

PHASE II ENVIRONMENTAL SITE ASSESSMENT (ASTM E1903-97)

Troy Belting and Supply Company
70 Cohoes Road
Watervliet (Town of Colonie), New York

Project No. 11RJS286.5

FNB No. 11-000907-02

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TABLE OF CONTENTS

1. Executive Summary
2. Introduction
 - a. Purpose
 - b. Special Terms and Conditions
 - c. Limitations and Exceptions
 - d. Limiting Conditions and Methodologies Used
3. Background
 - a. Site Description and Features
 - b. Physical Setting
 - c. Site History and Land Use
 - d. Adjacent Property Uses
 - e. Summary of Previous Study
4. Phase II Activities
 - a. Scope of Assessment
 - i. Site Conceptual Model and Sampling Plan
 - ii. Chemical Testing/Laboratory Analysis Plan
 - iii. Deviations from Work Plan
 - b. Field Explorations and Methods
 - i. Test Pits
 - ii. Test Borings
 - iii. Monitoring Well Installations
 - c. Sampling and Chemical Analyses and Methods
 - i. Soil
 - ii. Groundwater
5. Evaluation and Presentation of Results
 - a. Subsurface Conditions
 - b. Field Observations and Screening
 - c. Analytical Data
 - i. Soil
 - ii. Groundwater
6. Discussion of Findings and Conclusions
 - a. Recognized Environmental Conditions
 - b. Affected Media
 - c. Evaluation of Media Quality
 - d. Other Concerns
7. Recommendations
8. Signature of Environmental Professionals

List of Tables

Table 1	Tabulated Soil Analytical Results
Table 2	Tabulated Groundwater Analytical Results

List of Figures

Figure 1	Topographic Map
Figure 2	Boring Location Map

List of Appendices

Appendix A	Subsurface Exploration Logs
Appendix B	Laboratory Analytical Reports

1. EXECUTIVE SUMMARY

RJ Szustakowski Environmental, Inc. (RJS), was contracted to complete a Phase II Environmental Site Assessment at 70 Cohoes Road, Watervliet (Town of Colonie), Albany County, New York. The Phase II work was completed to address concerns identified within a Transaction Screen previously completed by others. The potential environmental concerns were identified as current/historic operations (electric motor repair), a varnish underground storage tank (UST) and a former west adjacent foundry. An on-site degreaser was also identified as a potential environmental concern. Additional information relative to the areas of concern and the work completed at the Site is provided below.

Current/Historic On-Site Operations

On-site operations have reportedly included electric motor repair/cleaning since 1965 when the existing building was constructed. To assess this concern, two soil borings were completed suspected down-gradient of this operation. [Note that additional borings, while completed on other areas of the property, also assessed this concern. See below for information relative to additional borings completed on-site.] Borings were completed using a hydraulically driven rig (Geoprobe) until equipment refusal was encountered between approximately 5.5 and 6 feet below grade (ftbg).

One soil sample was submitted to the laboratory for target compound list (TCL) volatile organic compound (VOC), TCL semi-volatile organic compound (S-VOC) and Resource Conservation and Recovery Act (RCRA) metals analyses via United States Environmental Protection Agency (USEPA) test methods 8260, 8270 and 6010, respectively. No S-VOCs were detected above laboratory detection limits. Tetrachloroethene (PCE), a VOC compound commonly associated with solvents/varnishes, was detected below applicable soil cleanup objectives (SCOs). Five metals were also detected at concentrations below SCOs.

UST and Degreaser

One double-walled UST for the storage of varnish of unknown size and integrity was identified in the northern portion of the building. A degreaser, which apparently uses non-chlorinated solvents at this time, is located east of the UST. To assess these concerns, ten soil borings, one of which was converted into a temporary monitoring well, were completed using a hydraulically driven rig (Geoprobe) until equipment refusal was encountered between approximately 3 and 8.5 ftbg.

Five soil samples and one groundwater sample were submitted to the laboratory for TCL VOC, TCL S-VOC and RCRA metals analyses via USEPA test methods 8260, 8270 and 6010, respectively.

Regarding the soil samples, multiple VOC, S-VOC and metal compounds were identified above laboratory detection limits. Trichloroethene (TCE), a degradation compound of PCE, was detected at a concentration significantly above applicable SCOs. What appeared to be solvent product was observed within one of the boring locations. [It should be noted that due to the significant TCE concentration, detection limits on other VOCs were elevated and such may be present at concentrations above applicable SCOs but below method detection limits.]

Regarding the groundwater sample, no S-VOC compounds were detected above laboratory detection limits. Nine VOC compounds, including PCE and TCE, were detected at concentrations above applicable SCOs. Three metals were also identified above SCOs. [It should be noted that due to the significant PCE and TCE concentration, detection limits on other VOCs were elevated and such may be present at concentrations above applicable SCOs but below method detection limits.] While the scope of work did not include sampling of bedrock groundwater, the presence of significant contaminant concentration and even suspect product in the overburden just above bedrock suggests that bedrock groundwater is likely impacted.

Former West Adjacent Foundry

West adjacent operations reportedly included an iron and brass foundry from at least 1951 through at least 1971. To assess this concern, two soil borings were completed proximate to the western property border. Borings were completed using a hydraulically driven rig (Geoprobe) until equipment refusal was encountered between approximately 4 and 5 ftbg.

One soil sample was submitted to the laboratory for TCL VOC, TCL S-VOC and RCRA metals analyses via USEPA test methods 8260, 8270 and 6010, respectively. No VOCs were detected above laboratory detection limits. S-VOC and metal concentrations did not exceed applicable SCOs.

In conclusion, significant solvent-related impacts were identified in connection with the Site. Further work would be required to fully assess the extent of impact and costs associated with remediating the impacted soils. The next phase of study should include bedrock groundwater monitoring wells.

RJS is very concerned about the potential for indoor air contamination within proximate residential houses. Such could be perceived as an "imminent threat" to human health which, RJS understands, is reportable to the state. RJS recommends that the current property owner discuss this with their counsel and document that the New York State Department of Environmental Conservation (NYSDEC) is made aware of the results of this study. If the site owner does not make a report to the state, RJS will feel required to do so.

2. INTRODUCTION

a. Purpose

The Phase II work was completed to address concerns identified within a Transaction Screen previously completed by others. The potential environmental concerns were identified as current/historic operations (electric motor repair), a varnish UST and a former west adjacent foundry. An on-site degreaser was also identified as a potential environmental concern. Additional information relative to the areas of concern and the work completed at the Site is provided below.

b. Special Terms and Conditions

The scope of work for this project was approved by the Client by email on September 7, 2011.

c. Limitations and Exceptions

The following limitations/exceptions should be noted.

- The UST and degreaser are located within the existing building. As such, as intrusive investigation was limited to the exterior portion of the Site, borings could not be completed in the immediate areas of these structures.
- While RJS proposed to collect up to three groundwater samples on-site, overburden groundwater was only evident at one location. As such, additional soil samples were collected on-site in place of the groundwater samples.

d. Limiting Conditions and Methodologies Used

The study was completed using standard methodologies, as described below, and is generally consistent with ASTM E1903-97. Such would typically include collection of representative samples from various locations and/or at various depths. As with any study, it is possible that additional impact is present at locations not sampled in this study.

3. BACKGROUND

a. Site Description and Features

The Site, addressed at 70 Cohoes Road, Watervliet (Town of Colonie), Albany County, New York, measures approximately 2.4 acres and includes one commercial/industrial structure. Exterior portions of the Site were noted to include asphalt paved areas, green areas and trees.

The potential environmental concerns were identified as current/historic operations (electric motor repair), a varnish UST and a former west adjacent foundry. An on-site degreaser was also identified as a potential environmental concern.

b. Physical Setting

The Site is included on the Troy South Quadrangle of an undated topographic map and appears to be developed with one structure (likely the existing building). The topographic map also indicates that site topography varies between 25 (eastern portion of the Site) and 35 (western portion of the Site) feet above mean sea level. Groundwater flow would be anticipated to the east, toward the Hudson River. However, localized subsurface variations and man-made structures can modify flow directions, a site-specific study would be required to confirm groundwater flow direction. The topographic map is provided as Figure 1.

c. Site History and Land Use

The existing building, constructed in 1965, has been utilized as an electric motor repair operation by Troy Belting and Supply since construction. Operations reportedly include cleaning of electric motors.

Prior to construction of the existing building, the Site was reportedly vacant land.

Adjacent operations reportedly included an iron and brass foundry from at least 1951 through at least 1971.

d. Adjacent Property Uses

Direction	Current Use	Apparent Past Use	Comments/Concerns
North:	Residential	Residential	None
South:	Residential	Residential	None
East:	Residential	Residential	None
West:	Troy Belting and Supply (additional location)	Iron and Brass Foundry	Foundry operations could have impacted the environment/Site.

e. Summary of Previous Study

Prior to the Phase II investigation, HRP Associates, Inc. (HRP), completed "Environmental Transaction Screening Report, Troy Belting and Supply Company, 70 Cohoes Road, Watervliet, New York," dated August 12, 2011. Current/historic operations were identified as including electric motor repair since 1965. One double-walled UST, of unknown size and integrity, for the storage of varnish was identified on-site. Due to historic uses, HRP recommended further research regarding varnish and petroleum storage and disposal practices. [Note that in RJS' experience, as the facility operated for 20 years before hazardous waste regulations were implemented, it is not likely that further research into handling practices would have provided sufficient information so as to negate the need for this intrusive (Phase II) study.]

4. PHASE II ACTIVITIES

a. Scope of Assessment

This assessment included the following scope of work.

i. Site Conceptual Model and Sampling Plan

The areas of concern were identified as current/historic operations (electric motor repair), a varnish UST, a degreaser, and a former west adjacent foundry. Conceptual models and sampling plans associated with each area of concern are detailed below.

Current/Historic On-Site Operations

On-site operations have reportedly included electric motor repair/cleaning since 1965 when the existing building was constructed. To assess this concern, two soil borings were completed suspected down-gradient of this operation. [Note that additional borings, while completed on other areas of the property, also assessed this concern. See below for information relative to additional borings completed on-site.] Borings were completed using a hydraulically driven rig (Geoprobe) until equipment refusal was encountered between approximately 5.5 and 6 ftbg.

UST and Degreaser

One double-walled UST for the storage of varnish was identified in the northern portion of the building. A degreaser, which apparently uses non-chlorinated solvents at this time, is located east of the UST. To assess these concerns, ten soil borings, one of which was converted into a temporary monitoring well, were completed using a hydraulically driven rig (Geoprobe) until equipment refusal was encountered between approximately 3 and 8.5 ftbg.

Former West Adjacent Foundry

West adjacent operations reportedly included an iron and brass foundry from at least 1951 through at least 1971. To assess this concern, two soil borings were completed proximate to the western property border. Borings were completed using a hydraulically driven rig (Geoprobe) until equipment refusal was encountered between approximately 4 and 5 ftbg.

The areas of concern identified above are depicted on the site map provided in the Appendix as Figure 2.

ii. Chemical Testing/Laboratory Analysis Plan

Current/Historic On-Site Operations

One soil sample was submitted to the laboratory for TCL VOC, TCL S-VOC and RCRA metals analyses via USEPA test methods 8260, 8270 and 6010, respectively.

UST and Degreaser

Five soil samples and one groundwater sample were submitted to the laboratory for TCL VOC, TCL S-VOC and RCRA metals analyses via USEPA test methods 8260, 8270 and 6010, respectively.

Former West Adjacent Foundry

One soil sample was submitted to the laboratory for TCL VOC, TCL S-VOC and RCRA metals analyses via USEPA test methods 8260, 8270 and 6010, respectively.

iii. Deviations from Work Plan

There were no significant deviations from the work plan prepared by RJS with the exception that the borings were not extended to the originally anticipated depth due to the presence of shallow bedrock. In addition, borings could not be completed in the immediate areas of the UST and degreaser structures due to their locations within the building. It should also be noted that additional soil samples were collected to account for the lack of groundwater samples.

b. Field Explorations and Methods

i. Test Pits

Test pits were not completed as part of this study.

ii. Test Borings

Fourteen test borings (SB-1 through SB-14) were completed by Precision Environmental Services, Inc. (PES), using a hydraulically driven percussion soil sampler manufactured by Geoprobe® on September 14, 2011. Borings were completed proximate to the areas of concern detailed above. The borings were advanced in four foot intervals until refusal. (Equipment refusal, likely associated with bedrock, was encountered at each boring location.) Upon completion, each boring was backfilled with soil cuttings and capped with concrete or asphalt patch, where appropriate.

Boring logs are included in Appendix A.

iii. Monitoring Well Installations

One one-inch diameter temporary monitoring well (TMW-1) was installed on-site (water was not encountered at the other boring locations). The well was installed on the exterior portion of the Site, north of the UST and northwest of the degreaser. During drilling, groundwater was encountered at this location at approximately 6 ftbg. Depth to groundwater, measured using a water level indicator prior to sampling, was measured at approximately 5.5 ftbg. Note that the monitoring well was removed subsequent to sampling and the test boring backfilled as detailed above.

Well construction details are included on the boring logs (Appendix A).

c. Sampling and Chemical Analyses and Methods

i. Soil

Soil samples were characterized using visual and olfactory senses as well as screened using a photo-ionization detector (PID) during completion of each soil boring. The test borings utilized pre-cleaned/decontaminated macrocore samplers, equipped with a new plastic inner liner, advanced by the Geoprobe® rig to the desired depth. The four foot liner was removed from the macrocore and opened with a utility knife followed by placing the soil in sample bags (prior to being screened). The soil characterization and PID information were recorded on the boring logs, which are included in Appendix A.

Soil samples selected for laboratory analysis were placed into the appropriate laboratory-supplied sample containers. The containers were sealed and labeled with the project name, sample location identifier, date and technician initials. The sample was then placed into an iced cooler for storage prior to shipment to Accutest Laboratories (Accutest); Accutest is included in the National Environmental Laboratory Accreditation Program (NELAP).

A standard chain-of-custody form was completed to document the samples submitted to the laboratory; such identified the sample, location identification, date/time collected and analyses to be completed. The form was then signed by the sampling technician when the samples were relinquished to the laboratory.

RJS selected seven soil samples for laboratory analysis. The rationale for the samples and testing completed are presented below.

Sample ID	PID Reading (ppm) ¹	Reason Sample Selected for Analysis	Analyses Completed
SB-2 (2-4')	1390	Subsurface conditions proximate to UST and/or degreaser. Significantly elevated PID readings and suspect solvent odors noted. Note that suspect product globules and a sheen were noted in connection with sample SB-14 (8-8.5').	TCL VOCs, TCL S-VOCs and RCRA Metals
SB-3 (4-5')	1171		
SB-4 (6-8')	Over 9,999 ²		
SB-13 (4-6')	1,406		
SB-14 (8-8.5')	Over 9,999		
SB-5 (4-6')	0.0	Subsurface conditions suspected down-gradient of current/historic electric motor repair operations.	
SB-10 (2-4')	0.0	Subsurface conditions proximate to westerly property border, suspected down-gradient of former west adjacent foundry.	

Analytical results associated with the above samples are discussed below.

¹ ppm = parts per million

² This represents the instrument's upper detection limit.

ii. Groundwater

A water sample was collected using a peristaltic pump subsequent to extracting a minimum of three well volumes from the well (TMW-1). Water was displaced from the dedicated tubing associated with the pump into the appropriate laboratory-supplied bottleware. Water samples were handled in the same manner described in the soil section above. Additional information relative to the water sample is provided below.

Sample ID	Reason Sample Selected for Analysis	Analysis Completed
TMW-1	Groundwater conditions north of the UST and northwest of the degreaser.	TCL VOCs, TCL S-VOCs and RCRA Metals

5. EVALUATION AND PRESENTATION OF RESULTS

The results of this Phase II study are summarized as follows.

a. Subsurface Conditions

Details of the subsurface soil conditions are described within the boring logs included in Appendix A. Generally, all of the borings encountered combinations of gravel and clay to depths of at least 8.5 ftbg. Sand was also encountered at some locations.

Apparent bedrock refusal was encountered at each boring locations at depths ranging between 3 and 8.5 ftbg.

As indicated above, groundwater was encountered at one location (SB-2, north of the UST).

b. Field Observations and Screening

Significantly elevated PID readings and suspect solvent odors were noted at six boring locations (SB-1, SB-2, SB-3, SB-4, SB-13 and SB-14) located north of the existing structure (north of the UST and degreaser). The highest PID readings, above 9,999 ppm, were noted at two locations (SB-4 and SB-14) at intervals on top of bedrock. Suspect product globules and a sheen were also noted on top of bedrock at SB-14. [This suggests that underlying bedrock groundwater has likely been impacted.]

c. Analytical Data

Tabulated soil and groundwater analytical testing results are included in Table 1 and Table 2, respectively. The complete laboratory analytical data reports are provided in Appendix B.

i. Soil

New York State has several soil guidance values depending on the nature and intended use of the Site. In this instance, as the Site is utilized commercially, RJS used Part 375 Protection of Public Health/Restricted Use (Commercial) SCOs for comparison of the soils selected for analysis. [It should be noted that these objectives are intended for remediation of Brownfields sites under NYSDEC oversight. While the NYSDEC does not have any soil standards for sites such as this, it is common practice to use these objectives for guidance.]

A summary of soil analytical testing results is provided below.

Current/Historic On-Site Operations

No S-VOCs were detected above laboratory detection limits. PCE, a VOC compound commonly associated with solvents/varnishes, was detected below applicable SCOs. Five metals were also detected at concentrations below SCOs.

UST and Degreaser

Multiple VOC, S-VOC and metal concentrations were identified above laboratory detection limits. TCE, a degradation compound of PCE, was detected at a concentration significantly above applicable SCOs. [It should be noted that due to the significant TCE concentration, detection limits on other VOCs were elevated and such may be present at concentrations above applicable SCOs but below method detection limits.]

Former West Adjacent Foundry

No VOCs were detected above laboratory detection limits. S-VOC and metal concentrations did not exceed applicable SCOs.

ii Groundwater

The groundwater sample analytical results were compared to NYSDEC groundwater quality standards for the GA water class. GA is classified by the NYSDEC as a source of drinking water or groundwater. A summary of analytical testing results is provided below.

No S-VOC compounds were detected above laboratory detection limits. Nine VOC compounds, including PCE and TCE, were detected at concentrations above applicable SCOs. Three metals were also identified above SCOs. [It should be noted that due to the significant PCE and TCE concentration, detection limits on other VOCs were elevated and such may be present at concentrations above applicable SCOs but below method detection limits.]

6. DISCUSSION OF FINDINGS AND CONCLUSIONS

The results of the Phase II environmental site assessment are presented below.

a. Recognized Environmental Conditions

The solvent impacted soil and groundwater identified at the Site is considered a significant recognized environmental condition (REC).

b. Affected Media

Solvent impacted soil and groundwater was identified north of the existing building (north of the UST and degreaser). The greatest concentrations were found on top of bedrock suggesting that underlying bedrock groundwater has likely been impacted. While the exact source of the impact is unknown, such could be associated with the on-site varnish UST, site operations and/or the degreaser.

c. Evaluation of Media Quality

Based on the significant concentrations of VOC/solvent-related analytes identified and the potential for impacts to underlying bedrock, impacts are likely widespread and are likely present on portions of the Site not investigated by RJS. Additional intrusive study would be warranted to delineate impacted soil and groundwater.

d. Other Concerns

- It is possible that impacts have migrated off-site. Therefore, groundwater impact and associated vapor intrusion is a significant concern, especially as residential properties are located adjacent to the Site.

7. RECOMMENDATIONS

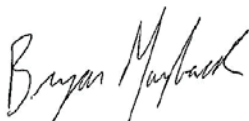
Significant solvent-related impacts were identified in connection with the Site. Further work would be required to fully assess the extent of impact and costs associated with remediating the impacted soils. The next phase of study should include bedrock groundwater sampling.

RJS recommends that the current property owner discuss this with their counsel and confirm that the NYSDEC is made aware of the results of this study. If the site owner does not make a report to the state, due to the potential impact to adjacent residential properties, RJS will feel required to do so.

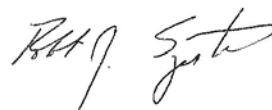
8. SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

We trust that this report satisfies your current needs. Should you have any questions, please contact the undersigned at 716-649-9718.

RJS ENVIRONMENTAL



Bryan Mayback
Sr. Project Manager



Robert J. Szustakowski
President

TABLES

Table 1
Soil Analytical Data
11RJS286.5

Sample ID:			SB-2, 2'-4'	SB-3, 4'-5'	SB-4, 6'-8'	SB-5, 4'-6'	SB-10, 2'-4'	SB-13, 4'-6'	SB-14, 8'-8.5'
REC	Unit of Measurement	Part 375 Restricted Commercial Use SCOs*	Varnish UST and Degreaser			Suspected Down-Gradient of Current/ Historic Electric Engine Repair Building	Suspected Down-Gradient of Former Adjacent Foundry	Varnish UST and Degreaser	
Date Sampled:			9/14/2011	9/14/2011	9/14/2011	9/14/2011	9/14/2011	9/14/2011	9/14/2011
PID Reading (ppm)			1,390	1,171	Over 9,999	0.0	0.0	1,406	Over 9,999
VOCs									
1,1-Dichloroethane	ug/kg	240,000	ND (240)	ND (100)	ND (110)	ND (110)	ND (140)	ND (120)	630
1,1-Dichloroethene	ug/kg	500,000	ND (240)	ND (100)	ND (110)	ND (110)	ND (140)	ND (120)	903
cis-1,2-Dichloroethene	ug/kg	500,000	ND (240)	1,100	477	ND (110)	ND (140)	2,820	22,300
trans-1,2-Dichloroethene	ug/kg	500,000	ND (240)	ND (100)	ND (110)	ND (110)	ND (140)	ND (120)	254
Ethylbenzene	ug/kg	390,000	ND (240)	ND (100)	ND (110)	ND (110)	ND (140)	ND (120)	966
Tetrachloroethene	ug/kg	150,000	ND (240)	ND (100)	2,540	223	ND (140)	532	96,900
Toluene	ug/kg	500,000	ND (590)	ND (250)	ND (280)	ND (290)	ND (360)	ND (290)	1,580
1,1,1-Trichloroethane	ug/kg	500,000	ND (240)	274	345	ND (110)	ND (140)	ND (120)	26,400
Trichloroethene	ug/kg	200,000	ND (240)	5,100	102,000	ND (110)	ND (140)	2,850	1,490,000
Vinyl chloride	ug/kg	13,000	ND (240)	ND (100)	ND (110)	ND (110)	ND (140)	ND (120)	1,610
Xylene (total)	ug/kg	500,000	ND (240)	ND (100)	ND (110)	ND (110)	ND (140)	ND (120)	3,590
S-VOCs									
Anthracene	ug/kg	500,000	ND (260)	ND (260)	ND (260)	ND (260)	319	ND (270)	ND (280)
Benzo(a)anthracene	ug/kg	5,600	ND (260)	ND (260)	ND (260)	ND (260)	672	ND (270)	ND (280)
Benzo(a)pyrene	ug/kg	1,000	ND (260)	ND (260)	ND (260)	ND (260)	396	ND (270)	ND (280)
Benzo(b)fluoranthene	ug/kg	5,600	ND (260)	ND (260)	ND (260)	ND (260)	418	ND (270)	ND (280)
Benzo(k)fluoranthene	ug/kg	56,000	ND (260)	ND (260)	ND (260)	ND (260)	396	ND (270)	ND (280)
Butyl benzyl phthalate	ug/kg	NS	ND (260)	ND (260)	ND (260)	ND (260)	ND (310)	ND (270)	465
Chrysene	ug/kg	56,000	ND (260)	ND (260)	ND (260)	ND (260)	607	ND (270)	316
Di-n-butyl phthalate	ug/kg	NS	ND (260)	ND (260)	ND (260)	ND (260)	ND (310)	ND (270)	524
bis(2-Ethylhexyl)phthalate	ug/kg	NS	309	ND (260)	687	ND (260)	ND (310)	548	9,840
Fluoranthene	ug/kg	500,000	ND (260)	ND (260)	ND (260)	ND (260)	1,220	ND (270)	606
2-Methylnaphthalene	ug/kg	NS	ND (260)	ND (260)	ND (260)	ND (260)	ND (310)	ND (270)	336
Naphthalene	ug/kg	500,000	ND (260)	ND (260)	280	ND (260)	ND (310)	ND (270)	971
Phenanthrene	ug/kg	500,000	ND (260)	ND (260)	ND (260)	ND (260)	1,070	ND (270)	326
Pyrene	ug/kg	500,000	ND (260)	ND (260)	ND (260)	ND (260)	1,060	ND (270)	670
Metals									
Arsenic	mg/kg	16	7.5	7.2	9.7	10.5	4.9	8.3	7.8
Barium	mg/kg	400	75	393	151	119	105	87.4	140
Cadmium	mg/kg	9.3	ND	ND	ND	ND	1.1	ND	ND
Chromium	mg/kg	1,500**	21.9	22.2	21	21.5	26.1	20.7	21.8
Lead	mg/kg	1,000	23.3	15.9	16.4	19.8	67.2	16.8	44.6
Mercury	mg/kg	2.8	0.098	ND	0.052	0.064	0.043	0.067	0.13

Notes:

Only analytes detected are shown in the table above. Refer to the laboratory report for a complete list of analytes.

*Commercial restricted use soil cleanup objectives (SCOs) as presented in 6 NYCRR Part 375-6.8(b), dated December 14, 2006

**While the testing results would represent total chromium, the tri-valent chromium standard was used as most chromium in the environment is tri- and no hexa-valent.

REC= recognized environmental concern

PID= photo-ionization detector

ppm= parts per million

ug/kg= micrograms per kilogram

mg/kg= milligrams per kilogram

VOCs= volatile organic compounds

S-VOCs= semi-volatile organic compounds

ND= not detected/below laboratory detection limit

NS= not specified

 = analyte detected above NYSDEC guidance value

 = analyte detected below NYSDEC guidance value

Table 2

Groundwater Analytical Results

11RJS286.5

Sample ID:	Unit of Measurement	NYSDEC Groundwater Quality Standards (Class GA)*	TMW-1
REC			Varnish UST and Degreaser
Date Sampled:			9/14/2011
VOCs			
Acetone	ug/l	50**	11.8
1,1-Dichloroethane	ug/l	5	97
1,1-Dichloroethene	ug/l	5	16.6
cis-1,2-Dichloroethene	ug/l	5	3990
trans-1,2-Dichloroethene	ug/l	5	33.2
Ethylbenzene	ug/l	5	3.1
Tetrachloroethene	ug/l	5	196
Toluene	ug/l	5	1.3
1,1,1-Trichloroethane	ug/l	5	83.2
Trichloroethene	ug/l	5	1880
Vinyl chloride	ug/l	2	1830
Xylene (total)	ug/l	5	6.7
S-VOCs			
No SVOC analytes were detected above laboratory detection limits			
Metals			
Arsenic	ug/l	25	28.2
Barium	ug/l	1,000	802
Chromium	ug/l	50	83.9
Lead	ug/l	25	77.1
Mercury	ug/l	0.7	0.54

Notes:

Only analytes detected are shown in the table above. Refer to the laboratory report for a complete list of analytes.

*= 6 NYCRR Part 703, Class GA= source groundwater drinking water (groundwater)

** New York State guidance value

VOCs= volatile organic compounds

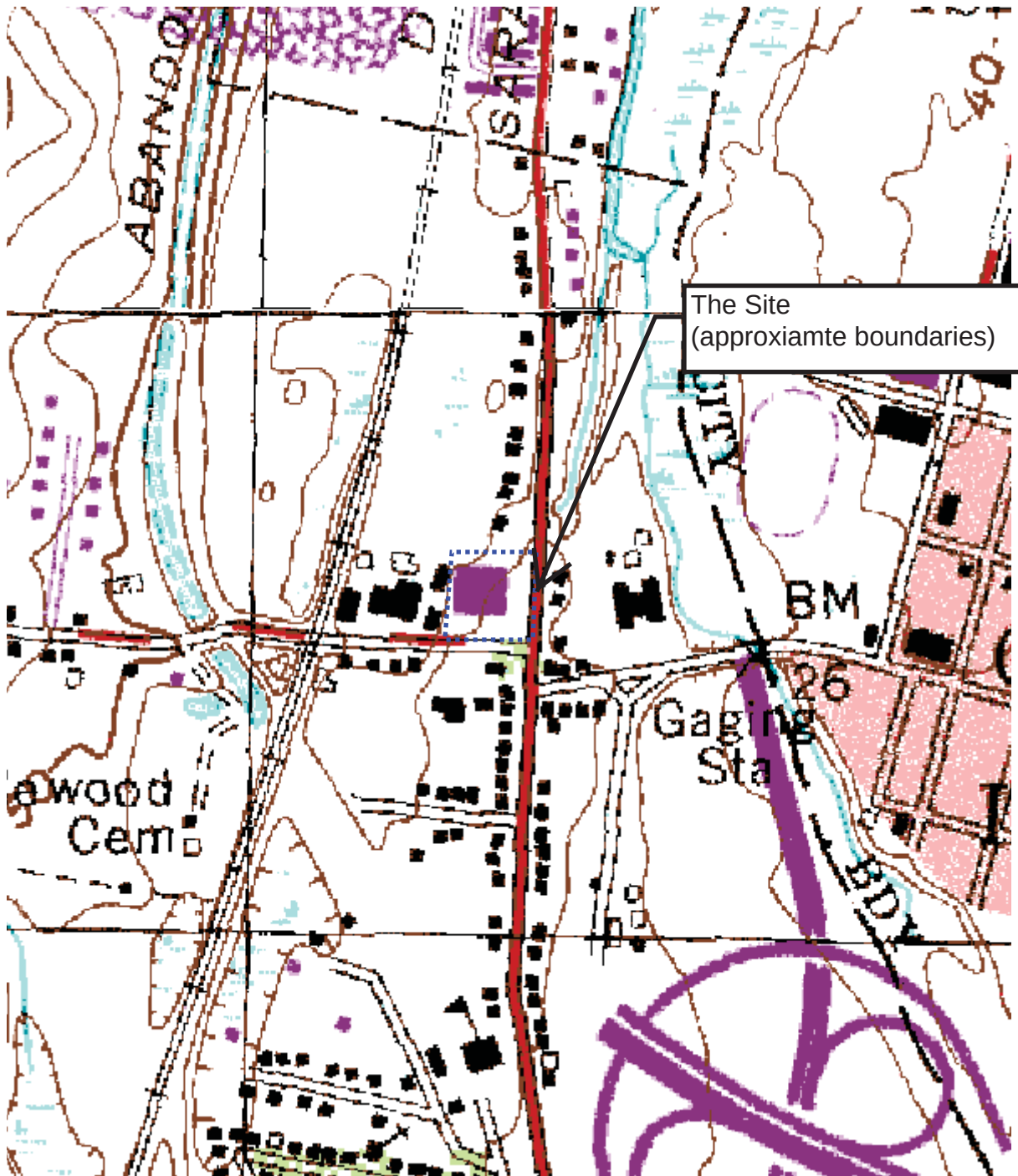
S-VOCs= semi-volatile organic compounds

ug/l= micrograms per liter

 = analyte detected above NYSDEC guidance value

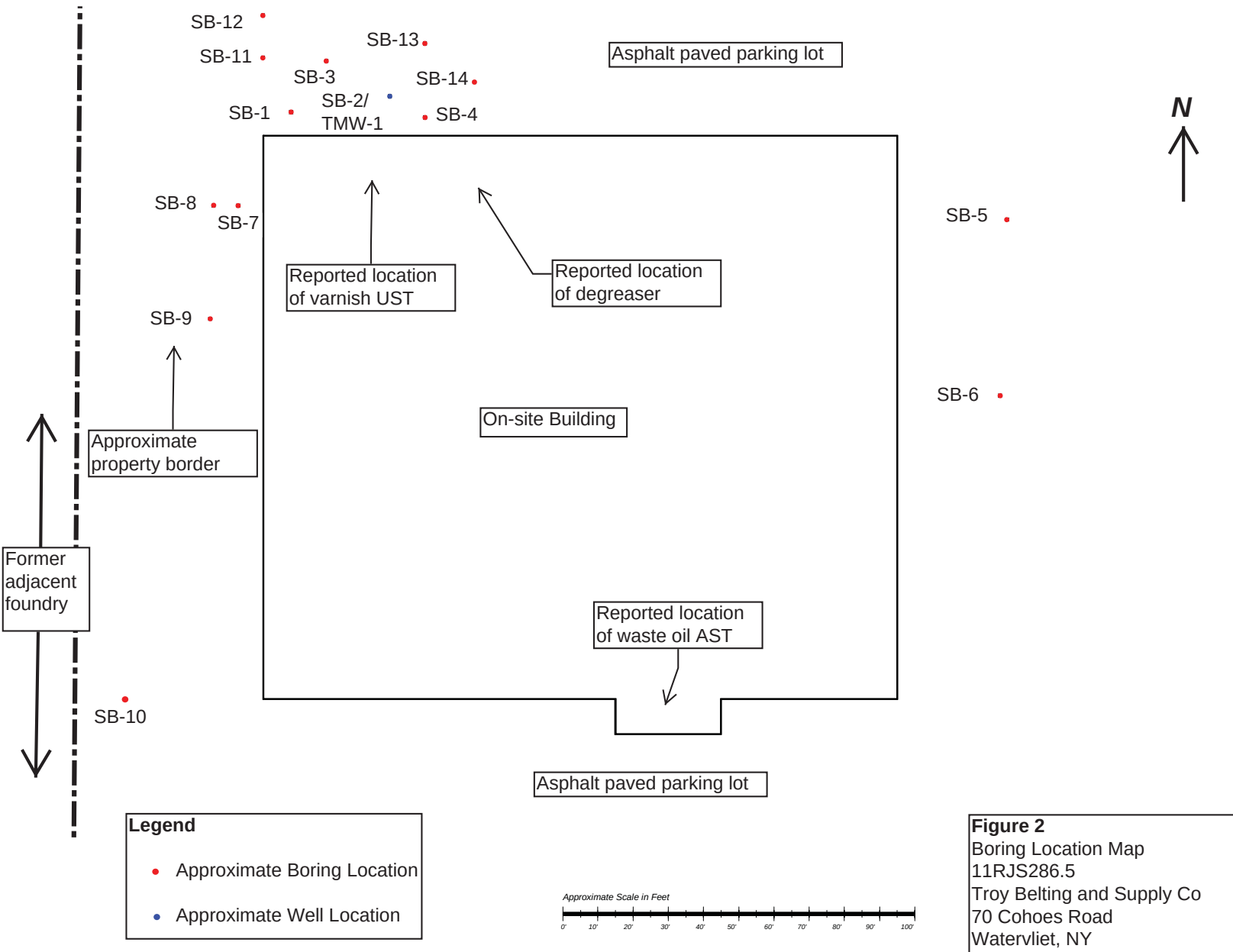
 = analyte detected below NYSDEC guidance value

FIGURES



Center: 42.7473°N 73.7011°W
Elevation at center: 26 feet (8 meters)
Quad: USGS Troy South
Drg Name: o42073f6
Drg Source Scale: 1:24,000

Figure 1
Topo Map
11RJS286.5
70 Cohoes Road
Watervliet, New York



APPENDIX A

SUBSURFACE EXPLORATION LOGS

DRILLING LOG OF WELL/BORING NO. SB-1

Page 1 of 14

Project Number: 11RJS286.5

Total Depth of Hole: 6 feet below grade (ftbg)

Project Location: 70 Cohoes Road, Watervliet, New York

Ground Elevation: NA

Boring Location: North of varnish UST/degreaser

Water Encountered: NA

Date Start/Finished: September 14, 2011

Water At End of Drilling: NA

Drilling Contractor: Precision Environmental Services, Inc.

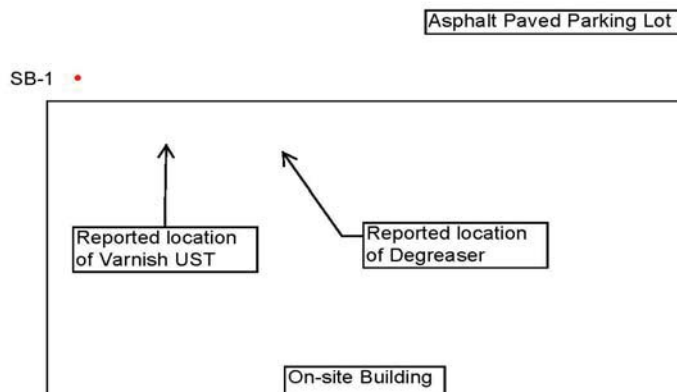
Equipment: Geoprobe

Drilling Method: Hydraulically driven system (Geoprobe)

Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B o r i n g C o u n t s	I n t e r v a l	P l u s R e a d i n g	R e c o r d e d	Comments
Ground Surface				(Feet)	Parts Per Million (PPM)	(Percent)		
NA	1	NA	0-2 ftbg: dark brown/black topsoil followed by brown/gray sandy Clay (medium stiff, low plasticity, moist)	NA	0-2	0.0	80	Suspect solvent odors noted between approximately 4-6 ftbg
			2-4 ftbg: brown gravelly Clay (stiff, low plasticity, moist)		2-4	0.0	75	
	5		4-6 ftbg: brown/gray sandy Gravel (angular, sub-rounded, moist)		4-6	415	100	Equipment refusal encountered at approximately 6 ftbg

Boring Location Sketch

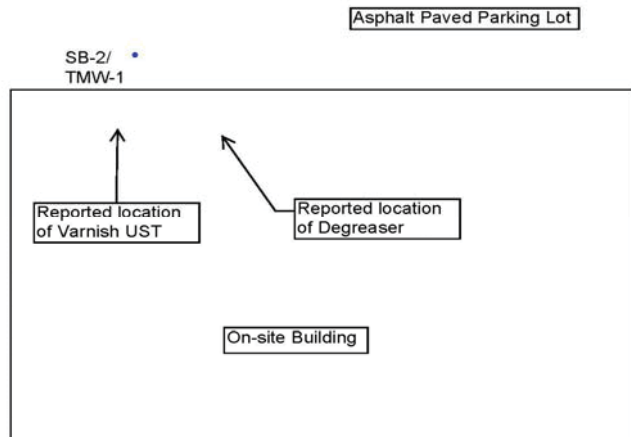

RJS Environmental

Project Number: 11RJS286.5	Total Depth of Hole: 7.5 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: North of varnish UST/degreaser	Water Encountered: 6 ftbg
Date Start/Finished: September 14, 2011	Water At End of Drilling: 5.5 ftbg
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w	I n t e r v a l	P l o t t e d	R e c o r d e d	Comments
Ground Surface								
				(Feet)		Parts Per Million (PPM)		(Inches)
NA	1	R i s e r S c r e e n	0-2 ftbg: black topsoil followed by brown gravelly Clay (medium stiff, medium plasticity, moist)	NA	0-2	0.0	100	Suspect solvent odors noted between approximately 2-4 and 6-7.5 ftbg
	5		2-4 ftbg: gray gravelly Clay (stiff, low plasticity, moist)		2-4	1390	100	
			4-6 ftbg: gray gravelly Clay (stiff, low plasticity, moist)		4-6	21.2	75	
			6-7.5 ftbg: gray/brown gravelly Clay (stiff, low plasticity, wet)		6-7.5	310	75	Equipment refusal encountered at approximately 7.5 ftbg

Well details: Riser from 0-2.5 ftbg, Screen from 2.5 - 7.5 ftbg. Well removed subsequent to sampling.

Boring Location Sketch



RJS Environmental

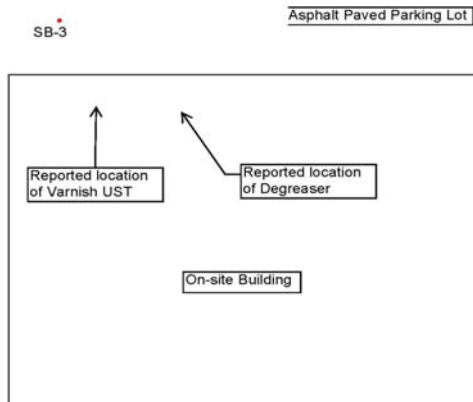
DRILLING LOG OF WELL/BORING NO. SB-3

Page 3 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 5 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: North of varnish UST/degreaser	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e a d i n g	R e c o v e r y	Comments
Ground Surface				Parts Per Million (PPM)				
NA	1	NA	0-4 ftbg: dark brown/black topsoil followed by tan/brown gravelly sandy Clay (medium stiff, low plasticity, moist)	NA	0-4	35.7	50	Suspect solvent odor noted between approximately 4-5 ftbg
	5		4-5 ftbg: brown Clay (stiff, low plasticity, moist) with trace crushed stone		4-5	1,171	100	Equipment refusal encountered at approximately 5 ftbg

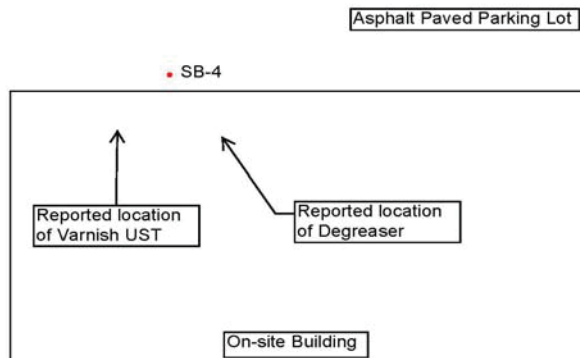
Boring Location Sketch


RJS Environmental

Project Number: 11RJS286.5	Total Depth of Hole: 8 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: North of varnish UST/degreaser	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P l o t t e d R e a d i n g	R e c o r d e d	Comments
Ground Surface								
					(Feet)	Parts Per Million (PPM)	(Percent)	
NA	1	NA	0-0.25 ftbg: Asphalt and subbase	NA	0-2	0.0	75	Strong suspect solvent odors noted between approximately 4 8 ftbg
			0-2 ftbg: brown/gray sandy Clay (medium stiff, medium plasticity, moist)		2-4	0.0	75	
			2-4 ftbg: gray/brown gravelly Clay (medium stiff, medium plasticity, moist)		4-6	1,742	75	
			4-6 ftbg: gray/brown gravelly sandy Clay (stiff, low plasticity, moist)		6-8	Over 9,999	100	
	5		6-8 ftbg: gray gravelly sandy Clay (stiff, low plasticity, moist)		Equipment refusal encountered at approximately 8 ftbg			

Boring Location Sketch



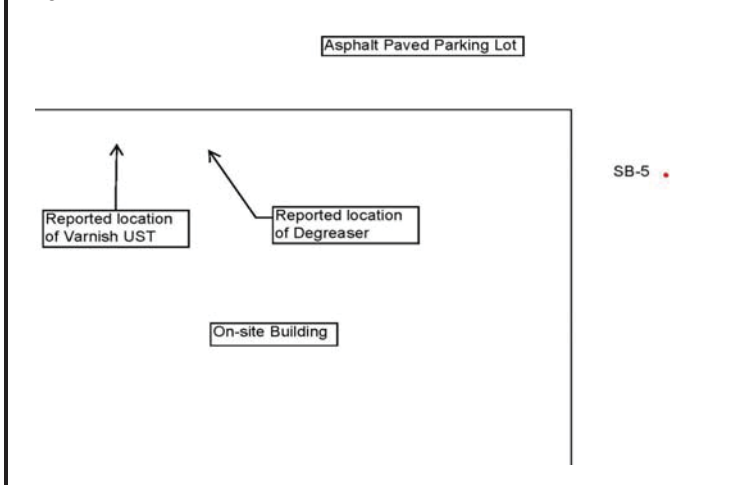
RJS Environmental

DRILLING LOG OF WELL/BORING NO. SB-5

Page 5 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 6 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: East/suspected down-gradient of the on-site building	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P l o w R e a d i n g	R e c o v e r y	Comments
Ground Surface								
					(Feet)	Parts Per Million (PPM)	(Percent)	
NA	1	NA	0-2 ftbg: dark brown topsoil followed by gray/brown gravelly Clay (medium stiff, medium plasticity, moist)	NA	0-2	0.0	100	Equipment refusal encountered at approximately 6 ftbg
			2-4 ftbg: gray gravelly sandy Clay (medium stiff, medium plasticity, moist)		2-4	0.0	100	
	5		4-6 ftbg: brown/gray gravelly sandy Clay (stiff, low plasticity, moist)		4-6	0.0	50	

Boring Location Sketch


RJS Environmental

Project Number: 11RJS286.5

Total Depth of Hole: 5.5 feet below grade (ftbg)

Project Location: 70 Cohoes Road, Watervliet, New York

Ground Elevation: NA

Boring Location: East/suspected down-gradient of the on-site building

Water Encountered: NA

Date Start/Finished: September 14, 2011

Water At End of Drilling: NA

Drilling Contractor: Precision Environmental Services, Inc.

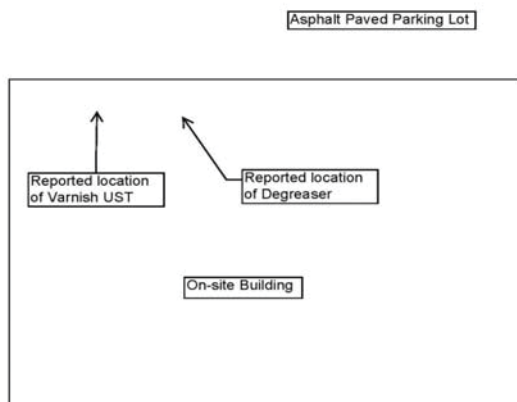
Equipment: Geoprobe

Drilling Method: Hydraulically driven system (Geoprobe)

Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e a d i n g	R e c o v e r y	Comments
Ground Surface								
				(Feet)		Parts Per Million (PPM)		(Percent)
NA	1	NA	0-2 ftbg: dark brown topsoil followed by Gravel (angular, loose, moist)	NA	0-2	0.0	90	Equipment refusal encountered at approximately 5.5 ftbg
			2-4 ftbg: tan/gray gravelly Sand (medium, medium dense, moist)		2-4	0.0	100	
	5		4-5.5 ftbg: tan/gray sandy Gravel (angular, medium dense, moist)		4-5.5	0.0	100	

Boring Location Sketch

*RJS Environmental*

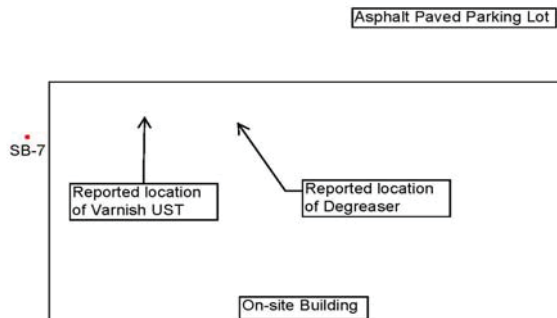
DRILLING LOG OF WELL/BORING NO. SB-7

Page 7 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 3.7 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: West of on-site building	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e a d i n g	R e c o v e r y	Comments
Ground Surface (Feet) Parts Per Million (PPM) (Percent)								
NA	1	NA	0-3.7 ftbg: gray crushed rock/ Gravel	NA	0-3.7	0.0	75	Equipment refusal encountered at approximately 3.7 ftbg

Boring Location Sketch


RJS Environmental

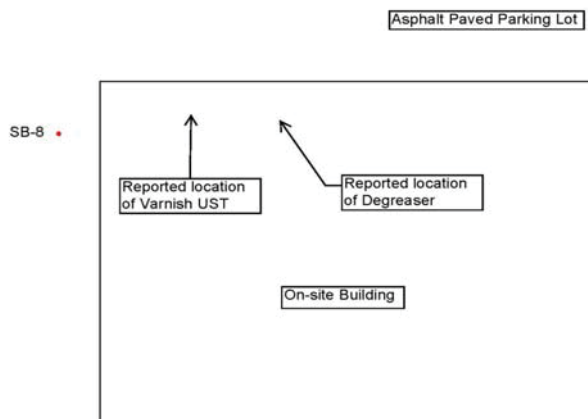
DRILLING LOG OF WELL/BORING NO. SB-8

Page 8 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 3 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: West of on-site building	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e c o v e r y	Comments
Ground Surface				Parts Per Million (PPM)			
NA	1	NA	0-3 ftbg: brown topsoil followed by gray crushed rock	NA	0-3	0.0	75 Equipment refusal encountered at approximately 3 ftbg

Boring Location Sketch


RJS Environmental

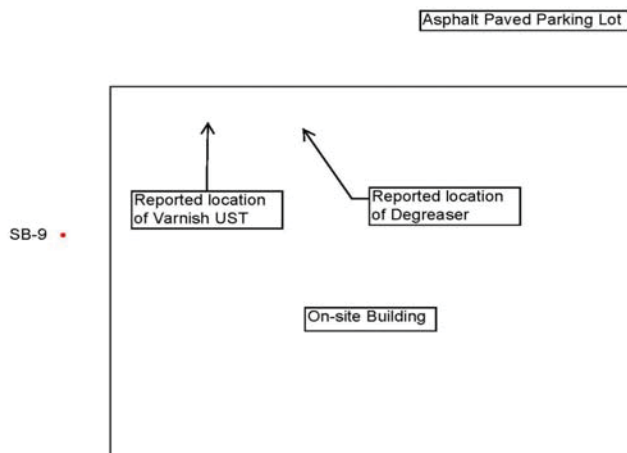
DRILLING LOG OF WELL/BORING NO. SB-9

Page 9 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 4.3 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: Suspected down-gradient of former adjacent foundry	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P l o t t e d R e c o r d e d g	R e c o v e r y	Comments
Ground Surface					(Feet)	Parts Per Million (PPM)	(Percent)	
NA	1	NA	0-2 ftbg: dark brown/black topsoil followed by brown/gray Clay (stiff, low plasticity, moist)	NA	0-2	0.0	100	Equipment refusal encountered at approximately 4.3 ftbg
			2-4.3 ftbg: gray Gravel (angular, loose, dry) with rock dust		2-4.3	0.0	100	

Boring Location Sketch


RJS Environmental

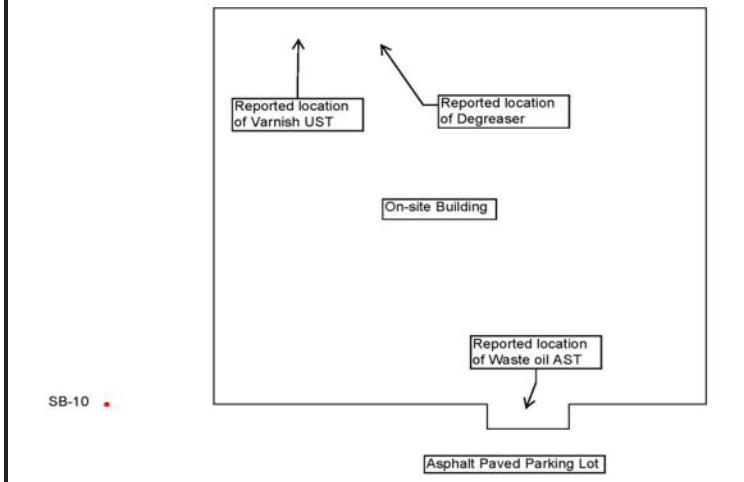
DRILLING LOG OF WELL/BORING NO. SB-10

Page 10 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 5 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: Suspected down-gradient of former adjacent foundry	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B o r i n g L o c a t i o n	I n t e r v a l	P I D R e c o v e r y	Comments
Ground Surface					(Feet)	Parts Per Million (PPM)	(Percent)
NA	1	NA	0-2 ftbg: dark brown/tan sandy Clay (medium stiff, medium plasticity, moist) with trace gravel	NA	0-2	0.0	90
	2-4 ftbg: brown/gray gravelly Clay (medium stiff, medium plasticity, moist)		2-4		0.0	90	
	4-5 ftbg: gray gravelly Clay (stiff, low plasticity, moist) with trace gray crushed rock		4-5		0.0	25	
Equipment refusal encountered at approximately 5 ftbg							

Boring Location Sketch


RJS Environmental

Project Number: 11RJS286.5

Total Depth of Hole: 3 feet below grade (ftbg)

Project Location: 70 Cohoes Road, Watervliet, New York

Ground Elevation: NA

Boring Location: North of UST

Water Encountered: NA

Date Start/Finished: September 14, 2011

Water At End of Drilling: NA

Drilling Contractor: Precision Environmental Services, Inc.

Equipment: Geoprobe

Drilling Method: Hydraulically driven system (Geoprobe)

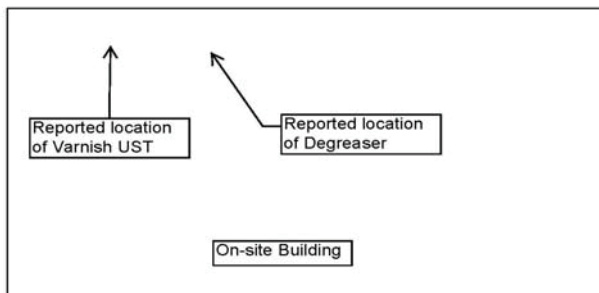
Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e a d i n g	R e c o v e r y	Comments
Ground Surface				Parts Per (Feet) Million (Percent) (PPM)				
NA	1	NA	0-3 ftbg: brown sandy topsoil with trace crushed rock	NA	0-3	0.0	75	Equipment refusal encountered at approximately 3 ftbg

Boring Location Sketch

SB-11 •

Asphalt Paved Parking Lot

*RJS Environmental*

DRILLING LOG OF WELL/BORING NO. SB-12

Page 12 of 14

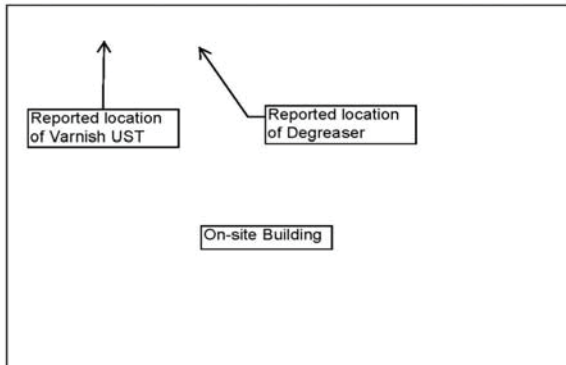
Project Number: 11RJS286.5	Total Depth of Hole: 3 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: North of UST	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e a d i n g	R e c o v e r y	Comments
Ground Surface				(Feet)		Parts Per Million (PPM)	(Percent)	
NA	1	NA	0-3 ftbg: brown sandy topsoil with trace crushed rock followed by gray/brown gravelly Clay (medium stiff, medium plasticity, moist)	NA	0-3	0.0	100	Equipment refusal encountered at approximately 3 ftbg

Boring Location Sketch

SB-12

Asphalt Paved Parking Lot


RJS Environmental

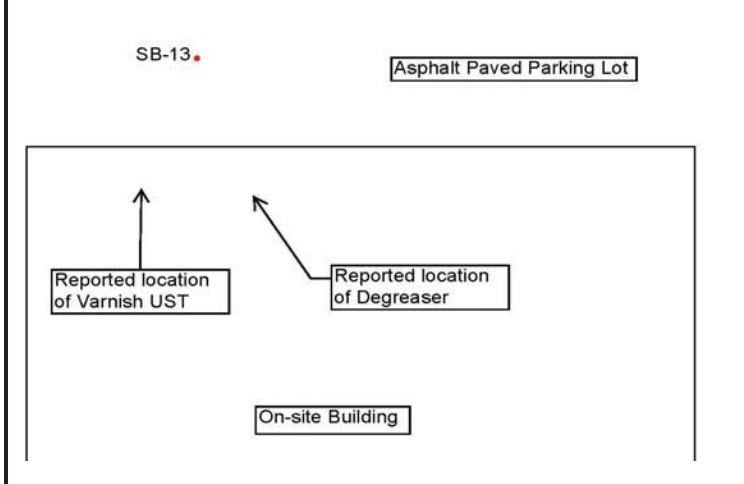
DRILLING LOG OF WELL/BORING NO. SB-13

Page 13 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 7.8 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: North of UST/degreaser	Water Encountered: NA
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P I D R e a d i n g	R e c o v e r y	Comments
Ground Surface								
					(Feet)	Parts Per Million (PPM)	(Percent)	
NA	1 5	NA	0-2.25 ftbg: Asphalt and subbase	NA	0-2	20.1	75	Strong suspect solvent odors noted at approximately 4-6 ftbg Equipment refusal encountered at approximately 7.8 ftbg
			0-2 ftbg: brown gravelly Clay (stiff, low plasticity, moist)		2-4	13.7	75	
			2-6 ftbg: brown/gray gravelly Clay (stiff, low plasticity, moist)		4-6	1,406	75	
			6-7.8 ftbg: gray gravelly Clay (stiff, low plasticity, moist)		6-7.8	603	75	

Boring Location Sketch


RJS Environmental

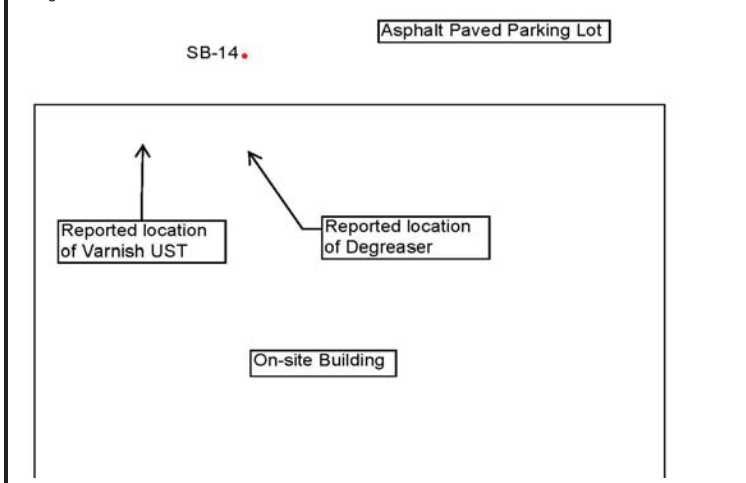
DRILLING LOG OF WELL/BORING NO. SB-14

Page 14 of 14

Project Number: 11RJS286.5	Total Depth of Hole: 8.5 feet below grade (ftbg)
Project Location: 70 Cohoes Road, Watervliet, New York	Ground Elevation: NA
Boring Location: North of UST/degreaser	Water Encountered: 8 ftbg
Date Start/Finished: September 14, 2011	Water At End of Drilling: NA
Drilling Contractor: Precision Environmental Services, Inc.	Equipment: Geoprobe
Drilling Method: Hydraulically driven system (Geoprobe)	Technician: William Sisco

E l e v a t i o n	D e p t h	Well Completion Diagram	Soil/Rock Description	B l o w C o u n t s	I n t e r v a l	P l o t t e d R e c o r d e d P a r t s P e r M i l l i o n (PPM)	R e c o r d e d P e r c e n t (Percent)	Comments
Ground Surface					(Feet)	Parts Per Million (PPM)		
NA	1	NA	0-0.25 ftbg: Asphalt and subbase	NA	0-2	46.7	50	Suspect solvent odors noted between approximately 2-8.5 ftbg. Suspect product globules and sheen noted between 8 and 8.5 ftbg.
			0.25-2 ftbg: brown sandy Clay (medium stiff, medium plasticity, moist)		2-4	410	75	
			2-4 ftbg: grey gravelly sandy Clay (medium stiff, medium plasticity, moist)		4-6	260	75	
			4-6 ftbg: brown/grey Clay (medium stiff, medium plasticity, moist)		6-8	923	75	
	5		6-8 ftbg: grey clayey Gravel (angular, loose, moist) with crushed stone fragments		8-8.5	Over 9,999	75	Equipment refusal encountered at approximately 8.5 ftbg
	10		8-8.5 ftbg: gray Clay (medium stiff, low plasticity, wet)					

Boring Location Sketch


RJS Environmental

APPENDIX B

LABORATORY ANALYTICAL REPORTS



09/28/11

Technical Report for

RJS Environmental

11RJS286.5 70 Cohoes Road, Watervliet, NY

11RJS286.5

Accutest Job Number: MC3652

Sampling Date: 09/14/11

Report to:

RJS Environmental

Jmecca@rjsenviro.com

ATTN: Joseph Mecca

Total number of pages in report: **55**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Fand
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Sample Results	4
2.1: MC3652-1: TMW-1	5
2.2: MC3652-2: SB-2, 2'-4'	11
2.3: MC3652-3: SB-4, 6'-8'	17
2.4: MC3652-4: SB-14, 8'-8.5'	23
2.5: MC3652-5: SB-5, 4'-6'	29
2.6: MC3652-6: SB-10, 2'-4'	35
2.7: MC3652-7: SB-3, 4'-5'	41
2.8: MC3652-8: SB-13, 4'-6'	47
Section 3: Misc. Forms	53
3.1: Chain of Custody	54



Sample Summary

RJS Environmental

Job No: MC3652

11RJS286.5 70 Cohoes Road, Watervliet, NY
Project No: 11RJS286.5

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC3652-1	09/14/11	00:00 WS	09/16/11	AQ	Ground Water	TMW-1
MC3652-2	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-2, 2' -4'
MC3652-3	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-4, 6' -8'
MC3652-4	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-14, 8' -8.5'
MC3652-5	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-5, 4' -6'
MC3652-6	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-10, 2' -4'
MC3652-7	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-3, 4' -5'
MC3652-8	09/14/11	00:00 WS	09/16/11	SO	Soil	SB-13, 4' -6'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID: TMW-1							
Lab Sample ID: MC3652-1				Date Sampled: 09/14/11			
Matrix: AQ - Ground Water				Date Received: 09/16/11			
Method: SW846 8260B				Percent Solids: n/a			
Project: 11RJS286.5 70 Cohoes Road, Watervliet, NY							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R23169.D	1	09/20/11	TD	n/a	n/a	MSR857
Run #2	R23207.D	10	09/21/11	TD	n/a	n/a	MSR859

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	11.8	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	97.0	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	16.6	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	3990 ^a	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	33.2	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	3.1	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	196	1.0	ug/l	
108-88-3	Toluene	1.3	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	83.2	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1880 ^a	10	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TMW-1	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-1	Date Received:	09/16/11
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	1830 ^a	10	ug/l	
1330-20-7	Xylene (total)	6.7	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	100%	70-130%
2037-26-5	Toluene-D8	100%	98%	70-130%
460-00-4	4-Bromofluorobenzene	98%	101%	70-130%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	TMW-1	
Lab Sample ID:	MC3652-1	Date Sampled: 09/14/11
Matrix:	AQ - Ground Water	Date Received: 09/16/11
Method:	SW846 8270C SW846 3510C	Percent Solids: n/a
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27246.D	1	09/20/11	PR	09/16/11	OP26281	MSS1176
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	ND	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
86-74-8	Carbazole	ND	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

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Report of Analysis

Page 2 of 3

Client Sample ID:	TMW-1	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-1	Date Received:	09/16/11
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		15-110%
4165-62-2	Phenol-d5	20%		15-110%
118-79-6	2,4,6-Tribromophenol	92%		15-110%
4165-60-0	Nitrobenzene-d5	73%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%

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Report of Analysis

Page 3 of 3

Client Sample ID:	TMW-1	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-1	Date Received:	09/16/11
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	86%		30-130%

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Report of Analysis

Page 1 of 1

Client Sample ID:	TMW-1	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-1	Date Received:	09/16/11
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	28.2	4.0	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³
Barium	802	50	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³
Chromium	83.9	10	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³
Lead	77.1	5.0	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³
Mercury	0.54	0.20	ug/l	1	09/20/11	09/21/11 MA	SW846 7470A ²	SW846 7470A ⁴
Selenium	< 10	10	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/17/11	09/19/11 DA	SW846 6010C ¹	SW846 3010A ³

(1) Instrument QC Batch: MA13404

(2) Instrument QC Batch: MA13406

(3) Prep QC Batch: MP17743

(4) Prep QC Batch: MP17756

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID: SB-2, 2' -4' Lab Sample ID: MC3652-2 Matrix: SO - Soil Method: SW846 8260B Project: 11RJS286.5 70 Cohoes Road, Watervliet, NY							
				Date Sampled: 09/14/11 Date Received: 09/16/11 Percent Solids: 91.4			
Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K54912.D	1	09/20/11	GK	n/a	n/a	MSK1834
Run #2							
Run #	Initial Weight	Final Volume	Methanol Aliquot				
Run #1	9.99 g	10.0 ml	50.0 ul				
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	590	ug/kg	
71-43-2	Benzene	ND	59	ug/kg	
75-27-4	Bromodichloromethane	ND	240	ug/kg	
75-25-2	Bromoform	ND	240	ug/kg	
74-83-9	Bromomethane	ND	240	ug/kg	
78-93-3	2-Butanone (MEK)	ND	590	ug/kg	
75-15-0	Carbon disulfide	ND	590	ug/kg	
56-23-5	Carbon tetrachloride	ND	240	ug/kg	
108-90-7	Chlorobenzene	ND	240	ug/kg	
75-00-3	Chloroethane	ND	590	ug/kg	
67-66-3	Chloroform	ND	240	ug/kg	
74-87-3	Chloromethane	ND	590	ug/kg	
124-48-1	Dibromochloromethane	ND	240	ug/kg	
75-34-3	1,1-Dichloroethane	ND	240	ug/kg	
107-06-2	1,2-Dichloroethane	ND	240	ug/kg	
75-35-4	1,1-Dichloroethene	ND	240	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	240	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	240	ug/kg	
78-87-5	1,2-Dichloropropane	ND	240	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	240	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	240	ug/kg	
100-41-4	Ethylbenzene	ND	240	ug/kg	
591-78-6	2-Hexanone	ND	590	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	590	ug/kg	
75-09-2	Methylene chloride	ND	240	ug/kg	
100-42-5	Styrene	ND	590	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	240	ug/kg	
127-18-4	Tetrachloroethene	ND	240	ug/kg	
108-88-3	Toluene	ND	590	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	240	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	240	ug/kg	
79-01-6	Trichloroethene	ND	240	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-2, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-2	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.4
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	240	ug/kg	
1330-20-7	Xylene (total)	ND	240	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	126%		70-130%

ND = Not detected

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-2, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-2	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.4
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27276.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	530	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	530	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	530	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	530	ug/kg	
95-48-7	2-Methylphenol	ND	530	ug/kg	
	3&4-Methylphenol	ND	530	ug/kg	
88-75-5	2-Nitrophenol	ND	530	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	530	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	530	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	530	ug/kg	
83-32-9	Acenaphthene	ND	260	ug/kg	
208-96-8	Acenaphthylene	ND	260	ug/kg	
120-12-7	Anthracene	ND	260	ug/kg	
56-55-3	Benzo(a)anthracene	ND	260	ug/kg	
50-32-8	Benzo(a)pyrene	ND	260	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	260	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	260	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	260	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	530	ug/kg	
86-74-8	Carbazole	ND	260	ug/kg	
218-01-9	Chrysene	ND	260	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	SB-2, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-2	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.4
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	530	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	530	ug/kg	
91-94-1	3,3' -Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	260	ug/kg	
132-64-9	Dibenzofuran	ND	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	309	260	ug/kg	
206-44-0	Fluoranthene	ND	260	ug/kg	
86-73-7	Fluorene	ND	260	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	530	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	ND	260	ug/kg	
88-74-4	2-Nitroaniline	ND	530	ug/kg	
99-09-2	3-Nitroaniline	ND	530	ug/kg	
100-01-6	4-Nitroaniline	ND	530	ug/kg	
91-20-3	Naphthalene	ND	260	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	ND	260	ug/kg	
129-00-0	Pyrene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		30-130%
4165-62-2	Phenol-d5	48%		30-130%
118-79-6	2,4,6-Tribromophenol	76%		30-130%
4165-60-0	Nitrobenzene-d5	88%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%

ND = Not detected

RL = Reporting Limit

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Report of Analysis

Page 3 of 3

Client Sample ID:	SB-2, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-2	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.4
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	76%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-2, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-2	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.4
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.5	0.82	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Barium	75.0	4.1	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Cadmium	< 0.33	0.33	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Chromium	21.9	0.82	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Lead	23.3	0.82	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Mercury	0.098	0.032	mg/kg	1	09/17/11	09/19/11 MA	SW846 7471B ¹	SW846 7471B ³
Selenium	< 0.82	0.82	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Silver	< 0.41	0.41	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA13400

(2) Instrument QC Batch: MA13404

(3) Prep QC Batch: MP17742

(4) Prep QC Batch: MP17747

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	SB-4, 6'-8'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-3	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.2
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E55676.D	1	09/19/11	GK	n/a	n/a	MSE2260
Run #2	K54913.D	1	09/20/11	GK	n/a	n/a	MSK1834

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.1 g	10.0 ml	100 ul
Run #2	10.1 g	10.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	280	ug/kg	
71-43-2	Benzene	ND	28	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	280	ug/kg	
75-15-0	Carbon disulfide	ND	280	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	280	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	280	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	477	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
591-78-6	2-Hexanone	ND	280	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	280	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
100-42-5	Styrene	ND	280	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	2540	110	ug/kg	
108-88-3	Toluene	ND	280	ug/kg	
71-55-6	1,1,1-Trichloroethane	345	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	102000 ^a	1100	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-4, 6'-8'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-3	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.2
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	110	ug/kg	
1330-20-7	Xylene (total)	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	108%	70-130%
2037-26-5	Toluene-D8	113%	105%	70-130%
460-00-4	4-Bromofluorobenzene	104%	117%	70-130%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-4, 6'-8'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-3	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.2
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27277.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	21.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	510	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	510	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	510	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	510	ug/kg	
95-48-7	2-Methylphenol	ND	510	ug/kg	
	3&4-Methylphenol	ND	510	ug/kg	
88-75-5	2-Nitrophenol	ND	510	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	ug/kg	
87-86-5	Pentachlorophenol	ND	510	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	510	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	510	ug/kg	
83-32-9	Acenaphthene	ND	260	ug/kg	
208-96-8	Acenaphthylene	ND	260	ug/kg	
120-12-7	Anthracene	ND	260	ug/kg	
56-55-3	Benzo(a)anthracene	ND	260	ug/kg	
50-32-8	Benzo(a)pyrene	ND	260	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	260	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	260	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	260	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	510	ug/kg	
86-74-8	Carbazole	ND	260	ug/kg	
218-01-9	Chrysene	ND	260	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4, 6'-8'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-3	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.2
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	510	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	510	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	260	ug/kg	
132-64-9	Dibenzofuran	ND	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	687	260	ug/kg	
206-44-0	Fluoranthene	ND	260	ug/kg	
86-73-7	Fluorene	ND	260	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	510	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	ND	260	ug/kg	
88-74-4	2-Nitroaniline	ND	510	ug/kg	
99-09-2	3-Nitroaniline	ND	510	ug/kg	
100-01-6	4-Nitroaniline	ND	510	ug/kg	
91-20-3	Naphthalene	280	260	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	ND	260	ug/kg	
129-00-0	Pyrene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		30-130%
4165-62-2	Phenol-d5	53%		30-130%
118-79-6	2,4,6-Tribromophenol	64%		30-130%
4165-60-0	Nitrobenzene-d5	57%		30-130%
321-60-8	2-Fluorobiphenyl	56%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	SB-4, 6' -8'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-3	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.2
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	60%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-4, 6'-8'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-3	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.2
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	9.7	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Barium	151	4.1	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Cadmium	< 0.33	0.33	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Chromium	21.0	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Lead	16.4	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Mercury	0.052	0.033	mg/kg	1	09/17/11	09/19/11 MA	SW846 7471B ¹	SW846 7471B ⁴
Selenium	< 0.83	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ³	SW846 3050B ⁵
Silver	< 0.41	0.41	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA13400

(2) Instrument QC Batch: MA13404

(3) Instrument QC Batch: MA13409

(4) Prep QC Batch: MP17742

(5) Prep QC Batch: MP17747

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	SB-14, 8' -8.5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-4	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E55681.D	1	09/20/11	GK	n/a	n/a	MSE2260
Run #2	K54914.D	1	09/20/11	GK	n/a	n/a	MSK1834

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.73 g	10.0 ml	100 ul
Run #2	9.73 g	10.0 ml	1.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	350	ug/kg	
71-43-2	Benzene	ND	35	ug/kg	
75-27-4	Bromodichloromethane	ND	140	ug/kg	
75-25-2	Bromoform	ND	140	ug/kg	
74-83-9	Bromomethane	ND	140	ug/kg	
78-93-3	2-Butanone (MEK)	ND	350	ug/kg	
75-15-0	Carbon disulfide	ND	350	ug/kg	
56-23-5	Carbon tetrachloride	ND	140	ug/kg	
108-90-7	Chlorobenzene	ND	140	ug/kg	
75-00-3	Chloroethane	ND	350	ug/kg	
67-66-3	Chloroform	ND	140	ug/kg	
74-87-3	Chloromethane	ND	350	ug/kg	
124-48-1	Dibromochloromethane	ND	140	ug/kg	
75-34-3	1,1-Dichloroethane	630	140	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	ug/kg	
75-35-4	1,1-Dichloroethene	903	140	ug/kg	
156-59-2	cis-1,2-Dichloroethene	22300	140	ug/kg	
156-60-5	trans-1,2-Dichloroethene	254	140	ug/kg	
78-87-5	1,2-Dichloropropane	ND	140	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	140	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	140	ug/kg	
100-41-4	Ethylbenzene	966	140	ug/kg	
591-78-6	2-Hexanone	ND	350	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	350	ug/kg	
75-09-2	Methylene chloride	ND	140	ug/kg	
100-42-5	Styrene	ND	350	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	140	ug/kg	
127-18-4	Tetrachloroethene	96900 ^a	14000	ug/kg	
108-88-3	Toluene	1580	350	ug/kg	
71-55-6	1,1,1-Trichloroethane	26400	140	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	140	ug/kg	
79-01-6	Trichloroethene	1490000 ^a	14000	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-14, 8' -8.5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-4	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	1610	140	ug/kg	
1330-20-7	Xylene (total)	3590	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%	106%	70-130%
2037-26-5	Toluene-D8	106%	103%	70-130%
460-00-4	4-Bromofluorobenzene	98%	112%	70-130%

(a) Result is from Run# 2

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-14, 8' -8.5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-4	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27278.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	570	ug/kg	
95-48-7	2-Methylphenol	ND	570	ug/kg	
	3&4-Methylphenol	ND	570	ug/kg	
88-75-5	2-Nitrophenol	ND	570	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	570	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	ug/kg	
83-32-9	Acenaphthene	ND	280	ug/kg	
208-96-8	Acenaphthylene	ND	280	ug/kg	
120-12-7	Anthracene	ND	280	ug/kg	
56-55-3	Benzo(a)anthracene	ND	280	ug/kg	
50-32-8	Benzo(a)pyrene	ND	280	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	280	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	280	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	280	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	465	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	570	ug/kg	
86-74-8	Carbazole	ND	280	ug/kg	
218-01-9	Chrysene	316	280	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-14, 8' -8.5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-4	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	280	ug/kg	
132-64-9	Dibenzofuran	ND	280	ug/kg	
84-74-2	Di-n-butyl phthalate	524	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	9840	280	ug/kg	
206-44-0	Fluoranthene	606	280	ug/kg	
86-73-7	Fluorene	ND	280	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	570	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	280	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	336	280	ug/kg	
88-74-4	2-Nitroaniline	ND	570	ug/kg	
99-09-2	3-Nitroaniline	ND	570	ug/kg	
100-01-6	4-Nitroaniline	ND	570	ug/kg	
91-20-3	Naphthalene	971	280	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	326	280	ug/kg	
129-00-0	Pyrene	670	280	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		30-130%
4165-62-2	Phenol-d5	47%		30-130%
118-79-6	2,4,6-Tribromophenol	70%		30-130%
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	61%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	SB-14, 8' -8.5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-4	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	71%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-14, 8' -8.5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-4	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	85.0
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.8	0.90	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Barium	140	4.5	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Cadmium	< 0.36	0.36	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Chromium	21.8	0.90	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Lead	44.6	0.90	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Mercury	0.13	0.031	mg/kg	1	09/17/11	09/19/11 MA	SW846 7471B ¹	SW846 7471B ³
Selenium	< 0.90	0.90	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Silver	< 0.45	0.45	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA13400

(2) Instrument QC Batch: MA13404

(3) Prep QC Batch: MP17742

(4) Prep QC Batch: MP17747

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	SB-5, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-5	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K54909.D	1	09/20/11	GK	n/a	n/a	MSK1834
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.85 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	290	ug/kg	
71-43-2	Benzene	ND	29	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	290	ug/kg	
75-15-0	Carbon disulfide	ND	290	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	290	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	290	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
591-78-6	2-Hexanone	ND	290	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
100-42-5	Styrene	ND	290	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	223	110	ug/kg	
108-88-3	Toluene	ND	290	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-5, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-5	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	110	ug/kg	
1330-20-7	Xylene (total)	ND	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	115%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-5, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-5	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27279.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	520	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	520	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	520	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	520	ug/kg	
95-48-7	2-Methylphenol	ND	520	ug/kg	
	3&4-Methylphenol	ND	520	ug/kg	
88-75-5	2-Nitrophenol	ND	520	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	ug/kg	
87-86-5	Pentachlorophenol	ND	520	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	520	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	520	ug/kg	
83-32-9	Acenaphthene	ND	260	ug/kg	
208-96-8	Acenaphthylene	ND	260	ug/kg	
120-12-7	Anthracene	ND	260	ug/kg	
56-55-3	Benzo(a)anthracene	ND	260	ug/kg	
50-32-8	Benzo(a)pyrene	ND	260	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	260	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	260	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	260	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	520	ug/kg	
86-74-8	Carbazole	ND	260	ug/kg	
218-01-9	Chrysene	ND	260	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-5	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	520	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	520	ug/kg	
91-94-1	3,3' -Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	260	ug/kg	
132-64-9	Dibenzofuran	ND	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	ND	260	ug/kg	
86-73-7	Fluorene	ND	260	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	520	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	ND	260	ug/kg	
88-74-4	2-Nitroaniline	ND	520	ug/kg	
99-09-2	3-Nitroaniline	ND	520	ug/kg	
100-01-6	4-Nitroaniline	ND	520	ug/kg	
91-20-3	Naphthalene	ND	260	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	ND	260	ug/kg	
129-00-0	Pyrene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		30-130%
4165-62-2	Phenol-d5	48%		30-130%
118-79-6	2,4,6-Tribromophenol	61%		30-130%
4165-60-0	Nitrobenzene-d5	51%		30-130%
321-60-8	2-Fluorobiphenyl	54%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	SB-5, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-5	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	63%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-5, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-5	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	93.9
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	10.5	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Barium	119	4.1	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Cadmium	< 0.33	0.33	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Chromium	21.5	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Lead	19.8	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Mercury	0.064	0.034	mg/kg	1	09/17/11	09/19/11 MA	SW846 7471B ¹	SW846 7471B ⁴
Selenium	< 0.83	0.83	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ³	SW846 3050B ⁵
Silver	< 0.41	0.41	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA13400

(2) Instrument QC Batch: MA13404

(3) Instrument QC Batch: MA13409

(4) Prep QC Batch: MP17742

(5) Prep QC Batch: MP17747

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	SB-10, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-6	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E55678.D	1	09/19/11	GK	n/a	n/a	MSE2260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.6 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	360	ug/kg	
71-43-2	Benzene	ND	36	ug/kg	
75-27-4	Bromodichloromethane	ND	140	ug/kg	
75-25-2	Bromoform	ND	140	ug/kg	
74-83-9	Bromomethane	ND	140	ug/kg	
78-93-3	2-Butanone (MEK)	ND	360	ug/kg	
75-15-0	Carbon disulfide	ND	360	ug/kg	
56-23-5	Carbon tetrachloride	ND	140	ug/kg	
108-90-7	Chlorobenzene	ND	140	ug/kg	
75-00-3	Chloroethane	ND	360	ug/kg	
67-66-3	Chloroform	ND	140	ug/kg	
74-87-3	Chloromethane	ND	360	ug/kg	
124-48-1	Dibromochloromethane	ND	140	ug/kg	
75-34-3	1,1-Dichloroethane	ND	140	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	ug/kg	
75-35-4	1,1-Dichloroethene	ND	140	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	140	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	140	ug/kg	
78-87-5	1,2-Dichloropropane	ND	140	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	140	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	140	ug/kg	
100-41-4	Ethylbenzene	ND	140	ug/kg	
591-78-6	2-Hexanone	ND	360	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	360	ug/kg	
75-09-2	Methylene chloride	ND	140	ug/kg	
100-42-5	Styrene	ND	360	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	140	ug/kg	
127-18-4	Tetrachloroethene	ND	140	ug/kg	
108-88-3	Toluene	ND	360	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	140	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	140	ug/kg	
79-01-6	Trichloroethene	ND	140	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-10, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-6	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	140	ug/kg	
1330-20-7	Xylene (total)	ND	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-10, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-6	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27280.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	310	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	620	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	620	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	620	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	620	ug/kg	
95-48-7	2-Methylphenol	ND	620	ug/kg	
	3&4-Methylphenol	ND	620	ug/kg	
88-75-5	2-Nitrophenol	ND	620	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	620	ug/kg	
108-95-2	Phenol	ND	310	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	620	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	620	ug/kg	
83-32-9	Acenaphthene	ND	310	ug/kg	
208-96-8	Acenaphthylene	ND	310	ug/kg	
120-12-7	Anthracene	319	310	ug/kg	
56-55-3	Benzo(a)anthracene	672	310	ug/kg	
50-32-8	Benzo(a)pyrene	396	310	ug/kg	
205-99-2	Benzo(b)fluoranthene	418	310	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	310	ug/kg	
207-08-9	Benzo(k)fluoranthene	396	310	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	310	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	310	ug/kg	
91-58-7	2-Chloronaphthalene	ND	310	ug/kg	
106-47-8	4-Chloroaniline	ND	620	ug/kg	
86-74-8	Carbazole	ND	310	ug/kg	
218-01-9	Chrysene	607	310	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	310	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	310	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	310	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	310	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-10, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-6	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	310	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	310	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	310	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	620	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	620	ug/kg	
91-94-1	3,3' -Dichlorobenzidine	ND	310	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	310	ug/kg	
132-64-9	Dibenzofuran	ND	310	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	310	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	310	ug/kg	
84-66-2	Diethyl phthalate	ND	310	ug/kg	
131-11-3	Dimethyl phthalate	ND	310	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	310	ug/kg	
206-44-0	Fluoranthene	1220	310	ug/kg	
86-73-7	Fluorene	ND	310	ug/kg	
118-74-1	Hexachlorobenzene	ND	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	620	ug/kg	
67-72-1	Hexachloroethane	ND	310	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	310	ug/kg	
78-59-1	Isophorone	ND	310	ug/kg	
91-57-6	2-Methylnaphthalene	ND	310	ug/kg	
88-74-4	2-Nitroaniline	ND	620	ug/kg	
99-09-2	3-Nitroaniline	ND	620	ug/kg	
100-01-6	4-Nitroaniline	ND	620	ug/kg	
91-20-3	Naphthalene	ND	310	ug/kg	
98-95-3	Nitrobenzene	ND	310	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	310	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	310	ug/kg	
85-01-8	Phenanthrene	1070	310	ug/kg	
129-00-0	Pyrene	1060	310	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		30-130%
4165-62-2	Phenol-d5	47%		30-130%
118-79-6	2,4,6-Tribromophenol	76%		30-130%
4165-60-0	Nitrobenzene-d5	56%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	SB-10, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-6	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	77%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-10, 2' -4'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-6	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	79.5
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.9	0.91	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Barium	105	4.6	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Cadmium	1.1	0.36	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Chromium	26.1	0.91	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Lead	67.2	0.91	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Mercury	0.043	0.040	mg/kg	1	09/17/11	09/19/11 MA	SW846 7471B ¹	SW846 7471B ³
Selenium	< 0.91	0.91	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴
Silver	< 0.46	0.46	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA13400

(2) Instrument QC Batch: MA13404

(3) Prep QC Batch: MP17742

(4) Prep QC Batch: MP17747

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	SB-3, 4' -5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-7	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E55679.D	1	09/19/11	GK	n/a	n/a	MSE2260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	11.2 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	1100	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	274	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	5100	100	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-3, 4' -5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-7	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-3, 4' -5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-7	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27275.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	530	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	530	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	530	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	530	ug/kg	
95-48-7	2-Methylphenol	ND	530	ug/kg	
	3&4-Methylphenol	ND	530	ug/kg	
88-75-5	2-Nitrophenol	ND	530	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	530	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	530	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	530	ug/kg	
83-32-9	Acenaphthene	ND	260	ug/kg	
208-96-8	Acenaphthylene	ND	260	ug/kg	
120-12-7	Anthracene	ND	260	ug/kg	
56-55-3	Benzo(a)anthracene	ND	260	ug/kg	
50-32-8	Benzo(a)pyrene	ND	260	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	260	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	260	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	260	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	530	ug/kg	
86-74-8	Carbazole	ND	260	ug/kg	
218-01-9	Chrysene	ND	260	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3, 4' -5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-7	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	530	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	530	ug/kg	
91-94-1	3,3' -Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	260	ug/kg	
132-64-9	Dibenzofuran	ND	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	ND	260	ug/kg	
86-73-7	Fluorene	ND	260	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	530	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	ND	260	ug/kg	
88-74-4	2-Nitroaniline	ND	530	ug/kg	
99-09-2	3-Nitroaniline	ND	530	ug/kg	
100-01-6	4-Nitroaniline	ND	530	ug/kg	
91-20-3	Naphthalene	ND	260	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	ND	260	ug/kg	
129-00-0	Pyrene	ND	260	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		30-130%
4165-62-2	Phenol-d5	48%		30-130%
118-79-6	2,4,6-Tribromophenol	53%		30-130%
4165-60-0	Nitrobenzene-d5	52%		30-130%
321-60-8	2-Fluorobiphenyl	52%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	SB-3, 4' -5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-7	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	58%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-3, 4' -5'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-7	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	94.2
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.2	0.81	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Barium	393	4.1	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Cadmium	< 0.32	0.32	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Chromium	22.2	0.81	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Lead	15.9	0.81	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵
Mercury	< 0.035	0.035	mg/kg	1	09/17/11	09/19/11 MA	SW846 7471B ¹	SW846 7471B ⁴
Selenium	< 0.81	0.81	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ³	SW846 3050B ⁵
Silver	< 0.41	0.41	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ²	SW846 3050B ⁵

(1) Instrument QC Batch: MA13400

(2) Instrument QC Batch: MA13404

(3) Instrument QC Batch: MA13409

(4) Prep QC Batch: MP17742

(5) Prep QC Batch: MP17747

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	SB-13, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-8	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.0
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E55680.D	1	09/20/11	GK	n/a	n/a	MSE2260
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.4 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	290	ug/kg	
71-43-2	Benzene	ND	29	ug/kg	
75-27-4	Bromodichloromethane	ND	120	ug/kg	
75-25-2	Bromoform	ND	120	ug/kg	
74-83-9	Bromomethane	ND	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	290	ug/kg	
75-15-0	Carbon disulfide	ND	290	ug/kg	
56-23-5	Carbon tetrachloride	ND	120	ug/kg	
108-90-7	Chlorobenzene	ND	120	ug/kg	
75-00-3	Chloroethane	ND	290	ug/kg	
67-66-3	Chloroform	ND	120	ug/kg	
74-87-3	Chloromethane	ND	290	ug/kg	
124-48-1	Dibromochloromethane	ND	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	ug/kg	
156-59-2	cis-1,2-Dichloroethene	2820	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	ug/kg	
78-87-5	1,2-Dichloropropane	ND	120	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
591-78-6	2-Hexanone	ND	290	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	ug/kg	
75-09-2	Methylene chloride	ND	120	ug/kg	
100-42-5	Styrene	ND	290	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ug/kg	
127-18-4	Tetrachloroethene	532	120	ug/kg	
108-88-3	Toluene	ND	290	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	120	ug/kg	
79-01-6	Trichloroethene	2850	120	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	SB-13, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-8	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.0
Method:	SW846 8260B		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	111%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	SB-13, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-8	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.0
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S27281.D	1	09/21/11	PR	09/17/11	OP26283	MSS1177
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
	3&4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	270	ug/kg	
208-96-8	Acenaphthylene	ND	270	ug/kg	
120-12-7	Anthracene	ND	270	ug/kg	
56-55-3	Benzo(a)anthracene	ND	270	ug/kg	
50-32-8	Benzo(a)pyrene	ND	270	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	270	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	270	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	270	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	ND	270	ug/kg	
218-01-9	Chrysene	ND	270	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	SB-13, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-8	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.0
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3' -Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	270	ug/kg	
132-64-9	Dibenzofuran	ND	270	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	548	270	ug/kg	
206-44-0	Fluoranthene	ND	270	ug/kg	
86-73-7	Fluorene	ND	270	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	270	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	270	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	270	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	ND	270	ug/kg	
129-00-0	Pyrene	ND	270	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		30-130%
4165-62-2	Phenol-d5	50%		30-130%
118-79-6	2,4,6-Tribromophenol	66%		30-130%
4165-60-0	Nitrobenzene-d5	61%		30-130%
321-60-8	2-Fluorobiphenyl	61%		30-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	SB-13, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-8	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.0
Method:	SW846 8270C SW846 3546		
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	70%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	SB-13, 4' -6'	Date Sampled:	09/14/11
Lab Sample ID:	MC3652-8	Date Received:	09/16/11
Matrix:	SO - Soil	Percent Solids:	91.0
Project:	11RJS286.5 70 Cohoes Road, Watervliet, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	8.3	0.84	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³
Barium	87.4	4.2	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³
Cadmium	< 0.34	0.34	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³
Chromium	20.7	0.84	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³
Lead	16.8	0.84	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³
Mercury	0.067	0.032	mg/kg	1	09/22/11	09/22/11 MA	SW846 7471B ²	SW846 7471B ⁴
Selenium	< 0.84	0.84	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³
Silver	< 0.42	0.42	mg/kg	1	09/19/11	09/20/11 DA	SW846 6010C ¹	SW846 3050B ³

(1) Instrument QC Batch: MA13404

(2) Instrument QC Batch: MA13414

(3) Prep QC Batch: MP17747

(4) Prep QC Batch: MP17768

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (NY)
- Chain of Custody

Client / Reporting Information Company Name: <u>RJS Environmental</u> Street Address: <u>4169 Alameda Parkway</u> City: <u>Blauvelt, NY</u> Zip: <u>14219</u> Project Contact: <u>Bryce Meybeck</u> E-mail: _____ Phone #: <u>716-312-8266</u> Fax #: _____ Sampler(s) Name(s): <u>William Sisco</u> Phone #: <u>315-242-8441</u>		Project Information Project Name: <u>11RJS 286.5</u> Street: <u>70 Cohoes Road</u> City: <u>Watkinsville, NY</u> Project#: <u>11RJS 286.5</u> Client PO#: <u>11RJS 286.5</u> Project Manager: <u>Bryce Meybeck</u> Billing Information (If different from Report to): _____		Requested Analysis (see TEST CODE sheet) Matrix Codes: <u>TCL VOCs</u> <u>TCL SVOCs</u> <u>PCRA Metals</u> Matrix Codes: <u>10F, GFS</u> <u>10EE, SF, SAH</u>	
Collection Field ID / Point of Collection: <u>TMW-1</u> Date: <u>9/14/11</u> Time: _____ Matrix: <u>US H₂O</u> # of bottles: <u>6</u> Number of preserved bottles: <u>3</u> Matrix: <u>US Soil</u> # of bottles: <u>2</u> Matrix: <u>US Soil</u> # of bottles: <u>2</u> Matrix: <u>US Soil</u> # of bottles: <u>2</u> Matrix: <u>US Soil</u> # of bottles: <u>2</u> Matrix: <u>US Soil</u> # of bottles: <u>2</u> Matrix: <u>US Soil</u> # of bottles: <u>2</u> Matrix: <u>US Soil</u> # of bottles: <u>3</u>		Data Deliverable Information ☒ Commercial "A" (Level 1) ☐ NYASP Category A ☐ Commercial "B" (Level 2) ☐ NYASP Category B ☐ FULLT1 (Level 3+4) ☐ State Forms ☐ CT RCP ☐ EDD Format ☐ MA MCP ☐ Other _____ Commercial "A" = Results Only Commercial "B" = Results + QC Summary		Comments / Special Instructions <u>* Elevated PID Readings and Evidence of Impact in field. *</u>	
Turnaround Time (Business days) ☐ Std. 10 Business Days ☒ Std. 5 Business Days (By Contract only) ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink		Approved By (Accutest PM): / Date: _____		Sample Custody must be documented below each time samples change possession, including courier delivery.	
Relinquished by: <u>William Sisco</u> Date Time: <u>9/15/11 10:35</u> Relinquished by: <u>FedEx</u> Date Time: <u>9/16/11 9:15</u>		Received By: <u>[Signature]</u> Date Time: <u>9/15/11 16:10</u> Received By: <u>[Signature]</u> Date Time: _____		Received By: <u>2 FED EX</u> Date Time: _____ Received By: _____ Date Time: _____	
Relinquished by: _____ Date Time: _____ Relinquished by: _____ Date Time: _____		Received By: _____ Date Time: _____ Received By: _____ Date Time: _____		Custody Seal # ☐ Intact ☐ Not Intact Preserved where applicable ☐ On Ice ☒ Cooler Temp. <u>1.7</u>	

MC3652: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC3652 **Client:** RJS ENV **Immediate Client Services Action Required:** No
Date / Time Received: 9/16/2011 **Delivery Method:** **Client Service Action Required at Login:** No
Project: 11RJS286.5 **No. Coolers:** 1 **Airbill #'s:** N/A

Cooler Security Y or N Y or N
 1. Custody Seals Present: ☒ ☐ 3. COC Present: ☒ ☐
 2. Custody Seals Intact: ☒ ☐ 4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature Y or N
 1. Temp criteria achieved: ☒ ☐
 2. Cooler temp verification: Infrared gun
 3. Cooler media: Ice (bag)

Quality Control Preservation Y or N N/A
 1. Trip Blank present / cooler: ☐ ☐ ☒
 2. Trip Blank listed on COC: ☐ ☐ ☒
 3. Samples preserved properly: ☒ ☐
 4. VOCs headspace free: ☒ ☐ ☐

Sample Integrity - Documentation Y or N
 1. Sample labels present on bottles: ☒ ☐
 2. Container labeling complete: ☒ ☐
 3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition Y or N
 1. Sample recvd within HT: ☒ ☐
 2. All containers accounted for: ☒ ☐
 3. Condition of sample: Intact

Sample Integrity - Instructions Y or N N/A
 1. Analysis requested is clear: ☒ ☐
 2. Bottles received for unspecified tests: ☐ ☒
 3. Sufficient volume recvd for analysis: ☒ ☐
 4. Compositing instructions clear: ☐ ☐ ☒
 5. Filtering instructions clear: ☐ ☐ ☒

Comments

APPENDIX B

WORK PLAN DATED JANUARY 17, 2012

STERLING

Sterling Environmental Engineering, P.C.

January 17, 2012

Mr. Keith Goertz
NYS Department of Environmental Conservation
Region 4
1130 N. Westcott Road
Schenectady, New York 12306-2014

Subject: Troy Belting & Supply Co.
Work Plan for Additional Environmental Investigation
STERLING File #2011-31

Dear Mr. Goertz,

As we discussed by telephone on October 19, 2011, Troy Belting & Supply Co., located at 70 Cohoes Road, Watervliet, Town of Colonie, NY, recently undertook an Environmental Transaction Screening in support of a loan application. Based on the findings of the Environmental Transaction Screening, a location was identified where soil and groundwater are potentially impacted with several volatile organic compounds (VOCs).

Based upon our review of the Environmental Transaction Screening and associated data, the following Work Plan provides for confirmation of previously reported findings and outlines recommended environmental investigations to determine the nature and extent of VOC impacted soil and water. We developed this Work Plan to address the requirements of New York State Department of Environmental Conservation (NYSDEC) DER-10 such that the data developed are intended to be usable for remedial decisions by the NYSDEC.

Bedrock Monitoring Well Installation

- Review existing bedrock geology literature for the local area to determine type of bedrock and typical fracture depths and patterns.
- Identify locations of underground utility lines and associated bedding material. These installations may provide a preferential pathway for groundwater flow and migration of contaminants.
- Install three (3) bedrock monitoring wells at the locations indicated on the attached figure.

The anticipated groundwater flow direction in the bedrock aquifer is to the east towards the Hudson River. Accordingly, one (1) monitoring well will be installed near the western subject property line to serve as the upgradient well with respect to the anticipated groundwater flow direction. This well will be drilled to 10 feet below top of bedrock to identify the extent of fractured rock and will be screened at the first-encountered water bearing fracture zone. The second monitoring well will be installed near the previously identified impacted area. The third

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well will be installed near the eastern property line downgradient of the apparent impacted area. The exact location of well placements may change based on the literature review and field conditions encountered.

- The monitoring wells will be surveyed by a licensed land surveyor for location and elevation to determine groundwater elevations in the bedrock aquifer and flow direction.
- Drilling activities will be observed by Sterling Environmental Engineering, P.C. (STERLING) at each location. STERLING will log soil type and screen soil samples with a photoionization detector (PID). One (1) soil sample will be collected at the second monitoring well location and analyzed for the parameters listed below with Category B deliverables. Soil samples from the upgradient and downgradient monitoring wells may be analyzed if PID readings or visual observations indicate contamination is present.
 - USEPA Target Compound List (TCL) Volatile Organic Compounds (VOCs) and Semi-Volatile Compounds (SVOCs) plus 30 Tentatively Identified Compounds (TICs).
 - USEPA Target Analyte List (TAL) Metals.
- All soil, bedrock cuttings and groundwater collected during well development will be contained and subsequently managed based on the analytical results.
- Well development to remove fine materials from the well casing and screen generated during drilling will be conducted at least one (1) week prior to sampling the monitoring wells.

Groundwater Quality Monitoring

Monitoring wells will be purged and sampled using low-flow methodology. This sampling technique minimizes turbidity, which allows for the collection of a representative groundwater sample while minimizing the volume of purged water.

Three (3) groundwater samples (one (1) per well), one (1) groundwater duplicate, one (1) matrix spike/matrix spike duplicate (MS/MSD) and one (1) trip blank will be analyzed for the following parameters, Category B deliverables:

- USEPA Target Compound List (TCL) Volatile Organic Compounds (VOCs) and Semi-Volatile Compounds (SVOCs) plus 30 Tentatively Identified Compounds (TICs).
- USEPA Target Analyte List (TAL) Metals.

Samples will be analyzed by a NYSDOH ELAP certified laboratory. A Data Usability Summary Report (DUSR) will be provided by an independent third party.

STERLING will provide a summary report with monitoring well installation details, analytical results, groundwater elevation contour map and findings.

Schedule

The field investigation will be scheduled following NYSDEC review and approval of the work plan.

Please contact me should you have any questions.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

A handwritten signature in cursive script, reading "Rodney L. Aldrich".

Rodney L. Aldrich, P.E.
Director of Environmental Services
rod@sterlingenvironmental.com

RLA/bc
Email/First Class Mail
Attachment

APPENDIX C

**SOIL BORING AND
BEDROCK CORE LOGS**



BORING LOG

Boring No. MW-1

Project Name: Troy Belting – Additional Environmental Investigation **Project No.:** 2011-31
Client Name: Nixon Peabody, LLP **Date:** 4/17/2012
Location: 70 Cohoes Road, Watervliet, NY 12189 **Logged By:** NJS
Weather/Temp.: Sunny, Breezy, 60°F **Checked By:** EMD

Drilling Co.: SJB Services, Inc. **Depth:** 4.7 ft (from grade)
Driller: Tom Farrell, Jason Langden (Assistant) **Equipment:** 2' length 2" I.D. Split Spoon Sampler
Date Started: 4/17/2012 **Surface Elev.:** 32.38'
Date Completed: 4/17/2012 **Depth to Water from TOC (5/4/12):** 2.02'

Depth (ft.)	Sample No.	Blow Counts/6"	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	COMMENTS PID = background \ headspace (ppm)
2	1	(0-2') 4 3 4 4	0-0.5' – dark brown SILT, some sand with roots 0.5-0.75 – brown SAND, with gravel up to 1.5" diameter, some clay 0.75-1.25 – brown SAND, with silt and clay (dry)	0-2' - 15" recovery (rec.) PID – 0.0/0.0
4	2	(2-4') 5 4 6 14	2-2.75' – gray CLAY – trace silt 2.75-3' – brown/gray weathered SHALE with silt 3-3.08' - gray CLAY – trace silt (moist)	2-4' – 13" rec. PID – 0.0/0.0
6	3	(4-4.7) 31 50/.2	4-4.42' – dark brown SILT, some sand with roots (slough) 4.42-4.71' – gray weathered SHALE, angular, up to 1.5" diameter (dry)	4-4.7 – 10" rec. PID – 0.0/0.0
			Refusal at 4.71 (see Core Log for MW-1)	Refusal at 4.71', hole is dry. Crew 3' 7/8" roller bits into rock 4.7'-5.5' No soil sample collected. See Figure 1 for Well Construction Schematic.



Sterling Environmental Engineering, P.C.

Page 1 of 1

CORE LOG

Boring No. MW-1

Project Name: Troy Belting – Additional Environmental Investigation

Project No.: 2011-31

Client Name: Nixon Peabody, LLP

Date: 4/17/2012

Location: 70 Cohoes Road, Watervliet, NY 12189

Logged By: NJS

Weather/Temp.: Sunny, Breezy, 60°F

Checked By: EMD

Drilling Co.: SJB Services, Inc.

Depth: 19' (from grade)
CME 550 – 4 1/4"

Driller: Tom Farrell, Jason Langden (Assistant)

Equipment: OD H.S. Auger

Date Started: 4/17/2012

Surface Elev.: 32.38'

Date Completed: 4/17/2012

Core Dia.: 2.5"

Depth (ft.)	DESCRIPTIVE LOG (rock type, color, grain size, texture, bedding, minerals, remarks)	Run No.	Core Rec. Run Length	% Recovery	RQD
5	5.5-6' gray, weathered SHALE	1	0.3/0.5	60	0
6					
7		2	3/3	100	61
8					
9					
10		3	0.5/0.5	100	0
11		4	4.5/5	90	69
12					
13					
14					
15	6-19' gray, fractured SHALE				
16		5	4.9/5	98	41
17					
18					
19					
	End of boring = 19'				



Sterling Environmental Engineering, P.C.

BORING LOG

Boring No. MW-2Project Name: Troy Belting – Additional Environmental InvestigationProject No.: 2011-31Client Name: Nixon Peabody, LLPDate: 4/18/2012Location: 70 Cohoes Road, Watervliet, NY 12189Logged By: NJSWeather/Temp.: Overcast, Breezy, 37°FChecked By: EMDDrilling Co.: SJB Services, Inc.Depth: 8.5 ft (from grade)Driller: Tom Farrell, Jason Langden (Assistant)Equipment: 2' length 2" I.D.
Split Spoon SamplerDate Started: 4/18/2012Surface Elev.: 33.26'Date Completed: 4/18/2012Depth to Water from TOC (5/4/12): 7.17'

Depth (ft.)	Sample No.	Blow Counts/6"	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	COMMENTS PID = background/headspace (ppm)
2	1	(0.5-2') 5 4 3 3	0-0.5' ASPHALT– 12 inch auger– no sample 0.5-0.75 dark grey SUB-BASE STONE, up to 1" diameter 0.75-1.8 dark brown GRAVEL some clay (moist)	0.5-2' – 16" recovery (rec.) Solvent odor. PID – 0.0/14.0
4	2	(2-4') 5 5 6 6	2-2.5' dark grey CLAY some gravel up to 1.5" diameter with roots 2.5-6.5' gray CLAY with brown silt (moist)	2-4' – 13" rec. Solvent odor. PID – 0.0/17.0
6	3	(4-6') 8 10 9 11	4-6.5' gray CLAY, some gravel to 1" diameter with brown silt (moist)	4-6' – 14" rec. Solvent odor. PID – 0.0/55.0
8	4	(6-8') 15 29 25 50/4	6.5-8' gray weathered SHALE, up to 1" diameter	6-8' – 14" rec. Solvent odor. PID – 0.0/86.0 (Sample (S-04) is composite of Samples 3 and 4)
	5	50/0.4 50/0.1	8-8.4' gray CLAY, some gravel with brown silt 8.4-8.5' gray CLAY with grey weathered SHALE (wet due to drill water)	Crew sets casing and flushes hole. 8-8.4' – 5" rec. PID – 0.0/64.0 Solvent odor.
			Refusal at 8.5' (see Core Log for MW-2).	8.4-8.5' – 1" rec. Crew 3 7/8" roller bits into rock 8.5-10.5' See Figure 2 for Well Construction Schematic.



Sterling Environmental Engineering, P.C.

Page 1 of 1

CORE LOG

Boring No. MW-2

Project Name: Troy Belting – Additional Environmental Investigation **Project No.:** 2011-31
Client Name: Nixon Peabody, LLP **Date:** 4/18/2012
Location: 70 Cohoes Road, Watervliet, NY 12189 **Logged By:** NJS
Weather/Temp.: Overcast, Breezy, 37°F **Checked By:** EMD

Drilling Co.: SJB Services, Inc. **Depth:** 20' (from grade)
Driller: Tom Farrell, Jason Langden (Assistant) **Equipment:** CME 550 – 4 1/4"
Date Started: 4/18/2012 **Surface Elev.:** 33.26'
Date Completed: 4/18/2012 **Core Dia.:** 2.5"

Depth (ft.)	DESCRIPTIVE LOG (rock type, color, grain size, texture, bedding, minerals, remarks)	Run No.	Core Rec.	% Recovery	RQD
			Run Length		
10	10-20' gray, fractured SHALE	1	0.6/1	60	86
11					
12					
13		2	4.8/5	96	81
14					
15					
16					
17					
18		3	3.5/3.5	100	57
19					
20					
	End of boring = 20'				



BORING LOG

Boring No. MW-3Project Name: Troy Belting – Additional Environmental InvestigationProject No.: 2011-31Client Name: Nixon Peabody, LLPDate: 4/19/2012Location: 70 Cohoes Road, Watervliet, NY 12189Logged By: NJSWeather/Temp.: Overcast, Breezy, 35°FChecked By: EMDDrilling Co.: SJB Services, Inc.Depth: 4 ft (from grade)2' length 2" I.D.Split SpoonSamplerDriller: Tom Farrell, Jason Langden (Assistant)

Equipment:

Date Started: 4/19/2012Surface Elev.: 32.18'Date Completed: 4/19/2012Depth to Water from TOC (5/4/12): 7.40'

Depth (ft.)	Sample No.	Blow Counts/6"	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	COMMENTS PID = background\headspace (ppm)
2	1	(0-2') 4 5 7 9	0-0.33' dark brown TOPSOIL, sand with silt, some roots 0.33-2.5' brown coarse sand with angular shale fragments, up to 1" diameter (dry)	0-2' - 13" recovery (rec.) No odor. PID – 0.0/0.0
4	2	(2-4') 12 15 44 55/0.1	2.5-4' gray weathered SHALE up to 1" diameter (dry)	2-4' – 13" recovery (rec.) No odor. PID – 0.0/0.0
			Refusal at 4.0' – (see Core Log for MW-3).	Crew 3' 7/8" roller bits into rock 4'-5' No soil sample collected. See Figure 3 for Well Construction Schematic.



Sterling Environmental Engineering, P.C.

Page 1 of 1

CORE LOG

Boring No. MW-3

Project Name:	<u>Troy Belting – Additional Environmental Investigation</u>	Project No.:	<u>2011-31</u>
Client Name:	<u>Nixon Peabody, LLP</u>	Date:	<u>4/19/2012</u>
Location:	<u>70 Cohoes Road, Watervliet, NY 12189</u>	Logged By:	<u>NJS</u>
Weather/Temp.:	<u>Overcast, Breezy, 35°F</u>	Checked By:	<u>EMD</u>

Drilling Co.:	<u>SJB Services, Inc.</u>	Depth:	<u>17' (from grade)</u> <u>CME 550 – 4 1/4"</u>
Driller:	<u>Tom Farrell, Jason Langden (Assistant)</u>	Equipment:	<u>OD H.S. Auger</u>
Date Started:	<u>4/19/2012</u>	Surface Elev.:	<u>32.18'</u>
Date Completed:	<u>4/19/2012</u>	Core Dia.:	<u>2.5"</u>

Depth (ft.)	DESCRIPTIVE LOG (rock type, color, grain size, texture, bedding, minerals, remarks)	Run No.	Core Rec. Run Length	% Recovery	RQD
5	5-17' gray, fractured SHALE	1	3/4	65	0
6					
7					
8					
9					
10		2	4.2/5	84	38
11					
12					
13		3	3.5/3	117	83
14					
15					
16					
17	End of boring = 17'				

APPENDIX D

WELL DEVELOPMENT FIELD NOTES



Contract
Drilling
and
Testing

Eastern New York Office
PO Box 2199
Ballston Spa, NY 12020
Phone: (518) 899-7491
FAX: (518) 899-7496

FAX TRANSMITTAL SHEET

TO: Nathan DATE: 4/27/12
COMPANY: Sterling Env.
FAX: 456-3532 NO. OF PAGES: 2 (including this cover)
FROM: Jim Vincent ORIGINAL TO BE MAILED? No
SUBJECT: Cohoes HW's - Well Dev. Field Notes

MESSAGE:

CONFIDENTIALITY NOTICE

The documents accompanying this telecopy transmission contain confidential information which is legally privileged. The information is intended only for the use of the recipient named above. If you have reached this telecopy in error, please notify us immediately at (518) 899-7491 to arrange for the return of this telecopied documents to us and you are hereby notified that any disclosure, copying, distribution, or taking of any action in reliance on the contents of this telecopied information is strictly prohibited.

4-27-12

Troy Belt

Vol

Well #	Water level	T.D.	Well	Well	
MW-1	2.40'	18.23'	2.69	3.07	Bailed dry
MW-2	3.65	19.00	2.65	7.83	
MW-3	7.50'	16.65	1.55	4.66	

Well #	Water level	Turb		
MW-1	3.0	115	Bailed dry	Slow recovery
"	6.0	205	pumped dry	No Sheen or odor
"	9.0	179	pumped dry	
"	12.0	93	pumped dry	
"	15.0	73	pumped dry	
"	17.0	51	pumped dry	
MW-3	2.0	756	pumped dry	Very Slow recovery
"	3.0	853	pumped dry	No Sheen or odor
"	4.0	190	pumped dry	
"	4.25	64	Bailed dry	
"	4.50	47	Bailed dry	
MW-2	1.0	757	-	Very Slow recovery
"	2.5	276	pumped dry	No Sheen or odor
"	3.5	884	pumped dry	
"	4.0	217	pumped dry	
"	4.5	122	Bailed dry	
"	5.0	94	Bailed dry	
"	5.5	60	Bailed dry	

all wells were Surged with 1 1/4" x 4" PVC Surge Block
while pump was down between wells

APPENDIX E

MONITORING WELL SURVEY MONITORING WELL ELEVATIONS

NOTES:

- 1) THE ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, AS TRANSFERRED FROM A UNITED STATES COAST AND GEODETIC SURVEY DISK LOCATED ON ARCH STREET, IN GREEN ISLAND, NY. FOR FURTHER INFORMATION SEE THE FLOOD INSURANCE RATE MAP FOR THE VILLAGE OF GREEN ISLAND, NY, COMMUNITY PANEL NO. 360009 0001 B, PRODUCED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, WHERE SAID DISK IS REFERRED TO AS RM5 AND DESCRIBED MORE FULLY.
- 2) ALL MONITORING WELLS SHOWN HEREON WERE INSTALLED FLUSH WITH THE SURFACE THEREFORE GROUND ELEVATION AND TOP OF CASING ELEVATION ARE THE SAME.



APPROXIMATE PROPERTY LINE

ASPHALT PARKING LOT

MW-2
ELV. = 33.26'

MW-3
ELV. = 32.18'

LAWN AREA

BRICK COMMERCIAL / INDUSTRIAL BUILDING
KNOWN AS TROY BELTING & SUPPLY COMPANY, INC.
70 COHOES ROAD WATERVLIET, NY

LAWN AREA

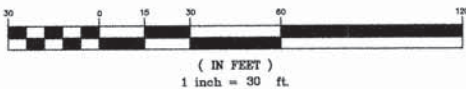
MW 1
ELV. = 32.38'

ASPHALT PARKING LOT

COHOES ROAD - NYS ROUTE 32

ELM STREET

GRAPHIC SCALE



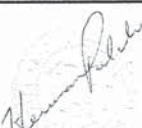
LEGEND

- MW 1  MONITORING WELL LOCATED
ELV. = 32.38' ELEVATION IN FEET ABOVE SEA LEVEL (SEE NOTES)

CORNERSTONE
SURVEYING & MAPPING
189 NORTH LAKE AVENUE (518) 326-2585
TROY, NY 12180

Unauthorized alteration or addition to this drawing is a violation of Section 7209, Subdivision 2 of the New York State Education Law. Only copies made from the original of this drawing, and marked with an original of the Land Surveyor's seal and their original signature shall be considered to be valid true copies.

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HERMAN PULCHER, LS
NY LIC. NO. 050377

NO.	DATE	REVISION	BY

MONITORING WELL SURVEY
TROY BELTING & SUPPLY COMPANY, INC.
70 COHOES ROAD WATERVLIET, NY
TAX MAP NO. 20.20-1-4 TOWN OF COLONIE
ALBANY COUNTY STATE OF NEW YORK
DATE: APRIL 28, 2012 SCALE: 1' = 30'
CAD FILE: TBS JOB NO. 12-011 SHEET 1 OF 1

CORNERSTONE SURVEYING & MAPPING

May 1, 2012

Troy Belting & Supply Company, Inc.
70 Cohoes Road
Watervliet, NY 12189

Attention: David Barcomb

MONITORING WELL ELEVATIONS

<u>Well No.</u>	<u>Ground Elevation / Top Casing Elevation</u>	<u>Location</u>
1	32.38' / 32.00'	In lawn area off south west corner of building
2	33.26' / 32.91'	In asphalt parking lot off north side of building
3	32.18' / 31.69'	In lawn area off north east corner of building

The elevations were determined from transferring elevations from a United States Coast and Geodetic Survey Disk located on Arch Street in Green Island and are referenced to the National Geodetic Vertical Datum of 1929.



A handwritten signature in cursive script that reads "Herman Pulcher".

Herman Pulcher, LS

APPENDIX F
LOW FLOW SAMPLING DATA SHEETS

Low Flow Purging / Sampling Data Sheet

Project: Troy Belting Site: Troy Belting
 Well No.: MW-1 Date: 5/4/2012
 Well Depth: 18.23' Screen Length: 8.23 – 18.23'
 Well Diameter: 2" Casing Type: 2" PVC Casing
 Sampling Device: Peristaltic Pump Tubing Type: HDPE 1/4" OD x 3/16" ID
 Static Water Level: 2.02' from TOC Tubing Depth: 15 - 17'
 Sampling Personnel: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm ²) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
1:10 pm	0.36	3.00	0.98	6.96	12.98	0.420	-55.5	0.97	45.3
1:13 pm	0.36	3.48	1.46	6.96	12.85	0.415	-50.5	0.60	49.9
1:15 pm	0.26	4.11	2.09	6.96	12.76	0.396	-47.4	0.51	34.3
1:18 pm	0.32	4.34	2.32	6.97	12.71	0.393	-46.9	0.47	29.3
1:21 pm	0.34	4.53	2.51	6.97	12.66	0.393	-47.9	0.48	25.9
1:24 pm	0.34	4.71	2.69	6.98	12.81	0.389	-49.7	0.51	22.2
1:27 pm	0.33	4.80	2.78	6.98	12.71	0.389	-52.7	0.54	20.9
1:30 pm	0.34	5.02	3.00	6.98	12.68	0.388	-54.9	0.54	19.7

Low Flow Purging / Sampling Data Sheet

Project:	Troy Belting	Site:	Troy Belting
Well No.:	MW-2	Date:	5/4/2012
Well Depth:	19.00'	Screen Length:	9 – 19'
Well Diameter:	2"	Casing Type:	2" PVC Casing
Sampling Device:	Peristaltic Pump	Tubing Type:	HDPE 1/4" OD x 3/16" ID
Static Water Level:	7.17' from TOC	Tubing Depth:	16 - 18'
Sampling Personnel:	Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.		

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1 m)	pH (± 0.1)	Temp. ($^{\circ}$ C) ($\pm 3\%$)	SC (mS/cm ²) ($\pm 3\%$)	ORP (mV) (± 10)	DO (mg/L) ($\pm 10\%$)	Turbidity (nTu)($\pm 10\%$)
10:00 am	0.34	7.51	0.34	7.10	13.11	1.359	119.6	7.88	12.4
10:03 am	0.30	7.52	0.35	7.09	13.03	1.359	117.4	7.76	10.68
10:06 am	0.30	8.69	1.52	7.09	13.08	1.350	115.2	7.87	9.47
10:09 am	0.20	9.68	2.51	7.08	13.18	1.343	112.7	8.20	8.47
10:12 am	0.22	10.11	2.94	7.10	13.20	1.347	110.2	8.22	7.79

Low Flow Purging / Sampling Data Sheet

Project: Well No.:	Troy Belting MW-3	Site: Date:	Troy Belting 5/4/2012
Well Depth: Well Diameter:	16.65' 2"	Screen Length: Casing Type:	6.65 – 16.65' 2" PVC Casing
Sampling Device: Static Water Level:	Peristaltic Pump 7.40' from TOC	Tubing Type: Tubing Depth:	HDPE 1/4" OD x 3/16" ID 13 - 16'
Sampling Personnel:	Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.		

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (<0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm ²) (± 3%)	ORP (mV) (± 10)	DO (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
11:00 am	0.40	8.11	0.71	7.25	12.24	1.798	101.0	1.49	7.09
11:03 am	0.42	8.91	1.51	7.23	12.10	1.674	68.0	0.88	4.26
11:06 am	0.44	10.35	2.95	7.19	11.63	1.429	55.6	1.62	16.7
11:09 am	0.44	11.59	4.10	7.18	11.63	1.392	61.0	1.62	39.3
11:12 am	0.42	12.35	4.95	7.15	11.75	1.781	62.9	2.27	66.6
11:15 am	0.40	13.42	6.02	7.17	12.03	1.834	70.3	1.45	24.5
11:18 am	0.42	14.08	6.68	7.18	12.08	1.865	73.2	1.46	35.7
11:21 am	0.42	15.50	8.10	7.21	12.07	1.835	80.2	1.61	23.6
	Purged Dry								

Report Date:
24-May-12 16:23



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sterling Environmental Engineering P.C.
24 Wade Road
Latham, NY 12110

Work Order: L0935
Project : Town of Colonie
Project #:

Attn: Rodney Aldrich

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L0935-01	MW-1	Aqueous	04-May-12 13:20	05-May-12 08:25
L0935-02	MW-2	Aqueous	04-May-12 10:15	05-May-12 08:25
L0935-03	MW-3	Aqueous	04-May-12 12:45	05-May-12 08:25
L0935-04	TRIP BLANK	Aqueous	04-May-12 00:00	05-May-12 08:25
L0935-05	DUP-1	Aqueous	04-May-12 12:00	05-May-12 08:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Town of Colonie

SDG : L0935

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-1	L0935-01	SW8260_W	SW8270_W		SW6010_W	
MW-1	L0935-01				SW7470	
MW-2	L0935-02	SW8260_W	SW8270_W		SW6010_W	
MW-2	L0935-02				SW7470	
MW-3	L0935-03	SW8260_W	SW8270_W		SW6010_W	
MW-3	L0935-03				SW7470	
TRIP BLANK	L0935-04	SW8260_W				
DUP-1	L0935-05	SW8260_W	SW8270_W		SW6010_W	
DUP-1	L0935-05				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Town of Colonie

SDG : L0935

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L0935-01A	AQ	5/4/2012	5/5/2012	NA	5/17/2012
L0935-01AMS	AQ	5/4/2012	5/5/2012	NA	5/17/2012
L0935-01AMSD	AQ	5/4/2012	5/5/2012	NA	5/17/2012
L0935-02A	AQ	5/4/2012	5/5/2012	NA	5/17/2012
L0935-02ADL	AQ	5/4/2012	5/5/2012	NA	5/18/2012
L0935-03A	AQ	5/4/2012	5/5/2012	NA	5/18/2012
L0935-04A	AQ	5/4/2012	5/5/2012	NA	5/17/2012
L0935-05A	AQ	5/4/2012	5/5/2012	NA	5/18/2012
L0935-05ADL	AQ	5/4/2012	5/5/2012	NA	5/18/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSSEMI

Project Name : Town of Colonie

SDG : L0935

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
L0935-01B	AQ	5/4/2012	5/5/2012	5/9/2012	5/11/2012
L0935-01BMS	AQ	5/4/2012	5/5/2012	5/9/2012	5/11/2012
L0935-01BMSD	AQ	5/4/2012	5/5/2012	5/9/2012	5/11/2012
L0935-02B	AQ	5/4/2012	5/5/2012	5/9/2012	5/11/2012
L0935-03B	AQ	5/4/2012	5/5/2012	5/16/2012	5/11/2012
L0935-03BRE	AQ	5/4/2012	5/5/2012	5/16/2012	5/16/2012
L0935-05B	AQ	5/4/2012	5/5/2012	5/9/2012	5/11/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Town of Colonie

SDG : L0935

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L0935-01A	AQ	SW8260_W	NA	LOW	1
L0935-01AMS	AQ	SW8260_W	NA	LOW	1
L0935-01AMSD	AQ	SW8260_W	NA	LOW	1
L0935-02A	AQ	SW8260_W	NA	LOW	1
L0935-02ADL	AQ	SW8260_W	NA	LOW	2500
L0935-03A	AQ	SW8260_W	NA	LOW	1
L0935-04A	AQ	SW8260_W	NA	LOW	1
L0935-05A	AQ	SW8260_W	NA	LOW	100
L0935-05ADL	AQ	SW8260_W	NA	LOW	1600

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSSEMI

Project Name : Town of Colonie

SDG : L0935

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
L0935-01B	AQ	SW8270_W	3510C	NA	1
L0935-01BMS	AQ	SW8270_W	3510C	NA	1
L0935-01BMSD	AQ	SW8270_W	3510C	NA	1
L0935-02B	AQ	SW8270_W	3510C	NA	1
L0935-03B	AQ	SW8270_W	3510C	NA	1
L0935-03BRE	AQ	SW8270_W	3510C	NA	1
L0935-05B	AQ	SW8270_W	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary ME

Project Name : Town of Colonie

SDG : L0935

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L0935-01C	AQ	SW6010_W	5/5/2012	5/21/2012
L0935-01CDUP	AQ	SW6010_W	5/5/2012	5/21/2012
L0935-01CMS	AQ	SW6010_W	5/5/2012	5/21/2012
L0935-02C	AQ	SW6010_W	5/5/2012	5/21/2012
L0935-03C	AQ	SW6010_W	5/5/2012	5/21/2012
L0935-05C	AQ	SW6010_W	5/5/2012	5/21/2012
SW7470				
L0935-01C	AQ	SW7470	5/5/2012	5/15/2012
L0935-01CDUP	AQ	SW7470	5/5/2012	5/15/2012
L0935-01CMS	AQ	SW7470	5/5/2012	5/15/2012
L0935-02C	AQ	SW7470	5/5/2012	5/15/2012
L0935-03C	AQ	SW7470	5/5/2012	5/15/2012
L0935-05C	AQ	SW7470	5/5/2012	5/15/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0935

Client ID: STERLING

Project: Town of Colonie

WO Name: Town of Colonie

Location: STERLING_COLONIE,

Comments: Include TICs

Case:

SDG:

PO: 2011-31

HC Due: 05/24/12

Fax Due:

Fax Report: ☐

Report Level: ASP-B

Special Program:

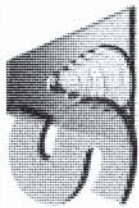
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0935-01A	MW-1	05/04/2012 13:20	05/05/2012	Aqueous	SW8260_W	/ +TICs			Y		VOA
L0935-01B	MW-1	05/04/2012 13:20	05/05/2012	Aqueous	SW8270_W	/ +TICs			Y		E2
L0935-01C	MW-1	05/04/2012 13:20	05/05/2012	Aqueous	SW6010_W	/ TAL,			Y	Y	E2
L0935-01C	MW-1	05/04/2012 13:20	05/05/2012	Aqueous	SW7470	/			Y	Y	E2
L0935-02A	MW-2	05/04/2012 10:15	05/05/2012	Aqueous	SW8260_W	/ +TICs					VOA
L0935-02B	MW-2	05/04/2012 10:15	05/05/2012	Aqueous	SW8270_W	/ +TICs					E2
L0935-02C	MW-2	05/04/2012 10:15	05/05/2012	Aqueous	SW6010_W	/ TAL,			Y	E2	
L0935-02C	MW-2	05/04/2012 10:15	05/05/2012	Aqueous	SW7470	/				E2	
L0935-03A	MW-3	05/04/2012 12:45	05/05/2012	Aqueous	SW8260_W	/ +TICs					VOA
L0935-03B	MW-3	05/04/2012 12:45	05/05/2012	Aqueous	SW8270_W	/ +TICs					E2
L0935-03C	MW-3	05/04/2012 12:45	05/05/2012	Aqueous	SW6010_W	/ TAL,			Y	E2	
L0935-03C	MW-3	05/04/2012 12:45	05/05/2012	Aqueous	SW7470	/				E2	
L0935-04A	TRIP BLANK	05/04/2012 00:00	05/05/2012	Aqueous	SW8260_W	/ +TICs					VOA
L0935-05A	DUP-1	05/04/2012 12:00	05/05/2012	Aqueous	SW8260_W	/ +TICs					VOA
L0935-05B	DUP-1	05/04/2012 12:00	05/05/2012	Aqueous	SW8270_W	LIMITED VOLUME USE CAUTION / +TICs					E2
L0935-05C	DUP-1	05/04/2012 12:00	05/05/2012	Aqueous	SW6010_W	/ TAL,			Y	E2	
L0935-05C	DUP-1	05/04/2012 12:00	05/05/2012	Aqueous	SW7470	/				E2	

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

TAT- Indicate Date Needed: 5/5/12

- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: Liz Davis

Sterling Environmental Eng. PC.

24 Wade Road

Latham NY 12110

Project Mgr.: Liz Davis

Invoice To: Same as Report

Project No.: 2011-31

Site Name: Town of Colonie (Tray Belting)

Location: 70 Cohoes Road State: NY

Sampler(s): Charlotte Verboef

P.O. No.: _____ RQN: _____

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= _____ 10= _____ 11= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

List preservative code below:

2 3

Notes:

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Analyses:

TCL VOCs

TCL SVOCs

PWS 30 TICS

TAL Metals

QA/QC Reporting Level

☐ Level I

☐ Level II

☐ Level III

☒ Level IV

☒ Other Cat B

State specific reporting standards:

G=Grab C=Composite

Matrix

Type

Lab Id: Sample Id: Date: Time:

01 MW-1 4/5/12 1:20 G

02 MW-2 4/5/12 10:15 G

03 MW-3 4/5/12 12:45 G

04 TRIP BLANK

☒ E-mail to Liz.davis@sterlingenvironmental.com
Charlotte Verboef

EDD Format _____

Condition upon receipt: ☒ Iced ☐ Ambient 4.0

Relinquished by:

Charlotte Verboef

Received by:

APV

Date:

4/5/12

Time:

4:00pm

Date:

5/5/12

Time:

8:25



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: STD TAT
TAT- Indicate Date Needed: STD TAT
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: Liz Davis
Sterling Environmental Eng. P.C.
24 Wade Road
Latham, NY 12110
Project Mgr.: Liz Davis

Invoice To: Same as Report

P.O. No.: RQN:

Project No.: 2011-31
Site Name: Town of Colonie (Tray Belling)
Location: 70 Concord Road State: NY
Sampler(s): Charlotte Verhoef

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9=10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

QA/QC Reporting Level

☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other NYS ASP
Cat. B.

State specific reporting standards:

List preservative code below:

2 3

Containers:

of VOA Vials
of Amber Glass
of Clear Glass
of Plastic

Matrix

Type

Lab Id: OS Sample Id: DVP-1 Date: 5/4/12 Time: 12:00

MS (MW-1) 5/4/12 11:40

MSD (MW-1) 5/4/12 11:40

TRP Blank

✉ E-mail to Liz Davis sterlingenvironmental.com
Charlotte.Verhoef@sterlingenvironmental.com
EDD Format

Relinquished by: Charlotte Verhoef

Received by:

Date:

Time:

4/5/12 4:00pm

5/5/12 8:25

Condition upon receipt: ☒ Iced ☐ Ambient 4.0

Received By: <i>[Signature]</i>		Page 01 of 00	
Reviewed By: <i>[Signature]</i>		Log-in Date 05/05/2012	
Work Order: L0935		Client Name: Sterling Environmental Engineering P.C.	
Project Name/Event: Town of Colonie			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
L0935-01		<2				H	
L0935-02		<2				H	
L0935-03		<2				H	
L0935-04						H	
L0935-05		<2				H	

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 7935 2453 1700,
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed /
	Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	4, 4 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	05/05/2012
12. Time Received	08:25
Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On
IR Temp Gun ID: MT-1	
Coolant Condition: ICE	
Preservative Name/Lot No:	

VOA Matrix Key:

US = Unpreserved Soil A = Air

UA = Unpreserved Aqueous H = HCl

M = MeOH E = Encore

N = NaHSO4 F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No *JV 5/5/12*

Rad OK Yes / No

Spectrum Analytical, Inc. RI Division Sample Condition Notification

Project#: L0935Date of Receipt: 5/5/12Client: Sterling EnvironmentalReceived By: JVClient project #/name: Sterling Colonie

Unusual Occurance Description:

One bottle for sample DVP-01 (L0935-QSR)
was received broken. There is one, one liter
remaining

Client Contacted:

Contacted via: Phone/Fax/E-mail

Date: _____ Time: _____

Contacted By: _____

Name of person contacted: _____

Client Response:

Responded via: Phone/Fax/E-mail

Date: _____

Name of person responding: _____

Responding to: _____

Action Taken: _____



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L0935

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA
Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

Instrument Code: V6
Instrument Type: GCMS-VOA
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 5973
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-66208 in batch 66208, Percent Recovery is outside QC Limits, recovery is below criteria for 2,2-Dichloropropane at 63% with criteria of (70-135).

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spikes were performed on samples: MW-1 (L0935-01AMS) and MW-1 (L0935-01AMSD).

Percent recoveries were within the QC limits with the following exceptions:

MW-1 (L0935-01AMS) Percent Recovery is outside QC Limits, recovery is below criteria for 2,2-Dichloropropane at 39% with criteria of (70-135), 4-Isopropyltoluene at 71% with criteria of (75-130), n-Butylbenzene at 69% with criteria of (70-135) and Xylene (Total) at 80% with criteria of (81-121).

MW-1 (L0935-01AMSD) Percent Recovery is outside QC Limits, recovery is below criteria for 2,2-Dichloropropane at 37% with criteria of (70-135).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

MW-2 (L0935-02ADL) : Dilution Factor: 2500

DUP-1 (L0935-05A) : Dilution Factor: 100

DUP-1 (L0935-05ADL) : Dilution Factor: 1600

G. Samples:

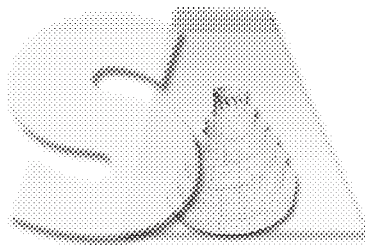
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.' or similar, written in a cursive style.

Signed: _____

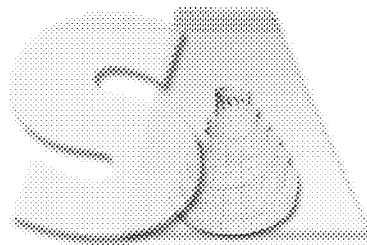
Date: _____ 5/24/2012 _____



SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-66208	101	99	100	100				0
02	MB-66208	102	98	102	93				0
03	TRIP BLANK	103	99	100	91				0
04	MW-1	103	100	102	92				0
05	MW-2	99	97	101	105				0
06	LCS-66227	98	96	101	100				0
07	MB-66227	100	97	99	101				0
08	MW-1MS	105	105	104	103				0
09	MW-1MSD	99	98	101	100				0
10	DUP-1	100	101	100	100				0
11	LCS-66235	100	97	101	98				0
12	MB-66235	100	99	100	100				0
13	MW-2DL	98	97	99	100				0
14	MW-3	98	97	99	100				0
15	DUP-1DL	100	97	100	102				0

QC LIMITS
 (85-115)
 (70-120)
 (85-120)
 (75-120)

VDMC1 (DBFM) Dibromofluoromethane
 VDMC2 (DCE) = 1,2-Dichloroethane-d4
 VDMC3 (TOL) = Toluene-d8
 VDMC4 (BFB) = Bromofluorobenzene
 # Column to be used to flag recovery values
 * Values outside of contract required QC limits

som111.10.27.A

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix Spike - EPA Sample No.: MW-1 Level: (TRACE or LOW) LOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	43.1204	86		30-155
Chloromethane	50.0000	0.0000	42.9092	86		40-125
Vinyl chloride	50.0000	1.4802	43.3226	84		50-145
Bromomethane	50.0000	0.0000	37.5674	75		30-145
Chloroethane	50.0000	0.0000	40.8939	82		60-135
Trichlorofluoromethane	50.0000	0.0000	43.2575	87		60-145
1,1-Dichloroethene	50.0000	0.0000	41.1007	82		70-130
Acetone	50.0000	0.0000	39.0006	78		40-140
Iodomethane	50.0000	0.0000	40.8713	82		72-121
Carbon disulfide	50.0000	0.0000	41.5212	83		35-160
Methylene chloride	50.0000	0.0000	40.6255	81		55-140
trans-1,2-Dichloroethene	50.0000	0.0000	40.3673	81		60-140
Methyl tert-butyl ether	50.0000	0.0000	45.1102	90		65-125
1,1-Dichloroethane	50.0000	0.0000	42.4064	85		70-135
Vinyl acetate	50.0000	0.0000	31.9039	64		38-163
2-Butanone	50.0000	0.0000	40.6237	81		30-150
cis-1,2-Dichloroethene	50.0000	0.7569	42.0882	83		70-125
2,2-Dichloropropane	50.0000	0.0000	19.5580	39	*	70-135
Bromochloromethane	50.0000	0.0000	43.7182	87		65-130
Chloroform	50.0000	0.0000	42.7956	86		65-135
1,1,1-Trichloroethane	50.0000	0.0000	40.1989	80		65-130
1,1-Dichloropropene	50.0000	0.0000	40.8900	82		75-130
Carbon tetrachloride	50.0000	0.0000	42.2400	84		65-140
1,2-Dichloroethane	50.0000	0.0000	43.4864	87		70-130
Benzene	50.0000	0.0000	42.2163	84		80-120
Trichloroethene	50.0000	0.0000	41.2750	83		70-125
1,2-Dichloropropane	50.0000	0.0000	42.9880	86		75-125
Dibromomethane	50.0000	0.0000	44.9601	90		75-125
Bromodichloromethane	50.0000	0.0000	43.6370	87		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	40.1211	80		70-130
4-Methyl-2-pentanone	50.0000	0.0000	46.4546	93		60-135
Toluene	50.0000	0.0000	41.2138	82		75-120
trans-1,3-Dichloropropene	50.0000	0.0000	41.3253	83		55-140
1,1,2-Trichloroethane	50.0000	0.0000	43.5744	87		75-125
1,3-Dichloropropane	50.0000	0.0000	42.4275	85		75-125
Tetrachloroethene	50.0000	0.0000	37.6285	75		45-150
2-Hexanone	50.0000	0.0000	40.3143	81		55-130
Dibromochloromethane	50.0000	0.0000	44.4740	89		60-135
1,2-Dibromoethane	50.0000	0.0000	43.9856	88		80-120
Chlorobenzene	50.0000	0.0000	40.4201	81		80-120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	41.2976	83		80-130
Ethylbenzene	50.0000	0.0000	38.6146	77		75-125
m,p-Xylene	100.0000	0.0000	79.5513	80		75-130
o-Xylene	50.0000	0.0000	40.1547	80		80-120

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix Spike - EPA Sample No.: MW-1 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	119.7061	80	*	81-121
Styrene	50.0000	0.0000	41.7385	83		65-135
Bromoform	50.0000	0.0000	45.8438	92		70-130
Isopropylbenzene	50.0000	0.0000	39.3863	79		75-125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	42.4669	85		65-130
Bromobenzene	50.0000	0.0000	40.0566	80		75-125
1,2,3-Trichloropropane	50.0000	0.0000	41.0705	82		75-125
n-Propylbenzene	50.0000	0.0000	37.2160	74		70-130
2-Chlorotoluene	50.0000	0.0000	39.6599	79		75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	37.5311	75		75-130
4-Chlorotoluene	50.0000	0.0000	37.5146	75		75-130
tert-Butylbenzene	50.0000	0.0000	38.6329	77		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	37.5948	75		75-130
sec-Butylbenzene	50.0000	0.0000	36.5429	73		70-125
4-Isopropyltoluene	50.0000	0.0000	35.4485	71	*	75-130
1,3-Dichlorobenzene	50.0000	0.0000	37.9260	76		75-125
1,4-Dichlorobenzene	50.0000	0.0000	38.2973	77		75-125
n-Butylbenzene	50.0000	0.0000	34.4119	69	*	70-135
1,2-Dichlorobenzene	50.0000	0.0000	39.4670	79		70-120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	45.5273	91		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	34.7229	69		65-135
Hexachlorobutadiene	50.0000	0.0000	30.3976	61		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	36.4074	73		55-140
Naphthalene	50.0000	0.0000	41.1995	82		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	QC LIMITS	
						RPD	REC.
Dichlorodifluoromethane	50.0000	40.6804	81		6	0-40	30-155
Chloromethane	50.0000	41.6620	83		3	0-40	40-125
Vinyl chloride	50.0000	41.7137	80		4	0-40	50-145
Bromomethane	50.0000	36.2770	73		3	0-40	30-145
Chloroethane	50.0000	39.9225	80		2	0-40	60-135
Trichlorofluoromethane	50.0000	42.0361	84		3	0-40	60-145
1,1-Dichloroethene	50.0000	39.4855	79		4	0-40	70-130
Acetone	50.0000	38.6039	77		1	0-40	40-140
Iodomethane	50.0000	42.0662	84		3	0-40	72-121
Carbon disulfide	50.0000	41.3899	83		0	0-40	35-160
Methylene chloride	50.0000	39.3509	79		3	0-40	55-140
trans-1,2-Dichloroethene	50.0000	39.9594	80		1	0-40	60-140
Methyl tert-butyl ether	50.0000	43.8353	88		3	0-40	65-125
1,1-Dichloroethane	50.0000	40.9753	82		3	0-40	70-135
Vinyl acetate	50.0000	27.8267	56		14	0-40	38-163
2-Butanone	50.0000	40.0806	80		1	0-40	30-150
cis-1,2-Dichloroethene	50.0000	40.9726	80		3	0-40	70-125
2,2-Dichloropropane	50.0000	18.4746	37	*	6	0-40	70-135
Bromochloromethane	50.0000	42.4207	85		3	0-40	65-130

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix Spike - EPA Sample No.: MW-1 Level: (TRACE or LOW) LOW

Chloroform	50.0000	41.3978	83		3	0-40	65-135
1,1,1-Trichloroethane	50.0000	40.1634	80		0	0-40	65-130
1,1-Dichloropropene	50.0000	39.2579	79		4	0-40	75-130
Carbon tetrachloride	50.0000	41.5295	83		2	0-40	65-140
1,2-Dichloroethane	50.0000	42.2071	84		3	0-40	70-130
Benzene	50.0000	42.0683	84		0	0-40	80-120
Trichloroethene	50.0000	40.1880	80		3	0-40	70-125
1,2-Dichloropropane	50.0000	41.8599	84		3	0-40	75-125
Dibromomethane	50.0000	42.8783	86		5	0-40	75-125
Bromodichloromethane	50.0000	41.9503	84		4	0-40	75-120
cis-1,3-Dichloropropene	50.0000	38.5708	77		4	0-40	70-130
4-Methyl-2-pentanone	50.0000	44.6680	89		4	0-40	60-135
Toluene	50.0000	40.1653	80		3	0-40	75-120
trans-1,3-Dichloropropene	50.0000	40.7414	81		1	0-40	55-140
1,1,2-Trichloroethane	50.0000	42.2748	85		3	0-40	75-125
1,3-Dichloropropane	50.0000	43.2431	86		2	0-40	75-125
Tetrachloroethene	50.0000	40.0971	80		6	0-40	45-150
2-Hexanone	50.0000	40.1099	80		1	0-40	55-130
Dibromochloromethane	50.0000	44.2170	88		1	0-40	60-135
1,2-Dibromoethane	50.0000	43.7812	88		0	0-40	80-120
Chlorobenzene	50.0000	41.9841	84		4	0-40	80-120
1,1,1,2-Tetrachloroethane	50.0000	42.1670	84		2	0-40	80-130
Ethylbenzene	50.0000	40.2833	81		4	0-40	75-125
m,p-Xylene	100.0000	81.3172	81		2	0-40	75-130
o-Xylene	50.0000	41.6441	83		4	0-40	80-120
Xylene (Total)	150.0000	122.9613	82		3	0-40	81-121
Styrene	50.0000	42.6652	85		2	0-40	65-135
Bromoform	50.0000	45.5540	91		1	0-40	70-130
Isopropylbenzene	50.0000	40.4854	81		3	0-40	75-125
1,1,2,2-Tetrachloroethane	50.0000	44.1083	88		4	0-40	65-130
Bromobenzene	50.0000	42.7931	86		7	0-40	75-125
1,2,3-Trichloropropane	50.0000	41.8983	84		2	0-40	75-125
n-Propylbenzene	50.0000	41.7699	84		12	0-40	70-130
2-Chlorotoluene	50.0000	42.8020	86		8	0-40	75-125
1,3,5-Trimethylbenzene	50.0000	40.9363	82		9	0-40	75-130
4-Chlorotoluene	50.0000	41.3953	83		10	0-40	75-130
tert-Butylbenzene	50.0000	41.8254	84		8	0-40	70-130
1,2,4-Trimethylbenzene	50.0000	40.8220	82		8	0-40	75-130
sec-Butylbenzene	50.0000	39.8274	80		9	0-40	70-125
4-Isopropyltoluene	50.0000	39.2430	78		10	0-40	75-130
1,3-Dichlorobenzene	50.0000	41.5584	83		9	0-40	75-125
1,4-Dichlorobenzene	50.0000	41.6008	83		8	0-40	75-125
n-Butylbenzene	50.0000	37.8622	76		10	0-40	70-135
1,2-Dichlorobenzene	50.0000	42.1453	84		7	0-40	70-120
1,2-Dibromo-3-chloropropan	50.0000	47.8168	96		5	0-40	50-130
1,2,4-Trichlorobenzene	50.0000	38.2518	77		10	0-40	65-135
Hexachlorobutadiene	50.0000	33.8182	68		11	0-40	50-140

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix Spike - EPA Sample No.: MW-1 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	40.2920	81		10		0-40	55-140
Naphthalene	50.0000	46.4248	93		12		0-40	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 5 out of 136 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66208

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66208 LCS Lot No.: _____
Date Extracted: 05/16/2012 Date Analyzed (1): 05/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	37.3737	75		30 - 155
Chloromethane	50.0000	0.0000	43.1129	86		40 - 125
Vinyl chloride	50.0000	0.0000	45.8037	92		50 - 145
Bromomethane	50.0000	0.0000	52.3289	105		30 - 145
Chloroethane	50.0000	0.0000	46.3838	93		60 - 135
Trichlorofluoromethane	50.0000	0.0000	43.8147	88		60 - 145
1,1-Dichloroethene	50.0000	0.0000	42.5805	85		70 - 130
Acetone	50.0000	0.0000	30.0919	60		40 - 140
Iodomethane	50.0000	0.0000	47.1160	94		72 - 121
Carbon disulfide	50.0000	0.0000	40.1712	80		35 - 160
Methylene chloride	50.0000	0.0000	45.4068	91		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	42.8739	86		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	45.4282	91		65 - 125
1,1-Dichloroethane	50.0000	0.0000	44.3792	89		70 - 135
Vinyl acetate	50.0000	0.0000	44.9217	90		38 - 163
2-Butanone	50.0000	0.0000	35.6882	71		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	44.3671	89		70 - 125
2,2-Dichloropropane	50.0000	0.0000	31.6314	63	*	70 - 135
Bromochloromethane	50.0000	0.0000	45.4320	91		65 - 130
Chloroform	50.0000	0.0000	44.8040	90		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	44.0215	88		65 - 130
1,1-Dichloropropene	50.0000	0.0000	43.3758	87		75 - 130
Carbon tetrachloride	50.0000	0.0000	43.8146	88		65 - 140
1,2-Dichloroethane	50.0000	0.0000	45.8629	92		70 - 130
Benzene	50.0000	0.0000	42.7616	86		80 - 120
Trichloroethene	50.0000	0.0000	43.3133	87		70 - 125
1,2-Dichloropropane	50.0000	0.0000	45.4479	91		75 - 125
Dibromomethane	50.0000	0.0000	46.4288	93		75 - 125
Bromodichloromethane	50.0000	0.0000	46.3595	93		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	44.5184	89		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	41.8917	84		60 - 135
Toluene	50.0000	0.0000	41.1994	82		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	43.6787	87		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	44.6781	89		75 - 125
1,3-Dichloropropane	50.0000	0.0000	44.8121	90		75 - 125
Tetrachloroethene	50.0000	0.0000	49.4584	99		45 - 150
2-Hexanone	50.0000	0.0000	36.6797	73		55 - 130
Dibromochloromethane	50.0000	0.0000	46.6329	93		60 - 135
1,2-Dibromoethane	50.0000	0.0000	44.5115	89		80 - 120
Chlorobenzene	50.0000	0.0000	42.8733	86		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	44.3615	89		80 - 130
Ethylbenzene	50.0000	0.0000	42.6719	85		75 - 125
m,p-Xylene	100.0000	0.0000	83.6726	84		75 - 130
o-Xylene	50.0000	0.0000	43.8012	88		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66208

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66208 LCS Lot No.: _____
Date Extracted: 05/16/2012 Date Analyzed (1): 05/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	127.4738	85		81 - 121
Styrene	50.0000	0.0000	44.7908	90		65 - 135
Bromoform	50.0000	0.0000	45.2567	91		70 - 130
Isopropylbenzene	50.0000	0.0000	44.3172	89		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	41.3407	83		65 - 130
Bromobenzene	50.0000	0.0000	42.2672	85		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	40.3584	81		75 - 125
n-Propylbenzene	50.0000	0.0000	42.7911	86		70 - 130
2-Chlorotoluene	50.0000	0.0000	41.4759	83		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	43.3295	87		75 - 130
4-Chlorotoluene	50.0000	0.0000	41.7675	84		75 - 130
tert-Butylbenzene	50.0000	0.0000	41.0319	82		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	41.1967	82		75 - 130
sec-Butylbenzene	50.0000	0.0000	42.9480	86		70 - 125
4-Isopropyltoluene	50.0000	0.0000	43.1682	86		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	41.0127	82		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	39.4360	79		75 - 125
n-Butylbenzene	50.0000	0.0000	41.4895	83		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	41.4997	83		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	40.1287	80		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	41.1504	82		65 - 135
Hexachlorobutadiene	50.0000	0.0000	37.5219	75		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	41.2480	82		55 - 140
Naphthalene	50.0000	0.0000	39.6097	79		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66227 LCS Lot No.: _____
Date Extracted: 05/17/2012 Date Analyzed (1): 05/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	43.9845	88		30 - 155
Chloromethane	50.0000	0.0000	51.2607	103		40 - 125
Vinyl chloride	50.0000	0.0000	48.3305	97		50 - 145
Bromomethane	50.0000	0.0000	49.3557	99		30 - 145
Chloroethane	50.0000	0.0000	47.9062	96		60 - 135
Trichlorofluoromethane	50.0000	0.0000	49.4387	99		60 - 145
1,1-Dichloroethene	50.0000	0.0000	48.8995	98		70 - 130
Acetone	50.0000	0.0000	50.5592	101		40 - 140
Iodomethane	50.0000	0.0000	55.5047	111		72 - 121
Carbon disulfide	50.0000	0.0000	50.4594	101		35 - 160
Methylene chloride	50.0000	0.0000	48.2958	97		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.7582	98		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	49.7507	100		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.9905	100		70 - 135
Vinyl acetate	50.0000	0.0000	47.3443	95		38 - 163
2-Butanone	50.0000	0.0000	48.8285	98		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	48.0878	96		70 - 125
2,2-Dichloropropane	50.0000	0.0000	45.7192	91		70 - 135
Bromochloromethane	50.0000	0.0000	49.6199	99		65 - 130
Chloroform	50.0000	0.0000	48.6512	97		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	48.4667	97		65 - 130
1,1-Dichloropropene	50.0000	0.0000	47.3783	95		75 - 130
Carbon tetrachloride	50.0000	0.0000	50.8971	102		65 - 140
1,2-Dichloroethane	50.0000	0.0000	48.3501	97		70 - 130
Benzene	50.0000	0.0000	49.7642	100		80 - 120
Trichloroethene	50.0000	0.0000	48.4761	97		70 - 125
1,2-Dichloropropane	50.0000	0.0000	49.4507	99		75 - 125
Dibromomethane	50.0000	0.0000	48.5451	97		75 - 125
Bromodichloromethane	50.0000	0.0000	49.5501	99		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	51.1823	102		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.8888	98		60 - 135
Toluene	50.0000	0.0000	48.7844	98		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.6443	105		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	47.4842	95		75 - 125
1,3-Dichloropropane	50.0000	0.0000	49.7296	99		75 - 125
Tetrachloroethene	50.0000	0.0000	52.4955	105		45 - 150
2-Hexanone	50.0000	0.0000	47.7209	95		55 - 130
Dibromochloromethane	50.0000	0.0000	51.2294	102		60 - 135
1,2-Dibromoethane	50.0000	0.0000	49.8566	100		80 - 120
Chlorobenzene	50.0000	0.0000	50.0697	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.2490	100		80 - 130
Ethylbenzene	50.0000	0.0000	49.6956	99		75 - 125
m,p-Xylene	100.0000	0.0000	100.4794	100		75 - 130
o-Xylene	50.0000	0.0000	51.0080	102		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66227 LCS Lot No.: _____
Date Extracted: 05/17/2012 Date Analyzed (1): 05/17/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	151.4874	101		81 - 121
Styrene	50.0000	0.0000	52.6896	105		65 - 135
Bromoform	50.0000	0.0000	52.7069	105		70 - 130
Isopropylbenzene	50.0000	0.0000	49.7288	99		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.9457	98		65 - 130
Bromobenzene	50.0000	0.0000	52.0675	104		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	48.3370	97		75 - 125
n-Propylbenzene	50.0000	0.0000	51.7522	104		70 - 130
2-Chlorotoluene	50.0000	0.0000	52.9533	106		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	51.0922	102		75 - 130
4-Chlorotoluene	50.0000	0.0000	51.0637	102		75 - 130
tert-Butylbenzene	50.0000	0.0000	50.2861	101		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	50.4683	101		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.9019	100		70 - 125
4-Isopropyltoluene	50.0000	0.0000	49.0616	98		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	50.3628	101		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	50.6793	101		75 - 125
n-Butylbenzene	50.0000	0.0000	49.5586	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	50.5333	101		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	53.2027	106		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	49.5953	99		65 - 135
Hexachlorobutadiene	50.0000	0.0000	45.8208	92		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	50.5280	101		55 - 140
Naphthalene	50.0000	0.0000	54.7595	110		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66235

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66235 LCS Lot No.: _____
Date Extracted: 05/18/2012 Date Analyzed (1): 05/18/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	51.5419	103		30 - 155
Chloromethane	50.0000	0.0000	51.5395	103		40 - 125
Vinyl chloride	50.0000	0.0000	50.5214	101		50 - 145
Bromomethane	50.0000	0.0000	49.2577	99		30 - 145
Chloroethane	50.0000	0.0000	49.6636	99		60 - 135
Trichlorofluoromethane	50.0000	0.0000	54.8699	110		60 - 145
1,1-Dichloroethene	50.0000	0.0000	51.3025	103		70 - 130
Acetone	50.0000	0.0000	60.4235	121		40 - 140
Iodomethane	50.0000	0.0000	53.0992	106		72 - 121
Carbon disulfide	50.0000	0.0000	51.8589	104		35 - 160
Methylene chloride	50.0000	0.0000	49.6804	99		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	50.5273	101		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.6690	101		65 - 125
1,1-Dichloroethane	50.0000	0.0000	50.5317	101		70 - 135
Vinyl acetate	50.0000	0.0000	49.3562	99		38 - 163
2-Butanone	50.0000	0.0000	53.3993	107		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	50.6876	101		70 - 125
2,2-Dichloropropane	50.0000	0.0000	53.6157	107		70 - 135
Bromochloromethane	50.0000	0.0000	51.1439	102		65 - 130
Chloroform	50.0000	0.0000	51.4219	103		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	51.2784	103		65 - 130
1,1-Dichloropropene	50.0000	0.0000	49.4712	99		75 - 130
Carbon tetrachloride	50.0000	0.0000	53.5341	107		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.4748	101		70 - 130
Benzene	50.0000	0.0000	51.1537	102		80 - 120
Trichloroethene	50.0000	0.0000	48.9668	98		70 - 125
1,2-Dichloropropane	50.0000	0.0000	50.9738	102		75 - 125
Dibromomethane	50.0000	0.0000	50.3039	101		75 - 125
Bromodichloromethane	50.0000	0.0000	51.4857	103		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.7928	108		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.4344	97		60 - 135
Toluene	50.0000	0.0000	50.2144	100		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	55.0501	110		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	49.1127	98		75 - 125
1,3-Dichloropropane	50.0000	0.0000	49.8567	100		75 - 125
Tetrachloroethene	50.0000	0.0000	48.1730	96		45 - 150
2-Hexanone	50.0000	0.0000	50.9112	102		55 - 130
Dibromochloromethane	50.0000	0.0000	54.1492	108		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.6334	101		80 - 120
Chlorobenzene	50.0000	0.0000	51.9490	104		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.2460	102		80 - 130
Ethylbenzene	50.0000	0.0000	50.5468	101		75 - 125
m,p-Xylene	100.0000	0.0000	102.4493	102		75 - 130
o-Xylene	50.0000	0.0000	51.2881	103		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66235

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66235 LCS Lot No.: _____
Date Extracted: 05/18/2012 Date Analyzed (1): 05/18/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	153.7374	102		81 - 121
Styrene	50.0000	0.0000	55.1581	110		65 - 135
Bromoform	50.0000	0.0000	55.9464	112		70 - 130
Isopropylbenzene	50.0000	0.0000	49.7030	99		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	51.6845	103		65 - 130
Bromobenzene	50.0000	0.0000	52.5436	105		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	58.0313	116		75 - 125
n-Propylbenzene	50.0000	0.0000	53.1979	106		70 - 130
2-Chlorotoluene	50.0000	0.0000	53.8250	108		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	51.0153	102		75 - 130
4-Chlorotoluene	50.0000	0.0000	52.4511	105		75 - 130
tert-Butylbenzene	50.0000	0.0000	52.1682	104		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	49.8360	100		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.1928	98		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.6022	97		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	51.1945	102		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	50.8631	102		75 - 125
n-Butylbenzene	50.0000	0.0000	48.2144	96		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	50.5039	101		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	52.7335	105		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	45.3000	91		65 - 135
Hexachlorobutadiene	50.0000	0.0000	42.5625	85		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	46.2035	92		55 - 140
Naphthalene	50.0000	0.0000	51.1730	102		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V6I7035.D Lab Sample ID: MB-66227
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/17/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 21:09
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-66227	LCS-66227	V6I7032.D	19:57
02	MW-1MS	L0935-01AMS	V6I7039.D	22:46
03	MW-1MSD	L0935-01AMSD	V6I7040.D	23:10
04	DUP-1	L0935-05A	V6I7055.D	5:13

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-66235

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V6I7066.D Lab Sample ID: MB-66235
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/18/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:19
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-66235	LCS-66235	V6I7063.D	9:06
02	MW-2DL	L0935-02ADL	V6I7067.D	10:43
03	MW-3	L0935-03A	V6I7068.D	11:08
04	DUP-1DL	L0935-05ADL	V6I7069.D	11:32

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-66208

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V8B1746.D Lab Sample ID: MB-66208
Instrument ID: V10
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/17/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 6:35
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-66208	LCS-66208	V8B1743.D	5:18
02	TRIP BLANK	L0935-04A	V8B1748.D	7:27
03	MW-1	L0935-01A	V8B1756.D	10:53
04	MW-2	L0935-02A	V8B1757.D	11:19

COMMENTS:

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V6I7020.D BFB Injection Date: 05/17/2012
Instrument ID: V6 BFB Injection Time: 15:54
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	44.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	Greater than 50.0% of mass 95	82.3
175	5.0 - 9.0% of mass 174	6.3 (7.6)1
176	95.0 - 101.0% of mass 174	81.2 (98.7)1
177	5.0 - 9.0% of mass 176	5.7 (7.0)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0016A	VSTD0016A	V6I7021.D	05/17/2012	16:19
02	VSTD0056A	VSTD0056A	V6I7022.D	05/17/2012	16:43
03	VSTD0206A	VSTD0206A	V6I7023.D	05/17/2012	17:07
04	VSTD0506A	VSTD0506A	V6I7024.D	05/17/2012	17:31
05	VSTD1006A	VSTD1006A	V6I7025.D	05/17/2012	17:56
06	VSTD2006A	VSTD2006A	V6I7026.D	05/17/2012	18:20

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V6I7030.D BFB Injection Date: 05/17/2012
Instrument ID: V6 BFB Injection Time: 18:44
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.6
75	30.0 - 60.0% of mass 95	44.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 (0.4)1
174	Greater than 50.0% of mass 95	83.7
175	5.0 - 9.0% of mass 174	6.4 (7.6)1
176	95.0 - 101.0% of mass 174	81.7 (97.7)1
177	5.0 - 9.0% of mass 176	5.6 (6.8)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506B	VSTD0506B	V6I7031.D	05/17/2012	19:33
02	LCS-66227	LCS-66227	V6I7032.D	05/17/2012	19:57
03	MB-66227	MB-66227	V6I7035.D	05/17/2012	21:09
04	MW-1MS	L0935-01AMS	V6I7039.D	05/17/2012	22:46
05	MW-1MSD	L0935-01AMSD	V6I7040.D	05/17/2012	23:10
06	DUP-1	L0935-05A	V6I7055.D	05/18/2012	5:13

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB6C

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V6I7061.D BFB Injection Date: 05/18/2012
Instrument ID: V6 BFB Injection Time: 8:13
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	42.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	82.6
175	5.0 - 9.0% of mass 174	6.2 (7.5)1
176	95.0 - 101.0% of mass 174	80.6 (97.5)1
177	5.0 - 9.0% of mass 176	5.6 (7.0)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506C	VSTD0506C	V6I7062.D	05/18/2012	8:32
02	LCS-66235	LCS-66235	V6I7063.D	05/18/2012	9:06
03	MB-66235	MB-66235	V6I7066.D	05/18/2012	10:19
04	MW-2DL	L0935-02ADL	V6I7067.D	05/18/2012	10:43
05	MW-3	L0935-03A	V6I7068.D	05/18/2012	11:08
06	DUP-1DL	L0935-05ADL	V6I7069.D	05/18/2012	11:32

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V8B1700.D BFB Injection Date: 05/16/2012
Instrument ID: V10 BFB Injection Time: 9:25
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.6
75	30.0 - 80.0% of mass 95	55.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.5 (0.9)1
174	50.0 -120% of mass 95	58.4
175	5.0 - 9.0% of mass 174	4.2 (7.2)1
176	95.0 - 101% of mass 174	58.1 (99.6)1
177	5.0 - 9.0% of mass 176	3.8 (6.5)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010D	VSTD05010D	V8B1704.D	05/16/2012	12:07
02	VSTD02010D	VSTD02010D	V8B1705.D	05/16/2012	12:33
03	VSTD00510D	VSTD00510D	V8B1706.D	05/16/2012	12:59
04	VSTD00110D	VSTD00110D	V8B1708.D	05/16/2012	13:51
05	VSTD20010D	VSTD20010D	V8B1709.D	05/16/2012	14:17
06	VSTD10010D	VSTD10010D	V8B1710.D	05/16/2012	14:43

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10F

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: V8B1741.D BFB Injection Date: 05/17/2012
Instrument ID: V10 BFB Injection Time: 4:27
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.4
75	30.0 - 80.0% of mass 95	45.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 -120% of mass 95	80.5
175	5.0 - 9.0% of mass 174	5.6 (7.0)1
176	95.0 - 101% of mass 174	77.7 (96.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.4)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010F	VSTD05010F	V8B1742.D	05/17/2012	4:52
02	LCS-66208	LCS-66208	V8B1743.D	05/17/2012	5:18
03	MB-66208	MB-66208	V8B1746.D	05/17/2012	6:35
04	TRIP BLANK	L0935-04A	V8B1748.D	05/17/2012	7:27
05	MW-1	L0935-01A	V8B1756.D	05/17/2012	10:53
06	MW-2	L0935-02A	V8B1757.D	05/17/2012	11:19

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/17/2012 05/17/2012
 EPA Sample No.(VSTD#####): VSTD0506B Date Analyzed: 05/17/2012
 Lab File ID (Standard): V6I7031.D Time Analyzed: 19:33
 Instrument ID: V6 Heated Purge: (Y/N) N

	IS1 (S1)	AREA	#	RT	#	IS2 (S2)	AREA	#	RT	#	IS3 (S3)	AREA	#	RT	#
12 HOUR STD	735325			5.367		617916			8.36		302325			10.857	
UPPER LIMIT	1470650			5.867		1235832			8.86		604650			11.357	
LOWER LIMIT	367663			4.867		308958			7.86		151163			10.357	
SAMPLE NO.															
01 LCS-66227	734802			5.377		613119			8.370		306063			10.855	
02 MB-66227	735408			5.368		630554			8.362		331083			10.859	
03 MW-1MS	688572			5.369		599099			8.362		319531			10.859	
04 MW-1MSD	742874			5.377		627590			8.371		315187			10.855	
05 DUP-1	721955			5.366		616088			8.360		322197			10.857	

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/17/2012 05/17/2012
 EPA Sample No.(VSTD#####): VSTD0506C Date Analyzed: 05/18/2012
 Lab File ID (Standard): V6I7062.D Time Analyzed: 8:32
 Instrument ID: V6 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	737052	5.367	618401	8.361	306281	10.857
UPPER LIMIT	1474104	5.867	1236802	8.861	612562	11.357
LOWER LIMIT	368526	4.867	309201	7.861	153141	10.357
SAMPLE NO.						
01 LCS-66235	725362	5.377	608513	8.370	297680	10.855
02 MB-66235	715876	5.367	616619	8.361	317913	10.857
03 MW-2DL	710489	5.376	606119	8.370	313730	10.855
04 MW-3	714149	5.377	614745	8.359	314697	10.856
05 DUP-1DL	706131	5.366	601121	8.359	314302	10.856

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/16/2012 05/16/2012
 EPA Sample No.(VSTD#####): VSTD05010F Date Analyzed: 05/17/2012
 Lab File ID (Standard): V8B1742.D Time Analyzed: 4:52
 Instrument ID: V10 Heated Purge: (Y/N) N

	IS1 (S1)	AREA	#	RT	#	IS2 (S2)	AREA	#	RT	#	IS3 (S3)	AREA	#	RT	#
12 HOUR STD		467361		5.301		336829			8.288		164569			10.779	
UPPER LIMIT		934722		5.801		673658			8.788		329138			11.279	
LOWER LIMIT		233681		4.801		168415			7.788		82285			10.279	
SAMPLE NO.															
01 LCS-66208		467832		5.304		335745			8.287		162109			10.779	
02 MB-66208		437152		5.300		304984			8.287		120197			10.783	
03 TRIP BLANK		434495		5.300		301665			8.287		115941			10.782	
04 MW-1		421707		5.300		291488			8.288		116979			10.783	
05 MW-2		436515		5.317		304666			8.294		162570			10.783	

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1756.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	1.5	J
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.76	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1756.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B1756.D
Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 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 Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1756.d
 Report Date: 18-May-2012 14:36

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1756.d
 Lab Smp Id: L0935-01A Client Smp ID: MW-1
 Inj Date : 17-MAY-2012 10:53
 Operator : SRC: LIMS Inst ID: V8.i
 Smp Info : 5ML,L0935-01A,,66208
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
 Meth Date : 18-May-2012 14:36 amarquis Quant Type: ISTD
 Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
 Als bottle: 100
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
4 Vinyl Chloride	62	1.917	1.918	(0.362)	3666	1.48023	1
28 cis-1,2-Dichloroethene	96	4.323	4.319	(0.816)	1917	0.75689	0.8
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	110175	51.6965	52
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	24975	49.7916	50
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	421707	50.0000	
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	404471	50.8919	51
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	291488	50.0000	
\$ 79 Bromofluorobenzene	95	9.586	9.583	(1.157)	129228	46.2028	46
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779	(1.000)	116979	50.0000	

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1756.d
Report Date: 18-May-2012 14:36

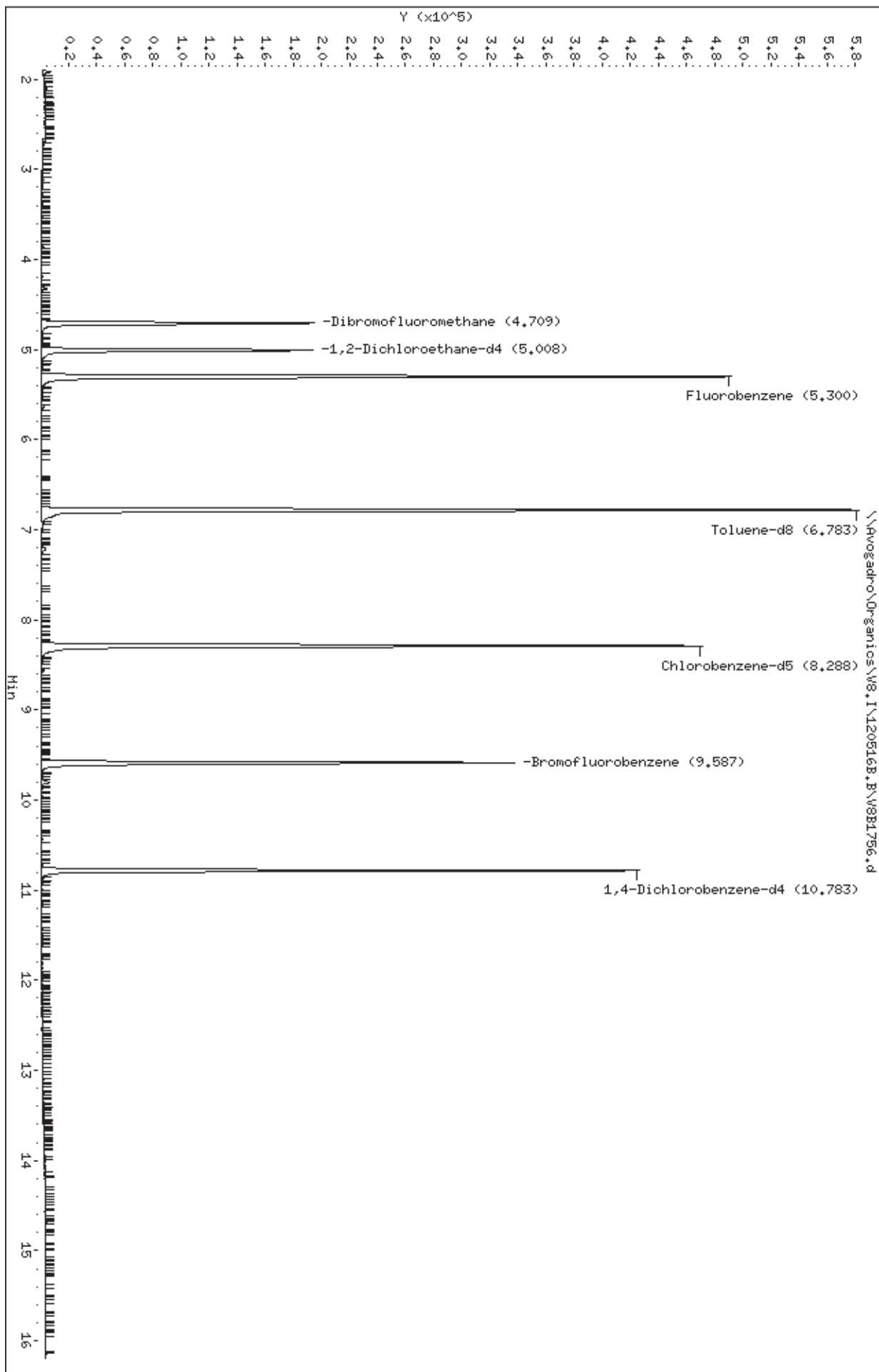
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1756.d
Lab Smp Id: L0935-01A Client Smp ID: MW-1
Inj Date : 17-MAY-2012 10:53
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,L0935-01A,,66208
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:36 amarquis Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W8.I\120516B.B\W8B1756.d
 Date : 17-May-2012 10:53
 Client ID: MW-1
 Sample Info: SHL, L0935-01A, 66208
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W8.i
 Operator: SRC: LIMS
 Column diameter: 0.25



Data File: \\Avogadro\Organics\V8,I\120516B,B\V8B1756.d

Date : 17-MAY-2012 10:53

Client ID: MW-1

Instrument: V8.i

Sample Info: 5ML,L0935-01A,,66208

Purge Volume: 5.0

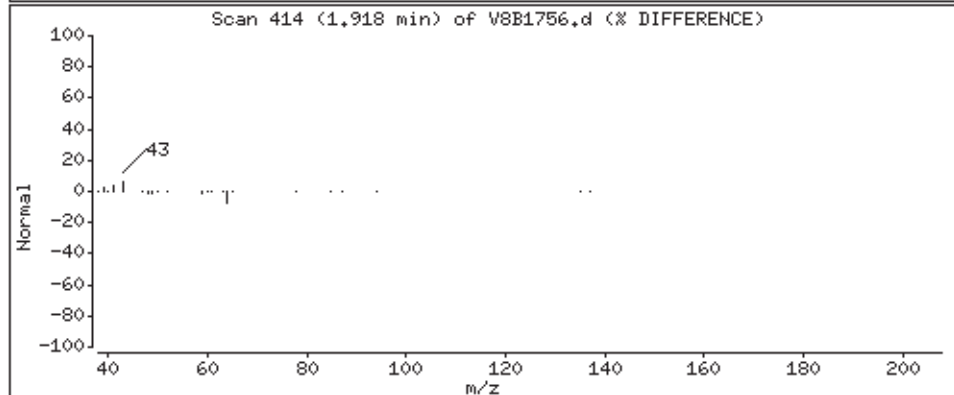
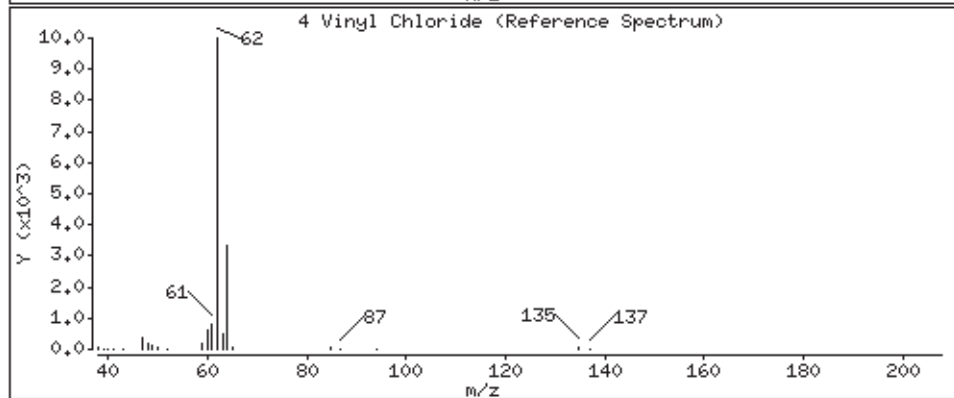
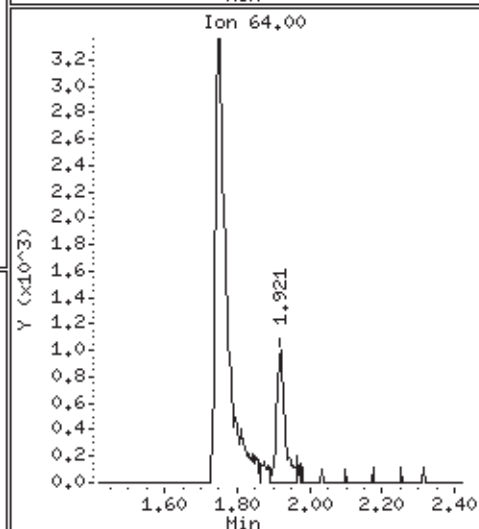
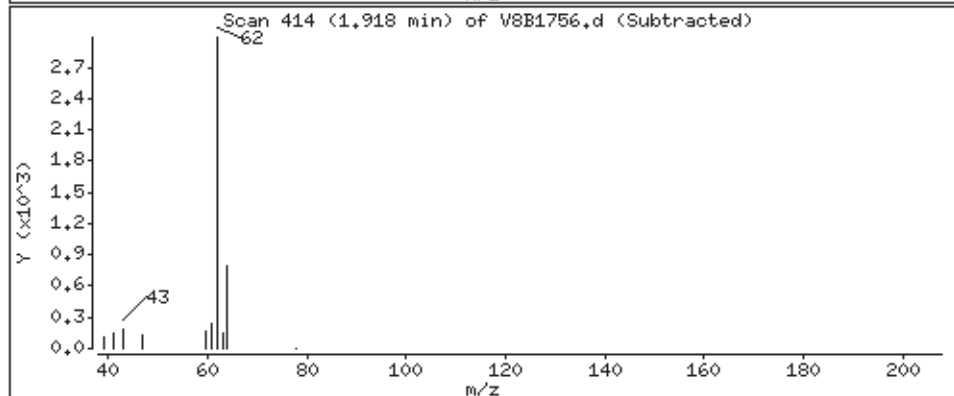
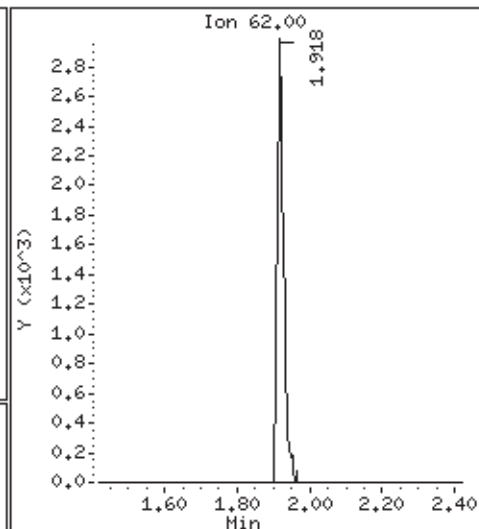
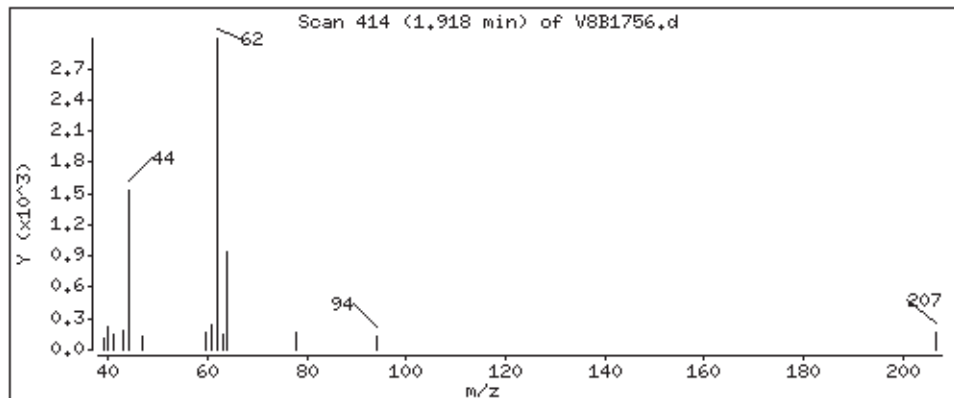
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

4 Vinyl Chloride

Concentration: 1 ug/L



Data File: \\Avogadro\Organics\V8,I\120516B,B\V8B1756.d

Date : 17-MAY-2012 10:53

Client ID: MW-1

Instrument: V8.i

Sample Info: 5ML,L0935-01A,,66208

Purge Volume: 5.0

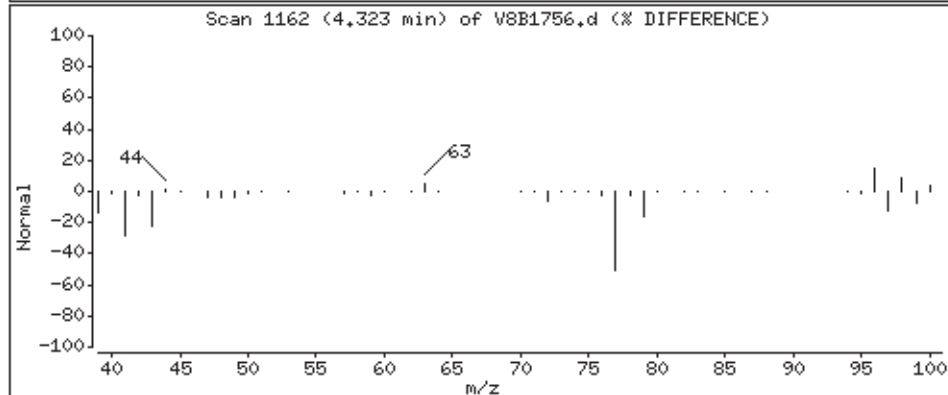
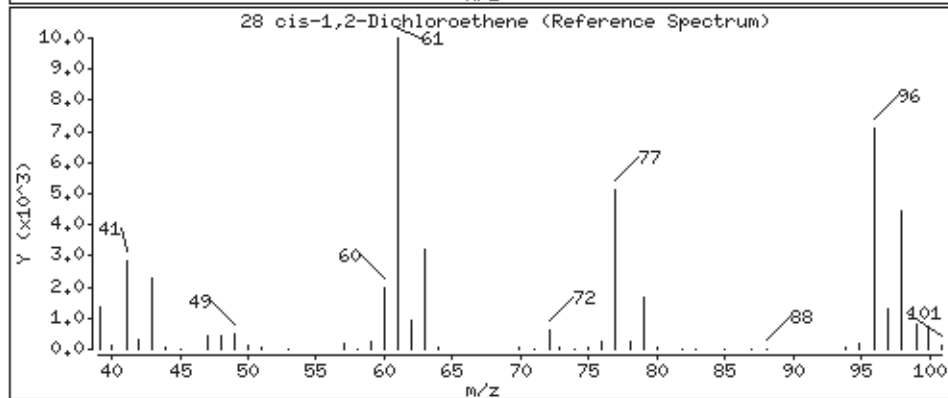
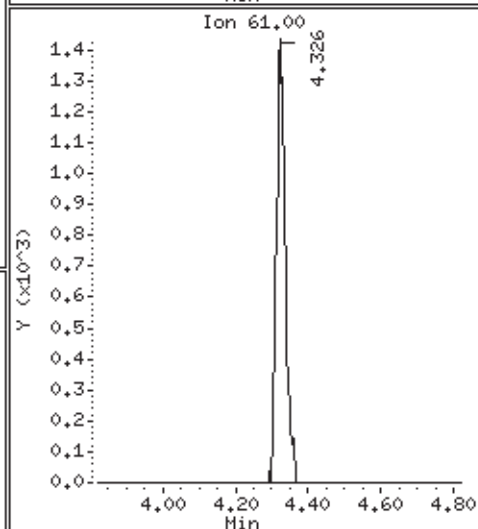
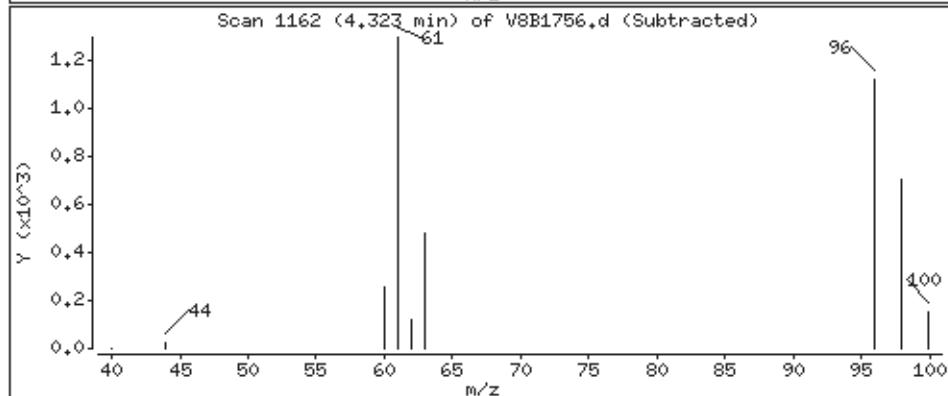
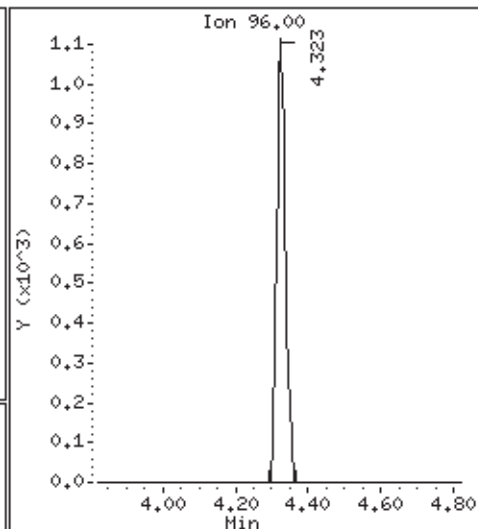
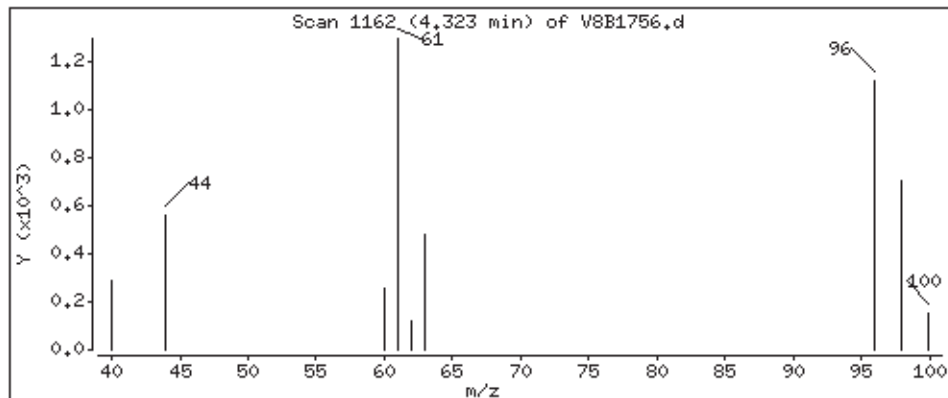
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 0.8 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-02A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1757.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	290	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	2.0	J
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	1300	E
67-64-1	Acetone	130	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	2.1	J
75-09-2	Methylene chloride	520	E
156-60-5	trans-1,2-Dichloroethene	260	E
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	3000	E
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5200	E
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.1	
71-55-6	1,1,1-Trichloroethane	2800	E
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	3.8	J
71-43-2	Benzene	8.4	
79-01-6	Trichloroethene	6500	E
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	14	
108-88-3	Toluene	210	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	9.9	
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-02A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1757.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	2600	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	32	
179601-23-1	m,p-Xylene	76	
95-47-6	o-Xylene	44	
1330-20-7	Xylene (Total)	120	
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	7.5	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	12	
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	35	
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	98	
135-98-8	sec-Butylbenzene	5.4	
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	11	
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	0.82	J
91-20-3	Naphthalene	8.7	

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B1757.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012

% Moisture: not dec. Date Analyzed: 05/17/2012

GC Column: DB-624 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 Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (5.67020)	5.670	27	J
02	620-14-4	Benzene, 1-ethyl-3-methyl-	9.956	42	NJ
03	611-14-3	Benzene, 1-ethyl-2-methyl-	10.258	37	NJ
04	526-73-8	Benzene, 1,2,3-trimethyl-	10.856	80	NJ
05		Unknown (11.05262)	11.053	39	J
06	535-77-3	Benzene, 1-methyl-3-(1-methy	11.130	33	NJ
07	934-80-5	Benzene, 4-ethyl-1,2-dimethy	11.490	16	NJ
08		Unknown (11.60565)	11.606	22	J
09	95-93-2	Benzene, 1,2,4,5-tetramethyl	12.287	26	NJ

¹EPA-designated Registry Number.

