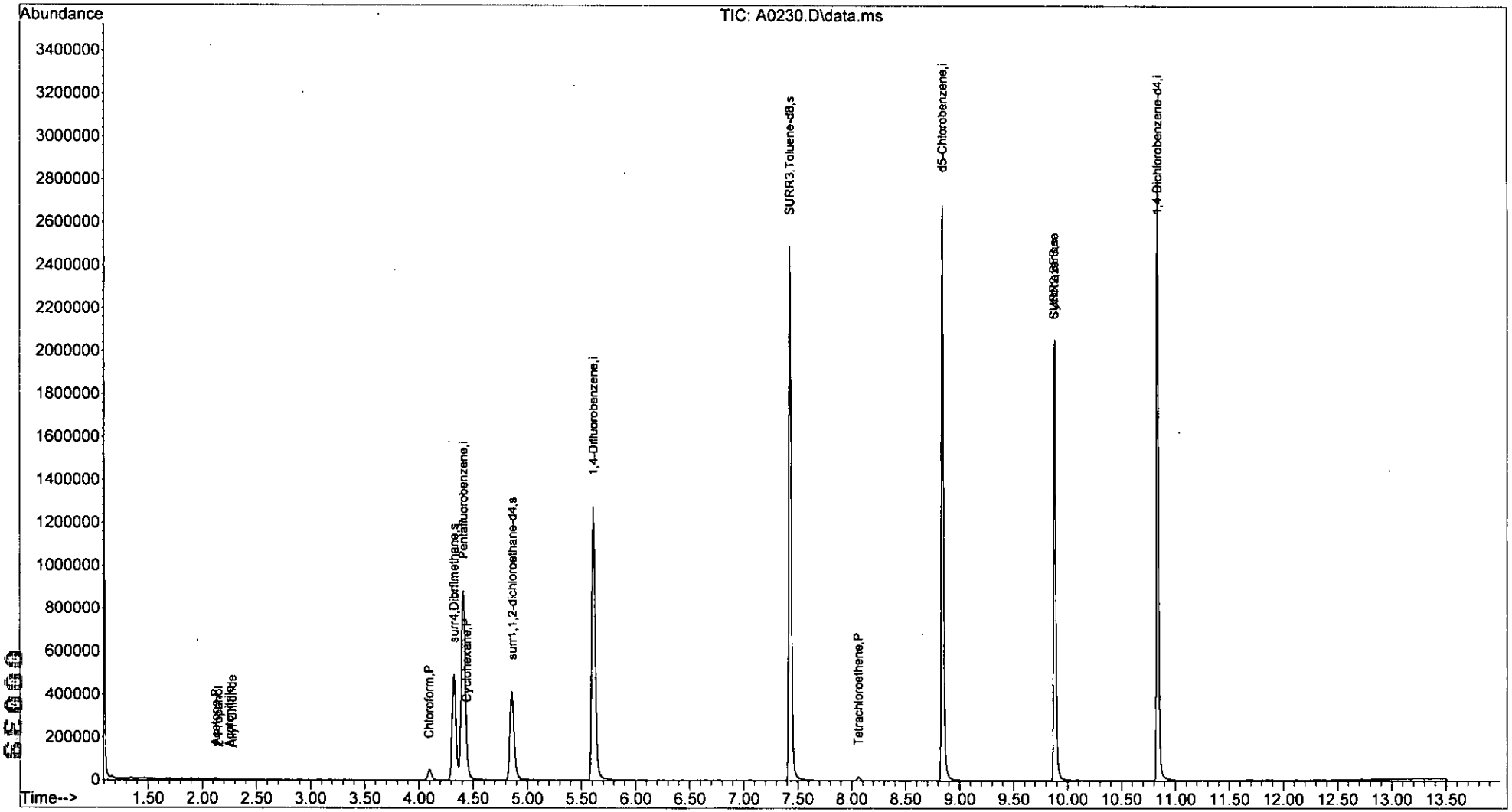
FN
7/17/14

7/17/14

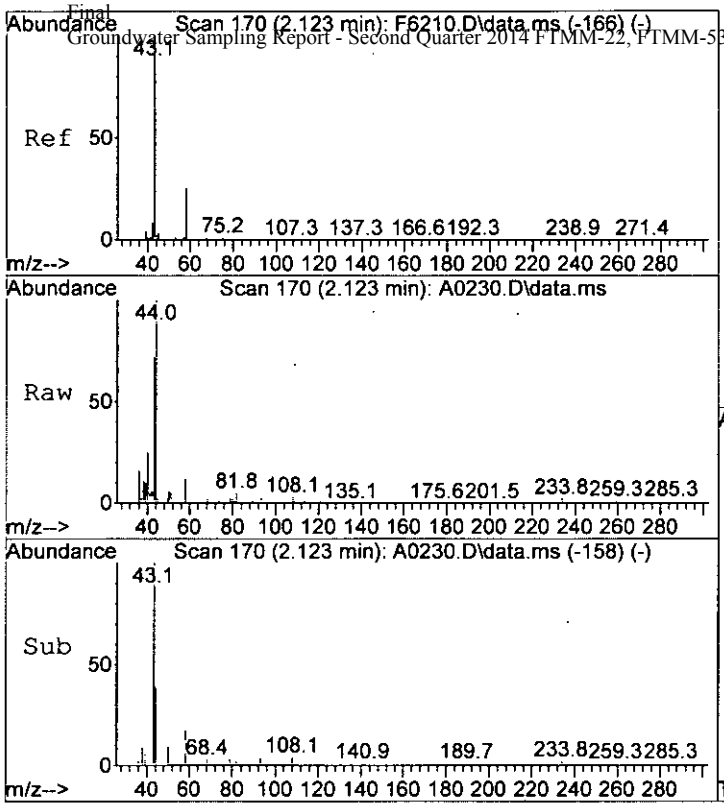
Quantitation Report (Not Reviewed)

Sample : R1405048-001|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0230.D Vial: 10
Acq On : 10 Jul 2014 2:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 14:27:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



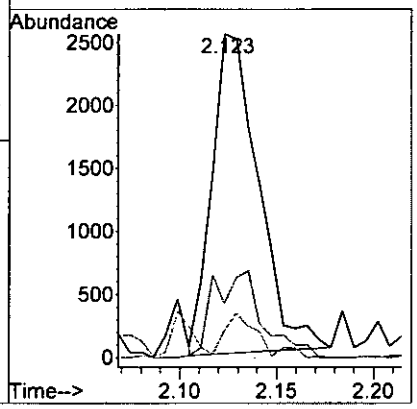
W061114.M Thu Jul 10 14:27:19 2014 MSVO10 Page: 2

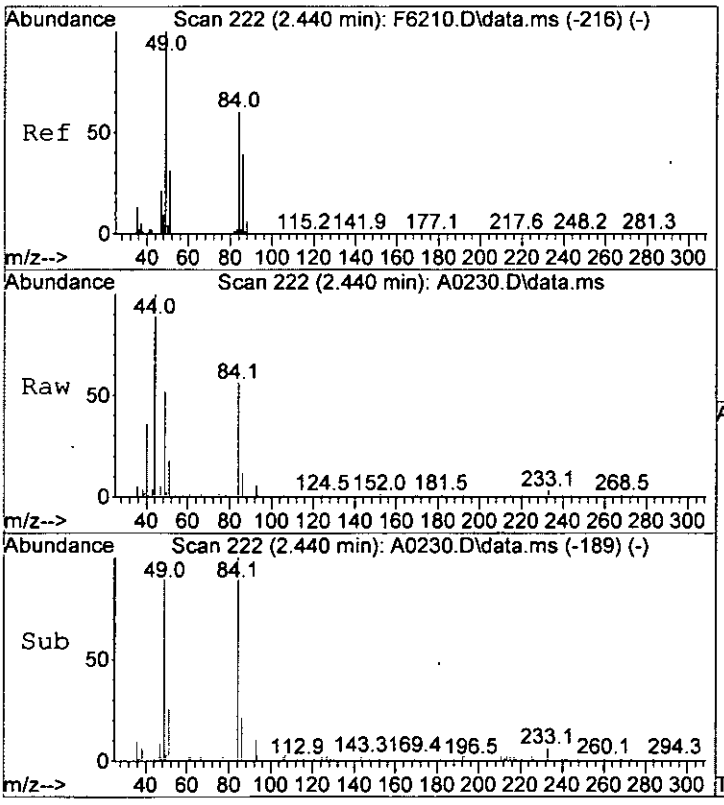


#15
Acetone
Concen: 2.20 ug/L
RT: 2.123 min Scan# 170
Delta R.T. -0.000 min
Lab File: A0230.D
Acq: 10 Jul 2014 2:14 pm

Tgt Ion: 43 Resp: 4241

Ion	Ratio	Lower	Upper
43	100		
58	16.6	7.2	47.2
42	8.2	0.0	27.0

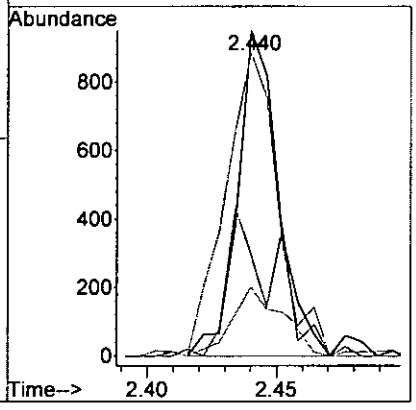


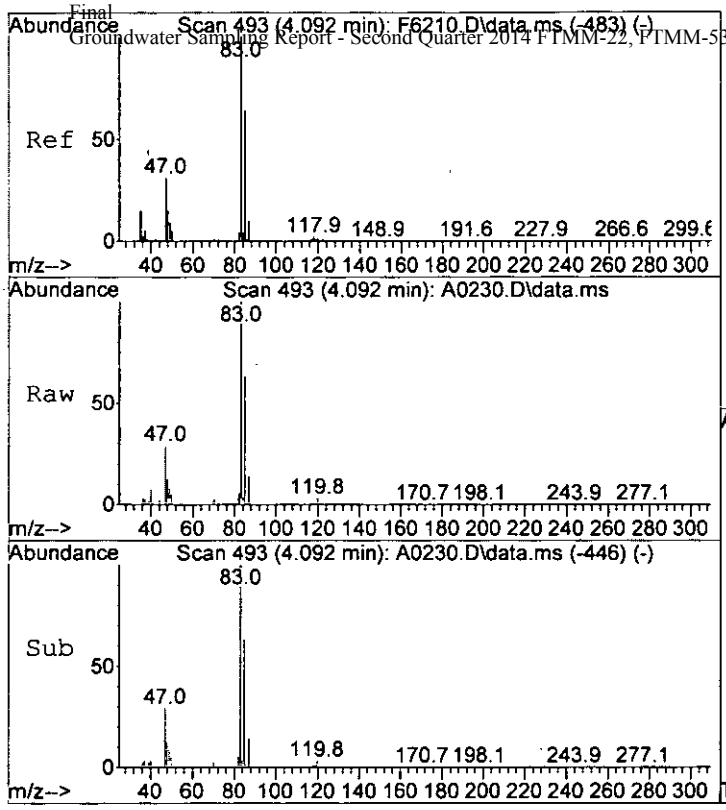


#22
Methylene Chloride
Concen: Below Cal
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: A0230.D
Acq: 10 Jul 2014 2:14 pm

Tgt Ion: 84 Resp: 1040

Ion	Ratio	Lower	Upper
84	100		
86	21.2	44.5	84.5#
49	93.3	123.0	163.0#
51	31.3	22.1	62.1

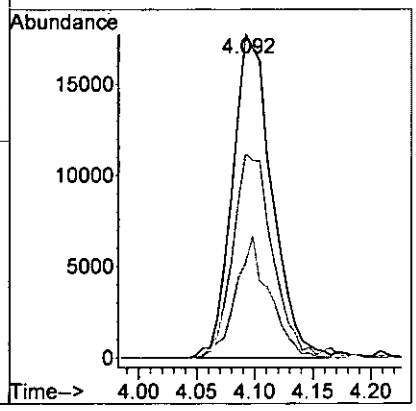


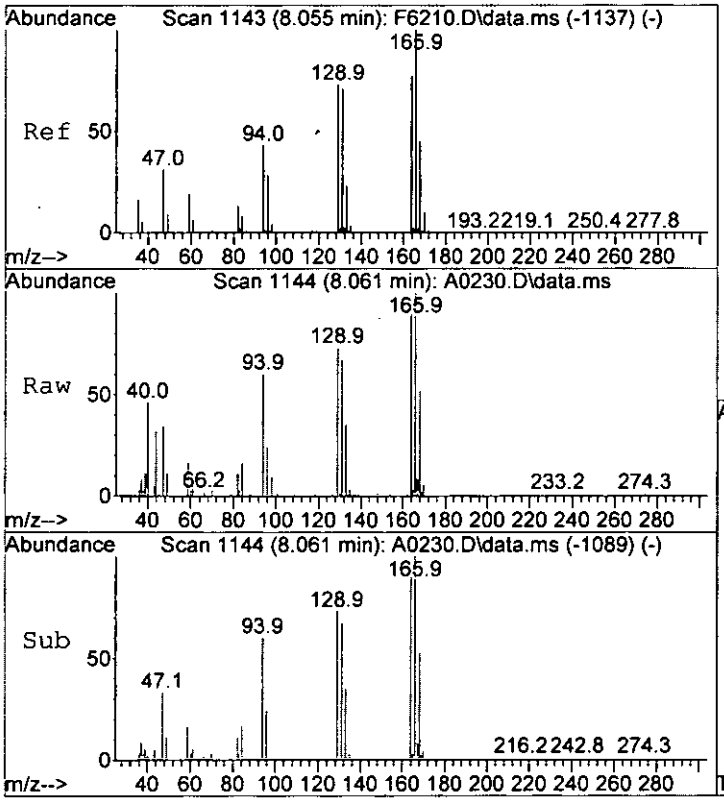


#40
Chloroform
Concen: 3.13 ug/L
RT: 4.092 min Scan# 493
Delta R.T. -0.000 min
Lab File: A0230.D
Acq: 10 Jul 2014 2:14 pm

Tgt Ion: 83 Resp: 41735

Ion	Ratio	Lower	Upper
83	100		
85	62.9	42.7	82.7
47	29.3	5.9	45.9

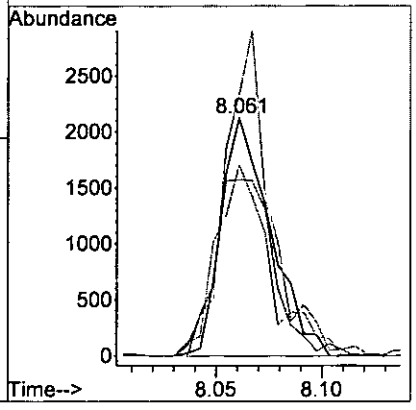




#72
Tetrachloroethene
Concen: 0.48 ug/L
RT: 8.061 min Scan# 1144
Delta R.T. 0.006 min
Lab File: A0230.D
Acq: 10 Jul 2014 2:14 pm

Tgt Ion:164 Resp: 3433

Ion	Ratio	Lower	Upper
164	100		
166	109.9	106.8	146.8
129	80.3	69.6	109.6
131	74.0	68.5	108.5



A0230.D W061114.M Thu Jul 17 10:26:02 2014 MSVO10 Page 4

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0230.D
Acq On : 10 Jul 2014 2:14 pm
Operator : F.NAEGLER
Sample : R1405048-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0230.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.098	486	494	505	rBV2	46824	111713	2.87%	0.524%
2	4.324	522	531	538	rBV	491380	1209552	31.03%	5.678%
3	4.409	538	545	561	rVB	878344	2311852	59.30%	10.853%
4	4.860	610	619	640	rBV	410561	1111454	28.51%	5.218%
5	5.610	734	742	758	rBV	1273716	2852192	73.16%	13.390%
6	7.427	1035	1040	1067	rBV	2487369	3898356	100.00%	18.301%
7	8.841	1267	1272	1288	rBV	2688142	3549199	91.04%	16.662%
8	9.884	1438	1443	1460	rBV	2054995	2748150	70.50%	12.901%
9	10.835	1594	1599	1620	rBV	2793932	3509025	90.01%	16.473%

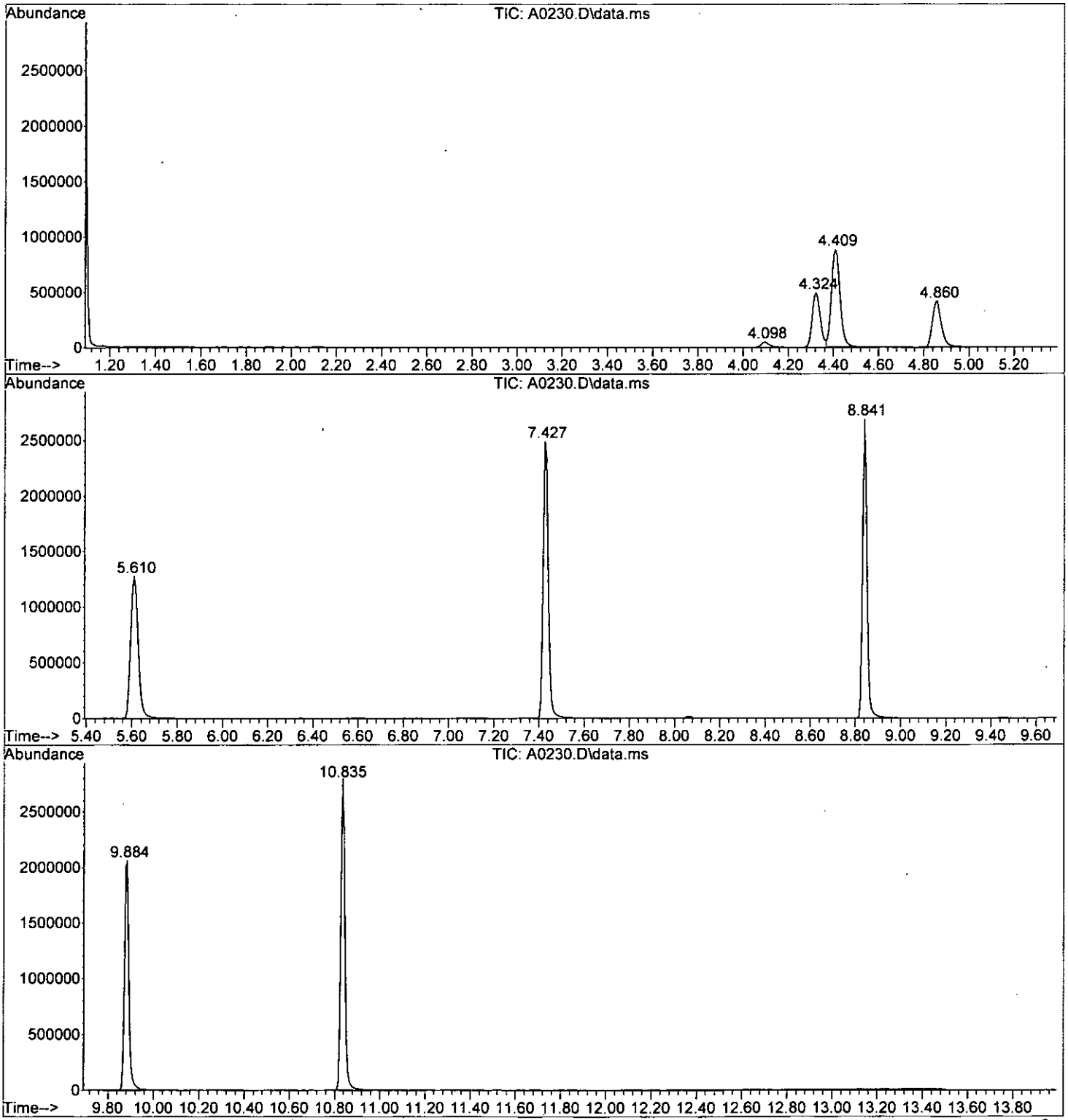
Sum of corrected areas: 21301493

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0230.D
Acq On : 10 Jul 2014 2:14 pm
Operator : F.NAEGLER
Sample : R1405048-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Thu Jul 17 10:26:12 2014 MSVO10 Page: 2

00043

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0230.D
Acq On : 10 Jul 2014 2:14 pmm
Operator : F.NAEGLERR
Sample : R1405048-001|1.0
Misc : PARSONS 11603 T44
ALS Vial : 10 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1125
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 14:44

Sample Name: FTMM-53-GW-699MW09-7.75
Lab Code: R1405048-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0231.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.4**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1125
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:44
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1405048-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1125
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 14:44
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1405048-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0231.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	7/10/14 14:44	
Dibromofluoromethane	104	85-115	7/10/14 14:44	
Toluene-d8	97	85-120	7/10/14 14:44	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1444

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW09-7.75
Lab Code: R1405048-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-002|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0231.D Vial: 11
Acq On : 10 Jul 2014 2:44 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 14:57:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	859515	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1258419	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1130917	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	565484	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	388301	51.75	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.50%			
48) surr1,1,2-dichloroetha...	4.854	65	400542	53.19	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 106.38%			
65) SURR3,Toluene-d8	7.433	98	1402284	48.48	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.96%			
70) SURR2,BFB	9.878	95	545562	47.74	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.48%			
Target Compounds						Qvalue
15) Acetone	2.123	43	2636	1.36	ug/L	94
16) 2-Propanol	2.208	45	192	0.57	ug/L #	53
19) Acetonitrile	2.330	40	1003	3.85	ug/L #	1
20) Allyl Chloride	2.269	76	1194	0.29	ug/L #	1
89) Cyclohexanone	9.878	55	1700	1.93	ug/L #	13

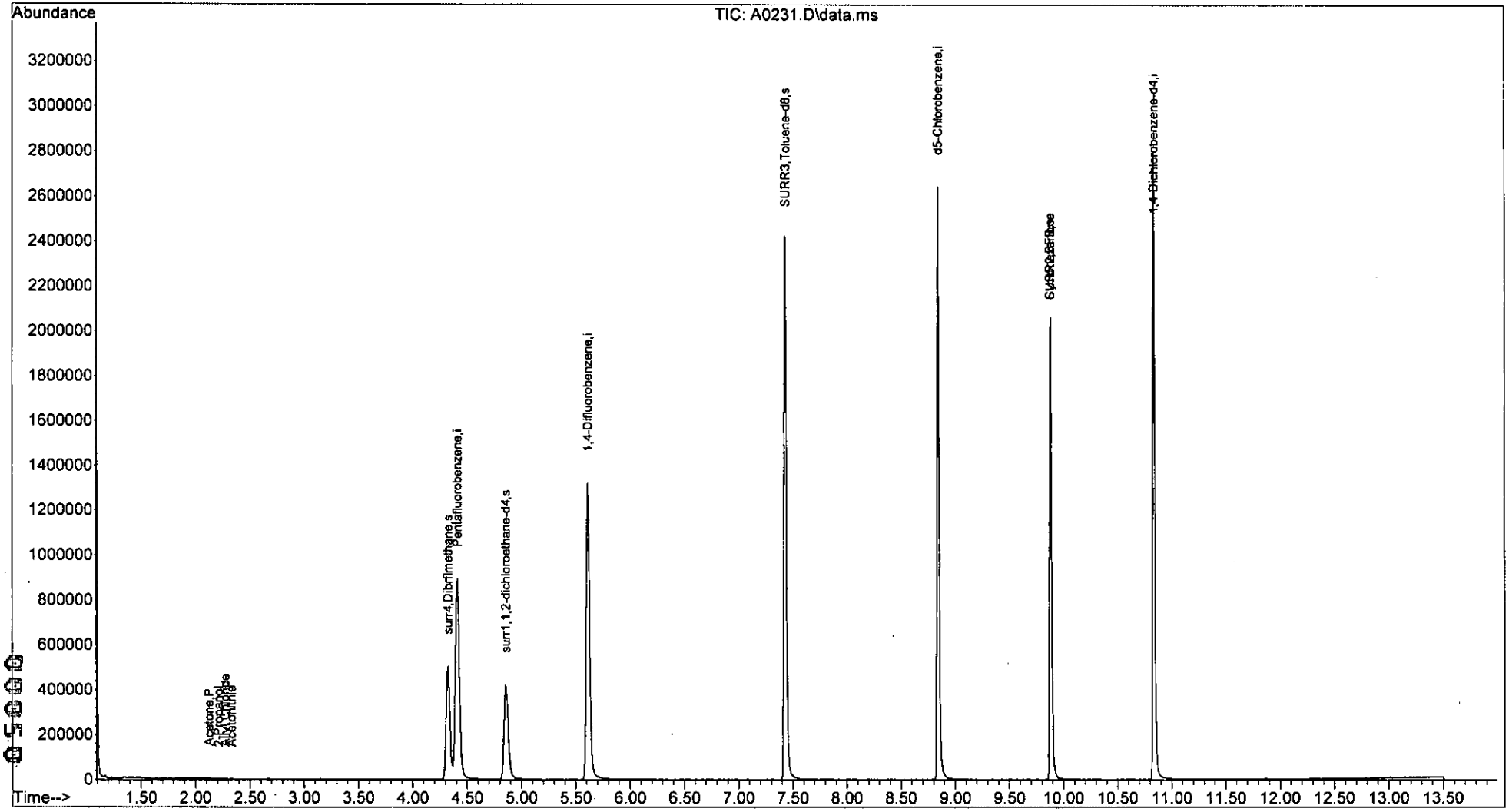
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
7/17/14

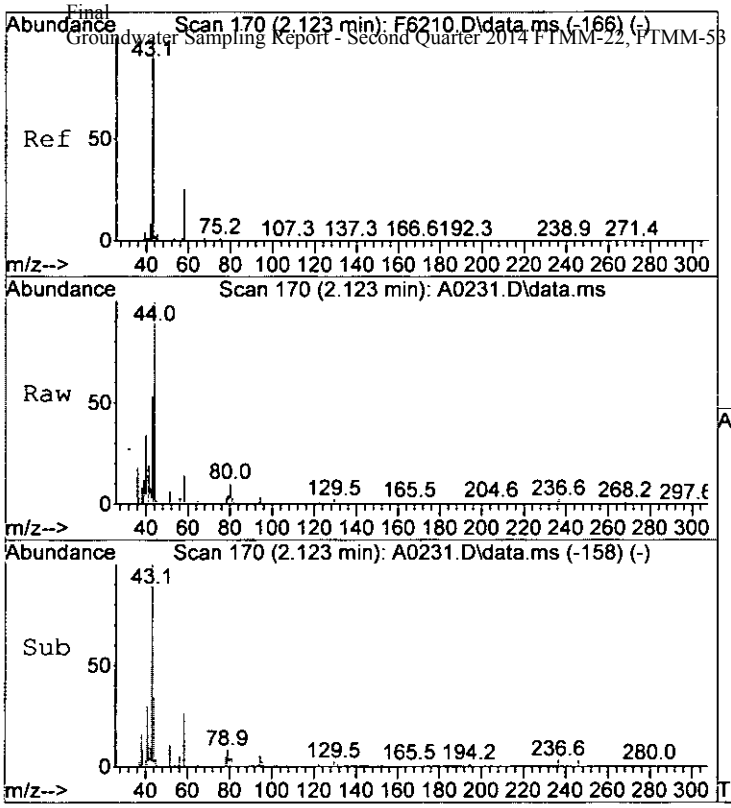
Quantitation Report (Not Reviewed)

Sample : R1405048-002|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0231.D Vial: 11
Acq On : 10 Jul 2014 2:44 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 14:57:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



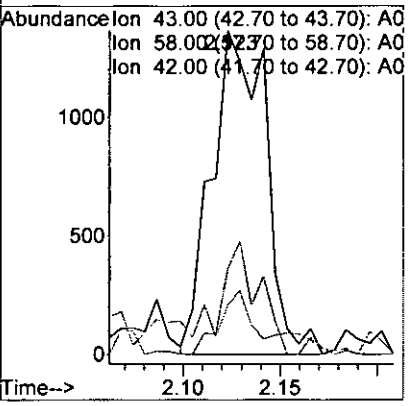
W061114.M Thu Jul 10 14:57:36 2014 MSVO10 Page: 2



#15
Acetone
Concen: 1.36 ug/L
RT: 2.123 min Scan# 170
Delta R.T. -0.000 min
Lab File: A0231.D
Acq: 10 Jul 2014 2:44 pm

Tgt Ion: 43 Resp: 2636

Ion	Ratio	Lower	Upper
43	100		
58	26.5	7.2	47.2
42	15.1	0.0	27.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0231.D
Acq On : 10 Jul 2014 2:44 pm
Operator : F.NAEGLER
Sample : R1405048-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0231.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV2	505429	1229198	31.56%	5.781%
2	4.409	538	545	562	rVB	889585	2331171	59.85%	10.963%
3	4.854	608	618	635	rBV	422601	1135155	29.15%	5.338%
4	5.610	734	742	757	rBV	1320371	2905982	74.61%	13.666%
5	7.427	1035	1040	1056	rBV	2423377	3894730	100.00%	18.316%
6	8.841	1267	1272	1288	rBV	2643621	3510280	90.13%	16.508%
7	9.884	1438	1443	1457	rBV	2062710	2741697	70.40%	12.893%
8	10.835	1594	1599	1615	rBV	2805793	3516344	90.28%	16.536%

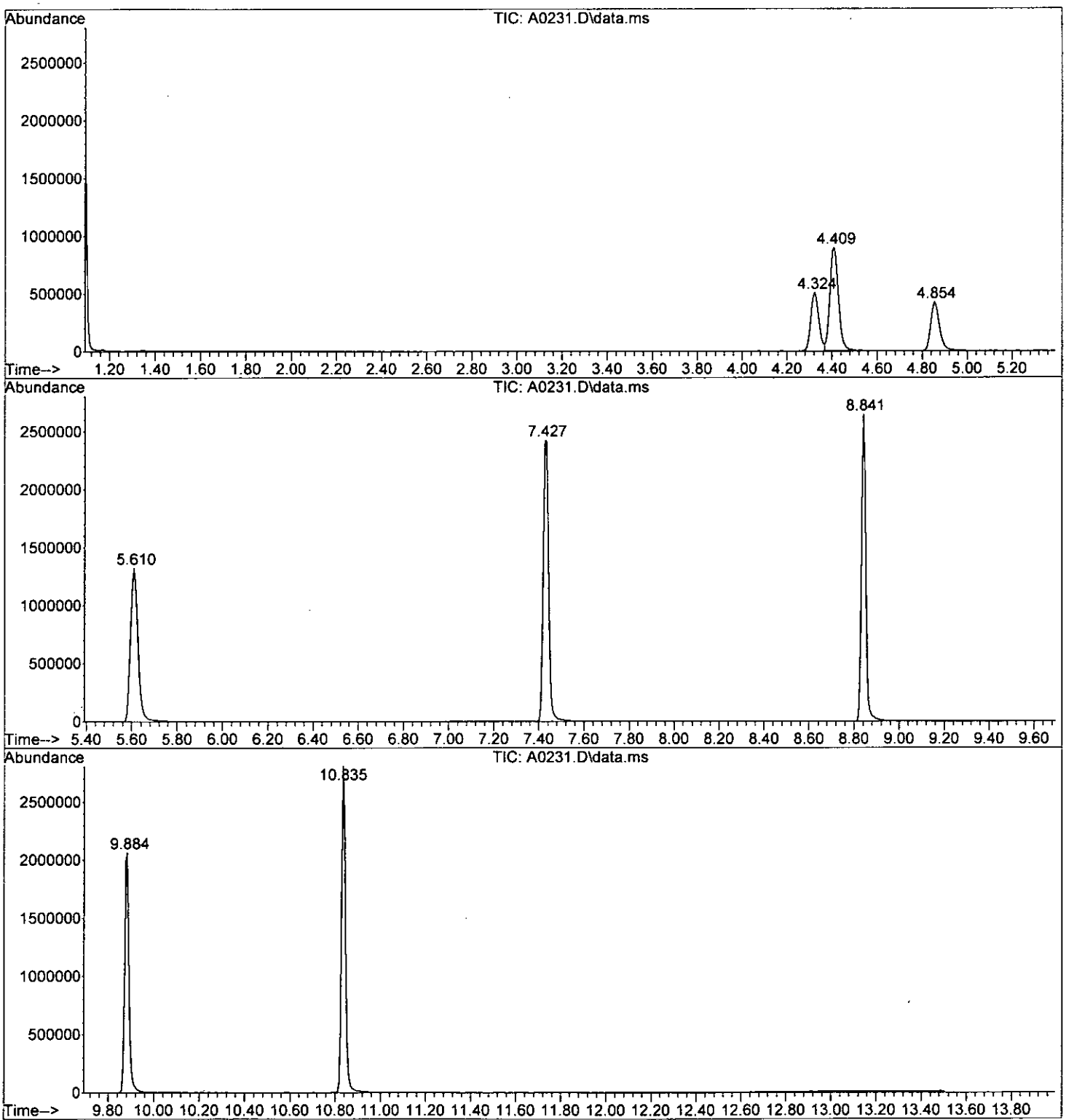
Sum of corrected areas: 21264557

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0231.D
Acq On : 10 Jul 2014 2:44 pm
Operator : F.NAEGLER
Sample : R1405048-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Thu Jul 17 12:54:01 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0231.D
Acq On : 10 Jul 2014 2:44 pmm
Operator : F.NAEGLERR
Sample : R1405048-002|1.0
Misc : PARSONS 11603 T44
ALS Vial : 11 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1150
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 15:14

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1405048-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0232.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.6**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1150
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 15:14
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1405048-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0232.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1150
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 15:14
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1405048-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0232.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 15:14	
Dibromofluoromethane	106	85-115	7/10/14 15:14	
Toluene-d8	99	85-120	7/10/14 15:14	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1514

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1405048-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-003|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0232.D Vial: 12
Acq On : 10 Jul 2014 3:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 15:27:50 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	839201	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1204821	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1126231	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	566554	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	380400	52.95	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.90%			
48) surr1,1,2-dichloroetha...	4.854	65	388605	53.90	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.80%			
65) SURR3,Toluene-d8	7.433	98	1366073	49.33	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.66%			
70) SURR2,BFB	9.878	95	542422	49.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.14%			
Target Compounds						Qvalue
5) Bromomethane	1.562	94	343	Below Cal	#	45
15) Acetone	2.129	43	4857	2.57	ug/L	85
16) 2-Propanol	2.135	45	164	0.50	ug/L #	1
19) Acetonitrile	2.349	40	743	2.92	ug/L #	1
20) Allyl Chloride	2.269	76	1013	0.25	ug/L #	1
83) (m+p)Xylene	9.110	106	3196	0.22	ug/L	90
89) Cyclohexanone	9.878	55	2139	2.43	ug/L #	15

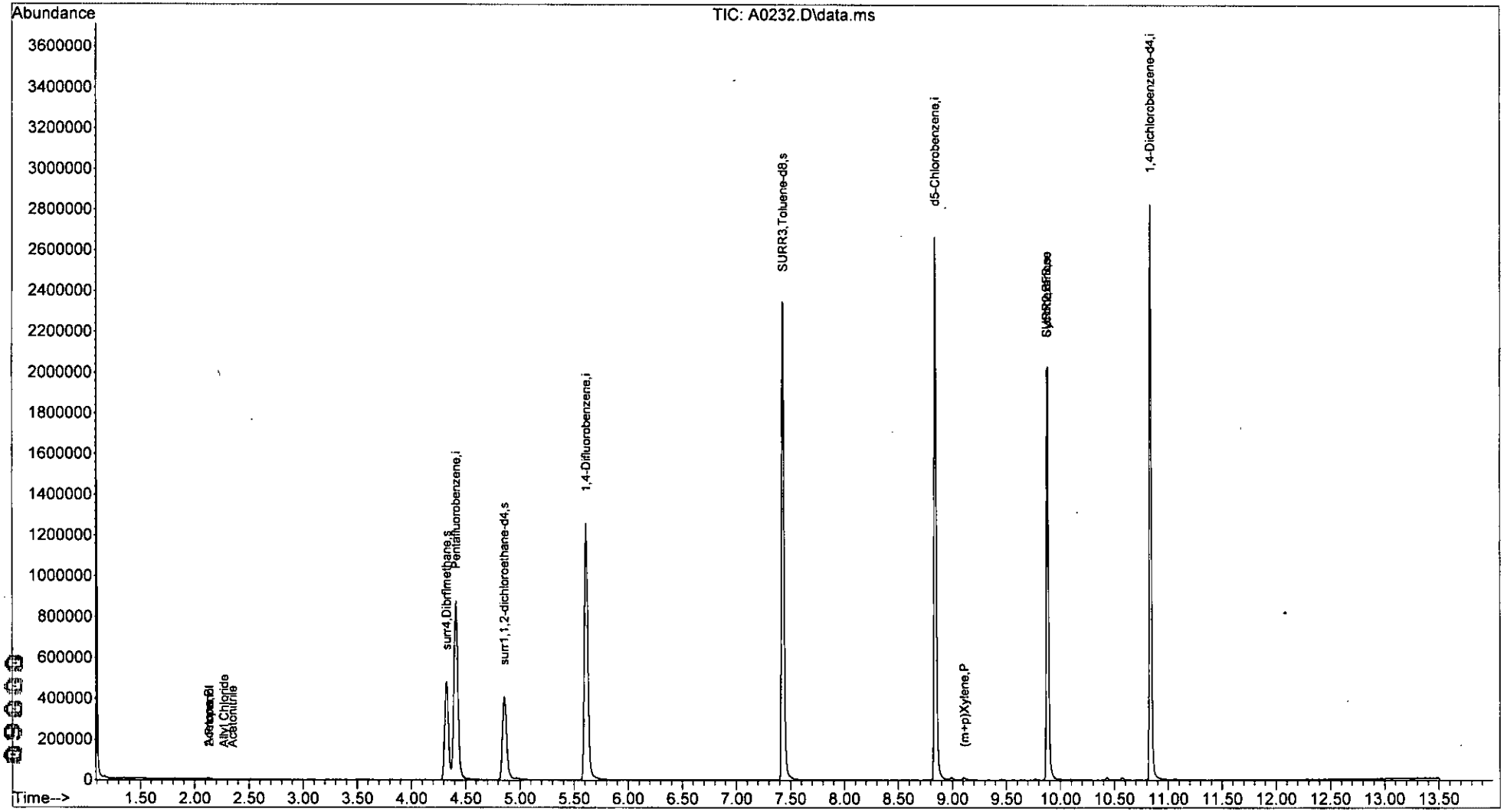
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
7/17/14

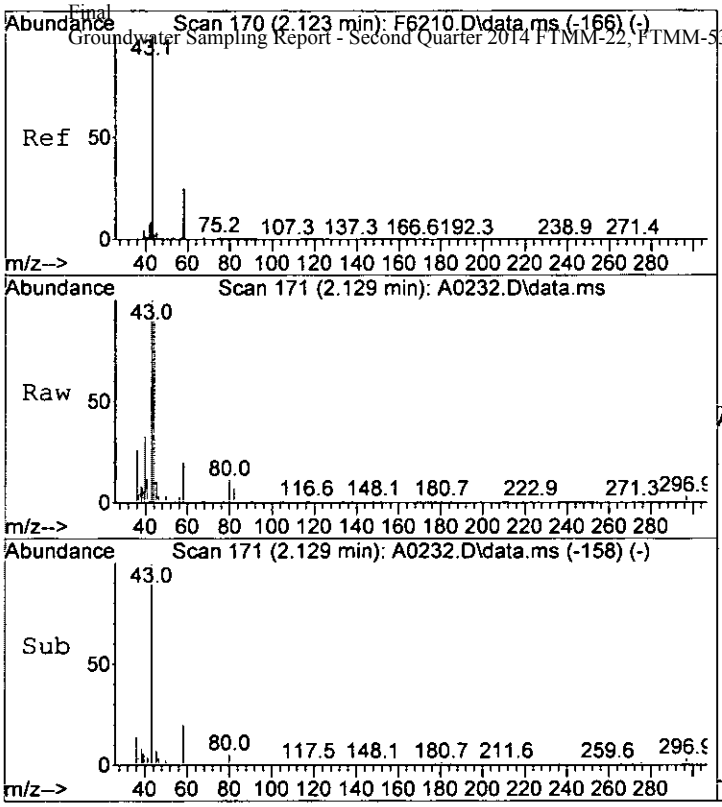
Quantitation Report (Not Reviewed)

Sample : R1405048-003|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0232.D Vial: 12
Acq On : 10 Jul 2014 3:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 15:27:50 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



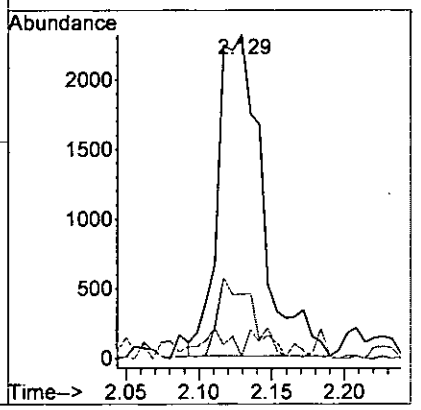
W061114.M Thu Jul 10 15:27:50 2014 MSVO10 Page: 2

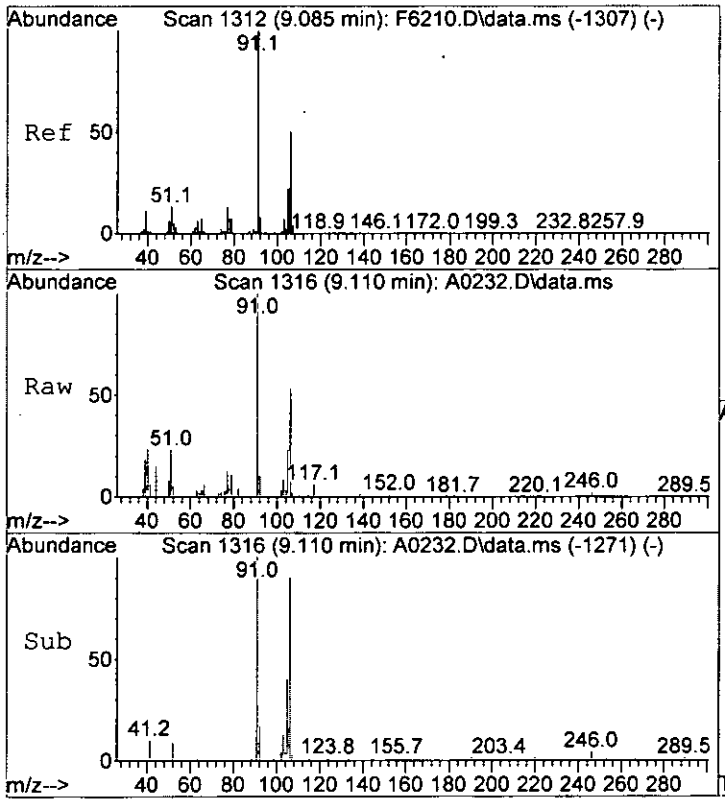


#15
Acetone
Concen: 2.57 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A0232.D
Acq: 10 Jul 2014 3:14 pm

Tgt Ion: 43 Resp: 4857

Ion	Ratio	Lower	Upper
43	100		
58	20.0	7.2	47.2
42	0.7	0.0	27.0

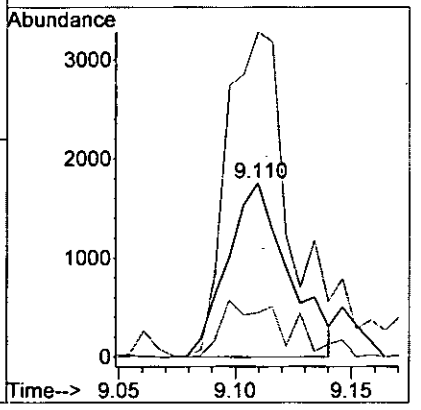




#83
(m+p)Xylene
Concen: 0.22 ug/L
RT: 9.110 min Scan# 1316
Delta R.T. 0.024 min
Lab File: A0232.D
Acq: 10 Jul 2014 3:14 pm

Tgt Ion:106 Resp: 3196

Ion	Ratio	Lower	Upper
106	100		
91	187.1	183.8	223.8
77	25.2	8.7	48.7



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0232.D
Acq On : 10 Jul 2014 3:14 pm
Operator : F.NAEGLER
Sample : R1405048-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0232.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV2	480648	1185433	31.19%	5.668%
2	4.409	538	545	559	rVB	872479	2253754	59.30%	10.776%
3	4.854	608	618	634	rBV	406882	1110098	29.21%	5.308%
4	5.610	734	742	758	rBV	1257046	2804843	73.80%	13.411%
5	7.427	1035	1040	1059	rBV	2349749	3800617	100.00%	18.172%
6	8.841	1267	1272	1288	rBV	2664192	3478787	91.53%	16.633%
7	9.884	1438	1443	1456	rBV	2029319	2741713	72.14%	13.109%
8	10.835	1594	1599	1620	rBV	2829203	3539643	93.13%	16.924%

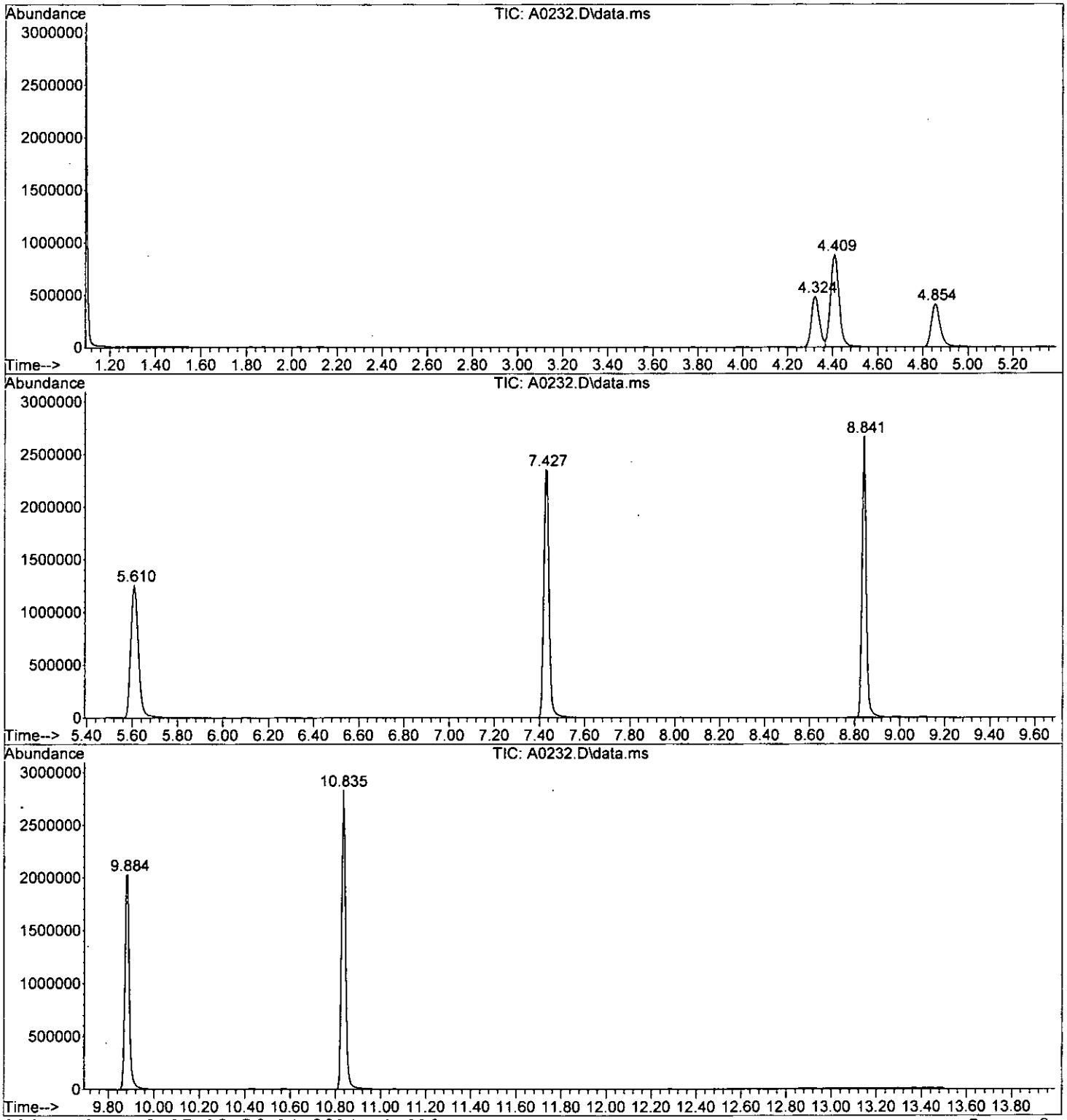
Sum of corrected areas: 20914888

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0232.D
Acq On    : 10 Jul 2014    3:14 pm
Operator  : F.NAEGLER
Sample    : R1405048-003|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 12   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W061114.M Thu Jul 17 12:56:14 2014 MSVO10 Page: 2

00063

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0232.D
Acq On : 10 Jul 2014 3:14 pmm
Operator : F.NAEGLERR
Sample : R1405048-003|1.0
Misc : PARSONS 11603 T44
ALS Vial : 12 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1155
Date Received: 7/ 2/14
Date Analyzed: 7/15/14 14:06

Sample Name: FTMM-53-GW-699RW05-4.8
Lab Code: R1405048-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071514\A0369.D\

Analysis Lot: 401710
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**7.8**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**3.9**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.21**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental
Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1155
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/15/14 14:06
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1405048-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.74**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.45**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**7.6**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.46**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**6.3**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**16**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1155
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/15/14 14:06
Sample Name:	FTMM-53-GW-699RW05-4.8	**Units:**	µg/L
Lab Code:	R1405048-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0369.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/15/14 14:06	
Dibromofluoromethane	102	85-115	7/15/14 14:06	
Toluene-d8	98	85-120	7/15/14 14:06	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/15/14 1406

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-4.8
Lab Code: R1405048-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	1.66	**7.8**	J
000107-83-5	Pentane, 2-methyl-	2.46	**5.2**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**11.3**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.42	**11.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**13.6**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-004|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0369.D Vial: 8
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 14:19:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FU 7/16/14

KF 7/16/14

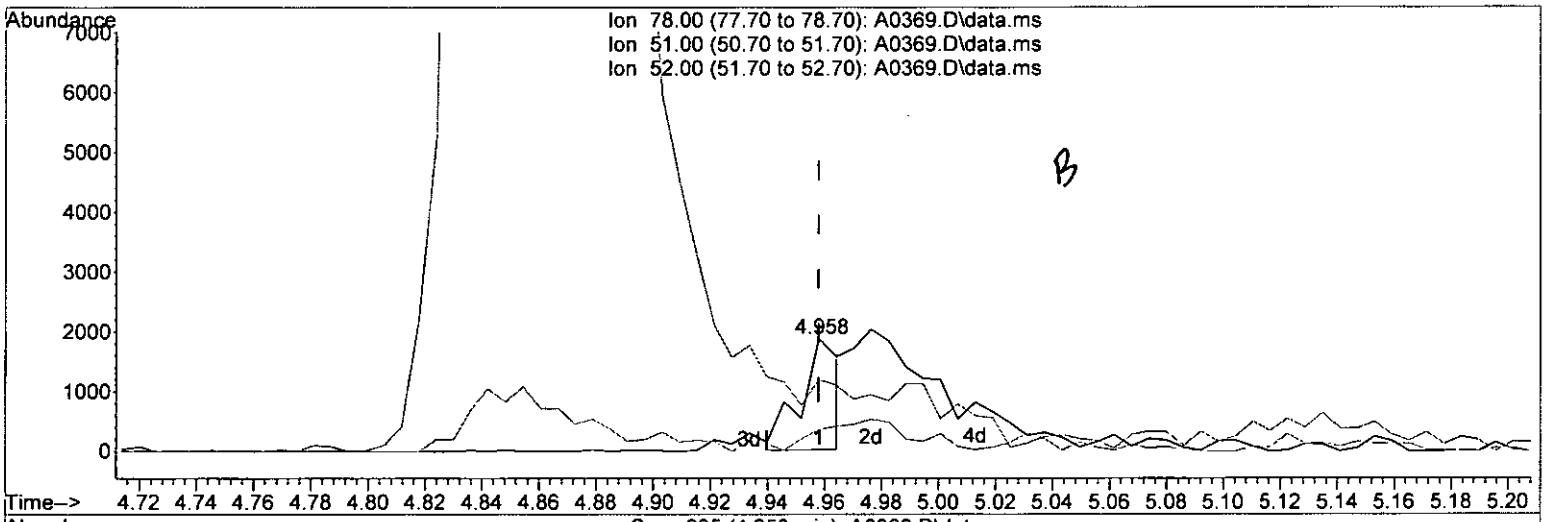
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	823328	50.00 ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1208382	50.00 ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1103912	50.00 ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	575020	50.00 ug/L		0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	367690	51.03 ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.06%			
48) surr1,1,2-dichloroetha...	4.854	65	412685	57.07 ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 114.14%			
65) SURR3,Toluene-d8	7.433	98	1360541	48.99 ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.98%			
70) SURR2,BFB	9.878	95	539075	49.12 ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.24%			
Target Compounds						Qvalue
12) Acrolein	~~1.977~~	~~56~~	~~489~~	~~0.51 ug/L~~	#	~~1~~
15) Acetone	~~2.111~~	~~43~~	~~11920~~	~~6.42 ug/L~~		~~74~~ 2,2-dimethyl butane
16) 2-Propanol	~~2.190~~	~~45~~	~~610~~	~~1.90 ug/L~~		~~59~~
19) Acetonitrile	~~2.318~~	~~40~~	~~512~~	~~2.05 ug/L~~	#	~~1~~
20) Allyl Chloride	~~2.270~~	~~76~~	~~1466~~	~~0.37 ug/L~~	#	~~1~~
21) Methyl Acetate	~~2.385~~	~~43~~	~~2239~~	~~0.56 ug/L~~	#	~~60~~
22) Methylene Chloride	2.385	84	788	Below Cal	#	1
24) Acrylonitrile	~~2.678~~	~~53~~	~~1576~~	~~0.78 ug/L~~	#	~~17~~
44) Cyclohexane	4.446	41	17853	1.99 ug/L		83 > NT(DER)
55) Methylcyclohexane	6.220	55	5111	0.46 ug/L	#	75
59) Methyl Methacrylate	~~6.470~~	~~69~~	~~993~~	~~0.28 ug/L~~	#	~~34~~
61) 2-Nitropropane	~~6.921~~	~~41~~	~~923~~	~~0.66 ug/L~~	#	~~18~~
66) Toluene	7.512	91	15483	0.46 ug/L		99
82) Ethylbenzene	8.988	106	8705	0.74 ug/L	#	86
83) (m+p)Xylene	9.085	106	90836	6.28 ug/L		89
84) o-Xylene	9.433	106	240563	16.46 ug/L		97
85) Styrene	~~9.439~~	~~104~~	~~12372~~	~~0.50 ug/L~~	#	~~1~~
88) Isopropylbenzene	9.762	105	16212	0.45 ug/L		93
89) Cyclohexanone	~~9.878~~	~~55~~	~~1561~~	~~1.81 ug/L~~	#	~~13~~
97) 3-Chlorotoluene	~~10.256~~	~~91~~	~~11532~~	~~0.47 ug/L~~	#	~~40~~
98) 4-Chlorotoluene	~~10.256~~	~~91~~	~~12111~~	~~0.42 ug/L~~	#	~~47~~
99) 1,3,5-Trimethylbenzene	10.256	105	112982	3.94 ug/L		98
101) 1,2,4-Trimethylbenzene	10.561	105	226001	7.80 ug/L		97
117) Naphthalen	12.383	128	105017	7.62 ug/L		94
120) 2,3,6-Trichlorotoluene	13.017	159	668	0.20 ug/L		88 NT(DER)
49) benzene	4.976		6424	0.21 ug/L		FU 7/16/14

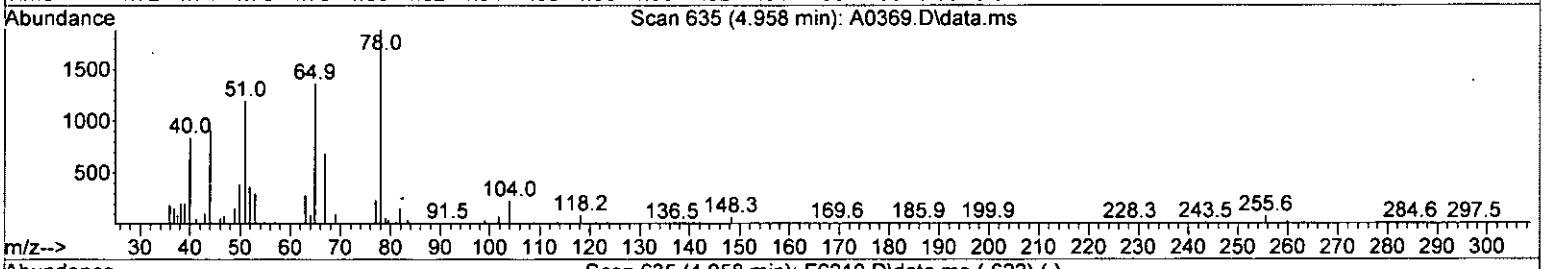
(#) = qualifier out of range (m) = manual integration (+) = signals summed

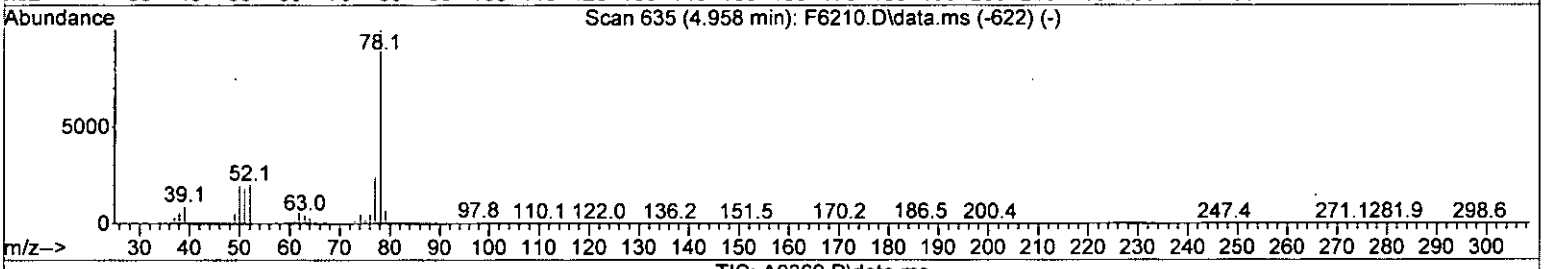
Quantitation Report (Qedit)

Sample : R1405048-004|1.0
Data File : I:\ACQUDATA\msvoa10\data\071514\A0369.D Vial: 8
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 14:19:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0369.D\data.ms

(49) Benzene (P)

4.958min (+0.000) 0.06 ug/L

response 1734

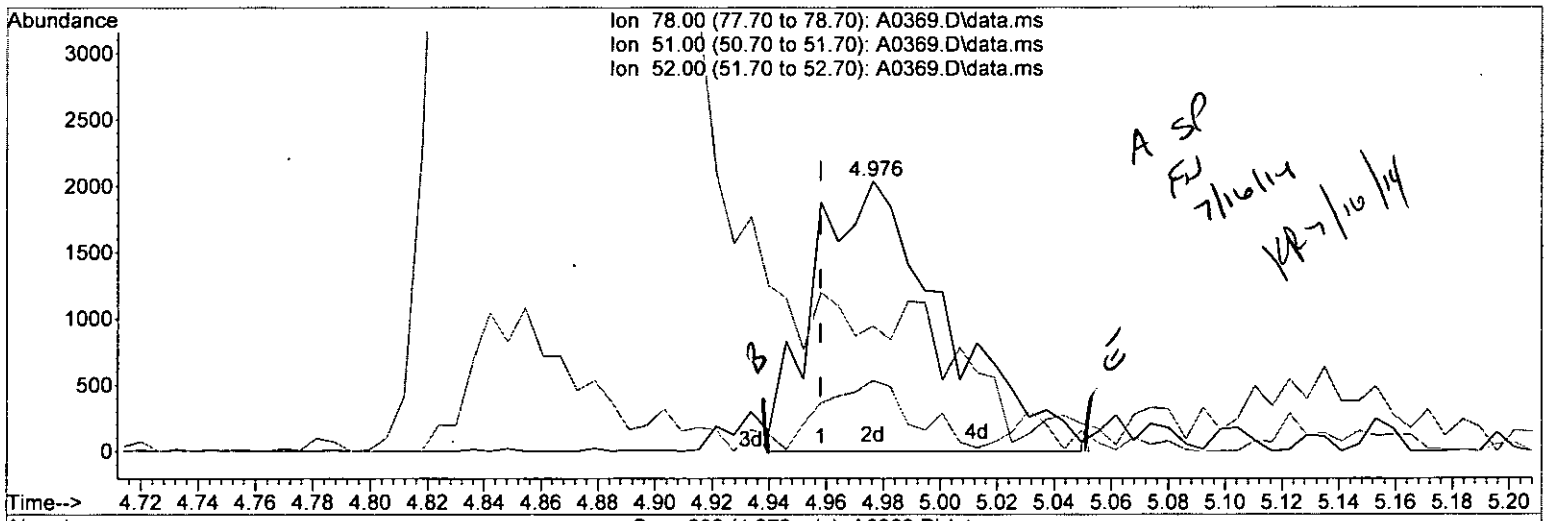
Ion	Exp%	Act%
78.00	100	100
51.00	19.40	63.60#
52.00	16.90	19.27
0.00	0.00	0.00

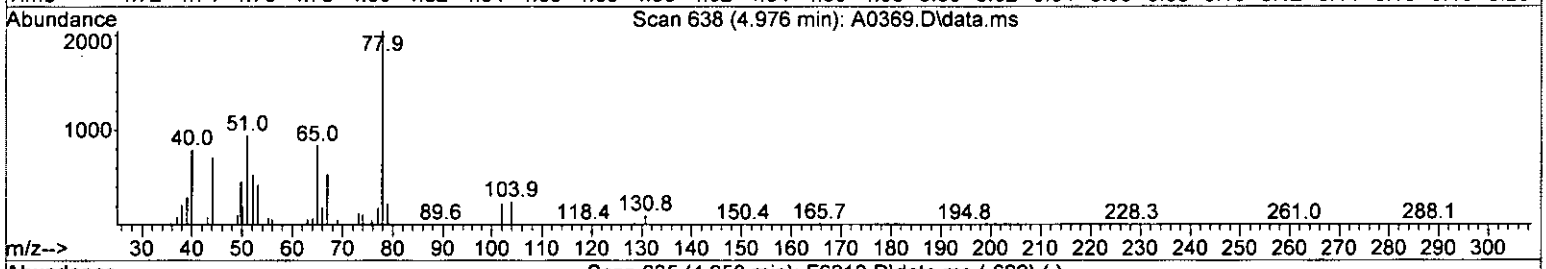
W061114.M Wed Jul 16 13:22:51 2014 MSVO10 Page: 1

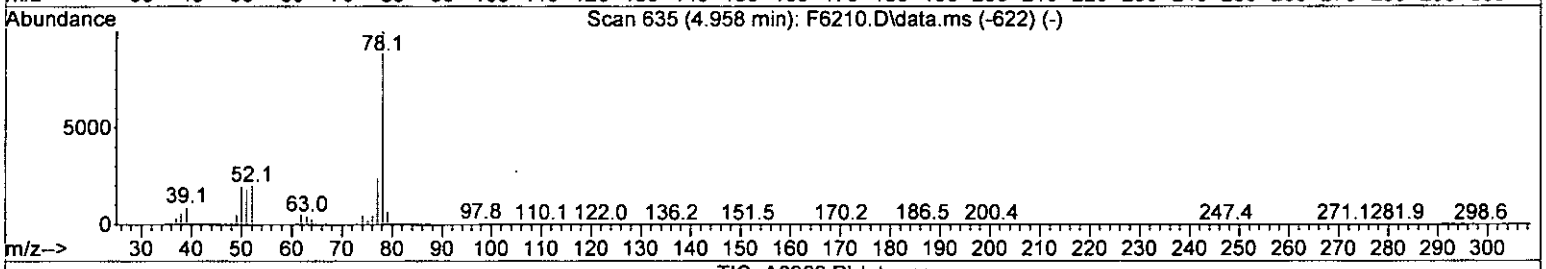
Quantitation Report (Qedit)

Sample : R1405048-004|1.0
Data File : I:\ACQUDATA\msvoa10\data\071514\A0369.D Vial: 8
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 14:19:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0369.D\data.ms

(49) Benzene (P)

4.976min (+0.018) 0.21 ug/L m

response 6424

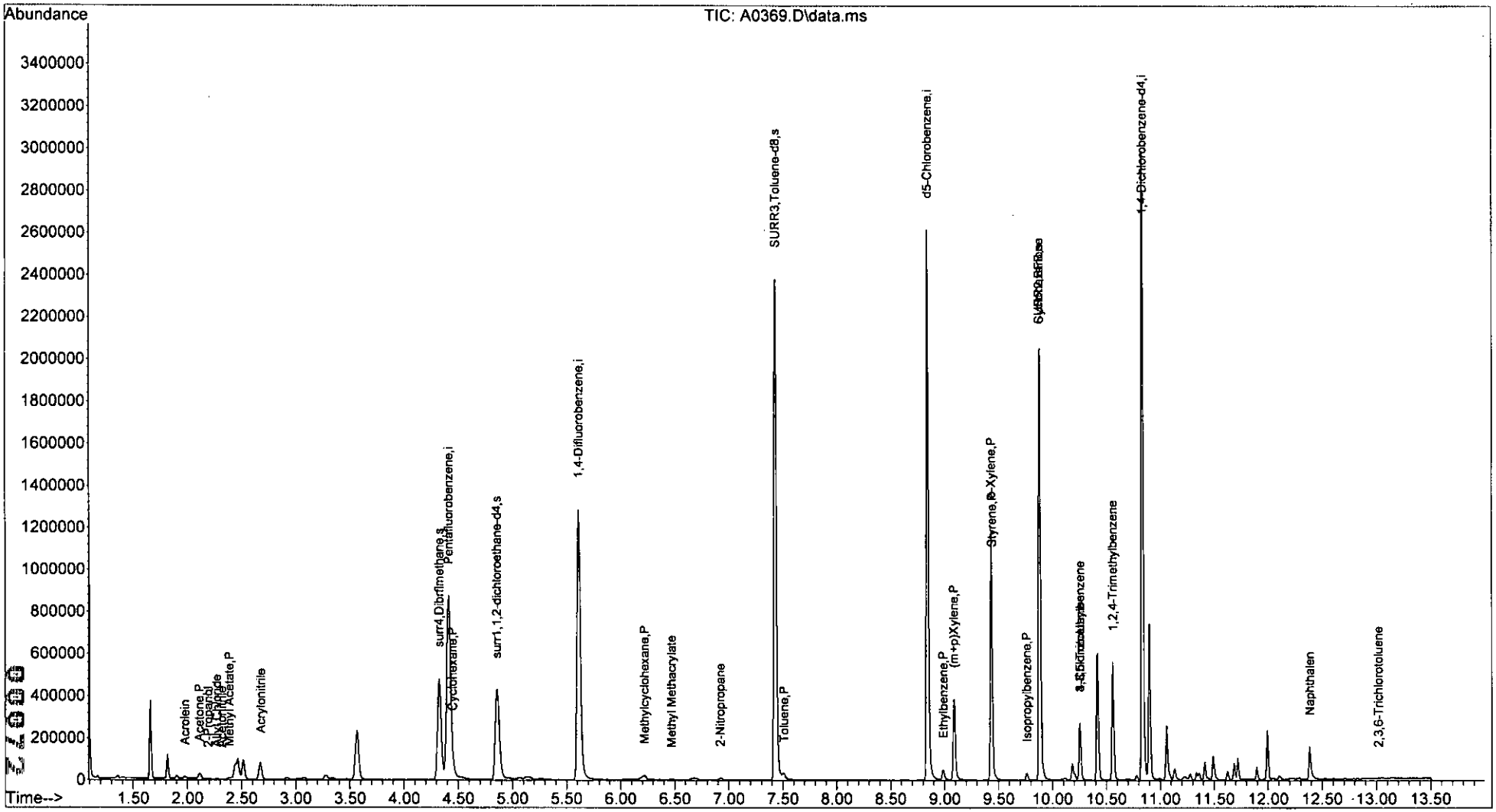
Ion	Exp%	Act%
78.00	100	100
51.00	19.40	46.32#
52.00	16.90	26.18
0.00	0.00	0.00

W061114.M Wed Jul 16 13:23:09 2014 MSVO10 Page: 1

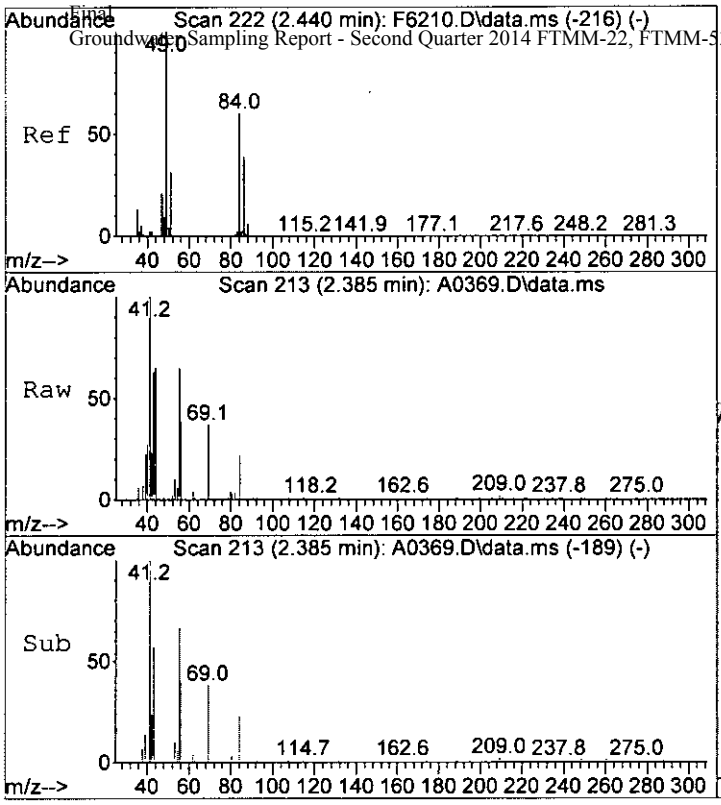
Quantitation Report (Not Reviewed)

Sample : R1405048-004|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0369.D Vial: 8
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 14:19:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



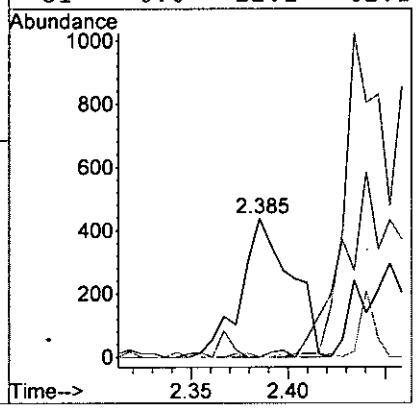
W061114.M Tue Jul 15 14:19:14 2014 MSVO10 Page: 2

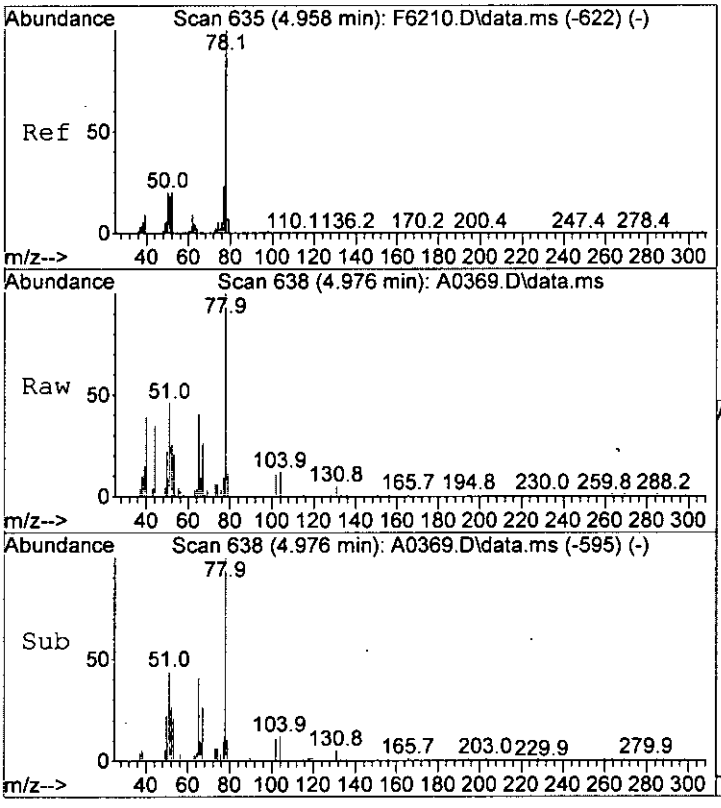


#22
Methylene Chloride
Concen: Below Cal
RT: 2.385 min Scan# 213
Delta R.T. -0.055 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion: 84 Resp: 788

Ion	Ratio	Lower	Upper
84	100		
86	0.0	44.5	84.5#
49	0.0	123.0	163.0#
51	0.0	22.1	62.1#

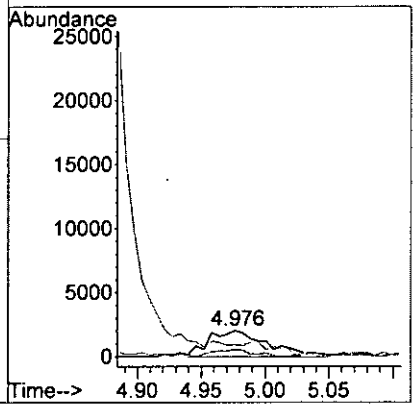


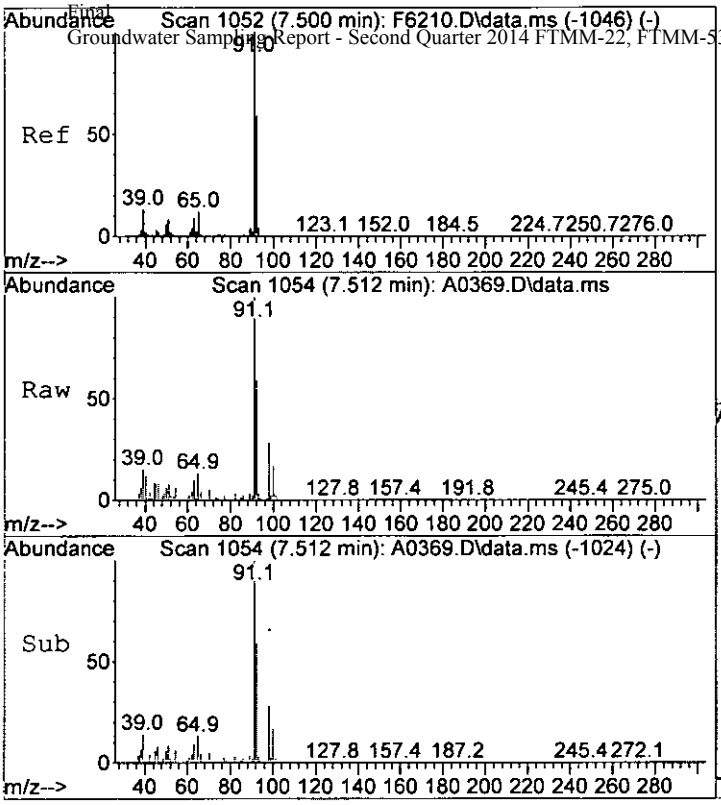


#49
Benzene
Concen: 0.21 ug/L m
RT: 4.976 min Scan# 638
Delta R.T. 0.018 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion: 78 Resp: 6424

Ion	Ratio	Lower	Upper
78	100		
51	46.3	0.0	39.4#
52	26.2	0.0	36.9

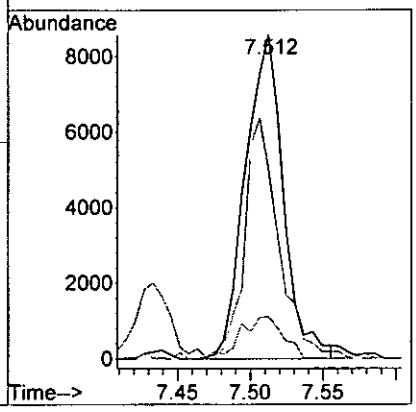


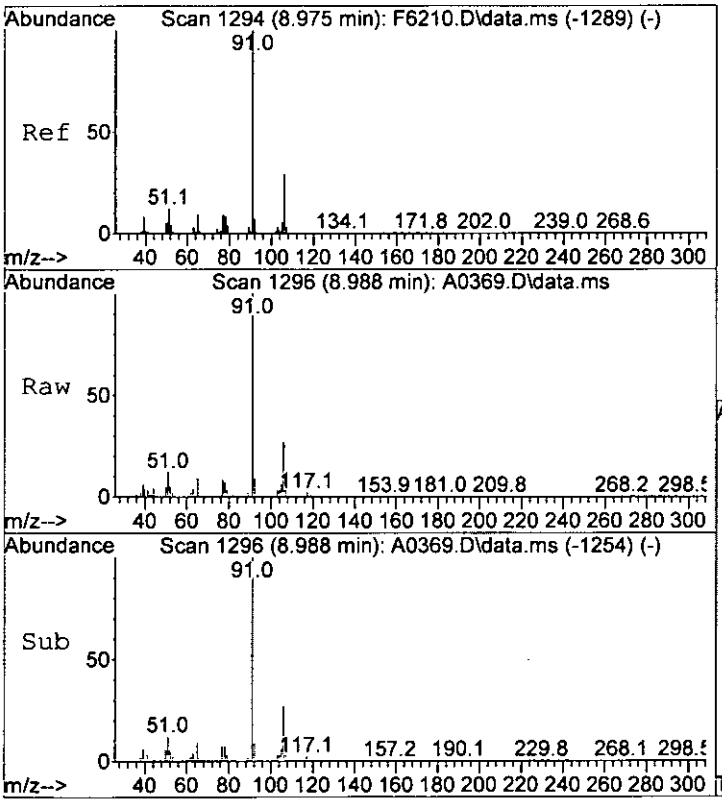


#66
Toluene
Concen: 0.46 ug/L
RT: 7.512 min Scan# 1054
Delta R.T. 0.012 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion: 91 Resp: 15483

Ion	Ratio	Lower	Upper
91	100		
92	58.7	39.5	79.5
65	13.0	0.0	32.0

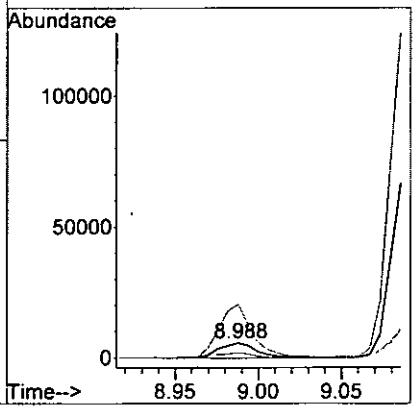


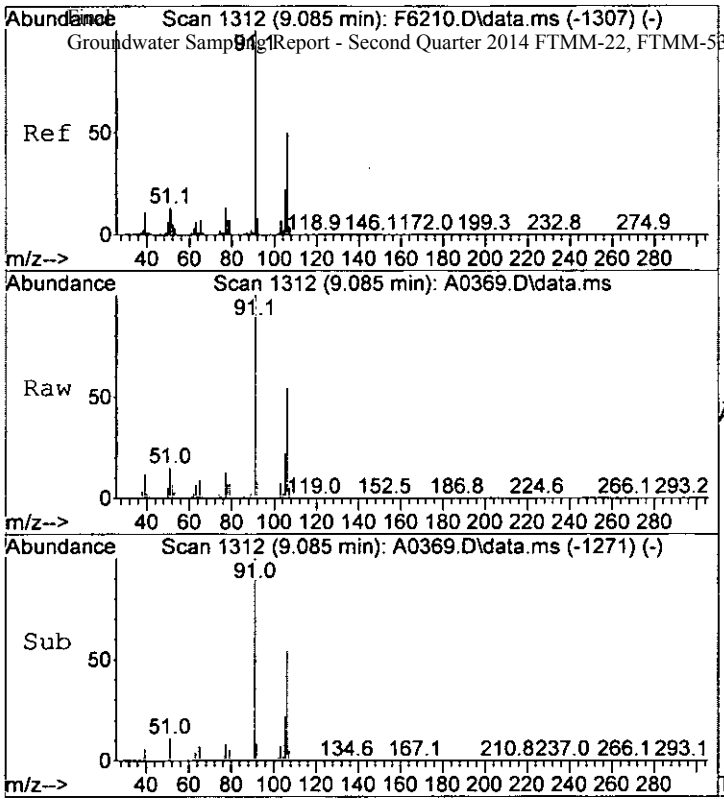


#82
Ethylbenzene
Concen: 0.74 ug/L
RT: 8.988 min Scan# 1296
Delta R.T. 0.006 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:106 Resp: 8705

Ion	Ratio	Lower	Upper
106	100		
91	365.6	314.0	354.0#
65	31.4	11.1	51.1

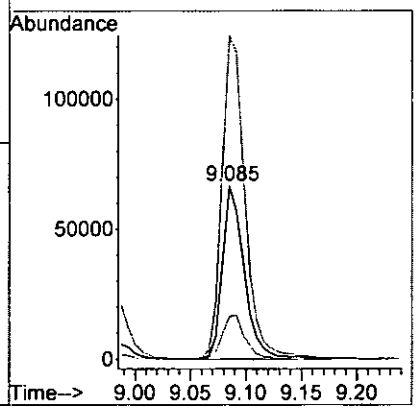


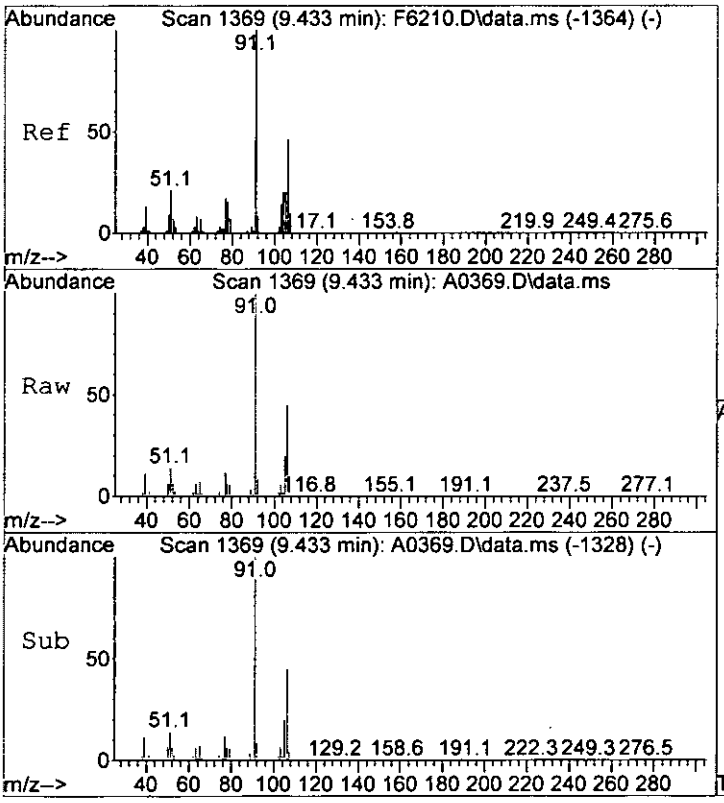


#83
(m+p)Xylene
Concen: 6.28 ug/L
RT: 9.085 min Scan# 1312
Delta R.T. 0.000 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:106 Resp: 90836

Ion	Ratio	Lower	Upper
106	100		
91	186.7	183.8	223.8
77	24.3	8.7	48.7

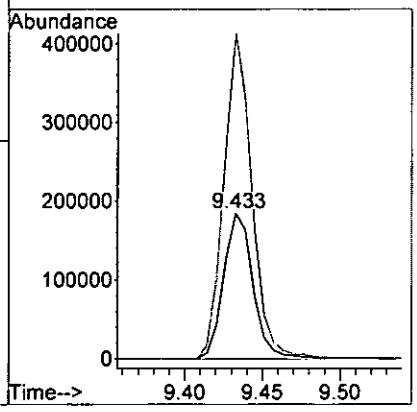


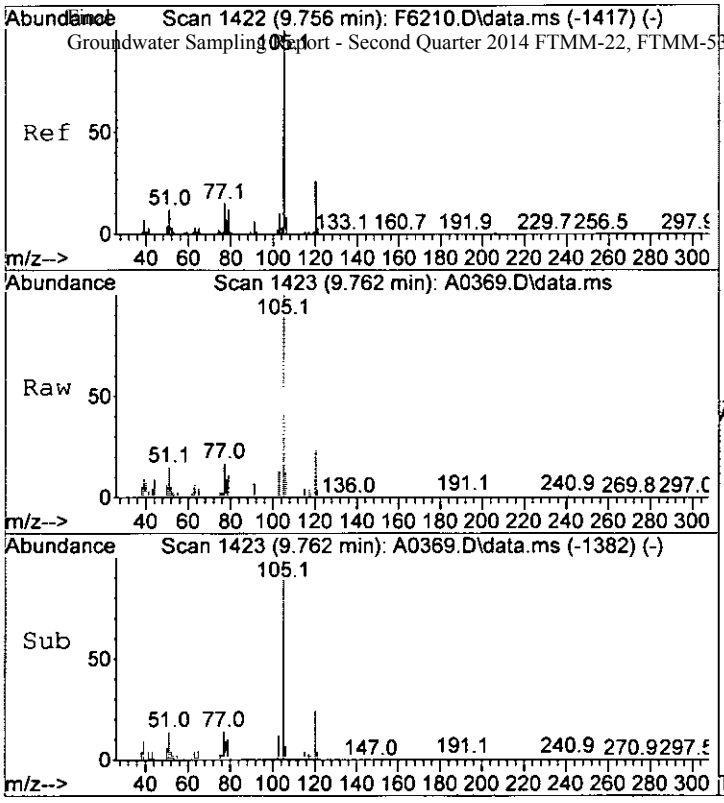


#84
o-Xylene
Concen: 16.46 ug/L
RT: 9.433 min Scan# 1369
Delta R.T. 0.000 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:106 Resp: 240563

Ion	Ratio	Lower	Upper
106	100		
91	223.3	198.0	238.0

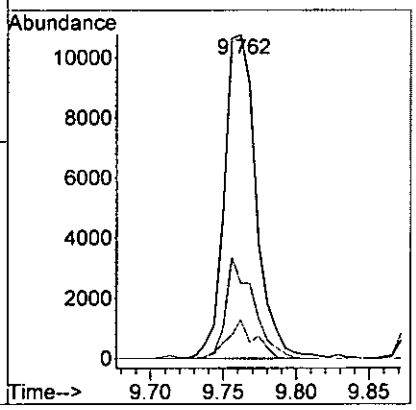


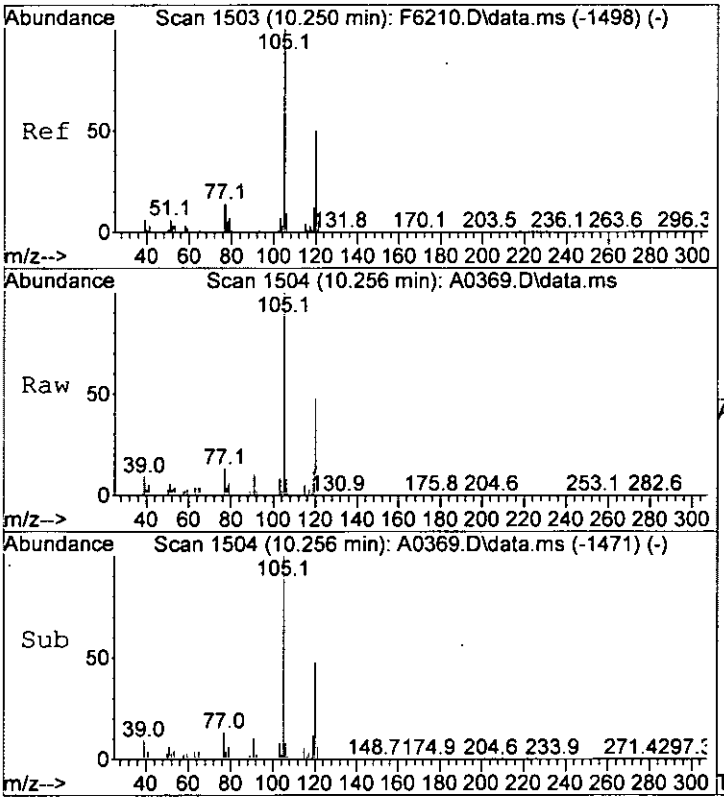


#88
Isopropylbenzene
Concen: 0.45 ug/L
RT: 9.762 min Scan# 1423
Delta R.T. 0.006 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:105 Resp: 16212

Ion	Ratio	Lower	Upper
105	100		
120	23.3	6.8	46.8
106	11.8	0.0	28.8

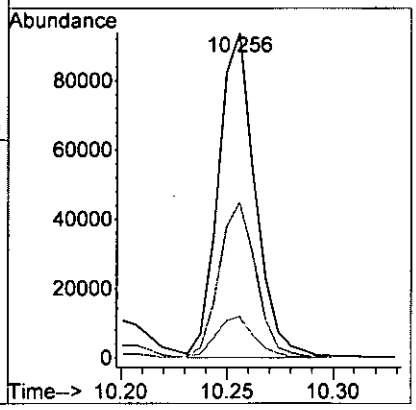


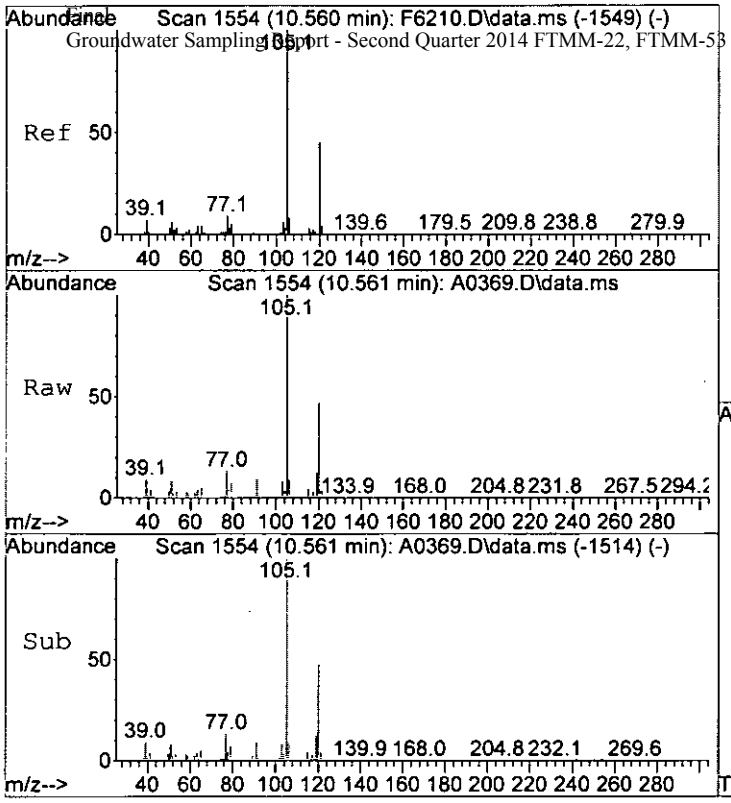


#99
1,3,5-Trimethylbenzene
Concen: 3.94 ug/L
RT: 10.256 min Scan# 1504
Delta R.T. 0.006 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:105 Resp: 112982

Ion	Ratio	Lower	Upper
105	100		
120	47.8	28.5	68.5
77	12.6	0.0	34.2

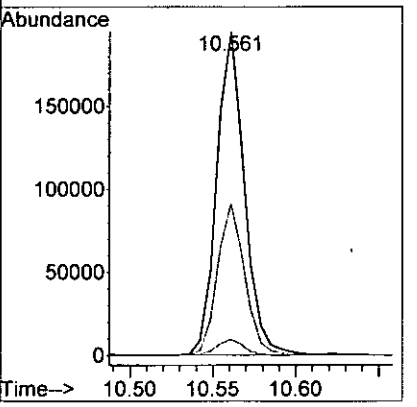


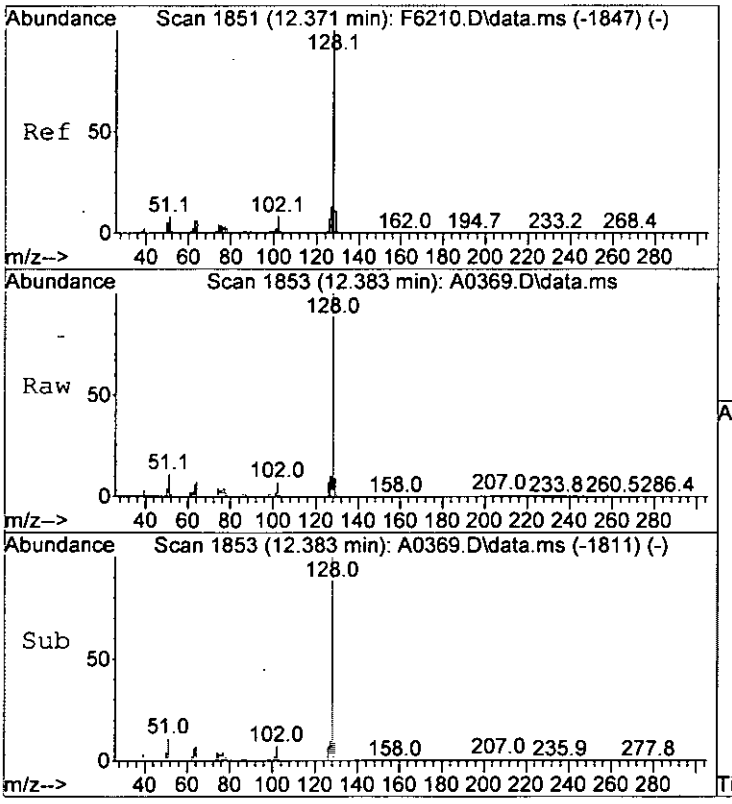


#101
1,2,4-Trimethylbenzene
Concen: 7.80 ug/L
RT: 10.561 min Scan# 1554
Delta R.T. 0.000 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:105 Resp: 226001

Ion	Ratio	Lower	Upper
105	100		
120	46.9	24.9	64.9
65	4.9	0.0	25.0

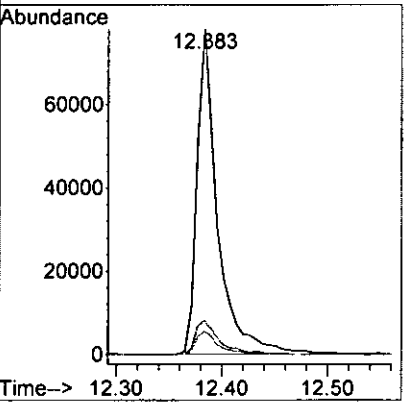




#117
Naphthalen
Concen: 7.62 ug/L
RT: 12.383 min Scan# 1853
Delta R.T. 0.000 min
Lab File: A0369.D
Acq: 15 Jul 2014 2:06 pm

Tgt Ion:128 Resp: 105017

Ion	Ratio	Lower	Upper
128	100		
127	10.4	0.0	32.9
102	7.2	0.0	28.7



A0369.D W061114.M Wed Jul 16 13:25:48 2014 MSVO10 Page 7

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

FJ 7/16/14

Signal : TIC: A0369.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	90	94	98	rBV	370085	366429	9.65%	1.249%
2	1.818	116	120	124	rVB	112764	121658	3.20%	0.415%
3	2.111	162	168	177	rVB3	28131	55746	1.47%	0.190%
4	2.465	217	226	230	rBV3	94324	243855	6.42%	0.831%
5	2.513	230	234	243	rVB	92726	158160	4.16%	0.539%
6	2.672	254	260	268	rVB	80273	142709	3.76%	0.486%
7	3.275	353	359	365	rBV4	19374	42405	1.12%	0.144%
8	3.562	397	406	419	rBV	233889	528146	13.91%	1.800%
9	4.324	522	531	538	rBV	478496	1147795	30.22%	3.911%
10	4.409	538	545	561	rVB	864245	2338152	61.57%	7.967%
11	4.861	610	619	634	rBV	430894	1156390	30.45%	3.940%
12	5.610	735	742	764	rBV	1283761	2841358	74.82%	9.682%
13	6.220	829	842	852	rBV6	20379	65563	1.73%	0.223%
14	7.433	1035	1041	1050	rBV	2376918	3797794	100.00%	12.941%
15	7.506	1050	1053	1061	rVB3	30551	55355	1.46%	0.189%
16	8.841	1267	1272	1292	rBV	2613422	3444008	90.68%	11.735%
17	8.988	1292	1296	1301	rBV	45828	64971	1.71%	0.221%
18	9.085	1306	1312	1322	rBV	382953	538480	14.18%	1.835%
19	9.433	1364	1369	1387	rBV	1190497	1509562	39.75%	5.144%
20	9.762	1418	1423	1430	rVB2	31172	45622	1.20%	0.155%
21	9.884	1438	1443	1458	rVB	2051507	2717679	71.56%	9.260%
22	10.183	1488	1492	1499	rBV	78236	121332	3.19%	0.413%
23	10.256	1499	1504	1512	rVB	269824	336574	8.86%	1.147%
24	10.420	1525	1531	1544	rBV	603916	789410	20.79%	2.690%
25	10.561	1549	1554	1563	rVB	557910	656936	17.30%	2.238%
26	10.835	1594	1599	1605	rBV	2984770	3586690	94.44%	12.221%
27	10.902	1605	1610	1622	rVB	739893	976128	25.70%	3.326%
28	11.061	1631	1636	1644	rBV	256780	332109	8.74%	1.132%
29	11.134	1644	1648	1656	rVB	51099	71062	1.87%	0.242%
30	11.335	1676	1681	1683	rBV2	35377	41535	1.09%	0.142%
31	11.414	1689	1694	1697	rBV	82664	97229	2.56%	0.331%
32	11.487	1702	1706	1716	rVB2	111092	156939	4.13%	0.535%
33	11.621	1724	1728	1734	rBV	40372	49678	1.31%	0.169%
34	11.682	1734	1738	1741	rBV	79727	87959	2.32%	0.300%
35	11.719	1741	1744	1750	rVB	100955	110268	2.90%	0.376%

W061114.M Wed Jul 16 13:25:58 2014 MSVO10 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

36	11.896	1770	1773	1781	rVB	59544	66008	1.74%	0.225%
37	11.993	1781	1789	1795	rBV2	235219	269421	7.09%	0.918%
38	12.383	1849	1853	1863	rBV	155777	216409	5.70%	0.737%

Sum of corrected areas: 29347524

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0369.D
Acq On    : 15 Jul 2014    2:06 pm
Operator  : F.NAEGLER
Sample    : R1405048-004|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 8   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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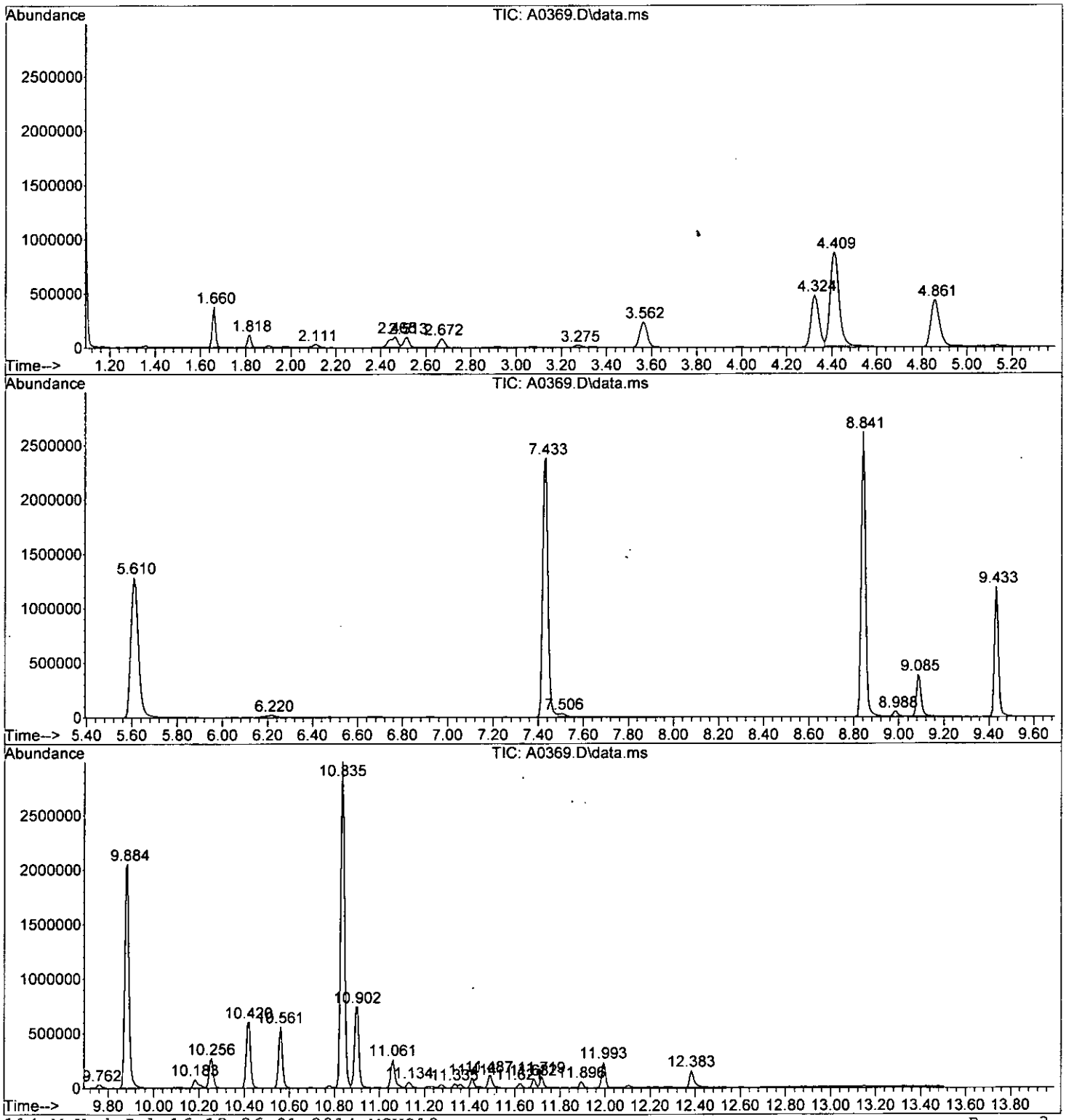


Library Search Compound Report

Data Path : I:\ACQUDATA\MSVOA10\DATA\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

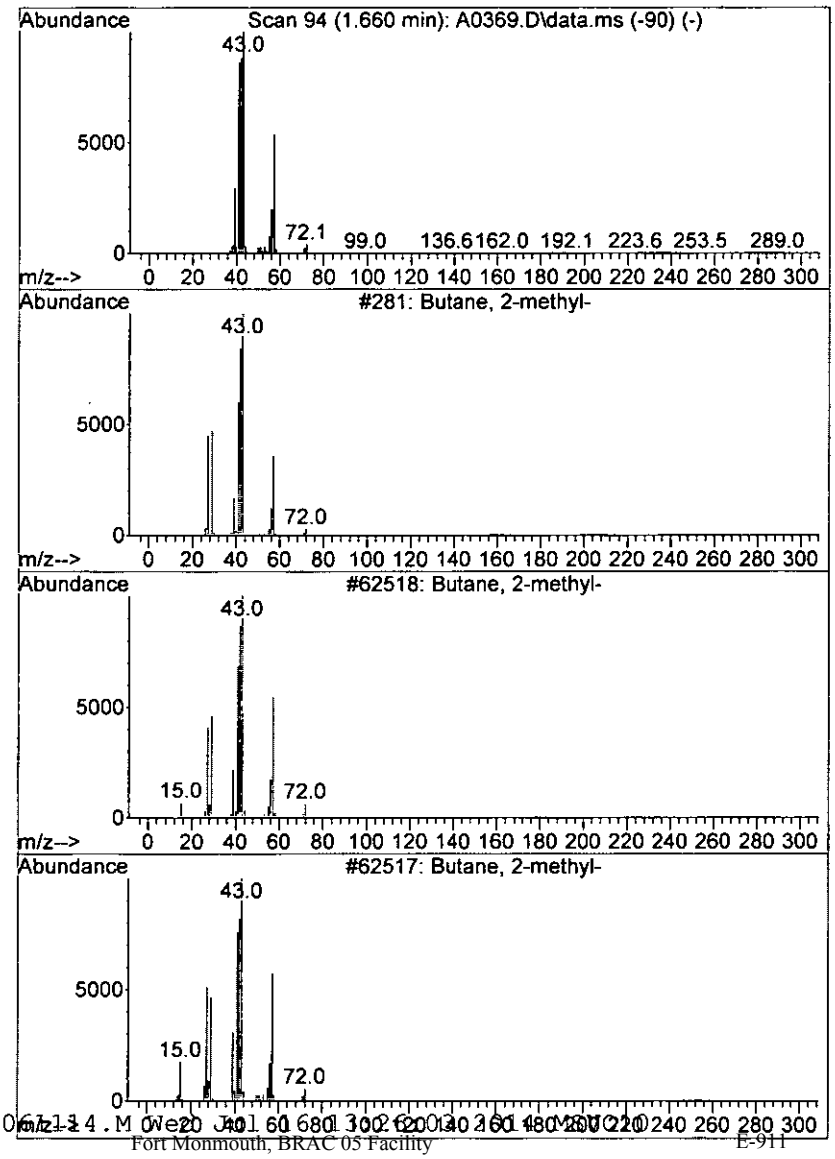
****

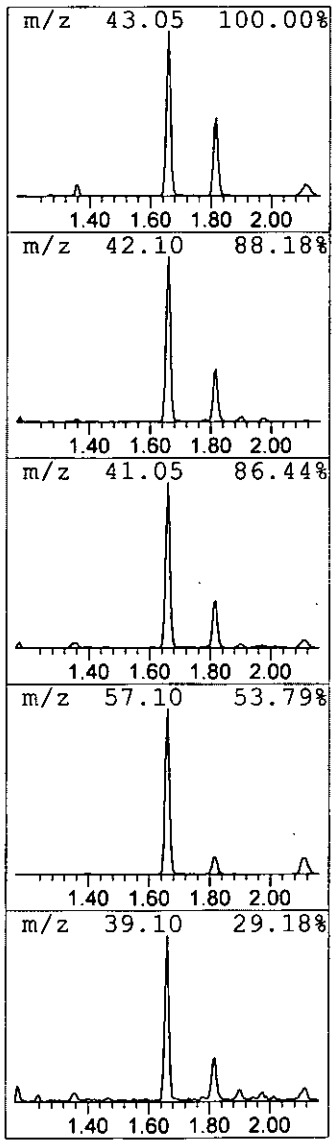
Peak Number 1 Butane, 2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.660	7.84 ug/L	366429	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	78
2	Butane, 2-methyl-	72	C5H12	000078-78-4	56
3	Butane, 2-methyl-	72	C5H12	000078-78-4	47
4	1-Butene	56	C4H8	000106-98-9	9
5	1-Butene	56	C4H8	000106-98-9	9

* UNK





Library Search Compound Report

Data Path : I:\ACQUDATA\MSVOA10\DATA\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

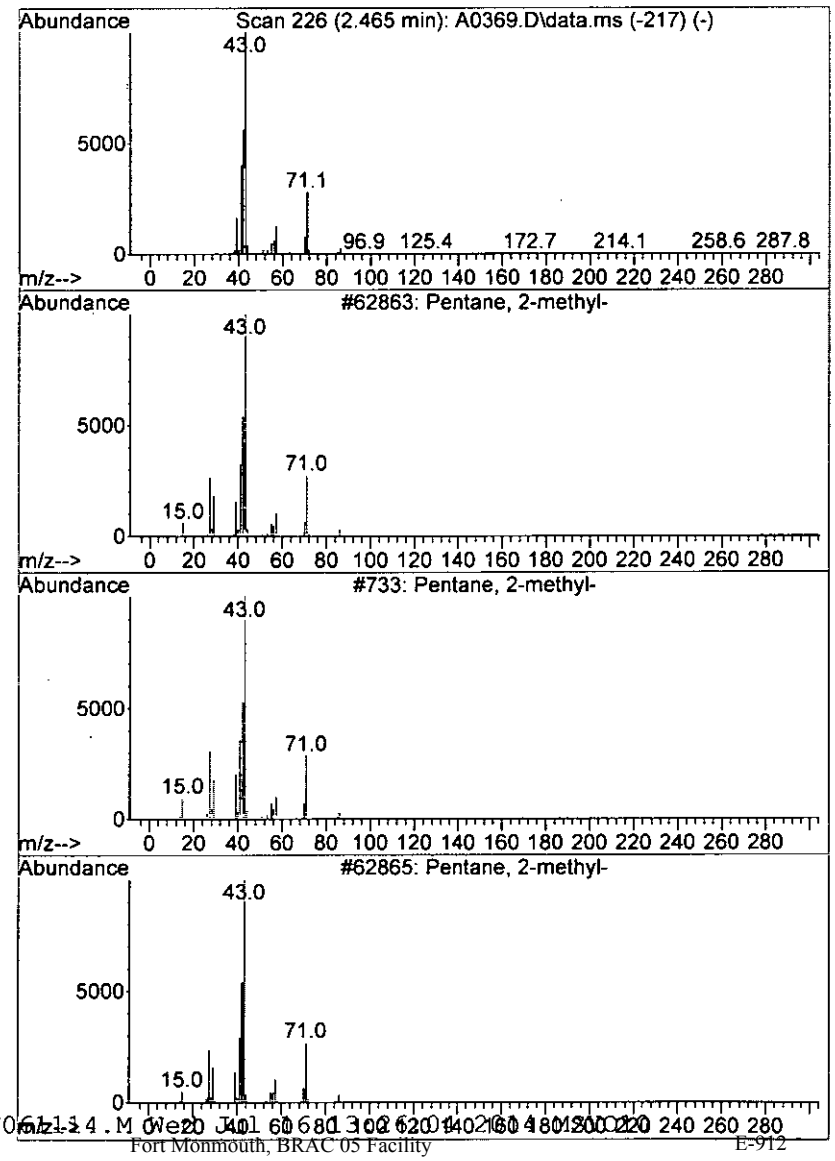
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

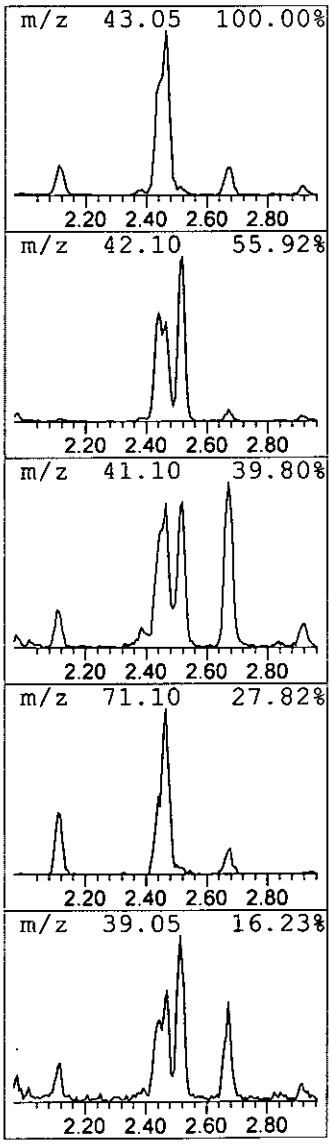
****

Peak Number 2 Pentane, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.465	5.21 ug/L	243855	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	74
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

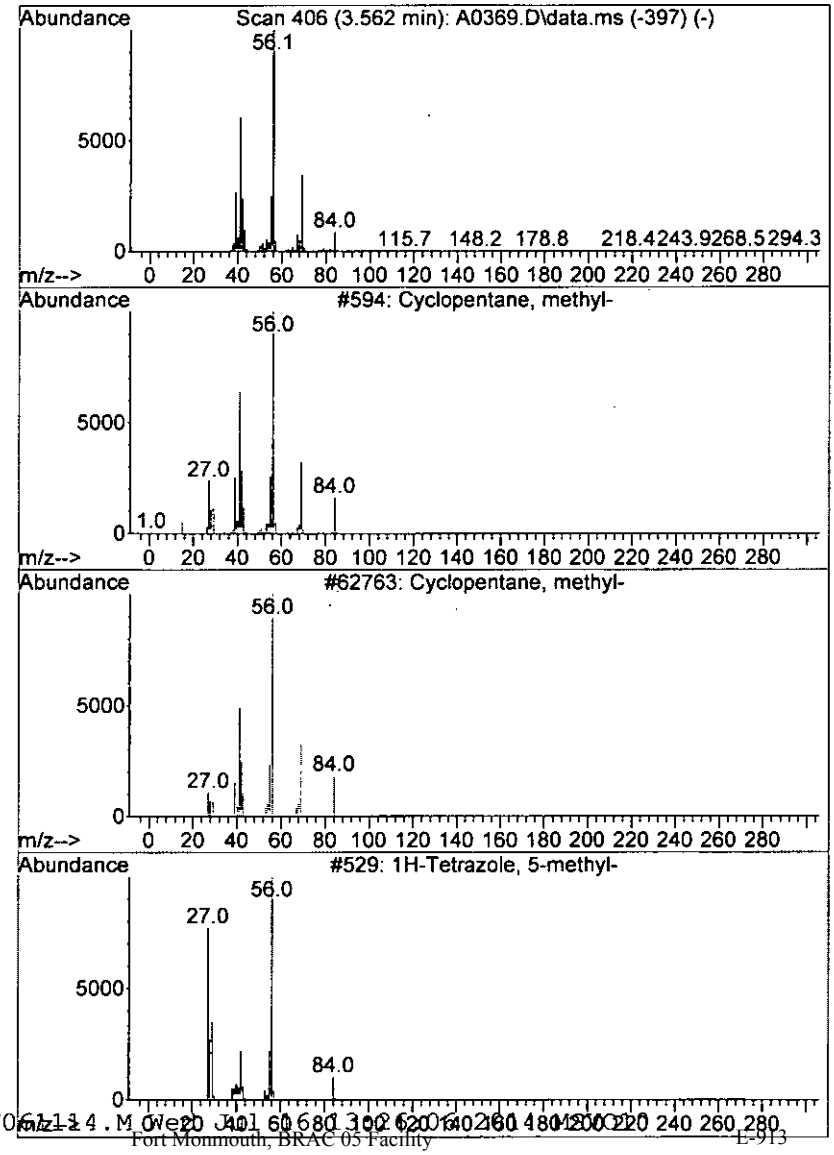
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

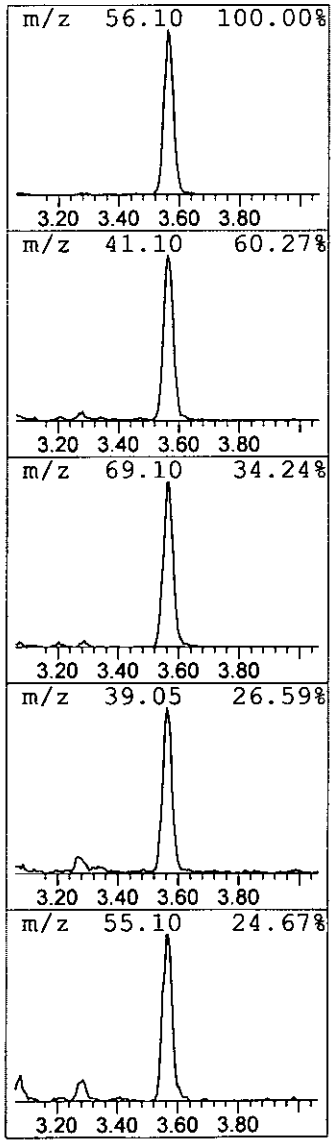
****

Peak Number 3 Cyclopentane, methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.562	11.29 ug/L	528146	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	72
4	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	72
5	Cyclobutane, ethyl-	84	C6H12	004806-61-5	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

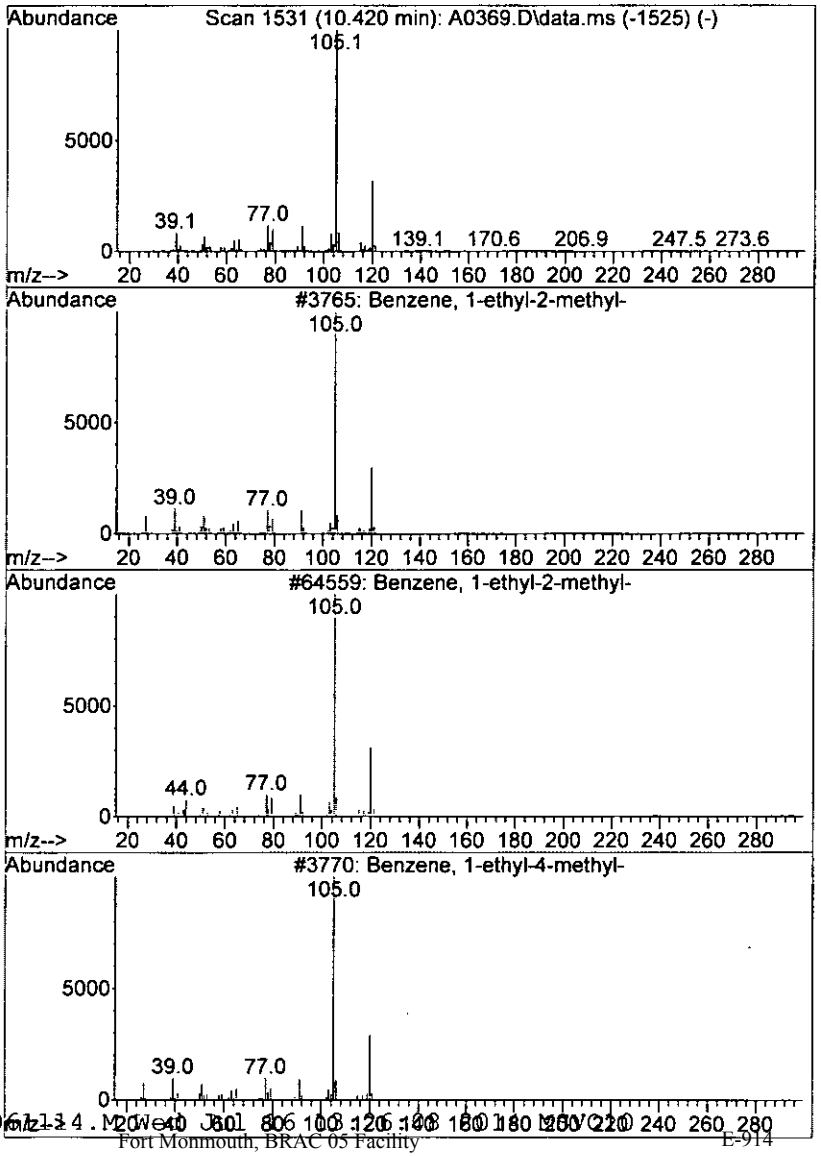
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

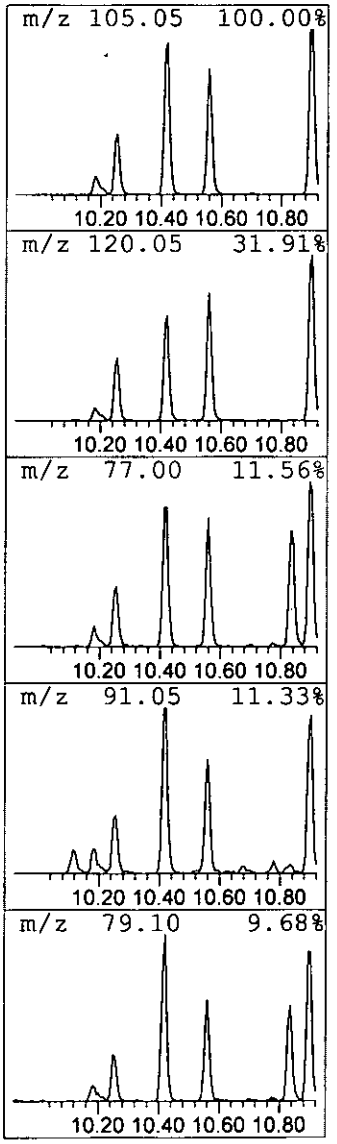
****

Peak Number 4 Benzene, 1-ethyl-2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.420	11.00 ug/L	789410	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91





Library Search Compound Report

Data Path : I:\ACQUDATA\MSVOA10\DATA\071514\
Data File : A0369.D
Acq On : 15 Jul 2014 2:06 pm
Operator : F.NAEGLER
Sample : R1405048-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

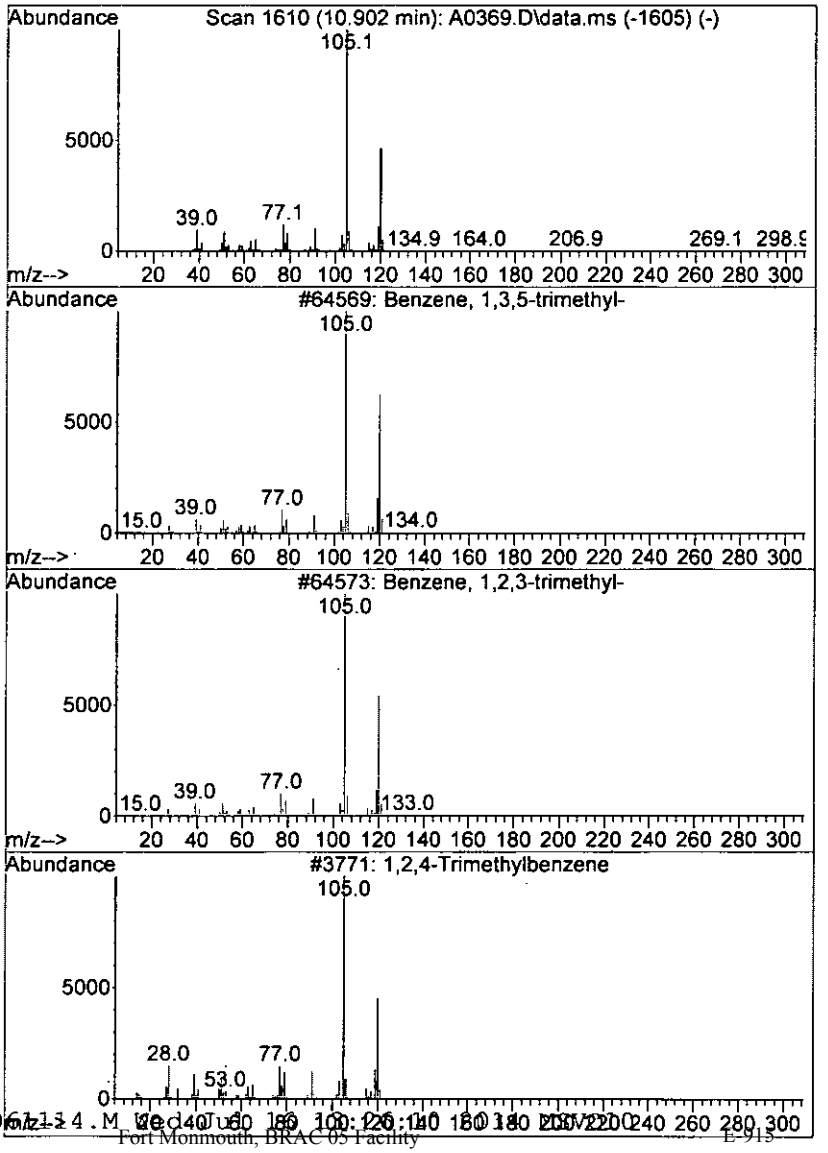
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

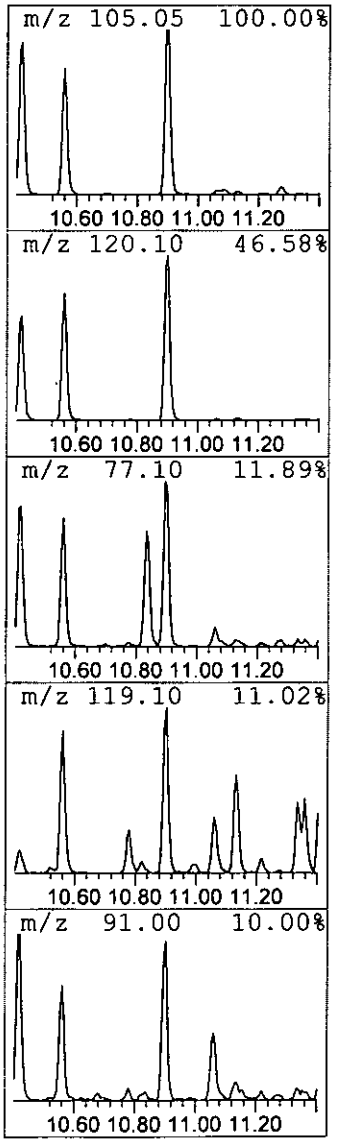
****

Peak Number 5 Benzene, 1,3,5-trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.902	13.61 ug/L	976128	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	95
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	94
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94





Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:14
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.30**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.7**	J	5.0	5.0	1.3	
71-43-2	Benzene	**0.31**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:14
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.27**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.30**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:14
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0234.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	7/10/14 16:14	
Dibromofluoromethane	105	85-115	7/10/14 16:14	
Toluene-d8	99	85-120	7/10/14 16:14	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1614

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1405048-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-005|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0234.D Vial: 14
Acq On : 10 Jul 2014 4:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 16:28:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	836561	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1214074	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1141331	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	569797	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	378507	52.29	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.58%			
48) surr1,1,2-dichloroetha...	4.854	65	393807	54.21	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.42%			
65) SURR3,Toluene-d8	7.427	98	1377097	49.35	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.70%			
70) SURR2,BFB	9.878	95	550105	49.89	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.78%			
Target Compounds						Qvalue
15) Acetone	2.123	43	3114	1.65	ug/L	78
16) 2-Propanol	~~2.227~~	~~45~~	~~236~~	~~0.72~~	~~ug/L~~	~~90~~
19) Acetonitrile	~~2.349~~	~~40~~	~~616~~	~~2.43~~	~~ug/L #~~	~~1~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~1530~~	~~0.38~~	~~ug/L #~~	1
44) Cyclohexane	4.446	41	1985	0.22	ug/L	84
49) Benzene	4.970	78	9654 ~~8040~~	0.31 ~~0.26~~	ug/L	70
82) Ethylbenzene	8.988	106	3310	0.27	ug/L	98
89) Cyclohexanone	~~9.878~~	~~55~~	~~1628~~	~~1.83~~	~~ug/L #~~	~~14~~
101) 1,2,4-Trimethylbenzene	10.573	105	8617	0.30	ug/L	80
117) Naphthalen	12.438	128	4155	0.30	ug/L	94

NT(DE) FN 7/17/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FN 7/17/14

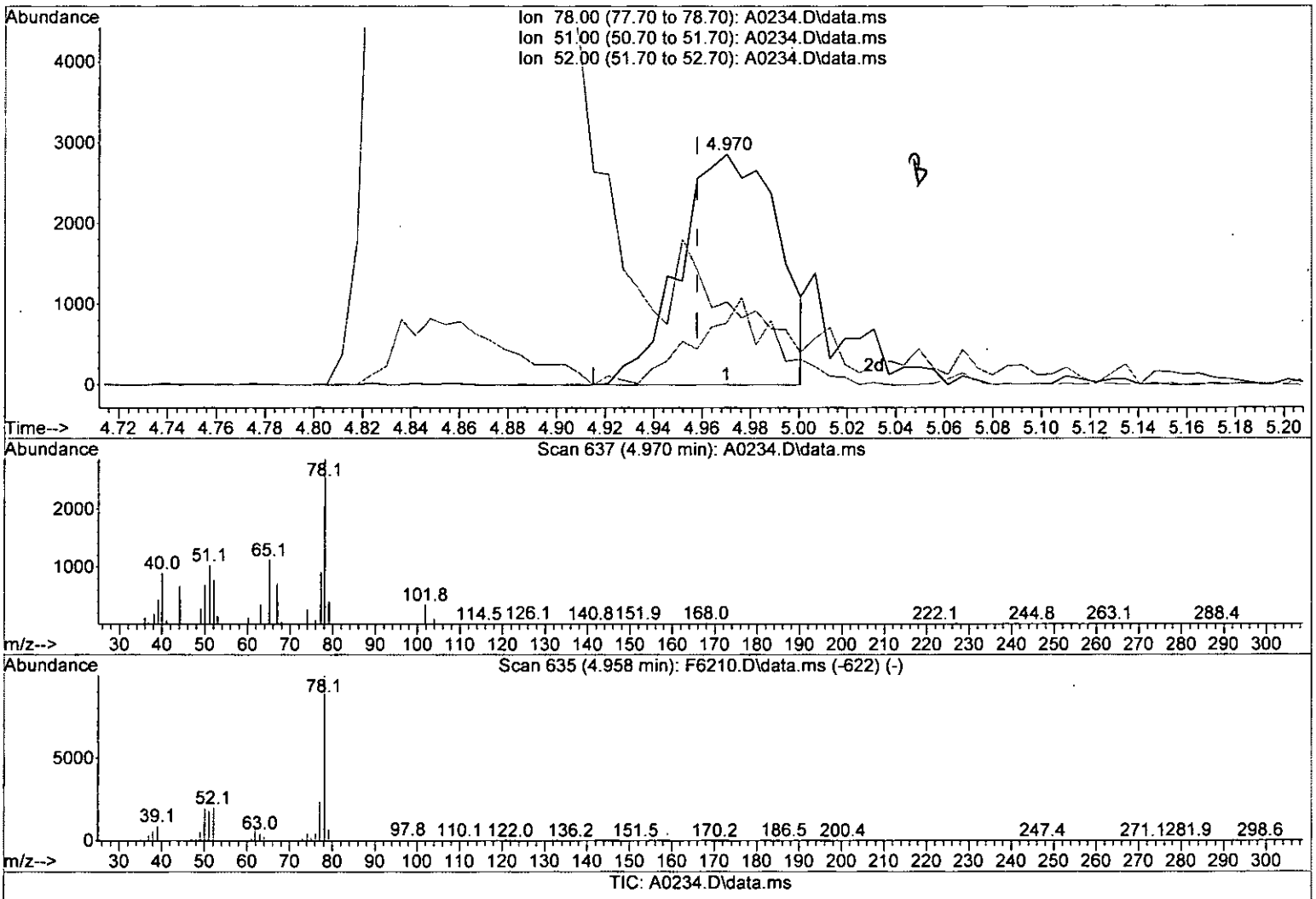
7/17/14

W061114.M Thu Jul 10 16:28:07 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : R1405048-005|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0234.D Vial: 14
Acq On : 10 Jul 2014 4:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 16:28:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



TIC: A0234.D\data.ms

(49) Benzene (P)

4.970min (+0.012) 0.26 ug/L

response 8040

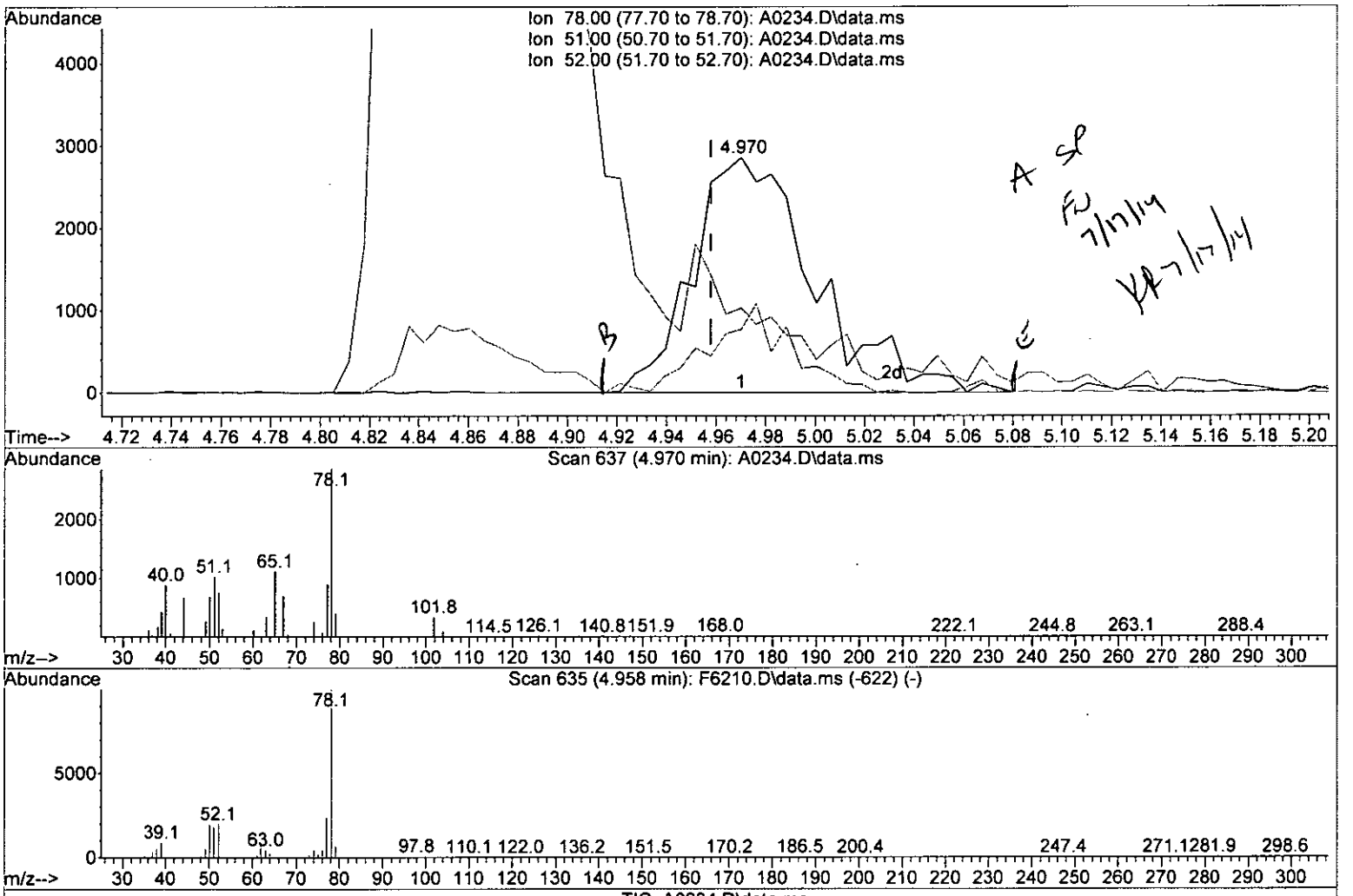
Ion	Exp%	Act%
78.00	100	100
51.00	19.40	35.88
52.00	16.90	26.70
0.00	0.00	0.00

W061114.M Thu Jul 17 12:57:00 2014 MSVOA10 Page: 1

Quantitation Report (Qedit)

Sample : R1405048-005|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0234.D Vial: 14
Acq On : 10 Jul 2014 4:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 16:28:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



TIC: A0234.D\data.ms

(49) Benzene (P)

4.970min (+0.012) 0.31 ug/L m

response 9654

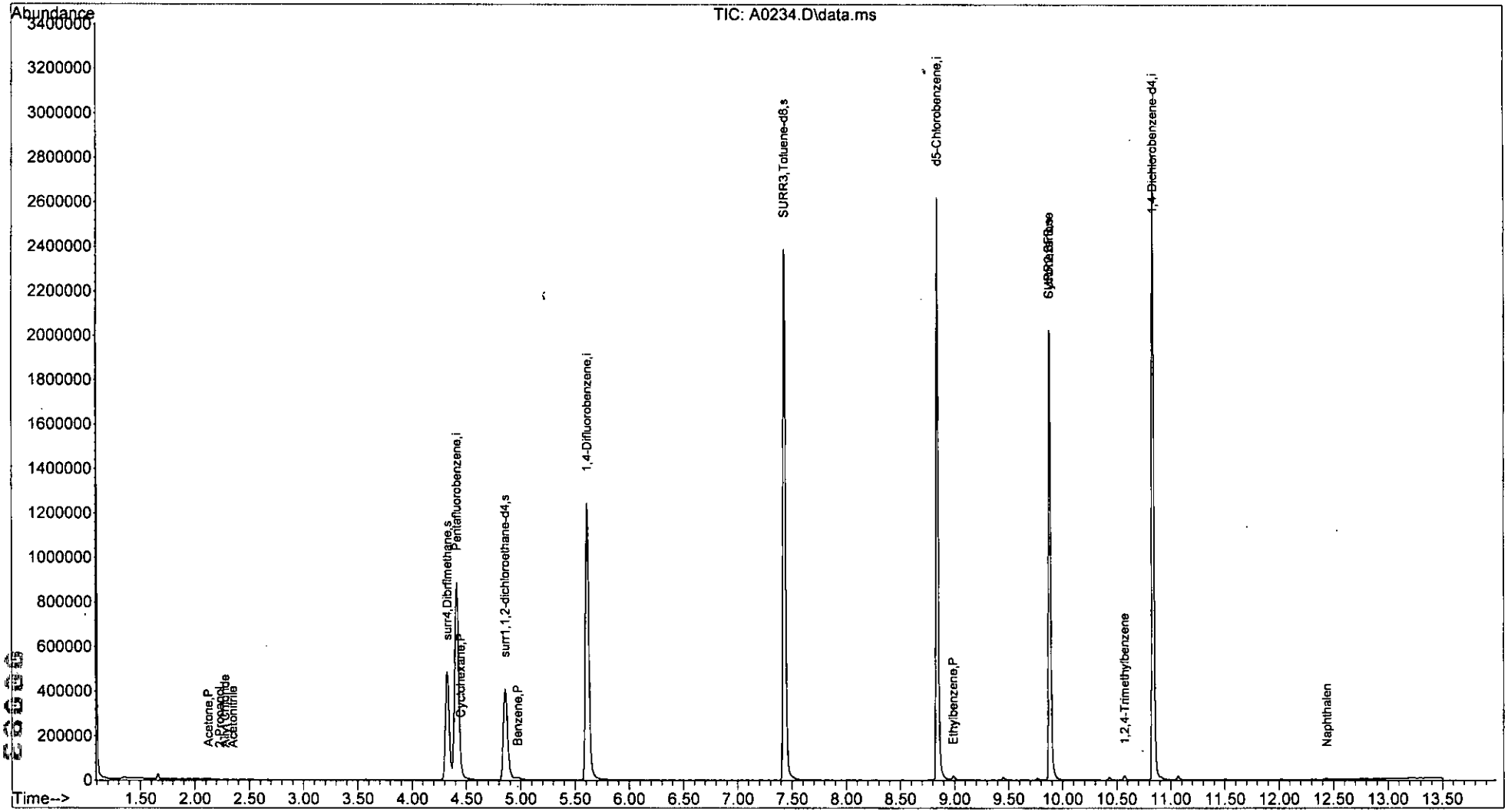
Ion	Exp%	Act%
78.00	100	100
51.00	19.40	35.88
52.00	16.90	26.70
0.00	0.00	0.00

W061114.M Thu Jul 17 12:57:08 2014 MSVO10 Page: 1

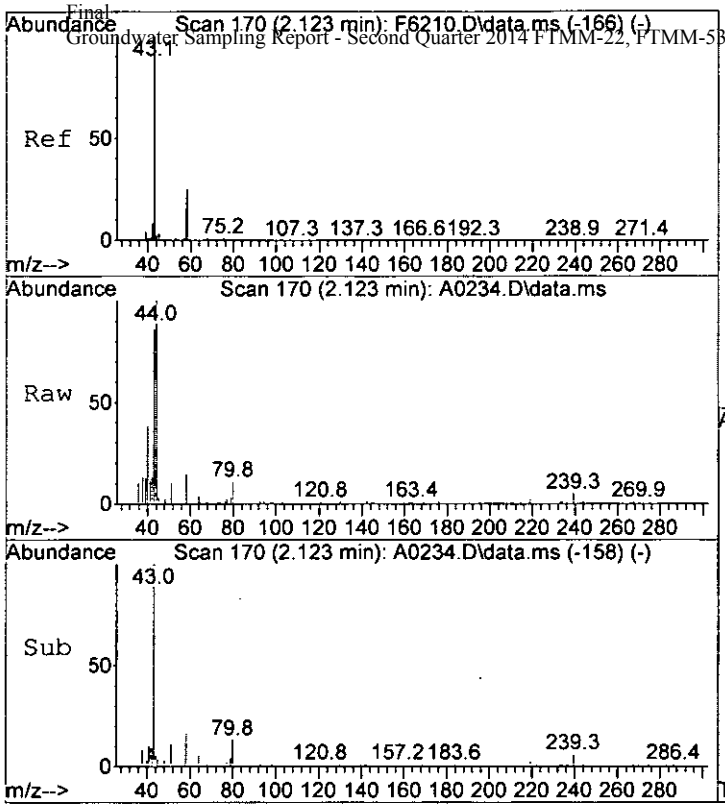
Quantitation Report (Not Reviewed)

Sample : R1405048-005|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0234.D Vial: 14
Acq On : 10 Jul 2014 4:14 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 16:28:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



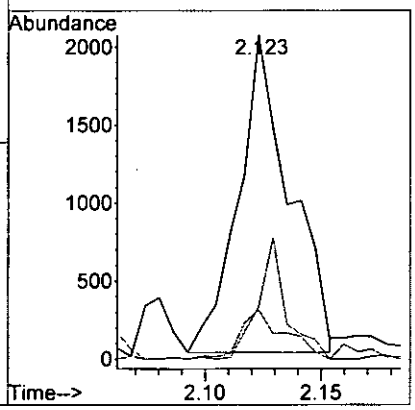
W061114.M Thu Jul 10 16:28:09 2014 MSVO10 Page: 2

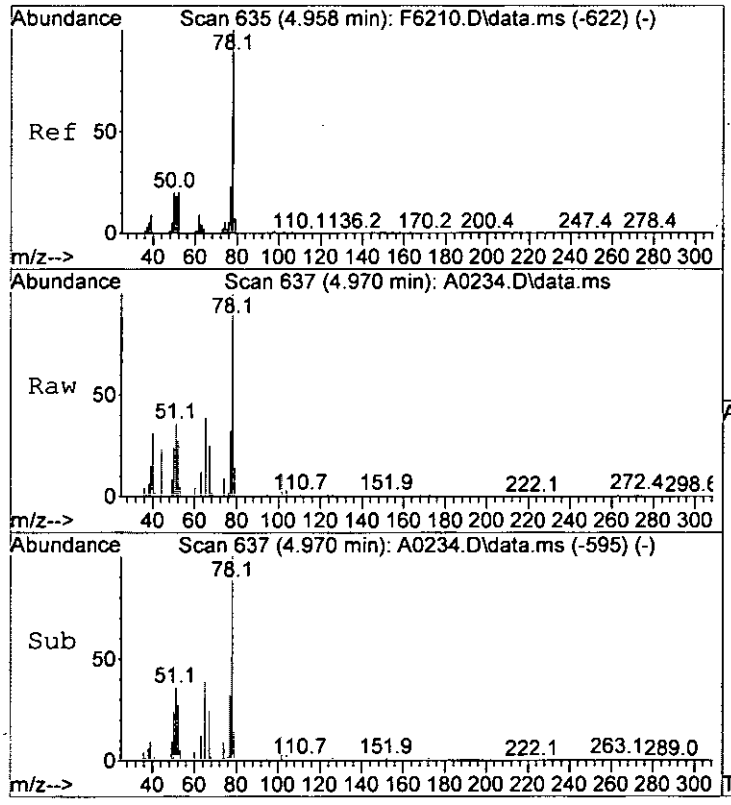


#15
Acetone
Concen: 1.65 ug/L
RT: 2.123 min Scan# 170
Delta R.T. -0.000 min
Lab File: A0234.D
Acq: 10 Jul 2014 4:14 pm

Tgt Ion: 43 Resp: 3114

Ion	Ratio	Lower	Upper
43	100		
58	16.1	7.2	47.2
42	15.2	0.0	27.0

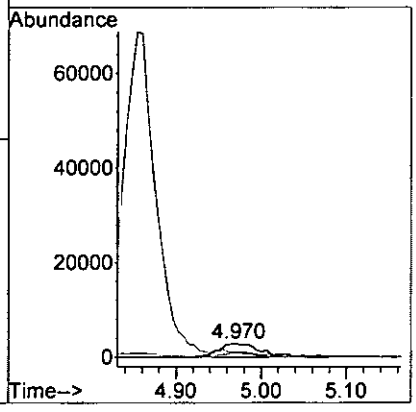


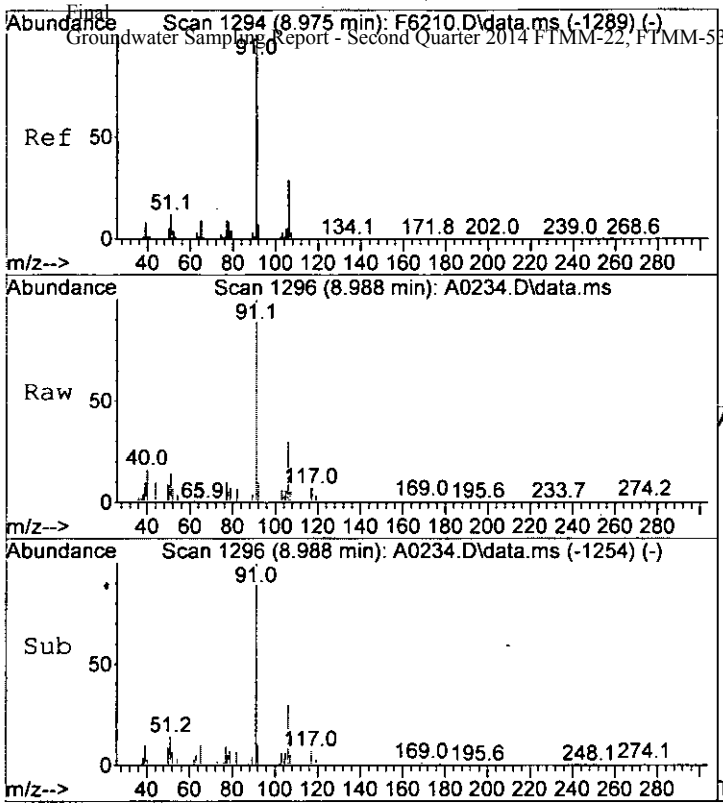


#49
Benzene
Concen: 0.31 ug/L m
RT: 4.970 min Scan# 637
Delta R.T. 0.012 min
Lab File: A0234.D
Acq: 10 Jul 2014 4:14 pm

Tgt Ion: 78 Resp: 9654

Ion	Ratio	Lower	Upper
78	100		
51	35.9	0.0	39.4
52	26.7	0.0	36.9

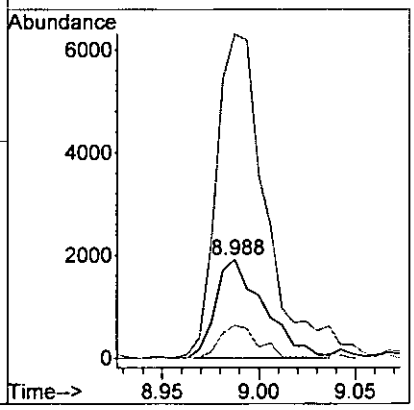


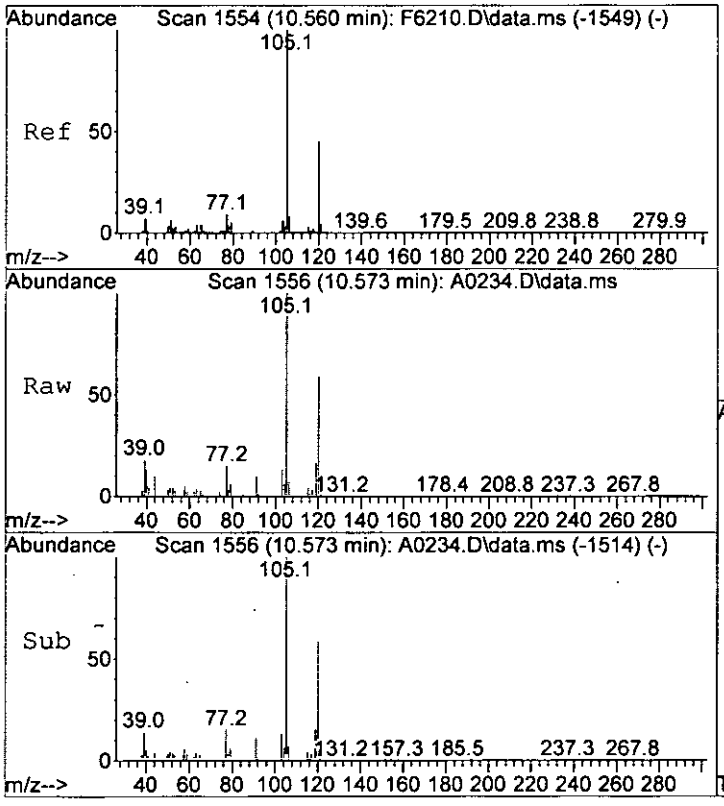


#82
Ethylbenzene
Concen: 0.27 ug/L
RT: 8.988 min Scan# 1296
Delta R.T. 0.006 min
Lab File: A0234.D
Acq: 10 Jul 2014 4:14 pm

Tgt Ion:106 Resp: 3310

Ion	Ratio	Lower	Upper
106	100		
91	329.0	314.0	354.0
65	33.0	11.1	51.1

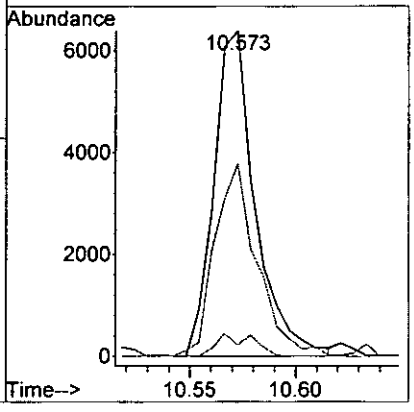


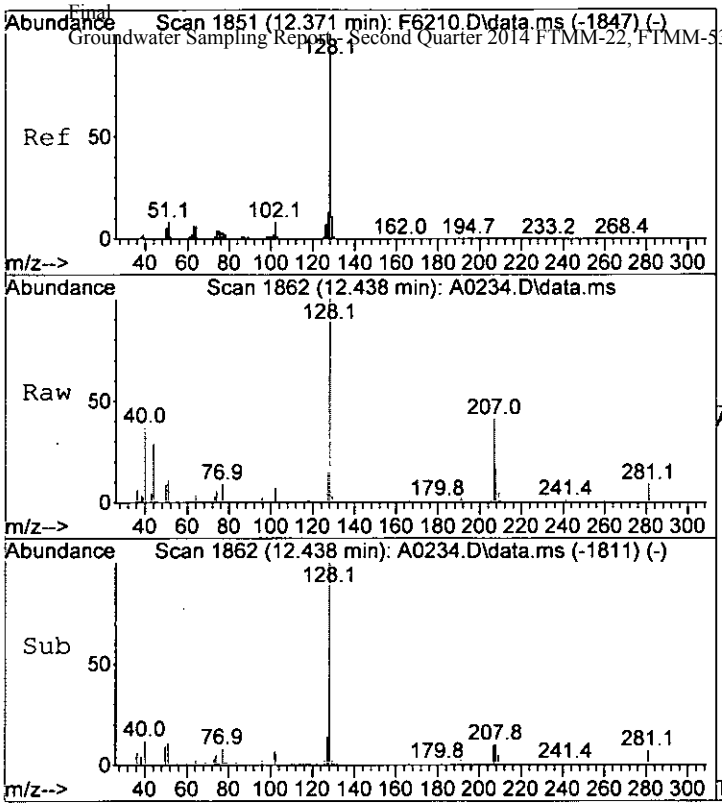


#101
1,2,4-Trimethylbenzene
Concen: 0.30 ug/L
RT: 10.573 min Scan# 1556
Delta R.T. 0.012 min
Lab File: A0234.D
Acq: 10 Jul 2014 4:14 pm

Tgt Ion:105 Resp: 8617

Ion	Ratio	Lower	Upper
105	100		
120	59.1	24.9	64.9
65	3.5	0.0	25.0

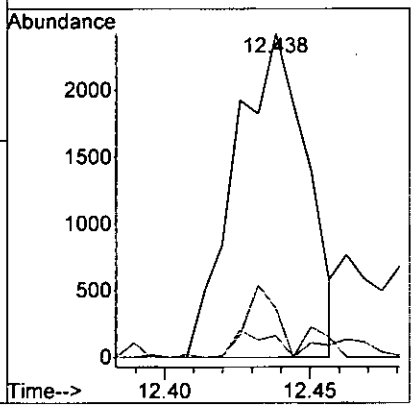




#117
Naphthalen
Concen: 0.30 ug/L
RT: 12.438 min Scan# 1862
Delta R.T. 0.055 min
Lab File: A0234.D
Acq: 10 Jul 2014 4:14 pm

Tgt Ion:128 Resp: 4155

Ion	Ratio	Lower	Upper
128	100		
127	15.1	0.0	32.9
102	6.6	0.0	28.7



A0234.D W061114.M Thu Jul 17 12:59:36 2014 MSVO10 Page 5

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0234.D
Acq On : 10 Jul 2014 4:14 pm
Operator : F.NAEGLER
Sample : R1405048-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0234.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	485115	1191012	30.90%	5.657%
2	4.409	538	545	567	rVB	885531	2301628	59.71%	10.932%
3	4.854	609	618	631	rBV2	407962	1103537	28.63%	5.241%
4	5.610	734	742	757	rBV	1244226	2817922	73.10%	13.384%
5	7.427	1035	1040	1059	rBV	2386076	3854988	100.00%	18.310%
6	8.841	1267	1272	1288	rBV	2620896	3522348	91.37%	16.730%
7	9.878	1438	1442	1459	rBV	2025076	2735351	70.96%	12.992%
8	10.835	1594	1599	1609	rBV	2809423	3527268	91.50%	16.753%

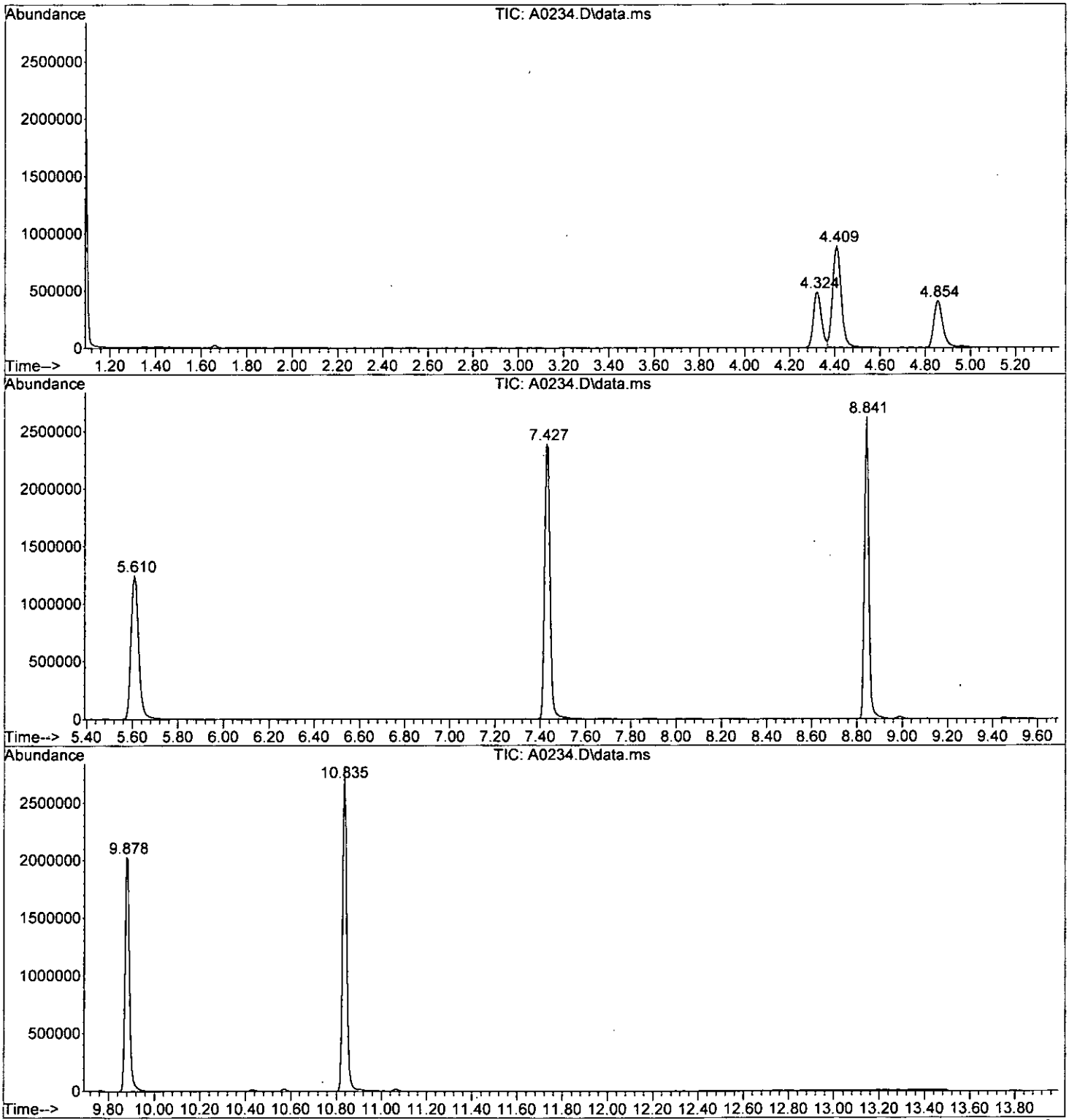
Sum of corrected areas: 21054054

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0234.D
Acq On : 10 Jul 2014 4:14 pm
Operator : F.NAEGLER
Sample : R1405048-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Thu Jul 17 12:59:46 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0234.D
Acq On : 10 Jul 2014 4:14 pmm
Operator : F.NAEGLERR
Sample : R1405048-005|1.0
Misc : PARSONS 11603 T44
ALS Vial : 14 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1205
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:45
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1405048-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1205
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:45
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1405048-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1205
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 16:45
Sample Name:	FTMM-53-GW-699MW04-6.85	**Units:**	µg/L
Lab Code:	R1405048-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0235.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	7/10/14 16:45	
Dibromofluoromethane	106	85-115	7/10/14 16:45	
Toluene-d8	99	85-120	7/10/14 16:45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1645

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW04-6.85
Lab Code: R1405048-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-006|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0235.D Vial: 15
Acq On : 10 Jul 2014 4:45 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 16:58:23 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	858083	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1225711	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1125529	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	572084	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	385892	52.80	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.60%			
48) surr1,1,2-dichloroetha...	4.854	65	399690	54.49	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.98%			
65) SURR3,Toluene-d8	7.433	98	1389277	49.32	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.64%			
70) SURR2,BFB	9.878	95	536868	48.23	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.46%			
Target Compounds						Qvalue
15) Acetone	2.129	43	4257	2.20	ug/L	87
16) 2-Propanol	~~2.190~~	~~45~~	~~314~~	~~0.94~~	~~ug/L #~~	~~50~~
19) Acetonitrile	~~2.269~~	~~40~~	~~525~~	~~2.02~~	~~ug/L #~~	~~1~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~1250~~	~~0.30~~	~~ug/L #~~	~~1~~
44) Cyclohexane	4.446	41	1878	0.21	ug/L	90
89) Cyclohexanone	~~9.878~~	~~55~~	~~1687~~	~~1.92~~	~~ug/L #~~	~~20~~

d NT(DEL) ee FJ 7/17/14

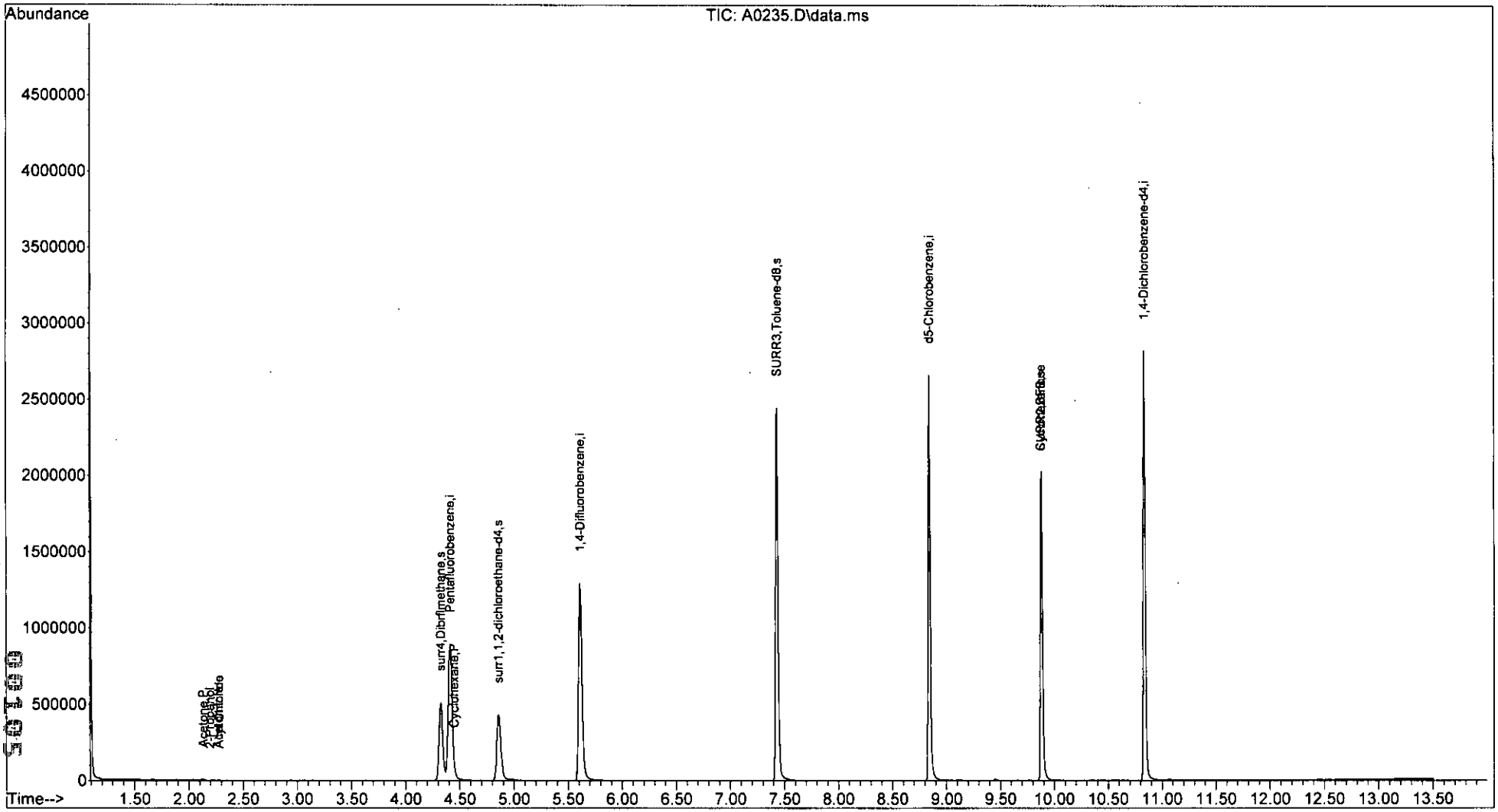
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ 7/17/14

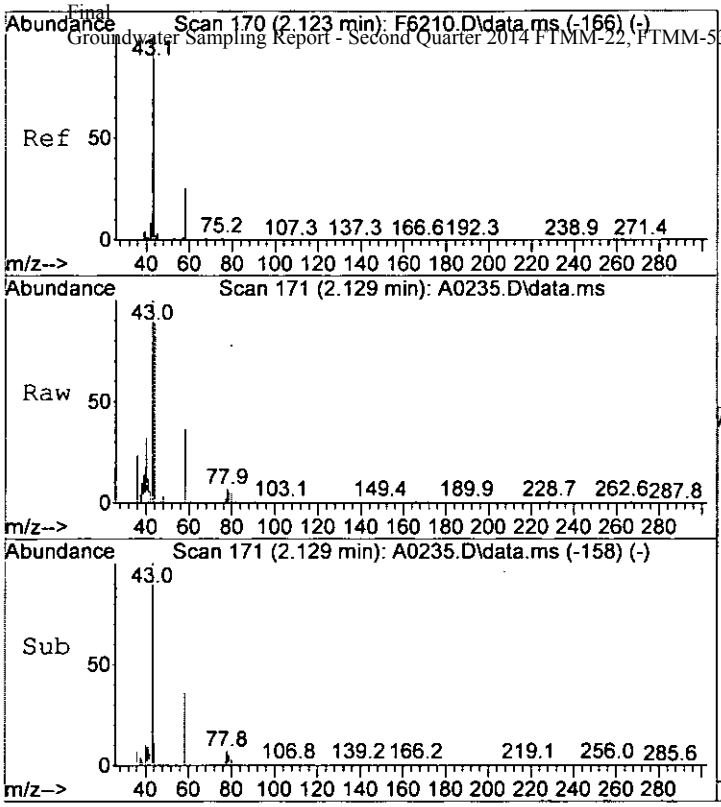
Quantitation Report (Not Reviewed)

Sample : R1405048-006|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0235.D Vial: 15
Acq On : 10 Jul 2014 4:45 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 16:58:23 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



