United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 2567

NJDEP Case #s 89-12-12-1442
and 91-08-27-1414

May 2000

VOLUME 1 0F 4

ATC ASSOCIATES INC.

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May 19, 2000

New Jersey Department of Environmental Protection
Bureau of Federal Case Management
CN 028
401 East State Street
Trenton, New Jersey 08625-1454

RE: Results of Long-Term Groundwater Monitoring Program
Fort Monmouth, Building 2567
Fort Monmouth, New Jersey
NJDEP Case #89-12-12-1442 and #91-08-27-1414

Dear Mr. Ian R. Curtis

ATC Associates, Inc. (ATC), on behalf of Fort Monmouth, presents in this letter, a summary report describing the results of the long-term monitoring program conducted for the investigation of the former underground storage tank (UST) system at Building 2567 at Fort Monmouth, New Jersey. Provided below is a brief site history and summary of previous investigations, excerpted from the *Site Investigation Report* dated January 1995, prepared by Weston for the Fort Monmouth, Building 2567. The site history and summary of previous investigations is followed by a description of the results of the long-term monitoring program to date.

Site History

Building 2567 is located off Laboratory Road in the Charles Wood area of Fort Monmouth. A site map detailing the former UST locations is provided as Figure 1. Building 2567 is used as the installation gas station. On 12 December 1989, the New Jersey Department of Environmental Protection (NJDEP) Hotline was contacted due to a suspected release at the subject facility. The facility was assigned NJDEP case #89-12-12-1442. The release was investigated by performing a tightness test on 30 January 1990. The suspected line passed the test.

On 15 and 16 January 1991, tightness tests were performed on the facility's USTs. One UST failed. The NJDEP Hotline was contacted and the site was assigned case #91-08-27-1414. In response to the suspected release, four groundwater monitoring wells (MW-1 to MW-4) were installed at the subject facility on 9 October 1991. Groundwater was encountered between 2.5 to 5 feet bgs. Subsequent monitoring events indicated the groundwater flow direction was to the southeast.

Groundwater samples were collected from the four monitoring wells on 10 December 1991. Analysis for volatile organic compounds with a library search of fifteen tentatively identified compounds (VO+10) and total lead indicated no compounds were detected above the NJDEP Groundwater Quality Standards (GWQS), except for benzene, 1,2-dichloroethene, total xylenes, and methylene chloride.

The four monitoring wells were subsequently sampled on 26 October 1992, 21 April 1993, 3 February 1994, and 31 March 1994. Analytical results from these sampling events indicated that concentrations of lead, benzene, total xylenes, and methylene chloride were detected above the NJDEP GWQS.

On 2 to 5 February 1993, the four subject USTs were closed according to NJDEP regulations. Based on field screening, approximately 936 cubic yards of potentially impacted soils were removed from the site. Groundwater was encountered during excavation activities at approximately 7 feet below the ground surface (bgs).

On 2 February 1993 and 24 February 1993, soil samples were collected from the excavation area. Analysis for total petroleum hydrocarbons (TPH) and lead indicated no samples reported concentrations above the NJDEP GWQS. However, thirteen of the twenty-three samples reported volatile organic compounds above the NJDEP GWQS. Concentrations of xylenes, benzene, and ethylbenzene were detected above the NJDEP GWQS.

On 23 September 1994, an additional monitoring well (MW-5) was installed downgradient from the site.

The Site Investigation Report in January 1995 recommended no further action for the soils due to source removal including approximately 936 cubic yards of soil and the excavation was backfilled with clean fill and a capped with asphalt reducing the potential for residual soil contaminants to leach into the groundwater. The report recommended further groundwater monitoring to determine flow patterns on the site.

Results of the Long-Term Monitoring Program

As part of the long-term monitoring program for Building 2567, the five existing monitoring wells (MW-1 through MW-5) were sampled on 5 May 1995, 15 August 1995, 21 November 1995, 20 February 1996, 7 January 1997 and 11 April 1997. Prior to sampling, each well was gauged and groundwater elevations were then calculated from depth-to-water measurements. Groundwater elevation data are summarized in Table 1, located in Appendix A of this report. A groundwater elevation contour map showing groundwater flow direction based on the most recent groundwater elevation measurements (April 1997) is provided as Figure 1, located in Appendix A. Groundwater flow direction was determined to be to the southeast. This groundwater flow direction has remained consistent throughout the monitoring period. A groundwater sampling summary is provided in Appendix A as Table 2. After gauging each well, the wells were purged and sampled. All sampling procedures were conducted in accordance with the NJDEP Field Sampling Procedures Manual. The samples were analyzed for VO+15 using EPA Method 624 and total lead.

The analytical results from each sampling event were compared to the NJDEP Groundwater Quality Standards (GWQS). Each constituent that exceeded the established GWQS was then compared to its maximum background concentration, as identified in the 1995 *Site Investigation Report* prepared by Weston.

A review of the historical groundwater analytical results indicates that concentrations of benzene, xylenes, methyl tertiary butyl ether (MTBE), and methylene chloride have been detected during these sampling events above the NJDEP GWQS. The highest concentrations have historically been detected in samples collected from MW-3. Methylene chloride has been detected, however, methylene chloride is commonly found as a laboratory contaminant and was also observed in quality control blanks. Concentrations of benzene in samples collected from MW-3 have been decreasing from 94 micrograms per liter (µg/L) in May 1995 to not detected in April 1997. The groundwater analytical data, included in Attachment B, is summarized in Attachment A, Tables 3 through 8.

ATC, on behalf of Fort Monmouth, recommends that a determination be made to obtain a conditional No Further Action (NFA) with a Classification Exception Area (CEA). Based on the relatively low concentrations present in the groundwater at the subject site and the lack of potential receptors, ATC believes this site qualifies for a conditional NFA with a CEA. According to the NJDEP document titled "Final Guidance on Designation of Classification Exception Areas", four criteria are necessary to obtain a conditional NFA with a CEA in UST cases. The criteria are as follows:

- Source and source area are remediated (i.e. no soils contamination above the site-specific impact to groundwater criteria and no product remaining);
- Decreasing groundwater contaminant trends are established based upon site-specific groundwater monitoring and a sound technical decision can be made to predict the duration it will take to meet the GWQS;
- Monitoring of groundwater clearly indicates that contaminants have not and will not migrate beyond given boundaries; and
- No receptors are at risk and public water supply is available.

The site may qualify for a conditional NFA with a CEA due to the following:

- The source and impacted soils in the source area have been removed;
- Concentrations of benzene in MW-3 have decreased from the initial concentration of 2,100 µg/L (12/10/91) to not detected (04/11/97);

- CEA boundaries have not been determined, however, ATC believes that contaminants will not migrate beyond given boundaries based on historical data. CEA boundaries need to be determined based on further aquifer characterization, i.e. hydraulic gradient and conductivity;

- No receptors have been identified to date.

If you have any questions or concerns regarding this summary report, please feel free to contact me at (609) 386-8800.

Sincerely,
ATC Associates Inc.

Peter Niculescu
Senior Project Geologist

Edward S. Curry
Project Geologist

Enclosures: Appendix A – Tables and Figures
Appendix B – Groundwater Analytical Data Reports

cc: Project File

APPENDIX A

TABLES AND FIGURES

TABLE 1
GROUNDWATER ELEVATIONS
Fort Monmouth, Charles Wood Area
Site 2567

Well ID/ Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to Product (ft)	Groundwater Elevation (ft)
MW-1				
04/11/97	33.93	3.80	NA	30.13
01/07/97	33.93	3.75	NA	30.18
02/20/96	33.93	3.55	NA	30.38
11/21/95	33.93	3.60	NA	30.33
08/15/95	33.93	5.11	NA	28.82
05/25/95	33.93	4.36	NA	29.57
MW-2				
04/11/97	35.26	3.40	NA	31.86
01/07/97	35.26	3.30	NA	31.96
02/20/96	35.26	3.04	NA	32.22
11/21/95	35.26	3.00	NA	32.26
08/15/95	35.26	4.68	NA	30.58
05/25/95	35.26	4.03	NA	31.23
MW-3				
04/11/97	33.88	3.15	NA	30.73
01/07/97	33.88	3.15	NA	30.73
02/20/96	33.88	3.00	NA	30.88
11/21/95	33.88	3.00	NA	30.88
08/15/95	33.88	4.45	NA	29.43
05/25/95	33.88	3.69	NA	30.19
MW-4				
04/11/97	33.88	2.55	NA	31.33
01/07/97	33.88	2.15	NA	31.73
02/20/96	33.88	2.07	NA	31.81
11/21/95	33.88	2.22	NA	31.66
08/15/95	33.88	3.77	NA	30.11
05/25/95	33.88	3.08	NA	30.80
MW-5				
04/11/97	34.99	7.20	NA	27.79
01/07/97	34.99	7.30	NA	27.69
02/20/96	34.99	7.05	NA	27.94
11/21/95	34.99	6.30	NA	28.69
08/15/95	34.99	7.84	NA	27.15
05/25/95	34.99	7.59	NA	27.40

Notes:
NA - Not Applicable

TABLE 2
SAMPLING SUMMARY
Fort Monmouth, Charles Wood Area
Site 2567

Sample Identification	Laboratory Identification	Sample Date	Sample Time	Sample Matrix	Sample Analyses
Bldg. 2567 MW-1 2926925	95-24199	05/25/95	10:22	Groundwater	VO+15, Pb
Bldg. 2567 MW-2 2926926	95-24200	05/25/95	9:13	Groundwater	VO+15, Pb
Bldg. 2567 MW-3 2926947	95-24201	05/25/95	11:14	Groundwater	VO+15, Pb
Bldg. 2567 MW-4 2926948	95-24202	05/25/95	9:44	Groundwater	VO+15, Pb
Bldg. 2567 MW-5 2931783	95-24203	05/25/95	11:50	Groundwater	VO+15, Pb
Bldg. 2567 MW-1 2926925	95-36414	08/15/95	10:30	Groundwater	VO+15, Pb
Bldg. 2567 MW-2 2926926	95-36412	08/15/95	9:21	Groundwater	VO+15, Pb
Bldg. 2567 MW-3 2926947	95-36415	08/15/95	11:23	Groundwater	VO+15, Pb
Bldg. 2567 MW-4 2926946	95-36413	08/15/95	9:50	Groundwater	VO+15, Pb
Bldg. 2567 MW-5 2931788	95-36416	08/15/95	12:21	Groundwater	VO+15, Pb
Bldg. 2567 MW-1 2926925	95-54052	11/21/95	11:54	Groundwater	VO+15, Pb
Bldg. 2567 MW-2 2926926	95-54053	11/21/95	10:40	Groundwater	VO+15, Pb
Bldg. 2567 MW-3 2926947	95-54054	11/21/95	12:53	Groundwater	VO+15, Pb
Bldg. 2567 MW-4 2926948	95-54055	11/21/95	11:14	Groundwater	VO+15, Pb
Bldg. 2567 MW-5 2931783	95-54056	11/21/95	14:21	Groundwater	VO+15, Pb
2017.1 MW-1 2926925	96-8368	02/20/96	11:15	Groundwater	VO+15, Pb
2017.1 MW-2 2926926	96-8369	02/20/96	10:00	Groundwater	VO+15, Pb
2017.3 MW-3 2926947	96-8370	02/20/96	12:10	Groundwater	VO+15, Pb
2017.4 MW-4 2926948	96-8371	02/20/96	10:34	Groundwater	VO+15, Pb
2017.5 MW-5 2931783	96-8372	02/20/96	12:40	Groundwater	VO+15, Pb
Bldg. 2567 MW-1	2258.7	01/07/97	15:05	Groundwater	BTEX, PB
Bldg. 2567 MW-2	2258.5	01/07/97	11:45	Groundwater	BTEX, PB
Bldg. 2567 MW-3	2258.6	01/07/97	14:25	Groundwater	BTEX, PB
Bldg. 2567 MW-4	2258.3	01/07/97	10:30	Groundwater	BTEX, PB
Bldg. 2567 MW-5	2258.4	01/07/97	11:05	Groundwater	BTEX, PB
Bldg. 2567 MW-1	2446.06	04/11/97	14:20	Groundwater	VO+15, Pb
Bldg. 2567 MW-2	2442.05	04/11/97	12:00	Groundwater	VO+15, Pb
Bldg. 2567 MW-3	2442.07	04/11/97	14:45	Groundwater	VO+15, Pb
Bldg. 2567 MW-4	2442.03	04/11/97	10:30	Groundwater	VO+15, Pb
Bldg. 2567 MW-5	2442.04	04/11/97	11:00	Groundwater	VO+15, Pb

Notes:
NA - Not Available
VO+15 - Volatile organic compounds with a library search of fifteen tentatively identified compounds
Pb - Total lead

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - 05/25/95
Fort Monmouth, Charles Wood Area
Site 2567

Sample Identification Lab Identification	MW-1 95-24199	MW-2 95-24200	MW-3 95-24201	MW-4 95-24202	MW-5 95-24203	NJDEP GWQS
Total Lead	<2.5	<2.5	2.7	<2.5	4.0	10

Detected Volatile Organic Compounds	MW-1 95-24199	MW-2 95-24200	MW-3 95-24201	MW-4 95-24202	MW-5 95-24203	NJDEP GWQS
Methylene Chloride	1.5B	.90B	**21B**	1.0B	1.2B	3
Benzene	ND	ND	**94**	ND	ND	1
Toluene	0.70	ND	3.8	ND	ND	1,000
Ethylbenzene	ND	1	6.3	ND	ND	700
Xylenes (total)	0.50	6.5	**190**	ND	ND	40
Methyl Tertiary Butyl Ether	**110**	3.1	**400**	ND	ND	70
Tertiary Butyl Alcohol	930	ND	ND	ND	ND	NA
Isopropylbenzene	ND	1.1	17	ND	ND	NA
n-Propylbenzene	ND	1.3	13	ND	ND	NA
1,3,5-Trimethylbenzene	ND	1.0	12	ND	ND	NA
1,2,4-Trimethylbenzene	ND	8.8	8.6	ND	ND	NA
Naphthalene	ND	11.0	9.4	ND	ND	NA
# of TICs	2	13	14	0	0	
TIC Concentration (total)	2	35	154	ND	ND	NA

Notes:
1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
TIC- Tentatively identified compound
B- Compound detected in blank
ND- Not detected
NA- Not applicable

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - 08/15/95
Fort Monmouth, Charles Wood Area
Site 2567

Sample Identification Lab Identification	MW-1 95-36414	MW-2 95-36412	MW-3 95-36415	MW-4 95-36413	MW-5 95-36416	NJDEP GWQS
Total Lead	3.3	5.6	<2.5	2.6	5.0	10

Detected Volatile Organic Compounds	MW-1 95-36414	MW-2 95-36412	MW-3 95-36415	MW-4 95-36413	MW-5 95-36416	NJDEP GWQS
Methylene Chloride	1.3B	1.3B	**25B**	1.3B	1.2B	3
Benzene	ND	ND	**89**	ND	ND	1
Toluene	0.7	ND	ND	ND	ND	1,000
Ethylbenzene	ND	0.6	8.4	ND	ND	700
Xylenes (total)	0.5	5.3	**360**	ND	ND	40
Methyl Tertiary Butyl Ether	29	2.5	**670**	ND	ND	70
Tertiary Butyl Alcohol	930	ND	ND	ND	ND	NA
Isopropylbenzene	ND	1.1	30	ND	ND	NA
n-Propylbenzene	ND	1.3	25	ND	ND	NA
1,3,5-Trimethylbenzene	ND	1.0	38	ND	ND	NA
1,2,4-Trimethylbenzene	ND	8.2	33	ND	ND	NA
Naphthalene	ND	11.0	21	ND	ND	NA
# of TICs	2	15	15	0	0	
TIC Concentration (total)	2	41	298	ND	ND	NA

Notes:

1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
TIC- Tentatively identified compound
B- Compound detected in blank
ND- Not detected
NA- Not applicable

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - 11/21/95
Fort Monmouth, Charles Wood Area
Site 2567

Sample Identification Lab Identification	MW-1 95-54052	MW-2 95-54053	MW-3 95-54054	MW-4 95-54055	MW-5 95-54056	NJDEP GWQS
Total Lead	<3.0	<3.0	<3.0	<3.0	<3.0	10

Detected Volatile Organic Compounds	MW-1 95-54052	MW-2 95-54053	MW-3 95-54054	MW-4 95-54055	MW-5 95-54056	NJDEP GWQS
Methylene Chloride	**36B**	.60B	**18B**	.60B	ND	3
Benzene	ND	ND	**35**	ND	ND	1
Toluene	ND	ND	ND	ND	ND	1,000
Ethylbenzene	ND	ND	ND	ND	ND	700
Xylenes (total)	ND	3.6	**91**	ND	ND	40
Methyl Tertiary Butyl Ether	**80**	1.6	**360**	ND	ND	70
Tertiary Butyl Alcohol	860	ND	46	ND	ND	NA
Isopropylbenzene	ND	1.0	14	ND	ND	NA
n-Propylbenzene	ND	1.1	ND	ND	ND	NA
1,3,5-Trimethylbenzene	ND	0.6	7.7	ND	ND	NA
1,2,4-Trimethylbenzene	ND	4.6	5.0	ND	ND	NA
Naphthalene	ND	7.3	6.6	ND	ND	NA
# of TICs	2	13	9	3	2	
TIC Concentration (total)	80	30	155	4	2	NA

Notes:

1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
TIC- Tentatively identified compound
B- Compound detected in blank
ND- Not detected
NA- Not applicable

TABLE 6
GROUNDWATER ANALYTICAL RESULTS - 02/20/96
Fort Monmouth, Charles Wood Area
Site 2567

Sample Identification Lab Identification	MW-1 96-8368	MW-2 96-8369	MW-3 96-8370	MW-4 96-8371	MW-5 96-8372	NJDEP GWQS
Total Lead	4.0	<3.0	6.0	<3.0	<3.0	10

Detected Volatile Organic Compounds	MW-1 96-8368	MW-2 96-8369	MW-3 96-8370	MW-4 96-8371	MW-5 96-8372	NJDEP GWQS
Methylene Chloride	2.1B	2.0B	2.4B	1.2B	.80B	3
Benzene	ND	ND	**40**	ND	ND	1
Toluene	ND	ND	1.0	ND	ND	1,000
Ethylbenzene	ND	ND	4.5	ND	ND	700
Xylenes (total)	ND	4.2	**70**	ND	ND	40
Methyl Tertiary Butyl Ether	**100**	2.0	**250**	ND	ND	70
Tertiary Butyl Alcohol	780	ND	43	ND	ND	NA
Isopropylbenzene	ND	1.0	13	ND	ND	NA
n-Propylbenzene	ND	1.1	8.3	ND	ND	NA
1,3,5-Trimethylbenzene	ND	0.8	4.7	ND	ND	NA
1,2,4-Trimethylbenzene	ND	6.2	1.4	ND	ND	NA
Naphthalene	ND	7.2	5.4	ND	ND	NA
# of TICs	3	14	15	0	1	
TIC Concentration (total)	3	30	164	ND	1	NA

Notes:

1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
TIC- Tentatively identified compound
B- Compound detected in blank
ND- Not detected
NA- Not applicable

TABLE 7
GROUNDWATER ANALYTICAL RESULTS - 01/07/97
Fort Monmouth, Charles Wood Area
Site 2567

Sample Identification Lab Identification	MW-1 2258.7	MW-2 2258.5	MW-3 2258.6	MW-4 2258.3	MW-5 2258.4	NJDEP GWQS
Total Lead	1.4	0.8	1.2	ND	ND	10

Detected Volatile Organic Compounds	MW-1 2258.7	MW-2 2258.5	MW-3 2258.6	MW-4 2258.3	MW-5 2258.4	NJDEP GWQS
Benzene	ND	ND	**19.93**	ND	ND	1
Toluene	ND	ND	0.91	ND	ND	1,000
Ethylbenzene	ND	ND	0.15	ND	ND	700
Xylenes (total)	ND	ND	28.49	ND	ND	40

Notes:
1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
ND- Not detected

TABLE 8
GROUNDWATER ANALYTICAL RESULTS - 04/11/97
Fort Monmouth, Charles Wood Area
Site 2567

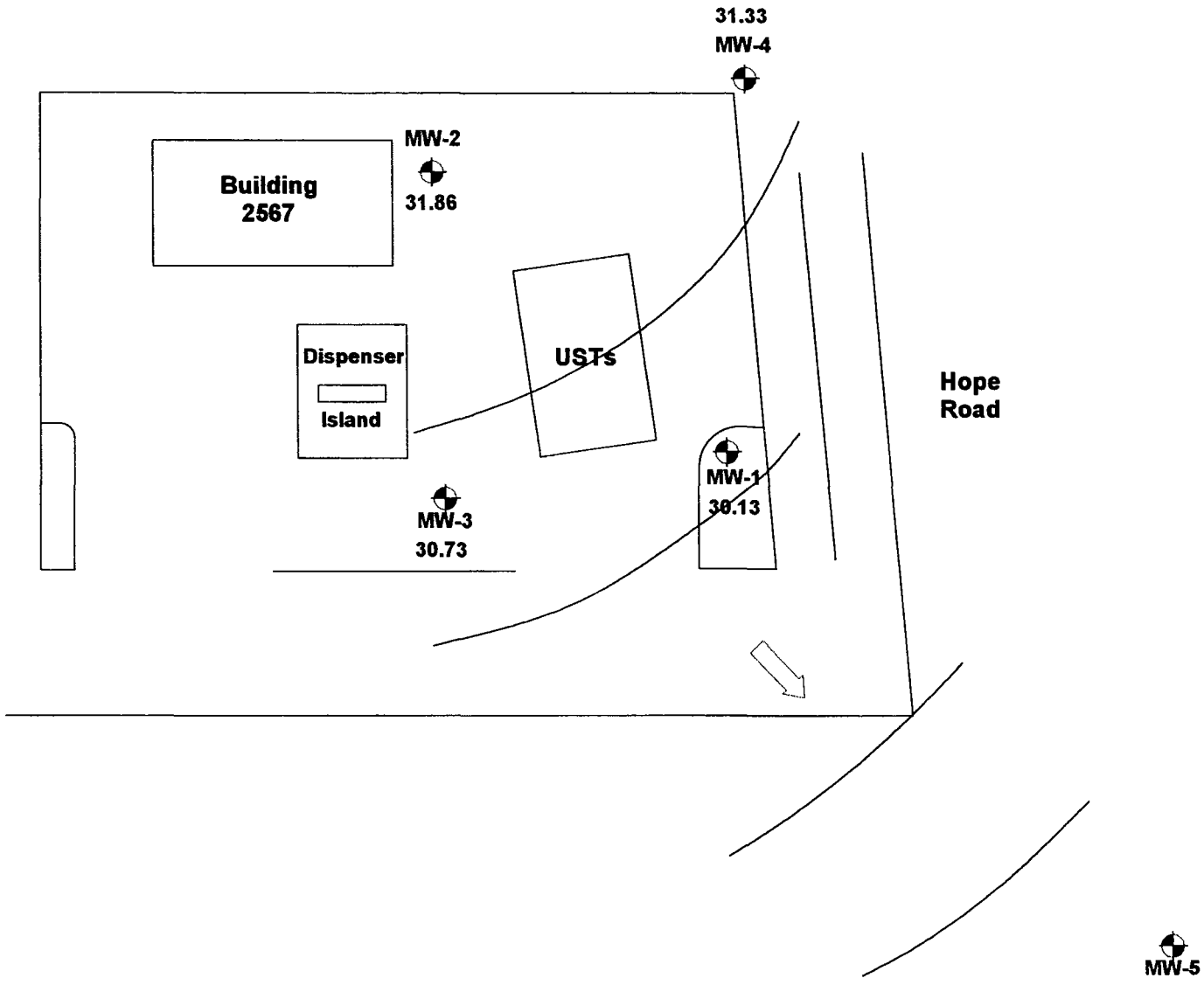
Sample Identification Lab Identification	MW-1 2446.06	MW-2 2446.05	MW-3 2446.07	MW-4 2446.03	MW-5 2446.04	NJDEP GWQS
Total Lead	4.0	<3.0	6.0	<3.0	<3.0	10

Detected Volatile Organic Compounds	MW-1 2446.06	MW-2 2446.05	MW-3 2446.07	MW-4 2446.03	MW-5 2446.04	NJDEP GWQS
None Detected	ND	ND	ND	ND	ND	NA

Notes:

1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
ND- Not detected
NA- Not applicable



Legend:

Monitoring Well

Groundwater Flow Direction

FIGURE 1 GROUNDWATER CONTOUR MAP (04/11/97)

Site Address: U.S. Army Fort Monmouth, Charles Wood Area Building 2567 Fort Monmouth, New Jersey	**ATC** Associates, Inc.
Client: U.S Army Fort Monmouth, NJ Directorate of Public Works	Three Terri Lane, Burlington, New Jersey 08016
ATC Project Number: 68.02711.0001	**Scale:** 1" = 40'

APPENDIX B

ANALYTICAL DATA REPORTS

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (908)532-6224 FAX: (908)532-3484
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

ANALYTICAL DATA REPORT
FOR
Directorate of Public Works
Fort Monmouth, NJ 07703

PROJECT : DERA Long Term Monitoring

SAMPLE LOCATION AND IDENTIFICATION

SITE: Bldg. 2567

LABORATORY ID #	MONITOR WELL #	NJDEP WELL ID #	SAMPLE DATE
2446.03	MW-4	2926948	04/11/97
2446.04	MW-5	2931783	04/11/97
2446.05	MW-2	2926926	04/11/97
2446.06	MW-1	2926925	04/11/97
2446.07	MW-3	2926947	04/11/97

NJDEP Laboratory Certification # 13461

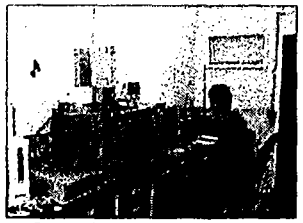
Report Date: 7 October, 97

Daniel Wright
Laboratory Director

METHODOLOGY SUMMARY

PARAMETER	REFERENCE
TARGET ANALYTE LIST METALS	Standard Methods, 18th ed.
Aluminum	3111D
Antimony	3113B
Arsenic	3113B
Barium	3111D
Beryllium	3113B
Cadmium	3111B
Calcium	3111B
Chromium	3111D
Cobalt	3113B
Copper	3111B
Iron	3111B
Lead	3113B
Magnesium	3111B
Manganese	3111B
Mercury	3112B
Nickel	3111B
Potassium	3111B
Selenium	3113B
Silver	3111B
Sodium	3111B
Thallium	3113B
Vanadium	3111D
Zinc	3111B

PARAMETER	REFERENCE
TARGET COMPOUND LIST ORGANICS	Federal Register 40 CFR Part 136 Appendix A
Base/Neutral and Acid Extractables by GC/MS	625
Purgeable Organics by GC/MS	624
Pesticide and PCB by GC	608



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: Joe Fallon
Phone #:
(✓)DERA ( )OMA ( )Other:
Project No:
Location: Bldg 2567
Samplers Name / Company : Ray Pogwist / TVS

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	# bottles	624 + 15	Pb							Remarks / Preservation Method
2446 01	Trip Blank	4/11/97	0800	AQ	2	x								624-HCl Pb-HNO_3
02	Field Blank		1000		3	x	x							All Samples Kept ≤ 4°C
03	Bldg 2567 MW-4		1030		5	x	x							# 29-26948
04	Bldg 2567 MW-5		1100		3	x	x							# 29-31783
05	Bldg 2567 MW-2		1200		3	x	x							#29 26926
06	Bldg 2567 MW-1		1420		3	x	x							#29-26925
07	Bldg 2567 MW-3		1445		3	x	x							" 29 26947
08	Field ~~Blank~~ DUP DUP 4/11/97		—		3	x	x							

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	4/11/97 1355	[signature] DURANT			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (✓)Standard, ( )Screen / non-certified
Turnaround time: (✓)Standard 4 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks:

print legibly

Custody.xls4/3/97

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG 2567
MW# 4
NJDEP ID# 2926948
NJDEP CERT# 13461
SAMPLING CONTRATOR TVS
SAMPLER RAY POGWIST

DATE 4/11/97 WEATHER OVERCAST 50'S

ELEVATION OF CASING SURVEY MARK
DTW 2.55
DEPTH OF WELL 11.50
HEIGHT OF WATER 8.95
8.95 X 0.65 X 3 = 17.45
GAL OF H2O TO BE EVACUATED 17.45 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.3 GPM
Hnu 0 PPM

PURGE START TIME 9:20
pH 4.52 TEMP 50.3 DEG F
DISSOLVED O2 2.9 PPM SPECIFIC CONDUCTIVITY 131 us/cm

PURGE END TIME 10:20
pH 5.28 TEMP 50.2 DEG F
DISSOLVED O2 2.6 PPM SPECIFIC CONDUCTIVITY 230 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 3.05 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 17.5 GAL

pH 5.26 TEMP 50.2 DEG F
DISSOLVED O2 2.4 PPM SPECIFIC CONDUCTIVITY 239 us/cm

COMMENTS:_____
_____
_____

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG2567
MW# 5
NJDEP ID# 2931783
NJDEP CERT# 13461
SAMPLING CONTRATOR TVS
SAMPLER RAY POGWIST

DATE 4/11/97 WEATHER OVERCAST 50'S

ELEVATION OF CASING SURVEY MARK
DTW 7.20
DEPTH OF WELL 14.75
HEIGHT OF WATER 7.55
7.55 X 0.65 X ___3___ = 14.72
GAL OF H2O TO BE EVACUATED 14.72 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) __PERISTALIC___
PURGE RATE 0.2 GPM
Hnu 0 PPM

PURGE START TIME 9:35
pH 5.30 TEMP 45.5 DEG F
DISSOLVED O2 2.5 PPM SPECIFIC CONDUCTIVITY 132 us/cm

PURGE END TIME 10:50
pH 6.58 TEMP 48.0 DEG F
DISSOLVED O2 2.4 PPM SPECIFIC CONDUCTIVITY 121 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 8.03 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 14.8 GAL

pH 6.41 TEMP 48.5 DEG F
DISSOLVED O2 2.2 PPM SPECIFIC CONDUCTIVITY 120 us/cm

COMMENTS:_____
_____
_____

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG2567
MW# 2
NJDEP ID# 926926
NJDEP CERT# 13461
SAMPLING CONTRATOR TVS
SAMPLER RAY POGWIST

DATE 4/11/97 WEATHER OVERCAST 50'S

ELEVATION OF CASING SURVEY MARK
DTW 3.40
DEPTH OF WELL 12.20
HEIGHT OF WATER 8.80
8.80 X 0.65 X ___3___ = 17.16
GAL OF H2O TO BE EVACUATED 17.16 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.3 GPM
Hnu 0 PPM

PURGE START TIME 10;45
pH 5.87 TEMP 50.6 DEG F
DISSOLVED O2 3.5 PPM SPECIFIC CONDUCTIVITY 871 us/cm

PURGE END TIME 11:51
pH 6.50 TEMP 51.3 DEG F
DISSOLVED O2 2.6 PPM SPECIFIC CONDUCTIVITY 590 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 3.60 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 17.2 GAL

pH 6.51 TEMP 51.6 DEG F
DISSOLVED O2 2.5 PPM SPECIFIC CONDUCTIVITY 581 us/cm

COMMENTS:_____
_____
_____

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG2567
MW# 1
NJDEP ID# 2926925
NJDEP CERT# 13461
SAMPLING CONTRATOR TVS
SAMPLER RAY POGWIST

DATE 4/11/97 WEATHER OVERCAST 50'S

ELEVATION OF CASING SURVEY MARK
DTW 3.80
DEPTH OF WELL 13.10
HEIGHT OF WATER 9.30
9.30 X 0.65 X 3 = 18.13
GAL OF H2O TO BE EVACUATED 18.14 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.3 GPM
Hnu 0 PPM

PURGE START TIME 13:15
pH 6.54 TEMP 54.5 DEG F
DISSOLVED O2 3.7 PPM SPECIFIC CONDUCTIVITY 558 us/cm

PURGE END TIME 14:15
pH 6.81 TEMP 54.2 DEG F
DISSOLVED O2 3.2 PPM SPECIFIC CONDUCTIVITY 642 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 5.05 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 18.14 GAL

pH 6.91 TEMP 54.2 DEG F
DISSOLVED O2 3.0 PPM SPECIFIC CONDUCTIVITY 640 us/cm

COMMENTS:_____
_____
_____

U.S. ARMY FORT MOMOUTH
MONITORING WELL SAMPLING DATASHEET

BLDG2567
MW# 3
NJDEP ID#2926947
NJDEP CERT# 13461
SAMPLING CONTRATOR TVS
SAMPLER RAY POGWIST

DATE 4/11/97 WEATHER OVERCAST 50'S

ELEVATION OF CASING SURVEY MARK
DTW 3.15
DEPTH OF WELL 12.50
HEIGHT OF WATER 9.35
9.35 X 0.65 X ___3___ = 18.23
GAL OF H2O TO BE EVACUATED 18.23 GAL
PURGE METHOD: (FLOW OF <0.5 TO >5.0 GPM) PERISTALIC
PURGE RATE 0.3 GPM
Hnu 0 PPM

PURGE START TIME 13:00
pH 6.50 TEMP 53.6 DEG F
DISSOLVED O2 2.9 PPM SPECIFIC CONDUCTIVITY 108 us/cm

PURGE END TIME 14:35
pH 7.23 TEMP 57.5 DEG F
DISSOLVED O2 2.6 PPM SPECIFIC CONDUCTIVITY 308 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 3.85 FT
sampling method : dedicated (law NJDEP FSPM 1992) teflon ® bailer
TOTAL VOLUME PURGED: 18.25 GAL

pH 7.25 TEMP 58.1 DEG F
DISSOLVED O2 2.5 PPM SPECIFIC CONDUCTIVITY 320 us/cm

COMMENTS: _____
_____
_____

Organic Data Qualifiers

Form 1:

This form reports concentrations of Tentatively Identified Compounds. Form 1E is the Volatile report, Form 1F is for Semi-Volatiles.

Qualifiers are:

J	Estimated Value
N	Presumptive evidence of a compound
E	Concentration exceeds calibration range
D	Diluted sample
A	TIC is a suspected aldol condensation product

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	**V00645**	Sample Name	**Daily Blank**
Date	**24-Apr-97**	Field ID	**Daily Blank**
Analyst	**Skelton**	Dilution Factor	**1**

CAS#	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v00646.d**	Sample Name	**2446.01**
Operator	**Paul Skelton**	Field ID	**Trip Blank**
Date Acquired	**04/24/97 18:16**	Sample Multiplier	**1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v00647.d**	Sample Name	**2446.02**
Operator	**Paul Skelton**	Field ID	**Field Blank**
Date Acquired	**04/24/97 19:03**	Sample Multiplier	**1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v00648.d**
Operator **Paul Skelton**
Date Acquired **04/24/97 19:51**

Sample Name **2446.03**
Field ID **Bldg 2567 MW4**
Sample Multiplier **1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v00649.d**	Sample Name	**2446.04**
Operator	**Paul Skelton**	Field ID	**Bldg 2567 MW5**
Date Acquired	**04/24/97 20:40**	Sample Multiplier	**1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**v00650.d**	Sample Name	**2446.05**
Operator	**Paul Skelton**	Field ID	**Bldg 2567 MW2**
Date Acquired	**04/24/97 21:28**	Sample Multiplier	**1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **v00651.d**
Operator **Paul Skelton**
Date Acquired **04/24/97 22:16**

Sample Name **2446.06**
Field ID **Bldg 2567 MW1**
Sample Multiplier **1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

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Data File Name **v00652.d**
Operator **Paul Skelton**
Date Acquired **04/24/97 23:04**

Sample Name **2446.07**
Field ID **Bldg 2567 MW3**
Sample Multiplier **1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name	**V00653.D**	Sample Name	**2446.08**
Operator	**Paul Skelton**	Field ID	**Field Duplicate**
Date Acquired	**04/24/97 23:52**	Sample Multiplier	**1**

CAS #	Name	R.T.	Response	Amount	MDL	GW Criteria
	Dichlorodifluoromethane			not detected	3.63 ug/L	na
74-87-3	Chloromethane			not detected	0.79 ug/L	30
75-01-4	Vinyl Chloride			not detected	2.61 ug/L	5
74-83-9	Bromomethane			not detected	1.45 ug/L	10
75-00-3	Chloroethane			not detected	2.20 ug/L	na
75-69-4	Trichlorofluoromethane			not detected	1.31 ug/L	na
75-35-4	1,1-Dichloroethene			not detected	0.74 ug/L	2
67-64-1	Acetone			not detected	1.57 ug/L	700
75-15-0	Carbon Disulfide			not detected	0.54 ug/L	na
75-09-2	Methylene Chloride			not detected	1.66 ug/L	2
156-60-5	trans-1,2-Dichloroethene			not detected	0.50 ug/L	100
75-35-3	1,1-Dichloroethane			not detected	0.83 ug/L	70
108-05-4	Vinyl Acetate			not detected	2.07 ug/L	na
78-93-3	2-Butanone			not detected	2.06 ug/L	300
	cis-1,2-Dichloroethene			not detected	0.65 ug/L	10
67-66-3	Chloroform			not detected	0.43 ug/L	6
75-55-6	1,1,1-Trichloroethane			not detected	0.81 ug/L	30
56-23-5	Carbon Tetrachloride			not detected	1.20 ug/L	2
71-43-2	Benzene			not detected	0.51 ug/L	1
107-06-2	1,2-Dichloroethane			not detected	1.27 ug/L	2
79-01-6	Trichloroethene			not detected	0.94 ug/L	1
78-87-5	1,2-Dichloropropane			not detected	0.78 ug/L	1
75-27-4	Bromodichloromethane			not detected	0.77 ug/L	1
110-75-8	2-Chloroethyl vinyl ether			not detected	1.05 ug/L	na
10061-01-5	cis-1,3-Dichloropropene			not detected	0.60 ug/L	na
108-10-1	4-Methyl-2-Pentanone			not detected	1.33 ug/L	400
108-88-3	Toluene			not detected	0.73 ug/L	1000
10061-02-6	trans-1,3-Dichloropropene			not detected	1.43 ug/L	na
79-00-5	1,1,2-Trichloroethane			not detected	1.49 ug/L	3
127-18-4	Tetrachloroethene			not detected	0.92 ug/L	1
591-78-6	2-Hexanone			not detected	1.12 ug/L	na
126-48-1	Dibromochloromethane			not detected	1.36 ug/L	10
108-90-7	Chlorobenzene			not detected	0.66 ug/L	4
100-41-4	Ethylbenzene			not detected	1.14 ug/L	700
1330-20-7	m+p-Xylenes			not detected	2.53 ug/L	na
1330-20-7	o-Xylene			not detected	1.92 ug/L	na
100-42-5	Styrene			not detected	1.57 ug/L	100
75-25-2	Bromoform			not detected	1.68 ug/L	4
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1.71 ug/L	2
541-73-1	1,3-Dichlorobenzene			not detected	2.51 ug/L	600
106-46-7	1,4-Dichlorobenzene			not detected	3.08 ug/L	74
95-50-1	1,2-Dichlorobenzene			not detected	2.75 ug/L	600

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Daily Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: Location SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: Daily Blank

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00645.D

Level: (low/med) LOW Date Received: 04/24/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	unknown hydrocarbon	34.92	5	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Trip Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER

Sample wt/vol: 5.0 (g/ml) ML

Level: (low/med) LOW

% Moisture: not dec.

GC Column: RTX-502 ID: 0.25 (mm)

Soil Extract Volume: (uL)

Lab Sample ID: 2446.01

Lab File ID: V00646.D

Date Received: 04/11/97

Date Analyzed: 04/24/97

Dilution Factor: 1.0

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Blank**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.02

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00647.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW4**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.03

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00648.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW5**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.04

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00649.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 2

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000627-45-2	N-Ethylformamide	34.92	9	JN
2. 031502-14-4	2-Nonen-1-ol, (E)-	36.71	6	JN

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW2**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.05

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00650.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW1**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.06

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00651.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 000075-65-0	2-Propanol, 2-methyl-	12.04	18	JN
2. 001634-04-4	Propane, 2-methoxy-2-methyl-	14.12	66	JN
3. 000071-36-3	1-Butanol	36.71	4	JN

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **MW3**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.07

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00652.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 4

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001066-40-6	Silanol, trimethyl-	13.92	9	JN
2. 007385-10-6	Silane, 9H-fluoren-9-yltrimethyl-	34.92	24	JN
3. 000300-57-2	Benzene, 2-propenyl-	36.05	3	JN
4. 031502-14-4	2-Nonen-1-ol, (E)-	36.71	10	JN

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **Field Dup**

Lab Name: FMETL Project

NJDEP # 13461 Case No.: 2446 Location B.2567 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 2446.08

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: V00653.D

Level: (low/med) LOW Date Received: 04/11/97

% Moisture: not dec. Date Analyzed: 04/24/97

GC Column: RTX-502 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 4

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 001634-04-4	Propane, 2-methoxy-2-methyl-	14.13	6	JN
2. 000300-57-2	Benzene, 2-propenyl-	36.05	8	JN
3. 000112-20-9	1-Nonanamine	36.70	5	JN
4. 000075-83-2	Butane, 2,2-dimethyl-	36.91	6	JN

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2446.02-.08
Sample Received: 4/11/97
Analysis Start: 4/22/97
Analysis Completed: 4/22/97

Site: Ft. Monmouth
Building 2567

Matrix: Aqueous

TEST PARAMETER: LEAD

Laboratory ID#	Sample Location/ Identification	Result (ug/L)	MDL (ug/L)
2446.02	Field Blank	1.2	0.5
2446.03	Bldg. 2567 MW 4	2.3	0.5
2446.04	Bldg. 2567 MW 5	2.7	0.5
2446.05	Bldg. 2567 MW 2	10.7	0.5
2446.06	Bldg. 2567 MW 3	1.8	0.5
2446.07	Bldg. 2567 MW 1	2.5	0.5
2446.08	Bldg. 2567 Dup	1.1	0.5

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (908)532-4359 Fax (908)532-3484 EMail:appleby@doim6.monmouth.army.mil
NJDEP Certification #13461

Chain of Custody Record

Page 1 of 1

Customer: (DERA) (OMA) (Other:________)

Project No: 02-00618

Sampler's Signature: [signature] Ray Pogwist

Lab Sample I.D.	Sample Location	Date	Time	Sample Type	Gcd	pH	S. Cond	Diss. O2	HNa	Pb	Remarks / Preservation Method
2258 .1	Trip Blank	1/7/97	0800	Aqua	X						Pb - HNO_3 added (5 Bottle 250ml)
.2	Field Blank	↓	955	↓	X					Y	Gcd - HCl added (16 Bottle 40ml)
.3	Bldg 2567 MW4	↓	1030	↓	X	X	X	X	X	Y	NJ # 2926948
.4	Bldg 2567 MW5	↓	1105	↓	↓	↓	↓	↓	↓	↓	NJ # 2931783
.5	Bldg 2567 PTW 2	↓	1145	↓	↓	↓	↓	↓	↓	↓	NJ # 2926946
.6	Bldg 2567 MW3	↓	1435	↓	↓	↓	↓	↓	↓	↓	NJ # 2926947
.7	Bldg 2567 MW1	↓	1505	↓	↓	↓	↓	↓	↓	↓	NJ # 2926925
.8	Bldg 2567 Dup.	↓	—	↓	↓	↓	↓	↓	↓		

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
[signature]	1/7/97	[signature] 1-7-97			
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Relinquished by (signature):	Date/Time:	Received for laboratory by (signature):	Date/Time:	Remarks.

1/7/97 Bldg 3567 onsite 09.15 windy cold 30's pt cloudy

Bldg 3567 MW 4 Dept # 296948

@ 1030

pH - 6.30
Temp - 45.8
Scond - 222
DO - 1.5
Hnu - 0

MW5 Dept # 293783

@ 1105

pH - 6.83
Temp - 46.8
Scond - 113
DO - 1.5
Hnu - 0

MW 2 Dept # 292[illegible]

@ 1145

pH - 6.61
Temp - 47.8
Scond - 645
DO - 1.6
Hnu - 0

MW 3 Dept # 292697

@ 1445

pH - 7.40
Temp - 47.6
Scond - 330
DO - 1.3
Hnu -

MW 1 Dept # 292695

@ 1505

pH - 7.11
Temp - 48.4
Scond - 575
DO - 1.5
Hnu - 0

well BG MW is # 293263 Depth to water is 4.50

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 3 NJDEPE WELL ID # 2926947
LABORATORY: NJDEP CERT #
SAMPLING CONTRACTOR: TVS
SAMPLERS NAMES: Ray Pagnotti

DATE: 1/7/96
WEATHER CONDITIONS: windy pT Cloudy 30's

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: ____.____FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3 .15 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: ____.____FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 0 PPM
DEPTH OF WELL: 12.50 FT HEIGHT OF WATER: 9 .35 FT
GAL OF H2O TO BE EVACUATED (EST) 18.2 GAL
(9.35 X 0.65 X 3 = 18.2)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) peristaltic
PURGE RATE (0.5 GPM) : 0.2 GPM

PURGE START TIME: 1315
pH: 7.72 s.u. TEMP: 45.8 Deg.C/F
Dissolved Oxygen: 1.6 PPM Specific Conductivity: 102 us/cm

PURGE END TIME: 1415
pH: 7.51 s.u. TEMP: 46.9 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 310 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 4 .55 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18.2 GAL
pH: 7.40 s.u. TEMP: 47.6 Deg.C
Dissolved Oxygen: 1.3 PPM Specific Conductivity: 330 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 1 NJDEPE WELL ID # 29 26925
LABORATORY: NJDEP CERT #
SAMPLING CONTRACTOR: TVS
SAMPLERS NAMES: Ray Pognist

DATE: ~~1/6~~ 1/7/96
WEATHER CONDITIONS: windy pt cloudy 30's

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: ____.____FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 5 .75 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: ____.____FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 0 PPM
DEPTH OF WELL: 13 .10 FT HEIGHT OF WATER: 9 .35 FT
GAL OF H2O TO BE EVACUATED (EST) 18.2 GAL
(9.35 X 0.65 X 3 = 18.2)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) peristaltic
PURGE RATE (0.5 GPM) : 0.3 GPM

PURGE START TIME: 1330
pH: 7.30 s.u. TEMP: 44.6 Deg.C ~~0~~F
Dissolved Oxygen: 1.9 PPM Specific Conductivity: 386 us/cm

PURGE END TIME: 1500
pH: 7.15 s.u. TEMP: 47.5 Deg.C
Dissolved Oxygen: 1.7 PPM Specific Conductivity: 444 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 4 .60 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18.2 GAL
pH: 7.14 s.u. TEMP: 48.4 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 535 us/cm

COMMENTS: well BGMW6B #193263 Depth is 4.50'

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 2 NJDEPE WELL ID # 2926926
LABORATORY: NJDEP CERT #
SAMPLING CONTRACTOR: TVS
SAMPLERS NAMES: Ray Pogwist

DATE: 11/7/97
WEATHER CONDITIONS: windy partly 30's

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: ____.____FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.30 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: ____.____FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 0 PPM
DEPTH OF WELL: 12.20 FT HEIGHT OF WATER: 8.90 FT
GAL OF H2O TO BE EVACUATED (EST) _____ GAL
(8.90 X 0.65 X 3 = 17.35)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) peristaltic
PURGE RATE (0.5 GPM) : 0.3 GPM

PURGE START TIME: 1040
pH: 6.30 s.u. TEMP: 44.1 Deg.C °F
Dissolved Oxygen: 1.9 PPM Specific Conductivity: 550 us/cm

PURGE END TIME: 1140
pH: ~~6.10~~ s.u. 1.7 TEMP: ~~46.2~~ Deg.C
Dissolved Oxygen: ~~1.5~~ PPM Specific Conductivity: ~~535~~ us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 3.90 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : _____ GAL 47.8
pH: ~~6.33~~ s.u. 1.6 TEMP: ~~46.8~~ Deg.C 645
Dissolved Oxygen: ~~1.5~~ PPM Specific Conductivity: ~~533~~ us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 5 NJDEPE WELL ID # 2931783
LABORATORY: NJDEP CERT #
SAMPLING CONTRACTOR: TLS
SAMPLERS NAMES: Ray Pogwist

DATE: 1/7/97
WEATHER CONDITIONS: windy pt cloudy 30's

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: ____.____FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 7.30 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: ____.____FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 0 PPM
DEPTH OF WELL: 14.75FT HEIGHT OF WATER: 7.45 FT
GAL OF H2O TO BE EVACUATED (EST) 14.52 GAL
(7.45 X 0.65 X 3 = 14.52)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) peristalic pump
PURGE RATE (0.5 GPM) : 0.2 GPM

PURGE START TIME: 945
pH: 6.50 s.u. TEMP: 43.5 Deg.C
Dissolved Oxygen: 2.2 PPM Specific Conductivity: 130 us/cm

PURGE END TIME: 1100
pH: 6.70 s.u. TEMP: 46.2 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 125 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 7.80 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 14.6 GAL
pH: 6.83 s.u. TEMP: 46.8 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 113 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 4 NJDEPE WELL ID # 2926948
LABORATORY: NJDEP CERT #
SAMPLING CONTRACTOR: TVS
SAMPLERS NAMES: Ray Pagwist

DATE: 1/7/97
WEATHER CONDITIONS: windy pT cloudy 30's

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: ____.____FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 2.15 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: ____.____FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 0 PPM
DEPTH OF WELL: 11.60 FT HEIGHT OF WATER: 9.15 FT
GAL OF H2O TO BE EVACUATED (EST) 17.9 GAL
(9.15 X 0.65 X 3 = 17.9)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Peristaltic pump
PURGE RATE (0.5 GPM) : 0.3 GPM

PURGE START TIME: 945
pH: 6.90 s.u. TEMP: 45 Deg.C ~~F~~
Dissolved Oxygen: 1.0 PPM Specific Conductivity: 511 us/cm

PURGE END TIME: 1025
pH: 6.41 s.u. TEMP: 45.5 Deg.C
Dissolved Oxygen: 1.3 PPM Specific Conductivity: 109 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 2.80 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18 GAL
pH: 6.30 s.u. TEMP: 45.8 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 222 us/cm

COMMENTS: _____

Report of Analysis
U.S.Army, Fort MonmouthEnvironmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 173
Ft. Monmouth, NJ 07703

Lab ID #: 2258.2-.8
Sample Received: 1/07/97
Analysis Start: 1/13/97
Analysis Completed: 1/13/97

Site: Ft. Monmouth
Building 2567

Matrix: Aqueous

Method of Analysis: Std. Methods 18th, Method 3113B
Method of Digestion: NA

TEST PARAMETER: LEAD

Laboratory ID#	Sample Location/ Identification	Result (ug/L)	MDL (ug/L)
2258.2	Field Blank	ND	0.5
2258.3	Bldg. 2567 MW 4	ND	0.5
2258.4	Bldg. 2567 MW 5	ND	0.5
2258.5	Bldg. 2567 MW 2	0.8	0.5
2258.6	Bldg. 2567 MW 3	1.2	0.5
2258.7	Bldg. 2567 MW 1	1.4	0.5
2258.8	Bldg. 2567 Dup	0.8	0.5

ND = Not Detected, MDL = Method Detection Limit, NA = Not Applicable

Daniel K. Wright
Laboratory Director

BTEX Analysis Data Sheet

Sample I.D.: **blank**
Misc. ID: **M. BLANK**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219704.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.96	**23.19**	**ug/L**

Surrogate Percent Recovery: **116.0 %** Limit: 60-140%

Last Cal. Update: Thu Mar 27 11:10:21 1997

BTEX Analysis Data Sheet

Sample I.D.: **icv**
Misc. ID: **20 ppb**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219705.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	16.86	24.14	0.02
108-88-3	TOLUENE	22.07	22.05	24.01	0.04
100-41-4	Ethylbenzene #2	24.16	24.15	23.71	0.04
106-42-3	p+m-Xylene #2	24.40	24.38	44.96	0.05
95-47-6	o-Xylene #2	24.81	24.79	21.98	0.04

Total BTEX: 138.80 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.93	**22.36**	**ug/L**

Surrogate Percent Recovery: **111.8 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.1**
Misc. ID: **T. Blank**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219714.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.92	**22.44**	**ug/L**

Surrogate Percent Recovery: 112.2 % Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.2**
Misc. ID: **F. Blank**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219706.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.91	**24.60**	**ug/L**

Surrogate Percent Recovery: **123.0 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.3**
Misc. ID: **MW #4**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219707.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.90	**23.85**	**ug/L**

Surrogate Percent Recovery: **119.2 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.4**
Misc. ID: **MW #5**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219708.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.91	**23.27**	**ug/L**

Surrogate Percent Recovery: **116.4 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.5**
Misc. ID: **MW #2**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219709.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.92	**22.64**	**ug/L**

Surrogate Percent Recovery: **113.2 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.6**
Misc. ID: **MW #3**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219710.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	16.84	19.93	0.02
108-88-3	TOLUENE	22.07	22.05	0.91	0.04
100-41-4	Ethylbenzene #2	24.16	24.14	0.15	0.04
106-42-3	p + m-Xylene #2	24.40	24.36	27.87	0.05
95-47-6	o-Xylene #2	24.81	24.78	0.62	0.04

Total BTEX: 49.49 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.92	**22.22**	**ug/L**

Surrogate Percent Recovery: **111.1 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.7**
Misc. ID: **MW #1**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219711.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p+m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.92	**22.74**	**ug/L**

Surrogate Percent Recovery: **113.7 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.8**
Misc. ID: **Field Dup.**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219712.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	NA	<	0.02
108-88-3	TOLUENE	22.07	NA	<	0.04
100-41-4	Ethylbenzene #2	24.16	NA	<	0.04
106-42-3	p + m-Xylene #2	24.40	NA	<	0.05
95-47-6	o-Xylene #2	24.81	NA	<	0.04

Total BTEX: < 0.19 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.92	**23.15**	**ug/L**

Surrogate Percent Recovery: **115.7 %** Limit: 60-140%

BTEX Analysis Data Sheet

Sample I.D.: **2258.7 ms**
Misc. ID: **MW #1 MS**
Date Analyzed: **01/21/97**

Lab Name: **Fort Monmouth Environmental Testiong Lab.** Contract:
Lab Code: **13461** Case No.: SAS No.: SDG No.:
Matrix: (soil/water): **Water** Method: **BTEX**
Wt/Vol.: **5 mL** Dilution Factor: **1**

File: C:\HPCHEM\6\DATA\01219713.D\

Results:
Concentration Units: **ug/L**

CAS #	Compound	Expected R.T.	R.T.	Amount	MDL
71-43-2	Benzene	16.88	16.84	24.29	0.02
108-88-3	TOLUENE	22.07	22.05	23.14	0.04
100-41-4	Ethylbenzene #2	24.16	24.14	23.15	0.04
106-42-3	p + m-Xylene #2	24.40	24.37	44.42	0.05
95-47-6	o-Xylene #2	24.81	24.78	21.87	0.04

Total BTEX: 136.87 **ug/L**

Surrogate Recovery:

98-08-8	aaa-TFT	19.95	19.92	**22.45**	**ug/L**

Surrogate Percent Recovery: **112.2 %** Limit: 60-140%

EMSL ANALYTICAL, INC.

Asbestos - Lead - Enivronmental - Materials

New Jersey

Corporate Office & Main Laboratory
108 Haddon Avenue
Westmont, NJ 08108
(609) 858-4800

3 Cooper Street
Westmont, NJ 08108
(609) 858-4800

1056 Stelton Road
Piscataway, NJ 08854
(908) 981-0550

New York

350 Fifth Avenue
Empire State Bldg.
Suite 1524
New York, NY 10118
(212) 290-0051

208 Stonehinge Lane
Carle Place, NY 11514
(516) 997-7251

California

1720 S. Amphlett Blvd.
Suite 130
San Mateo, CA 4402
(415) 570-5401

Georgia

1600 Rosewell Street, SE
Suite One
Smyrna, GA 30080
(770) 333-6066

Michigan

212 S. Wagner Road
Ann Arbor, MI 48103
(313) 668-6810

North Carolina

620-G Guilford College Rd.
Greensboro, NC 27409
(910) 297-1487

Texas

2501 Central Parkway
Suite C-13
Houston, TX 77092
(713) 686-3635

Washington

Harbor Marina Corp. Ctr.
1001 SW Klickitat Way
Suite 107
Seattle, WA 98134
(206) 233-9007

ANALYTICAL DATA REPORT
FOR
E-SYSTEMS
P.O. Box 360
Fort Monmouth, NJ 07703

PROJECT : **MW Sampling, Bldg. #2567**
91-8-27-1414

EMSL Project: # 96031158

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
2017.1 MW-1, 2926925	**96-8368**	**Aqueous**	**2/20/96 @ 1115**	**2/20/96**
2017.1 MW-2, 2926926	**96-8369**	**Aqueous**	**2/20/96 @ 1000**	**2/20/96**
2017.3 MW-3, 2926947	**96-8370**	**Aqueous**	**2/20/96 @ 1210**	**2/20/96**
2017.4 MW-4, 2926948	**96-8371**	**Aqueous**	**2/20/96 @ 1034**	**2/20/96**
2017.5 MW-5, 2931783	**96-8372**	**Aqueous**	**2/20/96 @ 1240**	**2/20/96**
2016.3 Field Blank	**96-8366**	**Aqueous**	**2/20/96 @ 1420**	**2/20/96**
2016.4 Trip Blank	**96-8367**	**Aqueous**	**2/20/96 @ 0605**	**2/20/96**

Laboratory Name — EMSL ANALYTICAL, INC.

Certification No. — NJDEP No. 04653
PADER No. 68-367
NY-ELAP No. 10896

Supervisor/Manager Signature

Printed Name — Paul V. Laraia

Date — 3-20-96

EMSL

TABLE OF CONTENTS

EMSL

SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report: 03/06/96
Project Number: 96031158
Lab ID: 96-0008368
Date Collected: 02/20/96 11:15
Collected By: Client
Date Received: 02/21/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg#2567,91-8-27-1414

Client Designation: MW-1,1-2926925

	Conc.	Unit
LEAD		
Lead Analysis		
Lead(Pb) in Water by Furnace(7421)	0.00400	mg/l
METALS		
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 29 26925 005

91-8-27-1414

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9608368V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1365.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.1	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2926925

91-8-27-1414

006

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9608368V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1365.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	100	
75-65-0	tertiary-Butyl alcohol	780	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 292625 91-8-27-1414 007

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608368V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1365.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 3 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 108-20-3	Diisopropyl ether	9.12	1	J
2.	Unknown	11.57	1	J
3.	Column Bleed	22.94	1	J
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EMSL

Date of Report: 03/06/96
Project Number: 96031158
Lab ID: 96-0008369
Date Collected: 02/20/96 10:00
Collected By: Client
Date Received: 02/21/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg#2567,91-8-27-1414

Client Designation: MW-2,2-2926926

	Conc.	Unit
LEAD		
Lead Analysis		
Lead(Pb) in Water by Furnace(7421)	<0.00300	mg/l
METALS		
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2926926

009

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9608369V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1363.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.0	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2926926

010

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9608369V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1363.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	4.2	
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	1.0	
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	1.1	
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.80	
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	6.2	
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	7.2	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	2.0	
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 2926926

011

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 2 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9608369V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1363.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units:

Number TICs found: 14 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 622-96-8	Benzene, 1-ethyl-4-methyl-	19.90	2	J
2. 526-73-8	Benzene, 1,2,3-trimethyl-	21.47	3	J
3. 496-11-7	Indane	21.85	8	J
4.	Unknown Hydrocarbon	21.98	1	J
5. 934-80-5	Benzene, 4-ethyl-1,2-dimethy	22.49	1	J
6.	Unknown Hydrocarbon	22.67	1	J
7.	Unknown	22.78	1	J
8. 27133-93-3	2,3-Dihydro-1-methylindene	22.90	3	J
9. 95-93-2	Benzene, 1,2,4,5-tetramethyl	23.42	1	J
10. 527-53-7	Benzene, 1,2,3,5-tetramethyl	23.51	1	J
11. 824-22-6	1H-Indene, 2,3-dihydro-4-met	24.02	1	J
12. 874-35-1	1H-Indene, 2,3-dihydro-5-met	24.29	1	J
13.	Unknown Hydrocarbon	24.31	3	J
14.	Unknown	24.63	3	J
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EMSL

Date of Report: 03/06/96
Project Number: 96031158
Lab ID: 96-0008370
Date Collected: 02/20/96 12:10
Collected By: Client
Date Received: 02/21/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg#2567,91-8-27-1414

Client Designation: MW-3,3-2926947

	Conc.	Unit
LEAD		
Lead Analysis		
Lead(Pb) in Water by Furnace(7421)	0.00600	mg/l
METALS		
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2926947

013

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9608370V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1366.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	40	
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	1.0	
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 8926947

014

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9608370V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1366.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	4.5	
1330-29-7	Xylene (total)	70	
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	13	
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	8.3	
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	4.7	
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	1.4	
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	5.4	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	250	
75-65-0	tertiary-Butyl alcohol	43	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 2926947 015

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 3 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9608370V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1366.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown Hydrocarbon	5.12	6	J
2.	Unknown Hydrocarbon	5.13	26	J
3. 109-66-0	Pentane	5.70	9	J
4. 616-12-6	2-Pentene, 3-methyl-, (E)-	9.56	4	J
5.	Unknown Hydrocarbon	9.83	37	J
6. 110-82-7	Cyclohexane	11.00	12	J
7.	Unknown	11.74	4	J
8. 19037-72-0	Cyclopentene, 4,4-dimethyl-	13.89	5	J
9. 620-14-4	Benzene, 1-ethyl-3-methyl-	19.86	3	J
10. 611-14-3	Benzene, 1-ethyl-2-methyl-	20.40	3	J
11. 108-67-8	Benzene, 1,3,5-trimethyl-	21.48	14	J
12.	Unknown	21.85	29	J
13. 535-77-3	Benzene, 1-methyl-3-(1-methy	22.68	3	J
14.	Unknown Hydrocarbon	22.91	5	J
15. 824-22-6	1H-Indene, 2,3-dihydro-4-met	24.32	4	J
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EMSL

Date of Report: 03/06/96
Project Number: 96031158
Lab ID: 96-0008371
Date Collected: 02/20/96 10:34
Collected By: Client
Date Received: 02/21/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg#2567,91-8-27-1414

Client Designation: MW-4,4-2926948

	Conc.	Unit
LEAD		
Lead Analysis		
Lead(Pb) in Water by Furnace(7421)	<0.00300	mg/l
METALS		
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2926948

017

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9608371V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1351.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.2	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2926948 018

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9608371V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1351.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 2926948

019

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 4 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608371V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1351.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
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EMSL

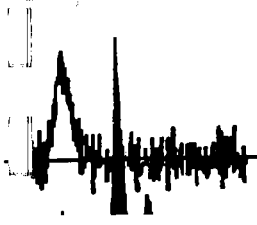
Date of Report: 03/06/96
Project Number: 96031158
Lab ID: 96-0008372
Date Collected: 02/20/96 12:40
Collected By: Client
Date Received: 02/21/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg#2567,91-8-27-1414

Client Designation: MW-5,5-2931783

	Conc.	Unit
LEAD		
Lead Analysis		
Lead(Pb) in Water by Furnace(7421)	<0.00300	mg/l
METALS		
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l



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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2931783

021

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9608372V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1352.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.80	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2931783

022

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9608372V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1352.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 2931783

023

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 5 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608372V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1352.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 1 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	23.06	1	J
2.				
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EMSL

Date of Report: 03/20/96
Project Number: 96031157
Lab ID: 96-0008366
Date Collected: 02/20/96 14:20
Collected By: Client
Date Received: 02/20/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg #699

Client Designation: Field Blank

	Conc.	Unit
LEAD		
Lead Analysis		
Lead(Pb) in Water by Furnace(7421)	<0.00300	mg/l
METALS		
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 025

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: FB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608366V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1348.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.90	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

Field Blank

026

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: FB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608366V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1348.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

FMETL# 027

Field Blank

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: FB NJDEP MW#: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608366V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1348.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	10.68	1	J
2.				
3.				
4.				
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28.				
29.				
30.				

Date of Report: 03/20/96
Project Number: 96031157
Lab ID: 96-0008367
Date Collected: 02/20/96 06:05
Collected By: Client
Date Received: 02/20/96 17:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg #699

Client Designation: Trip Blank

	Conc.	Unit
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 029

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: TB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608367V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1347.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 030

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: TB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608367V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1347.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

FMETL# 031

Trip Blank

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: TB NJDEP MW#: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608367V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1347.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	10.68	1	J
2.	Column Bleed	23.04	1	J
3.				
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EMSL

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR
ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submission. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

		Check If Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name, address & date of report.	X
2.	Table of Contents	X
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	X
4.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s.	X
5.	Document bound, paginated and legible.	X
6.	Chain of Custody	X
7.	Methodology Summary	X
8.	Laboratory Chronicle and Holding Time Check.	X
9.	Results submitted on a dry weight basis (if applicable).	X
10	Method Detection Limits.	X
11	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP.	X
12	Non-Conformance Summary	X

Paul Jones

Laboratory Manager or Environmental Consultant's Signature

3-20-92

Date

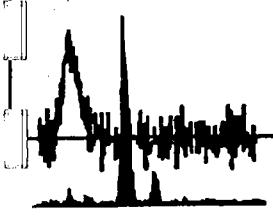
EMSL

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

A. Checklist which must be attached to the Summary

The following information must be reported in the Closure Plan Implementation Summary for all laboratory analyses performed in the compliance with the site assessment requirements:

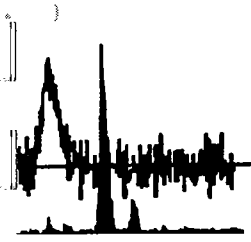
Page #		
1	1.	Name and address of the facility.
1	2.	Name of the laboratory performing the sample analysis.
1	3.	NJDEP certification number assigned to the laboratory pursuant to N.J.A.C. 7:18.
1	4.	Laboratory sample identification number.
1	5.	Customer sample identification number corresponding to the laboratory sample identification.
1	6.	Sample Location (also on the site diagram).
1	7.	Matrix of the sample analyzed (i.e., water or sediments; including soil, sediment, and sludges). All sediment results must be reported on a dry weight basis.
44-45	8.	The reference for the method used (e.g., EPA Method 625, 40 CFR Part 136).
1	9.	The signature of the person completing the report form.
1	10.	The dates the laboratory report form was prepared, as well as the dates the sample were collected, submitted and analyzed.
46	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
3-31	12.	Sample results and corresponding units for each parameter.



EMSL

CHAIN OF CUSTODY AND PRESERVATION CHECKLIST

AND WELL SAMPLING DATA SHEET



EMSL [illegible]

3 Coop[illegible]reet
Westmont, New Jersey 08108
609-858-9573
609-858-4571 (Fax)

Chain of Custody / Analysis Request Form

EMSL Project # 96[illegible]1158
PO # IJO#95-0091/SAI

Custody and Sample Information - Print ALL information. Put N/A in blanks not applicable. Press firmly.

1. Report to:	2. Bill to:	Project: Bld #2567 91-8-27-1414 MW SAMPLING
US ARMY FT.MONMOUTH Charles Appleby SELFM-PW-EV Env.Lab.Cert#13461		Tel #: 908-532-6224 FAX #:

3. Sampled by (Signature)	4. # of Samples in Shipment	5. Date of Sample Shipment	6. Date Results Needed
NONEMAKER/PALILONIS	7 (Seven)	2-20-96	

Item No.	Sample Number	Station Location / Sample ID	COMP	GRAB	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO3	H2SO4	ICE	NONE	OTHER	Sampling: Date	Time	Number of Containers	Indicate Analysis Requested: Lead	VOA 524.2 *	Library search including calibration std.	Xylene	MTBE / TBA	Laboratory Number
1	2017.1	MW-1 1-2926925			X					X	X					2-20	11:15		X	X		X		9368
2	2017.2	MW-2 2-2926926			X					X	X					2-20	10:00		X	X		X		69
3	2017.3	MW-3 3-2926947			X					X	X					2-20	12:10		X	X		X		70
4	2017.4	MW-4 4-2926948			X					X	X					2-20	10:34		X	X		X		71
5	2017.5	MW-5 5-2931783			X					X	X					2-20	12:40		X	X		X		72
6	~~2017.6~~	Field Blank (2016.3			X					X	X					2-20	1420		X	X		X		
7	~~2017.7~~	T.B. 2016.4)		↓	X					X						2-20	6:05			X		X		
8																								
9																								

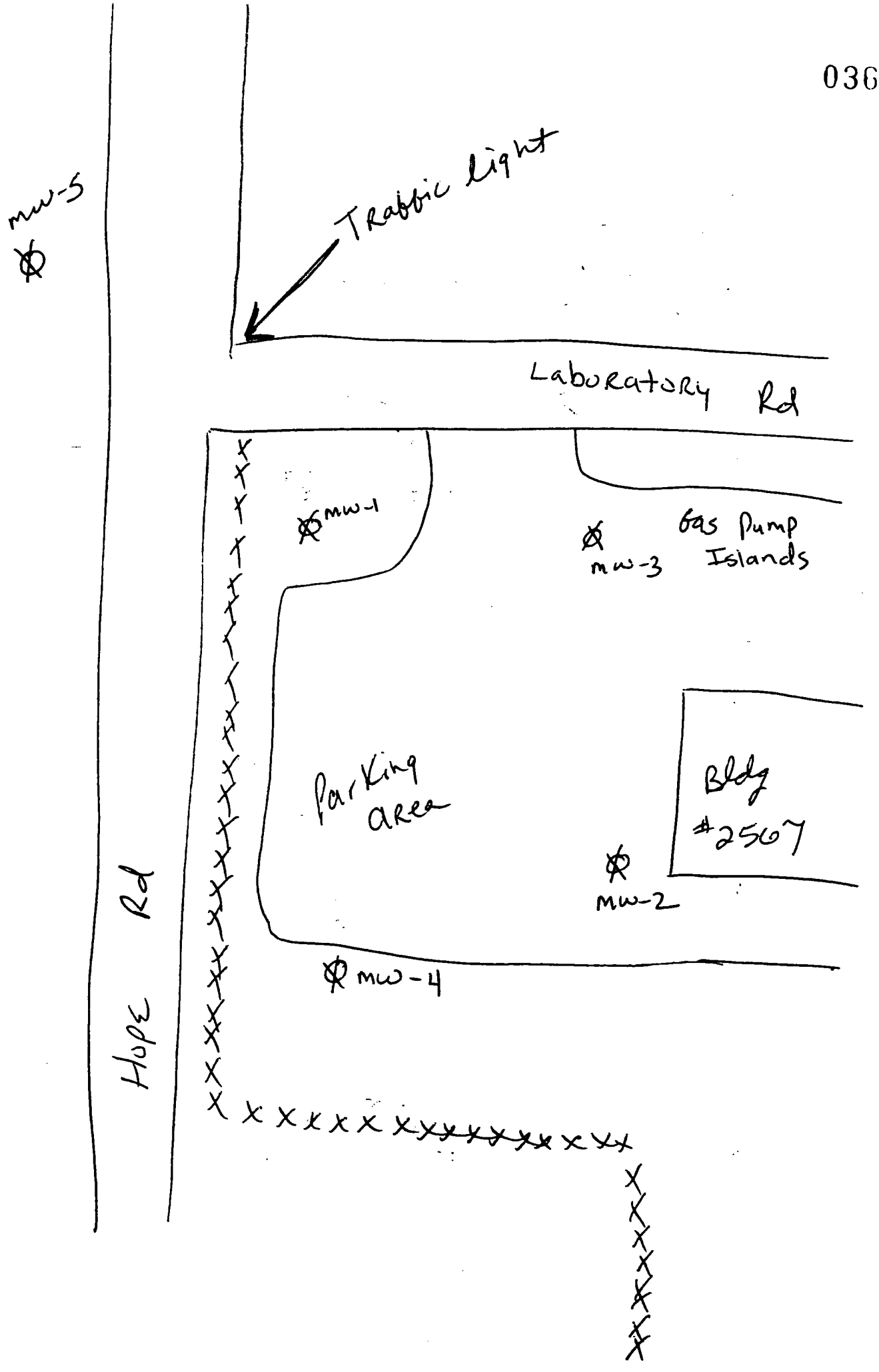
Released by (Signature)	Date/Time Released	Delivery Method	Received by (Signature)	Company/Agency Affiliation	Date/Time Received	Condition Noted
X [illegible]	12/21	Courier	[illegible]	EMSL	2/20/	
	/		[illegible]	EMSL	2/21/17:00	
	/				/	

Please indicate turnaround time: standard 10D 5D 72HR 48HR 24HR (Must call for quick turn)

Comments: Page 1 of 1
* A drawing depicting sample location on reverse side.

Please indicate reporting requirements:
1) Results only 2) Results & QC (3) Reduced Deliverables

035


MW-5
Traffic light
Laboratory Rd
MW-1
MW-3
Gas Pump Islands
Parking area
Bldg #2567
MW-2
MW-4
Hope Rd

EMSL PRESERVATIVE CHECKLIST

To be completed upon sample receipt

Instructions:

1. Place an X in box if okay.
2. Record actual pH if outside acceptable range
3. Record temperature of cool blank or note Y/N if samples are cooled.
4. Record corrective action in remarks.

pH ≤ 2													> 9	≥ 12	deg.C	SAMPLES	
COD	NH3	TKN	TOX	VOA*	PHENOL	TOC	PHC	O&G	METALS	HARD	TPO4	NO2&3	SO2	TCN	TEMP	EMSL #	REMARKS
N2SO4	H2SO4	H2SO4	H2SO4	HCL	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	H2SO4	H2SO4	NaOH ZNAC	NaOH			
				✓					✓						3	8368	
				✓					✓							69	
				✓					✓							70	
				✓					✓							71	
				✓					✓							72	

*ALL VOA VIALS RECEIVED WITH NO HEADSPACE AND SEPTUM WAS TEFLON SIDE DOWN, EXCEPT WHERE NOTED.

SPECIAL INSTRUCTIONS/NON-COMPLIANCE NOTATIONS _____

_____

SAMPLE No(S).	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
8543	BN	2/27/96	SVANETTEN	SV
8389	TCLP Herb	2/29/96	SVANETTEN	SV
9609686-95	TCLP VOA + TICER	03/04 - 05/96	M. CIAMPI	
8339-9; 8350; 8359	BNA 8270	3/1/96	S. VANETTEN	SV
8197	BN	3/1/96	S. VANETTEN	SV
10046; 44-5; 10177	BTEX	3/4/96	S. VANETTEN	SV
960 8208	TCLP	02/28/96	M. CIAMPI	
961 8389	TCLP	02/28/96	M. CIAMPI	
960 8338-41	TCL VOA 'CROWLIST	02/22-23/96	M. CIAMPI	
960 8718	VOA + MTBE	02/26/96	M. CIAMPI	
9608364-67	524.2	2/22/96	S. Kessler	
9608368-72	524.2	2/23/96, 2/22/96	S. Kessler	
9608376-88	524.2	2/23/96, 3/4/96, 3/5/96	S. Kessler	
9608338-63	8021 + MTBE	2/24/96 → 3/1/96	S. Kessler	
96010473	VOA	03/06/96	M. CIAMPI	
8570	BN+	3/5/96	S. VANETTEN	SV
8704+5	TCLP BNA + Fingerprint	3/5/96	S. VANETTEN	SV
9608704	BTEX 8240, TCLP	02/27 - 29/96	M. CIAMPI	
9608705	TCLP	02/28/96	M. CIAMPI	
9608795	BENZENE + QC, TCLP + QC	02/27 - 03/05/96	M. CIAMPI	
9608798	VOA + QC/QC + CROSS + 2ND RUN	02/27 - 29/96	M. CIAMPI	
9608805-06	BTEX 8240	02/26/96	M. CIAMPI	

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL

EMSL LAB ID NO. 8368-8372/8366-8367 PROJECT NO. 96031158

SAMPLE/CONTAINERS PARAMETERS

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
2/22+26		Lead	Mark Maymind	Mark Maymind

INTERNAL CUSTODY

838E

Project #: 96031158

Lab ID #'s: 8368-8372/8366-8367

Analyst

	Name (please print)	Signature	Date
1. Base/Neutrals			
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals:			
Flame			
Furnace	Mark Maynard	Mark Maynard	2/23+27
ICP			
7. Volatiles:			
GC			
GC/MS			
8. TOC			
9. TOX			
10. Phenols (Total)			
11. Cyanide (Total)			
12. TPH -IR			
13. Mercury			
14. Other			
15. Other			
16. Other			

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 1 NJDEPE WELL ID # 2926925
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: SUSAN PALILONIS, DAVE NONEMAKER

DATE: 2-20-96
WEATHER CONDITIONS: overcast, cold, rain

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 12.09 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.55 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.01 FT (none detect 1045)

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 21 PPM
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 17 GAL
(8.54 X 0.65 X 3 = 16.65)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1050
pH: 6.31 s.u. TEMP: 9.0 Deg.C
Dissolved Oxygen: 4.6 PPM Specific Conductivity: 467 us/cm

PURGE END TIME: 11:05
pH: 6.63 s.u. TEMP: 9.0 Deg.C
Dissolved Oxygen: 4.1 PPM Specific Conductivity: 702 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 7.35 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
1115 TOTAL VOLUME PURGED : 17 GAL.
pH: 6.74 s.u. TEMP: 8.8 Deg.C
Dissolved Oxygen: 4.3 PPM Specific Conductivity: 739 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 2 NJDEPE WELL ID # 2926926
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: SUSAN PALILONIS, DAVE NONEMAKER

DATE: 2/20/96
WEATHER CONDITIONS: Overcast, drizzle

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 17.23 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.04 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 20.01 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 41* PPM 0915
*NOISE Detect.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 18 GAL
(9.19 X 0.65 X 3 = 17.9)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1437
pH: 6.25 s.u. TEMP: 11.9 Deg.C
Dissolved Oxygen: 3.4 PPM Specific Conductivity: 860 us/cm

PURGE END TIME: 9:50
pH: 5.95 s.u. TEMP: 10.4 Deg.C
Dissolved Oxygen: 3.6 PPM Specific Conductivity: 845 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 5.60 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18 GAL.
10:00
pH: 5.97 s.u. TEMP: 10.3 Deg.C
Dissolved Oxygen: 3.5 PPM Specific Conductivity: 893 us/cm

COMMENTS: Inside casing filled w/water - no gasket

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 3 NJDEPE WELL ID # 2926947
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: SUSAN PALILONIS, DAVE NONEMAKER

DATE: 2-20-96
WEATHER CONDITIONS: overcast, cold

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 12.48 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.00 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: <0.01 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 0.3 PPM 1120
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 19 GAL
(9.48 X 0.65 X 3 = 18.48)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 11:25
pH: 6.65 s.u. TEMP: 9.1 Deg.C
Dissolved Oxygen: 3.4 PPM Specific Conductivity: 526 us/cm

PURGE END TIME: 11:57
pH: 6.56 s.u. TEMP: 9.6 Deg.C
Dissolved Oxygen: 3.3 PPM Specific Conductivity: 585 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 6.42 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
1210 TOTAL VOLUME PURGED : 17 GAL.
pH: 6.64 s.u. TEMP: 9.7 Deg.C
Dissolved Oxygen: 3.3 PPM Specific Conductivity: 572 us/cm

COMMENTS: Strong odor - gasoline

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2562 MW#: 4 NJDEPE WELL ID # 292 6948
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: SUSAN PALILONIS, DAVE NONEMAKER

DATE: 2-20-96
WEATHER CONDITIONS: overcast drizzle

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 11.93 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 2.07 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: <0.01 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: <1 PPM 1010 # none Detect.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 20 GAL
(9.86 X 0.65 X 3 = 19.23
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 10:12
pH: 6.78 s.u. TEMP: 8.2 Deg.C
Dissolved Oxygen: 3.9 PPM Specific Conductivity: 57.7 us/cm

PURGE END TIME: 10:29
pH: 5.41 s.u. TEMP: 7.9 Deg.C
Dissolved Oxygen: 3.9 PPM Specific Conductivity: 289 us/cm

1034 DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 2.09 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 20 GAL.
pH: 5.46 s.u. TEMP: 7.9 Deg.C
Dissolved Oxygen: 3.6 PPM Specific Conductivity: 270 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 5 NJDEPE WELL ID # 29 31 783
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: SUSAN PALILONIS, DAVE NONEMAKER

DATE: 2-20-96
WEATHER CONDITIONS: overcast, drizzle

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 14.98 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 7.05 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 10.01 FT & none Det.

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 4 PPM 1215
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 16 GAL
(7.93 X 0.65 X 3 = 15.4)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 12:18
pH: 5.88 s.u. TEMP: 8.9 Deg.C
Dissolved Oxygen: 2.9 PPM Specific Conductivity: 263 us/cm

PURGE END TIME: 12:27
pH: 5.40 s.u. TEMP: 7.9 Deg.C
Dissolved Oxygen: 2.7 PPM Specific Conductivity: 267 us/cm

1245

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 7.6 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 16 GAL.
pH: 5.76 s.u. TEMP: 7.7 Deg.C
Dissolved Oxygen: 2.8 PPM Specific Conductivity: 259 us/cm

COMMENTS: _____

EMSL

METHODOLOGY SUMMARY

METHODOLOGY SUMMARY

EPA Method 524.2 - Aqueous

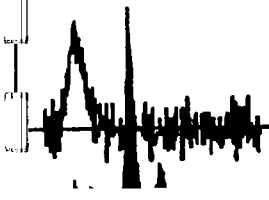
This is a purge and trap gas chromatograph/mass spectrometer (GC/MS) method. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer.

An HP5890/5970 GC/MS was used with a capiullary column (DB-624 0.53 mn ID).

Method detection limits are as stated.

Metals - Aqueous (Total)

This is a procedure used to determine metals concentrations in aqueous matrices. It involves an acidic digestion under oxidizing conditions of approximately 100 milliliters of sample. Nitric and hydrochloric acids as well as hydrogen peroxide are employed in the digestion. The digested sample is filtered and diluted to 100 milliliters. The analysis is performed by ICP, furnace atomic absorption or flame atomic absorption. Reference methods are SW-846 3rd Edition, September 1986, Revised July 1992, EPA Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983 and Methods for the Determination of Metals in Environmental Samples EPA/600/4-91/010 June 1991.



EMSL

LABORATORY CHRONICLE

Lab ID: **96-8366 TO 96-8372** Client: **E-Systems**

		I DATE	II	Hold Time
Date Sampled	**2/20/96**			
Receipt/Refrigeration	**2/20/96**			
Extractions				
1. Metals Prep.	**2/22 & 26/96**			
Analyses				
1. Volatile Organics	**2/22-23/96**			**14 days**
2. Metals	**2/23 & 27/96**			**6 months**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton
(Printed Name) Peter B. Panton
(Date) 03/20/96

NOTE: If fractions are re-extracted and re-analyzed because the initial endeavors failed to meet the required Quality Control Criteria, the dates of re-extraction and/or re-analysis will be entered in Column II Additionally.

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2.	GC/MS Tune Specifications		
	a. BFB Meet Criteria		X
	b. DFTPP Meet Criteria	NA	
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series.		X
4,	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of. sample analysis for 600 series and 12 hours for 8000 series.		X
5.	GC/MS Calibration - Initial Requirements		
	a. Calibration Check Compounds		X
	b. System Performance Check Compounds		X
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		X
	a. VOA Fraction **Methylene Chloride 0 - 0.9 ppb.**		
	b. B/N Fraction		
	c. Acid Fraction		
7.	Surrogate Recoveries Meet Criteria		X
	If not met, list those compounds and their recoveries which fall outside the acceptable range:		
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	If not met, were the calculations checked and the results qualified as "estimated"?		
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)		X
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Area/Retention Time Shift Meet Criteria		X

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont.