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d
Lab Smp Id: L0935-02A Client Smp ID: MW-2
Inj Date : 17-MAY-2012 11:19
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,L0935-02A,,66208
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:36 amarquis Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
4 Vinyl Chloride	62	1.914	1.918 (0.360)		747673	291.648	290(A)
6 Chloroethane	64	2.290	2.294 (0.431)		2567	2.02083	2
10 1,1-Dichloroethene	96	2.921	2.927 (0.549)		2828091	1277.45	1300(A)
12 Acetone	58	2.950	2.953 (0.555)		50106	128.936	130
14 Carbon Disulfide	76	3.114	3.117 (0.586)		15754	2.05964	2
18 Methylene Chloride	84	3.297	3.300 (0.620)		1321509	518.150	520(A)
21 trans-1,2-Dichloroethene	96	3.522	3.522 (0.663)		627606	263.292	260(A)
23 1,1-Dichloroethane	63	3.853	3.853 (0.725)		13238679	2979.07	3000(A)
28 cis-1,2-Dichloroethene	96	4.345	4.319 (0.817)		13728375	5236.53	5200(AM)M7 AED 05/18
35 Chloroform	83	4.577	4.573 (0.861)		21752	5.06896	5
\$ 36 Dibromofluoromethane	113	4.712	4.708 (0.886)		109151	49.4786	49
37 1,1,1-Trichloroethane	97	4.760	4.750 (0.895)		9954314	2805.59	2800(A)
\$ 42 1,2-Dichloroethane-d4	102	5.011	5.007 (0.943)		25235	48.6033	49
43 Benzene	78	5.091	5.069 (0.958)		84605	8.37295	8
44 1,2-Dichloroethane	62	5.078	5.072 (0.955)		12511	3.78628	4
* 46 Fluorobenzene	96	5.316	5.300 (1.000)		436515	50.0000	
47 Trichloroethene	130	5.621	5.628 (1.057)		15932132	6520.62	6500(AQM)M7 AED 05/18
57 4-Methyl-2-pentanone	43	6.654	6.644 (1.252)		30976	13.8833	14
\$ 58 Toluene-d8	98	6.792	6.782 (0.819)		418158	50.3383	50
59 Toluene	91	6.859	6.850 (1.290)		2190664	205.820	200(A)
62 1,1,2-Trichloroethane	97	7.248	7.242 (1.363)		22126	9.94415	10
63 Tetrachloroethene	164	7.416	7.409 (0.894)		5220244	2646.62	2600(A)
* 68 Chlorobenzene-d5	117	8.293	8.287 (1.000)		304666	50.0000	

Compounds	QUANT SIG							CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
							(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
72 Ethylbenzene	106		8.438	8.435 (1.017)		105933	32.2236	32	
73 m,p-Xylene	106		8.563	8.564 (1.033)		314300	75.5262	76	
74 o-Xylene	106		9.010	9.010 (1.086)		172541	44.3646	44	
77 Isopropylbenzene	105		9.419	9.419 (1.136)		69505	7.46560	7	
\$ 79 Bromofluorobenzene	95		9.586	9.583 (1.156)		153530	52.5172	52	
83 n-Propylbenzene	120		9.862	9.863 (0.915)		32683	11.7947	12	
85 1,3,5-Trimethylbenzene	105		10.046	10.046 (0.932)		294742	34.5173	34	
M 94 Xylene (Total)	106					486841	119.891	120	
88 1,2,4-Trimethylbenzene	105		10.432	10.432 (0.967)		899336	98.2993	98	
89 sec-Butylbenzene	105		10.605	10.605 (0.984)		55861	5.43198	5	
* 92 1,4-Dichlorobenzene-d4	152		10.782	10.779 (1.000)		162570	50.0000		
95 n-Butylbenzene	91		11.149	11.149 (1.034)		76118	10.5615	10(Q)	
101 Naphthalene	128		12.853	12.853 (1.192)		50323	8.70953	9	
102 1,2,3-Trichlorobenzene	180		13.058	13.059 (1.211)		1713	0.81658	0.8	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d
 Lab Smp Id: L0935-02A Client Smp ID: MW-2
 Inj Date : 17-MAY-2012 11:19
 Operator : SRC: LIMS Inst ID: V8.i
 Smp Info : 5ML,L0935-02A,,66208
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
 Meth Date : 18-May-2012 14:36 amarquis Quant Type: ISTD
 Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
 Als bottle: 100
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Fluorobenzene	5.317	887246	50.000
* 92 1,4-Dichlorobenzene-d4	10.783	1138042	50.000

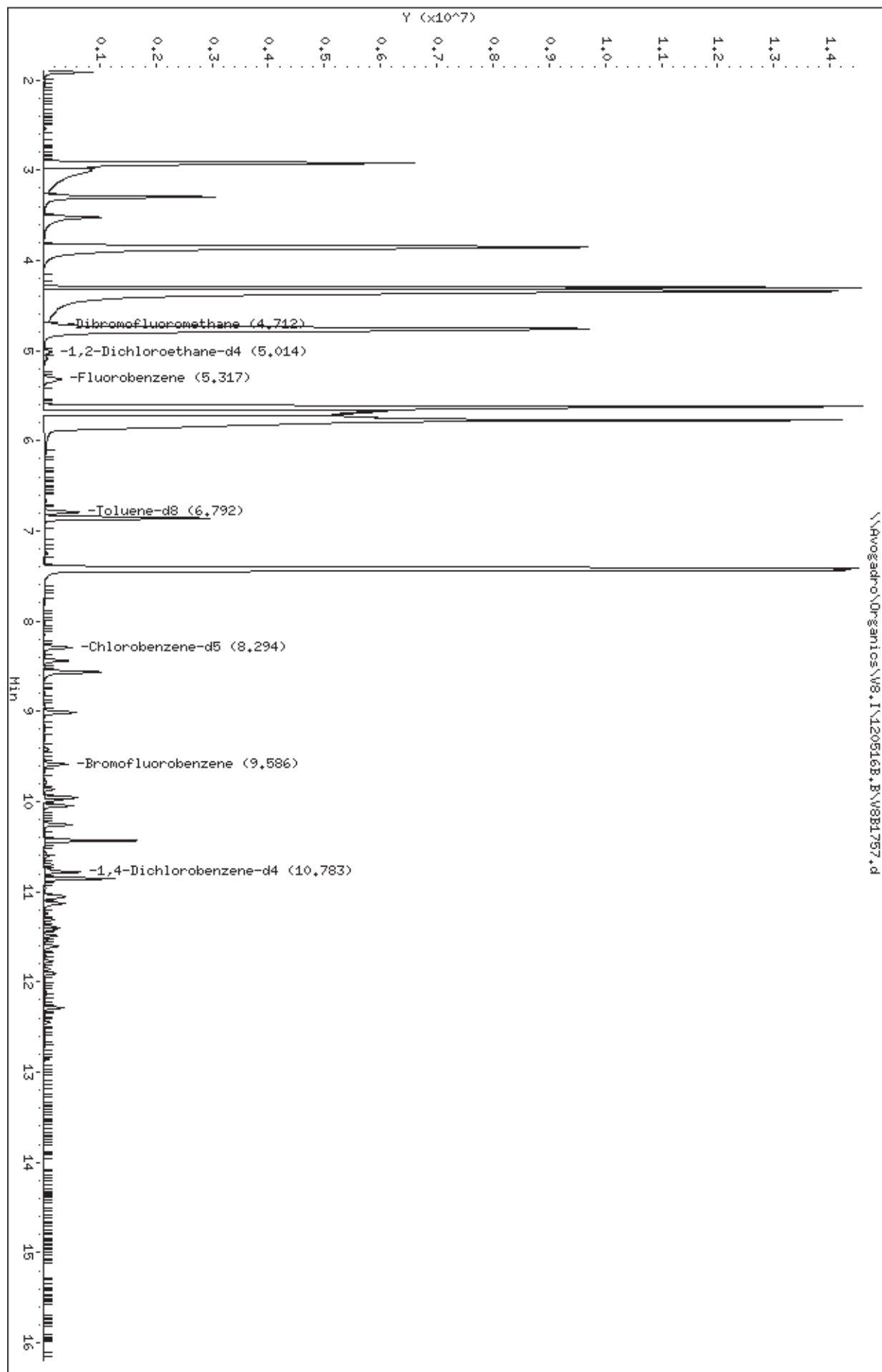
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
5.670	471265	26.5577238	26	0		0	46
Benzene, 1-ethyl-3-methyl-				CAS #: 620-14-4			
9.956	966271	42.4531956	42	97	NIST2002.L	9131	92
Benzene, 1-ethyl-2-methyl-				CAS #: 611-14-3			
10.258	832754	36.5870920	36	94	NIST2002.L	9130	92
Benzene, 1,2,3-trimethyl-				CAS #: 526-73-8			
10.856	1823381	80.1103873	80	95	NIST2002.L	9123	92
Unknown				CAS #:			
11.053	877896	38.5704308	38	0		0	92

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d
 Report Date: 18-May-2012 14:36

RT	CONCENTRATIONS				QUANT			CPND #
	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY		
====	====	=====	=====	====	=====	=====	=====	
Benzene, 1-methyl-3-(1-methylethyl)-					CAS #: 535-77-3			
11.130	747921	32.8599674	33	95	NIST2002.L	14402	92	
Benzene, 4-ethyl-1,2-dimethyl-					CAS #: 934-80-5			
11.490	356588	15.6667209	16	96	NIST2002.L	14377	92	
Unknown					CAS #:			
11.606	507654	22.3038171	22	0		0	92	
Benzene, 1,2,4,5-tetramethyl-					CAS #: 95-93-2			
12.287	582623	25.5975677	26	90	NIST2002.L	14361	92	

Data File: \\Avogadro\Organics\W8.1\120516B.B\W8B1757.d
Date : 17-May-2012 11:19
Client ID: MW-2
Sample Info: 5HL, L0935-02H, 66208
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

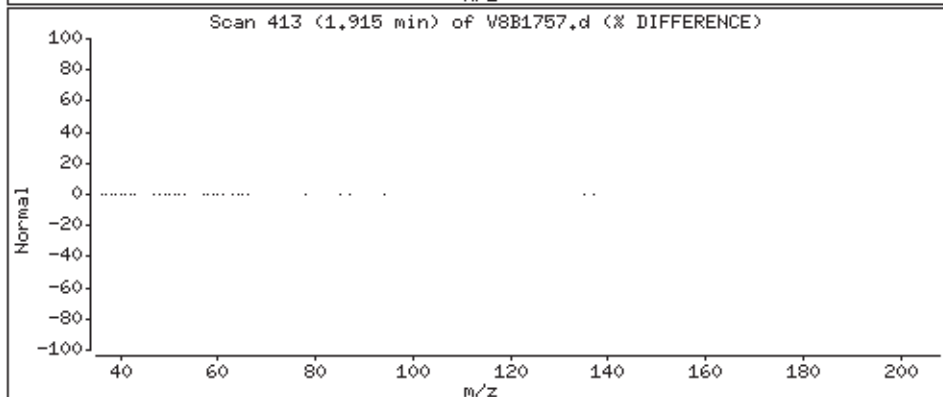
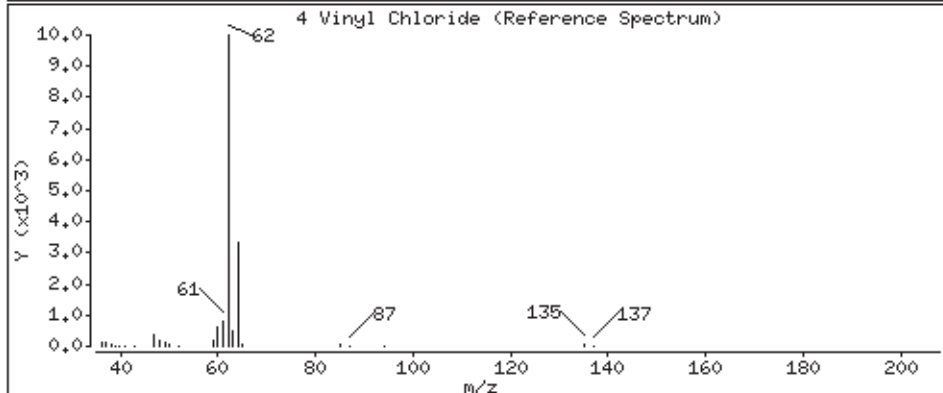
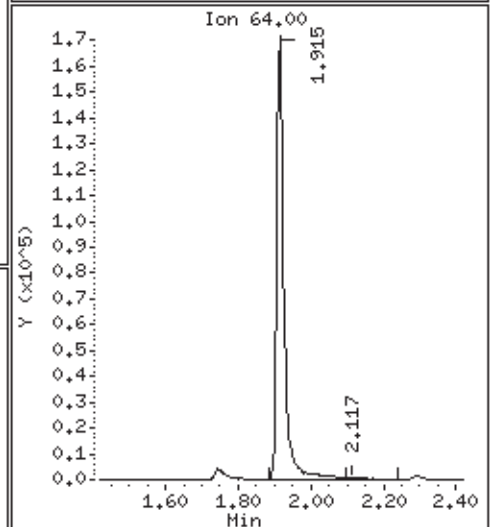
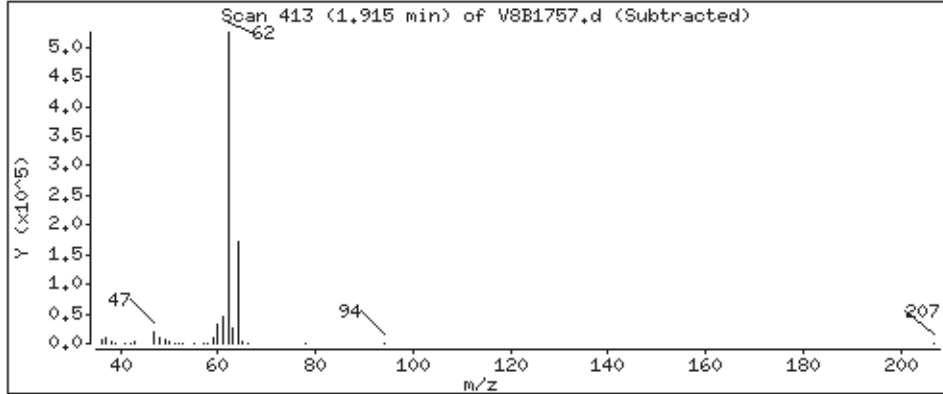
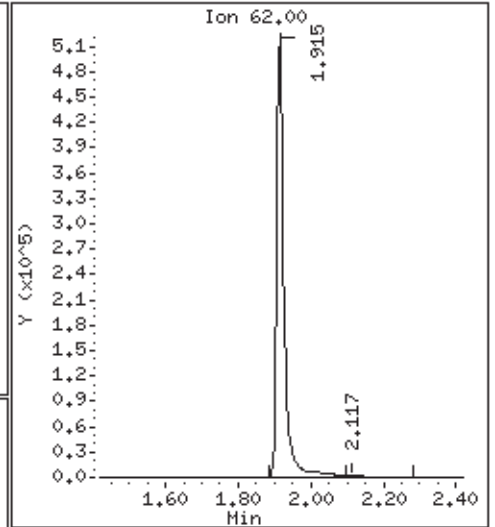
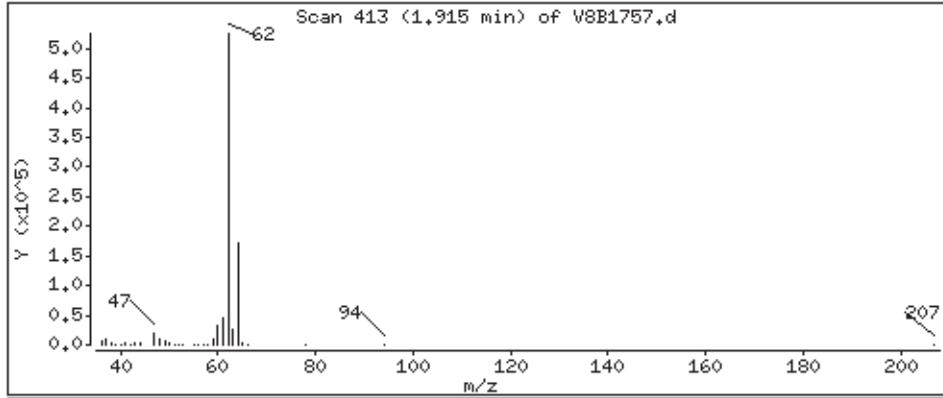
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

4 Vinyl Chloride

Concentration: 290 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

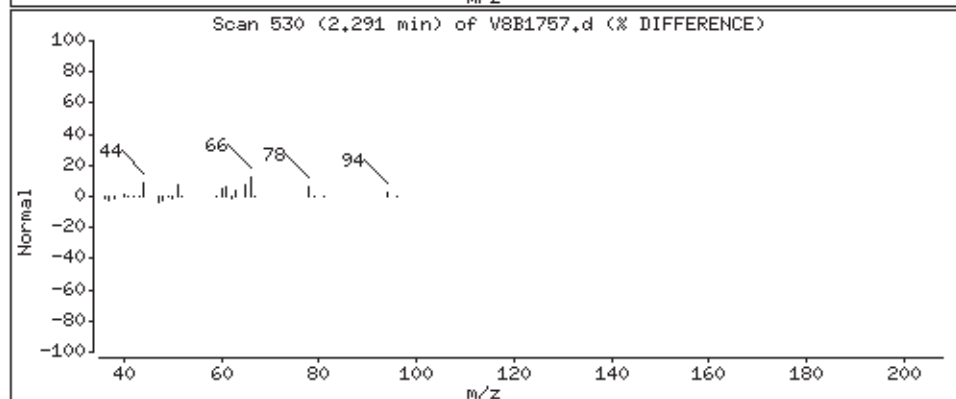
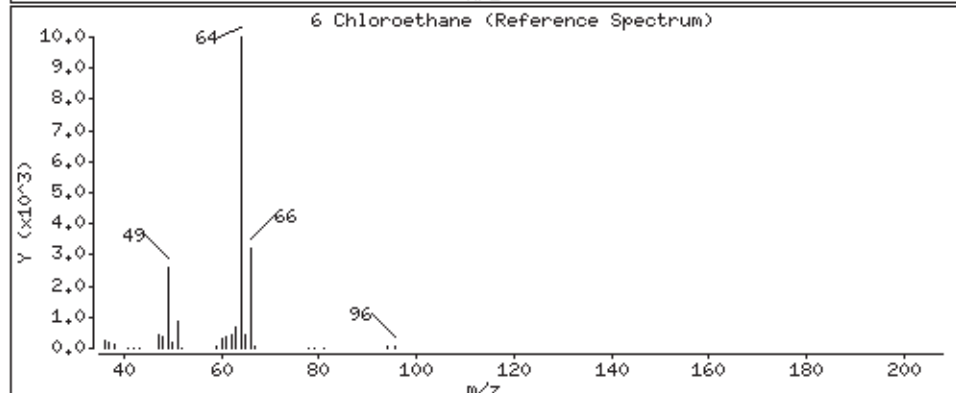
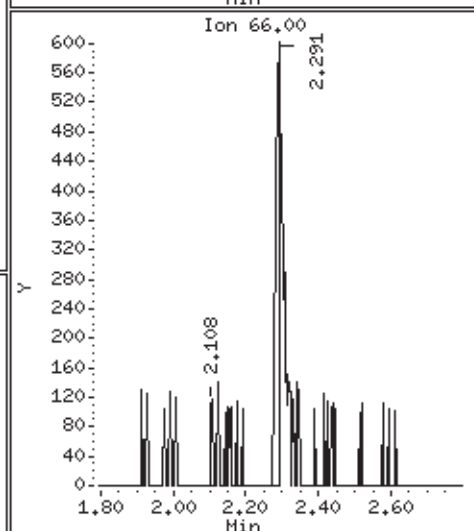
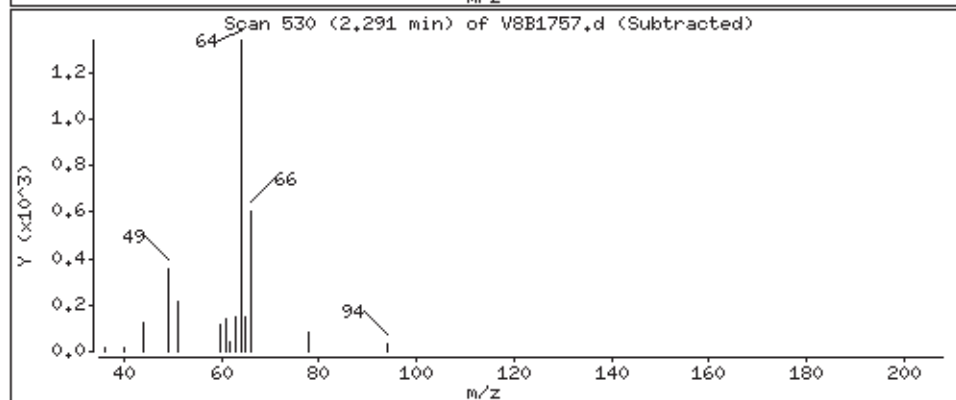
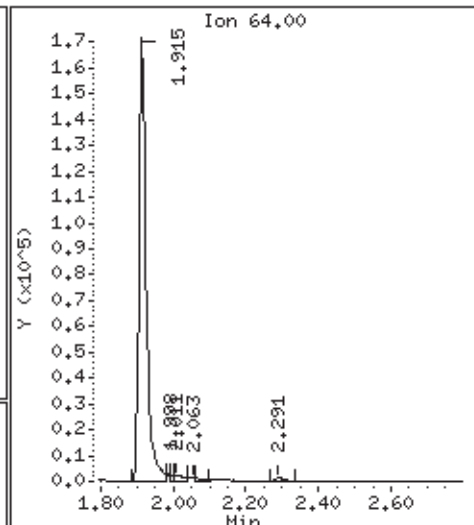
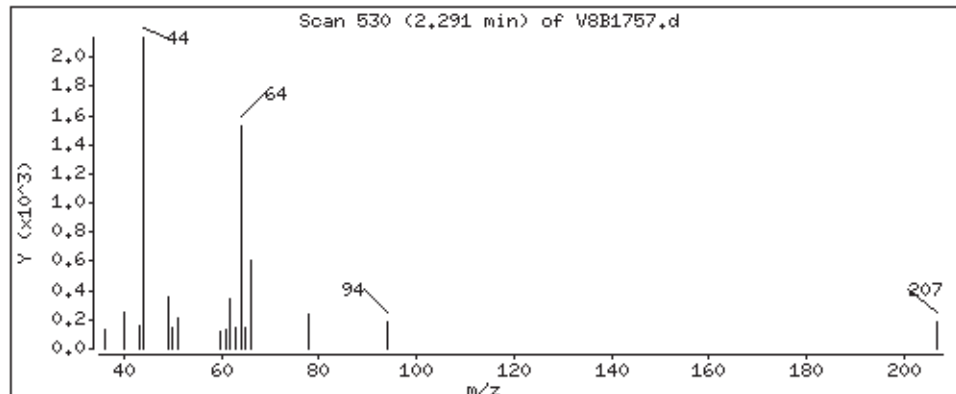
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

6 Chloroethane

Concentration: 2 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

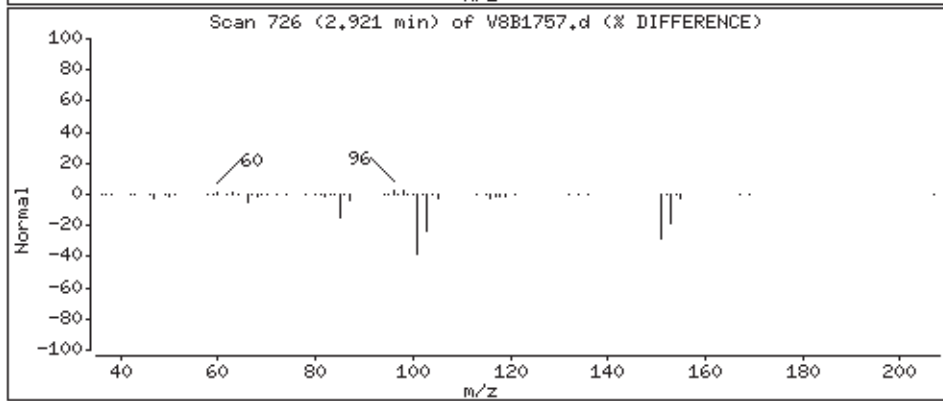
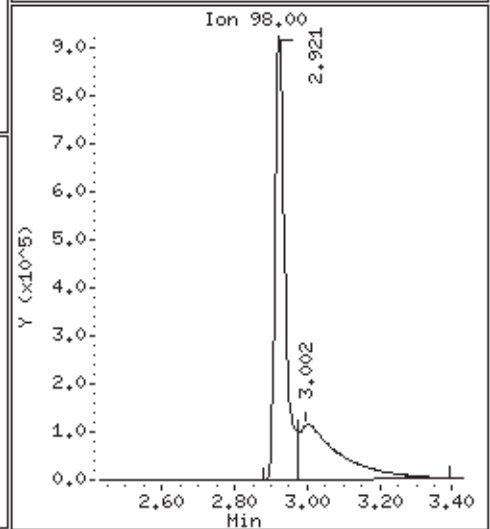
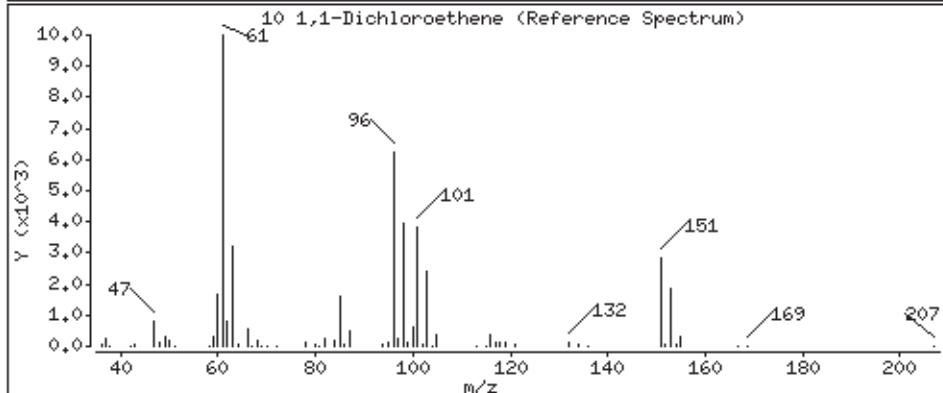
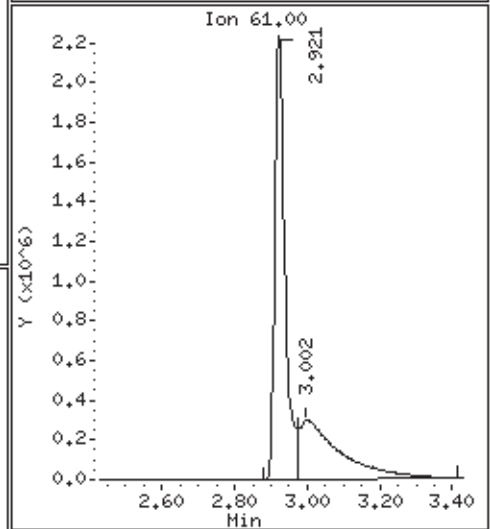
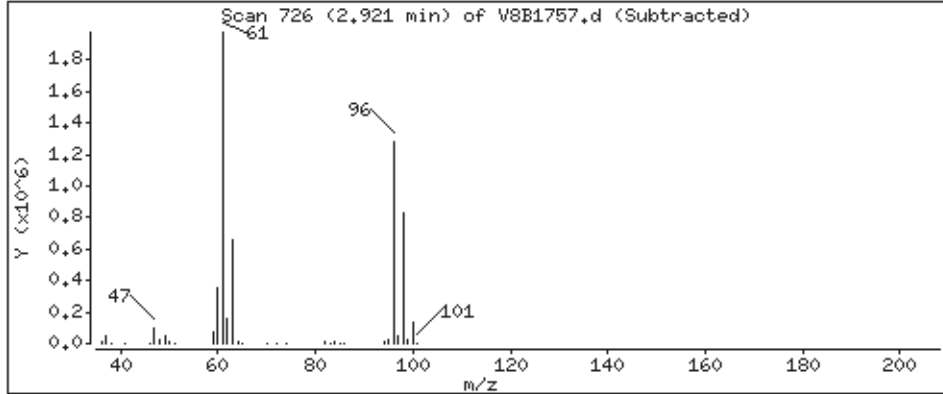
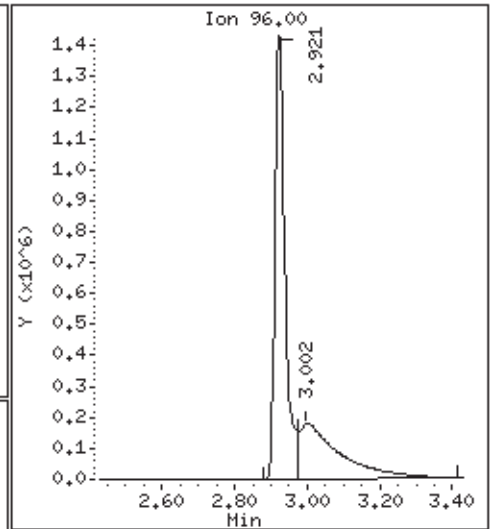
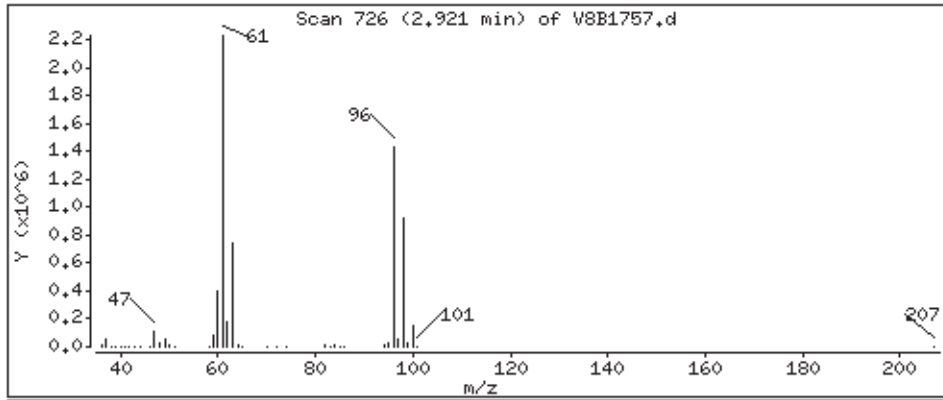
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

10 1,1-Dichloroethene

Concentration: 1300 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

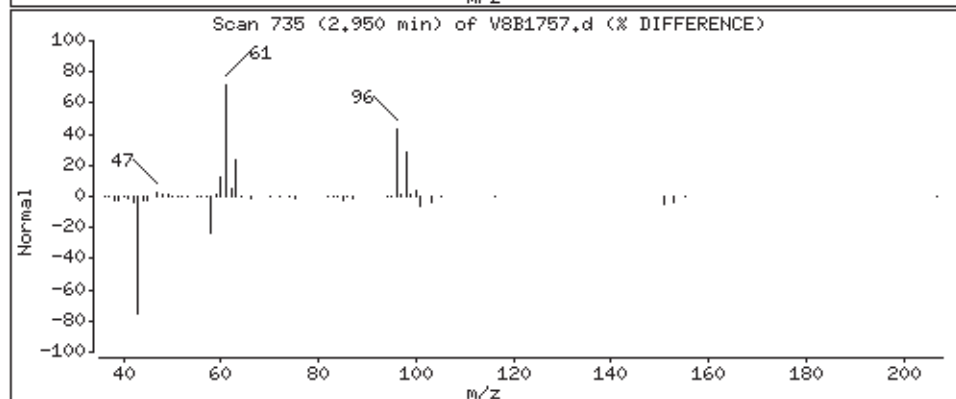
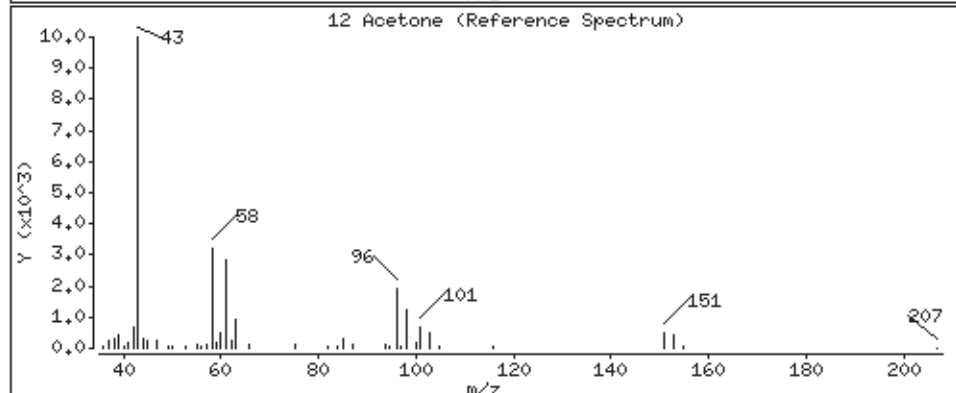
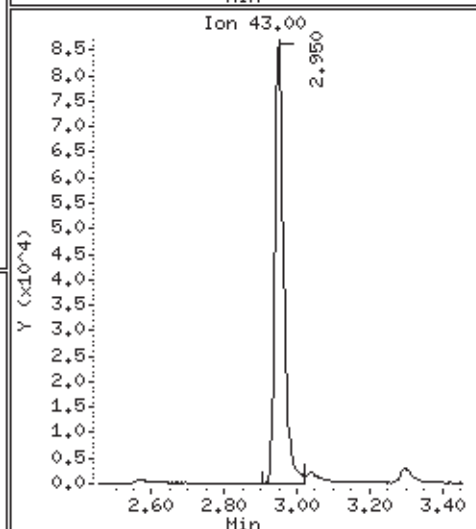
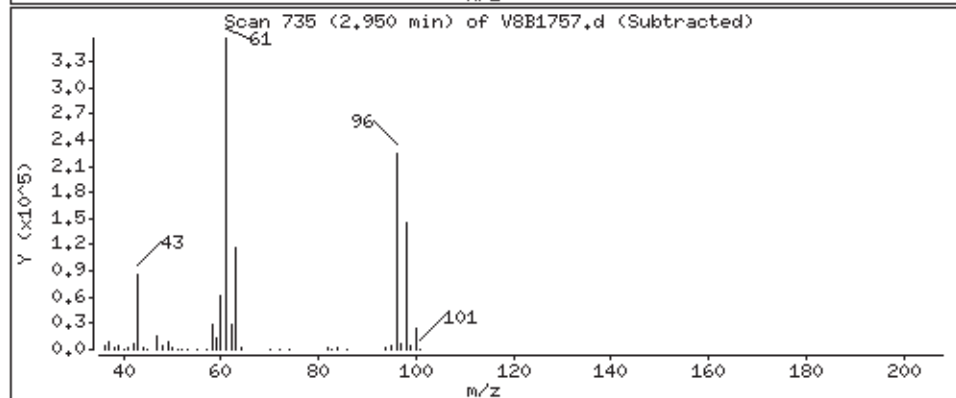
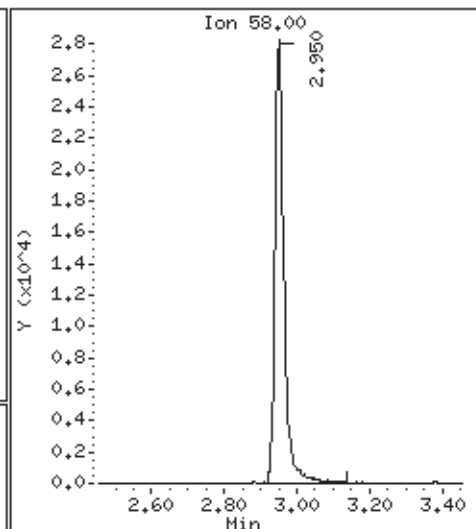
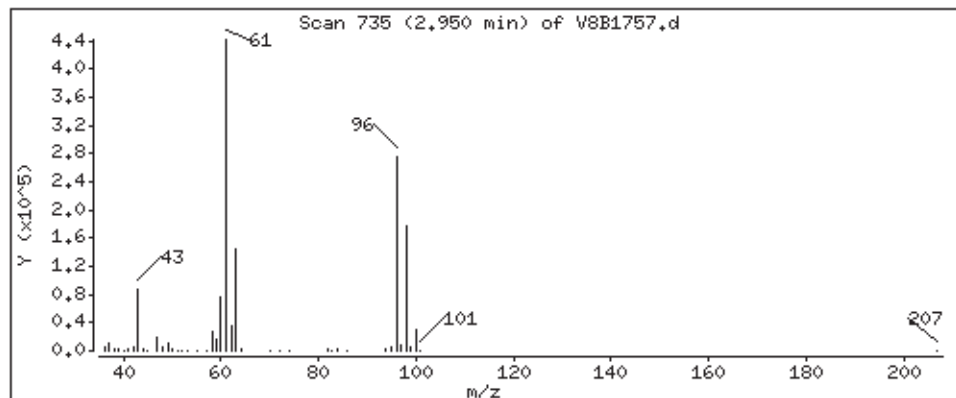
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

12 Acetone

Concentration: 130 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

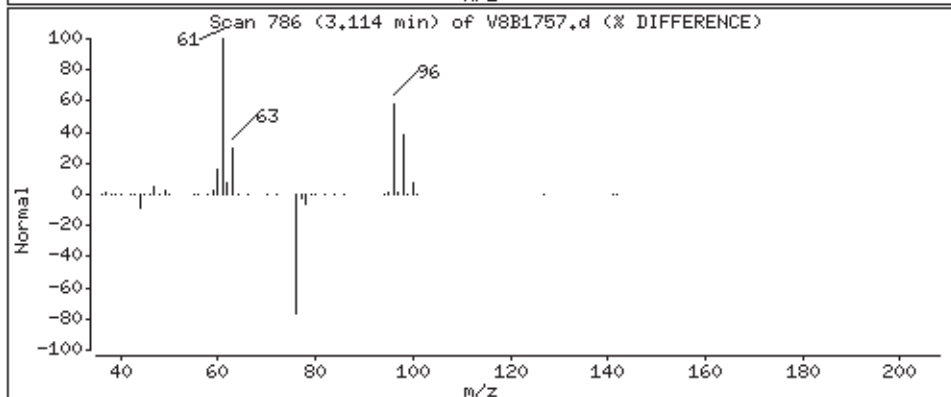
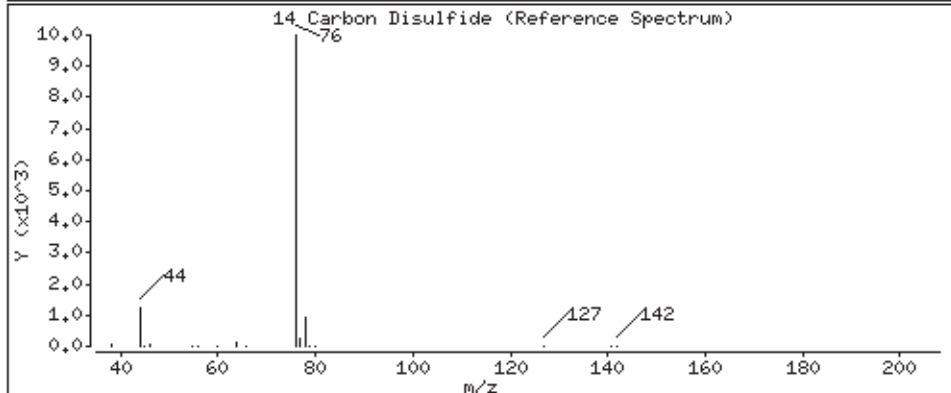
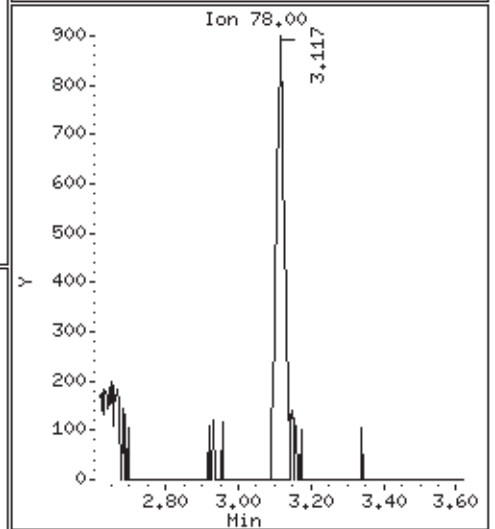
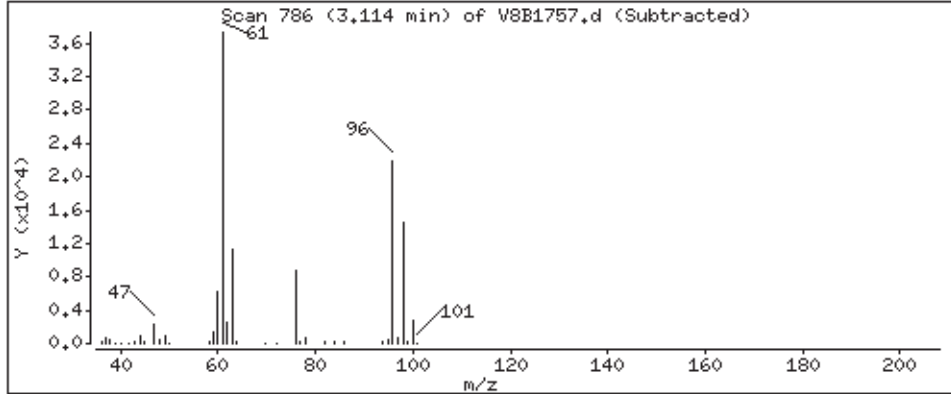
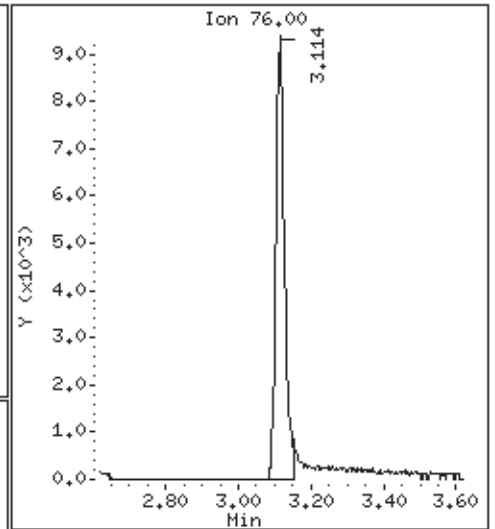
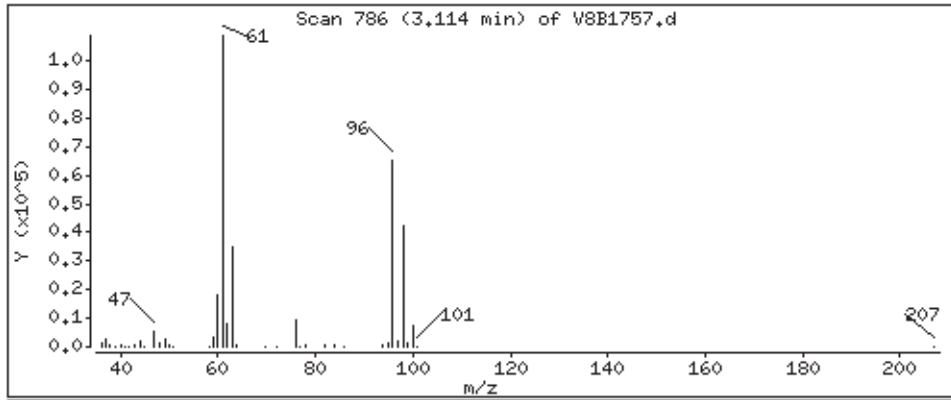
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

14 Carbon Disulfide

Concentration: 2 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

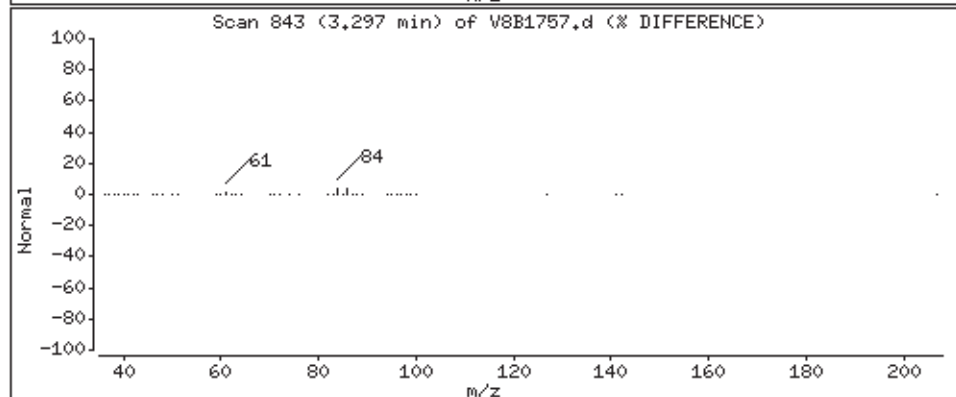
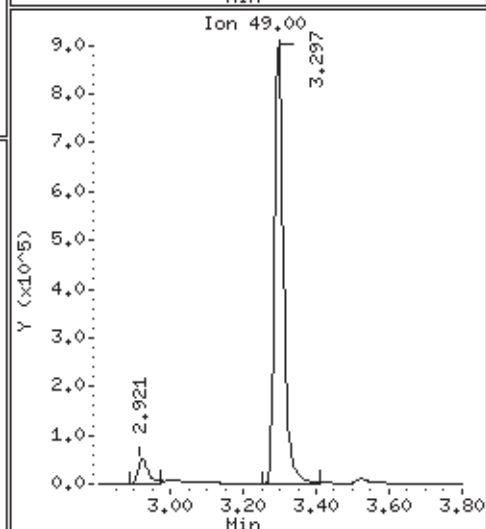
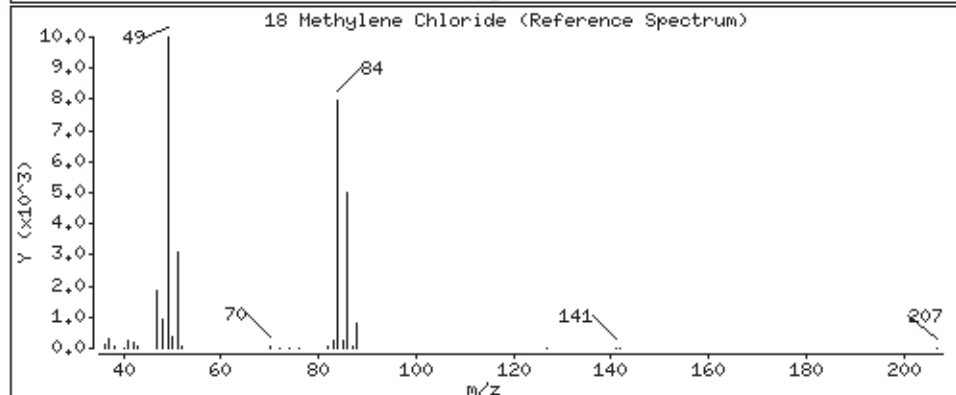
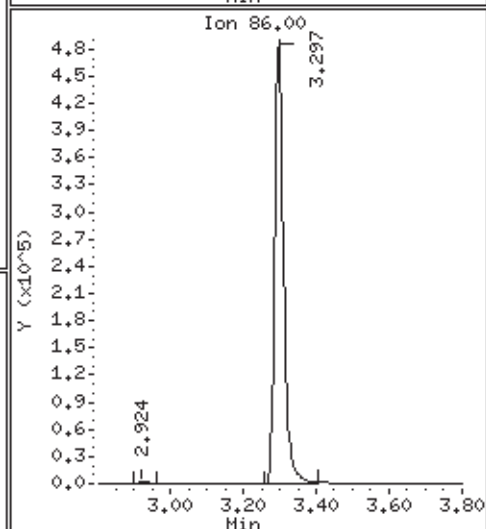
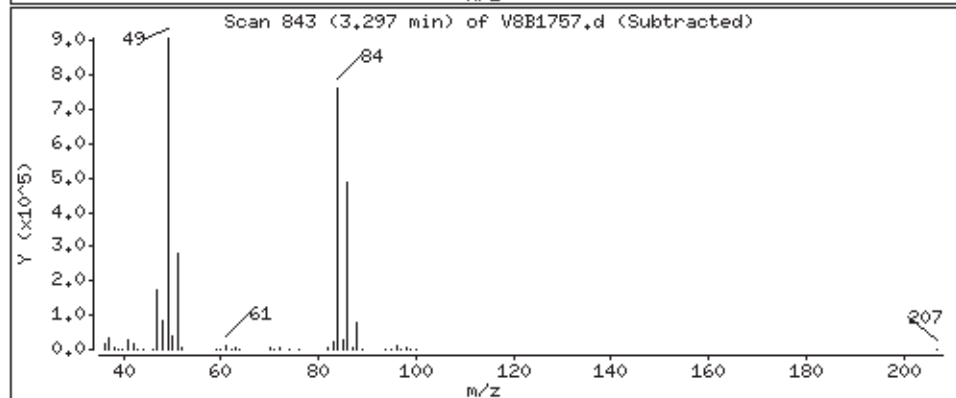
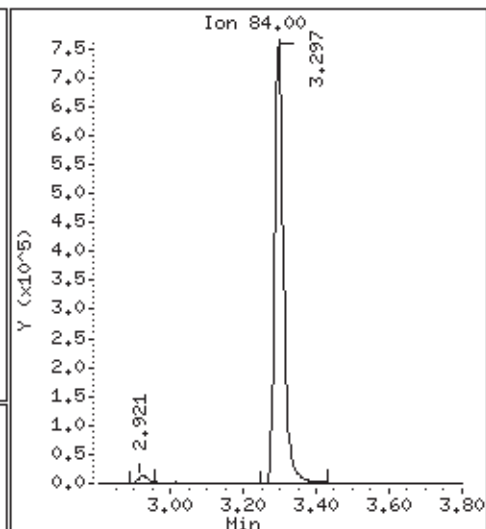
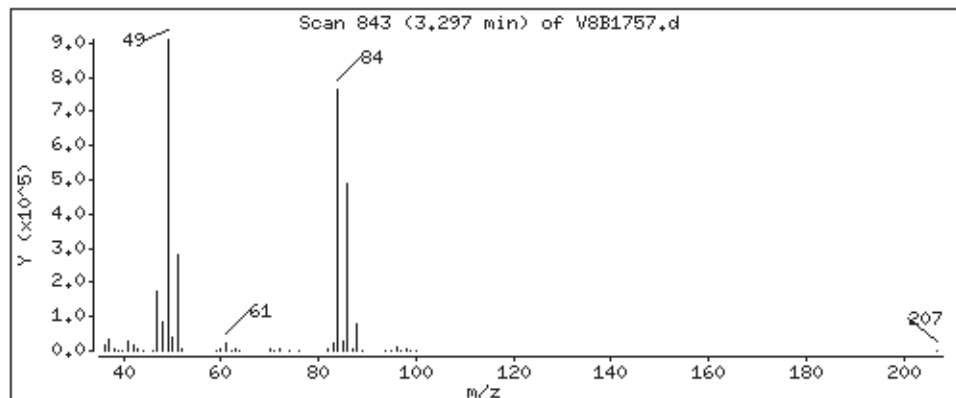
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

18 Methylene Chloride

Concentration: 520 ug/L



Data File: \\Avogadro\Organics\V8,I\120516B,B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

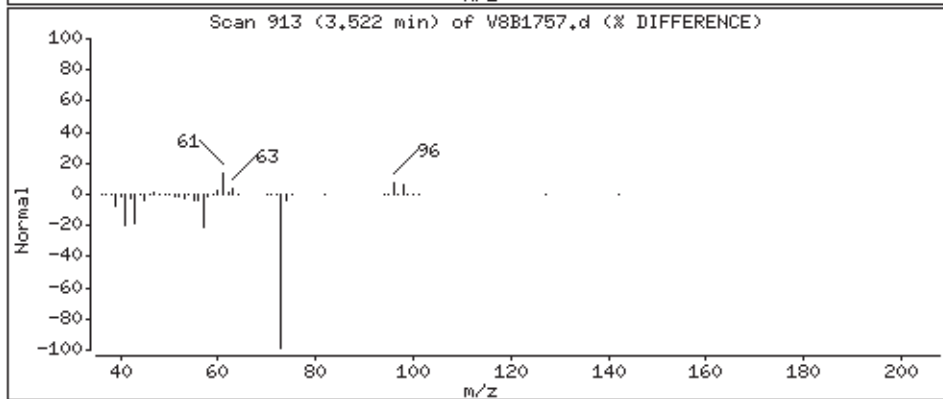
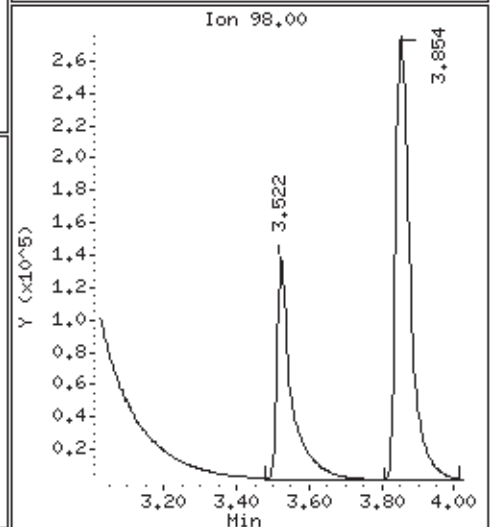
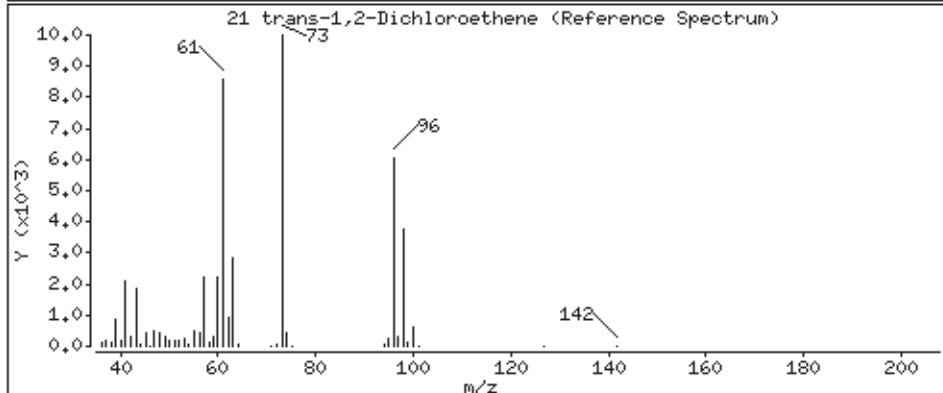
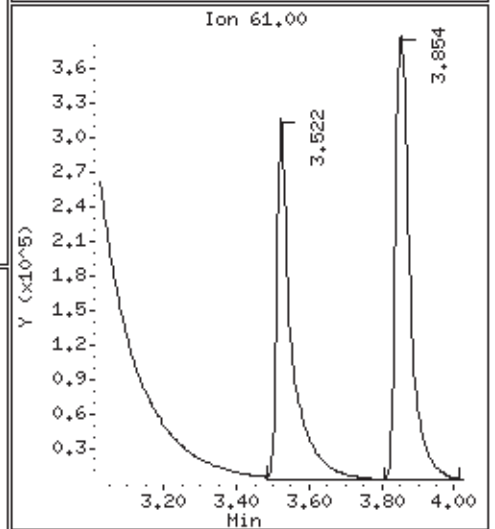
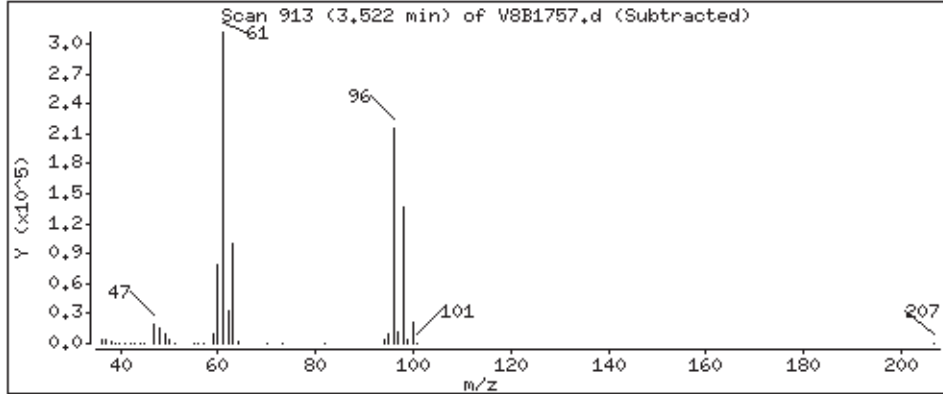
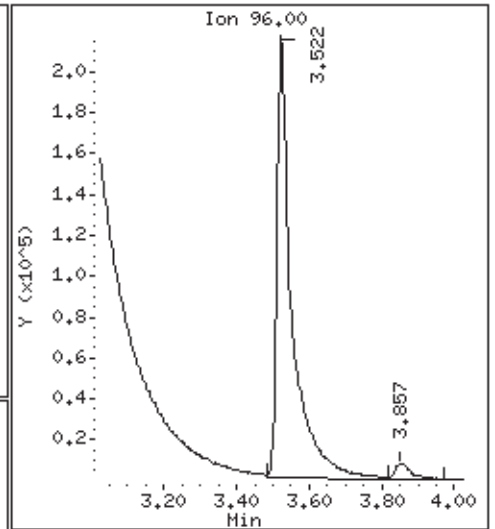
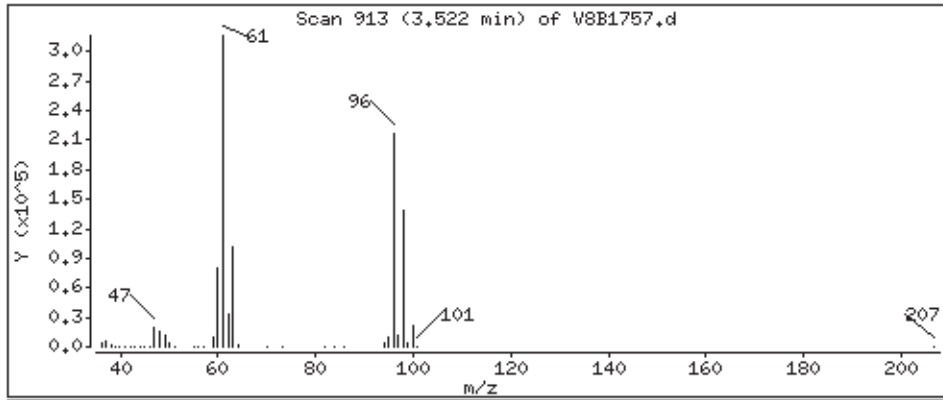
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

21 trans-1,2-Dichloroethene

Concentration: 260 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

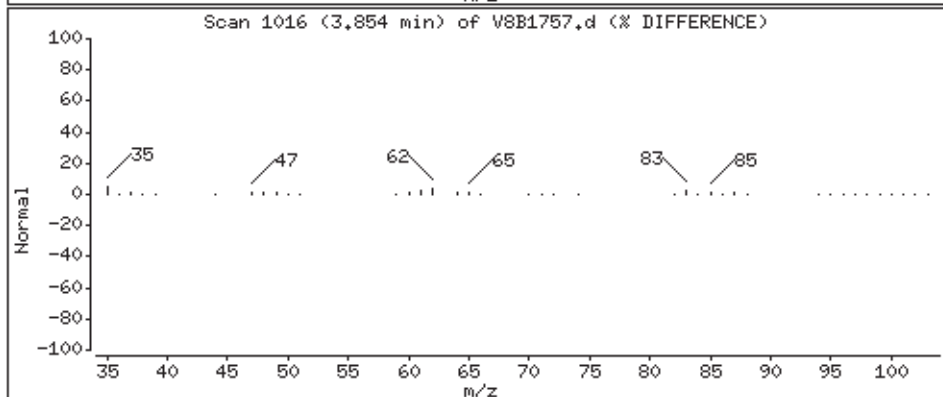
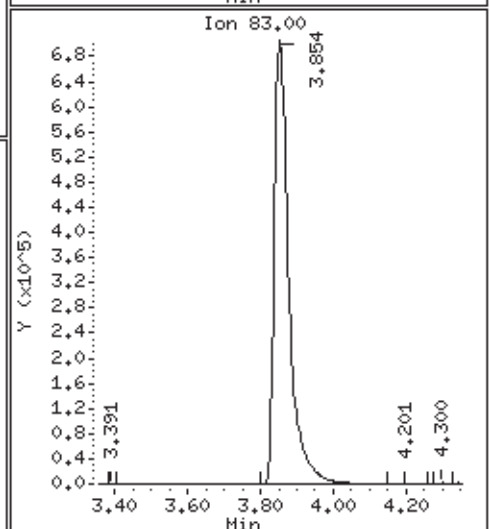
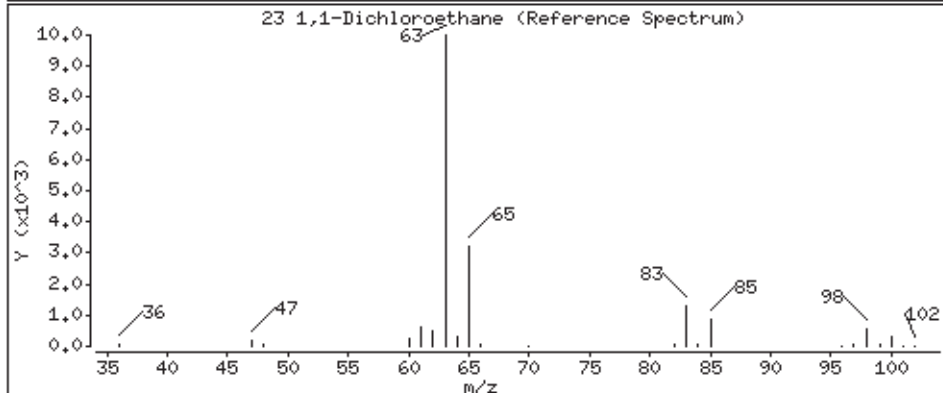
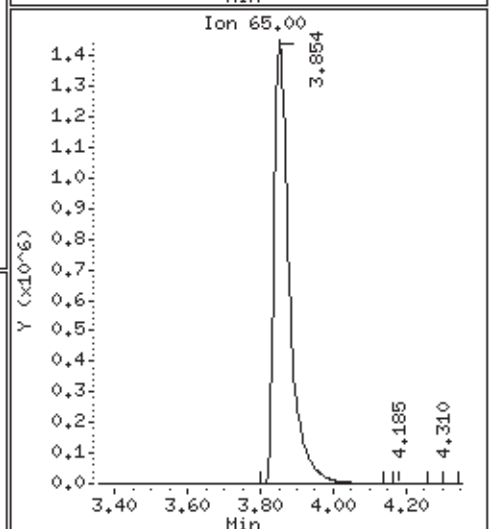
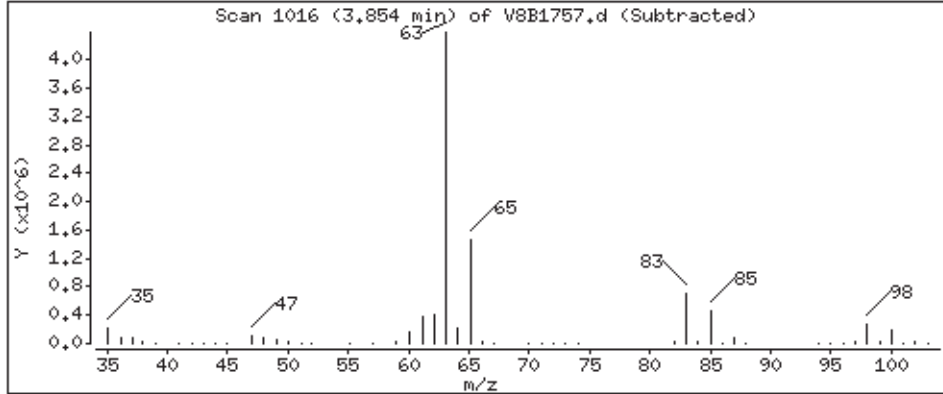
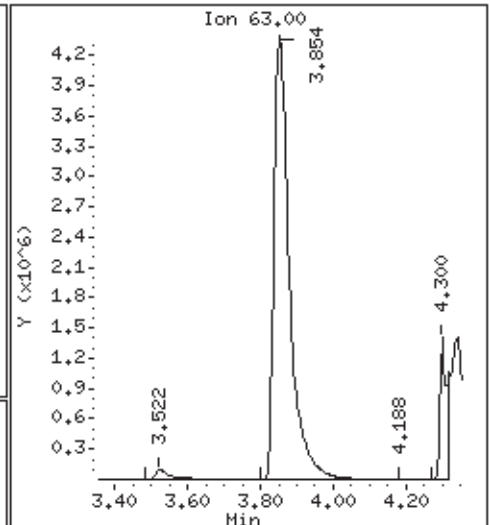
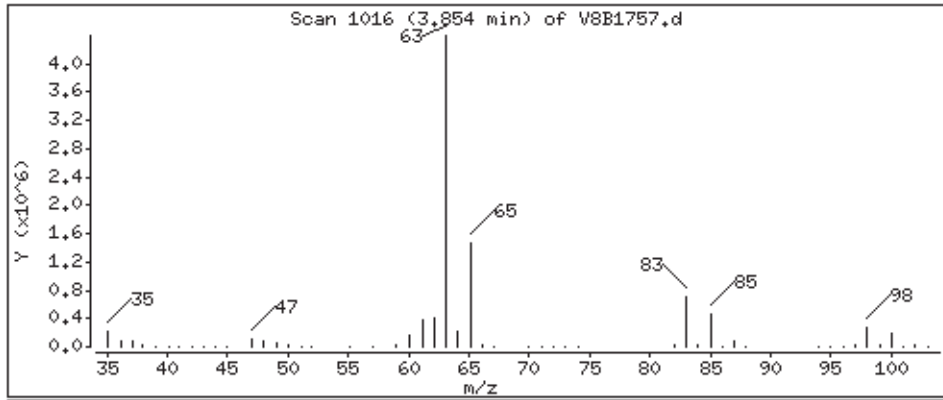
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

23 1,1-Dichloroethane

Concentration: 3000 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

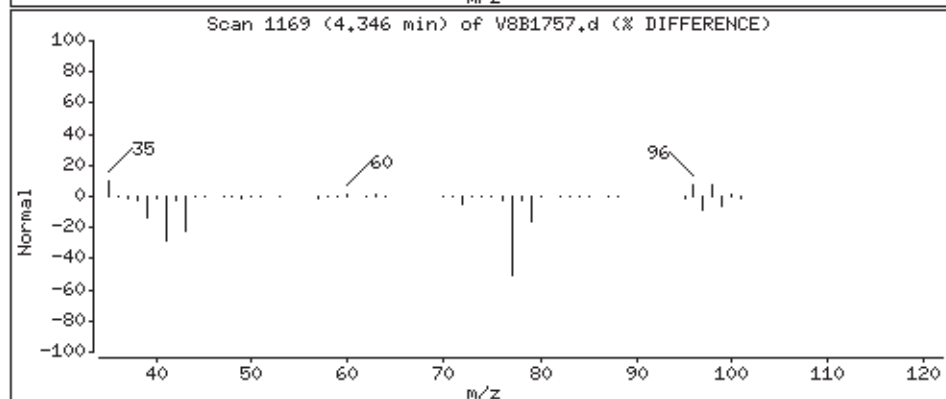
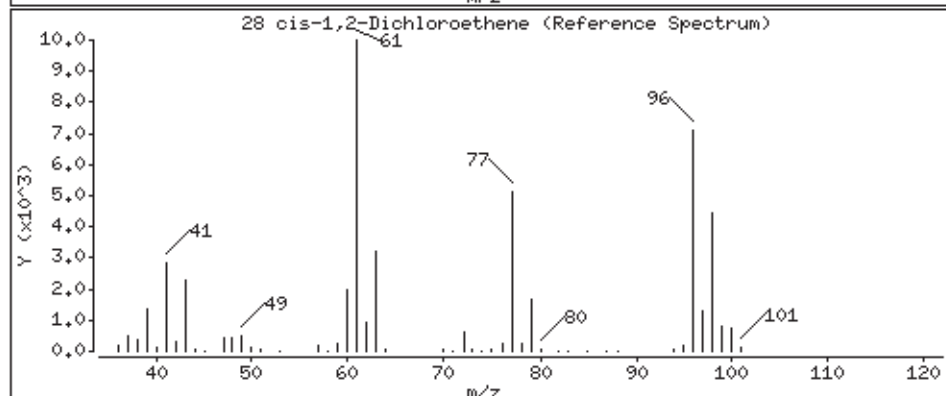
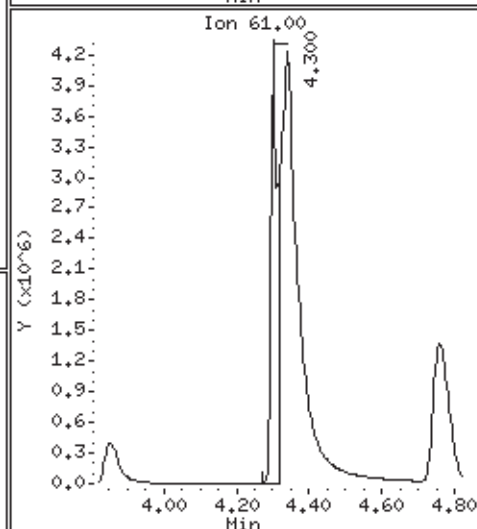
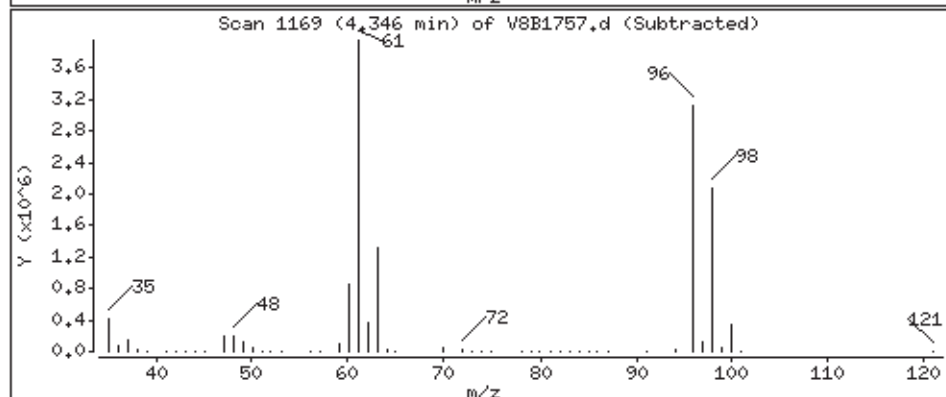
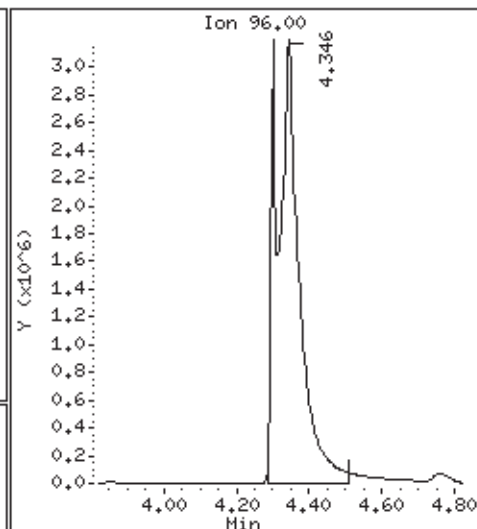
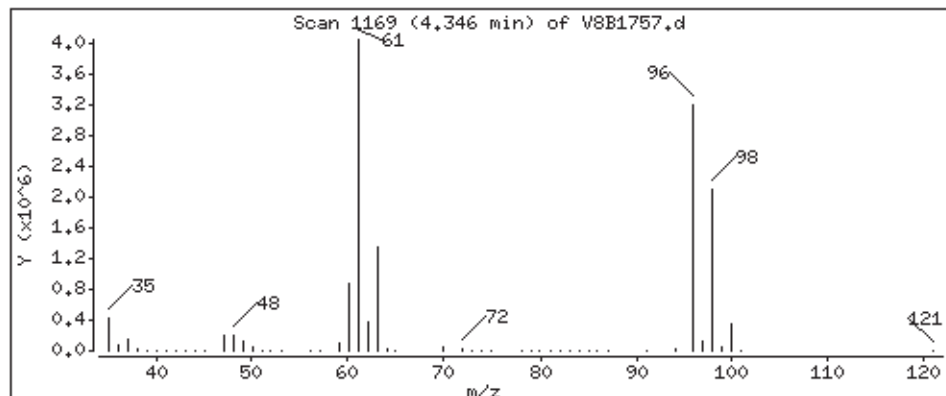
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 5200 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

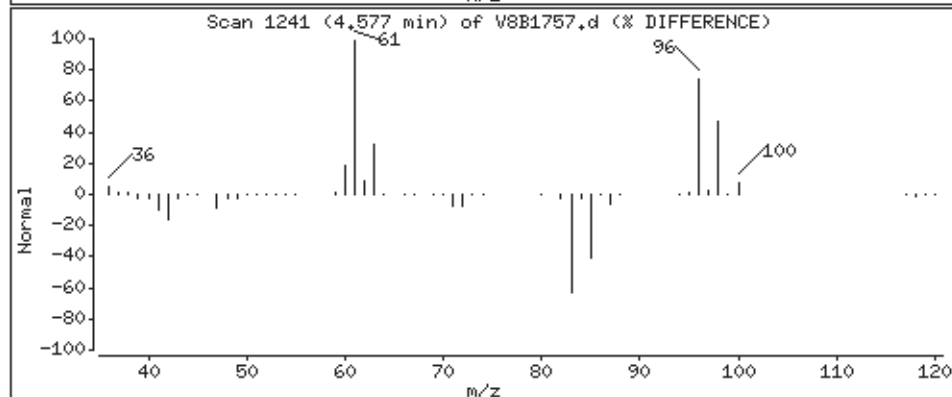
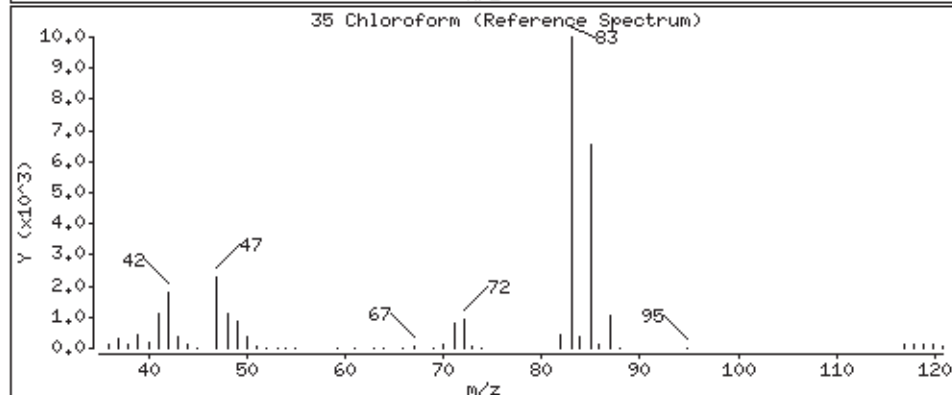
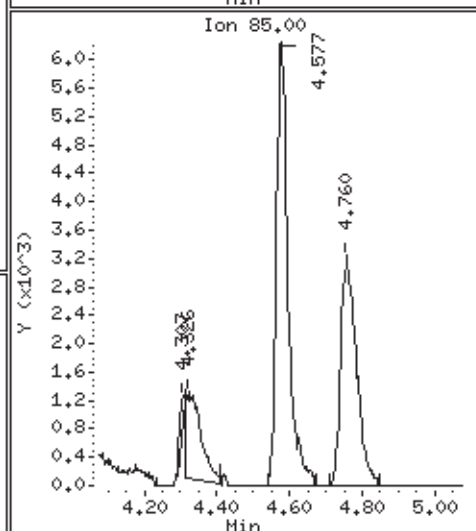
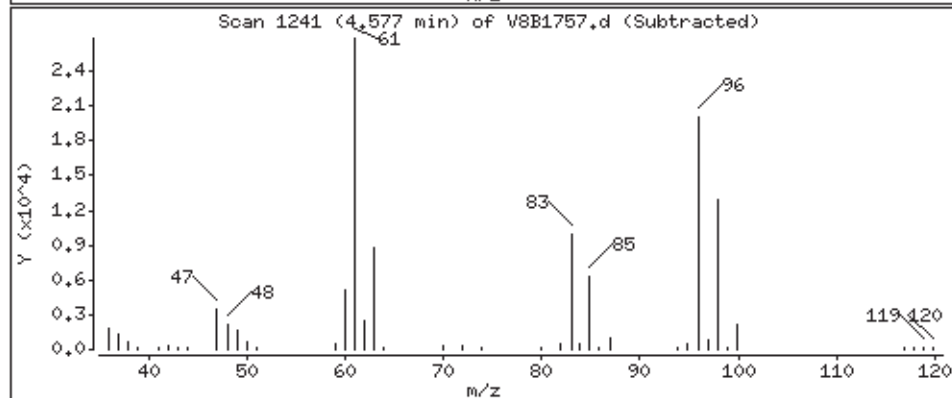
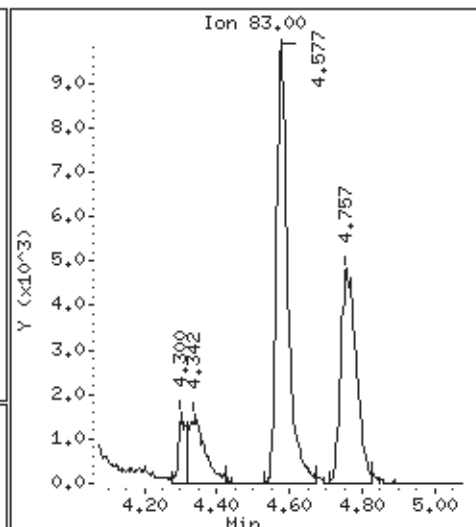
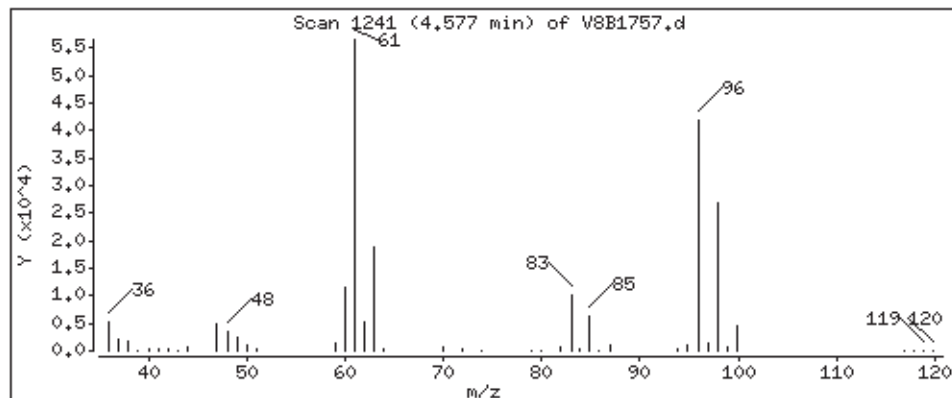
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

35 Chloroform

Concentration: 5 ug/L



Data File: \\Avogadro\Organics\V8,I\120516B,B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

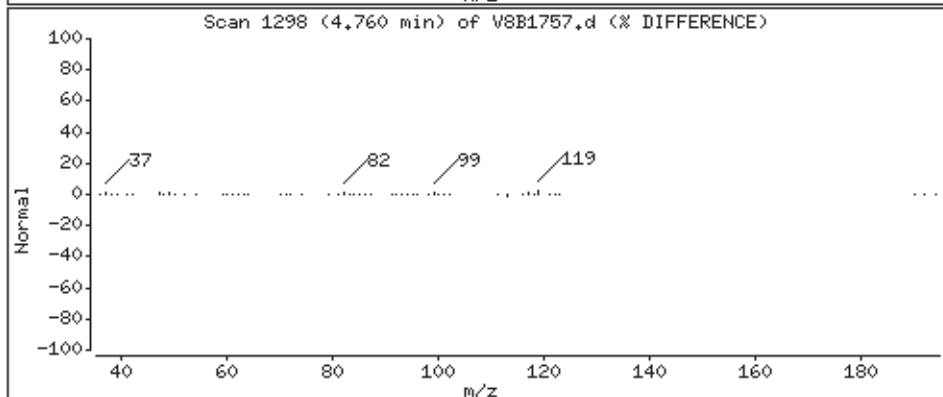
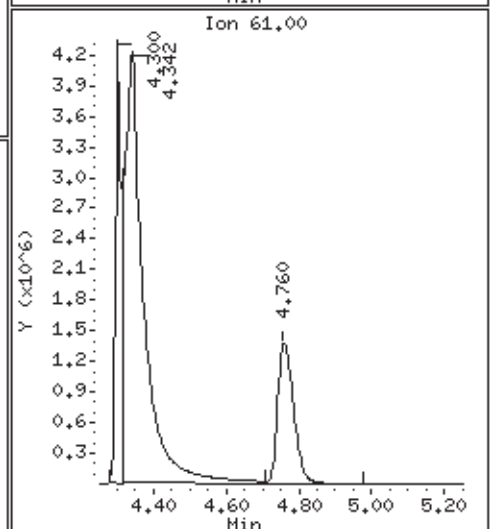
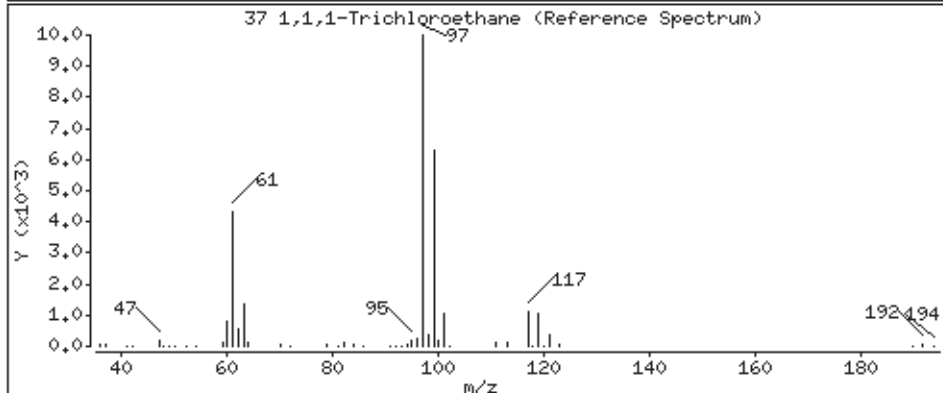
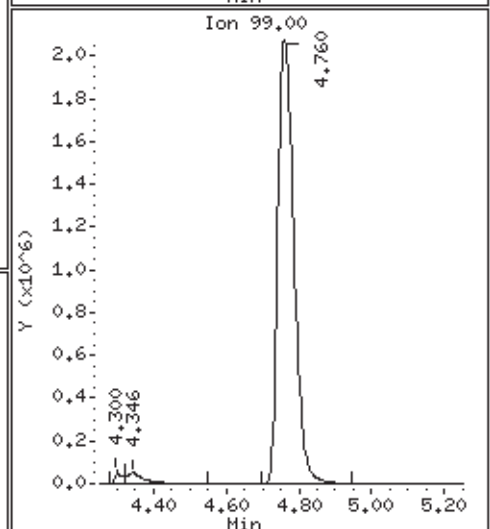
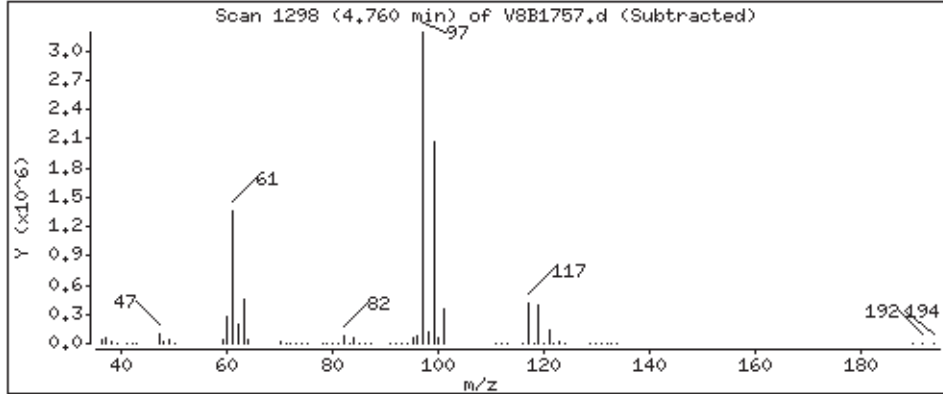
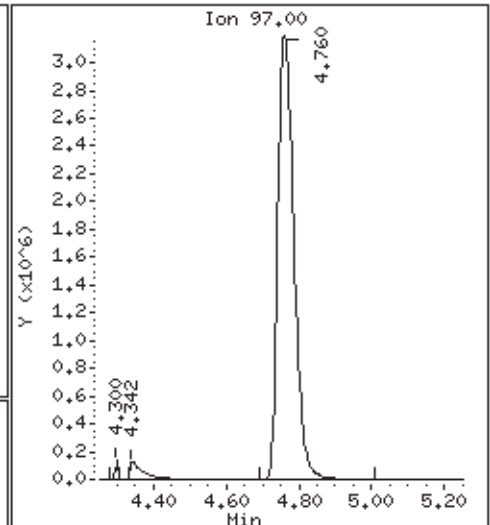
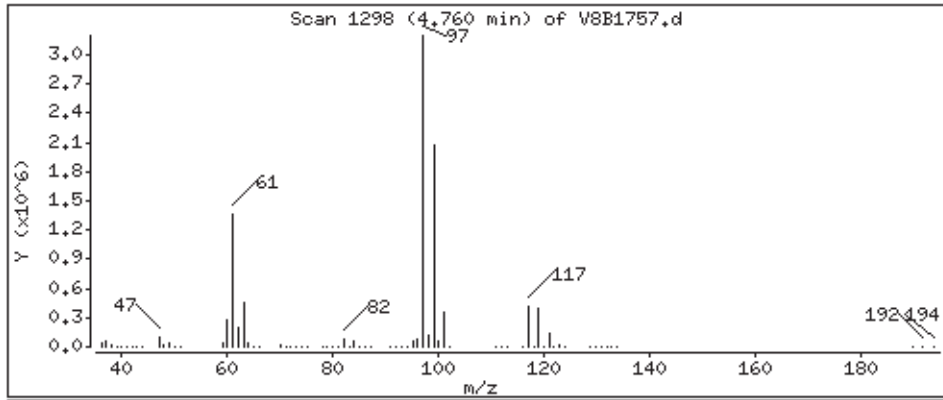
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

37 1,1,1-Trichloroethane

Concentration: 2800 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

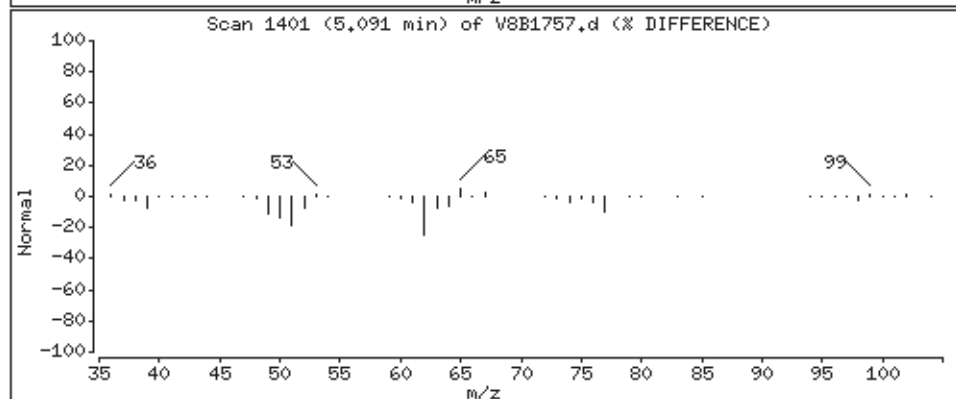
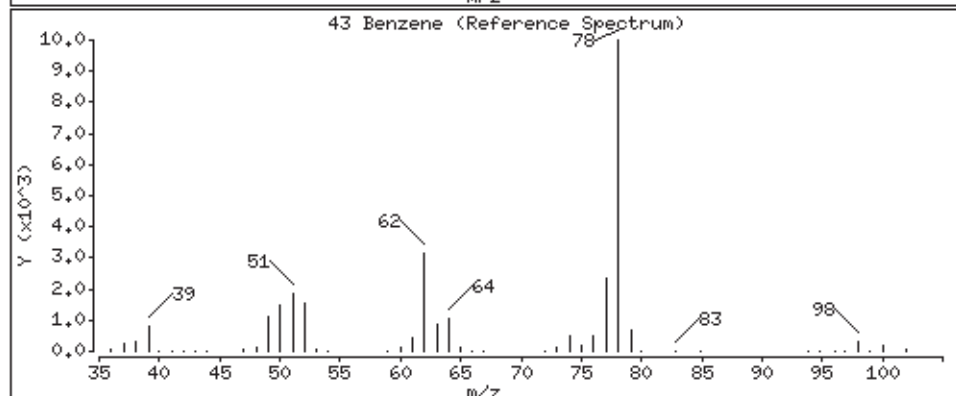
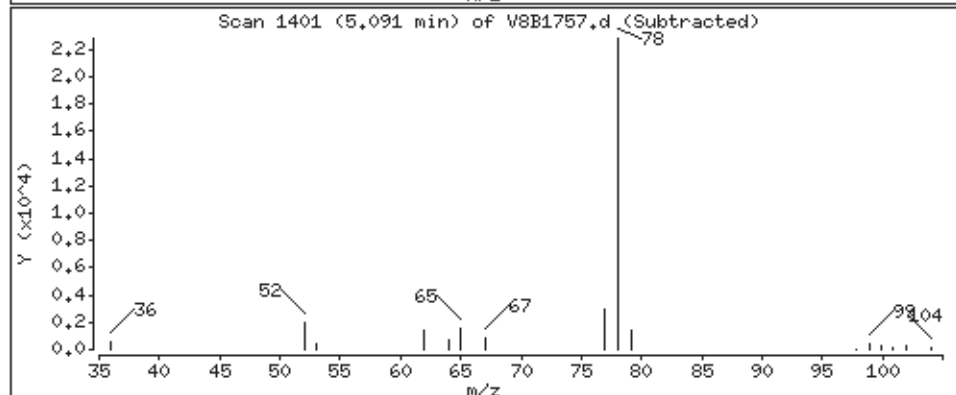
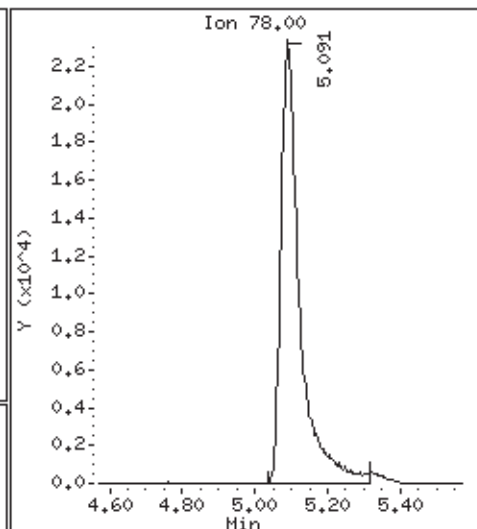
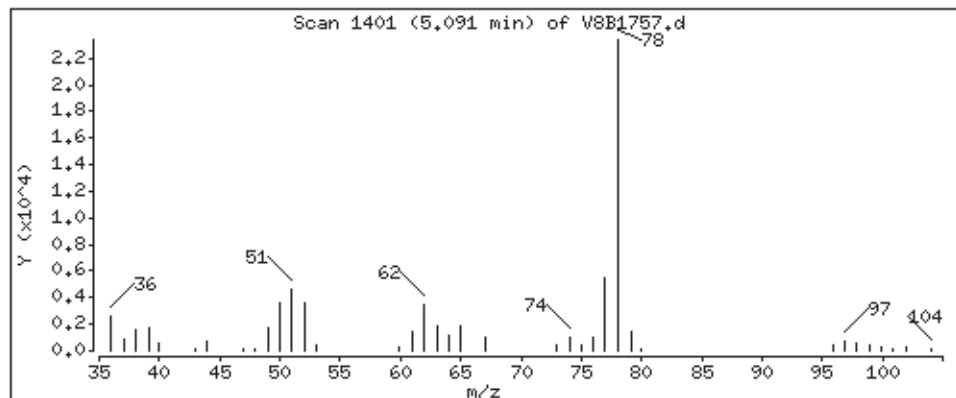
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

43 Benzene

Concentration: 8 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

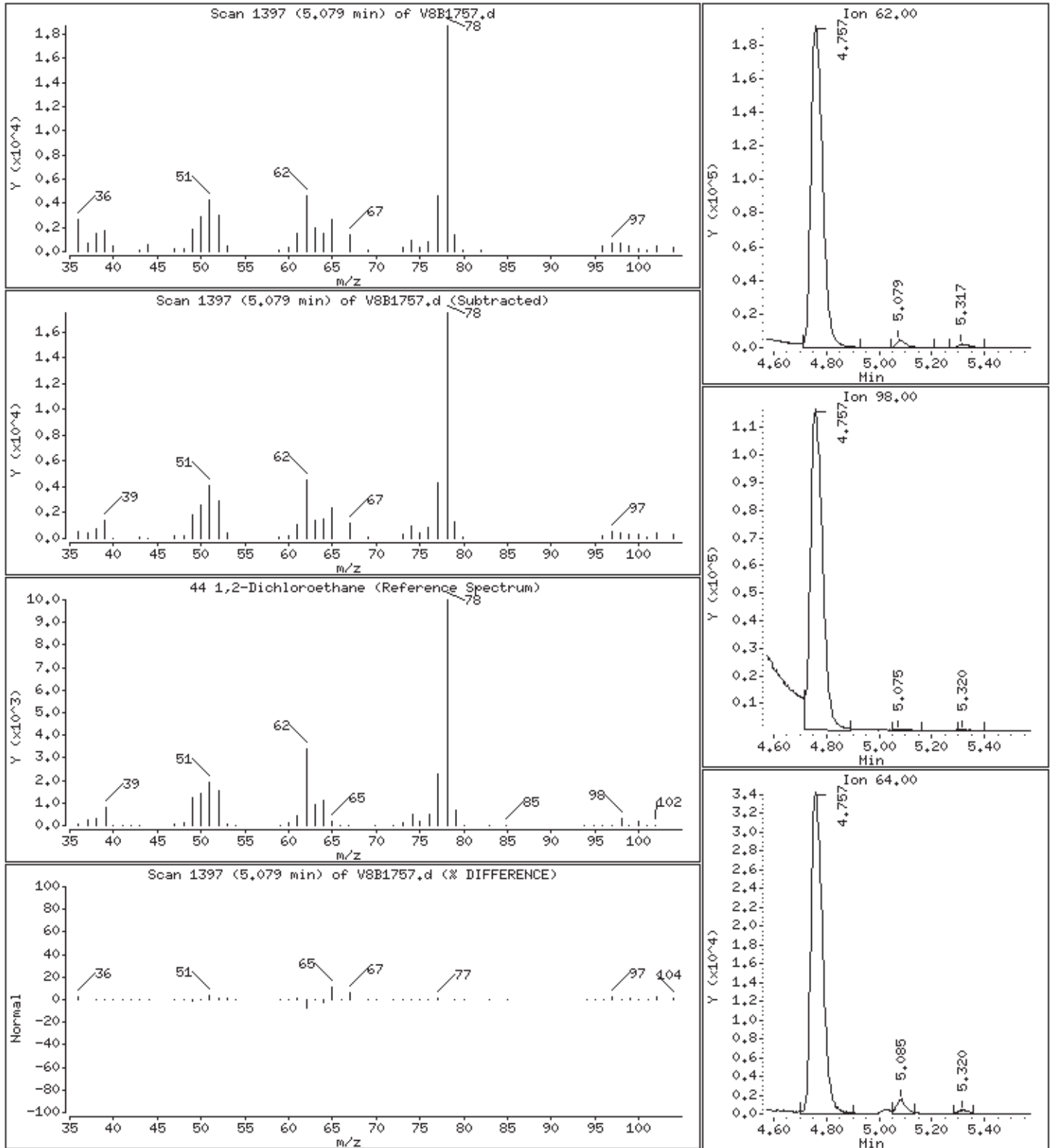
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

44 1,2-Dichloroethane

Concentration: 4 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

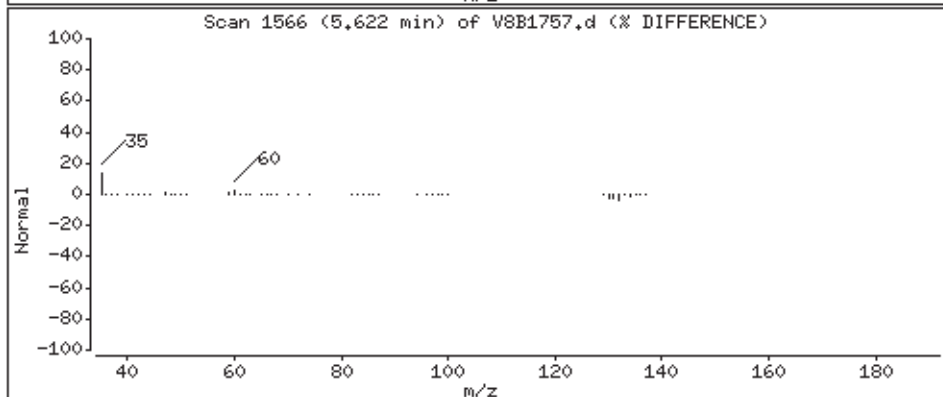
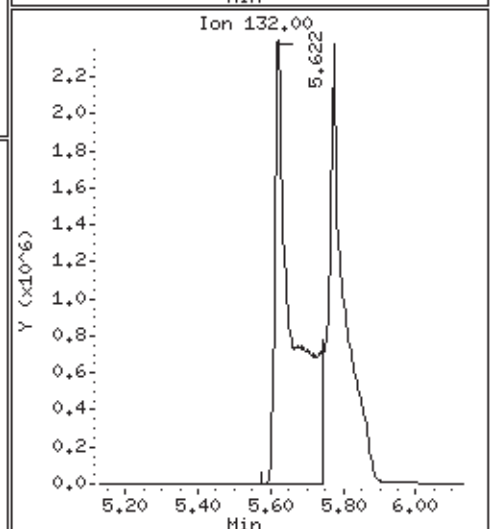
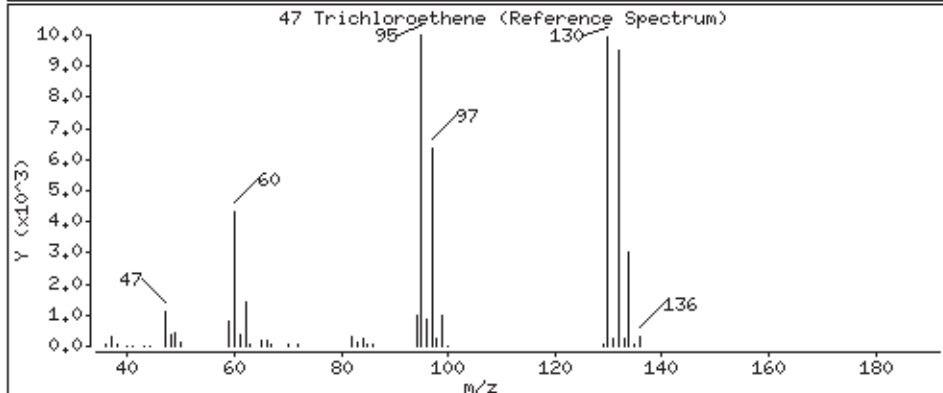
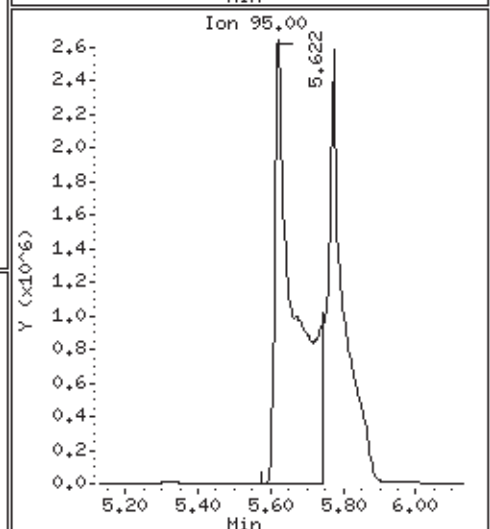
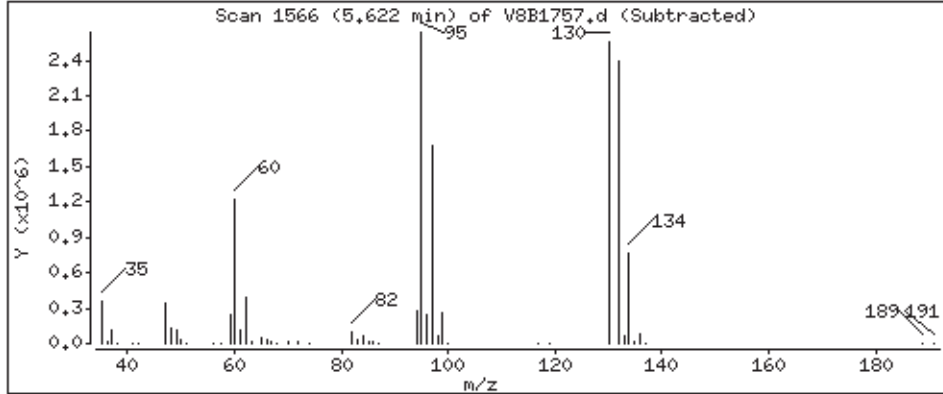
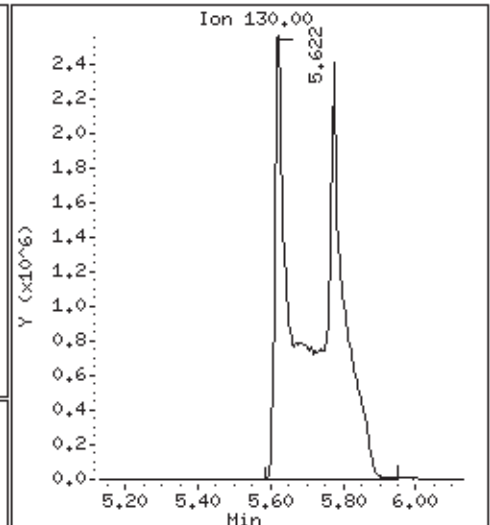
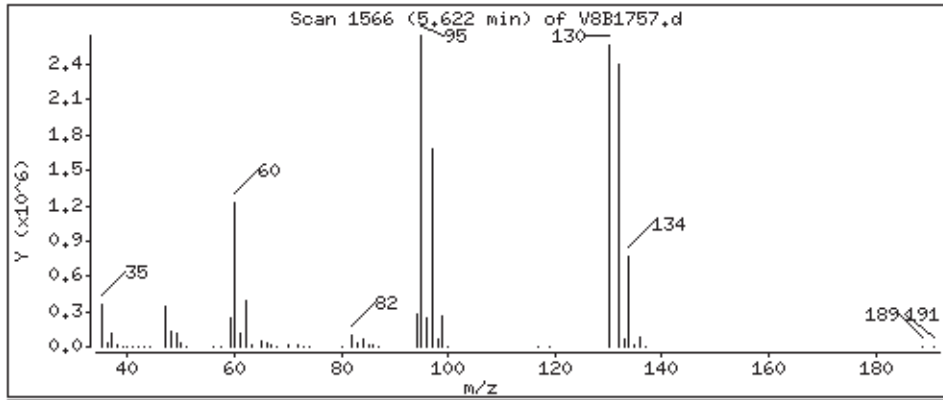
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 6500 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

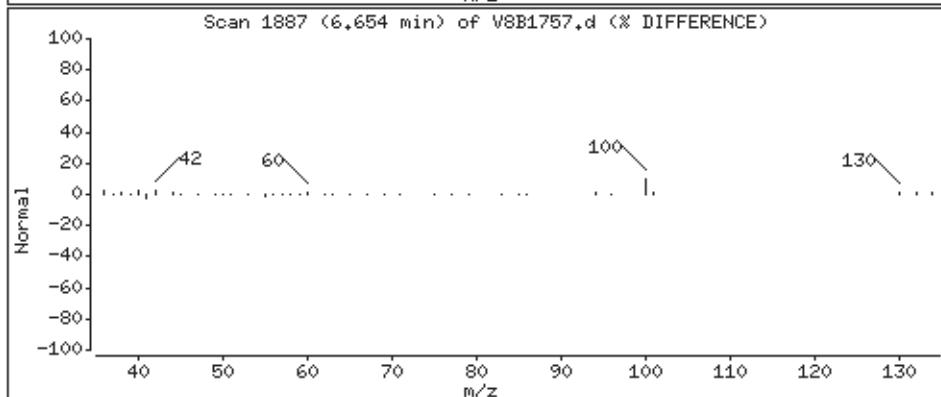
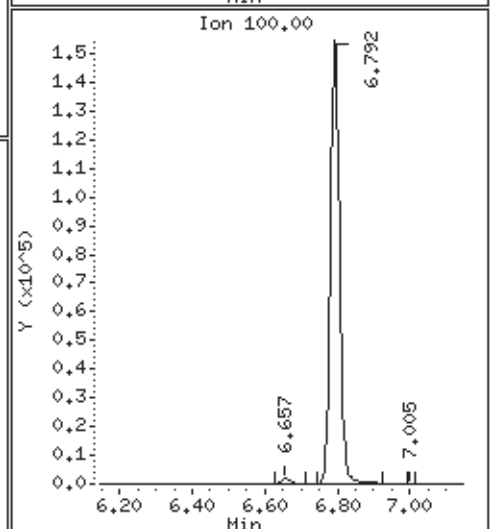
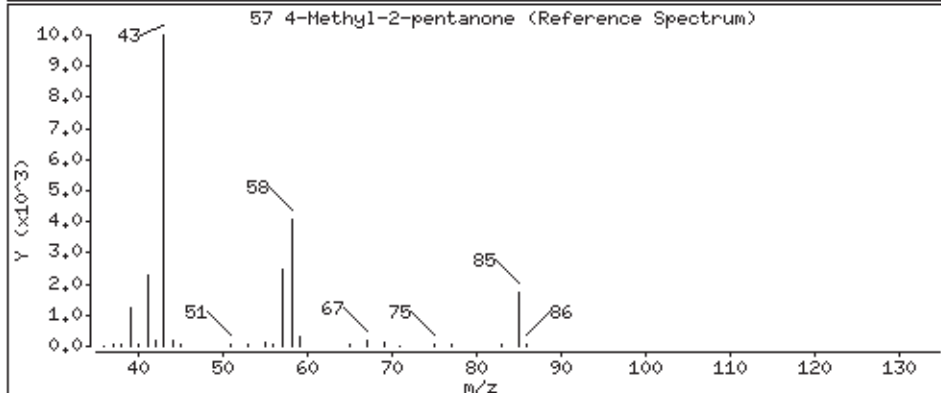
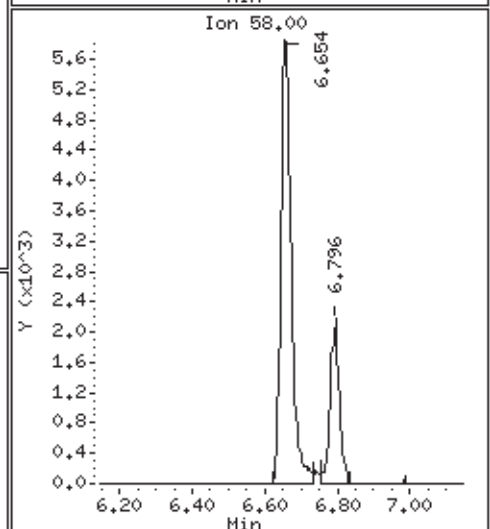
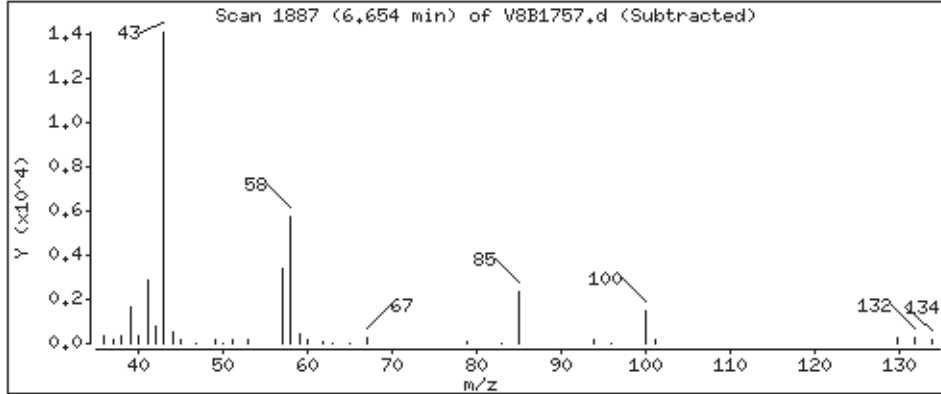
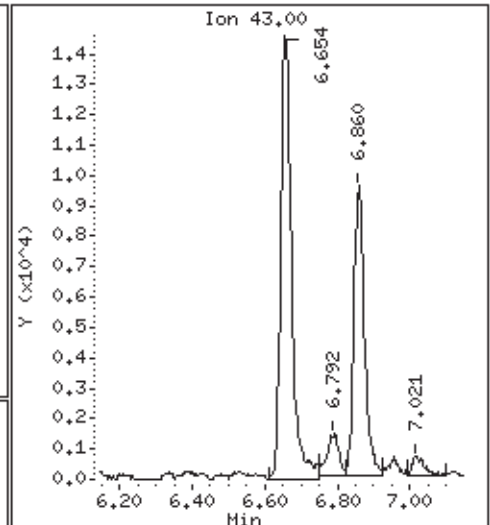
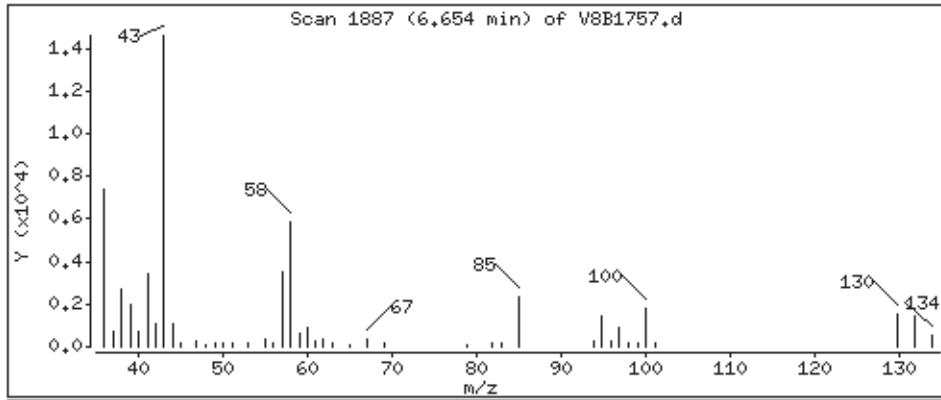
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

57 4-Methyl-2-pentanone

Concentration: 14 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

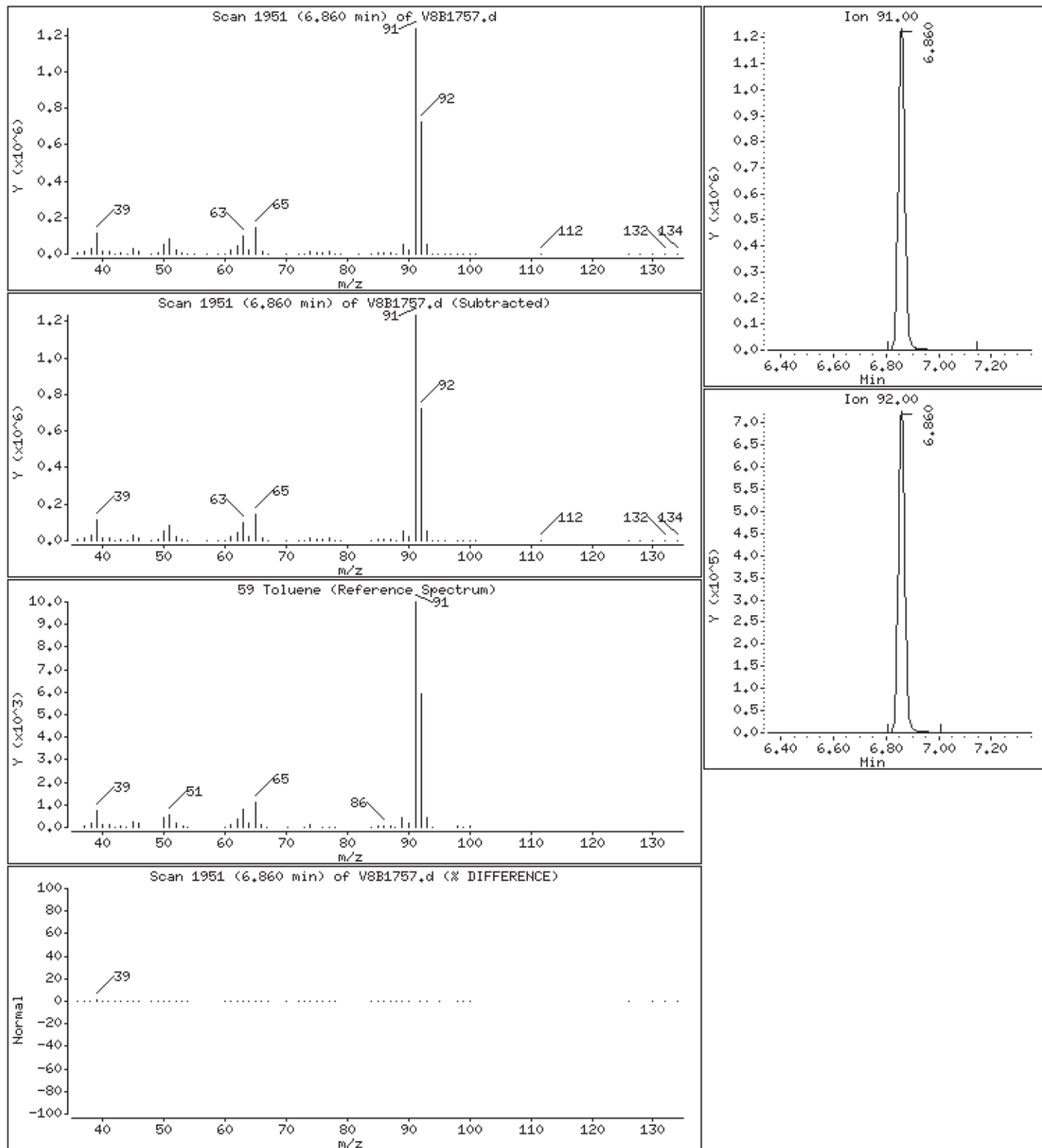
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

59 Toluene

Concentration: 200 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

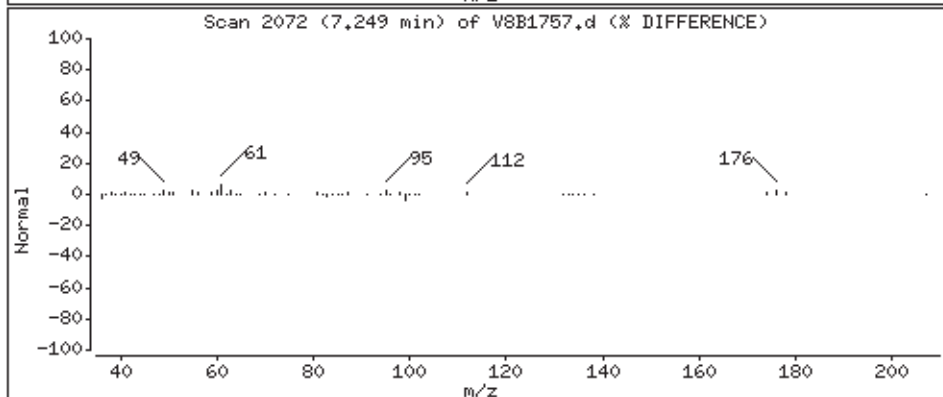
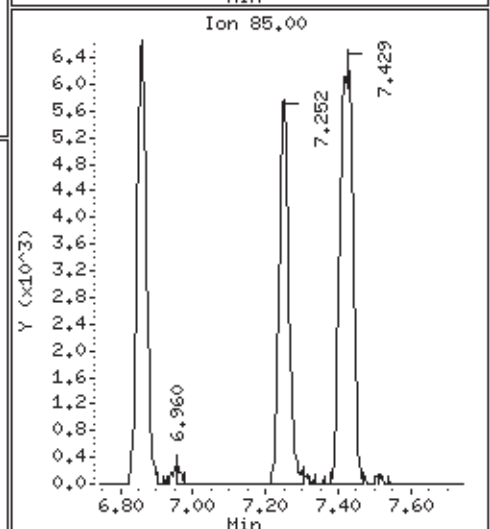
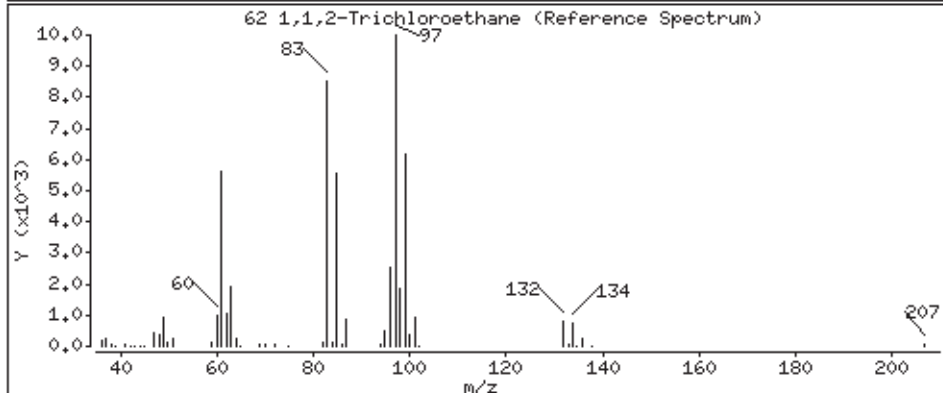
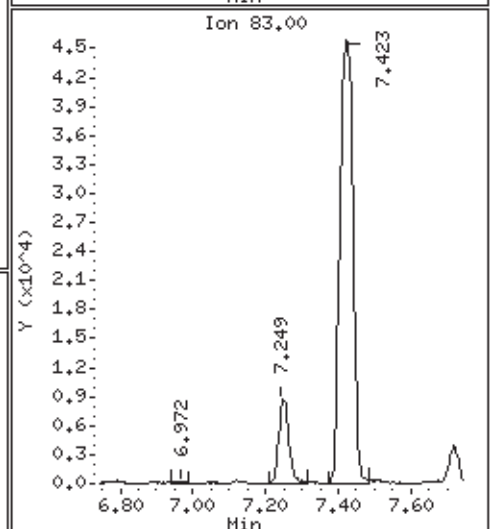
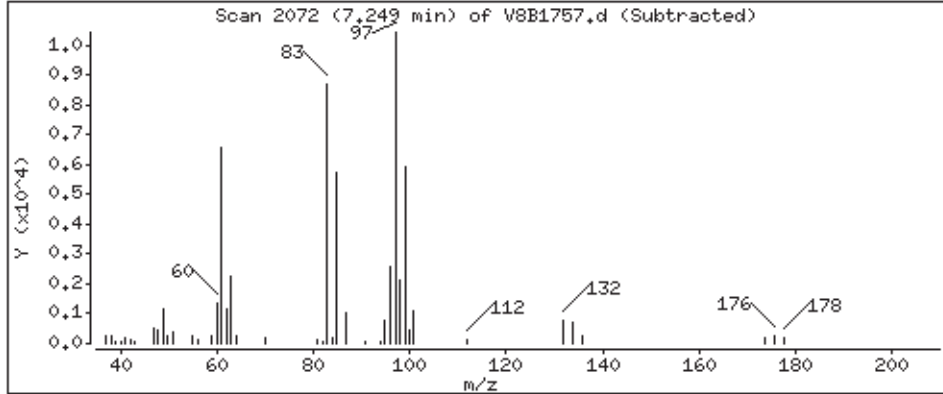
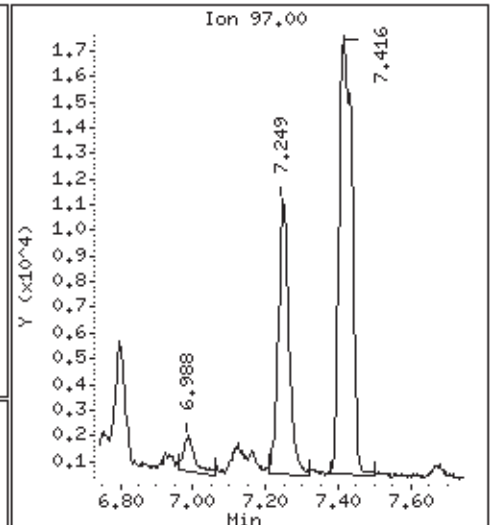
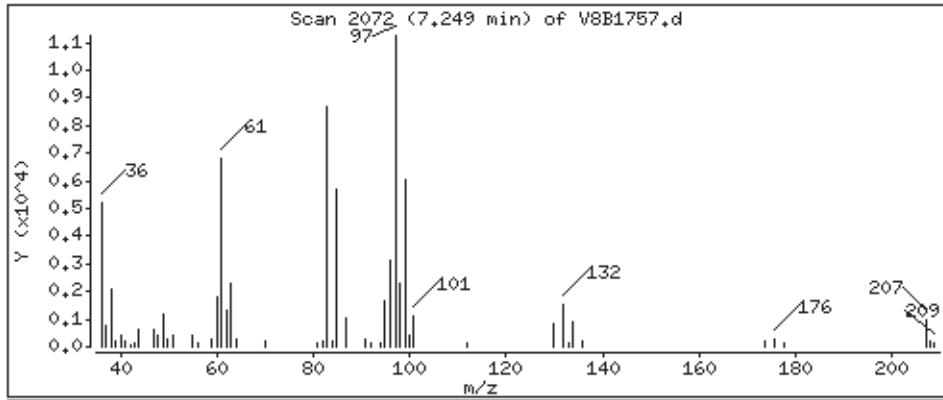
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

62 1,1,2-Trichloroethane

Concentration: 10 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

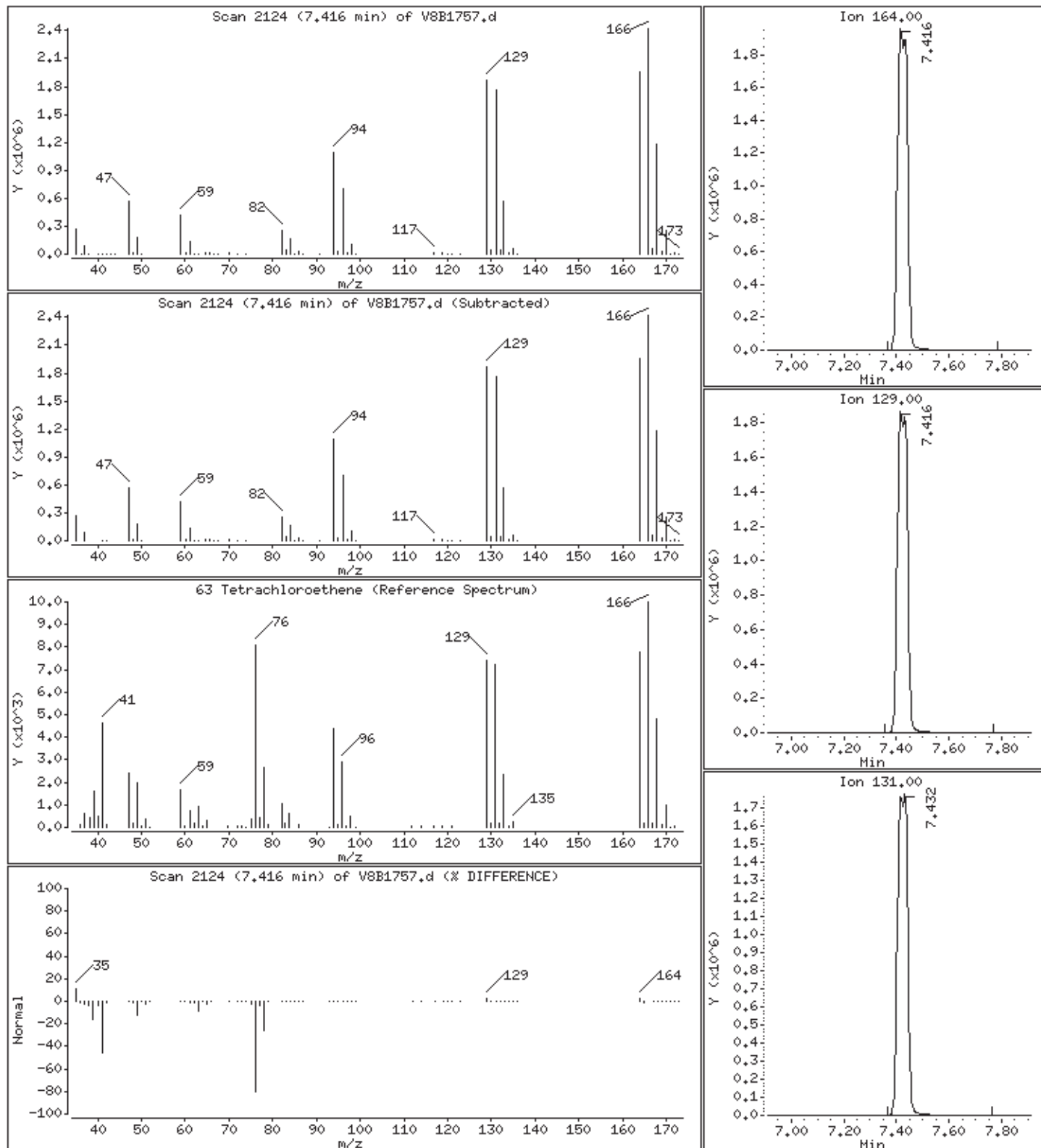
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 2600 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

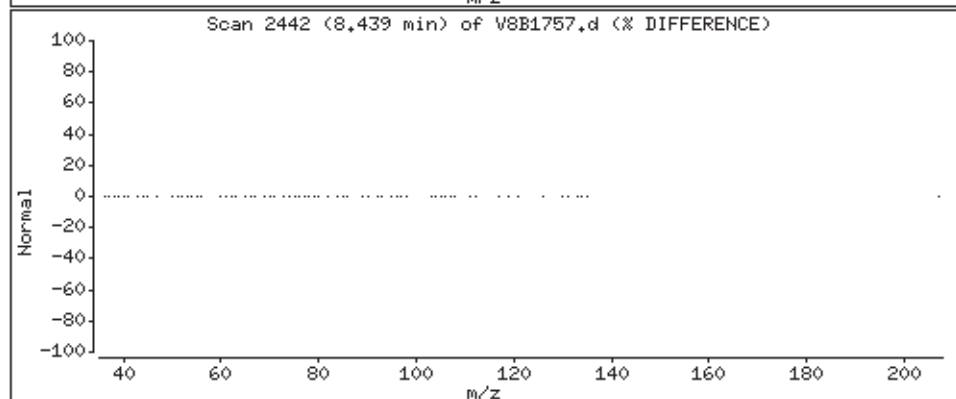
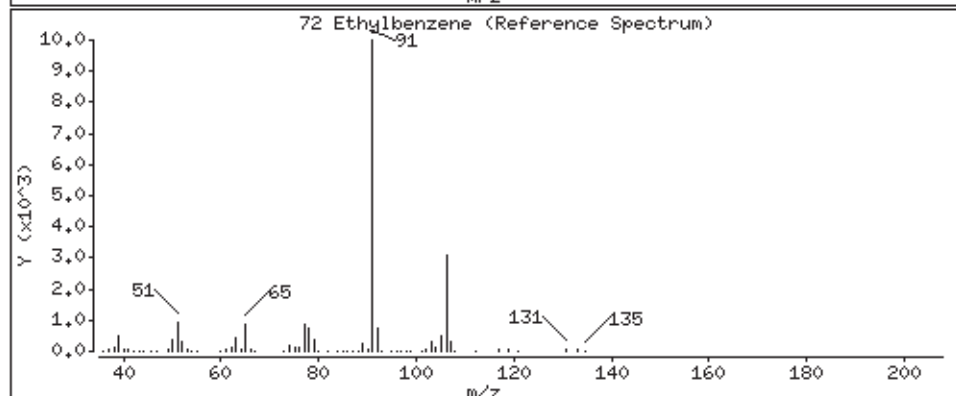
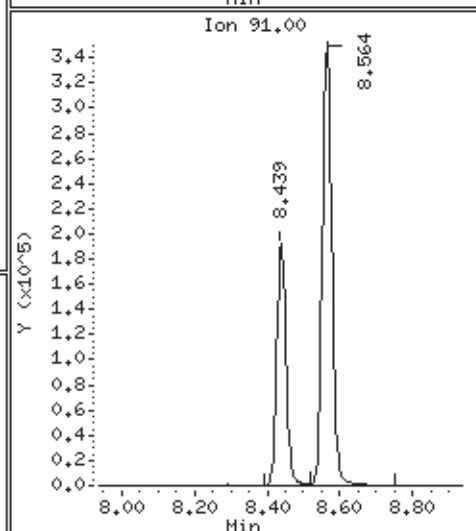
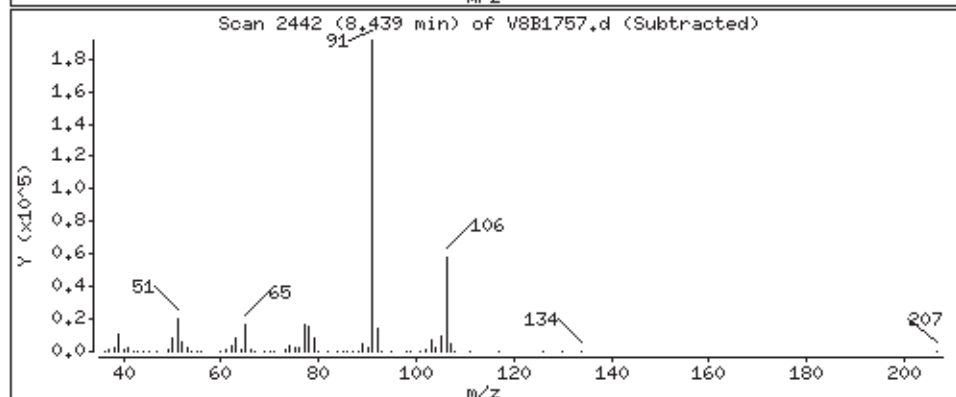
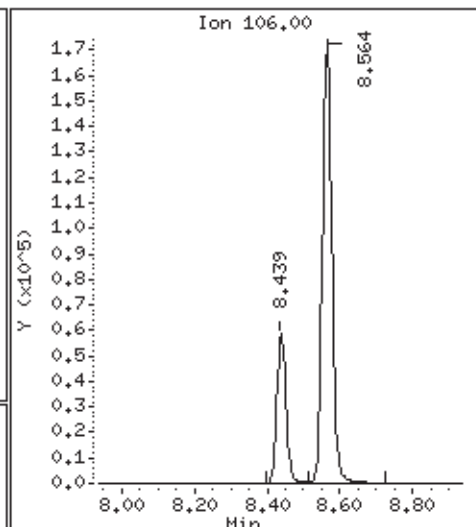
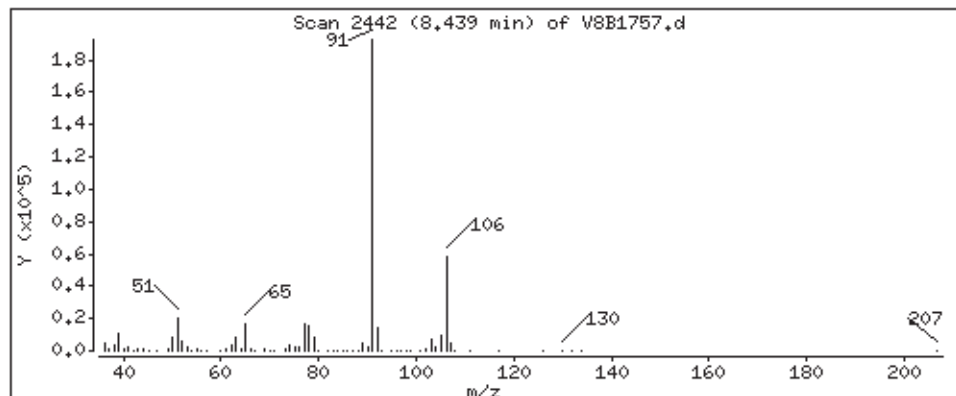
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

72 Ethylbenzene

Concentration: 32 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

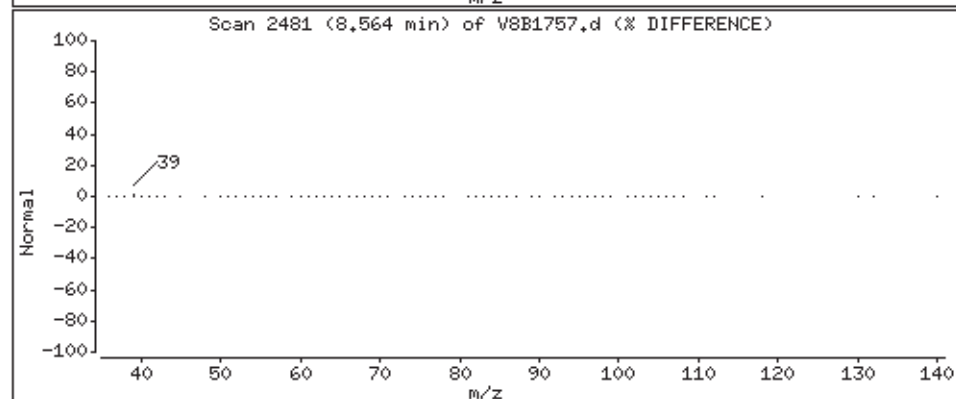
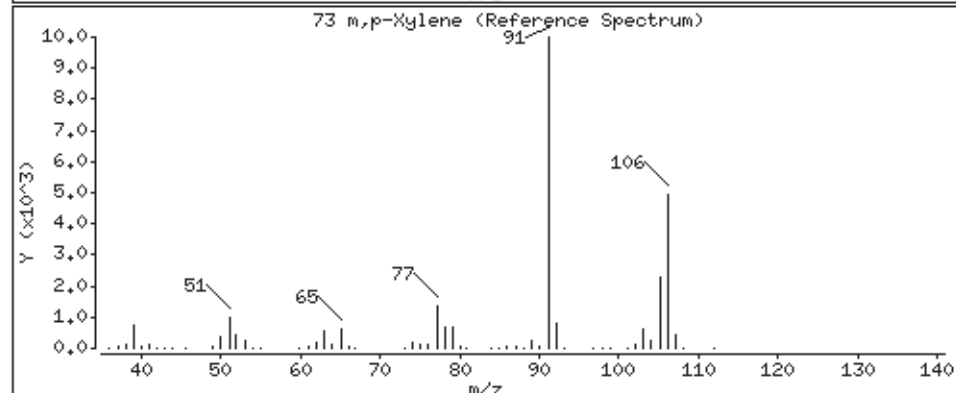
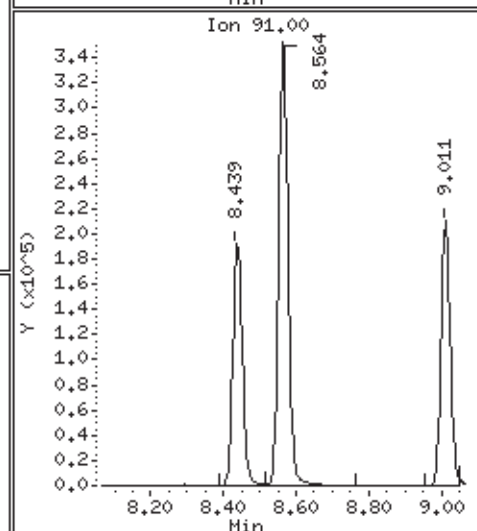
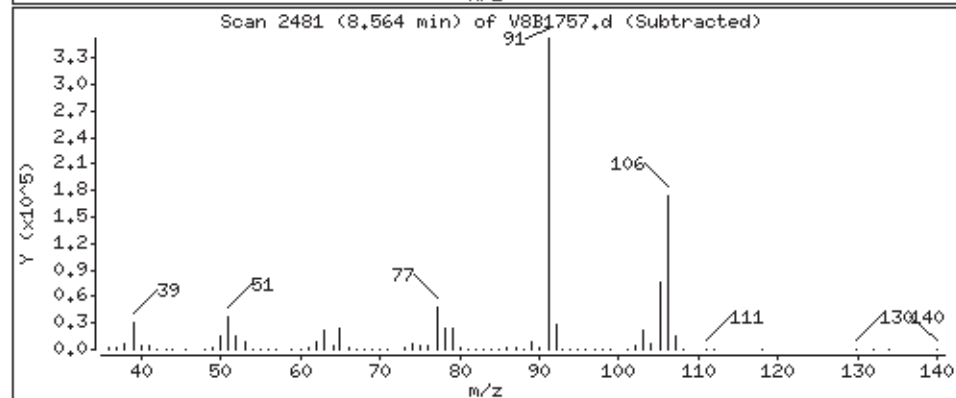
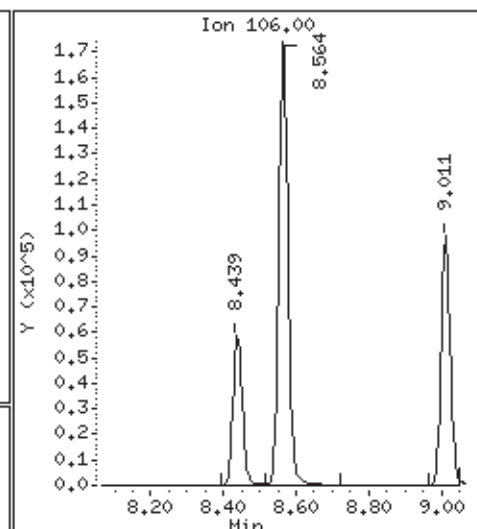
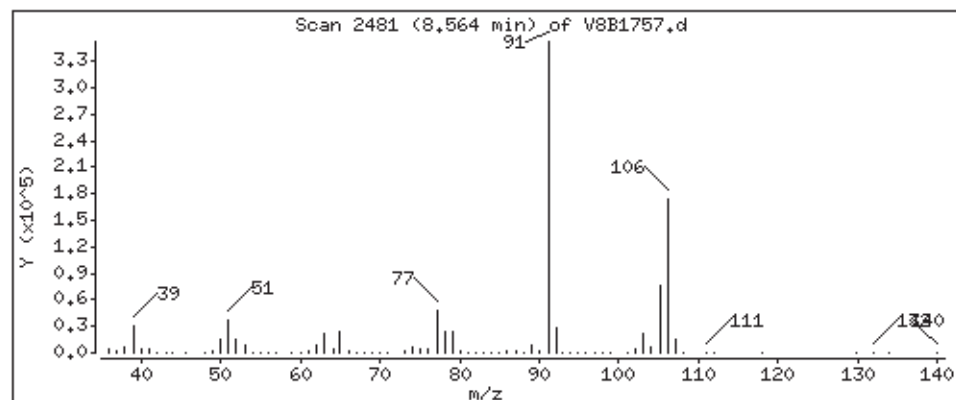
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

73 m,p-Xylene

Concentration: 76 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

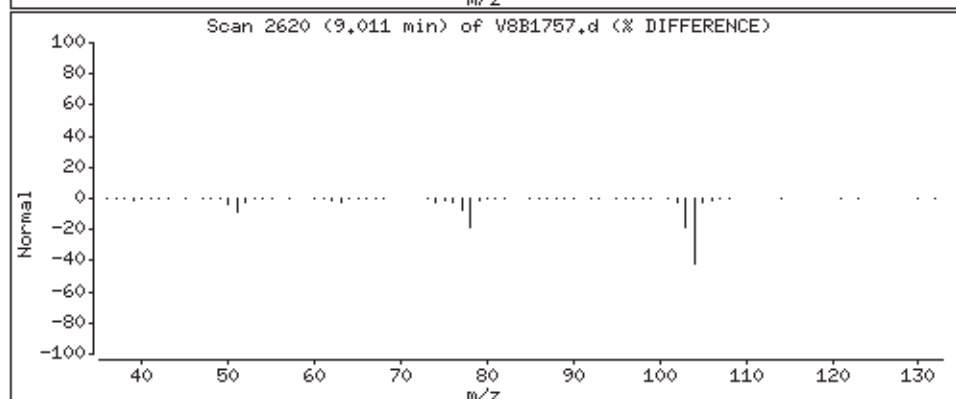
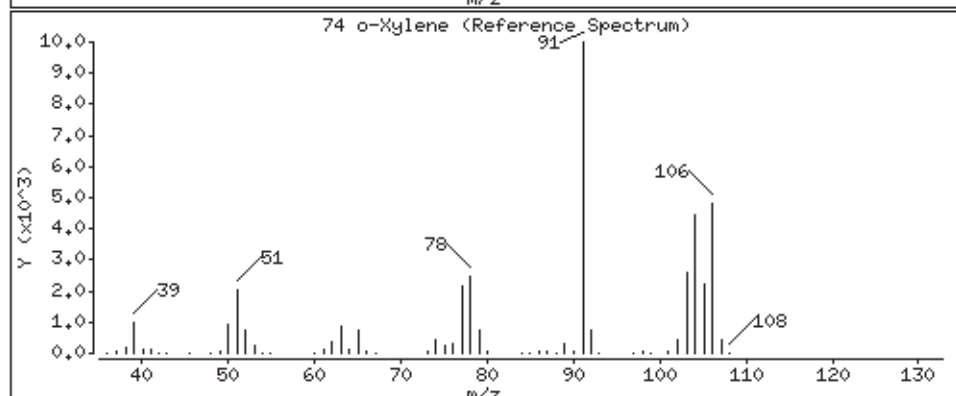
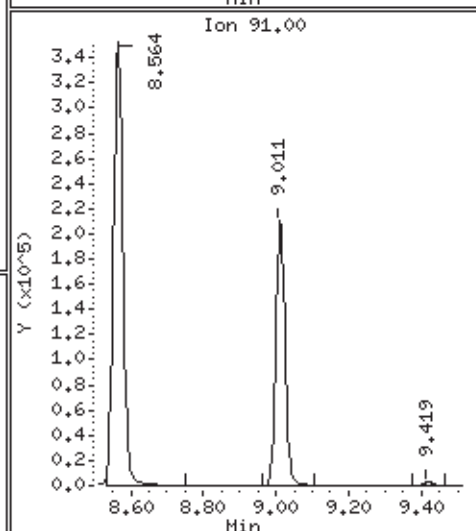
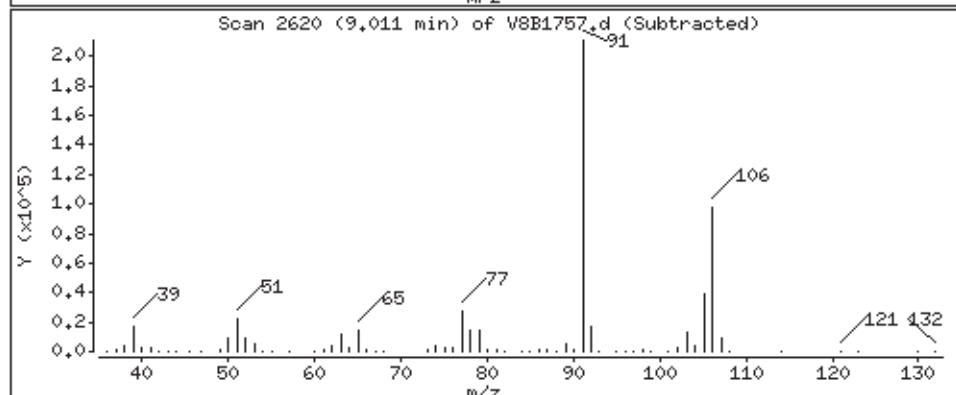
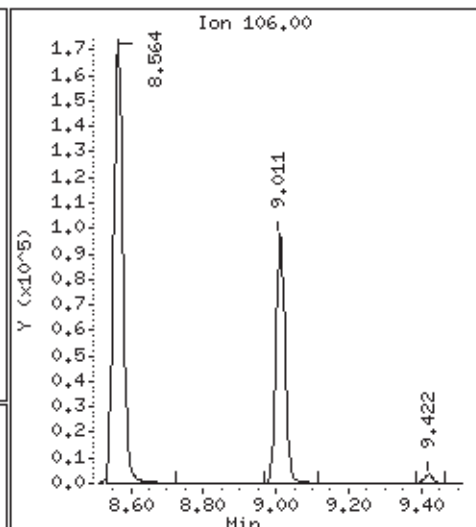
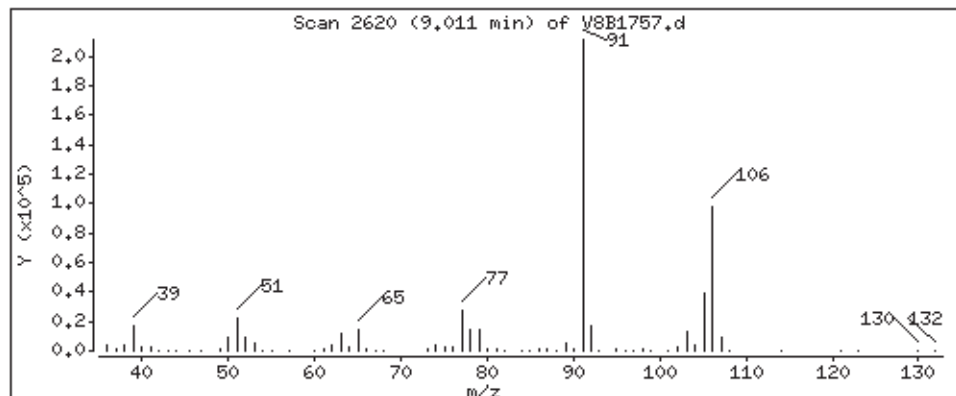
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

74 o-Xylene

Concentration: 44 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

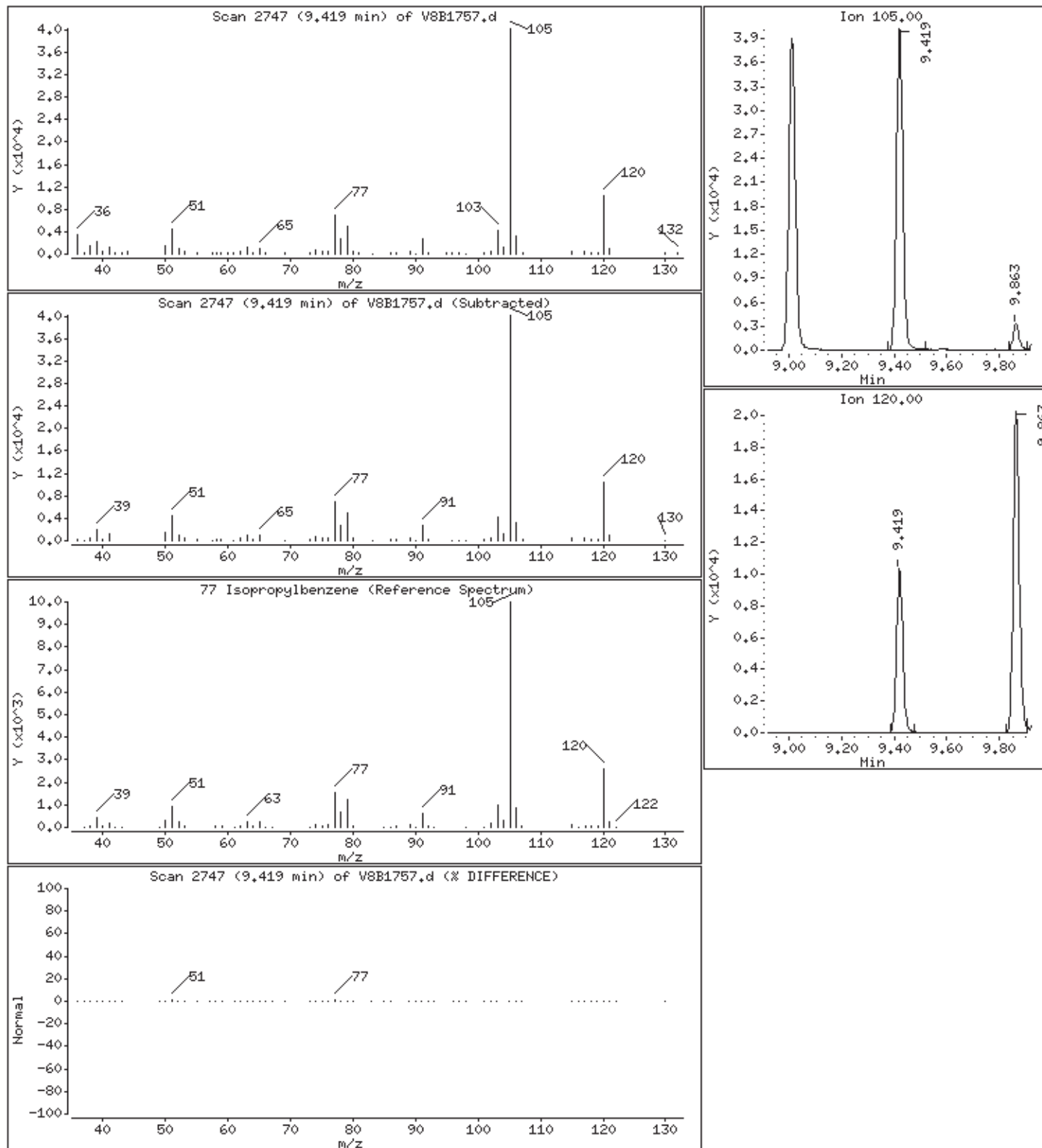
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