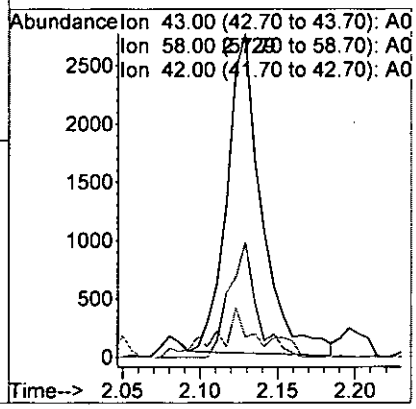
W061114.M Thu Jul 10 16:58:19 2014 MSVO10 Page: 2



#15
Acetone
Concen: 2.20 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A0235.D
Acq: 10 Jul 2014 4:45 pm

Tgt Ion: 43 Resp: 4257

Ion	Ratio	Lower	Upper
43	100		
58	35.6	7.2	47.2
42	6.2	0.0	27.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0235.D
Acq On : 10 Jul 2014 4:45 pm
Operator : F.NAEGLER
Sample : R1405048-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0235.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	520	531	538	rBV	508801	1230094	31.76%	5.819%
2	4.409	538	545	560	rVB	887023	2312368	59.70%	10.939%
3	4.854	609	618	634	rBV	430634	1146866	29.61%	5.426%
4	5.610	735	742	764	rBV	1291442	2884019	74.46%	13.644%
5	7.433	1035	1041	1060	rBV	2441991	3873109	100.00%	18.323%
6	8.841	1267	1272	1290	rBV	2659691	3472223	89.65%	16.427%
7	9.884	1438	1443	1459	rBV	2029075	2695674	69.60%	12.753%
8	10.835	1594	1599	1609	rBV	2817929	3523536	90.97%	16.669%

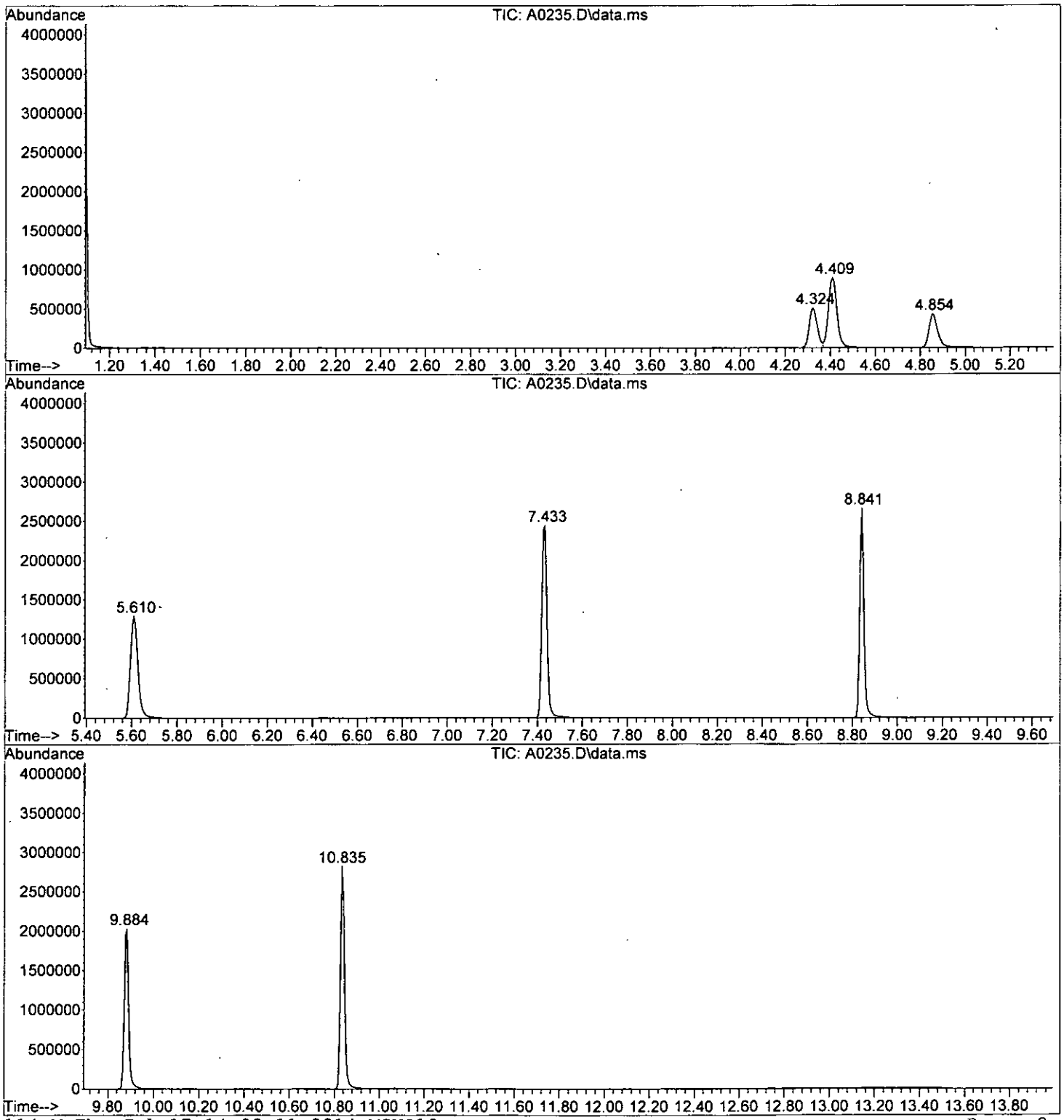
Sum of corrected areas: 21137889

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0235.D
Acq On : 10 Jul 2014 4:45 pm
Operator : F.NAEGLER
Sample : R1405048-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Thu Jul 17 14:02:11 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0235.D
Acq On : 10 Jul 2014 4:45 pmm
Operator : F.NAEGLERR
Sample : R1405048-006|1.0
Misc : PARSONS 11603 T44
ALS Vial : 15 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1215
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 17:15

Sample Name: FTMM-53-GW-699RW03-8.2
Lab Code: R1405048-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0236.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**42**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**3.1**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.59**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.88**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1215
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:15
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1405048-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.28**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**17**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**7.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**6.5**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.22**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**9.8**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.90**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**12**		5.0	1.0	0.20	
95-47-6	o-Xylene	**14**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.3**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1215
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:15
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1405048-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0236.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	7/10/14 17:15	
Dibromofluoromethane	103	85-115	7/10/14 17:15	
Toluene-d8	97	85-120	7/10/14 17:15	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1715

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW03-8.2
Lab Code: R1405048-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.66	**11.7**	JN
000079-29-8	Butane, 2,3-dimethyl-	2.44	**7.2**	JN
000096-14-0	Pentane, 3-methyl-	2.67	**8.2**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**10.3**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.18	**7.1**	JN
	unknown	10.20	**7.9**	J
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.41	**26.7**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**13.4**	JN
	unknown	11.05	**33.5**	J
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	11.34	**8.0**	JN
000874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	11.41	**6.9**	JN
000768-49-0	Benzene, (2-methyl-1-propenyl)-	11.49	**13.2**	JN
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	11.68	**9.0**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.72	**10.5**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**12.8**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0236.D Vial: 16
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 17:28:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FV 7/17/14 KF 7/17/14

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	857128	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1245572	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1130145	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	593623	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.324	113	383157	51.59 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.18%		
48) surr1,1,2-dichloroetha...	4.861	65	396029	53.13 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 106.26%		
65) SURR3,Toluene-d8	7.433	98	1394537	48.71 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.42%		
70) SURR2,BFB	9.878	95	550646	48.68 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.36%		
Target Compounds					Qvalue
5) Bromomethane	1.562	94	302	Below Cal #	27
12) Acrolein	~~2.117~~	~~56~~	~~5132~~	~~5.16 ug/L~~	~~84~~
15) Acetone	~~2.117~~	~~43~~	~~20767~~	~~10.74 ug/L~~	~~76~~ 2,2-Dimethyl butane
16) 2-Propanol	~~2.202~~	~~45~~	~~210~~	~~0.63 ug/L~~	~~91~~
19) Acetonitrile	~~2.355~~	~~40~~	~~591~~	~~2.28 ug/L #~~	~~1~~
21) Methyl Acetate	~~2.379~~	~~43~~	~~2046~~	~~0.49 ug/L #~~	~~61~~
22) Methylene Chloride	2.446	84	2602	Below Cal #	42
24) Acrylonitrile	~~2.672~~	~~53~~	~~4302~~	~~2.04 ug/L #~~	~~24~~
35) 2-Butanone	~~3.653~~	~~43~~	~~1624~~	~~0.62 ug/L #~~	~~25~~
38) Methacrylonitrile	~~3.934~~	~~67~~	~~525~~	~~0.25 ug/L #~~	~~8~~
39) Tetrahydrofuran	~~4.166~~	~~42~~	~~360~~	~~0.23 ug/L #~~	~~31~~
40) Chloroform	4.098	83	3782	0.28 ug/L	90
44) Cyclohexane	4.440	41	25027	2.70 ug/L	78 NT(DEL)
49) Benzene	4.964	78	28229	0.88 ug/L	81
53) 1-Butanol	~~6.019~~	~~56~~	~~262~~	~~19.40 ug/L #~~	~~29~~
55) Methylcyclohexane	6.208	55	20190	1.78 ug/L #	64
59) Methyl Methacrylate	~~6.476~~	~~69~~	~~2463~~	~~0.66 ug/L #~~	~~61~~
61) 2-Nitropropane	~~6.891~~	~~41~~	~~2456~~	~~1.71 ug/L #~~	~~45~~
66) Toluene	7.512	91	7699	0.22 ug/L	87
69) 1,1,2-Trichloroethane	~~7.884~~	~~97~~	~~2196~~	~~0.37 ug/L #~~	~~20~~
82) Ethylbenzene	8.982	106	209623	17.32 ug/L #	88
83) (m+p)Xylene	9.091	106	145527	9.82 ug/L	91
84) o-Xylene	9.433	106	208981	13.97 ug/L	91
85) Styrene	~~9.433~~	~~104~~	~~10663~~	~~0.42 ug/L #~~	~~1~~
88) Isopropylbenzene	9.756	105	255052	6.96 ug/L	99
89) Cyclohexanone	~~9.847~~	~~55~~	~~730~~	~~0.83 ug/L #~~	~~27~~
90) trans-1,4-Dichloro-2-B...	~~10.103~~	~~53~~	~~3423~~	~~1.76 ug/L #~~	~~1~~
95) n-Propylbenzene	10.103	91	463346	11.51 ug/L	99
96) 2-Chlorotoluene	~~10.177~~	~~91~~	~~23568~~	~~0.95 ug/L #~~	~~62~~
97) 3-Chlorotoluene	~~10.177~~	~~91~~	~~23568~~	~~0.94 ug/L #~~	~~45~~
98) 4-Chlorotoluene	~~10.256~~	~~91~~	~~9939~~	~~0.33 ug/L #~~	~~51~~
99) 1,3,5-Trimethylbenzene	10.256	105	91359	3.09 ug/L	99
101) 1,2,4-Trimethylbenzene	10.561	105	1267347	42.38 ug/L	96
103) sec-Butylbenzene	10.701	105	44532	1.31 ug/L	99
104) p-Isopropyltoluene	10.817	119	17356	0.59 ug/L	96

Quantitation Report (Not Reviewed)

Sample : R1405048-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0236.D Vial: 16
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 17:28:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) n-Butylbenzene	11.146	91	~~33443~~ 0.90	~~1.31~~	ug/L	88
117) Naphthalen	12.383	128	92934	6.53	ug/L	98

FD 7/17/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

FD
7/17/14

Quantitation Report (Qedit)

```
Sample    : R1405048-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0236.D      Vial: 16
Acq On    : 10 Jul 2014    5:15 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      : PARSONS 11603 T4

Quant Time: Jul 17 14:06:26 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration
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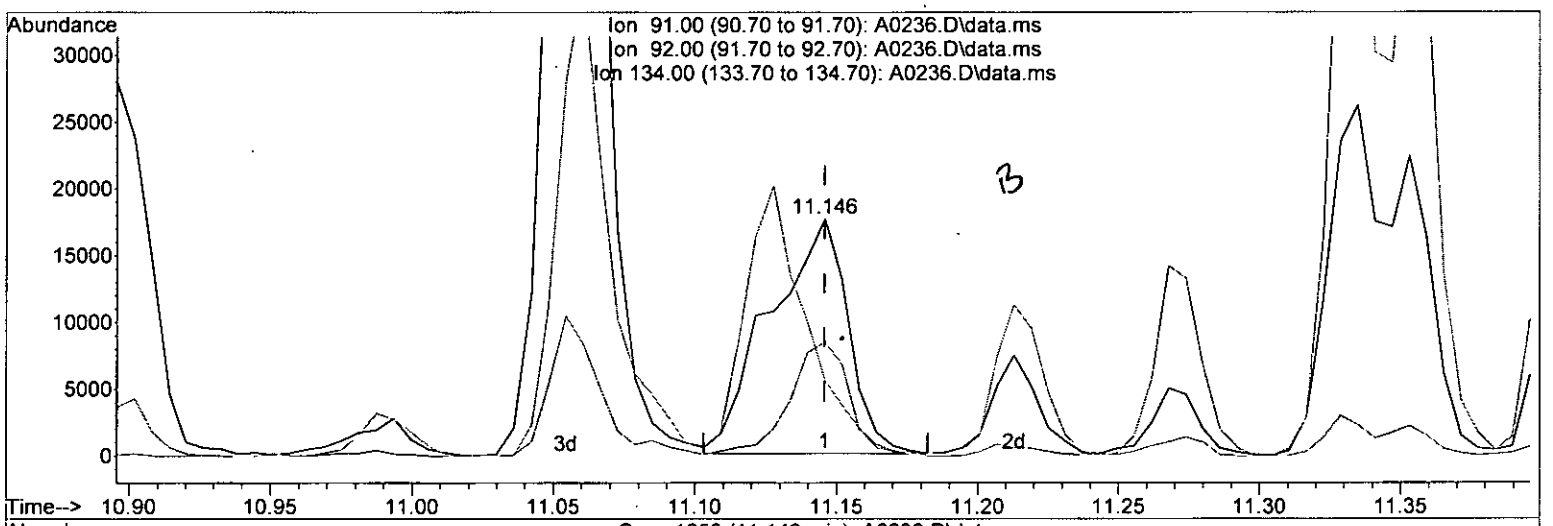
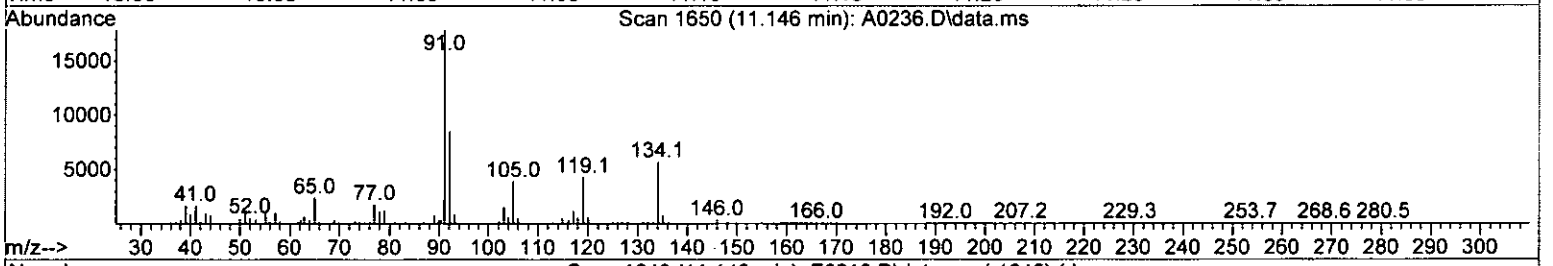
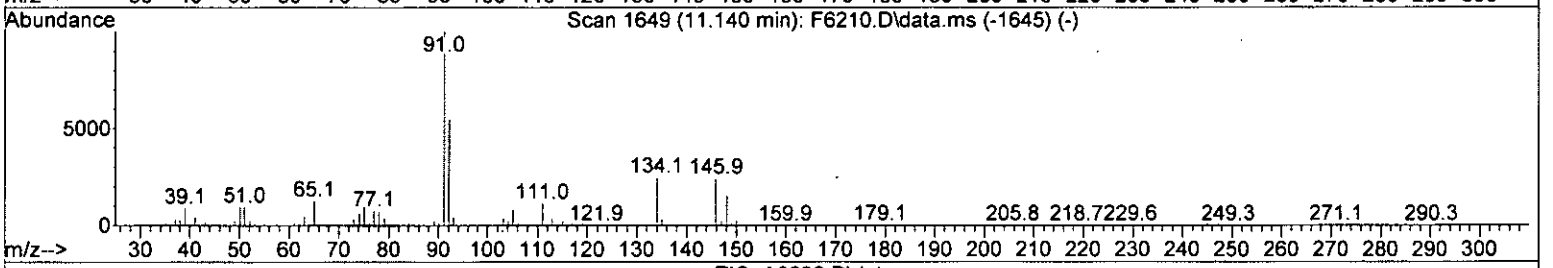






TIC: A0236.D\data.ms

(109) n-Butylbenzene

11.146min (+0.000) 1.31 ug/L

response 33443

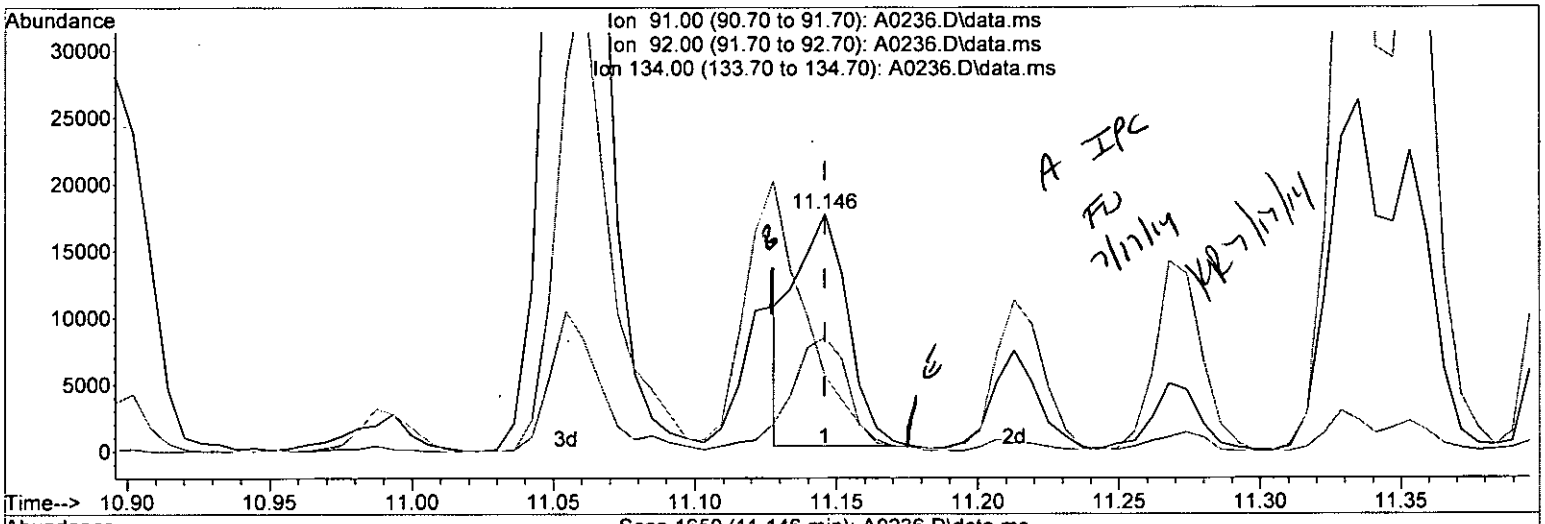
Ion	Exp%	Act%
91.00	100	100
92.00	55.10	47.75
134.00	24.20	31.77
0.00	0.00	0.00

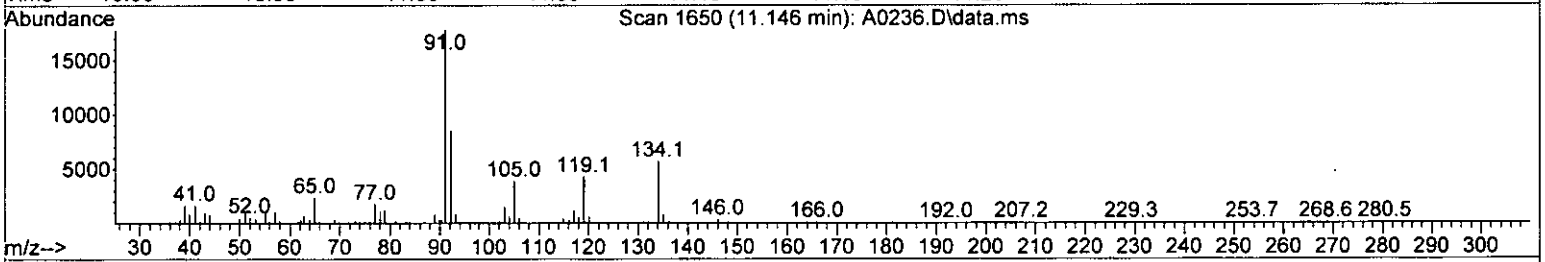
W061114.M Thu Jul 17 14:09:03 2014 MSVO10 Page: 1

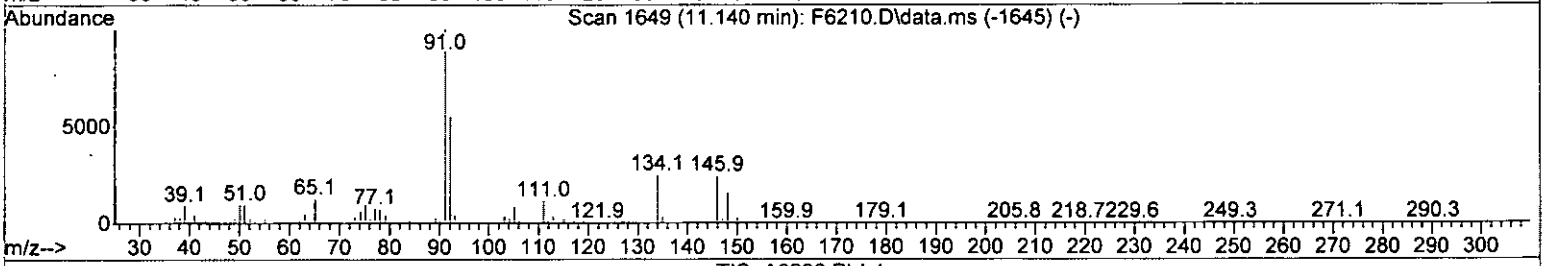
Quantitation Report (Qedit)

Sample : R1405048-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0236.D Vial: 16
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 17 14:06:26 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0236.D\data.ms

(109) n-Butylbenzene

11.146min (+0.000) 0.90 ug/L m

response 22952

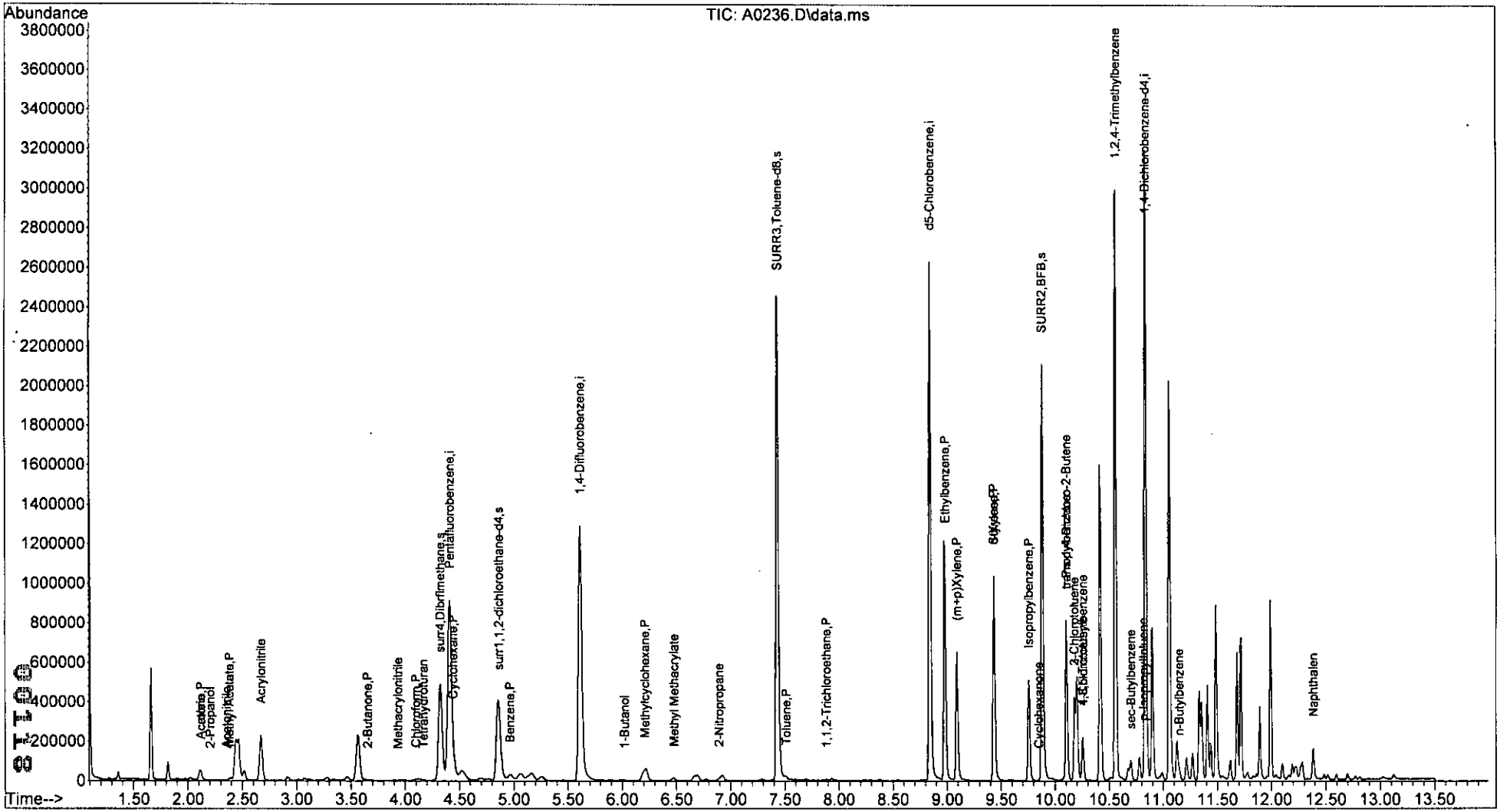
Ion	Exp%	Act%
91.00	100	100
92.00	55.10	47.75
134.00	24.20	31.77
0.00	0.00	0.00

W061114.M Thu Jul 17 14:09:16 2014 MSVO10 Page: 1

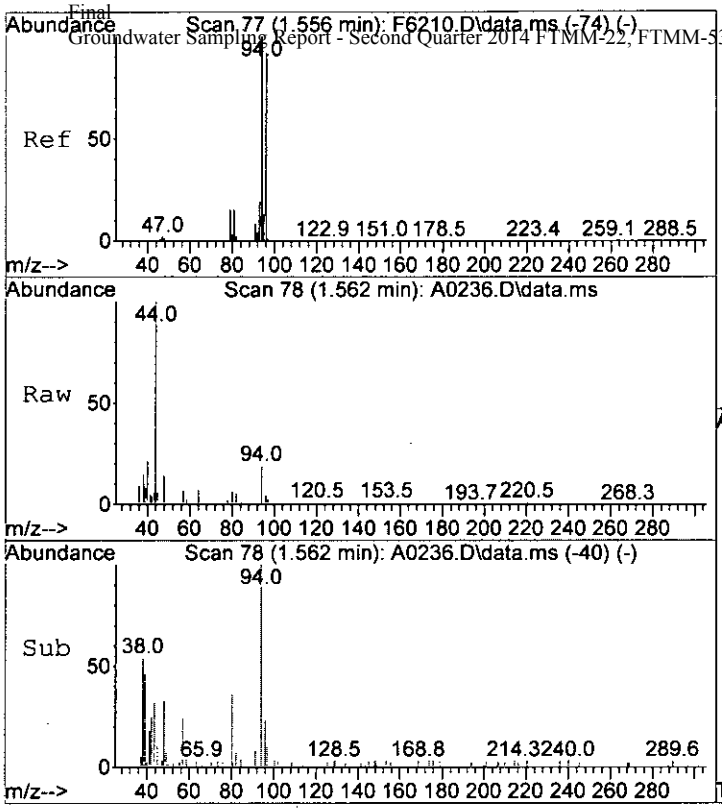
Quantitation Report (Not Reviewed)

Sample : R1405048-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0236.D Vial: 16
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 17:28:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



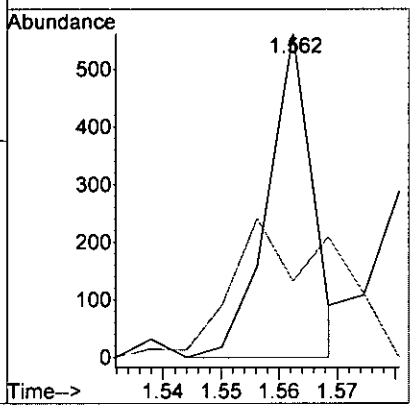
W061114.M Fri Jul 11 08:22:01 2014 MSVO10 Page: 3

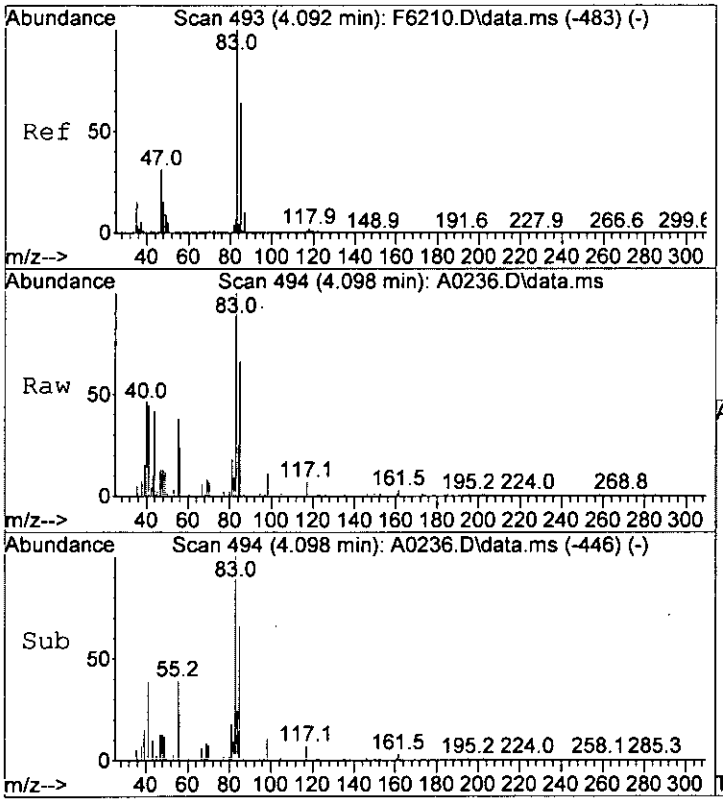


#5
Bromomethane
Concen: Below Cal
RT: 1.562 min Scan# 78
Delta R.T. 0.006 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion: 94 Resp: 302

Ion	Ratio	Lower	Upper
94	100		
96	23.5	74.0	114.0#

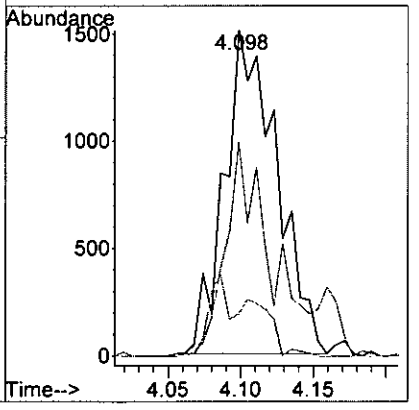


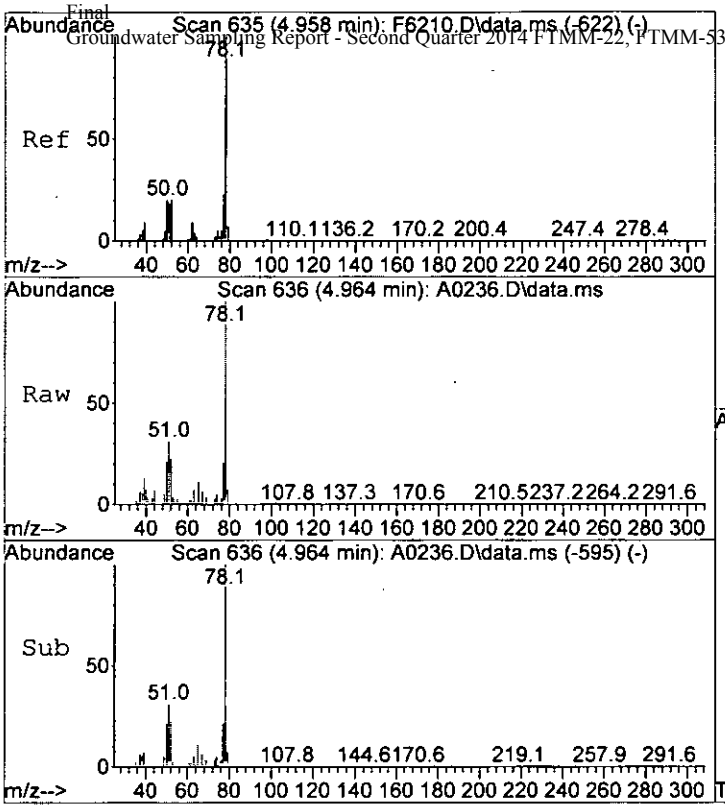


#40
Chloroform
Concen: 0.28 ug/L
RT: 4.098 min Scan# 494
Delta R.T. 0.006 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion: 83 Resp: 3782

Ion	Ratio	Lower	Upper
83	100		
85	65.6	42.7	82.7
47	12.9	5.9	45.9

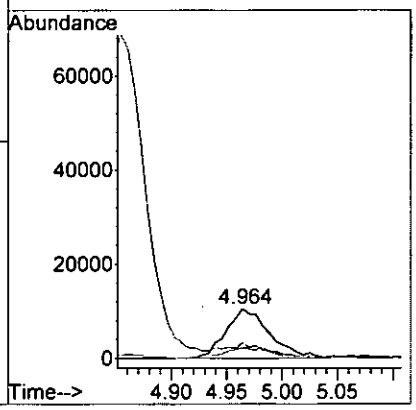


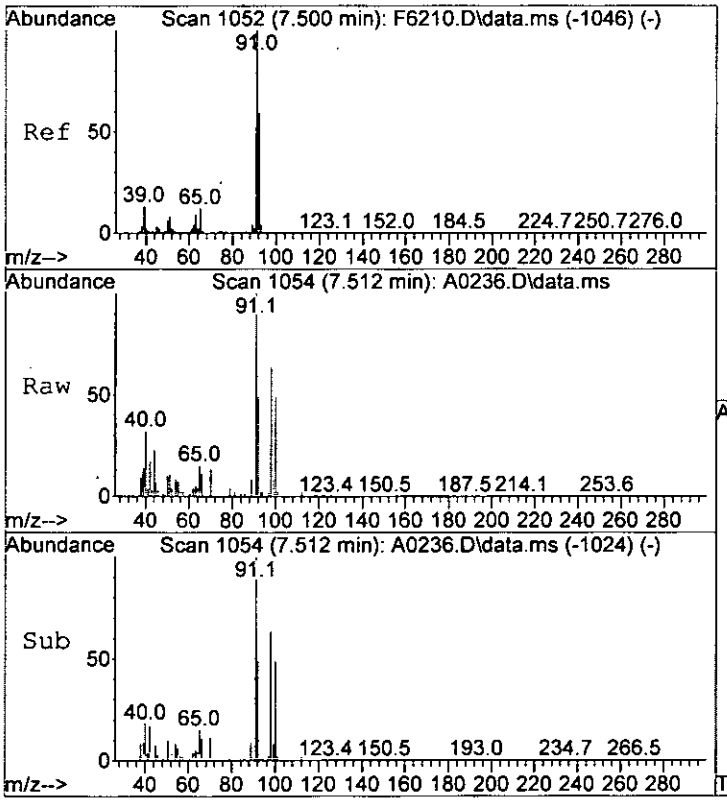


#49
Benzene
Concen: 0.88 ug/L
RT: 4.964 min Scan# 636
Delta R.T. 0.006 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion: 78 Resp: 28229

Ion	Ratio	Lower	Upper
78	100		
51	30.8	0.0	39.4
52	22.0	0.0	36.9

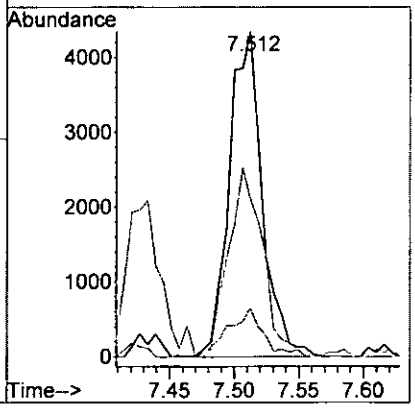


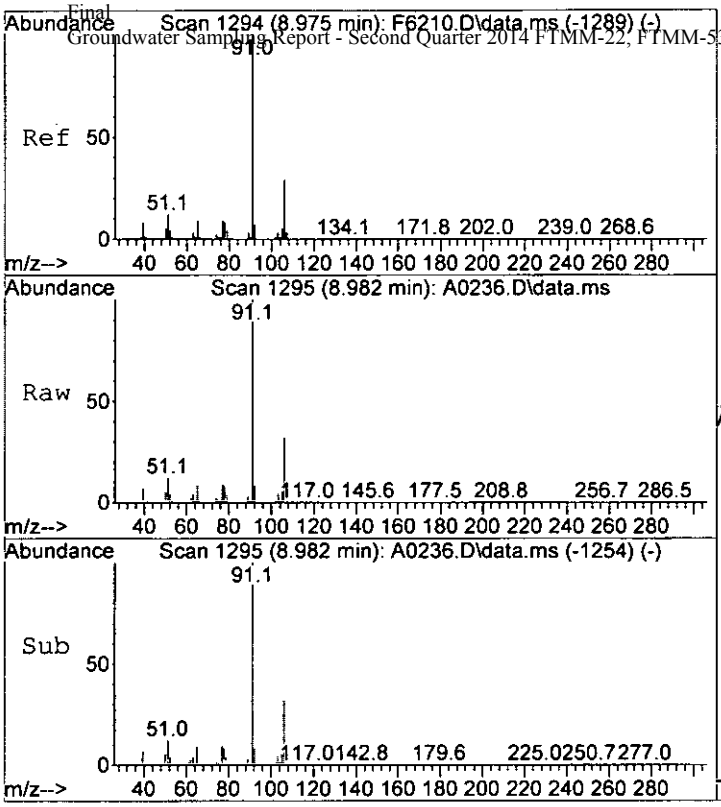


#66
Toluene
Concen: 0.22 ug/L
RT: 7.512 min Scan# 1054
Delta R.T. 0.012 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion: 91 Resp: 7699

Ion	Ratio	Lower	Upper
91	100		
92	48.7	39.5	79.5
65	14.9	0.0	32.0

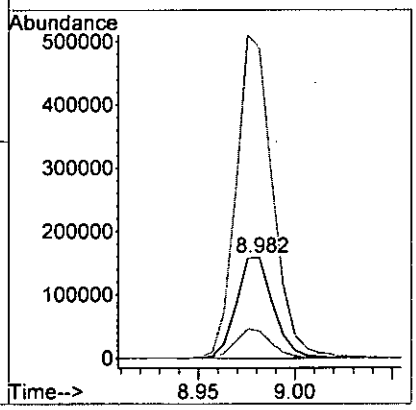


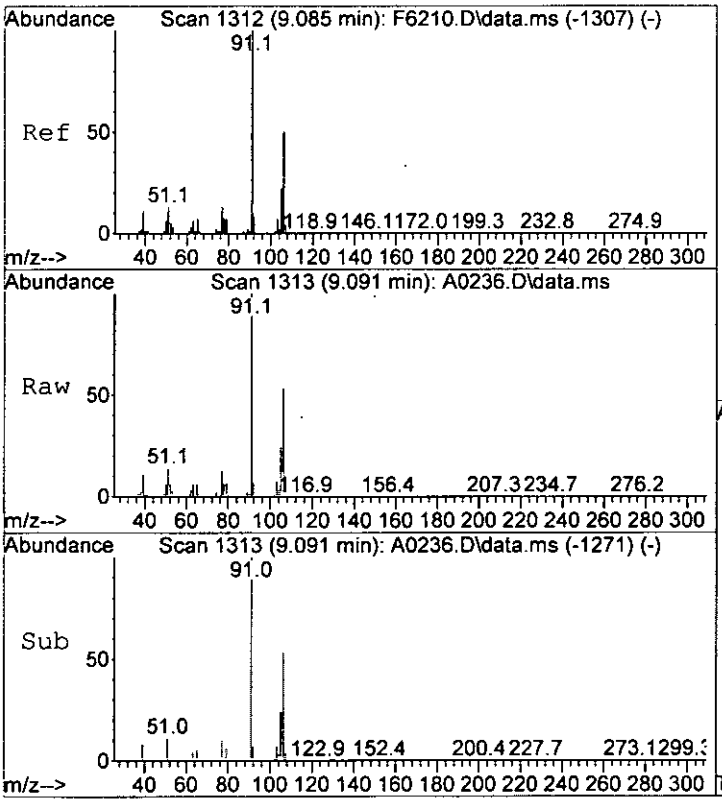


#82
Ethylbenzene
Concen: 17.32 ug/L
RT: 8.982 min Scan# 1295
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:106 Resp: 209623

Ion	Ratio	Lower	Upper
106	100		
91	308.4	314.0	354.0#
65	26.8	11.1	51.1

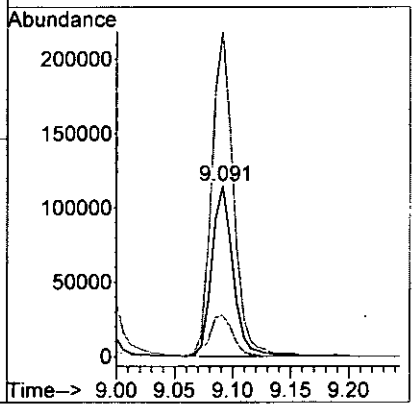


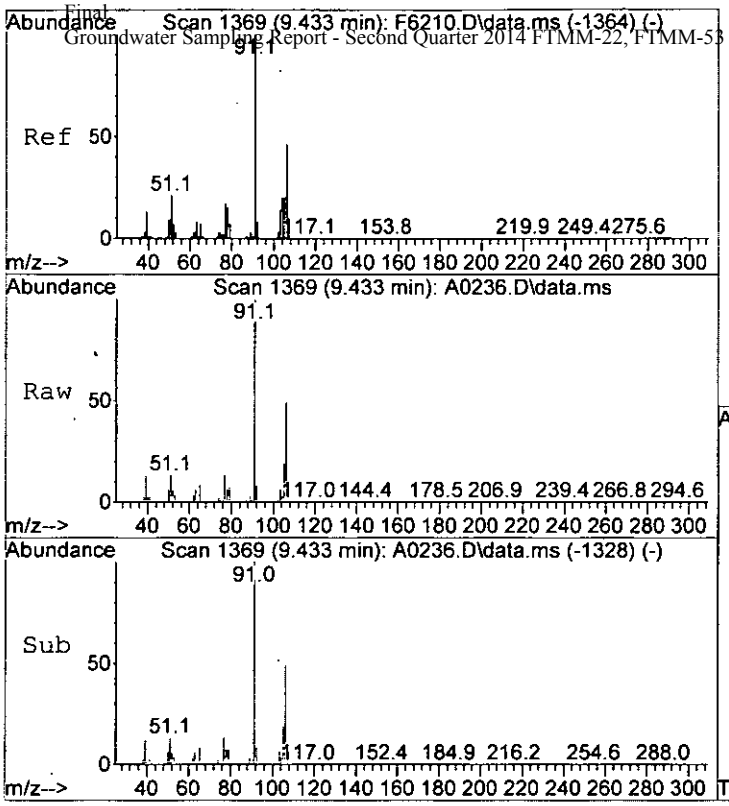


#83
(m+p)Xylene
Concen: 9.82 ug/L
RT: 9.091 min Scan# 1313
Delta R.T. 0.006 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:106 Resp: 145527

Ion	Ratio	Lower	Upper
106	100		
91	190.4	183.8	223.8
77	24.2	8.7	48.7

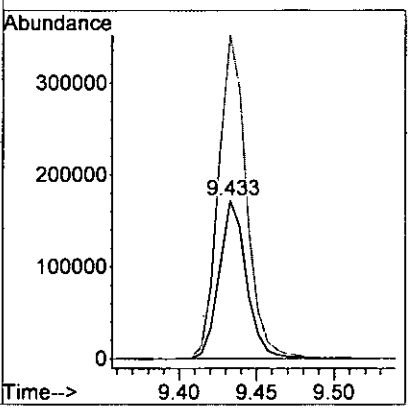


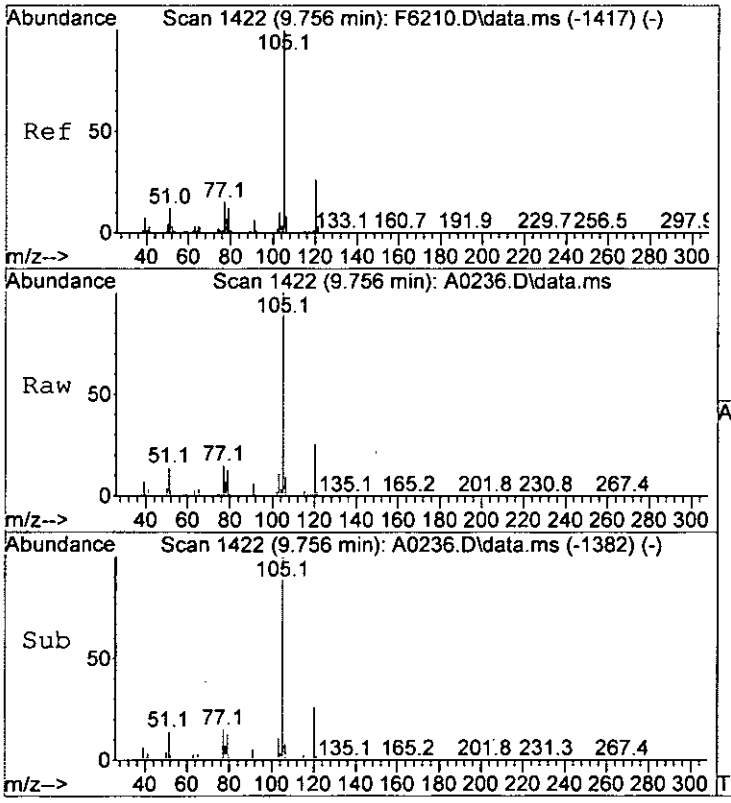


#84
o-Xylene
Concen: 13.97 ug/L
RT: 9.433 min Scan# 1369
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:106 Resp: 208981

Ion	Ratio	Lower	Upper
106	100		
91	203.9	198.0	238.0

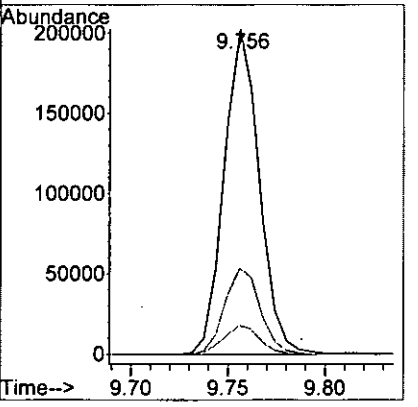


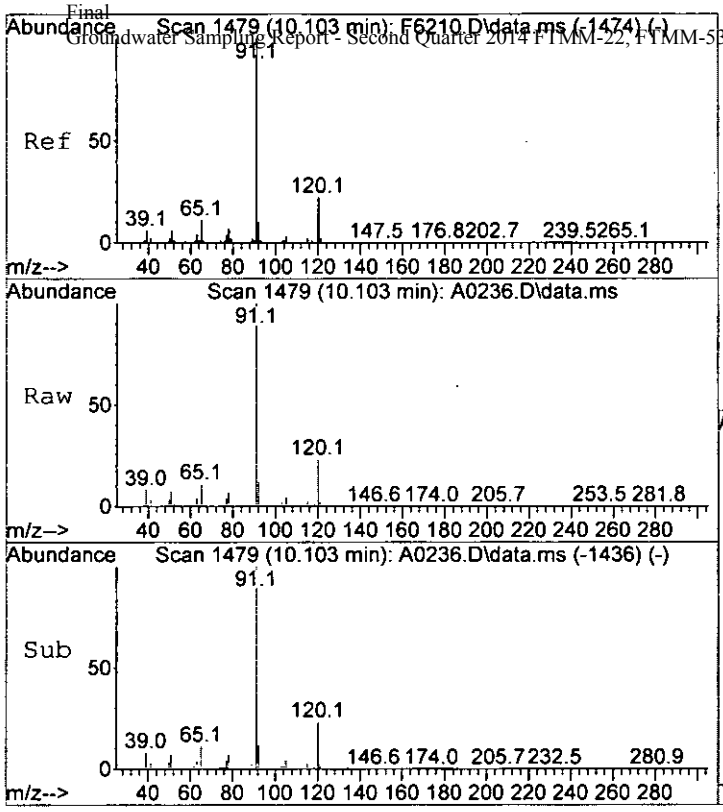


#88
Isopropylbenzene
Concen: 6.96 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:105 Resp: 255052

Ion	Ratio	Lower	Upper
105	100		
120	26.4	6.8	46.8
106	8.7	0.0	28.8

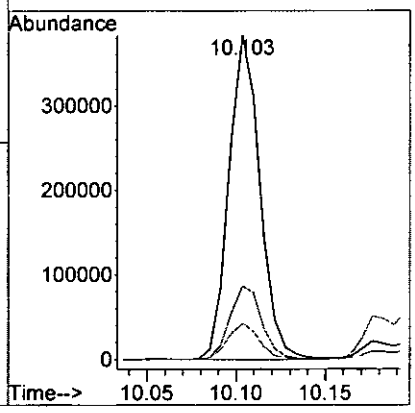


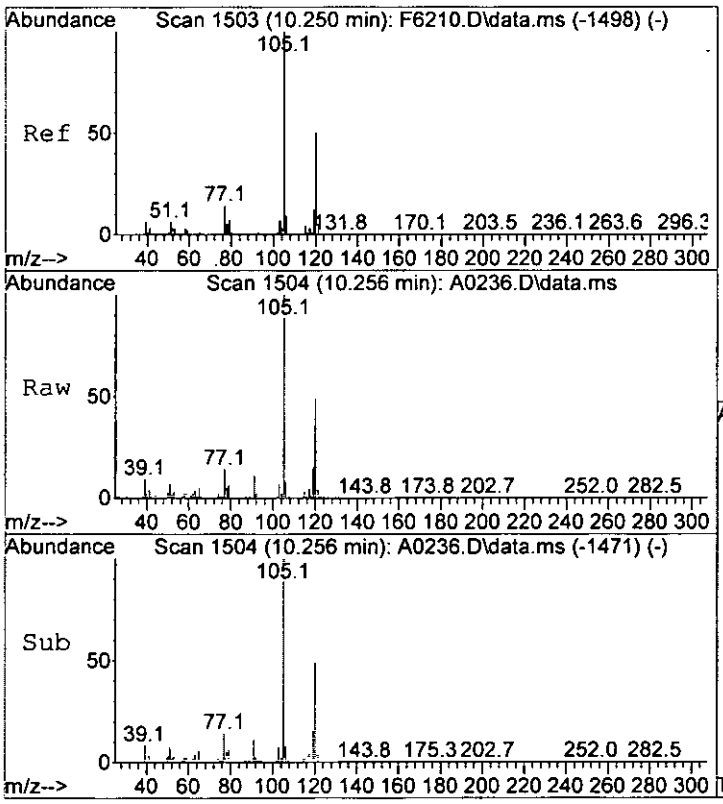


#95
n-Propylbenzene
Concen: 11.51 ug/L
RT: 10.103 min Scan# 1479
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion: 91 Resp: 463346

Ion	Ratio	Lower	Upper
91	100		
120	22.6	2.9	42.9
65	11.1	0.0	31.4

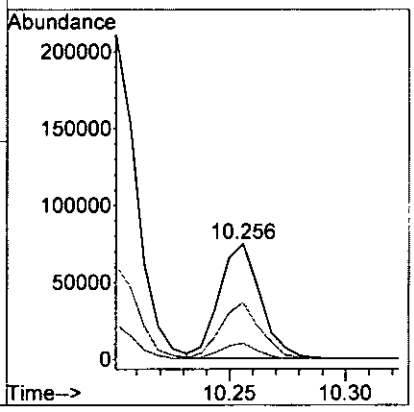


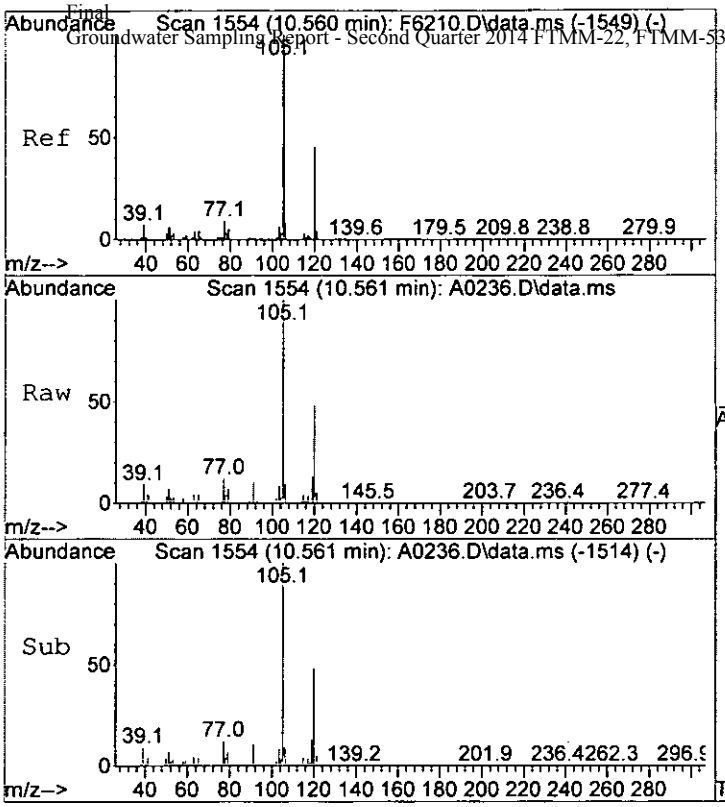


#99
1,3,5-Trimethylbenzene
Concen: 3.09 ug/L
RT: 10.256 min Scan# 1504
Delta R.T. 0.006 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:105 Resp: 91359

Ion	Ratio	Lower	Upper
105	100		
120	49.2	28.5	68.5
77	13.8	0.0	34.2

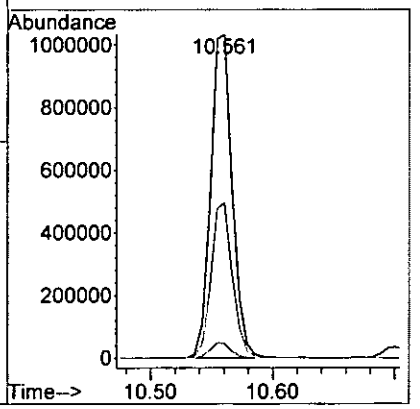


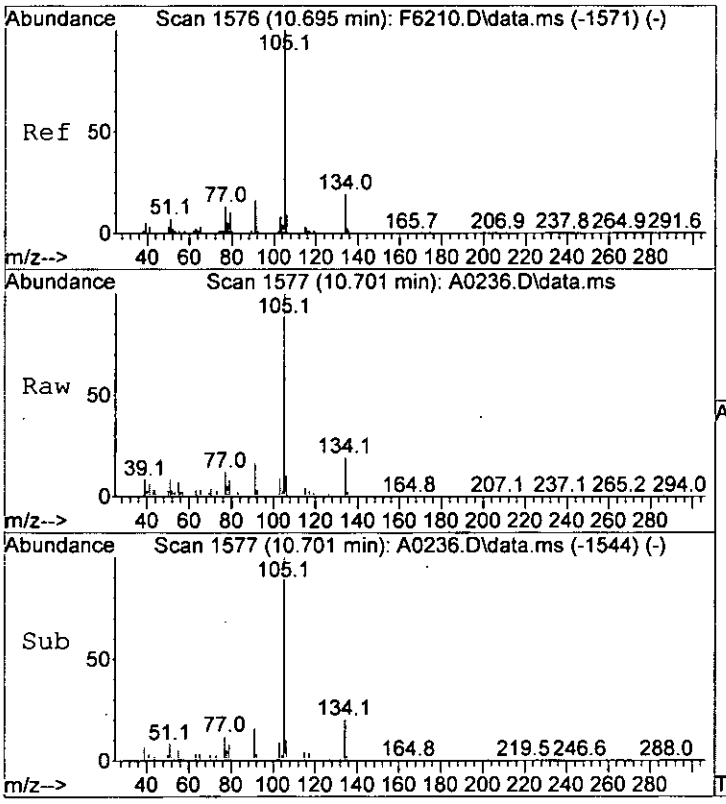


#101
1,2,4-Trimethylbenzene
Concen: 42.38 ug/L
RT: 10.561 min Scan# 1554
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:105 Resp: 1267347

Ion	Ratio	Lower	Upper
105	100		
120	48.0	24.9	64.9
65	4.5	0.0	25.0

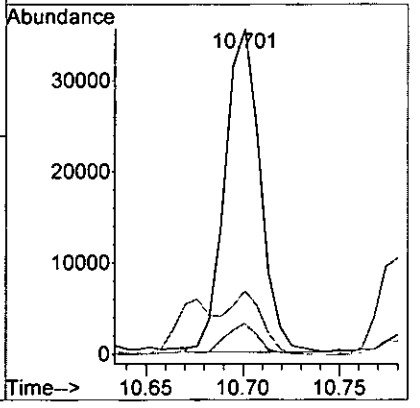


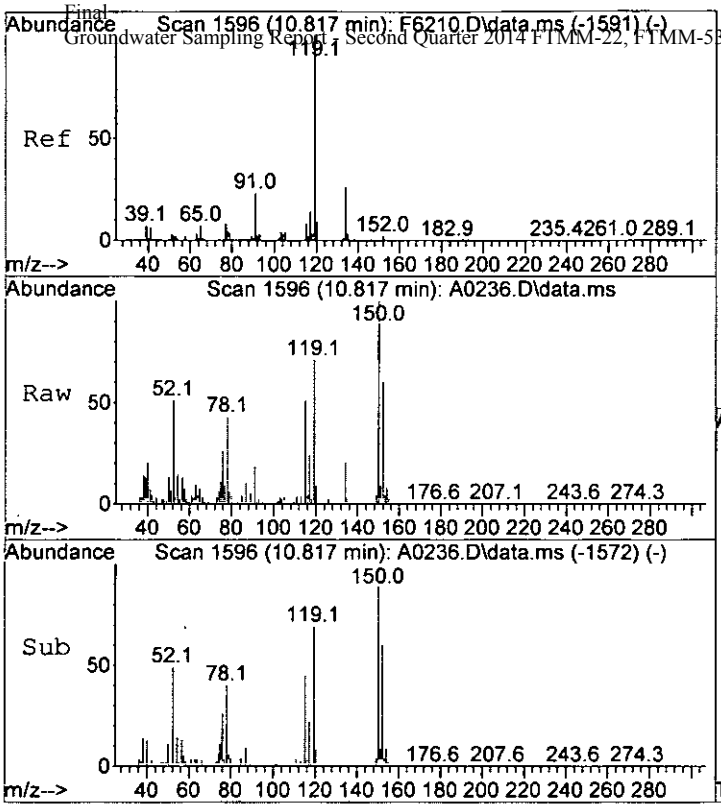


#103
sec-Butylbenzene
Concen: 1.31 ug/L
RT: 10.701 min Scan# 1577
Delta R.T. 0.006 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:105 Resp: 44532

Ion	Ratio	Lower	Upper
105	100		
134	19.3	0.0	38.9
103	9.4	0.0	28.6

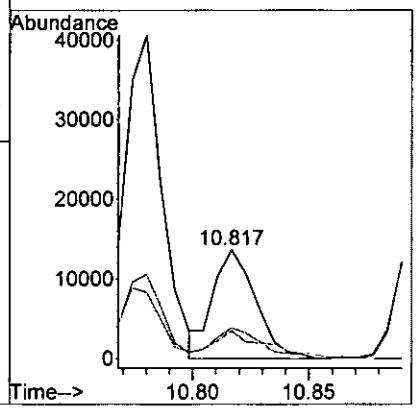


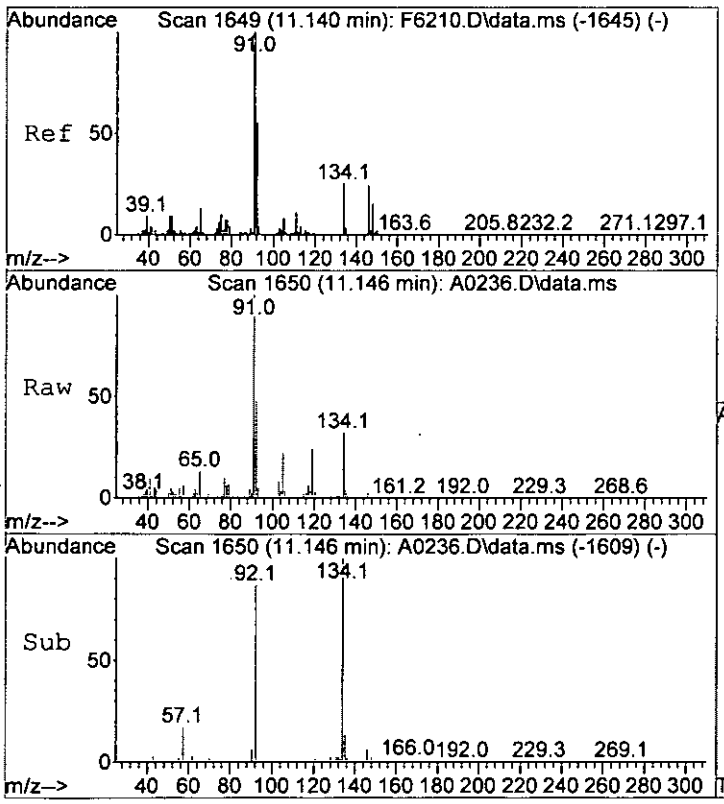


#104
p-Isopropyltoluene
Concen: 0.59 ug/L
RT: 10.817 min Scan# 1596
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:119 Resp: 17356

Ion	Ratio	Lower	Upper
119	100		
134	28.2	5.5	45.5
91	25.6	4.5	44.5

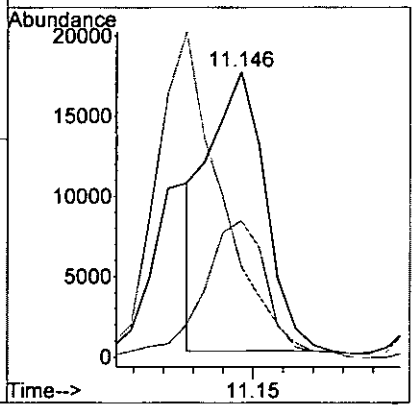


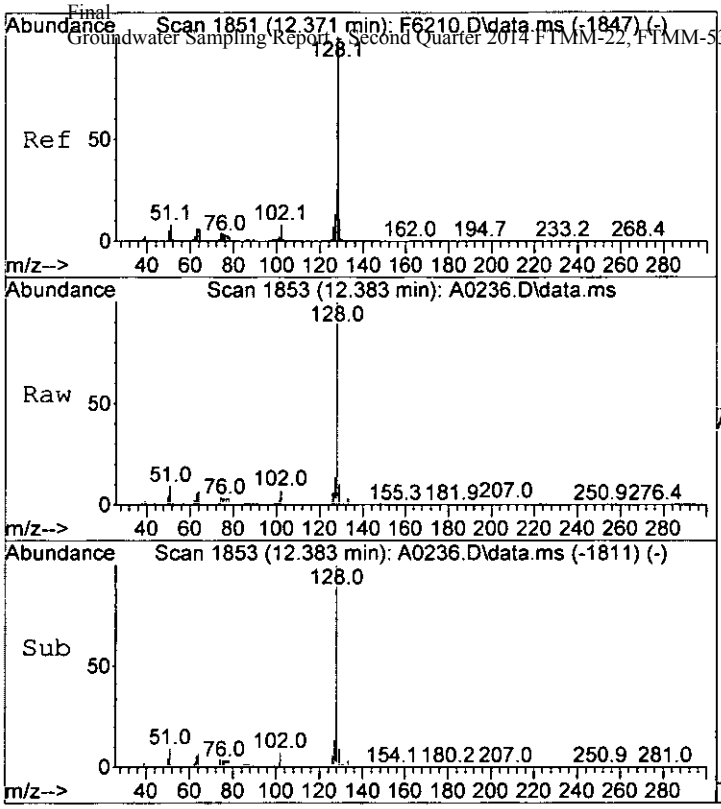


#109
n-Butylbenzene
Concen: 0.90 ug/L m
RT: 11.146 min Scan# 1650
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion: 91 Resp: 22952

Ion	Ratio	Lower	Upper
91	100		
92	47.7	35.1	75.1
134	31.8	4.2	44.2

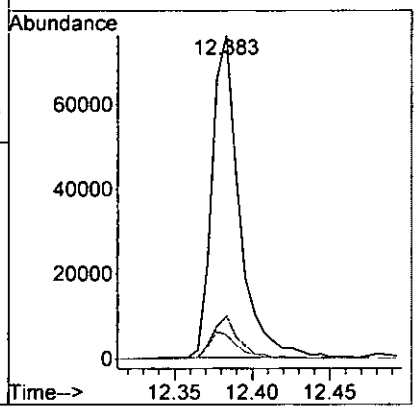




#117
Naphthalen
Concen: 6.53 ug/L
RT: 12.383 min Scan# 1853
Delta R.T. 0.000 min
Lab File: A0236.D
Acq: 10 Jul 2014 5:15 pm

Tgt Ion:128 Resp: 92934

Ion	Ratio	Lower	Upper
128	100		
127	13.2	0.0	32.9
102	7.3	0.0	28.7



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0236.D\data.ms

FR 7/17/14

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	89	94	99	rBV	562300	580495	15.10%	1.218%
2	1.812	116	119	125	rBV	86351	96560	2.51%	0.203%
3	2.111	161	168	176	rVB2	46929	92190	2.40%	0.193%
4	2.440	216	222	224	rBV	198934	357130	9.29%	0.749%
5	2.513	231	234	242	rVB2	45598	76992	2.00%	0.162%
6	2.672	252	260	274	rBV	227685	406412	10.58%	0.853%
7	3.562	398	406	419	rBV	230686	511710	13.32%	1.074%
8	4.324	521	531	538	rBV2	486780	1208571	31.45%	2.536%
9	4.409	538	545	558	rVV	910202	2485513	64.67%	5.215%
10	4.519	559	563	579	rVB4	48012	162622	4.23%	0.341%
11	4.854	610	618	631	rBV	403834	1098924	28.59%	2.306%
12	4.964	631	636	644	rVV2	27922	80413	2.09%	0.169%
13	5.068	644	653	658	rVV5	32558	108482	2.82%	0.228%
14	5.159	660	668	677	rVV6	37590	126385	3.29%	0.265%
15	5.257	677	684	695	rVB9	16992	53279	1.39%	0.112%
16	5.610	734	742	767	rBV	1288188	2905902	75.61%	6.097%
17	6.214	829	841	850	rBV6	60273	194174	5.05%	0.407%
18	6.671	907	916	917	rBV4	24113	46835	1.22%	0.098%
19	6.689	917	919	926	rVB5	27270	43246	1.13%	0.091%
20	6.921	944	957	967	rBV7	26867	80545	2.10%	0.169%
21	7.427	1035	1040	1050	rBV	2454267	3843083	100.00%	8.064%
22	8.841	1267	1272	1289	rBV	2628459	3531096	91.88%	7.409%
23	8.976	1290	1294	1305	rVB	1212367	1576573	41.02%	3.308%
24	9.091	1308	1313	1320	rBV	646751	832954	21.67%	1.748%
25	9.433	1364	1369	1379	rBV	1035396	1285854	33.46%	2.698%
26	9.756	1417	1422	1433	rBV	510849	656507	17.08%	1.378%
27	9.878	1438	1442	1453	rBV	2106541	2770279	72.08%	5.813%
28	10.103	1468	1479	1486	rBV	810205	1005692	26.17%	2.110%
29	10.177	1486	1491	1493	rVV	421630	528718	13.76%	1.109%
30	10.201	1493	1495	1500	rVV	526552	585602	15.24%	1.229%
31	10.256	1500	1504	1511	rVB	217144	275687	7.17%	0.578%
32	10.414	1525	1530	1541	rBV	1599304	1983973	51.62%	4.163%
33	10.561	1549	1554	1568	rVB	2987976	3701924	96.33%	7.768%
34	10.670	1568	1572	1574	rBV	56569	71248	1.85%	0.149%
35	10.701	1574	1577	1583	rVB	98927	132694	3.45%	0.278%

W061114.M Thu Jul 17 14:10:25 2014 MSVO10 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

36	10.780	1583	1590	1593	rBV	113914	144032	3.75%	0.302%
37	10.835	1593	1599	1605	rVV	3188470	3718581	96.76%	7.803%
38	10.902	1605	1610	1616	rVV	769049	994377	25.87%	2.087%
39	10.987	1618	1624	1629	rVB3	35251	62772	1.63%	0.132%
40	11.054	1630	1635	1643	rBV	2023638	2492107	64.85%	5.229%
41	11.128	1643	1647	1657	rVB2	194447	310403	8.08%	0.651%
42	11.213	1657	1661	1667	rBV3	112386	146654	3.82%	0.308%
43	11.268	1667	1670	1676	rVB	135640	152201	3.96%	0.319%
44	11.335	1676	1681	1683	rBV	448626	596867	15.53%	1.252%
45	11.353	1683	1684	1689	rVV	388103	314184	8.18%	0.659%
46	11.408	1689	1693	1696	rVV	470899	511832	13.32%	1.074%
47	11.439	1696	1698	1702	rVV	177526	180857	4.71%	0.379%
48	11.487	1702	1706	1713	rVB	877205	983835	25.60%	2.064%
49	11.621	1722	1728	1733	rVB2	97980	122674	3.19%	0.257%
50	11.682	1733	1738	1741	rBV	644817	667199	17.36%	1.400%
51	11.719	1741	1744	1750	rVV	718550	779652	20.29%	1.636%
52	11.780	1750	1754	1757	rVB4	30130	43235	1.13%	0.091%
53	11.890	1769	1772	1780	rVB	367229	371705	9.67%	0.780%
54	11.993	1785	1789	1794	rVB2	901438	951884	24.77%	1.997%
55	12.097	1803	1806	1812	rVB3	78634	94293	2.45%	0.198%
56	12.188	1818	1821	1823	rBV	65863	68109	1.77%	0.143%
57	12.225	1823	1827	1831	rVV2	59328	104393	2.72%	0.219%
58	12.280	1831	1836	1842	rVB2	90286	159547	4.15%	0.335%
59	12.383	1849	1853	1859	rBV	155011	187996	4.89%	0.394%

Sum of corrected areas: 47657653

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On    : 10 Jul 2014   5:15 pm
Operator  : F.NAEGLER
Sample    : R1405048-007|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 16   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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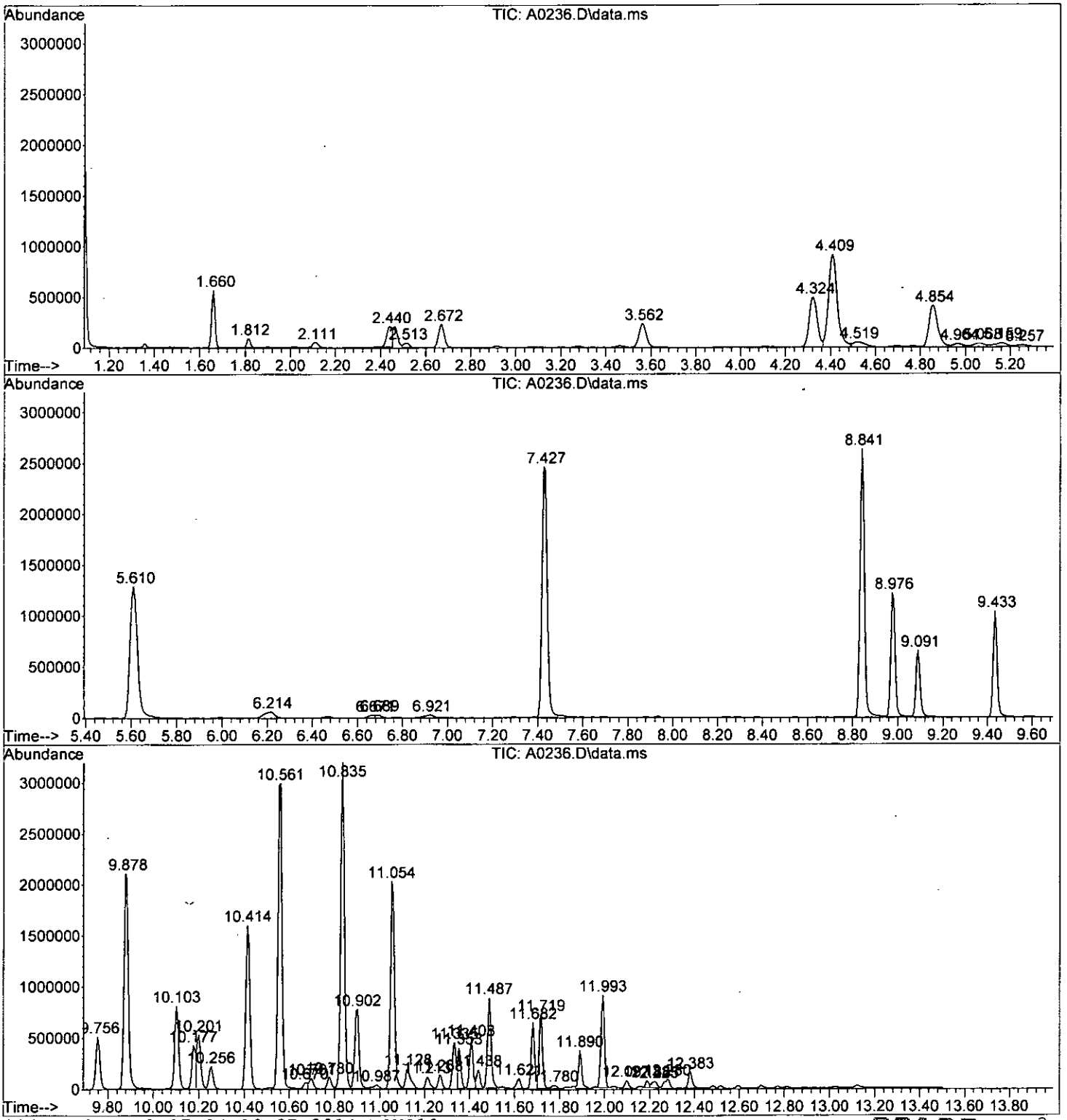


Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

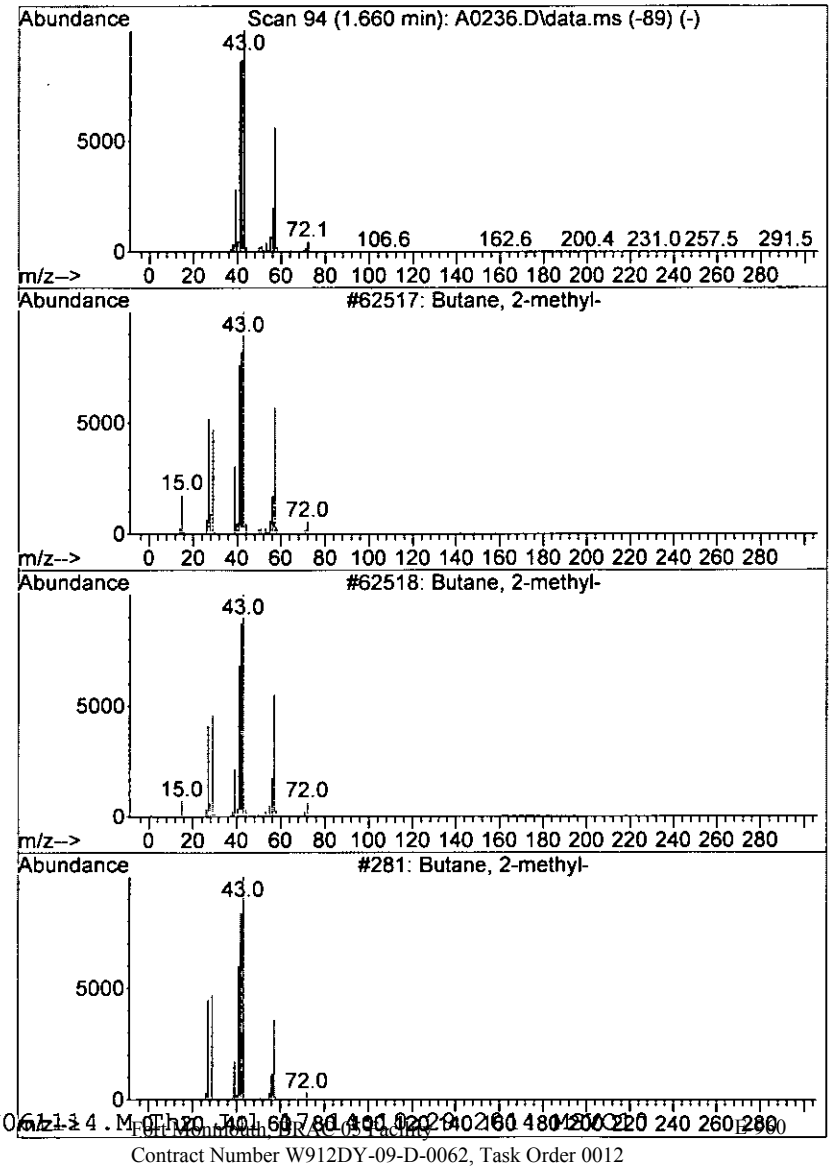
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

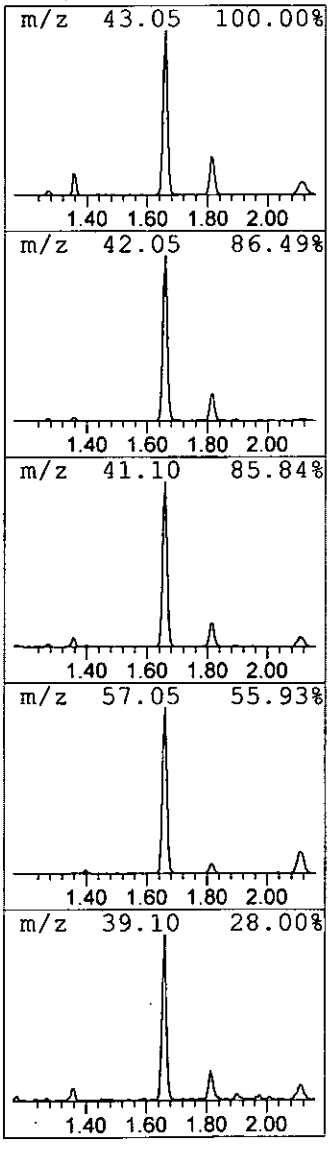
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.660	11.68 ug/L	580495	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	90
2	Butane, 2-methyl-	72	C5H12	000078-78-4	74
3	Butane, 2-methyl-	72	C5H12	000078-78-4	72
4	Butane, 1-chloro-2-methyl-	106	C5H11Cl	000616-13-7	18
5	3-Buten-1-ol	72	C4H8O	000627-27-0	9





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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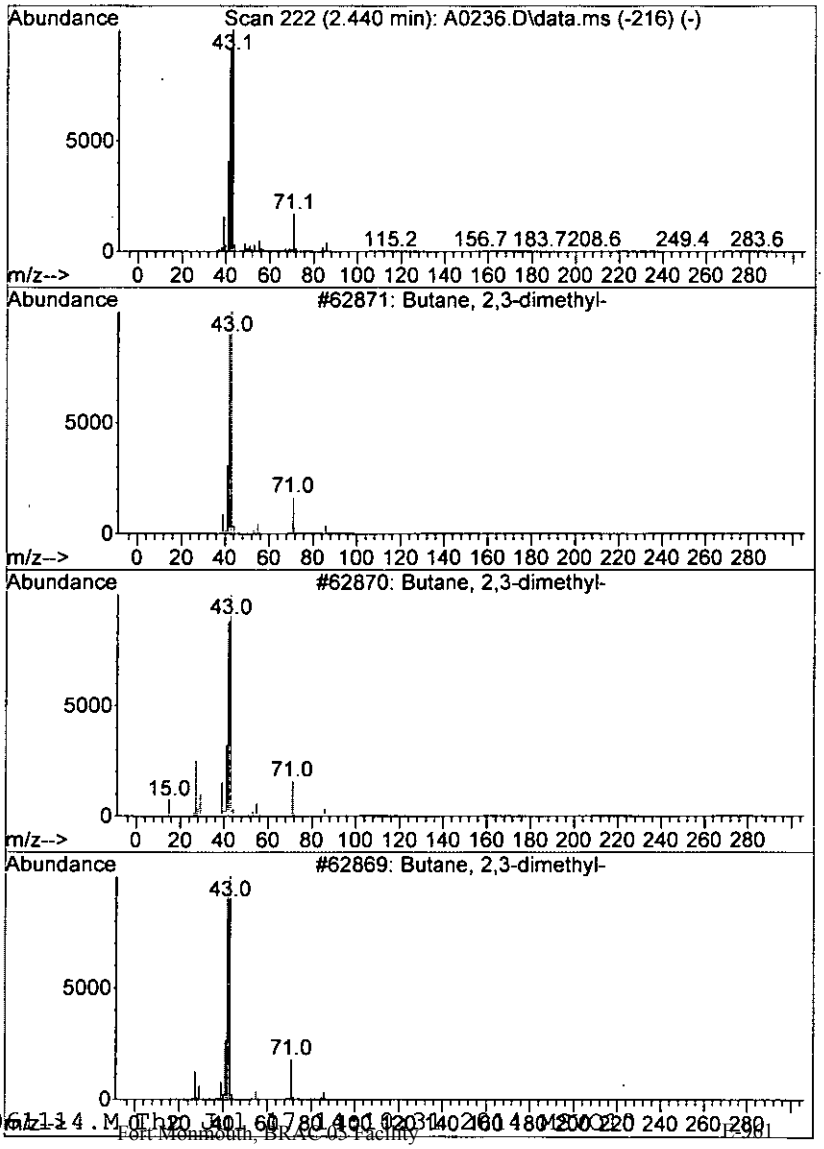
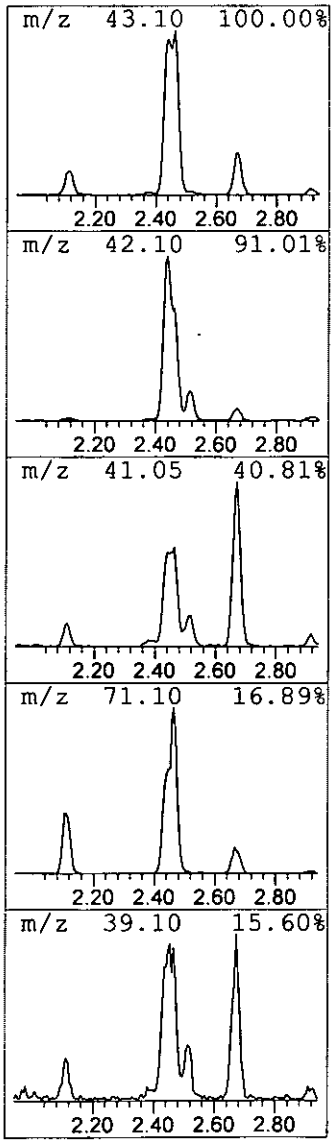
Peak Number 2 Butane, 2,3-dimethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.440	7.18 ug/L	357130	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	87
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	59
5	Furan, tetrahydro-	72	C4H8O	000109-99-9	36





Library Search Compound Report

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Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

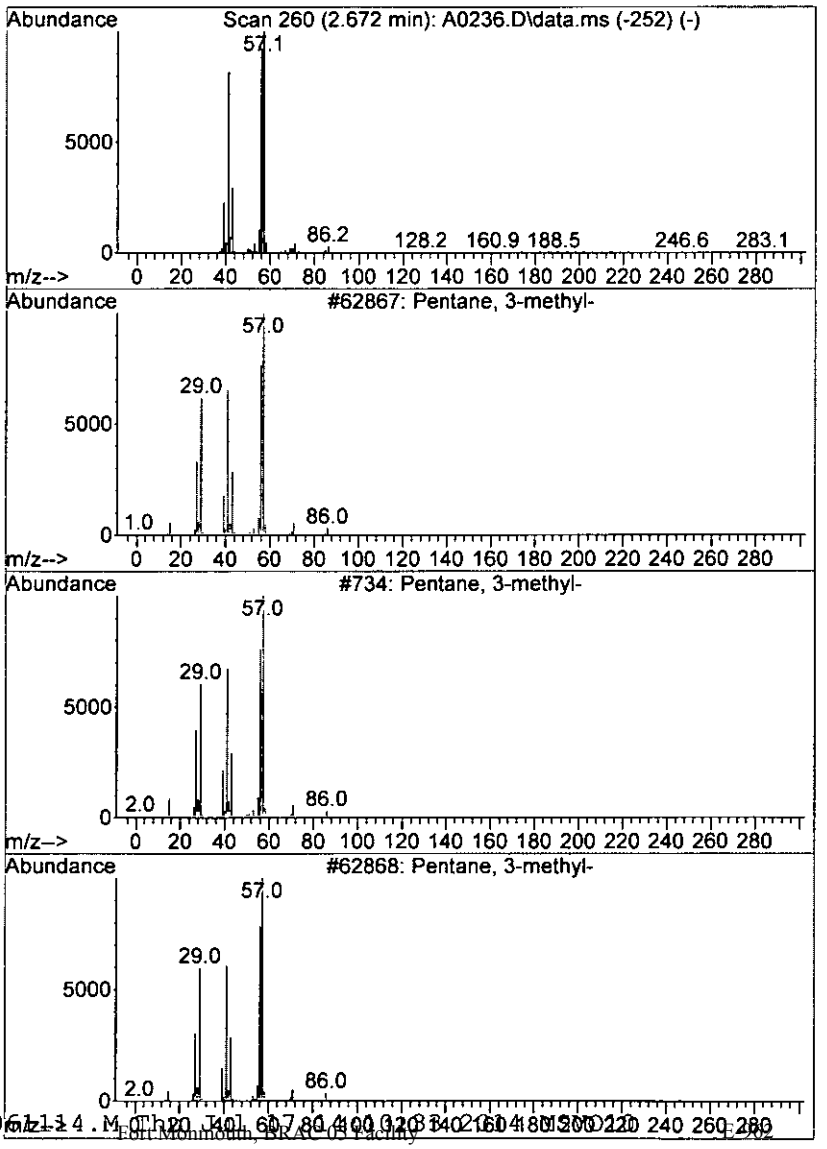
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

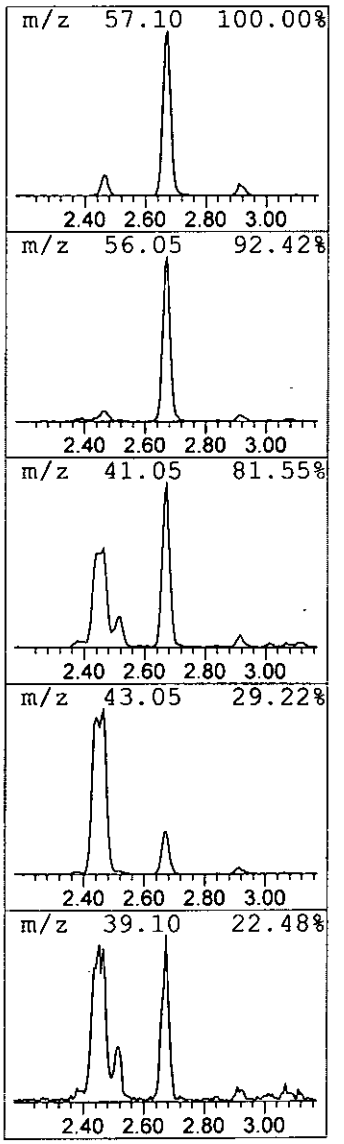
****

Peak Number 3 Pentane, 3-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.672	8.18 ug/L	406412	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	80
4	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	50
5	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	50





Library Search Compound Report

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Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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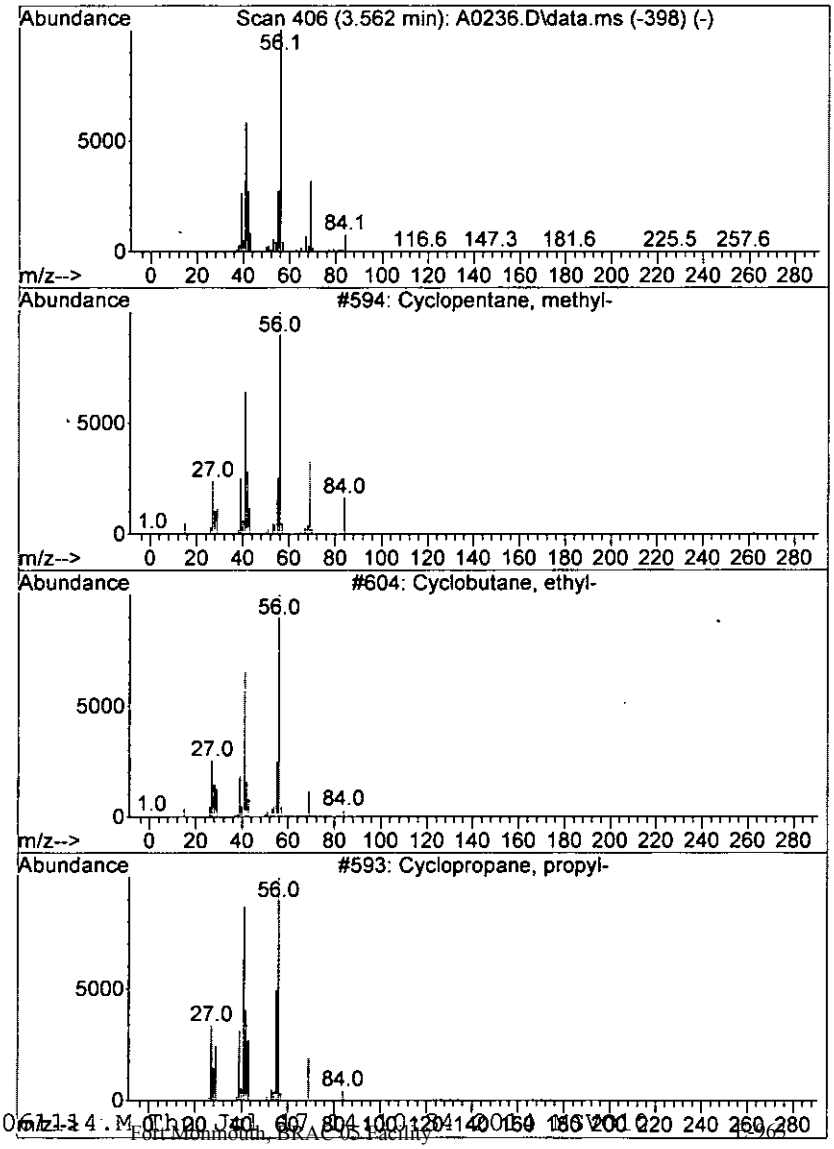
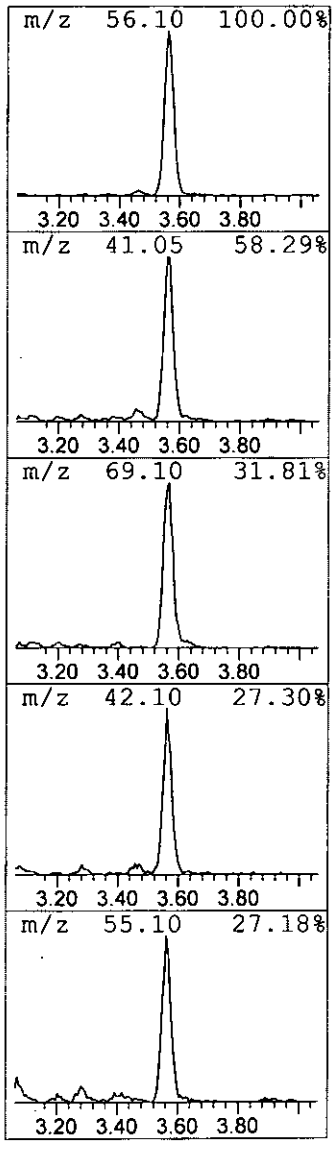
Peak Number 4 Cyclopentane, methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.562	10.29 ug/L	511710	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	90
2	Cyclobutane, ethyl-	84	C6H12	004806-61-5	78
3	Cyclopropane, propyl-	84	C6H12	002415-72-7	78
4	Cyclopentane, methyl-	84	C6H12	000096-37-7	72
5	Cyclobutane	56	C4H8	000287-23-0	59





Library Search Compound Report

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Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

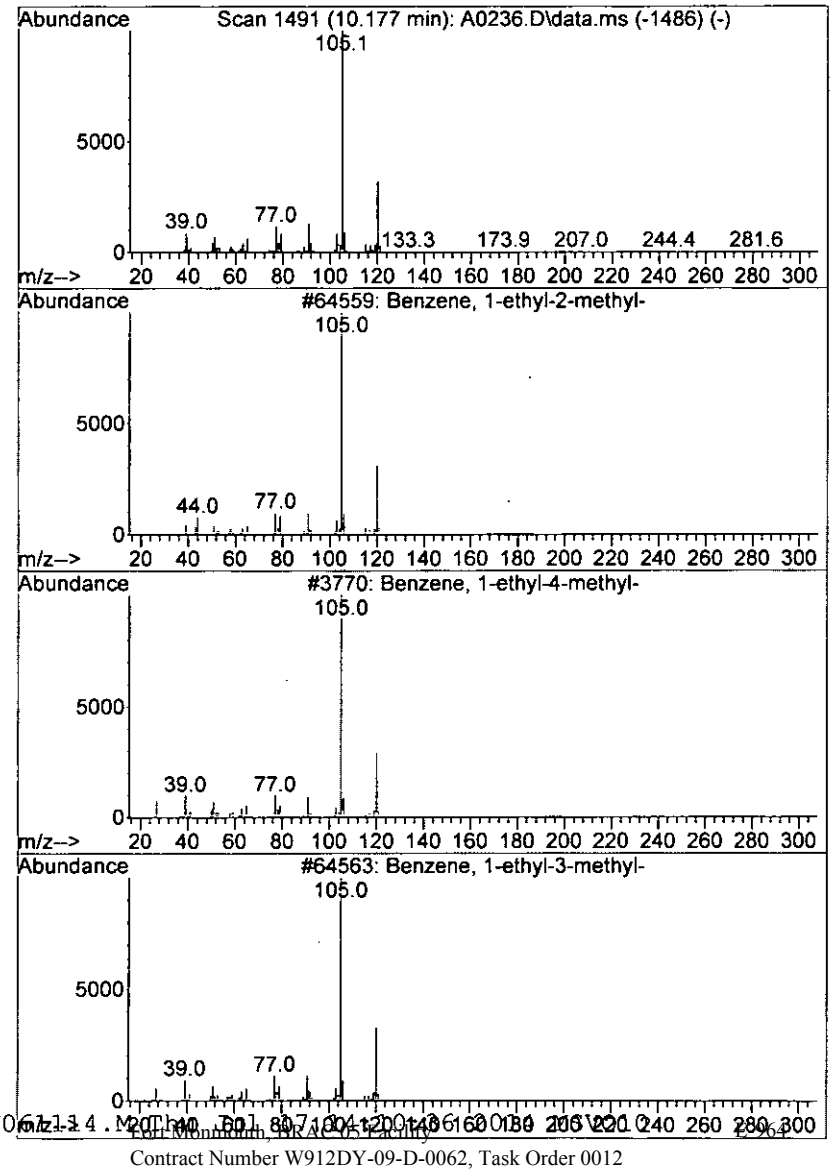
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

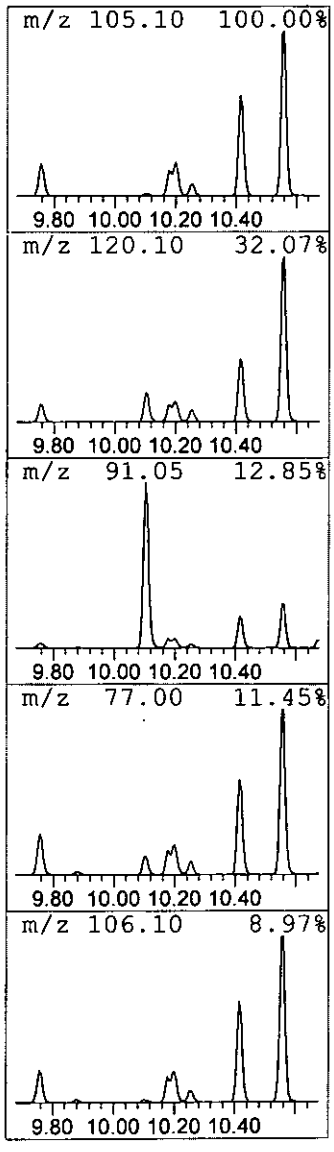
****

Peak Number 5 Benzene, 1-ethyl-2-methyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.177	7.11 ug/L	528718	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	95
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95





Library Search Compound Report

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Data File : A0236.D
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Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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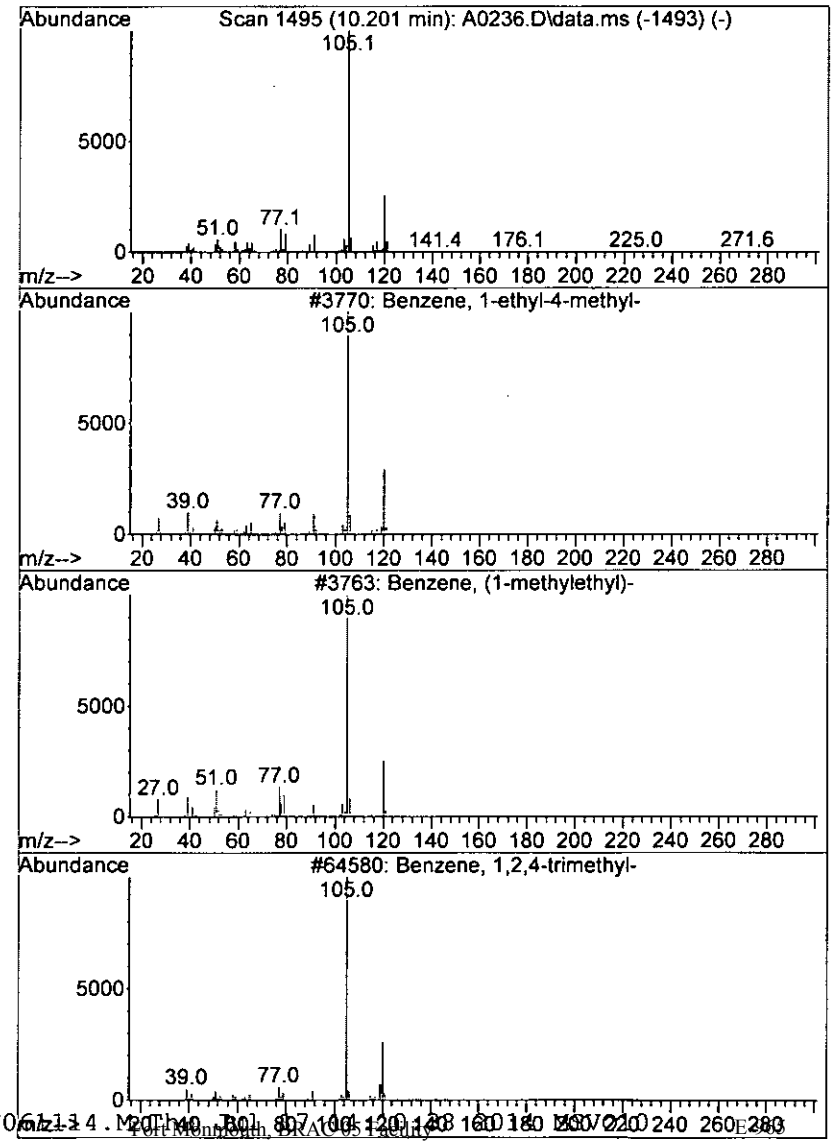
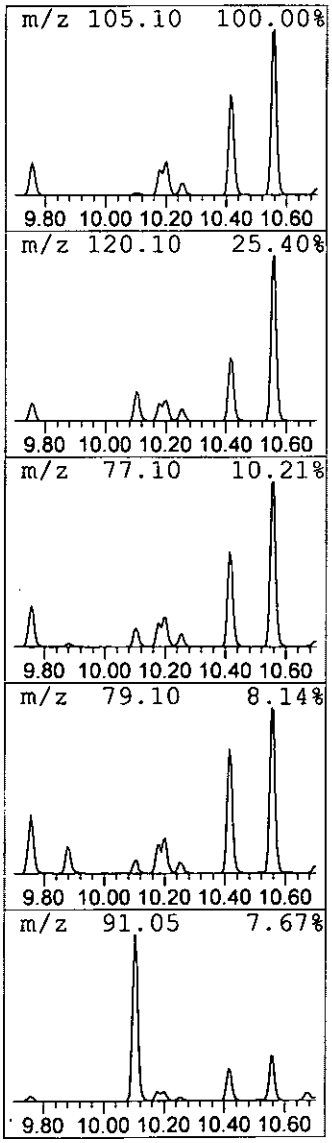
Peak Number 6 Benzene, 1-ethyl-4-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.201	7.87 ug/L	585602	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	83
2	Benzene, (1-methylethyl)-	120	C9H12	000098-82-8	81
3	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	80
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	80
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	80





Library Search Compound Report

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Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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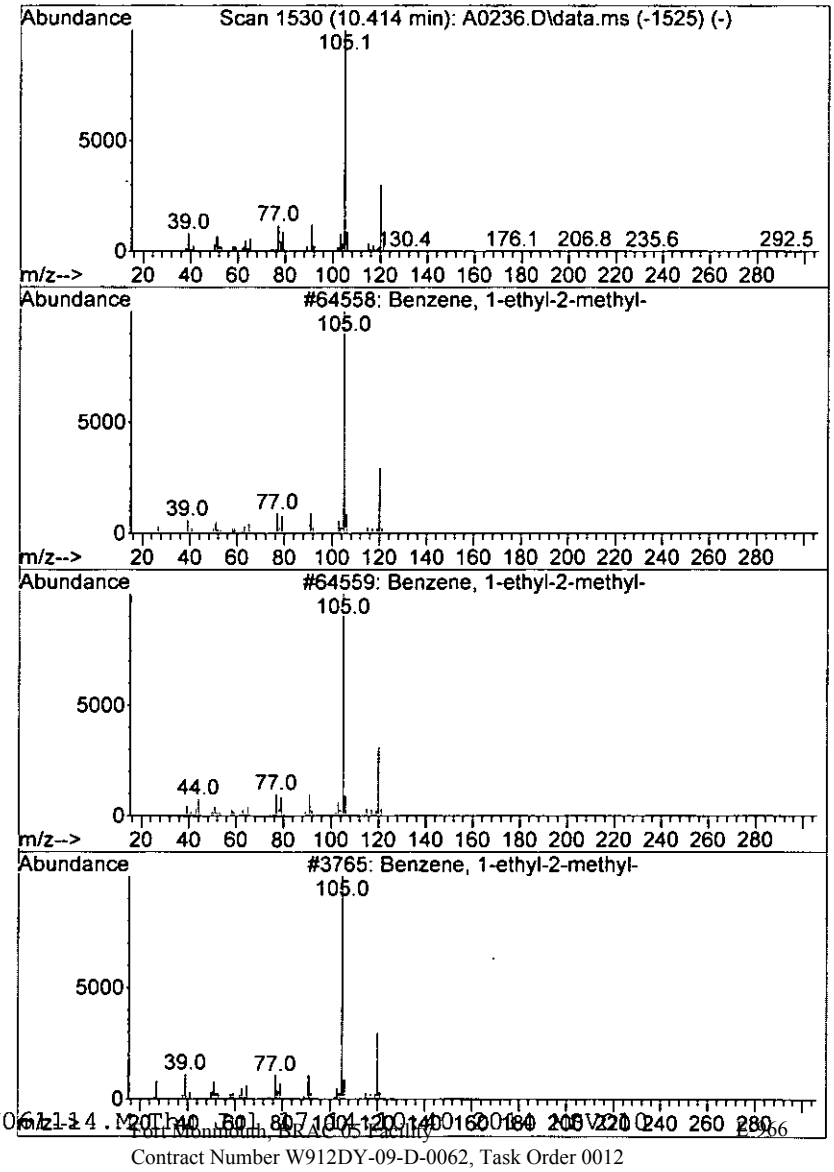
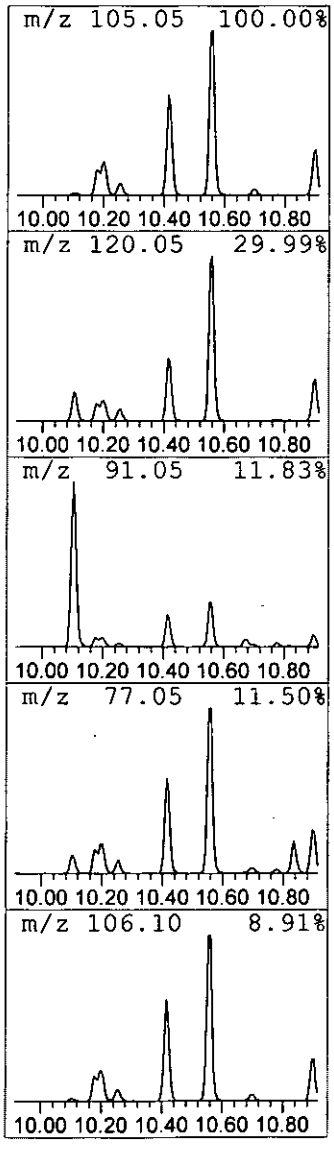
Peak Number 7 Benzene, 1-ethyl-2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.414	26.68 ug/L	1983970	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	93





Library Search Compound Report

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Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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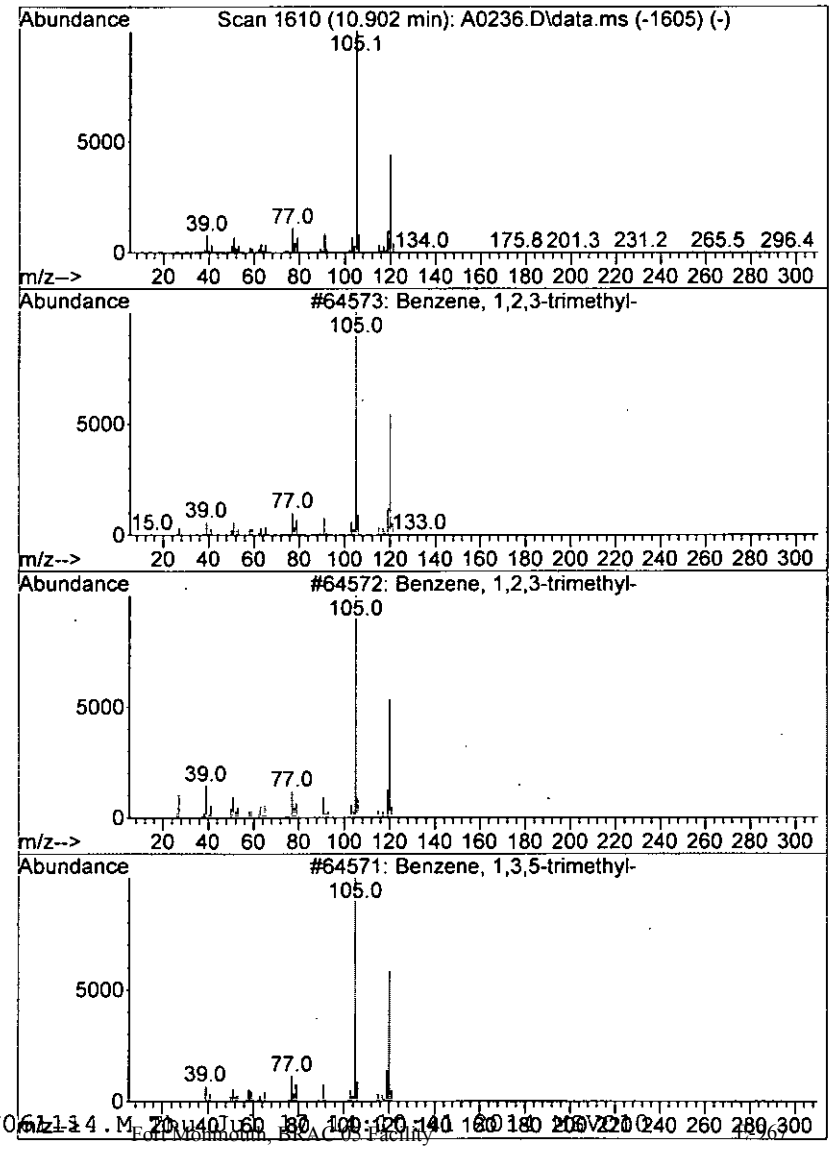
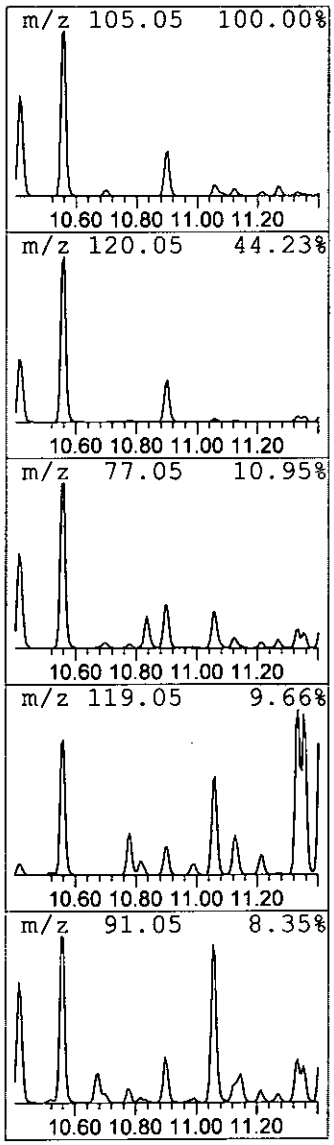
Peak Number 8 Benzene, 1,2,3-trimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.902	13.37 ug/L	994377	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
5	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	93





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Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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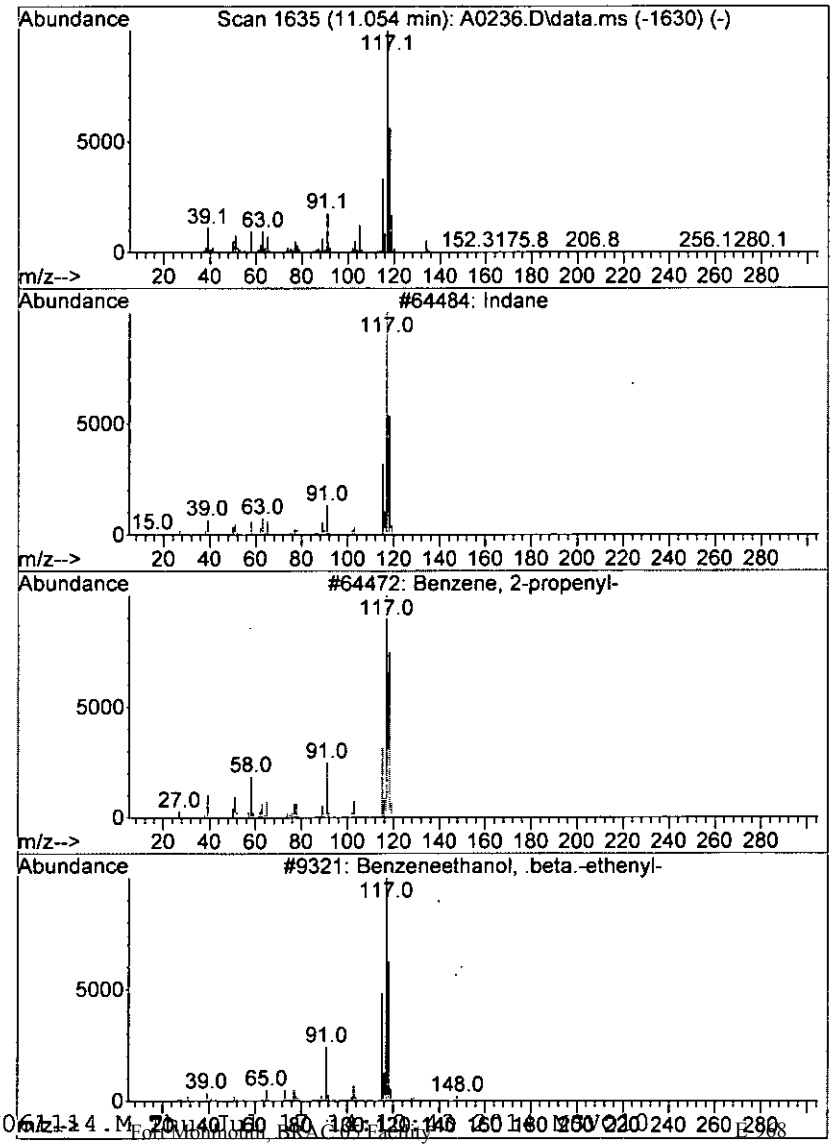
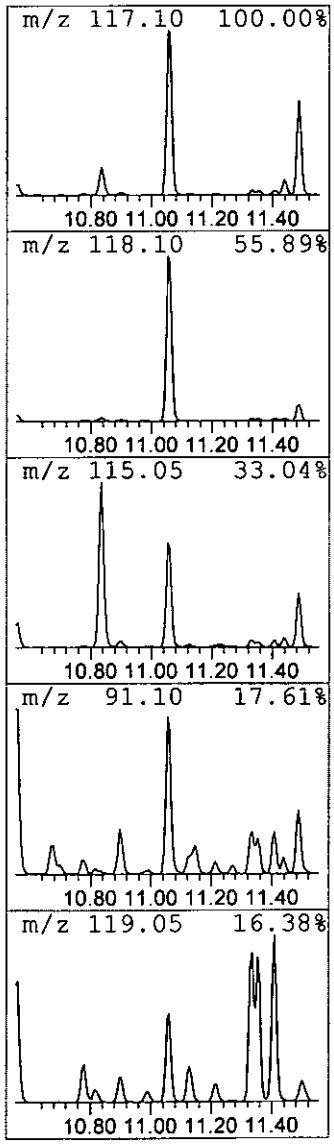
Peak Number 9 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.054	33.51 ug/L	2492110	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
* 1	Indane	118	C9H10	000496-11-7	76
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	76
UNK 3	Benzeneethanol, .beta.-ethenyl-	148	C10H12O	006052-63-7	72
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	68
5	Benzene, cyclopropyl-	118	C9H10	000873-49-4	50





Library Search Compound Report

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Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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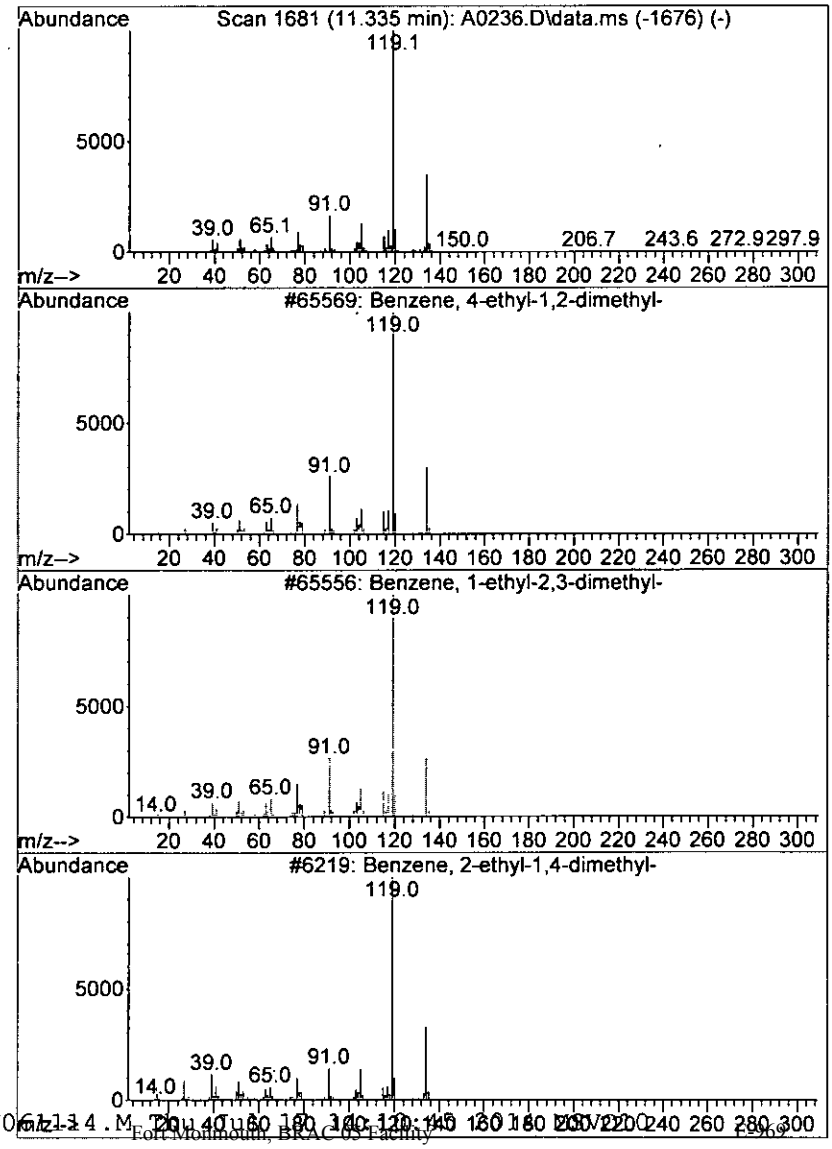
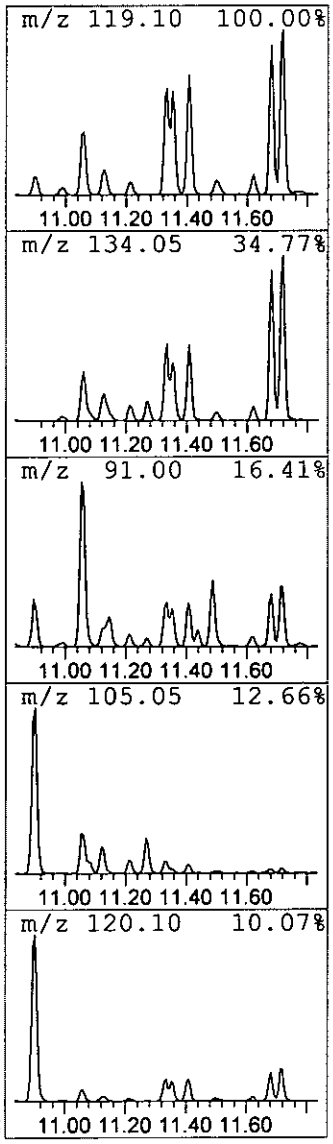
Peak Number 10 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.335	8.03 ug/L	596867	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	96
2	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	96
3	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





Library Search Compound Report

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Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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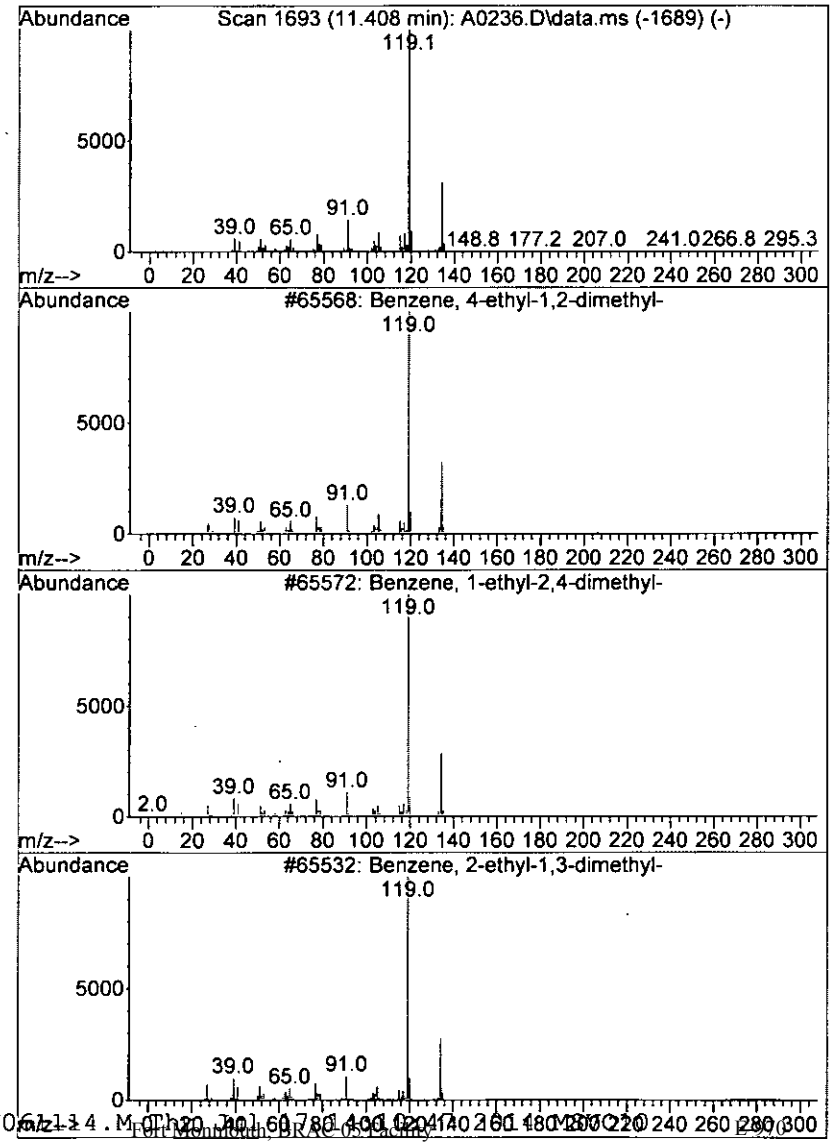
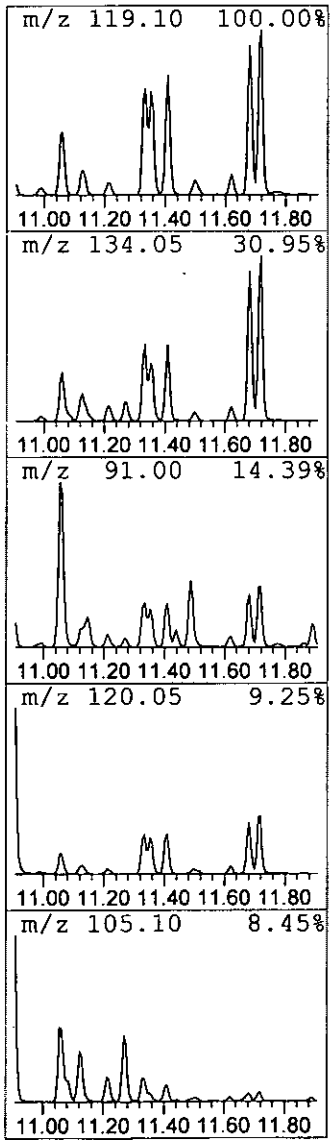
Peak Number 11 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.408	6.88 ug/L	511832	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
2	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	95
3	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	95
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





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Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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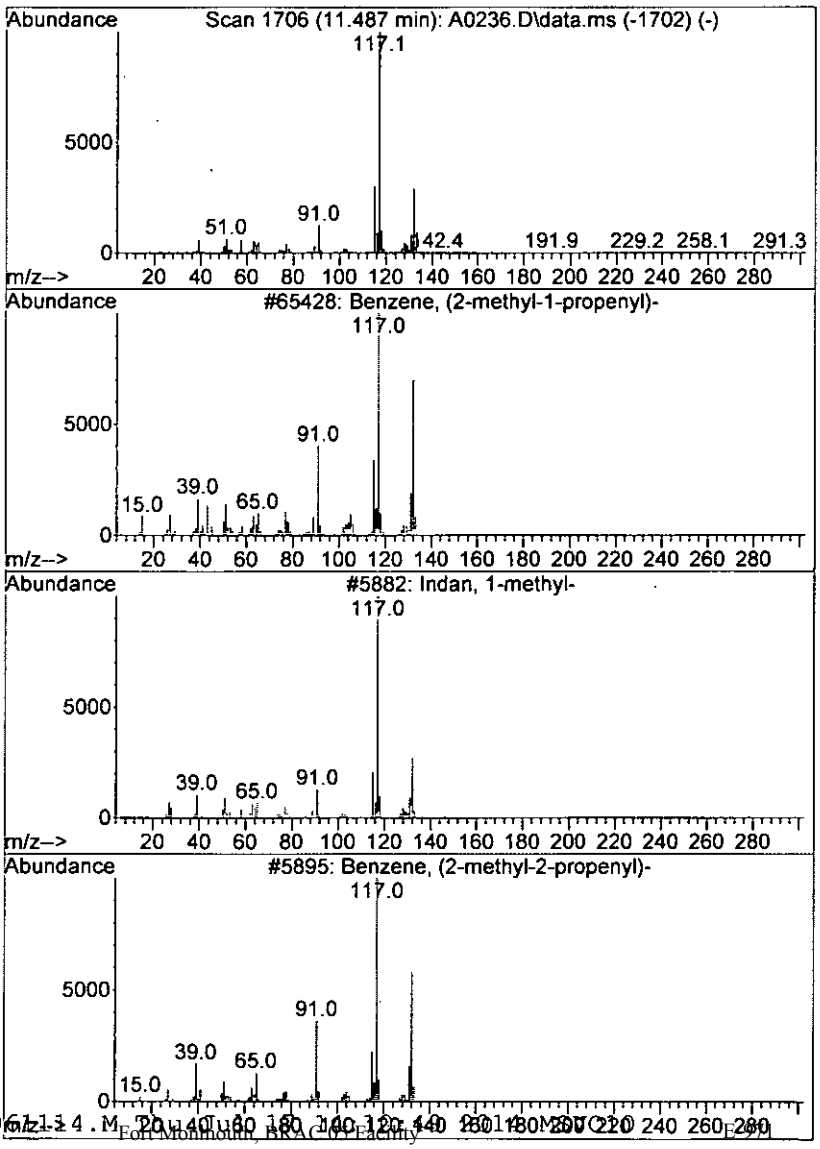
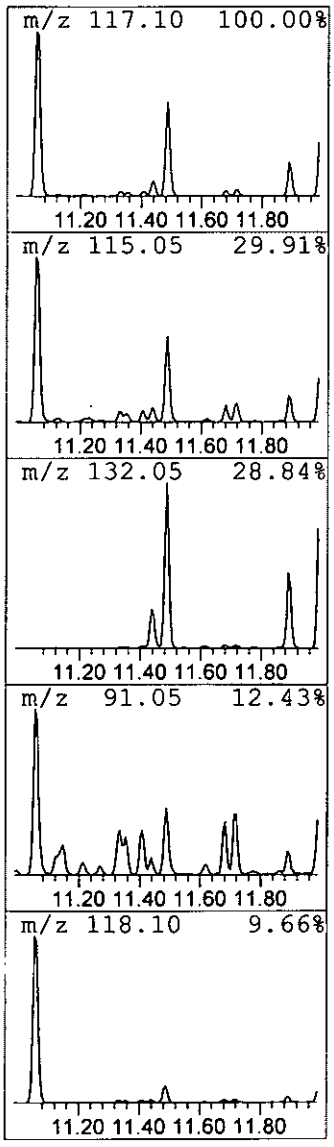
Peak Number 12 Benzene, (2-methyl-1-propen... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.487	13.23 ug/L	983835	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	90
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
4	Indan, 1-methyl-	132	C10H12	000767-58-8	87
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87





Library Search Compound Report

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Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On    : 10 Jul 2014    5:15 pm
Operator  : F.NAEGLER
Sample    : R1405048-007|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 16   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

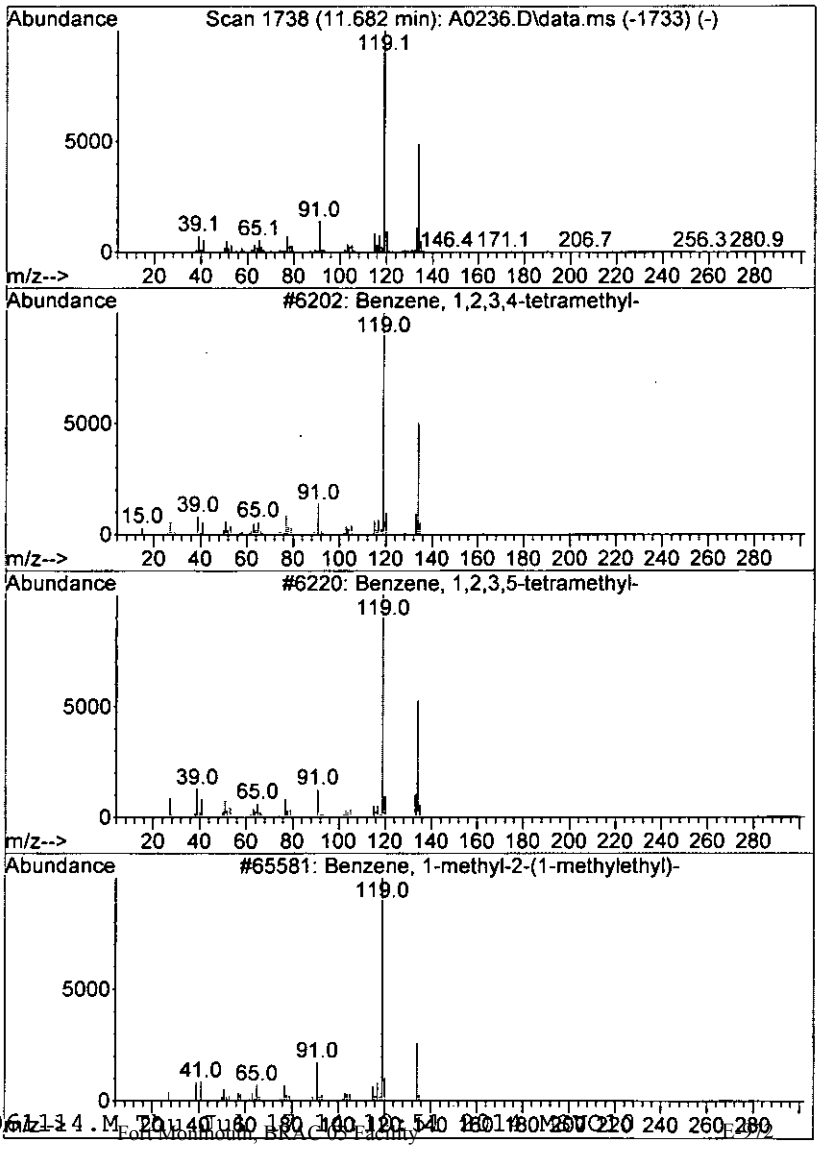
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

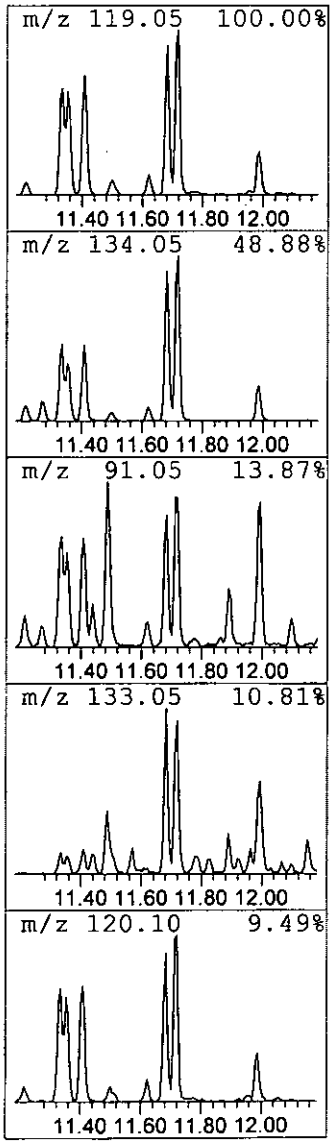
****

Peak Number 13 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.682	8.97 ug/L	667199	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	96
4	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

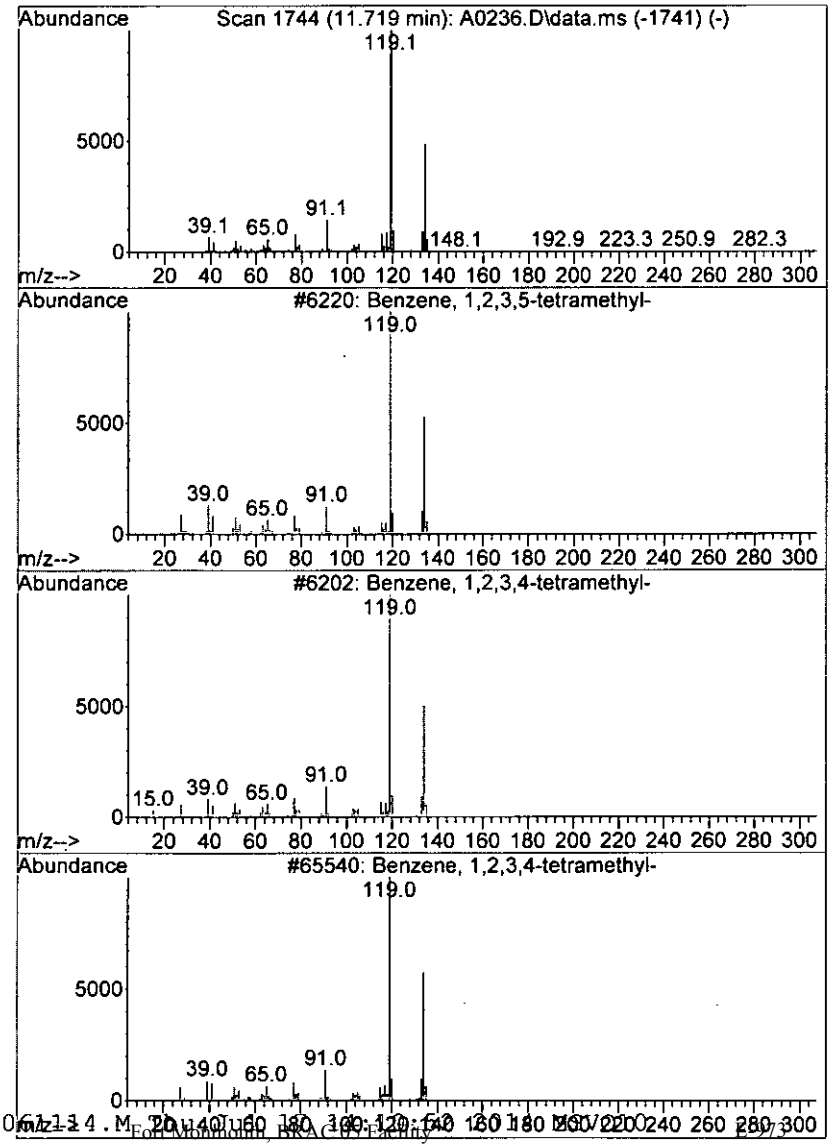
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

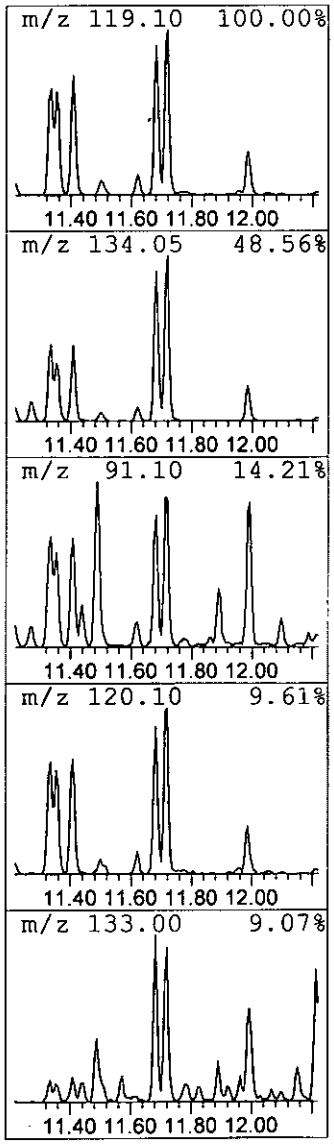
****

Peak Number 14 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.719	10.48 ug/L	779652	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0236.D
Acq On : 10 Jul 2014 5:15 pm
Operator : F.NAEGLER
Sample : R1405048-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

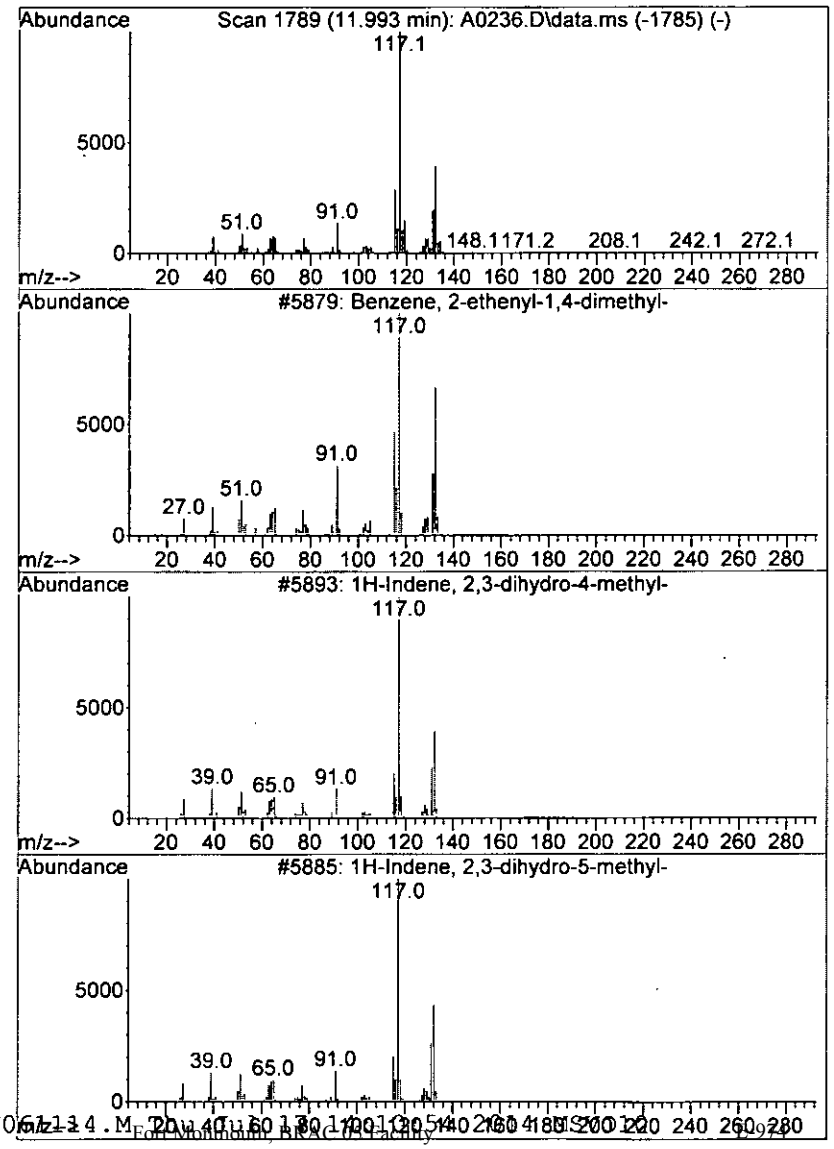
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

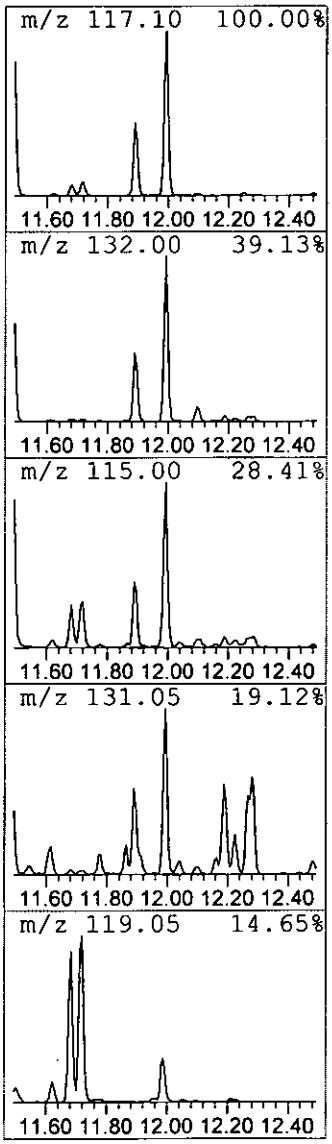
****

Peak Number 15 Benzene, 2-ethenyl-1,4-dime... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.993	12.80 ug/L	951884	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	96
2	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	95
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	95
4	Indan, 1-methyl-	132	C10H12	000767-58-8	87
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	81





Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1220
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 17:45

Sample Name: FTMM-53-GW-699RW11-8.3
Lab Code: R1405048-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0237.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.21**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**2.7**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental
Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1220
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:45
Sample Name:	FTMM-53-GW-699RW11-8.3	**Units:**	µg/L
Lab Code:	R1405048-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**0.28**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**4.3**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.74**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.22**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**5.1**		5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.33**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1220
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 17:45
Sample Name:	FTMM-53-GW-699RW11-8.3	**Units:**	µg/L
Lab Code:	R1405048-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0237.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	7/10/14 17:45	
Dibromofluoromethane	106	85-115	7/10/14 17:45	
Toluene-d8	100	85-120	7/10/14 17:45	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/2/14
Date Analyzed: 7/10/14 1745

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW11-8.3
Lab Code: R1405048-008

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000079-29-8	Butane, 2,3-dimethyl-	2.44	**6.3**	JN
	unknown	11.06	**5.1**	J
000767-58-8	Indan, 1-methyl-	11.49	**6.9**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**7.6**	JN

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-008|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0237.D Vial: 17
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 17:58:36 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	841644	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1216350	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1135723	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	582879	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	386018	53.23	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 106.46%				
48) surr1,1,2-dichloroetha...	4.854	65	394429	54.19	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.38%				
65) SURR3,Toluene-d8	7.427	98	1393121	49.83	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.66%				
70) SURR2,BFB	9.884	95	552856	50.05	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.10%				
Target Compounds							Qvalue
12) Acrolein	~~2.111~~	~~56~~	~~6635~~	~~6.79~~	~~ug/L~~	~~#~~	~~64~~
15) Acetone	~~2.111~~	~~43~~	~~25995~~	~~13.70~~	~~ug/L~~	~~#~~	~~64~~ 2,2-dimethyl butane
19) Acetonitrile	~~2.336~~	~~40~~	~~832~~	~~3.26~~	~~ug/L~~	~~#~~	~~5~~
21) Methyl Acetate	~~2.440~~	~~43~~	~~100670~~	~~24.74~~	~~ug/L~~	~~#~~	~~60~~
22) Methylene Chloride	2.501	84	591	Below Cal		#	9
24) Acrylonitrile	~~2.678~~	~~53~~	~~915~~	~~0.44~~	~~ug/L~~	~~#~~	~~11~~
35) 2-Butanone	~~3.678~~	~~43~~	~~803~~	~~0.31~~	~~ug/L~~	~~#~~	~~32~~
44) Cyclohexane	4.440	41	5227	0.58	ug/L		97 NT(DE-)
49) Benzene	4.964	78	85834	2.73	ug/L		93
55) Methylcyclohexane	6.189	55	6449	0.58	ug/L	#	32 NT(DE-)
61) 2-Nitropropane	~~6.890~~	~~41~~	~~490~~	~~0.35~~	~~ug/L~~	~~#~~	~~69~~
66) Toluene	7.512	91	7471	0.22	ug/L		87
82) Ethylbenzene	8.988	106	3443	0.28	ug/L	#	70
88) Isopropylbenzene	9.756	105	156822	4.26	ug/L		98
89) Cyclohexanone	~~9.878~~	~~55~~	~~2366~~	~~2.67~~	~~ug/L~~	~~#~~	~~13~~
90) trans-1,4-Dichloro-2-B...	~~10.103~~	~~53~~	~~1373~~	~~0.70~~	~~ug/L~~	~~#~~	~~1~~
95) n-Propylbenzene	10.103	91	200138	5.06	ug/L		98
101) 1,2,4-Trimethylbenzene	10.567	105	6299	0.21	ug/L		98
103) sec-Butylbenzene	10.701	105	10842	0.33	ug/L		92
117) Naphthalen	12.408	128	10326	0.74	ug/L		99

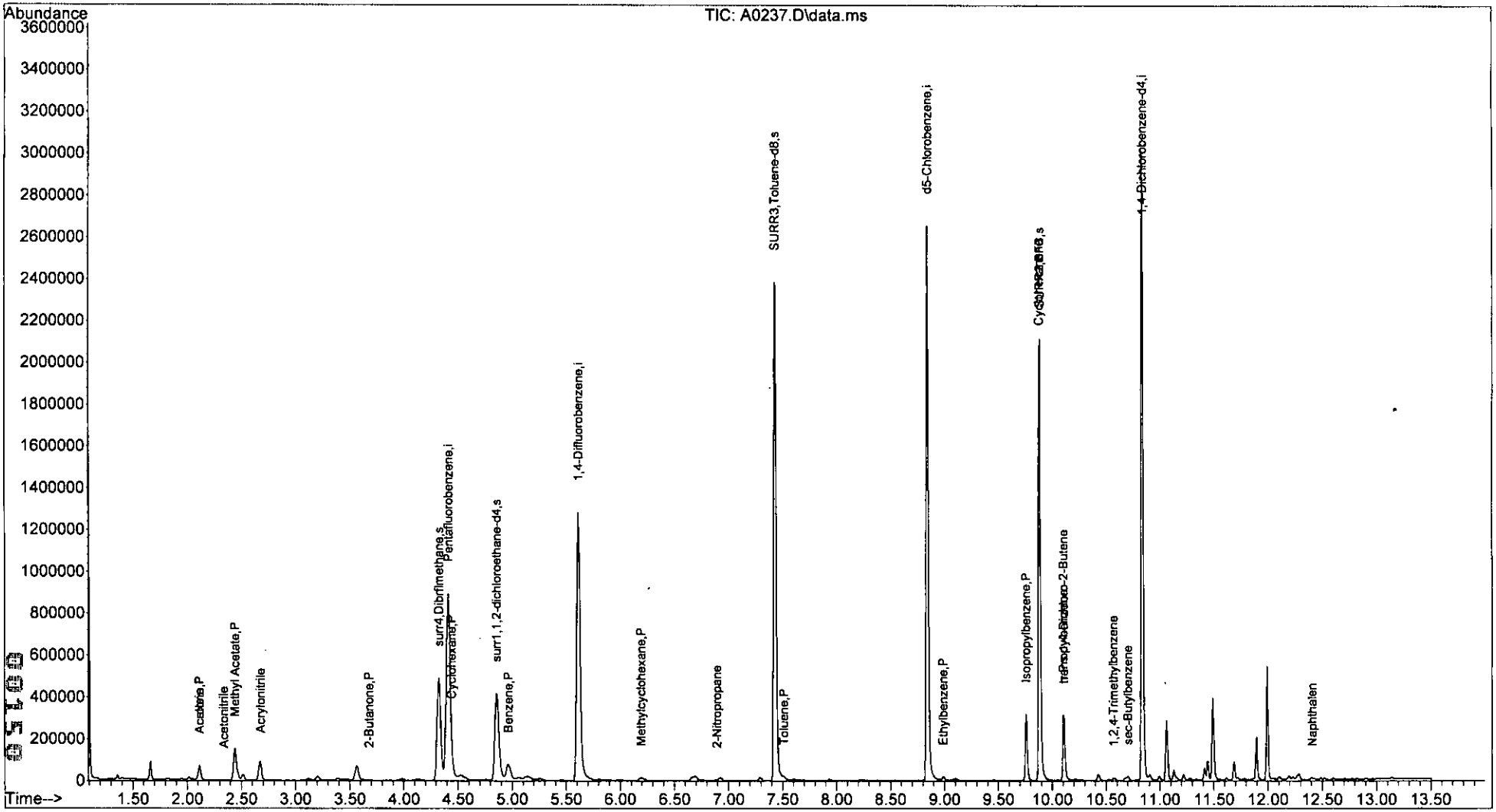
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FV
7/17/14

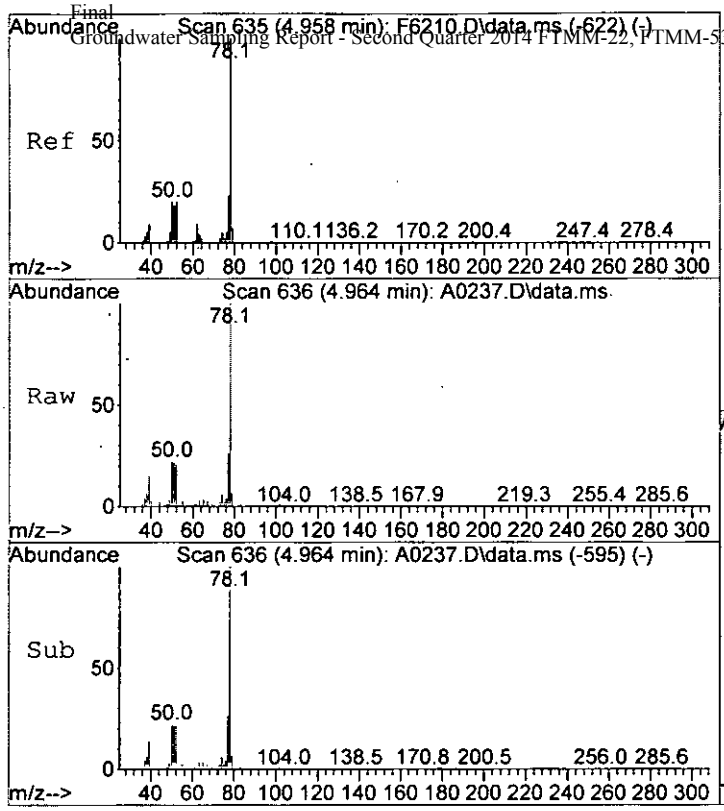
Quantitation Report (Not Reviewed)

Sample : R1405048-008|1.0
Data File : I:\ACQUDATA\msvoa10\data\071014\A0237.D Vial: 17
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 17:58:36 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



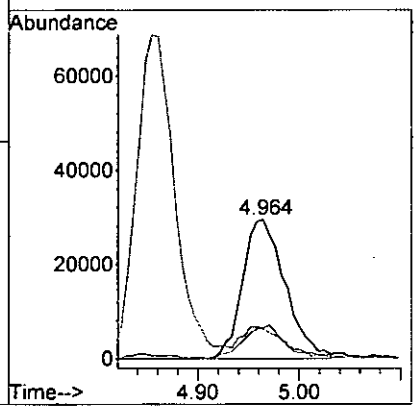
W061114.M Fri Jul 11 08:23:01 2014 MSVO10 Page: 2

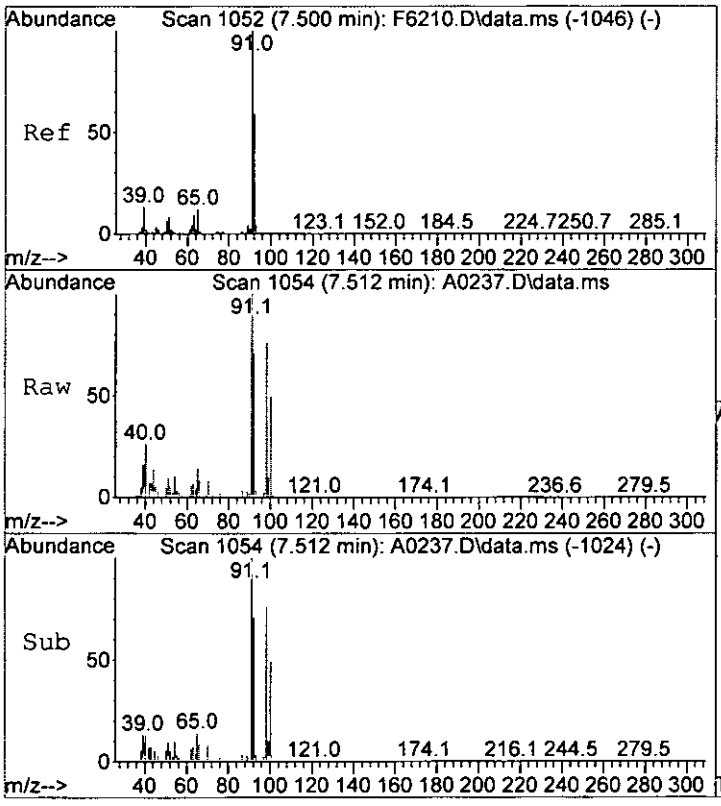


#49
Benzene
Concen: 2.73 ug/L
RT: 4.964 min Scan# 636
Delta R.T. 0.006 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion: 78 Resp: 85834

Ion	Ratio	Lower	Upper
78	100		
51	21.5	0.0	39.4
52	21.4	0.0	36.9

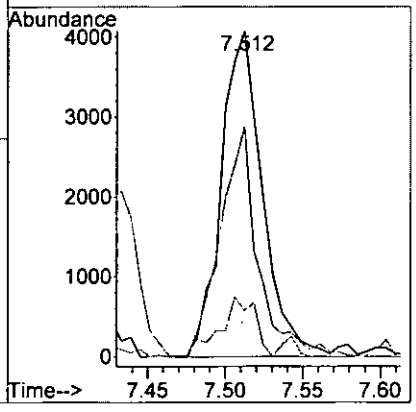


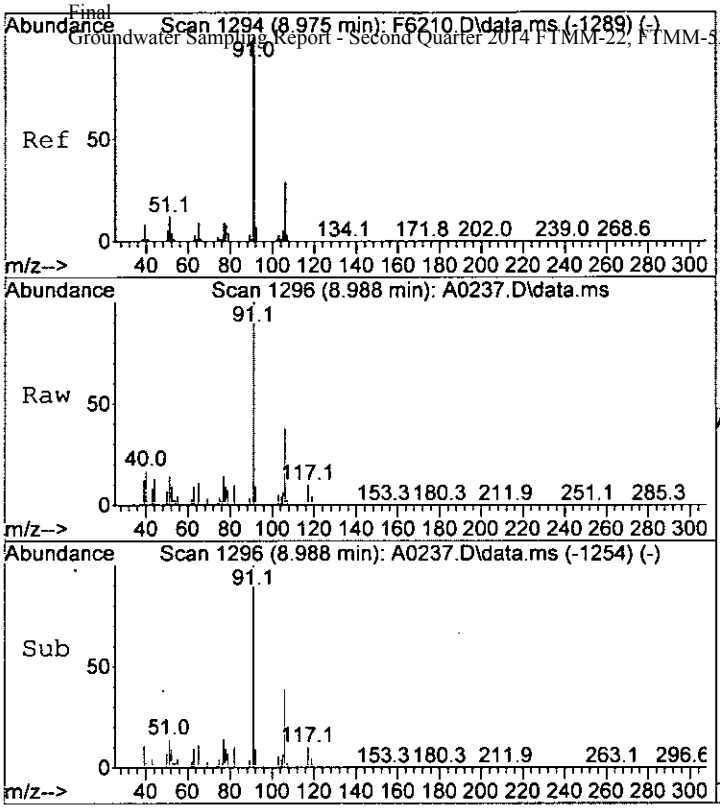


#66
Toluene
Concen: 0.22 ug/L
RT: 7.512 min Scan# 1054
Delta R.T. 0.012 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion: 91 Resp: 7471

Ion	Ratio	Lower	Upper
91	100		
92	70.8	39.5	79.5
65	14.2	0.0	32.0

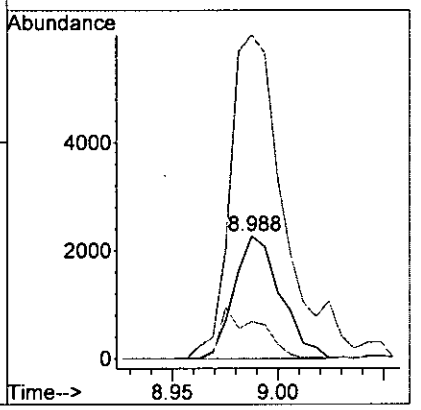


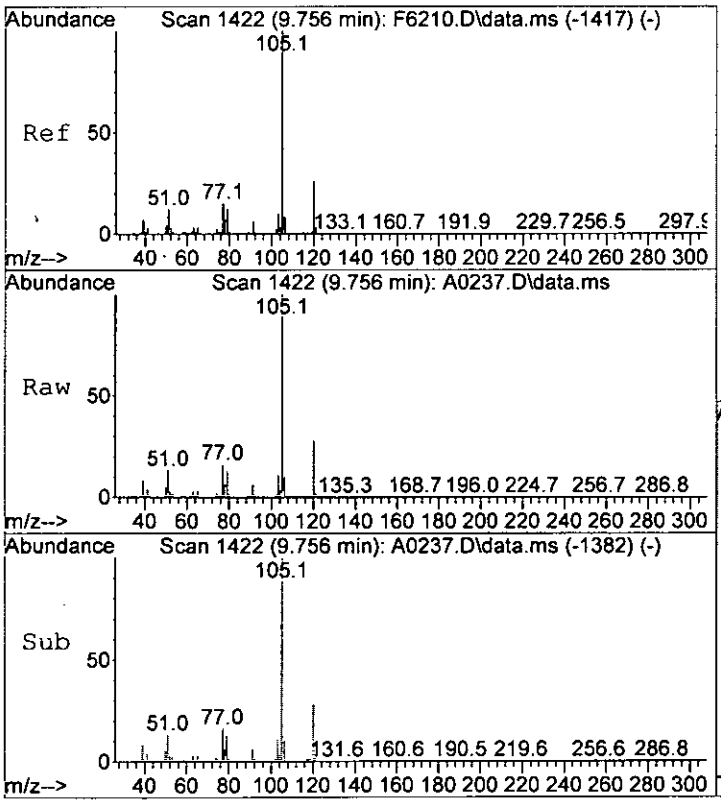


#82
Ethylbenzene
Concen: 0.28 ug/L
RT: 8.988 min Scan# 1296
Delta R.T. 0.006 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion:106 Resp: 3443

Ion	Ratio	Lower	Upper
106	100		
91	264.2	314.0	354.0#
65	30.1	11.1	51.1

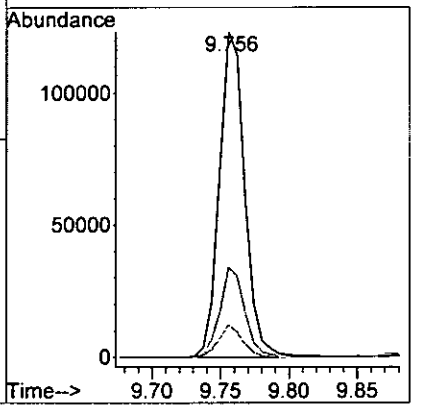


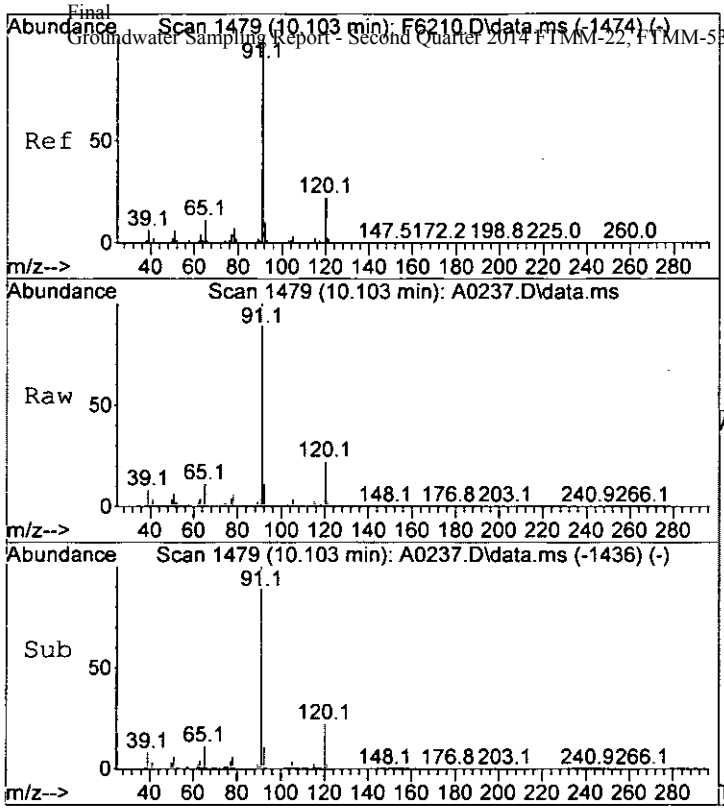


#88
Isopropylbenzene
Concen: 4.26 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. -0.000 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion:105 Resp: 156822

Ion	Ratio	Lower	Upper
105	100		
120	27.6	6.8	46.8
106	9.9	0.0	28.8

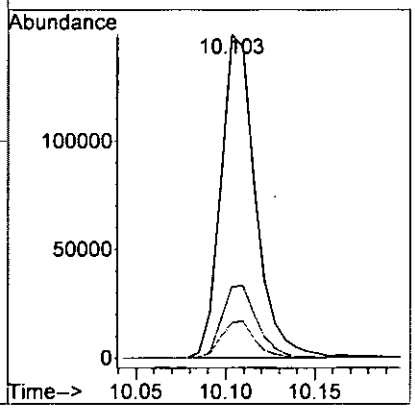


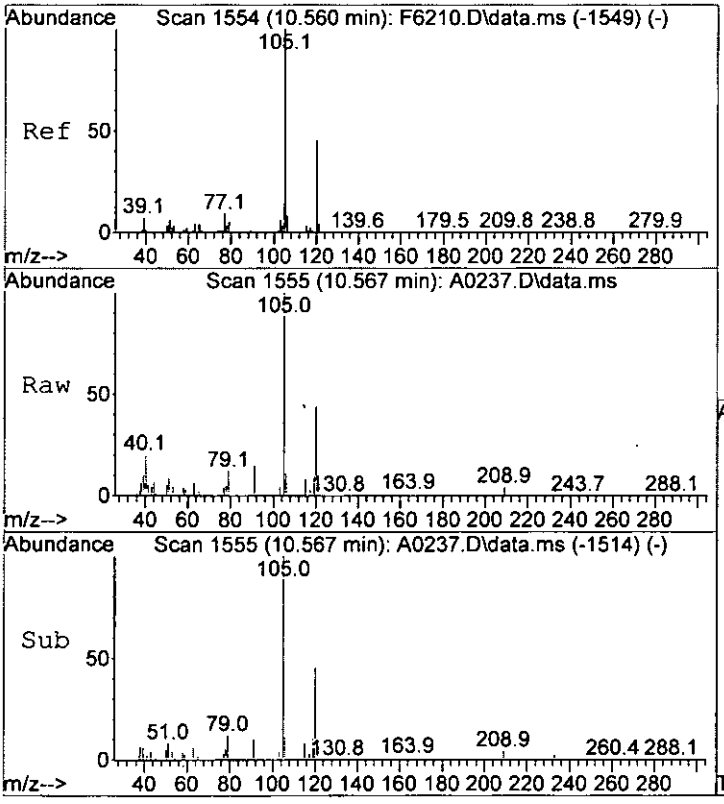


#95
n-Propylbenzene
Concen: 5.06 ug/L
RT: 10.103 min Scan# 1479
Delta R.T. -0.000 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion: 91 Resp: 200138

Ion	Ratio	Lower	Upper
91	100		
120	21.9	2.9	42.9
65	10.8	0.0	31.4

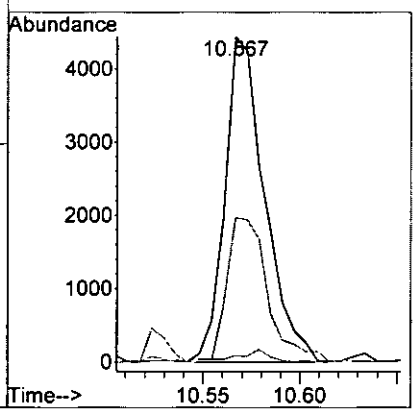


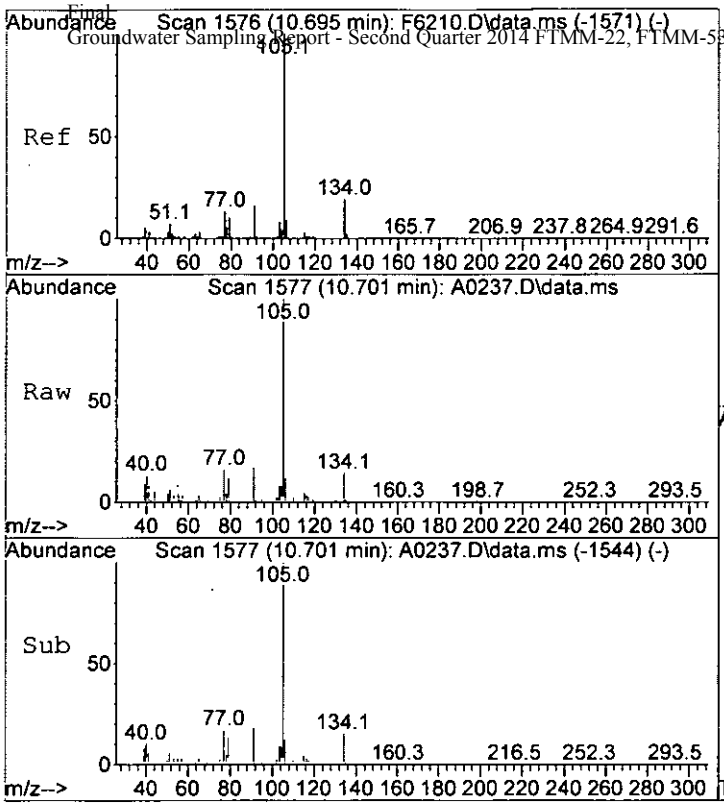


#101
1,2,4-Trimethylbenzene
Concen: 0.21 ug/L
RT: 10.567 min Scan# 1555
Delta R.T. 0.006 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion:105 Resp: 6299

Ion	Ratio	Lower	Upper
105	100		
120	44.2	24.9	64.9
65	1.9	0.0	25.0

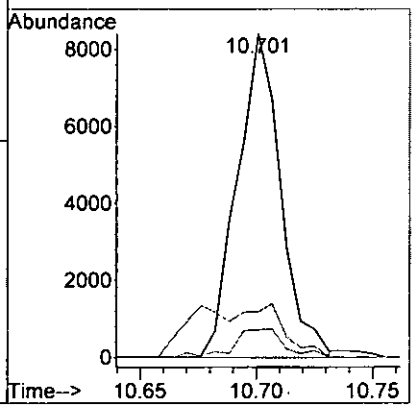


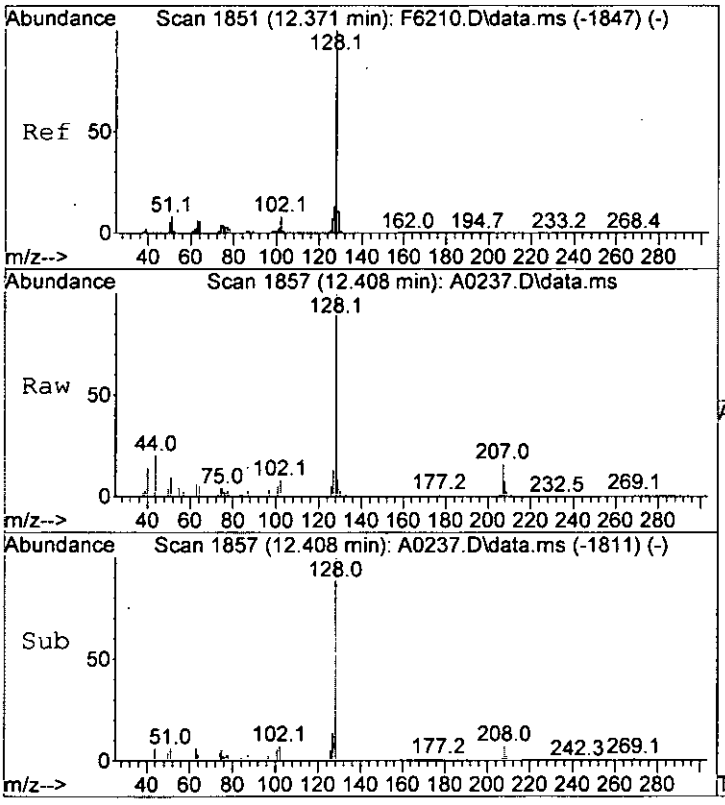


#103
sec-Butylbenzene
Concen: 0.33 ug/L
RT: 10.701 min Scan# 1577
Delta R.T. 0.006 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion:105 Resp: 10842

Ion	Ratio	Lower	Upper
105	100		
134	14.0	0.0	38.9
103	8.5	0.0	28.6

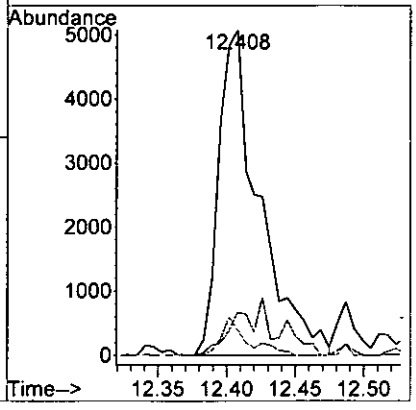




#117
Naphthalen
Concen: 0.74 ug/L
RT: 12.408 min Scan# 1857
Delta R.T. 0.024 min
Lab File: A0237.D
Acq: 10 Jul 2014 5:45 pm

Tgt Ion:128 Resp: 10326

Ion	Ratio	Lower	Upper
128	100		
127	13.1	0.0	32.9
102	7.9	0.0	28.7



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0237.D
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
Sample : R1405048-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

FJ 7/17/14

Signal : TIC: A0237.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	90	94	103	rVB	87023	91884	2.38%	0.362%
2	2.111	162	168	178	rVB2	68868	112564	2.92%	0.443%