		No	Yes
10.	Extraction Holding Time Met	**NA**	

If not met, list number of days exceeded for each sample:

		No	Yes
11.	Analysis Holding Time Met		**X**

If not met, list number of days exceeded for each sample:

12. Definitions:
U=Not Detected. J=Detected, but below report detection limit.
B=Compound found in blank. E=Estimated concentration. NA=Not Applicable

Additional Comments:

Laboratory Manager Paul Faraia Date: 3-20-96

EMSL

METALS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Calibration Summary Meet Criteria		X
2.	ICP Interference Check Sample Results Summary Submitted (if applicable) Meet Criteria	NA	
3.	Serial Dilution Summary Submitted (if applicable) / Meet Criteria	NA	
4.	Laboratory Control Sample Summary Submitted (if applicable) / Meet Criteria		X
5.	Blank Contamination - If yes, list compounds and concentrations in each blank.	X	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if not met, list those compounds and their recoveries which fall outside the acceptable range)		X
7.	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample:		
8.	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample:		

9. Definitions: U=Not Detected. J=Detected, but below report detection limit. B=Compound found in blank, E=Estimated concentration. NA=Not Applicable

Additional Comments: _____

Laboratory Manager: Paul Faraig Date: 3-20-96

EMSL

GC/MS VOLATILE ORGANIC DATA PACKAGE

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: C1131.D BFB Injection Date: 02/01/96

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1852

GC Column DB-62 ID: 0.53 (mm) Heated Purge: (Y / N) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0% of mass 95	19.9	
75	30.0 - 60.0% of mass 95	46.4	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.2	
173	Less than 2.0% of mass 174	0.0	(0.0)1
174	Greater than 50.0% of mass 95	63.8	
175	5.0 - 9.0% of mass 174	5.2	(8.1)1
176	95.0 - 101.0% of mass 174	63.7	(99.8)1
177	5.0 - 9.0% of mass 176	3.8	(6.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		0.5 PPB STANDARD	C1132.D	02/01/96	1914
02		10 PPB STANDARD	C1133.D	02/01/96	1949
03		20 PPB STANDARD	C1134.D	02/01/96	2023
04		30 PPB STANDARD	C1135.D	02/01/96	2057
05		40 PPB STANDARD	C1136.D	02/01/96	2131
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

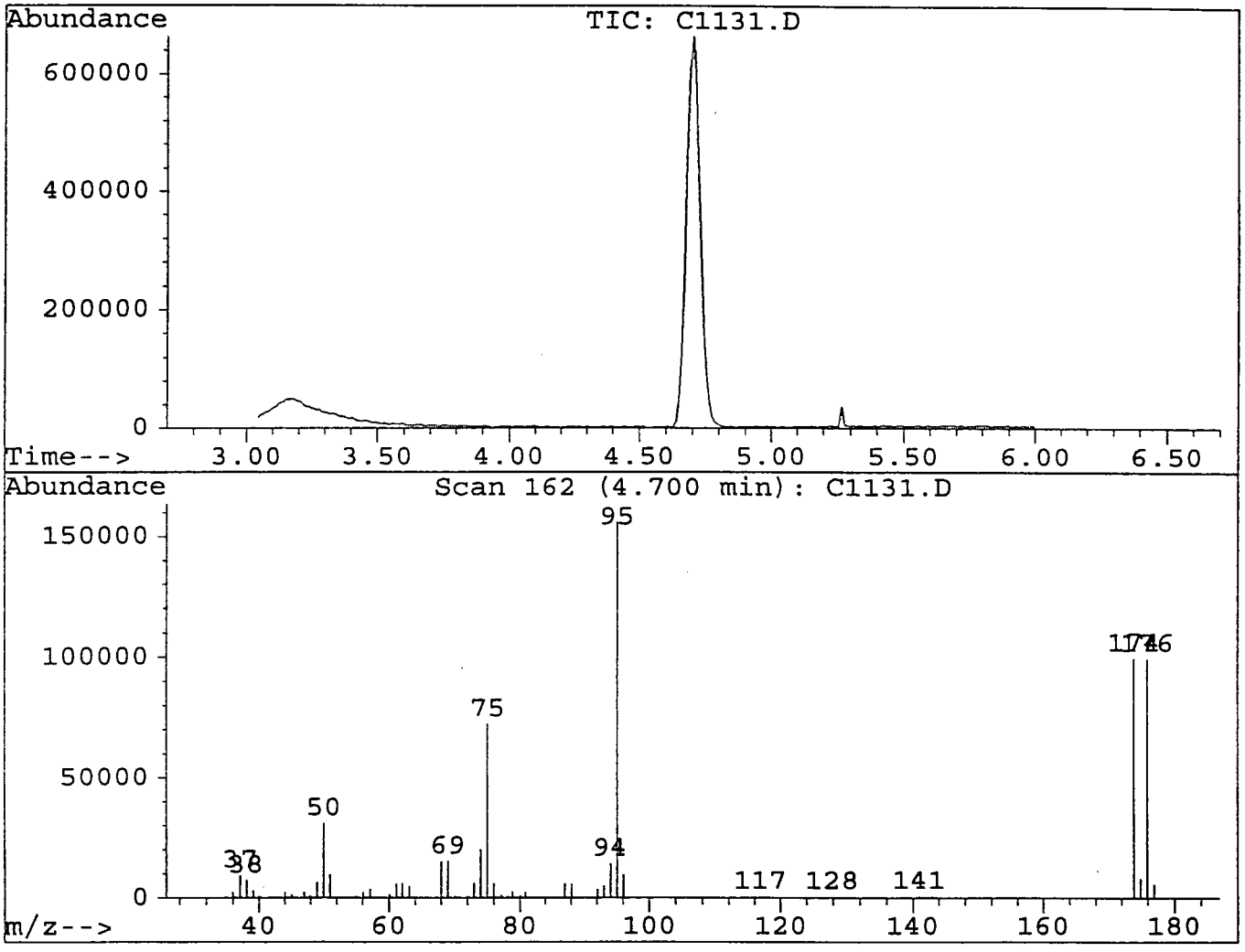
CLPBFB

052

Data File : D:\HPCHEM\1\DATA\C1131.D
Acq On : 1 Feb 96 6:52 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	31104	PASS
75	95	30	80	46.4	72456	PASS
95	95	100	100	100.0	156224	PASS
96	95	5	9	6.2	9731	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	63.8	99648	PASS
175	174	5	9	8.1	8024	PASS
176	174	95	101	99.8	99440	PASS
177	176	5	9	6.0	5988	PASS

C1131.D VOA524.M Fri Feb 02 12:40:25 1996 VOA

Scan 162 (4.700 min): C1131.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2197	50.05	31104	68.05	15215	80.00	918
37.10	9317	51.05	9683	69.05	15309	80.90	2453
38.10	7234	55.05	732	70.15	990	87.00	5813
39.10	2892	56.10	2282	72.05	653	88.05	5779
40.00	704	57.10	3565	73.05	6160	92.05	3444
43.10	628	60.10	1548	74.05	20216	93.05	5054
44.00	2247	61.10	5850	75.05	72456	94.05	14300
45.10	1534	62.00	6098	76.05	5963	95.05	156224
47.05	2402	63.10	4988	77.10	1313	96.05	9731
47.95	912	64.00	538	78.10	822	116.85	555
49.05	6429	67.15	535	78.90	2557	117.95	502

Scan 162 (4.700 min): C1131.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
127.90	576						
141.00	807						
142.90	763						
173.95	99648						
174.95	8024						
175.95	99440						
176.95	5988						

Response Factor Report 5972 - In

054

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Initial Calibration

Calibration Files
0.5 =C1132.D 10 =C1133.D 20 =C1134.D
30 =C1135.D 40 =C1136.D

		Compound	0.5	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	ISTD						
2)	M	Dichlorodifluorometha	0.363	0.348	0.345	0.343	0.342	0.348	2.47
3)	M	Chloromethane	0.220	0.205	0.205	0.205	0.204	0.208	3.17
4)	M	Vinyl chloride	0.250	0.263	0.258	0.256	0.254	0.256	1.80
5)	M	Bromomethane	0.200	0.178	0.176	0.165	0.169	0.178	7.80
6)	M	Chloroethane	0.157	0.159	0.153	0.143	0.125	0.147	9.59
7)	M	Trichlorofluoromethan	0.536	0.542	0.536	0.528	0.528	0.534	1.09
8)	M	1,1-Dichloroethene	0.253	0.263	0.259	0.259	0.256	0.258	1.49
9)	M	Methylene chloride		0.255	0.222	0.215	0.209	0.225	9.15
10)	M	trans-1,2-Dichloroeth	0.280	0.289	0.288	0.289	0.289	0.287	1.45
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.558	0.548	0.541	0.541	0.538	0.545	1.47
13)	M	2,2-Dichloropropane	0.528	0.495	0.480	0.469	0.462	0.487	5.33
14)	M	cis-1,2-Dichloroethen	0.281	0.274	0.272	0.275	0.273	0.275	1.18
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.106	0.110	0.109	0.110	0.112	0.109	2.07
17)	M	Chloroform	0.504	0.503	0.496	0.497	0.497	0.500	0.78
18)	M	1,1,1-Trichloroethane	0.524	0.512	0.508	0.508	0.505	0.511	1.48
19)	M	Carbon tetrachloride	0.472	0.481	0.474	0.474	0.473	0.475	0.79
20)	M	1,1-Dichloropropene	0.473	0.469	0.459	0.458	0.453	0.463	1.79
21)	M	Benzene	0.965	0.890	0.869	0.865	0.855	0.889	5.01
22)	M	1,2-Dichloroethane	0.199	0.204	0.201	0.201	0.199	0.201	0.96
23)	M	Trichloroethene	0.399	0.376	0.371	0.373	0.372	0.378	3.10
24)	M	1,2-Dichloropropane	0.291	0.295	0.290	0.290	0.285	0.290	1.18
25)	M	Dibromomethane	0.125	0.126	0.125	0.126	0.127	0.126	0.66
26)	M	Bromodichloromethane	0.389	0.402	0.397	0.401	0.400	0.398	1.33
27)	M	cis-1,3-Dichloroprope	0.353	0.360	0.353	0.356	0.353	0.355	0.82
28)	M	Toluene	0.748	0.632	0.619	0.622	0.614	0.647	8.81
29)	M	trans-1,3-Dichloropro	0.243	0.247	0.242	0.246	0.243	0.244	0.79
30)	M	1,1,2-Trichloroethane	0.120	0.120	0.118	0.121	0.119	0.120	0.91
31)	M	Tetrachloroethene	0.465	0.440	0.434	0.438	0.435	0.442	2.90
32)	M	1,3-Dichloropropane	0.239	0.235	0.231	0.233	0.228	0.233	1.77
33)	M	Dibromochloromethane	0.223	0.242	0.244	0.248	0.248	0.241	4.37
34)	M	1,2-Dibromoethane	0.170	0.174	0.172	0.177	0.175	0.174	1.61
35)	M	Chlorobenzene	0.740	0.697	0.685	0.688	0.685	0.699	3.32
36)	M	1,1,1,2-Tetrachloroet	0.288	0.296	0.290	0.292	0.291	0.291	1.06
37)	M	Ethylbenzene	1.372	1.297	1.262	1.258	1.244	1.287	4.00
38)	M	Xylene (para & meta)	0.511	0.486	0.472	0.467	0.462	0.480	4.06
39)	M	Xylene (Ortho)	0.461	0.441	0.427	0.426	0.422	0.435	3.68
40)	M	Styrene	0.687	0.683	0.668	0.667	0.662	0.674	1.59
41)	M	Bromoform	0.107	0.128	0.128	0.132	0.133	0.126	8.61
	M	Isopropylbenzene	1.261	1.250	1.228	1.221	1.213	1.234	1.62
	S	4-Bromofluorobenzene	0.491	0.490	0.482	0.478	0.483	0.485	1.14

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Initial Calibration

Calibration Files
0.5 =C1132.D 10 =C1133.D 20 =C1134.D
30 =C1135.D 40 =C1136.D

		Compound	0.5	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.300	0.302	0.298	0.300	0.298	0.300	0.60
45)	M	1,1,2,2-Tetrachloroet	0.160	0.157	0.153	0.155	0.152	0.155	2.12
46)	M	1,2,3-Trichloropropan	0.157	0.159	0.153	0.154	0.151	0.155	2.11
47)	M	n-Propylbenzene	1.834	1.744	1.699	1.680	1.663	1.724	3.98
48)	M	2-Chlorotoluene	1.092	0.973	0.945	0.935	0.930	0.975	6.94
49)	M	4-Chlorotoluene	1.207	1.131	1.084	1.085	1.064	1.114	5.16
50)	M	1,3,5-Trimethylbenzen	1.105	1.080	1.047	1.035	1.034	1.060	2.94
51)	M	tert-Butylbenzene	1.298	1.235	1.204	1.197	1.188	1.224	3.65
52)	M	1,2,4-Trimethylbenzen	1.112	1.053	1.023	1.015	1.006	1.042	4.11
53)	M	sec-Butylbenzene	1.790	1.698	1.641	1.626	1.608	1.673	4.42
54)	M	1,3-Dichlorobenzene	0.637	0.609	0.591	0.586	0.581	0.601	3.82
55)	M	4-Isopropyltoluene	1.418	1.380	1.332	1.316	1.290	1.347	3.82
56)	M	1,4-Dichlorobenzene	0.622	0.597	0.576	0.567	0.568	0.586	4.02
57)	S	1,2-Dichlorobenzene-d	0.293	0.294	0.291	0.285	0.282	0.289	1.88
58)	M	1,2-Dichlorobenzene	0.488	0.471	0.451	0.449	0.441	0.460	4.16
59)	M	n-Butylbenzene	1.470	1.404	1.348	1.333	1.315	1.374	4.58
60)	M	1,2-Dibromo-3-chlorop	0.027	0.032	0.031	0.032	0.032	0.031	6.47
61)	M	1,2,4-Trichlorobenzen	0.358	0.371	0.362	0.364	0.365	0.364	1.35
62)	M	Hexachlorobutadiene	0.342	0.338	0.325	0.325	0.325	0.331	2.42
63)	M	Naphthalene	0.401	0.363	0.358	0.358	0.356	0.367	5.20
64)	M	1,2,3-Trichlorobenzen	0.261	0.274	0.271	0.267	0.267	0.268	1.80
65)		Methyl-tert butyl eth	0.350	0.298	0.294	0.298	0.294	0.307	7.91
66)		tert-Butyl Alcohol		0.004	0.004	0.005	0.005	0.005	3.11

(#) = Out of Range

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C1132.D
Acq On : 1 Feb 96 7:14 pm
Sample : 0.5 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:51 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.04	96	1296636	5.00	ug/L	-0.09
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.28	95	636276	5.20	ug/L	104.03%
57) 1,2-Dichlorobenzene-d4	22.08	152	379625	5.28	ug/L	105.50%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.42	85	47076	0.88	ug/L	97
3) Chloromethane	3.83	50	28492	0.55	ug/L	95
4) Vinyl chloride	4.04	62	32459	0.58	ug/L	98
5) Bromomethane	4.74	94	25975	0.83	ug/L	81
6) Chloroethane	4.99	64	20345	0.60	ug/L	94
7) Trichlorofluoromethane	5.56	101	69528	0.71	ug/L	93
8) 1,1-Dichloroethene	6.66	96	32766	0.54	ug/L	94
9) Methylene chloride	7.66	84	179280	3.15	ug/L	92
10) trans-1,2-Dichloroethene	8.20	96	36246	0.52	ug/L	94
12) 1,1-Dichloroethane	8.99	63	72346	0.56	ug/L	93
13) 2,2-Dichloropropane	10.04	77	68416	0.65	ug/L	92
14) cis-1,2-Dichloroethene	10.05	96	36378	0.55	ug/L	94
16) Bromochloromethane	10.48	128	13719	0.54	ug/L	96
17) Chloroform	10.62	83	65392	0.57	ug/L	96
18) 1,1,1-Trichloroethane	10.94	97	67963	0.59	ug/L	98
19) Carbon tetrachloride	11.23	117	61171	0.58	ug/L	98
20) 1,1-Dichloropropene	11.22	75	61308	0.57	ug/L	98
21) Benzene	11.57	78	125156	0.56	ug/L m	97
22) 1,2-Dichloroethane	11.59	62	25810	0.61	ug/L	98
23) Trichloroethene	12.67	95	51687	0.57	ug/L	97
24) 1,2-Dichloropropane	13.04	63	37714	0.51	ug/L	88
25) Dibromomethane	13.25	93	16199	0.55	ug/L	94
26) Bromodichloromethane	13.51	83	50419	0.57	ug/L	95
27) cis-1,3-Dichloropropene	14.26	75	45782	0.56	ug/L	95
28) Toluene	14.83	92	97001	0.60	ug/L	96
29) trans-1,3-Dichloropropene	15.20	75	31541	0.59	ug/L	89
30) 1,1,2-Trichloroethane	15.51	83	15515	0.55	ug/L	88
31) Tetrachloroethene	15.79	166	60238	0.57	ug/L	97
32) 1,3-Dichloropropane	15.80	76	30962	0.56	ug/L	100
33) Dibromochloromethane	16.21	129	28855	0.52	ug/L	97
34) 1,2-Dibromoethane	16.42	107	22018	0.55	ug/L	82
35) Chlorobenzene	17.26	112	95903	0.56	ug/L	97
36) 1,1,1,2-Tetrachloroethane	17.40	131	37294	0.54	ug/L	92
37) Ethylbenzene	17.45	91	177855	0.55	ug/L	97
38) Xylene (para & meta)	17.64	106	132501	1.08	ug/L	89
39) Xylene (Ortho)	18.35	106	59793	0.54	ug/L	95
40) Styrene	18.36	104	89042	0.55	ug/L	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C1132.D
Acq On : 1 Feb 96 7:14 pm
Sample : 0.5 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:51 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.71	173	13827	0.45	ug/L		97
42)	Isopropylbenzene	19.00	105	163467	0.52	ug/L		99
44)	Bromobenzene	19.57	156	38901	0.54	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.52	83	20760	0.57	ug/L		95
46)	1,2,3-Trichloropropane	19.61	75	20387	0.58	ug/L	#	1
47)	n-Propylbenzene	19.74	91	237844	0.55	ug/L		92
48)	2-Chlorotoluene	19.91	91	141636	0.57	ug/L		92
49)	4-Chlorotoluene	20.11	91	156544	0.58	ug/L		99
50)	1,3,5-Trimethylbenzene	20.06	105	143332	0.54	ug/L		99
51)	tert-Butylbenzene	20.65	119	168243	0.60	ug/L		99
52)	1,2,4-Trimethylbenzene	20.74	105	144135	0.56	ug/L		100
53)	sec-Butylbenzene	21.06	105	232150	0.55	ug/L		99
54)	1,3-Dichlorobenzene	21.27	146	82628	0.58	ug/L		98
55)	4-Isopropyltoluene	21.31	119	183903	0.56	ug/L		98
56)	1,4-Dichlorobenzene	21.43	146	80670	0.58	ug/L		96
58)	1,2-Dichlorobenzene	22.12	146	63254	0.58	ug/L		91
59)	n-Butylbenzene	22.07	91	190561	0.56	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.54	75	3505	0.51	ug/L	#	75
61)	1,2,4-Trichlorobenzene	25.08	180	46355	0.52	ug/L		100
62)	Hexachlorobutadiene	25.41	225	44287	0.54	ug/L		85
63)	Naphthalene	25.55	128	51961	0.59	ug/L		100
64)	1,2,3-Trichlorobenzene	26.04	180	33875	0.53	ug/L		93
65)	Methyl-tert butyl ether	8.25	73	45394	0.66	ug/L		97

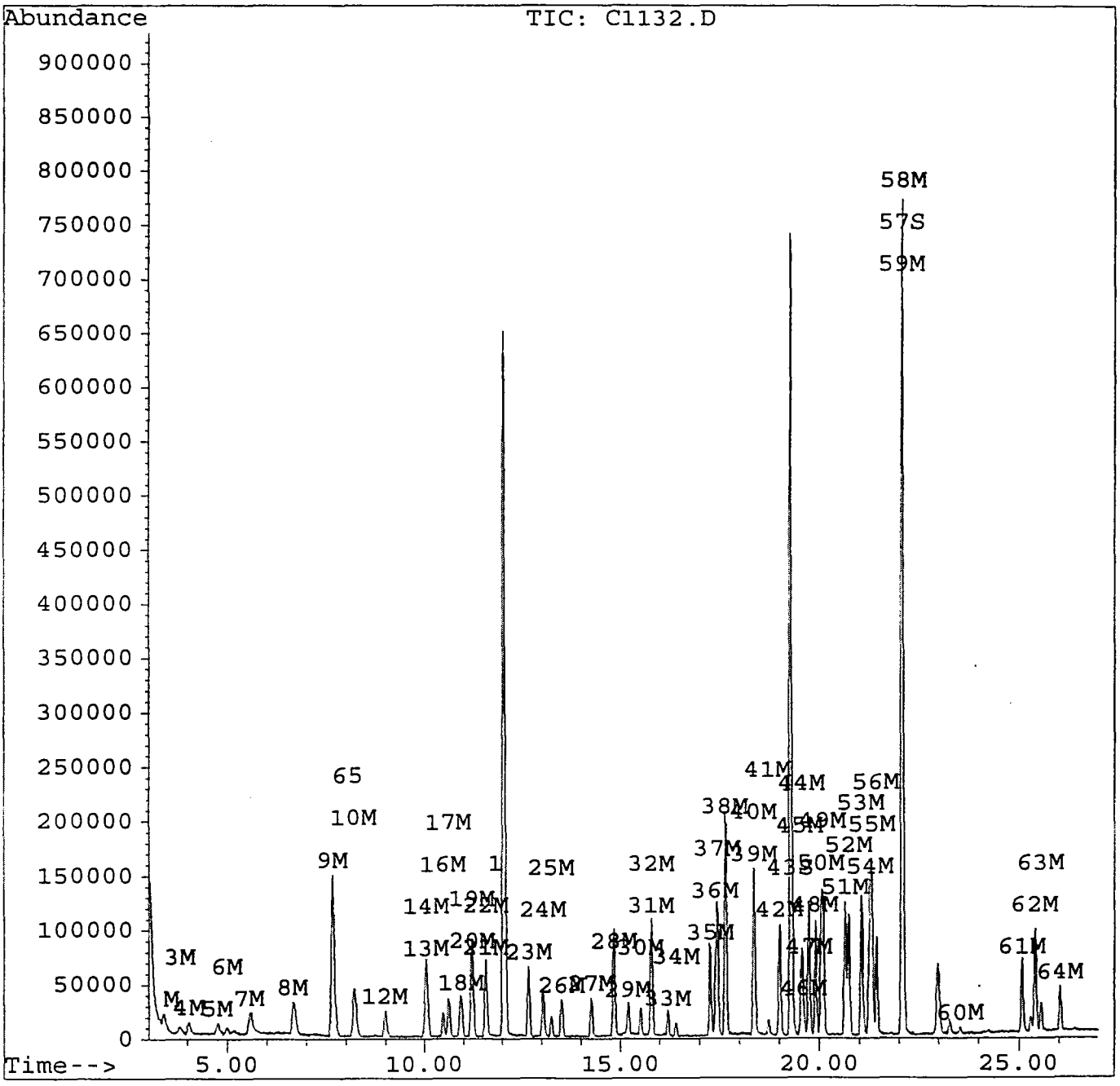
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C1132.D
Acq On : 1 Feb 96 7:14 pm
Sample : 0.5 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:51 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1133.d
Acq On : 1 Feb 96 7:49 pm
Sample : 10 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:37 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.05	96	1335271	5.00	ug/L	-0.08
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.28	95	654319	5.19	ug/L	103.88%
57) 1,2-Dichlorobenzene-d4	22.08	152	393031	5.30	ug/L	106.07%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.44	85	928247	16.94	ug/L	100
3) Chloromethane	3.84	50	547687	10.18	ug/L	97
4) Vinyl chloride	4.06	62	701120	12.25	ug/L	100
5) Bromomethane	4.74	94	476282	14.72	ug/L	99
6) Chloroethane	4.99	64	425488	12.24	ug/L	99
7) Trichlorofluoromethane	5.59	101	1446848	14.39	ug/L	98
8) 1,1-Dichloroethene	6.69	96	702692	11.23	ug/L	94
9) Methylene chloride	7.68	84	681983	11.63	ug/L	96
10) trans-1,2-Dichloroethene	8.22	96	772441	10.83	ug/L	98
12) 1,1-Dichloroethane	9.02	63	1464752	11.03	ug/L	100
13) 2,2-Dichloropropane	10.05	77	1320860	12.16	ug/L	95
14) cis-1,2-Dichloroethene	10.08	96	732022	10.81	ug/L	95
16) Bromochloromethane	10.50	128	293728	11.17	ug/L	97
17) Chloroform	10.64	83	1343842	11.47	ug/L	99
18) 1,1,1-Trichloroethane	10.95	97	1368477	11.47	ug/L	98
19) Carbon tetrachloride	11.24	117	1284966	11.91	ug/L	98
20) 1,1-Dichloropropene	11.23	75	1253527	11.30	ug/L	97
21) Benzene	11.59	78	2377684	10.39	ug/L	99
22) 1,2-Dichloroethane	11.61	62	544120	12.54	ug/L	98
23) Trichloroethene	12.68	95	1003623	10.78	ug/L	99
24) 1,2-Dichloropropane	13.05	63	788110	10.36	ug/L	98
25) Dibromomethane	13.26	93	337227	11.21	ug/L	98
26) Bromodichloromethane	13.52	83	1072595	11.79	ug/L	98
27) cis-1,3-Dichloropropene	14.27	75	960693	11.51	ug/L	97
28) Toluene	14.84	92	1688027	10.13	ug/L	100
29) trans-1,3-Dichloropropene	15.20	75	658494	11.95	ug/L	99
30) 1,1,2-Trichloroethane	15.52	83	321129	10.96	ug/L	97
31) Tetrachloroethene	15.80	166	1175921	10.75	ug/L	99
32) 1,3-Dichloropropane	15.81	76	627362	11.01	ug/L	99
33) Dibromochloromethane	16.21	129	645051	11.23	ug/L	97
34) 1,2-Dibromoethane	16.42	107	465944	11.20	ug/L	99
35) Chlorobenzene	17.27	112	1860586	10.56	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.41	131	790286	11.18	ug/L	97
37) Ethylbenzene	17.45	91	3464806	10.46	ug/L	99
38) Xylene (para & meta)	17.65	106	2593362	20.52	ug/L	94
39) Xylene (Ortho)	18.35	106	1177069	10.38	ug/L	97
40) Styrene	18.38	104	1824749	10.91	ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1133.d
Acq On : 1 Feb 96 7:49 pm
Sample : 10 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:37 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.72	173	342225	10.72	ug/L		97
42)	Isopropylbenzene	19.00	105	3336970	10.33	ug/L	m	0
44)	Bromobenzene	19.57	156	807322	10.93	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.53	83	419822	11.12	ug/L		98
46)	1,2,3-Trichloropropane	19.61	75	425208	11.79	ug/L	#	4
47)	n-Propylbenzene	19.75	91	4656876	10.43	ug/L		94
48)	2-Chlorotoluene	19.91	91	2598207	10.06	ug/L		90
49)	4-Chlorotoluene	20.11	91	3019647	10.92	ug/L	m	99
50)	1,3,5-Trimethylbenzene	20.06	105	2883404	10.56	ug/L		100
51)	tert-Butylbenzene	20.65	119	3298425	11.46	ug/L		99
52)	1,2,4-Trimethylbenzene	20.75	105	2813043	10.60	ug/L		99
53)	sec-Butylbenzene	21.06	105	4535319	10.48	ug/L		98
54)	1,3-Dichlorobenzene	21.27	146	1625814	11.01	ug/L		98
55)	4-Isopropyltoluene	21.31	119	3684559	10.80	ug/L		99
56)	1,4-Dichlorobenzene	21.43	146	1593811	11.14	ug/L		100
58)	1,2-Dichlorobenzene	22.12	146	1256660	11.18	ug/L	m	0
59)	n-Butylbenzene	22.07	91	3749727	10.64	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.54	75	84143	11.84	ug/L		87
61)	1,2,4-Trichlorobenzene	25.09	180	991091	10.88	ug/L		100
62)	Hexachlorobutadiene	25.41	225	901646	10.67	ug/L		96
63)	Naphthalene	25.55	128	968717	10.73	ug/L		100
64)	1,2,3-Trichlorobenzene	26.04	180	731791	11.05	ug/L		100
65)	Methyl-tert butyl ether	8.26	73	796634	11.21	ug/L		96
66)	tert-Butyl Alcohol	8.00	59	23663	22.05	ug/L		100

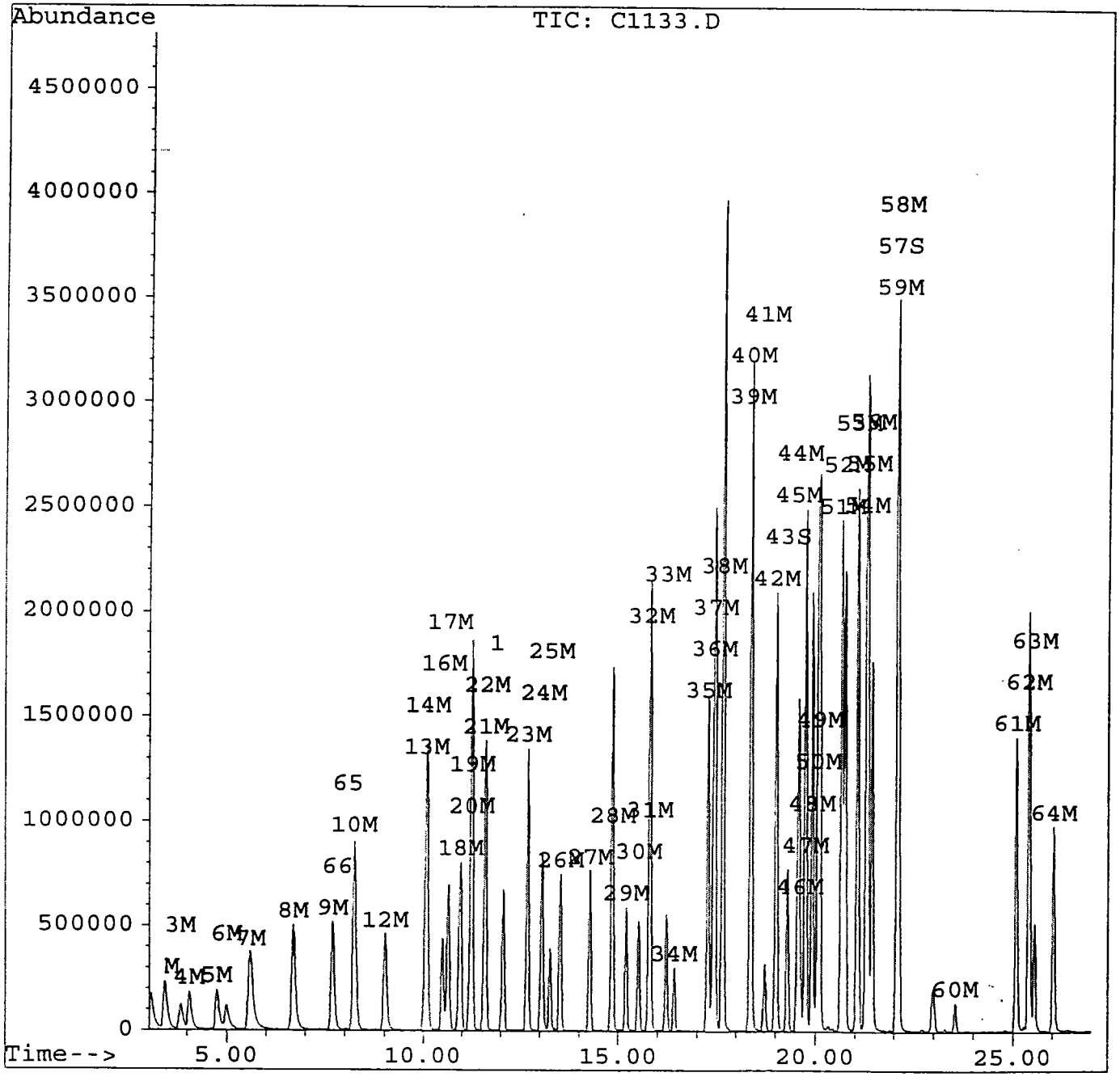
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1133.d
Acq On : 1 Feb 96 7:49 pm
Sample : 10 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:37 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration



Quantitation Report

062

Data File : d:\hpchem\1\data\c1134.d
Acq On : 1 Feb 96 8:23 pm
Sample : 20 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:39 1996

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.06	96	1323441	5.00	ug/L	-0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.29	95	637860	5.11	ug/L	102.18%
57) 1,2-Dichlorobenzene-d4	22.08	152	385655	5.25	ug/L	105.01%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.43	85	1824612	33.60	ug/L	98
3) Chloromethane	3.84	50	1087565	20.39	ug/L	99
4) Vinyl chloride	4.06	62	1365679	24.07	ug/L	99
5) Bromomethane	4.73	94	931709	29.05	ug/L	100
6) Chloroethane	4.96	64	809810	23.51	ug/L	99
7) Trichlorofluoromethane	5.58	101	2836643	28.47	ug/L	99
8) 1,1-Dichloroethene	6.69	96	1373551	22.14	ug/L	96
9) Methylene chloride	7.68	84	1175633	20.22	ug/L	96
10) trans-1,2-Dichloroethene	8.22	96	1524102	21.55	ug/L	97
12) 1,1-Dichloroethane	9.02	63	2861897	21.75	ug/L	99
13) 2,2-Dichloropropane	10.06	77	2543041	23.63	ug/L	95
14) cis-1,2-Dichloroethene	10.07	96	1442224	21.48	ug/L	98
16) Bromochloromethane	10.50	128	578320	22.19	ug/L	99
17) Chloroform	10.64	83	2628195	22.63	ug/L	100
18) 1,1,1-Trichloroethane	10.95	97	2687126	22.73	ug/L	99
19) Carbon tetrachloride	11.25	117	2508605	23.46	ug/L	99
20) 1,1-Dichloropropene	11.24	75	2431900	22.11	ug/L	98
21) Benzene	11.59	78	4601194	20.29	ug/L	99
22) 1,2-Dichloroethane	11.62	62	1061949	24.69	ug/L	98
23) Trichloroethene	12.69	95	1964064	21.29	ug/L	99
24) 1,2-Dichloropropane	13.05	63	1533615	20.35	ug/L	98
25) Dibromomethane	13.26	93	661355	22.18	ug/L	98
26) Bromodichloromethane	13.53	83	2104226	23.34	ug/L	100
27) cis-1,3-Dichloropropene	14.27	75	1868647	22.58	ug/L	97
28) Toluene	14.85	92	3276427	19.84	ug/L	100
29) trans-1,3-Dichloropropene	15.21	75	1283074	23.49	ug/L	97
30) 1,1,2-Trichloroethane	15.53	83	625907	21.55	ug/L	98
31) Tetrachloroethene	15.80	166	2294893	21.17	ug/L	100
32) 1,3-Dichloropropane	15.82	76	1225165	21.70	ug/L	98
33) Dibromochloromethane	16.22	129	1289955	22.66	ug/L	97
34) 1,2-Dibromoethane	16.41	107	911606	22.11	ug/L	100
35) Chlorobenzene	17.27	112	3627206	20.78	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.40	131	1535049	21.91	ug/L	98
37) Ethylbenzene	17.46	91	6682938	20.35	ug/L	100
38) Xylene (para & meta)	17.65	106	4999819	39.92	ug/L	95
39) Xylene (Ortho)	18.36	106	2261477	20.13	ug/L	96
40) Styrene	18.38	104	3538224	21.34	ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1134.d
Acq On : 1 Feb 96 8:23 pm
Sample : 20 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:39 1996

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.72	173	679466	21.48	ug/L		100
42)	Isopropylbenzene	19.01	105	6502752	20.31	ug/L		100
44)	Bromobenzene	19.58	156	1577239	21.55	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.54	83	807460	21.57	ug/L		98
46)	1,2,3-Trichloropropane	19.61	75	808284	22.61	ug/L	#	26
47)	n-Propylbenzene	19.74	91	8995739	20.33	ug/L		93
48)	2-Chlorotoluene	19.92	91	5001504	19.55	ug/L		92
49)	4-Chlorotoluene	20.11	91	5738190	20.94	ug/L		99
50)	1,3,5-Trimethylbenzene	20.06	105	5544548	20.48	ug/L		99
51)	tert-Butylbenzene	20.66	119	6373792	22.35	ug/L		99
52)	1,2,4-Trimethylbenzene	20.74	105	5417278	20.60	ug/L		99
53)	sec-Butylbenzene	21.06	105	8687409	20.25	ug/L		98
54)	1,3-Dichlorobenzene	21.28	146	3126476	21.35	ug/L		98
55)	4-Isopropyltoluene	21.32	119	7052348	20.86	ug/L		99
56)	1,4-Dichlorobenzene	21.44	146	3047437	21.50	ug/L		99
58)	1,2-Dichlorobenzene	22.12	146	2386294	21.43	ug/L	m	0
59)	n-Butylbenzene	22.06	91	7137925	20.43	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.54	75	164301	23.32	ug/L		94
61)	1,2,4-Trichlorobenzene	25.09	180	1916524	21.23	ug/L		100
62)	Hexachlorobutadiene	25.40	225	1720910	20.55	ug/L	m	76
63)	Naphthalene	25.55	128	1892689	21.15	ug/L		100
64)	1,2,3-Trichlorobenzene	26.03	180	1434083	21.85	ug/L		99
65)	Methyl-tert butyl ether	8.26	73	1555763	22.09	ug/L		97
66)	tert-Butyl Alcohol	8.02	59	47057	44.24	ug/L		100

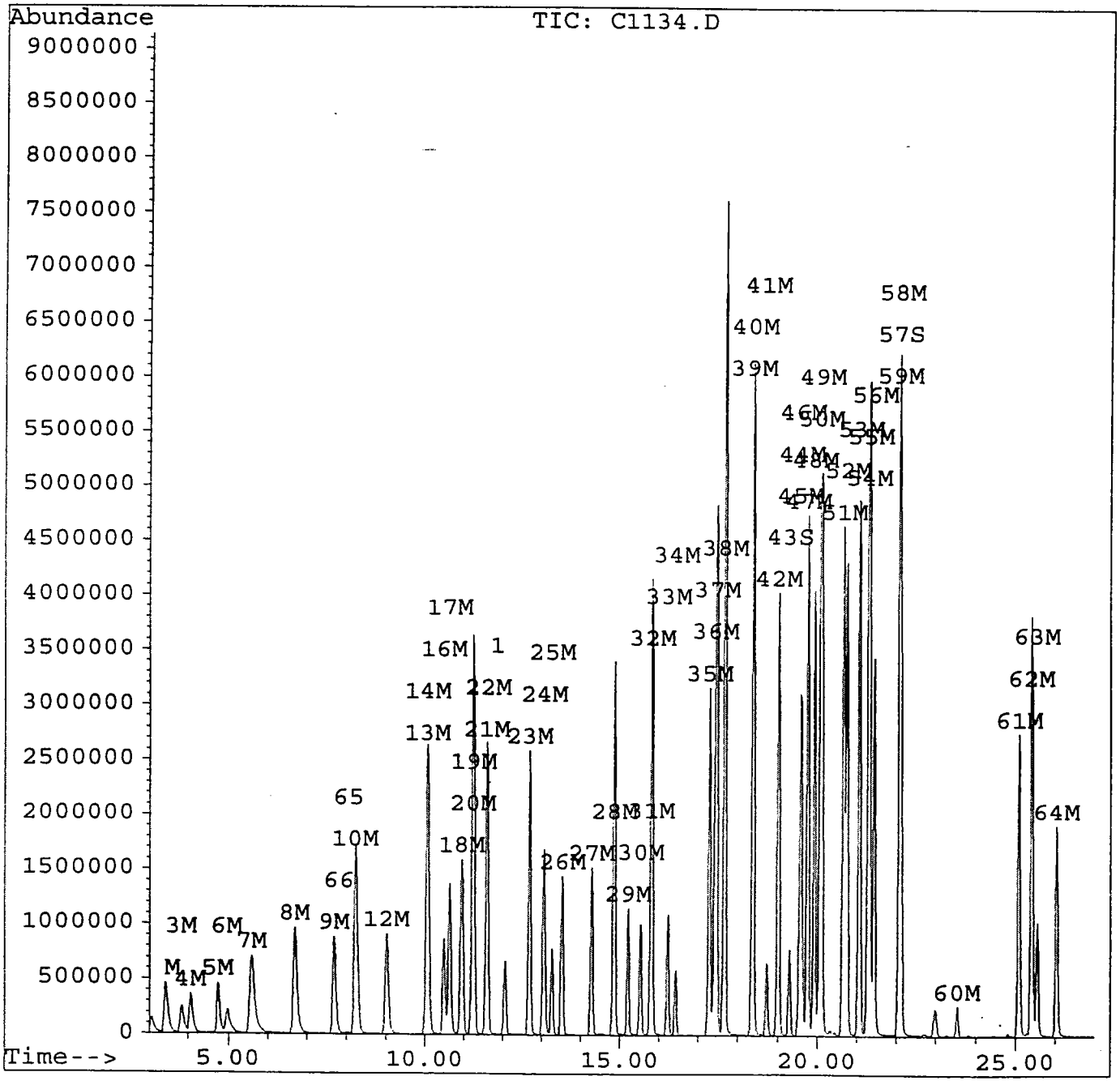
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1134.d
Acq On : 1 Feb 96 8:23 pm
Sample : 20 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:39 1996

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1135.d
Acq On : 1 Feb 96 8:57 pm
Sample : 30 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:41 1996

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.05	96	1301185	5.00	ug/L		-0.08
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.29	95	621570	5.06	ug/L		101.27%
57) 1,2-Dichlorobenzene-d4	22.09	152	371245	5.14	ug/L		102.81%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.45	85	2679925	50.20	ug/L		100
3) Chloromethane	3.84	50	1603181	30.57	ug/L		100
4) Vinyl chloride	4.07	62	2002092	35.90	ug/L		99
5) Bromomethane	4.72	94	1285020	40.75	ug/L	m	0
6) Chloroethane	4.94	64	1118392	33.02	ug/L		99
7) Trichlorofluoromethane	5.57	101	4125586	42.11	ug/L		99
8) 1,1-Dichloroethene	6.68	96	2018206	33.09	ug/L		95
9) Methylene chloride	7.68	84	1681250	29.42	ug/L		97
10) trans-1,2-Dichloroethene	8.22	96	2254143	32.42	ug/L		97
12) 1,1-Dichloroethane	9.01	63	4226543	32.66	ug/L		99
13) 2,2-Dichloropropane	10.06	77	3660874	34.59	ug/L	m	0
14) cis-1,2-Dichloroethene	10.07	96	2146639	32.52	ug/L	m	0
16) Bromochloromethane	10.49	128	862489	33.65	ug/L		98
17) Chloroform	10.64	83	3879896	33.98	ug/L		100
18) 1,1,1-Trichloroethane	10.95	97	3962127	34.09	ug/L		99
19) Carbon tetrachloride	11.24	117	3700214	35.19	ug/L		99
20) 1,1-Dichloropropene	11.24	75	3576022	33.07	ug/L		98
21) Benzene	11.59	78	6750943	30.28	ug/L		100
22) 1,2-Dichloroethane	11.61	62	1566813	37.05	ug/L		97
23) Trichloroethene	12.68	95	2911015	32.10	ug/L		99
24) 1,2-Dichloropropane	13.05	63	2265987	30.58	ug/L		98
25) Dibromomethane	13.26	93	986914	33.66	ug/L		95
26) Bromodichloromethane	13.52	83	3134301	35.36	ug/L		100
27) cis-1,3-Dichloropropene	14.27	75	2775577	34.11	ug/L		98
28) Toluene	14.85	92	4854531	29.89	ug/L		99
29) trans-1,3-Dichloropropene	15.21	75	1922417	35.79	ug/L		98
30) 1,1,2-Trichloroethane	15.53	83	945428	33.11	ug/L		98
31) Tetrachloroethene	15.80	166	3415622	32.04	ug/L		100
32) 1,3-Dichloropropane	15.82	76	1820806	32.80	ug/L		98
33) Dibromochloromethane	16.22	129	1937785	34.62	ug/L		97
34) 1,2-Dibromoethane	16.42	107	1381012	34.07	ug/L		99
35) Chlorobenzene	17.27	112	5372027	31.30	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.41	131	2280757	33.11	ug/L		97
37) Ethylbenzene	17.46	91	9818123	30.41	ug/L		99
38) Xylene (para & meta)	17.66	106	7297074	59.26	ug/L		96
39) Xylene (Ortho)	18.36	106	3324414	30.10	ug/L		97
40) Styrene	18.38	104	5209037	31.96	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1135.d
Acq On : 1 Feb 96 8:57 pm
Sample : 30 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:41 1996

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.73	173	1028793	33.08	ug/L		99
42)	Isopropylbenzene	19.01	105	9532324	30.28	ug/L	m	0
44)	Bromobenzene	19.58	156	2338291	32.50	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.54	83	1207137	32.80	ug/L		100
46)	1,2,3-Trichloropropane	19.62	75	1201168	34.17	ug/L	#	1
47)	n-Propylbenzene	19.76	91	13113379	30.14	ug/L		94
48)	2-Chlorotoluene	19.92	91	7296832	29.01	ug/L		91
49)	4-Chlorotoluene	20.11	91	8468955	31.44	ug/L	m	99
50)	1,3,5-Trimethylbenzene	20.07	105	8079734	30.35	ug/L		100
51)	tert-Butylbenzene	20.66	119	9346427	33.33	ug/L		99
52)	1,2,4-Trimethylbenzene	20.75	105	7921464	30.64	ug/L		100
53)	sec-Butylbenzene	21.07	105	12691759	30.09	ug/L		98
54)	1,3-Dichlorobenzene	21.28	146	4578734	31.81	ug/L		98
55)	4-Isopropyltoluene	21.32	119	10270798	30.90	ug/L		99
56)	1,4-Dichlorobenzene	21.44	146	4429731	31.78	ug/L		99
58)	1,2-Dichlorobenzene	22.12	146	3504738	32.01	ug/L	m	0
59)	n-Butylbenzene	22.08	91	10407164	30.30	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.54	75	246905	35.65	ug/L		91
61)	1,2,4-Trichlorobenzene	25.09	180	2842296	32.02	ug/L		100
62)	Hexachlorobutadiene	25.41	225	2540564	30.86	ug/L	m	87
63)	Naphthalene	25.55	128	2794749	31.76	ug/L		100
64)	1,2,3-Trichlorobenzene	26.04	180	2081324	32.26	ug/L		98
65)	Methyl-tert butyl ether	8.26	73	2324084	33.56	ug/L		97
66)	tert-Butyl Alcohol	8.03	59	73904	70.66	ug/L		100

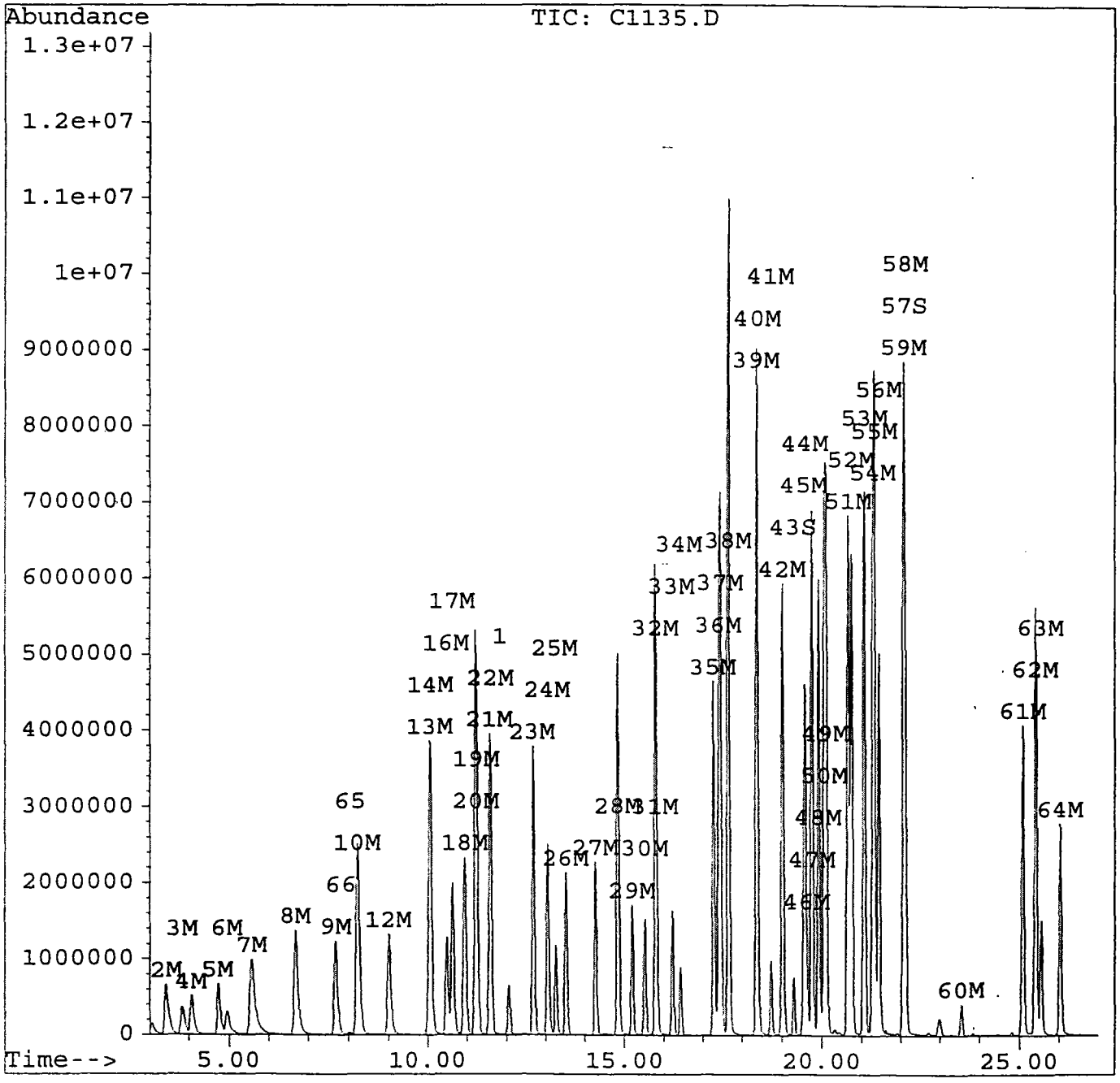
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1135.d
Acq On : 1 Feb 96 8:57 pm
Sample : 30 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:41 1996

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1136.d
Acq On : 1 Feb 96 9:31 pm
Sample : 40 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:44 1996

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.06	96	1271451	5.00	ug/L		-0.08
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.30	95	614544	5.12	ug/L		102.47%
57) 1,2-Dichlorobenzene-d4	22.09	152	357957	5.07	ug/L		101.45%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.44	85	3479462	66.70	ug/L		99
3) Chloromethane	3.84	50	2077153	40.53	ug/L		100
4) Vinyl chloride	4.07	62	2579480	47.33	ug/L	m	0
5) Bromomethane	4.73	94	1716050	55.69	ug/L	m	0
6) Chloroethane	4.93	64	1267594	38.30	ug/L		98
7) Trichlorofluoromethane	5.56	101	5371626	56.11	ug/L	m	0
8) 1,1-Dichloroethene	6.69	96	2608874	43.77	ug/L		98
9) Methylene chloride	7.68	84	2126680	38.08	ug/L		98
10) trans-1,2-Dichloroethene	8.23	96	2941565	43.30	ug/L		100
12) 1,1-Dichloroethane	9.02	63	5475608	43.31	ug/L		100
13) 2,2-Dichloropropane	10.06	77	4702363	45.47	ug/L		97
14) cis-1,2-Dichloroethene	10.08	96	2776675	43.05	ug/L	m	0
16) Bromochloromethane	10.50	128	1138034	45.44	ug/L		99
17) Chloroform	10.65	83	5050881	45.27	ug/L		100
18) 1,1,1-Trichloroethane	10.96	97	5140400	45.26	ug/L		99
19) Carbon tetrachloride	11.25	117	4807772	46.79	ug/L		100
20) 1,1-Dichloropropene	11.24	75	4608244	43.61	ug/L		98
21) Benzene	11.59	78	8700544	39.94	ug/L		100
22) 1,2-Dichloroethane	11.62	62	2024649	48.99	ug/L		97
23) Trichloroethene	12.69	95	3778782	42.64	ug/L		99
24) 1,2-Dichloropropane	13.06	63	2903827	40.10	ug/L	m	88
25) Dibromomethane	13.27	93	1287767	44.95	ug/L		97
26) Bromodichloromethane	13.53	83	4065795	46.94	ug/L		100
27) cis-1,3-Dichloropropene	14.28	75	3592008	45.18	ug/L		99
28) Toluene	14.86	92	6241191	39.33	ug/L	m	0
29) trans-1,3-Dichloropropene	15.21	75	2473351	47.13	ug/L		97
30) 1,1,2-Trichloroethane	15.53	83	1211823	43.43	ug/L		99
31) Tetrachloroethene	15.80	166	4422704	42.46	ug/L		100
32) 1,3-Dichloropropane	15.82	76	2315166	42.68	ug/L		99
33) Dibromochloromethane	16.22	129	2518522	46.05	ug/L		97
34) 1,2-Dibromoethane	16.42	107	1784733	45.06	ug/L		99
35) Chlorobenzene	17.28	112	6972637	41.58	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.41	131	2956173	43.92	ug/L		98
37) Ethylbenzene	17.45	91	12652337	40.10	ug/L		100
38) Xylene (para & meta)	17.66	106	9407008	78.18	ug/L		96
39) Xylene (Ortho)	18.37	106	4293912	39.78	ug/L		98
40) Styrene	18.39	104	6738609	42.31	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1136.d
Acq On : 1 Feb 96 9:31 pm
Sample : 40 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:44 1996

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.73	173	1353473	44.54	ug/L		97
42)	Isopropylbenzene	19.02	105	12336260	40.11	ug/L	m	0
44)	Bromobenzene	19.58	156	3030772	43.11	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.54	83	1550203	43.11	ug/L		99
46)	1,2,3-Trichloropropane	19.62	75	1539680	44.83	ug/L	#	15
47)	n-Propylbenzene	19.75	91	16920408	39.80	ug/L		94
48)	2-Chlorotoluene	19.93	91	9461774	38.49	ug/L		91
49)	4-Chlorotoluene	20.11	91	10823982	41.12	ug/L		99
50)	1,3,5-Trimethylbenzene	20.07	105	10521507	40.45	ug/L		100
51)	tert-Butylbenzene	20.66	119	12079211	44.08	ug/L		98
52)	1,2,4-Trimethylbenzene	20.75	105	10237377	40.52	ug/L		100
53)	sec-Butylbenzene	21.06	105	16356088	39.69	ug/L		98
54)	1,3-Dichlorobenzene	21.28	146	5906777	41.99	ug/L		99
55)	4-Isopropyltoluene	21.33	119	13124424	40.40	ug/L		98
56)	1,4-Dichlorobenzene	21.44	146	5773708	42.40	ug/L		100
58)	1,2-Dichlorobenzene	22.13	146	4483462	41.90	ug/L		97
59)	n-Butylbenzene	22.07	91	13376849	39.85	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.54	75	320560	47.36	ug/L		91
61)	1,2,4-Trichlorobenzene	25.09	180	3707732	42.75	ug/L		100
62)	Hexachlorobutadiene	25.41	225	3306925	41.10	ug/L	m	80
63)	Naphthalene	25.56	128	3618415	42.08	ug/L		100
64)	1,2,3-Trichlorobenzene	26.04	180	2716696	43.09	ug/L	m	0
65)	Methyl-tert butyl ether	8.26	73	2992373	44.22	ug/L		96
66)	tert-Butyl Alcohol	8.07	59	93205	91.20	ug/L		100

(#) = qualifier out of range (m) = manual integration

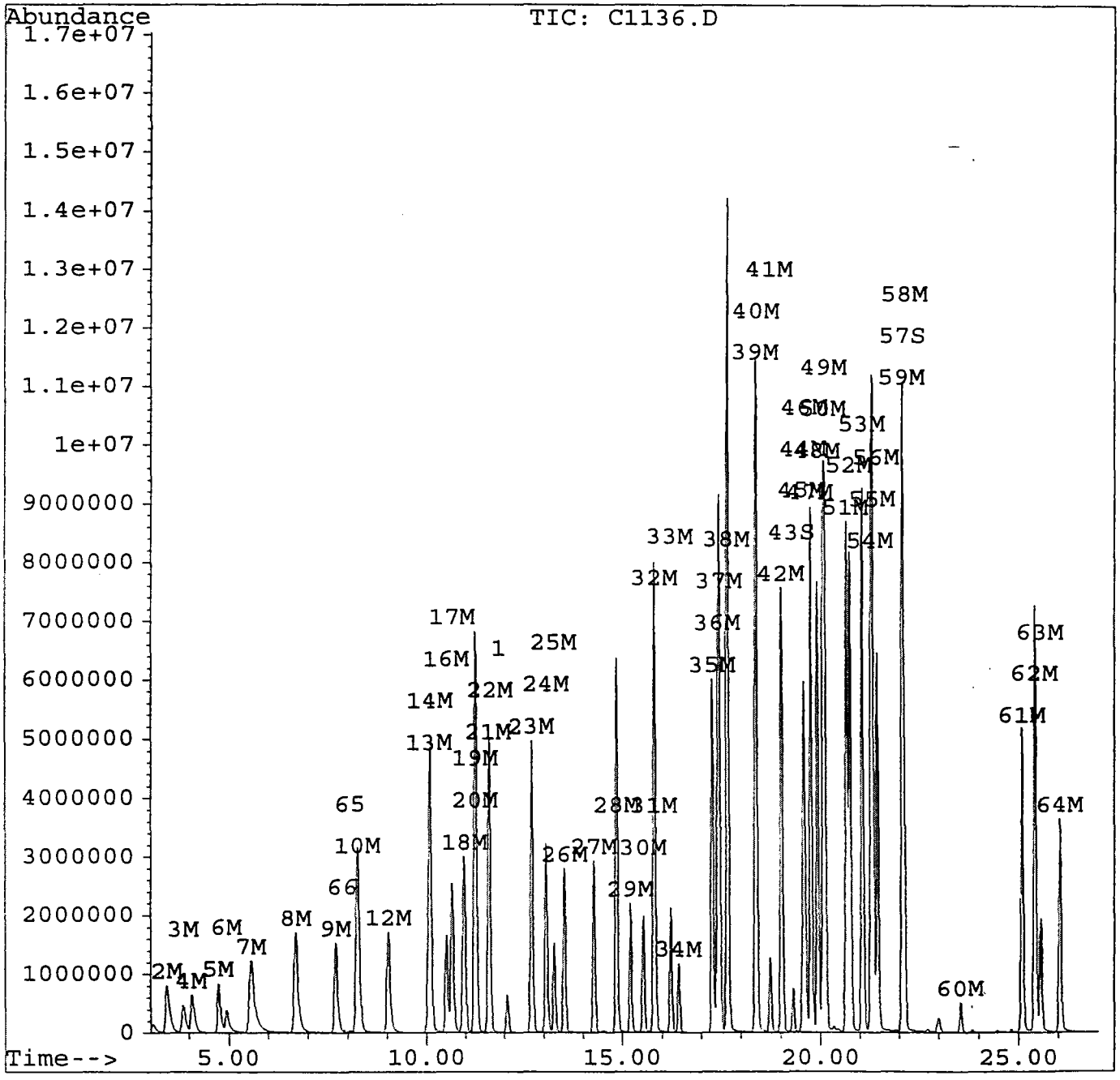
Quantitation Report

070

Data File : d:\hpchem\1\data\c1136.d
Acq On : 1 Feb 96 9:31 pm
Sample : 40 PPB STANDARD
Misc : 524.2 INITIAL CALIBRATION
Quant Time: Feb 2 13:44 1996

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 02 13:52:31 1996
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: C1438.D BFB Injection Date: 03/04/96

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1606

GC Column DB-62 ID: 0.53 (mm) Heated Purge: (Y / N) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 60.0% of mass 95	46.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.0
175	5.0 - 9.0% of mass 174	5.0 (7.1)1
176	95.0 - 101.0% of mass 174	69.3 (99.0)1
177	5.0 - 9.0% of mass 176	4.8 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

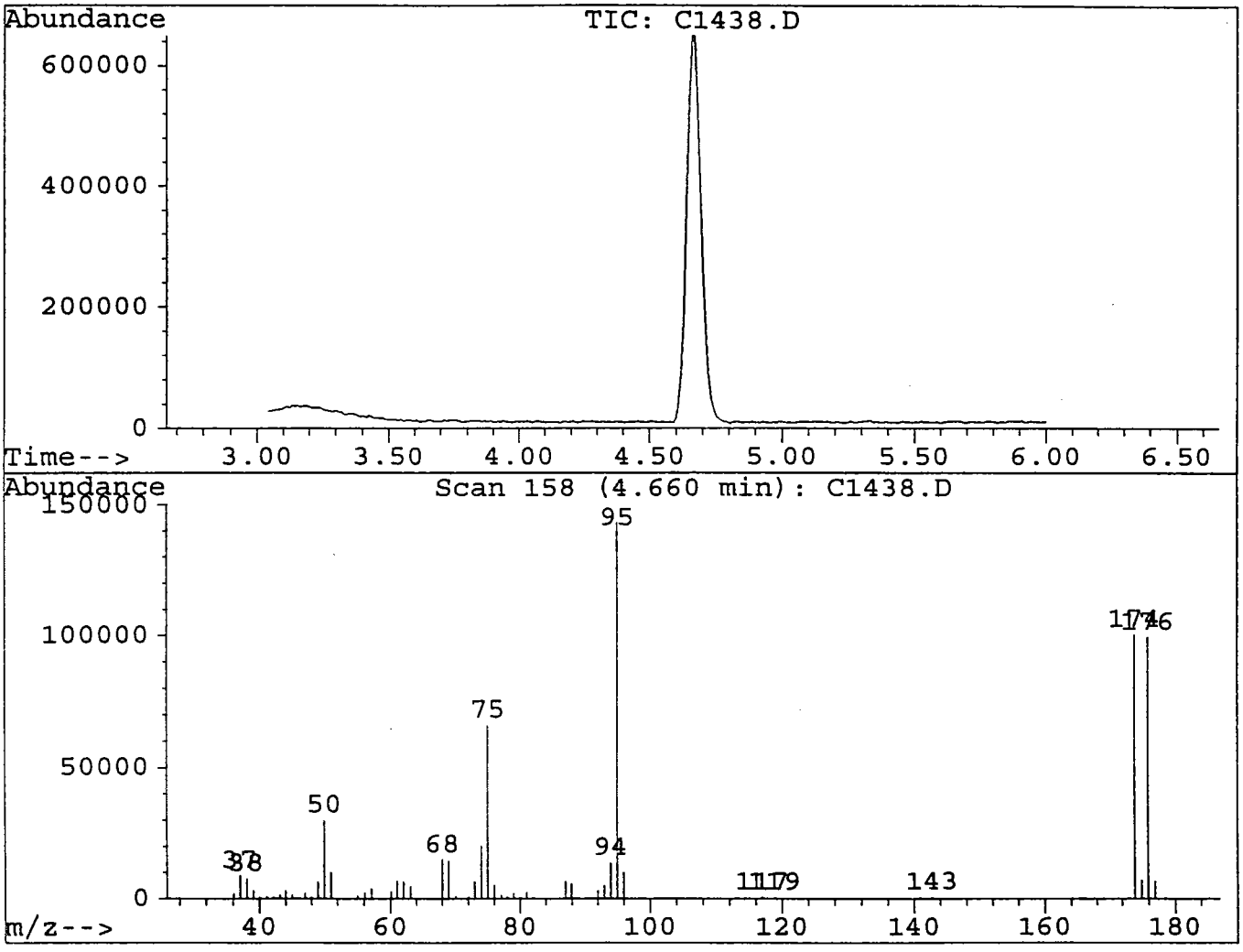
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		0.5 PPB STANDARD	C1440.D	03/04/96	1619
02		4 PPB STANDARD	C1441.D	03/04/96	1654
03		10 PPB STANDARD	C1442.D	03/04/96	1730
04		20 PPB STANDARD	C1443.D	03/04/96	1805
05		40 PPB STANDARD	C1444.D	03/04/96	1840
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C1438.D
Acq On : 4 Mar 96 4:06 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 158

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	30016	PASS
75	95	30	80	46.0	65856	PASS
95	95	100	100	100.0	143296	PASS
96	95	5	9	7.0	10018	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	70.0	100304	PASS
175	174	5	9	7.1	7138	PASS
176	174	95	101	99.0	99344	PASS
177	176	5	9	6.9	6806	PASS

Scan 158 (4.660 min): C1438.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1943	48.05	690	68.05	15025	80.00	631
37.10	8954	49.05	6400	69.05	14553	81.00	2470
38.10	7827	50.05	30016	70.15	1146	82.00	573
39.10	3078	51.05	10096	72.05	1008	87.00	6668
40.00	591	55.05	1243	73.05	6512	87.95	5780
41.10	879	56.10	2287	74.05	20072	90.95	562
42.10	584	57.10	3819	75.05	65856	92.05	3153
43.10	1507	60.10	2630	76.05	5496	93.05	4865
44.00	3121	61.00	6992	77.10	1293	94.05	13709
45.00	1543	62.00	6631	78.00	916	95.05	143296
47.05	2349	63.10	4653	79.00	2307	96.05	10018

Scan 158 (4.660 min): C1438.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.95	654						
118.90	504						
140.90	674						
142.80	794						
173.95	100304						
174.95	7138						
175.95	99344						
176.95	6806						

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Initial Calibration

Calibration Files
0.5 =C1440.D 4 =C1441.D 10 =C1442.D
20 =C1443.D 40 =C1444.D

		Compound	0.5	4	10	20	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha		0.301	0.286	0.270	0.263	0.280	5.99
3)	M	Chloromethane		0.207	0.206	0.198	0.193	0.201	3.36
4)	M	Vinyl chloride	0.239	0.231	0.229	0.226	0.223	0.229	2.66
5)	M	Bromomethane	0.143	0.137	0.133	0.128	0.125	0.133	5.18
6)	M	Chloroethane	0.149	0.144	0.139	0.133	0.116	0.136	9.50
7)	M	Trichlorofluoromethan	0.537	0.504	0.493	0.484	0.466	0.497	5.34
8)	M	1,1-Dichloroethene	0.245	0.237	0.235	0.232	0.229	0.236	2.58
9)	M	Methylene chloride		0.260	0.212	0.202	0.193	0.217	13.61
10)	M	trans-1,2-Dichloroeth	0.284	0.270	0.267	0.265	0.261	0.270	3.24
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.518	0.499	0.499	0.498	0.494	0.502	1.90
13)	M	2,2-Dichloropropane	0.470	0.428	0.422	0.409	0.398	0.425	6.47
14)	M	cis-1,2-Dichloroethen	0.257	0.258	0.258	0.256	0.253	0.257	0.87
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.105	0.104	0.107	0.108	0.108	0.106	1.66
17)	M	Chloroform	0.498	0.456	0.455	0.459	0.456	0.465	3.97
18)	M	1,1,1-Trichloroethane	0.507	0.477	0.475	0.474	0.469	0.481	3.12
19)	M	Carbon tetrachloride	0.453	0.444	0.446	0.445	0.443	0.446	0.89
20)	M	1,1-Dichloropropene	0.458	0.432	0.429	0.424	0.413	0.431	3.86
21)	M	Benzene	0.890	0.845	0.826	0.826	0.817	0.841	3.50
22)	M	1,2-Dichloroethane	0.205	0.191	0.193	0.198	0.195	0.196	2.79
23)	M	Trichloroethene	0.391	0.355	0.355	0.352	0.346	0.360	5.00
24)	M	1,2-Dichloropropane	0.290	0.279	0.278	0.281	0.278	0.281	1.74
25)	M	Dibromomethane	0.125	0.114	0.117	0.118	0.118	0.118	3.50
26)	M	Bromodichloromethane	0.378	0.364	0.360	0.363	0.364	0.366	1.93
27)	M	cis-1,3-Dichloroprope	0.327	0.325	0.326	0.328	0.327	0.327	0.41
28)	M	Toluene	0.688	0.616	0.604	0.599	0.592	0.620	6.33
29)	M	trans-1,3-Dichloropro	0.226	0.227	0.226	0.233	0.232	0.229	1.48
30)	M	1,1,2-Trichloroethane	0.124	0.119	0.114	0.118	0.117	0.119	3.11
31)	M	Tetrachloroethene	0.496	0.448	0.441	0.433	0.423	0.448	6.35
32)	M	1,3-Dichloropropane	0.243	0.228	0.225	0.230	0.225	0.230	3.37
33)	M	Dibromochloromethane	0.201	0.242	0.239	0.248	0.249	0.236	8.39
34)	M	1,2-Dibromoethane	0.168	0.165	0.168	0.173	0.171	0.169	1.87
35)	M	Chlorobenzene	0.767	0.716	0.694	0.692	0.677	0.709	4.96
36)	M	1,1,1,2-Tetrachloroet	0.319	0.303	0.295	0.296	0.293	0.301	3.49
37)	M	Ethylbenzene	1.415	1.307	1.266	1.252	1.216	1.291	5.94
38)	M	Xylene (para & meta)	0.536	0.505	0.485	0.474	0.460	0.492	5.99
39)	M	Xylene (Ortho)	0.495	0.457	0.444	0.435	0.422	0.450	6.14
40)	M	Styrene	0.737	0.703	0.682	0.679	0.658	0.692	4.31
41)	M	Bromoform	0.114	0.131	0.133	0.137	0.136	0.130	7.36
42)	M	Isopropylbenzene	1.415	1.311	1.267	1.245	1.205	1.289	6.25
	S	4-Bromofluorobenzene	0.504	0.494	0.501	0.505	0.497	0.500	0.94

(#) = Out of Range

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Initial Calibration

Calibration Files
0.5 =C1440.D 4 =C1441.D 10 =C1442.D
20 =C1443.D 40 =C1444.D

		Compound	0.5	4	10	20	40	Avg	%RSD
44)	M	Bromobenzene	0.350	0.322	0.314	0.312	0.301	0.320	5.77
45)	M	1,1,2,2-Tetrachloroet	0.169	0.159	0.154	0.157	0.155	0.159	3.92
46)	M	1,2,3-Trichloropropan	0.178	0.162	0.155	0.154	0.151	0.160	6.59
47)	M	n-Propylbenzene	1.946	1.782	1.709	1.688	1.617	1.748	7.15
48)	M	2-Chlorotoluene	1.134	0.985	0.941	0.926	0.898	0.977	9.54
49)	M	4-Chlorotoluene	1.252	1.159	1.126	1.098	1.045	1.136	6.80
50)	M	1,3,5-Trimethylbenzen	1.276	1.141	1.097	1.072	1.046	1.127	8.04
51)	M	tert-Butylbenzene	1.310	1.183	1.116	1.111	1.060	1.156	8.35
52)	M	1,2,4-Trimethylbenzen	1.232	1.108	1.065	1.047	1.012	1.093	7.81
53)	M	sec-Butylbenzene	1.944	1.785	1.714	1.675	1.597	1.743	7.52
54)	M	1,3-Dichlorobenzene	0.737	0.651	0.627	0.611	0.590	0.643	8.87
55)	M	4-Isopropyltoluene	1.594	1.467	1.411	1.373	1.301	1.429	7.71
56)	M	1,4-Dichlorobenzene	0.712	0.641	0.622	0.604	0.570	0.630	8.40
57)	S	1,2-Dichlorobenzene-d	0.326	0.324	0.324	0.321	0.307	0.320	2.46
58)	M	1,2-Dichlorobenzene	0.563	0.512	0.489	0.474	0.453	0.498	8.49
59)	M	n-Butylbenzene	1.546	1.419	1.372	1.341	1.278	1.391	7.25
60)	M	1,2-Dibromo-3-chlorop	0.032	0.033	0.031	0.032	0.032	0.032	2.08
61)	M	1,2,4-Trichlorobenzen	0.416	0.376	0.373	0.375	0.367	0.381	5.20
62)	M	Hexachlorobutadiene	0.424	0.388	0.377	0.372	0.356	0.383	6.66
63)	M	Naphthalene	0.373	0.296	0.304	0.319	0.313	0.321	9.49
64)	M	1,2,3-Trichlorobenzen	0.301	0.276	0.278	0.278	0.272	0.281	4.08
65)		Methyl-tert butyl eth	0.318	0.298	0.293	0.297	0.294	0.300	3.47
66)		tert-Butyl Alcohol		0.005	0.005	0.005	0.005	0.005	3.38

(#) = Out of Range

Quantitation Report

076

Data File : D:\HPCHEM\1\DATA\C1440.D
Acq On : 4 Mar 96 4:19 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:40 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.95	96	1229547	5.00	ug/L		-0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.20	95	619350	5.20	ug/L		103.91%
57) 1,2-Dichlorobenzene-d4	21.99	152	400547	5.63	ug/L		112.69%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.39	85	43339	0.51	ug/L		91
3) Chloromethane	3.77	50	30606	0.60	ug/L		93
4) Vinyl chloride	4.02	62	29339	0.47	ug/L		83
5) Bromomethane	4.70	94	17553	0.40	ug/L		95
6) Chloroethane	4.93	64	18348	0.51	ug/L		86
7) Trichlorofluoromethane	5.50	101	66085	0.50	ug/L		96
8) 1,1-Dichloroethene	6.59	96	30134	0.47	ug/L		93
9) Methylene chloride	7.58	84	94398	1.70	ug/L		98
10) trans-1,2-Dichloroethene	8.10	96	34928	0.50	ug/L		94
12) 1,1-Dichloroethane	8.90	63	63726	0.48	ug/L		100
13) 2,2-Dichloropropane	9.94	77	57781	0.48	ug/L		95
14) cis-1,2-Dichloroethene	9.96	96	31600	0.47	ug/L	#	85
16) Bromochloromethane	10.37	128	12863	0.48	ug/L		94
17) Chloroform	10.53	83	61175	0.50	ug/L		91
18) 1,1,1-Trichloroethane	10.85	97	62313	0.50	ug/L		90
19) Carbon tetrachloride	11.13	117	55686	0.48	ug/L		93
20) 1,1-Dichloropropene	11.13	75	56336	0.50	ug/L		94
21) Benzene	11.48	78	109474	0.50	ug/L		99
22) 1,2-Dichloroethane	11.51	62	25214	0.51	ug/L		99
23) Trichloroethene	12.59	95	48107	0.52	ug/L		95
24) 1,2-Dichloropropane	12.95	63	35618	0.50	ug/L		86
25) Dibromomethane	13.15	93	15386	0.50	ug/L		89
26) Bromodichloromethane	13.41	83	46521	0.48	ug/L		92
27) cis-1,3-Dichloropropene	14.17	75	40202	0.46	ug/L		99
28) Toluene	14.74	92	84629	0.53	ug/L		100
29) trans-1,3-Dichloropropene	15.11	75	27755	0.46	ug/L		96
30) 1,1,2-Trichloroethane	15.42	83	15282	0.52	ug/L		93
31) Tetrachloroethene	15.69	166	61038	0.56	ug/L		97
32) 1,3-Dichloropropane	15.71	76	29939	0.52	ug/L		96
33) Dibromochloromethane	16.11	129	24742	0.42	ug/L		100
34) 1,2-Dibromoethane	16.31	107	20611	0.48	ug/L		97
35) Chlorobenzene	17.18	112	94353	0.55	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.30	131	39163	0.55	ug/L		96
37) Ethylbenzene	17.35	91	173999	0.55	ug/L		98
38) Xylene (para & meta)	17.56	106	131715	1.12	ug/L		98
39) Xylene (Ortho)	18.27	106	60806	0.57	ug/L		97
40) Styrene	18.29	104	90607	0.55	ug/L		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C1440.D
Acq On : 4 Mar 96 4:19 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:40 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.63	173	13977	0.45	ug/L		95
42)	Isopropylbenzene	18.92	105	173989	0.57	ug/L		99
44)	Bromobenzene	19.48	156	43034	0.58	ug/L		91
45)	1,1,2,2-Tetrachloroethane	19.44	83	20833	0.55	ug/L		98
46)	1,2,3-Trichloropropane	19.53	75	21837	0.57	ug/L	#	69
47)	n-Propylbenzene	19.65	91	239225	0.56	ug/L		99
48)	2-Chlorotoluene	19.83	91	139411	0.58	ug/L		97
49)	4-Chlorotoluene	20.01	91	153926	0.56	ug/L		94
50)	1,3,5-Trimethylbenzene	19.97	105	156903	0.60	ug/L		95
51)	tert-Butylbenzene	20.57	119	161053	0.53	ug/L	m	94
52)	1,2,4-Trimethylbenzene	20.65	105	151520	0.59	ug/L		84
53)	sec-Butylbenzene	20.96	105	238964	0.58	ug/L		97
54)	1,3-Dichlorobenzene	21.18	146	90640	0.61	ug/L		94
55)	4-Isopropyltoluene	21.23	119	195986	0.59	ug/L		98
56)	1,4-Dichlorobenzene	21.34	146	87548	0.61	ug/L		98
58)	1,2-Dichlorobenzene	22.02	146	69241	0.61	ug/L		90
59)	n-Butylbenzene	21.98	91	190146	0.56	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.43	75	3903	0.52	ug/L	#	65
61)	1,2,4-Trichlorobenzene	24.99	180	51188	0.57	ug/L		100
62)	Hexachlorobutadiene	25.31	225	52172	0.64	ug/L		94
63)	Naphthalene	25.46	128	45901	0.51	ug/L		100
64)	1,2,3-Trichlorobenzene	25.94	180	37010	0.56	ug/L		99
65)	Methyl-tert butyl ether	8.14	73	39154	0.52	ug/L	m	53

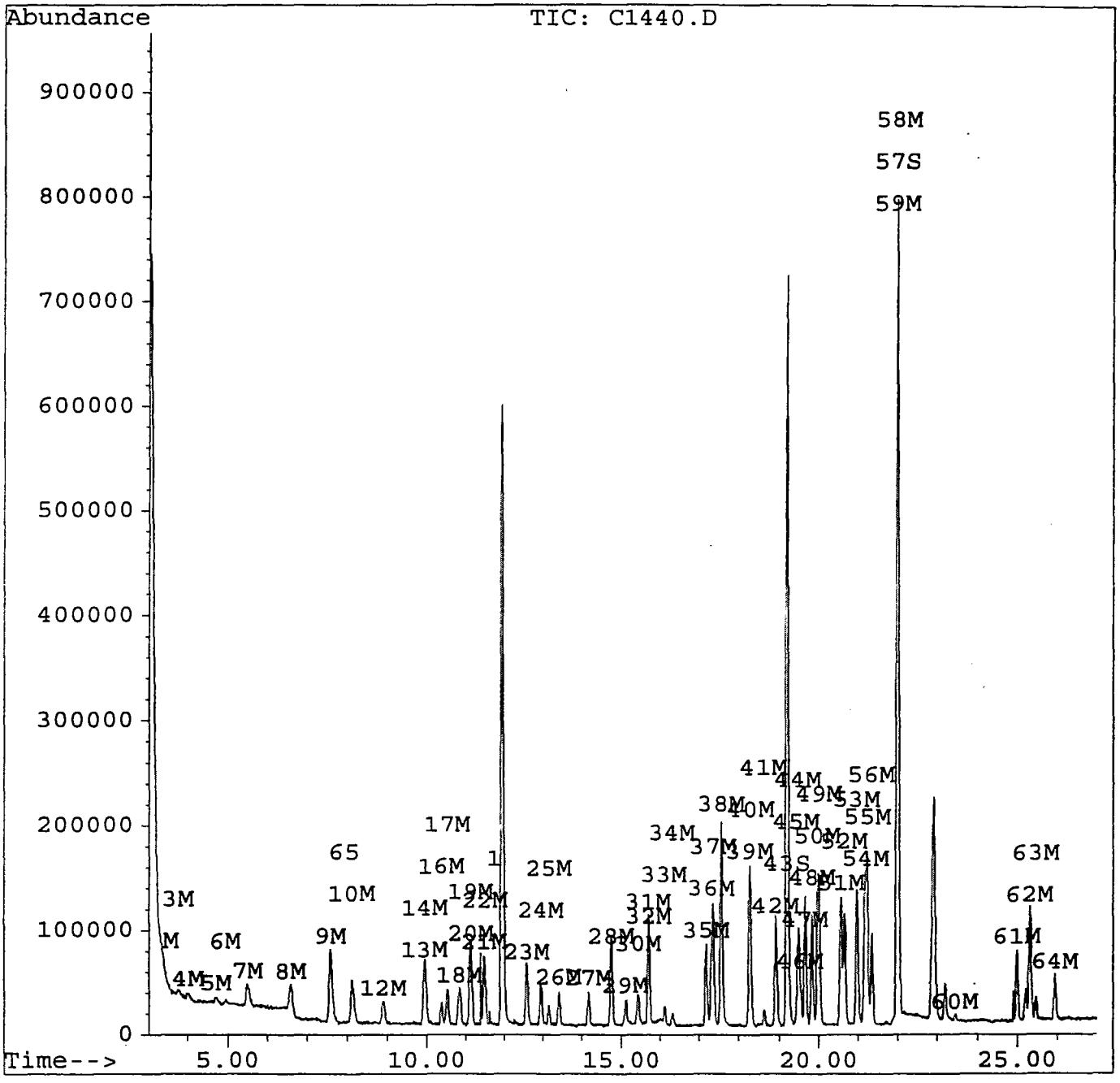
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C1440.D
Acq On : 4 Mar 96 4:19 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:40 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



Quantitation Report

079

Data File : d:\hpchem\1\data\c1441.d
Acq On : 4 Mar 96 4:54 pm
Sample : 4 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:15 1996

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.95	96	1262112	5.00	ug/L	-0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.20	95	623144	5.09	ug/L	101.85%
57) 1,2-Dichlorobenzene-d4	21.99	152	409485	5.61	ug/L	112.24%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	303735	3.46	ug/L	99
3) Chloromethane	3.78	50	209308	3.99	ug/L	98
4) Vinyl chloride	4.00	62	233460	3.61	ug/L	99
5) Bromomethane	4.70	94	138255	3.08	ug/L	98
6) Chloroethane	4.94	64	145630	3.91	ug/L	100
7) Trichlorofluoromethane	5.50	101	508572	3.77	ug/L	99
8) 1,1-Dichloroethene	6.59	96	239458	3.68	ug/L	96
9) Methylene chloride	7.58	84	262112	4.61	ug/L	97
10) trans-1,2-Dichloroethene	8.12	96	272494	3.76	ug/L	95
12) 1,1-Dichloroethane	8.91	63	503913	3.66	ug/L	100
13) 2,2-Dichloropropane	9.95	77	432406	3.52	ug/L	99
14) cis-1,2-Dichloroethene	9.96	96	260931	3.76	ug/L	99
16) Bromochloromethane	10.38	128	105273	3.81	ug/L	96
17) Chloroform	10.53	83	460679	3.65	ug/L	97
18) 1,1,1-Trichloroethane	10.84	97	482113	3.73	ug/L	98
19) Carbon tetrachloride	11.13	117	448330	3.74	ug/L	98
20) 1,1-Dichloropropene	11.12	75	436071	3.73	ug/L	98
21) Benzene	11.48	78	853367	3.80	ug/L	99
22) 1,2-Dichloroethane	11.51	62	192911	3.81	ug/L	98
23) Trichloroethene	12.58	95	358821	3.76	ug/L	99
24) 1,2-Dichloropropane	12.95	63	282012	3.85	ug/L	99
25) Dibromomethane	13.16	93	115044	3.62	ug/L	98
26) Bromodichloromethane	13.41	83	368018	3.66	ug/L	96
27) cis-1,3-Dichloropropene	14.17	75	327724	3.66	ug/L	97
28) Toluene	14.74	92	622319	3.81	ug/L	99
29) trans-1,3-Dichloropropene	15.10	75	229080	3.71	ug/L	98
30) 1,1,2-Trichloroethane	15.42	83	120234	3.98	ug/L	98
31) Tetrachloroethene	15.69	166	452104	4.05	ug/L	99
32) 1,3-Dichloropropane	15.71	76	229942	3.91	ug/L	91
33) Dibromochloromethane	16.11	129	244218	4.02	ug/L	93
34) 1,2-Dibromoethane	16.31	107	166247	3.79	ug/L	97
35) Chlorobenzene	17.18	112	722853	4.10	ug/L	97
36) 1,1,1,2-Tetrachloroethane	17.31	131	306015	4.16	ug/L	99
37) Ethylbenzene	17.35	91	1319489	4.06	ug/L	100
38) Xylene (para & meta)	17.56	106	1019239	8.42	ug/L	97
39) Xylene (Ortho)	18.27	106	461015	4.19	ug/L	99
40) Styrene	18.29	104	710259	4.18	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1441.d
Acq On : 4 Mar 96 4:54 pm
Sample : 4 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:15 1996

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.63	173	132361	4.18	ug/L		100
42)	Isopropylbenzene	18.92	105	1324196	4.25	ug/L		98
44)	Bromobenzene	19.48	156	325016	4.30	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.43	83	160631	4.10	ug/L		95
46)	1,2,3-Trichloropropane	19.52	75	163806	4.19	ug/L	#	81
47)	n-Propylbenzene	19.66	91	1798785	4.13	ug/L		98
48)	2-Chlorotoluene	19.83	91	994352	4.04	ug/L		99
49)	4-Chlorotoluene	20.01	91	1170462	4.16	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.97	105	1151943	4.30	ug/L		100
51)	tert-Butylbenzene	20.57	119	1194134	3.86	ug/L	m	99
52)	1,2,4-Trimethylbenzene	20.65	105	1118682	4.25	ug/L		91
53)	sec-Butylbenzene	20.97	105	1802395	4.27	ug/L		98
54)	1,3-Dichlorobenzene	21.19	146	657339	4.33	ug/L		97
55)	4-Isopropyltoluene	21.23	119	1480862	4.35	ug/L		99
56)	1,4-Dichlorobenzene	21.34	146	647685	4.38	ug/L		96
58)	1,2-Dichlorobenzene	22.02	146	516857	4.45	ug/L		97
59)	n-Butylbenzene	21.98	91	1433233	4.13	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.45	75	33403	4.33	ug/L		95
61)	1,2,4-Trichlorobenzene	24.99	180	379380	4.13	ug/L		99
62)	Hexachlorobutadiene	25.31	225	391724	4.69	ug/L		98
63)	Naphthalene	25.46	128	298671	3.22	ug/L		100
64)	1,2,3-Trichlorobenzene	25.94	180	278412	4.12	ug/L		98
65)	Methyl-tert butyl ether	8.16	73	300618	3.88	ug/L		97
66)	tert-Butyl Alcohol	7.94	59	9694	8.45	ug/L		100

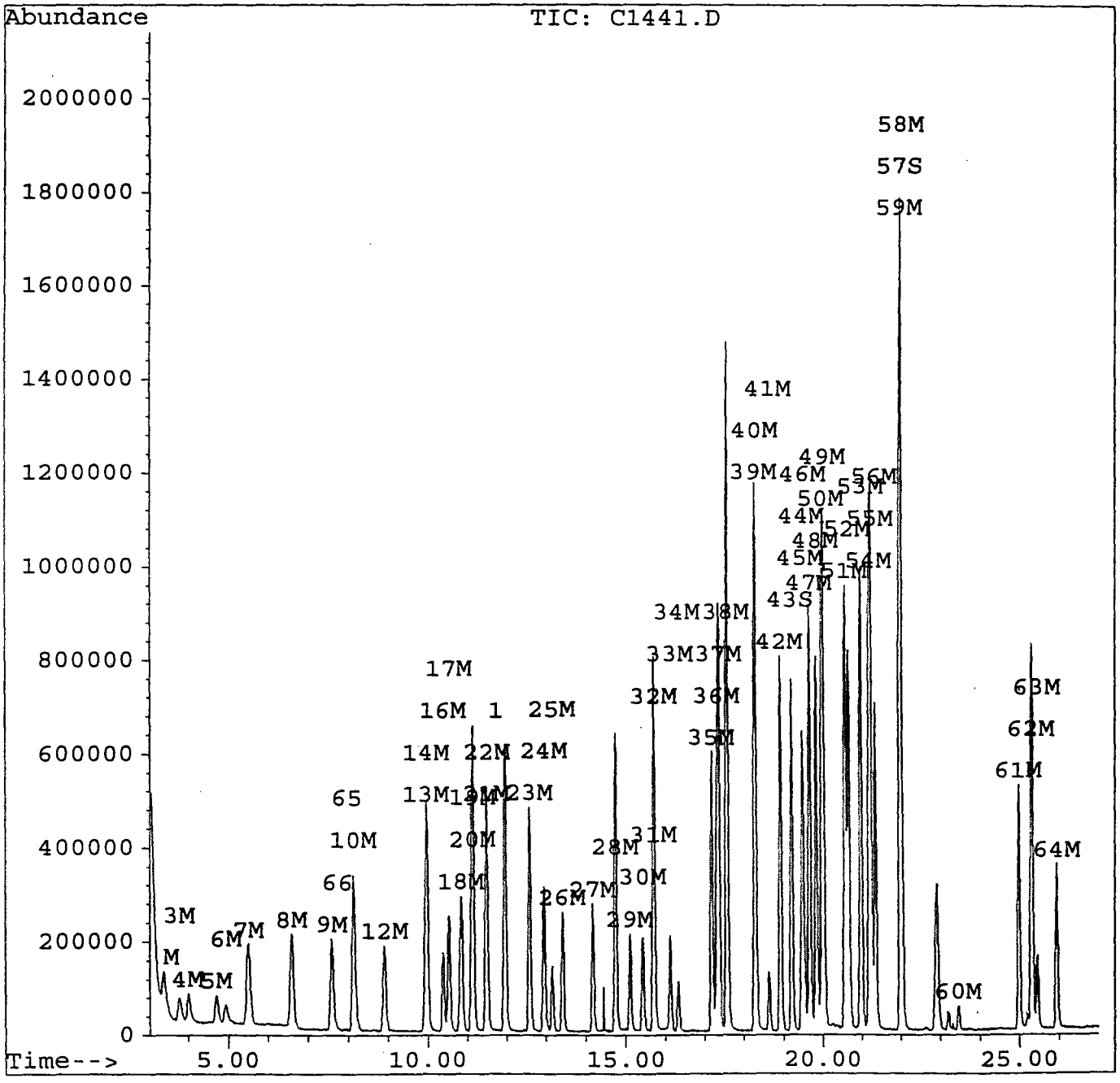
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1441.d
Acq On : 4 Mar 96 4:54 pm
Sample : 4 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:15 1996

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



Quantitation Report

082

Data File : d:\hpchem\1\data\c1442.d
Acq On : 4 Mar 96 5:30 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:20 1996