77 Isopropylbenzene

Concentration: 7 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

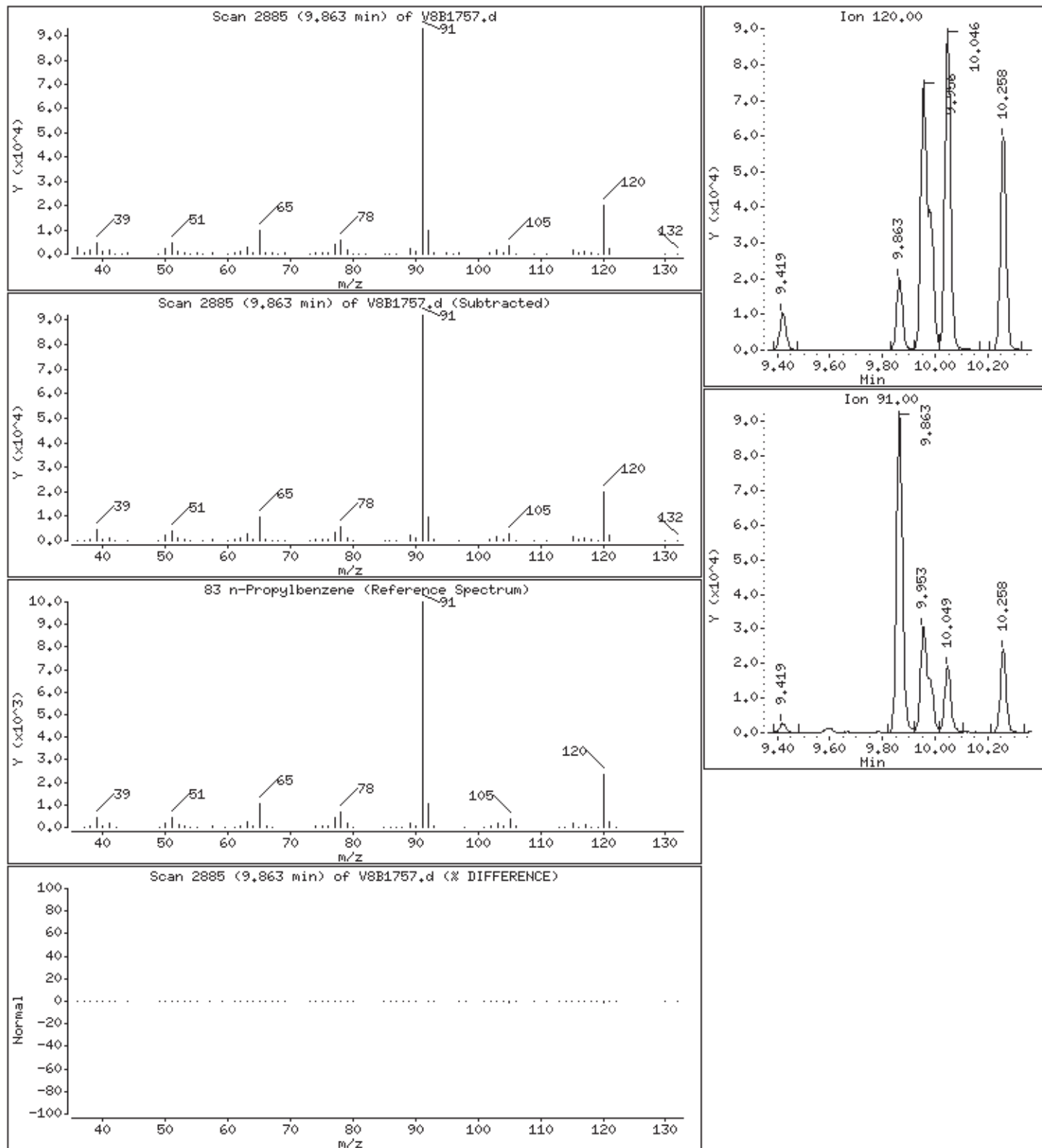
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

83 n-Propylbenzene

Concentration: 12 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

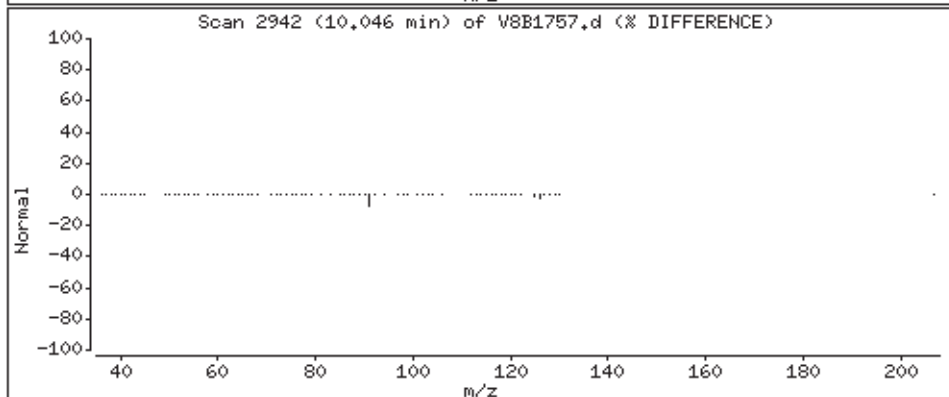
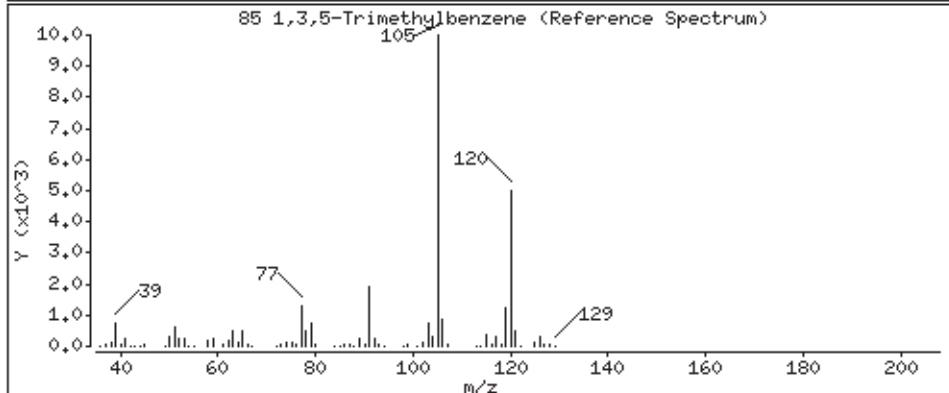
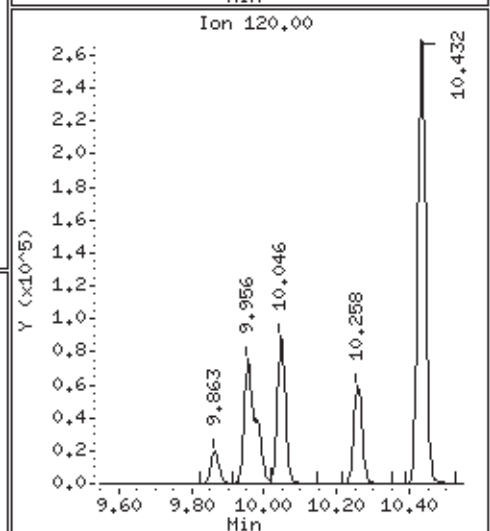
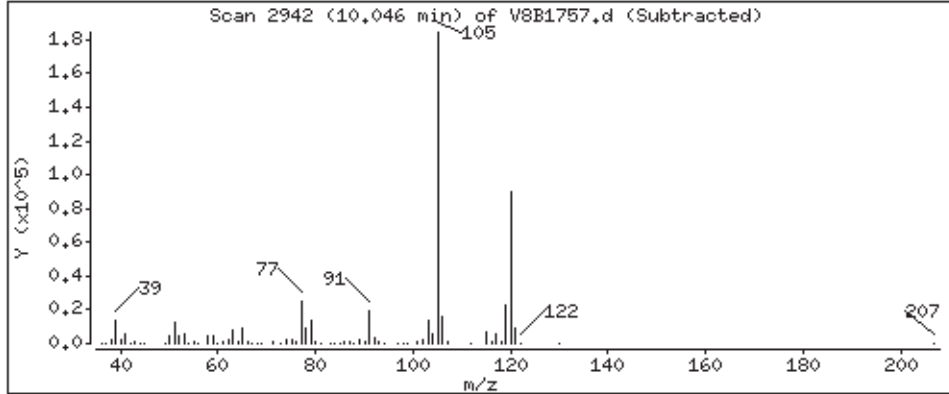
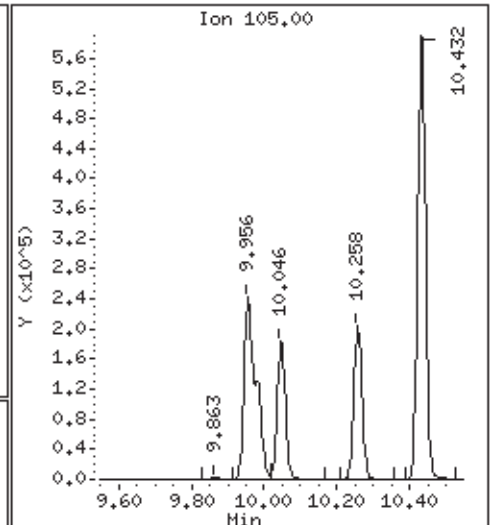
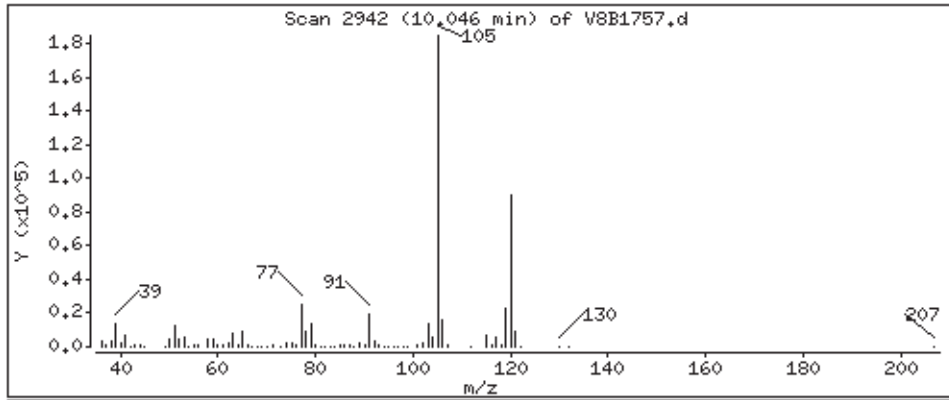
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

85 1,3,5-Trimethylbenzene

Concentration: 34 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

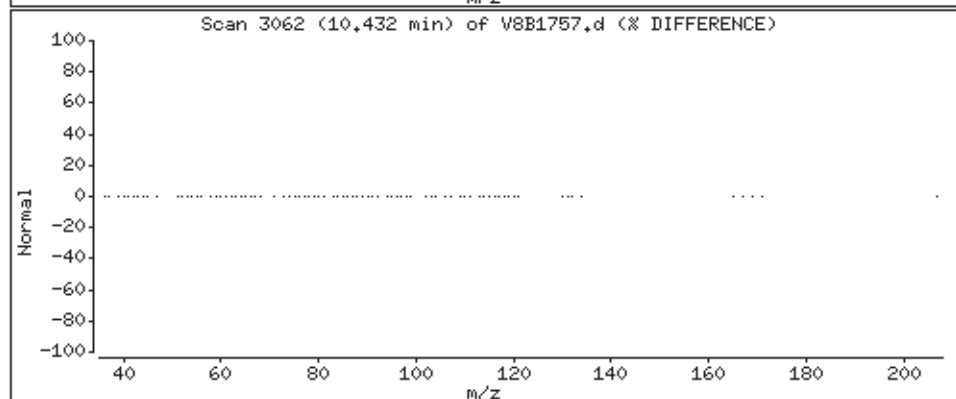
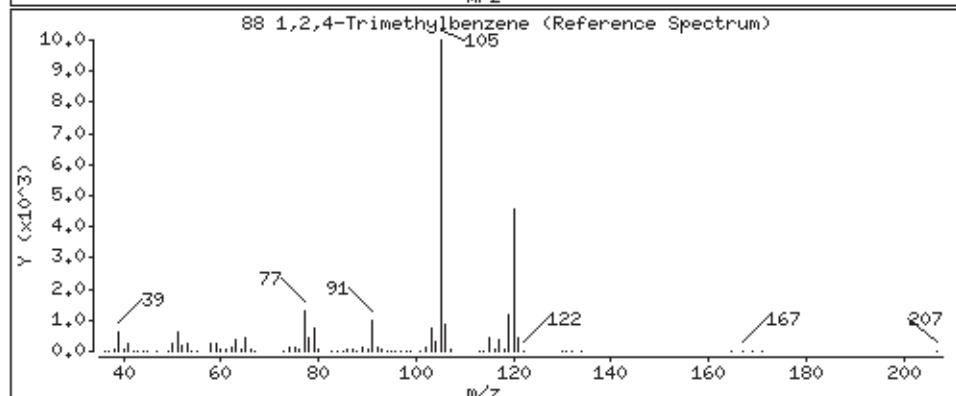
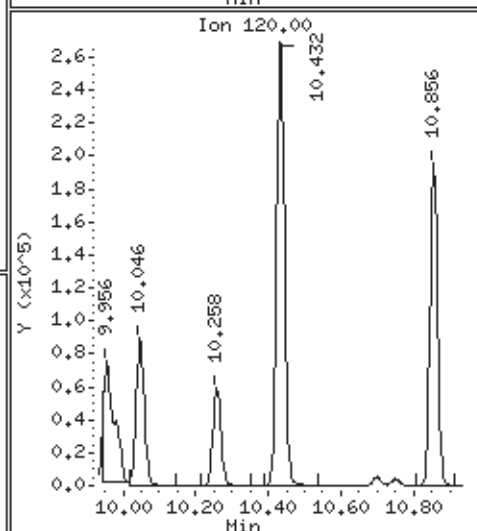
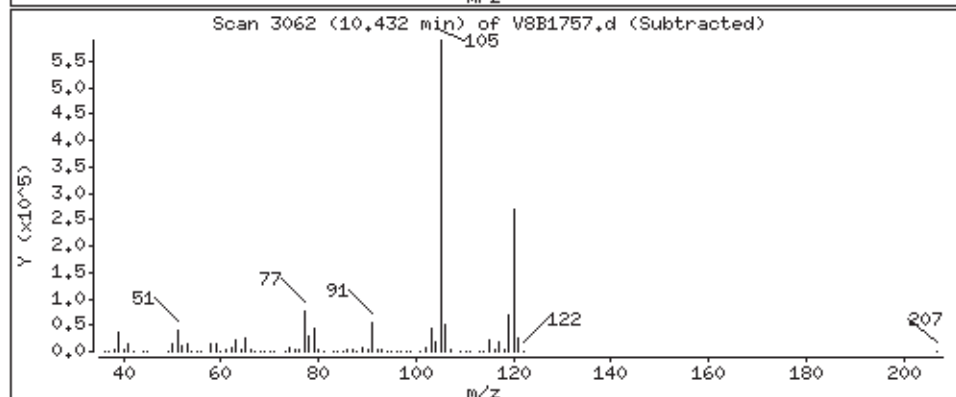
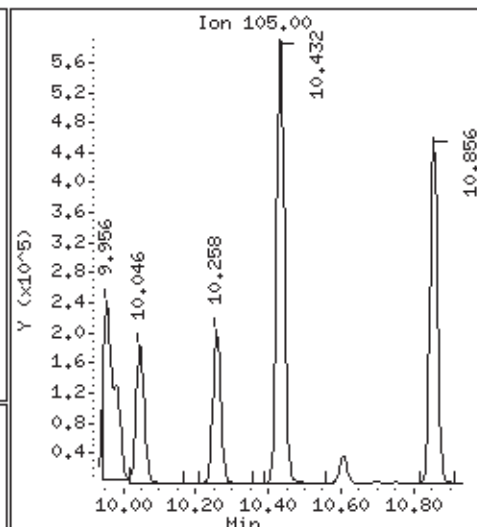
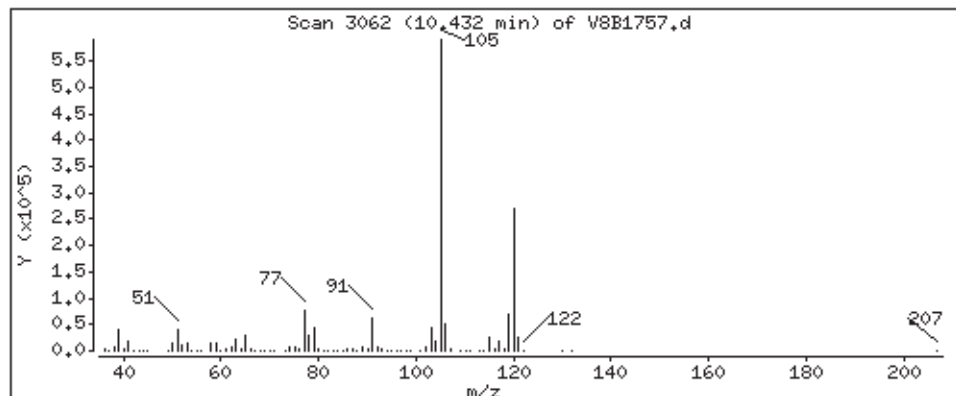
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

88 1,2,4-Trimethylbenzene

Concentration: 98 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

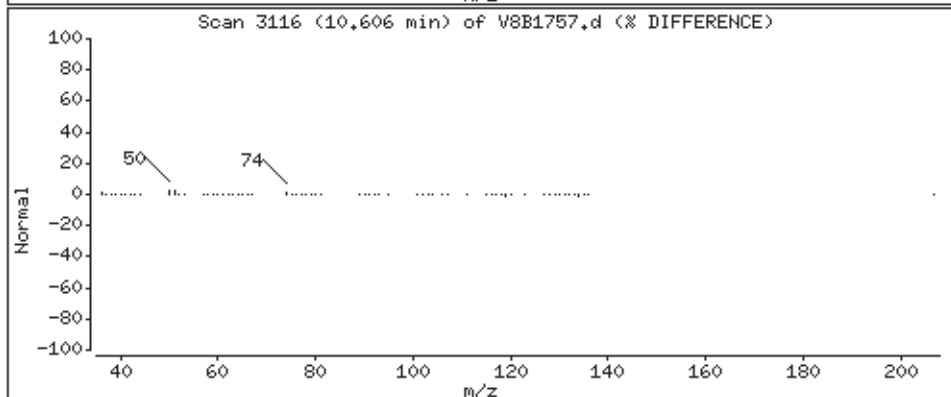
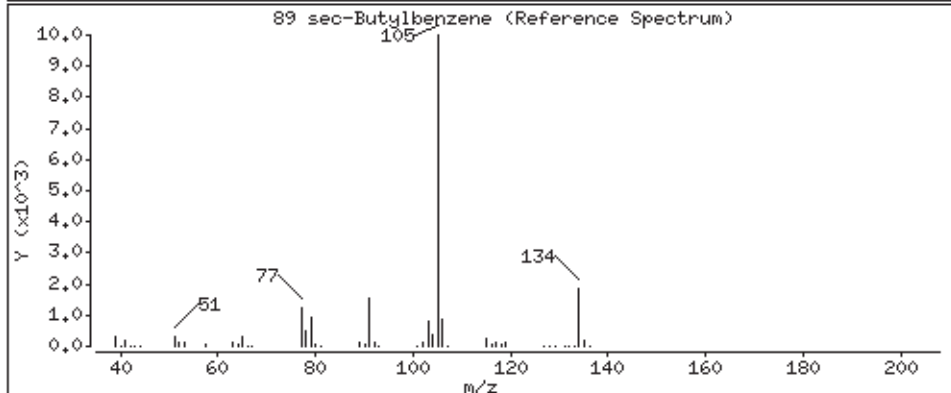
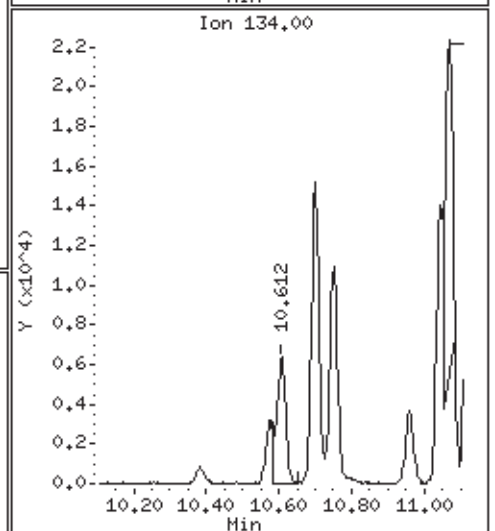
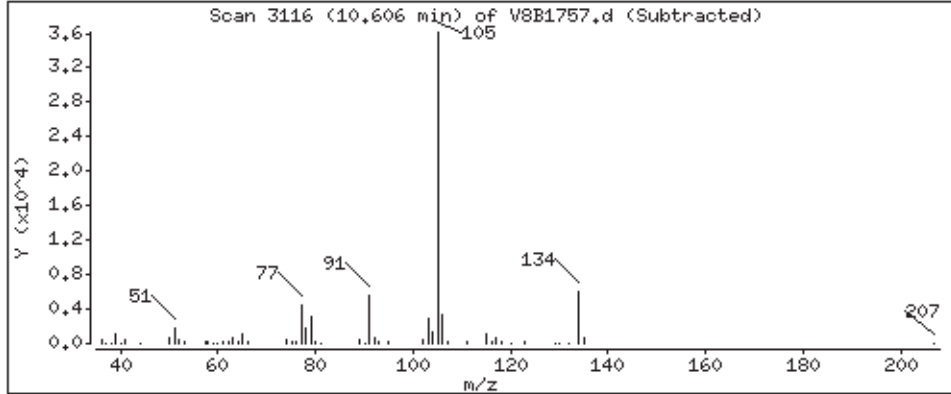
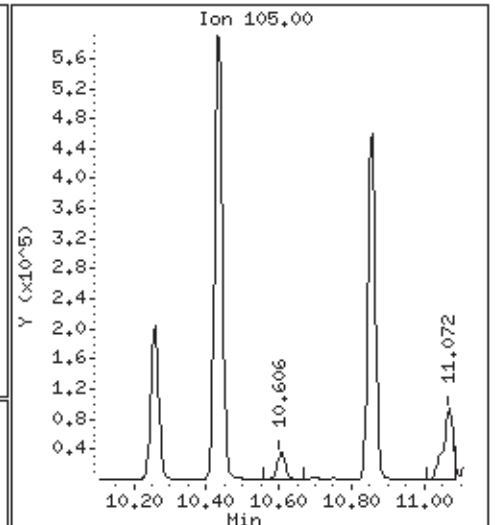
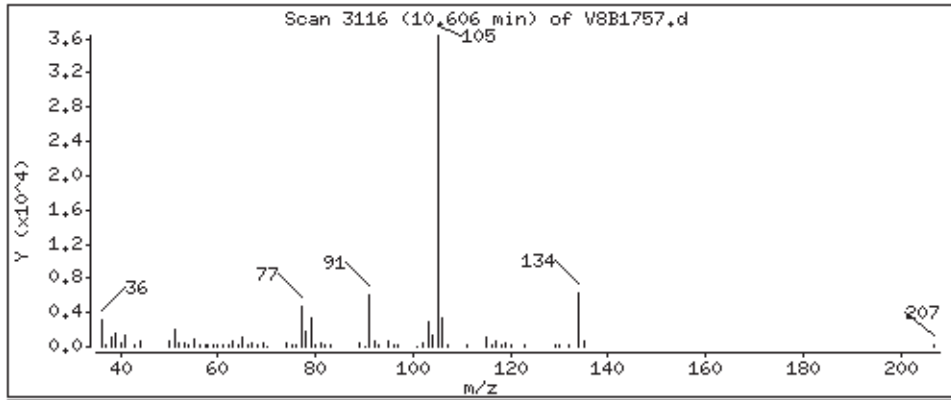
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

89 sec-Butylbenzene

Concentration: 5 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

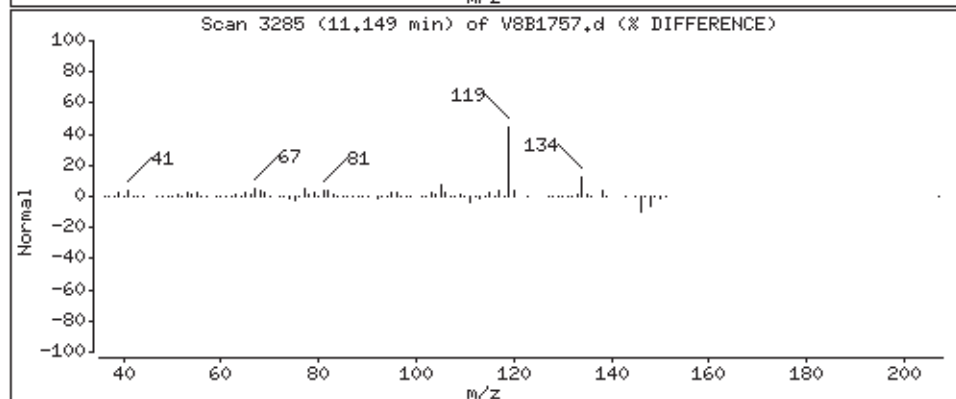
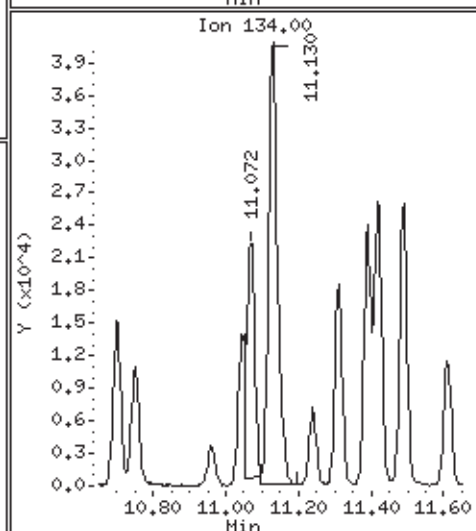
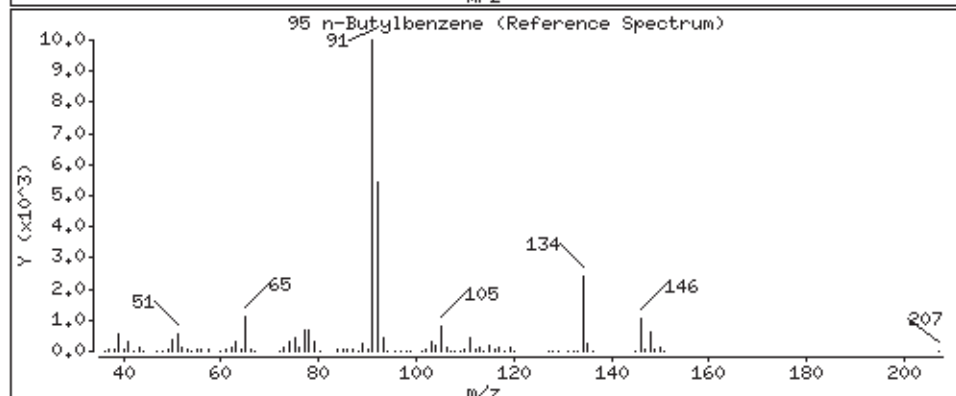
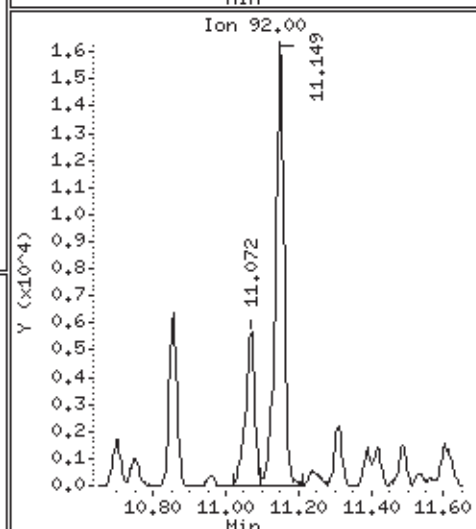
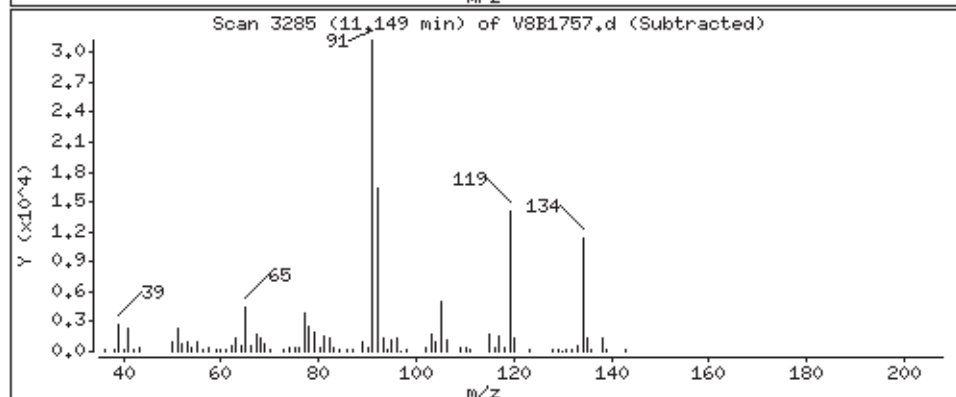
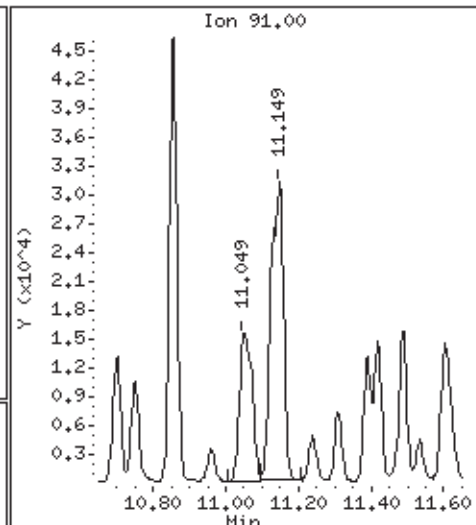
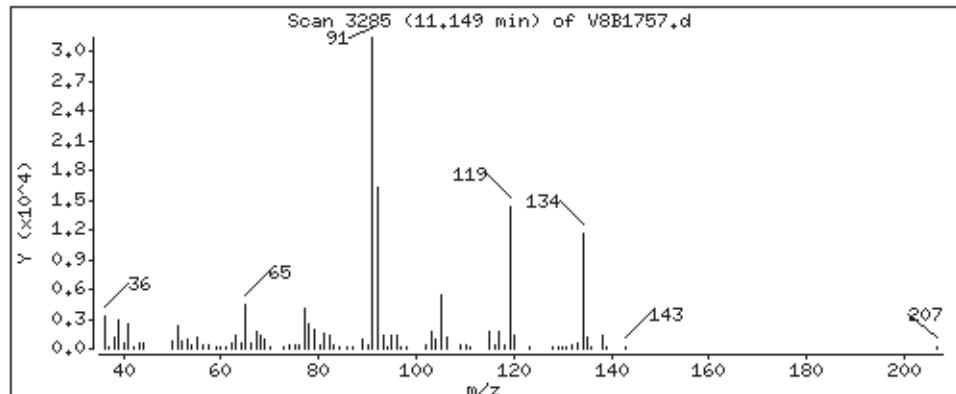
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

95 n-Butylbenzene

Concentration: 10 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

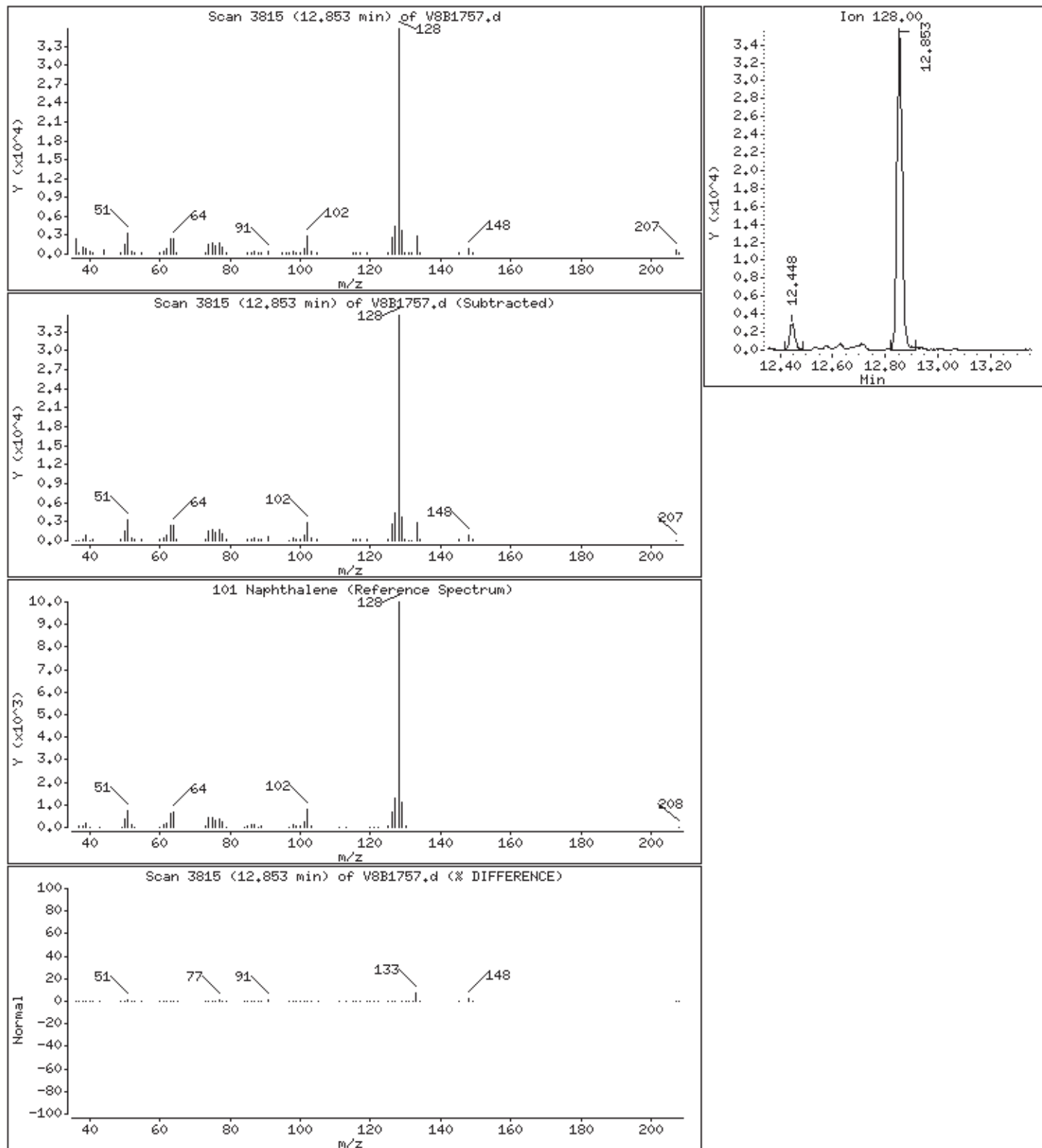
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

101 Naphthalene

Concentration: 9 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

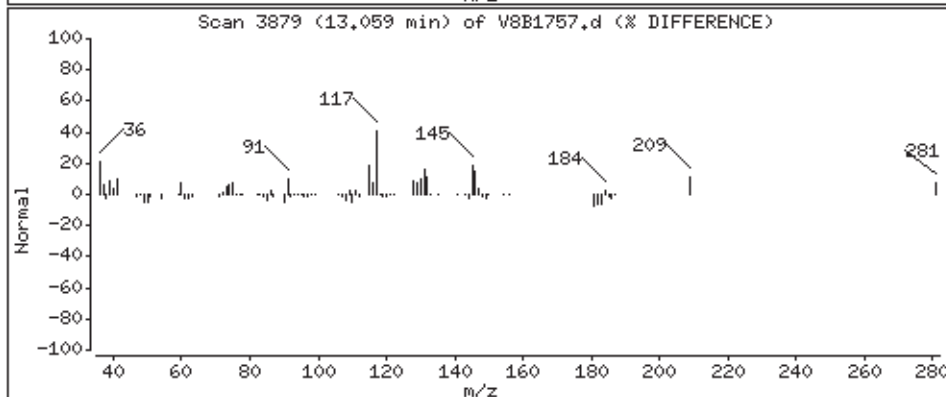
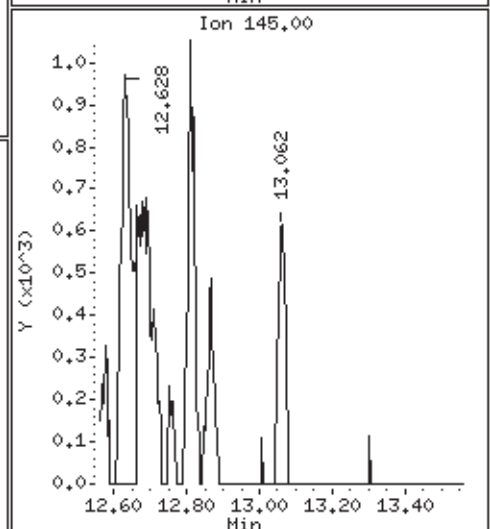
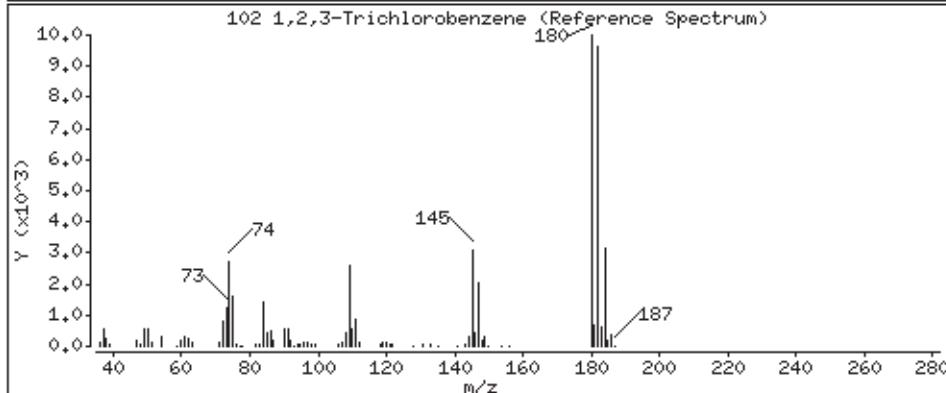
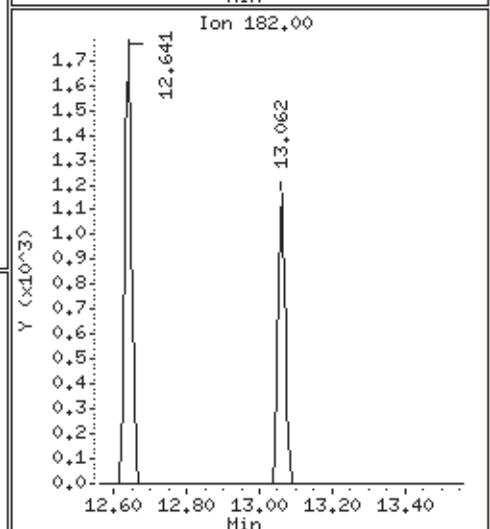
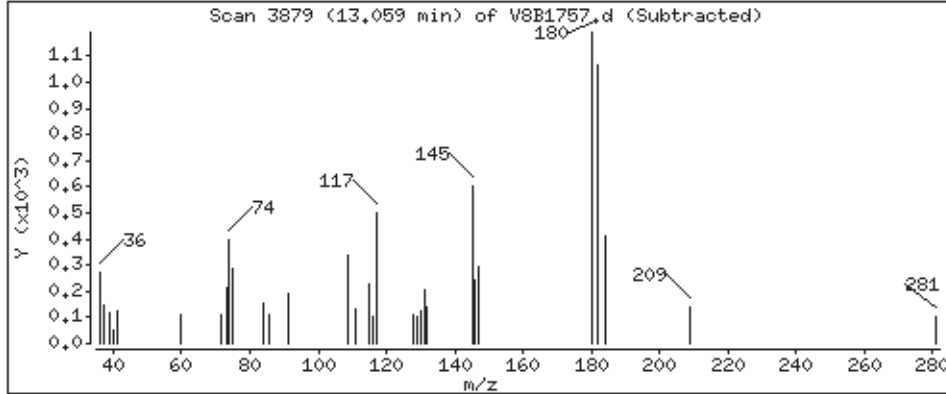
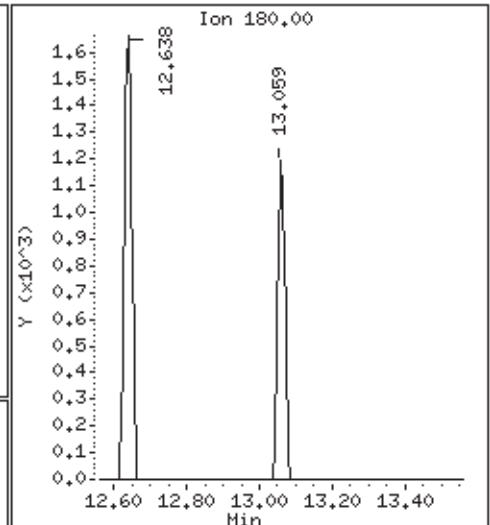
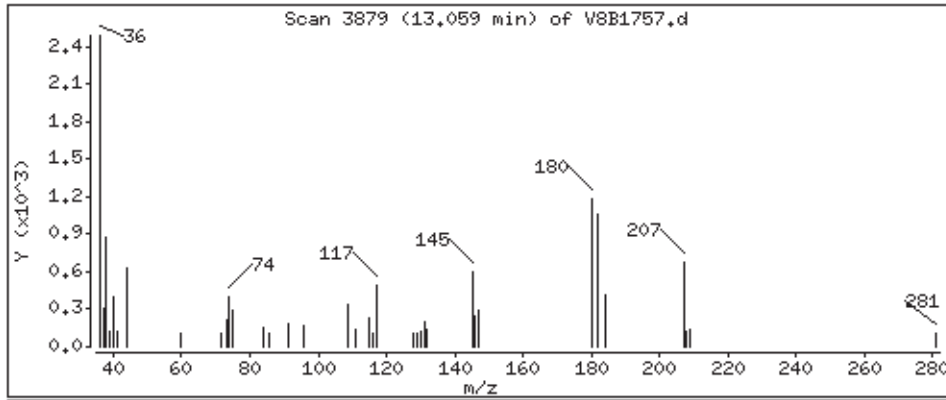
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

102 1,2,3-Trichlorobenzene

Concentration: 0.8 ug/L



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

Weight

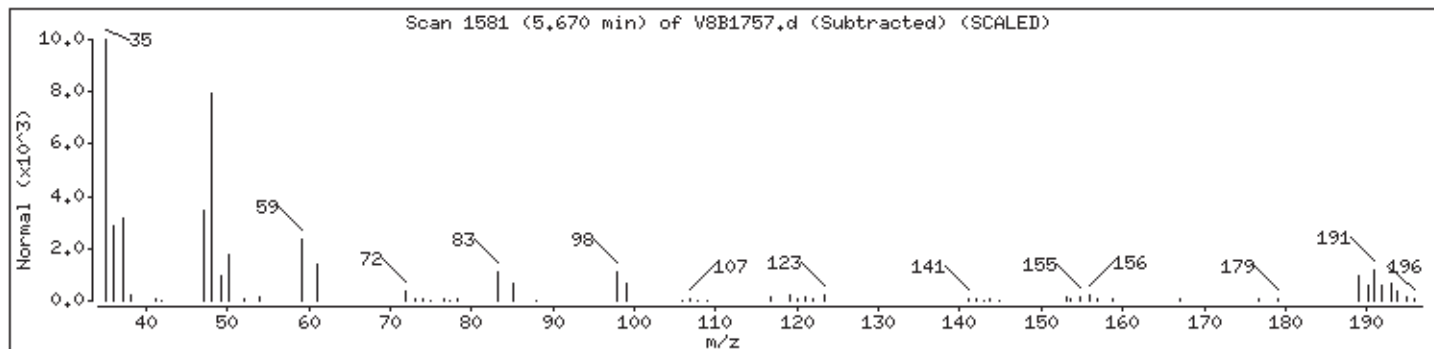
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Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

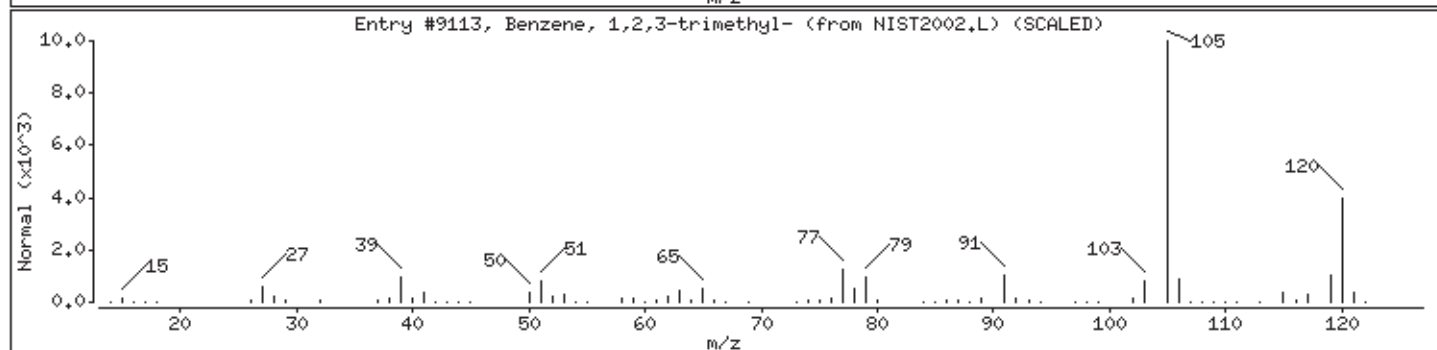
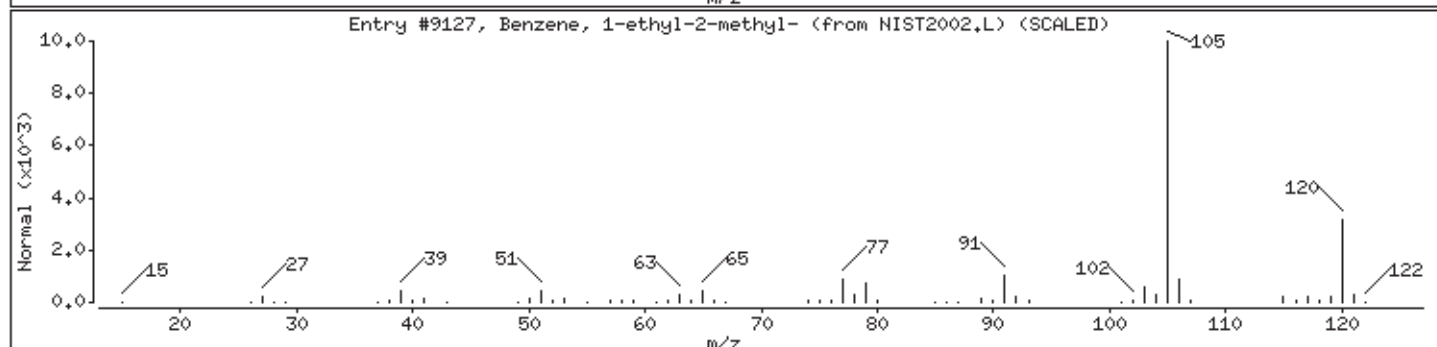
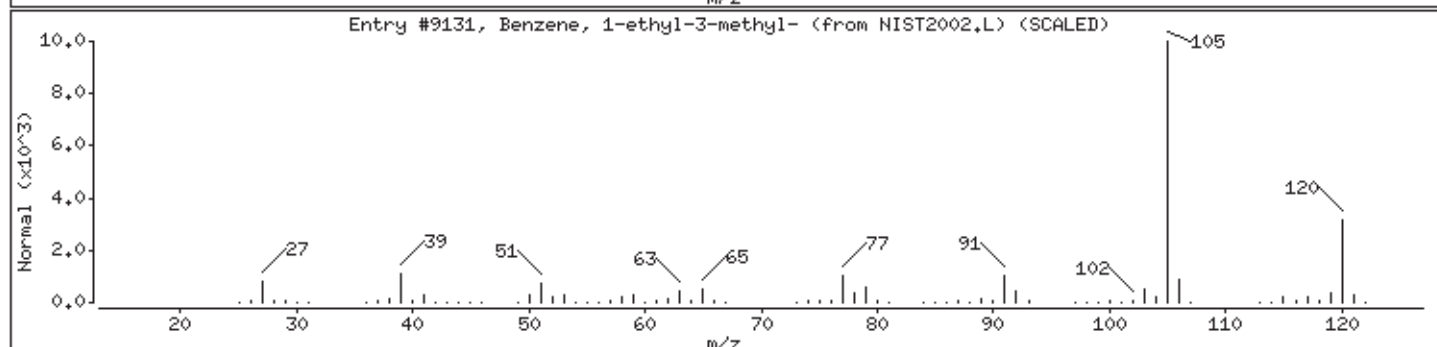
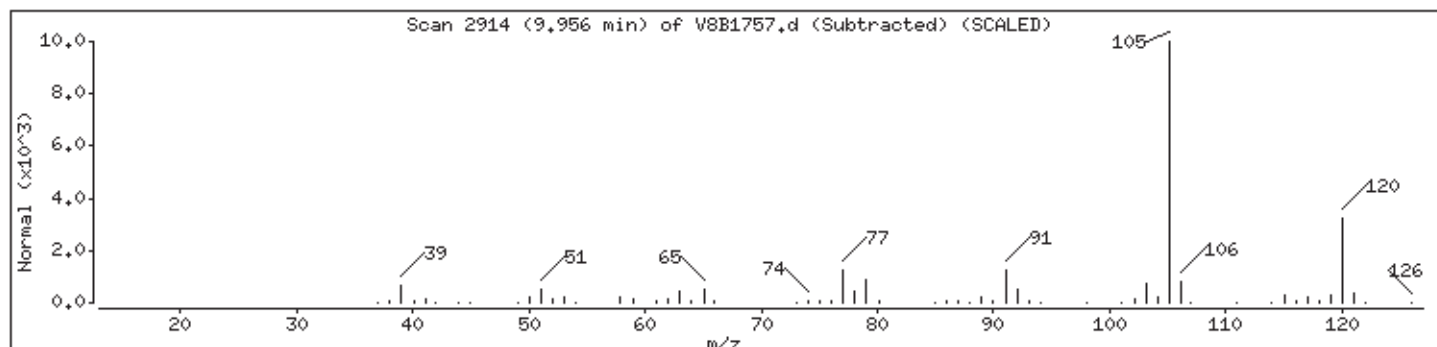
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9131	97	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9127	94	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9113	91	C9H12	120



Data File: \\Avogadro\Organics\V8,I\120516B,B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

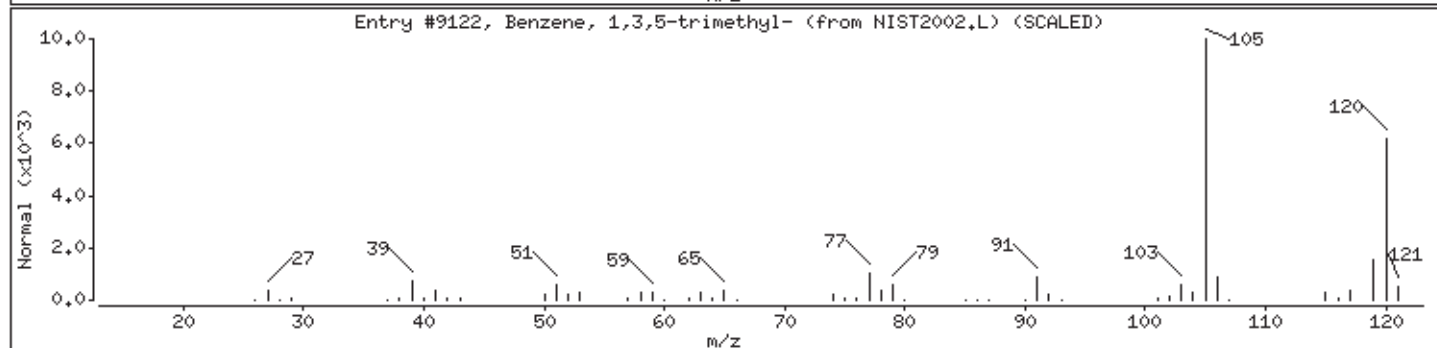
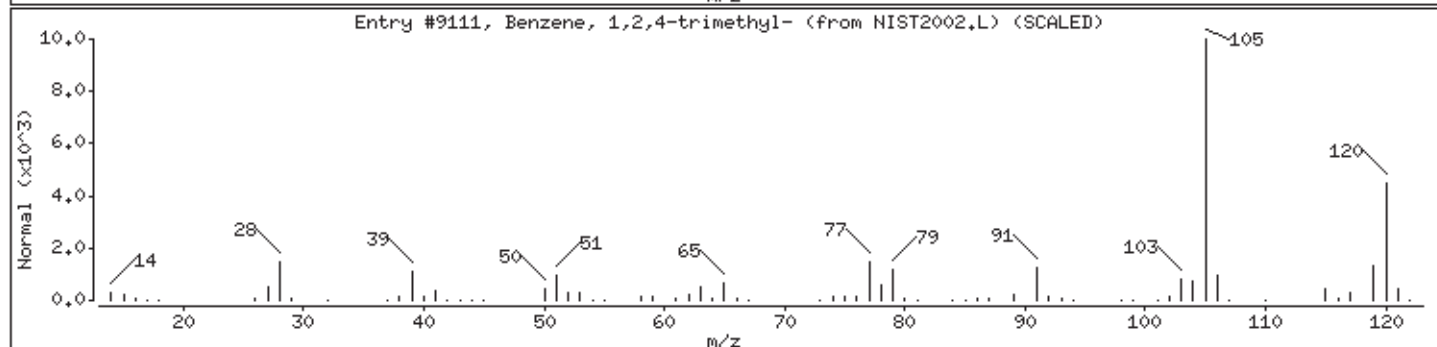
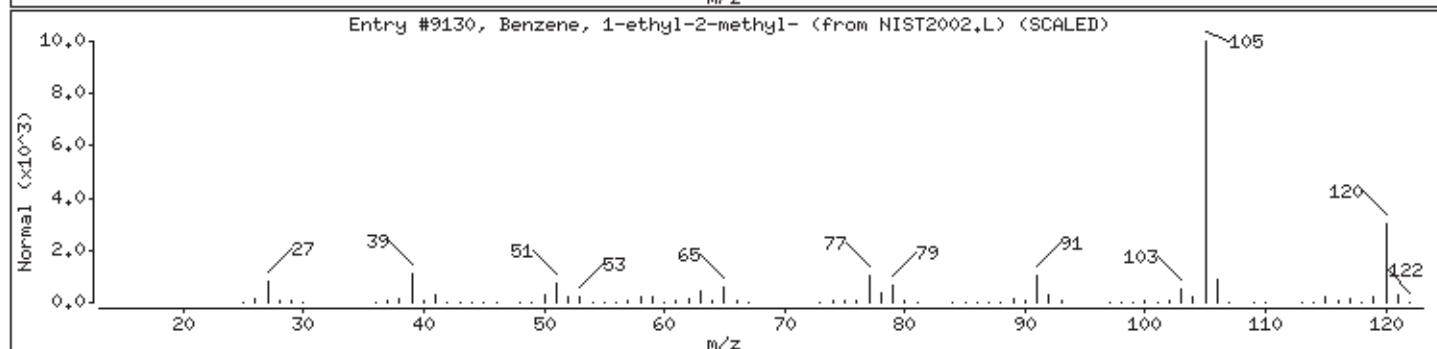
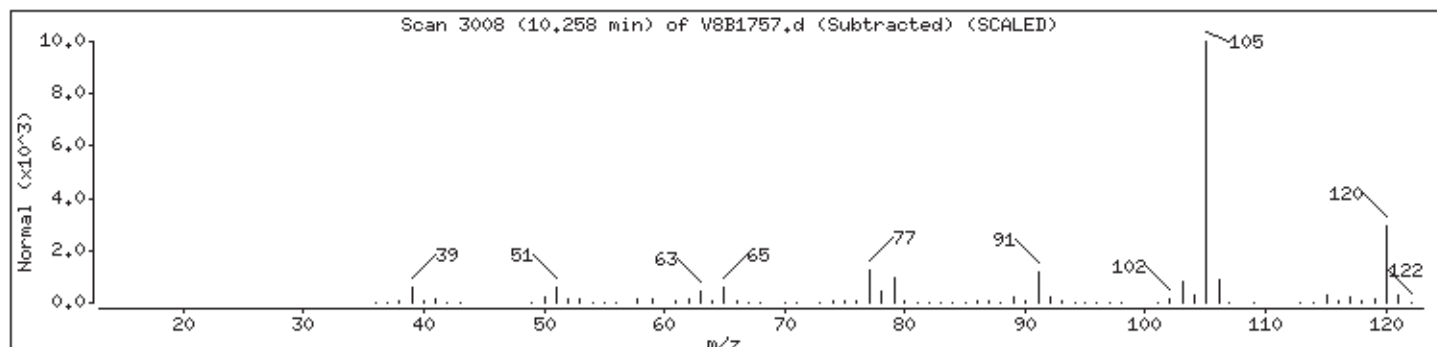
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	94	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9111	91	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	91	C9H12	120



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

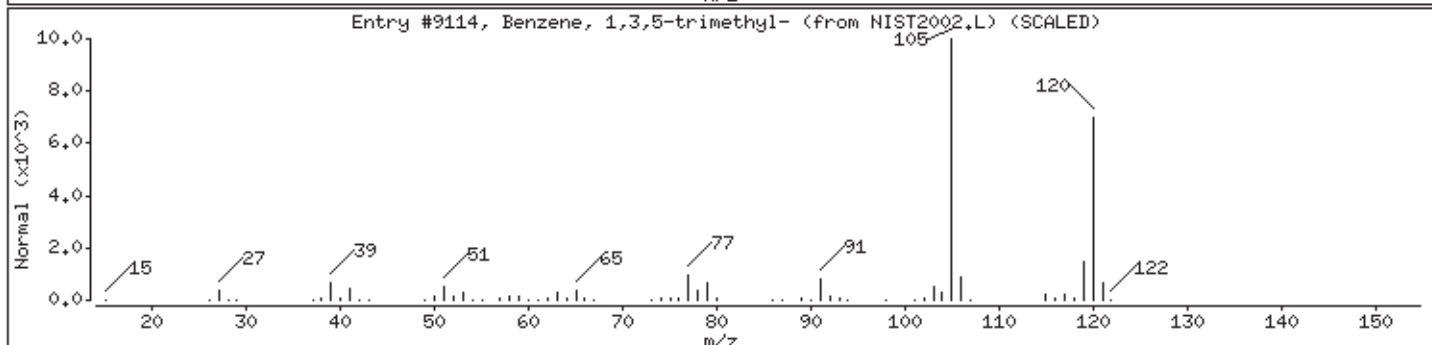
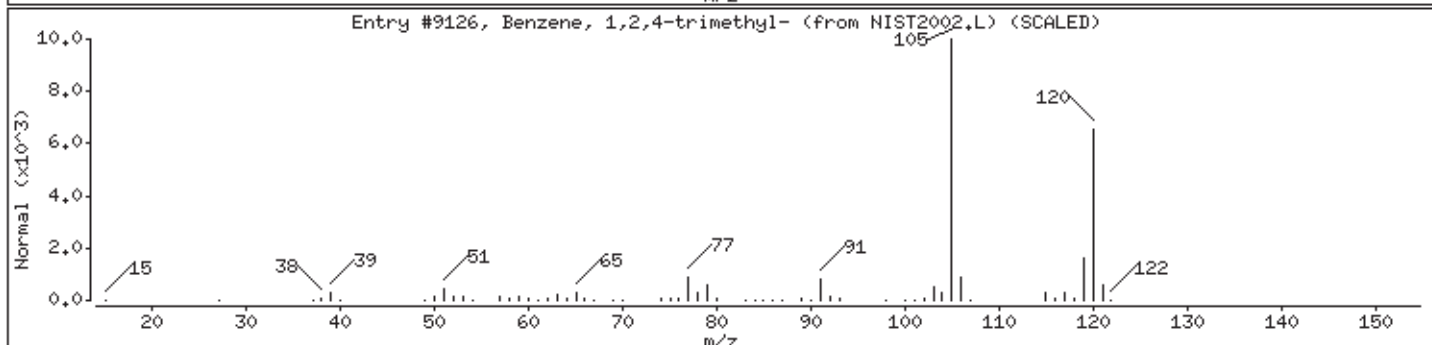
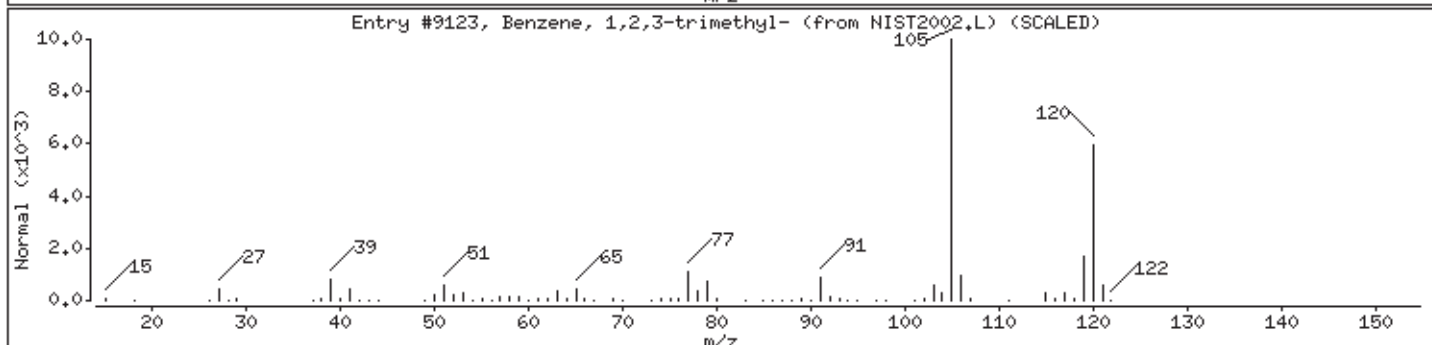
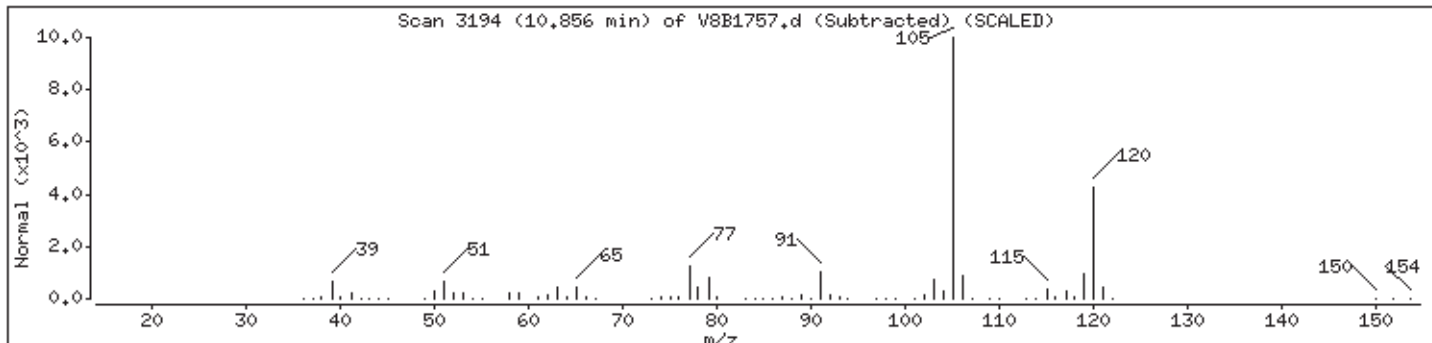
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	95	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9126	94	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9114	91	C9H12	120



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

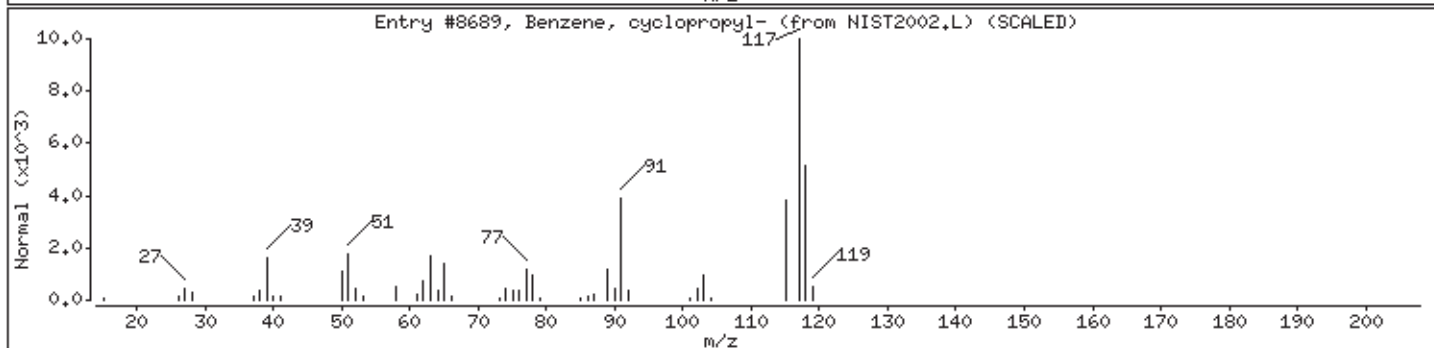
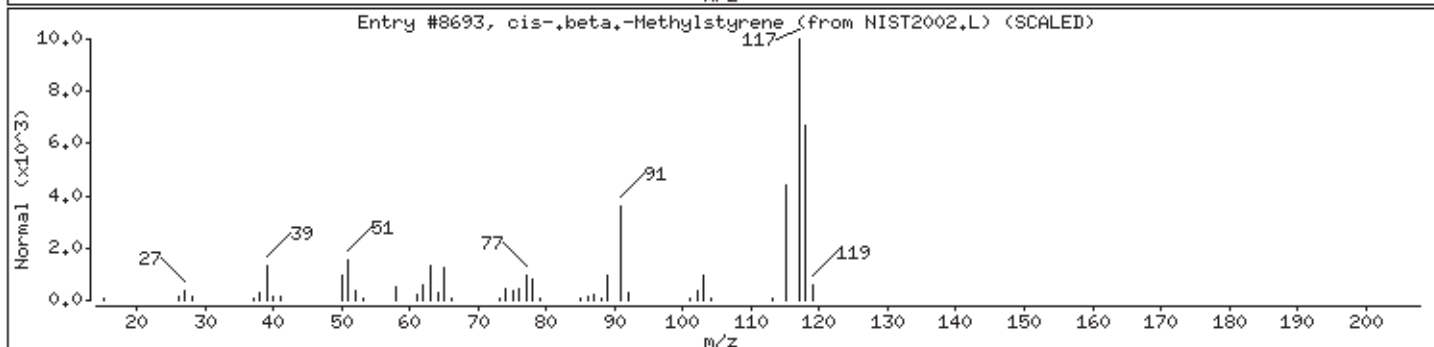
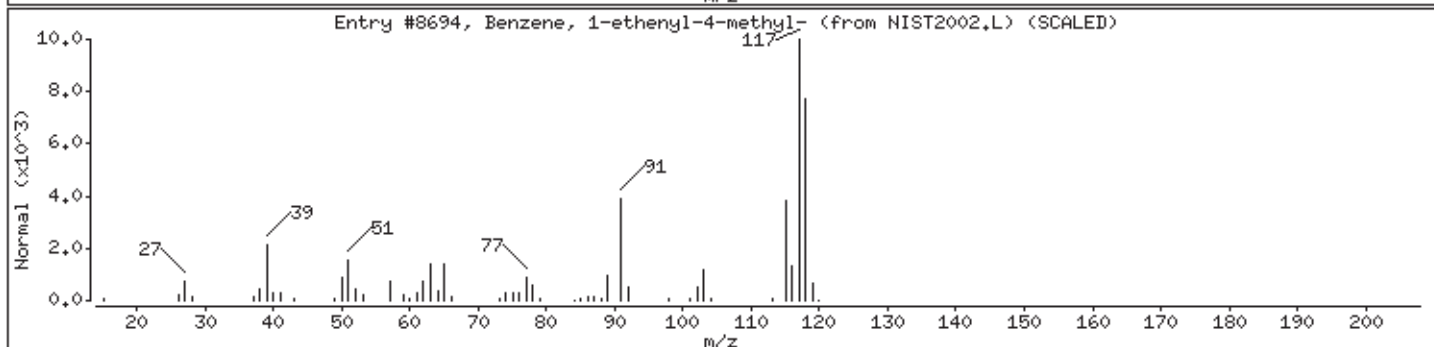
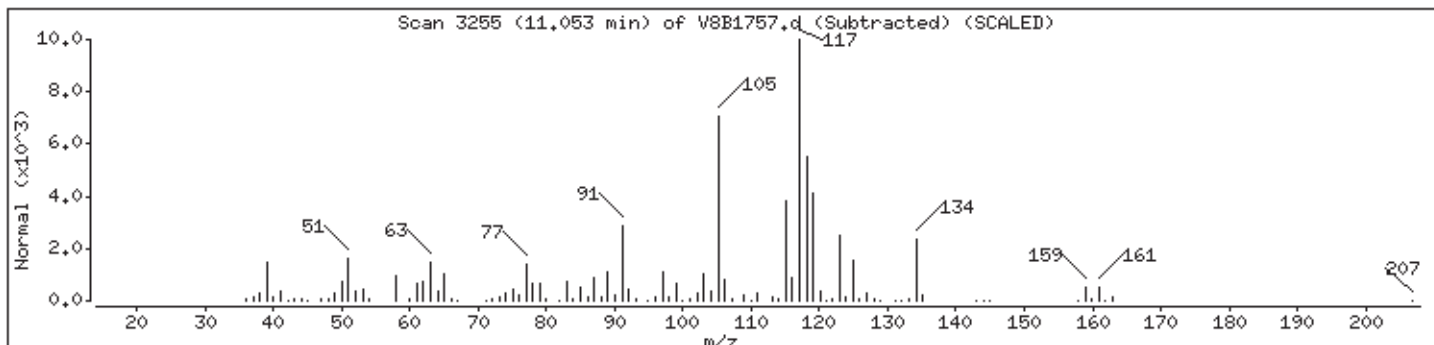
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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Benzene, 1-ethenyl-4-methyl-	622-97-9	NIST2002.L	8694	80	C9H10	118
cis-,beta.,-Methylstyrene	766-90-5	NIST2002.L	8693	70	C9H10	118
Benzene, cyclopropyl-	873-49-4	NIST2002.L	8689	70	C9H10	118



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

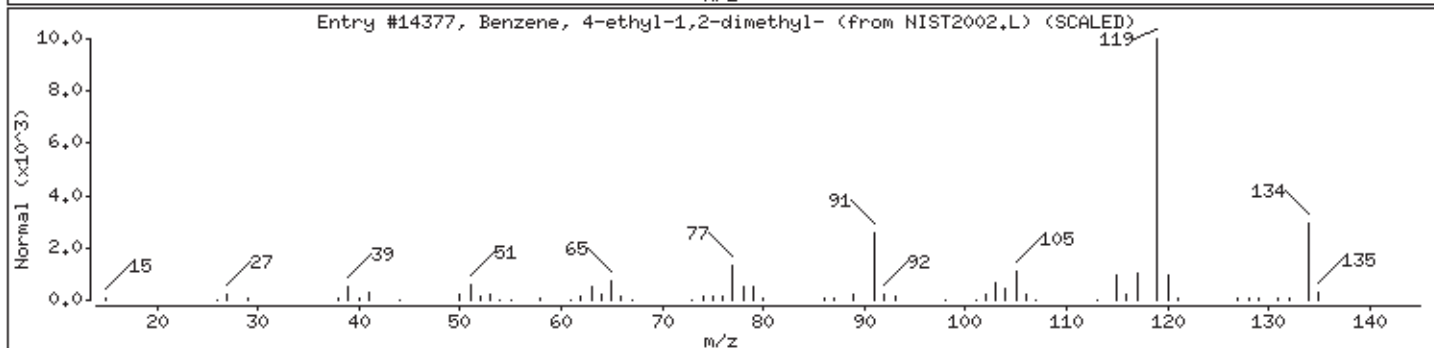
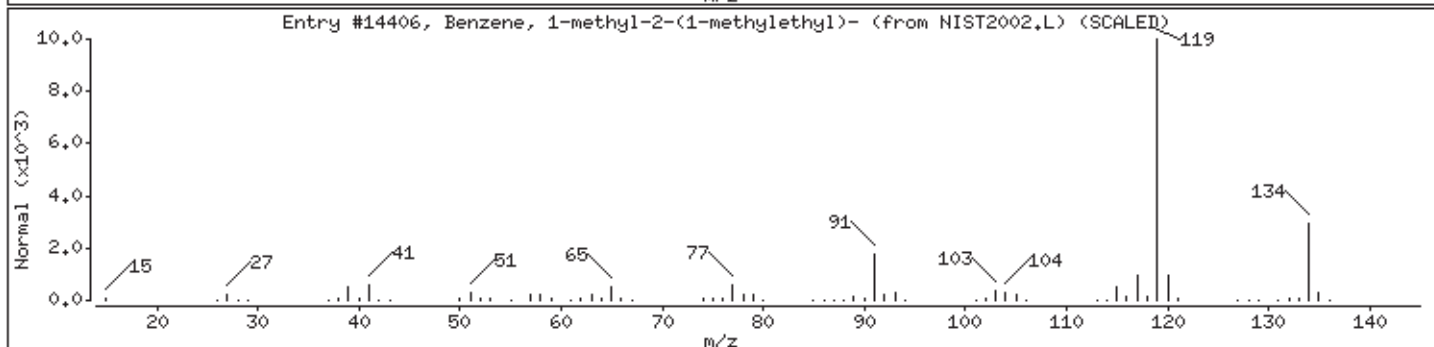
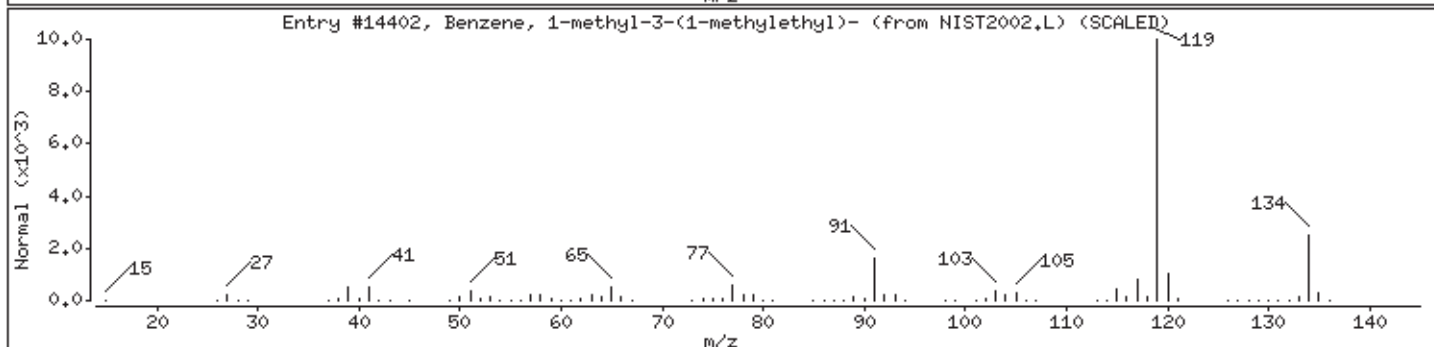
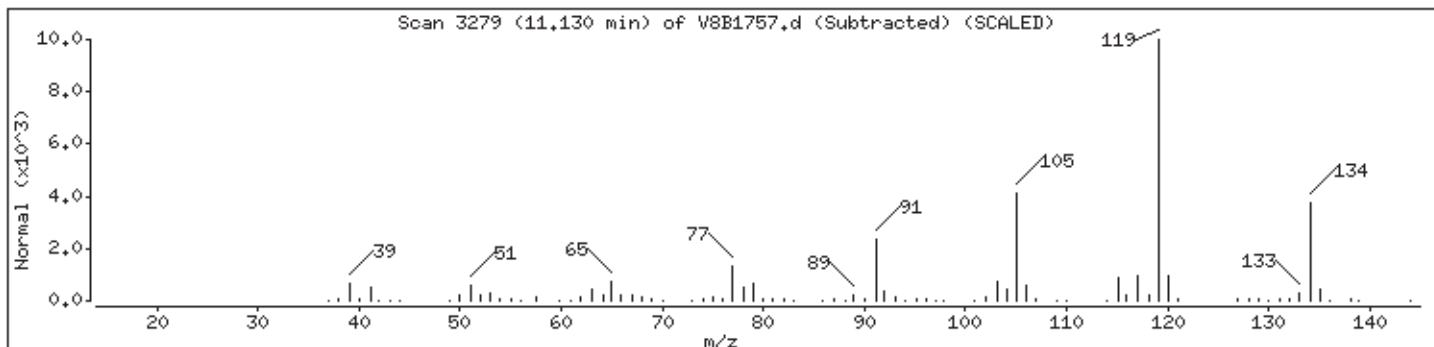
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14402	95	C ₁₀ H ₁₄	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14406	94	C ₁₀ H ₁₄	134
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NIST2002.L	14377	94	C ₁₀ H ₁₄	134



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

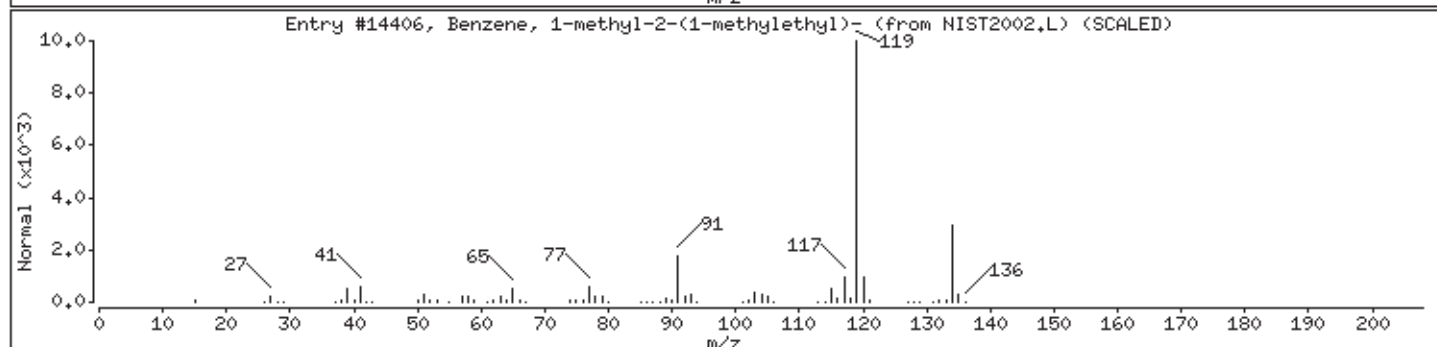
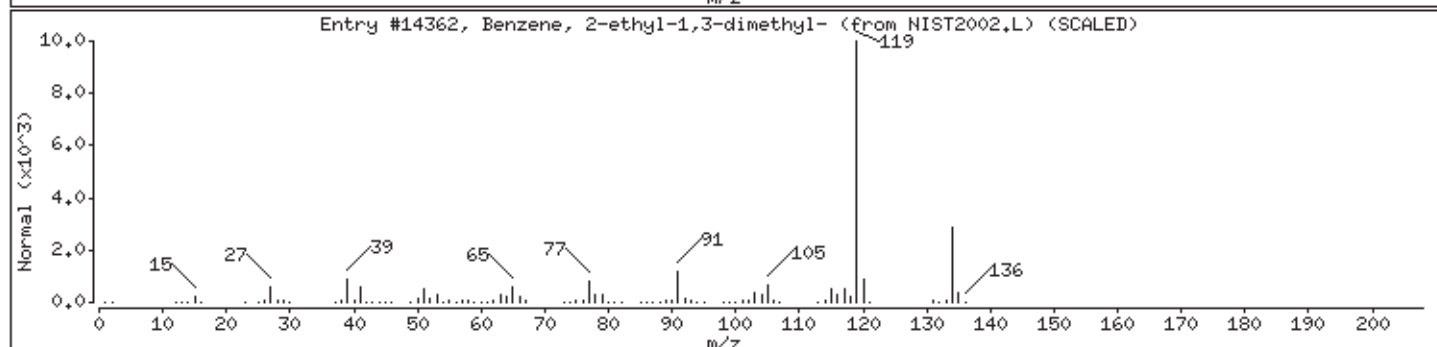
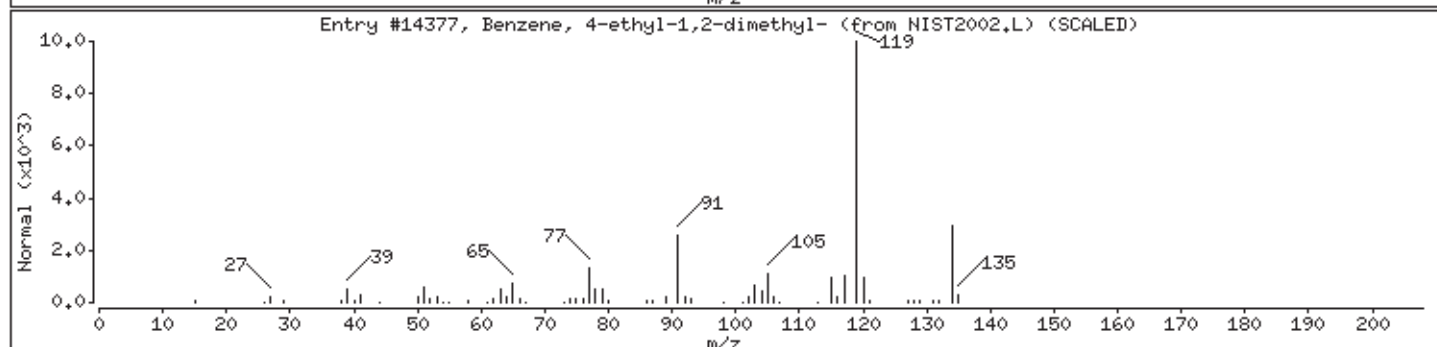
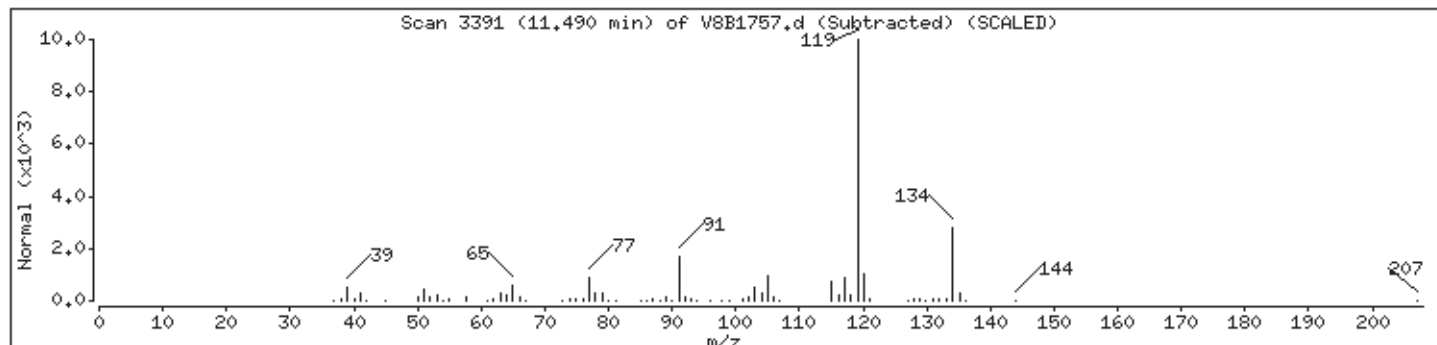
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NIST2002.L	14377	96	C ₁₀ H ₁₄	134
Benzene, 2-ethyl-1,3-dimethyl-	2870-04-4	NIST2002.L	14362	95	C ₁₀ H ₁₄	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14406	95	C ₁₀ H ₁₄	134



Data File: \\Avogadro\Organics\V8,I\120516B,B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

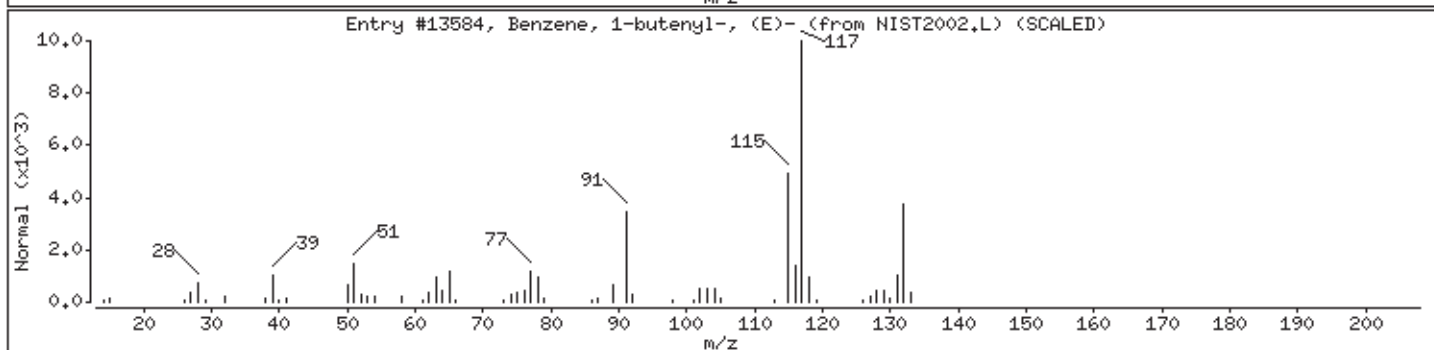
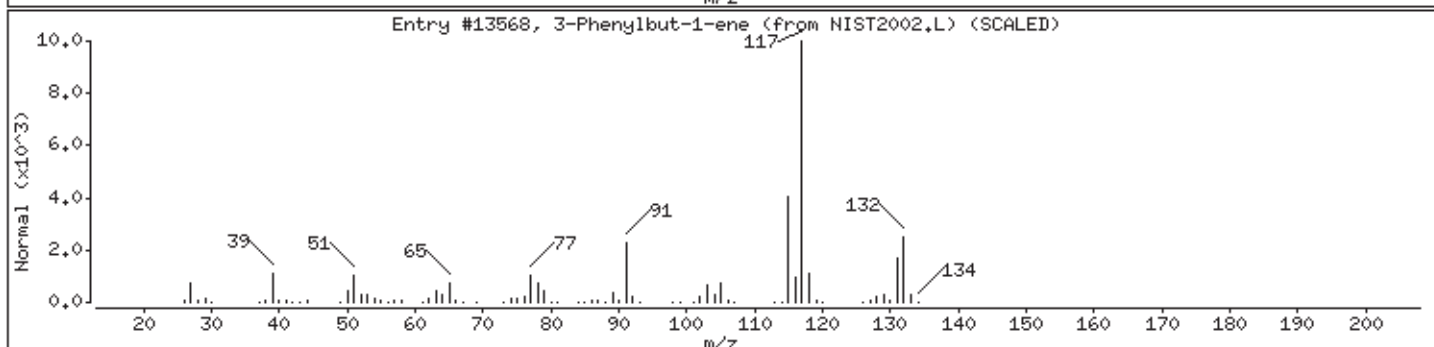
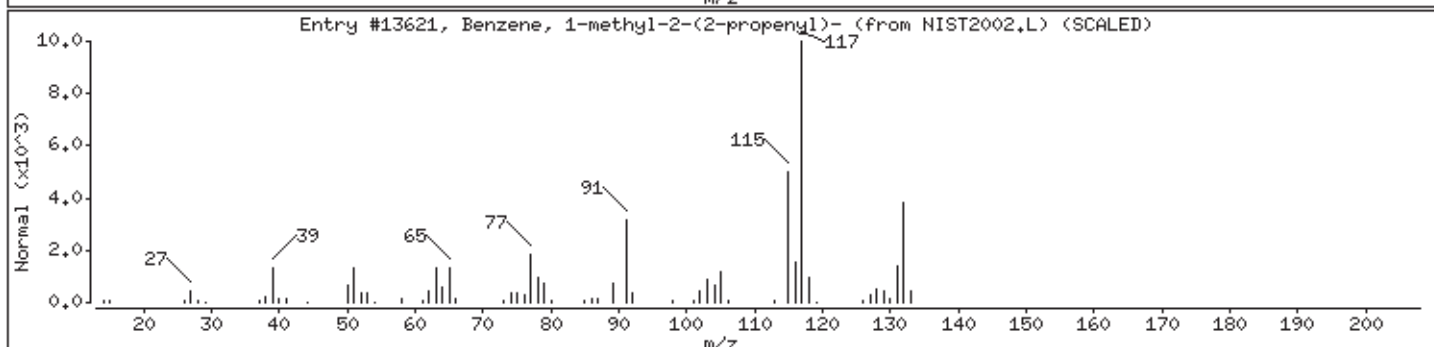
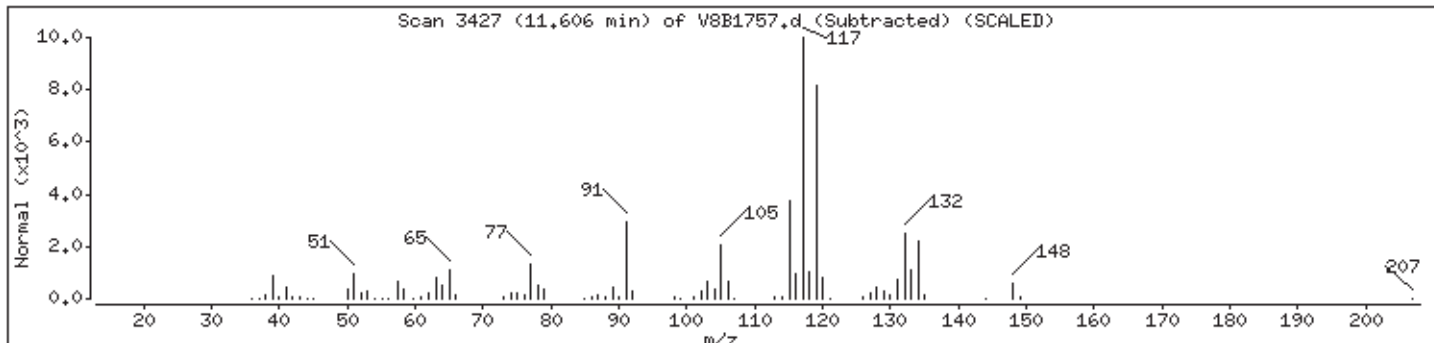
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-methyl-2-(2-propenyl)-	1587-04-8	NIST2002.L	13621	80	C10H12	132
3-Phenylbut-1-ene	934-10-1	NIST2002.L	13568	64	C10H12	132
Benzene, 1-butenyl-, (E)-	1005-64-7	NIST2002.L	13584	64	C10H12	132



Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1757.d

Date : 17-MAY-2012 11:19

Client ID: MW-2

Instrument: V8.i

Sample Info: 5HL,L0935-02A,,66208

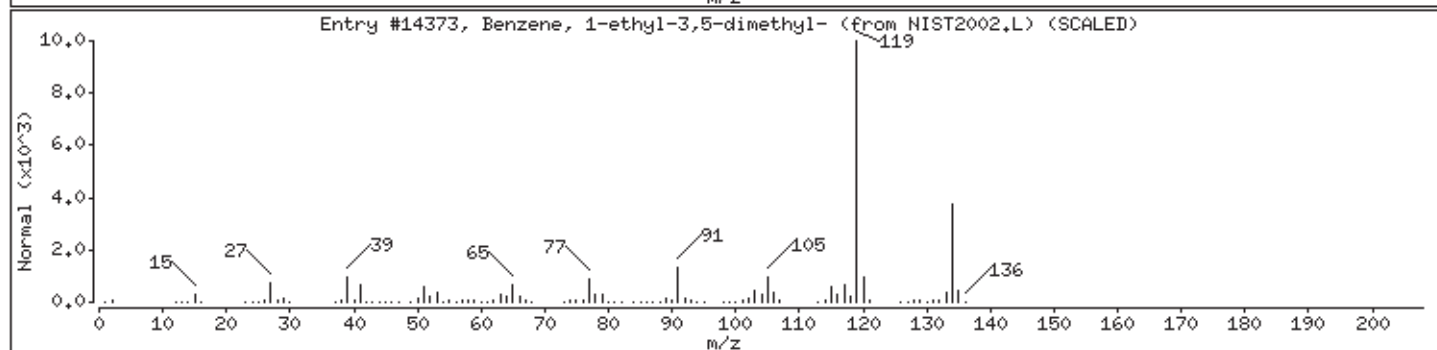
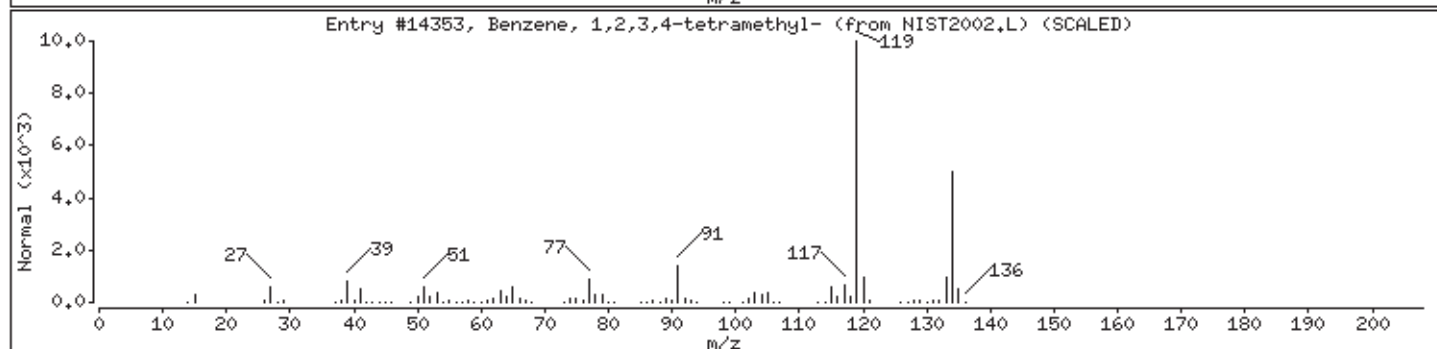
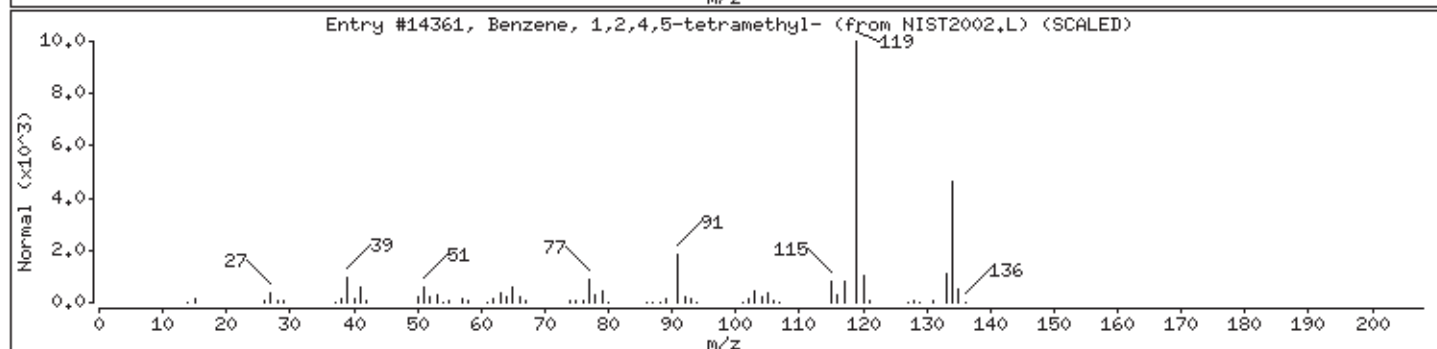
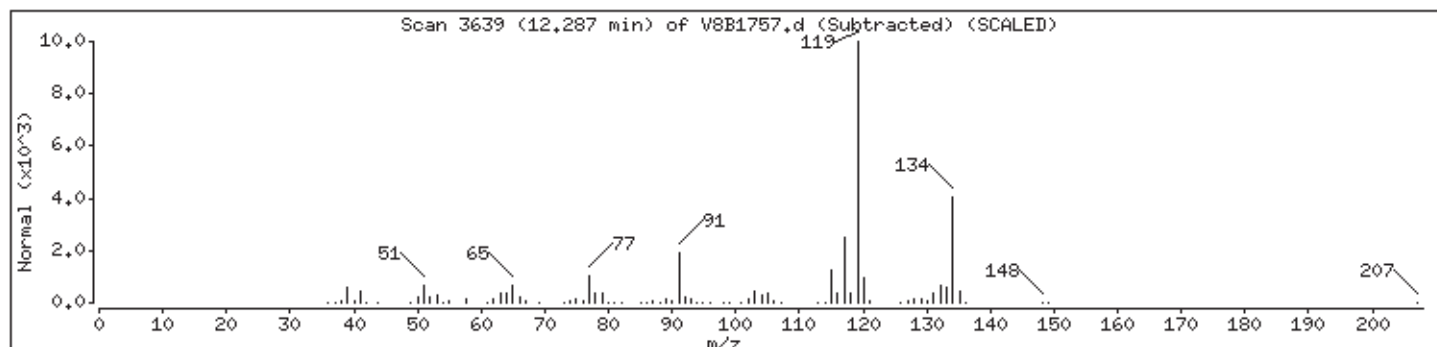
Purge Volume: 5.0

Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST2002.L	14361	90	C ₁₀ H ₁₄	134
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST2002.L	14353	87	C ₁₀ H ₁₄	134
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST2002.L	14373	87	C ₁₀ H ₁₄	134



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-2DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-02ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7067.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 2500.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	13000	U
74-87-3	Chloromethane	13000	U
75-01-4	Vinyl chloride	13000	U
74-83-9	Bromomethane	13000	U
75-00-3	Chloroethane	13000	U
75-69-4	Trichlorofluoromethane	13000	U
75-35-4	1,1-Dichloroethene	13000	U
67-64-1	Acetone	13000	U
74-88-4	Iodomethane	13000	U
75-15-0	Carbon disulfide	13000	U
75-09-2	Methylene chloride	13000	U
156-60-5	trans-1,2-Dichloroethene	13000	U
1634-04-4	Methyl tert-butyl ether	13000	U
75-34-3	1,1-Dichloroethane	4300	DJ
108-05-4	Vinyl acetate	13000	U
78-93-3	2-Butanone	13000	U
156-59-2	cis-1,2-Dichloroethene	28000	D
594-20-7	2,2-Dichloropropane	13000	U
74-97-5	Bromochloromethane	13000	U
67-66-3	Chloroform	13000	U
71-55-6	1,1,1-Trichloroethane	2800	DJ
563-58-6	1,1-Dichloropropene	13000	U
56-23-5	Carbon tetrachloride	13000	U
107-06-2	1,2-Dichloroethane	13000	U
71-43-2	Benzene	13000	U
79-01-6	Trichloroethene	260000	D
78-87-5	1,2-Dichloropropane	13000	U
74-95-3	Dibromomethane	13000	U
75-27-4	Bromodichloromethane	13000	U
10061-01-5	cis-1,3-Dichloropropene	13000	U
108-10-1	4-Methyl-2-pentanone	13000	U
108-88-3	Toluene	13000	U
10061-02-6	trans-1,3-Dichloropropene	13000	U
79-00-5	1,1,2-Trichloroethane	13000	U
142-28-9	1,3-Dichloropropane	13000	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-2DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-02ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7067.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 2500.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	3200	DJ
591-78-6	2-Hexanone	13000	U
124-48-1	Dibromochloromethane	13000	U
106-93-4	1,2-Dibromoethane	13000	U
108-90-7	Chlorobenzene	13000	U
630-20-6	1,1,1,2-Tetrachloroethane	13000	U
100-41-4	Ethylbenzene	13000	U
179601-23-1	m,p-Xylene	13000	U
95-47-6	o-Xylene	13000	U
1330-20-7	Xylene (Total)	13000	U
100-42-5	Styrene	13000	U
75-25-2	Bromoform	13000	U
98-82-8	Isopropylbenzene	13000	U
79-34-5	1,1,2,2-Tetrachloroethane	13000	U
108-86-1	Bromobenzene	13000	U
96-18-4	1,2,3-Trichloropropane	13000	U
103-65-1	n-Propylbenzene	13000	U
95-49-8	2-Chlorotoluene	13000	U
108-67-8	1,3,5-Trimethylbenzene	13000	U
106-43-4	4-Chlorotoluene	13000	U
98-06-6	tert-Butylbenzene	13000	U
95-63-6	1,2,4-Trimethylbenzene	13000	U
135-98-8	sec-Butylbenzene	13000	U
99-87-6	4-Isopropyltoluene	13000	U
541-73-1	1,3-Dichlorobenzene	13000	U
106-46-7	1,4-Dichlorobenzene	13000	U
104-51-8	n-Butylbenzene	13000	U
95-50-1	1,2-Dichlorobenzene	13000	U
96-12-8	1,2-Dibromo-3-chloropropane	13000	U
120-82-1	1,2,4-Trichlorobenzene	13000	U
87-68-3	Hexachlorobutadiene	13000	U
87-61-6	1,2,3-Trichlorobenzene	13000	U
91-20-3	Naphthalene	13000	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-2DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-02ADL
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7067.D
Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012
% Moisture: not dec. Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2500.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D
 Report Date: 18-May-2012 14:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7067.D
 Lab Smp Id: L0935-02ADL Client Smp ID: MW-2DL
 Inj Date : 18-MAY-2012 10:43
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L0935-02ADL,,66235,2500
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
 Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
 Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
 Als bottle: 24
 Dil Factor: 2500.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	2500.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
23 1,1-Dichloroethane	63	3.932	3.923 (0.731)		11581	1.70264	4200
28 cis-1,2-Dichloroethene	96	4.394	4.396 (0.817)		49313	11.2998	28000
\$ 36 Dibromofluoromethane	113	4.784	4.787 (0.890)		198584	49.0364	49
37 1,1,1-Trichloroethane	97	4.820	4.822 (0.897)		5616	1.10467	2800
\$ 42 1,2-Dichloroethane-d4	102	5.080	5.082 (0.945)		45608	48.5985	48
M 50 1,2-Dichloroethene (Total)	96				49313	11.2998	28000
* 46 Fluorobenzene	96	5.376	5.366 (1.000)		710489	50.0000	
47 Trichloroethene	130	5.695	5.698 (1.059)		487898	104.425	260000
\$ 58 Toluene-d8	98	6.855	6.846 (0.819)		686974	49.5769	50
63 Tetrachloroethene	164	7.482	7.473 (0.894)		4852	1.27763	3200
* 68 Chlorobenzene-d5	117	8.369	8.360 (1.000)		606119	50.0000	
\$ 79 Bromofluorobenzene	95	9.659	9.662 (1.154)		283380	50.0142	50
* 92 1,4-Dichlorobenzene-d4	152	10.854	10.857 (1.000)		313730	50.0000	

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D
Report Date: 18-May-2012 14:46

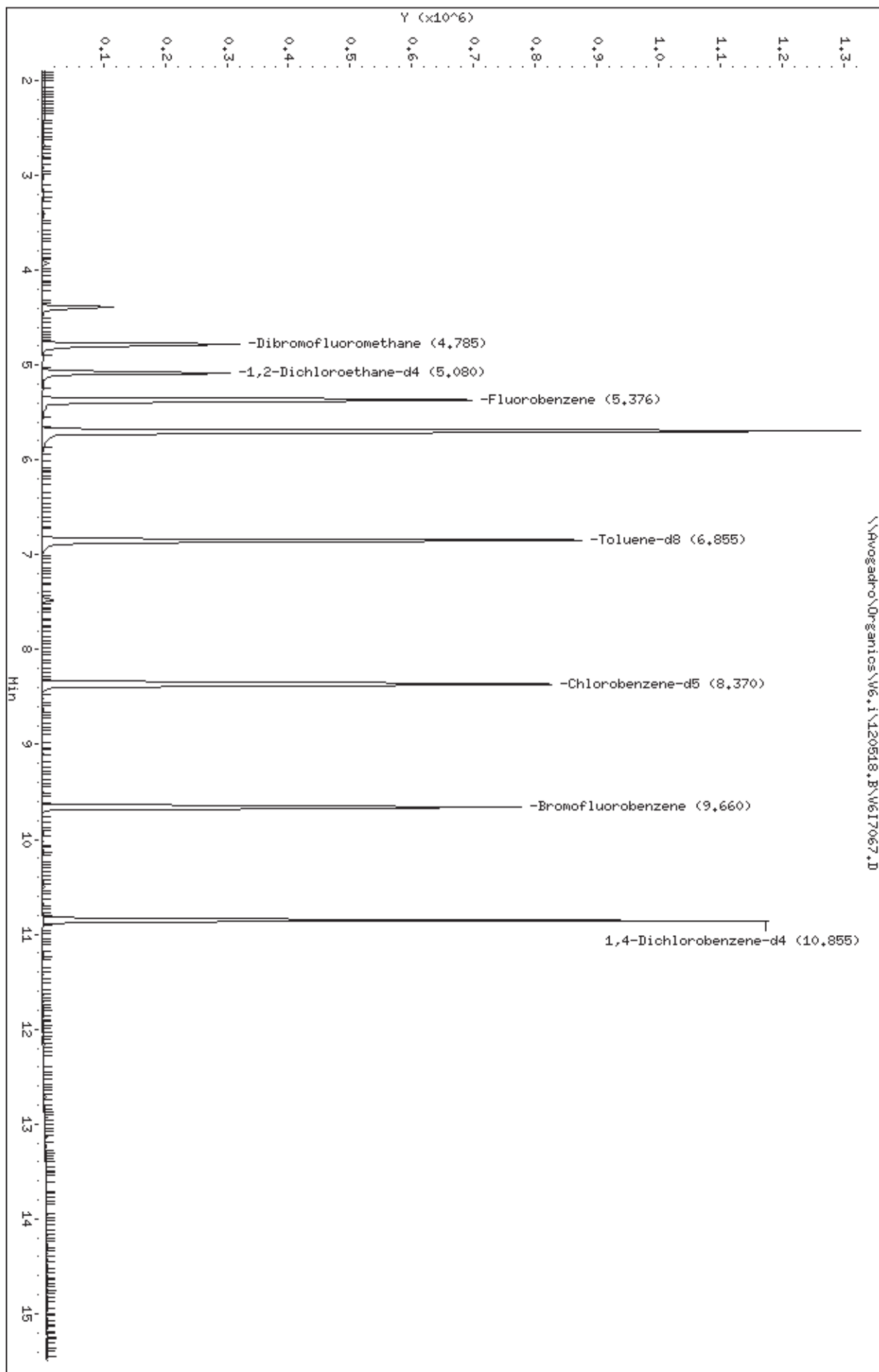
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7067.D
Lab Smp Id: L0935-02ADL Client Smp ID: MW-2DL
Inj Date : 18-MAY-2012 10:43
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-02ADL,,66235,2500
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 24
Dil Factor: 2500.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W6,i\120518.B\W6I7067.D
Date : 18-May-2012 10:43
Client ID: MM-2DL
Sample Info: 5HL, L0935-02HDL, 66235, 2500
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D

Date : 18-MAY-2012 10:43

Client ID: MW-2DL

Instrument: V6.i

Sample Info: 5HL,L0935-02ADL,,66235,2500

Purge Volume: 5.0

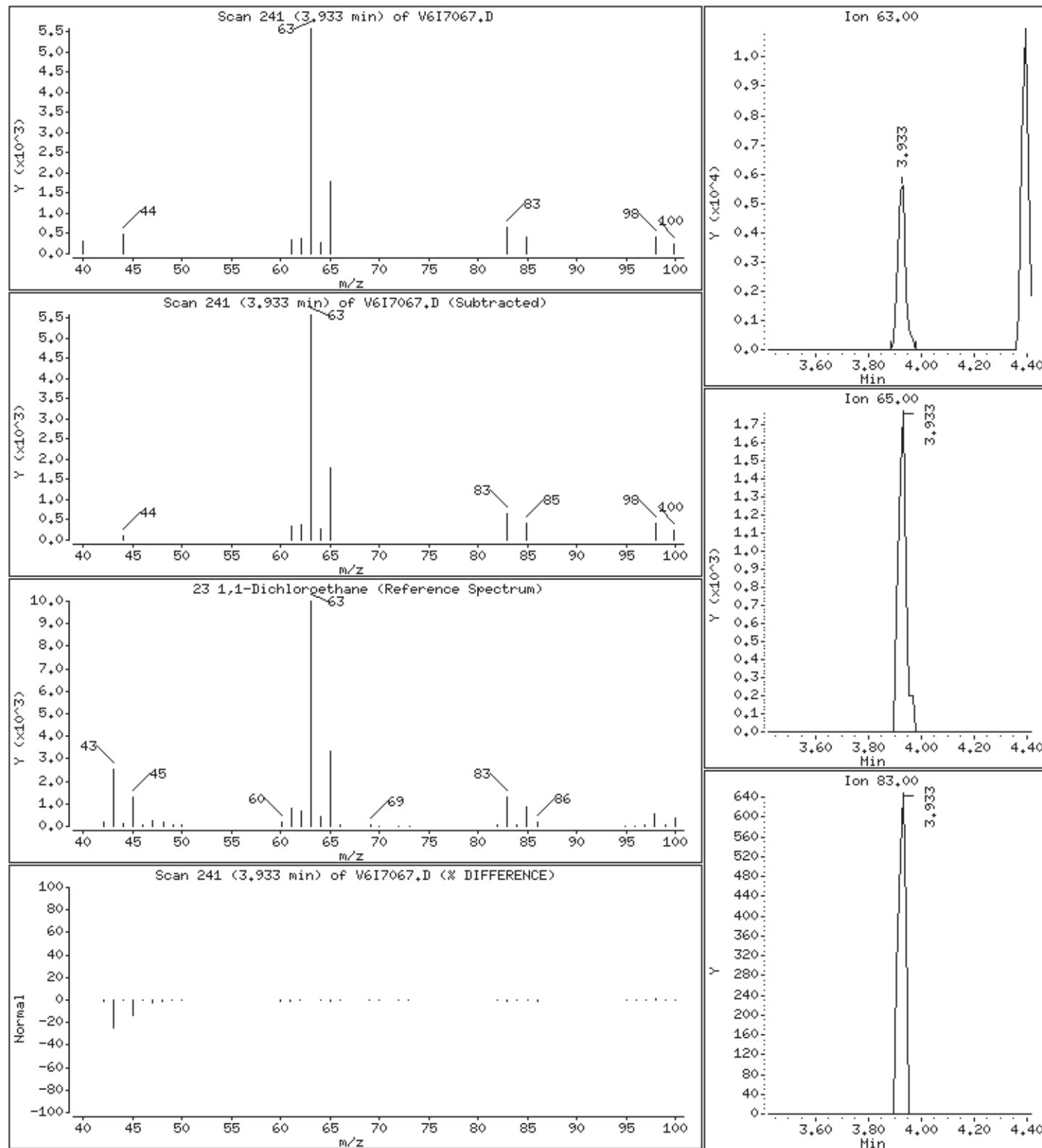
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

23 1,1-Dichloroethane

Concentration: 4200 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D

Date : 18-MAY-2012 10:43

Client ID: MW-2DL

Instrument: V6.i

Sample Info: 5HL,L0935-02ADL,,66235,2500

Purge Volume: 5.0

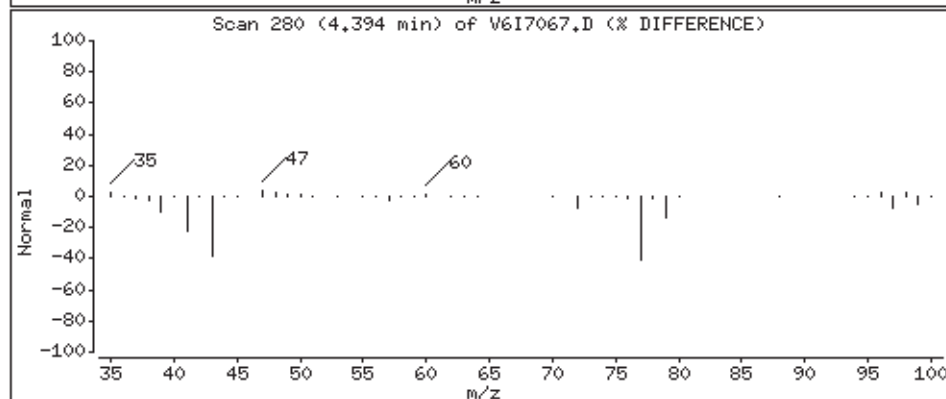
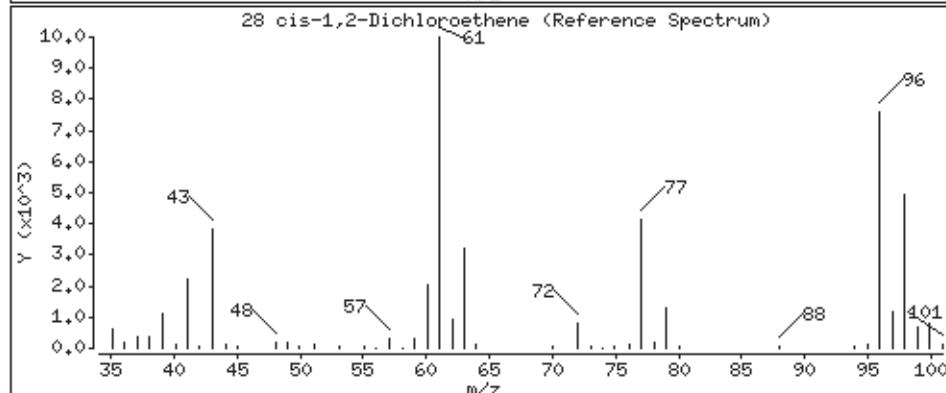
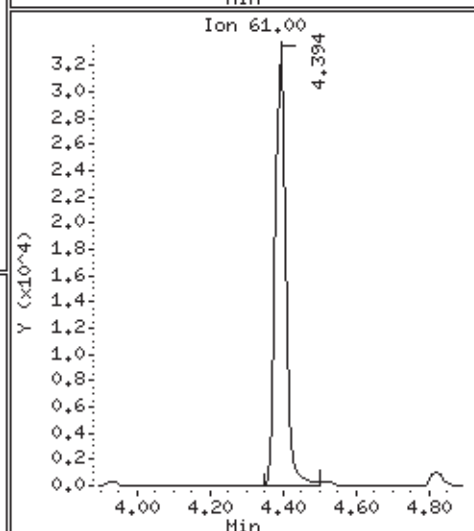
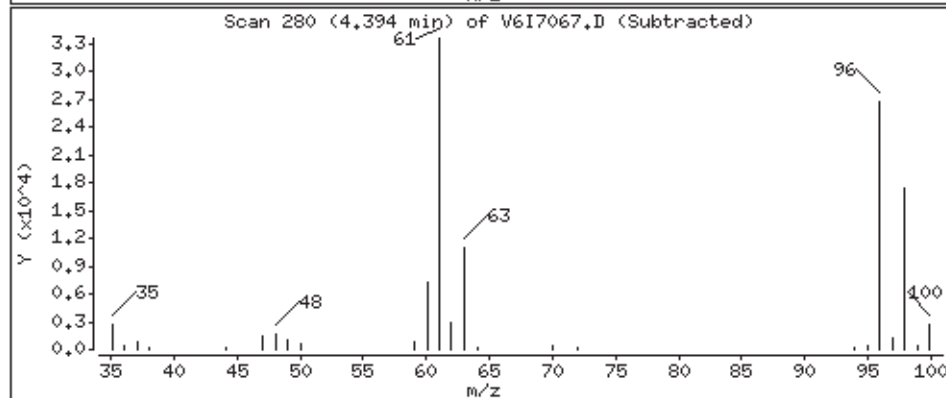
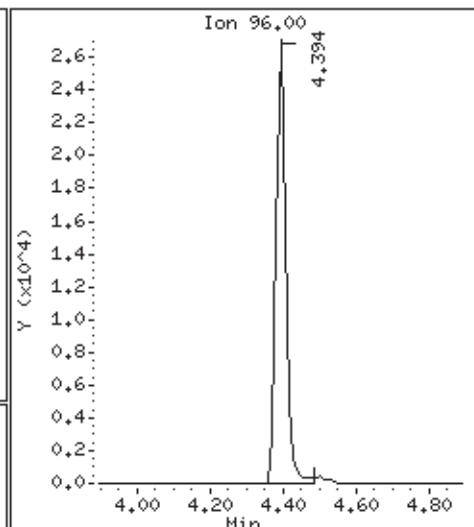
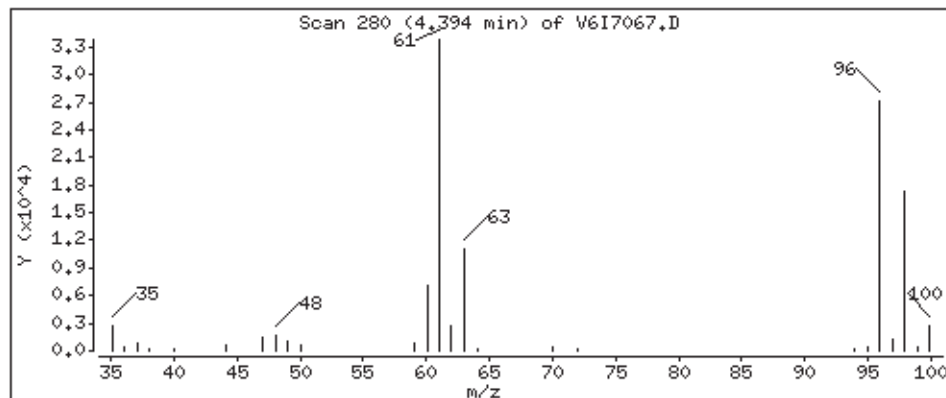
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 28000 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D

Date : 18-MAY-2012 10:43

Client ID: MW-2DL

Instrument: V6.i

Sample Info: 5HL,L0935-02ADL,,66235,2500

Purge Volume: 5.0

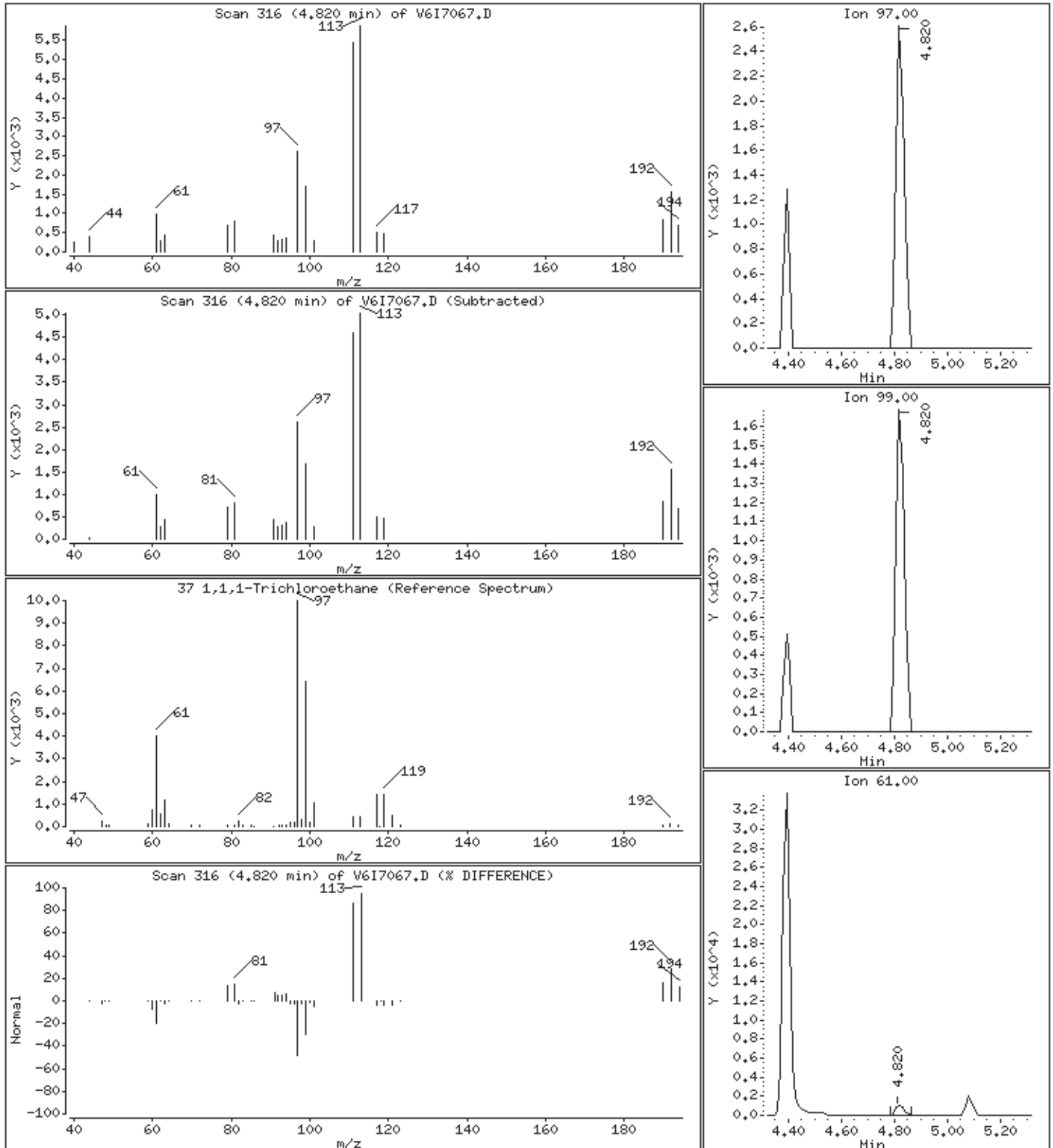
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

37 1,1,1-Trichloroethane

Concentration: 2800 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D

Date : 18-MAY-2012 10:43

Client ID: MW-2DL

Instrument: V6.i

Sample Info: 5HL,L0935-02ADL,,66235,2500

Purge Volume: 5.0

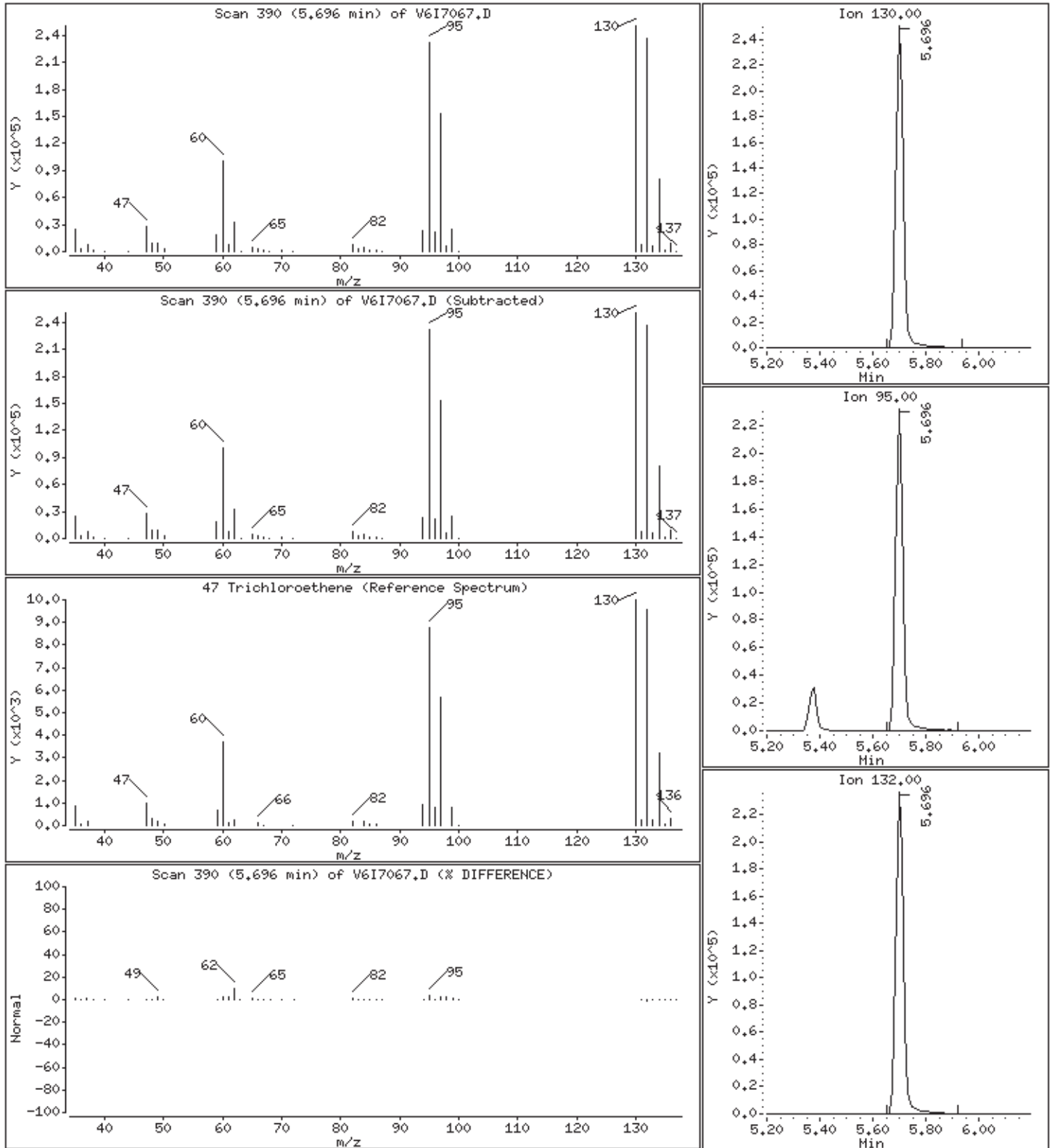
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 260000 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7067.D

Date : 18-MAY-2012 10:43

Client ID: MW-2DL

Instrument: V6.i

Sample Info: 5HL,L0935-02ADL,,66235,2500

Purge Volume: 5.0

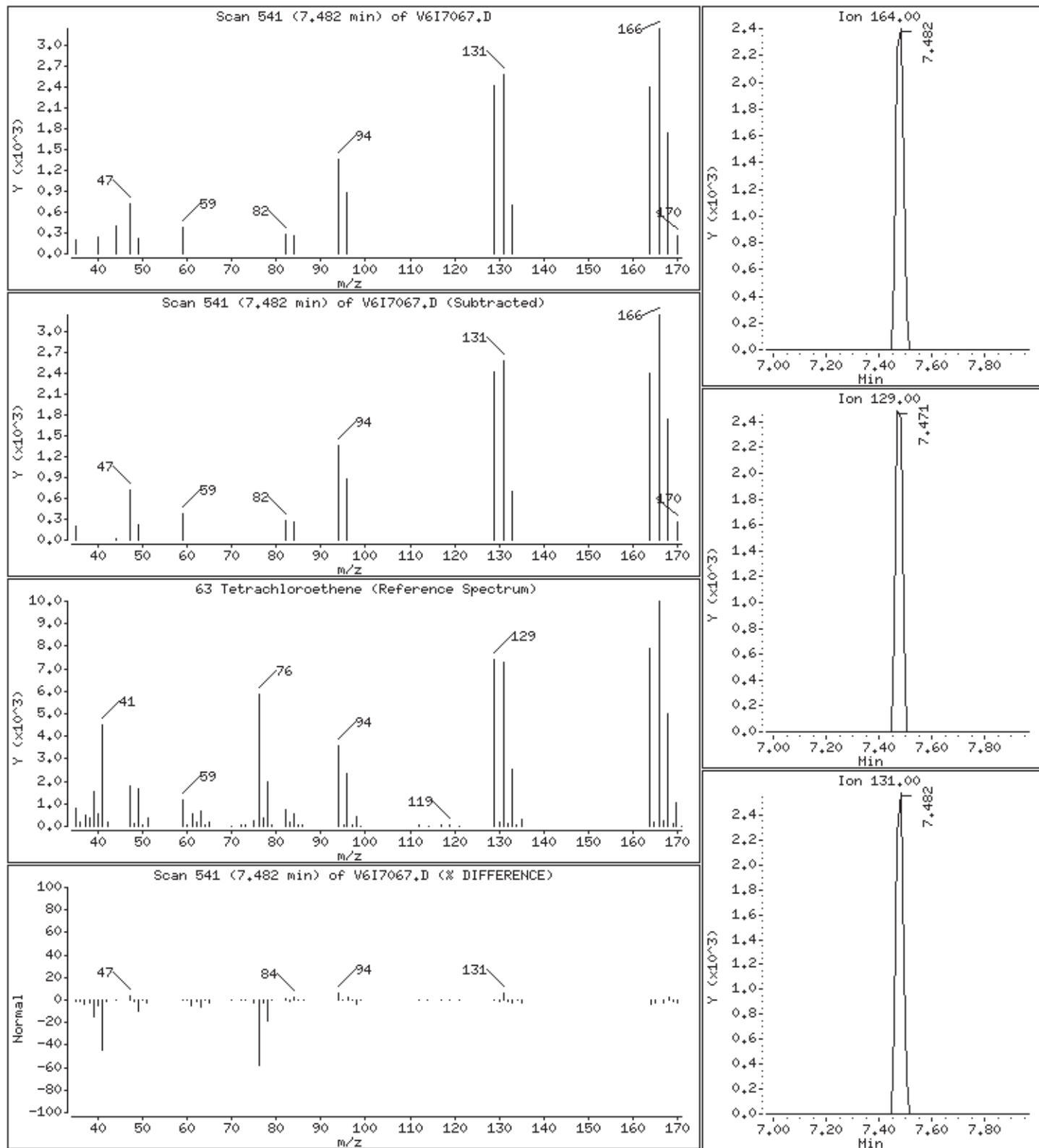
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 3200 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-03A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7068.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.2	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	39	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-03A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7068.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.2	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7068.D
Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012
% Moisture: not dec. Date Analyzed: 05/18/2012
GC Column: DB-624 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 Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7068.D
Report Date: 18-May-2012 14:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7068.D
Lab Smp Id: L0935-03A Client Smp ID: MW-3
Inj Date : 18-MAY-2012 11:08
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML, L0935-03A, , 66235,
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
28 cis-1,2-Dichloroethene	96	4.394	4.396	(0.817)	5068	1.15535	1
\$ 36 Dibromofluoromethane	113	4.785	4.787	(0.890)	199292	48.9590	49
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.082	(0.945)	45910	48.6695	49
M 50 1,2-Dichloroethene (Total)	96				5068	1.15535	1
* 46 Fluorobenzene	96	5.377	5.366	(1.000)	714149	50.0000	
47 Trichloroethene	130	5.696	5.698	(1.059)	184853	39.3615	39
\$ 58 Toluene-d8	98	6.844	6.846	(0.819)	694487	49.4159	49
63 Tetrachloroethene	164	7.483	7.473	(0.895)	4637	1.20388	1
* 68 Chlorobenzene-d5	117	8.358	8.360	(1.000)	614745	50.0000	
\$ 79 Bromofluorobenzene	95	9.660	9.662	(1.156)	286845	49.9153	50
* 92 1,4-Dichlorobenzene-d4	152	10.855	10.857	(1.000)	314697	50.0000	

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7068.D
Report Date: 18-May-2012 14:46

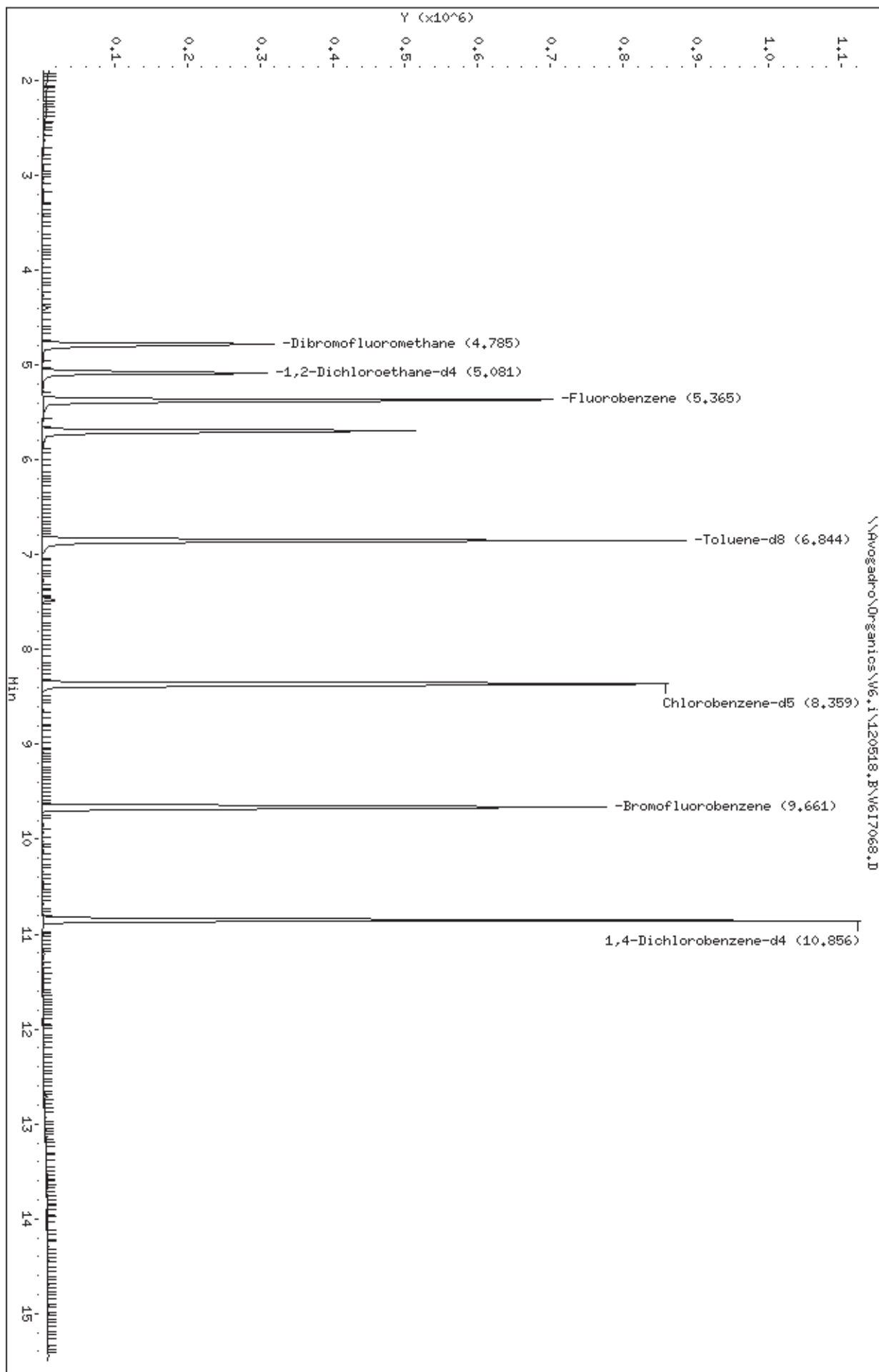
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7068.D
Lab Smp Id: L0935-03A Client Smp ID: MW-3
Inj Date : 18-MAY-2012 11:08
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-03A,,66235,
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W6,i\120518.B\W6I7068.D
Date : 18-May-2012 11:08
Client ID: MM-3
Sample Info: 5HL, L0935-03H, 66235,
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7068.D

Date : 18-MAY-2012 11:08

Client ID: MW-3

Instrument: V6.i

Sample Info: 5HL,L0935-03A,,66235,

Purge Volume: 5.0

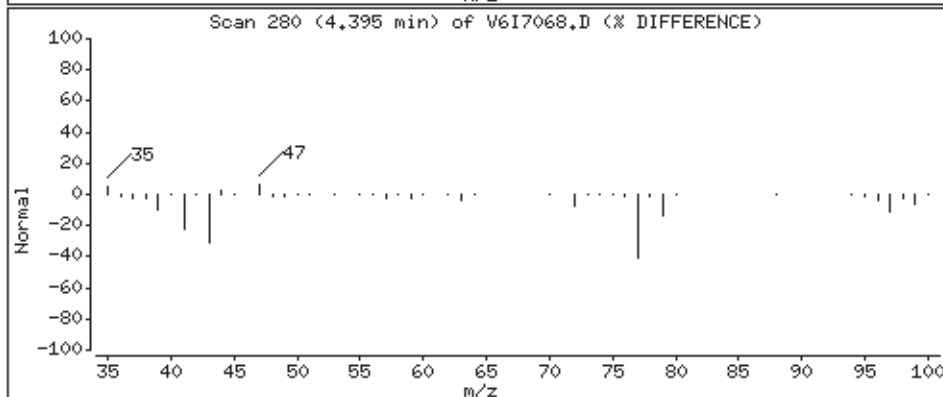
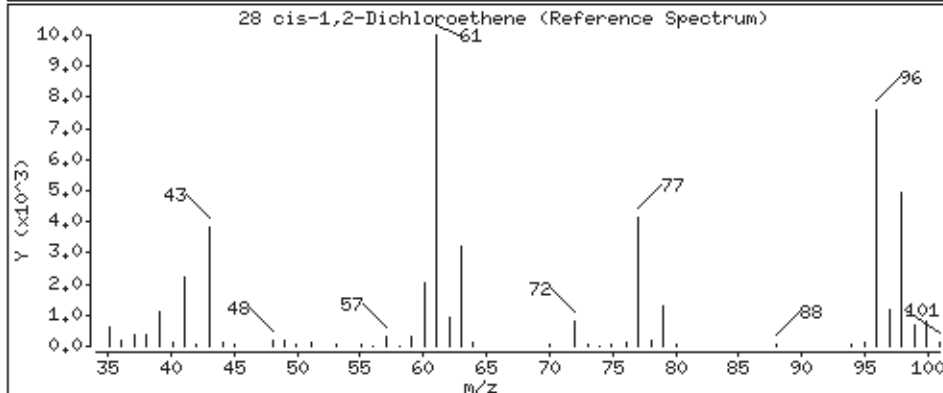
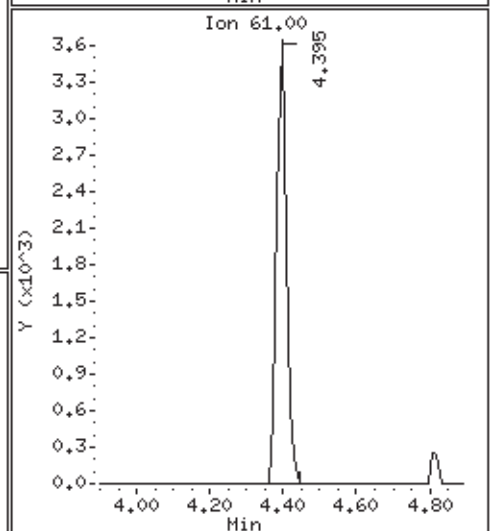
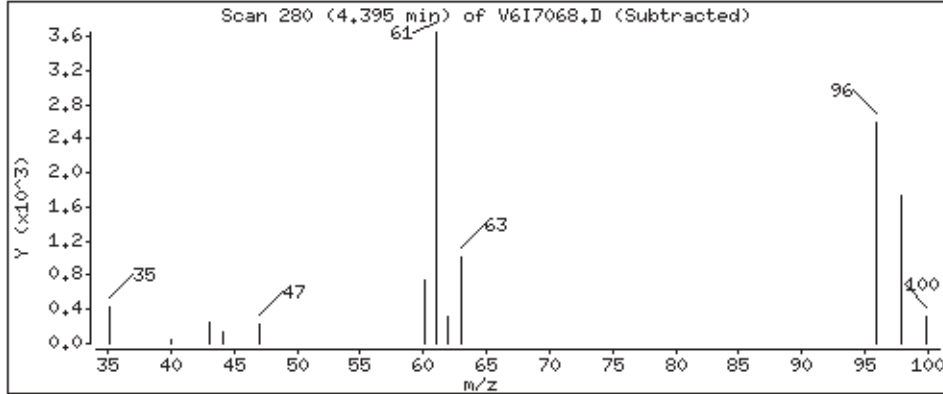
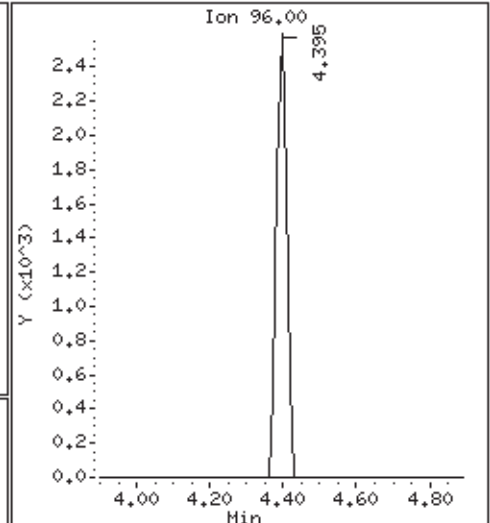
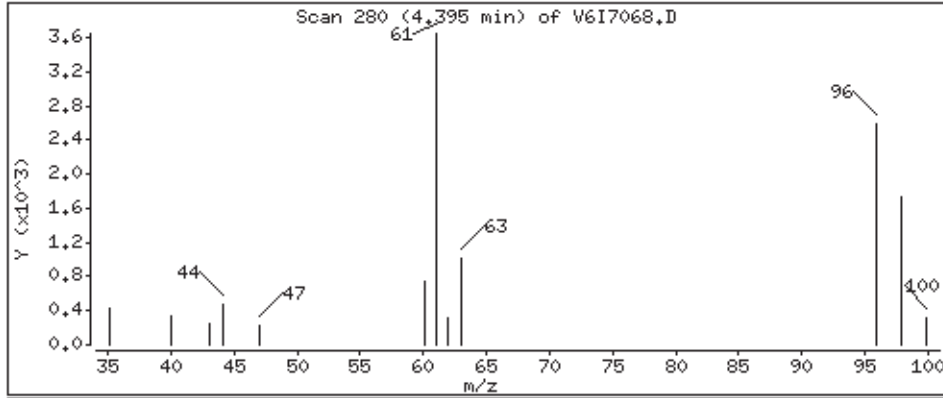
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 1 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7068.D

Date : 18-MAY-2012 11:08

Client ID: MW-3

Instrument: V6.i

Sample Info: 5HL,L0935-03A,,66235,

Purge Volume: 5.0

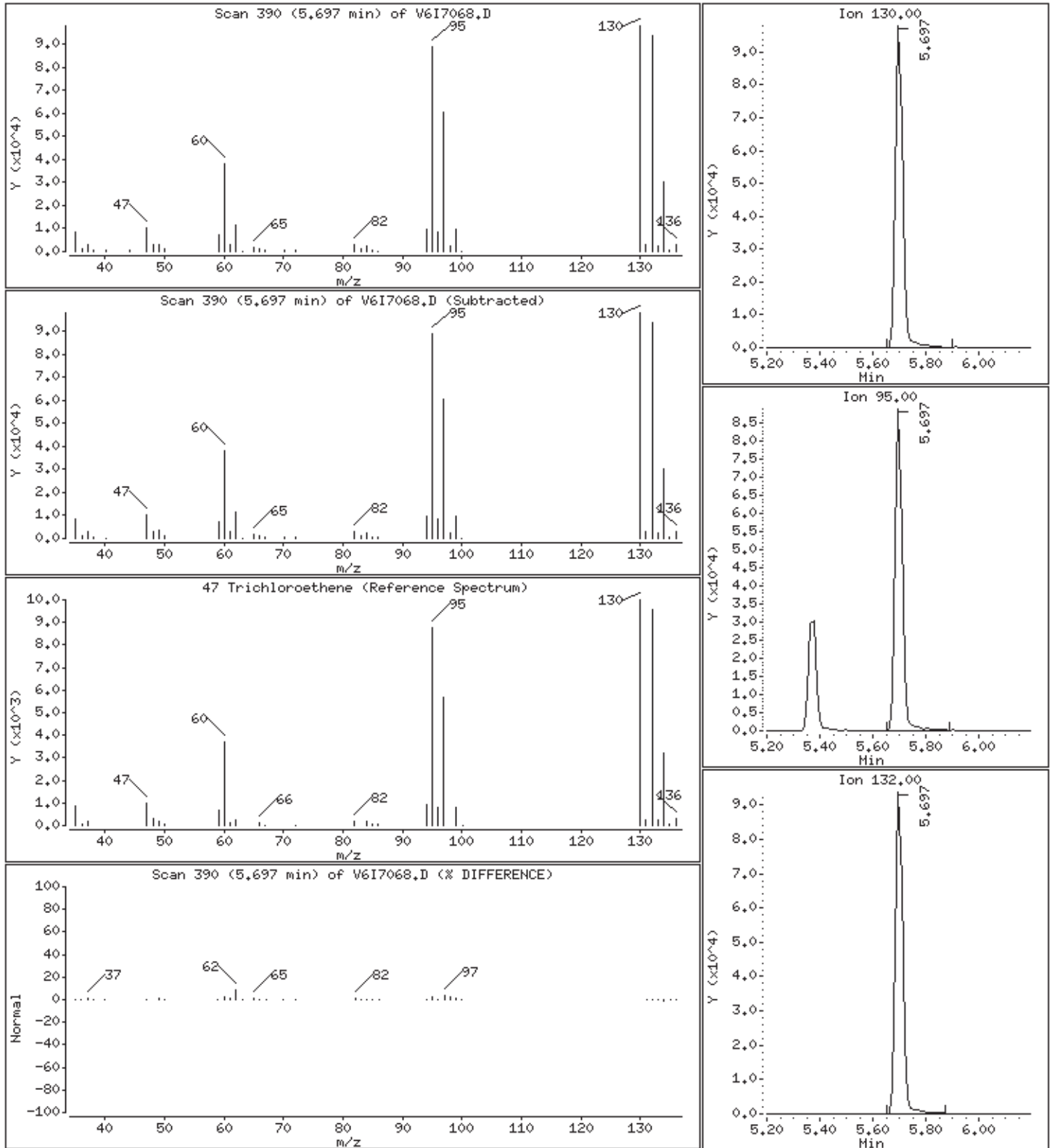
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 39 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7068.D

Date : 18-MAY-2012 11:08

Client ID: MW-3

Instrument: V6.i

Sample Info: 5HL,L0935-03A,,66235,

Purge Volume: 5.0

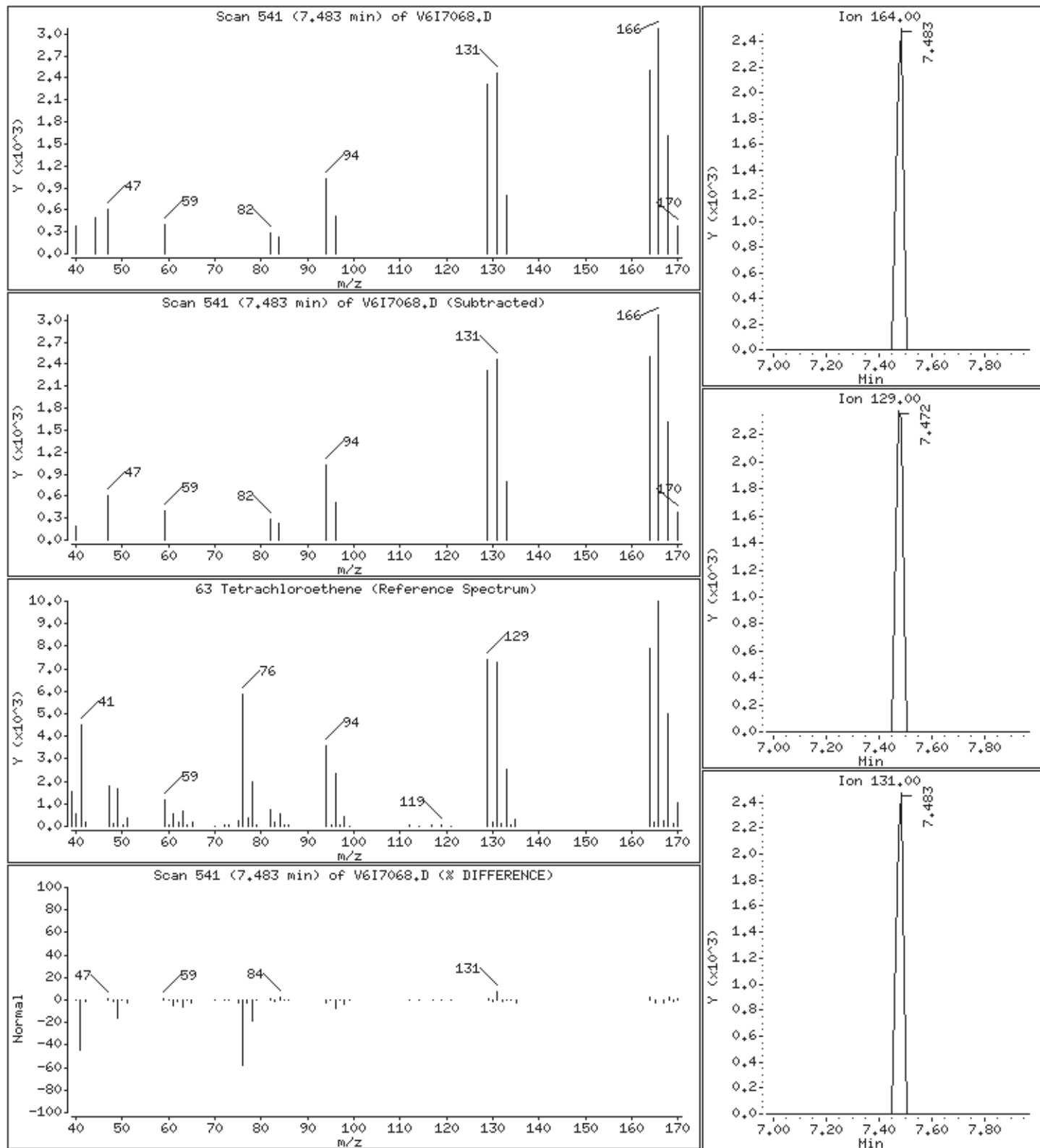
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 1 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B1748.D
Level: (TRACE/LOW/MED) LOW Date Received: 05/05/2012
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-04A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1748.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B1748.D
Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 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 Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1748.d
 Report Date: 21-May-2012 15:34

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1748.d
 Lab Smp Id: L0935-04A Client Smp ID: TRIP BLANK
 Inj Date : 17-MAY-2012 07:27
 Operator : SRC: LIMS Inst ID: V8.i
 Smp Info : 5ML,L0935-04A,,66208
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
 Meth Date : 21-May-2012 15:34 cmosher Quant Type: ISTD
 Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
 Als bottle: 100
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	112693	51.3217	51
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	25526	49.3923	49
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	434495	50.0000	
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	413299	50.2483	50
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	301665	50.0000	
\$ 79 Bromofluorobenzene	95	9.586	9.583	(1.157)	132273	45.6961	46
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779	(1.000)	115941	50.0000	

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1748.d
Report Date: 21-May-2012 15:34

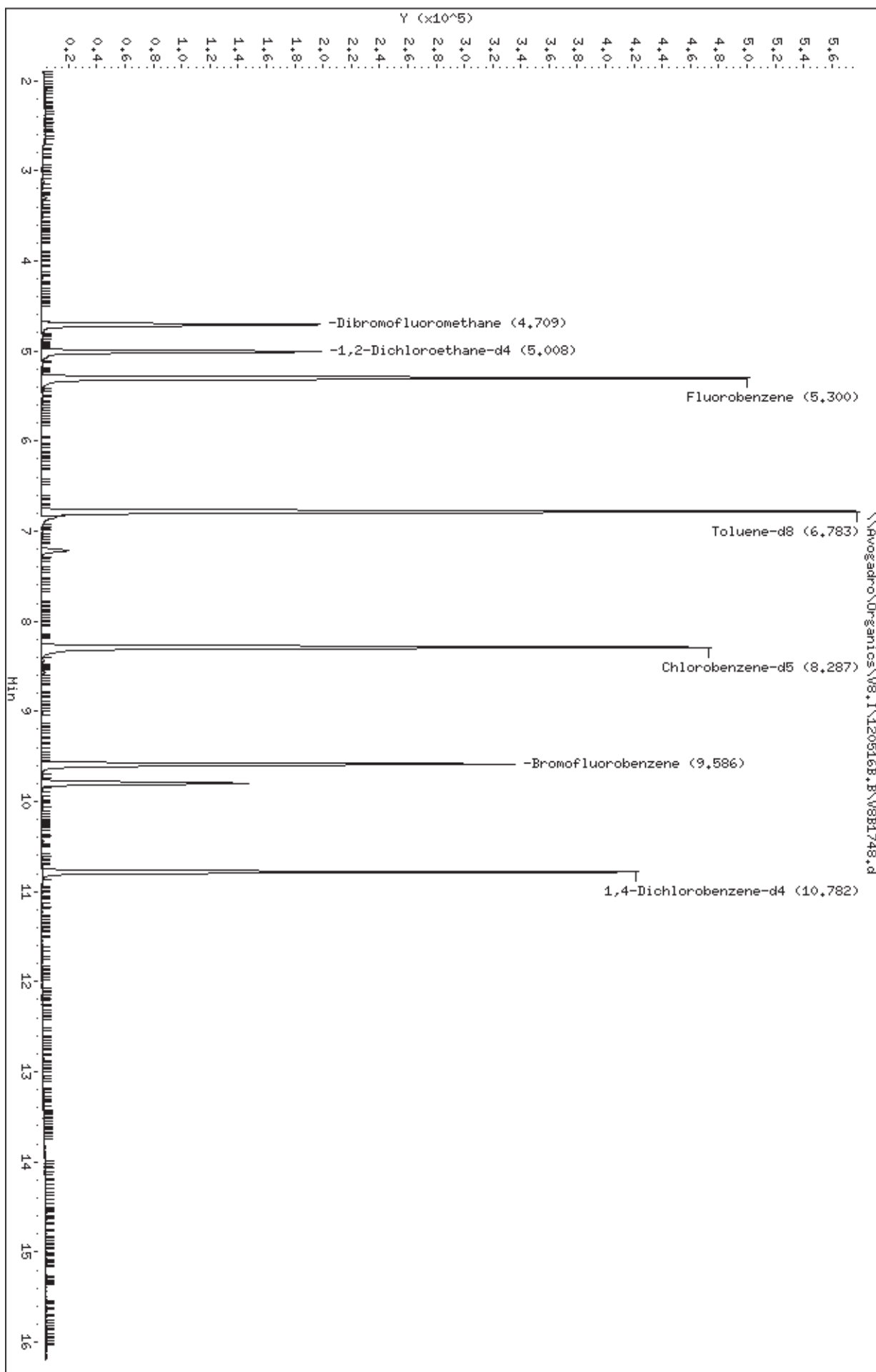
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1748.d
Lab Smp Id: L0935-04A Client Smp ID: TRIP BLANK
Inj Date : 17-MAY-2012 07:27
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,L0935-04A,,66208
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 21-May-2012 15:34 cmosher Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100
Dil Factor: 1.000000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W8.I\120516B.B\W8B1748.d
Date : 17-MAY-2012 07:27
Client ID: TRIP BLANK
Sample Info: SHL, L0935-040, 66208
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-05A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7055.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 100.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	500	U
74-87-3	Chloromethane	500	U
75-01-4	Vinyl chloride	170	J
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	500	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	1100	
67-64-1	Acetone	500	U
74-88-4	Iodomethane	500	U
75-15-0	Carbon disulfide	500	U
75-09-2	Methylene chloride	380	J
156-60-5	trans-1,2-Dichloroethene	70	J
1634-04-4	Methyl tert-butyl ether	500	U
75-34-3	1,1-Dichloroethane	3900	
108-05-4	Vinyl acetate	500	U
78-93-3	2-Butanone	500	U
156-59-2	cis-1,2-Dichloroethene	25000	E
594-20-7	2,2-Dichloropropane	500	U
74-97-5	Bromochloromethane	500	U
67-66-3	Chloroform	500	U
71-55-6	1,1,1-Trichloroethane	3000	
563-58-6	1,1-Dichloropropene	500	U
56-23-5	Carbon tetrachloride	500	U
107-06-2	1,2-Dichloroethane	500	U
71-43-2	Benzene	500	U
79-01-6	Trichloroethene	130000	E
78-87-5	1,2-Dichloropropane	500	U
74-95-3	Dibromomethane	500	U
75-27-4	Bromodichloromethane	500	U
10061-01-5	cis-1,3-Dichloropropene	500	U
108-10-1	4-Methyl-2-pentanone	500	U
108-88-3	Toluene	210	J
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
142-28-9	1,3-Dichloropropane	500	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-05A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7055.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 100.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	3900	
591-78-6	2-Hexanone	500	U
124-48-1	Dibromochloromethane	500	U
106-93-4	1,2-Dibromoethane	500	U
108-90-7	Chlorobenzene	500	U
630-20-6	1,1,1,2-Tetrachloroethane	500	U
100-41-4	Ethylbenzene	500	U
179601-23-1	m,p-Xylene	79	J
95-47-6	o-Xylene	500	U
1330-20-7	Xylene (Total)	79	J
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
98-82-8	Isopropylbenzene	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
108-86-1	Bromobenzene	500	U
96-18-4	1,2,3-Trichloropropane	500	U
103-65-1	n-Propylbenzene	500	U
95-49-8	2-Chlorotoluene	500	U
108-67-8	1,3,5-Trimethylbenzene	500	U
106-43-4	4-Chlorotoluene	500	U
98-06-6	tert-Butylbenzene	500	U
95-63-6	1,2,4-Trimethylbenzene	140	J
135-98-8	sec-Butylbenzene	500	U
99-87-6	4-Isopropyltoluene	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
104-51-8	n-Butylbenzene	500	U
95-50-1	1,2-Dichlorobenzene	500	U
96-12-8	1,2-Dibromo-3-chloropropane	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
87-68-3	Hexachlorobutadiene	500	U
87-61-6	1,2,3-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7055.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012

% Moisture: not dec. _____ Date Analyzed: 05/18/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D
Report Date: 18-May-2012 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D
Lab Smp Id: L0935-05A Client Smp ID: DUP-1
Inj Date : 18-MAY-2012 05:13
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-05A,,66227,100
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:43 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 47
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
4 Vinyl Chloride	62	2.017	2.027 (0.376)		8954	1.72681	170
10 1,1-Dichloroethene	96	3.023	3.010 (0.563)		47351	11.3272	1100
12 Acetone	58	3.035	3.033 (0.566)		813	1.49090	150(Q)
18 Methylene Chloride	84	3.413	3.400 (0.636)		19660	3.79621	380
21 trans-1,2-Dichloroethene	96	3.591	3.589 (0.669)		2786	0.69690	70
23 1,1-Dichloroethane	63	3.922	3.932 (0.731)		272147	39.3756	3900
28 cis-1,2-Dichloroethene	96	4.395	4.394 (0.819)		1108391	249.948	25000(A)
\$ 36 Dibromofluoromethane	113	4.786	4.784 (0.892)		205127	49.8476	50
37 1,1,1-Trichloroethane	97	4.821	4.820 (0.899)		155755	30.1506	3000
\$ 42 1,2-Dichloroethane-d4	102	5.082	5.080 (0.947)		48089	50.4283	50
M 50 1,2-Dichloroethene (Total)	96				1111177	250.645	25000
* 46 Fluorobenzene	96	5.366	5.376 (1.000)		721955	50.0000	
47 Trichloroethene	130	5.697	5.696 (1.062)		6141986	1293.70	130000(A)
\$ 58 Toluene-d8	98	6.845	6.855 (0.819)		704624	50.0278	50
59 Toluene	91	6.916	6.914 (1.289)		32111	2.10823	210
63 Tetrachloroethene	164	7.472	7.482 (0.894)		150446	38.9745	3900
* 68 Chlorobenzene-d5	117	8.359	8.370 (1.000)		616088	50.0000	
73 m,p-Xylene	106	8.631	8.630 (1.033)		5347	0.79312	79
\$ 79 Bromofluorobenzene	95	9.661	9.660 (1.156)		288237	50.0482	50
M 94 Xylene (Total)	106				5347	0.79312	79
88 1,2,4-Trimethylbenzene	105	10.501	10.500 (0.967)		18404	1.36621	140
* 92 1,4-Dichlorobenzene-d4	152	10.856	10.855 (1.000)		322197	50.0000	

Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D
Report Date: 18-May-2012 14:44

QC Flag Legend

- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D
Report Date: 18-May-2012 14:44

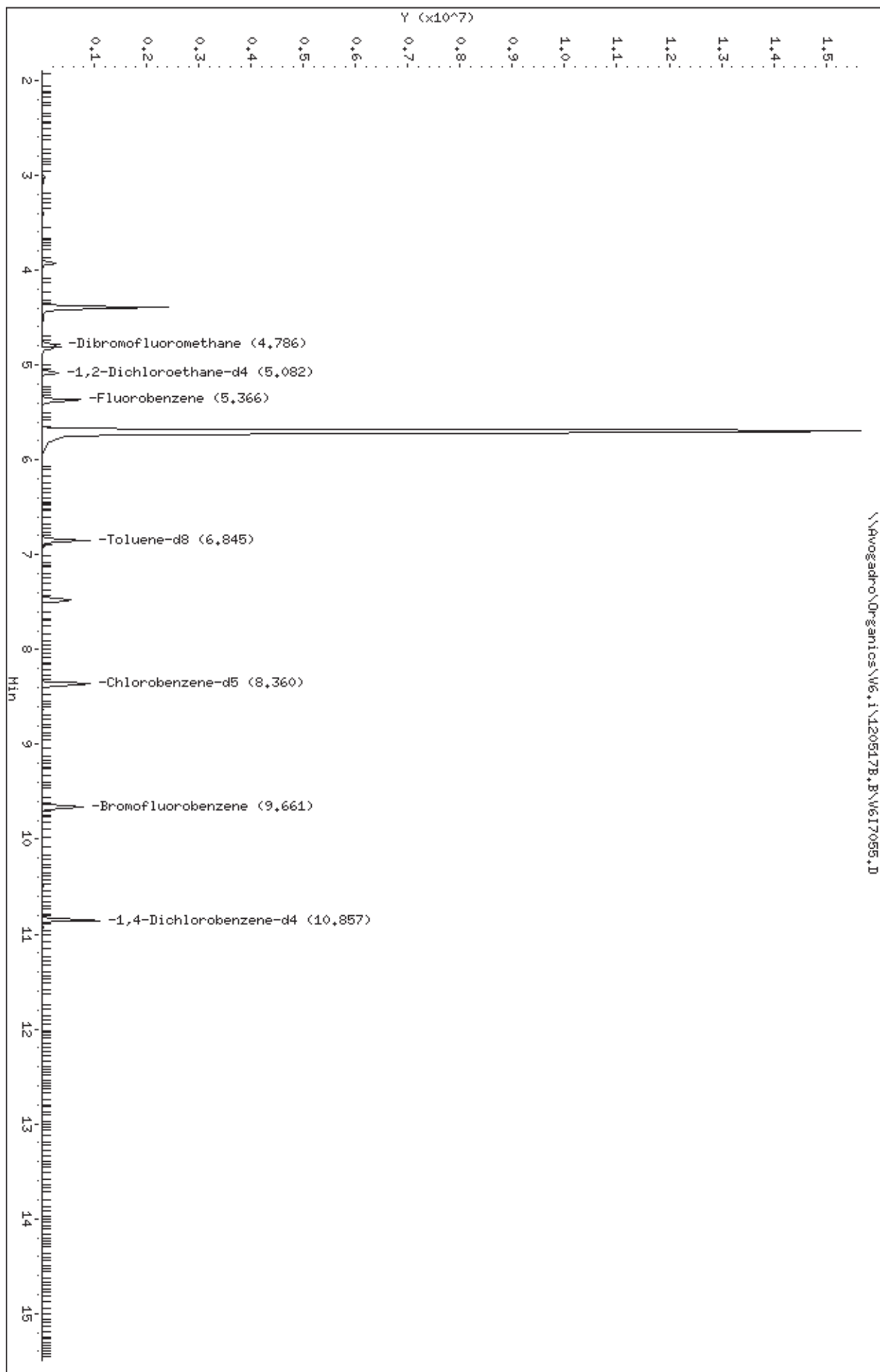
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D
Lab Smp Id: L0935-05A Client Smp ID: DUP-1
Inj Date : 18-MAY-2012 05:13
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-05A,,66227,100
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:43 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 47
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W6,i\120517B,B\W617055.D
Date : 18-May-2012 05:13
Client ID: DUP-1
Sample Info: 5HL, L0935-05H, 66227, 100
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