3	2.440	215	222	230	rBV2	149995	297337	7.71%	1.171%
4	2.513	230	234	240	rVB	26648	45936	1.19%	0.181%
5	2.672	252	260	269	rBV	90470	167038	4.33%	0.658%
6	3.562	400	406	417	rVB2	67822	147293	3.82%	0.580%
7	4.324	521	531	538	rBV2	488011	1196195	31.03%	4.709%
8	4.409	538	545	558	rVV	893406	2372603	61.54%	9.340%
9	4.519	560	563	581	rVB9	23840	88241	2.29%	0.347%
10	4.854	610	618	629	rBV2	414213	1100785	28.55%	4.333%
11	4.964	630	636	647	rVB2	69181	193424	5.02%	0.761%
12	5.141	658	665	675	rVB9	15437	57633	1.49%	0.227%
13	5.610	734	742	765	rBV	1281008	2889073	74.93%	11.373%
14	7.427	1035	1040	1051	rBV	2382799	3855455	100.00%	15.178%
15	8.841	1267	1272	1288	rBV	2656410	3530093	91.56%	13.897%
16	9.756	1417	1422	1430	rBV	317564	402748	10.45%	1.585%
17	9.884	1438	1443	1459	rBV	2112594	2772954	71.92%	10.916%
18	10.103	1474	1479	1491	rBV	313553	429013	11.13%	1.689%
19	10.426	1526	1532	1540	rBV	28236	45507	1.18%	0.179%
20	10.835	1594	1599	1608	rBV	3011414	3618344	93.85%	14.244%
21	11.060	1631	1636	1642	rBV	284924	365226	9.47%	1.438%
22	11.127	1643	1647	1655	rVV2	47080	71408	1.85%	0.281%
23	11.414	1689	1694	1696	rBV	59542	68440	1.78%	0.269%
24	11.438	1696	1698	1702	rVV	89307	102729	2.66%	0.404%
25	11.487	1702	1706	1714	rVB2	391161	496599	12.88%	1.955%
26	11.688	1735	1739	1743	rBV	88481	107565	2.79%	0.423%
27	11.896	1769	1773	1781	rVB	206858	230015	5.97%	0.905%
28	11.993	1785	1789	1795	rBV	540904	546197	14.17%	2.150%

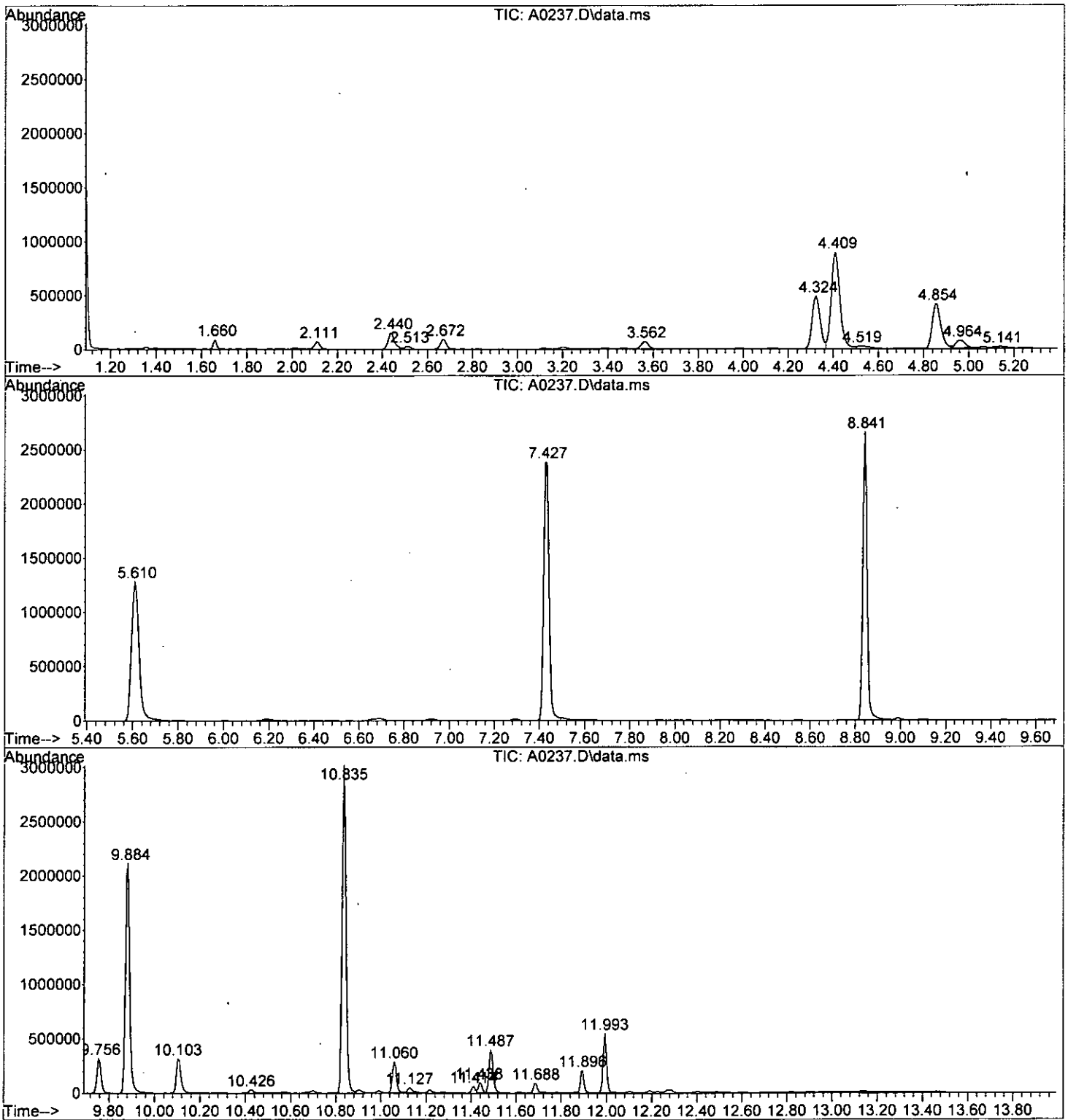
Sum of corrected areas: 25402299

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0237.D
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
Sample : R1405048-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Thu Jul 17 14:15:09 2014 MSVO10 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0237.D
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
Sample : R1405048-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

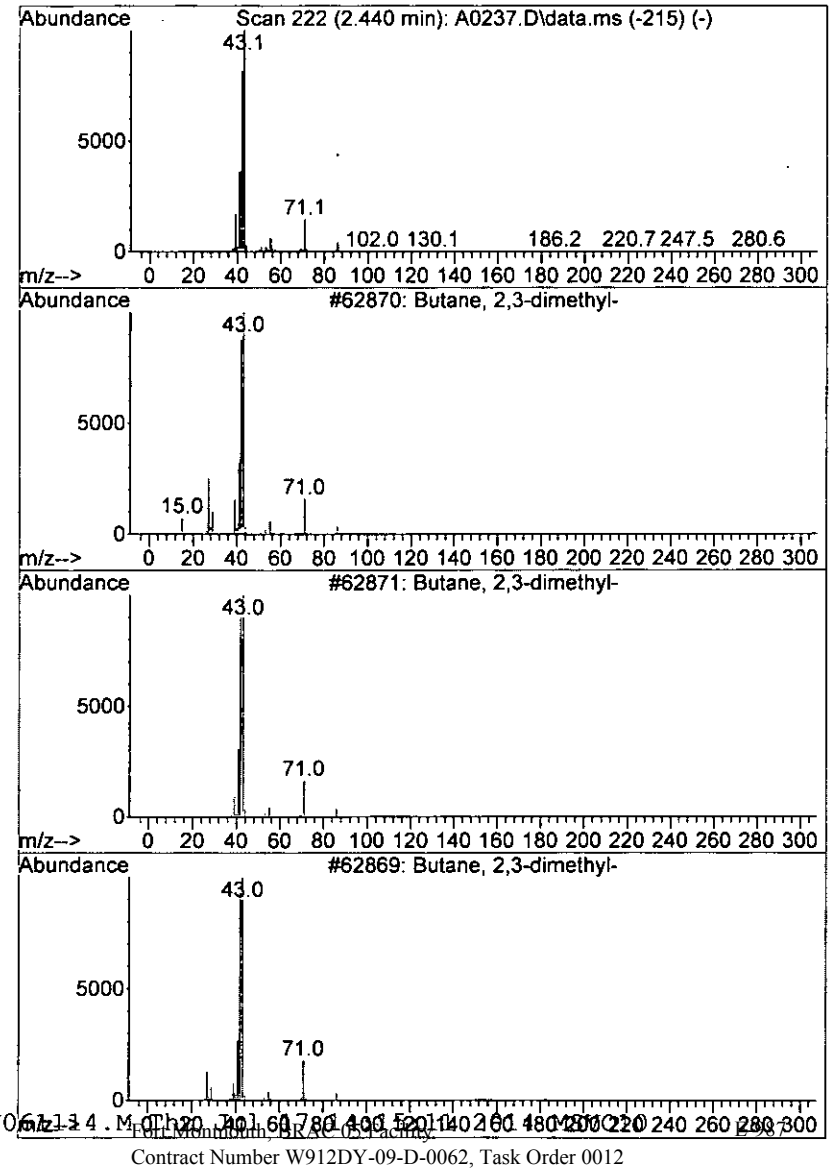
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

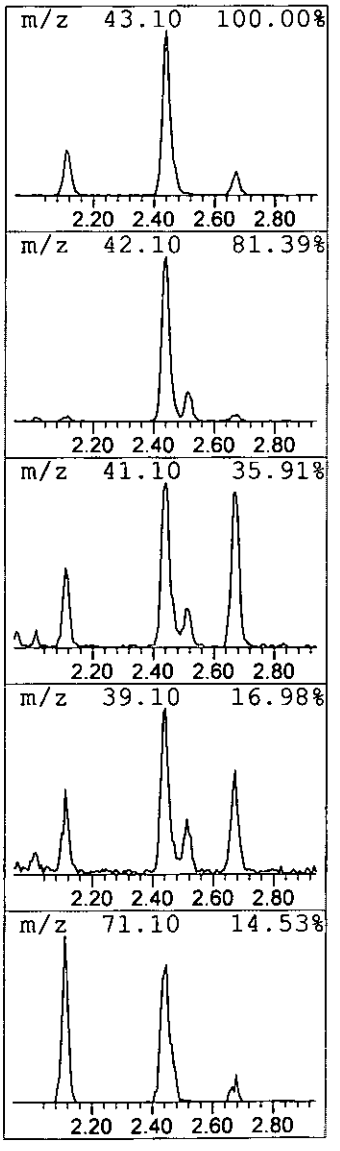
****

Peak Number 1 Butane, 2,3-dimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.440	6.27 ug/L	297337	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	91
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	90
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	90
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	38
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	37





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0237.D
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
Sample : R1405048-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

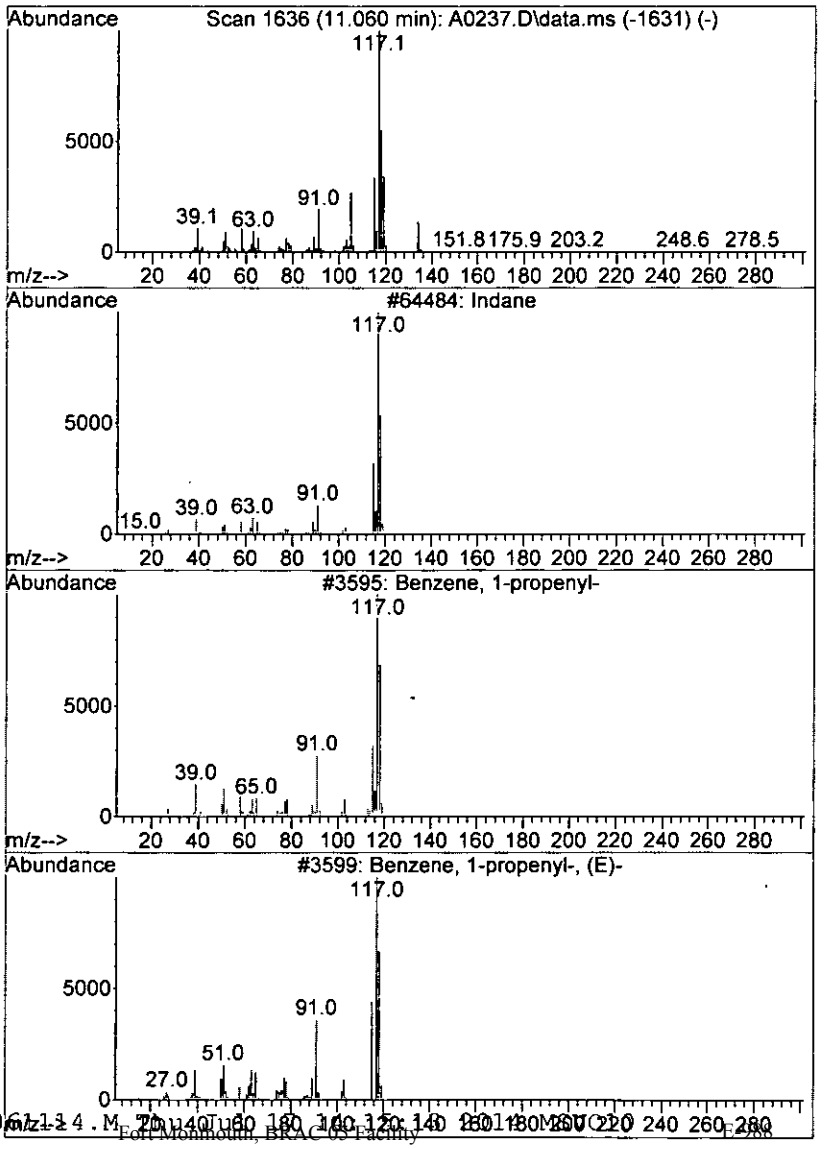
****

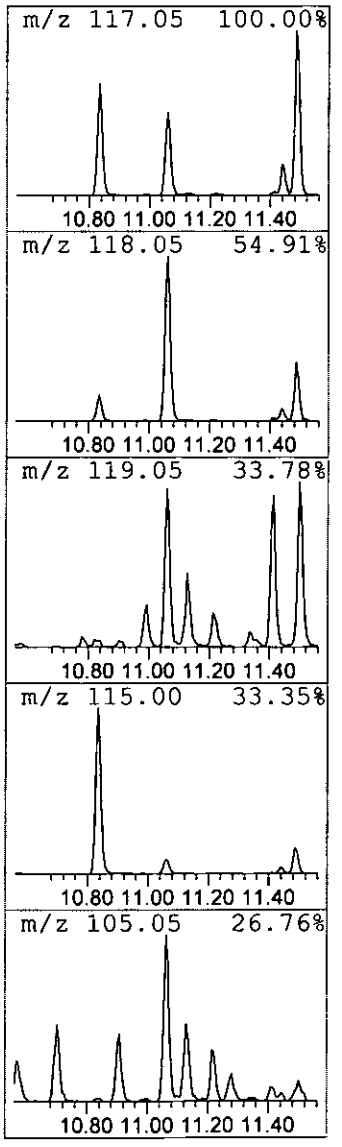
Peak Number 2 Indane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.060	5.05 ug/L	365226	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	70
2	Benzene, 1-propenyl-	118	C9H10	000637-50-3	64
3	Benzene, 1-propenyl-, (E)-	118	C9H10	000873-66-5	64
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	52
5	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	50

* UNK





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0237.D
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
Sample : R1405048-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

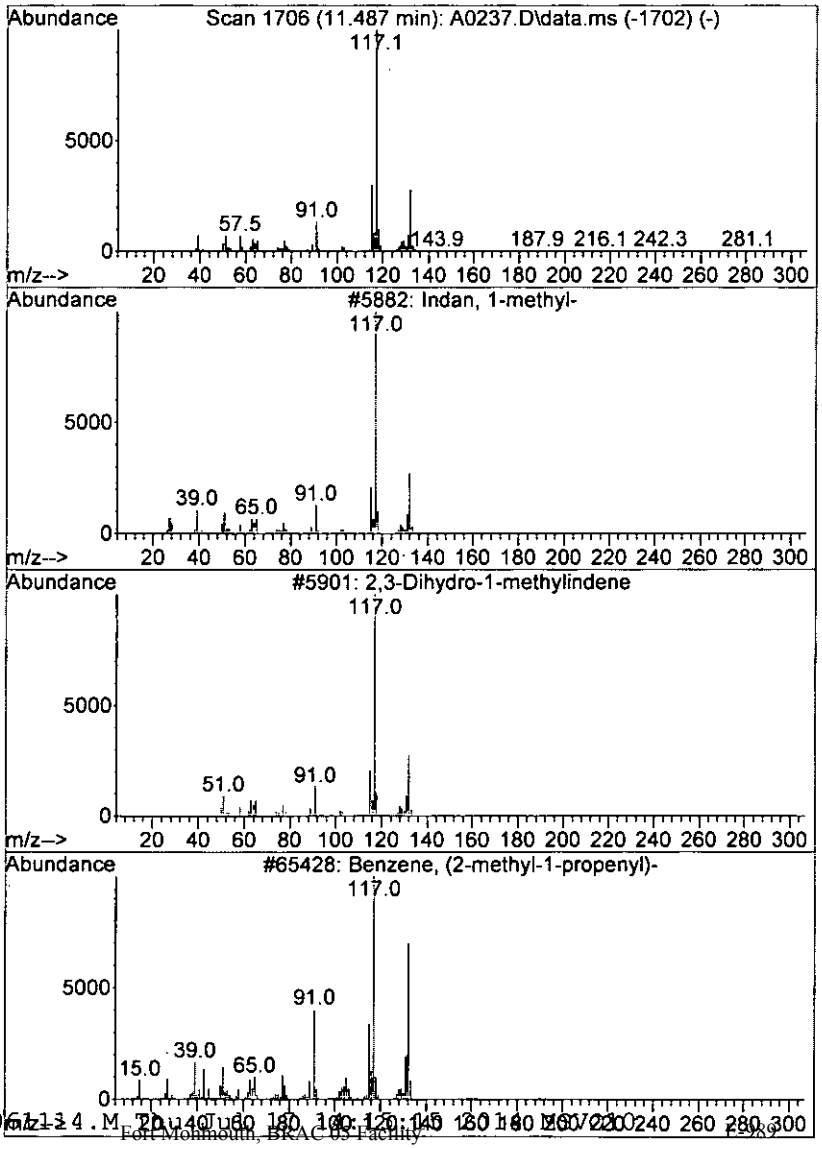
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

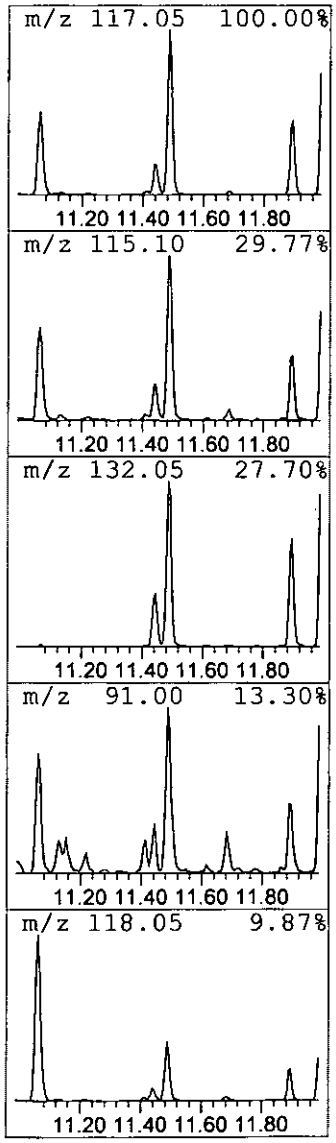
****

Peak Number 3 Indan, 1-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.487	6.86 ug/L	496599	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	93
2	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	93
3	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	87
4	Benzene, 1-ethenyl-3-ethyl-, mix...	264	C20H24	055319-72-7	72
5	Benzene, 1-ethenyl-4-ethyl-	132	C10H12	003454-07-7	72





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0237.D
Acq On : 10 Jul 2014 5:45 pm
Operator : F.NAEGLER
Sample : R1405048-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

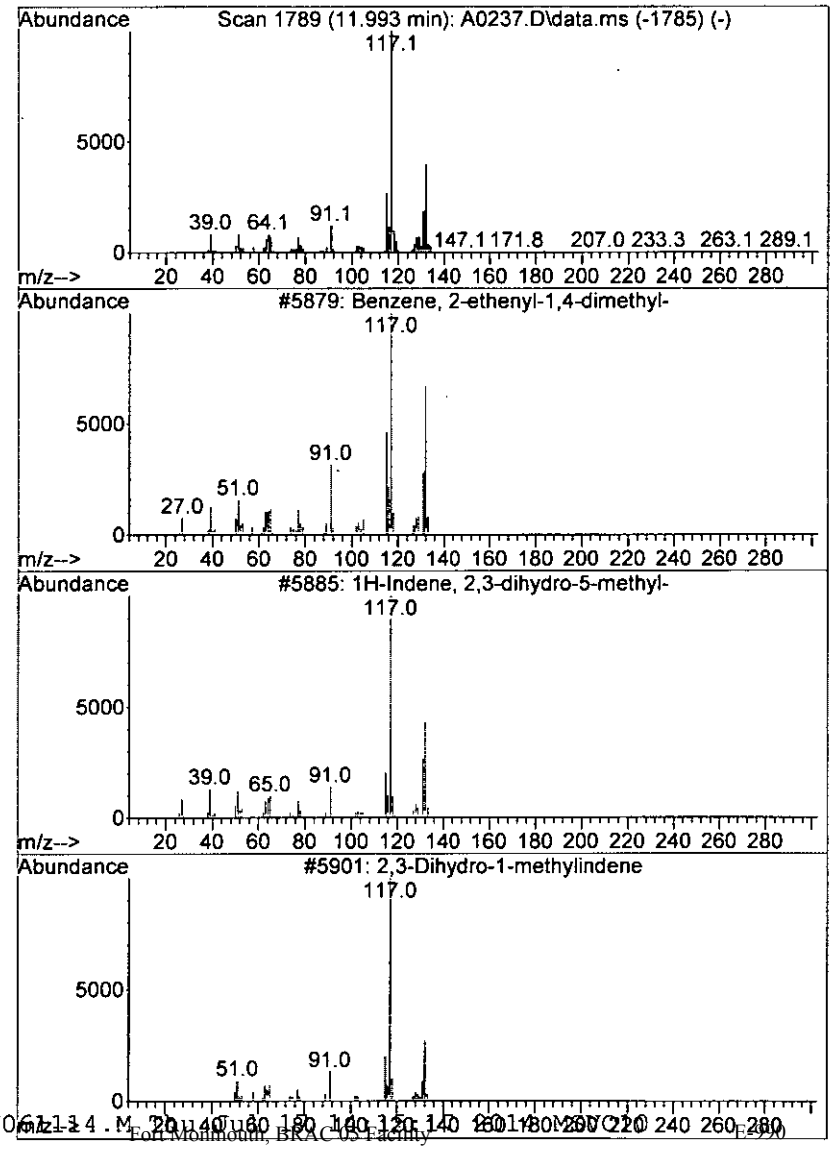
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

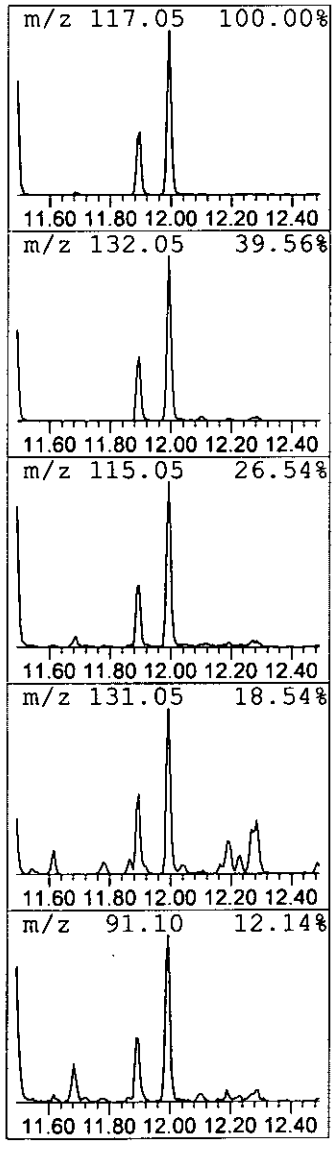
****

Peak Number 4 Benzene, 2-ethenyl-1,4-dime... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.993	7.55 ug/L	546197	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	92
2	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	90
3	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	90
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	90
5	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	90





Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1135
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:15
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**2.1**	J	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	ND	U	13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	ND	U	13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
75-65-0	tert-Butyl Alcohol	ND	U	250	50	27	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	ND	U	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	**3.2**	J	13	13	3.1	
71-43-2	Benzene	ND	U	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	ND	U	13	2.5	0.73	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1135
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:15
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	ND	U	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	0.80	
100-41-4	Ethylbenzene	ND	U	13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	ND	U	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	ND	U	13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**350**		13	2.5	0.75	
108-88-3	Toluene	ND	U	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	**160**		13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	**13**		13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	**190**		13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	ND	U	25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	ND	U	13	2.5	0.50	
95-47-6	o-Xylene	ND	U	13	2.5	0.50	
135-98-8	sec-Butylbenzene	ND	U	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	**1.3**	J	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1135
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:15
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0238.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 18:15	
Dibromofluoromethane	108	85-115	7/10/14 18:15	
Toluene-d8	100	85-120	7/10/14 18:15	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1815

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1405048-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-009|2.5
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0238.D Vial: 18
Acq On : 10 Jul 2014 6:15 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 18:28:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	834791	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1201770	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1147925	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	586206	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	385969	53.86	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 107.72%				
48) surr1,1,2-dichloroetha...	4.854	65	388710	54.05	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.10%				
65) SURR3,Toluene-d8	7.433	98	1387027	50.22	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.44%				
70) SURR2,BFB	9.878	95	541180	49.59	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.18%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.361	62	53522	5.27	ug/L		96
13) 1,1-Diclethene	2.099	96	4694	0.84	ug/L		91
15) Acetone	2.129	43	2392	1.27	ug/L		81
16) 2-Propanol	~~2.202~~	~~45~~	~~755~~	~~2.32~~	~~ug/L~~		~~95~~
19) Acetonitrile	~~2.337~~	~~40~~	~~506~~	~~2.00~~	~~ug/L~~	~~#~~	~~1~~
20) Allyl Chloride	~~2.270~~	~~76~~	~~1042~~	~~0.26~~	~~ug/L~~	~~#~~	~~1~~
22) Methylene Chloride	2.452	84	846	Below Cal		#	75
26) trans-1,2-Dichloroethene	2.678	96	3538	0.50	ug/L		91
34) cis-1,2-Dichloroethene	3.678	96	601800	75.08	ug/L		98
54) Trichloroethene	5.970	130	540087	64.83	ug/L		94
72) Tetrachloroethene	8.055	164	1008998	141.57	ug/L		95
89) Cyclohexanone	~~9.878~~	~~55~~	~~1835~~	~~2.05~~	~~ug/L~~	~~#~~	~~13~~

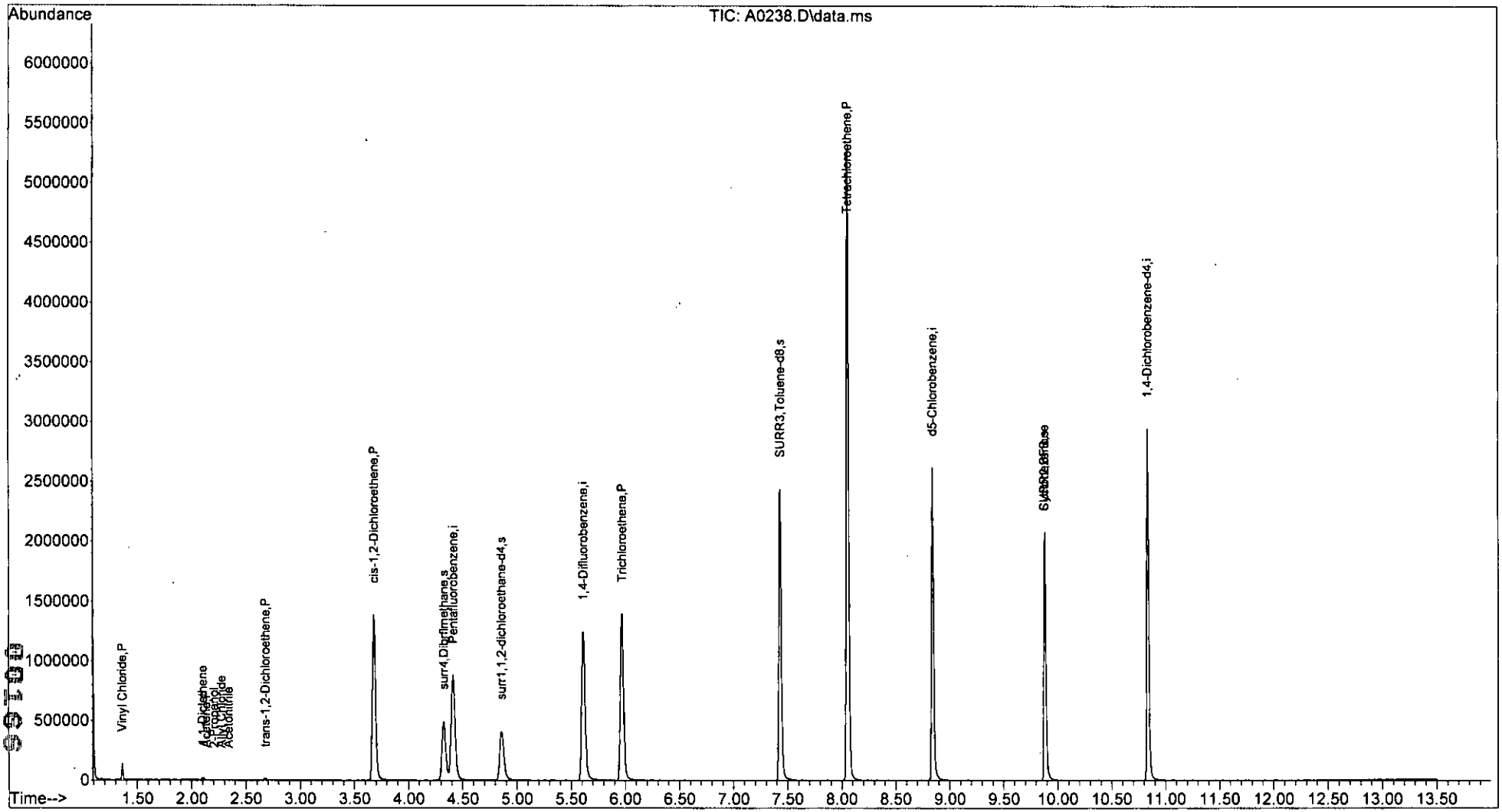
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FD
7/17/14

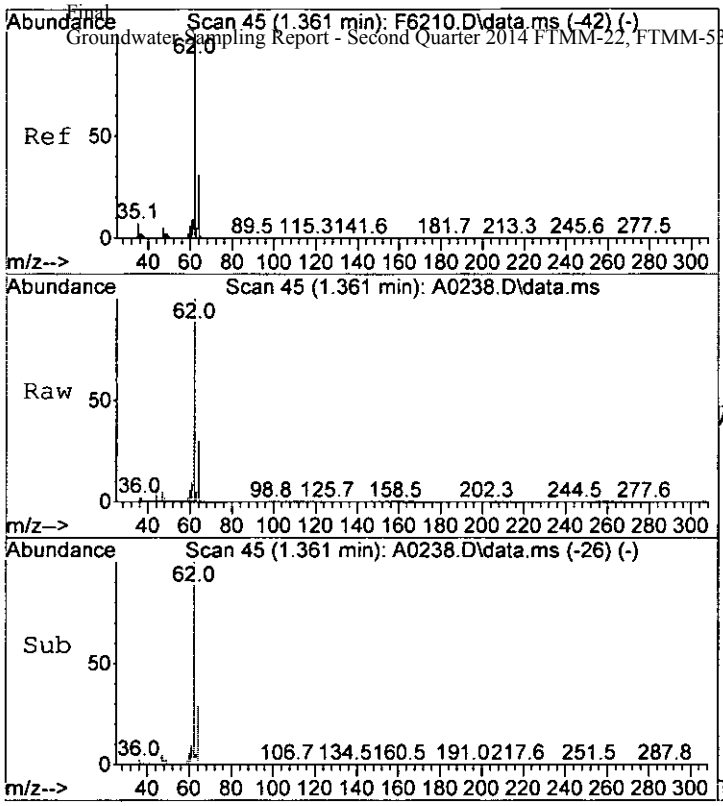
Quantitation Report (Not Reviewed)

Sample : R1405048-009|2.5
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0238.D Vial: 18
Acq On : 10 Jul 2014 6:15 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 18:28:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



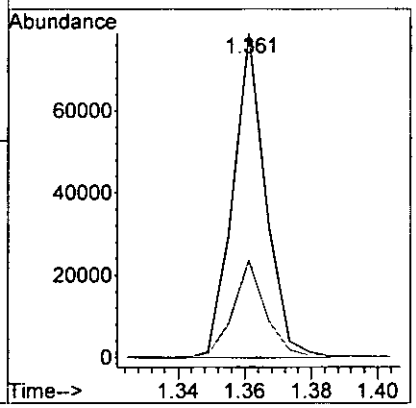
W061114.M Thu Jul 10 18:28:47 2014 MSVO10

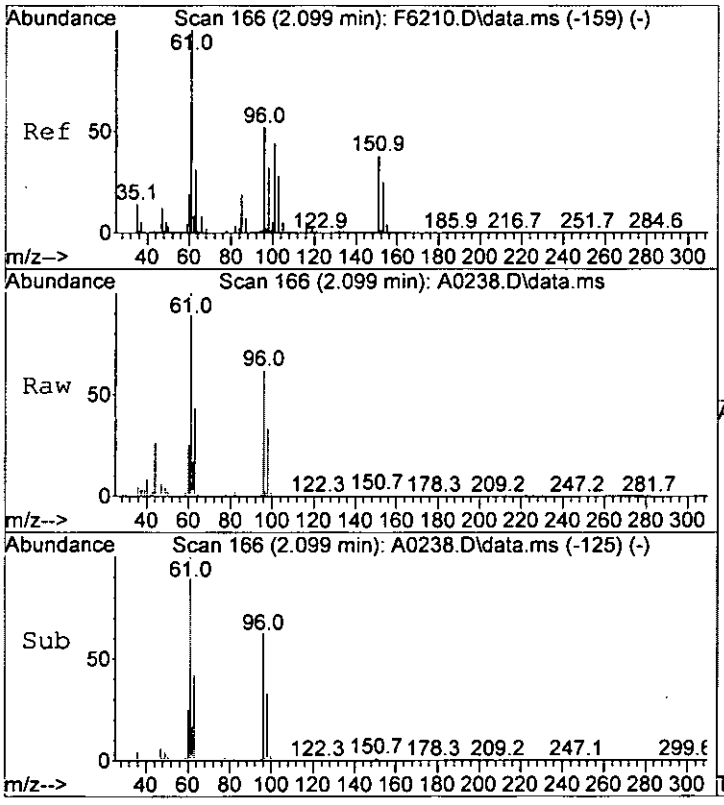


#4
Vinyl Chloride
Concen: 5.27 ug/L
RT: 1.361 min Scan# 45
Delta R.T. 0.000 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion: 62 Resp: 53522

Ion	Ratio	Lower	Upper
62	100		
64	29.9	12.0	52.0

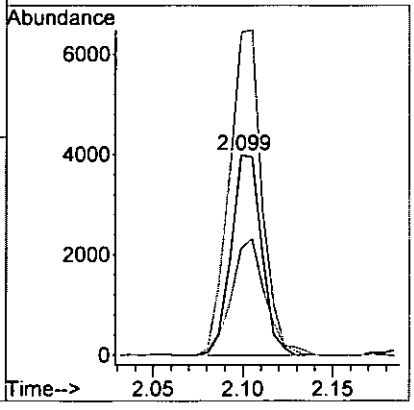


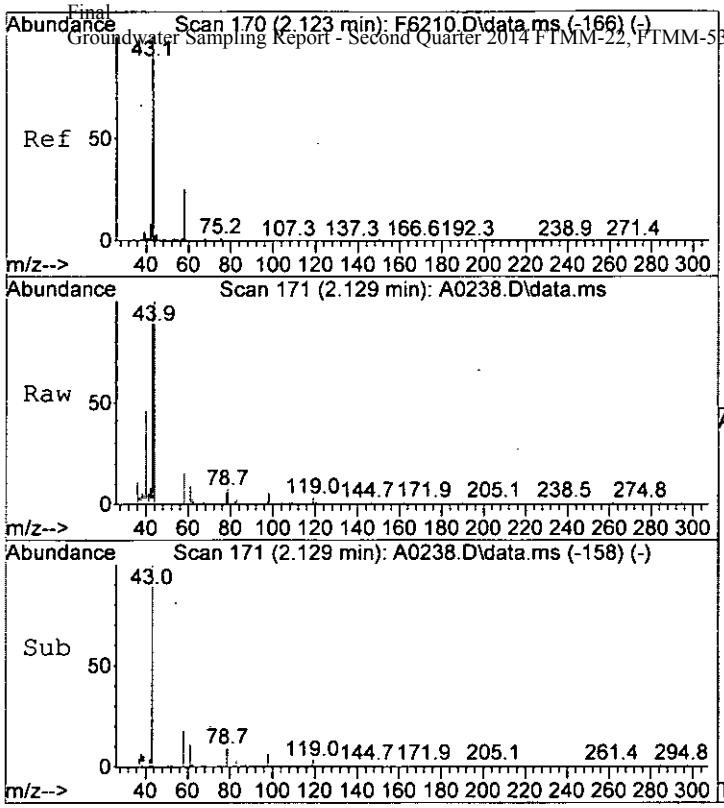


#13
1,1-Diclethene
Concen: 0.84 ug/L
RT: 2.099 min Scan# 166
Delta R.T. 0.000 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion: 96 Resp: 4694

Ion	Ratio	Lower	Upper
96	100		
98	53.3	47.5	87.5
61	161.6	149.6	189.6

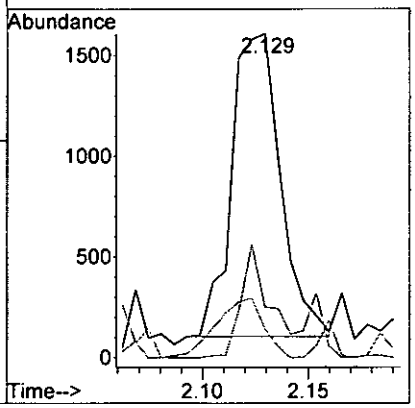


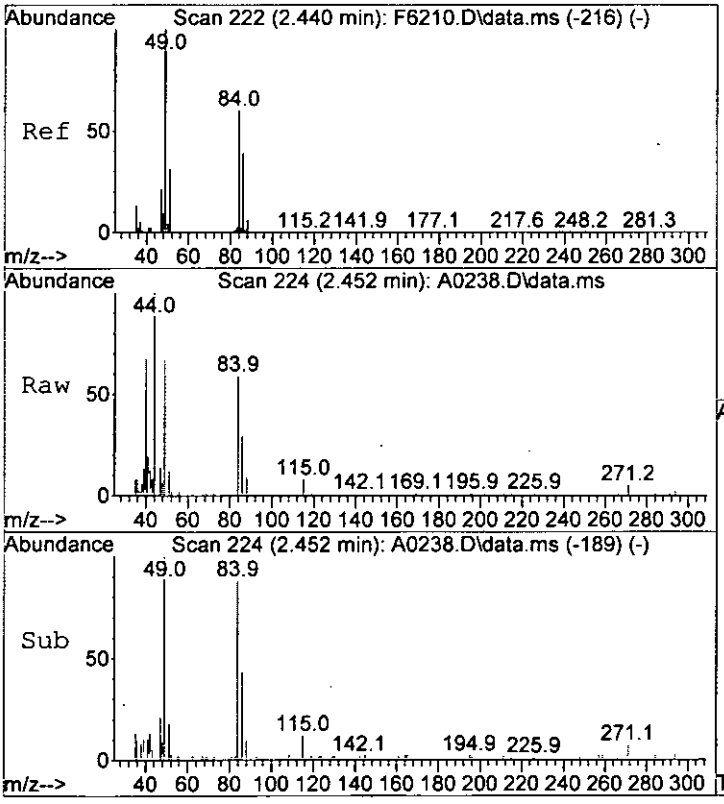


#15
Acetone
Concen: 1.27 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion: 43 Resp: 2392

Ion	Ratio	Lower	Upper
43	100		
58	15.5	7.2	47.2
42	8.8	0.0	27.0

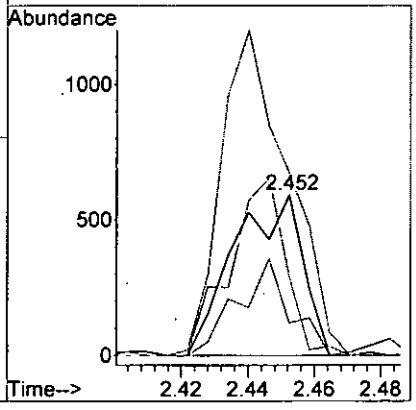


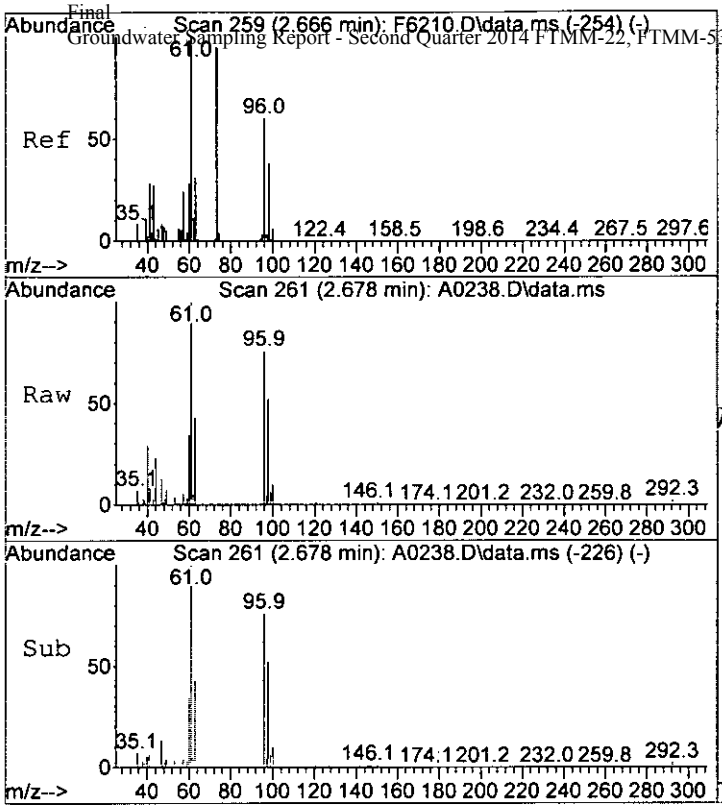


#22
Methylene Chloride
Concen: Below Cal
RT: 2.452 min Scan# 224
Delta R.T. 0.012 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion: 84 Resp: 846

Ion	Ratio	Lower	Upper
84	100		
86	49.3	44.5	84.5
49	113.5	123.0	163.0#
51	20.1	22.1	62.1#

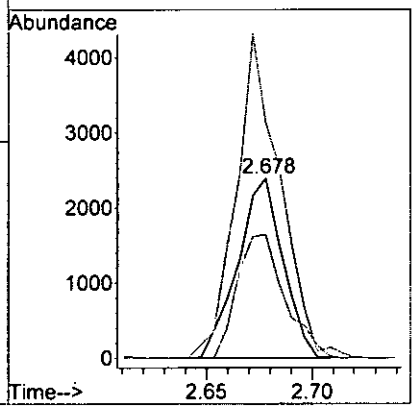


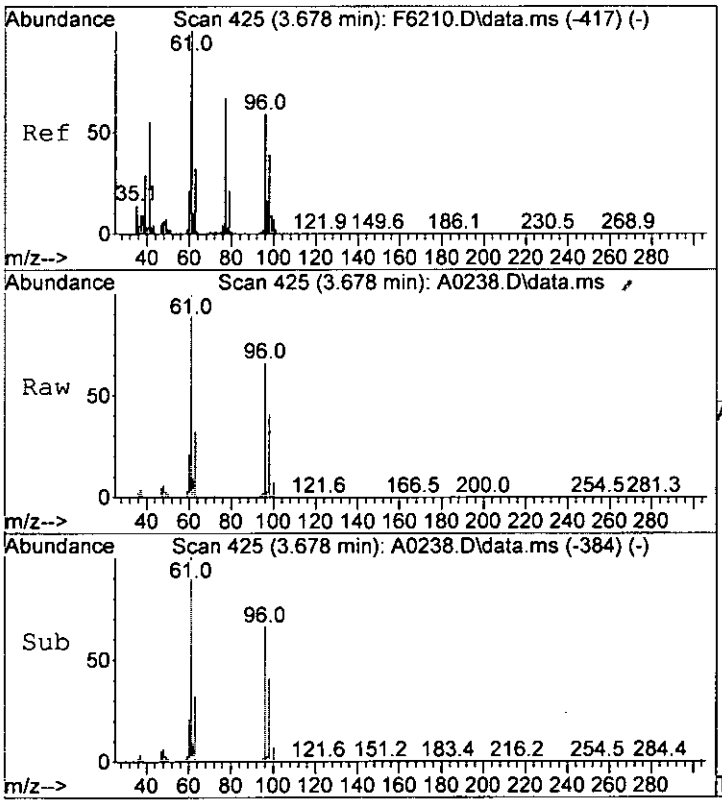


#26
trans-1,2-Dichloroethene
Concen: 0.50 ug/L
RT: 2.678 min Scan# 261
Delta R.T. 0.006 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion: 96 Resp: 3538

Ion	Ratio	Lower	Upper
96	100		
98	68.6	44.0	84.0
61	131.0	124.3	164.3

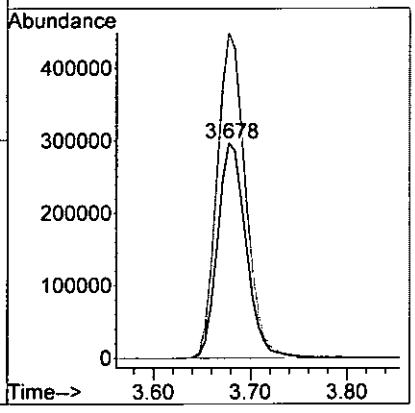


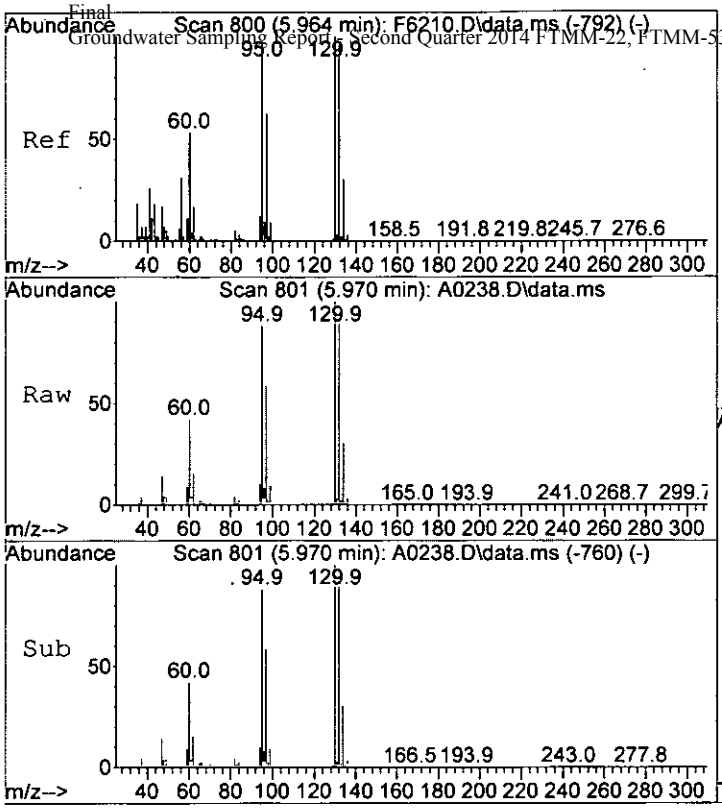


#34
cis-1,2-Dichloroethene
Concen: 75.08 ug/L
RT: 3.678 min Scan# 425
Delta R.T. -0.006 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion: 96 Resp: 601800

Ion	Ratio	Lower	Upper
96	100		
61	151.4	128.3	168.3

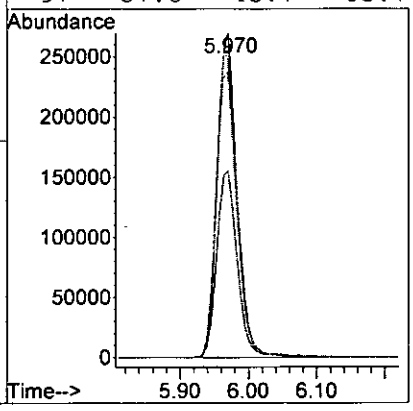


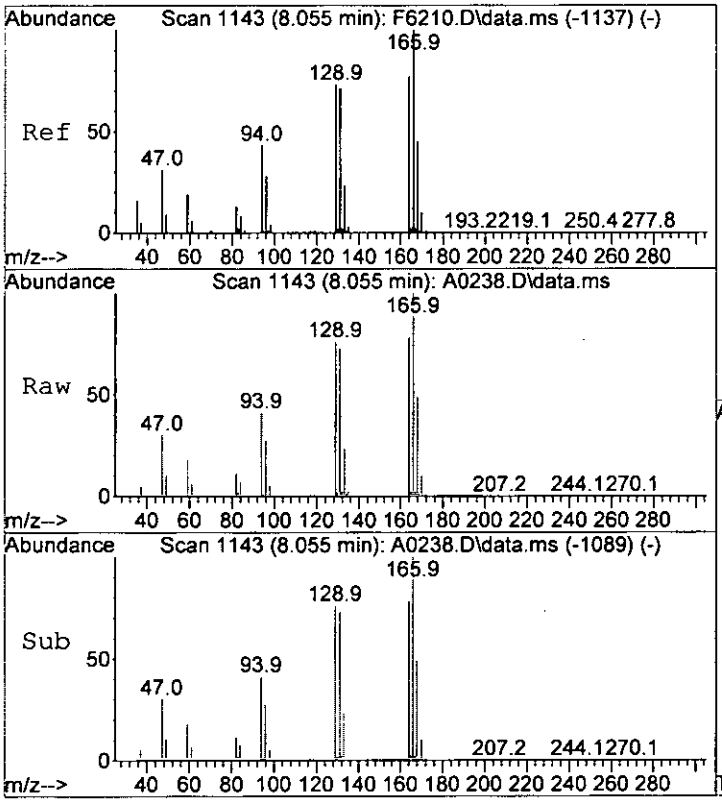


#54
Trichloroethene
Concen: 64.83 ug/L
RT: 5.970 min Scan# 801
Delta R.T. 0.000 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion:130 Resp: 540087

Ion	Ratio	Lower	Upper
130	100		
132	92.0	74.1	114.1
95	88.3	76.9	116.9
97	57.8	43.7	83.7

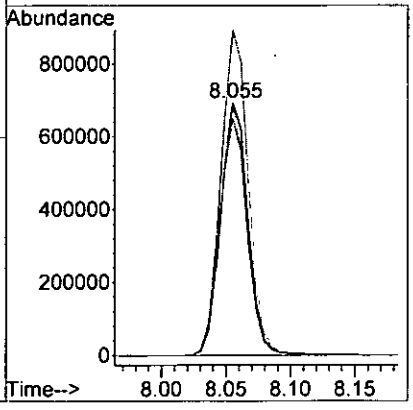




#72
Tetrachloroethene
Concen: 141.57 ug/L
RT: 8.055 min Scan# 1143
Delta R.T. 0.000 min
Lab File: A0238.D
Acq: 10 Jul 2014 6:15 pm

Tgt Ion:164 Resp: 1008998

Ion	Ratio	Lower	Upper
164	100		
166	128.9	106.8	146.8
129	98.3	69.6	109.6
131	93.7	68.5	108.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0238.D
Acq On : 10 Jul 2014 6:15 pm
Operator : F.NAEGLER
Sample : R1405048-009|2.5
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0238.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.361	42	45	48	rBV	130618	90077	1.18%	0.261%
2	3.678	417	425	439	rBV	1383816	2803729	36.67%	8.111%
3	4.324	522	531	538	rBV2	493271	1190239	15.57%	3.443%
4	4.409	538	545	564	rVB	876916	2266038	29.64%	6.556%
5	4.854	610	618	637	rBV2	410611	1115880	14.60%	3.228%
6	5.610	732	742	760	rBV	1244843	2824268	36.94%	8.171%
7	5.970	793	801	823	rBV	1396977	2895147	37.87%	8.376%
8	7.433	1035	1041	1066	rVB	2437395	3836384	50.18%	11.099%
9	8.055	1137	1143	1165	rVB	5271419	7645243	100.00%	22.117%
10	8.841	1267	1272	1290	rBV	2618203	3519034	46.03%	10.180%
11	9.884	1438	1443	1460	rBV	2077738	2745312	35.91%	7.942%
12	10.835	1594	1599	1620	rBV	2942142	3635247	47.55%	10.517%

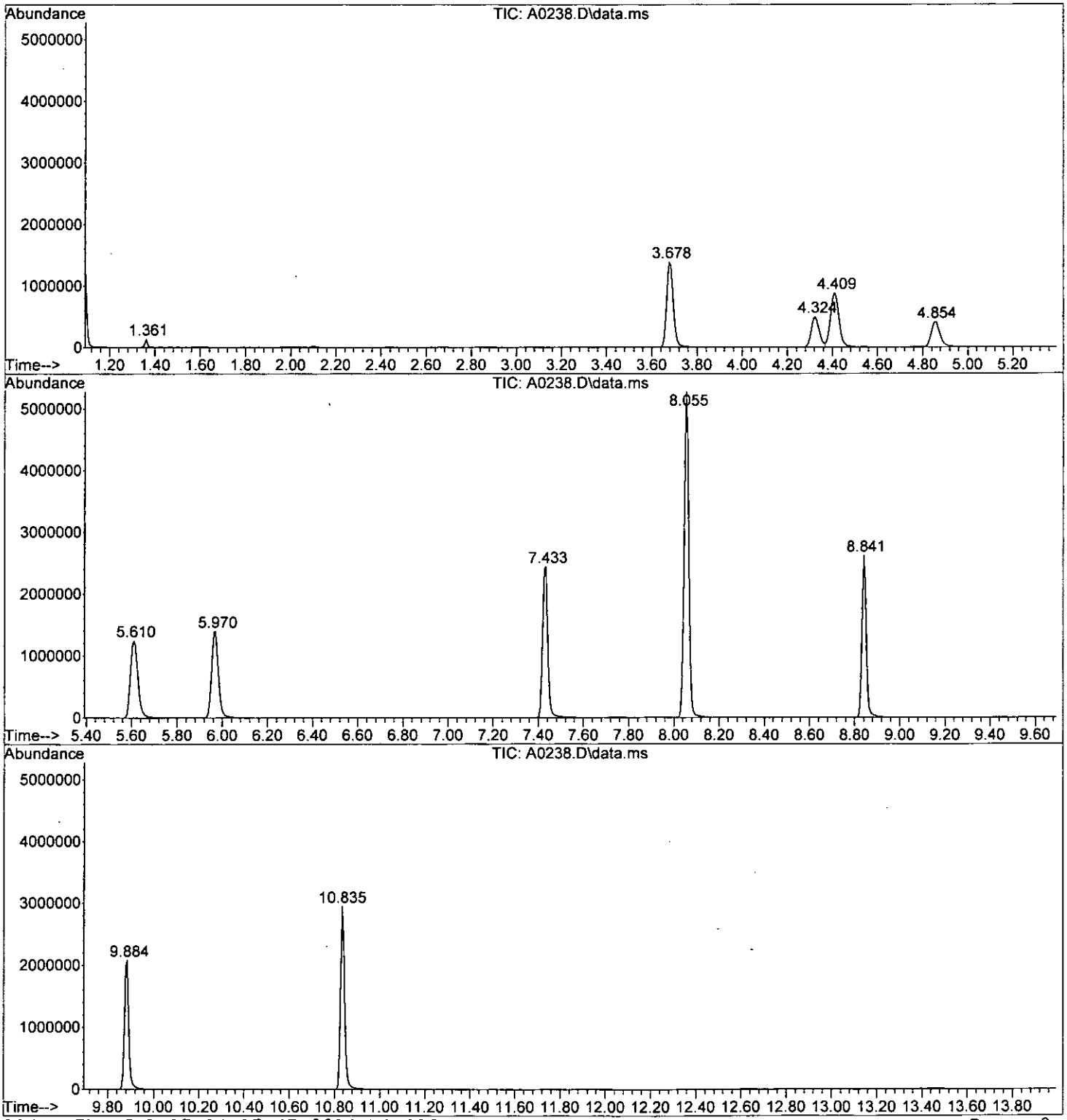
Sum of corrected areas: 34566598

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0238.D
Acq On : 10 Jul 2014 6:15 pm
Operator : F.NAEGLER
Sample : R1405048-009|2.5
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0238.D
Acq On : 10 Jul 2014 6:15 pmm
Operator : F.NAEGLERR
Sample : R1405048-009|2.55
Misc : PARSONS 11603 T44
ALS Vial : 18 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1140
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 18:45

Sample Name: FTMM-68-GW-565MW01D-22.31
Lab Code: R1405048-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0239.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	50	10	2.2	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	50	10	3.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	50	10	2.5	
79-00-5	1,1,2-Trichloroethane	ND	U	50	10	3.5	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	50	10	2.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	50	10	5.7	
563-58-6	1,1-Dichloropropene	ND	U	50	10	2.9	
87-61-6	1,2,3-Trichlorobenzene	ND	U	50	10	8.2	
96-18-4	1,2,3-Trichloropropane	ND	U	50	10	7.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	50	10	2.4	
95-63-6	1,2,4-Trimethylbenzene	ND	U	50	10	2.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	10	7.4	
106-93-4	1,2-Dibromoethane	ND	U	50	10	2.4	
95-50-1	1,2-Dichlorobenzene	ND	U	50	10	2.1	
107-06-2	1,2-Dichloroethane	ND	U	50	10	3.6	
78-87-5	1,2-Dichloropropane	ND	U	50	10	2.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	50	10	2.0	
541-73-1	1,3-Dichlorobenzene	ND	U	50	10	2.0	
142-28-9	1,3-Dichloropropane	ND	U	50	10	2.7	
106-46-7	1,4-Dichlorobenzene	ND	U	50	10	2.0	
594-20-7	2,2-Dichloropropane	ND	U	50	10	2.7	
78-93-3	2-Butanone (MEK)	ND	U	50	10	8.2	
95-49-8	2-Chlorotoluene	ND	U	50	10	2.0	
591-78-6	2-Hexanone	ND	U	50	50	17	
75-65-0	tert-Butyl Alcohol	ND	U	1000	200	110	
106-43-4	4-Chlorotoluene	ND	U	50	10	2.4	
99-87-6	p-Isopropyltoluene	ND	U	50	10	2.0	
108-10-1	4-Methyl-2-pentanone	ND	U	50	10	6.7	
67-64-1	Acetone	ND	U	50	50	13	
71-43-2	Benzene	ND	U	50	10	2.0	
108-86-1	Bromobenzene	ND	U	50	10	2.9	
74-97-5	Bromochloromethane	ND	U	50	10	3.2	
75-27-4	Bromodichloromethane	ND	U	50	10	3.2	
75-25-2	Bromoform	ND	U	50	10	4.2	
74-83-9	Bromomethane	ND	U	50	10	2.9	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1140
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1405048-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	50	10	4.5	
108-90-7	Chlorobenzene	ND	U	50	10	2.9	
75-00-3	Chloroethane	ND	U	50	10	2.4	
67-66-3	Chloroform	ND	U	50	10	2.5	
74-87-3	Chloromethane	ND	U	50	10	2.1	
124-48-1	Dibromochloromethane	ND	U	50	10	3.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	50	10	4.7	
75-09-2	Methylene Chloride	ND	U	50	10	3.2	
100-41-4	Ethylbenzene	ND	U	50	10	2.0	
87-68-3	Hexachlorobutadiene	ND	U	50	10	6.2	
98-82-8	Isopropylbenzene (Cumene)	ND	U	50	10	2.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	50	10	2.9	
91-20-3	Naphthalene	ND	U	50	10	2.0	
100-42-5	Styrene	ND	U	50	10	2.0	
127-18-4	Tetrachloroethene (PCE)	**1800**		50	10	3.0	
108-88-3	Toluene	ND	U	50	10	2.0	
79-01-6	Trichloroethene (TCE)	**42**	J	50	10	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	50	10	2.0	
75-01-4	Vinyl Chloride	ND	U	50	10	3.2	
156-59-2	cis-1,2-Dichloroethene	**34**	J	50	10	3.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	50	10	2.4	
179601-23-1	m,p-Xylenes	ND	U	100	20	3.4	
104-51-8	n-Butylbenzene	ND	U	50	10	2.1	
103-65-1	n-Propylbenzene	ND	U	50	10	2.0	
95-47-6	o-Xylene	ND	U	50	10	2.0	
135-98-8	sec-Butylbenzene	ND	U	50	10	2.7	
98-06-6	tert-Butylbenzene	ND	U	50	10	2.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	50	10	3.4	
10061-02-6	trans-1,3-Dichloropropene	ND	U	50	10	2.0	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1140
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 18:45
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1405048-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0239.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 18:45	
Dibromofluoromethane	104	85-115	7/10/14 18:45	
Toluene-d8	98	85-120	7/10/14 18:45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1845

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1405048-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-010|10.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0239.D Vial: 19
Acq On : 10 Jul 2014 6:45 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 18:59:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	832148	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1218822	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1124885	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	572687	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	377517	51.95	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.90%			
48) surr1,1,2-dichloroetha...	4.854	65	391401	53.67	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.34%			
65) SURR3,Toluene-d8	7.427	98	1378606	49.21	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.42%			
70) SURR2,BFB	9.878	95	548925	49.59	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.18%			
Target Compounds						Qvalue
5) Bromomethane	1.556	94	327	Below Cal	#	50
15) Acetone	2.123	43	1113	0.59	ug/L	75
16) 2-Propanol	2.196	45	563	1.73	ug/L	99
19) Acetonitrile	2.331	40	578	2.29	ug/L #	1
20) Allyl Chloride	2.282	76	997	0.25	ug/L #	1
22) Methylene Chloride	2.446	84	1101	Below Cal	#	77
34) cis-1,2-Dichloroethene	3.684	96	26785	3.35	ug/L	98
54) Trichloroethene	5.976	130	35657	4.22	ug/L	94
72) Tetrachloroethene	8.055	164	1265510	181.19	ug/L	96
89) Cyclohexanone	9.878	55	1990	2.26	ug/L #	13

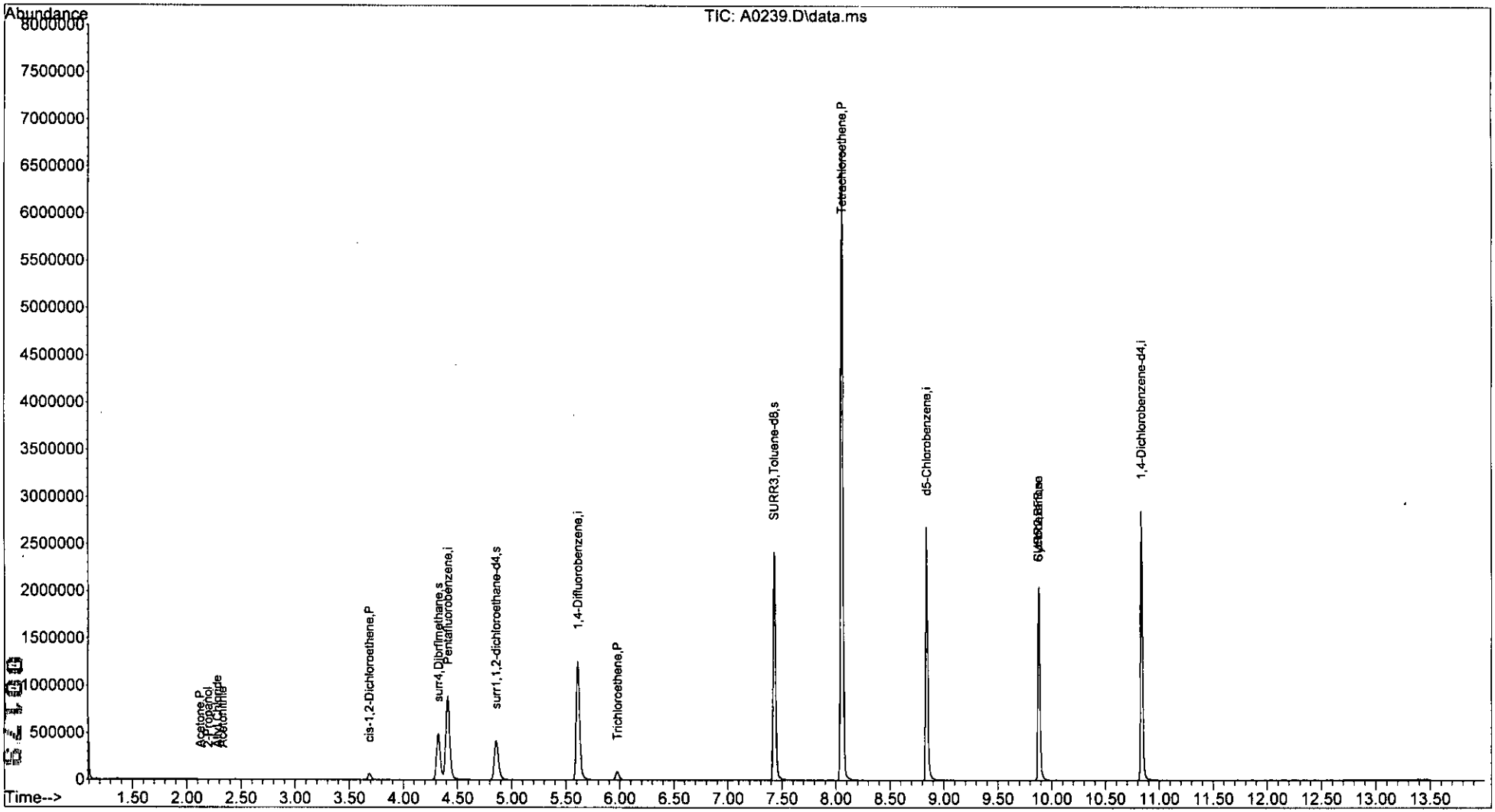
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FU
7/17/14

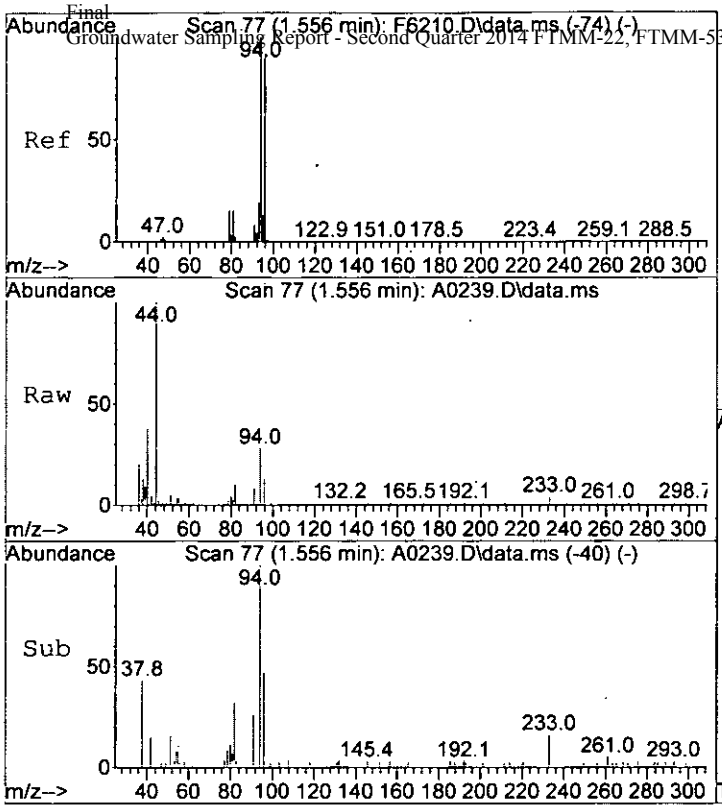
Quantitation Report (Not Reviewed)

Sample : RI405048-010|10.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0239.D Vial: 19
Acq On : 10 Jul 2014 6:45 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 18:59:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



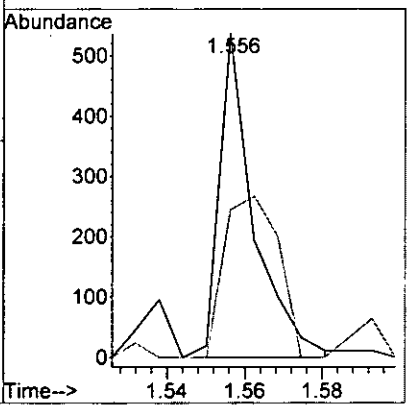
W061114.M Thu Jul 10 18:59:04 2014 MSVO10 Page: 2

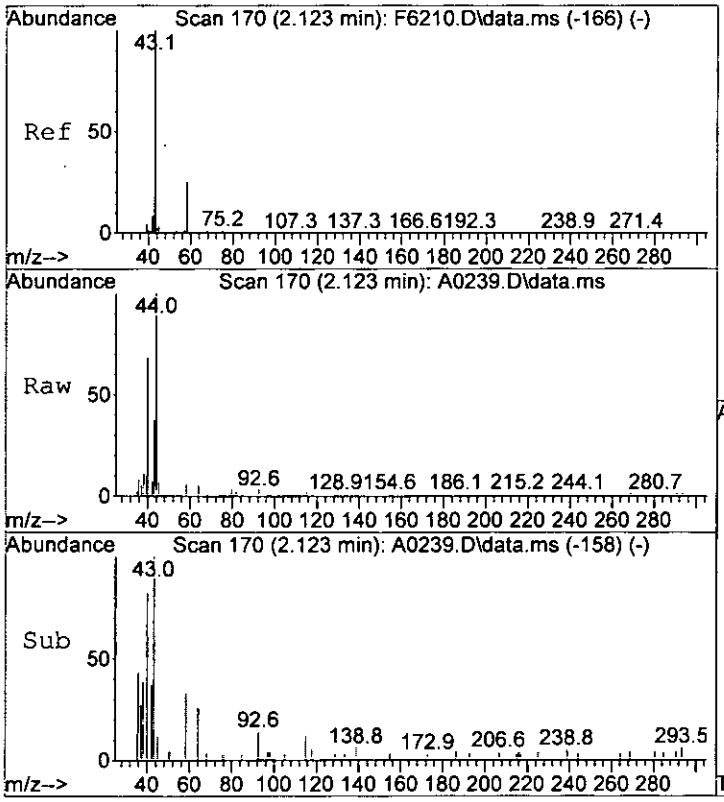


#5
Bromomethane
Concen: Below Cal
RT: 1.556 min Scan# 77
Delta R.T. 0.000 min
Lab File: A0239.D
Acq: 10 Jul 2014 6:45 pm

Tgt Ion: 94 Resp: 327

Ion	Ratio	Lower	Upper
94	100		
96	45.5	74.0	114.0#

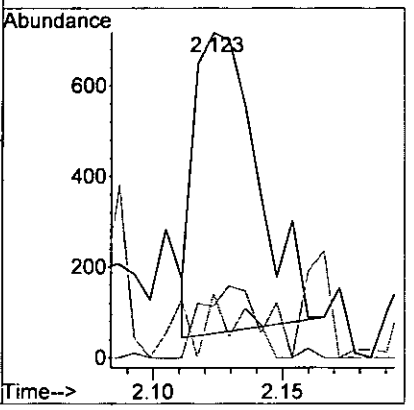


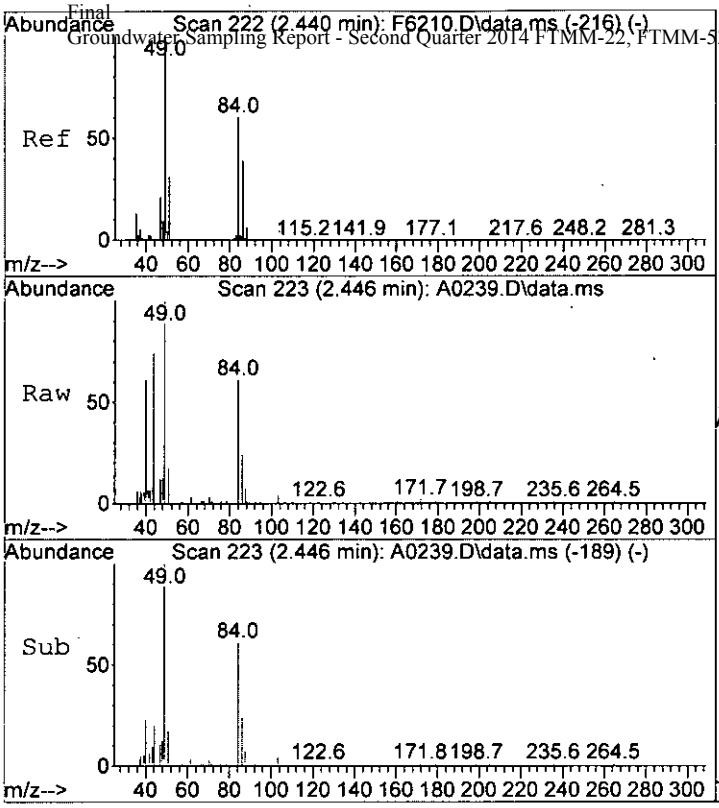


#15
Acetone
Concen: 0.59 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A0239.D
Acq: 10 Jul 2014 6:45 pm

Tgt Ion: 43 Resp: 1113

Ion	Ratio	Lower	Upper
43	100		
58	15.8	7.2	47.2
42	19.8	0.0	27.0

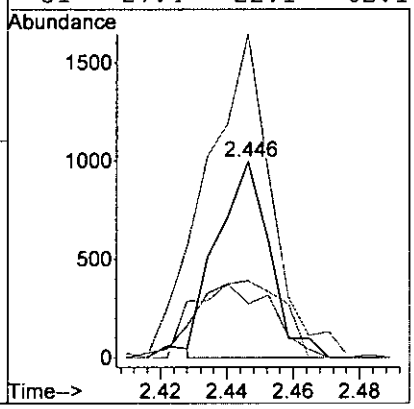


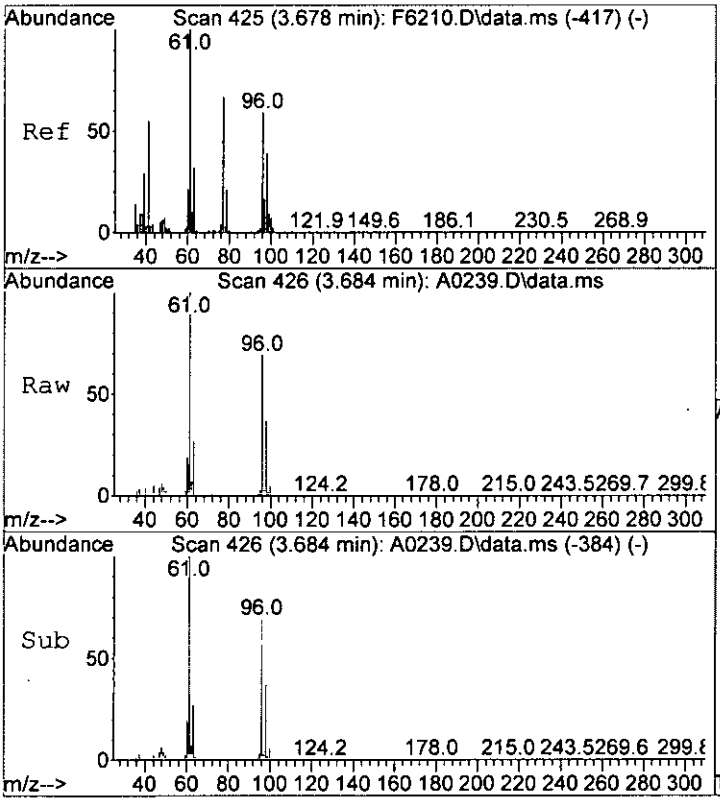


#22
Methylene Chloride
Concen: Below Cal
RT: 2.446 min Scan# 223
Delta R.T. 0.006 min
Lab File: A0239.D
Acq: 10 Jul 2014 6:45 pm

Tgt Ion: 84 Resp: 1101

Ion	Ratio	Lower	Upper
84	100		
86	39.1	44.5	84.5#
49	165.1	123.0	163.0#
51	27.4	22.1	62.1

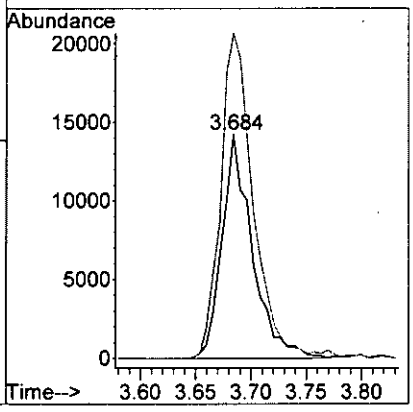


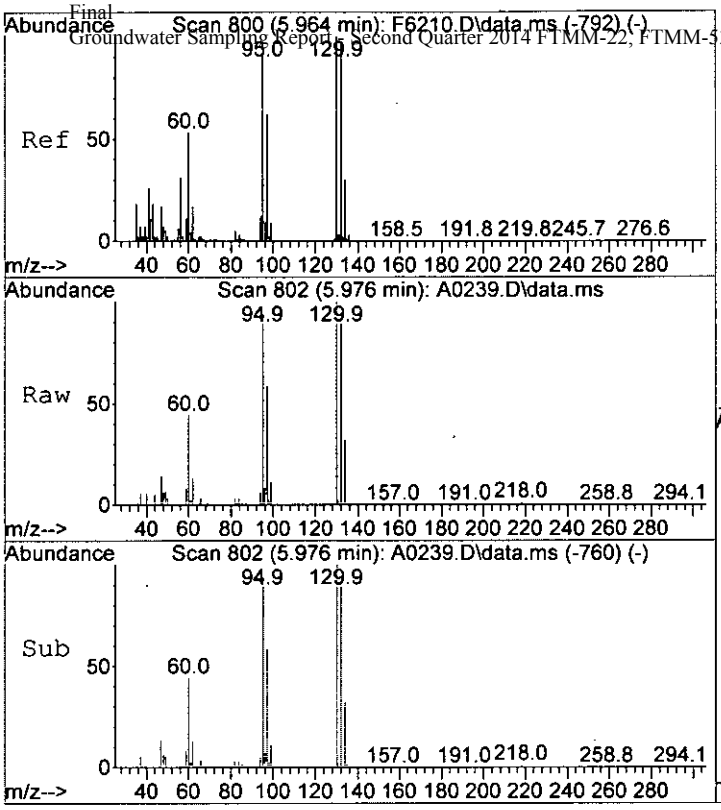


#34
cis-1,2-Dichloroethene
Concen: 3.35 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.000 min
Lab File: A0239.D
Acq: 10 Jul 2014 6:45 pm

Tgt Ion: 96 Resp: 26785

Ion	Ratio	Lower	Upper
96	100		
61	145.6	128.3	168.3

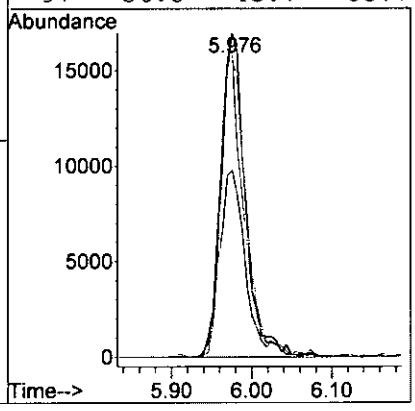


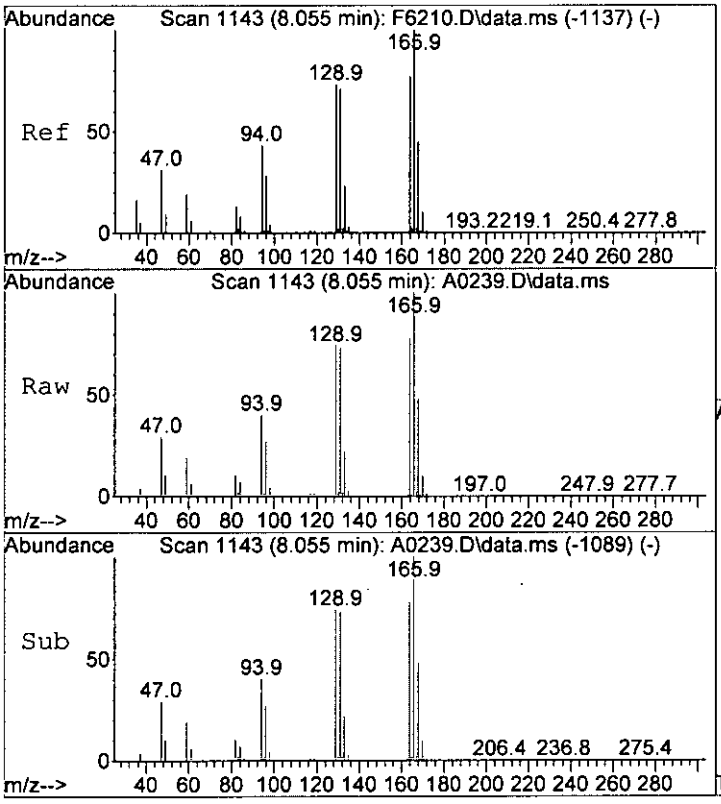


#54
Trichloroethene
Concen: 4.22 ug/L
RT: 5.976 min Scan# 802
Delta R.T. 0.006 min
Lab File: A0239.D
Acq: 10 Jul 2014 6:45 pm

Tgt Ion:130 Resp: 35657

Ion	Ratio	Lower	Upper
130	100		
132	89.1	74.1	114.1
95	92.2	76.9	116.9
97	56.3	43.7	83.7

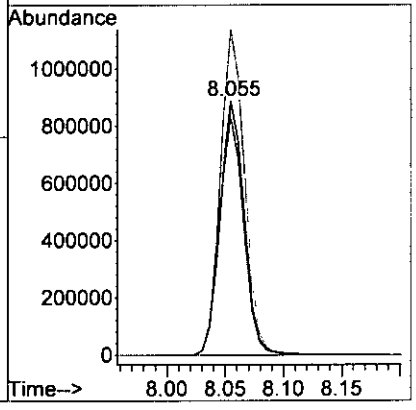




#72
Tetrachloroethene
Concen: 181.19 ug/L
RT: 8.055 min Scan# 1143
Delta R.T. 0.000 min
Lab File: A0239.D
Acq: 10 Jul 2014 6:45 pm

Tgt Ion:164 Resp: 1265510

Ion	Ratio	Lower	Upper
164	100		
166	128.1	106.8	146.8
129	95.3	69.6	109.6
131	93.0	68.5	108.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0239.D
Acq On : 10 Jul 2014 6:45 pm
Operator : F.NAEGLER
Sample : R1405048-010|10.0
Misc : PARSONS 11603 T4
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0239.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.684	420	426	437	rBV2	61824	128812	1.35%	0.417%
2	4.324	522	531	538	rBV2	489414	1190204	12.43%	3.848%
3	4.409	538	545	567	rVB	886020	2288777	23.90%	7.401%
4	4.854	609	618	632	rBV	416776	1106524	11.56%	3.578%
5	5.610	734	742	758	rBV	1261023	2826182	29.52%	9.138%
6	5.976	795	802	814	rBV2	88667	190111	1.99%	0.615%
7	7.427	1035	1040	1060	rBV	2423358	3825840	39.96%	12.371%
8	8.055	1137	1143	1163	rVB	6670652	9574930	100.00%	30.960%
9	8.841	1267	1272	1289	rBV	2688764	3483072	36.38%	11.262%
10	9.884	1438	1443	1454	rBV	2054408	2755010	28.77%	8.908%
11	10.835	1594	1599	1611	rBV	2863644	3557202	37.15%	11.502%

Sum of corrected areas: 30926664

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0239.D
Acq On    : 10 Jul 2014    6:45 pm
Operator  : F.NAEGLER
Sample    : R1405048-010|10.0
Misc      : PARSONS 11603 T4
ALS Vial  : 19   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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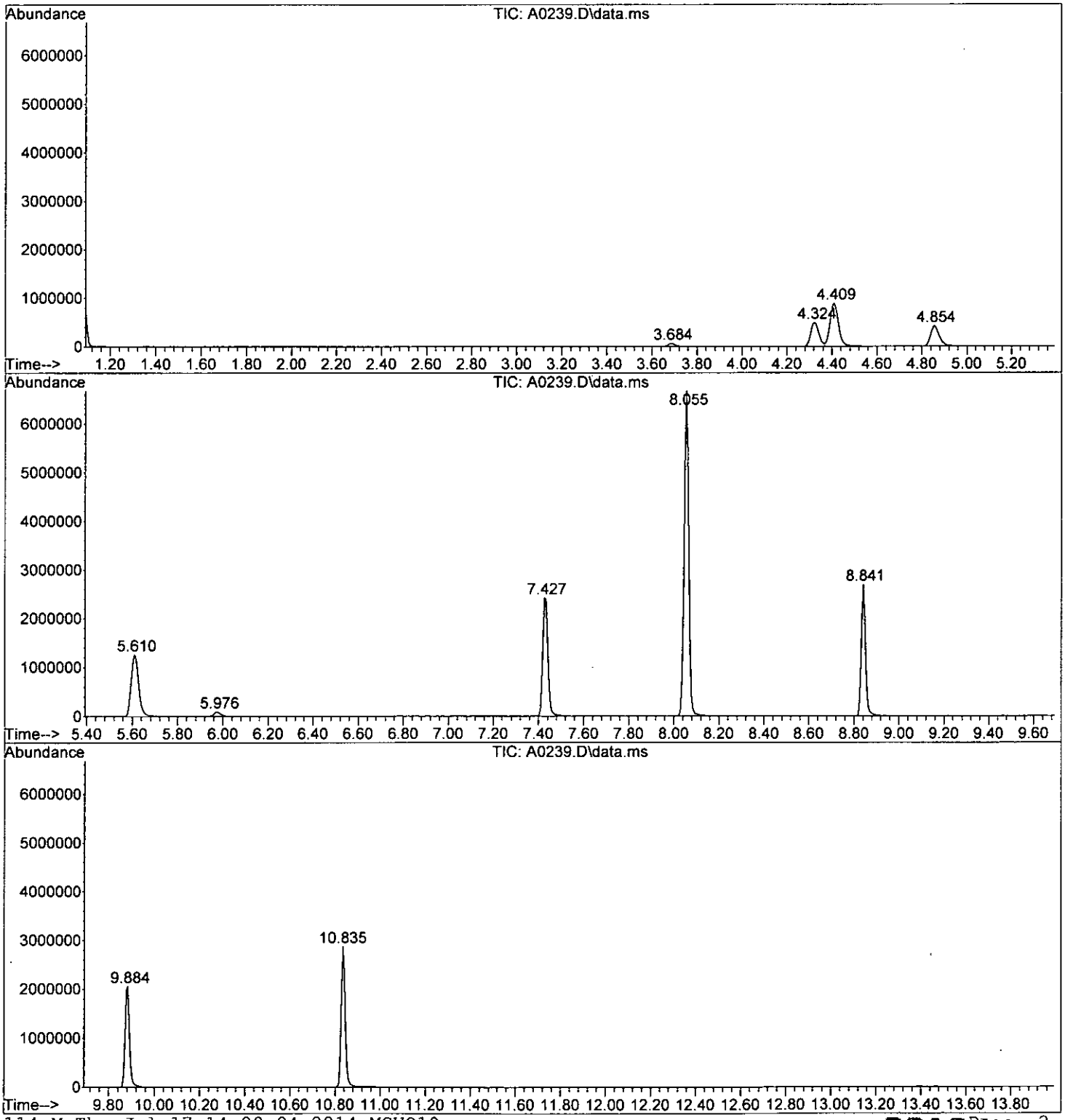


W061114.M Thu Jul 17 14:20:04 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0239.D
Acq On : 10 Jul 2014 6:45 pmm
Operator : F.NAEGLERR
Sample : R1405048-010|10.0
Misc : PARSONS 11603 T44
ALS Vial : 19 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 0800
Date Received: 7/ 2/14
Date Analyzed: 7/10/14 12:13

Sample Name: FTMM-TB-070114
Lab Code: R1405048-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0226.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 12:13
Sample Name:	FTMM-TB-070114	**Units:**	µg/L
Lab Code:	R1405048-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0226.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 2/14
		Date Analyzed:	7/10/14 12:13
Sample Name:	FTMM-TB-070114	**Units:**	µg/L
Lab Code:	R1405048-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0226.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/10/14 12:13	
Dibromofluoromethane	105	85-115	7/10/14 12:13	
Toluene-d8	98	85-120	7/10/14 12:13	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/1/14
Sample Matrix:	Water	**Date Received:**	7/2/14
		Date Analyzed:	7/10/14 1213

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-070114	**Units:**	µg/L
Lab Code:	R1405048-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-011|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0226.D Vial: 6
Acq On : 10 Jul 2014 12:13 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 12:26:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	868727	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1248656	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1161528	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	568360	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	390020	52.39	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.78%			
48) surr1,1,2-dichloroetha...	4.854	65	394095	52.74	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 105.48%			
65) SURR3,Toluene-d8	7.427	98	1401522	48.84	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.68%			
70) SURR2,BFB	9.884	95	557554	49.17	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.34%			
Target Compounds						Qvalue
15) Acetone	2.123	43	1080	0.55	ug/L #	55
16) 2-Propanol	~~2.135~~	~~45~~	~~303~~	~~0.89~~	~~ug/L #~~	~~1~~
19) Acetonitrile	~~2.288~~	~~40~~	~~684~~	~~2.60~~	~~ug/L #~~	~~1~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~2859~~	~~0.68~~	~~ug/L #~~	~~1~~
89) Cyclohexanone	~~9.878~~	~~55~~	~~1943~~	~~2.14~~	~~ug/L #~~	~~14~~
112) Trielution Dichlorotol...	11.853	125	2768	0.21	ug/L	85
119) 2,4,5-Trichlorotoluene	12.963	159	1168	0.35	ug/L	87
120) 2,3,6-Trichlorotoluene	12.963	159	1168	0.36	ug/L	84

NT (DEL)

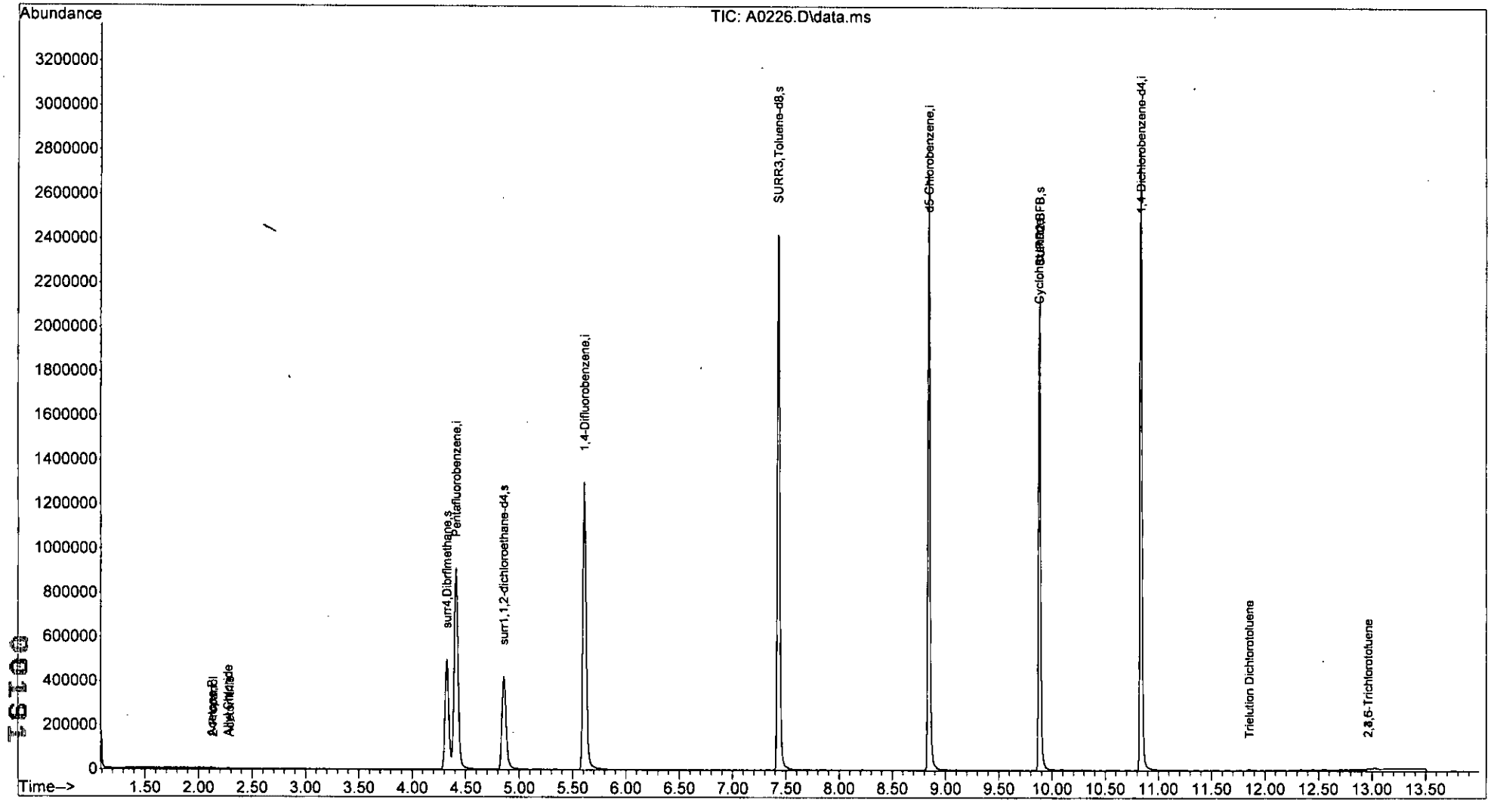
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
7/17/14

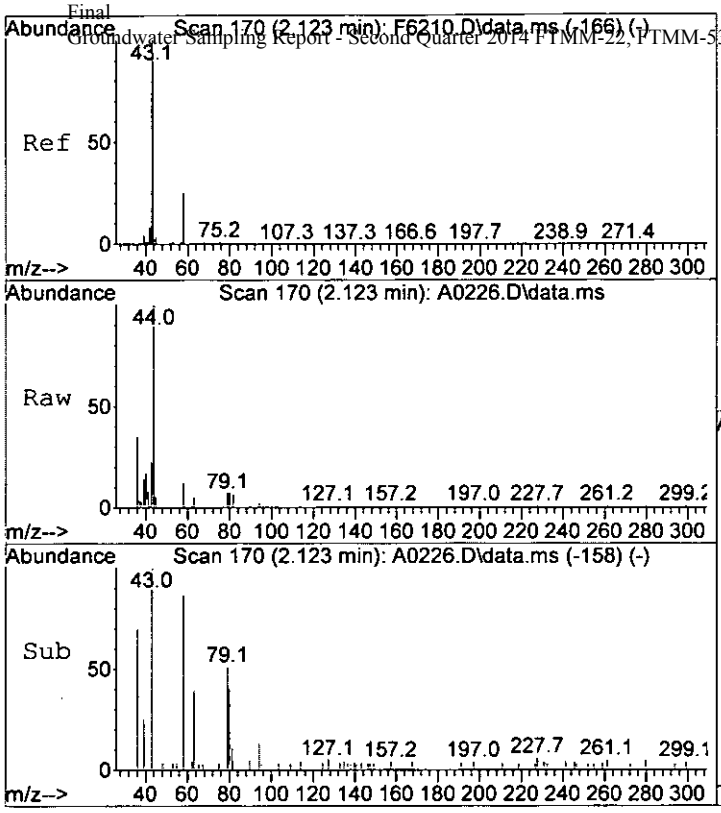
Quantitation Report (Not Reviewed)

Sample : R1405048-011|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0226.D Vial: 6
Acq On : 10 Jul 2014 12:13 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 12:26:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



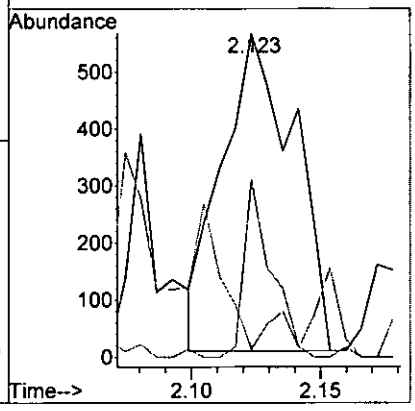
W061114.M Thu Jul 10 12:26:15 2014 MSVO10 Page: 2



#15
Acetone
Concen: 0.55 ug/L
RT: 2.123 min Scan# 170
Delta R.T. -0.000 min
Lab File: A0226.D
Acq: 10 Jul 2014 12:13 pm

Tgt Ion: 43 Resp: 1080

Ion	Ratio	Lower	Upper
43	100		
58	54.9	7.2	47.2#
42	2.5	0.0	27.0



A0226.D W061114.M Thu Jul 17 10:21:16 2014 MSVO10 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0226.D
Acq On : 10 Jul 2014 12:13 pm
Operator : F.NAEGLER
Sample : R1405048-011|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0226.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	520	531	538	rBV	496712	1217634	31.33%	5.702%
2	4.409	538	545	561	rVB	907293	2324048	59.80%	10.883%
3	4.854	610	618	638	rBV	419946	1121641	28.86%	5.252%
4	5.610	734	742	766	rBV	1300658	2895942	74.52%	13.561%
5	7.427	1035	1040	1059	rBV	2421664	3886251	100.00%	18.198%
6	8.841	1267	1272	1289	rBV	2698261	3589145	92.35%	16.807%
7	9.884	1438	1443	1458	rBV	2142171	2783726	71.63%	13.035%
8	10.835	1594	1599	1625	rBV	2802595	3536595	91.00%	16.561%

Sum of corrected areas: 21354982

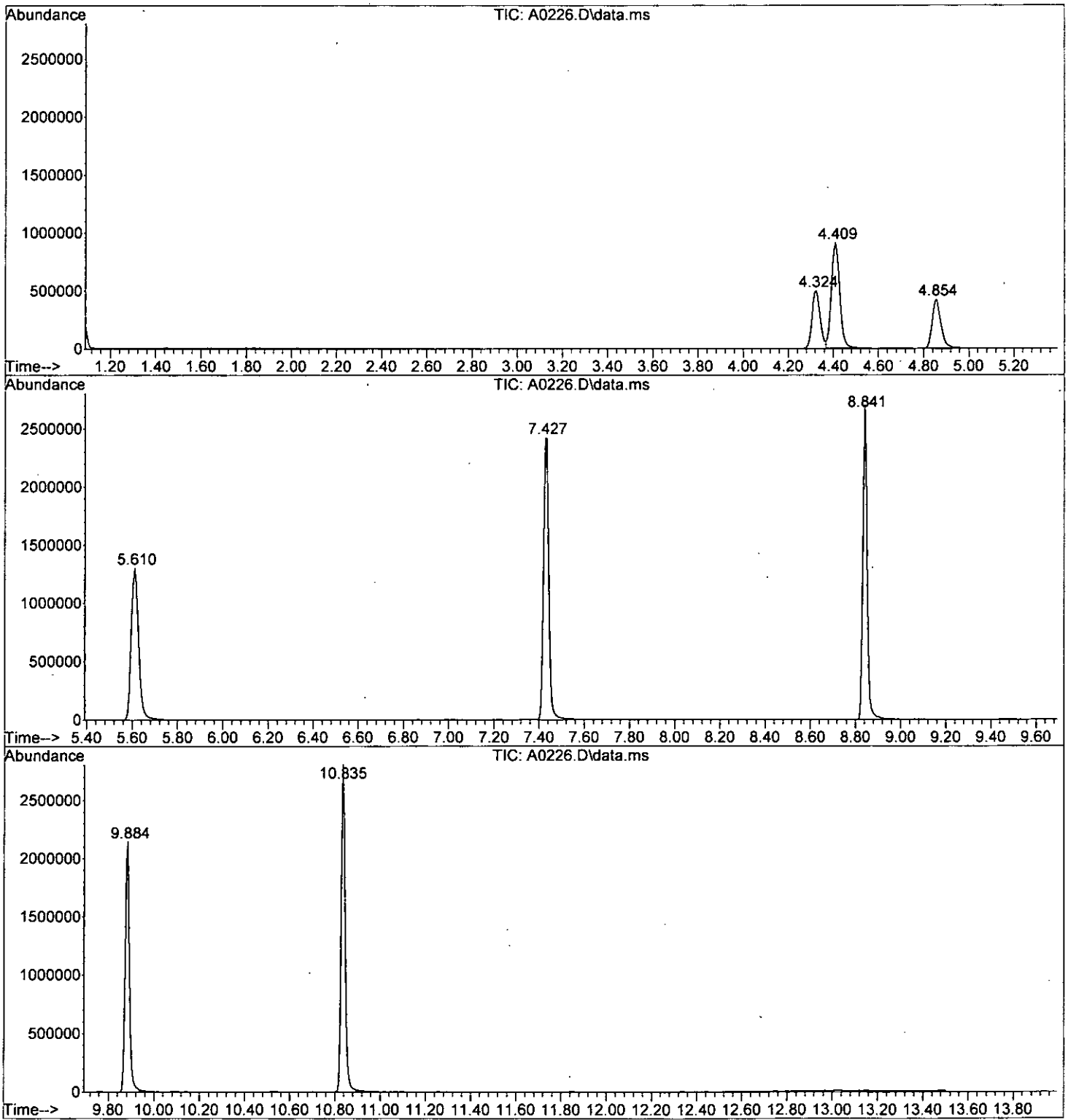
W061114.M Thu Jul 17 10:21:21 2014 MSVO10 Page: 1

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0226.D
Acq On    : 10 Jul 2014  12:13 pm
Operator  : F.NAEGLER
Sample    : R1405048-011|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W061114.M Thu Jul 17 10:21:23 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0226.D
Acq On : 10 Jul 2014 12:13 pmm
Operator : F.NAEGLERR
Sample : R1405048-011|1.0
Misc : PARSONS 11603 T44
ALS Vial : 6 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 1/14 1300
Date Received: 7/ 3/14
Date Analyzed: 7/15/14 13:05

Sample Name: FTMM-EB-070114
Lab Code: R1405048-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071514\A0367.D\

Analysis Lot: 401710
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	7.0		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1300
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:05
Sample Name:	FTMM-EB-070114	**Units:**	µg/L
Lab Code:	R1405048-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0367.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.65**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.22**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 1/14 1300
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:05
Sample Name:	FTMM-EB-070114	**Units:**	µg/L
Lab Code:	R1405048-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0367.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	7/15/14 13:05	
Dibromofluoromethane	107	85-115	7/15/14 13:05	
Toluene-d8	97	85-120	7/15/14 13:05	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/1/14
Date Received: 7/3/14
Date Analyzed: 7/15/14 1305

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-EB-070114
Lab Code: R1405048-012

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-012|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0367.D Vial: 6
Acq On : 15 Jul 2014 1:05 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:18:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	850198	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1241882	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1113023	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	560716	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	394892	53.33	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 106.66%			
48) surr1,1,2-dichloroetha...	4.854	65	410818	55.28	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 110.56%			
65) SURR3,Toluene-d8	7.427	98	1388717	48.65	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.30%			
70) SURR2,BFB	9.878	95	539498	47.83	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.66%			
Target Compounds						Qvalue
15) Acetone	2.123	43	13406	6.99	ug/L	88
16) 2-Propanol	~~2.215~~	~~45~~	~~167~~	~~0.50~~	~~ug/L~~	~~92~~
19) Acetonitrile	~~2.306~~	~~40~~	~~621~~	~~2.41~~	~~ug/L #~~	~~1~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~1821~~	~~0.44~~	~~ug/L #~~	~~1~~
22) Methylene Chloride	2.440	84	1352	Below Cal	#	74
23) TBA	2.513 ~~2.501~~	59	2307 ~~672~~	4.41 ~~1.28~~	ug/L	72 FJ 7/16/14
40) Chloroform	4.099	83	8570	0.65	ug/L	92
66) Toluene	7.506	91	7561	0.22	ug/L	79
89) Cyclohexanone	~~9.847~~	~~55~~	~~478~~	~~0.55~~	~~ug/L #~~	~~56~~
119) 2,4,5-Trichlorotoluene	12.969	159	1208	0.37	ug/L	83 > NT (DEB)
120) 2,3,6-Trichlorotoluene	12.969	159	1208	0.37	ug/L	83

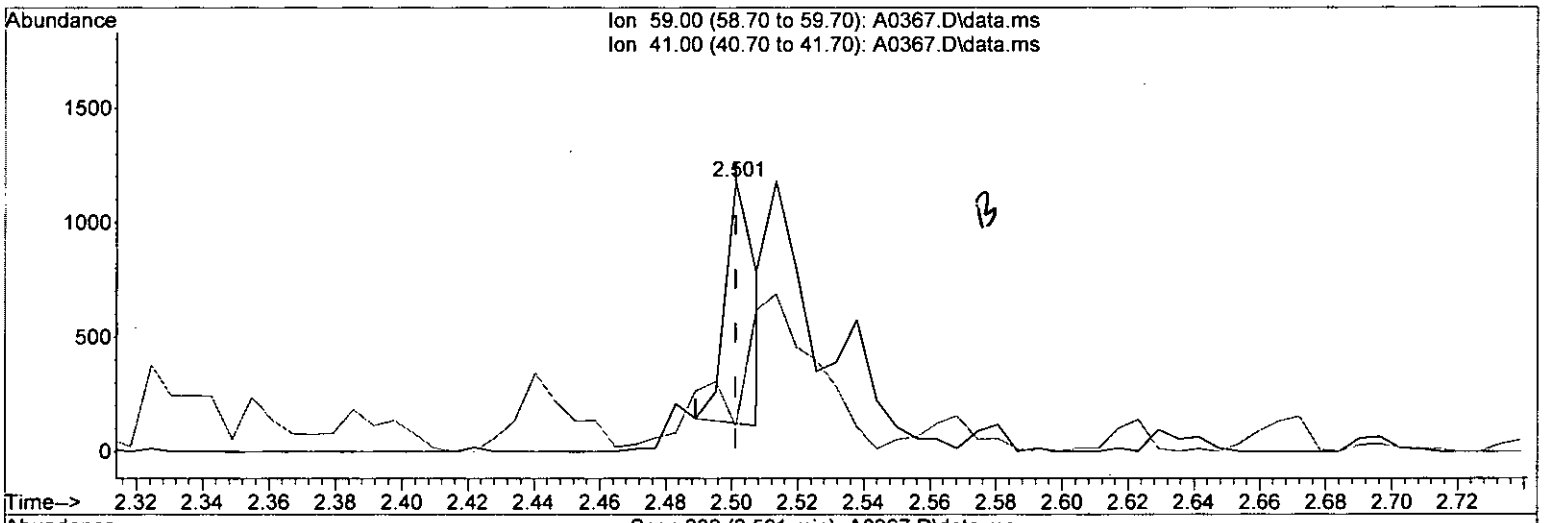
(#) = qualifier out of range (m) = manual integration (+) = signals summed

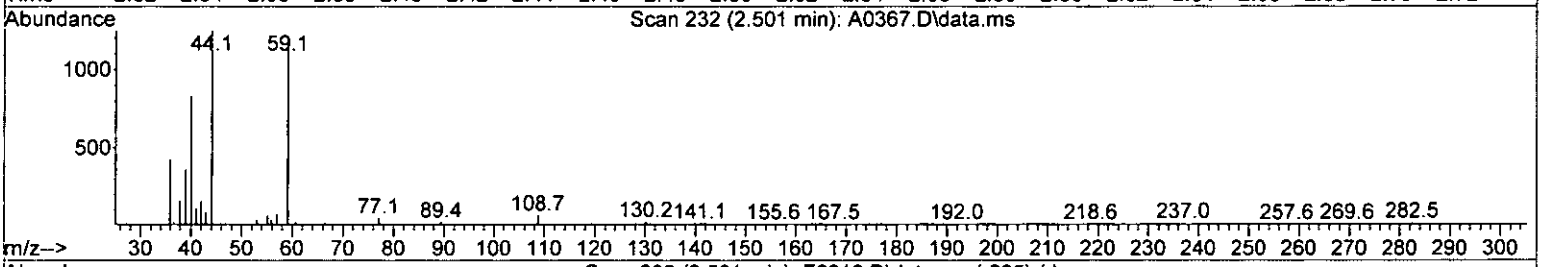
FJ
7/16/14

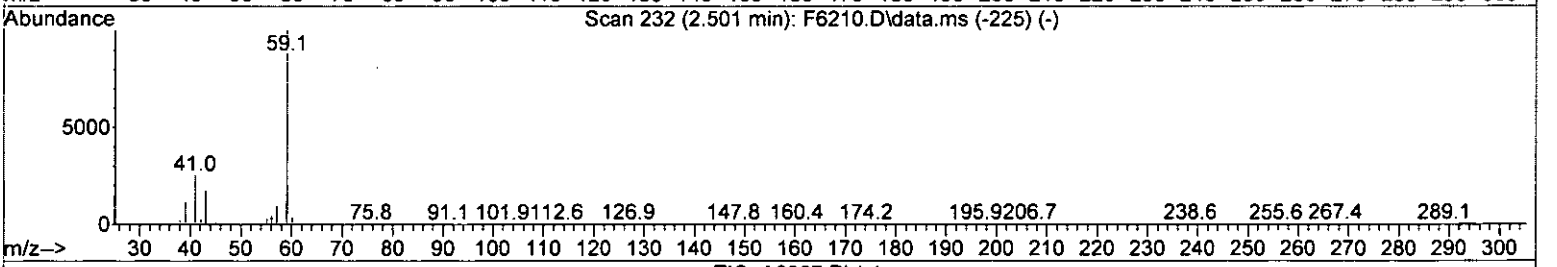
Quantitation Report (Qedit)

Sample : R1405048-012|1.0
Data File : I:\ACQUDATA\msvoa10\data\071514\A0367.D Vial: 6
Acq On : 15 Jul 2014 1:05 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:18:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0367.D\data.ms

(23) TBA

2.501min (+0.000) 1.28 ug/L

response 672

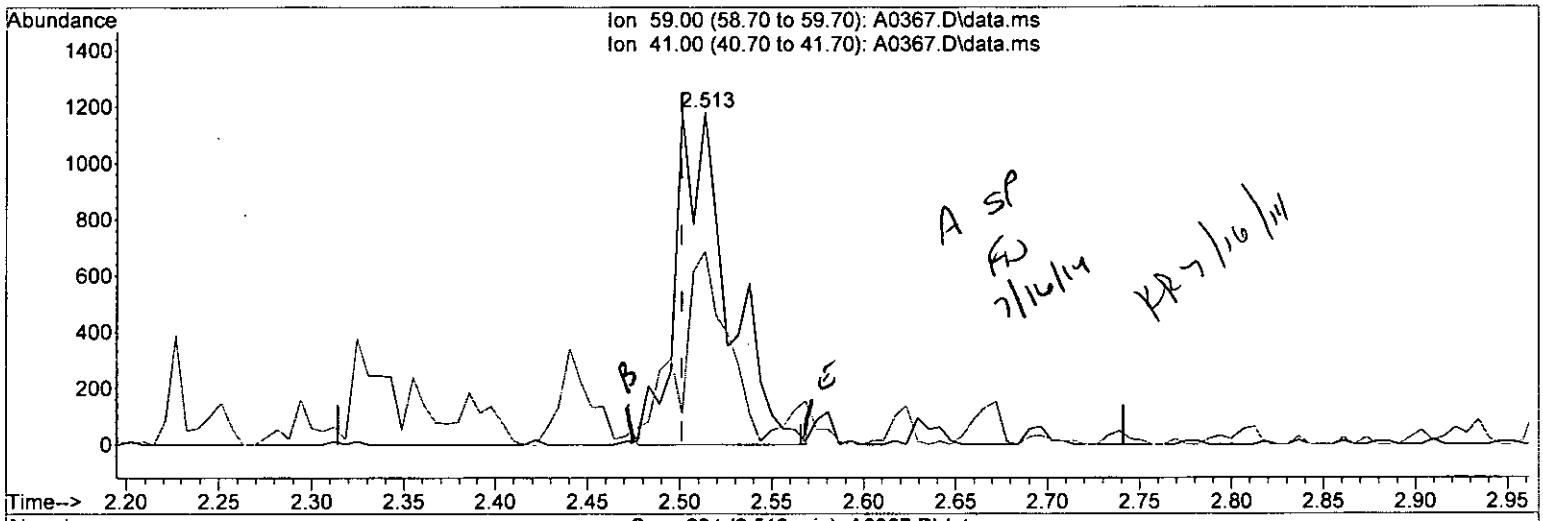
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	9.33
0.00	0.00	0.00
0.00	0.00	0.00

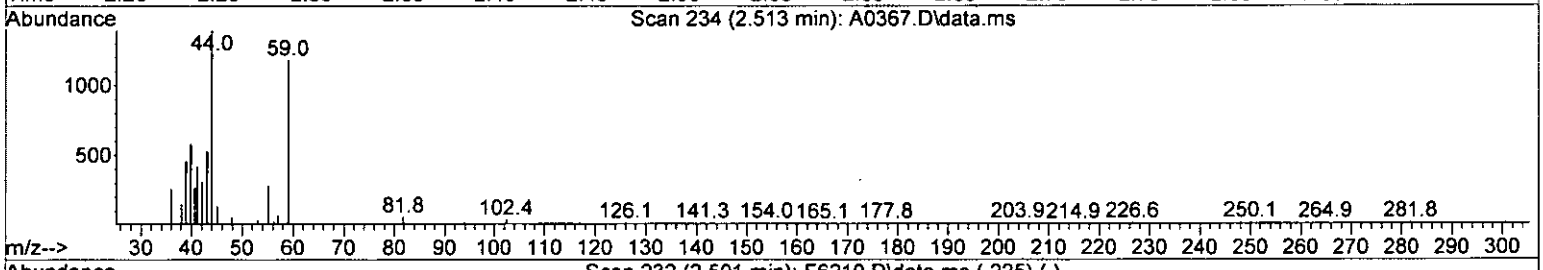
W061114.M Wed Jul 16 13:13:13 2014 MSVO10 Page: 1

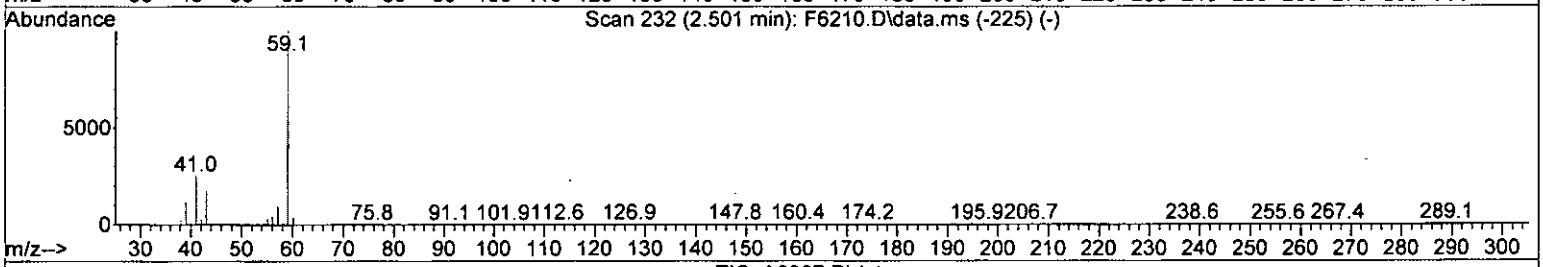
Quantitation Report (Qedit)

Sample : R1405048-012|1.0
Data File : I:\ACQUDATA\msvoa10\data\071514\A0367.D Vial: 6
Acq On : 15 Jul 2014 1:05 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:18:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0367.D\data.ms

(23) TBA

2.513min (+0.012) 4.41 ug/L m

response 2307

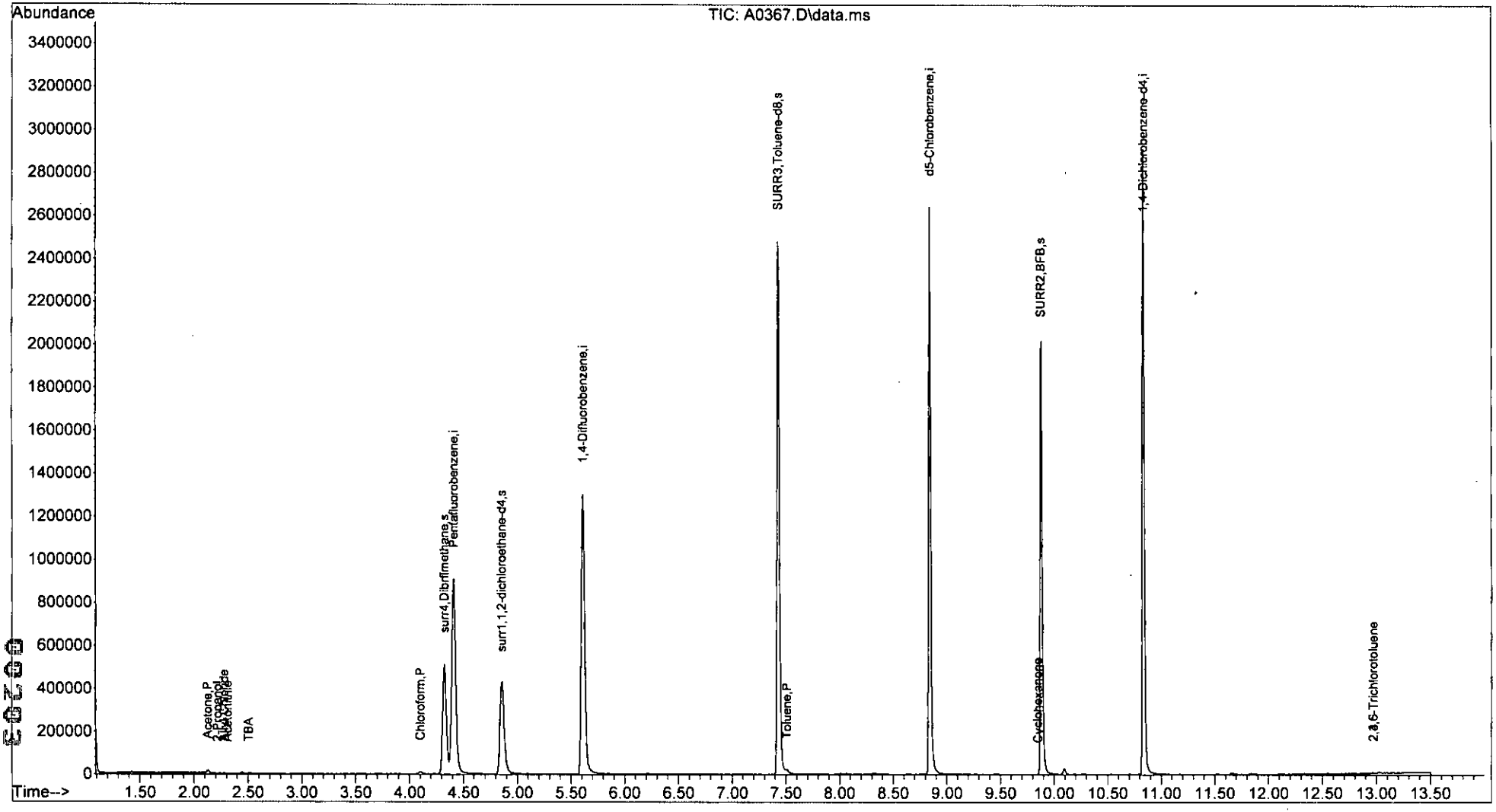
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	35.34
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Wed Jul 16 13:13:26 2014 MSVO10 Page: 1

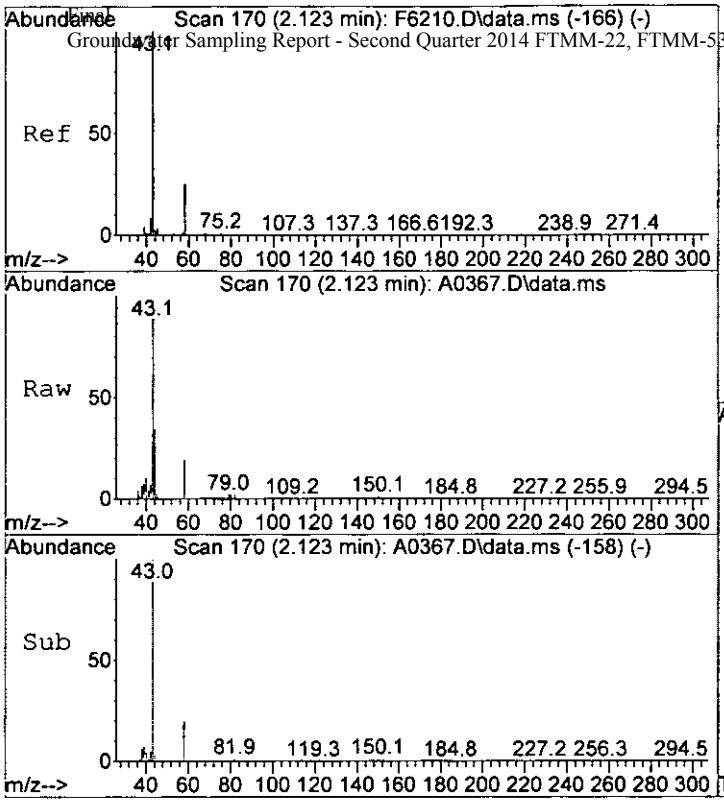
Quantitation Report (Not Reviewed)

Sample : R1405048-012|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0367.D Vial: 6
Acq On : 15 Jul 2014 1:05 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:18:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



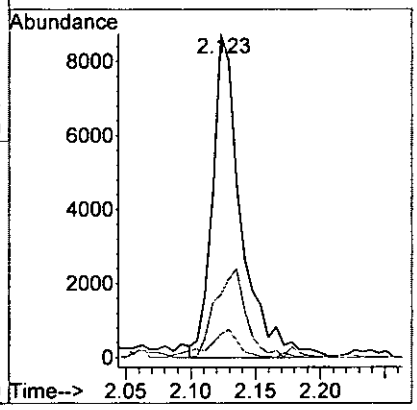
W061114.M Tue Jul 15 13:18:30 2014 MSVO10

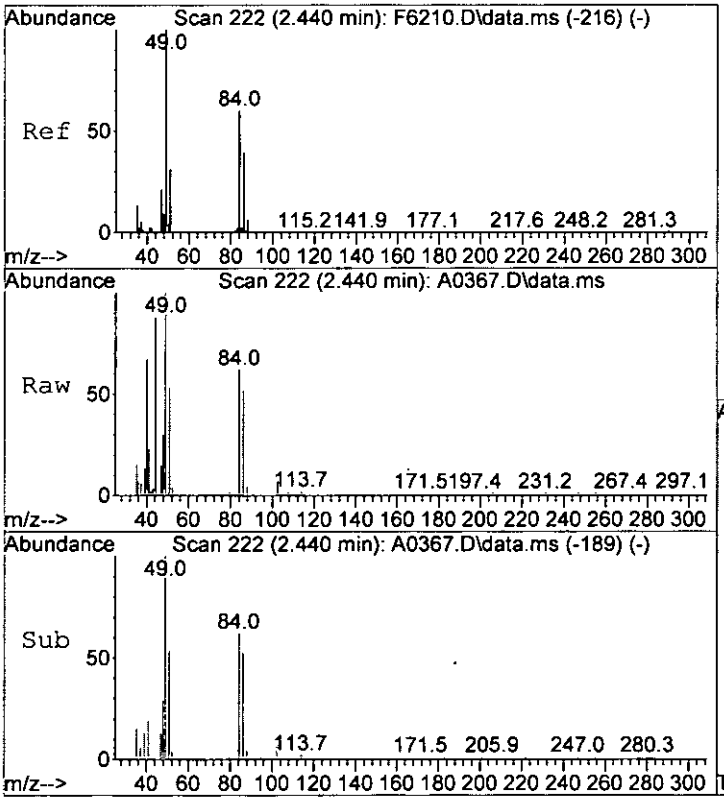


#15
Acetone
Concen: 6.99 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A0367.D
Acq: 15 Jul 2014 1:05 pm

Tgt Ion: 43 Resp: 13406

Ion	Ratio	Lower	Upper
43	100		
58	19.3	7.2	47.2
42	7.1	0.0	27.0

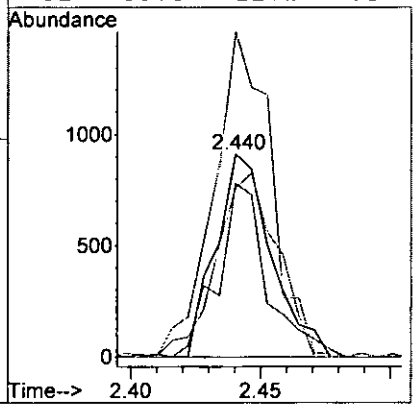


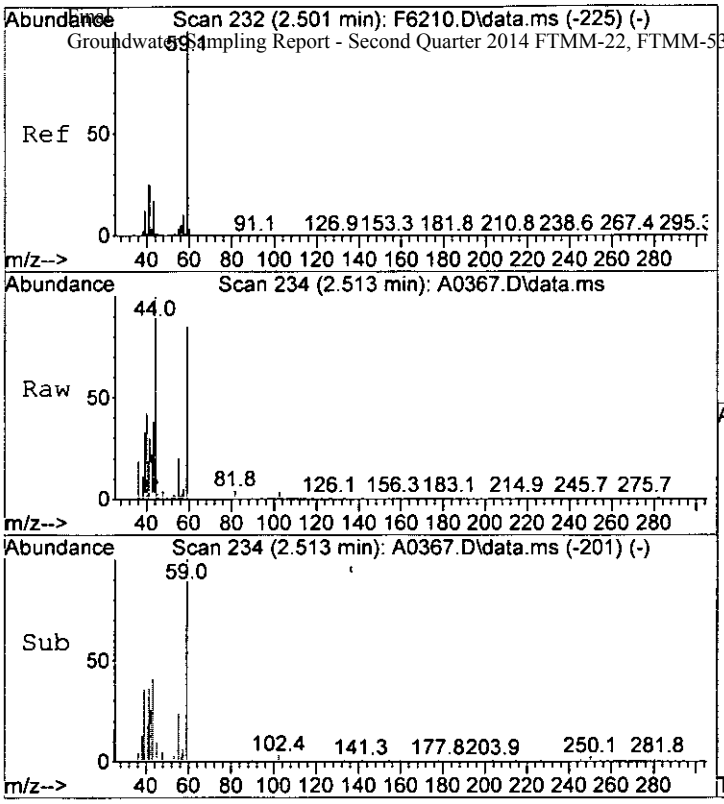


#22
Methylene Chloride
Concen: Below Cal
RT: 2.440 min Scan# 222
Delta R.T. 0.000 min
Lab File: A0367.D
Acq: 15 Jul 2014 1:05 pm

Tgt Ion: 84 Resp: 1352

Ion	Ratio	Lower	Upper
84	100		
86	83.3	44.5	84.5
49	160.5	123.0	163.0
51	85.5	22.1	62.1#

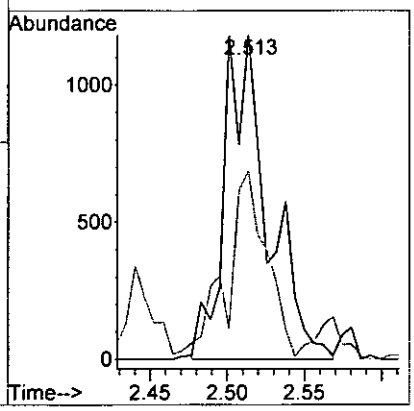


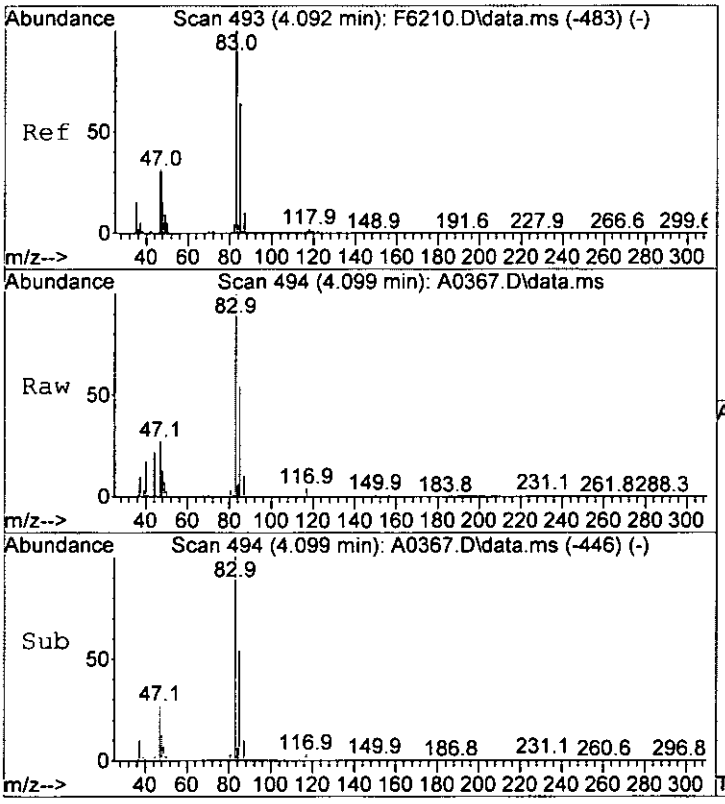


#23
TBA
Concen: 4.41 ug/L m
RT: 2.513 min Scan# 234
Delta R.T. 0.012 min
Lab File: A0367.D
Acq: 15 Jul 2014 1:05 pm

Tgt Ion: 59 Resp: 2307

Ion	Ratio	Lower	Upper
59	100		
41	35.3	2.8	42.8

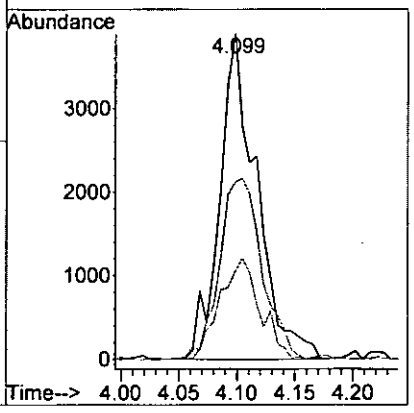


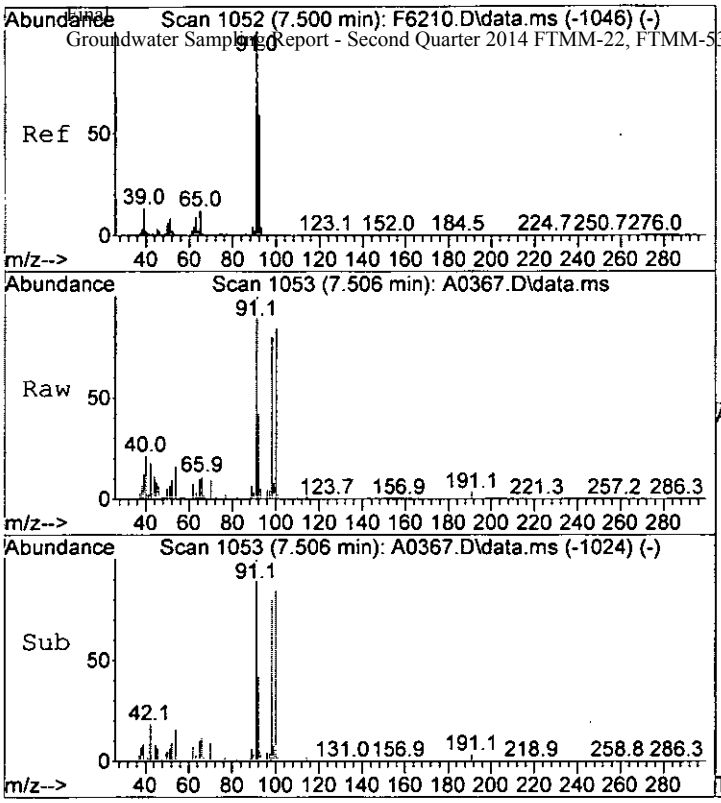


#40
Chloroform
Concen: 0.65 ug/L
RT: 4.099 min Scan# 494
Delta R.T. 0.006 min
Lab File: A0367.D
Acq: 15 Jul 2014 1:05 pm

Tgt Ion: 83 Resp: 8570

Ion	Ratio	Lower	Upper
83	100		
85	54.4	42.7	82.7
47	26.9	5.9	45.9

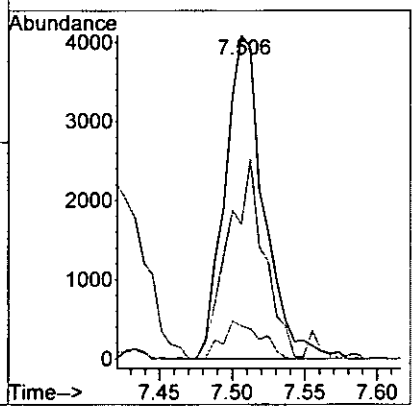




#66
Toluene
Concen: 0.22 ug/L
RT: 7.506 min Scan# 1053
Delta R.T. 0.006 min
Lab File: A0367.D
Acq: 15 Jul 2014 1:05 pm

Tgt Ion: 91 Resp: 7561

Ion	Ratio	Lower	Upper
91	100		
92	41.6	39.5	79.5
65	10.2	0.0	32.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0367.D
Acq On : 15 Jul 2014 1:05 pm
Operator : F.NAEGLER
Sample : R1405048-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0367.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	509955	1230741	31.91%	5.791%
2	4.409	538	545	564	rVB	905022	2327108	60.34%	10.950%
3	4.861	609	619	638	rBV	431339	1179393	30.58%	5.549%
4	5.610	735	742	755	rBV	1301021	2903379	75.28%	13.661%
5	7.427	1035	1040	1051	rBV	2478237	3856904	100.00%	18.148%
6	8.841	1267	1272	1294	rBV	2638049	3507777	90.95%	16.505%
7	9.884	1438	1443	1458	rBV	2015446	2693053	69.82%	12.671%
8	10.091	1472	1477	1485	rBV2	26988	42292	1.10%	0.199%
9	10.835	1594	1599	1614	rBV	2909086	3512428	91.07%	16.527%

Sum of corrected areas: 21253075

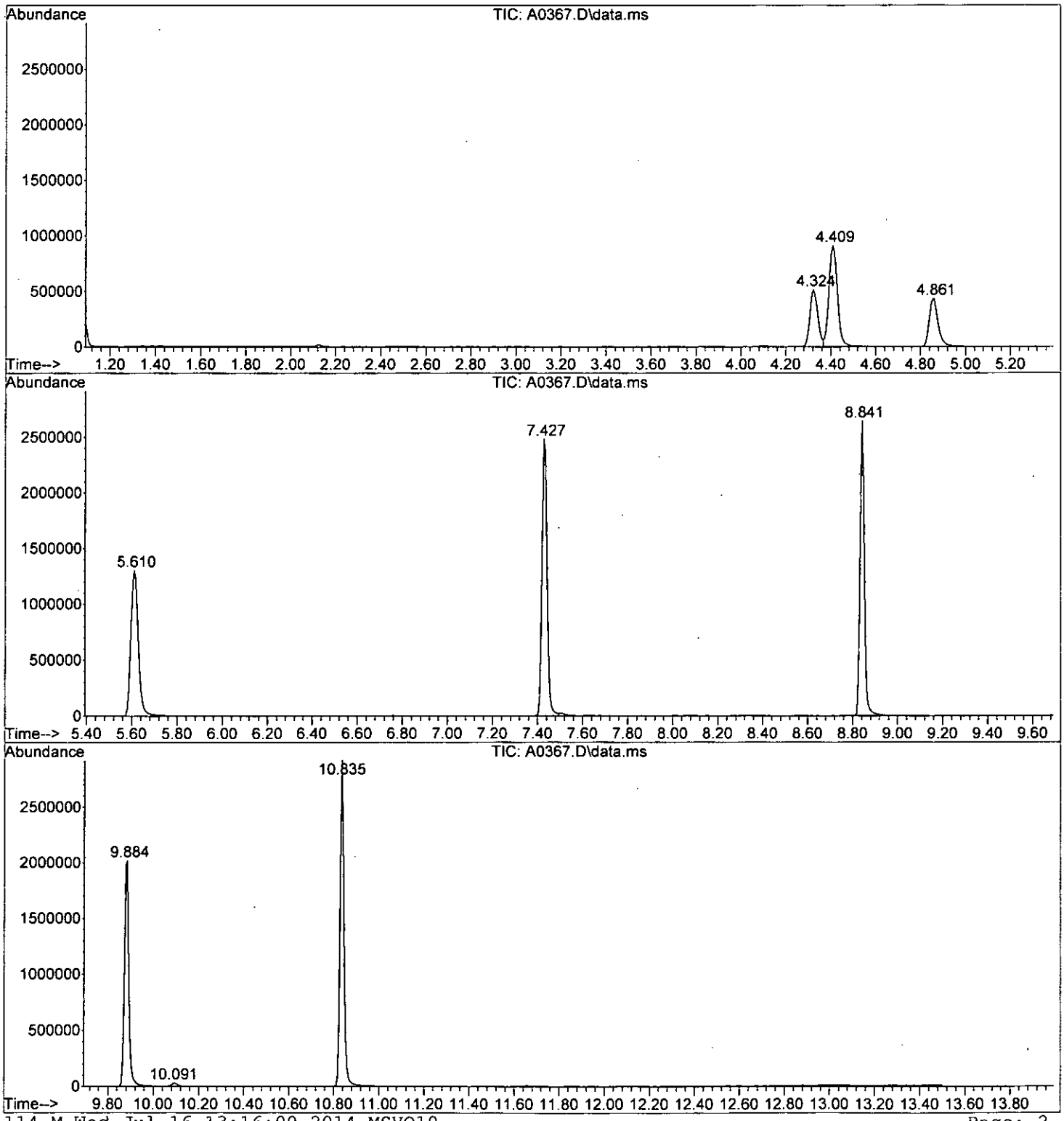
W061114.M Wed Jul 16 13:15:58 2014 MSVQ10 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\MSVOA10\DATA\071514\
Data File : A0367.D
Acq On : 15 Jul 2014 1:05 pm
Operator : F.NAEGLER
Sample : R1405048-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Wed Jul 16 13:16:00 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