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.95	96	1276212	5.00	ug/L		-0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.20	95	639185	5.17	ug/L		103.32%
57) 1,2-Dichlorobenzene-d4	21.99	152	412979	5.60	ug/L		111.94%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.38	85	729782	8.21	ug/L		98
3) Chloromethane	3.78	50	526686	9.92	ug/L		99
4) Vinyl chloride	4.00	62	585446	8.95	ug/L		99
5) Bromomethane	4.69	94	339999	7.50	ug/L		97
6) Chloroethane	4.92	64	353883	9.41	ug/L		99
7) Trichlorofluoromethane	5.49	101	1258301	9.23	ug/L		100
8) 1,1-Dichloroethene	6.58	96	599427	9.10	ug/L		95
9) Methylene chloride	7.57	84	540798	9.40	ug/L		96
10) trans-1,2-Dichloroethene	8.12	96	682535	9.32	ug/L		99
12) 1,1-Dichloroethane	8.90	63	1273396	9.15	ug/L		97
13) 2,2-Dichloropropane	9.95	77	1076586	8.67	ug/L		98
14) cis-1,2-Dichloroethene	9.96	96	659307	9.39	ug/L		99
16) Bromochloromethane	10.37	128	272564	9.75	ug/L		99
17) Chloroform	10.53	83	1161173	9.11	ug/L		98
18) 1,1,1-Trichloroethane	10.84	97	1213307	9.29	ug/L		99
19) Carbon tetrachloride	11.14	117	1139231	9.40	ug/L		100
20) 1,1-Dichloropropene	11.13	75	1095135	9.28	ug/L		98
21) Benzene	11.48	78	2108493	9.29	ug/L		100
22) 1,2-Dichloroethane	11.51	62	492466	9.62	ug/L		97
23) Trichloroethene	12.58	95	904919	9.38	ug/L		99
24) 1,2-Dichloropropane	12.95	63	709776	9.58	ug/L		100
25) Dibromomethane	13.15	93	297723	9.27	ug/L		98
26) Bromodichloromethane	13.42	83	919997	9.06	ug/L		96
27) cis-1,3-Dichloropropene	14.17	75	832619	9.19	ug/L		96
28) Toluene	14.75	92	1542927	9.34	ug/L		98
29) trans-1,3-Dichloropropene	15.11	75	577322	9.26	ug/L	m	52
30) 1,1,2-Trichloroethane	15.43	83	291804	9.55	ug/L		98
31) Tetrachloroethene	15.69	166	1125160	9.97	ug/L		99
32) 1,3-Dichloropropane	15.72	76	573208	9.63	ug/L		98
33) Dibromochloromethane	16.12	129	609775	9.92	ug/L		98
34) 1,2-Dibromoethane	16.31	107	428813	9.67	ug/L		99
35) Chlorobenzene	17.17	112	1771770	9.93	ug/L		100
36) 1,1,1,2-Tetrachloroethane	17.30	131	752310	10.12	ug/L		98
37) Ethylbenzene	17.35	91	3230103	9.84	ug/L		100
38) Xylene (para & meta)	17.56	106	2473681	20.20	ug/L		99
39) Xylene (Ortho)	18.26	106	1132513	10.19	ug/L		99
40) Styrene	18.29	104	1741991	10.13	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1442.d
Acq On : 4 Mar 96 5:30 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:20 1996

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.62	173	338840	10.57	ug/L		97
42)	Isopropylbenzene	18.92	105	3234518	10.27	ug/L	m	0
44)	Bromobenzene	19.48	156	800388	10.47	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.44	83	393895	9.93	ug/L		98
46)	1,2,3-Trichloropropane	19.52	75	396090	10.02	ug/L	#	74
47)	n-Propylbenzene	19.65	91	4361422	9.91	ug/L		100
48)	2-Chlorotoluene	19.83	91	2400562	9.65	ug/L		99
49)	4-Chlorotoluene	20.01	91	2874348	10.11	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.97	105	2801046	10.35	ug/L		99
51)	tert-Butylbenzene	20.57	119	2847784	9.11	ug/L	m	98
52)	1,2,4-Trimethylbenzene	20.65	105	2718252	10.22	ug/L		91
53)	sec-Butylbenzene	20.97	105	4374183	10.25	ug/L		100
54)	1,3-Dichlorobenzene	21.19	146	1599684	10.43	ug/L		99
55)	4-Isopropyltoluene	21.23	119	3601589	10.47	ug/L		99
56)	1,4-Dichlorobenzene	21.34	146	1588149	10.62	ug/L		95
58)	1,2-Dichlorobenzene	22.03	146	1247106	10.63	ug/L		97
59)	n-Butylbenzene	21.98	91	3502814	9.99	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.45	75	79975	10.26	ug/L		94
61)	1,2,4-Trichlorobenzene	24.99	180	951235	10.24	ug/L		98
62)	Hexachlorobutadiene	25.31	225	961012	11.38	ug/L		100
63)	Naphthalene	25.46	128	776512	8.29	ug/L		100
64)	1,2,3-Trichlorobenzene	25.94	180	709195	10.37	ug/L		98
65)	Methyl-tert butyl ether	8.15	73	748736	9.56	ug/L	m	53
66)	tert-Butyl Alcohol	7.92	59	24871	21.43	ug/L		100

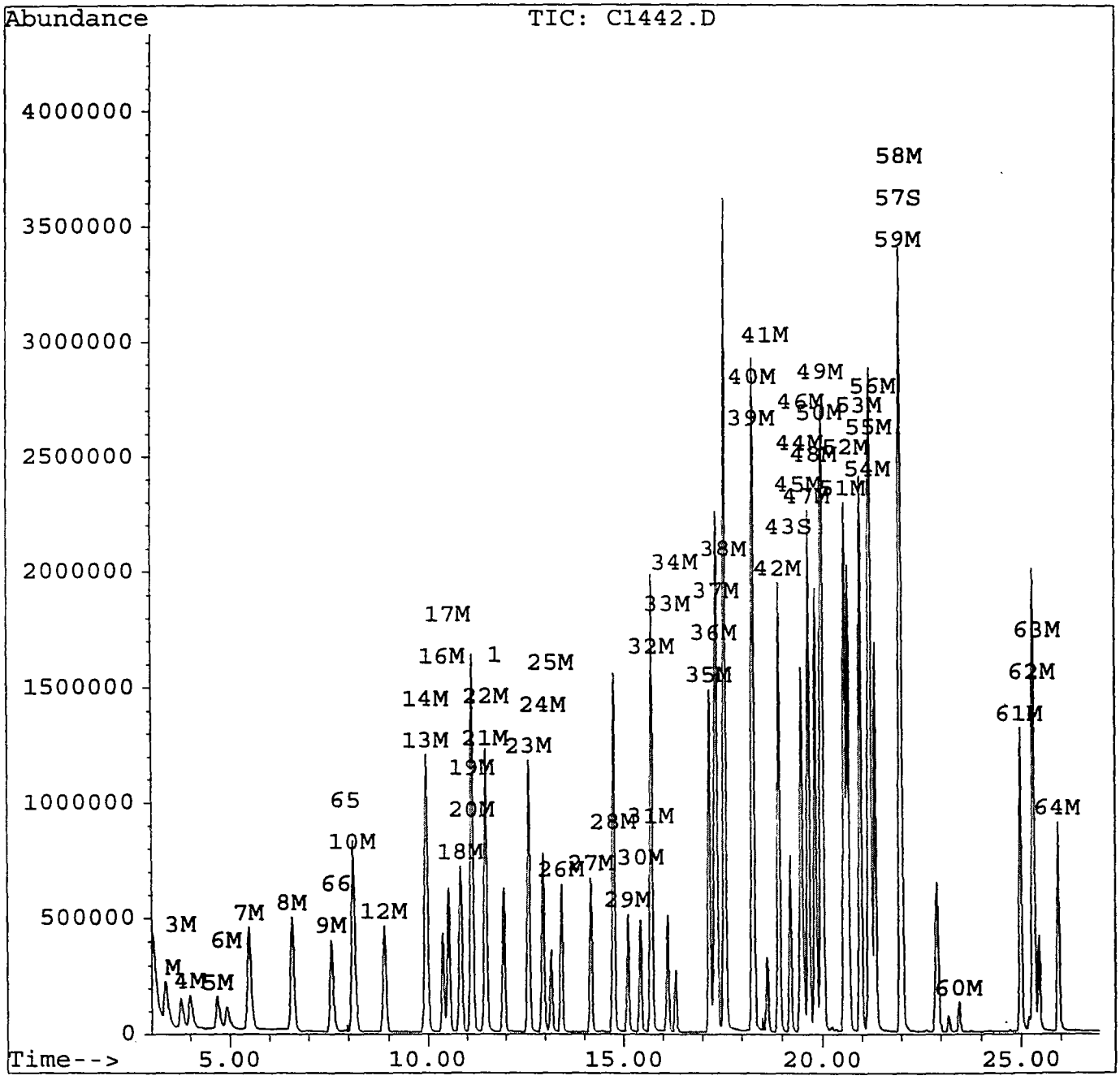
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1442.d
Acq On : 4 Mar 96 5:30 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:20 1996

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1443.d
Acq On : 4 Mar 96 6:05 pm
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:25 1996

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.95	96	1234711	5.00	ug/L		-0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.20	95	623165	5.21	ug/L		104.12%
57) 1,2-Dichlorobenzene-d4	21.99	152	396061	5.55	ug/L		110.97%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.39	85	1335375	15.53	ug/L		98
3) Chloromethane	3.78	50	976498	19.01	ug/L		99
4) Vinyl chloride	4.00	62	1114193	17.61	ug/L		99
5) Bromomethane	4.67	94	633718	14.45	ug/L		95
6) Chloroethane	4.91	64	655743	18.01	ug/L		97
7) Trichlorofluoromethane	5.48	101	2388828	18.11	ug/L		99
8) 1,1-Dichloroethene	6.59	96	1147521	18.01	ug/L		97
9) Methylene chloride	7.58	84	999185	17.95	ug/L		98
10) trans-1,2-Dichloroethene	8.11	96	1309461	18.48	ug/L		98
12) 1,1-Dichloroethane	8.90	63	2457171	18.25	ug/L		99
13) 2,2-Dichloropropane	9.95	77	2021101	16.81	ug/L		100
14) cis-1,2-Dichloroethene	9.96	96	1266636	18.65	ug/L	m	0
16) Bromochloromethane	10.38	128	531685	19.67	ug/L		95
17) Chloroform	10.53	83	2266332	18.37	ug/L		98
18) 1,1,1-Trichloroethane	10.84	97	2341375	18.54	ug/L		99
19) Carbon tetrachloride	11.14	117	2197358	18.75	ug/L		99
20) 1,1-Dichloropropene	11.13	75	2094981	18.34	ug/L		97
21) Benzene	11.49	78	4078733	18.58	ug/L		100
22) 1,2-Dichloroethane	11.51	62	976064	19.70	ug/L		98
23) Trichloroethene	12.58	95	1737028	18.61	ug/L		99
24) 1,2-Dichloropropane	12.95	63	1386220	19.34	ug/L		100
25) Dibromomethane	13.16	93	584130	18.80	ug/L		99
26) Bromodichloromethane	13.41	83	1793199	18.25	ug/L		96
27) cis-1,3-Dichloropropene	14.17	75	1621219	18.50	ug/L		96
28) Toluene	14.74	92	2958701	18.52	ug/L		99
29) trans-1,3-Dichloropropene	15.11	75	1148863	19.04	ug/L	m	52
30) 1,1,2-Trichloroethane	15.42	83	584163	19.77	ug/L		98
31) Tetrachloroethene	15.70	166	2140449	19.60	ug/L		99
32) 1,3-Dichloropropane	15.71	76	1136832	19.74	ug/L		95
33) Dibromochloromethane	16.12	129	1226557	20.63	ug/L		99
34) 1,2-Dibromoethane	16.32	107	852521	19.87	ug/L		100
35) Chlorobenzene	17.18	112	3420070	19.81	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.31	131	1460438	20.31	ug/L		99
37) Ethylbenzene	17.35	91	6183266	19.46	ug/L		100
38) Xylene (para & meta)	17.56	106	4686369	39.56	ug/L		97
39) Xylene (Ortho)	18.27	106	2147243	19.97	ug/L		100
40) Styrene	18.29	104	3355871	20.17	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1443.d
Acq On : 4 Mar 96 6:05 pm
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:25 1996

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.63	173	677376	21.84	ug/L		100
42)	Isopropylbenzene	18.92	105	6149635	20.17	ug/L	m	49
44)	Bromobenzene	19.49	156	1539055	20.81	ug/L		93
45)	1,1,2,2-Tetrachloroethane	19.45	83	773431	20.16	ug/L		100
46)	1,2,3-Trichloropropane	19.53	75	761261	19.91	ug/L		85
47)	n-Propylbenzene	19.66	91	8335822	19.58	ug/L		99
48)	2-Chlorotoluene	19.83	91	4575656	19.00	ug/L		99
49)	4-Chlorotoluene	20.02	91	5421656	19.71	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.97	105	5296713	20.23	ug/L		99
51)	tert-Butylbenzene	20.57	119	5489396	18.16	ug/L	m	100
52)	1,2,4-Trimethylbenzene	20.66	105	5172311	20.10	ug/L		92
53)	sec-Butylbenzene	20.97	105	8270391	20.02	ug/L		100
54)	1,3-Dichlorobenzene	21.19	146	3016138	20.33	ug/L		98
55)	4-Isopropyltoluene	21.23	119	6779798	20.38	ug/L		99
56)	1,4-Dichlorobenzene	21.34	146	2982477	20.61	ug/L		97
58)	1,2-Dichlorobenzene	22.03	146	2339396	20.60	ug/L		98
59)	n-Butylbenzene	21.98	91	6623471	19.52	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.46	75	159994	21.21	ug/L		92
61)	1,2,4-Trichlorobenzene	25.00	180	1854411	20.64	ug/L		100
62)	Hexachlorobutadiene	25.32	225	1835665	22.46	ug/L	m	76
63)	Naphthalene	25.46	128	1576965	17.40	ug/L		100
64)	1,2,3-Trichlorobenzene	25.94	180	1373343	20.75	ug/L		98
65)	Methyl-tert butyl ether	8.16	73	1468273	19.38	ug/L	m	1
66)	tert-Butyl Alcohol	7.92	59	51140	45.54	ug/L		100

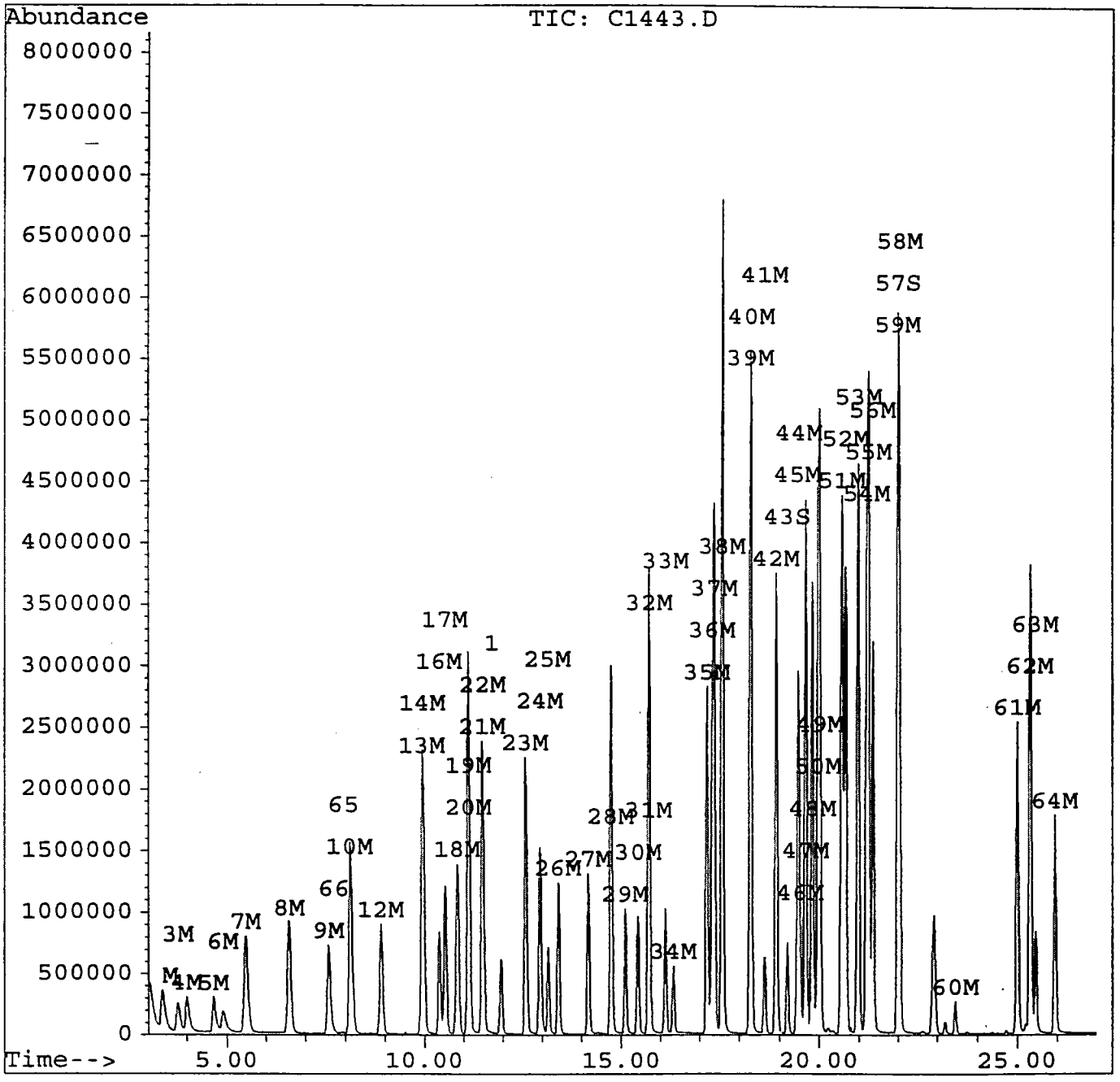
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1443.d
Acq On : 4 Mar 96 6:05 pm
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:25 1996

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1444.d
Acq On : 4 Mar 96 6:40 pm
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:29 1996

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.96	96	1240800	5.00	ug/L		-0.04
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.20	95	616143	5.12	ug/L		102.44%
57) 1,2-Dichlorobenzene-d4	21.99	152	380365	5.30	ug/L		106.04%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.38	85	2612335	30.24	ug/L		96
3) Chloromethane	3.78	50	1919347	37.19	ug/L		99
4) Vinyl chloride	4.00	62	2209605	34.76	ug/L		100
5) Bromomethane	4.65	94	1244386	28.24	ug/L		98
6) Chloroethane	4.85	64	1149113	31.41	ug/L		100
7) Trichlorofluoromethane	5.45	101	4629953	34.93	ug/L		98
8) 1,1-Dichloroethene	6.57	96	2272843	35.49	ug/L		96
9) Methylene chloride	7.58	84	1920002	34.31	ug/L		96
10) trans-1,2-Dichloroethene	8.11	96	2592953	36.42	ug/L		99
12) 1,1-Dichloroethane	8.90	63	4906258	36.25	ug/L		99
13) 2,2-Dichloropropane	9.95	77	3948711	32.69	ug/L	m	0
14) cis-1,2-Dichloroethene	9.96	96	2510429	36.78	ug/L	m	0
16) Bromochloromethane	10.38	128	1073336	39.51	ug/L		96
17) Chloroform	10.54	83	4522614	36.49	ug/L		99
18) 1,1,1-Trichloroethane	10.85	97	4655331	36.68	ug/L	m	0
19) Carbon tetrachloride	11.14	117	4394949	37.31	ug/L		99
20) 1,1-Dichloropropene	11.14	75	4100256	35.72	ug/L		98
21) Benzene	11.49	78	8113455	36.78	ug/L		100
22) 1,2-Dichloroethane	11.51	62	1932405	38.81	ug/L		98
23) Trichloroethene	12.59	95	3434237	36.61	ug/L		99
24) 1,2-Dichloropropane	12.95	63	2759139	38.30	ug/L	m	86
25) Dibromomethane	13.16	93	1169062	37.44	ug/L		99
26) Bromodichloromethane	13.43	83	3610789	36.57	ug/L		95
27) cis-1,3-Dichloropropene	14.18	75	3245178	36.85	ug/L		97
28) Toluene	14.76	92	5873033	36.58	ug/L		99
29) trans-1,3-Dichloropropene	15.11	75	2305036	38.02	ug/L	m	52
30) 1,1,2-Trichloroethane	15.43	83	1159414	39.04	ug/L		98
31) Tetrachloroethene	15.70	166	4198563	38.27	ug/L		100
32) 1,3-Dichloropropane	15.72	76	2234599	38.61	ug/L		98
33) Dibromochloromethane	16.12	129	2468641	41.33	ug/L		97
34) 1,2-Dibromoethane	16.32	107	1700401	39.43	ug/L		99
35) Chlorobenzene	17.18	112	6724505	38.76	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.31	131	2908753	40.24	ug/L		98
37) Ethylbenzene	17.36	91	12067377	37.80	ug/L		99
38) Xylene (para & meta)	17.57	106	9125530	76.66	ug/L		100
39) Xylene (Ortho)	18.27	106	4192582	38.80	ug/L		98
40) Styrene	18.29	104	6529960	39.06	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1444.d
Acq On : 4 Mar 96 6:40 pm
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:29 1996

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.63	173	1353831	43.44	ug/L		99
42)	Isopropylbenzene	18.92	105	11957270	39.03	ug/L	m	0
44)	Bromobenzene	19.49	156	2991744	40.25	ug/L	m	0
45)	1,1,2,2-Tetrachloroethane	19.45	83	1535696	39.83	ug/L		100
46)	1,2,3-Trichloropropane	19.53	75	1503298	39.11	ug/L		100
47)	n-Propylbenzene	19.66	91	16053260	37.52	ug/L		98
48)	2-Chlorotoluene	19.83	91	8915663	36.85	ug/L		100
49)	4-Chlorotoluene	20.03	91	10371511	37.51	ug/L		94
50)	1,3,5-Trimethylbenzene	19.98	105	10384039	39.46	ug/L		100
51)	tert-Butylbenzene	20.57	119	10517290	34.62	ug/L	m	99
52)	1,2,4-Trimethylbenzene	20.66	105	10041435	38.84	ug/L		92
53)	sec-Butylbenzene	20.97	105	15854332	38.19	ug/L		99
54)	1,3-Dichlorobenzene	21.19	146	5858999	39.30	ug/L		98
55)	4-Isopropyltoluene	21.24	119	12911885	38.62	ug/L		100
56)	1,4-Dichlorobenzene	21.36	146	5658801	38.92	ug/L		96
58)	1,2-Dichlorobenzene	22.04	146	4496393	39.41	ug/L		98
59)	n-Butylbenzene	21.98	91	12681338	37.19	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.45	75	321096	42.36	ug/L		96
61)	1,2,4-Trichlorobenzene	25.00	180	3641856	40.33	ug/L		99
62)	Hexachlorobutadiene	25.32	225	3537618	43.07	ug/L	m	76
63)	Naphthalene	25.46	128	3110718	34.16	ug/L	m	0
64)	1,2,3-Trichlorobenzene	25.94	180	2701032	40.62	ug/L	m	0
65)	Methyl-tert butyl ether	8.16	73	2917065	38.31	ug/L	m	0
66)	tert-Butyl Alcohol	7.95	59	99772	88.41	ug/L		100

(#) = qualifier out of range (m) = manual integration

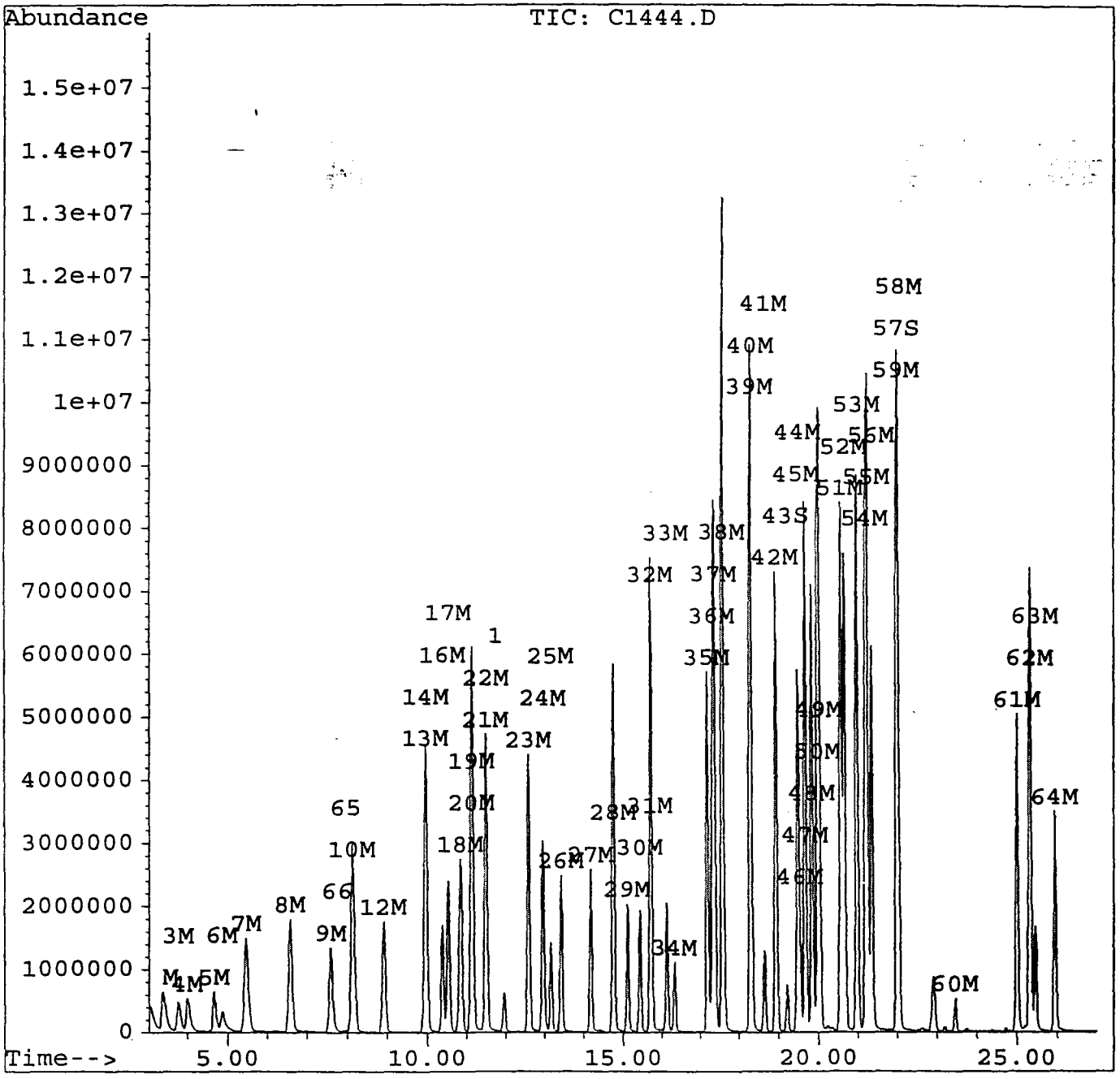
Quantitation Report

090

Data File : d:\hpchem\1\data\c1444.d
Acq On : 4 Mar 96 6:40 pm
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Mar 5 11:29 1996

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C1338.D BFB Injection Date: 2/22/96

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1600

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.1
75	30.0 - 66.0% of mass 95	46.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.5 (0.8)1
174	50.0 - 120.0% of mass 95	63.9
175	4.0 - 9.0% of mass 174	4.2 (6.6)1
176	93.0 - 101.0% of mass 174	62.3 (97.4)1
177	5.0 - 9.0% of mass 176	4.7 (7.5)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

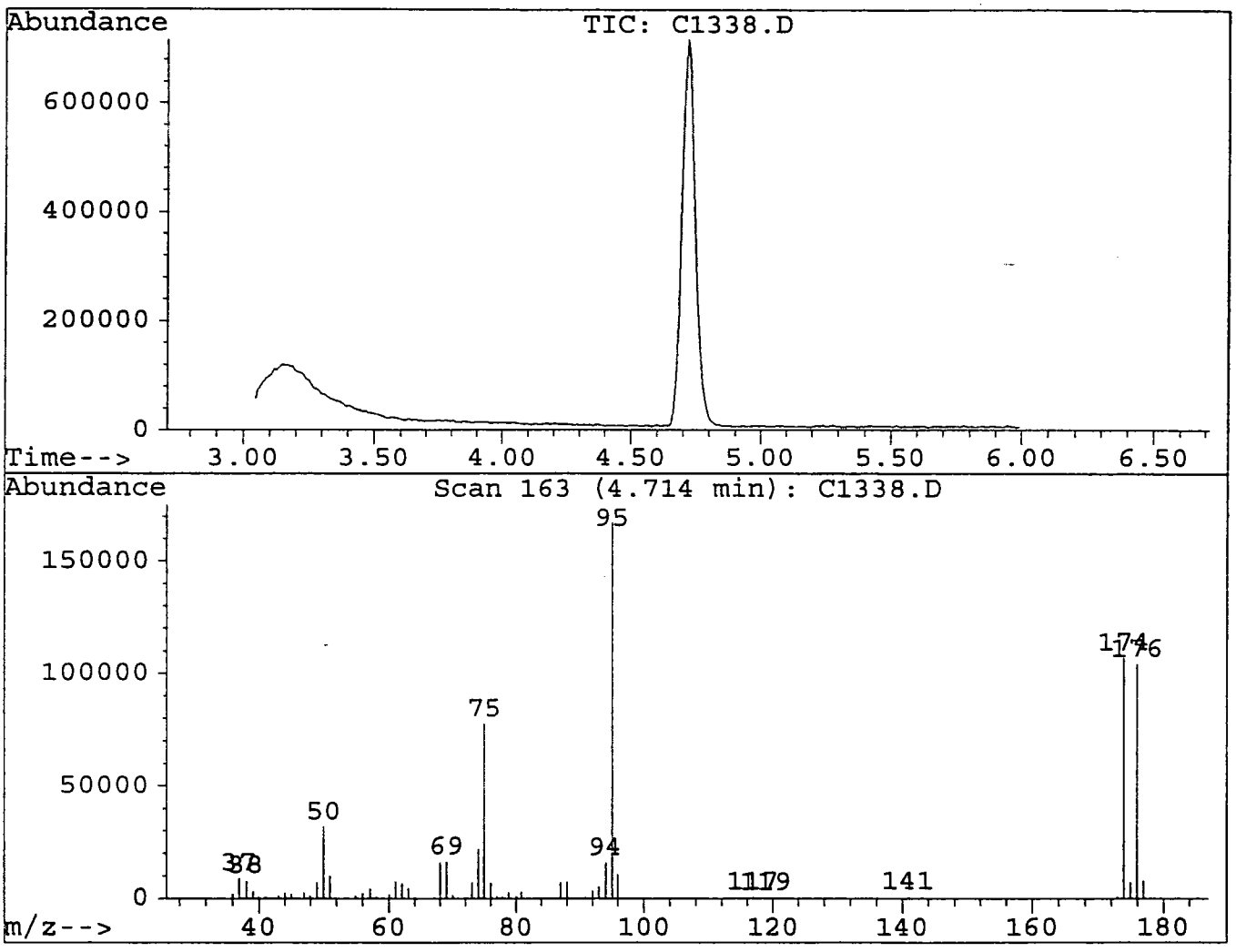
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C1339.D	2/22/96	1613
02	VBLK01	M. BLANK	C1340.D	2/22/96	1649
03	9607649V	9607649V	C1342.D	2/22/96	1800
04	9607650V	9607650V	C1343.D	2/22/96	1835
05	9607654V	9607654V	C1344.D	2/22/96	1911
06	9607655V	9607655V	C1345.D	2/22/96	1946
07	9607656V	9607656V	C1346.D	2/22/96	2021
08	9608367V	9608367V	C1347.D	2/22/96	2056
09	9608366V	9608366V	C1348.D	2/22/96	2131
10	9608364V	9608364V	C1349.D	2/22/96	2206
11	9608365V	9608365V	C1350.D	2/22/96	2241
12	9608371V	9608371V	C1351.D	2/22/96	2316
13	9608372V	9608372V	C1352.D	2/22/96	2351
14	10 QCS	10 QCS	C1353.D	2/23/96	0026
15	1 STND	1 STND	C1354.D	2/23/96	0101
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C1338.D
Acq On : 22 Feb 96 4:00 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 163

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	31832	PASS
75	95	30	80	46.3	77400	PASS
95	95	100	100	100.0	167040	PASS
96	95	5	9	6.4	10700	PASS
173	174	0	2	0.8	809	PASS
174	95	50	100	63.9	106792	PASS
175	174	5	9	6.6	7064	PASS
176	174	95	101	97.4	104016	PASS
177	176	5	9	7.5	7768	PASS

C1338.D VOA524.M Thu Feb 22 16:16:01 1996 VOA

Scan 163 (4.714 min): C1338.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2066	49.05	7153	64.00	652	77.90	820
37.00	8906	50.05	31832	67.15	629	78.90	2712
38.10	7968	51.05	9812	68.05	15931	80.00	963
39.10	3235	54.95	1276	69.05	16338	80.90	2934
39.90	742	56.00	2456	70.05	1590	81.90	656
41.00	839	57.10	4432	71.95	700	87.00	7116
43.00	1449	58.10	790	73.05	7045	87.95	7315
44.00	2629	60.00	1885	74.05	21944	90.85	529
45.00	1849	61.00	7594	74.95	77400	91.95	3495
47.05	2556	62.00	6878	76.05	7184	92.95	5219
47.95	1365	63.00	4835	77.00	1030	94.05	15833

Scan 163 (4.714 min): C1338.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.05	167040						
95.95	10700						
116.85	646						
118.90	562						
140.90	907						
143.00	891						
172.95	809						
173.95	106792						
174.95	7064						
175.95	104016						
176.95	7768						

VOLATILE CONTINUING CALIBRATION CHECK

094

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 2/22/96 Time: 1613

Lab File ID: C1339.D Init. Calib. Date(s): 2/1/96 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.348	0.265		23.9	30.0
Chloromethane	0.208	0.188		9.6	30.0
Vinyl chloride	0.256	0.240		6.3	30.0
Bromomethane	0.178	0.162		9.0	30.0
Chloroethane	0.147	0.152		-3.4	30.0
Trichlorofluoromethane	0.534	0.500		6.4	30.0
1,1-Dichloroethene	0.258	0.252		2.3	30.0
Methylene chloride	0.225	0.276		-22.7	30.0
trans-1,2-Dichloroethene	0.287	0.288		-0.3	30.0
1,1-Dichloroethane	0.545	0.539		1.1	30.0
2,2-Dichloropropane	0.487	0.476		2.3	30.0
cis-1,2-Dichloroethene	0.275	0.276		-0.4	30.0
Bromochloromethane	0.109	0.111		-1.8	30.0
Chloroform	0.500	0.501		-0.2	30.0
1,1,1-Trichloroethane	0.511	0.492		3.7	30.0
Carbon tetrachloride	0.475	0.461		2.9	30.0
1,1-Dichloropropene	0.463	0.462		0.2	30.0
Benzene	0.889	0.885		0.4	30.0
1,2-Dichloroethane	0.201	0.198		1.5	30.0
Trichloroethene	0.378	0.372		1.6	30.0
1,2-Dichloropropane	0.290	0.296		-2.1	30.0
Dibromomethane	0.126	0.130		-3.2	30.0
Bromodichloromethane	0.398	0.407		-2.3	30.0
cis-1,3-Dichloropropene	0.355	0.365		-2.8	30.0
Toluene	0.647	0.633		2.2	30.0
trans-1,3-Dichloropropene	0.244	0.251		-2.9	30.0
1,1,2-Trichloroethane	0.120	0.125		-4.2	30.0
Tetrachloroethene	0.442	0.425		3.8	30.0
1,3-Dichloropropane	0.233	0.245		-5.2	30.0
Dibromochloromethane	0.241	0.250		-3.7	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.699	0.692		1.0	30.0
1,1,1,2-Tetrachloroethane	0.291	0.296		-1.7	30.0
Ethylbenzene	1.287	1.276		0.9	30.0
Xylene (para & meta)	0.480	0.480		0.0	30.0
Xylene (Ortho)	0.435	0.438		-0.7	30.0

VOLATILE CONTINUING CALIBRATION CHECK

095

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 2/22/96 Time: 1613

Lab File ID: C1339.D Init. Calib. Date(s): 2/1/96 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.674	0.681		-1.0	30.0
Bromoform	0.126	0.132		-4.8	30.0
Isopropylbenzene	1.234	1.228		0.5	30.0
Bromobenzene	0.300	0.298		0.7	30.0
1,1,2,2-Tetrachloroethane	0.155	0.165		-6.5	30.0
1,2,3-Trichloropropane	0.155	0.161		-3.9	30.0
n-Propylbenzene	1.724	1.703		1.2	30.0
2-Chlorotoluene	0.975	0.955		2.1	30.0
4-Chlorotoluene	1.114	1.098		1.4	30.0
1,3,5-Trimethylbenzene	1.060	1.053		0.7	30.0
tert-Butylbenzene	1.224	1.201		1.9	30.0
1,2,4-Trimethylbenzene	1.042	1.037		0.5	30.0
sec-Butylbenzene	1.673	1.652		1.3	30.0
1,3-Dichlorobenzene	0.601	0.604		-0.5	30.0
4-Isopropyltoluene	1.347	1.332		1.1	30.0
1,4-Dichlorobenzene	0.586	0.593		-1.2	30.0
1,2-Dichlorobenzene	0.460	0.467		-1.5	30.0
n-Butylbenzene	1.374	1.360		1.0	30.0
1,2-Dibromo-3-chloropropane	0.031	0.033		-6.5	30.0
1,2,4-Trichlorobenzene	0.364	0.364		0.0	30.0
Hexachlorobutadiene	0.331	0.299		9.7	30.0
Naphthalene	0.367	0.375		-2.2	30.0
1,2,3-Trichlorobenzene	0.268	0.272		-1.5	30.0
4-Bromofluorobenzene	0.485	0.494		-1.9	30.0
1,2-Dichlorobenzene-d4	0.289	0.294		-1.7	30.0

Evaluate Continuing Calibration Report

096

Data File : D:\HPCHEM\1\DATA\C1339.D
Acq On : 22 Feb 96 4:13 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	104	-0.01
2	M	Dichlorodifluoromethane	0.348	0.265	24.0	79	-0.02
3	M	Chloromethane	0.208	0.188	9.8	95	-0.01
4	M	Vinyl chloride	0.256	0.240	6.1	95	-0.02
5	M	Bromomethane	0.178	0.162	8.9	94	-0.02
6	M	Chloroethane	0.147	0.152	-3.1	99	-0.02
7	M	Trichlorofluoromethane	0.534	0.500	6.4	96	-0.01
8	M	1,1-Dichloroethene	0.258	0.252	2.4	99	-0.02
9	M	Methylene chloride	0.225	0.276	-22.2	112	-0.02
10	M	trans-1,2-Dichloroethene	0.287	0.288	-0.2	103	-0.01
1		Hexane	0.000	0.000#	0.0	0#	-0.02
2	M	1,1-Dichloroethane	0.545	0.539	1.1	102	-0.01
13	M	2,2-Dichloropropane	0.487	0.476	2.2	100	-0.02
14	M	cis-1,2-Dichloroethene	0.275	0.276	-0.2	104	-0.01
5		2-Butanone	0.000	0.000#	0.0	0#	0.18
16	M	Bromochloromethane	0.109	0.111	-1.0	104	-0.01
17	M	Chloroform	0.500	0.501	-0.4	103	-0.01
8	M	1,1,1-Trichloroethane	0.511	0.492	3.8	100	-0.02
9	M	Carbon tetrachloride	0.475	0.461	2.8	99	-0.01
20	M	1,1-Dichloropropene	0.463	0.462	0.1	102	-0.01
1	M	Benzene	0.889	0.885	0.4	103	-0.01
2	M	1,2-Dichloroethane	0.201	0.198	1.5	101	-0.02
23	M	Trichloroethene	0.378	0.372	1.5	103	-0.02
24	M	1,2-Dichloropropane	0.290	0.296	-2.1	104	-0.01
5	M	Dibromomethane	0.126	0.130	-3.5	107	-0.01
26	M	Bromodichloromethane	0.398	0.407	-2.2	105	-0.01
27	M	cis-1,3-Dichloropropene	0.355	0.365	-2.8	105	-0.01
8	M	Toluene	0.647	0.633	2.1	104	-0.02
9	M	trans-1,3-Dichloropropene	0.244	0.251	-2.6	105	-0.01
30	M	1,1,2-Trichloroethane	0.120	0.125	-4.8	108	-0.01
1	M	Tetrachloroethene	0.442	0.425	3.8	100	-0.02
2	M	1,3-Dichloropropane	0.233	0.245	-4.9	108	-0.01
33	M	Dibromochloromethane	0.241	0.250	-4.0	108	-0.01
34	M	1,2-Dibromoethane	0.174	0.181	-3.9	107	-0.02
5	M	Chlorobenzene	0.699	0.692	1.0	103	-0.02
6	M	1,1,1,2-Tetrachloroethane	0.291	0.296	-1.7	104	-0.02
37	M	Ethylbenzene	1.287	1.276	0.8	102	-0.02
8	M	Xylene (para & meta)	0.480	0.480	-0.0	102	-0.02
9	M	Xylene (Ortho)	0.435	0.438	-0.6	103	-0.02
4	M	Styrene	0.674	0.681	-1.1	103	-0.02
1	M	Bromoform	0.126	0.132	-4.9	107	-0.01
2	M	Isopropylbenzene	1.234	1.228	0.6	102	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C1339.D Vial: 2
Acq On : 22 Feb 96 4:13 pm Operator: SRK
Sample : 10 PPB CHK STANDARD Inst : 5972 - In
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
3	S	4-Bromofluorobenzene	0.485	0.494	-2.0	105	-0.01
4	M	Bromobenzene	0.300	0.298	0.5	102	-0.02
45	M	1,1,2,2-Tetrachloroethane	0.155	0.165	-6.0	109	-0.02
46	M	1,2,3-Trichloropropane	0.155	0.161	-4.1	105	-0.01
7	M	n-Propylbenzene	1.724	1.703	1.2	101	-0.01
48	M	2-Chlorotoluene	0.975	0.955	2.0	102	-0.02
49	M	4-Chlorotoluene	1.114	1.098	1.5	101	-0.01
0	M	1,3,5-Trimethylbenzene	1.060	1.053	0.7	101	-0.02
1	M	tert-Butylbenzene	1.224	1.201	1.9	101	-0.01
52	M	1,2,4-Trimethylbenzene	1.042	1.037	0.4	102	-0.02
3	M	sec-Butylbenzene	1.673	1.652	1.2	101	-0.01
4	M	1,3-Dichlorobenzene	0.601	0.604	-0.6	103	-0.01
55	M	4-Isopropyltoluene	1.347	1.332	1.2	100	-0.01
56	M	1,4-Dichlorobenzene	0.586	0.593	-1.2	103	-0.02
7	S	1,2-Dichlorobenzene-d4	0.289	0.294	-1.6	103	-0.02
8	M	1,2-Dichlorobenzene	0.460	0.467	-1.5	103	-0.01
59	M	n-Butylbenzene	1.374	1.360	1.0	100	-0.02
0	M	1,2-Dibromo-3-chloropropane	0.031	0.033	-6.6	107	-0.02
1	M	1,2,4-Trichlorobenzene	0.364	0.364	-0.0	102	-0.02
62	M	Hexachlorobutadiene	0.331	0.299	9.5	92	-0.02
3	M	Naphthalene	0.367	0.375	-2.1	107	-0.01
4	M	1,2,3-Trichlorobenzene	0.268	0.272	-1.3	103	-0.02
65		Methyl-tert butyl ether	0.307	0.308	-0.3	107	-0.01
66		tert-Butyl Alcohol	0.005	0.005	-13.5	121	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : d:\hpchem\1\data\c1339.d
Acq On : 22 Feb 96 4:13 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Feb 23 11:01 1996

Vial: 2 098
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.15	96	1384774	5.00	ug/L		-0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.37	95	684590	5.10	ug/L		101.98%
57) 1,2-Dichlorobenzene-d4	22.15	152	406690	5.08	ug/L		101.60%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.49	85	733038	7.60	ug/L	m	97
3) Chloromethane	3.90	50	519653	9.02	ug/L		98
4) Vinyl chloride	4.13	62	665983	9.39	ug/L		96
5) Bromomethane	4.82	94	448327	9.11	ug/L		95
6) Chloroethane	5.06	64	421136	10.31	ug/L		99
7) Trichlorofluoromethane	5.67	101	1384704	9.36	ug/L		100
8) 1,1-Dichloroethene	6.78	96	697489	9.76	ug/L		98
9) Methylene chloride	7.77	84	763067	12.22	ug/L	m	100
10) trans-1,2-Dichloroethene	8.31	96	796542	10.02	ug/L		98
12) 1,1-Dichloroethane	9.11	63	1493651	9.89	ug/L		97
13) 2,2-Dichloropropane	10.15	77	1318445	9.78	ug/L		99
14) cis-1,2-Dichloroethene	10.16	96	763188	10.02	ug/L		99
16) Bromochloromethane	10.58	128	306259	10.10	ug/L		95
17) Chloroform	10.73	83	1388345	10.04	ug/L		97
18) 1,1,1-Trichloroethane	11.03	97	1362807	9.62	ug/L		98
19) Carbon tetrachloride	11.33	117	1277530	9.72	ug/L		98
20) 1,1-Dichloropropene	11.32	75	1279940	9.99	ug/L		100
21) Benzene	11.67	78	2451693	9.96	ug/L		100
22) 1,2-Dichloroethane	11.69	62	547137	9.85	ug/L		99
23) Trichloroethene	12.77	95	1031432	9.85	ug/L		98
24) 1,2-Dichloropropane	13.14	63	820967	10.21	ug/L		97
25) Dibromomethane	13.34	93	360656	10.35	ug/L		95
26) Bromodichloromethane	13.60	83	1126116	10.22	ug/L		99
27) cis-1,3-Dichloropropene	14.35	75	1010741	10.28	ug/L		100
28) Toluene	14.92	92	1753645	9.79	ug/L		100
29) trans-1,3-Dichloropropene	15.28	75	694073	10.26	ug/L		98
30) 1,1,2-Trichloroethane	15.60	83	347358	10.48	ug/L		99
31) Tetrachloroethene	15.87	166	1177958	9.62	ug/L		97
32) 1,3-Dichloropropane	15.89	76	677513	10.49	ug/L		100
33) Dibromochloromethane	16.29	129	693508	10.40	ug/L		100
34) 1,2-Dibromoethane	16.49	107	500068	10.39	ug/L		97
35) Chlorobenzene	17.34	112	1917576	9.90	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.48	131	820262	10.17	ug/L		97
37) Ethylbenzene	17.52	91	3534888	9.92	ug/L		100
38) Xylene (para & meta)	17.73	106	2657958	20.01	ug/L		99
39) Xylene (Ortho)	18.43	106	1212665	10.06	ug/L		97
40) Styrene	18.45	104	1885627	10.11	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1339.d
Acq On : 22 Feb 96 4:13 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Feb 23 11:01 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.80	173	364974	10.49	ug/L		97
42)	Isopropylbenzene	19.08	105	3399746	9.94	ug/L	m	0
44)	Bromobenzene	19.64	156	825867	9.95	ug/L		95
45)	1,1,2,2-Tetrachloroethane	19.60	83	456236	10.60	ug/L		96
46)	1,2,3-Trichloropropane	19.69	75	446716	10.41	ug/L	#	68
47)	n-Propylbenzene	19.82	91	4717757	9.88	ug/L		100
48)	2-Chlorotoluene	19.98	91	2645809	9.80	ug/L		100
49)	4-Chlorotoluene	20.18	91	3039847	9.85	ug/L		100
50)	1,3,5-Trimethylbenzene	20.13	105	2916983	9.93	ug/L		100
51)	tert-Butylbenzene	20.73	119	3326308	9.81	ug/L		99
52)	1,2,4-Trimethylbenzene	20.81	105	2872859	9.96	ug/L		100
53)	sec-Butylbenzene	21.13	105	4574840	9.88	ug/L		100
54)	1,3-Dichlorobenzene	21.35	146	1673160	10.06	ug/L		99
55)	4-Isopropyltoluene	21.39	119	3687760	9.88	ug/L		99
56)	1,4-Dichlorobenzene	21.50	146	1642791	10.12	ug/L		100
58)	1,2-Dichlorobenzene	22.19	146	1292277	10.15	ug/L	m	0
59)	n-Butylbenzene	22.13	91	3767589	9.90	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.60	75	90195	10.66	ug/L		97
61)	1,2,4-Trichlorobenzene	25.15	180	1008024	10.00	ug/L		98
62)	Hexachlorobutadiene	25.47	225	829157	9.05	ug/L		98
63)	Naphthalene	25.62	128	1037399	10.21	ug/L		100
64)	1,2,3-Trichlorobenzene	26.11	180	752055	10.13	ug/L		99
65)	Methyl-tert butyl ether	8.34	73	852328	10.03	ug/L		98
66)	tert-Butyl Alcohol	8.10	59	28598	22.71	ug/L		100

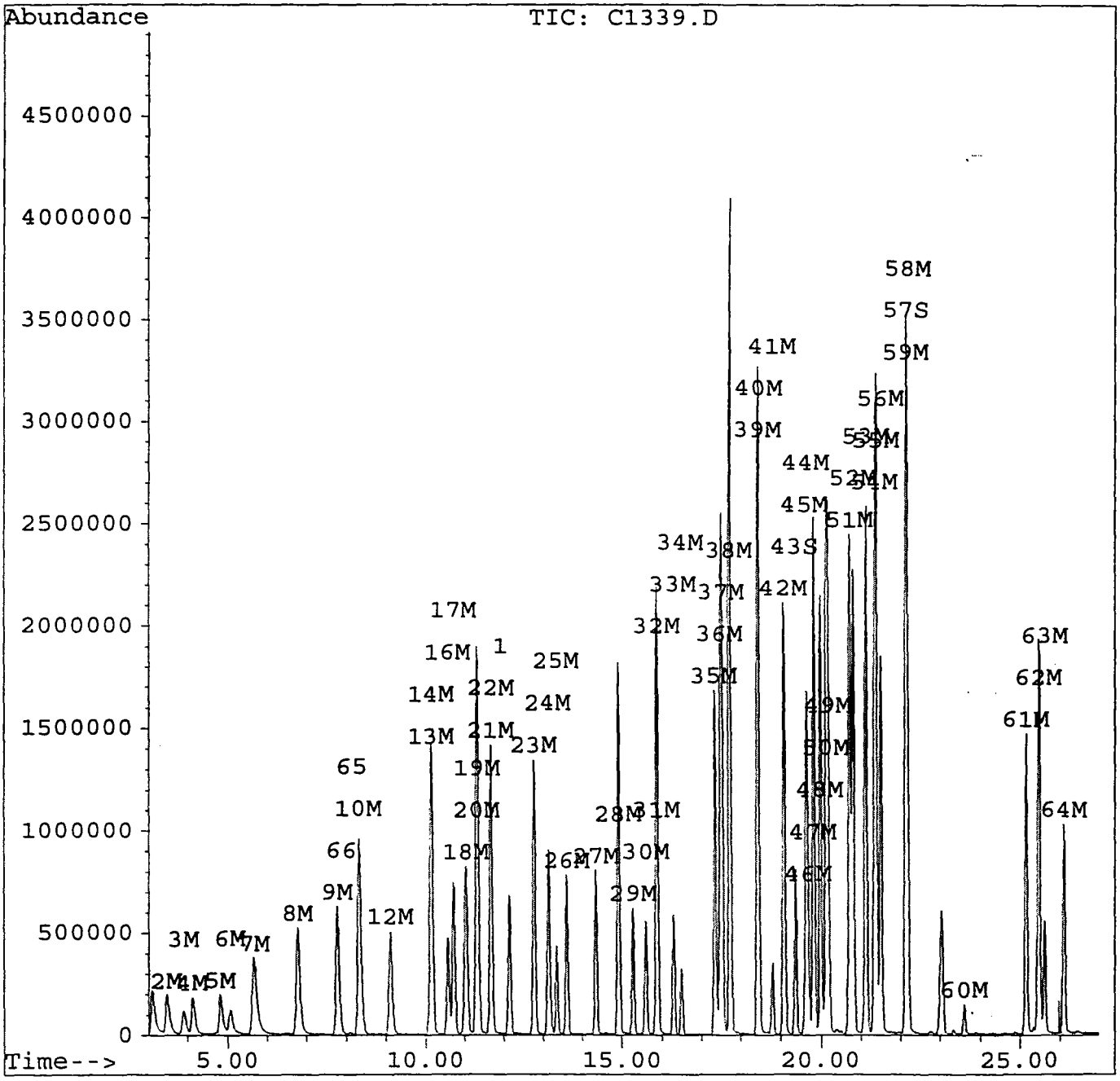
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1339.d
Acq On : 22 Feb 96 4:13 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Feb 23 11:01 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1353.d
Acq On : 23 Feb 96 12:26 am
Sample : 10 QCS
Misc : 25 ML
Quant Time: Feb 23 11:16 1996

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.14	96	1313811	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	651364	5.11	ug/L	102.28%
57) 1,2-Dichlorobenzene-d4	22.16	152	387340	5.10	ug/L	101.99%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.49	85	840691	9.19	ug/L	100
3) Chloromethane	3.91	50	546351	10.00	ug/L	97
4) Vinyl chloride	4.13	62	642998	9.55	ug/L	98
5) Bromomethane	4.81	94	408055	8.74	ug/L	96
6) Chloroethane	5.07	64	400129	10.33	ug/L	100
7) Trichlorofluoromethane	5.67	101	1300127	9.26	ug/L	100
8) 1,1-Dichloroethene	6.78	96	702277	10.36	ug/L	96
9) Methylene chloride	7.78	84	686200	11.58	ug/L	97
10) trans-1,2-Dichloroethene	8.32	96	761102	10.10	ug/L	99
12) 1,1-Dichloroethane	9.11	63	1475863	10.30	ug/L	99
13) 2,2-Dichloropropane	10.16	77	1011357	7.91	ug/L	96
14) cis-1,2-Dichloroethene	10.17	96	733175	10.15	ug/L	100
16) Bromochloromethane	10.59	128	298715	10.38	ug/L	94
17) Chloroform	10.73	83	1335891	10.18	ug/L	98
18) 1,1,1-Trichloroethane	11.04	97	1336587	9.95	ug/L	98
19) Carbon tetrachloride	11.34	117	1230583	9.87	ug/L	99
20) 1,1-Dichloropropene	11.33	75	1252531	10.31	ug/L	99
21) Benzene	11.68	78	2378626	10.18	ug/L	99
22) 1,2-Dichloroethane	11.70	62	534397	10.14	ug/L	100
23) Trichloroethene	12.77	95	986134	9.93	ug/L	99
24) 1,2-Dichloropropane	13.15	63	806774	10.58	ug/L	98
25) Dibromomethane	13.34	93	340877	10.31	ug/L	97
26) Bromodichloromethane	13.61	83	1078855	10.32	ug/L	99
27) cis-1,3-Dichloropropene	14.35	75	898299	9.63	ug/L	99
28) Toluene	14.93	92	1684419	9.91	ug/L	100
29) trans-1,3-Dichloropropene	15.29	75	606934	9.45	ug/L	97
30) 1,1,2-Trichloroethane	15.61	83	330776	10.52	ug/L	97
31) Tetrachloroethene	15.88	166	1153490	9.93	ug/L	98
32) 1,3-Dichloropropane	15.90	76	628299	10.25	ug/L	100
33) Dibromochloromethane	16.30	129	644784	10.19	ug/L	99
34) 1,2-Dibromoethane	16.51	107	473262	10.36	ug/L	96
35) Chlorobenzene	17.35	112	1850169	10.07	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.49	131	797750	10.42	ug/L	99
37) Ethylbenzene	17.53	91	3415693	10.10	ug/L	98
38) Xylene (para & meta)	17.73	106	2572416	20.41	ug/L	100
39) Xylene (Ortho)	18.43	106	1167071	10.20	ug/L	98
40) Styrene	18.47	104	1792718	10.13	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1353.d
Acq On : 23 Feb 96 12:26 am
Sample : 10 QCS
Misc : 25 ML
Quant Time: Feb 23 11:16 1996

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.81	173	338815	10.27	ug/L		94
42)	Isopropylbenzene	19.08	105	3635283	11.21	ug/L	m	0
44)	Bromobenzene	19.65	156	797925	10.14	ug/L		95
45)	1,1,2,2-Tetrachloroethane	19.61	83	416190	10.19	ug/L		99
46)	1,2,3-Trichloropropane	19.69	75	415646	10.21	ug/L	#	76
47)	n-Propylbenzene	19.83	91	4532875	10.01	ug/L		100
48)	2-Chlorotoluene	19.99	91	2565938	10.02	ug/L		100
49)	4-Chlorotoluene	20.19	91	2920760	9.98	ug/L		99
50)	1,3,5-Trimethylbenzene	20.14	105	2795092	10.03	ug/L		98
51)	tert-Butylbenzene	20.73	119	3199866	9.95	ug/L		99
52)	1,2,4-Trimethylbenzene	20.83	105	2796681	10.22	ug/L		100
53)	sec-Butylbenzene	21.14	105	4445625	10.11	ug/L		100
54)	1,3-Dichlorobenzene	21.35	146	1606021	10.17	ug/L		99
55)	4-Isopropyltoluene	21.39	119	3661209	10.34	ug/L		100
56)	1,4-Dichlorobenzene	21.52	146	1563246	10.15	ug/L		99
58)	1,2-Dichlorobenzene	22.20	146	1240133	10.27	ug/L		99
59)	n-Butylbenzene	22.15	91	3596982	9.96	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.61	75	83741	10.43	ug/L		96
61)	1,2,4-Trichlorobenzene	25.16	180	945854	9.89	ug/L		98
62)	Hexachlorobutadiene	25.48	225	855821	9.84	ug/L		98
63)	Naphthalene	25.62	128	970261	10.06	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.12	180	728058	10.34	ug/L		97

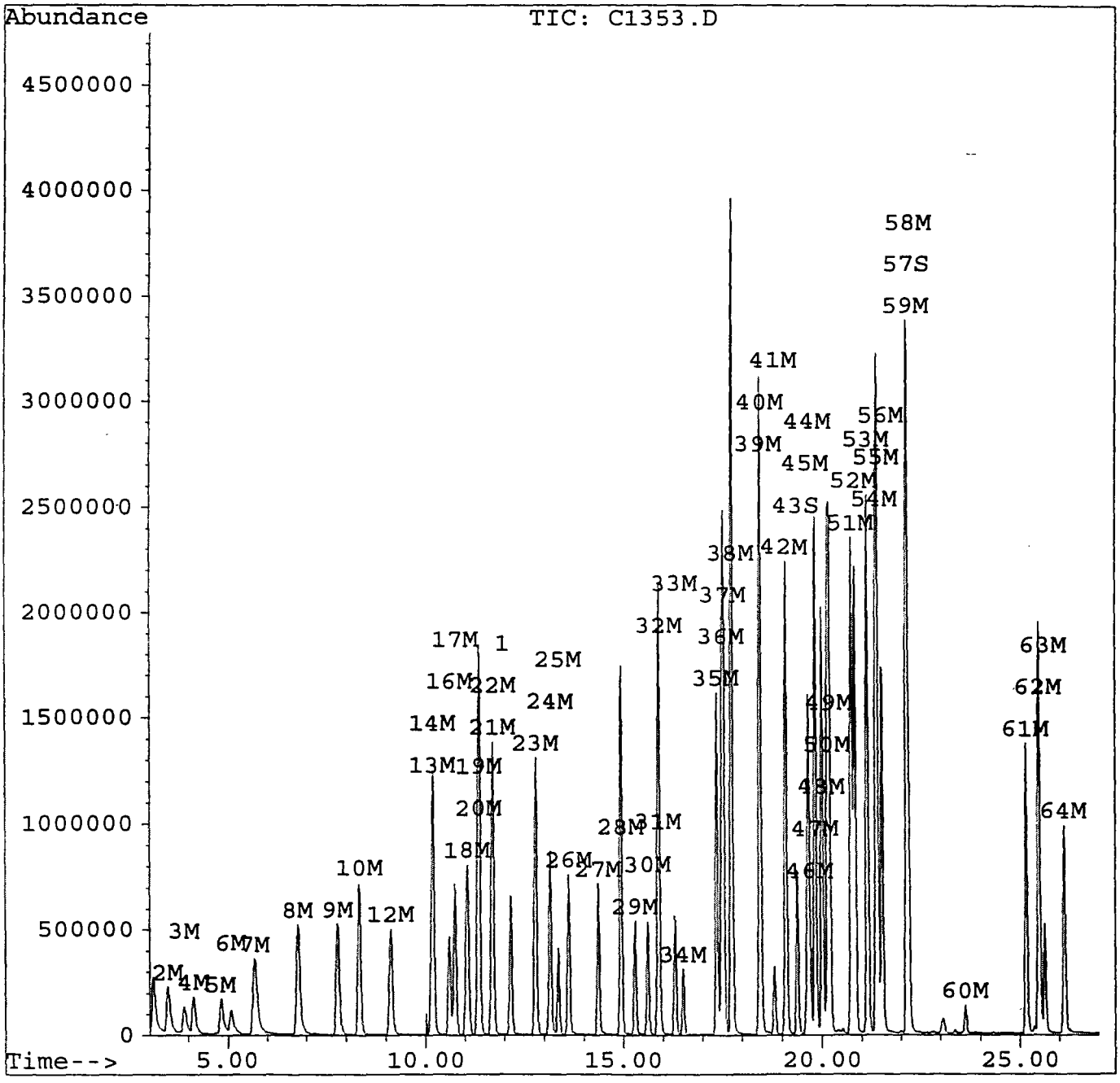
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1353.d
Acq On : 23 Feb 96 12:26 am
Sample : 10 QCS
Misc : 25 ML
Quant Time: Feb 23 11:16 1996

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1354.d
Acq On : 23 Feb 96 1:01 am
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Feb 23 1:29 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.16	96	1304070	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	654713	5.18	ug/L	103.57%
57) 1,2-Dichlorobenzene-d4	22.17	152	388500	5.15	ug/L	103.06%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.49	85	76995	0.85	ug/L	91
3) Chloromethane	3.92	50	50867	0.94	ug/L	84
4) Vinyl chloride	4.12	62	63244	0.95	ug/L	99
5) Bromomethane	4.86	94	48847	1.05	ug/L	93
6) Chloroethane	5.10	64	43198	1.12	ug/L	99
7) Trichlorofluoromethane	5.68	101	137197	0.98	ug/L	97
8) 1,1-Dichloroethene	6.79	96	69434	1.03	ug/L	93
9) Methylene chloride	7.77	84	205959	3.50	ug/L	97
10) trans-1,2-Dichloroethene	8.33	96	79820	1.07	ug/L	95
12) 1,1-Dichloroethane	9.11	63	147452	1.04	ug/L	96
13) 2,2-Dichloropropane	10.16	77	103108	0.81	ug/L	100
14) cis-1,2-Dichloroethene	10.18	96	76930	1.07	ug/L	93
16) Bromochloromethane	10.60	128	29692	1.04	ug/L	93
17) Chloroform	10.73	83	137803	1.06	ug/L	99
18) 1,1,1-Trichloroethane	11.04	97	136923	1.03	ug/L	98
19) Carbon tetrachloride	11.34	117	126460	1.02	ug/L	94
20) 1,1-Dichloropropene	11.33	75	127153	1.05	ug/L	96
21) Benzene	11.68	78	245769	1.06	ug/L	100
22) 1,2-Dichloroethane	11.70	62	54904	1.05	ug/L	97
23) Trichloroethene	12.78	95	102682	1.04	ug/L	91
24) 1,2-Dichloropropane	13.15	63	82829	1.09	ug/L	98
25) Dibromomethane	13.35	93	35699	1.09	ug/L	99
26) Bromodichloromethane	13.61	83	110147	1.06	ug/L	95
27) cis-1,3-Dichloropropene	14.35	75	93219	1.01	ug/L	98
28) Toluene	14.93	92	188184	1.12	ug/L	98
29) trans-1,3-Dichloropropene	15.29	75	63869	1.00	ug/L	98
30) 1,1,2-Trichloroethane	15.61	83	34732	1.11	ug/L	97
31) Tetrachloroethene	15.88	166	121789	1.06	ug/L	98
32) 1,3-Dichloropropane	15.90	76	66492	1.09	ug/L	100
33) Dibromochloromethane	16.31	129	66949	1.07	ug/L	96
34) 1,2-Dibromoethane	16.51	107	48803	1.08	ug/L	94
35) Chlorobenzene	17.35	112	194824	1.07	ug/L	97
36) 1,1,1,2-Tetrachloroethane	17.50	131	82433	1.09	ug/L	99
37) Ethylbenzene	17.54	91	361834	1.08	ug/L	99
38) Xylene (para & meta)	17.73	106	275108	2.20	ug/L	99
39) Xylene (Ortho)	18.43	106	124162	1.09	ug/L	99
40) Styrene	18.45	104	189117	1.08	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1354.d
Acq On : 23 Feb 96 1:01 am
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Feb 23 1:29 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	Bromoform	18.81	173	32533	0.99	ug/L	99
42)	Isopropylbenzene	19.09	105	343450	1.07	ug/L	99
44)	Bromobenzene	19.65	156	85688	1.10	ug/L	95
45)	1,1,2,2-Tetrachloroethane	19.61	83	44238	1.09	ug/L	95
46)	1,2,3-Trichloropropane	19.69	75	44627	1.10	ug/L	94
47)	n-Propylbenzene	19.83	91	475069	1.06	ug/L	99
48)	2-Chlorotoluene	20.00	91	292422	1.15	ug/L	100
49)	4-Chlorotoluene	20.19	91	324255	1.12	ug/L	99
50)	1,3,5-Trimethylbenzene	20.14	105	294956	1.07	ug/L	97
51)	tert-Butylbenzene	20.73	119	335221	1.05	ug/L	95
52)	1,2,4-Trimethylbenzene	20.83	105	297582	1.10	ug/L	99
53)	sec-Butylbenzene	21.14	105	463809	1.06	ug/L	97
54)	1,3-Dichlorobenzene	21.35	146	172569	1.10	ug/L	98
55)	4-Isopropyltoluene	21.39	119	366676	1.04	ug/L	99
56)	1,4-Dichlorobenzene	21.52	146	165760	1.08	ug/L	99
58)	1,2-Dichlorobenzene	22.20	146	135744	1.13	ug/L	97
59)	n-Butylbenzene	22.15	91	375156	1.05	ug/L	100
60)	1,2-Dibromo-3-chloropropan	23.62	75	8736	1.10	ug/L	95
61)	1,2,4-Trichlorobenzene	25.16	180	104350	1.10	ug/L	99
62)	Hexachlorobutadiene	25.49	225	85290	0.99	ug/L	100
63)	Naphthalene	25.63	128	111390	1.16	ug/L	100
64)	1,2,3-Trichlorobenzene	26.12	180	80093	1.15	ug/L	97
65)	Methyl-tert butyl ether	8.36	73	87825	1.10	ug/L	97
66)	tert-Butyl Alcohol	8.10	59	1331	1.12	ug/L	100

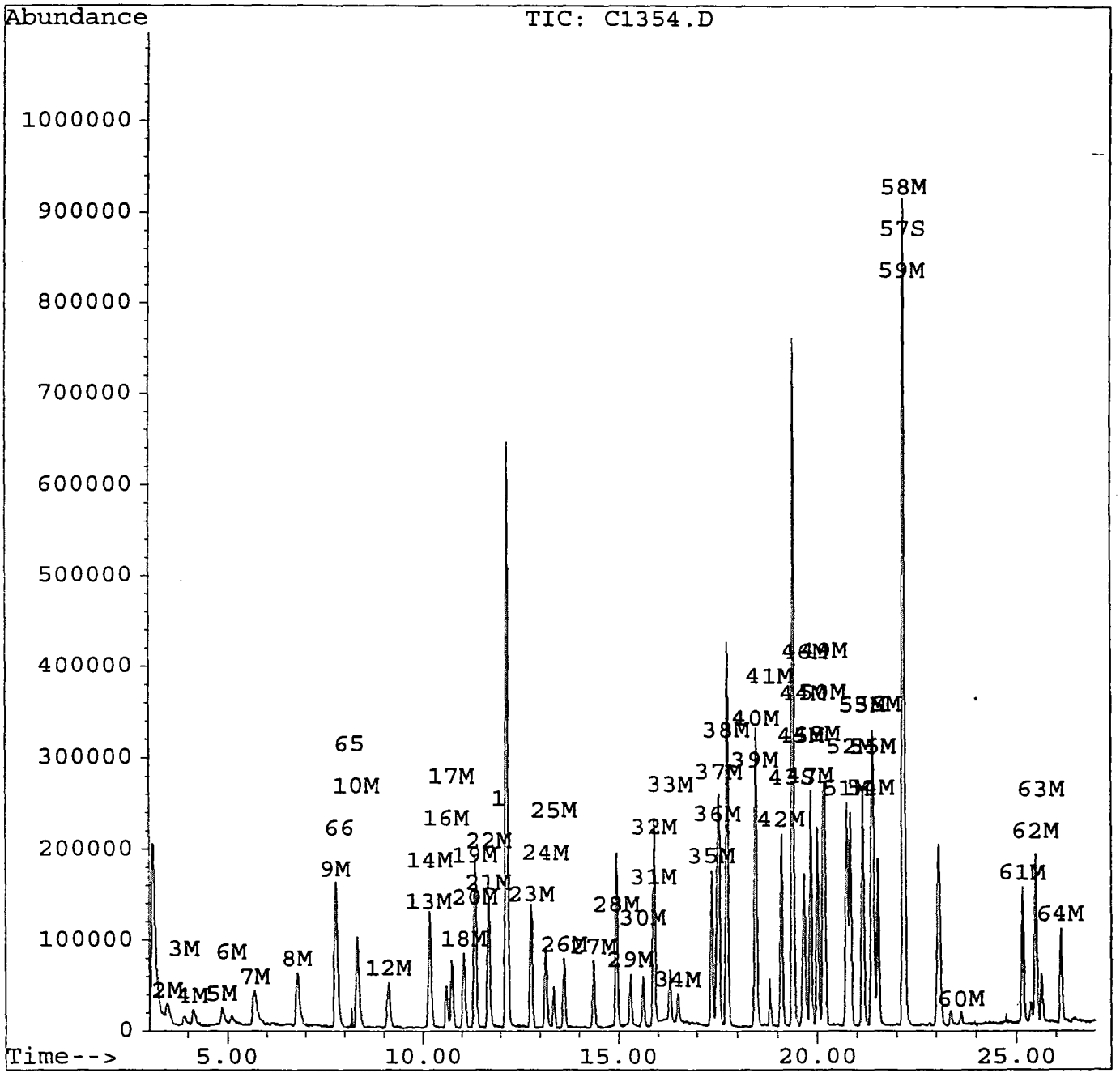
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1354.d
Acq On : 23 Feb 96 1:01 am
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Feb 23 1:29 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C1355.D BFB Injection Date: 2/23/96

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1436

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.4
75	30.0 - 66.0% of mass 95	45.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	66.1
175	4.0 - 9.0% of mass 174	4.7 (7.2)1
176	93.0 - 101.0% of mass 174	64.6 (97.6)1
177	5.0 - 9.0% of mass 176	3.8 (5.9)2

1-Value is % mass 174 2-Value is % mass 176

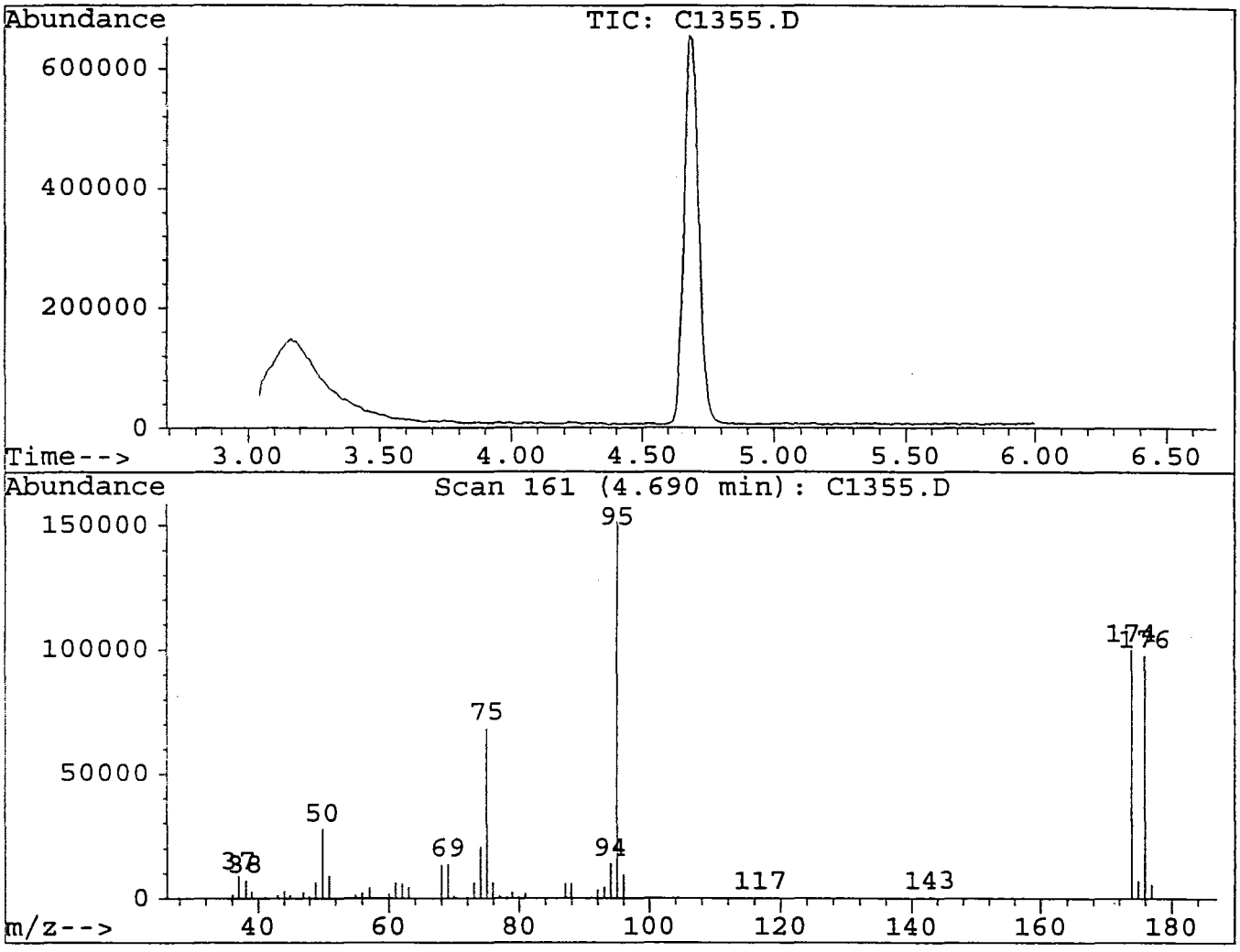
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C1356.D	2/23/96	1450
02	VBLK01	M. BLANK	C1357.D	2/23/96	1525
03	9608369V	9608369V	C1363.D	2/23/96	1857
04	9608376V	9608376V	C1364.D	2/23/96	1932
05	9608368V	9608368V	C1365.D	2/23/96	2007
06	9608370V	9608370V	C1366.D	2/23/96	2042
07	9608369MS	08369MS	C1367.D	2/23/96	2117
08	9608369MSD	08369MSD	C1368.D	2/23/96	2151
09	10 QCS	10 QCS	C1370.D	2/23/96	2301
10	1 STND	1 STND	C1371.D	2/23/96	2336
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C1355.D
Acq On : 23 Feb 96 2:36 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 161

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	27936	PASS
75	95	30	80	45.2	68504	PASS
95	95	100	100	100.0	151488	PASS
96	95	5	9	6.3	9476	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	66.1	100184	PASS
175	174	5	9	7.2	7171	PASS
176	174	95	101	97.6	97816	PASS
177	176	5	9	5.9	5779	PASS

Scan 161 (4.690 min): C1355.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1705	50.05	27936	69.05	13882	80.90	2272
37.00	8703	51.05	9037	69.95	1187	87.00	6090
38.10	7192	55.05	1443	71.95	863	87.95	5904
39.00	2765	56.00	2196	73.05	6445	91.05	549
41.10	714	57.10	4369	74.05	20568	92.05	3274
43.00	1362	58.00	575	75.05	68504	93.05	4559
44.00	3135	60.00	1693	75.95	6297	94.05	13892
44.90	1366	61.00	6407	77.00	833	95.05	151488
47.05	2534	62.00	5848	78.10	675	96.05	9476
47.95	864	63.00	4736	78.90	2312	116.85	545
48.95	6404	68.05	13284	79.90	971	140.90	813

Scan 161 (4.690 min): C1355.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.90	946						
173.95	100184						
174.95	7171						
175.95	97816						
176.95	5779						

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 2/23/96 Time: 1450

Lab File ID: C1356.D Init. Calib. Date(s): 2/1/96 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.348	0.329		5.5	30.0
Chloromethane	0.208	0.207		0.5	30.0
Vinyl chloride	0.256	0.263		-2.7	30.0
Bromomethane	0.178	0.173		2.8	30.0
Chloroethane	0.147	0.164		-11.6	30.0
Trichlorofluoromethane	0.534	0.516		3.4	30.0
1,1-Dichloroethene	0.258	0.261		-1.2	30.0
Methylene chloride	0.225	0.274		-21.8	30.0
trans-1,2-Dichloroethene	0.287	0.292		-1.7	30.0
1,1-Dichloroethane	0.545	0.545		0.0	30.0
2,2-Dichloropropane	0.487	0.492		-1.0	30.0
cis-1,2-Dichloroethene	0.275	0.276		-0.4	30.0
Bromochloromethane	0.109	0.106		2.8	30.0
Chloroform	0.500	0.495		1.0	30.0
1,1,1-Trichloroethane	0.511	0.492		3.7	30.0
Carbon tetrachloride	0.475	0.456		4.0	30.0
1,1-Dichloropropene	0.463	0.471		-1.7	30.0
Benzene	0.889	0.917		-3.1	30.0
1,2-Dichloroethane	0.201	0.197		2.0	30.0
Trichloroethene	0.378	0.370		2.1	30.0
1,2-Dichloropropane	0.290	0.297		-2.4	30.0
Dibromomethane	0.126	0.121		4.0	30.0
Bromodichloromethane	0.398	0.393		1.3	30.0
cis-1,3-Dichloropropene	0.355	0.366		-3.1	30.0
Toluene	0.647	0.657		-1.5	30.0
trans-1,3-Dichloropropene	0.244	0.253		-3.7	30.0
1,1,2-Trichloroethane	0.120	0.123		-2.5	30.0
Tetrachloroethene	0.442	0.424		4.1	30.0
1,3-Dichloropropane	0.233	0.242		-3.9	30.0
Dibromochloromethane	0.241	0.239		0.8	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.699	0.713		-2.0	30.0
1,1,1,2-Tetrachloroethane	0.291	0.294		-1.0	30.0
Ethylbenzene	1.287	1.346		-4.6	30.0
Xylene (para & meta)	0.480	0.508		-5.8	30.0
Xylene (Ortho)	0.435	0.458		-5.3	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 2/23/96 Time: 1450

Lab File ID: C1356.D Init. Calib. Date(s): 2/1/96 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.674	0.718		-6.5	30.0
Bromoform	0.126	0.124		1.6	30.0
Isopropylbenzene	1.234	1.298		-5.2	30.0
Bromobenzene	0.300	0.298		0.7	30.0
1,1,2,2-Tetrachloroethane	0.155	0.162		-4.5	30.0
1,2,3-Trichloropropane	0.155	0.160		-3.2	30.0
n-Propylbenzene	1.724	1.813		-5.2	30.0
2-Chlorotoluene	0.975	0.984		-0.9	30.0
4-Chlorotoluene	1.114	1.167		-4.8	30.0
1,3,5-Trimethylbenzene	1.060	1.116		-5.3	30.0
tert-Butylbenzene	1.224	1.181		3.5	30.0
1,2,4-Trimethylbenzene	1.042	1.103		-5.9	30.0
sec-Butylbenzene	1.673	1.771		-5.9	30.0
1,3-Dichlorobenzene	0.601	0.615		-2.3	30.0
4-Isopropyltoluene	1.347	1.429		-6.1	30.0
1,4-Dichlorobenzene	0.586	0.597		-1.9	30.0
1,2-Dichlorobenzene	0.460	0.474		-3.0	30.0
n-Butylbenzene	1.374	1.457		-6.0	30.0
1,2-Dibromo-3-chloropropane	0.031	0.031		0.0	30.0
1,2,4-Trichlorobenzene	0.364	0.365		-0.3	30.0
Hexachlorobutadiene	0.331	0.307		7.3	30.0
Naphthalene	0.367	0.378		-3.0	30.0
1,2,3-Trichlorobenzene	0.268	0.270		-0.7	30.0
4-Bromofluorobenzene	0.485	0.488		-0.6	30.0
1,2-Dichlorobenzene-d4	0.289	0.290		-0.3	30.0

Evaluate Continuing Calibration Report

112

Data File : D:\HPCHEM\1\DATA\C1356.D
Acq On : 23 Feb 96 2:50 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	95	-0.17
2	M	Dichlorodifluoromethane	0.348	0.329	5.4	90	-0.12
3	M	Chloromethane	0.208	0.207	0.6	96	-0.13
4	M	Vinyl chloride	0.256	0.263	-2.6	95	-0.15
5	M	Bromomethane	0.178	0.173	2.5	92	-0.16
6	M	Chloroethane	0.147	0.164	-11.3	98	-0.17
7	M	Trichlorofluoromethane	0.534	0.516	3.3	91	-0.17
8	M	1,1-Dichloroethene	0.258	0.261	-1.0	94	-0.18
9	M	Methylene chloride	0.225	0.274	-21.6	102	-0.18
10	M	trans-1,2-Dichloroethene	0.287	0.292	-1.6	96	-0.18
11		Hexane	0.000	0.000#	0.0	0#	-0.18
12	M	1,1-Dichloroethane	0.545	0.545	0.1	95	-0.18
13	M	2,2-Dichloropropane	0.487	0.492	-1.1	95	-0.18
14	M	cis-1,2-Dichloroethene	0.275	0.276	-0.4	96	-0.17
15		2-Butanone	0.000	0.000#	0.0	0#	-0.01
16	M	Bromochloromethane	0.109	0.106	3.0	92	-0.17
17	M	Chloroform	0.500	0.495	1.0	94	-0.17
18	M	1,1,1-Trichloroethane	0.511	0.492	3.8	91	-0.17
19	M	Carbon tetrachloride	0.475	0.456	4.0	90	-0.17
20	M	1,1-Dichloropropene	0.463	0.471	-1.7	95	-0.17
21	M	Benzene	0.889	0.917	-3.1	98	-0.16
22	M	1,2-Dichloroethane	0.201	0.197	1.8	92	-0.17
23	M	Trichloroethene	0.378	0.370	2.0	94	-0.17
24	M	1,2-Dichloropropane	0.290	0.297	-2.2	96	-0.16
25	M	Dibromomethane	0.126	0.121	3.8	91	-0.16
26	M	Bromodichloromethane	0.398	0.393	1.3	93	-0.15
27	M	cis-1,3-Dichloropropene	0.355	0.366	-3.2	97	-0.16
28	M	Toluene	0.647	0.657	-1.6	99	-0.16
29	M	trans-1,3-Dichloropropene	0.244	0.253	-3.7	98	-0.15
30	M	1,1,2-Trichloroethane	0.120	0.123	-2.9	98	-0.15
31	M	Tetrachloroethene	0.442	0.424	4.1	92	-0.15
32	M	1,3-Dichloropropane	0.233	0.242	-3.9	98	-0.15
33	M	Dibromochloromethane	0.241	0.239	0.7	94	-0.15
34	M	1,2-Dibromoethane	0.174	0.172	0.9	94	-0.15
35	M	Chlorobenzene	0.699	0.713	-2.0	97	-0.15
36	M	1,1,1,2-Tetrachloroethane	0.291	0.294	-0.8	94	-0.15
37	M	Ethylbenzene	1.287	1.346	-4.6	99	-0.15
38	M	Xylene (para & meta)	0.480	0.508	-6.0	100	-0.15
39	M	Xylene (Ortho)	0.435	0.458	-5.1	99	-0.15
40	M	Styrene	0.674	0.718	-6.5	100	-0.14
41	M	Bromoform	0.126	0.124	1.0	92	-0.14
42	M	Isopropylbenzene	1.234	1.298	-5.2	99	-0.14