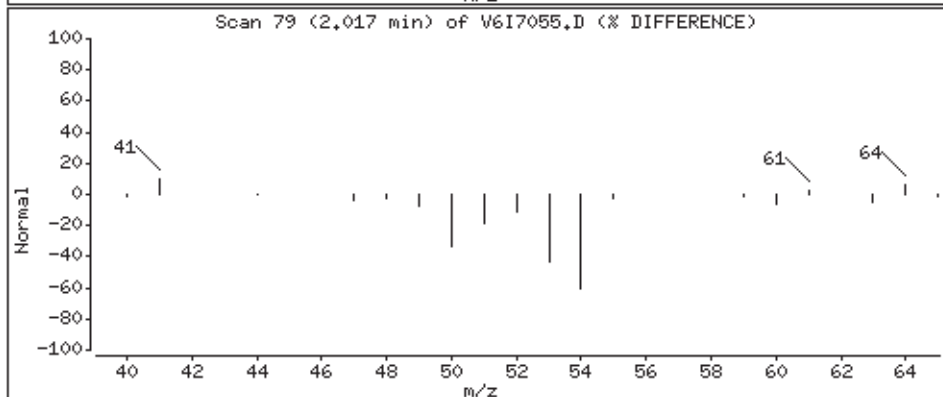
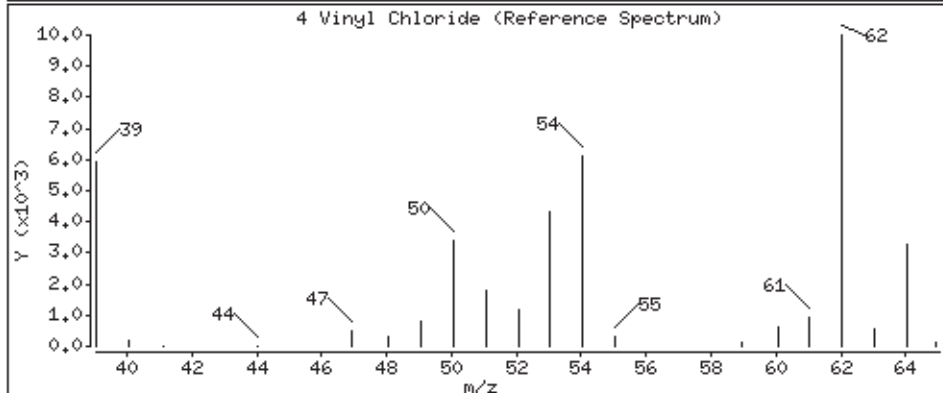
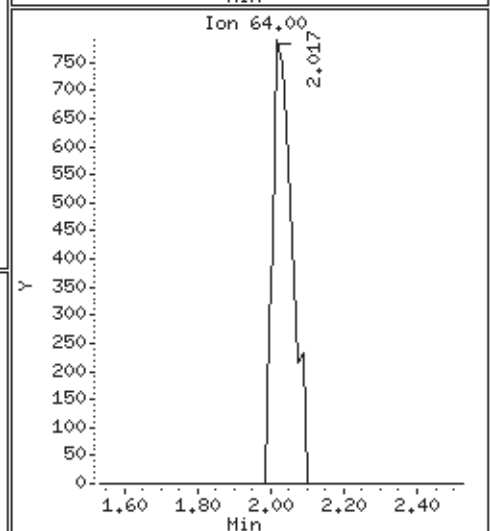
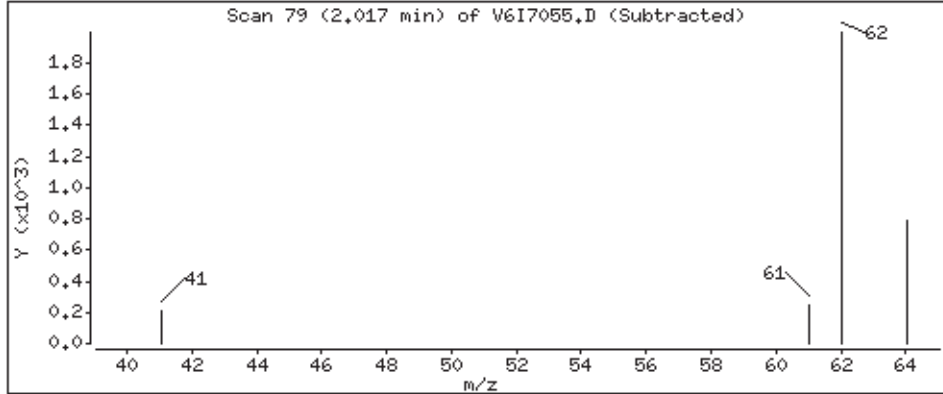
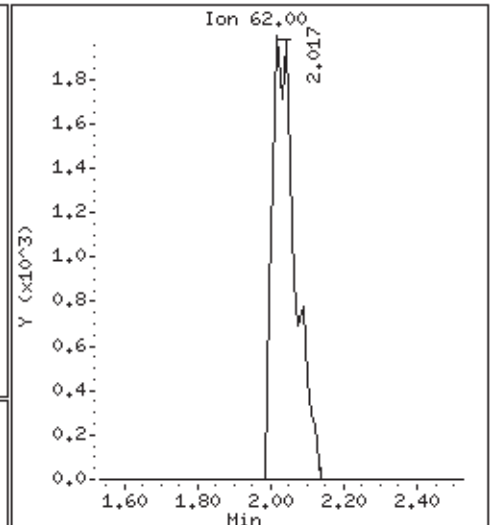
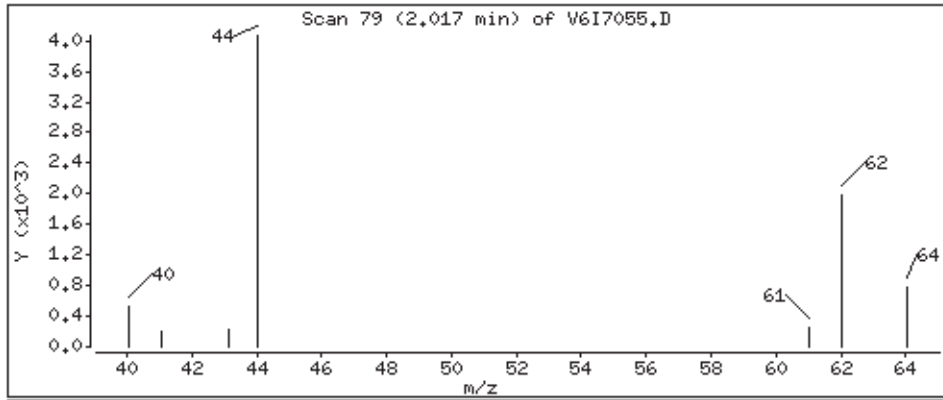
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

4 Vinyl Chloride

Concentration: 170 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

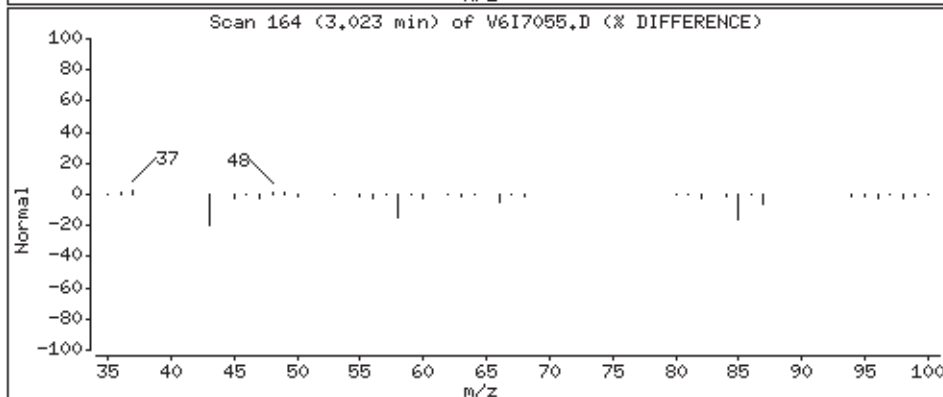
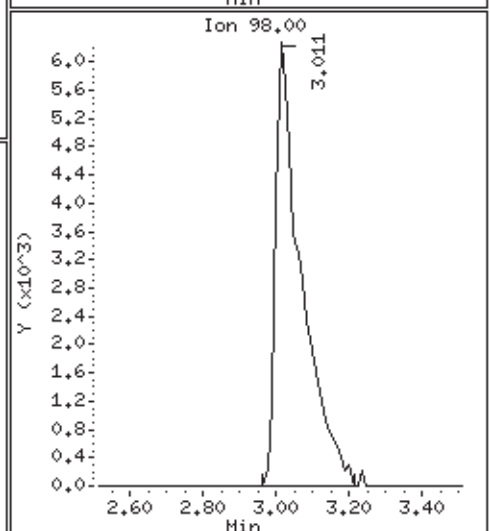
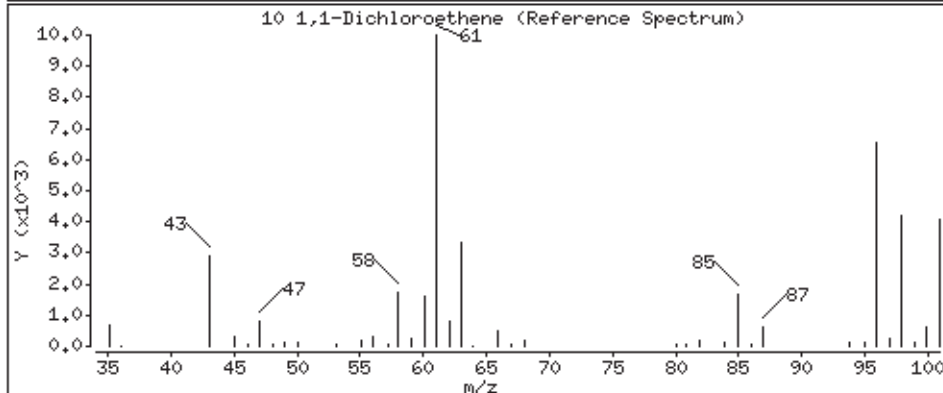
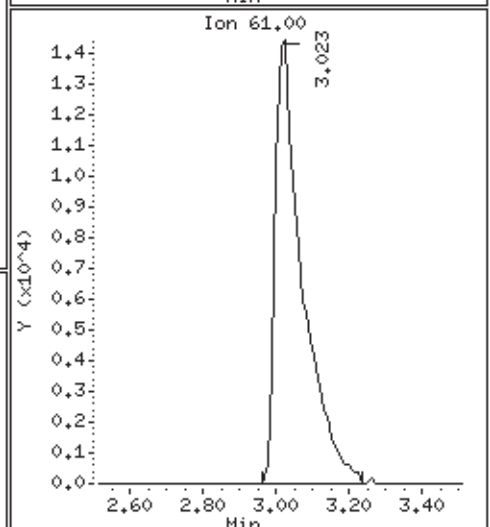
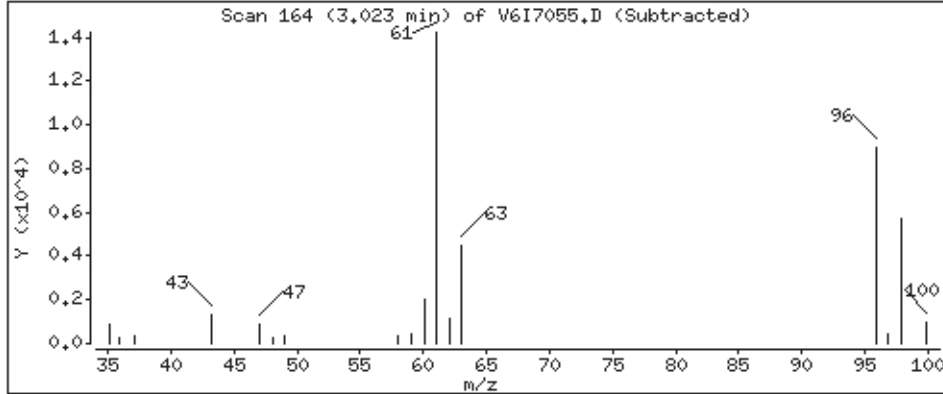
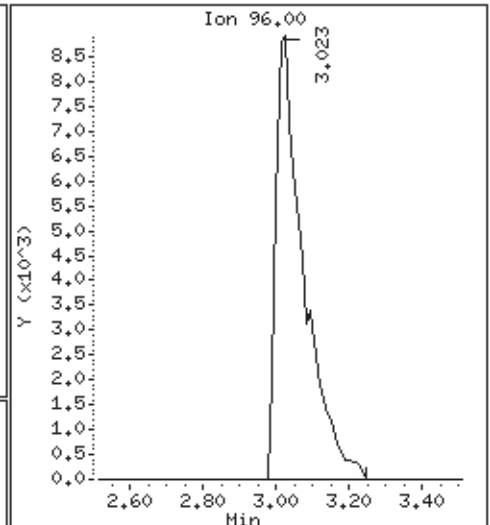
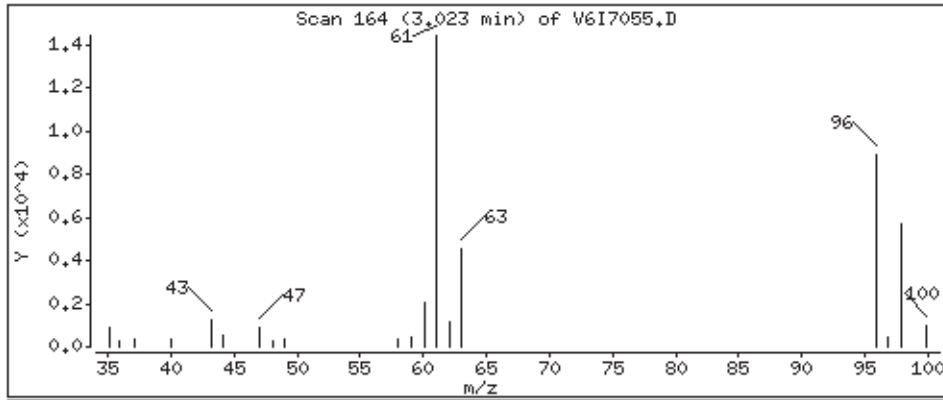
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

10 1,1-Dichloroethene

Concentration: 1100 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

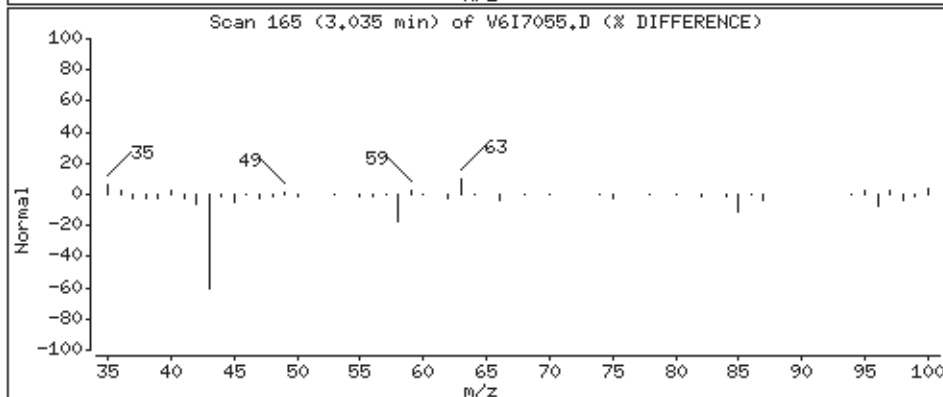
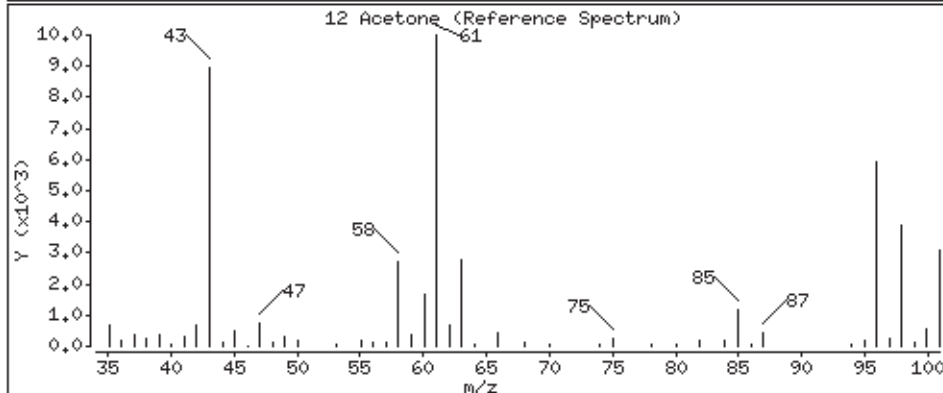
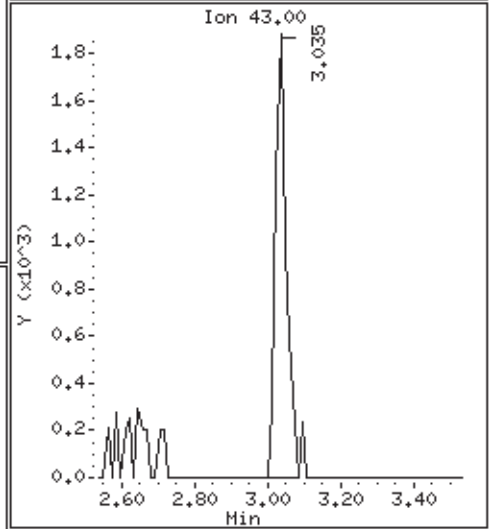
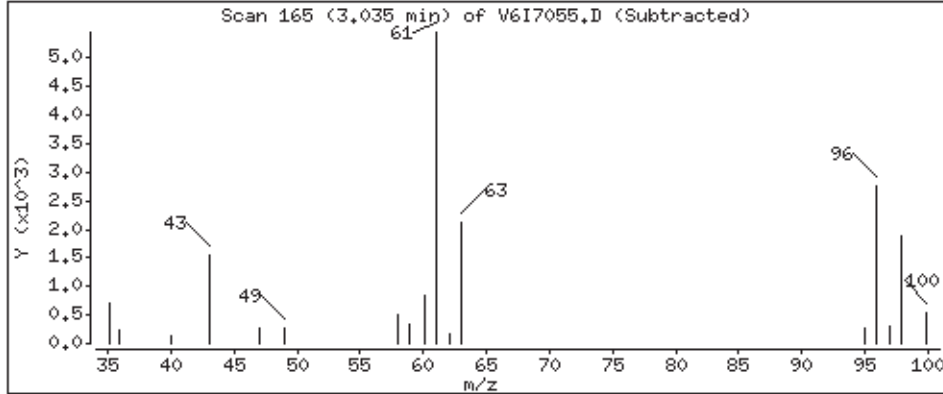
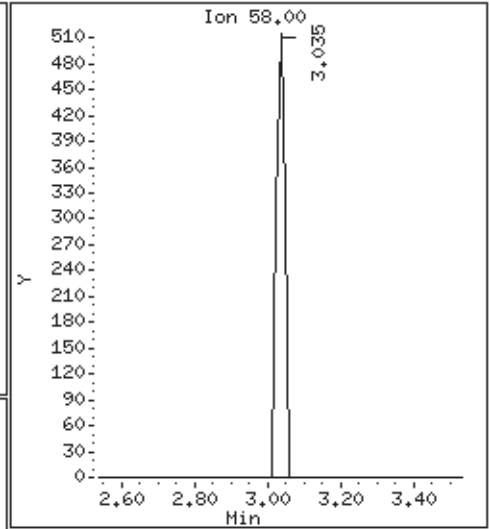
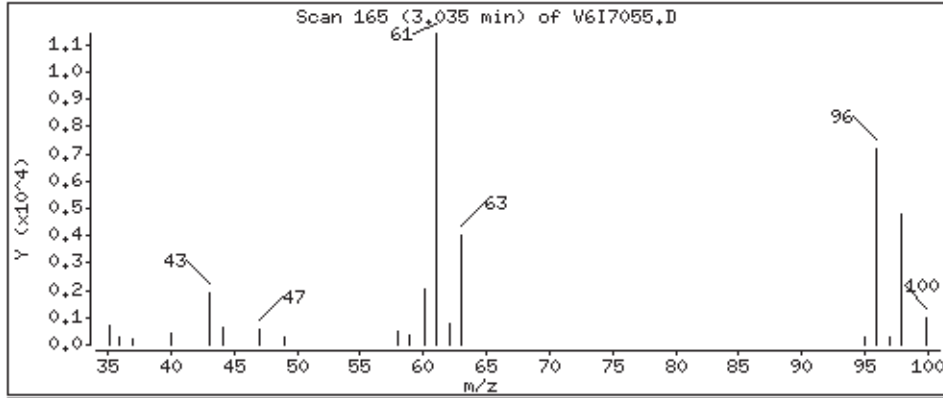
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

12 Acetone

Concentration: 150 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

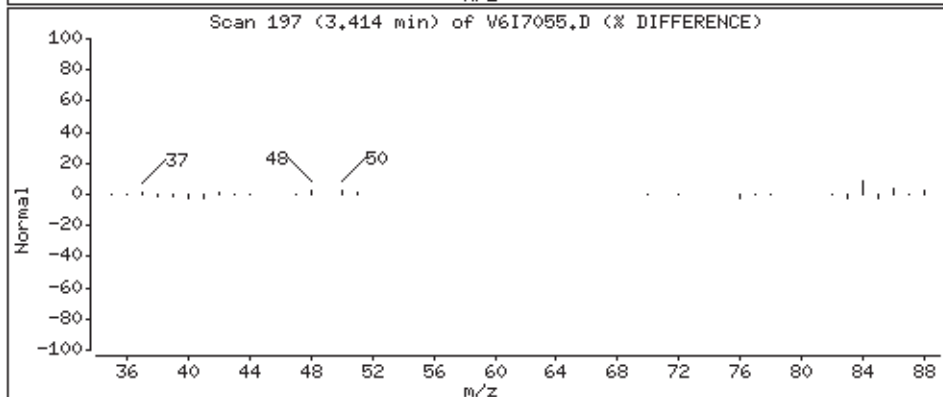
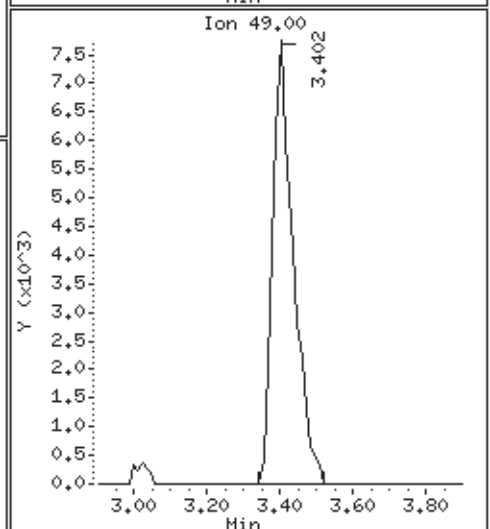
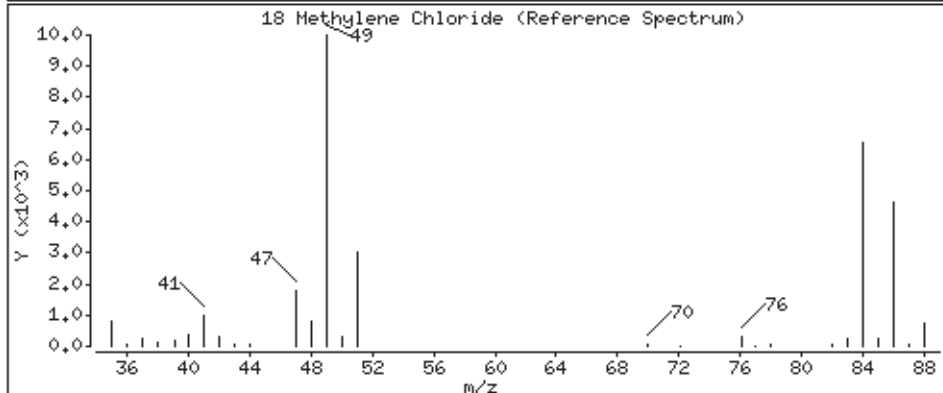
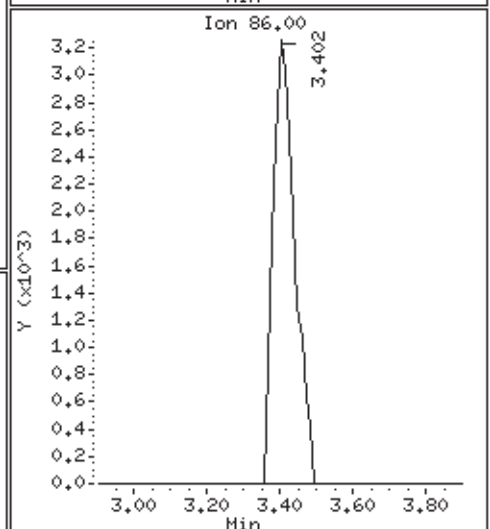
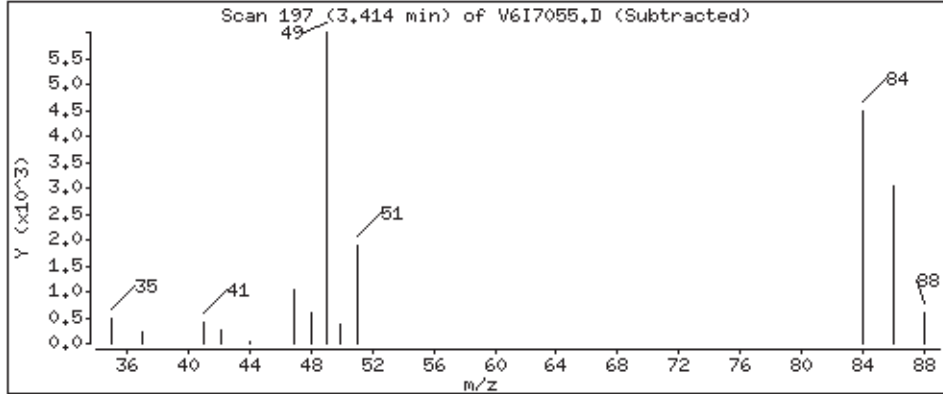
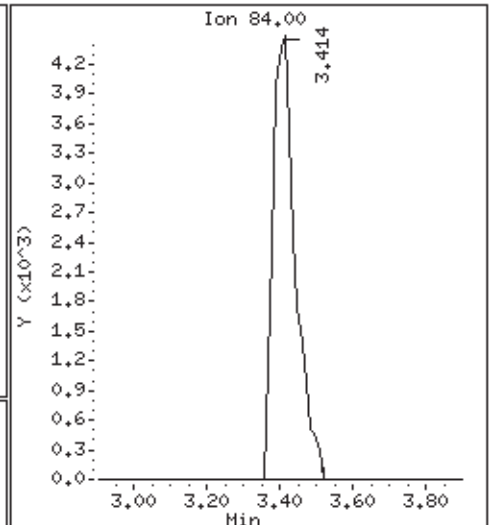
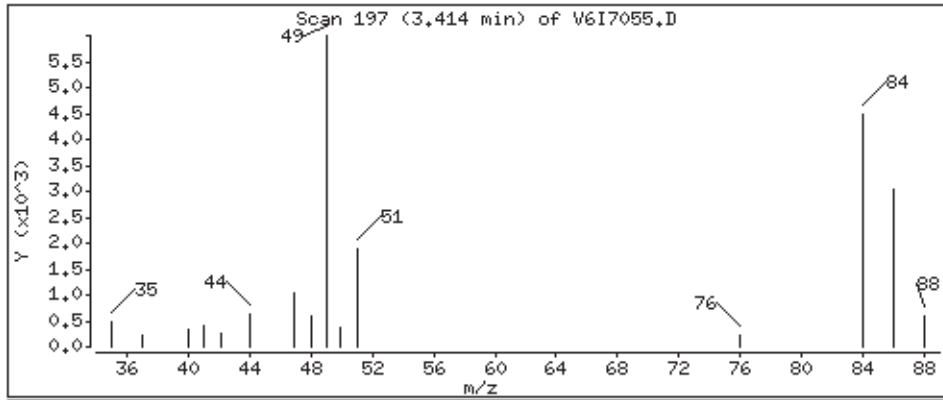
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

18 Methylene Chloride

Concentration: 380 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

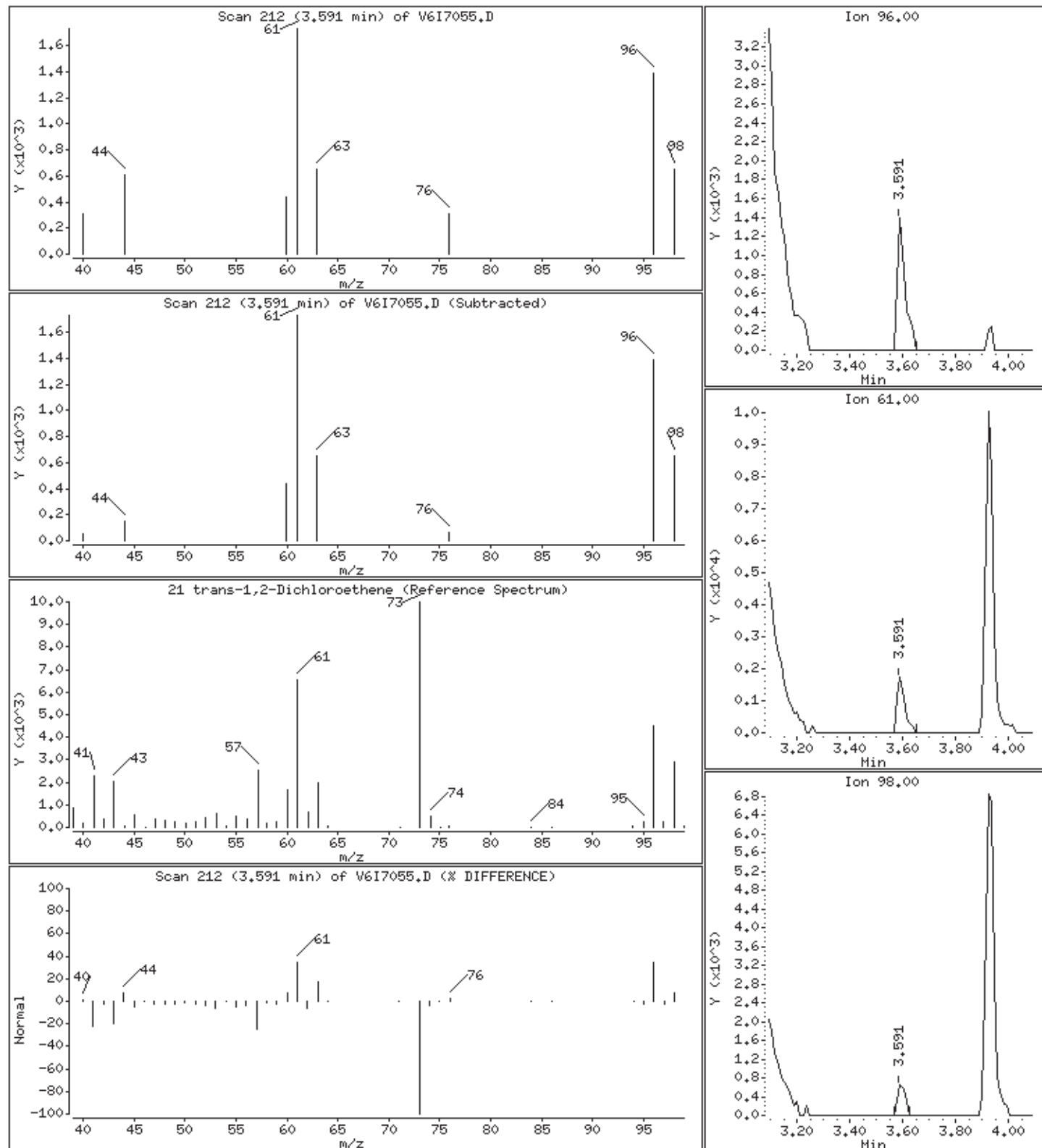
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

21 trans-1,2-Dichloroethene

Concentration: 70 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

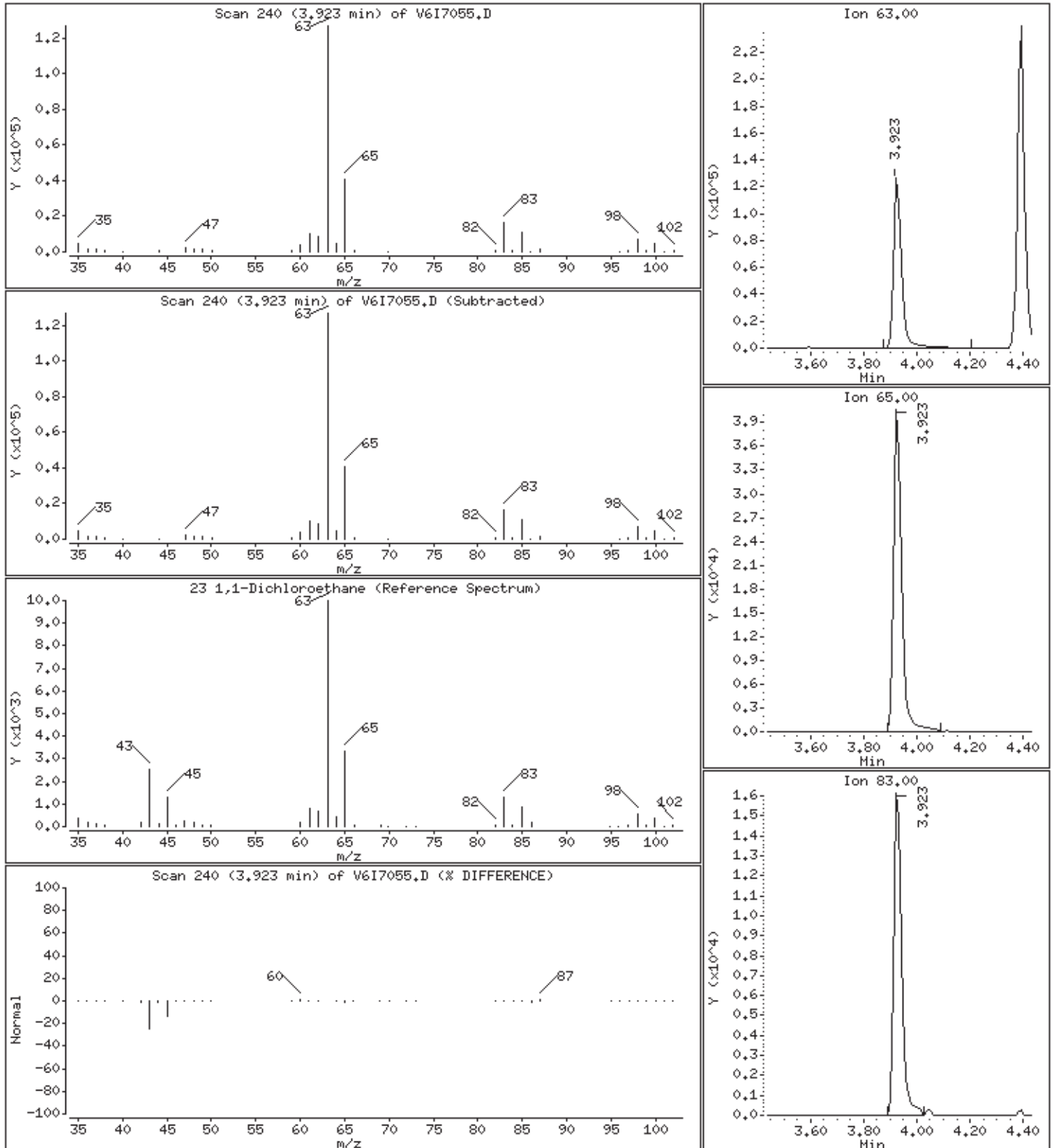
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

23 1,1-Dichloroethane

Concentration: 3900 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

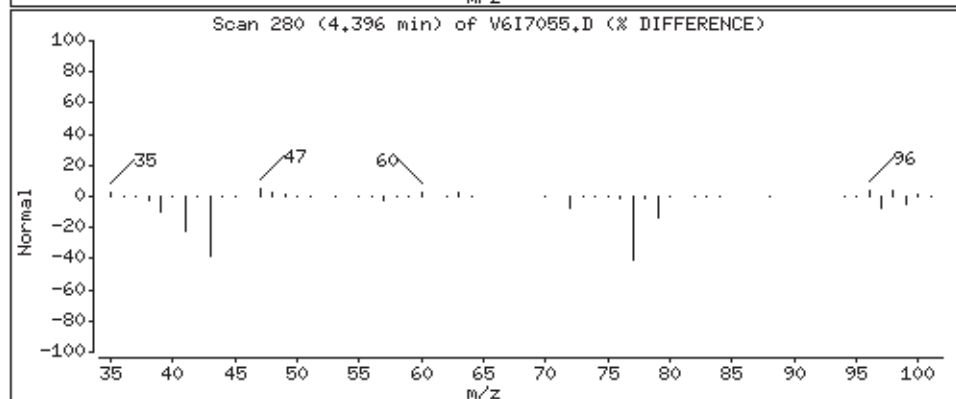
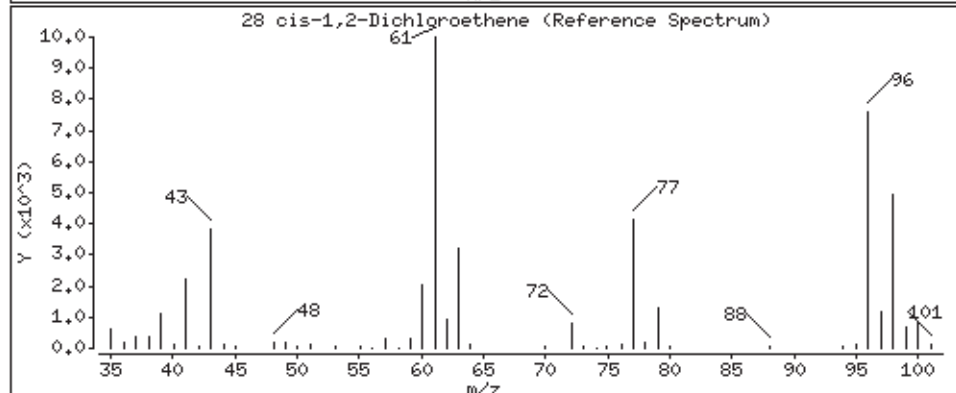
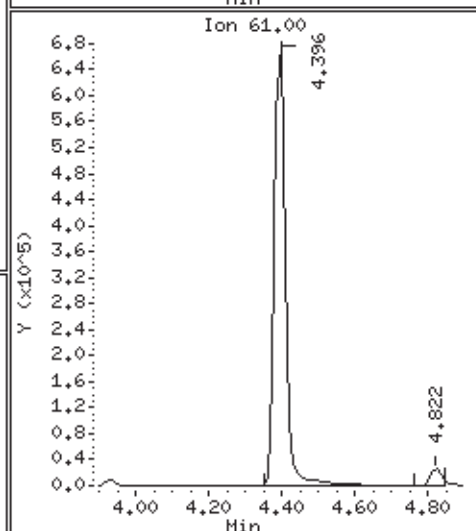
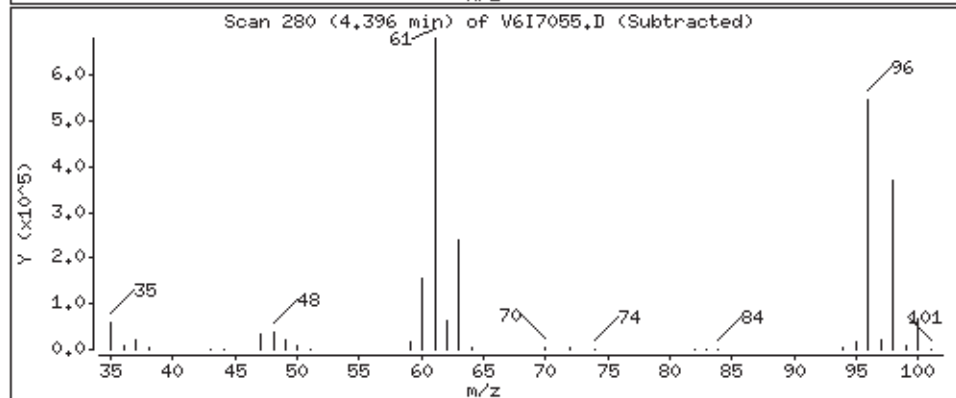
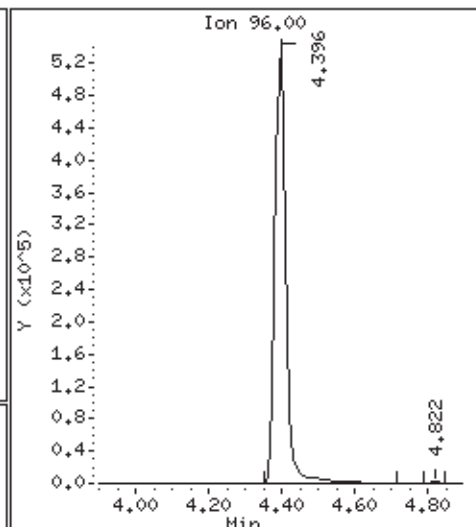
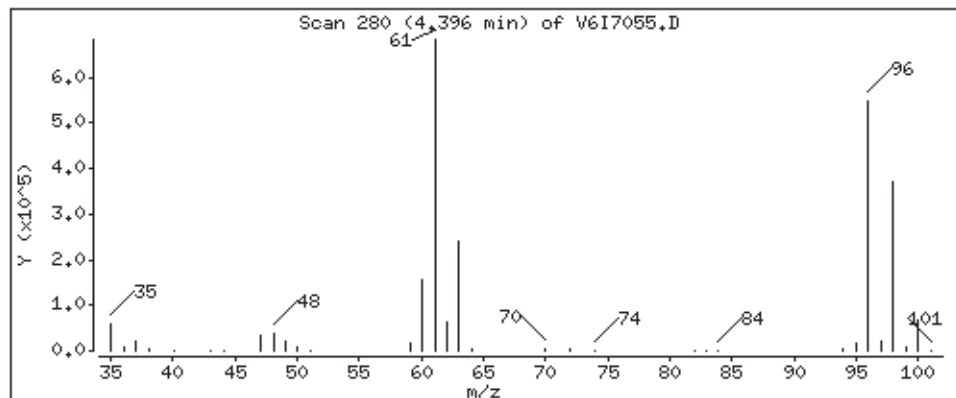
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 25000 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

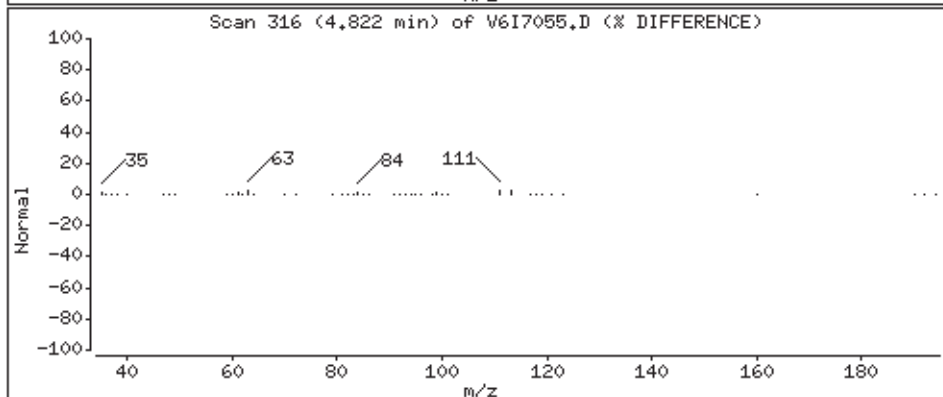
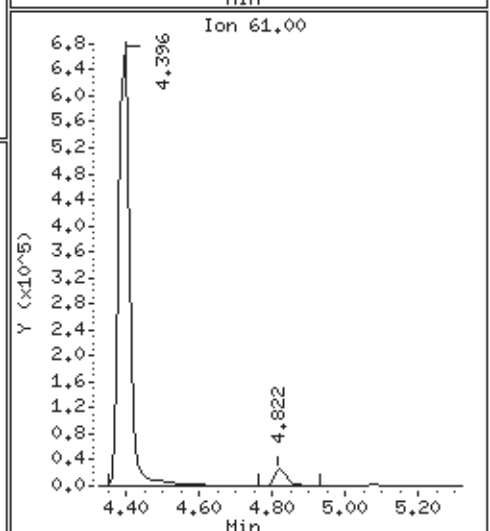
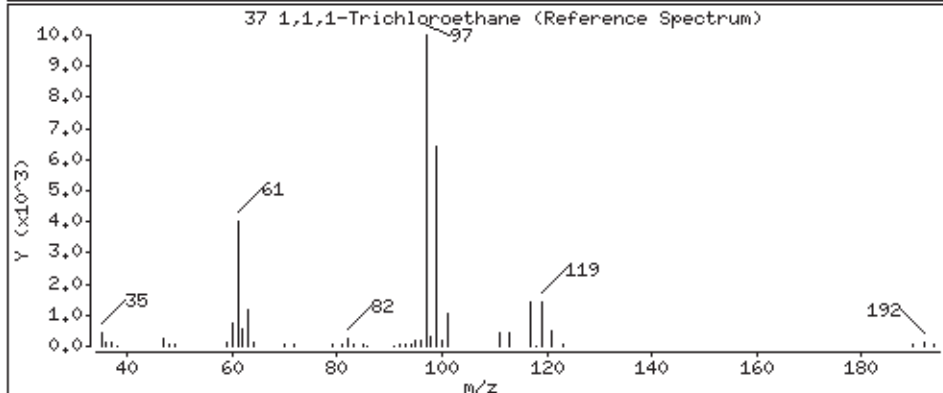
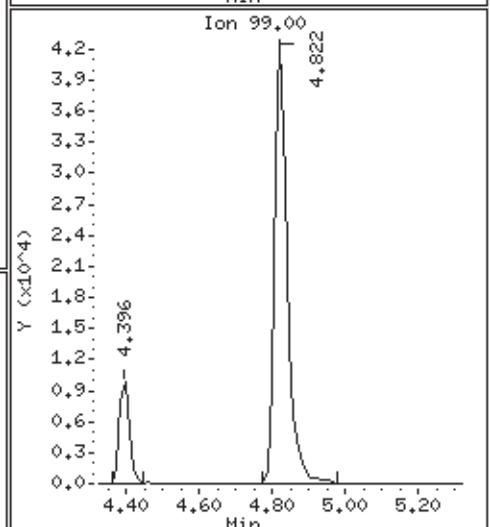
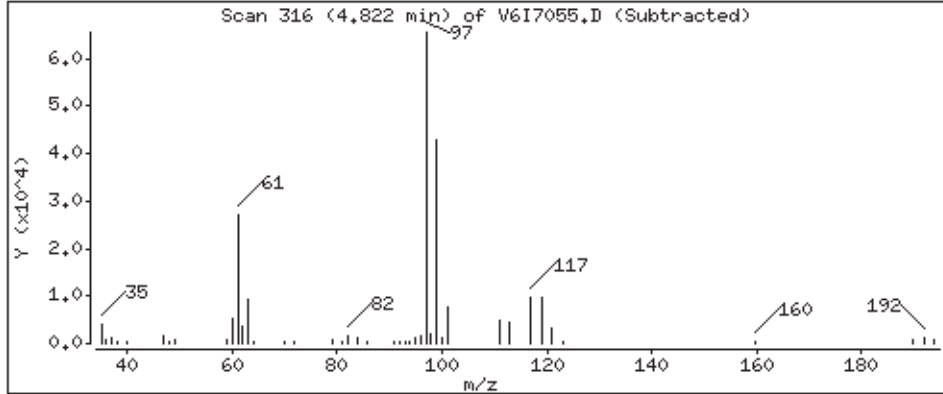
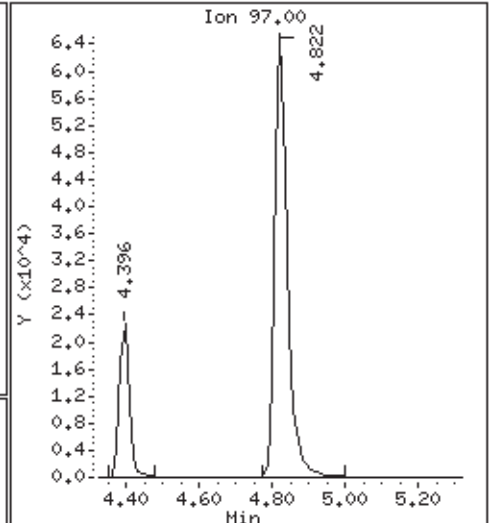
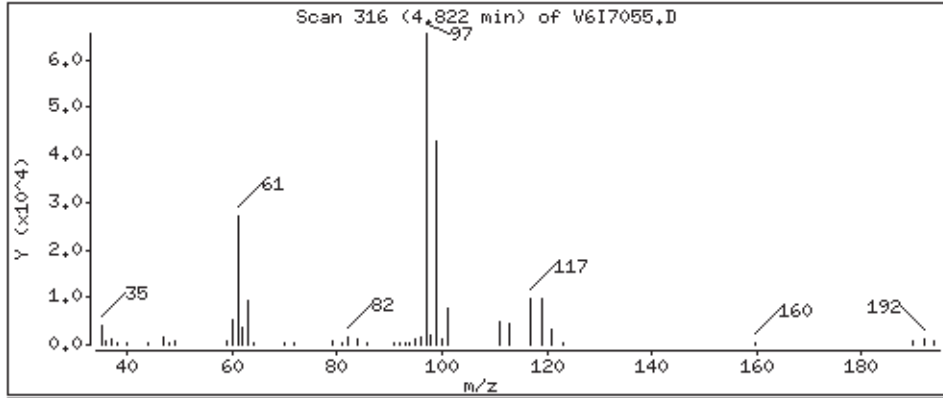
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

37 1,1,1-Trichloroethane

Concentration: 3000 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

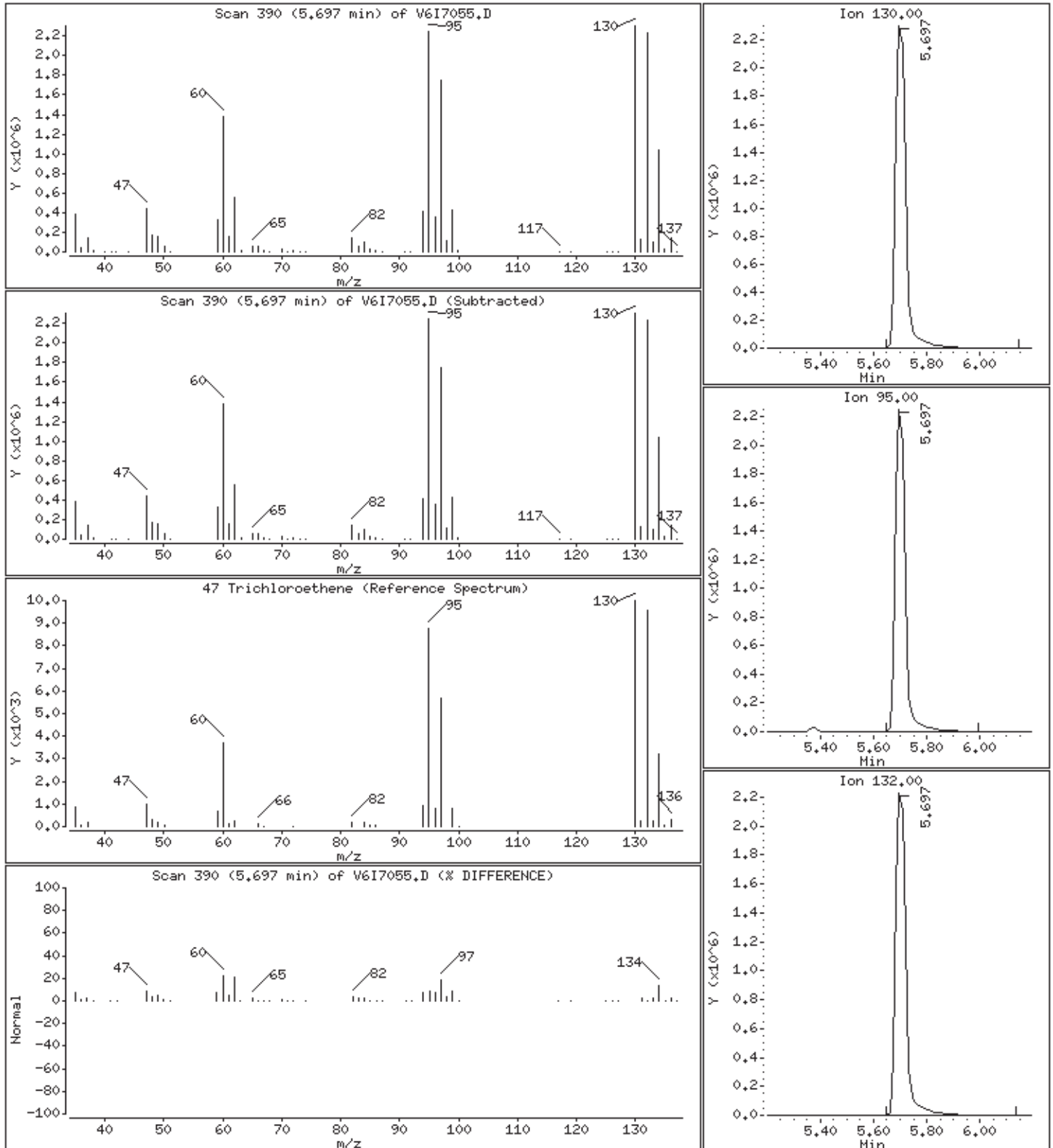
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 130000 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

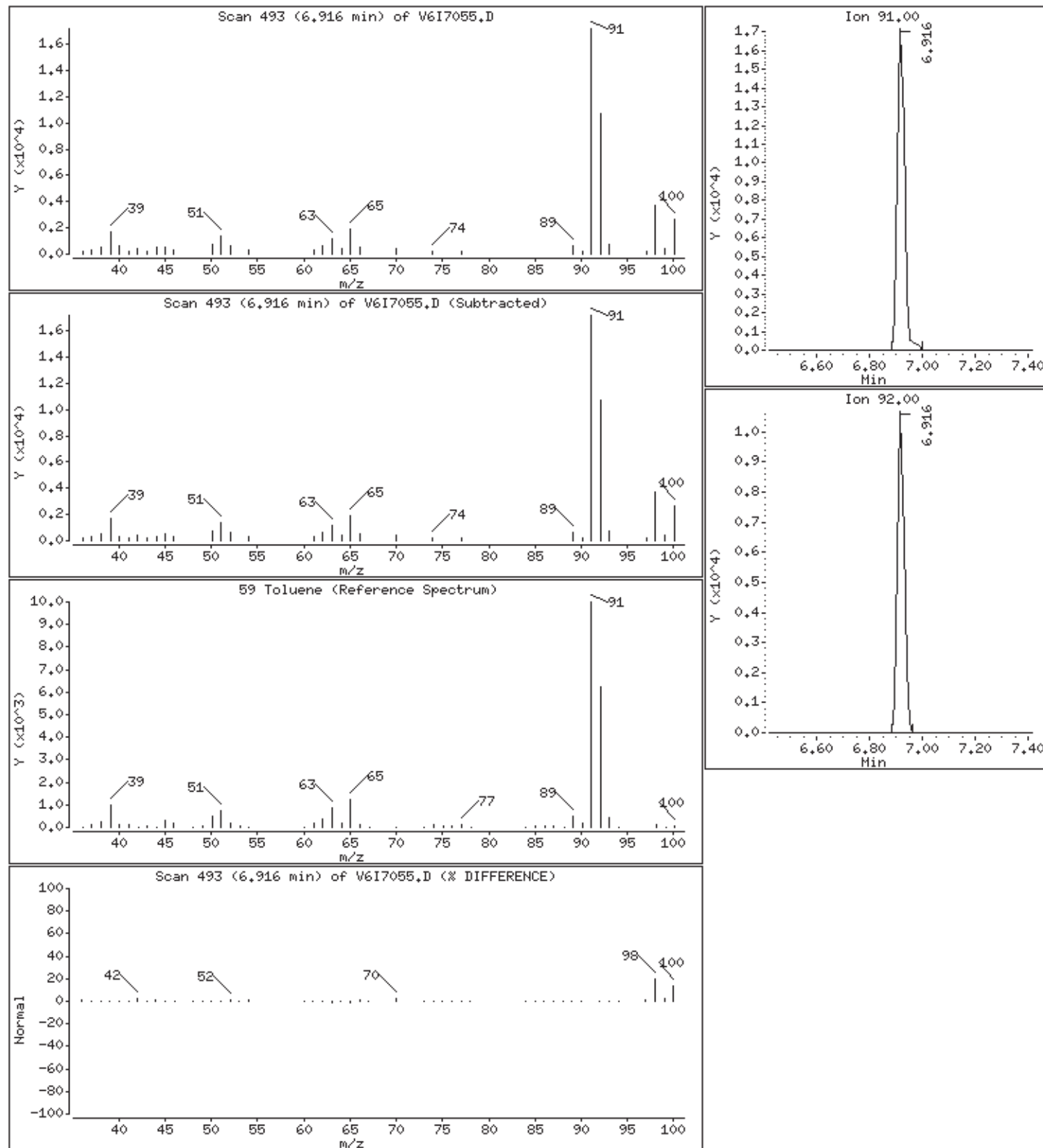
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

59 Toluene

Concentration: 210 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

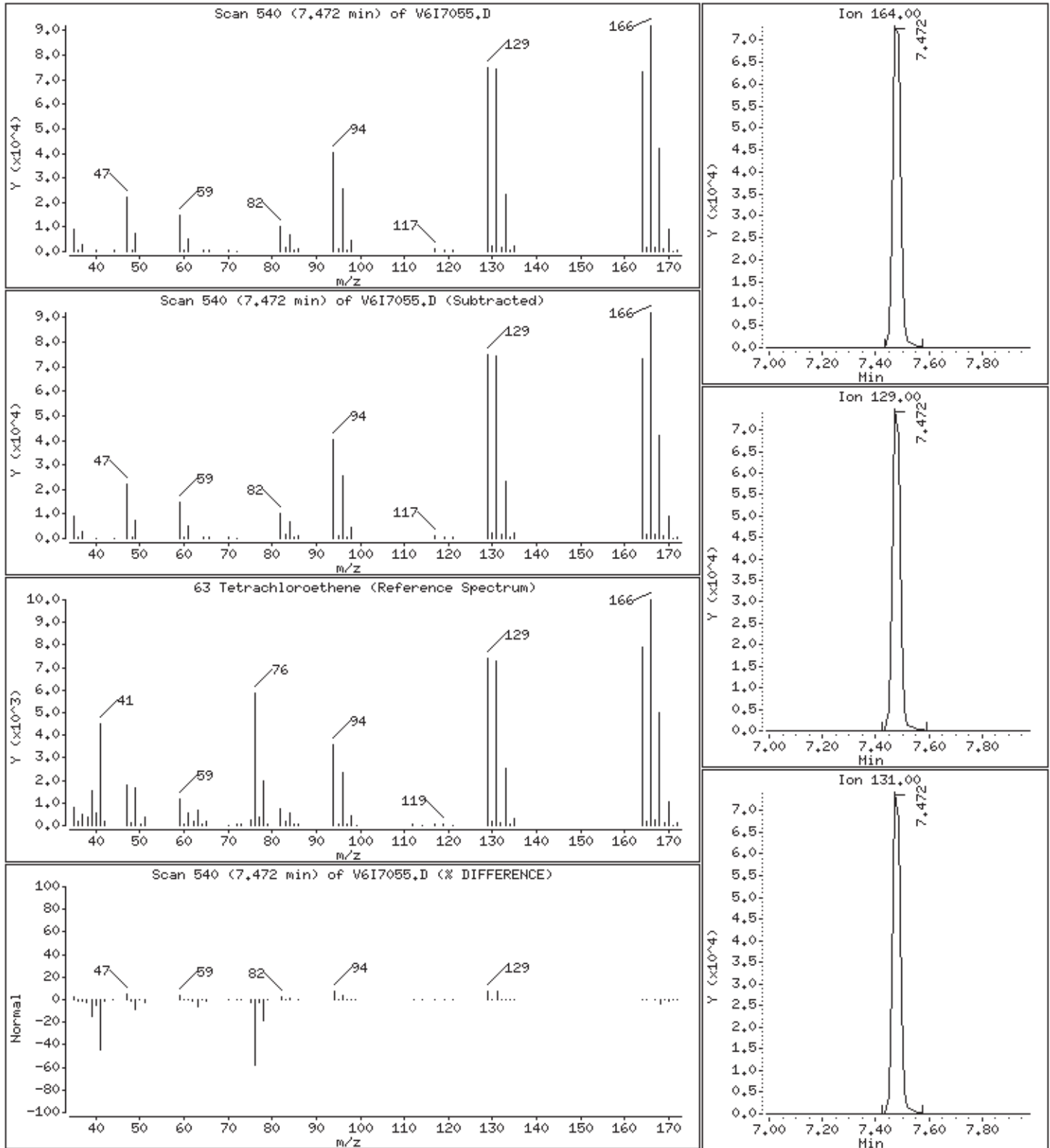
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 3900 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

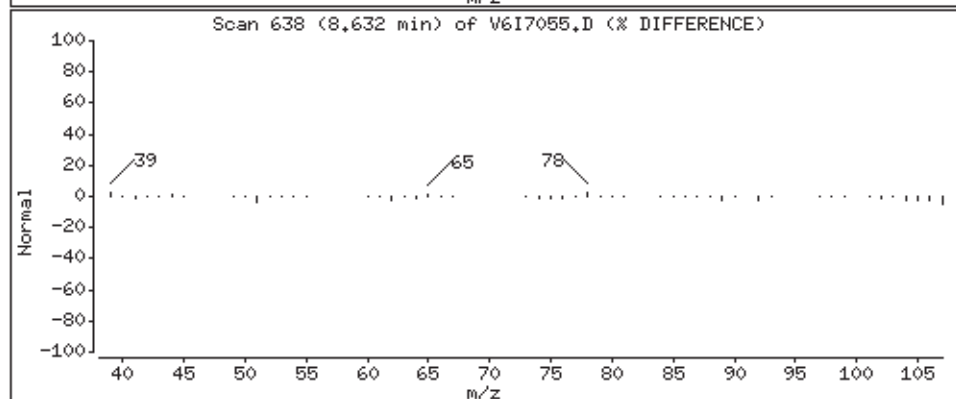
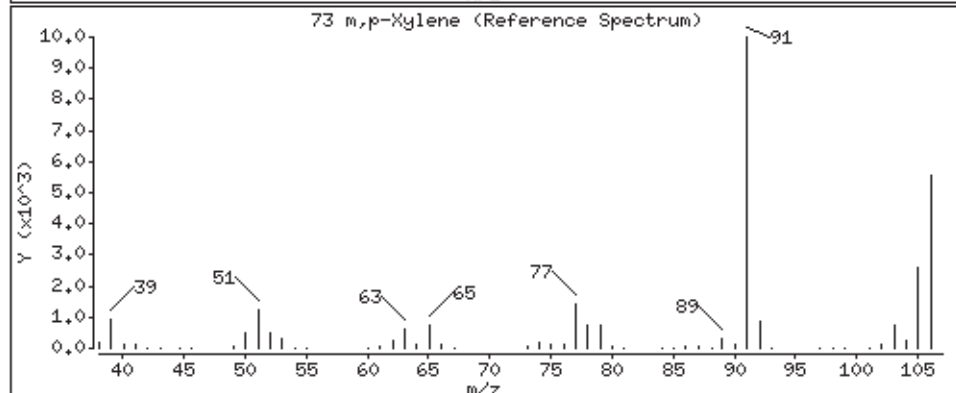
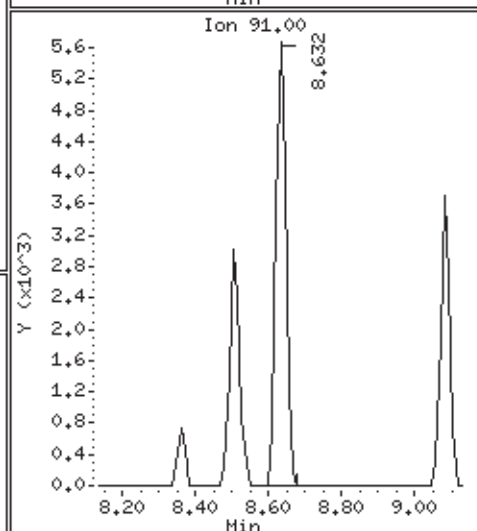
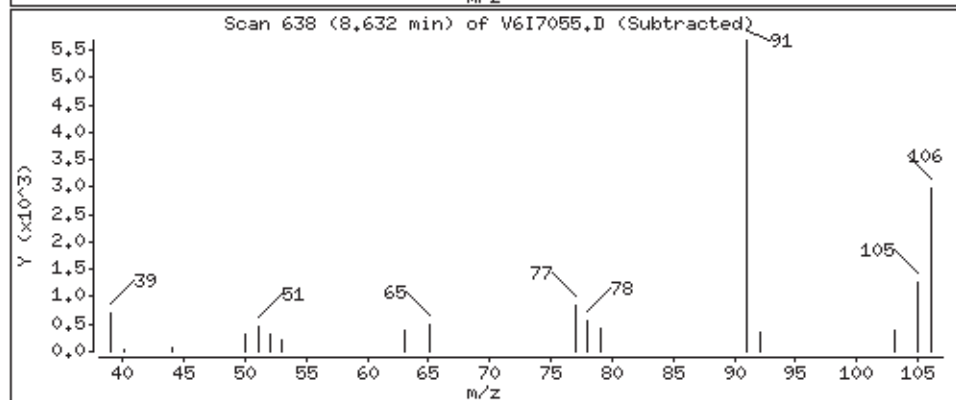
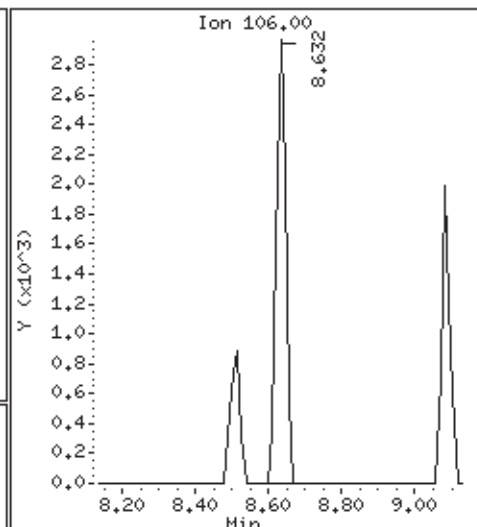
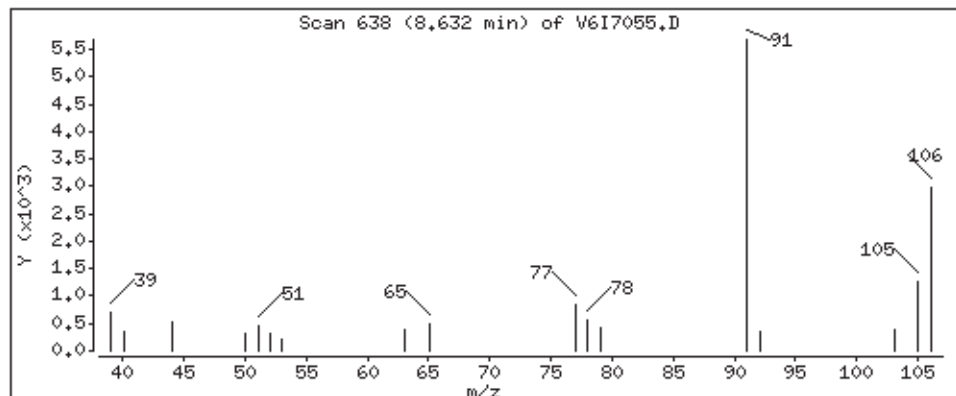
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

73 m,p-Xylene

Concentration: 79 ug/L



Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7055.D

Date : 18-MAY-2012 05:13

Client ID: DUP-1

Instrument: V6.i

Sample Info: 5HL,L0935-05A,,66227,100

Purge Volume: 5.0

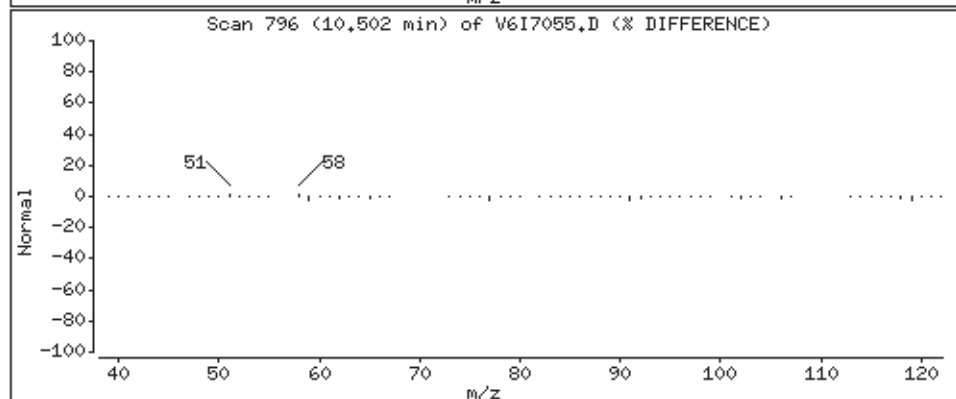
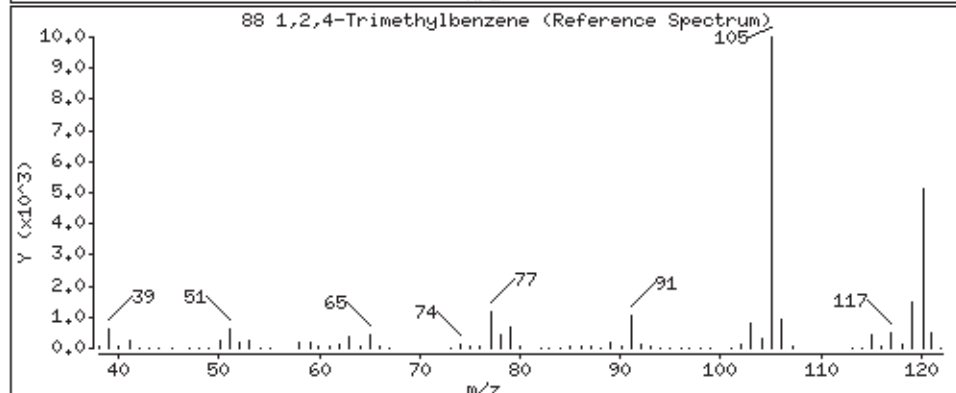
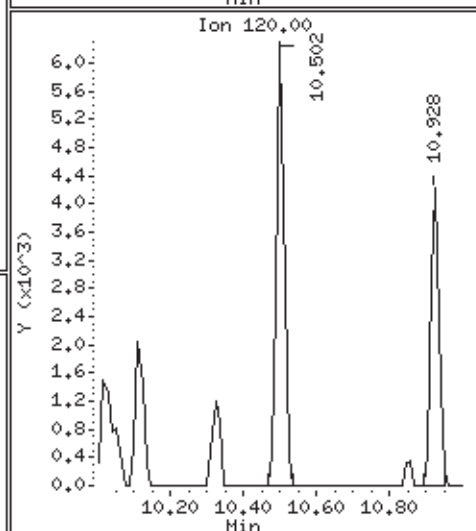
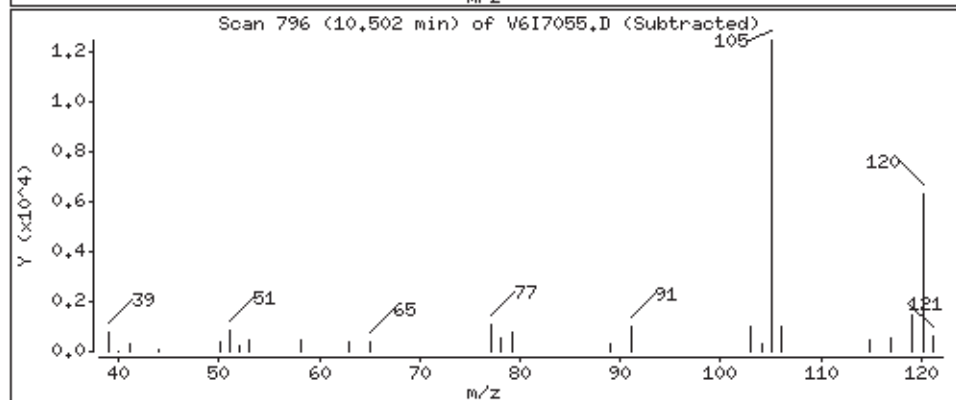
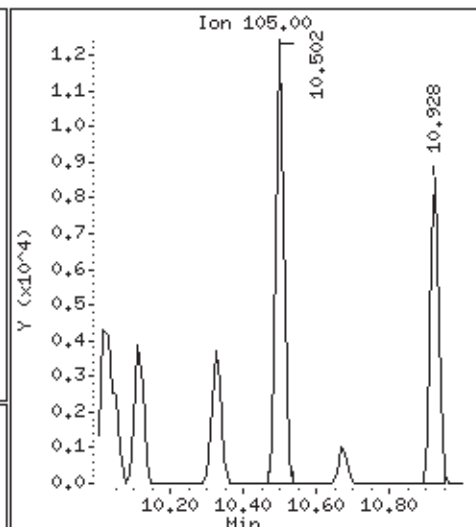
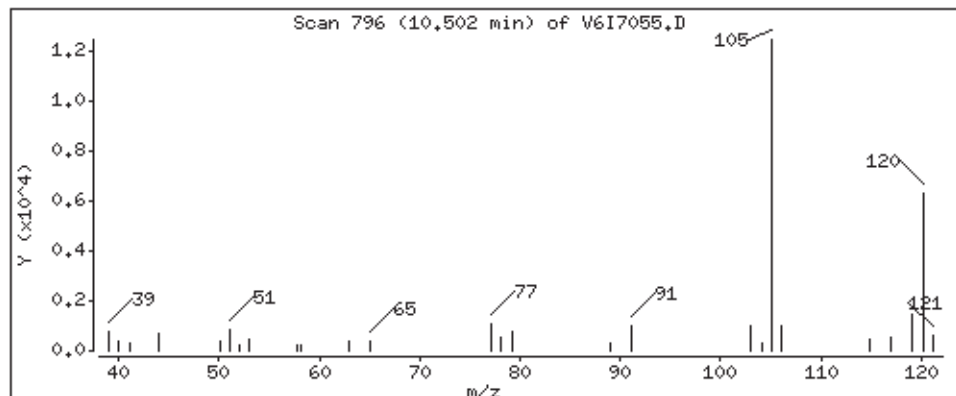
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

88 1,2,4-Trimethylbenzene

Concentration: 140 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-05ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7069.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1600.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	8000	U
74-87-3	Chloromethane	8000	U
75-01-4	Vinyl chloride	8000	U
74-83-9	Bromomethane	8000	U
75-00-3	Chloroethane	8000	U
75-69-4	Trichlorofluoromethane	8000	U
75-35-4	1,1-Dichloroethene	1000	DJ
67-64-1	Acetone	8000	U
74-88-4	Iodomethane	8000	U
75-15-0	Carbon disulfide	8000	U
75-09-2	Methylene chloride	8000	U
156-60-5	trans-1,2-Dichloroethene	8000	U
1634-04-4	Methyl tert-butyl ether	8000	U
75-34-3	1,1-Dichloroethane	4700	DJ
108-05-4	Vinyl acetate	8000	U
78-93-3	2-Butanone	8000	U
156-59-2	cis-1,2-Dichloroethene	33000	D
594-20-7	2,2-Dichloropropane	8000	U
74-97-5	Bromochloromethane	8000	U
67-66-3	Chloroform	8000	U
71-55-6	1,1,1-Trichloroethane	3000	DJ
563-58-6	1,1-Dichloropropene	8000	U
56-23-5	Carbon tetrachloride	8000	U
107-06-2	1,2-Dichloroethane	8000	U
71-43-2	Benzene	8000	U
79-01-6	Trichloroethene	280000	D
78-87-5	1,2-Dichloropropane	8000	U
74-95-3	Dibromomethane	8000	U
75-27-4	Bromodichloromethane	8000	U
10061-01-5	cis-1,3-Dichloropropene	8000	U
108-10-1	4-Methyl-2-pentanone	8000	U
108-88-3	Toluene	8000	U
10061-02-6	trans-1,3-Dichloropropene	8000	U
79-00-5	1,1,2-Trichloroethane	8000	U
142-28-9	1,3-Dichloropropane	8000	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-05ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7069.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1600.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	4200	DJ
591-78-6	2-Hexanone	8000	U
124-48-1	Dibromochloromethane	8000	U
106-93-4	1,2-Dibromoethane	8000	U
108-90-7	Chlorobenzene	8000	U
630-20-6	1,1,1,2-Tetrachloroethane	8000	U
100-41-4	Ethylbenzene	8000	U
179601-23-1	m,p-Xylene	8000	U
95-47-6	o-Xylene	8000	U
1330-20-7	Xylene (Total)	8000	U
100-42-5	Styrene	8000	U
75-25-2	Bromoform	8000	U
98-82-8	Isopropylbenzene	8000	U
79-34-5	1,1,2,2-Tetrachloroethane	8000	U
108-86-1	Bromobenzene	8000	U
96-18-4	1,2,3-Trichloropropane	8000	U
103-65-1	n-Propylbenzene	8000	U
95-49-8	2-Chlorotoluene	8000	U
108-67-8	1,3,5-Trimethylbenzene	8000	U
106-43-4	4-Chlorotoluene	8000	U
98-06-6	tert-Butylbenzene	8000	U
95-63-6	1,2,4-Trimethylbenzene	8000	U
135-98-8	sec-Butylbenzene	8000	U
99-87-6	4-Isopropyltoluene	8000	U
541-73-1	1,3-Dichlorobenzene	8000	U
106-46-7	1,4-Dichlorobenzene	8000	U
104-51-8	n-Butylbenzene	8000	U
95-50-1	1,2-Dichlorobenzene	8000	U
96-12-8	1,2-Dibromo-3-chloropropane	8000	U
120-82-1	1,2,4-Trichlorobenzene	8000	U
87-68-3	Hexachlorobutadiene	8000	U
87-61-6	1,2,3-Trichlorobenzene	8000	U
91-20-3	Naphthalene	8000	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-05ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7069.D

Level: (TRACE or LOW/MED) LOW Date Received: 05/05/2012

% Moisture: not dec. _____ Date Analyzed: 05/18/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1600.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D
Report Date: 18-May-2012 14:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7069.D
Lab Smp Id: L0935-05ADL Client Smp ID: DUP-1DL
Inj Date : 18-MAY-2012 11:32
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-05ADL,,66235,1600
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 26
Dil Factor: 1600.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1600.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
10 1,1-Dichloroethene	96	3.010	3.024 (0.561)	2627	0.64251	1000	
23 1,1-Dichloroethane	63	3.922	3.923 (0.731)	19734	2.91919	4700	
28 cis-1,2-Dichloroethene	96	4.395	4.396 (0.819)	89095	20.5416	33000	
\$ 36 Dibromofluoromethane	113	4.785	4.787 (0.892)	200332	49.7733	50	
37 1,1,1-Trichloroethane	97	4.821	4.822 (0.899)	9546	1.88930	3000	
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.082 (0.947)	45151	48.4084	48	
M 50 1,2-Dichloroethene (Total)	96			89095	20.5416	33000	
* 46 Fluorobenzene	96	5.365	5.366 (1.000)	706131	50.0000		
47 Trichloroethene	130	5.697	5.698 (1.062)	826842	178.062	280000	
\$ 58 Toluene-d8	98	6.844	6.846 (0.819)	688456	50.0970	50	
63 Tetrachloroethene	164	7.483	7.473 (0.895)	9812	2.60518	4200	
* 68 Chlorobenzene-d5	117	8.359	8.360 (1.000)	601121	50.0000		
\$ 79 Bromofluorobenzene	95	9.661	9.662 (1.156)	285787	50.8584	51	
* 92 1,4-Dichlorobenzene-d4	152	10.856	10.857 (1.000)	314302	50.0000		

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D
Report Date: 18-May-2012 14:46

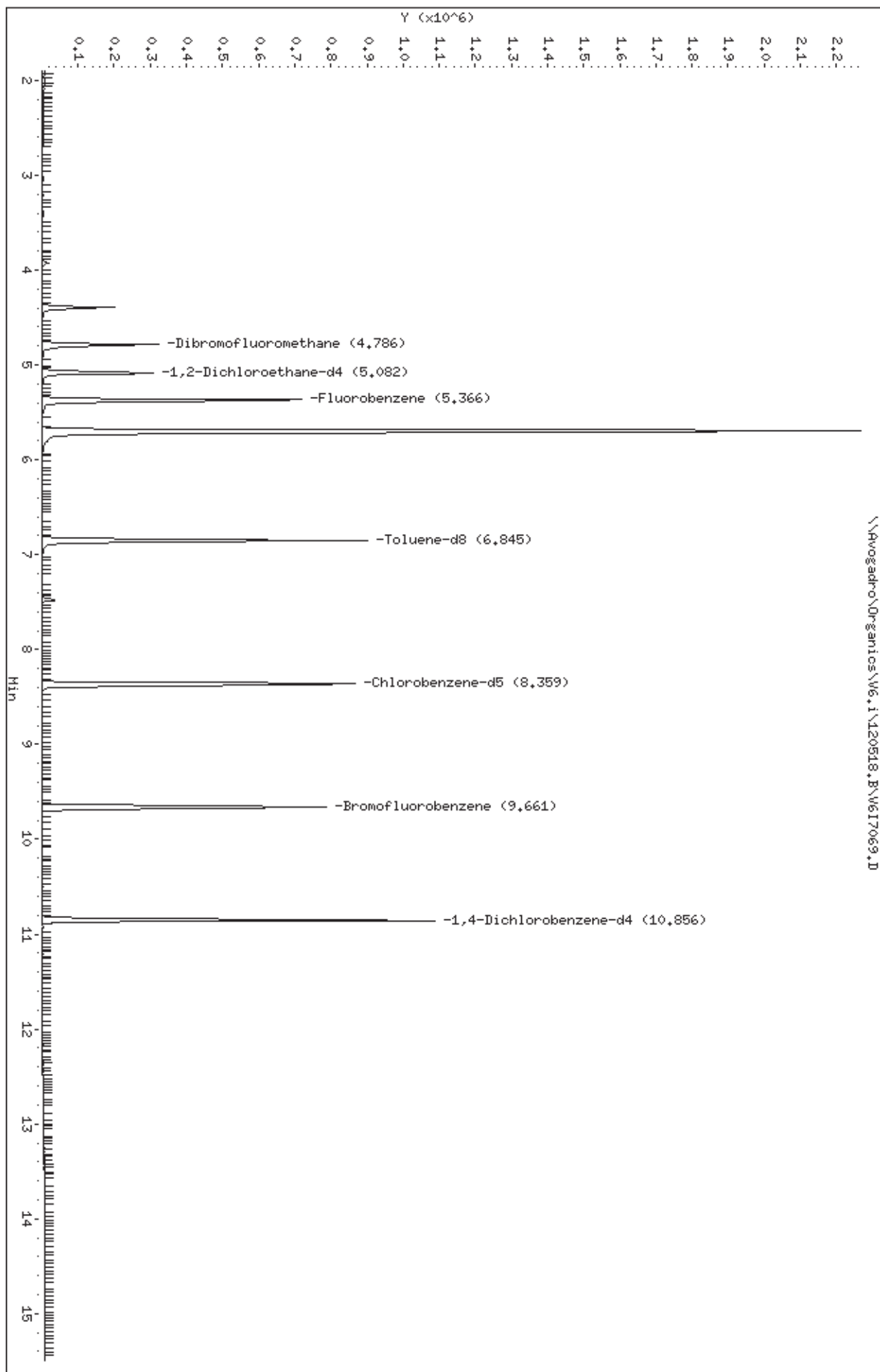
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7069.D
Lab Smp Id: L0935-05ADL Client Smp ID: DUP-1DL
Inj Date : 18-MAY-2012 11:32
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-05ADL,,66235,1600
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 26
Dil Factor: 1600.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W6,i\120518.B\W6I7069.D
Date : 18-May-2012 11:32
Client ID: DUP-1DL
Sample Info: SHL,L0935-05HDL,,66235,1600
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D

Date : 18-MAY-2012 11:32

Client ID: DUP-1DL

Instrument: V6.i

Sample Info: 5HL,L0935-05ADL,,66235,1600

Purge Volume: 5.0

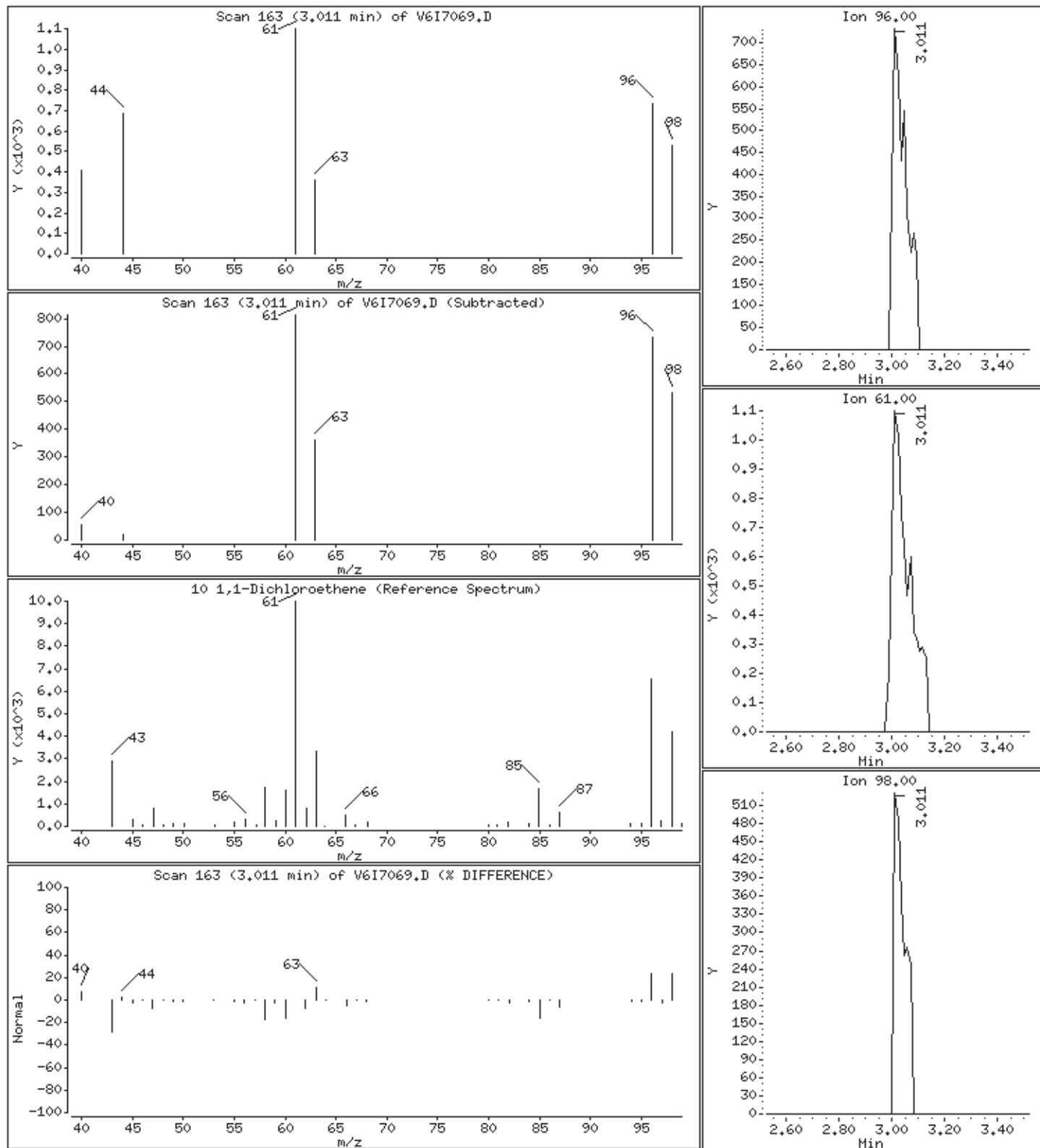
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

10 1,1-Dichloroethene

Concentration: 1000 ug/L



Data File: \\Avogadro\Organics\V6.i\120518,B\V6I7069.D

Date : 18-MAY-2012 11:32

Client ID: DUP-1DL

Instrument: V6.i

Sample Info: 5HL,L0935-05ADL,,66235,1600

Purge Volume: 5.0

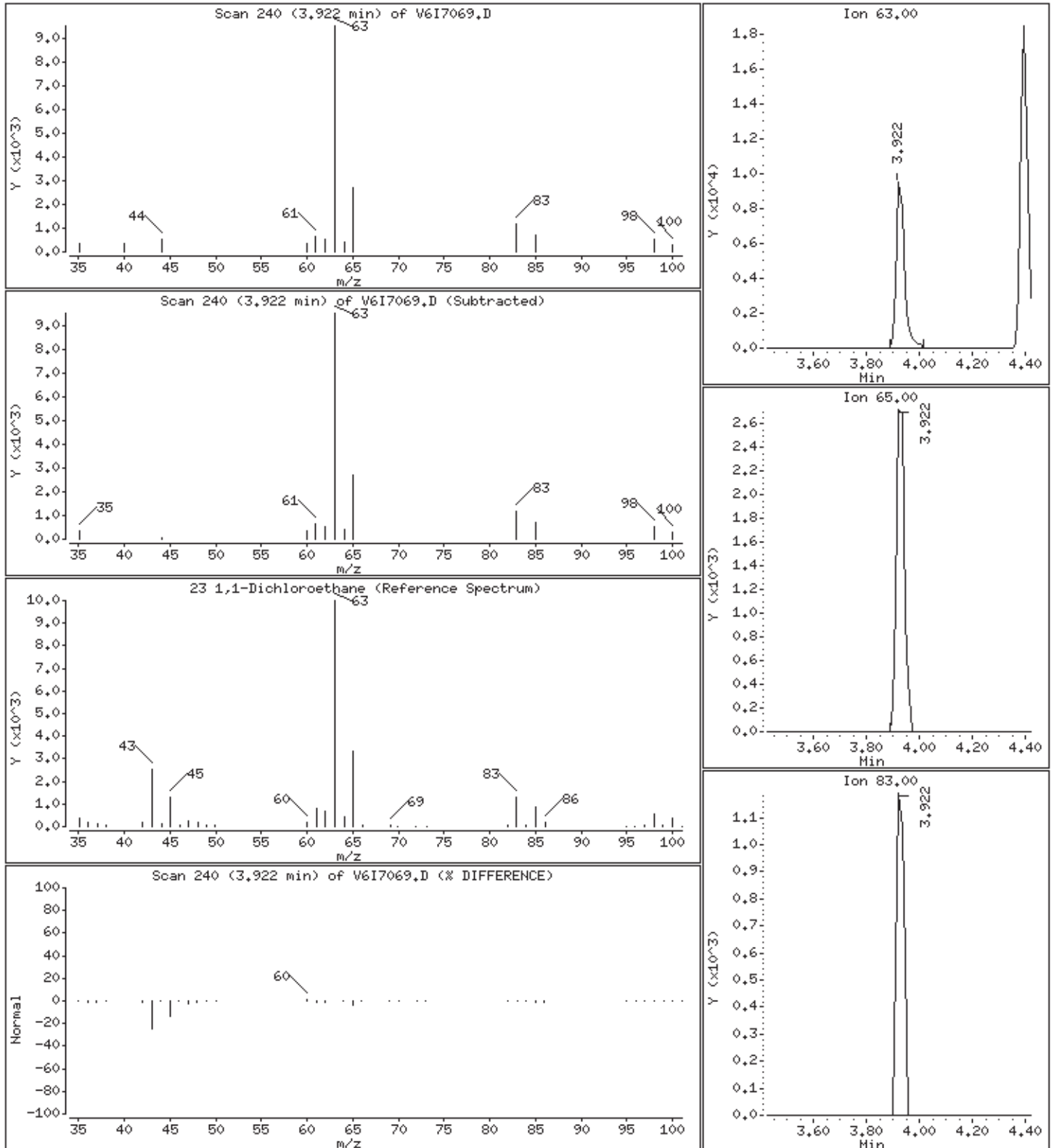
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

23 1,1-Dichloroethane

Concentration: 4700 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D

Date : 18-MAY-2012 11:32

Client ID: DUP-1DL

Instrument: V6.i

Sample Info: 5HL,L0935-05ADL,,66235,1600

Purge Volume: 5.0

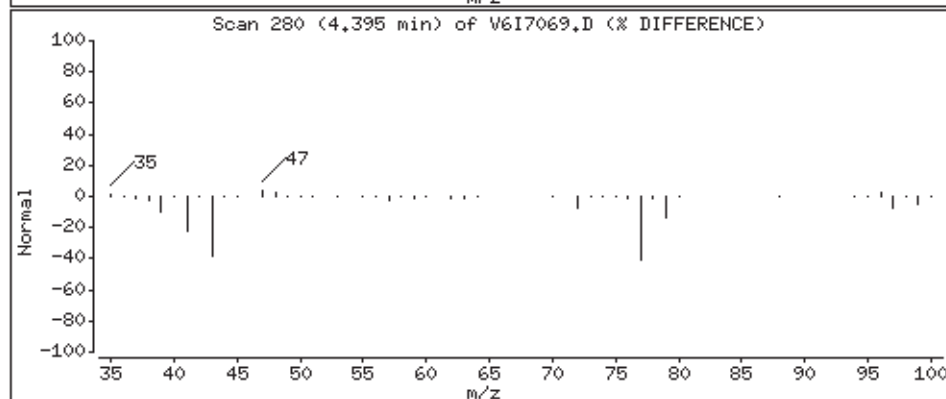
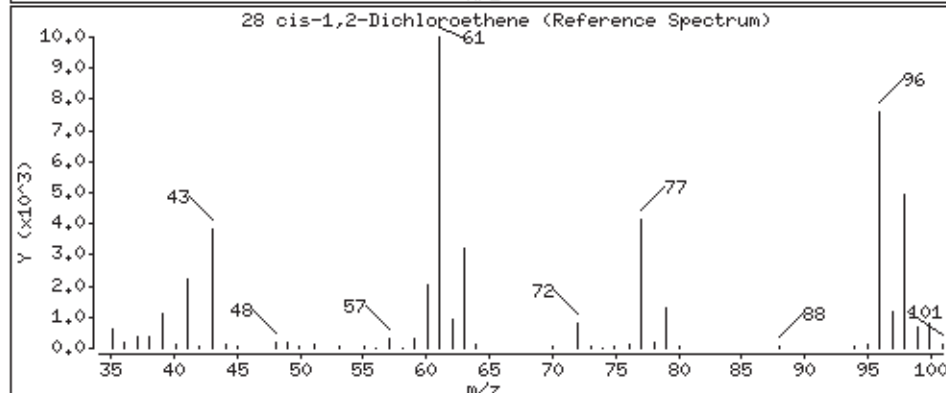
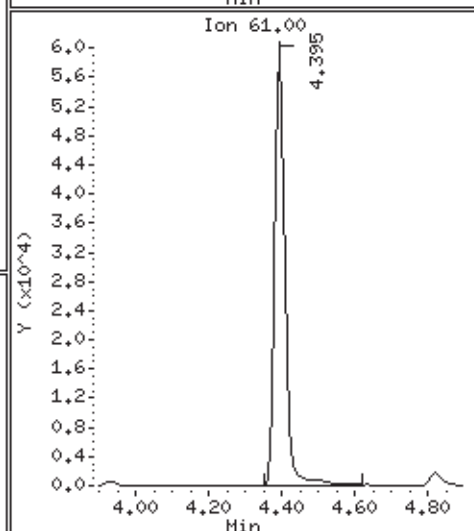
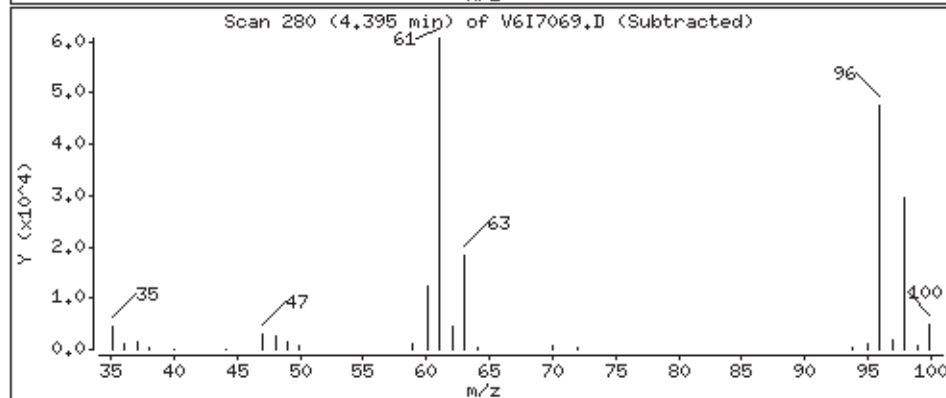
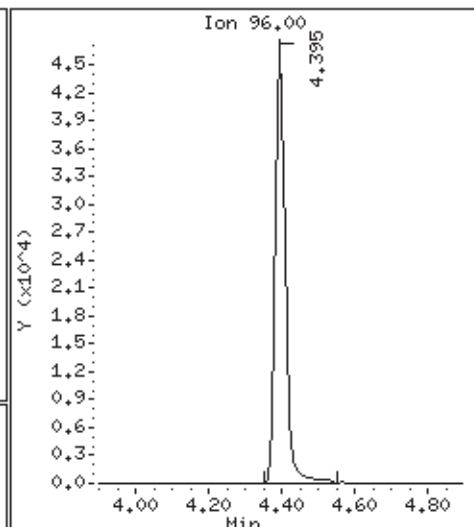
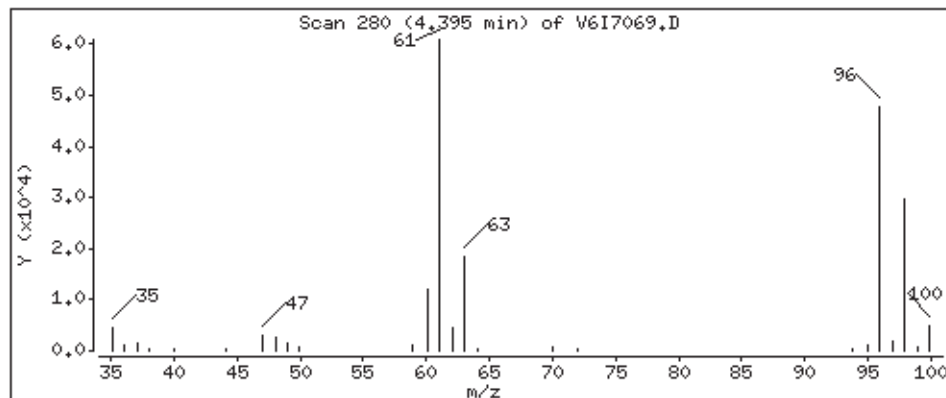
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 33000 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D

Date : 18-MAY-2012 11:32

Client ID: DUP-1DL

Instrument: V6.i

Sample Info: 5HL,L0935-05ADL,,66235,1600

Purge Volume: 5.0

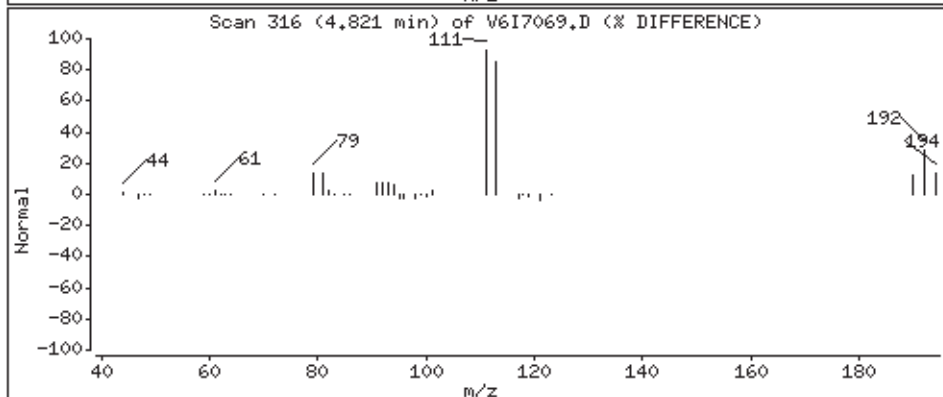
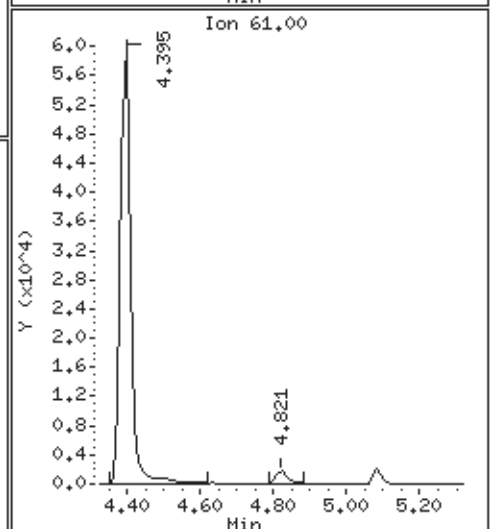
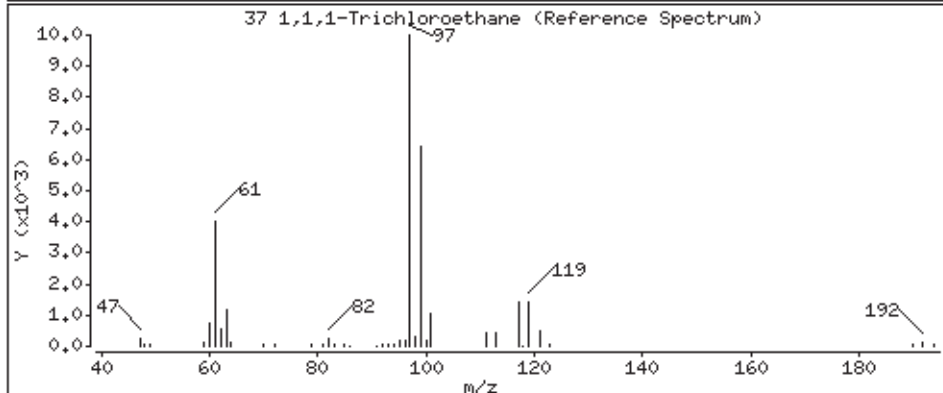
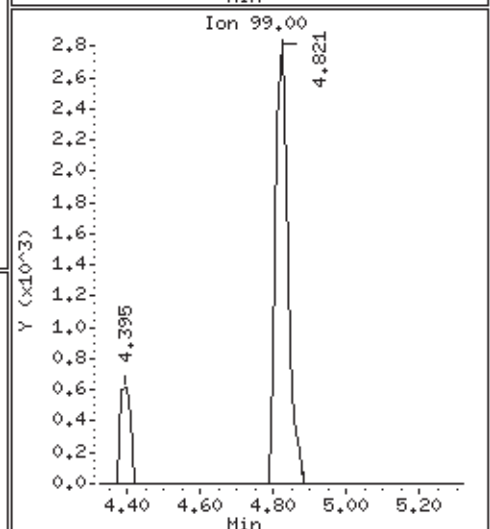
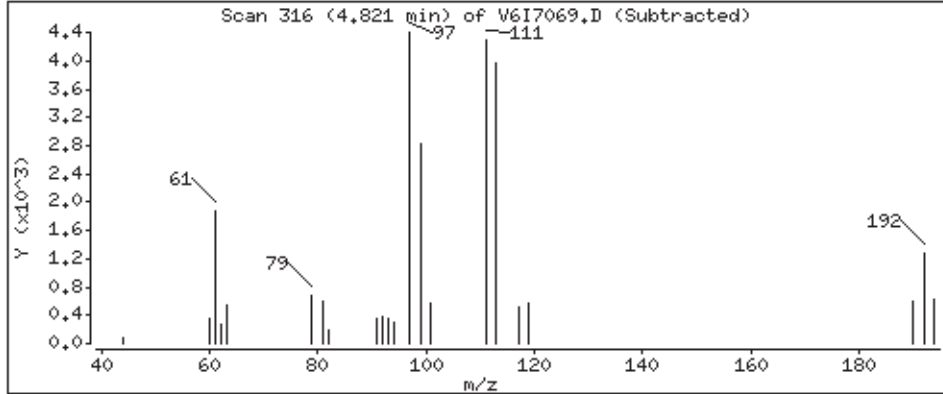
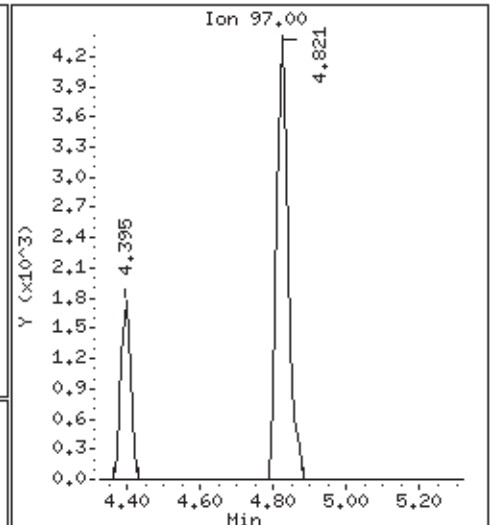
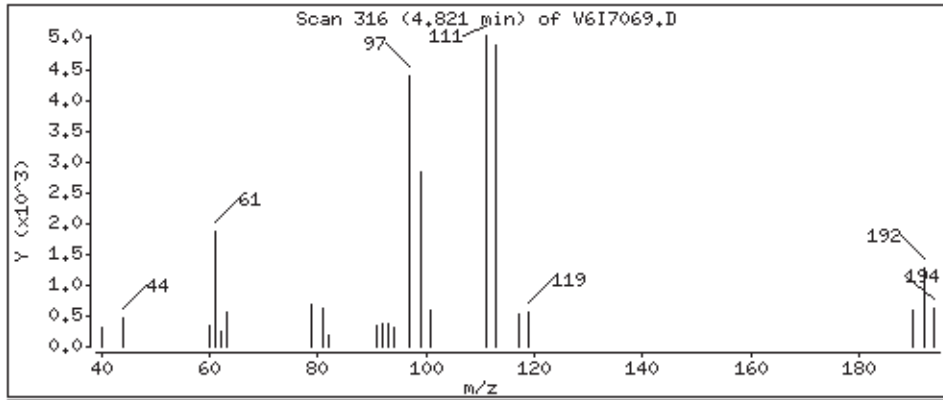
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

37 1,1,1-Trichloroethane

Concentration: 3000 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D

Date : 18-MAY-2012 11:32

Client ID: DUP-1DL

Instrument: V6.i

Sample Info: 5HL,L0935-05ADL,,66235,1600

Purge Volume: 5.0

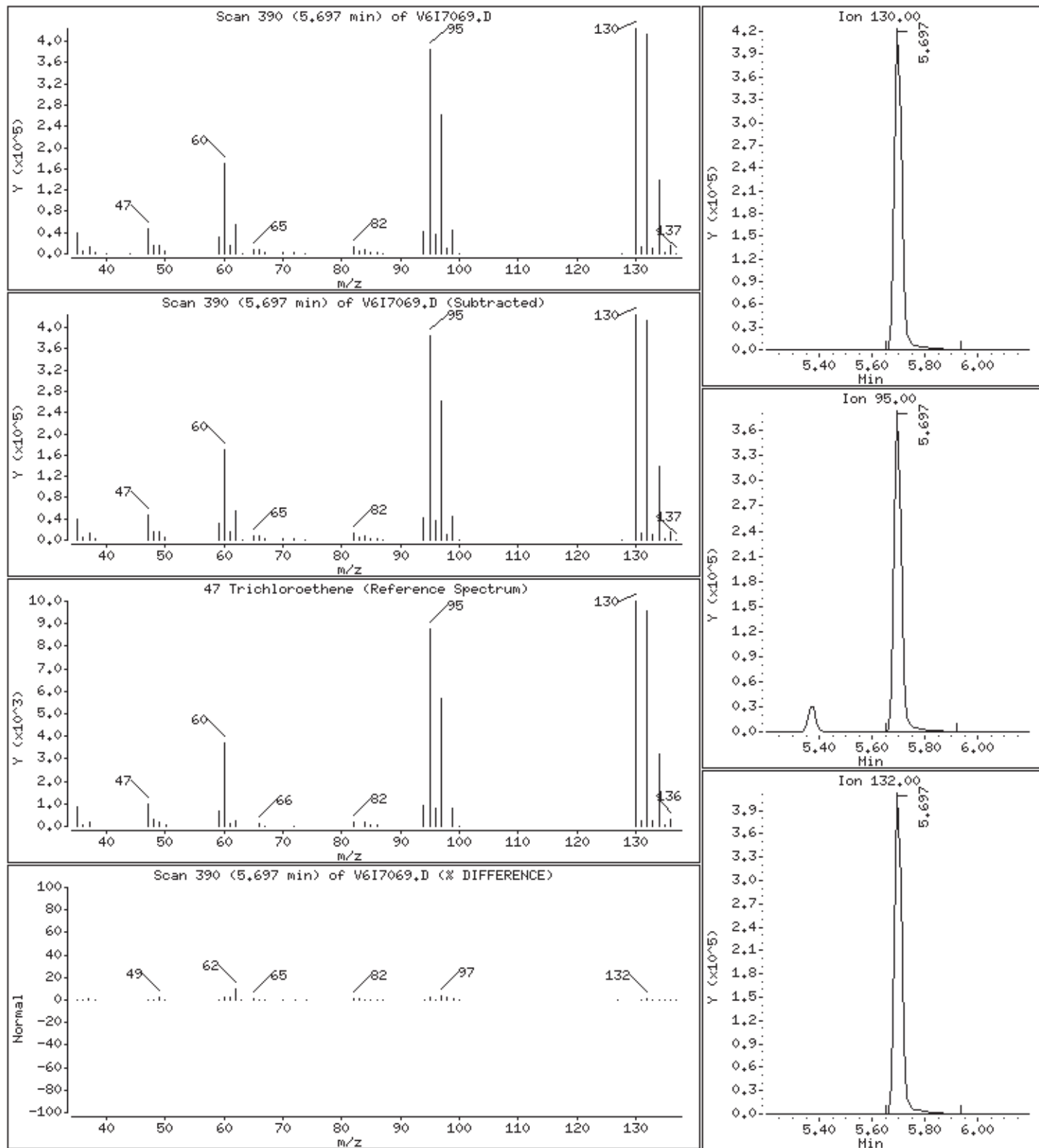
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 280000 ug/L



Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7069.D

Date : 18-MAY-2012 11:32

Client ID: DUP-1DL

Instrument: V6.i

Sample Info: 5HL,L0935-05ADL,,66235,1600

Purge Volume: 5.0

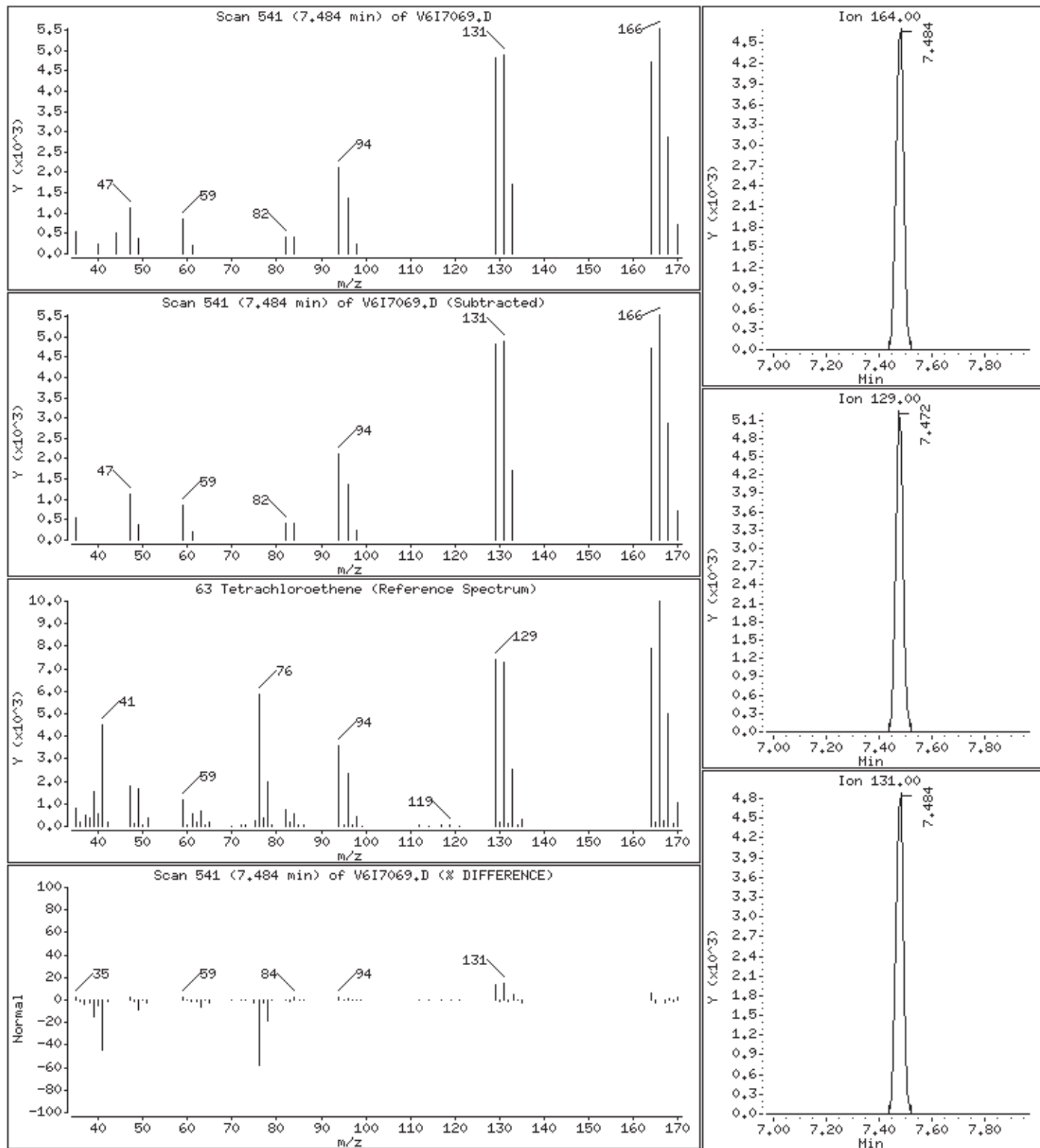
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 4200 ug/L



Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Instrument ID: V6

Heated Purge: (Y/N) N

Purge Volume: 5

Purge Column: DB-624

Case No.: L0935

SAS No.:

Calibration Date(s): 05/17/2012

Calibration Times: 16:19

SDG No.: SL0935

05/17/2012

18:20

GC Column: DB-624

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = <u>V6I7022.D</u> RRF020 = <u>V6I7023.D</u> RRF050 = <u>V6I7024.D</u> RRF100 = <u>V6I7025.D</u> RRF200 = <u>V6I7026.D</u>												
RRF001 = <u>V6I7021.D</u>												
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.251	0.287	0.289	0.276	0.279	0.317					0.283	7.6
Chloromethane	0.371	0.456	0.496	0.495	0.492	0.550					0.477	12.6
Vinyl chloride	0.334	0.367	0.372	0.358	0.367	0.357					0.359	3.8
Bromomethane	0.169	0.167	0.173	0.171	0.179	0.262					0.187	19.9
Chloroethane	0.195	0.207	0.207	0.205	0.207	0.221					0.207	4.0
Trichlorofluoromethane	0.333	0.378	0.368	0.370	0.376	0.318					0.357	7.1
1,1-Dichloroethene	0.279	0.298	0.297	0.296	0.299	0.270					0.290	4.2
Acetone	0.038	0.041	0.040	0.040	0.039						0.040	3.3
Iodomethane	0.418	0.470	0.505	0.540	0.574	0.533					0.506	11.0
Carbon disulfide	0.948	1.230	1.170	0.903	1.110	1.453					1.136	17.7
Methylene chloride	0.324	0.328	0.313	0.308	0.310	0.559					0.357	27.8
trans-1,2-Dichloroethene	0.272	0.281	0.272	0.278	0.277	0.282					0.277	1.5
Methyl tert-butyl ether	0.728	0.748	0.725	0.699	0.649	0.737					0.714	5.0
1,1-Dichloroethane	0.479	0.504	0.482	0.479	0.465	0.463					0.479	3.1
Vinyl acetate	1.080	1.120	1.057	1.009	0.922	1.154					1.057	7.9
2-Butanone	0.032	0.039	0.038	0.037	0.037						0.037	7.2
cis-1,2-Dichloroethene	0.292	0.326	0.312	0.287	0.281	0.345					0.307	8.1
2,2-Dichloropropane	0.210	0.230	0.218	0.213	0.200	0.263					0.222	10.1
Bromochloromethane	0.155	0.163	0.154	0.160	0.159	0.157					0.158	2.0
Chloroform	0.415	0.446	0.430	0.420	0.403	0.490					0.434	7.2
1,1,1-Trichloroethane	0.344	0.368	0.358	0.351	0.343	0.384					0.358	4.4
1,1-Dichloropropene	0.132	0.146	0.142	0.142	0.140	0.156					0.143	5.5
Carbon tetrachloride	0.289	0.314	0.306	0.300	0.287	0.293					0.298	3.5
1,2-Dichloroethane	0.340	0.350	0.334	0.328	0.317	0.367					0.339	5.2
Benzene	0.991	1.022	0.959	0.908	0.820	1.061					0.960	9.0
Trichloroethene	0.336	0.328	0.315	0.306	0.291	0.396					0.329	11.1
1,2-Dichloropropane	0.267	0.283	0.277	0.267	0.261	0.290					0.274	4.1

Lab Name:	Spectrum Analytical, Inc.	Case No.:	L0935	SAS No.:	SDG No.:	SL0935
Lab Code:	MITKEM					
Instrument ID:	V6	Calibration Date(s): 05/17/2012 05/17/2012				
Heated Purge: (Y/N)	N	Calibration Times: 16:19 18:20				
Purge Volume:	5	(mL)				
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30 (mm)

LAB FILE ID: RRF005 = <u>V6I7022.D</u> RRF020 = <u>V6I7023.D</u> RRF050 = <u>V6I7024.D</u> RRF100 = <u>V6I7025.D</u> RRF200 = <u>V6I7026.D</u>											
RRF001 = <u>V6I7021.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
Dibromomethane	0.169	0.182	0.176	0.172	0.170	0.173				0.174	2.9
Bromodichloromethane	0.333	0.350	0.340	0.329	0.316	0.344				0.335	3.6
cis-1,3-Dichloropropene	0.372	0.410	0.413	0.403	0.388	0.367				0.392	5.0
4-Methyl-2-pentanone	0.282	0.281	0.282	0.270	0.259					0.275	3.7
Toluene	1.100	1.111	1.052	0.968	0.861	1.237				1.055	12.2
trans-1,3-Dichloropropene	0.335	0.366	0.369	0.366	0.354	0.289				0.347	8.9
1,1,2-Trichloroethane	0.238	0.251	0.244	0.243	0.234	0.265				0.246	4.5
1,3-Dichloropropane	0.455	0.466	0.456	0.450	0.436	0.480				0.457	3.2
Tetrachloroethene	0.327	0.326	0.305	0.290	0.276	0.355				0.313	9.1
2-Hexanone	0.239	0.264	0.257	0.249	0.252					0.252	3.6
Dibromochloromethane	0.322	0.354	0.356	0.366	0.366	0.316				0.347	6.4
1,2-Dibromoethane	0.307	0.332	0.329	0.322	0.317	0.334				0.324	3.2
Chlorobenzene	0.865	0.916	0.874	0.834	0.782	0.952				0.871	6.9
1,1,1,2-Tetrachloroethane	0.327	0.347	0.347	0.342	0.340	0.363				0.345	3.4
Ethylbenzene	0.448	0.475	0.461	0.441	0.432	0.536				0.465	8.1
m,p-Xylene	0.557	0.576	0.549	0.506	0.473	0.622				0.547	9.6
o-Xylene	0.538	0.572	0.540	0.522	0.503	0.590				0.544	5.9
Xylene (Total)	0.551	0.575	0.546	0.512	0.483	0.612				0.546	8.3
Styrene	0.792	0.895	0.872	0.854	0.810	0.794				0.836	5.2
Bromoform	0.171	0.219	0.221	0.226	0.232	0.174				0.207	13.1
Isopropylbenzene	1.344	1.408	1.287	1.187	1.102	1.531				1.310	11.8
1,1,2,2-Tetrachloroethane	0.710	0.725	0.748	0.753	0.695	0.760				0.732	3.6
Bromobenzene	0.731	0.745	0.777	0.763	0.705	0.799				0.753	4.4
1,2,3-Trichloropropane	0.614	0.637	0.704	0.775	0.776	0.628				0.689	10.7
n-Propylbenzene	0.716	0.738	0.749	0.754	0.703	0.812				0.745	5.1
2-Chlorotoluene	0.637	0.683	0.705	0.703	0.663	0.687				0.680	3.8
1,3,5-Trimethylbenzene	2.070	2.125	2.032	1.981	1.774	2.270				2.042	8.1

Lab Code: MITKEM	Case No.: L0935	SAS No.:	SDG No.: SL0935
Instrument ID: V6	Calibration Date(s): 05/17/2012 05/17/2012		
Heated Purge: (Y/N) N	Calibration Times: 16:19 18:20		
Purge Volume: 5	(mL)		
GC Column: DB-624	ID: 0.25	(mm)	Length: 30 (mm)

LAB FILE ID: RRF005 = <u>V6I7022.D</u> RRF020 = <u>V6I7023.D</u> RRF050 = <u>V6I7024.D</u> RRF100 = <u>V6I7025.D</u> RRF200 = <u>V6I7026.D</u> RRF001 = <u>V6I7021.D</u>										
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				
							RRF			% RSD
4-Chlorotoluene	0.714	0.734	0.741	0.724	0.690	0.804				5.2
tert-Butylbenzene	2.406	2.487	2.388	2.361	2.168	2.484				4.9
1,2,4-Trimethylbenzene	2.165	2.177	2.053	1.998	1.790	2.359				9.2
sec-Butylbenzene	2.602	2.596	2.395	2.317	2.055	2.821				10.8
4-Isopropyltoluene	2.175	2.169	2.031	1.988	1.784	2.433				10.4
1,3-Dichlorobenzene	1.358	1.357	1.310	1.264	1.152	1.497				8.6
1,4-Dichlorobenzene	1.384	1.383	1.327	1.294	1.176	1.537				8.8
n-Butylbenzene	1.762	1.782	1.626	1.626	1.484	1.884				8.4
1,2-Dichlorobenzene	1.282	1.330	1.266	1.210	1.101	1.481				9.9
1,2-Dibromo-3-chloropropane	0.122	0.118	0.123	0.128	0.124	0.083				14.3
1,2,4-Trichlorobenzene	0.677	0.626	0.564	0.598	0.584	0.642				6.7
Hexachlorobutadiene	0.278	0.256	0.231	0.251	0.241	0.307				10.6
1,2,3-Trichlorobenzene	0.564	0.535	0.475	0.502	0.490	0.513				6.3
Naphthalene	1.608	1.722	1.572	1.637	1.474	1.478				6.1

Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Instrument ID: V6

Heated Purge: (Y/N) N

Purge Volume: 5

GC Column: DB-624

Case No.: L0935

SAS No.:

Calibration Date(s): 05/17/2012

Calibration Times: 16:19

ID: 0.25

Length: 30

SDG No.: SL0935

05/17/2012

18:20

(mL)

(mm)

LAB FILE ID: RRF005 = <u>V6I7022.D</u> RRF020 = <u>V6I7023.D</u> RRF050 = <u>V6I7024.D</u> RRF100 = <u>V6I7025.D</u> RRF200 = <u>V6I7026.D</u> RRF001 = <u>V6I7021.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
Dibromofluoromethane	0.282	0.285	0.289	0.285	0.283	0.286				0.285	0.9
1,2-Dichloroethane-d4	0.065	0.069	0.065	0.065	0.066	0.064				0.066	2.7
Toluene-d8	1.131	1.133	1.142	1.150	1.160	1.142				1.143	1.0
Bromofluorobenzene	0.474	0.477	0.470	0.454	0.462	0.470				0.468	1.8

Lab Code: MITKEM	Case No.: L0935	SAS No.:	SDG No.: SL0935
Instrument ID: V10	Calibration Date(s): 05/16/2012 05/16/2012		
Heated Purge: (Y/N) N	Calibration Times: 12:07 14:43		
Purge Volume: 5	(mL)		
GC Column: DB-624	ID: 0.25	(mm)	Length: 30 (mm)

LAB FILE ID: RRF005 = V8B1706.D RRF020 = V8B1705.D RRF050 = V8B1704.D RRF100 = V8B1710.D RRF200 = V8B1709.D										
RRF001 = V8B1708.D										
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				
							RRF			% RSD
Dichlorodifluoromethane	0.304	0.321	0.284	0.252	0.282	0.317				8.8
Chloromethane	0.366	0.367	0.345	0.323	0.362	0.425				9.3
Vinyl chloride	0.308	0.310	0.286	0.265	0.298	0.295				5.6
Bromomethane	0.131	0.117	0.106	0.115	0.075	0.111				17.0
Chloroethane	0.157	0.148	0.140	0.125	0.139	0.164				9.5
Trichlorofluoromethane	0.338	0.350	0.315	0.281	0.319	0.366				9.1
1,1-Dichloroethene	0.267	0.264	0.241	0.224	0.249	0.277				7.6
Acetone	0.044	0.049	0.052	0.037	0.041					13.5
Iodomethane	0.099	0.135	0.148	0.165	0.180	0.077				29.6
Carbon disulfide	0.911	0.852	0.831	0.748	0.814	1.101				14.0
Methylene chloride	0.331	0.303	0.291	0.274	0.295	0.487				23.9
trans-1,2-Dichloroethene	0.276	0.278	0.264	0.247	0.271	0.302				6.6
Methyl tert-butyl ether	0.758	0.808	0.796	0.770	0.800	0.744				3.3
1,1-Dichloroethane	0.517	0.528	0.498	0.469	0.509	0.534				4.6
Vinyl acetate	0.884	0.964	0.959	0.926	0.946	0.836				5.4
2-Butanone	0.032	0.044	0.045	0.038	0.041					12.5
cis-1,2-Dichloroethene	0.309	0.306	0.295	0.279	0.302	0.310				3.9
2,2-Dichloropropane	0.390	0.414	0.398	0.347	0.390	0.380				5.8
Bromochloromethane	0.141	0.137	0.133	0.126	0.137	0.142				4.3
Chloroform	0.500	0.504	0.480	0.456	0.498	0.512				4.2
1,1,1-Trichloroethane	0.410	0.424	0.396	0.374	0.418	0.416				4.6
1,1-Dichloropropene	0.133	0.137	0.130	0.122	0.137	0.129				4.5
Carbon tetrachloride	0.341	0.357	0.334	0.316	0.358	0.344				4.6
1,2-Dichloroethane	0.382	0.384	0.372	0.360	0.380	0.393				3.0
Benzene	1.178	1.159	1.098	1.038	1.113	1.359				9.5
Trichloroethene	0.286	0.285	0.273	0.258	0.285	0.292				4.4
1,2-Dichloropropane	0.297	0.308	0.295	0.281	0.296	0.300				3.0

Lab Name: MITKEM

Lab Code: MITKEM

Instrument ID: V10

Heated Purge: (Y/N) N

Purge Volume: 5

GC Column: DB-624

Case No.: L0935

SAS No.:

Calibration Date(s): 05/16/2012

Calibration Times: 12:07

Contract:

SDG No.: SL0935

05/16/2012

14:43

(mL)

(mm)

30

Length:

LAB FILE ID: RRF005 = V8B1706.D RRF020 = V8B1705.D RRF050 = V8B1704.D RRF100 = V8B1710.D RRF200 = V8B1709.D											
RRF001 = V8B1708.D											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
Dibromomethane	0.175	0.182	0.180	0.175	0.182	0.173				0.178	2.4
Bromodichloromethane	0.353	0.376	0.371	0.356	0.389	0.350				0.366	4.2
cis-1,3-Dichloropropene	0.403	0.440	0.447	0.429	0.471	0.374				0.427	8.1
4-Methyl-2-pentanone	0.224	0.269	0.262	0.258	0.265					0.256	7.1
Toluene	1.223	1.188	1.132	1.062	1.158	1.552				1.219	14.1
trans-1,3-Dichloropropene	0.351	0.388	0.395	0.389	0.423	0.326				0.379	9.1
1,1,2-Trichloroethane	0.249	0.266	0.253	0.245	0.258	0.259				0.255	3.0
1,3-Dichloropropane	0.601	0.639	0.608	0.584	0.602	0.633				0.611	3.4
Tetrachloroethene	0.328	0.324	0.301	0.290	0.319	0.381				0.324	9.7
2-Hexanone	0.199	0.298	0.290	0.260	0.269					0.263	14.8
Dibromochloromethane	0.358	0.402	0.394	0.389	0.419	0.336				0.383	8.0
1,2-Dibromoethane	0.358	0.377	0.363	0.357	0.372	0.361				0.365	2.2
Chlorobenzene	1.072	1.059	0.999	0.949	1.003	1.130				1.035	6.2
1,1,1,2-Tetrachloroethane	0.356	0.376	0.360	0.345	0.372	0.359				0.361	3.2
Ethylbenzene	0.537	0.553	0.526	0.499	0.536	0.585				0.540	5.3
m,p-Xylene	0.693	0.690	0.654	0.612	0.645	0.804				0.683	9.7
o-Xylene	0.639	0.665	0.633	0.596	0.631	0.665				0.638	4.0
Xylene (Total)	0.675	0.682	0.647	0.607	0.640	0.757				0.668	7.7
Styrene	0.937	1.059	1.039	1.003	1.068	0.833				0.990	9.1
Bromoform	0.210	0.249	0.245	0.250	0.264	0.191				0.235	12.0
Isopropylbenzene	1.496	1.609	1.561	1.465	1.565	1.471				1.528	3.9
1,1,2,2-Tetrachloroethane	1.057	1.144	0.992	0.945	0.910	1.135				1.031	9.5
Bromobenzene	0.920	0.906	0.828	0.784	0.809	0.998				0.874	9.3
1,2,3-Trichloropropane	1.190	1.283	1.160	1.147	1.128	1.368				1.213	7.7
n-Propylbenzene	0.871	0.896	0.845	0.782	0.816	0.903				0.852	5.6
2-Chlorotoluene	0.864	0.848	0.783	0.719	0.744	0.945				0.817	10.3
1,3,5-Trimethylbenzene	2.779	2.811	2.639	2.431	2.470	2.990				2.687	8.0

Lab Name:	Spectrum Analytical, Inc.	Case No.:	L0935	SAS No.:	SDG No.:	SL0935
Lab Code:	MITKEM					
Instrument ID:	V10	Calibration Date(s): 05/16/2012 05/16/2012				
Heated Purge: (Y/N)	N	Calibration Times: 12:07 14:43				
Purge Volume:	5	(mL)				
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30 (mm)

LAB FILE ID: RRF005 = <u>V8B1706.D</u> RRF020 = <u>V8B1705.D</u> RRF050 = <u>V8B1704.D</u> RRF100 = <u>V8B1710.D</u> RRF200 = <u>V8B1709.D</u>									
RRF001 = <u>V8B1708.D</u>									
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001			
							RRF		% RSD
4-Chlorotoluene	0.869	0.866	0.801	0.741	0.761	0.918	0.826		8.4
tert-Butylbenzene	2.692	2.818	2.635	2.453	2.500	2.780	2.646		5.6
1,2,4-Trimethylbenzene	2.935	2.870	2.682	2.475	2.519	3.402	2.814		12.1
sec-Butylbenzene	3.263	3.305	3.215	2.916	2.976	3.302	3.163		5.4
4-Isopropyltoluene	2.508	2.653	2.584	2.386	2.427	2.503	2.510		3.9
1,3-Dichlorobenzene	1.587	1.547	1.431	1.347	1.374	1.837	1.520		11.9
1,4-Dichlorobenzene	1.701	1.589	1.466	1.375	1.401	2.083	1.602		16.6
n-Butylbenzene	2.253	2.279	2.286	2.142	2.169	2.171	2.217		2.8
1,2-Dichlorobenzene	1.612	1.563	1.414	1.327	1.322	1.744	1.497		11.4
1,2-Dibromo-3-chloropropane	0.160	0.174	0.146	0.158	0.146	0.147	0.155		7.2
1,2,4-Trichlorobenzene	0.861	0.775	0.682	0.747	0.696	0.439	0.700		20.4
Hexachlorobutadiene	0.442	0.373	0.341	0.307	0.295	0.446	0.367		17.8
1,2,3-Trichlorobenzene	0.790	0.737	0.618	0.699	0.601	0.427	0.645		19.9
Naphthalene	1.836	1.985	1.632	2.074	1.691	1.443	1.777		13.2

Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Instrument ID: V10

Heated Purge: (Y/N) N

Purge Volume: 5

GC Column: DB-624

Case No.: L0935

SAS No.:

Calibration Date(s): 05/16/2012

Calibration Times: 12:07

ID: 0.25

Length: 30

SDG No.: SL0935

05/16/2012

14:43

(mL)

(mm)

LAB FILE ID: RRF005 = <u>V8B1706.D</u> RRF020 = <u>V8B1705.D</u> RRF050 = <u>V8B1704.D</u> RRF100 = <u>V8B1710.D</u> RRF200 = <u>V8B1709.D</u> RRF001 = <u>V8B1708.D</u>									
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001			
							RRF		% RSD
Dibromofluoromethane	0.253	0.253	0.253	0.252	0.253	0.252	0.252		0.3
1,2-Dichloroethane-d4	0.060	0.058	0.060	0.059	0.060	0.058	0.059		1.4
Toluene-d8	1.387	1.375	1.363	1.351	1.341	1.406	1.370		1.8
Bromofluorobenzene	0.473	0.474	0.481	0.484	0.487	0.463	0.477		1.9

Data File: \\avogadro\organics\V6.i\120517A.B\V6I7021.D
Report Date: 18-May-2012 12:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120517A.B\V6I7021.D
Lab Smp Id: VSTD0016A Client Smp ID: VSTD0016A
Inj Date : 17-MAY-2012 16:19
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0016A,VSTD0016A
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517A.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 12:47 wluo Quant Type: ISTD
Cal Date : 17-MAY-2012 16:19 Cal File: V6I7021.D
Als bottle: 18 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.745	1.748 (0.324)		4698	1.00000	1
2 Freon114	85	1.851	1.854 (0.344)		5875	1.00000	1
3 Chloromethane	50	1.946	1.937 (0.362)		8162	1.00000	1
4 Vinyl Chloride	62	2.017	2.020 (0.375)		5293	1.00000	1.0
5 Bromomethane	94	2.336	2.316 (0.435)		3894	1.00000	1(Q)
6 Chloroethane	64	2.395	2.410 (0.446)		3281	1.00000	1
7 Trichlorofluoromethane	101	2.608	2.588 (0.485)		4725	1.00000	0.9
126 Ethanol	46	2.715	2.718 (0.505)		1023	500.000	730(AQ)
8 Ether	59	2.809	2.801 (0.523)		3545	1.00000	1(Q)
9 Acrolein	56	2.916	2.919 (0.542)		4011	5.00000	5
10 1,1-Dichloroethene	96	3.022	3.014 (0.562)		4000	1.00000	0.9(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.999	3.002 (0.558)		3632	1.00000	0.9
12 Acetone	58	3.034	3.037 (0.564)		417	1.00000	0.7(Q)
13 Iodomethane	142	3.153	3.156 (0.586)		7903	1.00000	1
14 Carbon Disulfide	76	3.212	3.203 (0.597)		21561	1.00000	1
15 Acetonitrile	41	3.283	3.274 (0.611)		11335	1.00000	10
16 Allyl Chloride	39	3.283	3.274 (0.611)		4581	1.00000	1.0(Q)
17 Methyl Acetate	43	3.283	3.286 (0.611)		3706	1.00000	1
18 Methylene Chloride	84	3.413	3.404 (0.635)		8292	1.00000	1
19 tert-Butanol	59	3.437	3.440 (0.639)		479	1.00000	1
20 Acrylonitrile	53	3.567	3.570 (0.663)		1637	1.00000	0.9
21 trans-1,2-Dichloroethene	96	3.590	3.594 (0.668)		4178	1.00000	1
22 Methyl tert-butyl ether	73	3.579	3.582 (0.666)		10936	1.00000	1

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.922	3.925 (0.729)		6876		1.00000	1.0
24 Vinyl acetate	43	3.945	3.949 (0.734)		17131		1.00000	1
25 Diisopropyl Ether	45	3.957	3.949 (0.736)		16924		1.00000	1
26 2-Chloro-1,3-Butadiene	53	4.005	3.996 (0.745)		6473		1.00000	1
27 Ethyl tert-butyl ether	59	4.241	4.244 (0.789)		13138		1.00000	1
29 2,2-Dichloropropane	77	4.395	4.398 (0.817)		3906		1.00000	1
28 cis-1,2-Dichloroethene	96	4.395	4.398 (0.817)		5114		1.00000	1
30 2-Butanone	72	4.395	4.398 (0.817)		375		1.00000	0.7(TQ)
32 Propionitrile	54	4.454	4.446 (0.828)		6267		1.00000	10
33 Methacrylonitrile	41	4.573	4.576 (0.850)		4532		1.00000	2
34 Bromochloromethane	128	4.596	4.599 (0.855)		2330		1.00000	1.0
31 Tetrahydrofuran	72	4.644	4.635 (0.864)		942		1.00000	2(Q)
35 Chloroform	83	4.644	4.647 (0.864)		7279		1.00000	1
\$ 36 Dibromofluoromethane	113	4.786	4.789 (0.890)		212483		1.00000	50
37 1,1,1-Trichloroethane	97	4.821	4.824 (0.897)		5692		1.00000	1
38 Cyclohexane	56	4.868	4.872 (0.905)		7817		1.00000	1
39 1,1-Dichloropropene	110	4.951	4.954 (0.921)		2320		1.00000	1
40 Carbon Tetrachloride	117	4.963	4.966 (0.923)		4342		1.00000	1.0
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.085 (0.945)		47577		1.00000	48
43 Benzene	78	5.141	5.144 (0.956)		15744		1.00000	1
44 1,2-Dichloroethane	62	5.152	5.144 (0.958)		5452		1.00000	1
45 tert-Amyl methyl ether	73	5.212	5.203 (0.969)		10874		1.00000	1
M 50 1,2-Dichloroethene (Total)	96				9292		2.00000	2
* 46 Fluorobenzene	96	5.377	5.369 (1.000)		742040		50.0000	
47 Trichloroethene	130	5.697	5.700 (1.059)		5876		1.00000	1
48 Methylcyclohexane	83	5.874	5.877 (1.092)		6334		1.00000	1
49 1,2-Dichloropropane	63	5.910	5.913 (1.099)		4306		1.00000	1
51 Methyl Methacrylate	69	5.981	5.972 (1.112)		2908		1.00000	1
52 Dibromomethane	93	6.028	6.019 (1.121)		2569		1.00000	1.0
53 1,4-Dioxane	88	6.028	6.019 (1.121)		534		1.00000	14(TQ)
54 Bromodichloromethane	83	6.158	6.149 (1.145)		5103		1.00000	1
55 2-Chloroethyl vinyl ether	63	6.844	6.422 (1.273)		438		1.00000	0.4(TaQ)
56 cis-1,3-Dichloropropene	75	6.584	6.575 (1.224)		5441		1.00000	0.9
57 4-Methyl-2-pentanone	43	6.714	6.717 (1.249)		4258		1.00000	1
\$ 58 Toluene-d8	98	6.844	6.848 (0.819)		720826		1.00000	50
59 Toluene	91	6.915	6.919 (1.286)		18357		1.00000	1
60 trans-1,3-Dichloropropene	75	7.128	7.120 (1.326)		4293		1.00000	0.8
61 Ethyl Methacrylate	69	7.199	7.191 (1.339)		3199		1.00000	0.8
62 1,1,2-Trichloroethane	97	7.318	7.321 (1.361)		3939		1.00000	1
63 Tetrachloroethene	164	7.472	7.475 (0.894)		4484		1.00000	1
64 1,3-Dichloropropane	76	7.495	7.498 (0.897)		6059		1.00000	1
65 2-Hexanone	43	7.566	7.569 (0.905)		3036		1.00000	1.0
66 Dibromochloromethane	129	7.744	7.735 (0.926)		3986		1.00000	0.9(T)
67 1,2-Dibromoethane	107	7.874	7.877 (0.942)		4221		1.00000	1(T)
69 1-Chlorohexane	91	8.347	8.350 (0.999)		6926		1.00000	1(Q)
* 68 Chlorobenzene-d5	117	8.359	8.362 (1.000)		630978		50.0000	
70 Chlorobenzene	112	8.395	8.398 (1.004)		12011		1.00000	1
71 1,1,1,2-Tetrachloroethane	131	8.477	8.481 (1.014)		4581		1.00000	1
72 Ethylbenzene	106	8.513	8.504 (1.018)		6769		1.00000	1
73 m,p-Xylene	106	8.631	8.634 (1.033)		15708		2.00000	2
74 o-Xylene	106	9.081	9.084 (1.086)		7444		1.00000	1
75 Styrene	104	9.105	9.096 (1.089)		10021		1.00000	0.9
76 Bromoform	173	9.317	9.321 (1.115)		2194		1.00000	0.8(T)
77 Isopropylbenzene	105	9.495	9.486 (1.136)		19318		1.00000	1

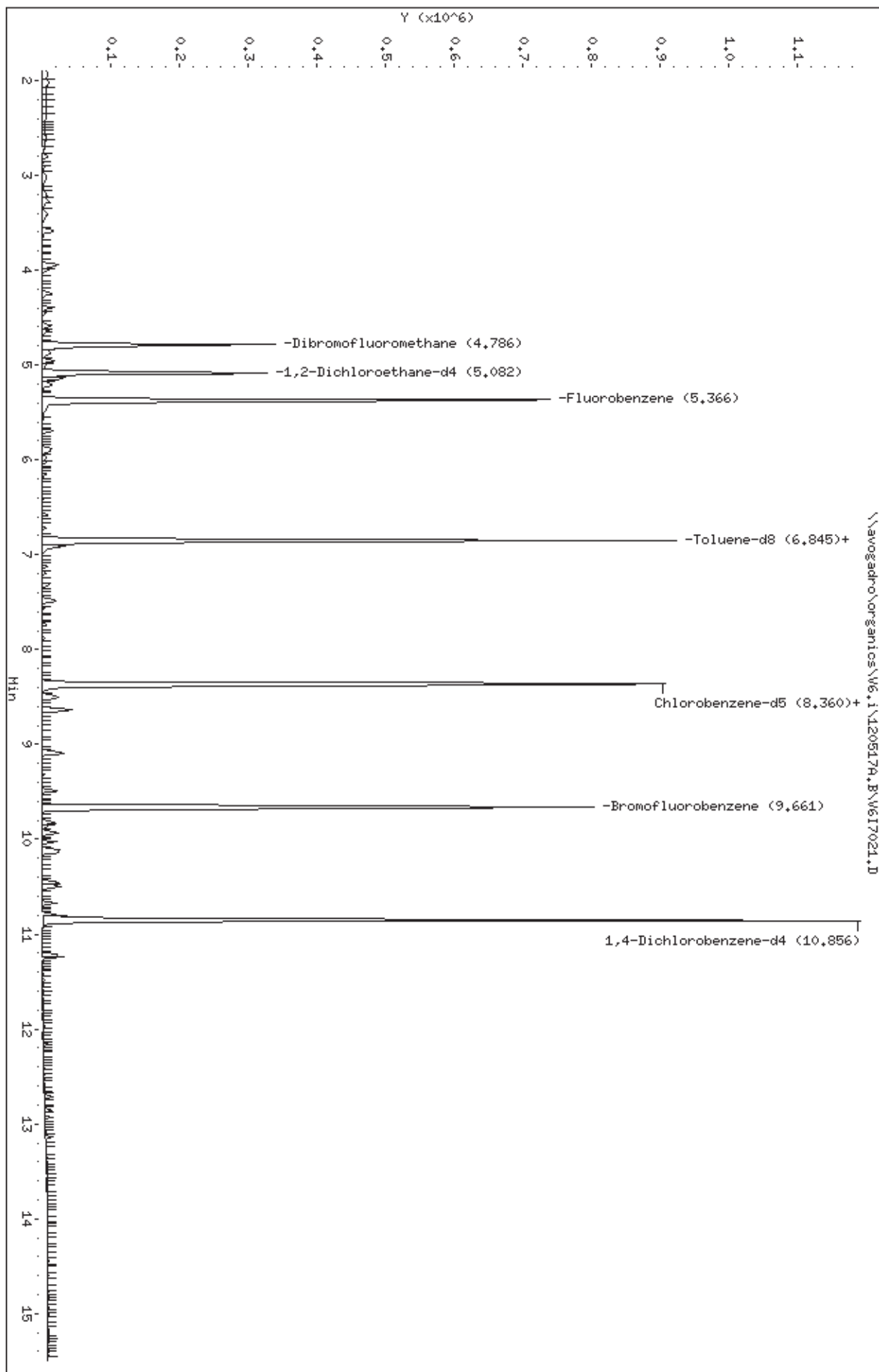
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
78 trans-1,4-Dichloro-2-butene	75	9.862	9.865 (1.180)		4197		1.00000	0.9(TQ)
\$ 79 Bromofluorobenzene	95	9.661	9.664 (1.156)		296690		1.00000	50
80 1,1,2,2-Tetrachloroethane	83	9.814	9.806 (0.904)		5080		1.00000	1
81 Bromobenzene	156	9.826	9.829 (0.905)		5340		1.00000	1
82 1,2,3-Trichloropropane	75	9.862	9.865 (0.908)		4197		1.00000	0.9(Q)
83 n-Propylbenzene	120	9.933	9.936 (0.915)		5427		1.00000	1(Q)
84 2-Chlorotoluene	126	10.027	10.031 (0.924)		4590		1.00000	1(Q)
85 1,3,5-Trimethylbenzene	105	10.110	10.113 (0.931)		15171		1.00000	1
86 4-Chlorotoluene	126	10.146	10.137 (0.935)		5374		1.00000	1(Q)
M 94 Xylene (Total)	106				23152		3.00000	3
87 tert-Butylbenzene	119	10.453	10.457 (0.963)		16601		1.00000	1
88 1,2,4-Trimethylbenzene	105	10.501	10.504 (0.967)		15769		1.00000	1
89 sec-Butylbenzene	105	10.678	10.670 (0.984)		18858		1.00000	1
90 1,3-Dichlorobenzene	146	10.785	10.788 (0.993)		10009		1.00000	1
91 4-Isopropyltoluene	119	10.820	10.812 (0.997)		16264		1.00000	1
* 92 1,4-Dichlorobenzene-d4	152	10.856	10.859 (1.000)		334192		50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.879	10.883 (1.002)		10274		1.00000	1(Q)
95 n-Butylbenzene	91	11.211	11.214 (1.033)		12591		1.00000	1
96 1,2-Dichlorobenzene	146	11.246	11.249 (1.036)		9897		1.00000	1
97 Hexachloroethane	117	11.483	11.486 (1.058)		1001		1.00000	0.5
98 1,2-Dibromo-3-chloropropane	75	11.968	11.971 (1.102)		556		1.00000	0.7
141 1,3,5-Trichlorobenzene	182	12.157	12.161 (2.261)		4375		1.00000	1(A)
99 1,2,4-Trichlorobenzene	180	12.714	12.717 (1.171)		4288		1.00000	1
100 Hexachlorobutadiene	225	12.856	12.859 (1.184)		2050		1.00000	1
101 Naphthalene	128	12.927	12.930 (1.191)		9881		1.00000	0.9
102 1,2,3-Trichlorobenzene	180	13.139	13.143 (1.210)		3429		1.00000	1.0

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120517H,B\W6I7021.D
Date : 17-MAY-2012 16:19
Client ID: WSTD0016A
Sample Info: 5HL,WSTD0016A,WSTD0016A
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120517A.B\V6I7022.D
Report Date: 18-May-2012 12:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120517A.B\V6I7022.D
Lab Smp Id: VSTD0056A Client Smp ID: VSTD0056A
Inj Date : 17-MAY-2012 16:43
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0056A,VSTD0056A
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517A.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 12:47 wluo Quant Type: ISTD
Cal Date : 17-MAY-2012 16:43 Cal File: V6I7022.D
Als bottle: 19 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.756	1.748 (0.327)		18070	5.00000	4
2 Freon114	85	1.851	1.854 (0.344)		26601	5.00000	5
3 Chloromethane	50	1.934	1.937 (0.360)		26707	5.00000	4
4 Vinyl Chloride	62	2.016	2.020 (0.375)		24043	5.00000	5
5 Bromomethane	94	2.324	2.316 (0.432)		12172	5.00000	4
6 Chloroethane	64	2.407	2.410 (0.448)		14066	5.00000	5
7 Trichlorofluoromethane	101	2.584	2.588 (0.481)		23970	5.00000	5
126 Ethanol	46	2.715	2.718 (0.505)		8066	500.000	1100(A)
8 Ether	59	2.809	2.801 (0.523)		17121	5.00000	5
9 Acrolein	56	2.916	2.919 (0.542)		19305	25.0000	23
10 1,1-Dichloroethene	96	3.022	3.014 (0.562)		20086	5.00000	5
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.999	3.002 (0.558)		18055	5.00000	4
12 Acetone	58	3.034	3.037 (0.564)		2729	5.00000	5(Q)
13 Iodomethane	142	3.164	3.156 (0.589)		30098	5.00000	4
14 Carbon Disulfide	76	3.212	3.203 (0.597)		68313	5.00000	4
15 Acetonitrile	41	3.271	3.274 (0.608)		54148	50.0000	48
16 Allyl Chloride	39	3.283	3.274 (0.611)		21145	5.00000	5(Q)
17 Methyl Acetate	43	3.283	3.286 (0.611)		16500	5.00000	5
18 Methylene Chloride	84	3.401	3.404 (0.633)		23369	5.00000	5
19 tert-Butanol	59	3.448	3.440 (0.641)		3416	10.0000	8
20 Acrylonitrile	53	3.567	3.570 (0.663)		8411	5.00000	5
21 trans-1,2-Dichloroethene	96	3.590	3.594 (0.668)		19621	5.00000	5
22 Methyl tert-butyl ether	73	3.578	3.582 (0.666)		52459	5.00000	5

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.933	3.925 (0.732)		34498		5.00000	5
24 Vinyl acetate	43	3.945	3.949 (0.734)		77799		5.00000	5
25 Diisopropyl Ether	45	3.957	3.949 (0.736)		71416		5.00000	5
26 2-Chloro-1,3-Butadiene	53	4.004	3.996 (0.745)		28538		5.00000	5
27 Ethyl tert-butyl ether	59	4.241	4.244 (0.789)		59135		5.00000	5
29 2,2-Dichloropropane	77	4.395	4.398 (0.817)		15132		5.00000	5
28 cis-1,2-Dichloroethene	96	4.395	4.398 (0.817)		21041		5.00000	5
30 2-Butanone	72	4.395	4.398 (0.817)		2328		5.00000	5(Q)
32 Propionitrile	54	4.454	4.446 (0.828)		30891		50.0000	50
33 Methacrylonitrile	41	4.572	4.576 (0.850)		25307		10.0000	9
34 Bromochloromethane	128	4.596	4.599 (0.855)		11199		5.00000	5
31 Tetrahydrofuran	72	4.632	4.635 (0.861)		4641		10.0000	9
35 Chloroform	83	4.643	4.647 (0.864)		29880		5.00000	5
\$ 36 Dibromofluoromethane	113	4.785	4.789 (0.890)		203260		50.0000	49
37 1,1,1-Trichloroethane	97	4.821	4.824 (0.897)		24760		5.00000	5
38 Cyclohexane	56	4.868	4.872 (0.905)		30865		5.00000	4
39 1,1-Dichloropropene	110	4.951	4.954 (0.921)		9530		5.00000	5
40 Carbon Tetrachloride	117	4.963	4.966 (0.923)		20801		5.00000	5
41 Isobutyl Alcohol	43	4.998	5.002 (0.930)		20237		100.000	100
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.085 (0.945)		46983		50.0000	49
43 Benzene	78	5.140	5.144 (0.956)		71377		5.00000	5
44 1,2-Dichloroethane	62	5.152	5.144 (0.958)		24512		5.00000	5
45 tert-Amyl methyl ether	73	5.211	5.203 (0.969)		52502		5.00000	5
M 50 1,2-Dichloroethene (Total)	96				40662		10.0000	10
* 46 Fluorobenzene	96	5.377	5.369 (1.000)		720605		50.0000	
47 Trichloroethene	130	5.696	5.700 (1.059)		24215		5.00000	5
48 Methylcyclohexane	83	5.886	5.877 (1.095)		26582		5.00000	4
49 1,2-Dichloropropane	63	5.909	5.913 (1.099)		19215		5.00000	5
51 Methyl Methacrylate	69	5.980	5.972 (1.112)		12880		5.00000	5
52 Dibromomethane	93	6.016	6.019 (1.119)		12144		5.00000	5
53 1,4-Dioxane	88	6.028	6.019 (1.121)		3297		100.000	90
54 Bromodichloromethane	83	6.158	6.149 (1.145)		23973		5.00000	5
55 2-Chloroethyl vinyl ether	63	6.418	6.422 (1.194)		2887		5.00000	3
56 cis-1,3-Dichloropropene	75	6.584	6.575 (1.224)		26830		5.00000	5
57 4-Methyl-2-pentanone	43	6.714	6.717 (1.249)		20352		5.00000	5
\$ 58 Toluene-d8	98	6.856	6.848 (0.820)		707064		50.0000	49
59 Toluene	91	6.915	6.919 (1.286)		79290		5.00000	5
60 trans-1,3-Dichloropropene	75	7.128	7.120 (1.326)		24175		5.00000	5
61 Ethyl Methacrylate	69	7.199	7.191 (1.339)		17376		5.00000	4
62 1,1,2-Trichloroethane	97	7.318	7.321 (1.361)		17128		5.00000	5
63 Tetrachloroethene	164	7.483	7.475 (0.895)		20438		5.00000	5
64 1,3-Dichloropropane	76	7.495	7.498 (0.897)		28460		5.00000	5
65 2-Hexanone	43	7.566	7.569 (0.905)		14969		5.00000	5
66 Dibromochloromethane	129	7.744	7.735 (0.926)		20151		5.00000	5(T)
67 1,2-Dibromoethane	107	7.874	7.877 (0.942)		19215		5.00000	5(T)
69 1-Chlorohexane	91	8.347	8.350 (0.999)		25948		5.00000	5(Q)
* 68 Chlorobenzene-d5	117	8.359	8.362 (1.000)		625385		50.0000	
70 Chlorobenzene	112	8.394	8.398 (1.004)		54114		5.00000	5
71 1,1,1,2-Tetrachloroethane	131	8.477	8.481 (1.014)		20471		5.00000	5
72 Ethylbenzene	106	8.501	8.504 (1.017)		28003		5.00000	5(Q)
73 m,p-Xylene	106	8.631	8.634 (1.033)		69677		10.0000	10
74 o-Xylene	106	9.081	9.084 (1.086)		33669		5.00000	5
75 Styrene	104	9.104	9.096 (1.089)		49545		5.00000	5
76 Bromoform	173	9.317	9.321 (1.115)		10725		5.00000	4

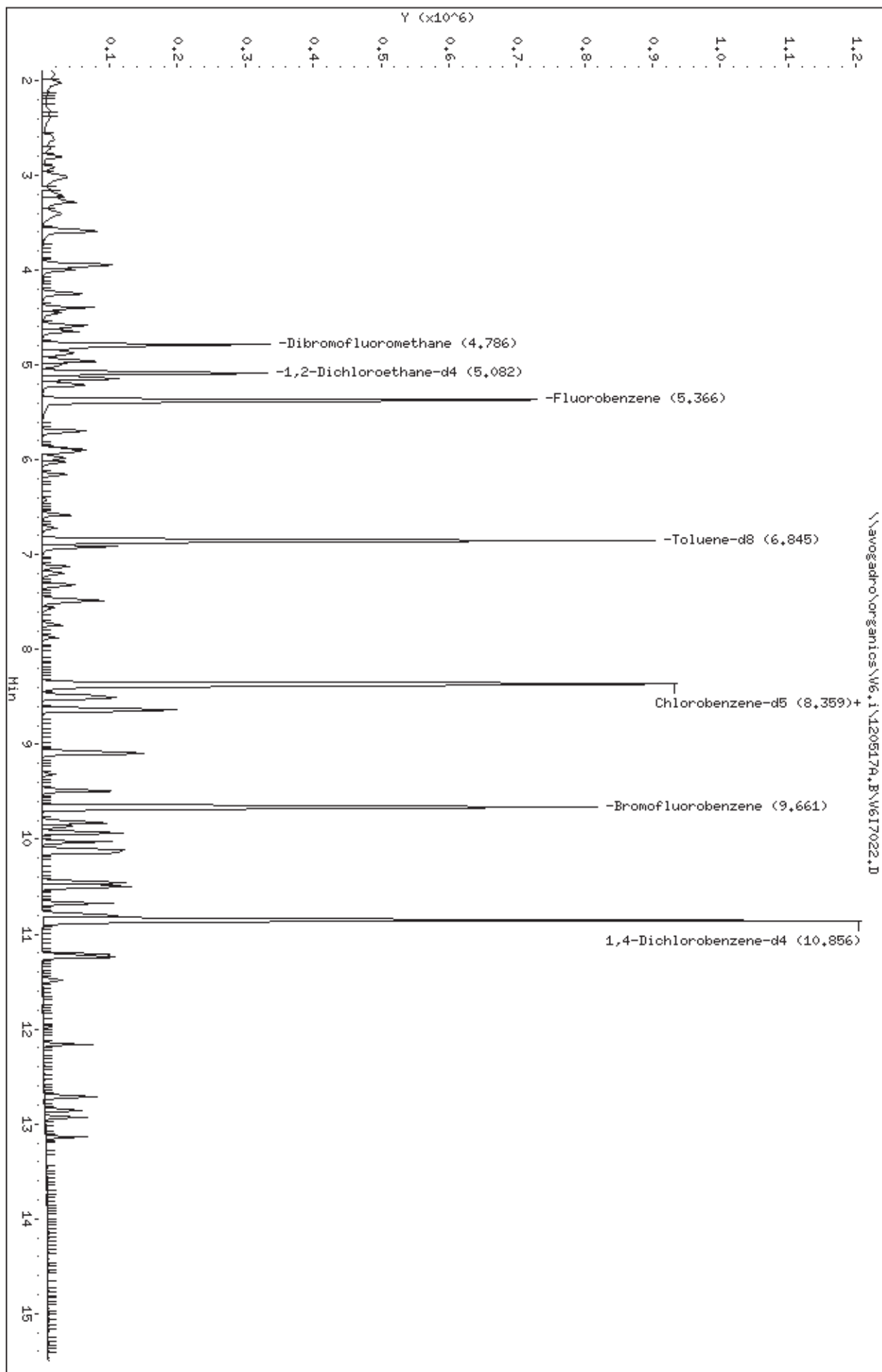
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.495	9.486 (1.136)		84074		5.00000	5
78 trans-1,4-Dichloro-2-butene	75	9.862	9.865 (1.180)		20633		5.00000	4(TQH)
\$ 79 Bromofluorobenzene	95	9.660	9.664 (1.156)		296522		50.0000	51
80 1,1,2,2-Tetrachloroethane	83	9.814	9.806 (0.904)		23856		5.00000	5
81 Bromobenzene	156	9.826	9.829 (0.905)		24563		5.00000	5
82 1,2,3-Trichloropropane	75	9.862	9.865 (0.908)		20633		5.00000	4(Q)
83 n-Propylbenzene	120	9.933	9.936 (0.915)		24049		5.00000	5(Q)
84 2-Chlorotoluene	126	10.027	10.031 (0.924)		21409		5.00000	5(Q)
85 1,3,5-Trimethylbenzene	105	10.110	10.113 (0.931)		69555		5.00000	5
86 4-Chlorotoluene	126	10.146	10.137 (0.935)		24012		5.00000	5(Q)
M 94 Xylene (Total)	106				103346		15.0000	15
87 tert-Butylbenzene	119	10.453	10.457 (0.963)		80861		5.00000	5
88 1,2,4-Trimethylbenzene	105	10.501	10.504 (0.967)		72752		5.00000	5
89 sec-Butylbenzene	105	10.678	10.670 (0.984)		87431		5.00000	5
90 1,3-Dichlorobenzene	146	10.785	10.788 (0.993)		45642		5.00000	5
91 4-Isopropyltoluene	119	10.820	10.812 (0.997)		73082		5.00000	5
* 92 1,4-Dichlorobenzene-d4	152	10.856	10.859 (1.000)		336073		50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.879	10.883 (1.002)		46509		5.00000	5
95 n-Butylbenzene	91	11.211	11.214 (1.033)		59223		5.00000	5
96 1,2-Dichlorobenzene	146	11.246	11.249 (1.036)		43087		5.00000	5
97 Hexachloroethane	117	11.483	11.486 (1.058)		6289		5.00000	3
98 1,2-Dibromo-3-chloropropane	75	11.968	11.971 (1.102)		4116		5.00000	5
141 1,3,5-Trichlorobenzene	182	12.157	12.161 (2.261)		20968		5.00000	6(A)
99 1,2,4-Trichlorobenzene	180	12.713	12.717 (1.171)		22764		5.00000	6
100 Hexachlorobutadiene	225	12.855	12.859 (1.184)		9347		5.00000	5
101 Naphthalene	128	12.938	12.930 (1.192)		54041		5.00000	5
102 1,2,3-Trichlorobenzene	180	13.139	13.143 (1.210)		18949		5.00000	5

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120517A,B\W617022.D
Date : 17-May-2012 16:43
Client ID: VSTD0056A
Sample Info: 5HL,VSTD0056A,VSTD0056A
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120517A.B\V6I7023.D
 Report Date: 18-May-2012 12:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120517A.B\V6I7023.D
 Lab Smp Id: VSTD0206A Client Smp ID: VSTD0206A
 Inj Date : 17-MAY-2012 17:07
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VSTD0206A,VSTD0206A
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120517A.B\v68260Gadd-6lvl.m
 Meth Date : 18-May-2012 12:47 wluo Quant Type: ISTD
 Cal Date : 17-MAY-2012 17:07 Cal File: V6I7023.D
 Als bottle: 20 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.759	1.748 (0.328)		82044	20.0000	20
2 Freon114	85	1.853	1.854 (0.345)		112144	20.0000	20
3 Chloromethane	50	1.936	1.937 (0.361)		130082	20.0000	19
4 Vinyl Chloride	62	2.019	2.020 (0.376)		104895	20.0000	20
5 Bromomethane	94	2.315	2.316 (0.431)		47631	20.0000	18
6 Chloroethane	64	2.410	2.410 (0.449)		58961	20.0000	20
7 Trichlorofluoromethane	101	2.587	2.588 (0.482)		107940	20.0000	21
126 Ethanol	46	2.717	2.718 (0.506)		30370	2000.00	2200(AQ)
8 Ether	59	2.800	2.801 (0.522)		68120	20.0000	20
9 Acrolein	56	2.918	2.919 (0.544)		86908	100.000	100
10 1,1-Dichloroethene	96	3.013	3.014 (0.561)		84967	20.0000	20
11 1,1,2-Trichloro-1,2,2-Trifluo	101	3.001	3.002 (0.559)		84164	20.0000	21
12 Acetone	58	3.037	3.037 (0.566)		11767	20.0000	22(Q)
13 Iodomethane	142	3.167	3.156 (0.590)		134055	20.0000	18
14 Carbon Disulfide	76	3.214	3.203 (0.599)		351249	20.0000	22
15 Acetonitrile	41	3.273	3.274 (0.610)		231167	200.000	210(A)
16 Allyl Chloride	39	3.273	3.274 (0.610)		90765	20.0000	20(Q)
17 Methyl Acetate	43	3.285	3.286 (0.612)		69157	20.0000	20
18 Methylene Chloride	84	3.404	3.404 (0.634)		93594	20.0000	21
19 tert-Butanol	59	3.439	3.440 (0.641)		17128	40.0000	42
20 Acrylonitrile	53	3.569	3.570 (0.665)		35817	20.0000	21
21 trans-1,2-Dichloroethene	96	3.593	3.594 (0.669)		80168	20.0000	20
22 Methyl tert-butyl ether	73	3.581	3.582 (0.667)		213666	20.0000	21

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.924	3.925 (0.731)		143896		20.0000	21
24 Vinyl acetate	43	3.948	3.949 (0.735)		319777		20.0000	21
25 Diisopropyl Ether	45	3.948	3.949 (0.735)		290816		20.0000	20
26 2-Chloro-1,3-Butadiene	53	3.995	3.996 (0.744)		125574		20.0000	21
27 Ethyl tert-butyl ether	59	4.244	4.244 (0.791)		236978		20.0000	20
29 2,2-Dichloropropane	77	4.397	4.398 (0.819)		65624		20.0000	21
28 cis-1,2-Dichloroethene	96	4.397	4.398 (0.819)		93011		20.0000	21
30 2-Butanone	72	4.397	4.398 (0.819)		11211		20.0000	22
32 Propionitrile	54	4.457	4.446 (0.830)		128782		200.000	210(A)
33 Methacrylonitrile	41	4.575	4.576 (0.852)		103351		40.0000	37
34 Bromochloromethane	128	4.599	4.599 (0.857)		46540		20.0000	21
31 Tetrahydrofuran	72	4.634	4.635 (0.863)		20356		40.0000	41
35 Chloroform	83	4.646	4.647 (0.866)		127363		20.0000	20
\$ 36 Dibromofluoromethane	113	4.788	4.789 (0.892)		203595		50.0000	50
37 1,1,1-Trichloroethane	97	4.823	4.824 (0.899)		105050		20.0000	20
38 Cyclohexane	56	4.871	4.872 (0.907)		135313		20.0000	20
39 1,1-Dichloropropene	110	4.954	4.954 (0.923)		41576		20.0000	20
40 Carbon Tetrachloride	117	4.965	4.966 (0.925)		89611		20.0000	21
41 Isobutyl Alcohol	43	5.001	5.002 (0.932)		80597		400.000	420(A)
\$ 42 1,2-Dichloroethane-d4	102	5.084	5.085 (0.947)		49414		50.0000	52
43 Benzene	78	5.143	5.144 (0.958)		291702		20.0000	21
44 1,2-Dichloroethane	62	5.143	5.144 (0.958)		99783		20.0000	21
45 tert-Amyl methyl ether	73	5.202	5.203 (0.969)		209820		20.0000	20
M 50 1,2-Dichloroethene (Total)	96				173179		40.0000	42
* 46 Fluorobenzene	96	5.368	5.369 (1.000)		713663		50.0000	
47 Trichloroethene	130	5.699	5.700 (1.062)		93701		20.0000	20
48 Methylcyclohexane	83	5.877	5.877 (1.095)		118242		20.0000	20
49 1,2-Dichloropropane	63	5.912	5.913 (1.101)		80740		20.0000	21
51 Methyl Methacrylate	69	5.983	5.972 (1.115)		55507		20.0000	20
52 Dibromomethane	93	6.019	6.019 (1.121)		51994		20.0000	21
53 1,4-Dioxane	88	6.019	6.019 (1.121)		17027		400.000	470(A)
54 Bromodichloromethane	83	6.149	6.149 (1.145)		99874		20.0000	21
55 2-Chloroethyl vinyl ether	63	6.421	6.422 (1.196)		19676		20.0000	21
56 cis-1,3-Dichloropropene	75	6.575	6.575 (1.225)		117086		20.0000	21
57 4-Methyl-2-pentanone	43	6.717	6.717 (1.251)		80247		20.0000	20
\$ 58 Toluene-d8	98	6.847	6.848 (0.819)		702148		50.0000	50
59 Toluene	91	6.918	6.919 (1.289)		317148		20.0000	21
60 trans-1,3-Dichloropropene	75	7.119	7.120 (1.326)		104514		20.0000	21
61 Ethyl Methacrylate	69	7.202	7.191 (1.342)		77697		20.0000	21
62 1,1,2-Trichloroethane	97	7.320	7.321 (1.364)		71524		20.0000	20
63 Tetrachloroethene	164	7.474	7.475 (0.894)		80858		20.0000	21
64 1,3-Dichloropropane	76	7.498	7.498 (0.897)		115543		20.0000	20
65 2-Hexanone	43	7.569	7.569 (0.905)		65406		20.0000	21
66 Dibromochloromethane	129	7.746	7.735 (0.926)		87779		20.0000	20
67 1,2-Dibromoethane	107	7.876	7.877 (0.942)		82428		20.0000	20
69 1-Chlorohexane	91	8.350	8.350 (0.999)		107756		20.0000	20(Q)
* 68 Chlorobenzene-d5	117	8.361	8.362 (1.000)		619893		50.0000	
70 Chlorobenzene	112	8.397	8.398 (1.004)		227202		20.0000	21
71 1,1,1,2-Tetrachloroethane	131	8.480	8.481 (1.014)		86125		20.0000	20
72 Ethylbenzene	106	8.503	8.504 (1.017)		117797		20.0000	20(Q)
73 m,p-Xylene	106	8.634	8.634 (1.033)		285495		40.0000	42
74 o-Xylene	106	9.083	9.084 (1.086)		141884		20.0000	21
75 Styrene	104	9.095	9.096 (1.088)		221843		20.0000	21
76 Bromoform	173	9.320	9.321 (1.115)		54270		20.0000	21