```
Data Path : I:\ACQUDATA\msvoa10\data\071514\\
Data File : A0367.D
Acq On    : 15 Jul 2014    1:05 pmm
Operator  : F.NAEGLERR
Sample    : R1405048-012|1.0
Misc      : PARSONS 11603 T44
ALS Vial  : 6   Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title  : MS#10 - 8260B WATERS 10mL Purgee

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP
```

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

****

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:35
Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**8.1**		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:35
Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**0.86**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.35**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 1210
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/15/14 13:35
Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0368.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	7/15/14 13:35	
Dibromofluoromethane	103	85-115	7/15/14 13:35	
Toluene-d8	98	85-120	7/15/14 13:35	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/2/14
Sample Matrix:	Water	**Date Received:**	7/3/14
		Date Analyzed:	7/15/14 1335

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-DI-070214	**Units:**	µg/L
Lab Code:	R1405048-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-013|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0368.D Vial: 7
Acq On : 15 Jul 2014 1:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:48:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	832205	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1222854	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1108370	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	549276	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	375479	51.50	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.00%			
48) surr1,1,2-dichloroetha...	4.854	65	403431	55.13	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 110.26%			
65) SURR3,Toluene-d8	7.433	98	1378883	49.06	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.12%			
70) SURR2,BFB	9.884	95	530888	47.80	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.60%			
Target Compounds						Qvalue
12) Acrolein	~~2.026~~	~~56~~	~~270~~	~~0.29~~	~~ug/L #~~	~~41~~
15) Acetone	2.123	43	15153	8.07	ug/L	85
16) 2-Propanol	~~2.196~~	~~45~~	~~338~~	~~1.04~~	~~ug/L #~~	~~38~~
19) Acetonitrile	~~2.349~~	~~40~~	~~602~~	~~2.39~~	~~ug/L #~~	1
22) Methylene Chloride	2.440	84	1742	Below Cal		88
23) TBA	2.507	59	2553	4.99	ug/L	67
35) 2-Butanone	~~3.800~~	~~43~~	~~578~~	~~0.23~~	~~ug/L #~~	~~62~~
40) Chloroform	4.105	83	11114	0.86	ug/L	90
66) Toluene	7.506	91	~~11104~~ 0.35	~~0.33~~	ug/L	82
89) Cyclohexanone	~~9.847~~	~~55~~	~~299~~	~~0.35~~	~~ug/L #~~	~~67~~

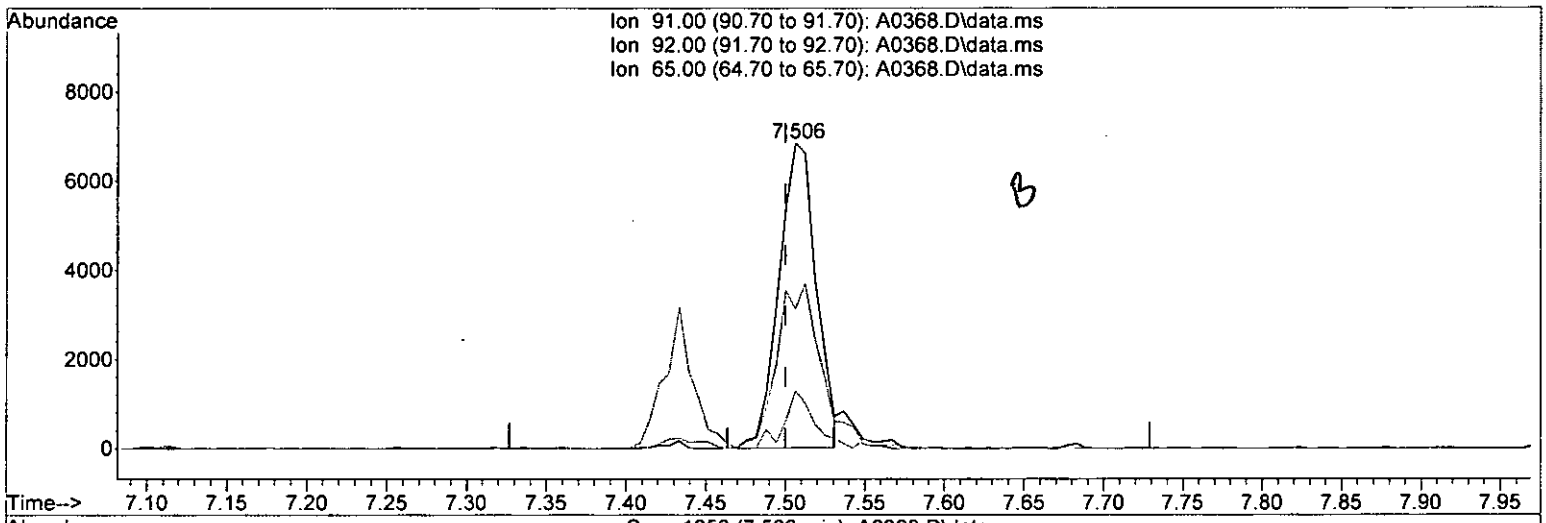
(#) = qualifier out of range (m) = manual integration (+) = signals summed

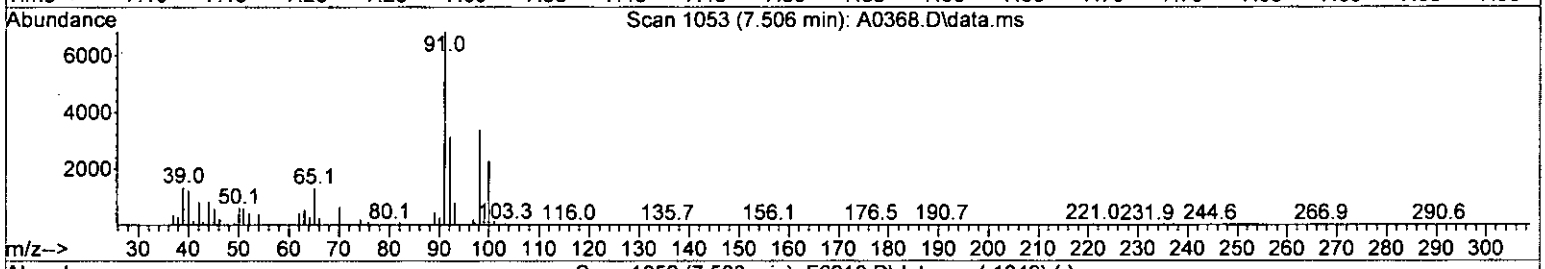
FJ
7/16/14

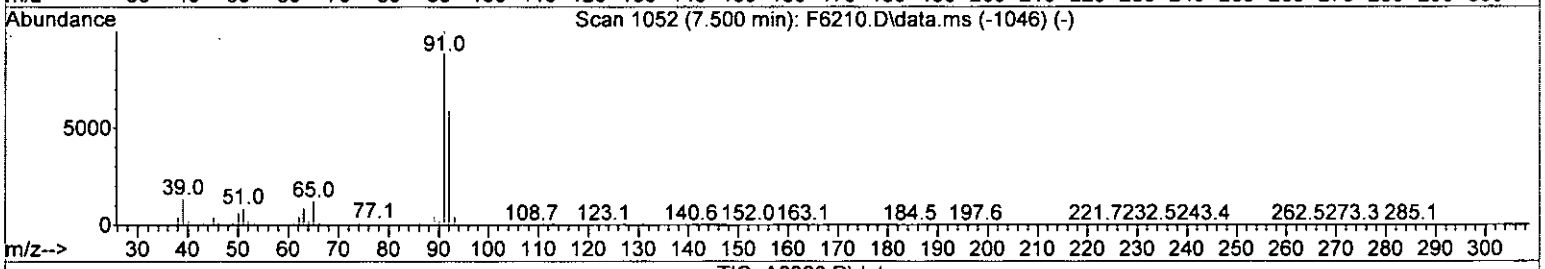
Quantitation Report (Qedit)

Sample : R1405048-013|1.0
Data File : I:\ACQUDATA\msvoa10\data\071514\A0368.D Vial: 7
Acq On : 15 Jul 2014 1:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:48:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0368.D\data.ms

(66) Toluene (P)

7.506min (+0.006) 0.33 ug/L

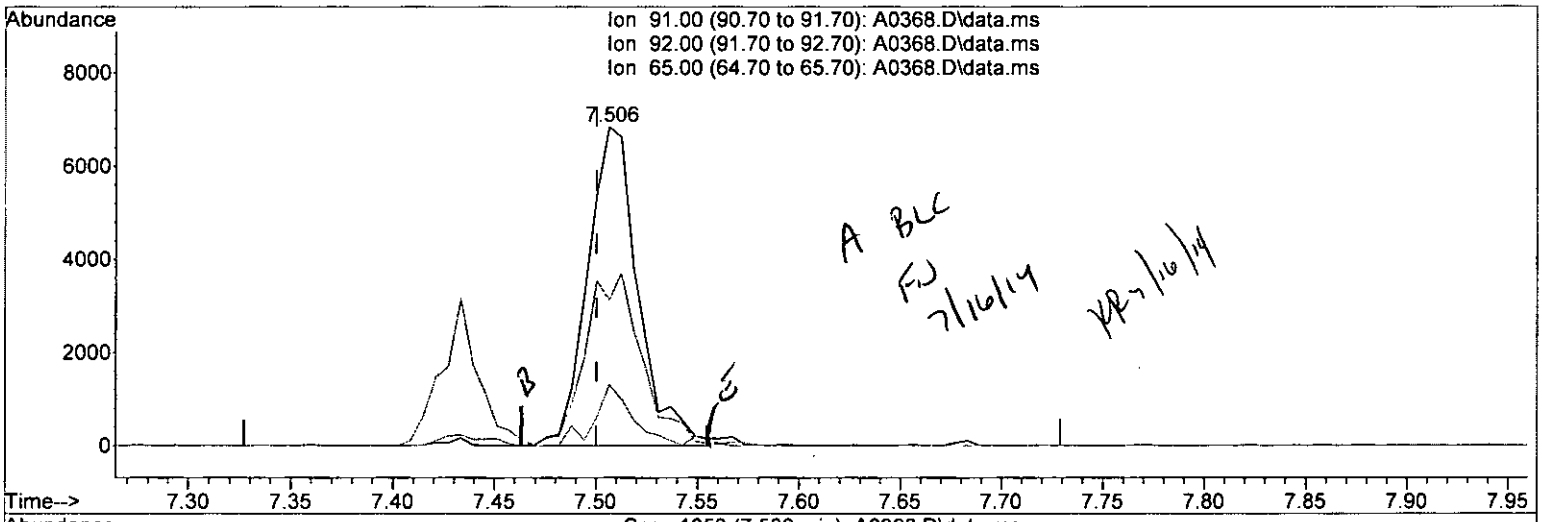
response 11104

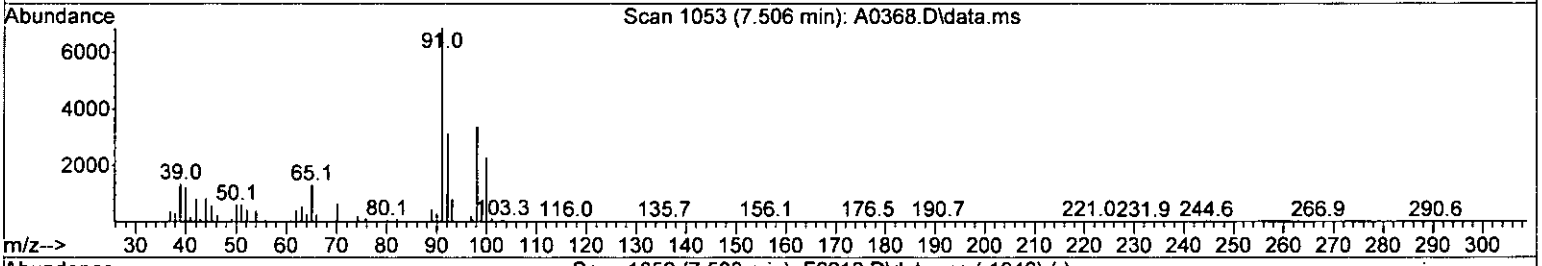
Ion	Exp%	Act%
91.00	100	100
92.00	59.50	45.67
65.00	12.00	18.92
0.00	0.00	0.00

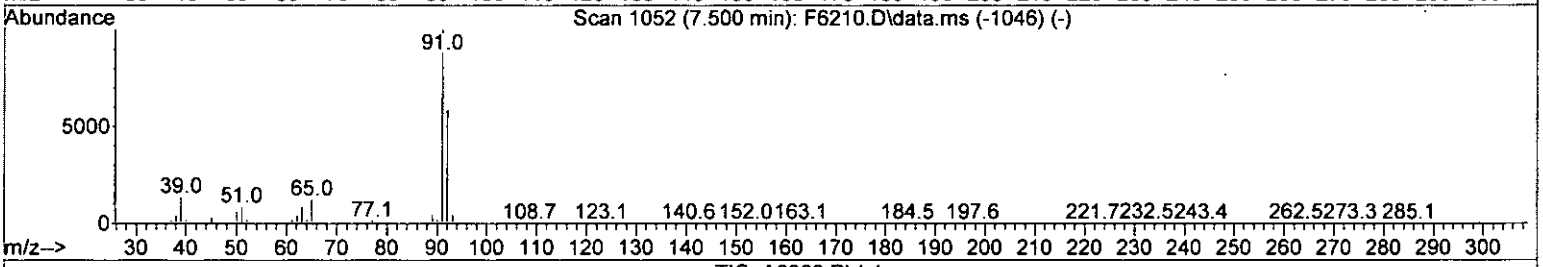
Quantitation Report (Qedit)

Sample : R1405048-013|1.0
Data File : I:\ACQUDATA\msvoa10\data\071514\A0368.D Vial: 7
Acq On : 15 Jul 2014 1:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:48:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0368.D\data.ms

(66) Toluene (P)

7.506min (+0.006) 0.35 ug/L m

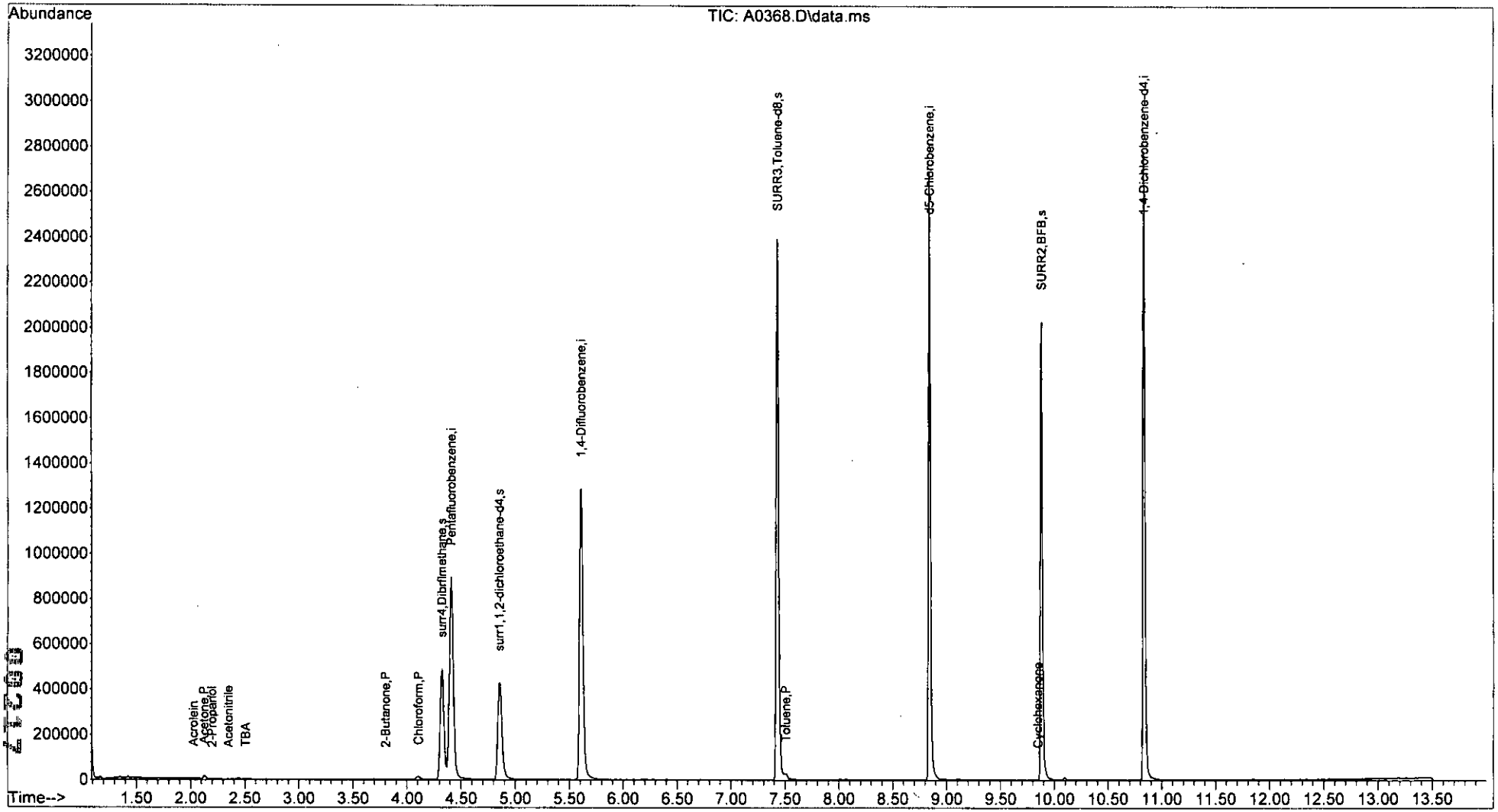
response 11770

Ion	Exp%	Act%
91.00	100	100
92.00	59.50	45.67
65.00	12.00	18.92
0.00	0.00	0.00

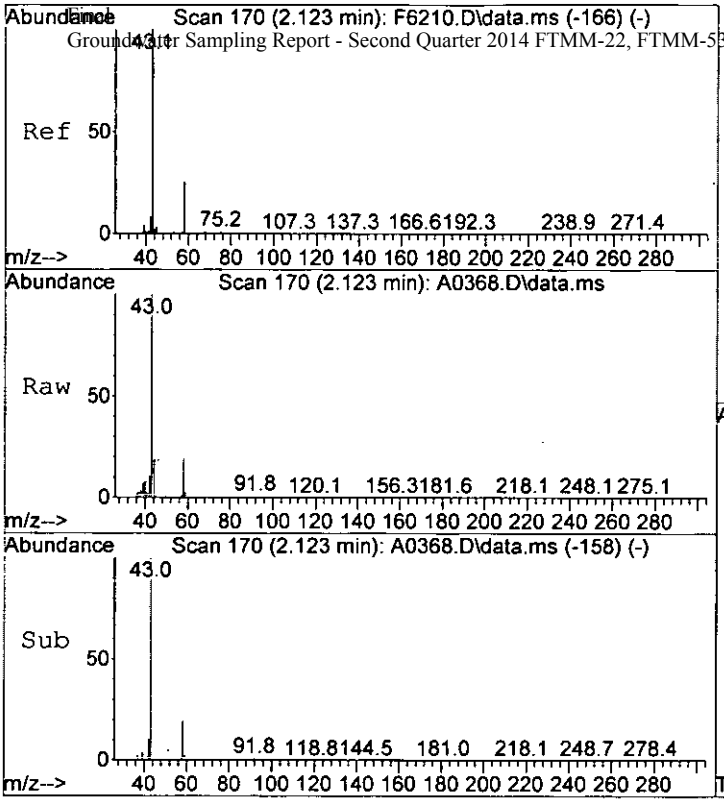
Quantitation Report (Not Reviewed)

Sample : R1405048-013|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0368.D Vial: 7
Acq On : 15 Jul 2014 1:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 15 13:48:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



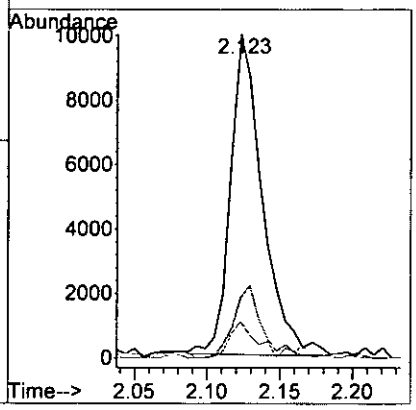
W061114.M Tue Jul 15 13:48:49 2014 MSVO10 Page: 2

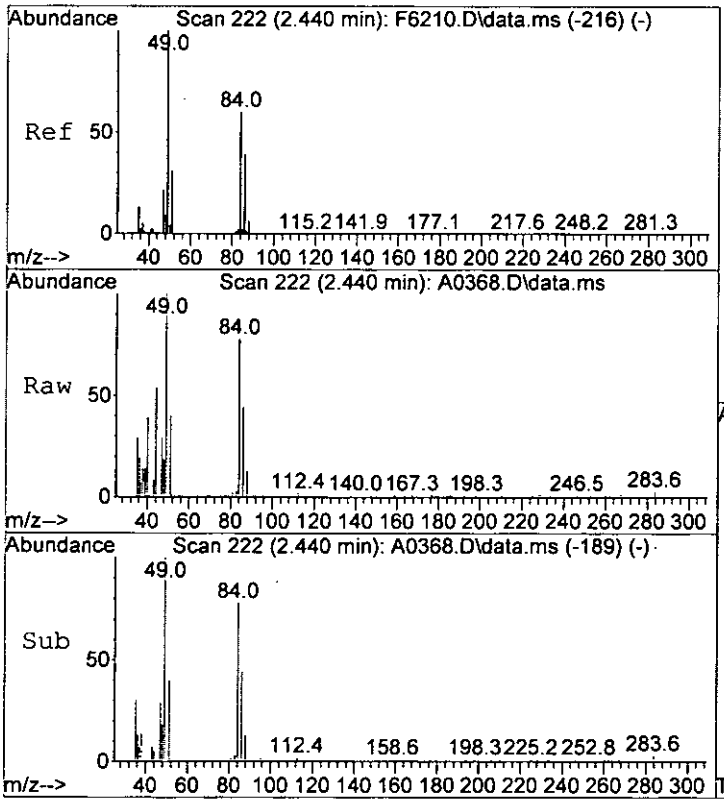


#15
Acetone
Concen: 8.07 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A0368.D
Acq: 15 Jul 2014 1:35 pm

Tgt Ion: 43 Resp: 15153

Ion	Ratio	Lower	Upper
43	100		
58	18.9	7.2	47.2
42	11.1	0.0	27.0

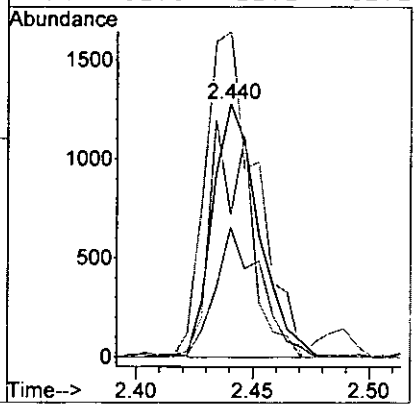




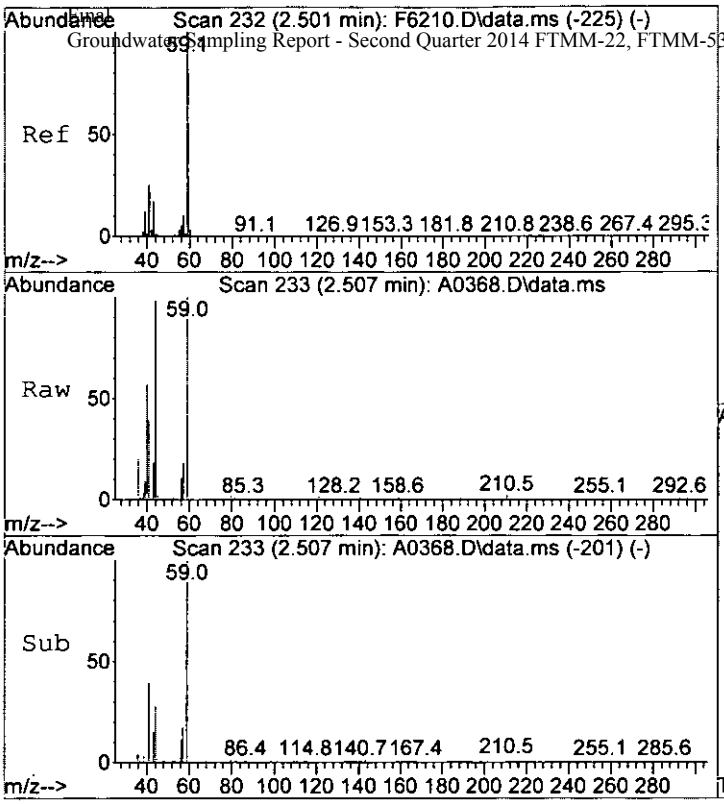
#22
Methylene Chloride
Concen: Below Cal
RT: 2.440 min Scan# 222
Delta R.T. 0.000 min
Lab File: A0368.D
Acq: 15 Jul 2014 1:35 pm

Tgt Ion: 84 Resp: 1742

Ion	Ratio	Lower	Upper
84	100		
86	56.2	44.5	84.5
49	128.6	123.0	163.0
51	51.0	22.1	62.1



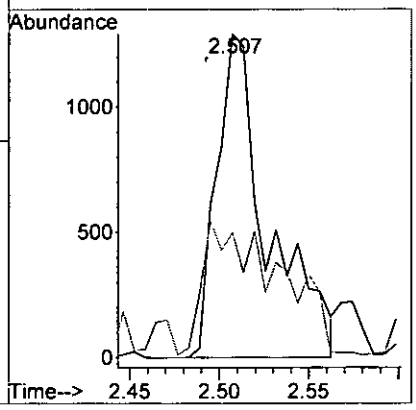
A0368.D W061114.M Wed Jul 16 13:18:41 2014 MSVO10 Page 3

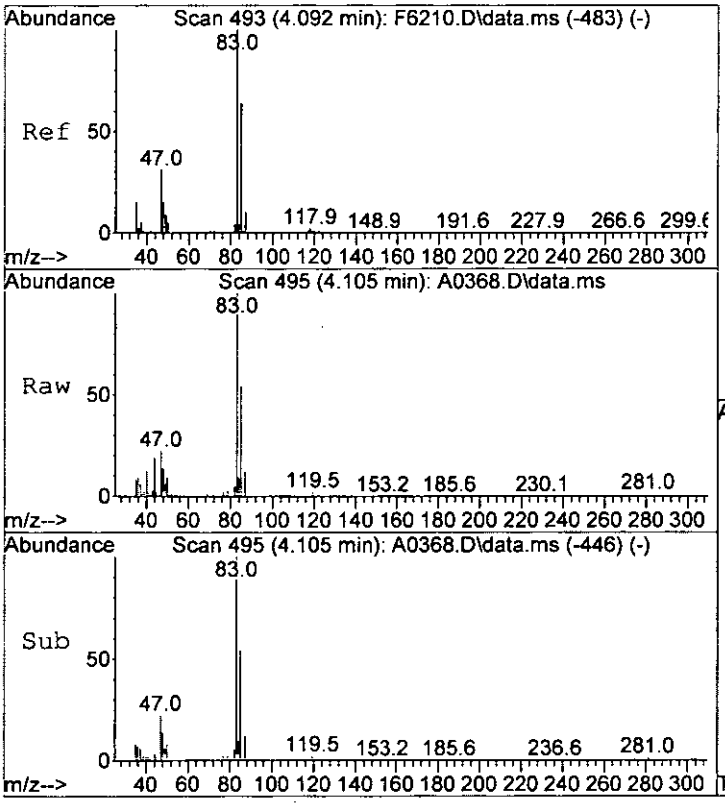


#23
TBA
Concen: 4.99 ug/L
RT: 2.507 min Scan# 233
Delta R.T. 0.006 min
Lab File: A0368.D
Acq: 15 Jul 2014 1:35 pm

Tgt Ion: 59 Resp: 2553

Ion	Ratio	Lower	Upper
59	100		
41	38.5	2.8	42.8

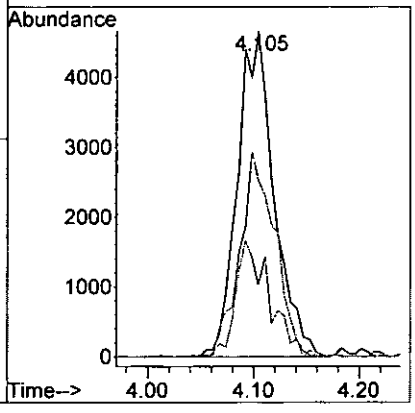


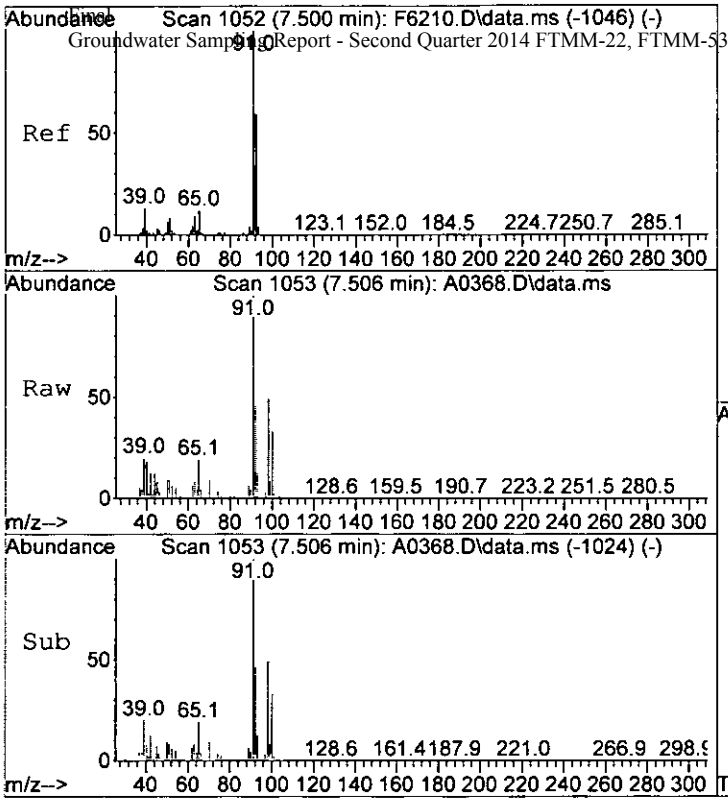


#40
Chloroform
Concen: 0.86 ug/L
RT: 4.105 min Scan# 495
Delta R.T. 0.012 min
Lab File: A0368.D
Acq: 15 Jul 2014 1:35 pm

Tgt Ion: 83 Resp: 11114

Ion	Ratio	Lower	Upper
83	100		
85	54.1	42.7	82.7
47	21.9	5.9	45.9

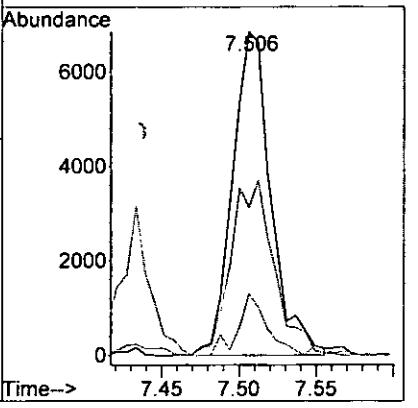




#66
Toluene
Concen: 0.35 ug/L m
RT: 7.506 min Scan# 1053
Delta R.T. 0.006 min
Lab File: A0368.D
Acq: 15 Jul 2014 1:35 pm

Tgt Ion: 91 Resp: 11770

Ion	Ratio	Lower	Upper
91	100		
92	45.7	39.5	79.5
65	18.9	0.0	32.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0368.D
Acq On : 15 Jul 2014 1:35 pm
Operator : F.NAEGLER
Sample : R1405048-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0368.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV	488094	1181808	30.85%	5.629%
2	4.409	538	545	561	rVB	891907	2306420	60.21%	10.986%
3	4.854	610	618	646	rBV	426994	1158002	30.23%	5.516%
4	5.610	735	742	761	rBV	1287014	2873230	75.01%	13.686%
5	7.427	1035	1040	1051	rBV	2393010	3830523	100.00%	18.246%
6	8.841	1267	1272	1288	rBV	2693695	3462343	90.39%	16.492%
7	9.884	1438	1443	1460	rBV	2029321	2684944	70.09%	12.789%
8	10.835	1594	1599	1625	rBV	2781630	3496420	91.28%	16.655%

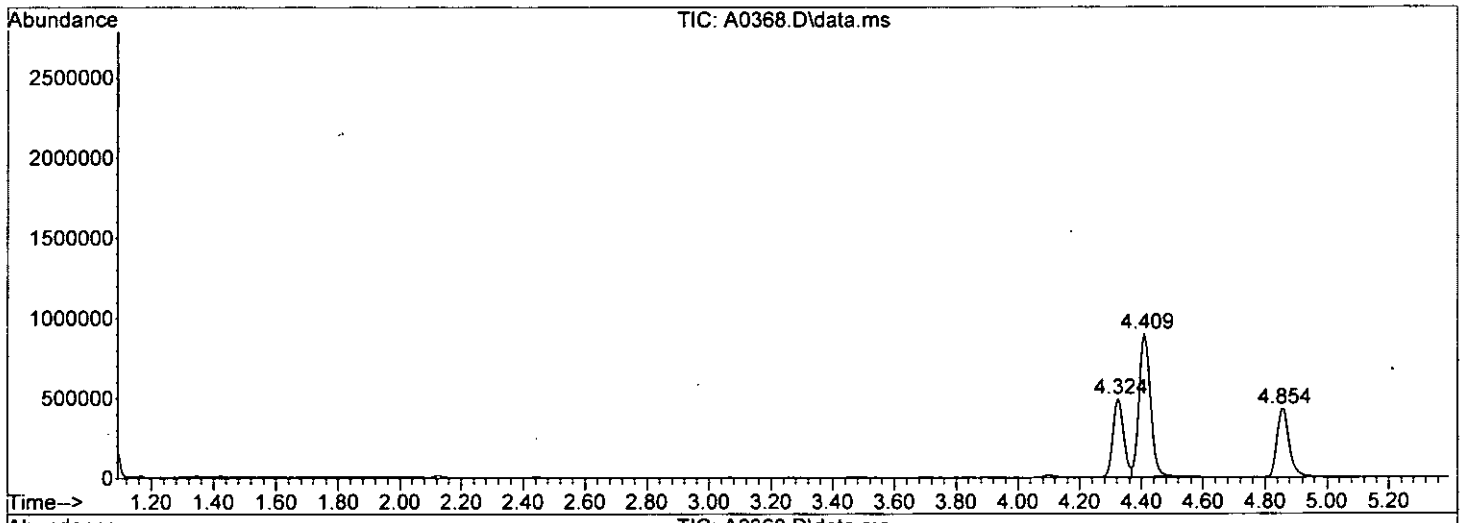
Sum of corrected areas: 20993690

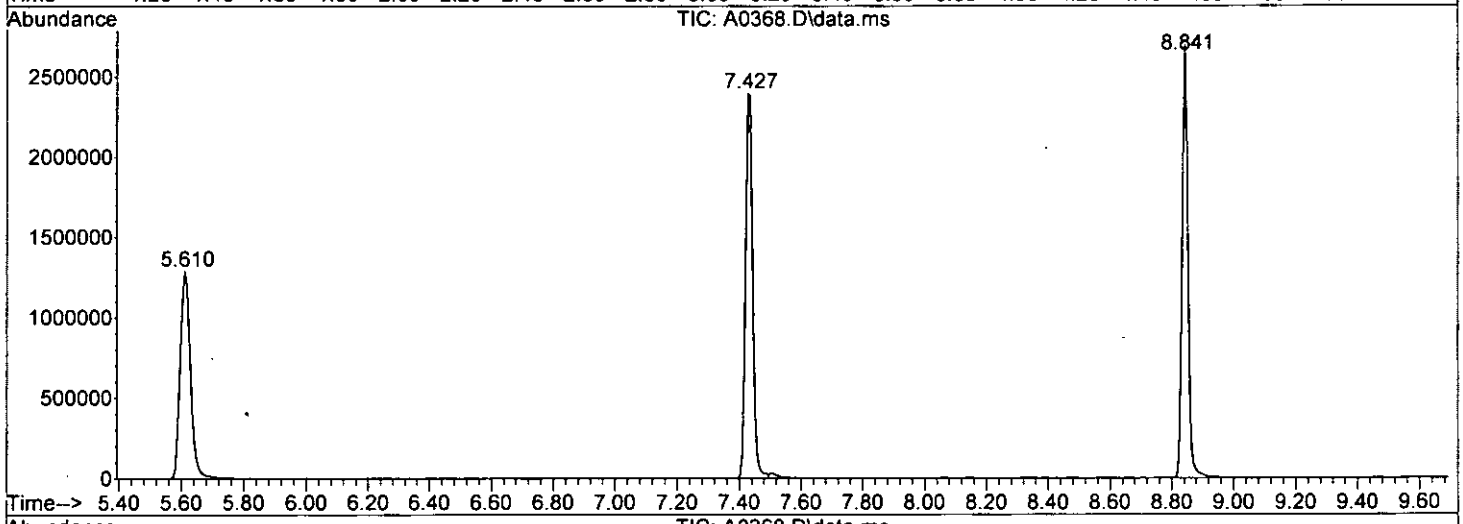
LSC Report - Integrated Chromatogram

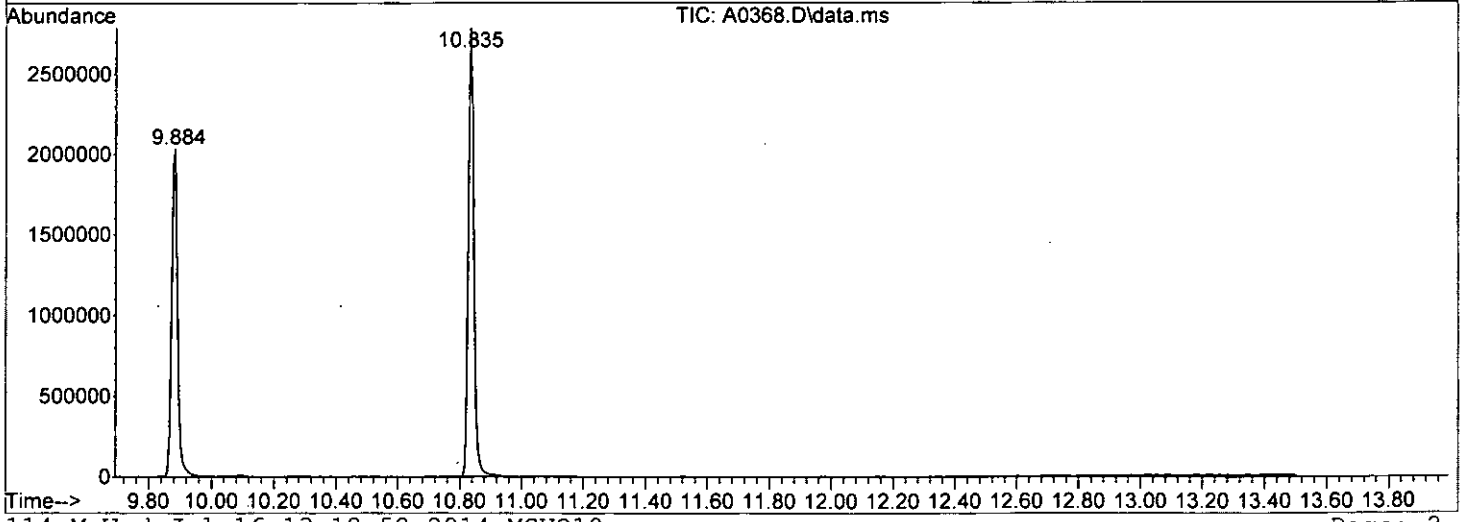
Data Path : I:\ACQUDATA\MSVOA10\DATA\071514\
Data File : A0368.D
Acq On : 15 Jul 2014 1:35 pm
Operator : F.NAEGLER
Sample : R1405048-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P







W061114.M Wed Jul 16 13:18:52 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071514\\
Data File : A0368.D
Acq On : 15 Jul 2014 1:35 pmm
Operator : F.NAEGLERR
Sample : R1405048-013|1.0
Misc : PARSONS 11603 T44
ALS Vial : 7 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 2/14 0800
Date Received: 7/ 3/14
Date Analyzed: 7/10/14 13:43

Sample Name: FTMM-TB-070214
Lab Code: R1405048-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0229.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/ 2/14 0800
Date Received: 7/ 3/14
Date Analyzed: 7/10/14 13:43

Sample Name: FTMM-TB-070214
Lab Code: R1405048-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0229.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	7/ 2/14 0800
Sample Matrix:	Water	**Date Received:**	7/ 3/14
		Date Analyzed:	7/10/14 13:43
Sample Name:	FTMM-TB-070214	**Units:**	µg/L
Lab Code:	R1405048-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0229.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	7/10/14 13:43	
Dibromofluoromethane	104	85-115	7/10/14 13:43	
Toluene-d8	98	85-120	7/10/14 13:43	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: 7/2/14
Date Received: 7/3/14
Date Analyzed: 7/10/14 1343

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-TB-070214
Lab Code: R1405048-014

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1405048-014|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0229.D Vial: 9
Acq On : 10 Jul 2014 1:43 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 13:56:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	844094	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1220632	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1129632	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	568026	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	378361	51.99	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.98%			
48) surr1,1,2-dichloroetha...	4.854	65	391666	53.62	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.24%			
65) SURR3,Toluene-d8	7.427	98	1372226	48.91	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.82%			
70) SURR2,BFB	9.878	95	541734	48.87	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.74%			
Target Compounds						Qvalue
15) Acetone	2.123	43	1672	0.88	ug/L	72
19) Acetonitrile	~~2.337~~	~~40~~	~~586~~	~~2.29~~	~~ug/L #~~	~~1~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~958~~	~~0.24~~	~~ug/L #~~	~~1~~
89) Cyclohexanone	~~9.878~~	~~55~~	~~1505~~	~~1.70~~	~~ug/L #~~	~~18~~
120) 2,3,6-Trichlorotoluene	13.024	159	732	0.22	ug/L #	53

NT (DEL)

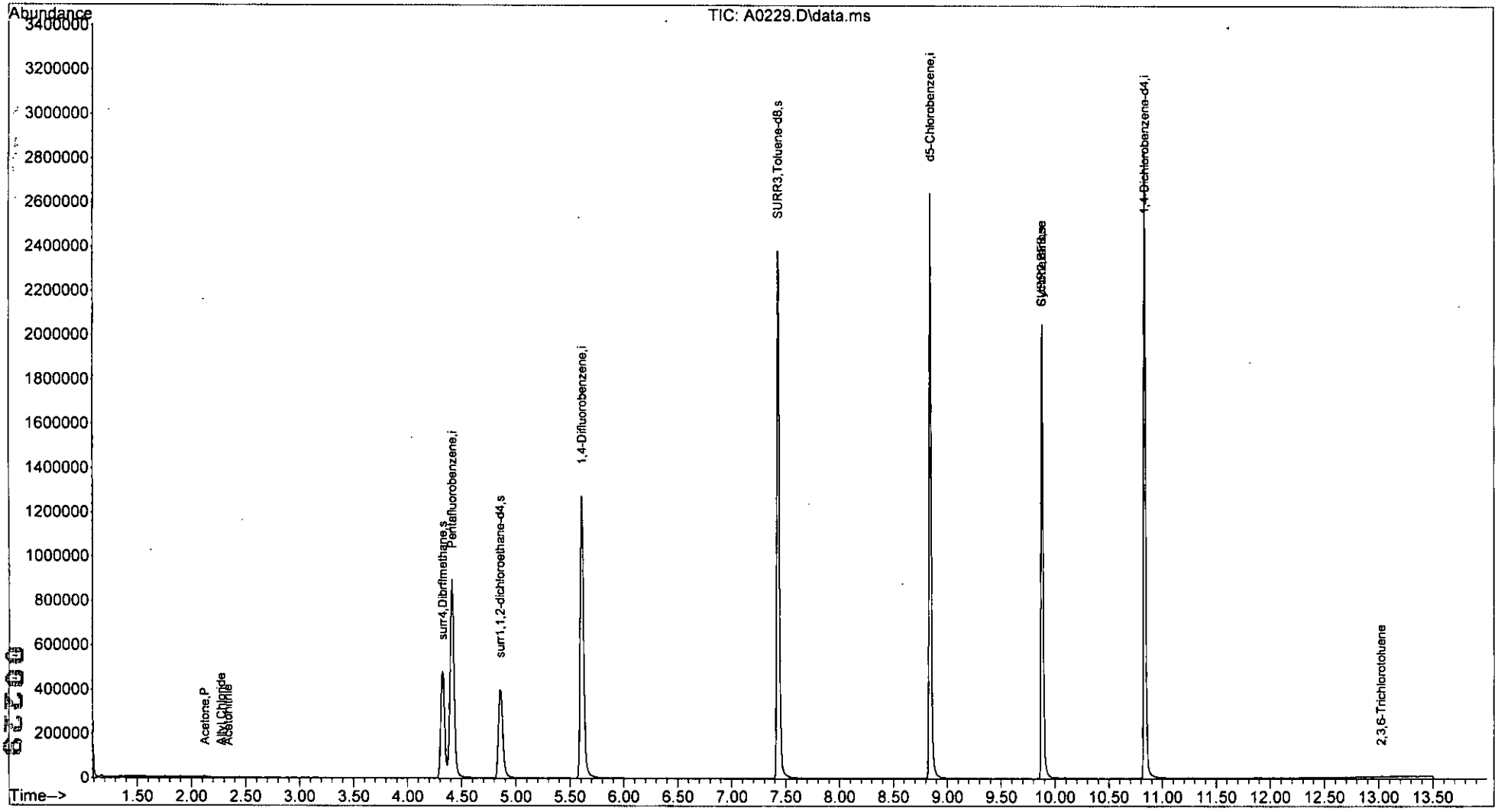
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FV
7/17/14

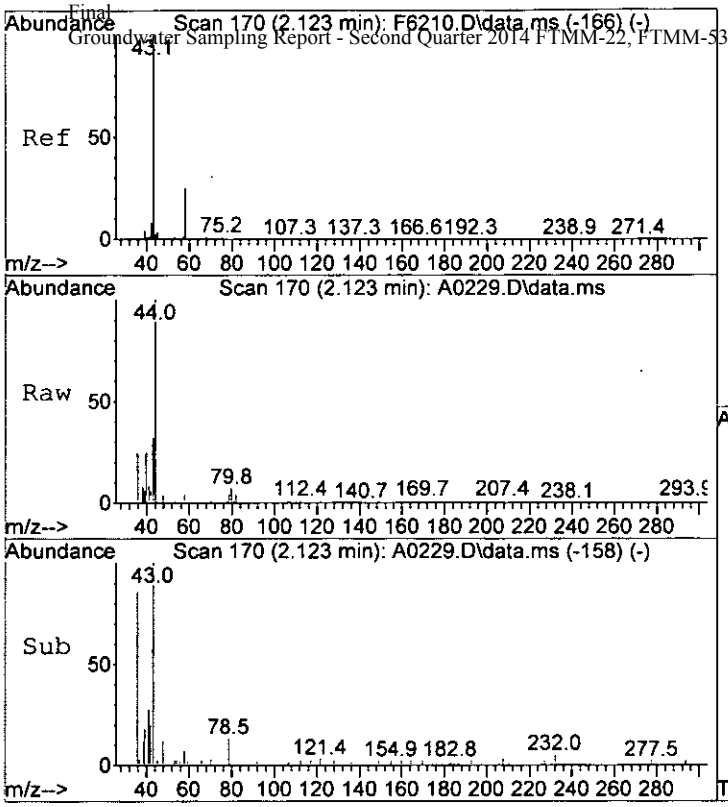
Quantitation Report (Not Reviewed)

Sample : R1405048-014|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0229.D Vial: 9
Acq On : 10 Jul 2014 1:43 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jul 10 13:56:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



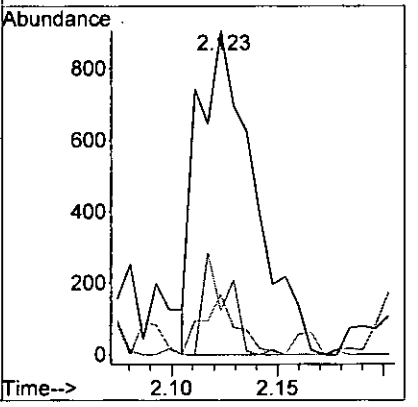
W061114.M Thu Jul 10 13:56:57 2014 MSVO10



#15
Acetone
Concen: 0.88 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A0229.D
Acq: 10 Jul 2014 1:43 pm

Tgt Ion: 43 Resp: 1672

Ion	Ratio	Lower	Upper
43	100		
58	13.5	7.2	47.2
42	18.5	0.0	27.0



A0229.D W061114.M Thu Jul 17 10:23:13 2014 MSVO10 Page 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0229.D
Acq On : 10 Jul 2014 1:43 pm
Operator : F.NAEGLER
Sample : R1405048-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0229.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV2	479737	1194104	31.23%	5.687%
2	4.409	538	545	563	rVB	890831	2293266	59.98%	10.922%
3	4.854	608	618	636	rBV	399591	1105153	28.91%	5.263%
4	5.610	734	742	767	rBV	1273987	2843967	74.39%	13.545%
5	7.427	1035	1040	1060	rBV	2384129	3823103	100.00%	18.208%
6	8.841	1267	1272	1291	rBV	2645043	3493057	91.37%	16.636%
7	9.884	1437	1443	1461	rBV	2052573	2742202	71.73%	13.060%
8	10.835	1594	1599	1616	rBV	2835479	3502228	91.61%	16.680%

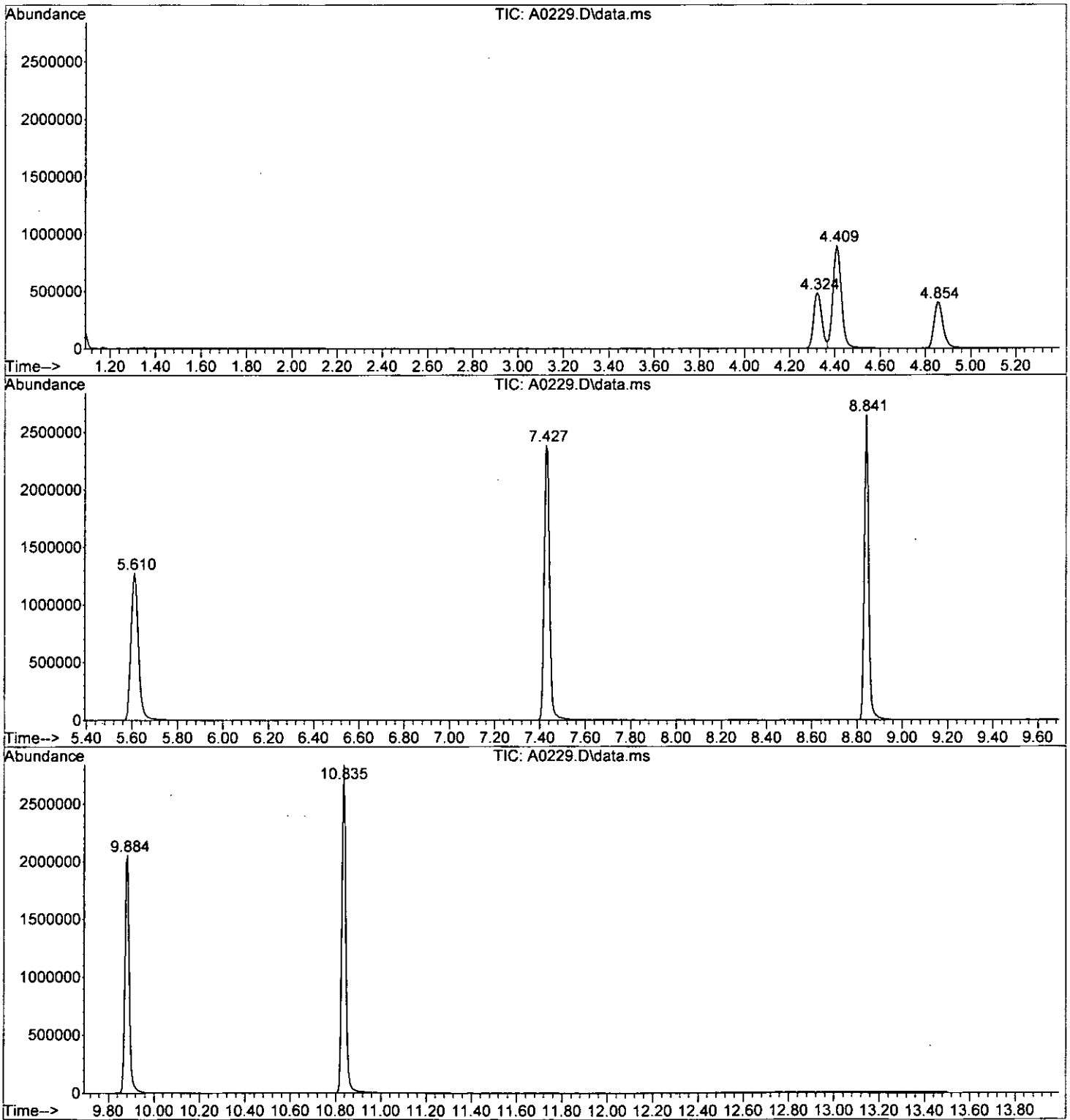
Sum of corrected areas: 20997080

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0229.D
Acq On : 10 Jul 2014 1:43 pm
Operator : F.NAEGLER
Sample : R1405048-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 9 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Thu Jul 17 10:23:21 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0229.D
Acq On : 10 Jul 2014 1:43 pmm
Operator : F.NAEGLERR
Sample : R1405048-014|1.0
Misc : PARSONS 11603 T44
ALS Vial : 9 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Initial Calibration - Summary Report

Calibration ID: RC1400047 6/11/14 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3774	<=20	4.9
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6832	<=20	8.8
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5752	<=20	2.8
1,1,2-Trichloroethane	T	Average RF		0.100	0.2406	<=20	3.0
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.3801	<=20	8.8
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8705	<=20	3.6
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3332	<=20	8.2
1,1-Dichloropropene	T	Average RF			0.4044	<=20	6.9
1,2,3-Trichlorobenzene	T	Average RF			0.5318	<=20	4.5
1,2,3-Trichloropropane	T	Average RF			0.1529	<=20	7.5
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7820	<=20	5.1
1,2,4-Trimethylbenzene	T	Average RF			2.519	<=20	4.5
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08846	<=20	10.2
1,2-Dibromoethane	T	Average RF		0.100	0.2683	<=20	4.5
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5668	<=20	4.8
1,2-Dichlorobenzene	T	Average RF		0.400	1.410	<=20	3.3
1,2-Dichloroethane	T	Average RF		0.100	0.4235	<=20	4.2
1,2-Dichloropropane	T	Average RF		0.100	0.3693	<=20	5.5
1,3,5-Trichlorobenzene	T	Average RF			0.9589	<=20	4.5
1,3,5-Trimethylbenzene	T	Average RF			2.491	<=20	3.7
1,3-Dichlorobenzene	T	Average RF		0.600	1.543	<=20	3.8
1,3-Dichloropropane	T	Average RF			0.4621	<=20	3.3
1,4-Dichlorobenzene	T	Average RF		0.500	1.563	<=20	4.7
1,4-Dioxane	T	Average RF			0.001813	<=20	5.5
1-Butanol	T	Quadratic	1/X2		0.004909	>=0.99	0.9977
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.5323	<=20	6.6
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6036	<=20	5.8
2,2-Dichloropropane	T	Average RF			0.6377	<=20	8.6
2,3,6-Trichlorotoluene	T	Average RF			0.2893	<=20	12.0
2,4,5-Trichlorotoluene	T	Average RF			0.2920	<=20	7.6
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			1.140	<=20	5.2
2,4-Dichlorobenzotrifluoride	T	Average RF			0.6694	<=20	6.8
2,5-Dichlorobenzotrifluoride	T	Average RF			0.7696	<=20	6.2
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1537	<=20	7.3
2-Chloro-1,3-butadiene	T	Average RF			0.8376	<=20	5.3
2-Chlorobenzotrifluoride	T	Average RF			0.5693	<=20	7.5
2-Chloroethyl Vinyl Ether	T	Average RF			0.1702	<=20	8.6
2-Chlorotoluene	T	Average RF			2.084	<=20	5.3
2-Hexanone	T	Average RF		0.05	0.1956	<=20	4.9
2-Methyl-1-propanol	T	Average RF			0.01049	<=20	9.9
2-Methyl-2-propanol	T	Average RF			0.03076	<=20	5.2
2-Nitropropane	T	Average RF			0.05775	<=20	11.2
2-Propanol	T	Average RF			0.01952	<=20	5.5
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.158	<=20	4.0
3,4-Dichlorobenzotrifluoride	T	Average RF			0.7466	<=20	6.9
3-Chloro-1-propene	T	Average RF			0.2411	<=20	7.5
3-Chlorobenzotrifluoride	T	Average RF			0.5750	<=20	8.3
3-Chlorotoluene	T	Average RF			2.111	<=20	7.0
4-Chlorotoluene	T	Average RF			2.524	<=20	3.8
4-Isopropyltoluene	T	Average RF			2.495	<=20	5.0
4-Methyl-2-pentanone	T	Average RF		0.05	0.2465	<=20	6.0

Initial Calibration - Summary Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.1127	<=20	11.3
Acetonitrile	T	Average RF			0.01514	<=20	7.5
Acrolein	T	Average RF			0.05806	<=20	6.8
Acrylonitrile	T	Average RF			0.1232	<=20	6.0
Benzene	T	Average RF		0.500	1.290	<=20	4.3
Bromobenzene	T	Average RF			0.8344	<=20	3.1
Bromochloromethane	T	Average RF			0.2816	<=20	4.9
Bromodichloromethane	T	Average RF		0.200	0.4057	<=20	5.7
Bromoform	T	Average RF		0.100	0.1979	<=20	10.4
Bromomethane	T	Quadratic	1/X2	0.100	0.2195	>=0.99	0.9981
Carbon Disulfide	T	Average RF		0.100	1.419	<=20	4.2
Carbon Tetrachloride	T	Average RF		0.05	0.1345	<=20	8.6
Chlorobenzene	T	Average RF		0.500	1.037	<=20	3.7
Chloroethane	T	Average RF		0.100	0.3307	<=20	8.8
Chloroform	T	Average RF		0.200	0.7782	<=20	3.7
Chloromethane	T	Average RF		0.100	0.5794	<=20	5.9
Cyclohexane	T	Average RF		0.100	0.3721	<=20	4.2
Cyclohexanone	T	Average RF			0.03907	<=20	5.1
Dibromochloromethane	T	Average RF		0.100	0.3305	<=20	7.8
Dibromomethane	T	Average RF			0.1690	<=20	5.4
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.4677	<=20	10.8
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8807	<=20	2.6
Dichloromethane	T	Linear	1/X2	0.100	0.5021	>=0.99	0.9962
Diethyl Ether	T	Average RF			0.3751	<=20	4.0
Diisopropyl Ether	T	Average RF			1.762	<=20	3.5
Ethyl Methacrylate	T	Average RF			0.3115	<=20	14.3
Ethyl tert-Butyl Ether	T	Average RF			1.499	<=20	3.7
Ethylbenzene	T	Average RF		0.100	0.5354	<=20	6.4
Hexachlorobutadiene	T	Average RF			0.3747	<=20	11.1
Iodomethane	T	Quadratic	1/X		0.3489	>=0.99	0.9968
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.620	<=20	5.6
Methacrylonitrile	T	Average RF			0.1248	<=20	6.3
Methyl Acetate	T	Average RF		0.100	0.2417	<=20	6.2
Methyl Methacrylate	T	Average RF			0.1493	<=20	11.8
Methyl tert-Butyl Ether	T	Average RF		0.100	1.057	<=20	2.2
Methylcyclohexane	T	Average RF		0.100	0.4551	<=20	4.7
Naphthalene	T	Average RF			1.198	<=20	5.6
Propionitrile	T	Average RF			0.03970	<=20	13.1
Styrene	T	Average RF		0.300	1.118	<=20	6.1
Tetrachloroethene (PCE)	T	Average RF		0.200	0.3104	<=20	7.1
Tetrahydrofuran (THF)	T	Average RF			0.09148	<=20	2.6
Toluene	T	Average RF		0.400	1.387	<=20	3.7
Trichloroethene (TCE)	T	Average RF		0.200	0.3466	<=20	6.6
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6528	<=20	7.7
Vinyl Acetate	T	Average RF			0.06166	<=20	13.8
Vinyl Chloride	T	Average RF		0.100	0.6080	<=20	8.0
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4801	<=20	5.5
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4895	<=20	6.1
m,p-Xylenes	T	Average RF		0.100	0.6556	<=20	5.2
n-Butyl Acetate	T	Average RF			0.5143	<=20	8.5
n-Butylbenzene	T	Average RF			2.156	<=20	7.7
n-Heptane	T	Average RF			0.3618	<=20	10.5

Initial Calibration - Summary Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Column Name:	1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.392	<=20	5.1
o-Xylene	T	Average RF		0.300	0.6620	<=20	4.8
sec-Butylbenzene	T	Average RF			2.852	<=20	5.5
tert-Amyl Methyl Ether	T	Average RF			1.127	<=20	3.3
tert-Butylbenzene	T	Average RF			2.069	<=20	5.8
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4235	<=20	5.3
trans-1,3-Dichloropropene	T	Average RF		0.100	0.4006	<=20	7.5
trans-1,4-Dichloro-2-butene	T	Average RF			0.08602	<=20	14.8
1,2-Dichloroethane-d4	S	Average RF			0.2992	<=20	2.5
4-Bromofluorobenzene	S	Average RF			0.4541	<=20	0.8
Dibromofluoromethane	S	Average RF			0.2981	<=20	1.2
Toluene-d8	S	Average RF			1.149	<=20	1.0

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400047-01	0.5 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9407.D	6/11/14 16:24
02	RC1400047-02	1.0 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9408.D	6/11/14 16:54
03	RC1400047-03	2.0 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9409.D	6/11/14 17:25
04	RC1400047-04	5.0 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9410.D	6/11/14 17:55
05	RC1400047-05	10 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9411.D	6/11/14 18:25
06	RC1400047-06	50 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9412.D	6/11/14 18:56
07	RC1400047-07	100 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9413.D	6/11/14 19:26
08	RC1400047-08	150 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9414.D	6/11/14 19:56
09	RC1400047-09	200 PPB STD	I:\ACQUDATA\msvoa10\data\061114\F9415.D	6/11/14 20:27

Analyte **Curve Fit** **Weighting**

1,1,1,2-Tetrachloroethane Average RF RSD = 4.9 Average RF = 0.3774

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3745	02	1.000	0.3653	03	2.000	0.3582	04	5.000	0.3614
05	10.000	0.3561	06	50.000	0.3942	07	100.000	0.3878	08	150.000	0.3911
09	200.000	0.4077									

1,1,1-Trichloroethane (TCA) Average RF RSD = 8.8 Average RF = 0.6832

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8072	02	1.000	0.6928	03	2.000	0.6780	04	5.000	0.6717
05	10.000	0.5723	06	50.000	0.6760	07	100.000	0.6707	08	150.000	0.6748
09	200.000	0.7058									

1,1,2,2-Tetrachloroethane Average RF RSD = 2.8 Average RF = 0.5752

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5662	02	1.000	0.6008	03	2.000	0.5661	04	5.000	0.5743
05	10.000	0.5577	06	50.000	0.5968	07	100.000	0.5611	08	150.000	0.5661
09	200.000	0.5875									

1,1,2-Trichloroethane Average RF RSD = 3.0 Average RF = 0.2406

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2346	02	1.000	0.2384	03	2.000	0.2394	04	5.000	0.2352
05	10.000	0.2339	06	50.000	0.2487	07	100.000	0.2453	08	150.000	0.2357
09	200.000	0.2541									

1,1,2-Trichlorotrifluoroethane Average RF RSD = 8.8 Average RF = 0.3801

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4208	02	1.000	0.3996	03	2.000	0.3926	04	5.000	0.3694
05	10.000	0.3036	06	50.000	0.3799	07	100.000	0.3708	08	150.000	0.3794
09	200.000	0.4051									

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 3.6 Average RF = 0.8705

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8582	02	1.000	0.8979	03	2.000	0.8578	04	5.000	0.8895
05	10.000	0.8016	06	50.000	0.8752	07	100.000	0.8808	08	150.000	0.8659
09	200.000	0.9078									

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 8.2 Average RF = 0.3332

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3610	02	1.000	0.3511	03	2.000	0.3472	04	5.000	0.3349
05	10.000	0.2691	06	50.000	0.3242	07	100.000	0.3271	08	150.000	0.3284
09	200.000	0.3556									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,1-Dichloropropene Average RF RSD = 6.9 Average RF = 0.4044

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4423	02	1.000	0.4100	03	2.000	0.3968	04	5.000	0.4027
05	10.000	0.3407	06	50.000	0.4070	07	100.000	0.4041	08	150.000	0.4041
09	200.000	0.4314									

1,2,3-Trichlorobenzene Average RF RSD = 4.5 Average RF = 0.5318

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.5214	03	2.000	0.5549	04	5.000	0.5016	05	10.000	0.4990
06	50.000	0.5564	07	100.000	0.5238	08	150.000	0.5426	09	200.000	0.5544

1,2,3-Trichloropropane Average RF RSD = 7.5 Average RF = 0.1529

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1810	02	1.000	0.1545	03	2.000	0.1579	04	5.000	0.1461
05	10.000	0.1463	06	50.000	0.1498	07	100.000	0.1448	08	150.000	0.1447
09	200.000	0.1515									

1,2,4-Trichlorobenzene Average RF RSD = 5.1 Average RF = 0.7820

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8621	02	1.000	0.7586	03	2.000	0.7427	04	5.000	0.7600
05	10.000	0.7361	06	50.000	0.8106	07	100.000	0.7672	08	150.000	0.7959
09	200.000	0.8052									

1,2,4-Trimethylbenzene Average RF RSD = 4.5 Average RF = 2.519

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.401	02	1.000	2.427	03	2.000	2.464	04	5.000	2.551
05	10.000	2.347	06	50.000	2.680	07	100.000	2.582	08	150.000	2.618
09	200.000	2.598									

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 10.2 Average RF = 0.08846

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.08253	02	1.000	0.07031	03	2.000	0.09031	04	5.000	0.08564
05	10.000	0.08360	06	50.000	0.09800	07	100.000	0.09172	08	150.000	0.09498
09	200.000	0.09906									

1,2-Dibromoethane Average RF RSD = 4.5 Average RF = 0.2683

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2670	02	1.000	0.2468	03	2.000	0.2659	04	5.000	0.2604
05	10.000	0.2598	06	50.000	0.2840	07	100.000	0.2759	08	150.000	0.2709
09	200.000	0.2836									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 4.8 Average RF = 0.5668

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6260	02	1.000	0.5705	03	2.000	0.5479	04	5.000	0.5447
05	10.000	0.5403	06	50.000	0.5735	07	100.000	0.5483	08	150.000	0.5601
09	200.000	0.5897									

1,2-Dichlorobenzene Average RF RSD = 3.3 Average RF = 1.410

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.494	02	1.000	1.382	03	2.000	1.374	04	5.000	1.398
05	10.000	1.338	06	50.000	1.446	07	100.000	1.399	08	150.000	1.422
09	200.000	1.442									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,2-Dichloroethane Average RF RSD = 4.2 Average RF = 0.4235

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4565	02	1.000	0.4052	03	2.000	0.4046	04	5.000	0.4245
05	10.000	0.4115	06	50.000	0.4334	07	100.000	0.4240	08	150.000	0.4107
09	200.000	0.4407									

1,2-Dichloroethane-d4 Average RF RSD = 2.5 Average RF = 0.2992

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	50.000	0.3040	03	50.000	0.3096	08	50.000	0.2861	01	50.000	0.3064
09	50.000	0.2948	05	50.000	0.2982	06	50.000	0.2929	07	50.000	0.2961
02	50.000	0.3047									

1,2-Dichloropropane Average RF RSD = 5.5 Average RF = 0.3693

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4111	02	1.000	0.3487	03	2.000	0.3598	04	5.000	0.3614
05	10.000	0.3441	06	50.000	0.3742	07	100.000	0.3717	08	150.000	0.3645
09	200.000	0.3880									

1,3,5-Trichlorobenzene Average RF RSD = 4.5 Average RF = 0.9589

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9652	02	1.000	0.9052	03	2.000	0.9398	04	5.000	0.9516
05	10.000	0.8858	06	50.000	1.001	07	100.000	0.9733	08	150.000	0.9944
09	200.000	1.013									

1,3,5-Trimethylbenzene Average RF RSD = 3.7 Average RF = 2.491

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.532	02	1.000	2.448	03	2.000	2.437	04	5.000	2.478
05	10.000	2.291	06	50.000	2.602	07	100.000	2.518	08	150.000	2.569
09	200.000	2.543									

1,3-Dichlorobenzene Average RF RSD = 3.8 Average RF = 1.543

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.580	02	1.000	1.526	03	2.000	1.469	04	5.000	1.564
05	10.000	1.433	06	50.000	1.587	07	100.000	1.540	08	150.000	1.585
09	200.000	1.605									

1,3-Dichloropropane Average RF RSD = 3.3 Average RF = 0.4621

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4789	02	1.000	0.4451	03	2.000	0.4711	04	5.000	0.4566
05	10.000	0.4391	06	50.000	0.4785	07	100.000	0.4589	08	150.000	0.4521
09	200.000	0.4782									

1,4-Dichlorobenzene Average RF RSD = 4.7 Average RF = 1.563

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.690	02	1.000	1.516	03	2.000	1.457	04	5.000	1.561
05	10.000	1.469	06	50.000	1.604	07	100.000	1.562	08	150.000	1.594
09	200.000	1.614									

1,4-Dioxane Average RF RSD = 5.5 Average RF = 0.001813

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.001614	03	40.000	0.001824	04	100.000	0.001801	05	200.000	0.001825
06	1000.000	0.001949	07	2000.000	0.001768	08	3000.000	0.001816	09	4000.000	0.001906

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting		
1-Butanol	Quadratic	1/X2	COD = 0.9977	Y = 7.499E-6 X² + 0.004804 X + -0.001654

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.003081	03	100.000	0.004388	04	250.000	0.004067	05	500.000	0.004258
06	2500.000	0.005749	07	5000.000	0.005803	08	7500.000	0.005782	09	10000.000	0.006145

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 6.6 Average RF = 0.5323

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5430	02	1.000	0.5102	03	2.000	0.5272	04	5.000	0.5280
05	10.000	0.4541	06	50.000	0.5538	07	100.000	0.5492	08	150.000	0.5474
09	200.000	0.5779									

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 5.8 Average RF = 0.6036

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6807	02	1.000	0.5734	03	2.000	0.5789	04	5.000	0.5916
05	10.000	0.5707	06	50.000	0.6181	07	100.000	0.5885	08	150.000	0.5998
09	200.000	0.6302									

2,2-Dichloropropane Average RF RSD = 8.6 Average RF = 0.6377

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7309	02	1.000	0.7015	03	2.000	0.6418	04	5.000	0.6506
05	10.000	0.5421	06	50.000	0.6221	07	100.000	0.6177	08	150.000	0.6073
09	200.000	0.6250									

2,3,6-Trichlorotoluene Average RF RSD = 12.0 Average RF = 0.2893

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3707	03	2.000	0.2799	04	5.000	0.2711	05	10.000	0.2675
06	50.000	0.2777	07	100.000	0.2624	08	150.000	0.2867	09	200.000	0.2986

2,4,5-Trichlorotoluene Average RF RSD = 7.6 Average RF = 0.2920

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3303	03	2.000	0.2882	04	5.000	0.2805	05	10.000	0.2589
06	50.000	0.2900	07	100.000	0.2753	08	150.000	0.3000	09	200.000	0.3125

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 5.2 Average RF = 1.140

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	1.058	02	3.000	1.104	03	6.000	1.126	04	15.000	1.154
05	30.000	1.052	06	150.000	1.223	07	300.000	1.178	08	450.000	1.180
09	600.000	1.186									

2,4-Dichlorobenzotrifluoride Average RF RSD = 6.8 Average RF = 0.6694

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6692	02	1.000	0.6656	03	2.000	0.6429	04	5.000	0.6587
05	10.000	0.5752	06	50.000	0.6937	07	100.000	0.6751	08	150.000	0.7053
09	200.000	0.7392									

2,5-Dichlorobenzotrifluoride Average RF RSD = 6.2 Average RF = 0.7696

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7590	02	1.000	0.7566	03	2.000	0.7874	04	5.000	0.7858
05	10.000	0.6532	06	50.000	0.7840	07	100.000	0.7774	08	150.000	0.8107
09	200.000	0.8126									

2-Butanone (MEK) Average RF RSD = 7.3 Average RF = 0.1537

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1385	05	10.000	0.1425	06	50.000	0.1676	07	100.000	0.1569
08	150.000	0.1552	09	200.000	0.1617						

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Chloro-1,3-butadiene Average RF RSD = 5.3 Average RF = 0.8376

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8369	02	1.000	0.7649	03	2.000	0.7992	04	5.000	0.8569
05	10.000	0.7924	06	50.000	0.8741	07	100.000	0.8552	08	150.000	0.8517
09	200.000	0.9068									

2-Chlorobenzotrifluoride Average RF RSD = 7.5 Average RF = 0.5693

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5637	02	1.000	0.5436	03	2.000	0.5452	04	5.000	0.5718
05	10.000	0.4829	06	50.000	0.5992	07	100.000	0.5896	08	150.000	0.5987
09	200.000	0.6293									

2-Chloroethyl Vinyl Ether Average RF RSD = 8.6 Average RF = 0.1702

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1499	03	2.000	0.1538	04	5.000	0.1637	05	10.000	0.1638
06	50.000	0.1824	07	100.000	0.1840	08	150.000	0.1750	09	200.000	0.1893

2-Chlorotoluene Average RF RSD = 5.3 Average RF = 2.084

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.914	02	1.000	1.981	03	2.000	2.099	04	5.000	2.093
05	10.000	1.951	06	50.000	2.196	07	100.000	2.134	08	150.000	2.176
09	200.000	2.209									

2-Hexanone Average RF RSD = 4.9 Average RF = 0.1956

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1895	03	2.000	0.1866	04	5.000	0.1888	05	10.000	0.1859
06	50.000	0.2111	07	100.000	0.1991	08	150.000	0.1971	09	200.000	0.2064

2-Methyl-1-propanol Average RF RSD = 9.9 Average RF = 0.01049

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01245	03	40.000	0.01003	04	100.000	0.009459	05	200.000	0.009221
06	1000.000	0.01120	07	2000.000	0.01028	08	3000.000	0.01024	09	4000.000	0.01103

2-Methyl-2-propanol Average RF RSD = 5.2 Average RF = 0.03076

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02859	02	20.000	0.03066	03	40.000	0.03030	04	100.000	0.03216
05	200.000	0.02863	06	1000.000	0.03369	07	2000.000	0.03062	08	3000.000	0.03065
09	4000.000	0.03150									

2-Nitropropane Average RF RSD = 11.2 Average RF = 0.05775

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.05862	03	4.000	0.04403	04	10.000	0.06166	05	20.000	0.05302
06	100.000	0.06318	07	200.000	0.05956	08	300.000	0.05870	09	400.000	0.06324

2-Propanol Average RF RSD = 5.5 Average RF = 0.01952

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.01735	02	20.000	0.02044	03	40.000	0.01952	04	100.000	0.02013
05	200.000	0.01874	06	1000.000	0.02102	07	2000.000	0.01941	08	3000.000	0.01917
09	4000.000	0.01990									

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 4.0 Average RF = 1.158

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.168	02	2.000	1.113	03	4.000	1.127	04	10.000	1.167
05	20.000	1.086	06	100.000	1.245	07	200.000	1.184	08	300.000	1.175
09	400.000	1.155									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

3,4-Dichlorobenzotrifluoride Average RF RSD = 6.9 Average RF = 0.7466

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7984	02	1.000	0.7249	03	2.000	0.7232	04	5.000	0.7287
05	10.000	0.6355	06	50.000	0.7689	07	100.000	0.7573	08	150.000	0.7822
09	200.000	0.8004									

3-Chloro-1-propene Average RF RSD = 7.5 Average RF = 0.2411

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2130	02	1.000	0.2641	03	2.000	0.2267	04	5.000	0.2359
05	10.000	0.2196	06	50.000	0.2562	07	100.000	0.2531	08	150.000	0.2455
09	200.000	0.2557									

3-Chlorobenzotrifluoride Average RF RSD = 8.3 Average RF = 0.5750

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5606	02	1.000	0.5576	03	2.000	0.5800	04	5.000	0.5614
05	10.000	0.4694	06	50.000	0.6111	07	100.000	0.5986	08	150.000	0.6005
09	200.000	0.6362									

3-Chlorotoluene Average RF RSD = 7.0 Average RF = 2.111

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.825	02	1.000	2.034	03	2.000	2.060	04	5.000	2.229
05	10.000	1.972	06	50.000	2.237	07	100.000	2.197	08	150.000	2.200
09	200.000	2.248									

4-Bromofluorobenzene Average RF RSD = 0.8 Average RF = 0.4541

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4533	07	50.000	0.4551	09	50.000	0.4573	02	50.000	0.4510
04	50.000	0.4511	08	50.000	0.4499	01	50.000	0.4545	03	50.000	0.4623
05	50.000	0.4522									

4-Chlorotoluene Average RF RSD = 3.8 Average RF = 2.524

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.714	02	1.000	2.501	03	2.000	2.423	04	5.000	2.466
05	10.000	2.395	06	50.000	2.608	07	100.000	2.528	08	150.000	2.542
09	200.000	2.538									

4-Isopropyltoluene Average RF RSD = 5.0 Average RF = 2.495

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.548	02	1.000	2.449	03	2.000	2.450	04	5.000	2.431
05	10.000	2.223	06	50.000	2.644	07	100.000	2.538	08	150.000	2.604
09	200.000	2.564									

4-Methyl-2-pentanone Average RF RSD = 6.0 Average RF = 0.2465

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2243	03	2.000	0.2272	04	5.000	0.2388	05	10.000	0.2538
06	50.000	0.2617	07	100.000	0.2547	08	150.000	0.2486	09	200.000	0.2625

Acetone Average RF RSD = 11.3 Average RF = 0.1127

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1312	05	10.000	0.1171	06	50.000	0.1148	07	100.000	0.1012
08	150.000	0.09552	09	200.000	0.1166						

Acetonitrile Average RF RSD = 7.5 Average RF = 0.01514

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.01707	04	25.000	0.01331	05	50.000	0.01554	06	250.000	0.01452
07	500.000	0.01521	08	750.000	0.01506	09	1000.000	0.01528			

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Acrolein Average RF RSD = 6.8 Average RF = 0.05806

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.06646	03	10.000	0.05824	04	25.000	0.06069	05	50.000	0.05583
06	250.000	0.05791	07	500.000	0.05497	08	750.000	0.05445	09	1000.000	0.05594

Acrylonitrile Average RF RSD = 6.0 Average RF = 0.1232

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1240	02	5.000	0.1081	03	10.000	0.1232	04	25.000	0.1206
05	50.000	0.1164	06	250.000	0.1315	07	500.000	0.1272	08	750.000	0.1262
09	1000.000	0.1313									

Benzene Average RF RSD = 4.3 Average RF = 1.290

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.255	02	1.000	1.224	03	2.000	1.288	04	5.000	1.305
05	10.000	1.208	06	50.000	1.317	07	100.000	1.325	08	150.000	1.302
09	200.000	1.390									

Bromobenzene Average RF RSD = 3.1 Average RF = 0.8344

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8806	02	1.000	0.8100	03	2.000	0.8118	04	5.000	0.8386
05	10.000	0.8072	06	50.000	0.8507	07	100.000	0.8175	08	150.000	0.8304
09	200.000	0.8627									

Bromochloromethane Average RF RSD = 4.9 Average RF = 0.2816

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2672	02	1.000	0.3091	03	2.000	0.2742	04	5.000	0.2955
05	10.000	0.2709	06	50.000	0.2890	07	100.000	0.2767	08	150.000	0.2707
09	200.000	0.2814									

Bromodichloromethane Average RF RSD = 5.7 Average RF = 0.4057

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4006	02	1.000	0.3679	03	2.000	0.3945	04	5.000	0.4029
05	10.000	0.3852	06	50.000	0.4146	07	100.000	0.4212	08	150.000	0.4157
09	200.000	0.4485									

Bromoform Average RF RSD = 10.4 Average RF = 0.1979

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1855	02	1.000	0.1928	03	2.000	0.1624	04	5.000	0.1852
05	10.000	0.1861	06	50.000	0.2124	07	100.000	0.2108	08	150.000	0.2175
09	200.000	0.2281									

Bromomethane Quadratic 1/X2 COD = 0.9981 $Y = 0.03518 X^2 + 0.1699 X + 4.251E\text{-}4$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2340	02	1.000	0.1623	03	2.000	0.1522	04	5.000	0.1764
05	10.000	0.1947	06	50.000	0.2324	07	100.000	0.2495	08	150.000	0.2725
09	200.000	0.3015									

Carbon Disulfide Average RF RSD = 4.2 Average RF = 1.419

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.516	02	1.000	1.455	03	2.000	1.393	04	5.000	1.394
05	10.000	1.298	06	50.000	1.436	07	100.000	1.408	08	150.000	1.406
09	200.000	1.462									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Tetrachloride Average RF RSD = 8.6 Average RF = 0.1345

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1294	02	1.000	0.1498	03	2.000	0.1247	04	5.000	0.1327
05	10.000	0.1119	06	50.000	0.1373	07	100.000	0.1385	08	150.000	0.1384
09	200.000	0.1473									

Chlorobenzene Average RF RSD = 3.7 Average RF = 1.037

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.098	02	1.000	1.038	03	2.000	1.003	04	5.000	1.012
05	10.000	0.9725	06	50.000	1.073	07	100.000	1.037	08	150.000	1.031
09	200.000	1.066									

Chloroethane Average RF RSD = 8.8 Average RF = 0.3307

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3850	02	1.000	0.3264	03	2.000	0.3658	04	5.000	0.3198
05	10.000	0.2846	06	50.000	0.3265	07	100.000	0.3190	08	150.000	0.3176
09	200.000	0.3312									

Chloroform Average RF RSD = 3.7 Average RF = 0.7782

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8142	02	1.000	0.7994	03	2.000	0.7746	04	5.000	0.7723
05	10.000	0.7178	06	50.000	0.7688	07	100.000	0.7767	08	150.000	0.7716
09	200.000	0.8087									

Chloromethane Average RF RSD = 5.9 Average RF = 0.5794

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5575	02	1.000	0.5672	03	2.000	0.5451	04	5.000	0.5698
05	10.000	0.5267	06	50.000	0.6141	07	100.000	0.6054	08	150.000	0.6020
09	200.000	0.6273									

Cyclohexane Average RF RSD = 4.2 Average RF = 0.3721

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3560	02	1.000	0.3614	03	2.000	0.3896	04	5.000	0.3754
05	10.000	0.3573	06	50.000	0.3871	07	100.000	0.3600	08	150.000	0.3646
09	200.000	0.3971									

Cyclohexanone Average RF RSD = 5.1 Average RF = 0.03907

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03912	02	20.000	0.04152	03	40.000	0.03812	04	100.000	0.04004
05	200.000	0.03897	06	1000.000	0.04258	07	2000.000	0.03737	08	3000.000	0.03689
09	4000.000	0.03705									

Dibromochloromethane Average RF RSD = 7.8 Average RF = 0.3305

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3104	02	1.000	0.3012	03	2.000	0.3102	04	5.000	0.3120
05	10.000	0.3136	06	50.000	0.3565	07	100.000	0.3511	08	150.000	0.3494
09	200.000	0.3698									

Dibromofluoromethane Average RF RSD = 1.2 Average RF = 0.2981

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	50.000	0.3033	02	50.000	0.2948	05	50.000	0.2975	07	50.000	0.3025
09	50.000	0.3006	06	50.000	0.2924	04	50.000	0.2980	08	50.000	0.2969
01	50.000	0.2971									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dibromomethane Average RF RSD = 5.4 Average RF = 0.1690

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1826	02	1.000	0.1628	03	2.000	0.1558	04	5.000	0.1681
05	10.000	0.1584	06	50.000	0.1761	07	100.000	0.1720	08	150.000	0.1660
09	200.000	0.1789									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 10.8 Average RF = 0.4677

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5363	02	1.000	0.4327	03	2.000	0.4154	04	5.000	0.4213
05	10.000	0.3997	06	50.000	0.5093	07	100.000	0.4909	08	150.000	0.4912
09	200.000	0.5121									

Dichlorofluoromethane (CFC 21) Average RF RSD = 2.6 Average RF = 0.8807

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8755	02	1.000	0.9205	03	2.000	0.8587	04	5.000	0.8710
05	10.000	0.8658	06	50.000	0.8996	07	100.000	0.8648	08	150.000	0.8607
09	200.000	0.9094									

Dichloromethane Linear 1/X2 R2 = 0.9962 Y = 0.4115 X + 0.004244

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8538	02	1.000	0.6105	03	2.000	0.4813	04	5.000	0.4414
05	10.000	0.4082	06	50.000	0.4298	07	100.000	0.4266	08	150.000	0.4227
09	200.000	0.4446									

Diethyl Ether Average RF RSD = 4.0 Average RF = 0.3751

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4078	02	1.000	0.3771	03	2.000	0.3822	04	5.000	0.3787
05	10.000	0.3621	06	50.000	0.3762	07	100.000	0.3604	08	150.000	0.3601
09	200.000	0.3708									

Diisopropyl Ether Average RF RSD = 3.5 Average RF = 1.762

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.676	02	1.000	1.741	03	2.000	1.743	04	5.000	1.820
05	10.000	1.681	06	50.000	1.759	07	100.000	1.791	08	150.000	1.781
09	200.000	1.868									

Ethyl Methacrylate Average RF RSD = 14.3 Average RF = 0.3115

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2597	02	1.000	0.2365	03	2.000	0.2731	04	5.000	0.3149
05	10.000	0.3231	06	50.000	0.3537	07	100.000	0.3453	08	150.000	0.3370
09	200.000	0.3605									

Ethyl tert-Butyl Ether Average RF RSD = 3.7 Average RF = 1.499

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.577	02	1.000	1.461	03	2.000	1.464	04	5.000	1.515
05	10.000	1.407	06	50.000	1.484	07	100.000	1.500	08	150.000	1.500
09	200.000	1.581									

Ethylbenzene Average RF RSD = 6.4 Average RF = 0.5354

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5540	02	1.000	0.5136	03	2.000	0.5005	04	5.000	0.5404
05	10.000	0.4683	06	50.000	0.5602	07	100.000	0.5529	08	150.000	0.5540
09	200.000	0.5748									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting			
Hexachlorobutadiene	Average RF		RSD = 11.1	Average RF = 0.3747	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4692	02	1.000	0.3994	03	2.000	0.3802	04	5.000	0.3719
05	10.000	0.3277	06	50.000	0.3624	07	100.000	0.3335	08	150.000	0.3604
09	200.000	0.3673									

Iodomethane	Quadratic	1/X	COD = 0.9968	$Y = 0.05916 X^2 + 0.3484 X + -0.03549$	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.08014	05	10.000	0.1196	06	50.000	0.3201	07	100.000	0.4849
08	150.000	0.5237	09	200.000	0.5652						

Isopropylbenzene (Cumene)	Average RF		RSD = 5.6	Average RF = 1.620	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.555	02	1.000	1.573	03	2.000	1.641	04	5.000	1.641
05	10.000	1.427	06	50.000	1.742	07	100.000	1.670	08	150.000	1.677
09	200.000	1.655									

Methacrylonitrile	Average RF		RSD = 6.3	Average RF = 0.1248	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1321	03	2.000	0.1079	04	5.000	0.1202	05	10.000	0.1290
06	50.000	0.1286	07	100.000	0.1268	08	150.000	0.1234	09	200.000	0.1305

Methyl Acetate	Average RF		RSD = 6.2	Average RF = 0.2417	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2194	02	1.000	0.2327	03	2.000	0.2187	04	5.000	0.2479
05	10.000	0.2457	06	50.000	0.2615	07	100.000	0.2508	08	150.000	0.2447
09	200.000	0.2543									

Methyl Methacrylate	Average RF		RSD = 11.8	Average RF = 0.1493	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1617	02	1.000	0.1123	03	2.000	0.1448	04	5.000	0.1385
05	10.000	0.1389	06	50.000	0.1635	07	100.000	0.1613	08	150.000	0.1552
09	200.000	0.1674									

Methyl tert-Butyl Ether	Average RF		RSD = 2.2	Average RF = 1.057	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.042	02	1.000	1.066	03	2.000	1.045	04	5.000	1.079
05	10.000	1.019	06	50.000	1.086	07	100.000	1.054	08	150.000	1.042
09	200.000	1.082									

Methylcyclohexane	Average RF		RSD = 4.7	Average RF = 0.4551	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4699	02	1.000	0.4695	03	2.000	0.4702	04	5.000	0.4392
05	10.000	0.4142	06	50.000	0.4679	07	100.000	0.4389	08	150.000	0.4457
09	200.000	0.4801									

Naphthalene	Average RF		RSD = 5.6	Average RF = 1.198	

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.177	02	1.000	1.181	03	2.000	1.143	04	5.000	1.104
05	10.000	1.132	06	50.000	1.298	07	100.000	1.223	08	150.000	1.258
09	200.000	1.267									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Average RF

Propionitrile Average RF RSD = 13.1 Average RF = 0.03970

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.03616	02	5.000	0.03896	03	10.000	0.03018	04	25.000	0.03778
05	50.000	0.03607	06	250.000	0.04558	07	500.000	0.04431	08	750.000	0.04338
09	1000.000	0.04486									

Styrene Average RF RSD = 6.1 Average RF = 1.118

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.055	02	1.000	1.065	03	2.000	1.035	04	5.000	1.082
05	10.000	1.072	06	50.000	1.205	07	100.000	1.173	08	150.000	1.178
09	200.000	1.198									

Tetrachloroethene (PCE) Average RF RSD = 7.1 Average RF = 0.3104

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3217	02	1.000	0.3058	03	2.000	0.3081	04	5.000	0.3015
05	10.000	0.2597	06	50.000	0.3249	07	100.000	0.3161	08	150.000	0.3188
09	200.000	0.3372									

Tetrahydrofuran (THF) Average RF RSD = 2.6 Average RF = 0.09148

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.09332	04	5.000	0.09518	05	10.000	0.09122	06	50.000	0.09086
07	100.000	0.08957	08	150.000	0.08798	09	200.000	0.09221			

Toluene Average RF RSD = 3.7 Average RF = 1.387

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.375	02	1.000	1.355	03	2.000	1.369	04	5.000	1.407
05	10.000	1.279	06	50.000	1.438	07	100.000	1.438	08	150.000	1.384
09	200.000	1.440									

Toluene-d8 Average RF RSD = 1.0 Average RF = 1.149

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.153	08	50.000	1.137	01	50.000	1.154	03	50.000	1.142
05	50.000	1.144	02	50.000	1.141	09	50.000	1.158	07	50.000	1.172
04	50.000	1.142									

Trichloroethene (TCE) Average RF RSD = 6.6 Average RF = 0.3466

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3594	02	1.000	0.3070	03	2.000	0.3505	04	5.000	0.3502
05	10.000	0.3118	06	50.000	0.3541	07	100.000	0.3549	08	150.000	0.3529
09	200.000	0.3786									

Trichlorofluoromethane (CFC 11) Average RF RSD = 7.7 Average RF = 0.6528

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7187	02	1.000	0.6756	03	2.000	0.6457	04	5.000	0.6540
05	10.000	0.5331	06	50.000	0.6669	07	100.000	0.6485	08	150.000	0.6558
09	200.000	0.6770									

Vinyl Acetate Average RF RSD = 13.8 Average RF = 0.06166

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.06381	02	1.000	0.06095	03	2.000	0.04089	04	5.000	0.06230
05	10.000	0.05834	06	50.000	0.06633	07	100.000	0.06565	08	150.000	0.06668
09	200.000	0.06999									

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Vinyl Chloride Average RF RSD = 8.0 Average RF = 0.6080

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6714	02	1.000	0.5765	03	2.000	0.5608	04	5.000	0.5975
05	10.000	0.5174	06	50.000	0.6425	07	100.000	0.6305	08	150.000	0.6289
09	200.000	0.6461									

cis-1,2-Dichloroethene Average RF RSD = 5.5 Average RF = 0.4801

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5271	02	1.000	0.4439	03	2.000	0.4792	04	5.000	0.4647
05	10.000	0.4460	06	50.000	0.4859	07	100.000	0.4840	08	150.000	0.4838
09	200.000	0.5060									

cis-1,3-Dichloropropene Average RF RSD = 6.1 Average RF = 0.4895

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4631	02	1.000	0.4713	03	2.000	0.4447	04	5.000	0.4866
05	10.000	0.4716	06	50.000	0.5132	07	100.000	0.5196	08	150.000	0.4987
09	200.000	0.5364									

m,p-Xylenes Average RF RSD = 5.2 Average RF = 0.6556

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6400	02	2.000	0.6070	03	4.000	0.6437	04	10.000	0.6575
05	20.000	0.6069	06	100.000	0.7008	07	200.000	0.6810	08	300.000	0.6774
09	400.000	0.6857									

n-Butyl Acetate Average RF RSD = 8.5 Average RF = 0.5143

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6026	02	1.000	0.5062	03	2.000	0.4566	04	5.000	0.4666
05	10.000	0.5032	06	50.000	0.5521	07	100.000	0.5113	08	150.000	0.5068
09	200.000	0.5236									

n-Butylbenzene Average RF RSD = 7.7 Average RF = 2.156

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.437	02	1.000	2.130	03	2.000	1.949	04	5.000	2.048
05	10.000	1.914	06	50.000	2.262	07	100.000	2.171	08	150.000	2.266
09	200.000	2.226									

n-Heptane Average RF RSD = 10.5 Average RF = 0.3618

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4428	03	2.000	0.3672	04	5.000	0.3487	05	10.000	0.3078
06	50.000	0.3688	07	100.000	0.3478	08	150.000	0.3501	09	200.000	0.3616

n-Propylbenzene Average RF RSD = 5.1 Average RF = 3.392

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.503	02	1.000	3.410	03	2.000	3.299	04	5.000	3.465
05	10.000	3.027	06	50.000	3.630	07	100.000	3.478	08	150.000	3.424
09	200.000	3.292									

o-Xylene Average RF RSD = 4.8 Average RF = 0.6620

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6937	02	1.000	0.6246	03	2.000	0.6451	04	5.000	0.6446
05	10.000	0.6122	06	50.000	0.6862	07	100.000	0.6715	08	150.000	0.6790
09	200.000	0.7008									

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte	Curve Fit	Weighting

sec-Butylbenzene — Average RF — RSD = 5.5 — Average RF = 2.852

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.013	02	1.000	2.795	03	2.000	2.699	04	5.000	2.836
05	10.000	2.542	06	50.000	3.025	07	100.000	2.895	08	150.000	2.969
09	200.000	2.896									

tert-Amyl Methyl Ether — Average RF — RSD = 3.3 — Average RF = 1.127

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.150	02	1.000	1.146	03	2.000	1.074	04	5.000	1.135
05	10.000	1.068	06	50.000	1.125	07	100.000	1.140	08	150.000	1.120
09	200.000	1.186									

tert-Butylbenzene — Average RF — RSD = 5.8 — Average RF = 2.069

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.197	02	1.000	1.947	03	2.000	2.067	04	5.000	2.071
05	10.000	1.815	06	50.000	2.132	07	100.000	2.079	08	150.000	2.153
09	200.000	2.160									

trans-1,2-Dichloroethene — Average RF — RSD = 5.3 — Average RF = 0.4235

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4352	02	1.000	0.4071	03	2.000	0.4376	04	5.000	0.4156
05	10.000	0.3748	06	50.000	0.4327	07	100.000	0.4287	08	150.000	0.4281
09	200.000	0.4515									

trans-1,3-Dichloropropene — Average RF — RSD = 7.5 — Average RF = 0.4006

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3581	02	1.000	0.3638	03	2.000	0.3941	04	5.000	0.3974
05	10.000	0.3786	06	50.000	0.4262	07	100.000	0.4303	08	150.000	0.4133
09	200.000	0.4438									

trans-1,4-Dichloro-2-butene — Average RF — RSD = 14.8 — Average RF = 0.08602

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1043	02	1.000	0.06929	03	2.000	0.07902	04	5.000	0.07324
05	10.000	0.07221	06	50.000	0.09264	07	100.000	0.09253	08	150.000	0.09312
09	200.000	0.09790									

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.97	-3.2	03	2.000	1.90	-5.1
04	5.000	4.79	-4.2	05	10.000	9.44	-5.6	06	50.000	52.23	4.5
07	100.000	102.78	2.8	08	150.000	155.44	3.6	09	200.000	216.07	8.0

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.1	02	1.000	1.01	1.4	03	2.000	1.98	-0.8
04	5.000	4.92	-1.7	05	10.000	8.38	-16.2	06	50.000	49.47	-1.1
07	100.000	98.16	-1.8	08	150.000	148.14	-1.2	09	200.000	206.60	3.3

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.6	02	1.000	1.04	4.4	03	2.000	1.97	-1.6
04	5.000	4.99	-0.1	05	10.000	9.70	-3.0	06	50.000	51.88	3.8
07	100.000	97.55	-2.5	08	150.000	147.63	-1.6	09	200.000	204.28	2.1

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.99	-0.9	03	2.000	1.99	-0.5
04	5.000	4.89	-2.2	05	10.000	9.72	-2.8	06	50.000	51.68	3.4
07	100.000	101.96	2.0	08	150.000	146.97	-2.0	09	200.000	211.24	5.6

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.7	02	1.000	1.05	5.1	03	2.000	2.07	3.3
04	5.000	4.86	-2.8	05	10.000	7.99	-20.1	06	50.000	49.97	-0.1
07	100.000	97.54	-2.5	08	150.000	149.71	-0.2	09	200.000	213.14	6.6

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.4	02	1.000	1.03	3.1	03	2.000	1.97	-1.5
04	5.000	5.11	2.2	05	10.000	9.21	-7.9	06	50.000	50.27	0.5
07	100.000	101.18	1.2	08	150.000	149.20	-0.5	09	200.000	208.55	4.3

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.4	02	1.000	1.05	5.4	03	2.000	2.08	4.2
04	5.000	5.03	0.5	05	10.000	8.08	-19.2	06	50.000	48.65	-2.7
07	100.000	98.18	-1.8	08	150.000	147.84	-1.4	09	200.000	213.44	6.7

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.4	02	1.000	1.01	1.4	03	2.000	1.96	-1.9
04	5.000	4.98	-0.4	05	10.000	8.43	-15.7	06	50.000	50.33	0.7
07	100.000	99.94	-0.1	08	150.000	149.90	-0.1	09	200.000	213.38	6.7

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.98	-1.9	03	2.000	2.09	4.3	04	5.000	4.72	-5.7
05	10.000	9.38	-6.2	06	50.000	52.32	4.6	07	100.000	98.49	-1.5
08	150.000	153.07	2.0	09	200.000	208.52	4.3				

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.3	02	1.000	1.01	1.0	03	2.000	2.06	3.2
04	5.000	4.78	-4.5	05	10.000	9.56	-4.4	06	50.000	48.99	-2.0
07	100.000	94.65	-5.3	08	150.000	141.95	-5.4	09	200.000	198.06	-1.0

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.2	02	1.000	0.97	-3.0	03	2.000	1.90	-5.0
04	5.000	4.86	-2.8	05	10.000	9.41	-5.9	06	50.000	51.83	3.7
07	100.000	98.10	-1.9	08	150.000	152.67	1.8	09	200.000	205.91	3.0

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	0.96	-3.7	03	2.000	1.96	-2.2
04	5.000	5.06	1.3	05	10.000	9.32	-6.8	06	50.000	53.21	6.4
07	100.000	102.53	2.5	08	150.000	155.92	3.9	09	200.000	206.31	3.2

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	0.79	-20.5	03	2.000	2.04	2.1
04	5.000	4.84	-3.2	05	10.000	9.45	-5.5	06	50.000	55.39	10.8
07	100.000	103.68	3.7	08	150.000	161.06	7.4	09	200.000	223.96	12.0

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	0.92	-8.0	03	2.000	1.98	-0.9
04	5.000	4.85	-2.9	05	10.000	9.69	-3.1	06	50.000	52.93	5.9
07	100.000	102.84	2.8	08	150.000	151.48	1.0	09	200.000	211.42	5.7

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.4	02	1.000	1.01	0.7	03	2.000	1.93	-3.3
04	5.000	4.81	-3.9	05	10.000	9.53	-4.7	06	50.000	50.59	1.2
07	100.000	96.74	-3.3	08	150.000	148.22	-1.2	09	200.000	208.09	4.0

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.9	02	1.000	0.98	-2.0	03	2.000	1.95	-2.6
04	5.000	4.95	-0.9	05	10.000	9.49	-5.1	06	50.000	51.25	2.5
07	100.000	99.19	-0.8	08	150.000	151.19	0.8	09	200.000	204.45	2.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	I

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.8	02	1.000	0.96	-4.3	03	2.000	1.91	-4.4
04	5.000	5.01	0.2	05	10.000	9.72	-2.8	06	50.000	51.18	2.4
07	100.000	100.14	0.1	08	150.000	145.49	-3.0	09	200.000	208.13	4.1

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	50.000	50.80	1.6	03	50.000	51.73	3.5	08	50.000	47.82	-4.4
01	50.000	51.20	2.4	09	50.000	49.27	-1.5	05	50.000	49.83	-0.3
06	50.000	48.95	-2.1	07	50.000	49.48	-1.0	02	50.000	50.93	1.9

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.3	02	1.000	0.94	-5.6	03	2.000	1.95	-2.6
04	5.000	4.89	-2.1	05	10.000	9.32	-6.8	06	50.000	50.67	1.3
07	100.000	100.65	0.6	08	150.000	148.07	-1.3	09	200.000	210.14	5.1

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	0.94	-5.6	03	2.000	1.96	-2.0
04	5.000	4.96	-0.8	05	10.000	9.24	-7.6	06	50.000	52.22	4.4
07	100.000	101.50	1.5	08	150.000	155.55	3.7	09	200.000	211.38	5.7

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.6	02	1.000	0.98	-1.7	03	2.000	1.96	-2.2
04	5.000	4.97	-0.5	05	10.000	9.20	-8.0	06	50.000	52.24	4.5
07	100.000	101.08	1.1	08	150.000	154.71	3.1	09	200.000	204.19	2.1

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.4	02	1.000	0.99	-1.1	03	2.000	1.90	-4.8
04	5.000	5.07	1.3	05	10.000	9.29	-7.1	06	50.000	51.42	2.8
07	100.000	99.78	-0.2	08	150.000	154.04	2.7	09	200.000	208.04	4.0

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.6	02	1.000	0.96	-3.7	03	2.000	2.04	2.0
04	5.000	4.94	-1.2	05	10.000	9.50	-5.0	06	50.000	51.78	3.6
07	100.000	99.31	-0.7	08	150.000	146.75	-2.2	09	200.000	206.98	3.5

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.97	-3.0	03	2.000	1.86	-6.8
04	5.000	4.99	-0.1	05	10.000	9.40	-6.0	06	50.000	51.31	2.6
07	100.000	99.91	-0.1	08	150.000	153.00	2.0	09	200.000	206.50	3.3

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.81	-11.0	03	40.000	40.24	0.6	04	100.000	99.36	-0.6
05	200.000	201.33	0.7	06	1000.000	1,075.14	7.5	07	2000.000	1,949.93	-2.5
08	3000.000	3,005.72	0.2	09	4000.000	4,205.29	5.1				

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	49.21	-1.6	03	100.000	108.18	8.2	04	250.000	227.26	-9.1
05	500.000	453.88	-9.2	06	2500.000	2,769.45	10.8	07	5000.000	5,209.00	4.2
08	7500.000	7,354.56	-1.9	09	10000.000	9,806.36	-1.9				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.0	02	1.000	0.96	-4.2	03	2.000	1.98	-1.0
04	5.000	4.96	-0.8	05	10.000	8.53	-14.7	06	50.000	52.01	4.0
07	100.000	103.18	3.2	08	150.000	154.25	2.8	09	200.000	217.13	8.6

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.8	02	1.000	0.95	-5.0	03	2.000	1.92	-4.1
04	5.000	4.90	-2.0	05	10.000	9.46	-5.4	06	50.000	51.21	2.4
07	100.000	97.50	-2.5	08	150.000	149.07	-0.6	09	200.000	208.84	4.4

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.6	02	1.000	1.10	10.0	03	2.000	2.01	0.7
04	5.000	5.10	2.0	05	10.000	8.50	-15.0	06	50.000	48.78	-2.4
07	100.000	96.86	-3.1	08	150.000	142.86	-4.8	09	200.000	196.03	-2.0

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.28	28.1	03	2.000	1.94	-3.2	04	5.000	4.69	-6.3
05	10.000	9.24	-7.6	06	50.000	48.00	-4.0	07	100.000	90.69	-9.3
08	150.000	148.63	-0.9	09	200.000	206.40	3.2				

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.13	13.1	03	2.000	1.97	-1.3	04	5.000	4.80	-3.9
05	10.000	8.87	-11.3	06	50.000	49.66	-0.7	07	100.000	94.30	-5.7
08	150.000	154.12	2.7	09	200.000	214.06	7.0				

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.39	-7.2	02	3.000	2.90	-3.2	03	6.000	5.92	-1.3
04	15.000	15.18	1.2	05	30.000	27.69	-7.7	06	150.000	160.93	7.3
07	300.000	310.00	3.3	08	450.000	465.87	3.5	09	600.000	624.12	4.0

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.0	02	1.000	0.99	-0.6	03	2.000	1.92	-4.0
04	5.000	4.92	-1.6	05	10.000	8.59	-14.1	06	50.000	51.81	3.6
07	100.000	100.84	0.8	08	150.000	158.03	5.4	09	200.000	220.85	10.4

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.4	02	1.000	0.98	-1.7	03	2.000	2.05	2.3
04	5.000	5.10	2.1	05	10.000	8.49	-15.1	06	50.000	50.93	1.9
07	100.000	101.01	1.0	08	150.000	158.00	5.3	09	200.000	211.17	5.6

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	4.50	-9.9	05	10.000	9.27	-7.3	06	50.000	54.51	9.0
07	100.000	102.07	2.1	08	150.000	151.41	0.9	09	200.000	210.39	5.2

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.1	02	1.000	0.91	-8.7	03	2.000	1.91	-4.6
04	5.000	5.12	2.3	05	10.000	9.46	-5.4	06	50.000	52.18	4.4
07	100.000	102.11	2.1	08	150.000	152.53	1.7	09	200.000	216.53	8.3

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-1.0	02	1.000	0.95	-4.5	03	2.000	1.92	-4.2
04	5.000	5.02	0.4	05	10.000	8.48	-15.2	06	50.000	52.62	5.2
07	100.000	103.55	3.6	08	150.000	157.75	5.2	09	200.000	221.07	10.5

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.88	-12.0	03	2.000	1.81	-9.7	04	5.000	4.81	-3.9
05	10.000	9.62	-3.8	06	50.000	53.58	7.2	07	100.000	108.08	8.1
08	150.000	154.22	2.8	09	200.000	222.39	11.2				

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.2	02	1.000	0.95	-4.9	03	2.000	2.01	0.7
04	5.000	5.02	0.5	05	10.000	9.36	-6.4	06	50.000	52.70	5.4
07	100.000	102.42	2.4	08	150.000	156.62	4.4	09	200.000	212.04	6.0

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-3.1	03	2.000	1.91	-4.6	04	5.000	4.83	-3.5
05	10.000	9.50	-5.0	06	50.000	53.97	7.9	07	100.000	101.82	1.8
08	150.000	151.19	0.8	09	200.000	211.13	5.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	23.74	18.7	03	40.000	38.24	-4.4	04	100.000	90.19	-9.8
05	200.000	175.85	-12.1	06	1000.000	1,067.53	6.8	07	2000.000	1,960.30	-2.0
08	3000.000	2,928.98	-2.4	09	4000.000	4,207.88	5.2				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.29	-7.1	02	20.000	19.94	-0.3	03	40.000	39.41	-1.5
04	100.000	104.58	4.6	05	200.000	186.18	-6.9	06	1000.000	1,095.31	9.5
07	2000.000	1,991.29	-0.4	08	3000.000	2,990.07	-0.3	09	4000.000	4,096.67	2.4

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.03	1.5	03	4.000	3.05	-23.8	04	10.000	10.68	6.8
05	20.000	18.36	-8.2	06	100.000	109.40	9.4	07	200.000	206.26	3.1
08	300.000	304.90	1.6	09	400.000	438.03	9.5				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	8.89	-11.1	02	20.000	20.94	4.7	03	40.000	39.99	0.0
04	100.000	103.14	3.1	05	200.000	191.98	-4.0	06	1000.000	1,076.75	7.7
07	2000.000	1,988.43	-0.6	08	3000.000	2,947.01	-1.8	09	4000.000	4,077.89	1.9

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.01	0.8	02	2.000	1.92	-3.9	03	4.000	3.89	-2.6
04	10.000	10.08	0.8	05	20.000	18.76	-6.2	06	100.000	107.52	7.5
07	200.000	204.49	2.2	08	300.000	304.43	1.5	09	400.000	399.02	-0.2

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.9	02	1.000	0.97	-2.9	03	2.000	1.94	-3.1
04	5.000	4.88	-2.4	05	10.000	8.51	-14.9	06	50.000	51.49	3.0
07	100.000	101.43	1.4	08	150.000	157.16	4.8	09	200.000	214.40	7.2

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.7	02	1.000	1.10	9.6	03	2.000	1.88	-6.0
04	5.000	4.89	-2.2	05	10.000	9.11	-8.9	06	50.000	53.13	6.3
07	100.000	104.99	5.0	08	150.000	152.75	1.8	09	200.000	212.11	6.1

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.97	-3.0	03	2.000	2.02	0.9
04	5.000	4.88	-2.4	05	10.000	8.16	-18.4	06	50.000	53.14	6.3
07	100.000	104.10	4.1	08	150.000	156.64	4.4	09	200.000	221.27	10.6

Initial Calibration - Detailed Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.5	02	1.000	0.96	-3.7	03	2.000	1.95	-2.4
04	5.000	5.28	5.6	05	10.000	9.34	-6.6	06	50.000	52.98	6.0
07	100.000	104.05	4.1	08	150.000	156.27	4.2	09	200.000	212.97	6.5

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	49.91	-0.2	07	50.000	50.11	0.2	09	50.000	50.36	0.7
02	50.000	49.66	-0.7	04	50.000	49.68	-0.6	08	50.000	49.54	-0.9
01	50.000	50.04	0.1	03	50.000	50.90	1.8	05	50.000	49.80	-0.4

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	0.99	-0.9	03	2.000	1.92	-4.0
04	5.000	4.89	-2.3	05	10.000	9.49	-5.1	06	50.000	51.66	3.3
07	100.000	100.15	0.2	08	150.000	151.05	0.7	09	200.000	201.12	0.6

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.1	02	1.000	0.98	-1.8	03	2.000	1.96	-1.8
04	5.000	4.87	-2.5	05	10.000	8.91	-10.9	06	50.000	52.99	6.0
07	100.000	101.75	1.7	08	150.000	156.59	4.4	09	200.000	205.57	2.8

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.91	-9.0	03	2.000	1.84	-7.8	04	5.000	4.85	-3.1
05	10.000	10.30	3.0	06	50.000	53.10	6.2	07	100.000	103.35	3.3
08	150.000	151.31	0.9	09	200.000	212.99	6.5				

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	5.82	16.4	05	10.000	10.39	3.9	06	50.000	50.92	1.8
07	100.000	89.74	-10.3	08	150.000	127.07	-15.3	09	200.000	206.91	3.5

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	11.27	12.7	04	25.000	21.98	-12.1	05	50.000	51.32	2.6
06	250.000	239.66	-4.1	07	500.000	502.24	0.4	08	750.000	746.07	-0.5
09	1000.000	1,009.10	0.9								

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	5.72	14.5	03	10.000	10.03	0.3	04	25.000	26.13	4.5
05	50.000	48.08	-3.8	06	250.000	249.35	-0.3	07	500.000	473.39	-5.3
08	750.000	703.30	-6.2	09	1000.000	963.48	-3.7				

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.52	0.7	02	5.000	4.39	-12.3	03	10.000	10.01	0.1
04	25.000	24.48	-2.1	05	50.000	47.26	-5.5	06	250.000	266.93	6.8
07	500.000	516.29	3.3	08	750.000	768.33	2.4	09	1000.000	1,065.79	6.6

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.7	02	1.000	0.95	-5.1	03	2.000	2.00	-0.2
04	5.000	5.05	1.1	05	10.000	9.36	-6.4	06	50.000	51.04	2.1
07	100.000	102.68	2.7	08	150.000	151.32	0.9	09	200.000	215.43	7.7

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	0.97	-2.9	03	2.000	1.95	-2.7
04	5.000	5.02	0.5	05	10.000	9.67	-3.3	06	50.000	50.98	2.0
07	100.000	97.98	-2.0	08	150.000	149.28	-0.5	09	200.000	206.79	3.4

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.1	02	1.000	1.10	9.8	03	2.000	1.95	-2.6
04	5.000	5.25	4.9	05	10.000	9.62	-3.8	06	50.000	51.31	2.6
07	100.000	98.25	-1.7	08	150.000	144.18	-3.9	09	200.000	199.80	-0.1

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.3	02	1.000	0.91	-9.3	03	2.000	1.94	-2.8
04	5.000	4.97	-0.7	05	10.000	9.49	-5.1	06	50.000	51.11	2.2
07	100.000	103.84	3.8	08	150.000	153.70	2.5	09	200.000	221.13	10.6

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.3	02	1.000	0.97	-2.6	03	2.000	1.64	-17.9
04	5.000	4.68	-6.4	05	10.000	9.41	-5.9	06	50.000	53.67	7.3
07	100.000	106.54	6.5	08	150.000	164.87	9.9	09	200.000	230.57	15.3

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.5	02	1.000	0.83	-17.3	03	2.000	1.66	-17.2
04	5.000	4.97	-0.7	05	10.000	10.85	8.5	06	50.000	55.51	11.0
07	100.000	102.89	2.9	08	150.000	148.78	-0.8	09	200.000	195.85	-2.1

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.8	02	1.000	1.03	2.5	03	2.000	1.96	-1.8
04	5.000	4.91	-1.7	05	10.000	9.15	-8.5	06	50.000	50.60	1.2
07	100.000	99.24	-0.8	08	150.000	148.63	-0.9	09	200.000	206.12	3.1

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	I

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	1.11	11.4	03	2.000	1.86	-7.2
04	5.000	4.94	-1.3	05	10.000	8.33	-16.7	06	50.000	51.07	2.1
07	100.000	102.98	3.0	08	150.000	154.41	2.9	09	200.000	219.15	9.6

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.9	02	1.000	1.00	0.1	03	2.000	1.93	-3.3
04	5.000	4.88	-2.4	05	10.000	9.38	-6.2	06	50.000	51.76	3.5
07	100.000	100.05	0.0	08	150.000	149.21	-0.5	09	200.000	205.65	2.8

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.4	02	1.000	0.99	-1.3	03	2.000	2.21	10.6
04	5.000	4.84	-3.3	05	10.000	8.61	-13.9	06	50.000	49.37	-1.3
07	100.000	96.48	-3.5	08	150.000	144.08	-3.9	09	200.000	200.35	0.2

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.6	02	1.000	1.03	2.7	03	2.000	1.99	-0.5
04	5.000	4.96	-0.8	05	10.000	9.22	-7.8	06	50.000	49.39	-1.2
07	100.000	99.81	-0.2	08	150.000	148.72	-0.9	09	200.000	207.83	3.9

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.8	02	1.000	0.98	-2.1	03	2.000	1.88	-5.9
04	5.000	4.92	-1.7	05	10.000	9.09	-9.1	06	50.000	52.99	6.0
07	100.000	104.47	4.5	08	150.000	155.83	3.9	09	200.000	216.52	8.3

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.3	02	1.000	0.97	-2.9	03	2.000	2.09	4.7
04	5.000	5.05	0.9	05	10.000	9.60	-4.0	06	50.000	52.03	4.1
07	100.000	96.77	-3.2	08	150.000	147.00	-2.0	09	200.000	213.46	6.7

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	10.01	0.1	02	20.000	21.25	6.3	03	40.000	39.02	-2.4
04	100.000	102.48	2.5	05	200.000	199.46	-0.3	06	1000.000	1,089.83	9.0
07	2000.000	1,912.63	-4.4	08	3000.000	2,832.30	-5.6	09	4000.000	3,792.34	-5.2

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.1	02	1.000	0.91	-8.9	03	2.000	1.88	-6.1
04	5.000	4.72	-5.6	05	10.000	9.49	-5.1	06	50.000	53.94	7.9
07	100.000	106.24	6.2	08	150.000	158.60	5.7	09	200.000	223.80	11.9

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	50.000	50.87	1.7	02	50.000	49.44	-1.1	05	50.000	49.90	-0.2
07	50.000	50.74	1.5	09	50.000	50.42	0.8	06	50.000	49.04	-1.9
04	50.000	49.98	0.0	08	50.000	49.79	-0.4	01	50.000	49.82	-0.4

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.96	-3.7	03	2.000	1.84	-7.8
04	5.000	4.98	-0.5	05	10.000	9.37	-6.3	06	50.000	52.10	4.2
07	100.000	101.80	1.8	08	150.000	147.38	-1.7	09	200.000	211.73	5.9

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.7	02	1.000	0.93	-7.5	03	2.000	1.78	-11.2
04	5.000	4.50	-9.9	05	10.000	8.55	-14.5	06	50.000	54.45	8.9
07	100.000	104.97	5.0	08	150.000	157.54	5.0	09	200.000	218.99	9.5

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	1.05	4.5	03	2.000	1.95	-2.5
04	5.000	4.94	-1.1	05	10.000	9.83	-1.7	06	50.000	51.08	2.2
07	100.000	98.20	-1.8	08	150.000	146.60	-2.3	09	200.000	206.51	3.3

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.3	02	1.000	0.97	-3.2	03	2.000	1.82	-8.8
04	5.000	4.85	-3.1	05	10.000	9.40	-6.0	06	50.000	51.71	3.4
07	100.000	103.15	3.1	08	150.000	153.55	2.4	09	200.000	215.57	7.8

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.7	02	1.000	1.01	0.6	03	2.000	2.04	1.9
04	5.000	5.05	1.0	05	10.000	9.65	-3.5	06	50.000	50.15	0.3
07	100.000	96.09	-3.9	08	150.000	144.03	-4.0	09	200.000	197.75	-1.1

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.99	-1.2	03	2.000	1.98	-1.1
04	5.000	5.16	3.3	05	10.000	9.54	-4.6	06	50.000	49.91	-0.2
07	100.000	101.64	1.6	08	150.000	151.63	1.1	09	200.000	211.98	6.0

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.6	02	1.000	0.76	-24.1	03	2.000	1.75	-12.3
04	5.000	5.05	1.1	05	10.000	10.37	3.7	06	50.000	56.76	13.5
07	100.000	110.83	10.8	08	150.000	162.26	8.2	09	200.000	231.43	15.7

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.2	02	1.000	0.97	-2.5	03	2.000	1.95	-2.3
04	5.000	5.06	1.1	05	10.000	9.39	-6.1	06	50.000	49.51	-1.0
07	100.000	100.06	0.1	08	150.000	150.16	0.1	09	200.000	210.93	5.5

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	0.96	-4.1	03	2.000	1.87	-6.5
04	5.000	5.05	0.9	05	10.000	8.75	-12.5	06	50.000	52.31	4.6
07	100.000	103.27	3.3	08	150.000	155.21	3.5	09	200.000	214.71	7.4

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.63	25.2	02	1.000	1.07	6.6	03	2.000	2.03	1.5
04	5.000	4.96	-0.7	05	10.000	8.75	-12.5	06	50.000	48.36	-3.3
07	100.000	89.00	-11.0	08	150.000	144.27	-3.8	09	200.000	196.05	-2.0

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	6.12	22.3	05	10.000	8.29	-17.1	06	50.000	44.35	-11.3
07	100.000	106.07	6.1	08	150.000	152.05	1.4	09	200.000	197.30	-1.3

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.0	02	1.000	0.97	-2.9	03	2.000	2.03	1.3
04	5.000	5.06	1.3	05	10.000	8.81	-11.9	06	50.000	53.75	7.5
07	100.000	103.10	3.1	08	150.000	155.24	3.5	09	200.000	204.35	2.2

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	5.9	03	2.000	1.73	-13.5	04	5.000	4.81	-3.7
05	10.000	10.34	3.4	06	50.000	51.51	3.0	07	100.000	101.59	1.6
08	150.000	148.33	-1.1	09	200.000	209.07	4.5				

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.2	02	1.000	0.96	-3.7	03	2.000	1.81	-9.5
04	5.000	5.13	2.6	05	10.000	10.16	1.6	06	50.000	54.09	8.2
07	100.000	103.74	3.7	08	150.000	151.84	1.2	09	200.000	210.34	5.2

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.3	02	1.000	0.75	-24.8	03	2.000	1.94	-3.0
04	5.000	4.64	-7.2	05	10.000	9.30	-7.0	06	50.000	54.76	9.5
07	100.000	108.07	8.1	08	150.000	155.89	3.9	09	200.000	224.28	12.1

087361

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.5	02	1.000	1.01	0.9	03	2.000	1.98	-1.2
04	5.000	5.10	2.1	05	10.000	9.64	-3.6	06	50.000	51.38	2.8
07	100.000	99.70	-0.3	08	150.000	147.83	-1.4	09	200.000	204.69	2.3

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.3	02	1.000	1.03	3.2	03	2.000	2.07	3.3
04	5.000	4.83	-3.5	05	10.000	9.10	-9.0	06	50.000	51.41	2.8
07	100.000	96.44	-3.6	08	150.000	146.90	-2.1	09	200.000	211.02	5.5

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.7	02	1.000	0.99	-1.4	03	2.000	1.91	-4.6
04	5.000	4.61	-7.9	05	10.000	9.45	-5.5	06	50.000	54.15	8.3
07	100.000	102.09	2.1	08	150.000	157.54	5.0	09	200.000	211.47	5.7

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.28	-8.9	02	5.000	4.91	-1.9	03	10.000	7.60	-24.0
04	25.000	23.79	-4.8	05	50.000	45.44	-9.1	06	250.000	287.03	14.8
07	500.000	558.09	11.6	08	750.000	819.68	9.3	09	1000.000	1,130.01	13.0

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.7	02	1.000	0.95	-4.7	03	2.000	1.85	-7.4
04	5.000	4.84	-3.2	05	10.000	9.58	-4.2	06	50.000	53.88	7.8
07	100.000	104.93	4.9	08	150.000	158.06	5.4	09	200.000	214.31	7.2

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.6	02	1.000	0.99	-1.5	03	2.000	1.99	-0.7
04	5.000	4.86	-2.9	05	10.000	8.37	-16.3	06	50.000	52.33	4.7
07	100.000	101.83	1.8	08	150.000	154.05	2.7	09	200.000	217.27	8.6

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.04	2.0	04	5.000	5.20	4.1	05	10.000	9.97	-0.3
06	50.000	49.66	-0.7	07	100.000	97.92	-2.1	08	150.000	144.26	-3.8
09	200.000	201.60	0.8								

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.9	02	1.000	0.98	-2.3	03	2.000	1.97	-1.3
04	5.000	5.07	1.4	05	10.000	9.22	-7.8	06	50.000	51.83	3.7
07	100.000	103.65	3.6	08	150.000	149.71	-0.2	09	200.000	207.67	3.8

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.18	0.4	08	50.000	49.47	-1.1	01	50.000	50.21	0.4
03	50.000	49.67	-0.7	05	50.000	49.76	-0.5	02	50.000	49.66	-0.7
09	50.000	50.38	0.8	07	50.000	50.98	2.0	04	50.000	49.69	-0.6

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	0.89	-11.4	03	2.000	2.02	1.1
04	5.000	5.05	1.0	05	10.000	9.00	-10.0	06	50.000	51.09	2.2
07	100.000	102.39	2.4	08	150.000	152.73	1.8	09	200.000	218.45	9.2

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.1	02	1.000	1.03	3.5	03	2.000	1.98	-1.1
04	5.000	5.01	0.2	05	10.000	8.17	-18.3	06	50.000	51.08	2.2
07	100.000	99.34	-0.7	08	150.000	150.68	0.5	09	200.000	207.41	3.7

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	0.99	-1.1	03	2.000	1.33	-33.7
04	5.000	5.05	1.0	05	10.000	9.46	-5.4	06	50.000	53.79	7.6
07	100.000	106.47	6.5	08	150.000	162.21	8.1	09	200.000	227.01	13.5

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.4	02	1.000	0.95	-5.2	03	2.000	1.84	-7.8
04	5.000	4.91	-1.7	05	10.000	8.51	-14.9	06	50.000	52.84	5.7
07	100.000	103.71	3.7	08	150.000	155.17	3.4	09	200.000	212.56	6.3

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.8	02	1.000	0.92	-7.5	03	2.000	2.00	-0.2
04	5.000	4.84	-3.2	05	10.000	9.29	-7.1	06	50.000	50.61	1.2
07	100.000	100.81	0.8	08	150.000	151.17	0.8	09	200.000	210.79	5.4

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	0.96	-3.7	03	2.000	1.82	-9.1
04	5.000	4.97	-0.6	05	10.000	9.64	-3.6	06	50.000	52.43	4.9
07	100.000	106.15	6.2	08	150.000	152.83	1.9	09	200.000	219.17	9.6

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.98	-2.4	02	2.000	1.85	-7.4	03	4.000	3.93	-1.8
04	10.000	10.03	0.3	05	20.000	18.52	-7.4	06	100.000	106.90	6.9
07	200.000	207.77	3.9	08	300.000	309.98	3.3	09	400.000	418.38	4.6

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.2	02	1.000	0.98	-1.6	03	2.000	1.78	-11.2
04	5.000	4.54	-9.3	05	10.000	9.78	-2.2	06	50.000	53.67	7.3
07	100.000	99.41	-0.6	08	150.000	147.82	-1.5	09	200.000	203.60	1.8

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.0	02	1.000	0.99	-1.2	03	2.000	1.81	-9.6
04	5.000	4.75	-5.0	05	10.000	8.88	-11.2	06	50.000	52.45	4.9
07	100.000	100.72	0.7	08	150.000	157.64	5.1	09	200.000	206.51	3.3

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.22	22.4	03	2.000	2.03	1.5	04	5.000	4.82	-3.6
05	10.000	8.51	-14.9	06	50.000	50.96	1.9	07	100.000	96.12	-3.9
08	150.000	145.13	-3.2	09	200.000	199.85	-0.1				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.3	02	1.000	1.01	0.5	03	2.000	1.95	-2.7
04	5.000	5.11	2.2	05	10.000	8.92	-10.8	06	50.000	53.51	7.0
07	100.000	102.53	2.5	08	150.000	151.43	1.0	09	200.000	194.08	-3.0

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.8	02	1.000	0.94	-5.6	03	2.000	1.95	-2.5
04	5.000	4.87	-2.6	05	10.000	9.25	-7.5	06	50.000	51.83	3.7
07	100.000	101.45	1.4	08	150.000	153.86	2.6	09	200.000	211.72	5.9

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.6	02	1.000	0.98	-2.0	03	2.000	1.89	-5.4
04	5.000	4.97	-0.6	05	10.000	8.91	-10.9	06	50.000	53.02	6.0
07	100.000	101.48	1.5	08	150.000	156.15	4.1	09	200.000	203.07	1.5

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.0	02	1.000	1.02	1.7	03	2.000	1.91	-4.7
04	5.000	5.04	0.7	05	10.000	9.48	-5.2	06	50.000	49.91	-0.2
07	100.000	101.17	1.2	08	150.000	149.08	-0.6	09	200.000	210.38	5.2

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	0.94	-5.9	03	2.000	2.00	-0.1
04	5.000	5.01	0.1	05	10.000	8.77	-12.3	06	50.000	51.52	3.0
07	100.000	100.46	0.5	08	150.000	156.10	4.1	09	200.000	208.82	4.4

Initial Calibration - Detailed Report

Calibration ID:	RC1400047	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.8	02	1.000	0.96	-3.9	03	2.000	2.07	3.3
04	5.000	4.91	-1.8	05	10.000	8.85	-11.5	06	50.000	51.09	2.2
07	100.000	101.24	1.2	08	150.000	151.64	1.1	09	200.000	213.24	6.6

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.6	02	1.000	0.91	-9.2	03	2.000	1.97	-1.6
04	5.000	4.96	-0.8	05	10.000	9.45	-5.5	06	50.000	53.19	6.4
07	100.000	107.42	7.4	08	150.000	154.73	3.2	09	200.000	221.55	10.8

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	21.2	02	1.000	0.81	-19.5	03	2.000	1.84	-8.1
04	5.000	4.26	-14.9	05	10.000	8.39	-16.1	06	50.000	53.84	7.7
07	100.000	107.56	7.6	08	150.000	162.37	8.2	09	200.000	227.62	13.8

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 08:56:03 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

FV 6/12/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	929290	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1270082	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1136366	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	616735	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	377315	45.52	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.04%				
48) surr1,1,2-dichloroetha...	4.854	65	389140	44.62	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.24%				
65) SURR3,Toluene-d8	7.427	98	1465518	49.30	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.60%				
70) SURR2,BFB	9.878	95	577211	47.28	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.56%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	4984	0.49	ug/L		87
3) Chloromethane	1.294	50	5181	0.43	ug/L		85
4) Vinyl Chloride	1.361	62	6239	0.56	ug/L		98
5) Bromomethane	1.556	94	2175	0.67	ug/L		98
6) Chloroethane	1.611	64	3578	0.55	ug/L		96
7) Freon 21	1.721	67	8136	0.45	ug/L		94
8) Trichlorofluoromethane	1.770	101	6679	0.48	ug/L		92
9) Diethyl Ether	1.934	59	3790	0.56	ug/L	#	67
10) Freon 123a	1.934	67	5817	0.52	ug/L		80
11) Freon 123	1.965	83	6326	0.52	ug/L		92
12) Acrolein	2.026	56	3964	3.92	ug/L		96
13) 1,1-Diclethene	2.099	96	3355	0.52	ug/L	#	62
14) Freon 113	2.093	101	3910	0.50	ug/L		88
16) 2-Propanol	2.196	45	3225	9.38	ug/L	#	12
18) Carbon Disulfide	2.269	76	14085	0.59	ug/L		95
20) Allyl Chloride	2.355	76	1979	0.48	ug/L	#	44
21) Methyl Acetate	2.367	43	2039	0.40	ug/L		82
22) Methylene Chloride	2.440	84	7934	0.94	ug/L		97
23) TBA	2.501	59	5313	10.28	ug/L		76
24) Acrylonitrile	2.653	53	5762m	2.58	ug/L		
25) Methyl-t-Butyl Ether	2.660	73	9680	0.49	ug/L		87
26) trans-1,2-Dichloroethene	2.672	96	4044	0.49	ug/L		95
28) 1,1-Diclethane	3.050	63	7975	0.49	ug/L		96
29) Vinyl Acetate	3.123	86	593m	0.54	ug/L		
30) DIPE	3.111	45	15574	0.45	ug/L		92
31) 2-Chloro-1,3-Butadiene	3.147	53	7777	0.49	ug/L		87
32) ETBE	3.507	59	14652	0.54	ug/L		88
33) 2,2-Dichloropropane	3.684	77	6792	0.58	ug/L		92
34) cis-1,2-Dichloroethene	3.684	96	4898	0.52	ug/L		84
36) Propionitrile	3.848	54	1680	2.37	ug/L	#	1
37) Bromochloromethane	3.989	130	2483	0.45	ug/L	#	78
40) Chloroform	4.098	83	7566	0.49	ug/L		95
41) 1,1,1-Trichloroethane	4.360	97	7501	0.57	ug/L	#	37
42) TAME	5.190	73	10685	0.52	ug/L		77
44) Cyclohexane	4.440	41	4521m	0.45	ug/L		

W061114.M Thu Jun 12 08:56:45 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 08:56:03 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
46) Carbontetrachloride	4.617	121	1643	0.49 ug/L	#	53
47) 1,1-Dichloropropene	4.629	75	5617	0.58 ug/L	#	77
49) Benzene	4.976	78	15942	0.52 ug/L		94
50) 1,2-Dichloroethane	5.007	62	5798	0.50 ug/L		92
52) n-Heptane	5.464	43	6499	0.70 ug/L		83
54) Trichloroethene	5.982	130	4565	0.53 ug/L	#	88
55) Methylcyclohexane	6.220	55	5968	0.54 ug/L	#	74
56) 1,2-Diclpropane	6.269	63	5221m	0.63 ug/L		
57) Dibromomethane	6.415	93	2319m	0.53 ug/L		
59) Methyl Methacrylate	6.537	69	2054m	0.60 ug/L		
60) Bromodichloromethane	6.622	83	5088	0.50 ug/L		92
61) 2-Nitropropane	6.909	41	1012	0.33 ug/L		83
62) 2-Chloroethylvinyl Ether	7.043	63	1754m	0.47 ug/L		
63) cis-1,3-Dichloropropene	7.165	75	5882	0.53 ug/L		88
64) 4-Methyl-2-pentanone	7.366	43	1975	0.33 ug/L		95
66) Toluene	7.506	91	17462	0.53 ug/L		91
67) trans-1,3-Dichloropropene	7.768	75	4548	0.50 ug/L		75
68) Ethyl Methacrylate	7.896	69	3298	0.48 ug/L	#	63
69) 1,1,2-Trichloroethane	7.933	97	2979	0.50 ug/L	#	62
72) Tetrachloroethene	8.061	164	3656	0.55 ug/L		95
74) 1,3-Dichloropropane	8.098	76	5442	0.56 ug/L	#	57
75) Dibromochloromethane	8.311	129	3527	0.49 ug/L		89
76) N-Butyl Acetate	8.378	43	6848m	0.67 ug/L		
77) 1,2-Dibromoethane	8.415	107	3034m	0.52 ug/L		
78) 3-Chlorobenzotrifluoride	8.884	180	6370	0.51 ug/L		96
79) Chlorobenzene	8.866	112	12475	0.56 ug/L		86
80) 4-Chlorobenzotrifluoride	8.939	180	6171	0.54 ug/L		89
81) 1,1,1,2-Tetrachloroethane	8.957	131	4256	0.54 ug/L		87
82) Ethylbenzene	8.982	106	6295	0.58 ug/L	#	81
83) (m+p)Xylene	9.097	106	14546	1.10 ug/L		92
84) o-Xylene	9.445	106	7883	0.61 ug/L		94
85) Styrene	9.463	104	11984	0.55 ug/L		97
86) Bromoform	9.609	173	2108	0.49 ug/L		84
87) 2-Chlorobenzotrifluoride	9.676	180	6406	0.53 ug/L		92
88) Isopropylbenzene	9.762	105	17672	0.54 ug/L		99
89) Cyclohexanone	9.829	55	8892	11.15 ug/L		79
90) trans-1,4-Dichloro-2-B...	10.073	53	1185m	0.65 ug/L		
92) 1,1,2,2-Tetrachloroethane	10.012	83	3492	0.50 ug/L		94
93) Bromobenzene	10.006	156	5431	0.58 ug/L	#	84
94) 1,2,3-Trichloropropane	10.048	110	1116	0.63 ug/L	#	66
95) n-Propylbenzene	10.109	91	21605	0.58 ug/L		95
96) 2-Chlorotoluene	10.176	91	11802	0.51 ug/L		94
97) 3-Chlorotoluene	10.231	91	11258	0.44 ug/L		93
98) 4-Chlorotoluene	10.274	91	16736	0.59 ug/L		95
99) 1,3,5-Trimethylbenzene	10.262	105	15615	0.59 ug/L		92
100) tert-Butylbenzene	10.524	119	13549	0.61 ug/L		91
101) 1,2,4-Trimethylbenzene	10.567	105	14805	0.55 ug/L		95
102) 3,4-Dichlorobenzotrifl...	10.621	214	4924	0.58 ug/L		87
103) sec-Butylbenzene	10.701	105	18583	0.60 ug/L		92
104) p-Isopropyltoluene	10.823	119	15714	0.59 ug/L		94
105) 1,3-Dclbenz	10.786	146	9746	0.56 ug/L		92
106) 1,4-Dclbenz	10.853	146	10425	0.57 ug/L		79

W061114.M Thu Jun 12 08:56:45 2014 MSVO10 Page: 2

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 08:56:03 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

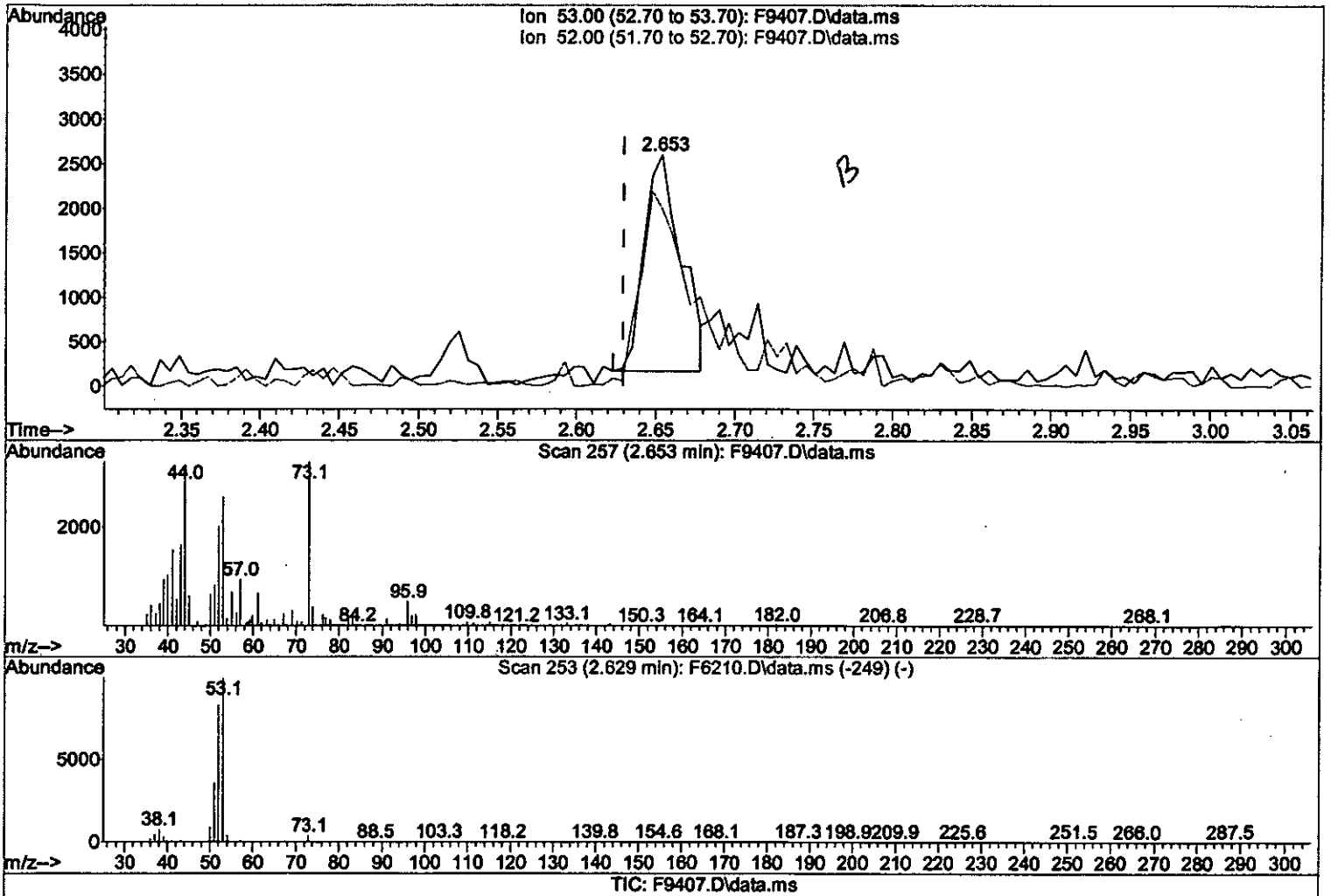
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
107)	2,4-Dichlorobenzotrifl...	10.914	214	4127	0.54 ug/L	87
108)	2,5-Dichlorobenzotrifl...	10.951	214	4681	0.53 ug/L	91
109)	n-Butylbenzene	11.158	91	15029	0.65 ug/L	81
110)	1,2-Dclbenz	11.164	146	9212	0.56 ug/L	90
111)	1,2-Dibromo-3-chloropr...	11.725	157	509	0.42 ug/L #	75
112)	Trielution Dichlorotol...	11.816	125	19579	1.49 ug/L	93
113)	1,3,5-Trichlorobenzene	11.859	180	5953	0.51 ug/L	93
114)	Coelution Dichlorotoluene	12.085	125	14403	1.05 ug/L	95
115)	1,2,4-Tcbenzene	12.261	180	5317	0.57 ug/L	96
116)	Hexachlorobt	12.335	225	2894	0.69 ug/L	91
117)	Naphthalen	12.420	128	7261m	0.46 ug/L	
118)	1,2,3-Tclbenzene	12.548	180	4655	0.62 ug/L	89
119)	2,4,5-Trichlorotoluene	12.969	159	2414	0.51 ug/L	90
120)	2,3,6-Trichlorotoluene	13.023	159	3124m	0.70 ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(24) Acrylonitrile

2.653min (+0.024) 1.77 ug/L

response 3950

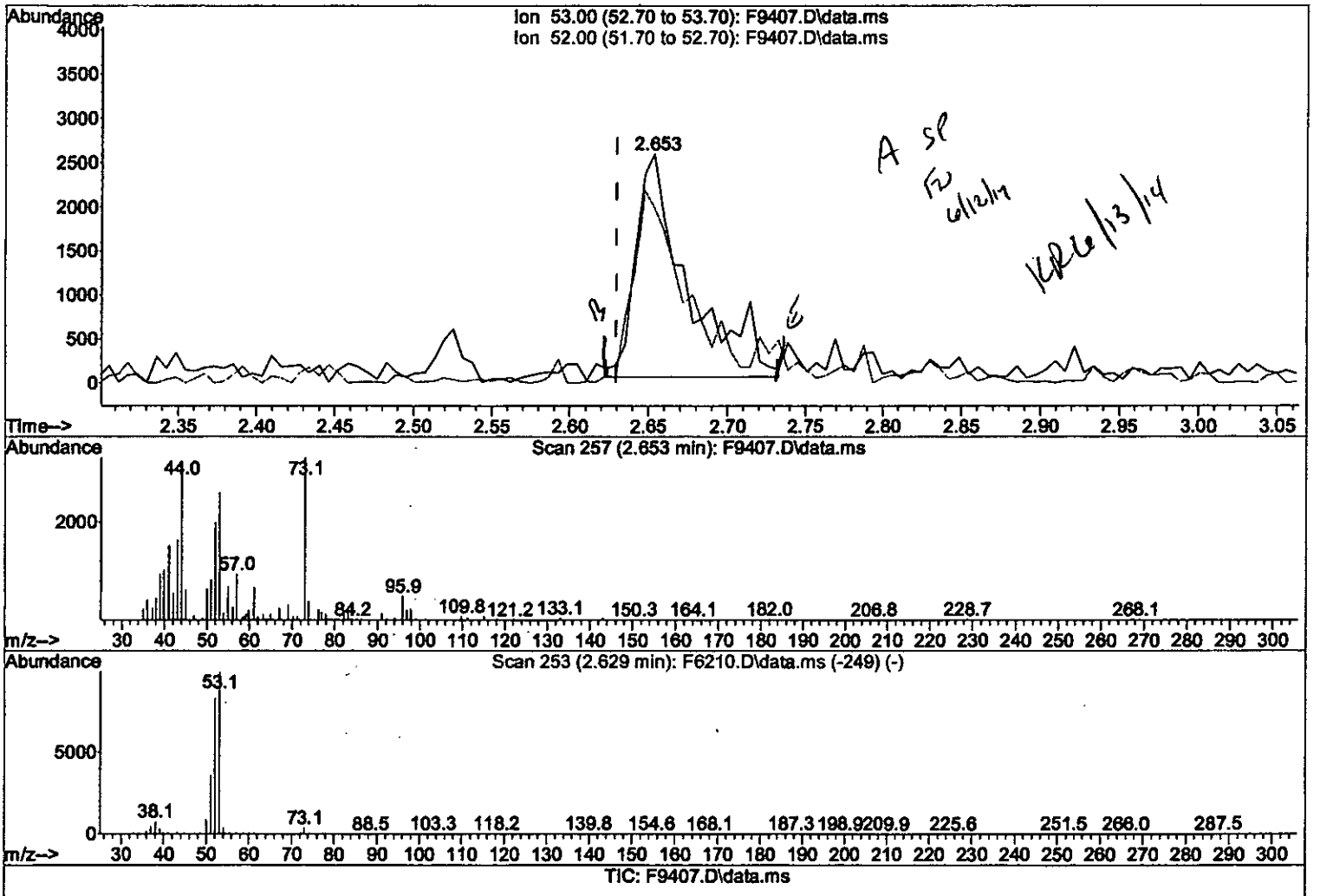
Ion	Exp%	Act%
53.00	100	100
52.00	85.70	76.76
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 08:46:57 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(24) Acrylonitrile

2.653min (+0.024) 2.58 ug/L m

response 5762

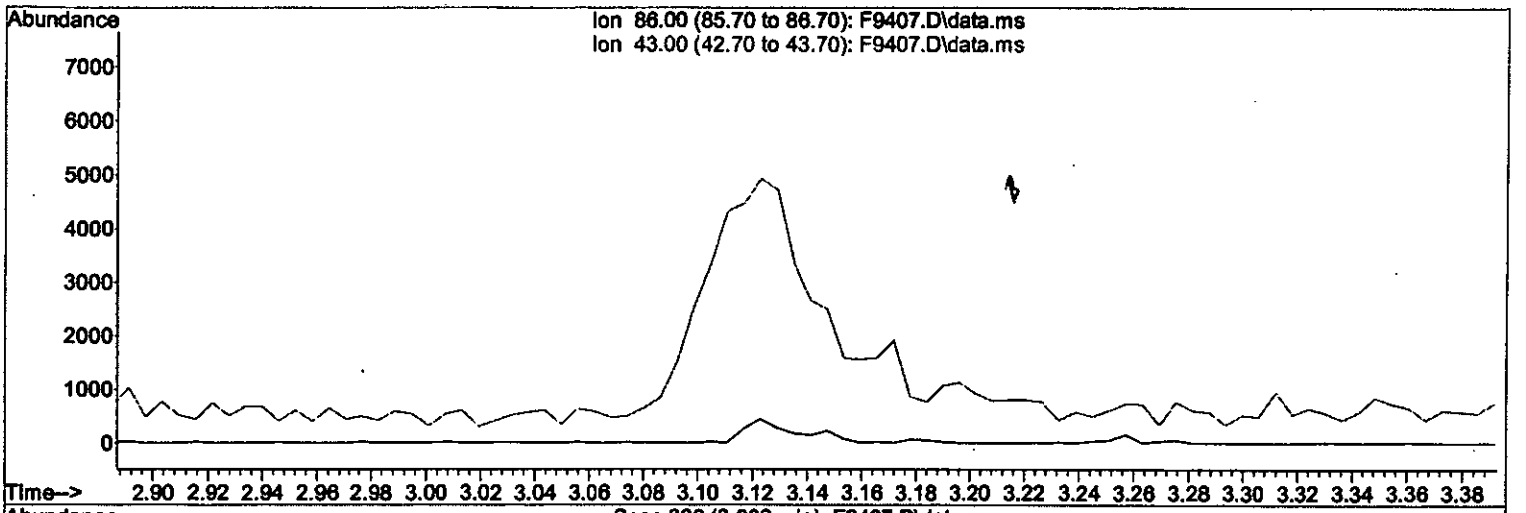
Ion	Exp%	Act%
53.00	100	100
52.00	85.70	76.76
0.00	0.00	0.00
0.00	0.00	0.00

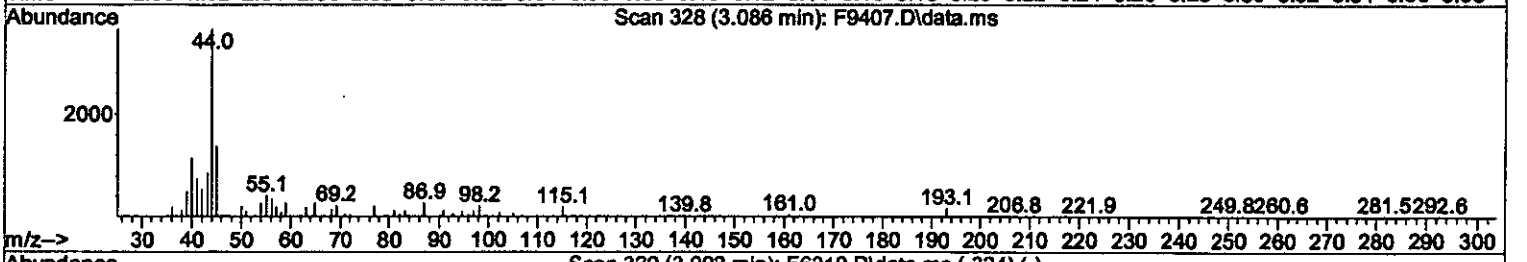
W061114.M Thu Jun 12 08:47:21 2014 MSVO10 Page: 1

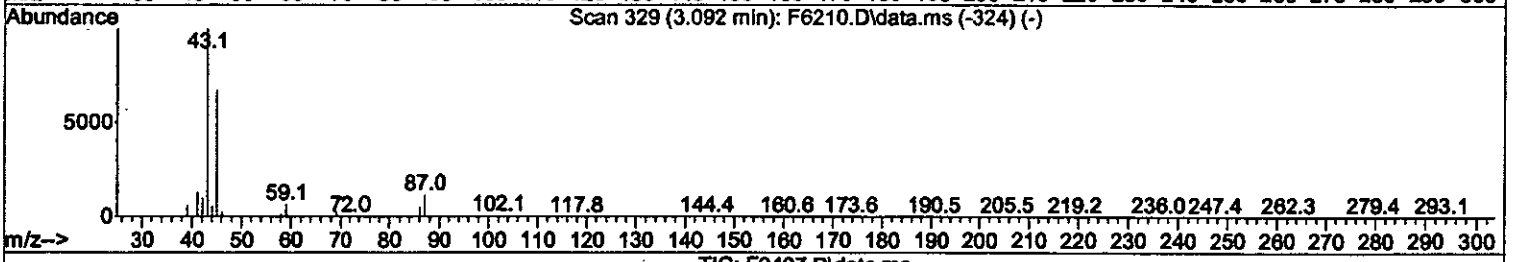
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(29) Vinyl Acetate

3.086min (-3.086) 0.00 ug/L

response 0

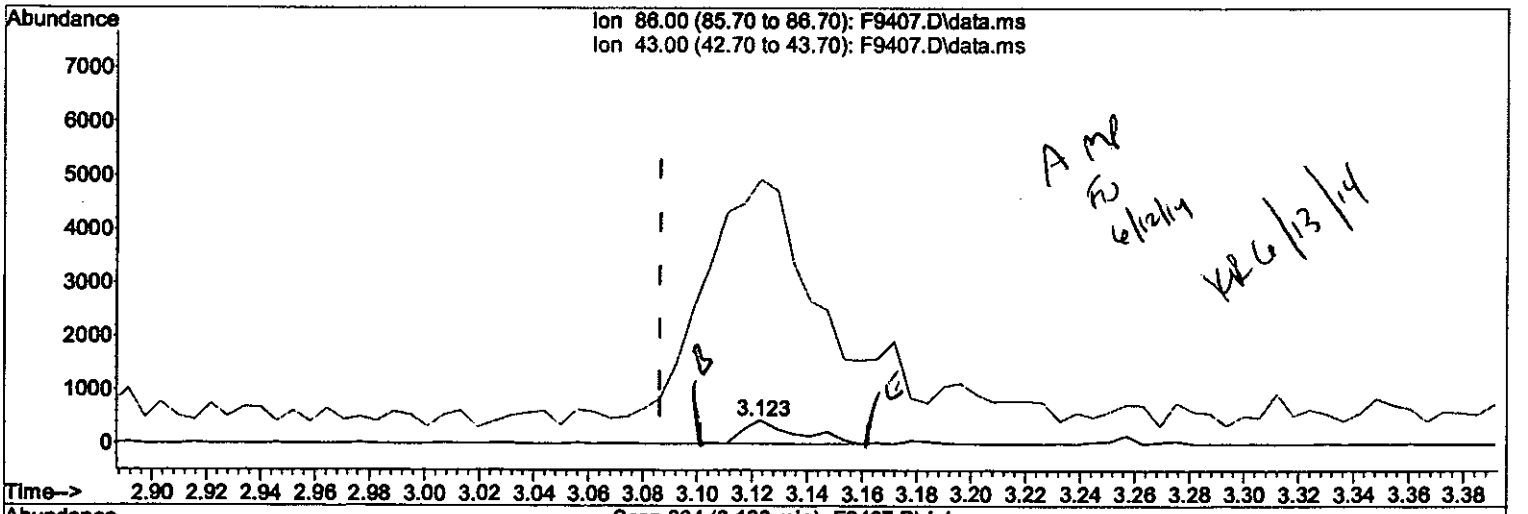
Ion	Exp%	Act%
86.00	100	0.00
43.00	1729.40	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

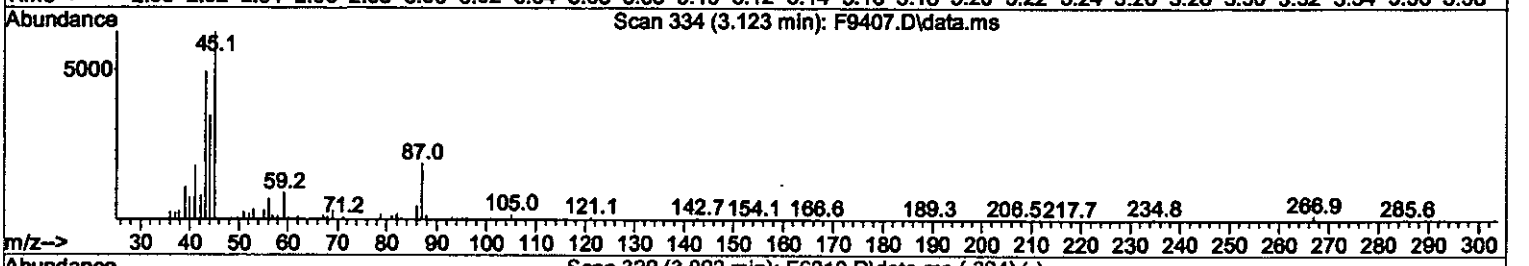
W061114.M Thu Jun 12 08:47:32 2014 MSVO10 Page: 1

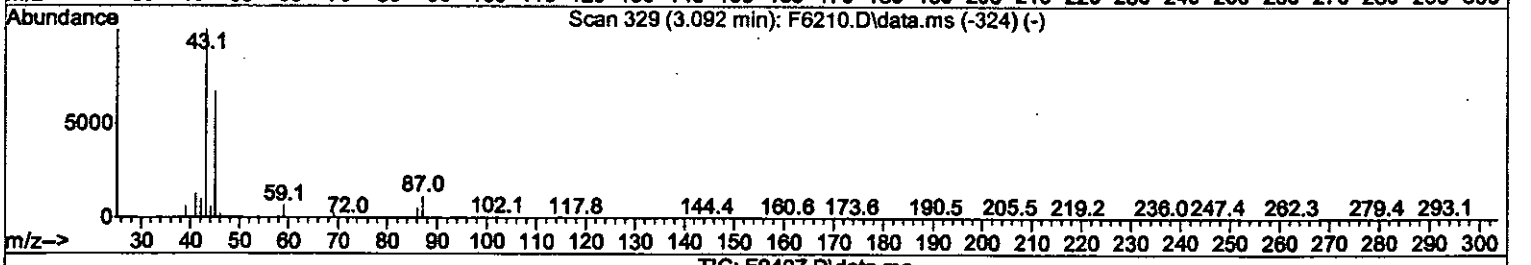
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(29) Vinyl Acetate

3.123min (+0.037) 0.54 ug/L m

response 593

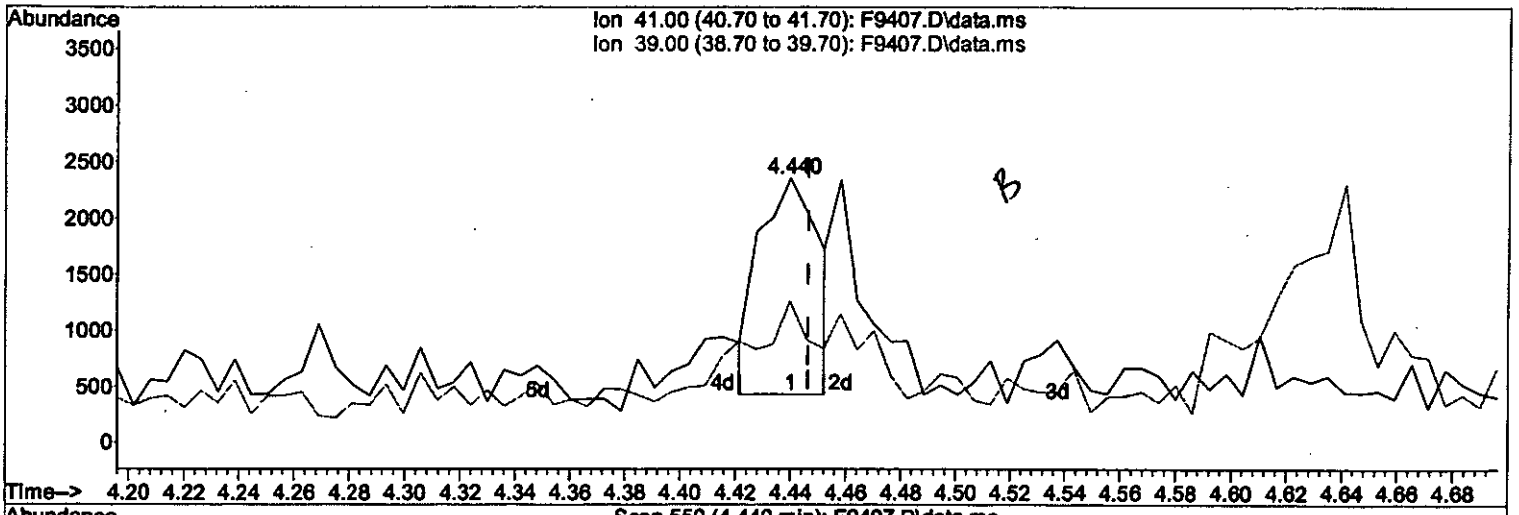
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	1105.61#
0.00	0.00	0.00
0.00	0.00	0.00

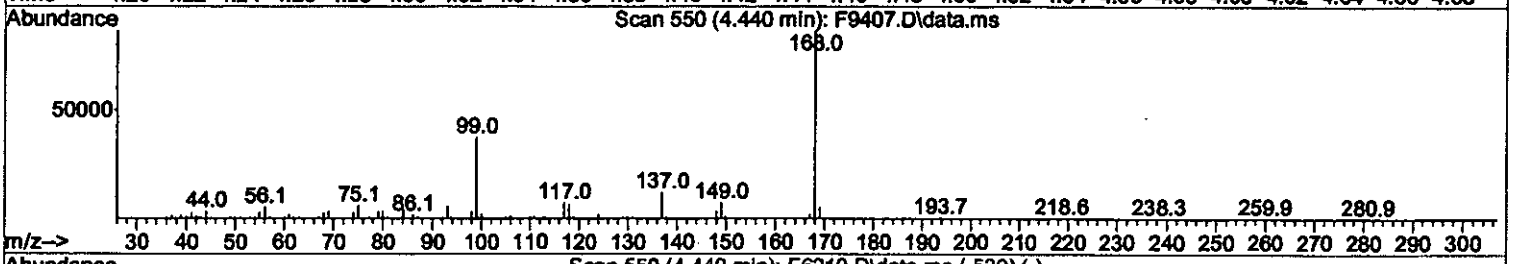
W061114.M Thu Jun 12 08:47:40 2014 MSVO10 Page: 1

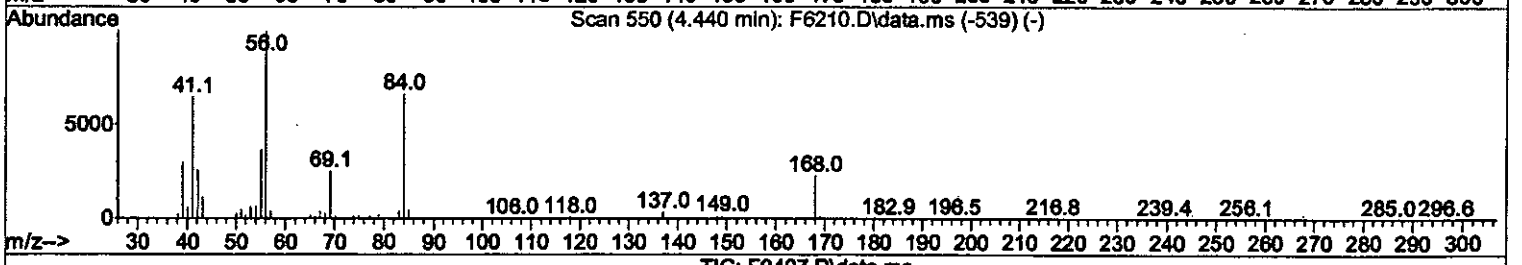
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(44) Cyclohexane (P)

4.440min (-0.006) 0.29 ug/L

response 2880

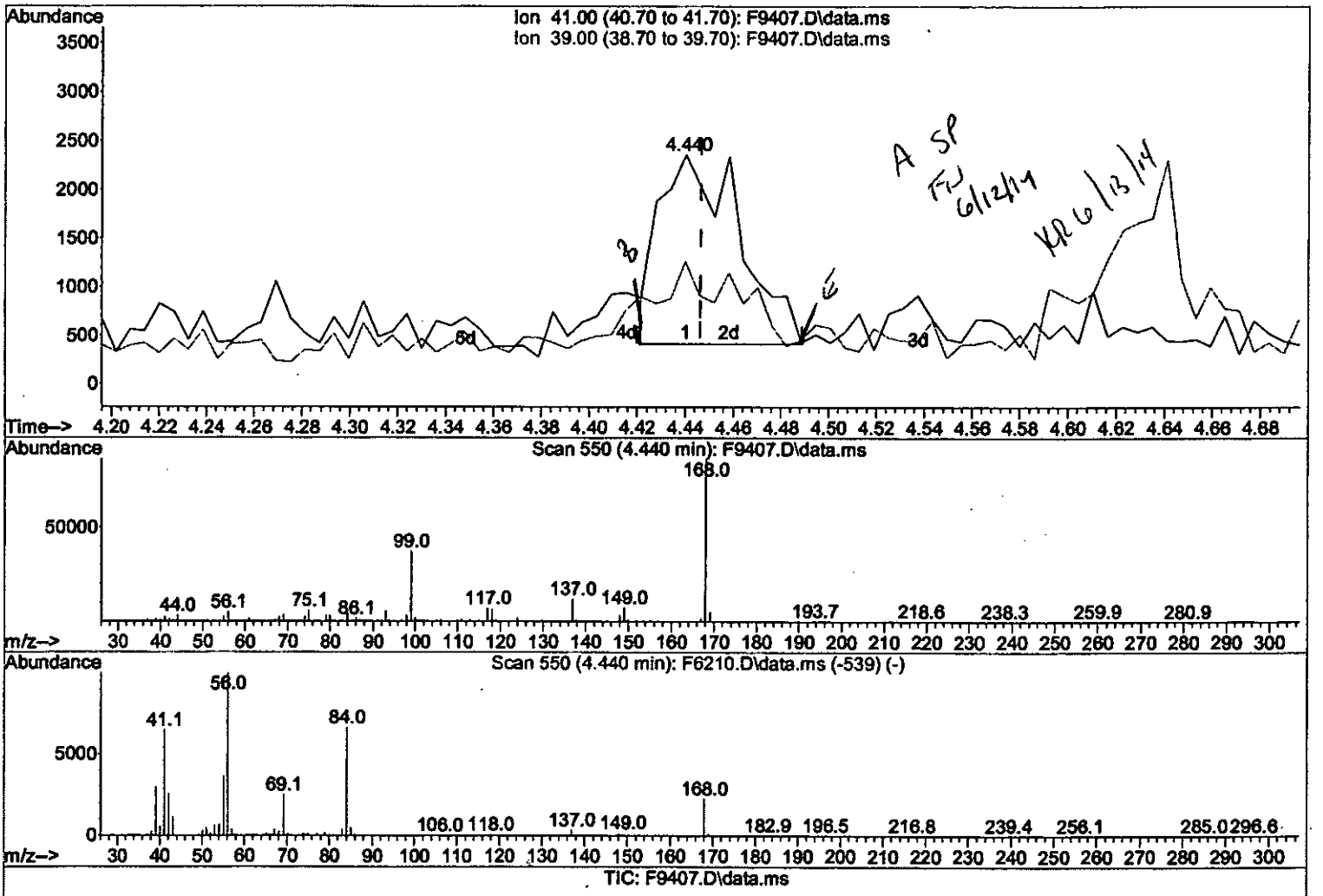
Ion	Exp%	Act%
41.00	100	100
39.00	51.30	53.44
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 08:48:52 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(44) Cyclohexane (P)

4.440min (-0.006) 0.45 ug/L m

response 4521

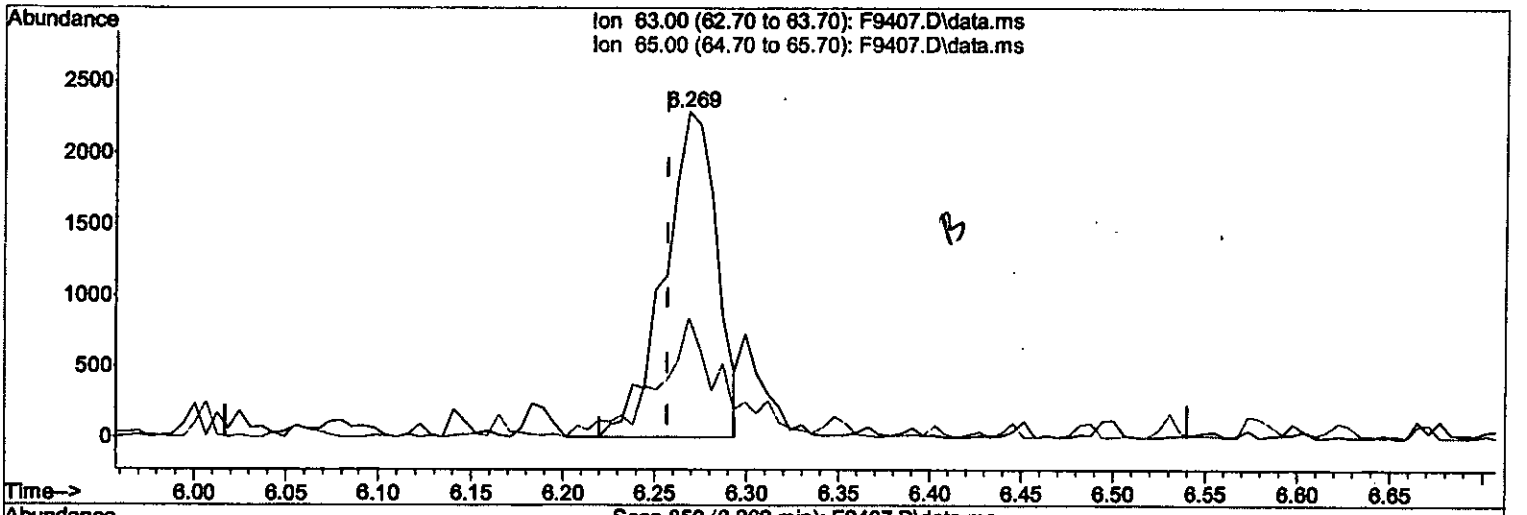
Ion	Exp%	Act%
41.00	100	100
39.00	51.30	53.44
0.00	0.00	0.00
0.00	0.00	0.00

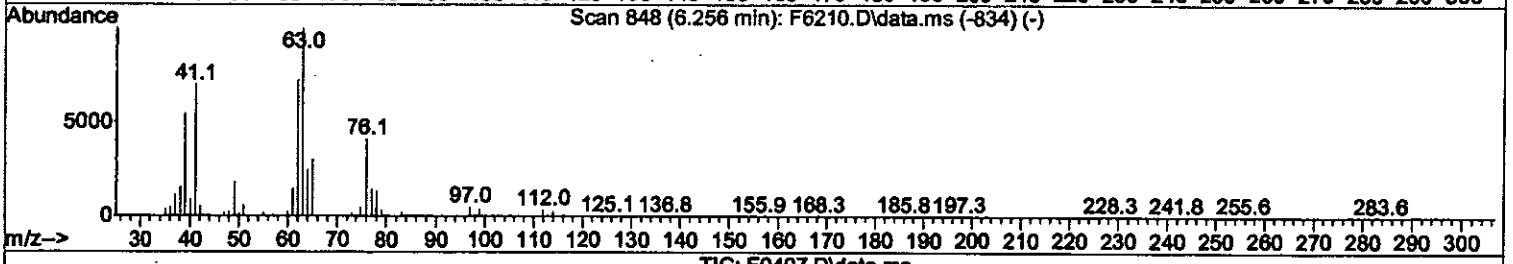
W061114.M Thu Jun 12 08:49:18 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration





TIC: F9407.D\data.ms

(56) 1,2-Dichloropropane (P)

6.269min (+0.012) 0.55 ug/L

response 4539

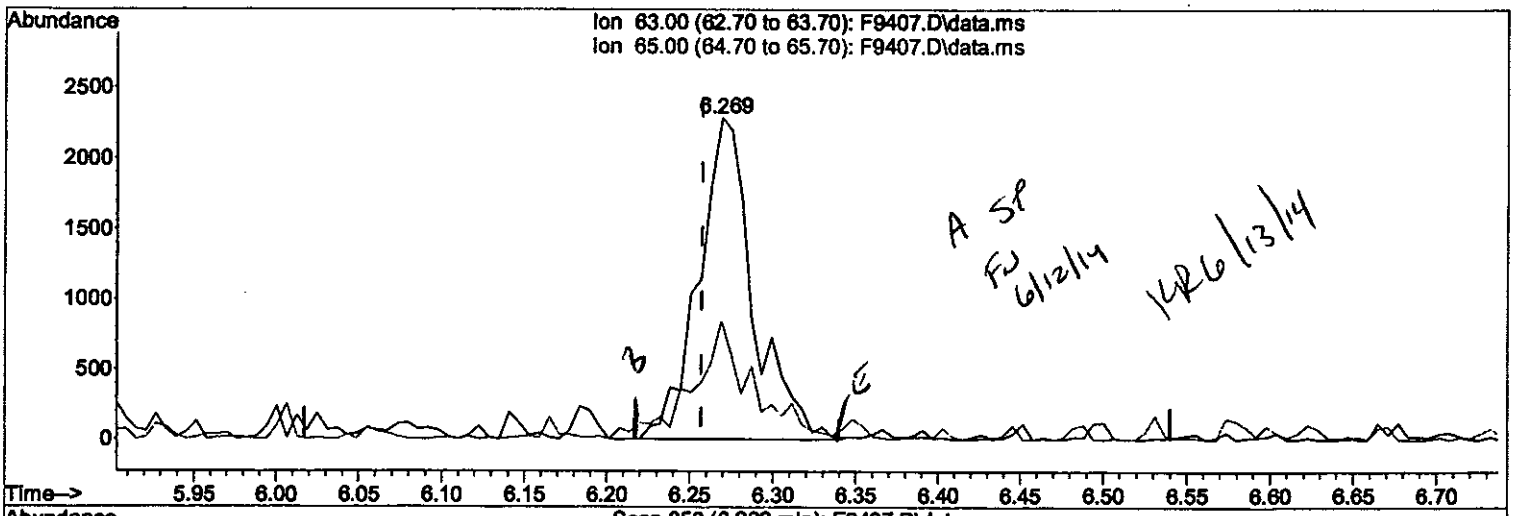
Ion	Exp%	Act%
63.00	100	100
65.00	30.00	36.86
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 08:49:55 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(56) 1,2-Dichloropropane (P)

6.269min (+0.012) 0.63 ug/L m

response 5221

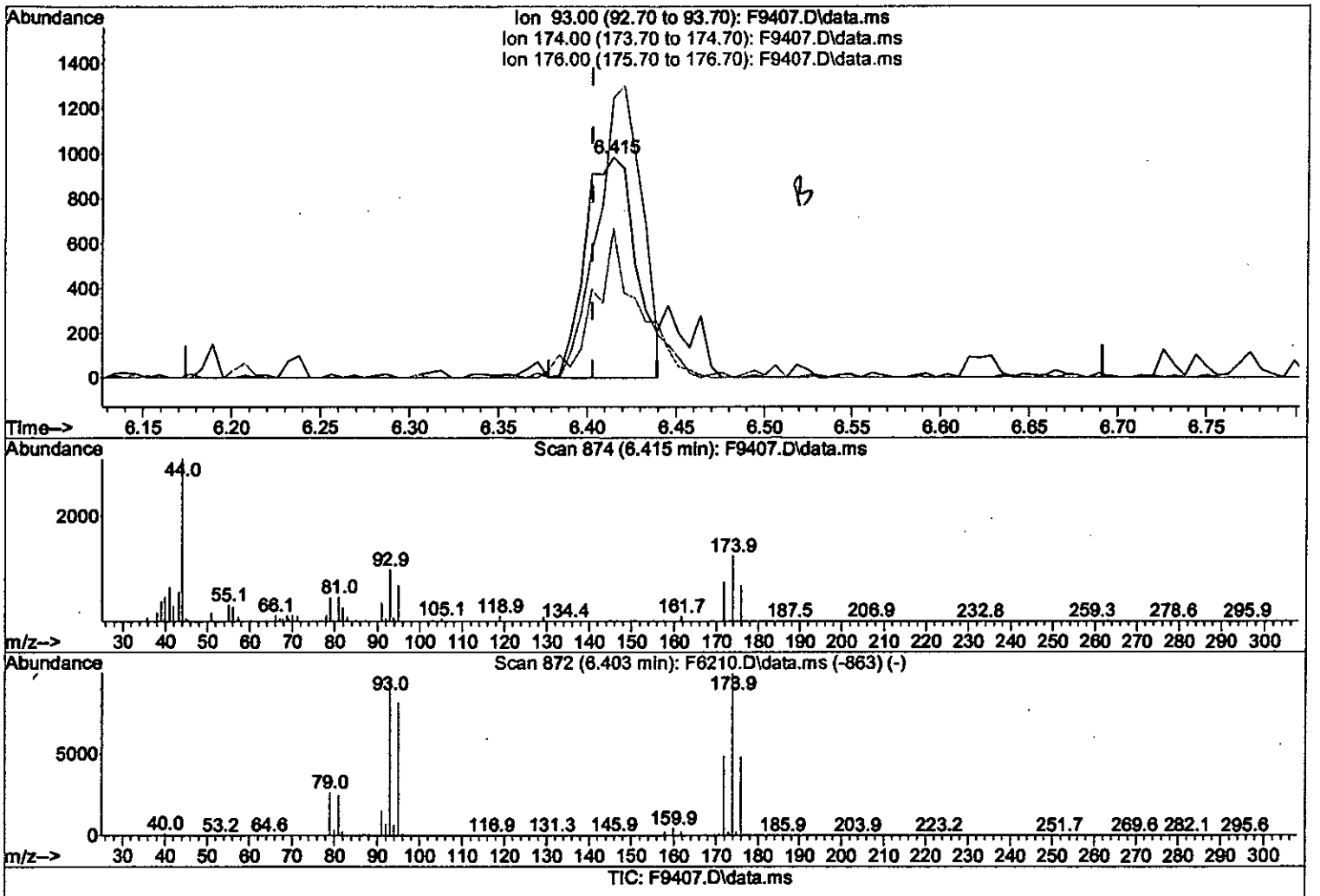
Ion	Exp%	Act%
63.00	100	100
65.00	30.00	36.86
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 08:50:15 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(57) Dibromomethane

6.415min (+0.012) 0.45 ug/L

response 1960

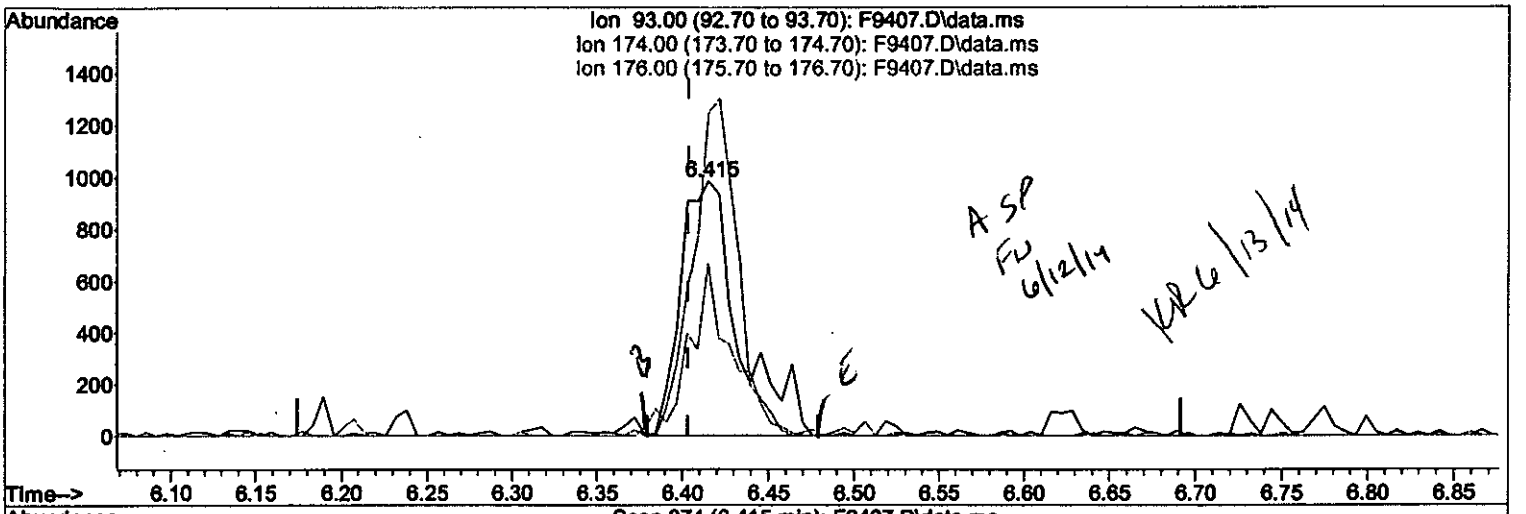
Ion	Exp%	Act%
93.00	100	100
174.00	102.60	126.60#
176.00	49.60	67.82
0.00	0.00	0.00

W061114.M Thu Jun 12 08:50:35 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(57) Dibromomethane

6.415min (+0.012) 0.53 ug/L m

response 2319

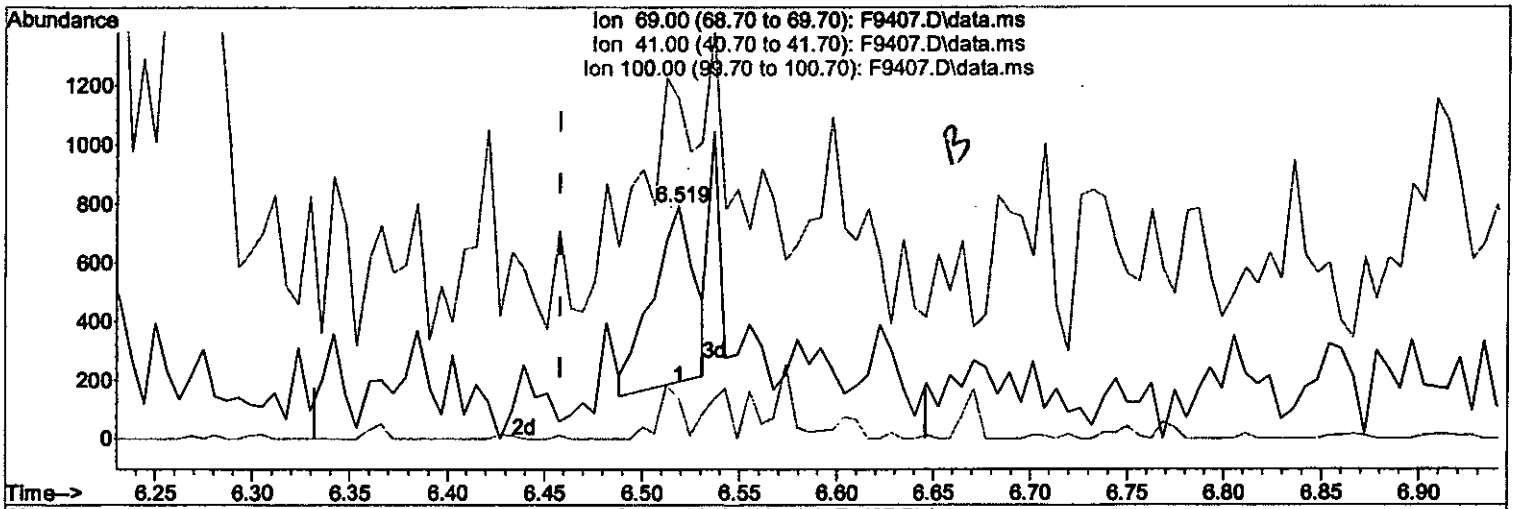
Ion	Exp%	Act%
93.00	100	100
174.00	102.60	126.60#
176.00	49.60	67.82
0.00	0.00	0.00

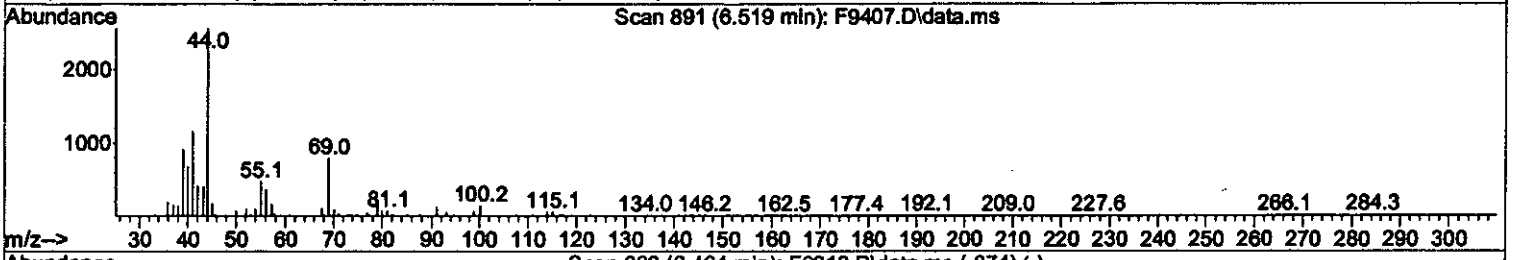
W061114.M Thu Jun 12 08:50:48 2014 MSVO10 Page: 1

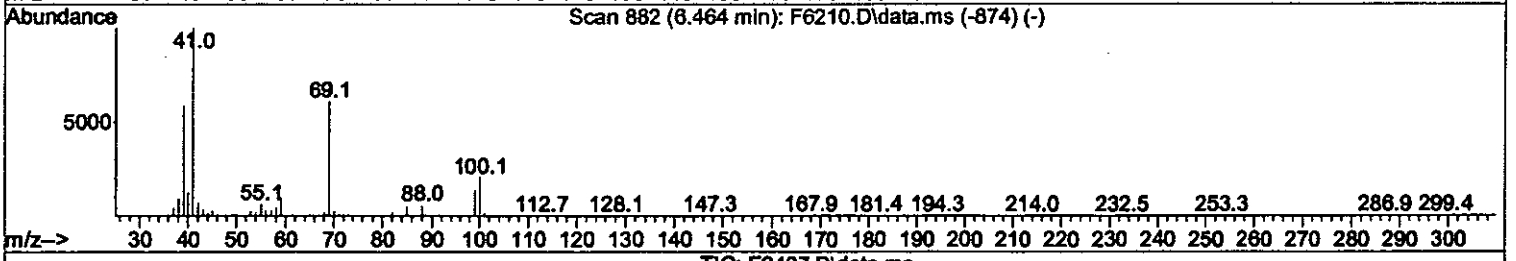
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(59) Methyl Methacrylate

6.519min (+0.061) 0.26 ug/L

response 901

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	145.76
100.00	36.90	18.08
0.00	0.00	0.00

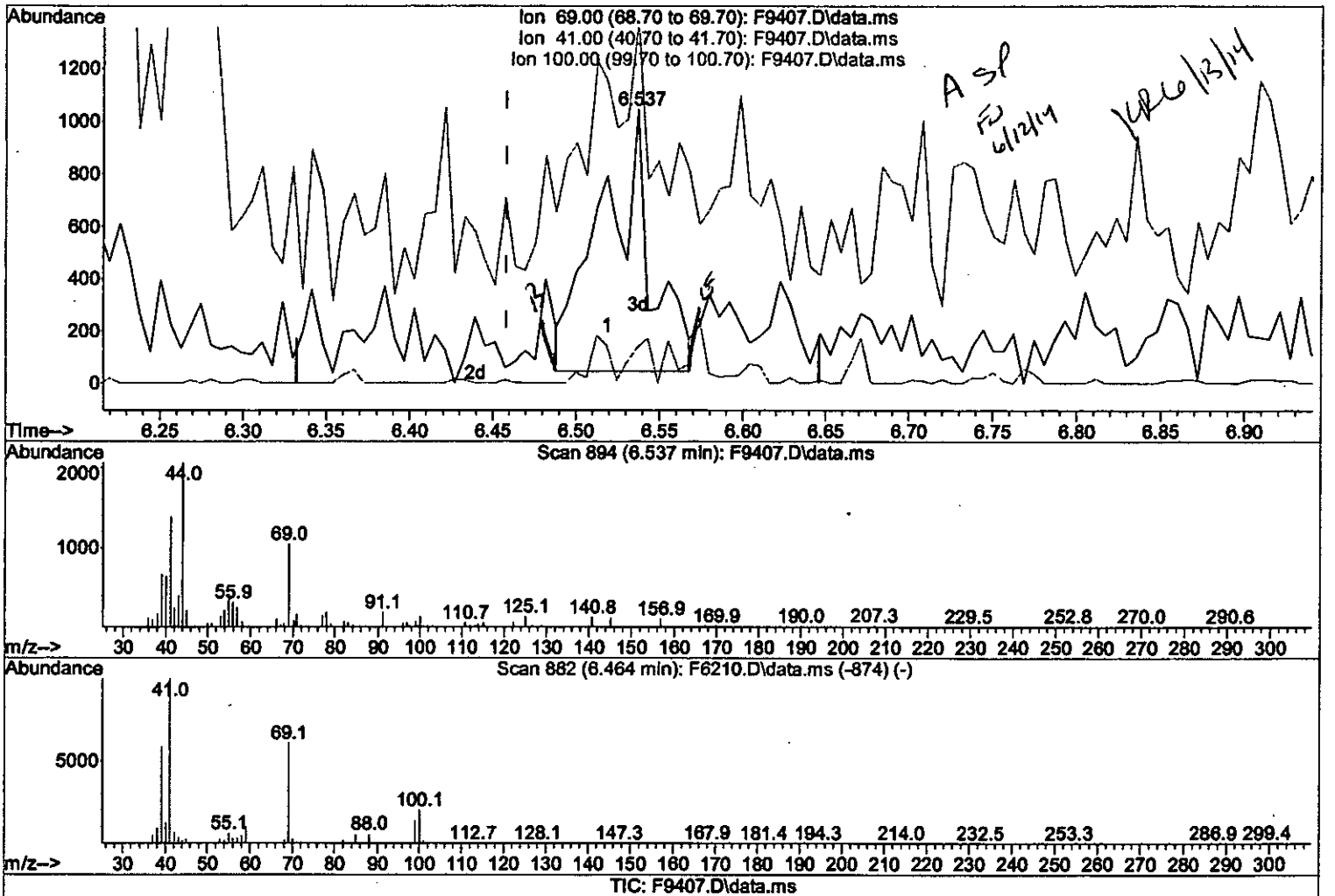
W061114.M Thu Jun 12 08:51:03 2014 MSVO10 Page: 1

00279

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(59) Methyl Methacrylate

6.537min (+0.079) 0.60 ug/L m

response 2054

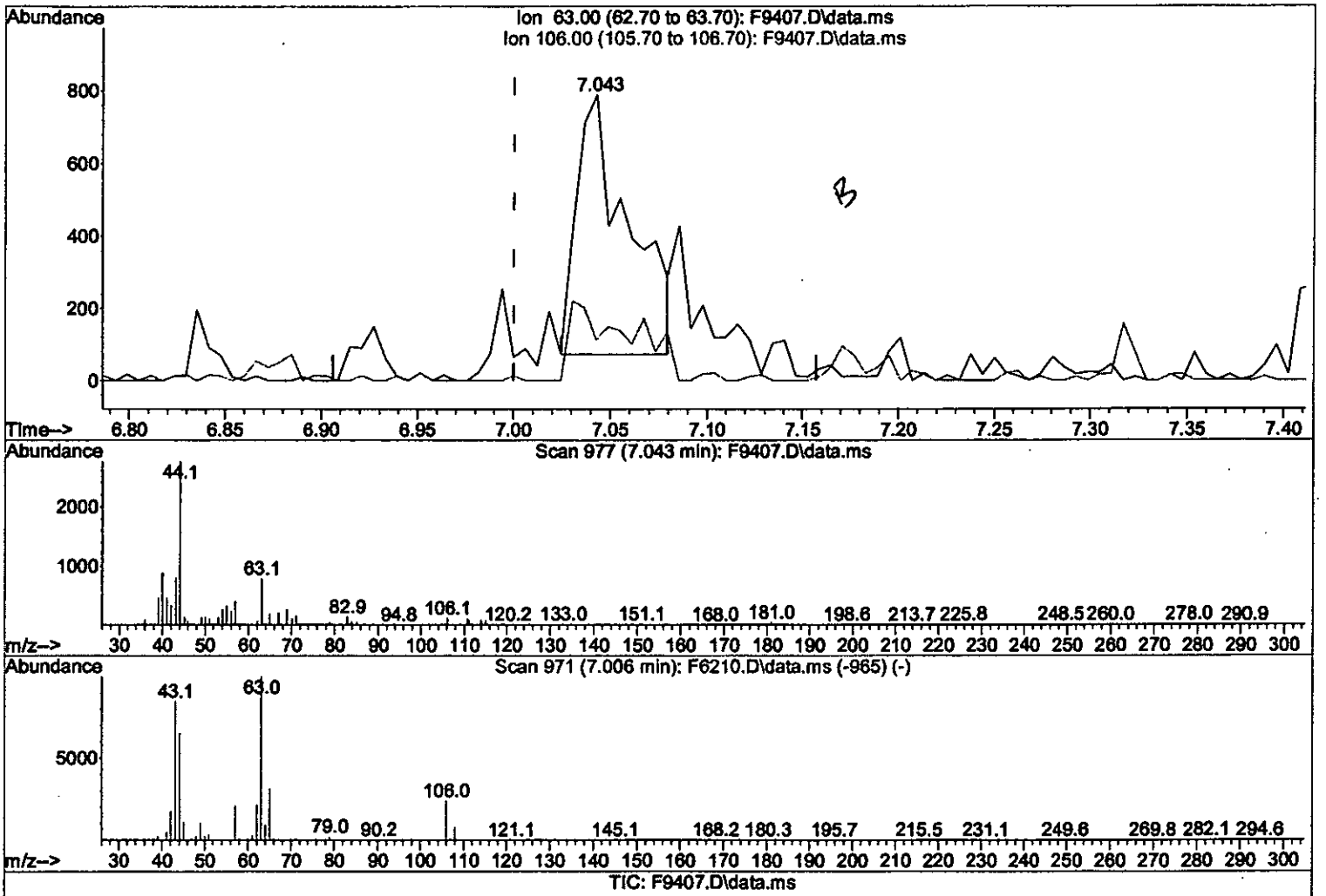
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	132.47
100.00	36.90	13.03#
0.00	0.00	0.00

W061114.M Thu Jun 12 08:51:37 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.043min (+0.043) 0.36 ug/L

response 1329

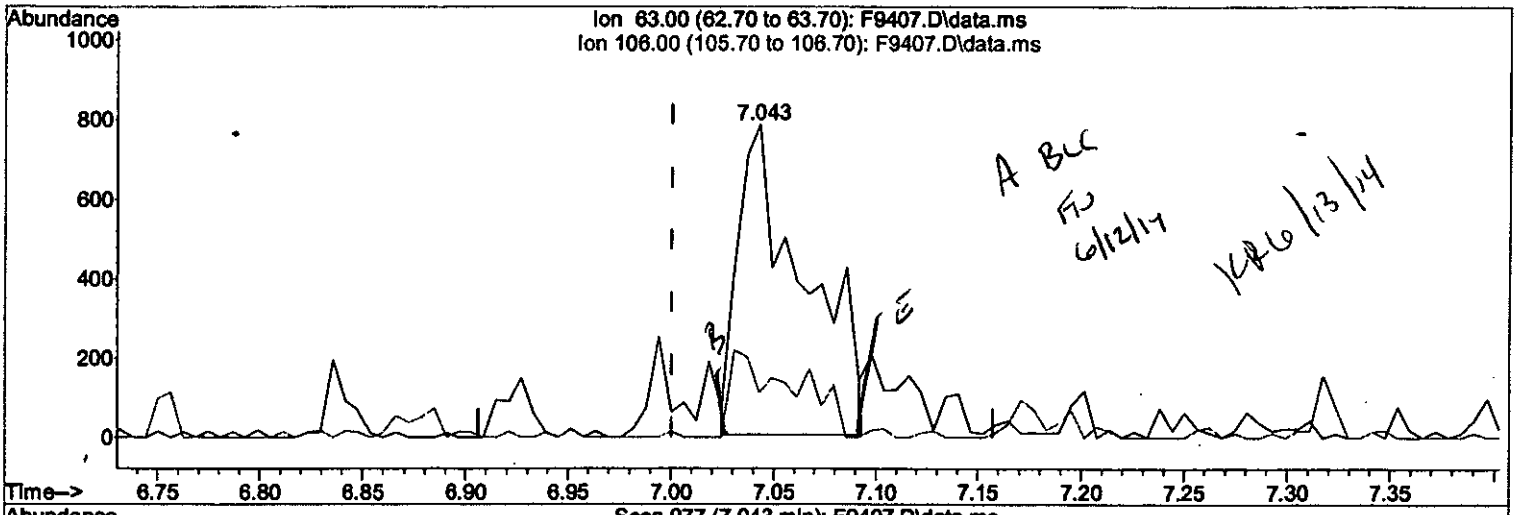
Ion	Exp%	Act%
63.00	100	100
106.00	27.80	14.34
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 08:51:56 2014 MSVO10 Page: 1

Quantitation Report (QedIt)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.043min (+0.043) 0.47 ug/L m

response 1754

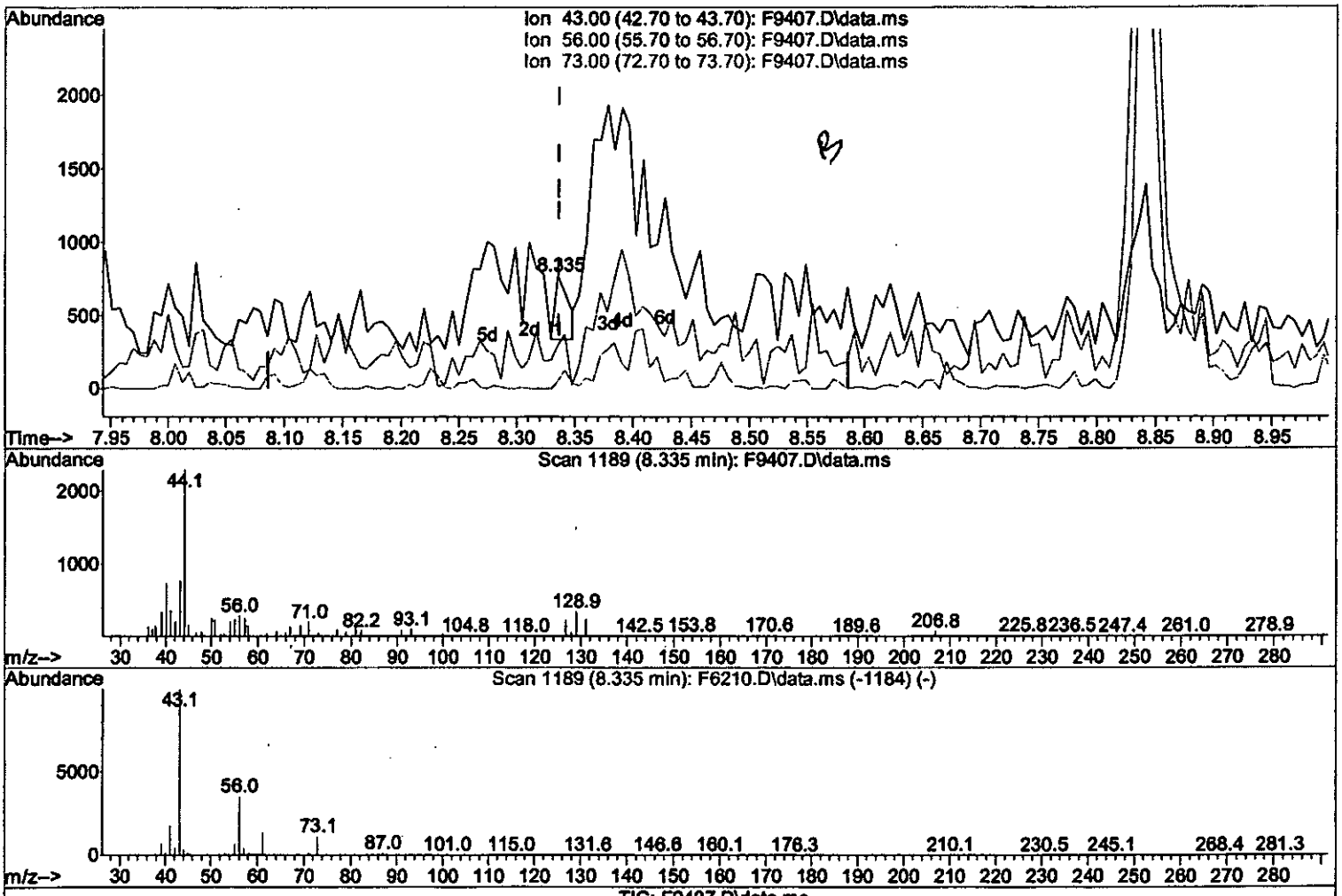
Ion	Exp%	Act%
63.00	100	100
106.00	27.80	14.34
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 08:52:13 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(76) N-Butyl Acetate

8.335min (-0.000) 0.03 ug/L

response 346

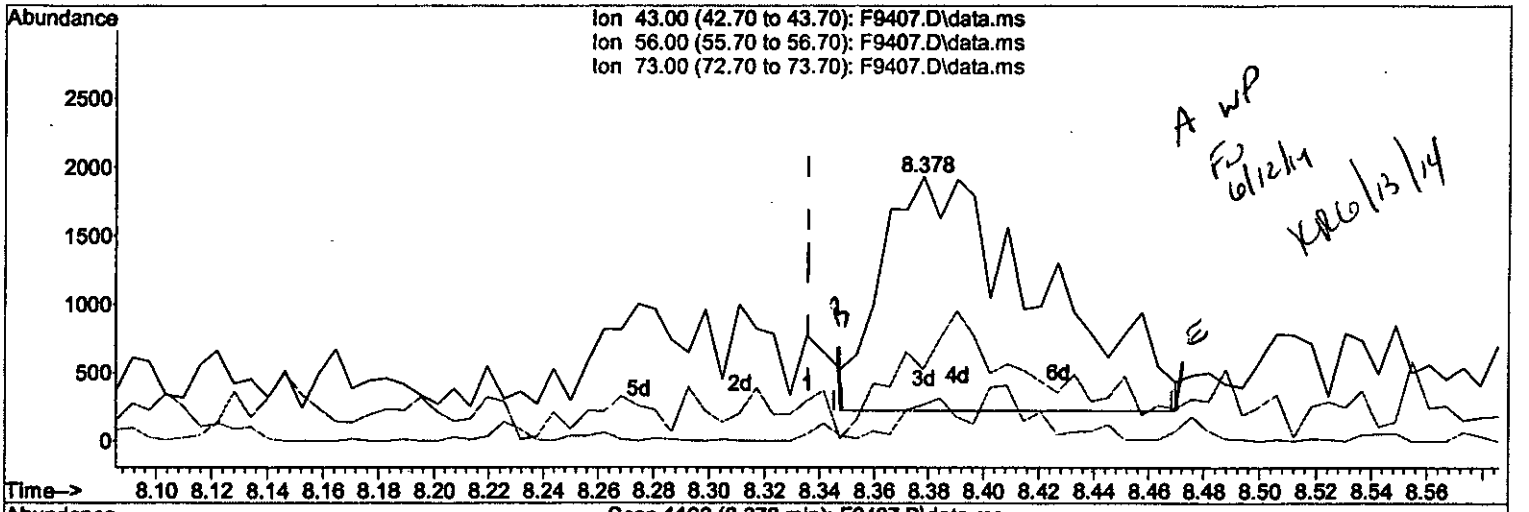
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	37.87
73.00	14.00	6.23
0.00	0.00	0.00

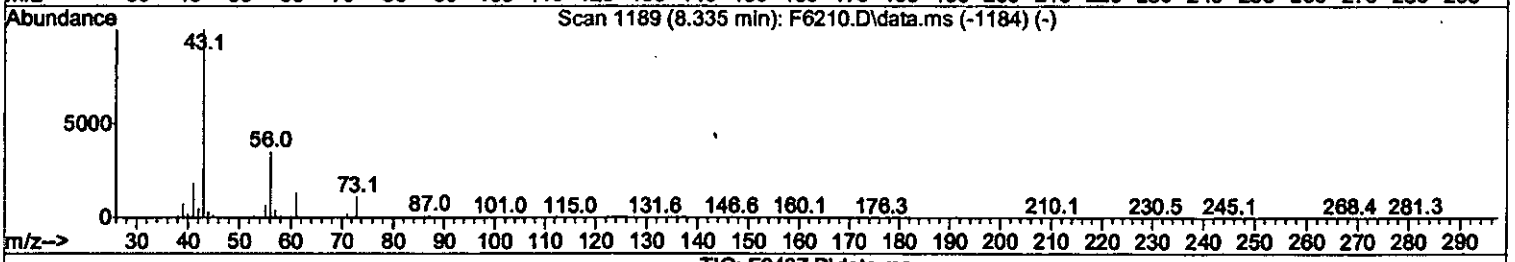
W061114.M Thu Jun 12 08:52:46 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration





TIC: F9407.D\data.ms

(76) N-Butyl Acetate

8.378min (+0.042) 0.67 ug/L m

response 6848

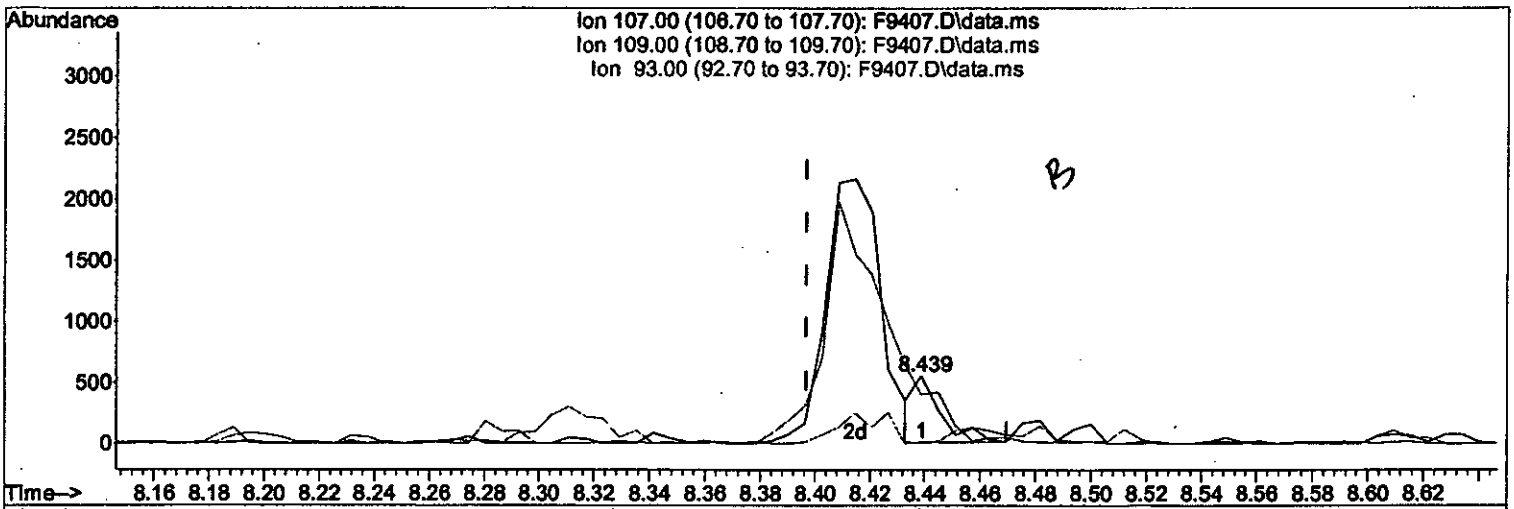
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	27.19
73.00	14.00	13.78
0.00	0.00	0.00

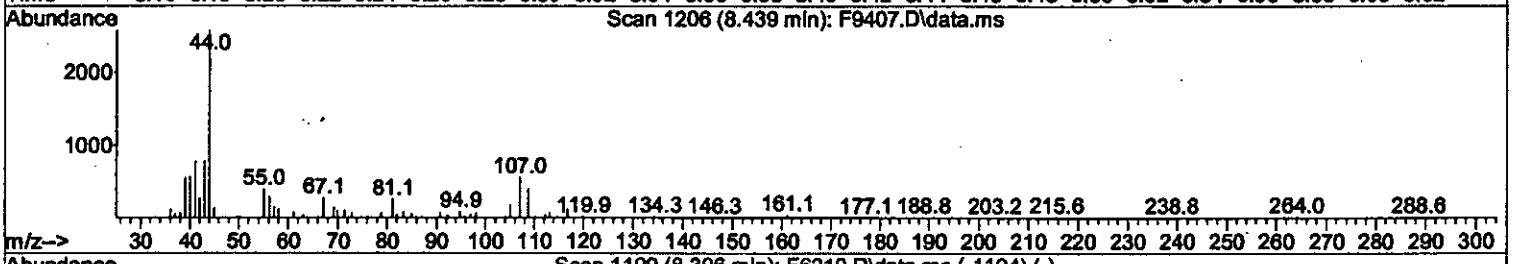
W061114.M Thu Jun 12 08:53:11 2014 MSVO10 Page: 1

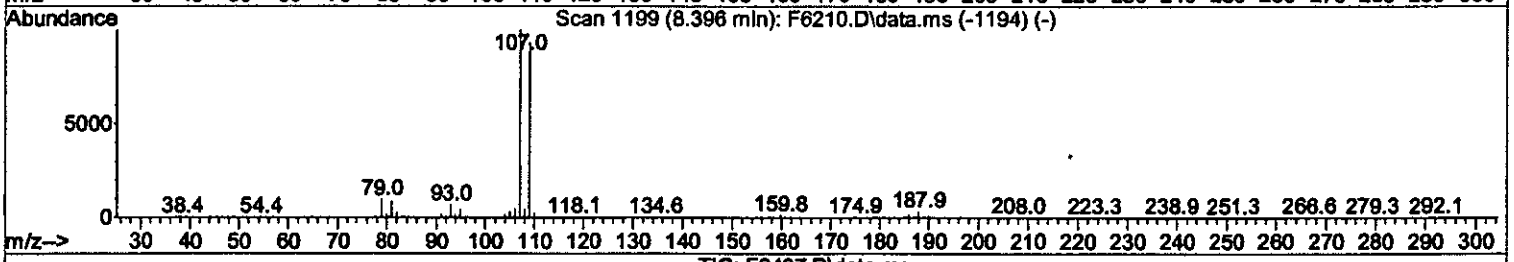
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(77) 1,2-Dibromoethane (P)

8.439min (+0.042) 0.06 ug/L

response 369

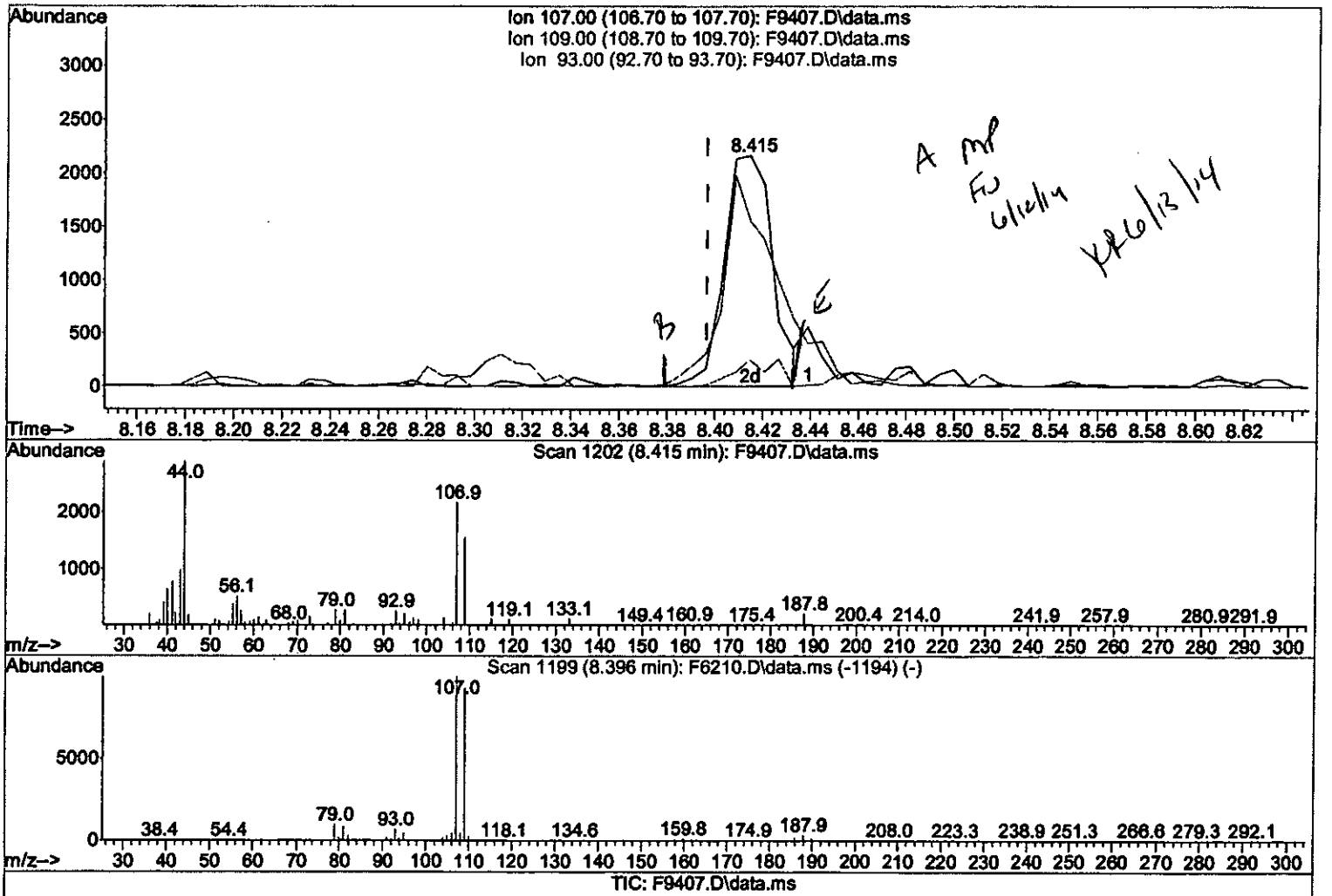
Ion	Exp%	Act%
107.00	100	100
109.00	92.20	72.92
93.00	5.90	2.17
0.00	0.00	0.00

W061114.M Thu Jun 12 08:53:18 2014 MSVO10 Page: 1

Quantitation Report (QedIt)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(77) 1,2-Dibromoethane (P)

8.415min (+0.018) 0.52 ug/L m

response 3034

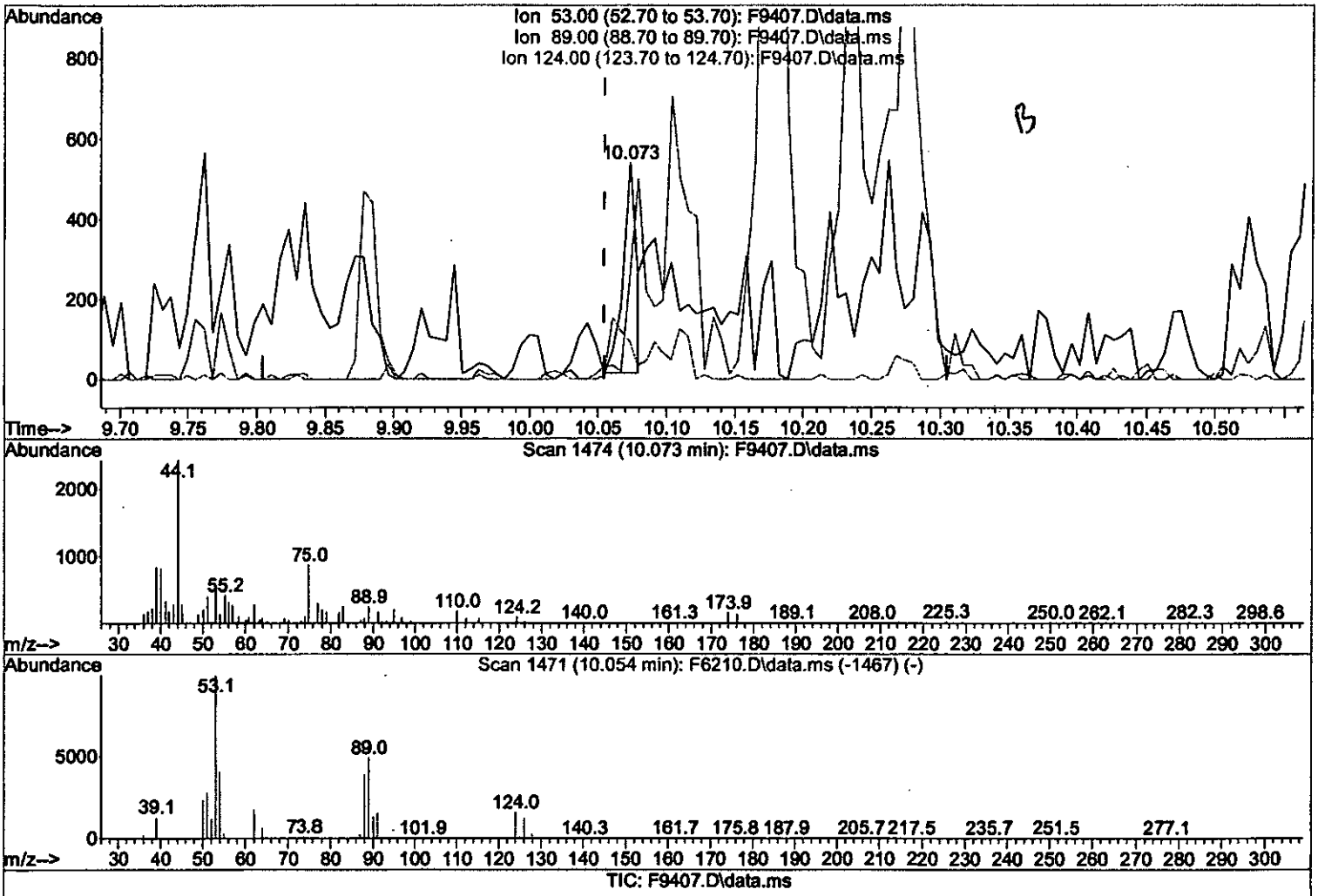
Ion	Exp%	Act%
107.00	100	100
109.00	92.20	71.88#
93.00	5.90	11.56
0.00	0.00	0.00

W061114.M Thu Jun 12 08:53:29 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.019) 0.20 ug/L

response 365

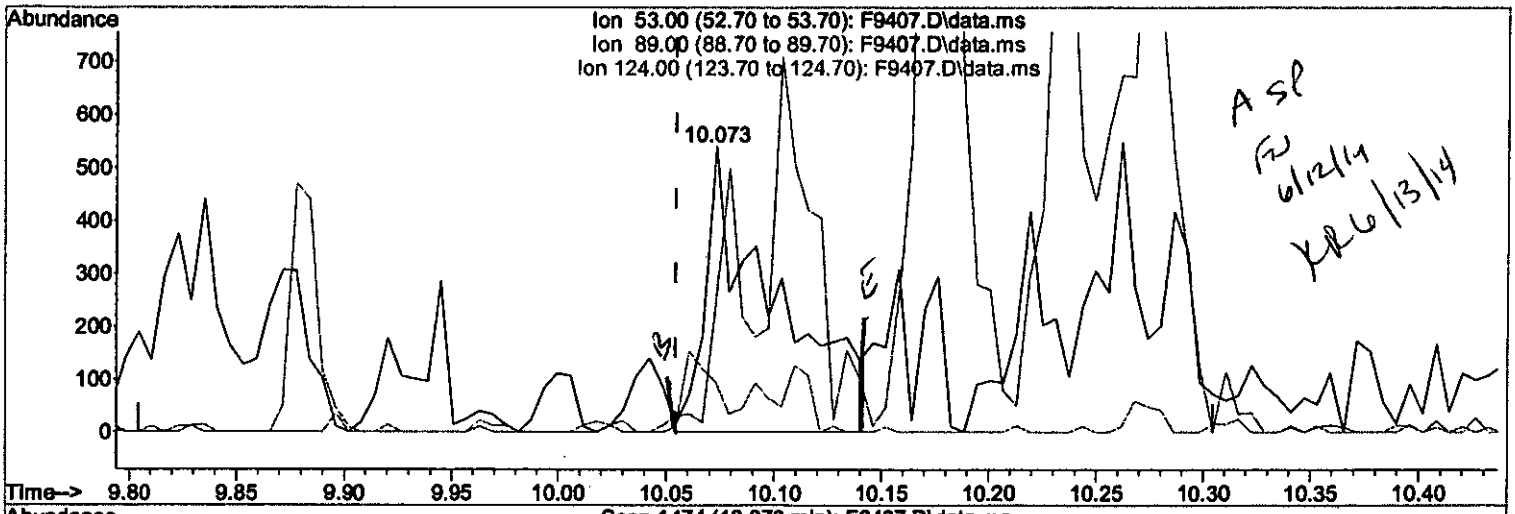
Ion	Exp%	Act%
53.00	100	100
89.00	57.40	48.15
124.00	20.90	17.59
0.00	0.00	0.00

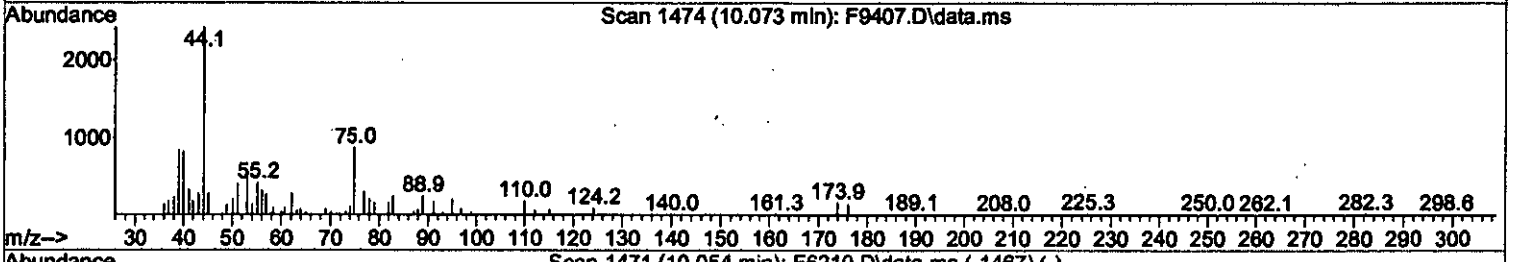
W061114.M Thu Jun 12 08:54:18 2014 MSVO10 Page: 1

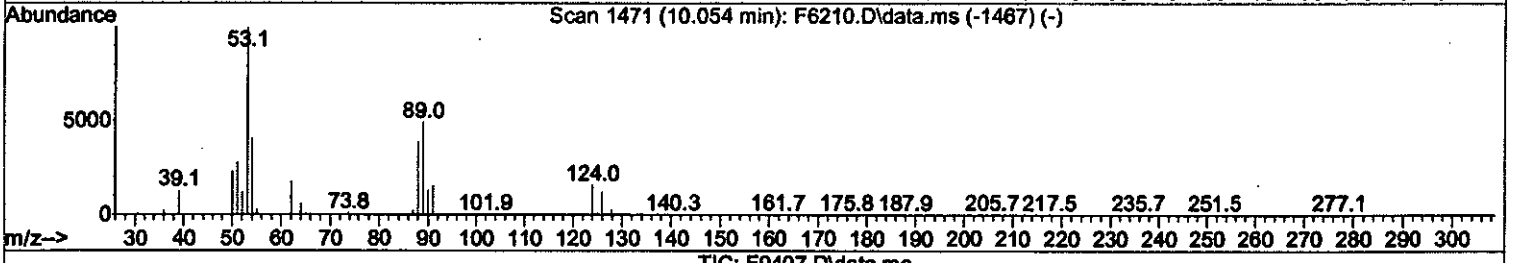
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.019) 0.65 ug/L m

response 1185

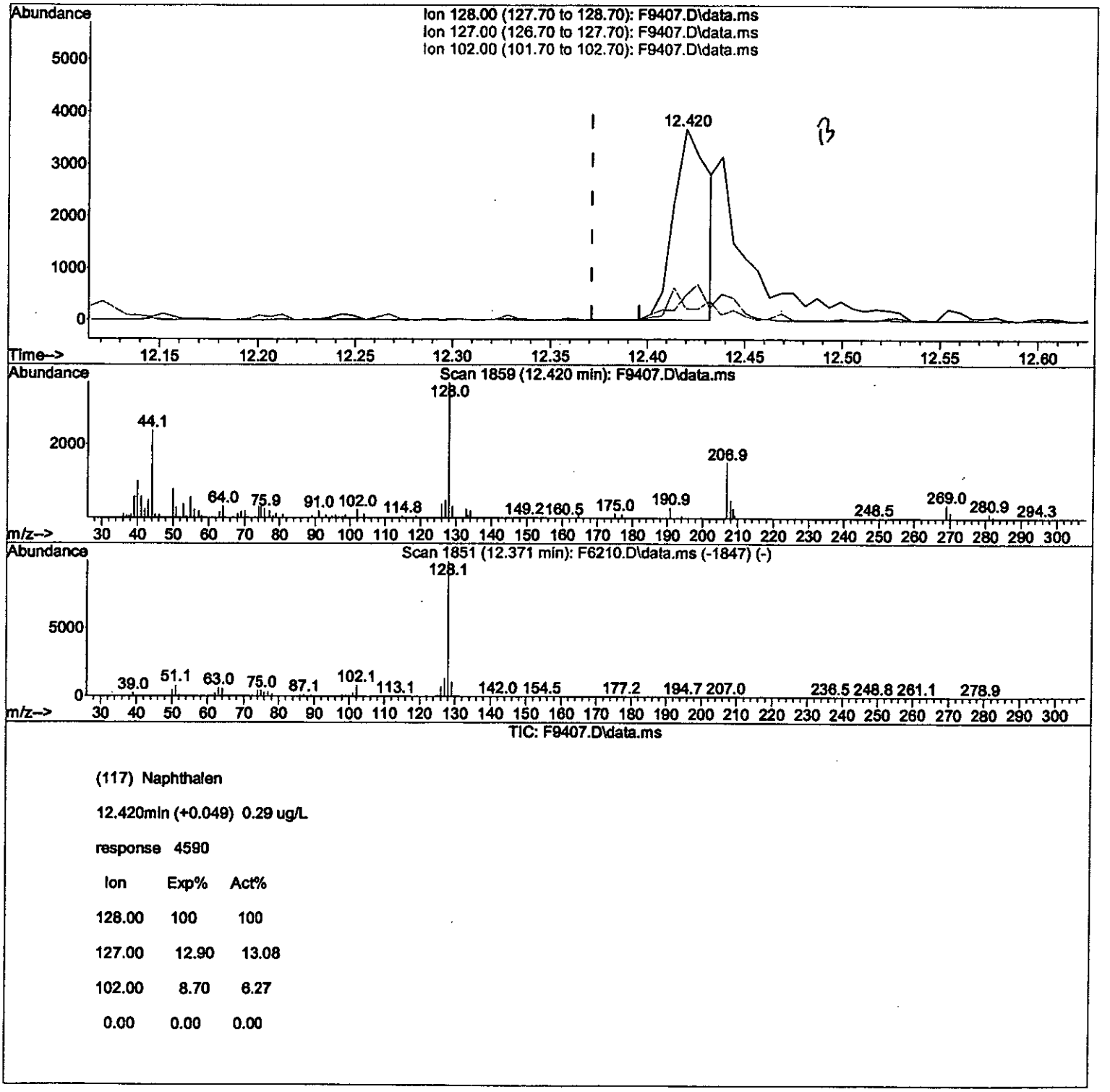
Ion	Exp%	Act%
53.00	100	100
89.00	57.40	45.74
124.00	20.90	17.59
0.00	0.00	0.00

W061114.M Thu Jun 12 08:55:06 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(117) Naphthalen

12.420min (+0.049) 0.29 ug/L

response 4590

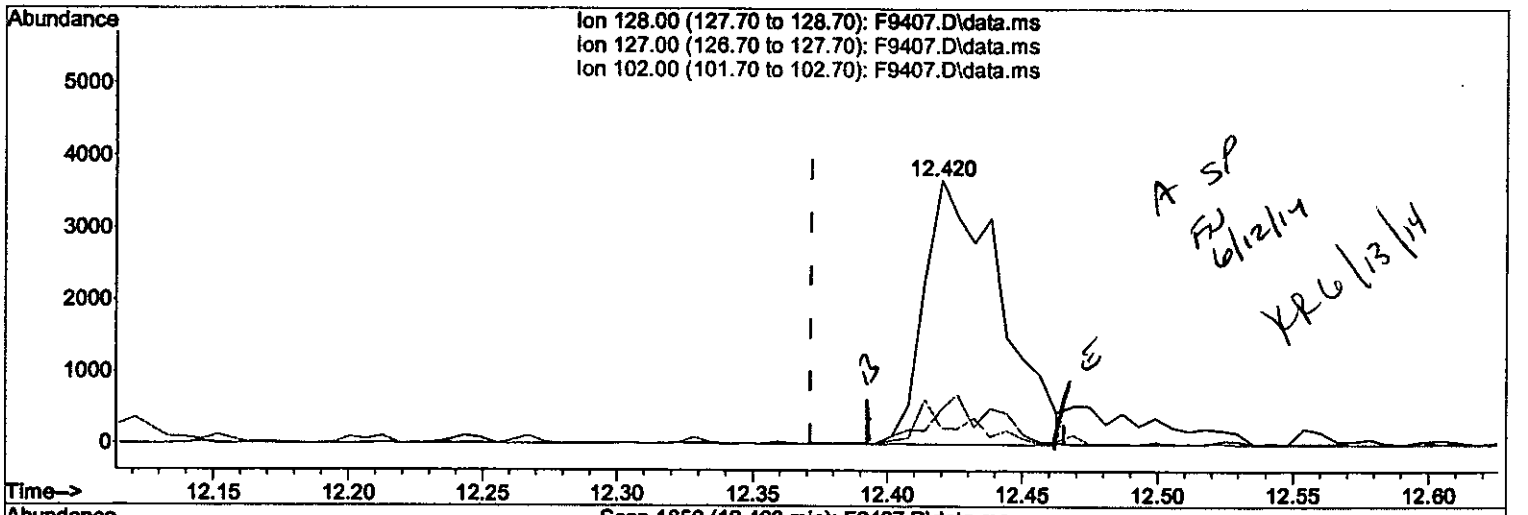
Ion	Exp%	Act%
128.00	100	100
127.00	12.90	13.08
102.00	8.70	6.27
0.00	0.00	0.00

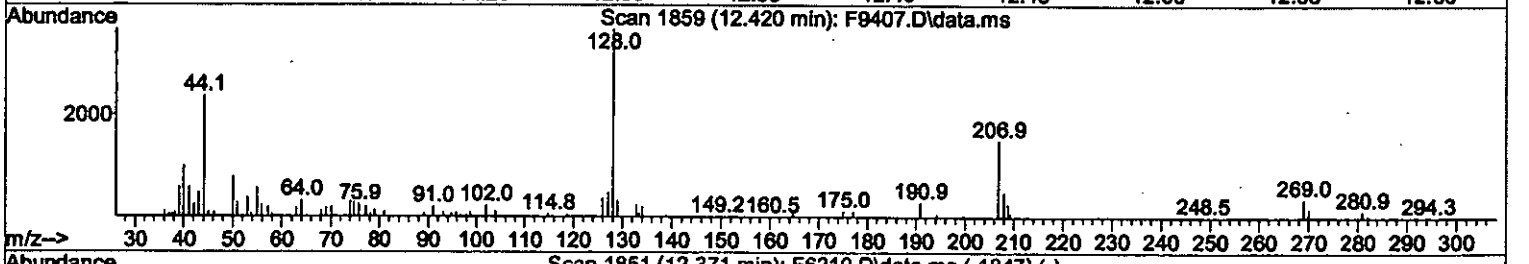
W061114.M Thu Jun 12 08:55:33 2014 MSVO10 Page: 1

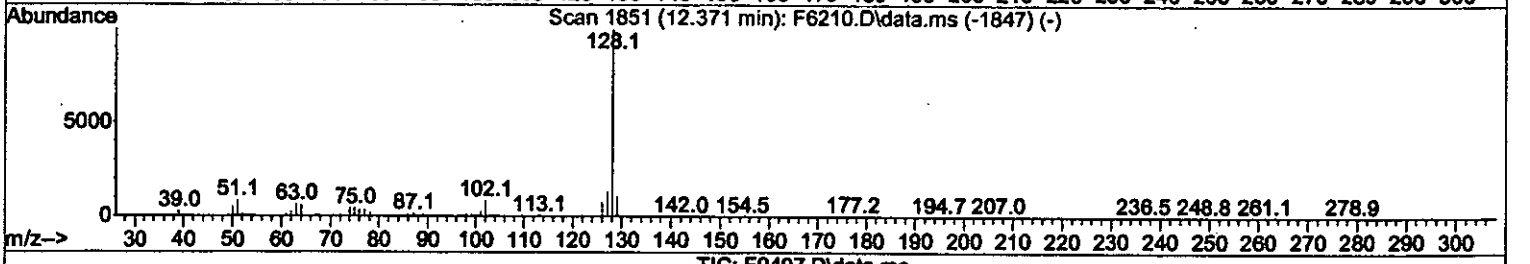
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(117) Naphthalen

12.420min (+0.049) 0.46 ug/L m

response 7261

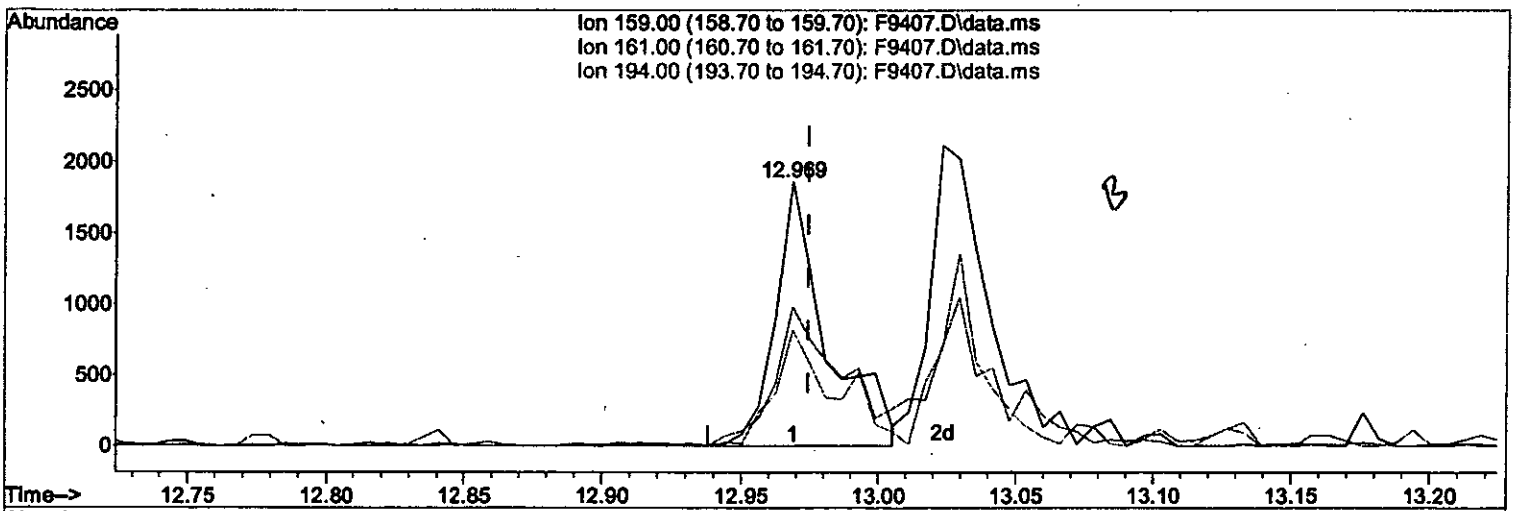
Ion	Exp%	Act%
128.00	100	100
127.00	12.90	13.08
102.00	8.70	6.27
0.00	0.00	0.00

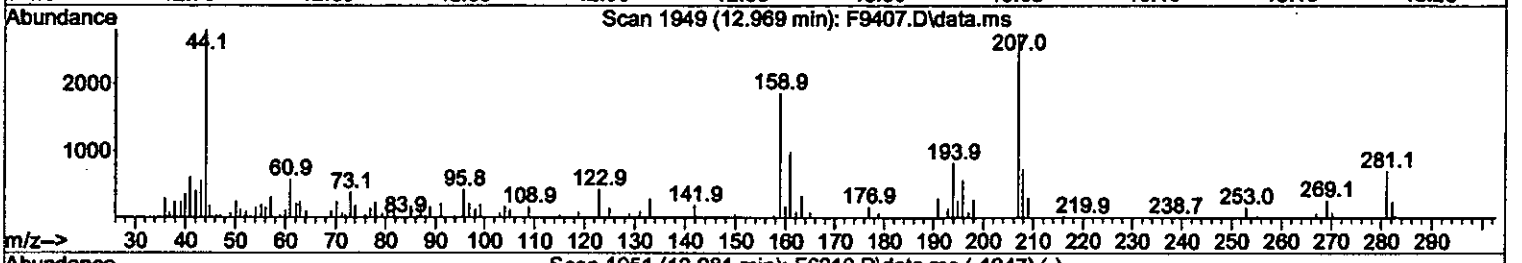
W061114.M Thu Jun 12 08:55:52 2014 MSVO10 Page: 1

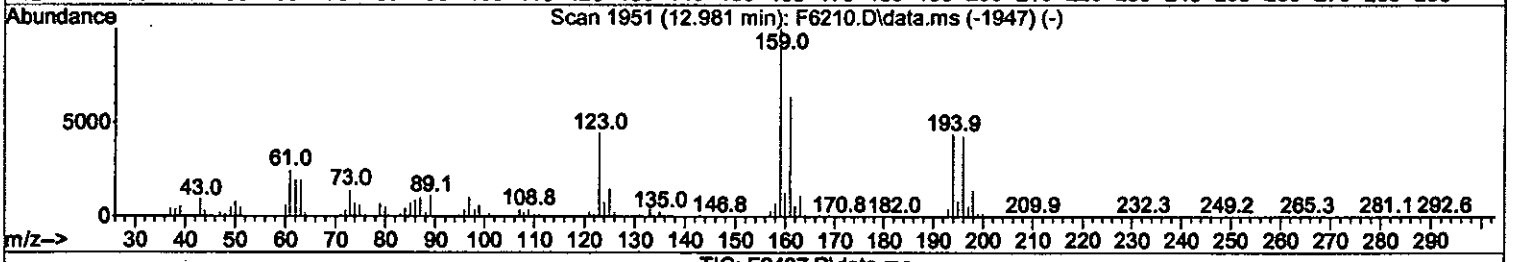
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9407.D\data.ms

(120) 2,3,6-Trichlorotoluene

12.969min (-0.005) 0.54 ug/L

response 2414

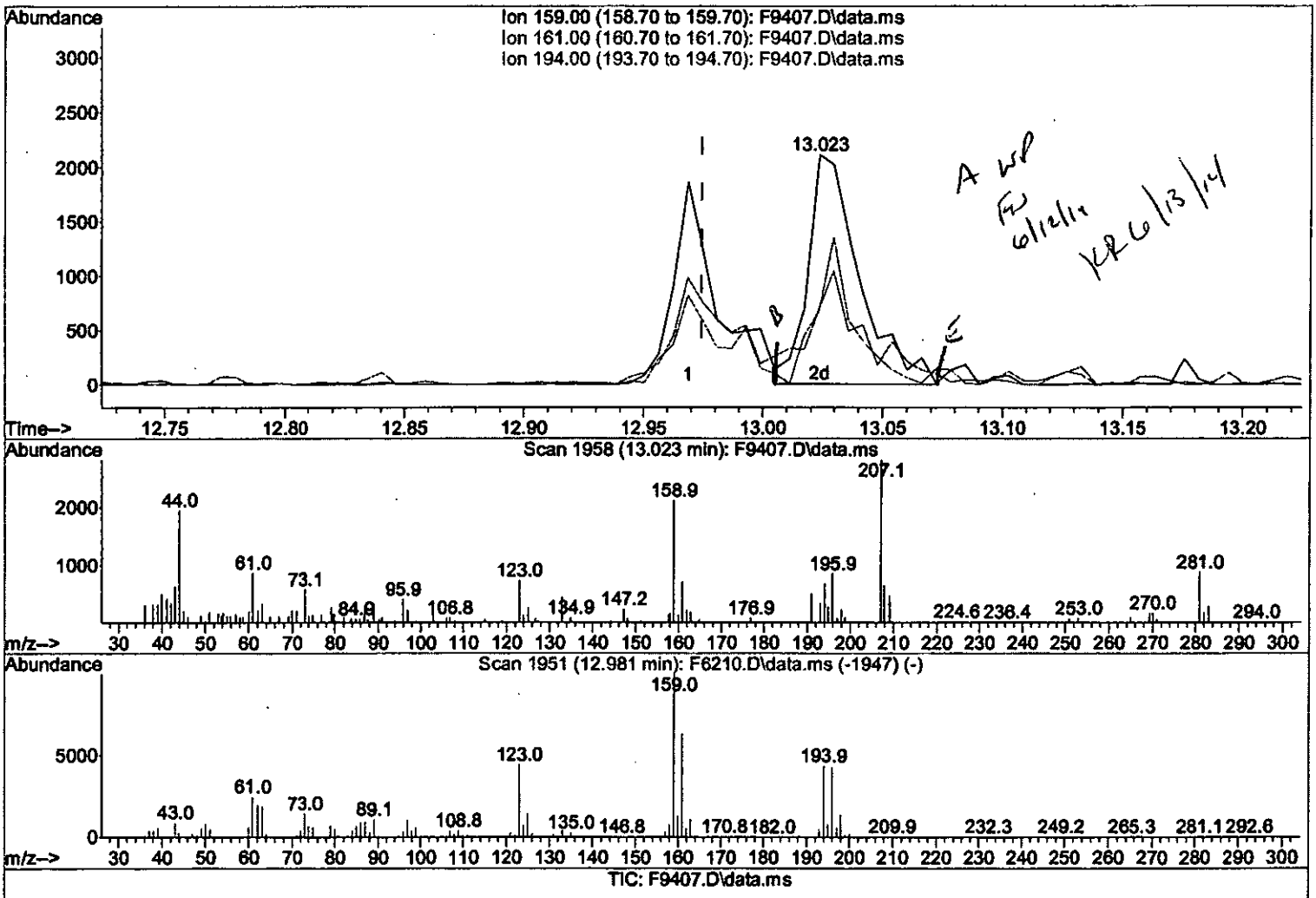
Ion	Exp%	Act%
159.00	100	100
161.00	61.90	52.77
194.00	48.10	43.90
0.00	0.00	0.00

W061114.M Thu Jun 12 08:55:59 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D Vial: 5
Acq On : 11 Jun 2014 4:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 16:37:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9407.D\data.ms

(120) 2,3,6-Trichlorotoluene

13.023min (+0.049) 0.70 ug/L m

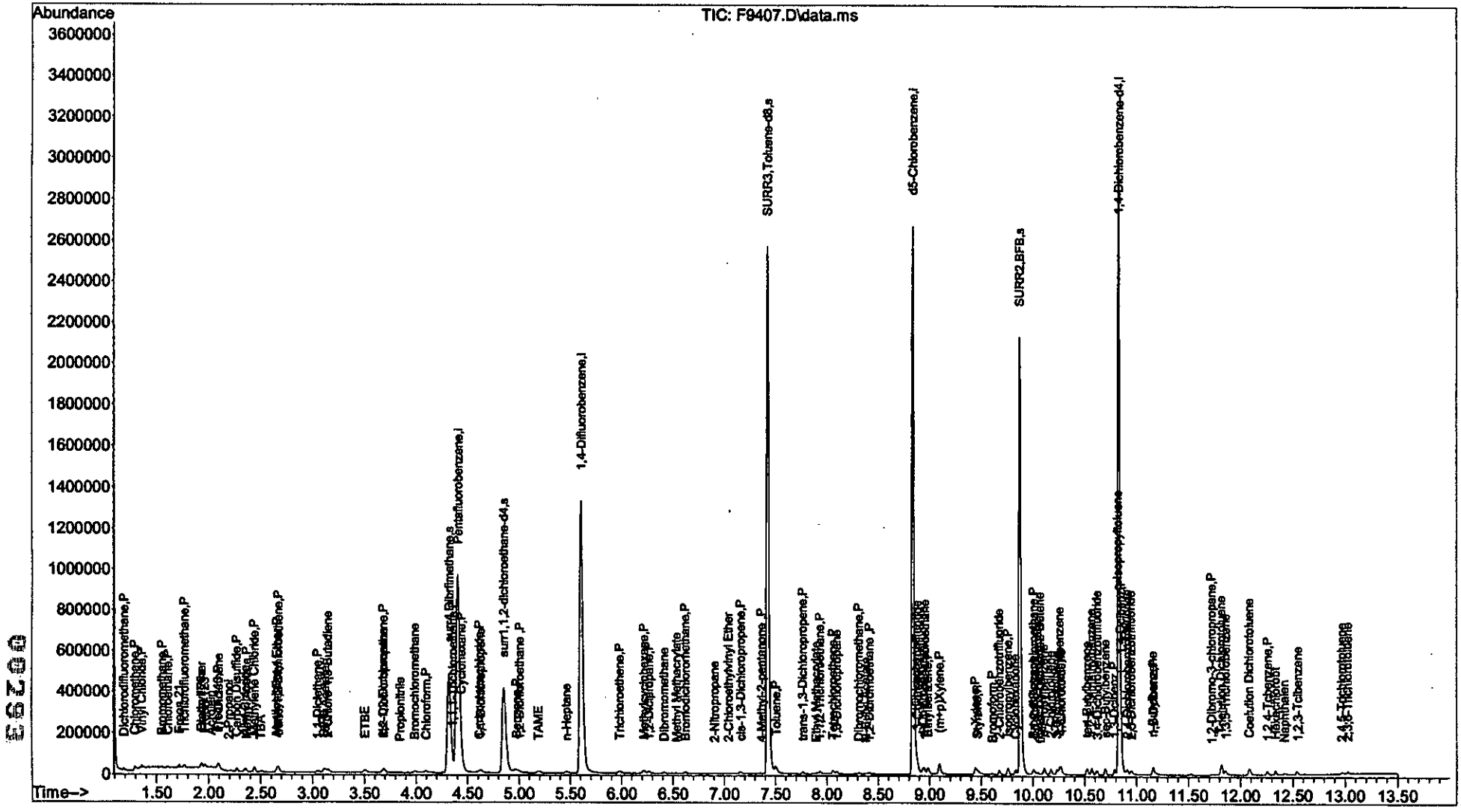
response 3124

Ion	Exp%	Act%
159.00	100	100
161.00	61.90	33.40#
194.00	48.10	32.35
0.00	0.00	0.00

W061114.M Thu Jun 12 08:56:10 2014 MSVO10 Page: 1

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9407.D      Vial: 5
Acq On    : 11 Jun 2014    4:24 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 08:56:03 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
```