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C1356.D
Acq On : 23 Feb 96 2:50 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.485	0.488	-0.6	95	-0.14
44	M	Bromobenzene	0.300	0.298	0.7	94	-0.15
45	M	1,1,2,2-Tetrachloroethane	0.155	0.162	-4.0	98	-0.14
46	M	1,2,3-Trichloropropane	0.155	0.160	-3.4	96	-0.14
47	M	n-Propylbenzene	1.724	1.813	-5.2	99	-0.14
48	M	2-Chlorotoluene	0.975	0.984	-0.9	96	-0.14
49	M	4-Chlorotoluene	1.114	1.167	-4.7	98	-0.14
50	M	1,3,5-Trimethylbenzene	1.060	1.116	-5.2	98	-0.14
51	M	tert-Butylbenzene	1.224	1.181	3.5	91	-0.13
52	M	1,2,4-Trimethylbenzene	1.042	1.103	-5.9	100	-0.14
53	M	sec-Butylbenzene	1.673	1.771	-5.9	99	-0.14
54	M	1,3-Dichlorobenzene	0.601	0.615	-2.4	96	-0.14
55	M	4-Isopropyltoluene	1.347	1.429	-6.1	99	-0.13
56	M	1,4-Dichlorobenzene	0.586	0.597	-1.8	95	-0.14
57	S	1,2-Dichlorobenzene-d4	0.289	0.290	-0.2	94	-0.14
58	M	1,2-Dichlorobenzene	0.460	0.474	-3.1	96	-0.14
59	M	n-Butylbenzene	1.374	1.457	-6.0	99	-0.14
60	M	1,2-Dibromo-3-chloropropane	0.031	0.031	-1.8	94	-0.14
61	M	1,2,4-Trichlorobenzene	0.364	0.365	-0.2	93	-0.14
62	M	Hexachlorobutadiene	0.331	0.307	7.1	87	-0.14
63	M	Naphthalene	0.367	0.378	-3.0	99	-0.14
64	M	1,2,3-Trichlorobenzene	0.268	0.270	-0.7	94	-0.15
65		Methyl-tert butyl ether	0.307	0.314	-2.2	100	-0.17
66		tert-Butyl Alcohol	0.005	0.005	-12.3	110	-0.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : d:\hpchem\1\data\c1356.d
Acq On : 23 Feb 96 2:50 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Feb 26 10:39 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.99	96	1270782	5.00	ug/L	-0.17
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.24	95	619659	5.03	ug/L	100.59%
57) 1,2-Dichlorobenzene-d4	22.03	152	368121	5.01	ug/L	100.21%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.39	85	836596	9.46	ug/L	99
3) Chloromethane	3.78	50	525385	9.94	ug/L	100
4) Vinyl chloride	4.00	62	668285	10.26	ug/L	95
5) Bromomethane	4.68	94	439901	9.75	ug/L	99
6) Chloroethane	4.92	64	417182	11.13	ug/L	98
7) Trichlorofluoromethane	5.52	101	1312029	9.67	ug/L	99
8) 1,1-Dichloroethene	6.62	96	662252	10.10	ug/L	99
9) Methylene chloride	7.61	84	696986	12.16	ug/L	99
10) trans-1,2-Dichloroethene	8.14	96	741004	10.16	ug/L	100
12) 1,1-Dichloroethane	8.94	63	1384826	9.99	ug/L	98
13) 2,2-Dichloropropane	9.99	77	1251260	10.11	ug/L	99
14) cis-1,2-Dichloroethene	10.00	96	701844	10.04	ug/L	97
16) Bromochloromethane	10.42	128	269793	9.70	ug/L	95
17) Chloroform	10.57	83	1257425	9.90	ug/L	99
18) 1,1,1-Trichloroethane	10.89	97	1250047	9.62	ug/L	99
19) Carbon tetrachloride	11.18	117	1157690	9.60	ug/L	99
20) 1,1-Dichloropropene	11.17	75	1196020	10.17	ug/L	99
21) Benzene	11.53	78	2330012	10.31	ug/L	100
22) 1,2-Dichloroethane	11.55	62	500960	9.82	ug/L	97
23) Trichloroethene	12.62	95	941483	9.80	ug/L	99
24) 1,2-Dichloropropane	12.99	63	754018	10.22	ug/L	100
25) Dibromomethane	13.20	93	307688	9.62	ug/L	96
26) Bromodichloromethane	13.46	83	998000	9.87	ug/L	98
27) cis-1,3-Dichloropropene	14.21	75	930959	10.32	ug/L	100
28) Toluene	14.78	92	1670400	10.16	ug/L	98
29) trans-1,3-Dichloropropene	15.15	75	643731	10.37	ug/L	97
30) 1,1,2-Trichloroethane	15.46	83	313106	10.29	ug/L	99
31) Tetrachloroethene	15.74	166	1077823	9.59	ug/L	99
32) 1,3-Dichloropropane	15.75	76	616064	10.39	ug/L	97
33) Dibromochloromethane	16.16	129	607518	9.93	ug/L	97
34) 1,2-Dibromoethane	16.36	107	437608	9.91	ug/L	100
35) Chlorobenzene	17.22	112	1812780	10.20	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.35	131	746437	10.08	ug/L	99
37) Ethylbenzene	17.39	91	3421127	10.46	ug/L	99
38) Xylene (para & meta)	17.60	106	2584732	21.20	ug/L	97
39) Xylene (Ortho)	18.30	106	1163460	10.51	ug/L	98
40) Styrene	18.33	104	1823630	10.65	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1356.d
Acq On : 23 Feb 96 2:50 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Feb 26 10:39 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.67	173	315862	9.90	ug/L		98
42)	Isopropylbenzene	18.96	105	3299782	10.52	ug/L		98
44)	Bromobenzene	19.52	156	756279	9.93	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.49	83	410557	10.40	ug/L		99
46)	1,2,3-Trichloropropane	19.56	75	407064	10.34	ug/L	#	81
47)	n-Propylbenzene	19.69	91	4607967	10.52	ug/L	m	54
48)	2-Chlorotoluene	19.87	91	2500854	10.09	ug/L		98
49)	4-Chlorotoluene	20.05	91	2965216	10.47	ug/L	m	97
50)	1,3,5-Trimethylbenzene	20.01	105	2836204	10.52	ug/L		99
51)	tert-Butylbenzene	20.61	119	3001234	9.65	ug/L		99
52)	1,2,4-Trimethylbenzene	20.69	105	2803739	10.59	ug/L	m	79
53)	sec-Butylbenzene	21.00	105	4500639	10.59	ug/L	m	58
54)	1,3-Dichlorobenzene	21.22	146	1563936	10.24	ug/L		99
55)	4-Isopropyltoluene	21.27	119	3631821	10.61	ug/L		100
56)	1,4-Dichlorobenzene	21.38	146	1516120	10.18	ug/L	m	98
58)	1,2-Dichlorobenzene	22.06	146	1205156	10.31	ug/L	m	0
59)	n-Butylbenzene	22.01	91	3702856	10.60	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.49	75	78994	10.18	ug/L		92
61)	1,2,4-Trichlorobenzene	25.03	180	926520	10.02	ug/L		100
62)	Hexachlorobutadiene	25.35	225	781471	9.29	ug/L		99
63)	Naphthalene	25.50	128	960576	10.30	ug/L	m	0
64)	1,2,3-Trichlorobenzene	25.98	180	685531	10.07	ug/L	m	0
65)	Methyl-tert butyl ether	8.19	73	797103	10.22	ug/L		97
66)	tert-Butyl Alcohol	7.93	59	25948	22.45	ug/L		100

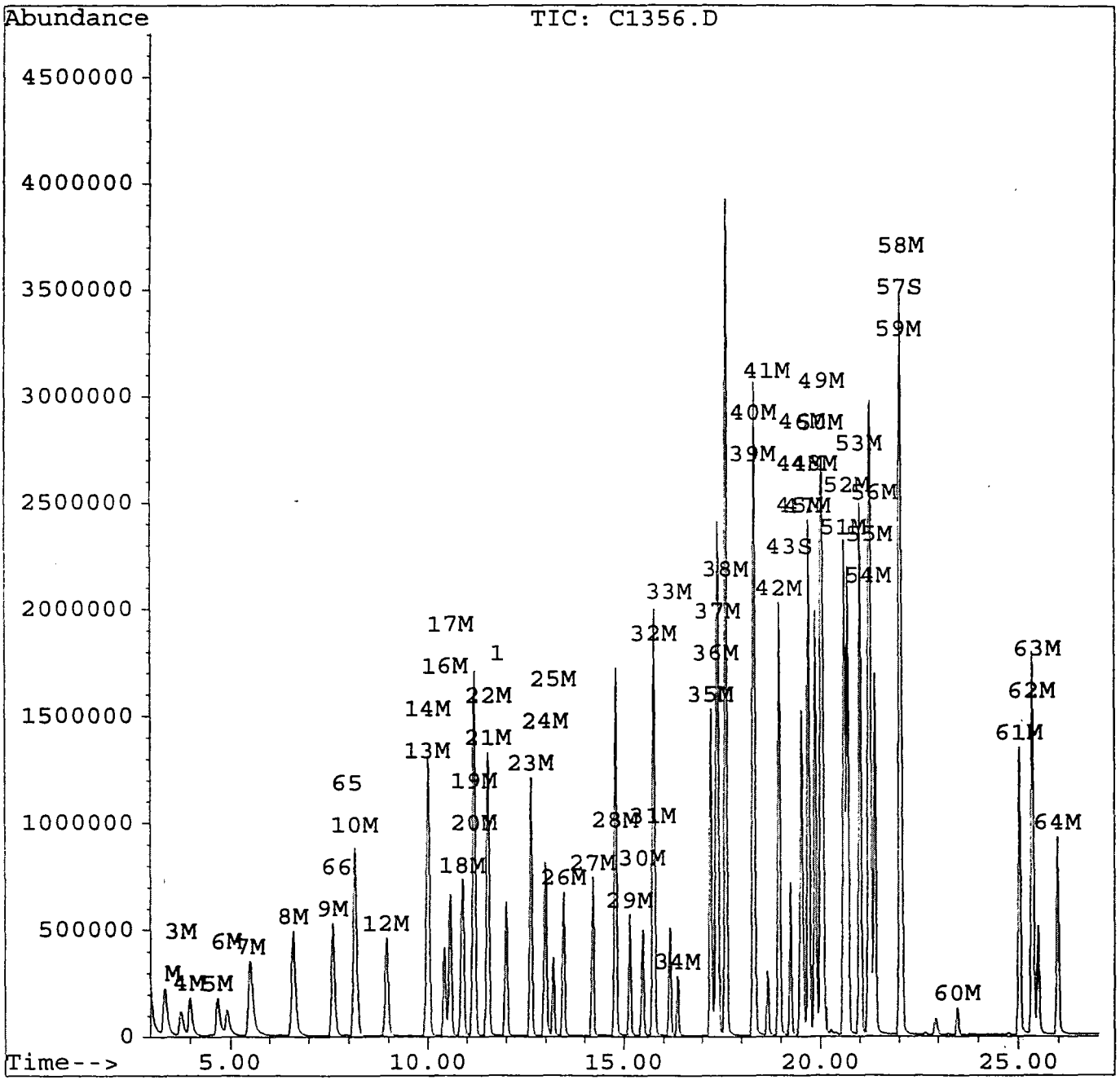
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1356.d
Acq On : 23 Feb 96 2:50 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Feb 26 10:39 1996

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1370.d
Acq On : 23 Feb 96 11:01 pm
Sample : 10 QCS
Misc : 25 ML
Quant Time: Feb 26 11:34 1996

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.02	96	1216631	5.00	ug/L	-0.14
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.26	95	579121	4.91	ug/L	98.20%
57) 1,2-Dichlorobenzene-d4	22.05	152	349448	4.97	ug/L	99.36%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.40	85	924383	10.91	ug/L	99
3) Chloromethane	3.80	50	564871	11.16	ug/L	100
4) Vinyl chloride	4.02	62	618057	9.92	ug/L	98
5) Bromomethane	4.70	94	387066	8.96	ug/L	99
6) Chloroethane	4.94	64	377974	10.54	ug/L	96
7) Trichlorofluoromethane	5.54	101	1202188	9.25	ug/L	100
8) 1,1-Dichloroethene	6.64	96	652694	10.39	ug/L	98
9) Methylene chloride	7.63	84	671318	12.24	ug/L	99
10) trans-1,2-Dichloroethene	8.17	96	711144	10.19	ug/L	100
12) 1,1-Dichloroethane	8.97	63	1339649	10.10	ug/L	95
13) 2,2-Dichloropropane	10.02	77	936681	7.91	ug/L	96
14) cis-1,2-Dichloroethene	10.03	96	661954	9.89	ug/L	99
16) Bromochloromethane	10.44	128	264142	9.92	ug/L	97
17) Chloroform	10.60	83	1192613	9.81	ug/L	100
18) 1,1,1-Trichloroethane	10.91	97	1206351	9.69	ug/L	99
19) Carbon tetrachloride	11.20	117	1101037	9.53	ug/L	97
20) 1,1-Dichloropropene	11.20	75	1159891	10.31	ug/L	99
21) Benzene	11.55	78	2229772	10.31	ug/L	100
22) 1,2-Dichloroethane	11.57	62	476556	9.76	ug/L	100
23) Trichloroethene	12.65	95	894931	9.73	ug/L	99
24) 1,2-Dichloropropane	13.01	63	729417	10.33	ug/L	98
25) Dibromomethane	13.22	93	296834	9.69	ug/L	96
26) Bromodichloromethane	13.49	83	941916	9.73	ug/L	98
27) cis-1,3-Dichloropropene	14.24	75	815591	9.44	ug/L	99
28) Toluene	14.81	92	1589647	10.10	ug/L	98
29) trans-1,3-Dichloropropene	15.17	75	545886	9.18	ug/L	97
30) 1,1,2-Trichloroethane	15.49	83	292682	10.05	ug/L	96
31) Tetrachloroethene	15.76	166	1027684	9.55	ug/L	97
32) 1,3-Dichloropropane	15.77	76	569724	10.04	ug/L	99
33) Dibromochloromethane	16.19	129	567388	9.69	ug/L	99
34) 1,2-Dibromoethane	16.38	107	414142	9.79	ug/L	100
35) Chlorobenzene	17.24	112	1678561	9.87	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.37	131	709823	10.02	ug/L	99
37) Ethylbenzene	17.41	91	3202599	10.23	ug/L	100
38) Xylene (para & meta)	17.62	106	2401978	20.58	ug/L	100
39) Xylene (Ortho)	18.32	106	1082711	10.22	ug/L	99
40) Styrene	18.34	104	1676751	10.23	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1370.d
Acq On : 23 Feb 96 11:01 pm
Sample : 10 QCS
Misc : 25 ML
Quant Time: Feb 26 11:34 1996

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.69	173	286981	9.39	ug/L		98
42)	Isopropylbenzene	18.97	105	3405607	11.34	ug/L	m	0
44)	Bromobenzene	19.54	156	733362	10.06	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.50	83	373464	9.88	ug/L		99
46)	1,2,3-Trichloropropane	19.58	75	379199	10.06	ug/L	#	70
47)	n-Propylbenzene	19.71	91	4279180	10.20	ug/L		99
48)	2-Chlorotoluene	19.88	91	2340940	9.87	ug/L		99
49)	4-Chlorotoluene	20.07	91	2735504	10.09	ug/L	m	99
50)	1,3,5-Trimethylbenzene	20.03	105	2632648	10.20	ug/L		98
51)	tert-Butylbenzene	20.62	119	2731202	9.17	ug/L	m	99
52)	1,2,4-Trimethylbenzene	20.71	105	2621843	10.34	ug/L	m	100
53)	sec-Butylbenzene	21.02	105	4202600	10.33	ug/L		100
54)	1,3-Dichlorobenzene	21.24	146	1453138	9.94	ug/L		99
55)	4-Isopropyltoluene	21.28	119	3450307	10.53	ug/L		100
56)	1,4-Dichlorobenzene	21.40	146	1397982	9.81	ug/L	m	98
58)	1,2-Dichlorobenzene	22.08	146	1124053	10.05	ug/L	m	0
59)	n-Butylbenzene	22.03	91	3394562	10.15	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.51	75	70025	9.42	ug/L		95
61)	1,2,4-Trichlorobenzene	25.05	180	836953	9.45	ug/L		98
62)	Hexachlorobutadiene	25.37	225	754148	9.36	ug/L		99
63)	Naphthalene	25.52	128	876580	9.82	ug/L		100
64)	1,2,3-Trichlorobenzene	26.00	180	636940	9.77	ug/L	m	0

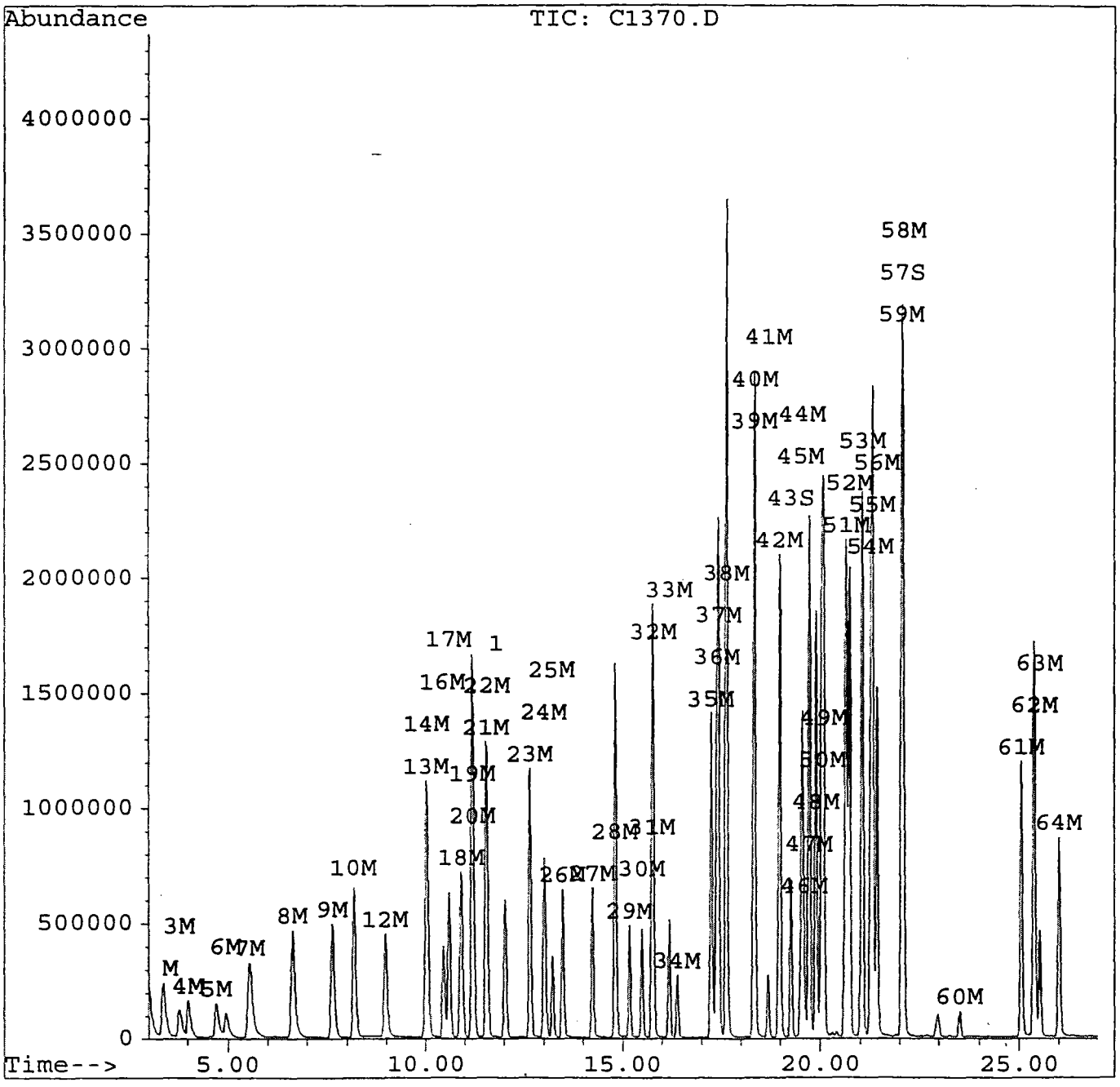
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1370.d
Acq On : 23 Feb 96 11:01 pm
Sample : 10 QCS
Misc : 25 ML
Quant Time: Feb 26 11:34 1996

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1371.d
Acq On : 23 Feb 96 11:36 pm
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Feb 26 11:35 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.02	96	1148208	5.00	ug/L	-0.14
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.26	95	563830	5.07	ug/L	101.30%
57) 1,2-Dichlorobenzene-d4	22.05	152	347656	5.24	ug/L	104.74%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.41	85	96365	1.21	ug/L	97
3) Chloromethane	3.81	50	50797	1.06	ug/L	99
4) Vinyl chloride	4.01	62	62463	1.06	ug/L	94
5) Bromomethane	4.73	94	54368	1.33	ug/L	99
6) Chloroethane	4.96	64	38316	1.13	ug/L	95
7) Trichlorofluoromethane	5.54	101	121218	0.99	ug/L	98
8) 1,1-Dichloroethene	6.65	96	63213	1.07	ug/L	100
9) Methylene chloride	7.63	84	239388	4.62	ug/L	96
10) trans-1,2-Dichloroethene	8.18	96	70885	1.08	ug/L	94
12) 1,1-Dichloroethane	8.97	63	131374	1.05	ug/L	97
13) 2,2-Dichloropropane	10.03	77	95336	0.85	ug/L	98
14) cis-1,2-Dichloroethene	10.03	96	67893	1.08	ug/L	93
16) Bromochloromethane	10.45	128	26796	1.07	ug/L	92
17) Chloroform	10.59	83	122733	1.07	ug/L	97
18) 1,1,1-Trichloroethane	10.91	97	120253	1.02	ug/L	98
19) Carbon tetrachloride	11.20	117	109411	1.00	ug/L	95
20) 1,1-Dichloropropene	11.20	75	112484	1.06	ug/L	98
21) Benzene	11.55	78	230209	1.13	ug/L	98
22) 1,2-Dichloroethane	11.58	62	48271	1.05	ug/L	98
23) Trichloroethene	12.66	95	91192	1.05	ug/L	92
24) 1,2-Dichloropropane	13.02	63	76101	1.14	ug/L	96
25) Dibromomethane	13.23	93	30373	1.05	ug/L	97
26) Bromodichloromethane	13.49	83	97097	1.06	ug/L	100
27) cis-1,3-Dichloropropene	14.24	75	87583	1.07	ug/L	100
28) Toluene	14.82	92	174709	1.18	ug/L	98
29) trans-1,3-Dichloropropene	15.17	75	59649	1.06	ug/L	99
30) 1,1,2-Trichloroethane	15.50	83	30144	1.10	ug/L	92
31) Tetrachloroethene	15.76	166	102128	1.01	ug/L	99
32) 1,3-Dichloropropane	15.77	76	63967	1.19	ug/L	96
33) Dibromochloromethane	16.19	129	56192	1.02	ug/L	96
34) 1,2-Dibromoethane	16.38	107	43004	1.08	ug/L	97
35) Chlorobenzene	17.24	112	176597	1.10	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.37	131	73560	1.10	ug/L	99
37) Ethylbenzene	17.42	91	336321	1.14	ug/L	99
38) Xylene (para & meta)	17.63	106	249912	2.27	ug/L	98
39) Xylene (Ortho)	18.33	106	113911	1.14	ug/L	95
40) Styrene	18.35	104	175347	1.13	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1371.d
Acq On : 23 Feb 96 11:36 pm
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Feb 26 11:35 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.70	173	30066	1.04	ug/L		99
42)	Isopropylbenzene	18.98	105	317688	1.12	ug/L		96
44)	Bromobenzene	19.55	156	80783	1.17	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.51	83	43327	1.21	ug/L		97
46)	1,2,3-Trichloropropane	19.59	75	44953	1.26	ug/L	#	53
47)	n-Propylbenzene	19.72	91	447112	1.13	ug/L		99
48)	2-Chlorotoluene	19.89	91	252260	1.13	ug/L		99
49)	4-Chlorotoluene	20.07	91	300161	1.17	ug/L	m	99
50)	1,3,5-Trimethylbenzene	20.03	105	279983	1.15	ug/L		97
51)	tert-Butylbenzene	20.63	119	288497	1.03	ug/L	m	100
52)	1,2,4-Trimethylbenzene	20.71	105	279377	1.17	ug/L	m	93
53)	sec-Butylbenzene	21.02	105	442806	1.15	ug/L		98
54)	1,3-Dichlorobenzene	21.25	146	162547	1.18	ug/L		99
55)	4-Isopropyltoluene	21.29	119	347316	1.12	ug/L		99
56)	1,4-Dichlorobenzene	21.40	146	156136	1.16	ug/L	m	99
58)	1,2-Dichlorobenzene	22.10	146	125016	1.18	ug/L	m	0
59)	n-Butylbenzene	22.04	91	370182	1.17	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.52	75	8338	1.19	ug/L		92
61)	1,2,4-Trichlorobenzene	25.06	180	99099	1.19	ug/L		100
62)	Hexachlorobutadiene	25.38	225	78472	1.03	ug/L		97
63)	Naphthalene	25.53	128	109467	1.30	ug/L		100
64)	1,2,3-Trichlorobenzene	26.01	180	76515	1.24	ug/L		92
65)	Methyl-tert butyl ether	8.21	73	83754	1.19	ug/L		91
66)	tert-Butyl Alcohol	7.98	59	2459	2.35	ug/L		100

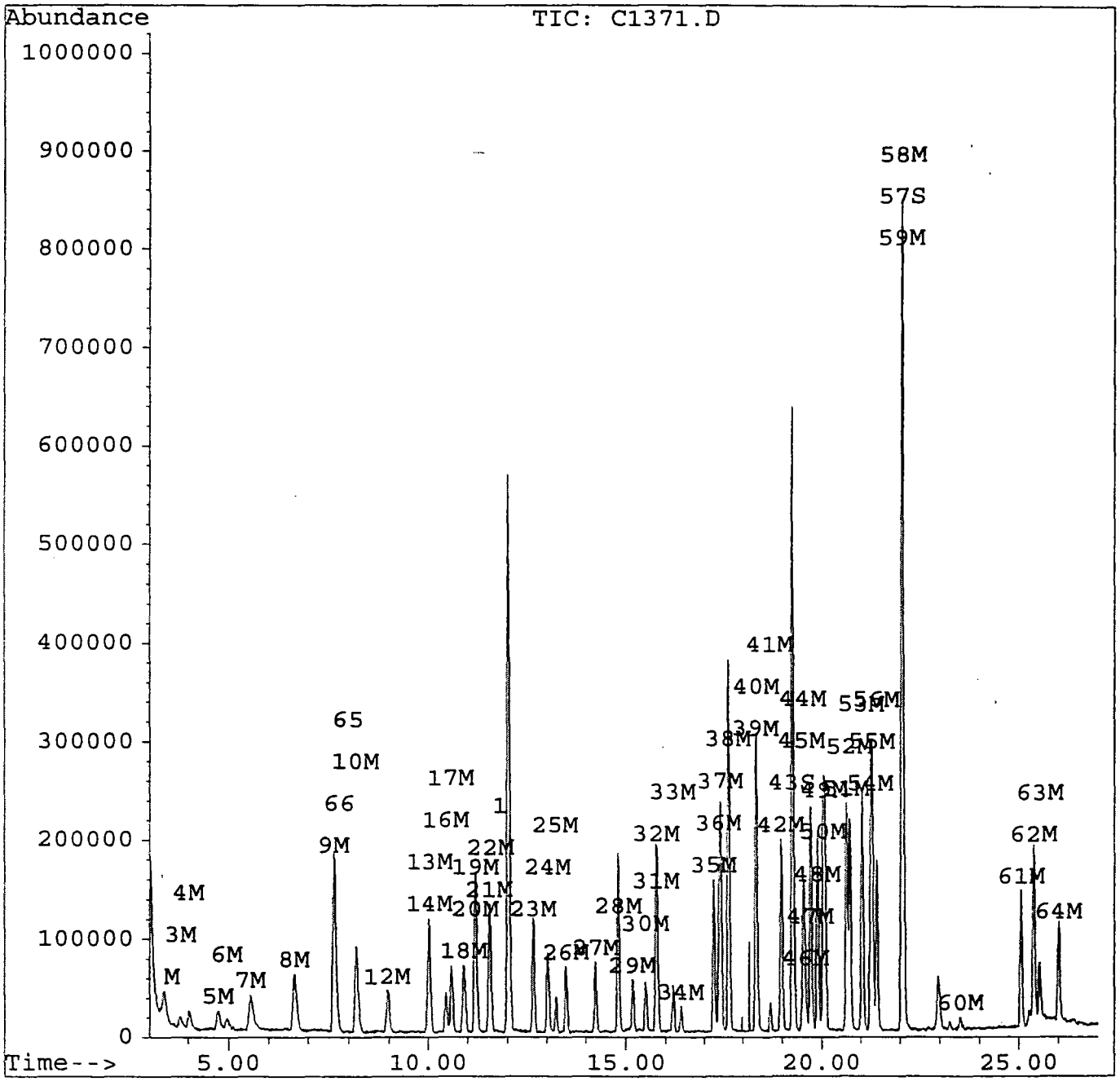
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1371.d
Acq On : 23 Feb 96 11:36 pm
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Feb 26 11:35 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C1438.D BFB Injection Date: 3/4/96

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1606

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.9
75	30.0 - 66.0% of mass 95	46.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	70.0
175	4.0 - 9.0% of mass 174	5.0 (7.1)1
176	93.0 - 101.0% of mass 174	69.3 (99.0)1
177	5.0 - 9.0% of mass 176	4.7 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

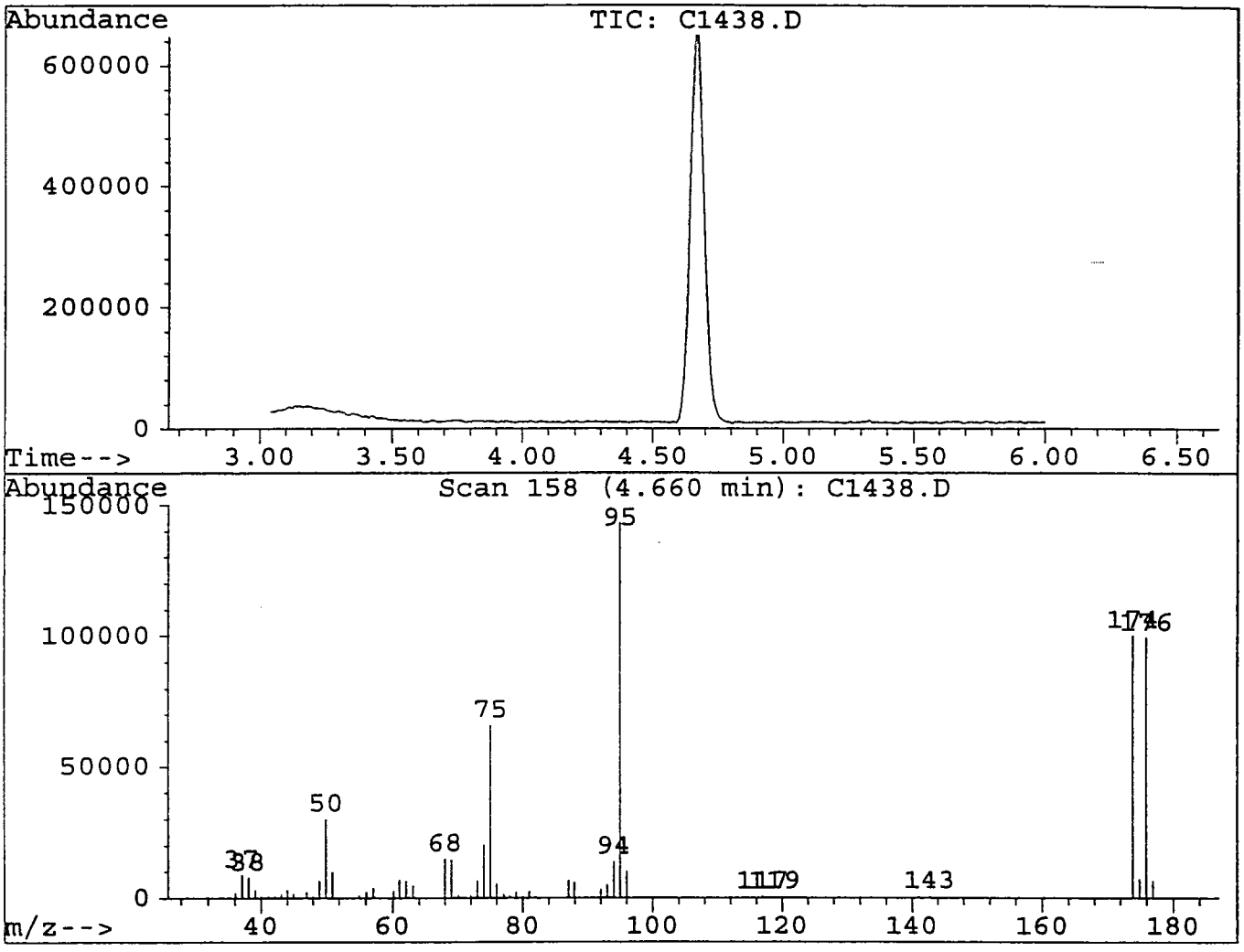
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C1445.D	3/4/96	1914
02	VBLK01	M. BLANK	C1446.D	3/4/96	1948
03	PA028	PA028	C1447.D	3/4/96	2023
04	9608370D	9608370D	C1448.D	3/4/96	2057
05	9608368D	9608368D	C1449.D	3/4/96	2131
06	9608386V	9608386V	C1450.D	3/4/96	2206
07	9608385V	9608385V	C1451.D	3/4/96	2240
08	9608387V	9608387V	C1452.D	3/4/96	2314
09	9608388V	9608388V	C1453.D	3/4/96	2348
10	10 QCS	10 QCS	C1454.D	3/5/96	0022
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C1438.D
Acq On : 4 Mar 96 4:06 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 158

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	30016	PASS
75	95	30	80	46.0	65856	PASS
95	95	100	100	100.0	143296	PASS
96	95	5	9	7.0	10018	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	70.0	100304	PASS
175	174	5	9	7.1	7138	PASS
176	174	95	101	99.0	99344	PASS
177	176	5	9	6.9	6806	PASS

C1438.D VOA524.M Tue Mar 05 12:57:59 1996 VOA

Scan 158 (4.660 min): C1438.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1943	48.05	690	68.05	15025	80.00	631
37.10	8954	49.05	6400	69.05	14553	81.00	2470
38.10	7827	50.05	30016	70.15	1146	82.00	573
39.10	3078	51.05	10096	72.05	1008	87.00	6668
40.00	591	55.05	1243	73.05	6512	87.95	5780
41.10	879	56.10	2287	74.05	20072	90.95	562
42.10	584	57.10	3819	75.05	65856	92.05	3153
43.10	1507	60.10	2630	76.05	5496	93.05	4865
44.00	3121	61.00	6992	77.10	1293	94.05	13709
45.00	1543	62.00	6631	78.00	916	95.05	143296
47.05	2349	63.10	4653	79.00	2307	96.05	10018

Scan 158 (4.660 min): C1438.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.95	654						
118.90	504						
140.90	674						
142.80	794						
173.95	100304						
174.95	7138						
175.95	99344						
176.95	6806						

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 3/4/96 Time: 1914

Lab File ID: C1445.D Init. Calib. Date(s): 3/4/96 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.280	0.280		0.0	30.0
Chloromethane	0.201	0.203		-1.0	30.0
Vinyl chloride	0.229	0.227		0.9	30.0
Bromomethane	0.133	0.149		-12.0	30.0
Chloroethane	0.136	0.136		0.0	30.0
Trichlorofluoromethane	0.497	0.485		2.4	30.0
1,1-Dichloroethene	0.236	0.233		1.3	30.0
Methylene chloride	0.217	0.214		1.4	30.0
trans-1,2-Dichloroethene	0.270	0.266		1.5	30.0
1,1-Dichloroethane	0.502	0.501		0.2	30.0
2,2-Dichloropropane	0.425	0.395		7.1	30.0
cis-1,2-Dichloroethene	0.257	0.255		0.8	30.0
Bromochloromethane	0.106	0.105		0.9	30.0
Chloroform	0.465	0.458		1.5	30.0
1,1,1-Trichloroethane	0.481	0.472		1.9	30.0
Carbon tetrachloride	0.446	0.446		0.0	30.0
1,1-Dichloropropene	0.431	0.438		-1.6	30.0
Benzene	0.841	0.833		1.0	30.0
1,2-Dichloroethane	0.196	0.196		0.0	30.0
Trichloroethene	0.360	0.356		1.1	30.0
1,2-Dichloropropane	0.281	0.282		-0.4	30.0
Dibromomethane	0.118	0.117		0.8	30.0
Bromodichloromethane	0.366	0.366		0.0	30.0
cis-1,3-Dichloropropene	0.327	0.324		0.9	30.0
Toluene	0.620	0.610		1.6	30.0
trans-1,3-Dichloropropene	0.229	0.230		-0.4	30.0
1,1,2-Trichloroethane	0.119	0.116		2.5	30.0
Tetrachloroethene	0.448	0.434		3.1	30.0
1,3-Dichloropropane	0.230	0.229		0.4	30.0
Dibromochloromethane	0.236	0.239		-1.3	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.709	0.698		1.6	30.0
1,1,1,2-Tetrachloroethane	0.301	0.292		3.0	30.0
Ethylbenzene	1.291	1.272		1.5	30.0
Xylene (para & meta)	0.492	0.488		0.8	30.0
Xylene (Ortho)	0.450	0.444		1.3	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 3/4/96 Time: 1914

Lab File ID: C1445.D Init. Calib. Date(s): 3/4/96

Heated Purge: (Y/N) N Init. Calib. Times:

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.692	0.687		0.7	30.0
Bromoform	0.130	0.131		-0.8	30.0
Isopropylbenzene	1.289	1.267		1.7	30.0
Bromobenzene	0.320	0.309		3.4	30.0
1,1,2,2-Tetrachloroethane	0.159	0.157		1.3	30.0
1,2,3-Trichloropropane	0.160	0.156		2.5	30.0
n-Propylbenzene	1.748	1.726		1.3	30.0
2-Chlorotoluene	0.977	1.018		-4.2	30.0
4-Chlorotoluene	1.136	1.124		1.1	30.0
1,3,5-Trimethylbenzene	1.127	1.095		2.8	30.0
tert-Butylbenzene	1.156	1.151		0.4	30.0
1,2,4-Trimethylbenzene	1.093	1.069		2.2	30.0
sec-Butylbenzene	1.743	1.719		1.4	30.0
1,3-Dichlorobenzene	0.643	0.628		2.3	30.0
4-Isopropyltoluene	1.429	1.431		-0.1	30.0
1,4-Dichlorobenzene	0.630	0.623		1.1	30.0
1,2-Dichlorobenzene	0.498	0.483		3.0	30.0
n-Butylbenzene	1.391	1.391		0.0	30.0
1,2-Dibromo-3-chloropropane	0.032	0.033		-3.1	30.0
1,2,4-Trichlorobenzene	0.381	0.375		1.6	30.0
Hexachlorobutadiene	0.383	0.373		2.6	30.0
Naphthalene	0.321	0.323		-0.6	30.0
1,2,3-Trichlorobenzene	0.281	0.282		-0.4	30.0
4-Bromofluorobenzene	0.500	0.499		0.2	30.0
1,2-Dichlorobenzene-d4	0.320	0.318		0.6	30.0

Evaluate Continuing Calibration Report

128

Data File : D:\HPCHEM\1\DATA\C1445.D
Acq On : 4 Mar 96 7:14 pm
Sample : 10 PPB CHK STANDARD
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	96	0.00
2	M	Dichlorodifluoromethane	0.280	0.280	-0.1	94	0.00
3	M	Chloromethane	0.201	0.203	-1.1	95	0.00
4	M	Vinyl chloride	0.229	0.227	1.1	95	-0.01
5	M	Bromomethane	0.133	0.149	-11.5	107	-0.01
6	M	Chloroethane	0.136	0.136	0.1	94	-0.01
7	M	Trichlorofluoromethane	0.497	0.485	2.5	94	0.00
8	M	1,1-Dichloroethene	0.236	0.233	1.1	95	0.00
9	M	Methylene chloride	0.217	0.214	1.2	97	0.00
10	M	trans-1,2-Dichloroethene	0.270	0.266	1.3	96	0.00
11		Hexane	0.000	0.000#	0.0	0#	0.00
12	M	1,1-Dichloroethane	0.502	0.501	0.2	96	0.00
13	M	2,2-Dichloropropane	0.425	0.395	7.1	90	0.00
14	M	cis-1,2-Dichloroethene	0.257	0.255	0.6	95	0.00
15		2-Butanone	0.000	0.000#	0.0	0#	-0.41#
16	M	Bromochloromethane	0.106	0.105	1.6	94	0.00
17	M	Chloroform	0.465	0.458	1.5	97	0.00
18	M	1,1,1-Trichloroethane	0.481	0.472	1.9	95	0.00
19	M	Carbon tetrachloride	0.446	0.446	0.1	96	0.00
20	M	1,1-Dichloropropene	0.431	0.438	-1.5	98	0.00
21	M	Benzene	0.841	0.833	1.0	97	0.00
22	M	1,2-Dichloroethane	0.196	0.196	0.3	97	0.00
23	M	Trichloroethene	0.360	0.356	0.9	97	0.00
24	M	1,2-Dichloropropane	0.281	0.282	-0.4	98	0.00
25	M	Dibromomethane	0.118	0.117	1.2	96	0.02
26	M	Bromodichloromethane	0.366	0.366	0.0	98	0.00
27	M	cis-1,3-Dichloropropene	0.327	0.324	0.6	96	0.00
28	M	Toluene	0.620	0.610	1.6	97	0.00
29	M	trans-1,3-Dichloropropene	0.229	0.230	-0.5	98	0.00
30	M	1,1,2-Trichloroethane	0.119	0.116	2.3	97	0.00
31	M	Tetrachloroethene	0.448	0.434	3.1	95	0.00
32	M	1,3-Dichloropropane	0.230	0.229	0.4	98	0.00
33	M	Dibromochloromethane	0.236	0.239	-1.4	96	0.00
34	M	1,2-Dibromoethane	0.169	0.167	1.3	95	0.00
35	M	Chlorobenzene	0.709	0.698	1.6	97	0.00
36	M	1,1,1,2-Tetrachloroethane	0.301	0.292	2.9	95	0.00
37	M	Ethylbenzene	1.291	1.272	1.4	97	0.00
38	M	Xylene (para & meta)	0.492	0.488	0.8	97	0.00
39	M	Xylene (Ortho)	0.450	0.444	1.4	96	0.00
40	M	Styrene	0.692	0.687	0.7	97	0.00
41	M	Bromoform	0.130	0.131	-0.7	95	0.00
42	M	Isopropylbenzene	1.289	1.267	1.7	96	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C1445.D
Acq On : 4 Mar 96 7:14 pm
Sample : 10 PPB CHK STANDARD
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.500	0.499	0.3	96	0.00
44	M	Bromobenzene	0.320	0.309	3.4	95	0.00
45	M	1,1,2,2-Tetrachloroethane	0.159	0.157	1.1	98	0.00
46	M	1,2,3-Trichloropropane	0.160	0.156	2.5	97	0.00
47	M	n-Propylbenzene	1.748	1.726	1.3	97	0.00
48	M	2-Chlorotoluene	0.977	1.018	-4.2	104	0.00
49	M	4-Chlorotoluene	1.136	1.124	1.1	96	0.00
50	M	1,3,5-Trimethylbenzene	1.127	1.095	2.8	96	0.00
51	M	tert-Butylbenzene	1.156	1.151	0.4	99	0.00
52	M	1,2,4-Trimethylbenzene	1.093	1.069	2.2	96	0.00
53	M	sec-Butylbenzene	1.743	1.719	1.4	96	0.00
54	M	1,3-Dichlorobenzene	0.643	0.628	2.4	96	0.00
55	M	4-Isopropyltoluene	1.429	1.431	-0.1	97	0.00
56	M	1,4-Dichlorobenzene	0.630	0.623	1.1	96	0.00
57	S	1,2-Dichlorobenzene-d4	0.320	0.318	0.8	94	0.00
58	M	1,2-Dichlorobenzene	0.498	0.483	3.1	95	0.00
59	M	n-Butylbenzene	1.391	1.391	-0.0	97	0.00
60	M	1,2-Dibromo-3-chloropropane	0.032	0.033	-1.5	100	0.00
61	M	1,2,4-Trichlorobenzene	0.381	0.375	1.8	97	0.00
62	M	Hexachlorobutadiene	0.383	0.373	2.8	95	0.00
63	M	Naphthalene	0.321	0.323	-0.5	102	0.00
64	M	1,2,3-Trichlorobenzene	0.281	0.282	-0.5	98	0.00
65		Methyl-tert butyl ether	0.300	0.288	4.1	94	0.00
66		tert-Butyl Alcohol	0.005	0.005	-0.0	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : d:\hpchem\1\data\c1445.d
Acq On : 4 Mar 96 7:14 pm
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time: Mar 5 12:01 1996

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.96	96	1226430	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.21	95	611556	4.99	ug/L	99.75%
57) 1,2-Dichlorobenzene-d4	22.00	152	389673	4.96	ug/L	99.22%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.38	85	687517	10.01	ug/L	99
3) Chloromethane	3.77	50	498893	10.11	ug/L	99
4) Vinyl chloride	3.99	62	556510	9.89	ug/L	99
5) Bromomethane	4.68	94	364730	11.15	ug/L	93
6) Chloroethane	4.91	64	333656	9.99	ug/L	97
7) Trichlorofluoromethane	5.49	101	1188420	9.75	ug/L	99
8) 1,1-Dichloroethene	6.59	96	571569	9.89	ug/L	98
9) Methylene chloride	7.58	84	525614	9.88	ug/L	99
10) trans-1,2-Dichloroethene	8.11	96	652486	9.87	ug/L	97
12) 1,1-Dichloroethane	8.91	63	1227728	9.98	ug/L	98
13) 2,2-Dichloropropane	9.95	77	969236	9.29	ug/L	99
14) cis-1,2-Dichloroethene	9.96	96	625432	9.94	ug/L	99
16) Bromochloromethane	10.38	128	256591	9.84	ug/L	98
17) Chloroform	10.54	83	1122503	9.85	ug/L	97
18) 1,1,1-Trichloroethane	10.85	97	1156604	9.81	ug/L	99
19) Carbon tetrachloride	11.14	117	1093446	9.99	ug/L	98
20) 1,1-Dichloropropene	11.13	75	1073672	10.15	ug/L	98
21) Benzene	11.49	78	2042193	9.90	ug/L	99
22) 1,2-Dichloroethane	11.51	62	479908	9.97	ug/L	98
23) Trichloroethene	12.59	95	874366	9.91	ug/L	99
24) 1,2-Dichloropropane	12.95	63	692303	10.04	ug/L	98
25) Dibromomethane	13.17	93	286896	9.88	ug/L	97
26) Bromodichloromethane	13.42	83	897532	10.00	ug/L	98
27) cis-1,3-Dichloropropene	14.18	75	795919	9.94	ug/L	99
28) Toluene	14.75	92	1496295	9.84	ug/L	98
29) trans-1,3-Dichloropropene	15.12	75	563740	10.05	ug/L	93
30) 1,1,2-Trichloroethane	15.42	83	284141	9.77	ug/L	98
31) Tetrachloroethene	15.70	166	1064980	9.69	ug/L	99
32) 1,3-Dichloropropane	15.72	76	562524	9.96	ug/L	99
33) Dibromochloromethane	16.13	129	586748	10.14	ug/L	100
34) 1,2-Dibromoethane	16.32	107	408946	9.87	ug/L	97
35) Chlorobenzene	17.18	112	1712990	9.84	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.31	131	717125	9.71	ug/L	98
37) Ethylbenzene	17.36	91	3121168	9.86	ug/L	100
38) Xylene (para & meta)	17.57	106	2393197	19.84	ug/L	99
39) Xylene (Ortho)	18.27	106	1089377	9.86	ug/L	99
40) Styrene	18.29	104	1685308	9.93	ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1445.d
Acq On : 4 Mar 96 7:14 pm
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time: Mar 5 12:01 1996

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.63	173	321629	10.07	ug/L		100
42)	Isopropylbenzene	18.92	105	3108394	9.83	ug/L	m	45
44)	Bromobenzene	19.49	156	757463	9.66	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.45	83	385281	9.89	ug/L		97
46)	1,2,3-Trichloropropane	19.53	75	383001	9.75	ug/L		89
47)	n-Propylbenzene	19.66	91	4232815	9.87	ug/L		99
48)	2-Chlorotoluene	19.83	91	2496052	10.42	ug/L		100
49)	4-Chlorotoluene	20.02	91	2755860	9.89	ug/L	m	97
50)	1,3,5-Trimethylbenzene	19.98	105	2686261	9.72	ug/L		99
51)	tert-Butylbenzene	20.58	119	2823491	9.96	ug/L	m	92
52)	1,2,4-Trimethylbenzene	20.66	105	2621891	9.78	ug/L		100
53)	sec-Butylbenzene	20.97	105	4216018	9.86	ug/L		100
54)	1,3-Dichlorobenzene	21.19	146	1540361	9.76	ug/L		99
55)	4-Isopropyltoluene	21.24	119	3509209	10.01	ug/L		99
56)	1,4-Dichlorobenzene	21.35	146	1527562	9.89	ug/L		98
58)	1,2-Dichlorobenzene	22.03	146	1183639	9.69	ug/L		99
59)	n-Butylbenzene	21.99	91	3412933	10.00	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.46	75	80143	10.15	ug/L		93
61)	1,2,4-Trichlorobenzene	25.00	180	919155	9.82	ug/L		100
62)	Hexachlorobutadiene	25.32	225	914069	9.72	ug/L		99
63)	Naphthalene	25.47	128	792066	10.05	ug/L		100
64)	1,2,3-Trichlorobenzene	25.95	180	692787	10.05	ug/L		100
65)	Methyl-tert butyl ether	8.16	73	706022	9.59	ug/L	m	0
66)	tert-Butyl Alcohol	7.92	59	24386	20.01	ug/L		100

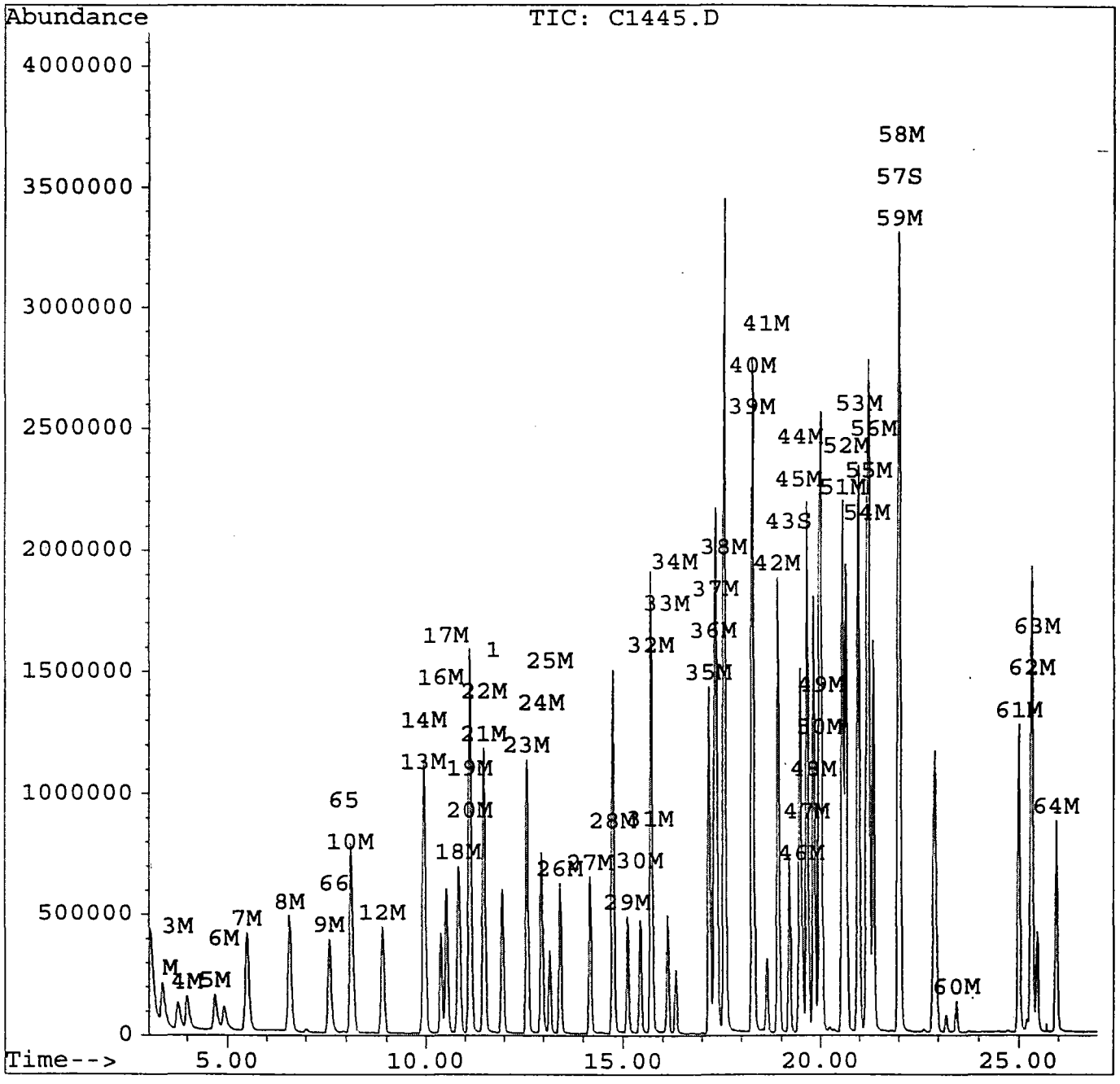
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1445.d
Acq On : 4 Mar 96 7:14 pm
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time: Mar 5 12:01 1996

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1454.d
Acq On : 5 Mar 96 12:22 am
Sample : 10 PPB QCS
Misc :
Quant Time: Mar 5 12:55 1996

Vial: 17 133
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.98	96	1355771	5.00	ug/L		0.03
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.22	95	642570	4.74	ug/L		94.81%
57) 1,2-Dichlorobenzene-d4	22.02	152	400665	4.61	ug/L		92.29%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.39	85	946221	12.46	ug/L		100
3) Chloromethane	3.78	50	578949	10.61	ug/L		98
4) Vinyl chloride	4.01	62	660621	10.62	ug/L		100
5) Bromomethane	4.70	94	422023	11.67	ug/L		97
6) Chloroethane	4.93	64	398704	10.80	ug/L		99
7) Trichlorofluoromethane	5.51	101	1317873	9.78	ug/L		99
8) 1,1-Dichloroethene	6.60	96	678457	10.62	ug/L		98
9) Methylene chloride	7.60	84	584732	9.95	ug/L		98
10) trans-1,2-Dichloroethene	8.13	96	732417	10.02	ug/L		98
12) 1,1-Dichloroethane	8.92	63	1407846	10.35	ug/L		99
13) 2,2-Dichloropropane	9.97	77	983886	8.53	ug/L		98
14) cis-1,2-Dichloroethene	9.98	96	696238	10.01	ug/L		99
16) Bromochloromethane	10.40	128	275801	9.57	ug/L		98
17) Chloroform	10.55	83	1235483	9.81	ug/L		100
18) 1,1,1-Trichloroethane	10.87	97	1314087	10.09	ug/L		99
19) Carbon tetrachloride	11.16	117	1226494	10.14	ug/L		99
20) 1,1-Dichloropropene	11.15	75	1217603	10.41	ug/L		98
21) Benzene	11.51	78	2316479	10.16	ug/L		99
22) 1,2-Dichloroethane	11.53	62	505265	9.49	ug/L	m	0
23) Trichloroethene	12.61	95	984960	10.10	ug/L		97
24) 1,2-Dichloropropane	12.97	63	772998	10.14	ug/L		97
25) Dibromomethane	13.18	93	305189	9.51	ug/L		98
26) Bromodichloromethane	13.44	83	984284	9.92	ug/L		100
27) cis-1,3-Dichloropropene	14.19	75	823781	9.30	ug/L		98
28) Toluene	14.76	92	1662145	9.89	ug/L		95
29) trans-1,3-Dichloropropene	15.13	75	549691	8.86	ug/L		94
30) 1,1,2-Trichloroethane	15.44	83	304236	9.46	ug/L		97
31) Tetrachloroethene	15.71	166	1162038	9.56	ug/L		99
32) 1,3-Dichloropropane	15.73	76	581006	9.31	ug/L		100
33) Dibromochloromethane	16.14	129	609223	9.53	ug/L		99
34) 1,2-Dibromoethane	16.34	107	427985	9.35	ug/L		97
35) Chlorobenzene	17.20	112	1839985	9.56	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.33	131	769939	9.43	ug/L		99
37) Ethylbenzene	17.38	91	3431088	9.80	ug/L		100
38) Xylene (para & meta)	17.59	106	2616536	19.62	ug/L		98
39) Xylene (Ortho)	18.29	106	1173927	9.61	ug/L		99
40) Styrene	18.31	104	1800825	9.60	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1454.d
Acq On : 5 Mar 96 12:22 am
Sample : 10 PPB QCS
Misc :
Quant Time: Mar 5 12:55 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.65	173	321057	9.09	ug/L		100
42)	Isopropylbenzene	18.94	105	3769340	10.79	ug/L	m	0
44)	Bromobenzene	19.51	156	795712	9.18	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.46	83	382481	8.88	ug/L		98
46)	1,2,3-Trichloropropane	19.54	75	396107	9.12	ug/L	#	78
47)	n-Propylbenzene	19.68	91	4673272	9.86	ug/L		99
48)	2-Chlorotoluene	19.85	91	2662326	10.05	ug/L		100
49)	4-Chlorotoluene	20.04	91	2894364	9.40	ug/L		94
50)	1,3,5-Trimethylbenzene	19.99	105	2919590	9.56	ug/L		98
51)	tert-Butylbenzene	20.59	119	3362548	10.73	ug/L		92
52)	1,2,4-Trimethylbenzene	20.68	105	2840921	9.59	ug/L		100
53)	sec-Butylbenzene	20.99	105	4666148	9.87	ug/L		100
54)	1,3-Dichlorobenzene	21.21	146	1601460	9.18	ug/L		99
55)	4-Isopropyltoluene	21.25	119	3874482	10.00	ug/L		99
56)	1,4-Dichlorobenzene	21.36	146	1551093	9.08	ug/L		99
58)	1,2-Dichlorobenzene	22.05	146	1253062	9.28	ug/L		97
59)	n-Butylbenzene	22.00	91	3673817	9.74	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.47	75	76422	8.76	ug/L		92
61)	1,2,4-Trichlorobenzene	25.02	180	904381	8.74	ug/L		98
62)	Hexachlorobutadiene	25.34	225	1005074	9.67	ug/L		100
63)	Naphthalene	25.48	128	800190	9.19	ug/L		100
64)	1,2,3-Trichlorobenzene	25.96	180	686177	9.01	ug/L		100

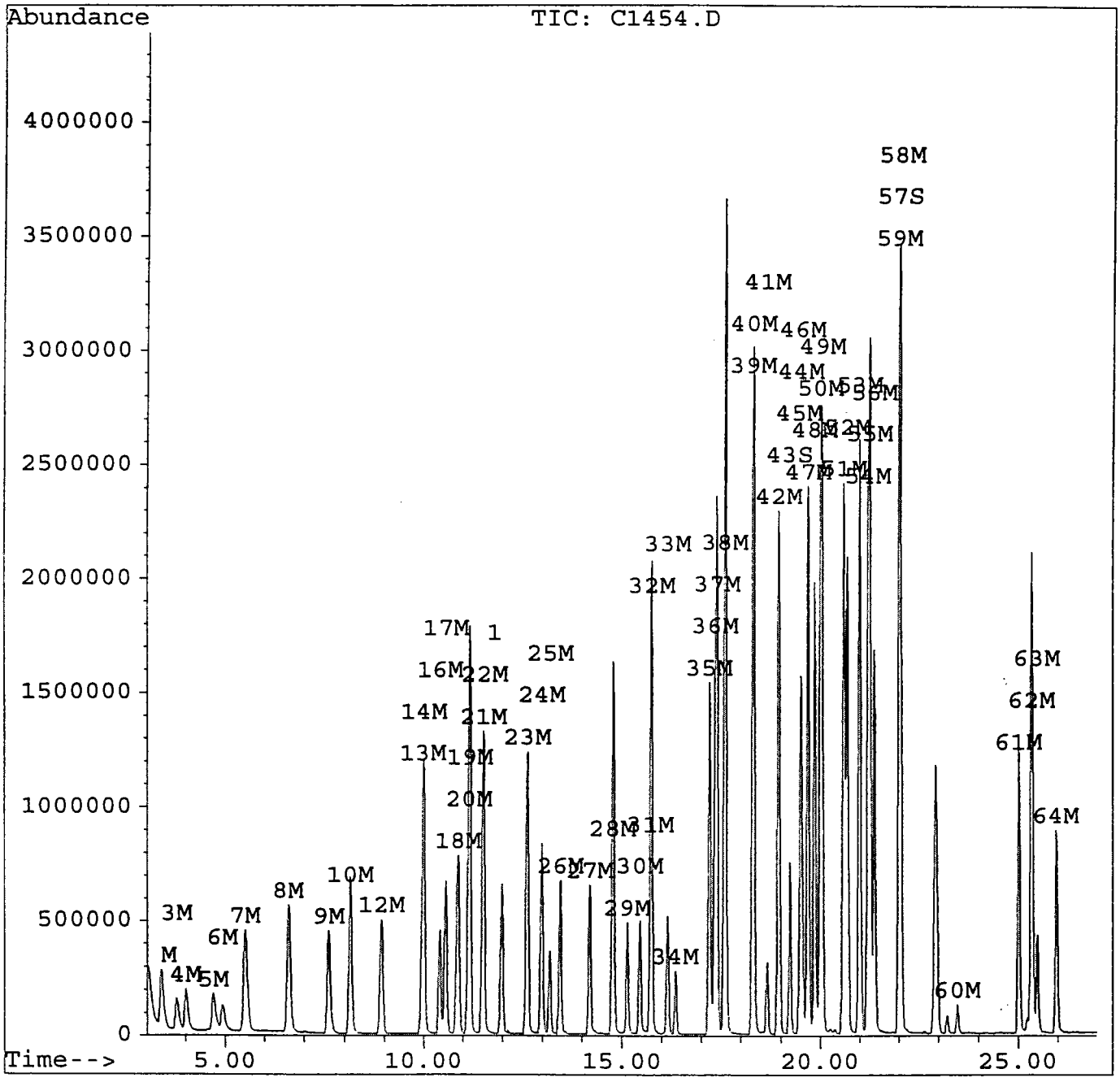
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1454.d
Acq On : 5 Mar 96 12:22 am
Sample : 10 PPB QCS
Misc :
Quant Time: Mar 5 12:55 1996

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C1339.D Date Analyzed: 2/22/96

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1613

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1384774	12.15				
	UPPER LIMIT	1800206	12.65				
	LOWER LIMIT	969342	11.65				
	SAMPLE NO.						
01	VBLK01	1349707	12.15				
02	9607649V	1329426	12.15				
03	9607650V	1298156	12.14				
04	9607654V	1294355	12.15				
05	9607655V	1278517	12.15				
06	9607656V	1301107	12.14				
07	9608367V	1313570	12.15				
08	9608366V	1270873	12.15				
09	9608364V	1281439	12.15				
10	9608365V	1319556	12.14				
11	9608371V	1292062	12.15				
12	9608372V	1133008	12.14				
13	10 QCS	1313811	12.14				
14	1 STND	1304070	12.16				
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C1356.D Date Analyzed: 2/23/96

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1450

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1270782	11.99				
	UPPER LIMIT	1652017	12.49				
	LOWER LIMIT	889547	11.49				
	SAMPLE NO.						
01	VBLK01	1250574	12.00				
02	9608369V	1243809	11.99				
03	9608376V	1204635	12.00				
04	9608368V	1207370	12.01				
05	9608370V	1162848	12.01				
06	9608369MS	1227939	12.01				
07	9608369MSD	1119023	12.01				
08	10 QCS	1216631	12.02				
09	1 STND	1148208	12.02				
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C1445.D Date Analyzed: 3/4/96

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1914

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1226430	11.96				
	UPPER LIMIT	1594359	12.46				
	LOWER LIMIT	858501	11.46				
	SAMPLE NO.						
01	VBLK01	1245678	11.96				
02	PA028	1274048	11.96				
03	9608370D	1302052	11.97				
04	9608368D	1311481	11.97				
05	9608386V	1245935	11.97				
06	9608385V	1337300	11.97				
07	9608387V	1270926	11.97				
08	9608388V	1195020	11.96				
09	10 QCS	1355771	11.98				
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 139

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: FB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608366V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1348.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.90	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 140

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: FB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608366V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1348.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 141

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: FB NJDEP MW#: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608366V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1348.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 1 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	10.68	1	J
2.				
3.				
4.				
5.				
6.				
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Quantitation Report

Data File : d:\hpchem\1\data\c1348.d
Acq On : 22 Feb 96 9:31 pm
Sample : 9608366
Misc : 25 ML FB
Quant Time: Feb 23 11:10 1996

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.15	96	1270873	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	631279	5.12	ug/L	102.47%
57) 1,2-Dichlorobenzene-d4	22.16	152	382510	5.21	ug/L	104.12%
Target Compounds						Qvalue
9) Methylene chloride	7.78	84	51417	0.90	ug/L	92

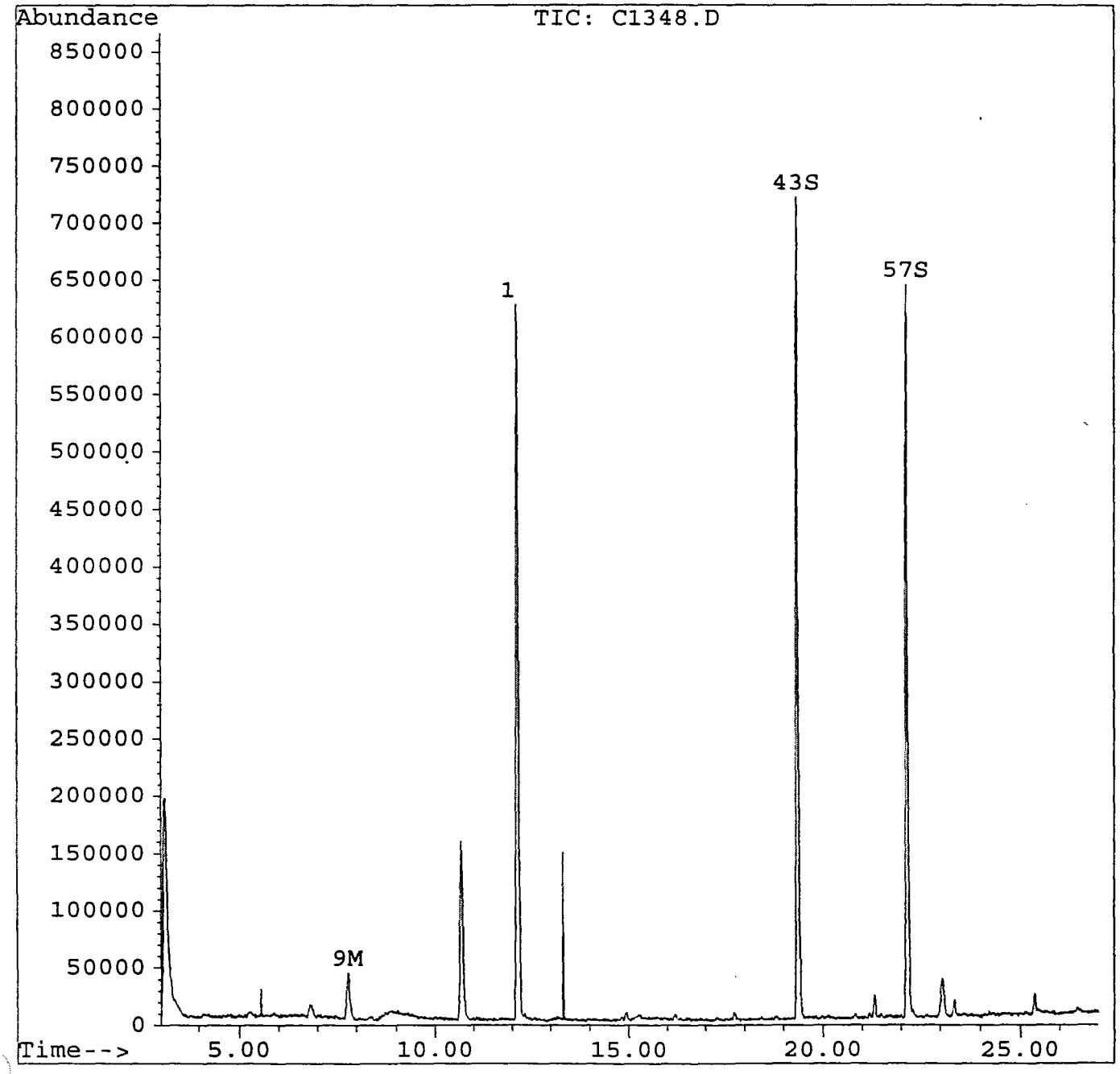
(#) = qualifier out of range (m) = manual integration

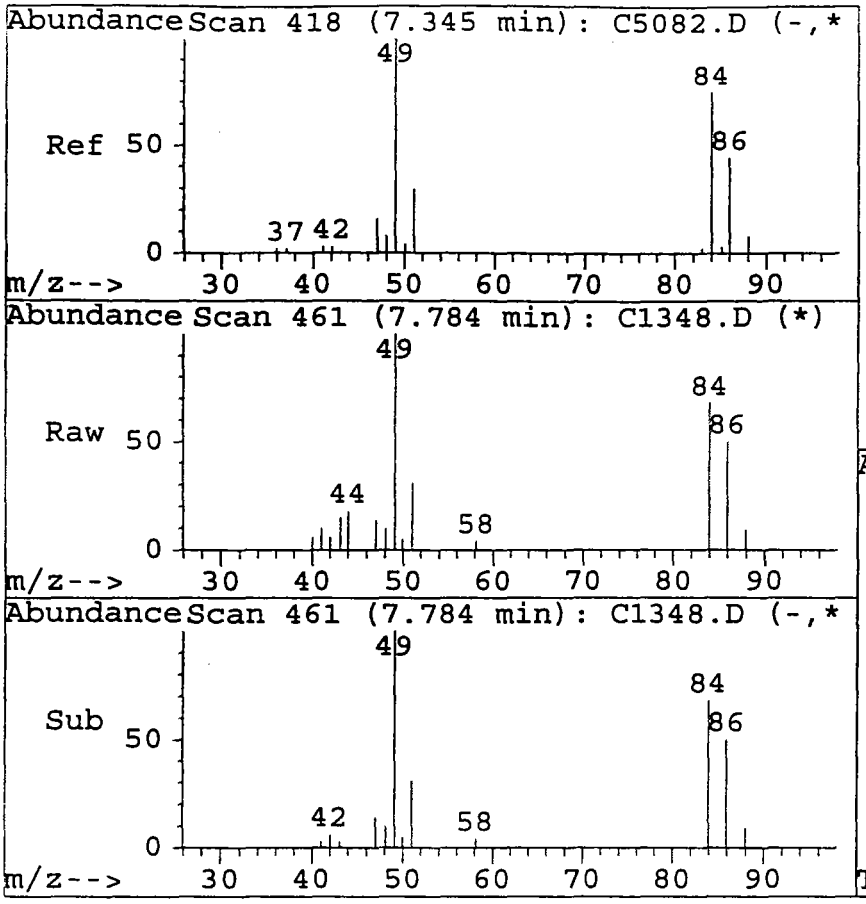
Quantitation Report

Data File : d:\hpchem\1\data\c1348.d
Acq On : 22 Feb 96 9:31 pm
Sample : 9608366
Misc : 25 ML FB
Quant Time: Feb 23 11:10 1996

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

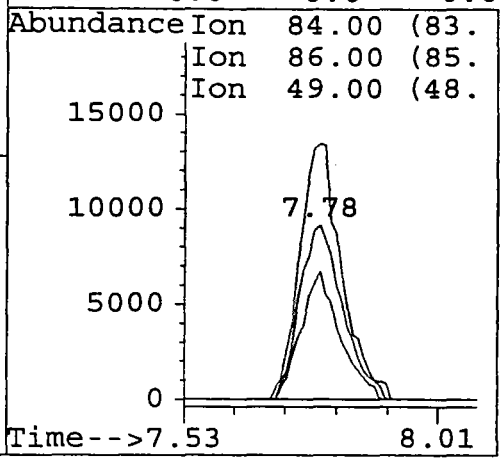




#9
Methylene chloride
Concen: 0.90 ug/L
RT: 7.78 min Scan# 461
Delta R.T. -0.00 min
Lab File: c1348.d
Acq: 22 Feb 96 9:31 pm

Tgt Ion:84 Resp: 51417

Ion	Ratio	Lower	Upper
84	100		
86	73.6	46.1	86.1
49	147.0	118.6	158.6
0	0.0	0.0	0.0



Library Search Compound Report

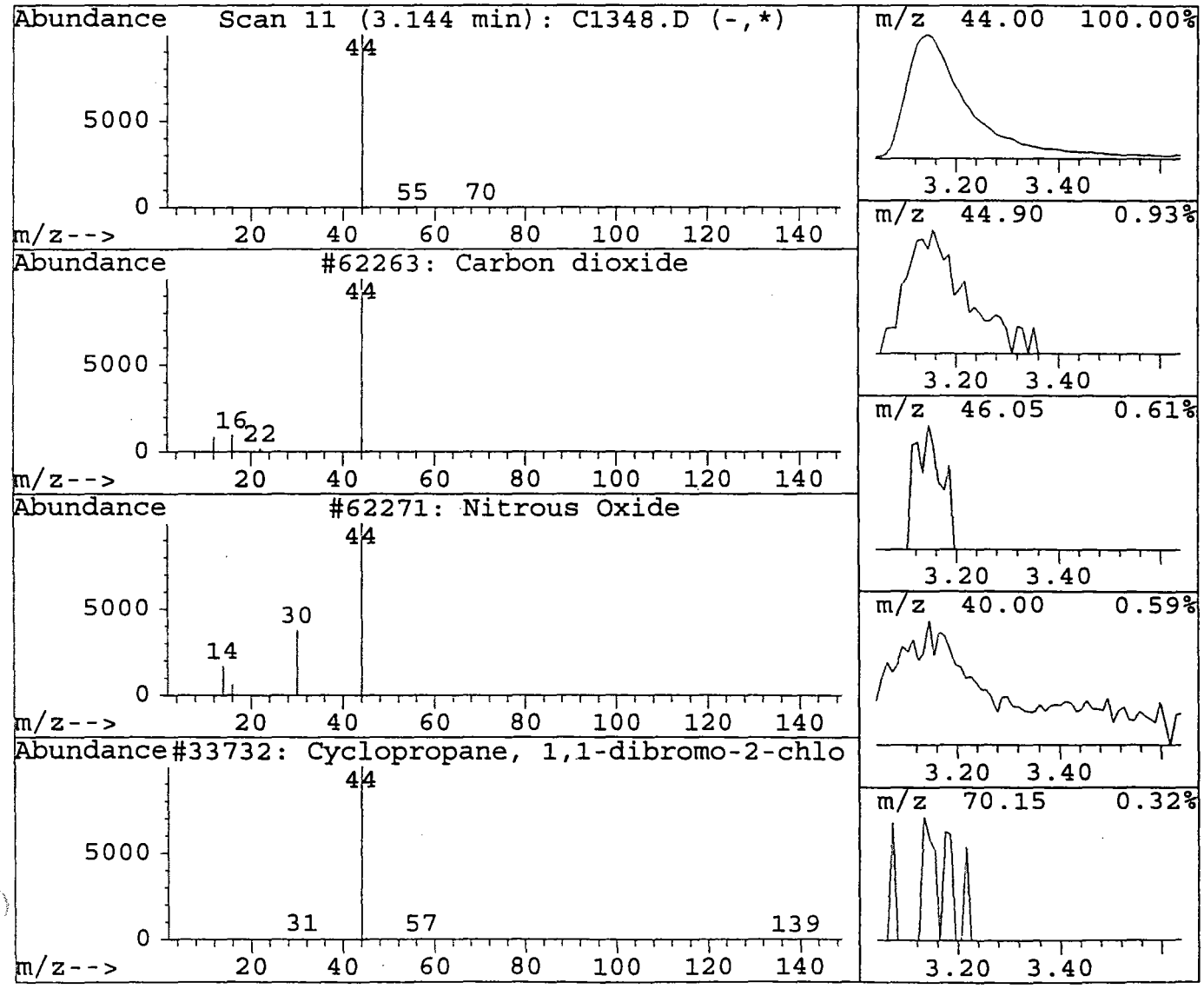
Data File : d:\hpchem\1\data\c1348.d
Acq On : 22 Feb 96 9:31 pm
Sample : 9608366
Misc : 25 ML FB

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.14	2.34 ug/L	1275503	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Acetaldehyde	36	000075-07-0	2



Library Search Compound Report

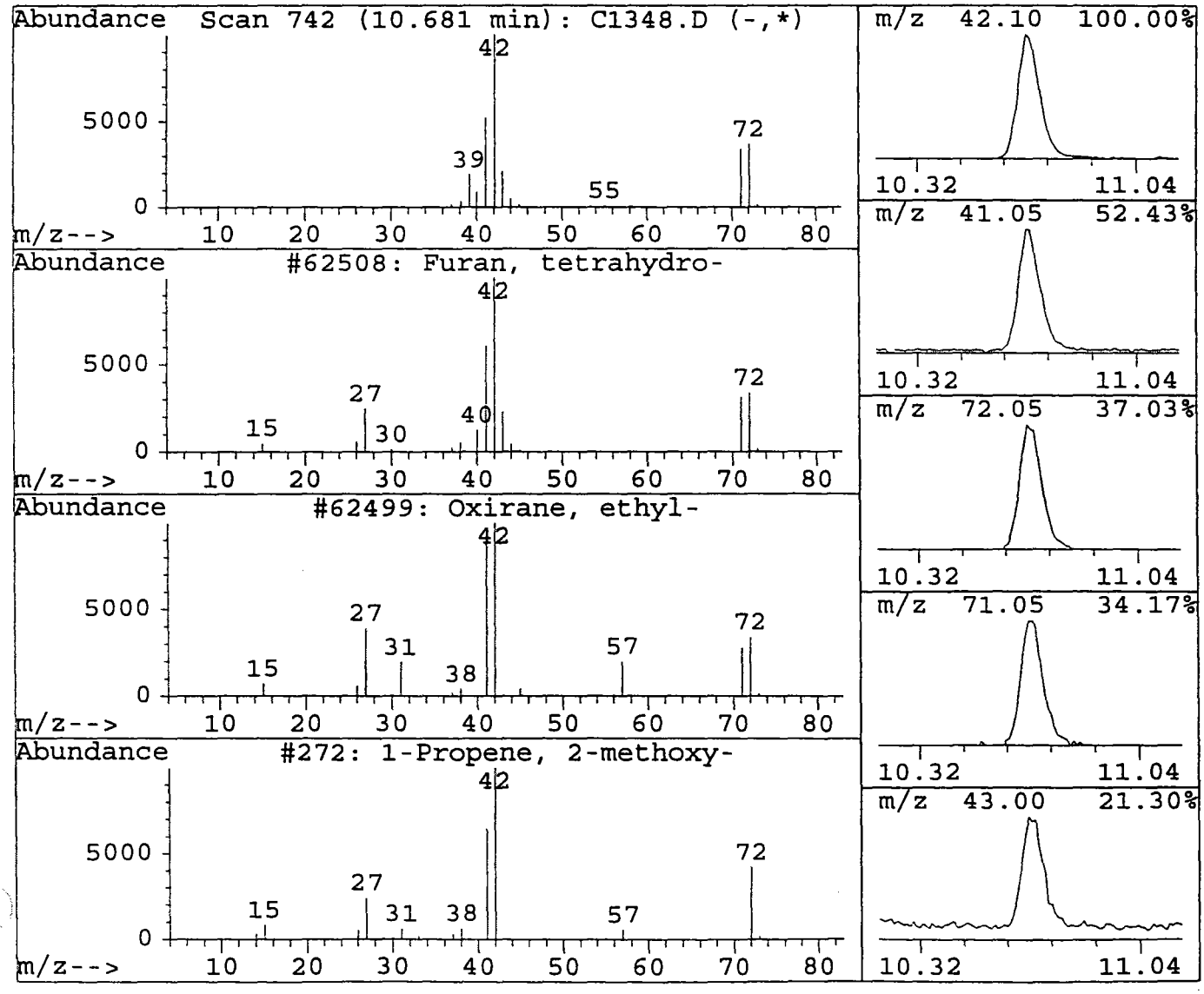
Data File : d:\hpchem\1\data\c1348.d
Acq On : 22 Feb 96 9:31 pm
Sample : 9608366
Misc : 25 ML FB

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.68	1.45 ug/L	792621	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62508	000109-99-9	72
2	Oxirane, ethyl-	62499	000106-88-7	40
3	1-Propene, 2-methoxy-	272	000116-11-0	38
4	Azetidine, 1-methyl-	246	004923-79-9	4
5	Oxirane, 2,2-dimethyl-	62511	000558-30-5	17



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# Trip Blank 147

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: TB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608367V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1347.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 148

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: TB NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: 9608367V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1347.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# Trip Blank 149

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: TB NJDEP MW#: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608367V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1347.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 2 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	10.68	1	J
2.	Column Bleed	23.04	1	J
3.				
4.				
5.				
6.				
7.				
8.				
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30.				