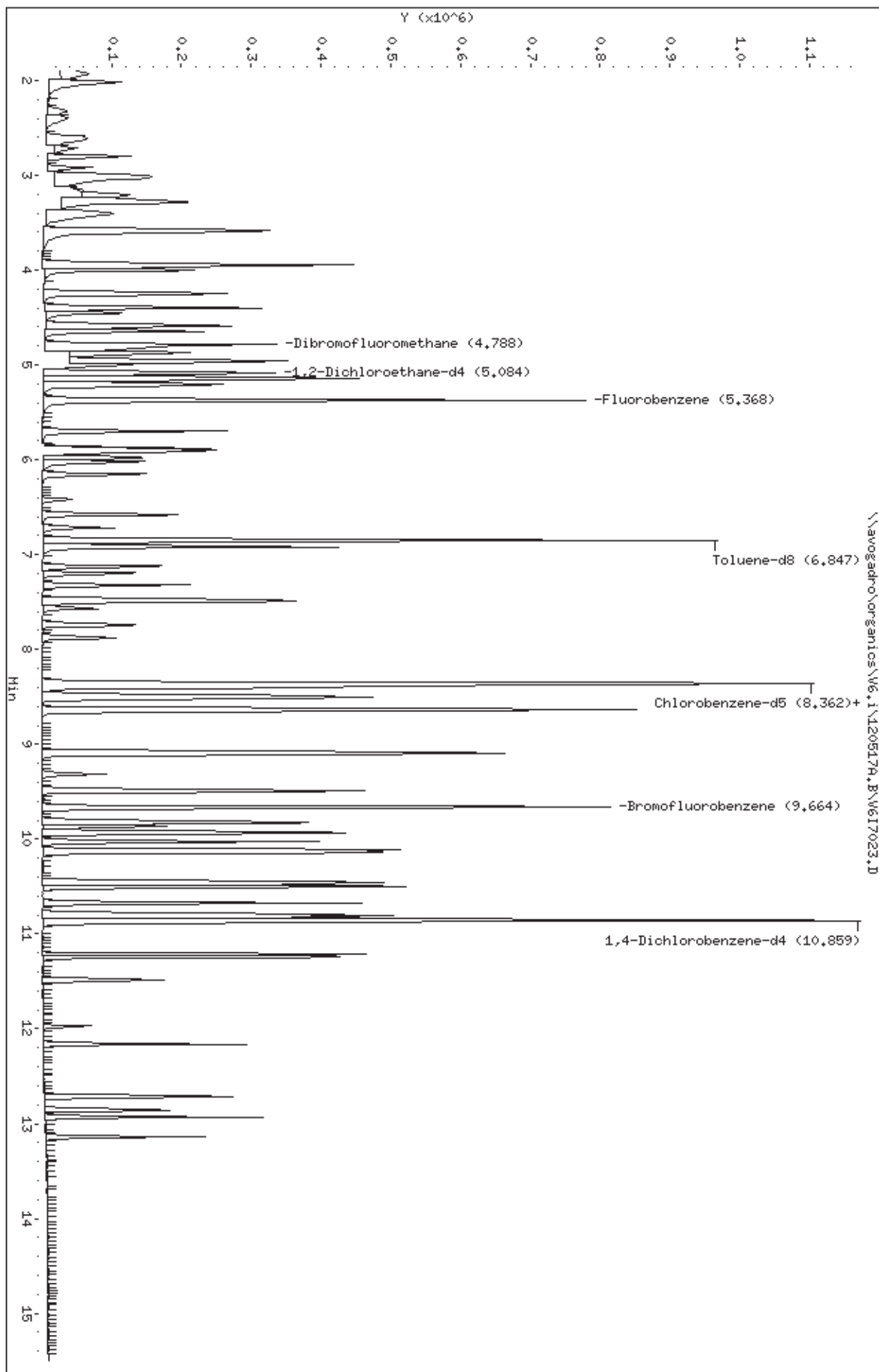
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.486	9.486	(1.134)	349118		20.0000	21
78 trans-1,4-Dichloro-2-butene	75	9.864	9.865	(1.180)	85652		20.0000	19(H)
\$ 79 Bromofluorobenzene	95	9.663	9.664	(1.156)	295598		50.0000	51
80 1,1,2,2-Tetrachloroethane	83	9.805	9.806	(0.903)	97492		20.0000	20
81 Bromobenzene	156	9.829	9.829	(0.905)	100161		20.0000	20
82 1,2,3-Trichloropropane	75	9.864	9.865	(0.908)	85652		20.0000	18(Q)
83 n-Propylbenzene	120	9.935	9.936	(0.915)	99234		20.0000	20(Q)
84 2-Chlorotoluene	126	10.030	10.031	(0.924)	91862		20.0000	20
85 1,3,5-Trimethylbenzene	105	10.113	10.113	(0.931)	285818		20.0000	21
86 4-Chlorotoluene	126	10.136	10.137	(0.934)	98724		20.0000	20(Q)
M 94 Xylene (Total)	106				427379		60.0000	63
87 tert-Butylbenzene	119	10.456	10.457	(0.963)	334461		20.0000	21
88 1,2,4-Trimethylbenzene	105	10.503	10.504	(0.967)	292797		20.0000	21
89 sec-Butylbenzene	105	10.669	10.670	(0.983)	349091		20.0000	21
90 1,3-Dichlorobenzene	146	10.787	10.788	(0.993)	182454		20.0000	20
91 4-Isopropyltoluene	119	10.811	10.812	(0.996)	291619		20.0000	21
* 92 1,4-Dichlorobenzene-d4	152	10.858	10.859	(1.000)	336194		50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.882	10.883	(1.002)	185943		20.0000	20
95 n-Butylbenzene	91	11.213	11.214	(1.033)	239617		20.0000	21
96 1,2-Dichlorobenzene	146	11.249	11.249	(1.036)	178822		20.0000	21
97 Hexachloroethane	117	11.485	11.486	(1.058)	39461		20.0000	21
98 1,2-Dibromo-3-chloropropane	75	11.970	11.971	(1.102)	15830		20.0000	20
141 1,3,5-Trichlorobenzene	182	12.160	12.161	(2.265)	82230		20.0000	22(A)
99 1,2,4-Trichlorobenzene	180	12.716	12.717	(1.171)	84240		20.0000	20
100 Hexachlorobutadiene	225	12.858	12.859	(1.184)	34363		20.0000	20
101 Naphthalene	128	12.929	12.930	(1.191)	231599		20.0000	22
102 1,2,3-Trichlorobenzene	180	13.142	13.143	(1.210)	71979		20.0000	21

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120517A,B\W6I7023.D
 Date : 17-May-2012 17:07
 Client ID: VSTD0206A
 Sample Info: 5HL,VSTD0206A,VSTD0206A
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: AH
 Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120517A.B\V6I7024.D
Report Date: 18-May-2012 12:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120517A.B\V6I7024.D
Lab Smp Id: VSTD0506A Client Smp ID: VSTD0506A
Inj Date : 17-MAY-2012 17:31
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506A,VSTD0506A
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517A.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 12:47 wluo Quant Type: ISTD
Cal Date : 17-MAY-2012 17:31 Cal File: V6I7024.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.748	1.748 (0.326)		206888	50.0000	51
2 Freon114	85	1.854	1.854 (0.345)		283148	50.0000	51
3 Chloromethane	50	1.937	1.937 (0.361)		355026	50.0000	52
4 Vinyl Chloride	62	2.020	2.020 (0.376)		266003	50.0000	52
5 Bromomethane	94	2.316	2.316 (0.431)		123943	50.0000	46
6 Chloroethane	64	2.410	2.410 (0.449)		147794	50.0000	50
7 Trichlorofluoromethane	101	2.588	2.588 (0.482)		263006	50.0000	51
126 Ethanol	46	2.718	2.718 (0.506)		75936	5000.00	4600(AQ)
8 Ether	59	2.801	2.801 (0.522)		163748	50.0000	49
9 Acrolein	56	2.919	2.919 (0.544)		217359	250.000	260(A)
10 1,1-Dichloroethene	96	3.014	3.014 (0.561)		212424	50.0000	51
11 1,1,2-Trichloro-1,2,2-Trifluo	101	3.002	3.002 (0.559)		202092	50.0000	50
12 Acetone	58	3.037	3.037 (0.566)		28732	50.0000	53
13 Iodomethane	142	3.156	3.156 (0.588)		360863	50.0000	50
14 Carbon Disulfide	76	3.203	3.203 (0.597)		836615	50.0000	51
15 Acetonitrile	41	3.274	3.274 (0.610)		555487	500.000	500(A)
16 Allyl Chloride	39	3.274	3.274 (0.610)		222473	50.0000	50(Q)
17 Methyl Acetate	43	3.286	3.286 (0.612)		171550	50.0000	50
18 Methylene Chloride	84	3.404	3.404 (0.634)		223876	50.0000	50
19 tert-Butanol	59	3.440	3.440 (0.641)		39997	100.000	98
20 Acrylonitrile	53	3.570	3.570 (0.665)		86720	50.0000	50
21 trans-1,2-Dichloroethene	96	3.594	3.594 (0.669)		194237	50.0000	49
22 Methyl tert-butyl ether	73	3.582	3.582 (0.667)		518575	50.0000	51

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.925	3.925	(0.731)	344606		50.0000	50
24 Vinyl acetate	43	3.949	3.949	(0.736)	756331		50.0000	50
25 Diisopropyl Ether	45	3.949	3.949	(0.736)	700537		50.0000	49
26 2-Chloro-1,3-Butadiene	53	3.996	3.996	(0.744)	298126		50.0000	50
27 Ethyl tert-butyl ether	59	4.244	4.244	(0.791)	574712		50.0000	50
29 2,2-Dichloropropane	77	4.398	4.398	(0.819)	155622		50.0000	49
28 cis-1,2-Dichloroethene	96	4.398	4.398	(0.819)	222913		50.0000	51
30 2-Butanone	72	4.398	4.398	(0.819)	27234		50.0000	55
32 Propionitrile	54	4.446	4.446	(0.828)	305919		500.000	500(A)
33 Methacrylonitrile	41	4.576	4.576	(0.852)	260232		100.000	92
34 Bromochloromethane	128	4.599	4.599	(0.857)	110366		50.0000	49
31 Tetrahydrofuran	72	4.635	4.635	(0.863)	49746		100.000	100
35 Chloroform	83	4.647	4.647	(0.866)	307263		50.0000	49
\$ 36 Dibromofluoromethane	113	4.789	4.789	(0.892)	206835		50.0000	51
37 1,1,1-Trichloroethane	97	4.824	4.824	(0.899)	255970		50.0000	50
38 Cyclohexane	56	4.872	4.872	(0.907)	335979		50.0000	50
39 1,1-Dichloropropene	110	4.954	4.954	(0.923)	101385		50.0000	50
40 Carbon Tetrachloride	117	4.966	4.966	(0.925)	218749		50.0000	51
41 Isobutyl Alcohol	43	5.002	5.002	(0.932)	189110		1000.00	990(A)
\$ 42 1,2-Dichloroethane-d4	102	5.085	5.085	(0.947)	46580		50.0000	49
43 Benzene	78	5.144	5.144	(0.958)	686006		50.0000	50
44 1,2-Dichloroethane	62	5.144	5.144	(0.958)	238555		50.0000	49
45 tert-Amyl methyl ether	73	5.203	5.203	(0.969)	518544		50.0000	51
M 50 1,2-Dichloroethene (Total)	96				417150		100.000	100
* 46 Fluorobenzene	96	5.369	5.369	(1.000)	715227		50.0000	
47 Trichloroethene	130	5.700	5.700	(1.062)	225328		50.0000	48
48 Methylcyclohexane	83	5.877	5.877	(1.095)	295569		50.0000	51
49 1,2-Dichloropropane	63	5.913	5.913	(1.101)	197798		50.0000	50
51 Methyl Methacrylate	69	5.972	5.972	(1.112)	143939		50.0000	52
52 Dibromomethane	93	6.019	6.019	(1.121)	126152		50.0000	51
53 1,4-Dioxane	88	6.019	6.019	(1.121)	33706		1000.00	920(A)
54 Bromodichloromethane	83	6.149	6.149	(1.145)	243234		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.422	6.422	(1.196)	55063		50.0000	60
56 cis-1,3-Dichloropropene	75	6.575	6.575	(1.225)	295493		50.0000	53
57 4-Methyl-2-pentanone	43	6.717	6.717	(1.251)	201939		50.0000	51
\$ 58 Toluene-d8	98	6.848	6.848	(0.819)	702027		50.0000	50
59 Toluene	91	6.919	6.919	(1.289)	752234		50.0000	50
60 trans-1,3-Dichloropropene	75	7.120	7.120	(1.326)	263748		50.0000	53
61 Ethyl Methacrylate	69	7.191	7.191	(1.339)	201029		50.0000	54
62 1,1,2-Trichloroethane	97	7.321	7.321	(1.364)	174367		50.0000	50
63 Tetrachloroethene	164	7.475	7.475	(0.894)	187435		50.0000	49
64 1,3-Dichloropropane	76	7.498	7.498	(0.897)	280086		50.0000	50
65 2-Hexanone	43	7.569	7.569	(0.905)	157749		50.0000	51
66 Dibromochloromethane	129	7.735	7.735	(0.925)	218982		50.0000	51
67 1,2-Dibromoethane	107	7.877	7.877	(0.942)	201942		50.0000	51
69 1-Chlorohexane	91	8.350	8.350	(0.999)	255325		50.0000	48(Q)
* 68 Chlorobenzene-d5	117	8.362	8.362	(1.000)	614633		50.0000	
70 Chlorobenzene	112	8.398	8.398	(1.004)	537210		50.0000	50
71 1,1,1,2-Tetrachloroethane	131	8.481	8.481	(1.014)	213396		50.0000	50
72 Ethylbenzene	106	8.504	8.504	(1.017)	283324		50.0000	50(Q)
73 m,p-Xylene	106	8.634	8.634	(1.033)	674293		100.000	100
74 o-Xylene	106	9.084	9.084	(1.086)	331730		50.0000	50
75 Styrene	104	9.096	9.096	(1.088)	535738		50.0000	52
76 Bromoform	173	9.321	9.321	(1.115)	135938		50.0000	53

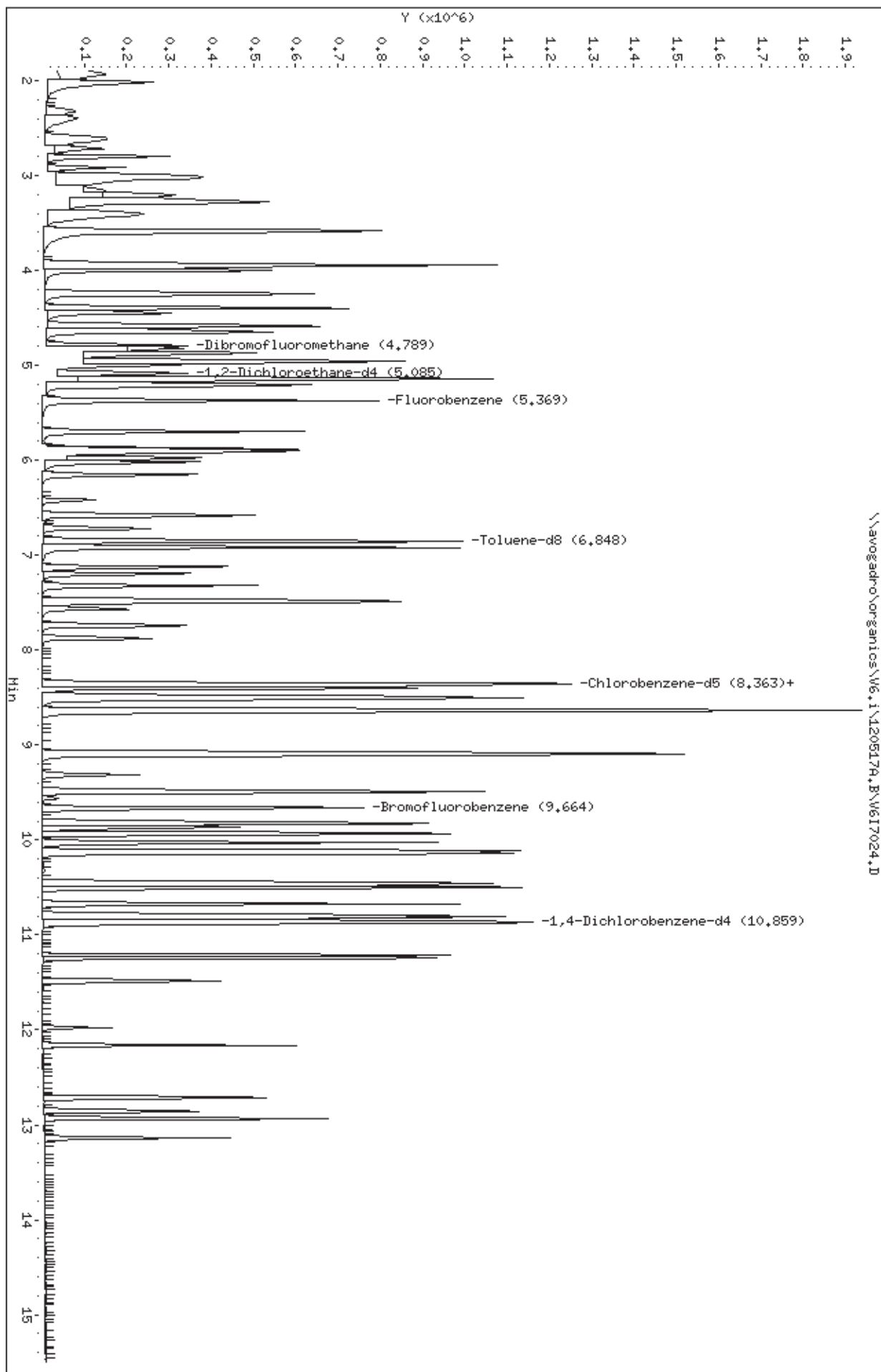
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.486	9.486 (1.134)		790766		50.0000	49
78 trans-1,4-Dichloro-2-butene	75	9.865	9.865 (1.180)		217679		50.0000	49(TH)
\$ 79 Bromofluorobenzene	95	9.664	9.664 (1.156)		288617		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.806	9.806 (0.903)		231200		50.0000	51
81 Bromobenzene	156	9.829	9.829 (0.905)		240208		50.0000	52
82 1,2,3-Trichloropropane	75	9.865	9.865 (0.908)		217679		50.0000	51
83 n-Propylbenzene	120	9.936	9.936 (0.915)		231715		50.0000	50(Q)
84 2-Chlorotoluene	126	10.031	10.031 (0.924)		218036		50.0000	52
85 1,3,5-Trimethylbenzene	105	10.113	10.113 (0.931)		628307		50.0000	50
86 4-Chlorotoluene	126	10.137	10.137 (0.934)		229129		50.0000	50
M 94 Xylene (Total)	106				1006023		150.000	150
87 tert-Butylbenzene	119	10.457	10.457 (0.963)		738373		50.0000	50
88 1,2,4-Trimethylbenzene	105	10.504	10.504 (0.967)		634918		50.0000	49
89 sec-Butylbenzene	105	10.670	10.670 (0.983)		740671		50.0000	48
90 1,3-Dichlorobenzene	146	10.788	10.788 (0.993)		405212		50.0000	50
91 4-Isopropyltoluene	119	10.812	10.812 (0.996)		627925		50.0000	48
* 92 1,4-Dichlorobenzene-d4	152	10.859	10.859 (1.000)		309228		50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.883	10.883 (1.002)		410323		50.0000	49
95 n-Butylbenzene	91	11.214	11.214 (1.033)		502699		50.0000	48
96 1,2-Dichlorobenzene	146	11.249	11.249 (1.036)		391414		50.0000	50
97 Hexachloroethane	117	11.486	11.486 (1.058)		93876		50.0000	54
98 1,2-Dibromo-3-chloropropane	75	11.971	11.971 (1.102)		38021		50.0000	53
141 1,3,5-Trichlorobenzene	182	12.161	12.161 (2.265)		168833		50.0000	45(A)
99 1,2,4-Trichlorobenzene	180	12.717	12.717 (1.171)		174530		50.0000	46
100 Hexachlorobutadiene	225	12.859	12.859 (1.184)		71448		50.0000	44
101 Naphthalene	128	12.930	12.930 (1.191)		486105		50.0000	50
102 1,2,3-Trichlorobenzene	180	13.143	13.143 (1.210)		146925		50.0000	46

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\120517A.B\W617024.D
Date : 17-May-2012 17:31
Client ID: VSTD0506A
Sample Info: 5HL,VSTD0506A,VSTD0506A
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120517A.B\V6I7025.D
 Report Date: 18-May-2012 12:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120517A.B\V6I7025.D
 Lab Smp Id: VSTD1006A Client Smp ID: VSTD1006A
 Inj Date : 17-MAY-2012 17:56
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VSTD1006A,VSTD1006A
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120517A.B\v68260Gadd-6lvl.m
 Meth Date : 18-May-2012 12:47 wluo Quant Type: ISTD
 Cal Date : 17-MAY-2012 17:56 Cal File: V6I7025.D
 Als bottle: 22 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.756	1.748 (0.327)		396823	100.000	97
2 Freon114	85	1.851	1.854 (0.344)		572607	100.000	100
3 Chloromethane	50	1.933	1.937 (0.360)		713198	100.000	100
4 Vinyl Chloride	62	2.028	2.020 (0.377)		516047	100.000	100
5 Bromomethane	94	2.324	2.316 (0.432)		246447	100.000	92
6 Chloroethane	64	2.407	2.410 (0.448)		295619	100.000	99
7 Trichlorofluoromethane	101	2.596	2.588 (0.483)		533074	100.000	100
126 Ethanol	46	2.714	2.718 (0.505)		156622	10000.0	8800(AQ)
8 Ether	59	2.797	2.801 (0.520)		332276	100.000	99
9 Acrolein	56	2.916	2.919 (0.542)		431335	500.000	510(A)
10 1,1-Dichloroethene	96	3.022	3.014 (0.562)		425678	100.000	100
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.998	3.002 (0.558)		434232	100.000	110
12 Acetone	58	3.034	3.037 (0.564)		58046	100.000	110
13 Iodomethane	142	3.164	3.156 (0.588)		777463	100.000	110
14 Carbon Disulfide	76	3.211	3.203 (0.597)		1299914	100.000	79
15 Acetonitrile	41	3.270	3.274 (0.608)		1113365	1000.00	990(A)
16 Allyl Chloride	39	3.282	3.274 (0.611)		445434	100.000	100(Q)
17 Methyl Acetate	43	3.282	3.286 (0.611)		337917	100.000	99
18 Methylene Chloride	84	3.401	3.404 (0.633)		443187	100.000	99
19 tert-Butanol	59	3.436	3.440 (0.639)		80689	200.000	200
20 Acrylonitrile	53	3.566	3.570 (0.663)		178391	100.000	100
21 trans-1,2-Dichloroethene	96	3.590	3.594 (0.668)		400717	100.000	100
22 Methyl tert-butyl ether	73	3.578	3.582 (0.665)		1007071	100.000	98

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.921	3.925 (0.729)		689403		100.000	100
24 Vinyl acetate	43	3.945	3.949 (0.734)		1453825		100.000	95
25 Diisopropyl Ether	45	3.957	3.949 (0.736)		1360670		100.000	95
26 2-Chloro-1,3-Butadiene	53	3.992	3.996 (0.743)		595249		100.000	99
27 Ethyl tert-butyl ether	59	4.241	4.244 (0.789)		1123761		100.000	96
29 2,2-Dichloropropane	77	4.395	4.398 (0.817)		306508		100.000	96
28 cis-1,2-Dichloroethene	96	4.395	4.398 (0.817)		413954		100.000	94
30 2-Butanone	72	4.395	4.398 (0.817)		53092		100.000	100
32 Propionitrile	54	4.454	4.446 (0.828)		615816		1000.00	990(A)
33 Methacrylonitrile	41	4.572	4.576 (0.850)		503326		200.000	180
34 Bromochloromethane	128	4.596	4.599 (0.855)		230553		100.000	100
31 Tetrahydrofuran	72	4.631	4.635 (0.861)		97932		200.000	200
35 Chloroform	83	4.643	4.647 (0.864)		604320		100.000	97
\$ 36 Dibromofluoromethane	113	4.785	4.789 (0.890)		205368		50.0000	50
37 1,1,1-Trichloroethane	97	4.821	4.824 (0.897)		505513		100.000	98
38 Cyclohexane	56	4.868	4.872 (0.905)		662146		100.000	98
39 1,1-Dichloropropene	110	4.951	4.954 (0.921)		204774		100.000	99
40 Carbon Tetrachloride	117	4.963	4.966 (0.923)		432536		100.000	100
41 Isobutyl Alcohol	43	4.998	5.002 (0.930)		371423		2000.00	1900(A)
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.085 (0.945)		46851		50.0000	49
43 Benzene	78	5.140	5.144 (0.956)		1308193		100.000	95
44 1,2-Dichloroethane	62	5.152	5.144 (0.958)		472315		100.000	97
45 tert-Amyl methyl ether	73	5.211	5.203 (0.969)		1014953		100.000	98
M 50 1,2-Dichloroethene (Total)	96				814671		200.000	190
* 46 Fluorobenzene	96	5.377	5.369 (1.000)		720094		50.0000	
47 Trichloroethene	130	5.696	5.700 (1.059)		441208		100.000	93
48 Methylcyclohexane	83	5.886	5.877 (1.095)		580011		100.000	100
49 1,2-Dichloropropane	63	5.909	5.913 (1.099)		383916		100.000	97
51 Methyl Methacrylate	69	5.980	5.972 (1.112)		279681		100.000	100
52 Dibromomethane	93	6.016	6.019 (1.119)		248394		100.000	99
53 1,4-Dioxane	88	6.016	6.019 (1.119)		71248		2000.00	1900(A)
54 Bromodichloromethane	83	6.158	6.149 (1.145)		473843		100.000	98
55 2-Chloroethyl vinyl ether	63	6.418	6.422 (1.194)		119109		100.000	130
56 cis-1,3-Dichloropropene	75	6.584	6.575 (1.224)		580851		100.000	100
57 4-Methyl-2-pentanone	43	6.714	6.717 (1.249)		389282		100.000	98
\$ 58 Toluene-d8	98	6.856	6.848 (0.819)		693535		50.0000	50
59 Toluene	91	6.915	6.919 (1.286)		1393776		100.000	92
60 trans-1,3-Dichloropropene	75	7.128	7.120 (1.326)		527267		100.000	100
61 Ethyl Methacrylate	69	7.199	7.191 (1.339)		408509		100.000	110
62 1,1,2-Trichloroethane	97	7.317	7.321 (1.361)		350281		100.000	99
63 Tetrachloroethene	164	7.483	7.475 (0.894)		349785		100.000	92
64 1,3-Dichloropropane	76	7.495	7.498 (0.895)		543060		100.000	98
65 2-Hexanone	43	7.566	7.569 (0.904)		300560		100.000	100
66 Dibromochloromethane	129	7.743	7.735 (0.925)		441393		100.000	100
67 1,2-Dibromoethane	107	7.873	7.877 (0.941)		388280		100.000	99
69 1-Chlorohexane	91	8.347	8.350 (0.997)		488863		100.000	93
* 68 Chlorobenzene-d5	117	8.370	8.362 (1.000)		603045		50.0000	
70 Chlorobenzene	112	8.394	8.398 (1.003)		1005978		100.000	96
71 1,1,1,2-Tetrachloroethane	131	8.477	8.481 (1.013)		412626		100.000	99
72 Ethylbenzene	106	8.512	8.504 (1.017)		531466		100.000	95
73 m,p-Xylene	106	8.631	8.634 (1.031)		1221648		200.000	180
74 o-Xylene	106	9.080	9.084 (1.085)		629121		100.000	96
75 Styrene	104	9.104	9.096 (1.088)		1030398		100.000	100
76 Bromoform	173	9.317	9.321 (1.113)		272309		100.000	110

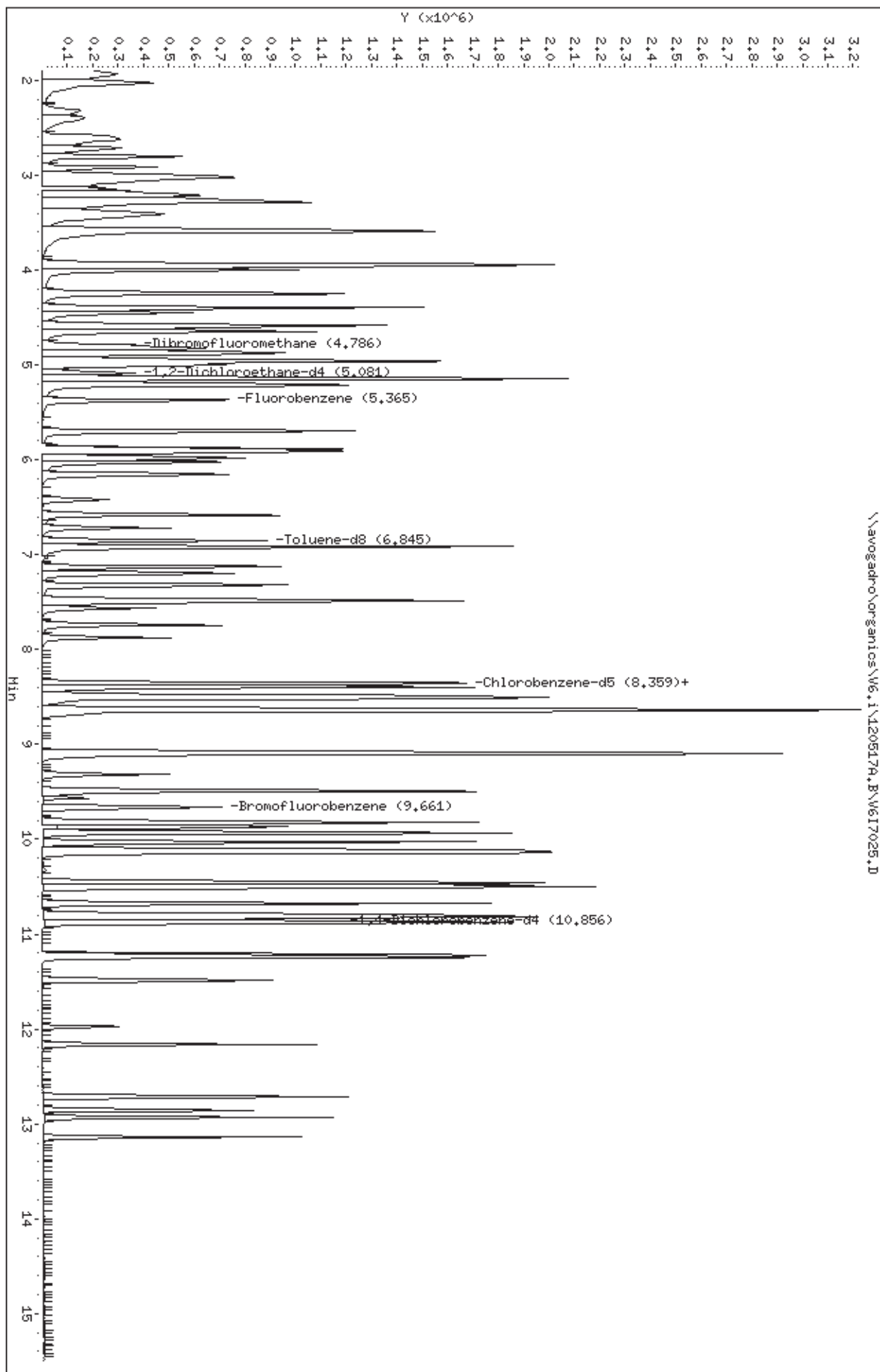
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.495	9.486	(1.134)	1431359	100.000	91
78 trans-1,4-Dichloro-2-butene	75	9.861	9.865	(1.178)	452057	100.000	100(H)
\$ 79 Bromofluorobenzene	95	9.660	9.664	(1.154)	273809	50.0000	48
80 1,1,2,2-Tetrachloroethane	83	9.814	9.806	(0.904)	436948	100.000	100
81 Bromobenzene	156	9.826	9.829	(0.905)	442658	100.000	100
82 1,2,3-Trichloropropane	75	9.861	9.865	(0.908)	449601	100.000	110
83 n-Propylbenzene	120	9.932	9.936	(0.915)	437062	100.000	100
84 2-Chlorotoluene	126	10.027	10.031	(0.924)	407889	100.000	100
85 1,3,5-Trimethylbenzene	105	10.110	10.113	(0.931)	1149270	100.000	97
86 4-Chlorotoluene	126	10.145	10.137	(0.935)	419907	100.000	98
M 94 Xylene (Total)	106				1850769	300.000	280
87 tert-Butylbenzene	119	10.453	10.457	(0.963)	1369269	100.000	99
88 1,2,4-Trimethylbenzene	105	10.500	10.504	(0.967)	1158872	100.000	96
89 sec-Butylbenzene	105	10.678	10.670	(0.984)	1343981	100.000	94
90 1,3-Dichlorobenzene	146	10.796	10.788	(0.995)	733278	100.000	96
91 4-Isopropyltoluene	119	10.820	10.812	(0.997)	1152774	100.000	95
* 92 1,4-Dichlorobenzene-d4	152	10.855	10.859	(1.000)	290003	50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.879	10.883	(1.002)	750670	100.000	96
95 n-Butylbenzene	91	11.222	11.214	(1.034)	942862	100.000	96
96 1,2-Dichlorobenzene	146	11.246	11.249	(1.036)	701822	100.000	95
97 Hexachloroethane	117	11.482	11.486	(1.058)	209489	100.000	130
98 1,2-Dibromo-3-chloropropane	75	11.968	11.971	(1.102)	74397	100.000	110
141 1,3,5-Trichlorobenzene	182	12.169	12.161	(2.263)	339479	100.000	89(A)
99 1,2,4-Trichlorobenzene	180	12.713	12.717	(1.171)	346670	100.000	97
100 Hexachlorobutadiene	225	12.855	12.859	(1.184)	145695	100.000	96
101 Naphthalene	128	12.938	12.930	(1.192)	949566	100.000	100
102 1,2,3-Trichlorobenzene	180	13.139	13.143	(1.210)	291271	100.000	98

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\120517H.B\W617025.D
Date : 17-May-2012 17:56
Client ID: VSTD1006A
Sample Info: 5HL,VSTD1006A,VSTD1006A
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120517A.B\V6I7026.D
Lab Smp Id: VSTD2006A Client Smp ID: VSTD2006A
Inj Date : 17-MAY-2012 18:20
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD2006A,VSTD2006A
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517A.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 12:47 wluo Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 23 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.744	1.748 (0.324)		788917	200.000	200
2 Freon114	85	1.851	1.854 (0.344)		1081606	200.000	200
3 Chloromethane	50	1.933	1.937 (0.360)		1390345	200.000	210(A)
4 Vinyl Chloride	62	2.028	2.020 (0.377)		1036204	200.000	200
5 Bromomethane	94	2.324	2.316 (0.432)		506096	200.000	190
6 Chloroethane	64	2.395	2.410 (0.445)		583557	200.000	200
7 Trichlorofluoromethane	101	2.596	2.588 (0.483)		1063290	200.000	210(A)
126 Ethanol	46	2.714	2.718 (0.505)		378052	20000.0	20000(A)
8 Ether	59	2.797	2.801 (0.520)		634038	200.000	190
9 Acrolein	56	2.916	2.919 (0.542)		846212	1000.00	1000(A)
10 1,1-Dichloroethene	96	3.022	3.014 (0.562)		843732	200.000	210(A)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.998	3.002 (0.558)		851332	200.000	220(A)
12 Acetone	58	3.034	3.037 (0.564)		110010	200.000	210(A)
13 Iodomethane	142	3.164	3.156 (0.588)		1621085	200.000	230(A)
14 Carbon Disulfide	76	3.211	3.203 (0.597)		3137917	200.000	200
15 Acetonitrile	41	3.270	3.274 (0.608)		2193356	2000.00	2000(A)
16 Allyl Chloride	39	3.282	3.274 (0.611)		894589	200.000	200(A)
17 Methyl Acetate	43	3.282	3.286 (0.611)		645345	200.000	190
18 Methylene Chloride	84	3.401	3.404 (0.633)		876622	200.000	200
19 tert-Butanol	59	3.436	3.440 (0.639)		159784	400.000	400(A)
20 Acrylonitrile	53	3.566	3.570 (0.663)		350390	200.000	210(A)
21 trans-1,2-Dichloroethene	96	3.590	3.594 (0.668)		782036	200.000	200
22 Methyl tert-butyl ether	73	3.578	3.582 (0.666)		1834433	200.000	180

Data File: \\avogadro\organics\V6.i\120517A.B\V6I7026.D
Report Date: 18-May-2012 12:48

						AMOUNTS	
		QUANT	SIG			CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.921	3.925	(0.729)	1315091	200.000	190
24 Vinyl acetate	43	3.945	3.949	(0.734)	2604723	200.000	170
25 Diisopropyl Ether	45	3.957	3.949	(0.736)	2464669	200.000	180
26 2-Chloro-1,3-Butadiene	53	3.992	3.996	(0.743)	1127709	200.000	190
27 Ethyl tert-butyl ether	59	4.241	4.244	(0.789)	2090991	200.000	180
29 2,2-Dichloropropane	77	4.395	4.398	(0.817)	564139	200.000	180
28 cis-1,2-Dichloroethene	96	4.395	4.398	(0.817)	794595	200.000	180
30 2-Butanone	72	4.395	4.398	(0.817)	104349	200.000	210(A)
32 Propionitrile	54	4.454	4.446	(0.828)	1179658	2000.00	1900(A)
33 Methacrylonitrile	41	4.572	4.576	(0.850)	946554	400.000	340(A)
34 Bromochloromethane	128	4.596	4.599	(0.855)	449440	200.000	200
31 Tetrahydrofuran	72	4.631	4.635	(0.861)	196305	400.000	400(A)
35 Chloroform	83	4.643	4.647	(0.864)	1140131	200.000	180
\$ 36 Dibromofluoromethane	113	4.785	4.789	(0.890)	200097	50.0000	50
37 1,1,1-Trichloroethane	97	4.821	4.824	(0.897)	968120	200.000	190
38 Cyclohexane	56	4.868	4.872	(0.905)	1262825	200.000	190
39 1,1-Dichloropropene	110	4.951	4.954	(0.921)	396992	200.000	200
40 Carbon Tetrachloride	117	4.963	4.966	(0.923)	812172	200.000	190
41 Isobutyl Alcohol	43	4.998	5.002	(0.930)	715038	4000.00	3800(A)
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.085	(0.945)	46336	50.0000	50
43 Benzene	78	5.140	5.144	(0.956)	2317021	200.000	170
44 1,2-Dichloroethane	62	5.152	5.144	(0.958)	896396	200.000	190
45 tert-Amyl methyl ether	73	5.211	5.203	(0.969)	1890576	200.000	190
M 50 1,2-Dichloroethene (Total)	96				1576631	400.000	380
* 46 Fluorobenzene	96	5.377	5.369	(1.000)	706444	50.0000	
47 Trichloroethene	130	5.696	5.700	(1.059)	822894	200.000	180
48 Methylcyclohexane	83	5.886	5.877	(1.095)	1111870	200.000	200
49 1,2-Dichloropropane	63	5.909	5.913	(1.099)	736719	200.000	190
51 Methyl Methacrylate	69	5.980	5.972	(1.112)	542966	200.000	200
52 Dibromomethane	93	6.016	6.019	(1.119)	479355	200.000	200
53 1,4-Dioxane	88	6.016	6.019	(1.119)	151051	4000.00	4200(A)
54 Bromodichloromethane	83	6.158	6.149	(1.145)	893364	200.000	190
55 2-Chloroethyl vinyl ether	63	6.418	6.422	(1.194)	250972	200.000	280(A)
56 cis-1,3-Dichloropropene	75	6.584	6.575	(1.224)	1096505	200.000	200
57 4-Methyl-2-pentanone	43	6.714	6.717	(1.249)	732942	200.000	190
\$ 58 Toluene-d8	98	6.856	6.848	(0.819)	671813	50.0000	51
59 Toluene	91	6.915	6.919	(1.286)	2434135	200.000	160
60 trans-1,3-Dichloropropene	75	7.128	7.120	(1.326)	1000791	200.000	200
61 Ethyl Methacrylate	69	7.199	7.191	(1.339)	797587	200.000	210(A)
62 1,1,2-Trichloroethane	97	7.317	7.321	(1.361)	661003	200.000	190
63 Tetrachloroethene	164	7.483	7.475	(0.894)	640559	200.000	180
64 1,3-Dichloropropane	76	7.495	7.498	(0.895)	1010666	200.000	190
65 2-Hexanone	43	7.566	7.569	(0.904)	583970	200.000	200
66 Dibromochloromethane	129	7.743	7.735	(0.925)	847940	200.000	210(A)
67 1,2-Dibromoethane	107	7.873	7.877	(0.941)	734065	200.000	200
69 1-Chlorohexane	91	8.347	8.350	(0.997)	891664	200.000	180
* 68 Chlorobenzene-d5	117	8.370	8.362	(1.000)	579245	50.0000	
70 Chlorobenzene	112	8.394	8.398	(1.003)	1810908	200.000	180
71 1,1,1,2-Tetrachloroethane	131	8.477	8.481	(1.013)	788418	200.000	200
72 Ethylbenzene	106	8.512	8.504	(1.017)	1000825	200.000	180
73 m,p-Xylene	106	8.643	8.634	(1.033)	2190489	400.000	340(A)
74 o-Xylene	106	9.080	9.084	(1.085)	1165934	200.000	180
75 Styrene	104	9.104	9.096	(1.088)	1877637	200.000	190
76 Bromoform	173	9.317	9.321	(1.113)	537619	200.000	220(A)

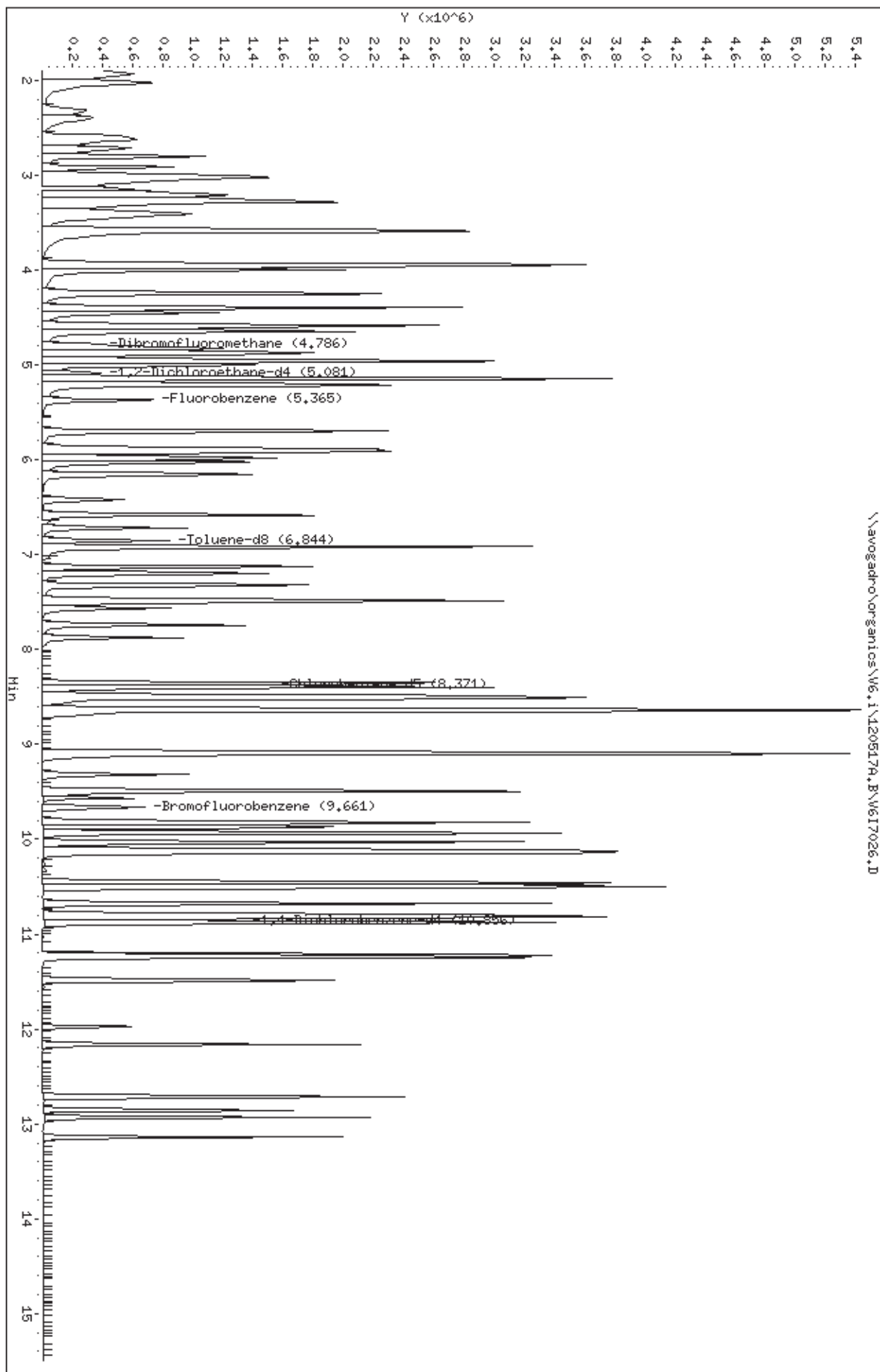
						AMOUNTS	
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.495	9.486	(1.134)	2553362	200.000	170
78 trans-1,4-Dichloro-2-butene	75	9.861	9.865	(1.178)	920731	200.000	220(AH)
\$ 79 Bromofluorobenzene	95	9.660	9.664	(1.154)	267832	50.0000	49
80 1,1,2,2-Tetrachloroethane	83	9.814	9.806	(0.904)	819710	200.000	190
81 Bromobenzene	156	9.826	9.829	(0.905)	832146	200.000	190
82 1,2,3-Trichloropropane	75	9.861	9.865	(0.908)	916062	200.000	220(A)
83 n-Propylbenzene	120	9.932	9.936	(0.915)	829189	200.000	190
84 2-Chlorotoluene	126	10.027	10.031	(0.924)	781787	200.000	190
85 1,3,5-Trimethylbenzene	105	10.122	10.113	(0.932)	2093357	200.000	170
86 4-Chlorotoluene	126	10.145	10.137	(0.935)	814110	200.000	190
M 94 Xylene (Total)	106				3356423	600.000	530
87 tert-Butylbenzene	119	10.453	10.457	(0.963)	2558461	200.000	180
88 1,2,4-Trimethylbenzene	105	10.500	10.504	(0.967)	2112275	200.000	170
89 sec-Butylbenzene	105	10.678	10.670	(0.984)	2425080	200.000	170
90 1,3-Dichlorobenzene	146	10.796	10.788	(0.995)	1359862	200.000	170
91 4-Isopropyltoluene	119	10.820	10.812	(0.997)	2105598	200.000	170
* 92 1,4-Dichlorobenzene-d4	152	10.855	10.859	(1.000)	294985	50.0000	
93 1,4-Dichlorobenzene	146	10.879	10.883	(1.002)	1387742	200.000	170
95 n-Butylbenzene	91	11.222	11.214	(1.034)	1751246	200.000	180
96 1,2-Dichlorobenzene	146	11.246	11.249	(1.036)	1298964	200.000	170
97 Hexachloroethane	117	11.482	11.486	(1.058)	457871	200.000	280(A)
98 1,2-Dibromo-3-chloropropane	75	11.968	11.971	(1.102)	146412	200.000	210(A)
141 1,3,5-Trichlorobenzene	182	12.169	12.161	(2.263)	665473	200.000	180(A)
99 1,2,4-Trichlorobenzene	180	12.713	12.717	(1.171)	688676	200.000	190
100 Hexachlorobutadiene	225	12.855	12.859	(1.184)	283988	200.000	180
101 Naphthalene	128	12.938	12.930	(1.192)	1738741	200.000	190
102 1,2,3-Trichlorobenzene	180	13.139	13.143	(1.210)	577983	200.000	190

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\1205179.B\W617026.D
 Date : 17-May-2012 18:20
 Client ID: VSTD2006A
 Sample Info: 5HL,VSTD2006A,VSTD2006A
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6.i
 Operator: AH SRC: AH
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120516.B\V8B1704.d
Lab Smp Id: VSTD05010D Client Smp ID: VSTD05010D
Inj Date : 16-MAY-2012 12:07
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD05010D,VSTD05010D
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:19 adatta Quant Type: ISTD
Cal Date : 15-MAY-2012 00:28 Cal File: V8B1642.d
Als bottle: 100 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.651	1.647 (0.311)		141659	50.0000	(aQ)
2 Freon114	85	1.766	1.766 (0.333)		131257	50.0000	(aQ)
3 Chloromethane	50	1.818	1.818 (0.343)		171936	50.0000	(aQ)
4 Vinyl Chloride	62	1.917	1.917 (0.362)		142851	50.0000	(aQ)
5 Bromomethane	94	2.204	2.200 (0.416)		52998	50.0000	(aQ)
6 Chloroethane	64	2.294	2.294 (0.433)		69978	50.0000	(aQ)
7 Trichlorofluoromethane	101	2.509	2.506 (0.473)		156925	50.0000	(aQ)
126 Ethanol	46	2.631	2.631 (0.497)		42741	5000.00	(aQ)
8 Ether	59	2.731	2.731 (0.515)		117925	50.0000	(aQ)
9 Acrolein	56	2.834	2.834 (0.535)		162441	250.000	(aQ)
10 1,1-Dichloroethene	96	2.924	2.924 (0.552)		120426	50.0000	(aQ)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.914 (0.550)		118473	50.0000	(aQ)
12 Acetone	58	2.953	2.953 (0.557)		26038	50.0000	(aQ)
13 Iodomethane	142	3.049	3.049 (0.575)		73850	50.0000	(aQ)
14 Carbon Disulfide	76	3.113	3.114 (0.587)		414673	50.0000	(aQ)
15 Acetonitrile	41	3.207	3.204 (0.605)		221369	500.000	(aQ)
16 Allyl Chloride	39	3.207	3.204 (0.605)		133629	50.0000	(aQ)
17 Methyl Acetate	43	3.210	3.210 (0.606)		106490	50.0000	(aQ)
18 Methylene Chloride	84	3.300	3.297 (0.623)		144984	50.0000	(aQ)
19 tert-Butanol	59	3.358	3.361 (0.634)		27362	100.000	(a)
20 Acrylonitrile	53	3.486	3.487 (0.658)		54489	50.0000	(aQ)
21 trans-1,2-Dichloroethene	96	3.519	3.519 (0.664)		131814	50.0000	(aQ)
22 Methyl tert-butyl ether	73	3.509	3.512 (0.662)		396972	50.0000	(aQ)

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	248317		50.0000	(aQ)
24 Vinyl acetate	43	3.879	3.879	(0.732)	478131		50.0000	(aQ)
25 Diisopropyl Ether	45	3.888	3.888	(0.734)	442395		50.0000	(aQ)
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	192867		50.0000	(aQ)
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	409640		50.0000	(aQ)
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	198670		50.0000	(aQ)
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	147345		50.0000	(aQ)
30 2-Butanone	72	4.319	4.319	(0.815)	22517		50.0000	(aQ)
32 Propionitrile	54	4.367	4.368	(0.824)	201848		500.000	(aQ)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	160822		100.000	(aQ)
34 Bromochloromethane	128	4.519	4.519	(0.853)	66221		50.0000	(aQ)
31 Tetrahydrofuran	72	4.564	4.560	(0.861)	38615		100.000	(aQ)
35 Chloroform	83	4.573	4.573	(0.863)	239151		50.0000	(aQ)
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	126202		50.0000	(a)
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	197554		50.0000	(aQ)
38 Cyclohexane	56	4.808	4.808	(0.907)	211687		50.0000	(aQ)
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	64712		50.0000	(aQ)
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	166587		50.0000	(aQ)
41 Isobutyl Alcohol	43	4.924	4.927	(0.929)	125456		1000.00	(aQ)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	29978		50.0000	(a)
43 Benzene	78	5.068	5.068	(0.956)	547464		50.0000	(a)
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	185558		50.0000	(aQ)
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	389851		50.0000	(aQ)
M 50 1,2-Dichloroethene (Total)	96				279159		100.000	(a)
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	498725		50.0000	(Q)
47 Trichloroethene	130	5.631	5.628	(1.062)	136290		50.0000	(aQ)
48 Methylcyclohexane	83	5.818	5.818	(1.098)	201343		50.0000	(aQ)
49 1,2-Dichloropropane	63	5.834	5.837	(1.101)	147170		50.0000	(aQ)
51 Methyl Methacrylate	69	5.911	5.911	(1.115)	111319		50.0000	(aQ)
52 Dibromomethane	93	5.943	5.943	(1.121)	89563		50.0000	(aQ)
53 1,4-Dioxane	88	5.943	5.946	(1.121)	36987		1000.00	(aQ)
54 Bromodichloromethane	83	6.078	6.078	(1.147)	184948		50.0000	(aQ)
55 2-Chloroethyl vinyl ether	63	6.506	6.503	(1.227)	1099		50.0000	(TaQ)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	223014		50.0000	(aQ)
57 4-Methyl-2-pentanone	43	6.644	6.644	(1.254)	130542		50.0000	(aQ)
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	485855		50.0000	(a)
59 Toluene	91	6.850	6.850	(1.292)	564359		50.0000	(aQ)
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.330)	197141		50.0000	(aQ)
61 Ethyl Methacrylate	69	7.129	7.130	(1.345)	156134		50.0000	(aQ)
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	126072		50.0000	(aQ)
63 Tetrachloroethene	164	7.409	7.409	(0.894)	107239		50.0000	(aQ)
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	216645		50.0000	(aQ)
65 2-Hexanone	43	7.490	7.490	(0.904)	103414		50.0000	(aQ)
66 Dibromochloromethane	129	7.657	7.657	(0.924)	140579		50.0000	(aQ)
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	129488		50.0000	(aQ)
69 1-Chlorohexane	91	8.277	8.277	(0.999)	175356		50.0000	(aQ)
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	356548		50.0000	(Q)
70 Chlorobenzene	112	8.319	8.319	(1.004)	356087		50.0000	(aQ)
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	128321		50.0000	(aQ)
72 Ethylbenzene	106	8.435	8.435	(1.018)	187721		50.0000	(aQ)
73 m,p-Xylene	106	8.563	8.564	(1.033)	466081		100.000	(aQ)
74 o-Xylene	106	9.010	9.010	(1.087)	225779		50.0000	(aQ)
75 Styrene	104	9.023	9.023	(1.089)	370604		50.0000	(aQ)
76 Bromoform	173	9.226	9.226	(1.113)	87231		50.0000	(aQ)

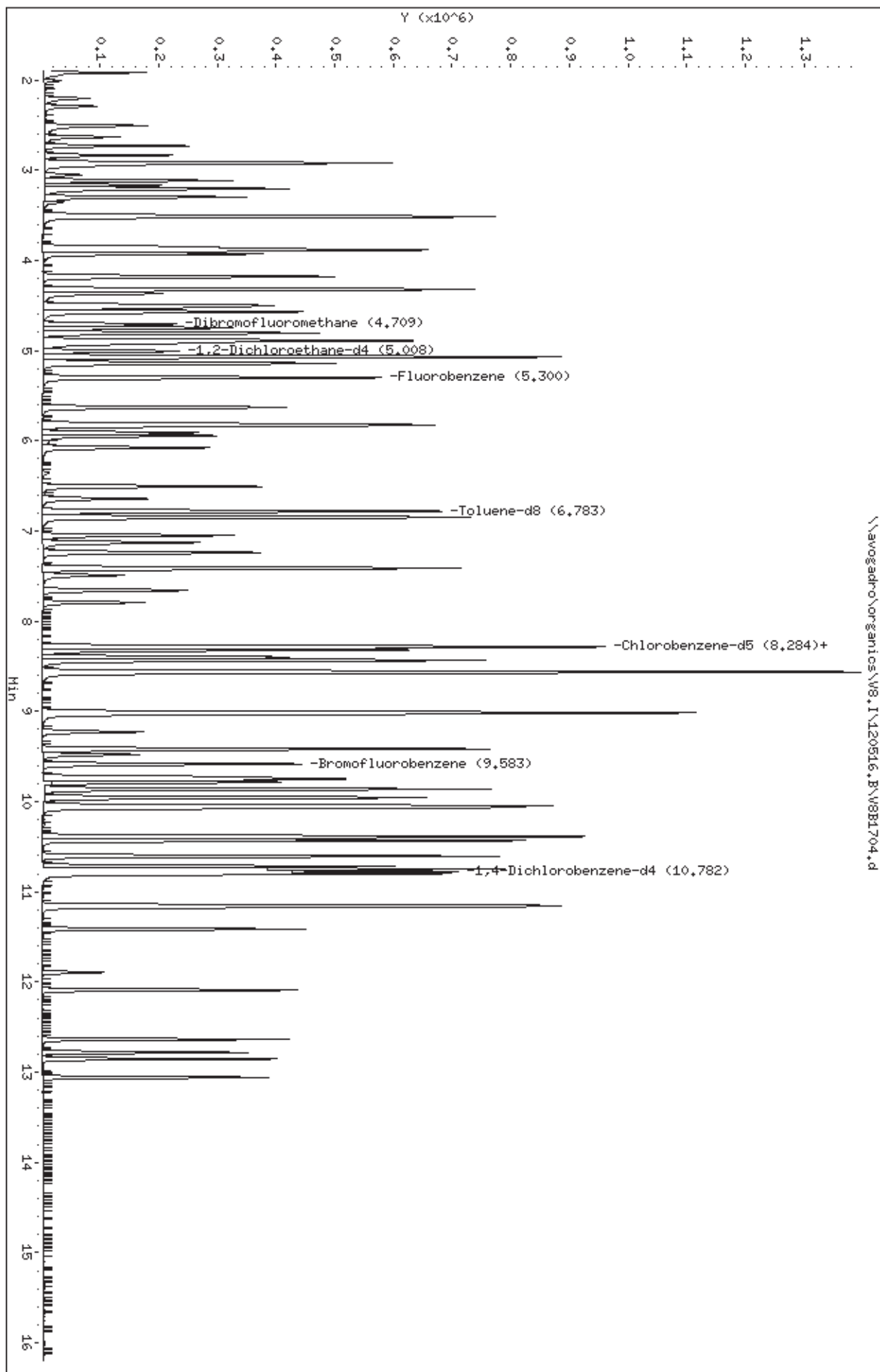
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.419	9.419 (1.137)		556721		50.0000	(aQ)
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		43241		50.0000	(aQ)
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.156)		171394		50.0000	(aQ)
80 1,1,2,2-Tetrachloroethane	83	9.727	9.724 (0.902)		170010		50.0000	(aQ)
81 Bromobenzene	156	9.750	9.753 (0.904)		141953		50.0000	(aQ)
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.907)		198736		50.0000	(aQ)
83 n-Propylbenzene	120	9.862	9.863 (0.915)		144823		50.0000	(aQ)
84 2-Chlorotoluene	126	9.956	9.956 (0.923)		134106		50.0000	(aQ)
85 1,3,5-Trimethylbenzene	105	10.046	10.046 (0.932)		452203		50.0000	(aQ)
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		137280		50.0000	(aQ)
M 94 Xylene (Total)	106				691860		150.000	(a)
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		451522		50.0000	(aQ)
88 1,2,4-Trimethylbenzene	105	10.432	10.432 (0.967)		459601		50.0000	(aQ)
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		550821		50.0000	(aQ)
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		245118		50.0000	(aQ)
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		442746		50.0000	(aQ)
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779 (1.000)		171338		50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.804	10.805 (1.002)		251192		50.0000	(aQ)
95 n-Butylbenzene	91	11.149	11.149 (1.034)		391595		50.0000	(aQ)
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		242285		50.0000	(aQ)
97 Hexachloroethane	117	11.412	11.412 (1.058)		89036		50.0000	(aQ)
98 1,2-Dibromo-3-chloropropane	75	11.894	11.895 (1.103)		25000		50.0000	(aQ)
141 1,3,5-Trichlorobenzene	182	12.091	12.091 (2.281)		120133		50.0000	(aQ)
99 1,2,4-Trichlorobenzene	180	12.637	12.637 (1.172)		116841		50.0000	(aQ)
100 Hexachlorobutadiene	225	12.782	12.782 (1.185)		58424		50.0000	(aQ)
101 Naphthalene	128	12.853	12.853 (1.192)		279585		50.0000	(a)
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		105811		50.0000	(aQ)

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W8,I\120516,B\W8B1704.d
Date : 16-May-2012 12:07
Client ID: WSTD05010D
Sample Info: 5HL,WSTD05010D,WSTD05010D
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120516.B\V8B1705.d
Lab Smp Id: VSTD02010D Client Smp ID: VSTD02010D
Inj Date : 16-MAY-2012 12:33
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD02010D,VSTD02010D
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:19 adatta Quant Type: ISTD
Cal Date : 16-MAY-2012 12:33 Cal File: V8B1705.d
Als bottle: 100 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.647	1.647	(0.311)	64737	20.0000	21
2 Freon114	85		1.766	1.766	(0.333)	60238	20.0000	21
3 Chloromethane	50		1.818	1.818	(0.343)	74088	20.0000	21
4 Vinyl Chloride	62		1.917	1.917	(0.362)	62551	20.0000	21
5 Bromomethane	94		2.207	2.200	(0.416)	23571	20.0000	21
6 Chloroethane	64		2.294	2.294	(0.433)	29875	20.0000	20
7 Trichlorofluoromethane	101		2.506	2.506	(0.473)	70555	20.0000	21
126 Ethanol	46		2.631	2.631	(0.497)	21367	2000.00	2200(A)
8 Ether	59		2.731	2.731	(0.515)	49136	20.0000	20
9 Acrolein	56		2.834	2.834	(0.535)	67172	100.000	100
10 1,1-Dichloroethene	96		2.924	2.924	(0.552)	53224	20.0000	21
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.917	2.914	(0.550)	53855	20.0000	21
12 Acetone	58		2.956	2.953	(0.558)	9792	20.0000	19
13 Iodomethane	142		3.052	3.049	(0.576)	27187	20.0000	19
14 Carbon Disulfide	76		3.117	3.114	(0.588)	171767	20.0000	20
15 Acetonitrile	41		3.204	3.204	(0.604)	106668	200.000	220(A)
16 Allyl Chloride	39		3.207	3.204	(0.605)	59183	20.0000	21
17 Methyl Acetate	43		3.213	3.210	(0.606)	43854	20.0000	20
18 Methylene Chloride	84		3.300	3.297	(0.623)	61145	20.0000	20
19 tert-Butanol	59		3.361	3.361	(0.634)	12179	40.0000	42
20 Acrylonitrile	53		3.493	3.487	(0.659)	20443	20.0000	19
21 trans-1,2-Dichloroethene	96		3.519	3.519	(0.664)	56008	20.0000	20

						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
22 Methyl tert-butyl ether	73	3.512	3.512	(0.663)	162935	20.0000	20	
23 1,1-Dichloroethane	63	3.853	3.850	(0.727)	106491	20.0000	20	
24 Vinyl acetate	43	3.879	3.879	(0.732)	194353	20.0000	20	
25 Diisopropyl Ether	45	3.888	3.888	(0.734)	188333	20.0000	20	
26 2-Chloro-1,3-Butadiene	53	3.930	3.927	(0.742)	82802	20.0000	20	
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	170007	20.0000	20	
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	83392	20.0000	20	
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	61799	20.0000	20	
30 2-Butanone	72	4.322	4.319	(0.816)	8790	20.0000	20	
32 Propionitrile	54	4.367	4.368	(0.824)	85056	200.000	200	
33 Methacrylonitrile	41	4.499	4.496	(0.849)	64941	40.0000	40	
34 Bromochloromethane	128	4.522	4.519	(0.853)	27703	20.0000	20	
31 Tetrahydrofuran	72	4.564	4.560	(0.861)	15267	40.0000	40	
35 Chloroform	83	4.573	4.573	(0.863)	101566	20.0000	20	
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	127672	50.0000	50	
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	85494	20.0000	21	
38 Cyclohexane	56	4.808	4.808	(0.907)	93994	20.0000	21	
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	27726	20.0000	20	
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	71917	20.0000	21	
41 Isobutyl Alcohol	43	4.927	4.927	(0.930)	57211	400.000	420(A)	
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	29440	50.0000	49	
43 Benzene	78	5.068	5.068	(0.956)	233778	20.0000	20	
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	77398	20.0000	20	
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	160113	20.0000	20	
M 50 1,2-Dichloroethene (Total)	96				117807	40.0000	41	
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	504177	50.0000		
47 Trichloroethene	130	5.628	5.628	(1.062)	57392	20.0000	20	
48 Methylcyclohexane	83	5.818	5.818	(1.098)	86393	20.0000	20	
49 1,2-Dichloropropane	63	5.834	5.837	(1.101)	62153	20.0000	20	
51 Methyl Methacrylate	69	5.914	5.911	(1.116)	44959	20.0000	20	
52 Dibromomethane	93	5.946	5.943	(1.122)	36790	20.0000	20	
53 1,4-Dioxane	88	5.946	5.946	(1.122)	16416	400.000	420(A)	
54 Bromodichloromethane	83	6.078	6.078	(1.147)	75790	20.0000	20	
55 2-Chloroethyl vinyl ether	63	6.512	6.503	(1.229)	407	20.0000	19(T)	
56 cis-1,3-Dichloropropene	75	6.509	6.506	(1.228)	88763	20.0000	20	
57 4-Methyl-2-pentanone	43	6.644	6.644	(1.254)	54326	20.0000	20	
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	485877	50.0000	50	
59 Toluene	91	6.850	6.850	(1.292)	239669	20.0000	20	
60 trans-1,3-Dichloropropene	75	7.052	7.049	(1.331)	78304	20.0000	20	
61 Ethyl Methacrylate	69	7.129	7.130	(1.345)	63158	20.0000	20	
62 1,1,2-Trichloroethane	97	7.242	7.239	(1.366)	53550	20.0000	20	
63 Tetrachloroethene	164	7.409	7.409	(0.894)	45732	20.0000	21	
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	90343	20.0000	20	
65 2-Hexanone	43	7.493	7.490	(0.904)	42065	20.0000	20	
66 Dibromochloromethane	129	7.660	7.657	(0.924)	56783	20.0000	20	
67 1,2-Dibromoethane	107	7.795	7.792	(0.941)	53229	20.0000	20	
69 1-Chlorohexane	91	8.277	8.277	(0.999)	71105	20.0000	20	
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	353337	50.0000		
70 Chlorobenzene	112	8.319	8.319	(1.004)	149619	20.0000	20	
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	53169	20.0000	20	
72 Ethylbenzene	106	8.435	8.435	(1.018)	78199	20.0000	20	
73 m,p-Xylene	106	8.563	8.564	(1.033)	195096	40.0000	41	
74 o-Xylene	106	9.010	9.010	(1.087)	93928	20.0000	20	
75 Styrene	104	9.023	9.023	(1.089)	149718	20.0000	20	

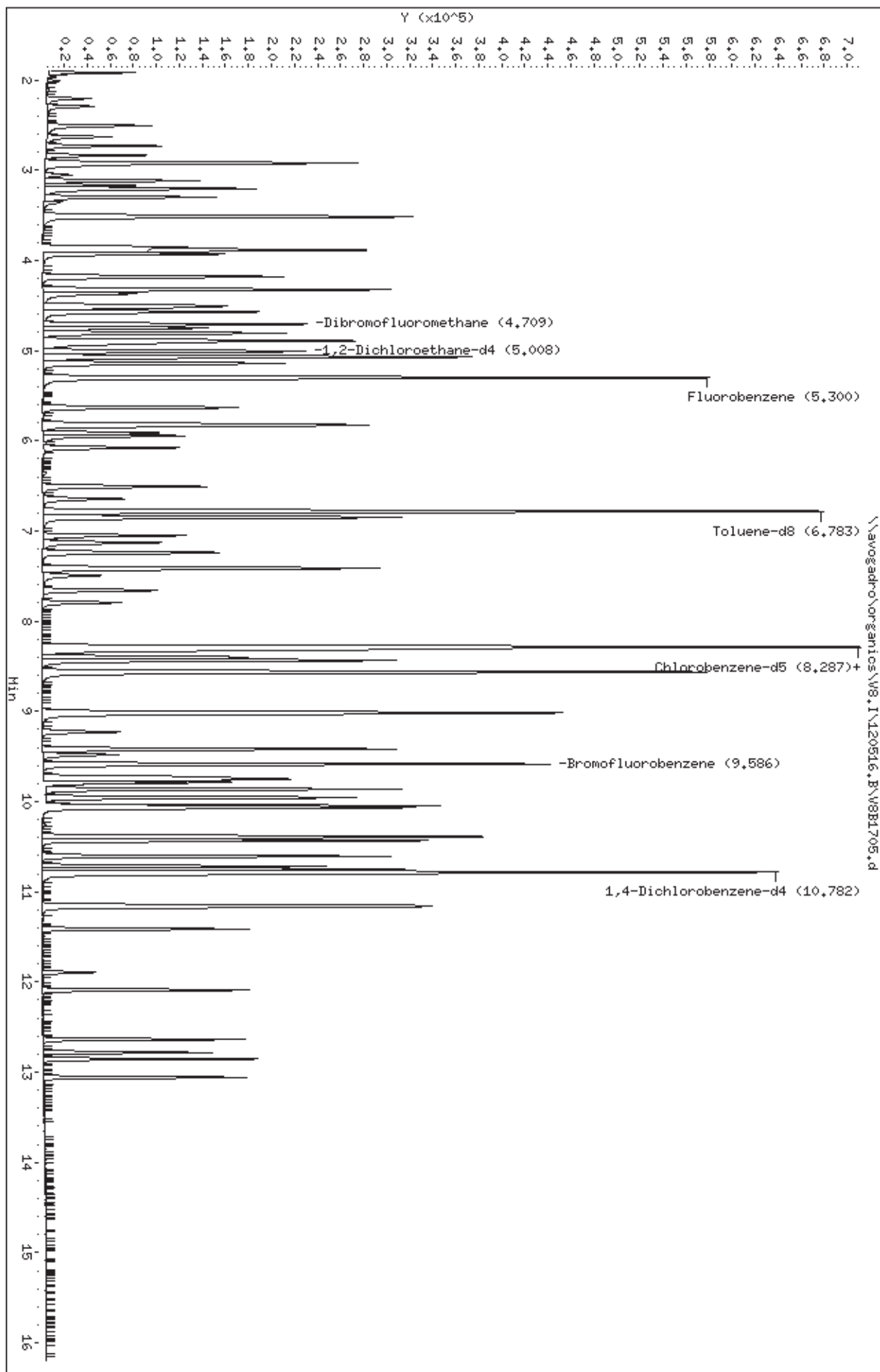
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.226	9.226 (1.113)		35229		20.0000	20
77 Isopropylbenzene	105	9.419	9.419 (1.137)		227443		20.0000	20
78 trans-1,4-Dichloro-2-butene	75	9.483	9.480 (1.144)		17695		20.0000	20
\$ 79 Bromofluorobenzene	95	9.586	9.583 (1.157)		167519		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.724 (0.902)		74885		20.0000	21
81 Bromobenzene	156	9.753	9.753 (0.905)		59281		20.0000	21
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		83988		20.0000	21
83 n-Propylbenzene	120	9.862	9.863 (0.915)		58664		20.0000	20
84 2-Chlorotoluene	126	9.956	9.956 (0.924)		55480		20.0000	21
85 1,3,5-Trimethylbenzene	105	10.046	10.046 (0.932)		183985		20.0000	21
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		56707		20.0000	21
M 94 Xylene (Total)	106				289024		60.0000	62
87 tert-Butylbenzene	119	10.387	10.383 (0.964)		184437		20.0000	21
88 1,2,4-Trimethylbenzene	105	10.432	10.432 (0.968)		187834		20.0000	21
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		216340		20.0000	20
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		101245		20.0000	21
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		173656		20.0000	20
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		163628		50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.805 (1.002)		104016		20.0000	21
95 n-Butylbenzene	91	11.149	11.149 (1.034)		149181		20.0000	20
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		102295		20.0000	21
97 Hexachloroethane	117	11.412	11.412 (1.059)		34333		20.0000	20
98 1,2-Dibromo-3-chloropropane	75	11.894	11.895 (1.104)		11385		20.0000	22
141 1,3,5-Trichlorobenzene	182	12.087	12.091 (2.281)		50322		20.0000	20(A)
99 1,2,4-Trichlorobenzene	180	12.637	12.637 (1.172)		50731		20.0000	21
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		24387		20.0000	21
101 Naphthalene	128	12.853	12.853 (1.192)		129928		20.0000	22
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		48247		20.0000	22

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8.1\120516.B\W8B1705.d
Date: 16-May-2012 12:33
Client ID: WSTD02010D
Sample Info: 5M, WSTD02010D, WSTD02010D
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120516.B\V8B1706.d
Lab Smp Id: VSTD00510D Client Smp ID: VSTD00510D
Inj Date : 16-MAY-2012 12:59
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD00510D,VSTD00510D
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:19 adatta Quant Type: ISTD
Cal Date : 16-MAY-2012 12:59 Cal File: V8B1706.d
Als bottle: 100 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.651	1.647 (0.311)		15114	5.00000	5
2 Freon114	85		1.766	1.766 (0.333)		13742	5.00000	5
3 Chloromethane	50		1.818	1.818 (0.343)		18231	5.00000	5
4 Vinyl Chloride	62		1.917	1.917 (0.362)		15314	5.00000	5
5 Bromomethane	94		2.207	2.200 (0.416)		6532	5.00000	6
6 Chloroethane	64		2.294	2.294 (0.433)		7818	5.00000	5
7 Trichlorofluoromethane	101		2.506	2.506 (0.473)		16827	5.00000	5
126 Ethanol	46		2.631	2.631 (0.497)		4318	500.000	470(A)
8 Ether	59		2.734	2.731 (0.516)		11447	5.00000	5
9 Acrolein	56		2.837	2.834 (0.535)		15565	25.0000	24
10 1,1-Dichloroethene	96		2.924	2.924 (0.552)		13289	5.00000	5
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.917	2.914 (0.550)		12659	5.00000	5
12 Acetone	58		2.953	2.953 (0.557)		2187	5.00000	4
13 Iodomethane	142		3.056	3.049 (0.577)		4907	5.00000	4
14 Carbon Disulfide	76		3.117	3.114 (0.588)		45351	5.00000	5
15 Acetonitrile	41		3.207	3.204 (0.605)		25907	50.0000	52
16 Allyl Chloride	39		3.204	3.204 (0.604)		14942	5.00000	5
17 Methyl Acetate	43		3.216	3.210 (0.607)		9823	5.00000	5
18 Methylene Chloride	84		3.300	3.297 (0.623)		16493	5.00000	5
19 tert-Butanol	59		3.361	3.361 (0.634)		2425	10.0000	9
20 Acrylonitrile	53		3.493	3.487 (0.659)		4487	5.00000	4
21 trans-1,2-Dichloroethene	96		3.522	3.519 (0.665)		13740	5.00000	5

						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
22 Methyl tert-butyl ether	73	3.509	3.512	(0.662)	37713	5.00000	5	
23 1,1-Dichloroethane	63	3.853	3.850	(0.727)	25737	5.00000	5	
24 Vinyl acetate	43	3.885	3.879	(0.733)	44019	5.00000	5	
25 Diisopropyl Ether	45	3.892	3.888	(0.734)	44432	5.00000	5	
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	18779	5.00000	5	
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	38902	5.00000	5	
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	19437	5.00000	5	
28 cis-1,2-Dichloroethene	96	4.322	4.319	(0.816)	15394	5.00000	5	
30 2-Butanone	72	4.329	4.319	(0.817)	1617	5.00000	4	
32 Propionitrile	54	4.374	4.368	(0.825)	18732	50.0000	47	
33 Methacrylonitrile	41	4.503	4.496	(0.850)	13966	10.0000	9	
34 Bromochloromethane	128	4.522	4.519	(0.853)	7005	5.00000	5	
31 Tetrahydrofuran	72	4.567	4.560	(0.862)	3357	10.0000	9	
35 Chloroform	83	4.576	4.573	(0.864)	24906	5.00000	5	
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	125856	50.0000	50	
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	20402	5.00000	5	
38 Cyclohexane	56	4.805	4.808	(0.907)	21744	5.00000	5	
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	6604	5.00000	5	
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	16984	5.00000	5	
41 Isobutyl Alcohol	43	4.930	4.927	(0.930)	9941	100.000	82	
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	29666	50.0000	50	
43 Benzene	78	5.068	5.068	(0.956)	58614	5.00000	5	
44 1,2-Dichloroethane	62	5.075	5.072	(0.958)	19008	5.00000	5	
45 tert-Amyl methyl ether	73	5.139	5.142	(0.970)	36395	5.00000	5	
M 50 1,2-Dichloroethene (Total)	96				29134	10.0000	10	
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	497775	50.0000		
47 Trichloroethene	130	5.634	5.628	(1.063)	14224	5.00000	5	
48 Methylcyclohexane	83	5.818	5.818	(1.098)	19270	5.00000	5	
49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	14799	5.00000	5	
51 Methyl Methacrylate	69	5.914	5.911	(1.116)	8976	5.00000	4	
52 Dibromomethane	93	5.946	5.943	(1.122)	8709	5.00000	5	
53 1,4-Dioxane	88	5.949	5.946	(1.123)	3389	100.000	91	
54 Bromodichloromethane	83	6.078	6.078	(1.147)	17585	5.00000	5	
55 2-Chloroethyl vinyl ether	63	6.776	6.503	(1.278)	292	5.00000	9(T)	
56 cis-1,3-Dichloropropene	75	6.509	6.506	(1.228)	20039	5.00000	5	
57 4-Methyl-2-pentanone	43	6.650	6.644	(1.255)	11140	5.00000	4	
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	477896	50.0000	50	
59 Toluene	91	6.850	6.850	(1.292)	60861	5.00000	5	
60 trans-1,3-Dichloropropene	75	7.052	7.049	(1.331)	17492	5.00000	5	
61 Ethyl Methacrylate	69	7.133	7.130	(1.346)	12226	5.00000	4	
62 1,1,2-Trichloroethane	97	7.242	7.239	(1.366)	12374	5.00000	5	
63 Tetrachloroethene	164	7.409	7.409	(0.894)	11300	5.00000	5	
64 1,3-Dichloropropane	76	7.422	7.419	(0.896)	20722	5.00000	5	
65 2-Hexanone	43	7.499	7.490	(0.905)	6861	5.00000	4	
66 Dibromochloromethane	129	7.660	7.657	(0.924)	12329	5.00000	5	
67 1,2-Dibromoethane	107	7.795	7.792	(0.941)	12332	5.00000	5	
69 1-Chlorohexane	91	8.280	8.277	(0.999)	16865	5.00000	5	
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	344652	50.0000		
70 Chlorobenzene	112	8.322	8.319	(1.004)	36939	5.00000	5	
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	12260	5.00000	5	
72 Ethylbenzene	106	8.438	8.435	(1.018)	18514	5.00000	5	
73 m,p-Xylene	106	8.567	8.564	(1.034)	47782	10.0000	10	
74 o-Xylene	106	9.010	9.010	(1.087)	22038	5.00000	5	
75 Styrene	104	9.026	9.023	(1.089)	32283	5.00000	5	

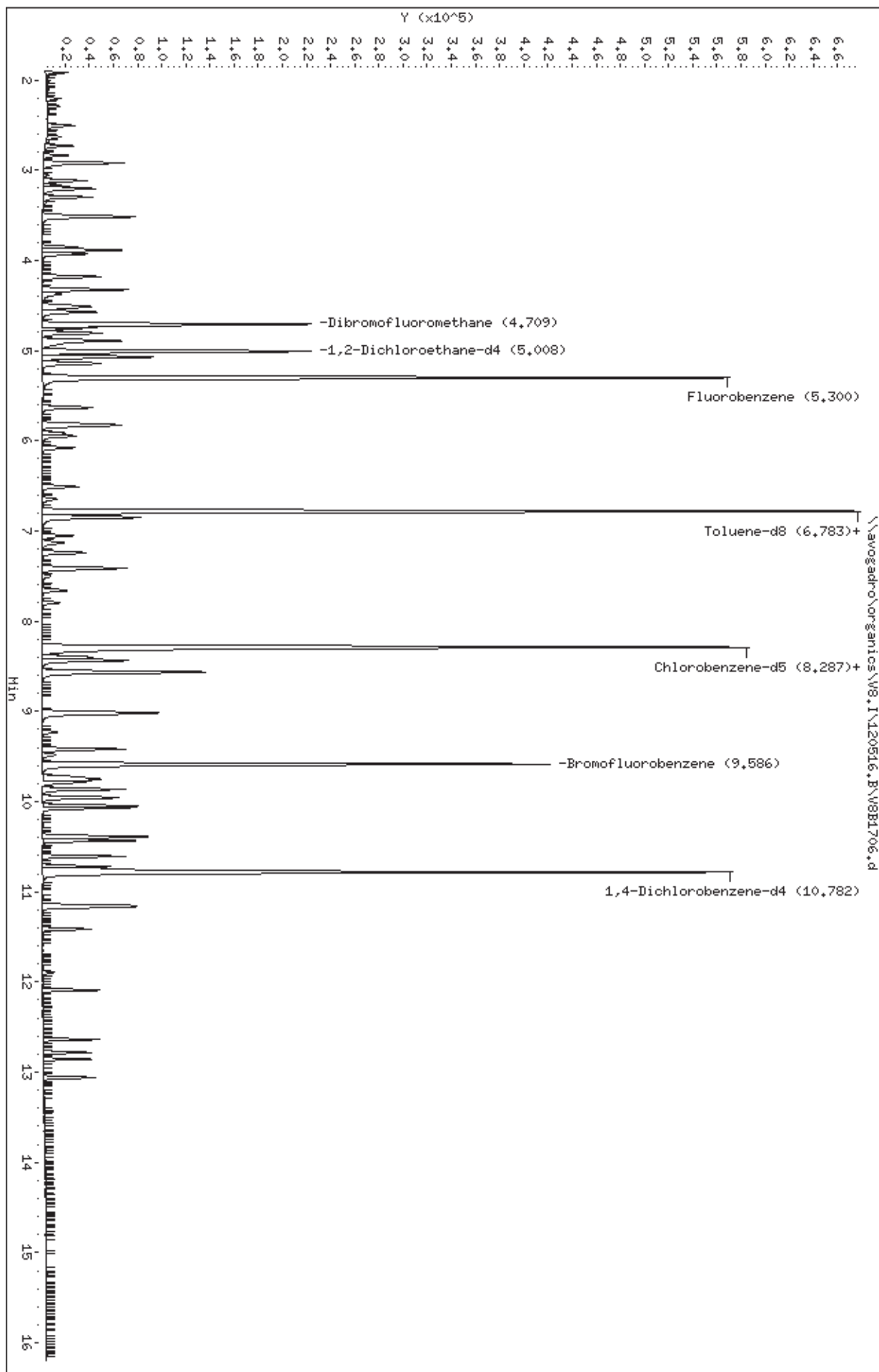
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.226	9.226 (1.113)		7240		5.00000	4
77 Isopropylbenzene	105	9.419	9.419 (1.137)		51574		5.00000	5
78 trans-1,4-Dichloro-2-butene	75	9.486	9.480 (1.145)		3166		5.00000	4
\$ 79 Bromofluorobenzene	95	9.586	9.583 (1.157)		163057		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.724 (0.902)		16182		5.00000	5
81 Bromobenzene	156	9.753	9.753 (0.905)		14076		5.00000	5
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.907)		18210		5.00000	5
83 n-Propylbenzene	120	9.866	9.863 (0.915)		13335		5.00000	5
84 2-Chlorotoluene	126	9.956	9.956 (0.923)		13220		5.00000	5
85 1,3,5-Trimethylbenzene	105	10.046	10.046 (0.932)		42537		5.00000	5
86 4-Chlorotoluene	126	10.071	10.068 (0.934)		13303		5.00000	5
M 94 Xylene (Total)	106				69820		15.0000	15
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		41203		5.00000	5
88 1,2,4-Trimethylbenzene	105	10.435	10.432 (0.968)		44921		5.00000	5
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		49948		5.00000	5
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		24290		5.00000	5
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		38388		5.00000	5
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779 (1.000)		153056		50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.805 (1.002)		26032		5.00000	5
95 n-Butylbenzene	91	11.152	11.149 (1.034)		34477		5.00000	5
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		24667		5.00000	5
97 Hexachloroethane	117	11.412	11.412 (1.058)		7622		5.00000	5
98 1,2-Dibromo-3-chloropropane	75	11.894	11.895 (1.103)		2443		5.00000	5
141 1,3,5-Trichlorobenzene	182	12.091	12.091 (2.281)		13367		5.00000	5(A)
99 1,2,4-Trichlorobenzene	180	12.637	12.637 (1.172)		13177		5.00000	6
100 Hexachlorobutadiene	225	12.785	12.782 (1.186)		6762		5.00000	6
101 Naphthalene	128	12.856	12.853 (1.192)		28107		5.00000	5
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		12087		5.00000	6

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8, I\120516, B\W8B1706.d
 Date : 16-May-2012 12:59
 Client ID: WSTD00510D
 Sample Info: 5M, WSTD00510D, WSTD00510D
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W8.i
 Operator: SRC:
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120516.B\V8B1708.d
Lab Smp Id: VSTD00110D Client Smp ID: VSTD00110D
Inj Date : 16-MAY-2012 13:51
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD00110D,VSTD00110D
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:19 adatta Quant Type: ISTD
Cal Date : 16-MAY-2012 13:51 Cal File: V8B1708.d
Als bottle: 100 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85		1.647	1.647 (0.311)		3089	1.00000	1
2 Freon114	85		1.766	1.766 (0.333)		2717	1.00000	1
3 Chloromethane	50		1.818	1.818 (0.343)		4137	1.00000	1
4 Vinyl Chloride	62		1.917	1.917 (0.362)		2872	1.00000	1.0
5 Bromomethane	94		2.207	2.200 (0.416)		1082	1.00000	1.0
6 Chloroethane	64		2.294	2.294 (0.433)		1593	1.00000	1
7 Trichlorofluoromethane	101		2.503	2.506 (0.472)		3558	1.00000	1
126 Ethanol	46		2.628	2.631 (0.496)		864	500.000	100
8 Ether	59		2.731	2.731 (0.515)		2263	1.00000	1.0
9 Acrolein	56		2.837	2.834 (0.535)		3129	5.00000	5
10 1,1-Dichloroethene	96		2.924	2.924 (0.551)		2693	1.00000	1
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.914	2.914 (0.550)		2611	1.00000	1
12 Acetone	58		2.953	2.953 (0.557)		434	1.00000	1.0(Q)
13 Iodomethane	142		3.052	3.049 (0.576)		746	1.00000	0.6
14 Carbon Disulfide	76		3.117	3.114 (0.588)		10715	1.00000	1
15 Acetonitrile	41		3.204	3.204 (0.604)		4662	1.00000	10
16 Allyl Chloride	39		3.207	3.204 (0.605)		3088	1.00000	1
17 Methyl Acetate	43		3.216	3.210 (0.607)		1978	1.00000	1
18 Methylene Chloride	84		3.300	3.297 (0.622)		4742	1.00000	1
19 tert-Butanol	59		3.361	3.361 (0.634)		434	1.00000	2
20 Acrylonitrile	53		3.512	3.487 (0.662)		709	1.00000	0.7
21 trans-1,2-Dichloroethene	96		3.519	3.519 (0.664)		2940	1.00000	1
22 Methyl tert-butyl ether	73		3.509	3.512 (0.662)		7244	1.00000	1.0

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	5196		1.00000	1
24 Vinyl acetate	43	3.885	3.879	(0.733)	8133		1.00000	0.9
25 Diisopropyl Ether	45	3.892	3.888	(0.734)	8433		1.00000	1.0
26 2-Chloro-1,3-Butadiene	53	3.930	3.927	(0.741)	3433		1.00000	0.9
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	7588		1.00000	1.0
29 2,2-Dichloropropane	77	4.323	4.326	(0.815)	3700		1.00000	1.0
28 cis-1,2-Dichloroethene	96	4.323	4.319	(0.815)	3014		1.00000	1
30 2-Butanone	72	4.564	4.319	(0.861)	319		1.00000	0.8(TQ)
32 Propionitrile	54	4.384	4.368	(0.827)	3259		1.00000	8
33 Methacrylonitrile	41	4.506	4.496	(0.850)	2539		1.00000	2
34 Bromochloromethane	128	4.525	4.519	(0.853)	1383		1.00000	1
31 Tetrahydrofuran	72	4.564	4.560	(0.861)	319		1.00000	0.9(Q)
35 Chloroform	83	4.570	4.573	(0.862)	4986		1.00000	1
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	122393		1.00000	50
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	4051		1.00000	1
38 Cyclohexane	56	4.811	4.808	(0.907)	4228		1.00000	1.0
39 1,1-Dichloropropene	110	4.895	4.888	(0.923)	1257		1.00000	1.0
40 Carbon Tetrachloride	117	4.895	4.895	(0.923)	3348		1.00000	1.0
41 Isobutyl Alcohol	43	5.146	4.927	(0.970)	2446		1.00000	20(T)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.944)	28413		1.00000	49
43 Benzene	78	5.072	5.068	(0.956)	13222		1.00000	1
44 1,2-Dichloroethane	62	5.075	5.072	(0.957)	3827		1.00000	1
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	7042		1.00000	0.9
M 50 1,2-Dichloroethene (Total)	96				5954		2.00000	(a)
* 46 Fluorobenzene	96	5.303	5.300	(1.000)	486616		50.0000	
47 Trichloroethene	130	5.634	5.628	(1.062)	2845		1.00000	1
48 Methylcyclohexane	83	5.814	5.818	(1.096)	3734		1.00000	1.0
49 1,2-Dichloropropane	63	5.834	5.837	(1.100)	2923		1.00000	1
51 Methyl Methacrylate	69	5.924	5.911	(1.117)	1330		1.00000	0.6
52 Dibromomethane	93	5.949	5.943	(1.122)	1681		1.00000	1.0
53 1,4-Dioxane	88	5.956	5.946	(1.123)	519		1.00000	14
54 Bromodichloromethane	83	6.078	6.078	(1.146)	3402		1.00000	0.9
55 2-Chloroethyl vinyl ether	63	6.779	6.503	(1.278)	316		1.00000	10(TQ)
56 cis-1,3-Dichloropropene	75	6.512	6.506	(1.228)	3636		1.00000	0.9
57 4-Methyl-2-pentanone	43	6.650	6.644	(1.254)	1977		1.00000	0.8
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	466019		1.00000	51
59 Toluene	91	6.850	6.850	(1.292)	15105		1.00000	1
60 trans-1,3-Dichloropropene	75	7.052	7.049	(1.330)	3175		1.00000	0.8
61 Ethyl Methacrylate	69	7.136	7.130	(1.346)	1753		1.00000	0.6
62 1,1,2-Trichloroethane	97	7.245	7.239	(1.366)	2520		1.00000	1
63 Tetrachloroethene	164	7.409	7.409	(0.894)	2525		1.00000	1
64 1,3-Dichloropropane	76	7.422	7.419	(0.896)	4193		1.00000	1
65 2-Hexanone	43	7.499	7.490	(0.905)	219		1.00000	0.1(TaQ)
66 Dibromochloromethane	129	7.663	7.657	(0.925)	2225		1.00000	0.9(T)
67 1,2-Dibromoethane	107	7.798	7.792	(0.941)	2392		1.00000	1.0(T)
69 1-Chlorohexane	91	8.284	8.277	(1.000)	3763		1.00000	1(Q)
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	331361		50.0000	
70 Chlorobenzene	112	8.322	8.319	(1.004)	7489		1.00000	1(Q)
71 1,1,1,2-Tetrachloroethane	131	8.400	8.400	(1.014)	2380		1.00000	1.0
72 Ethylbenzene	106	8.438	8.435	(1.018)	3876		1.00000	1
73 m,p-Xylene	106	8.564	8.564	(1.033)	10651		2.00000	2
74 o-Xylene	106	9.017	9.010	(1.088)	4408		1.00000	1
75 Styrene	104	9.027	9.023	(1.089)	5523		1.00000	0.8
76 Bromoform	173	9.226	9.226	(1.113)	1263		1.00000	0.8(T)

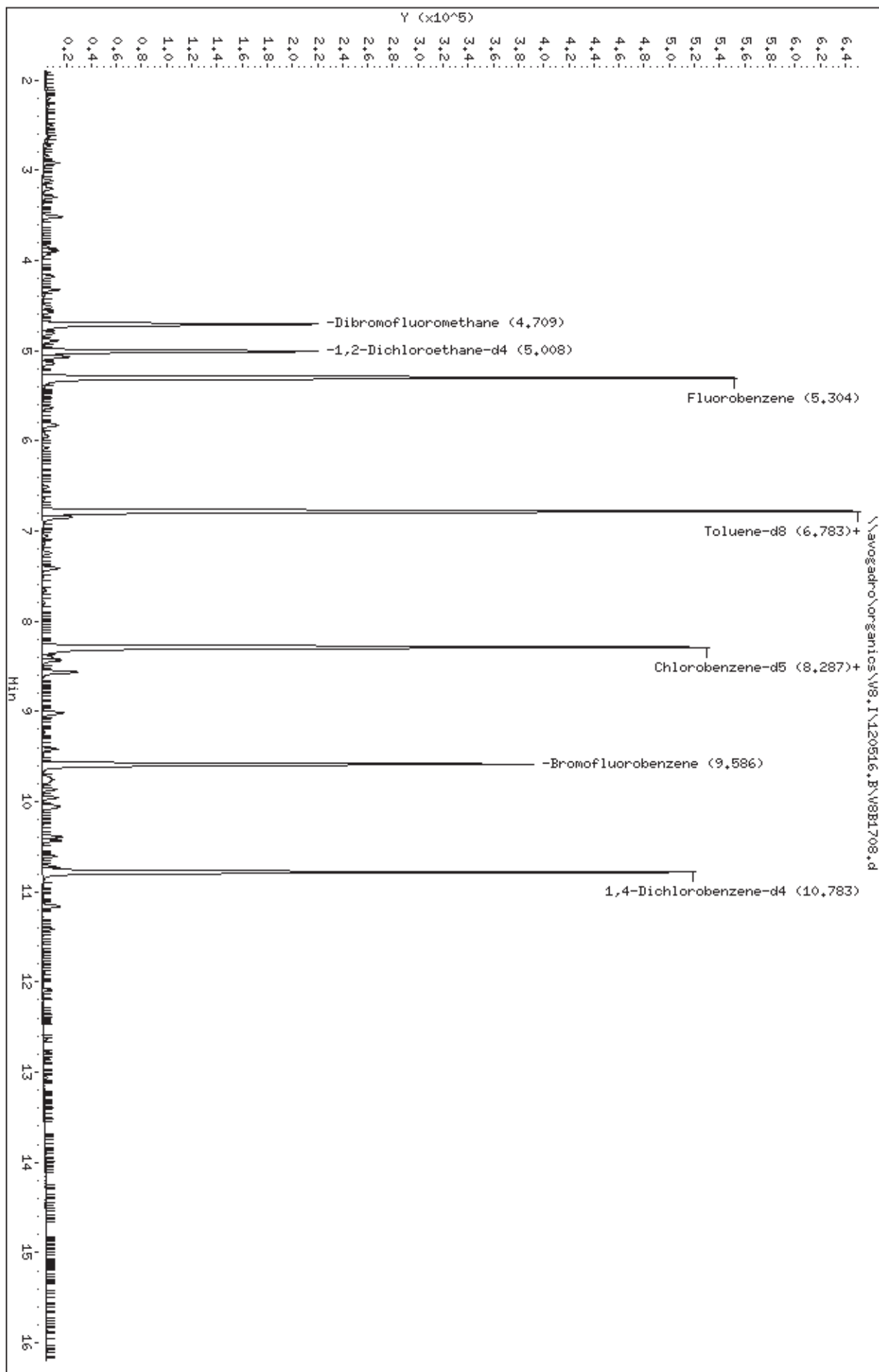
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.419	9.419 (1.137)		9747		1.00000	0.9
78 trans-1,4-Dichloro-2-butene	75	9.490	9.480 (1.145)		369		1.00000	0.5
\$ 79 Bromofluorobenzene	95	9.586	9.583 (1.157)		153296		1.00000	48
80 1,1,2,2-Tetrachloroethane	83	9.727	9.724 (0.902)		3166		1.00000	1
81 Bromobenzene	156	9.753	9.753 (0.905)		2784		1.00000	1
82 1,2,3-Trichloropropane	75	9.779	9.782 (0.907)		3818		1.00000	1
83 n-Propylbenzene	120	9.859	9.863 (0.914)		2520		1.00000	1
84 2-Chlorotoluene	126	9.956	9.956 (0.923)		2636		1.00000	1
85 1,3,5-Trimethylbenzene	105	10.046	10.046 (0.932)		8345		1.00000	1
86 4-Chlorotoluene	126	10.078	10.068 (0.935)		2563		1.00000	1
M 94 Xylene (Total)	106				15059		3.00000	(a)
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		7759		1.00000	1
88 1,2,4-Trimethylbenzene	105	10.435	10.432 (0.968)		9494		1.00000	1
89 sec-Butylbenzene	105	10.608	10.605 (0.984)		9213		1.00000	1
90 1,3-Dichlorobenzene	146	10.721	10.715 (0.994)		5126		1.00000	1
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		6986		1.00000	1.0
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779 (1.000)		139526		50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.805 (1.002)		5812		1.00000	1
95 n-Butylbenzene	91	11.152	11.149 (1.034)		6059		1.00000	0.9
96 1,2-Dichlorobenzene	146	11.174	11.168 (1.036)		4866		1.00000	1
97 Hexachloroethane	117	11.412	11.412 (1.058)		1561		1.00000	1
98 1,2-Dibromo-3-chloropropane	75	11.888	11.895 (1.103)		410		1.00000	0.9
141 1,3,5-Trichlorobenzene	182	12.091	12.091 (2.280)		2339		1.00000	0.9(A)
99 1,2,4-Trichlorobenzene	180	12.637	12.637 (1.172)		1226		1.00000	0.6
100 Hexachlorobutadiene	225	12.782	12.782 (1.185)		1245		1.00000	1
101 Naphthalene	128	12.856	12.853 (1.192)		4028		1.00000	0.8
102 1,2,3-Trichlorobenzene	180	13.059	13.059 (1.211)		1192		1.00000	0.6

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W8, I\120516, B\W8B1708.d
 Date : 16-May-2012 13:51
 Client ID: WSTD00110D
 Sample Info: 5M, WSTD00110D, WSTD00110D
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W8.i
 Operator: SRC:
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120516.B\V8B1709.d
Lab Smp Id: VSTD20010D Client Smp ID: VSTD20010D
Inj Date : 16-MAY-2012 14:17
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD20010D,VSTD20010D
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:19 adatta Quant Type: ISTD
Cal Date : 16-MAY-2012 14:17 Cal File: V8B1709.d
Als bottle: 100 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	571970	200.000	190
2 Freon114	85	1.766	1.766	(0.333)	511765	200.000	180
3 Chloromethane	50	1.818	1.818	(0.343)	733711	200.000	190
4 Vinyl Chloride	62	1.917	1.917	(0.362)	603328	200.000	200
5 Bromomethane	94	2.194	2.200	(0.414)	152966	200.000	140
6 Chloroethane	64	2.287	2.294	(0.431)	281150	200.000	180
7 Trichlorofluoromethane	101	2.506	2.506	(0.473)	646890	200.000	190
126 Ethanol	46	2.638	2.631	(0.497)	158363	20000.0	18000(A)
8 Ether	59	2.731	2.731	(0.515)	474434	200.000	200
9 Acrolein	56	2.834	2.834	(0.534)	644846	1000.00	990(A)
10 1,1-Dichloroethene	96	2.924	2.924	(0.551)	503771	200.000	190
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.914	2.914	(0.550)	471135	200.000	180
12 Acetone	58	2.953	2.953	(0.557)	82696	200.000	180
13 Iodomethane	142	3.049	3.049	(0.575)	364756	200.000	280(A)
14 Carbon Disulfide	76	3.113	3.114	(0.587)	1649815	200.000	180
15 Acetonitrile	41	3.204	3.204	(0.604)	814167	2000.00	1700(A)
16 Allyl Chloride	39	3.204	3.204	(0.604)	513303	200.000	180
17 Methyl Acetate	43	3.210	3.210	(0.605)	421252	200.000	200
18 Methylene Chloride	84	3.297	3.297	(0.622)	598939	200.000	170
19 tert-Butanol	59	3.367	3.361	(0.635)	115156	400.000	410(A)
20 Acrylonitrile	53	3.483	3.487	(0.657)	227754	200.000	230(A)
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	548564	200.000	190

Data File: \\avogadro\organics\V8.I\120516.B\V8B1709.d
Report Date: 18-May-2012 14:20

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.512	3.512	(0.662)	1620879		200.000	200(A)
23 1,1-Dichloroethane	63	3.853	3.850	(0.727)	1030761		200.000	200
24 Vinyl acetate	43	3.876	3.879	(0.731)	1916848		200.000	210(A)
25 Diisopropyl Ether	45	3.888	3.888	(0.733)	1769169		200.000	200
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	826626		200.000	210(A)
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	1676983		200.000	200
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	790036		200.000	200
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.814)	611924		200.000	200
30 2-Butanone	72	4.319	4.319	(0.814)	82159		200.000	200
32 Propionitrile	54	4.367	4.368	(0.824)	832745		2000.00	2000(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	658415		400.000	420(A)
34 Bromochloromethane	128	4.522	4.519	(0.853)	278522		200.000	200
31 Tetrahydrofuran	72	4.564	4.560	(0.861)	156115		400.000	410(A)
35 Chloroform	83	4.573	4.573	(0.862)	1008972		200.000	200
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	128104		50.0000	50
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	848158		200.000	200
38 Cyclohexane	56	4.808	4.808	(0.907)	838157		200.000	190
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	278118		200.000	200(A)
40 Carbon Tetrachloride	117	4.895	4.895	(0.923)	725189		200.000	210(A)
41 Isobutyl Alcohol	43	4.927	4.927	(0.929)	527961		4000.00	4200(A)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.944)	30563		50.0000	50
43 Benzene	78	5.068	5.068	(0.956)	2255902		200.000	190
44 1,2-Dichloroethane	62	5.072	5.072	(0.956)	770845		200.000	200
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	1620681		200.000	210(A)
M 50 1,2-Dichloroethene (Total)	96				1160488		400.000	390
* 46 Fluorobenzene	96	5.303	5.300	(1.000)	506717		50.0000	(T)
47 Trichloroethene	130	5.628	5.628	(1.061)	577805		200.000	200
48 Methylcyclohexane	83	5.821	5.818	(1.098)	773958		200.000	190
49 1,2-Dichloropropane	63	5.837	5.837	(1.101)	599994		200.000	200
51 Methyl Methacrylate	69	5.911	5.911	(1.115)	471737		200.000	220(A)
52 Dibromomethane	93	5.943	5.943	(1.121)	369339		200.000	200
53 1,4-Dioxane	88	5.946	5.946	(1.121)	148968		4000.00	4000(A)
54 Bromodichloromethane	83	6.078	6.078	(1.146)	788594		200.000	210(A)
55 2-Chloroethyl vinyl ether	63	6.502	6.503	(1.226)	5030		200.000	160(T)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	955659		200.000	220(A)
57 4-Methyl-2-pentanone	43	6.644	6.644	(1.253)	536370		200.000	210(A)
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	496239		50.0000	49
59 Toluene	91	6.850	6.850	(1.292)	2346533		200.000	180
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.329)	857158		200.000	220(A)
61 Ethyl Methacrylate	69	7.129	7.130	(1.344)	678470		200.000	220(A)
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.365)	523855		200.000	200
63 Tetrachloroethene	164	7.409	7.409	(0.894)	472083		200.000	190
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	891856		200.000	200
65 2-Hexanone	43	7.490	7.490	(0.904)	397652		200.000	200
66 Dibromochloromethane	129	7.660	7.657	(0.924)	620066		200.000	220(A)
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	550634		200.000	200
69 1-Chlorohexane	91	8.280	8.277	(0.999)	730632		200.000	190
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	370072		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	1484508		200.000	190
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	551402		200.000	200
72 Ethylbenzene	106	8.435	8.435	(1.018)	794015		200.000	200
73 m,p-Xylene	106	8.563	8.564	(1.033)	1908891		400.000	370(A)
74 o-Xylene	106	9.010	9.010	(1.087)	934590		200.000	200
75 Styrene	104	9.023	9.023	(1.089)	1580730		200.000	210(A)

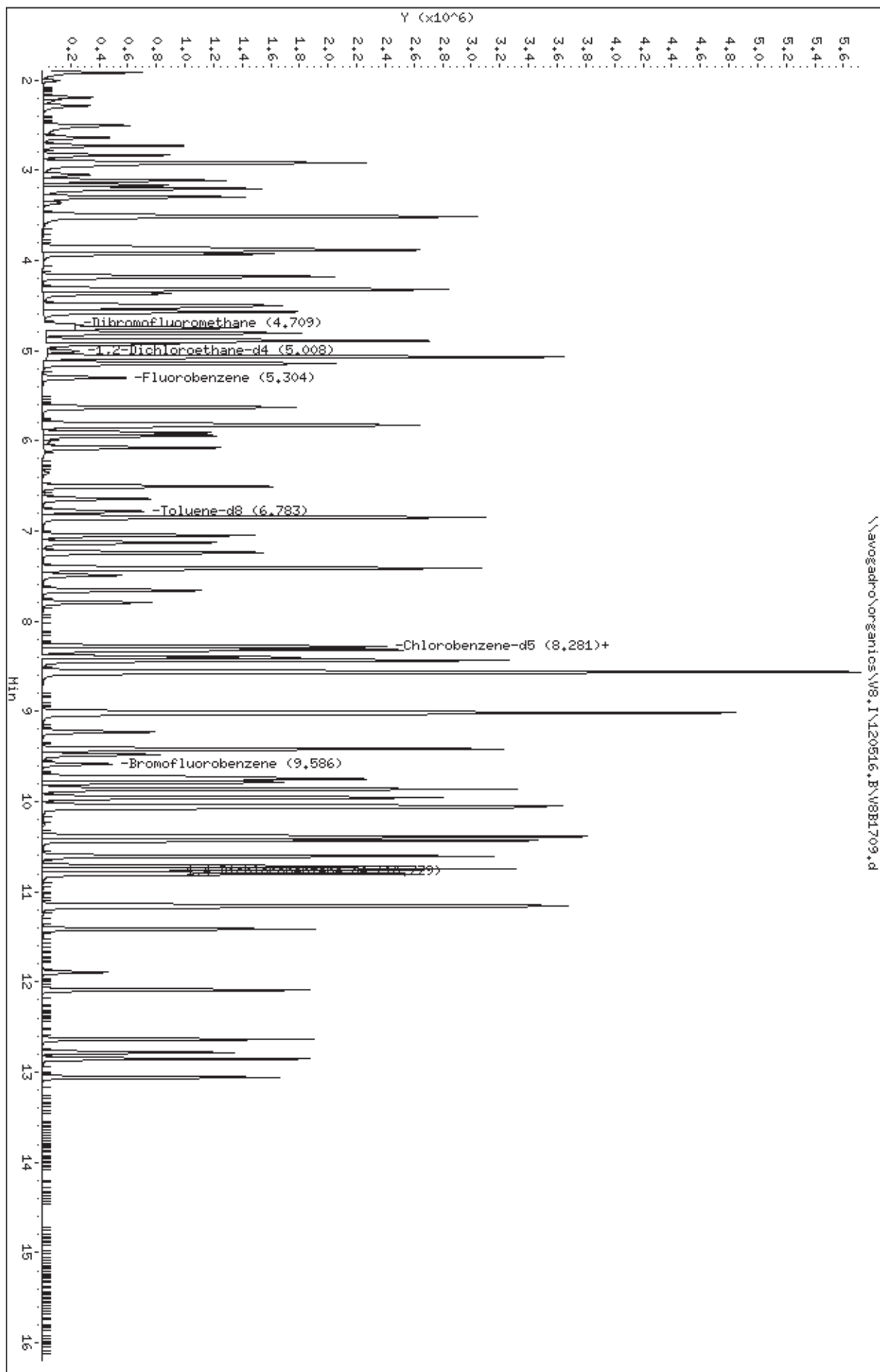
						AMOUNTS	
QUANT SIG						CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 Bromoform	173	9.229	9.226	(1.114)	390638	200.000	230(A)
77 Isopropylbenzene	105	9.419	9.419	(1.137)	2316177	200.000	200
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480	(1.144)	215322	200.000	240(A)
\$ 79 Bromofluorobenzene	95	9.586	9.583	(1.157)	180299	50.0000	51
80 1,1,2,2-Tetrachloroethane	83	9.727	9.724	(0.902)	685639	200.000	170
81 Bromobenzene	156	9.750	9.753	(0.905)	609761	200.000	180
82 1,2,3-Trichloropropane	75	9.785	9.782	(0.908)	850033	200.000	180
83 n-Propylbenzene	120	9.862	9.863	(0.915)	614510	200.000	190
84 2-Chlorotoluene	126	9.956	9.956	(0.924)	560527	200.000	180
85 1,3,5-Trimethylbenzene	105	10.046	10.046	(0.932)	1861067	200.000	180
86 4-Chlorotoluene	126	10.068	10.068	(0.934)	573359	200.000	180
M 94 Xylene (Total)	106				2843481	600.000	560
87 tert-Butylbenzene	119	10.387	10.383	(0.964)	1883195	200.000	190
88 1,2,4-Trimethylbenzene	105	10.432	10.432	(0.968)	1897550	200.000	170
89 sec-Butylbenzene	105	10.605	10.605	(0.984)	2242416	200.000	180
90 1,3-Dichlorobenzene	146	10.718	10.715	(0.994)	1035011	200.000	180
91 4-Isopropyltoluene	119	10.747	10.750	(0.997)	1828413	200.000	190
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779	(1.000)	188347	50.0000	
93 1,4-Dichlorobenzene	146	10.804	10.805	(1.002)	1055258	200.000	170
95 n-Butylbenzene	91	11.149	11.149	(1.034)	1634134	200.000	190
96 1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	996299	200.000	170
97 Hexachloroethane	117	11.415	11.412	(1.059)	381873	200.000	190
98 1,2-Dibromo-3-chloropropane	75	11.891	11.895	(1.103)	109638	200.000	190
141 1,3,5-Trichlorobenzene	182	12.087	12.091	(2.279)	508250	200.000	200(A)
99 1,2,4-Trichlorobenzene	180	12.634	12.637	(1.172)	524005	200.000	200
100 Hexachlorobutadiene	225	12.782	12.782	(1.186)	222561	200.000	160
101 Naphthalene	128	12.853	12.853	(1.192)	1274290	200.000	200
102 1,2,3-Trichlorobenzene	180	13.058	13.059	(1.211)	452796	200.000	190

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8,I\120516,B\W8B1709.d
Date : 16-May-2012 14:17
Client ID: WSTD0010D
Sample Info: 5M,WSTD0010D,WSTD0010D
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120516.B\V8B1710.d
Lab Smp Id: VSTD10010D Client Smp ID: VSTD10010D
Inj Date : 16-MAY-2012 14:43
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD10010D,VSTD10010D
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:19 adatta Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	255697	100.000	86
2 Freon114	85	1.766	1.766	(0.333)	236359	100.000	88
3 Chloromethane	50	1.818	1.818	(0.343)	327305	100.000	88
4 Vinyl Chloride	62	1.917	1.917	(0.362)	268272	100.000	90
5 Bromomethane	94	2.197	2.200	(0.415)	116850	100.000	100
6 Chloroethane	64	2.290	2.294	(0.432)	126714	100.000	86
7 Trichlorofluoromethane	101	2.506	2.506	(0.473)	284554	100.000	86
126 Ethanol	46	2.635	2.631	(0.497)	79830	10000.0	9000(A)
8 Ether	59	2.731	2.731	(0.515)	228325	100.000	96
9 Acrolein	56	2.834	2.834	(0.535)	326962	500.000	500(A)
10 1,1-Dichloroethene	96	2.924	2.924	(0.552)	226775	100.000	88
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.914	(0.550)	217537	100.000	87
12 Acetone	58	2.950	2.953	(0.557)	37543	100.000	83
13 Iodomethane	142	3.049	3.049	(0.575)	167412	100.000	120
14 Carbon Disulfide	76	3.114	3.114	(0.588)	757213	100.000	85
15 Acetonitrile	41	3.204	3.204	(0.604)	400112	1000.00	860(A)
16 Allyl Chloride	39	3.204	3.204	(0.604)	240979	100.000	88
17 Methyl Acetate	43	3.210	3.210	(0.606)	212685	100.000	100
18 Methylene Chloride	84	3.297	3.297	(0.622)	277688	100.000	83
19 tert-Butanol	59	3.361	3.361	(0.634)	55876	200.000	200
20 Acrylonitrile	53	3.483	3.487	(0.657)	109094	100.000	110
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	250619	100.000	91

Data File: \\avogadro\organics\V8.I\120516.B\V8B1710.d
Report Date: 18-May-2012 14:20

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.512	3.512	(0.663)	779619		100.000	99
23 1,1-Dichloroethane	63	3.853	3.850	(0.727)	474732		100.000	92
24 Vinyl acetate	43	3.876	3.879	(0.731)	938416		100.000	100
25 Diisopropyl Ether	45	3.888	3.888	(0.734)	857596		100.000	96
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	371671		100.000	94
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	797339		100.000	98
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	351699		100.000	90
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	282625		100.000	93
30 2-Butanone	72	4.319	4.319	(0.815)	38452		100.000	95
32 Propionitrile	54	4.368	4.368	(0.824)	418701		1000.00	1000(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	327287		200.000	200(A)
34 Bromochloromethane	128	4.522	4.519	(0.853)	127862		100.000	93
31 Tetrahydrofuran	72	4.560	4.560	(0.860)	78947		200.000	210(A)
35 Chloroform	83	4.573	4.573	(0.863)	461448		100.000	93
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	127371		50.0000	50
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	378625		100.000	92
38 Cyclohexane	56	4.808	4.808	(0.907)	392216		100.000	91
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	123096		100.000	92
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	319961		100.000	92
41 Isobutyl Alcohol	43	4.927	4.927	(0.930)	263760		2000.00	2100(A)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	29851		50.0000	50
43 Benzene	78	5.068	5.068	(0.956)	1051832		100.000	90
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	364303		100.000	95
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	767415		100.000	99
M 50 1,2-Dichloroethene (Total)	96				533244		200.000	180
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	506439		50.0000	
47 Trichloroethene	130	5.631	5.628	(1.062)	261535		100.000	92
48 Methylcyclohexane	83	5.818	5.818	(1.098)	372498		100.000	94
49 1,2-Dichloropropane	63	5.834	5.837	(1.101)	284578		100.000	95
51 Methyl Methacrylate	69	5.911	5.911	(1.115)	226250		100.000	100
52 Dibromomethane	93	5.943	5.943	(1.121)	176894		100.000	98
53 1,4-Dioxane	88	5.946	5.946	(1.122)	76054		2000.00	2000(A)
54 Bromodichloromethane	83	6.078	6.078	(1.147)	360377		100.000	97
55 2-Chloroethyl vinyl ether	63	6.509	6.503	(1.228)	2305		100.000	77(T)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	434283		100.000	100
57 4-Methyl-2-pentanone	43	6.644	6.644	(1.254)	261597		100.000	100
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	491530		50.0000	50
59 Toluene	91	6.850	6.850	(1.292)	1076165		100.000	87
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.330)	394254		100.000	100
61 Ethyl Methacrylate	69	7.130	7.130	(1.345)	318585		100.000	100
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	248036		100.000	96
63 Tetrachloroethene	164	7.409	7.409	(0.894)	211058		100.000	90
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	425088		100.000	96
65 2-Hexanone	43	7.490	7.490	(0.904)	189240		100.000	99
66 Dibromochloromethane	129	7.657	7.657	(0.924)	282978		100.000	100
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	259440		100.000	98
69 1-Chlorohexane	91	8.277	8.277	(0.999)	333170		100.000	91
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	363789		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	690344		100.000	92
71 1,1,1,2-Tetrachloroethane	131	8.400	8.400	(1.014)	250788		100.000	95
72 Ethylbenzene	106	8.435	8.435	(1.018)	362967		100.000	92
73 m,p-Xylene	106	8.564	8.564	(1.033)	891140		200.000	180
74 o-Xylene	106	9.010	9.010	(1.087)	433534		100.000	93
75 Styrene	104	9.023	9.023	(1.089)	730023		100.000	98

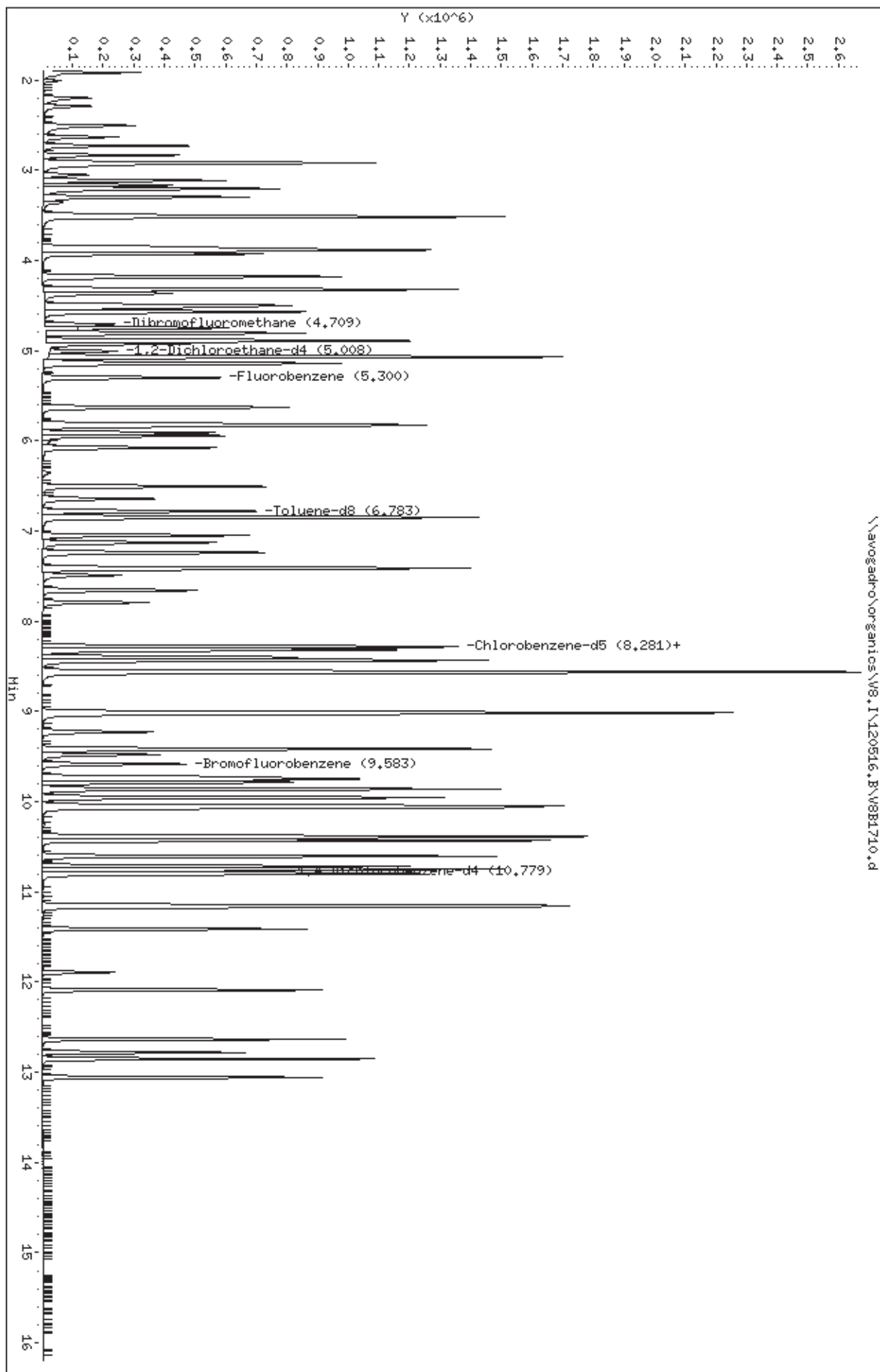
						AMOUNTS	
QUANT SIG						CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 Bromoform	173	9.226	9.226	(1.113)	181711	100.000	110
77 Isopropylbenzene	105	9.416	9.419	(1.136)	1065861	100.000	96
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480	(1.144)	101275	100.000	110
\$ 79 Bromofluorobenzene	95	9.583	9.583	(1.156)	175986	50.00000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.724	(0.902)	339934	100.000	92
81 Bromobenzene	156	9.750	9.753	(0.905)	281905	100.000	90
82 1,2,3-Trichloropropane	75	9.782	9.782	(0.908)	412268	100.000	94
83 n-Propylbenzene	120	9.863	9.863	(0.915)	281160	100.000	92
84 2-Chlorotoluene	126	9.956	9.956	(0.924)	258457	100.000	88
85 1,3,5-Trimethylbenzene	105	10.046	10.046	(0.932)	874249	100.000	92
86 4-Chlorotoluene	126	10.068	10.068	(0.934)	266315	100.000	90
M 94 Xylene (Total)	106				1324674	300.000	270
87 tert-Butylbenzene	119	10.383	10.383	(0.963)	881881	100.000	93
88 1,2,4-Trimethylbenzene	105	10.432	10.432	(0.968)	889885	100.000	88
89 sec-Butylbenzene	105	10.605	10.605	(0.984)	1048315	100.000	92
90 1,3-Dichlorobenzene	146	10.718	10.715	(0.994)	484226	100.000	88
91 4-Isopropyltoluene	119	10.750	10.750	(0.997)	857756	100.000	95
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779	(1.000)	179776	50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.805	(1.002)	494306	100.000	86
95 n-Butylbenzene	91	11.149	11.149	(1.034)	770176	100.000	97
96 1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	477053	100.000	89
97 Hexachloroethane	117	11.412	11.412	(1.059)	174057	100.000	94
98 1,2-Dibromo-3-chloropropane	75	11.895	11.895	(1.104)	56734	100.000	100
141 1,3,5-Trichlorobenzene	182	12.088	12.091	(2.281)	245049	100.000	97(A)
99 1,2,4-Trichlorobenzene	180	12.637	12.637	(1.172)	268524	100.000	110
100 Hexachlorobutadiene	225	12.782	12.782	(1.186)	110221	100.000	83
101 Naphthalene	128	12.853	12.853	(1.192)	745780	100.000	120
102 1,2,3-Trichlorobenzene	180	13.059	13.059	(1.211)	251176	100.000	110

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8,I\120516,B\W8B1710.d
Date : 16-May-2012 14:43
Client ID: WSTD10010D
Sample Info: 5M,WSTD10010D,WSTD10010D
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V6 Calibration Date: 05/17/2012 Time: 19:33

Lab File ID: V6I7031.D Init. Calib. Date(s): 05/17/2012 05/17/2012

EPA Sample No.(VSTD####) VSTD0506B Init. Calib. Time(s): 16:19 18:20

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.283	0.261	0.100	-7.9	20.0
Chloromethane	0.477	0.507	0.010	6.3	20.0
Vinyl chloride	0.359	0.358	0.010	-0.4	20.0
Bromomethane	0.187	0.186	0.010	-0.5	20.0
Chloroethane	0.207	0.209	0.010	0.8	20.0
Trichlorofluoromethane	0.357	0.360	0.010	0.9	20.0
1,1-Dichloroethene	0.290	0.293	0.100	1.1	20.0
Acetone	0.040	0.042	0.010	5.7	20.0
Iodomethane	0.506	0.584	0.010	15.3	20.0
Carbon disulfide	1.136	1.194	0.010	5.1	20.0
Methylene chloride	0.357	0.315	0.010	-11.9	20.0
trans-1,2-Dichloroethene	0.277	0.280	0.010	1.0	20.0
Methyl tert-butyl ether	0.714	0.749	0.010	4.8	20.0
1,1-Dichloroethane	0.479	0.491	0.010	2.6	20.0
Vinyl acetate	1.057	1.054	0.010	-0.3	20.0
2-Butanone	0.037	0.038	0.010	3.6	20.0
cis-1,2-Dichloroethene	0.307	0.314	0.010	2.1	20.0
2,2-Dichloropropane	0.222	0.209	0.010	-6.1	20.0
Bromochloromethane	0.158	0.167	0.010	5.7	20.0
Chloroform	0.434	0.446	0.010	2.8	20.0
1,1,1-Trichloroethane	0.358	0.354	0.010	-1.0	20.0
1,1-Dichloropropene	0.143	0.143	0.010	-0.1	20.0
Carbon tetrachloride	0.298	0.299	0.010	0.2	20.0
1,2-Dichloroethane	0.339	0.344	0.010	1.3	20.0
Benzene	0.960	0.994	0.010	3.6	20.0
Trichloroethene	0.329	0.328	0.010	-0.1	20.0
1,2-Dichloropropane	0.274	0.283	0.010	3.4	20.0
Dibromomethane	0.174	0.181	0.010	4.0	20.0
Bromodichloromethane	0.335	0.349	0.010	4.0	20.0
cis-1,3-Dichloropropene	0.392	0.420	0.010	7.1	20.0
4-Methyl-2-pentanone	0.275	0.286	0.010	3.9	20.0
Toluene	1.055	1.078	0.010	2.2	20.0
trans-1,3-Dichloropropene	0.347	0.385	0.010	11.1	20.0
1,1,2-Trichloroethane	0.246	0.249	0.010	1.2	20.0
1,3-Dichloropropane	0.457	0.476	0.010	4.0	20.0
Tetrachloroethene	0.313	0.342	0.010	9.1	20.0
2-Hexanone	0.252	0.260	0.010	3.2	20.0
Dibromochloromethane	0.347	0.374	0.010	7.8	20.0
1,2-Dibromoethane	0.324	0.340	0.010	5.1	20.0
Chlorobenzene	0.871	0.914	0.010	5.0	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V6 Calibration Date: 05/17/2012 Time: 19:33

Lab File ID: V6I7031.D Init. Calib. Date(s): 05/17/2012 05/17/2012

EPA Sample No.(VSTD####) VSTD0506B Init. Calib. Time(s): 16:19 18:20

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.345	0.362	0.010	5.1	20.0
Ethylbenzene	0.465	0.480	0.010	3.1	20.0
m,p-Xylene	0.547	0.565	0.010	3.2	20.0
o-Xylene	0.544	0.564	0.010	3.6	20.0
Xylene (Total)	0.546	0.564	0.010	3.4	20.0
Styrene	0.836	0.916	0.010	9.5	20.0
Bromoform	0.207	0.229	0.010	10.7	20.0
Isopropylbenzene	1.310	1.321	0.300	0.9	20.0
1,1,2,2-Tetrachloroethane	0.732	0.786	0.300	7.4	20.0
Bromobenzene	0.753	0.817	0.010	8.5	20.0
1,2,3-Trichloropropane	0.689	0.773	0.010	12.3	20.0
n-Propylbenzene	0.745	0.793	0.010	6.5	20.0
2-Chlorotoluene	0.680	0.746	0.010	9.7	20.0
1,3,5-Trimethylbenzene	2.042	2.160	0.010	5.8	20.0
4-Chlorotoluene	0.735	0.796	0.010	8.3	20.0
tert-Butylbenzene	2.382	2.486	0.010	4.4	20.0
1,2,4-Trimethylbenzene	2.090	2.199	0.010	5.2	20.0
sec-Butylbenzene	2.464	2.506	0.010	1.7	20.0
4-Isopropyltoluene	2.097	2.093	0.010	-0.2	20.0
1,3-Dichlorobenzene	1.323	1.402	0.010	5.9	20.0
1,4-Dichlorobenzene	1.350	1.425	0.010	5.6	20.0
n-Butylbenzene	1.694	1.689	0.100	-0.3	20.0
1,2-Dichlorobenzene	1.278	1.359	0.010	6.3	20.0
1,2-Dibromo-3-chloropropane	0.116	0.131	0.010	12.6	20.0
1,2,4-Trichlorobenzene	0.615	0.618	0.010	0.4	20.0
Hexachlorobutadiene	0.261	0.240	0.010	-7.8	20.0
1,2,3-Trichlorobenzene	0.513	0.528	0.010	2.8	20.0
Naphthalene	1.582	1.824	0.010	15.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V6 Calibration Date: 05/17/2012 Time: 19:33

Lab File ID: V6I7031.D Init. Calib. Date(s): 05/17/2012 05/17/2012

EPA Sample No.(VSTD####) VSTD0506B Init. Calib. Time(s): 16:19 18:20

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.285	0.277	0.010	-2.9	20.0
1,2-Dichloroethane-d4	0.066	0.064	0.010	-1.9	20.0
Toluene-d8	1.143	1.153	0.010	0.9	20.0
Bromofluorobenzene	0.468	0.462	0.010	-1.2	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V6 Calibration Date: 05/18/2012 Time: 8:32

Lab File ID: V6I7062.D Init. Calib. Date(s): 05/17/2012 05/17/2012

EPA Sample No.(VSTD####) VSTD0506C Init. Calib. Time(s): 16:19 18:20

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.283	0.255	0.100	-10.1	20.0
Chloromethane	0.477	0.462	0.010	-3.1	20.0
Vinyl chloride	0.359	0.332	0.010	-7.5	20.0
Bromomethane	0.187	0.170	0.010	-8.8	20.0
Chloroethane	0.207	0.191	0.010	-7.6	20.0
Trichlorofluoromethane	0.357	0.347	0.010	-2.8	20.0
1,1-Dichloroethene	0.290	0.266	0.100	-8.2	20.0
Acetone	0.040	0.044	0.010	10.7	20.0
Iodomethane	0.506	0.476	0.010	-6.0	20.0
Carbon disulfide	1.136	1.088	0.010	-4.2	20.0
Methylene chloride	0.357	0.298	0.010	-16.7	20.0
trans-1,2-Dichloroethene	0.277	0.258	0.010	-6.9	20.0
Methyl tert-butyl ether	0.714	0.692	0.010	-3.2	20.0
1,1-Dichloroethane	0.479	0.464	0.010	-3.1	20.0
Vinyl acetate	1.057	1.015	0.010	-4.0	20.0
2-Butanone	0.037	0.036	0.010	-3.0	20.0
cis-1,2-Dichloroethene	0.307	0.296	0.010	-3.7	20.0
2,2-Dichloropropane	0.222	0.208	0.010	-6.5	20.0
Bromochloromethane	0.158	0.160	0.010	0.9	20.0
Chloroform	0.434	0.425	0.010	-2.1	20.0
1,1,1-Trichloroethane	0.358	0.319	0.010	-10.7	20.0
1,1-Dichloropropene	0.143	0.131	0.010	-8.7	20.0
Carbon tetrachloride	0.298	0.277	0.010	-7.0	20.0
1,2-Dichloroethane	0.339	0.331	0.010	-2.5	20.0
Benzene	0.960	0.921	0.010	-4.0	20.0
Trichloroethene	0.329	0.302	0.010	-8.1	20.0
1,2-Dichloropropane	0.274	0.268	0.010	-2.2	20.0
Dibromomethane	0.174	0.168	0.010	-3.3	20.0
Bromodichloromethane	0.335	0.335	0.010	-0.2	20.0
cis-1,3-Dichloropropene	0.392	0.408	0.010	4.1	20.0
4-Methyl-2-pentanone	0.275	0.268	0.010	-2.5	20.0
Toluene	1.055	0.983	0.010	-6.8	20.0
trans-1,3-Dichloropropene	0.347	0.368	0.010	6.0	20.0
1,1,2-Trichloroethane	0.246	0.234	0.010	-4.9	20.0
1,3-Dichloropropane	0.457	0.446	0.010	-2.4	20.0
Tetrachloroethene	0.313	0.265	0.010	-15.5	20.0
2-Hexanone	0.252	0.255	0.010	1.0	20.0
Dibromochloromethane	0.347	0.364	0.010	4.9	20.0
1,2-Dibromoethane	0.324	0.319	0.010	-1.4	20.0
Chlorobenzene	0.871	0.837	0.010	-3.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V6 Calibration Date: 05/18/2012 Time: 8:32

Lab File ID: V6I7062.D Init. Calib. Date(s): 05/17/2012 05/17/2012

EPA Sample No.(VSTD####) VSTD0506C Init. Calib. Time(s): 16:19 18:20

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.345	0.340	0.010	-1.4	20.0
Ethylbenzene	0.465	0.427	0.010	-8.3	20.0
m,p-Xylene	0.547	0.502	0.010	-8.2	20.0
o-Xylene	0.544	0.503	0.010	-7.6	20.0
Xylene (Total)	0.546	0.502	0.010	-8.0	20.0
Styrene	0.836	0.867	0.010	3.7	20.0
Bromoform	0.207	0.227	0.010	9.5	20.0
Isopropylbenzene	1.310	1.149	0.300	-12.2	20.0
1,1,2,2-Tetrachloroethane	0.732	0.731	0.300	-0.2	20.0
Bromobenzene	0.753	0.747	0.010	-0.8	20.0
1,2,3-Trichloropropane	0.689	0.756	0.010	9.7	20.0
n-Propylbenzene	0.745	0.694	0.010	-6.9	20.0
2-Chlorotoluene	0.680	0.665	0.010	-2.1	20.0
1,3,5-Trimethylbenzene	2.042	1.858	0.010	-9.0	20.0
4-Chlorotoluene	0.735	0.696	0.010	-5.2	20.0
tert-Butylbenzene	2.382	2.207	0.010	-7.4	20.0
1,2,4-Trimethylbenzene	2.090	1.894	0.010	-9.4	20.0
sec-Butylbenzene	2.464	2.114	0.010	-14.2	20.0
4-Isopropyltoluene	2.097	1.809	0.010	-13.7	20.0
1,3-Dichlorobenzene	1.323	1.234	0.010	-6.7	20.0
1,4-Dichlorobenzene	1.350	1.266	0.010	-6.2	20.0
n-Butylbenzene	1.694	1.456	0.100	-14.0	20.0
1,2-Dichlorobenzene	1.278	1.206	0.010	-5.7	20.0
1,2-Dibromo-3-chloropropane	0.116	0.119	0.010	2.6	20.0
1,2,4-Trichlorobenzene	0.615	0.507	0.010	-17.6	20.0
Hexachlorobutadiene	0.261	0.195	0.010	-25.2	20.0
1,2,3-Trichlorobenzene	0.513	0.424	0.010	-17.4	20.0
Naphthalene	1.582	1.526	0.010	-3.5	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V6 Calibration Date: 05/18/2012 Time: 8:32

Lab File ID: V6I7062.D Init. Calib. Date(s): 05/17/2012 05/17/2012

EPA Sample No.(VSTD####) VSTD0506C Init. Calib. Time(s): 16:19 18:20

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.285	0.284	0.010	-0.3	20.0
1,2-Dichloroethane-d4	0.066	0.065	0.010	-1.5	20.0
Toluene-d8	1.143	1.151	0.010	0.7	20.0
Bromofluorobenzene	0.468	0.463	0.010	-1.0	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V10 Calibration Date: 05/17/2012 Time: 4:52

Lab File ID: V8B1742.D Init. Calib. Date(s): 05/16/2012 05/16/2012

EPA Sample No.(VSTD####) VSTD05010F Init. Calib. Time(s): 12:07 14:43

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.293	0.226	0.100	-23.1	20.0
Chloromethane	0.365	0.332	0.010	-9.0	20.0
Vinyl chloride	0.294	0.278	0.010	-5.4	20.0
Bromomethane	0.109	0.112	0.010	2.5	20.0
Chloroethane	0.146	0.138	0.010	-5.4	20.0
Trichlorofluoromethane	0.328	0.299	0.010	-8.9	20.0
1,1-Dichloroethene	0.254	0.225	0.100	-11.2	20.0
Acetone	0.045	0.029	0.010	-33.8	20.0
Iodomethane	0.134	0.159	0.010	18.9	20.0
Carbon disulfide	0.876	0.732	0.010	-16.4	20.0
Methylene chloride	0.330	0.271	0.010	-18.0	20.0
trans-1,2-Dichloroethene	0.273	0.244	0.010	-10.6	20.0
Methyl tert-butyl ether	0.779	0.713	0.010	-8.5	20.0
1,1-Dichloroethane	0.509	0.470	0.010	-7.7	20.0
Vinyl acetate	0.919	0.821	0.010	-10.7	20.0
2-Butanone	0.040	0.030	0.010	-24.6	20.0
cis-1,2-Dichloroethene	0.300	0.276	0.010	-8.1	20.0
2,2-Dichloropropane	0.387	0.258	0.010	-33.3	20.0
Bromochloromethane	0.136	0.127	0.010	-6.5	20.0
Chloroform	0.492	0.457	0.010	-7.0	20.0
1,1,1-Trichloroethane	0.406	0.376	0.010	-7.6	20.0
1,1-Dichloropropene	0.131	0.119	0.010	-9.6	20.0
Carbon tetrachloride	0.342	0.316	0.010	-7.6	20.0
1,2-Dichloroethane	0.378	0.354	0.010	-6.5	20.0
Benzene	1.157	1.032	0.010	-10.9	20.0
Trichloroethene	0.280	0.255	0.010	-8.9	20.0
1,2-Dichloropropane	0.296	0.276	0.010	-6.8	20.0
Dibromomethane	0.178	0.167	0.010	-5.9	20.0
Bromodichloromethane	0.366	0.348	0.010	-4.8	20.0
cis-1,3-Dichloropropene	0.427	0.391	0.010	-8.6	20.0
4-Methyl-2-pentanone	0.256	0.214	0.010	-16.4	20.0
Toluene	1.219	1.057	0.010	-13.3	20.0
trans-1,3-Dichloropropene	0.379	0.335	0.010	-11.7	20.0
1,1,2-Trichloroethane	0.255	0.234	0.010	-8.3	20.0
1,3-Dichloropropane	0.611	0.553	0.010	-9.6	20.0
Tetrachloroethene	0.324	0.364	0.010	12.4	20.0
2-Hexanone	0.263	0.195	0.010	-26.0	20.0
Dibromochloromethane	0.383	0.362	0.010	-5.5	20.0
1,2-Dibromoethane	0.365	0.328	0.010	-10.2	20.0
Chlorobenzene	1.035	0.916	0.010	-11.5	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V10 Calibration Date: 05/17/2012 Time: 4:52

Lab File ID: V8B1742.D Init. Calib. Date(s): 05/16/2012 05/16/2012

EPA Sample No.(VSTD####) VSTD05010F Init. Calib. Time(s): 12:07 14:43

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.361	0.333	0.010	-8.0	20.0
Ethylbenzene	0.540	0.479	0.010	-11.2	20.0
m,p-Xylene	0.683	0.594	0.010	-13.1	20.0
o-Xylene	0.638	0.579	0.010	-9.3	20.0
Xylene (Total)	0.668	0.589	0.010	-11.8	20.0
Styrene	0.990	0.944	0.010	-4.6	20.0
Bromoform	0.235	0.211	0.010	-10.0	20.0
Isopropylbenzene	1.528	1.411	0.300	-7.6	20.0
1,1,2,2-Tetrachloroethane	1.031	0.836	0.300	-18.9	20.0
Bromobenzene	0.874	0.748	0.010	-14.4	20.0
1,2,3-Trichloropropane	1.213	0.959	0.010	-20.9	20.0
n-Propylbenzene	0.852	0.747	0.010	-12.3	20.0
2-Chlorotoluene	0.817	0.693	0.010	-15.2	20.0
1,3,5-Trimethylbenzene	2.687	2.360	0.010	-12.2	20.0
4-Chlorotoluene	0.826	0.704	0.010	-14.7	20.0
tert-Butylbenzene	2.646	2.150	0.010	-18.8	20.0
1,2,4-Trimethylbenzene	2.814	2.364	0.010	-16.0	20.0
sec-Butylbenzene	3.163	2.794	0.010	-11.6	20.0
4-Isopropyltoluene	2.510	2.244	0.010	-10.6	20.0
1,3-Dichlorobenzene	1.520	1.269	0.010	-16.5	20.0
1,4-Dichlorobenzene	1.602	1.296	0.010	-19.1	20.0
n-Butylbenzene	2.217	1.896	0.100	-14.5	20.0
1,2-Dichlorobenzene	1.497	1.257	0.010	-16.0	20.0
1,2-Dibromo-3-chloropropane	0.155	0.122	0.010	-21.3	20.0
1,2,4-Trichlorobenzene	0.700	0.597	0.010	-14.7	20.0
Hexachlorobutadiene	0.367	0.279	0.010	-24.1	20.0
1,2,3-Trichlorobenzene	0.645	0.525	0.010	-18.6	20.0
Naphthalene	1.777	1.363	0.010	-23.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Instrument ID: V10 Calibration Date: 05/17/2012 Time: 4:52

Lab File ID: V8B1742.D Init. Calib. Date(s): 05/16/2012 05/16/2012

EPA Sample No.(VSTD####) VSTD05010F Init. Calib. Time(s): 12:07 14:43

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.252	0.258	0.010	2.2	20.0
1,2-Dichloroethane-d4	0.059	0.060	0.010	0.6	20.0
Toluene-d8	1.370	1.361	0.010	-0.7	20.0
Bromofluorobenzene	0.477	0.480	0.010	0.6	20.0

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120517B.B\V6I7031.D
Lab Smp Id: VSTD0506B Client Smp ID: VSTD0506B
Inj Date : 17-MAY-2012 19:33
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506B,VSTD0506B
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 12:48 wluo Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.757	1.757 (0.328)		191702	50.0000	46
2 Freon114	85	1.852	1.852 (0.345)		279450	50.0000	49
3 Chloromethane	50	1.935	1.935 (0.361)		372664	50.0000	53
4 Vinyl Chloride	62	2.029	2.029 (0.378)		263026	50.0000	50
5 Bromomethane	94	2.313	2.313 (0.431)		136788	50.0000	50
6 Chloroethane	64	2.408	2.408 (0.449)		153337	50.0000	50
7 Trichlorofluoromethane	101	2.597	2.597 (0.484)		265053	50.0000	50
126 Ethanol	46	2.716	2.716 (0.506)		88111	5000.00	5100(A)
8 Ether	59	2.799	2.799 (0.522)		174096	50.0000	51
9 Acrolein	56	2.917	2.917 (0.544)		225167	250.000	260(A)
10 1,1-Dichloroethene	96	3.023	3.023 (0.563)		215147	50.0000	50
11 1,1,2-Trichloro-1,2,2-Trifluo	101	3.000	3.000 (0.559)		212228	50.0000	52
12 Acetone	58	3.035	3.035 (0.566)		30855	50.0000	56
13 Iodomethane	142	3.165	3.165 (0.590)		429299	50.0000	58
14 Carbon Disulfide	76	3.213	3.213 (0.599)		877837	50.0000	52
15 Acetonitrile	41	3.272	3.272 (0.610)		616578	500.000	540(A)
16 Allyl Chloride	39	3.284	3.284 (0.612)		237551	50.0000	52
17 Methyl Acetate	43	3.284	3.284 (0.612)		177140	50.0000	51
18 Methylene Chloride	84	3.402	3.402 (0.634)		231361	50.0000	50
19 tert-Butanol	59	3.437	3.437 (0.641)		42776	100.000	100
20 Acrylonitrile	53	3.568	3.568 (0.665)		95579	50.0000	54
21 trans-1,2-Dichloroethene	96	3.591	3.591 (0.669)		205578	50.0000	50
22 Methyl tert-butyl ether	73	3.579	3.579 (0.667)		550725	50.0000	52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.923	3.923	(0.731)	361007		50.0000	51
24 Vinyl acetate	43	3.946	3.946	(0.735)	774705		50.0000	50
25 Diisopropyl Ether	45	3.946	3.946	(0.735)	737030		50.0000	50
26 2-Chloro-1,3-Butadiene	53	3.994	3.994	(0.744)	308919		50.0000	50
27 Ethyl tert-butyl ether	59	4.242	4.242	(0.791)	615040		50.0000	52
29 2,2-Dichloropropane	77	4.396	4.396	(0.819)	153394		50.0000	47
28 cis-1,2-Dichloroethene	96	4.396	4.396	(0.819)	230580		50.0000	51
30 2-Butanone	72	4.396	4.396	(0.819)	27947		50.0000	55
32 Propionitrile	54	4.455	4.455	(0.830)	331993		500.000	520(A)
33 Methacrylonitrile	41	4.573	4.573	(0.852)	267197		100.000	92
34 Bromochloromethane	128	4.597	4.597	(0.857)	122962		50.0000	53
31 Tetrahydrofuran	72	4.633	4.633	(0.863)	53483		100.000	100
35 Chloroform	83	4.644	4.644	(0.866)	328054		50.0000	51
\$ 36 Dibromofluoromethane	113	4.786	4.786	(0.892)	203564		50.0000	48
37 1,1,1-Trichloroethane	97	4.822	4.822	(0.899)	260452		50.0000	50
38 Cyclohexane	56	4.869	4.869	(0.907)	368059		50.0000	54
39 1,1-Dichloropropene	110	4.952	4.952	(0.923)	105098		50.0000	50
40 Carbon Tetrachloride	117	4.964	4.964	(0.925)	219645		50.0000	50
41 Isobutyl Alcohol	43	4.999	4.999	(0.932)	212111		1000.00	1100(A)
\$ 42 1,2-Dichloroethane-d4	102	5.082	5.082	(0.947)	47405		50.0000	49
43 Benzene	78	5.141	5.141	(0.958)	731094		50.0000	52
44 1,2-Dichloroethane	62	5.153	5.153	(0.960)	252689		50.0000	51
45 tert-Amyl methyl ether	73	5.201	5.201	(0.969)	547452		50.0000	52
M 50 1,2-Dichloroethene (Total)	96				436158		100.000	(a)
* 46 Fluorobenzene	96	5.366	5.366	(1.000)	735325		50.0000	
47 Trichloroethene	130	5.698	5.698	(1.062)	241439		50.0000	50
48 Methylcyclohexane	83	5.875	5.875	(1.095)	285425		50.0000	48
49 1,2-Dichloropropane	63	5.911	5.911	(1.101)	208258		50.0000	52
51 Methyl Methacrylate	69	5.982	5.982	(1.115)	160772		50.0000	57
52 Dibromomethane	93	6.017	6.017	(1.121)	132811		50.0000	52
53 1,4-Dioxane	88	6.017	6.017	(1.121)	44048		1000.00	1200(A)
54 Bromodichloromethane	83	6.159	6.159	(1.148)	256427		50.0000	52
55 2-Chloroethyl vinyl ether	63	6.419	6.419	(1.196)	58688		50.0000	62
56 cis-1,3-Dichloropropene	75	6.573	6.573	(1.225)	308864		50.0000	54
57 4-Methyl-2-pentanone	43	6.715	6.715	(1.251)	210257		50.0000	52
\$ 58 Toluene-d8	98	6.845	6.845	(0.819)	712347		50.0000	50
59 Toluene	91	6.916	6.916	(1.289)	792720		50.0000	51
60 trans-1,3-Dichloropropene	75	7.129	7.129	(1.329)	283144		50.0000	56
61 Ethyl Methacrylate	69	7.200	7.200	(1.342)	212451		50.0000	55
62 1,1,2-Trichloroethane	97	7.319	7.319	(1.364)	182892		50.0000	51
63 Tetrachloroethene	164	7.484	7.484	(0.895)	211230		50.0000	54
64 1,3-Dichloropropane	76	7.496	7.496	(0.897)	293927		50.0000	52
65 2-Hexanone	43	7.567	7.567	(0.905)	160877		50.0000	52
66 Dibromochloromethane	129	7.745	7.745	(0.926)	230851		50.0000	54
67 1,2-Dibromoethane	107	7.875	7.875	(0.942)	210057		50.0000	52
69 1-Chlorohexane	91	8.348	8.348	(0.999)	259832		50.0000	48
* 68 Chlorobenzene-d5	117	8.360	8.360	(1.000)	617916		50.0000	
70 Chlorobenzene	112	8.395	8.395	(1.004)	564669		50.0000	52
71 1,1,1,2-Tetrachloroethane	131	8.478	8.478	(1.014)	223677		50.0000	52
72 Ethylbenzene	106	8.502	8.502	(1.017)	296402		50.0000	52
73 m,p-Xylene	106	8.632	8.632	(1.033)	697928		100.000	100
74 o-Xylene	106	9.082	9.082	(1.086)	348480		50.0000	52
75 Styrene	104	9.094	9.094	(1.088)	565813		50.0000	55
76 Bromoform	173	9.318	9.318	(1.115)	141750		50.0000	55

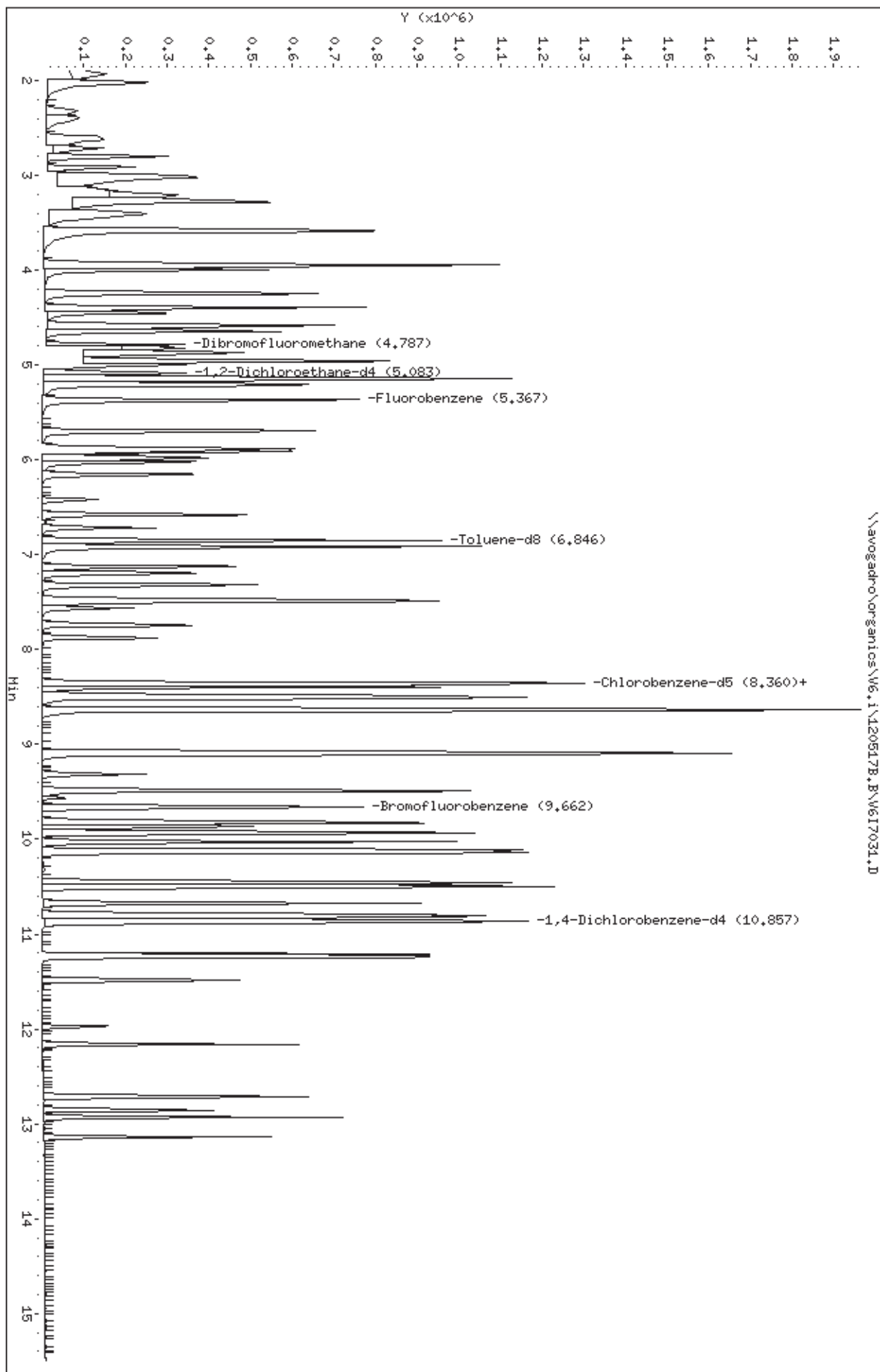
							AMOUNTS	
		QUANT SIG					CAL -AMT	ON -COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	=====	=====	=====	=====	=====	=====
	77 Isopropylbenzene	105	9.484	9.484	(1.134)	816272	50.0000	50
	78 trans-1,4-Dichloro-2-butene	75	9.863	9.863	(1.180)	233846	50.0000	52
\$	79 Bromofluorobenzene	95	9.662	9.662	(1.156)	285569	50.0000	49
	80 1,1,2,2-Tetrachloroethane	83	9.815	9.815	(0.904)	237507	50.0000	54
	81 Bromobenzene	156	9.827	9.827	(0.905)	247092	50.0000	54
	82 1,2,3-Trichloropropane	75	9.863	9.863	(0.908)	233846	50.0000	56
	83 n-Propylbenzene	120	9.934	9.934	(0.915)	239821	50.0000	53
	84 2-Chlorotoluene	126	10.028	10.028	(0.924)	225384	50.0000	55
	85 1,3,5-Trimethylbenzene	105	10.111	10.111	(0.931)	652900	50.0000	53
	86 4-Chlorotoluene	126	10.147	10.147	(0.935)	240517	50.0000	54
M	94 Xylene (Total)	106				1046408	150.000	(a)
	87 tert-Butylbenzene	119	10.454	10.454	(0.963)	751713	50.0000	52
	88 1,2,4-Trimethylbenzene	105	10.502	10.502	(0.967)	664959	50.0000	53
	89 sec-Butylbenzene	105	10.679	10.679	(0.984)	757497	50.0000	51
	90 1,3-Dichlorobenzene	146	10.786	10.786	(0.993)	423714	50.0000	53
	91 4-Isopropyltoluene	119	10.821	10.821	(0.997)	632642	50.0000	50
*	92 1,4-Dichlorobenzene-d4	152	10.857	10.857	(1.000)	302325	50.0000	
	93 1,4-Dichlorobenzene	146	10.880	10.880	(1.002)	430896	50.0000	53
	95 n-Butylbenzene	91	11.212	11.212	(1.033)	510670	50.0000	50
	96 1,2-Dichlorobenzene	146	11.247	11.247	(1.036)	410833	50.0000	53
	97 Hexachloroethane	117	11.484	11.484	(1.058)	103329	50.0000	61
	98 1,2-Dibromo-3-chloropropane	75	11.969	11.969	(1.102)	39644	50.0000	56
	141 1,3,5-Trichlorobenzene	182	12.158	12.158	(2.266)	180168	50.0000	46(A)
	99 1,2,4-Trichlorobenzene	180	12.714	12.714	(1.171)	186784	50.0000	50
100	Hexachlorobutadiene	225	12.856	12.856	(1.184)	72590	50.0000	46
101	Naphthalene	128	12.927	12.927	(1.191)	551483	50.0000	58
102	1,2,3-Trichlorobenzene	180	13.140	13.140	(1.210)	159547	50.0000	51

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6.1\120517B.B\W617031.D
Date : 17-May-2012 19:33
Client ID: VSTD0506B
Sample Info: 5HL,VSTD0506B,VSTD0506B
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120518.B\V6I7062.D
 Report Date: 18-May-2012 14:28

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120518.B\V6I7062.D
 Lab Smp Id: VSTD0506C Client Smp ID: VSTD0506C
 Inj Date : 18-MAY-2012 08:32
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VSTD0506C,VSTD0506C
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
 Meth Date : 18-May-2012 13:59 V6.i Quant Type: ISTD
 Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
 Als bottle: 19 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.757	1.757 (0.328)		187695	50.0000	45
2 Freon114	85	1.852	1.852 (0.345)		269586	50.0000	47
3 Chloromethane	50	1.935	1.935 (0.361)		340566	50.0000	48
4 Vinyl Chloride	62	2.030	2.030 (0.378)		244794	50.0000	46
5 Bromomethane	94	2.314	2.314 (0.431)		125595	50.0000	46
6 Chloroethane	64	2.408	2.408 (0.449)		140924	50.0000	46
7 Trichlorofluoromethane	101	2.598	2.598 (0.484)		255865	50.0000	48
126 Ethanol	46	2.716	2.716 (0.506)		117909	5000.00	6600(A)
8 Ether	59	2.799	2.799 (0.522)		166734	50.0000	48(Q)
9 Acrolein	56	2.917	2.917 (0.544)		223530	250.000	260(A)
10 1,1-Dichloroethene	96	3.024	3.024 (0.563)		195968	50.0000	46
11 1,1,2-Trichloro-1,2,2-Trifluo	101	3.000	3.000 (0.559)		199601	50.0000	48
12 Acetone	58	3.035	3.035 (0.566)		32378	50.0000	58
13 Iodomethane	142	3.166	3.166 (0.590)		350715	50.0000	47
14 Carbon Disulfide	76	3.213	3.213 (0.599)		801743	50.0000	48
15 Acetonitrile	41	3.272	3.272 (0.610)		613618	500.000	540(A)
16 Allyl Chloride	39	3.284	3.284 (0.612)		234691	50.0000	51
17 Methyl Acetate	43	3.284	3.284 (0.612)		168820	50.0000	48
18 Methylene Chloride	84	3.402	3.402 (0.634)		219277	50.0000	48
19 tert-Butanol	59	3.438	3.438 (0.641)		41835	100.000	100
20 Acrylonitrile	53	3.568	3.568 (0.665)		88604	50.0000	50
21 trans-1,2-Dichloroethene	96	3.591	3.591 (0.669)		190061	50.0000	46
22 Methyl tert-butyl ether	73	3.580	3.580 (0.667)		509873	50.0000	48

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.923	3.923	(0.731)	341816		50.0000	48
24 Vinyl acetate	43	3.946	3.946	(0.735)	748213		50.0000	48
25 Diisopropyl Ether	45	3.946	3.946	(0.735)	699256		50.0000	48
26 2-Chloro-1,3-Butadiene	53	3.994	3.994	(0.744)	283515		50.0000	46
27 Ethyl tert-butyl ether	59	4.242	4.242	(0.791)	571085		50.0000	48
29 2,2-Dichloropropane	77	4.396	4.396	(0.819)	153099		50.0000	47
28 cis-1,2-Dichloroethene	96	4.396	4.396	(0.819)	218059		50.0000	48
30 2-Butanone	72	4.396	4.396	(0.819)	26243		50.0000	51(Q)
32 Propionitrile	54	4.455	4.455	(0.830)	312181		500.000	490(A)
33 Methacrylonitrile	41	4.574	4.574	(0.852)	251508		100.000	86
34 Bromochloromethane	128	4.597	4.597	(0.857)	117566		50.0000	50
31 Tetrahydrofuran	72	4.633	4.633	(0.863)	49717		100.000	97
35 Chloroform	83	4.645	4.645	(0.866)	313260		50.0000	49
\$ 36 Dibromofluoromethane	113	4.787	4.787	(0.892)	209511		50.0000	50
37 1,1,1-Trichloroethane	97	4.822	4.822	(0.899)	235463		50.0000	45
38 Cyclohexane	56	4.869	4.869	(0.907)	336069		50.0000	49
39 1,1-Dichloropropene	110	4.952	4.952	(0.923)	96280		50.0000	46
40 Carbon Tetrachloride	117	4.964	4.964	(0.925)	204443		50.0000	46
41 Isobutyl Alcohol	43	5.000	5.000	(0.932)	198347		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	5.082	5.082	(0.947)	47700		50.0000	49
43 Benzene	78	5.142	5.142	(0.958)	679119		50.0000	48
44 1,2-Dichloroethane	62	5.153	5.153	(0.960)	243861		50.0000	49
45 tert-Amyl methyl ether	73	5.201	5.201	(0.969)	514838		50.0000	49
M 50 1,2-Dichloroethene (Total)	96				408120		100.000	(a)
* 46 Fluorobenzene	96	5.366	5.366	(1.000)	737052		50.0000	
47 Trichloroethene	130	5.698	5.698	(1.062)	222787		50.0000	46
48 Methylcyclohexane	83	5.875	5.875	(1.095)	260777		50.0000	44
49 1,2-Dichloropropane	63	5.911	5.911	(1.101)	197378		50.0000	49
51 Methyl Methacrylate	69	5.982	5.982	(1.115)	150446		50.0000	53
52 Dibromomethane	93	6.017	6.017	(1.121)	123865		50.0000	48
53 1,4-Dioxane	88	6.017	6.017	(1.121)	42994		1000.00	1100(A)
54 Bromodichloromethane	83	6.159	6.159	(1.148)	246659		50.0000	50
55 2-Chloroethyl vinyl ether	63	6.420	6.420	(1.196)	50445		50.0000	53
56 cis-1,3-Dichloropropene	75	6.573	6.573	(1.225)	300865		50.0000	52
57 4-Methyl-2-pentanone	43	6.715	6.715	(1.251)	197619		50.0000	48
\$ 58 Toluene-d8	98	6.846	6.846	(0.819)	711931		50.0000	50
59 Toluene	91	6.917	6.917	(1.289)	724585		50.0000	46
60 trans-1,3-Dichloropropene	75	7.129	7.129	(1.329)	270898		50.0000	53
61 Ethyl Methacrylate	69	7.200	7.200	(1.342)	203212		50.0000	52
62 1,1,2-Trichloroethane	97	7.319	7.319	(1.364)	172193		50.0000	48
63 Tetrachloroethene	164	7.473	7.473	(0.894)	163623		50.0000	42
64 1,3-Dichloropropane	76	7.496	7.496	(0.897)	275932		50.0000	49
65 2-Hexanone	43	7.567	7.567	(0.905)	157470		50.0000	51
66 Dibromochloromethane	129	7.745	7.745	(0.926)	224845		50.0000	52
67 1,2-Dibromoethane	107	7.875	7.875	(0.942)	197218		50.0000	49
69 1-Chlorohexane	91	8.348	8.348	(0.999)	225915		50.0000	42
* 68 Chlorobenzene-d5	117	8.360	8.360	(1.000)	618401		50.0000	
70 Chlorobenzene	112	8.396	8.396	(1.004)	517887		50.0000	48
71 1,1,1,2-Tetrachloroethane	131	8.478	8.478	(1.014)	210093		50.0000	49
72 Ethylbenzene	106	8.502	8.502	(1.017)	263922		50.0000	46
73 m,p-Xylene	106	8.632	8.632	(1.033)	621145		100.000	92
74 o-Xylene	106	9.082	9.082	(1.086)	310919		50.0000	46
75 Styrene	104	9.106	9.106	(1.089)	536123		50.0000	52
76 Bromoform	173	9.319	9.319	(1.115)	140276		50.0000	55