Quantitation Report (QT Reviewed)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FN 6/12/14

Quant Time: Jun 12 10:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	904843	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1251225	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1118537	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	610893	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	368871	45.17	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 90.34%				
48) surr1,1,2-dichloroetha...	4.854	65	381287	44.38	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.76%				
65) SURR3,Toluene-d8	7.427	98	1427956	48.77	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.54%				
70) SURR2,BFB	9.878	95	564343	46.92	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.84%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	7831	0.79	ug/L		95
3) Chloromethane	1.294	50	10264	0.88	ug/L		82
4) Vinyl Chloride	1.361	62	10433	0.96	ug/L		89
5) Bromomethane	1.556	94	2937	0.93	ug/L		99
6) Chloroethane	1.611	64	5907	0.93	ug/L		99
7) Freon 21	1.721	67	16658	0.95	ug/L		93
8) Trichlorofluoromethane	1.770	101	12226	0.90	ug/L		99
9) Diethyl Ether	1.940	59	6825	1.04	ug/L		91
10) Freon 123a	1.928	67	10325	0.95	ug/L		99
11) Freon 123	1.965	83	10376	0.88	ug/L		99
12) Acrolein	2.026	56	6014	6.10	ug/L		91
13) 1,1-Diclethene	2.105	96	6354	1.01	ug/L		92
14) Freon 113	2.093	101	7232	0.95	ug/L		96
15) Acetone	2.123	43	3515	1.47	ug/L		89
16) 2-Propanol	2.196	45	7398	22.10	ug/L		77
17) Iodomethane	2.215	142	1133	0.26	ug/L		86
18) Carbon Disulfide	2.270	76	26325	1.14	ug/L		98
19) Acetonitrile	2.324	40	1851	6.31	ug/L	#	50
20) Allyl Chloride	2.355	76	4780	1.20	ug/L	#	89
21) Methyl Acetate	2.361	43	4211	0.86	ug/L		84
22) Methylene Chloride	2.440	84	11049	1.35	ug/L		96
23) TBA	2.507	59	11096	22.05	ug/L		78
24) Acrylonitrile	2.648	53	9779	4.50	ug/L		100
25) Methyl-t-Butyl Ether	2.660	73	19299	1.01	ug/L		98
26) trans-1,2-Dichloroethene	2.672	96	7367	0.91	ug/L	#	46
28) 1,1-Diclethane	3.050	63	16250	1.03	ug/L		89
29) Vinyl Acetate	3.117	86	1103m	1.02	ug/L		
30) DIPE	3.111	45	31498	0.93	ug/L	#	63
31) 2-Chloro-1,3-Butadiene	3.147	53	13843	0.89	ug/L		94
32) ETBE	3.507	59	26434	1.00	ug/L		86
33) 2,2-Dichloropropane	3.684	77	12695	1.11	ug/L		90
34) cis-1,2-Dichloroethene	3.684	96	8034	0.88	ug/L		85
36) Propionitrile	3.818	54	3525m	5.12	ug/L		
37) Bromochloromethane	3.989	130	5594	1.04	ug/L	#	83
38) Methacrylonitrile	4.007	67	2391m	1.19	ug/L		

W061114.M Thu Jun 12 10:19:19 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 10:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
39) Tetrahydrofuran	4.086	42	1164	0.64 ug/L		96
40) Chloroform	4.098	83	14467	0.96 ug/L		88
41) 1,1,1-Trichloroethane	4.367	97	12537	0.98 ug/L	#	44
42) TAME	5.190	73	20743	1.04 ug/L		82
44) Cyclohexane	4.434	41	9044m	0.92 ug/L		
46) Carbontetrachloride	4.617	121	3749	1.15 ug/L		100
47) 1,1-Dichloropropene	4.629	75	10261	1.08 ug/L		93
49) Benzene	4.958	78	30631	1.01 ug/L		85
50) 1,2-Dichloroethane	5.001	62	10139	0.88 ug/L		91
51) Iso-Butyl Alcohol	4.934	43	6229m	28.35 ug/L		
52) n-Heptane	5.458	43	11080	1.21 ug/L		84
53) 1-Butanol	6.092	56	3855m	36.06 ug/L		
54) Trichloroethene	5.982	130	7682	0.91 ug/L		95
55) Methylcyclohexane	6.220	55	11750	1.07 ug/L	#	79
56) 1,2-Diclpropane	6.263	63	8727	1.06 ug/L		93
57) Dibromomethane	6.415	93	4074	0.95 ug/L		90
58) 1,4-Dioxane	6.482	88	808m	18.98 ug/L		
59) Methyl Methacrylate	6.507	69	2811m	0.83 ug/L		
60) Bromodichloromethane	6.628	83	9206	0.91 ug/L		96
61) 2-Nitropropane	6.915	41	2934m	0.96 ug/L		
62) 2-Chloroethylvinyl Ether	7.031	63	3750m	1.02 ug/L		
63) cis-1,3-Dichloropropene	7.153	75	11794	1.08 ug/L		89
64) 4-Methyl-2-pentanone	7.348	43	5612	0.95 ug/L		80
66) Toluene	7.506	91	33898	1.04 ug/L		99
67) trans-1,3-Dichloropropene	7.762	75	9105	1.01 ug/L		92
68) Ethyl Methacrylate	7.897	69	5919	0.87 ug/L		90
69) 1,1,2-Trichloroethane	7.933	97	5966	1.02 ug/L		92
72) Tetrachloroethene	8.055	164	6841	1.04 ug/L		91
73) 2-Hexanone	8.238	43	4239m	1.00 ug/L		
74) 1,3-Dichloropropane	8.092	76	9958	1.03 ug/L		80
75) Dibromochloromethane	8.305	129	6737	0.94 ug/L		94
76) N-Butyl Acetate	8.360	43	11323m	1.12 ug/L		
77) 1,2-Dibromoethane	8.409	107	5521	0.97 ug/L		88
78) 3-Chlorobenzotrifluoride	8.884	180	12473	1.01 ug/L	#	84
79) Chlorobenzene	8.872	112	23228	1.06 ug/L		93
80) 4-Chlorobenzotrifluoride	8.933	180	11413	1.01 ug/L		86
81) 1,1,1,2-Tetrachloroethane	8.951	131	8173	1.05 ug/L	#	86
82) Ethylbenzene	8.982	106	11489	1.07 ug/L		94
83) (m+p)Xylene	9.091	106	27159	2.09 ug/L		97
84) o-Xylene	9.439	106	13972	1.09 ug/L		92
85) Styrene	9.463	104	23832	1.11 ug/L		88
86) Bromoform	9.604	173	4313	1.02 ug/L		84
87) 2-Chlorobenzotrifluoride	9.677	180	12161	1.02 ug/L		89
88) Isopropylbenzene	9.756	105	35191	1.10 ug/L		99
89) Cyclohexanone	9.829	55	18577	23.68 ug/L		98
90) trans-1,4-Dichloro-2-B...	10.067	53	1550	0.86 ug/L		72
92) 1,1,2,2-Tetrachloroethane	10.012	83	7340	1.05 ug/L	#	77
93) Bromobenzene	10.006	156	9897	1.07 ug/L		94
94) 1,2,3-Trichloropropane	10.049	110	1888	1.07 ug/L	#	64
95) n-Propylbenzene	10.110	91	41658	1.13 ug/L		98
96) 2-Chlorotoluene	10.177	91	24204	1.05 ug/L		95
97) 3-Chlorotoluene	10.225	91	24847	0.99 ug/L		99

W061114.M Thu Jun 12 10:19:19 2014 MSVO10 Page: 2

Quantitation Report (QT Reviewed)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 10:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

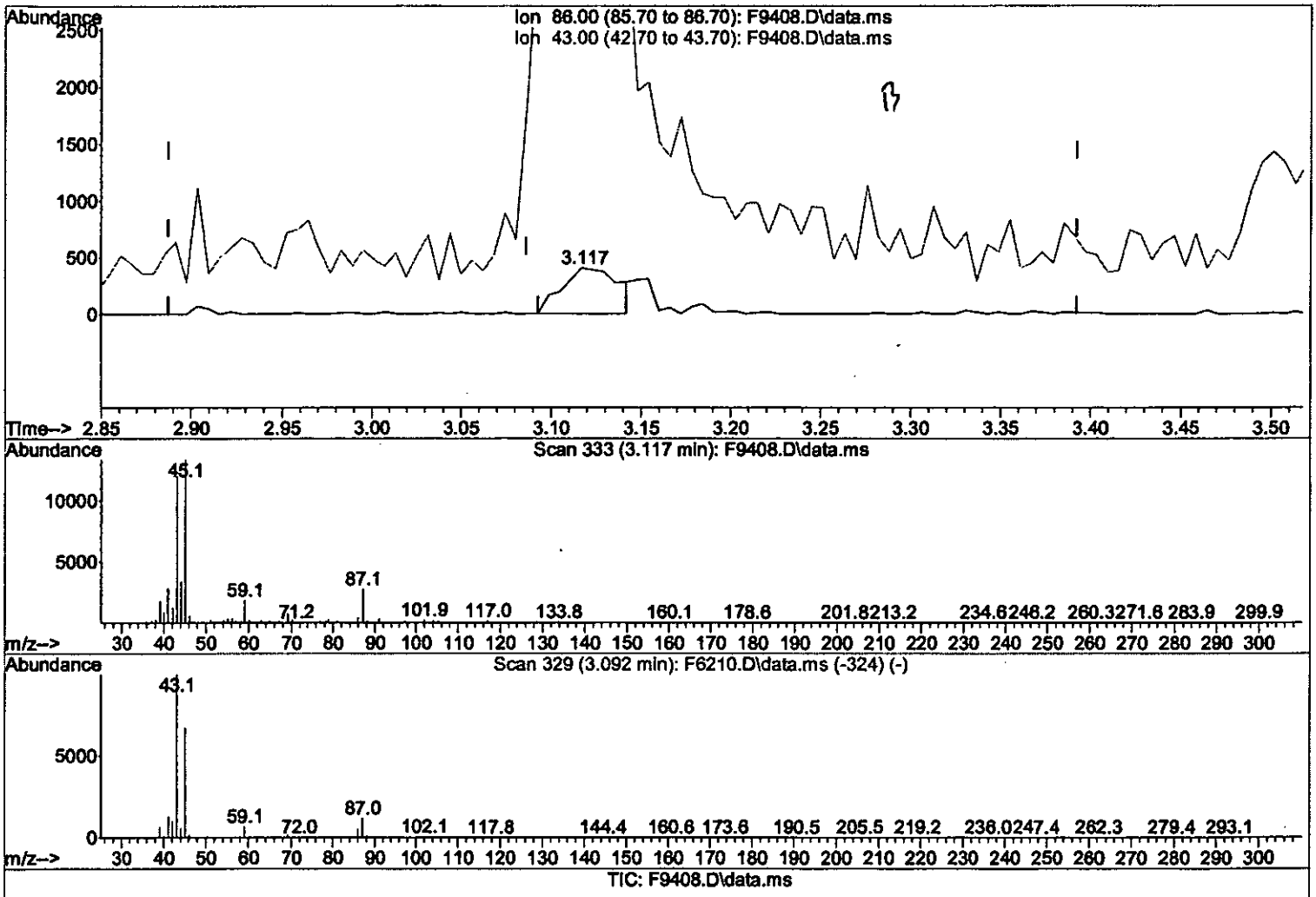
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
98)	4-Chlorotoluene	10.268	91	30561	1.09 ug/L	99
99)	1,3,5-Trimethylbenzene	10.256	105	29909	1.13 ug/L	93
100)	tert-Butylbenzene	10.518	119	23791	1.08 ug/L	99
101)	1,2,4-Trimethylbenzene	10.567	105	29648	1.11 ug/L	90
102)	3,4-Dichlorobenzotrifl...	10.616	214	8857	1.06 ug/L	91
103)	sec-Butylbenzene	10.701	105	34152	1.12 ug/L	97
104)	p-Isopropyltoluene	10.817	119	29926	1.14 ug/L	95
105)	1,3-Dclbenz	10.786	146	18645	1.08 ug/L	95
106)	1,4-Dclbenz	10.853	146	18528	1.01 ug/L	88
107)	2,4-Dichlorobenzotrifl...	10.908	214	8132	1.07 ug/L	95
108)	2,5-Dichlorobenzotrifl...	10.951	214	9244	1.05 ug/L	98
109)	n-Butylbenzene	11.158	91	26021	1.14 ug/L	96
110)	1,2-Dclbenz	11.158	146	16890	1.04 ug/L	92
111)	1,2-Dibromo-3-chloropr...	11.719	157	859	0.71 ug/L	90
112)	Trielution Dichlorotol...	11.810	125	40452	3.10 ug/L	90
113)	1,3,5-Trichlorobenzene	11.853	180	11060	0.96 ug/L	97
114)	Coelution Dichlorotoluene	12.079	125	27203	2.01 ug/L	92
115)	1,2,4-Tcbenzene	12.249	180	9268	0.99 ug/L	93
116)	Hexachlorobt	12.335	225	4880	1.17 ug/L	95
117)	Naphthalen	12.408	128	14428	0.91 ug/L	97
118)	1,2,3-Tclbenzene	12.536	180	6371	0.86 ug/L	90
119)	2,4,5-Trichlorotoluene	12.957	159	4035	0.87 ug/L	89
120)	2,3,6-Trichlorotoluene	13.011	159	4529m	1.02 ug/L	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



(29) Vinyl Acetate

3.117min (+0.031) 0.81 ug/L

response 870

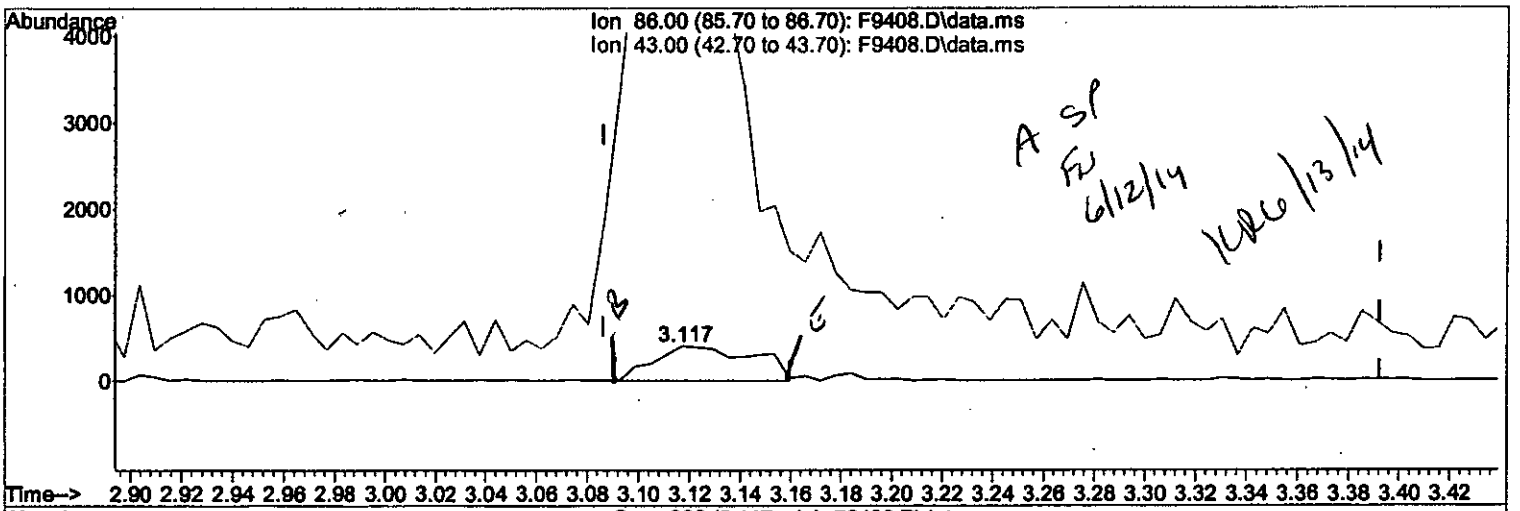
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	2966.83#
0.00	0.00	0.00
0.00	0.00	0.00

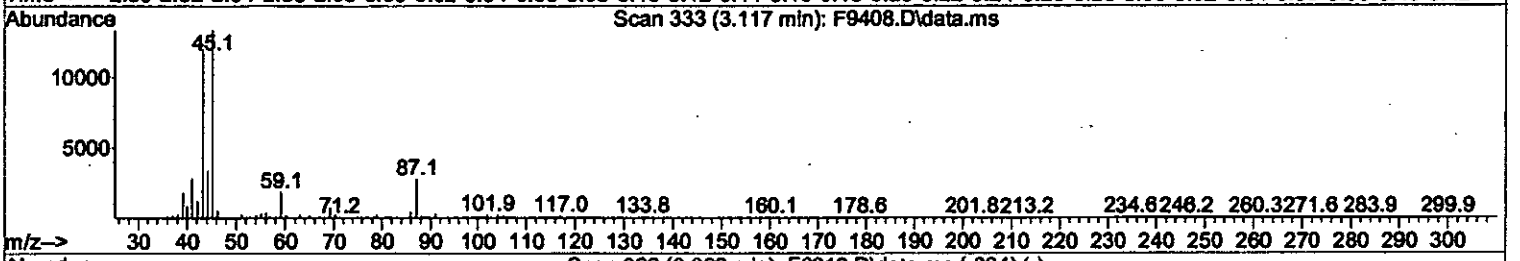
W061114.M Thu Jun 12 09:06:28 2014 MSVO10 Page: 1

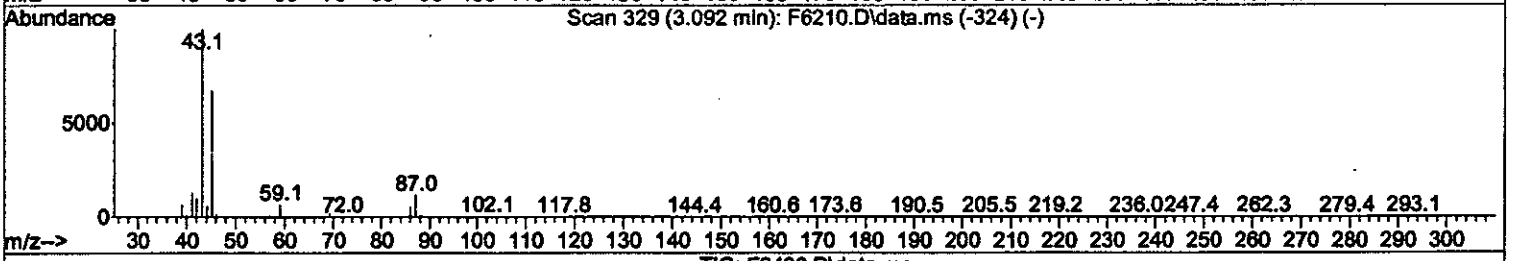
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(29) Vinyl Acetate

3.117min (+0.031) 1.02 ug/L m

response 1103

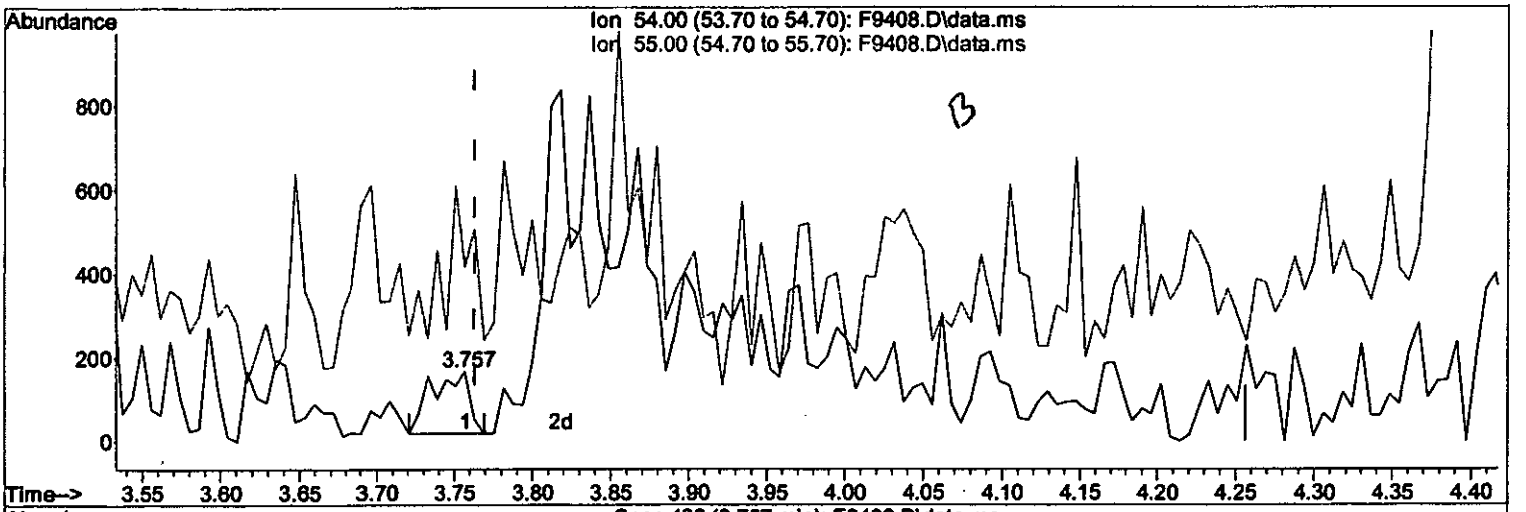
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	2966.83#
0.00	0.00	0.00
0.00	0.00	0.00

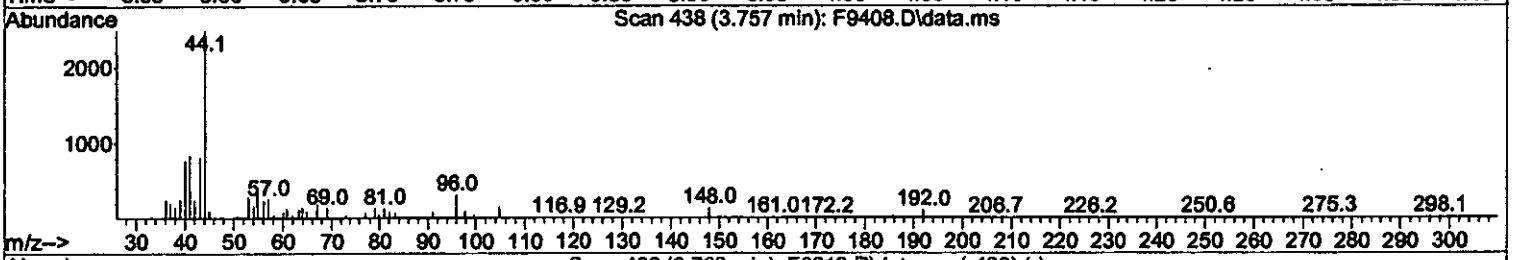
W061114.M Thu Jun 12 09:06:49 2014 MSVO10 Page: 1

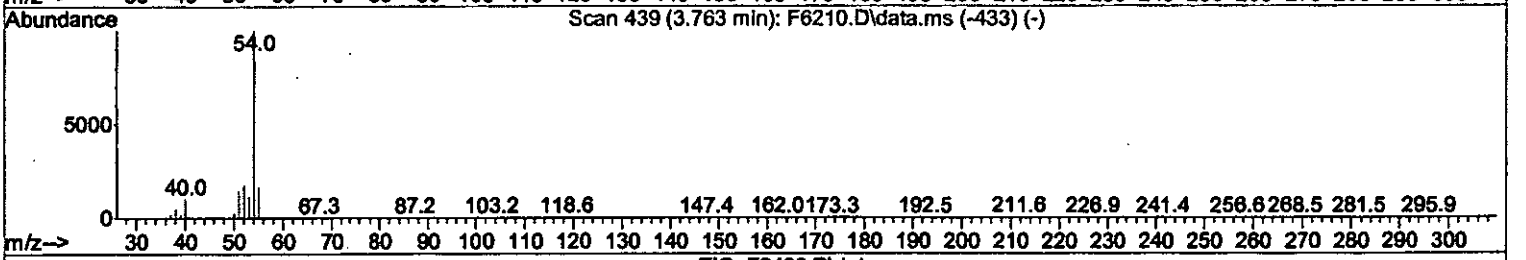
Quantitation Report (QedIt)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(36) Propionitrile

3.757min (-0.006) 0.36 ug/L

response 251

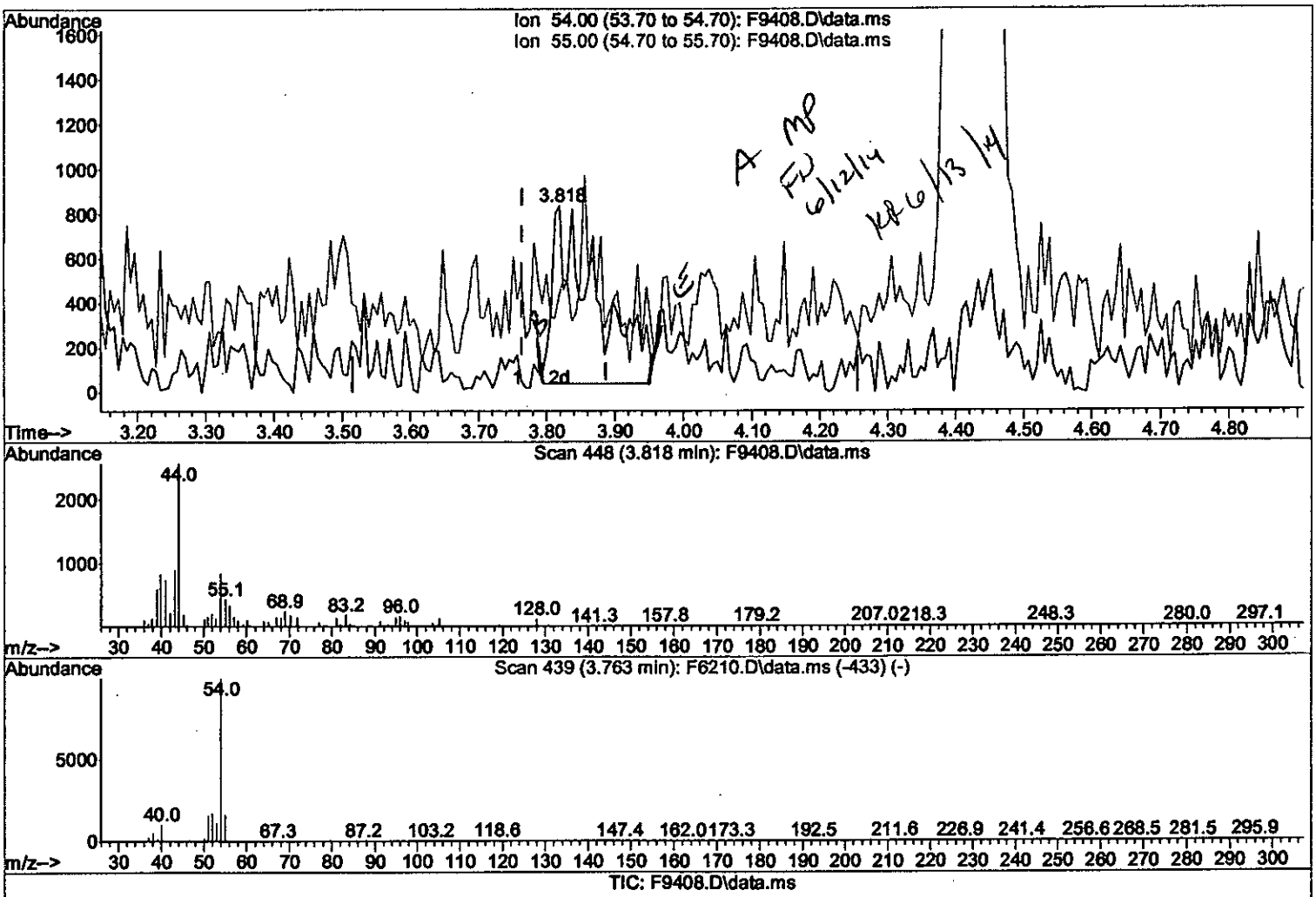
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	249.10#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:07:10 2014 MSVO10 Page: 1

Quantitation Report (QEdit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(36) Propionitrile

3.818min (+0.055) 5.12 ug/L m

response 3525

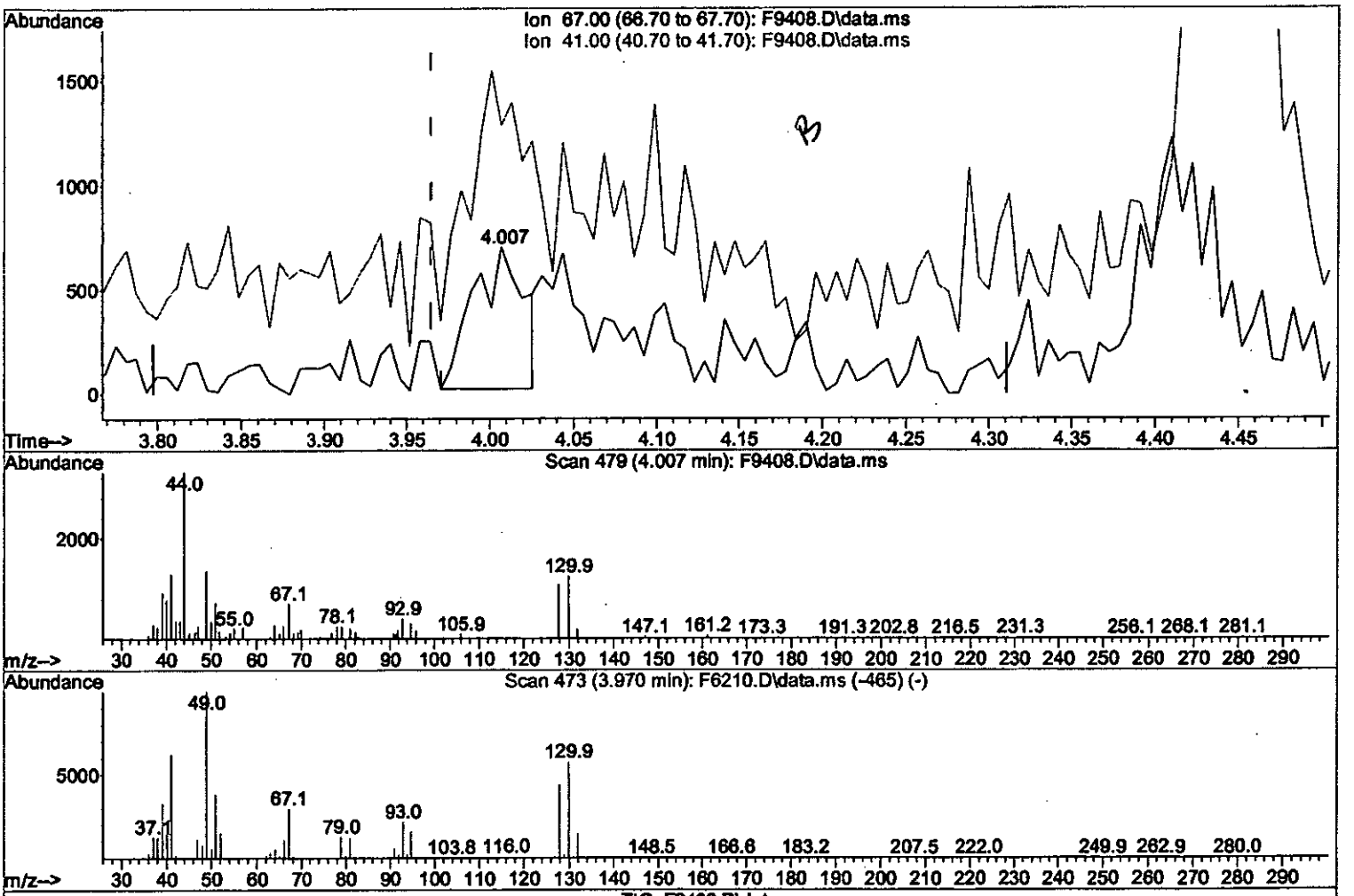
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	51.79#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 10:16:34 2014 MSVO10

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(38) Methacrylonitrile

4.007min (+0.043) 0.72 ug/L

response 1440

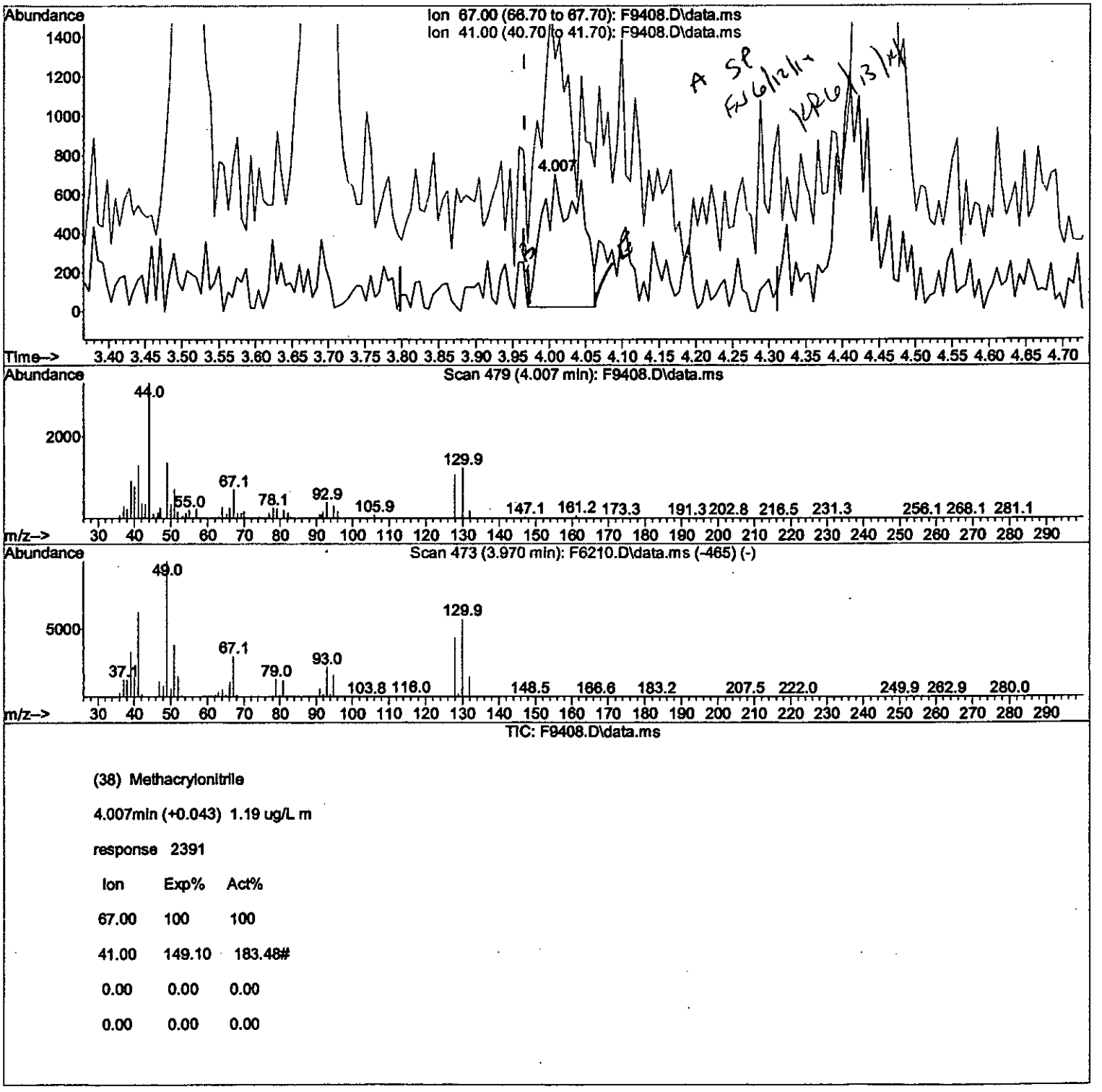
Ion	Exp%	Act%
67.00	100	100
41.00	149.10	183.48#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:08:00 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(38) Methacrylonitrile

4.007min (+0.043) 1.19 ug/L m

response 2391

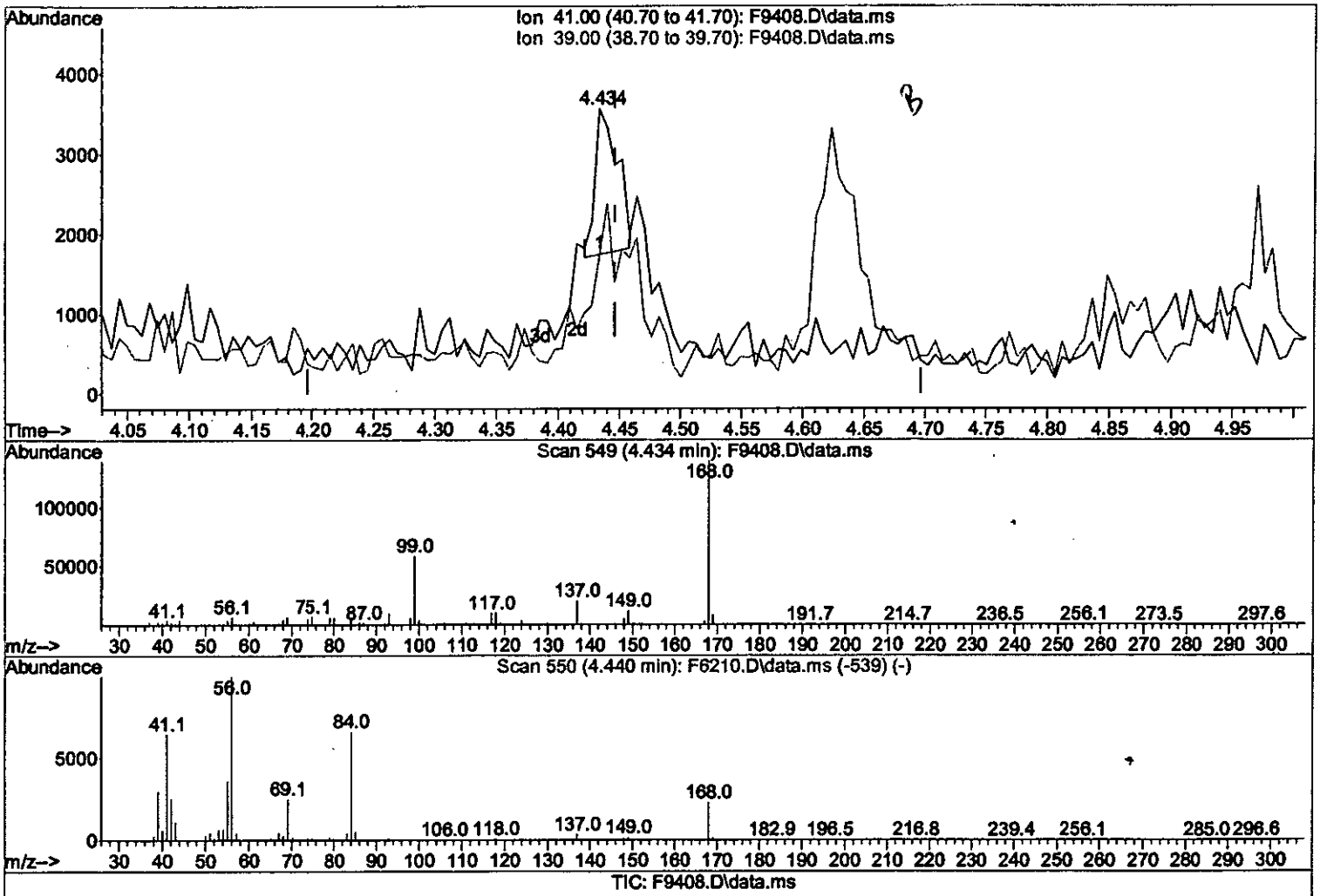
Ion	Exp%	Act%
67.00	100	100
41.00	149.10	183.48#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:08:23 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(44) Cyclohexane (P)

4.434min (-0.012) 0.23 ug/L

response 2292

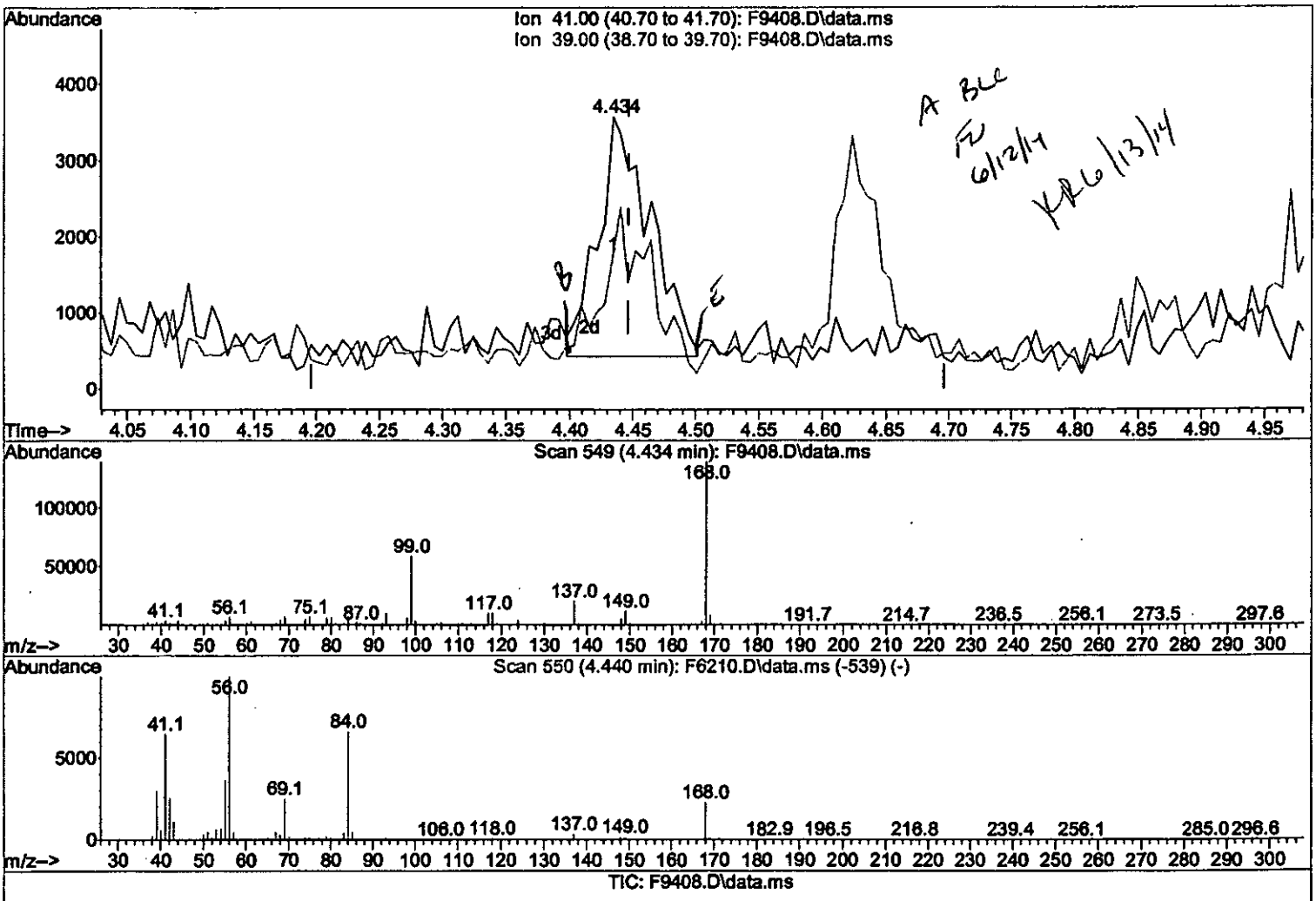
Ion	Exp%	Act%
41.00	100	100
39.00	51.30	48.32
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:08:58 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(44) Cyclohexane (P)

4.434min (-0.012) 0.92 ug/L m

response 9044

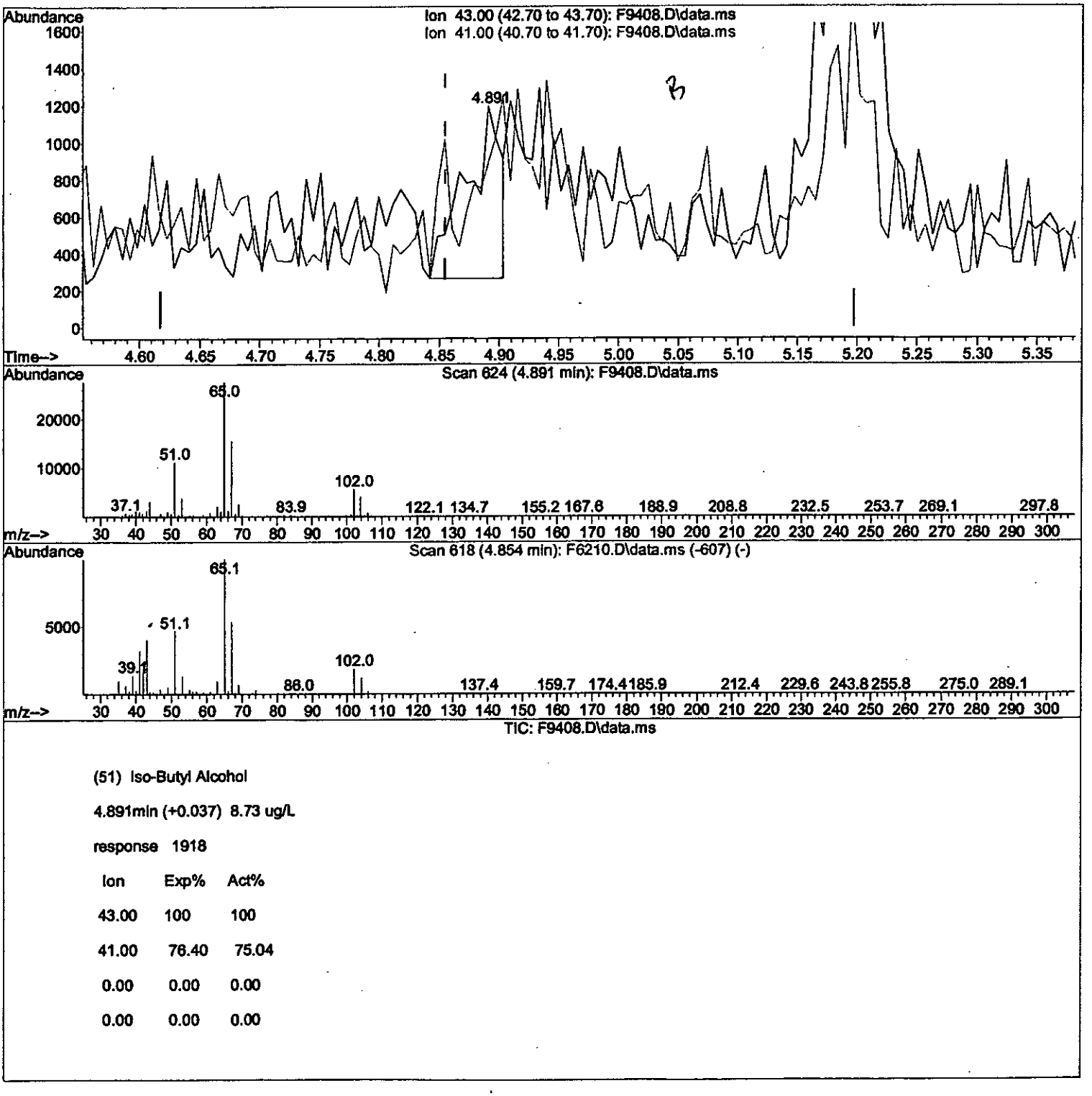
Ion	Exp%	Act%
41.00	100	100
39.00	51.30	48.32
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:09:10 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(51) Iso-Butyl Alcohol

4.891min (+0.037) 8.73 ug/L

response 1918

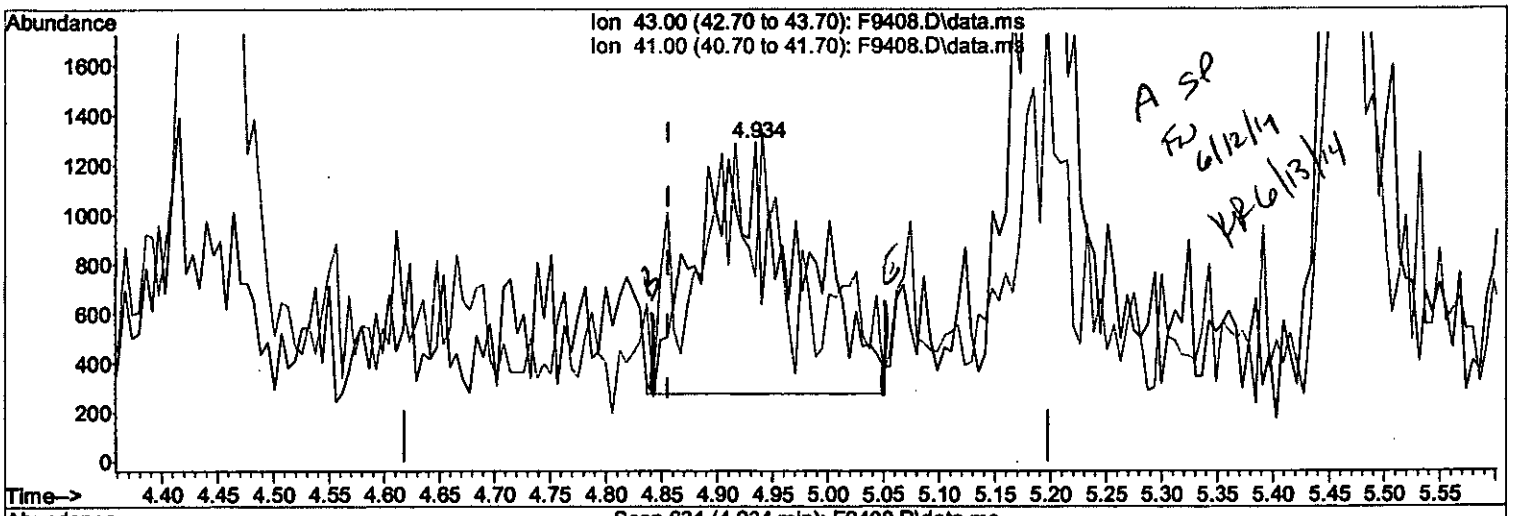
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	75.04
0.00	0.00	0.00
0.00	0.00	0.00

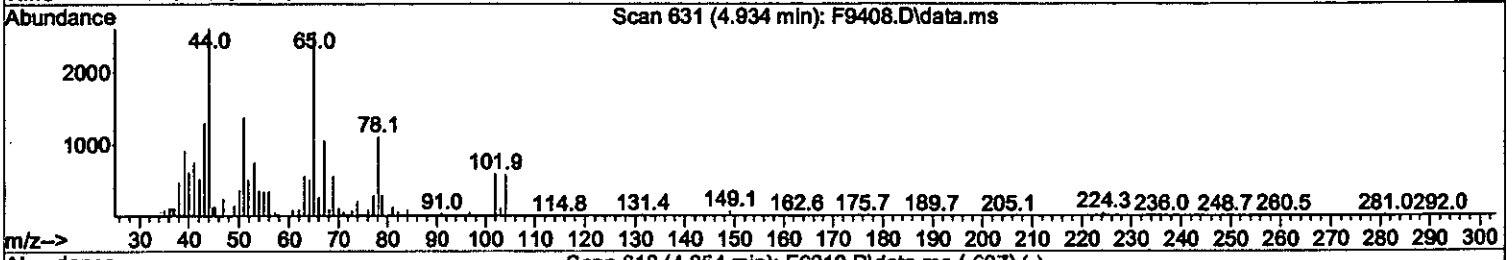
W061114.M Thu Jun 12 09:09:33 2014 MSVO10 Page: 1

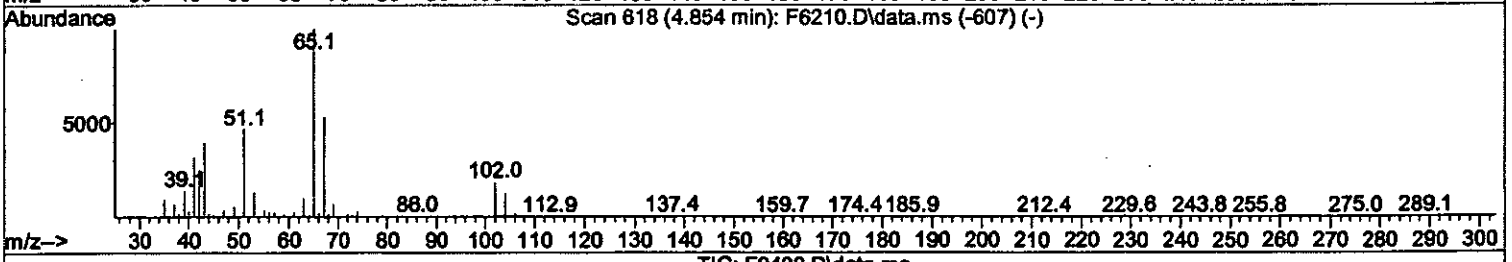
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(51) Iso-Butyl Alcohol

4.934min (+0.079) 28.35 ug/L m

response 6229

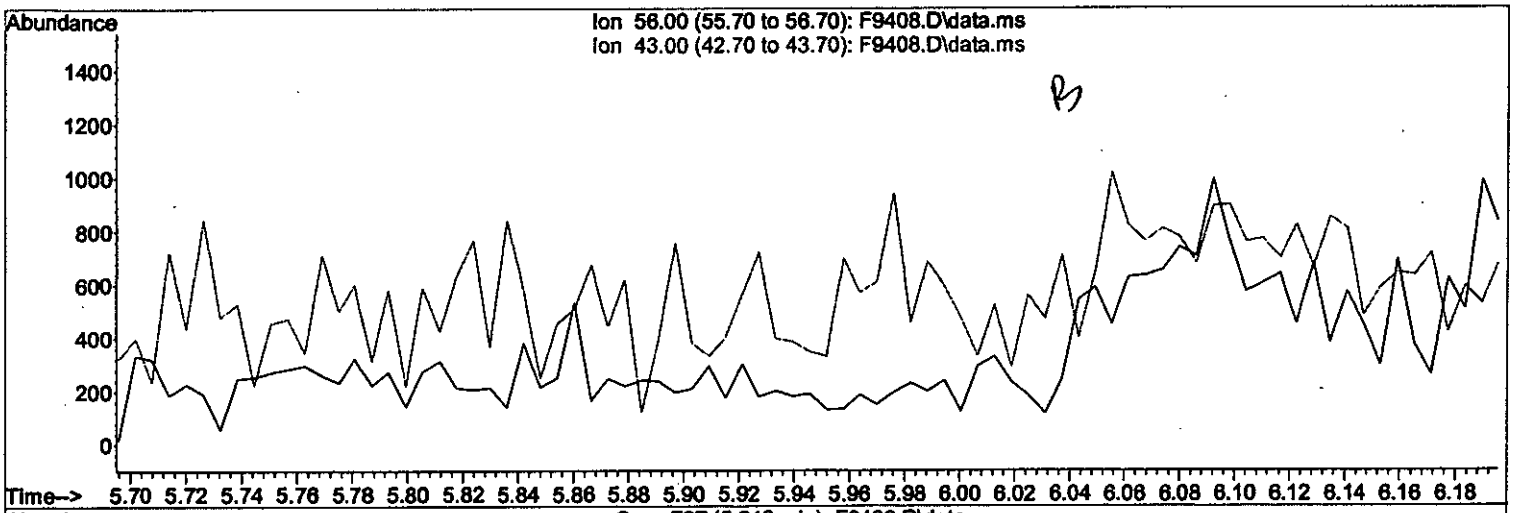
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	57.89
0.00	0.00	0.00
0.00	0.00	0.00

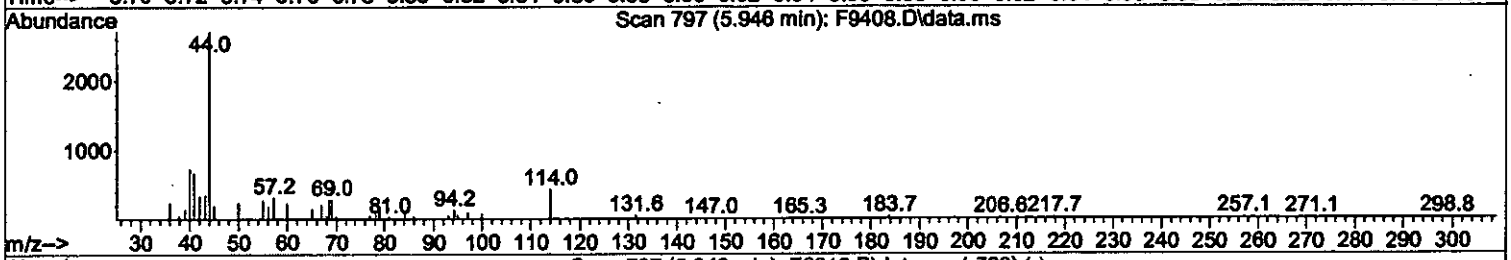
W061114.M Thu Jun 12 09:09:48 2014 MSVO10 Page: 1

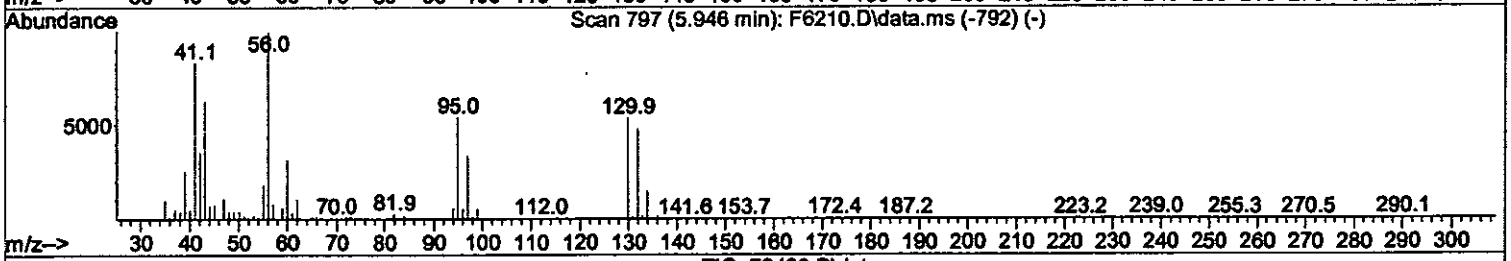
Quantitation Report (QEdit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(53) 1-Butanol

5.945min (-5.945) 0.00 ug/L

response 0

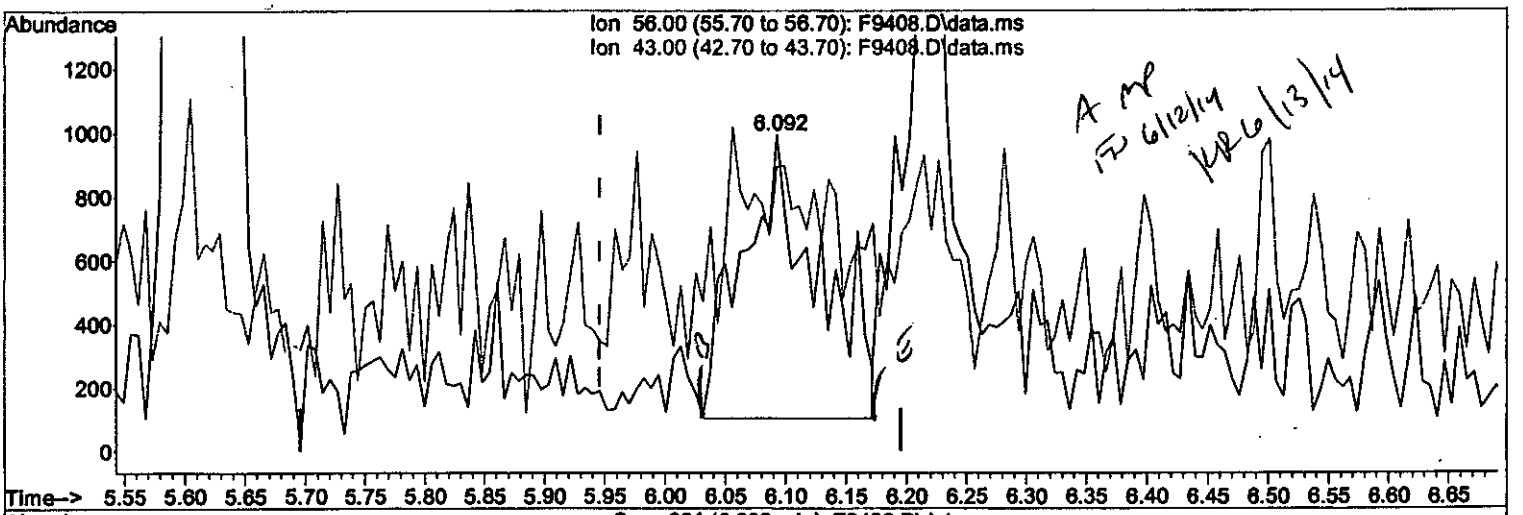
Ion	Exp%	Act%
56.00	100	0.00
43.00	56.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

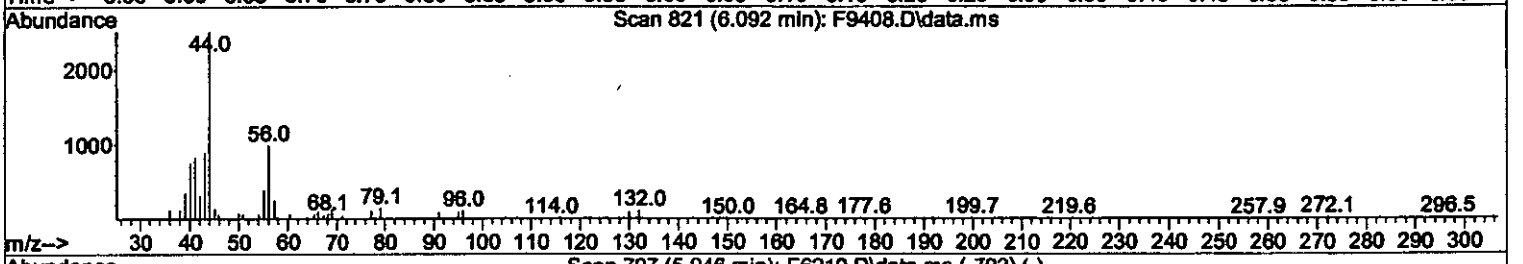
W061114.M Thu Jun 12 10:17:01 2014 MSVO10

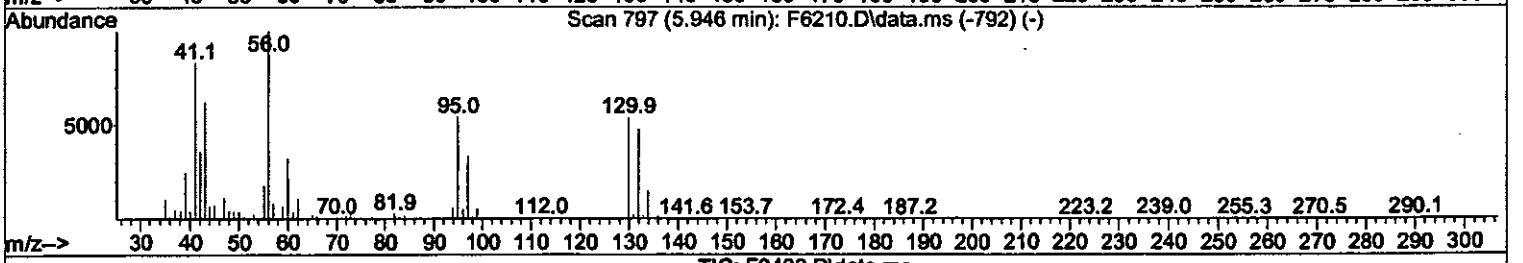
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(53) 1-Butanol

6.092min (+0.147) 36.06 ug/L m

response 3855

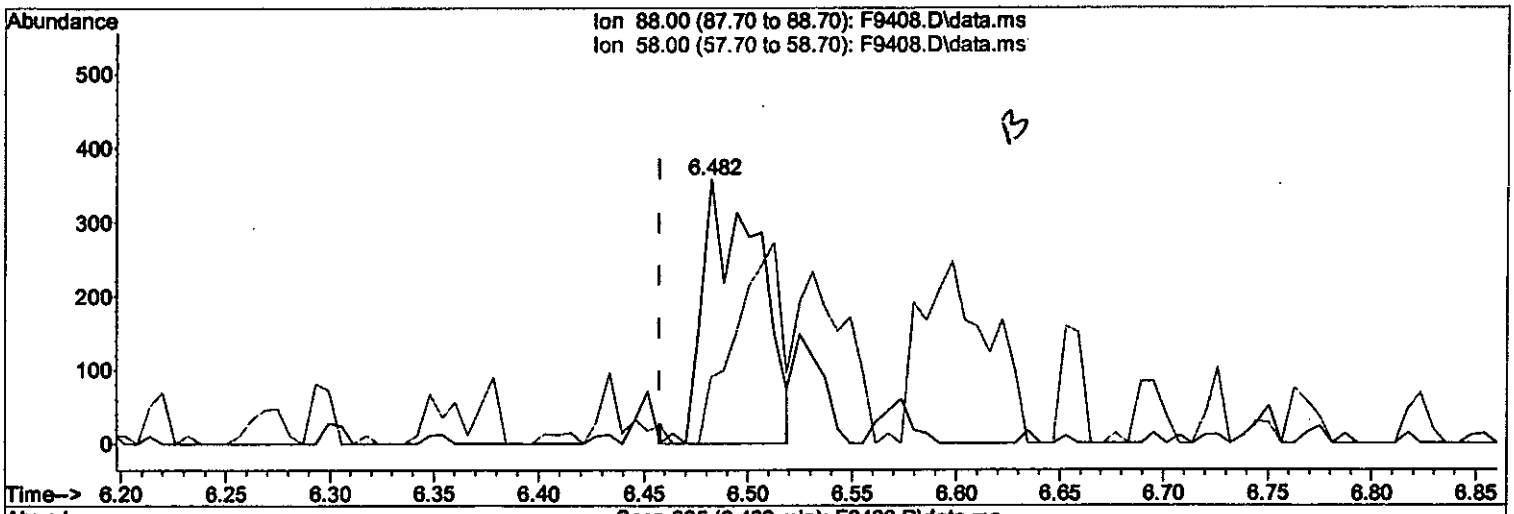
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	89.93#
0.00	0.00	0.00
0.00	0.00	0.00

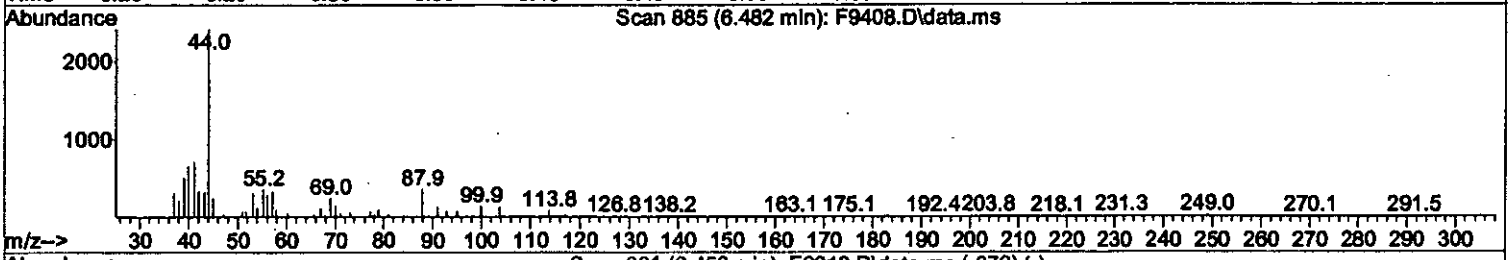
W061114.M Thu Jun 12 10:17:25 2014 MSVO10

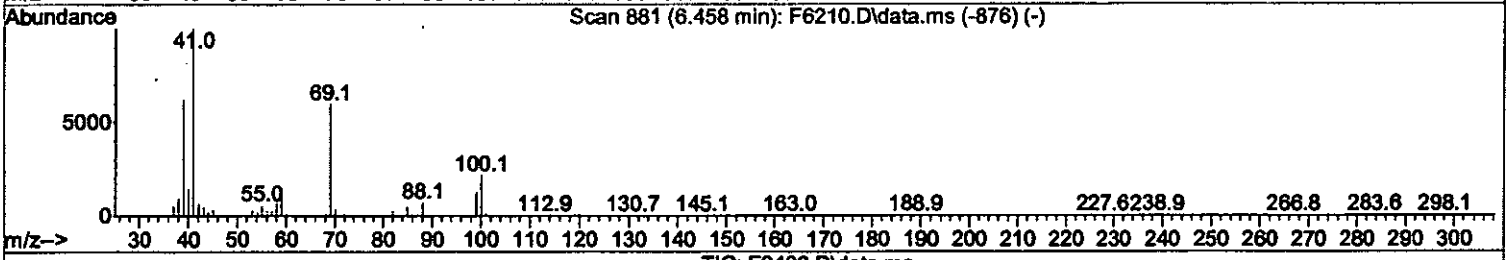
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.025) 15.88 ug/L

response 676

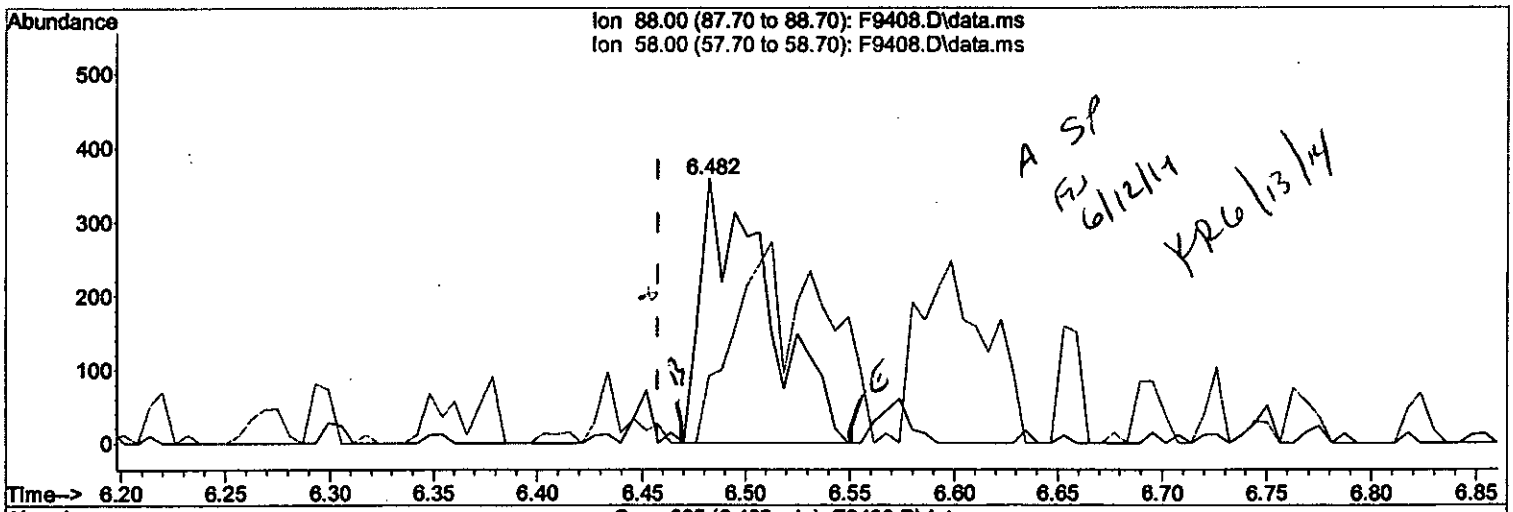
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	25.42#
0.00	0.00	0.00
0.00	0.00	0.00

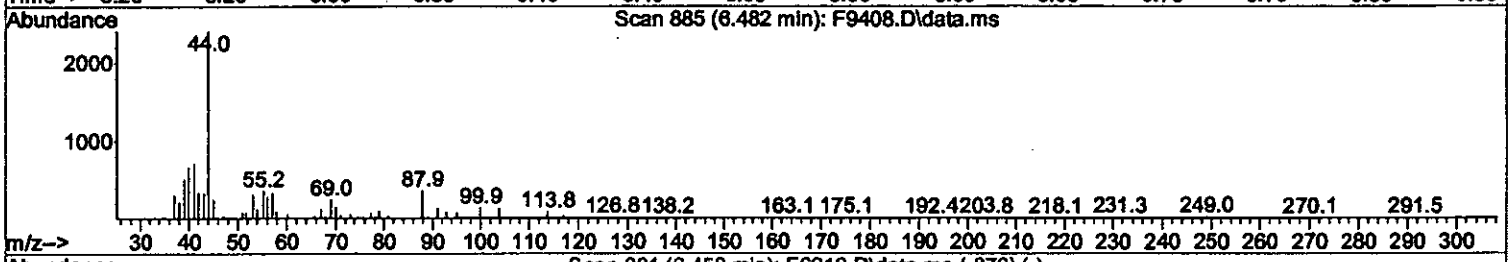
W061114.M Thu Jun 12 09:10:45 2014 MSVO10 Page: 1

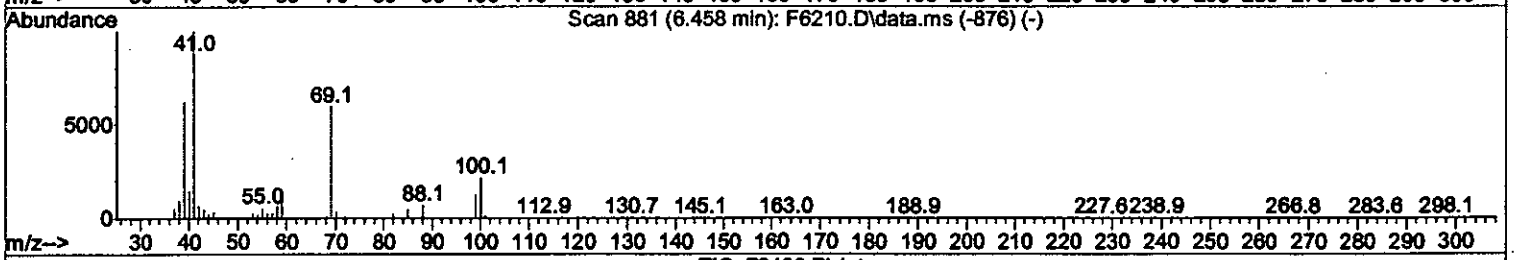
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.025) 18.98 ug/L m

response 808

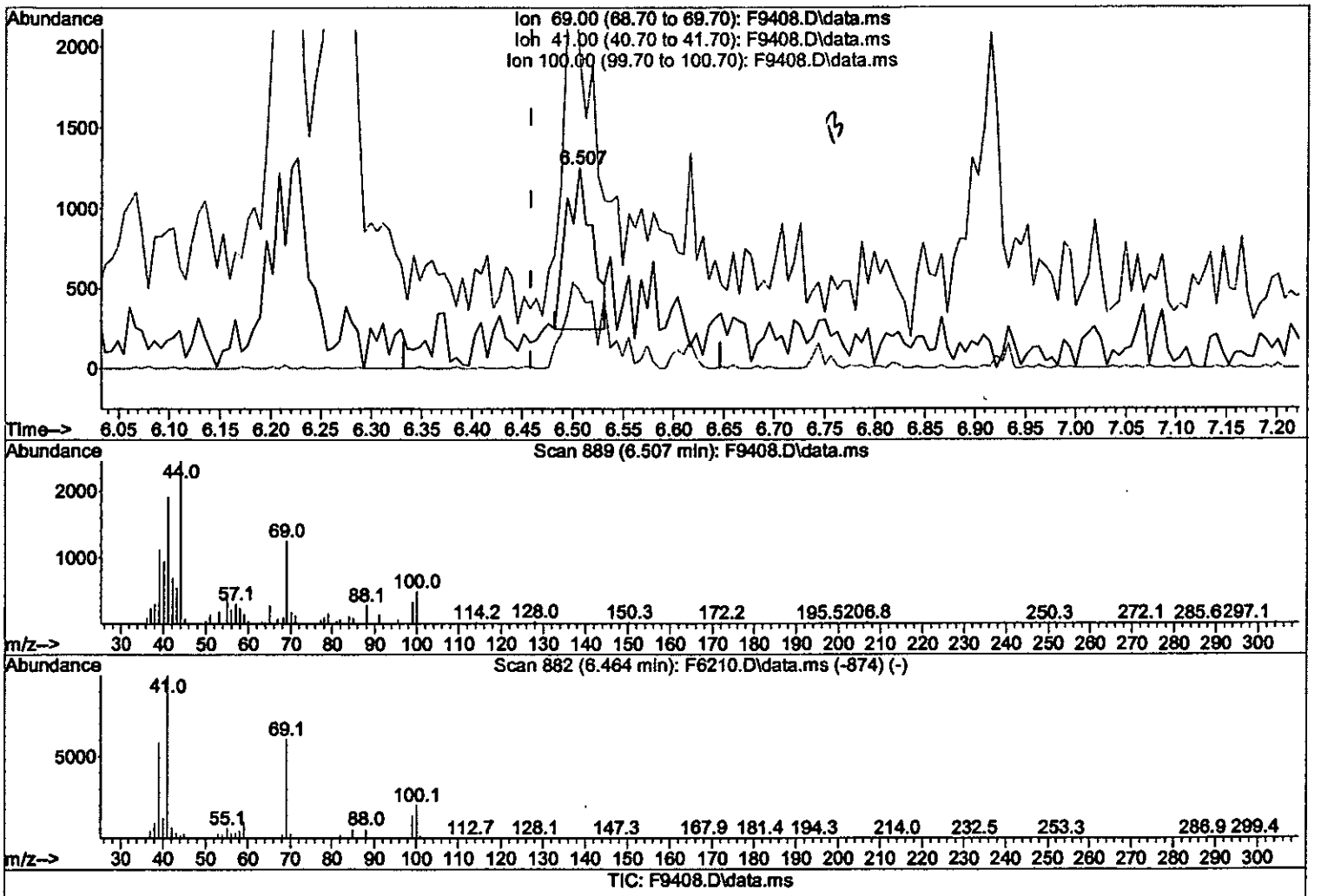
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	25.42#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:11:03 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(59) Methyl Methacrylate

6.507min (+0.049) 0.51 ug/L

response 1743

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	152.92#
100.00	36.90	39.25
0.00	0.00	0.00

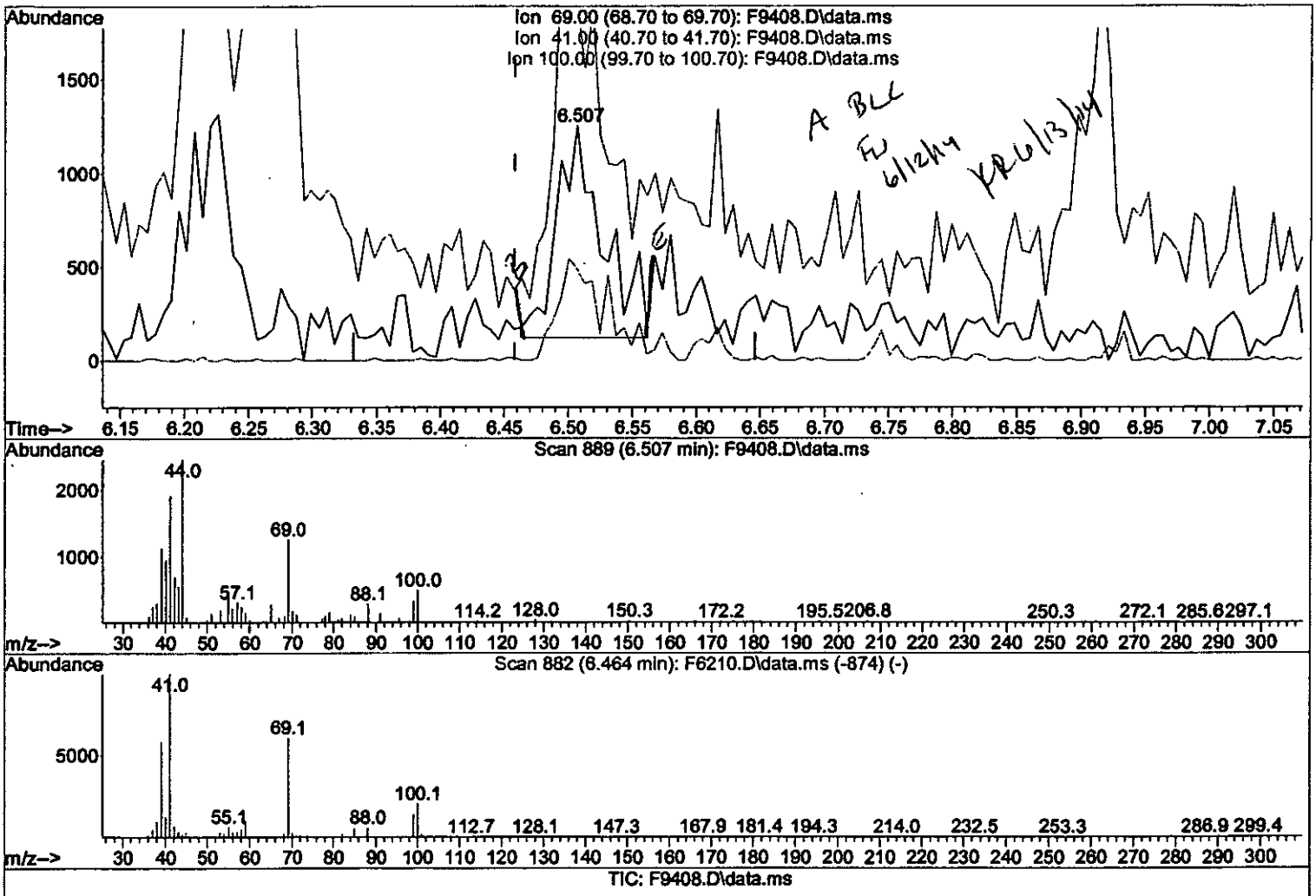
W061114.M Thu Jun 12 10:17:49 2014 MSVO10

00311

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(59) Methyl Methacrylate

6.507min (+0.049) 0.83 ug/L m

response 2811

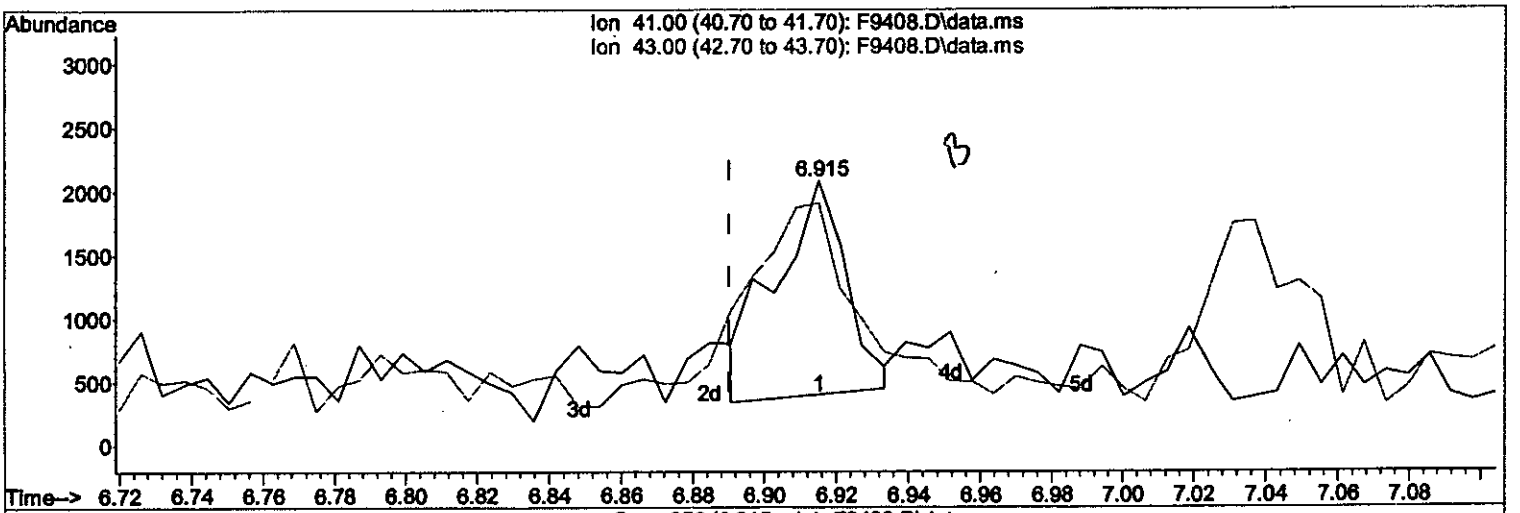
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	152.92#
100.00	36.90	39.25
0.00	0.00	0.00

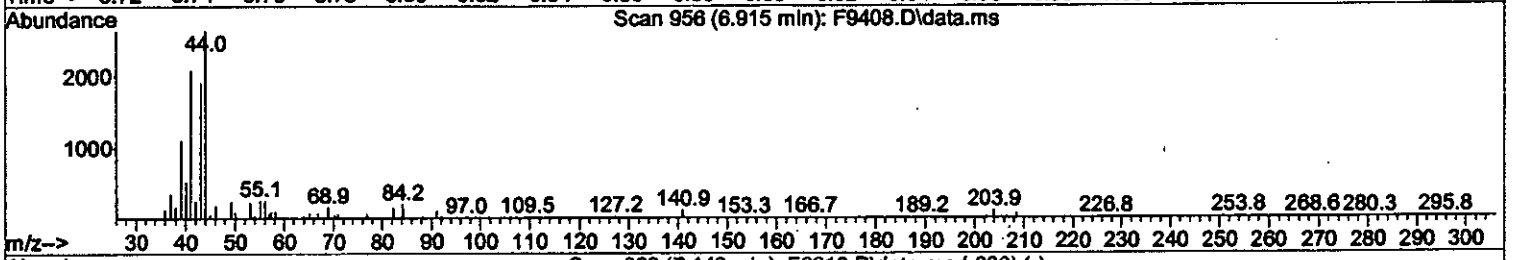
W061114.M Thu Jun 12 10:18:13 2014 MSVO10

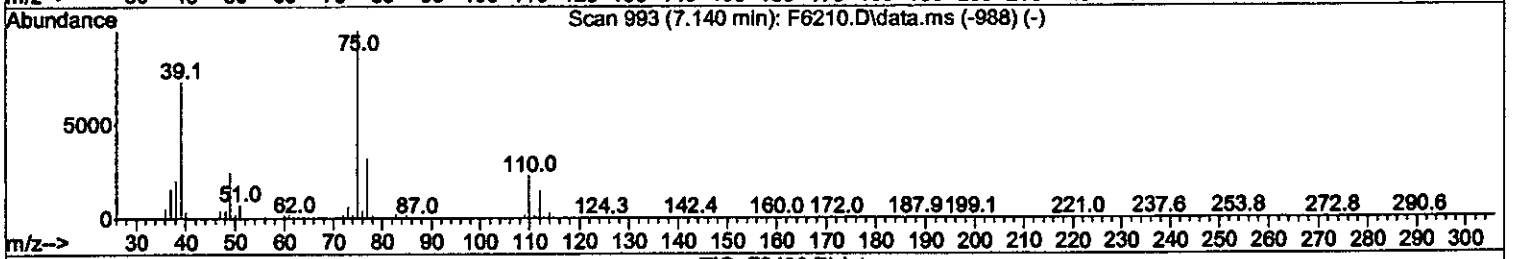
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(61) 2-Nitropropane

6.915min (+0.025) 0.76 ug/L

response 2311

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	91.59
0.00	0.00	0.00
0.00	0.00	0.00

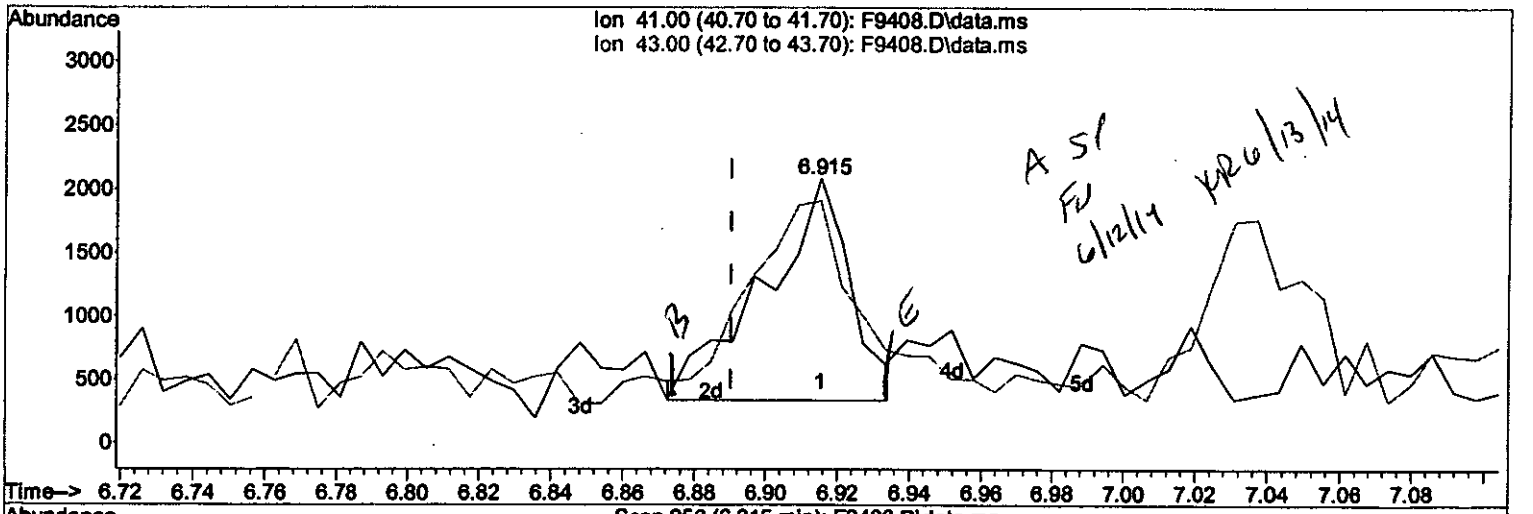
W061114.M Thu Jun 12 09:11:13 2014 MSVO10 Page: 1

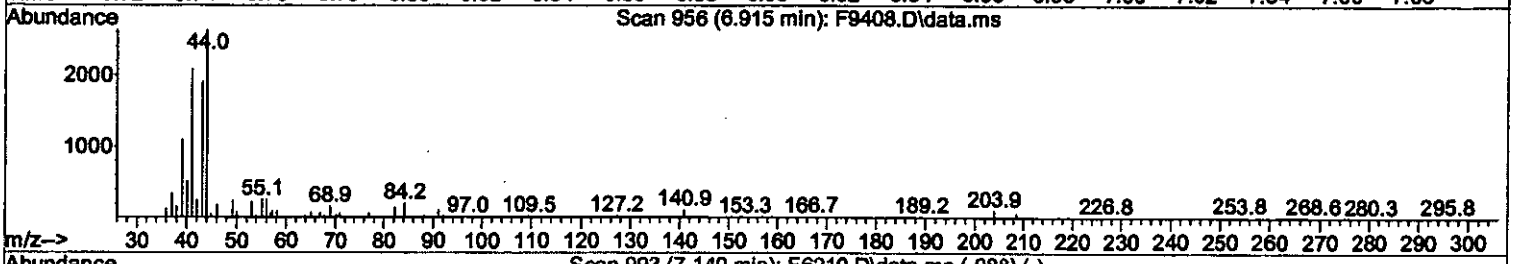
00313

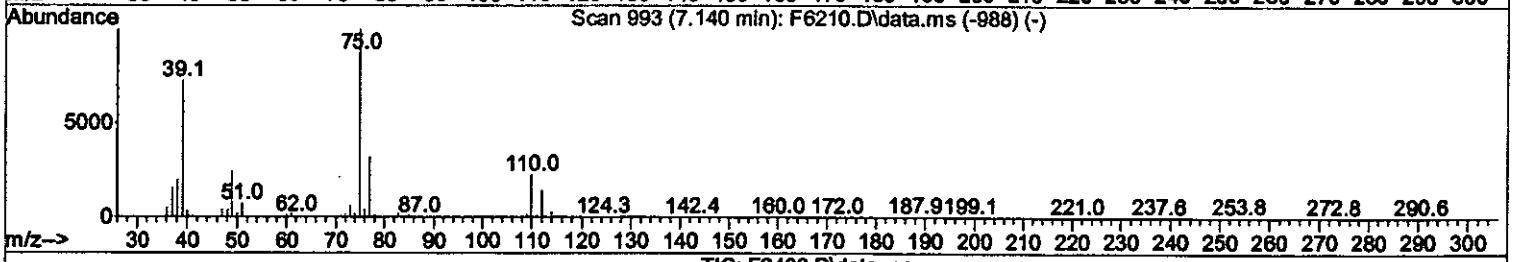
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(61) 2-Nitropropane

6.915min (+0.025) 0.96 ug/L m

response 2934

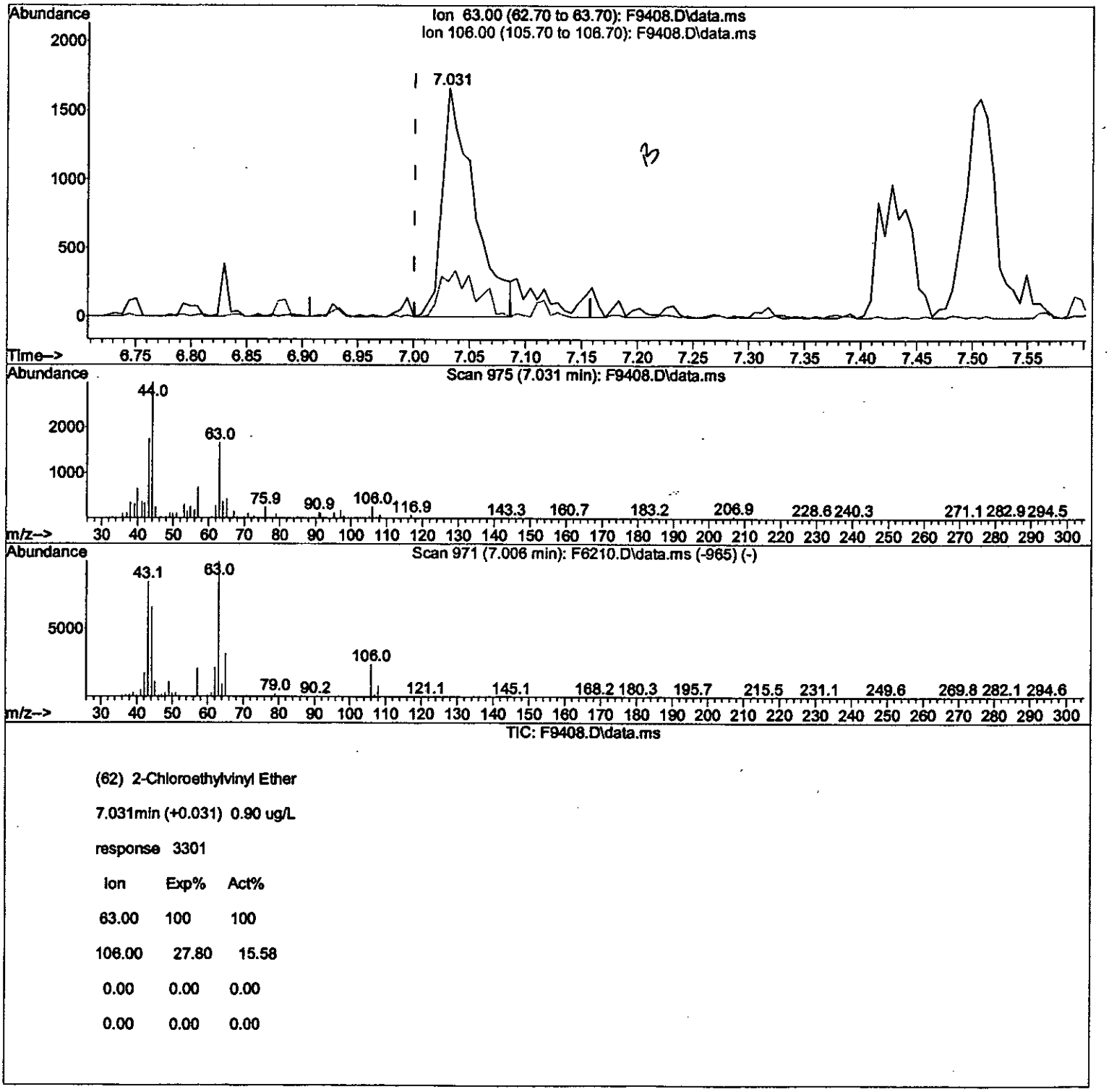
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	91.59
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:11:27 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.031min (+0.031) 0.90 ug/L

response 3301

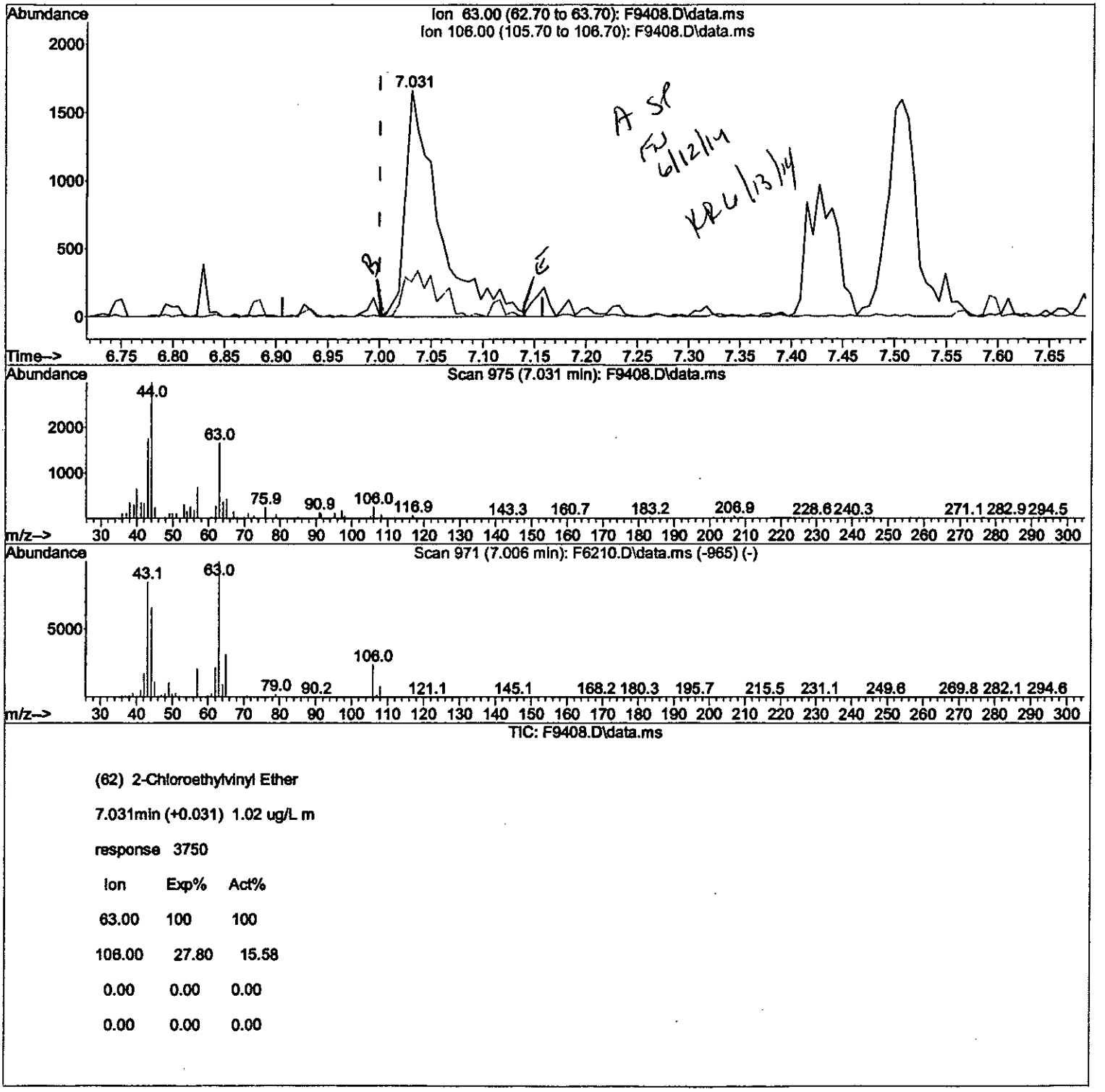
Ion	Exp%	Act%
63.00	100	100
106.00	27.80	15.58
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 10:18:37 2014 MSVO10

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:13:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



(62) 2-Chloroethylvinyl Ether

7.031min (+0.031) 1.02 ug/L m

response 3750

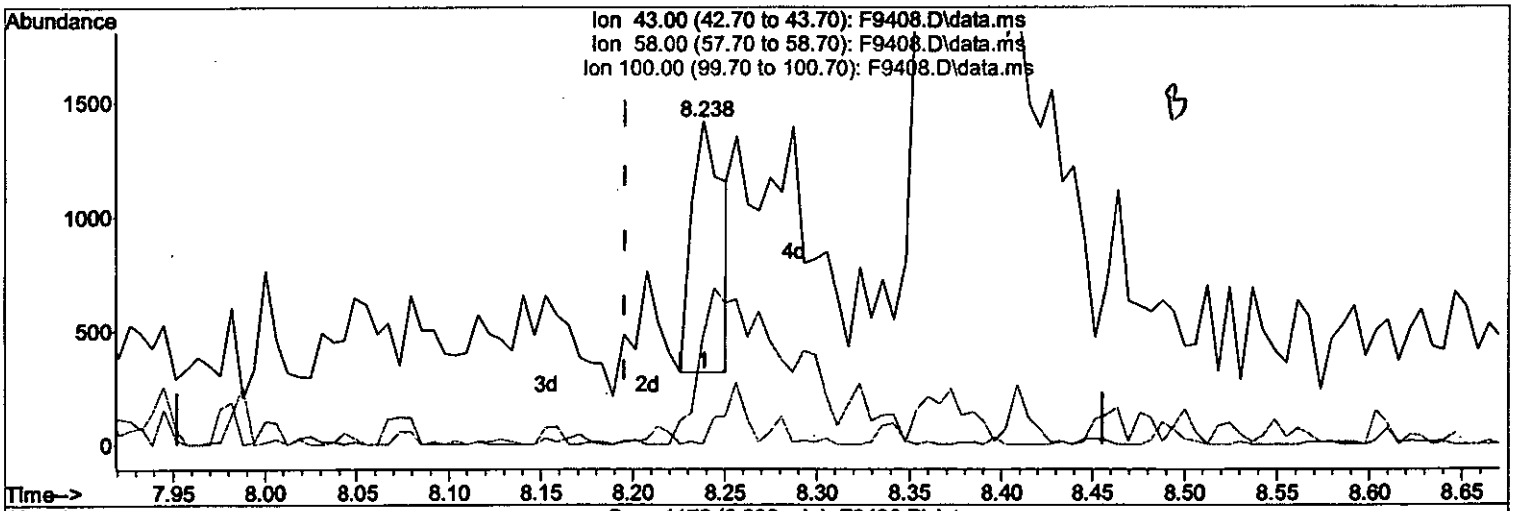
Ion	Exp%	Act%
63.00	100	100
106.00	27.80	15.58
0.00	0.00	0.00
0.00	0.00	0.00

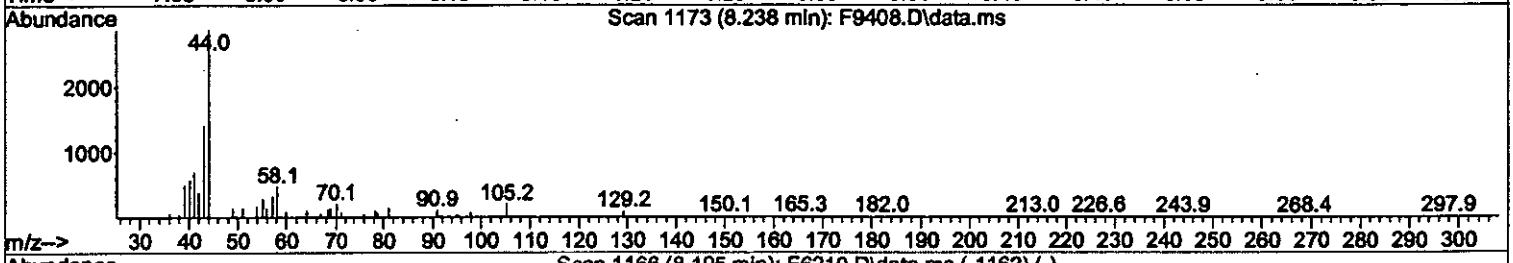
W061114.M Thu Jun 12 10:18:52 2014 MSVO10

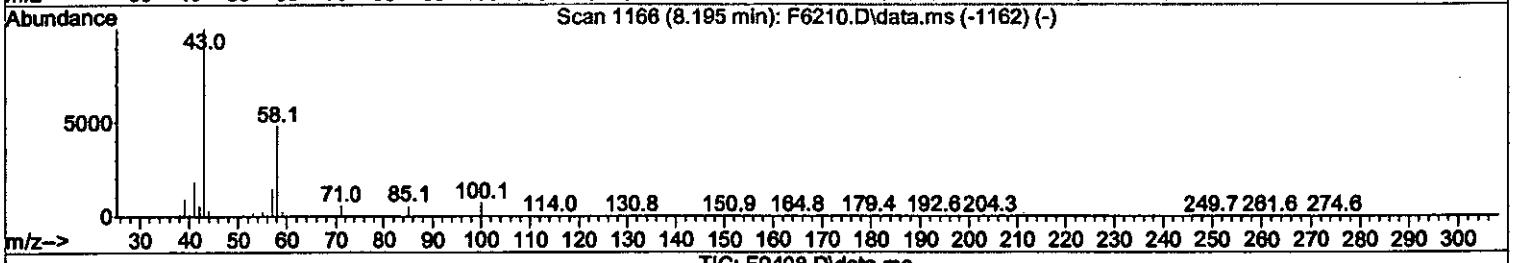
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(73) 2-Hexanone (P)