Quantitation Report

Data File : d:\hpchem\1\data\c1347.d
Acq On : 22 Feb 96 8:56 pm
Sample : 9608367
Misc : 25 ML TB
Quant Time: Feb 23 11:08 1996

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.15	96	1313570	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	655036	5.14	ug/L	102.87%
57) 1,2-Dichlorobenzene-d4	22.16	152	392431	5.17	ug/L	103.35%
Target Compounds						Qvalue
9) Methylene chloride	7.79	84	80948	1.37	ug/L	98

(#) = qualifier out of range (m) = manual integration

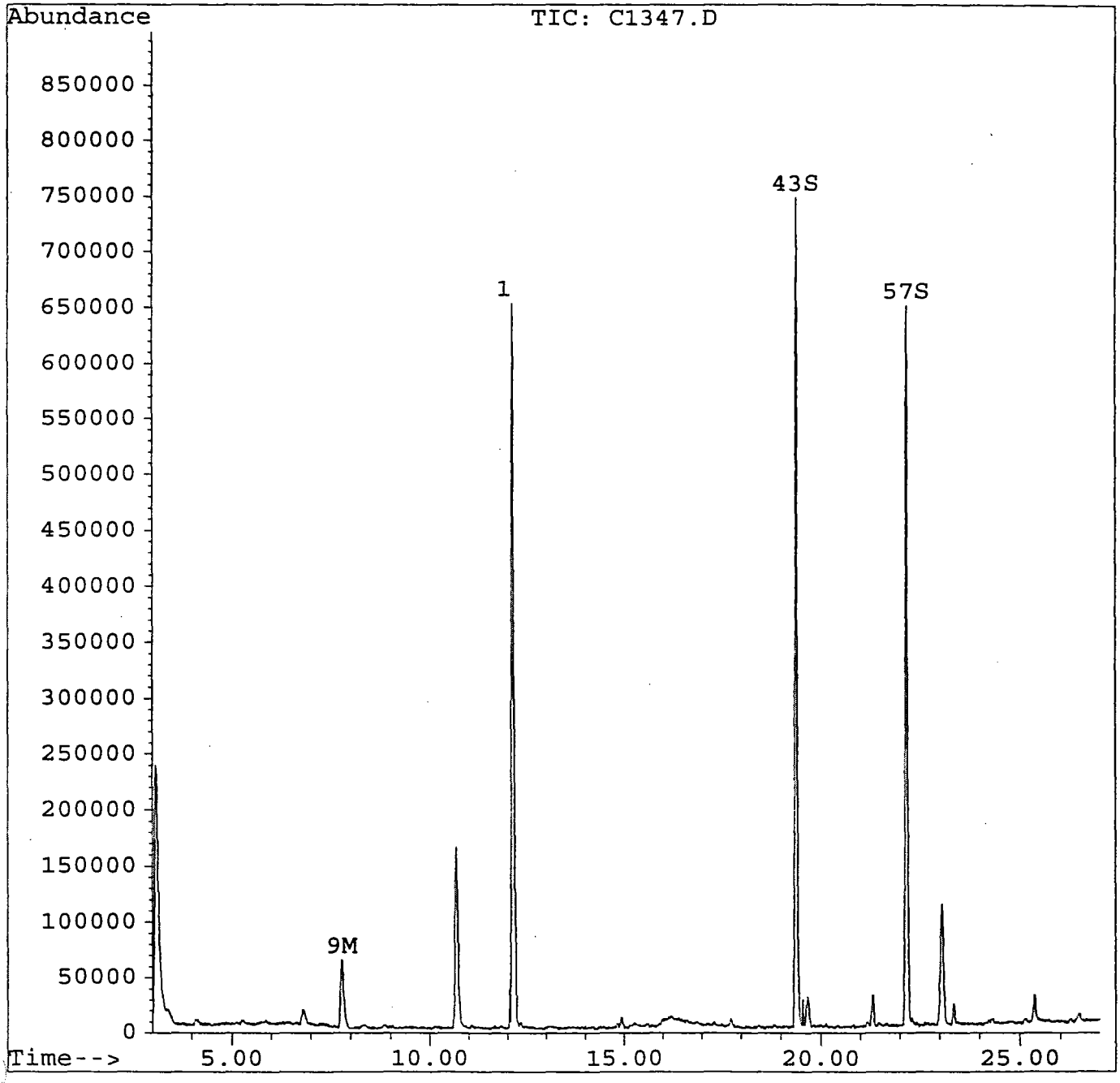
Quantitation Report

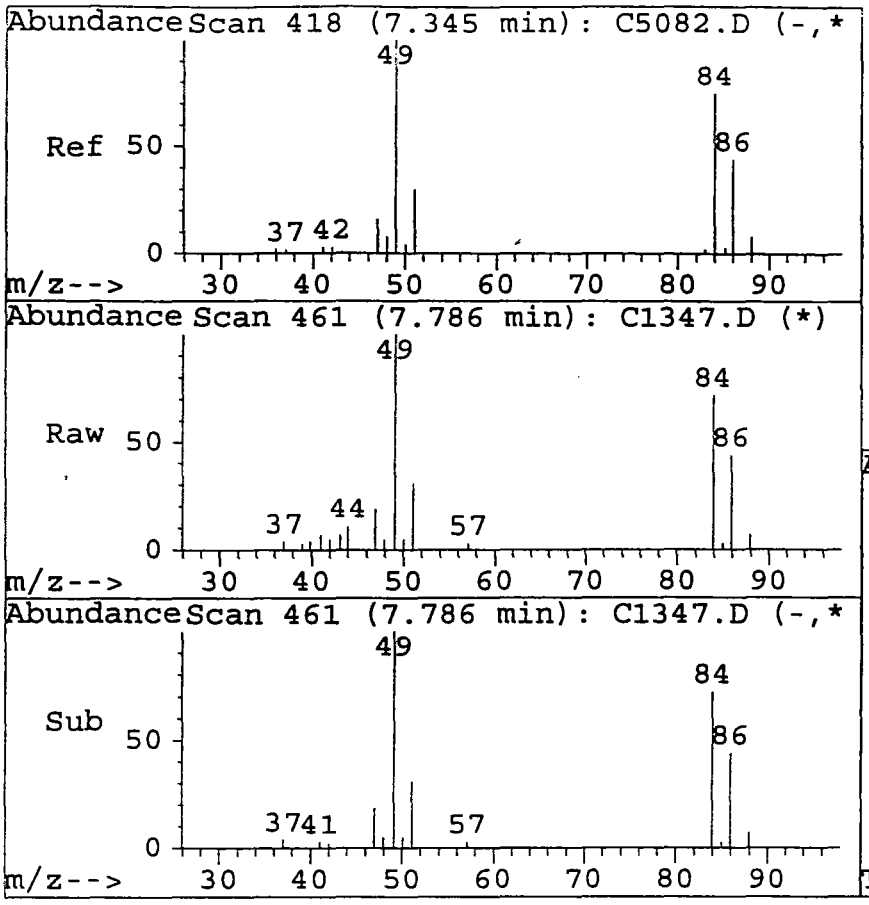
151

Data File : d:\hpchem\1\data\c1347.d
Acq On : 22 Feb 96 8:56 pm
Sample : 9608367
Misc : 25 ML TB
Quant Time: Feb 23 11:08 1996

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

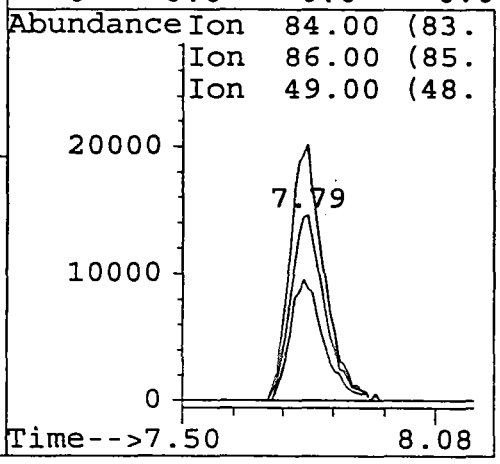




#9
Methylene chloride
Concen: 1.37 ug/L
RT: 7.79 min Scan# 461
Delta R.T. -0.00 min
Lab File: c1347.d
Acq: 22 Feb 96 8:56 pm

Tgt Ion:84 Resp: 80948

Ion	Ratio	Lower	Upper
84	100		
86	60.9	46.1	86.1
49	138.5	118.6	158.6
0	0.0	0.0	0.0



Library Search Compound Report

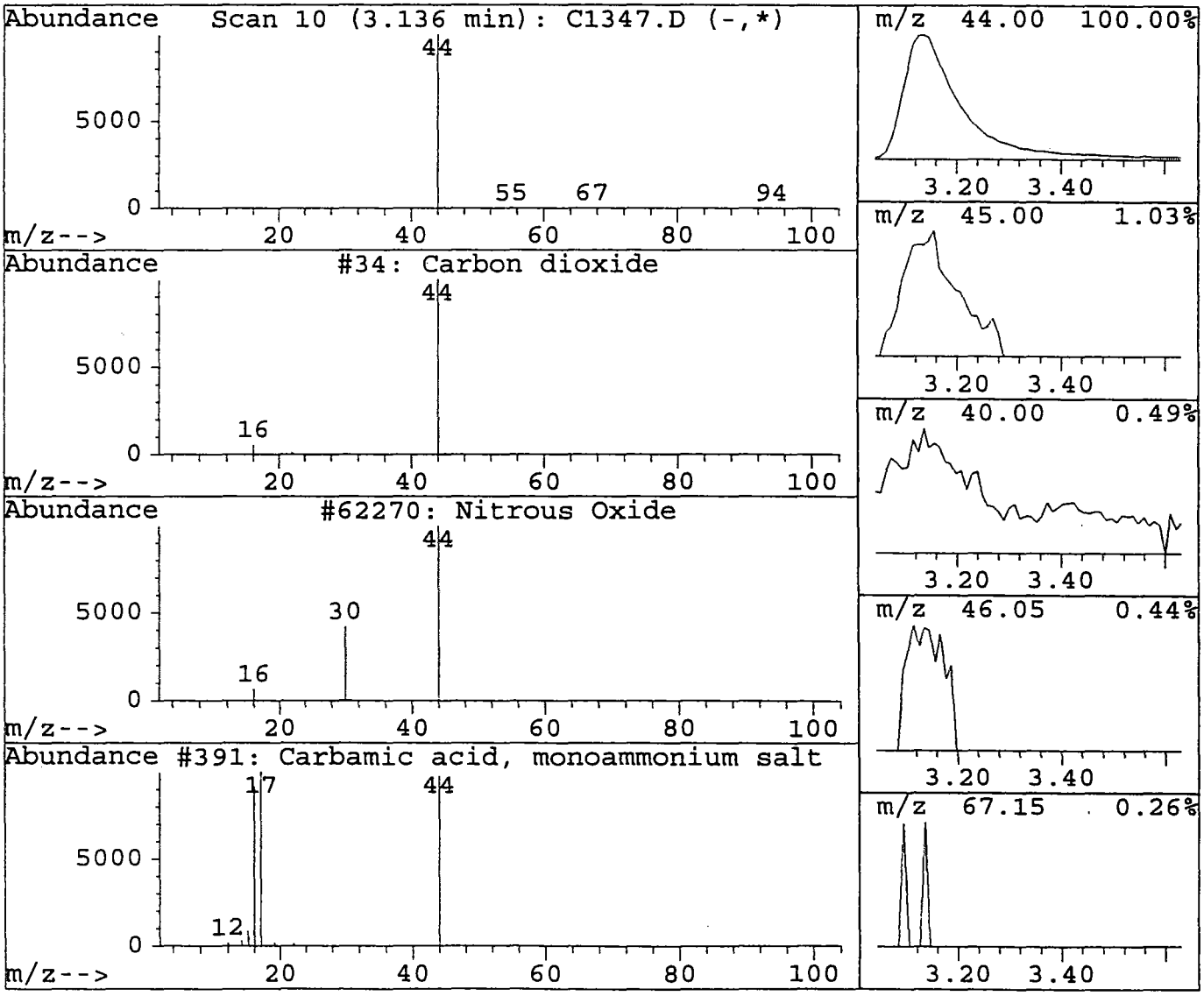
Data File : d:\hpchem\1\data\c1347.d
Acq On : 22 Feb 96 8:56 pm
Sample : 9608367
Misc : 25 ML TB

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.14	2.64 ug/L	1477429	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	62270	010024-97-2	3
3	Carbamic acid, monoammonium salt	391	001111-78-0	2
4	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
5	Acetaldehyde	36	000075-07-0	2



Library Search Compound Report

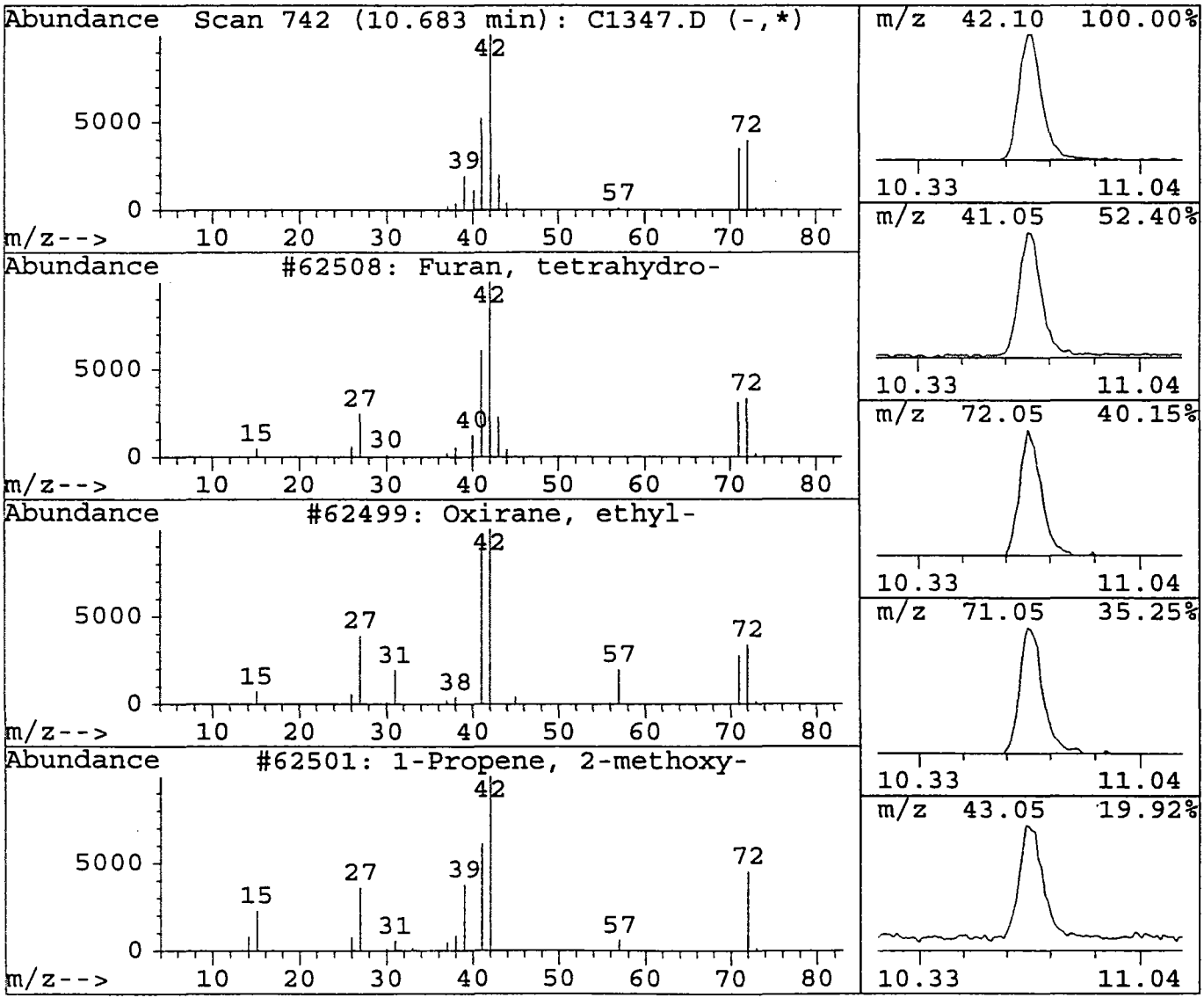
Data File : d:\hpchem\1\data\c1347.d
Acq On : 22 Feb 96 8:56 pm
Sample : 9608367
Misc : 25 ML TB

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.68	1.47 ug/L	822163	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62508	000109-99-9	72
2	Oxirane, ethyl-	62499	000106-88-7	64
3	1-Propene, 2-methoxy-	62501	000116-11-0	39
4	Azetidine, 1-methyl-	246	004923-79-9	4
5	Oxirane, 2,2-dimethyl-	62511	000558-30-5	39



Library Search Compound Report

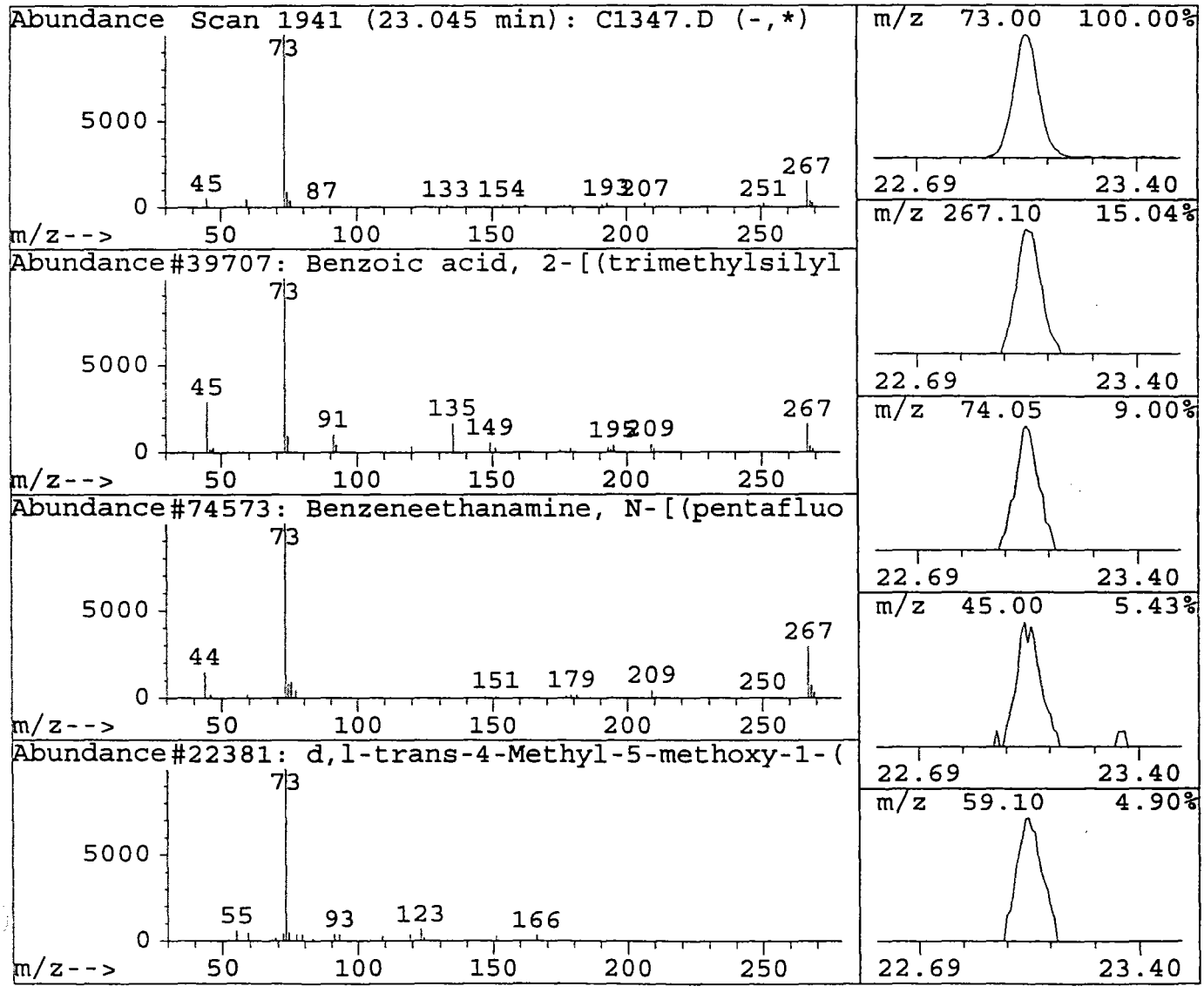
Data File : d:\hpchem\1\data\c1347.d
Acq On : 22 Feb 96 8:56 pm
Sample : 9608367
Misc : 25 ML TB

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.04	1.10 ug/L	618721	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	9
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	d,l-trans-4-Methyl-5-methoxy-1-(1-m	22381	000000-00-0	2
4	Butane, 2,3-dimethoxy-2-methyl-	5815	074421-00-4	2
5	Silane, tetramethyl-	62932	000075-76-3	2



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW-1

156

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9608368V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1365.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.1	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW-1 157

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9608368V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1365.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	100	
75-65-0	tertiary-Butyl alcohol	780	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# MW-1

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608368V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1365.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 108-20-3	Diisopropyl ether	9.12	1	J
2.	Unknown	11.57	1	J
3.	Column Bleed	22.94	1	J
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c1365.d
Acq On : 23 Feb 96 8:07 pm
Sample : 9608368
Misc : 25 ML
Quant Time: Feb 26 11:00 1996

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.01	96	1207370	5.00	ug/L	-0.15
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.25	95	580846	4.96	ug/L	99.24%
57) 1,2-Dichlorobenzene-d4	22.04	152	353303	5.06	ug/L	101.23%
Target Compounds						Qvalue
9) Methylene chloride	7.61	84	115163	2.12	ug/L	95
65) Methyl-tert butyl ether	8.19	73	7824464	105.60	ug/L m	0
66) tert-Butyl Alcohol	7.95	59	1107058	1008.17	ug/L	100

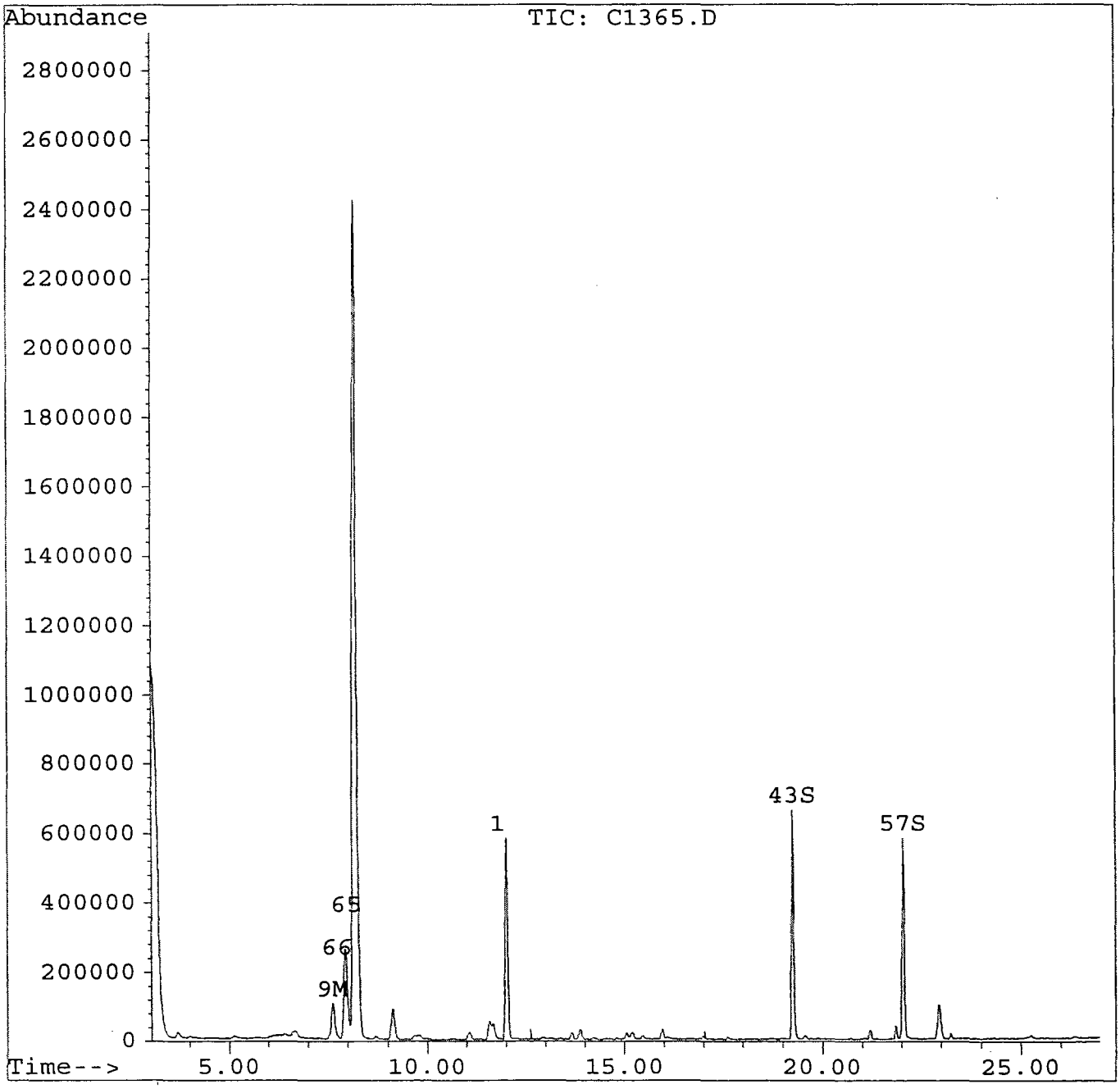
(#) = qualifier out of range (m) = manual integration

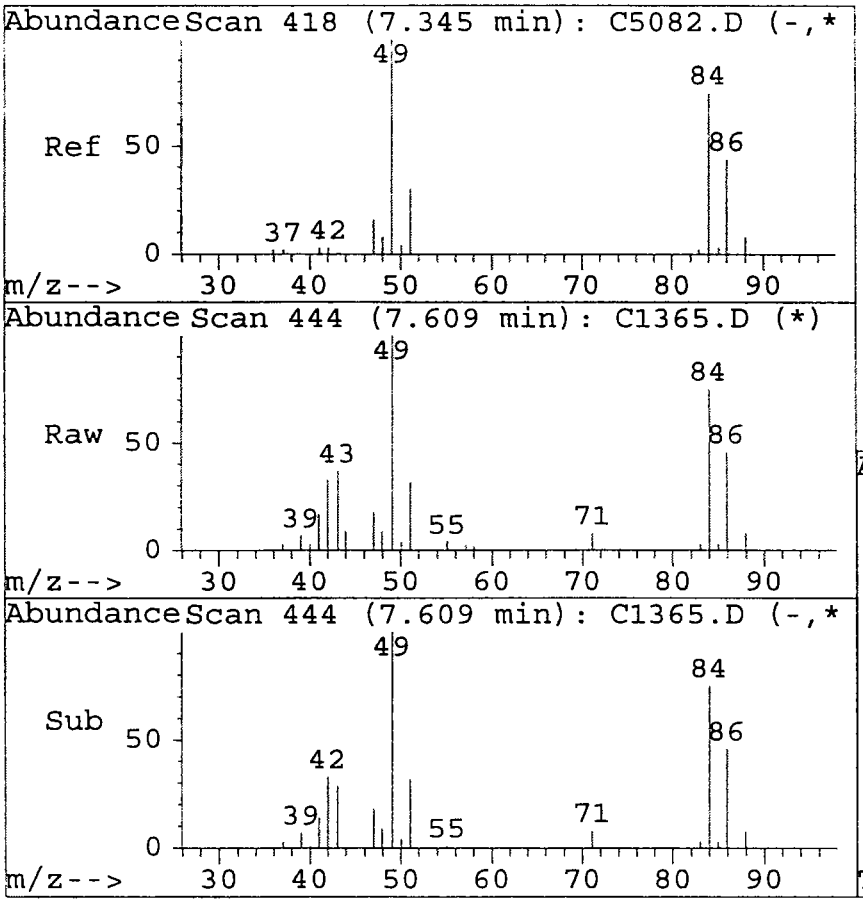
Quantitation Report

Data File : d:\hpchem\1\data\c1365.d
Acq On : 23 Feb 96 8:07 pm
Sample : 9608368
Misc : 25 ML
Quant Time: Feb 26 11:00 1996

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

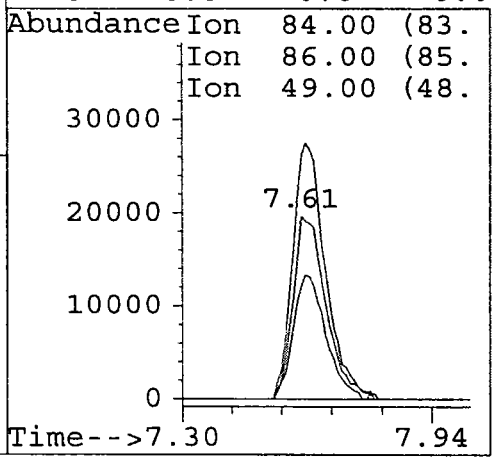


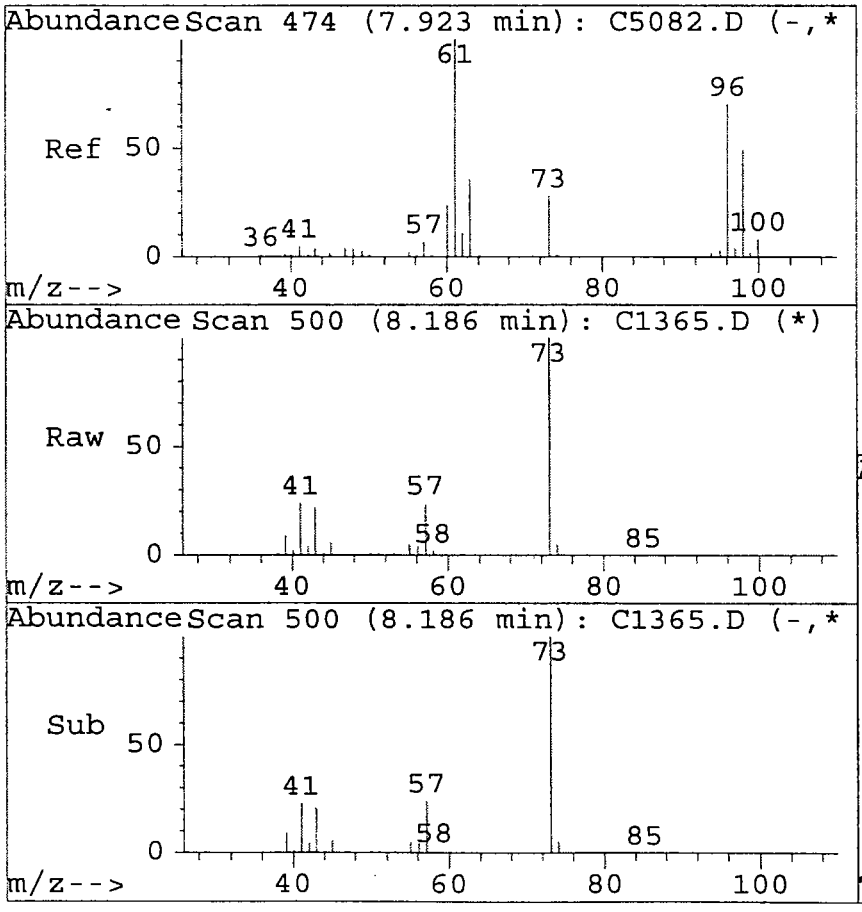


#9
Methylene chloride
Concen: 2.12 ug/L
RT: 7.61 min Scan# 444
Delta R.T. -0.18 min
Lab File: c1365.d
Acq: 23 Feb 96 8:07 pm

Tgt Ion:84 Resp: 115163

Ion	Ratio	Lower	Upper
84	100		
86	61.6	46.1	86.1
49	133.3	118.6	158.6
0	0.0	0.0	0.0

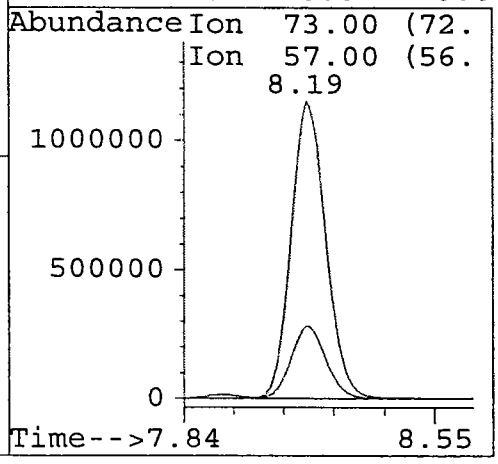


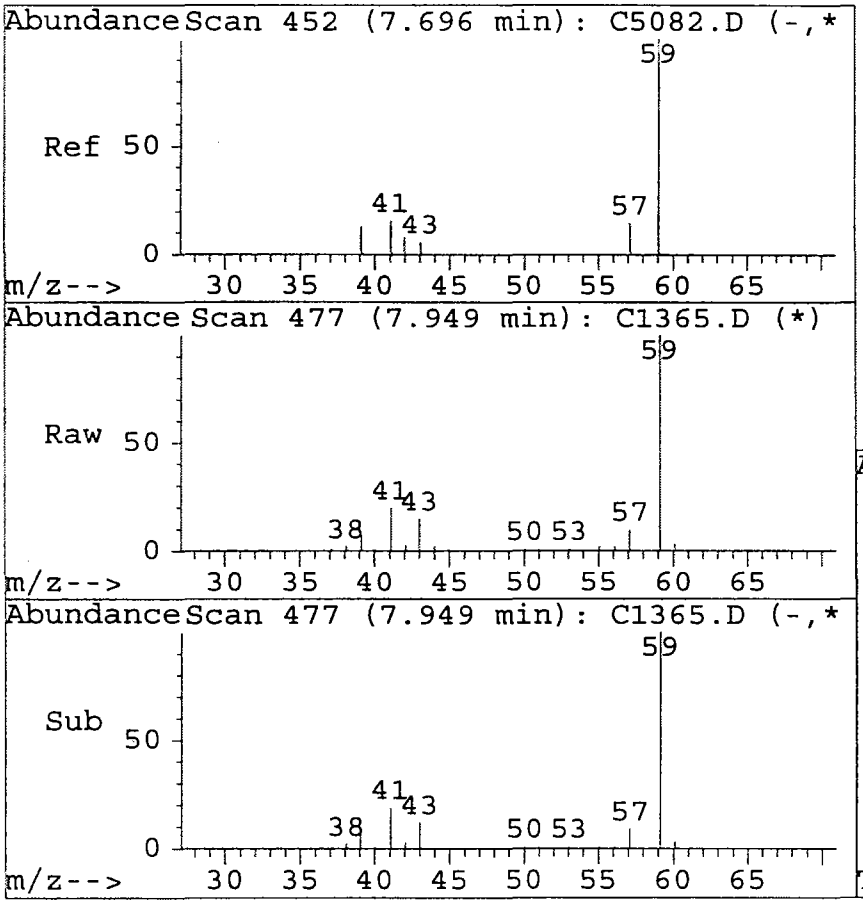


#65
Methyl-tert butyl ether
Concen: 105.60 ug/L m
RT: 8.19 min Scan# 500
Delta R.T. -0.17 min
Lab File: c1365.d
Acq: 23 Feb 96 8:07 pm

Tgt Ion:73 Resp: 7824464

Ion	Ratio	Lower	Upper
73	100		
57	24.4	5.1	45.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

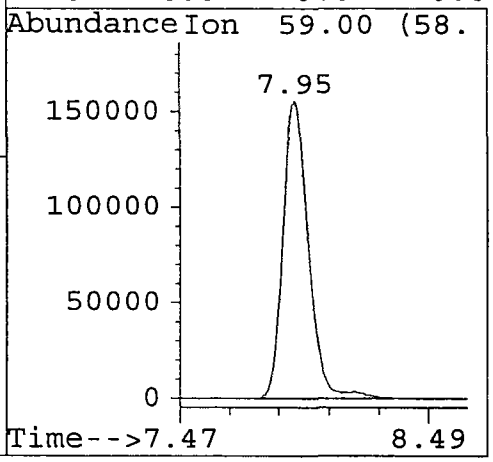




#66
tert-Butyl Alcohol
Concen: 1008.17 ug/L
RT: 7.95 min Scan# 477
Delta R.T. -0.16 min
Lab File: c1365.d
Acq: 23 Feb 96 8:07 pm

Tgt Ion:59 Resp: 1107058

Ion	Ratio	Lower	Upper
59	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report

Data File : d:\hpchem\1\data\c1449.d
Acq On : 4 Mar 96 9:31 pm
Sample : 9608368 DL BLDG 2567 MW-1
Misc : 1250 UL 1:20
Quant Time: Mar 5 12:19 1996

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.97	96	1311481	5.00	ug/L	0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.21	95	627126	4.78	ug/L	95.65%
57) 1,2-Dichlorobenzene-d4	22.01	152	393325	4.68	ug/L	93.66%
Target Compounds						Qvalue
65) Methyl-tert butyl ether	8.16	73	392803	4.99	ug/L	99
66) tert-Butyl Alcohol	7.92	59	50886	39.04	ug/L	100

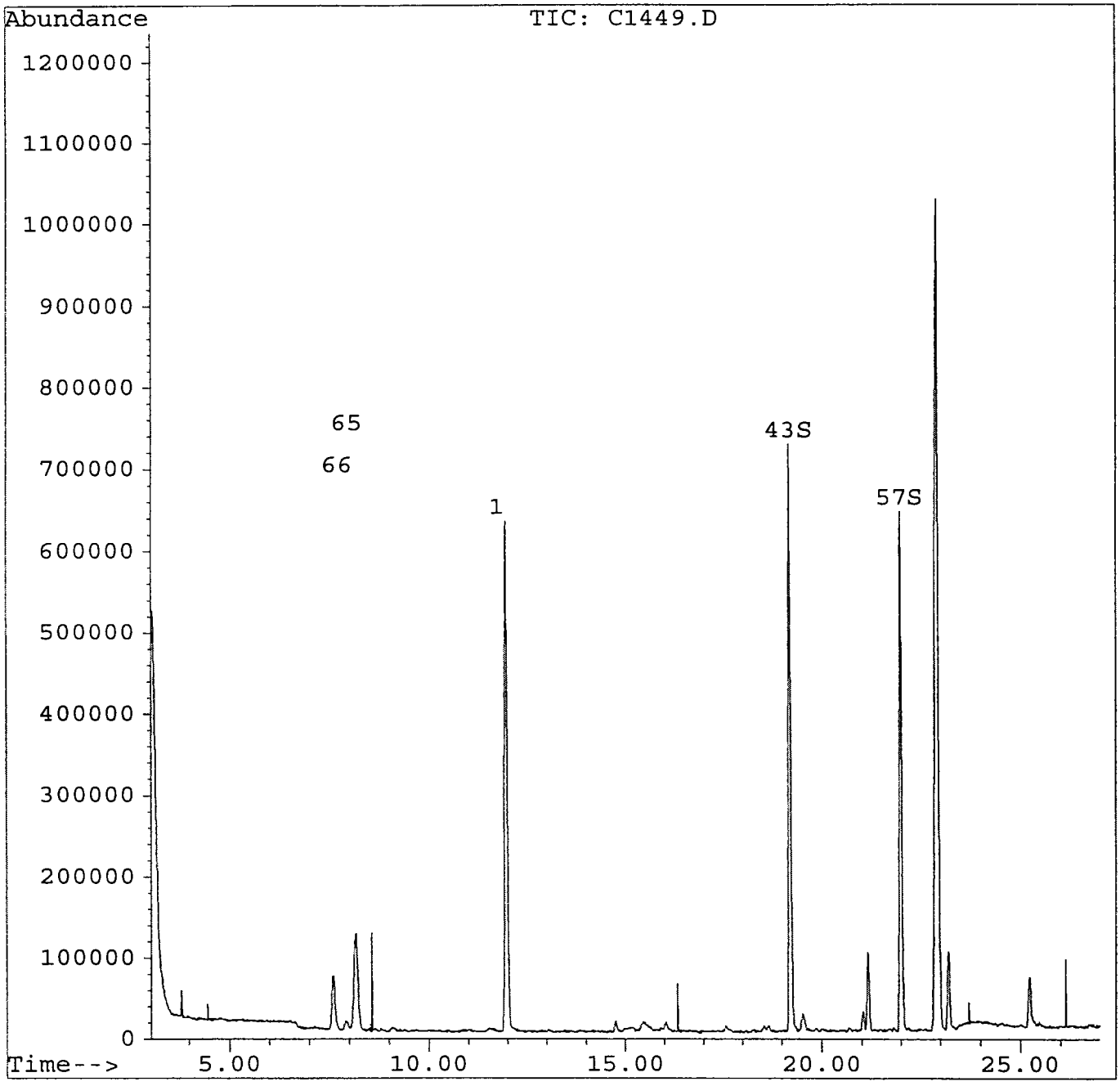
(#) = qualifier out of range (m) = manual integration

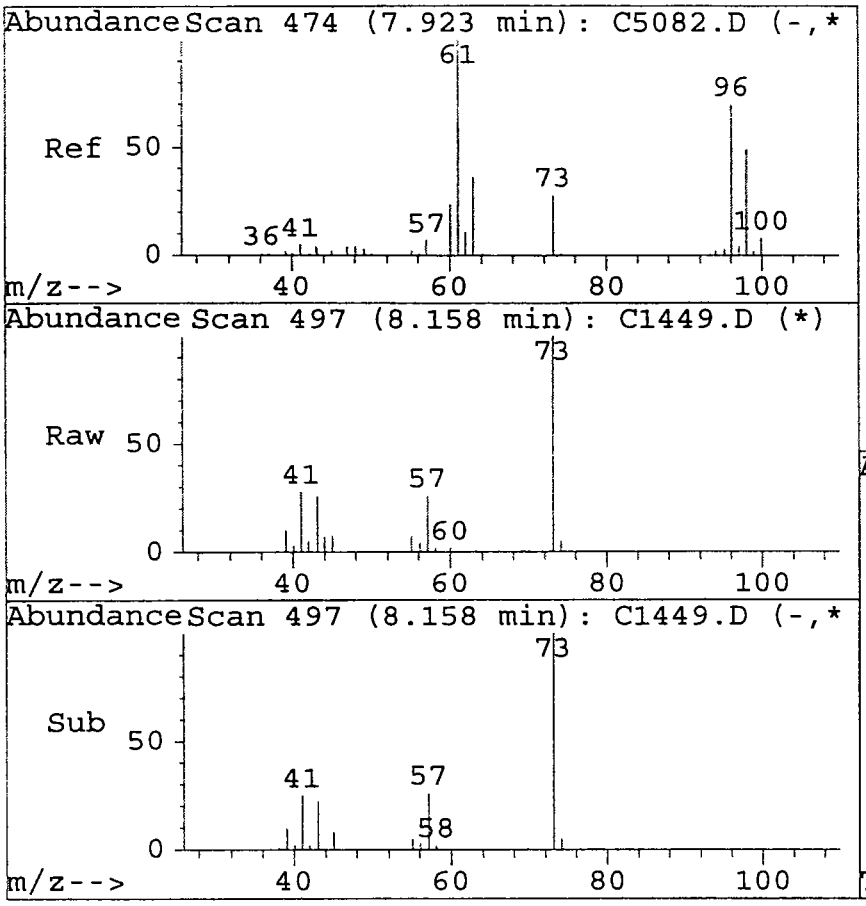
Quantitation Report

Data File : d:\hpchem\1\data\c1449.d
Acq On : 4 Mar 96 9:31 pm
Sample : 9608368 DL BLDG 2567 MW-1
Misc : 1250 UL 1:20
Quant Time: Mar 5 12:19 1996

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

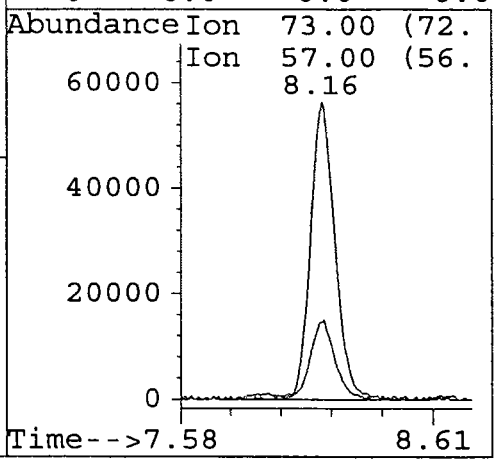


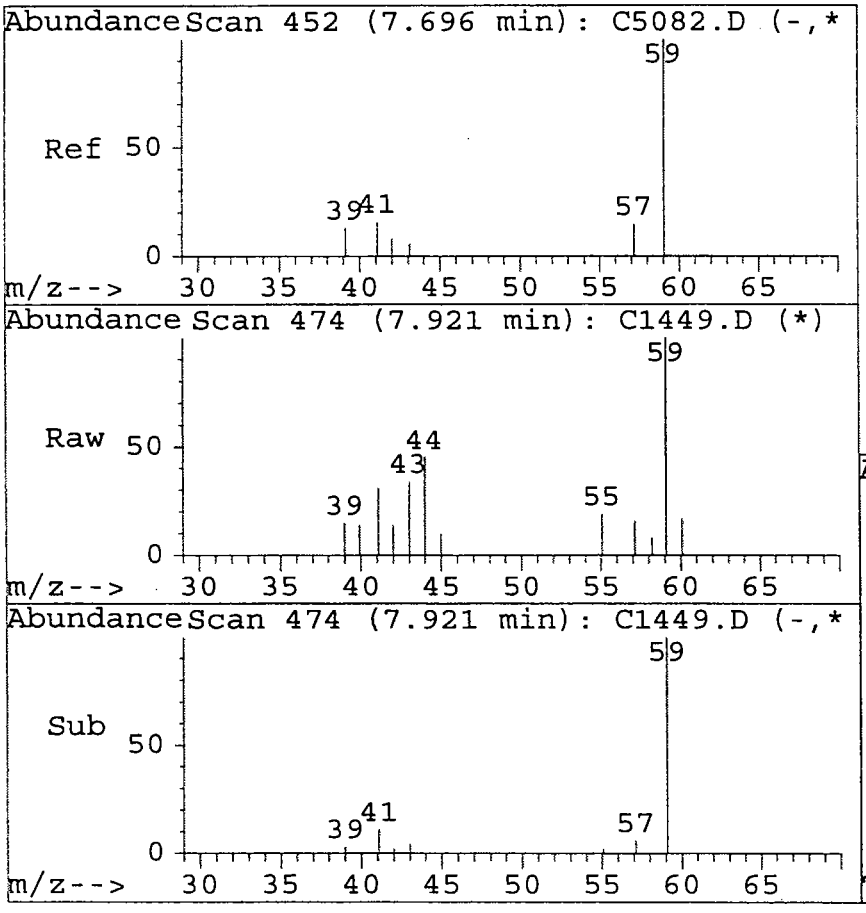


#65
Methyl-tert butyl ether
Concen: 4.99 ug/L
RT: 8.16 min Scan# 497
Delta R.T. 0.01 min
Lab File: c1449.d
Acq: 4 Mar 96 9:31 pm

Tgt Ion:73 Resp: 392803

Ion	Ratio	Lower	Upper
73	100		
57	26.0	5.4	45.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

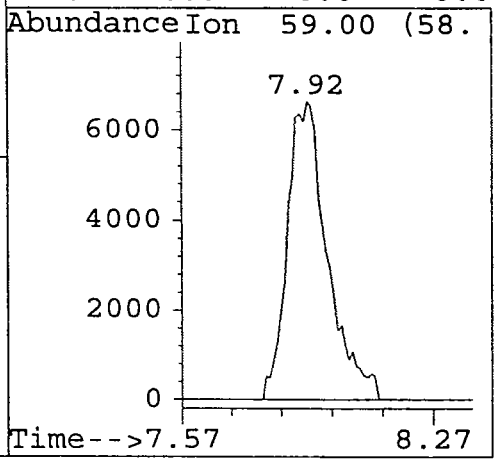




#66
tert-Butyl Alcohol
Concen: 39.04 ug/L
RT: 7.92 min Scan# 474
Delta R.T. 0.00 min
Lab File: c1449.d
Acq: 4 Mar 96 9:31 pm

Tgt Ion:59 Resp: 50886

Ion	Ratio	Lower	Upper
59	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

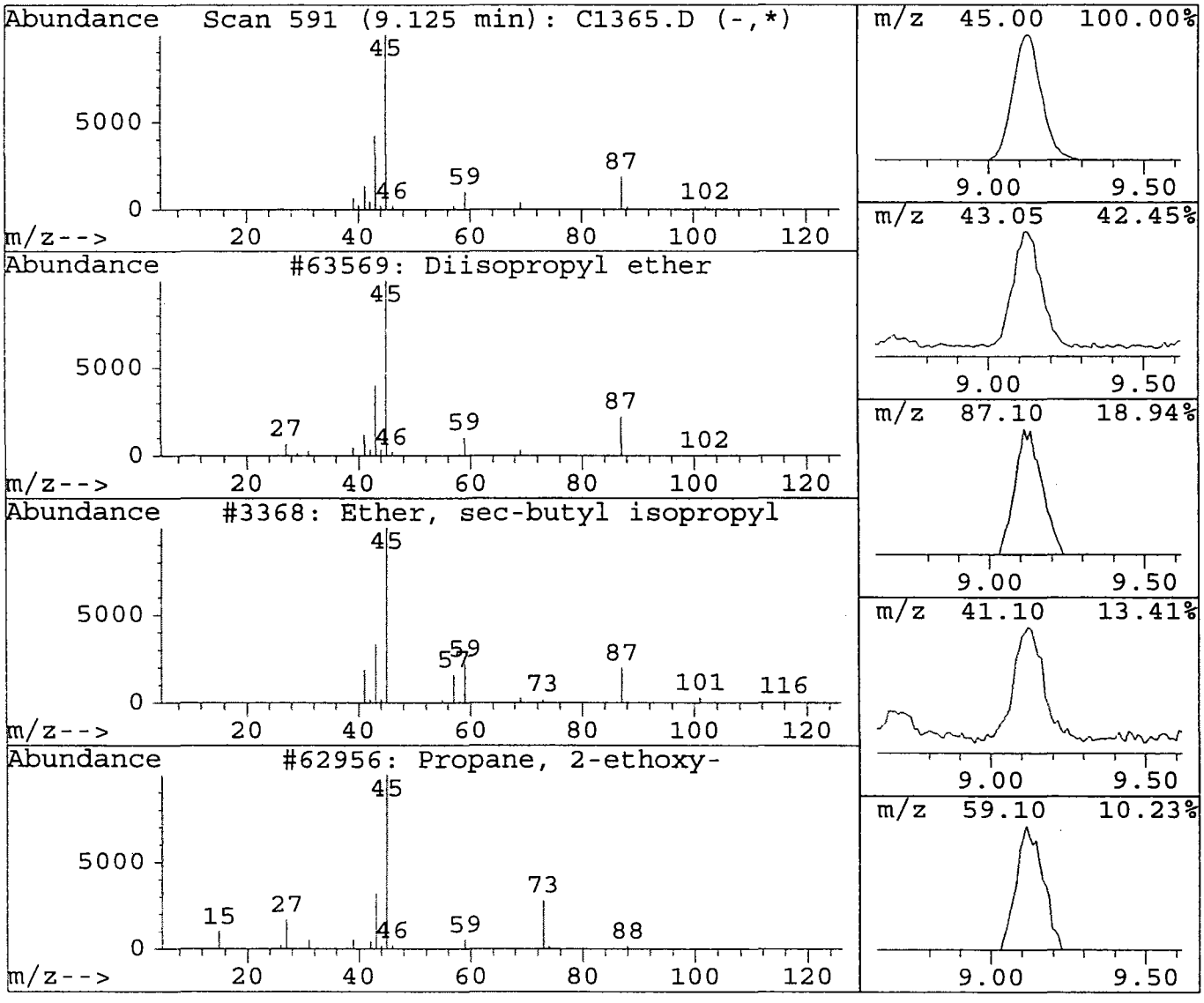
Data File : d:\hpchem\1\data\c1365.d
Acq On : 23 Feb 96 8:07 pm
Sample : 9608368
Misc : 25 ML

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.12	0.76 ug/L	390464	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Diisopropyl ether	63569	000108-20-3	56
2	Ether, sec-butyl isopropyl	3368	018641-81-1	40
3	Propane, 2-ethoxy-	62956	000625-54-7	72
4	1-Propanol, 2-(1-methylethoxy)-	3552	003944-37-4	38
5	(R)-(-)-2-Pentanol	850	031087-44-2	4



Library Search Compound Report

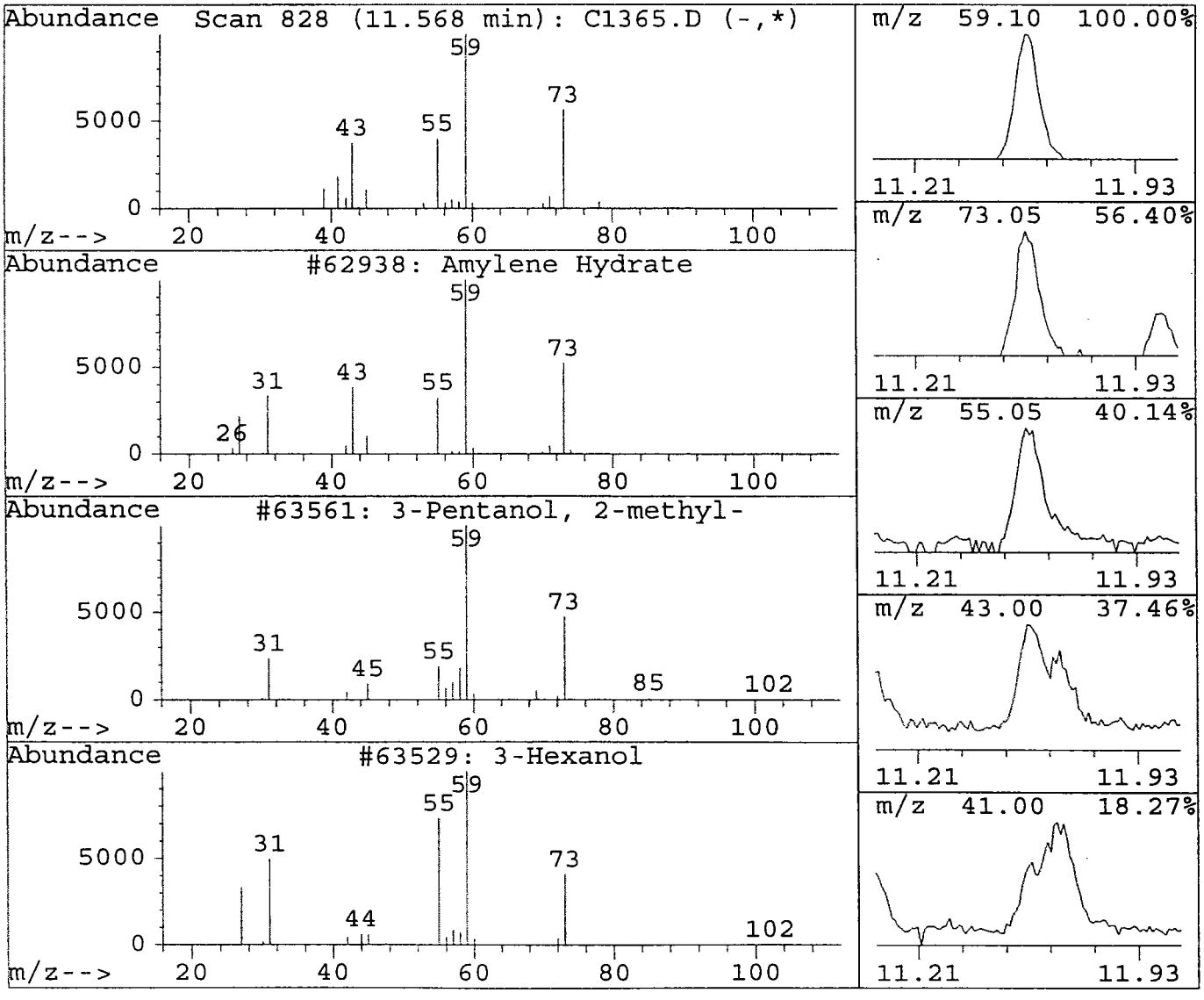
Data File : d:\hpchem\1\data\c1365.d
Acq On : 23 Feb 96 8:07 pm
Sample : 9608368
Misc : 25 ML

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.57	0.52 ug/L	266037	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Amylene Hydrate	62938	000075-85-4	64
2	3-Pentanol, 2-methyl-	63561	000565-67-3	38
3	3-Hexanol	63529	000623-37-0	9
4	Silane, trimethyl-	331	000993-07-7	9
5	Butane, 2-methoxy-	854	006795-87-5	40



Library Search Compound Report

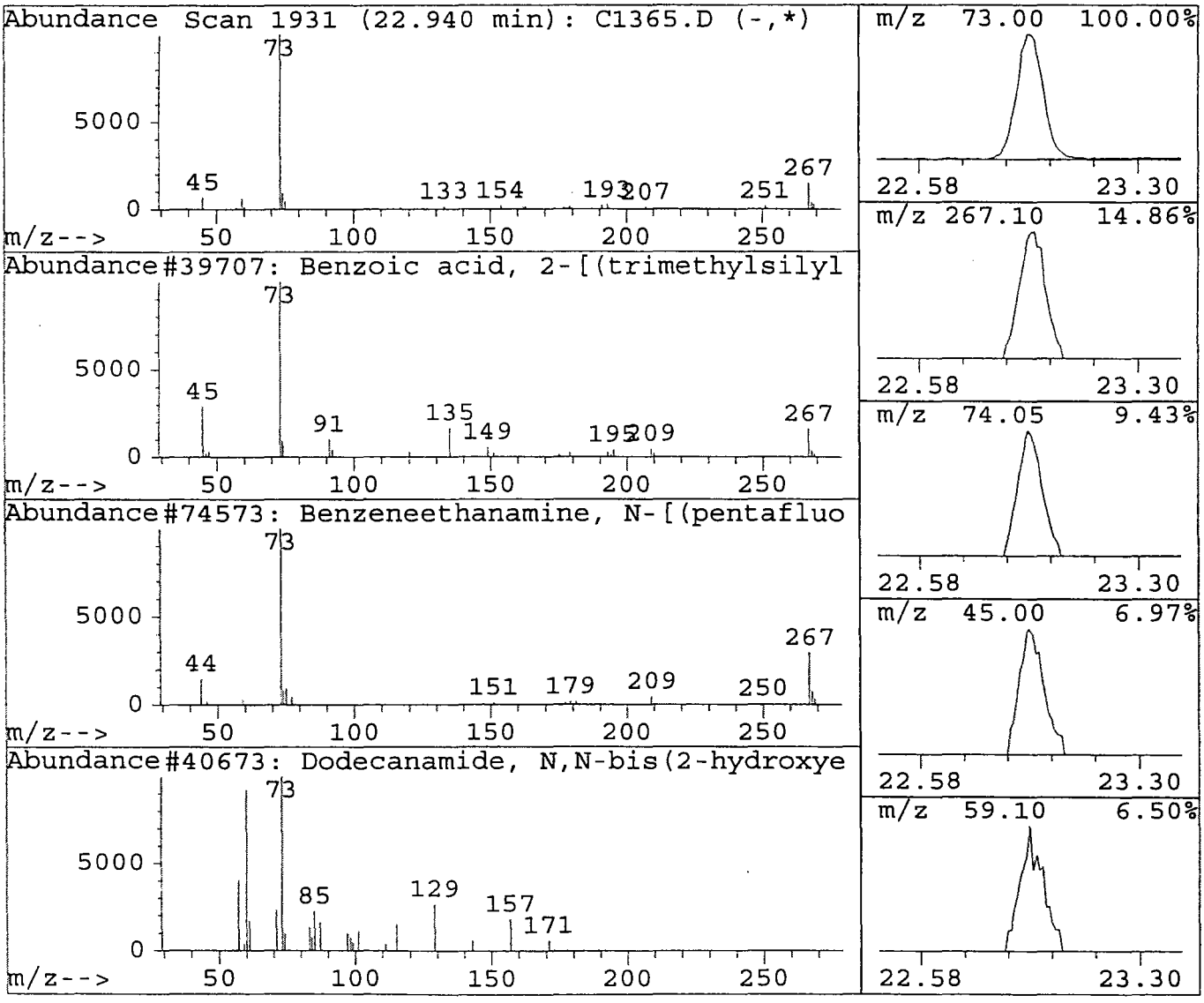
Data File : d:\hpchem\1\data\c1365.d
Acq On : 23 Feb 96 8:07 pm
Sample : 9608368
Misc : 25 ML

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.94	0.97 ug/L	497154	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	39
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	25
3	Dodecanamide, N,N-bis(2-hydroxyethy	40673	000120-40-1	2
4	Phosphorochloridous dihydrazide, he	25669	022692-22-4	2
5	Butane, 2,3-dimethoxy-2-methyl-	5815	074421-00-4	2



VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 169

MW-2

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9608369V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1363.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.0	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 170

mw-2

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9608369V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1363.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	4.2	
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	1.0	
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	1.1	
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.80	
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	6.2	
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	7.2	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	2.0	
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# mw-a

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 2 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9608369V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1363.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 14 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 622-96-8	Benzene, 1-ethyl-4-methyl-	19.90	2	J
2. 526-73-8	Benzene, 1,2,3-trimethyl-	21.47	3	J
3. 496-11-7	Indane	21.85	8	J
4.	Unknown Hydrocarbon	21.98	1	J
5. 934-80-5	Benzene, 4-ethyl-1,2-dimethy	22.49	1	J
6.	Unknown Hydrocarbon	22.67	1	J
7.	Unknown	22.78	1	J
8. 27133-93-3	2,3-Dihydro-1-methylindene	22.90	3	J
9. 95-93-2	Benzene, 1,2,4,5-tetramethyl	23.42	1	J
10. 527-53-7	Benzene, 1,2,3,5-tetramethyl	23.51	1	J
11. 824-22-6	1H-Indene, 2,3-dihydro-4-met	24.02	1	J
12. 874-35-1	1H-Indene, 2,3-dihydro-5-met	24.29	1	J
13.	Unknown Hydrocarbon	24.31	3	J
14.	Unknown	24.63	3	J
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML
Quant Time: Mar 5 16:22 1996

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : d:\HPCHEM\1\DATA\C1363.D\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.99	96	1243809	5.00	ug/L	-0.17
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.24	95	615058	5.10	ug/L	102.01%
57) 1,2-Dichlorobenzene-d4	22.04	152	379788	5.28	ug/L	105.63%
Target Compounds						Qvalue
9) Methylene chloride	7.61	84	114654	2.04	ug/L	97
38) Xylene (para & meta)	17.60	106	498535	4.18	ug/L	97
42) Isopropylbenzene	18.96	105	300927	0.98	ug/L	98
47) n-Propylbenzene	19.69	91	459744	1.07	ug/L m	54
50) 1,3,5-Trimethylbenzene	20.01	105	201296	0.76	ug/L	100
52) 1,2,4-Trimethylbenzene	20.70	105	1600377	6.17	ug/L m	99
63) Naphthalene	25.50	128	657033	7.20	ug/L m	100
65) Methyl-tert butyl ether	8.18	73	151096	1.98	ug/L	64

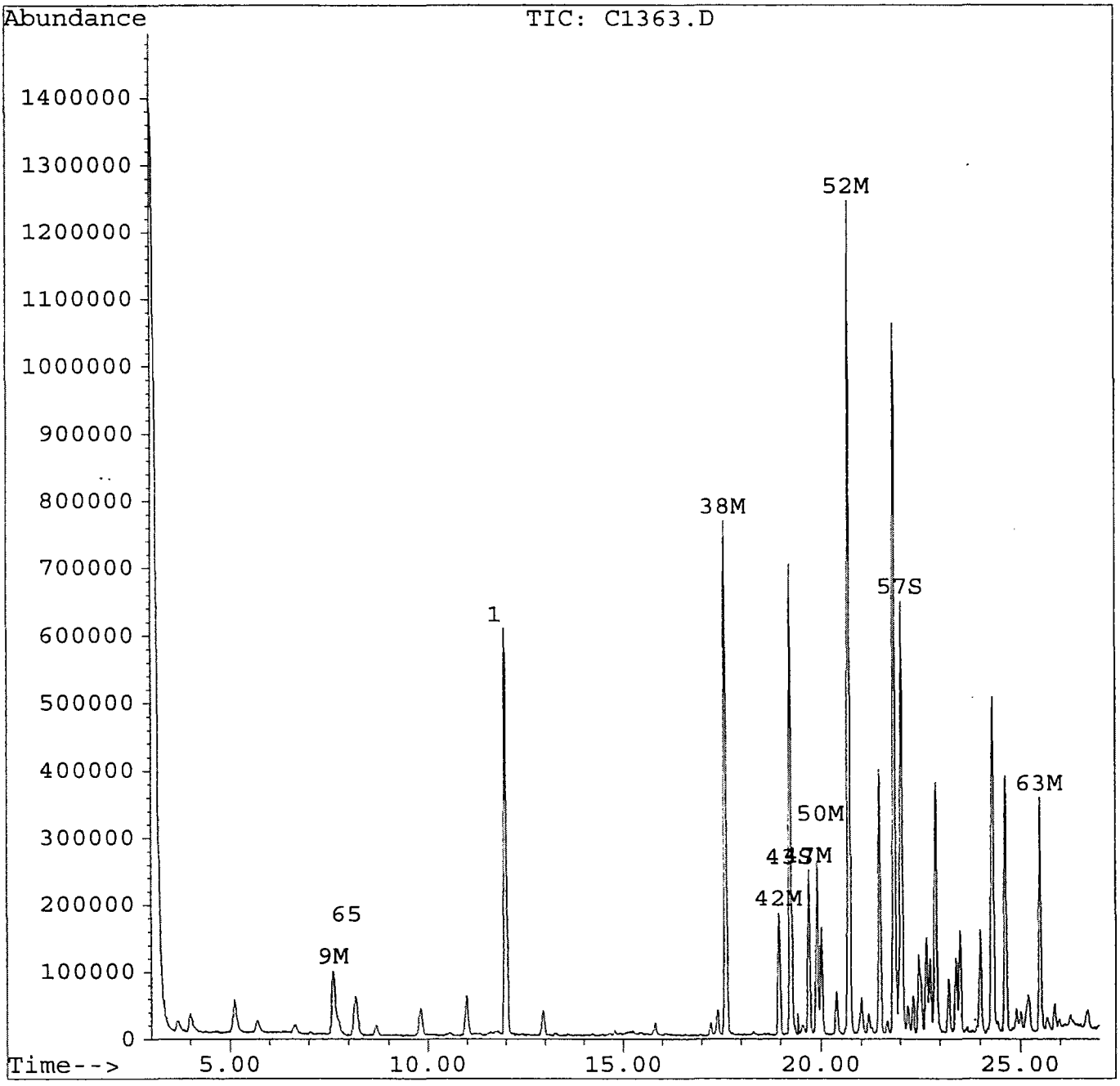
(#) = qualifier out of range (m) = manual integration

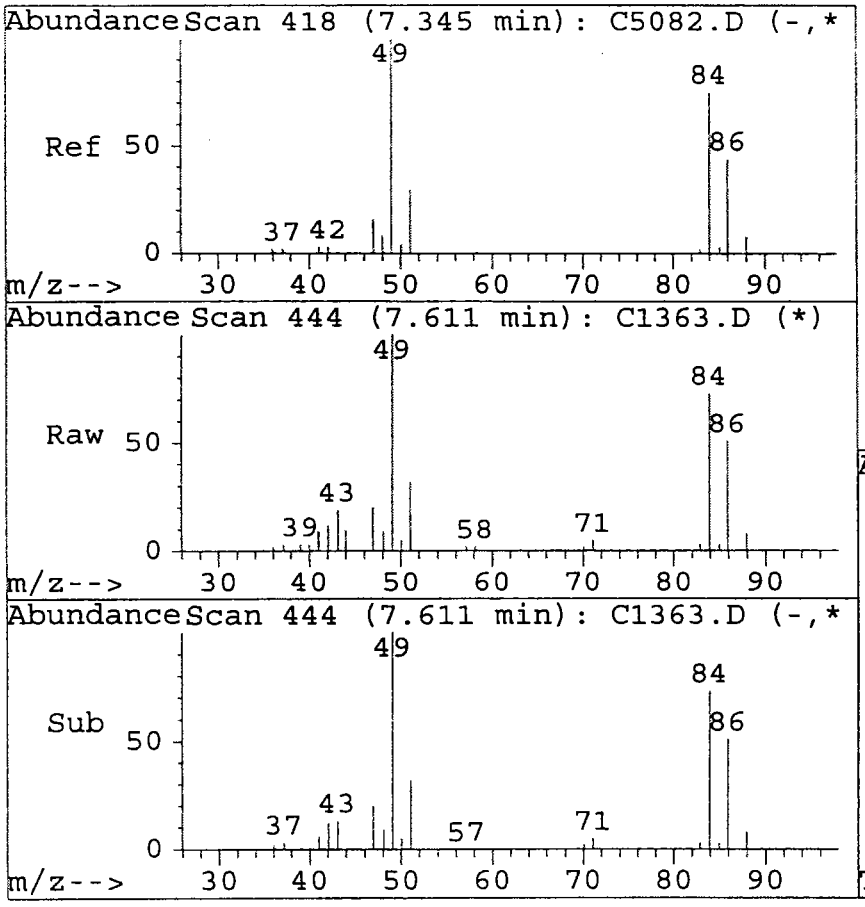
Quantitation Report

Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML
Quant Time: Mar 5 16:22 1996

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : d:\HPCHEM\1\DATA\C1363.D\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

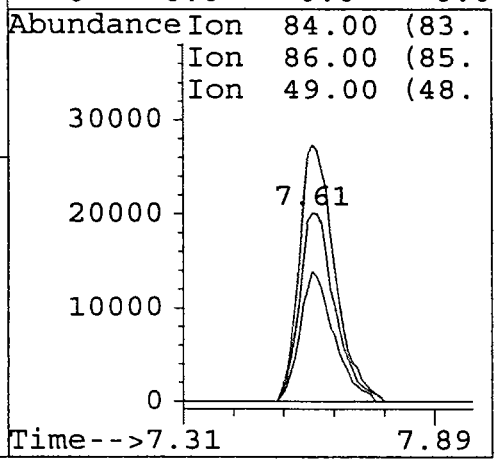


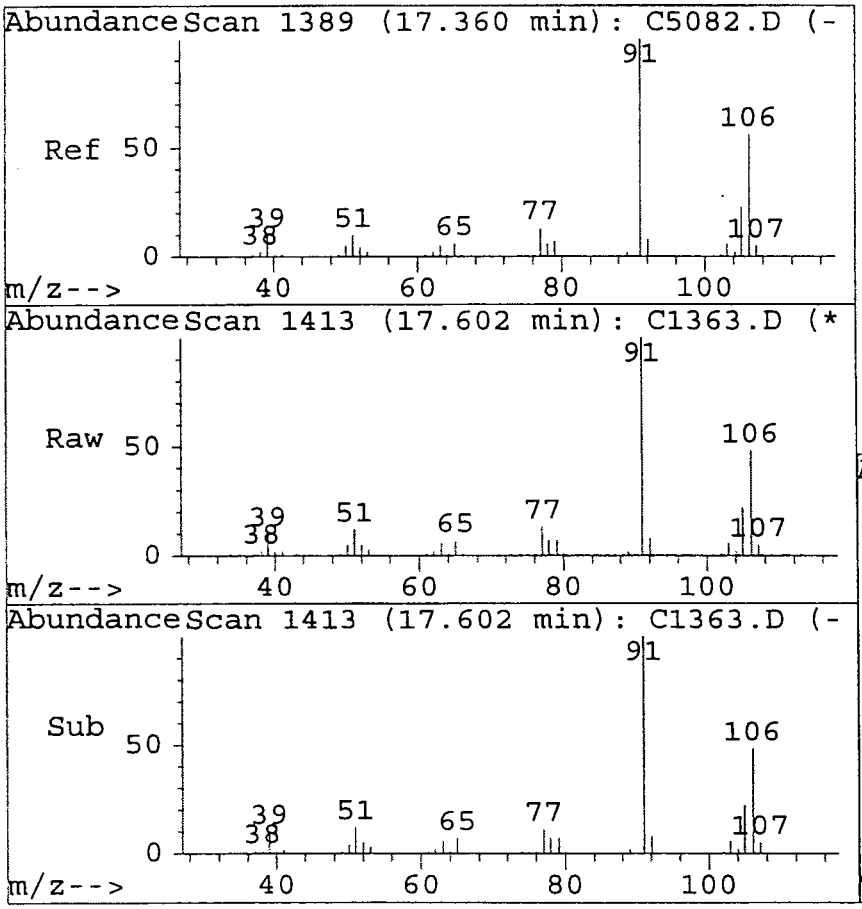


#9
Methylene chloride
Concen: 2.04 ug/L
RT: 7.61 min Scan# 444
Delta R.T. -0.18 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:84 Resp: 114654

Ion	Ratio	Lower	Upper
84	100		
86	69.5	46.1	86.1
49	136.2	118.6	158.6
0	0.0	0.0	0.0

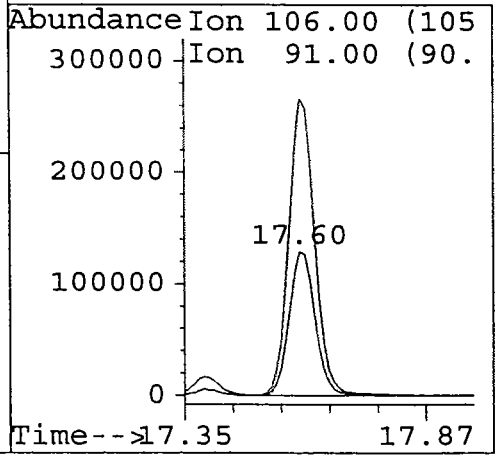


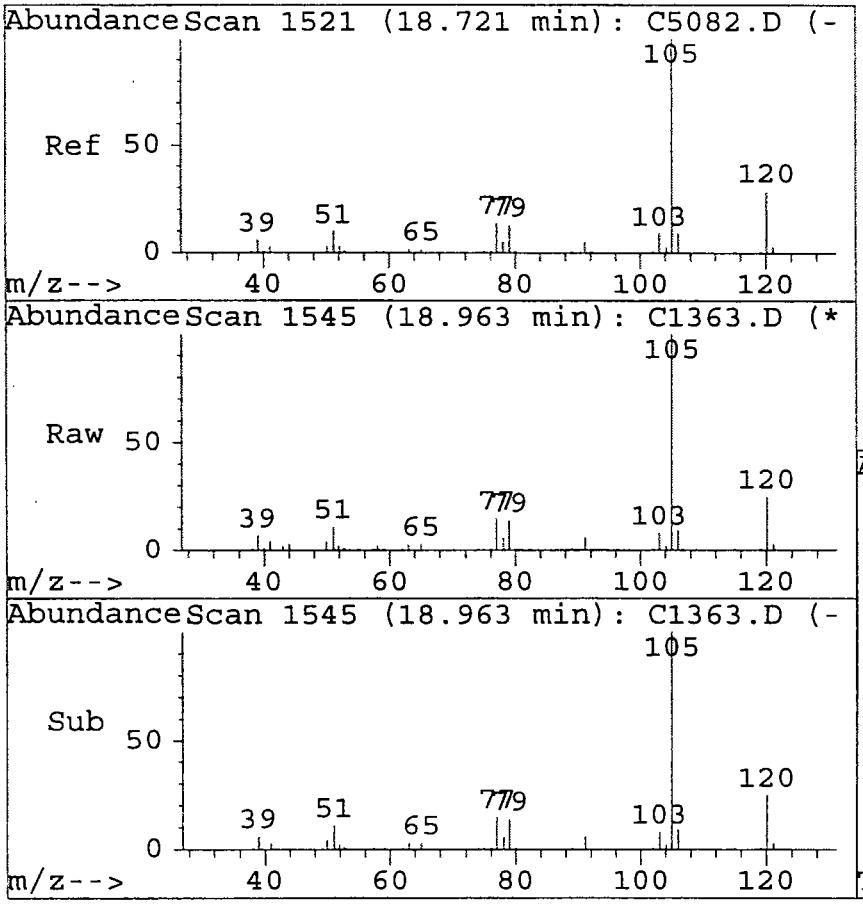


#38
Xylene (para & meta)
Concen: 4.18 ug/L
RT: 17.60 min Scan# 1413
Delta R.T. -0.14 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:106 Resp: 498535

Ion	Ratio	Lower	Upper
106	100		
91	206.9	182.5	222.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

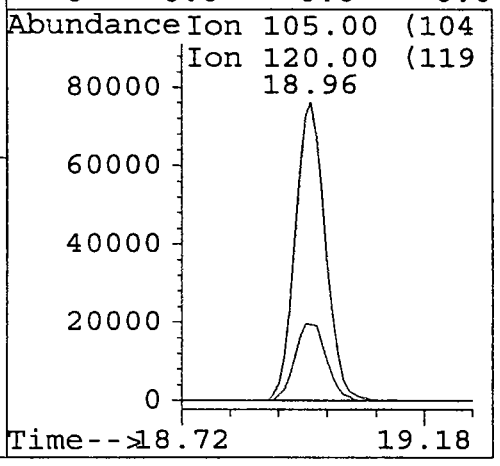


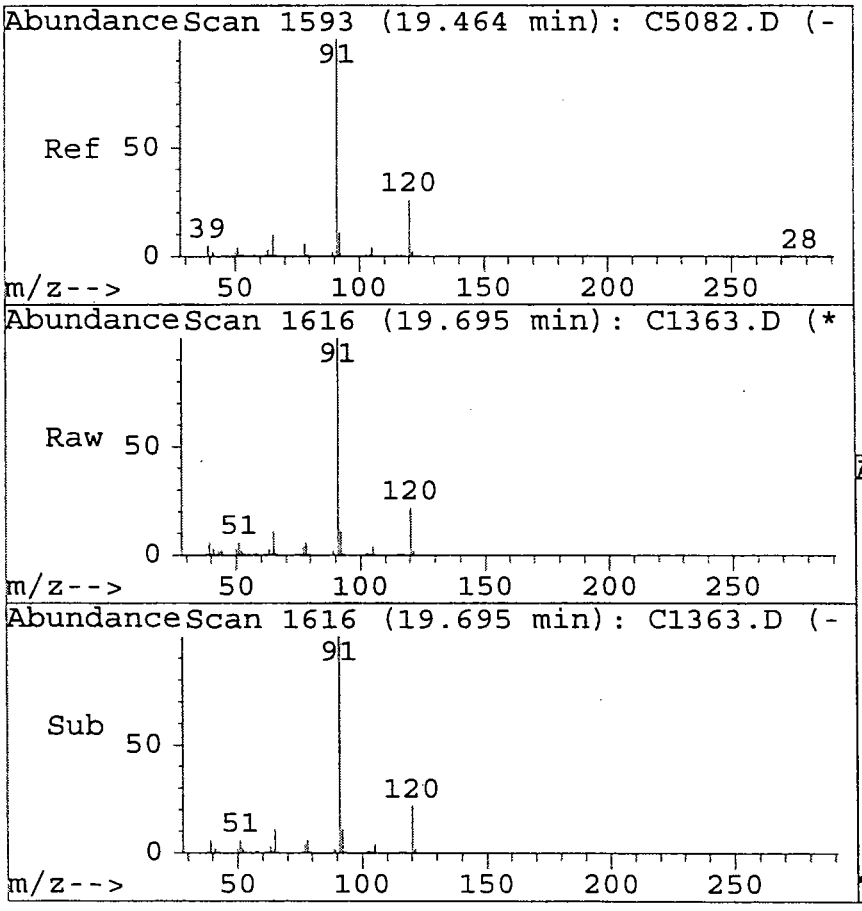


#42
Isopropylbenzene
Concen: 0.98 ug/L
RT: 18.96 min Scan# 1545
Delta R.T. -0.13 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:105 Resp: 300927

Ion	Ratio	Lower	Upper
105	100		
120	25.4	6.3	46.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

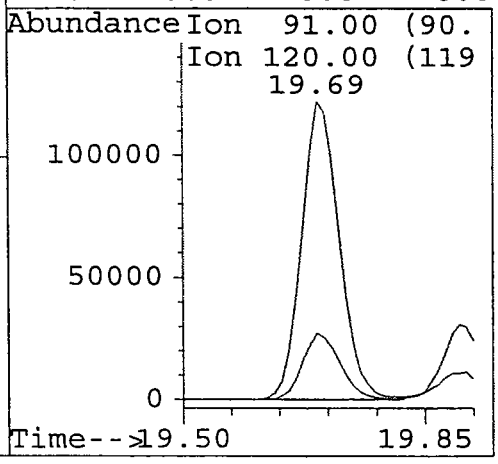


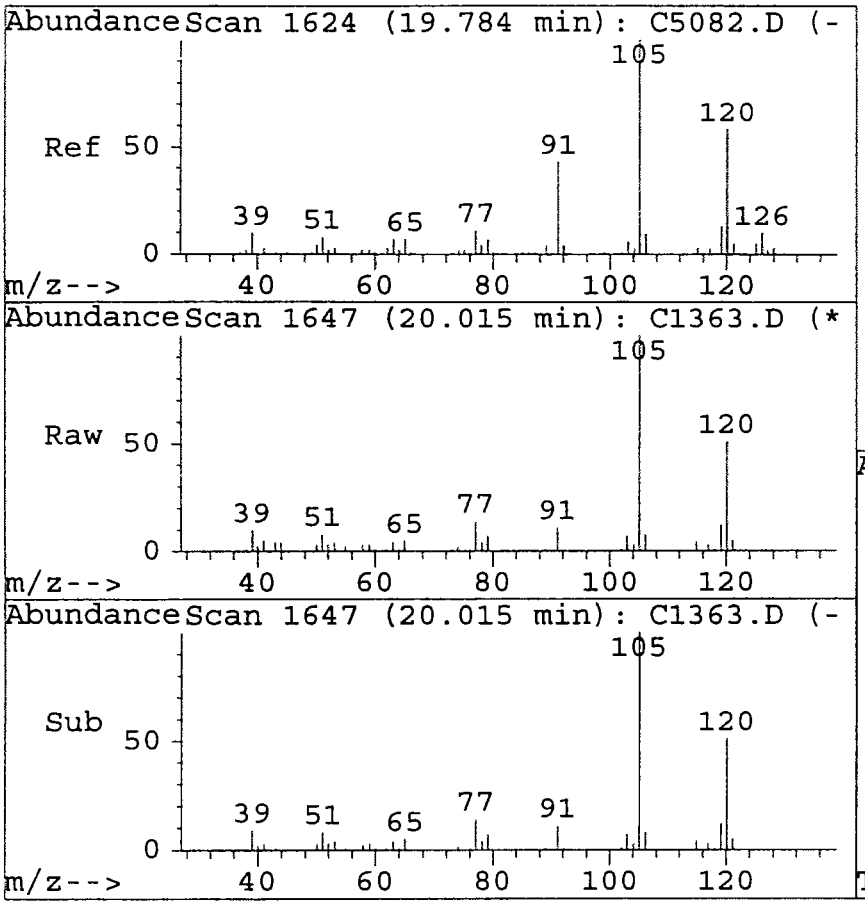


#47
n-Propylbenzene
Concen: 1.07 ug/L m
RT: 19.69 min Scan# 1616
Delta R.T. -0.13 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:91 Resp: 459744

Ion	Ratio	Lower	Upper
91	100		
120	25.6	2.1	42.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

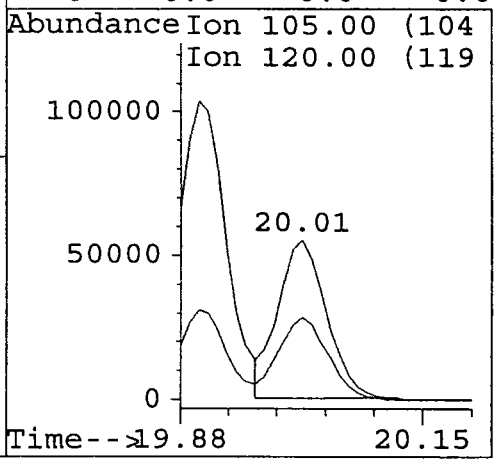


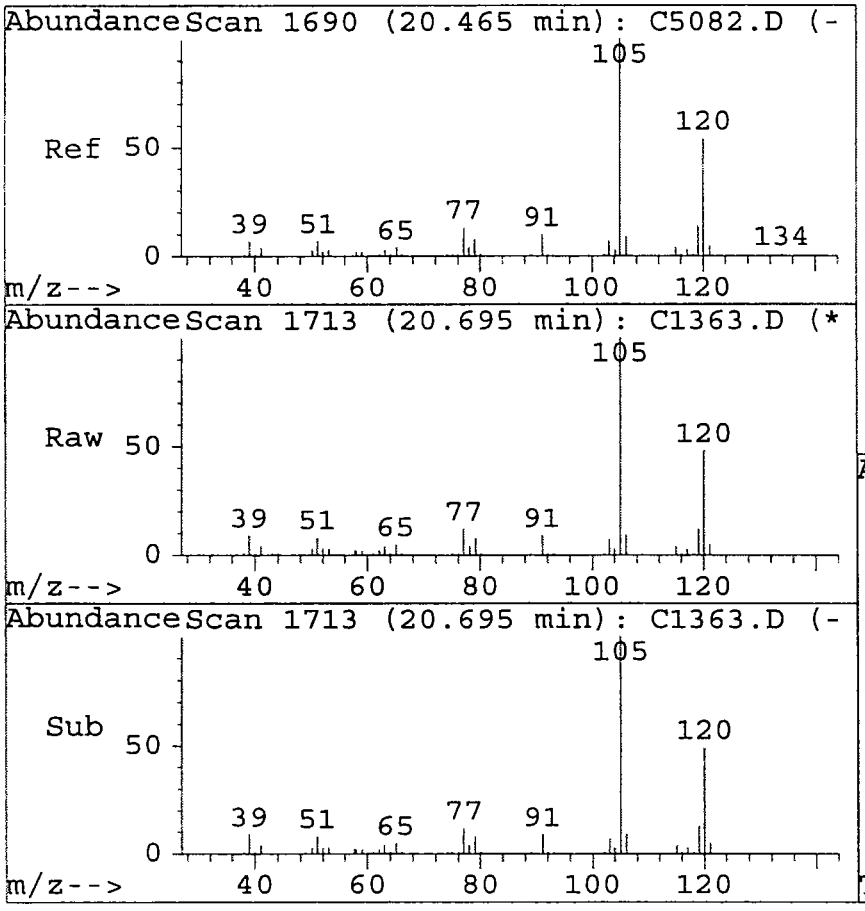


#50
1,3,5-Trimethylbenzene
Concen: 0.76 ug/L
RT: 20.01 min Scan# 1647
Delta R.T. -0.13 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:105 Resp: 201296

Ion	Ratio	Lower	Upper
105	100		
120	52.0	31.9	71.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

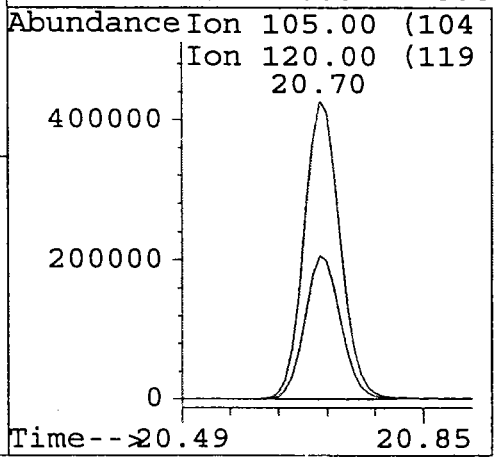


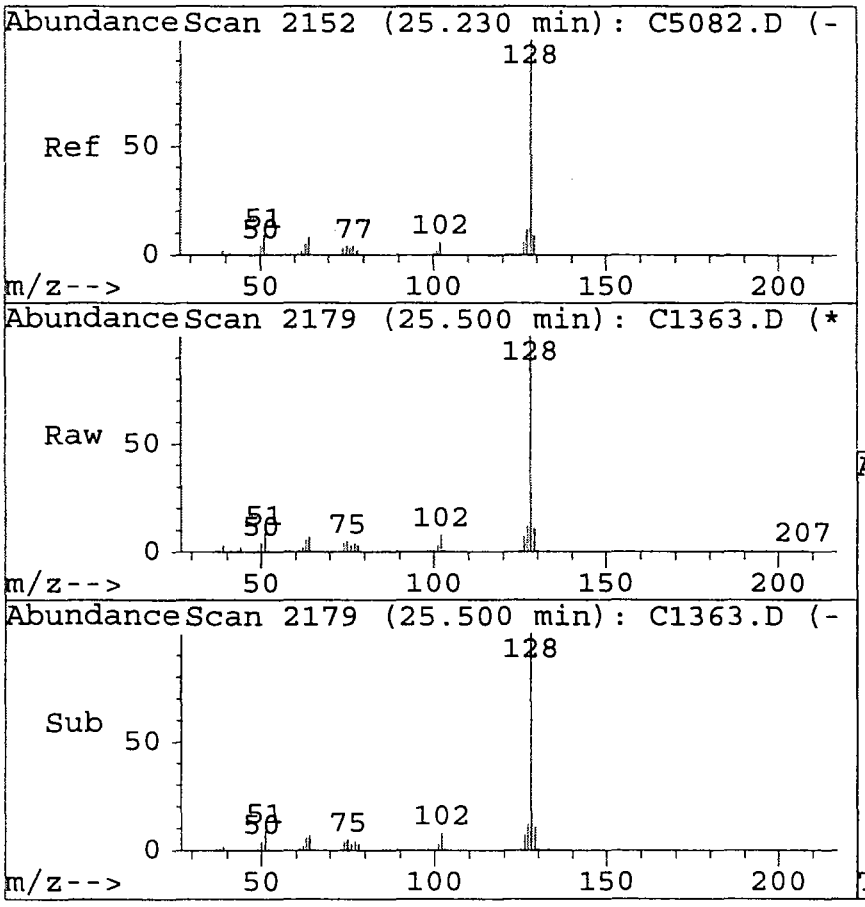


#52
1,2,4-Trimethylbenzene
Concen: 6.17 ug/L m
RT: 20.70 min Scan# 1713
Delta R.T. -0.13 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:105 Resp: 1600377

Ion	Ratio	Lower	Upper
105	100		
120	54.0	28.8	68.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

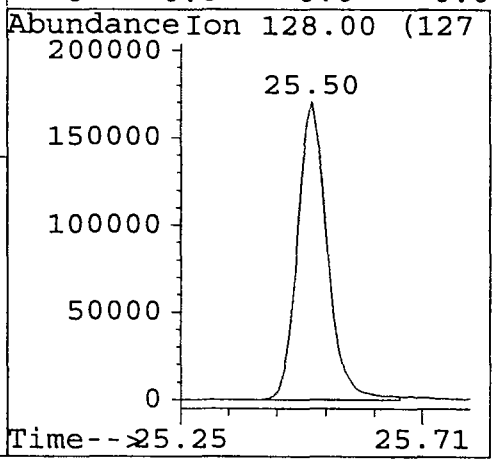


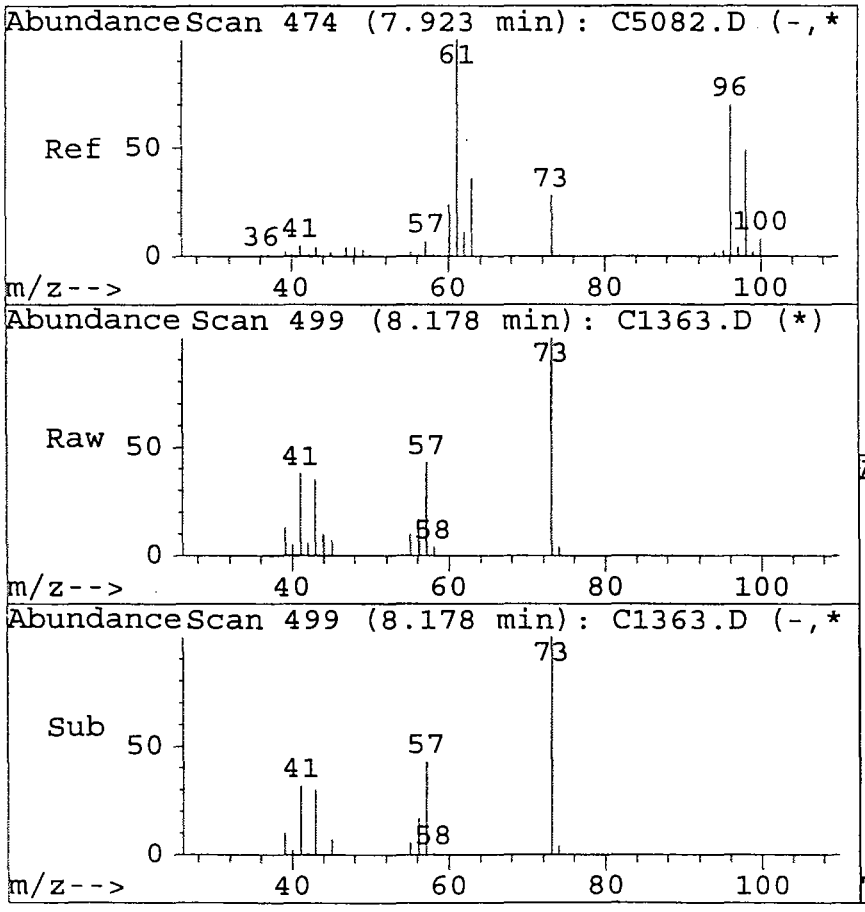


#63
Naphthalene
Concen: 7.20 ug/L m
RT: 25.50 min Scan# 2179
Delta R.T. -0.13 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:128 Resp: 657033

Ion	Ratio	Lower	Upper
128	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

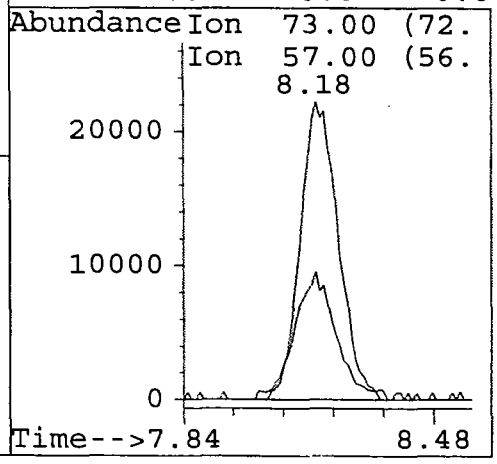




#65
Methyl-tert butyl ether
Concen: 1.98 ug/L
RT: 8.18 min Scan# 499
Delta R.T. -0.18 min
Lab File: c1363.d
Acq: 23 Feb 96 6:57 pm

Tgt Ion:73 Resp: 151096

Ion	Ratio	Lower	Upper
73	100		
57	43.0	5.1	45.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