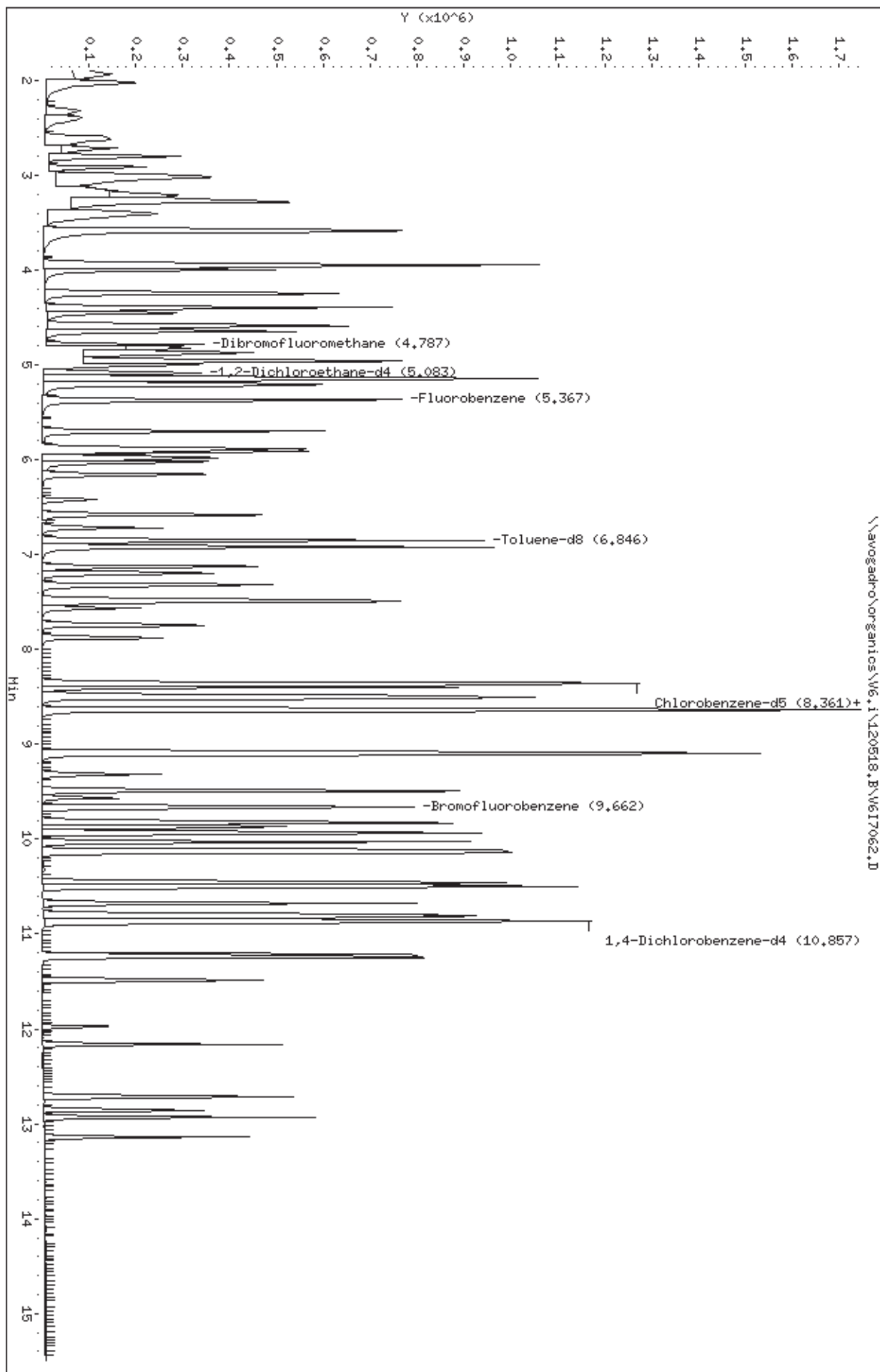
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.484	9.484 (1.134)		710766		50.0000	44
78 trans-1,4-Dichloro-2-butene	75	9.863	9.863 (1.180)		231559		50.0000	52(T)
\$ 79 Bromofluorobenzene	95	9.662	9.662 (1.156)		286386		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.816	9.816 (0.904)		223747		50.0000	50
81 Bromobenzene	156	9.827	9.827 (0.905)		228780		50.0000	50
82 1,2,3-Trichloropropane	75	9.863	9.863 (0.908)		231559		50.0000	55
83 n-Propylbenzene	120	9.934	9.934 (0.915)		212486		50.0000	46
84 2-Chlorotoluene	126	10.029	10.029 (0.924)		203746		50.0000	49
85 1,3,5-Trimethylbenzene	105	10.111	10.111 (0.931)		569015		50.0000	45
86 4-Chlorotoluene	126	10.147	10.147 (0.935)		213288		50.0000	47
M 94 Xylene (Total)	106				932064		150.000	(a)
87 tert-Butylbenzene	119	10.455	10.455 (0.963)		675836		50.0000	46
88 1,2,4-Trimethylbenzene	105	10.502	10.502 (0.967)		579972		50.0000	45
89 sec-Butylbenzene	105	10.679	10.679 (0.984)		647471		50.0000	43
90 1,3-Dichlorobenzene	146	10.786	10.786 (0.993)		378013		50.0000	47
91 4-Isopropyltoluene	119	10.821	10.821 (0.997)		554128		50.0000	43
* 92 1,4-Dichlorobenzene-d4	152	10.857	10.857 (1.000)		306281		50.0000	
93 1,4-Dichlorobenzene	146	10.880	10.880 (1.002)		387721		50.0000	47
95 n-Butylbenzene	91	11.212	11.212 (1.033)		445951		50.0000	43
96 1,2-Dichlorobenzene	146	11.247	11.247 (1.036)		369345		50.0000	47
97 Hexachloroethane	117	11.484	11.484 (1.058)		103440		50.0000	60
98 1,2-Dibromo-3-chloropropane	75	11.969	11.969 (1.102)		36585		50.0000	51
141 1,3,5-Trichlorobenzene	182	12.158	12.158 (2.266)		151106		50.0000	39(A)
99 1,2,4-Trichlorobenzene	180	12.715	12.715 (1.171)		155342		50.0000	41
100 Hexachlorobutadiene	225	12.857	12.857 (1.184)		59679		50.0000	37
101 Naphthalene	128	12.928	12.928 (1.191)		467443		50.0000	48
102 1,2,3-Trichlorobenzene	180	13.141	13.141 (1.210)		129806		50.0000	41

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6.1\120518.B\W617062.D
Date : 18-May-2012 08:32
Client ID: WSTD0506C
Sample Info: 5HL,WSTD0506C,WSTD0506C
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1742.d
Lab Smp Id: VSTD05010F Client Smp ID: VSTD05010F
Inj Date : 17-MAY-2012 04:52
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD05010F,VSTD05010F
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:36 amarquis Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.651	1.651 (0.312)		105472	50.0000	38
2 Freon114	85	1.766	1.766 (0.333)		93357	50.0000	38
3 Chloromethane	50	1.818	1.818 (0.343)		155130	50.0000	45
4 Vinyl Chloride	62	1.918	1.918 (0.362)		129890	50.0000	47
5 Bromomethane	94	2.207	2.207 (0.416)		52405	50.0000	51
6 Chloroethane	64	2.294	2.294 (0.433)		64351	50.0000	47
7 Trichlorofluoromethane	101	2.509	2.509 (0.473)		139615	50.0000	46
126 Ethanol	46	2.631	2.631 (0.497)		33805	5000.00	4200(A)
8 Ether	59	2.731	2.731 (0.515)		101063	50.0000	46
9 Acrolein	56	2.834	2.834 (0.535)		129589	250.000	220(A)
10 1,1-Dichloroethene	96	2.927	2.927 (0.552)		105194	50.0000	44
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.921	2.921 (0.551)		90942	50.0000	40
12 Acetone	58	2.953	2.953 (0.557)		13777	50.0000	33
13 Iodomethane	142	3.053	3.053 (0.576)		74400	50.0000	48
14 Carbon Disulfide	76	3.117	3.117 (0.588)		342224	50.0000	42
15 Acetonitrile	41	3.204	3.204 (0.604)		191594	500.000	450(A)
16 Allyl Chloride	39	3.207	3.207 (0.605)		116503	50.0000	46
17 Methyl Acetate	43	3.210	3.210 (0.606)		83397	50.0000	43
18 Methylene Chloride	84	3.300	3.300 (0.623)		126620	50.0000	47
19 tert-Butanol	59	3.358	3.358 (0.634)		19008	100.000	74
20 Acrylonitrile	53	3.487	3.487 (0.658)		43629	50.0000	47
21 trans-1,2-Dichloroethene	96	3.522	3.522 (0.665)		114028	50.0000	45
22 Methyl tert-butyl ether	73	3.512	3.512 (0.663)		333208	50.0000	46

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1742.d
Report Date: 18-May-2012 14:42

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ug/L)	ON - COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	219695		50.0000	46
24 Vinyl acetate	43	3.882	3.882	(0.732)	383488		50.0000	45
25 Diisopropyl Ether	45	3.888	3.888	(0.734)	392452		50.0000	48
26 2-Chloro-1,3-Butadiene	53	3.930	3.930	(0.742)	169655		50.0000	46
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.789)	354071		50.0000	47
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	120480		50.0000	33
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	128924		50.0000	46
30 2-Butanone	72	4.323	4.323	(0.816)	14072		50.0000	38
32 Propionitrile	54	4.368	4.368	(0.824)	167504		500.000	440(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	129281		100.000	88
34 Bromochloromethane	128	4.519	4.519	(0.853)	59481		50.0000	47
31 Tetrahydrofuran	72	4.560	4.560	(0.860)	30058		100.000	86
35 Chloroform	83	4.573	4.573	(0.863)	213555		50.0000	46
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	120624		50.0000	51
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	175589		50.0000	46
38 Cyclohexane	56	4.808	4.808	(0.907)	165057		50.0000	41
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	55492		50.0000	45
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	147523		50.0000	46
41 Isobutyl Alcohol	43	4.924	4.924	(0.929)	90478		1000.00	770(A)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	27872		50.0000	50
43 Benzene	78	5.069	5.069	(0.956)	482132		50.0000	44
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	165466		50.0000	47
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	330382		50.0000	46
M 50 1,2-Dichloroethene (Total)	96				242952		100.000	(a)
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	467361		50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	119222		50.0000	46
48 Methylcyclohexane	83	5.818	5.818	(1.098)	147494		50.0000	40
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	129132		50.0000	47
51 Methyl Methacrylate	69	5.911	5.911	(1.115)	88477		50.0000	44
52 Dibromomethane	93	5.946	5.946	(1.122)	78146		50.0000	47
53 1,4-Dioxane	88	5.946	5.946	(1.122)	27826		1000.00	800(A)
54 Bromodichloromethane	83	6.078	6.078	(1.147)	162777		50.0000	48
55 2-Chloroethyl vinyl ether	63	6.503	6.503	(1.227)	978		50.0000	35(T)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	182624		50.0000	46
57 4-Methyl-2-pentanone	43	6.644	6.644	(1.254)	99794		50.0000	42
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	458361		50.0000	50
59 Toluene	91	6.850	6.850	(1.292)	493869		50.0000	43
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.330)	156441		50.0000	44
61 Ethyl Methacrylate	69	7.130	7.130	(1.345)	124359		50.0000	44
62 1,1,2-Trichloroethane	97	7.242	7.242	(1.366)	109201		50.0000	46
63 Tetrachloroethene	164	7.409	7.409	(0.894)	122606		50.0000	56
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	186162		50.0000	45
65 2-Hexanone	43	7.493	7.493	(0.904)	65608		50.0000	37
66 Dibromochloromethane	129	7.660	7.660	(0.924)	121894		50.0000	47
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	110315		50.0000	45
69 1-Chlorohexane	91	8.277	8.277	(0.999)	144367		50.0000	43
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	336829		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	308450		50.0000	44
71 1,1,1,2-Tetrachloroethane	131	8.400	8.400	(1.014)	112009		50.0000	46
72 Ethylbenzene	106	8.435	8.435	(1.018)	161316		50.0000	44
73 m,p-Xylene	106	8.564	8.564	(1.033)	400032		100.000	87
74 o-Xylene	106	9.010	9.010	(1.087)	195090		50.0000	45
75 Styrene	104	9.023	9.023	(1.089)	318106		50.0000	46
76 Bromoform	173	9.226	9.226	(1.113)	71121		50.0000	45

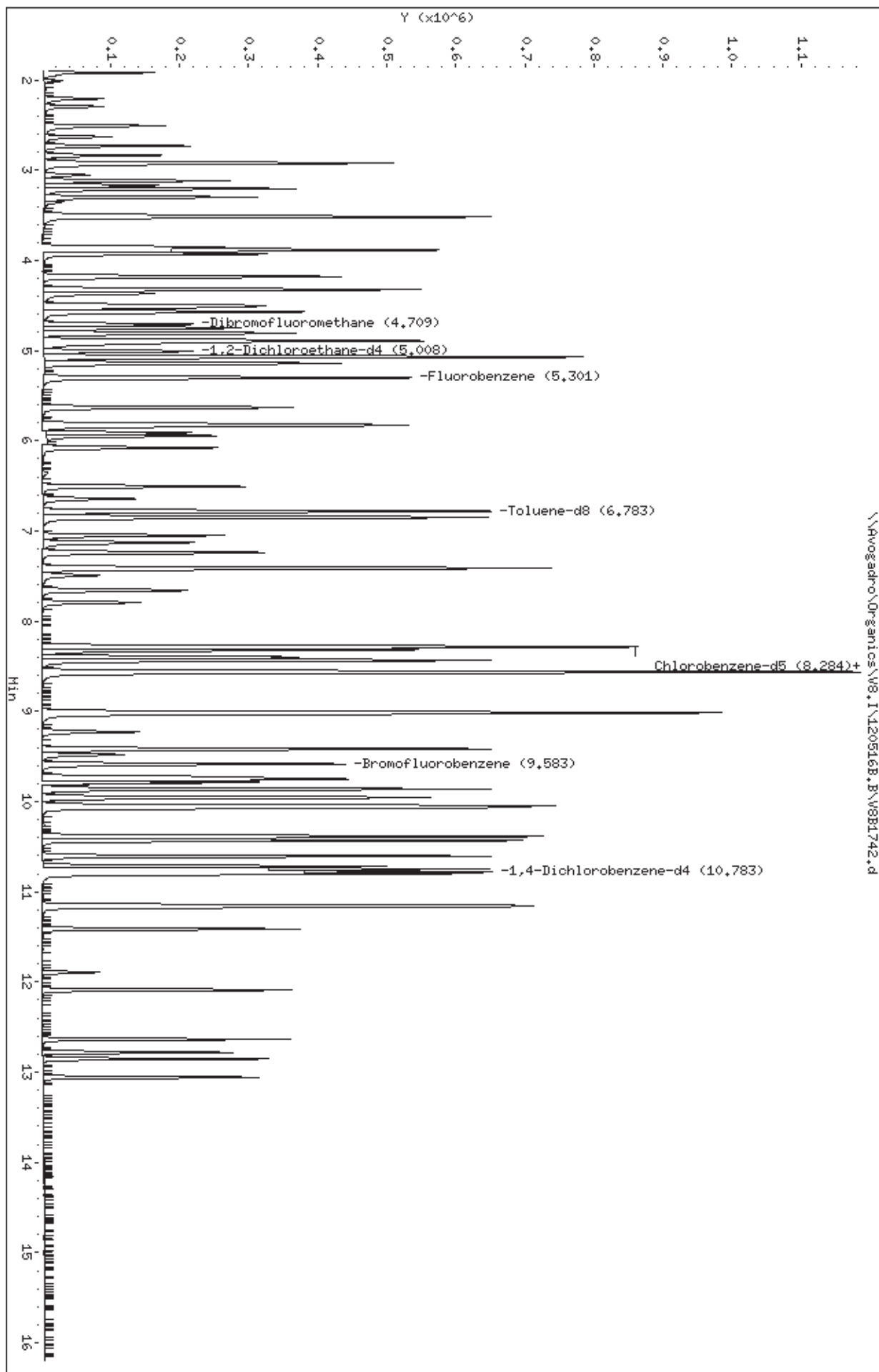
Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.419	9.419 (1.137)		475409	50.0000	46
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		30966	50.0000	37
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.156)		161623	50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.727 (0.902)		137629	50.0000	40
81 Bromobenzene	156	9.753	9.753 (0.905)		123077	50.0000	43
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		157832	50.0000	40
83 n-Propylbenzene	120	9.863	9.863 (0.915)		123015	50.0000	44
84 2-Chlorotoluene	126	9.953	9.953 (0.923)		114024	50.0000	42
85 1,3,5-Trimethylbenzene	105	10.046	10.046 (0.932)		388339	50.0000	45
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		115924	50.0000	43
M 94 Xylene (Total)	106				595122	150.000	(a)
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		353830	50.0000	41
88 1,2,4-Trimethylbenzene	105	10.432	10.432 (0.968)		389073	50.0000	42
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		459887	50.0000	44
90 1,3-Dichlorobenzene	146	10.718	10.718 (0.994)		208842	50.0000	42
91 4-Isopropyltoluene	119	10.747	10.747 (0.997)		369282	50.0000	45
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		164569	50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.805 (1.002)		213229	50.0000	40
95 n-Butylbenzene	91	11.149	11.149 (1.034)		311942	50.0000	43
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		206883	50.0000	42
97 Hexachloroethane	117	11.412	11.412 (1.059)		73162	50.0000	43
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891 (1.103)		20066	50.0000	39
141 1,3,5-Trichlorobenzene	182	12.088	12.088 (2.281)		100413	50.0000	43(A)
99 1,2,4-Trichlorobenzene	180	12.637	12.637 (1.172)		98245	50.0000	41
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		45897	50.0000	38
101 Naphthalene	128	12.853	12.853 (1.192)		224245	50.0000	38
102 1,2,3-Trichlorobenzene	180	13.059	13.059 (1.211)		86473	50.0000	41

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\W8.1\120516B.B\W8B1742.d
Date : 17-May-2012 04:52
Client ID: WSTD05010F
Sample Info: 5HL,WSTD05010F,WSTD05010F
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120517A.B\V6I7020.D
 Lab Smp Id: BFB6A Client Smp ID: BFB6A
 Inj Date : 17-MAY-2012 15:54
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 2UL, BFB6A, BFB6A
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120517A.B\bfb8260.m
 Meth Date : 30-Apr-2012 16:25 wluo Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
				ON-COL		FINAL			
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb						CAS #: 460-00-4			
9.661	9.600 (0.000)	95	121528				0.00-	100.00	100.00
9.661	9.600 (0.000)	50	22200				15.00-	40.00	18.27
9.661	9.600 (0.000)	75	53792				30.00-	60.00	44.26
9.661	9.600 (0.000)	96	8233				5.00-	9.00	6.77
9.661	9.600 (0.000)	173	175				0.00-	2.00	0.17
9.661	9.600 (0.000)	174	100032				50.00-	100.00	82.31
9.661	9.600 (0.000)	175	7619				5.00-	9.00	7.62
9.661	9.600 (0.000)	176	98728				95.00-	101.00	98.70
9.661	9.600 (0.000)	177	6883				5.00-	9.00	6.97

Date : 17-MAY-2012 15:54

Client ID: BFB6A

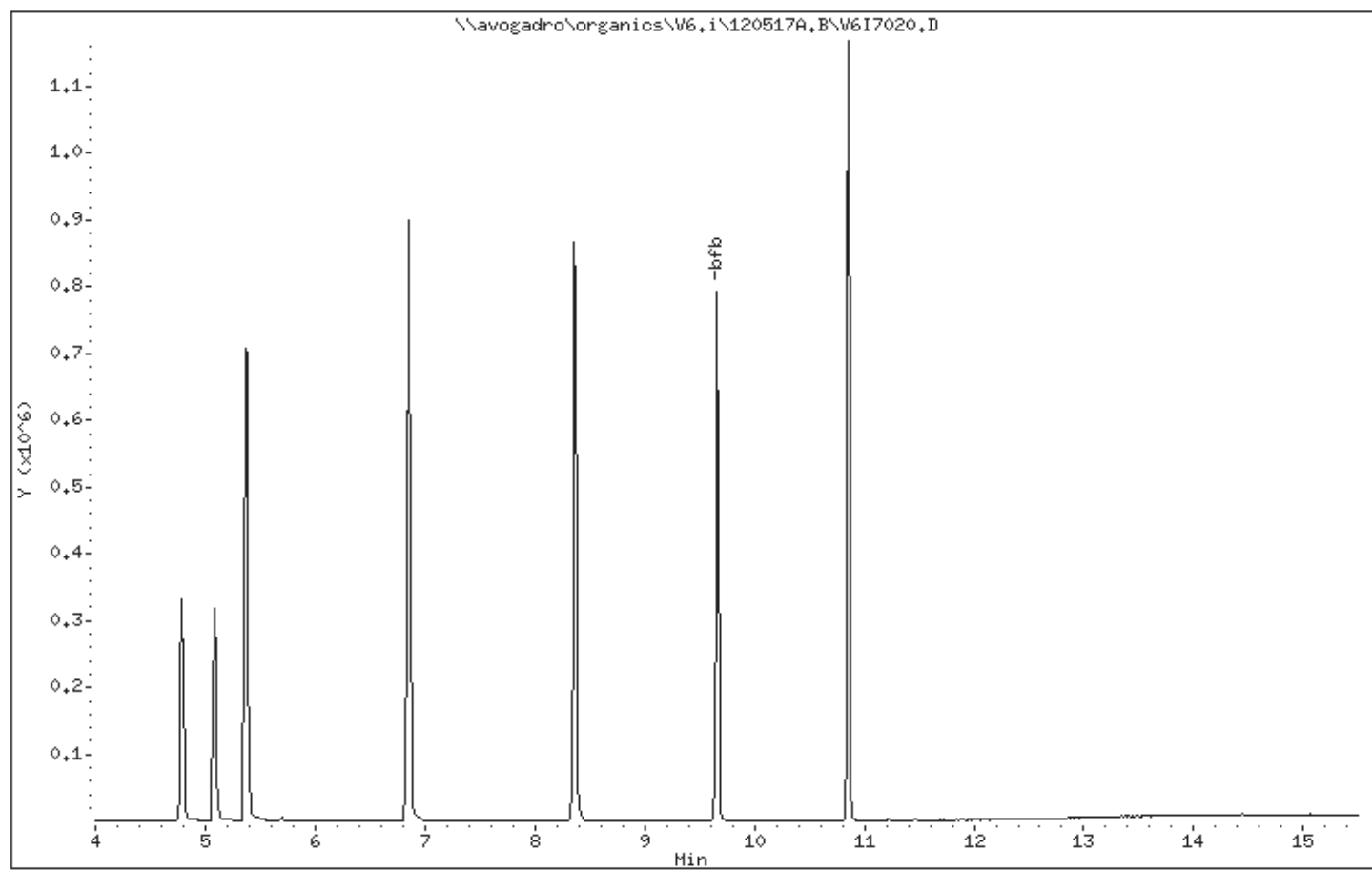
Instrument: V6.i

Sample Info: 2UL,BFB6A,BFB6A

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 17-MAY-2012 15:54

Client ID: BFB6A

Instrument: V6.i

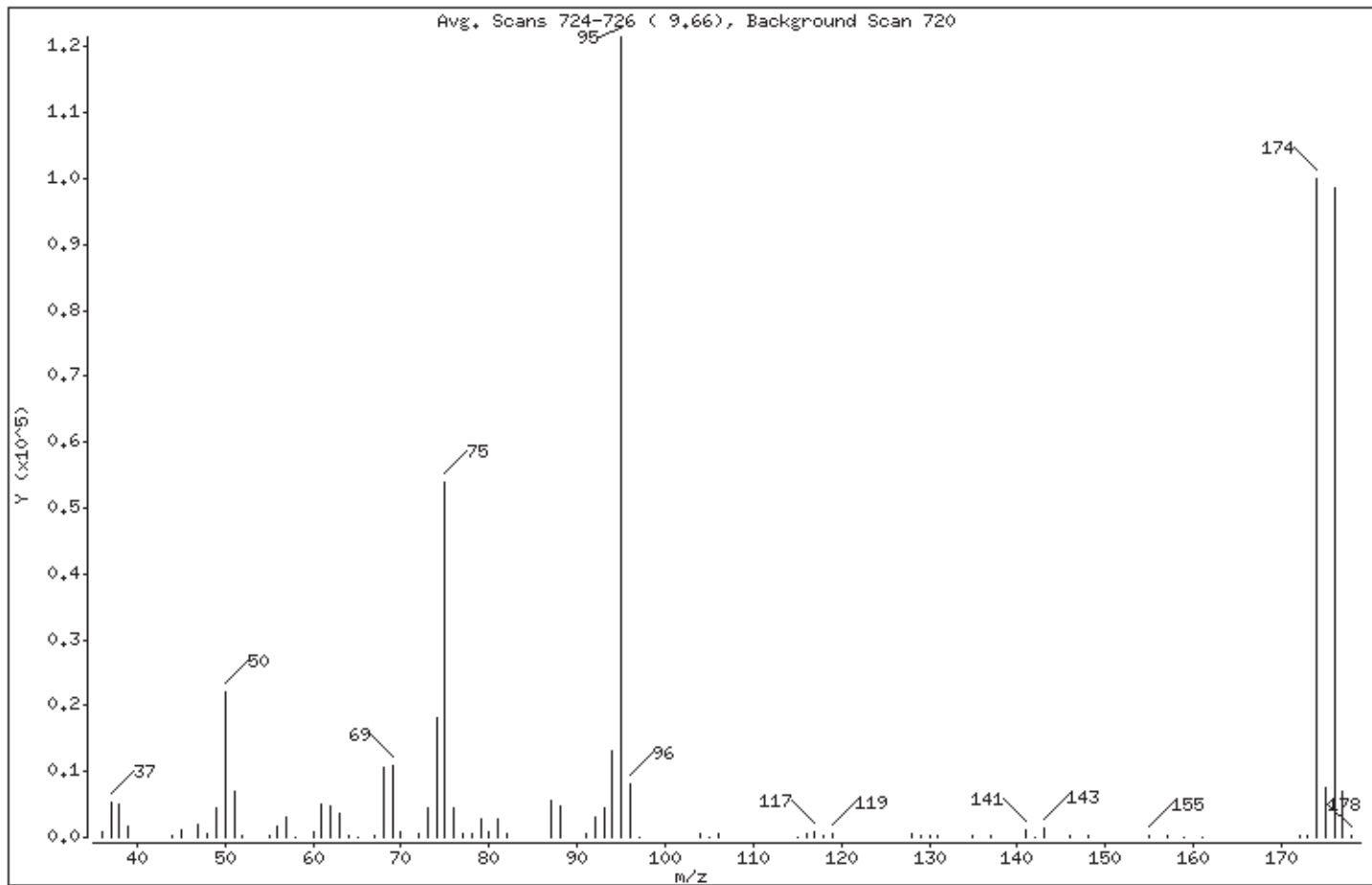
Sample Info: 2UL,BFB6A,BFB6A

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.27
75	30.00 - 60.00% of mass 95	44.26
96	5.00 - 9.00% of mass 95	6.77
173	Less than 2.00% of mass 174	0.14 (0.17)
174	50.00 - 100.00% of mass 95	82.31
175	5.00 - 9.00% of mass 174	6.27 (7.62)
176	95.00 - 101.00% of mass 174	81.24 (98.70)
177	5.00 - 9.00% of mass 176	5.66 (6.97)

Date : 17-MAY-2012 15:54

Client ID: BFB6A

Instrument: V6.i

Sample Info: 2UL,BFB6A,BFB6A

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I7020.D

Spectrum: Avg. Scans 724-726 (9.66), Background Scan 720

Location of Maximum: 95.00

Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	945	64.00	318	92.00	2935	141.00	1191
37.00	5200	65.00	93	93.00	4548	142.00	80
38.00	4955	67.00	281	94.00	13169	143.00	1320
39.00	1763	68.00	10647	95.00	121528	146.00	157
44.00	377	69.00	10809	96.00	8233	148.00	235

45.00	994	70.00	802	97.00	98	155.00	324
47.00	1823	72.00	618	104.00	436	157.00	212
48.00	651	73.00	4530	105.00	94	159.00	74
49.00	4561	74.00	18128	106.00	494	161.00	104
50.00	22200	75.00	53792	115.00	80	172.00	404

51.00	6956	76.00	4558	116.00	438	173.00	175
52.00	211	77.00	672	117.00	796	174.00	100032
55.00	306	78.00	526	118.00	418	175.00	7619
56.00	1648	79.00	2799	119.00	524	176.00	98728
57.00	3024	80.00	804	128.00	434	177.00	6883

58.00	72	81.00	2851	129.00	173	178.00	157
60.00	957	82.00	618	130.00	317		
61.00	4959	87.00	5484	131.00	160		
62.00	4811	88.00	4832	135.00	177		
63.00	3575	91.00	517	137.00	189		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120517B.B\V6I7030.D
 Lab Smp Id: BFB6B Client Smp ID: BFB6B
 Inj Date : 17-MAY-2012 18:44
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 2UL,BFB6B,BFB6B
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120517B.B\bfb8260.m
 Meth Date : 30-Apr-2012 16:25 wluo Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
		ON-COL		FINAL					
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb						CAS #: 460-00-4			
9.660	9.600 (0.000)		95	124624			0.00-	100.00	100.00
9.660	9.600 (0.000)		50	23208			15.00-	40.00	18.62
9.660	9.600 (0.000)		75	55224			30.00-	60.00	44.31
9.660	9.600 (0.000)		96	8243			5.00-	9.00	6.61
9.660	9.600 (0.000)		173	466			0.00-	2.00	0.45
9.660	9.600 (0.000)		174	104280			50.00-	100.00	83.68
9.660	9.600 (0.000)		175	7936			5.00-	9.00	7.61
9.660	9.600 (0.000)		176	101840			95.00-	101.00	97.66
9.660	9.600 (0.000)		177	6924			5.00-	9.00	6.80

Date : 17-MAY-2012 18:44

Client ID: BFB6B

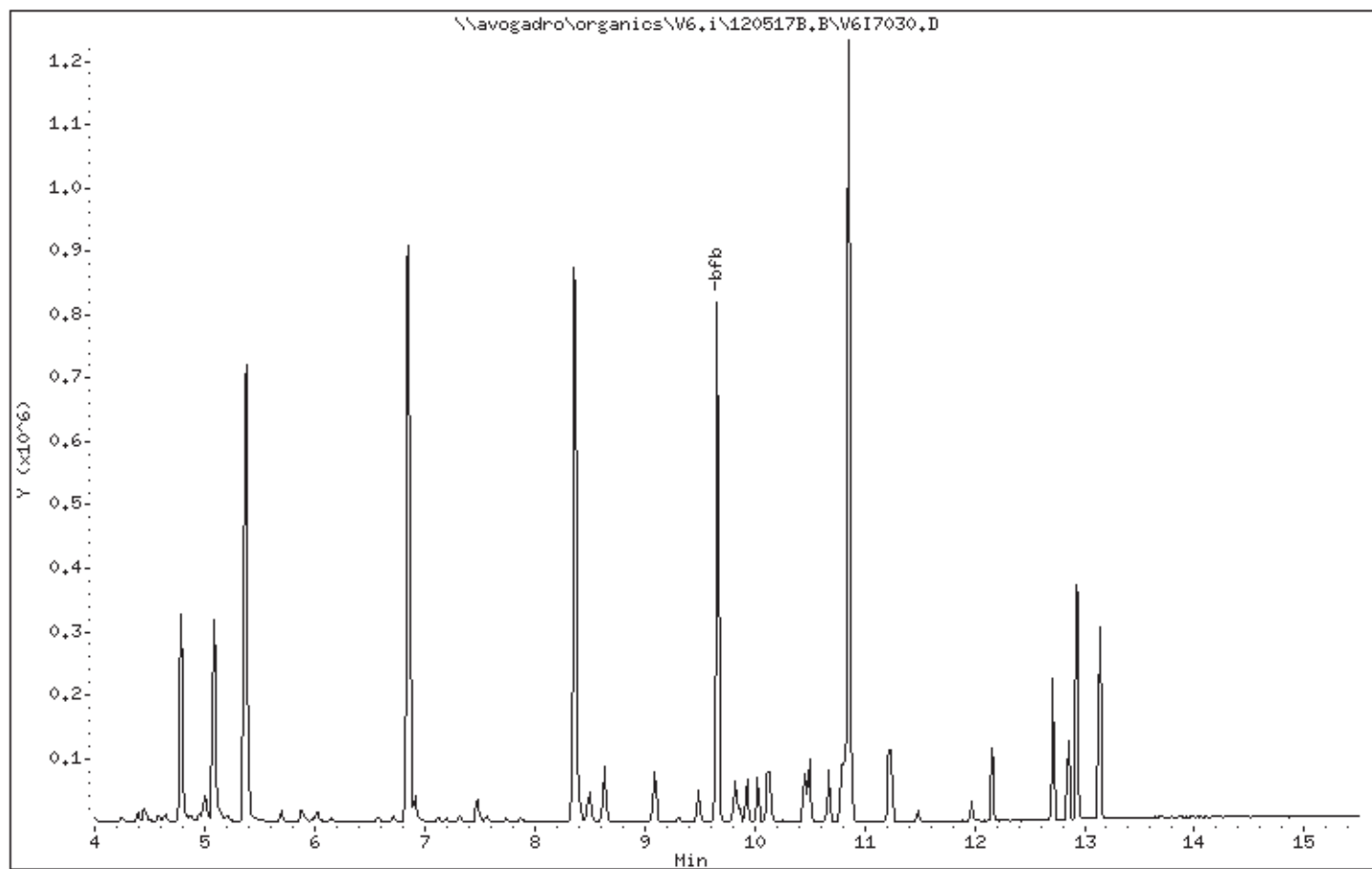
Instrument: V6.i

Sample Info: 2UL,BFB6B,BFB6B

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 17-MAY-2012 18:44

Client ID: BFB6B

Instrument: V6.i

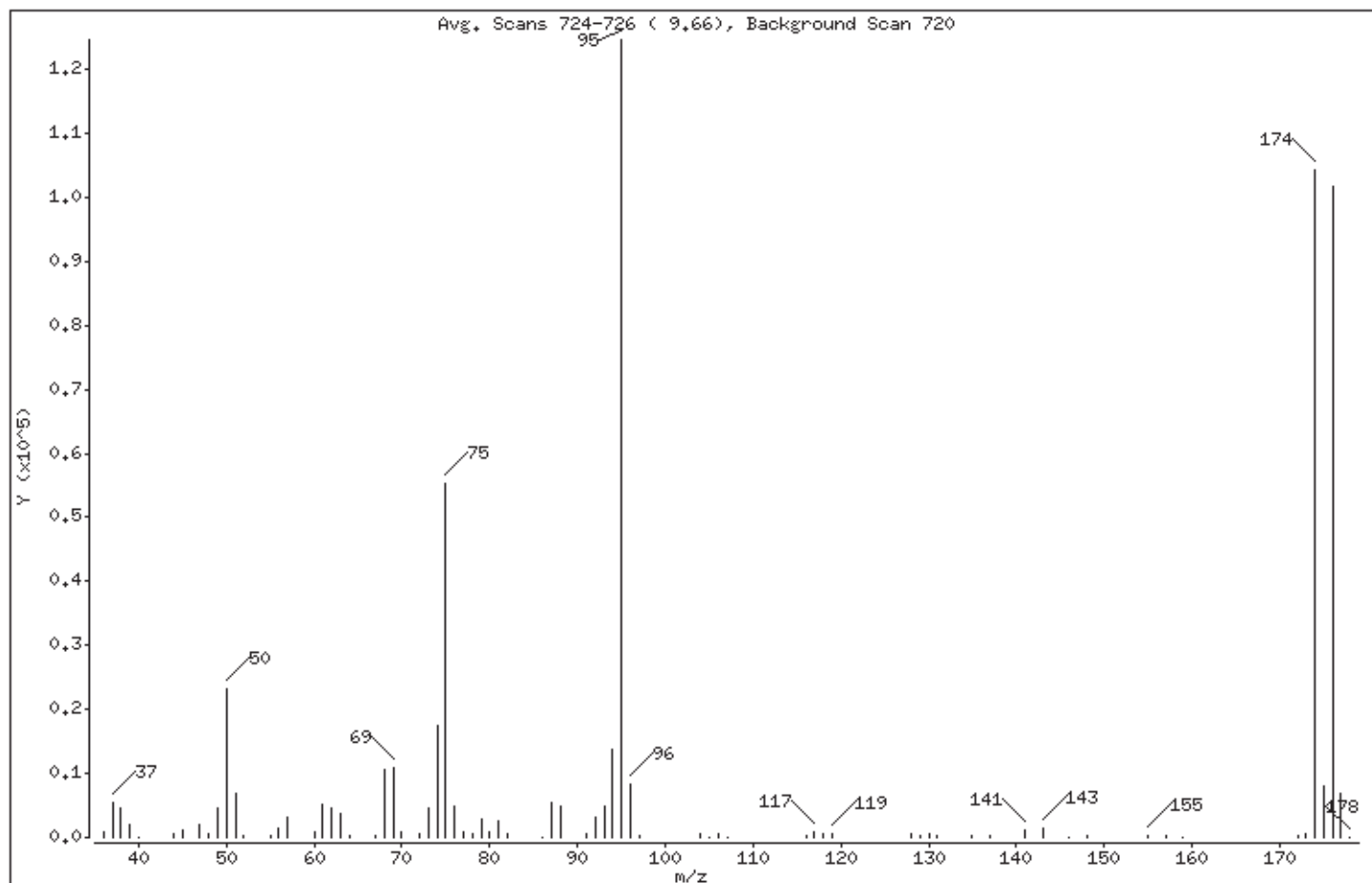
Sample Info: 2UL,BFB6B,BFB6B

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.62
75	30.00 - 60.00% of mass 95	44.31
96	5.00 - 9.00% of mass 95	6.61
173	Less than 2.00% of mass 174	0.37 (0.45)
174	50.00 - 100.00% of mass 95	83.68
175	5.00 - 9.00% of mass 174	6.37 (7.61)
176	95.00 - 101.00% of mass 174	81.72 (97.66)
177	5.00 - 9.00% of mass 176	5.56 (6.80)

Date : 17-MAY-2012 18:44

Client ID: BFB6B

Instrument: V6.i

Sample Info: 2UL,BFB6B,BFB6B

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I7030.D
 Spectrum: Avg. Scans 724-726 (9.66), Background Scan 720
 Location of Maximum: 95.00
 Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	977	63.00	3688	88.00	4975	131.00	192
37.00	5401	64.00	380	91.00	480	135.00	168
38.00	4665	67.00	245	92.00	3123	137.00	219
39.00	1971	68.00	10707	93.00	4827	141.00	1246
40.00	84	69.00	10914	94.00	13709	143.00	1346
44.00	527	70.00	791	95.00	124624	146.00	92
45.00	1070	72.00	566	96.00	8243	148.00	246
47.00	1939	73.00	4699	97.00	250	155.00	329
48.00	697	74.00	17504	104.00	532	157.00	214
49.00	4572	75.00	55224	105.00	99	159.00	73
50.00	23208	76.00	4786	106.00	528	172.00	288
51.00	6865	77.00	725	107.00	93	173.00	466
52.00	232	78.00	472	116.00	377	174.00	104280
55.00	225	79.00	2841	117.00	717	175.00	7936
56.00	1554	80.00	833	118.00	470	176.00	101840
57.00	3042	81.00	2495	119.00	586	177.00	6924
60.00	958	82.00	558	128.00	489	178.00	100
61.00	5032	86.00	70	129.00	207		
62.00	4697	87.00	5580	130.00	536		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120518.B\V6I7061.D
 Lab Smp Id: BFB6C Client Smp ID: BFB6C
 Inj Date : 18-MAY-2012 08:13
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 2UL,BFB6C,BFB6C
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120518.B\bfb8260.m
 Meth Date : 22-May-2012 14:46 wluo Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET103

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb				CAS #: 460-00-4					
6.359	6.300 (0.000)	95	20608				0.00-	100.00	100.00
6.359	6.300 (0.000)	50	3370				15.00-	40.00	16.35
6.359	6.300 (0.000)	75	8719				30.00-	60.00	42.31
6.359	6.300 (0.000)	96	1371				5.00-	9.00	6.65
6.359	6.300 (0.000)	173	0	0.0	0.0		0.00-	2.00	0.00
6.359	6.300 (0.000)	174	17032				50.00-	100.00	82.65
6.359	6.300 (0.000)	175	1273				5.00-	9.00	7.47
6.359	6.300 (0.000)	176	16600				95.00-	101.00	97.46
6.359	6.300 (0.000)	177	1164				5.00-	9.00	7.01

Date : 18-MAY-2012 08:13

Client ID: BFB6C

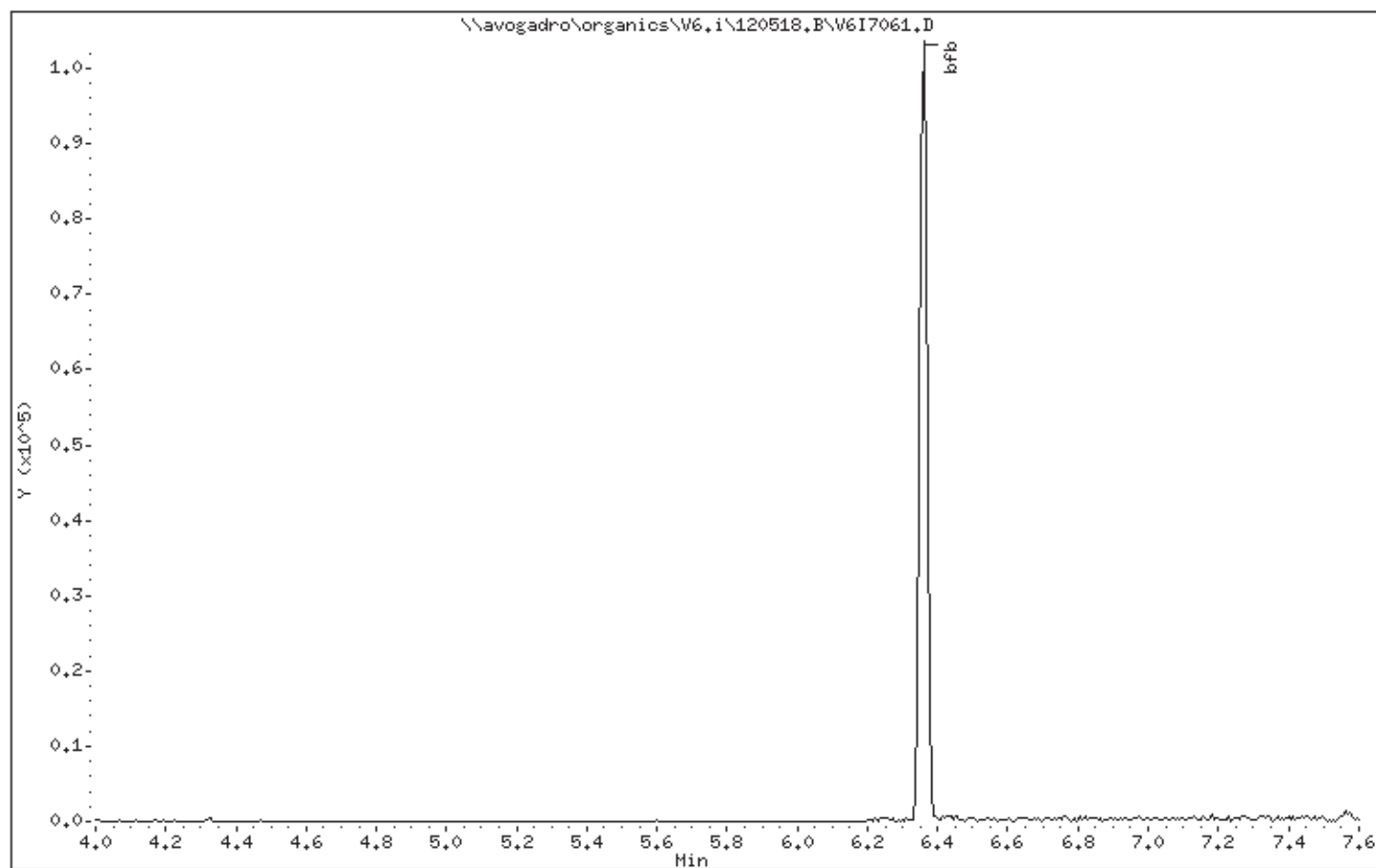
Instrument: V6.i

Sample Info: 2UL,BFB6C,BFB6C

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 18-MAY-2012 08:13

Client ID: BFB6C

Instrument: V6.i

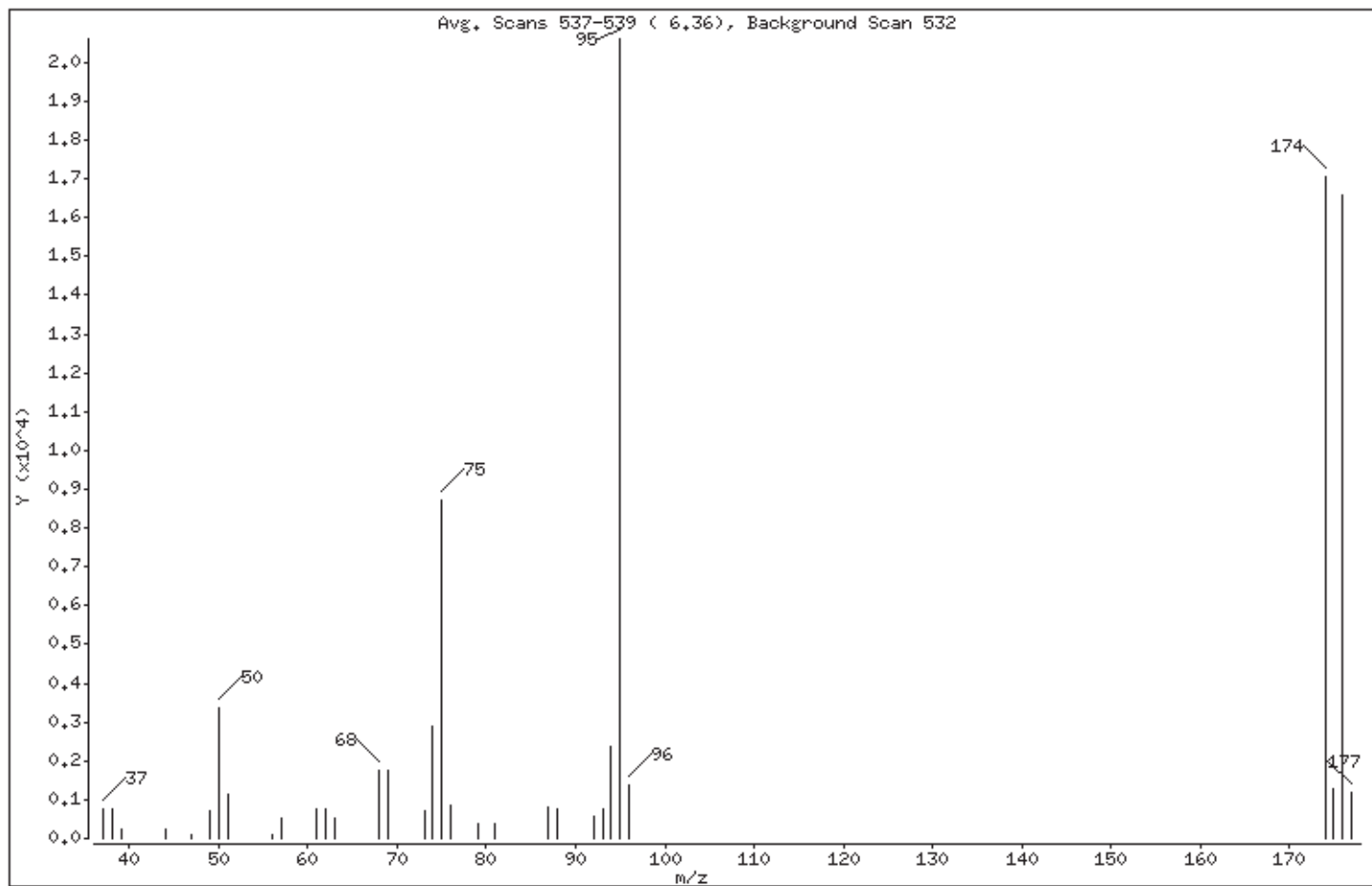
Sample Info: 2UL,BFB6C,BFB6C

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.35
75	30.00 - 60.00% of mass 95	42.31
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	82.65
175	5.00 - 9.00% of mass 174	6.18 (7.47)
176	95.00 - 101.00% of mass 174	80.55 (97.46)
177	5.00 - 9.00% of mass 176	5.65 (7.01)

Date : 18-MAY-2012 08:13

Client ID: BFB6C

Instrument: V6.i

Sample Info: 2UL,BFB6C,BFB6C

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I7061.D

Spectrum: Avg. Scans 537-539 (6.36), Background Scan 532

Location of Maximum: 95.00

Number of points: 32

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	781	57.00	537	76.00	837	96.00	1371
38.00	778	61.00	774	79.00	358	174.00	17032
39.00	241	62.00	773	81.00	379	175.00	1273
44.00	223	63.00	531	87.00	802	176.00	16600
47.00	101	68.00	1760	88.00	738	177.00	1164
49.00	696	69.00	1745	92.00	549		
50.00	3370	73.00	722	93.00	741		
51.00	1122	74.00	2868	94.00	2372		
56.00	109	75.00	8719	95.00	20608		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V8.I\120516.B\V8B1700.d
 Lab Smp Id: BFB10D Client Smp ID: BFB10D
 Inj Date : 16-MAY-2012 09:25
 Operator : SRC: Inst ID: V8.i
 Smp Info : 5ML,BFB10D,BFB10D
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120516.B\BFBSOM_V10.m
 Meth Date : 18-May-2012 14:18 adatta Quant Type: ISTD
 Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	REL RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
4.874	4.800 (0.000)		95	588096			0.00-	100.00	100.00
4.874	4.800 (0.000)		50	162496			15.00-	40.00	27.63
4.874	4.800 (0.000)		75	326720			30.00-	80.00	55.56
4.874	4.800 (0.000)		96	38992			5.00-	9.00	6.63
4.874	4.800 (0.000)		173	2929			0.00-	2.00	0.85
4.874	4.800 (0.000)		174	343232			50.00-	120.00	58.36
4.874	4.800 (0.000)		175	24640			5.00-	9.00	7.18
4.874	4.800 (0.000)		176	341696			95.00-	101.00	99.55
4.874	4.800 (0.000)		177	22160			5.00-	9.00	6.49

Date : 16-MAY-2012 09:25

Client ID: BFB10D

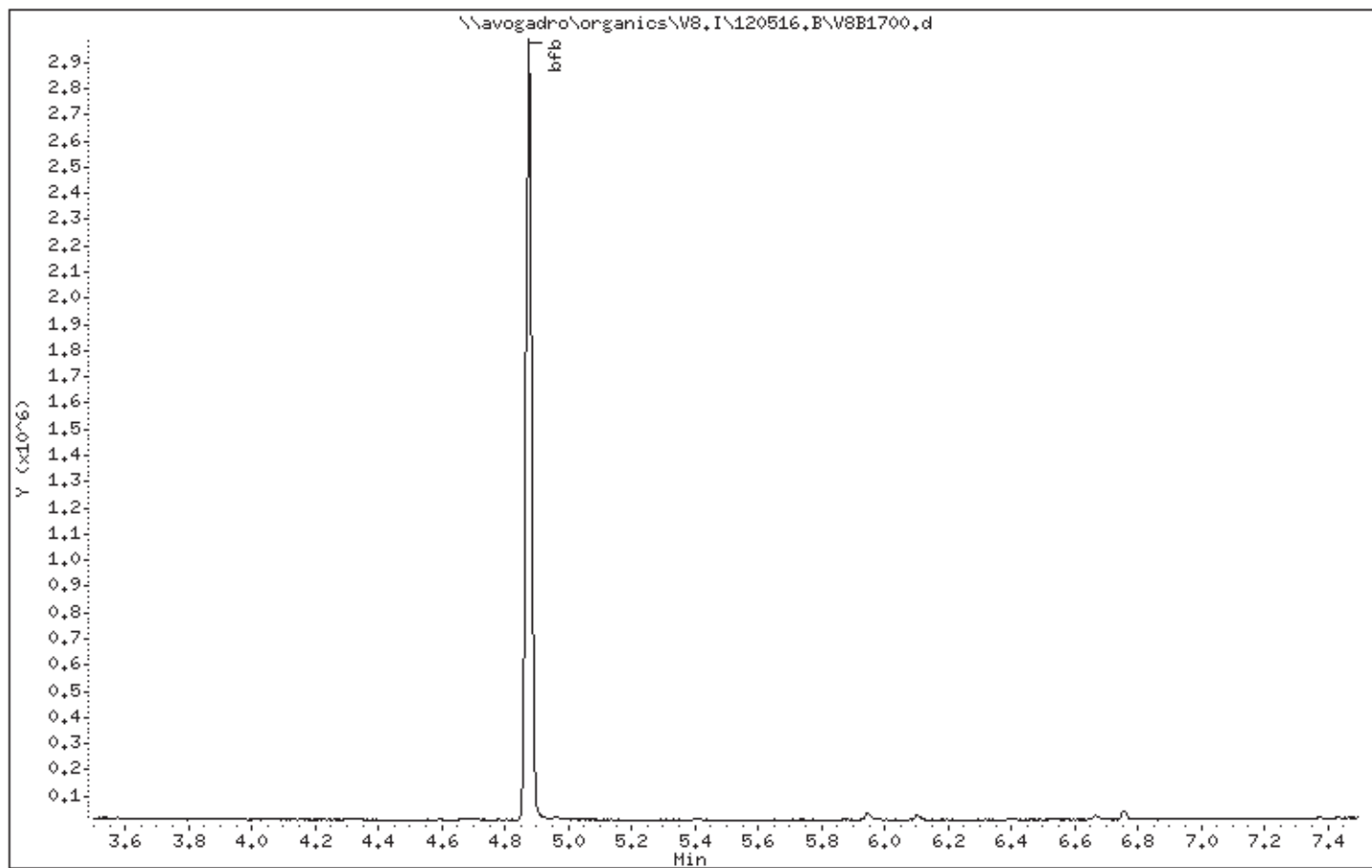
Instrument: V8.i

Sample Info: 5HL,BFB10D,BFB10D

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Date : 16-MAY-2012 09:25

Client ID: BFB10D

Instrument: V8.i

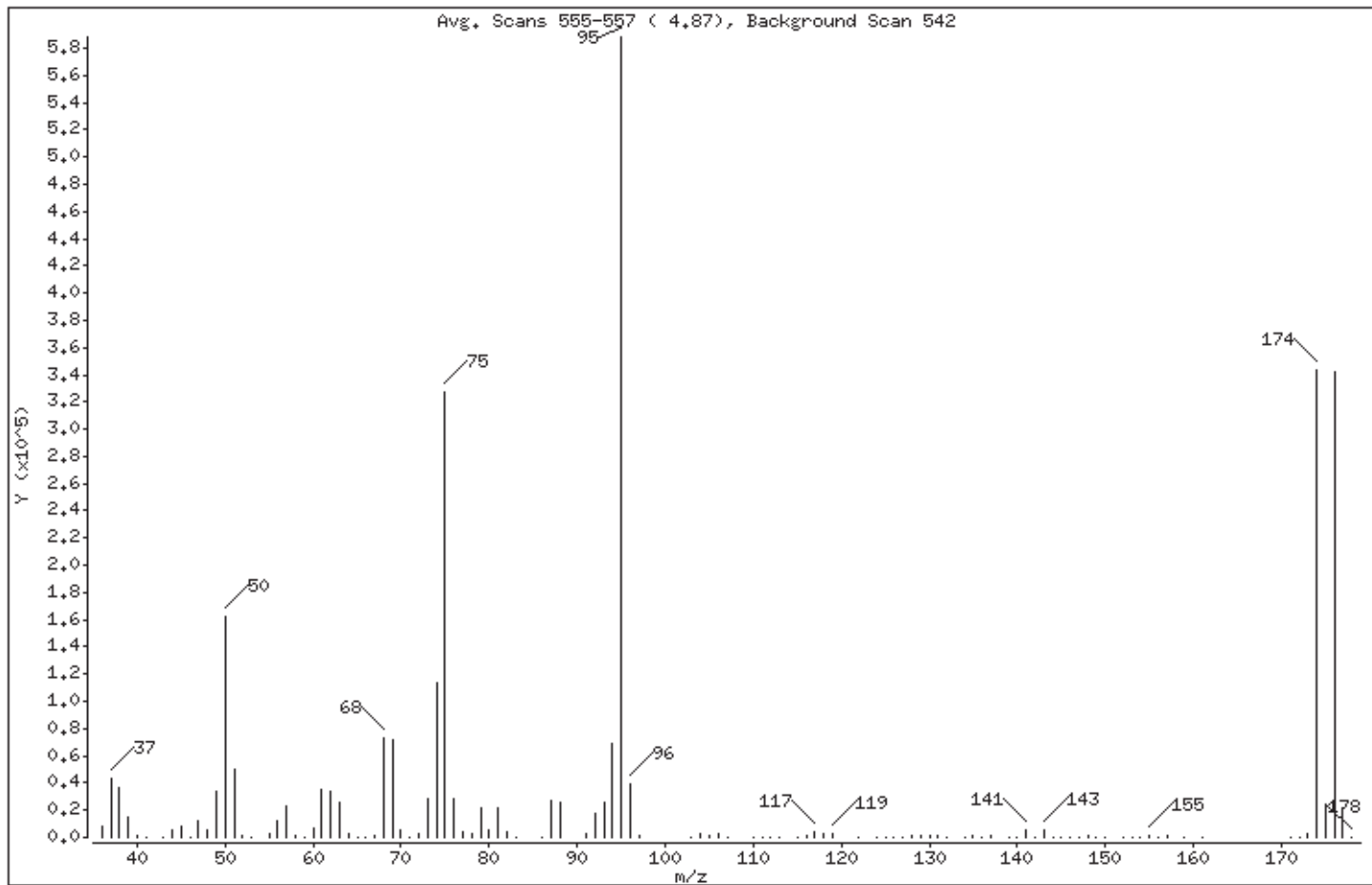
Sample Info: 5HL,BFB10D,BFB10D

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.63
75	30.00 - 80.00% of mass 95	55.56
96	5.00 - 9.00% of mass 95	6.63
173	Less than 2.00% of mass 174	0.50 (0.85)
174	50.00 - 120.00% of mass 95	58.36
175	5.00 - 9.00% of mass 174	4.19 (7.18)
176	95.00 - 101.00% of mass 174	58.10 (99.55)
177	5.00 - 9.00% of mass 176	3.77 (6.49)

Date : 16-MAY-2012 09:25

Client ID: BFB10D

Instrument: V8.i

Sample Info: 5HL,BFB10D,BFB10D

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

Data File: V8B1700.d

Spectrum: Avg. Scans 555-557 (4.87), Background Scan 542

Location of Maximum: 95.00

Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	7577	67.00	1481	105.00	919	142.00	541
37.00	43312	68.00	72520	106.00	2876	143.00	5705
38.00	37168	69.00	71824	107.00	607	144.00	416
39.00	14595	70.00	5796	110.00	405	145.00	568
40.00	828	71.00	347	111.00	584	146.00	591

41.00	39	72.00	3182	112.00	436	147.00	402
43.00	560	73.00	27840	113.00	660	148.00	1006
44.00	4789	74.00	113272	115.00	612	149.00	290
45.00	7711	75.00	326720	116.00	2027	150.00	413
46.00	641	76.00	28056	117.00	3831	152.00	181

47.00	11628	77.00	3426	118.00	2299	153.00	352
48.00	4929	78.00	2253	119.00	3228	154.00	414
49.00	33400	79.00	21896	122.00	81	155.00	1253
50.00	162496	80.00	5511	124.00	317	156.00	122
51.00	49872	81.00	22176	125.00	163	157.00	859

52.00	1843	82.00	4110	126.00	214	159.00	526
53.00	252	83.00	508	127.00	199	161.00	613
55.00	2050	86.00	635	128.00	1871	171.00	79
56.00	11590	87.00	27184	129.00	943	172.00	196
57.00	22496	88.00	25752	130.00	1943	173.00	2929

58.00	865	91.00	2540	131.00	781	174.00	343232
59.00	229	92.00	17328	132.00	53	175.00	24640
60.00	6505	93.00	25632	134.00	157	176.00	341696
61.00	34904	94.00	69128	135.00	1000	177.00	22160
62.00	34088	95.00	588096	136.00	221	178.00	509

63.00	26184	96.00	38992	137.00	923		
64.00	2251	97.00	1204	139.00	208		
65.00	397	103.00	281	140.00	299		
66.00	28	104.00	2976	141.00	5629		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1741.d
 Lab Smp Id: BFB10F Client Smp ID: BFB10F
 Inj Date : 17-MAY-2012 04:27
 Operator : SRC: Inst ID: V8.i
 Smp Info : 5ML,BFB10F,BFB10F
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120516B.B\BFBSOM_V10.m
 Meth Date : 18-May-2012 14:41 amarquis Quant Type: ISTD
 Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
 Als bottle: 100 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
1 bfb				CAS #: 460-00-4					
9.586	9.583 (0.000)	95	88784				0.00- 100.00	100.00	
9.586	9.583 (0.000)	50	15466				15.00- 40.00	17.42	
9.586	9.583 (0.000)	75	40536				30.00- 80.00	45.66	
9.586	9.583 (0.000)	96	5926				5.00- 9.00	6.67	
9.586	9.583 (0.000)	173	428				0.00- 2.00	0.60	
9.586	9.583 (0.000)	174	71432				50.00- 120.00	80.46	
9.586	9.583 (0.000)	175	5004				5.00- 9.00	7.01	
9.586	9.583 (0.000)	176	69016				95.00- 101.00	96.62	
9.586	9.583 (0.000)	177	4416				5.00- 9.00	6.40	

Date : 17-MAY-2012 04:27

Client ID: BFB10F

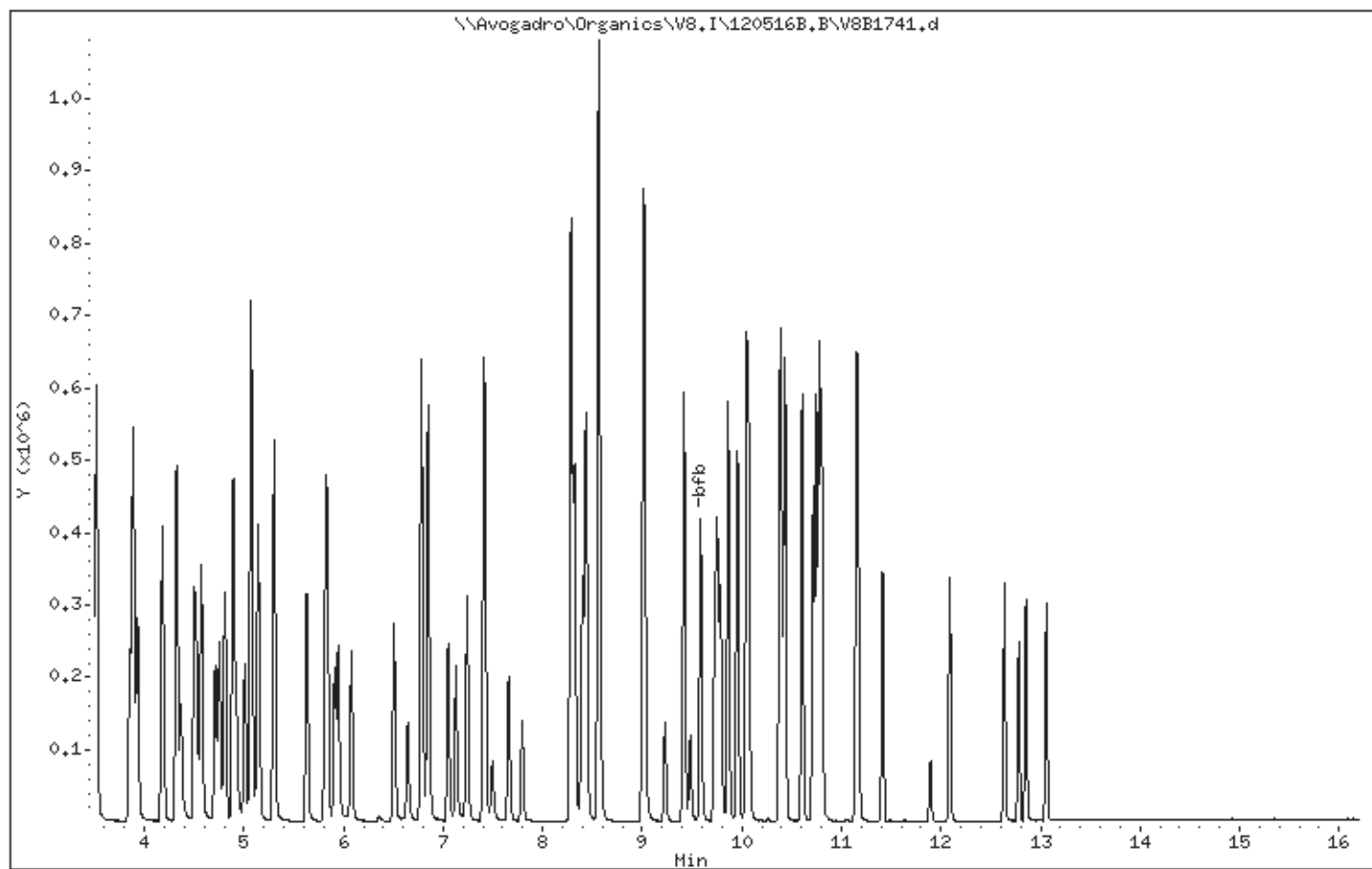
Instrument: V8.i

Sample Info: 5HL,BFB10F,BFB10F

Operator: SRC:

Column phase: DB-624

Column diameter: 0,25



Date : 17-MAY-2012 04:27

Client ID: BFB10F

Instrument: V8.i

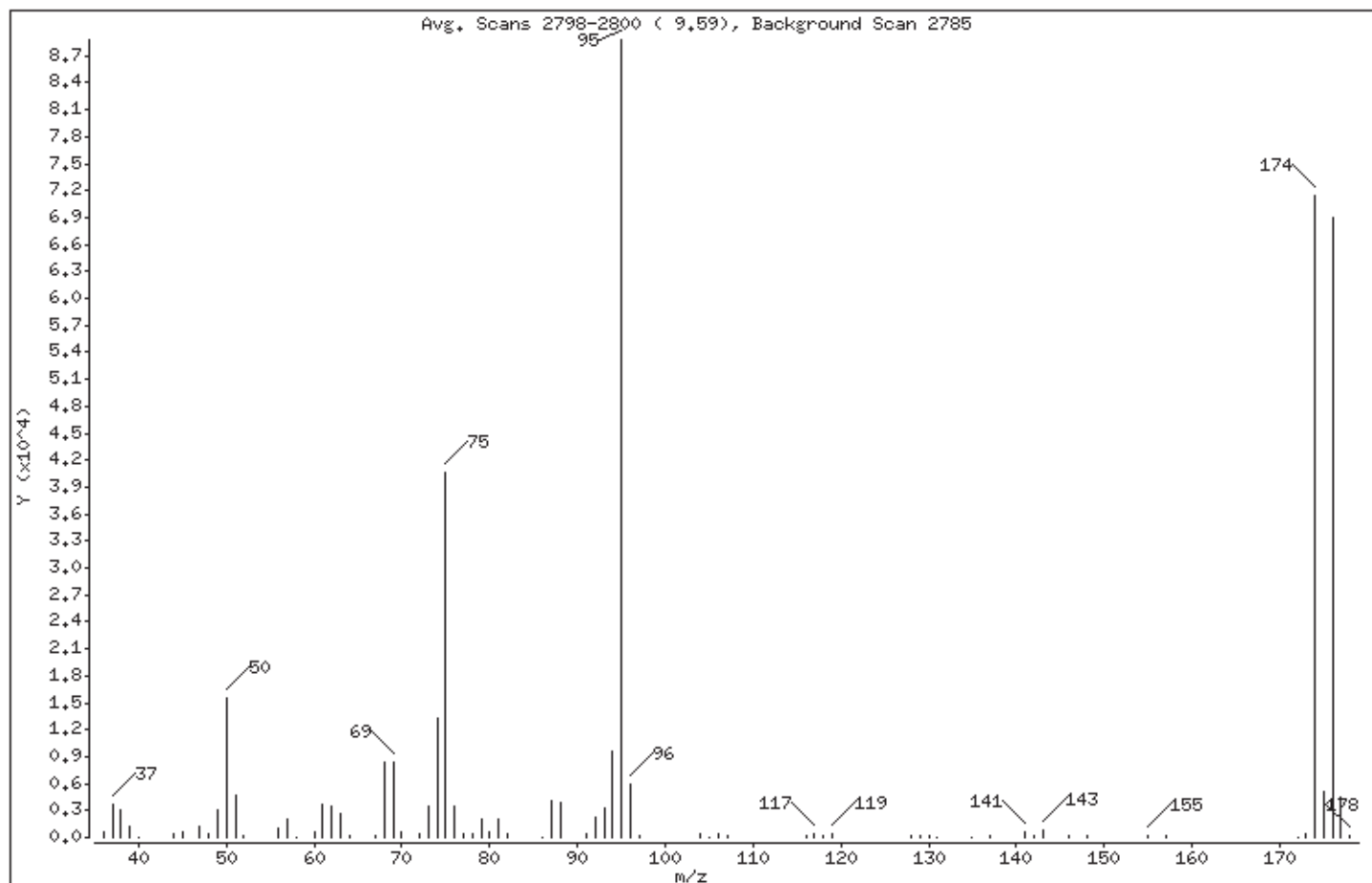
Sample Info: 5HL,BFB10F,BFB10F

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.42
75	30.00 - 80.00% of mass 95	45.66
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.48 (0.60)
174	50.00 - 120.00% of mass 95	80.46
175	5.00 - 9.00% of mass 174	5.64 (7.01)
176	95.00 - 101.00% of mass 174	77.73 (96.62)
177	5.00 - 9.00% of mass 176	4.97 (6.40)

Date : 17-MAY-2012 04:27

Client ID: BFB10F

Instrument: V8.i

Sample Info: 5HL,BFB10F,BFB10F

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

Data File: V8B1741.d							
Spectrum: Avg. Scans 2798-2800 (9.59), Background Scan 2785							
Location of Maximum: 95.00							
Number of points: 74							
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	618	63.00	2678	88.00	3802	131.00	90
37.00	3578	64.00	287	91.00	316	135.00	84
38.00	3132	67.00	217	92.00	2181	137.00	143
39.00	1149	68.00	8277	93.00	3350	141.00	669
40.00	7	69.00	8393	94.00	9529	142.00	107
44.00	439	70.00	639	95.00	88784	143.00	718
45.00	697	72.00	392	96.00	5926	146.00	137
47.00	1138	73.00	3561	97.00	152	148.00	200
48.00	456	74.00	13278	104.00	310	155.00	235
49.00	3033	75.00	40536	105.00	3	157.00	126
50.00	15466	76.00	3466	106.00	338	172.00	35
51.00	4600	77.00	444	107.00	120	173.00	428
52.00	219	78.00	401	116.00	261	174.00	71432
56.00	1091	79.00	2050	117.00	453	175.00	5004
57.00	2125	80.00	576	118.00	261	176.00	69016
58.00	34	81.00	2048	119.00	366	177.00	4416
60.00	666	82.00	450	128.00	298	178.00	103
61.00	3660	86.00	35	129.00	169		
62.00	3402	87.00	4092	130.00	271		

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66208

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: MB-66208
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1746.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66208

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: MB-66208
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1746.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-66208

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66208
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B1746.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 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 Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1746.d
Report Date: 22-May-2012 15:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1746.d
Lab Smp Id: MB-66208 Client Smp ID: MB-66208
Inj Date : 17-MAY-2012 06:35
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-66208,MB-66208,66208
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 21-May-2012 15:34 cmosher Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	112699	51.0125	51
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	25489	49.0209	49
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	437152	50.0000	
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	423451	50.9223	51
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	304984	50.0000	
\$ 79 Bromofluorobenzene	95	9.586	9.583	(1.157)	135388	46.2632	46
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779	(1.000)	120197	50.0000	

Data File: \\Avogadro\Organics\V8.I\120516B.B\V8B1746.d
Report Date: 22-May-2012 15:19

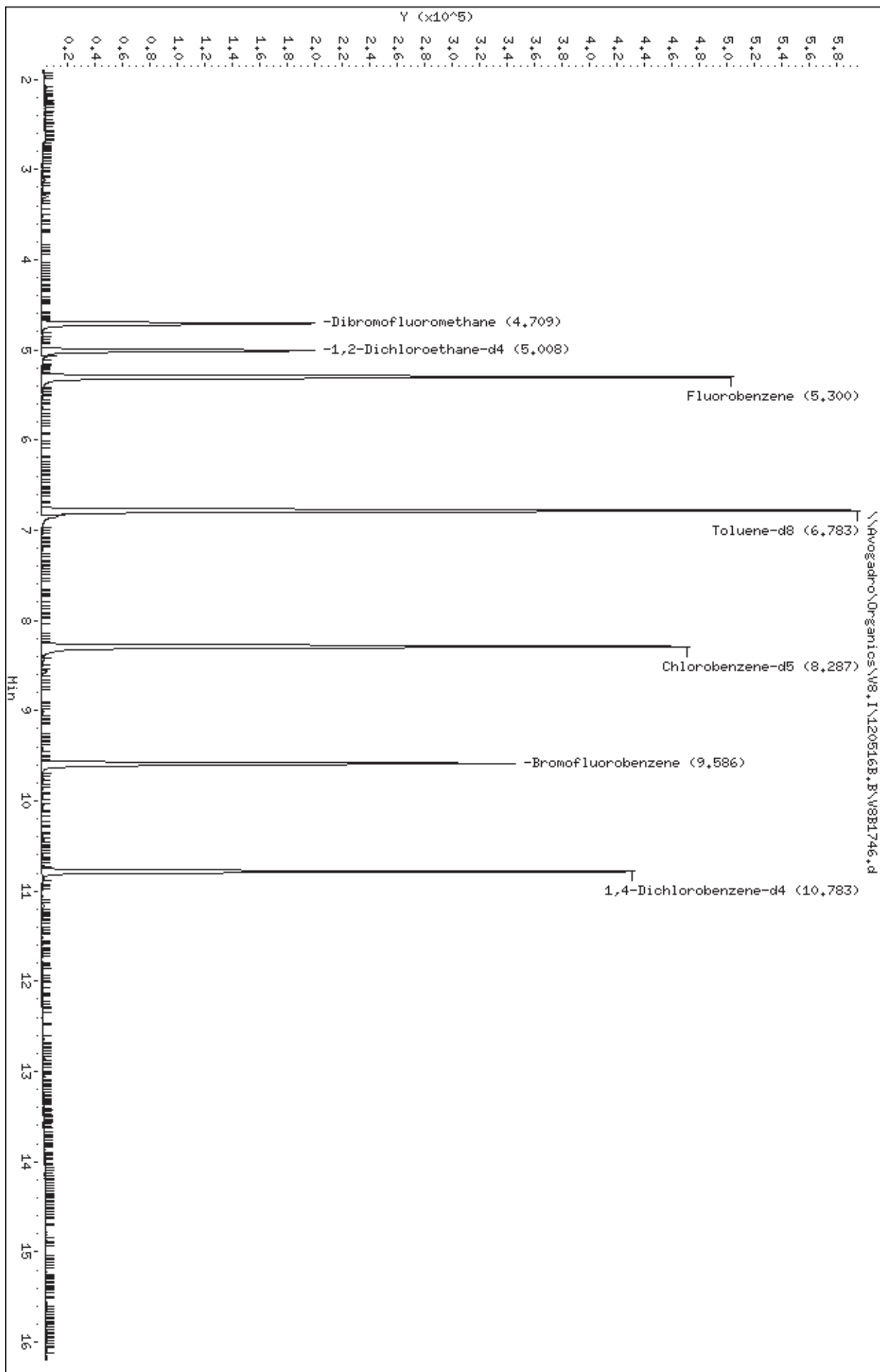
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1746.d
Lab Smp Id: MB-66208 Client Smp ID: MB-66208
Inj Date : 17-MAY-2012 06:35
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-66208,MB-66208,66208
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 21-May-2012 15:34 cmosher Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W8.I\120516B.B\W8B1746.d
Date : 17-May-2012 06:35
Client ID: MB-66208
Sample Info: SHL,MB-66208,MB-66208,66208
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66227
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7035.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66227
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7035.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66227
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7035.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 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 Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7035.D
 Report Date: 18-May-2012 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\Avogadro\Organics\V6.i\120517B.B\V6I7035.D
 Lab Smp Id: MB-66227 Client Smp ID: VBLK6B
 Inj Date : 17-MAY-2012 21:09
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,MB-66227,VBLK6B,66227
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lv1.m
 Meth Date : 18-May-2012 14:43 amarquis Quant Type: ISTD
 Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
 Als bottle: 29 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.788	4.784 (0.892)	208837	49.8208	50	
\$ 42 1,2-Dichloroethane-d4	102	5.084	5.080 (0.947)	47081	48.4681	48	
* 46 Fluorobenzene	96	5.368	5.376 (1.000)	735408	50.0000		
\$ 58 Toluene-d8	98	6.847	6.855 (0.819)	711740	49.3738	49	
* 68 Chlorobenzene-d5	117	8.361	8.370 (1.000)	630554	50.0000		
\$ 79 Bromofluorobenzene	95	9.663	9.660 (1.156)	296427	50.2895	50	
* 92 1,4-Dichlorobenzene-d4	152	10.858	10.855 (1.000)	331083	50.0000		

Data File: \\Avogadro\Organics\V6.i\120517B.B\V6I7035.D
Report Date: 18-May-2012 14:44

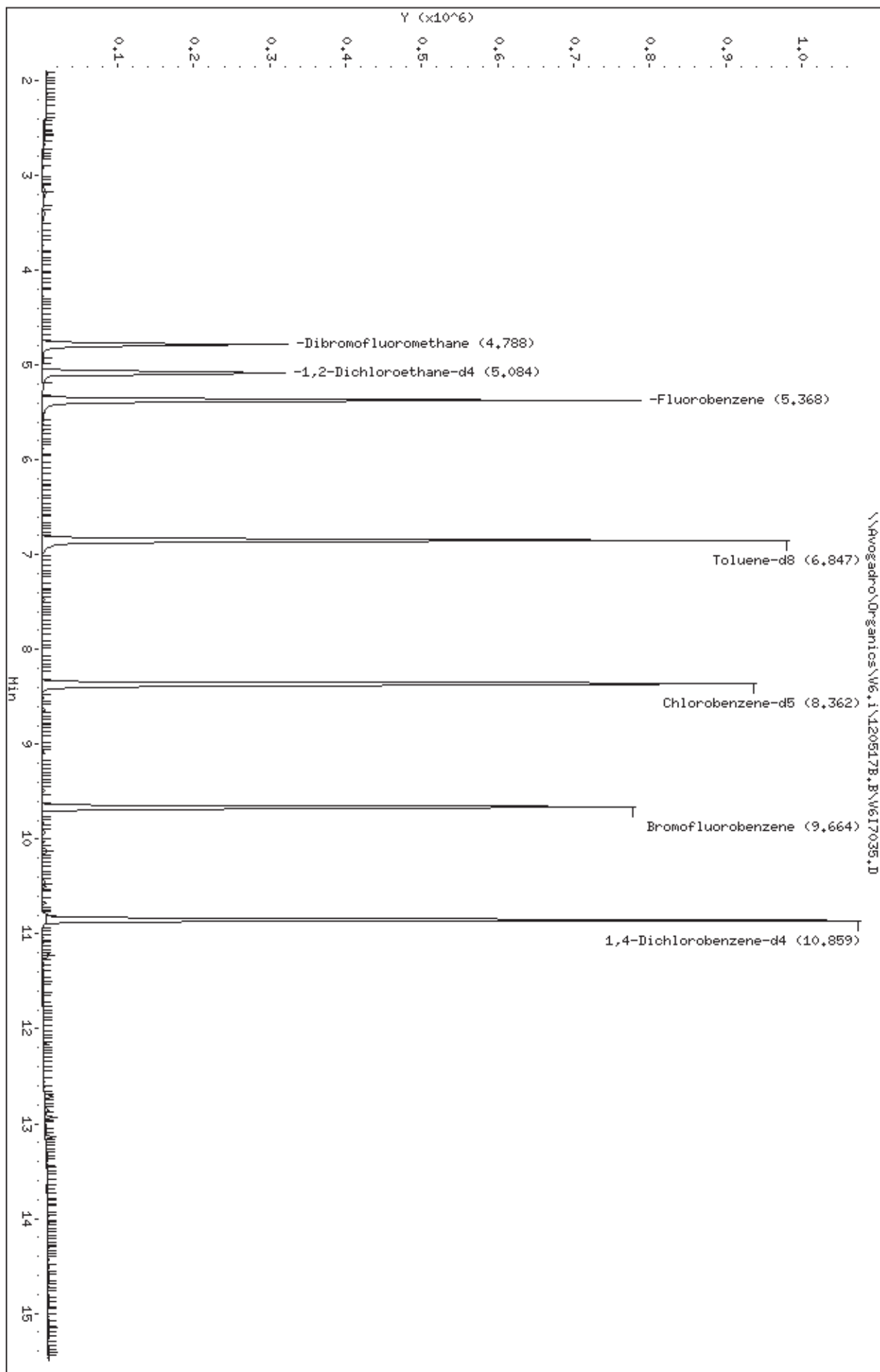
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120517B.B\V6I7035.D
Lab Smp Id: MB-66227 Client Smp ID: VBLK6B
Inj Date : 17-MAY-2012 21:09
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML, MB-66227, VBLK6B, 66227
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lv1.m
Meth Date : 18-May-2012 14:43 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 29 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W6,1\120517B,B\W617035.D
Date : 17-May-2012 21:09
Client ID: VBLK6B
Sample Info: 5HL,MB-66227,VBLK6B,66227
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66235

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: MB-66235
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7066.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66235

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66235

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7066.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 05/18/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-66235

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66235

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7066.D

Level: (TRACE or LOW/MED) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/18/2012

GC Column: DB-624 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 Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

¹EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7066.D
 Report Date: 18-May-2012 14:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7066.D
 Lab Smp Id: MB-66235 Client Smp ID: VBLK6C
 Inj Date : 18-MAY-2012 10:19
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,MB-66235,VBLK6C,66235
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
 Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
 Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
 Als bottle: 23 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.787	4.787	(0.892)	203282	49.8187	50	
\$ 42 1,2-Dichloroethane-d4	102	5.083	5.082	(0.947)	46825	49.5198	50	
* 46 Fluorobenzene	96	5.367	5.366	(1.000)	715876	50.0000		
\$ 58 Toluene-d8	98	6.846	6.846	(0.819)	701998	49.7985	50	
* 68 Chlorobenzene-d5	117	8.360	8.360	(1.000)	616619	50.0000		
\$ 79 Bromofluorobenzene	95	9.662	9.662	(1.156)	289067	50.1491	50	
* 92 1,4-Dichlorobenzene-d4	152	10.857	10.857	(1.000)	317913	50.0000		

Data File: \\Avogadro\Organics\V6.i\120518.B\V6I7066.D
Report Date: 18-May-2012 14:46

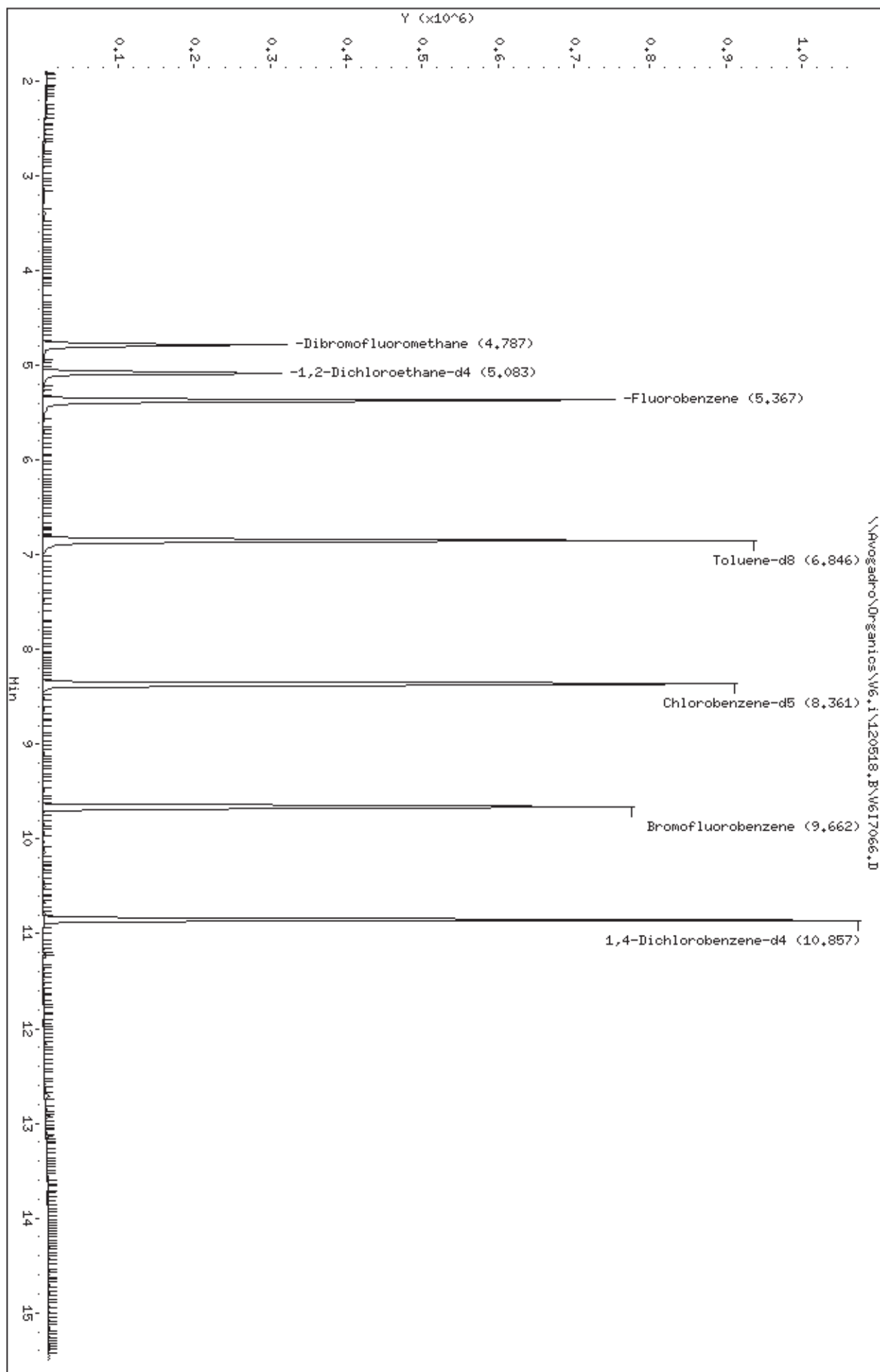
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120518.B\V6I7066.D
Lab Smp Id: MB-66235 Client Smp ID: VBLK6C
Inj Date : 18-MAY-2012 10:19
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,MB-66235,VBLK6C,66235
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:46 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 23 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\W6.i\120518.B\W617066.D
Date : 18-May-2012 10:19
Client ID: VBLK6C
Sample Info: SHL,HB-66235,VBLK6C,66235
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1MS

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01AMS
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7039.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	43	
74-87-3	Chloromethane	43	
75-01-4	Vinyl chloride	43	
74-83-9	Bromomethane	38	
75-00-3	Chloroethane	41	
75-69-4	Trichlorofluoromethane	43	
75-35-4	1,1-Dichloroethene	41	
67-64-1	Acetone	39	
74-88-4	Iodomethane	41	
75-15-0	Carbon disulfide	42	
75-09-2	Methylene chloride	41	
156-60-5	trans-1,2-Dichloroethene	40	
1634-04-4	Methyl tert-butyl ether	45	
75-34-3	1,1-Dichloroethane	42	
108-05-4	Vinyl acetate	32	
78-93-3	2-Butanone	41	
156-59-2	cis-1,2-Dichloroethene	42	
594-20-7	2,2-Dichloropropane	20	
74-97-5	Bromochloromethane	44	
67-66-3	Chloroform	43	
71-55-6	1,1,1-Trichloroethane	40	
563-58-6	1,1-Dichloropropene	41	
56-23-5	Carbon tetrachloride	42	
107-06-2	1,2-Dichloroethane	43	
71-43-2	Benzene	42	
79-01-6	Trichloroethene	41	
78-87-5	1,2-Dichloropropane	43	
74-95-3	Dibromomethane	45	
75-27-4	Bromodichloromethane	44	
10061-01-5	cis-1,3-Dichloropropene	40	
108-10-1	4-Methyl-2-pentanone	46	
108-88-3	Toluene	41	
10061-02-6	trans-1,3-Dichloropropene	41	
79-00-5	1,1,2-Trichloroethane	44	
142-28-9	1,3-Dichloropropane	42	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1MS

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01AMS
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7039.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	38	
591-78-6	2-Hexanone	40	
124-48-1	Dibromochloromethane	44	
106-93-4	1,2-Dibromoethane	44	
108-90-7	Chlorobenzene	40	
630-20-6	1,1,1,2-Tetrachloroethane	41	
100-41-4	Ethylbenzene	39	
179601-23-1	m,p-Xylene	80	
95-47-6	o-Xylene	40	
1330-20-7	Xylene (Total)	120	
100-42-5	Styrene	42	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	39	
79-34-5	1,1,2,2-Tetrachloroethane	42	
108-86-1	Bromobenzene	40	
96-18-4	1,2,3-Trichloropropane	41	
103-65-1	n-Propylbenzene	37	
95-49-8	2-Chlorotoluene	40	
108-67-8	1,3,5-Trimethylbenzene	38	
106-43-4	4-Chlorotoluene	38	
98-06-6	tert-Butylbenzene	39	
95-63-6	1,2,4-Trimethylbenzene	38	
135-98-8	sec-Butylbenzene	37	
99-87-6	4-Isopropyltoluene	35	
541-73-1	1,3-Dichlorobenzene	38	
106-46-7	1,4-Dichlorobenzene	38	
104-51-8	n-Butylbenzene	34	
95-50-1	1,2-Dichlorobenzene	39	
96-12-8	1,2-Dibromo-3-chloropropane	46	
120-82-1	1,2,4-Trichlorobenzene	35	
87-68-3	Hexachlorobutadiene	30	
87-61-6	1,2,3-Trichlorobenzene	36	
91-20-3	Naphthalene	41	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120517B.B\V6I7039.D
Lab Smp Id: L0935-01AMS Client Smp ID: MW-1MS
Inj Date : 17-MAY-2012 22:46
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L0935-01AMS,,66227
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 12:48 wluo Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 33 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.747	1.757 (0.326)		168124	50.0000	43
2 Freon114	85	1.854	1.852 (0.345)		217867	50.0000	41
3 Chloromethane	50	1.937	1.935 (0.361)		281662	50.0000	43
4 Vinyl Chloride	62	2.031	2.029 (0.378)		214253	50.0000	43
5 Bromomethane	94	2.315	2.313 (0.431)		96717	50.0000	38
6 Chloroethane	64	2.398	2.408 (0.447)		116504	50.0000	41
7 Trichlorofluoromethane	101	2.599	2.597 (0.484)		212799	50.0000	43
126 Ethanol	46	2.718	2.716 (0.506)		86265	5000.00	5300(A)
8 Ether	59	2.800	2.799 (0.522)		138777	50.0000	43(Q)
9 Acrolein	56	2.919	2.917 (0.544)		140595	250.000	180
10 1,1-Dichloroethene	96	3.025	3.023 (0.564)		163868	50.0000	41
11 1,1,2-Trichloro-1,2,2-Trifluo	101	3.002	3.000 (0.559)		164317	50.0000	43
12 Acetone	58	3.037	3.035 (0.566)		20284	50.0000	39
13 Iodomethane	142	3.167	3.165 (0.590)		284979	50.0000	41
14 Carbon Disulfide	76	3.215	3.213 (0.599)		649386	50.0000	42
15 Acetonitrile	41	3.274	3.272 (0.610)		501190	500.000	470(A)
16 Allyl Chloride	39	3.274	3.284 (0.610)		169824	50.0000	40(Q)
17 Methyl Acetate	43	3.286	3.284 (0.612)		97414	50.0000	30
18 Methylene Chloride	84	3.404	3.402 (0.634)		175316	50.0000	41
19 tert-Butanol	59	3.439	3.437 (0.641)		39392	100.000	100
20 Acrylonitrile	53	3.570	3.568 (0.665)		81699	50.0000	49
21 trans-1,2-Dichloroethene	96	3.593	3.591 (0.669)		153915	50.0000	40
22 Methyl tert-butyl ether	73	3.581	3.579 (0.667)		443855	50.0000	45

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.924	3.923 (0.731)		279542		50.0000	42
24 Vinyl acetate	43	3.948	3.946 (0.736)		464469		50.0000	32
25 Diisopropyl Ether	45	3.948	3.946 (0.736)		576163		50.0000	42
26 2-Chloro-1,3-Butadiene	53	3.995	3.994 (0.744)		227610		50.0000	40
27 Ethyl tert-butyl ether	59	4.244	4.242 (0.791)		475136		50.0000	42
29 2,2-Dichloropropane	77	4.398	4.396 (0.819)		59844		50.0000	20
28 cis-1,2-Dichloroethene	96	4.398	4.396 (0.819)		178009		50.0000	42
30 2-Butanone	72	4.398	4.396 (0.819)		19461		50.0000	41
32 Propionitrile	54	4.445	4.455 (0.828)		289396		500.000	490(A)
33 Methacrylonitrile	41	4.575	4.573 (0.852)		228194		100.000	84
34 Bromochloromethane	128	4.599	4.597 (0.857)		95215		50.0000	44
31 Tetrahydrofuran	72	4.634	4.633 (0.863)		43942		100.000	92
35 Chloroform	83	4.646	4.644 (0.866)		255778		50.0000	43
\$ 36 Dibromofluoromethane	113	4.788	4.786 (0.892)		205960		50.0000	52
37 1,1,1-Trichloroethane	97	4.824	4.822 (0.899)		198061		50.0000	40
38 Cyclohexane	56	4.871	4.869 (0.907)		289041		50.0000	45
39 1,1-Dichloropropene	110	4.954	4.952 (0.923)		80586		50.0000	41
40 Carbon Tetrachloride	117	4.966	4.964 (0.925)		173420		50.0000	42
41 Isobutyl Alcohol	43	5.001	4.999 (0.932)		178929		1000.00	970(A)
\$ 42 1,2-Dichloroethane-d4	102	5.084	5.082 (0.947)		47885		50.0000	53
43 Benzene	78	5.143	5.141 (0.958)		558189		50.0000	42
44 1,2-Dichloroethane	62	5.143	5.153 (0.958)		203195		50.0000	43
45 tert-Amyl methyl ether	73	5.202	5.201 (0.969)		432386		50.0000	44
M 50 1,2-Dichloroethene (Total)	96				331924		100.000	82
* 46 Fluorobenzene	96	5.368	5.366 (1.000)		688572		50.0000	
47 Trichloroethene	130	5.699	5.698 (1.062)		186897		50.0000	41
48 Methylcyclohexane	83	5.877	5.875 (1.095)		221605		50.0000	40
49 1,2-Dichloropropane	63	5.912	5.911 (1.101)		162158		50.0000	43
51 Methyl Methacrylate	69	5.972	5.982 (1.112)		130572		50.0000	49
52 Dibromomethane	93	6.019	6.017 (1.121)		107555		50.0000	45
53 1,4-Dioxane	88	6.019	6.017 (1.121)		38669		1000.00	1100(A)
54 Bromodichloromethane	83	6.149	6.159 (1.145)		201480		50.0000	44
55 2-Chloroethyl vinyl ether	63	6.575	6.419 (1.225)		1189		50.0000	1(TQ)
56 cis-1,3-Dichloropropene	75	6.575	6.573 (1.225)		216738		50.0000	40
57 4-Methyl-2-pentanone	43	6.717	6.715 (1.251)		177260		50.0000	46
\$ 58 Toluene-d8	98	6.847	6.845 (0.819)		711898		50.0000	52
59 Toluene	91	6.918	6.916 (1.289)		598711		50.0000	41
60 trans-1,3-Dichloropropene	75	7.119	7.129 (1.326)		197282		50.0000	41
61 Ethyl Methacrylate	69	7.190	7.200 (1.339)		171104		50.0000	47
62 1,1,2-Trichloroethane	97	7.321	7.319 (1.364)		147479		50.0000	44
63 Tetrachloroethene	164	7.474	7.484 (0.894)		141245		50.0000	38
64 1,3-Dichloropropane	76	7.498	7.496 (0.897)		232437		50.0000	42
65 2-Hexanone	43	7.569	7.567 (0.905)		120891		50.0000	40
66 Dibromochloromethane	129	7.746	7.745 (0.926)		184761		50.0000	44
67 1,2-Dibromoethane	107	7.877	7.875 (0.942)		170537		50.0000	44
69 1-Chlorohexane	91	8.350	8.348 (0.999)		188001		50.0000	36
* 68 Chlorobenzene-d5	117	8.362	8.360 (1.000)		599099		50.0000	
70 Chlorobenzene	112	8.397	8.395 (1.004)		421599		50.0000	40
71 1,1,1,2-Tetrachloroethane	131	8.480	8.478 (1.014)		170490		50.0000	41
72 Ethylbenzene	106	8.504	8.502 (1.017)		215362		50.0000	39
73 m,p-Xylene	106	8.634	8.632 (1.033)		521521		100.000	80
74 o-Xylene	106	9.084	9.082 (1.086)		261818		50.0000	40
75 Styrene	104	9.095	9.094 (1.088)		418204		50.0000	42
76 Bromoform	173	9.320	9.318 (1.115)		113815		50.0000	46

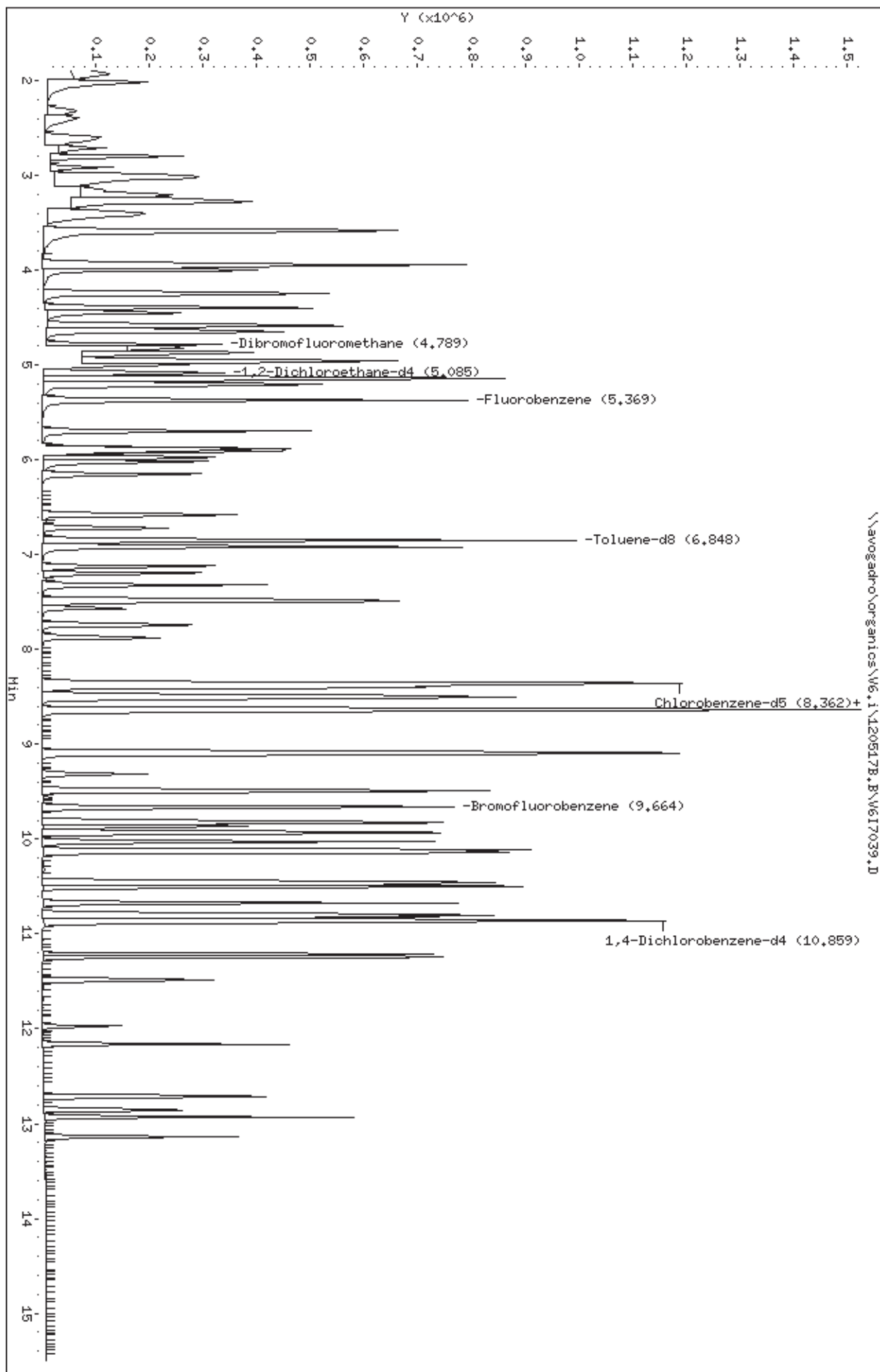
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.486	9.484 (1.134)		618105		50.0000	39
78 trans-1,4-Dichloro-2-butene	75	9.865	9.863 (1.180)		180851		50.0000	42
\$ 79 Bromofluorobenzene	95	9.663	9.662 (1.156)		288037		50.0000	51
80 1,1,2,2-Tetrachloroethane	83	9.805	9.815 (0.903)		198593		50.0000	42
81 Bromobenzene	156	9.829	9.827 (0.905)		192838		50.0000	40
82 1,2,3-Trichloropropane	75	9.865	9.863 (0.908)		180851		50.0000	41
83 n-Propylbenzene	120	9.936	9.934 (0.915)		177229		50.0000	37
84 2-Chlorotoluene	126	10.030	10.028 (0.924)		172253		50.0000	40
85 1,3,5-Trimethylbenzene	105	10.113	10.111 (0.931)		489779		50.0000	38
86 4-Chlorotoluene	126	10.137	10.147 (0.934)		176112		50.0000	38
M 94 Xylene (Total)	106				783339		150.000	120
87 tert-Butylbenzene	119	10.456	10.454 (0.963)		588161		50.0000	39
88 1,2,4-Trimethylbenzene	105	10.504	10.502 (0.967)		502241		50.0000	38
89 sec-Butylbenzene	105	10.669	10.679 (0.983)		575521		50.0000	36
90 1,3-Dichlorobenzene	146	10.788	10.786 (0.993)		320717		50.0000	38
91 4-Isopropyltoluene	119	10.811	10.821 (0.996)		474940		50.0000	35
* 92 1,4-Dichlorobenzene-d4	152	10.859	10.857 (1.000)		319531		50.0000	
93 1,4-Dichlorobenzene	146	10.882	10.880 (1.002)		330446		50.0000	38
95 n-Butylbenzene	91	11.213	11.212 (1.033)		372507		50.0000	34
96 1,2-Dichlorobenzene	146	11.249	11.247 (1.036)		322387		50.0000	39
97 Hexachloroethane	117	11.486	11.484 (1.058)		71279		50.0000	40
98 1,2-Dibromo-3-chloropropane	75	11.971	11.969 (1.102)		33880		50.0000	46
141 1,3,5-Trichlorobenzene	182	12.160	12.158 (2.265)		131779		50.0000	36(A)
99 1,2,4-Trichlorobenzene	180	12.716	12.714 (1.171)		136509		50.0000	35
100 Hexachlorobutadiene	225	12.858	12.856 (1.184)		50614		50.0000	30
101 Naphthalene	128	12.929	12.927 (1.191)		416495		50.0000	41
102 1,2,3-Trichlorobenzene	180	13.142	13.140 (1.210)		119407		50.0000	36

QC Flag Legend

- T - Target compound detected outside RT window.
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120517B,B\W617039.D
Date : 17-May-2012 22:46
Client ID: MM-LHS
Sample Info: SHL,L0935-01AMS,,66227
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1MSD

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01AMSD
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7040.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	41	
74-87-3	Chloromethane	42	
75-01-4	Vinyl chloride	42	
74-83-9	Bromomethane	36	
75-00-3	Chloroethane	40	
75-69-4	Trichlorofluoromethane	42	
75-35-4	1,1-Dichloroethene	39	
67-64-1	Acetone	39	
74-88-4	Iodomethane	42	
75-15-0	Carbon disulfide	41	
75-09-2	Methylene chloride	39	
156-60-5	trans-1,2-Dichloroethene	40	
1634-04-4	Methyl tert-butyl ether	44	
75-34-3	1,1-Dichloroethane	41	
108-05-4	Vinyl acetate	28	
78-93-3	2-Butanone	40	
156-59-2	cis-1,2-Dichloroethene	41	
594-20-7	2,2-Dichloropropane	18	
74-97-5	Bromochloromethane	42	
67-66-3	Chloroform	41	
71-55-6	1,1,1-Trichloroethane	40	
563-58-6	1,1-Dichloropropene	39	
56-23-5	Carbon tetrachloride	42	
107-06-2	1,2-Dichloroethane	42	
71-43-2	Benzene	42	
79-01-6	Trichloroethene	40	
78-87-5	1,2-Dichloropropane	42	
74-95-3	Dibromomethane	43	
75-27-4	Bromodichloromethane	42	
10061-01-5	cis-1,3-Dichloropropene	39	
108-10-1	4-Methyl-2-pentanone	45	
108-88-3	Toluene	40	
10061-02-6	trans-1,3-Dichloropropene	41	
79-00-5	1,1,2-Trichloroethane	42	
142-28-9	1,3-Dichloropropane	43	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1MSD

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01AMSD
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7040.D
Level: (TRACE/LOW/MED) LOW	Date Received: 05/05/2012
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	40	
591-78-6	2-Hexanone	40	
124-48-1	Dibromochloromethane	44	
106-93-4	1,2-Dibromoethane	44	
108-90-7	Chlorobenzene	42	
630-20-6	1,1,1,2-Tetrachloroethane	42	
100-41-4	Ethylbenzene	40	
179601-23-1	m,p-Xylene	81	
95-47-6	o-Xylene	42	
1330-20-7	Xylene (Total)	120	
100-42-5	Styrene	43	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	40	
79-34-5	1,1,2,2-Tetrachloroethane	44	
108-86-1	Bromobenzene	43	
96-18-4	1,2,3-Trichloropropane	42	
103-65-1	n-Propylbenzene	42	
95-49-8	2-Chlorotoluene	43	
108-67-8	1,3,5-Trimethylbenzene	41	
106-43-4	4-Chlorotoluene	41	
98-06-6	tert-Butylbenzene	42	
95-63-6	1,2,4-Trimethylbenzene	41	
135-98-8	sec-Butylbenzene	40	
99-87-6	4-Isopropyltoluene	39	
541-73-1	1,3-Dichlorobenzene	42	
106-46-7	1,4-Dichlorobenzene	42	
104-51-8	n-Butylbenzene	38	
95-50-1	1,2-Dichlorobenzene	42	
96-12-8	1,2-Dibromo-3-chloropropane	48	
120-82-1	1,2,4-Trichlorobenzene	38	
87-68-3	Hexachlorobutadiene	34	
87-61-6	1,2,3-Trichlorobenzene	40	
91-20-3	Naphthalene	46	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120517B.B\V6I7040.D
 Lab Smp Id: L0935-01AMSD Client Smp ID: MW-1MSD
 Inj Date : 17-MAY-2012 23:10
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L0935-01AMSD,,66227
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lvl.m
 Meth Date : 18-May-2012 12:48 wluo Quant Type: ISTD
 Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
 Als bottle: 34 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.756	1.757 (0.327)		171119	50.0000	41
2 Freon114	85	1.850	1.852 (0.344)		239942	50.0000	42
3 Chloromethane	50	1.933	1.935 (0.360)		295042	50.0000	42
4 Vinyl Chloride	62	2.028	2.029 (0.377)		222565	50.0000	42
5 Bromomethane	94	2.323	2.313 (0.432)		100760	50.0000	36
6 Chloroethane	64	2.406	2.408 (0.448)		122706	50.0000	40
7 Trichlorofluoromethane	101	2.596	2.597 (0.483)		223098	50.0000	42
126 Ethanol	46	2.714	2.716 (0.505)		89761	5000.00	5200(A)
8 Ether	59	2.797	2.799 (0.520)		149718	50.0000	43
9 Acrolein	56	2.915	2.917 (0.542)		130773	250.000	150
10 1,1-Dichloroethene	96	3.022	3.023 (0.562)		169843	50.0000	39
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.998	3.000 (0.558)		178686	50.0000	43
12 Acetone	58	3.033	3.035 (0.564)		21661	50.0000	39
13 Iodomethane	142	3.164	3.165 (0.588)		316442	50.0000	42
14 Carbon Disulfide	76	3.211	3.213 (0.597)		698382	50.0000	41
15 Acetonitrile	41	3.270	3.272 (0.608)		525404	500.000	450(A)
16 Allyl Chloride	39	3.282	3.284 (0.610)		179372	50.0000	39(Q)
17 Methyl Acetate	43	3.282	3.284 (0.610)		81337	50.0000	23
18 Methylene Chloride	84	3.400	3.402 (0.632)		183296	50.0000	39
19 tert-Butanol	59	3.436	3.437 (0.639)		40186	100.000	95
20 Acrylonitrile	53	3.566	3.568 (0.663)		81457	50.0000	46
21 trans-1,2-Dichloroethene	96	3.590	3.591 (0.668)		164375	50.0000	40
22 Methyl tert-butyl ether	73	3.578	3.579 (0.665)		465325	50.0000	44

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.921	3.923 (0.729)		291410		50.0000	41
24 Vinyl acetate	43	3.945	3.946 (0.734)		437059		50.0000	28
25 Diisopropyl Ether	45	3.956	3.946 (0.736)		602827		50.0000	41
26 2-Chloro-1,3-Butadiene	53	4.004	3.994 (0.745)		243808		50.0000	39
27 Ethyl tert-butyl ether	59	4.240	4.242 (0.789)		505475		50.0000	42
29 2,2-Dichloropropane	77	4.394	4.396 (0.817)		60987		50.0000	18
28 cis-1,2-Dichloroethene	96	4.394	4.396 (0.817)		186957		50.0000	41
30 2-Butanone	72	4.394	4.396 (0.817)		20715		50.0000	40
32 Propionitrile	54	4.453	4.455 (0.828)		300334		500.000	470(A)
33 Methacrylonitrile	41	4.572	4.573 (0.850)		230385		100.000	78
34 Bromochloromethane	128	4.595	4.597 (0.855)		99675		50.0000	42
31 Tetrahydrofuran	72	4.631	4.633 (0.861)		45845		100.000	89
35 Chloroform	83	4.643	4.644 (0.864)		266936		50.0000	41
\$ 36 Dibromofluoromethane	113	4.785	4.786 (0.890)		209010		50.0000	49
37 1,1,1-Trichloroethane	97	4.820	4.822 (0.897)		213492		50.0000	40
38 Cyclohexane	56	4.868	4.869 (0.905)		275460		50.0000	40
39 1,1-Dichloropropene	110	4.950	4.952 (0.921)		83471		50.0000	39
40 Carbon Tetrachloride	117	4.962	4.964 (0.923)		183949		50.0000	42
41 Isobutyl Alcohol	43	4.998	4.999 (0.930)		188767		1000.00	950(A)
\$ 42 1,2-Dichloroethane-d4	102	5.081	5.082 (0.945)		48125		50.0000	49
43 Benzene	78	5.140	5.141 (0.956)		600098		50.0000	42
44 1,2-Dichloroethane	62	5.152	5.153 (0.958)		212770		50.0000	42
45 tert-Amyl methyl ether	73	5.211	5.201 (0.969)		446781		50.0000	42
M 50 1,2-Dichloroethene (Total)	96				351332		100.000	81
* 46 Fluorobenzene	96	5.376	5.366 (1.000)		742874		50.0000	
47 Trichloroethene	130	5.696	5.698 (1.059)		196326		50.0000	40
48 Methylcyclohexane	83	5.885	5.875 (1.095)		240383		50.0000	40
49 1,2-Dichloropropane	63	5.909	5.911 (1.099)		170355		50.0000	42
51 Methyl Methacrylate	69	5.980	5.982 (1.112)		135328		50.0000	47
52 Dibromomethane	93	6.015	6.017 (1.119)		110664		50.0000	43
53 1,4-Dioxane	88	6.015	6.017 (1.119)		41802		1000.00	1100(A)
54 Bromodichloromethane	83	6.157	6.159 (1.145)		208967		50.0000	42
55 2-Chloroethyl vinyl ether	63	6.583	6.419 (1.224)		1459		50.0000	2(TQ)
56 cis-1,3-Dichloropropene	75	6.583	6.573 (1.224)		224795		50.0000	38
57 4-Methyl-2-pentanone	43	6.713	6.715 (1.249)		183884		50.0000	45
\$ 58 Toluene-d8	98	6.855	6.845 (0.819)		723133		50.0000	50
59 Toluene	91	6.915	6.916 (1.286)		629493		50.0000	40
60 trans-1,3-Dichloropropene	75	7.128	7.129 (1.326)		209833		50.0000	41
61 Ethyl Methacrylate	69	7.199	7.200 (1.339)		175403		50.0000	45
62 1,1,2-Trichloroethane	97	7.317	7.319 (1.361)		154364		50.0000	42
63 Tetrachloroethene	164	7.483	7.484 (0.894)		157669		50.0000	40
64 1,3-Dichloropropane	76	7.494	7.496 (0.895)		248172		50.0000	43
65 2-Hexanone	43	7.565	7.567 (0.904)		125998		50.0000	40
66 Dibromochloromethane	129	7.743	7.745 (0.925)		192429		50.0000	44
67 1,2-Dibromoethane	107	7.873	7.875 (0.941)		177817		50.0000	44
69 1-Chlorohexane	91	8.346	8.348 (0.997)		207405		50.0000	38
* 68 Chlorobenzene-d5	117	8.370	8.360 (1.000)		627590		50.0000	
70 Chlorobenzene	112	8.394	8.395 (1.003)		458738		50.0000	42
71 1,1,1,2-Tetrachloroethane	131	8.477	8.478 (1.013)		182358		50.0000	42
72 Ethylbenzene	106	8.512	8.502 (1.017)		235353		50.0000	40
73 m,p-Xylene	106	8.630	8.632 (1.031)		558450		100.000	81
74 o-Xylene	106	9.080	9.082 (1.085)		284442		50.0000	42
75 Styrene	104	9.104	9.094 (1.088)		447819		50.0000	43
76 Bromoform	173	9.317	9.318 (1.113)		118474		50.0000	46

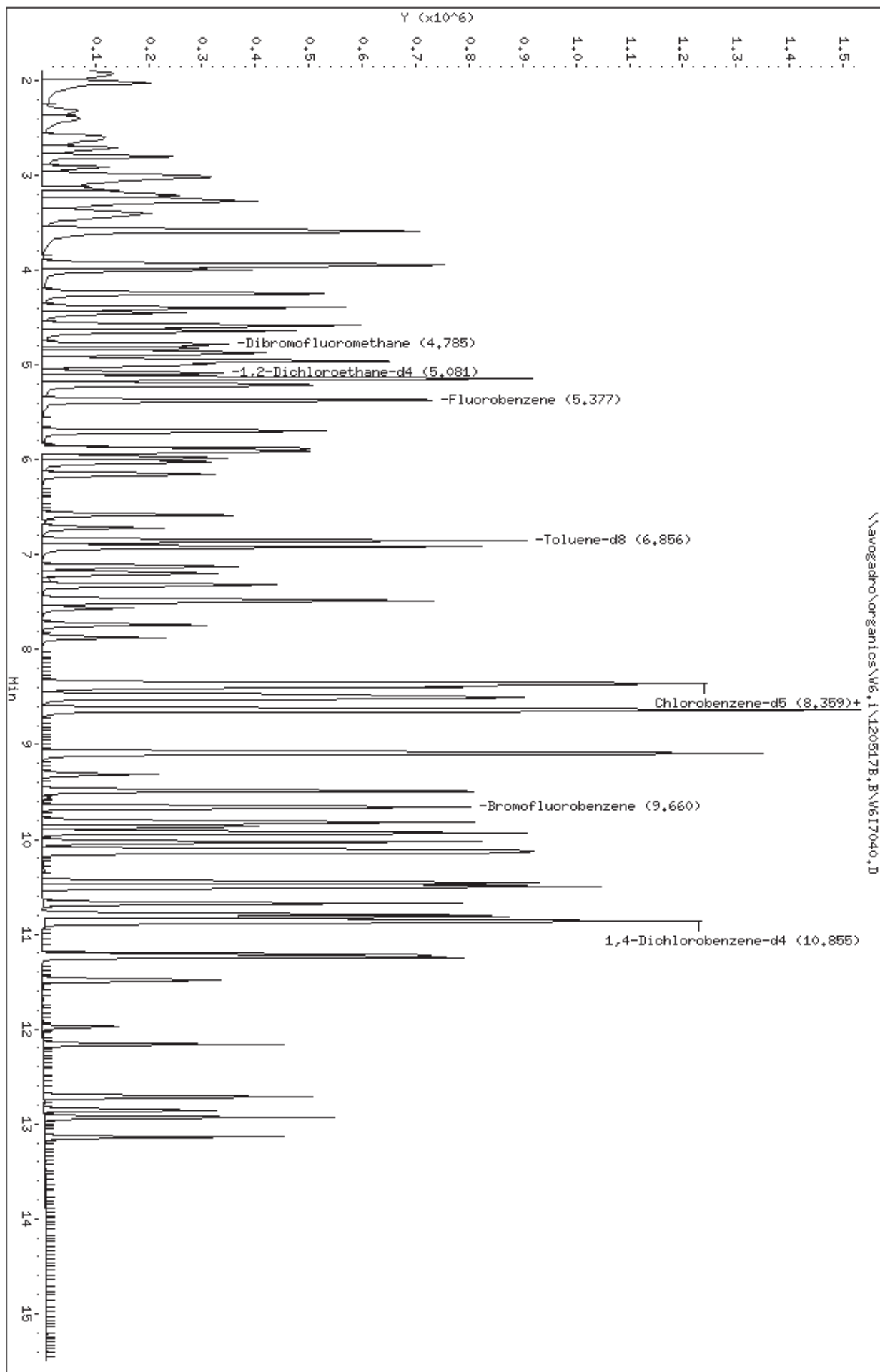
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.494	9.484 (1.134)		665569		50.0000	40
78 trans-1,4-Dichloro-2-butene	75	9.861	9.863 (1.178)		181988		50.0000	40
\$ 79 Bromofluorobenzene	95	9.660	9.662 (1.154)		293950		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.814	9.815 (0.904)		203465		50.0000	44
81 Bromobenzene	156	9.825	9.827 (0.905)		203211		50.0000	43
82 1,2,3-Trichloropropane	75	9.861	9.863 (0.908)		181988		50.0000	42
83 n-Propylbenzene	120	9.932	9.934 (0.915)		196211		50.0000	42
84 2-Chlorotoluene	126	10.027	10.028 (0.924)		183373		50.0000	43
85 1,3,5-Trimethylbenzene	105	10.109	10.111 (0.931)		526955		50.0000	41
86 4-Chlorotoluene	126	10.145	10.147 (0.935)		191688		50.0000	41
M 94 Xylene (Total)	106				842892		150.000	120
87 tert-Butylbenzene	119	10.453	10.454 (0.963)		628109		50.0000	42
88 1,2,4-Trimethylbenzene	105	10.500	10.502 (0.967)		537940		50.0000	41
89 sec-Butylbenzene	105	10.677	10.679 (0.984)		618722		50.0000	40
90 1,3-Dichlorobenzene	146	10.796	10.786 (0.995)		346656		50.0000	42
91 4-Isopropyltoluene	119	10.819	10.821 (0.997)		518631		50.0000	39
* 92 1,4-Dichlorobenzene-d4	152	10.855	10.857 (1.000)		315187		50.0000	
93 1,4-Dichlorobenzene	146	10.879	10.880 (1.002)		354070		50.0000	42
95 n-Butylbenzene	91	11.210	11.212 (1.033)		404285		50.0000	38
96 1,2-Dichlorobenzene	146	11.245	11.247 (1.036)		339585		50.0000	42
97 Hexachloroethane	117	11.482	11.484 (1.058)		74244		50.0000	42
98 1,2-Dibromo-3-chloropropane	75	11.979	11.969 (1.104)		35100		50.0000	48
141 1,3,5-Trichlorobenzene	182	12.157	12.158 (2.261)		140952		50.0000	36(A)
99 1,2,4-Trichlorobenzene	180	12.713	12.714 (1.171)		148338		50.0000	38
100 Hexachlorobutadiene	225	12.855	12.856 (1.184)		55544		50.0000	34
101 Naphthalene	128	12.938	12.927 (1.192)		462939		50.0000	46
102 1,2,3-Trichlorobenzene	180	13.139	13.140 (1.210)		130351		50.0000	40

QC Flag Legend

- T - Target compound detected outside RT window.
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120517B,B\W617040.D
 Date : 17-May-2012 23:10
 Client ID: MW-1HSD
 Sample Info: SWL,L0935-01AHSD,66227
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: LIMS
 Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-66208

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-66208
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1743.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	37	
74-87-3	Chloromethane	43	
75-01-4	Vinyl chloride	46	
74-83-9	Bromomethane	52	
75-00-3	Chloroethane	46	
75-69-4	Trichlorofluoromethane	44	
75-35-4	1,1-Dichloroethene	43	
67-64-1	Acetone	30	
74-88-4	Iodomethane	47	
75-15-0	Carbon disulfide	40	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	43	
1634-04-4	Methyl tert-butyl ether	45	
75-34-3	1,1-Dichloroethane	44	
108-05-4	Vinyl acetate	45	
78-93-3	2-Butanone	36	
156-59-2	cis-1,2-Dichloroethene	44	
594-20-7	2,2-Dichloropropane	32	
74-97-5	Bromochloromethane	45	
67-66-3	Chloroform	45	
71-55-6	1,1,1-Trichloroethane	44	
563-58-6	1,1-Dichloropropene	43	
56-23-5	Carbon tetrachloride	44	
107-06-2	1,2-Dichloroethane	46	
71-43-2	Benzene	43	
79-01-6	Trichloroethene	43	
78-87-5	1,2-Dichloropropane	45	
74-95-3	Dibromomethane	46	
75-27-4	Bromodichloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	45	
108-10-1	4-Methyl-2-pentanone	42	
108-88-3	Toluene	41	
10061-02-6	trans-1,3-Dichloropropene	44	
79-00-5	1,1,2-Trichloroethane	45	
142-28-9	1,3-Dichloropropane	45	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66208

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-66208
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V8B1743.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	37	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	45	
108-90-7	Chlorobenzene	43	
630-20-6	1,1,1,2-Tetrachloroethane	44	
100-41-4	Ethylbenzene	43	
179601-23-1	m,p-Xylene	84	
95-47-6	o-Xylene	44	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	45	
75-25-2	Bromoform	45	
98-82-8	Isopropylbenzene	44	
79-34-5	1,1,2,2-Tetrachloroethane	41	
108-86-1	Bromobenzene	42	
96-18-4	1,2,3-Trichloropropane	40	
103-65-1	n-Propylbenzene	43	
95-49-8	2-Chlorotoluene	41	
108-67-8	1,3,5-Trimethylbenzene	43	
106-43-4	4-Chlorotoluene	42	
98-06-6	tert-Butylbenzene	41	
95-63-6	1,2,4-Trimethylbenzene	41	
135-98-8	sec-Butylbenzene	43	
99-87-6	4-Isopropyltoluene	43	
541-73-1	1,3-Dichlorobenzene	41	
106-46-7	1,4-Dichlorobenzene	39	
104-51-8	n-Butylbenzene	41	
95-50-1	1,2-Dichlorobenzene	41	
96-12-8	1,2-Dibromo-3-chloropropane	40	
120-82-1	1,2,4-Trichlorobenzene	41	
87-68-3	Hexachlorobutadiene	38	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	40	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120516B.B\V8B1743.d
Lab Smp Id: LCS-66208 Client Smp ID: LCS-66208
Inj Date : 17-MAY-2012 05:18
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML, LCS-66208, LCS-66208, 66208
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120516B.B\v108260Gadd-6lvl.m
Meth Date : 18-May-2012 14:36 amarquis Quant Type: ISTD
Cal Date : 16-MAY-2012 14:43 Cal File: V8B1710.d
Als bottle: 100 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.651 (0.311)		102618	50.0000	37
2 Freon114	85	1.766	1.766 (0.333)		89720	50.0000	36
3 Chloromethane	50	1.818	1.818 (0.343)		147143	50.0000	43
4 Vinyl Chloride	62	1.917	1.918 (0.362)		125847	50.0000	46
5 Bromomethane	94	2.207	2.207 (0.416)		53563	50.0000	52
6 Chloroethane	64	2.294	2.294 (0.433)		63147	50.0000	46
7 Trichlorofluoromethane	101	2.509	2.509 (0.473)		134482	50.0000	44
126 Ethanol	46	2.631	2.631 (0.496)		33690	5000.00	4100(A)
8 Ether	59	2.731	2.731 (0.515)		99677	50.0000	46
9 Acrolein	56	2.834	2.834 (0.534)		128897	250.000	210(A)
10 1,1-Dichloroethene	96	2.924	2.927 (0.551)		101030	50.0000	42
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.921 (0.550)		86754	50.0000	38
12 Acetone	58	2.953	2.953 (0.557)		12533	50.0000	30
13 Iodomethane	142	3.052	3.053 (0.576)		72126	50.0000	47
14 Carbon Disulfide	76	3.117	3.117 (0.588)		329309	50.0000	40
15 Acetonitrile	41	3.207	3.204 (0.605)		193722	500.000	450(A)
16 Allyl Chloride	39	3.207	3.207 (0.605)		112382	50.0000	44
17 Methyl Acetate	43	3.210	3.210 (0.605)		87246	50.0000	45
18 Methylene Chloride	84	3.300	3.300 (0.622)		123170	50.0000	45
19 tert-Butanol	59	3.358	3.358 (0.633)		19659	100.000	76
20 Acrylonitrile	53	3.486	3.487 (0.657)		44238	50.0000	48
21 trans-1,2-Dichloroethene	96	3.519	3.522 (0.664)		109530	50.0000	43
22 Methyl tert-butyl ether	73	3.512	3.512 (0.662)		331207	50.0000	45

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.853	3.853	(0.727)	211366		50.0000	44
24 Vinyl acetate	43	3.882	3.882	(0.732)	386313		50.0000	45
25 Diisopropyl Ether	45	3.888	3.888	(0.733)	382343		50.0000	46
26 2-Chloro-1,3-Butadiene	53	3.930	3.930	(0.741)	163292		50.0000	45
27 Ethyl tert-butyl ether	59	4.181	4.181	(0.788)	345566		50.0000	46
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	114416		50.0000	32
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.814)	124660		50.0000	44
30 2-Butanone	72	4.322	4.323	(0.815)	13338		50.0000	36
32 Propionitrile	54	4.367	4.368	(0.824)	167181		500.000	440(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	131944		100.000	90
34 Bromochloromethane	128	4.522	4.519	(0.853)	57857		50.0000	45
31 Tetrahydrofuran	72	4.564	4.560	(0.861)	30364		100.000	86
35 Chloroform	83	4.573	4.573	(0.862)	206057		50.0000	45
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	119884		50.0000	51
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	167395		50.0000	44
38 Cyclohexane	56	4.808	4.808	(0.907)	160734		50.0000	40
39 1,1-Dichloropropene	110	4.888	4.888	(0.922)	53289		50.0000	43
40 Carbon Tetrachloride	117	4.895	4.895	(0.923)	140036		50.0000	44
41 Isobutyl Alcohol	43	4.924	4.924	(0.928)	88838		1000.00	760(A)
\$ 42 1,2-Dichloroethane-d4	102	5.004	5.007	(0.944)	27597		50.0000	50
43 Benzene	78	5.068	5.069	(0.956)	463086		50.0000	43
44 1,2-Dichloroethane	62	5.072	5.072	(0.956)	162417		50.0000	46
45 tert-Amyl methyl ether	73	5.142	5.142	(0.970)	325577		50.0000	46
M 50 1,2-Dichloroethene (Total)	96				234190		100.000	87
* 46 Fluorobenzene	96	5.303	5.300	(1.000)	467832		50.0000	
47 Trichloroethene	130	5.631	5.628	(1.062)	113422		50.0000	43
48 Methylcyclohexane	83	5.821	5.818	(1.098)	142747		50.0000	39
49 1,2-Dichloropropane	63	5.837	5.834	(1.101)	125664		50.0000	45
51 Methyl Methacrylate	69	5.911	5.911	(1.115)	88944		50.0000	44
52 Dibromomethane	93	5.943	5.946	(1.121)	77222		50.0000	46
53 1,4-Dioxane	88	5.943	5.946	(1.121)	27869		1000.00	800(A)
54 Bromodichloromethane	83	6.078	6.078	(1.146)	158640		50.0000	46
55 2-Chloroethyl vinyl ether	63	6.506	6.503	(1.227)	911		50.0000	33(T)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	177984		50.0000	44
57 4-Methyl-2-pentanone	43	6.644	6.644	(1.253)	100173		50.0000	42
\$ 58 Toluene-d8	98	6.782	6.782	(0.818)	458496		50.0000	50
59 Toluene	91	6.850	6.850	(1.292)	469969		50.0000	41
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.329)	154847		50.0000	44
61 Ethyl Methacrylate	69	7.129	7.130	(1.344)	124564		50.0000	44
62 1,1,2-Trichloroethane	97	7.239	7.242	(1.365)	106542		50.0000	45
63 Tetrachloroethene	164	7.409	7.409	(0.894)	107504		50.0000	49
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	183931		50.0000	45
65 2-Hexanone	43	7.493	7.493	(0.904)	64800		50.0000	37
66 Dibromochloromethane	129	7.660	7.660	(0.924)	119895		50.0000	47
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	108950		50.0000	44
69 1-Chlorohexane	91	8.277	8.277	(0.999)	137745		50.0000	41
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	335745		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	298005		50.0000	43
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	107641		50.0000	44
72 Ethylbenzene	106	8.435	8.435	(1.018)	154591		50.0000	43
73 m,p-Xylene	106	8.563	8.564	(1.033)	383721		100.000	84
74 o-Xylene	106	9.010	9.010	(1.087)	187727		50.0000	44
75 Styrene	104	9.023	9.023	(1.089)	307180		50.0000	45
76 Bromoform	173	9.229	9.226	(1.114)	71324		50.0000	45

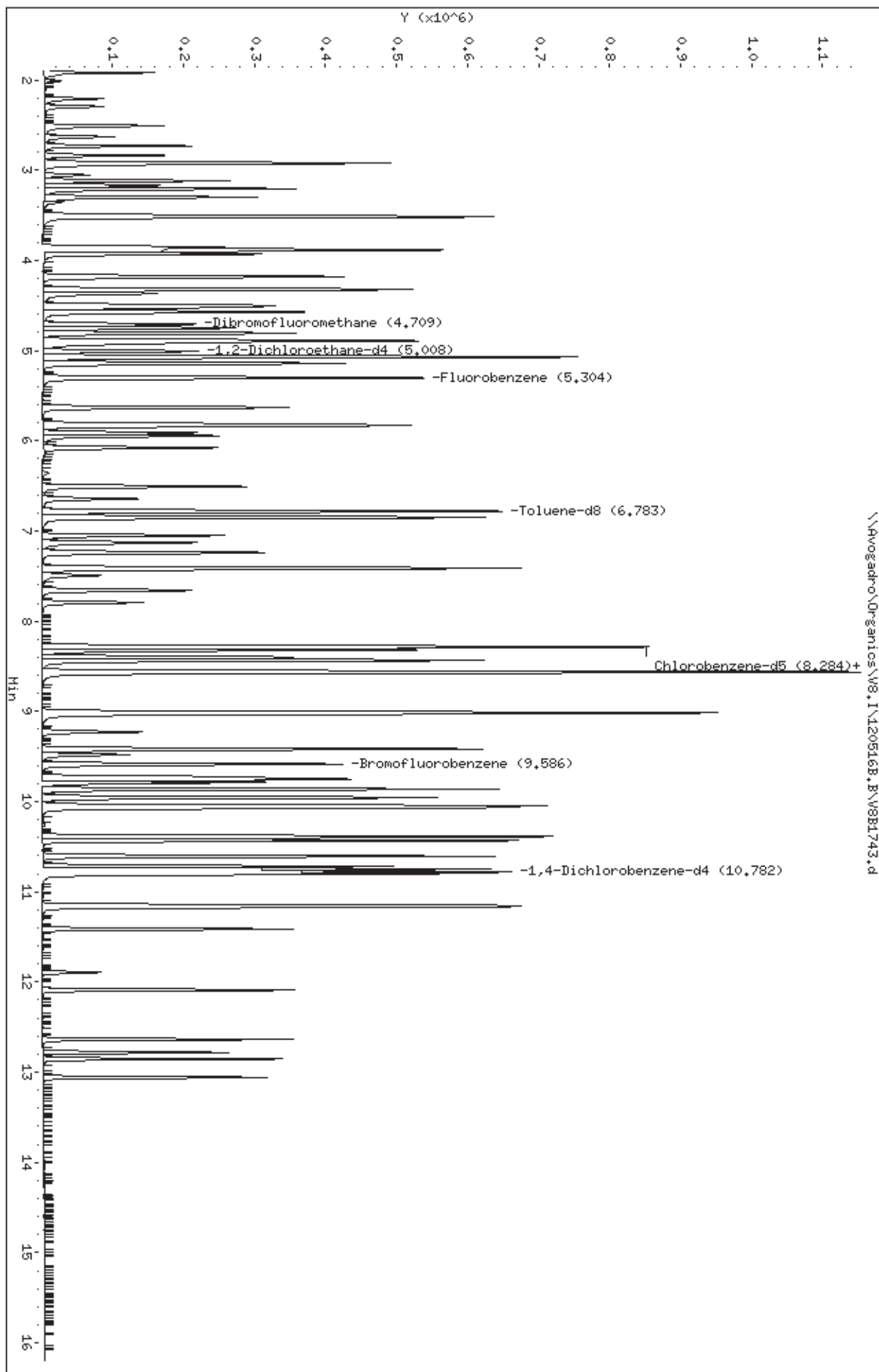
Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.419	9.419 (1.137)		454684	50.0000	44
78 trans-1,4-Dichloro-2-butene	75	9.483	9.480 (1.144)		31496	50.0000	38
\$ 79 Bromofluorobenzene	95	9.586	9.583 (1.157)		161416	50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.727 (0.902)		138138	50.0000	41
81 Bromobenzene	156	9.753	9.753 (0.905)		119793	50.0000	42
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		158676	50.0000	40
83 n-Propylbenzene	120	9.862	9.863 (0.915)		118238	50.0000	43
84 2-Chlorotoluene	126	9.956	9.953 (0.924)		109854	50.0000	41
85 1,3,5-Trimethylbenzene	105	10.046	10.046 (0.932)		368940	50.0000	43
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		111877	50.0000	42
M 94 Xylene (Total)	106				571448	150.000	130
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		352051	50.0000	41
88 1,2,4-Trimethylbenzene	105	10.431	10.432 (0.968)		375838	50.0000	41
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		440413	50.0000	43
90 1,3-Dichlorobenzene	146	10.718	10.718 (0.994)		202159	50.0000	41
91 4-Isopropyltoluene	119	10.750	10.747 (0.997)		351330	50.0000	43
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		162109	50.0000	
93 1,4-Dichlorobenzene	146	10.804	10.805 (1.002)		204879	50.0000	39
95 n-Butylbenzene	91	11.148	11.149 (1.034)		298172	50.0000	41
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		201412	50.0000	41
97 Hexachloroethane	117	11.412	11.412 (1.059)		70471	50.0000	42
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891 (1.103)		20160	50.0000	40
141 1,3,5-Trichlorobenzene	182	12.087	12.088 (2.279)		96640	50.0000	42(A)
99 1,2,4-Trichlorobenzene	180	12.637	12.637 (1.172)		96054	50.0000	41
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		44677	50.0000	38
101 Naphthalene	128	12.853	12.853 (1.192)		228213	50.0000	40
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		86284	50.0000	41

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\W8.1\120516B.B\W8B1743.d
Date : 17-May-2012 05:18
Client ID: LCS-66208
Sample Info: 5HL,LCS-66208,LCS-66208,66208
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC; LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66227

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66227
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7032.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	44	
74-87-3	Chloromethane	51	
75-01-4	Vinyl chloride	48	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	49	
75-35-4	1,1-Dichloroethene	49	
67-64-1	Acetone	51	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	47	
78-93-3	2-Butanone	49	
156-59-2	cis-1,2-Dichloroethene	48	
594-20-7	2,2-Dichloropropane	46	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	48	
563-58-6	1,1-Dichloropropene	47	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	48	
78-87-5	1,2-Dichloropropane	49	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	49	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	47	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-66227

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-66227
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I7032.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 05/17/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	52	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	50	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	51	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	53	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	52	
96-18-4	1,2,3-Trichloropropane	48	
103-65-1	n-Propylbenzene	52	
95-49-8	2-Chlorotoluene	53	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	50	
95-63-6	1,2,4-Trimethylbenzene	50	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	49	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	53	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	46	
87-61-6	1,2,3-Trichlorobenzene	51	
91-20-3	Naphthalene	55	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V6.i\120517B.B\V6I7032.D
Lab Smp Id: LCS-66227 Client Smp ID: VLCS6B
Inj Date : 17-MAY-2012 19:57
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,LCS-66227,VLCS6B,66227
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120517B.B\v68260Gadd-6lvl.m
Meth Date : 18-May-2012 14:43 amarquis Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.743	1.743 (0.324)		183007	50.0000	44
2 Freon114	85		1.850	1.850 (0.344)		262308	50.0000	46
3 Chloromethane	50		1.933	1.933 (0.360)		359073	50.0000	51
4 Vinyl Chloride	62		2.027	2.027 (0.377)		255067	50.0000	48
5 Bromomethane	94		2.311	2.311 (0.430)		135597	50.0000	49
6 Chloroethane	64		2.406	2.406 (0.448)		145645	50.0000	48
7 Trichlorofluoromethane	101		2.595	2.595 (0.483)		259535	50.0000	49
126 Ethanol	46		2.714	2.714 (0.505)		93650	5000.00	5400(A)
8 Ether	59		2.797	2.797 (0.520)		165022	50.0000	48
9 Acrolein	56		2.915	2.915 (0.542)		214373	250.000	250(A)
10 1,1-Dichloroethene	96		3.010	3.010 (0.560)		208051	50.0000	49
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.998	2.998 (0.558)		203653	50.0000	50
12 Acetone	58		3.033	3.033 (0.564)		28061	50.0000	50
13 Iodomethane	142		3.163	3.163 (0.588)		412996	50.0000	56
14 Carbon Disulfide	76		3.211	3.211 (0.597)		842163	50.0000	50
15 Acetonitrile	41		3.270	3.270 (0.608)		586180	500.000	510(A)
16 Allyl Chloride	39		3.282	3.282 (0.610)		219501	50.0000	48(Q)
17 Methyl Acetate	43		3.282	3.282 (0.610)		165344	50.0000	47
18 Methylene Chloride	84		3.400	3.400 (0.632)		221883	50.0000	48
19 tert-Butanol	59		3.436	3.436 (0.639)		38769	100.000	93
20 Acrylonitrile	53		3.566	3.566 (0.663)		88412	50.0000	50
21 trans-1,2-Dichloroethene	96		3.589	3.589 (0.668)		198390	50.0000	49
22 Methyl tert-butyl ether	73		3.578	3.578 (0.665)		522380	50.0000	50

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COL
	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.932	3.932 (0.732)		351661	50
24 Vinyl acetate	43	3.944	3.944 (0.734)		735532	47
25 Diisopropyl Ether	45	3.956	3.956 (0.736)		699062	48
26 2-Chloro-1,3-Butadiene	53	4.003	4.003 (0.745)		296885	48
27 Ethyl tert-butyl ether	59	4.240	4.240 (0.789)		585102	49
29 2,2-Dichloropropane	77	4.394	4.394 (0.817)		149285	46
28 cis-1,2-Dichloroethene	96	4.394	4.394 (0.817)		217039	48
30 2-Butanone	72	4.394	4.394 (0.817)		24962	49
32 Propionitrile	54	4.453	4.453 (0.828)		306520	480(A)
33 Methacrylonitrile	41	4.571	4.571 (0.850)		245859	85
34 Bromochloromethane	128	4.595	4.595 (0.855)		115324	50
31 Tetrahydrofuran	72	4.631	4.631 (0.861)		49047	96
35 Chloroform	83	4.642	4.642 (0.864)		310298	49
\$ 36 Dibromofluoromethane	113	4.784	4.784 (0.890)		206187	49
37 1,1,1-Trichloroethane	97	4.820	4.820 (0.897)		254829	48
38 Cyclohexane	56	4.867	4.867 (0.905)		353673	51
39 1,1-Dichloropropene	110	4.950	4.950 (0.921)		99642	47
40 Carbon Tetrachloride	117	4.962	4.962 (0.923)		222992	51
41 Isobutyl Alcohol	43	4.997	4.997 (0.930)		193439	980(A)
\$ 42 1,2-Dichloroethane-d4	102	5.080	5.080 (0.945)		46715	48
43 Benzene	78	5.139	5.139 (0.956)		702165	50
44 1,2-Dichloroethane	62	5.151	5.151 (0.958)		241089	48
45 tert-Amyl methyl ether	73	5.210	5.210 (0.969)		522214	50
M 50 1,2-Dichloroethene (Total)	96				415429	97
* 46 Fluorobenzene	96	5.376	5.376 (1.000)		734802	50
47 Trichloroethene	130	5.696	5.696 (1.059)		234242	48
48 Methylcyclohexane	83	5.885	5.885 (1.095)		271810	46
49 1,2-Dichloropropane	63	5.909	5.909 (1.099)		199060	49
51 Methyl Methacrylate	69	5.980	5.980 (1.112)		149714	53
52 Dibromomethane	93	6.027	6.027 (1.121)		123928	48
53 1,4-Dioxane	88	6.015	6.015 (1.119)		37004	980(A)
54 Bromodichloromethane	83	6.157	6.157 (1.145)		244142	50
55 2-Chloroethyl vinyl ether	63	6.417	6.417 (1.194)		55240	58
56 cis-1,3-Dichloropropene	75	6.583	6.583 (1.224)		295055	51
57 4-Methyl-2-pentanone	43	6.713	6.713 (1.249)		199073	49
\$ 58 Toluene-d8	98	6.855	6.855 (0.819)		710486	51
59 Toluene	91	6.914	6.914 (1.286)		756269	49
60 trans-1,3-Dichloropropene	75	7.127	7.127 (1.326)		268191	53
61 Ethyl Methacrylate	69	7.198	7.198 (1.339)		201551	52
62 1,1,2-Trichloroethane	97	7.317	7.317 (1.361)		171502	47
63 Tetrachloroethene	164	7.482	7.482 (0.894)		201662	52
64 1,3-Dichloropropane	76	7.494	7.494 (0.895)		278817	50
65 2-Hexanone	43	7.565	7.565 (0.904)		146450	48
66 Dibromochloromethane	129	7.743	7.743 (0.925)		217806	51
67 1,2-Dibromoethane	107	7.873	7.873 (0.941)		197823	50
69 1-Chlorohexane	91	8.346	8.346 (0.997)		256699	48
* 68 Chlorobenzene-d5	117	8.370	8.370 (1.000)		613119	50
70 Chlorobenzene	112	8.393	8.393 (1.003)		534470	50
71 1,1,1,2-Tetrachloroethane	131	8.476	8.476 (1.013)		212299	50
72 Ethylbenzene	106	8.512	8.512 (1.017)		283649	50
73 m,p-Xylene	106	8.630	8.630 (1.031)		674136	100
74 o-Xylene	106	9.080	9.080 (1.085)		340367	51
75 Styrene	104	9.103	9.103 (1.088)		540285	53
76 Bromoform	173	9.316	9.316 (1.113)		133916	53

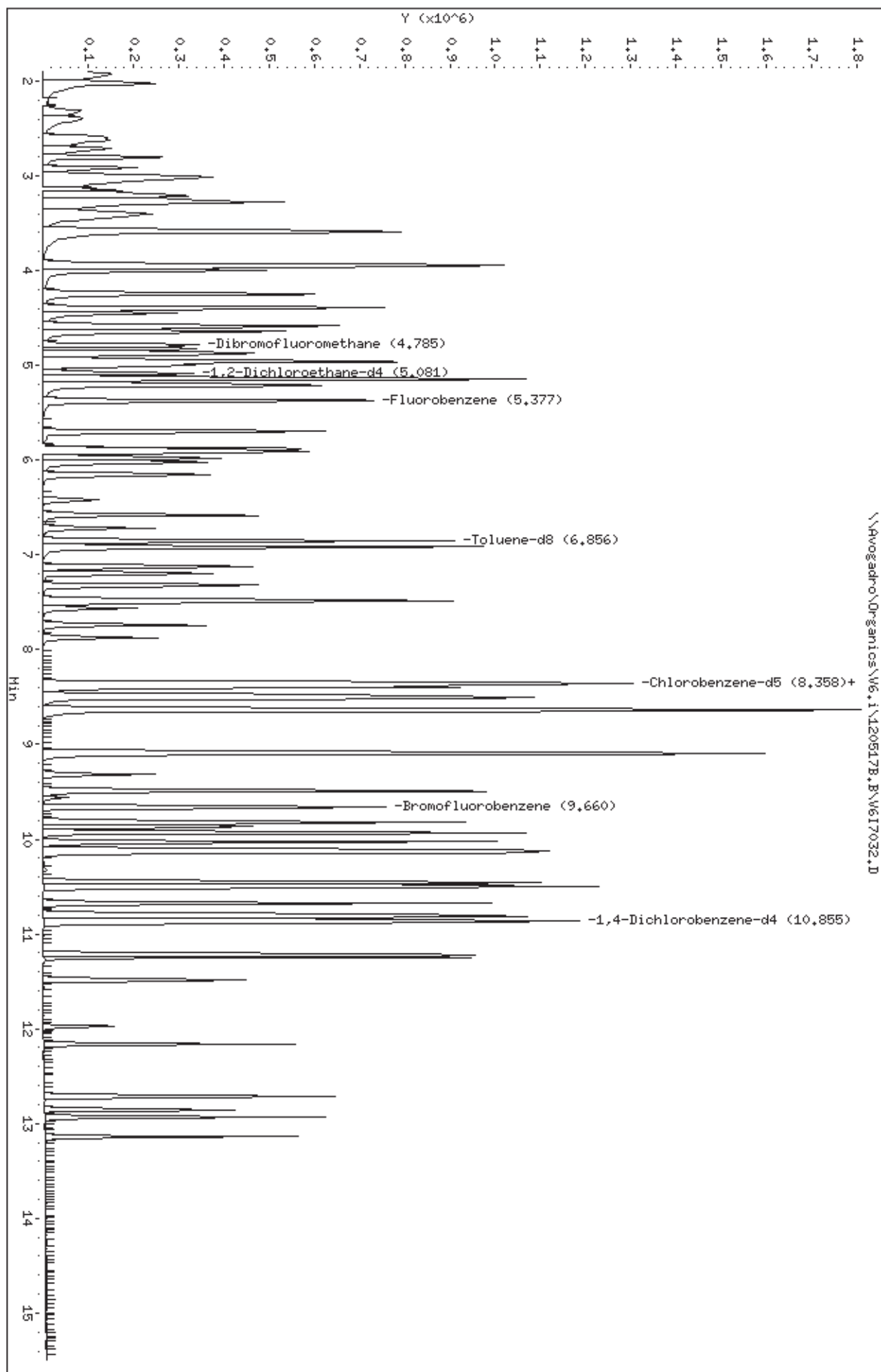
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.494	9.494	(1.134)	798676	50.0000	50
78 trans-1,4-Dichloro-2-butene	75	9.861	9.861	(1.178)	203877	50.0000	46
\$ 79 Bromofluorobenzene	95	9.660	9.660	(1.154)	285285	50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.813	9.813	(0.904)	219243	50.0000	49
81 Bromobenzene	156	9.825	9.825	(0.905)	240095	50.0000	52
82 1,2,3-Trichloropropane	75	9.861	9.861	(0.908)	203877	50.0000	48
83 n-Propylbenzene	120	9.932	9.932	(0.915)	236065	50.0000	52
84 2-Chlorotoluene	126	10.026	10.026	(0.924)	220296	50.0000	53
85 1,3,5-Trimethylbenzene	105	10.109	10.109	(0.931)	638648	50.0000	51
86 4-Chlorotoluene	126	10.145	10.145	(0.935)	229614	50.0000	51
M 94 Xylene (Total)	106				1014503	150.000	150
87 tert-Butylbenzene	119	10.452	10.452	(0.963)	733306	50.0000	50
88 1,2,4-Trimethylbenzene	105	10.500	10.500	(0.967)	645805	50.0000	50
89 sec-Butylbenzene	105	10.677	10.677	(0.984)	752790	50.0000	50
90 1,3-Dichlorobenzene	146	10.796	10.796	(0.995)	407936	50.0000	50
91 4-Isopropyltoluene	119	10.819	10.819	(0.997)	629623	50.0000	49
* 92 1,4-Dichlorobenzene-d4	152	10.855	10.855	(1.000)	306063	50.0000	
93 1,4-Dichlorobenzene	146	10.878	10.878	(1.002)	418852	50.0000	51
95 n-Butylbenzene	91	11.221	11.221	(1.034)	513858	50.0000	50
96 1,2-Dichlorobenzene	146	11.245	11.245	(1.036)	395384	50.0000	50
97 Hexachloroethane	117	11.482	11.482	(1.058)	102460	50.0000	60
98 1,2-Dibromo-3-chloropropane	75	11.979	11.979	(1.104)	37923	50.0000	53
141 1,3,5-Trichlorobenzene	182	12.168	12.168	(2.263)	179753	50.0000	46(A)
99 1,2,4-Trichlorobenzene	180	12.712	12.712	(1.171)	186760	50.0000	50
100 Hexachlorobutadiene	225	12.854	12.854	(1.184)	73079	50.0000	46
101 Naphthalene	128	12.937	12.937	(1.192)	530244	50.0000	55
102 1,2,3-Trichlorobenzene	180	13.138	13.138	(1.210)	158734	50.0000	50

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\W6.i\120517B.B\W617032.D
 Date : 17-May-2012 19:57
 Client ID: VLC6B
 Sample Info: 5HL,LCS-66227,VLC6B,66227
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6.i
 Operator: AH SRC: AH
 Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66235

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66235
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7063.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 05/18/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	52	
74-87-3	Chloromethane	52	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	51	
67-64-1	Acetone	60	
74-88-4	Iodomethane	53	
75-15-0	Carbon disulfide	52	
75-09-2	Methylene chloride	50	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	53	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	54	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	49	
56-23-5	Carbon tetrachloride	54	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	50	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	54	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	55	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-66235

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0935</u>	Mod. Ref No.: _____ SDG No.: <u>SL0935</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>LCS-66235</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I7063.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: _____
% Moisture: not dec. _____	Date Analyzed: <u>05/18/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
127-18-4	Tetrachloroethene	48	
591-78-6	2-Hexanone	51	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	51	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	55	
75-25-2	Bromoform	56	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	52	
108-86-1	Bromobenzene	53	
96-18-4	1,2,3-Trichloropropane	58	
103-65-1	n-Propylbenzene	53	
95-49-8	2-Chlorotoluene	54	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	52	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	50	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	49	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	53	
120-82-1	1,2,4-Trichlorobenzene	45	
87-68-3	Hexachlorobutadiene	43	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	51	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120518.B\V6I7063.D
Lab Smp Id: LCS-66235 Client Smp ID: VLCS6C
Inj Date : 18-MAY-2012 09:06
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,LCS-66235,VLCS6C,66235
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120518.B\v68260Gadd-6lv1.m
Meth Date : 18-May-2012 13:59 V6.i Quant Type: ISTD
Cal Date : 17-MAY-2012 18:20 Cal File: V6I7026.D
Als bottle: 20 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.743	1.757 (0.324)		211696	50.0000	52
2 Freon114	85	1.850	1.852 (0.344)		288623	50.0000	51
3 Chloromethane	50	1.933	1.935 (0.360)		356388	50.0000	52
4 Vinyl Chloride	62	2.027	2.030 (0.377)		263204	50.0000	50
5 Bromomethane	94	2.323	2.314 (0.432)		133589	50.0000	49
6 Chloroethane	64	2.406	2.408 (0.448)		149048	50.0000	50
7 Trichlorofluoromethane	101	2.595	2.598 (0.483)		284346	50.0000	55
126 Ethanol	46	2.714	2.716 (0.505)		116920	5000.00	6700(AQ)
8 Ether	59	2.796	2.799 (0.520)		166785	50.0000	49(Q)
9 Acrolein	56	2.915	2.917 (0.542)		227719	250.000	270(A)
10 1,1-Dichloroethene	96	3.009	3.024 (0.560)		215471	50.0000	51
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.998	3.000 (0.558)		218993	50.0000	54
12 Acetone	58	3.033	3.035 (0.564)		33105	50.0000	60
13 Iodomethane	142	3.163	3.166 (0.588)		390021	50.0000	53
14 Carbon Disulfide	76	3.211	3.213 (0.597)		854400	50.0000	52
15 Acetonitrile	41	3.270	3.272 (0.608)		604195	500.000	540(A)
16 Allyl Chloride	39	3.282	3.284 (0.610)		236953	50.0000	53
17 Methyl Acetate	43	3.282	3.284 (0.610)		168047	50.0000	49
18 Methylene Chloride	84	3.400	3.402 (0.632)		225233	50.0000	50
19 tert-Butanol	59	3.435	3.438 (0.639)		40424	100.000	98
20 Acrylonitrile	53	3.566	3.568 (0.663)		87411	50.0000	50
21 trans-1,2-Dichloroethene	96	3.589	3.591 (0.668)		202947	50.0000	50
22 Methyl tert-butyl ether	73	3.577	3.580 (0.665)		525187	50.0000	51

Data File: \\avogadro\organics\V6.i\120518.B\V6I7063.D
Report Date: 18-May-2012 14:28

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.921	3.923 (0.729)		350902		50.0000	50
24 Vinyl acetate	43	3.944	3.946 (0.734)		756938		50.0000	49
25 Diisopropyl Ether	45	3.956	3.946 (0.736)		713316		50.0000	50
26 2-Chloro-1,3-Butadiene	53	4.003	3.994 (0.745)		306397		50.0000	51
27 Ethyl tert-butyl ether	59	4.240	4.242 (0.789)		588518		50.0000	50
29 2,2-Dichloropropane	77	4.394	4.396 (0.817)		172820		50.0000	54
28 cis-1,2-Dichloroethene	96	4.394	4.396 (0.817)		225834		50.0000	51
30 2-Butanone	72	4.394	4.396 (0.817)		26948		50.0000	53
32 Propionitrile	54	4.453	4.455 (0.828)		307411		500.000	490(A)
33 Methacrylonitrile	41	4.571	4.574 (0.850)		248247		100.000	86
34 Bromochloromethane	128	4.595	4.597 (0.855)		117339		50.0000	51
31 Tetrahydrofuran	72	4.631	4.633 (0.861)		47756		100.000	95
35 Chloroform	83	4.642	4.645 (0.864)		323756		50.0000	51
\$ 36 Dibromofluoromethane	113	4.784	4.787 (0.890)		206794		50.0000	50
37 1,1,1-Trichloroethane	97	4.820	4.822 (0.897)		266149		50.0000	51
38 Cyclohexane	56	4.867	4.869 (0.905)		383291		50.0000	56
39 1,1-Dichloropropene	110	4.950	4.952 (0.921)		102707		50.0000	49
40 Carbon Tetrachloride	117	4.962	4.964 (0.923)		231532		50.0000	54
41 Isobutyl Alcohol	43	4.997	5.000 (0.930)		193833		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	5.080	5.082 (0.945)		46340		50.0000	48
43 Benzene	78	5.139	5.142 (0.956)		712499		50.0000	51
44 1,2-Dichloroethane	62	5.151	5.153 (0.958)		248450		50.0000	50
45 tert-Amyl methyl ether	73	5.210	5.201 (0.969)		520625		50.0000	50
M 50 1,2-Dichloroethene (Total)	96				428781		100.000	100
* 46 Fluorobenzene	96	5.376	5.366 (1.000)		725362		50.0000	
47 Trichloroethene	130	5.695	5.698 (1.059)		233573		50.0000	49
48 Methylcyclohexane	83	5.885	5.875 (1.095)		306497		50.0000	52
49 1,2-Dichloropropane	63	5.908	5.911 (1.099)		202555		50.0000	51
51 Methyl Methacrylate	69	5.979	5.982 (1.112)		149387		50.0000	53
52 Dibromomethane	93	6.027	6.017 (1.121)		126768		50.0000	50
53 1,4-Dioxane	88	6.027	6.017 (1.121)		48755		1000.00	1300(A)
54 Bromodichloromethane	83	6.157	6.159 (1.145)		250420		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.417	6.420 (1.194)		51584		50.0000	55
56 cis-1,3-Dichloropropene	75	6.583	6.573 (1.224)		306120		50.0000	54
57 4-Methyl-2-pentanone	43	6.713	6.715 (1.249)		194689		50.0000	48
\$ 58 Toluene-d8	98	6.855	6.846 (0.819)		705506		50.0000	51
59 Toluene	91	6.914	6.917 (1.286)		768437		50.0000	50
60 trans-1,3-Dichloropropene	75	7.127	7.129 (1.326)		276844		50.0000	55
61 Ethyl Methacrylate	69	7.198	7.200 (1.339)		208033		50.0000	54
62 1,1,2-Trichloroethane	97	7.317	7.319 (1.361)		175105		50.0000	49
63 Tetrachloroethene	164	7.482	7.473 (0.894)		183667		50.0000	48
64 1,3-Dichloropropane	76	7.494	7.496 (0.895)		277430		50.0000	50
65 2-Hexanone	43	7.565	7.567 (0.904)		155067		50.0000	51
66 Dibromochloromethane	129	7.743	7.745 (0.925)		228490		50.0000	54
67 1,2-Dibromoethane	107	7.873	7.875 (0.941)		199396		50.0000	51
69 1-Chlorohexane	91	8.346	8.348 (0.997)		262484		50.0000	50
* 68 Chlorobenzene-d5	117	8.370	8.360 (1.000)		608513		50.0000	
70 Chlorobenzene	112	8.393	8.396 (1.003)		550365		50.0000	52
71 1,1,1,2-Tetrachloroethane	131	8.476	8.478 (1.013)		214885		50.0000	51
72 Ethylbenzene	106	8.512	8.502 (1.017)		286340		50.0000	50
73 m,p-Xylene	106	8.642	8.632 (1.033)		682189		100.000	100
74 o-Xylene	106	9.080	9.082 (1.085)		339665		50.0000	51
75 Styrene	104	9.103	9.106 (1.088)		561348		50.0000	55
76 Bromoform	173	9.316	9.319 (1.113)		141079		50.0000	56

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.494	9.484 (1.134)		792266		50.0000	50
78 trans-1,4-Dichloro-2-butene	75	9.861	9.863 (1.178)		238062		50.0000	54
\$ 79 Bromofluorobenzene	95	9.659	9.662 (1.154)		278268		50.0000	49
80 1,1,2,2-Tetrachloroethane	83	9.813	9.816 (0.904)		225170		50.0000	52
81 Bromobenzene	156	9.825	9.827 (0.905)		235654		50.0000	52
82 1,2,3-Trichloropropane	75	9.861	9.863 (0.908)		238062		50.0000	58
83 n-Propylbenzene	120	9.932	9.934 (0.915)		236013		50.0000	53
84 2-Chlorotoluene	126	10.026	10.029 (0.924)		217789		50.0000	54
85 1,3,5-Trimethylbenzene	105	10.109	10.111 (0.931)		620221		50.0000	51
86 4-Chlorotoluene	126	10.145	10.147 (0.935)		229393		50.0000	52
M 94 Xylene (Total)	106				1021854		150.000	150
87 tert-Butylbenzene	119	10.452	10.455 (0.963)		739915		50.0000	52
88 1,2,4-Trimethylbenzene	105	10.500	10.502 (0.967)		620247		50.0000	50
89 sec-Butylbenzene	105	10.677	10.679 (0.984)		721767		50.0000	49
90 1,3-Dichlorobenzene	146	10.795	10.786 (0.995)		403315		50.0000	51
91 4-Isopropyltoluene	119	10.819	10.821 (0.997)		606643		50.0000	49
* 92 1,4-Dichlorobenzene-d4	152	10.855	10.857 (1.000)		297680		50.0000	
93 1,4-Dichlorobenzene	146	10.878	10.880 (1.002)		408857		50.0000	51
95 n-Butylbenzene	91	11.221	11.212 (1.034)		486227		50.0000	48
96 1,2-Dichlorobenzene	146	11.245	11.247 (1.036)		384331		50.0000	50
97 Hexachloroethane	117	11.482	11.484 (1.058)		113406		50.0000	68
98 1,2-Dibromo-3-chloropropane	75	11.979	11.969 (1.104)		36559		50.0000	53
141 1,3,5-Trichlorobenzene	182	12.168	12.158 (2.263)		159135		50.0000	42(A)
99 1,2,4-Trichlorobenzene	180	12.712	12.715 (1.171)		165913		50.0000	45
100 Hexachlorobutadiene	225	12.854	12.857 (1.184)		66023		50.0000	42
101 Naphthalene	128	12.937	12.928 (1.192)		481943		50.0000	51
102 1,2,3-Trichlorobenzene	180	13.138	13.141 (1.210)		141173		50.0000	46

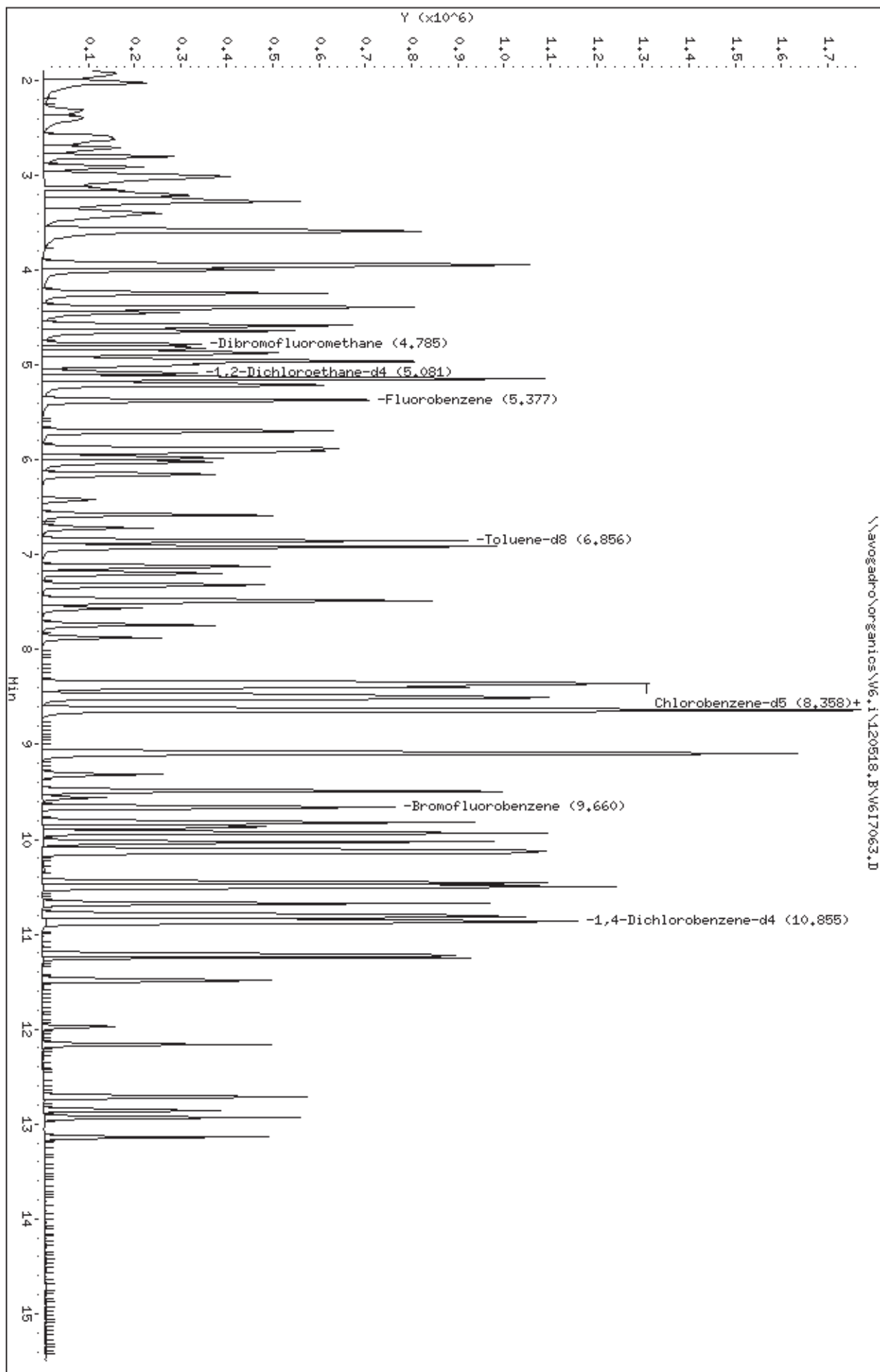
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120518.B\W6I7063.D
Date : 18-May-2012 09:06
Client ID: WLC86C
Sample Info: 5HL, LCS-66235, WLC86C, 66235
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



INJECTION LOG

METHOD:

INITIAL CAL:

COMMENTS:

CAL ID:

IS/SS ID:

ICV ID:

ANALYST:

ARCHIVE:

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory
Start: 17-MAY-12 15:54
End: 17-MAY-12 19:08
BATCH: 120517A.B
ANALYST: WL
METHOD: 8260-W
ICAL DATE: 5/17/12

Standards: IS/SS-VW120516A Awt. uL
STD-VW120516B 20 uL
BFB-VW120516A 2 uL
uL

Reviewed By: ASB Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL	STDS	SURROGATES	DILN	FLG	COMMENTS	pH
V6I7020	15:54	BFB6A	BFB6A	AQ									
V6I7021	16:19	VSTD0016A	VSTD0016A	AQ									
V6I7022	16:43	VSTD0056A	VSTD0056A	AQ									
V6I7023	17:07	VSTD0206A	VSTD0206A	AQ									
V6I7024	17:31	VSTD0506A	VSTD0506A	AQ									
V6I7025	17:56	VSTD1006A	VSTD1006A	AQ									
V6I7026	18:20	VSTD2006A	VSTD2006A	AQ									
V6I7027	19:08	VICV0506A	VICV0506A	AQ									

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

1 WL 5/18/12

Spectrum Analytical, Inc. RI Division V6 Injection Log
 Volatiles Laboratory
 ANALYST: WL BATCH: 120517B.B Start: 17-MAY-12 18:44
 METHOD: 826.4 ICAL DATE: 5/12/12 End: 18-MAY-12 05:13

Comments:

Standards: ISFS-VW120516A Ab UL
STD-VW120516B 20 UL
GFB-W120404A 2 UL
UL

Reviewed By: 518W Manual Integration: WA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL	STDS	SURROGATES	DILN	FLG	COMMENTS	PH
V6I7030	18:44	BFB6B											
V6I7031	19:33	VSTD0506B											
V6I7032	19:57	LCS-66227											
V6I7033	20:21	MB-66227											
V6I7034	20:45	MB-66227											
V6I7035	21:09	MB-66227											
V6I7036	21:34	L1009-12A											
V6I7037	21:58	L1009-13A											
V6I7038	22:22	L1009-03A											
V6I7039	22:46	L0935-01AMS											
V6I7040	23:10	L0935-01AMS											
V6I7041	23:34	L1009-03AMS											
V6I7042	23:59	L1009-03AMS											
V6I7043	00:23	BLK											
V6I7044	00:47	BLK											
V6I7045	01:11	L1009-14A											
V6I7046	01:36	L0935-02A											
V6I7047	02:00	L0935-03A											
V6I7048	02:24	L0951-01A											
V6I7049	02:48	L0952-01A											
V6I7050	03:12	L0952-02A											
V6I7051	03:37	L0954-01A											
V6I7052	04:01	L0954-02A											
V6I7053	04:25	L0954-03A											
V6I7054	04:49	L0954-04A											
V6I7055	05:13	L0935-05A											

E - One or more target compounds are above the calibration range
 R - One or more spike compounds are outside of control limits
 T - Sample was injected outside of the 12 hour sequence
 * - Internal Standard or Surrogate outside of control limit
 D - Surrogates are diluted

1 WL 5/18/12

```
Start: 18-MAY-12 07:11
End: 18-MAY-12 13:33
```

Standards:

$IS/IS - V_{IS}$	$1.05/6A$	$A_{IS} \cdot u_l$
$ISD - V_{ISD}$	$1.205/6B$	$20 \quad u_l$
$BFB - V_{BFB}$	$1.204/6A$	$2 \quad u_l$
		u_l

MI Review:

- One or more target compounds are above the calibration range
- One or more spike compounds are outside of control limits
- Sample was injected outside of the 12 hour sequence
- Internal Standard or Surrogate outside of control limit
- Surrogates are diluted

2/18/15

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory
METHOD: 8260 W ANALYST: AED
BATCH: 120516.B
Start: 16-MAY-12 09:25
End: 16-MAY-12 15:25

Comments:
Standards: BFB VW120516A 2 uL
1515 VW120516B AUTO uL
STD VW120516A 20 uL
CV VW120516C 20 uL

Reviewed By: JSM Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	EN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V8B1700	09:25	BFB10D	BFB10D												1		OK	
V8B1704	12:07	VSTD05010D	VSTD05010D				100	100	100						1		OK	
V8B1705	12:33	VSTD02010D	VSTD02010D				101	99	96						1		OK	
V8B1706	12:59	VSTD00510D	VSTD00510D				100	97	89						1		OK	
V8B1708	13:51	VSTD00110D	VSTD00110D				98	93	81						1		OK	
V8B1709	14:17	VSTD20010D	VSTD20010D				102	104	110						1		OK	
V8B1710	14:43	VSTD10010D	VSTD10010D				102	102	105						1		OK	
V8B1711	15:25	VICV05010D	VICV05010D				99	98	97	100	100	100	100		1	E	OK	

No good for 2-CVE

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 5/16/12

V10 Injection Log

METHOD: 8260 W
ICAL DATE: 5/11/12

ANALYST: AED

BATCH: 120516B.B

Start: 17-MAY-12 04:27

End: 17-MAY-12 20:08

Comments:

Standards: BFB VW120516A

2 uL

1555 VW120516B

uL

3 ID VW120516A

uL

Reviewed By: ASB Manual Integration: AED 5/11/12 MI Review: ASB

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	BATCH	FBZ	CBZ	DCB	DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	PH
V8B1741	04:27	BFB10F	BFB10F															
V8B1742	04:52	VSTD05010F	VSTD05010F															
V8B1743	05:18	LCS-66208	LCS-66208															
V8B1744	05:44	MB-66208	MB-66208															
V8B1745	06:10	MB-66208	MB-66208															
V8B1746	06:35	MB-66208	MB-66208															
V8B1747	07:01	L0907-16A	TRIP BLANK 5/4															
V8B1748	07:27	L0935-04A	TRIP BLANK															
V8B1749	07:52	L0983-07A	TRIP BLANK															
V8B1750	08:18	L0983-01A	TRIP BLANK															
V8B1751	08:44	L0983-02A	ESL-IL-050812															
V8B1752	09:10	L0983-03A	ESL-AF-050812															
V8B1753	09:36	L0983-04A	ESL-SL-050812															
V8B1754	10:02	L0983-05A	ESL-CE-050812															
V8B1755	10:27	L0983-06A	ESL-BF2E-050812															
V8B1756	10:53	L0935-01A	ESL-ED-050812															
V8B1757	11:19	L0935-02A	MW-1															
V8B1758	11:45	L0935-03A	MW-2															
V8B1759	12:11	VBLK	MW-3															
V8B1760	12:37	VBLK	VBLK															
V8B1761	13:03	L1016-13A	FIELD BLANK 5/1															
V8B1762	13:29	L1016-05ADL	MW-18_5/9/12DL															
V8B1763	13:54	L1016-12ADL	MW-19_5/10/12DL															
V8B1764	14:20	L1016-14ADL	MW-20_5/10/12DL															
V8B1765	14:46	L1016-15ADL	MW-21_5/10/12DL															
V8B1766	15:12	L1016-16ADL	MW-22_5/10/12DL															
V8B1774	18:50	L0001-01A	MDL-1															
V8B1775	19:16	L0001-02A	MDL-2															
V8B1776	19:42	L0001-03A	MDL-3															
V8B1777	20:08	L0001-04A	MDL-4															

R - One or more spike compounds are outside of control limits

T - Sample was injected outside of the 12 hour sequence

* - Internal Standard or Surrogate outside of control limit

D - Surrogates are diluted

AED 5/18/12

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
5/14/12	L0930	Verutek	01-07	CFA	AED	H	R10	
5/14/12	L0897	Watermark	14-28	VGB		H	R10	
5/14/12	L0931	Spectrum	01,02,04,06,08,10,12,13,15,17,19,21,23,25	VGB		H	R9	
5/14/12	L0907	KILLC	17-16	VGB		H	R10	
5/17/12	L0935	sterling	01-05	VGB		H	R9	
	L0927	EPA	05-07			H	R13	
	L0938	PEL	01-14			H	R10	
5/17/12	L0907	WVRC	17-21	VGB	AED	H	R10	
5/8/12	L0943	ENE	01-02	AED		H	R10	
	L0945	SEVENSON	01-02			UA VS AED 2/8/12		
	L0946	PEL	01-07			H		
	L0947	PEL	01-16			H		
	L0949	DVIRKA	01-19			UA		
5/8/12	L0951	VERUTEK	01	AED		H	R10	

Logbook ID 90.0191-04/12

Reviewed By: AED 5/9/12

"Preservative Used" Key

UA = Unpreserved Aqueous

E = Encore

US = Unpreserved Soil

M = MeOH

F = Freeze

T = Trace, HCL



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Semivolatile Organics ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L0935

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times with the following exceptions:

MW-3 (L0935-03BRE) exceed by-5 Days. The initial extraction was within hold time. Sample was re-extracted due to surrogate failures.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8270D

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3

Instrument Type: GCMS-SEMI

Description: HP6890 / HP5973

Manufacturer: Hewlett-Packard

Model: 6890 / 5973

GC Column used: 30 m X 0.25 mm ID [0.25 um thickness] Rxi-5sil MS capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

MW-1 (L0935-01B), recovery is below criteria for 2-Fluorophenol at 17% with criteria of (20-110).