8.238min (+0.043) 0.31 ug/L

response 1298

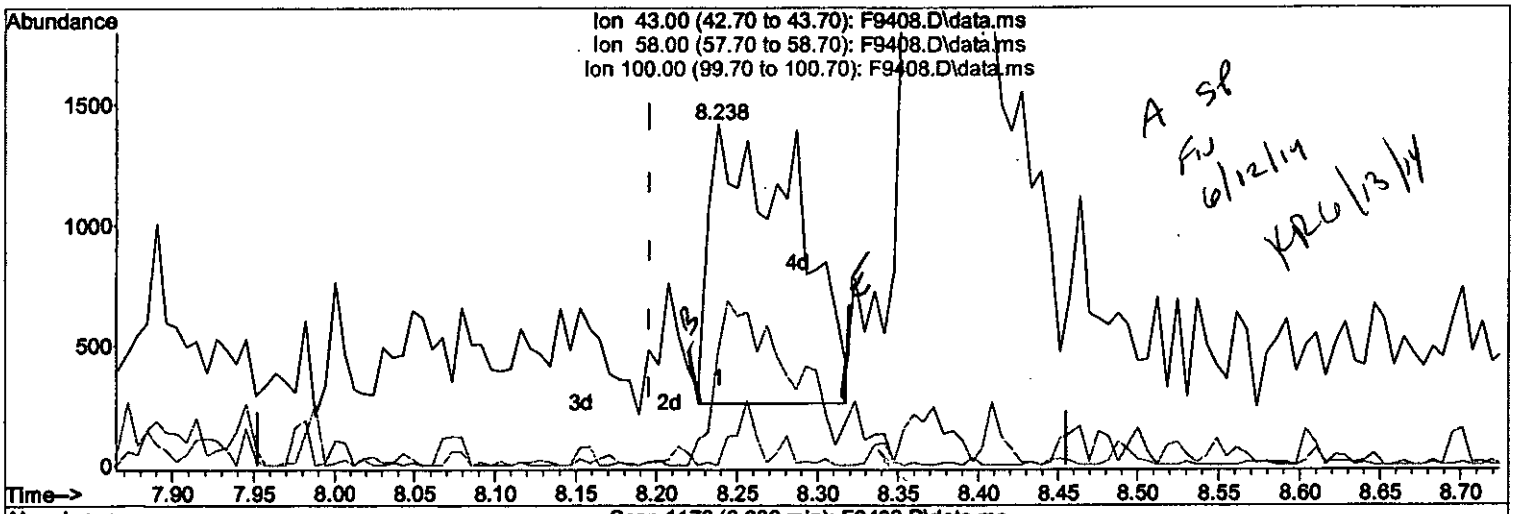
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	33.07
100.00	10.10	0.00
0.00	0.00	0.00

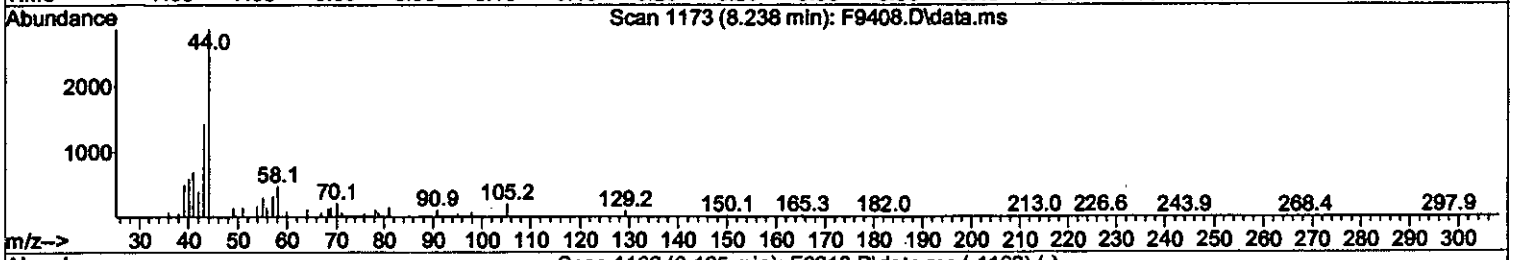
W061114.M Thu Jun 12 09:11:46 2014 MSVO10 Page: 1

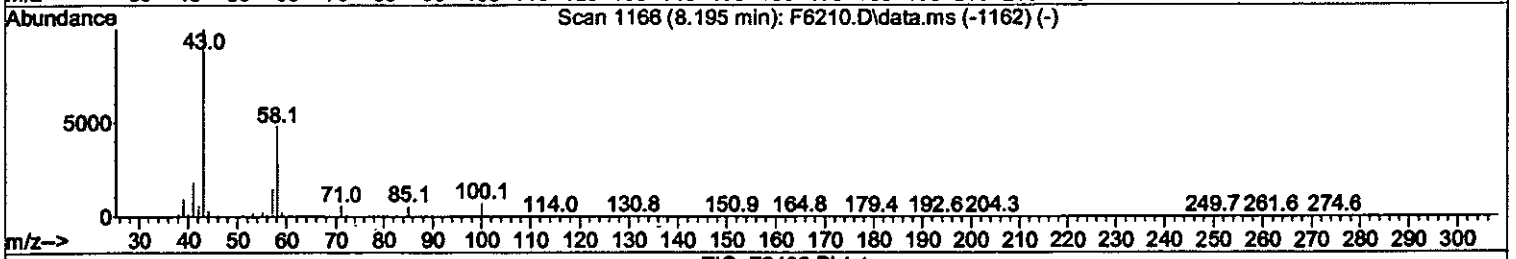
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9408.D\data.ms

(73) 2-Hexanone (P)

8.238min (+0.043) 1.00 ug/L m

response 4239

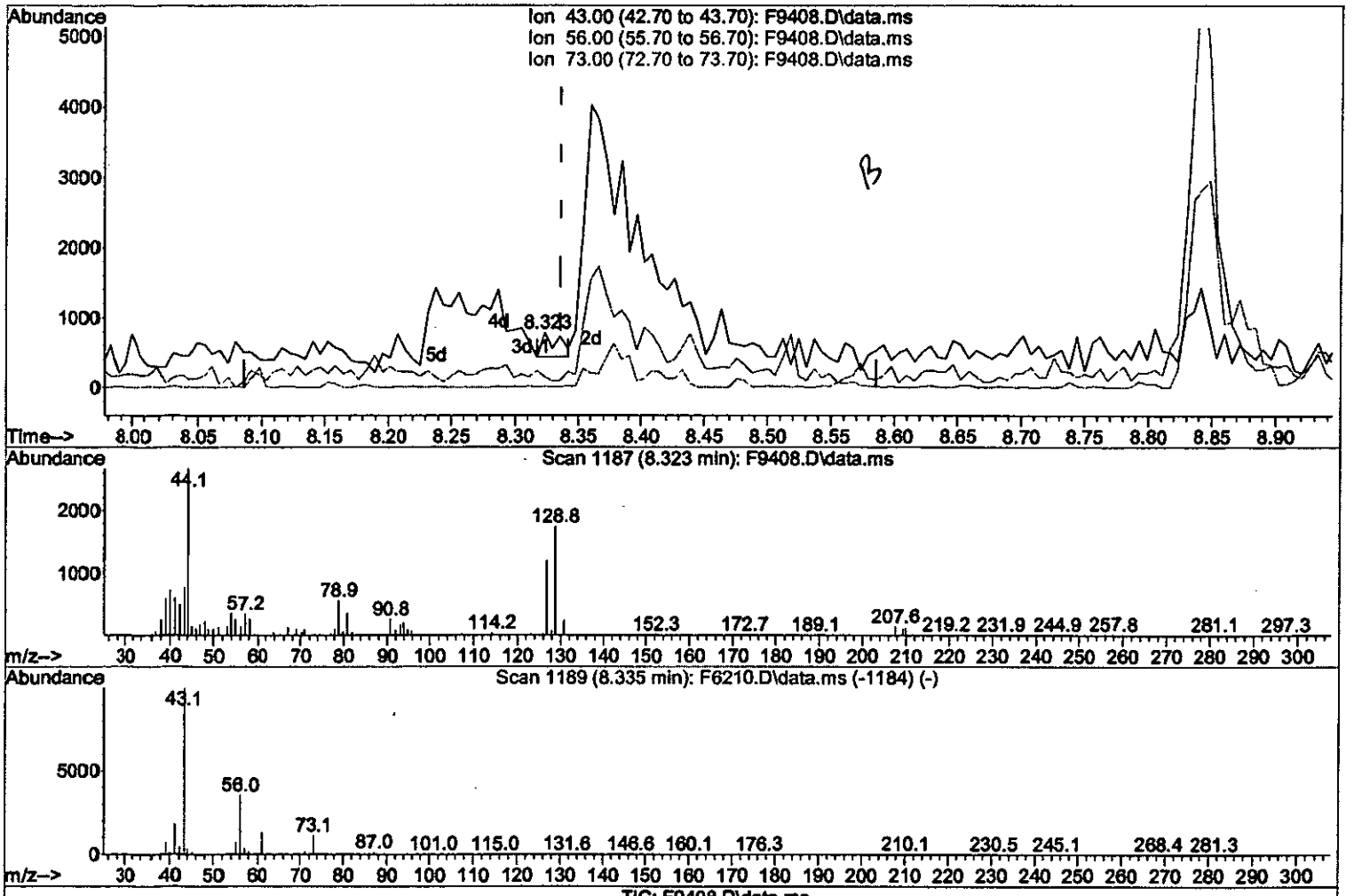
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	33.07
100.00	10.10	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:12:01 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(76) N-Butyl Acetate

8.323min (-0.012) 0.03 ug/L

response 324

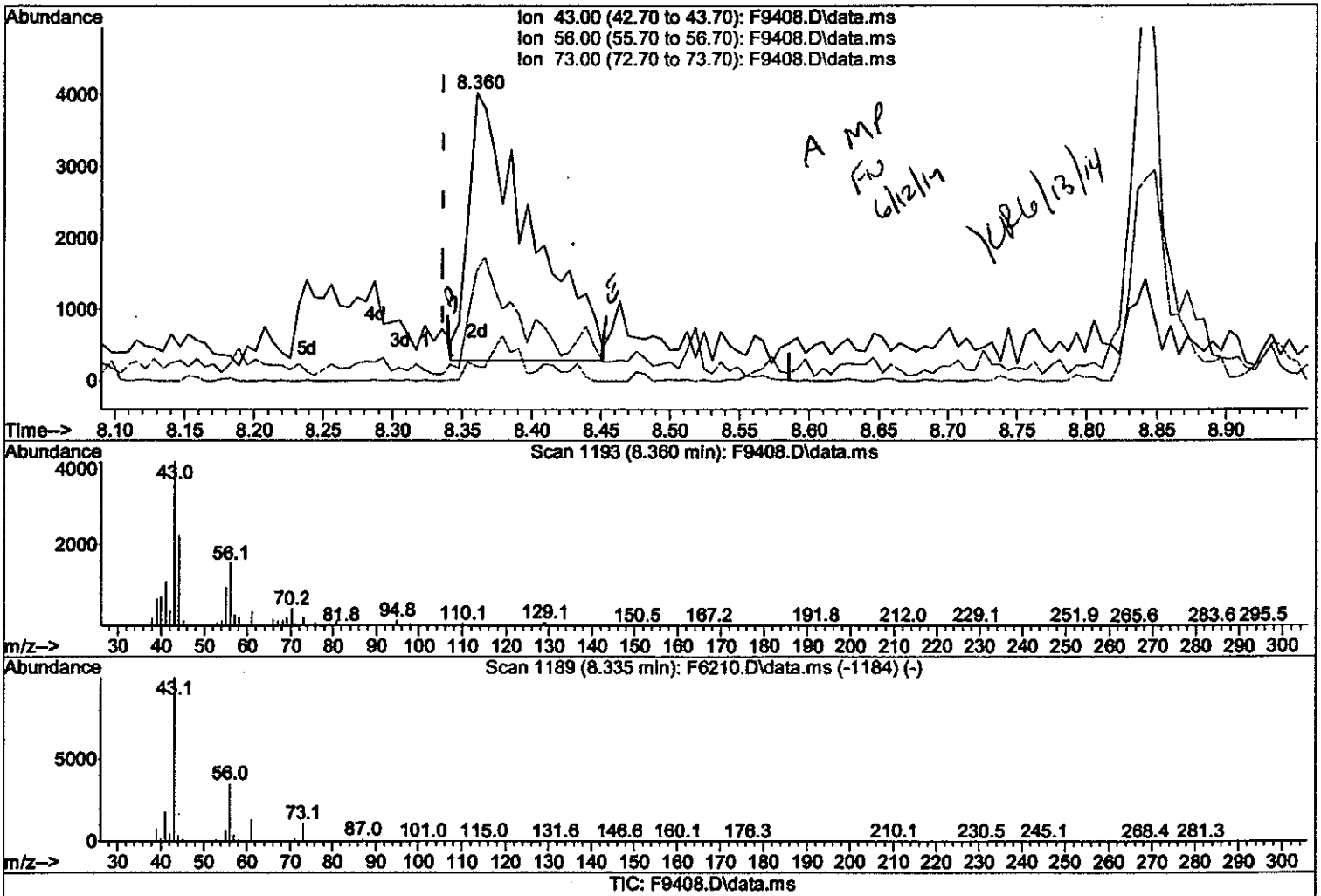
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	18.97
73.00	14.00	1.29
0.00	0.00	0.00

W061114.M Thu Jun 12 09:12:16 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



(76) N-Butyl Acetate

8.360min (+0.024) 1.12 ug/L m

response 11323

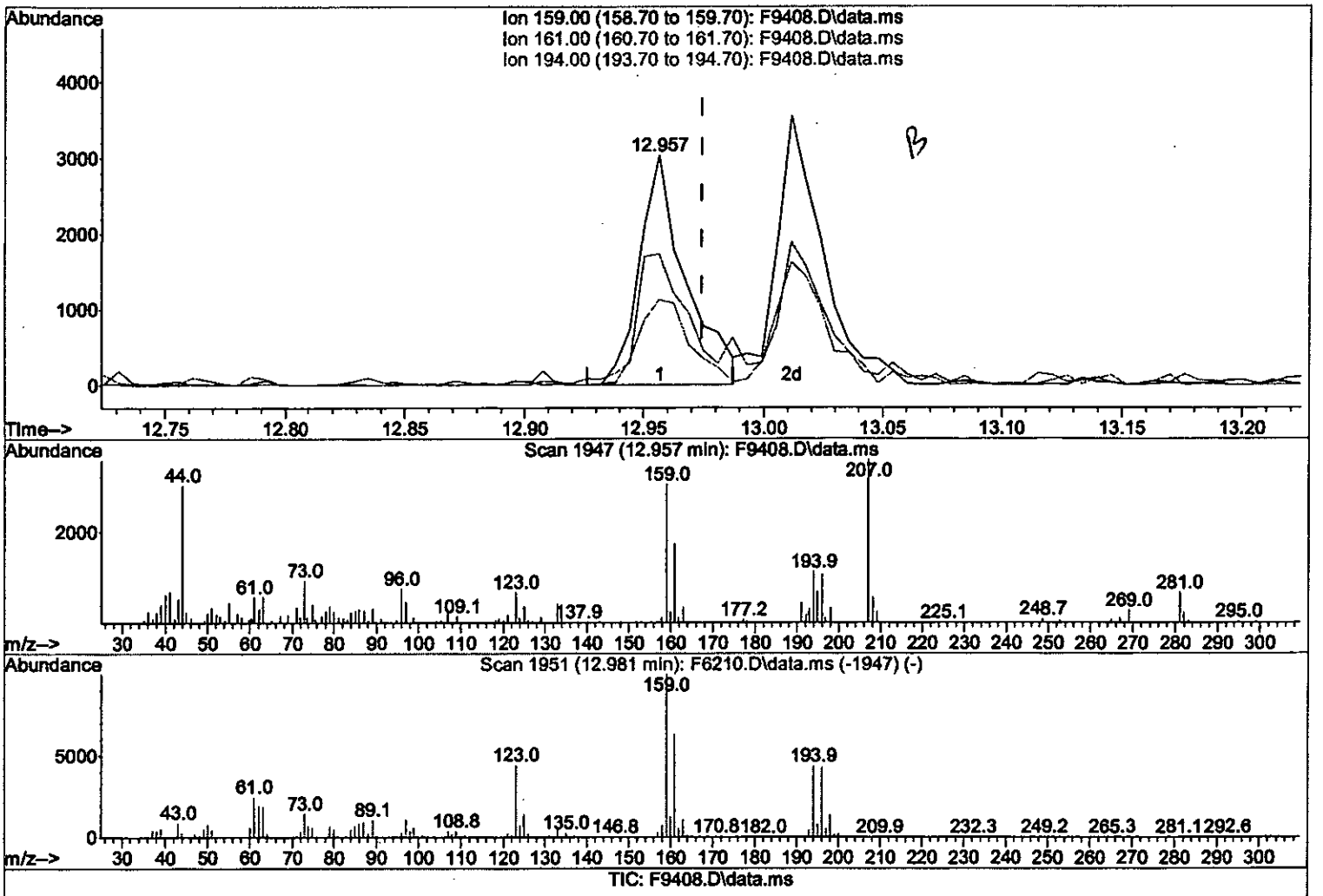
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	38.18
73.00	14.00	5.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:12:32 2014 MSVO10 Page: 1

Quantitation Report (QedIt)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(120) 2,3,6-Trichlorotoluene

12.957min (-0.017) 0.91 ug/L

response 4035

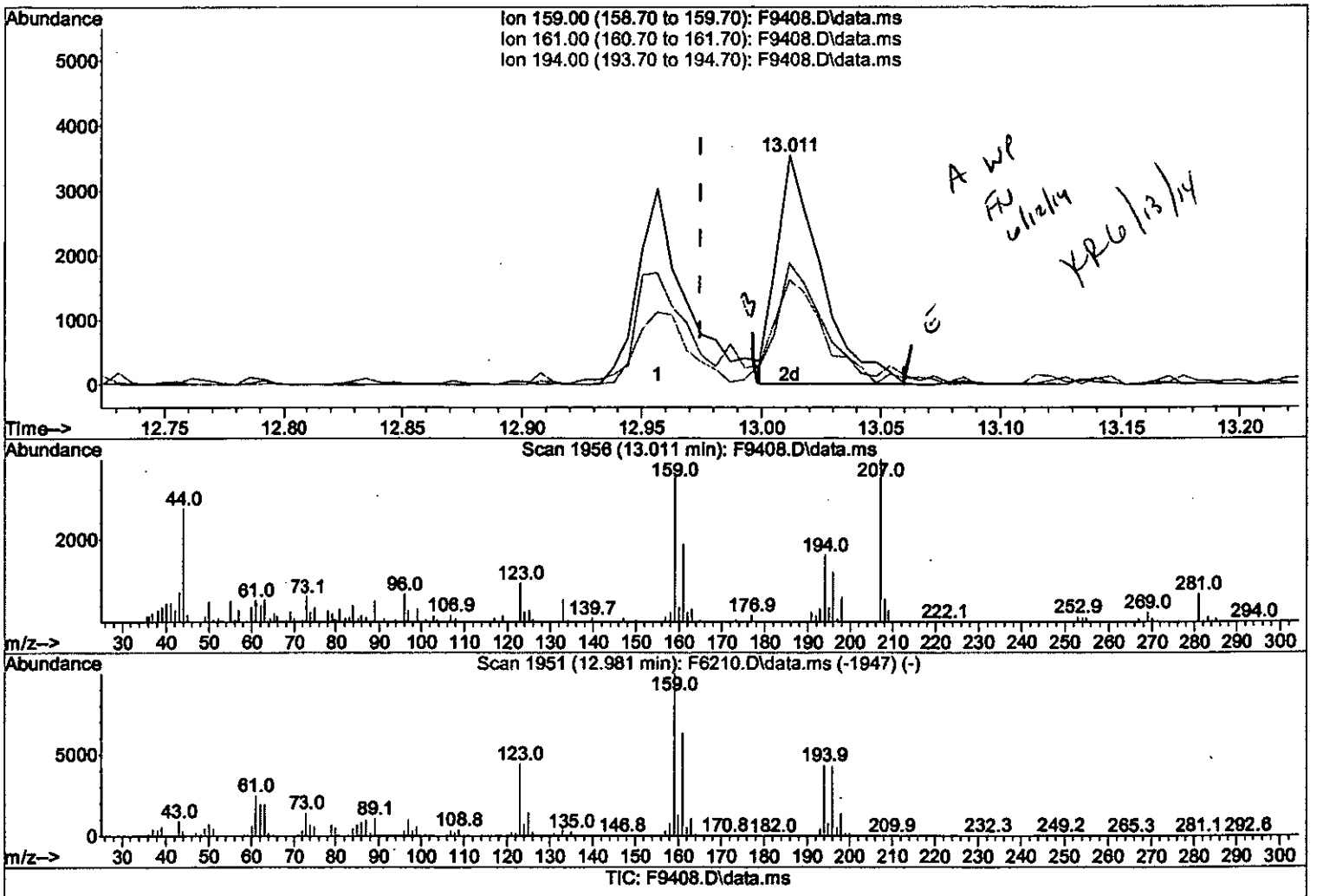
Ion	Exp%	Act%
159.00	100	100
161.00	61.90	57.10
194.00	48.10	37.03
0.00	0.00	0.00

W061114.M Thu Jun 12 09:13:03 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D Vial: 6
Acq On : 11 Jun 2014 4:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:07:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9408.D\data.ms

(120) 2,3,6-Trichlorotoluene

13.011min (+0.037) 1.02 ug/L m

response 4529

Ion	Exp%	Act%
159.00	100	100
161.00	61.90	53.11
194.00	48.10	45.77
0.00	0.00	0.00

W061114.M Thu Jun 12 09:13:12 2014 MSVO10 Page: 1

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9408.D      Vial: 6
Acq On    : 11 Jun 2014    4:54 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 10:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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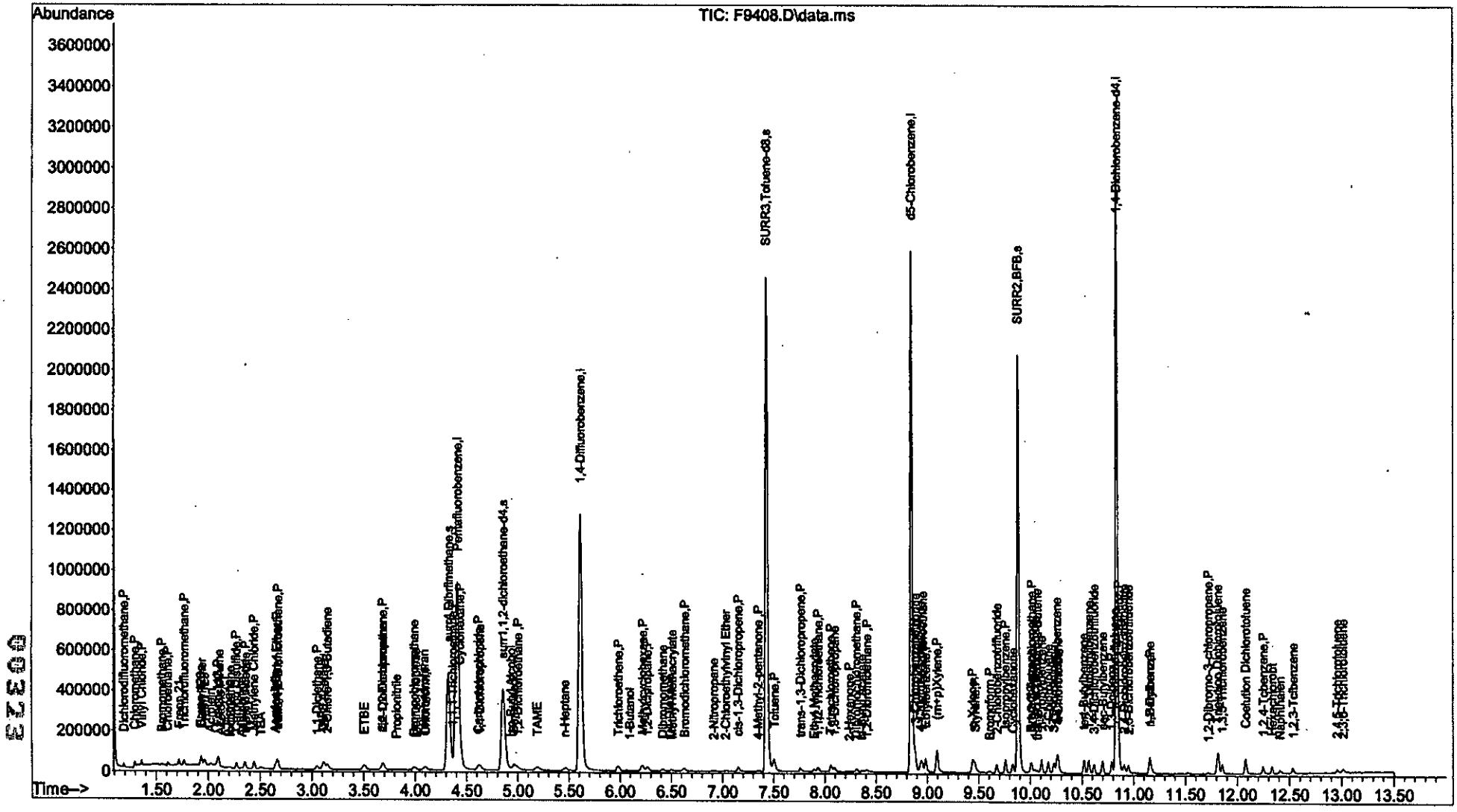


W061114.M Thu Jun 12 10:19:20 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FH 6/12/14

Quant Time: Jun 12 10:21:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	920234	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1271438	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1156624	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	629799	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	385619	46.47	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.94%				
48) surr1,1,2-dichloroetha...	4.854	65	393605	45.08	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 90.16%				
65) SURR3,Toluene-d8	7.427	98	1451486	48.78	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.56%				
70) SURR2,BFB	9.878	95	587778	48.09	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	15289	1.51	ug/L		97
3) Chloromethane	1.294	50	20064	1.70	ug/L		100
4) Vinyl Chloride	1.361	62	20644	1.88	ug/L		100
5) Bromomethane	1.556	94	5604	1.75	ug/L		96
6) Chloroethane	1.611	64	13464	2.08	ug/L		90
7) Freon 21	1.721	67	31608	1.77	ug/L		98
8) Trichlorofluoromethane	1.770	101	23769	1.73	ug/L		93
9) Diethyl Ether	1.934	59	14070	2.11	ug/L		89
10) Freon 123a	1.928	67	20168	1.82	ug/L		94
11) Freon 123	1.965	83	21309	1.79	ug/L		94
12) Acrolein	2.026	56	10719	10.70	ug/L		92
13) 1,1-Diclethene	2.105	96	12781	1.99	ug/L		90
14) Freon 113	2.093	101	14450	1.87	ug/L		99
15) Acetone	2.123	43	5592	2.29	ug/L		74
16) 2-Propanol	2.196	45	14367	42.20	ug/L		99
17) Iodomethane	2.215	142	2570	0.59	ug/L		98
18) Carbon Disulfide	2.269	76	51266	2.18	ug/L		98
19) Acetonitrile	2.330	40	3142m	10.54	ug/L		
20) Allyl Chloride	2.355	76	8344	2.05	ug/L	#	73
21) Methyl Acetate	2.361	43	8051	1.61	ug/L		93
22) Methylene Chloride	2.440	84	17716	2.12	ug/L	#	82
23) TBA	2.507	59	22308	43.60	ug/L		100
24) Acrylonitrile	2.641	53	22679	10.25	ug/L		96
25) Methyl-t-Butyl Ether	2.666	73	38451	1.99	ug/L		92
26) trans-1,2-Dichloroethene	2.672	96	16107	1.96	ug/L	#	85
28) 1,1-Diclethane	3.050	63	31576	1.96	ug/L		92
29) Vinyl Acetate	3.111	86	1505m	1.37	ug/L		
30) DIPE	3.117	45	64173	1.85	ug/L		82
31) 2-Chloro-1,3-Butadiene	3.147	53	29418	1.86	ug/L		100
32) ETBE	3.507	59	53890	2.00	ug/L		88
33) 2,2-Dichloropropane	3.678	77	23625	2.03	ug/L		92
34) cis-1,2-Dichloroethene	3.684	96	17639	1.89	ug/L		89
36) Propionitrile	3.818	54	5554	7.93	ug/L	#	9
37) Bromochloromethane	3.983	130	10093	1.85	ug/L		96
38) Methacrylonitrile	3.989	67	3972m	1.94	ug/L		

W061114.M Thu Jun 12 10:21:34 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 10:21:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
39) Tetrahydrofuran	4.086	42	3435m	1.84 ug/L		
40) Chloroform	4.098	83	28511	1.86 ug/L		94
41) 1,1,1-Trichloroethane	4.367	97	24957	1.92 ug/L	#	70
42) TAME	5.190	73	39519	1.94 ug/L		94
44) Cyclohexane	4.440	41	19812	1.99 ug/L		88
46) Carbontetrachloride	4.617	121	6343	1.91 ug/L	#	73
47) 1,1-Dichloropropene	4.623	75	20180	2.09 ug/L		98
49) Benzene	4.964	78	65507	2.13 ug/L		97
50) 1,2-Dichloroethane	4.988	62	20578	1.76 ug/L		95
51) Iso-Butyl Alcohol	4.891	43	10198m	45.68 ug/L		
52) n-Heptane	5.458	43	18675	2.00 ug/L		94
53) 1-Butanol	6.013	56	11157m	102.70 ug/L		
54) Trichloroethene	5.976	130	17825	2.07 ug/L		95
55) Methylcyclohexane	6.214	55	23912	2.14 ug/L	#	82
56) 1,2-Diclpropane	6.263	63	18296	2.20 ug/L		99
57) Dibromomethane	6.409	93	7924	1.81 ug/L		91
58) 1,4-Dioxane	6.500	88	1855m	42.88 ug/L		
59) Methyl Methacrylate	6.482	69	7364	2.14 ug/L		91
60) Bromodichloromethane	6.616	83	20062	1.95 ug/L		93
61) 2-Nitropropane	6.903	41	4479	1.44 ug/L	#	80
62) 2-Chloroethylvinyl Ether	7.025	63	7821	2.09 ug/L		98
63) cis-1,3-Dichloropropene	7.153	75	22618	2.04 ug/L		96
64) 4-Methyl-2-pentanone	7.348	43	11557	1.92 ug/L		97
66) Toluene	7.506	91	69605	2.11 ug/L		99
67) trans-1,3-Dichloropropene	7.756	75	20042	2.19 ug/L		98
68) Ethyl Methacrylate	7.884	69	13891	2.01 ug/L	#	68
69) 1,1,2-Trichloroethane	7.933	97	12174	2.05 ug/L		95
72) Tetrachloroethene	8.061	164	14256	2.09 ug/L	#	83
73) 2-Hexanone	8.238	43	8631m	1.96 ug/L		
74) 1,3-Dichloropropane	8.091	76	21797	2.18 ug/L		82
75) Dibromochloromethane	8.305	129	14353	1.94 ug/L		93
76) N-Butyl Acetate	8.354	43	21123	2.02 ug/L		93
77) 1,2-Dibromoethane	8.408	107	12303	2.08 ug/L		86
78) 3-Chlorobenzotrifluoride	8.878	180	26835	2.11 ug/L		95
79) Chlorobenzene	8.866	112	46397	2.05 ug/L		95
80) 4-Chlorobenzotrifluoride	8.933	180	24392	2.09 ug/L		97
81) 1,1,1,2-Tetrachloroethane	8.951	131	16572	2.07 ug/L		94
82) Ethylbenzene	8.982	106	23154	2.08 ug/L		99
83) (m+p)Xylene	9.091	106	59561	4.43 ug/L		97
84) o-Xylene	9.439	106	29846	2.25 ug/L		88
85) Styrene	9.457	104	47889	2.16 ug/L		95
86) Bromoform	9.603	173	7515	1.72 ug/L		96
87) 2-Chlorobenzotrifluoride	9.670	180	25224	2.05 ug/L		95
88) Isopropylbenzene	9.756	105	75916	2.29 ug/L		99
89) Cyclohexanone	9.823	55	35272	43.47 ug/L		98
90) trans-1,4-Dichloro-2-B...	10.061	53	3656	1.97 ug/L		94
92) 1,1,2,2-Tetrachloroethane	10.012	83	14261	1.98 ug/L		95
93) Bromobenzene	10.006	156	20452	2.14 ug/L		89
94) 1,2,3-Trichloropropane	10.048	110	3977	2.20 ug/L	#	89
95) n-Propylbenzene	10.109	91	83108	2.18 ug/L		100
96) 2-Chlorotoluene	10.170	91	52876	2.23 ug/L		98
97) 3-Chlorotoluene	10.225	91	51904	2.00 ug/L		99

Quantitation Report (QT Reviewed)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 10:21:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
98)	4-Chlorotoluene	10.268	91	61045	2.12	ug/L		93
99)	1,3,5-Trimethylbenzene	10.256	105	61387	2.26	ug/L		96
100)	tert-Butylbenzene	10.518	119	52077	2.29	ug/L		98
101)	1,2,4-Trimethylbenzene	10.560	105	62063	2.25	ug/L		97
102)	3,4-Dichlorobenzotrifl...	10.615	214	18219	2.11	ug/L		86
103)	sec-Butylbenzene	10.701	105	68003	2.17	ug/L		98
104)	p-Isopropyltoluene	10.823	119	61719	2.29	ug/L		90
105)	1,3-Dclbenz	10.786	146	37008	2.07	ug/L		99
106)	1,4-Dclbenz	10.859	146	36705	1.95	ug/L		97
107)	2,4-Dichlorobenzotrifl...	10.908	214	16197	2.07	ug/L		94
108)	2,5-Dichlorobenzotrifl...	10.945	214	19837	2.19	ug/L		95
109)	n-Butylbenzene	11.152	91	49100	2.09	ug/L		99
110)	1,2-Dclbenz	11.158	146	34607	2.07	ug/L		92
111)	1,2-Dibromo-3-chloropr...	11.719	157	2275	1.83	ug/L	#	72
112)	Trielution Dichlorotol...	11.810	125	85084	6.33	ug/L		96
113)	1,3,5-Trichlorobenzene	11.853	180	23675	1.99	ug/L		97
114)	Coelution Dichlorotoluene	12.079	125	56800	4.06	ug/L		93
115)	1,2,4-Tcbenzene	12.243	180	18710	1.95	ug/L		96
116)	Hexachlorobt	12.335	225	9579	2.23	ug/L		94
117)	Naphthalen	12.402	128	28784	1.77	ug/L		97
118)	1,2,3-Tclbenzene	12.530	180	13978	1.83	ug/L		95
119)	2,4,5-Trichlorotoluene	12.956	159	7260	1.51	ug/L		92
120)	2,3,6-Trichlorotoluene	13.017	159	7052m	1.54	ug/L		

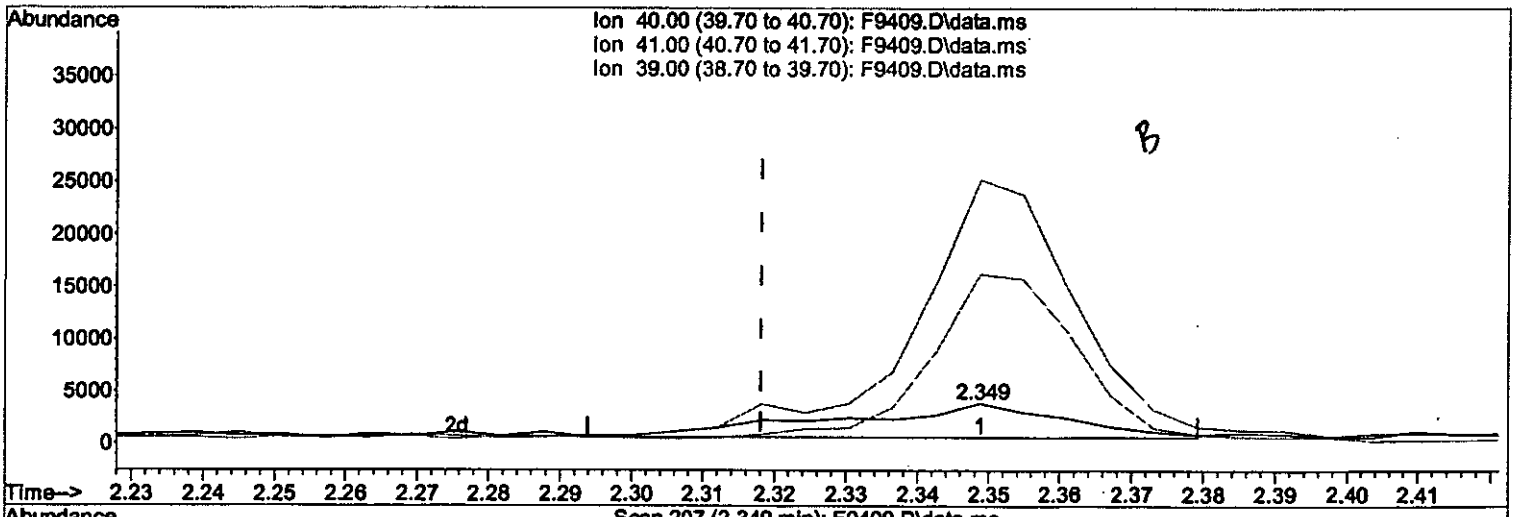
(#) = qualifier out of range (m) = manual integration (+) = signals summed

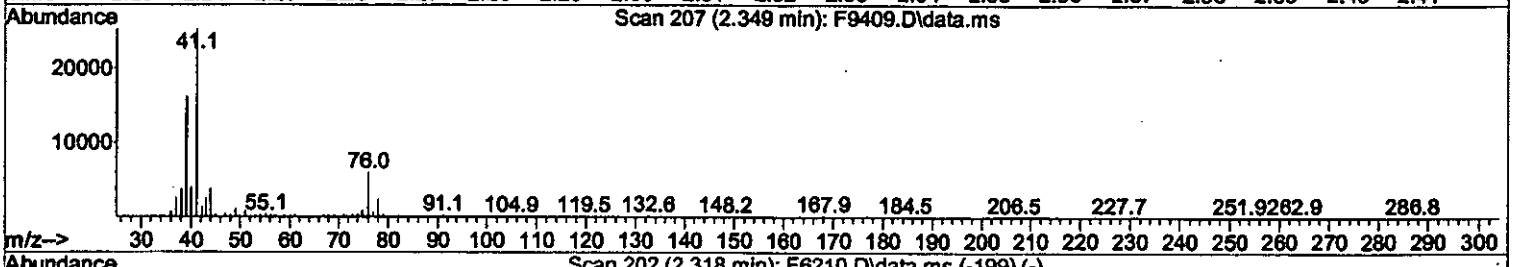
W061114.M Thu Jun 12 10:21:34 2014 MSVO10 Page: 3

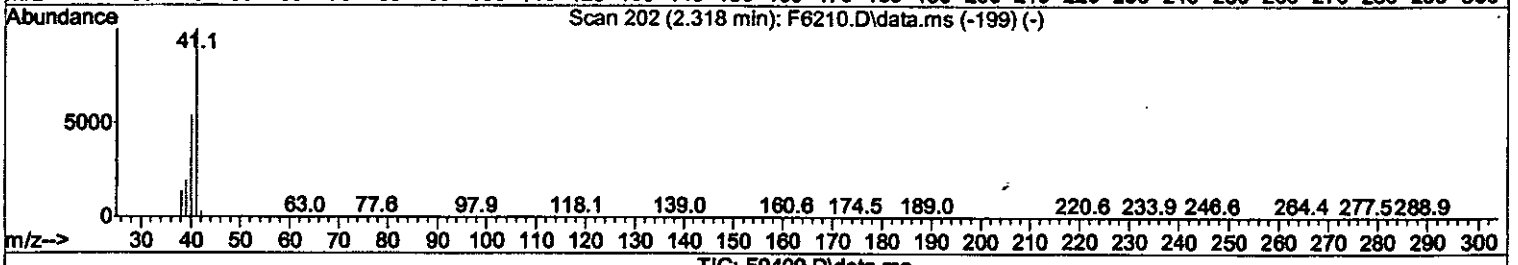
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(19) Acetonitrile

2.349min (+0.031) 24.18 ug/L

response 7209

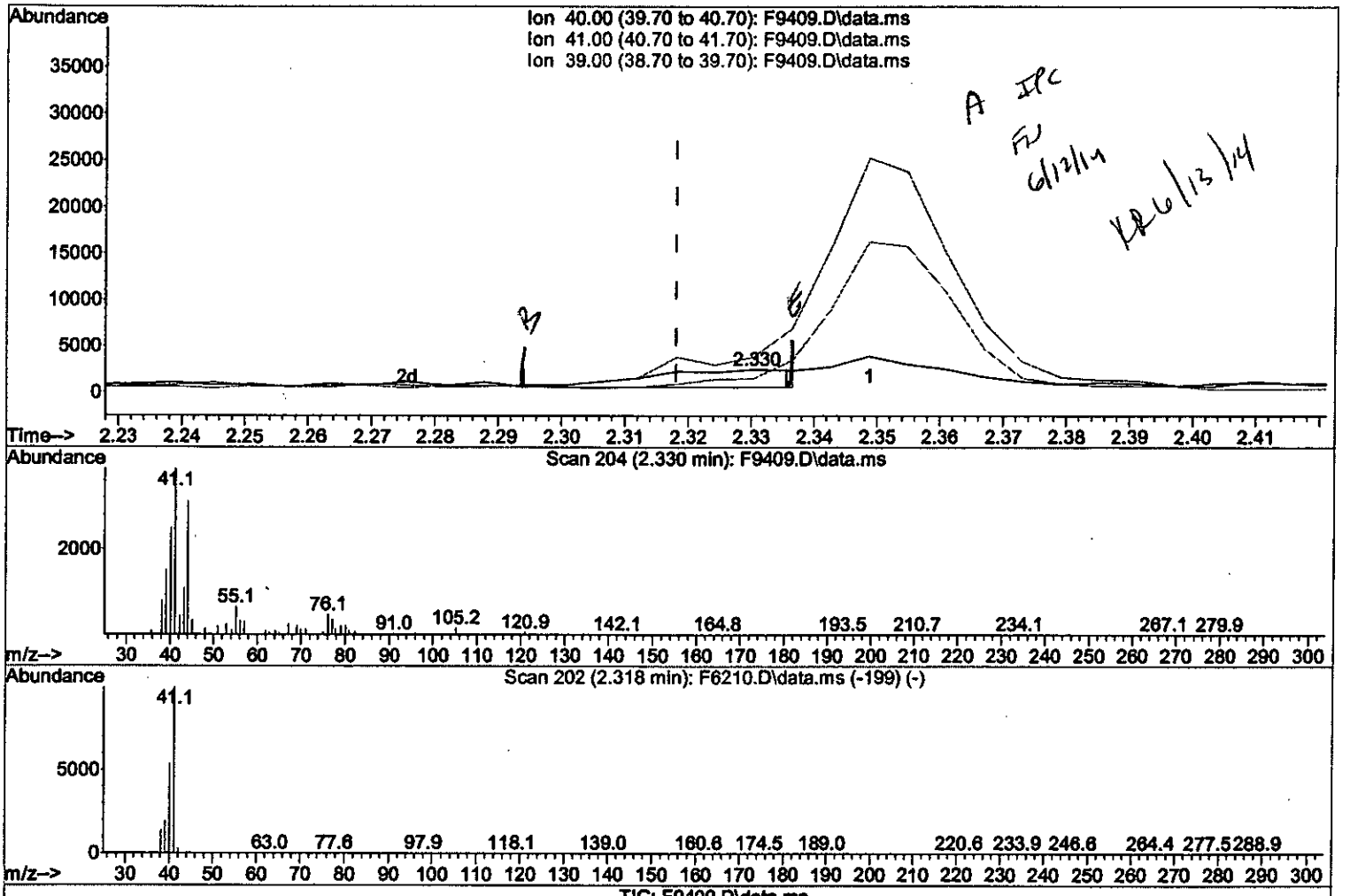
Ion	Exp%	Act%
40.00	100	100
41.00	182.70	645.65#
39.00	36.00	414.71#
0.00	0.00	0.00

W061114.M Thu Jun 12 09:14:18 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:18:43 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9409.D\data.ms

(19) Acetonitrile

2.330min (+0.012) 10.54 ug/L m

response 3142

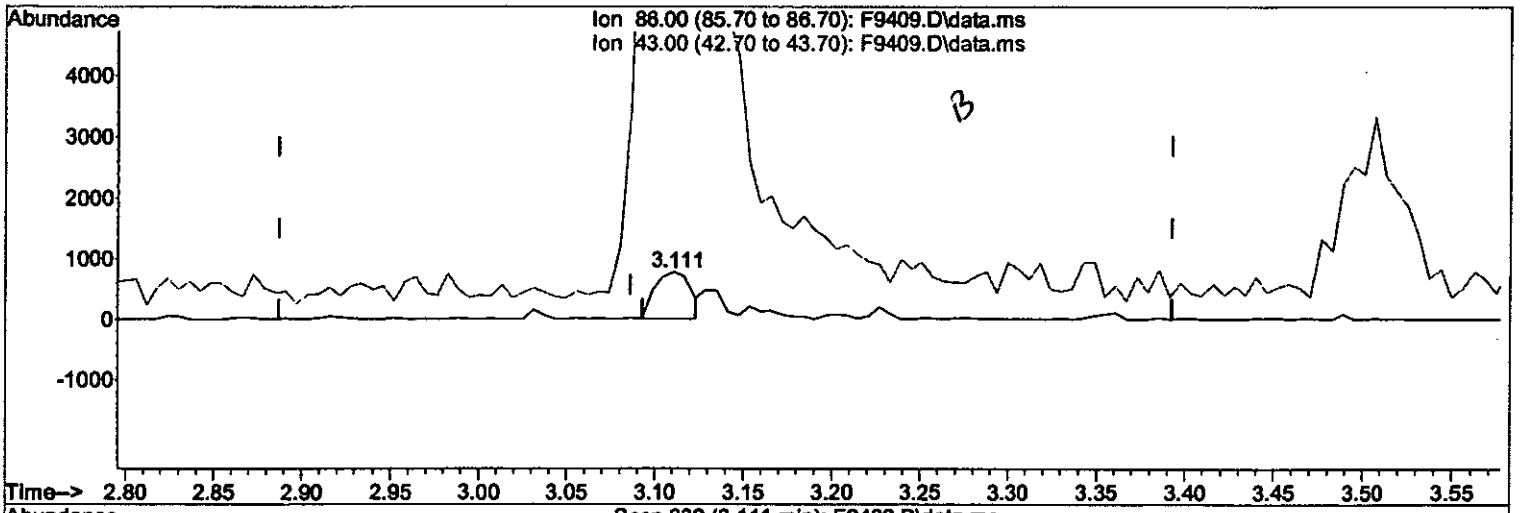
Ion	Exp%	Act%
40.00	100	100
41.00	182.70	155.70#
39.00	36.00	61.14#
0.00	0.00	0.00

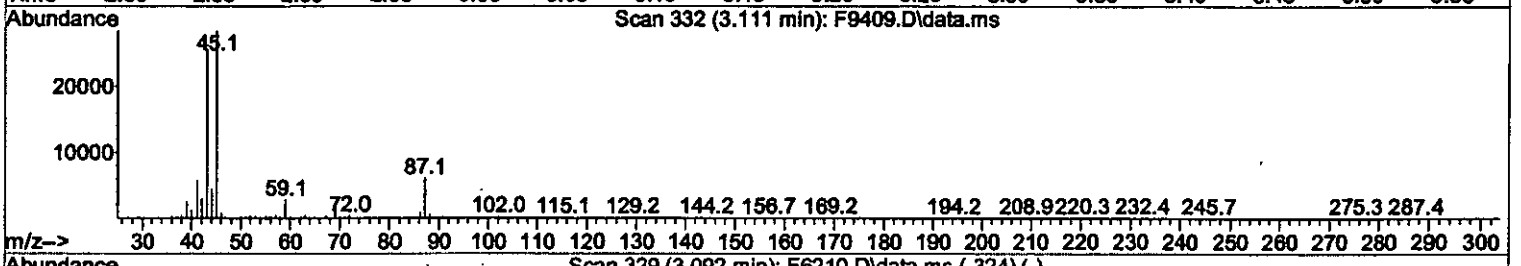
W061114.M Thu Jun 12 10:19:52 2014 MSVO10 Page: 1

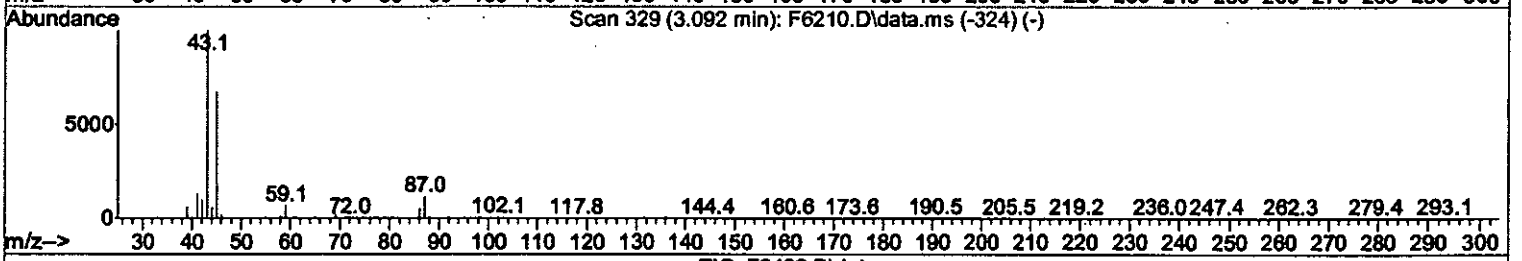
Quantitation Report (QedIt)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:18:43 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(29) Vinyl Acetate

3.111min (+0.025) 0.99 ug/L

response 1090

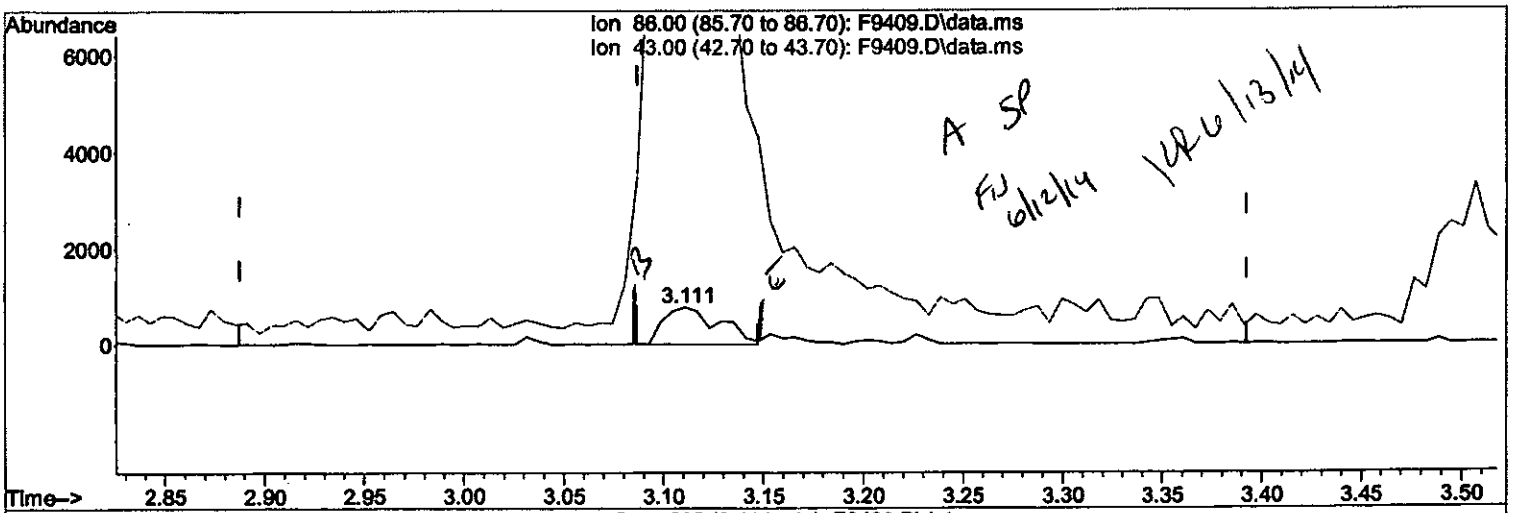
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	3329.37#
0.00	0.00	0.00
0.00	0.00	0.00

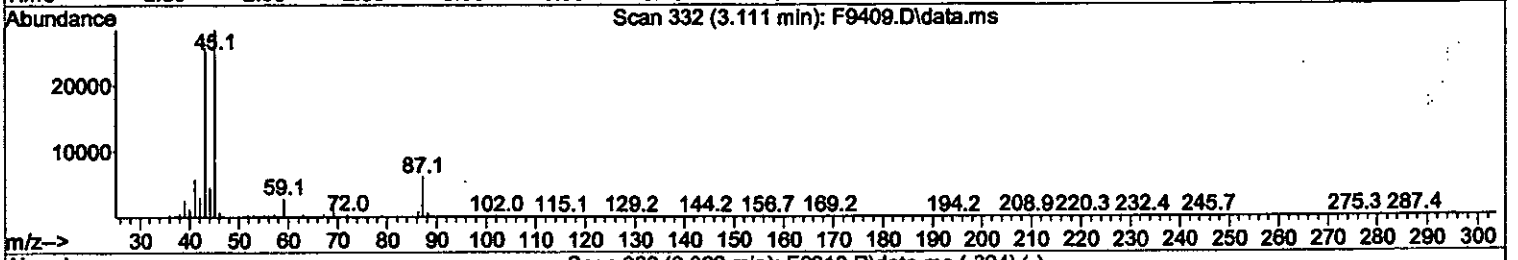
W061114.M Thu Jun 12 10:20:09 2014 MSVO10 Page: 1

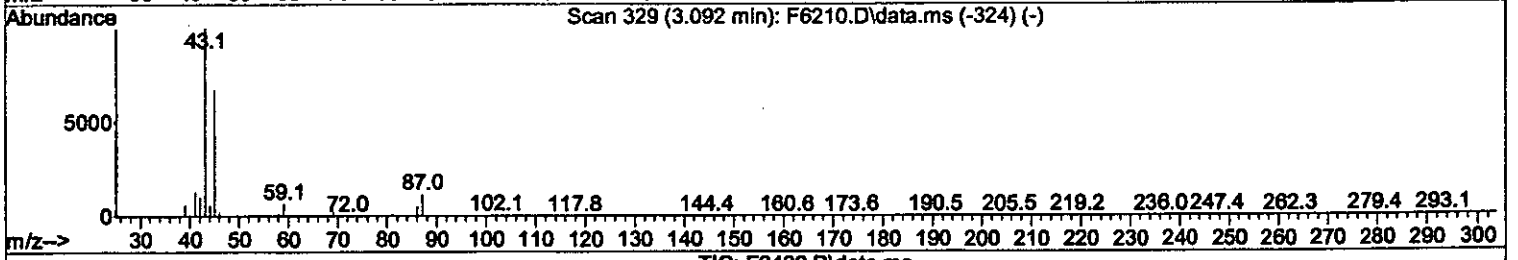
Quantitation Report (Quan)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:18:43 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(29) Vinyl Acetate

3.111min (+0.025) 1.37 ug/L m

response 1505

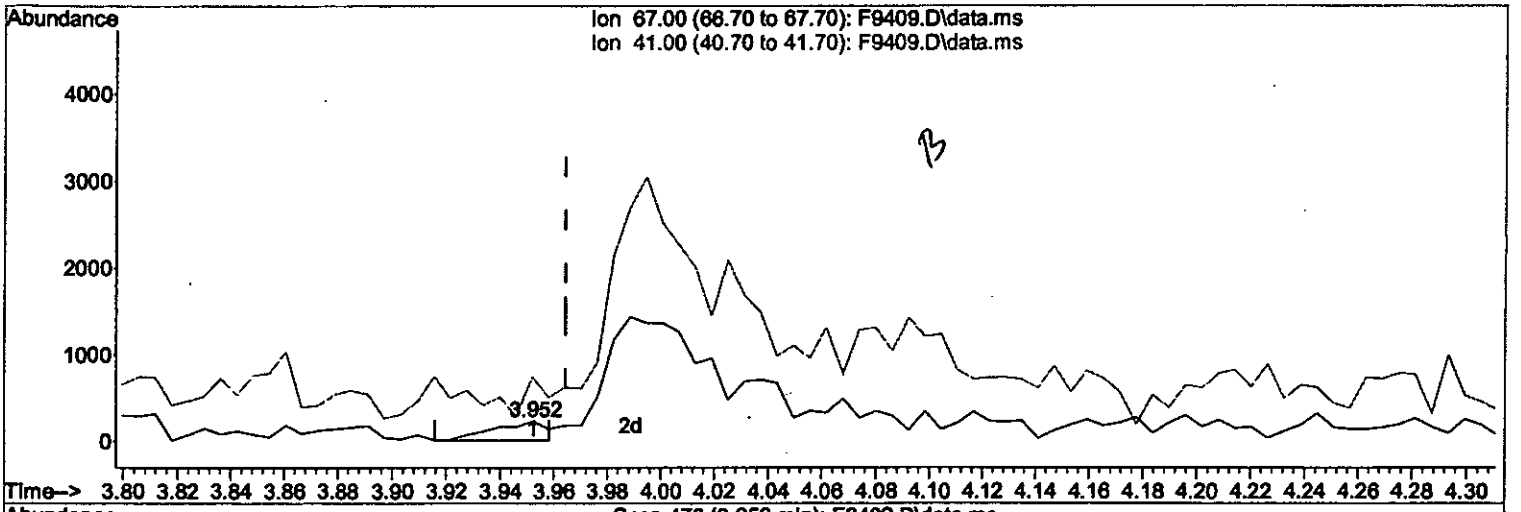
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	3329.37#
0.00	0.00	0.00
0.00	0.00	0.00

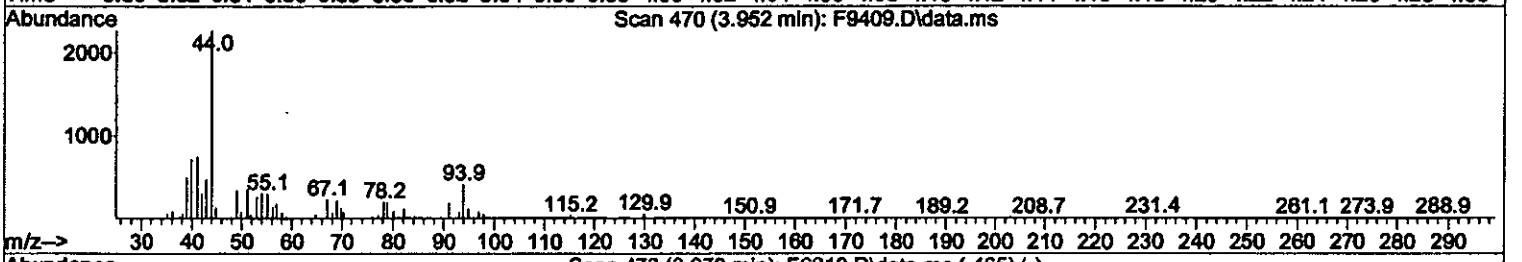
W061114.M Thu Jun 12 10:20:39 2014 MSVO10 Page: 1

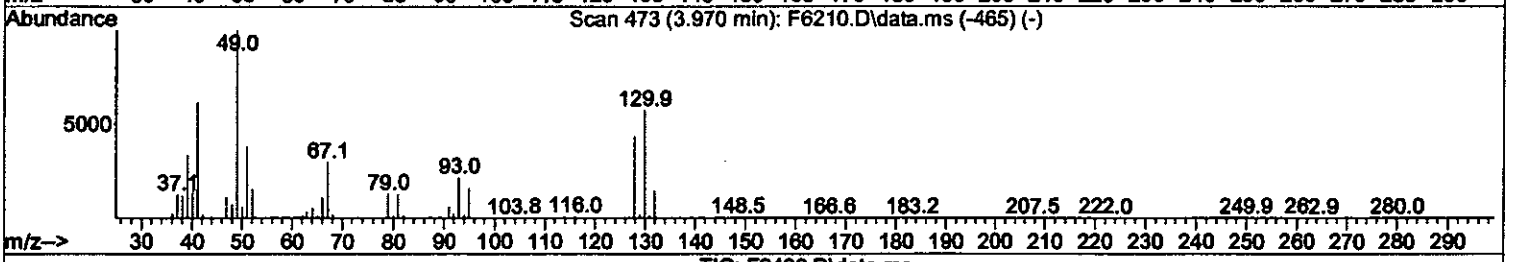
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(38) Methacrylonitrile

3.952min (-0.012) 0.15 ug/L

response 307

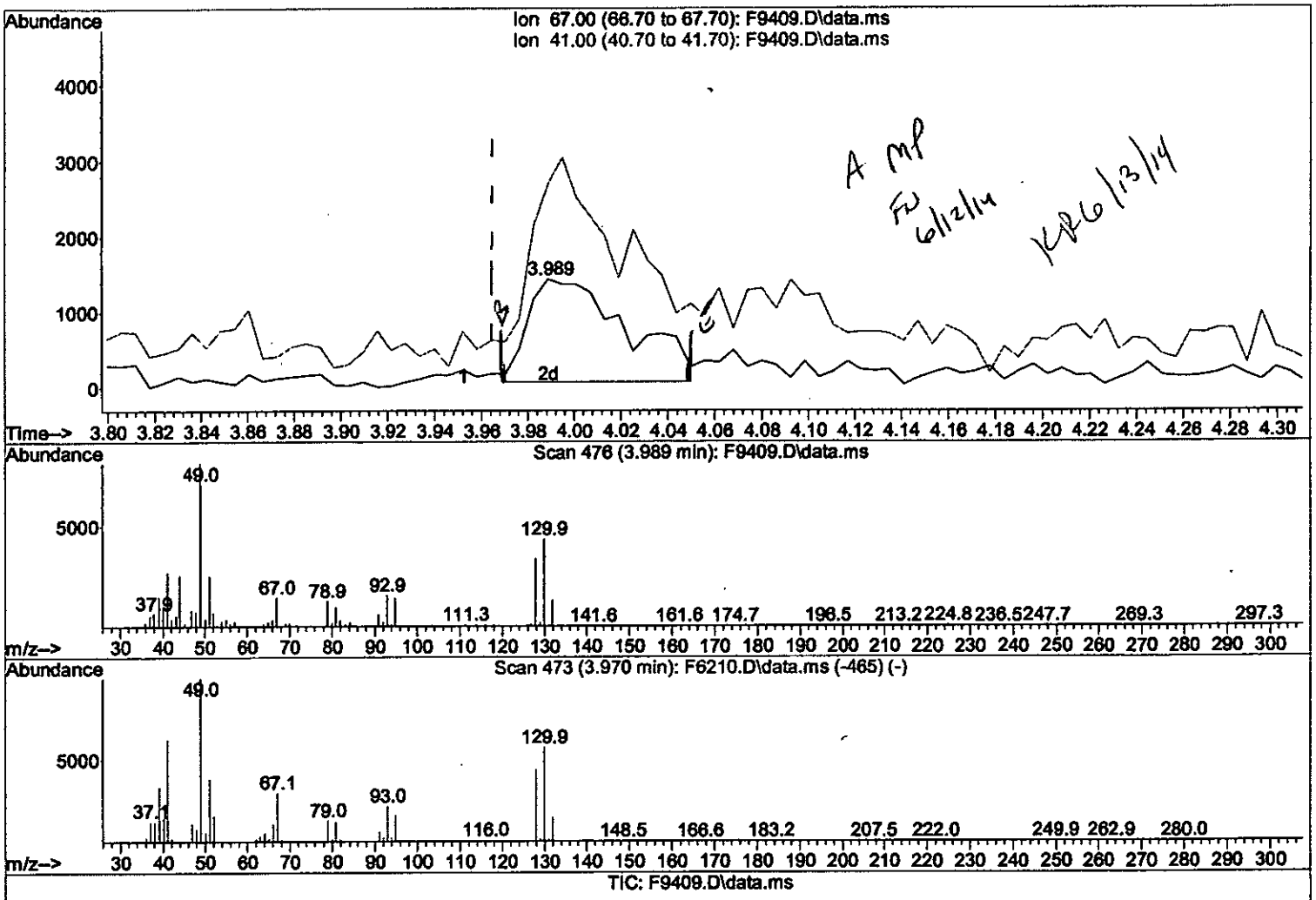
Ion	Exp%	Act%
67.00	100	100
41.00	149.10	320.26#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:15:21 2014 MSVO10 Page: 1

Quantitation Report (Quan)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9409.D\data.ms

(38) Methacrylonitrile

3.989min (+0.024) 1.94 ug/L m

response 3972

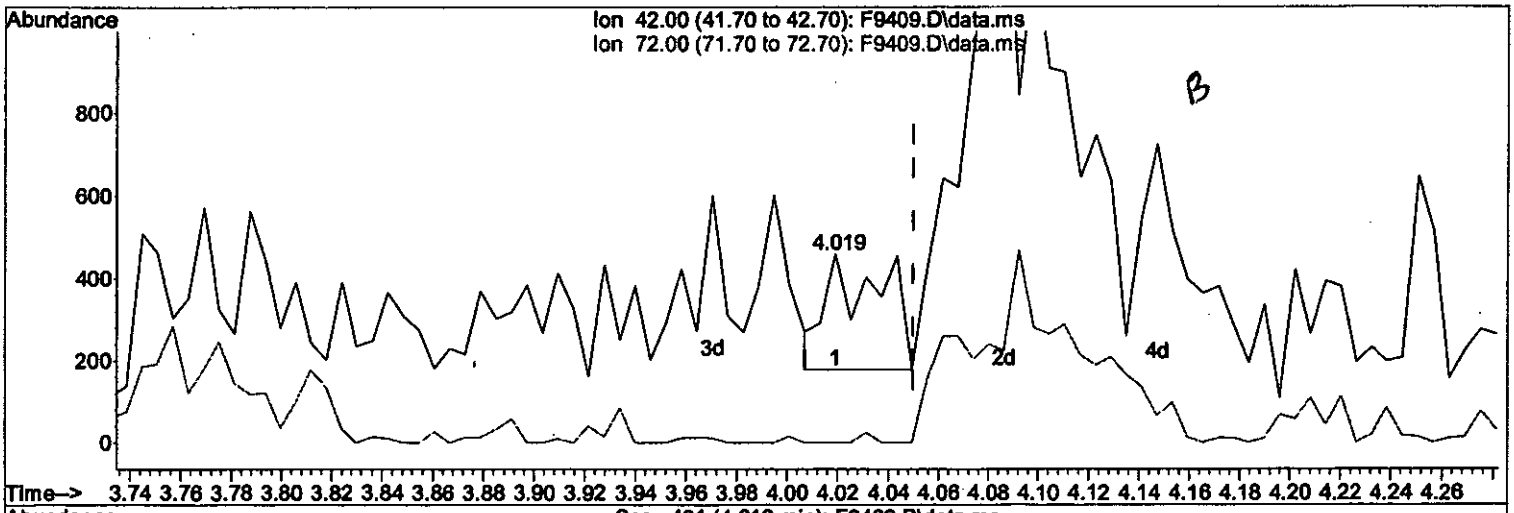
Ion	Exp%	Act%
67.00	100	100
41.00	149.10	188.30#
0.00	0.00	0.00
0.00	0.00	0.00

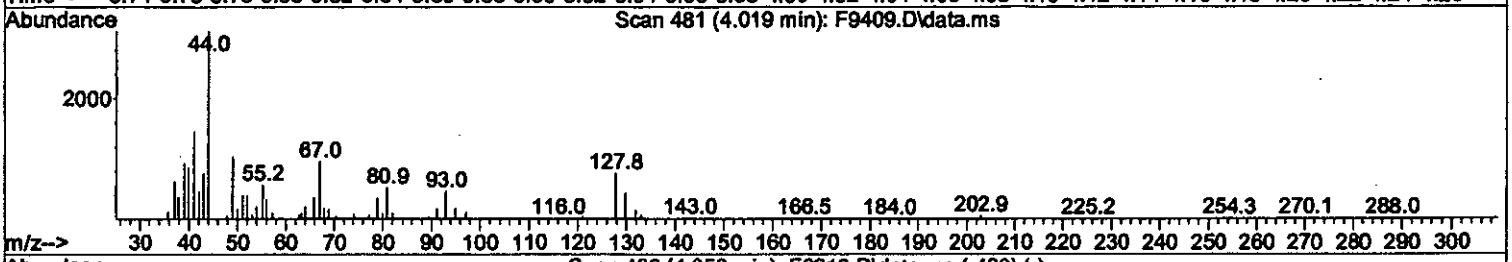
W061114.M Thu Jun 12 09:15:44 2014 MSVO10 Page: 1

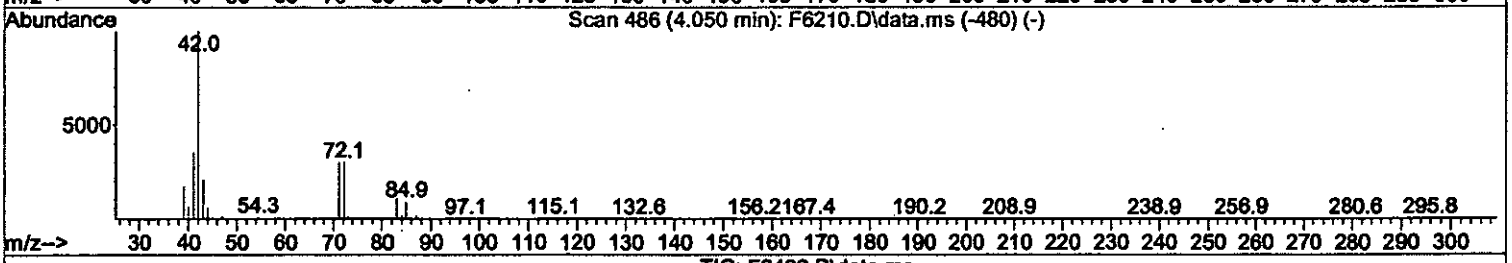
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(39) Tetrahydrofuran

4.019min (-0.031) 0.23 ug/L

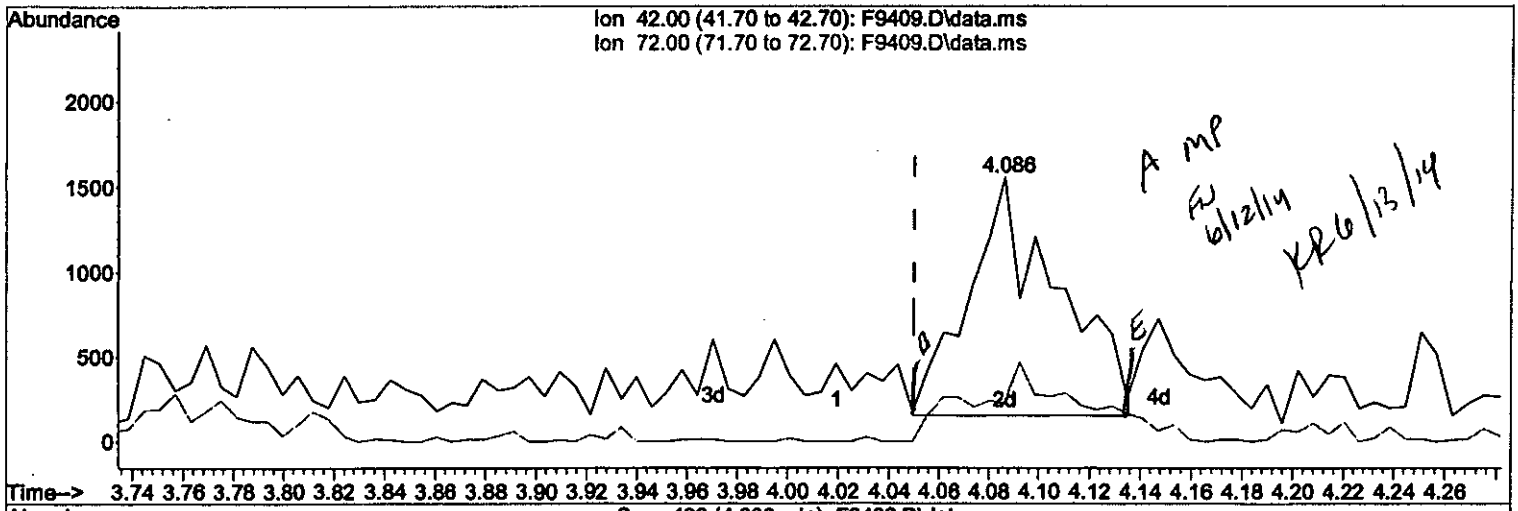
response 435

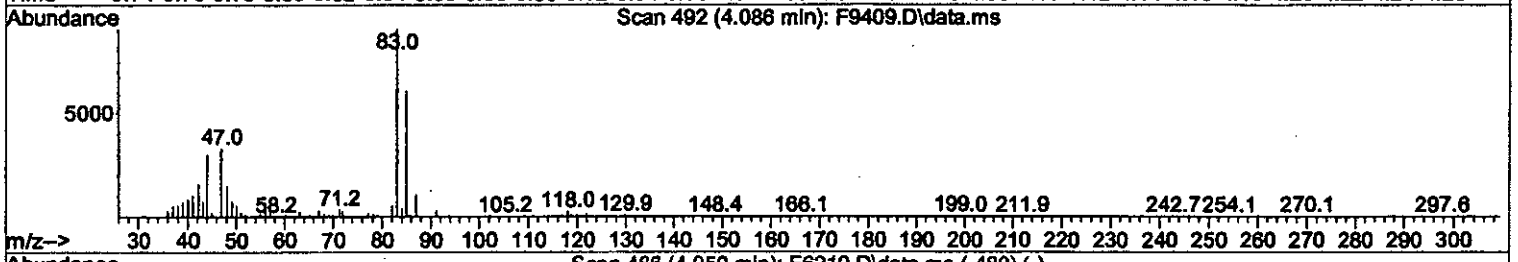
Ion	Exp%	Act%
42.00	100	100
72.00	45.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

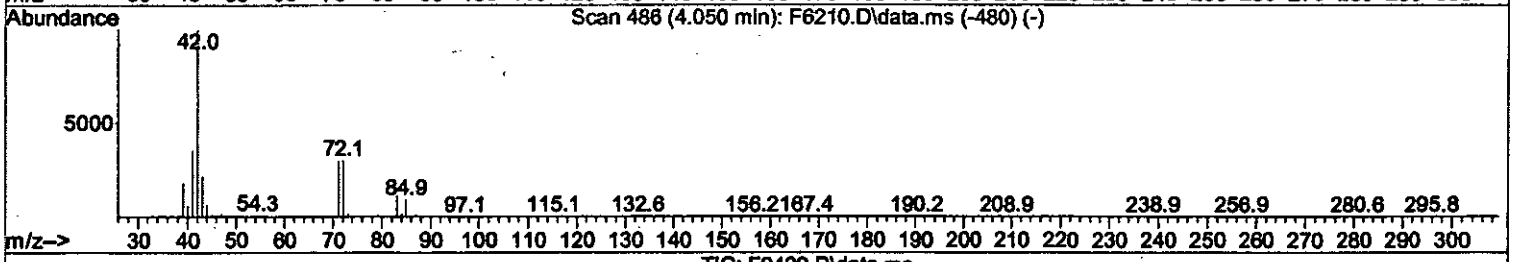
W061114.M Thu Jun 12 09:15:54 2014 MSVO10 Page: 1

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(39) Tetrahydrofuran

4.086min (+0.036) 1.84 ug/L m

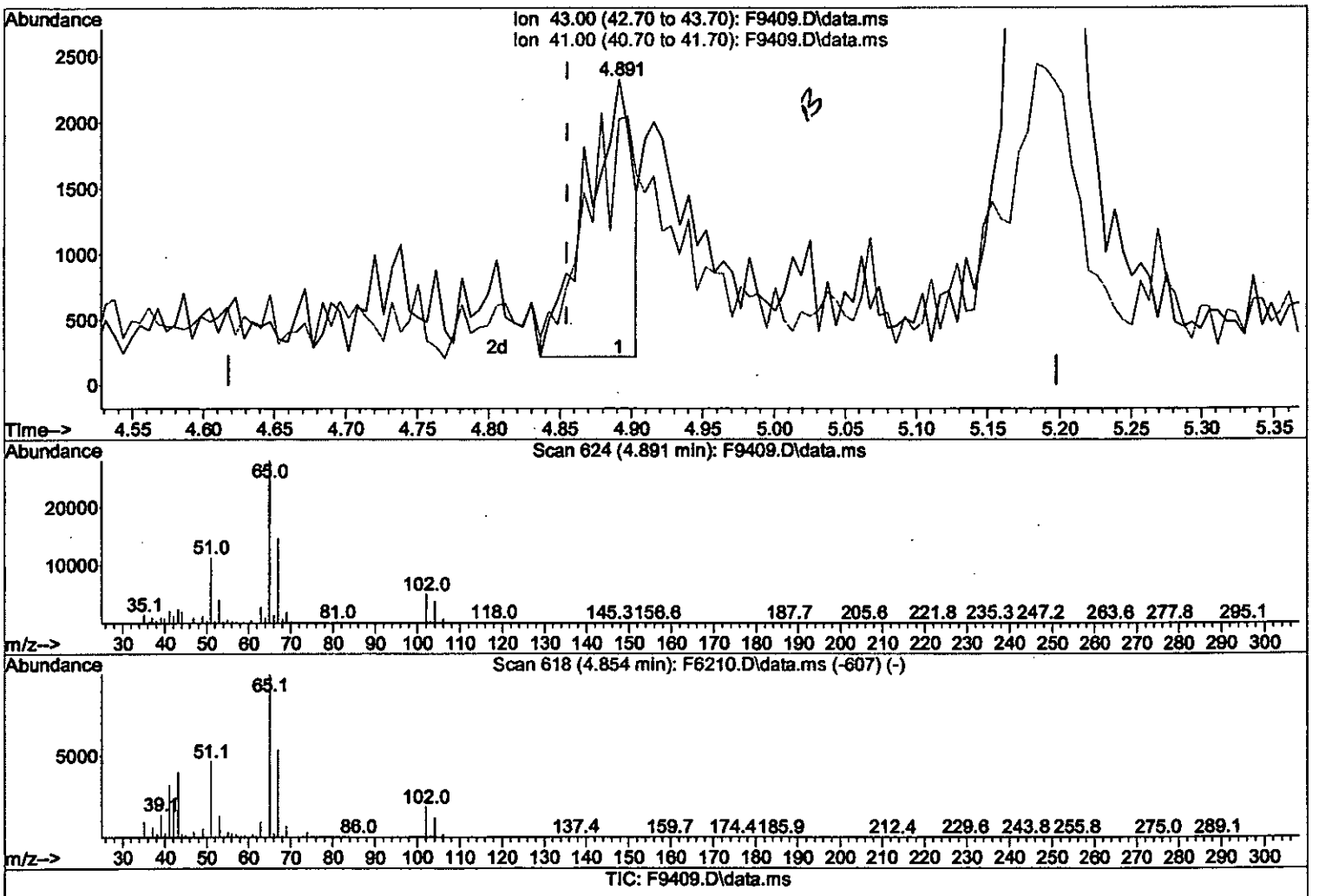
response 3435

Ion	Exp%	Act%
42.00	100	100
72.00	45.10	14.40#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:16:05 2014 MSVO10 Page: 1

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D      Vial: 7
Acq On    : 11 Jun 2014    5:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
```



TIC: F9409.D\data.ms

(51) Iso-Butyl Alcohol

4.891min (+0.036) 20.99 ug/L

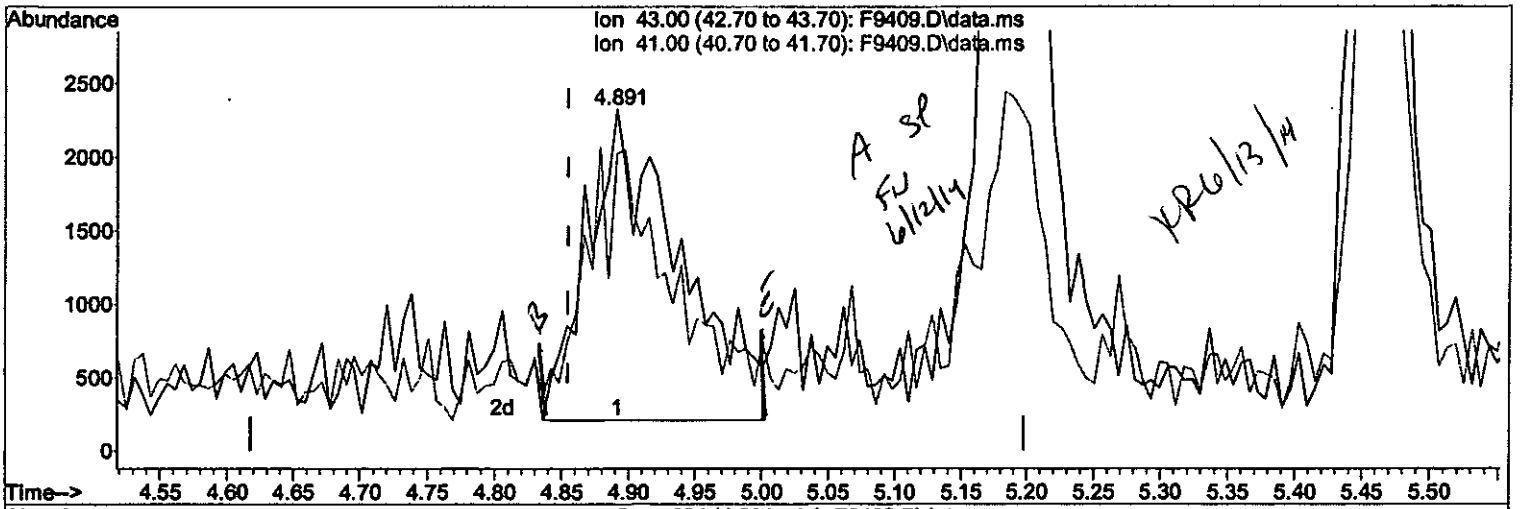
response 4687

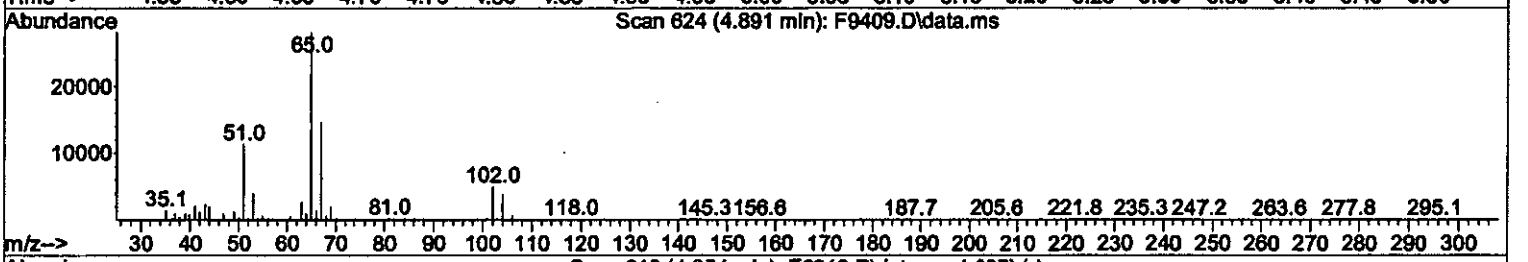
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	87.18
0.00	0.00	0.00
0.00	0.00	0.00

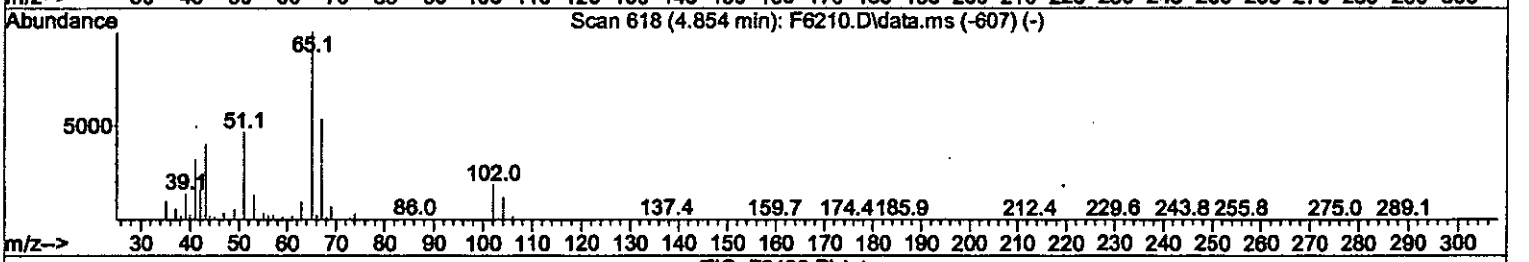
W061114.M Thu Jun 12 09:16:28 2014 MSVO10 Page: 1

```
Sample   : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D      Vial: 7
Acq On    : 11 Jun 2014    5:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
```







TIC: F9409.D\data.ms

(51) Iso-Butyl Alcohol

4.891min (+0.036) 45.68 ug/L m

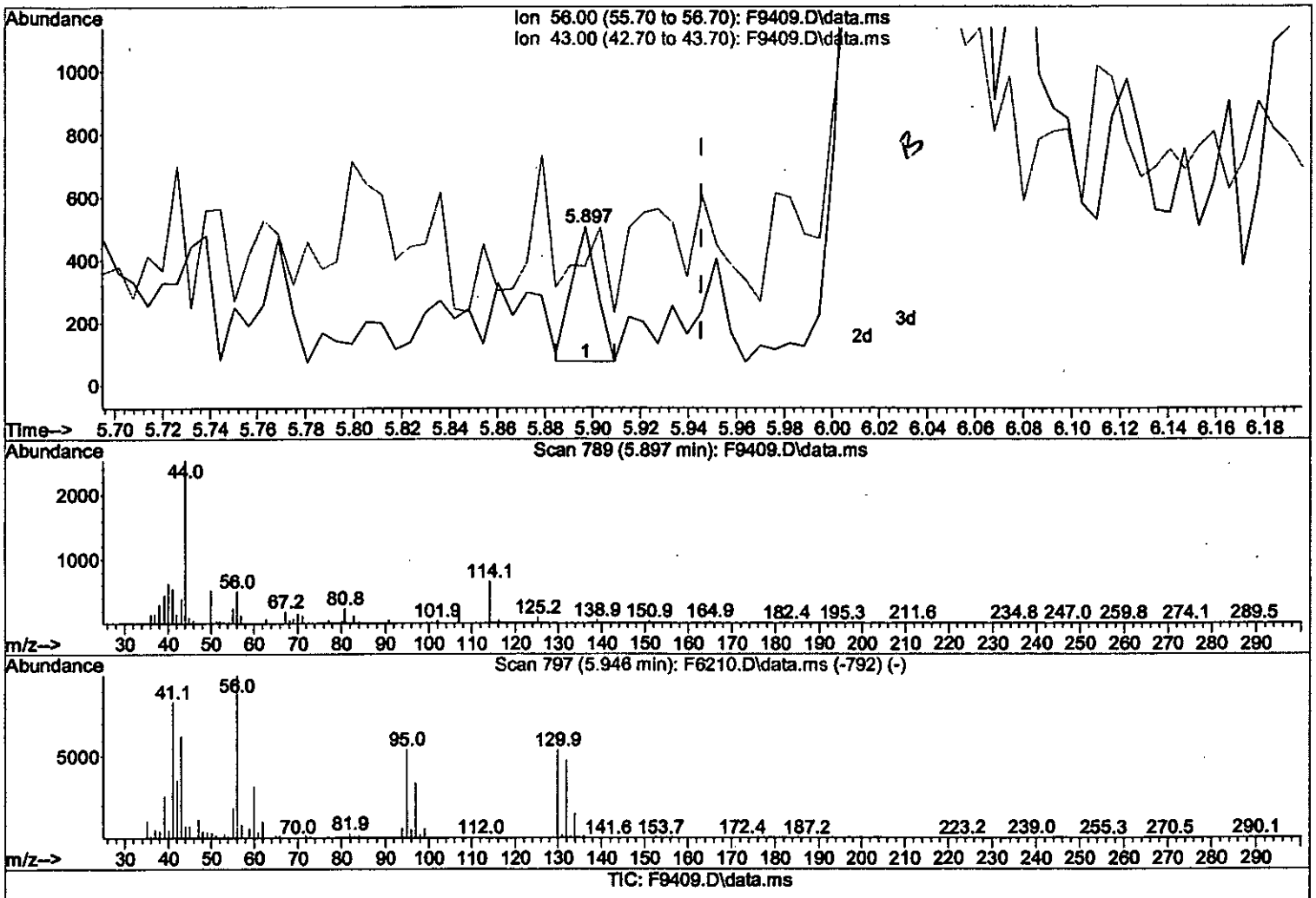
response 10198

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	87.18
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:16:43 2014 MSVO10 Page: 1

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D      Vial: 7
Acq On    : 11 Jun 2014    5:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
```



TIC: F9409.D\data.ms

(53) 1-Butanol

5.897min (-0.048) 2.88 ug/L

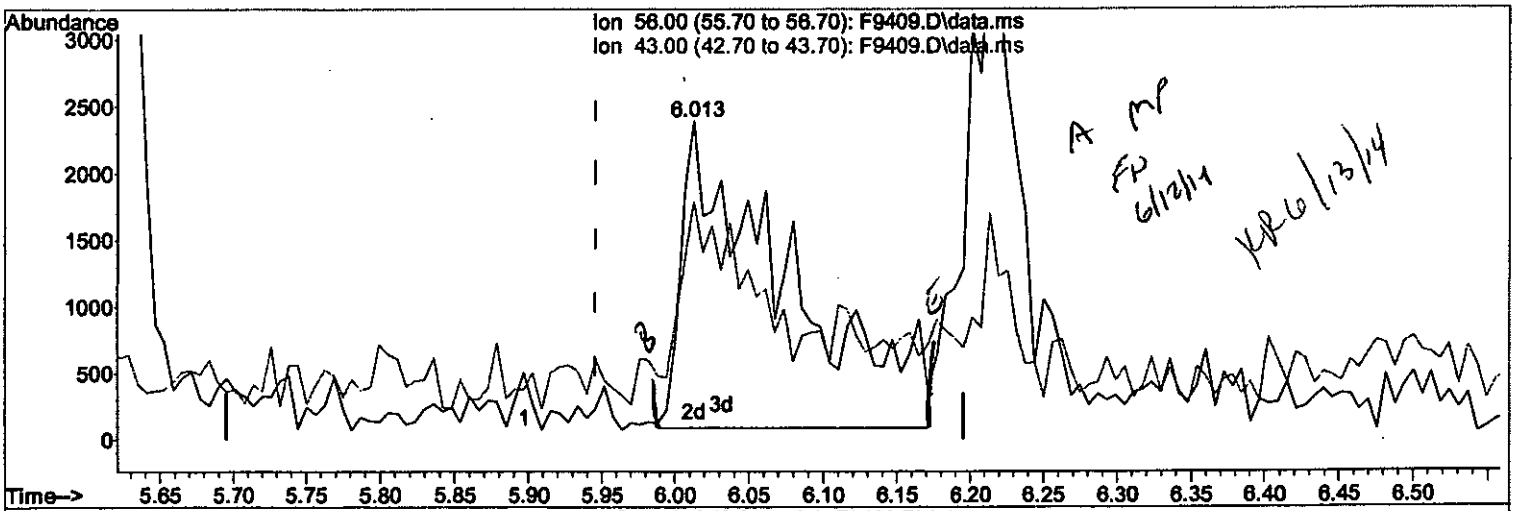
response 313

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	75.25
0.00	0.00	0.00
0.00	0.00	0.00

```
W061114.M Thu Jun 12 09:16:55 2014 MSVO10                    Page: 1
```

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D      Vial: 7
Acq On    : 11 Jun 2014    5:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
```



TIC: F9409.D\data.ms

(53) 1-Butanol

6.013min (+0.068) 102.70 ug/L m

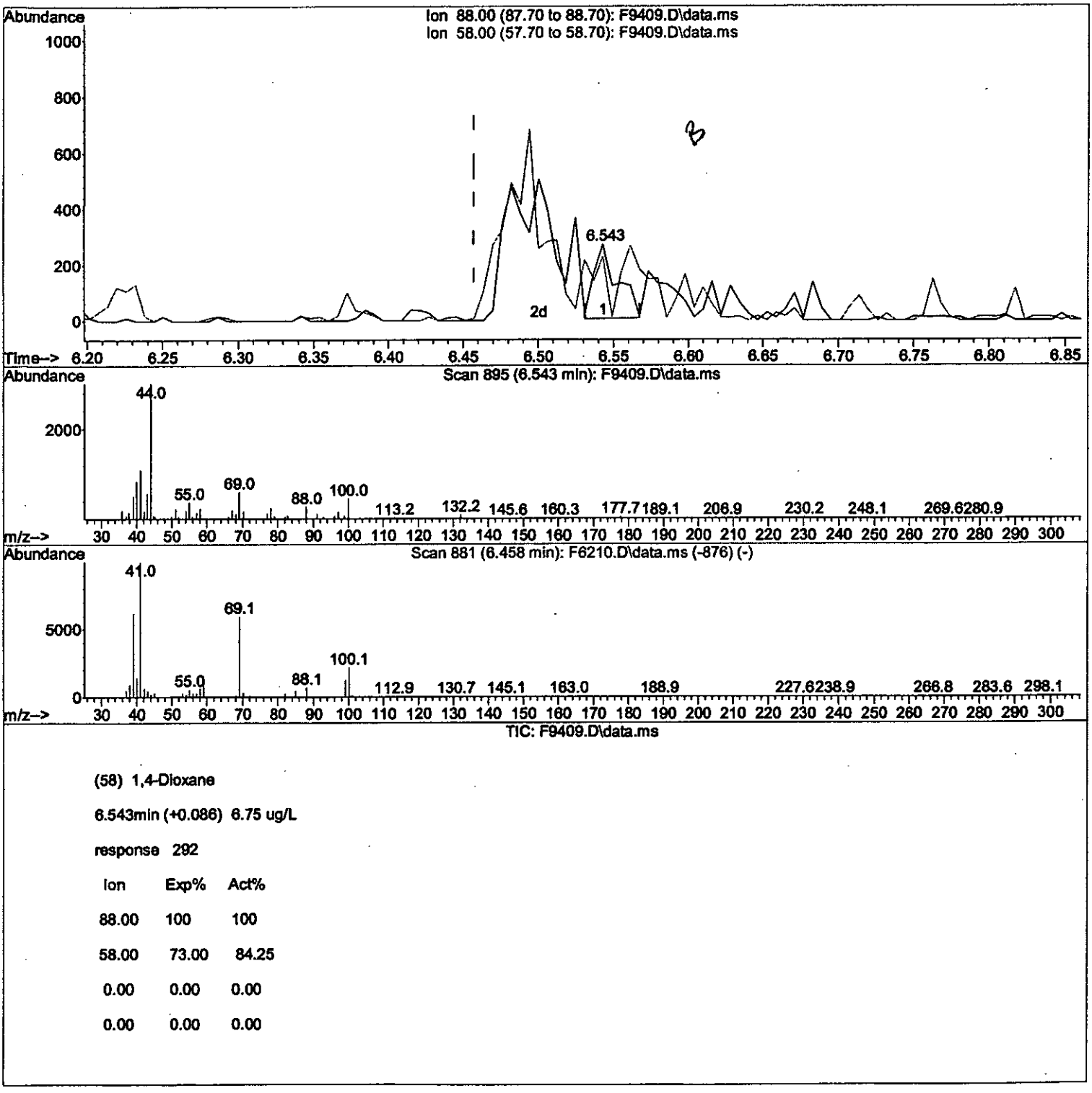
response 11157

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	75.13
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:17:30 2014 MSVO10 Page: 1

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D      Vial: 7
Acq On    : 11 Jun 2014    5:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
```



TIC: F9409.D\data.ms

(58) 1,4-Dioxane

6.543min (+0.086) 6.75 ug/L

response 292

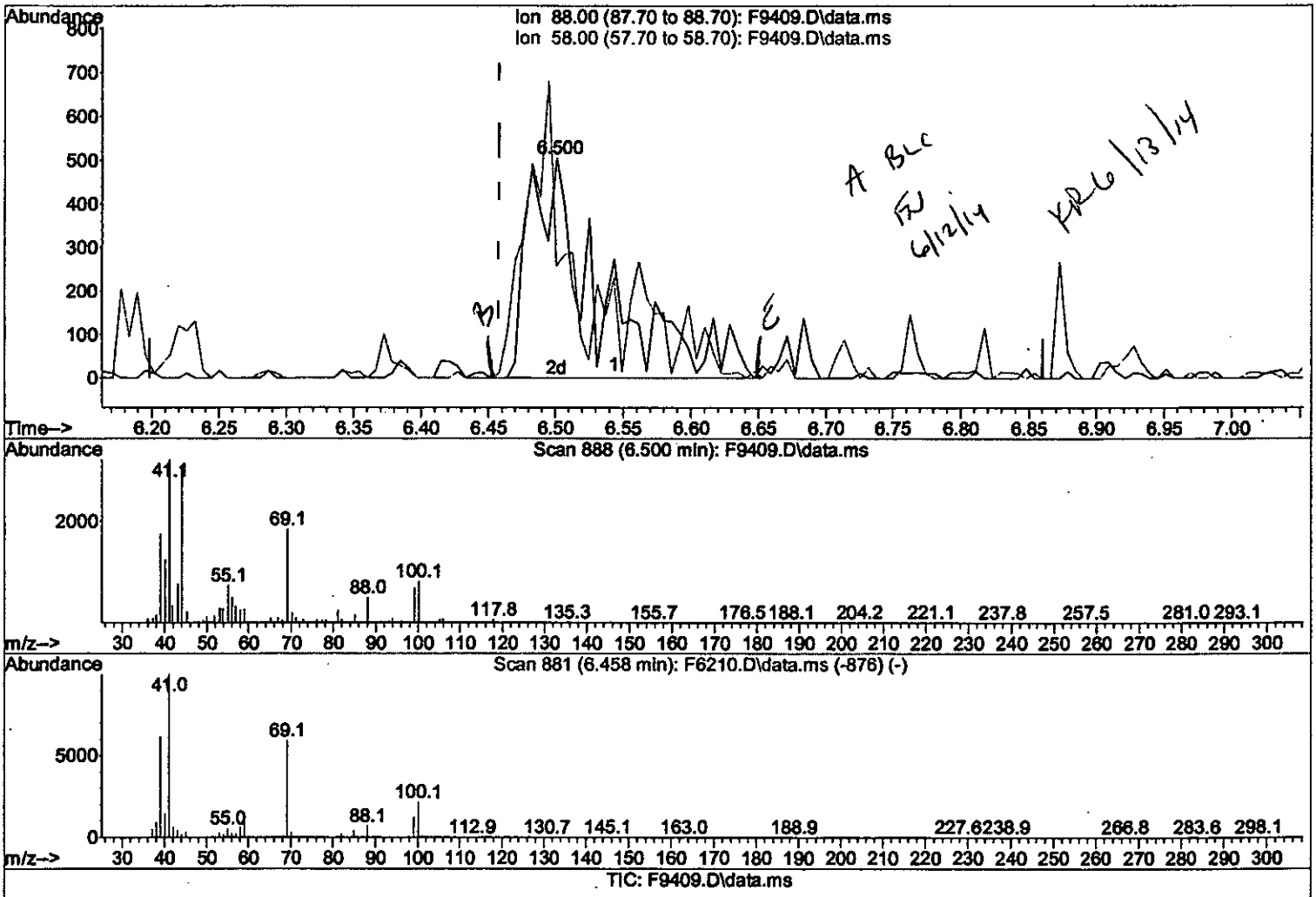
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	84.25
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:17:39 2014 MSVO10 Page: 1

00339

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9409.D\data.ms

(58) 1,4-Dioxane

6.500min (+0.043) 42.88 ug/L m

response 1855

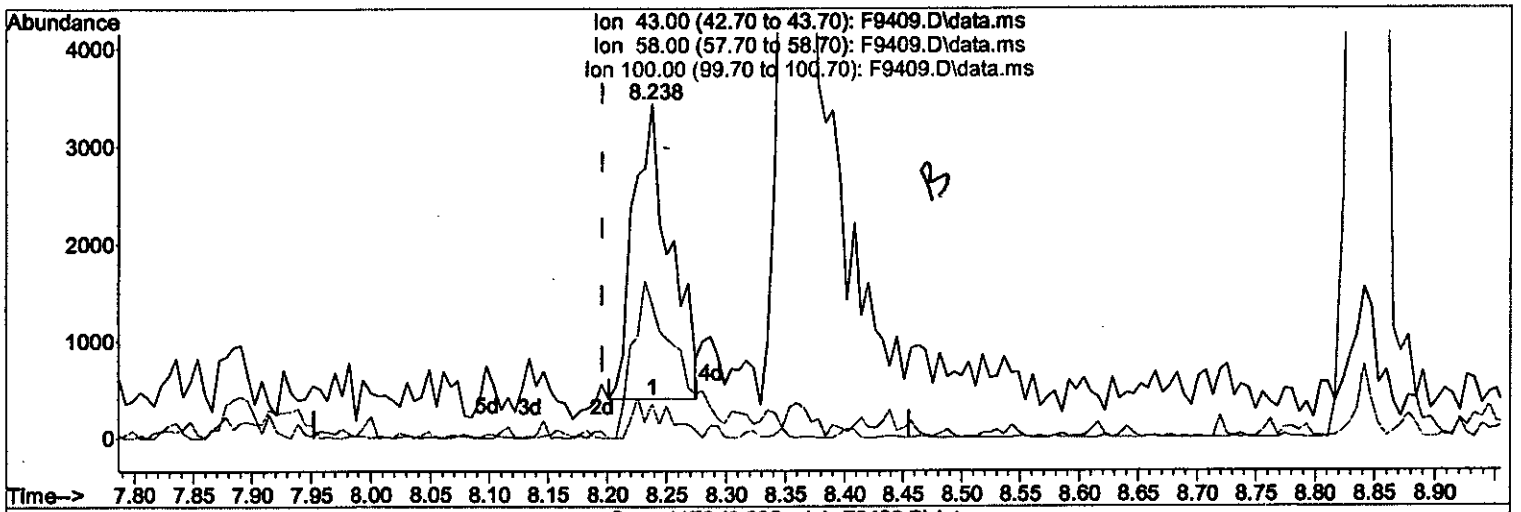
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	51.09#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:17:53 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:18:43 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9409.D\data.ms

(73) 2-Hexanone (P)

8.238min (+0.043) 1.48 ug/L

response 6504

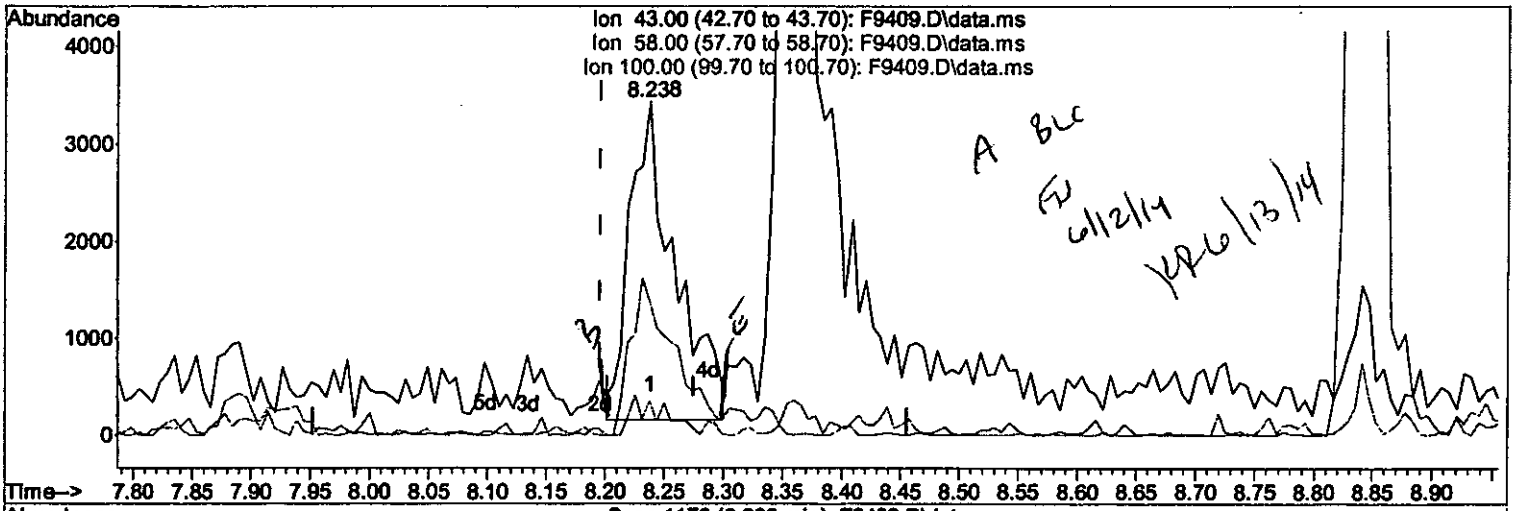
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	40.17
100.00	10.10	10.25
0.00	0.00	0.00

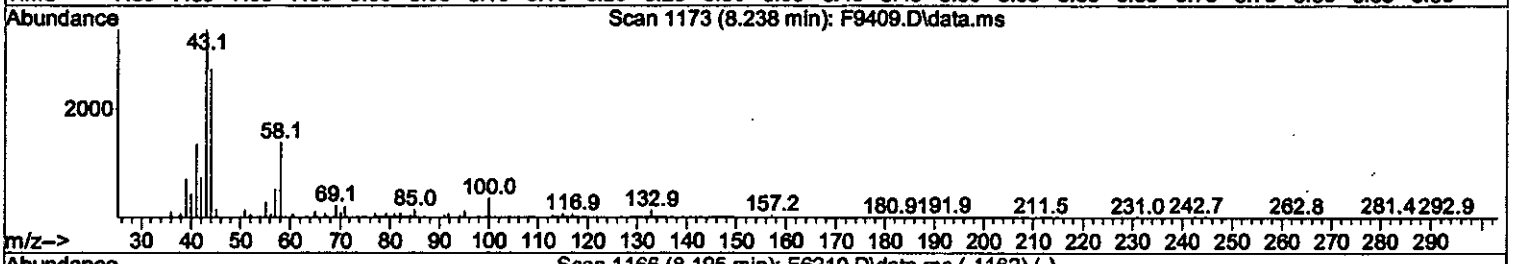
W061114.M Thu Jun 12 10:21:07 2014 MSVO10 Page: 1

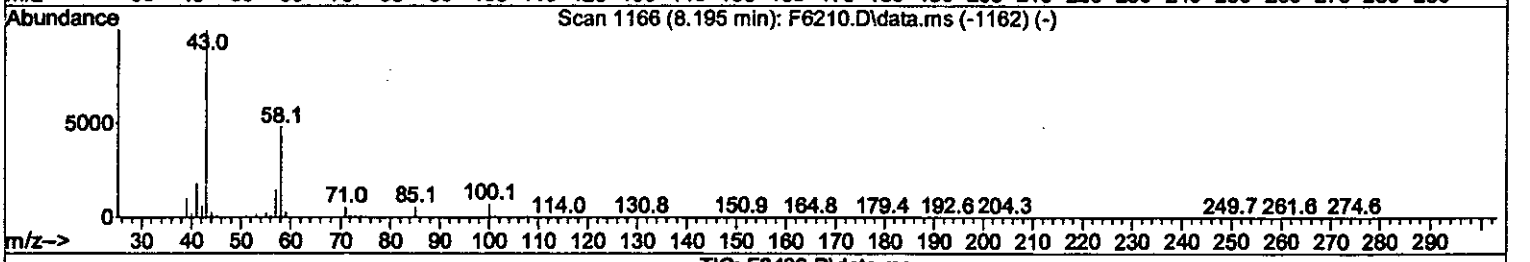
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:18:43 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(73) 2-Hexanone (P)

8.238min (+0.043) 1.96 ug/L m

response 8631

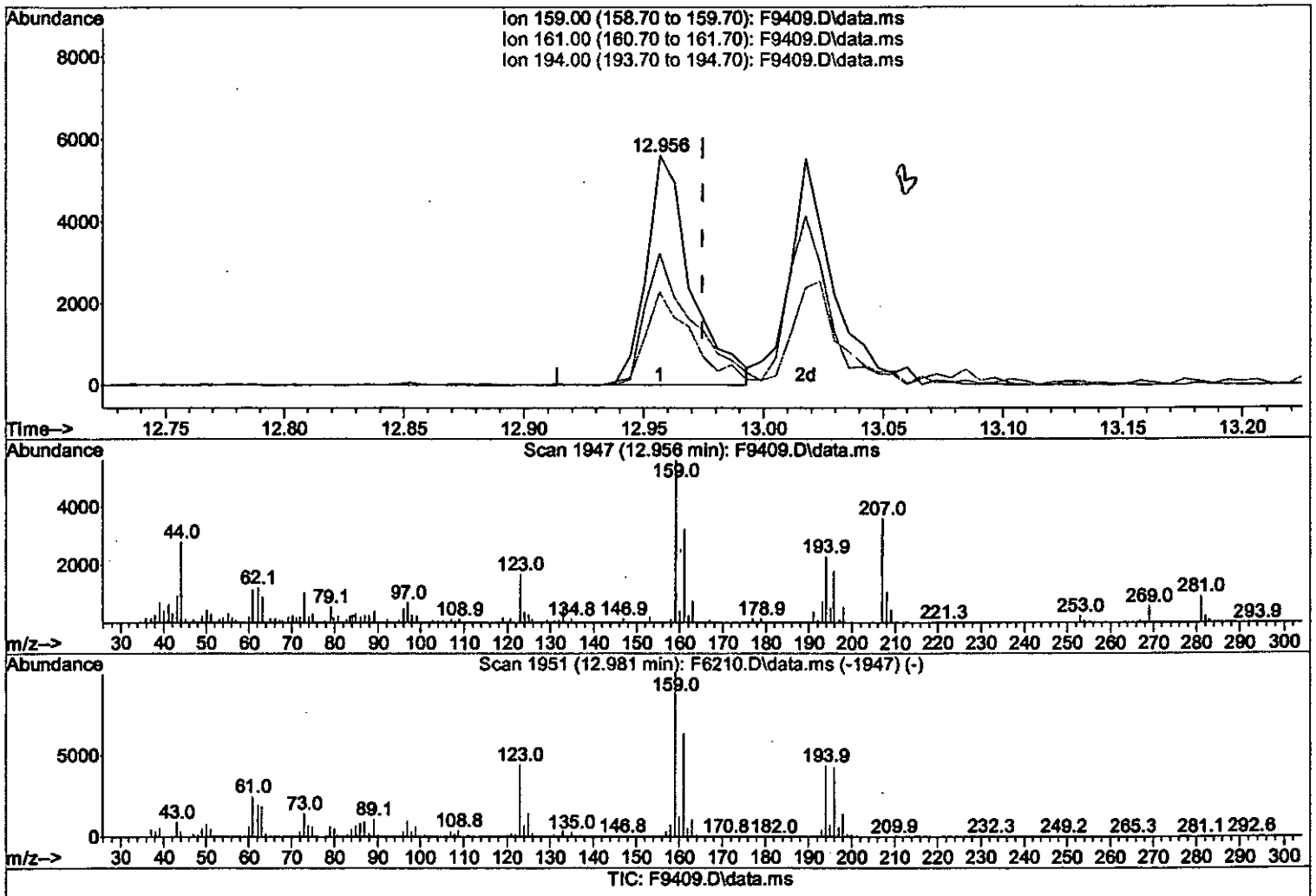
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	40.17
100.00	10.10	10.25
0.00	0.00	0.00

W061114.M Thu Jun 12 10:21:22 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9409.D\data.ms

(120) 2,3,6-Trichlorotoluene

12.956min (-0.018) 1.59 ug/L

response 7260

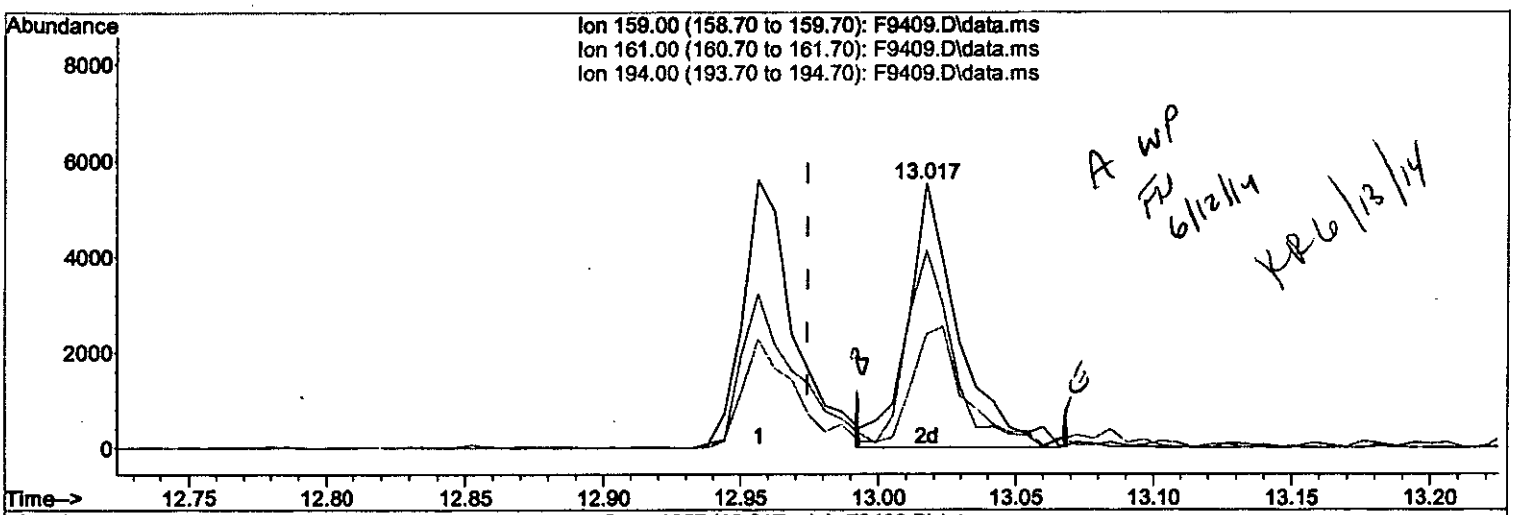
Ion	Exp%	Act%
159.00	100	100
161.00	61.90	57.46
194.00	48.10	40.65
0.00	0.00	0.00

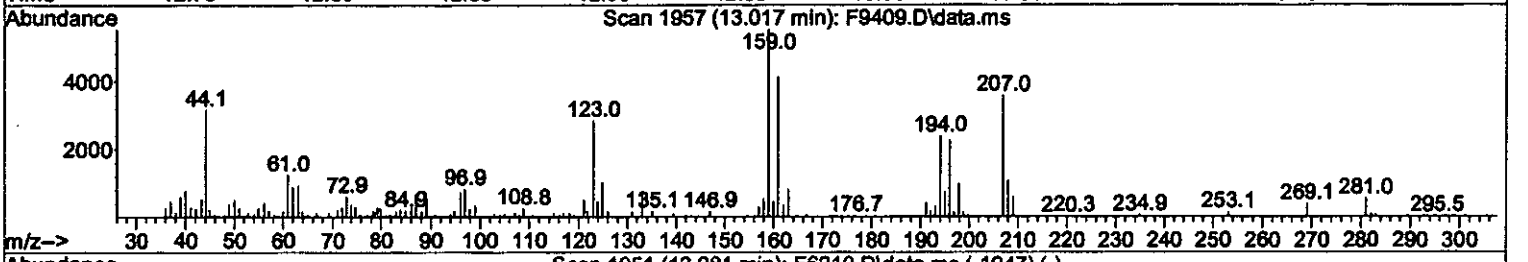
W061114.M Thu Jun 12 09:18:40 2014 MSVO10 Page: 1

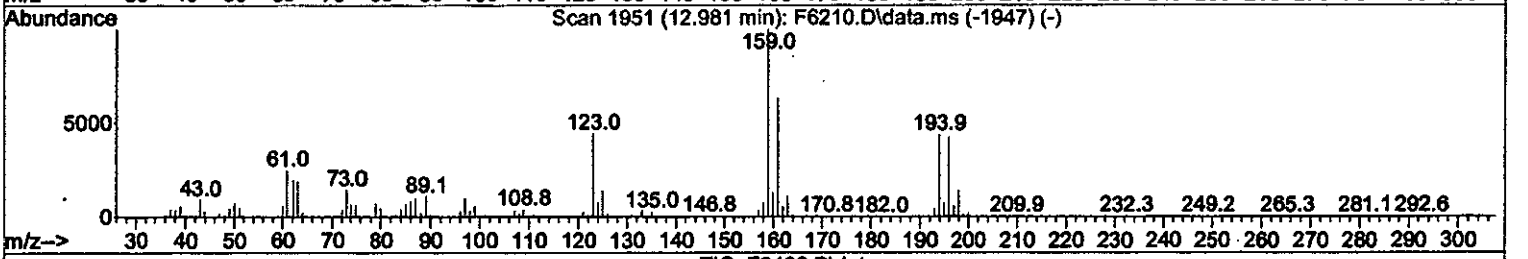
Quantitation Report (Quan)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D Vial: 7
Acq On : 11 Jun 2014 5:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 17:38:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9409.D\data.ms

(120) 2,3,6-Trichlorotoluene

13.017min (+0.043) 1.54 ug/L m

response 7052

Ion	Exp%	Act%
159.00	100	100
161.00	61.90	74.74
194.00	48.10	42.95
0.00	0.00	0.00

W061114.M Thu Jun 12 09:18:50 2014 MSVO10 Page: 1

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9409.D      Vial: 7
Acq On    : 11 Jun 2014    5:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 10:21:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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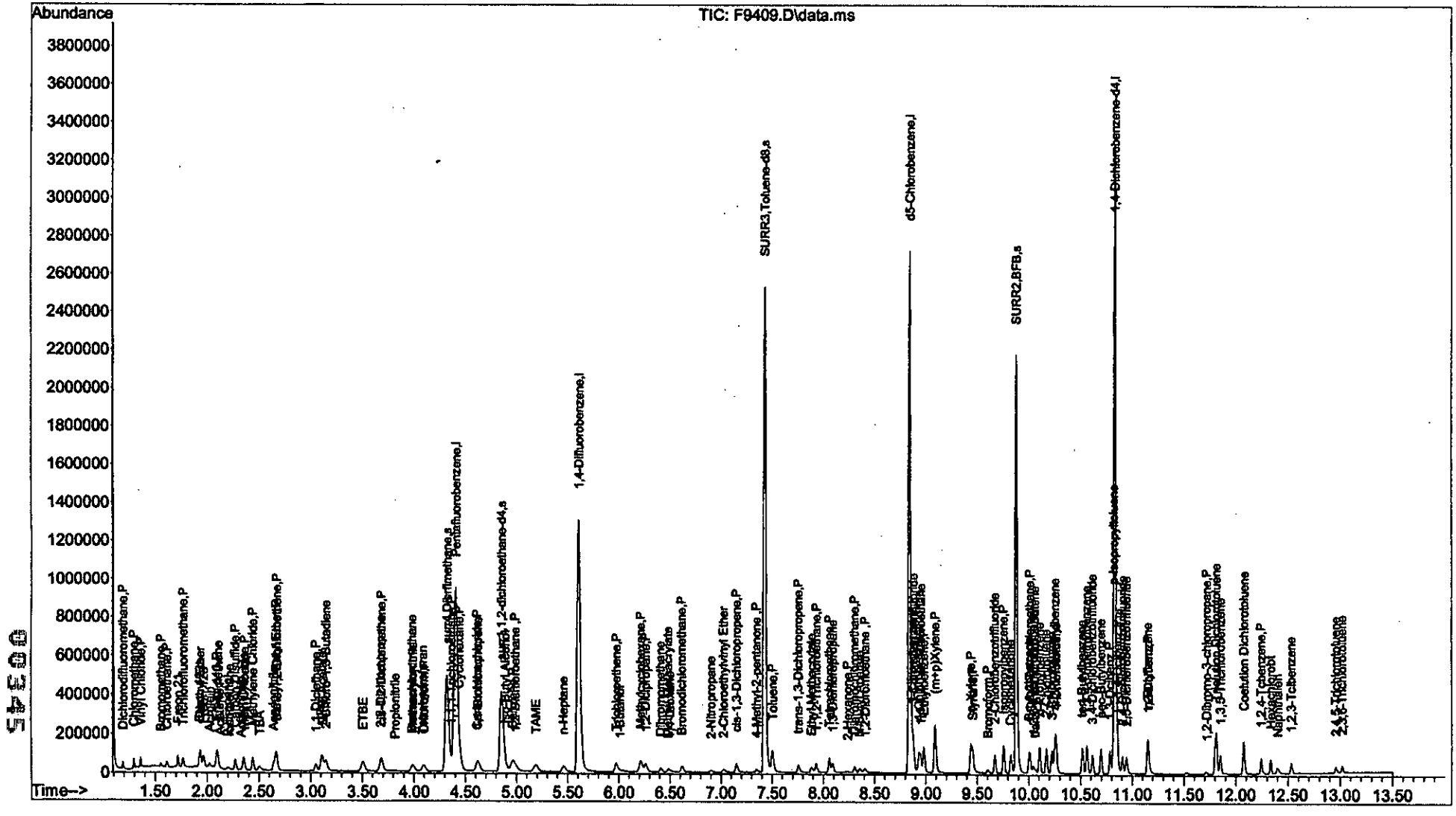


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W061114.M Thu Jun 12 10:21:36 2014 MSVO10                    Page: 4
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Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FJ 6/12/14

Quant Time: Jun 12 09:26:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	927805	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1301222	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1173606	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	628424	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	387758	45.66	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.32%				
48) surr1,1,2-dichloroetha...	4.854	65	395515	44.27	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.54%				
65) SURR3,Toluene-d8	7.427	98	1486145	48.80	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.60%				
70) SURR2,BFB	9.878	95	587029	46.93	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.86%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	39093	3.83	ug/L		95
3) Chloromethane	1.294	50	52864	4.44	ug/L		97
4) Vinyl Chloride	1.361	62	55435	4.99	ug/L		100
5) Bromomethane	1.556	94	16371	5.07	ug/L		88
6) Chloroethane	1.611	64	29670	4.55	ug/L		89
7) Freon 21	1.721	67	80809	4.48	ug/L		97
8) Trichlorofluoromethane	1.770	101	60675	4.37	ug/L		91
9) Diethyl Ether	1.934	59	35133	5.22	ug/L		89
10) Freon 123a	1.928	67	50537	4.52	ug/L		94
11) Freon 123	1.965	83	54889	4.56	ug/L		96
12) Acrolein	2.026	56	28156	27.87	ug/L		96
13) 1,1-Diclethene	2.099	96	31072	4.81	ug/L		88
14) Freon 113	2.093	101	34269	4.40	ug/L		99
15) Acetone	2.123	43	12172	4.95	ug/L		96
16) 2-Propanol	2.196	45	37358	108.83	ug/L		95
17) Iodomethane	2.215	142	7435	1.68	ug/L		98
18) Carbon Disulfide	2.269	76	129372	5.45	ug/L		98
19) Acetonitrile	2.318	40	6175	20.54	ug/L	#	74
20) Allyl Chloride	2.355	76	21883	5.34	ug/L	#	81
21) Methyl Acetate	2.361	43	23002	4.57	ug/L		89
22) Methylene Chloride	2.440	84	40950	4.87	ug/L	#	88
23) TBA	2.501	59	59685	115.69	ug/L		99
24) Acrylonitrile	2.635	53	55954	25.09	ug/L		99
25) Methyl-t-Butyl Ether	2.666	73	100108	5.13	ug/L		94
26) trans-1,2-Dichloroethene	2.672	96	38564	4.67	ug/L	#	85
28) 1,1-Diclethane	3.050	63	82532	5.08	ug/L		97
29) Vinyl Acetate	3.092	86	5780	5.23	ug/L	#	78
30) DIPE	3.111	45	168863	4.84	ug/L		89
31) 2-Chloro-1,3-Butadiene	3.141	53	79501	5.00	ug/L		82
32) ETBE	3.507	59	140606	5.18	ug/L		96
33) 2,2-Dichloropropane	3.684	77	60359	5.13	ug/L		96
34) cis-1,2-Dichloroethene	3.678	96	43114	4.59	ug/L	#	80
35) 2-Butanone	3.733	43	12847	3.95	ug/L		88
36) Propionitrile	3.781	54	17524	24.80	ug/L		92
37) Bromochloromethane	3.983	130	27421	4.99	ug/L	#	79

W061114.M Thu Jun 12 09:26:56 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:26:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.976	67	11151	5.41	ug/L		92
39)	Tetrahydrofuran	4.074	42	8831	4.70	ug/L		80
40)	Chloroform	4.098	83	71657	4.64	ug/L		97
41)	1,1,1-Trichloroethane	4.361	97	62319	4.76	ug/L		94
42)	TAME	5.184	73	105323	5.14	ug/L		95
44)	Cyclohexane	4.446	41	48853	4.78	ug/L		99
46)	Carbontetrachloride	4.610	121	17271	5.08	ug/L		88
47)	1,1-Dichloropropene	4.623	75	52404	5.29	ug/L		92
49)	Benzene	4.958	78	169756	5.38	ug/L		99
50)	1,2-Dichloroethane	4.988	62	55237	4.62	ug/L		93
51)	Iso-Butyl Alcohol	4.873	43	24616	107.74	ug/L		86
52)	n-Heptane	5.458	43	45380	4.75	ug/L		83
53)	1-Butanol	5.976	56	26463	238.01	ug/L		97
54)	Trichloroethene	5.970	130	45566	5.17	ug/L		97
55)	Methylcyclohexane	6.214	55	57148	5.01	ug/L	#	81
56)	1,2-Diclpropane	6.263	63	47028	5.52	ug/L		95
57)	Dibromomethane	6.409	93	21878	4.89	ug/L		93
58)	1,4-Dioxane	6.476	88	4688m	105.88	ug/L		
59)	Methyl Methacrylate	6.476	69	18020	5.11	ug/L	#	77
60)	Bromodichloromethane	6.622	83	52427	4.98	ug/L		99
61)	2-Nitropropane	6.903	41	16047	5.05	ug/L		94
62)	2-Chloroethylvinyl Ether	7.012	63	21295	5.57	ug/L		90
63)	cis-1,3-Dichloropropene	7.147	75	63314	5.57	ug/L		98
64)	4-Methyl-2-pentanone	7.342	43	31078	5.05	ug/L		97
66)	Toluene	7.500	91	183018	5.41	ug/L		97
67)	trans-1,3-Dichloropropene	7.750	75	51715	5.53	ug/L		97
68)	Ethyl Methacrylate	7.878	69	40971	5.80	ug/L		88
69)	1,1,2-Trichloroethane	7.927	97	30603	5.03	ug/L		97
72)	Tetrachloroethene	8.055	164	35389	5.11	ug/L		94
73)	2-Hexanone	8.213	43	22158	4.97	ug/L		91
74)	1,3-Dichloropropane	8.091	76	53590	5.29	ug/L		87
75)	Dibromochloromethane	8.305	129	36614	4.89	ug/L		89
76)	N-Butyl Acetate	8.348	43	54757	5.16	ug/L		97
77)	1,2-Dibromoethane	8.402	107	30562	5.10	ug/L		94
78)	3-Chlorobenzotrifluoride	8.878	180	65885	5.11	ug/L		94
79)	Chlorobenzene	8.866	112	118721	5.17	ug/L		98
80)	4-Chlorobenzotrifluoride	8.933	180	61964	5.23	ug/L		97
81)	1,1,1,2-Tetrachloroethane	8.945	131	42411	5.21	ug/L		97
82)	Ethylbenzene	8.982	106	63420	5.62	ug/L	#	88
83)	(m+p)Xylene	9.085	106	154330	11.32	ug/L		98
84)	o-Xylene	9.433	106	75654	5.63	ug/L		98
85)	Styrene	9.451	104	126958	5.64	ug/L		94
86)	Bromoform	9.597	173	21733	4.89	ug/L		93
87)	2-Chlorobenzotrifluoride	9.670	180	67101	5.36	ug/L		94
88)	Isopropylbenzene	9.756	105	192541	5.71	ug/L		99
89)	Cyclohexanone	9.823	55	93992	114.17	ug/L		99
90)	trans-1,4-Dichloro-2-B...	10.061	53	8595	4.55	ug/L		96
92)	1,1,2,2-Tetrachloroethane	10.012	83	36092	5.02	ug/L		89
93)	Bromobenzene	10.006	156	52698	5.52	ug/L		95
94)	1,2,3-Trichloropropane	10.042	110	9182	5.08	ug/L	#	89
95)	n-Propylbenzene	10.103	91	217777	5.73	ug/L		99
96)	2-Chlorotoluene	10.170	91	131554	5.56	ug/L		94

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:26:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	140104	5.42	ug/L	98
98)	4-Chlorotoluene	10.262	91	154983	5.39	ug/L	96
99)	1,3,5-Trimethylbenzene	10.256	105	155718	5.74	ug/L	99
100)	tert-Butylbenzene	10.518	119	130164	5.73	ug/L	99
101)	1,2,4-Trimethylbenzene	10.561	105	160295	5.81	ug/L	97
102)	3,4-Dichlorobenzotrifl...	10.615	214	45794	5.33	ug/L	96
103)	sec-Butylbenzene	10.695	105	178252	5.69	ug/L	98
104)	p-Isopropyltoluene	10.817	119	152787	5.68	ug/L	98
105)	1,3-Dclbenz	10.786	146	98258	5.51	ug/L	97
106)	1,4-Dclbenz	10.853	146	98098	5.22	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.908	214	41395	5.31	ug/L	97
108)	2,5-Dichlorobenzotrifl...	10.945	214	49382	5.45	ug/L	97
109)	n-Butylbenzene	11.146	91	128702	5.49	ug/L	96
110)	1,2-Dclbenz	11.152	146	87832	5.27	ug/L	96
111)	1,2-Dibromo-3-chloropr...	11.713	157	5382	4.34	ug/L	85
112)	Trielution Dichlorotol...	11.804	125	217506	16.22	ug/L	96
113)	1,3,5-Trichlorobenzene	11.847	180	59798	5.04	ug/L	94
114)	Coelution Dichlorotoluene	12.072	125	146723	10.52	ug/L	94
115)	1,2,4-Tcbenzene	12.237	180	47761	4.98	ug/L	95
116)	Hexachlorobt	12.328	225	23370	5.45	ug/L	98
117)	Naphthalen	12.383	128	69386	4.28	ug/L	96
118)	1,2,3-Tclbenzene	12.524	180	31523	4.13	ug/L	97
119)	2,4,5-Trichlorotoluene	12.944	159	17629	3.67	ug/L	91
120)	2,3,6-Trichlorotoluene	13.005	159	17038m	3.73	ug/L	

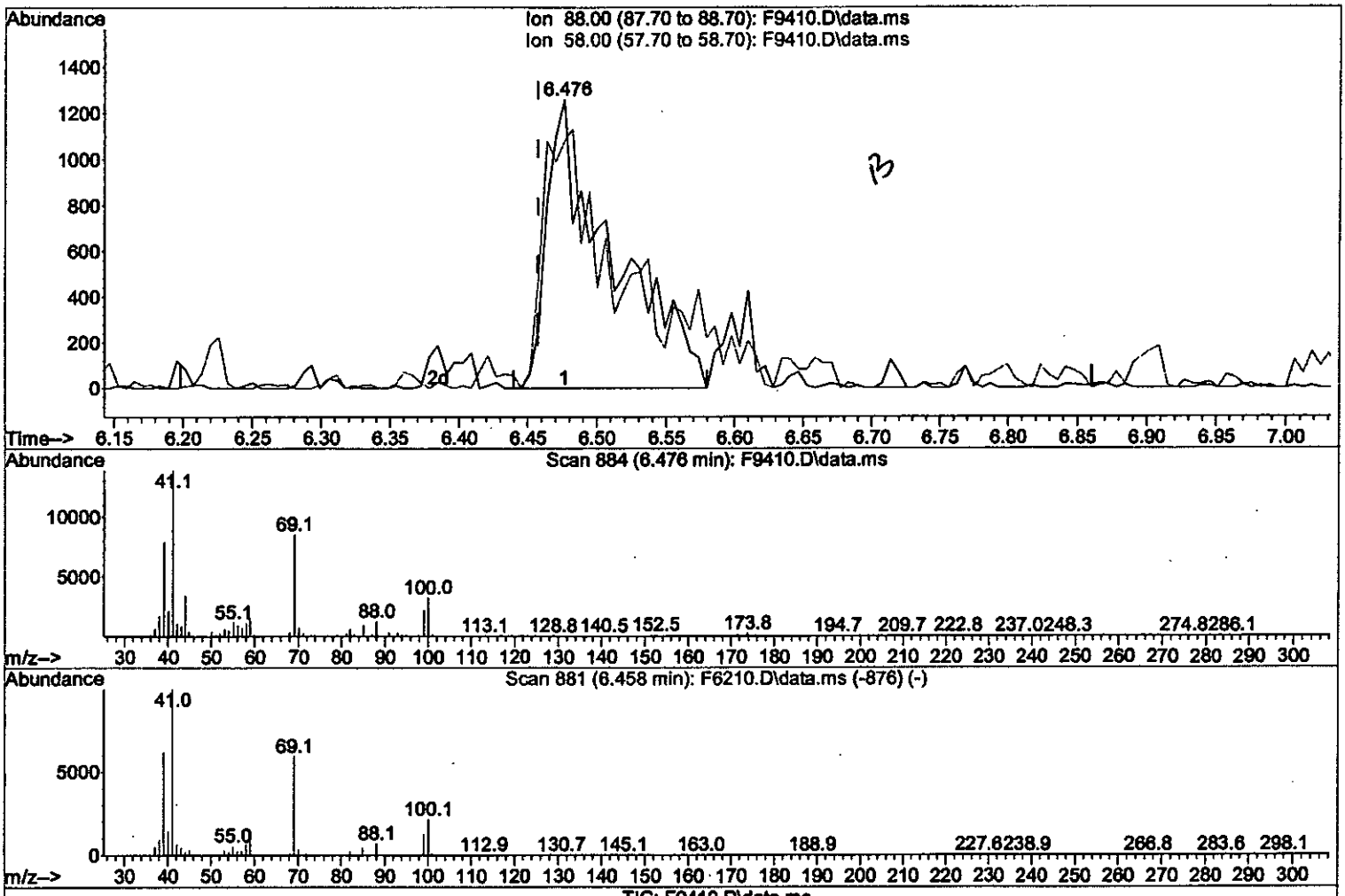
(#) = qualifier out of range (m) = manual integration (+) = signals summed

W061114.M Thu Jun 12 09:26:56 2014 MSVO10 Page: 3

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 18:08:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9410.D\data.ms

(58) 1,4-Dioxane

6.476min (+0.019) 92.40 ug/L

response 4091

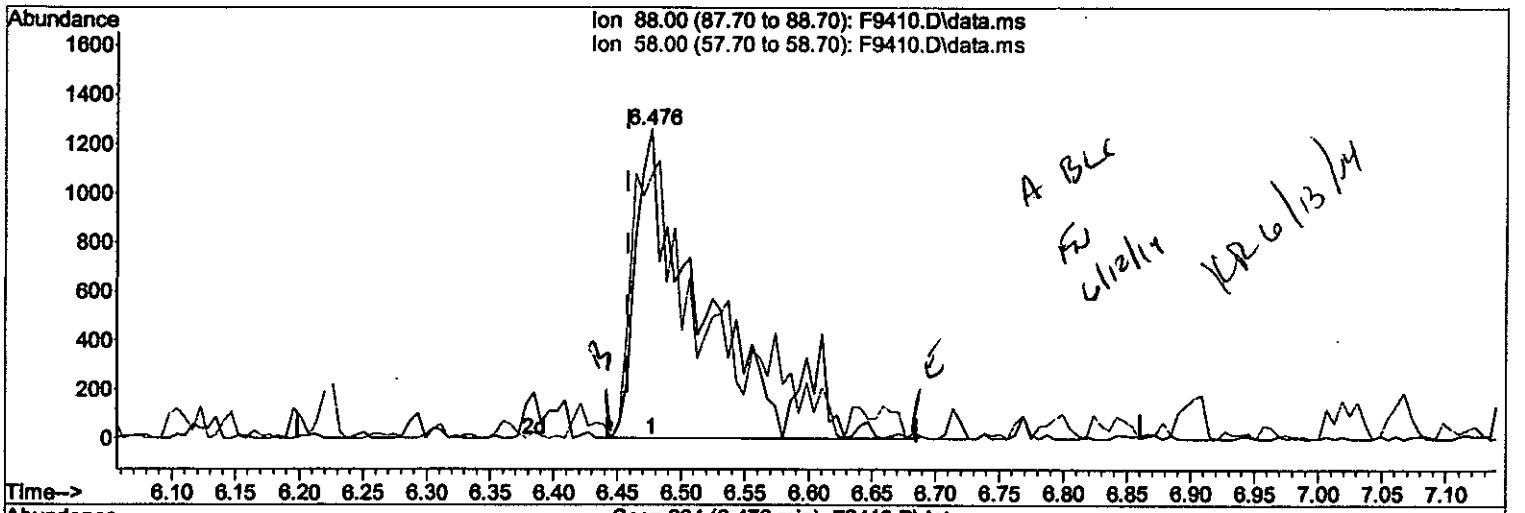
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	85.54
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:25:34 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 18:08:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9410.D\data.ms

(58) 1,4-Dioxane

6.476min (+0.019) 105.88 ug/L m

response 4688

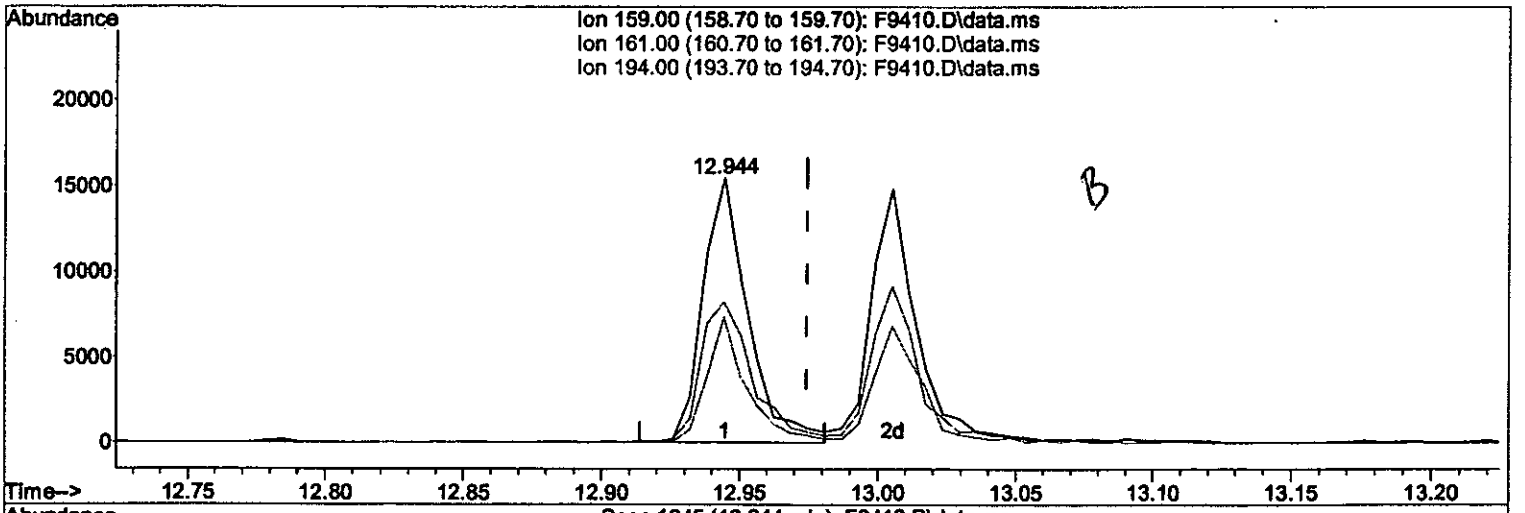
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	85.54
0.00	0.00	0.00
0.00	0.00	0.00

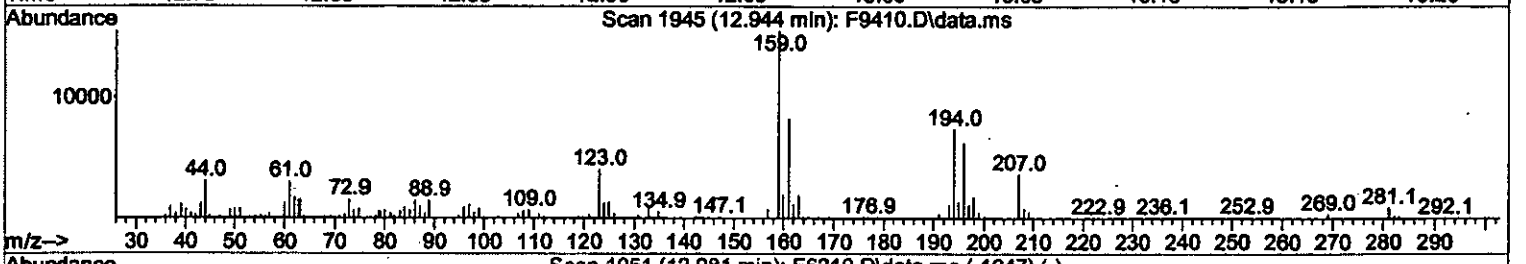
W061114.M Thu Jun 12 09:25:47 2014 MSVO10 Page: 1

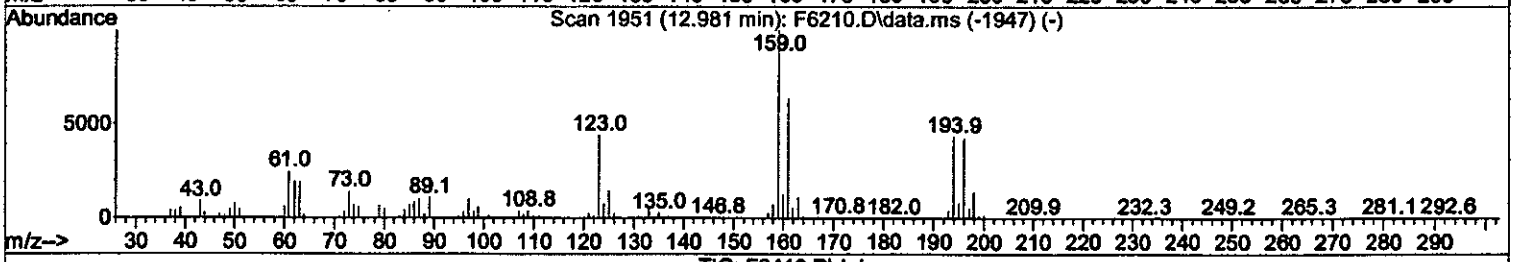
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 18:08:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9410.D\data.ms

(120) 2,3,6-Trichlorotoluene

12.944min (-0.030) 3.86 ug/L

response 17629

Ion	Exp%	Act%
159.00	100	100
161.00	61.90	53.12
194.00	48.10	47.44
0.00	0.00	0.00

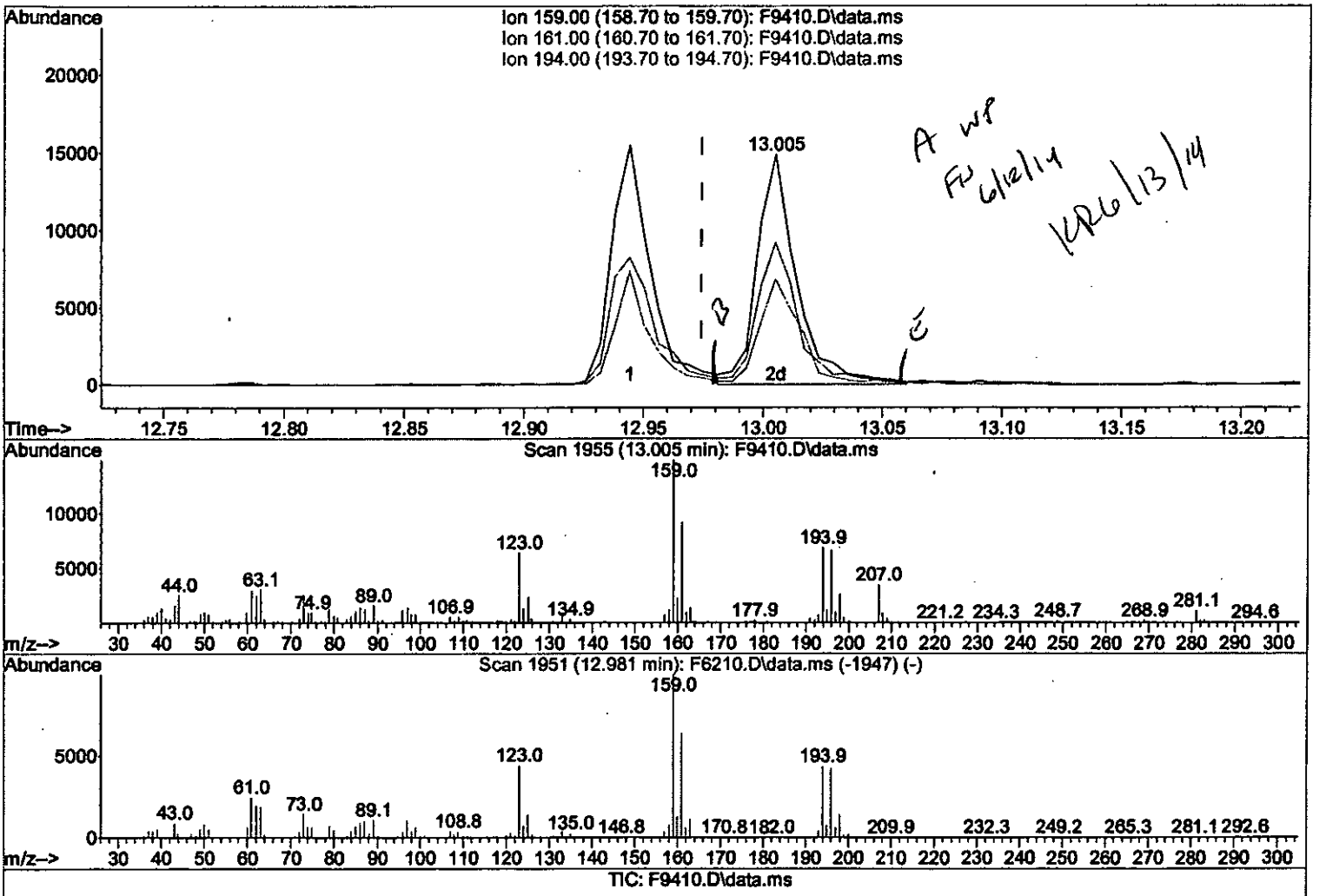
W061114.M Thu Jun 12 09:26:30 2014 MSVO10 Page: 1

00351

Quantitation Report (Edit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D Vial: 8
Acq On : 11 Jun 2014 5:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 18:08:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9410.D\data.ms

(120) 2,3,6-Trichlorotoluene

13.005min (+0.031) 3.73 ug/L m

response 17038

Ion	Exp%	Act%
159.00	100	100
161.00	61.90	61.72
194.00	48.10	45.92
0.00	0.00	0.00

W061114.M Thu Jun 12 09:26:38 2014 MSVO10 Page: 1

```
Sample    : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9410.D      Vial: 8
Acq On    : 11 Jun 2014    5:55 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 09:26:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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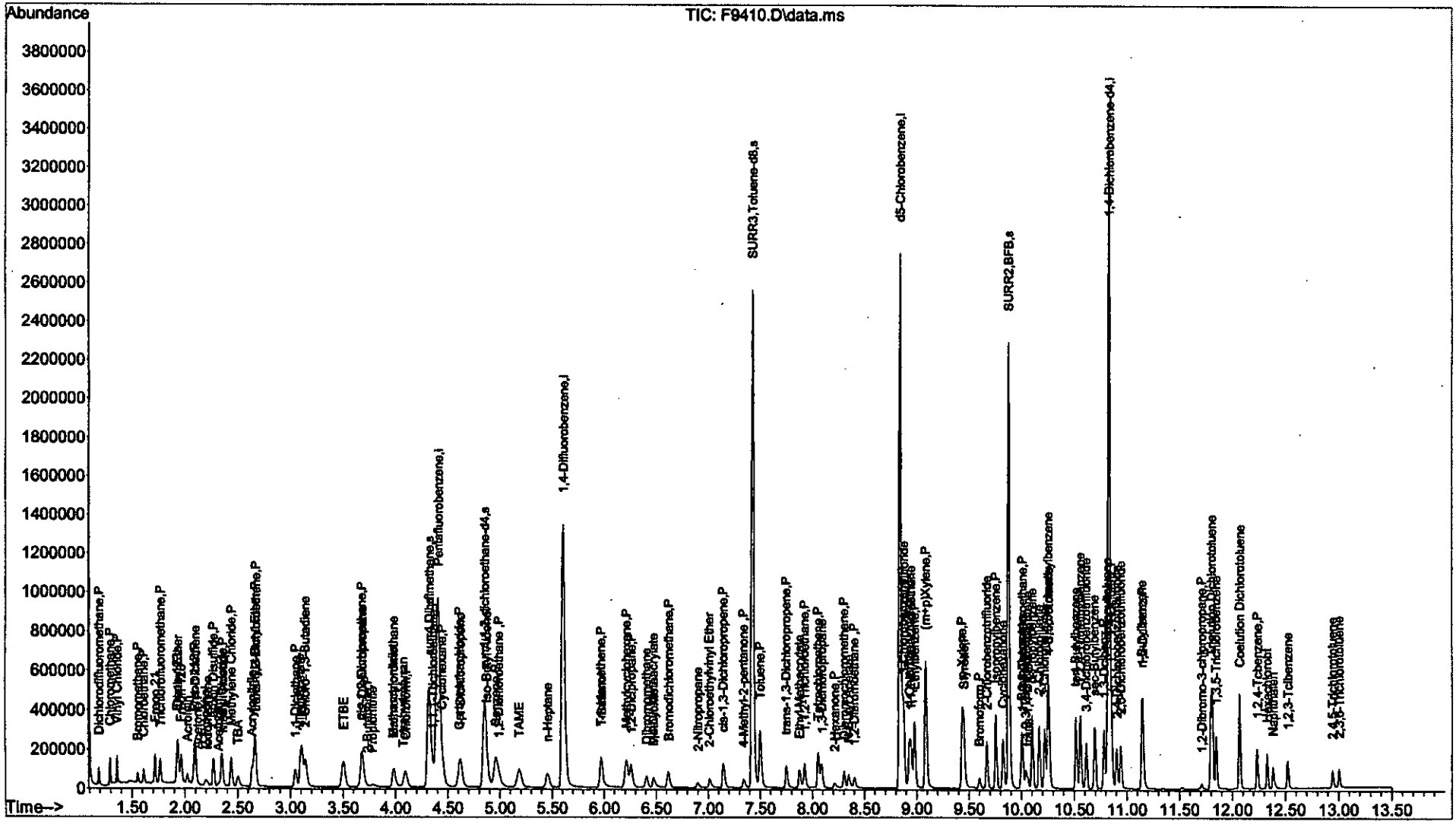


Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9411.D Vial: 9
Acq On : 11 Jun 2014 6:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:29:11 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

FN 6/12/14

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	954039	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1306550	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1169323	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	630045	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.318	113	388710	45.58 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 91.16%		
48) surr1,1,2-dichloroetha...	4.854	65	389586	43.42 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 86.84%		
65) SURR3,Toluene-d8	7.427	98	1494252	48.87 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.74%		
70) SURR2,BFB	9.878	95	590855	47.04 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.08%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.190	85	76264	7.27 ug/L	98
3) Chloromethane	1.294	50	100498	8.20 ug/L	99
4) Vinyl Chloride	1.361	62	98728	8.65 ug/L	98
5) Bromomethane	1.556	94	37159	11.19 ug/L	95
6) Chloroethane	1.611	64	54298	8.10 ug/L	99
7) Freon 21	1.721	67	165208	8.90 ug/L	100
8) Trichlorofluoromethane	1.770	101	101715	7.13 ug/L	95
9) Diethyl Ether	1.934	59	69094	9.97 ug/L	88
10) Freon 123a	1.928	67	103092	8.96 ug/L	91
11) Freon 123	1.965	83	108902	8.80 ug/L	99
12) Acrolein	2.020	56	53264	51.27 ug/L	97
13) 1,1-Diclethene	2.099	96	51351	7.73 ug/L	89
14) Freon 113	2.093	101	57934	7.23 ug/L	99
15) Acetone	2.123	43	22348	8.84 ug/L	96
16) 2-Propanol	2.196	45	71503	202.56 ug/L	89
17) Iodomethane	2.215	142	22816	5.03 ug/L	86
18) Carbon Disulfide	2.270	76	247729	10.16 ug/L	98
19) Acetonitrile	2.318	40	14828	47.98 ug/L	92
20) Allyl Chloride	2.349	76	41903	9.94 ug/L #	66
21) Methyl Acetate	2.355	43	46885	9.05 ug/L	95
22) Methylene Chloride	2.440	84	77897	9.00 ug/L	95
23) TBA	2.501	59	109259	205.96 ug/L	96
24) Acrylonitrile	2.629	53	111068	48.44 ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	194381	9.68 ug/L	92
26) trans-1,2-Dichloroethene	2.672	96	71508	8.41 ug/L	90
28) 1,1-Diclethane	3.050	63	152956	9.15 ug/L	94
29) Vinyl Acetate	3.093	86	11131	9.80 ug/L #	34
30) DIPE	3.111	45	320682	8.94 ug/L	93
31) 2-Chloro-1,3-Butadiene	3.141	53	151190	9.24 ug/L	85
32) ETBE	3.501	59	268498	9.63 ug/L	94
33) 2,2-Dichloropropane	3.678	77	103443	8.55 ug/L	97
34) cis-1,2-Dichloroethene	3.684	96	85093	8.82 ug/L	97
35) 2-Butanone	3.720	43	27190	8.12 ug/L	91
36) Propionitrile	3.775	54	34416	47.37 ug/L	88
37) Bromochloromethane	3.983	130	51697	9.14 ug/L #	85

W061114.M Thu Jun 12 09:31:15 2014 MSVO10

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9411.D Vial: 9
Acq On : 11 Jun 2014 6:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:29:11 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.977	67	24619	11.62 ug/L	95
39) Tetrahydrofuran	4.068	42	17406	9.01 ug/L	71
40) Chloroform	4.092	83	136960	8.63 ug/L	95
41) 1,1,1-Trichloroethane	4.354	97	109194	8.11 ug/L	93
42) TAME	5.184	73	203804	9.67 ug/L	98
44) Cyclohexane	4.446	41	93359	9.11 ug/L	87
46) Carbontetrachloride	4.617	121	29251	8.56 ug/L	87
47) 1,1-Dichloropropene	4.617	75	89034	8.95 ug/L	97
49) Benzene	4.958	78	315714	9.97 ug/L	96
50) 1,2-Dichloroethane	4.989	62	107521	8.96 ug/L	99
51) Iso-Butyl Alcohol	4.854	43	48191	210.06 ug/L	87
52) n-Heptane	5.458	43	80421	8.38 ug/L	91
53) 1-Butanol	5.970	56	55627	498.27 ug/L	92
54) Trichloroethene	5.970	130	81483	9.20 ug/L	95
55) Methylcyclohexane	6.220	55	108247	9.44 ug/L	86
56) 1,2-Diclpropane	6.257	63	89922	10.51 ug/L	96
57) Dibromomethane	6.403	93	41393	9.21 ug/L	99
58) 1,4-Dioxane	6.464	88	9538m	214.55 ug/L	
59) Methyl Methacrylate	6.470	69	36300	10.26 ug/L #	83
60) Bromodichloromethane	6.616	83	100644	9.53 ug/L	97
61) 2-Nitropropane	6.897	41	27710	8.68 ug/L	90
62) 2-Chloroethylvinyl Ether	7.006	63	42804	11.15 ug/L	89
63) cis-1,3-Dichloropropene	7.147	75	123243	10.80 ug/L	97
64) 4-Methyl-2-pentanone	7.336	43	66322	10.74 ug/L	95
66) Toluene	7.500	91	334235	9.84 ug/L	99
67) trans-1,3-Dichloropropene	7.750	75	98930	10.54 ug/L	96
68) Ethyl Methacrylate	7.872	69	84425	11.91 ug/L	82
69) 1,1,2-Trichloroethane	7.927	97	61125	10.00 ug/L	97
72) Tetrachloroethene	8.055	164	60736	8.81 ug/L	93
73) 2-Hexanone	8.207	43	43469	9.78 ug/L	94
74) 1,3-Dichloropropane	8.085	76	102701	10.18 ug/L	85
75) Dibromochloromethane	8.305	129	73336	9.82 ug/L	95
76) N-Butyl Acetate	8.341	43	117689	11.14 ug/L	99
77) 1,2-Dibromoethane	8.402	107	60765	10.17 ug/L	97
78) 3-Chlorobenzotrifluoride	8.878	180	109785	8.54 ug/L	98
79) Chlorobenzene	8.866	112	227439	9.94 ug/L	95
80) 4-Chlorobenzotrifluoride	8.927	180	106201	8.99 ug/L	96
81) 1,1,1,2-Tetrachloroethane	8.945	131	83272	10.27 ug/L	98
82) Ethylbenzene	8.982	106	109529	9.75 ug/L #	88
83) (m+p)Xylene	9.085	106	283885	20.89 ug/L	95
84) o-Xylene	9.433	106	143173	10.69 ug/L	97
85) Styrene	9.451	104	250587	11.18 ug/L	96
86) Bromoform	9.597	173	43533	9.84 ug/L	99
87) 2-Chlorobenzotrifluoride	9.671	180	112942	9.06 ug/L	96
88) Isopropylbenzene	9.756	105	333840	9.94 ug/L	99
89) Cyclohexanone	9.823	55	182269	222.20 ug/L	97
90) trans-1,4-Dichloro-2-B...	10.061	53	16887	8.98 ug/L #	79
92) 1,1,2,2-Tetrachloroethane	10.012	83	70273	9.75 ug/L	93
93) Bromobenzene	10.006	156	101710	10.64 ug/L #	87
94) 1,2,3-Trichloropropane	10.042	110	18429	10.17 ug/L	97
95) n-Propylbenzene	10.103	91	381441	10.00 ug/L	100
96) 2-Chlorotoluene	10.170	91	245824	10.36 ug/L	96

W061114.M Thu Jun 12 09:31:15 2014 MSVO10

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9411.D Vial: 9
Acq On : 11 Jun 2014 6:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

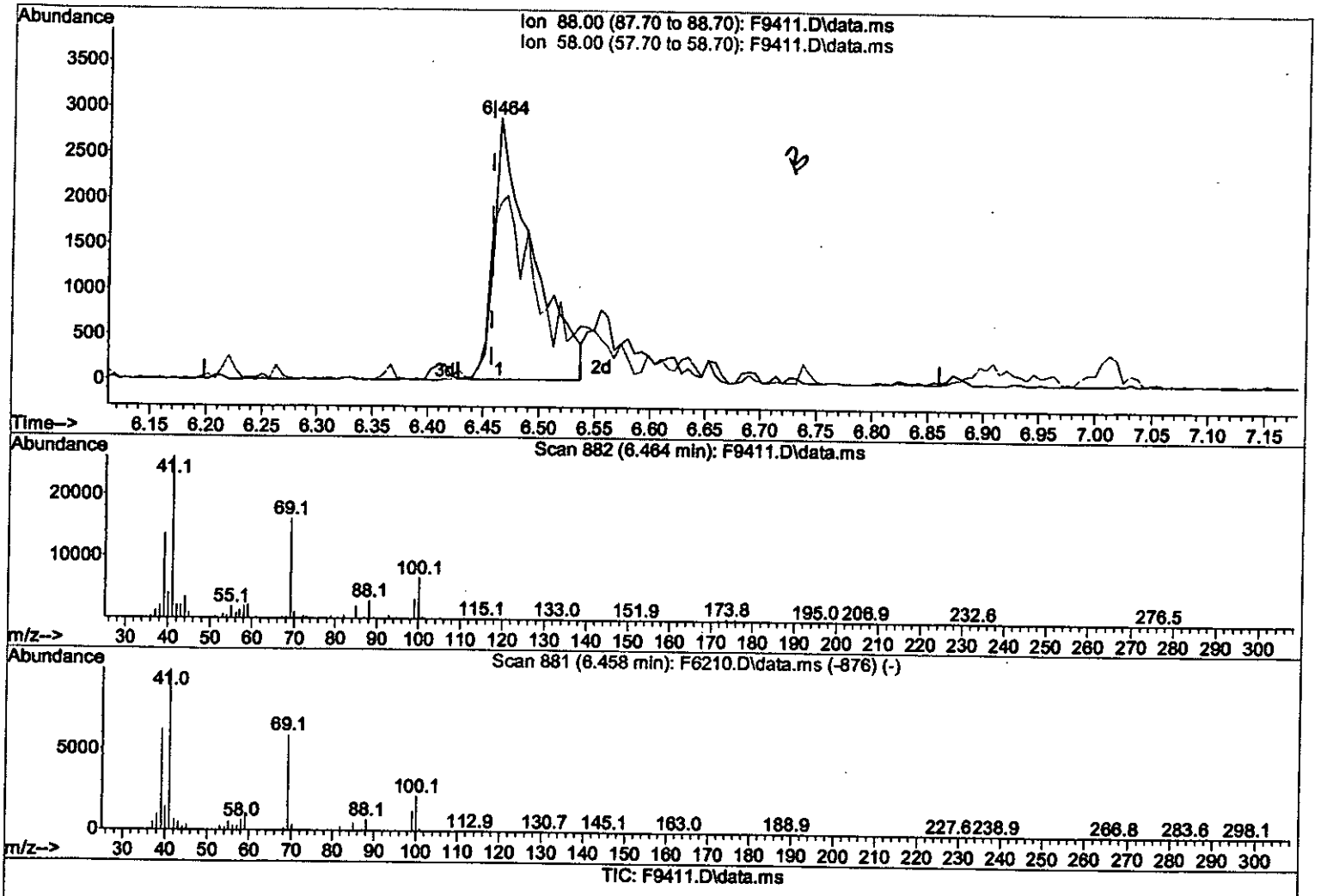
Quant Time: Jun 12 09:29:11 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97) 3-Chlorotoluene	10.219	91	248430	9.59 ug/L	99
98) 4-Chlorotoluene	10.262	91	301798	10.47 ug/L	95
99) 1,3,5-Trimethylbenzene	10.250	105	288696	10.62 ug/L	98
100) tert-Butylbenzene	10.518	119	228730	10.04 ug/L	97
101) 1,2,4-Trimethylbenzene	10.561	105	295766	10.70 ug/L	95
102) 3,4-Dichlorobenzotrifl...	10.615	214	80084	9.29 ug/L	96
103) sec-Butylbenzene	10.695	105	320351	10.20 ug/L	98
104) p-Isopropyltoluene	10.817	119	280073	10.38 ug/L	96
105) 1,3-Dclbenz	10.786	146	180574	10.10 ug/L	98
106) 1,4-Dclbenz	10.853	146	185144	9.83 ug/L	99
107) 2,4-Dichlorobenzotrifl...	10.902	214	72481	9.27 ug/L	96
108) 2,5-Dichlorobenzotrifl...	10.945	214	82310	9.07 ug/L	98
109) n-Butylbenzene	11.146	91	241238	10.27 ug/L	98
110) 1,2-Dclbenz	11.152	146	168584	10.08 ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.713	157	10534	8.47 ug/L	83
112) Trielution Dichlorotol...	11.804	125	397795	29.59 ug/L	93
113) 1,3,5-Trichlorobenzene	11.847	180	111615	9.37 ug/L	96
114) Coelution Dichlorotoluene	12.066	125	273777	19.57 ug/L	98
115) 1,2,4-Tcbenzene	12.231	180	92749	9.65 ug/L	94
116) Hexachlorobt	12.329	225	41298	9.61 ug/L	99
117) Naphthalen	12.383	128	142704	8.77 ug/L	98
118) 1,2,3-Tclbenzene	12.518	180	62874	8.22 ug/L	98
119) 2,4,5-Trichlorotoluene	12.938	159	32627	6.78 ug/L	96
120) 2,3,6-Trichlorotoluene	12.999	159	33703	7.37 ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 10 PRE STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9411.D Vial: 9
Acq On : 11 Jun 2014 6:25 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 18:39:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9411.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.007) 154.53 ug/L

response 6870

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	67.35
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:29:06 2014 MSVO10 Page: 1

```
Sample   : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9411.D      Vial: 9
Acq On    : 11 Jun 2014    6:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 18:39:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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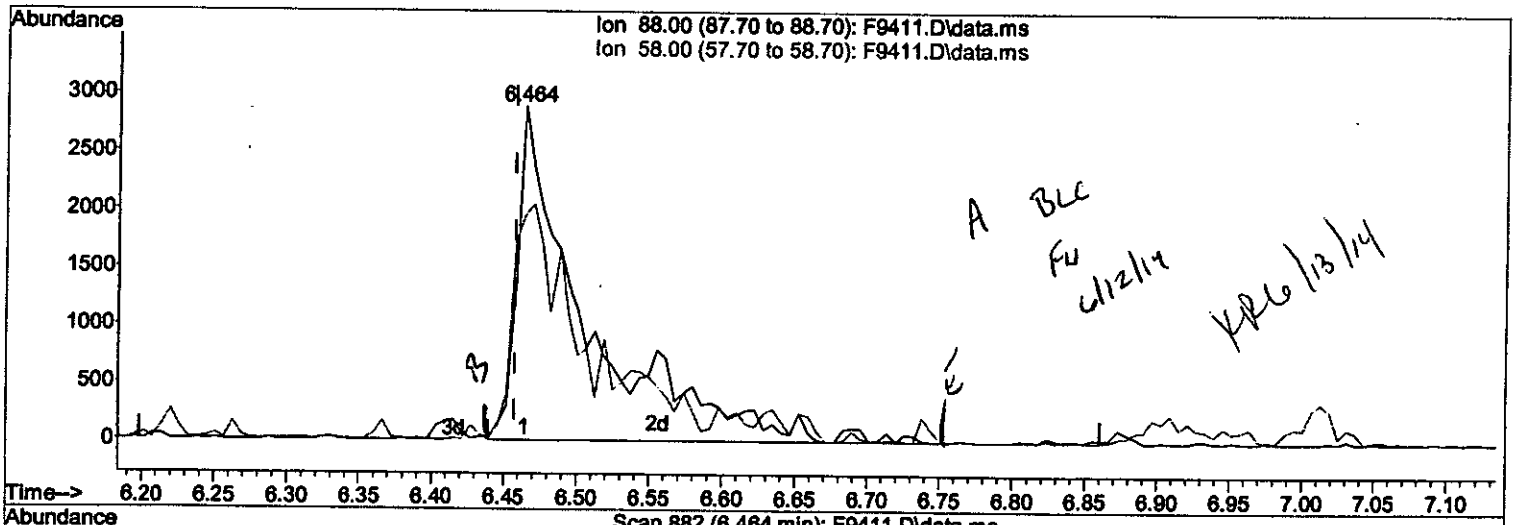