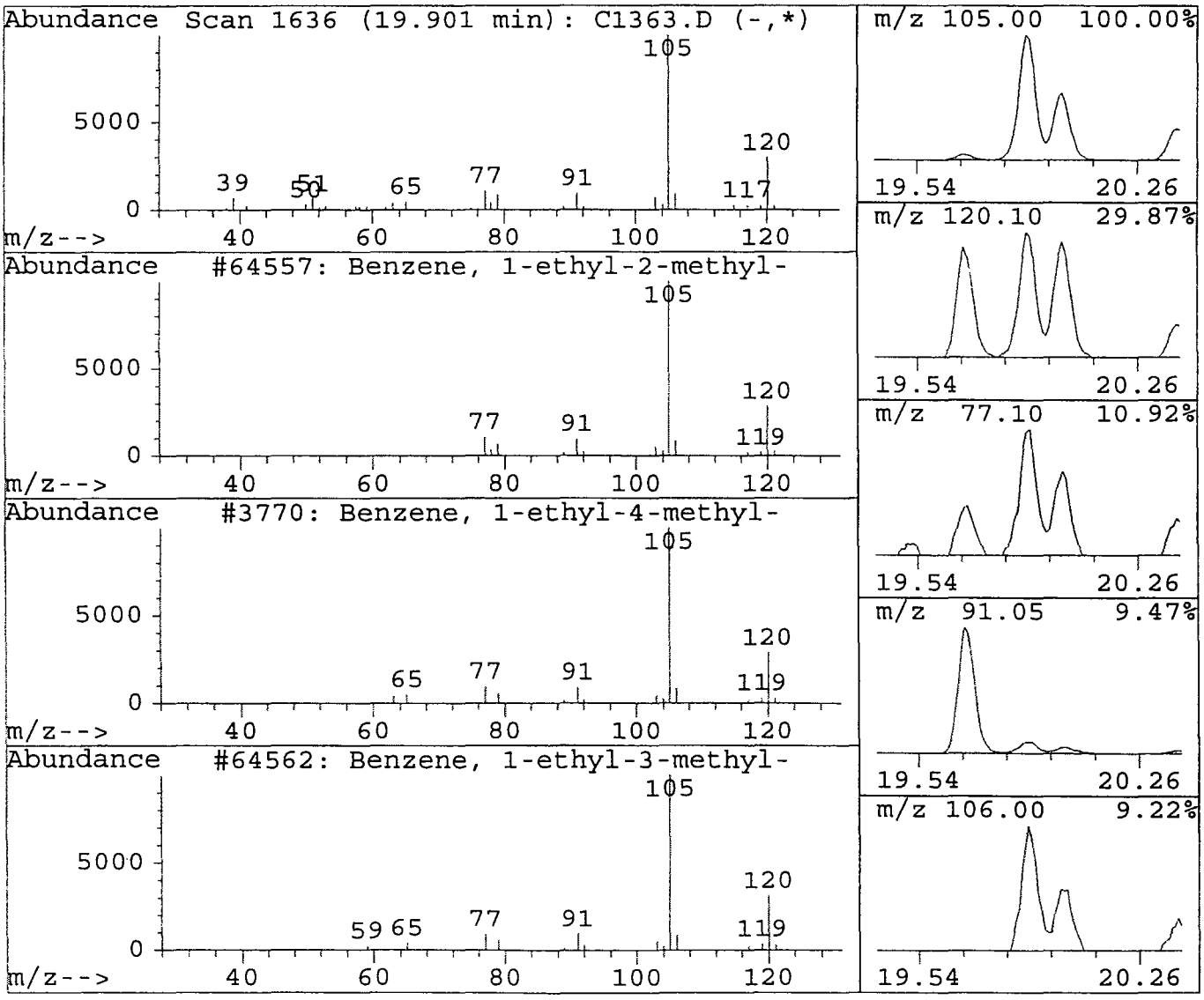
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.90	1.83 ug/L	967728	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	64557	000611-14-3	95
2	Benzene, 1-ethyl-4-methyl-	3770	000622-96-8	94
3	Benzene, 1-ethyl-3-methyl-	64562	000620-14-4	91
4	Benzene, (1-methylethyl)-	64552	000098-82-8	91
5	Benzene, 1,2,4-trimethyl-	64580	000095-63-6	72



Library Search Compound Report

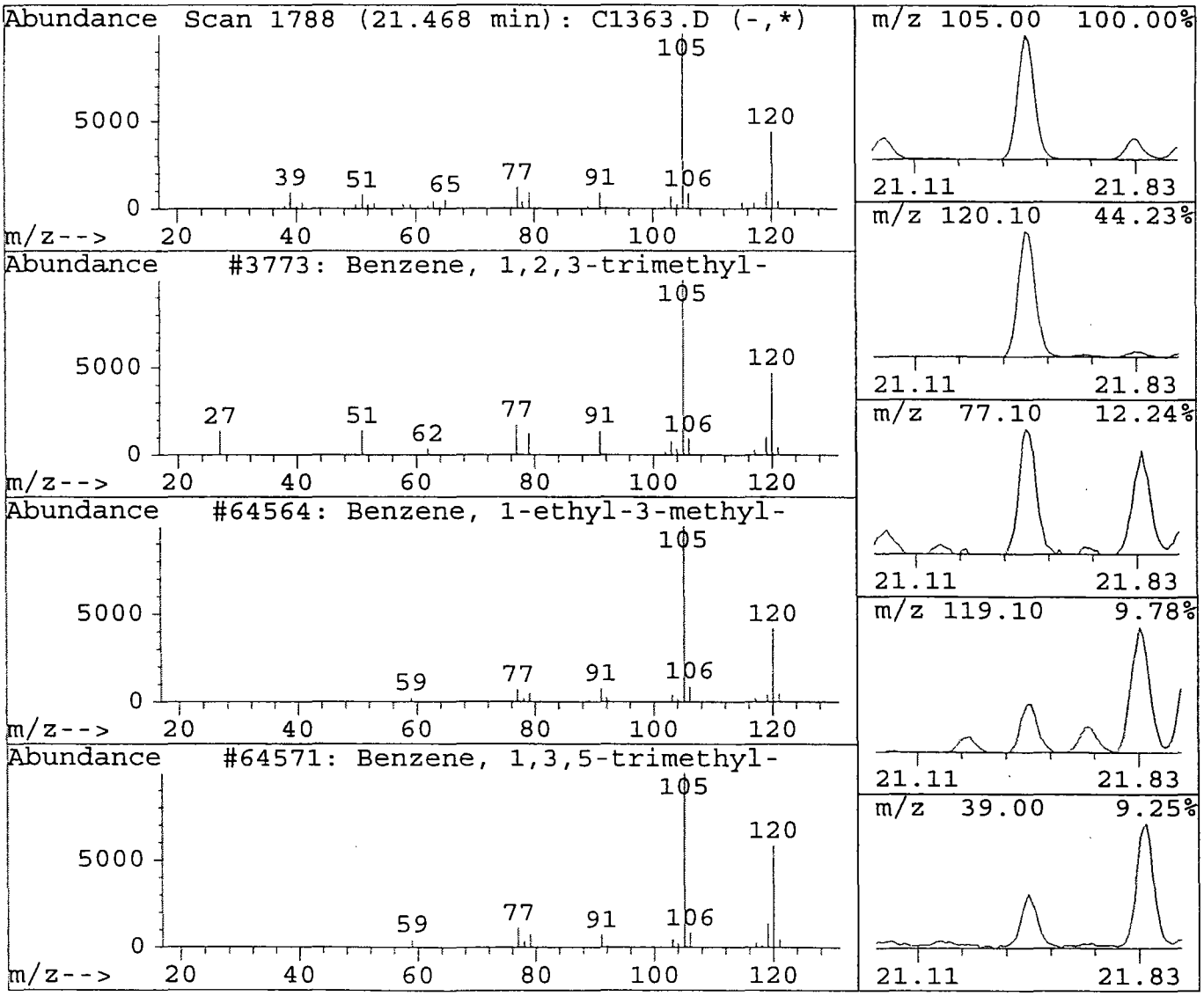
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.47	2.77 ug/L	1461849	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	3773	000526-73-8	83
2	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	90
3	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	72
4	Benzene, 1,2,4-trimethyl-	64578	000095-63-6	87
5	Benzene, 1-ethyl-4-methyl-	64566	000622-96-8	83



Library Search Compound Report

Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

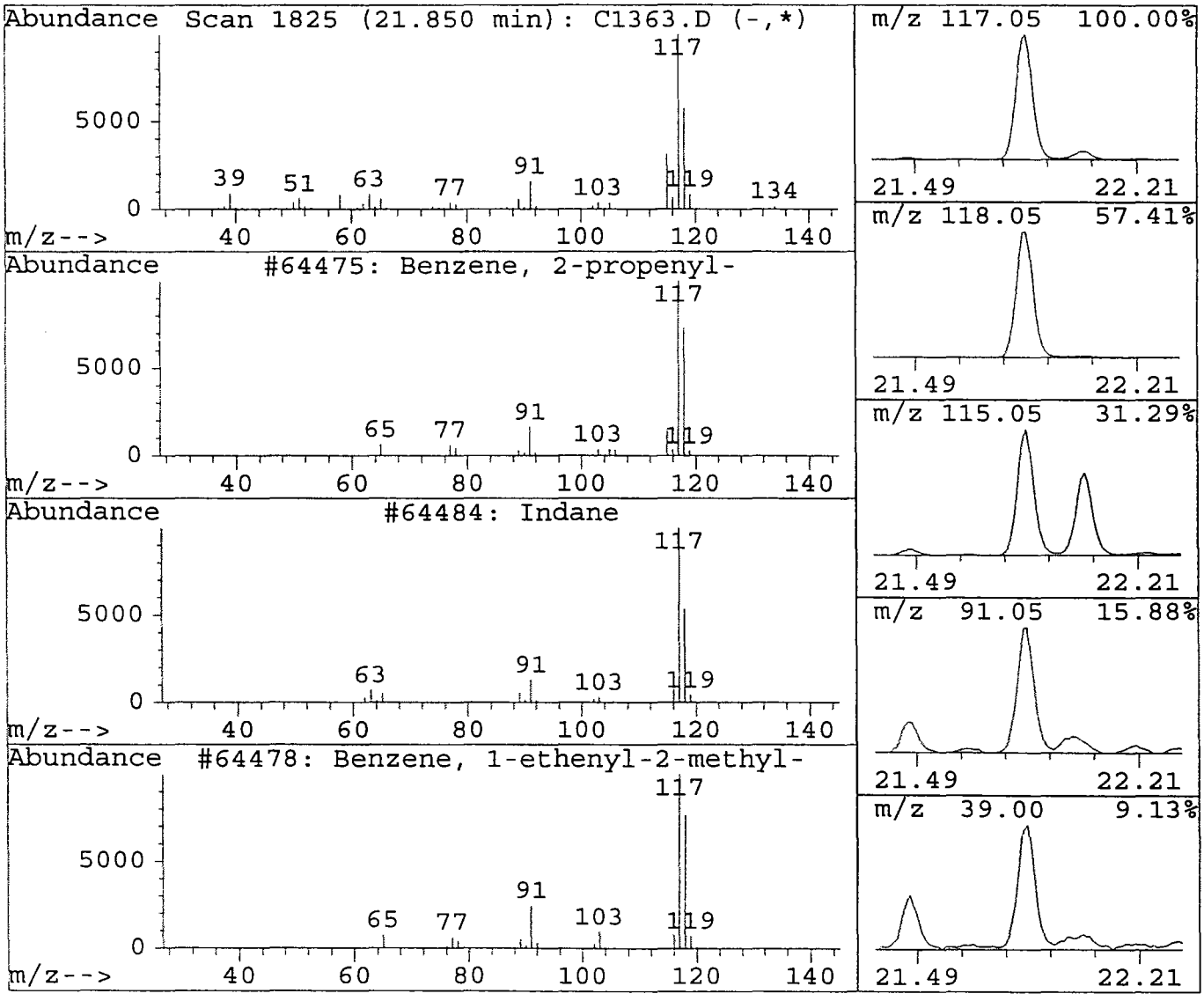
Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

180

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.85	7.83 ug/L	4142165	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 2-propenyl-	64475	000300-57-2	47
2	Indane	64484	000496-11-7	81
3	Benzene, 1-ethenyl-2-methyl-	64478	000611-15-4	25
4	Benzene, 1-propenyl-	64476	000637-50-3	49
5	Benzene, 1-ethenyl-4-methyl-	64480	000622-97-9	38



Library Search Compound Report

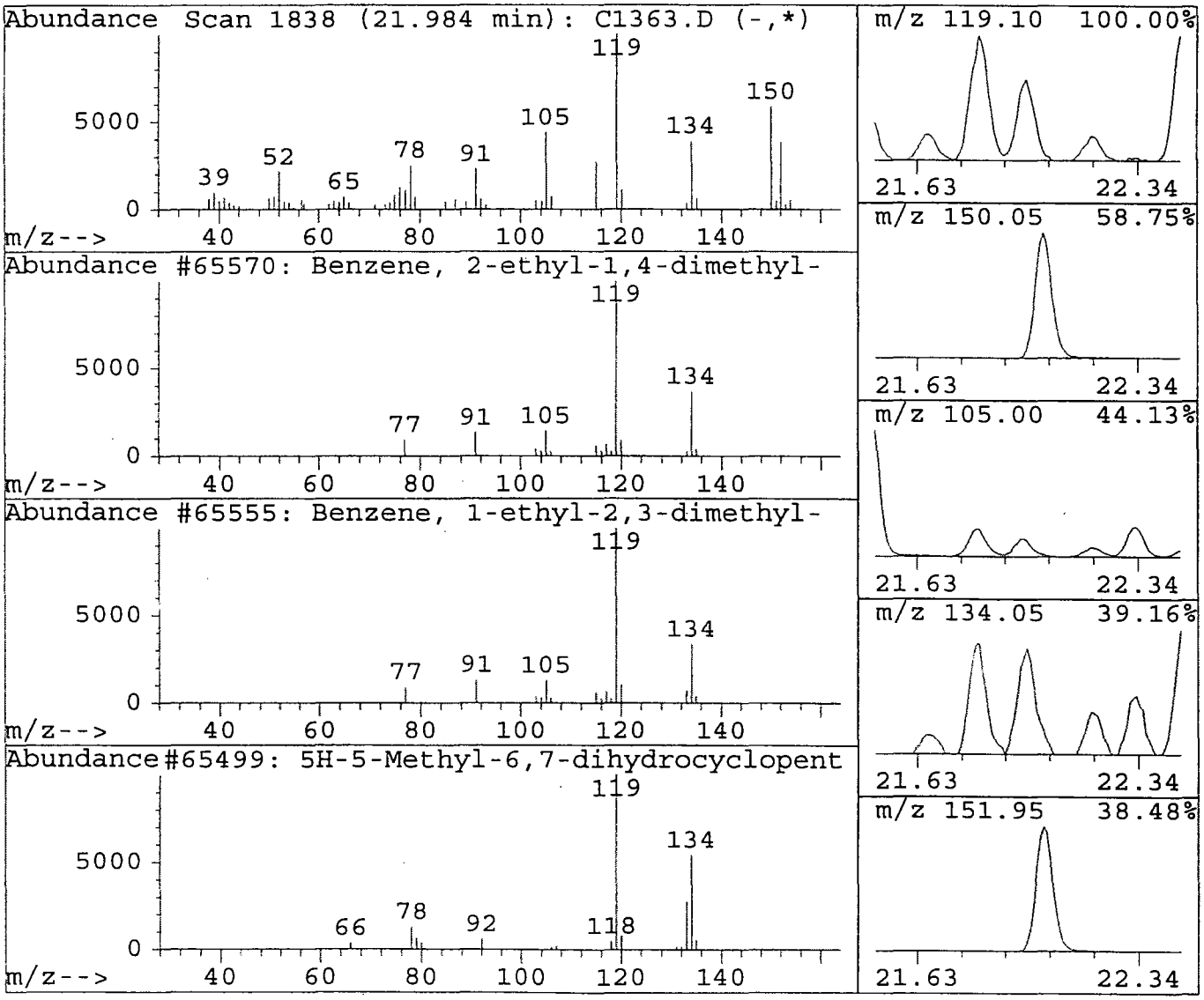
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.98	0.64 ug/L	337154	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	65570	001758-88-9	30
2	Benzene, 1-ethyl-2,3-dimethyl-	65555	000933-98-2	30
3	5H-5-Methyl-6,7-dihydrocyclopentapy	65499	023747-48-0	27
4	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	38
5	Benzene, 4-ethyl-1,2-dimethyl-	65567	000934-80-5	30



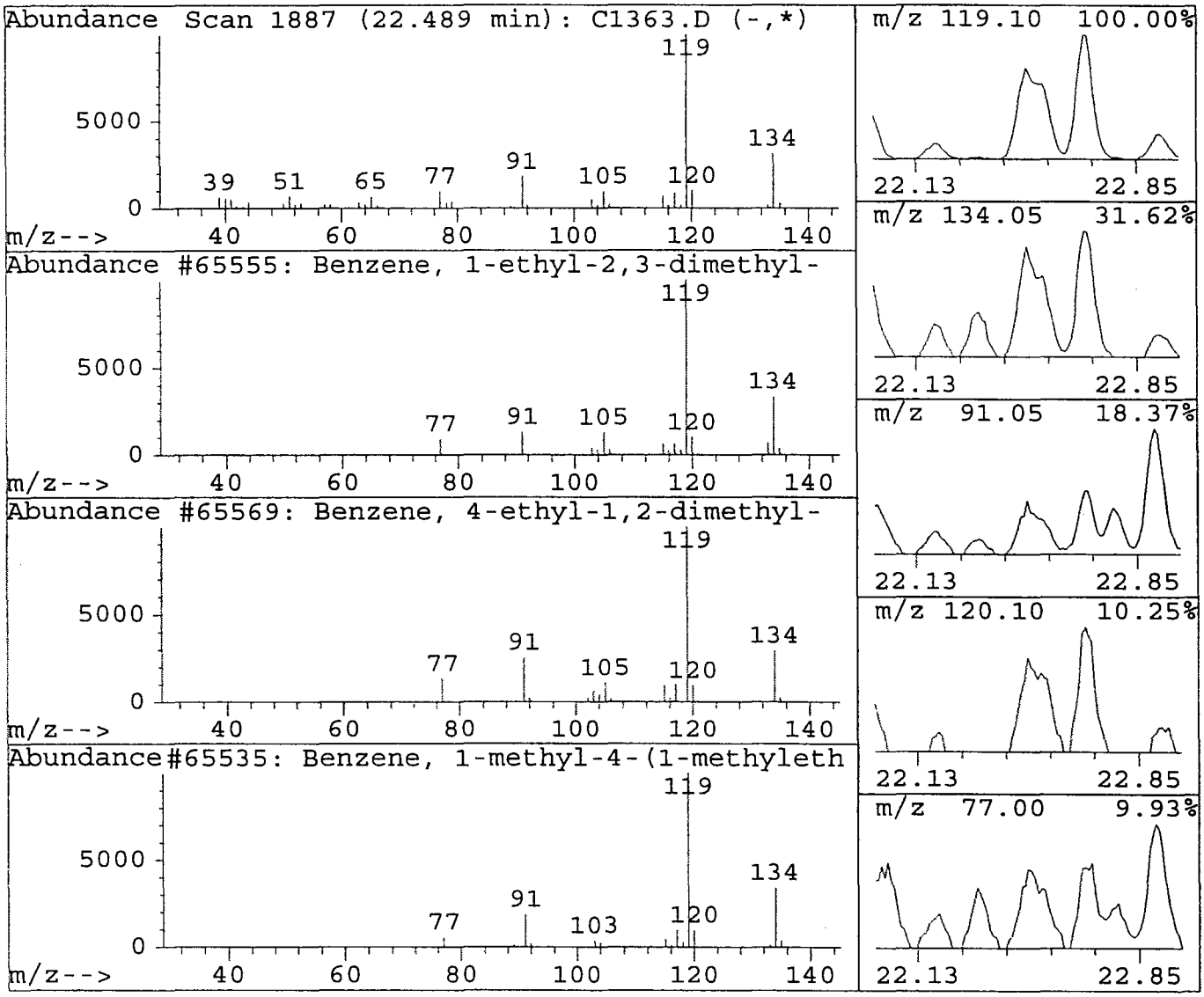
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.49	0.69 ug/L	363259	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2,3-dimethyl-	65555	000933-98-2	70
2	Benzene, 4-ethyl-1,2-dimethyl-	65569	000934-80-5	90
3	Benzene, 1-methyl-4-(1-methylethyl)	65535	000099-87-6	87
4	Benzene, 1-methyl-2-(1-methylethyl)	65581	000527-84-4	90
5	Benzene, 1-methyl-3-(1-methylethyl)	65579	000535-77-3	95



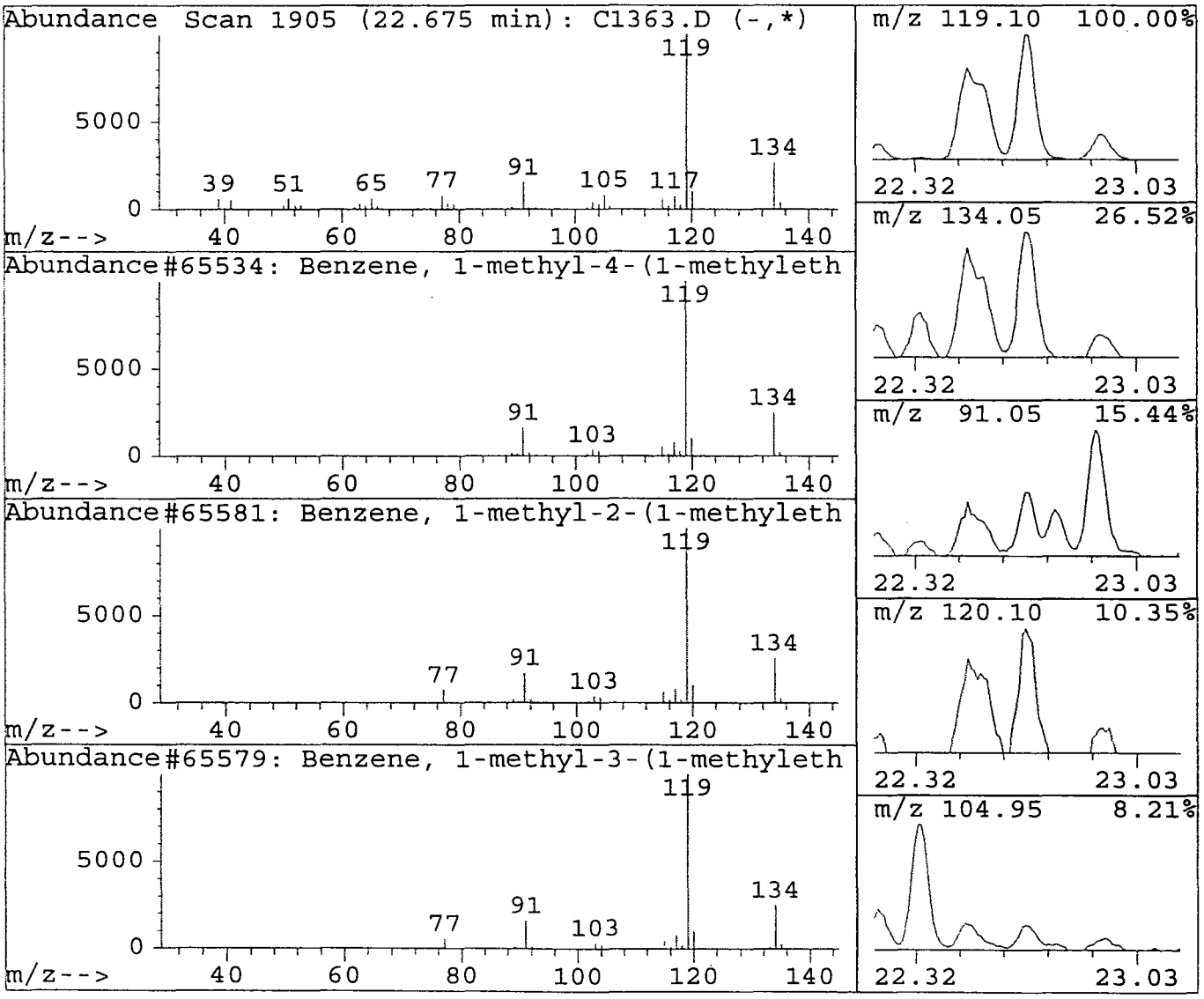
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.67	0.97 ug/L	512794	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylethyl)	65534	000099-87-6	91
2	Benzene, 1-methyl-2-(1-methylethyl)	65581	000527-84-4	94
3	Benzene, 1-methyl-3-(1-methylethyl)	65579	000535-77-3	94
4	Benzene, 4-ethyl-1,2-dimethyl-	6218	000934-80-5	94
5	Benzene, methyl(1-methylethyl)-	6208	025155-15-1	91



Library Search Compound Report

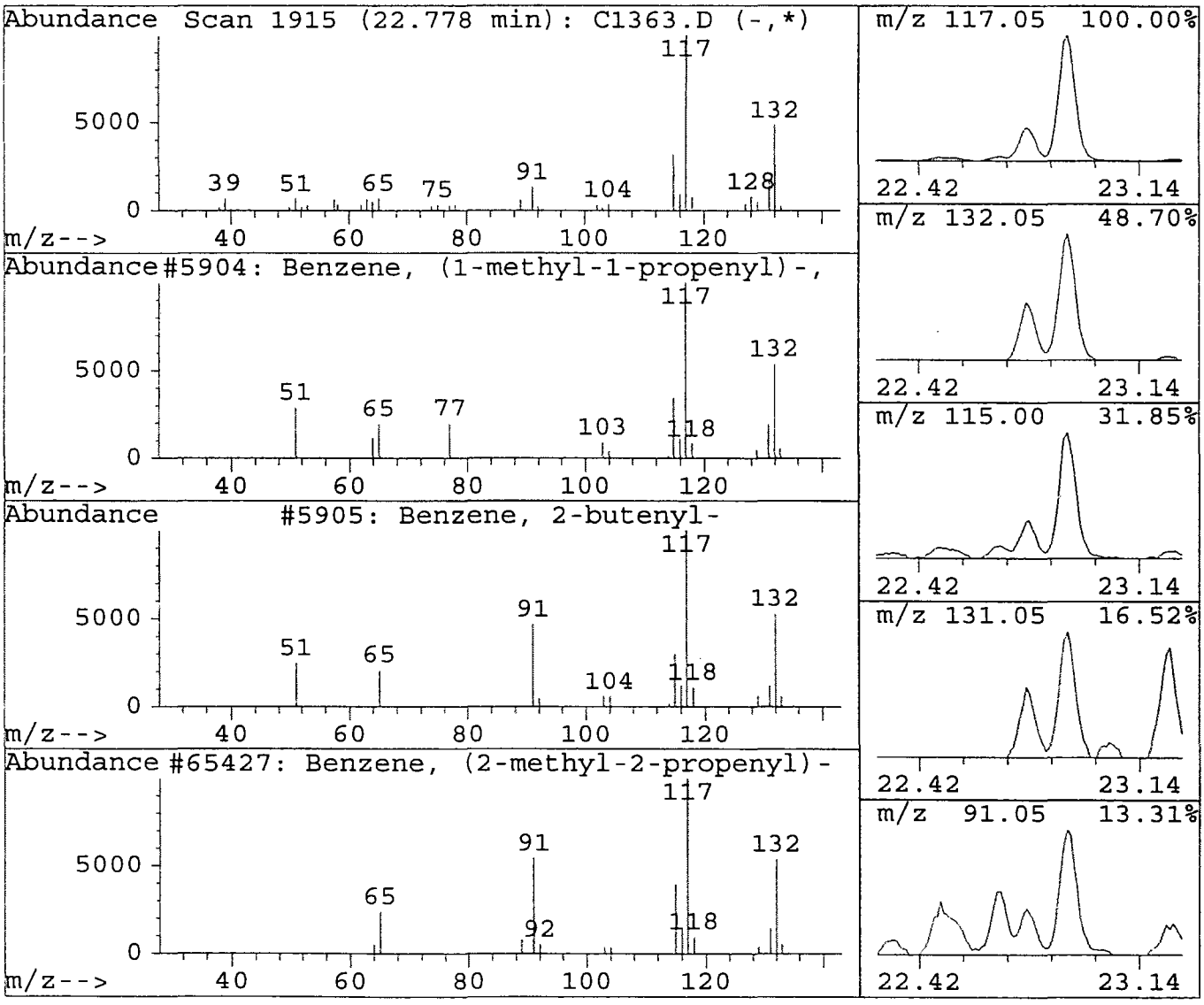
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.78	0.73 ug/L	385329	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, (1-methyl-1-propenyl)-, (Z	5904	000767-99-7	90
2	Benzene, 2-butenyl-	5905	001560-06-1	78
3	Benzene, (2-methyl-2-propenyl)-	65427	003290-53-7	90
4	Benzene, 1-methyl-2-(2-propenyl)-	65419	001587-04-8	90
5	Benzene, (1-methyl-1-propenyl)-, (E	5872	000768-00-3	53



Library Search Compound Report

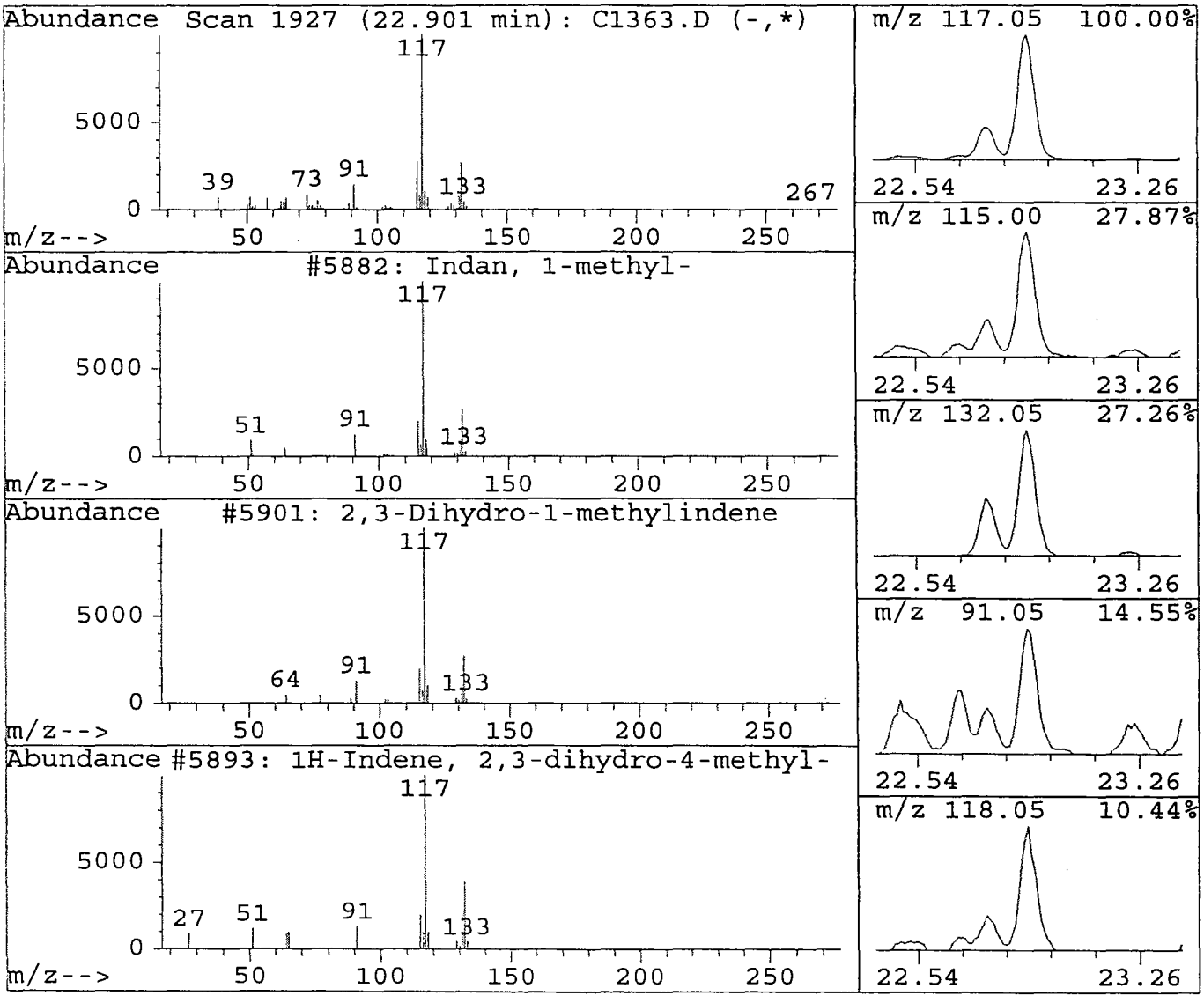
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.90	2.54 ug/L	1344021	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Indan, 1-methyl-	5882	000767-58-8	87
2	2,3-Dihydro-1-methylindene	5901	027133-93-3	93
3	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	53
4	Benzene, 1-ethenyl-3-ethyl-, mixt.	36689	055319-72-7	50
5	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	53



Library Search Compound Report

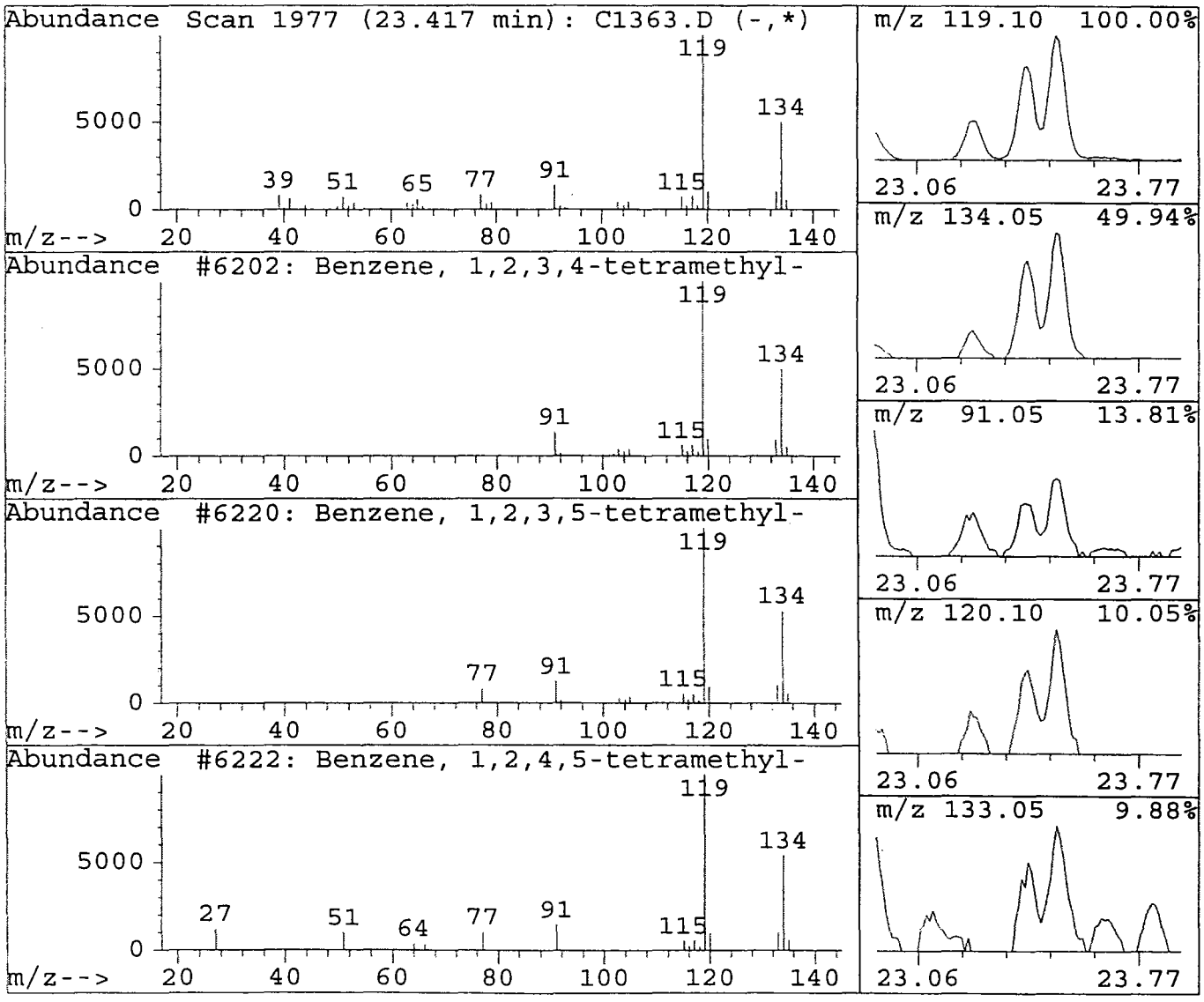
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.42	0.79 ug/L	416402	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	6202	000488-23-3	95
2	Benzene, 1,2,3,5-tetramethyl-	6220	000527-53-7	97
3	Benzene, 1,2,4,5-tetramethyl-	6222	000095-93-2	91
4	Benzene, 1,3-diethyl-	65565	000141-93-5	86
5	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	91



Library Search Compound Report

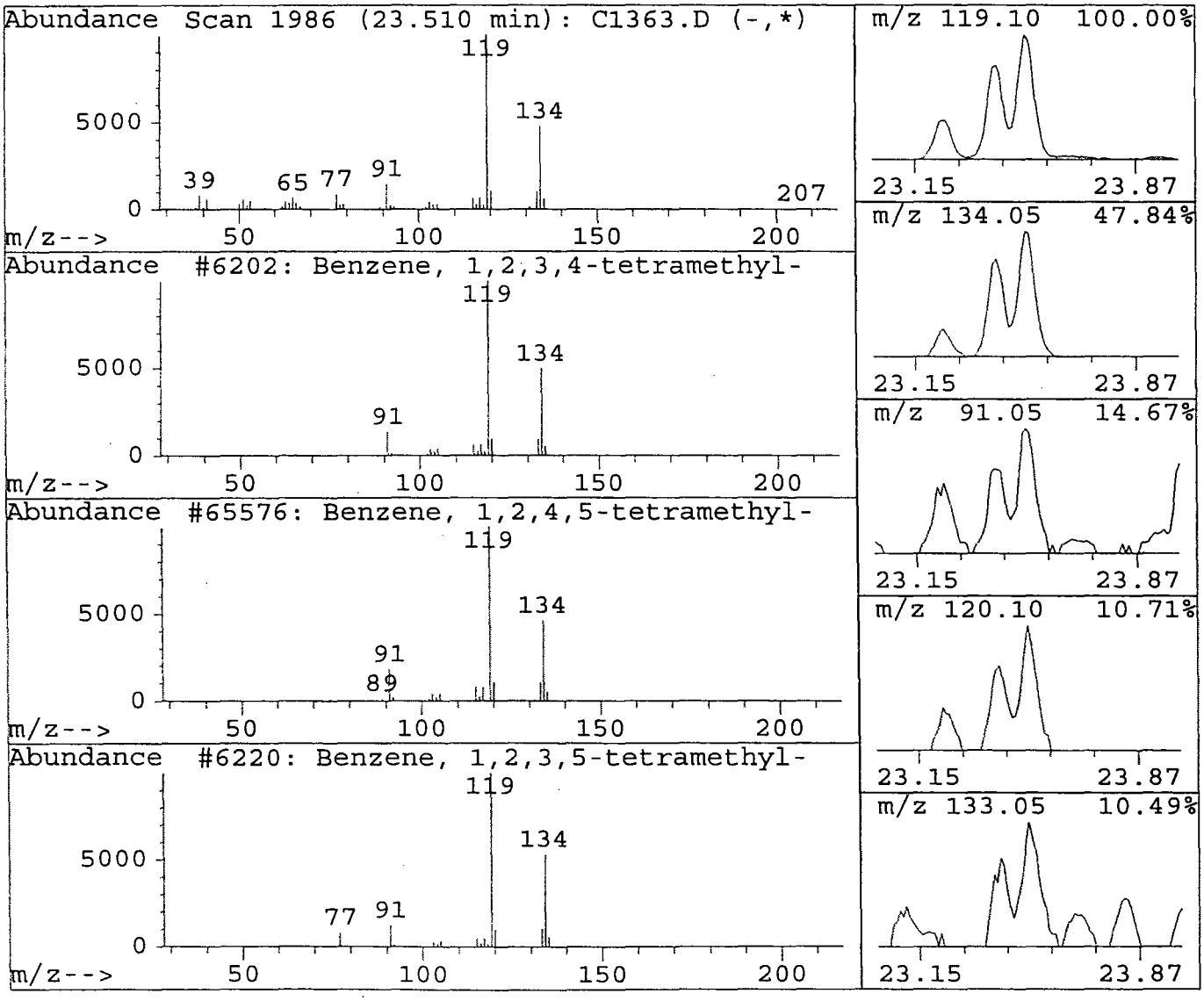
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.51	1.05 ug/L	553587	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	6202	000488-23-3	97
2	Benzene, 1,2,4,5-tetramethyl-	65576	000095-93-2	97
3	Benzene, 1,2,3,5-tetramethyl-	6220	000527-53-7	97
4	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	90
5	Benzene, 2-ethyl-1,4-dimethyl-	6219	001758-88-9	83



Library Search Compound Report

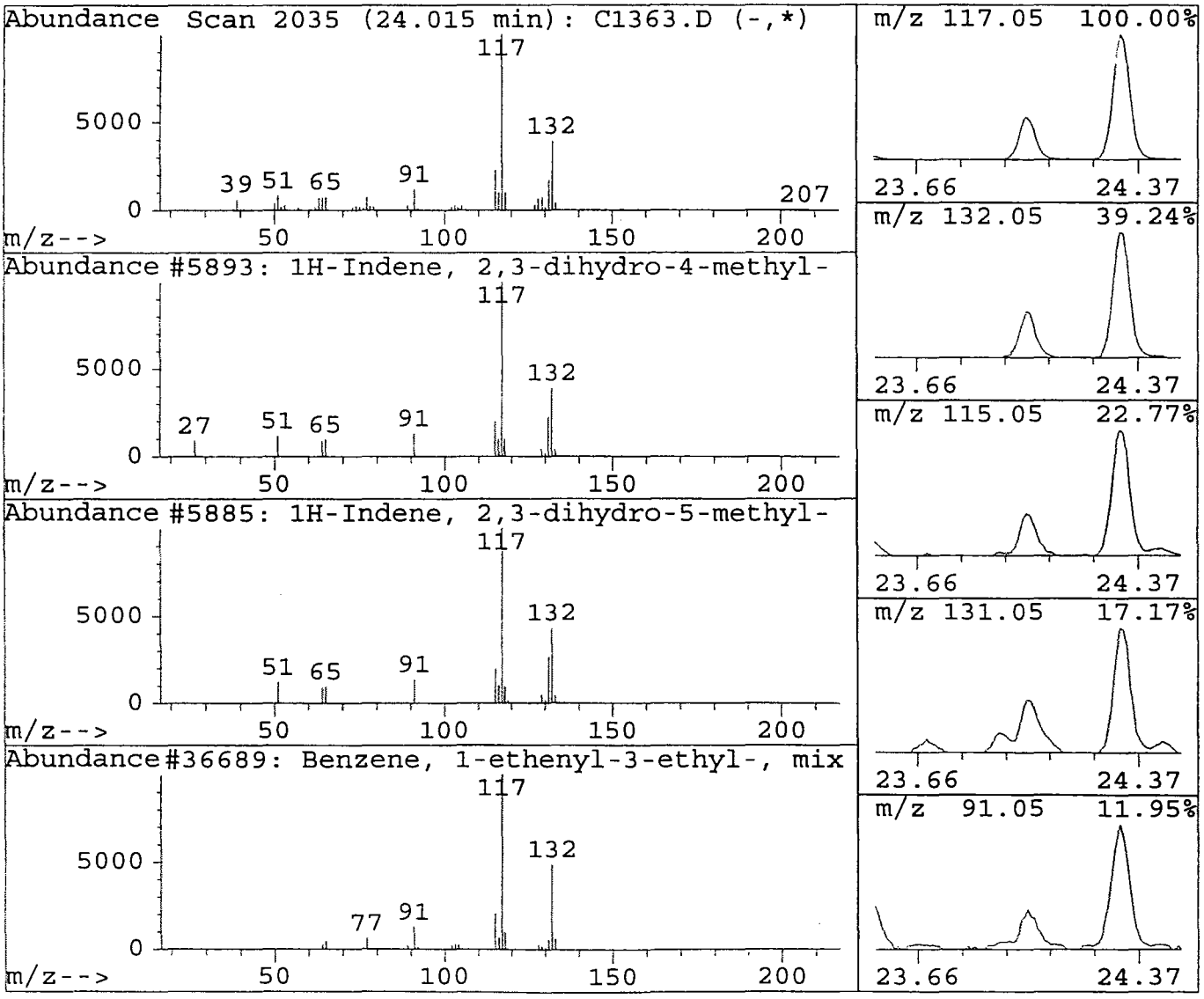
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.01	1.11 ug/L	586250	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	90
2	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	70
3	Benzene, 1-ethenyl-3-ethyl-, mixt.	36689	055319-72-7	86
4	Indan, 1-methyl-	5882	000767-58-8	80
5	2,3-Dihydro-1-methylindene	5901	027133-93-3	83



Library Search Compound Report

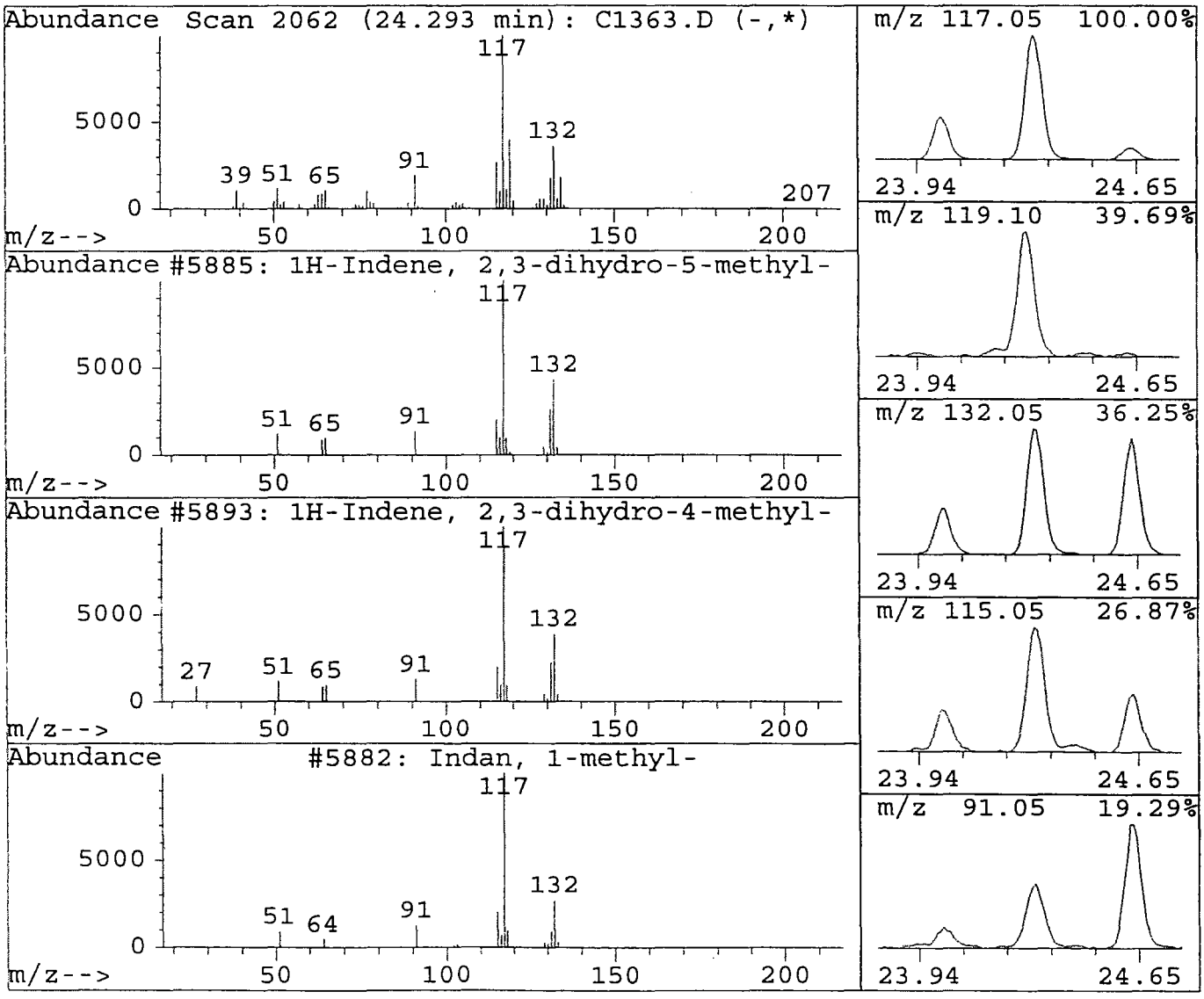
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.29	0.77 ug/L	409535	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	70
2	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	70
3	Indan, 1-methyl-	5882	000767-58-8	76
4	2,3-Dihydro-1-methylindene	5901	027133-93-3	93
5	Benzene, (1-methyl-1-propenyl)-, (Z	5904	000767-99-7	59



Library Search Compound Report

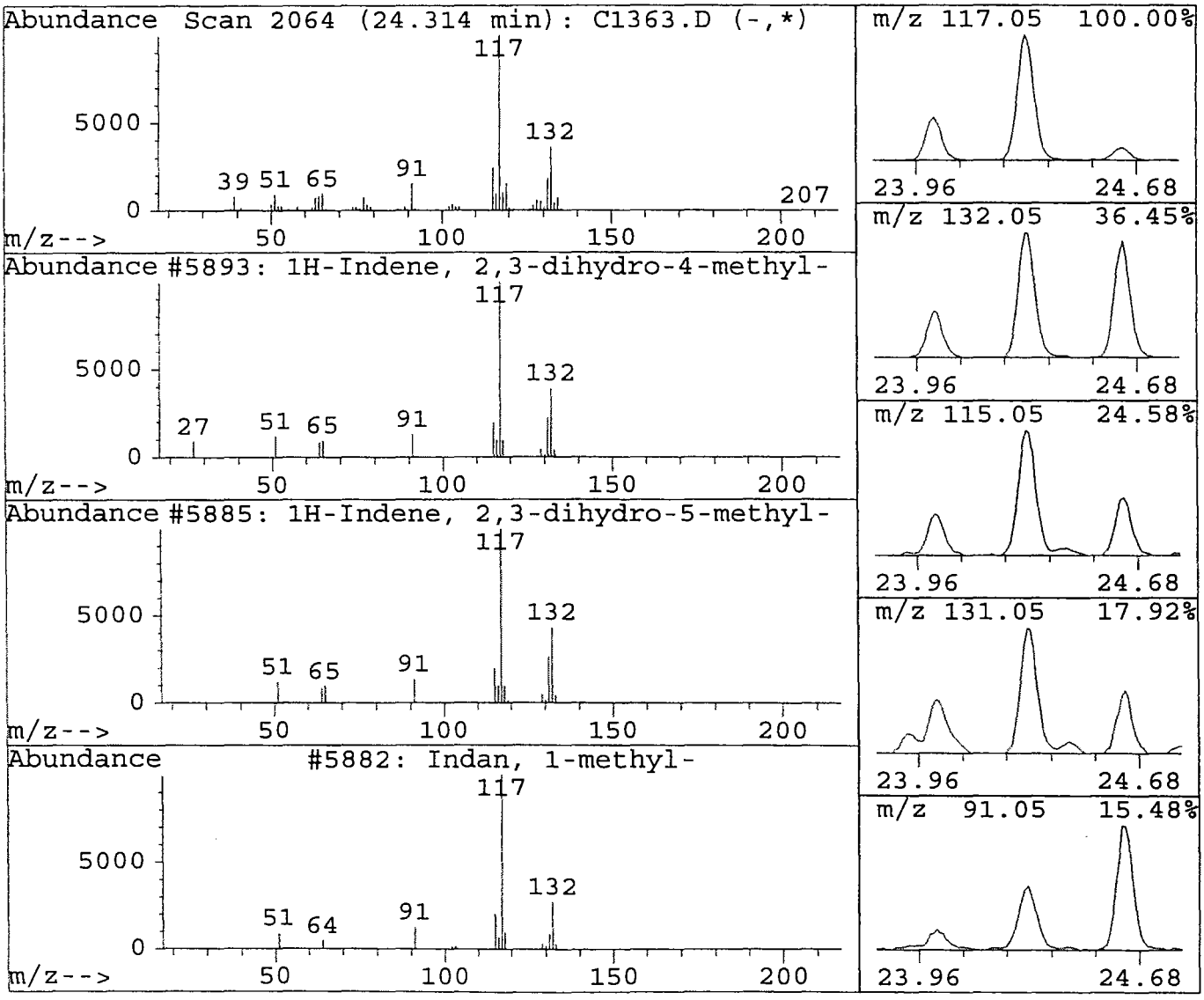
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.31	3.01 ug/L	1592849	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	87
2	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	87
3	Indan, 1-methyl-	5882	000767-58-8	72
4	2,3-Dihydro-1-methylindene	5901	027133-93-3	87
5	Benzene, 2-butenyl-	5905	001560-06-1	87



Library Search Compound Report

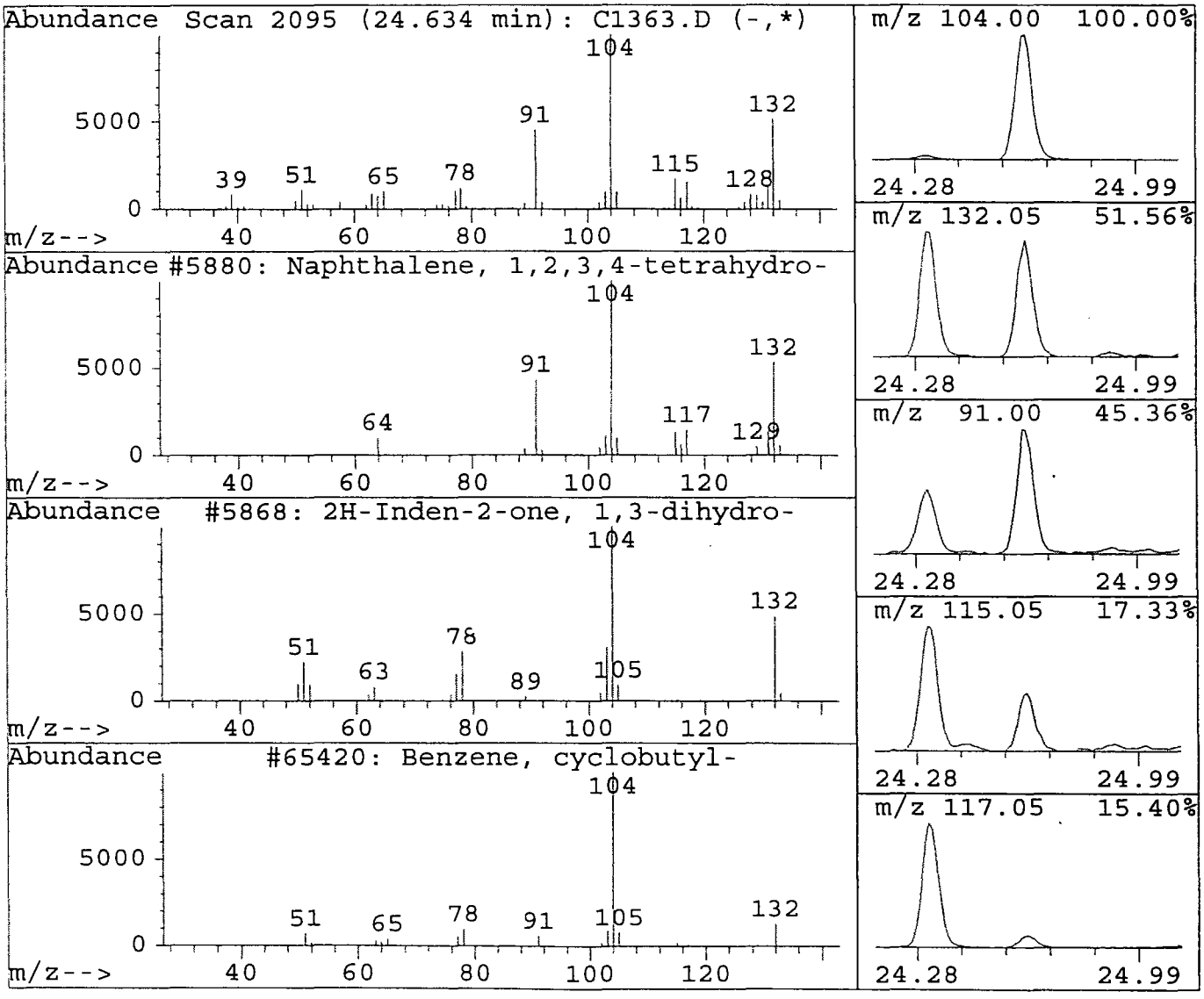
Data File : d:\hpchem\1\data\c1363.d
Acq On : 23 Feb 96 6:57 pm
Sample : 9608369
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.63	2.67 ug/L	1408940	Fluorobenzene	11.99

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	5880	000119-64-2	96
2	2H-Inden-2-one, 1,3-dihydro-	5868	000615-13-4	42
3	Benzene, cyclobutyl-	65420	004392-30-7	43
4	1H-Inden-1-one, 2,3-dihydro-	65405	000083-33-0	10
5	Acetic acid, 2-phenylethyl ester	67813	000103-45-7	32



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW-3 192

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9608370V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1366.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	40	
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	1.0	
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 193

MW-3

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9608370V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1366.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	4.5	
1330-29-7	Xylene (total)	70	
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	13	
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	8.3	
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	4.7	
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	1.4	
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	5.4	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	250	
75-65-0	tertiary-Butyl alcohol	43	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# mw-3

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 3 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9608370V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1366.D

Level: (low/med) LOW Date Received: 2/21/96

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown Hydrocarbon	5.12	6	J
2.	Unknown Hydrocarbon	5.13	26	J
3. 109-66-0	Pentane	5.70	9	J
4. 616-12-6	2-Pentene, 3-methyl-, (E)-	9.56	4	J
5.	Unknown Hydrocarbon	9.83	37	J
6. 110-82-7	Cyclohexane	11.00	12	J
7.	Unknown	11.74	4	J
8. 19037-72-0	Cyclopentene, 4,4-dimethyl-	13.89	5	J
9. 620-14-4	Benzene, 1-ethyl-3-methyl-	19.86	3	J
10. 611-14-3	Benzene, 1-ethyl-2-methyl-	20.40	3	J
11. 108-67-8	Benzene, 1,3,5-trimethyl-	21.48	14	J
12.	Unknown	21.85	29	J
13. 535-77-3	Benzene, 1-methyl-3-(1-methy	22.68	3	J
14.	Unknown Hydrocarbon	22.91	5	J
15. 824-22-6	1H-Indene, 2,3-dihydro-4-met	24.32	4	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

195

Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML
Quant Time: Mar 5 16:39 1996

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.01	96	1162848	5.00	ug/L		-0.15
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.25	95	569645	5.05	ug/L		101.06%
57) 1,2-Dichlorobenzene-d4	22.05	152	346566	5.15	ug/L		103.10%
Target Compounds							Qvalue
9) Methylene chloride	7.63	84	123199	2.35	ug/L	#	75
21) Benzene	11.54	78	8238725	39.85	ug/L		100
28) Toluene	14.80	92	152598	1.01	ug/L		100
37) Ethylbenzene	17.41	91	1346602	4.50	ug/L		100
38) Xylene (para & meta)	17.61	106	7708070	69.09	ug/L		99
39) Xylene (Ortho)	18.32	106	113101	1.12	ug/L		100
42) Isopropylbenzene	18.97	105	3768343	13.13	ug/L		99
47) n-Propylbenzene	19.70	91	3328538	8.30	ug/L	m	0
50) 1,3,5-Trimethylbenzene	20.02	105	1153924	4.68	ug/L		100
52) 1,2,4-Trimethylbenzene	20.70	105	351972	1.45	ug/L	m	97
63) Naphthalene	25.51	128	462374	5.42	ug/L	m	100
65) Methyl-tert butyl ether	8.20	73	19945197	279.50	ug/L		89
66) tert-Butyl Alcohol	7.94	59	45853	43.36	ug/L		100

(#) = qualifier out of range (m) = manual integration

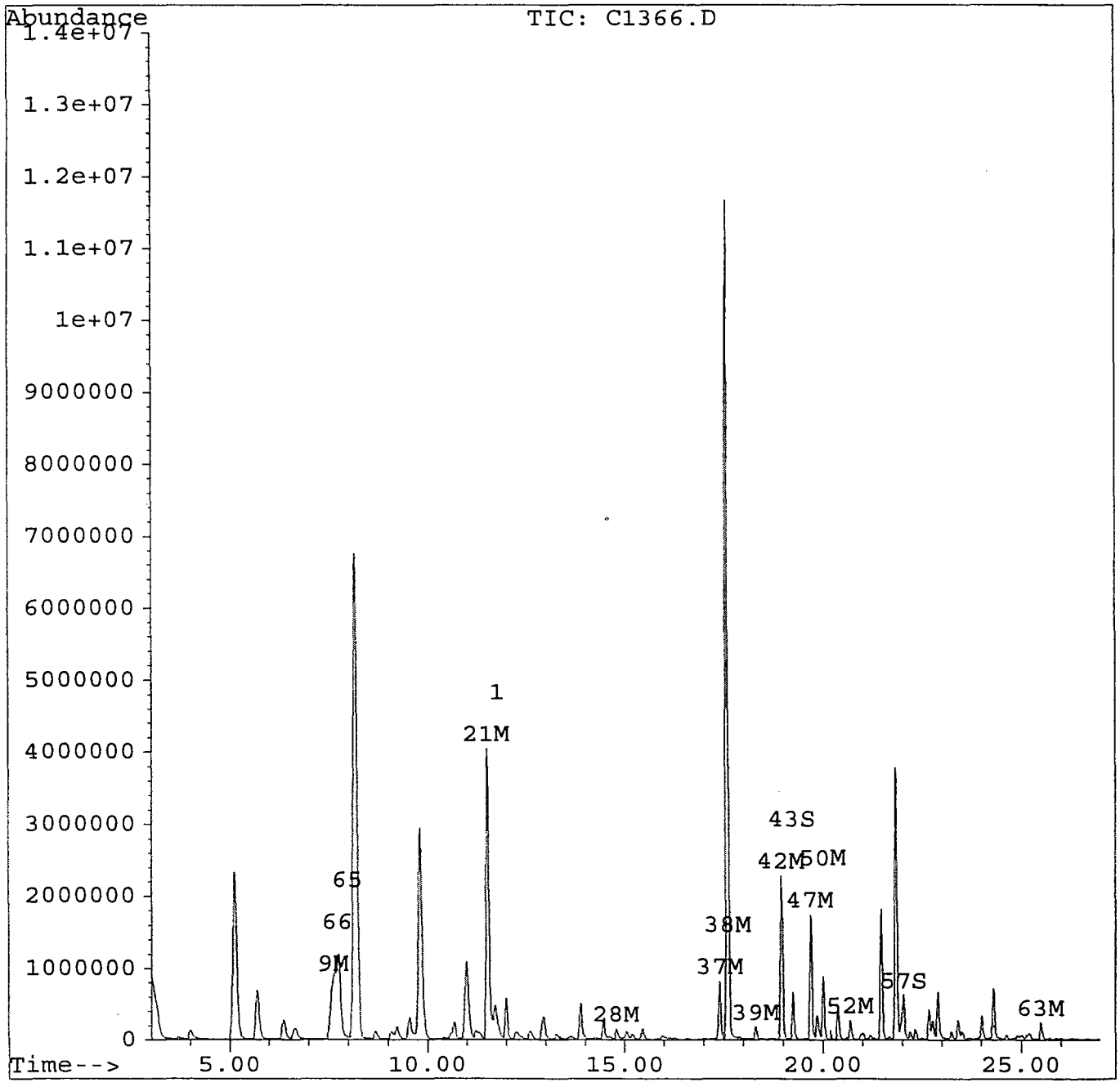
Quantitation Report

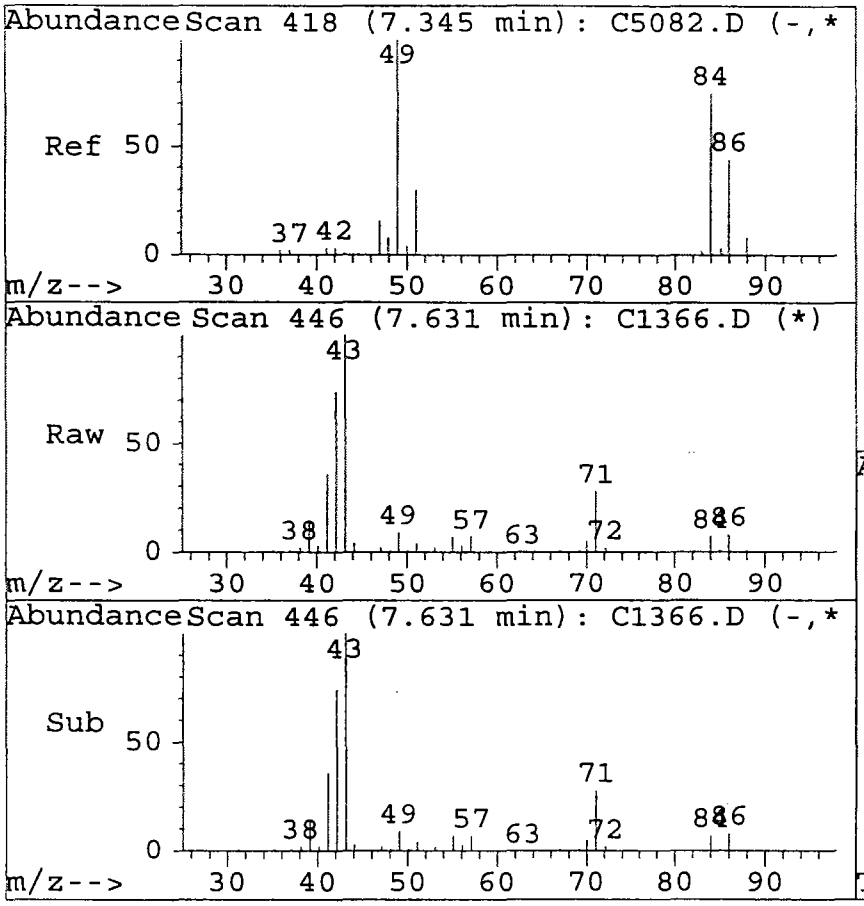
196

Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML
Quant Time: Mar 5 16:39 1996

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

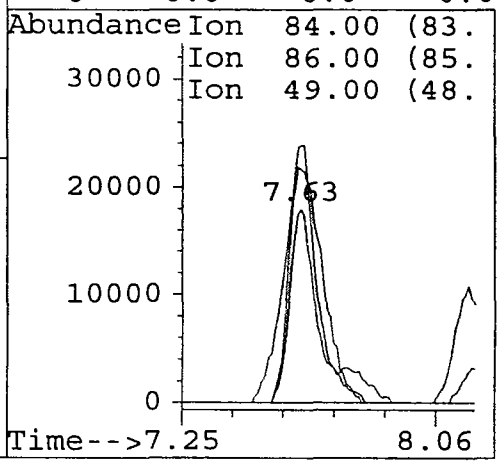


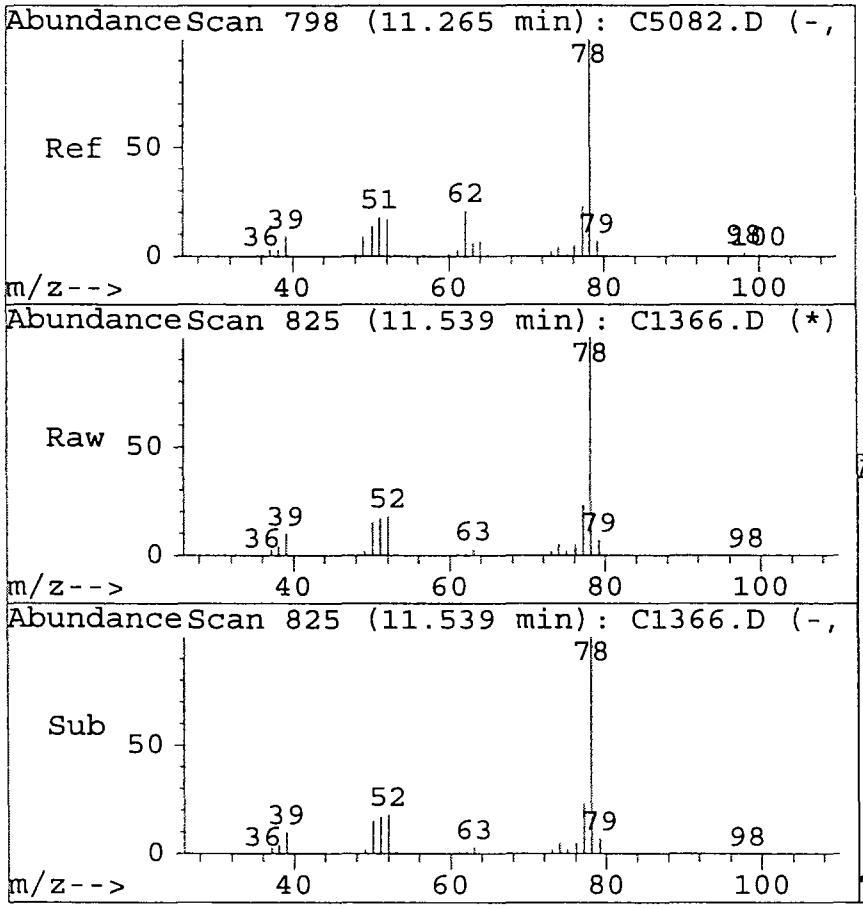


#9
Methylene chloride
Concen: 2.35 ug/L
RT: 7.63 min Scan# 446
Delta R.T. -0.16 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:84 Resp: 123199

Ion	Ratio	Lower	Upper
84	100		
86	120.6	46.1	86.1#
49	132.7	118.6	158.6
0	0.0	0.0	0.0

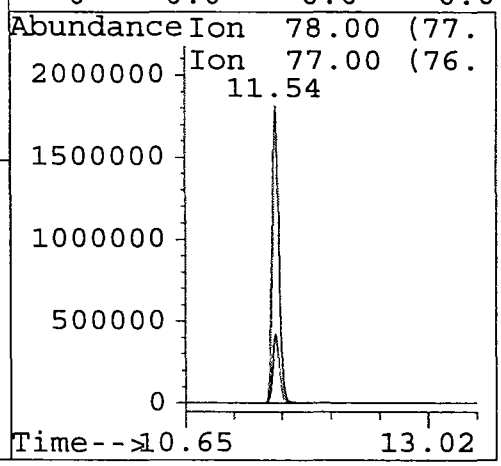


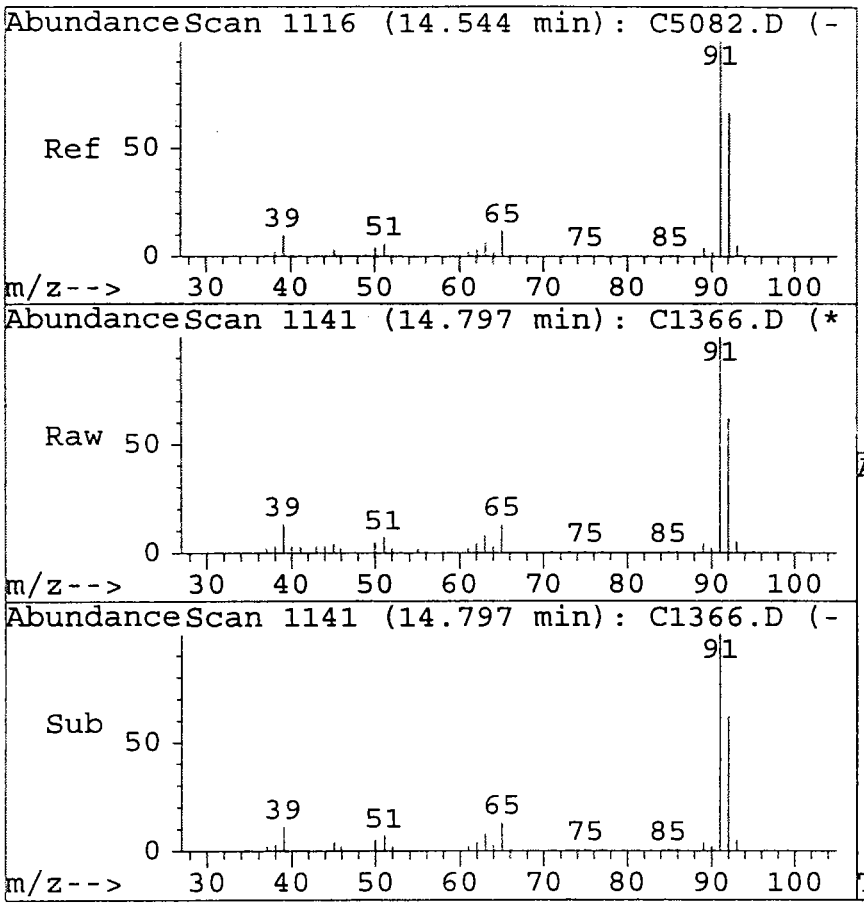


#21
Benzene
Concen: 39.85 ug/L
RT: 11.54 min Scan# 825
Delta R.T. -0.15 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:78 Resp: 8238725

Ion	Ratio	Lower	Upper
78	100		
77	23.4	3.3	43.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

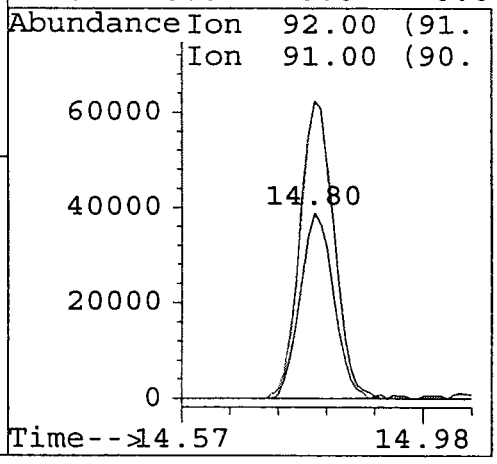


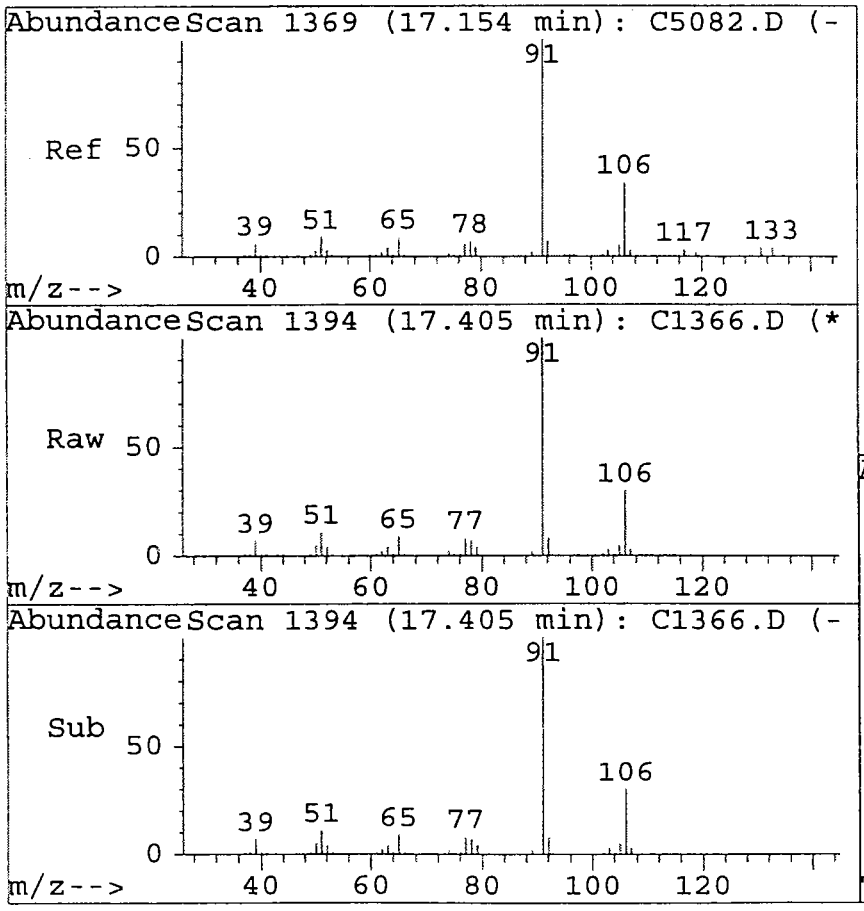


#28
Toluene
Concen: 1.01 ug/L
RT: 14.80 min Scan# 1141
Delta R.T. -0.15 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:92 Resp: 152598

Ion	Ratio	Lower	Upper
92	100		
91	160.8	140.5	180.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

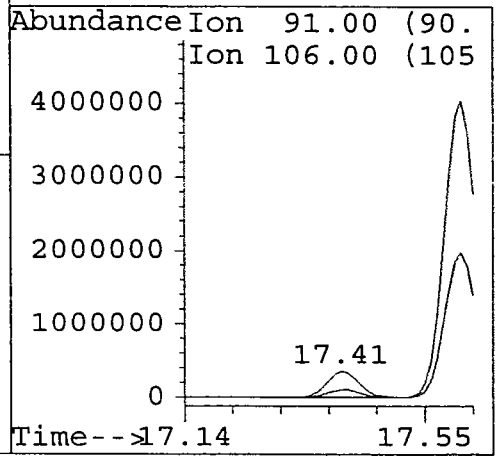


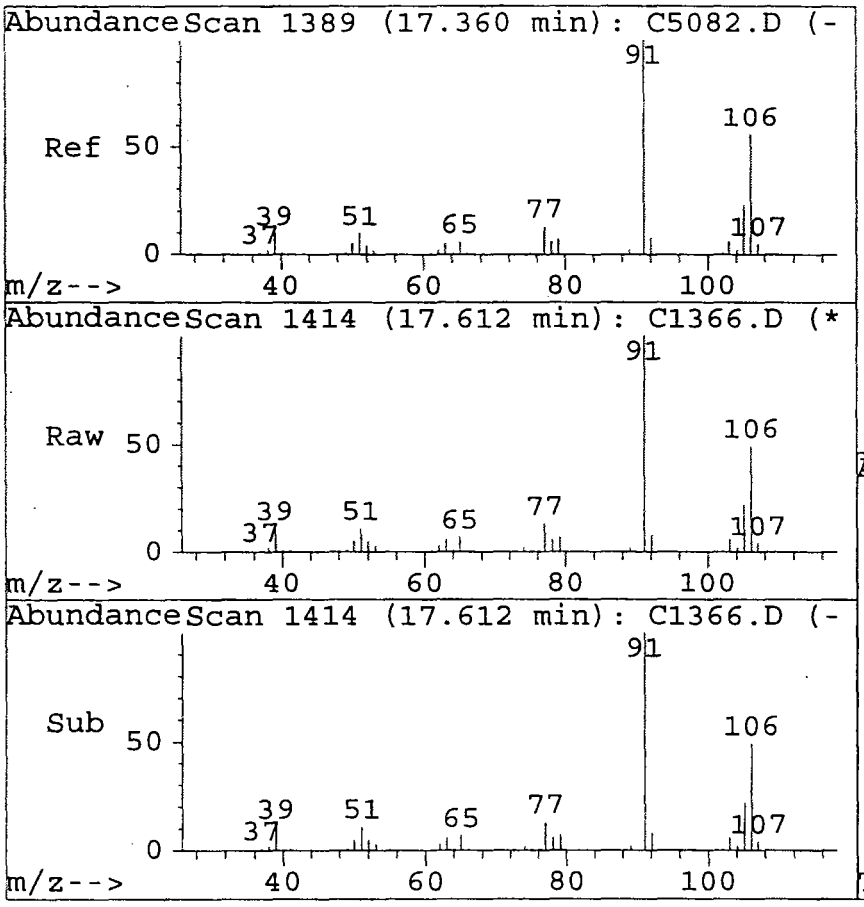


#37
Ethylbenzene
Concen: 4.50 ug/L
RT: 17.41 min Scan# 1394
Delta R.T. -0.13 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:91 Resp: 1346602

Ion	Ratio	Lower	Upper
91	100		
106	30.4	10.4	50.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

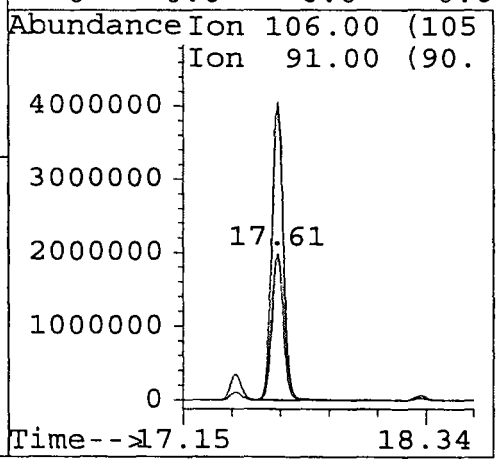


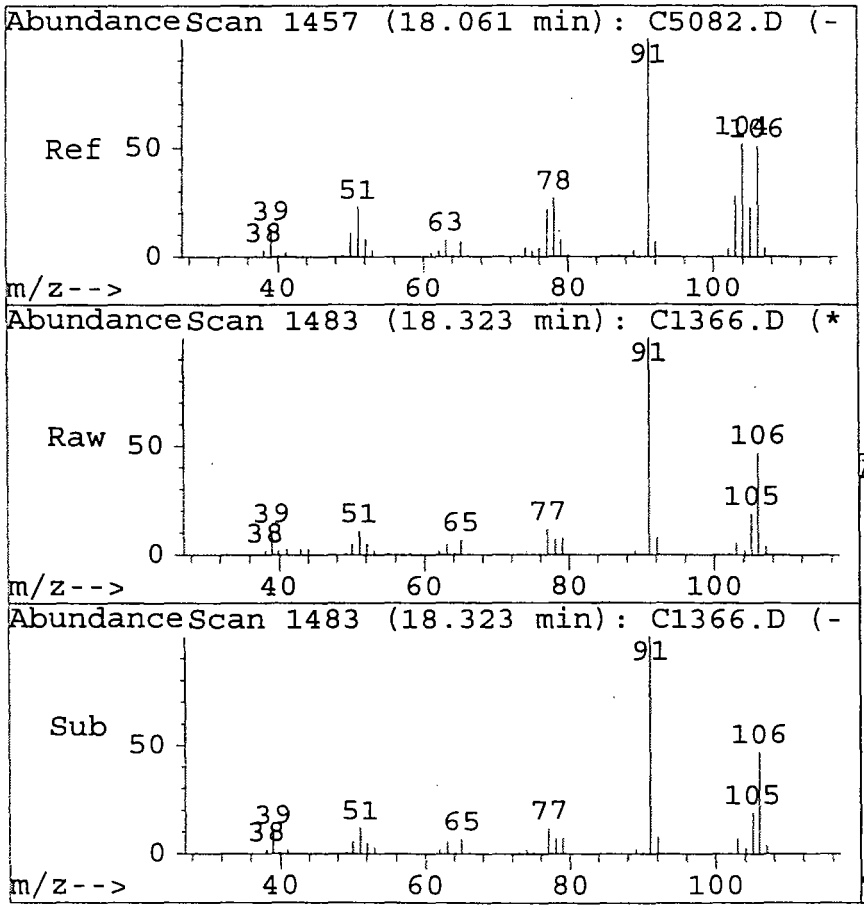


#38
Xylene (para & meta)
Concen: 69.09 ug/L
RT: 17.61 min Scan# 1414
Delta R.T. -0.13 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:106 Resp: 7708070

Ion	Ratio	Lower	Upper
106	100		
91	203.4	182.5	222.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

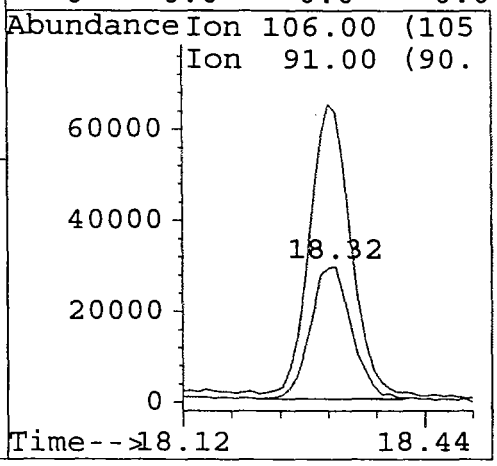


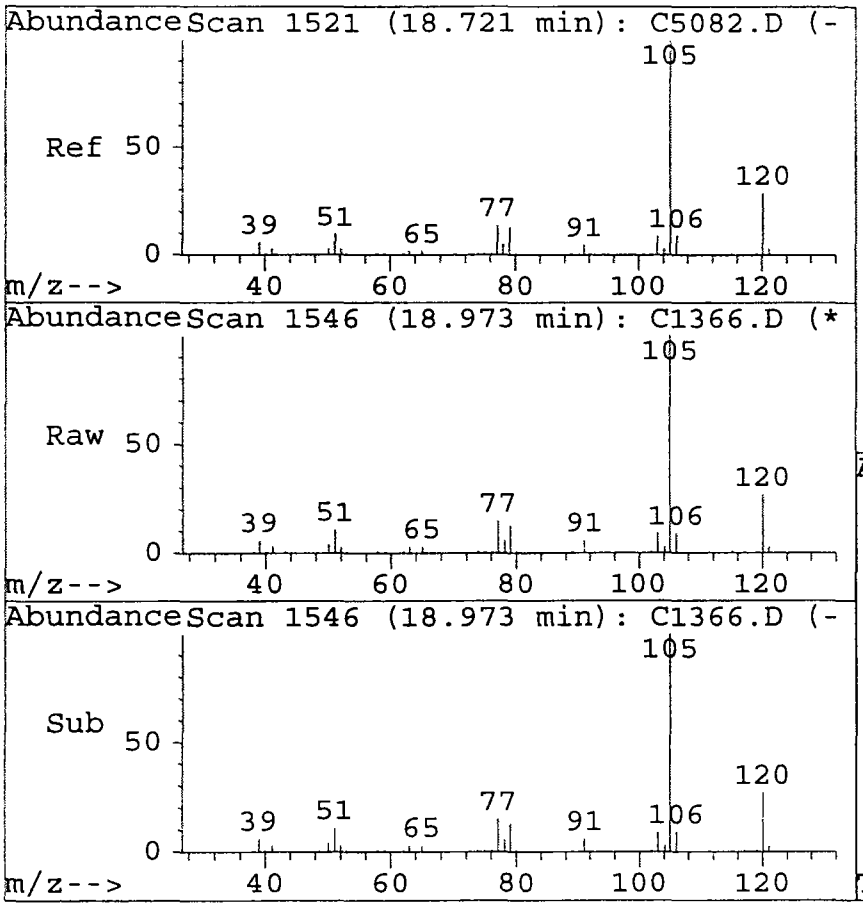


#39
Xylene (Ortho)
Concen: 1.12 ug/L
RT: 18.32 min Scan# 1483
Delta R.T. -0.12 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:106 Resp: 113101

Ion	Ratio	Lower	Upper
106	100		
91	212.6	193.1	233.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