MW-3 (L0935-03B), recovery is below criteria for 2-Fluorophenol at 13% with criteria of (20-110) and Phenol-d5 at 8% with criteria of (10-115).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spikes were performed on samples: MW-1 (L0935-01BMS) and MW-1 (L0935-01BMSD).

Percent recoveries were within the QC limits with the following exceptions:

MW-1 (L0935-01BMS)Percent Recovery is outside QC Limits, recovery is below criteria for 2,4-Dimethylphenol at 10% with criteria of (30-110).

MW-1 (L0935-01BMSD)Percent Recovery is outside QC Limits, recovery is below criteria for 2,4-Dimethylphenol at 9% with criteria of (30-110), 2-Methylphenol at 34% with criteria of (40-110) and 4-Methylphenol at 29% with criteria of (30-110).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

Sample MW-3 (L0935-03B) was re-extracted due to low surrogate recoveries. Both results were reported in this package.

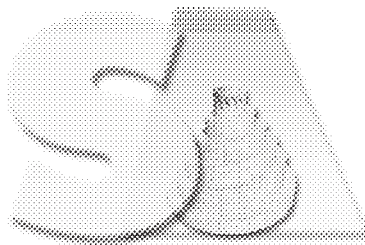
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. R.', is written over a horizontal line.

Signed:_____

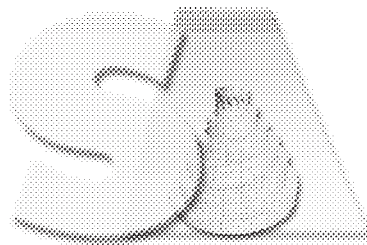
Date: 5/24/2012



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

2H - FORM II SV-2
WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-66049	78	79	84	78	71	88			0
02	LCS-66049	78	80	86	80	74	89			0
03	MW-1	66	70	74	11	17 *	58			1
04	MW-1MS	78	81	85	27	39	66			0
05	MW-1MSD	73	78	76	23	31	61			0
06	MW-2	71	76	87	25	30	83			0
07	MW-3	64	69	62	8 *	13 *	52			2
08	DUP-1	69	77	83	32	40	86			0
09	MB-66186	85	84	87	82	81	96			0
10	LCS-66186	87	88	93	86	83	104			0
11	LCSD-66186	85	86	88	83	79	98			0
12	MW-3RX	72	75	75	34	49	100			0

QC LIMITS

SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

3C - FORM III SV-1
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM

Case No.: L0935

Mod. Ref No.:

SDG No.: SL0935

Matrix Spike - EPA Sample No.: MW-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	14.5318	29		0-115
Bis(2-chloroethyl)ether	50.0000	0.0000	39.8254	80		35-110
2-Chlorophenol	50.0000	0.0000	33.1716	66		35-105
1,3-Dichlorobenzene	50.0000	0.0000	39.9625	80		30-100
1,4-Dichlorobenzene	50.0000	0.0000	39.8134	80		30-100
1,2-Dichlorobenzene	50.0000	0.0000	40.2956	81		35-100
2-Methylphenol	50.0000	0.0000	20.7727	42		40-110
2,2'-oxybis(1-Chloropropan	50.0000	0.0000	40.7585	82		30-123
4-Methylphenol	50.0000	0.0000	17.3820	35		30-110
N-Nitroso-di-n-propylamine	50.0000	0.0000	41.5286	83		35-130
Hexachloroethane	50.0000	0.0000	40.2613	81		30-95
Nitrobenzene	50.0000	0.0000	40.3986	81		45-110
Isophorone	50.0000	0.0000	39.7781	80		50-110
2-Nitrophenol	50.0000	0.0000	42.9985	86		40-115
2,4-Dimethylphenol	50.0000	0.0000	4.9712	10	*	30-110
2,4-Dichlorophenol	50.0000	0.0000	32.6786	65		50-105
1,2,4-Trichlorobenzene	50.0000	0.0000	40.4792	81		35-105
Naphthalene	50.0000	0.0000	40.8658	82		40-100
4-Chloroaniline	50.0000	0.0000	33.9545	68		15-110
Bis(2-chloroethoxy)methane	50.0000	0.0000	40.5118	81		45-105
Hexachlorobutadiene	50.0000	0.0000	41.7470	83		25-105
4-Chloro-3-methylphenol	50.0000	0.0000	24.3419	49		45-110
2-Methylnaphthalene	50.0000	0.0000	40.8992	82		45-105
Hexachlorocyclopentadiene	50.0000	0.0000	55.4299	111		27-147
2,4,6-Trichlorophenol	50.0000	0.0000	33.9423	68		50-115
2,4,5-Trichlorophenol	50.0000	0.0000	38.3267	77		50-110
2-Chloronaphthalene	50.0000	0.0000	40.7699	82		50-105
2-Nitroaniline	50.0000	0.0000	41.5071	83		50-115
Dimethylphthalate	50.0000	0.0000	40.3077	81		25-125
Acenaphthylene	50.0000	0.0000	41.1153	82		50-105
2,6-Dinitrotoluene	50.0000	0.0000	42.6065	85		50-115
3-Nitroaniline	50.0000	0.0000	33.6327	67		20-125
Acenaphthene	50.0000	0.0000	42.0236	84		45-110
2,4-Dinitrophenol	50.0000	0.0000	56.6854	113		15-140
4-Nitrophenol	50.0000	0.0000	21.1253	42		0-125
Dibenzofuran	50.0000	0.0000	42.9348	86		55-105
2,4-Dinitrotoluene	50.0000	0.0000	42.9117	86		50-120
Diethylphthalate	50.0000	0.0000	42.2340	84		40-120
4-Chlorophenyl-phenylether	50.0000	0.0000	43.4600	87		50-110
Fluorene	50.0000	0.0000	43.2118	86		50-110
4-Nitroaniline	50.0000	0.0000	35.6270	71		35-120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	47.3609	95		40-130
N-Nitrosodiphenylamine	50.0000	0.0000	40.0914	80		50-110
4-Bromophenyl-phenylether	50.0000	0.0000	43.3988	87		50-115

3C - FORM III SV-1
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix Spike - EPA Sample No.: MW-1 _____

Hexachlorobenzene	50.0000	0.0000	43.9156	88		50-110
Pentachlorophenol	50.0000	0.0000	30.8791	62		40-115
Phenanthrene	50.0000	0.0000	42.7621	86		50-115
Anthracene	50.0000	0.0000	41.8603	84		55-110
Carbazole	50.0000	0.0000	42.0442	84		50-115
Di-n-butylphthalate	50.0000	1.1490	44.7155	87		55-115
Fluoranthene	50.0000	0.0000	43.6815	87		55-115
Pyrene	50.0000	0.0000	41.9429	84		50-130
Butylbenzylphthalate	50.0000	0.0000	43.1655	86		45-115
3,3'-Dichlorobenzidine	50.0000	0.0000	20.7944	42		20-110
Benzo(a)anthracene	50.0000	0.0000	42.3486	85		55-110
Chrysene	50.0000	0.0000	43.7377	87		55-110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	43.8655	88		40-125
Di-n-octylphthalate	50.0000	0.0000	44.9806	90		35-135
Benzo(b)fluoranthene	50.0000	0.0000	44.0175	88		45-120
Benzo(k)fluoranthene	50.0000	0.0000	46.8412	94		45-125
Benzo(a)pyrene	50.0000	0.0000	43.9742	88		55-110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	43.4037	87		45-125
Dibenzo(a,h)anthracene	50.0000	0.0000	43.6369	87		40-125
Benzo(g,h,i)perylene	50.0000	0.0000	43.2948	87		40-125

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Phenol	50.0000	12.4659	25		15		0-40	0-115
Bis(2-chloroethyl)ether	50.0000	36.3108	73		9		0-40	35-110
2-Chlorophenol	50.0000	28.2728	57		16		0-40	35-105
1,3-Dichlorobenzene	50.0000	36.0882	72		10		0-40	30-100
1,4-Dichlorobenzene	50.0000	36.8643	74		8		0-40	30-100
1,2-Dichlorobenzene	50.0000	36.5949	73		10		0-40	35-100
2-Methylphenol	50.0000	16.8018	34	*	21		0-40	40-110
2,2'-oxybis(1-Chloropropan	50.0000	37.3650	75		9		0-40	30-123
4-Methylphenol	50.0000	14.5307	29	*	18		0-40	30-110
N-Nitroso-di-n-propylamine	50.0000	39.1950	78		6		0-40	35-130
Hexachloroethane	50.0000	36.5226	73		10		0-40	30-95
Nitrobenzene	50.0000	38.5797	77		5		0-40	45-110
Isophorone	50.0000	38.6530	77		3		0-40	50-110
2-Nitrophenol	50.0000	39.9732	80		7		0-40	40-115
2,4-Dimethylphenol	50.0000	4.5568	9	*	9		0-40	30-110
2,4-Dichlorophenol	50.0000	28.6096	57		13		0-40	50-105
1,2,4-Trichlorobenzene	50.0000	37.5733	75		7		0-40	35-105
Naphthalene	50.0000	38.5135	77		6		0-40	40-100
4-Chloroaniline	50.0000	32.9519	66		3		0-40	15-110
Bis(2-chloroethoxy)methane	50.0000	38.0272	76		6		0-40	45-105
Hexachlorobutadiene	50.0000	38.0219	76		9		0-40	25-105
4-Chloro-3-methylphenol	50.0000	22.5619	45		8		0-40	45-110
2-Methylnaphthalene	50.0000	39.0193	78		5		0-40	45-105

3C - FORM III SV-1
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix Spike - EPA Sample No.: MW-1

Hexachlorocyclopentadiene	50.0000	52.0616	104	6	0-40	27-147
2,4,6-Trichlorophenol	50.0000	30.8956	62	9	0-40	50-115
2,4,5-Trichlorophenol	50.0000	35.1402	70	9	0-40	50-110
2-Chloronaphthalene	50.0000	38.7059	77	5	0-40	50-105
2-Nitroaniline	50.0000	39.9787	80	4	0-40	50-115
Dimethylphthalate	50.0000	39.4941	79	2	0-40	25-125
Acenaphthylene	50.0000	40.4956	81	2	0-40	50-105
2,6-Dinitrotoluene	50.0000	41.9259	84	2	0-40	50-115
3-Nitroaniline	50.0000	34.0102	68	1	0-40	20-125
Acenaphthene	50.0000	40.9952	82	2	0-40	45-110
2,4-Dinitrophenol	50.0000	51.3600	103	10	0-40	15-140
4-Nitrophenol	50.0000	21.3859	43	1	0-40	0-125
Dibenzofuran	50.0000	41.1080	82	4	0-40	55-105
2,4-Dinitrotoluene	50.0000	42.4262	85	1	0-40	50-120
Diethylphthalate	50.0000	41.2567	83	2	0-40	40-120
4-Chlorophenyl-phenylether	50.0000	41.5487	83	4	0-40	50-110
Fluorene	50.0000	41.3882	83	4	0-40	50-110
4-Nitroaniline	50.0000	34.7108	69	3	0-40	35-120
4,6-Dinitro-2-methylphenol	50.0000	46.3775	93	2	0-40	40-130
N-Nitrosodiphenylamine	50.0000	38.7460	77	3	0-40	50-110
4-Bromophenyl-phenylether	50.0000	42.1564	84	3	0-40	50-115
Hexachlorobenzene	50.0000	42.0611	84	4	0-40	50-110
Pentachlorophenol	50.0000	28.2793	57	9	0-40	40-115
Phenanthrene	50.0000	41.4046	83	3	0-40	50-115
Anthracene	50.0000	41.4051	83	1	0-40	55-110
Carbazole	50.0000	41.1896	82	2	0-40	50-115
Di-n-butylphthalate	50.0000	43.1523	84	4	0-40	55-115
Fluoranthene	50.0000	42.8431	86	2	0-40	55-115
Pyrene	50.0000	39.9454	80	5	0-40	50-130
Butylbenzylphthalate	50.0000	41.0152	82	5	0-40	45-115
3,3'-Dichlorobenzidine	50.0000	20.9624	42	1	0-40	20-110
Benzo(a)anthracene	50.0000	41.2220	82	3	0-40	55-110
Chrysene	50.0000	40.5431	81	8	0-40	55-110
Bis(2-ethylhexyl)phthalate	50.0000	42.2391	84	4	0-40	40-125
Di-n-octylphthalate	50.0000	41.3594	83	8	0-40	35-135
Benzo(b)fluoranthene	50.0000	41.2391	82	7	0-40	45-120
Benzo(k)fluoranthene	50.0000	43.9506	88	6	0-40	45-125
Benzo(a)pyrene	50.0000	41.0558	82	7	0-40	55-110
Indeno(1,2,3-cd)pyrene	50.0000	41.1652	82	5	0-40	45-125
Dibenzo(a,h)anthracene	50.0000	41.4515	83	5	0-40	40-125
Benzo(g,h,i)perylene	50.0000	41.0154	82	5	0-40	40-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

3C - FORM III SV-1
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix Spike - EPA Sample No.: MW-1

Spike Recovery: 4 out of 128 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66049 LCS Lot No.: A082335
Date Extracted: 05/09/2012 Date Analyzed (1): 05/11/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	38.7996	78		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	40.0386	80		35 - 110
2-Chlorophenol	50.0000	0.0000	39.4696	79		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	39.5495	79		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	39.4446	79		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	40.0318	80		35 - 100
2-Methylphenol	50.0000	0.0000	40.0648	80		40 - 110
2,2'-oxybis(1-Chloropropan	50.0000	0.0000	39.4700	79		30 - 123
4-Methylphenol	50.0000	0.0000	40.3878	81		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	40.1443	80		35 - 130
Hexachloroethane	50.0000	0.0000	39.6272	79		30 - 95
Nitrobenzene	50.0000	0.0000	40.6990	81		45 - 110
Isophorone	50.0000	0.0000	39.2479	78		50 - 110
2-Nitrophenol	50.0000	0.0000	40.5412	81		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	36.3688	73		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	39.7055	79		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	40.4798	81		35 - 105
Naphthalene	50.0000	0.0000	39.8506	80		40 - 100
4-Chloroaniline	50.0000	0.0000	39.1336	78		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	40.1189	80		45 - 105
Hexachlorobutadiene	50.0000	0.0000	41.4904	83		25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	40.5764	81		45 - 110
2-Methylnaphthalene	50.0000	0.0000	39.7381	79		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	50.9450	102		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	42.6643	85		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	42.1055	84		50 - 110
2-Chloronaphthalene	50.0000	0.0000	40.2017	80		50 - 105
2-Nitroaniline	50.0000	0.0000	40.1897	80		50 - 115
Dimethylphthalate	50.0000	0.0000	41.7265	83		25 - 125
Acenaphthylene	50.0000	0.0000	40.5829	81		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	41.2795	83		50 - 115
3-Nitroaniline	50.0000	0.0000	33.2489	66		20 - 125
Acenaphthene	50.0000	0.0000	41.0094	82		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	46.2995	93		15 - 140
4-Nitrophenol	50.0000	0.0000	42.1758	84		0 - 125
Dibenzofuran	50.0000	0.0000	41.3255	83		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	41.9716	84		50 - 120
Diethylphthalate	50.0000	0.0000	41.4566	83		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	42.0288	84		50 - 110
Fluorene	50.0000	0.0000	41.5389	83		50 - 110
4-Nitroaniline	50.0000	0.0000	31.6545	63		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	44.6501	89		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	42.5823	85		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	42.6450	85		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66049 LCS Lot No.: A082335
Date Extracted: 05/09/2012 Date Analyzed (1): 05/11/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	44.0399	88		50 - 110
Pentachlorophenol	50.0000	0.0000	40.5110	81		40 - 115
Phenanthrene	50.0000	0.0000	42.4269	85		50 - 115
Anthracene	50.0000	0.0000	41.8138	84		55 - 110
Carbazole	50.0000	0.0000	41.1205	82		50 - 115
Di-n-butylphthalate	50.0000	0.0000	42.7828	86		55 - 115
Fluoranthene	50.0000	0.0000	42.4815	85		55 - 115
Pyrene	50.0000	0.0000	42.4084	85		50 - 130
Butylbenzylphthalate	50.0000	0.0000	43.4674	87		45 - 115
3,3'-Dichlorobenzidine	50.0000	0.0000	26.8207	54		20 - 110
Benzo(a)anthracene	50.0000	0.0000	42.2392	84		55 - 110
Chrysene	50.0000	0.0000	44.3771	89		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	44.1133	88		40 - 125
Di-n-octylphthalate	50.0000	0.0000	43.1471	86		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	40.0465	80		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	47.6947	95		45 - 125
Benzo(a)pyrene	50.0000	0.0000	43.6211	87		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	42.0968	84		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	42.1772	84		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	42.2828	85		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66186 LCS Lot No.: A085069
Date Extracted: 05/16/2012 Date Analyzed (1): 05/16/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	41.3626	83		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	42.9711	86		35 - 110
2-Chlorophenol	50.0000	0.0000	42.2825	85		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	43.0528	86		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	43.5285	87		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	43.2523	87		35 - 100
2-Methylphenol	50.0000	0.0000	42.5438	85		40 - 110
2,2'-oxybis(1-Chloropropan	50.0000	0.0000	41.4290	83		30 - 123
4-Methylphenol	50.0000	0.0000	42.4931	85		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	42.1079	84		35 - 130
Hexachloroethane	50.0000	0.0000	43.3522	87		30 - 95
Nitrobenzene	50.0000	0.0000	43.9573	88		45 - 110
Isophorone	50.0000	0.0000	43.6325	87		50 - 110
2-Nitrophenol	50.0000	0.0000	44.7287	89		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	45.4558	91		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	43.7858	88		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	43.3734	87		35 - 105
Naphthalene	50.0000	0.0000	43.5073	87		40 - 100
4-Chloroaniline	50.0000	0.0000	39.6846	79		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	43.1941	86		45 - 105
Hexachlorobutadiene	50.0000	0.0000	47.2426	94		25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	42.5408	85		45 - 110
2-Methylnaphthalene	50.0000	0.0000	43.6474	87		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	59.2682	119		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	47.6729	95		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	47.7392	95		50 - 110
2-Chloronaphthalene	50.0000	0.0000	45.2751	91		50 - 105
2-Nitroaniline	50.0000	0.0000	44.3725	89		50 - 115
Dimethylphthalate	50.0000	0.0000	45.5742	91		25 - 125
Acenaphthylene	50.0000	0.0000	43.3121	87		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	46.7873	94		50 - 115
3-Nitroaniline	50.0000	0.0000	43.2604	87		20 - 125
Acenaphthene	50.0000	0.0000	44.2684	89		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	54.5337	109		15 - 140
4-Nitrophenol	50.0000	0.0000	52.3271	105		0 - 125
Dibenzofuran	50.0000	0.0000	44.6344	89		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	46.9171	94		50 - 120
Diethylphthalate	50.0000	0.0000	44.9861	90		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	47.0215	94		50 - 110
Fluorene	50.0000	0.0000	45.3745	91		50 - 110
4-Nitroaniline	50.0000	0.0000	42.7823	86		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	48.4956	97		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	44.2667	89		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	47.5081	95		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCS-66186 LCS Lot No.: A085069
Date Extracted: 05/16/2012 Date Analyzed (1): 05/16/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	49.4999	99		50 - 110
Pentachlorophenol	50.0000	0.0000	53.2880	107		40 - 115
Phenanthrene	50.0000	0.0000	44.8863	90		50 - 115
Anthracene	50.0000	0.0000	44.8026	90		55 - 110
Carbazole	50.0000	0.0000	43.6896	87		50 - 115
Di-n-butylphthalate	50.0000	0.0000	44.7332	89		55 - 115
Fluoranthene	50.0000	0.0000	45.7770	92		55 - 115
Pyrene	50.0000	0.0000	44.1343	88		50 - 130
Butylbenzylphthalate	50.0000	0.0000	45.5631	91		45 - 115
3,3'-Dichlorobenzidine	50.0000	0.0000	40.2113	80		20 - 110
Benzo(a)anthracene	50.0000	0.0000	47.7078	95		55 - 110
Chrysene	50.0000	0.0000	42.7537	86		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	45.8756	92		40 - 125
Di-n-octylphthalate	50.0000	0.0000	44.9947	90		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	47.8412	96		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	48.2090	96		45 - 125
Benzo(a)pyrene	50.0000	0.0000	47.2232	94		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	48.8055	98		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	47.9261	96		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	48.6409	97		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66186

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L0935

Mod. Ref No.:

SDG No.: SL0935

Lab Sample ID: LCSD-66186

LCS Lot No.:

A085069

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #		QC LIMITS	
							RPD	REC.
Phenol	50.0000	39.8402	80		4		40	0 - 115
Bis(2-chloroethyl)ether	50.0000	40.5552	81		6		40	35 - 110
2-Chlorophenol	50.0000	40.3252	81		5		40	35 - 105
1,3-Dichlorobenzene	50.0000	41.5013	83		4		40	30 - 100
1,4-Dichlorobenzene	50.0000	41.5040	83		5		40	30 - 100
1,2-Dichlorobenzene	50.0000	41.5418	83		5		40	35 - 100
2-Methylphenol	50.0000	41.3733	83		2		40	40 - 110
2,2'-oxybis(1-Chloropropan	50.0000	39.5126	79		5		40	30 - 123
4-Methylphenol	50.0000	40.2467	80		6		40	30 - 110
N-Nitroso-di-n-propylamine	50.0000	40.8299	82		2		40	35 - 130
Hexachloroethane	50.0000	41.4020	83		5		40	30 - 95
Nitrobenzene	50.0000	42.4508	85		3		40	45 - 110
Isophorone	50.0000	42.3087	85		2		40	50 - 110
2-Nitrophenol	50.0000	42.7640	86		3		40	40 - 115
2,4-Dimethylphenol	50.0000	43.0322	86		6		40	30 - 110
2,4-Dichlorophenol	50.0000	42.8596	86		2		40	50 - 105
1,2,4-Trichlorobenzene	50.0000	41.4125	83		5		40	35 - 105
Naphthalene	50.0000	41.4959	83		5		40	40 - 100
4-Chloroaniline	50.0000	40.0906	80		1		40	15 - 110
Bis(2-chloroethoxy)methane	50.0000	41.7667	84		2		40	45 - 105
Hexachlorobutadiene	50.0000	45.6837	91		3		40	25 - 105
4-Chloro-3-methylphenol	50.0000	42.9172	86		1		40	45 - 110
2-Methylnaphthalene	50.0000	42.3486	85		2		40	45 - 105
Hexachlorocyclopentadiene	50.0000	55.1702	110		8		40	27 - 147
2,4,6-Trichlorophenol	50.0000	45.4796	91		4		40	50 - 115
2,4,5-Trichlorophenol	50.0000	45.3969	91		4		40	50 - 110
2-Chloronaphthalene	50.0000	43.1655	86		6		40	50 - 105
2-Nitroaniline	50.0000	42.7242	85		5		40	50 - 115
Dimethylphthalate	50.0000	43.3420	87		4		40	25 - 125
Acenaphthylene	50.0000	40.9318	82		6		40	50 - 105
2,6-Dinitrotoluene	50.0000	44.6141	89		5		40	50 - 115
3-Nitroaniline	50.0000	41.6745	83		5		40	20 - 125
Acenaphthene	50.0000	42.4981	85		5		40	45 - 110
2,4-Dinitrophenol	50.0000	41.4255	83		27		40	15 - 140
4-Nitrophenol	50.0000	49.3380	99		6		40	0 - 125
Dibenzofuran	50.0000	43.0084	86		3		40	55 - 105
2,4-Dinitrotoluene	50.0000	45.0350	90		4		40	50 - 120
Diethylphthalate	50.0000	43.1850	86		5		40	40 - 120
4-Chlorophenyl-phenylether	50.0000	44.5095	89		5		40	50 - 110
Fluorene	50.0000	43.4265	87		4		40	50 - 110
4-Nitroaniline	50.0000	42.8091	86		0		40	35 - 120
4,6-Dinitro-2-methylphenol	50.0000	45.8703	92		5		40	40 - 130
N-Nitrosodiphenylamine	50.0000	42.2880	85		5		40	50 - 110
4-Bromophenyl-phenylether	50.0000	45.0619	90		5		40	50 - 115
Hexachlorobenzene	50.0000	46.5113	93		6		40	50 - 110
Pentachlorophenol	50.0000	56.8749	114		6		40	40 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab Sample ID: LCSD-66186 LCS Lot No.: A085069

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #		QC LIMITS	
							RPD	REC.
Phenanthrene	50.0000	42.7496	85		6		40	50 - 115
Anthracene	50.0000	42.0725	84		7		40	55 - 110
Carbazole	50.0000	42.0103	84		4		40	50 - 115
Di-n-butylphthalate	50.0000	42.8531	86		3		40	55 - 115
Fluoranthene	50.0000	43.9541	88		4		40	55 - 115
Pyrene	50.0000	42.1152	84		5		40	50 - 130
Butylbenzylphthalate	50.0000	43.9660	88		3		40	45 - 115
3,3'-Dichlorobenzidine	50.0000	39.0791	78		3		40	20 - 110
Benzo(a)anthracene	50.0000	45.0304	90		5		40	55 - 110
Chrysene	50.0000	41.8010	84		2		40	55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	43.9839	88		4		40	40 - 125
Di-n-octylphthalate	50.0000	42.8210	86		5		40	35 - 135
Benzo(b)fluoranthene	50.0000	44.9895	90		6		40	45 - 120
Benzo(k)fluoranthene	50.0000	46.9705	94		2		40	45 - 125
Benzo(a)pyrene	50.0000	45.0636	90		4		40	55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	46.9373	94		4		40	45 - 125
Dibenzo(a,h)anthracene	50.0000	46.1595	92		4		40	40 - 125
Benzo(g,h,i)perylene	50.0000	46.1955	92		5		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: S3I0284.D Lab Sample ID: MB-66049
Instrument ID: S3 Date Extracted: 05/09/2012
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/11/2012
Level: (LOW/MED) LOW Time Analyzed: 12:42
Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-66049	LCS-66049	S3I0285.D	05/11/2012
02	MW-1	L0935-01B	S3I0287.D	05/11/2012
03	MW-1MS	L0935-01BMS	S3I0288.D	05/11/2012
04	MW-1MSD	L0935-01BMSD	S3I0289.D	05/11/2012
05	MW-2	L0935-02B	S3I0290.D	05/11/2012
06	MW-3	L0935-03B	S3I0291.D	05/11/2012
07	DUP-1	L0935-05B	S3I0292.D	05/11/2012

COMMENTS:

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: S3I0402.D Lab Sample ID: MB-66186
Instrument ID: S3 Date Extracted: 05/16/2012
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/16/2012
Level: (LOW/MED) LOW Time Analyzed: 15:00
Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-66186	LCS-66186	S3I0403.D	05/16/2012
02	LCSD-66186	LCSD-66186	S3I0404.D	05/16/2012
03	MW-3RX	L0935-03BRE	S3I0422.D	05/16/2012

COMMENTS:

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

DFTPP3U

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: S3I0120.D DFTPP Injection Date: 05/03/2012
Instrument ID: S3 DFTPP Injection Time: 12:04

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.1
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	47.9
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	29.4
365	Greater than 1.0% of mass 198	3.9
441	Present, but less than mass 443	11.3
442	50.0 - 100% of mass 198	75.6
443	15.0 - 24.0% of mass 442	15.1 (19.9)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253U	SSTD0253U	S3I0121A.D	05/03/2012	12:40
02	SSTD0803U	SSTD0803U	S3I0122.D	05/03/2012	13:02
03	SSTD0103U	SSTD0103U	S3I0123.D	05/03/2012	13:21
04	SSTD0603U	SSTD0603U	S3I0124.D	05/03/2012	13:40
05	SSTD0053U	SSTD0053U	S3I0125.D	05/03/2012	14:00
06	SSTD0403U	SSTD0403U	S3I0126.D	05/03/2012	14:19

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

DFTPP3A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: S3I0280.D DFTPP Injection Date: 05/11/2012
Instrument ID: S3 DFTPP Injection Time: 11:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	40.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	45.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	46.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	29.2
365	Greater than 1.0% of mass 198	3.7
441	Present, but less than mass 443	11.1
442	50.0 - 100% of mass 198	74.7
443	15.0 - 24.0% of mass 442	14.8 (19.8)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253A	SSTD0253A	S3I0281.D	05/11/2012	11:32
02	MB-66049	MB-66049	S3I0284.D	05/11/2012	12:42
03	LCS-66049	LCS-66049	S3I0285.D	05/11/2012	13:01
04	MW-1	L0935-01B	S3I0287.D	05/11/2012	13:40
05	MW-1MS	L0935-01BMS	S3I0288.D	05/11/2012	13:59
06	MW-1MSD	L0935-01BMSD	S3I0289.D	05/11/2012	14:18
07	MW-2	L0935-02B	S3I0290.D	05/11/2012	14:37
08	MW-3	L0935-03B	S3I0291.D	05/11/2012	14:56
09	DUP-1	L0935-05B	S3I0292.D	05/11/2012	15:16

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

DFTPP3E

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Lab File ID: S3I0400A.D DFTPP Injection Date: 05/16/2012
Instrument ID: S3 DFTPP Injection Time: 14:09

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	40.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	44.7
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	45.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 60.0% of mass 198	30.6
365	Greater than 1.0% of mass 198	3.8
441	Present, but less than mass 443	12.8
442	50.0 - 100% of mass 198	83.7
443	15.0 - 24.0% of mass 442	16.6 (19.8)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253E	SSTD0253E	S3I0401.D	05/16/2012	14:22
02	MB-66186	MB-66186	S3I0402.D	05/16/2012	15:00
03	LCS-66186	LCS-66186	S3I0403.D	05/16/2012	15:19
04	LCSD-66186	LCSD-66186	S3I0404.D	05/16/2012	15:38
05	MW-3RX	L0935-03BRE	S3I0422.D	05/16/2012	21:21

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 05/03/2012 05/03/2012
 EPA Sample No.(SSTD020##) SSTD0253A Date Analyzed: 05/11/2012
 Lab File ID (Standard): S3I0281.D Time Analyzed: 11:32
 Instrument ID: S3

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	404510		1606715		1058363	
	UPPER LIMIT	809020		3213430		2116726	
	LOWER LIMIT	202255		803358		529182	
	EPA SAMPLE NO.						
01	MB-66049	307534		1245376		848452	
02	LCS-66049	341571		1379270		899327	
03	MW-1	332299		1326082		861393	
04	MW-1MS	297068		1238718		815462	
05	MW-1MSD	292940		1203605		802209	
06	MW-2	293852		1191003		802848	
07	MW-3	295327		1210520		802240	
08	DUP-1	287776		1175785		787125	

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 EPA Sample No.(SSTD020##) SSTD0253A Date Analyzed: 05/11/2012
 Lab File ID (Standard): S3I0281.D Time Analyzed: 11:32
 Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	2095410	7.229	2602695	9.398	2656606	10.483
UPPER LIMIT	4190820	7.729	5205390	9.898	5313212	10.983
LOWER LIMIT	1047705	6.729	1301348	8.898	1328303	9.983
EPA SAMPLE NO.						
01 MB-66049	1735548	7.223	2184033	9.392	2207348	10.477
02 LCS-66049	1760142	7.224	2163122	9.398	2156366	10.477
03 MW-1	1730758	7.224	2097852	9.388	2066047	10.473
04 MW-1MS	1664364	7.224	2152539	9.392	2098926	10.472
05 MW-1MSD	1638713	7.225	2154078	9.394	2148279	10.473
06 MW-2	1616309	7.227	2042225	9.390	2094282	10.469
07 MW-3	1634223	7.223	2070759	9.386	2047093	10.471
08 DUP-1	1588862	7.222	2087452	9.386	2109626	10.465

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% 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 contract required QC limits with an asterisk.

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 05/03/2012 05/03/2012
 EPA Sample No.(SSTD020##) SSTD0253E Date Analyzed: 05/16/2012
 Lab File ID (Standard): S3I0401.D Time Analyzed: 14:22
 Instrument ID: S3

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
		AREA	#	AREA	#	AREA	#
12 HOUR STD		421193	2.17	1622909	3.922	1077134	5.861
UPPER LIMIT		842386	2.67	3245818	4.422	2154268	6.361
LOWER LIMIT		210597	1.67	811455	3.422	538567	5.361
EPA SAMPLE NO.							
01	MB-66186	339573	2.165	1303044	3.917	882925	5.851
02	LCS-66186	388120	2.169	1502695	3.921	976877	5.860
03	LCSD-66186	375817	2.167	1452127	3.924	969810	5.858
04	MW-3RX	302358	2.164	1189066	3.916	793045	5.850

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 EPA Sample No.(SSTD020##) SSTD0253E Date Analyzed: 05/16/2012
 Lab File ID (Standard): S3I0401.D Time Analyzed: 14:22
 Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	2183918	7.138	2892035	9.307	2995870	10.391
	UPPER LIMIT	4367836	7.638	5784070	9.807	5991740	10.891
	LOWER LIMIT	1091959	6.638	1446018	8.807	1497935	9.891
	EPA SAMPLE NO.						
01	MB-66186	1824802	7.139	2440769	9.302	2510364	10.397
02	LCS-66186	1958337	7.142	2548232	9.311	2574081	10.396
03	LCSD-66186	1970289	7.140	2569641	9.309	2619407	10.394
04	MW-3RX	1681049	7.132	2246056	9.296	2294791	10.375

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% 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 contract required QC limits with an asterisk.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01B
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0287.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: Decanted: (Y/N)	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup:(Y/N) N pH:	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01B
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0287.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup: (Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	1.1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-01B
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0287.D
 Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	57-10-3	n-Hexadecanoic acid	7.833	8.8	NJ
02	638-58-4	Tetradecanamide	8.250	9.8	NJ
03	112-84-5	13-Docosenamide, (Z)-	10.109	18	NJ

²EPA-designated Registry Number.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D
Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0287.D
Lab Smp Id: L0935-01B Client Smp ID: MW-1
Inj Date : 11-MAY-2012 13:40
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-01B,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112		1.513	1.518	(0.665)	93294	8.26909	8(aR)
\$ 5 Phenol-d5	99		2.341	2.346	(1.028)	83432	5.29996	5(a)
* 12 1,4-Dichlorobenzene-d4	152		2.277	2.282	(1.000)	332299	40.0000	
\$ 22 Nitrobenzene-d5	82		2.950	2.955	(0.728)	503542	33.1352	33
* 31 Naphthalene-d8	136		4.051	4.056	(1.000)	1326082	40.0000	
\$ 41 2-Fluorobiphenyl	172		5.344	5.348	(0.899)	1001976	35.2383	35
* 48 Acenaphthene-d10	164		5.947	5.952	(1.000)	861393	40.0000	
\$ 60 2,4,6-Tribromophenol	330		6.690	6.700	(0.926)	127764	29.1777	29
* 64 Phenanthrene-d10	188		7.224	7.229	(1.000)	1730758	40.0000	
68 Di-n-butylphthalate	149		7.769	7.774	(1.075)	57009	1.14898	1(a)
\$ 72 Terphenyl-d14	244		8.560	8.559	(0.912)	1410627	36.9702	37
* 76 Chrysene-d12	240		9.388	9.398	(1.000)	2097852	40.0000	
78 bis(2-Ethylhexyl)phthalate	149		9.468	9.472	(1.009)	35055	1.08243	1(a)
* 83 Perylene-d12	264		10.472	10.482	(1.000)	2066047	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D
 Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0287.D
 Lab Smp Id: L0935-01B Client Smp ID: MW-1
 Inj Date : 11-MAY-2012 13:40
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : L0935-01B,,66049
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
 Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8270C.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

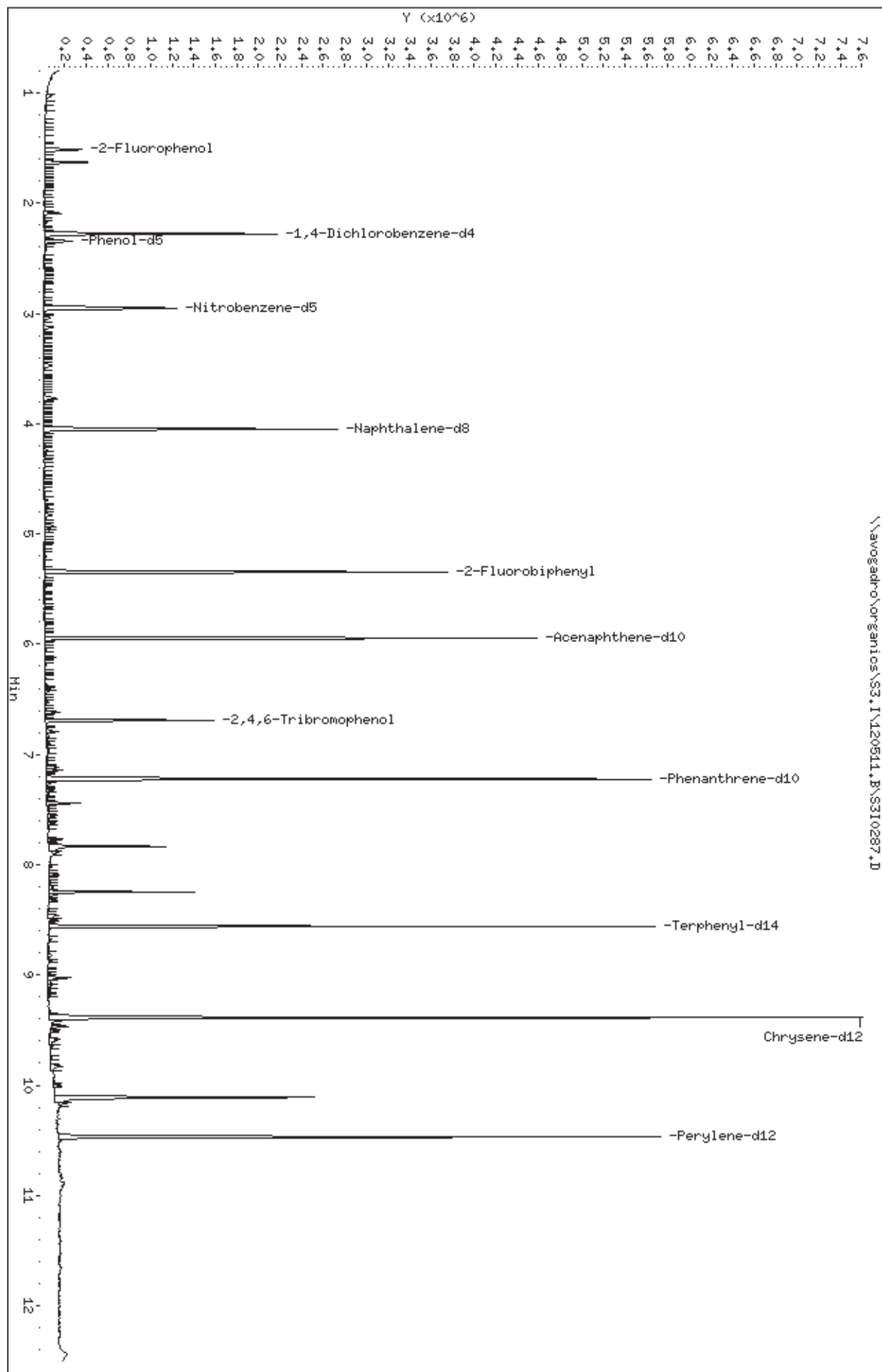
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 64 Phenanthrene-d10	7.224	4572987	40.000
* 83 Perylene-d12	10.473	5439403	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
n-Hexadecanoic acid					CAS #: 57-10-3		
7.834	1003913	8.78124107	9	99	NIST2002.L	92228	64
Tetradecanamide					CAS #: 638-58-4		
8.250	1124996	9.84035898	10	90	NIST2002.L	74437	64
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.109	2408269	17.7097993	18	93	NIST2002.L	135945	83

Data File: \\avogadro\organics\S3.I\120511.B\S310287.D
 Date : 11-May-2012 13:40
 Client ID: MW-1
 Sample Info: L0935-01B,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D

Date : 11-MAY-2012 13:40

Client ID: MW-1

Instrument: S3.i

Sample Info: L0935-01B,,66049

Volume Injected (uL): 1.0

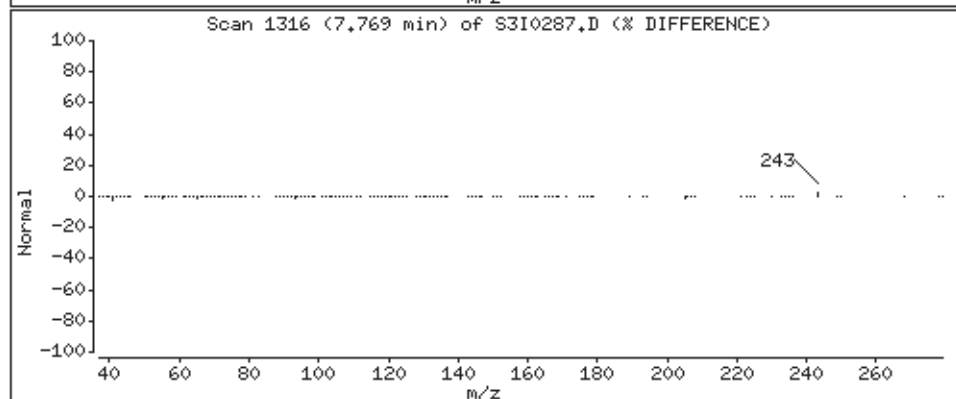
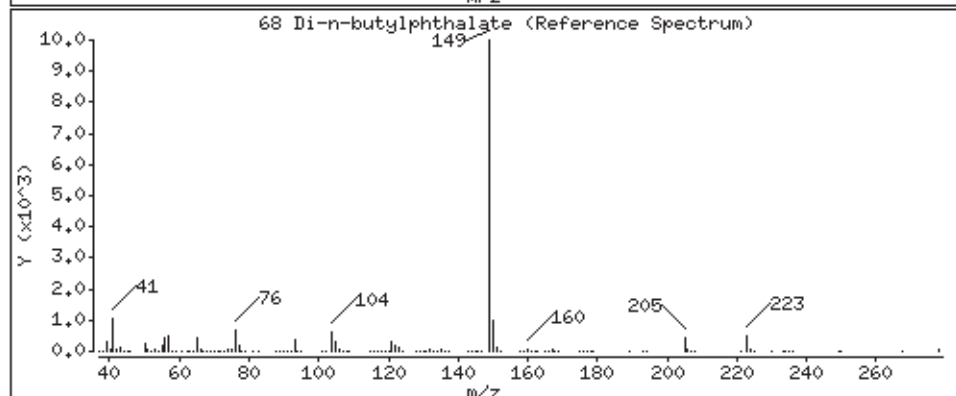
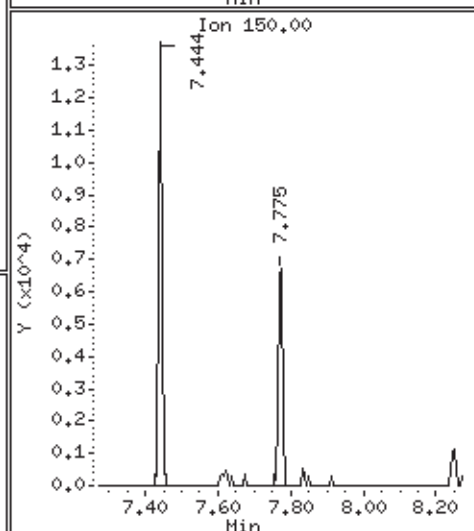
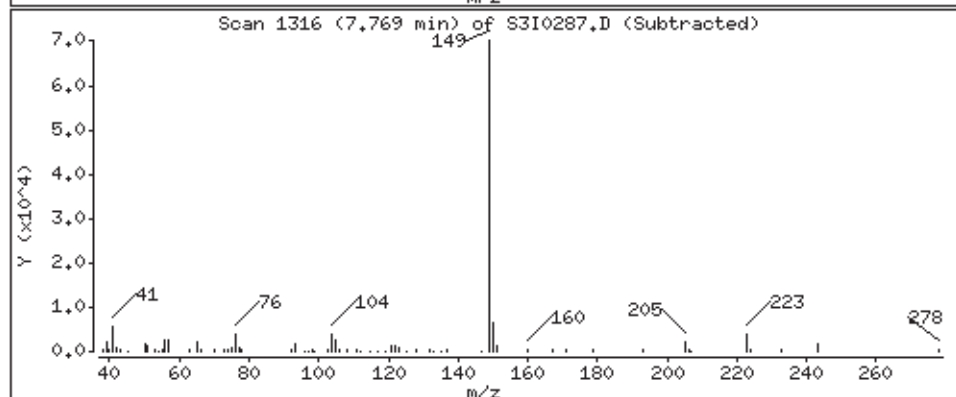
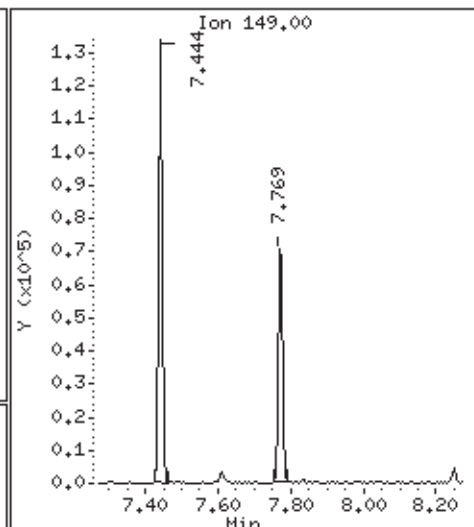
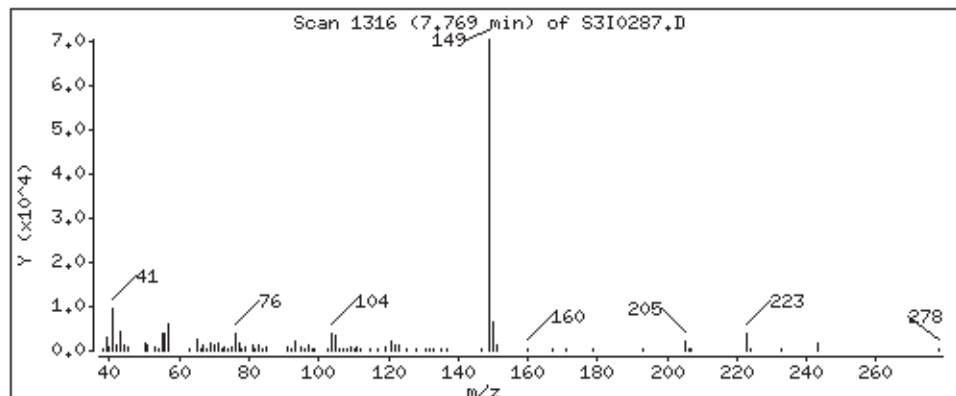
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

68 Di-n-butylphthalate

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D

Date : 11-MAY-2012 13:40

Client ID: MW-1

Instrument: S3.i

Sample Info: L0935-01B,,66049

Volume Injected (uL): 1.0

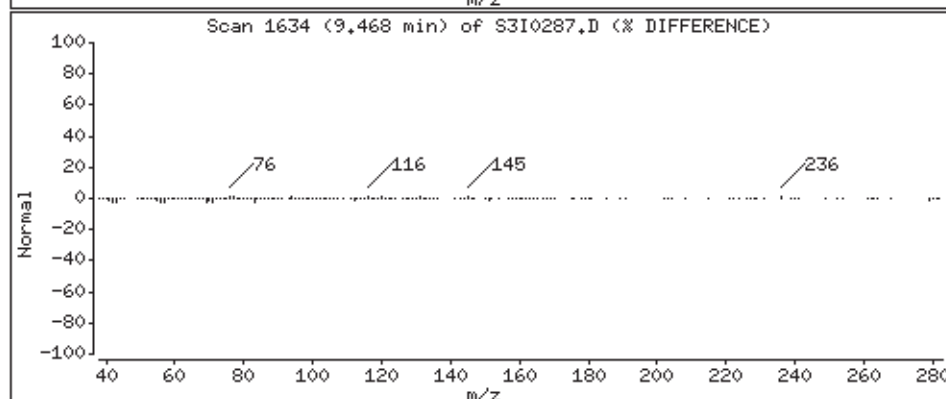
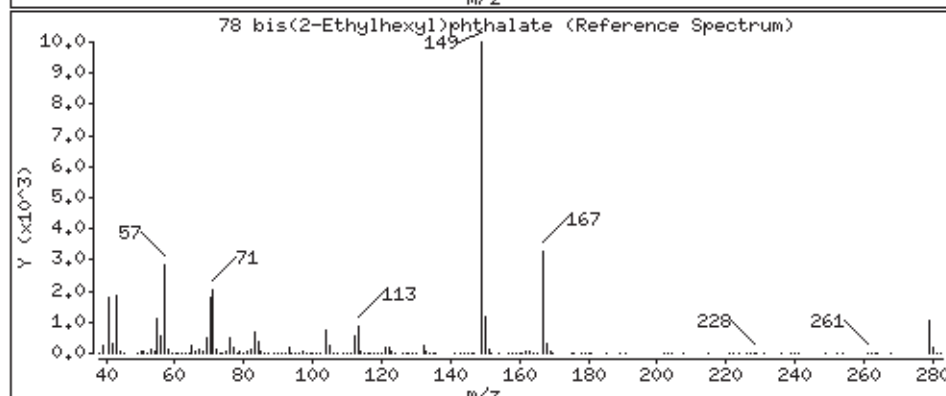
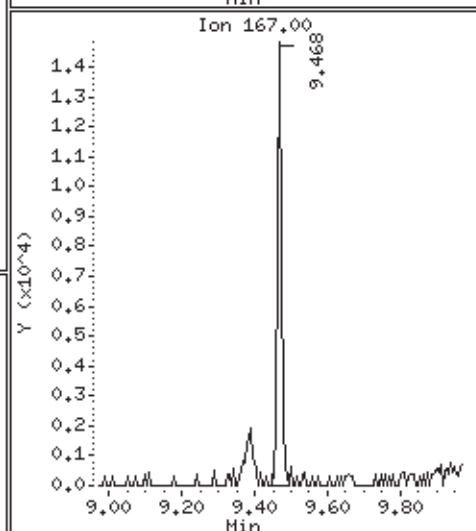
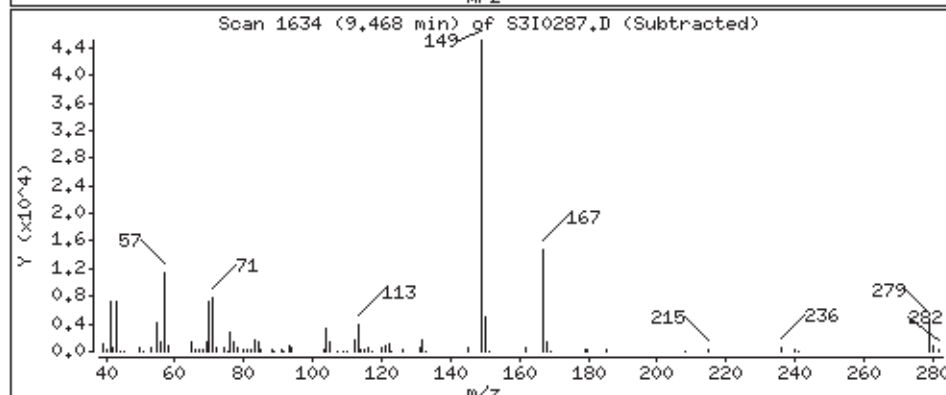
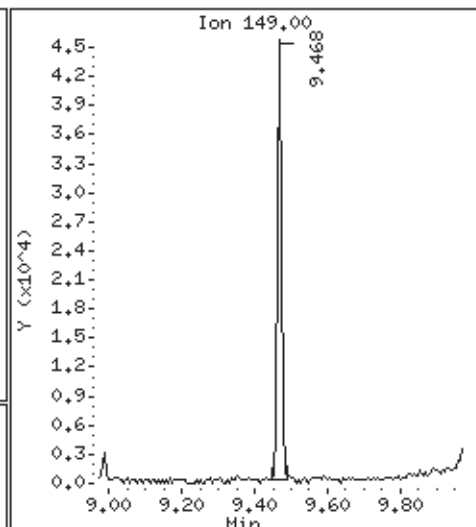
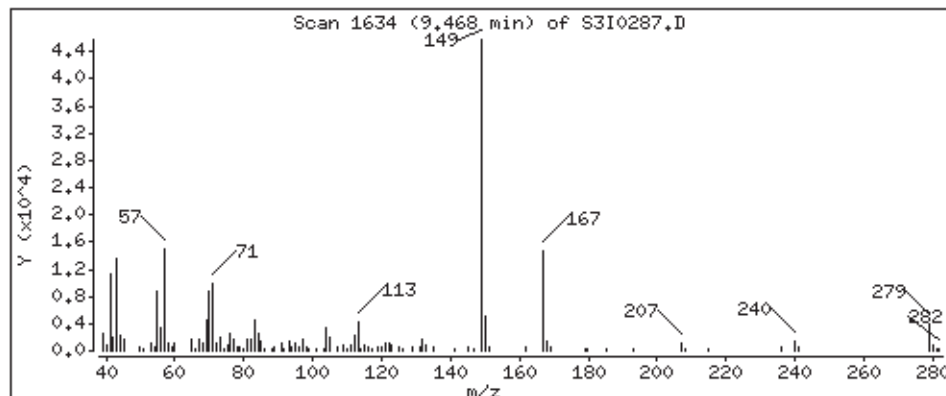
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

78 bis(2-Ethylhexyl)phthalate

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D

Date : 11-MAY-2012 13:40

Client ID: MW-1

Instrument: S3.i

Sample Info: L0935-01B,,66049

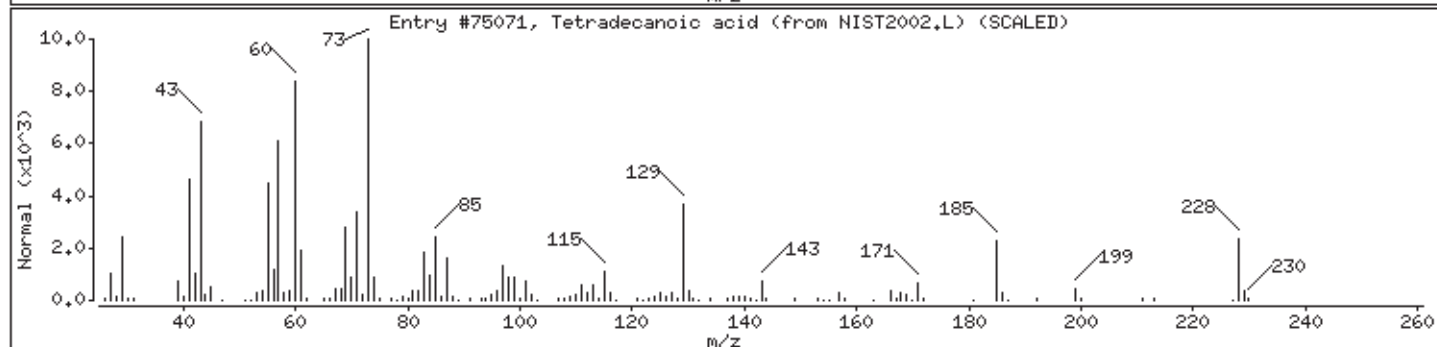
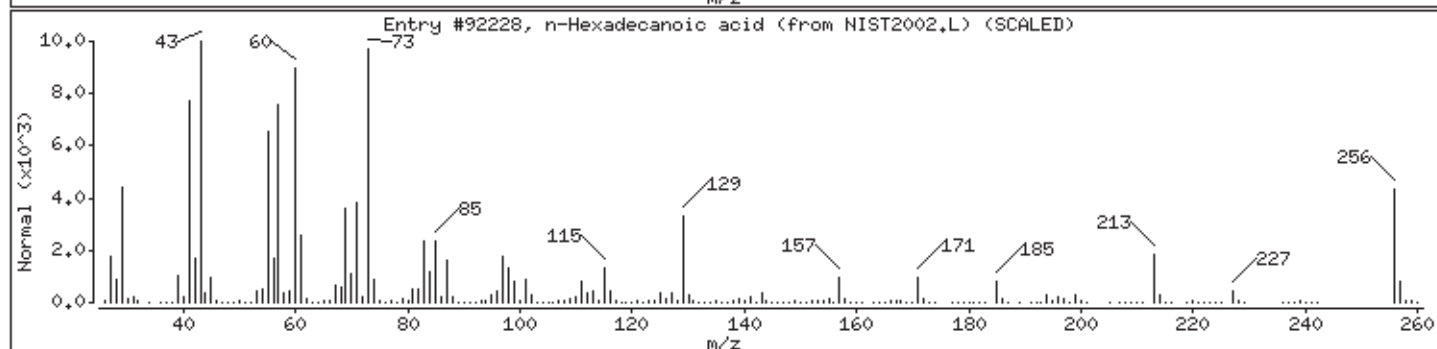
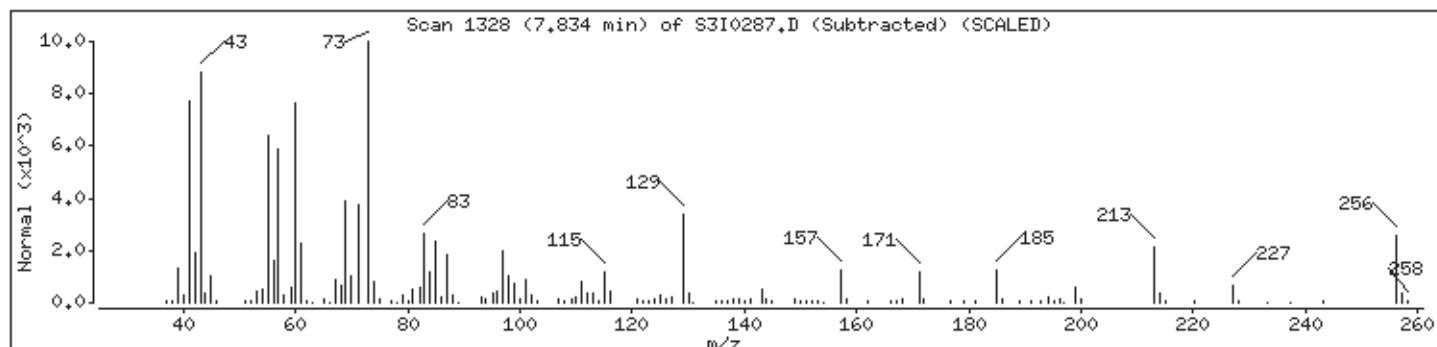
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92228	99	C16H32O2	256
Tetradecanoic acid	544-63-8	NIST2002.L	75071	86	C14H28O2	228



Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D

Date : 11-MAY-2012 13:40

Client ID: MW-1

Instrument: S3.i

Sample Info: L0935-01B,,66049

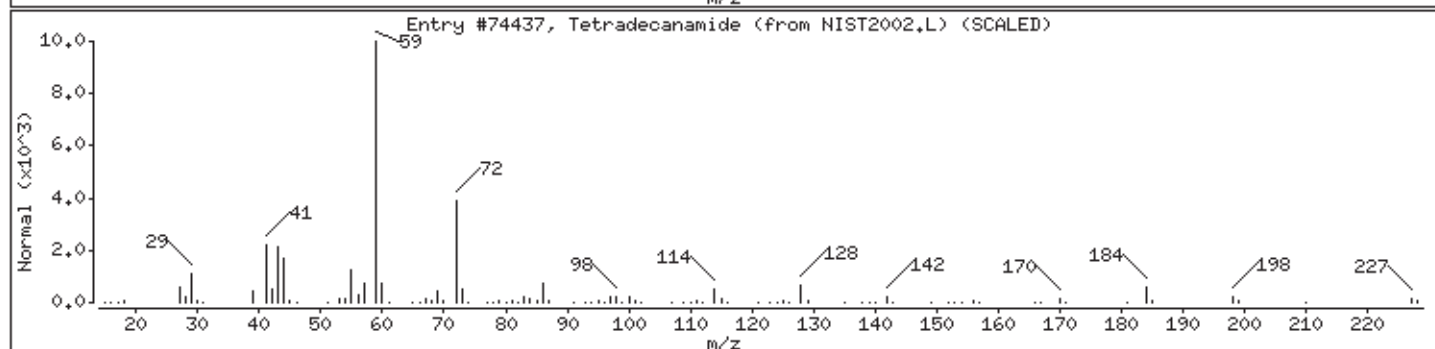
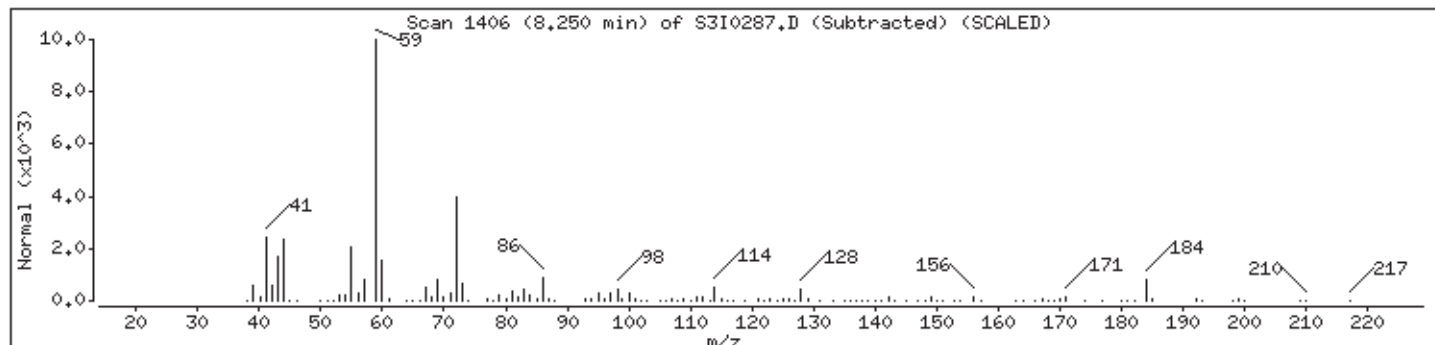
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetradecanamide	638-58-4	NIST2002.L	74437	90	C14H29NO	227



Data File: \\avogadro\organics\S3.I\120511.B\S3I0287.D

Date : 11-MAY-2012 13:40

Client ID: MW-1

Instrument: S3.i

Sample Info: L0935-01B,,66049

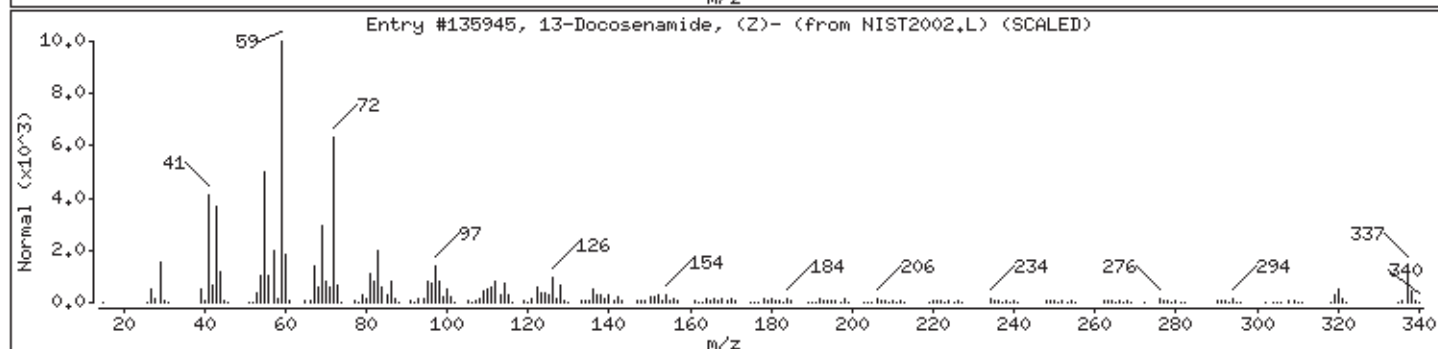
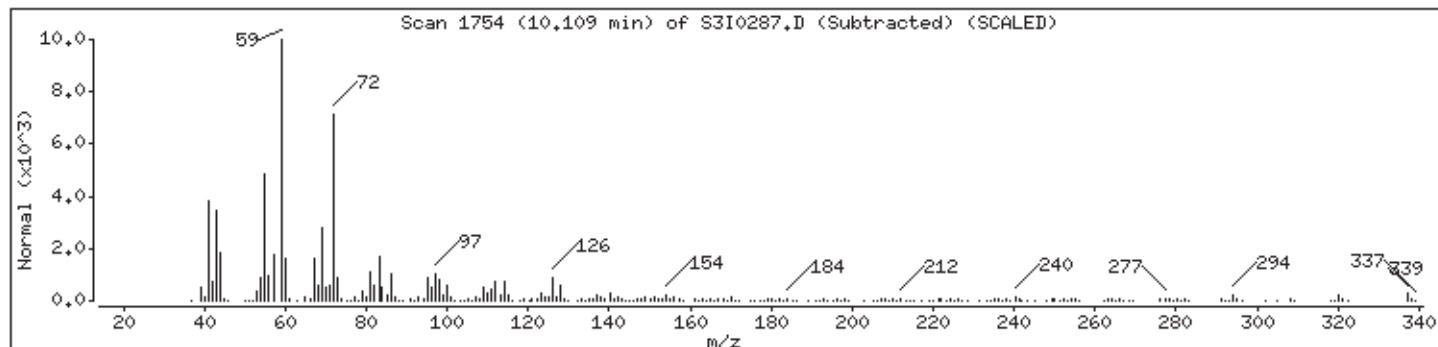
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135945	93	C22H43NO	337



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-02B
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0290.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: Decanted: (Y/N)	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup:(Y/N) N pH:	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	13	
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	8.5	J
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	13	
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	1.3	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	4.3	J
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-02B
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0290.D
 Level: (LOW/MED) LOW Extraction: (Type) SEPF
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	16	
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	2.0	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	4.4	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-02B
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0290.D
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	620-14-4	Benzene, 1-ethyl-3-methyl-	1.874	40	NJ
02	526-73-8	Benzene, 1,2,3-trimethyl- (1	1.933	29	NJ
03	611-14-3	Benzene, 1-ethyl-2-methyl-	1.997	27	NJ
04	526-73-8	Benzene, 1,2,3-trimethyl- (2	2.119	130	NJ
05		Unknown (2.42400)	2.424	22	J
06	1074-55-1	Benzene, 1-methyl-4-propyl-	2.568	23	NJ
07	934-74-7	Benzene, 1-ethyl-3,5-dimethy	2.627	44	NJ
08	1074-55-1	Benzene, 1-methyl-4-propyl-	2.707	22	NJ
09	1758-88-9	Benzene, 2-ethyl-1,4-dimethy	2.905	35	NJ
10	1120-21-4	Undecane	3.044	43	NJ
11	934-80-5	Benzene, 4-ethyl-1,2-dimethy	3.711	26	NJ
12		Unknown (4.80125)	4.801	45	J
13		Unknown (4.84398)	4.844	33	J
14		Unknown (5.03095)	5.031	61	J
15		Unknown (5.06302)	5.063	35	J
16	57-10-3	n-Hexadecanoic acid	7.836	18	NJ
17	112-84-5	13-Docosenamide, (Z)-	10.111	21	NJ

²EPA-designated Registry Number.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D
Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0290.D
Lab Smp Id: L0935-02B Client Smp ID: MW-2
Inj Date : 11-MAY-2012 14:37
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-02B,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.515	1.518	(0.665)	148826	14.9171	15
\$ 5 Phenol-d5	99	2.343	2.346	(1.028)	171272	12.3034	12
6 Phenol	94	2.354	2.357	(1.033)	195260	13.3777	13
* 12 1,4-Dichlorobenzene-d4	152	2.279	2.282	(1.000)	293852	40.0000	
20 4-Methylphenol	108	3.278	3.260	(1.438)	15117	1.34097	1(a)
\$ 22 Nitrobenzene-d5	82	2.952	2.955	(0.729)	481858	35.3045	35
25 2-Nitrophenol	139	3.524	3.527	(0.870)	54027	8.49635	8(a)
* 31 Naphthalene-d8	136	4.053	4.056	(1.000)	1191003	40.0000	
32 Naphthalene	128	4.074	4.082	(1.005)	420580	13.3852	13
36 2-Methylnaphthalene	142	4.929	4.932	(1.216)	29801	1.33059	1(aH)
\$ 41 2-Fluorobiphenyl	172	5.346	5.348	(0.899)	1013443	38.2406	38
* 48 Acenaphthene-d10	164	5.944	5.952	(1.000)	802848	40.0000	
51 4-Nitrophenol	109	6.532	6.524	(1.099)	16466	4.30021	4(a)
54 Diethylphthalate	149	6.409	6.417	(1.078)	426604	15.6381	16
\$ 60 2,4,6-Tribromophenol	330	6.692	6.700	(0.926)	169860	41.5380	42
* 64 Phenanthrene-d10	188	7.226	7.229	(1.000)	1616309	40.0000	
68 Di-n-butylphthalate	149	7.771	7.774	(1.075)	93167	2.01067	2(a)
\$ 72 Terphenyl-d14	244	8.562	8.559	(0.912)	1621015	43.6413	44
* 76 Chrysene-d12	240	9.390	9.398	(1.000)	2042225	40.0000	
78 bis(2-Ethylhexyl)phthalate	149	9.470	9.472	(1.009)	138304	4.38690	4(a)

Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D
Report Date: 15-May-2012 17:17

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS	ON-COLUMN					FINAL	
=====	=====		=====	=====	=====	=====	(ng)	(ug/L)
* 83 Perylene-d12	264		10.469	10.482	(1.000)	2094282	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D
 Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0290.D
 Lab Smp Id: L0935-02B Client Smp ID: MW-2
 Inj Date : 11-MAY-2012 14:37
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : L0935-02B,,66049
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
 Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8270C.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 12 1,4-Dichlorobenzene-d4	2.280	2418107	40.000
* 31 Naphthalene-d8	4.053	3094280	40.000
* 48 Acenaphthene-d10	5.944	3987139	40.000
* 64 Phenanthrene-d10	7.227	4250675	40.000
* 83 Perylene-d12	10.469	5501123	40.000

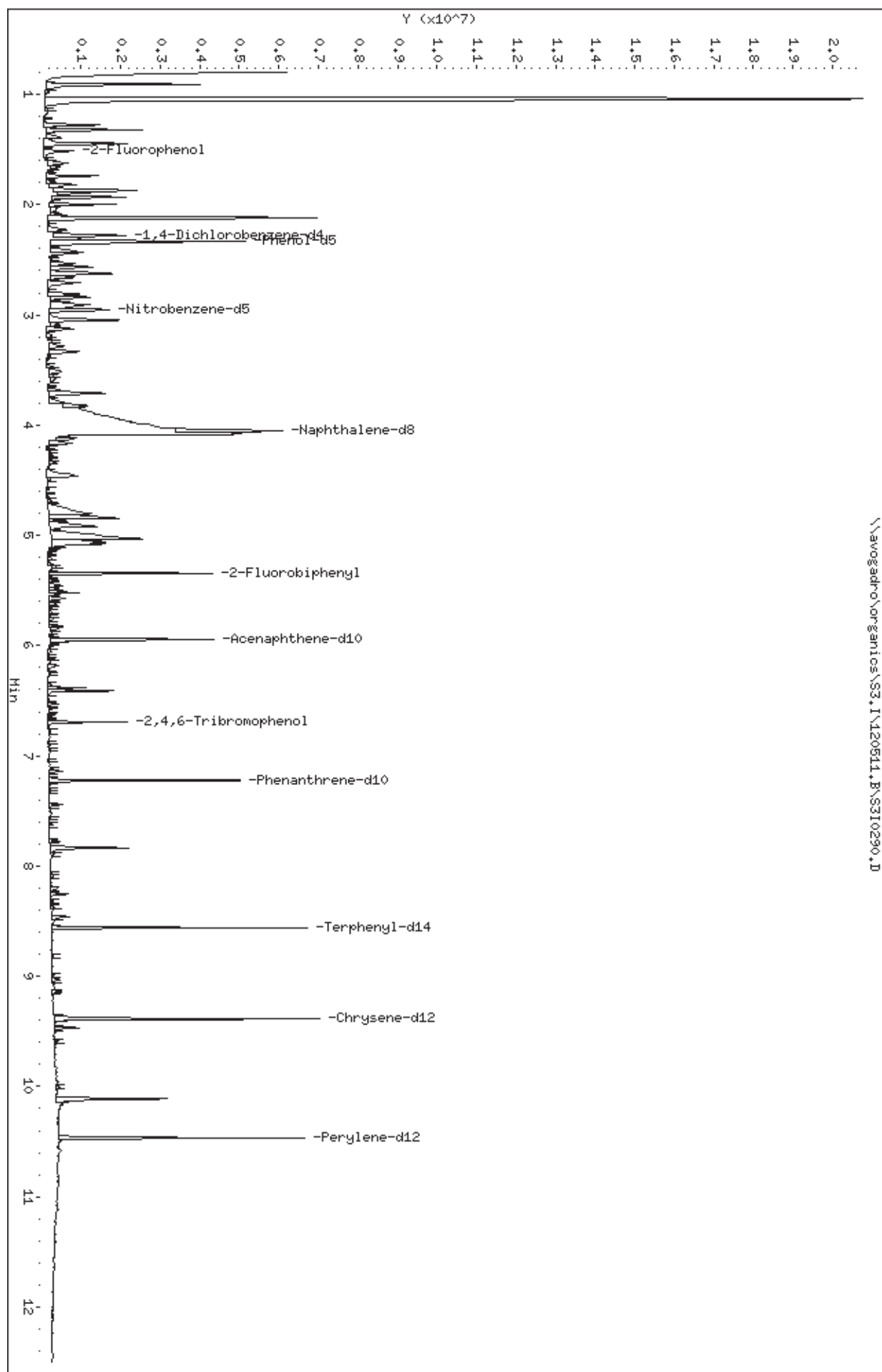
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng)	FINAL (ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1-ethyl-3-methyl-					CAS #: 620-14-4		
1.874	2435334	40.2849544	40	94	NIST2002.L	9128	12
Benzene, 1,2,3-trimethyl-					CAS #: 526-73-8		
1.933	1744202	28.8523510	29	97	NIST2002.L	9123	12

Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D
Report Date: 15-May-2012 17:17

RT	CONCENTRATIONS				QUAL	QUANT		CPND #
	AREA	ON-COL(	ng)	FINAL(ug/L)		LIBRARY	LIB ENTRY	
=====	=====	=====		=====	=====	=====	=====	=====
Benzene, 1-ethyl-2-methyl-						CAS #:		
1.997	1655951	27.3925120		27	94	NIST2002.L	9130	12
Benzene, 1,2,3-trimethyl-						CAS #:		
2.119	7872788	130.230559		130	97	NIST2002.L	9113	12
Unknown						CAS #:		
2.424	1301092	21.5224772		22	0		0	12
Benzene, 1-methyl-4-propyl-						CAS #:		
2.568	1363873	22.5609923		22	91	NIST2002.L	14344	12
Benzene, 1-ethyl-3,5-dimethyl-						CAS #:		
2.627	2640839	43.6843877		44	94	NIST2002.L	14373	12
Benzene, 1-methyl-4-propyl-						CAS #:		
2.707	1351360	22.3540006		22	95	NIST2002.L	14344	12
Benzene, 2-ethyl-1,4-dimethyl-						CAS #:		
2.905	2129415	35.2244818		35	95	NIST2002.L	14378	12
Undecane						CAS #:		
3.044	2628416	43.4788841		43	96	NIST2002.L	27120	12
Benzene, 4-ethyl-1,2-dimethyl-						CAS #:		
3.711	1997718	25.8246487		26	95	NIST2002.L	14377	31
Unknown						CAS #:		
4.801	3467319	44.8223002		45	0		0	31
Unknown						CAS #:		
4.844	2566308	33.1748565		33	0		0	31
Unknown						CAS #:		
5.031	6063939	60.8349828		61	0		0	48
Unknown						CAS #:		
5.063	3466830	34.7801241		35	0		0	48
n-Hexadecanoic acid						CAS #:		
7.836	1904343	17.9203821		18	98	NIST2002.L	92227	64
13-Docosenamide, (Z)-						CAS #:		
10.111	2952684	21.4696756		21	94	NIST2002.L	135944	83

Data File: \\avogadro\organics\S3,I\120511,B\S3I0290.D
 Date : 11-May-2012 14:37
 Client ID: MW-2
 Sample Info: L0935-02B,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

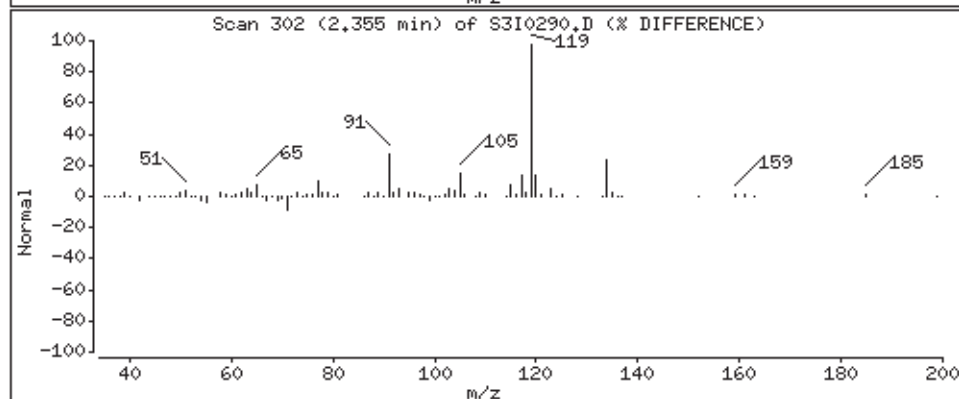
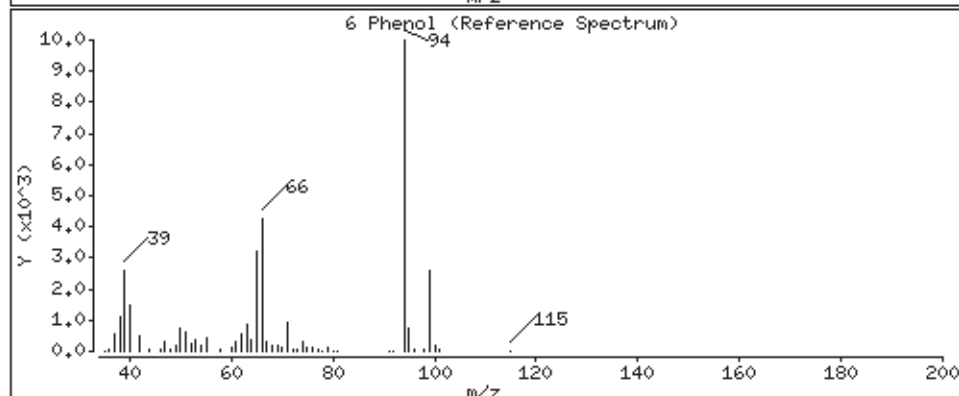
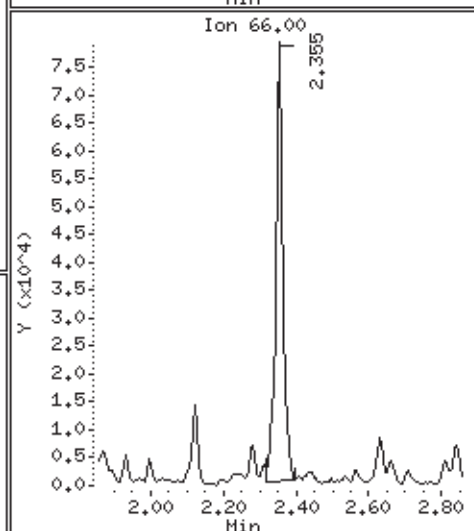
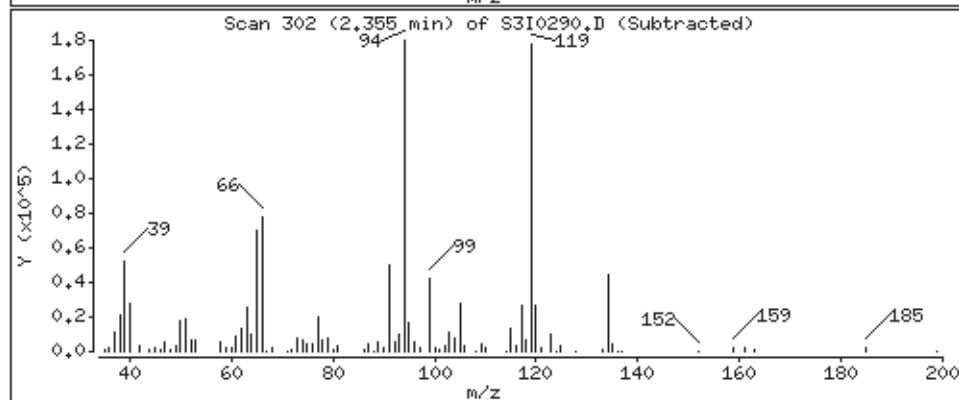
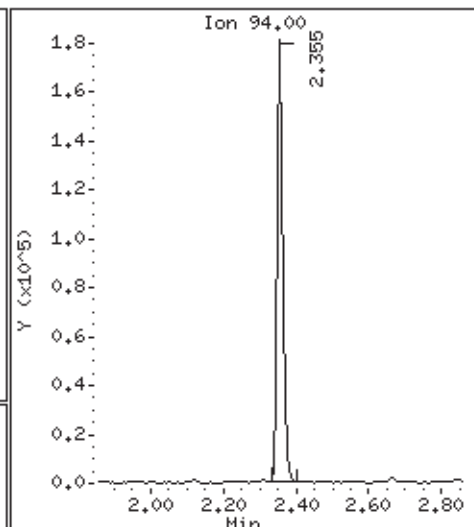
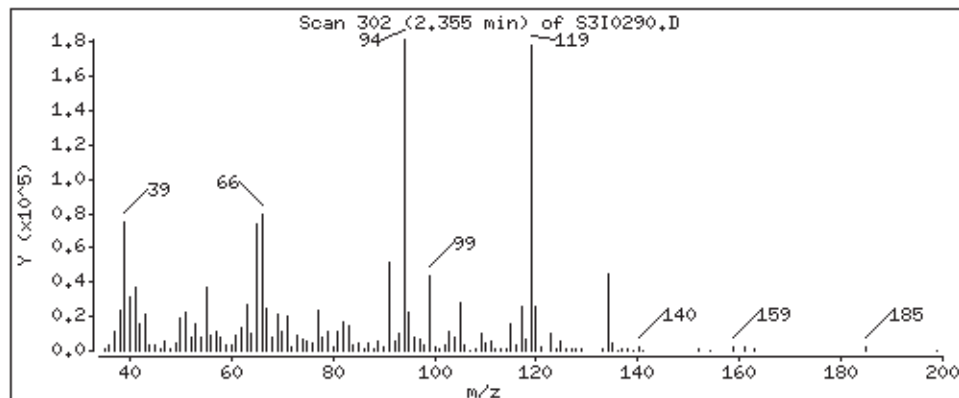
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

6 Phenol

Concentration: 13 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

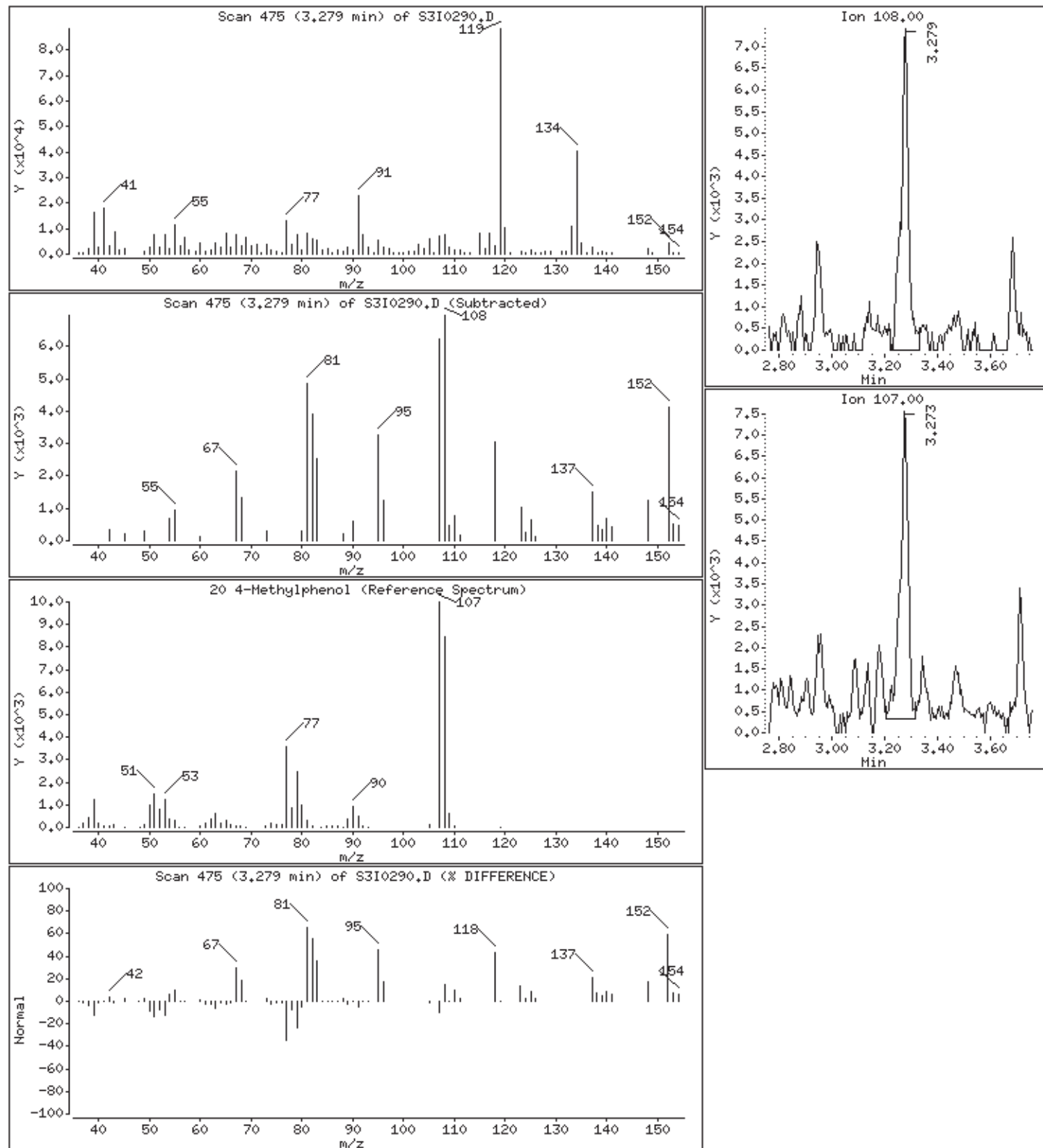
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

20 4-Methylphenol

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

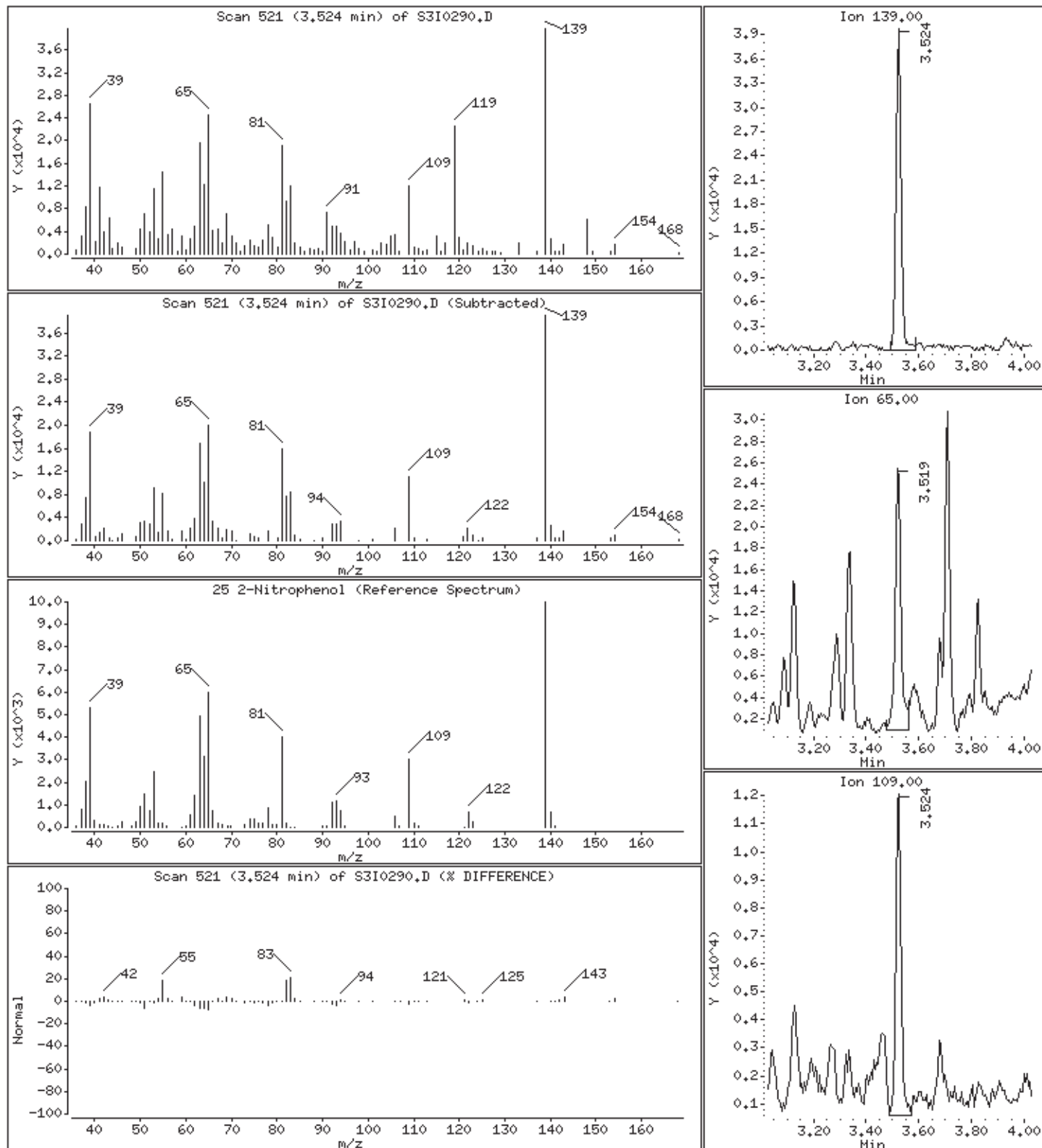
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

25 2-Nitrophenol

Concentration: 8 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

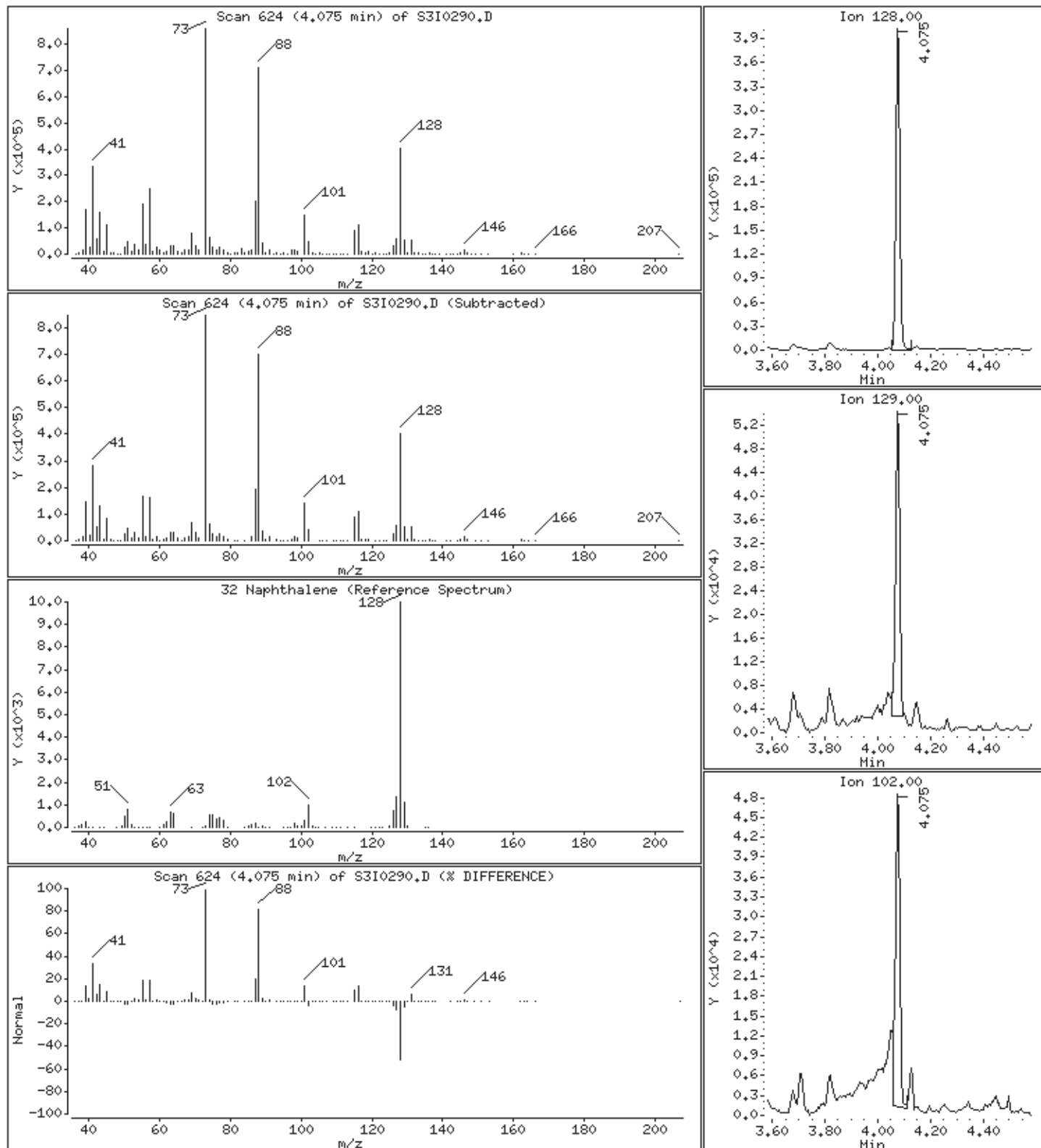
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

32 Naphthalene

Concentration: 13 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

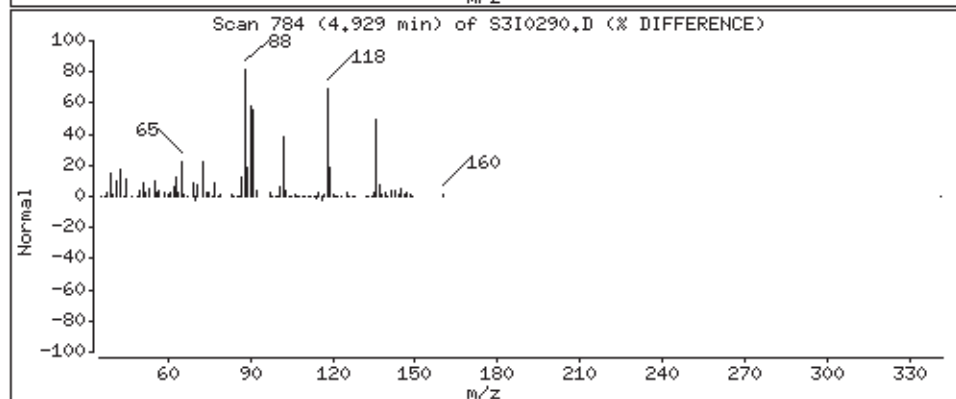
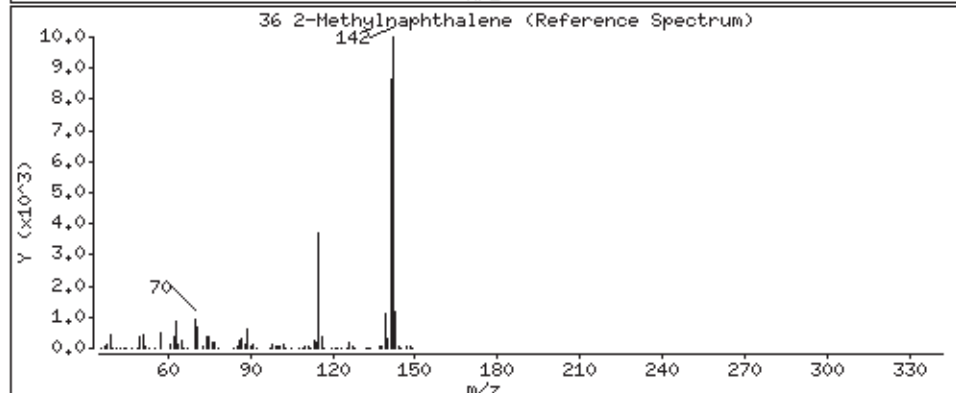
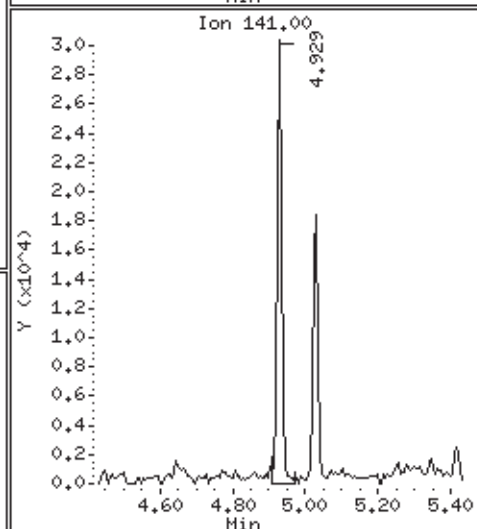
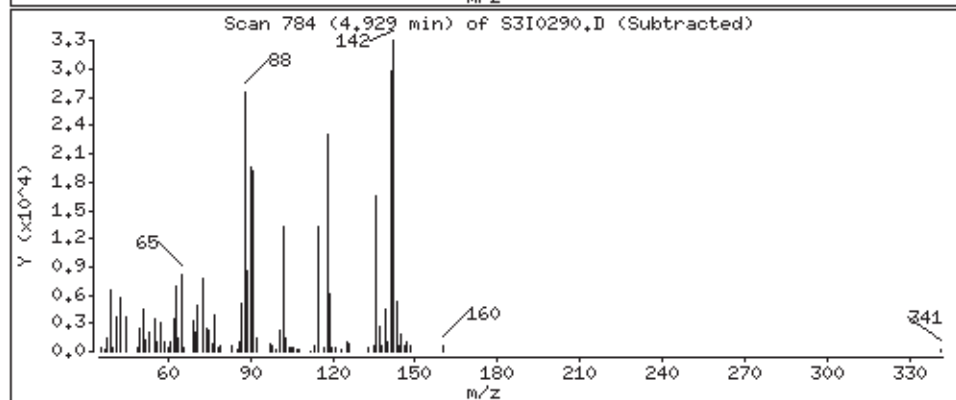
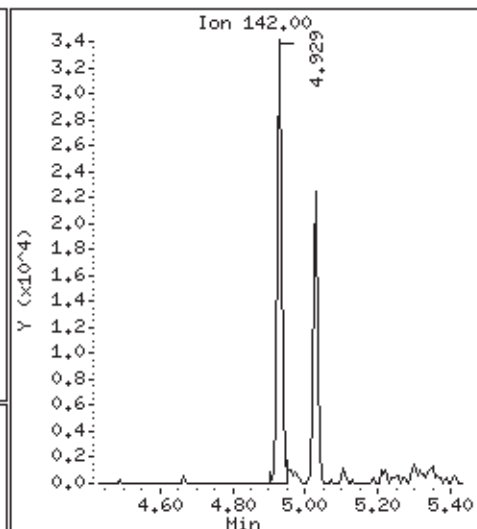
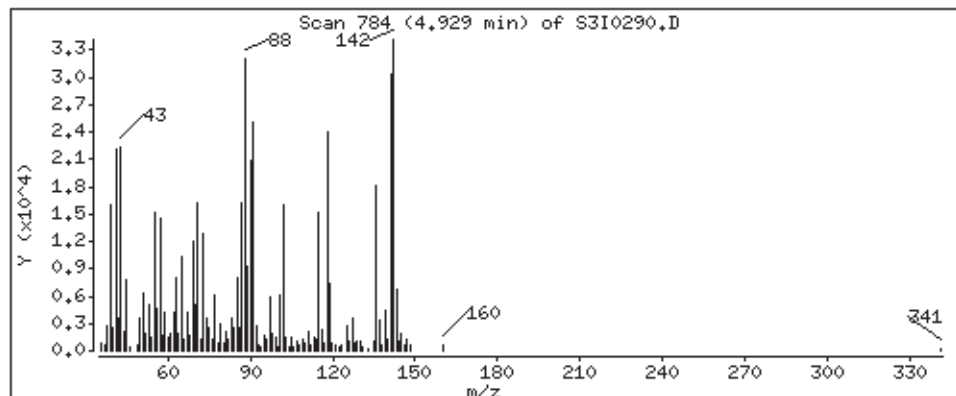
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

36 2-Methylnaphthalene

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

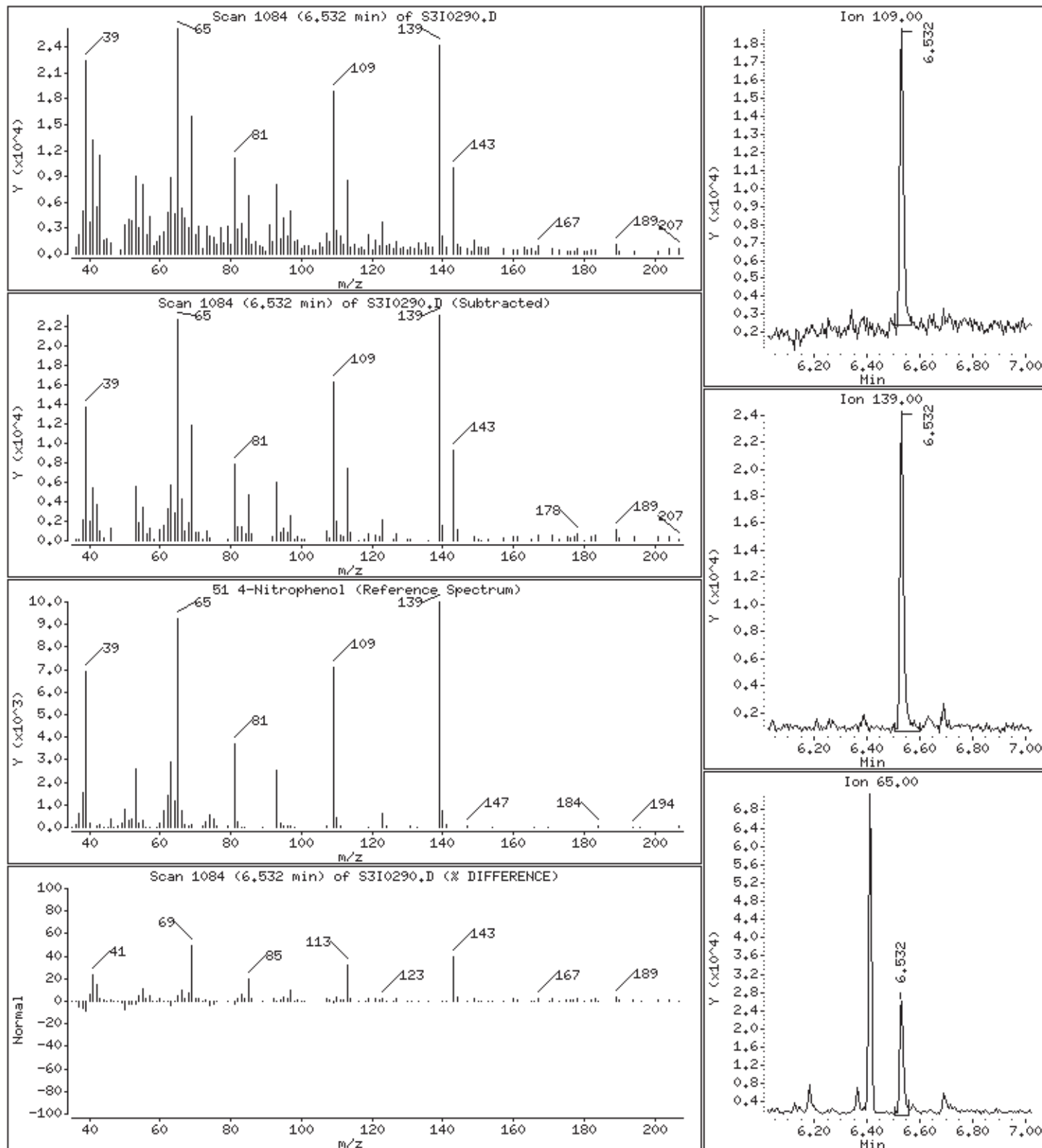
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

51 4-Nitrophenol

Concentration: 4 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

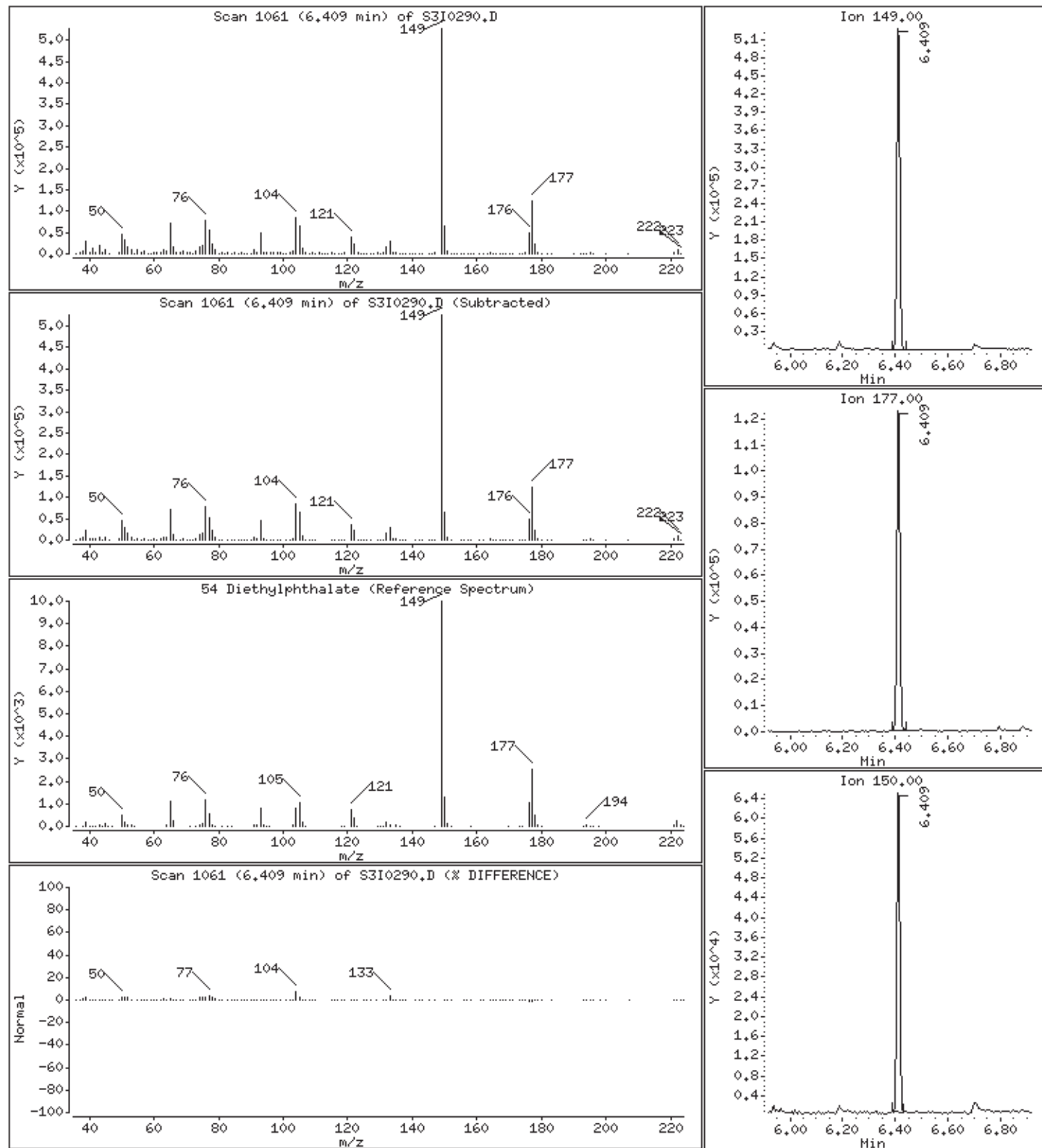
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

54 Diethylphthalate

Concentration: 16 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

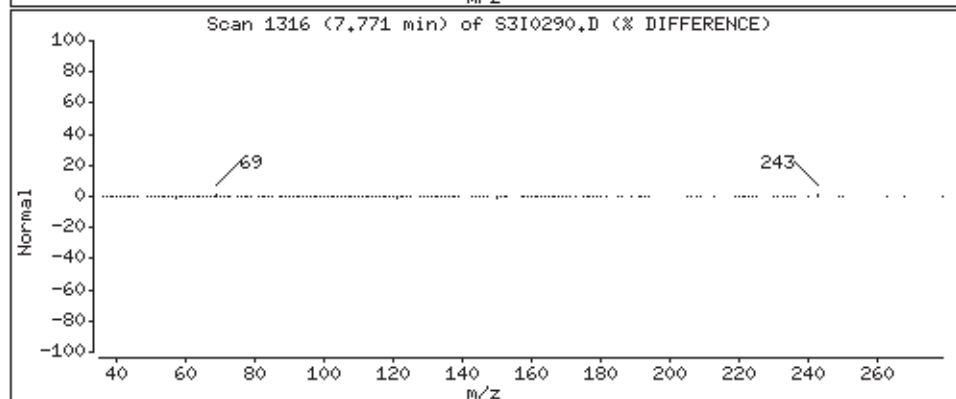
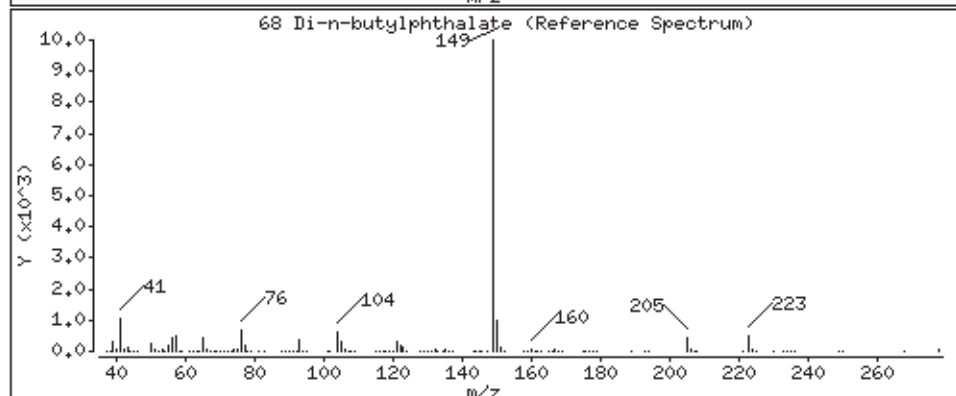
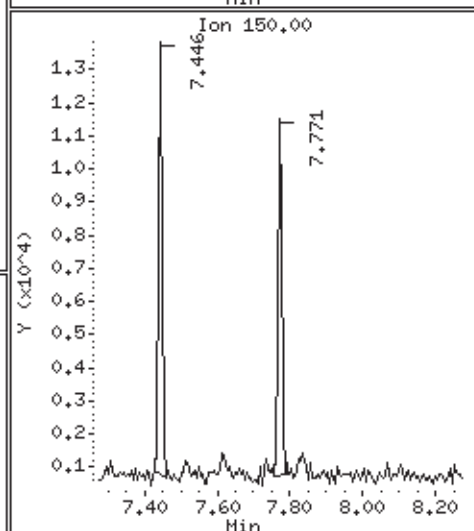
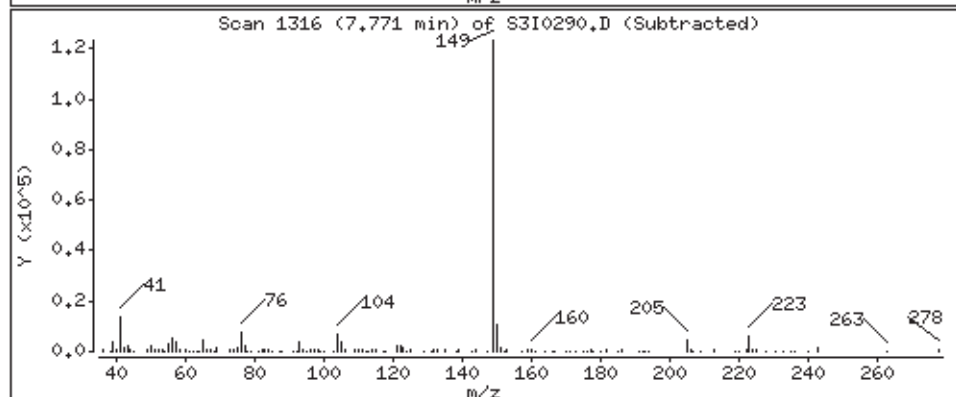
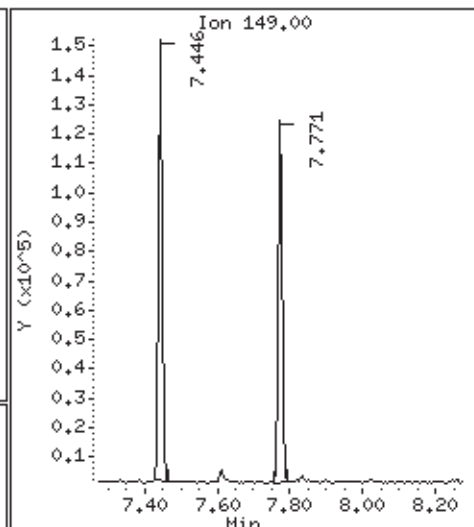
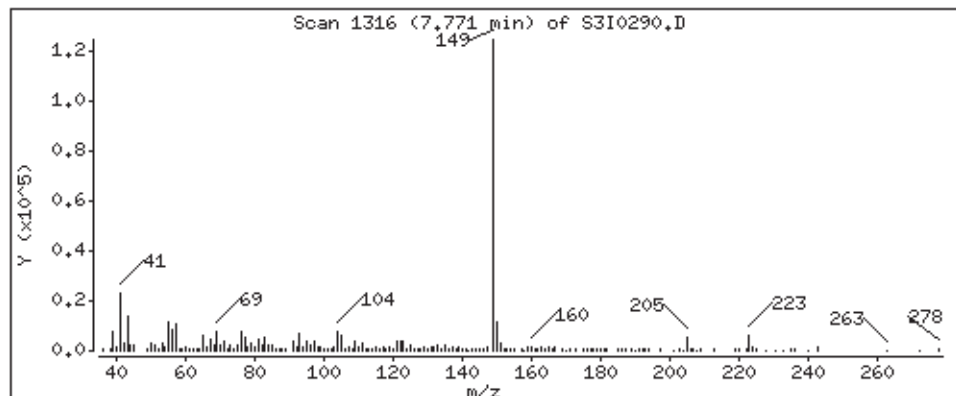
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

68 Di-n-butylphthalate

Concentration: 2 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

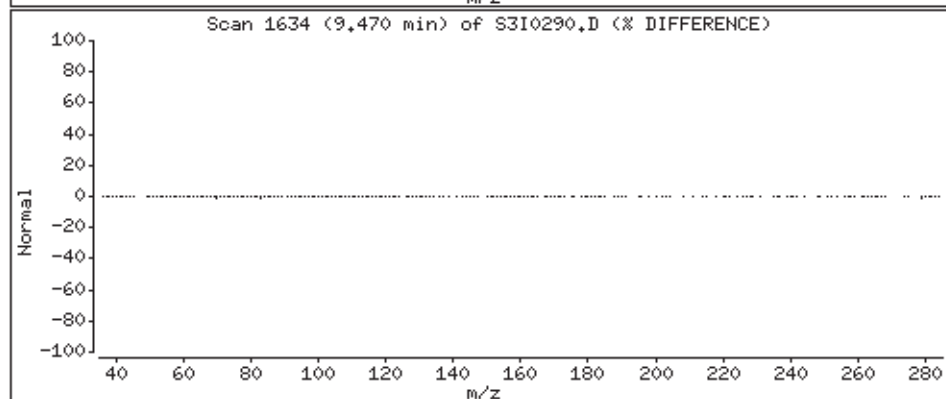
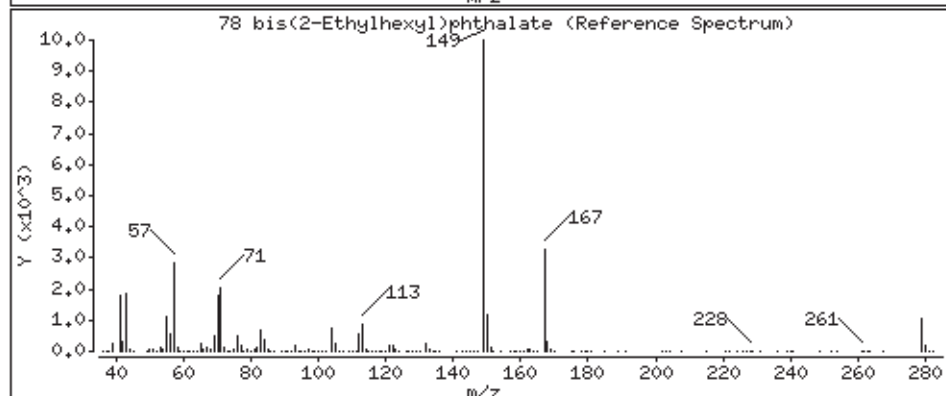
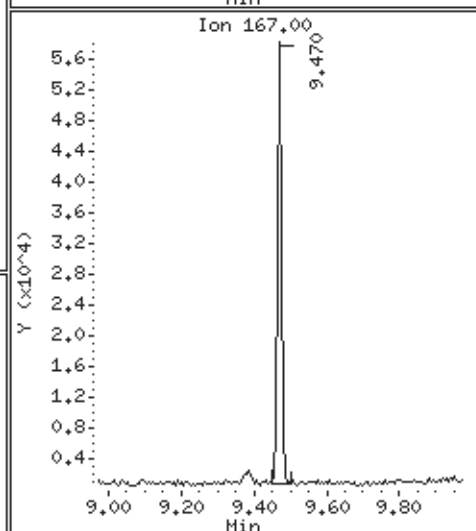
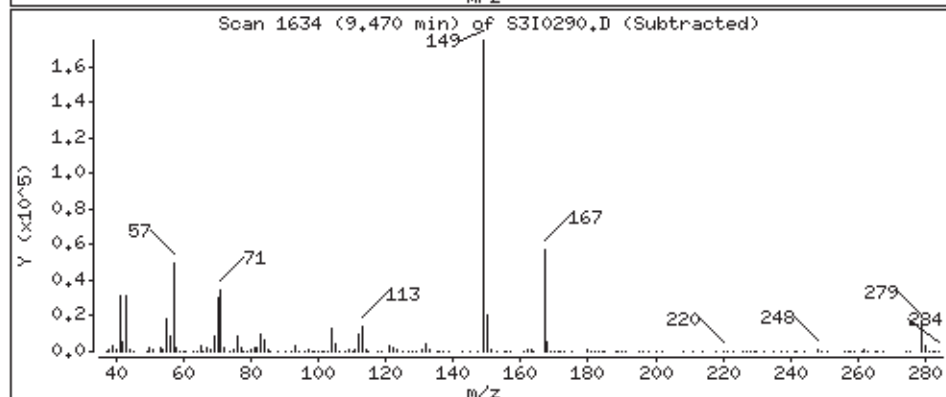
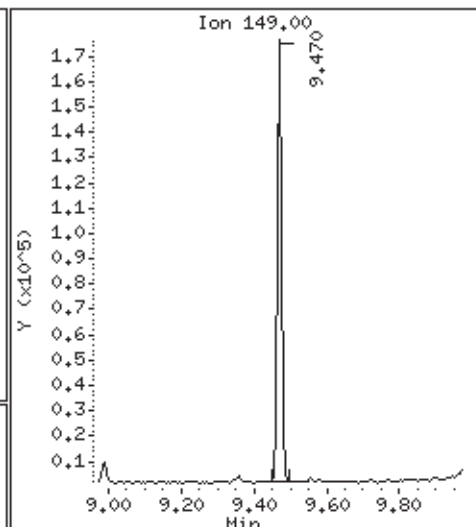
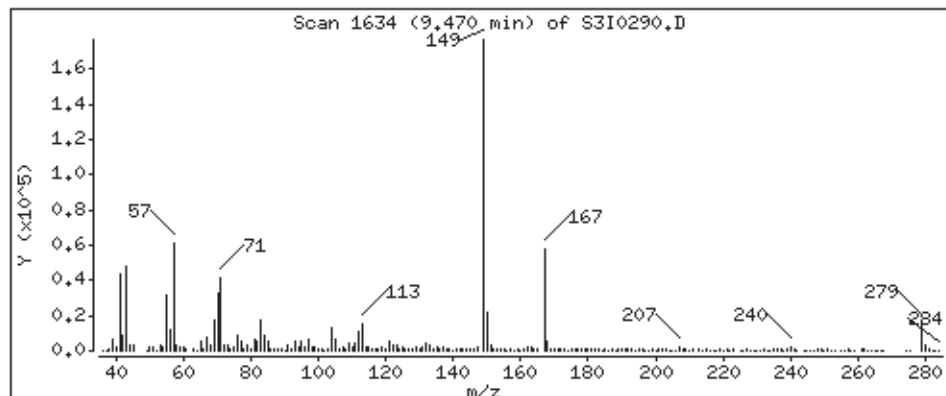
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

78 bis(2-Ethylhexyl)phthalate

Concentration: 4 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

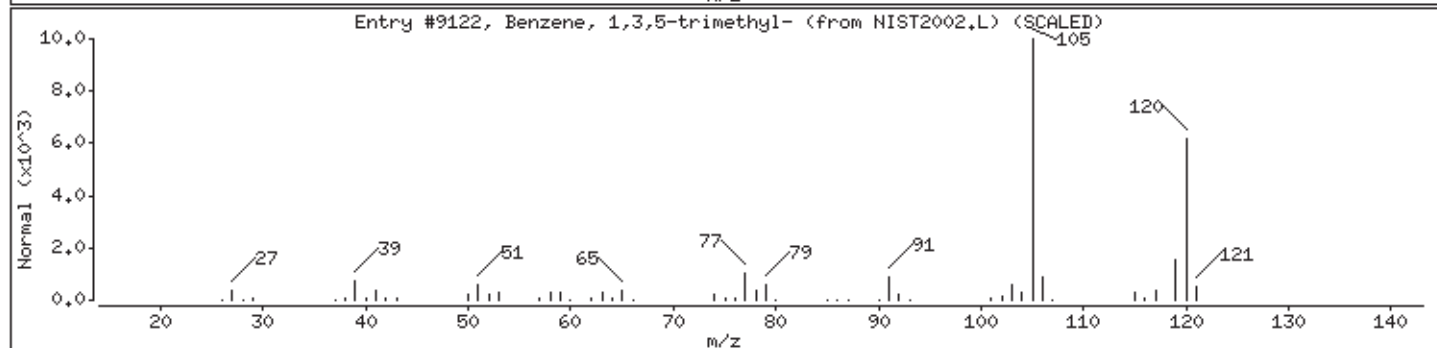
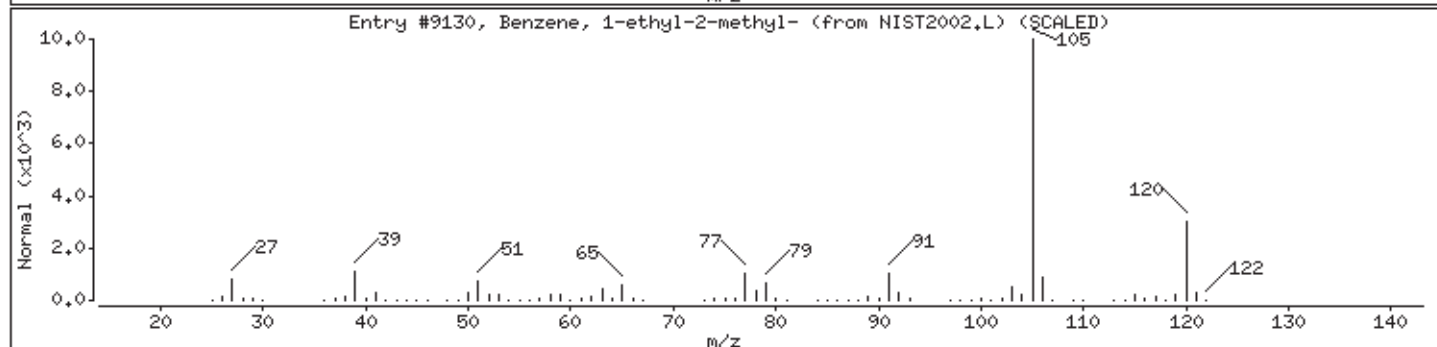
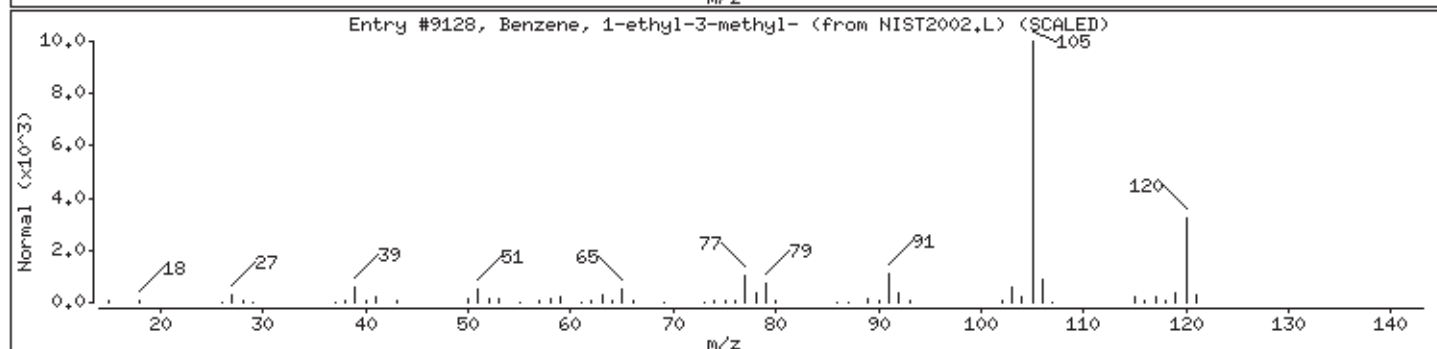
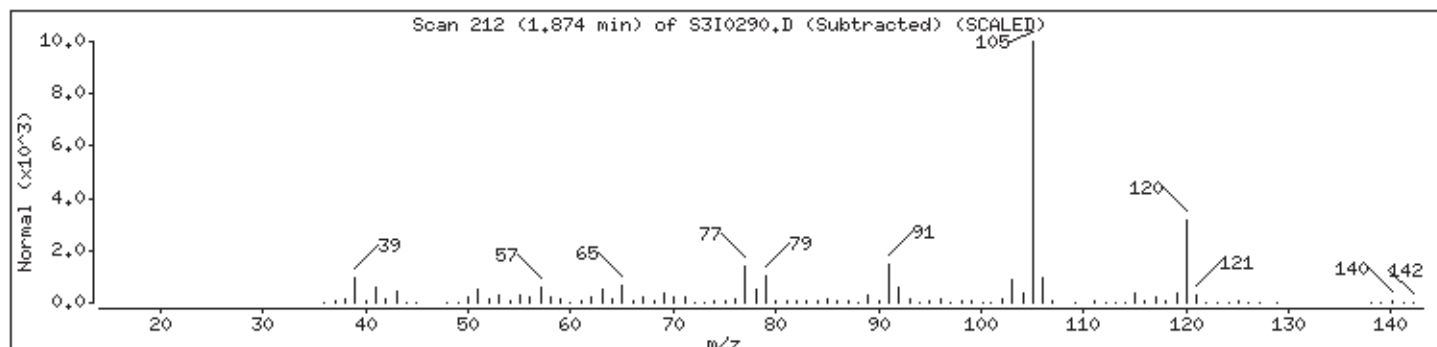
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9128	94	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	94	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	91	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

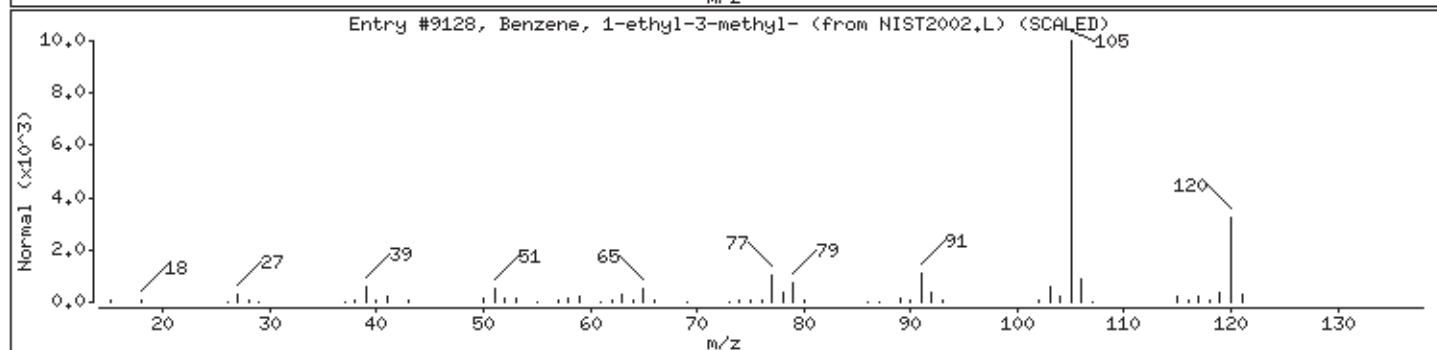
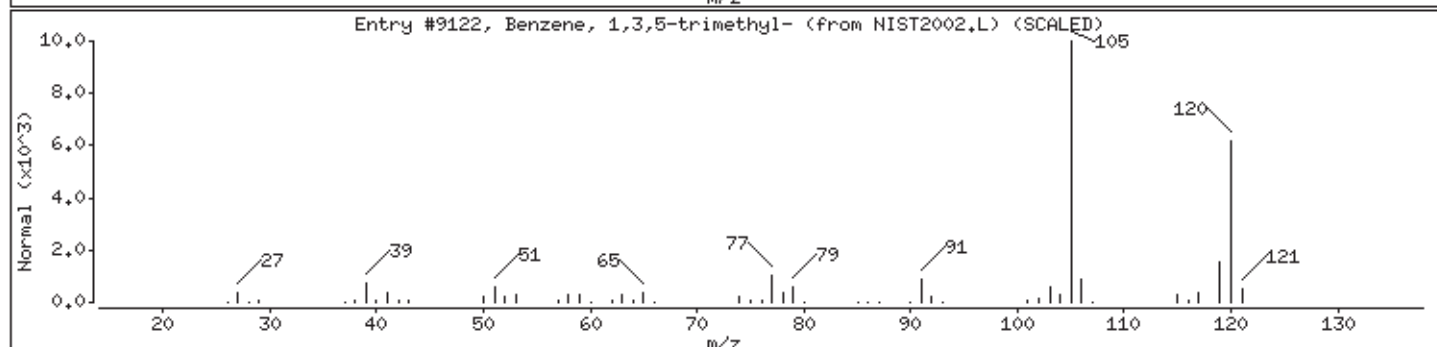
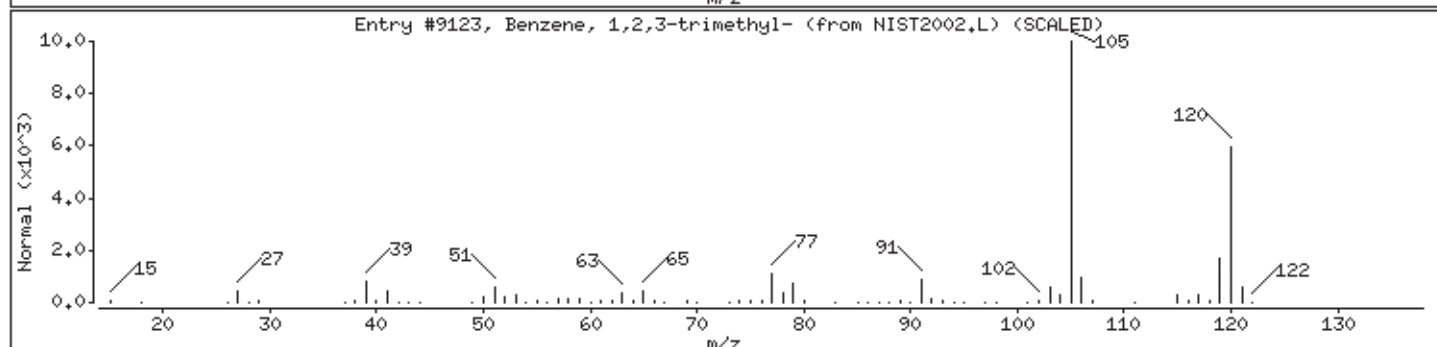
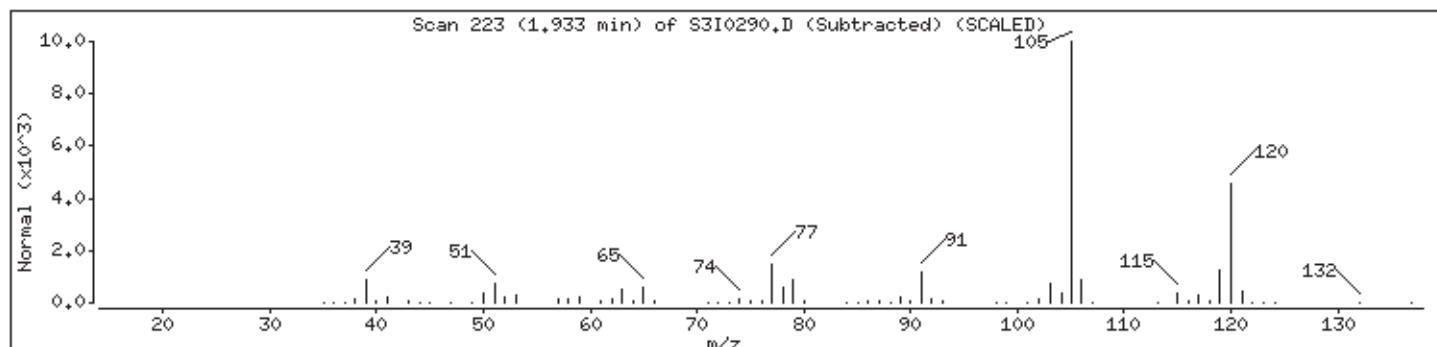
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	97	C ₉ H ₁₂	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	95	C ₉ H ₁₂	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9128	94	C ₉ H ₁₂	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

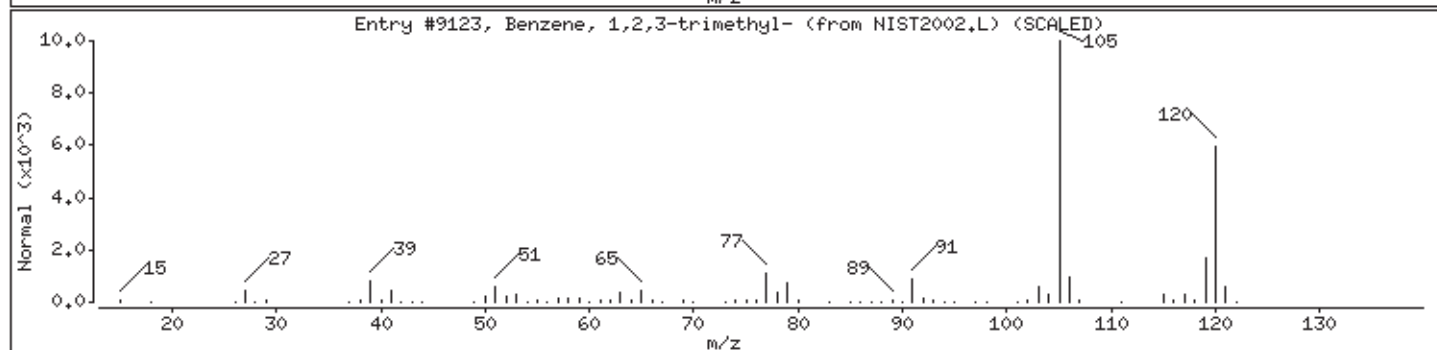
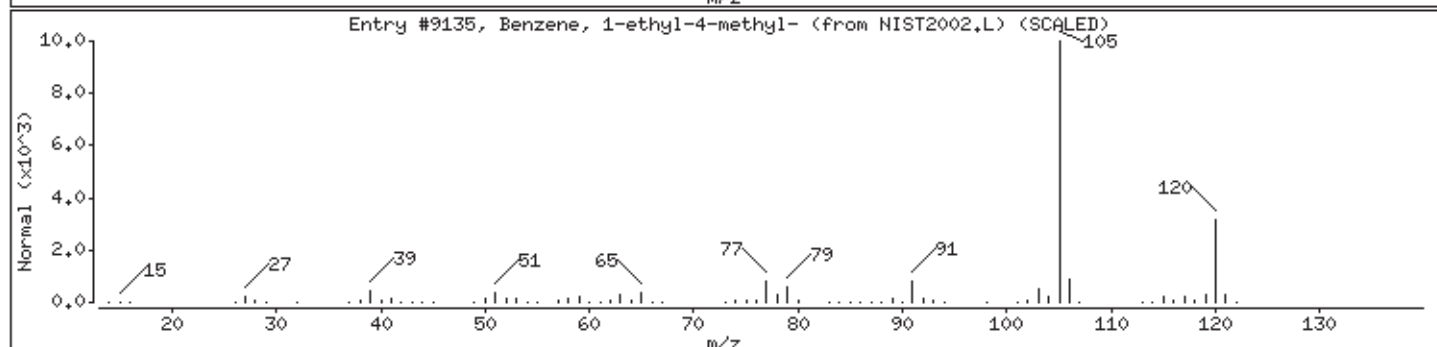
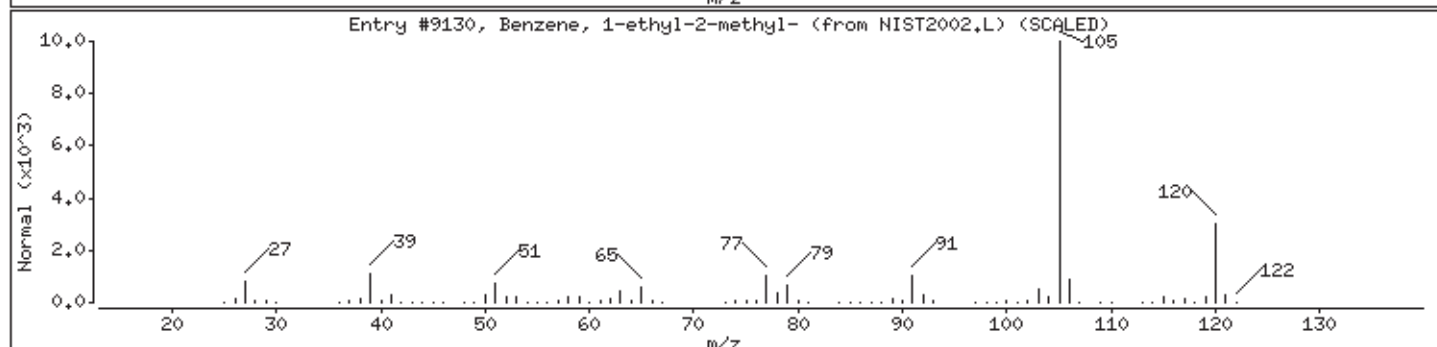
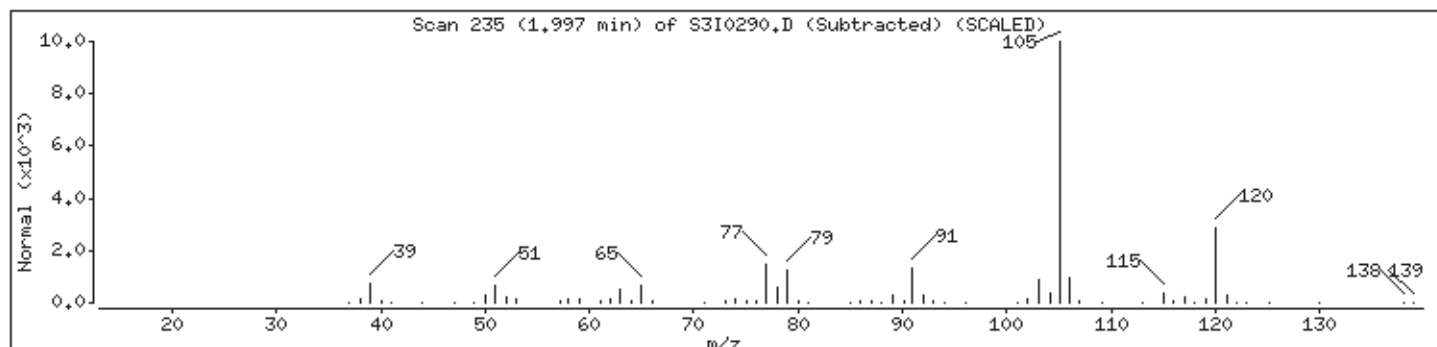
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	94	C9H12	120
Benzene, 1-ethyl-4-methyl-	622-96-8	NIST2002.L	9135	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	91	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

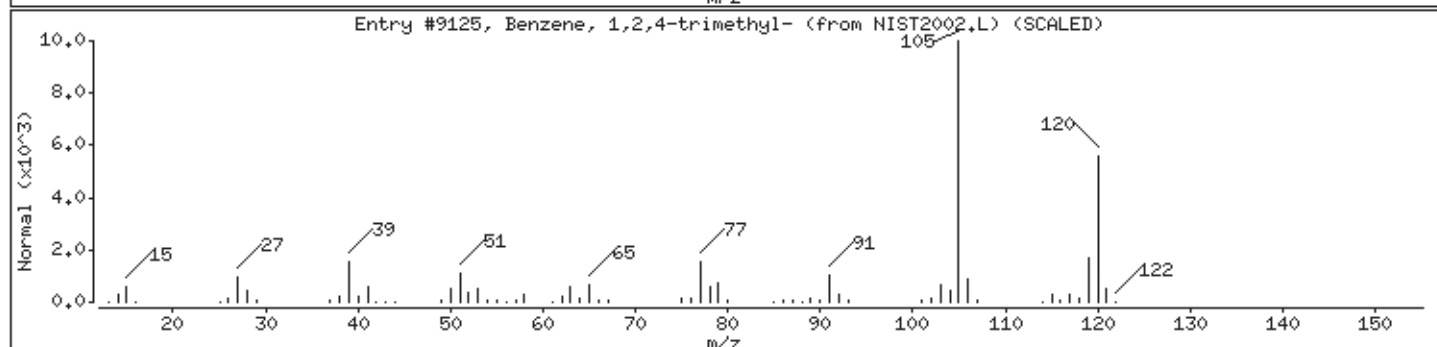
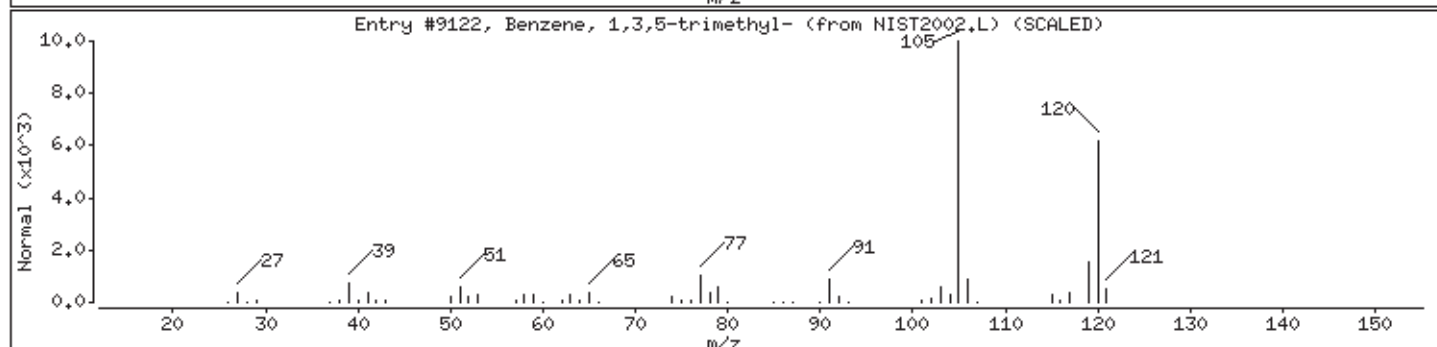
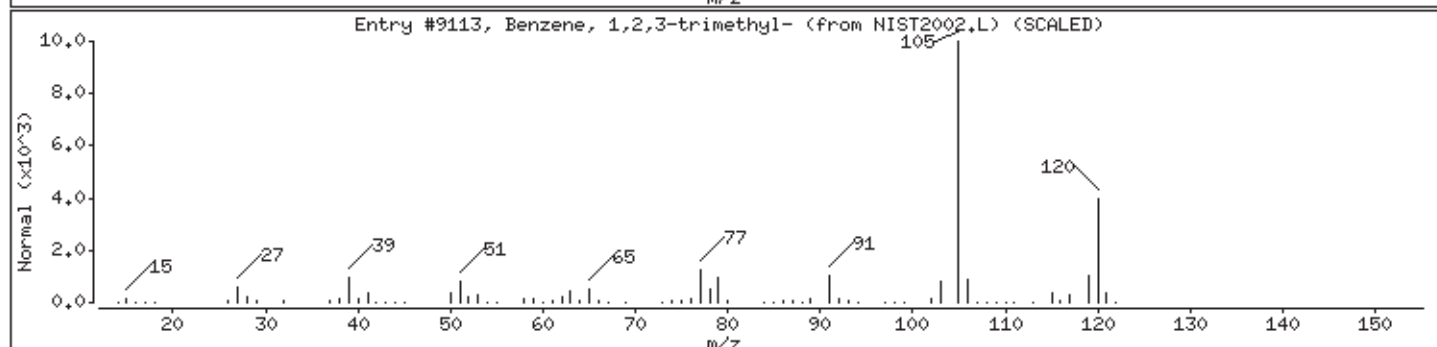
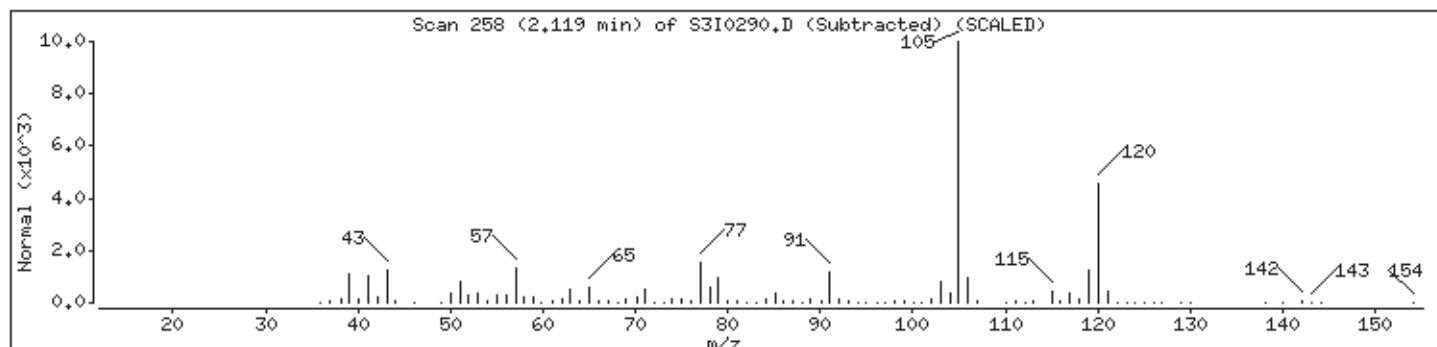
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9113	97	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	94	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9125	94	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

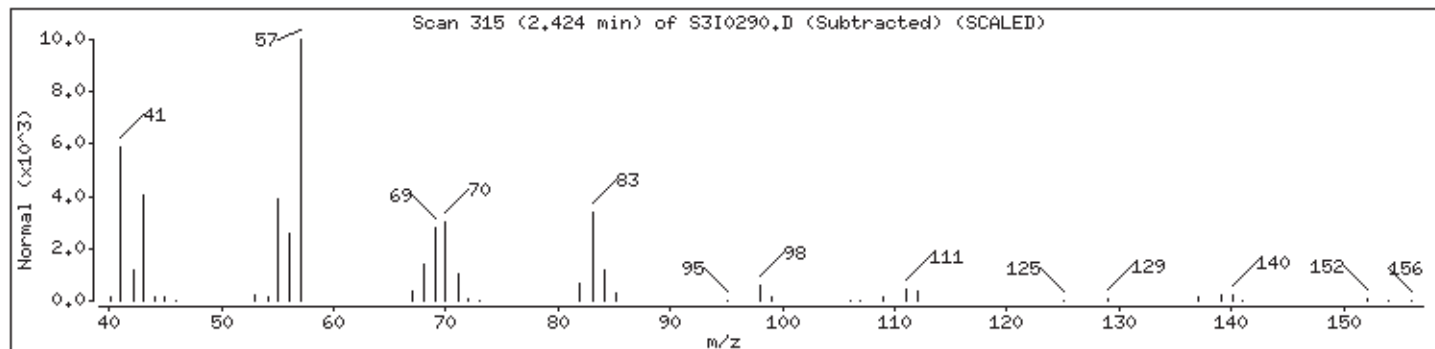
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

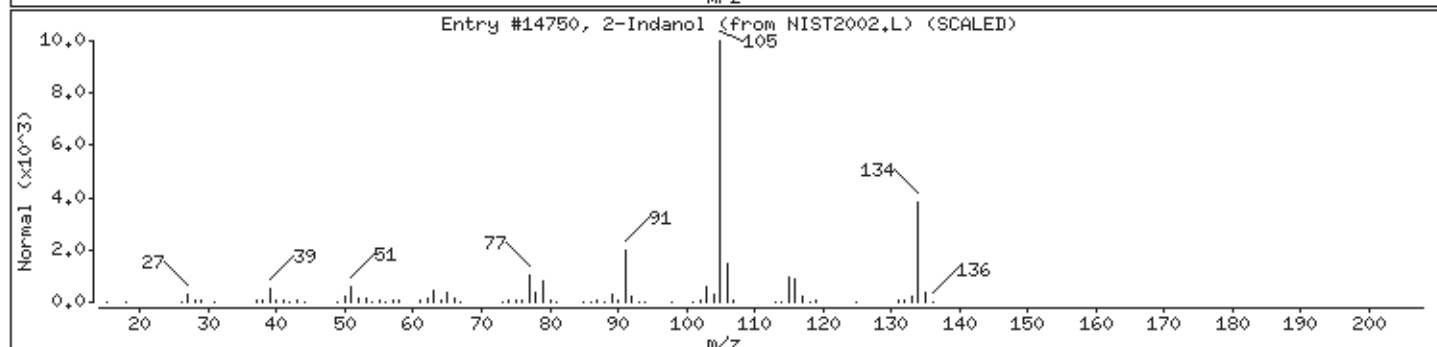
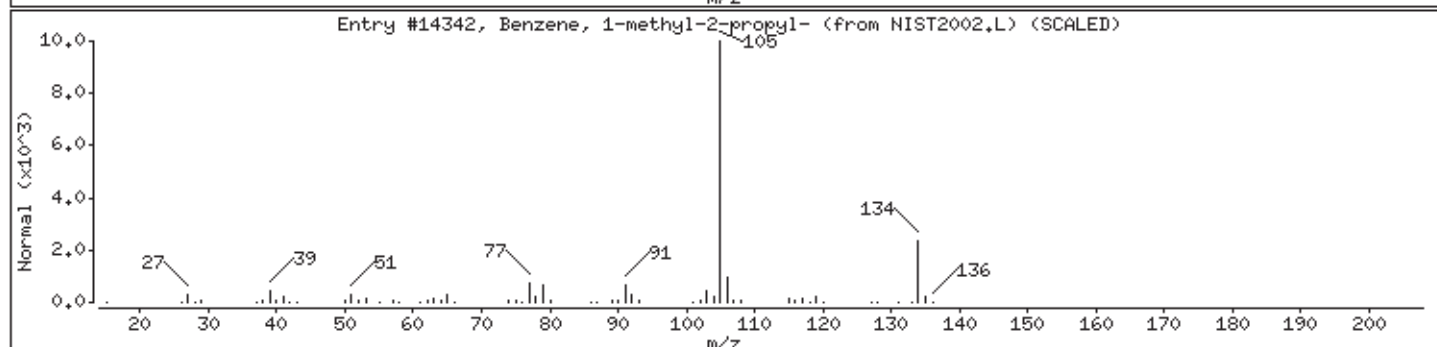
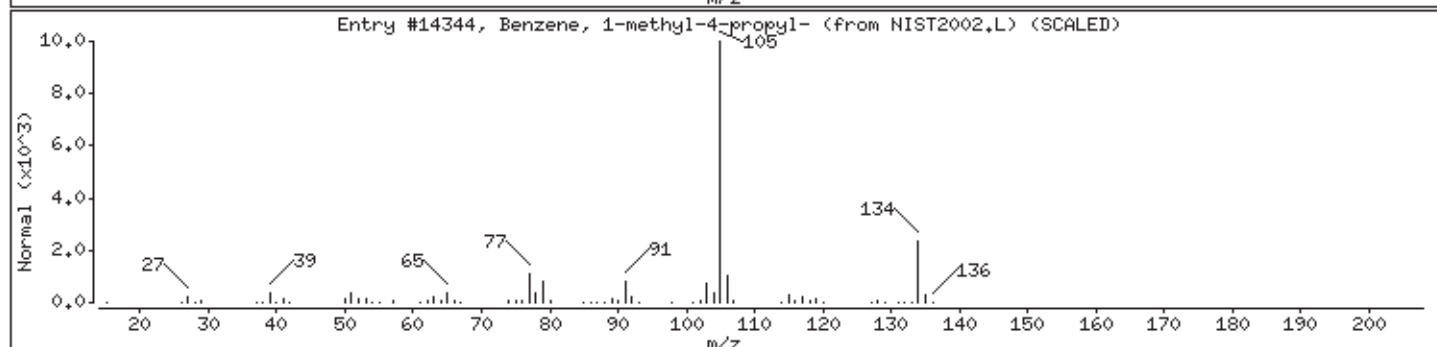
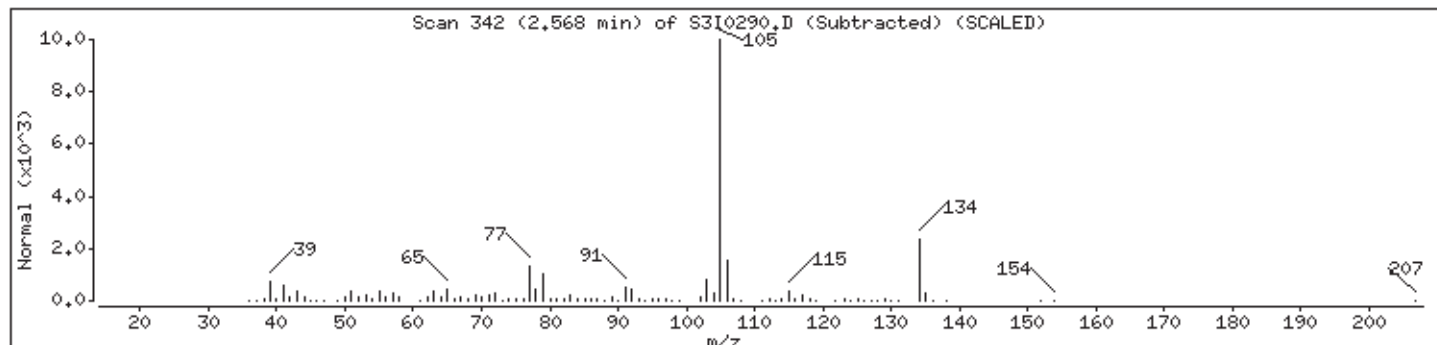
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-propyl-	1074-55-1	NIST2002.L	14344	91	C10H14	134
Benzene, 1-methyl-2-propyl-	1074-17-5	NIST2002.L	14342	91	C10H14	134
2-Indanol	4254-29-9	NIST2002.L	14750	90	C9H10O	134



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

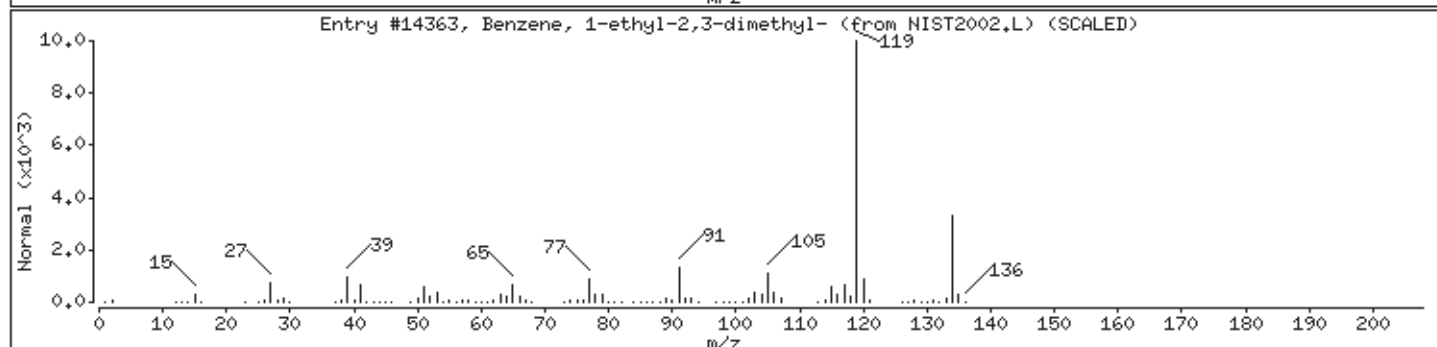
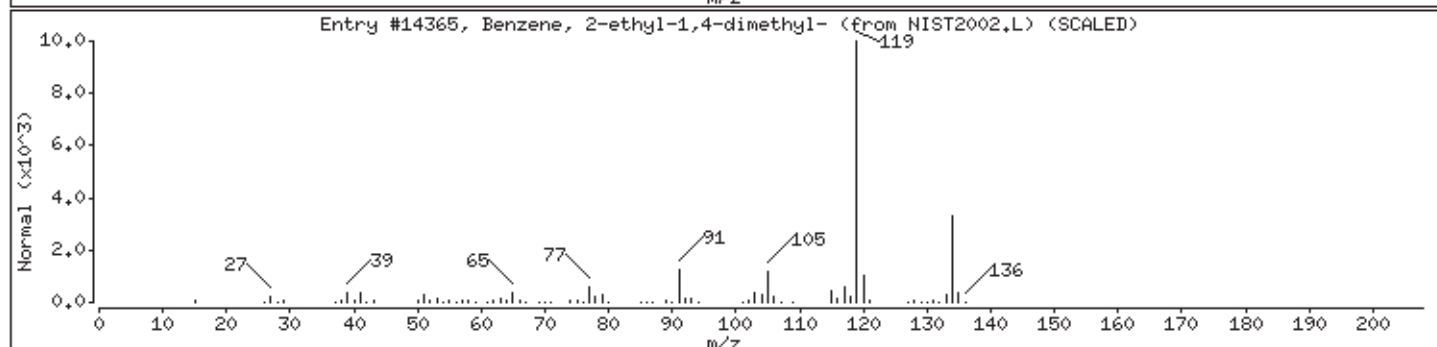
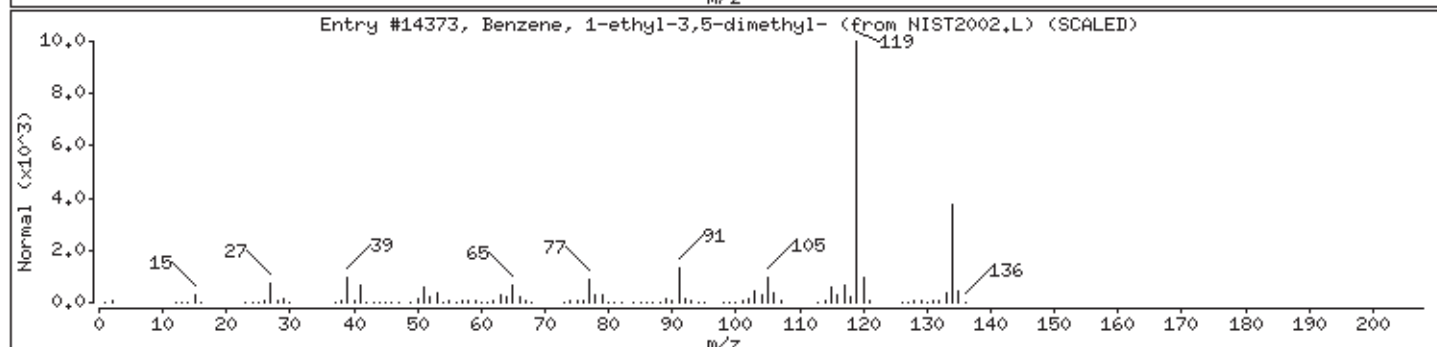
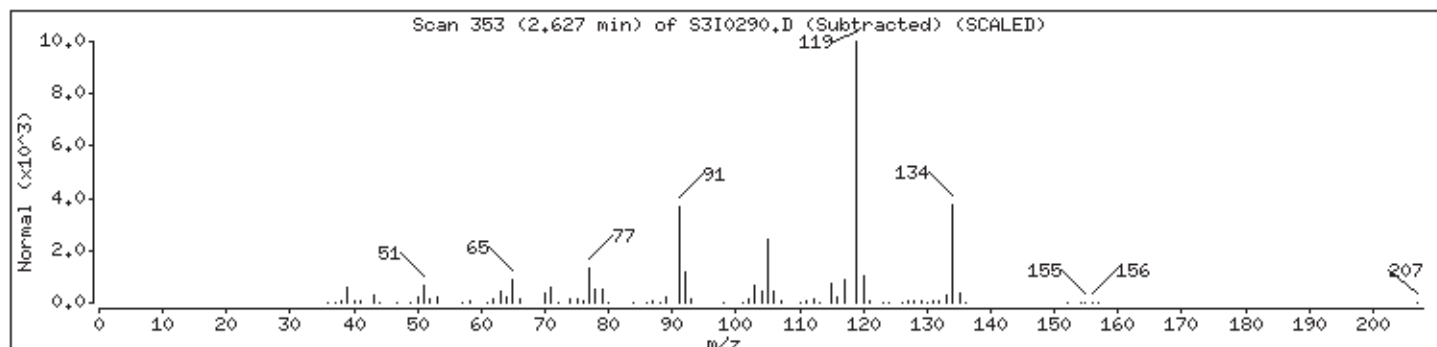
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST2002.L	14373	94	C10H14	134
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NIST2002.L	14365	94	C10H14	134
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NIST2002.L	14363	90	C10H14	134