TIC: F9411.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.007) 214.55 ug/L m

response 9538

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	67.35
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:29:21 2014 MSVO10 Page: 1

```
Sample    : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9411.D      Vial: 9
Acq On    : 11 Jun 2014    6:25 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 09:29:11 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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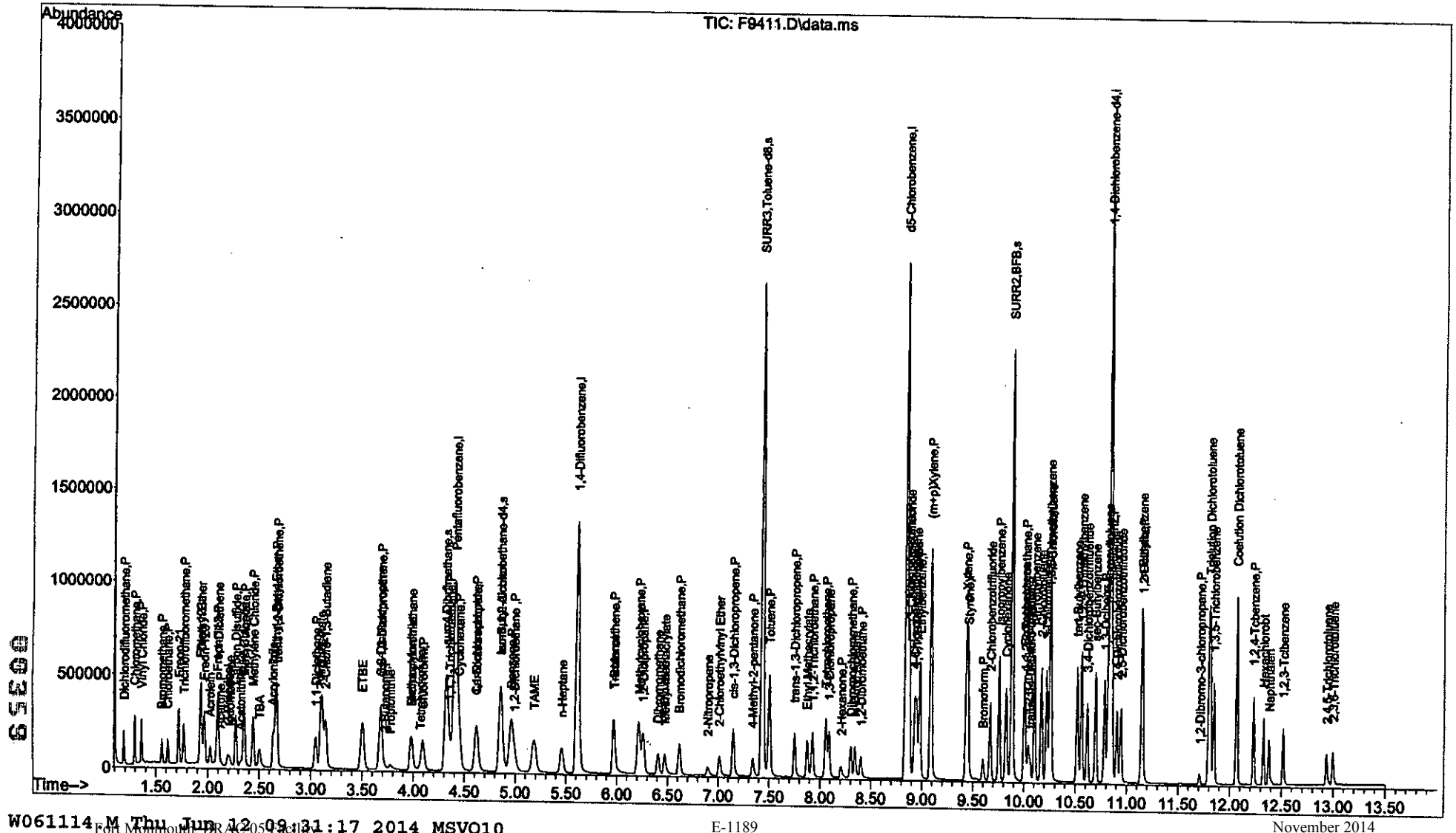


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W061114.M Thu Jun 12 09:31:17 2014 MSVO10                    Page: 4
```

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9412.D Vial: 10
Acq On : 11 Jun 2014 6:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:50:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

FV 6/12/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	899650	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1229455	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1095432	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	616514	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	359493	44.80	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 89.60%			
48) surr1,1,2-dichloroetha...	4.854	65	360100	42.65	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 85.30%			
65) SURR3,Toluene-d8	7.427	98	1418003	49.28	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.56%			
70) SURR2,BFB	9.878	95	557298	47.16	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.32%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	458189	46.33	ug/L	98
3) Chloromethane	1.294	50	552431	47.82	ug/L	98
4) Vinyl Chloride	1.361	62	577992	53.71	ug/L	99
5) Bromomethane	1.556	94	209111	66.79	ug/L	98
6) Chloroethane	1.611	64	293717	46.46	ug/L	94
7) Freon 21	1.721	67	809367	46.25	ug/L	99
8) Trichlorofluoromethane	1.769	101	599951	44.59	ug/L	99
9) Diethyl Ether	1.934	59	338463	51.82	ug/L	90
10) Freon 123a	1.928	67	515920	47.56	ug/L	94
11) Freon 123	1.965	83	556074	47.67	ug/L	97
12) Acrolein	2.019	56	260502	265.93	ug/L	98
13) 1,1-Diclethene	2.099	96	291650	46.56	ug/L #	88
14) Freon 113	2.093	101	341753	45.24	ug/L	100
15) Acetone	2.123	43	103309	43.35	ug/L	99
16) 2-Propanol	2.196	45	378169	1136.09	ug/L	94
17) Iodomethane	2.215	142	287960	67.28	ug/L	97
18) Carbon Disulfide	2.269	76	1291574	56.15	ug/L	99
19) Acetonitrile	2.318	40	65293	224.03	ug/L	97
20) Allyl Chloride	2.349	76	230455	57.98	ug/L #	66
21) Methyl Acetate	2.355	43	235280	48.17	ug/L	94
22) Methylene Chloride	2.440	84	386663	47.39	ug/L	89
23) TBA	2.501	59	606133	1211.69	ug/L	99
24) Acrylonitrile	2.629	53	591540	273.58	ug/L	98
25) Methyl-t-Butyl Ether	2.660	73	977325	51.62	ug/L	93
26) trans-1,2-Dichloroethene	2.666	96	389314	48.57	ug/L	88
28) 1,1-Diclethane	3.050	63	787343	49.95	ug/L	98
29) Vinyl Acetate	3.086	86	59678	55.70	ug/L #	92
30) DIPE	3.105	45	1582446	46.78	ug/L	92
31) 2-Chloro-1,3-Butadiene	3.141	53	786399	50.99	ug/L	92
32) ETBE	3.501	59	1335262	50.76	ug/L	94
33) 2,2-Dichloropropane	3.684	77	559676	49.08	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	437172	48.03	ug/L	87
35) 2-Butanone	3.702	43	150753	47.76	ug/L	94
36) Propionitrile	3.769	54	205012	299.24	ug/L	93
37) Bromochloromethane	3.982	130	260032	48.78	ug/L	92

W061114.M Thu Jun 12 09:51:00 2014 MSVO10

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9412.D Vial: 10
Acq On : 11 Jun 2014 6:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:50:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.970	67	115693	57.90 ug/L #	81
39) Tetrahydrofuran	4.062	42	81742	44.85 ug/L	88
40) Chloroform	4.092	83	691660	46.19 ug/L	96
41) 1,1,1-Trichloroethane	4.354	97	608202	47.90 ug/L	98
42) TAME	5.183	73	1012247	50.94 ug/L	97
44) Cyclohexane	4.446	41	475966	49.34 ug/L	90
46) Carbontetrachloride	4.616	121	168827	52.52 ug/L	95
47) 1,1-Dichloropropene	4.616	75	500399	53.48 ug/L	97
49) Benzene	4.958	78	1619610	54.34 ug/L	96
50) 1,2-Dichloroethane	4.988	62	532883	47.18 ug/L	96
51) Iso-Butyl Alcohol	4.848	43	275281	1275.14 ug/L	93
52) n-Heptane	5.452	43	453454	50.20 ug/L	90
53) 1-Butanol	5.946	56	353423	3364.21 ug/L	96
54) Trichloroethene	5.964	130	435385	52.25 ug/L	98
55) Methylcyclohexane	6.214	55	575228	53.32 ug/L	87
56) 1,2-Diclpropane	6.256	63	460050	57.12 ug/L	99
57) Dibromomethane	6.403	93	216474	51.19 ug/L	94
58) 1,4-Dioxane	6.464	88	47929m	1145.71 ug/L	
59) Methyl Methacrylate	6.464	69	201020	60.36 ug/L #	81
60) Bromodichloromethane	6.616	83	509786	51.29 ug/L	97
61) 2-Nitropropane	6.890	41	155356	51.73 ug/L	87
62) 2-Chloroethylvinyl Ether	7.006	63	224245	62.09 ug/L	95
63) cis-1,3-Dichloropropene	7.140	75	631016	58.77 ug/L	97
64) 4-Methyl-2-pentanone	7.335	43	321808	55.36 ug/L	99
66) Toluene	7.500	91	1767821	55.31 ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	523964	59.32 ug/L	95
68) Ethyl Methacrylate	7.872	69	434807	65.19 ug/L	84
69) 1,1,2-Trichloroethane	7.921	97	305740	53.16 ug/L	99
72) Tetrachloroethene	8.055	164	355888	55.10 ug/L	97
73) 2-Hexanone	8.195	43	231242	55.53 ug/L	99
74) 1,3-Dichloropropane	8.085	76	524197	55.48 ug/L	89
75) Dibromochloromethane	8.299	129	390548	55.84 ug/L	98
76) N-Butyl Acetate	8.335	43	604735	61.10 ug/L	97
77) 1,2-Dibromoethane	8.396	107	311071	55.59 ug/L	98
78) 3-Chlorobenzotrifluoride	8.878	180	669438	55.61 ug/L	99
79) Chlorobenzene	8.866	112	1175809	54.85 ug/L	99
80) 4-Chlorobenzotrifluoride	8.927	180	606603	54.82 ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	431768	56.81 ug/L	97
82) Ethylbenzene	8.975	106	613622	58.30 ug/L	98
83) (m+p)Xylene	9.085	106	1535265	120.62 ug/L	98
84) o-Xylene	9.433	106	751651	59.93 ug/L	98
85) Styrene	9.445	104	1319669	62.83 ug/L	97
86) Bromoform	9.597	173	232678	56.12 ug/L	98
87) 2-Chlorobenzotrifluoride	9.670	180	656336	56.20 ug/L	95
88) Isopropylbenzene	9.756	105	1907828	60.64 ug/L	98
89) Cyclohexanone	9.823	55	932953	1214.07 ug/L	97
90) trans-1,4-Dichloro-2-B...	10.054	53	101479	57.61 ug/L	97
92) 1,1,2,2-Tetrachloroethane	10.012	83	367966	52.20 ug/L	96
93) Bromobenzene	10.000	156	524494	56.05 ug/L	98
94) 1,2,3-Trichloropropane	10.036	110	92382	52.11 ug/L	99
95) n-Propylbenzene	10.103	91	2238236	59.98 ug/L	99
96) 2-Chlorotoluene	10.170	91	1354109	58.34 ug/L	95

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9412.D Vial: 10
Acq On : 11 Jun 2014 6:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

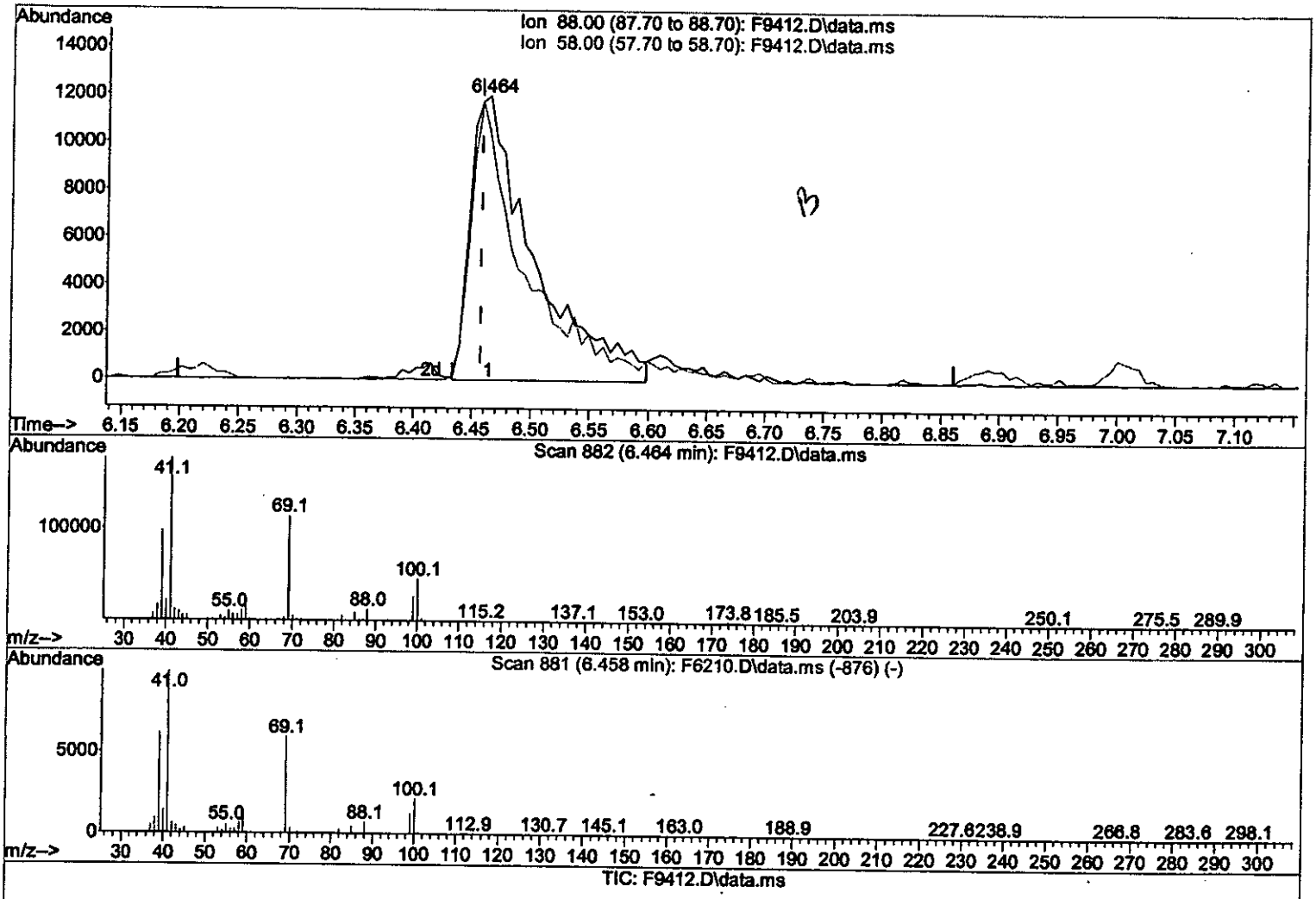
Quant Time: Jun 12 09:50:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1379201	54.38	ug/L	99
98)	4-Chlorotoluene	10.256	91	1607762	57.02	ug/L	98
99)	1,3,5-Trimethylbenzene	10.250	105	1604382	60.29	ug/L	98
100)	tert-Butylbenzene	10.518	119	1314546	58.95	ug/L	100
101)	1,2,4-Trimethylbenzene	10.554	105	1652348	61.07	ug/L	99
102)	3,4-Dichlorobenzotrifl...	10.615	214	474023	56.19	ug/L	98
103)	sec-Butylbenzene	10.695	105	1864778	60.67	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1629842	61.71	ug/L	98
105)	1,3-Dclbenz	10.780	146	978341	55.93	ug/L	99
106)	1,4-Dclbenz	10.853	146	988988	53.67	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	427672	55.89	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.945	214	483373	54.43	ug/L	98
109)	n-Butylbenzene	11.140	91	1394312	60.66	ug/L	99
110)	1,2-Dclbenz	11.152	146	891253	54.49	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	60420	49.66	ug/L	97
112)	Trielution Dichlorotol...	11.804	125	2262406	171.99	ug/L	96
113)	1,3,5-Trichlorobenzene	11.847	180	617391	52.99	ug/L	98
114)	Coelution Dichlorotoluene	12.066	125	1535012	112.16	ug/L	97
115)	1,2,4-Tcbenzene	12.231	180	499739	53.13	ug/L	94
116)	Hexachlorobt	12.328	225	223425	53.15	ug/L	99
117)	Naphthalen	12.377	128	800093	50.27	ug/L	98
118)	1,2,3-Tclbenzene	12.517	180	343033	45.83	ug/L	98
119)	2,4,5-Trichlorotoluene	12.932	159	178769	37.98	ug/L	92
120)	2,3,6-Trichlorotoluene	12.999	159	171219	38.24	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9412.D Vial: 10
Acq On : 11 Jun 2014 6:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 19:09:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration



TIC: F9412.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.007) 1062.84 ug/L

response 44462

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	87.50
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:50:03 2014 MSVO10 Page: 1

```
Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9412.D      Vial: 10
Acq On    : 11 Jun 2014    6:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 19:09:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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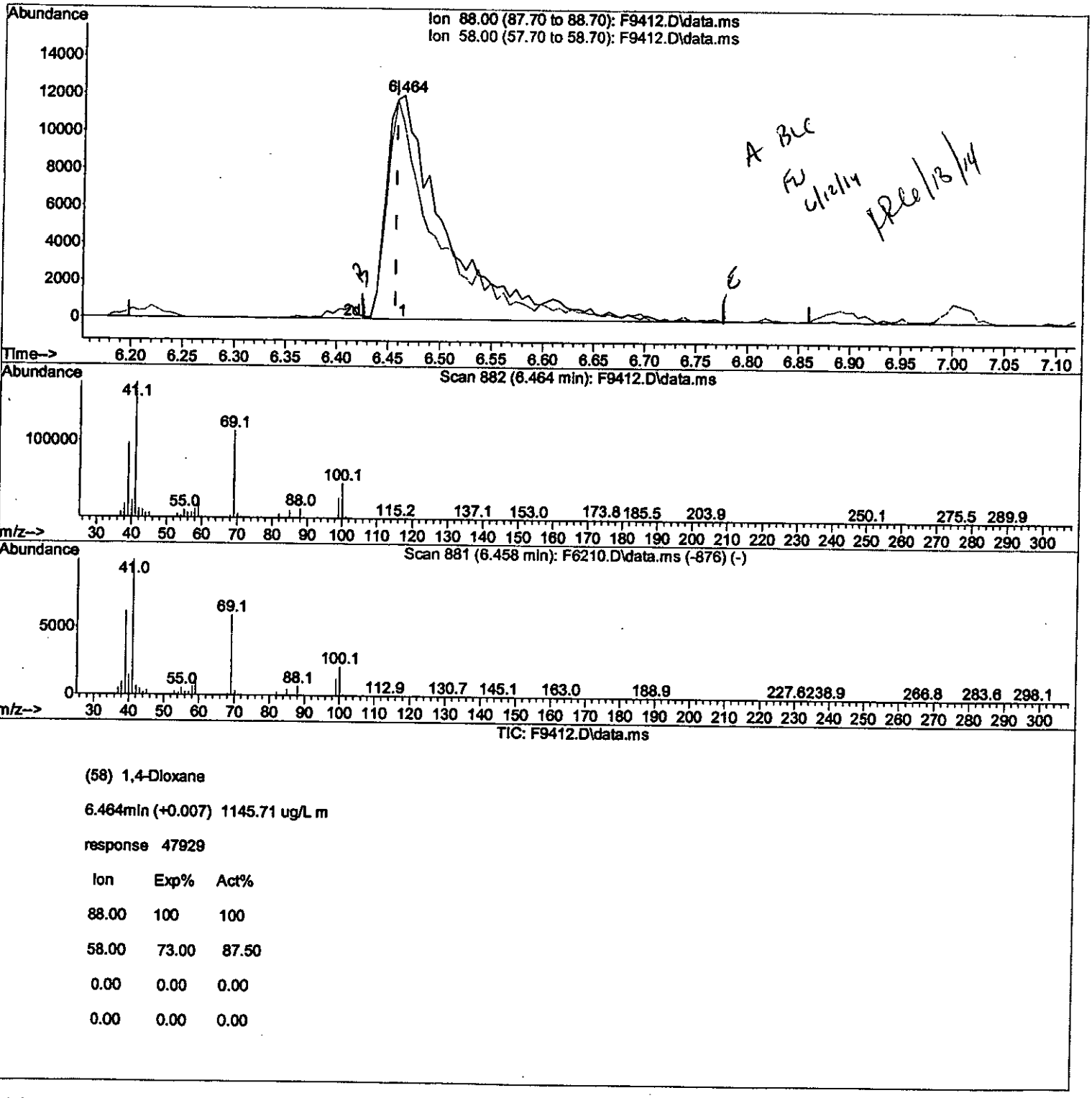

(58) 1,4-Dioxane

6.464min (+0.007) 1145.71 ug/L m

response 47929

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	87.50
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:50:13 2014 MSVO10

```
Sample    : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9412.D      Vial: 10
Acq On    : 11 Jun 2014    6:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 09:50:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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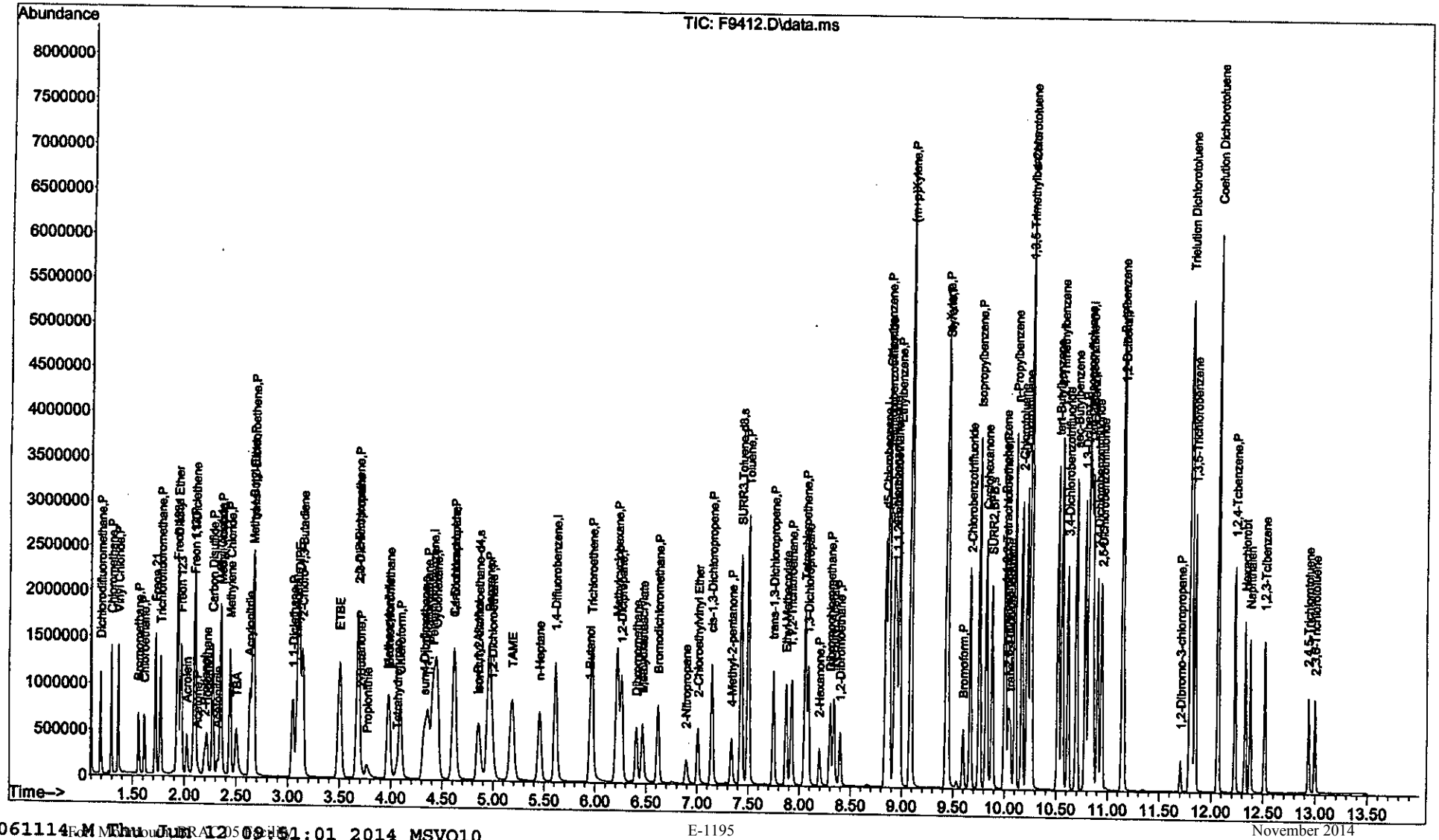

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9413.D Vial: 11
Acq On : 11 Jun 2014 7:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:52:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

FW 6/12/14

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	937437	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1286258	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1172829	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	652828	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.324	113	389145	46.35 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.70%		
48) surr1,1,2-dichloroetha...	4.848	65	380858	43.12 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 86.24%		
65) SURR3,Toluene-d8	7.427	98	1507015	50.06 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.12%		
70) SURR2,BFB	9.878	95	585384	47.34 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.68%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.190	85	920390	89.31 ug/L	98
3) Chloromethane	1.294	50	1134977	94.28 ug/L	98
4) Vinyl Chloride	1.361	62	1182170	105.42 ug/L	98
5) Bromomethane	1.556	94	467865	143.41 ug/L	99
6) Chloroethane	1.611	64	598117	90.79 ug/L	97
7) Freon 21	1.721	67	1621479	88.93 ug/L	99
8) Trichlorofluoromethane	1.770	101	1215898	86.73 ug/L	98
9) Diethyl Ether	1.934	59	675700	99.28 ug/L	91
10) Freon 123a	1.928	67	1027981	90.94 ug/L	94
11) Freon 123	1.965	83	1103299	90.77 ug/L	99
12) Acrolein	2.019	56	515331	504.87 ug/L	97
13) 1,1-Diclethene	2.099	96	613338	93.98 ug/L	92
14) Freon 113	2.093	101	695120	88.30 ug/L	99
15) Acetone	2.117	43	189712	76.39 ug/L	96
16) 2-Propanol	2.190	45	727696	2098.02 ug/L	90
17) Iodomethane	2.215	142	909183	203.87 ug/L	97
18) Carbon Disulfide	2.269	76	2639275	110.12 ug/L	99
19) Acetonitrile	2.312	40	142580	469.48 ug/L	97
20) Allyl Chloride	2.349	76	474542	114.58 ug/L #	74
21) Methyl Acetate	2.355	43	470213	92.40 ug/L	95
22) Methylene Chloride	2.440	84	799784	94.07 ug/L	93
23) TBA	2.495	59	1148247	2202.88 ug/L	99
24) Acrylonitrile	2.629	53	1192177	529.15 ug/L	98
25) Methyl-t-Butyl Ether	2.660	73	1976244	100.17 ug/L	94
26) trans-1,2-Dichloroethene	2.666	96	803805	96.25 ug/L	90
28) 1,1-Diclethane	3.044	63	1651340	100.55 ug/L	98
29) Vinyl Acetate	3.086	86	123080	110.24 ug/L #	79
30) DIPE	3.105	45	3357948	95.27 ug/L	98
31) 2-Chloro-1,3-Butadiene	3.141	53	1603394	99.78 ug/L	90
32) ETBE	3.501	59	2811723	102.59 ug/L	94
33) 2,2-Dichloropropane	3.678	77	1158044	97.45 ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	907347	95.67 ug/L	86
35) 2-Butanone	3.690	43	294156	89.44 ug/L	98
36) Propionitrile	3.763	54	415363	581.83 ug/L	94
37) Bromochloromethane	3.976	130	518818	93.40 ug/L	89

W061114.M Thu Jun 12 09:53:05 2014 MSVO10

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9413.D Vial: 11
Acq On : 11 Jun 2014 7:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:52:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.964	67	237739	114.19 ug/L #	75
39) Tetrahydrofuran	4.050	42	167933	88.43 ug/L	85
40) Chloroform	4.092	83	1456265	93.34 ug/L	95
41) 1,1,1-Trichloroethane	4.354	97	1257470	95.04 ug/L	96
42) TAME	5.183	73	2138062	103.26 ug/L	99
44) Cyclohexane	4.446	41	926195	91.77 ug/L	91
46) Carbontetrachloride	4.617	121	356175	105.90 ug/L	86
47) 1,1-Dichloropropene	4.617	75	1039579	106.20 ug/L	99
49) Benzene	4.958	78	3408771	109.31 ug/L	97
50) 1,2-Dichloroethane	4.988	62	1090854	92.31 ug/L	96
51) Iso-Butyl Alcohol	4.848	43	528853	2341.53 ug/L	97
52) n-Heptane	5.452	43	894783	94.69 ug/L	91
53) 1-Butanol	5.946	56	746364	6790.84 ug/L	98
54) Trichloroethene	5.964	130	912930	104.72 ug/L	98
55) Methylcyclohexane	6.214	55	1129046	100.04 ug/L	87
56) 1,2-Diclpropane	6.256	63	956127	113.47 ug/L	99
57) Dibromomethane	6.403	93	442499	100.02 ug/L	94
58) 1,4-Dioxane	6.458	88	90943m	2077.93 ug/L	
59) Methyl Methacrylate	6.464	69	415064	119.12 ug/L #	85
60) Bromodichloromethane	6.616	83	1083640	104.21 ug/L	97
61) 2-Nitropropane	6.890	41	306442	97.52 ug/L	87
62) 2-Chloroethylvinyl Ether	7.006	63	473263	125.25 ug/L	96
63) cis-1,3-Dichloropropene	7.140	75	1336644	119.00 ug/L	98
64) 4-Methyl-2-pentanone	7.329	43	655247	107.74 ug/L	98
66) Toluene	7.500	91	3698615	110.61 ug/L	100
67) trans-1,3-Dichloropropene	7.744	75	1107048	119.81 ug/L	96
68) Ethyl Methacrylate	7.872	69	888182	127.29 ug/L	87
69) 1,1,2-Trichloroethane	7.921	97	631008	104.87 ug/L	98
72) Tetrachloroethene	8.055	164	741535	107.22 ug/L	97
73) 2-Hexanone	8.195	43	467073	104.76 ug/L	97
74) 1,3-Dichloropropane	8.085	76	1076389	106.40 ug/L	91
75) Dibromochloromethane	8.299	129	823480	109.96 ug/L	99
76) N-Butyl Acetate	8.335	43	1199328	113.17 ug/L	98
77) 1,2-Dibromoethane	8.396	107	647096	108.02 ug/L	100
78) 3-Chlorobenzotrifluoride	8.878	180	1404161	108.95 ug/L	98
79) Chlorobenzene	8.866	112	2433110	106.02 ug/L	98
80) 4-Chlorobenzotrifluoride	8.927	180	1288266	108.74 ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	909763	111.81 ug/L	97
82) Ethylbenzene	8.975	106	1296870	115.09 ug/L	91
83) (m+p)Xylene	9.085	106	3194911	234.45 ug/L	92
84) o-Xylene	9.433	106	1575179	117.31 ug/L	95
85) Styrene	9.445	104	2751916	122.38 ug/L	97
86) Bromoform	9.597	173	494540	111.41 ug/L	97
87) 2-Chlorobenzotrifluoride	9.670	180	1382942	110.60 ug/L	98
88) Isopropylbenzene	9.756	105	3918114	116.32 ug/L	100
89) Cyclohexanone	9.823	55	1752997	2130.66 ug/L	97
90) trans-1,4-Dichloro-2-B...	10.054	53	217042	115.09 ug/L	99
92) 1,1,2,2-Tetrachloroethane	10.006	83	732552	98.13 ug/L	97
93) Bromobenzene	10.000	156	1067434	107.72 ug/L	97
94) 1,2,3-Trichloropropane	10.042	110	189022	100.69 ug/L	96
95) n-Propylbenzene	10.103	91	4540971	114.92 ug/L	99
96) 2-Chlorotoluene	10.170	91	2786542	113.38 ug/L	95

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9413.D Vial: 11
Acq On : 11 Jun 2014 7:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:52:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	2868491	106.82 ug/L	98
98)	4-Chlorotoluene	10.262	91	3300182	110.53 ug/L	92
99)	1,3,5-Trimethylbenzene	10.250	105	3287169	116.66 ug/L	98
100)	tert-Butylbenzene	10.518	119	2714034	114.94 ug/L	99
101)	1,2,4-Trimethylbenzene	10.560	105	3371531	117.68 ug/L	95
102)	3,4-Dichlorobenzotrifl...	10.615	214	988804	110.69 ug/L	99
103)	sec-Butylbenzene	10.701	105	3779443	116.12 ug/L	98
104)	p-Isopropyltoluene	10.817	119	3314053	118.51 ug/L	97
105)	1,3-Dclbenz	10.780	146	2010434	108.55 ug/L	99
106)	1,4-Dclbenz	10.853	146	2039020	104.49 ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	881395	108.77 ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.945	214	1015075	107.94 ug/L	97
109)	n-Butylbenzene	11.140	91	2834916	116.48 ug/L	98
110)	1,2-Dclbenz	11.152	146	1826623	105.46 ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	119752	92.95 ug/L	90
112)	Trielution Dichlorotol...	11.798	125	4614863	331.31 ug/L	92
113)	1,3,5-Trichlorobenzene	11.847	180	1270763	103.00 ug/L	97
114)	Coelution Dichlorotoluene	12.066	125	3091373	213.31 ug/L	97
115)	1,2,4-Tcbenzene	12.225	180	1001701	100.58 ug/L	96
116)	Hexachlorobt	12.328	225	435401	97.81 ug/L	99
117)	Naphthalen	12.371	128	1597202	94.78 ug/L	98
118)	1,2,3-Tclbenzene	12.511	180	683851	86.29 ug/L	97
119)	2,4,5-Trichlorotoluene	12.926	159	359484	72.12 ug/L	94
120)	2,3,6-Trichlorotoluene	12.987	159	342575	72.25 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

W061114.M Thu Jun 12 09:53:05 2014 MSVO10

```
Sample   : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9413.D      Vial: 11
Acq On    : 11 Jun 2014    7:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 19:39:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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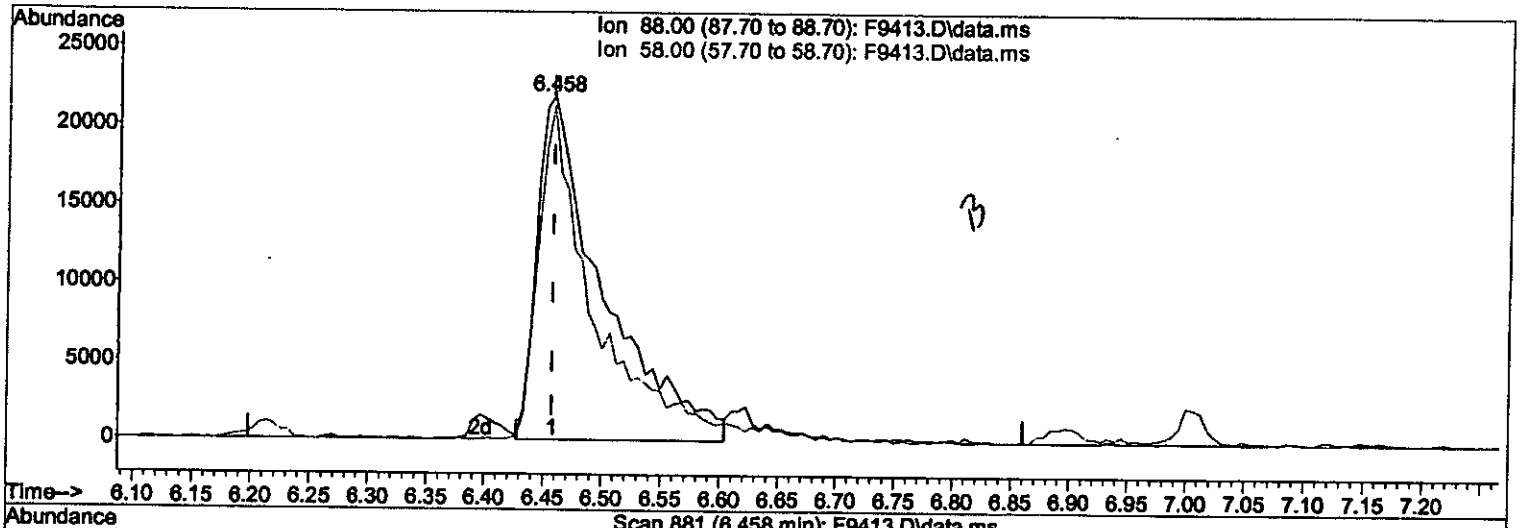

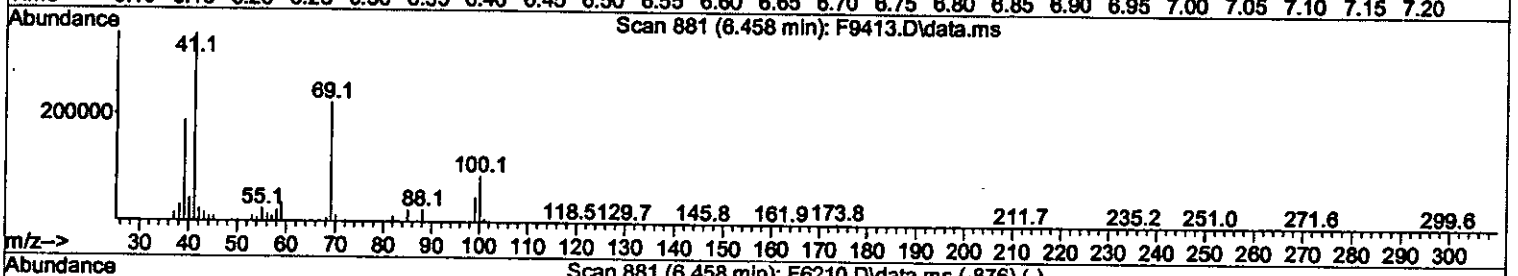

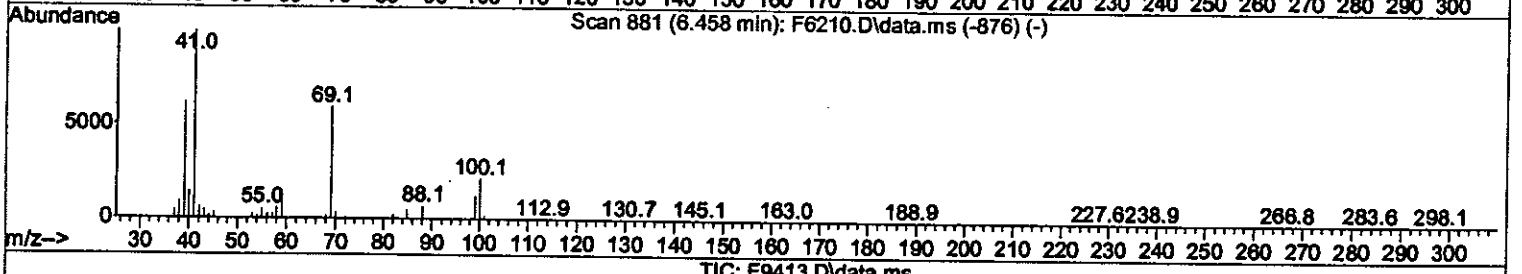

TIC: F9413.D\data.ms

(58) 1,4-Dioxane

6.458min (+0.001) 1948.72 ug/L

response 85288

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	97.19#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:52:10 2014 MSVO10

Page: 1

00369

```
Sample   : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9413.D      Vial: 11
Acq On    : 11 Jun 2014    7:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 19:39:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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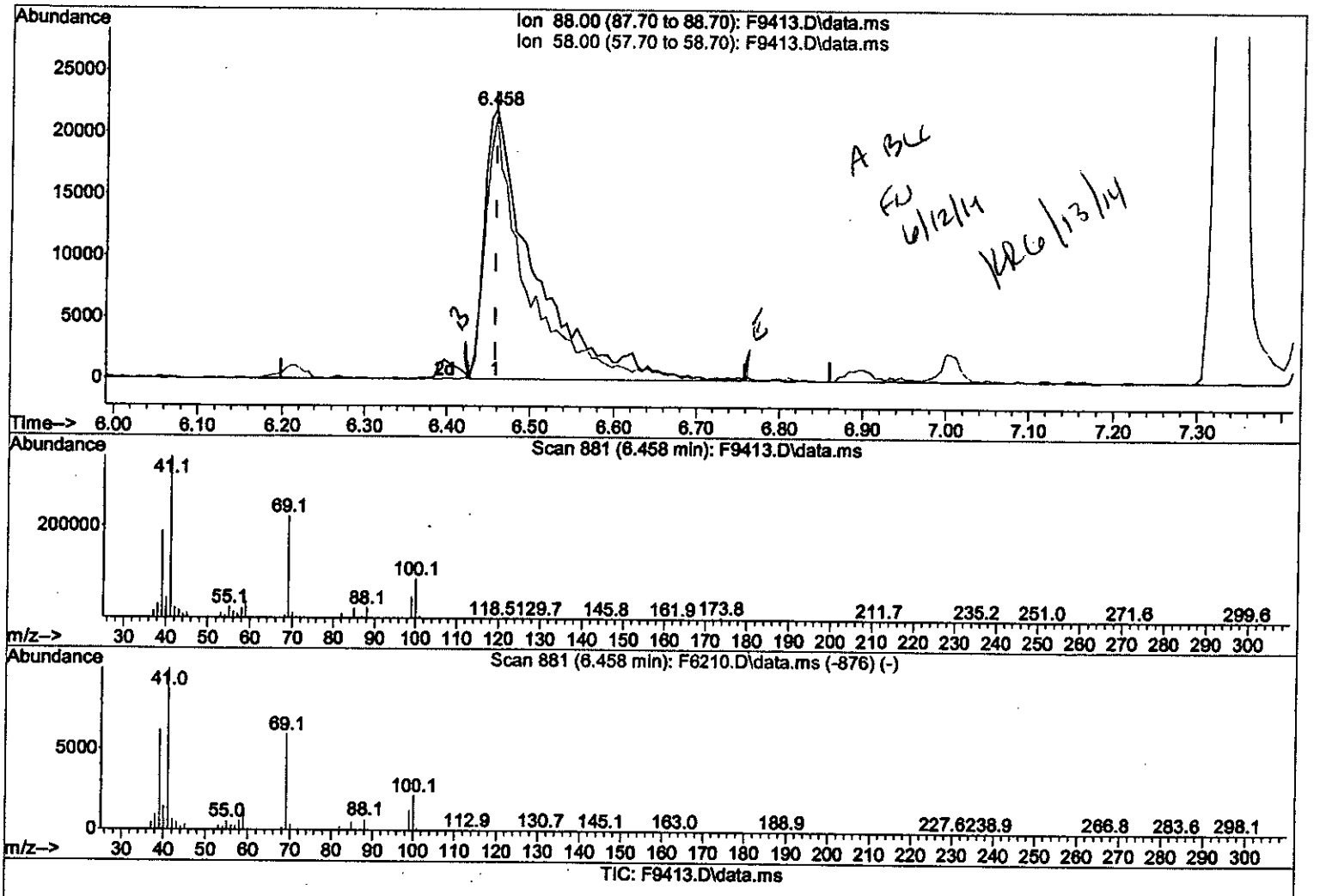

TIC: F9413.D\data.ms

(58) 1,4-Dioxane

6.458min (+0.001) 2077.93 ug/L m

response 90943

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	97.19#
0.00	0.00	0.00
0.00	0.00	0.00

```
W061114.M Thu Jun 12 09:52:23 2014 MSVO10                    Page: 1
```

```
Sample    : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9413.D      Vial: 11
Acq On    : 11 Jun 2014    7:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 09:52:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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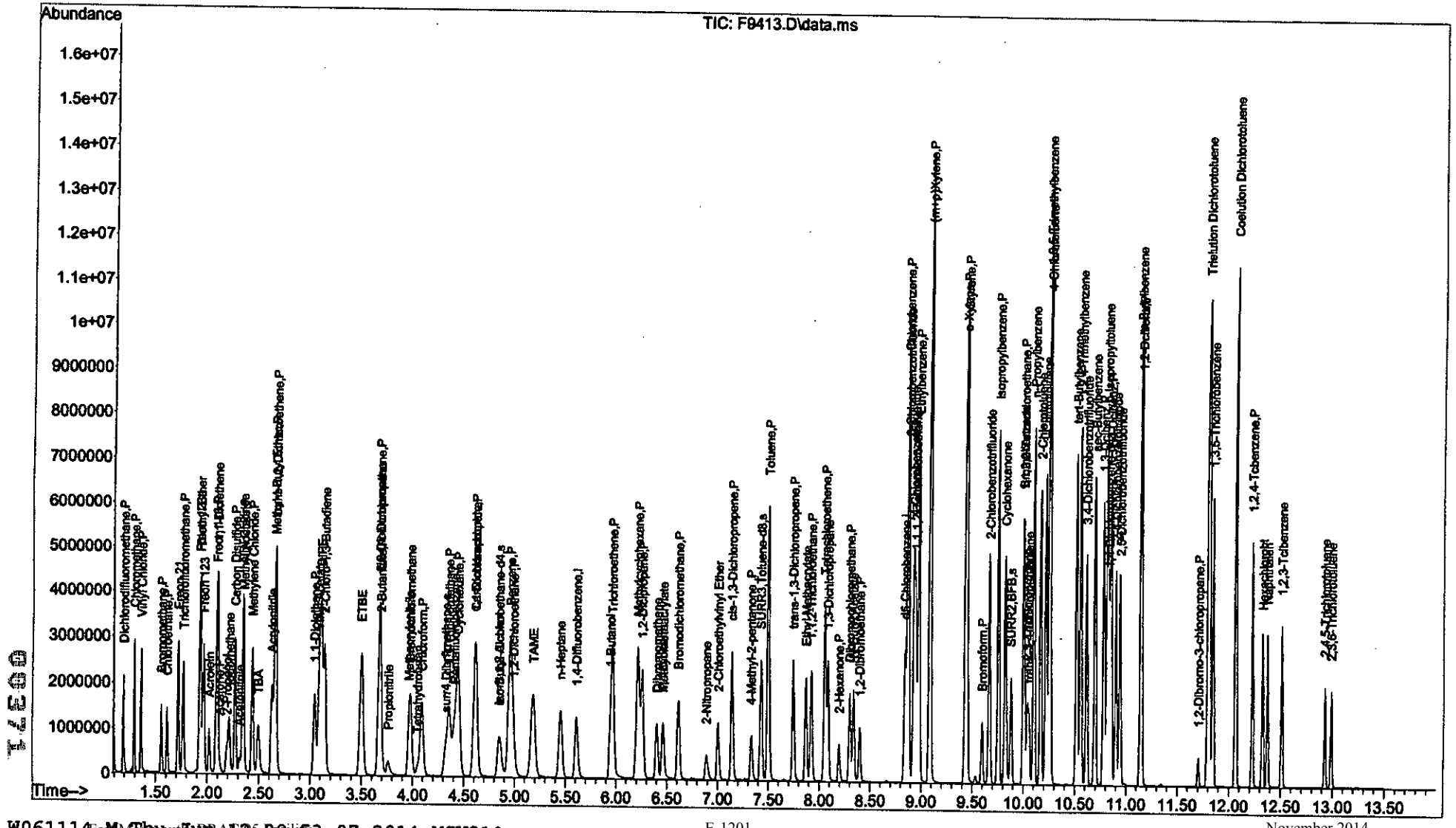

W061114.M Thu Jun 12 09:53:07 2014 MSVO10 Page: 4

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9414.D Vial: 12
Acq On : 11 Jun 2014 7:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FJ 6/12/14

Quant Time: Jun 11 20:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	925132	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1281614	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1140367	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	641068	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.324	113	380479	45.49 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 90.98%		
48) surr1,1,2-dichloroetha...	4.854	65	366711	41.67 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 83.34%		
65) SURR3,Toluene-d8	7.427	98	1457203	48.58 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.16%		
70) SURR2,BFB	9.878	95	576566	46.80 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.60%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.191	85	1363151	134.03 ug/L	99
3) Chloromethane	1.294	50	1670709	140.62 ug/L	96
4) Vinyl Chloride	1.361	62	1745489	157.72 ug/L	99
5) Bromomethane	1.556	94	756370	234.92 ug/L	98
6) Chloroethane	1.611	64	881511	135.59 ug/L	97
7) Freon 21	1.721	67	2388742	132.75 ug/L	99
8) Trichlorofluoromethane	1.770	101	1820047	131.54 ug/L	99
9) Diethyl Ether	1.934	59	999523	148.81 ug/L	91
10) Freon 123a	1.928	67	1554362	139.34 ug/L	95
11) Freon 123	1.965	83	1664744	138.78 ug/L	98
12) Acrolein	2.020	56	755567	750.08 ug/L	98
13) 1,1-Diclethene	2.099	96	911401	141.50 ug/L	92
14) Freon 113	2.093	101	1052903	135.53 ug/L	99
15) Acetone	2.117	43	265096	108.16 ug/L	99
16) 2-Propanol	2.190	45	1064346	3109.43 ug/L	93
17) Iodomethane	2.215	142	1453521	330.27 ug/L	97
18) Carbon Disulfide	2.270	76	3901012	164.92 ug/L	99
19) Acetonitrile	2.318	40	209018	697.41 ug/L	99
20) Allyl Chloride	2.349	76	681344	166.70 ug/L #	79
21) Methyl Acetate	2.355	43	679169	135.23 ug/L	94
22) Methylene Chloride	2.440	84	1173050	139.80 ug/L	95
23) TBA	2.501	59	1701549	3307.79 ug/L	97
24) Acrylonitrile	2.629	53	1750878	787.47 ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	2891750	148.52 ug/L	94
26) trans-1,2-Dichloroethene	2.666	96	1188193	144.17 ug/L	89
28) 1,1-Diclethane	3.044	63	2403221	148.28 ug/L	99
29) Vinyl Acetate	3.087	86	185062	167.96 ug/L #	95
30) DIPE	3.105	45	4943891	142.14 ug/L	98
31) 2-Chloro-1,3-Butadiene	3.141	53	2363820	149.05 ug/L	91
32) ETBE	3.501	59	4164190	153.95 ug/L	94
33) 2,2-Dichloropropane	3.678	77	1685485	143.72 ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	1342755	143.46 ug/L	87
35) 2-Butanone	3.690	43	430638	132.68 ug/L	96
36) Propionitrile	3.763	54	602045	854.55 ug/L	93
37) Bromochloromethane	3.983	130	751365	137.06 ug/L	94

W061114.M Thu Jun 12 09:54:52 2014 MSVO10

Page: 1

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9414.D Vial: 12
Acq On : 11 Jun 2014 7:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 20:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.964	67	342556	166.72 ug/L #	76
39) Tetrahydrofuran	4.050	42	244166	130.28 ug/L	86
40) Chloroform	4.092	83	2141409	139.08 ug/L	97
41) 1,1,1-Trichloroethane	4.361	97	1872729	143.42 ug/L	98
42) TAME	5.184	73	3109039	152.16 ug/L	98
44) Cyclohexane	4.446	41	1401872	139.40 ug/L	92
46) Carbontetrachloride	4.617	121	532150	158.80 ug/L	87
47) 1,1-Dichloropropene	4.617	75	1553673	159.30 ug/L	99
49) Benzene	4.958	78	5005282	161.09 ug/L	97
50) 1,2-Dichloroethane	4.989	62	1579230	134.12 ug/L	96
51) Iso-Butyl Alcohol	4.854	43	787335	3498.61 ug/L	93
52) n-Heptane	5.452	43	1346036	142.96 ug/L	92
53) 1-Butanol	5.946	56	1111522	10149.90 ug/L	97
54) Trichloroethene	5.964	130	1356839	156.20 ug/L	97
55) Methylcyclohexane	6.214	55	1713455	152.37 ug/L	87
56) 1,2-Diclpropane	6.257	63	1401570	166.93 ug/L	99
57) Dibromomethane	6.403	93	638292	144.79 ug/L	92
58) 1,4-Dioxane	6.452	88	139678	3203.03 ug/L	89
59) Methyl Methacrylate	6.464	69	596547	171.83 ug/L #	81
60) Bromodichloromethane	6.616	83	1598210	154.25 ug/L	98
61) 2-Nitropropane	6.891	41	451355	144.16 ug/L	94
62) 2-Chloroethylvinyl Ether	7.006	63	672852	178.72 ug/L	95
63) cis-1,3-Dichloropropene	7.141	75	1917500	171.33 ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	955861	157.74 ug/L	99
66) Toluene	7.500	91	5322822	159.76 ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	1588917	172.58 ug/L	96
68) Ethyl Methacrylate	7.866	69	1295653	186.36 ug/L	82
69) 1,1,2-Trichloroethane	7.921	97	906322	151.17 ug/L	99
72) Tetrachloroethene	8.055	164	1090706	162.20 ug/L	96
73) 2-Hexanone	8.195	43	674362	155.56 ug/L	98
74) 1,3-Dichloropropane	8.086	76	1546548	157.23 ug/L	90
75) Dibromochloromethane	8.299	129	1195372	164.17 ug/L	99
76) N-Butyl Acetate	8.335	43	1733924	168.28 ug/L	98
77) 1,2-Dibromoethane	8.396	107	926779	159.10 ug/L	99
78) 3-Chlorobenzotrifluoride	8.878	180	2054353	163.94 ug/L	98
79) Chlorobenzene	8.866	112	3528421	158.12 ug/L	100
80) 4-Chlorobenzotrifluoride	8.927	180	1872635	162.56 ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	1337823	169.10 ug/L	98
82) Ethylbenzene	8.982	106	1895208	172.98 ug/L #	85
83) (m+p)Xylene	9.085	106	4634661	349.79 ug/L #	81
84) o-Xylene	9.433	106	2322846	177.91 ug/L	93
85) Styrene	9.445	104	4030326	184.33 ug/L	97
86) Bromoform	9.597	173	744096	172.40 ug/L	96
87) 2-Chlorobenzotrifluoride	9.671	180	2048355	168.48 ug/L	97
88) Isopropylbenzene	9.756	105	5736105	175.14 ug/L	97
89) Cyclohexanone	9.823	55	2524055	3155.17 ug/L	98
90) trans-1,4-Dichloro-2-B...	10.055	53	318570	173.73 ug/L	99
92) 1,1,2,2-Tetrachloroethane	10.012	83	1088662	148.51 ug/L	96
93) Bromobenzene	10.000	156	1597016	164.13 ug/L	98
94) 1,2,3-Trichloropropane	10.042	110	278357	151.00 ug/L	96
95) n-Propylbenzene	10.103	91	6585799	169.73 ug/L	95
96) 2-Chlorotoluene	10.171	91	4184218	173.37 ug/L	96

W061114.M Thu Jun 12 09:54:52 2014 MSVO10

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9414.D Vial: 12
Acq On : 11 Jun 2014 7:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 20:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	4230251	160.42 ug/L	98
98)	4-Chlorotoluene	10.262	91	4887944	166.71 ug/L	92
99)	1,3,5-Trimethylbenzene	10.250	105	4940733	178.57 ug/L	97
100)	tert-Butylbenzene	10.518	119	4141378	178.61 ug/L	99
101)	1,2,4-Trimethylbenzene	10.561	105	5034835	178.97 ug/L	93
102)	3,4-Dichlorobenzotrifl...	10.616	214	1504420	171.51 ug/L	99
103)	sec-Butylbenzene	10.701	105	5710553	178.67 ug/L	97
104)	p-Isopropyltoluene	10.817	119	5008253	182.38 ug/L	98
105)	1,3-Dclbenz	10.780	146	3047698	167.57 ug/L	98
106)	1,4-Dclbenz	10.853	146	3066488	160.03 ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	1356375	170.46 ug/L	100
108)	2,5-Dichlorobenzotrifl...	10.945	214	1559131	168.83 ug/L	97
109)	n-Butylbenzene	11.140	91	4357185	182.31 ug/L	97
110)	1,2-Dclbenz	11.152	146	2734032	160.74 ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	182668	144.38 ug/L	93
112)	Trielution Dichlorotol...	11.804	125	6810303	497.89 ug/L	94
113)	1,3,5-Trichlorobenzene	11.847	180	1912402	157.85 ug/L	96
114)	Coelution Dichlorotoluene	12.066	125	4519305	317.56 ug/L	96
115)	1,2,4-Tcbenzene	12.225	180	1530760	156.52 ug/L	97
116)	Hexachlorobt	12.329	225	693027	158.54 ug/L	99
117)	Naphthalen	12.371	128	2420155	146.25 ug/L	99
118)	1,2,3-Tclbenzene	12.512	180	1043594	134.10 ug/L	96
119)	2,4,5-Trichlorotoluene	12.926	159	576926	117.87 ug/L	97
120)	2,3,6-Trichlorotoluene	12.987	159	551343	118.42 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Sample    : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9414.D      Vial: 12
Acq On    : 11 Jun 2014    7:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 20:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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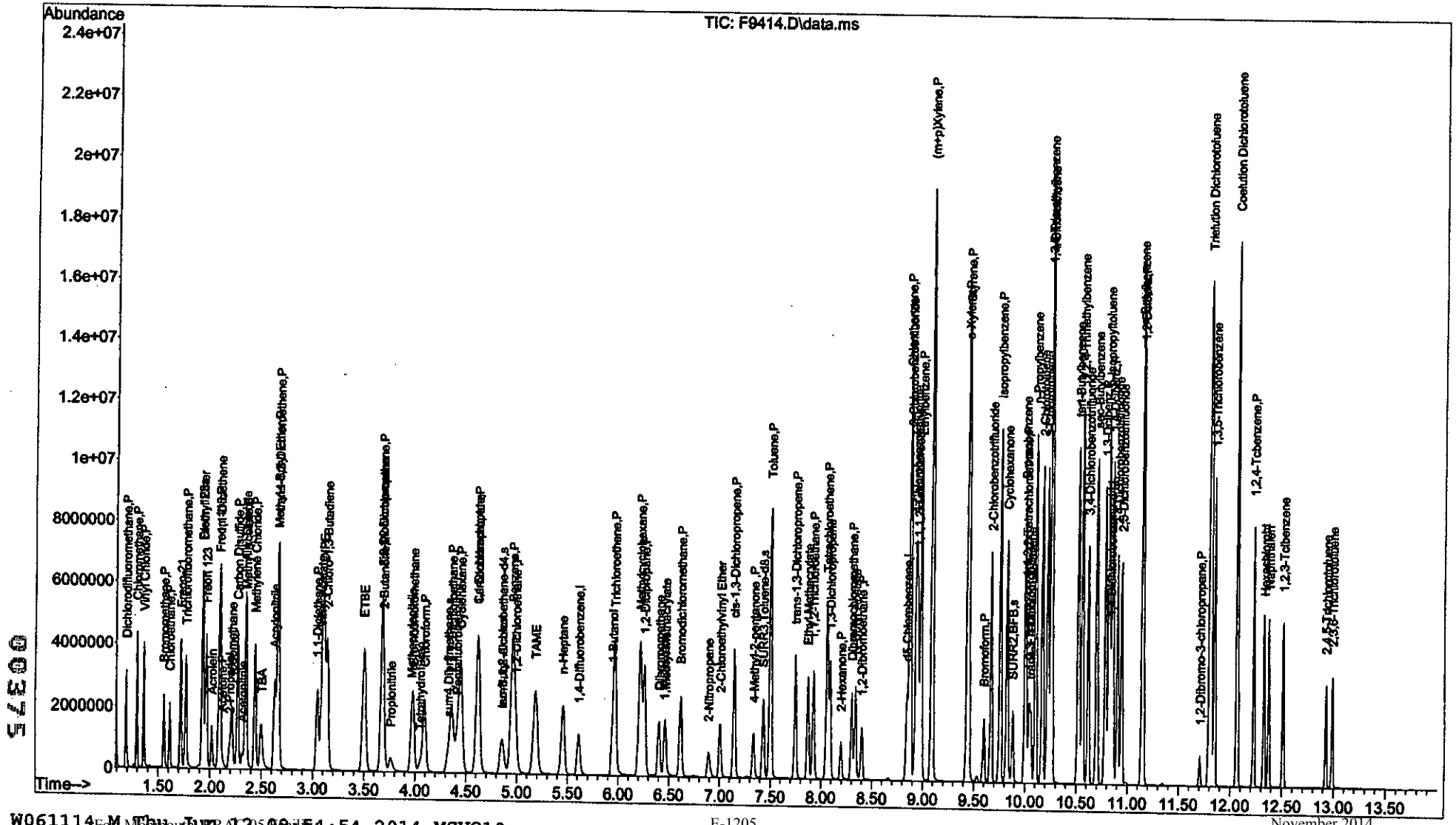

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9415.D Vial: 13
Acq On : 11 Jun 2014 8:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FW 6/12/14

Quant Time: Jun 12 09:55:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	891955	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1207280	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1089790	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	607237	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.318	113	362940	46.06 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 92.12%		
48) surr1,1,2-dichloroetha...	4.854	65	355902	42.93 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 85.86%		
65) SURR3,Toluene-d8	7.427	98	1397980	49.48 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.96%		
70) SURR2,BFB	9.878	95	552116	47.57 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.14%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.190	85	1826928	186.31 ug/L	99
3) Chloromethane	1.294	50	2238071	195.39 ug/L	95
4) Vinyl Chloride	1.361	62	2305320	216.06 ug/L	99
5) Bromomethane	1.556	94	1075536	346.47 ug/L	99
6) Chloroethane	1.611	64	1181766	188.54 ug/L	95
7) Freon 21	1.715	67	3244415	187.01 ug/L	98
8) Trichlorofluoromethane	1.769	101	2415447	181.07 ug/L	99
9) Diethyl Ether	1.934	59	1323095	204.31 ug/L	92
10) Freon 123a	1.928	67	2103859	195.61 ug/L	95
11) Freon 123	1.965	83	2248571	194.42 ug/L	99
12) Acrolein	2.019	56	997966	1027.57 ug/L	99
13) 1,1-Diclethene	2.099	96	1268634	204.29 ug/L	91
14) Freon 113	2.093	101	1445237	192.95 ug/L	97
15) Acetone	2.117	43	416174	176.12 ug/L	98
16) 2-Propanol	2.190	45	1419961	4302.65 ug/L	90
17) Iodomethane	2.215	142	2016385	475.20 ug/L	97
18) Carbon Disulfide	2.269	76	5215967	228.72 ug/L	100
19) Acetonitrile	2.312	40	272572	943.29 ug/L	96
20) Allyl Chloride	2.349	76	912209	231.49 ug/L #	80
21) Methyl Acetate	2.355	43	907121	187.33 ug/L	94
22) Methylene Chloride	2.440	84	1586264	196.08 ug/L	96
23) TBA	2.501	59	2247669	4531.97 ug/L	98
24) Acrylonitrile	2.629	53	2341650	1092.35 ug/L	99
25) Methyl-t-Butyl Ether	2.660	73	3860377	205.65 ug/L	93
26) trans-1,2-Dichloroethene	2.666	96	1610898	202.72 ug/L	91
28) 1,1-Diclethane	3.044	63	3238725	207.26 ug/L	99
29) Vinyl Acetate	3.086	86	249697	235.05 ug/L	98
30) DIPE	3.105	45	6663586	198.70 ug/L	97
31) 2-Chloro-1,3-Butadiene	3.141	53	3235197	211.59 ug/L	90
32) ETBE	3.501	59	5639489	216.25 ug/L	95
33) 2,2-Dichloropropane	3.678	77	2229852	197.21 ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	1805163	200.04 ug/L	86
35) 2-Butanone	3.690	43	576903	184.36 ug/L	97
36) Propionitrile	3.763	54	800208	1178.07 ug/L	95
37) Bromochloromethane	3.982	130	1003876	189.93 ug/L	92

W061114.M Thu Jun 12 09:56:29 2014 MSVO10

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9415.D Vial: 13
Acq On : 11 Jun 2014 8:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:55:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.964	67	465515	234.99 ug/L #	81
39) Tetrahydrofuran	4.050	42	328987	182.07 ug/L	85
40) Chloroform	4.092	83	2885224	194.36 ug/L	96
41) 1,1,1-Trichloroethane	4.360	97	2518118	200.02 ug/L	97
42) TAME	5.183	73	4230225	214.73 ug/L	98
44) Cyclohexane	4.446	41	1917671	202.43 ug/L	89
46) Carbontetrachloride	4.617	121	711460	225.38 ug/L	92
47) 1,1-Dichloropropene	4.617	75	2083297	226.75 ug/L	99
49) Benzene	4.958	78	6712654	229.35 ug/L	97
50) 1,2-Dichloroethane	4.988	62	2128067	191.86 ug/L	96
51) Iso-Butyl Alcohol	4.848	43	1065508	5026.23 ug/L	96
52) n-Heptane	5.452	43	1746056	196.87 ug/L	90
53) 1-Butanol	5.946	56	1483851	14384.11 ug/L	97
54) Trichloroethene	5.964	130	1828201	223.42 ug/L	97
55) Methylcyclohexane	6.214	55	2318639	218.88 ug/L	86
56) 1,2-Diclpropane	6.256	63	1873668	236.90 ug/L	99
57) Dibromomethane	6.403	93	863833	208.02 ug/L	92
58) 1,4-Dioxane	6.458	88	184088m	4481.34 ug/L	
59) Methyl Methacrylate	6.458	69	808485	247.22 ug/L #	82
60) Bromodichloromethane	6.616	83	2166007	221.92 ug/L	98
61) 2-Nitropropane	6.890	41	610816	207.11 ug/L	91
62) 2-Chloroethylvinyl Ether	7.006	63	914020	257.72 ug/L	96
63) cis-1,3-Dichloropropene	7.140	75	2590325	245.69 ug/L	99
64) 4-Methyl-2-pentanone	7.335	43	1267519	222.05 ug/L	98
66) Toluene	7.500	91	6955399	221.61 ug/L	95
67) trans-1,3-Dichloropropene	7.744	75	2143076	247.10 ug/L	96
68) Ethyl Methacrylate	7.872	69	1740779	265.80 ug/L	87
69) 1,1,2-Trichloroethane	7.927	97	1227087	217.27 ug/L	98
72) Tetrachloroethene	8.055	164	1470099	228.76 ug/L	98
73) 2-Hexanone	8.195	43	899915	217.22 ug/L	99
74) 1,3-Dichloropropane	8.085	76	2084517	221.76 ug/L	90
75) Dibromochloromethane	8.299	129	1611950	231.66 ug/L	99
76) N-Butyl Acetate	8.335	43	2282342	231.78 ug/L	99
77) 1,2-Dibromoethane	8.396	107	1236134	222.06 ug/L	96
78) 3-Chlorobenzotrifluoride	8.878	180	2773305	231.59 ug/L	98
79) Chlorobenzene	8.866	112	4647205	217.92 ug/L	99
80) 4-Chlorobenzotrifluoride	8.933	180	2519147	228.84 ug/L	97
81) 1,1,1,2-Tetrachloroethane	8.945	131	1777135	235.06 ug/L	98
82) Ethylbenzene	8.982	106	2505520	239.30 ug/L #	73
83) (m+p)Xylene	9.091	106	5977962	472.11 ug/L #	71
84) o-Xylene	9.433	106	3054701	244.83 ug/L #	87
85) Styrene	9.445	104	5222439	249.94 ug/L	97
86) Bromoform	9.597	173	994455	241.10 ug/L	98
87) 2-Chlorobenzotrifluoride	9.670	180	2743345	236.11 ug/L	96
88) Isopropylbenzene	9.756	105	7215864	230.54 ug/L	94
89) Cyclohexanone	9.823	55	3229718	4224.64 ug/L	98
90) trans-1,4-Dichloro-2-B...	10.061	53	426779	243.55 ug/L	90
92) 1,1,2,2-Tetrachloroethane	10.012	83	1426947	205.51 ug/L	98
93) Bromobenzene	10.000	156	2095523	227.36 ug/L	99
94) 1,2,3-Trichloropropane	10.042	110	367896	210.70 ug/L	99
95) n-Propylbenzene	10.103	91	7995217	217.53 ug/L	91
96) 2-Chlorotoluene	10.170	91	5365856	234.71 ug/L	94

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9415.D Vial: 13
Acq On : 11 Jun 2014 8:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 09:55:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	5461031	218.63 ug/L	96
98)	4-Chlorotoluene	10.262	91	6164463	221.96 ug/L	92
99)	1,3,5-Trimethylbenzene	10.256	105	6177040	235.69 ug/L	92
100)	tert-Butylbenzene	10.518	119	5247588	238.93 ug/L	98
101)	1,2,4-Trimethylbenzene	10.560	105	6310464	236.80 ug/L	90
102)	3,4-Dichlorobenzotrifl...	10.615	214	1944100	233.98 ug/L	98
103)	sec-Butylbenzene	10.701	105	7034489	232.35 ug/L	94
104)	p-Isopropyltoluene	10.817	119	6228099	239.43 ug/L	96
105)	1,3-Dclbenz	10.786	146	3898898	226.31 ug/L	96
106)	1,4-Dclbenz	10.859	146	3920245	215.98 ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	1795557	238.23 ug/L	100
108)	2,5-Dichlorobenzotrifl...	10.945	214	1973826	225.64 ug/L	99
109)	n-Butylbenzene	11.146	91	5406727	238.82 ug/L	93
110)	1,2-Dclbenz	11.152	146	3502019	217.36 ug/L	97
111)	1,2-Dibromo-3-chloropr...	11.707	157	240612	200.78 ug/L	95
112)	Trielution Dichlorotol...	11.804	125	8642140	667.01 ug/L	95
113)	1,3,5-Trichlorobenzene	11.847	180	2461682	214.51 ug/L	95
114)	Coelution Dichlorotoluene	12.066	125	5610905	416.24 ug/L	94
115)	1,2,4-Tcbenzene	12.225	180	1955687	211.11 ug/L	97
116)	Hexachlorobt	12.328	225	892069	215.45 ug/L	100
117)	Naphthalen	12.371	128	3077318	196.32 ug/L	99
118)	1,2,3-Tclbenzene	12.511	180	1346659	182.68 ug/L	98
119)	2,4,5-Trichlorotoluene	12.926	159	758995	163.70 ug/L	94
120)	2,3,6-Trichlorotoluene	12.987	159	725227	164.44 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample    : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9415.D      Vial: 13
Acq On    : 11 Jun 2014    8:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 11 20:40:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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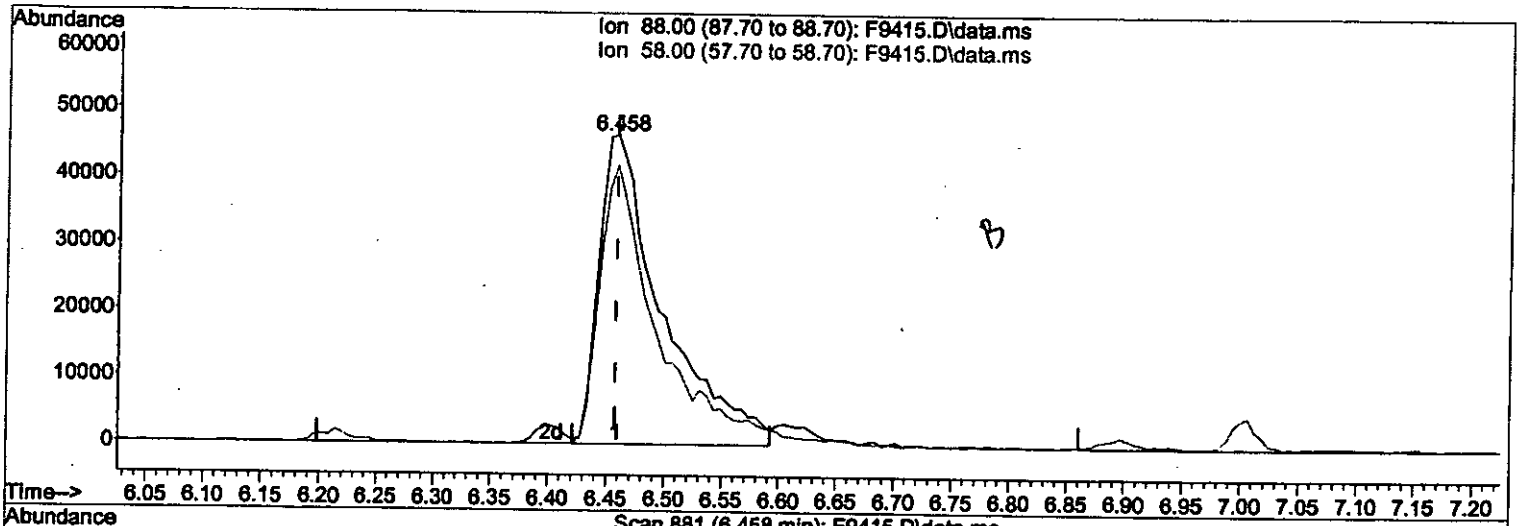
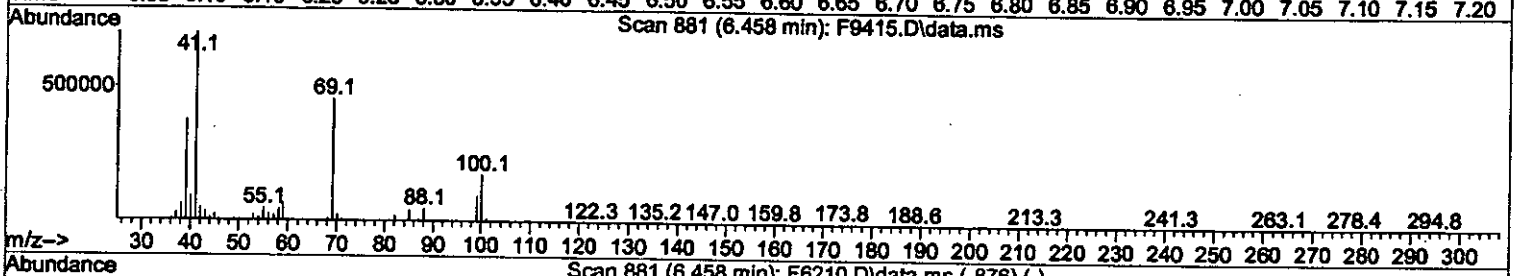
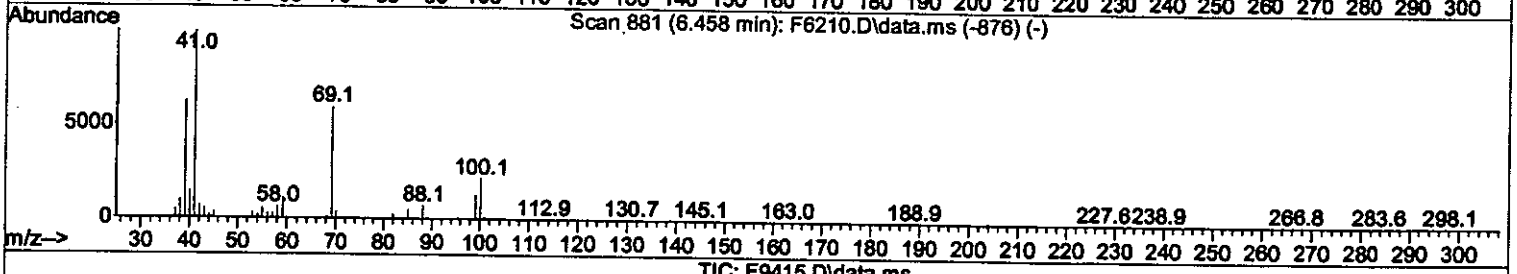






TIC: F9415.D\data.ms

(58) 1,4-Dioxane

6.458min (+0.001) 4242.02 ug/L

response 174257

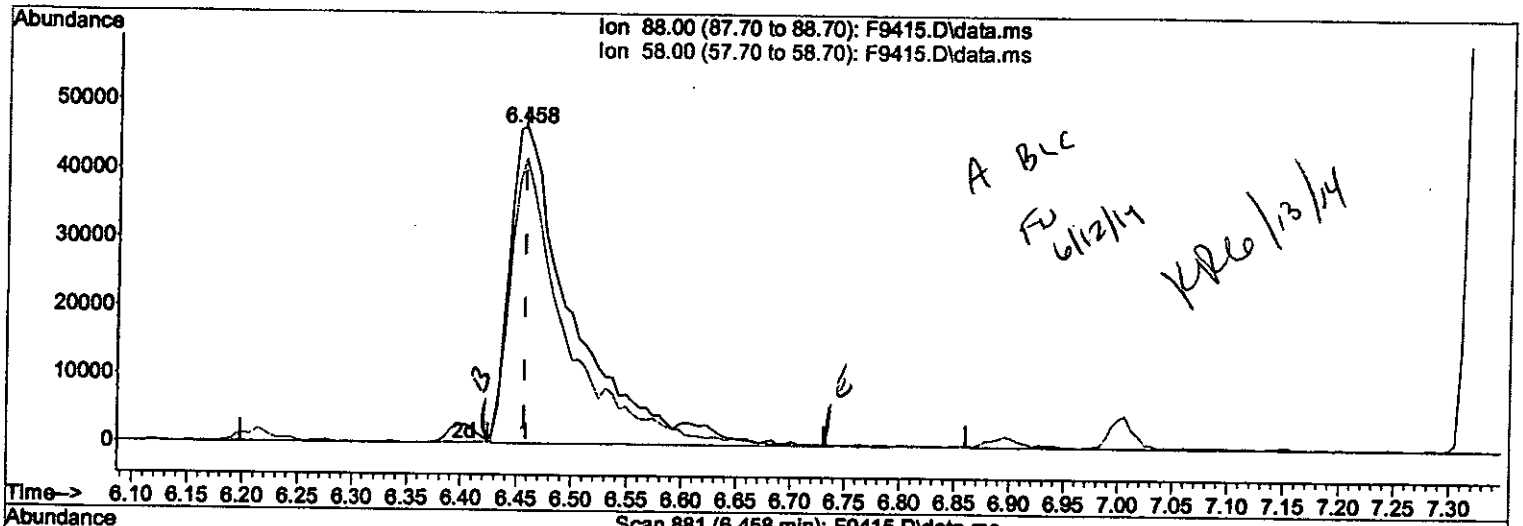
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.14
0.00	0.00	0.00
0.00	0.00	0.00

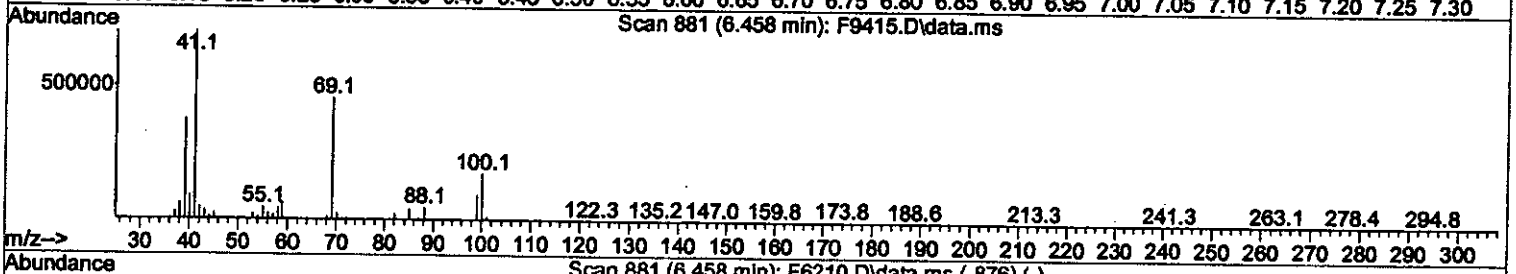
W061114.M Thu Jun 12 09:55:38 2014 MSVO10

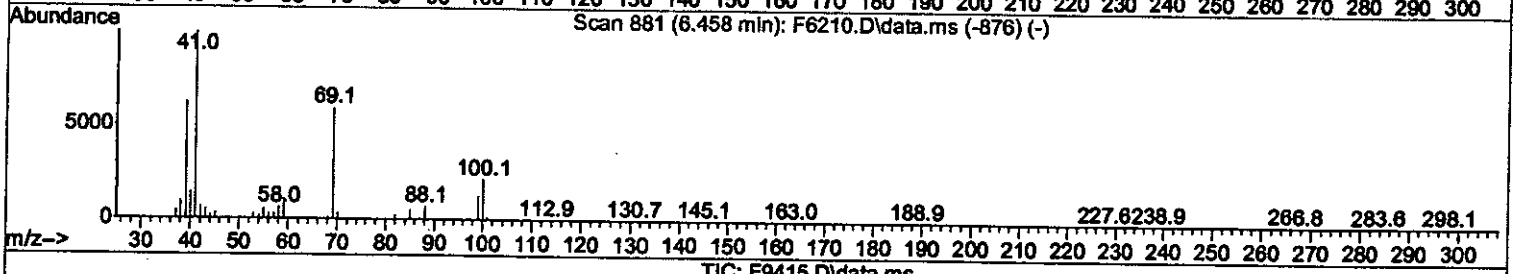
Page: 1

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9415.D Vial: 13
Acq On : 11 Jun 2014 8:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 11 20:40:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration







TIC: F9415.D\data.ms

(58) 1,4-Dioxane

6.458min (+0.001) 4481.34 ug/L m

response 184088

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.14
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jun 12 09:55:48 2014 MSVO10

Page: 1

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Sample    : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\061114\F9415.D      Vial: 13
Acq On    : 11 Jun 2014    8:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 09:55:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Wed Jun 11 15:55:52 2014
Response via : Initial Calibration
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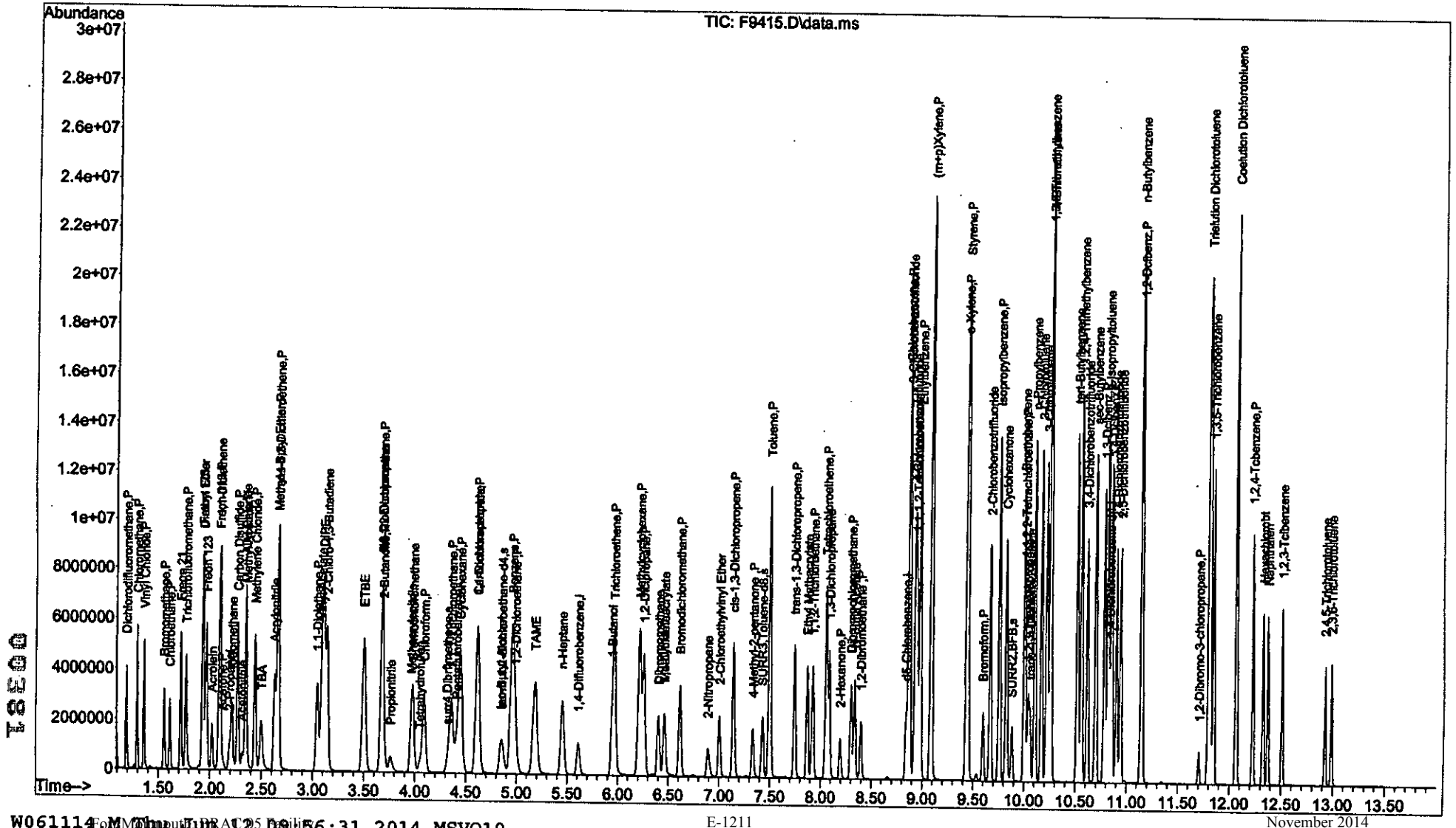


Initial Calibration Verification Summary Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400047-10	T	Average RF	50	47.90	ppm	-4.2	<=30
1,1,1-Trichloroethane (TCA)	RC1400047-10	T	Average RF	50	47.36	ppm	-5.3	<=30
1,1,2,2-Tetrachloroethane	RC1400047-10	T	Average RF	50	48.98	ppm	-2.0	<=30
1,1,2-Trichloroethane	RC1400047-10	T	Average RF	50	48.36	ppm	-3.3	<=30
1,1,2-Trichlorotrifluoroethane	RC1400047-10	T	Average RF	50	46.64	ppm	-6.7	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400047-10	T	Average RF	50	47.98	ppm	-4.0	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400047-10	T	Average RF	50	54.04	ppm	8.1	<=30
1,1-Dichloropropene	RC1400047-10	T	Average RF	50	48.79	ppm	-2.4	<=30
1,2,3-Trichlorobenzene	RC1400047-10	T	Average RF	50	50.14	ppm	0.3	<=30
1,2,3-Trichloropropane	RC1400047-10	T	Average RF	50	48.99	ppm	-2.0	<=30
1,2,4-Trichlorobenzene	RC1400047-10	T	Average RF	50	48.93	ppm	-2.1	<=30
1,2,4-Trimethylbenzene	RC1400047-10	T	Average RF	50	48.54	ppm	-2.9	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400047-10	T	Average RF	50	52.09	ppm	4.2	<=30
1,2-Dibromoethane	RC1400047-10	T	Average RF	50	50.12	ppm	0.2	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400047-10	T	Average RF	50	54.51	ppm	9.0	<=30
1,2-Dichlorobenzene	RC1400047-10	T	Average RF	50	48.58	ppm	-2.8	<=30
1,2-Dichloroethane	RC1400047-10	T	Average RF	50	49.63	ppm	-0.7	<=30
1,2-Dichloropropane	RC1400047-10	T	Average RF	50	48.42	ppm	-3.2	<=30
1,3,5-Trichlorobenzene	RC1400047-10	T	Average RF	50	49.21	ppm	-1.6	<=30
1,3,5-Trimethylbenzene	RC1400047-10	T	Average RF	50	47.84	ppm	-4.3	<=30
1,3-Dichlorobenzene	RC1400047-10	T	Average RF	50	48.43	ppm	-3.1	<=30
1,3-Dichloropropane	RC1400047-10	T	Average RF	50	48.50	ppm	-3.0	<=30
1,4-Dichlorobenzene	RC1400047-10	T	Average RF	50	48.51	ppm	-3.0	<=30
1,4-Dioxane	RC1400047-10	T	Average RF	1000	1084	ppm	8.4	<=30
1-Butanol	RC1400047-10	T	Quadratic	2500	2721	ppm	8.8	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400047-10	T	Average RF	50	45.28	ppm	-9.4	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400047-10	T	Average RF	50	47.56	ppm	-4.9	<=30
2,2-Dichloropropane	RC1400047-10	T	Average RF	50	50.19	ppm	0.4	<=30
2,3,6-Trichlorotoluene	RC1400047-10	T	Average RF	50	51.36	ppm	2.7	<=30
2,4,5-Trichlorotoluene	RC1400047-10	T	Average RF	50	53.77	ppm	7.5	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400047-10	T	Average RF	150	150.7	ppm	0.5	<=30
2,4-Dichlorobenzotrifluoride	RC1400047-10	T	Average RF	50	47.48	ppm	-5.0	<=30
2,5-Dichlorobenzotrifluoride	RC1400047-10	T	Average RF	50	47.05	ppm	-5.9	<=30
2-Butanone (MEK)	RC1400047-10	T	Average RF	50	50.56	ppm	1.1	<=30
2-Chloro-1,3-butadiene	RC1400047-10	T	Average RF	50	42.63	ppm	-14.7	<=30
2-Chlorobenzotrifluoride	RC1400047-10	T	Average RF	50	46.00	ppm	-8.0	<=30
2-Chloroethyl Vinyl Ether	RC1400047-10	T	Average RF	50	46.75	ppm	-6.5	<=30
2-Chlorotoluene	RC1400047-10	T	Average RF	50	48.39	ppm	-3.2	<=30
2-Hexanone	RC1400047-10	T	Average RF	50	50.01	ppm	0.0	<=30
2-Methyl-1-propanol	RC1400047-10	T	Average RF	1000	975.0	ppm	-2.5	<=30
2-Methyl-2-propanol	RC1400047-10	T	Average RF	1000	1043	ppm	4.3	<=30
2-Nitropropane	RC1400047-10	T	Average RF	100	104.9	ppm	4.9	<=30
2-Propanol	RC1400047-10	T	Average RF	1000	1023	ppm	2.3	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400047-10	T	Average RF	100	101.4	ppm	1.4	<=30
3,4-Dichlorobenzotrifluoride	RC1400047-10	T	Average RF	50	47.17	ppm	-5.7	<=30
3-Chloro-1-propene	RC1400047-10	T	Average RF	50	45.18	ppm	-9.6	<=30
3-Chlorobenzotrifluoride	RC1400047-10	T	Average RF	50	46.38	ppm	-7.2	<=30
3-Chlorotoluene	RC1400047-10	T	Average RF	50	48.32	ppm	-3.4	<=30
4-Chlorotoluene	RC1400047-10	T	Average RF	50	48.08	ppm	-3.8	<=30
4-Isopropyltoluene	RC1400047-10	T	Average RF	50	48.57	ppm	-2.9	<=30
4-Methyl-2-pentanone	RC1400047-10	T	Average RF	50	50.68	ppm	1.4	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400047-10	T	Average RF	50	49.65	ppm	-0.7	<=30
Acetonitrile	RC1400047-10	T	Average RF	250	253.4	ppm	1.4	<=30
Acrolein	RC1400047-10	T	Average RF	100	72.80	ppm	-27.2	<=30
Acrylonitrile	RC1400047-10	T	Average RF	250	244.9	ppm	-2.0	<=30
Benzene	RC1400047-10	T	Average RF	50	48.41	ppm	-3.2	<=30
Bromobenzene	RC1400047-10	T	Average RF	50	47.27	ppm	-5.5	<=30
Bromochloromethane	RC1400047-10	T	Average RF	50	49.76	ppm	-0.5	<=30
Bromodichloromethane	RC1400047-10	T	Average RF	50	51.34	ppm	2.7	<=30
Bromoform	RC1400047-10	T	Average RF	50	50.24	ppm	0.5	<=30
Bromomethane	RC1400047-10	T	Quadratic	50	43.73	ppm	-12.5	<=30
Carbon Disulfide	RC1400047-10	T	Average RF	50	39.56	ppm	-20.9	<=30
Carbon Tetrachloride	RC1400047-10	T	Average RF	50	48.84	ppm	-2.3	<=30
Chlorobenzene	RC1400047-10	T	Average RF	50	47.90	ppm	-4.2	<=30
Chloroethane	RC1400047-10	T	Average RF	50	45.73	ppm	-8.5	<=30
Chloroform	RC1400047-10	T	Average RF	50	48.42	ppm	-3.2	<=30
Chloromethane	RC1400047-10	T	Average RF	50	50.30	ppm	0.6	<=30
Cyclohexane	RC1400047-10	T	Average RF	50	44.18	ppm	-11.6	<=30
Cyclohexanone	RC1400047-10	T	Average RF	1000	916.8	ppm	-8.3	<=30
Dibromochloromethane	RC1400047-10	T	Average RF	50	51.35	ppm	2.7	<=30
Dibromomethane	RC1400047-10	T	Average RF	50	49.83	ppm	-0.3	<=30
Dichlorodifluoromethane (CFC 12)	RC1400047-10	T	Average RF	50	52.52	ppm	5.0	<=30
Dichlorofluoromethane (CFC 21)	RC1400047-10	T	Average RF	50	40.39	ppm	-19.2	<=30
Dichloromethane	RC1400047-10	T	Linear	50	51.16	ppm	2.3	<=30
Diethyl Ether	RC1400047-10	T	Average RF	50	48.19	ppm	-3.6	<=30
Diisopropyl Ether	RC1400047-10	T	Average RF	50	46.08	ppm	-7.8	<=30
Ethyl Methacrylate	RC1400047-10	T	Average RF	50	53.38	ppm	6.8	<=30
Ethyl tert-Butyl Ether	RC1400047-10	T	Average RF	50	45.70	ppm	-8.6	<=30
Ethylbenzene	RC1400047-10	T	Average RF	50	44.48	ppm	-11.0	<=30
Hexachlorobutadiene	RC1400047-10	T	Average RF	50	43.46	ppm	-13.1	<=30
Iodomethane	RC1400047-10	T	Quadratic	50	50.01	ppm	0.0	<=30
Isopropylbenzene (Cumene)	RC1400047-10	T	Average RF	50	48.79	ppm	-2.4	<=30
Methacrylonitrile	RC1400047-10	T	Average RF	50	49.69	ppm	-0.6	<=30
Methyl Acetate	RC1400047-10	T	Average RF	50	50.72	ppm	1.4	<=30
Methyl Methacrylate	RC1400047-10	T	Average RF	50	53.23	ppm	6.5	<=30
Methyl tert-Butyl Ether	RC1400047-10	T	Average RF	50	51.37	ppm	2.7	<=30
Methylcyclohexane	RC1400047-10	T	Average RF	50	44.53	ppm	-10.9	<=30
Naphthalene	RC1400047-10	T	Average RF	50	51.94	ppm	3.9	<=30
Propionitrile	RC1400047-10	T	Average RF	250	276.2	ppm	10.5	<=30
Styrene	RC1400047-10	T	Average RF	50	49.46	ppm	-1.1	<=30
Tetrachloroethene (PCE)	RC1400047-10	T	Average RF	50	48.46	ppm	-3.1	<=30
Tetrahydrofuran (THF)	RC1400047-10	T	Average RF	50	51.89	ppm	3.8	<=30
Toluene	RC1400047-10	T	Average RF	50	48.16	ppm	-3.7	<=30
Trichloroethene (TCE)	RC1400047-10	T	Average RF	50	49.44	ppm	-1.1	<=30
Trichlorofluoromethane (CFC 11)	RC1400047-10	T	Average RF	50	47.12	ppm	-5.8	<=30
Vinyl Acetate	RC1400047-10	T	Average RF	50	49.83	ppm	-0.3	<=30
Vinyl Chloride	RC1400047-10	T	Average RF	50	46.58	ppm	-6.8	<=30
cis-1,2-Dichloroethene	RC1400047-10	T	Average RF	50	48.28	ppm	-3.4	<=30
cis-1,3-Dichloropropene	RC1400047-10	T	Average RF	50	50.74	ppm	1.5	<=30
m,p-Xylenes	RC1400047-10	T	Average RF	100	97.21	ppm	-2.8	<=30
n-Butyl Acetate	RC1400047-10	T	Average RF	50	46.63	ppm	-6.7	<=30
n-Butylbenzene	RC1400047-10	T	Average RF	50	47.86	ppm	-4.3	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400047 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400047-10	T	Average RF	50	46.80	ppm	-6.4	<=30
n-Propylbenzene	RC1400047-10	T	Average RF	50	48.46	ppm	-3.1	<=30
o-Xylene	RC1400047-10	T	Average RF	50	47.55	ppm	-4.9	<=30
sec-Butylbenzene	RC1400047-10	T	Average RF	50	47.94	ppm	-4.1	<=30
tert-Amyl Methyl Ether	RC1400047-10	T	Average RF	50	47.10	ppm	-5.8	<=30
tert-Butylbenzene	RC1400047-10	T	Average RF	50	47.21	ppm	-5.6	<=30
trans-1,2-Dichloroethene	RC1400047-10	T	Average RF	50	48.81	ppm	-2.4	<=30
trans-1,3-Dichloropropene	RC1400047-10	T	Average RF	50	53.06	ppm	6.1	<=30
trans-1,4-Dichloro-2-butene	RC1400047-10	T	Average RF	50	46.75	ppm	-6.5	<=30
1,2-Dichloroethane-d4	RC1400047-10	S	Average RF	50	50.27	ppm	0.5	<=30
4-Bromofluorobenzene	RC1400047-10	S	Average RF	50	50.64	ppm	1.3	<=30
Dibromofluoromethane	RC1400047-10	S	Average RF	50	50.32	ppm	0.6	<=30
Toluene-d8	RC1400047-10	S	Average RF	50	50.04	ppm	0.1	<=30

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\MSVOA10\DATA\061214\F9427.D Vial: 3
Acq On : 12 Jun 2014 12:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 13:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FV 6/12/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	933541	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1287287	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1154662	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	644979	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	386193	50.32	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.64%			
48) surr1,1,2-dichloroetha...	4.854	65	387212	50.27	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.54%			
65) SURR3,Toluene-d8	7.427	98	1480377	50.04	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.08%			
70) SURR2,BFB	9.878	95	592011	50.64	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.28%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	458554	52.52	ug/L	97
3) Chloromethane	1.294	50	544197	50.30	ug/L	97
4) Vinyl Chloride	1.361	62	528748	46.58	ug/L	98
5) Bromomethane	1.556	94	164271	43.73	ug/L	96
6) Chloroethane	1.611	64	282290	45.73	ug/L	97
7) Freon 21	1.721	67	664165	40.39	ug/L	99
8) Trichlorofluoromethane	1.770	101	574321	47.12	ug/L	100
9) Diethyl Ether	1.934	59	337492	48.19	ug/L	93
10) Freon 123a	1.928	67	576862	54.51	ug/L	94
11) Freon 123	1.965	83	535893	47.56	ug/L	99
12) Acrolein	2.020	56	78923	72.80	ug/L	100
13) 1,1-Diclethene	2.099	96	336181	54.04	ug/L	91
14) Freon 113	2.093	101	330997	46.64	ug/L	98
15) Acetone	2.123	43	104523	49.65	ug/L	99
16) 2-Propanol	2.196	45	372689	1022.62	ug/L	90
17) Iodomethane	2.215	142	347435	50.01	ug/L	99
18) Carbon Disulfide	2.270	76	1047867	39.56	ug/L	99
19) Acetonitrile	2.318	40	71631	253.38	ug/L	98
20) Allyl Chloride	2.349	76	203346	45.18	ug/L #	76
21) Methyl Acetate	2.355	43	228953	50.72	ug/L	96
22) Methylene Chloride	2.440	84	397002	51.16	ug/L	94
23) TBA	2.501	59	598790	1042.75	ug/L	99
24) Acrylonitrile	2.629	53	563251	244.94	ug/L	100
25) Methyl-t-Butyl Ether	2.660	73	1013939	51.37	ug/L	92
26) trans-1,2-Dichloroethene	2.666	96	385959	48.81	ug/L	89
28) 1,1-Diclethane	3.044	63	779906	47.98	ug/L	98
29) Vinyl Acetate	3.086	86	57365	49.83	ug/L	99
30) DIPE	3.105	45	1516138	46.08	ug/L	93
31) 2-Chloro-1,3-Butadiene	3.141	53	666596	42.63	ug/L	89
32) ETBE	3.501	59	1278966	45.70	ug/L	95
33) 2,2-Dichloropropane	3.678	77	597491	50.19	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	432715	48.28	ug/L #	84
35) 2-Butanone	3.702	43	145102	50.56	ug/L	88
36) Propionitrile	3.763	54	204682	276.16	ug/L	97
37) Bromochloromethane	3.983	130	261667	49.76	ug/L	91

W061114.M Thu Jun 12 13:09:58 2014 MSVO10

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\MSVOA10\DATA\061214\F9427.D Vial: 3
Acq On : 12 Jun 2014 12:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 13:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.964	67	115803	49.69 ug/L #	84
39) Tetrahydrofuran	4.056	42	88626	51.89 ug/L	89
40) Chloroform	4.092	83	703608	48.42 ug/L	97
41) 1,1,1-Trichloroethane	4.361	97	604143	47.36 ug/L	98
42) TAME	5.184	73	991126	47.10 ug/L	98
44) Cyclohexane	4.446	41	423157	44.18 ug/L	89
46) Carbontetrachloride	4.617	121	169069	48.84 ug/L	88
47) 1,1-Dichloropropene	4.617	75	507915	48.79 ug/L	99
49) Benzene	4.958	78	1608299	48.41 ug/L	96
50) 1,2-Dichloroethane	4.982	62	541040	49.63 ug/L	92
51) Iso-Butyl Alcohol	4.854	43	263249	975.00 ug/L	98
52) n-Heptane	5.452	43	436023	46.80 ug/L	90
53) 1-Butanol	5.946	56	363053	2721.18 ug/L	100
54) Trichloroethene	5.964	130	441181	49.44 ug/L	97
55) Methylcyclohexane	6.214	55	521714	44.53 ug/L	85
56) 1,2-Diclpropane	6.257	63	460369	48.42 ug/L	99
57) Dibromomethane	6.403	93	216787	49.83 ug/L	94
58) 1,4-Dioxane	6.458	88	50610	1084.27 ug/L	96
59) Methyl Methacrylate	6.464	69	204590	53.23 ug/L	86
60) Bromodichloromethane	6.616	83	536260	51.34 ug/L	98
61) 2-Nitropropane	6.891	41	156035	104.94 ug/L	96
62) 2-Chloroethylvinyl Ether	7.006	63	204867	46.75 ug/L	94
63) cis-1,3-Dichloropropene	7.141	75	639381	50.74 ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	321585	50.68 ug/L	98
66) Toluene	7.500	91	1719763	48.16 ug/L	99
67) trans-1,3-Dichloropropene	7.744	75	547271	53.06 ug/L	96
68) Ethyl Methacrylate	7.872	69	428125	53.38 ug/L	87
69) 1,1,2-Trichloroethane	7.921	97	299546	48.36 ug/L	99
72) Tetrachloroethene	8.055	164	347393	48.46 ug/L	98
73) 2-Hexanone	8.195	43	225838	50.01 ug/L	98
74) 1,3-Dichloropropane	8.085	76	517506	48.50 ug/L	91
75) Dibromochloromethane	8.299	129	391877	51.35 ug/L	96
76) N-Butyl Acetate	8.335	43	553860	46.63 ug/L	99
77) 1,2-Dibromoethane	8.396	107	310459	50.12 ug/L	98
78) 3-Chlorobenzotrifluoride	8.878	180	615951	46.38 ug/L	98
79) Chlorobenzene	8.866	112	1146950	47.90 ug/L	98
80) 4-Chlorobenzotrifluoride	8.927	180	556621	45.28 ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	417410	47.90 ug/L	97
82) Ethylbenzene	8.976	106	549974	44.48 ug/L	94
83) (m+p)Xylene	9.085	106	1471689	97.21 ug/L	97
84) o-Xylene	9.433	106	726833	47.55 ug/L	96
85) Styrene	9.445	104	1276995	49.46 ug/L	98
86) Bromoform	9.597	173	229582	50.24 ug/L	98
87) 2-Chlorobenzotrifluoride	9.671	180	604809	46.00 ug/L	97
88) Isopropylbenzene	9.756	105	1825305	48.79 ug/L	99
89) Cyclohexanone	9.823	55	827265	916.80 ug/L	97
90) trans-1,4-Dichloro-2-B...	10.055	53	92879	46.75 ug/L	95
92) 1,1,2,2-Tetrachloroethane	10.012	83	363409	48.98 ug/L	97
93) Bromobenzene	10.000	156	508801	47.27 ug/L	96
94) 1,2,3-Trichloropropane	10.042	110	96648	48.99 ug/L	95
95) n-Propylbenzene	10.103	91	2120416	48.46 ug/L	98
96) 2-Chlorotoluene	10.170	91	1300651	48.39 ug/L	95

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\MSVOA10\DATA\061214\F9427.D Vial: 3
Acq On : 12 Jun 2014 12:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jun 12 13:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

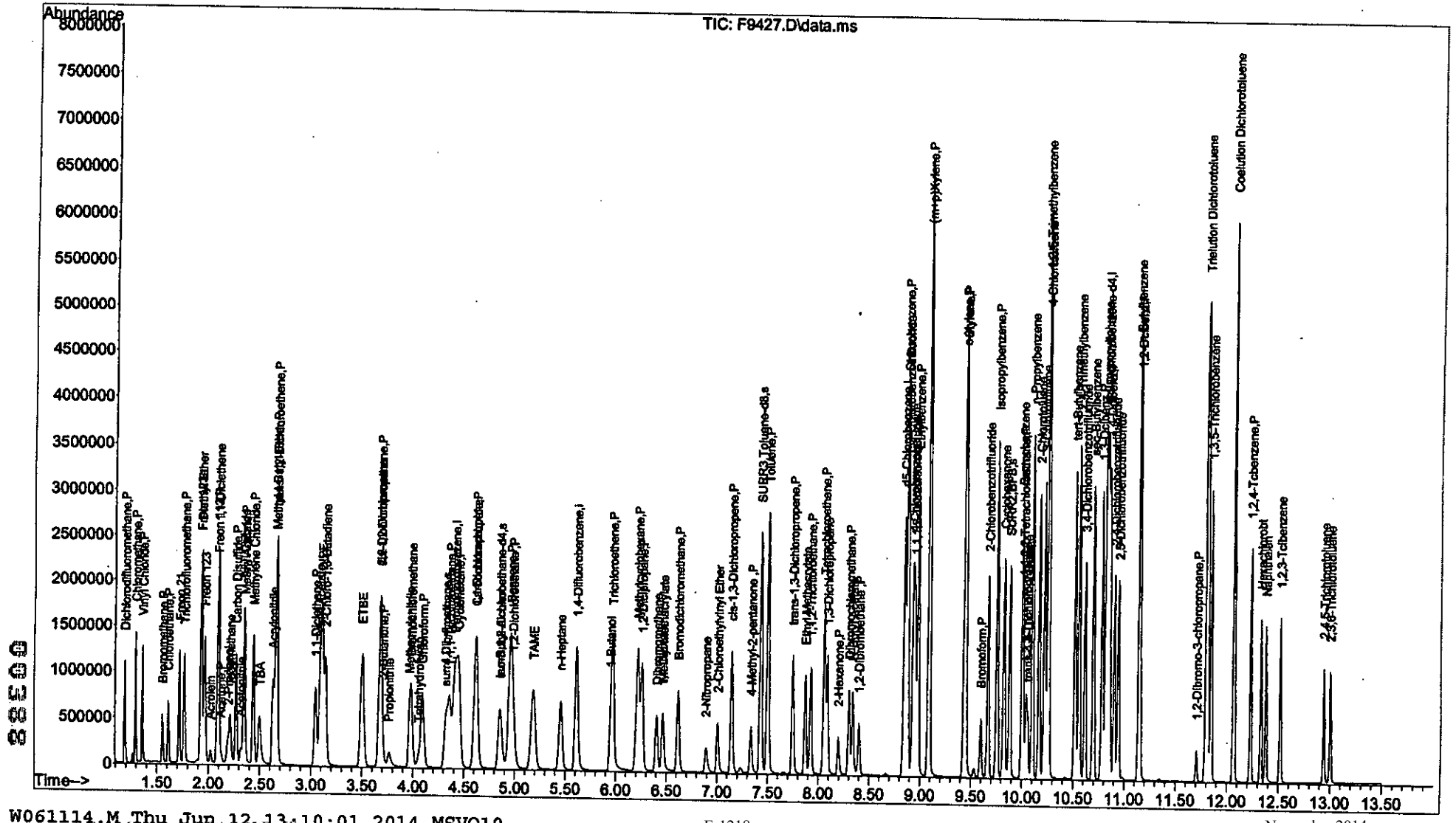
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1316004	48.32 ug/L	97
98)	4-Chlorotoluene	10.262	91	1565256	48.08 ug/L	92
99)	1,3,5-Trimethylbenzene	10.250	105	1537223	47.84 ug/L	97
100)	tert-Butylbenzene	10.518	119	1260046	47.21 ug/L	99
101)	1,2,4-Trimethylbenzene	10.561	105	1577031	48.54 ug/L	97
102)	3,4-Dichlorobenzotrifl...	10.615	214	454334	47.17 ug/L	97
103)	sec-Butylbenzene	10.695	105	1763939	47.94 ug/L	99
104)	p-Isopropyltoluene	10.817	119	1562782	48.57 ug/L	97
105)	1,3-Dclbenz	10.780	146	964062	48.43 ug/L	98
106)	1,4-Dclbenz	10.853	146	978244	48.51 ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	409975	47.48 ug/L	100
108)	2,5-Dichlorobenzotrifl...	10.945	214	467086	47.05 ug/L	97
109)	n-Butylbenzene	11.140	91	1330948	47.86 ug/L	99
110)	1,2-Dclbenz	11.152	146	883800	48.58 ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	59440	52.09 ug/L	96
112)	Trielution Dichlorotol...	11.804	125	2216281	150.69 ug/L	96
113)	1,3,5-Trichlorobenzene	11.847	180	608685	49.21 ug/L	94
114)	Coelution Dichlorotoluene	12.066	125	1514253	101.38 ug/L	97
115)	1,2,4-Tcbenzene	12.231	180	493626	48.93 ug/L	97
116)	Hexachlorobt	12.329	225	210023	43.46 ug/L	100
117)	Naphthalen	12.377	128	802851	51.94 ug/L	99
118)	1,2,3-Tclbenzene	12.518	180	343960	50.14 ug/L	98
119)	2,4,5-Trichlorotoluene	12.938	159	202512	53.77 ug/L	96
120)	2,3,6-Trichlorotoluene	12.999	159	191668	51.36 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

W061114.M Thu Jun 12 13:09:58 2014 MSVO10