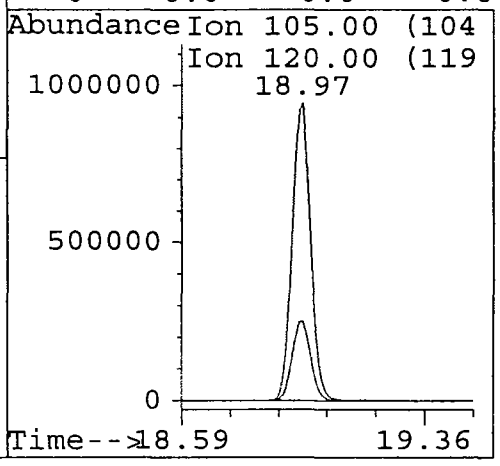


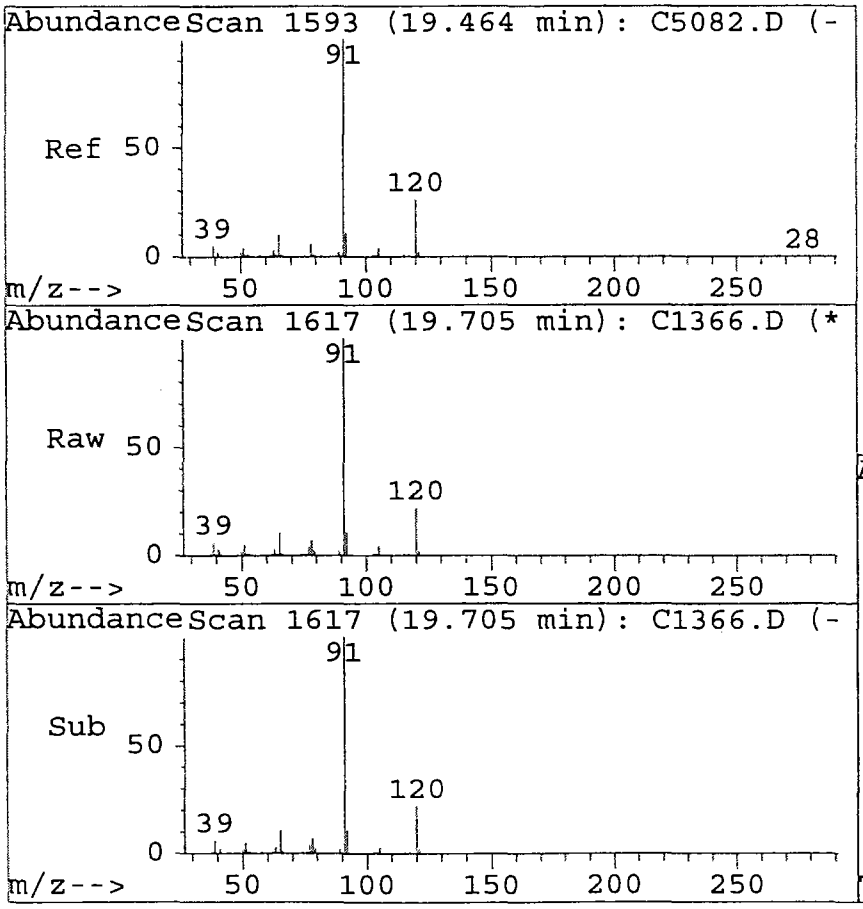


#42
Isopropylbenzene
Concen: 13.13 ug/L
RT: 18.97 min Scan# 1546
Delta R.T. -0.12 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:105 Resp: 3768343

Ion	Ratio	Lower	Upper
105	100		
120	26.6	6.3	46.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

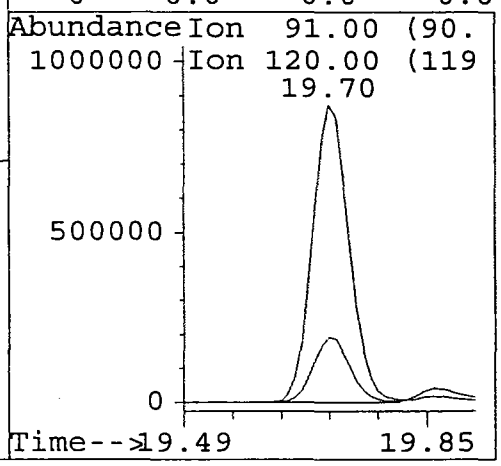


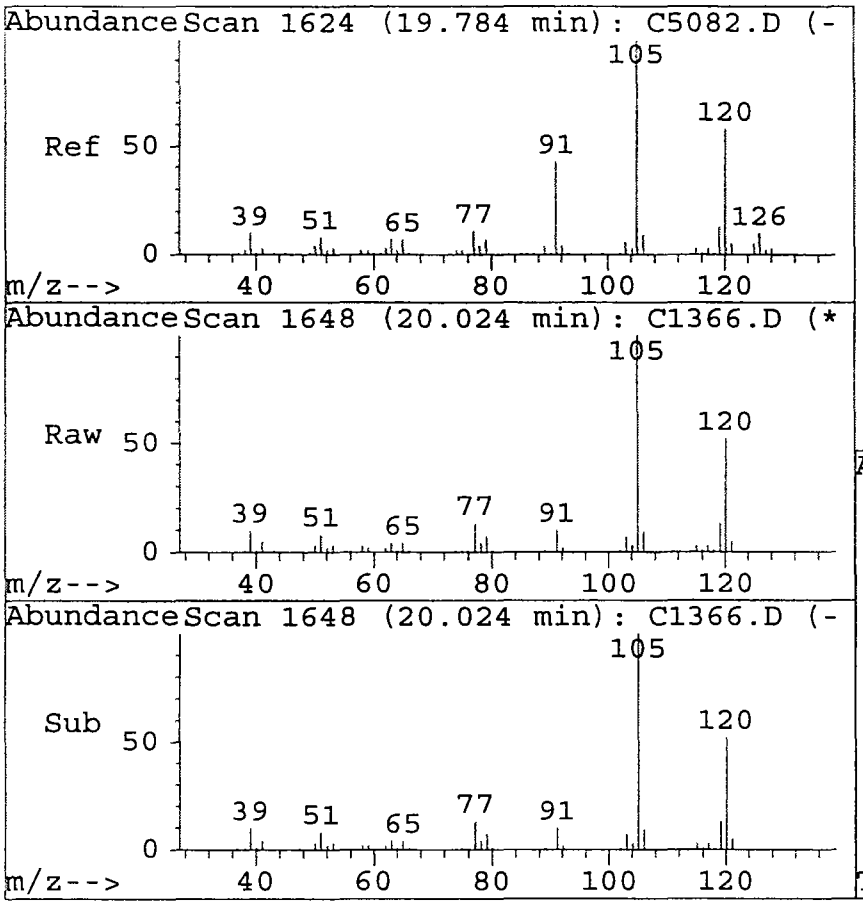


#47
n-Propylbenzene
Concen: 8.30 ug/L m
RT: 19.70 min Scan# 1617
Delta R.T. -0.12 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:91 Resp: 3328538

Ion	Ratio	Lower	Upper
91	100		
120	25.6	2.1	42.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

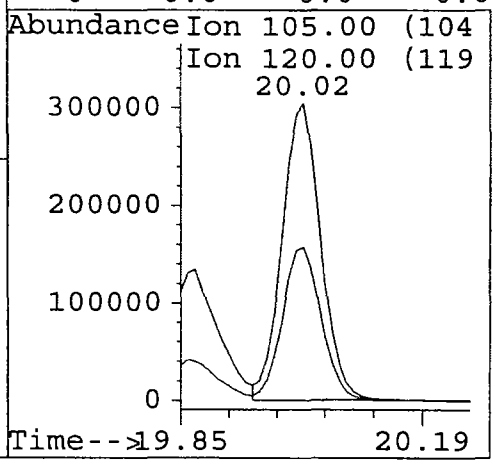


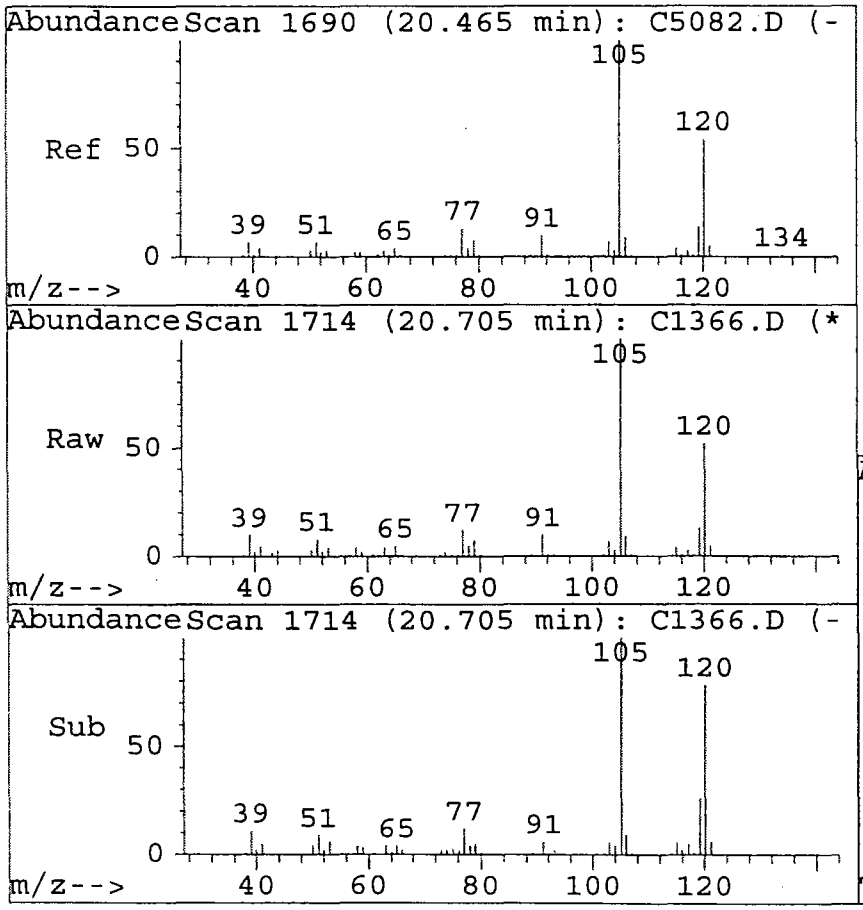


#50
1,3,5-Trimethylbenzene
Concen: 4.68 ug/L
RT: 20.02 min Scan# 1648
Delta R.T. -0.12 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:105 Resp: 1153924

Ion	Ratio	Lower	Upper
105	100		
120	51.6	31.9	71.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

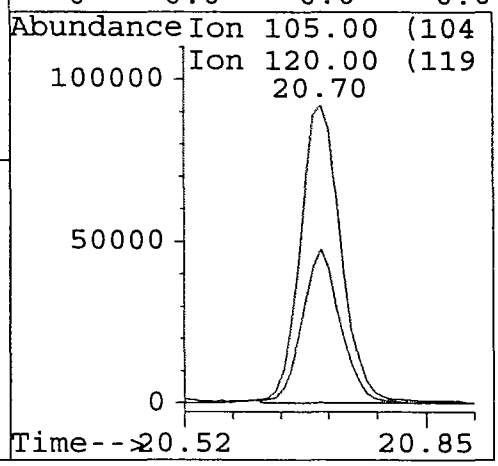


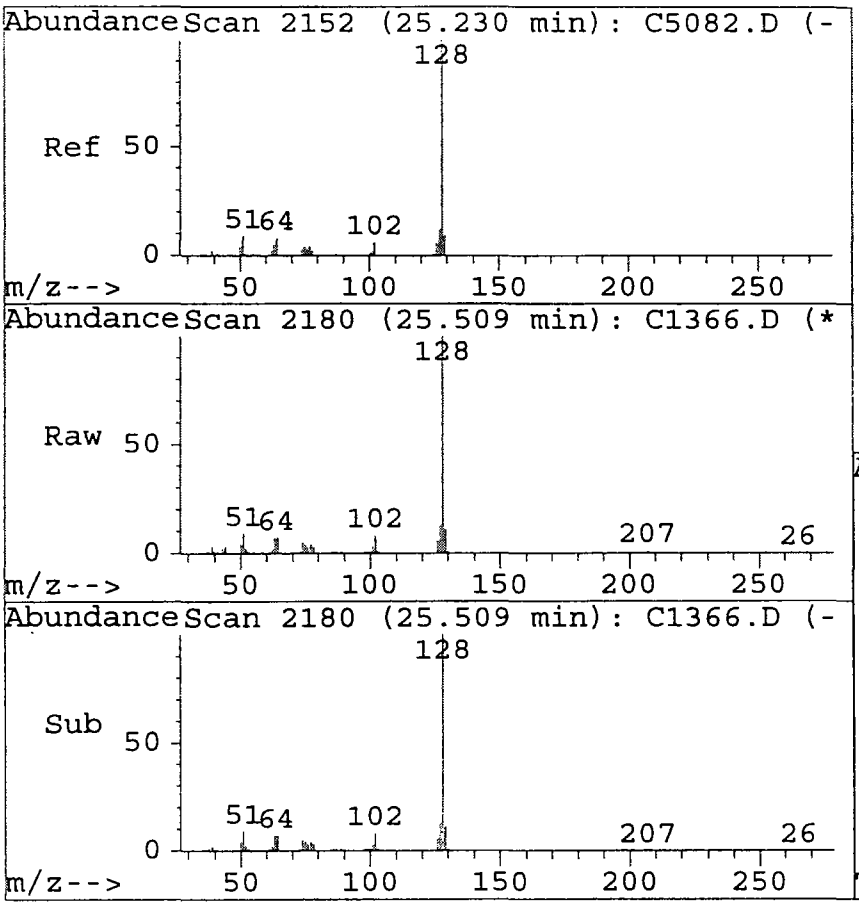


#52
1,2,4-Trimethylbenzene
Concen: 1.45 ug/L m
RT: 20.70 min Scan# 1714
Delta R.T. -0.12 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:105 Resp: 351972

Ion	Ratio	Lower	Upper
105	100		
120	54.0	28.8	68.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

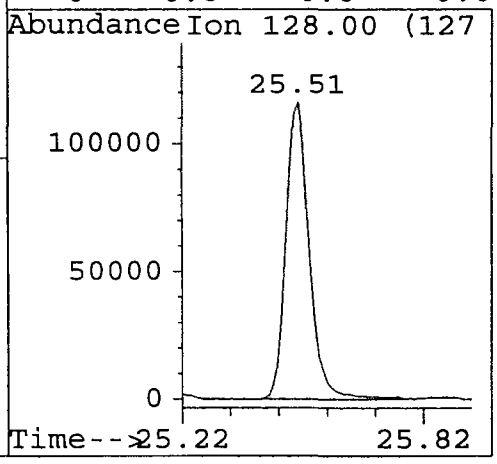


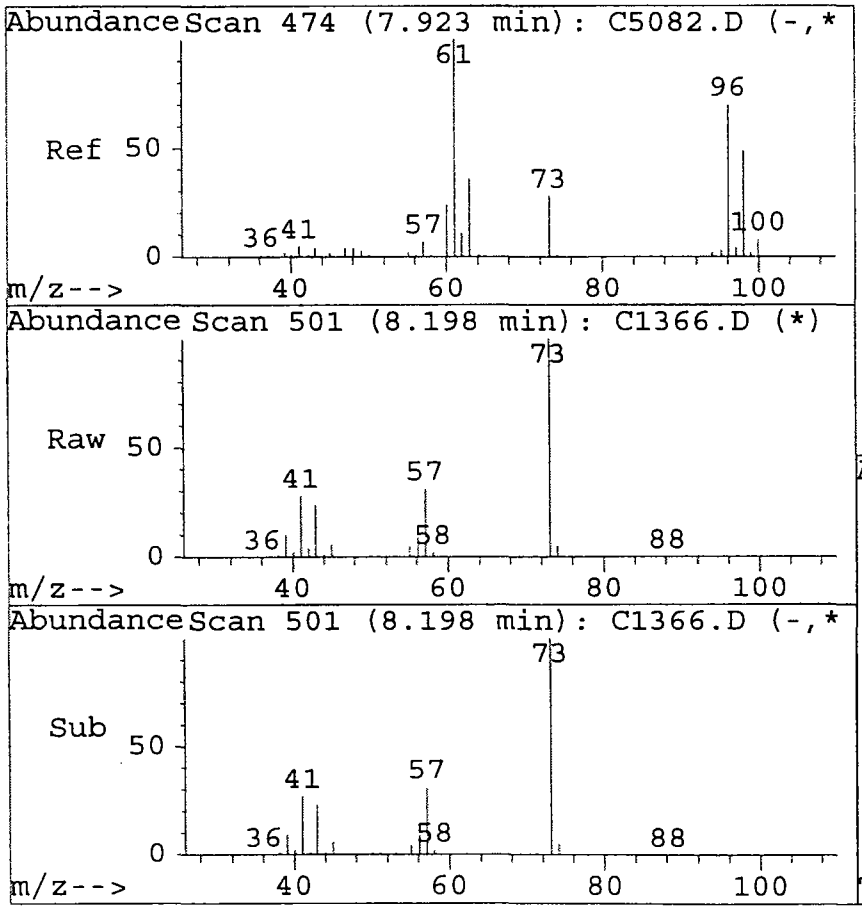


#63
Naphthalene
Concen: 5.42 ug/L m
RT: 25.51 min Scan# 2180
Delta R.T. -0.12 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:128 Resp: 462374

Ion	Ratio	Lower	Upper
128	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

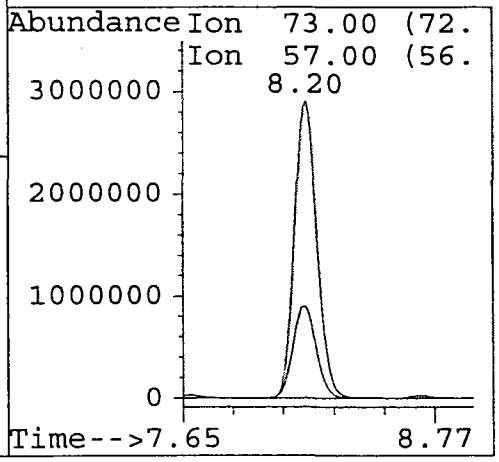


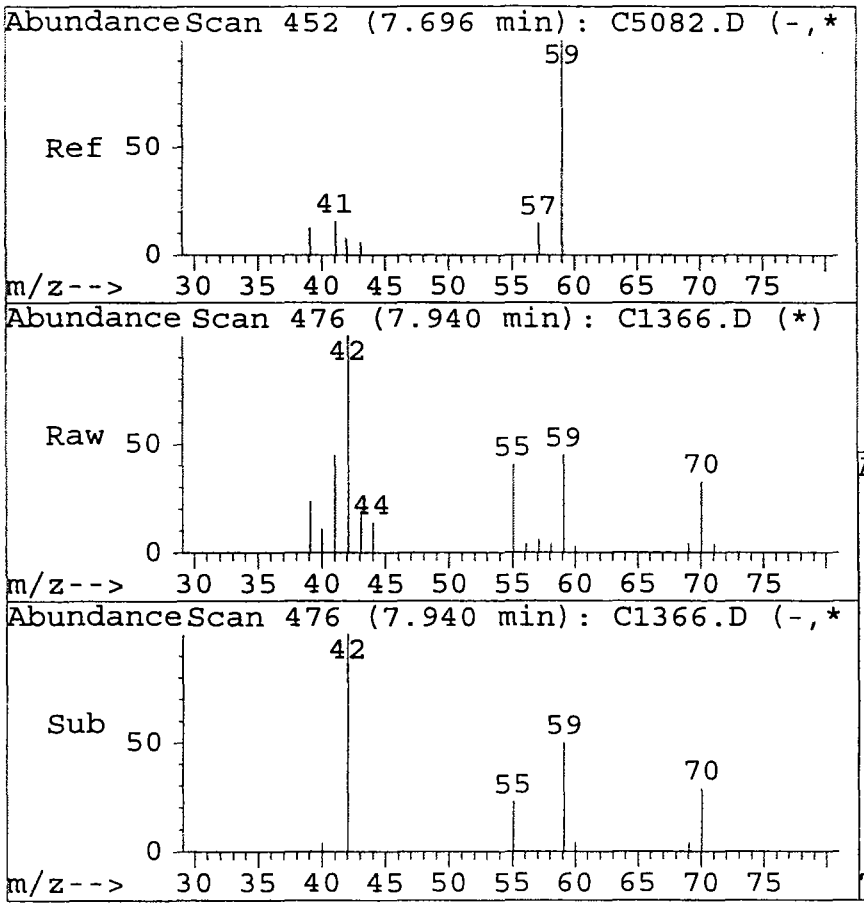


#65
Methyl-tert butyl ether
Concen: 279.50 ug/L
RT: 8.20 min Scan# 501
Delta R.T. -0.16 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:73 Resp:19945197

Ion	Ratio	Lower	Upper
73	100		
57	30.7	5.1	45.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

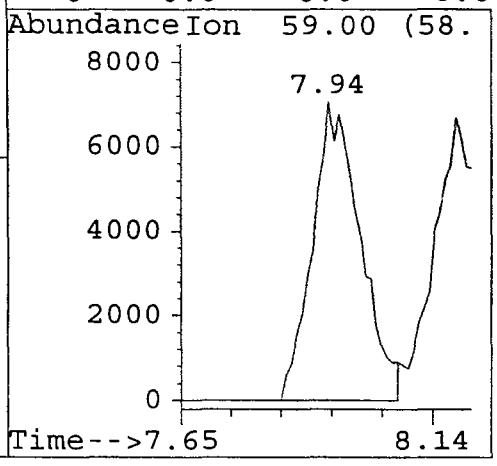




#66
tert-Butyl Alcohol
Concen: 43.36 ug/L
RT: 7.94 min Scan# 476
Delta R.T. -0.17 min
Lab File: c1366.d
Acq: 23 Feb 96 8:42 pm

Tgt Ion:59 Resp: 45853

Ion	Ratio	Lower	Upper
59	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report

Data File : d:\hpchem\1\data\c1448.d
Acq On : 4 Mar 96 8:57 pm
Sample : 9608370 DL BLDG 2567 MW-3
Misc : 2.5 ML 1:10
Quant Time: Mar 5 12:17 1996

Vial: 11 204
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.97	96	1302052	5.00	ug/L	0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.21	95	617388	4.74	ug/L	94.85%
57) 1,2-Dichlorobenzene-d4	22.00	152	385968	4.63	ug/L	92.57%
Target Compounds						Qvalue
65) Methyl-tert butyl ether	8.15	73	1925287	24.63	ug/L m	1

(#) = qualifier out of range (m) = manual integration

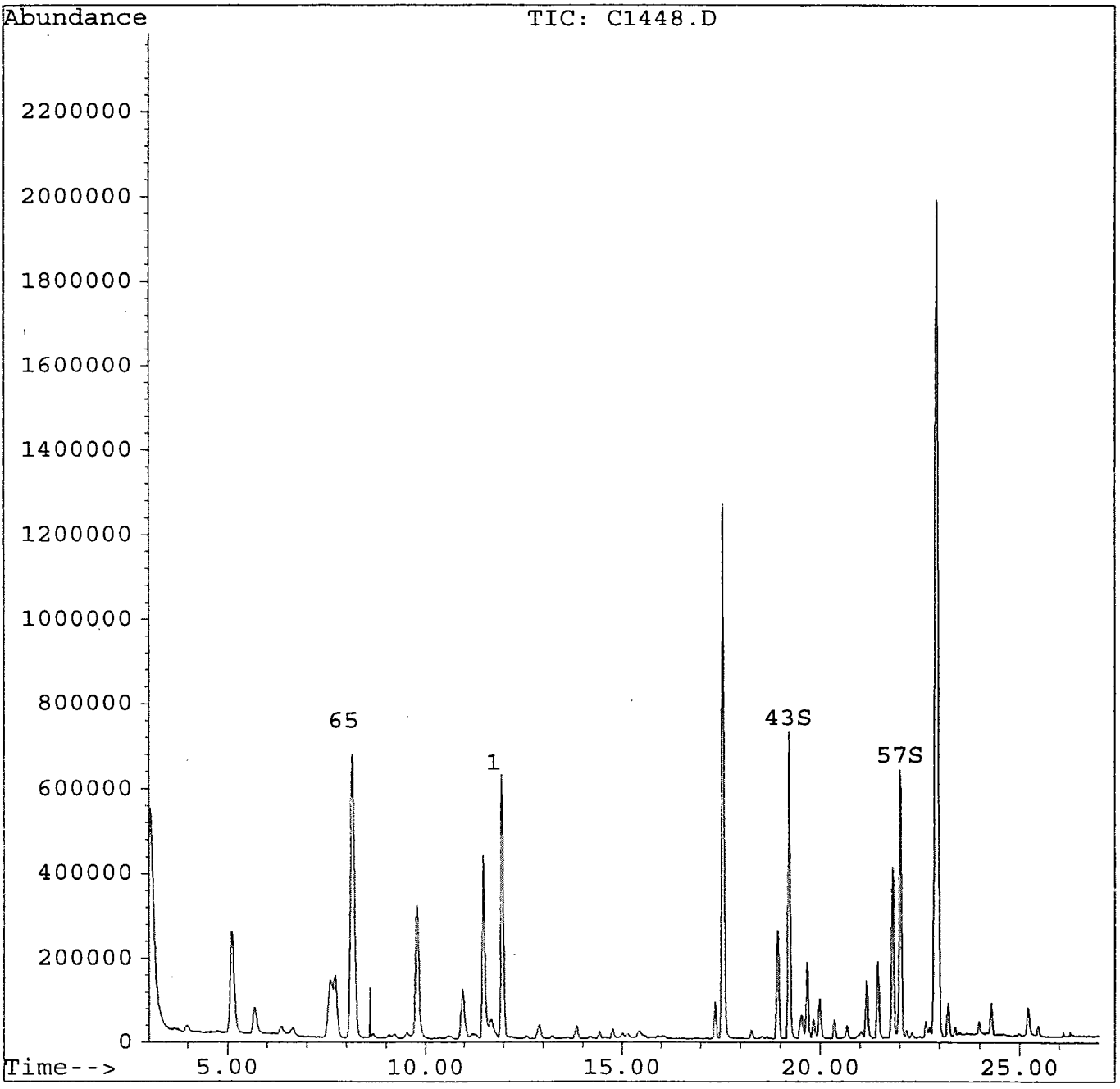
Quantitation Report

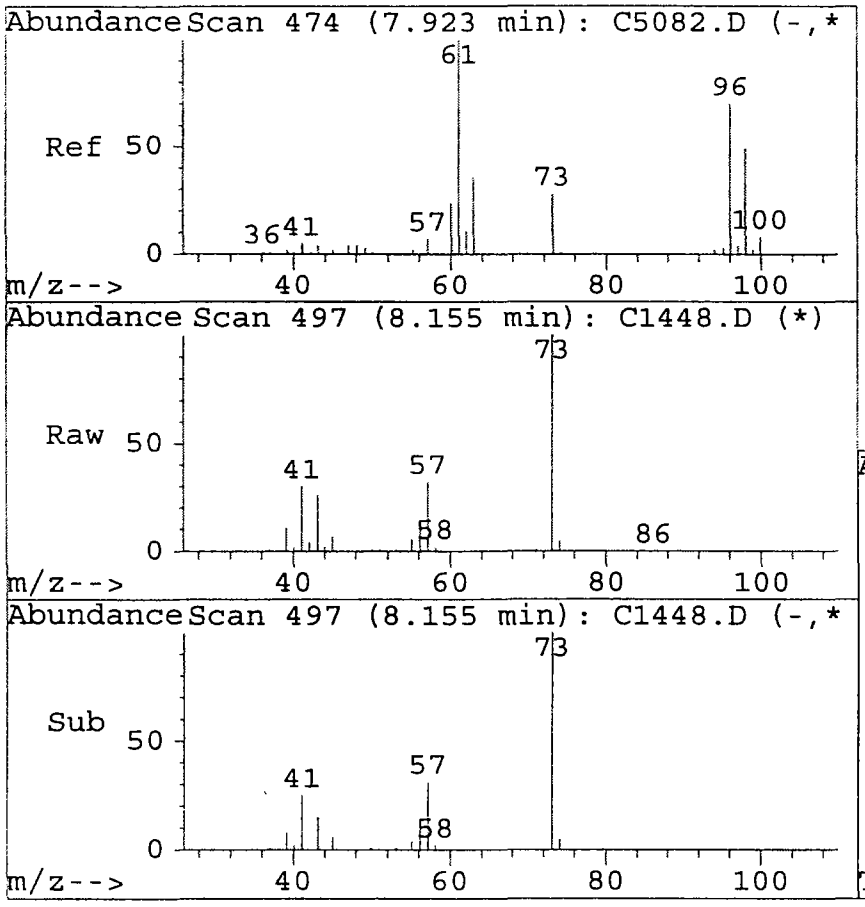
Data File : d:\hpchem\1\data\c1448.d
Acq On : 4 Mar 96 8:57 pm
Sample : 9608370 DL BLDG 2567 MW-3
Misc : 2.5 ML 1:10
Quant Time: Mar 5 12:17 1996

Vial: 11
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

205

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

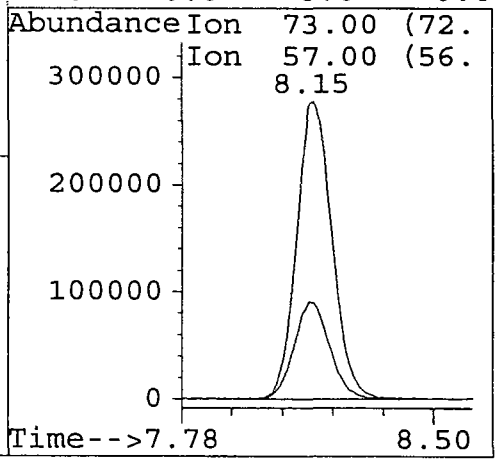




#65
Methyl-tert butyl ether
Concen: 24.63 ug/L m
RT: 8.15 min Scan# 497
Delta R.T. 0.01 min
Lab File: c1448.d
Acq: 4 Mar 96 8:57 pm

Tgt Ion:73 Resp: 1925287

Ion	Ratio	Lower	Upper
73	100		
57	25.4	5.4	45.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

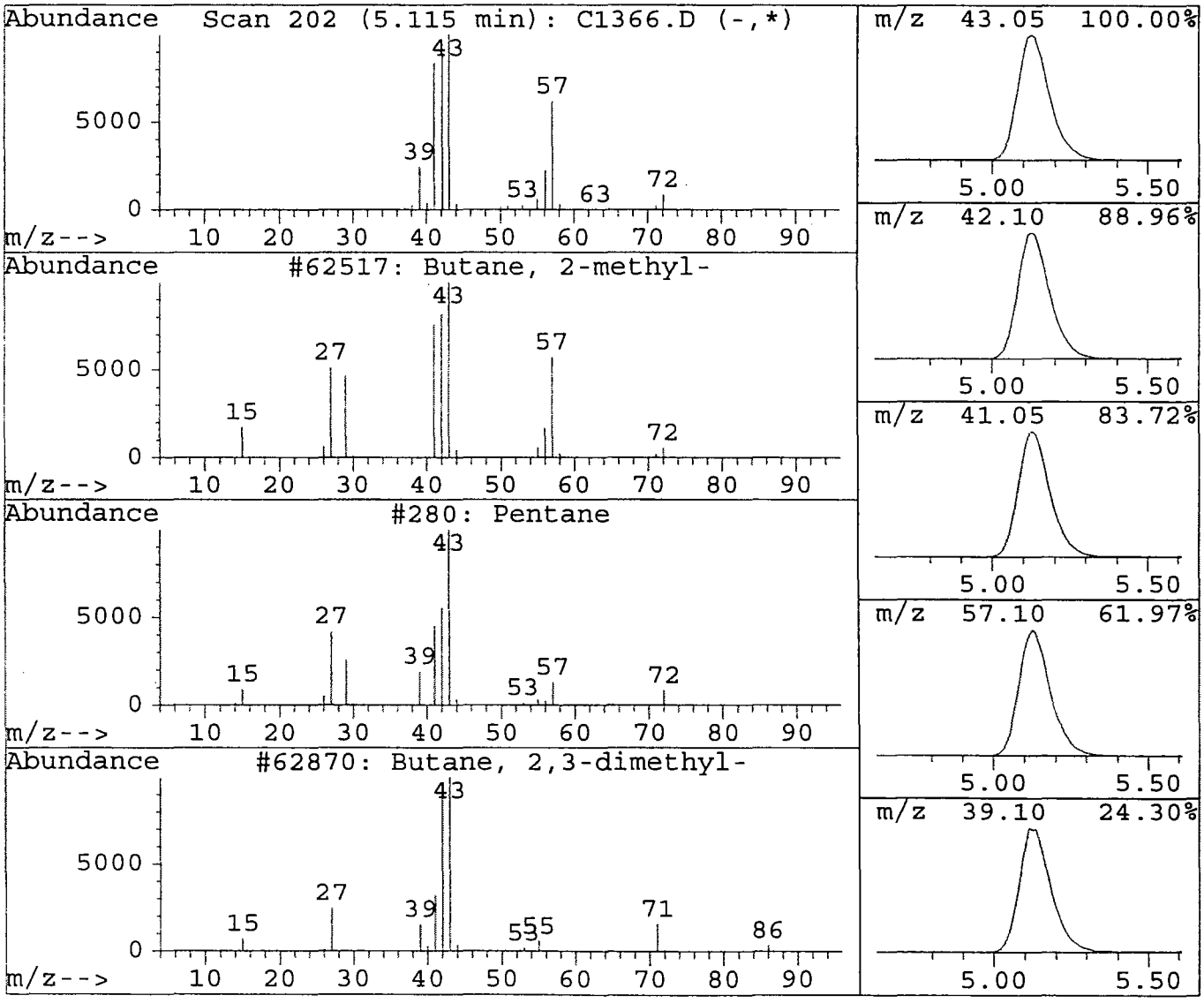
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.12	6.24 ug/L	3143779	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-methyl-	62517	000078-78-4	90
2	Pentane	280	000109-66-0	9
3	Butane, 2,3-dimethyl-	62870	000079-29-8	9
4	3-Buten-1-ol	264	000627-27-0	9
5	Propane, 2-methyl-1-nitro-	1811	000625-74-1	9



Library Search Compound Report

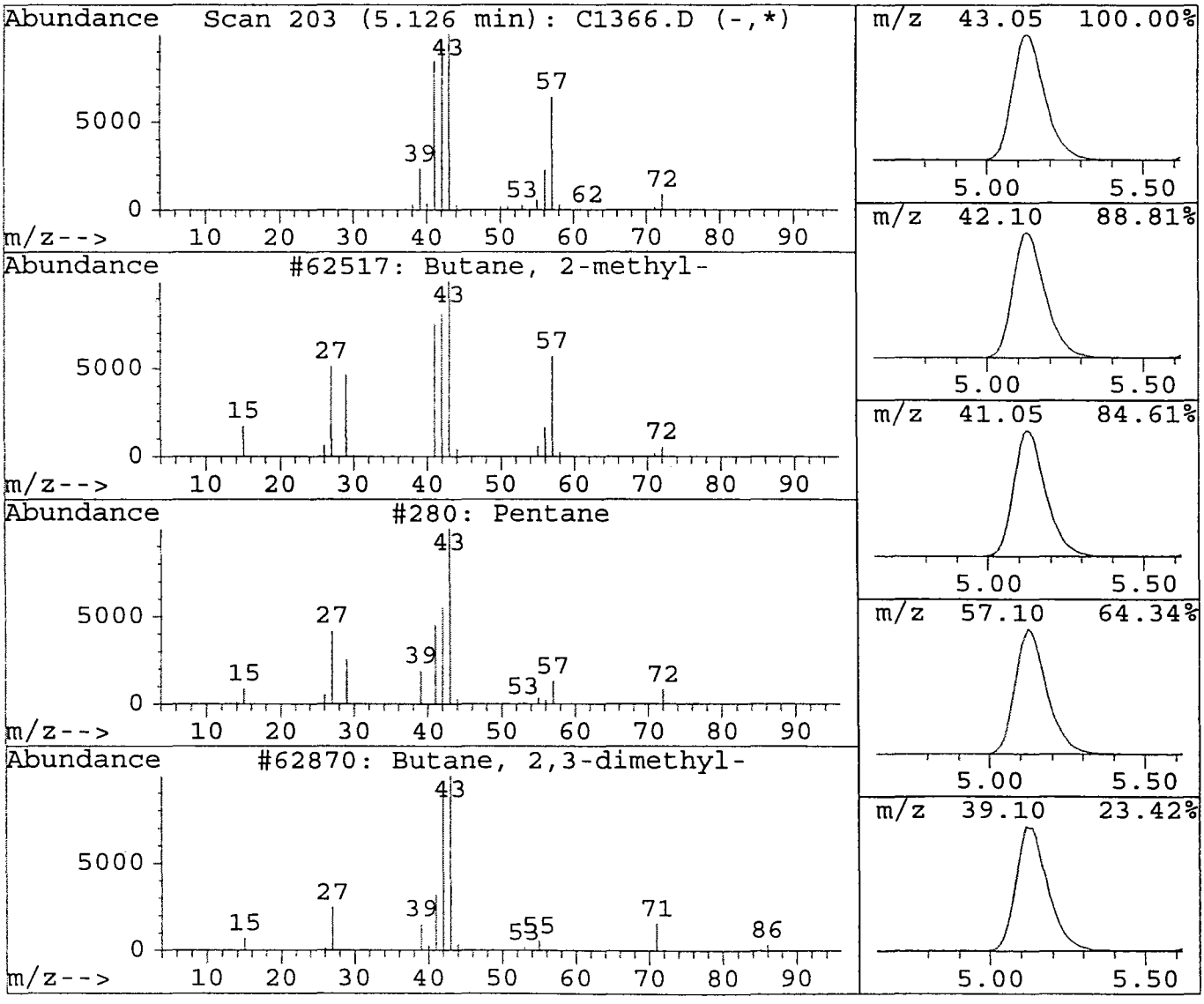
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.13	26.25 ug/L	13232587	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-methyl-	62517	000078-78-4	90
2	Pentane	280	000109-66-0	9
3	Butane, 2,3-dimethyl-	62870	000079-29-8	9
4	3-Buten-1-ol	264	000627-27-0	9
5	Cyclobutane, methyl-	229	000598-61-8	9



Library Search Compound Report

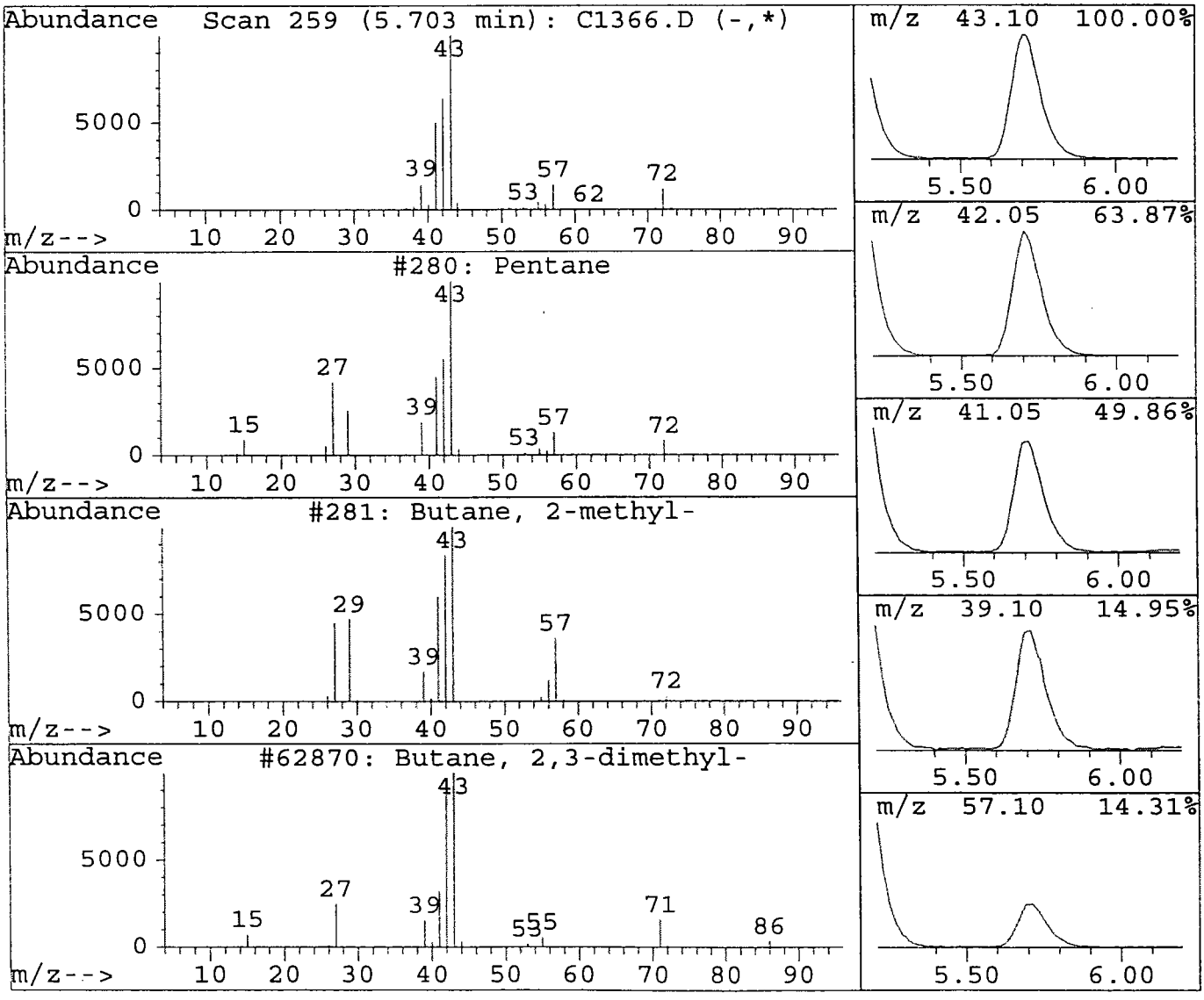
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.70	8.88 ug/L	4476327	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentane	280	000109-66-0	90
2	Butane, 2-methyl-	281	000078-78-4	36
3	Butane, 2,3-dimethyl-	62870	000079-29-8	36
4	Ethylenimine	62262	000151-56-4	5
5	Propanal, 2-methyl-	62512	000078-84-2	5



Library Search Compound Report

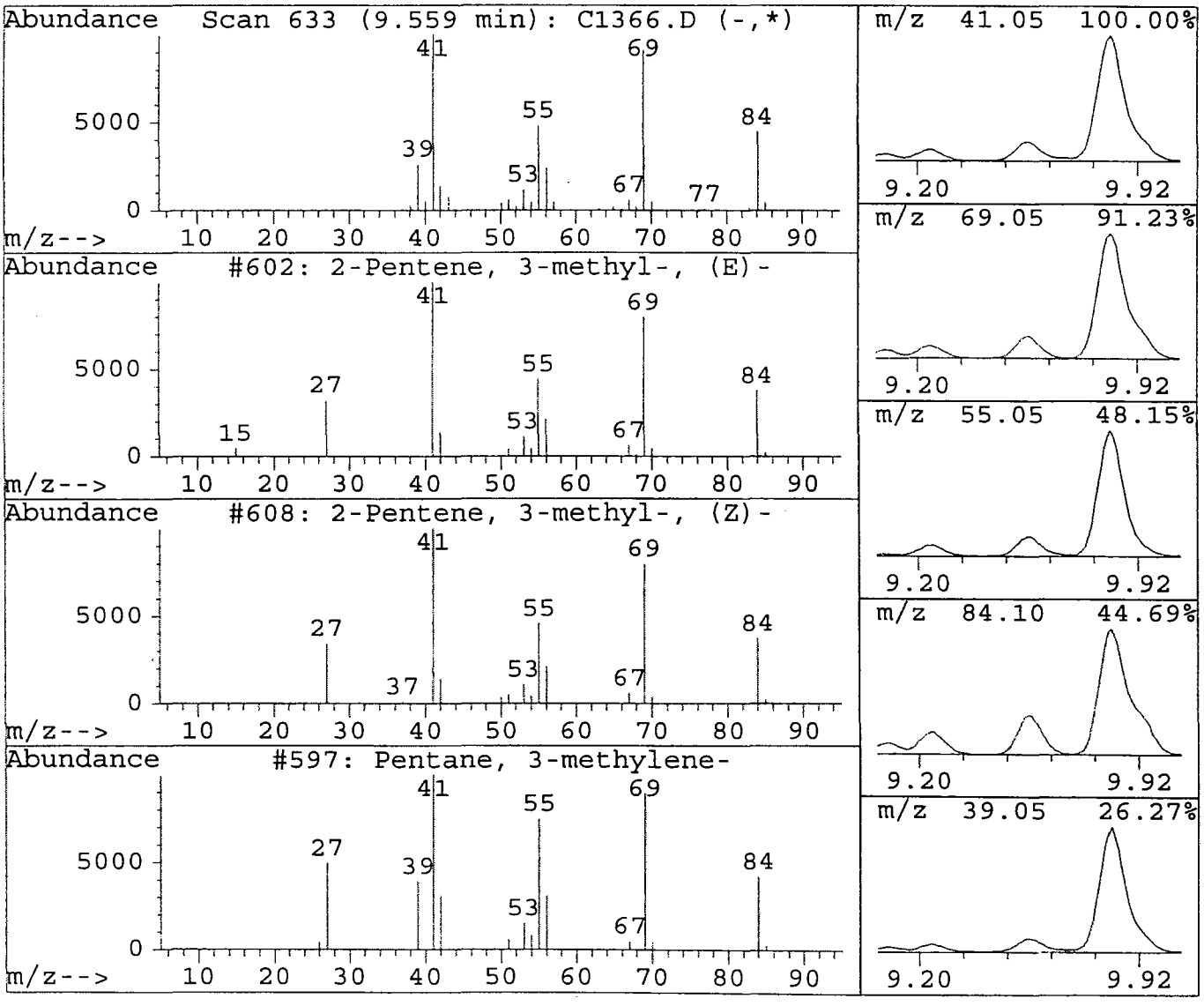
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.56	3.79 ug/L	1912568	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Pentene, 3-methyl-, (E)-	602	000616-12-6	94
2	2-Pentene, 3-methyl-, (Z)-	608	000922-62-3	94
3	Pentane, 3-methylene-	597	000760-21-4	45
4	2-Pentene, 4-methyl-	62770	004461-48-7	80
5	Cyclopropane, 1-ethyl-1-methyl-	609	053778-43-1	25



Library Search Compound Report

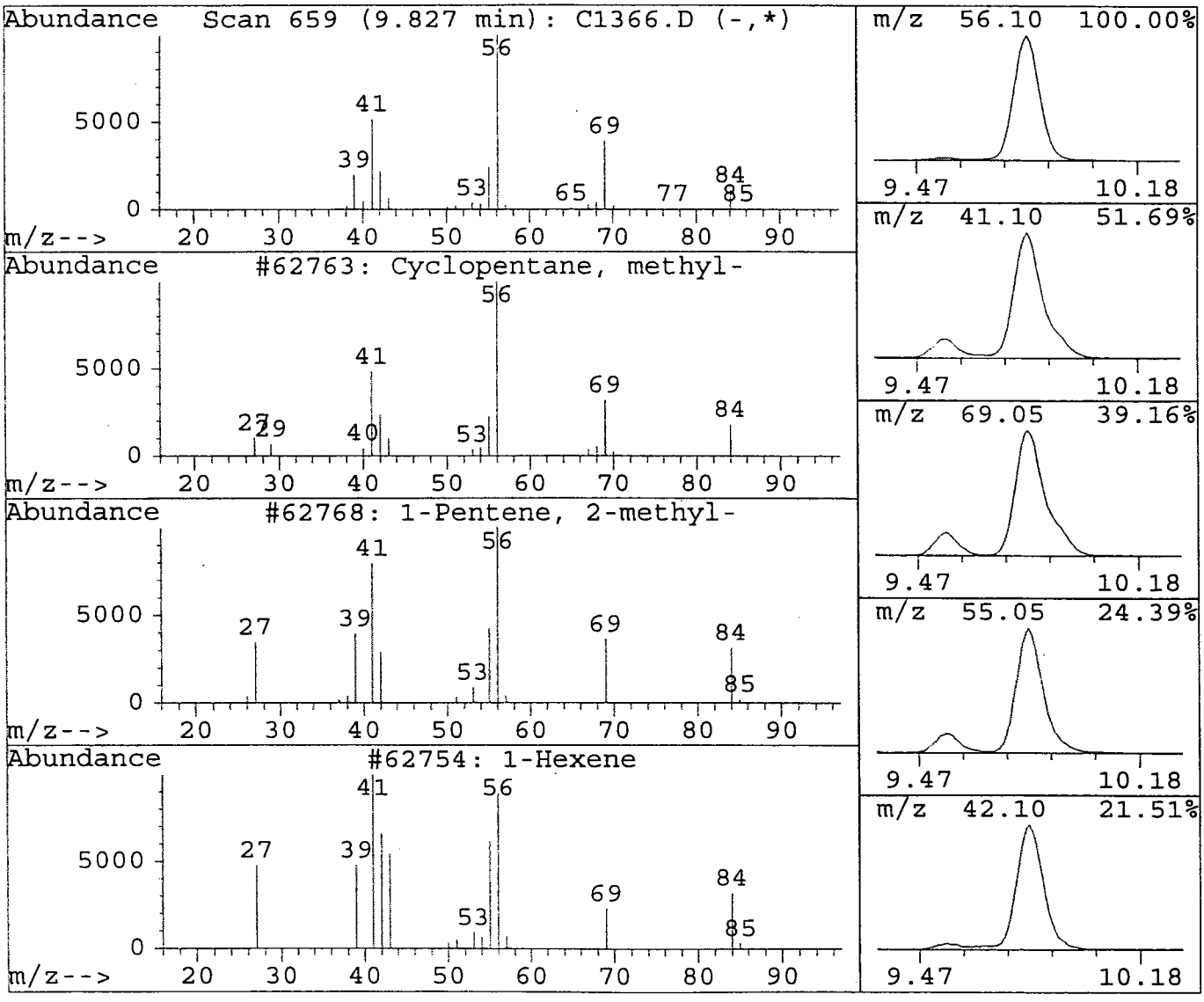
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.83	36.67 ug/L	18485864	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, methyl-	62763	000096-37-7	49
2	1-Pentene, 2-methyl-	62768	000763-29-1	27
3	1-Hexene	62754	000592-41-6	35
4	1H-Tetrazole, 5-methyl-	529	004076-36-2	64
5	Cyclopropane, 1-ethyl-2-methyl-, ci	588	019781-68-1	27



Library Search Compound Report

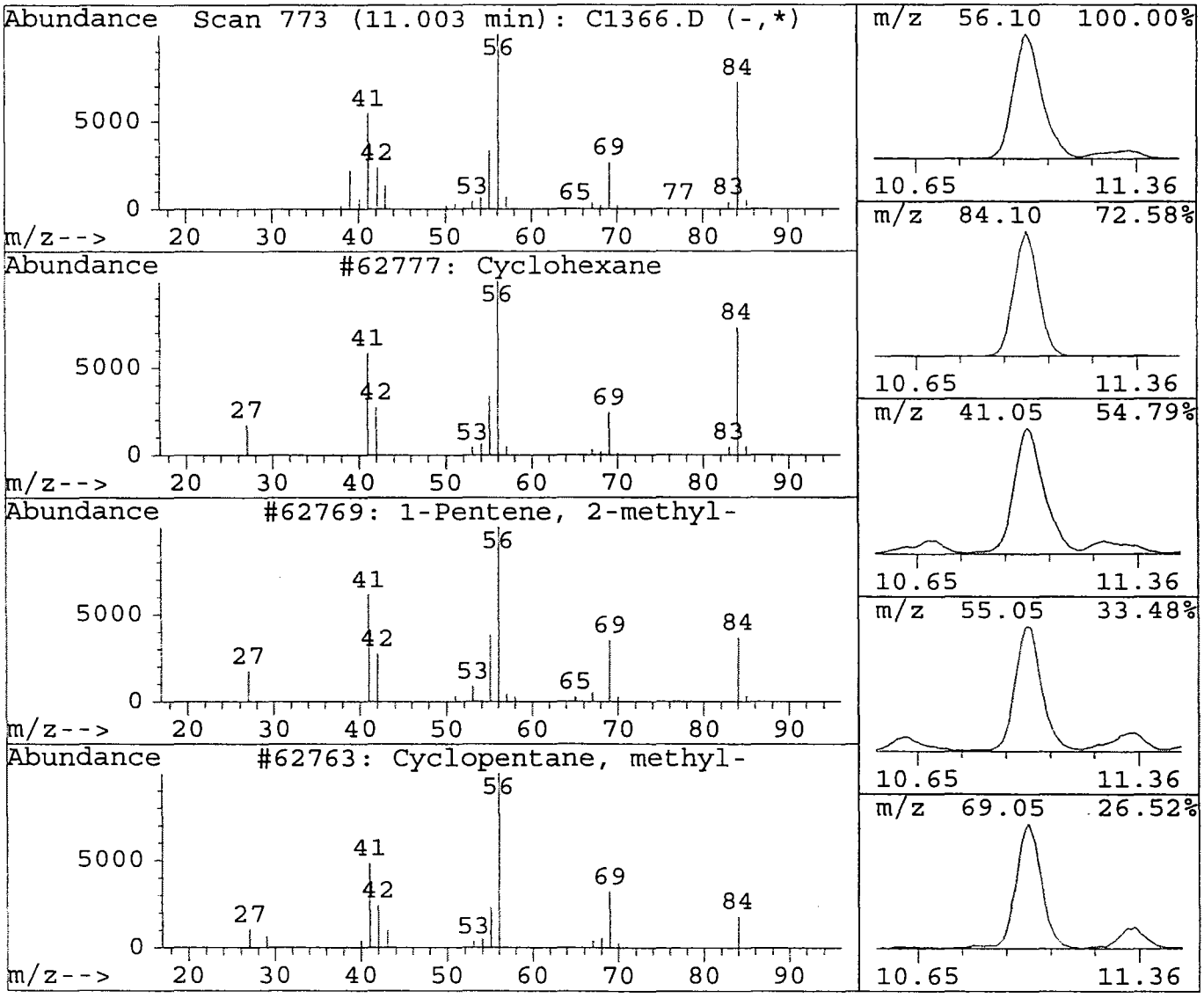
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.00	11.87 ug/L	5982912	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane	62777	000110-82-7	94
2	1-Pentene, 2-methyl-	62769	000763-29-1	50
3	Cyclopentane, methyl-	62763	000096-37-7	42
4	Cyclobutane, ethyl-	604	004806-61-5	42
5	Cyclopropane, propyl-	593	002415-72-7	23



Library Search Compound Report

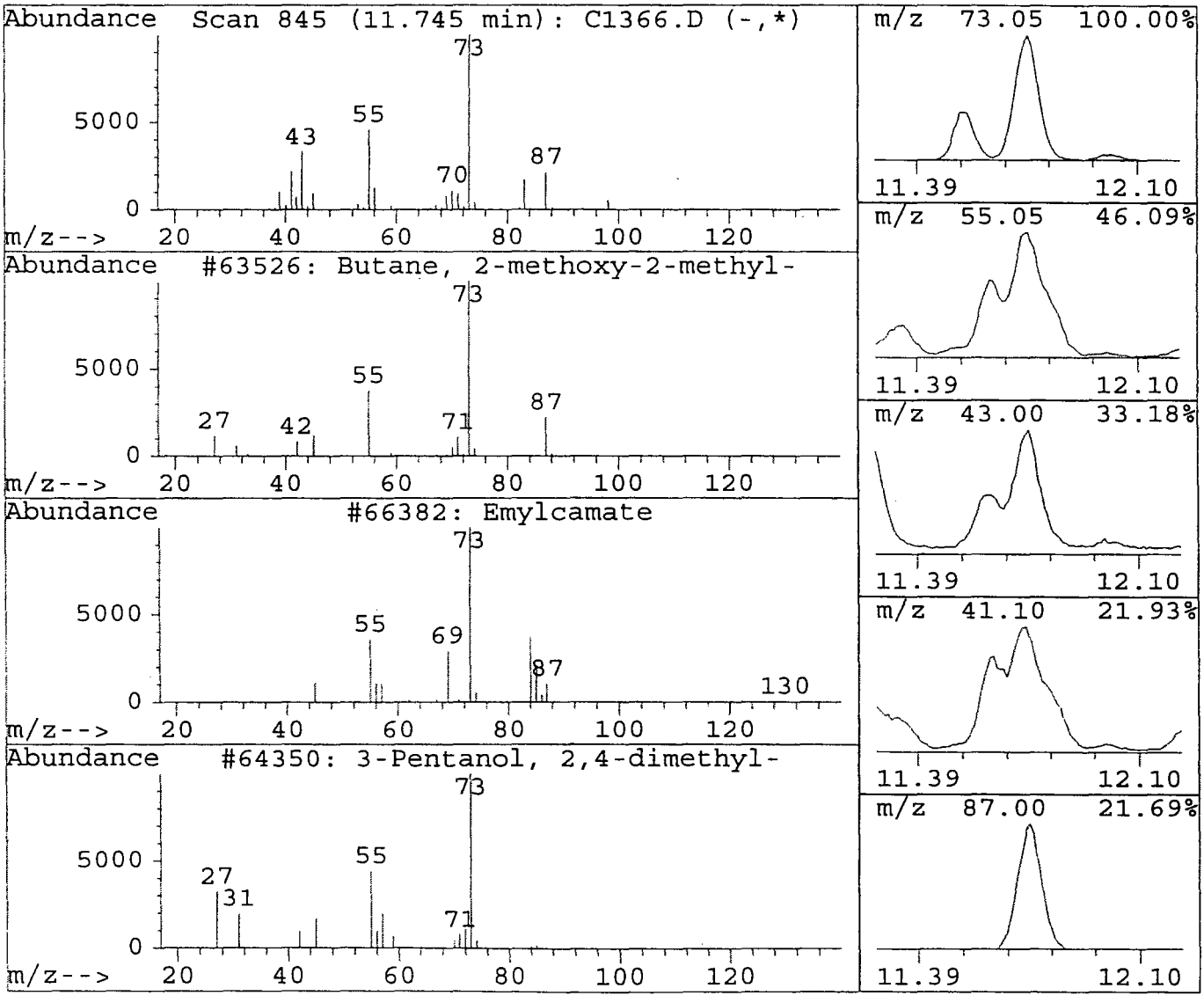
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.74	3.86 ug/L	1945018	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-methoxy-2-methyl-	63526	000994-05-8	50
2	Emylcamate	66382	000078-28-4	9
3	3-Pentanol, 2,4-dimethyl-	64350	000600-36-2	9
4	2-Methyl-5-hexen-3-ol	3017	032815-70-6	12
5	1-Butanamine	299	000109-73-9	5



Library Search Compound Report

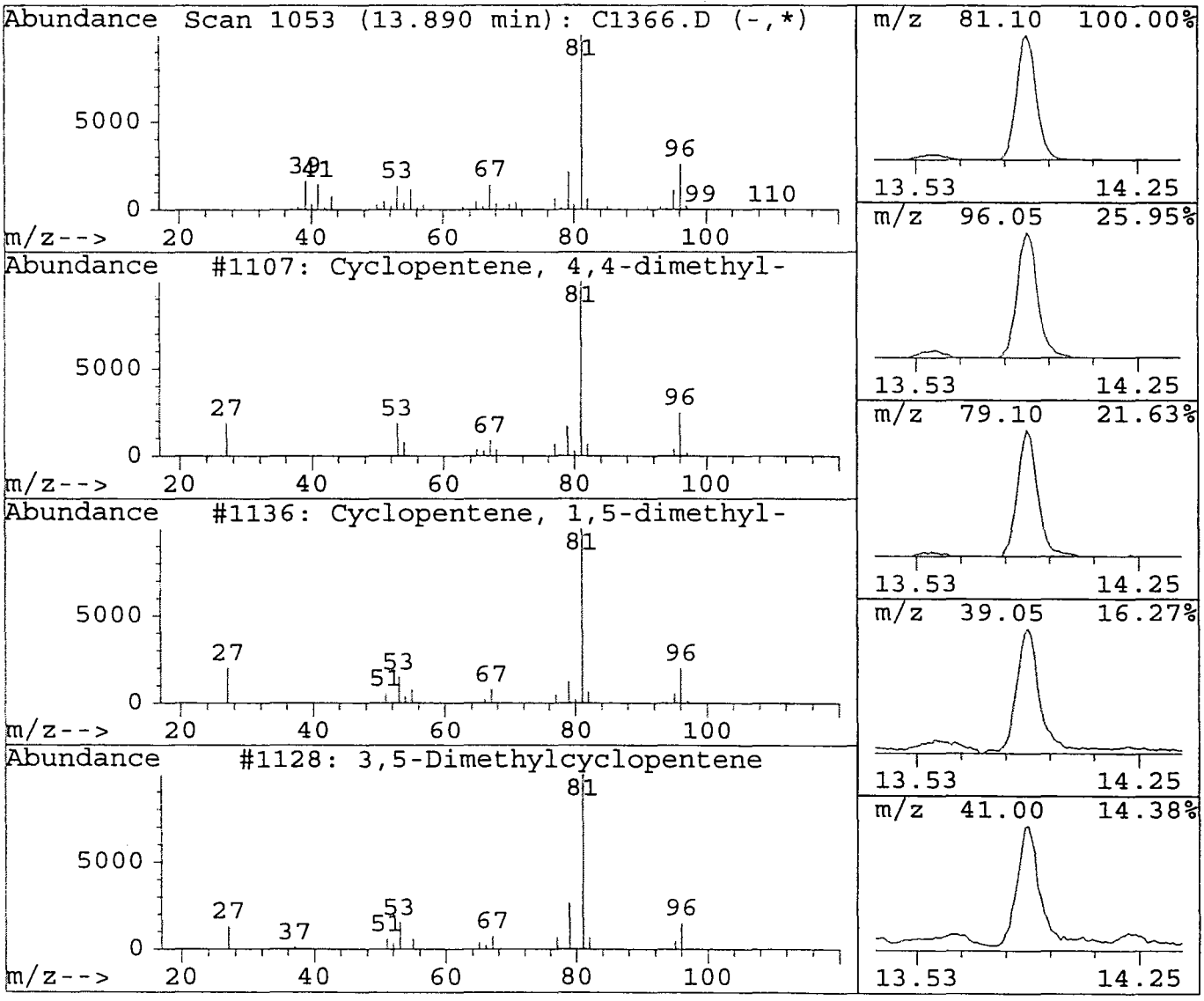
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
13.89	4.93 ug/L	2483408	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentene, 4,4-dimethyl-	1107	019037-72-0	87
2	Cyclopentene, 1,5-dimethyl-	1136	016491-15-9	64
3	3,5-Dimethylcyclopentene	1128	007459-71-4	50
4	Cyclopentane, 1-methyl-2-methylene-	1103	041158-41-2	80
5	2,4-Heptadiene, (E,E)-	1113	002384-94-3	38



Library Search Compound Report

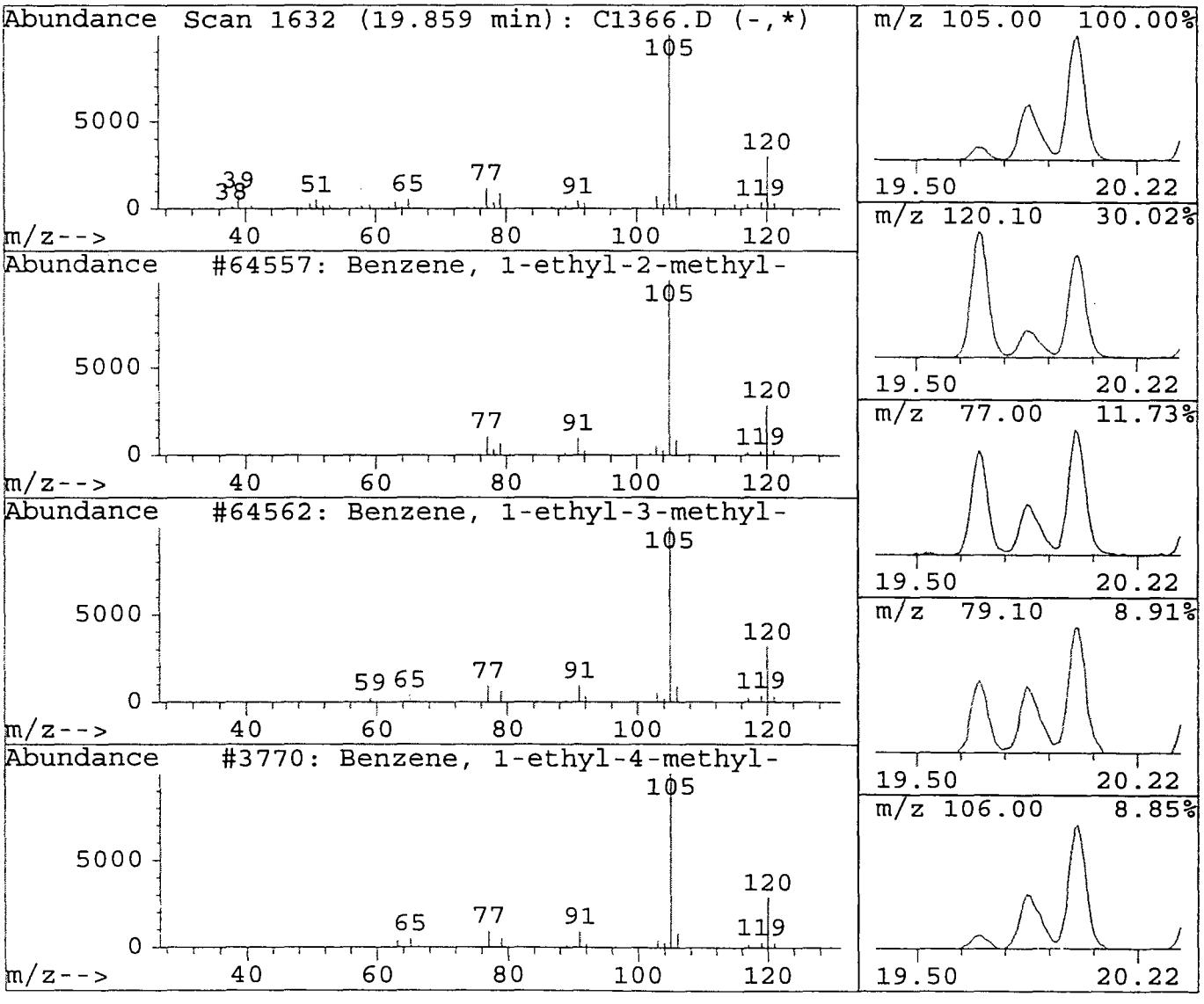
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.86	3.06 ug/L	1545043	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	64557	000611-14-3	94
2	Benzene, 1-ethyl-3-methyl-	64562	000620-14-4	94
3	Benzene, 1-ethyl-4-methyl-	3770	000622-96-8	94
4	Benzene, (1-methylethyl)-	64556	000098-82-8	81
5	Benzene, 1,2,3-trimethyl-	64575	000526-73-8	72



Library Search Compound Report

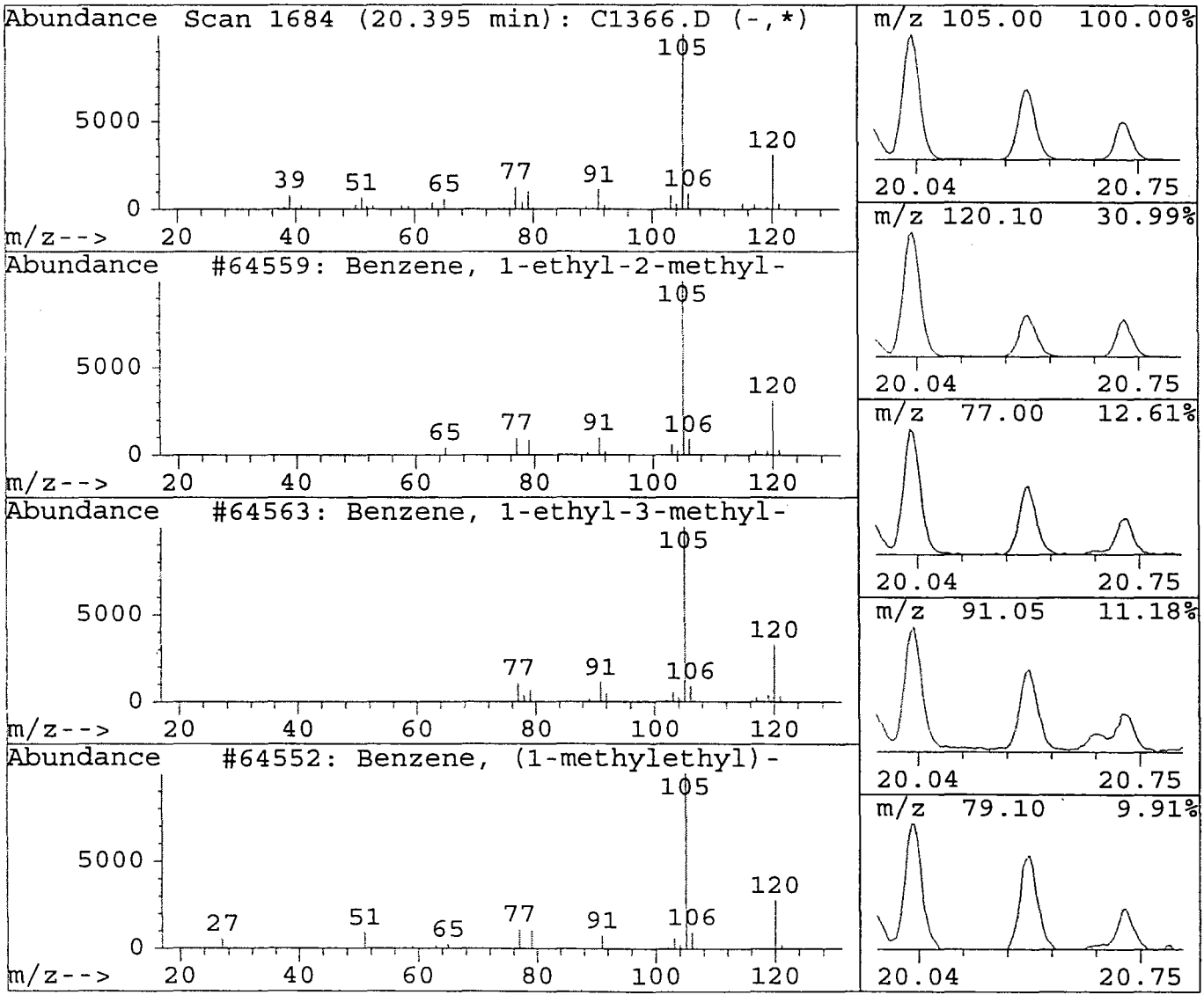
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.40	3.35 ug/L	1691102	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	64559	000611-14-3	95
2	Benzene, 1-ethyl-3-methyl-	64563	000620-14-4	91
3	Benzene, (1-methylethyl)-	64552	000098-82-8	91
4	Benzene, 1-ethyl-4-methyl-	3770	000622-96-8	94
5	Benzene, 1,2,3-trimethyl-	64576	000526-73-8	91



Library Search Compound Report

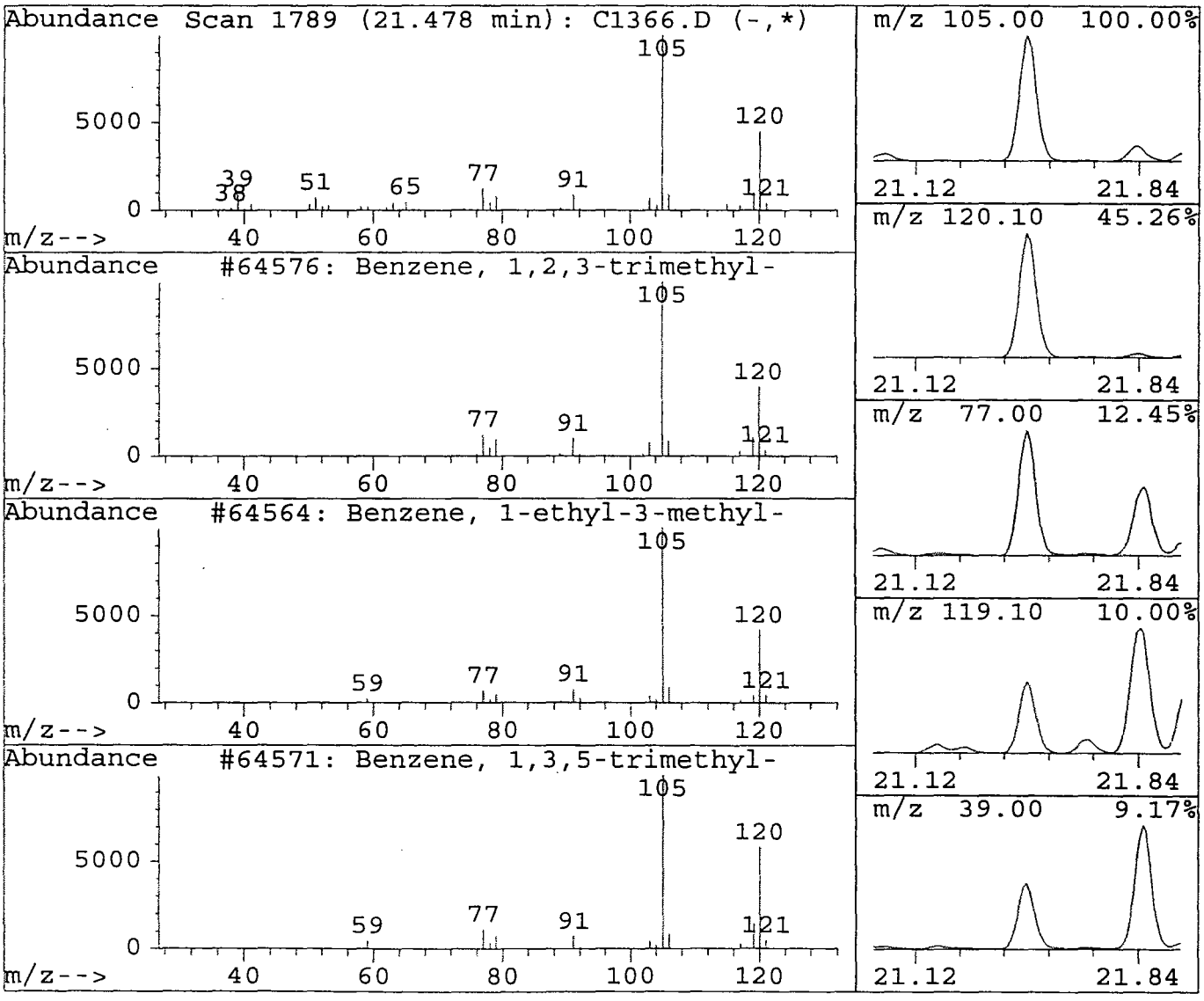
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.48	13.53 ug/L	6817996	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	64576	000526-73-8	86
2	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	90
3	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	91
4	Benzene, 1,2,4-trimethyl-	64578	000095-63-6	87
5	Benzene, 1-ethyl-4-methyl-	64566	000622-96-8	87



Library Search Compound Report

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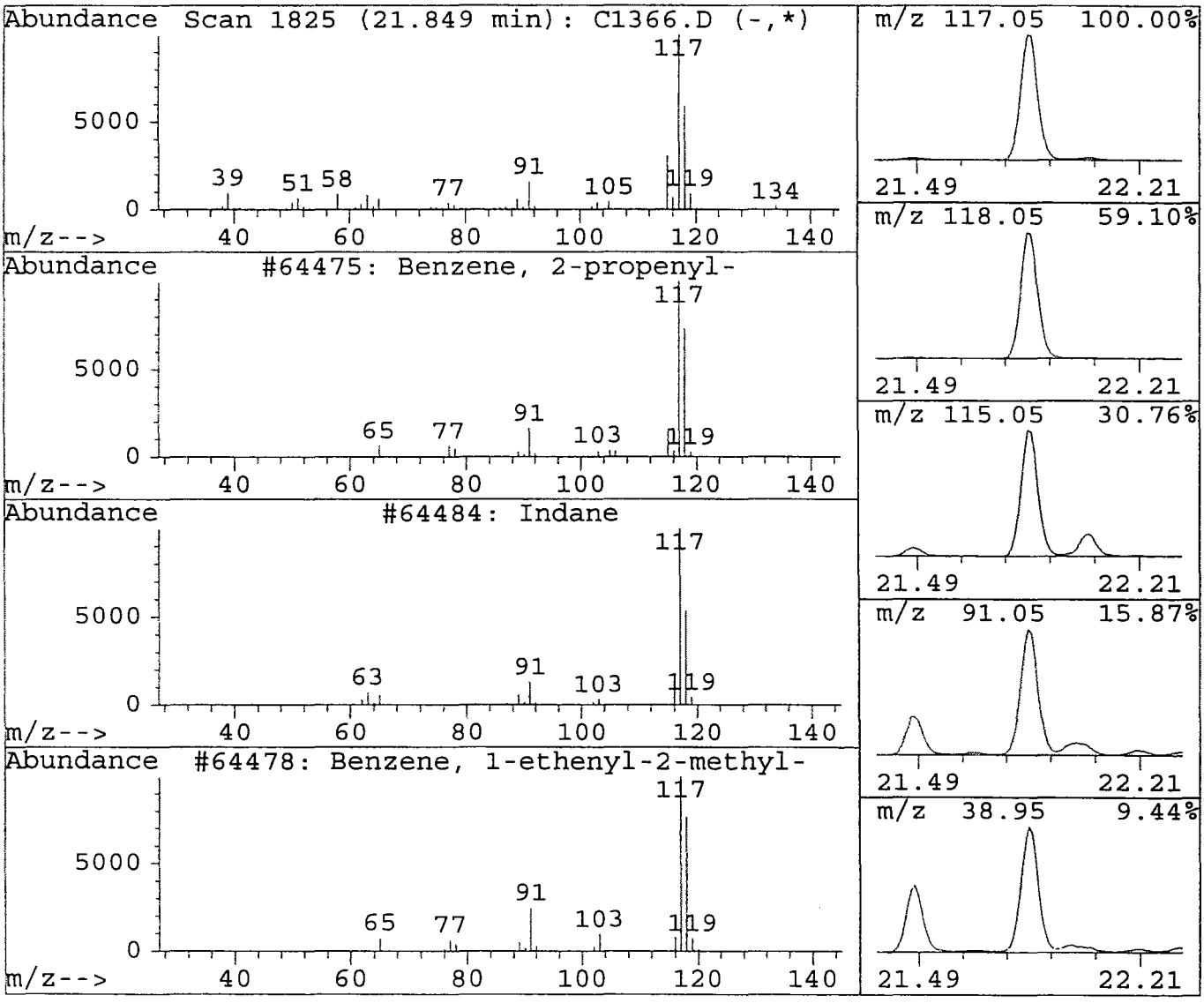
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.85	29.14 ug/L	14691653	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 2-propenyl-	64475	000300-57-2	38
2	Indane	64484	000496-11-7	81
3	Benzene, 1-ethenyl-2-methyl-	64478	000611-15-4	47
4	Benzene, 1-propenyl-	64476	000637-50-3	43
5	Benzene, 1-ethenyl-4-methyl-	64480	000622-97-9	22



Library Search Compound Report

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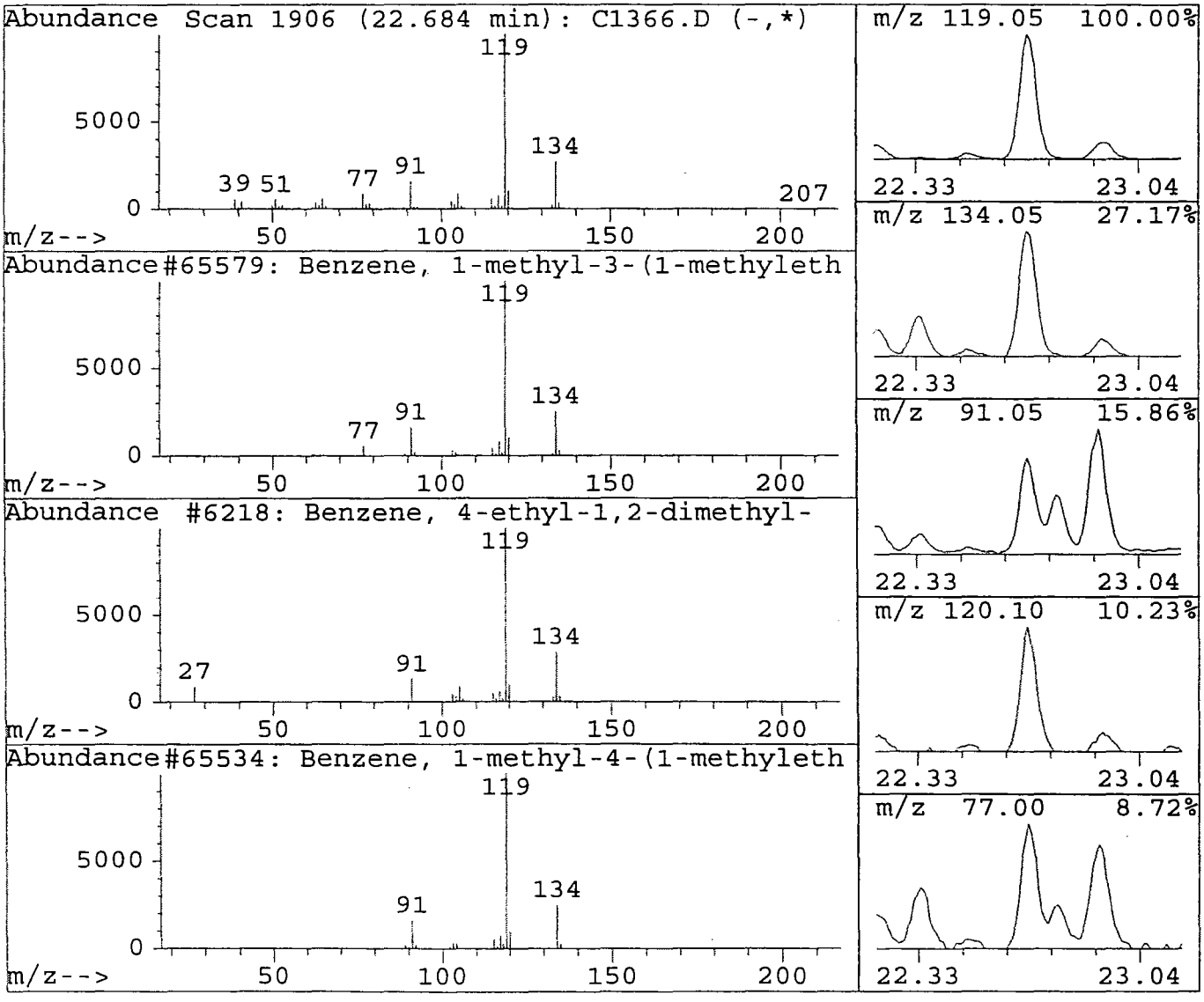
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.68	3.21 ug/L	1620613	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methylethyl)	65579	000535-77-3	94
2	Benzene, 4-ethyl-1,2-dimethyl-	6218	000934-80-5	95
3	Benzene, 1-methyl-4-(1-methylethyl)	65534	000099-87-6	91
4	Benzene, 1-methyl-2-(1-methylethyl)	6228	000527-84-4	94
5	Benzene, 1-ethyl-2,4-dimethyl-	65572	000874-41-9	94



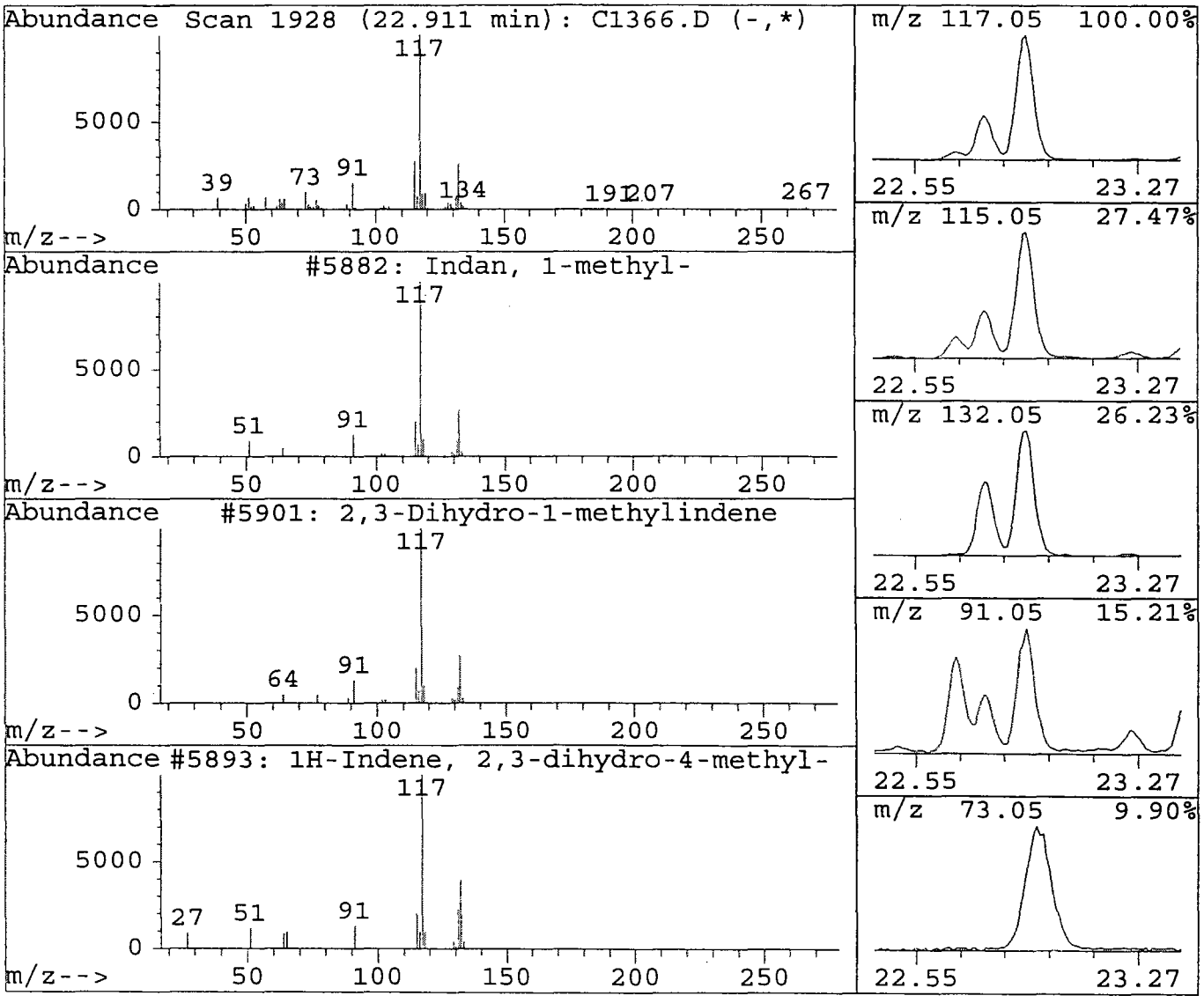
Data File : d:\hpchem\1\data\c1366.d
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.91	4.75 ug/L	2392340	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Indan, 1-methyl-	5882	000767-58-8	81
2	2,3-Dihydro-1-methylindene	5901	027133-93-3	81
3	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	43
4	Benzene, 1-ethenyl-3-ethyl-, mixt.	36689	055319-72-7	43
5	Benzene, 1-ethenyl-3-ethyl-	5902	007525-62-4	53



Library Search Compound Report

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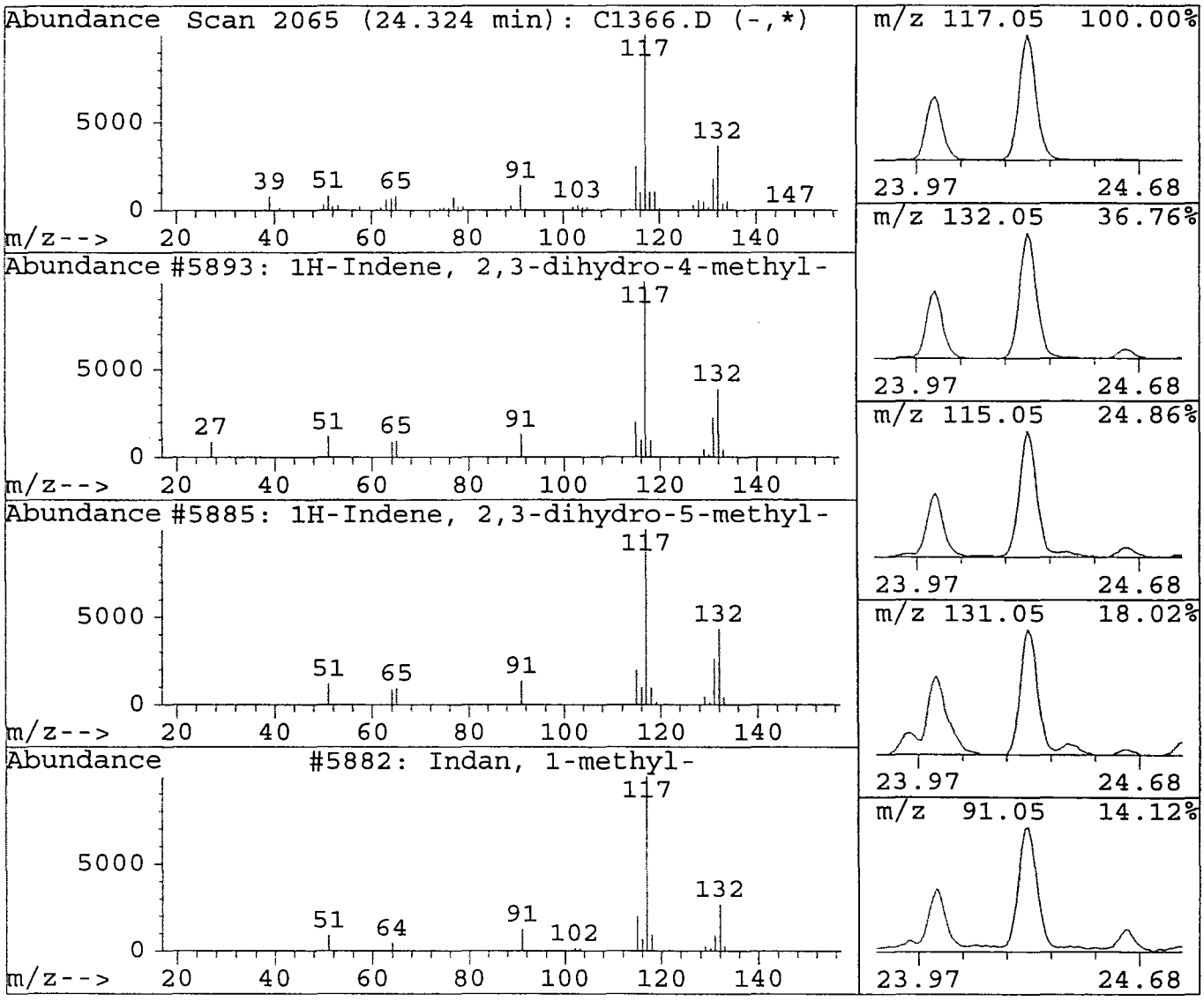
Acq On : 23 Feb 96 8:42 pm
Sample : 9608370
Misc : 25 ML

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.32	4.48 ug/L	2258603	Fluorobenzene	12.01

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	95
2	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	87
3	Indan, 1-methyl-	5882	000767-58-8	80
4	2,3-Dihydro-1-methylindene	5901	027133-93-3	93
5	Benzene, 1-ethenyl-3-ethyl-, mixt.	36689	055319-72-7	43



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 222

mw-4

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9608371V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1351.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.2	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw-4 223

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9608371V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1351.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 224

mw4

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 4 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9608371V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1351.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
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Quantitation Report

225

Data File : d:\hpchem\1\data\c1351.d
Acq On : 22 Feb 96 11:16 pm
Sample : 9608371
Misc : 25 ML BLDG 2567 MW-4
Quant Time: Feb 23 11:13 1996

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.15	96	1292062	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	644454	5.14	ug/L	102.89%
57) 1,2-Dichlorobenzene-d4	22.16	152	388861	5.21	ug/L	104.11%
Target Compounds						Qvalue
9) Methylene chloride	7.77	84	67181	1.15	ug/L	93

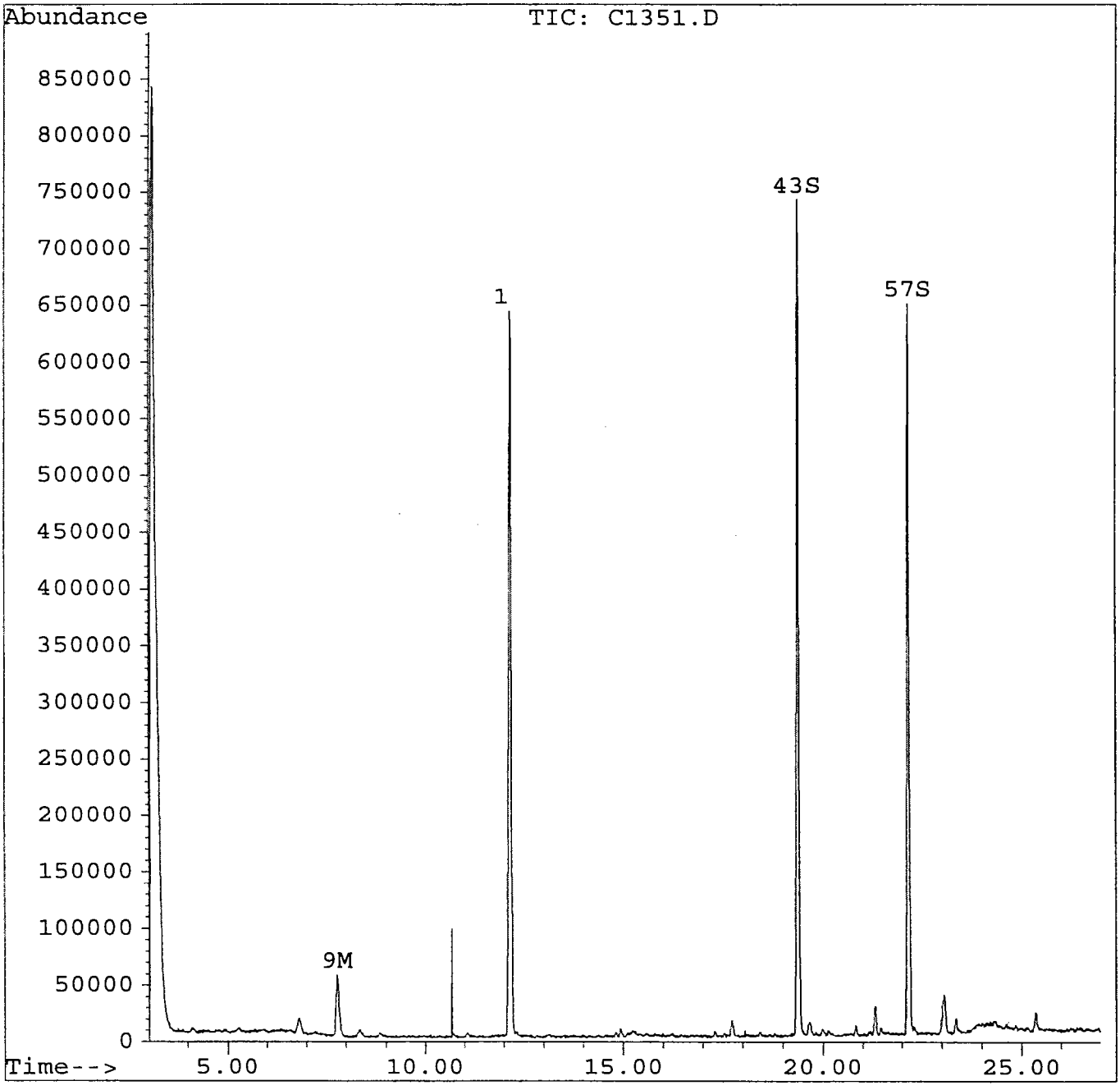
(#) = qualifier out of range (m) = manual integration

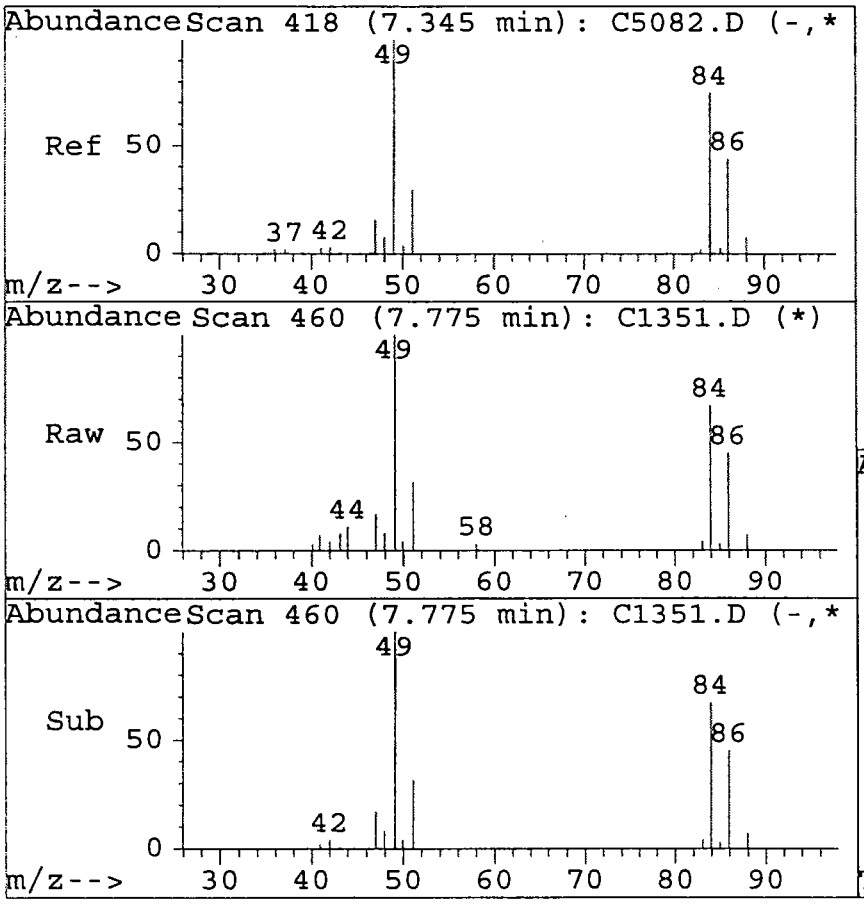
Quantitation Report

Data File : d:\hpchem\1\data\c1351.d
Acq On : 22 Feb 96 11:16 pm
Sample : 9608371
Misc : 25 ML BLDG 2567 MW-4
Quant Time: Feb 23 11:13 1996

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

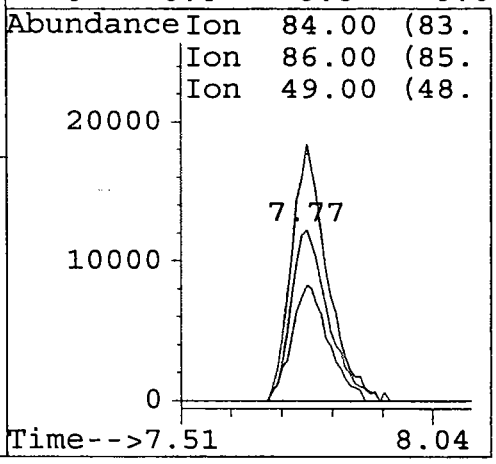




#9
Methylene chloride
Concen: 1.15 ug/L
RT: 7.77 min Scan# 460
Delta R.T. -0.01 min
Lab File: c1351.d
Acq: 22 Feb 96 11:16 pm

Tgt Ion:84 Resp: 67181

Ion	Ratio	Lower	Upper
84	100		
86	67.7	46.1	86.1
49	150.2	118.6	158.6
0	0.0	0.0	0.0



Library Search Compound Report

228

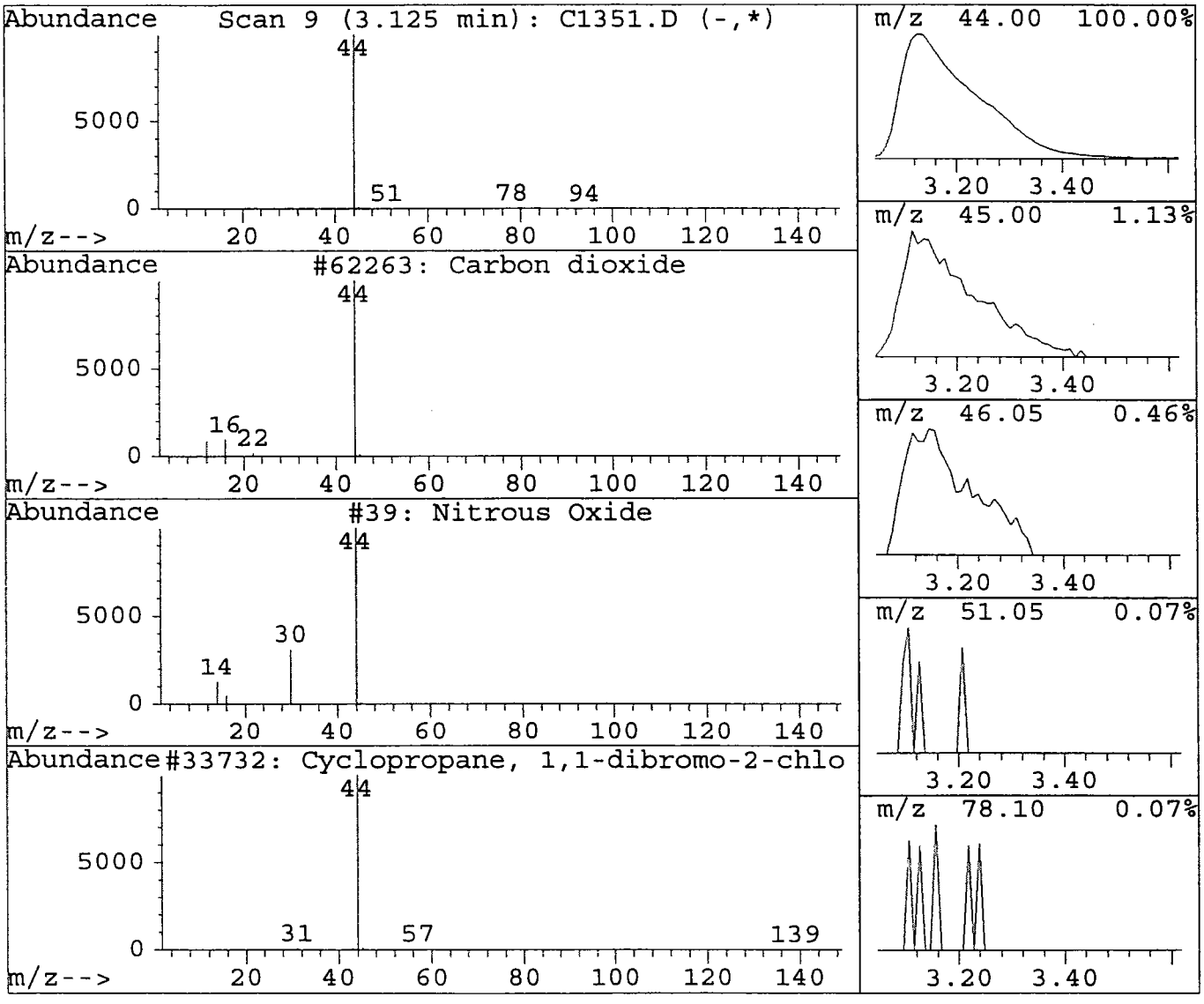
Data File : d:\hpchem\1\data\c1351.d
Acq On : 22 Feb 96 11:16 pm
Sample : 9608371
Misc : 25 ML BLDG 2567 MW-4

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.12	14.42 ug/L	7944542	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	39	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw-5 229

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9608372V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1352.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.80	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw-5

230

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9608372V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1352.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# MW-5 231

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2567 NJDEP MW#: 5 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9608372V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1352.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	23.06	1	J
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Quantitation Report

Data File : d:\hpchem\1\data\c1352.d
Acq On : 22 Feb 96 11:51 pm
Sample : 9608372
Misc : 25 ML BLDG 2567 MW-5
Quant Time: Feb 23 11:14 1996

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.14	96	1133008	5.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.38	95	567624	5.17	ug/L	103.35%
57) 1,2-Dichlorobenzene-d4	22.16	152	346545	5.29	ug/L	105.81%
Target Compounds						Qvalue
9) Methylene chloride	7.75	84	42487	0.83	ug/L	100

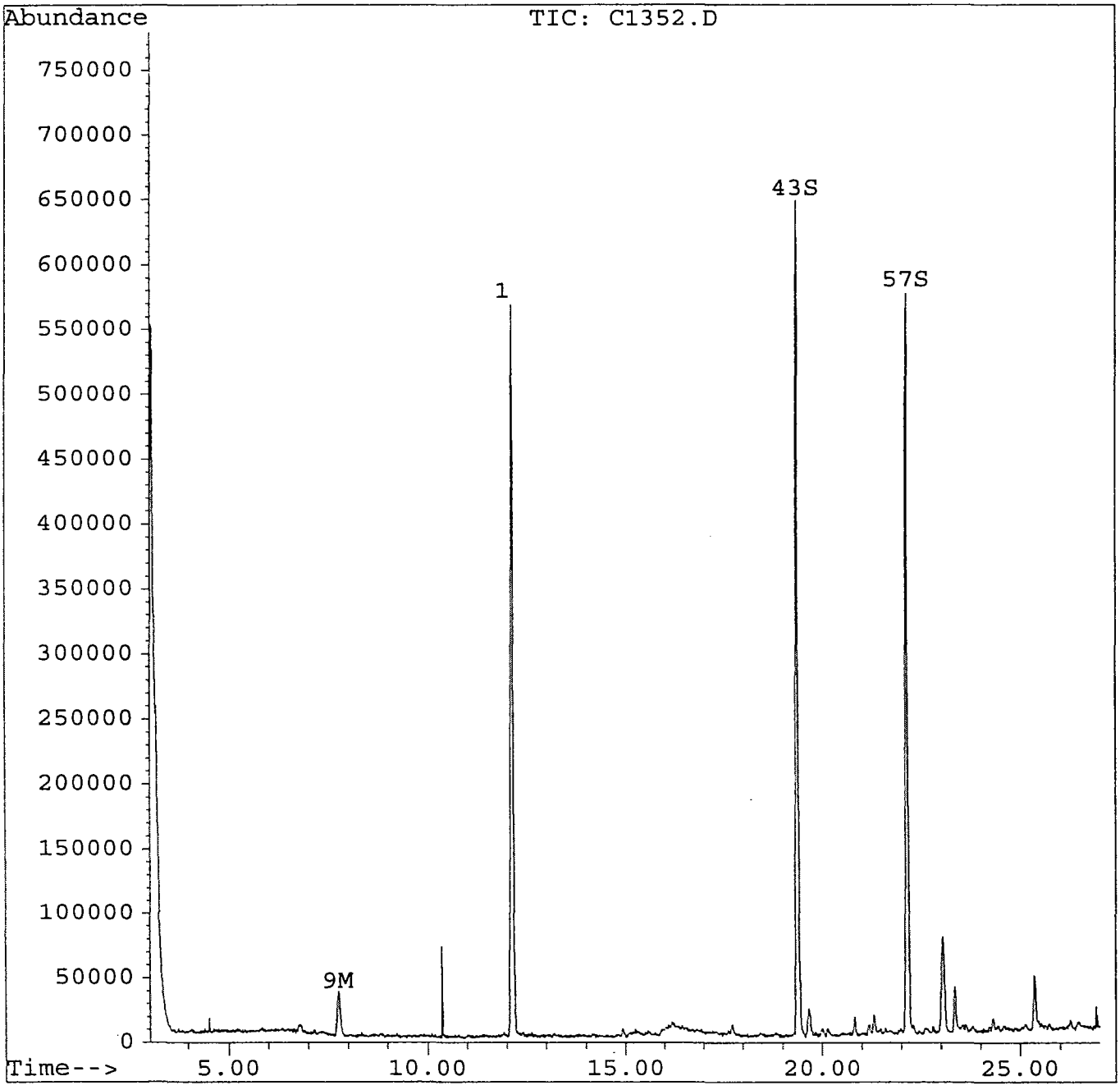
(#) = qualifier out of range (m) = manual integration

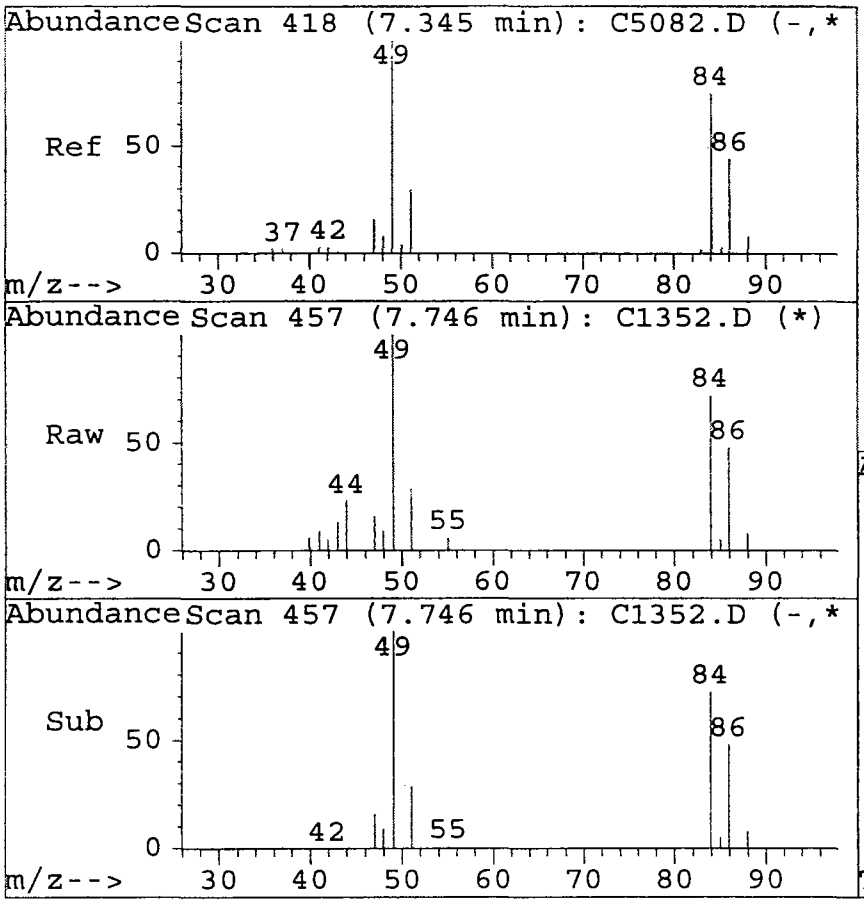
Quantitation Report

Data File : d:\hpchem\1\data\c1352.d
Acq On : 22 Feb 96 11:51 pm
Sample : 9608372
Misc : 25 ML BLDG 2567 MW-5
Quant Time: Feb 23 11:14 1996

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

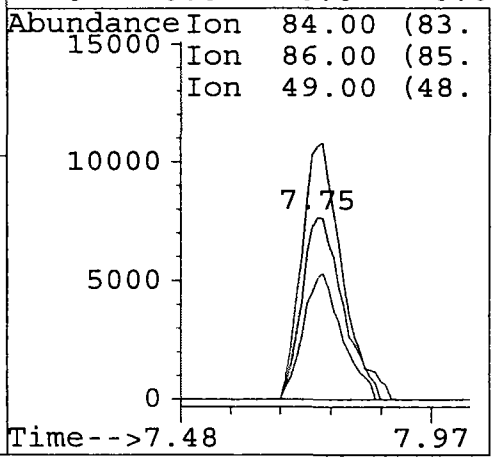




#9
Methylene chloride
Concen: 0.83 ug/L
RT: 7.75 min Scan# 457
Delta R.T. -0.04 min
Lab File: c1352.d
Acq: 22 Feb 96 11:51 pm

Tgt Ion:84 Resp: 42487

Ion	Ratio	Lower	Upper
84	100		
86	66.7	46.1	86.1
49	139.0	118.6	158.6
0	0.0	0.0	0.0



Library Search Compound Report

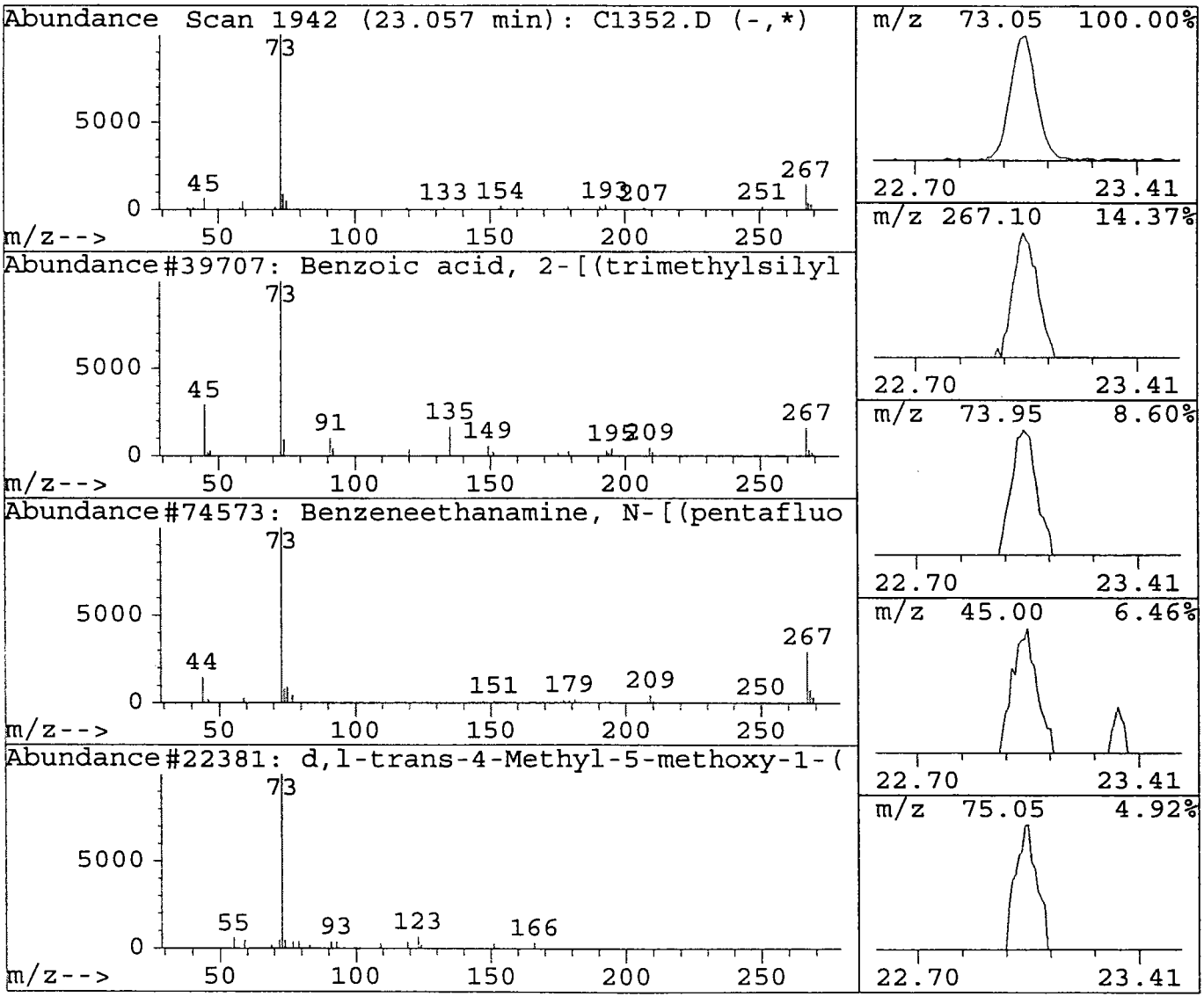
Data File : d:\hpchem\1\data\c1352.d
Acq On : 22 Feb 96 11:51 pm
Sample : 9608372
Misc : 25 ML BLDG 2567 MW-5

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.06	0.84 ug/L	405986	Fluorobenzene	12.14

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	38
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	4
3	d,l-trans-4-Methyl-5-methoxy-1-(1-m	22381	000000-00-0	2
4	Octanal, 7-methoxy-3,7-dimethyl-	19455	003613-30-7	2
5	N-Ethylformamide	292	000627-45-2	4



WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	VBLK01	105	107			
02	9607649V	106	108			
03	9607650V	105	108			
04	9607654V	105	109			
05	9607655V	106	109			
06	9607656V	106	108			
07	9608367V	103	103			
08	9608366V	102	104			
09	9608364V	104	105			
10	9608365V	103	104			
11	9608371V	103	104			
12	9608372V	103	106			
13	10 QCS	102	102			
14	1 STND	104	103			
15						
16						
17						
18						
19						
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25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (BFB) = 4-Bromofluorobenzene	(80-120)
SMC2 (DCB) = 1,2-Dichlorobenzene-d4	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	VBLK01	101	104			
02	9608369V	102	106			
03	9608376V	104	103			
04	9608368V	99	101			
05	9608370V	101	103			
06	9608369MS	98	99			
07	9608369MSD	102	105			
08	10 QCS	98	99			
09	1 STND	101	105			
10						
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QC LIMITS

SMC1 (BFB) = 4-Bromofluorobenzene (80-120)

SMC2 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	VBLK01	99	99			
02	PA028	99	97			
03	9608370D	95	93			
04	9608368D	96	94			
05	9608386V	99	98			
06	9608385V	95	93			
07	9608387V	98	96			
08	9608388V	95	92			
09	10 QCS	95	92			
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	QC LIMITS
SMC1 (BFB) = 4-Bromofluorobenzene	(80-120)
SMC2 (DCB) = 1,2-Dichlorobenzene-d4	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 239

VBLK01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARM

Project No.: FT. MONMOUTH NJ Site: _____ Location: _____ Group: _____

Lab File ID: C1340.D Lab Sample ID: M. BLANK

Date Analyzed: 2/22/96 Time Analyzed: 1649

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	9607649V	9607649V	C1342.D	1800
02	9607650V	9607650V	C1343.D	1835
03	9607654V	9607654V	C1344.D	1911
04	9607655V	9607655V	C1345.D	1946
05	9607656V	9607656V	C1346.D	2021
06	9608367V	9608367V	C1347.D	2056
07	9608366V	9608366V	C1348.D	2131
08	9608364V	9608364V	C1349.D	2206
09	9608365V	9608365V	C1350.D	2241
10	9608371V	9608371V	C1351.D	2316
11	9608372V	9608372V	C1352.D	2351
12	10 QCS	10 QCS	C1353.D	0026
13	1 STND	1 STND	C1354.D	0101
14				
15				
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLK01

240

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1340.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.90	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLK01

241

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1340.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 242

VBLK01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG: _____ NJDEPMW#: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1340.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 2/22/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
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Quantitation Report

Data File : d:\hpchem\1\data\c1340.d
Acq On : 22 Feb 96 4:49 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Feb 23 11:02 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.15	96	1349707	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.36	95	685665	5.24	ug/L	104.80%
57) 1,2-Dichlorobenzene-d4	22.16	152	417340	5.35	ug/L	106.96%
Target Compounds						Qvalue
9) Methylene chloride	7.77	84	52761	0.87	ug/L	91

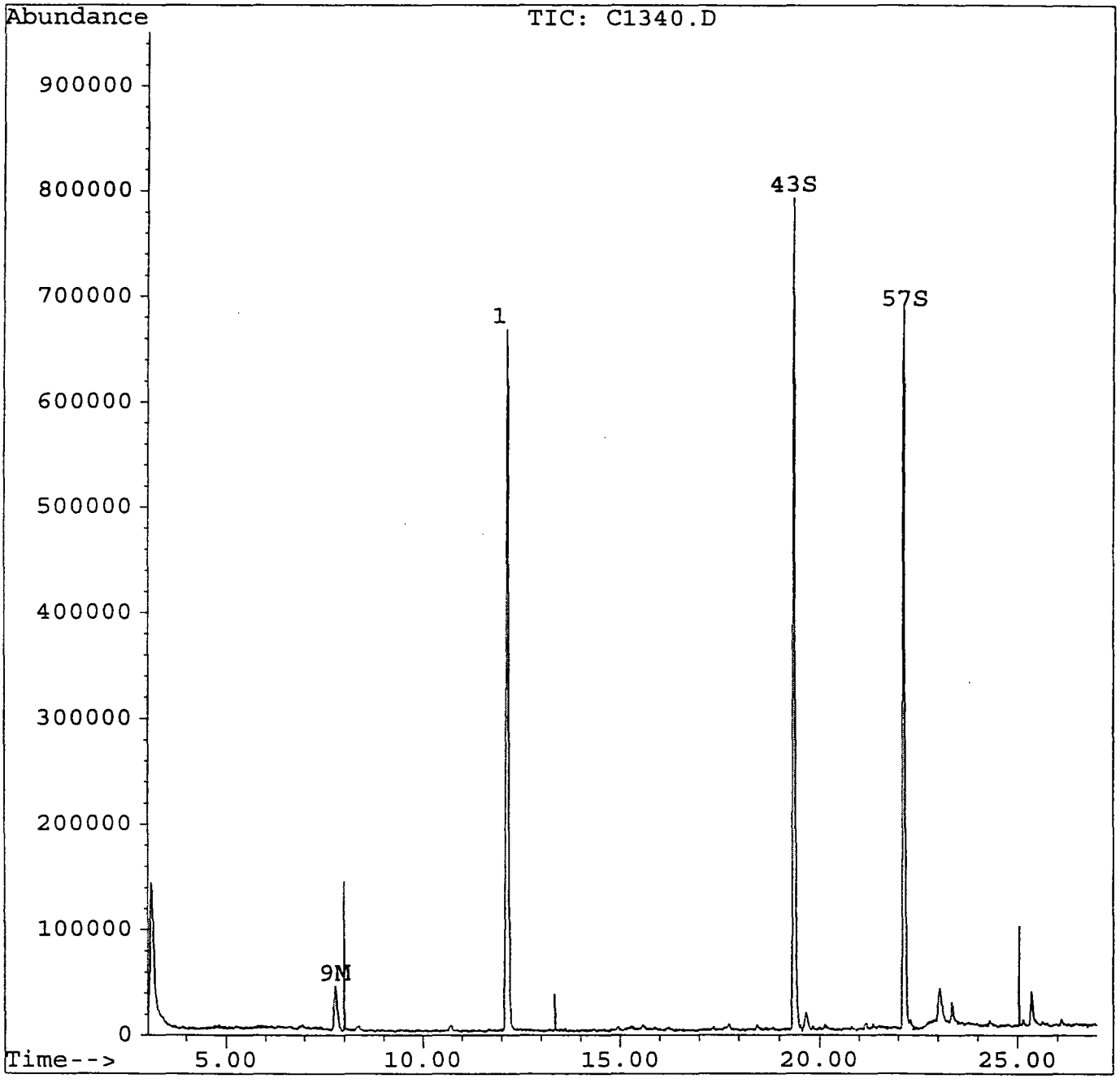
(#) = qualifier out of range (m) = manual integration

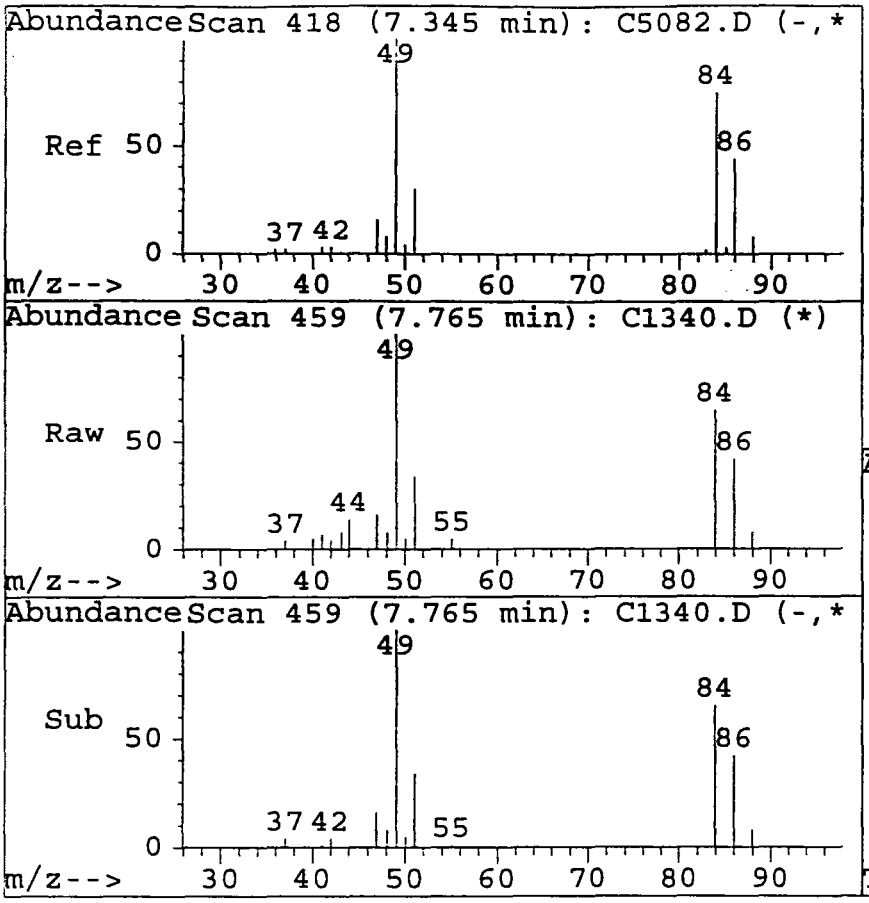
Quantitation Report

Data File : d:\hpchem\1\data\c1340.d
Acq On : 22 Feb 96 4:49 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Feb 23 11:02 1996

Vial: 3 244
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration





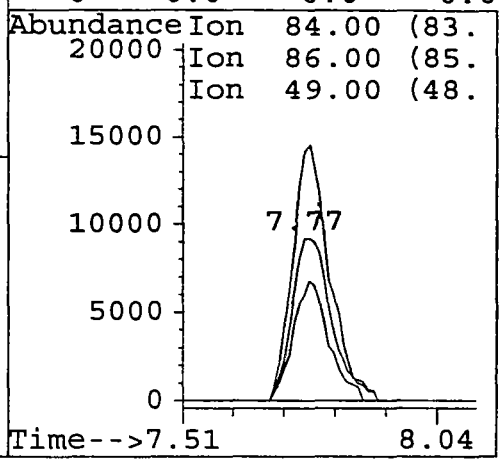
#9
Methylene chloride

245

Concen: 0.87 ug/L
RT: 7.77 min Scan# 459
Delta R.T. -0.02 min
Lab File: c1340.d
Acq: 22 Feb 96 4:49 pm

Tgt Ion:84 Resp: 52761

Ion	Ratio	Lower	Upper
84	100		
86	64.3	46.1	86.1
49	153.6	118.6	158.6
0	0.0	0.0	0.0



Library Search Compound Report

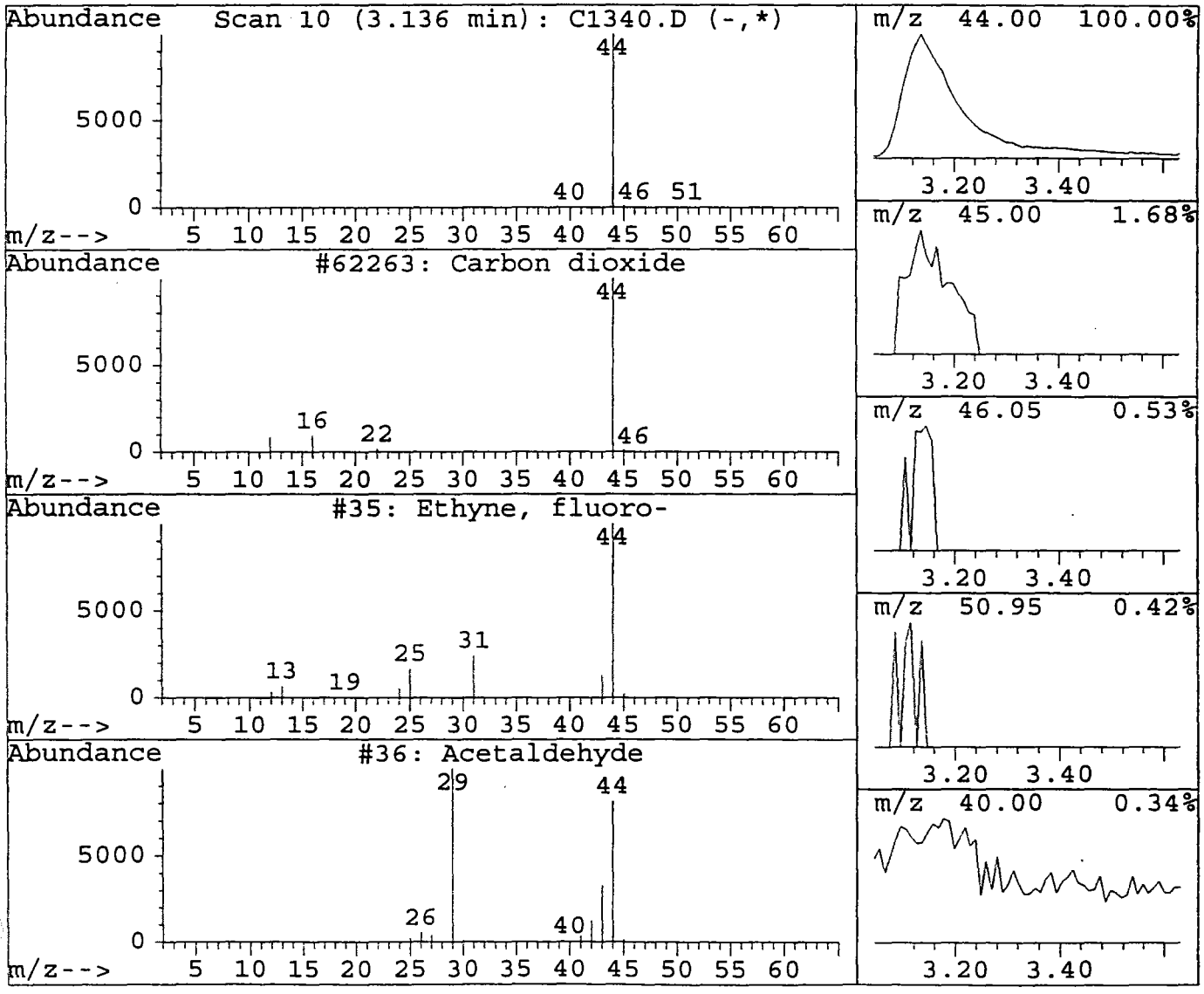
Data File : d:\hpchem\1\data\c1340.d
Acq On : 22 Feb 96 4:49 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.14	1.37 ug/L	797695	Fluorobenzene	12.15

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Ethyne, fluoro-	35	002713-09-9	3
3	Acetaldehyde	36	000075-07-0	3
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2



4A

SAMPLE NO. 247

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C1357.D Lab Sample ID: M. BLANK

Date Analyzed: 2/23/96 Time Analyzed: 1525

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	9608369V	9608369V	C1363.D	1857
02	9608376V	9608376V	C1364.D	1932
03	9608368V	9608368V	C1365.D	2007
04	9608370V	9608370V	C1366.D	2042
05	9608369MS	08369MS	C1367.D	2117
06	9608369MSD	08369MSD	C1368.D	2151
07	10 QCS	10 QCS	C1370.D	2301
08	1 STND	1 STND	C1371.D	2336
09				
10				
11				
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1357.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.90	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: _____ NJDEP MW#: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1357.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units:
(ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 250

VBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1357.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 2/23/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
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Quantitation Report

Data File : d:\hpchem\1\data\c1357.d
Acq On : 23 Feb 96 3:25 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Feb 26 10:04 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.00	96	1250574	5.00	ug/L	-0.15
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.24	95	611258	5.04	ug/L	100.83%
57) 1,2-Dichlorobenzene-d4	22.04	152	374492	5.18	ug/L	103.59%
Target Compounds						Qvalue
9) Methylene chloride	7.61	84	48233	0.86	ug/L	94

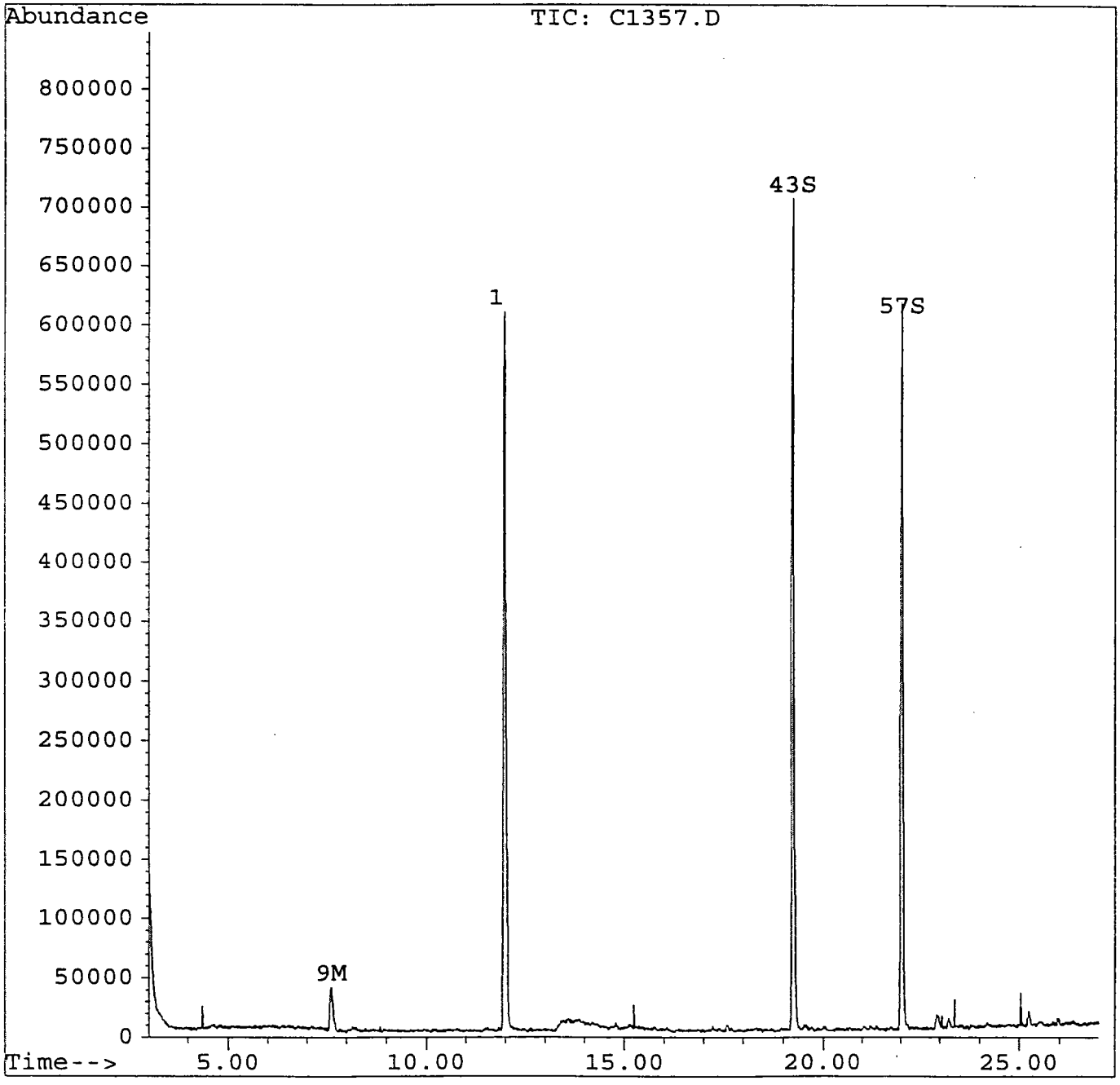
(#) = qualifier out of range (m) = manual integration

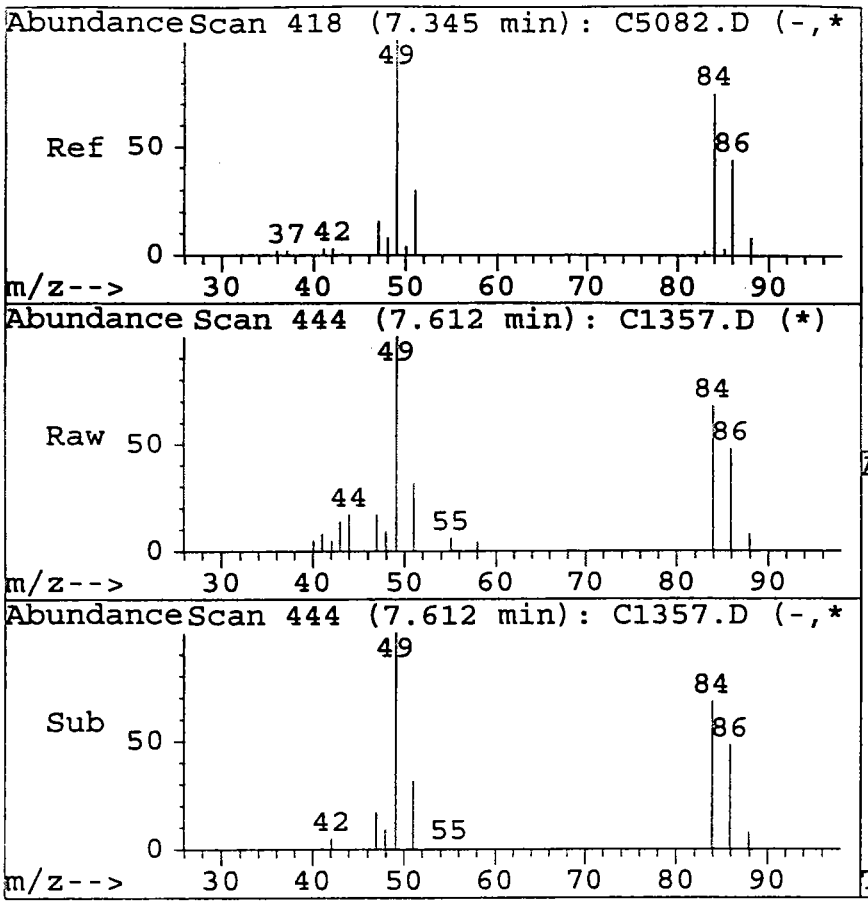
Quantitation Report

Data File : d:\hpchem\1\data\c1357.d
Acq On : 23 Feb 96 3:25 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Feb 26 10:04 1996

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

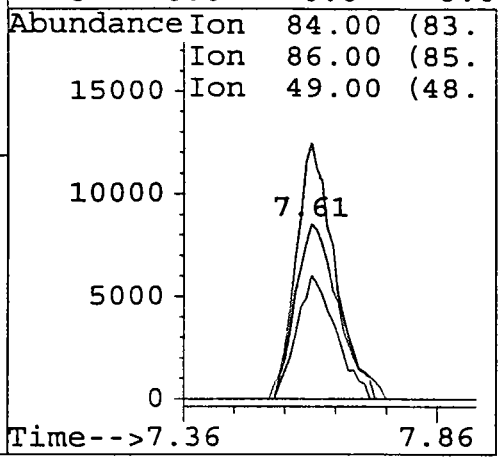




#9
Methylene chloride
Concen: 0.86 ug/L
RT: 7.61 min Scan# 444
Delta R.T. -0.18 min
Lab File: c1357.d
Acq: 23 Feb 96 3:25 pm

Tgt Ion:84 Resp: 48233

Ion	Ratio	Lower	Upper
84	100		
86	70.8	46.1	86.1
49	146.6	118.6	158.6
0	0.0	0.0	0.0



Library Search Compound Report

Data File : d:\hpchem\1\data\c1357.d
Acq On : 23 Feb 96 3:25 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : NBS75K.L

No Library Search Compounds Detected

SAMPLE NO. 255

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARM

Project No.: FT. MONMOUTH NJ Site: _____ Location: _____ Group: _____

Lab File ID: C1446.D Lab Sample ID: M. BLANK

Date Analyzed: 3/4/96 Time Analyzed: 1948

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	PA028	PA028	C1447.D	2023
02	9608370D	9608370D	C1448.D	2057
03	9608368D	9608368D	C1449.D	2131
04	9608386V	9608386V	C1450.D	2206
05	9608385V	9608385V	C1451.D	2240
06	9608387V	9608387V	C1452.D	2314
07	9608388V	9608388V	C1453.D	2348
08	10 QCS	10 QCS	C1454.D	0022
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 256

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1446.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 3/4/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.50	U
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: _____ NJDEP MW#: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1446.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 3/4/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C1446.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 3/4/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	22.91	2	J
2.				
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Quantitation Report

Data File : d:\hpchem\1\data\c1446.d
Acq On : 4 Mar 96 7:48 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Mar 5 12:03 1996

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.96	96	1245678	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.21	95	617071	4.95	ug/L	99.09%
57) 1,2-Dichlorobenzene-d4	22.00	152	394315	4.94	ug/L	98.85%
Target Compounds						Qvalue

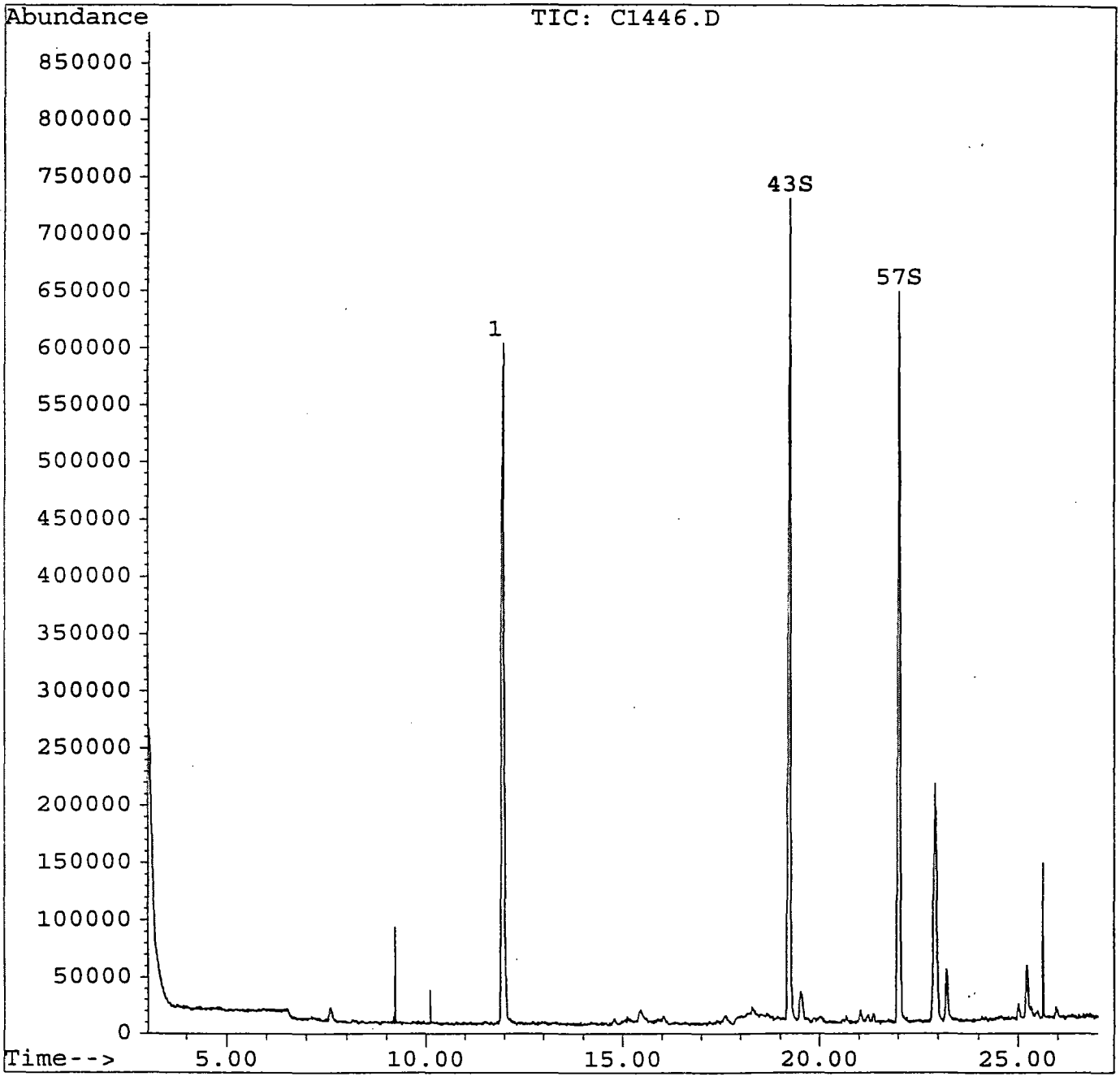
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1446.d
Acq On : 4 Mar 96 7:48 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Mar 5 12:03 1996

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Mar 05 11:46:45 1996
Response via : Multiple Level Calibration



Library Search Compound Report

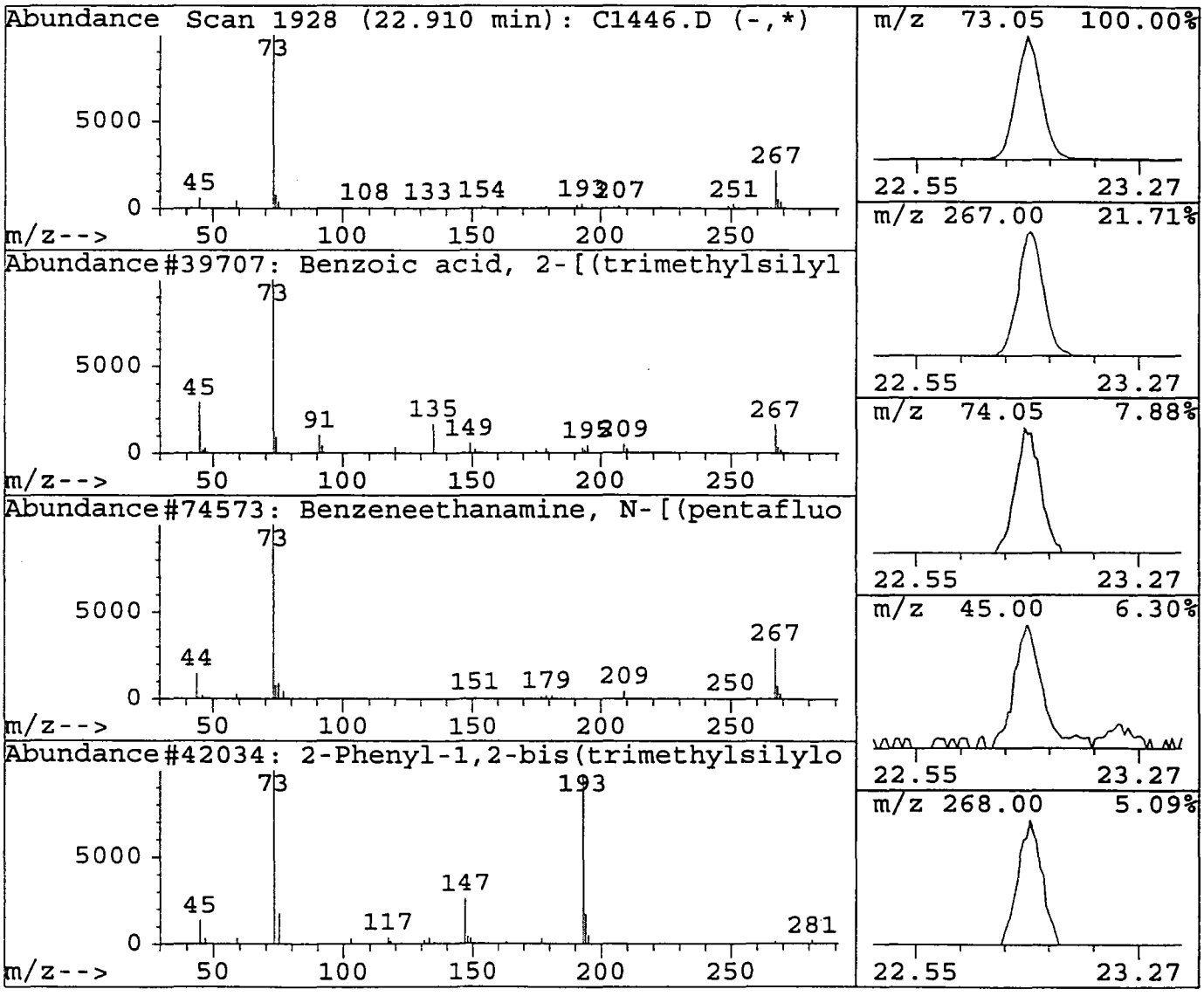
Data File : d:\hpchem\1\data\c1446.d
Acq On : 4 Mar 96 7:48 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.91	1.80 ug/L	960139	Fluorobenzene	11.96

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	4
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	40
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	4



Spike Recovery and RPD Summary Report - WATER

Method : D:\HPCHEM\1\DATA\C1363.D\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Initial Calibration

Non-Spiked Sample: C1363.D

	Spike Sample	Spike Duplicate Sample
File ID :	C1367.D	C1368.D
Sample :	9608369 MS	9608369 MSD
Acq Time:	23 Feb 96 9:17 pm	23 Feb 96 9:51 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.0	10	9	9	91	93	2	25	80-120
Chloromethane	0.0	10	9	10	94	98	5	25	80-120
Vinyl chloride	0.0	10	10	10	102	102	1	25	80-120
Bromomethane	0.0	10	10	10	98	105	7	25	80-120
Chloroethane	0.0	10	11	11	109	109	0	25	80-120
Trichlorofluorometha	0.0	10	10	10	95	97	1	25	80-120
1,1-Dichloroethene	0.0	10	10	10	101	102	0	25	80-120
Methylene chloride	2.0	10	11	11	87	91	4	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	101	102	1	25	80-120
1,1-Dichloroethane	0.0	10	10	10	99	101	2	25	80-120
2,2-Dichloropropane	0.0	10	9	9	87	86	1	25	80-120
cis-1,2-Dichloroethe	0.0	10	10	10	100	102	3	25	80-120
Bromochloromethane	0.0	10	10	10	97	102	5	25	80-120
Chloroform	0.0	10	10	10	99	101	2	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	96	98	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	96	97	1	25	80-120
1,1-Dichloropropene	0.0	10	10	10	101	101	1	25	80-120
Benzene	0.0	10	10	10	103	104	1	25	80-120
1,2-Dichloroethane	0.0	10	10	10	98	103	5	25	80-120
Trichloroethene	0.0	10	10	10	98	99	1	25	80-120
1,2-Dichloropropane	0.0	10	10	11	103	106	3	25	80-120
Dibromomethane	0.0	10	10	10	98	104	6	25	80-120
Bromodichloromethane	0.0	10	10	10	95	97	2	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	10	99	103	4	25	80-120
Toluene	0.0	10	10	10	100	101	1	25	80-120
trans-1,3-Dichloropr	0.0	10	10	10	100	104	4	25	80-120
1,1,2-Trichloroethan	0.0	10	10	11	104	108	5	25	80-120
Tetrachloroethene	0.0	10	10	10	96	97	1	25	80-120
1,3-Dichloropropane	0.0	10	10	11	103	110	6	25	80-120
Dibromochloromethane	0.0	10	10	10	98	103	4	25	80-120
1,2-Dibromoethane	0.0	10	10	11	99	106	7	25	80-120
Chlorobenzene	0.0	10	10	10	101	103	1	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	10	10	100	103	2	25	80-120
Ethylbenzene	0.0	10	11	11	104	105	1	25	80-120
Xylene (para & meta)	4.2	20	25	25	104	106	2	25	80-120
Xylene (Ortho)	0.0	10	10	10	103	105	2	25	80-120
Styrene	0.0	10	10	11	103	105	2	25	80-120
Bromoform	0.0	10	10	11	98	105	7	25	80-120
Isopropylbenzene	1.0	10	11	12	105	105	1	25	80-120
Bromobenzene	0.0	10	10	10	100	103	3	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	11	11	105	112	7	25	80-120
1,2,3-Trichloropropa	0.0	10	10	11	103	109	6	25	80-120
n-Propylbenzene	1.1	10	11	12	104	104	1	25	80-120

2-Chlorotoluene	0.0	10	10	10	100	102	3	25	80-120
4-Chlorotoluene	0.0	10	10	11	101	104	3	25	80-120
1,3,5-Trimethylbenze	0.8	10	11	11	103	105	2	25	80-120
tert-Butylbenzene	0.0	10	10	10	95	96	1	25	80-120
1,2,4-Trimethylbenze	6.2	10	17	17	104	108	4	25	80-120
sec-Butylbenzene	0.0	10	11	11	105	106	1	25	80-120
1,3-Dichlorobenzene	0.0	10	10	10	100	104	3	25	80-120
4-Isopropyltoluene	0.0	10	10	10	101	103	1	25	80-120
1,4-Dichlorobenzene	0.0	10	10	11	101	105	4	25	80-120
1,2-Dichlorobenzene	0.0	10	10	11	102	107	5	25	80-120
n-Butylbenzene	0.0	10	10	11	104	106	2	25	80-120
1,2-Dibromo-3-chloro	0.0	10	11	11	108	113	4	25	80-120
1,2,4-Trichlorobenze	0.0	10	10	11	99	105	6	25	80-120
Hexachlorobutadiene	0.0	10	9	9	91	94	3	25	80-120
Naphthalene	7.2	10	17	19	101	116	14	25	80-120
1,2,3-Trichlorobenze	0.0	10	10	11	101	108	7	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c1367.d
Acq On : 23 Feb 96 9:17 pm
Sample : 9608369 MS
Misc : 25 ML
Quant Time: Feb 26 11:28 1996

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.01	96	1227939	5.00	ug/L	-0.15
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.26	95	584590	4.91	ug/L	98.21%
57) 1,2-Dichlorobenzene-d4	22.05	152	352535	4.97	ug/L	99.32%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.40	85	784073	9.17	ug/L	97
3) Chloromethane	3.80	50	477794	9.35	ug/L	96
4) Vinyl chloride	4.02	62	639019	10.16	ug/L	99
5) Bromomethane	4.69	94	425604	9.76	ug/L	100
6) Chloroethane	4.94	64	396117	10.94	ug/L	99
7) Trichlorofluoromethane	5.53	101	1250824	9.54	ug/L	99
8) 1,1-Dichloroethene	6.63	96	642808	10.14	ug/L	99
9) Methylene chloride	7.63	84	596912	10.78	ug/L	100
10) trans-1,2-Dichloroethene	8.17	96	711571	10.10	ug/L	96
12) 1,1-Dichloroethane	8.96	63	1324963	9.89	ug/L	97
13) 2,2-Dichloropropane	10.01	77	1035728	8.66	ug/L	98
14) cis-1,2-Dichloroethene	10.02	96	672797	9.96	ug/L	97
16) Bromochloromethane	10.44	128	261227	9.72	ug/L	98
17) Chloroform	10.59	83	1217345	9.92	ug/L	99
18) 1,1,1-Trichloroethane	10.90	97	1208776	9.62	ug/L	97
19) Carbon tetrachloride	11.20	117	1123369	9.64	ug/L	98
20) 1,1-Dichloropropene	11.19	75	1143496	10.07	ug/L	100
21) Benzene	11.54	78	2249923	10.31	ug/L	100
22) 1,2-Dichloroethane	11.57	62	482048	9.78	ug/L	100
23) Trichloroethene	12.64	95	908091	9.78	ug/L	98
24) 1,2-Dichloropropane	13.01	63	732011	10.27	ug/L	98
25) Dibromomethane	13.22	93	302750	9.80	ug/L	100
26) Bromodichloromethane	13.48	83	962067	9.85	ug/L	98
27) cis-1,3-Dichloropropene	14.23	75	864643	9.92	ug/L	100
28) Toluene	14.81	92	1594715	10.04	ug/L	98
29) trans-1,3-Dichloropropene	15.16	75	602361	10.04	ug/L	98
30) 1,1,2-Trichloroethane	15.48	83	304233	10.35	ug/L	97
31) Tetrachloroethene	15.75	166	1041108	9.59	ug/L	98
32) 1,3-Dichloropropane	15.77	76	591977	10.34	ug/L	99
33) Dibromochloromethane	16.18	129	581863	9.84	ug/L	98
34) 1,2-Dibromoethane	16.37	107	423181	9.92	ug/L	98
35) Chlorobenzene	17.23	112	1761895	10.26	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.36	131	717977	10.04	ug/L	98
37) Ethylbenzene	17.41	91	3340325	10.57	ug/L	99
38) Xylene (para & meta)	17.62	106	2953119	25.07	ug/L	99
39) Xylene (Ortho)	18.32	106	1104620	10.33	ug/L	99
40) Styrene	18.34	104	1705013	10.31	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1367.d
Acq On : 23 Feb 96 9:17 pm
Sample : 9608369 MS
Misc : 25 ML
Quant Time: Feb 26 11:28 1996

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.68	173	302810	9.82	ug/L		97
42)	Isopropylbenzene	18.97	105	3468699	11.44	ug/L		99
44)	Bromobenzene	19.54	156	733291	9.97	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.50	83	401163	10.51	ug/L		99
46)	1,2,3-Trichloropropane	19.58	75	393007	10.33	ug/L	#	55
47)	n-Propylbenzene	19.71	91	4837934	11.43	ug/L		100
48)	2-Chlorotoluene	19.88	91	2390633	9.98	ug/L		99
49)	4-Chlorotoluene	20.07	91	2836339	10.37	ug/L	m	98
50)	1,3,5-Trimethylbenzene	20.02	105	2884074	11.08	ug/L		100
51)	tert-Butylbenzene	20.62	119	2891236	9.62	ug/L		99
52)	1,2,4-Trimethylbenzene	20.71	105	4231766	16.54	ug/L	m	99
53)	sec-Butylbenzene	21.02	105	4314396	10.50	ug/L		100
54)	1,3-Dichlorobenzene	21.24	146	1483633	10.06	ug/L		99
55)	4-Isopropyltoluene	21.28	119	3398579	10.27	ug/L		99
56)	1,4-Dichlorobenzene	21.39	146	1464344	10.18	ug/L	m	99
58)	1,2-Dichlorobenzene	22.08	146	1153204	10.21	ug/L	m	0
59)	n-Butylbenzene	21.86	91	197702	0.59	ug/L		73
60)	1,2-Dibromo-3-chloropropan	23.50	75	81133	10.82	ug/L		94
61)	1,2,4-Trichlorobenzene	25.05	180	886885	9.93	ug/L		99
62)	Hexachlorobutadiene	25.37	225	738951	9.09	ug/L		99
63)	Naphthalene	25.52	128	1556229	17.27	ug/L	m	100
64)	1,2,3-Trichlorobenzene	26.00	180	664379	10.10	ug/L	m	0
65)	Methyl-tert butyl ether	8.21	73	944249	12.53	ug/L		97
66)	tert-Butyl Alcohol	7.96	59	27277	24.42	ug/L		100

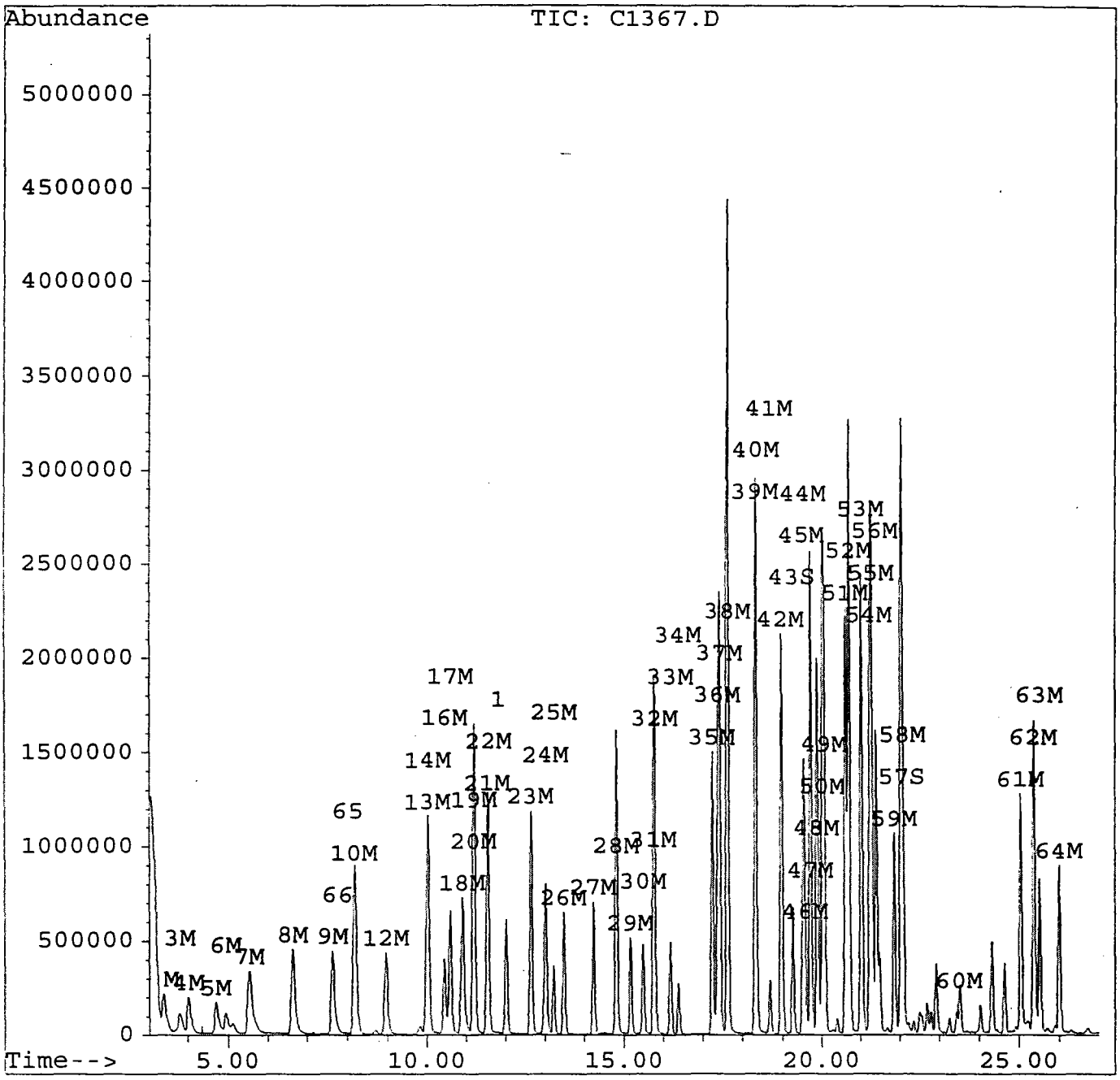
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1367.d
Acq On : 23 Feb 96 9:17 pm
Sample : 9608369 MS
Misc : 25 ML
Quant Time: Feb 26 11:28 1996

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c1368.d
Acq On : 23 Feb 96 9:51 pm
Sample : 9608369 MSD
Misc : 25 ML
Quant Time: Feb 26 11:31 1996

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.01	96	1119023	5.00	ug/L	-0.15
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.26	95	555787	5.12	ug/L	102.46%
57) 1,2-Dichlorobenzene-d4	22.05	152	340164	5.26	ug/L	105.16%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.40	85	727379	9.34	ug/L	97
3) Chloromethane	3.80	50	456722	9.81	ug/L	99
4) Vinyl chloride	4.02	62	586454	10.23	ug/L	96
5) Bromomethane	4.70	94	416239	10.47	ug/L	100
6) Chloroethane	4.94	64	360011	10.91	ug/L	97
7) Trichlorofluoromethane	5.52	101	1156610	9.68	ug/L	97
8) 1,1-Dichloroethene	6.64	96	588476	10.19	ug/L	99
9) Methylene chloride	7.63	84	562444	11.15	ug/L	99
10) trans-1,2-Dichloroethene	8.18	96	652684	10.16	ug/L	98
12) 1,1-Dichloroethane	8.96	63	1234097	10.11	ug/L	97
13) 2,2-Dichloropropane	10.02	77	938291	8.61	ug/L	96
14) cis-1,2-Dichloroethene	10.02	96	630416	10.24	ug/L	99
16) Bromochloromethane	10.45	128	251012	10.24	ug/L	97
17) Chloroform	10.60	83	1133245	10.14	ug/L	99
18) 1,1,1-Trichloroethane	10.91	97	1118156	9.77	ug/L	98
19) Carbon tetrachloride	11.20	117	1029361	9.69	ug/L	98
20) 1,1-Dichloropropene	11.19	75	1048268	10.13	ug/L	99
21) Benzene	11.55	78	2077783	10.44	ug/L	100
22) 1,2-Dichloroethane	11.57	62	460845	10.26	ug/L	98
23) Trichloroethene	12.65	95	837934	9.91	ug/L	99
24) 1,2-Dichloropropane	13.01	63	688832	10.60	ug/L	98
25) Dibromomethane	13.22	93	292243	10.38	ug/L	97
26) Bromodichloromethane	13.49	83	892351	10.02	ug/L	100
27) cis-1,3-Dichloropropene	14.23	75	816637	10.28	ug/L	98
28) Toluene	14.81	92	1470616	10.16	ug/L	98
29) trans-1,3-Dichloropropene	15.17	75	569298	10.41	ug/L	98
30) 1,1,2-Trichloroethane	15.49	83	290515	10.85	ug/L	98
31) Tetrachloroethene	15.75	166	962586	9.73	ug/L	97
32) 1,3-Dichloropropane	15.77	76	573035	10.98	ug/L	98
33) Dibromochloromethane	16.18	129	553111	10.27	ug/L	98
34) 1,2-Dibromoethane	16.37	107	412578	10.61	ug/L	96
35) Chlorobenzene	17.24	112	1628248	10.41	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.37	131	668927	10.26	ug/L	99
37) Ethylbenzene	17.41	91	3068311	10.66	ug/L	99
38) Xylene (para & meta)	17.62	106	2727649	25.41	ug/L	99
39) Xylene (Ortho)	18.32	106	1022766	10.50	ug/L	97
40) Styrene	18.34	104	1587694	10.53	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1368.d
Acq On : 23 Feb 96 9:51 pm
Sample : 9608369 MSD
Misc : 25 ML
Quant Time: Feb 26 11:31 1996

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.68	173	295255	10.50	ug/L		98
42)	Isopropylbenzene	18.97	105	3183860	11.52	ug/L		99
44)	Bromobenzene	19.54	156	688044	10.26	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.50	83	390997	11.24	ug/L		97
46)	1,2,3-Trichloropropane	19.57	75	379999	10.96	ug/L	#	80
47)	n-Propylbenzene	19.71	91	4439862	11.51	ug/L		100
48)	2-Chlorotoluene	19.88	91	2234901	10.24	ug/L		100
49)	4-Chlorotoluene	20.07	91	2652526	10.64	ug/L	m	100
50)	1,3,5-Trimethylbenzene	20.02	105	2668367	11.24	ug/L		100
51)	tert-Butylbenzene	20.62	119	2655840	9.69	ug/L		100
52)	1,2,4-Trimethylbenzene	20.71	105	3955582	16.96	ug/L	m	100
53)	sec-Butylbenzene	21.02	105	3979002	10.63	ug/L		100
54)	1,3-Dichlorobenzene	21.24	146	1398241	10.40	ug/L		99
55)	4-Isopropyltoluene	21.28	119	3139939	10.41	ug/L		99
56)	1,4-Dichlorobenzene	21.40	146	1382902	10.55	ug/L	m	99
58)	1,2-Dichlorobenzene	22.08	146	1104772	10.74	ug/L	m	0
59)	n-Butylbenzene	22.03	91	3255119	10.59	ug/L	m	75
60)	1,2-Dibromo-3-chloropropan	23.50	75	77230	11.30	ug/L		95
61)	1,2,4-Trichlorobenzene	25.05	180	856052	10.51	ug/L		99
62)	Hexachlorobutadiene	25.37	225	692776	9.35	ug/L	m	95
63)	Naphthalene	25.52	128	1546386	18.83	ug/L	m	100
64)	1,2,3-Trichlorobenzene	26.00	180	648690	10.82	ug/L	m	0
65)	Methyl-tert butyl ether	8.21	73	866441	12.62	ug/L		98
66)	tert-Butyl Alcohol	7.95	59	25477	25.03	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c1368.d
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Sample : 9608369 MSD
Misc : 25 ML
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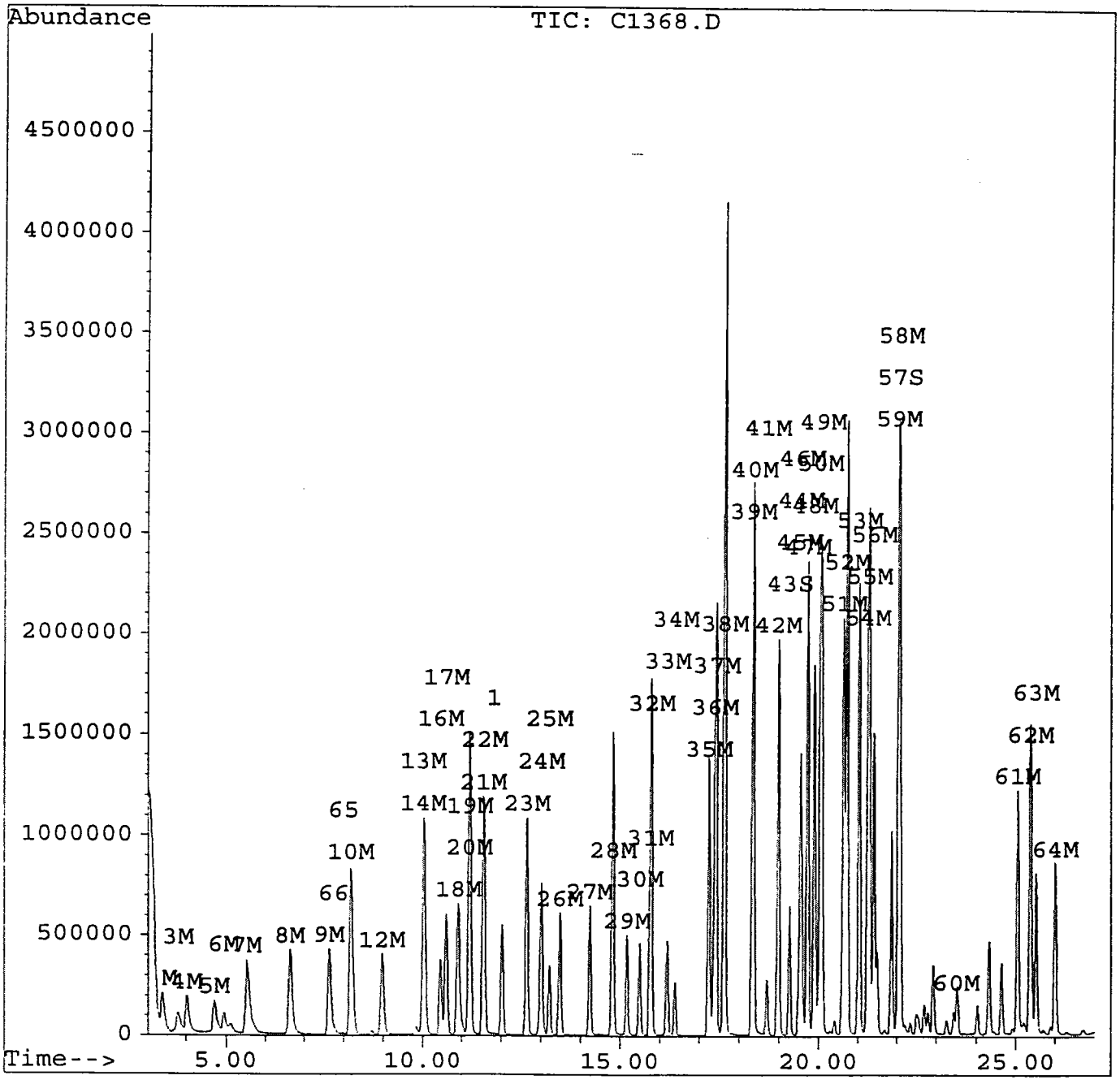
Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri Feb 16 10:19:15 1996
Response via : Multiple Level Calibration



EMSL

METALS DATA PACKAGE

EMSL

COVER PAGE - METALS ANALYSES DATA PACKAGE

Lab Name: **EMSL ANALYTICAL, INC.** Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

SOW No.: _____

Client Sample ID	Lab Sample ID
2017.1	**96-8368**
2017.2	**96-8369**
2017.3	**96-8370**
2017.4	**96-8371**
2017.5	**96-8372**
2016.3	**96-8366**

Were ICP interelement corrections applied? Yes/No **NO**

Were ICP background corrections applies? Yes/No **NO**

If yes - were raw data generated before application of background correction? Yes/No **NO**

Comments: **ICP was not used**

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 conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Paul Laraia Name: Paul V. Laraia

Date: 3-20-96 Title: Laboratory Manager

EMSL

Attention: Barbara O"Toole
E-Systems
P.O. Box 360
Fort Monmouth, NJ 07703

Project #: 96031158
Date Received: 02/21/96 17:00

Customer Project No. MW Sampling, Bldg. #2567, 91-8-27-1414

The following results are for Lead (Pb) in Water by Furnace (7421)

Lab #	Conc.	Unit	Client Designation
96 0008368	0.00400	mg/l	MW-1, 1-2926925
96 0008369	<0.00300	mg/l	MW-2, 2-2926926
96 0008370	0.00600	mg/l	MW-3, 3-2926947
96 0008371	<0.00300	mg/l	MW-4, 4-2926948
96 0008372	<0.00300	mg/l	MW-5, 5-2931783
96 0008366	<0.00300	mg/l	Field Blank

EMSL

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: **EMSL Analytical** Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Initial Calibration Source: **Inorganic Ventures**

Continuing Calibration Source: **SPEX**

Concentration Units: **mg/l**

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	**20.0**	**20.21**	**101**	**20.0**	**20.79**	**104**			**F**
Lead	**20.0**	**20.38**	**102**	**20.0**	**20.41**	**102**			**F**
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110

EMSL

BLANKS

Lab Name: **EMSL ANALYTICAL** Contract: _____

Lab Code: _____ Case No.: _____ AS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): **Water**

Preparation Blank Concentration Units (mg/l or mg/kg): **mg/l**

	Inital Calibration Blank		Continuing Calibration Blank (ug/l)						Preparation Blank		
Analyte	(ug/l)	C	1	C	2	C	3	C		C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	**330**		**220**						**<0.003**		**F**
Lead	**40**		**140**						**<0.003**		**F**
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

SPIKE SAMPLE RECOVERY

Lab Name: **EMSL Analytical** Contract: _____ Lab Sample No.: **96-8181, 96-8820**

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): **Water** Level (low/med) : **Low**

% Solids for Sample:_____

Concentration Units (mg/l or mg/kg dry weight):__**mg/l**____

	Control Limit	Spiked Sample		Sample Result		Spike Added			
Analyte	%R	Result (SSR)	C	(SR)	C	(SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	**75-125**	**0.024**		**0.004**		**0.02**	**100**		**F**
Lead	**75-125**	**0.023**		**0.005**		**0.02**	**90**		**F**
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:_____

DUPLICATES

Lab Name: **EMSL ANALYTICAL** Contract: _____ Lab Sample No.: **96-8181, 96-8820**

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): **Water** :Level (low/med.): **Low**

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	**+/-20%**	**0.024**		**0.024**		**0.0**		**F**
Lead	**+/-20%**	**0.023**		**0.025**		**8.3**		**F**
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

LABORATORY CONTROL SAMPLE

Lab Name: **EMSL Analytical** Contract: _____

Lab Code: _____ Case No.: _____ SAS No: _____ SDG No: _____

Solid LCS Source: _____

Aqueous LCS Source: **Inorganic Ventures**

Analyte	Aqueous (mg/l) True	Found	% R	Solid (mg/kg) True	Found	C	Limits	% R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	**20.0**	**20.9**	**104**				**80-120%**	
Lead	**20.0**	**20.7**	**103**				**80-120%**	
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

LABORATORY AUTHENTICATION STATEMENT

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18, 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR Part 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Paul Faraq

Laboratory Manager (as defined in N.J.A.C. 7:18)