```
Sample    : 50 PPB ICV
Data File : I:\ACQUDATA\MSVOA10\DATA\061214\F9427.D      Vial: 3
Acq On    : 12 Jun 2014  12:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Jun 12 13:09:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration
```



Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/10/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\071014\A0222.D\

Calibration Date: 6/11/14
Calibration ID: RC1400047
Analysis Lot: 401024
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	47.8	0.3774	0.3609	-4.4	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	48.9	0.6832	0.6686	-2.1	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	47.2	0.5752	0.5429	-5.6	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	48.0	0.2406	0.2311	-4.0	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	51.5	0.8705	0.8962	2.9	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.1	0.3332	0.3271	-1.8	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	47.3	0.4044	0.3828	-5.3	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	55.1	0.5318	0.5863	10.3	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	46.9	0.1529	0.1434	-6.3	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	49.8	0.7820	0.7792	-0.4	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	47.1	2.519	2.371	-5.8	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	54.5	0.08846	0.09633	8.9	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	47.7	0.2683	0.2559	-4.6	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	48.4	1.410	1.365	-3.2	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	48.5	0.4235	0.4106	-3.0	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	47.7	0.3693	0.3522	-4.6	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	46.4	2.491	2.311	-7.2	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	48.3	1.543	1.491	-3.4	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	46.2	0.4621	0.4273	-7.5	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	48.3	1.563	1.509	-3.5	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	47.5	0.6377	0.6053	-5.1	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	59.2	0.1537	0.1819	18.3	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	45.8	2.084	1.910	-8.3	NA	± 20 %	Average RF
2-Hexanone	50.0	50.6	0.1956	0.1979	1.2	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	909	0.03076	0.02795	-9.1	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	44.8	2.524	2.262	-10.4	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	47.6	2.495	2.374	-4.8	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	50.2	0.2465	0.2474	0.4	NA	± 20 %	Average RF
Acetone	50.0	58.0	0.1127	0.1309	16.1	NA	± 20 %	Average RF
Benzene	50.0	47.5	1.290	1.227	-4.9	NA	± 20 %	Average RF
Bromobenzene	50.0	45.2	0.8344	0.7540	-9.6	NA	± 20 %	Average RF
Bromochloromethane	50.0	53.4	0.2816	0.3007	6.8	NA	± 20 %	Average RF
Bromodichloromethane	50.0	48.3	0.4057	0.3917	-3.4	NA	± 20 %	Average RF
Bromoform	50.0	49.3	0.1979	0.1951	-1.4	NA	± 20 %	Average RF
Bromomethane	50.0	52.8	NA	NA	NA	5.6	± 20 %	Quadratic
Carbon Tetrachloride	50.0	47.8	0.1345	0.1286	-4.3	NA	± 20 %	Average RF
Chlorobenzene	50.0	46.9	1.037	0.9723	-6.2	NA	± 20 %	Average RF
Chloroethane	50.0	47.7	0.3307	0.3153	-4.7	NA	± 20 %	Average RF
Chloroform	50.0	50.1	0.7782	0.7804	0.3	NA	± 20 %	Average RF
Chloromethane	50.0	54.3	0.5794	0.6287	8.5	NA	± 20 %	Average RF
Dibromochloromethane	50.0	51.0	0.3305	0.3370	2.0	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/10/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\071014\A0222.D\

Calibration Date: 6/11/14
Calibration ID: RC1400047
Analysis Lot: 401024
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	51.3	0.4677	0.4797	2.6	NA	± 20 %	Average RF
Methylene Chloride	50.0	52.5	NA	NA	NA	5.0	± 20 %	Linear
Ethylbenzene	50.0	46.3	0.5354	0.4953	-7.5	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	39.9	0.3747	0.2993	-20.1 *	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	46.8	1.620	1.515	-6.5	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	47.3	1.057	1.000	-5.4	NA	± 20 %	Average RF
Naphthalene	50.0	60.4	1.198	1.448	20.9 *	NA	± 20 %	Average RF
Styrene	50.0	46.3	1.118	1.036	-7.4	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	48.2	0.3104	0.2990	-3.7	NA	± 20 %	Average RF
Toluene	50.0	46.6	1.387	1.292	-6.8	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	50.6	0.3466	0.3506	1.2	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	54.0	0.6528	0.7051	8.0	NA	± 20 %	Average RF
Vinyl Chloride	50.0	51.7	0.6080	0.6283	3.3	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.5	0.4801	0.4849	1.0	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	45.3	0.4895	0.4437	-9.4	NA	± 20 %	Average RF
m,p-Xylenes	100	94.4	0.6556	0.6185	-5.7	NA	± 20 %	Average RF
n-Butylbenzene	50.0	46.1	2.156	1.986	-7.9	NA	± 20 %	Average RF
n-Propylbenzene	50.0	47.1	3.392	3.196	-5.8	NA	± 20 %	Average RF
o-Xylene	50.0	45.4	0.6620	0.6017	-9.1	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	47.2	2.852	2.690	-5.7	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	46.0	2.069	1.902	-8.1	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	51.2	0.4235	0.4334	2.3	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	45.1	0.4006	0.3610	-9.9	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	48.1	0.4541	0.4368	-3.8	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	53.3	0.2981	0.3175	6.5	NA	± 20 %	Average RF
Toluene-d8	50.0	48.8	1.149	1.121	-2.5	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FJ 7/14/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	i	Pentafluorobenzene	1.0000	1.0000	0.0	98	0.00	
2	P	Dichlorodifluoromethane	0.4677	0.4797	-2.6	92	0.00	
3	P	Chloromethane	0.5794	0.6287	-8.5	100	0.00	
4	P	Vinyl Chloride	0.6080	0.6283	-3.3	96	0.00	
5	P	Bromomethane	0.2195	0.2190	-5.6 ~~-0.2~~	92	0.00	
6	P	Chloroethane	0.3307	0.3153	4.7	94	0.00	
7		Freon 21	0.8807	0.7988	9.3	87	0.00	
8	P	Trichlorofluoromethane	0.6528	0.7051	-8.0	103	0.00	
9		Diethyl Ether	0.3751	0.3774	-0.6	98	0.00	
10		Freon 123a	0.5668	0.5166	8.9	88	0.00	
11		Freon 123	0.6036	0.5336	11.6	84	0.00	
12		Acrolein	0.0581	0.0504	13.3	85	0.00	
13		1,1-Diclethene	0.3332	0.3271	1.8	99	0.00	
14	P	Freon 113	0.3801	0.3986	-4.9	103	0.00	
15	P	Acetone	0.1127	0.1309	-16.1	111	0.00	
16		2-Propanol	0.0195	0.0208	-6.7	97	0.00	
17		Iodomethane	0.3489	0.2606	24.7 ~~-25.3#~~	80	0.00	NT
18	P	Carbon Disulfide	1.4185	1.3307	6.2	91	0.00	
19		Acetonitrile	0.0151	0.0168	-11.3	113	0.00	
20		Allyl Chloride	0.2411	0.2479	-2.8	95	0.00	
21	P	Methyl Acetate	0.2417	0.2750	-13.8	103	0.00	
22	P	Methylene Chloride	0.5021	0.4365	-5.0 ~~-13.1~~	99	0.00	
23		TBA	0.0308	0.0280	9.1	81	0.00	
24		Acrylonitrile	0.1232	0.1401	-13.7	104	0.00	
25	P	Methyl-t-Butyl Ether	1.0572	1.0004	5.4	90	0.00	
26	P	trans-1,2-Dichloroethene	0.4235	0.4334	-2.3	98	0.00	
27		Halothane	0.0000	0.0000	0.0	0#	-3.03#	
28	P	1,1-Diclethane	0.8705	0.8962	-3.0	100	0.00	
29		Vinyl Acetate	0.0617	0.0602	2.4	89	0.00	
30		DIPE	1.7622	1.9643	-11.5	109	0.00	
31		2-Chloro-1,3-Butadiene	0.8376	0.7996	4.5	89	0.00	
32		ETBE	1.4988	1.3824	7.8	91	0.00	
33		2,2-Dichloropropane	0.6377	0.6053	5.1	95	0.00	
34	P	cis-1,2-Dichloroethene	0.4801	0.4849	-1.0	98	0.00	
35	P	2-Butanone	0.1537	0.1819	-18.3	106	-0.02	
36		Propionitrile	0.0397	0.0477	-20.2#	102	-0.01	NT
37		Bromochloromethane	0.2816	0.3007	-6.8	102	0.00	
38		Methacrylonitrile	0.1248	0.1223	2.0	93	-0.01	
39		Tetrahydrofuran	0.0915	0.1029	-12.5	111	-0.01	
40	P	Chloroform	0.7782	0.7804	-0.3	99	0.00	
41	P	1,1,1-Trichloroethane	0.6832	0.6686	2.1	97	0.00	
42		TAME	1.1271	0.9726	13.7	84	0.00	
43	i	1,4-Difluorobenzene	1.0000	1.0000	0.0	104	0.00	
44	P	Cyclohexane	0.3721	0.3541	4.8	95	0.00	
45	s	surr4,Dibrflmethane	0.2981	0.3175	-6.5	113	0.00	
46	P	Carbontetrachloride	0.1345	0.1286	4.4	97	0.00	
47		1,1-Dichloropropene	0.4044	0.3828	5.3	97	0.00	

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
48	s	surr1,1,2-dichloroethane-d4	0.2992	0.3159	-5.6	112	0.00	
49	P	Benzene	1.2905	1.2267	4.9	96	0.00	
50	P	1,2-Dichloroethane	0.4235	0.4106	3.0	98	0.00	
51		Iso-Butyl Alcohol	0.0105	0.0100	4.8	92	0.00	
52		n-Heptane	0.3618	0.4036	-11.6	113	0.00	
53		1-Butanol	0.0049	0.0043	15.5 ~~12.2~~	77	-0.02	
54	P	Trichloroethene	0.3466	0.3506	-1.2	103	0.00	
55	P	Methylcyclohexane	0.4551	0.3944	13.3	87	0.00	
56	P	1,2-Diclpropane	0.3693	0.3522	4.6	98	0.00	
57		Dibromomethane	0.1690	0.1675	0.9	99	0.00	
58		1,4-Dioxane	0.0018	0.0021	-16.7	114	0.00	
59		Methyl Methacrylate	0.1493	0.1435	3.9	91	0.00	
60	P	Bromodichloromethane	0.4057	0.3917	3.5	98	0.00	
61		2-Nitropropane	0.0578	0.0461	20.2#	76	0.00	NT
62		2-Chloroethylvinyl Ether	0.1702	0.1585	6.9	90	0.00	
63	P	cis-1,3-Dichloropropene	0.4895	0.4437	9.4	90	0.00	
64	P	4-Methyl-2-pentanone	0.2465	0.2474	-0.4	98	0.00	
65	s	SURR3,Toluene-d8	1.1492	1.1210	2.5	101	0.00	
66	P	Toluene	1.3871	1.2924	6.8	93	0.00	
67	P	trans-1,3-Dichloropropene	0.4006	0.3610	9.9	88	0.00	
68		Ethyl Methacrylate	0.3115	0.2956	5.1	87	0.00	
69	P	1,1,2-Trichloroethane	0.2406	0.2311	3.9	96	0.00	
70	s	SURR2,BFB	0.4541	0.4368	3.8	100	0.00	
71	i	d5-Chlorobenzene	1.0000	1.0000	0.0	105	0.00	
72	P	Tetrachloroethene	0.3104	0.2990	3.7	97	0.00	
73	P	2-Hexanone	0.1956	0.1979	-1.2	99	-0.01	
74		1,3-Dichloropropane	0.4621	0.4273	7.5	94	0.00	
75	P	Dibromochloromethane	0.3305	0.3370	-2.0	100	0.00	
76		N-Butyl Acetate	0.5143	0.4571	11.1	87	0.00	
77	P	1,2-Dibromoethane	0.2683	0.2559	4.6	95	0.00	
78		3-Chlorobenzotrifluoride	0.5750	0.5571	3.1	96	0.00	
79	P	Chlorobenzene	1.0368	0.9723	6.2	96	0.00	
80		4-Chlorobenzotrifluoride	0.5323	0.5041	5.3	96	0.00	
81		1,1,1,2-Tetrachloroethane	0.3774	0.3609	4.4	97	0.00	
82	P	Ethylbenzene	0.5354	0.4953	7.5	93	0.00	
83	P	(m+p)Xylene	0.6556	0.6185	5.7	93	0.00	
84	P	o-Xylene	0.6620	0.6017	9.1	93	0.00	
85	P	Styrene	1.1180	1.0356	7.4	91	0.00	
86	P	Bromoform	0.1979	0.1951	1.4	97	0.00	
87		2-Chlorobenzotrifluoride	0.5693	0.5261	7.6	93	0.00	
88	P	Isopropylbenzene	1.6201	1.5152	6.5	92	0.00	
89		Cyclohexanone	0.0391	0.0379	3.1	94	0.00	
90		trans-1,4-Dichloro-2-Butene	0.0860	0.0806	6.3	92	0.00	
91	i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	104	0.00	
92	P	1,1,2,2-Tetrachloroethane	0.5752	0.5429	5.6	94	0.00	
93		Bromobenzene	0.8344	0.7540	9.6	92	0.00	

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
94		1,2,3-Trichloropropane	0.1529	0.1434	6.2	99	0.00	
95		n-Propylbenzene	3.3921	3.1957	5.8	91	0.00	
96		2-Chlorotoluene	2.0837	1.9102	8.3	90	0.00	
97		3-Chlorotoluene	2.1114	1.9396	8.1	90	0.00	
98		4-Chlorotoluene	2.5238	2.2623	10.4	90	0.00	
99		1,3,5-Trimethylbenzene	2.4909	2.3108	7.2	92	0.00	
100		tert-Butylbenzene	2.0692	1.9021	8.1	92	0.00	
101		1,2,4-Trimethylbenzene	2.5186	2.3715	5.8	92	0.00	
102		3,4-Dichlorobenzotrifluorid	0.7466	0.6834	8.5	92	0.00	
103		sec-Butylbenzene	2.8524	2.6904	5.7	92	0.00	
104		p-Isopropyltoluene	2.4946	2.3737	4.8	93	0.00	
105	P	1,3-Dclbenz	1.5432	1.4907	3.4	97	0.00	
106	P	1,4-Dclbenz	1.5632	1.5086	3.5	97	0.00	
107		2,4-Dichlorobenzotrifluorid	0.6694	0.6109	8.7	91	0.00	
108		2,5-Dichlorobenzotrifluorid	0.7696	0.7099	7.8	94	0.00	
109		n-Butylbenzene	2.1558	1.9865	7.9	91	0.00	
110	P	1,2-Dclbenz	1.4104	1.3648	3.2	98	0.00	
111	P	1,2-Dibromo-3-chloropropane	0.0885	0.0963	-8.8	102	0.00	
112		Trielution Dichlorotoluene	1.1402	1.1310	0.8	96	0.00	
113		1,3,5-Trichlorobenzene	0.9589	0.9316	2.8	96	0.00	
114		Coelution Dichlorotoluene	1.1579	1.1632	-0.5	97	0.00	
115	P	1,2,4-Tcbenzene	0.7820	0.7792	0.4	100	0.00	
116		Hexachlorobt	0.3747	0.2993	20.1#	86	0.00	(1)
117		Naphthalen	1.1982	1.4481	-20.9#	116	0.00	(2)
118		1,2,3-Tclbenzene	0.5318	0.5863	-10.2	109	0.00	
119		2,4,5-Trichlorotoluene	0.2920	0.3482	-19.2	124	0.00	
120		2,3,6-Trichlorotoluene	0.2893	0.3398	-17.5	127	0.00	

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

R2408064-04

FD 7/14/14

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	879282	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1273995	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1155627	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	639151	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	404519	53.25	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 106.50%				
48) surr1,1,2-dichloroetha...	4.854	65	402414	52.79	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 105.58%				
65) SURR3,Toluene-d8	7.427	98	1428092	48.77	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.54%				
70) SURR2,BFB	9.878	95	556440	48.09	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	421781	51.29	ug/L		97
3) Chloromethane	1.294	50	552847	54.26	ug/L		99
4) Vinyl Chloride	1.361	62	552428	51.67	ug/L		98
5) Bromomethane	1.556	94	192557	52.78	ug/L		100
6) Chloroethane	1.611	64	277219	47.67	ug/L		96
7) Freon 21	1.721	67	702383	45.35	ug/L		99
8) Trichlorofluoromethane	1.770	101	620010	54.01	ug/L		99
9) Diethyl Ether	1.934	59	331810	50.31	ug/L		83
10) Freon 123a	1.928	67	454213	45.57	ug/L		94
11) Freon 123	1.965	83	469208	44.21	ug/L		97
12) Acrolein	2.020	56	221393	216.82	ug/L		99
13) 1,1-Diclethene	2.099	96	287592	49.08	ug/L	#	81
14) Freon 113	2.093	101	350496	52.43	ug/L		97
15) Acetone	2.123	43	115084	58.04	ug/L		96
16) 2-Propanol	2.196	45	366336	1067.22	ug/L		95
17) Iodomethane	2.215	142	229129	37.67	ug/L		97
18) Carbon Disulfide	2.270	76	1170075	46.91	ug/L		99
19) Acetonitrile	2.318	40	73893	277.51	ug/L		93
20) Allyl Chloride	2.349	76	218006	51.42	ug/L	#	47
21) Methyl Acetate	2.355	43	241790	56.87	ug/L		90
22) Methylene Chloride	2.440	84	383787	52.52	ug/L	#	82
23) TBA	2.501	59	491540	908.81	ug/L		77
24) Acrylonitrile	2.629	53	615752	284.30	ug/L		95
25) Methyl-t-Butyl Ether	2.660	73	879660	47.32	ug/L		92
26) trans-1,2-Dichloroethene	2.666	96	381103	51.17	ug/L	#	83
28) 1,1-Diclethane	3.050	63	787973	51.47	ug/L		99
29) Vinyl Acetate	3.087	86	52916	48.80	ug/L	#	59
30) DIPE	3.105	45	1727130	55.73	ug/L		92
31) 2-Chloro-1,3-Butadiene	3.141	53	703038	47.73	ug/L		87
32) ETBE	3.501	59	1215485	46.12	ug/L		92
33) 2,2-Dichloropropane	3.678	77	532260	47.47	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	426321	50.50	ug/L		87
35) 2-Butanone	3.696	43	159942	59.17	ug/L		90
36) Propionitrile	3.763	54	209918	300.71	ug/L		96
37) Bromochloromethane	3.983	130	264409	53.38	ug/L		90

W061114.M Thu Jul 10 10:27:41 2014 MSVO10 Page: 1

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Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.964	67	107566	49.00	ug/L	#	69
39) Tetrahydrofuran	4.056	42	90502	56.26	ug/L		73
40) Chloroform	4.092	83	686203	50.14	ug/L		90
41) 1,1,1-Trichloroethane	4.361	97	587911	48.93	ug/L		95
42) TAME	5.184	73	855186	43.14	ug/L		92
44) Cyclohexane	4.446	41	451112	47.59	ug/L		86
46) Carbontetrachloride	4.617	121	163874	47.83	ug/L		89
47) 1,1-Dichloropropene	4.617	75	487635	47.33	ug/L		99
49) Benzene	4.958	78	1562782	47.53	ug/L		94
50) 1,2-Dichloroethane	4.982	62	523090	48.48	ug/L		92
51) Iso-Butyl Alcohol	4.854	43	253527	948.79	ug/L		91
52) n-Heptane	5.452	43	514211	55.77	ug/L		84
53) 1-Butanol	5.946	56	273607	2112.92	ug/L		83
54) Trichloroethene	5.970	130	446696	50.58	ug/L		92
55) Methylcyclohexane	6.214	55	502445	43.33	ug/L		84
56) 1,2-Diclpropane	6.257	63	448724	47.69	ug/L		98
57) Dibromomethane	6.403	93	213361	49.56	ug/L		91
58) 1,4-Dioxane	6.464	88	54470m	1179.15	ug/L		
59) Methyl Methacrylate	6.464	69	182766m	48.04	ug/L		
60) Bromodichloromethane	6.616	83	499022	48.28	ug/L		95
61) 2-Nitropropane	6.891	41	117540	79.88	ug/L		98
62) 2-Chloroethylvinyl Ether	7.006	63	201942	46.56	ug/L		94
63) cis-1,3-Dichloropropene	7.141	75	565272	45.32	ug/L		99
64) 4-Methyl-2-pentanone	7.336	43	315245	50.20	ug/L		97
66) Toluene	7.500	91	1646548	46.59	ug/L		99
67) trans-1,3-Dichloropropene	7.744	75	459929	45.06	ug/L		97
68) Ethyl Methacrylate	7.872	69	376639	47.45	ug/L	#	66
69) 1,1,2-Trichloroethane	7.921	97	294391	48.02	ug/L		100
72) Tetrachloroethene	8.055	164	345522	48.16	ug/L		98
73) 2-Hexanone	8.195	43	228721	50.60	ug/L		93
74) 1,3-Dichloropropane	8.086	76	493754m	46.23	ug/L		
75) Dibromochloromethane	8.299	129	389420	50.99	ug/L		100
76) N-Butyl Acetate	8.335	43	528247	44.44	ug/L		93
77) 1,2-Dibromoethane	8.396	107	295692	47.69	ug/L		94
78) 3-Chlorobenzotrifluoride	8.878	180	643790	48.44	ug/L		97
79) Chlorobenzene	8.866	112	1123632	46.89	ug/L		98
80) 4-Chlorobenzotrifluoride	8.927	180	582595	47.35	ug/L		98
81) 1,1,1,2-Tetrachloroethane	8.945	131	417079	47.82	ug/L		98
82) Ethylbenzene	8.976	106	572406	46.26	ug/L	#	91
83) (m+p)Xylene	9.085	106	1429520	94.35	ug/L		95
84) o-Xylene	9.433	106	695288	45.44	ug/L		97
85) Styrene	9.445	104	1196738	46.31	ug/L		98
86) Bromoform	9.597	173	225462	49.30	ug/L		98
87) 2-Chlorobenzotrifluoride	9.671	180	607935	46.20	ug/L		96
88) Isopropylbenzene	9.756	105	1751035	46.76	ug/L		99
89) Cyclohexanone	9.823	55	875912	969.90	ug/L		94
90) trans-1,4-Dichloro-2-B...	10.055	53	93109	46.83	ug/L		92
92) 1,1,2,2-Tetrachloroethane	10.006	83	346986	47.19	ug/L		98
93) Bromobenzene	10.000	156	481909	45.18	ug/L		96
94) 1,2,3-Trichloropropane	10.042	110	91636	46.87	ug/L		93
95) n-Propylbenzene	10.103	91	2042513	47.10	ug/L		98
96) 2-Chlorotoluene	10.171	91	1220911	45.84	ug/L		93

W061114.M Thu Jul 10 10:27:41 2014 MSVO10 Page: 2

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

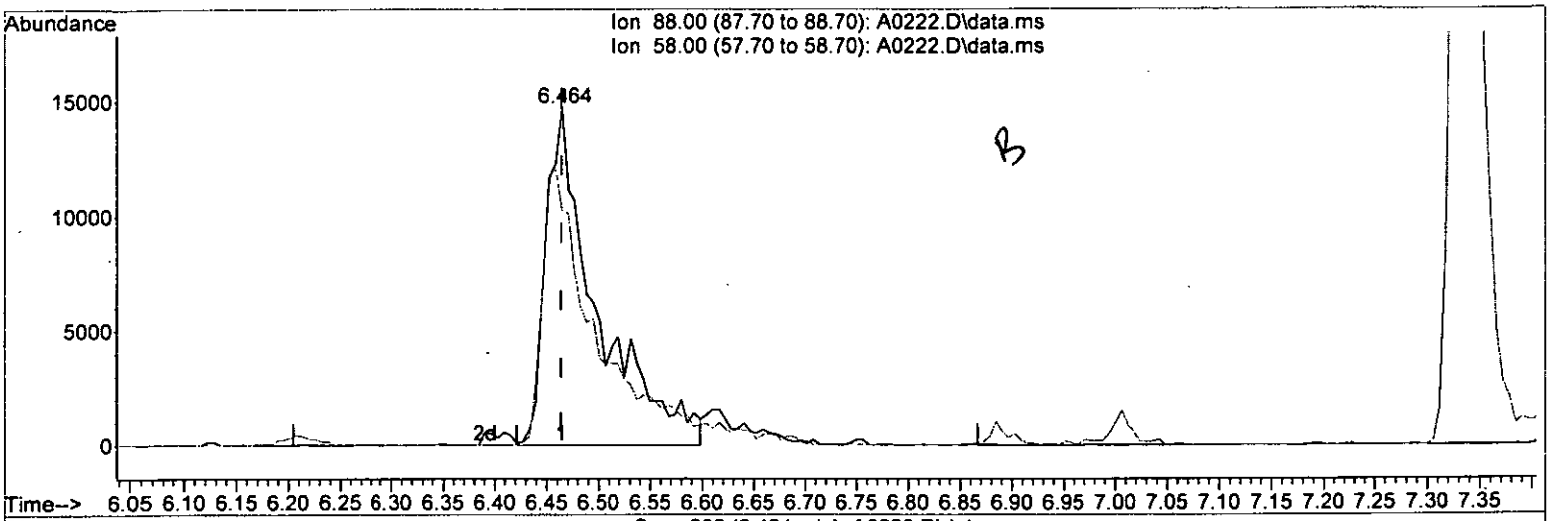
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1239704	45.93	ug/L	96
98)	4-Chlorotoluene	10.256	91	1445922	44.82	ug/L	98
99)	1,3,5-Trimethylbenzene	10.250	105	1476966	46.39	ug/L	96
100)	tert-Butylbenzene	10.518	119	1215737	45.96	ug/L	99
101)	1,2,4-Trimethylbenzene	10.561	105	1515744	47.08	ug/L	94
102)	3,4-Dichlorobenzotrifl...	10.616	214	436819	45.77	ug/L	94
103)	sec-Butylbenzene	10.695	105	1719578	47.16	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1517130	47.58	ug/L	97
105)	1,3-Dclbenz	10.780	146	952813	48.30	ug/L	100
106)	1,4-Dclbenz	10.853	146	964243	48.26	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	390453	45.63	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.945	214	453702	46.12	ug/L	98
109)	n-Butylbenzene	11.140	91	1269664	46.07	ug/L	99
110)	1,2-Dclbenz	11.152	146	872318	48.38	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	61572	54.45	ug/L	91
112)	Trielution Dichlorotol...	11.804	125	2168670	148.80	ug/L	95
113)	1,3,5-Trichlorobenzene	11.847	180	595411	48.57	ug/L	94
114)	Coelution Dichlorotoluene	12.066	125	1486905	100.46	ug/L	96
115)	1,2,4-Tcbenzene	12.225	180	498013	49.82	ug/L	98
116)	Hexachlorobt	12.329	225	191297	39.94	ug/L	97
117)	Naphthalen	12.377	128	925536	60.43	ug/L	98
118)	1,2,3-Tclbenzene	12.512	180	374742	55.13	ug/L	96
119)	2,4,5-Trichlorotoluene	12.932	159	222533	59.63	ug/L	98
120)	2,3,6-Trichlorotoluene	12.993	159	217179	58.72	ug/L	98

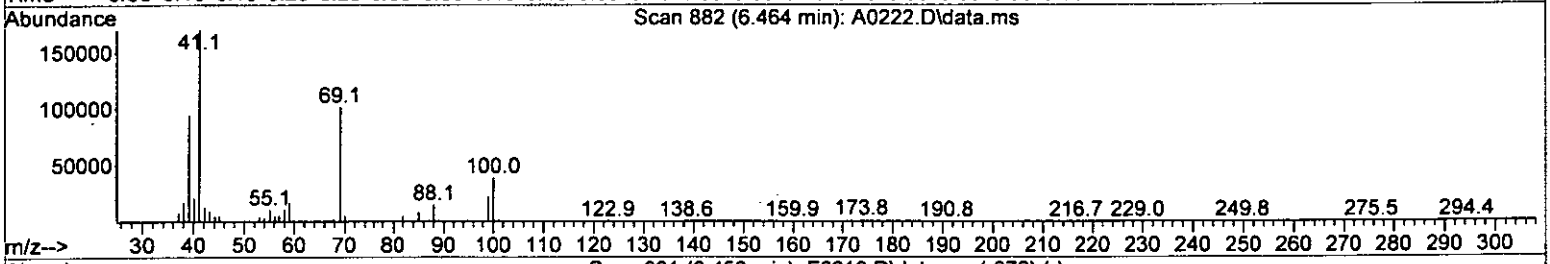
(#) = qualifier out of range (m) = manual integration (+) = signals summed

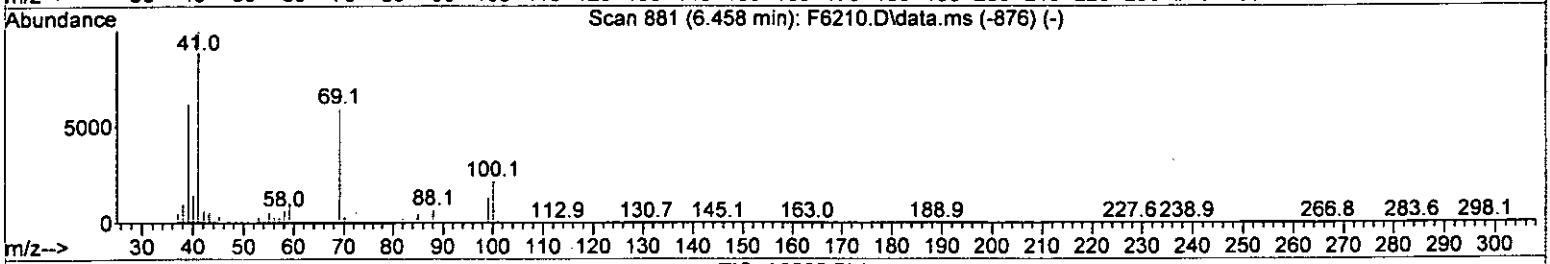
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:16:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0222.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 1084.72 ug/L

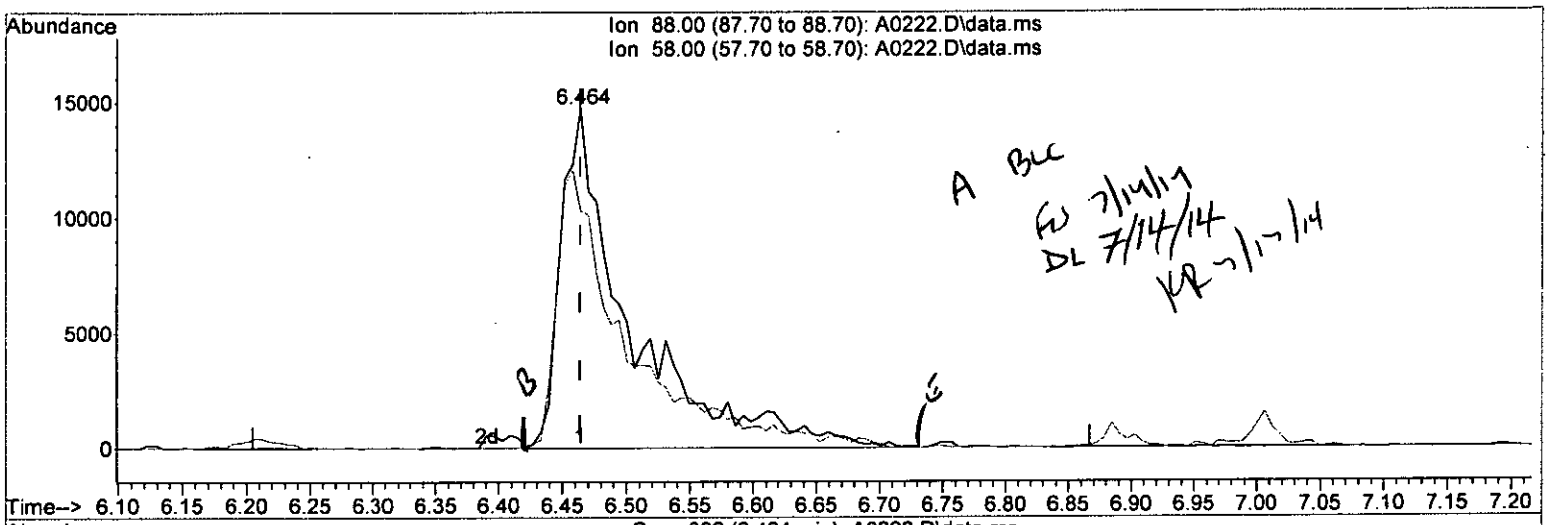
response 50108

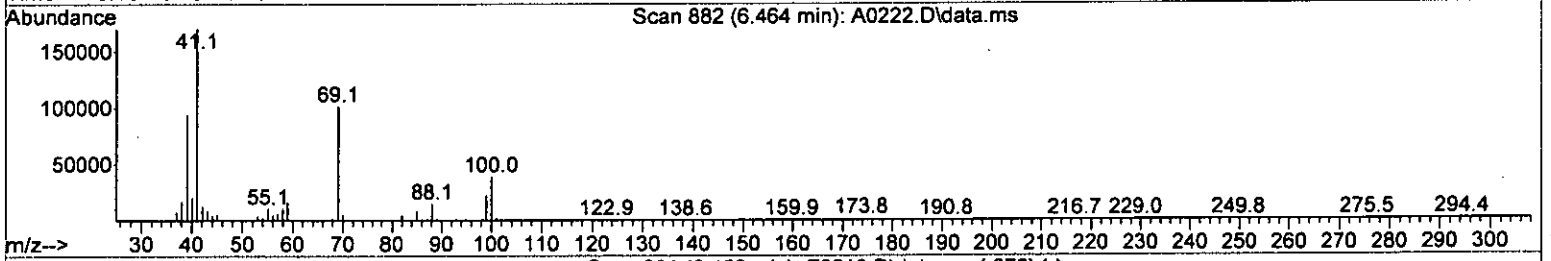
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	70.03
0.00	0.00	0.00
0.00	0.00	0.00

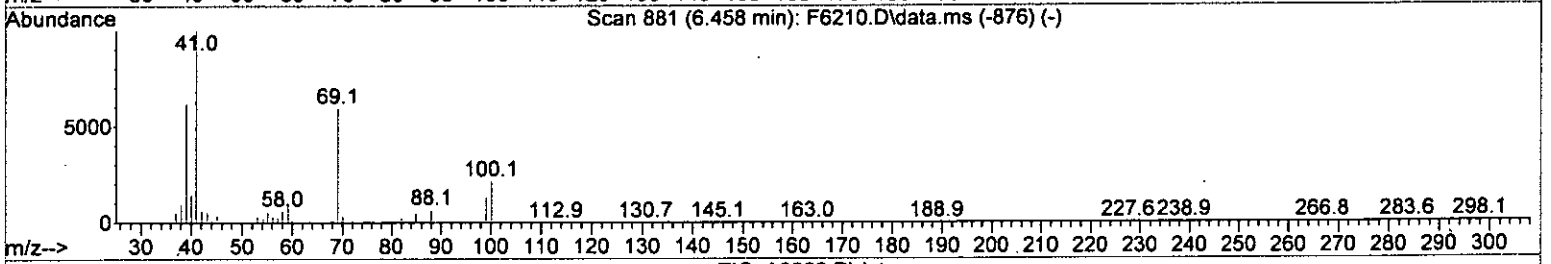
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:16:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0222.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 1179.15 ug/L m

response 54470

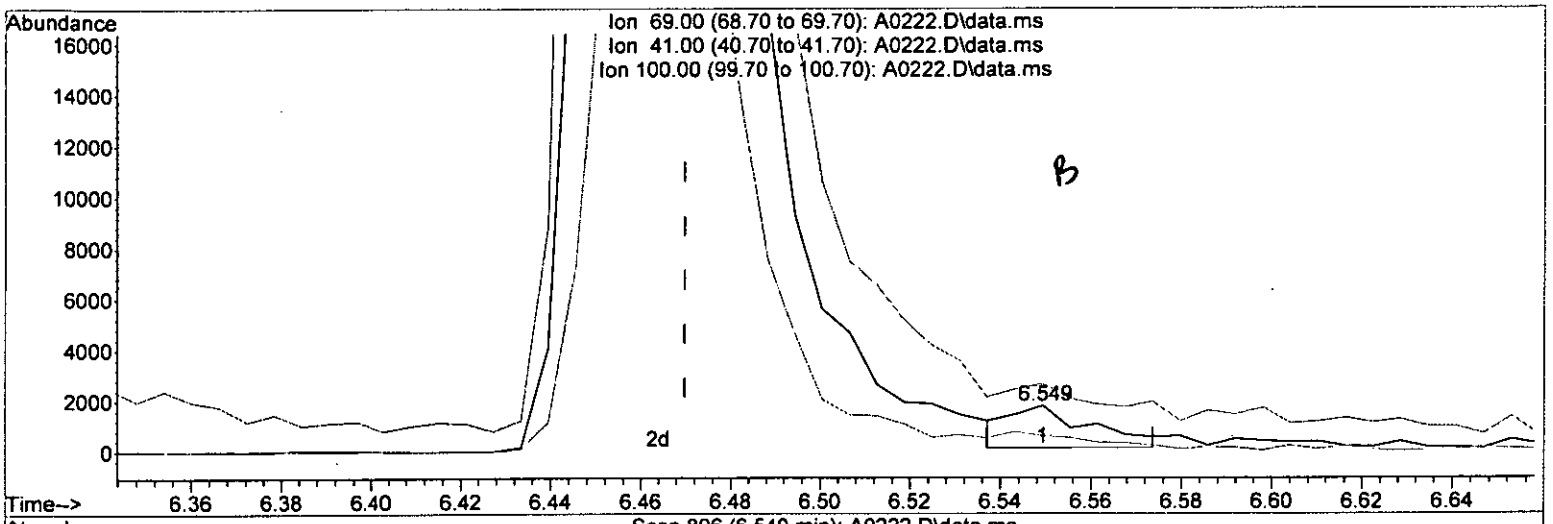
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	70.03
0.00	0.00	0.00
0.00	0.00	0.00

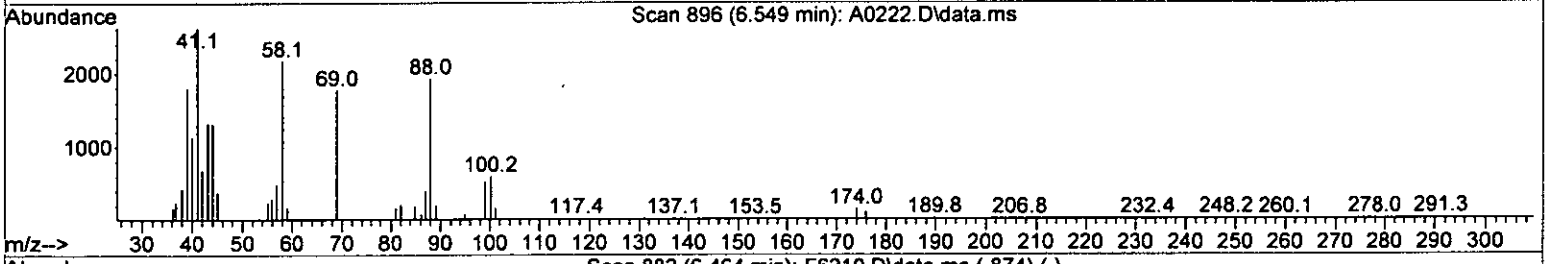
W061114.M Thu Jul 10 10:26:39 2014 MSVO10 Page: 1

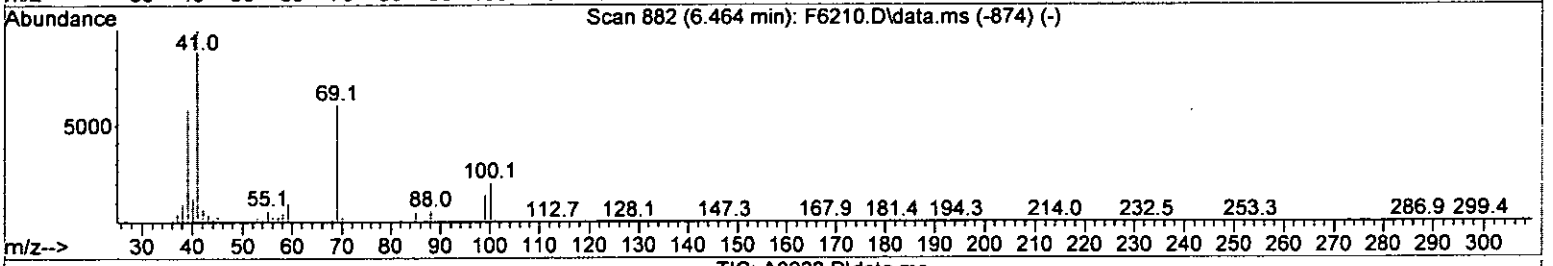
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:16:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0222.D\data.ms

(59) Methyl Methacrylate

6.549min (+0.079) 0.54 ug/L

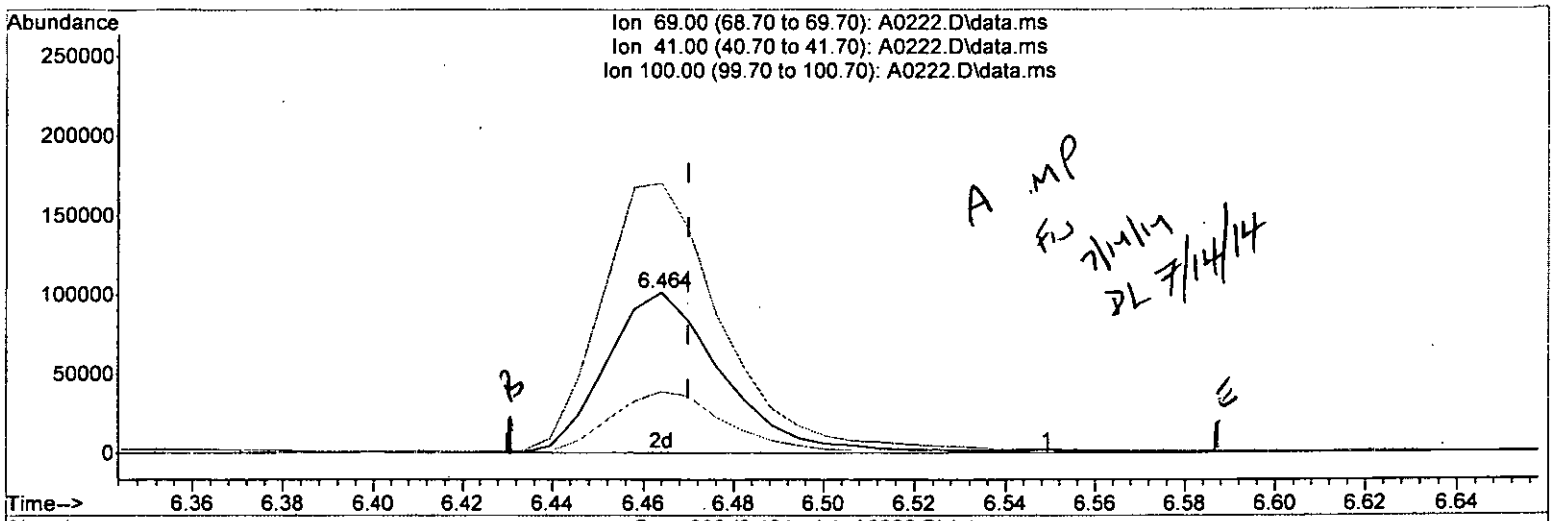
response 2072

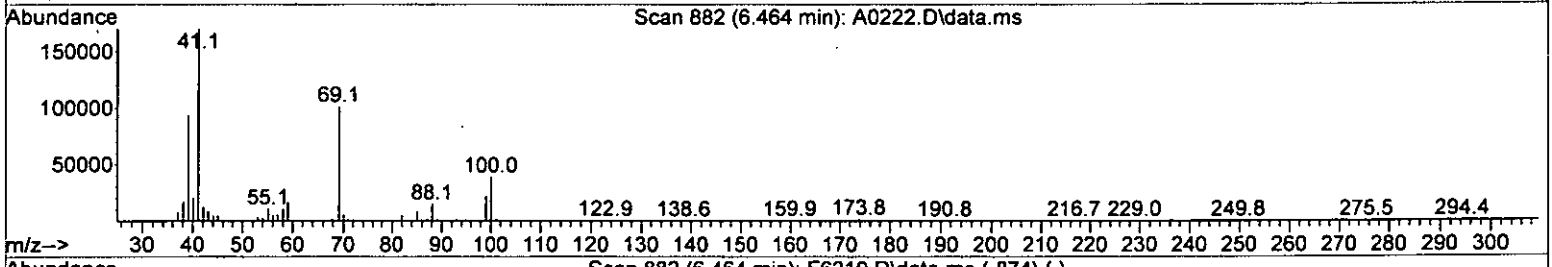
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	148.13
100.00	36.90	33.20
0.00	0.00	0.00

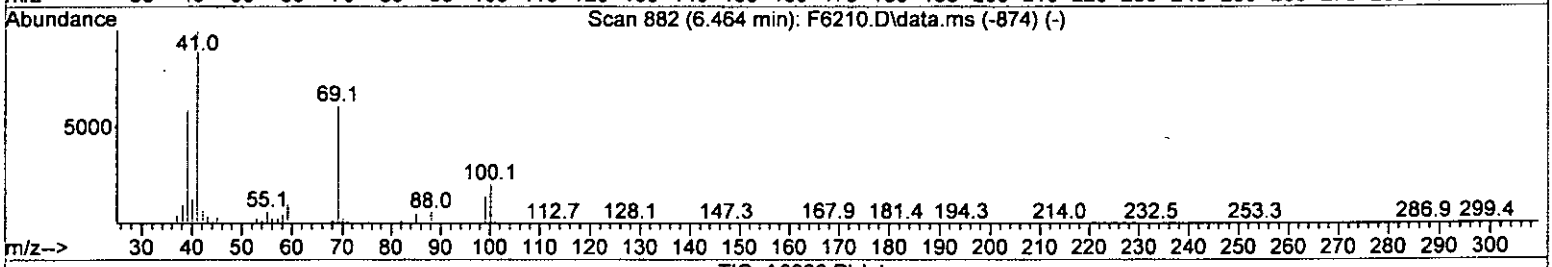
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:16:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0222.D\data.ms

(59) Methyl Methacrylate

6.464min (-0.006) 48.04 ug/L m

response 182766

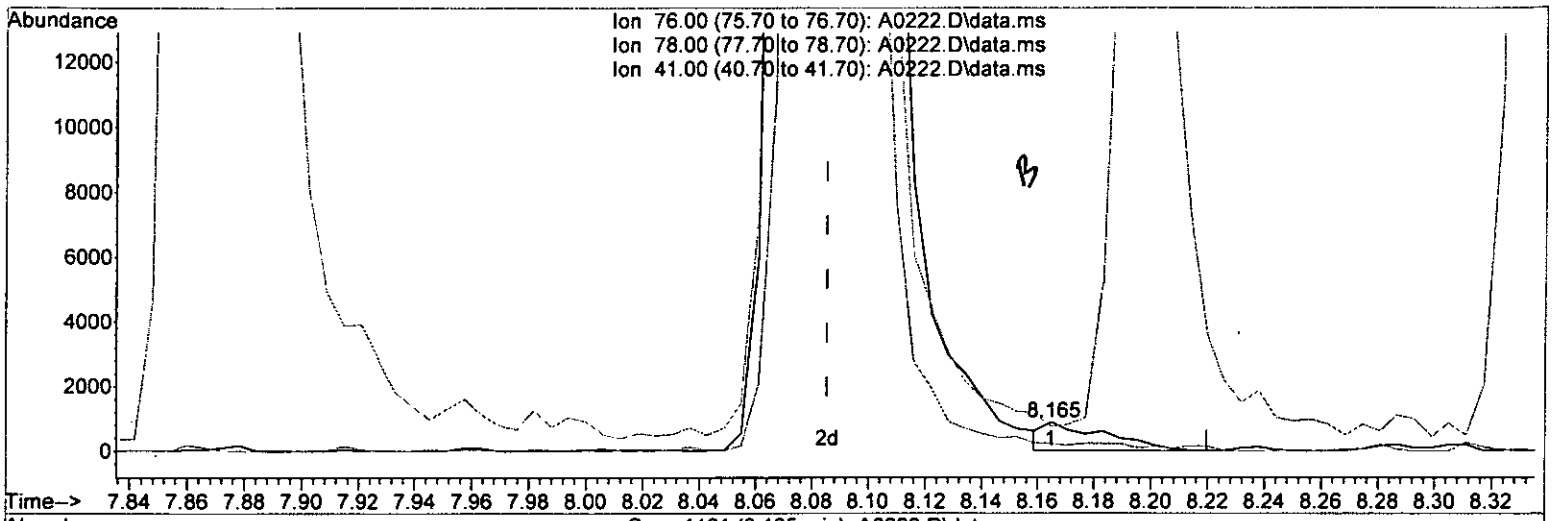
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	168.03#
100.00	36.90	38.05
0.00	0.00	0.00

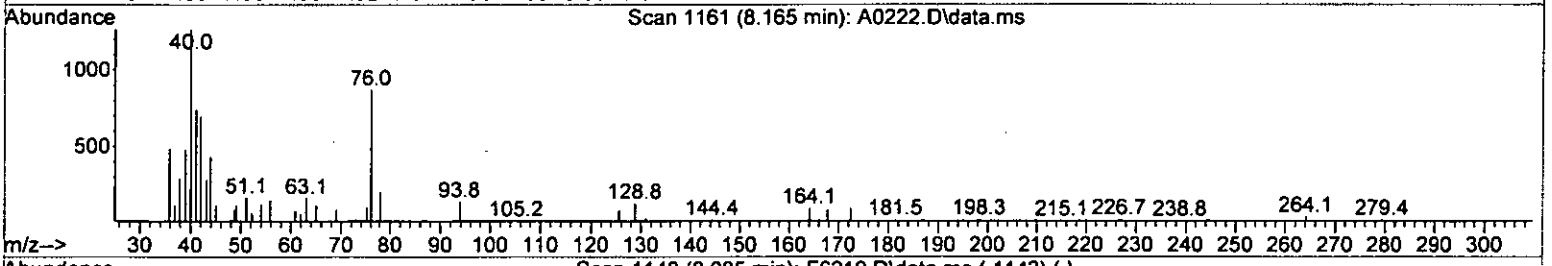
W061114.M Thu Jul 10 10:26:50 2014 MSVO10 Page: 1

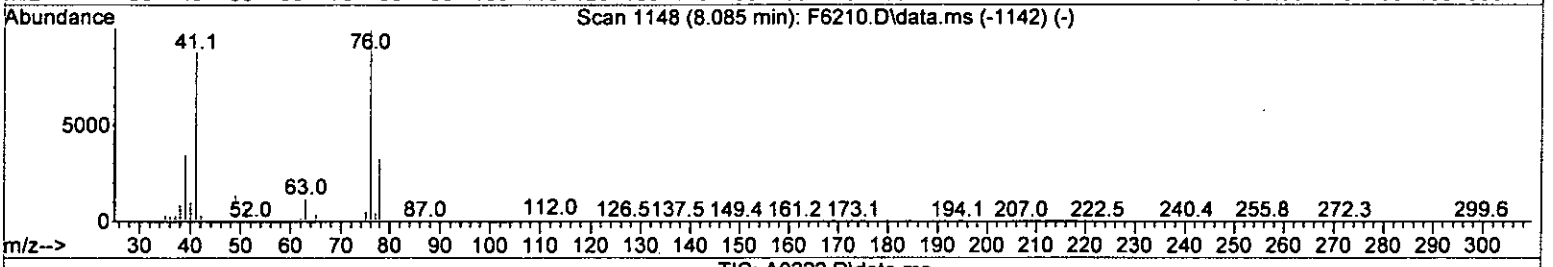
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:16:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0222.D\data.ms

(74) 1,3-Dichloropropane

8.165min (+0.079) 0.12 ug/L

response 1291

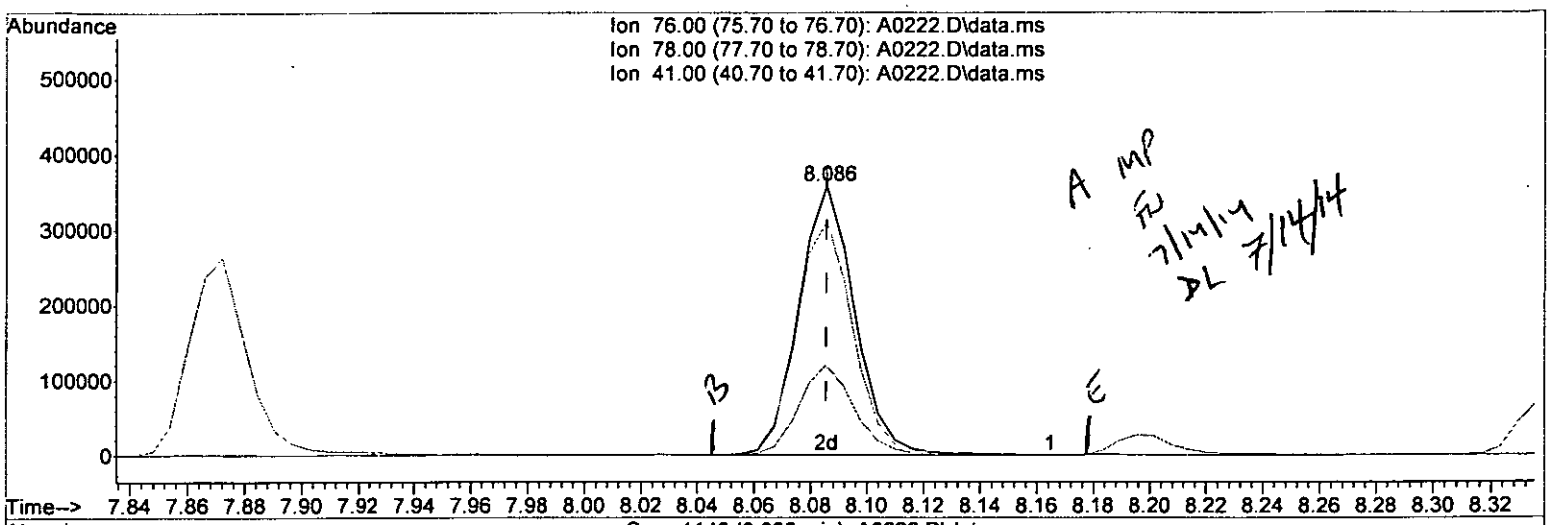
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	22.95
41.00	66.30	85.35
0.00	0.00	0.00

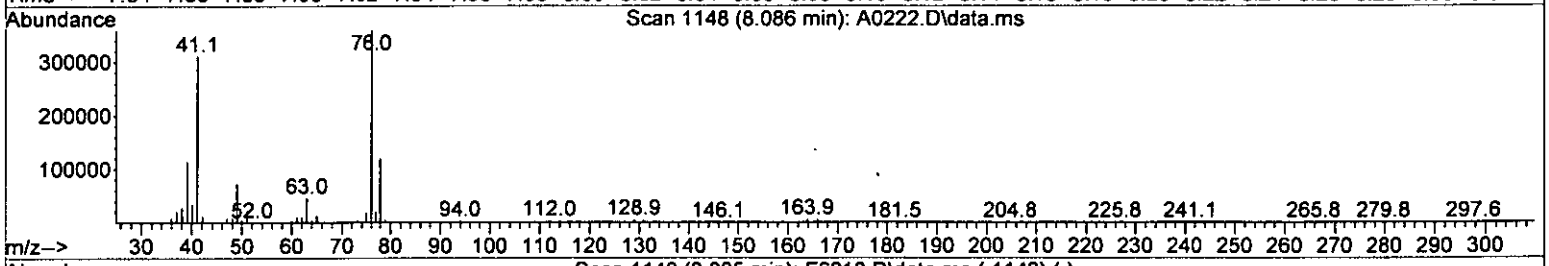
W061114.M Thu Jul 10 10:27:02 2014 MSVO10 Page: 1

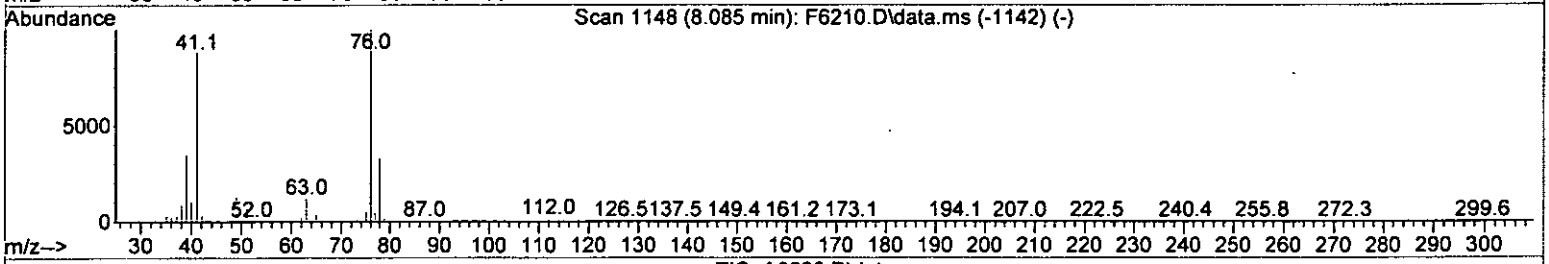
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:16:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0222.D\data.ms

(74) 1,3-Dichloropropane

8.086min (+0.000) 46.23 ug/L m

response 493754

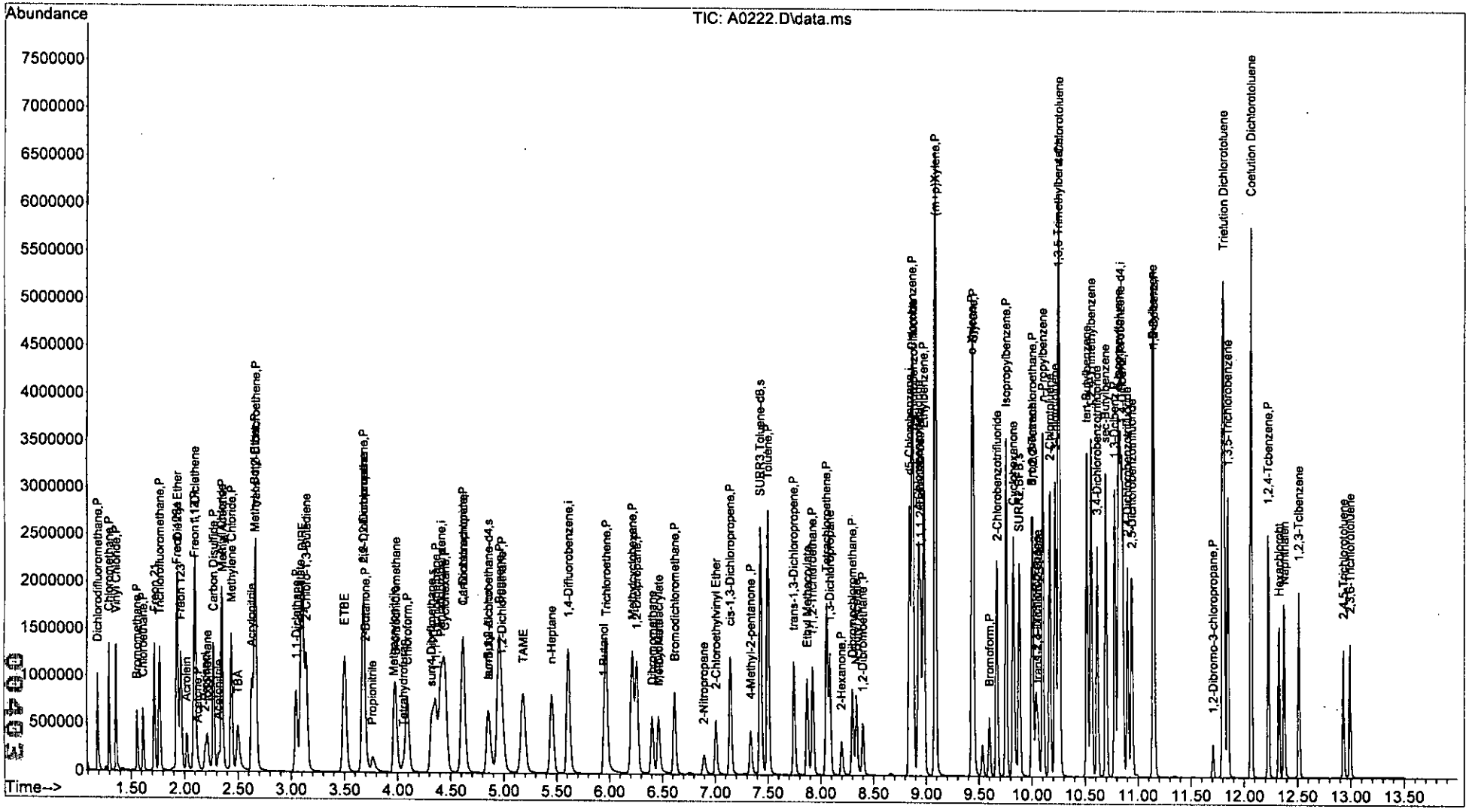
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	33.20
41.00	66.30	86.71#
0.00	0.00	0.00

W061114.M Thu Jul 10 10:27:15 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071014\A0222.D Vial: 2
Acq On : 10 Jul 2014 10:03 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



W061114.M Thu Jul 10 10:27:44 2014 MSVO10 Page: 4

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/15/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\071514\A0363.D\

Calibration Date: 6/11/14
Calibration ID: RC1400047
Analysis Lot: 401710
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	47.5	0.3774	0.3583	-5.1	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	46.7	0.6832	0.6387	-6.5	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	47.8	0.5752	0.5501	-4.4	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	47.9	0.2406	0.2303	-4.3	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	50.9	0.8705	0.8853	1.7	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.9	0.3332	0.3322	-0.3	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	46.1	0.4044	0.3731	-7.7	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	57.7	0.5318	0.6134	15.3	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	47.9	0.1529	0.1464	-4.3	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	51.0	0.7820	0.7973	2.0	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	47.4	2.519	2.385	-5.3	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	54.0	0.08846	0.09561	8.1	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	47.5	0.2683	0.2550	-5.0	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	49.0	1.410	1.381	-2.1	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	48.7	0.4235	0.4128	-2.5	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	47.9	0.3693	0.3538	-4.2	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	46.0	2.491	2.292	-8.0	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	47.6	1.543	1.469	-4.8	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	46.4	0.4621	0.4289	-7.2	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	47.2	1.563	1.477	-5.5	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	46.0	0.6377	0.5864	-8.0	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	58.3	0.1537	0.1791	16.5	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	46.6	2.084	1.941	-6.8	NA	± 20 %	Average RF
2-Hexanone	50.0	49.2	0.1956	0.1922	-1.7	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	889	0.03076	0.02735	-11.1	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	45.3	2.524	2.288	-9.3	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	47.9	2.495	2.388	-4.3	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	48.5	0.2465	0.2392	-2.9	NA	± 20 %	Average RF
Acetone	50.0	53.8	0.1127	0.1214	7.7	NA	± 20 %	Average RF
Benzene	50.0	46.8	1.290	1.207	-6.5	NA	± 20 %	Average RF
Bromobenzene	50.0	45.8	0.8344	0.7640	-8.4	NA	± 20 %	Average RF
Bromochloromethane	50.0	52.8	0.2816	0.2975	5.6	NA	± 20 %	Average RF
Bromodichloromethane	50.0	46.9	0.4057	0.3808	-6.1	NA	± 20 %	Average RF
Bromoform	50.0	47.2	0.1979	0.1866	-5.7	NA	± 20 %	Average RF
Bromomethane	50.0	47.0	NA	NA	NA	-6.1	± 20 %	Quadratic
Carbon Tetrachloride	50.0	45.3	0.1345	0.1217	-9.5	NA	± 20 %	Average RF
Chlorobenzene	50.0	47.0	1.037	0.9742	-6.0	NA	± 20 %	Average RF
Chloroethane	50.0	46.9	0.3307	0.3098	-6.3	NA	± 20 %	Average RF
Chloroform	50.0	49.6	0.7782	0.7717	-0.8	NA	± 20 %	Average RF
Chloromethane	50.0	56.1	0.5794	0.6504	12.2	NA	± 20 %	Average RF
Dibromochloromethane	50.0	49.0	0.3305	0.3236	-2.1	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000

Service Request: R1405048
Date Analyzed: 7/15/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\071514\A0363.D\

Calibration Date: 6/11/14
Calibration ID: RC1400047
Analysis Lot: 401710
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	47.0	0.4677	0.4397	-6.0	NA	± 20 %	Average RF
Methylene Chloride	50.0	51.4	NA	NA	NA	2.8	± 20 %	Linear
Ethylbenzene	50.0	46.7	0.5354	0.4995	-6.7	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	41.3	0.3747	0.3098	-17.3	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	46.3	1.620	1.500	-7.4	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	46.5	1.057	0.9829	-7.0	NA	± 20 %	Average RF
Naphthalene	50.0	62.4	1.198	1.496	24.8 *	NA	± 20 %	Average RF
Styrene	50.0	47.1	1.118	1.053	-5.8	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	46.2	0.3104	0.2865	-7.7	NA	± 20 %	Average RF
Toluene	50.0	45.9	1.387	1.273	-8.2	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	48.5	0.3466	0.3358	-3.1	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	50.4	0.6528	0.6582	0.8	NA	± 20 %	Average RF
Vinyl Chloride	50.0	50.0	0.6080	0.6082	0.0	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	50.1	0.4801	0.4805	0.1	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	45.2	0.4895	0.4426	-9.6	NA	± 20 %	Average RF
m,p-Xylenes	100	94.1	0.6556	0.6168	-5.9	NA	± 20 %	Average RF
n-Butylbenzene	50.0	47.0	2.156	2.025	-6.0	NA	± 20 %	Average RF
n-Propylbenzene	50.0	47.7	3.392	3.233	-4.7	NA	± 20 %	Average RF
o-Xylene	50.0	45.7	0.6620	0.6053	-8.6	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	46.9	2.852	2.676	-6.2	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	46.7	2.069	1.934	-6.5	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	50.6	0.4235	0.4282	1.1	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	44.1	0.4006	0.3531	-11.9	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	48.6	0.4541	0.4413	-2.8	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	52.4	0.2981	0.3124	4.8	NA	± 20 %	Average RF
Toluene-d8	50.0	49.4	1.149	1.136	-1.1	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FN 7/15/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Pentafluorobenzene	1.0000	1.0000	0.0	94	0.00
2	P	Dichlorodifluoromethane	0.4677	0.4397	6.0	82	0.00
3	P	Chloromethane	0.5794	0.6504	-12.3	100	0.00
4	P	Vinyl Chloride	0.6080	0.6082	-0.0	89	0.00
5	P	Bromomethane	0.2195	0.1910	6.1 ~~13.0~~	78	0.00
6	P	Chloroethane	0.3307	0.3098	6.3	90	0.00
7		Freon 21	0.8807	0.8534	3.1	90	0.00
8	P	Trichlorofluoromethane	0.6528	0.6582	-0.8	93	0.00
9		Diethyl Ether	0.3751	0.3734	0.5	94	0.00
10		Freon 123a	0.5668	0.5273	7.0	87	0.00
11		Freon 123	0.6036	0.5533	8.3	85	0.00
12		Acrolein	0.0581	0.0582	-0.2	95	0.00
13		1,1-Diclethene	0.3332	0.3322	0.3	97	0.00
14	P	Freon 113	0.3801	0.3855	-1.4	96	0.00
15	P	Acetone	0.1127	0.1214	-7.7	100	0.00
16		2-Propanol	0.0195	0.0213	-9.2	96	0.00 (1)
17		Iodomethane	0.3489	0.2578	25.3 ~~26.1#~~	76	0.00
18	P	Carbon Disulfide	1.4185	1.2622	11.0	83	0.00
19		Acetonitrile	0.0151	0.0173	-14.6	113	0.00
20		Allyl Chloride	0.2411	0.2332	3.3	86	0.00
21	P	Methyl Acetate	0.2417	0.2839	-17.5	103	0.00
22	P	Methylene Chloride	0.5021	0.4272	-2.8 ~~14.9~~	94	0.00
23		TBA	0.0308	0.0273	11.4	77	0.00
24		Acrylonitrile	0.1232	0.1434	-16.4	103	0.00
25	P	Methyl-t-Butyl Ether	1.0572	0.9829	7.0	85	0.00
26	P	trans-1,2-Dichloroethene	0.4235	0.4282	-1.1	93	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.03#
28	P	1,1-Diclethane	0.8705	0.8853	-1.7	96	0.00
29		Vinyl Acetate	0.0617	0.0559	9.4	80	0.00
30		DIPE	1.7622	2.0410	-15.8	110	0.00
31		2-Chloro-1,3-Butadiene	0.8376	0.8048	3.9	87	0.00
32		ETBE	1.4988	1.4036	6.4	89	0.00
33		2,2-Dichloropropane	0.6377	0.5864	8.0	89	0.00
34	P	cis-1,2-Dichloroethene	0.4801	0.4805	-0.1	93	0.00
35	P	2-Butanone	0.1537	0.1791	-16.5	101	-0.02
36		Propionitrile	0.0397	0.0475	-19.6	98	0.00
37		Bromochloromethane	0.2816	0.2975	-5.6	97	0.00
38		Methacrylonitrile	0.1248	0.1211	3.0	89	-0.01
39		Tetrahydrofuran	0.0915	0.1043	-14.0	108	0.00
40	P	Chloroform	0.7782	0.7717	0.8	95	0.00
41	P	1,1,1-Trichloroethane	0.6832	0.6387	6.5	89	0.00
42		TAME	1.1271	0.9779	13.2	82	0.00
43	i	1,4-Difluorobenzene	1.0000	1.0000	0.0	101	0.00
44	P	Cyclohexane	0.3721	0.3681	1.1	96	0.00
45	s	surr4,Dibrflmethane	0.2981	0.3124	-4.8	108	0.00
46	P	Carbontetrachloride	0.1345	0.1217	9.5	89	0.00
47		1,1-Dichloropropene	0.4044	0.3731	7.7	92	0.00

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	s	surr1,1,2-dichloroethane-d4	0.2992	0.3222	-7.7	111	0.00
49	P	Benzene	1.2905	1.2071	6.5	92	0.00
50	P	1,2-Dichloroethane	0.4235	0.4128	2.5	96	0.00
51		Iso-Butyl Alcohol	0.0105	0.0100	4.8	90	0.00
52		n-Heptane	0.3618	0.3952	-9.2	108	0.00
53		1-Butanol	0.0049	0.0042	17.3 ~~14.3~~	74	-0.02
54	P	Trichloroethene	0.3466	0.3358	3.1	96	0.00
55	P	Methylcyclohexane	0.4551	0.4092	10.1	88	0.00
56	P	1,2-Diclpropane	0.3693	0.3538	4.2	95	0.00
57		Dibromomethane	0.1690	0.1675	0.9	96	0.00
58		1,4-Dioxane	0.0018	0.0018	0.0	95	0.00
59		Methyl Methacrylate	0.1493	0.1374	8.0	85	0.00
60	P	Bromodichloromethane	0.4057	0.3808	6.1	93	0.00
61		2-Nitropropane	0.0578	0.0467	19.2	74	0.00
62		2-Chloroethylvinyl Ether	0.1702	0.1451	14.7	80	0.00
63	P	cis-1,3-Dichloropropene	0.4895	0.4426	9.6	87	0.00
64	P	4-Methyl-2-pentanone	0.2465	0.2392	3.0	92	0.00
65	s	SURR3,Toluene-d8	1.1492	1.1360	1.1	99	0.00
66	P	Toluene	1.3871	1.2733	8.2	89	0.00
67	P	trans-1,3-Dichloropropene	0.4006	0.3531	11.9	84	0.00
68		Ethyl Methacrylate	0.3115	0.2976	4.5	85	0.00
69	P	1,1,2-Trichloroethane	0.2406	0.2303	4.3	93	0.00
70	s	SURR2,BFB	0.4541	0.4413	2.8	98	0.00
71	i	d5-Chlorobenzene	1.0000	1.0000	0.0	103	0.00
72	P	Tetrachloroethene	0.3104	0.2865	7.7	91	0.00
73	P	2-Hexanone	0.1956	0.1922	1.7	94	-0.01
74		1,3-Dichloropropane	0.4621	0.4289	7.2	92	0.00
75	P	Dibromochloromethane	0.3305	0.3236	2.1	93	0.00
76		N-Butyl Acetate	0.5143	0.4970	3.4	92	0.00
77	P	1,2-Dibromoethane	0.2683	0.2550	5.0	92	0.00
78		3-Chlorobenzotrifluoride	0.5750	0.5352	6.9	90	0.00
79	P	Chlorobenzene	1.0368	0.9742	6.0	93	0.00
80		4-Chlorobenzotrifluoride	0.5323	0.4788	10.1	89	0.00
81		1,1,1,2-Tetrachloroethane	0.3774	0.3583	5.1	93	0.00
82	P	Ethylbenzene	0.5354	0.4995	6.7	92	0.00
83	P	(m+p)Xylene	0.6556	0.6168	5.9	90	0.00
84	P	o-Xylene	0.6620	0.6053	8.6	91	0.00
85	P	Styrene	1.1180	1.0531	5.8	90	0.00
86	P	Bromoform	0.1979	0.1866	5.7	90	0.00
87		2-Chlorobenzotrifluoride	0.5693	0.5298	6.9	91	0.00
88	P	Isopropylbenzene	1.6201	1.4995	7.4	88	0.00
89		Cyclohexanone	0.0391	0.0395	-1.0	95	0.00
90		trans-1,4-Dichloro-2-Butene	0.0860	0.0849	1.3	94	0.00
91	i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	99	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5752	0.5501	4.4	92	0.00
93		Bromobenzene	0.8344	0.7640	8.4	89	0.00

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
94		1,2,3-Trichloropropane	0.1529	0.1464	4.3	97	0.00	
95		n-Propylbenzene	3.3921	3.2329	4.7	88	0.00	
96		2-Chlorotoluene	2.0837	1.9411	6.8	88	0.00	
97		3-Chlorotoluene	2.1114	2.0039	5.1	89	0.00	
98		4-Chlorotoluene	2.5238	2.2885	9.3	87	0.00	
99		1,3,5-Trimethylbenzene	2.4909	2.2922	8.0	88	0.00	
100		tert-Butylbenzene	2.0692	1.9345	6.5	90	0.00	
101		1,2,4-Trimethylbenzene	2.5186	2.3849	5.3	88	0.00	
102		3,4-Dichlorobenzotrifluorid	0.7466	0.6742	9.7	87	0.00	
103		sec-Butylbenzene	2.8524	2.6756	6.2	88	0.00	
104		p-Isopropyltoluene	2.4946	2.3878	4.3	90	0.00	
105	P	1,3-Dclbenz	1.5432	1.4694	4.8	92	0.00	
106	P	1,4-Dclbenz	1.5632	1.4769	5.5	91	0.00	
107		2,4-Dichlorobenzotrifluorid	0.6694	0.6006	10.3	86	0.00	
108		2,5-Dichlorobenzotrifluorid	0.7696	0.6993	9.1	89	0.00	
109		n-Butylbenzene	2.1558	2.0254	6.0	89	0.00	
110	P	1,2-Dclbenz	1.4104	1.3813	2.1	95	0.00	
111	P	1,2-Dibromo-3-chloropropane	0.0885	0.0956	-8.0	97	0.00	
112		Trielution Dichlorotoluene	1.1402	1.1784	-3.4	96	0.00	
113		1,3,5-Trichlorobenzene	0.9589	0.9484	1.1	94	0.00	
114		Coelution Dichlorotoluene	1.1579	1.2292	-6.2	98	0.00	
115	P	1,2,4-Tcbenzene	0.7820	0.7973	-2.0	98	0.00	
116		Hexachlorobt	0.3747	0.3098	17.3	85	0.00	
117		Naphthalen	1.1982	1.4959	-24.8#	115	-0.01	(2)
118		1,2,3-Tclbenzene	0.5318	0.6134	-15.3	110	0.00	
119		2,4,5-Trichlorotoluene	0.2920	0.3860	-32.2#	132	-0.01	NT
120		2,3,6-Trichlorotoluene	0.2893	0.3883	-34.2#	139	-0.01	NT

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1403243-04 1-10

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FV 7/15/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	849970	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1240269	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1125475	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	612532	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	387452	52.39	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.78%				
48) surr1,1,2-dichloroetha...	4.854	65	399600	53.84	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.68%				
65) SURR3,Toluene-d8	7.427	98	1408964	49.43	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.86%				
70) SURR2,BFB	9.878	95	547288	48.59	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	373723	47.01	ug/L		98
3) Chloromethane	1.294	50	552793	56.12	ug/L		98
4) Vinyl Chloride	1.361	62	516993	50.02	ug/L		98
5) Bromomethane	1.556	94	162329	46.95	ug/L		100
6) Chloroethane	1.611	64	263361	46.85	ug/L		94
7) Freon 21	1.721	67	725405	48.45	ug/L		97
8) Trichlorofluoromethane	1.770	101	559439	50.41	ug/L		99
9) Diethyl Ether	1.934	59	317337	49.77	ug/L		80
10) Freon 123a	1.928	67	448176	46.52	ug/L		96
11) Freon 123	1.965	83	470278	45.84	ug/L		99
12) Acrolein	2.020	56	247173	250.42	ug/L		97
13) 1,1-Diclethene	2.099	96	282321	49.85	ug/L	#	82
14) Freon 113	2.093	101	327702	50.71	ug/L		100
15) Acetone	2.123	43	103186	53.84	ug/L		98
16) 2-Propanol	2.196	45	362910	1093.70	ug/L		99
17) Iodomethane	2.215	142	219155	37.36	ug/L		99
18) Carbon Disulfide	2.276	76	1072825	44.49	ug/L		99
19) Acetonitrile	2.318	40	73557	285.77	ug/L		99
20) Allyl Chloride	2.349	76	198171	48.36	ug/L	#	40
21) Methyl Acetate	2.355	43	241280	58.71	ug/L		88
22) Methylene Chloride	2.440	84	363137	51.39	ug/L	#	78
23) TBA	2.501	59	464857	889.11	ug/L		77
24) Acrylonitrile	2.629	53	609587	291:16	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	835403	46.48	ug/L		89
26) trans-1,2-Dichloroethene	2.672	96	363924	50.55	ug/L		90
28) 1,1-Diclethane	3.050	63	752484	50.85	ug/L		99
29) Vinyl Acetate	3.087	86	47486	45.30	ug/L	#	30
30) DIPE	3.105	45	1734751	57.91	ug/L		90
31) 2-Chloro-1,3-Butadiene	3.141	53	684070	48.05	ug/L		87
32) ETBE	3.501	59	1193042	46.83	ug/L		93
33) 2,2-Dichloropropane	3.684	77	498420	45.98	ug/L		98
34) cis-1,2-Dichloroethene	3.678	96	408444m	50.05	ug/L		
35) 2-Butanone	3.702	43	152255	58.27	ug/L		89
36) Propionitrile	3.769	54	201890	299.18	ug/L		97
37) Bromochloromethane	3.983	130	252879	52.82	ug/L	#	83

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.964	67	102967	48.53	ug/L	#	50
39) Tetrahydrofuran	4.062	42	88664	57.02	ug/L		73
40) Chloroform	4.092	83	655954	49.58	ug/L		94
41) 1,1,1-Trichloroethane	4.361	97	542838	46.74	ug/L		96
42) TAME	5.184	73	831202	43.38	ug/L		92
44) Cyclohexane	4.446	41	456547	49.47	ug/L		91
46) Carbontetrachloride	4.617	121	150943	45.26	ug/L		94
47) 1,1-Dichloropropene	4.617	75	462799	46.14	ug/L		99
49) Benzene	4.958	78	1497117	46.77	ug/L		93
50) 1,2-Dichloroethane	4.989	62	511995	48.74	ug/L		92
51) Iso-Butyl Alcohol	4.854	43	247520	951.50	ug/L		100
52) n-Heptane	5.452	43	490186	54.61	ug/L		82
53) 1-Butanol	5.946	56	260410	2068.73	ug/L		86
54) Trichloroethene	5.970	130	416510	48.45	ug/L		95
55) Methylcyclohexane	6.214	55	507548	44.96	ug/L	#	78
56) 1,2-Diclpropane	6.257	63	438854	47.91	ug/L		99
57) Dibromomethane	6.403	93	207785	49.58	ug/L		98
58) 1,4-Dioxane	6.464	88	45729	1016.84	ug/L	#	76
59) Methyl Methacrylate	6.464	69	170474	46.03	ug/L	#	65
60) Bromodichloromethane	6.616	83	472330	46.94	ug/L		96
61) 2-Nitropropane	6.891	41	115739	80.79	ug/L		93
62) 2-Chloroethylvinyl Ether	7.006	63	179982	42.63	ug/L		96
63) cis-1,3-Dichloropropene	7.141	75	548984	45.21	ug/L		95
64) 4-Methyl-2-pentanone	7.336	43	296672	48.53	ug/L		95
66) Toluene	7.500	91	1579290	45.90	ug/L		98
67) trans-1,3-Dichloropropene	7.744	75	437886	44.06	ug/L		97
68) Ethyl Methacrylate	7.872	69	369115	47.77	ug/L	#	67
69) 1,1,2-Trichloroethane	7.927	97	285612	47.86	ug/L		96
72) Tetrachloroethene	8.055	164	322458	46.15	ug/L		97
73) 2-Hexanone	8.195	43	216346	49.15	ug/L		92
74) 1,3-Dichloropropane	8.086	76	482664	46.41	ug/L	#	78
75) Dibromochloromethane	8.299	129	364248	48.97	ug/L		99
76) N-Butyl Acetate	8.335	43	559313	48.31	ug/L		92
77) 1,2-Dibromoethane	8.396	107	286957	47.52	ug/L		92
78) 3-Chlorobenzotrifluoride	8.878	180	602310	46.53	ug/L		98
79) Chlorobenzene	8.866	112	1096493	46.98	ug/L		96
80) 4-Chlorobenzotrifluoride	8.927	180	538864	44.97	ug/L		96
81) 1,1,1,2-Tetrachloroethane	8.945	131	403231	47.47	ug/L		99
82) Ethylbenzene	8.976	106	562180	46.65	ug/L		97
83) (m+p)Xylene	9.085	106	1388476	94.09	ug/L		97
84) o-Xylene	9.433	106	681268	45.72	ug/L		96
85) Styrene	9.445	104	1185188	47.09	ug/L		97
86) Bromoform	9.597	173	210019	47.15	ug/L		95
87) 2-Chlorobenzotrifluoride	9.671	180	596303	46.53	ug/L		93
88) Isopropylbenzene	9.756	105	1687653	46.28	ug/L		100
89) Cyclohexanone	9.823	55	889272	1011.08	ug/L		95
90) trans-1,4-Dichloro-2-B...	10.055	53	95524	49.33	ug/L		83
92) 1,1,2,2-Tetrachloroethane	10.006	83	336953	47.82	ug/L		97
93) Bromobenzene	10.000	156	467974	45.78	ug/L		97
94) 1,2,3-Trichloropropane	10.042	110	89660	47.85	ug/L		97
95) n-Propylbenzene	10.103	91	1980260	47.65	ug/L		98
96) 2-Chlorotoluene	10.170	91	1188973	46.58	ug/L		94

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

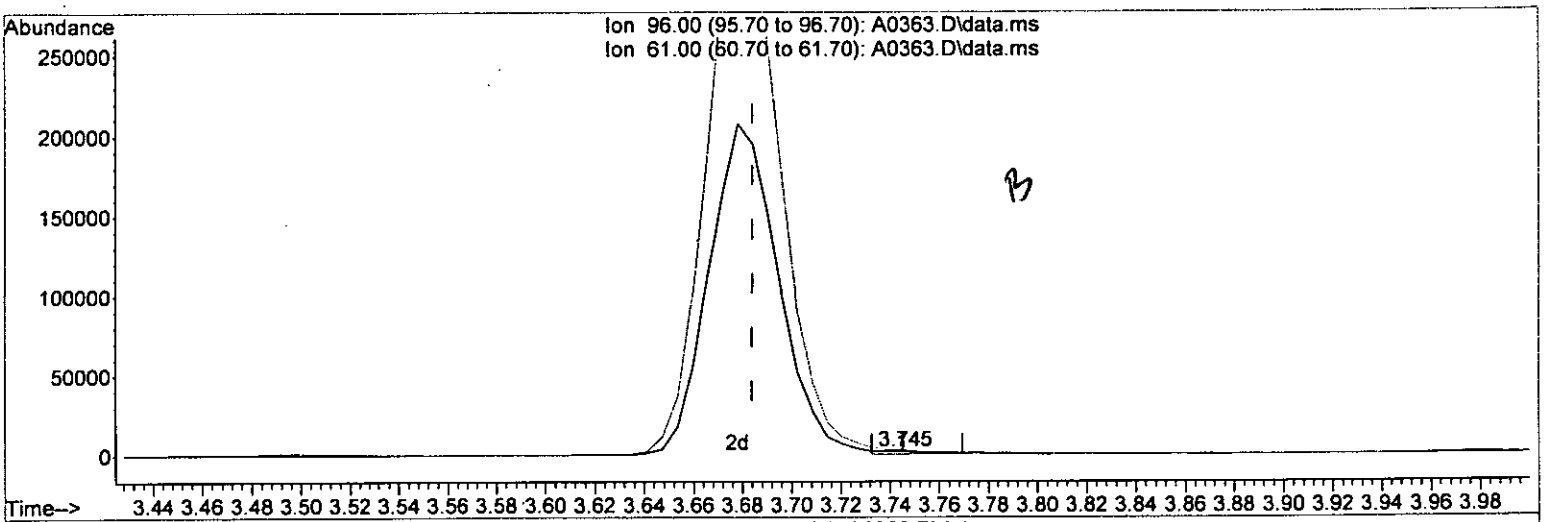
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1227444	47.45	ug/L	94
98)	4-Chlorotoluene	10.262	91	1401752	45.34	ug/L	90
99)	1,3,5-Trimethylbenzene	10.250	105	1404054	46.01	ug/L	97
100)	tert-Butylbenzene	10.518	119	1184914	46.74	ug/L	98
101)	1,2,4-Trimethylbenzene	10.555	105	1460811	47.35	ug/L	97
102)	3,4-Dichlorobenzotrifl...	10.616	214	412971	45.15	ug/L	98
103)	sec-Butylbenzene	10.695	105	1638915	46.90	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1462613	47.86	ug/L	97
105)	1,3-Dclbenz	10.780	146	900045	47.61	ug/L	99
106)	1,4-Dclbenz	10.853	146	904619	47.24	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	367914	44.86	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.945	214	428358	45.43	ug/L	98
109)	n-Butylbenzene	11.140	91	1240628	46.98	ug/L	99
110)	1,2-Dclbenz	11.152	146	846074	48.97	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	58566	54.04	ug/L	95
112)	Trielution Dichlorotol...	11.798	125	2165476	155.04	ug/L	90
113)	1,3,5-Trichlorobenzene	11.847	180	580900	49.45	ug/L	95
114)	Coelution Dichlorotoluene	12.066	125	1505817	106.16	ug/L	96
115)	1,2,4-Tcbenzene	12.225	180	488369	50.98	ug/L	97
116)	Hexachlorobt	12.329	225	189743	41.34	ug/L	98
117)	Naphthalen	12.371	128	916273	62.42	ug/L	99
118)	1,2,3-Tclbenzene	12.512	180	375704	57.67	ug/L	95
119)	2,4,5-Trichlorotoluene	12.926	159	236444	66.11	ug/L	99
120)	2,3,6-Trichlorotoluene	12.987	159	237818	67.10	ug/L	98

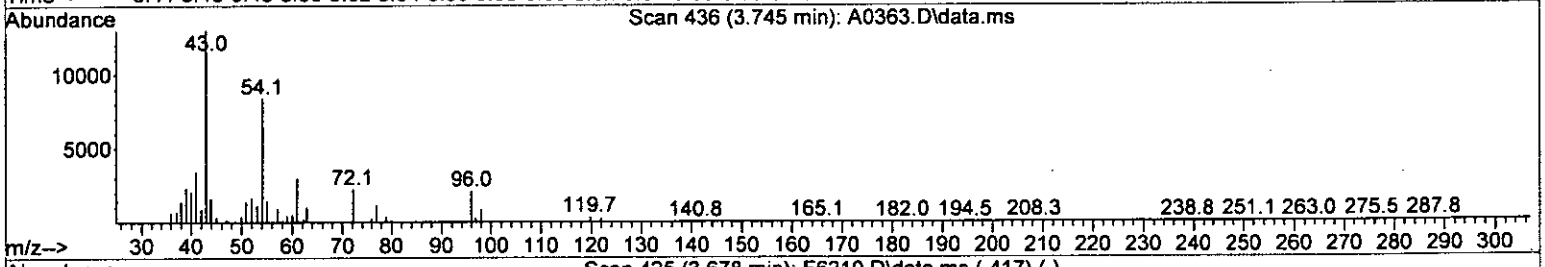
(#) = qualifier out of range (m) = manual integration (+) = signals summed

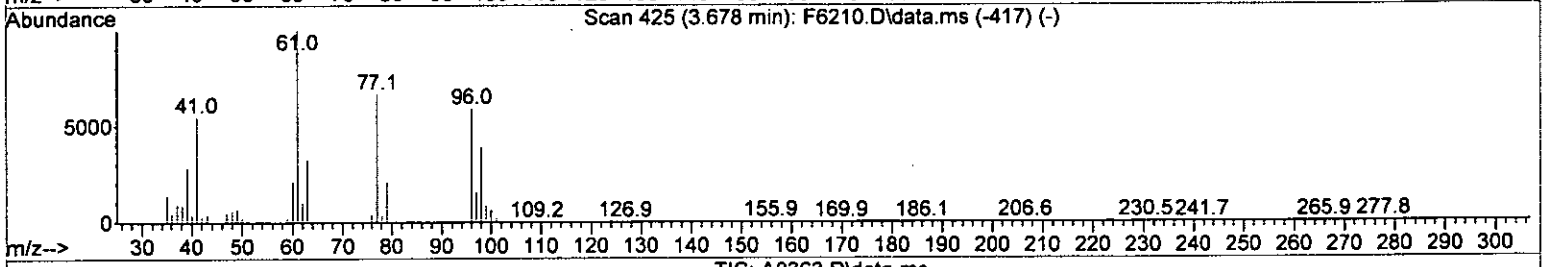
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:05:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0363.D\data.ms

(34) cis-1,2-Dichloroethene (P)

3.745min (+0.061) 0.25 ug/L

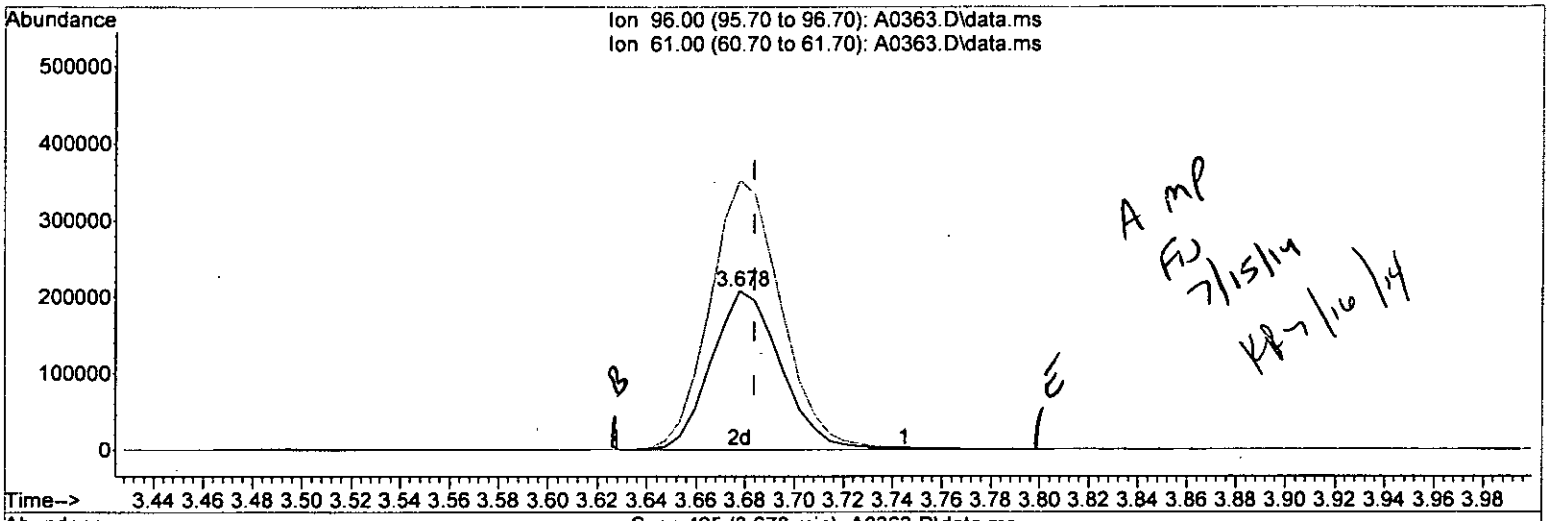
response 2019

Ion	Exp%	Act%
96.00	100	100
61.00	148.30	142.30
0.00	0.00	0.00
0.00	0.00	0.00

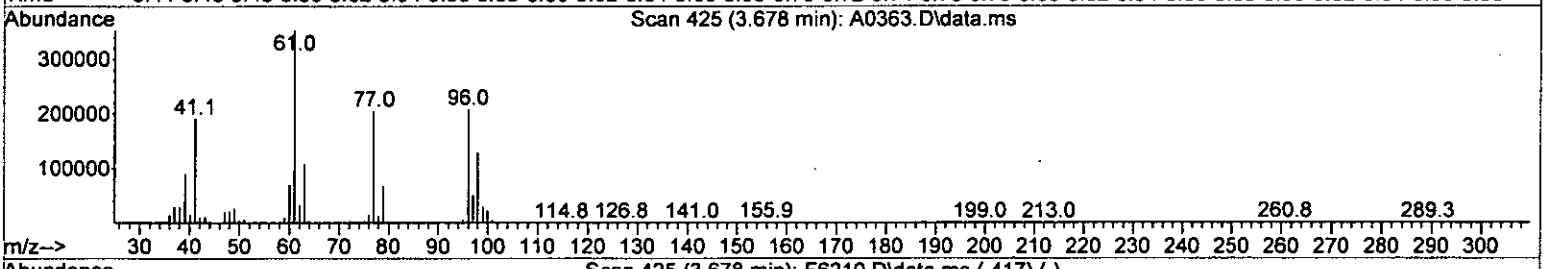
Quantitation Report (Qedit)

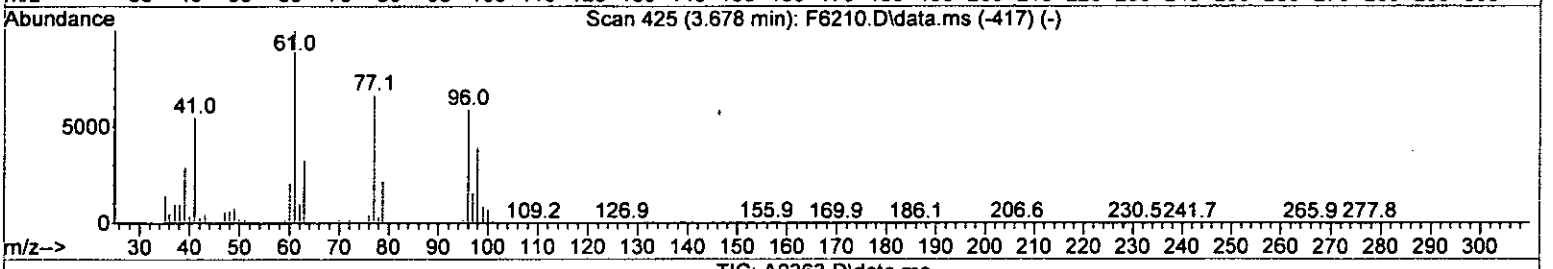
Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:05:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



A mp FJ 7/15/14 KP 7/16/14





TIC: A0363.D\data.ms

(34) cis-1,2-Dichloroethene (P)

3.678min (-0.006) 50.05 ug/L m

response 408444

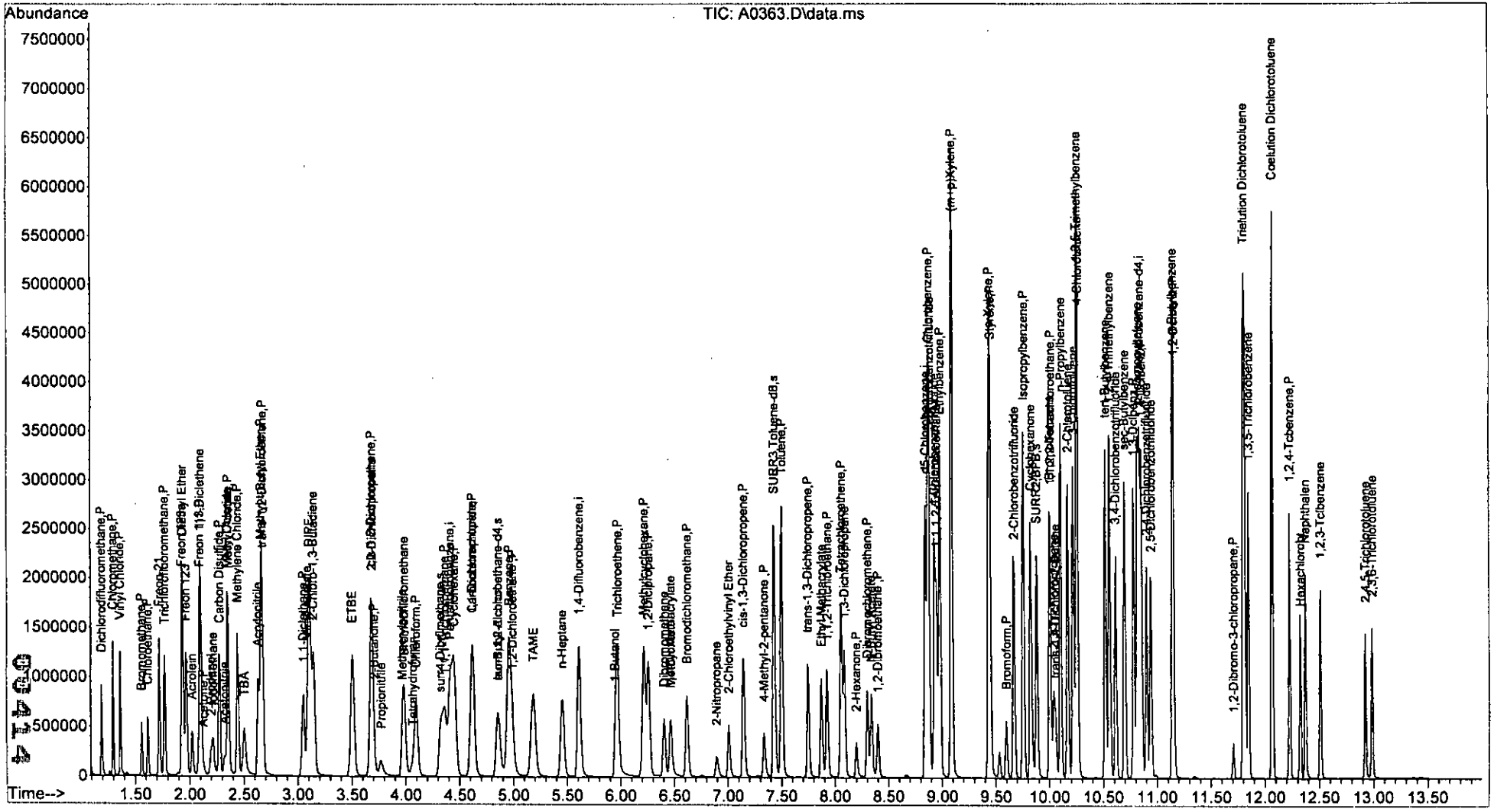
Ion	Exp%	Act%
96.00	100	100
61.00	148.30	169.57#
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Tue Jul 15 11:11:25 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\071514\A0363.D Vial: 2
Acq On : 15 Jul 2014 10:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:11:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

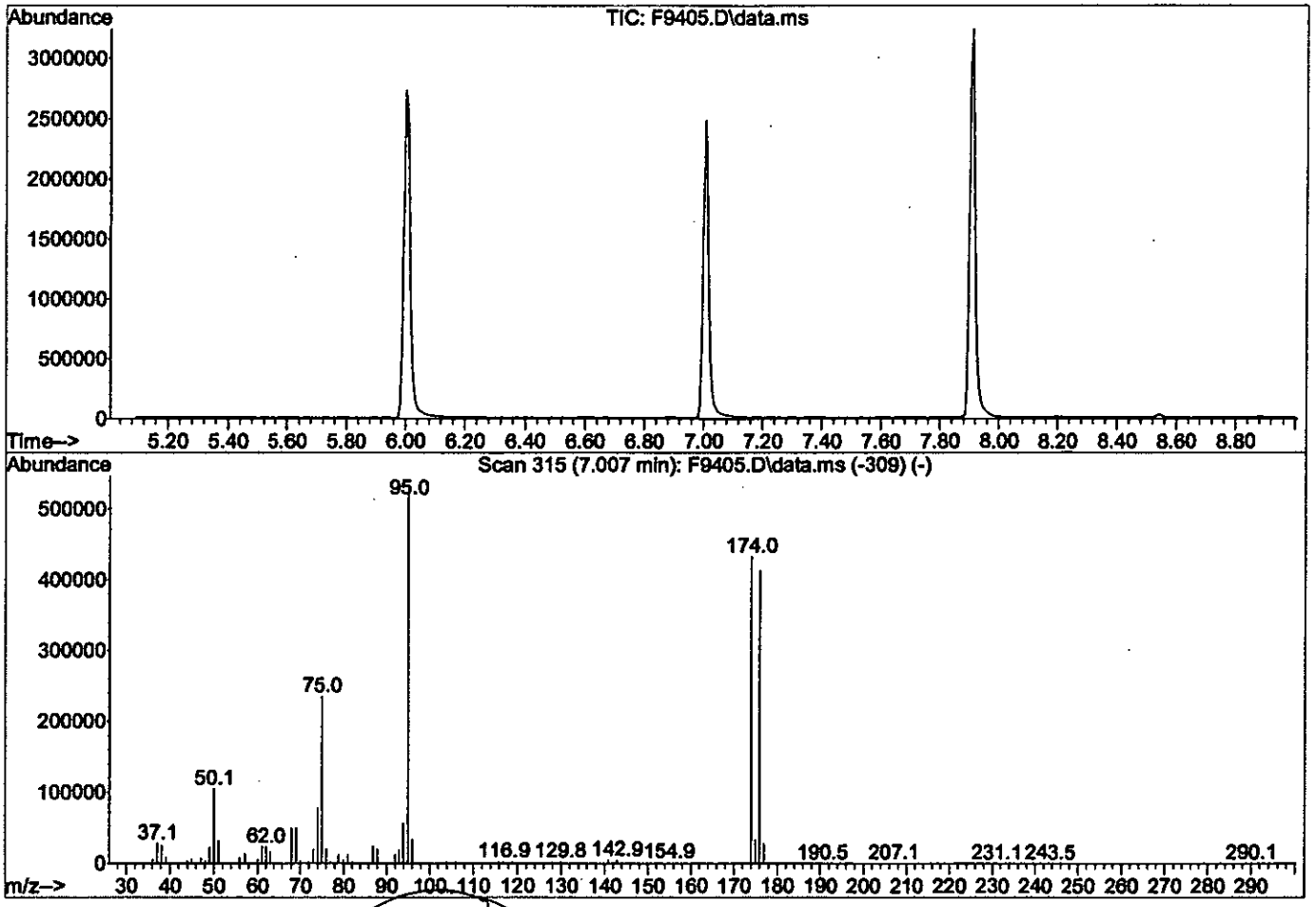
RIGHT SOLUTIONS | RIGHT PARTNER

Data Path : I:\ACQUDATA\msvoa10\data\061114\
Data File : F9405.D
Acq On : 11 Jun 2014 3:27 pm
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 3 Sample Multiplier: 1

FJ 6/12/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T061114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



Spectrum Information: Scan 315

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	104816	PASS
75	95	30	60	45.2	235313	PASS
95	95	100	100	100.0	520512	PASS
96	95	5	9	6.5	33616	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.1	432576	PASS
175	174	5	9	7.7	33184	PASS
176	174	95	101	95.3	412352	PASS
177	176	5	9	6.6	27280	PASS

T061114.M Wed Jun 11 15:33:33 2014 MSVO10 Page: 1

BFB

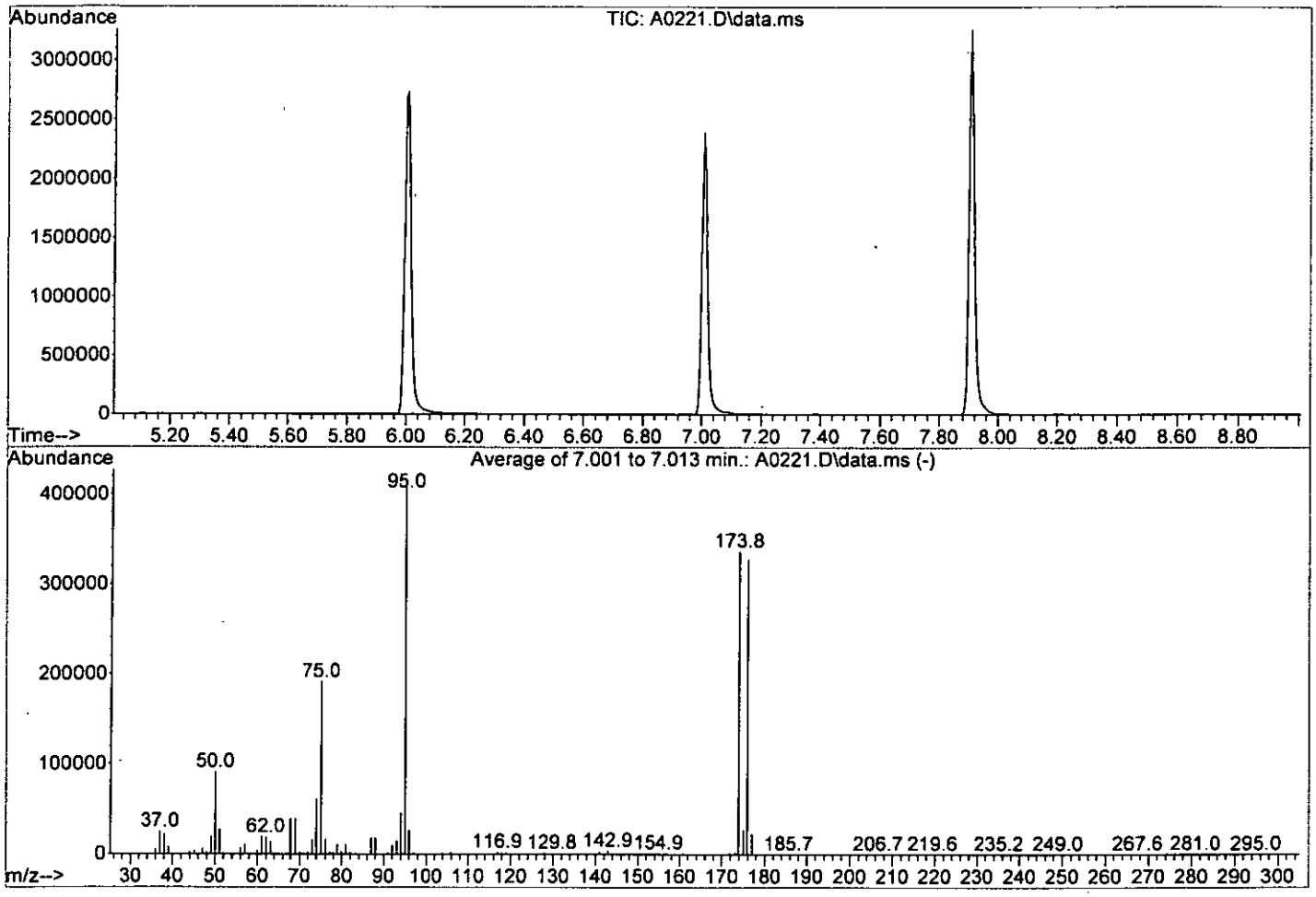
```
Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0221.D
Acq On    : 10 Jul 2014    9:36 am
Operator  : F.NAEGLER
Sample    : TUNE
Misc      :
ALS Vial  : 1   Sample Multiplier: 1

Integration File: CPD4.P

Method    : I:\ACQUDATA\MSVOA10\METHODS\T061114.M
Title     : 8260B WATERS
Last Update  : Wed Sep 27 14:33:13 2006
```

R2408064-03

FJ 7/14/14



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	90880	PASS
75	95	30	60	47.0	191061	PASS
95	95	100	100	100.0	406379	PASS
96	95	5	9	6.6	26624	PASS
173	174	0.00	2	0.7	2296	PASS
174	95	50	120	82.8	336303	PASS
175	174	5	9	8.0	26781	PASS
176	174	95	101	97.2	326912	PASS
177	176	5	9	6.9	22652	PASS

T061114.M Thu Jul 10 10:10:02 2014 MSVO10

BFB

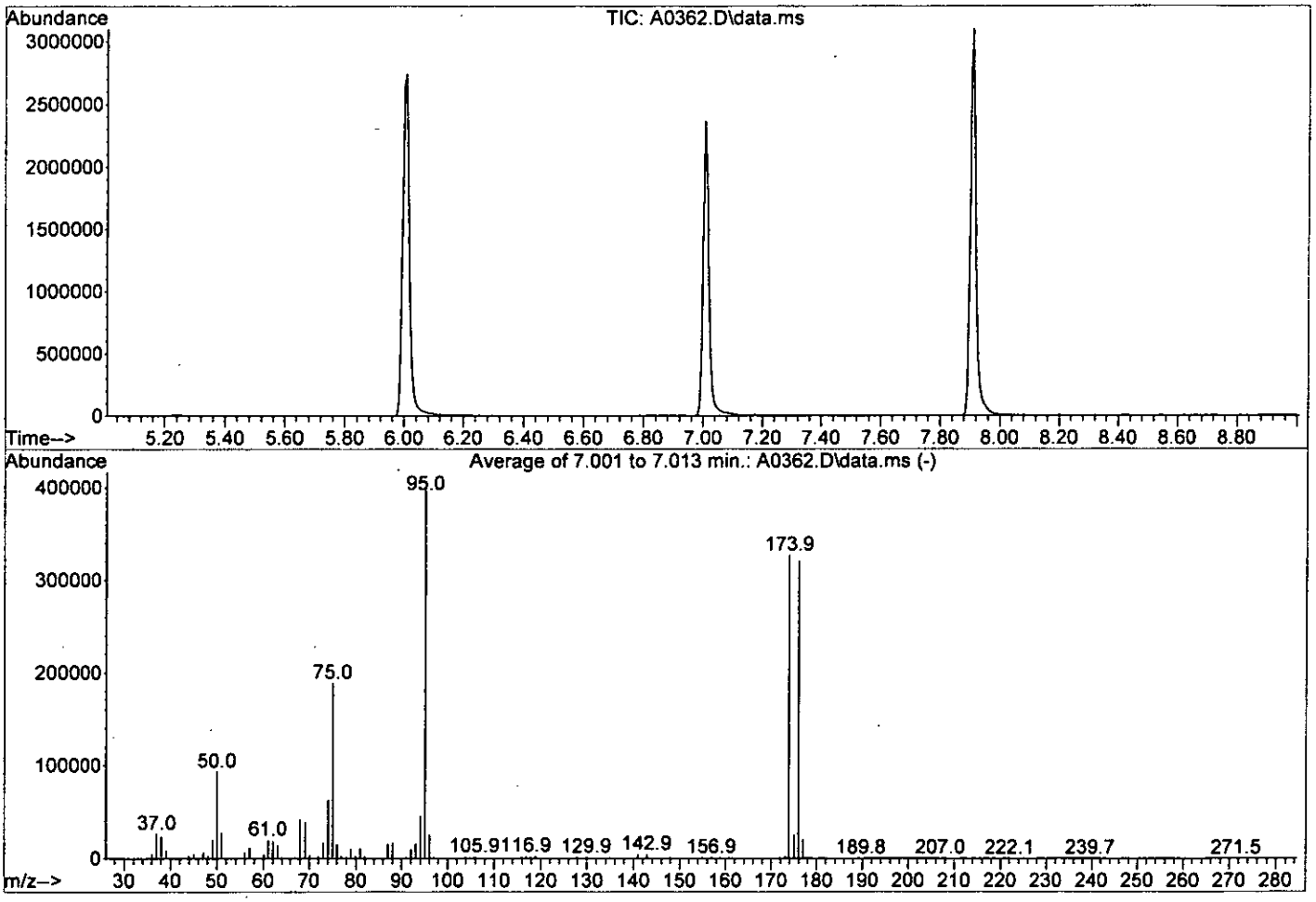
Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0362.D
Acq On : 15 Jul 2014 10:22 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

RQ1408240-031-09

FJ 7/15/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T061114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.5	93397	PASS
75	95	30	60	47.5	188523	PASS
95	95	100	100	100.0	396629	PASS
96	95	5	9	6.3	25013	PASS
173	174	0.00	2	0.7	2365	PASS
174	95	50	120	82.4	326699	PASS
175	174	5	9	7.7	25232	PASS
176	174	95	101	97.9	319957	PASS
177	176	5	9	6.4	20390	PASS

T061114.M Tue Jul 15 10:29:01 2014 MSVO10 Page: 1

ALS Group USA, Corp. dba ALS Environmental

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 11:42
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408064-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0225.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 11:42
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408064-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0225.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 11:42
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408064-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0225.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	7/10/14 11:42	
Dibromofluoromethane	105	85-115	7/10/14 11:42	
Toluene-d8	97	85-120	7/10/14 11:42	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 1142

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408064-01	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : MBLK
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0225.D Vial: 5
Acq On : 10 Jul 2014 11:42 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ14080G4-01

Quant Time: Jul 10 11:56:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	866141	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1262659	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1158683	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	609530	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.324	113	395344	52.51 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.02%		
48) surr1,1,2-dichloroetha...	4.860	65	398682	52.77 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 105.54%		
65) SURR3,Toluene-d8	7.433	98	1407614	48.50 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.00%		
70) SURR2,BFB	9.878	95	554562	48.36 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.72%		
Target Compounds					Qvalue
5) Bromomethane	~~1.562~~	~~94~~	~~1046~~	~~0.23 ug/L~~	~~79~~ <LR
12) Acrolein	~~2.032~~	~~56~~	~~255~~	~~0.25 ug/L #~~	~~39~~
15) Acetone	~~2.123~~	~~43~~	~~734~~	~~0.38 ug/L #~~	~~53~~
16) 2-Propanol	~~2.209~~	~~45~~	~~178~~	~~0.53 ug/L~~	~~74~~
17) Iodomethane	~~2.221~~	~~142~~	~~343~~	~~5.06 ug/L~~	~~76~~
19) Acetonitrile	~~2.391~~	~~40~~	~~513~~	~~1.96 ug/L #~~	~~1~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~1345~~	~~0.32 ug/L #~~	~~1~~
22) Methylene Chloride	2.440	84	1102	Below Cal	91
89) Cyclohexanone	~~9.853~~	~~55~~	~~345~~	~~0.38 ug/L #~~	~~39~~
112) Trielution Dichlorotol...	11.841	125	3631	0.26 ug/L	97 > NT(DL)
114) Coelution Dichlorotoluene	12.109	125	3085	0.22 ug/L	92
116) Hexachlorobt	12.335	225	1016	0.22 ug/L	95
118) 1,2,3-Tclbenzene	12.542	180	2019 ~~1716~~	0.32 ~~0.26~~ ug/L	90 FN 7/14/14
119) 2,4,5-Trichlorotoluene	13.011	159	2519	0.71 ug/L	86 > NT(DL)
120) 2,3,6-Trichlorotoluene	13.011	159	2519	0.71 ug/L	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

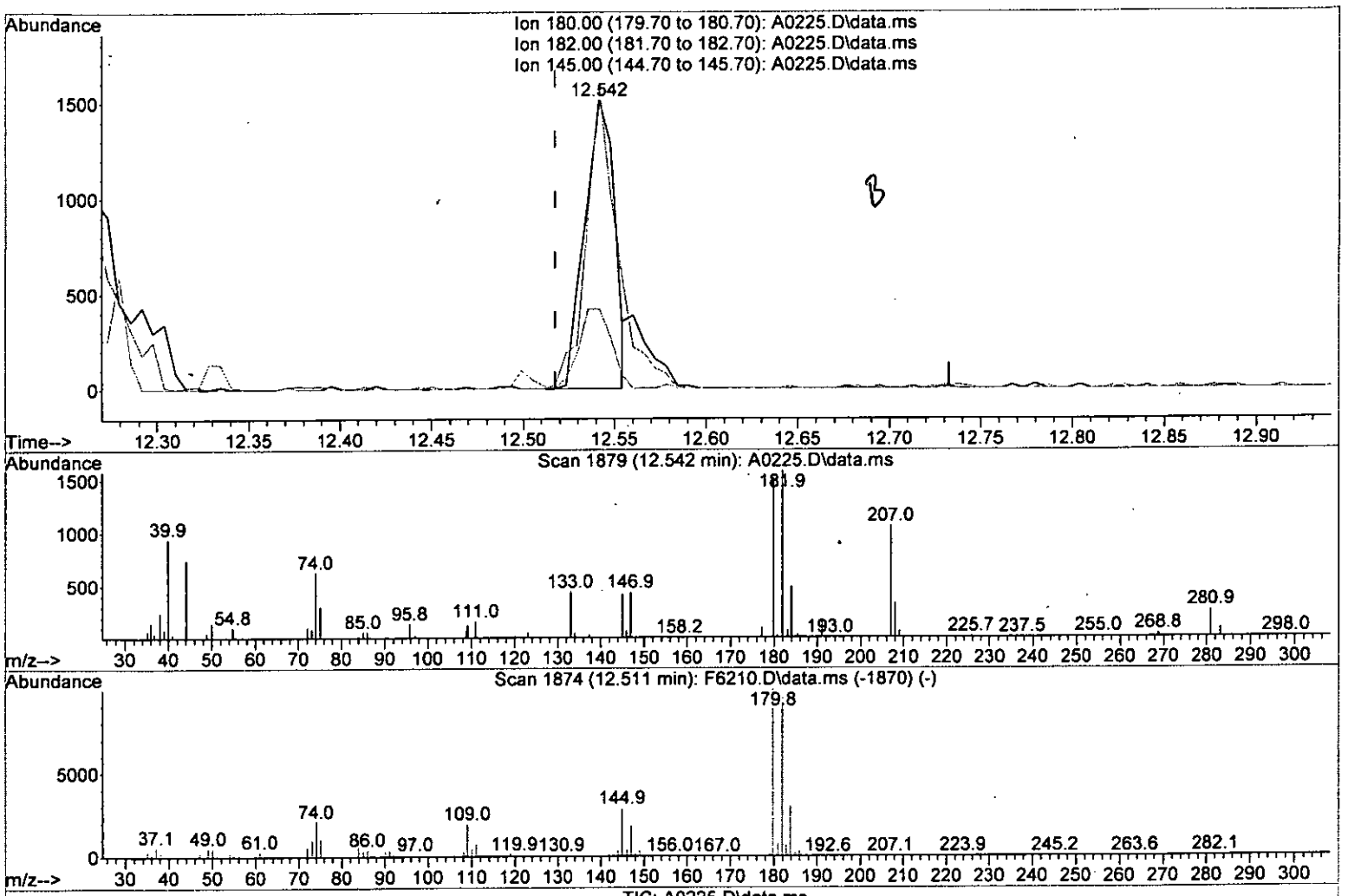
FN 7/14/14

W061114.M Thu Jul 10 11:55:59 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : MBLK
Data File : I:\ACQUDATA\msvoa10\data\071014\A0225.D Vial: 5
Acq On : 10 Jul 2014 11:42 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 11:56:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



TIC: A0225.D\data.ms

(118) 1,2,3-Tclbenzene

12.542min (+0.024) 0.26 ug/L

response 1716

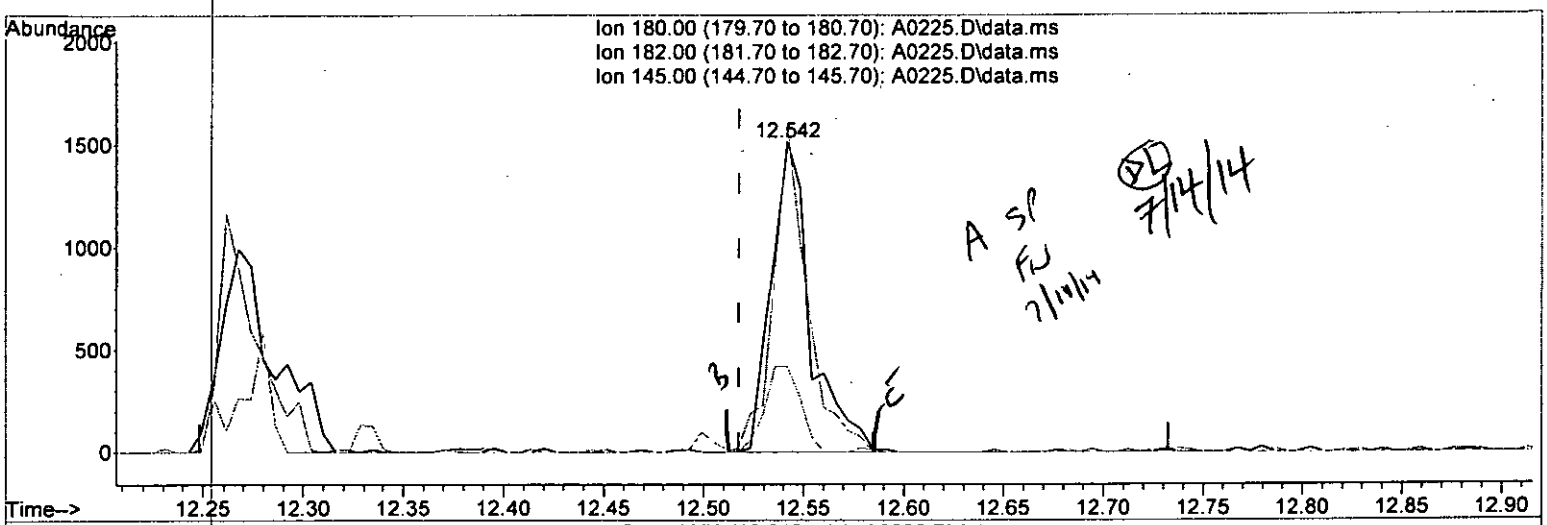
Ion	Exp%	Act%
180.00	100	100
182.00	92.80	102.40
145.00	32.20	27.03
0.00	0.00	0.00

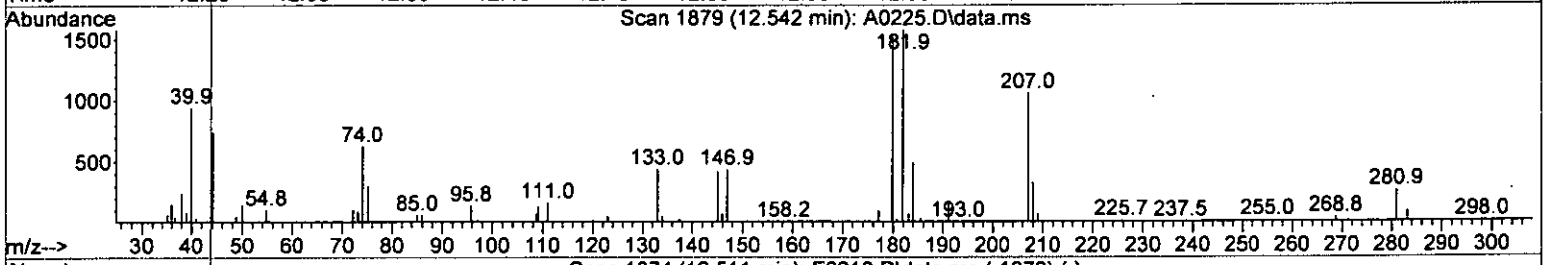
W061114.M Mon Jul 14 12:07:51 2014 MSVO10 Page: 1

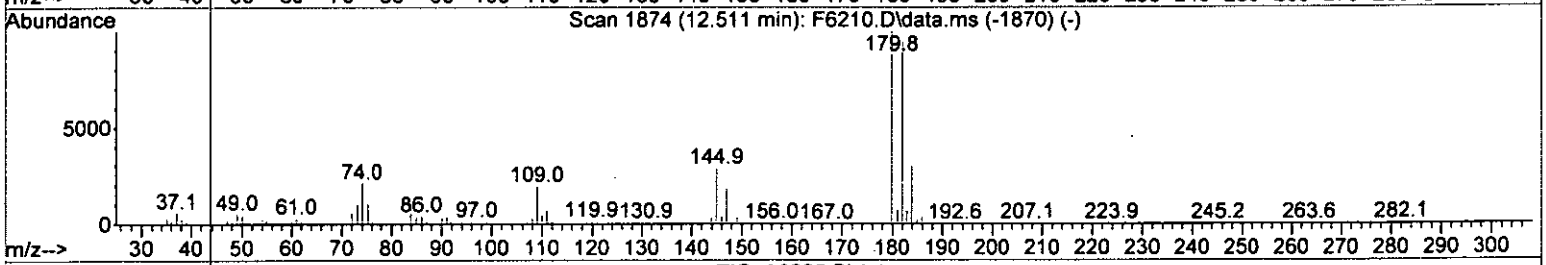
Quantitation Report (Qedit)

Sample : MBLK
Data File : I:\ACQUDATA\msvoa10\data\071014\A0225.D Vial: 5
Acq On : 10 Jul 2014 11:42 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 11:56:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0225.D\data.ms

(118) 1,2,3-Tclbenzene

12.542min (+0.024) 0.32 ug/L m

response 2049

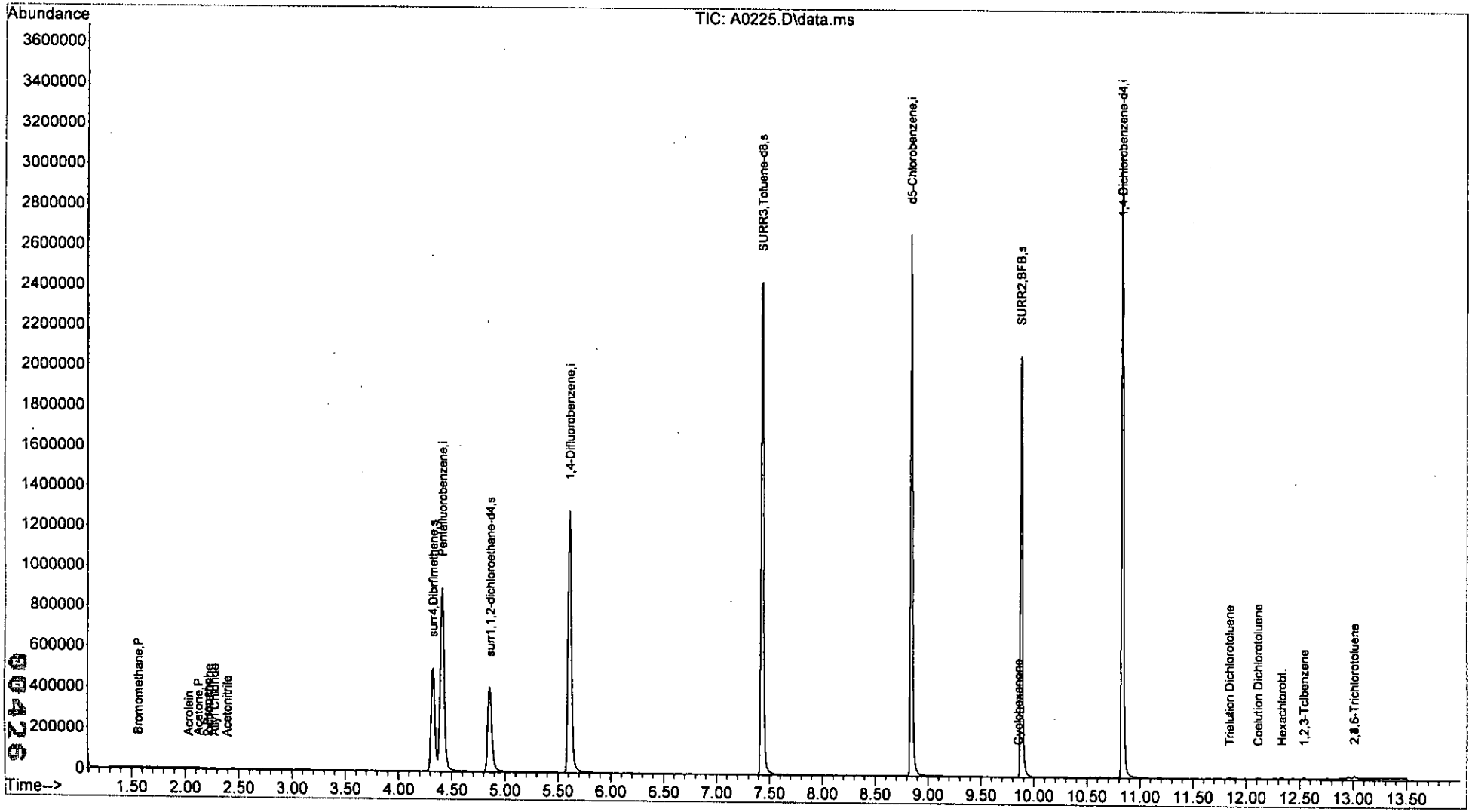
Ion	Exp%	Act%
180.00	100	100
182.00	92.80	104.37
145.00	32.20	27.55
0.00	0.00	0.00

W061114.M Mon Jul 14 12:08:04 2014 MSVO10 Page: 1

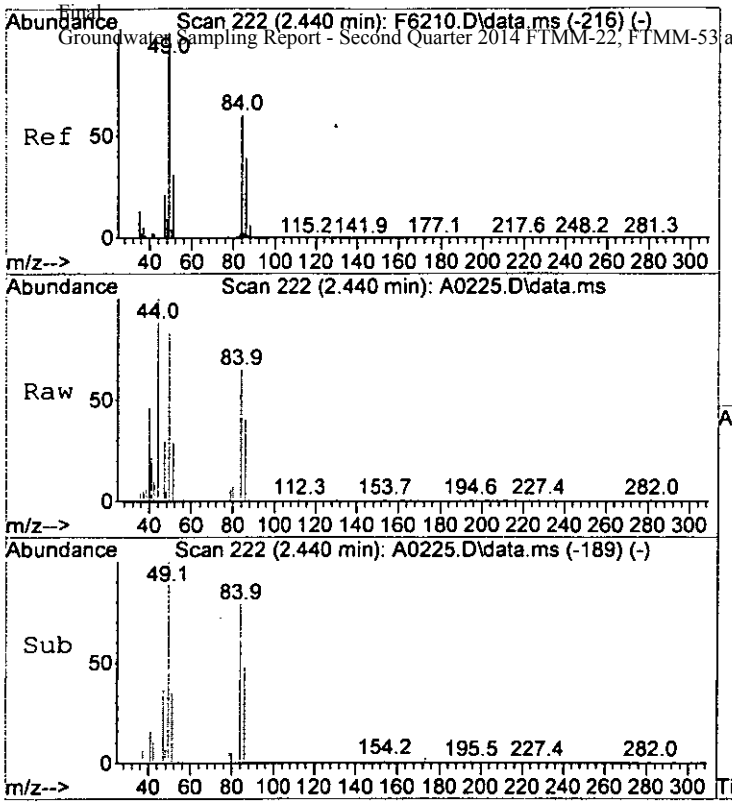
Quantitation Report (Not Reviewed)

Sample : MBLK
Data File : I:\ACQUDATA\MSVOA10\DATA\071014\A0225.D Vial: 5
Acq On : 10 Jul 2014 11:42 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 11:56:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



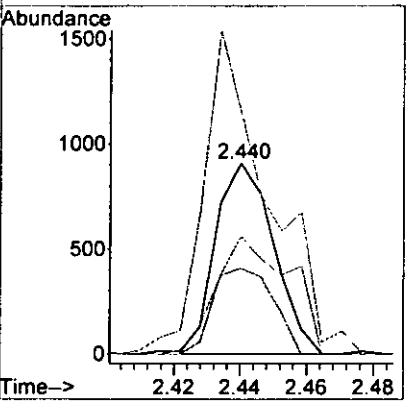
W061114.M Thu Jul 10 11:56:02 2014 MSVO10

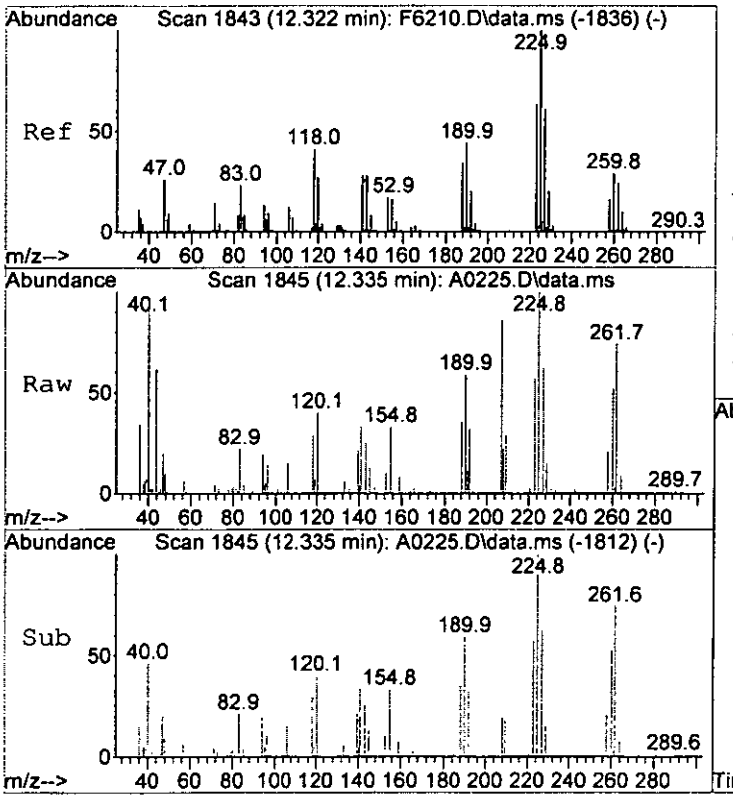


#22
Methylene Chloride
Concen: Below Cal
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: A0225.D
Acq: 10 Jul 2014 11:42 am

Tgt Ion: 84 Resp: 1102

Ion	Ratio	Lower	Upper
84	100		
86	61.4	44.5	84.5
49	127.0	123.0	163.0
51	44.9	22.1	62.1

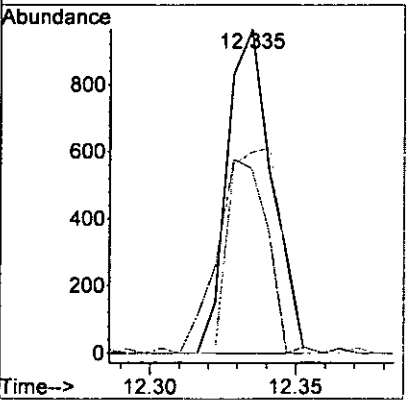


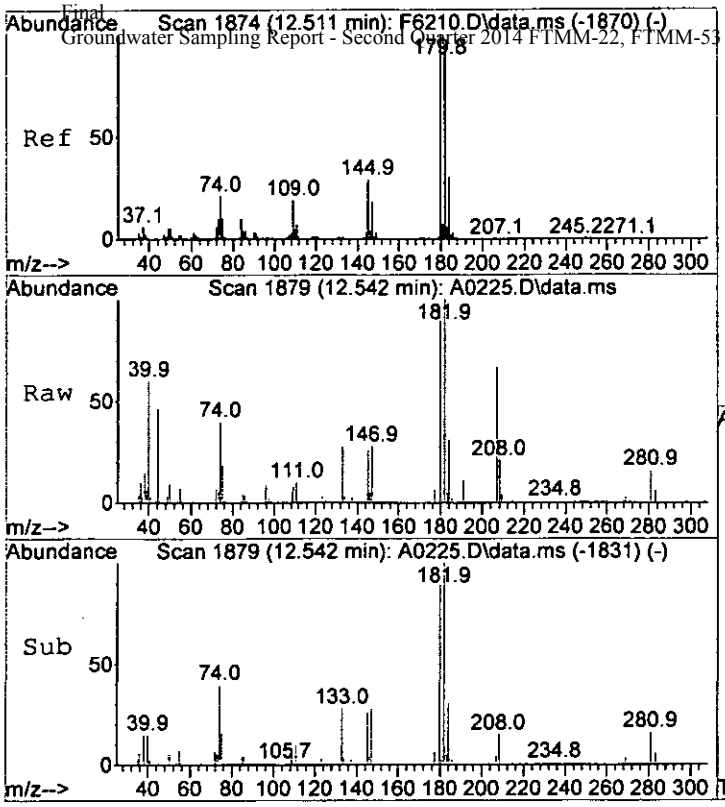


#116
Hexachlorobt
Concen: 0.22 ug/L
RT: 12.335 min Scan# 1845
Delta R.T. 0.006 min
Lab File: A0225.D
Acq: 10 Jul 2014 11:42 am

Tgt Ion:225 Resp: 1016

Ion	Ratio	Lower	Upper
225	100		
223	56.9	43.0	83.0
227	61.8	43.6	83.6

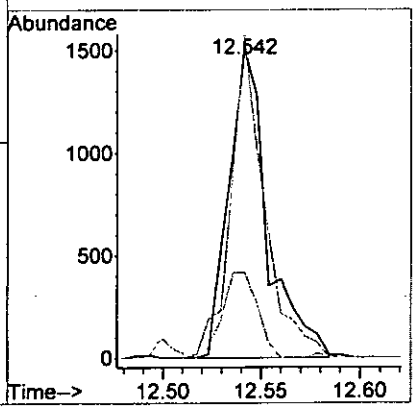




#118
1,2,3-Tclbenzene
Concen: 0.32 ug/L m
RT: 12.542 min Scan# 1879
Delta R.T. 0.024 min
Lab File: A0225.D
Acq: 10 Jul 2014 11:42 am

Tgt Ion:180 Resp: 2049

Ion	Ratio	Lower	Upper
180	100		
182	104.4	72.8	112.8
145	27.5	12.2	52.2



A0225.D W061114.M Mon Jul 14 12:10:20 2014 MSVO10 Page 4

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0225.D
Acq On : 10 Jul 2014 11:42 am
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0225.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	523	531	538	rBV	499610	1234396	31.66%	5.724%
2	4.409	538	545	566	rVB	897922	2344209	60.12%	10.869%
3	4.854	608	618	635	rBV	415689	1124415	28.84%	5.214%
4	5.610	734	742	758	rBV	1287012	2892882	74.19%	13.413%
5	7.433	1035	1041	1063	rBV	2424840	3899050	100.00%	18.079%
6	8.841	1267	1272	1288	rBV	2662985	3544992	90.92%	16.437%
7	9.878	1438	1442	1459	rBV	2067798	2775491	71.18%	12.869%
8	10.835	1594	1599	1614	rBV	3065662	3751603	96.22%	17.395%

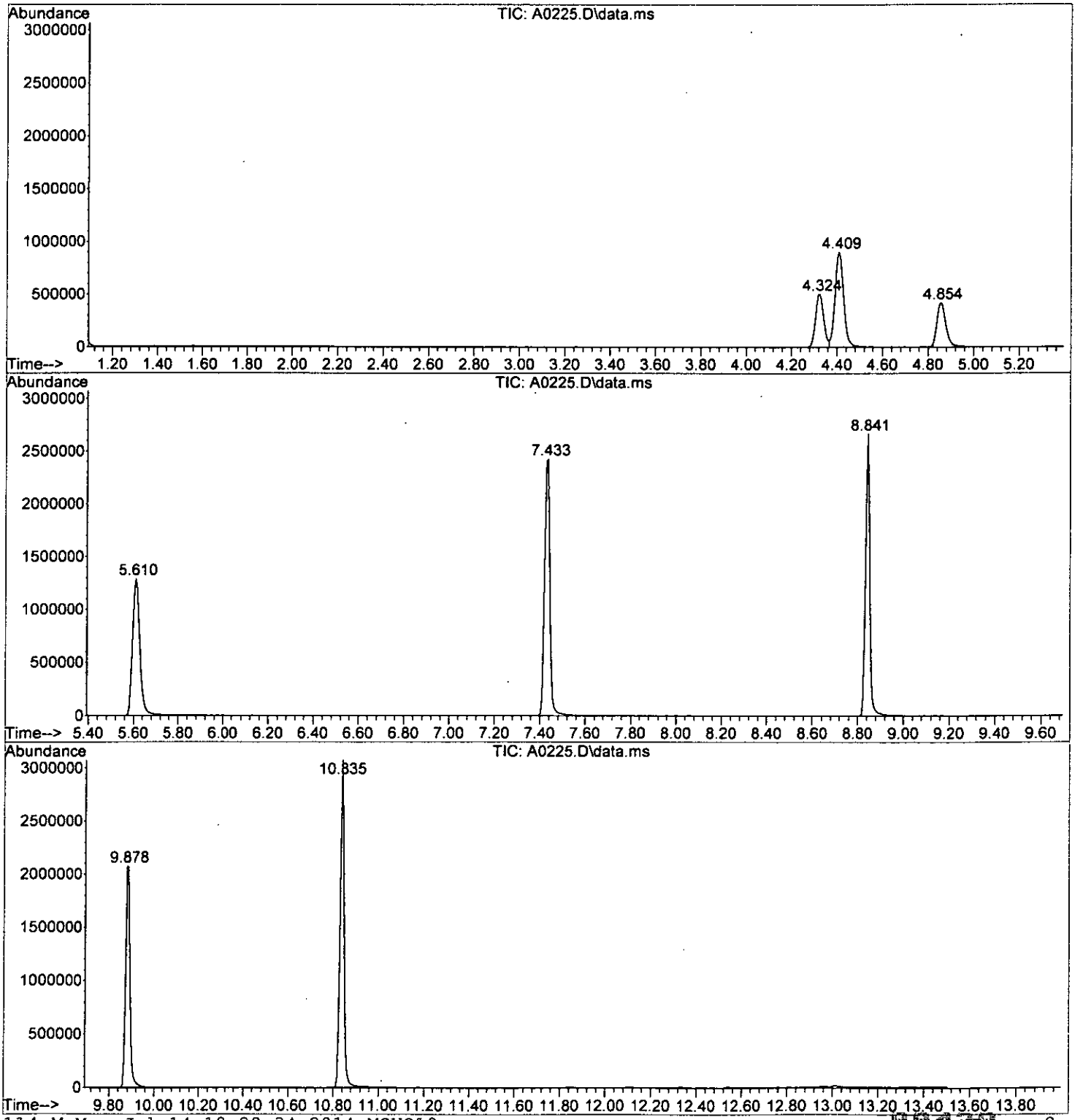
Sum of corrected areas: 21567038

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071014\
Data File : A0225.D
Acq On : 10 Jul 2014 11:42 am
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Mon Jul 14 12:20:34 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071014\\
Data File : A0225.D
Acq On : 10 Jul 2014 11:42 amm
Operator : F.NAEGLERR
Sample : MBLKK
Misc :
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 12:35
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408240-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0366.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 12:35
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408240-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0366.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 12:35
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408240-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0366.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	7/15/14 12:35	
Dibromofluoromethane	105	85-115	7/15/14 12:35	
Toluene-d8	99	85-120	7/15/14 12:35	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 1235

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1408240-01	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : MBLK
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0366.D Vial: 5
Acq On : 15 Jul 2014 12:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1408245-01 1-07

Quant Time: Jul 15 12:48:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	4.409	168	855461	50.00 ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1244714	50.00 ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1126687	50.00 ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	583290	50.00 ug/L	0.00
System Monitoring Compounds					
45) surr4,Dibrflmethane	4.324	113	391142	52.70 ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.40%		
48) surr1,1,2-dichloroetha...	4.854	65	404544	54.31 ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.62%		
65) SURR3,Toluene-d8	7.427	98	1414838	49.46 ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.92%		
70) SURR2,BFB	9.878	95	537996	47.59 ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.18%		
Target Compounds					Qvalue
15) Acetone	~~2.123~~	~~43~~	~~1260~~	~~0.65 ug/L #~~	~~67~~
16) 2-Propanol	~~2.196~~	~~45~~	~~433~~	~~1.30 ug/L~~	~~60~~
17) Iodomethane	~~2.227~~	~~142~~	~~362~~	~~5.07 ug/L #~~	~~62~~
20) Allyl Chloride	~~2.276~~	~~76~~	~~1321~~	~~0.32 ug/L #~~	~~1~~
22) Methylene Chloride	2.440	84	1661	Below Cal #	76
89) Cyclohexanone	~~9.841~~	~~55~~	~~853~~	~~0.97 ug/L #~~	~~75~~
112) Trielution Dichlorotol...	11.847	125	3431	0.26 ug/L	82 NT(DE2)
118) 1,2,3-Tclbenzene	12.548	180	1575	0.25 ug/L	91
119) 2,4,5-Trichlorotoluene	12.963	159	2305	0.68 ug/L	88 >NT(DE2)
120) 2,3,6-Trichlorotoluene	13.023	159	2795	0.83 ug/L	93

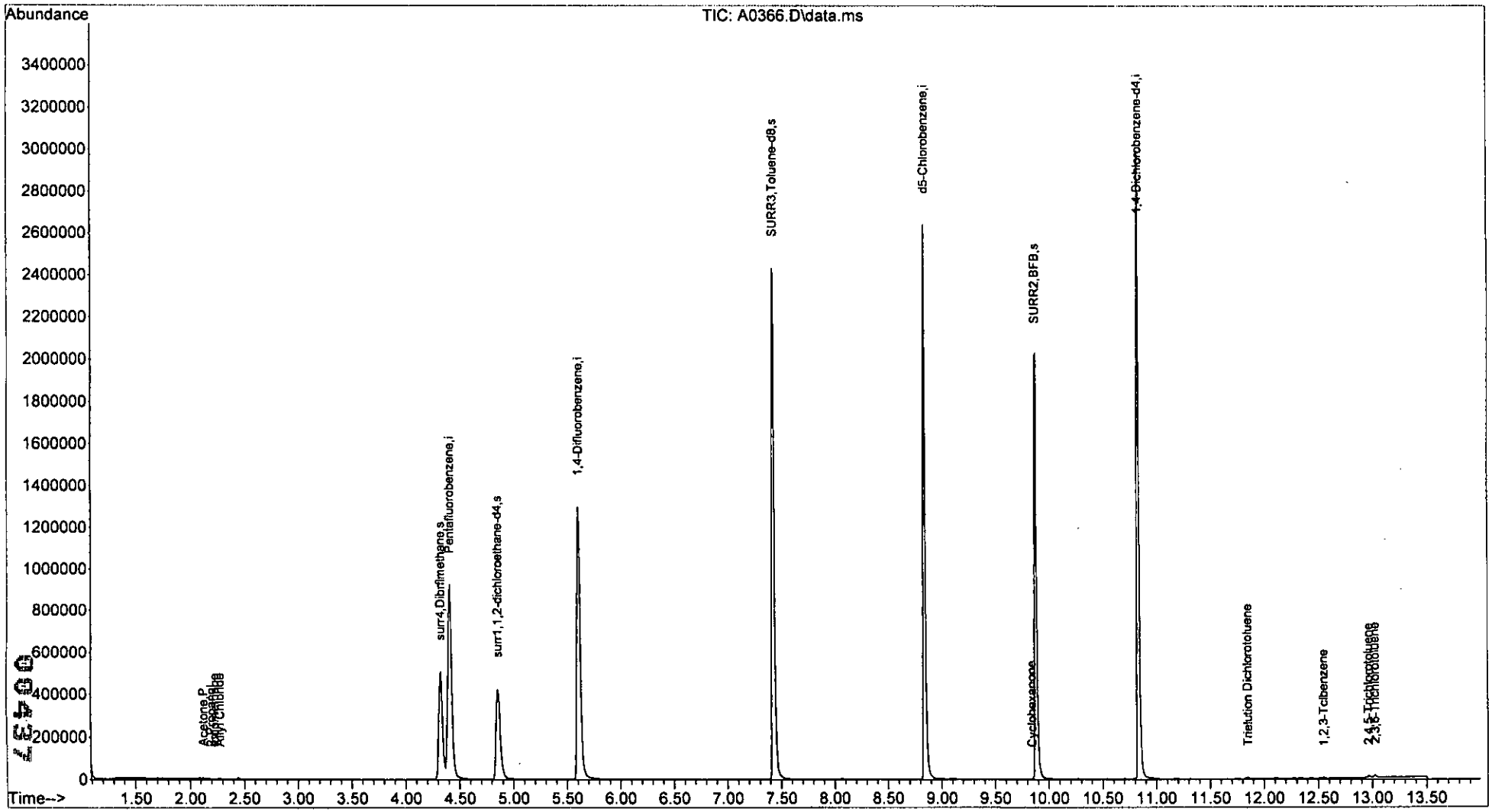
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
7/16/14

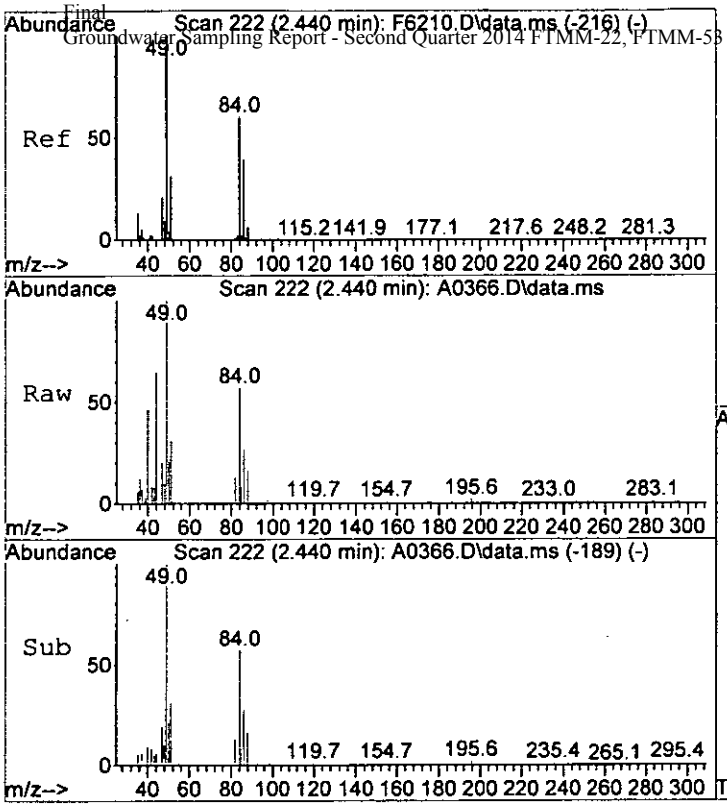
Quantitation Report (Not Reviewed)

Sample : MBLK
Data File : I:\ACQUDATA\MSVOA10\DATA\071514\A0366.D Vial: 5
Acq On : 15 Jul 2014 12:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 12:48:06 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



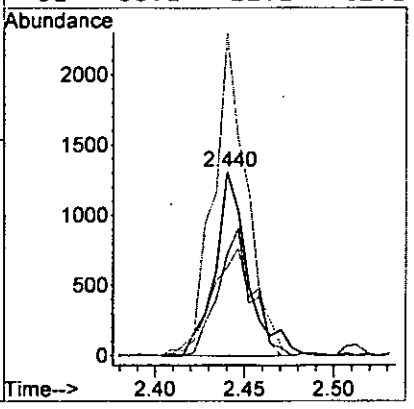
W061114.M Tue Jul 15 12:48:11 2014 MSVO10 Page: 2

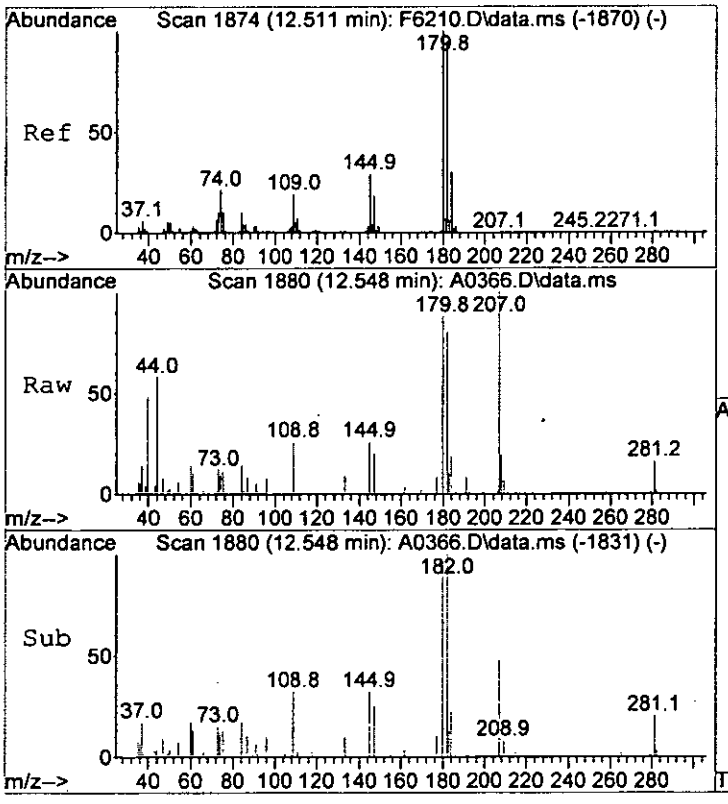


#22
Methylene Chloride
Concen: Below Cal
RT: 2.440 min Scan# 222
Delta R.T. -0.000 min
Lab File: A0366.D
Acq: 15 Jul 2014 12:35 pm

Tgt Ion: 84 Resp: 1661

Ion	Ratio	Lower	Upper
84	100		
86	48.0	44.5	84.5
49	175.3	123.0	163.0#
51	55.1	22.1	62.1

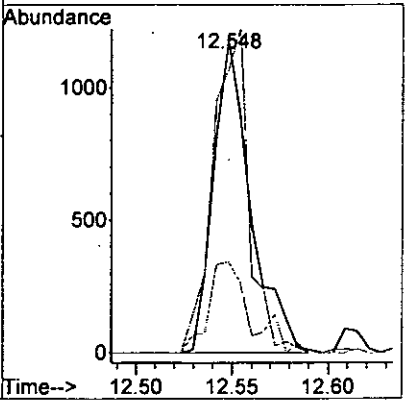




#118
1,2,3-Tclbenzene
Concen: 0.25 ug/L
RT: 12.548 min Scan# 1880
Delta R.T. 0.030 min
Lab File: A0366.D
Acq: 15 Jul 2014 12:35 pm

Tgt Ion:180 Resp: 1575

Ion	Ratio	Lower	Upper
180	100		
182	102.6	72.8	112.8
145	29.1	12.2	52.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0366.D
Acq On : 15 Jul 2014 12:35 pm
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A0366.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV	507339	1234934	31.37%	5.739%
2	4.409	538	545	569	rVB	921240	2365785	60.10%	10.994%
3	4.854	610	618	635	rBV	424777	1152398	29.27%	5.355%
4	5.610	734	742	758	rBV	1297364	2929736	74.43%	13.615%
5	7.427	1035	1040	1060	rBV	2430068	3936491	100.00%	18.293%
6	8.841	1267	1272	1287	rBV	2640616	3512663	89.23%	16.324%
7	9.884	1438	1443	1459	rVB	2030172	2725637	69.24%	12.666%
8	10.835	1594	1599	1616	rBV	2993010	3661180	93.01%	17.014%

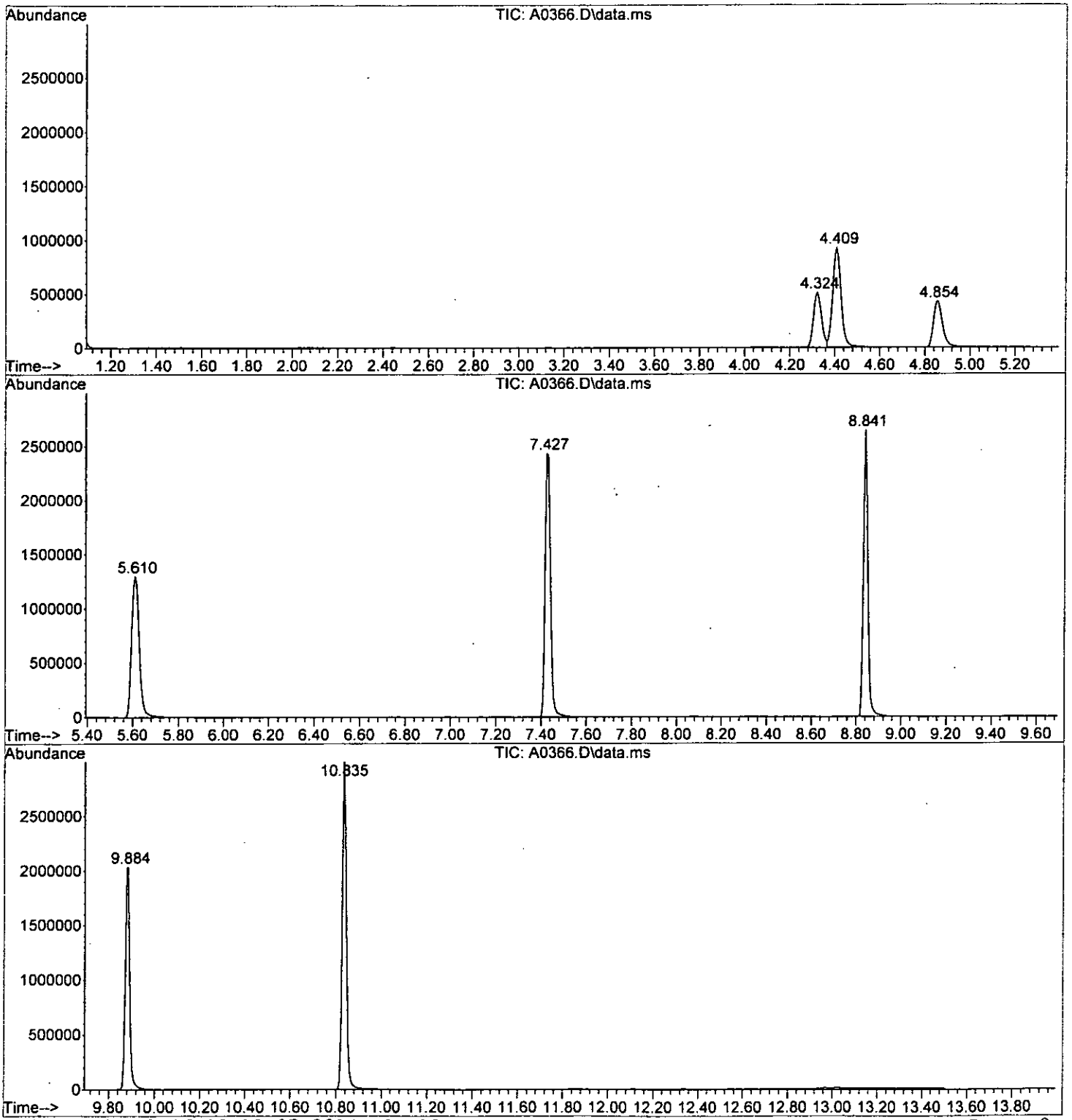
Sum of corrected areas: 21518824

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\071514\
Data File : A0366.D
Acq On : 15 Jul 2014 12:35 pm
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W061114.M Wed Jul 16 13:12:07 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\071514\\
Data File : A0366.D
Acq On : 15 Jul 2014 12:35 pmm
Operator : F.NAEGLERR
Sample : MBLKK
Misc :
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 10:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1408064-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0223.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.1**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**20.1**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**20.1**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**20.7**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.8**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**22.6**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**20.3**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**24.4**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**20.6**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**21.2**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**19.2**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**22.1**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**19.8**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**20.5**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.6**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**20.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**19.2**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**20.1**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**18.6**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.2**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**18.9**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**24.7**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.3**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**19.8**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**373**		100	20	11	
106-43-4	4-Chlorotoluene	**19.0**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**19.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**18.0**		5.0	1.0	0.67	
67-64-1	Acetone	**30.5**		5.0	5.0	1.3	
71-43-2	Benzene	**20.2**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.2**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**22.7**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.5**		5.0	1.0	0.32	
75-25-2	Bromoform	**18.9**		5.0	1.0	0.42	
74-83-9	Bromomethane	**22.8**		5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 3Q2014/748810-03000
Sample Matrix: Water

Service Request: R1405048
Date Collected: NA
Date Received: NA
Date Analyzed: 7/10/14 10:33

Sample Name: Lab Control Sample
Lab Code: RQ1408064-02

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\071014\A0223.D\

Analysis Lot: 401024
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**19.0**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**19.8**		5.0	1.0	0.29	
75-00-3	Chloroethane	**20.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**20.9**		5.0	1.0	0.25	
74-87-3	Chloromethane	**23.9**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**20.4**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**24.9**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**22.2**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**17.5**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**18.2**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**19.3**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**20.1**		5.0	1.0	0.29	
91-20-3	Naphthalene	**25.8**		5.0	1.0	0.20	
100-42-5	Styrene	**19.1**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.8**		5.0	1.0	0.30	
108-88-3	Toluene	**19.7**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.1**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**22.0**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**20.6**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**19.4**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**39.0**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**19.1**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**19.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**19.0**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**19.4**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**19.1**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**21.5**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**18.9**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/10/14 10:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1408064-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401024
Data File Name:	I:\ACQUDATA\msvoa10\data\071014\A0223.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	7/10/14 10:33	
Dibromofluoromethane	106	85-115	7/10/14 10:33	
Toluene-d8	99	85-120	7/10/14 10:33	

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071014\A0223.D Vial: 3
Acq On : 10 Jul 2014 10:33 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1408064-02

FJ 7/14/14

Quant Time: Jul 10 11:36:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	862963	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1232347	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1155323	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	627832	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	389344	52.99	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.98%				
48) surr1,1,2-dichloroetha...	4.854	65	390178	52.91	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 105.82%				
65) SURR3,Toluene-d8	7.427	98	1401732	49.49	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.98%				
70) SURR2,BFB	9.878	95	555830	49.66	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	200956	24.90	ug/L		97
3) Chloromethane	1.294	50	238542	23.85	ug/L		99
4) Vinyl Chloride	1.361	62	215999	20.59	ug/L		99
5) Bromomethane	1.556	94	73675	22.84	ug/L		96
6) Chloroethane	1.611	64	114419	20.05	ug/L		97
7) Freon 21	1.721	67	239597	15.76	ug/L		99
8) Trichlorofluoromethane	1.770	101	247375	21.96	ug/L		98
9) Diethyl Ether	1.934	59	132648	20.49	ug/L		82
10) Freon 123a	1.928	67	208227	21.29	ug/L		98
11) Freon 123	1.965	83	195327	18.75	ug/L		100
12) Acrolein	2.026	56	34028	33.96	ug/L		90
13) 1,1-Diclethene	2.099	96	129732	22.56	ug/L	#	84
14) Freon 113	2.093	101	145019	22.11	ug/L		98
15) Acetone	2.123	43	59417	30.53	ug/L		99
16) 2-Propanol	2.196	45	138204	410.23	ug/L		97
17) Iodomethane	2.215	142	73196	16.36	ug/L		98
18) Carbon Disulfide	2.270	76	408471	16.68	ug/L		99
19) Acetonitrile	2.318	40	28204	107.92	ug/L		98
20) Allyl Chloride	2.349	76	75930	18.25	ug/L	#	43
21) Methyl Acetate	2.355	43	85435	20.48	ug/L		90
22) Methylene Chloride	2.440	84	161263	22.19	ug/L	#	80
23) TBA	2.501	59	197890	372.80	ug/L		77
24) Acrylonitrile	2.629	53	231979	109.13	ug/L		100
25) Methyl-t-Butyl Ether	2.660	73	367168	20.12	ug/L		92
26) trans-1,2-Dichloroethene	2.666	96	157218	21.51	ug/L	#	83
28) 1,1-Diclethane	3.050	63	313067	20.84	ug/L		99
29) Vinyl Acetate	3.093	86	18099	17.01	ug/L	#	7
30) DIPE	3.105	45	575946	18.94	ug/L		88
31) 2-Chloro-1,3-Butadiene	3.141	53	259626	17.96	ug/L		84
32) ETBE	3.501	59	413120	15.97	ug/L		93
33) 2,2-Dichloropropane	3.684	77	208475	18.94	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	171844	20.74	ug/L		85
35) 2-Butanone	3.708	43	65449	24.67	ug/L		89
36) Propionitrile	3.769	54	79627	116.22	ug/L		93
37) Bromochloromethane	3.983	130	110269	22.68	ug/L		88

W061114.M Thu Jul 10 11:37:13 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071014\A0223.D Vial: 3
Acq On : 10 Jul 2014 10:33 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 11:36:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	44132	20.49	ug/L	#	66
39) Tetrahydrofuran	4.068	42	39266	24.87	ug/L		80
40) Chloroform	4.092	83	281247	20.94	ug/L		92
41) 1,1,1-Trichloroethane	4.355	97	236890	20.09	ug/L		96
42) TAME	5.184	73	301747	15.51	ug/L		95
44) Cyclohexane	4.446	41	174273	19.00	ug/L		86
46) Carbontetrachloride	4.623	121	62896	18.98	ug/L		94
47) 1,1-Dichloropropene	4.623	75	202733	20.34	ug/L		95
49) Benzene	4.958	78	641584	20.17	ug/L		97
50) 1,2-Dichloroethane	4.989	62	214728	20.57	ug/L		94
51) Iso-Butyl Alcohol	4.854	43	102481	396.48	ug/L		95
52) n-Heptane	5.458	43	205717	23.07	ug/L		85
53) 1-Butanol	5.952	56	107635	900.86	ug/L		81
54) Trichloroethene	5.970	130	180117	21.08	ug/L		93
55) Methylcyclohexane	6.214	55	196274	17.50	ug/L	#	79
56) 1,2-Diclpropane	6.257	63	185706	20.40	ug/L		96
57) Dibromomethane	6.403	93	85992	20.65	ug/L		96
58) 1,4-Dioxane	6.464	88	24199m	541.56	ug/L		
59) Methyl Methacrylate	6.464	69	68963	18.74	ug/L	#	63
60) Bromodichloromethane	6.616	83	205176	20.52	ug/L		95
61) 2-Nitropropane	6.897	41	43886	30.83	ug/L		86
62) 2-Chloroethylvinyl Ether	7.006	63	54160	12.91	ug/L		92
63) cis-1,3-Dichloropropene	7.147	75	234462	19.43	ug/L		97
64) 4-Methyl-2-pentanone	7.336	43	109578	18.04	ug/L		95
66) Toluene	7.500	91	674322	19.72	ug/L		99
67) trans-1,3-Dichloropropene	7.750	75	186101	18.85	ug/L		94
68) Ethyl Methacrylate	7.872	69	142984	18.62	ug/L	#	72
69) 1,1,2-Trichloroethane	7.921	97	122828	20.71	ug/L		97
72) Tetrachloroethene	8.055	164	141893	19.78	ug/L		95
73) 2-Hexanone	8.201	43	89337	19.77	ug/L		93
74) 1,3-Dichloropropane	8.086	76	198791	18.62	ug/L	#	80
75) Dibromochloromethane	8.299	129	155440	20.36	ug/L		100
76) N-Butyl Acetate	8.342	43	196647	16.55	ug/L		95
77) 1,2-Dibromoethane	8.396	107	122739	19.80	ug/L		99
78) 3-Chlorobenzotrifluoride	8.878	180	265070	19.95	ug/L		99
79) Chlorobenzene	8.866	112	474509	19.81	ug/L		97
80) 4-Chlorobenzotrifluoride	8.927	180	244439	19.87	ug/L		99
81) 1,1,1,2-Tetrachloroethane	8.945	131	166559	19.10	ug/L		97
82) Ethylbenzene	8.982	106	216345	17.49	ug/L		93
83) (m+p)Xylene	9.085	106	591345	39.04	ug/L		99
84) o-Xylene	9.433	106	289971	18.96	ug/L		94
85) Styrene	9.445	104	492163	19.05	ug/L		99
86) Bromoform	9.597	173	86308	18.88	ug/L		96
87) 2-Chlorobenzotrifluoride	9.671	180	259302	19.71	ug/L		97
88) Isopropylbenzene	9.756	105	723380	19.32	ug/L		100
89) Cyclohexanone	9.823	55	321743	356.36	ug/L		95
90) trans-1,4-Dichloro-2-B...	10.061	53	32254	16.23	ug/L		84
92) 1,1,2,2-Tetrachloroethane	10.006	83	145123	20.09	ug/L		98
93) Bromobenzene	10.000	156	200589	19.15	ug/L		97
94) 1,2,3-Trichloropropane	10.042	110	39642	20.64	ug/L		95
95) n-Propylbenzene	10.103	91	839014	19.70	ug/L		99
96) 2-Chlorotoluene	10.171	91	504665	19.29	ug/L		92

W061114.M Thu Jul 10 11:37:13 2014 MSVO10 Page: 2

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071014\A0223.D Vial: 3
Acq On : 10 Jul 2014 10:33 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 11:36:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

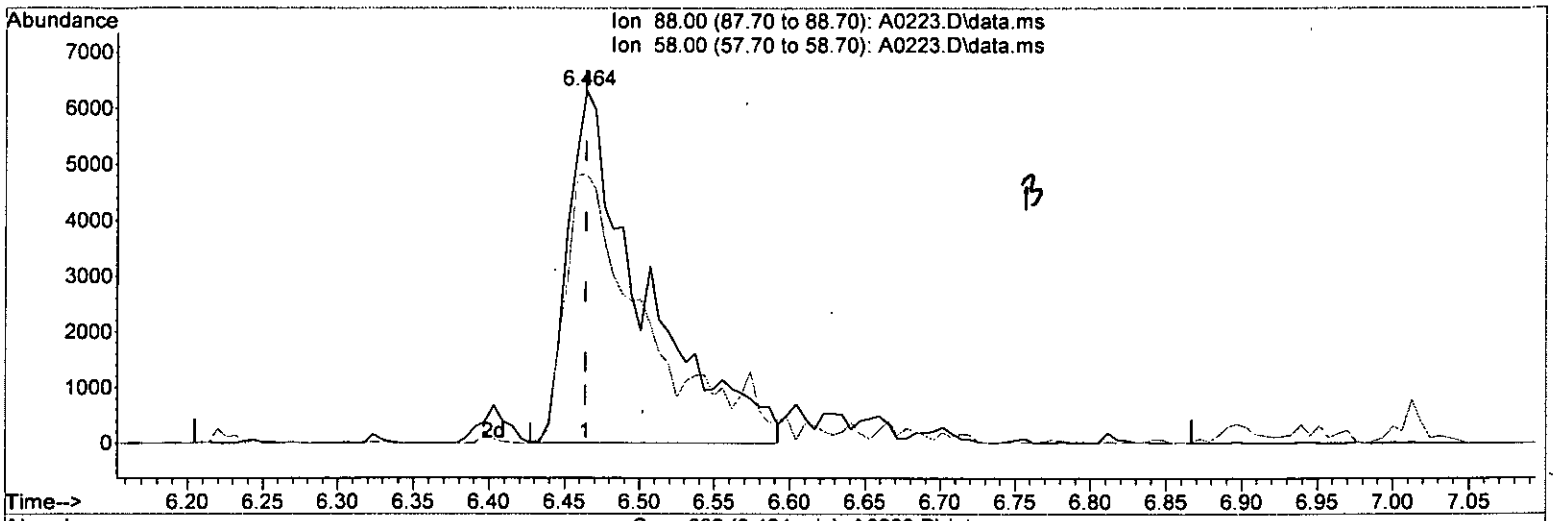
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	516677	19.49	ug/L	95
98)	4-Chlorotoluene	10.262	91	601132	18.97	ug/L	93
99)	1,3,5-Trimethylbenzene	10.250	105	599634	19.17	ug/L	96
100)	tert-Butylbenzene	10.518	119	495038	19.05	ug/L	98
101)	1,2,4-Trimethylbenzene	10.561	105	608219	19.23	ug/L	95
102)	3,4-Dichlorobenzotrifl...	10.616	214	179930	19.19	ug/L	98
103)	sec-Butylbenzene	10.695	105	693053	19.35	ug/L	99
104)	p-Isopropyltoluene	10.817	119	614253	19.61	ug/L	96
105)	1,3-Dclbenz	10.780	146	389615	20.11	ug/L	98
106)	1,4-Dclbenz	10.853	146	397157	20.23	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	161021	19.16	ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.945	214	177190	18.33	ug/L	100
109)	n-Butylbenzene	11.146	91	518083	19.14	ug/L	95
110)	1,2-Dclbenz	11.152	146	362318	20.46	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	24533	22.09	ug/L	89
112)	Trielution Dichlorotol...	11.804	125	897490	62.69	ug/L	95
113)	1,3,5-Trichlorobenzene	11.847	180	248305	20.62	ug/L	97
114)	Coelution Dichlorotoluene	12.066	125	625730	43.04	ug/L	97
115)	1,2,4-Tcbenzene	12.231	180	207768	21.16	ug/L	96
116)	Hexachlorobt	12.329	225	85599	18.19	ug/L	99
117)	Naphthalen	12.377	128	387791	25.77	ug/L	98
118)	1,2,3-Tclbenzene	12.518	180	163127	24.43	ug/L	95
119)	2,4,5-Trichlorotoluene	12.932	159	112039	30.56	ug/L	99
120)	2,3,6-Trichlorotoluene	12.993	159	111276	30.63	ug/L	98

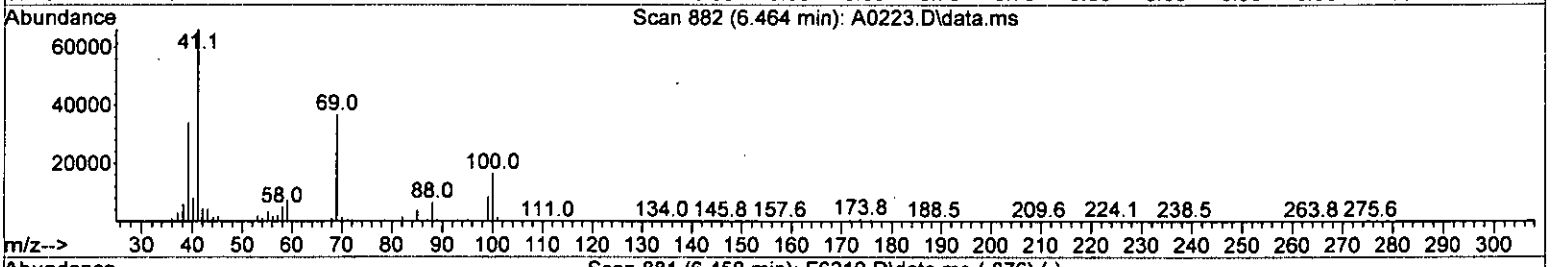
(#) = qualifier out of range (m) = manual integration (+) = signals summed

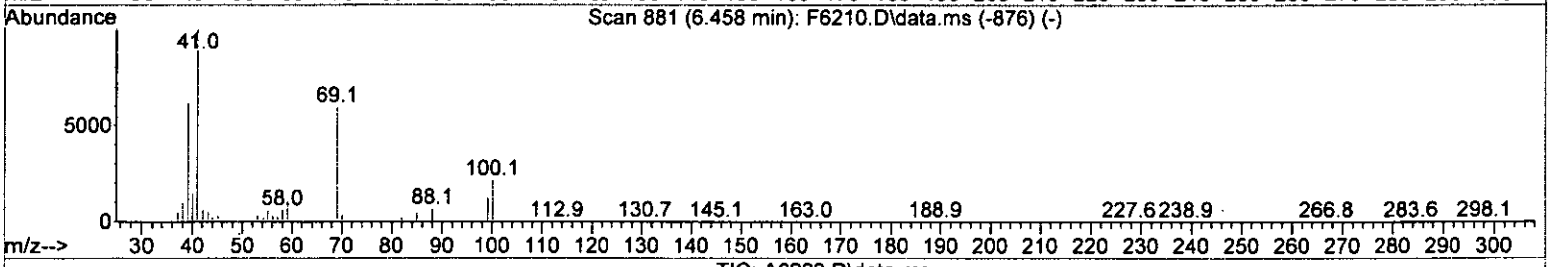
Quantitation Report (Qedit)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071014\A0223.D Vial: 3
Acq On : 10 Jul 2014 10:33 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:47:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0223.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 487.20 ug/L

response 21770

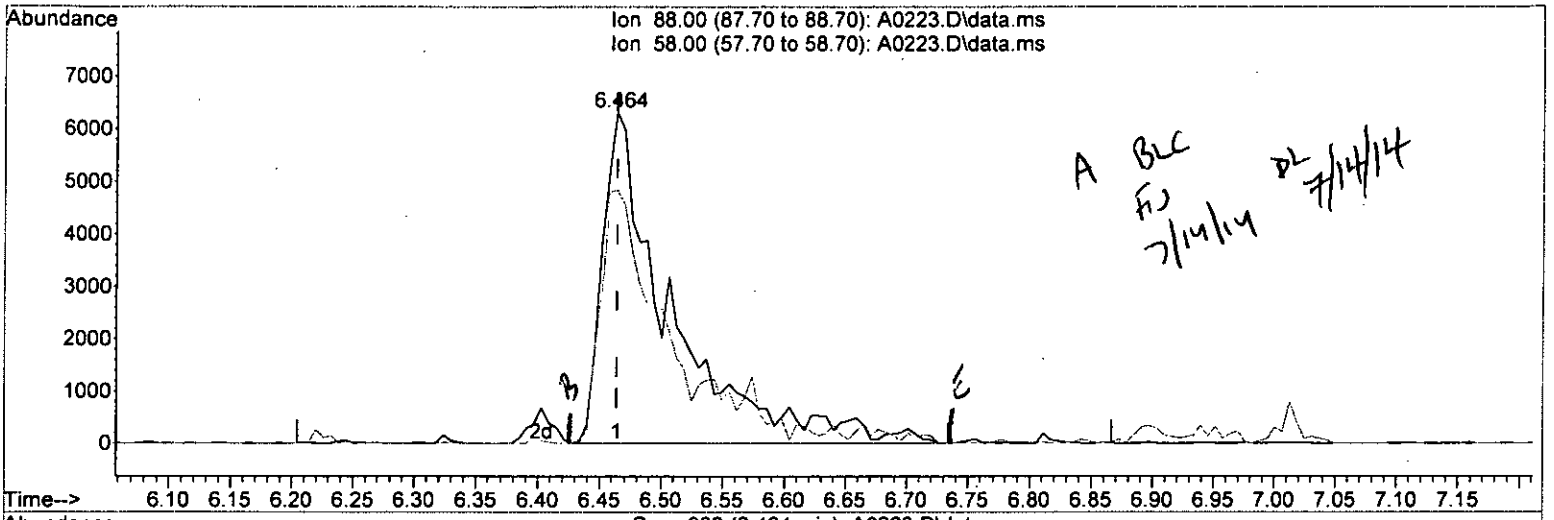
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	76.47
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Thu Jul 10 11:36:31 2014 MSVO10 Page: 1

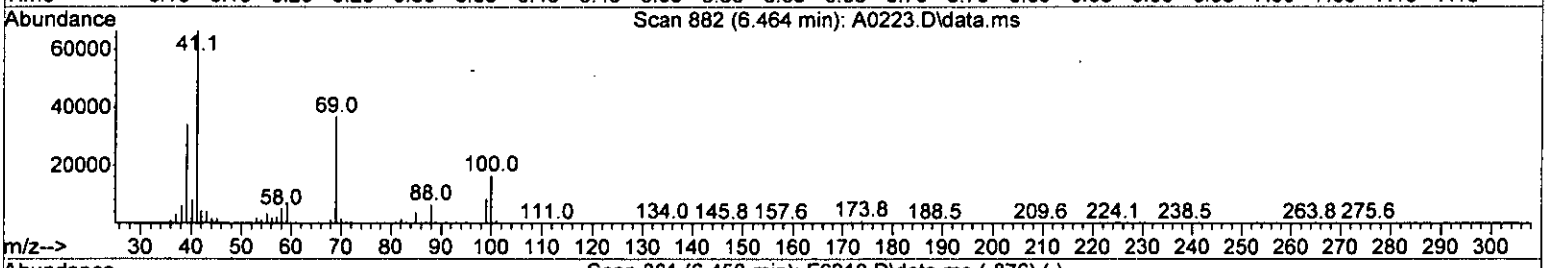
Quantitation Report (Qedit)

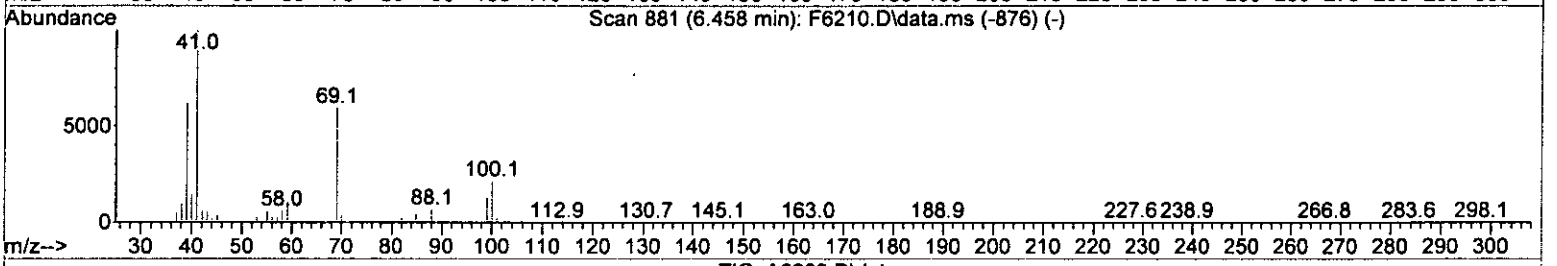
Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071014\A0223.D Vial: 3
Acq On : 10 Jul 2014 10:33 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 10:47:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



A BLC FJ 7/14/14 DL 7/14/14





TIC: A0223.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 541.56 ug/L m

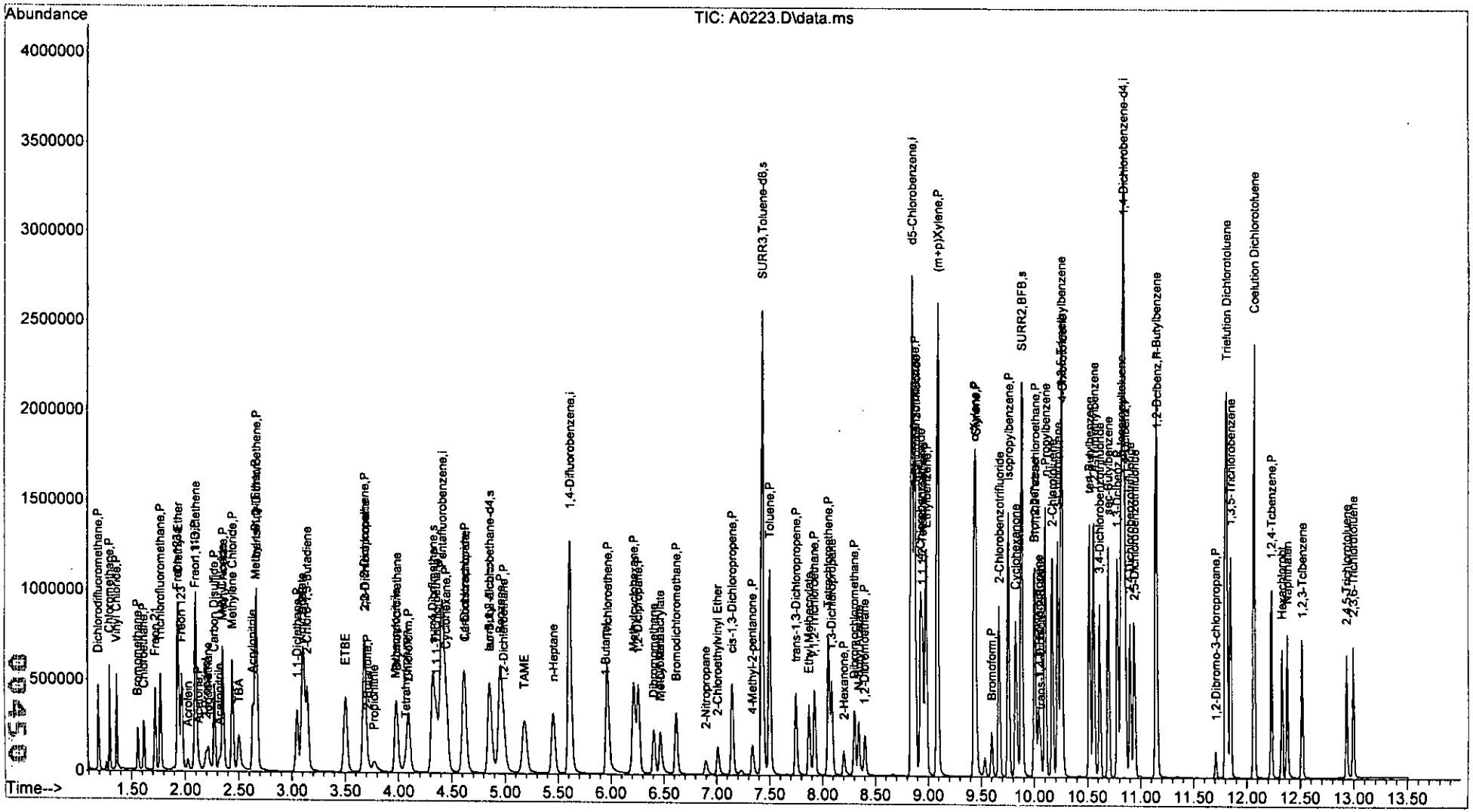
response 24199

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	76.47
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071014\A0223.D Vial: 3
Acq On : 10 Jul 2014 10:33 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 10 11:36:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



W061114.M Thu Jul 10 11:37:16 2014 MSVO10 Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 11:34
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1408240-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0364.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**18.5**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.8**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**20.9**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**20.0**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.8**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**22.9**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**19.5**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**26.2**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**21.3**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**22.9**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**19.8**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**21.8**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**19.5**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**20.7**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**20.8**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**20.1**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**18.8**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**20.2**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.1**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.4**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**18.3**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**23.9**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.2**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**17.8**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**385**		100	20	11	
106-43-4	4-Chlorotoluene	**19.2**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**19.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**17.1**		5.0	1.0	0.67	
67-64-1	Acetone	**25.6**		5.0	5.0	1.3	
71-43-2	Benzene	**19.2**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.4**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**22.4**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.0**		5.0	1.0	0.32	
75-25-2	Bromoform	**18.5**		5.0	1.0	0.42	
74-83-9	Bromomethane	**21.2**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 11:34
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1408240-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0364.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**18.3**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**19.4**		5.0	1.0	0.29	
75-00-3	Chloroethane	**19.3**		5.0	1.0	0.24	
67-66-3	Chloroform	**20.9**		5.0	1.0	0.25	
74-87-3	Chloromethane	**24.3**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**20.3**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**22.5**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**21.9**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**17.3**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**18.0**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**18.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**20.2**		5.0	1.0	0.29	
91-20-3	Naphthalene	**27.2**		5.0	1.0	0.20	
100-42-5	Styrene	**18.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.0**		5.0	1.0	0.30	
108-88-3	Toluene	**18.9**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**20.0**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**20.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**19.6**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**21.0**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**18.6**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**38.1**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**18.9**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**19.4**		5.0	1.0	0.20	
95-47-6	o-Xylene	**18.4**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**19.0**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**19.0**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**21.4**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**18.6**		5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Client:	Parsons Engineering Science	**Service Request:**	R1405048
Project:	FTMM 3Q2014/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	7/15/14 11:34
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1408240-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	401710
Data File Name:	I:\ACQUDATA\msvoa10\data\071514\A0364.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	7/15/14 11:34	
Dibromofluoromethane	107	85-115	7/15/14 11:34	
Toluene-d8	98	85-120	7/15/14 11:34	

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071514\A0364.D Vial: 3
Acq On : 15 Jul 2014 11:34 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1408240-02 7/15/14

Quant Time: Jul 15 11:48:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

FJ 7/15/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	865428	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1260011	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.842	117	1149884	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	608930	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	400721	53.34	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 106.68%				
48) surr1,1,2-dichloroetha...	4.854	65	402627	53.40	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 106.80%				
65) SURR3,Toluene-d8	7.427	98	1424630	49.19	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.38%				
70) SURR2,BFB	9.878	95	552870	48.32	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.64%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	181841	22.47	ug/L		98
3) Chloromethane	1.294	50	243803	24.31	ug/L		99
4) Vinyl Chloride	1.361	62	206511	19.62	ug/L		96
5) Bromomethane	1.556	94	68185	21.20	ug/L		97
6) Chloroethane	1.611	64	110455	19.30	ug/L		97
7) Freon 21	1.721	67	246883	16.20	ug/L		100
8) Trichlorofluoromethane	1.770	101	232202	20.55	ug/L		98
9) Diethyl Ether	1.934	59	136095	20.96	ug/L		84
10) Freon 123a	1.928	67	204432	20.84	ug/L		95
11) Freon 123	1.965	83	190433	18.23	ug/L		98
12) Acrolein	2.026	56	34447	34.28	ug/L		99
13) 1,1-Diclethene	2.099	96	131960	22.88	ug/L	#	83
14) Freon 113	2.093	101	138308	21.02	ug/L		95
15) Acetone	2.123	43	49978	25.61	ug/L		98
16) 2-Propanol	2.196	45	143378	424.38	ug/L		97
17) Iodomethane	2.215	142	72481	16.22	ug/L		95
18) Carbon Disulfide	2.270	76	367386	14.96	ug/L		98
19) Acetonitrile	2.318	40	35509	135.49	ug/L		98
20) Allyl Chloride	2.349	76	74592	17.88	ug/L	#	42
21) Methyl Acetate	2.355	43	90679	21.67	ug/L		92
22) Methylene Chloride	2.440	84	159940	21.94	ug/L	#	81
23) TBA	2.501	59	204945	384.99	ug/L		80
24) Acrylonitrile	2.629	53	247555	116.13	ug/L		98
25) Methyl-t-Butyl Ether	2.660	73	369554	20.20	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	156675	21.37	ug/L		89
28) 1,1-Diclethane	3.050	63	312932	20.77	ug/L		99
29) Vinyl Acetate	3.093	86	17566	16.46	ug/L	#	1
30) DIPE	3.105	45	654535	21.46	ug/L		88
31) 2-Chloro-1,3-Butadiene	3.141	53	243227	16.78	ug/L		86
32) ETBE	3.501	59	460002	17.73	ug/L		91
33) 2,2-Dichloropropane	3.684	77	202256	18.33	ug/L		99
34) cis-1,2-Dichloroethene	3.684	96	174653	21.02	ug/L		89
35) 2-Butanone	3.708	43	63455	23.85	ug/L		93
36) Propionitrile	3.769	54	83225	121.13	ug/L		91
37) Bromochloromethane	3.983	130	109122	22.38	ug/L	#	83

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071514\A0364.D Vial: 3
Acq On : 15 Jul 2014 11:34 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:48:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.971	67	44451	20.58 ug/L	#	66
39) Tetrahydrofuran	4.062	42	40105	25.33 ug/L		93
40) Chloroform	4.092	83	281659	20.91 ug/L		93
41) 1,1,1-Trichloroethane	4.361	97	233908	19.78 ug/L		93
42) TAME	5.184	73	327576	16.79 ug/L		91
44) Cyclohexane	4.440	41	174533	18.61 ug/L		84
46) Carbontetrachloride	4.617	121	61947	18.28 ug/L		90
47) 1,1-Dichloropropene	4.617	75	199063	19.54 ug/L		99
49) Benzene	4.958	78	624046	19.19 ug/L		92
50) 1,2-Dichloroethane	4.989	62	222412	20.84 ug/L		92
51) Iso-Butyl Alcohol	4.854	43	108022	408.74 ug/L		97
52) n-Heptane	5.458	43	195713	21.46 ug/L	#	78
53) 1-Butanol	5.952	56	116061	947.79 ug/L		85
54) Trichloroethene	5.964	130	174700	20.00 ug/L		95
55) Methylcyclohexane	6.214	55	193640	16.89 ug/L		82
56) 1,2-Diclpropane	6.257	63	186778	20.07 ug/L		97
57) Dibromomethane	6.403	93	89004	20.90 ug/L		98
58) 1,4-Dioxane	6.464	88	24033m	526.03 ug/L		
59) Methyl Methacrylate	6.464	69	73506	19.54 ug/L	#	67
60) Bromodichloromethane	6.616	83	204282	19.98 ug/L		99
61) 2-Nitropropane	6.897	41	45003	30.92 ug/L		93
62) 2-Chloroethylvinyl Ether	7.007	63	57418	13.39 ug/L		92
63) cis-1,3-Dichloropropene	7.147	75	228891	18.56 ug/L		98
64) 4-Methyl-2-pentanone	7.336	43	106483	17.14 ug/L		95
66) Toluene	7.500	91	659205	18.86 ug/L		98
67) trans-1,3-Dichloropropene	7.750	75	187908	18.61 ug/L		96
68) Ethyl Methacrylate	7.872	69	146952	18.72 ug/L	#	62
69) 1,1,2-Trichloroethane	7.927	97	121230	20.00 ug/L		96
72) Tetrachloroethene	8.055	164	135544	18.99 ug/L		98
73) 2-Hexanone	8.201	43	80177	17.83 ug/L		88
74) 1,3-Dichloropropane	8.086	76	203306	19.13 ug/L	#	80
75) Dibromochloromethane	8.305	129	153949	20.26 ug/L		97
76) N-Butyl Acetate	8.342	43	202707	17.14 ug/L		92
77) 1,2-Dibromoethane	8.396	107	120263	19.49 ug/L		98
78) 3-Chlorobenzotrifluoride	8.878	180	232994	17.62 ug/L		99
79) Chlorobenzene	8.866	112	463283	19.43 ug/L		97
80) 4-Chlorobenzotrifluoride	8.927	180	214074	17.49 ug/L		97
81) 1,1,1,2-Tetrachloroethane	8.945	131	160882	18.54 ug/L		96
82) Ethylbenzene	8.976	106	212374	17.25 ug/L		94
83) (m+p)Xylene	9.085	106	573824	38.06 ug/L		93
84) o-Xylene	9.433	106	280177	18.40 ug/L		95
85) Styrene	9.445	104	481246	18.72 ug/L		98
86) Bromoform	9.597	173	83977	18.45 ug/L		98
87) 2-Chlorobenzotrifluoride	9.671	180	228464	17.45 ug/L		93
88) Isopropylbenzene	9.756	105	693827	18.62 ug/L		98
89) Cyclohexanone	9.823	55	324278	360.87 ug/L		98
90) trans-1,4-Dichloro-2-B...	10.061	53	35490	17.94 ug/L		85
92) 1,1,2,2-Tetrachloroethane	10.006	83	146031	20.85 ug/L		98
93) Bromobenzene	10.000	156	197107	19.40 ug/L		98
94) 1,2,3-Trichloropropane	10.043	110	39624	21.27 ug/L		98
95) n-Propylbenzene	10.103	91	800103	19.37 ug/L		99
96) 2-Chlorotoluene	10.171	91	486336	19.16 ug/L		95

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071514\A0364.D Vial: 3
Acq On : 15 Jul 2014 11:34 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:48:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration

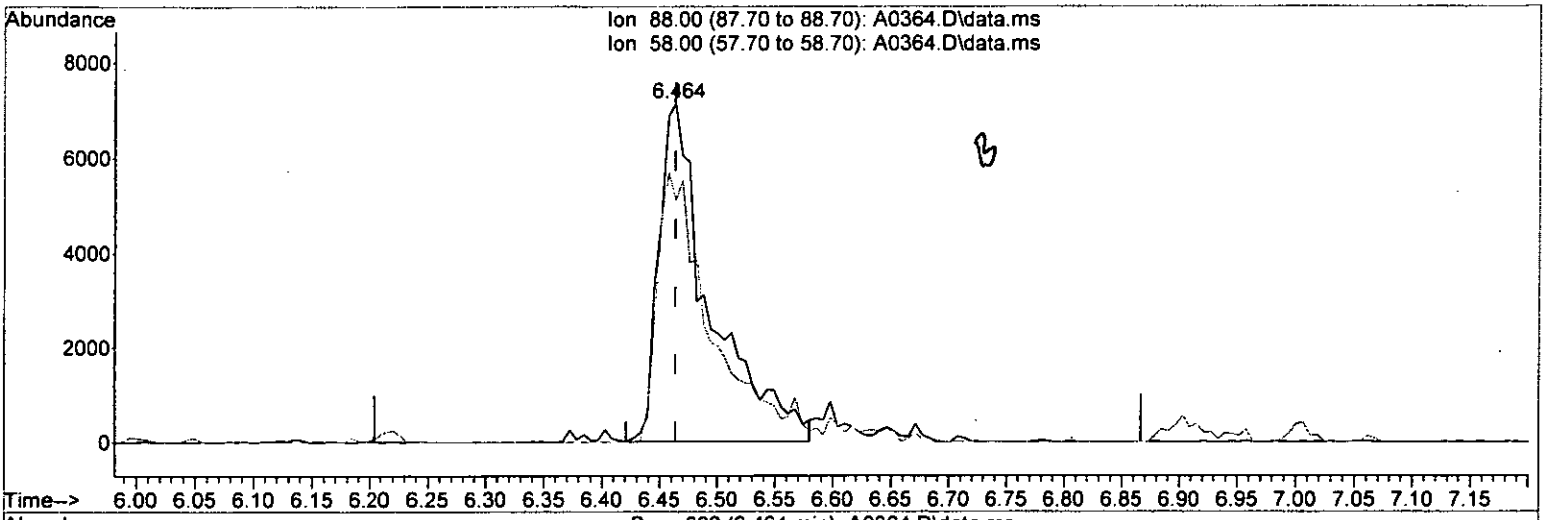
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	480718	18.70	ug/L	96
98)	4-Chlorotoluene	10.256	91	591289	19.24	ug/L	97
99)	1,3,5-Trimethylbenzene	10.250	105	570957	18.82	ug/L	97
100)	tert-Butylbenzene	10.518	119	478004	18.97	ug/L	98
101)	1,2,4-Trimethylbenzene	10.561	105	605965	19.76	ug/L	98
102)	3,4-Dichlorobenzotrifl...	10.616	214	163632	18.00	ug/L	100
103)	sec-Butylbenzene	10.695	105	658237	18.95	ug/L	99
104)	p-Isopropyltoluene	10.817	119	593963	19.55	ug/L	96
105)	1,3-Dclbenz	10.780	146	380176	20.23	ug/L	98
106)	1,4-Dclbenz	10.853	146	388431	20.40	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	151300	18.56	ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.945	214	161936	17.28	ug/L	95
109)	n-Butylbenzene	11.140	91	496680	18.92	ug/L	98
110)	1,2-Dclbenz	11.152	146	356021	20.73	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	23532	21.84	ug/L	91
112)	Trielution Dichlorotol...	11.804	125	851225	61.30	ug/L	94
113)	1,3,5-Trichlorobenzene	11.847	180	233955	20.03	ug/L	94
114)	Coelution Dichlorotoluene	12.067	125	608671	43.16	ug/L	97
115)	1,2,4-Tcbenzene	12.231	180	218126	22.90	ug/L	99
116)	Hexachlorobt	12.329	225	82334	18.04	ug/L	99
117)	Naphthalen	12.377	128	397481	27.24	ug/L	98
118)	1,2,3-Tclbenzene	12.518	180	169790	26.22	ug/L	96
119)	2,4,5-Trichlorotoluene	12.938	159	117082	32.93	ug/L	95
120)	2,3,6-Trichlorotoluene	12.999	159	115078	32.66	ug/L	96

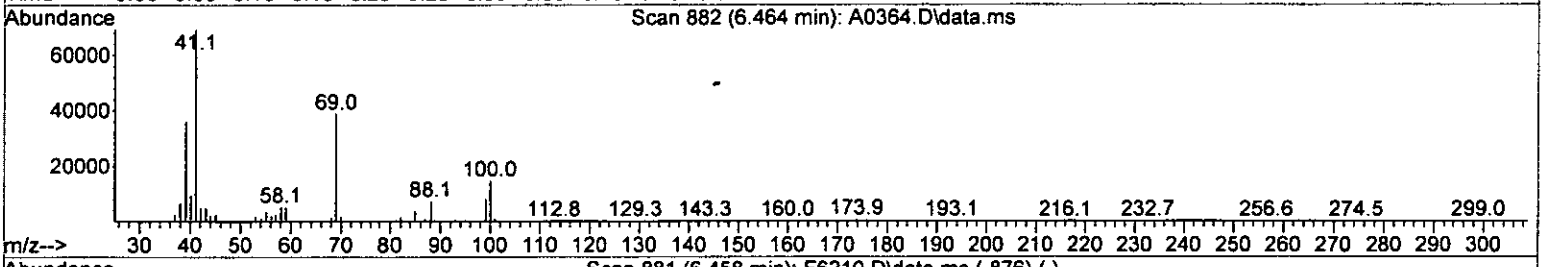
(#) = qualifier out of range (m) = manual integration (+) = signals summed

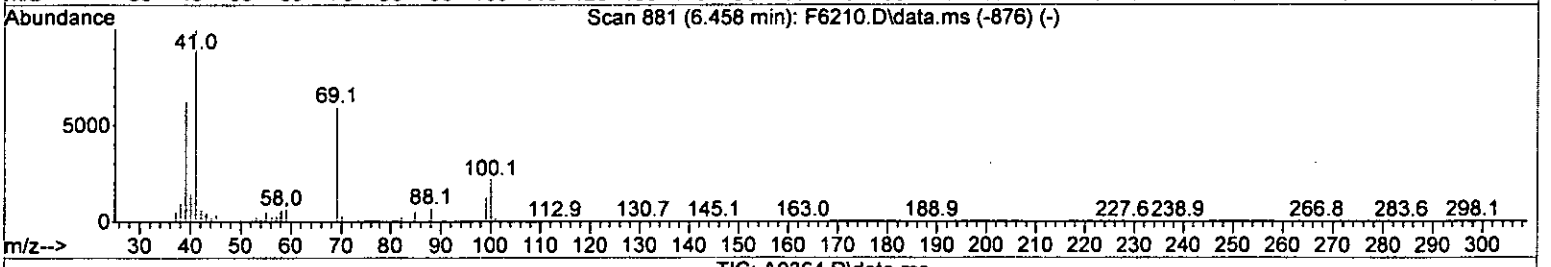
Quantitation Report (Qedit)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071514\A0364.D Vial: 3
Acq On : 15 Jul 2014 11:34 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:47:22 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0364.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 483.55 ug/L

response 22092

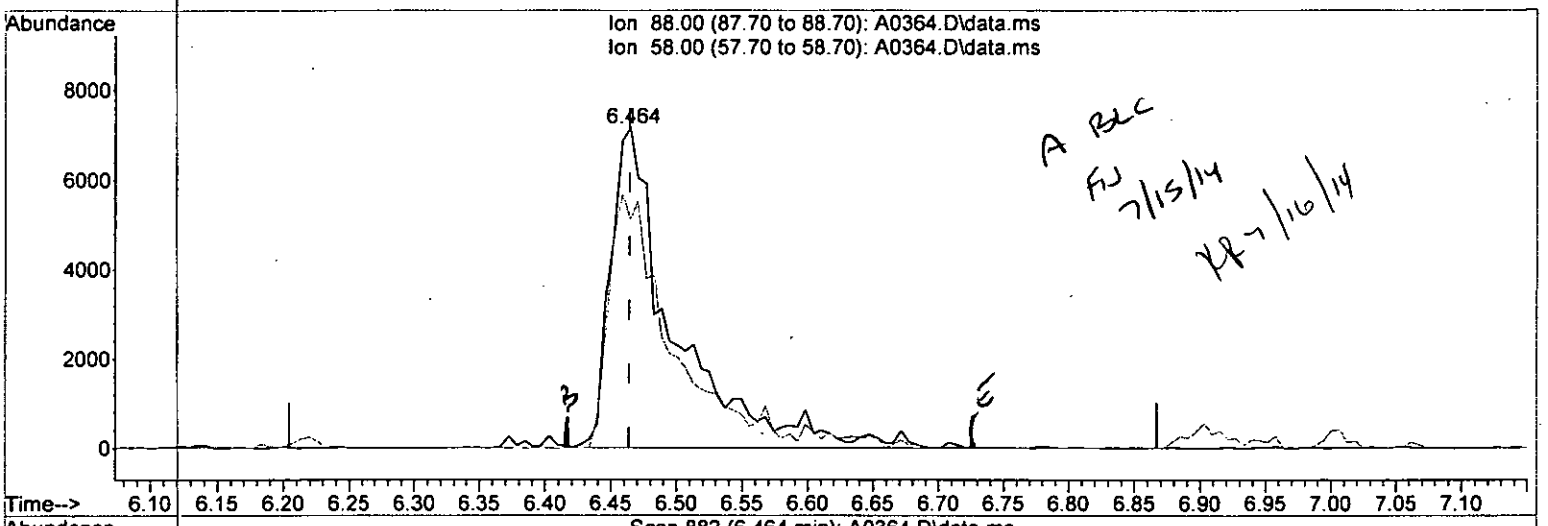
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	71.38
0.00	0.00	0.00
0.00	0.00	0.00

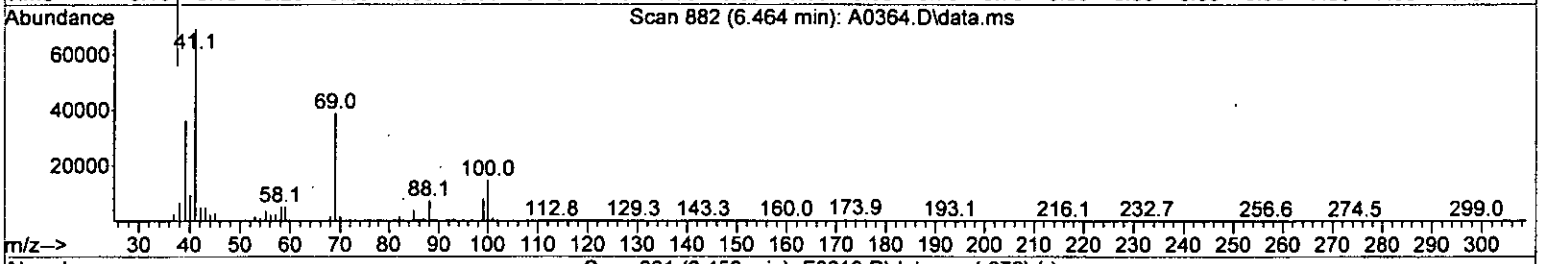
W061114.M Tue Jul 15 11:48:15 2014 MSVO10 Page: 1

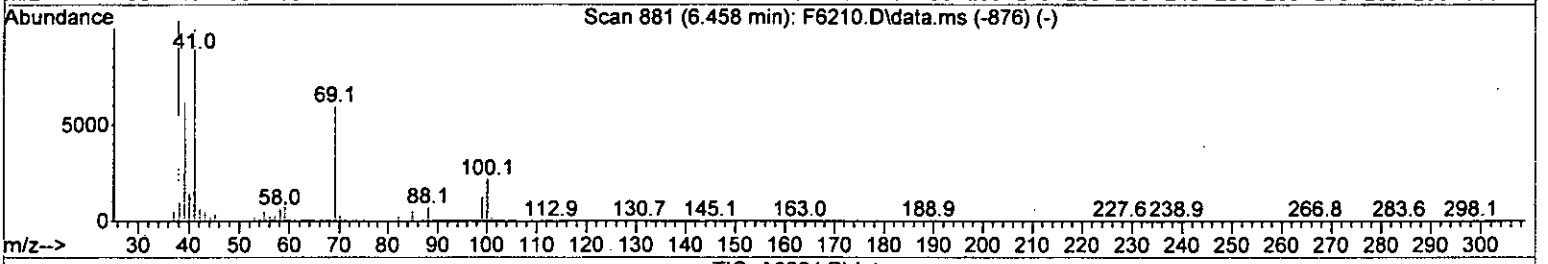
Quantitation Report (Qedit)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071514\A0364.D Vial: 3
Acq On : 15 Jul 2014 11:34 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:47:22 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration







TIC: A0364.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 526.03 ug/L m

response 24033

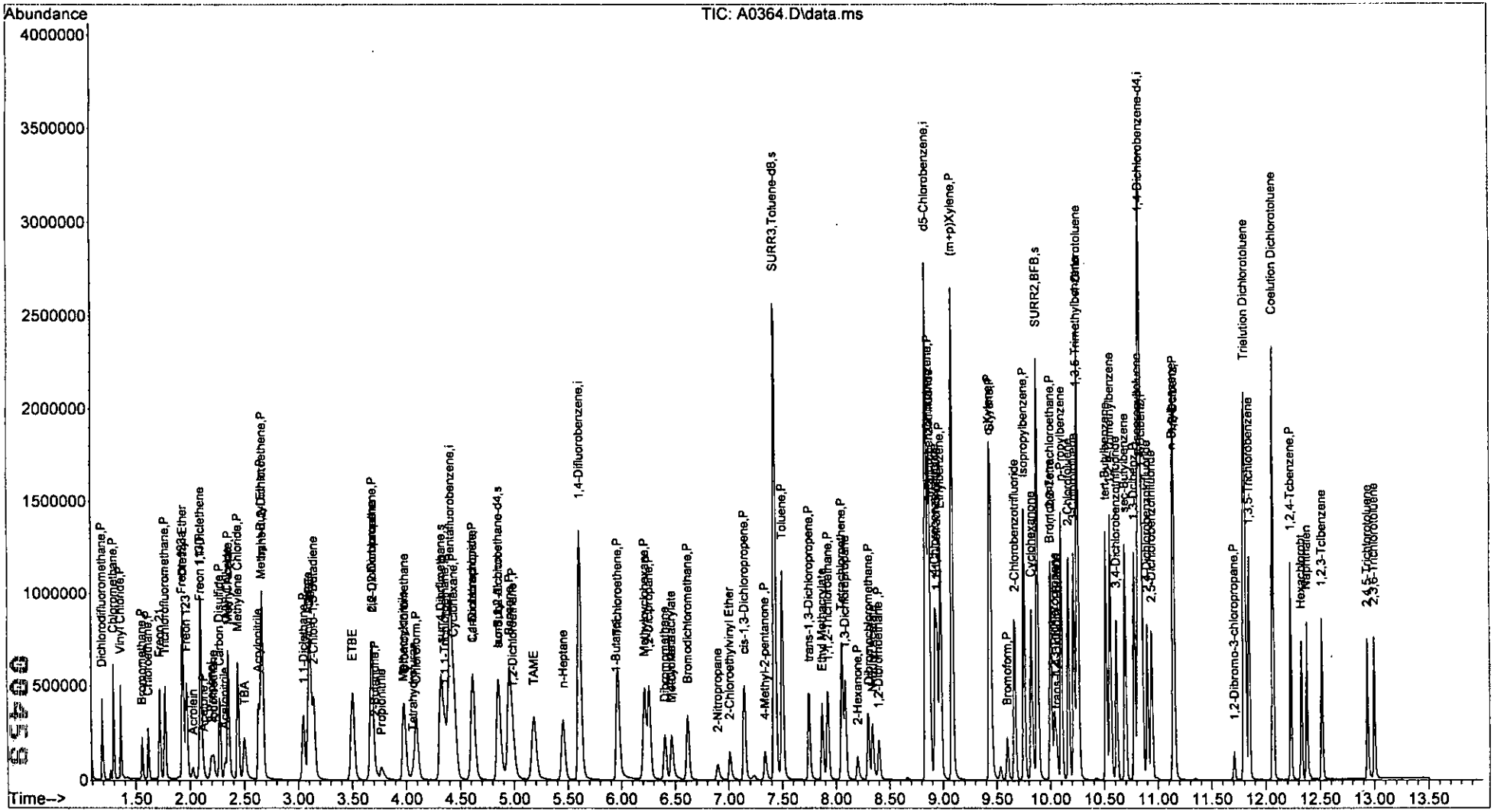
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	71.38
0.00	0.00	0.00
0.00	0.00	0.00

W061114.M Tue Jul 15 11:48:25 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\071514\A0364.D Vial: 3
Acq On : 15 Jul 2014 11:34 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 15 11:48:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W061114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Thu Jun 12 11:30:06 2014
Response via : Initial Calibration



W061114.M Tue Jul 15 11:49:06 2014 MSVO10 Page: 4

Analysis: 8260C Analyst: F. Naegler Tune Method: T061114.M
Date: 6/11/14 Data Path: j:\acqudata\msvoa10\061114 Run Method: W061114.M
Instr. MS#10 LIMS Run# : —

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								F9403	Y	
2	BLK								04	Y	
3	TUNE								05	Y	
4	ICAL BLK								06	Y	
5	0.5 ppb Std								07	Y	
6	1.0								08	Y	
7	2.0								09	Y	
8	5.0								10	Y	
9	10								11	Y	
10	50								12	Y	
11	100								13	Y	
12	150								14	Y	
13	200								15	Y	
14	BLK								16	Y	
15	BLK								17	Y	

WATER ICAL TABLE

CONC (PPB)	0.5	1.0	2.0	5.0	10	50	100	150	200
1°T/G = 71498	10mL/1mL → 5mL/50mL	10mL/5mL	20mL/5mL	50mL/50mL	2mL/100mL	5mL/50mL	10mL/5mL	15mL/5mL	20mL/5mL
1° HSL = 71505	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° Fr = 71500	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° HBo = 71034	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° OCC = 71035	↓	↓	↓	↓	↓	↓	↓	↓	↓

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

Primary :
Primary :
Primary :
Primary :
Primary :

Secondary :
Secondary :
Secondary :
Secondary :
Secondary :

Combined IS/Surr 500 : 71261
Surrogate : —
Internal Std : —

Runlog-MSVOAr2 9/20/13
Page 89

Analysis: 8260C Analyst: F. Naegler Tune Method: T061114.M
Date: 6/12/14 Data Path: j:\acqudata\msvoa10\061214. Run Method: W061114.M
Instr. MS#10 LIMS Run# :

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								F9423	Y	
2	BLK								24	Y	
1	TUNE								25	Y	
2	CCV								26	Y	
3	50 PPB ICV								27	Y	

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary 500 : 71498 - 5mL | 50mL
HSL Primary : 71505 -
Fr Primary : 71500
HBO Primary : 71034
OCL Primary : 71035 - | (CCV)

Fr Secondary 200 : 70519 - 5mL
T/G Secondary 500 : 71484 - 2mL
HSL Secondary : 71367 -
HBO Secondary : 70520 -
OCL Secondary : 71185 - | 50mL (LCS)

-12.5mL - 5mL | 50mL (SPK) (ICV)

Combined IS/Surr 500 : 71261
Surrogate : —
Internal Std : —

Runlog-MSVOAr2 9/20/13
Page 90

Analysis: 8260C | Analyst: F. Naegler | Tune Method: T061114.M
Date: 7/10/14 | Data Path: j:\acqudata\msvoa10\071014 | Run Method: W061114.M
Instr.: MS #10 | LIMS Run#: 401024

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								A0220	Y	
1	TUNE								21	Y	
2	CCV								22	Y	
3	LCS								23	Y	Acetone ↑
4	MBLK								24	(N)	
5	MBLK								25	Y	BQ14-08064-01
6	R1405048-011	1.0		[redacted]	11603	4	1	<2	26	Y	
7	-012	1.0					1	<2	27	(N)	acetone Hit Rpt 1/1
8	-013	1.0					1	<2	28	(N)	acetone Hit ↓
9	-014	1.0					1	<2	29	Y	
10	-001	1.0					1	<2	30	Y	
11	-002	1.0					1	<2	31	Y	
12	-003	1.0					1	<2	32	Y	
13	-004	2.0	25/5mL				1	<2	33	(N)	Rpt 1/1
14	-005	1.0					1	<2	34	Y	
15	-006	1.0					1	<2	35	Y	
16	-007	1.0					1	<2	36	(N) Y	~~acetone Hit Rpt 1/1~~ EE 7/11/14
17	-008	1.0					1	<2	37	Y	
18	-009	2.5	20/5mL				1	<2	38	Y	
19	-010	10.0	5/5mL				1	<2	39	Y	
20	-004	1.0		↓	↓	↓	2	<2	40	(N)	Rpt 1/1 d.o
21	R1405131-001	5.0	10/5mL	[redacted]	9866	1	2	<2	41	Y	DL
22	-001MS	5.0	↓	↓	↓	↓	2	<2	42	Y	
23	-001MSD	5.0	↓	↓	↓	↓	2	<2	43	Y	
24	BLK								44	Y	

FU 7/10/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary 500 : 72049 - 5mL/5mL
HSL Primary : 72085 -
Fr Primary : 72371 -
HBO Primary : 72046 -
OCL Primary : 72130 - (CCV)

Fr Secondary 200 : 71581 - 5mL
T/G Secondary 500 : 72050 - 2mL
HSL Secondary : 72064 -
HBO Secondary : 71564 -
OCL Secondary : 72140 - 5mL (LCS)

-12.5mL - 5mL 50mL (SPK)

Combined IS/Surr 500 : 72186
Surrogate : ——
Internal Std : ——

Runlog-MSVOAr2 9/20/13

Analysis: 8260C Analyst: F.Riegler Tune Method: T061114.M
Date: 7/15/14 Data Path: j:\acqudata\msvoa_01\071514 Run Method: W061114.M
Instr. MS #10 LIMS Run#: 401710

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								A0360	Y	
1	BLK								61	Y	
1	TUNE								62	Y	
2	CCV								63	Y	
3	LCS								64	Y	
4	MBLK								65	N	Full
5	MBLK								66	Y	RQ1408240-01 / -07
6	R1405048-012	1.0		[redacted]	11603	4	2	<2	67	Y	
7	-013	1.0					2	<2	68	Y	
8	-004	1.0					3	<2	69	Y	
9	R1405132-001	2.0	25/5mL		9866	1	2	<2	70	Y	DL
10	RQ1407919-01	1.0			6680	2	2	(5)	71	Y	
11	R1405044-001	25.0	2/5mL				2	(5)	72	Y	
12	RQ1407758-01	1.0			6680	1	1	(5)	73	Y	
13	R1405118-001	25,000	5/5mL→1/5mL→1/5				1	(10)	74	Y	foamy!
14	R1405158-003	1.0			8975	4	1	<2	75	Y	
15	-001	1.0					1	<2	76	Y	
16	-002	20.0	5/5mL→25/5mL				1	(3)	77	Y	foamy!
17	R1405197-004	2.0	25/5mL		9893	2	2	(7)	78	Y	DL
18	-006	2.5	20/5mL				2	(7)	79	Y	DL
19	-009	1.0					1	(7)	80	Y	
20	-012	1.0					1	(7)	81	Y	
21	R1405433-001	1.0			6693	2	1	<2	82	Y	
22	R1405171-001	25.0	2/5mL		9088	2	1	<2	83	Y	foamy!
23	-001MS	25.0					1	<2	84	Y	
24	-001MSD	25.0					1	<2	85	Y	
25	BLK								86	Y	
			FN 7/15/14								

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary 500 : 72049 - 5mL/5mL
72499 HSL Primary : 72085 (CCV)
FF Primary : 72371
HBO Primary : 72046 -
OCC Primary : 72130 -

FF Secondary 200 : 72454 - 5mL
T/G Secondary 500 : 72050 - 2mL
HSL Secondary : 72064 -
HBO Secondary : 72455 -
OCC Secondary : 72140 -

5mL (LCS)
-12.5mL -5mL
5mL (SPK)

Combined IS/Surr 500 : 72453
Surrogate :
Internal Std :

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