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

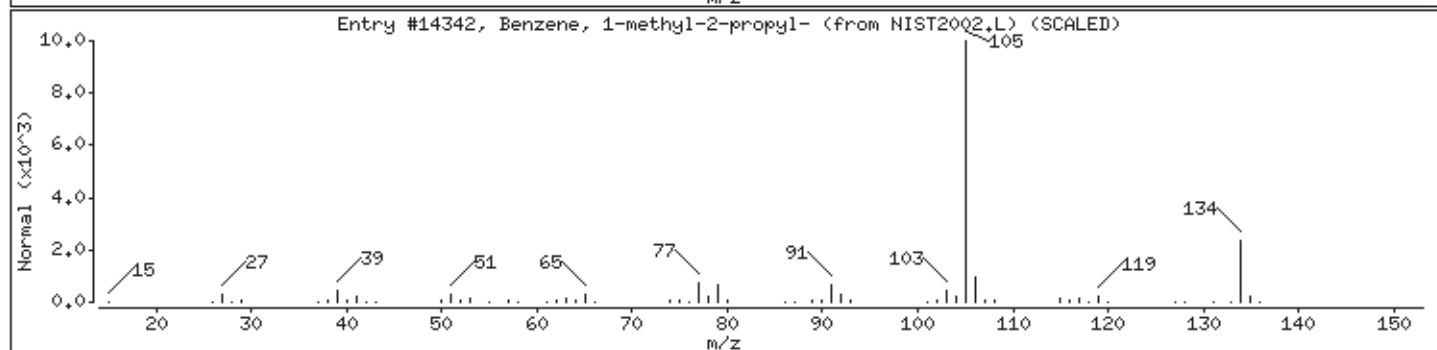
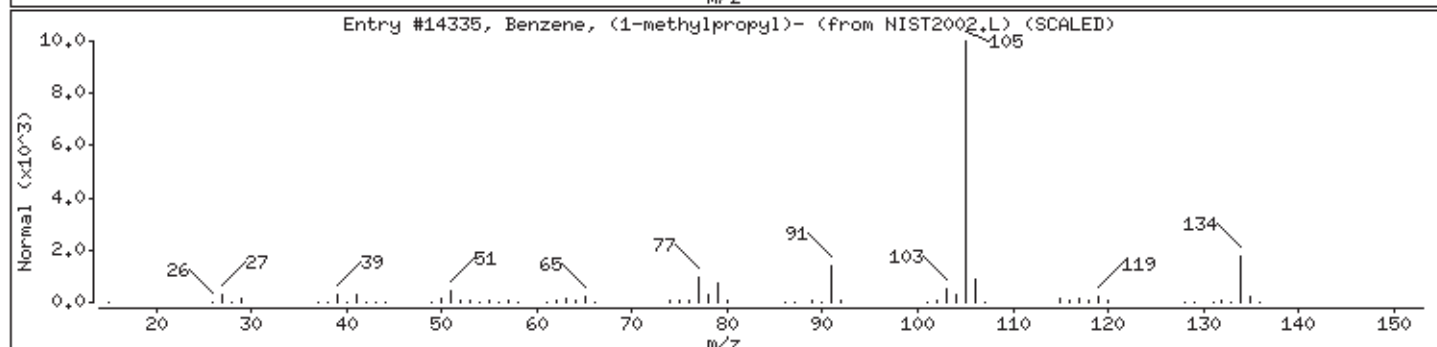
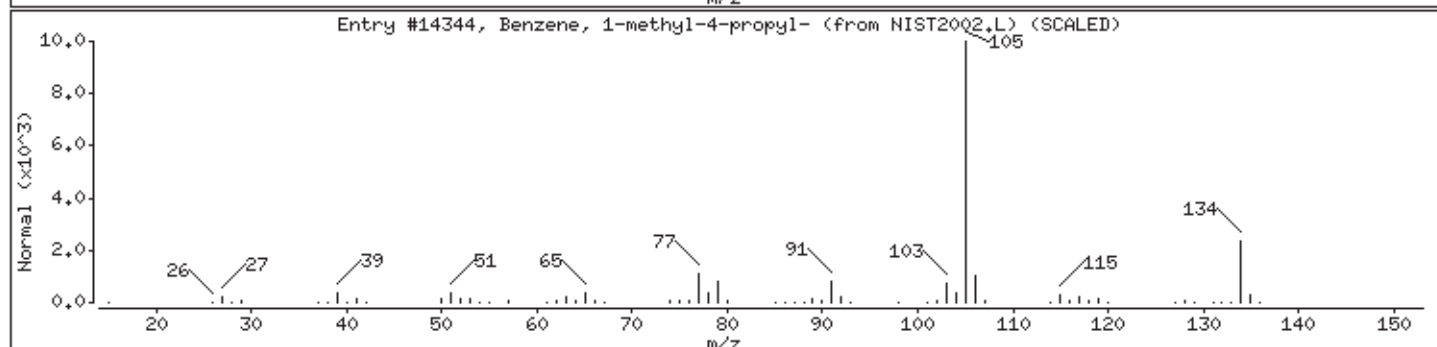
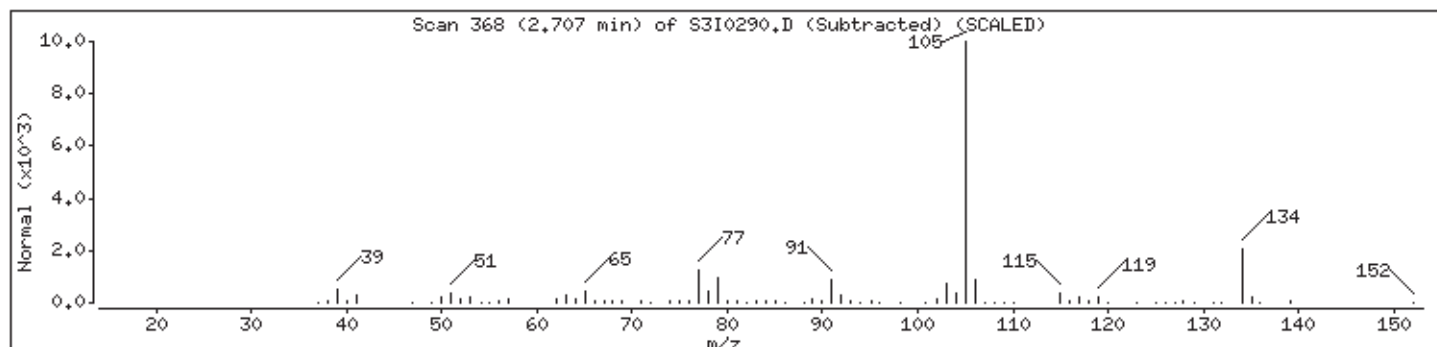
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-propyl-	1074-55-1	NIST2002.L	14344	95	C10H14	134
Benzene, (1-methylpropyl)-	135-98-8	NIST2002.L	14335	91	C10H14	134
Benzene, 1-methyl-2-propyl-	1074-17-5	NIST2002.L	14342	91	C10H14	134



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

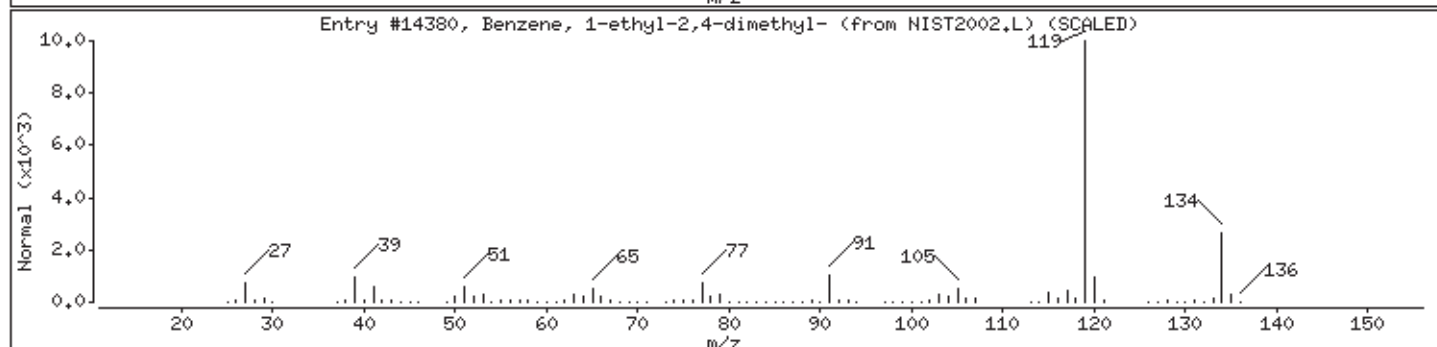
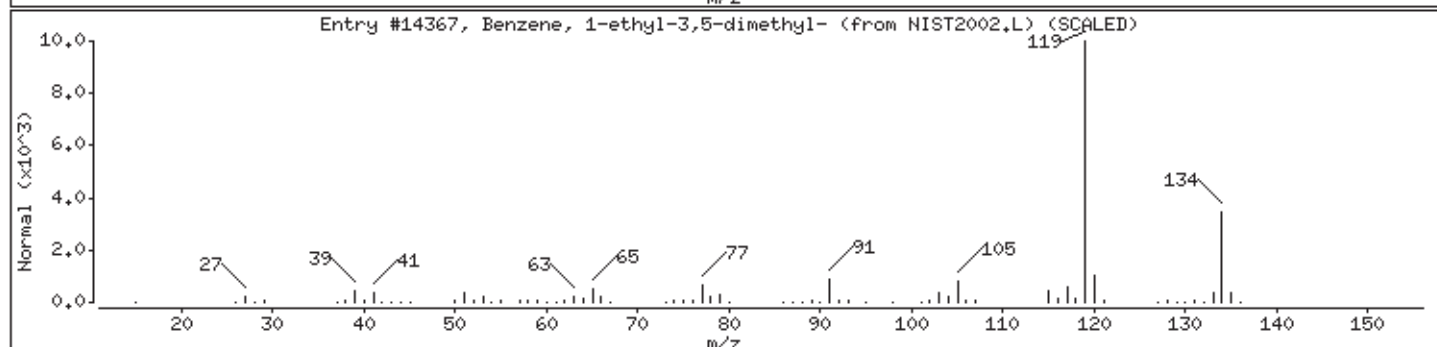
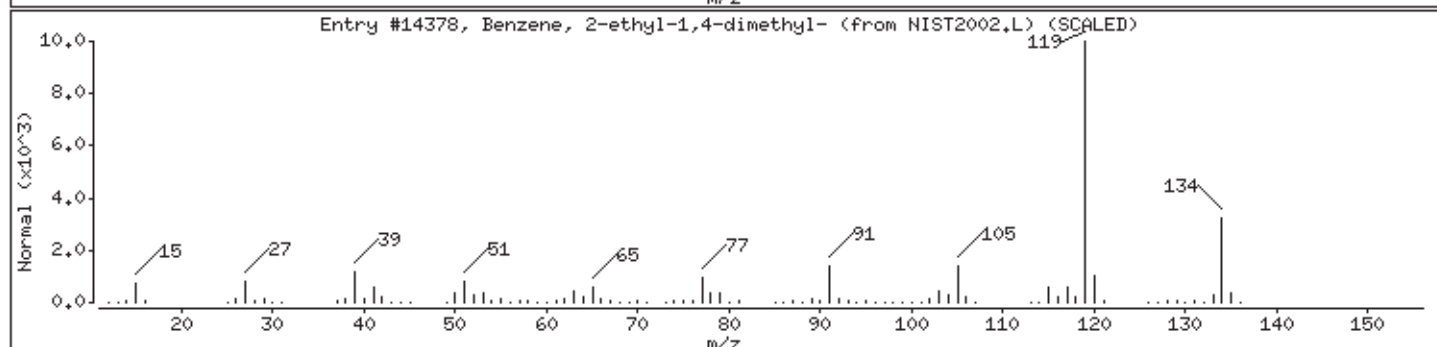
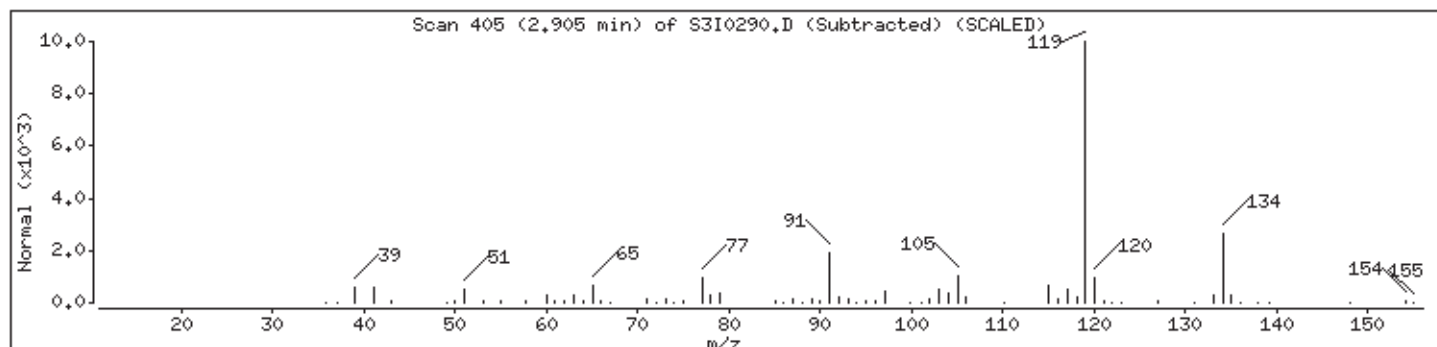
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NIST2002.L	14378	95	C ₁₀ H ₁₄	134
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST2002.L	14367	94	C ₁₀ H ₁₄	134
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST2002.L	14380	93	C ₁₀ H ₁₄	134



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

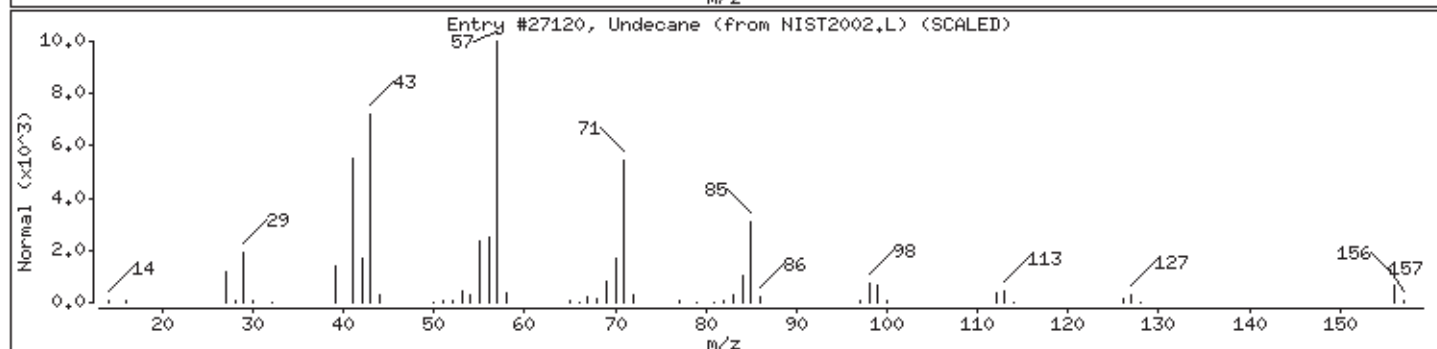
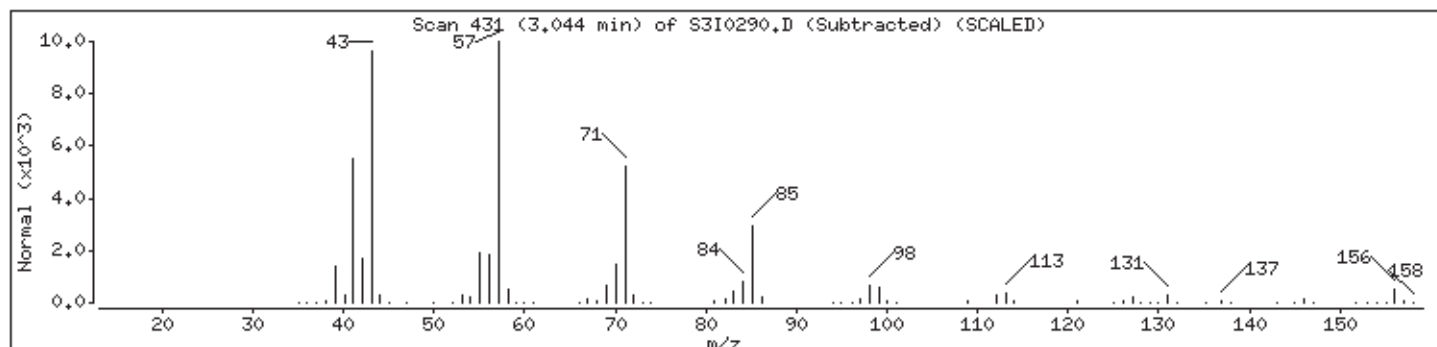
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Undecane	1120-21-4	NIST2002.L	27120	96	C ₁₁ H ₂₄	156



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

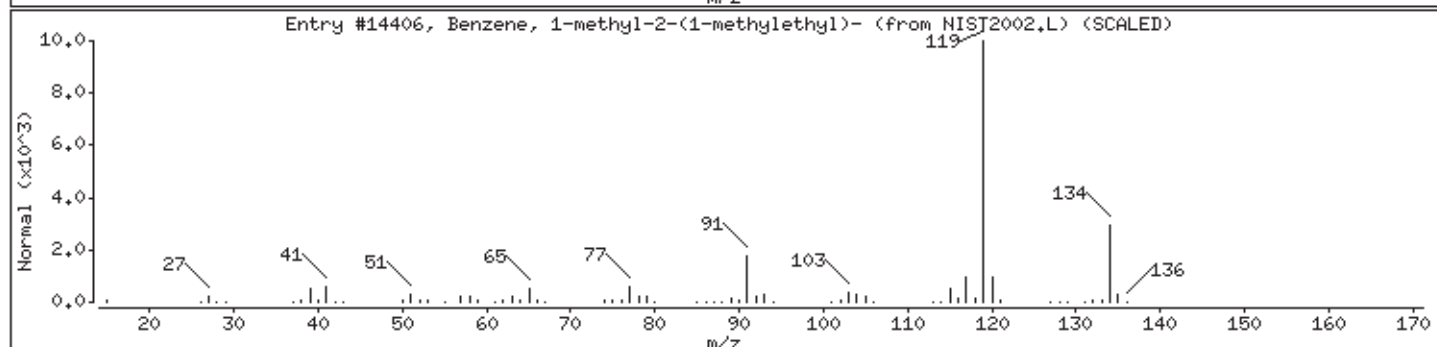
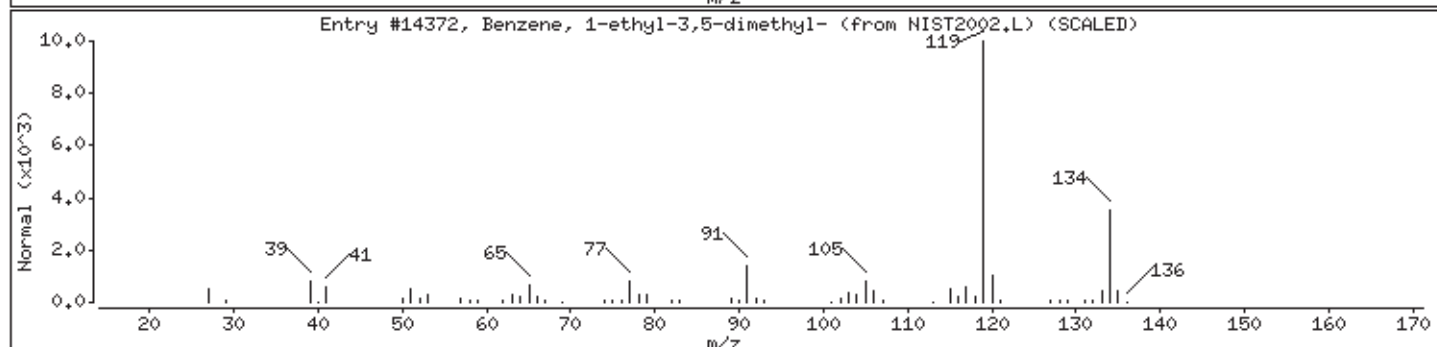
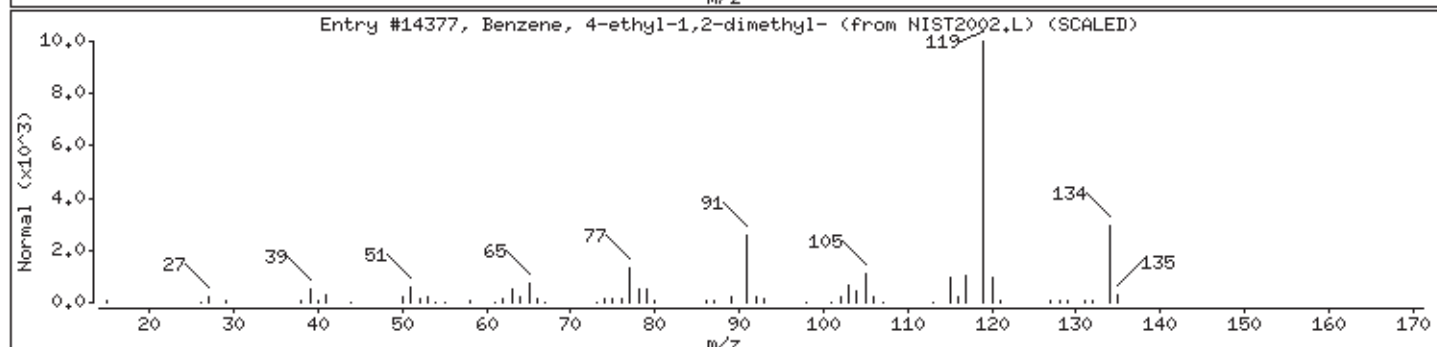
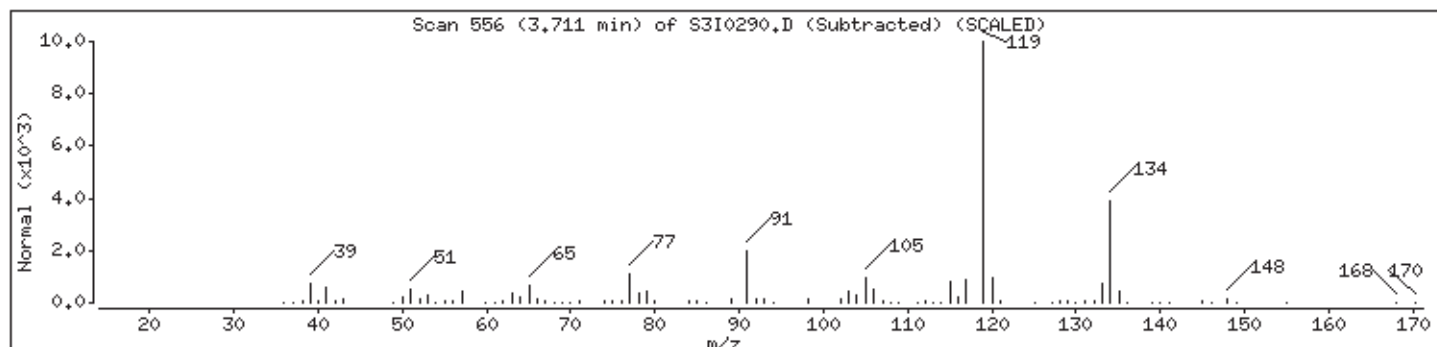
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	NIST2002.L	14377	95	C ₁₀ H ₁₄	134
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST2002.L	14372	95	C ₁₀ H ₁₄	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST2002.L	14406	93	C ₁₀ H ₁₄	134



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

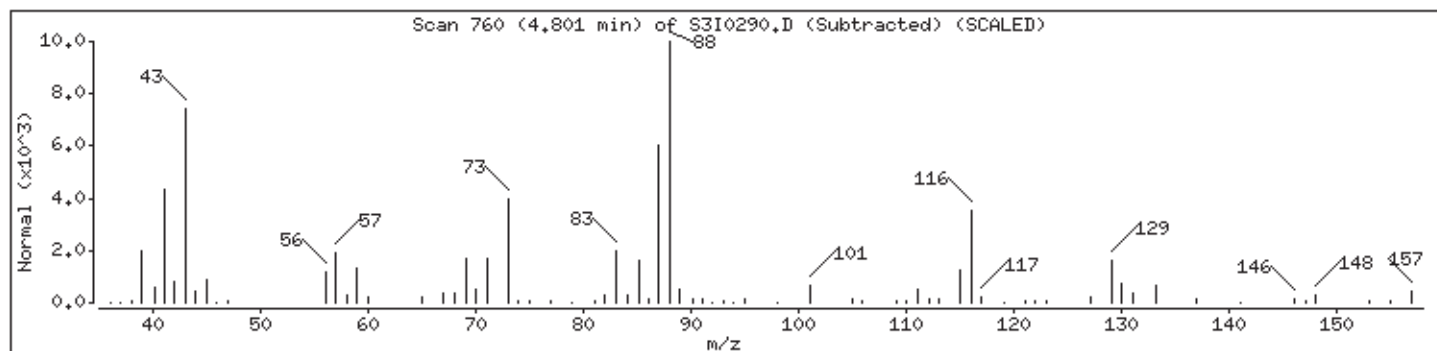
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

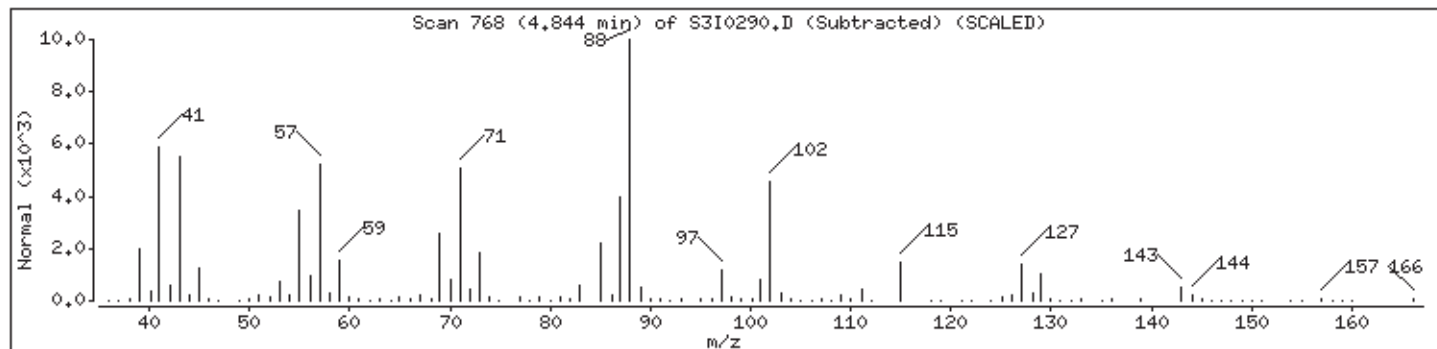
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

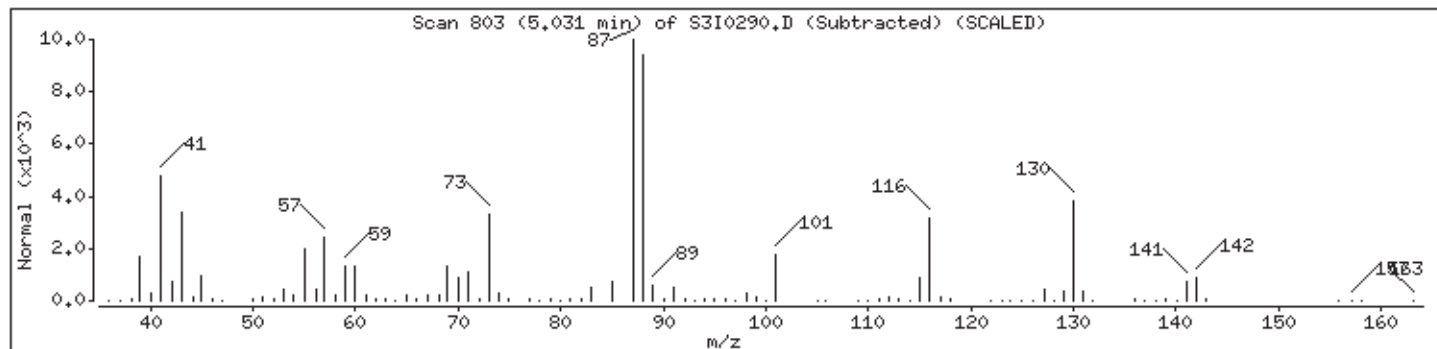
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Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

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Instrument: S3.i

Sample Info: L0935-02B,,66049

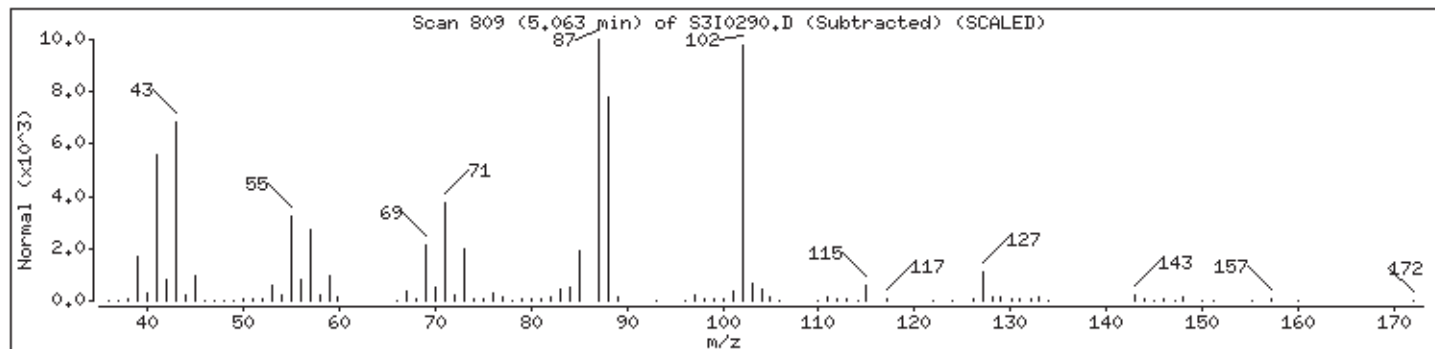
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

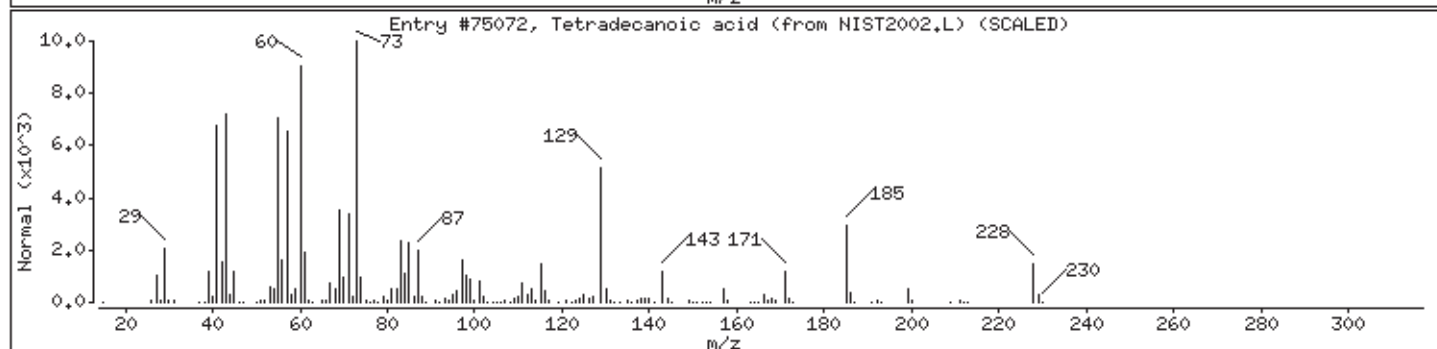
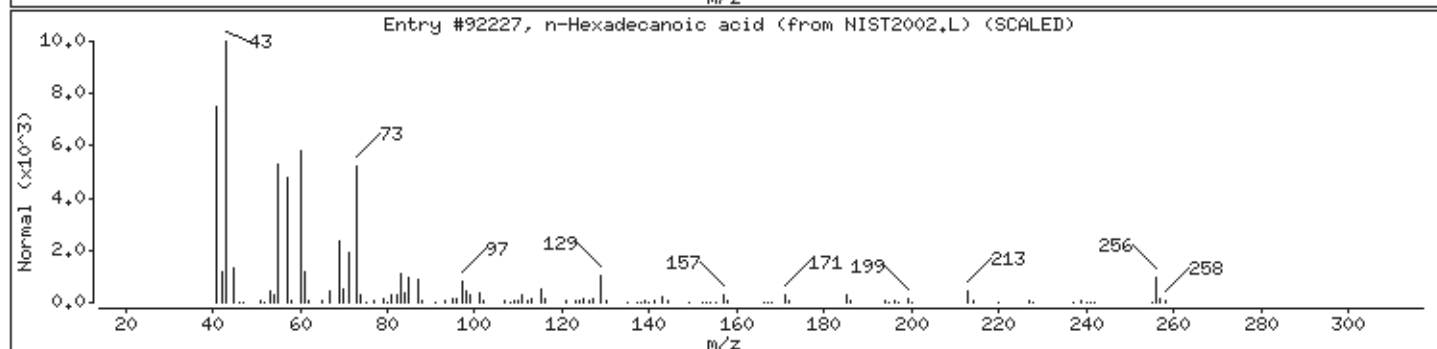
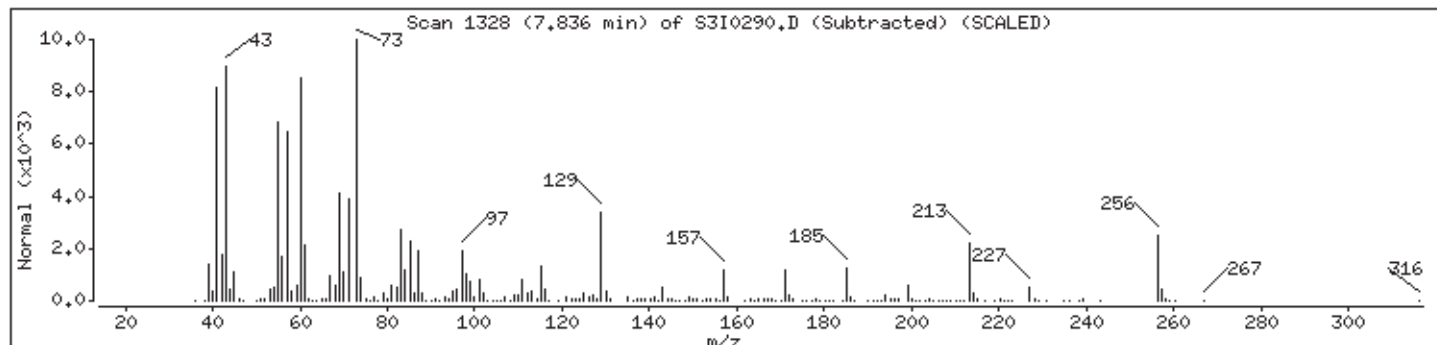
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	98	C16H32O2	256
Tetradecanoic acid	544-63-8	NIST2002.L	75072	89	C14H28O2	228



Data File: \\avogadro\organics\S3.I\120511.B\S3I0290.D

Date : 11-MAY-2012 14:37

Client ID: MW-2

Instrument: S3.i

Sample Info: L0935-02B,,66049

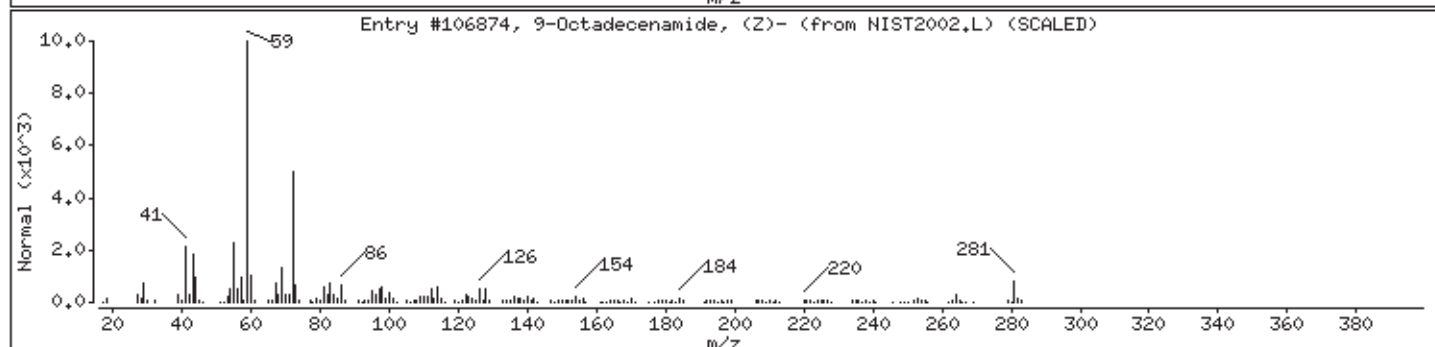
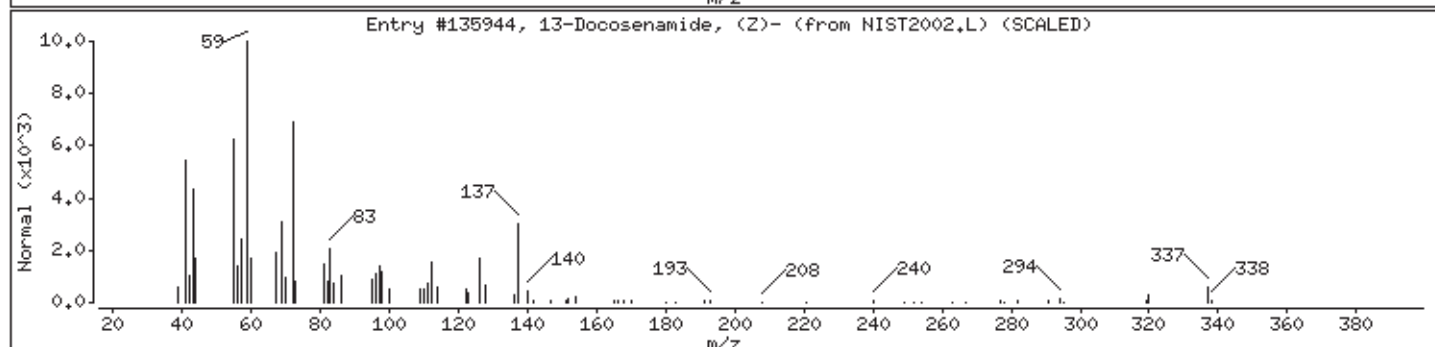
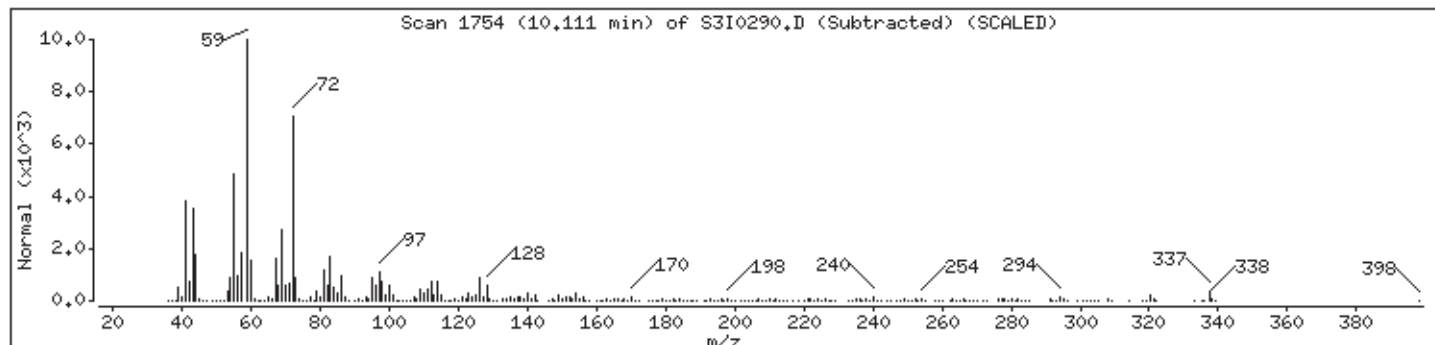
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135944	94	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	86	C18H35NO	281



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-03B
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0291.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup:(Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0291.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
121-14-2	2,4-Dinitrotoluene	10		U
84-66-2	Diethylphthalate	10		U
7005-72-3	4-Chlorophenyl-phenylether	10		U
86-73-7	Fluorene	10		U
100-01-6	4-Nitroaniline	20		U
534-52-1	4,6-Dinitro-2-methylphenol	20		U
86-30-6	N-Nitrosodiphenylamine	10		U
101-55-3	4-Bromophenyl-phenylether	10		U
118-74-1	Hexachlorobenzene	10		U
87-86-5	Pentachlorophenol	20		U
85-01-8	Phenanthrene	10		U
120-12-7	Anthracene	10		U
86-74-8	Carbazole	10		U
84-74-2	Di-n-butylphthalate	1.3		J
206-44-0	Fluoranthene	10		U
129-00-0	Pyrene	10		U
85-68-7	Butylbenzylphthalate	10		U
91-94-1	3,3'-Dichlorobenzidine	10		U
56-55-3	Benzo(a)anthracene	10		U
218-01-9	Chrysene	10		U
117-81-7	Bis(2-ethylhexyl)phthalate	2.0		J
117-84-0	Di-n-octylphthalate	10		U
205-99-2	Benzo(b)fluoranthene	10		U
207-08-9	Benzo(k)fluoranthene	10		U
50-32-8	Benzo(a)pyrene	10		U
193-39-5	Indeno(1,2,3-cd)pyrene	10		U
53-70-3	Dibenzo(a,h)anthracene	10		U
191-24-2	Benzo(g,h,i)perylene	10		U

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-03B
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0291.D
 Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (2.08903)	2.089	8.5	J
02		Unknown (3.49402)	3.494	6.4	J
03	1526-17-6	2-Fluoro-6-nitrophenol	3.734	4.1	NJ
04	57-10-3	n-Hexadecanoic acid	7.832	14	NJ
05		Unknown (8.24852)	8.249	6.7	J
06	112-84-5	13-Docosenamide, (Z)-	10.113	20	NJ

²EPA-designated Registry Number.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D
Report Date: 15-May-2012 17:18

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0291.D
Lab Smp Id: L0935-03B Client Smp ID: MW-3
Inj Date : 11-MAY-2012 14:56
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-03B,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.512	1.518 (0.664)	64531	6.43574	6(aR)	
\$ 5 Phenol-d5	99	2.340	2.346 (1.028)	55431	3.96203	4(aR)	
* 12 1,4-Dichlorobenzene-d4	152	2.276	2.282 (1.000)	295327	40.0000		
\$ 22 Nitrobenzene-d5	82	2.949	2.955 (0.728)	440812	31.7765	32	
* 31 Naphthalene-d8	136	4.049	4.056 (1.000)	1210520	40.0000		
\$ 41 2-Fluorobiphenyl	172	5.342	5.348 (0.898)	915932	34.5874	34	
* 48 Acenaphthene-d10	164	5.946	5.952 (1.000)	802240	40.0000		
\$ 60 2,4,6-Tribromophenol	330	6.693	6.700 (0.927)	107621	26.0294	26	
* 64 Phenanthrene-d10	188	7.222	7.229 (1.000)	1634223	40.0000		
68 Di-n-butylphthalate	149	7.773	7.774 (1.076)	59960	1.27983	1(a)	
\$ 72 Terphenyl-d14	244	8.558	8.559 (0.912)	1174468	31.1836	31	
* 76 Chrysene-d12	240	9.386	9.398 (1.000)	2070759	40.0000		
78 bis(2-Ethylhexyl)phthalate	149	9.466	9.472 (1.009)	65493	2.04876	2(a)	
* 83 Perylene-d12	264	10.470	10.482 (1.000)	2047093	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0291.D
 Lab Smp Id: L0935-03B Client Smp ID: MW-3
 Inj Date : 11-MAY-2012 14:56
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : L0935-03B,,66049
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
 Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8270C.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 12 1,4-Dichlorobenzene-d4	2.276	1922372	40.000
* 31 Naphthalene-d8	4.050	2759922	40.000
* 64 Phenanthrene-d10	7.223	4195847	40.000
* 83 Perylene-d12	10.471	5471571	40.000

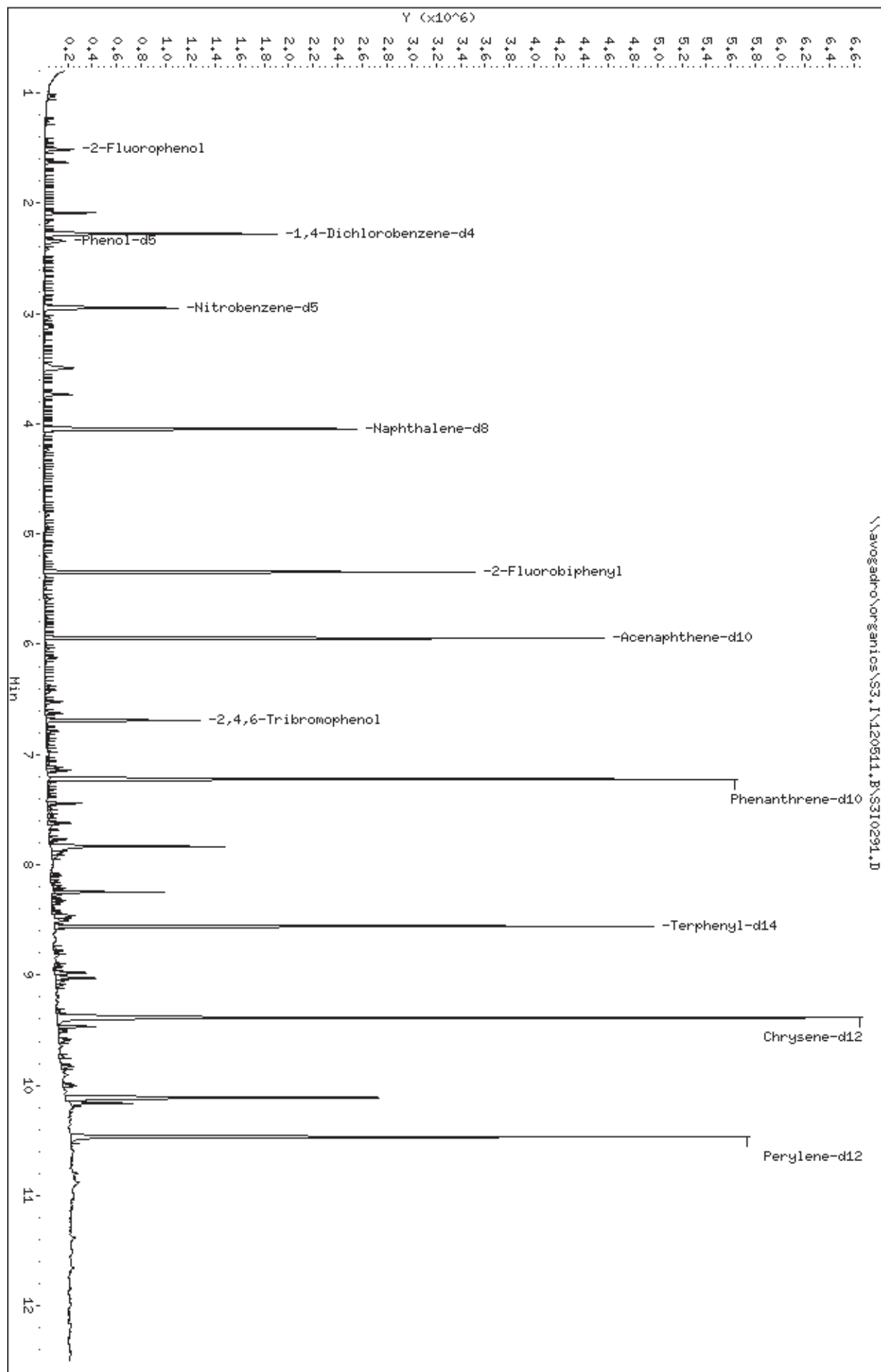
RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ng)	FINAL(ug/L)		LIBRARY	LIB ENTRY	
Unknown 2.089	407934	8.48813964	8	0		0	12
Unknown 3.494	440692	6.38701868	6	0		0	31
2-Fluoro-6-nitrophenol 3.734	283966	4.11556472	4	97	NIST2002.L	27950	31

Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D
 Report Date: 15-May-2012 17:18

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ng)	FINAL(ug/L)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
n-Hexadecanoic acid					CAS #: 57-10-3		
7.832	1492970	14.2328366	14	99	NIST2002.L	92228	64
Unknown					CAS #:		
8.249	704422	6.71541747	7	0		0	64
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.113	2785640	20.3644565	20	94	NIST2002.L	135945	83

Data File: \\avogadro\organics\S3.1\120511.B\S310291.D
 Date : 11-May-2012 14:56
 Client ID: MW-3
 Sample Info: L0935-03B,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

Volume Injected (uL): 1.0

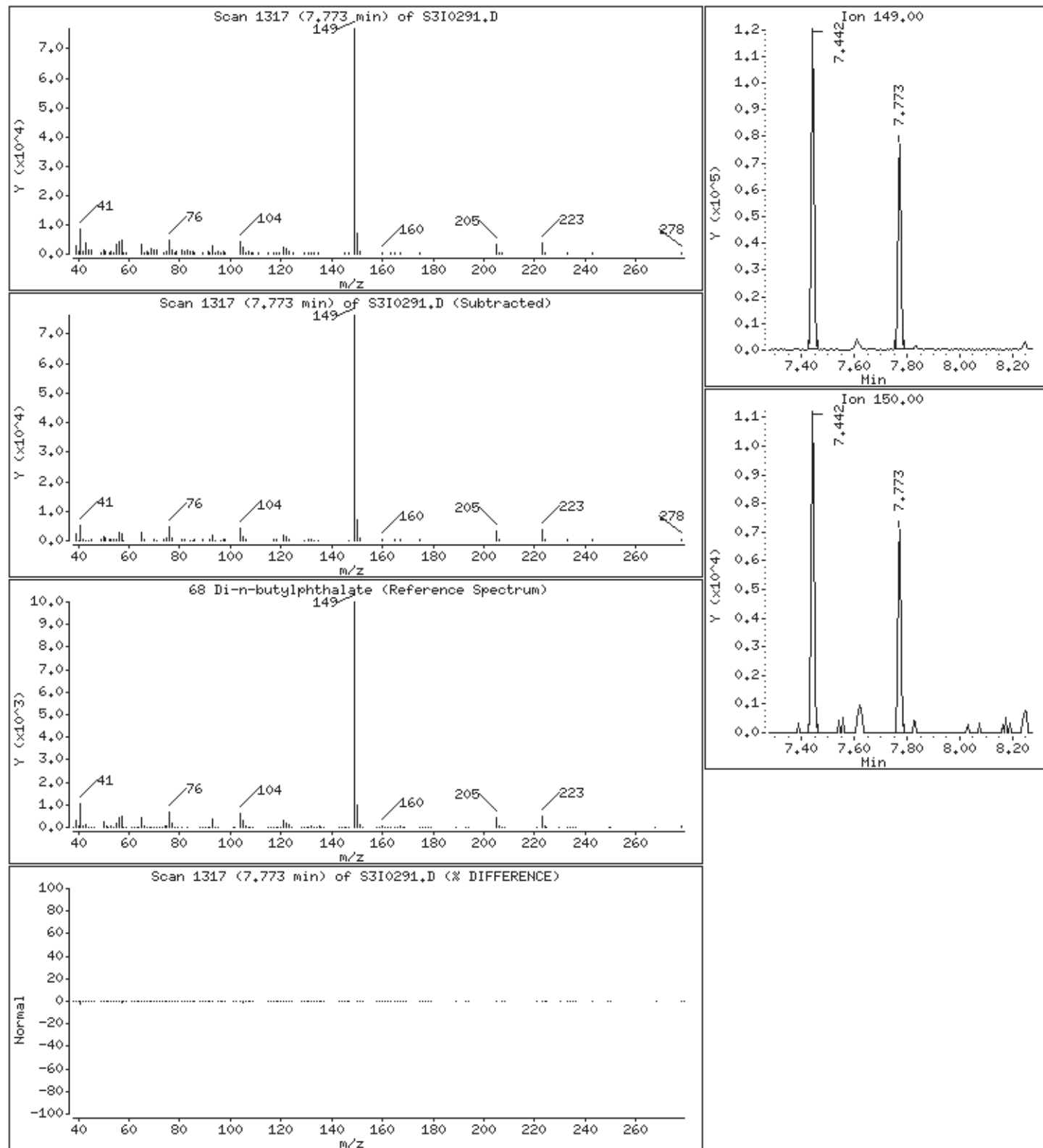
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

68 Di-n-butylphthalate

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

Volume Injected (uL): 1.0

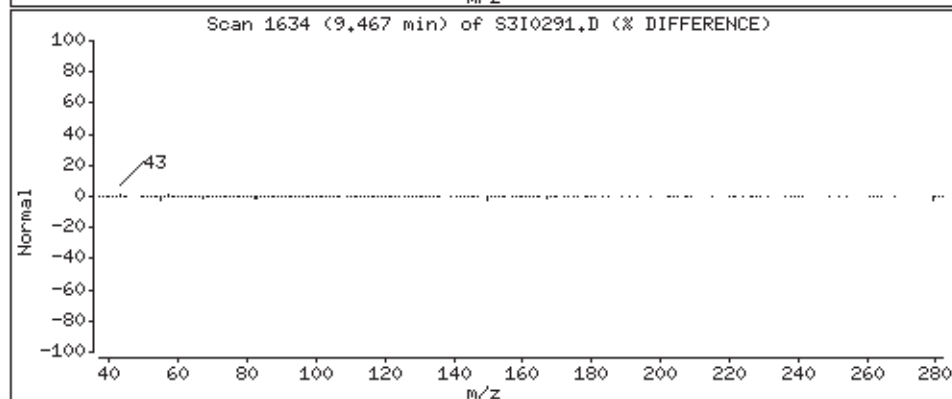
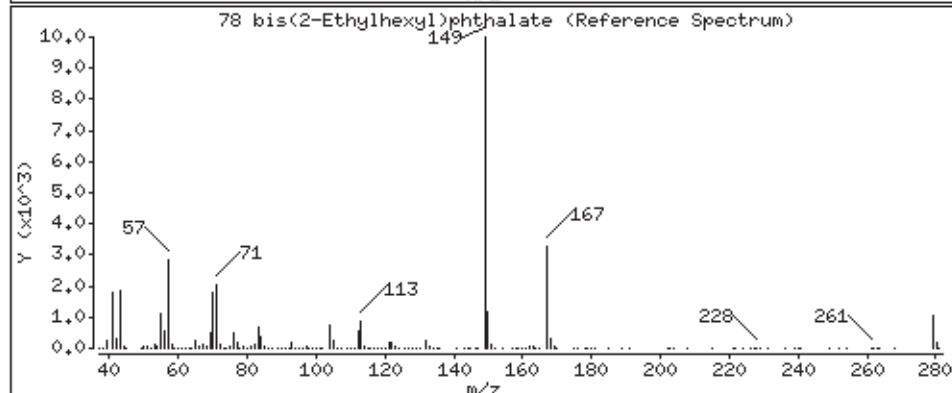
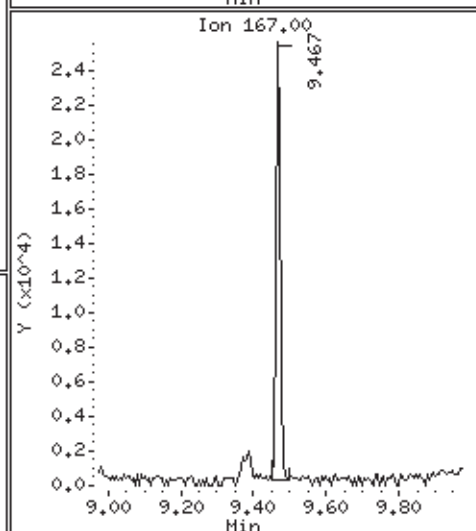
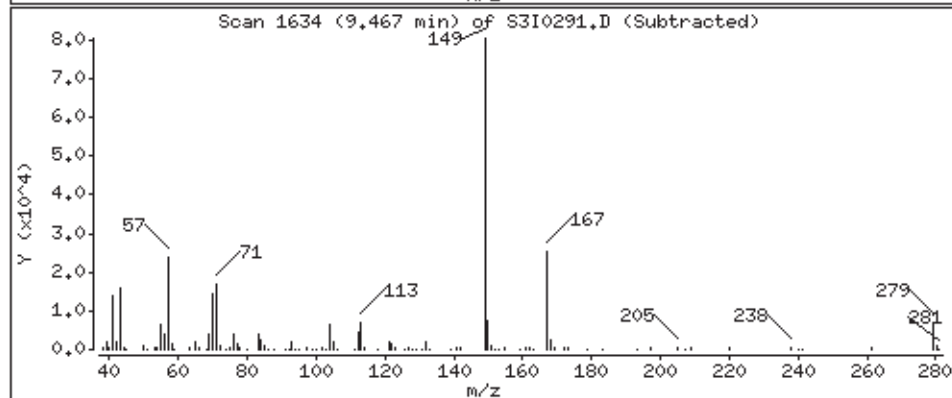
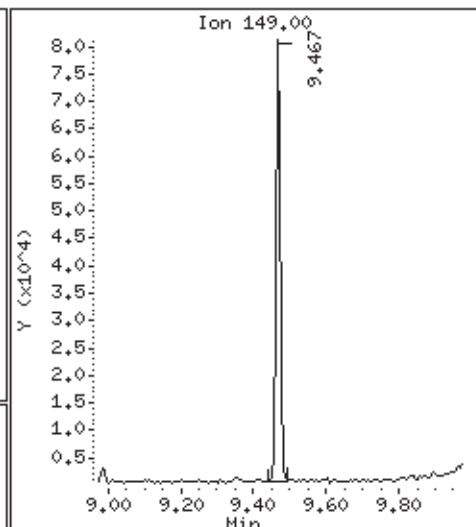
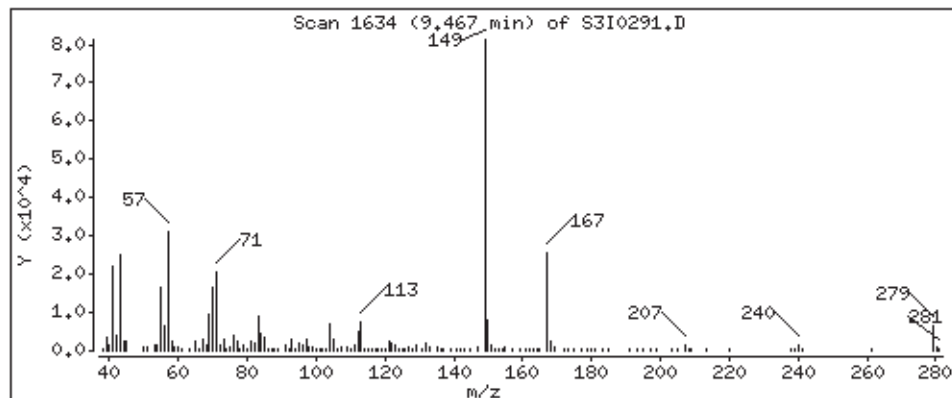
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

78 bis(2-Ethylhexyl)phthalate

Concentration: 2 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

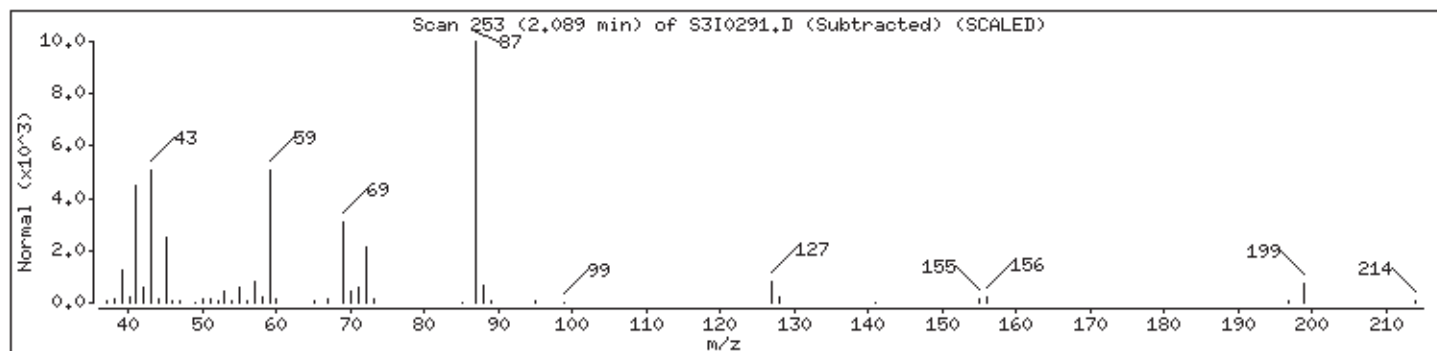
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

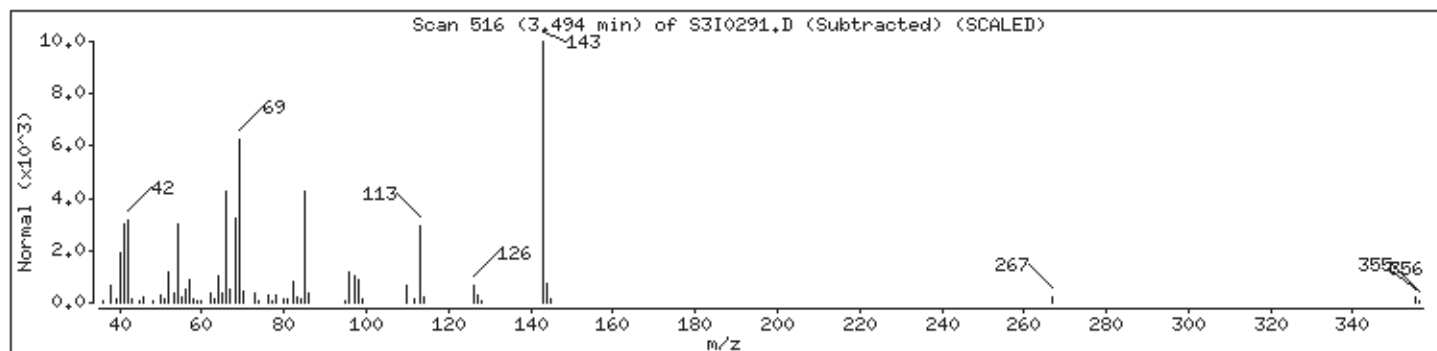
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

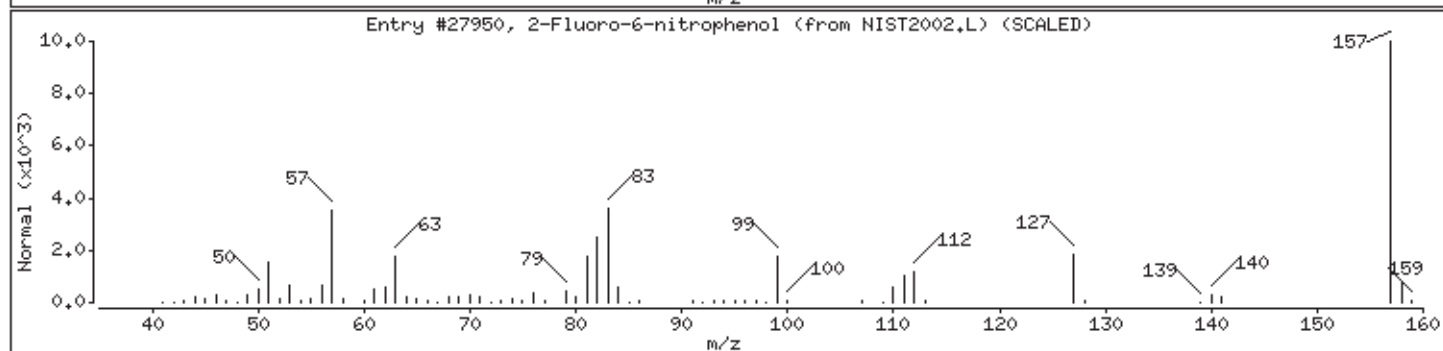
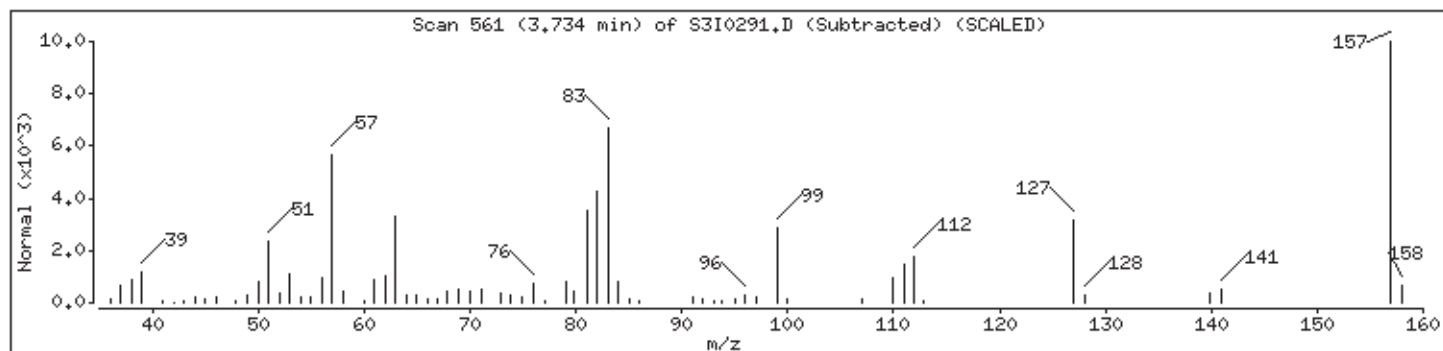
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Fluoro-6-nitrophenol	1526-17-6	NIST2002.L	27950	97	C6H4FN03	157



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

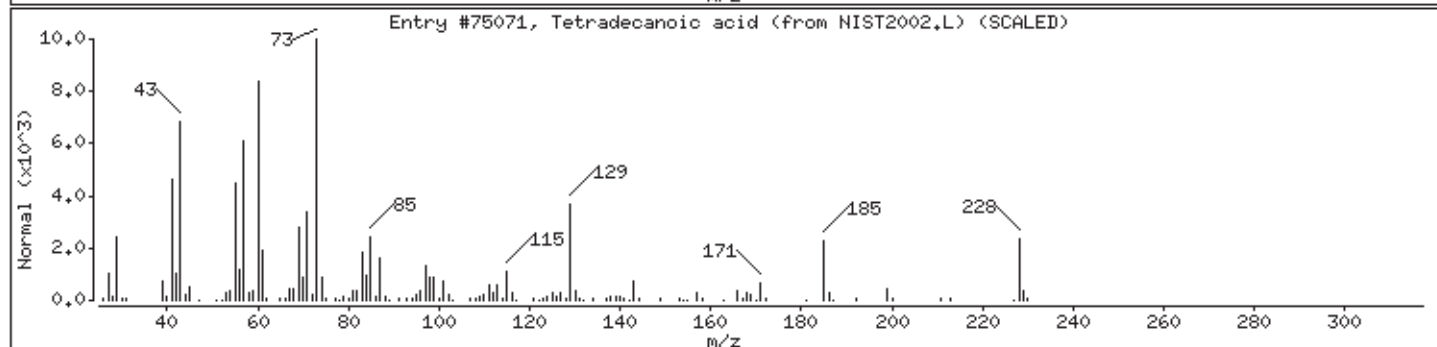
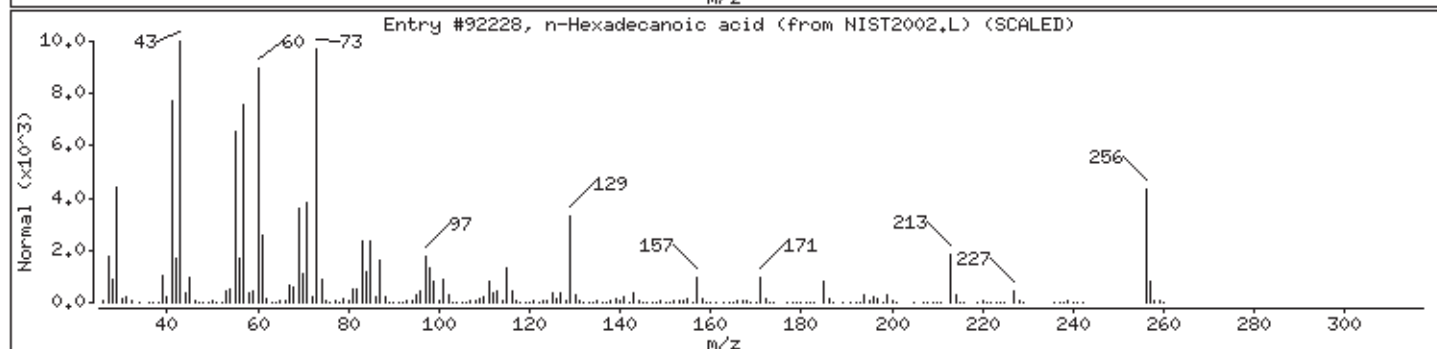
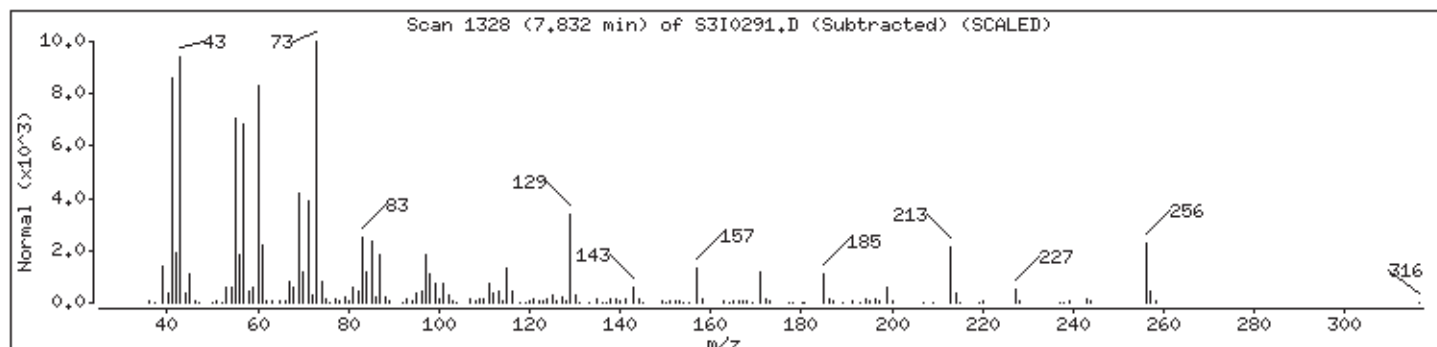
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92228	99	C16H32O2	256
Tetradecanoic acid	544-63-8	NIST2002.L	75071	94	C14H28O2	228



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

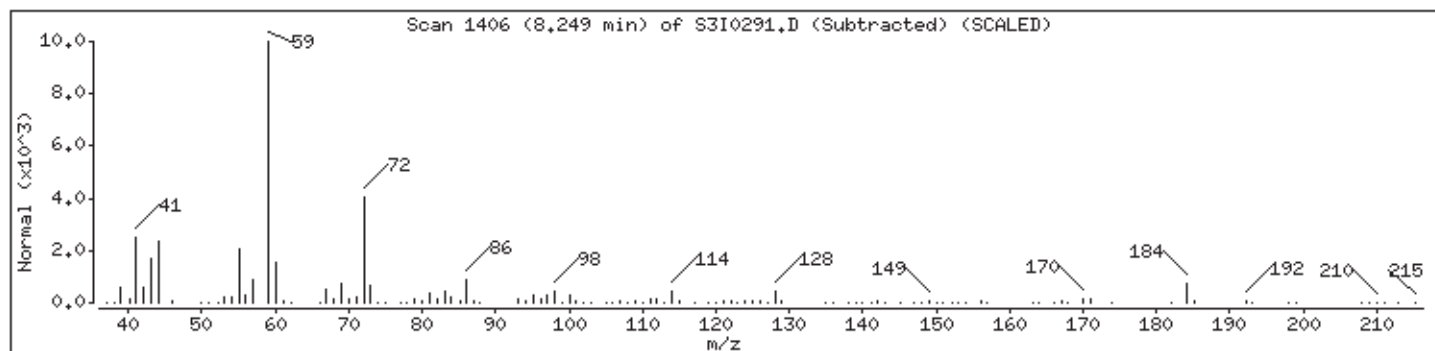
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0291.D

Date : 11-MAY-2012 14:56

Client ID: MW-3

Instrument: S3.i

Sample Info: L0935-03B,,66049

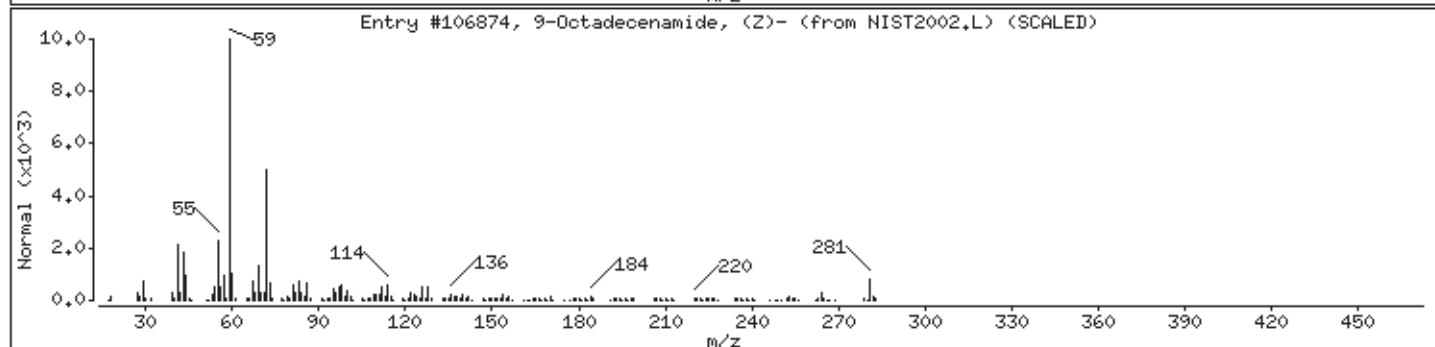
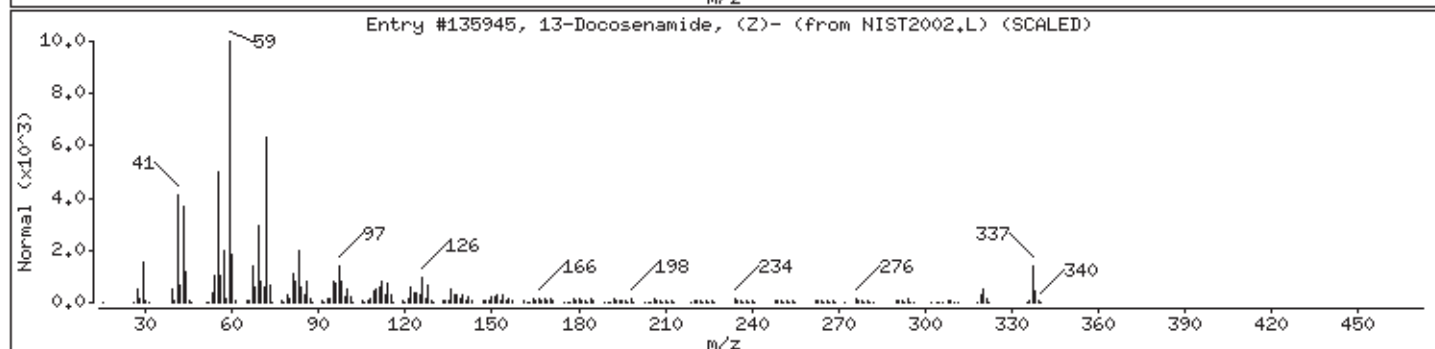
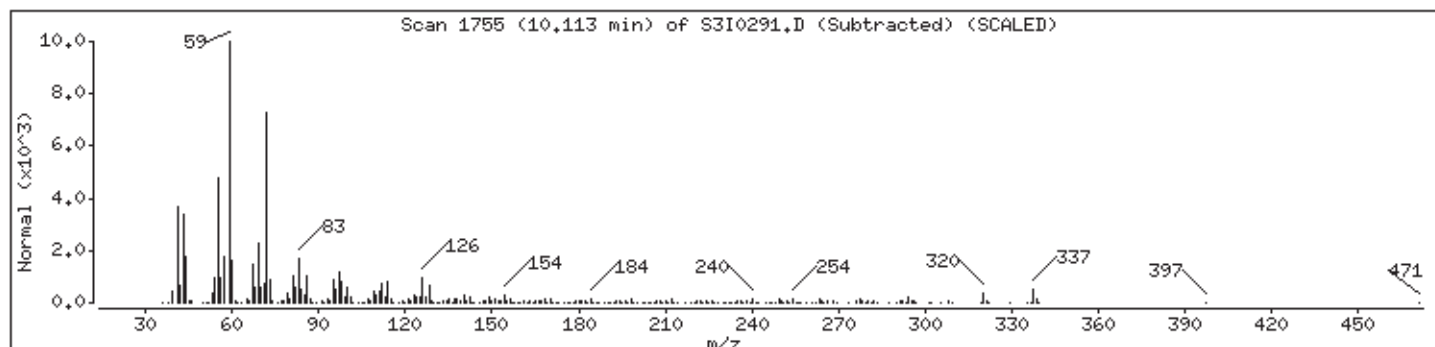
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135945	94	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	87	C18H35NO	281



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3RX

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-03BRE
Sample wt/vol: 700 (g/mL) ML	Lab File ID: S3I0422.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/16/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/16/2012
GPC Cleanup:(Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	14	U
111-44-4	Bis(2-chloroethyl)ether	14	U
95-57-8	2-Chlorophenol	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
95-48-7	2-Methylphenol	14	U
108-60-1	2,2'-oxybis(1-Chloropropane)	14	U
106-44-5	4-Methylphenol	14	U
621-64-7	N-Nitroso-di-n-propylamine	14	U
67-72-1	Hexachloroethane	14	U
98-95-3	Nitrobenzene	14	U
78-59-1	Isophorone	14	U
88-75-5	2-Nitrophenol	14	U
105-67-9	2,4-Dimethylphenol	14	U
120-83-2	2,4-Dichlorophenol	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U
91-20-3	Naphthalene	14	U
106-47-8	4-Chloroaniline	14	U
111-91-1	Bis(2-chloroethoxy)methane	14	U
87-68-3	Hexachlorobutadiene	14	U
59-50-7	4-Chloro-3-methylphenol	14	U
91-57-6	2-Methylnaphthalene	14	U
77-47-4	Hexachlorocyclopentadiene	14	U
88-06-2	2,4,6-Trichlorophenol	14	U
95-95-4	2,4,5-Trichlorophenol	29	U
91-58-7	2-Chloronaphthalene	14	U
88-74-4	2-Nitroaniline	29	U
131-11-3	Dimethylphthalate	14	U
208-96-8	Acenaphthylene	14	U
606-20-2	2,6-Dinitrotoluene	14	U
99-09-2	3-Nitroaniline	29	U
83-32-9	Acenaphthene	14	U
51-28-5	2,4-Dinitrophenol	29	U
100-02-7	4-Nitrophenol	29	U
132-64-9	Dibenzofuran	14	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3RX

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-03BRE
Sample wt/vol: 700 (g/mL) ML	Lab File ID: S3I0422.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/16/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/16/2012
GPC Cleanup:(Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
121-14-2	2,4-Dinitrotoluene	14	U
84-66-2	Diethylphthalate	14	U
7005-72-3	4-Chlorophenyl-phenylether	14	U
86-73-7	Fluorene	14	U
100-01-6	4-Nitroaniline	29	U
534-52-1	4,6-Dinitro-2-methylphenol	29	U
86-30-6	N-Nitrosodiphenylamine	14	U
101-55-3	4-Bromophenyl-phenylether	14	U
118-74-1	Hexachlorobenzene	14	U
87-86-5	Pentachlorophenol	29	U
85-01-8	Phenanthrene	14	U
120-12-7	Anthracene	14	U
86-74-8	Carbazole	14	U
84-74-2	Di-n-butylphthalate	14	U
206-44-0	Fluoranthene	14	U
129-00-0	Pyrene	14	U
85-68-7	Butylbenzylphthalate	14	U
91-94-1	3,3'-Dichlorobenzidine	14	U
56-55-3	Benzo(a)anthracene	14	U
218-01-9	Chrysene	14	U
117-81-7	Bis(2-ethylhexyl)phthalate	14	U
117-84-0	Di-n-octylphthalate	14	U
205-99-2	Benzo(b)fluoranthene	14	U
207-08-9	Benzo(k)fluoranthene	14	U
50-32-8	Benzo(a)pyrene	14	U
193-39-5	Indeno(1,2,3-cd)pyrene	14	U
53-70-3	Dibenzo(a,h)anthracene	14	U
191-24-2	Benzo(g,h,i)perylene	14	U

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3RX

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-03BRE
Sample wt/vol: 700 (g/mL) ML Lab File ID: S3I0422.D
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	57-10-3	n-Hexadecanoic acid	7.768	39	NJ
02	57-11-4	Octadecanoic acid	8.388	6.8	NJ

²EPA-designated Registry Number.

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0422.D
Lab Smp Id: L0935-03BRE Client Smp ID: MW-3RE
Inj Date : 16-MAY-2012 21:21
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-03BRE,,66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	700.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON - COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
\$ 3 2-Fluorophenol	112	1.490	1.507 (0.689)		252262	24.5733	35
\$ 5 Phenol-d5	99	2.356	2.383 (1.089)		243913	17.0287	24
* 12 1,4-Dichlorobenzene-d4	152	2.164	2.169 (1.000)		302358	40.0000	
\$ 22 Nitrobenzene-d5	82	2.810	2.821 (0.718)		487460	35.7732	51
* 31 Naphthalene-d8	136	3.916	3.921 (1.000)		1189066	40.0000	
\$ 41 2-Fluorobiphenyl	172	5.246	5.252 (0.897)		982270	37.5225	54
* 48 Acenaphthene-d10	164	5.850	5.861 (1.000)		793045	40.0000	
\$ 60 2,4,6-Tribromophenol	330	6.619	6.630 (0.928)		211986	49.8432	71
* 64 Phenanthrene-d10	188	7.132	7.137 (1.000)		1681049	40.0000	
\$ 72 Terphenyl-d14	244	8.467	8.473 (0.911)		1538553	37.6622	54
* 76 Chrysene-d12	240	9.295	9.306 (1.000)		2246056	40.0000	
78 bis(2-Ethylhexyl)phthalate	149	9.375	9.381 (1.009)		35724	1.03030	1(aH)
* 83 Perylene-d12	264	10.374	10.391 (1.000)		2294791	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.I\120516.B\S3I0422.D
 Report Date: 24-May-2012 10:36

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0422.D
 Lab Smp Id: L0935-03BRE Client Smp ID: MW-3RE
 Inj Date : 16-MAY-2012 21:21
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : L0935-03BRE,,66186
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
 Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8270C.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

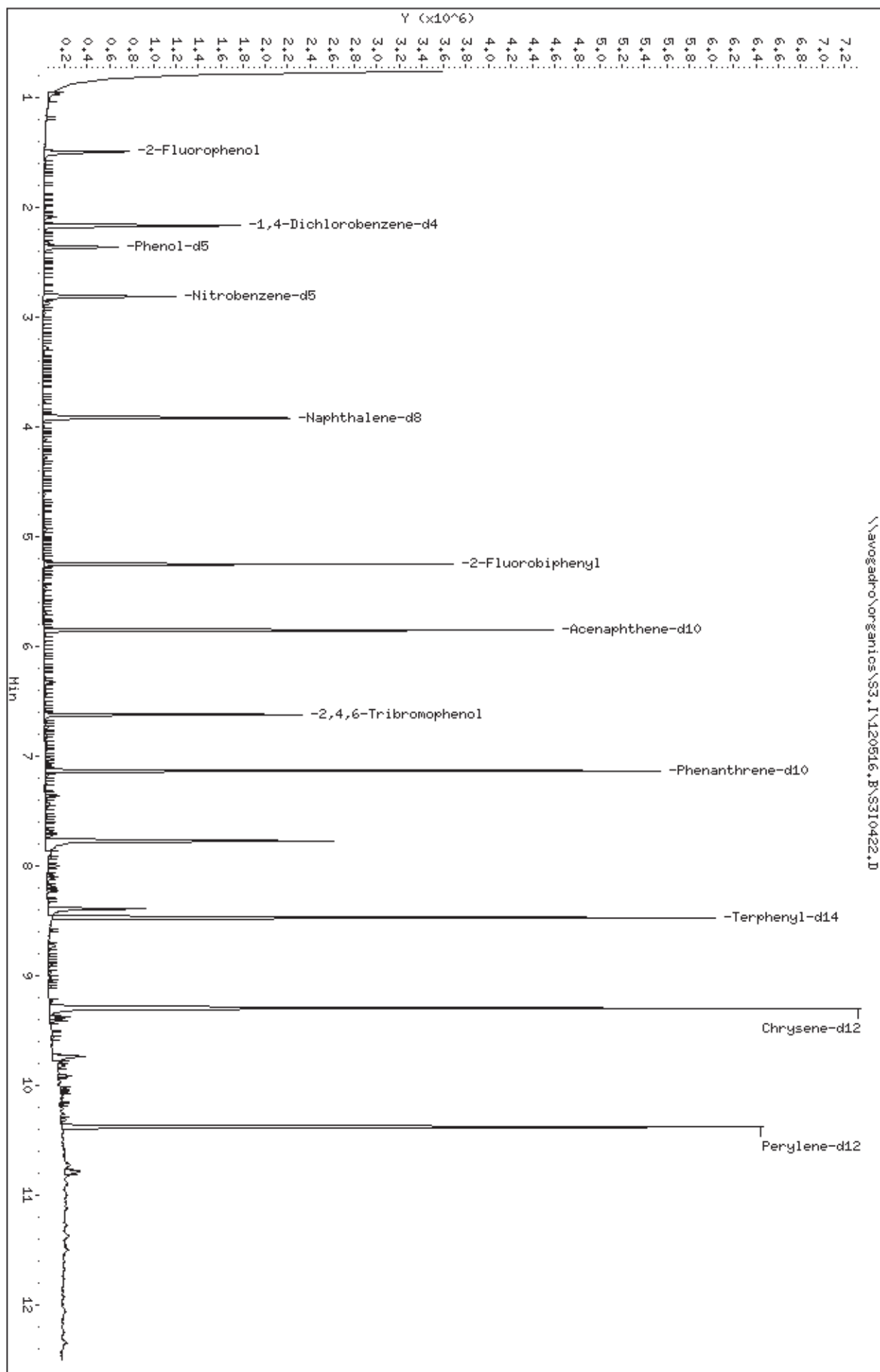
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	700.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 64 Phenanthrene-d10	7.132	4378967	40.000
* 76 Chrysene-d12	9.296	7861278	40.000

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ng)	FINAL(ug/L)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
n-Hexadecanoic acid CAS #: 57-10-3							
7.768	2994504	27.3535163	39	98	NIST2002.L	92228	64
Octadecanoic acid CAS #: 57-11-4							
8.388	936426	4.76474979	7	99	NIST2002.L	108841	76

Data File: \\avogadro\organics\S3.I\120516.B\S310422.D
 Date : 16-May-2012 21:21
 Client ID: MW-3RE
 Sample Info: L0935-03BRE,,66186
 Volume Injected (uL): 1.0
 Column phase: Rx1-SS11 HS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120516.B\S3I0422.D

Date : 16-MAY-2012 21:21

Client ID: MW-3RE

Instrument: S3.i

Sample Info: L0935-03BRE,,66186

Volume Injected (uL): 1.0

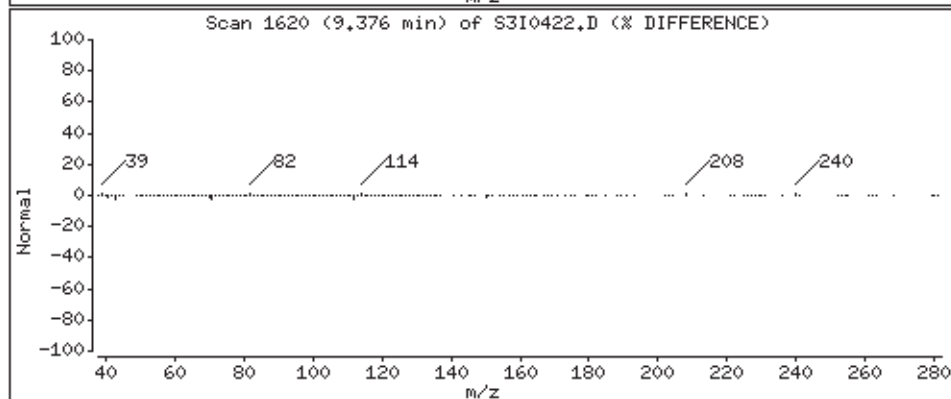
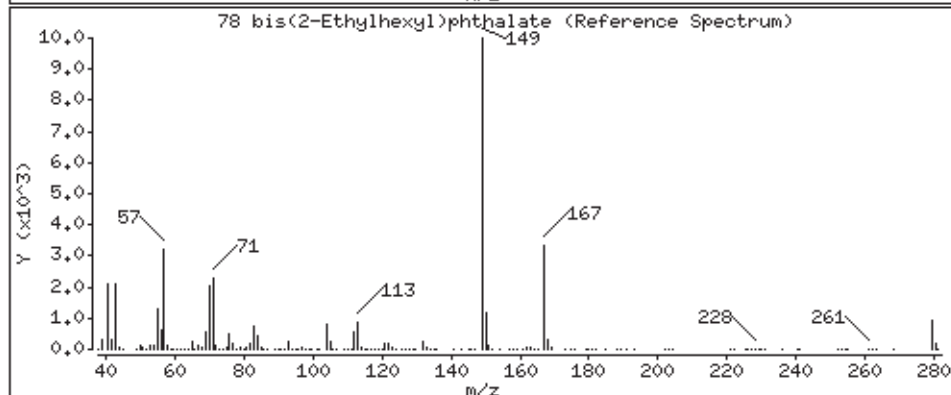
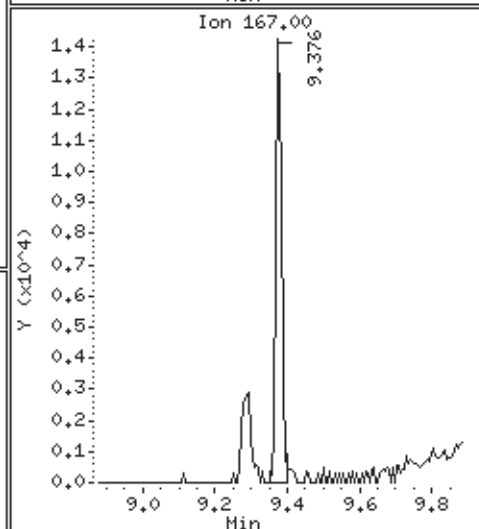
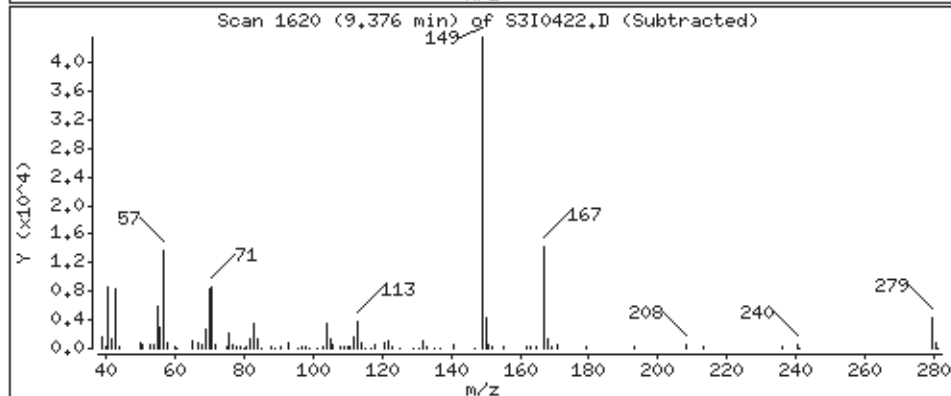
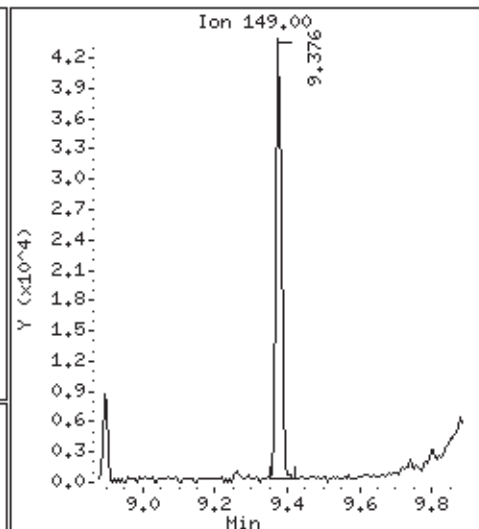
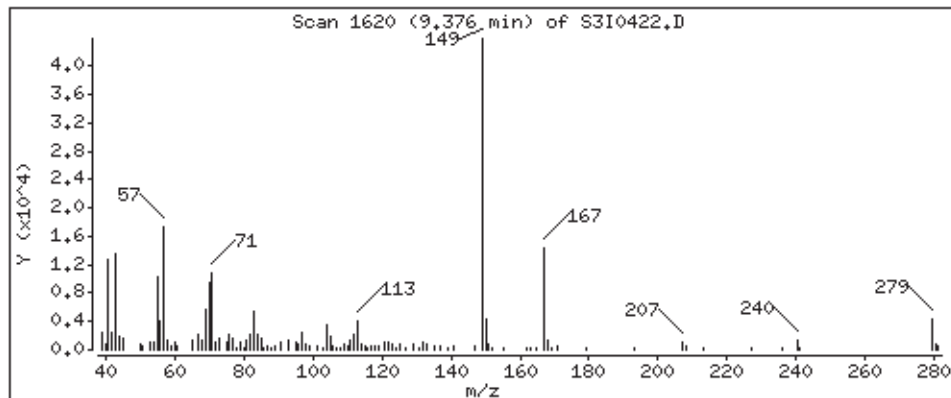
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

78 bis(2-Ethylhexyl)phthalate

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3,I\120516,B\S3I0422.D

Date : 16-MAY-2012 21:21

Client ID: MW-3RE

Instrument: S3.i

Sample Info: L0935-03BRE,,66186

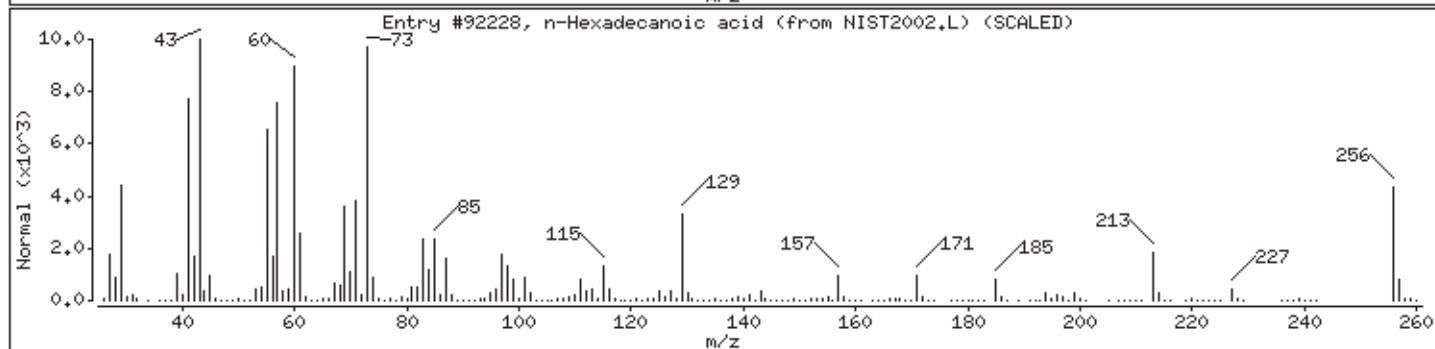
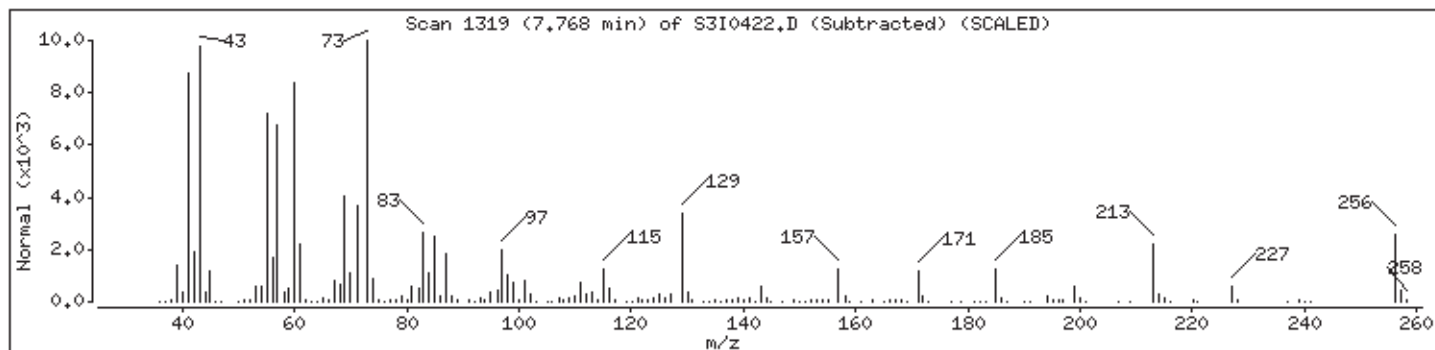
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92228	98	C16H32O2	256



Data File: \\avogadro\organics\S3,I\120516,B\S3I0422.D

Date : 16-MAY-2012 21:21

Client ID: MW-3RE

Instrument: S3.i

Sample Info: L0935-03BRE,,66186

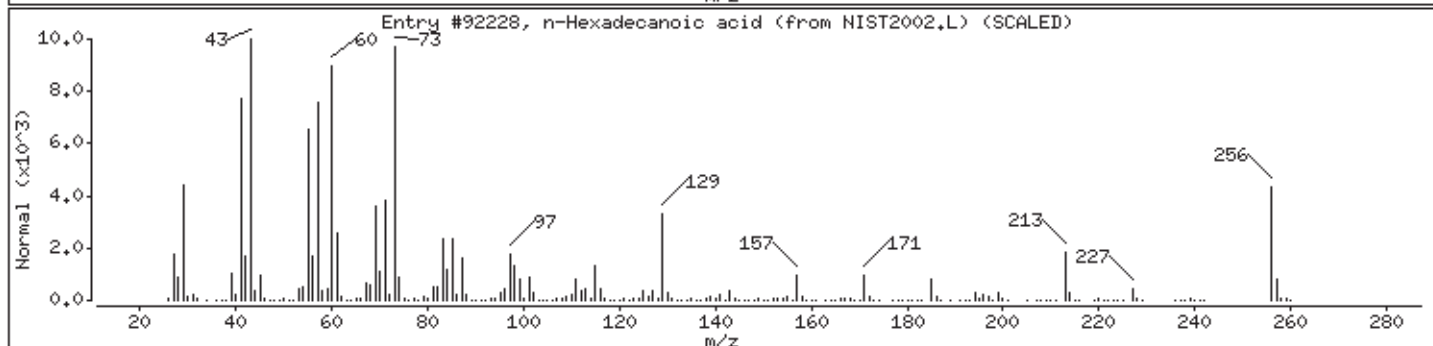
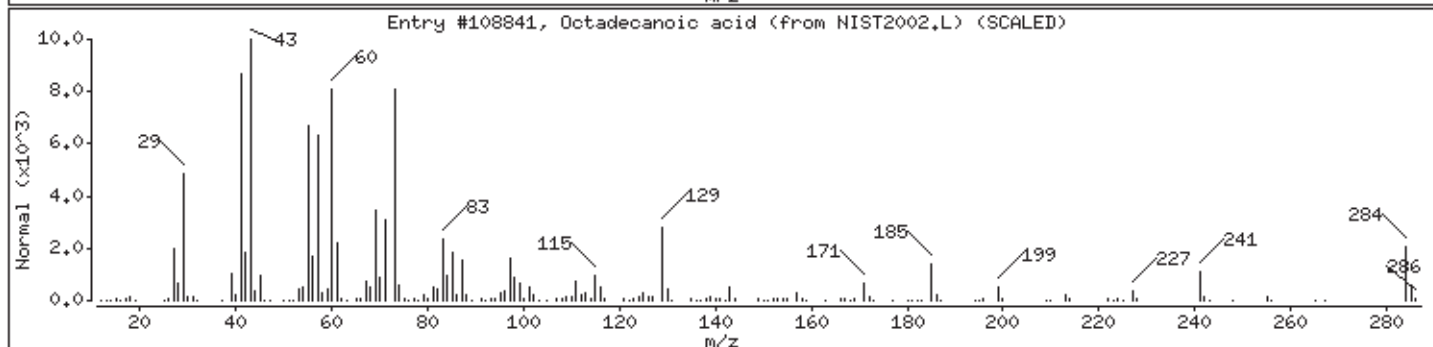
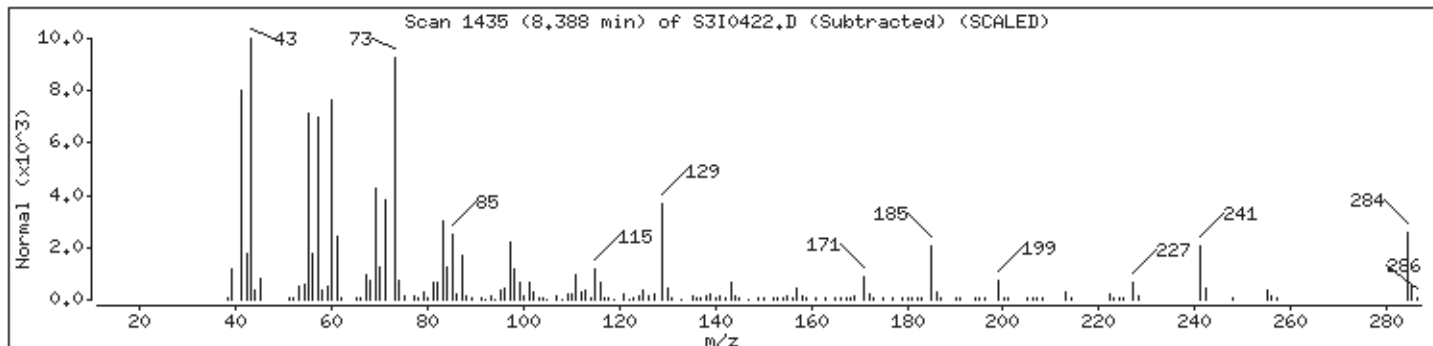
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIST2002.L	108841	99	C18H36O2	284
n-Hexadecanoic acid	57-10-3	NIST2002.L	92228	93	C16H32O2	256



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-05B
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0292.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup: (Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	15	
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	4.2	J
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	7.8	J
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	2.8	J
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0292.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	40	
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	1.8	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	4.4	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0292.D

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	611-14-3	Benzene, 1-ethyl-2-methyl- (	1.870	13	NJ
02	108-67-8	Benzene, 1,3,5-trimethyl-	1.928	13	NJ
03	611-14-3	Benzene, 1-ethyl-2-methyl- (	1.998	12	NJ
04	526-73-8	Benzene, 1,2,3-trimethyl-	2.115	47	NJ
05	1758-88-9	Benzene, 2-ethyl-1,4-dimethy	2.623	16	NJ
06	119-64-2	Naphthalene, 1,2,3,4-tetrahy	3.819	8.4	NJ
07		Unknown (4.10253)	4.103	5.0	J
08		Unknown (4.74360)	4.744	4.3	J
09		Unknown (4.79702)	4.797	6.0	J
10		Unknown (4.83442)	4.834	14	J
11		Unknown (4.91455)	4.915	11	J
12		Unknown (4.99467)	4.995	13	J
13		Unknown (5.02138)	5.021	22	J
14		Unknown (5.05878)	5.059	14	J
15	57-10-3	n-Hexadecanoic acid	7.831	18	NJ
16	112-84-5	13-Docosenamide, (Z)-	10.112	19	NJ

²EPA-designated Registry Number.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D
Report Date: 15-May-2012 17:18

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0292.D
Lab Smp Id: L0935-05B Client Smp ID: DUP-1
Inj Date : 11-MAY-2012 15:16
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-05B,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.511	1.518	(0.664)	196298	20.0907	20
\$ 5 Phenol-d5	99	2.339	2.346	(1.028)	215783	15.8282	16
6 Phenol	94	2.350	2.357	(1.033)	217911	15.2448	15
* 12 1,4-Dichlorobenzene-d4	152	2.275	2.282	(1.000)	287776	40.0000	
20 4-Methylphenol	108	3.274	3.260	(1.439)	14782	1.33893	1(a)
\$ 22 Nitrobenzene-d5	82	2.948	2.955	(0.728)	465860	34.5742	34
25 2-Nitrophenol	139	3.520	3.527	(0.869)	26128	4.16210	4(a)
* 31 Naphthalene-d8	136	4.049	4.056	(1.000)	1175785	40.0000	
32 Naphthalene	128	4.075	4.082	(1.007)	243014	7.83417	8(a)
\$ 41 2-Fluorobiphenyl	172	5.347	5.348	(0.899)	997925	38.4073	38
* 48 Acenaphthene-d10	164	5.945	5.952	(1.000)	787125	40.0000	
51 4-Nitrophenol	109	6.527	6.524	(1.098)	10382	2.76549	3(aQ)
54 Diethylphthalate	149	6.410	6.417	(1.078)	1080389	40.3950	40
\$ 60 2,4,6-Tribromophenol	330	6.693	6.700	(0.927)	172945	43.0230	43
* 64 Phenanthrene-d10	188	7.222	7.229	(1.000)	1588862	40.0000	
68 Di-n-butylphthalate	149	7.772	7.774	(1.076)	80418	1.76551	2(a)
\$ 72 Terphenyl-d14	244	8.557	8.559	(0.912)	1581173	41.6464	42
* 76 Chrysene-d12	240	9.385	9.398	(1.000)	2087452	40.0000	
78 bis(2-Ethylhexyl)phthalate	149	9.466	9.472	(1.009)	140771	4.36840	4(a)
* 83 Perylene-d12	264	10.465	10.482	(1.000)	2109626	40.0000	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D
Report Date: 15-May-2012 17:18

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D
 Report Date: 15-May-2012 17:18

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0292.D
 Lab Smp Id: L0935-05B Client Smp ID: DUP-1
 Inj Date : 11-MAY-2012 15:16
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : L0935-05B,,66049
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
 Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8270C.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 12 1,4-Dichlorobenzene-d4	2.276	2114453	40.000
* 31 Naphthalene-d8	4.049	7290813	40.000
* 48 Acenaphthene-d10	5.946	3655832	40.000
* 64 Phenanthrene-d10	7.222	4094152	40.000
* 83 Perylene-d12	10.465	5639209	40.000

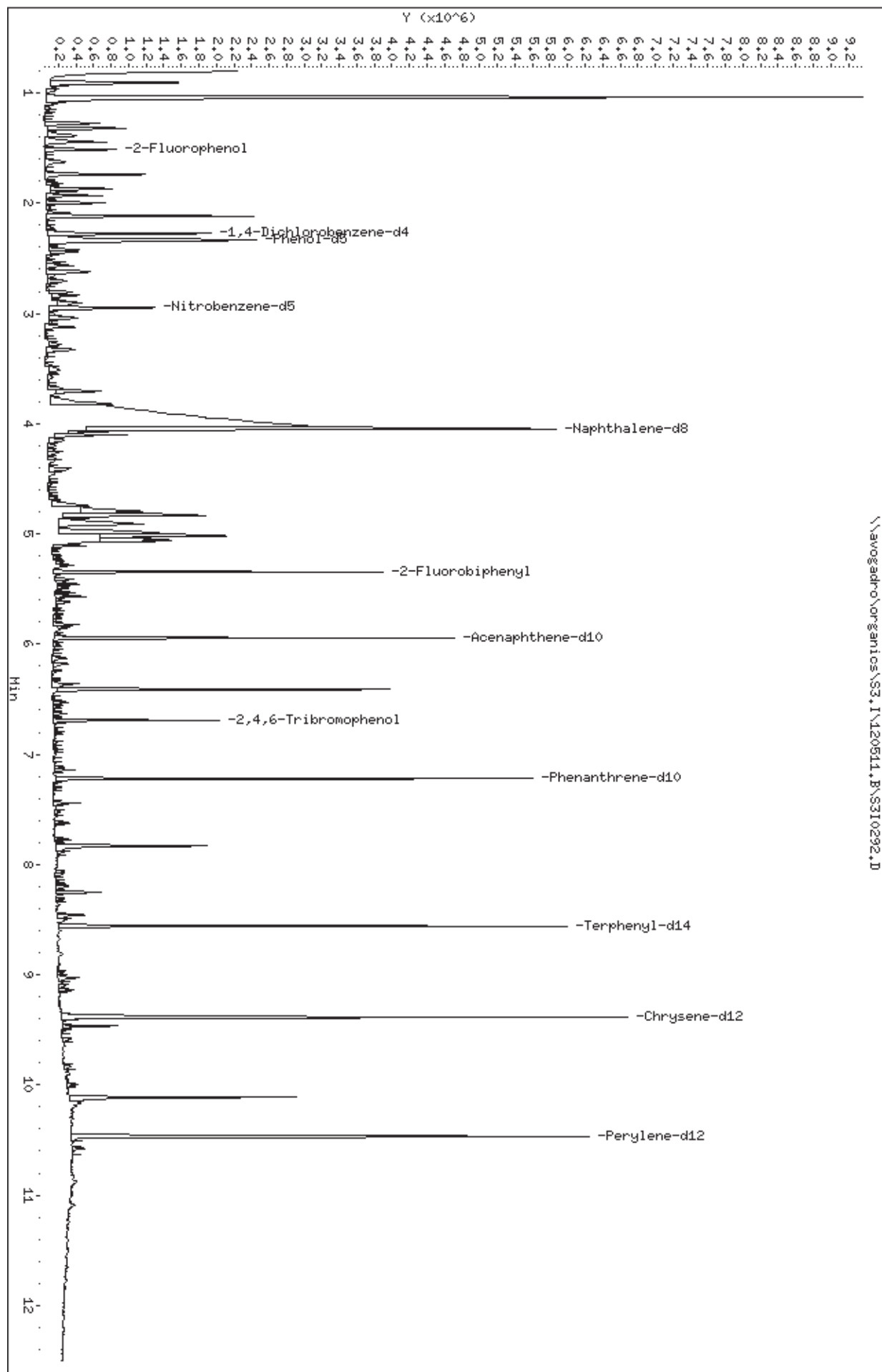
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng)	FINAL (ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Benzene, 1-ethyl-2-methyl-					CAS #: 611-14-3		
1.870	697101	13.1873478	13	94	NIST2002.L	9130	12
Benzene, 1,3,5-trimethyl-					CAS #: 108-67-8		
1.928	663410	12.5500086	12	97	NIST2002.L	9122	12

Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D
Report Date: 15-May-2012 17:18

RT	CONCENTRATIONS			QUAL	QUANT			CPND #
	AREA	ON-COL (ng)	FINAL (ug/L)		LIBRARY	LIB	ENTRY	
====	====	=====	=====	====	=====		=====	=====
Benzene, 1-ethyl-2-methyl-					CAS #: 611-14-3			
1.998	626241	11.8468621	12	95	NIST2002.L		9130	12
Benzene, 1,2,3-trimethyl-					CAS #: 526-73-8			
2.115	2492226	47.1464852	47	97	NIST2002.L		9123	12
Benzene, 2-ethyl-1,4-dimethyl-					CAS #: 1758-88-9			
2.623	827324	15.6508278	16	95	NIST2002.L		14365	12
Naphthalene, 1,2,3,4-tetrahydro-					CAS #: 119-64-2			
3.819	1523022	8.35583836	8	93	NIST2002.L		13613	31
Unknown					CAS #:			
4.103	903903	4.95913165	5	0			0	31
Unknown					CAS #:			
4.744	792698	4.34902178	4	0			0	31
Unknown					CAS #:			
4.797	1095339	6.00942085	6	0			0	31
Unknown					CAS #:			
4.834	2473870	13.5725330	14	0			0	31
Unknown					CAS #:			
4.915	1915489	10.5090552	10	0			0	31
Unknown					CAS #:			
4.995	2313472	12.6925315	13	0			0	31
Unknown					CAS #:			
5.021	1998778	21.8694733	22	0			0	48
Unknown					CAS #:			
5.059	1283099	14.0389306	14	0			0	48
n-Hexadecanoic acid					CAS #: 57-10-3			
7.831	1798932	17.5756270	18	96	NIST2002.L		92227	64
13-Docosenamide, (Z)-					CAS #: 112-84-5			
10.112	2641598	18.7373636	19	95	NIST2002.L		135944	83

Data File: \\avogadro\organics\S3,I\120511,B\S3I0292.D
 Date : 11-May-2012 15:16
 Client ID: DUP-1
 Sample Info: L0935-05B,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

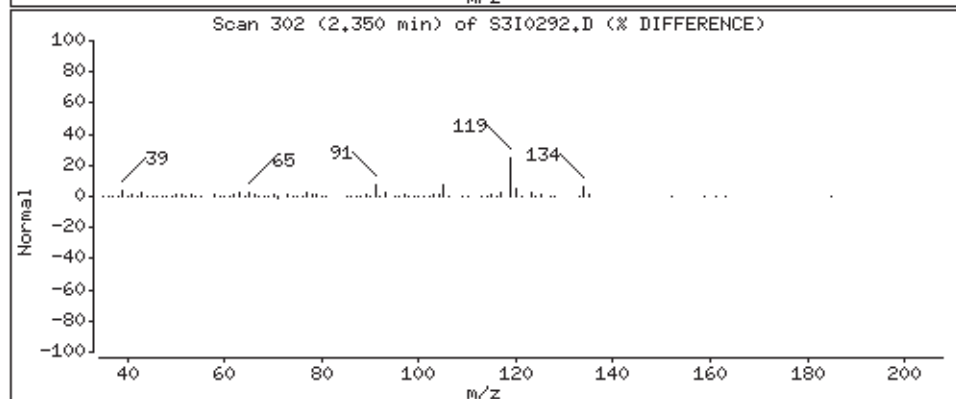
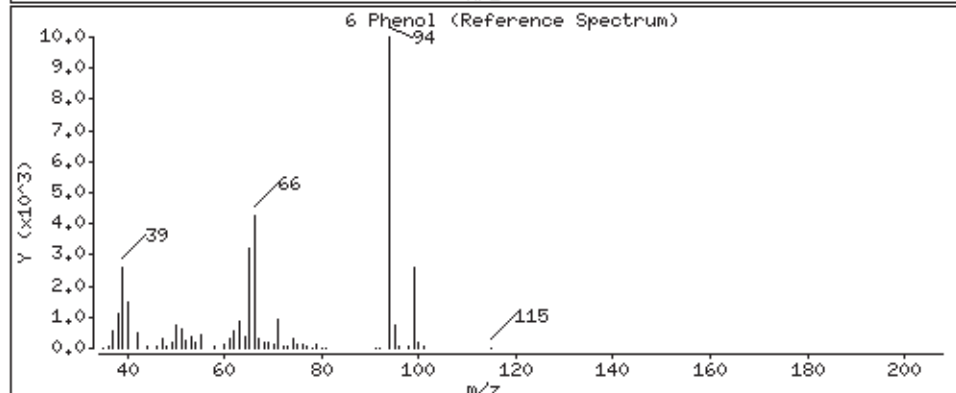
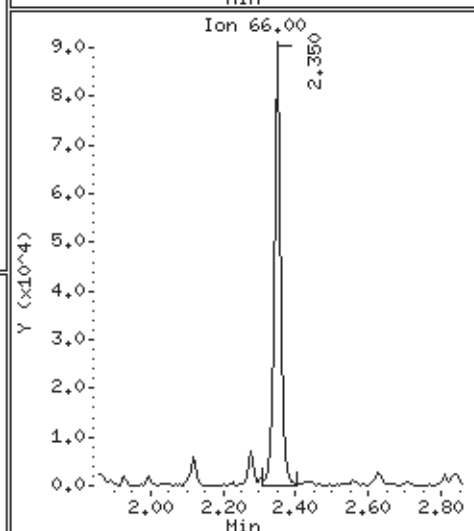
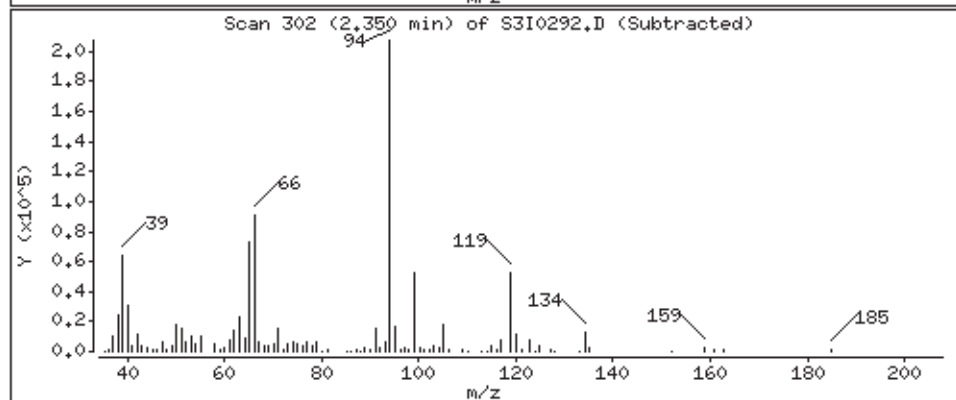
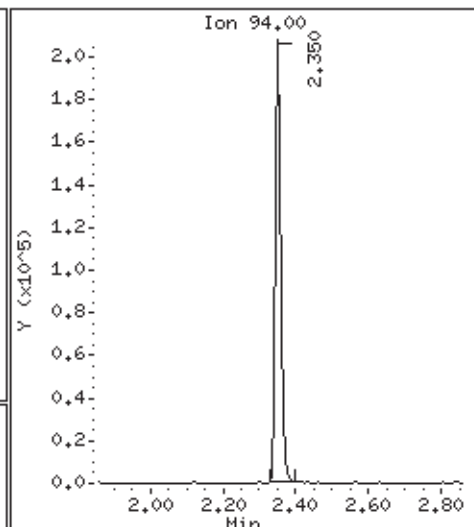
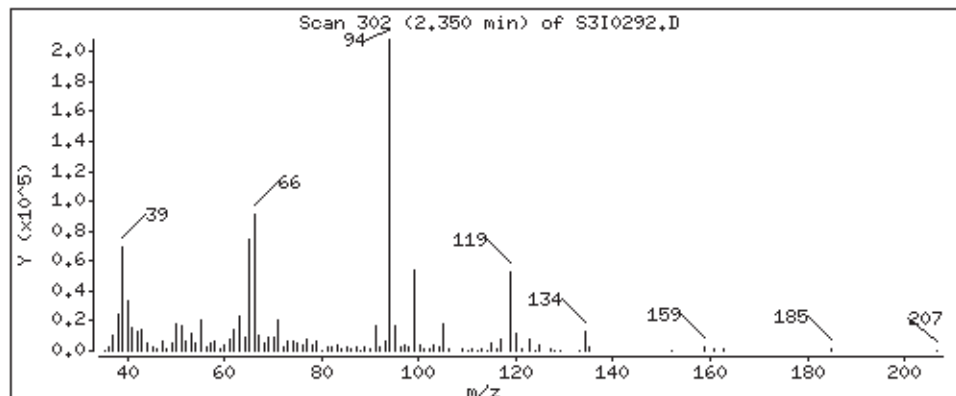
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

6 Phenol

Concentration: 15 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

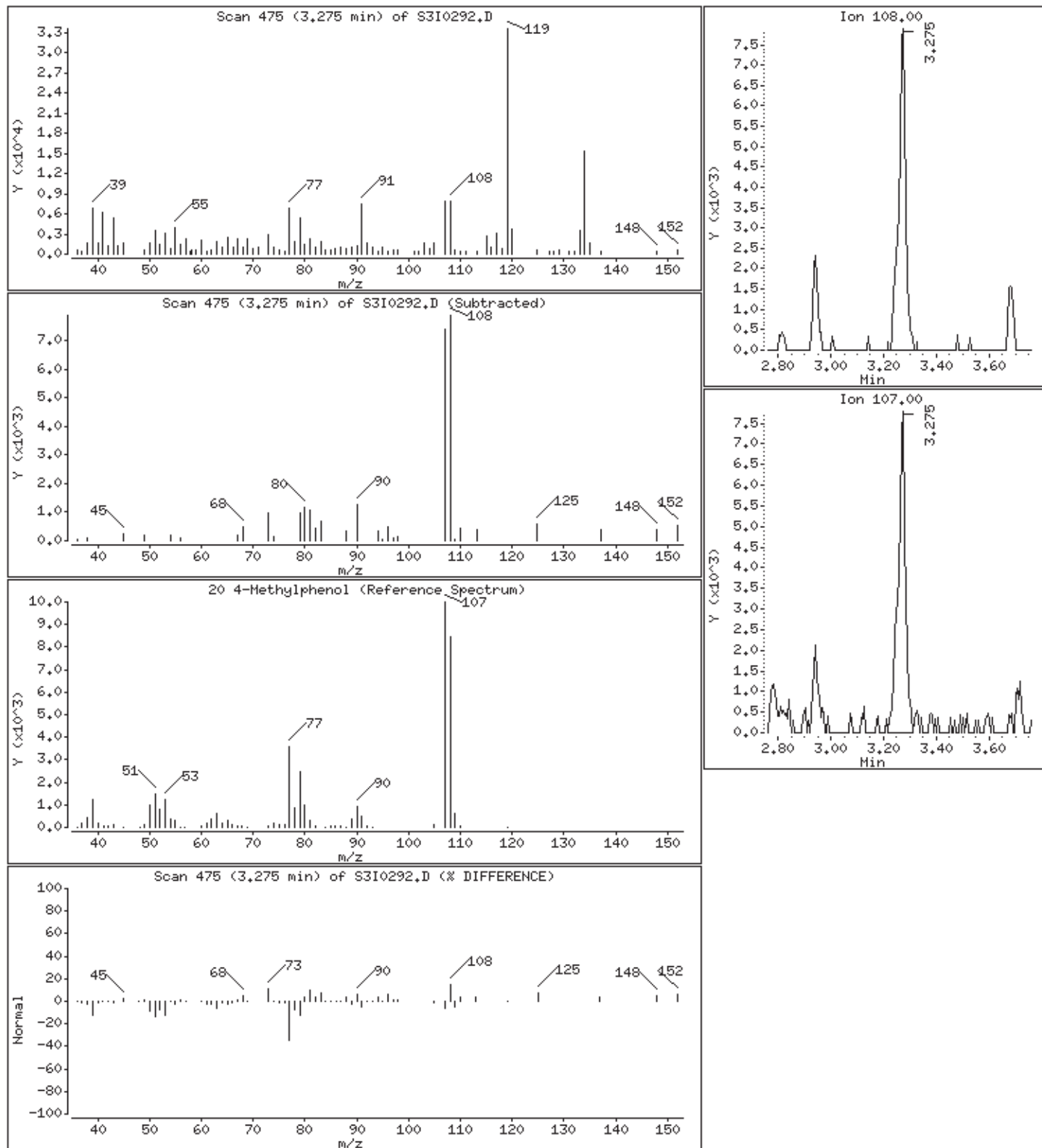
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

20 4-Methylphenol

Concentration: 1 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

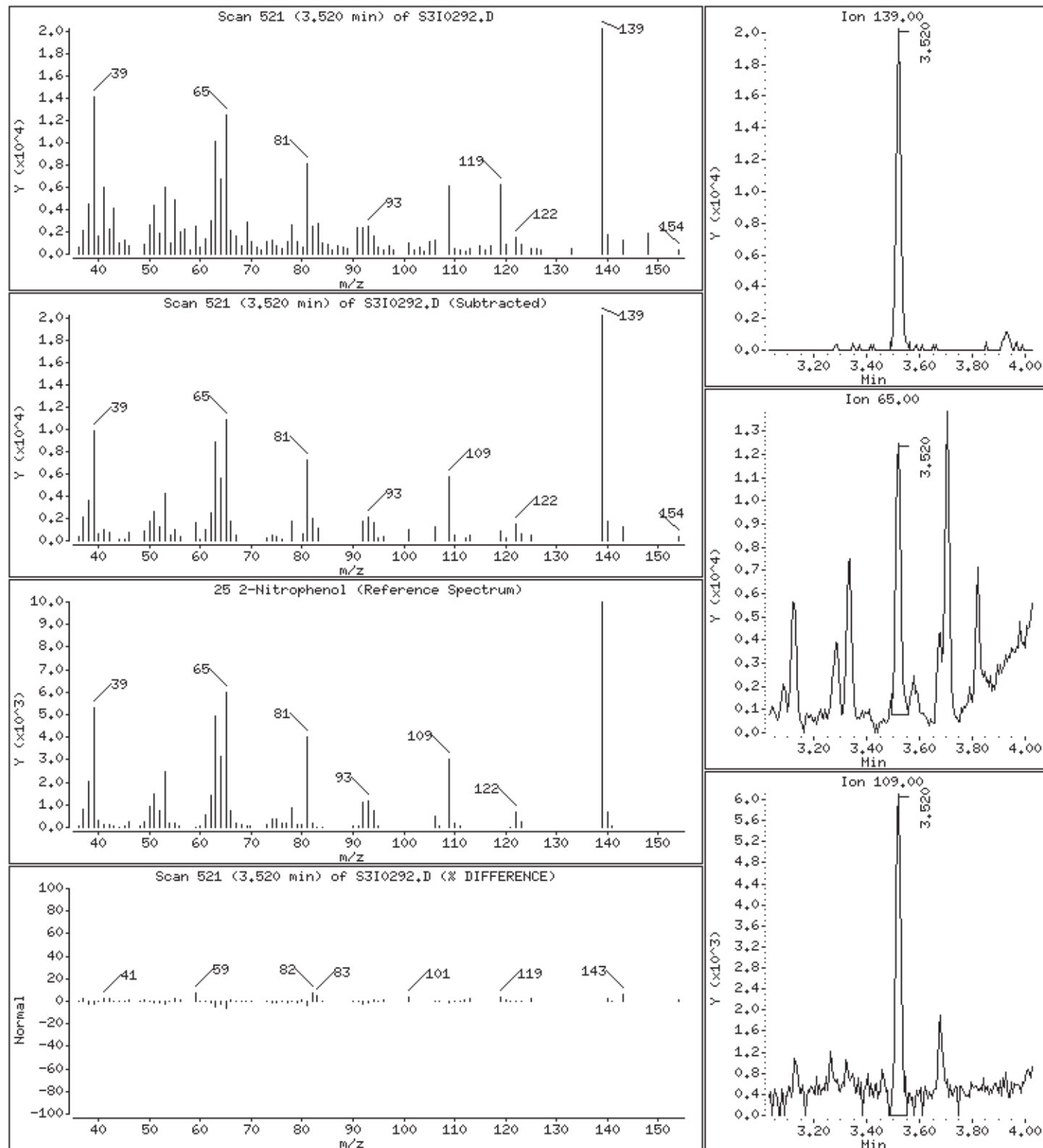
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

25 2-Nitrophenol

Concentration: 4 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

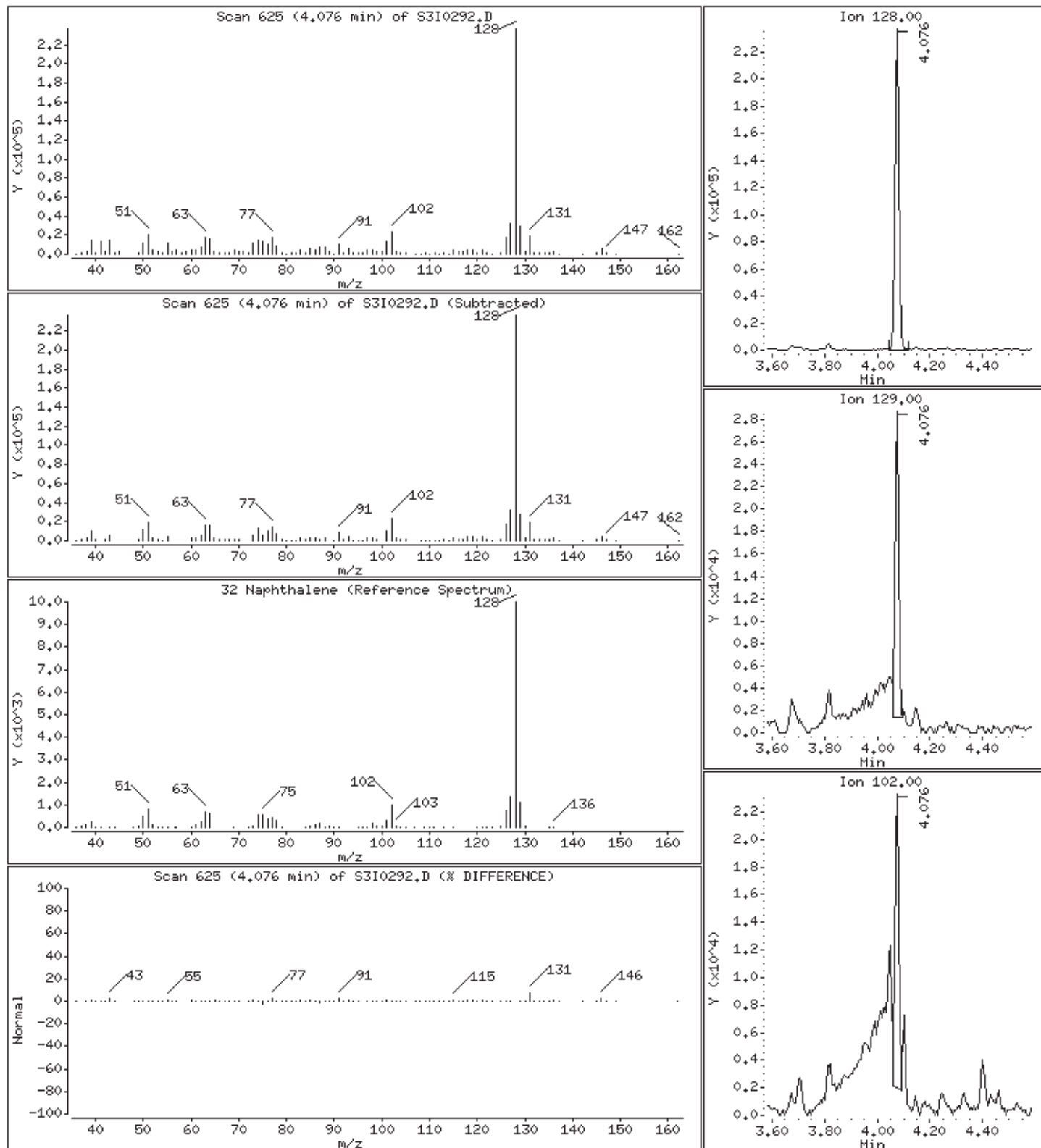
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

32 Naphthalene

Concentration: 8 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

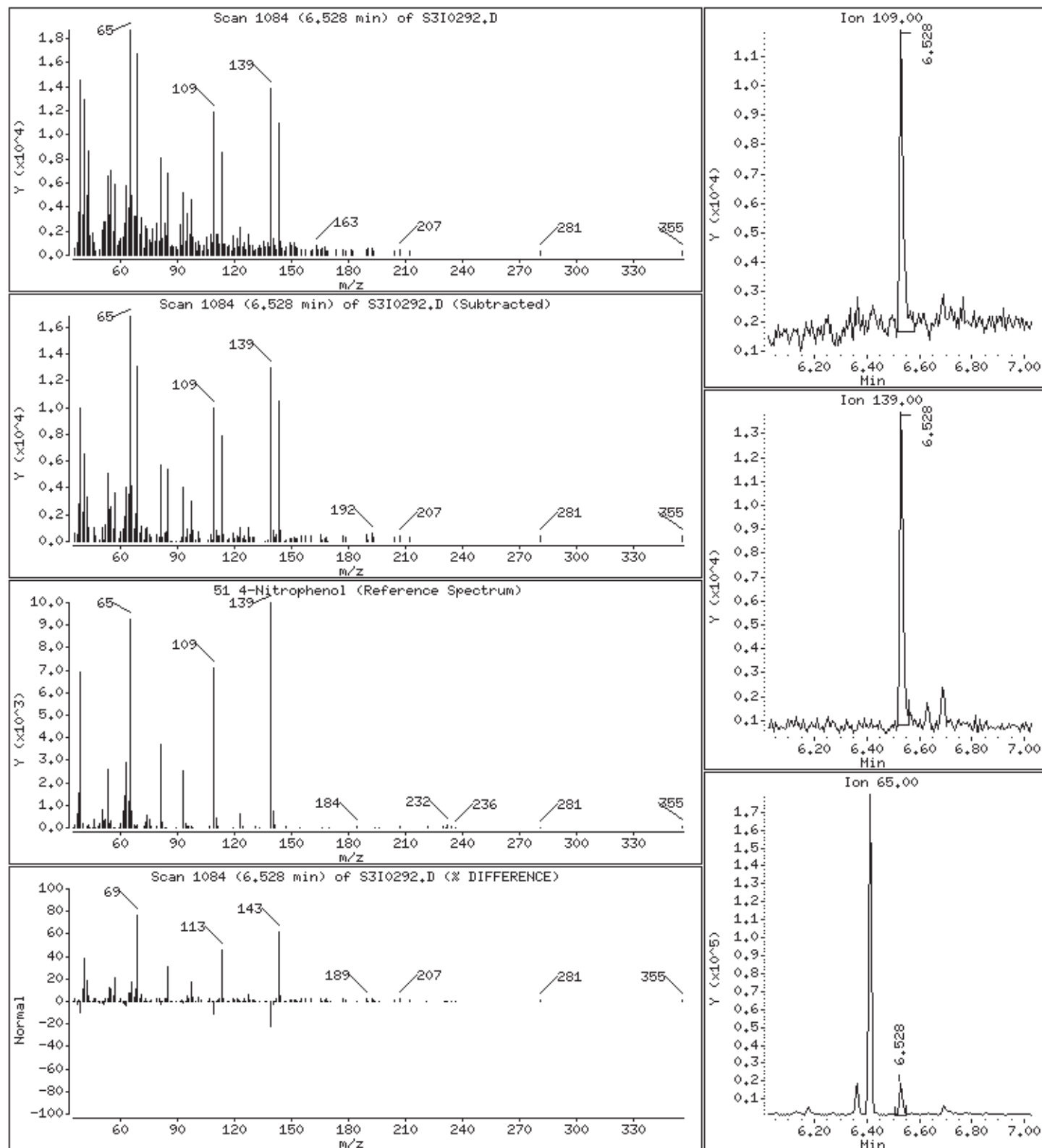
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

51 4-Nitrophenol

Concentration: 3 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

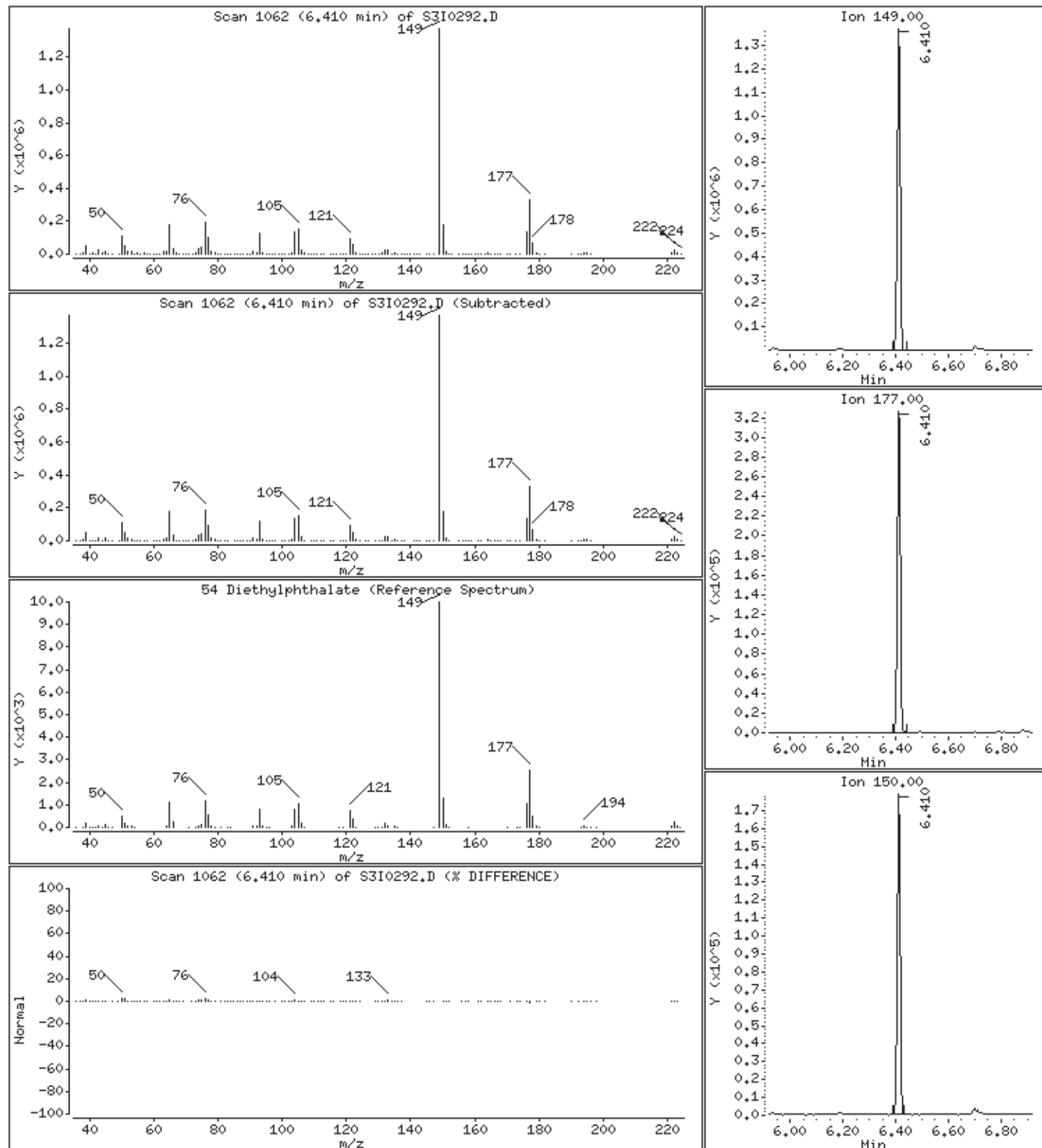
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

54 Diethylphthalate

Concentration: 40 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

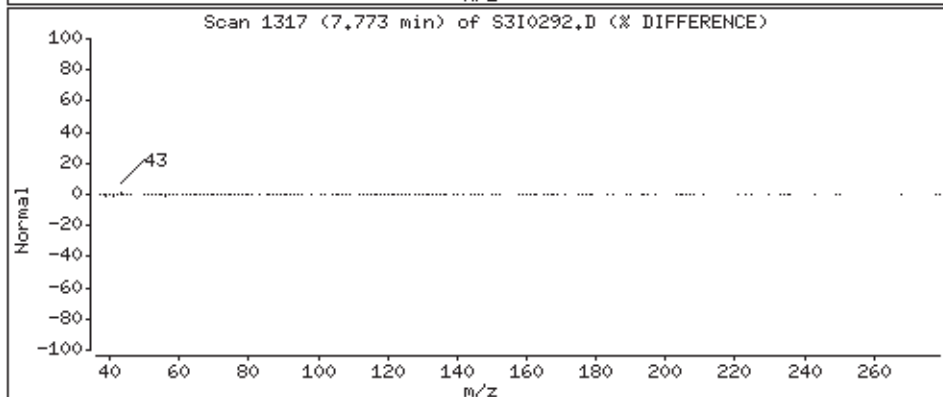
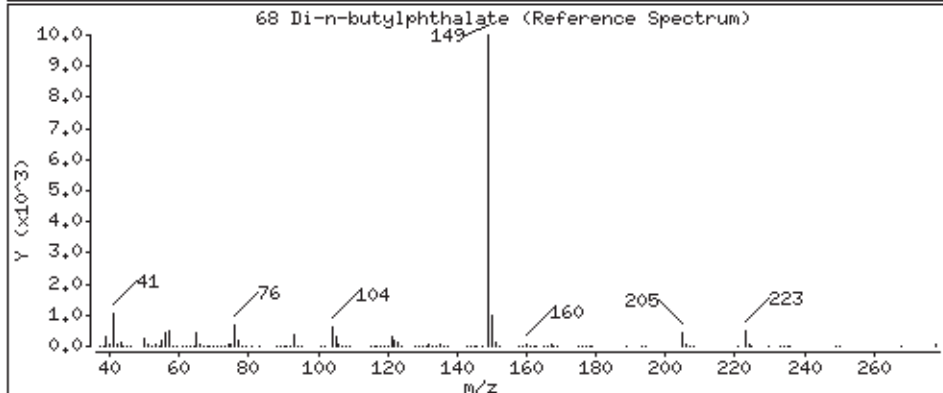
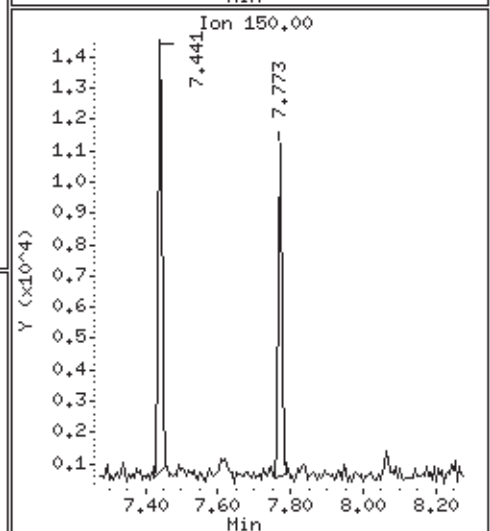
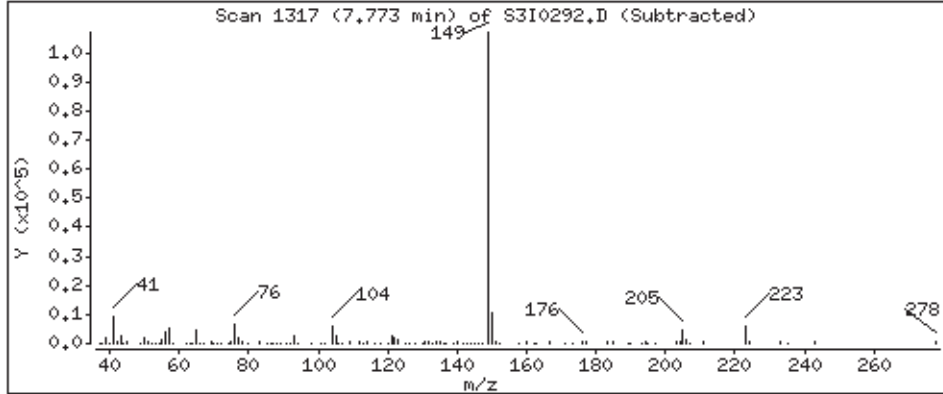
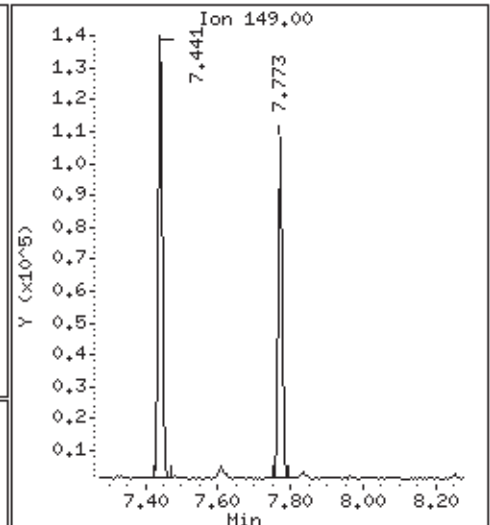
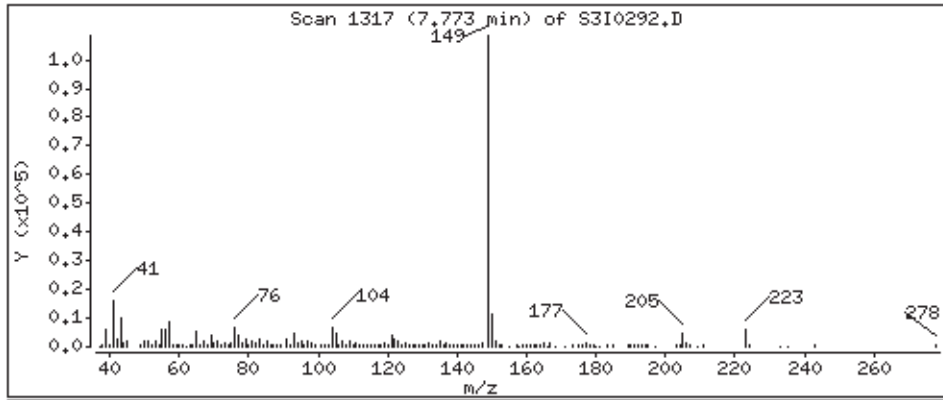
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

68 Di-n-butylphthalate

Concentration: 2 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

Volume Injected (uL): 1.0

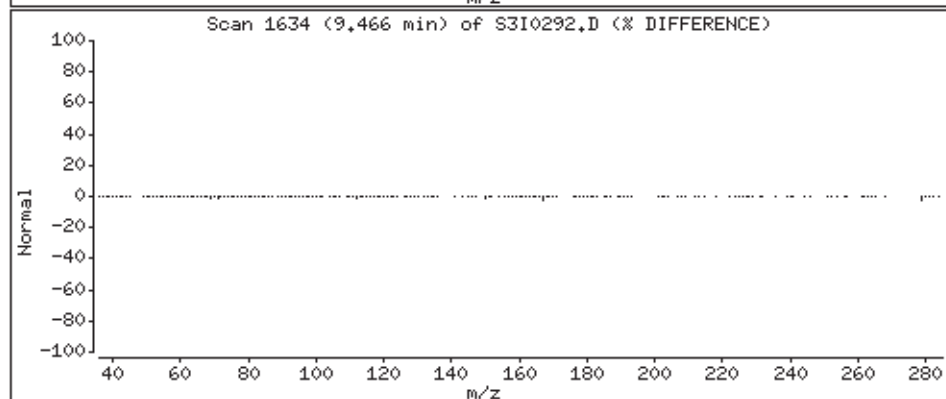
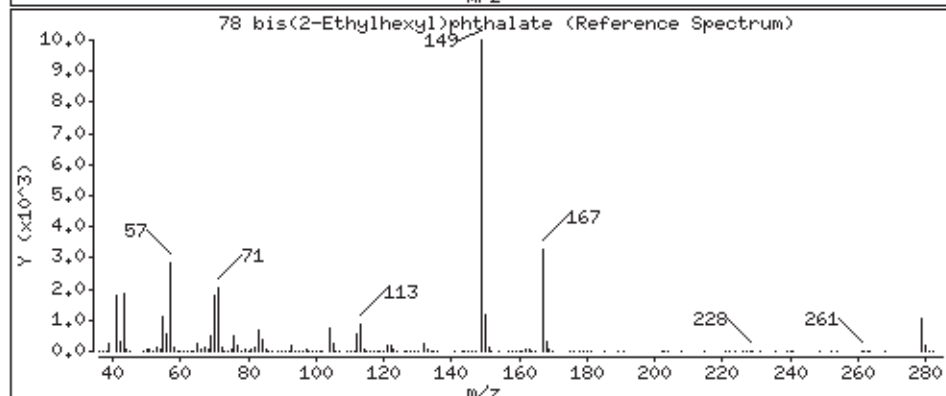
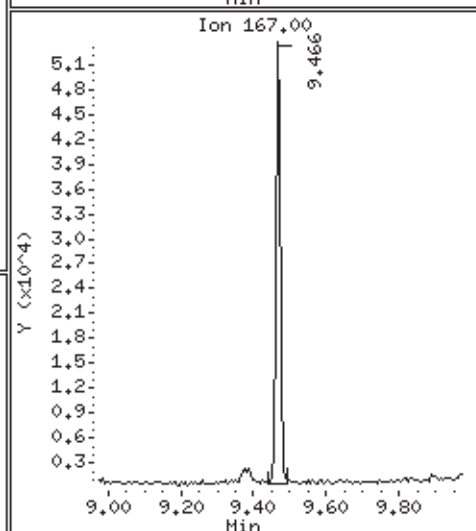
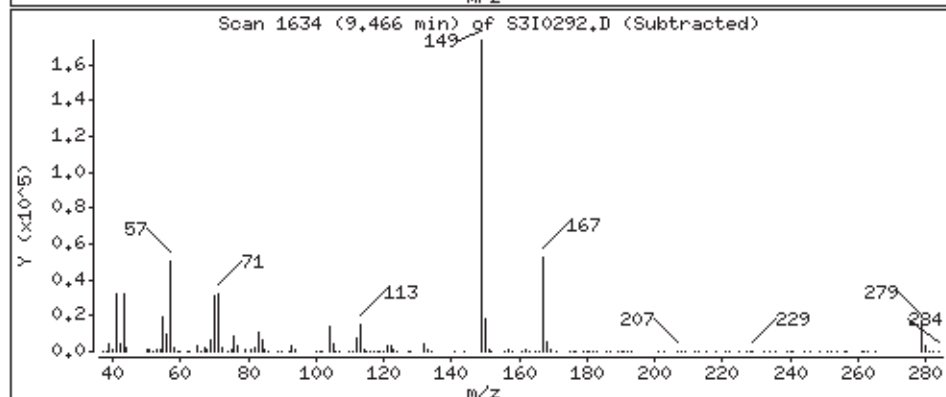
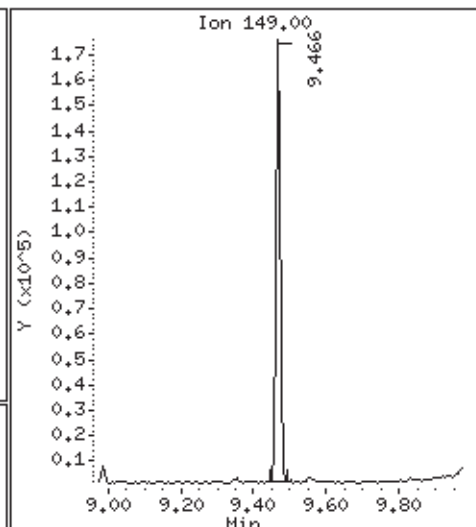
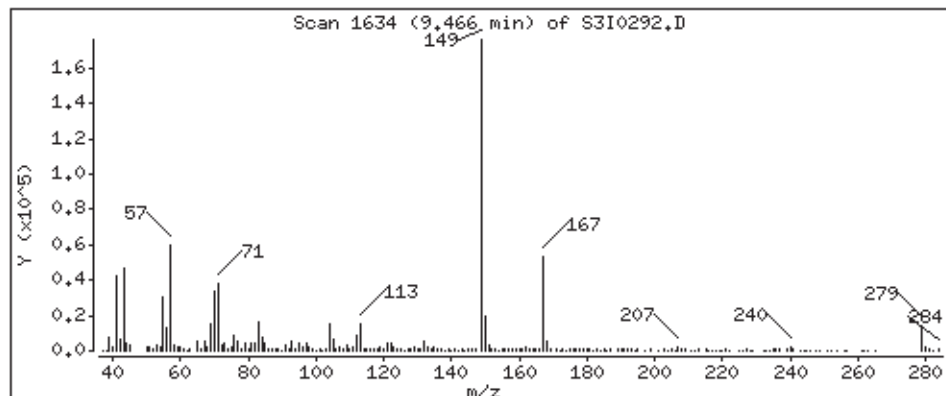
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

78 bis(2-Ethylhexyl)phthalate

Concentration: 4 ug/L



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

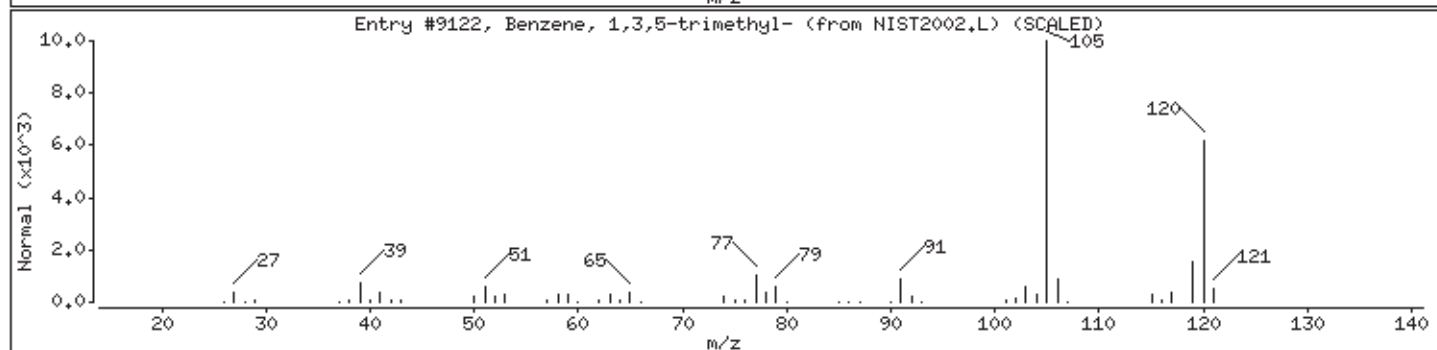
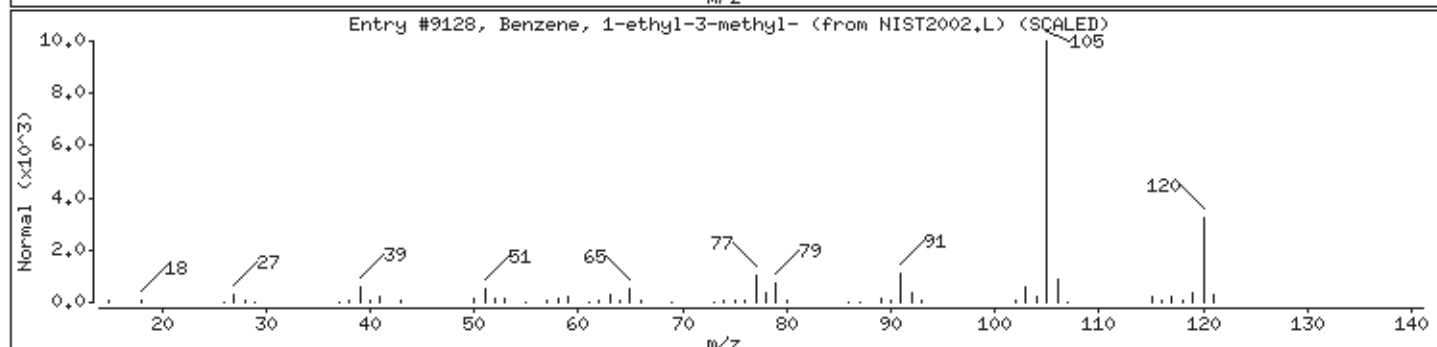
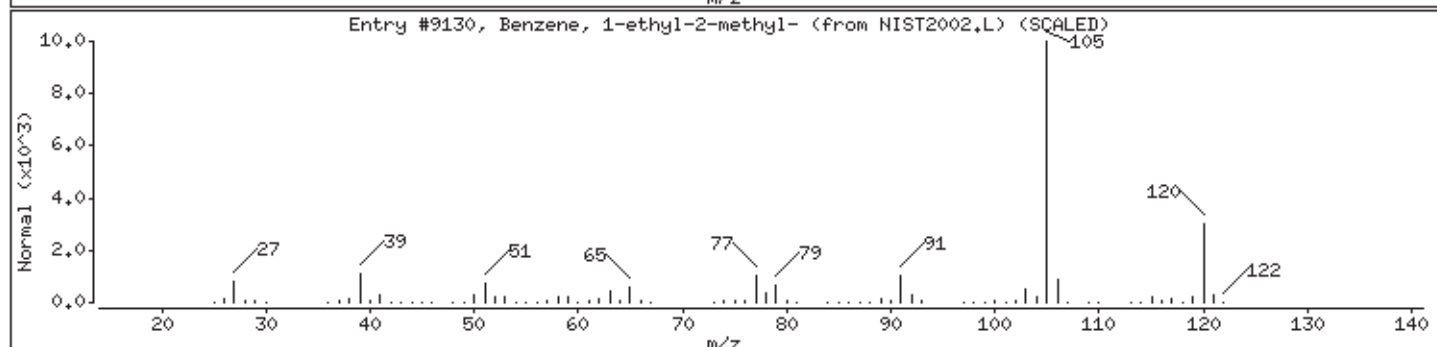
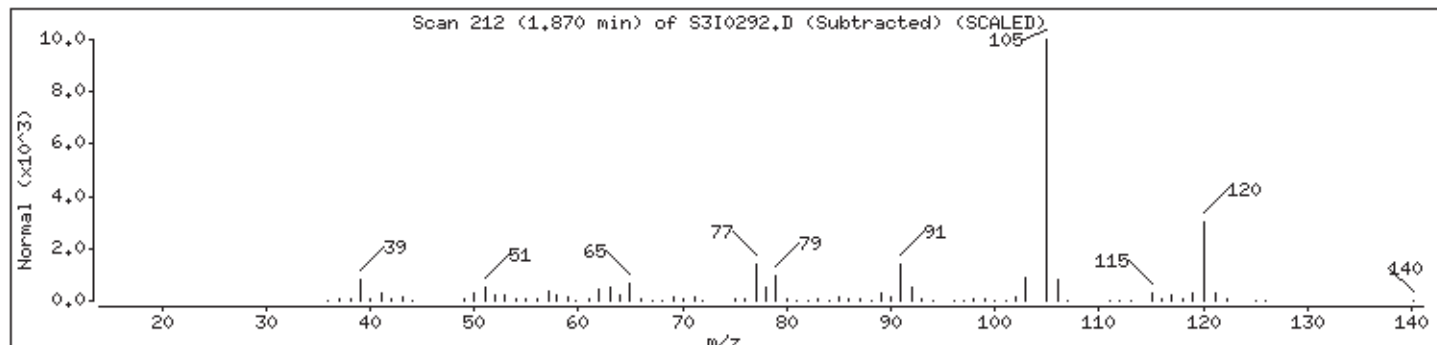
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	94	C9H12	120
Benzene, 1-ethyl-3-methyl-	620-14-4	NIST2002.L	9128	91	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	91	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

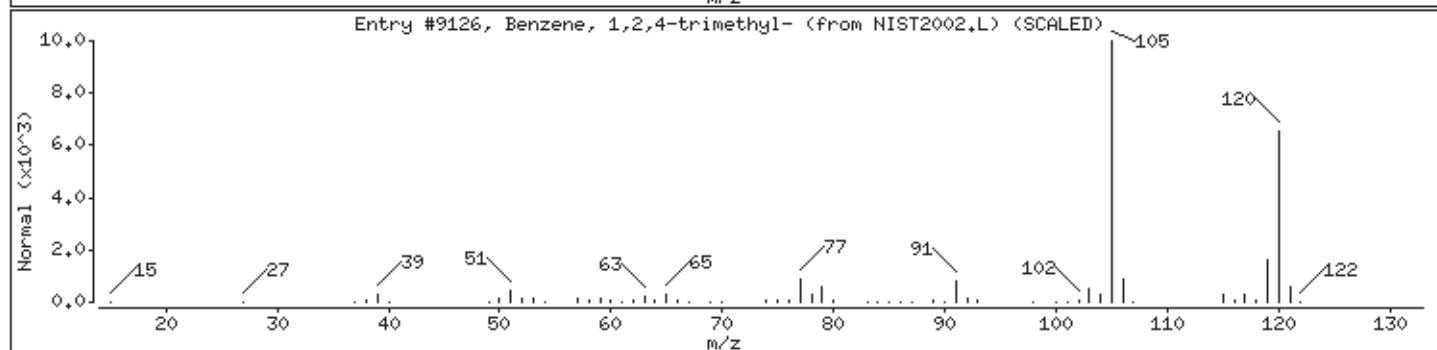
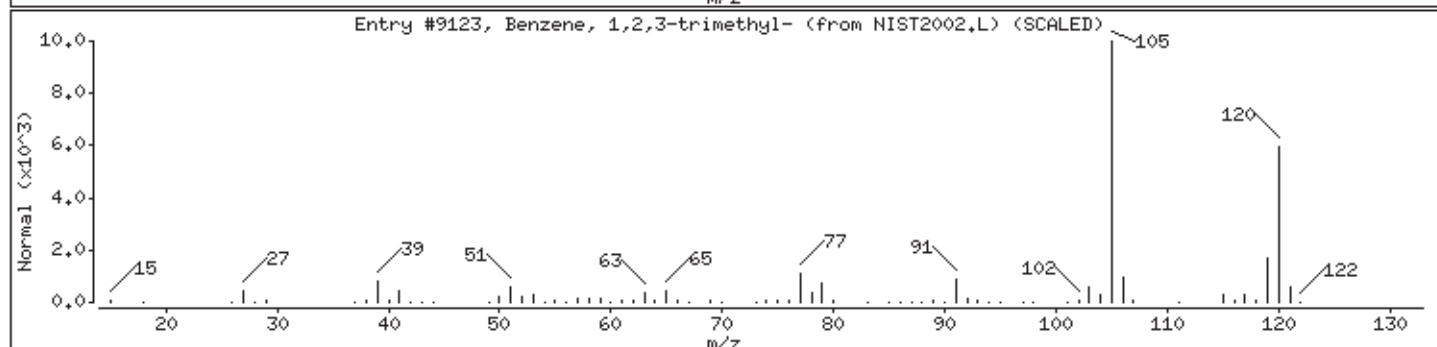
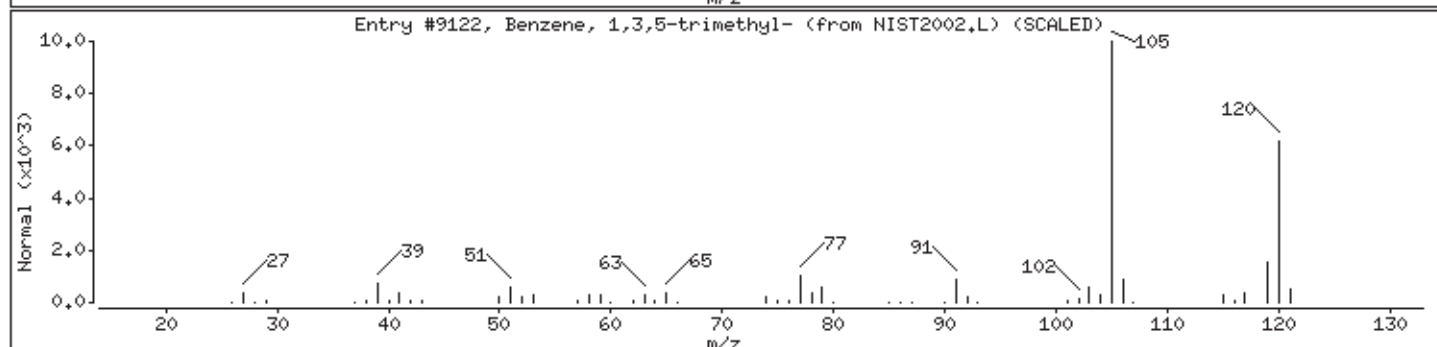
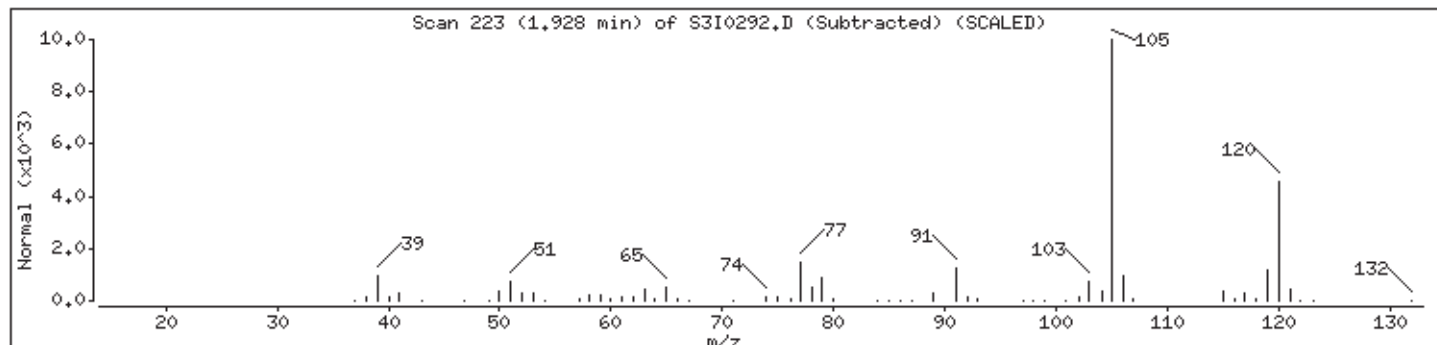
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	97	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	97	C9H12	120
Benzene, 1,2,4-trimethyl-	95-63-6	NIST2002.L	9126	95	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

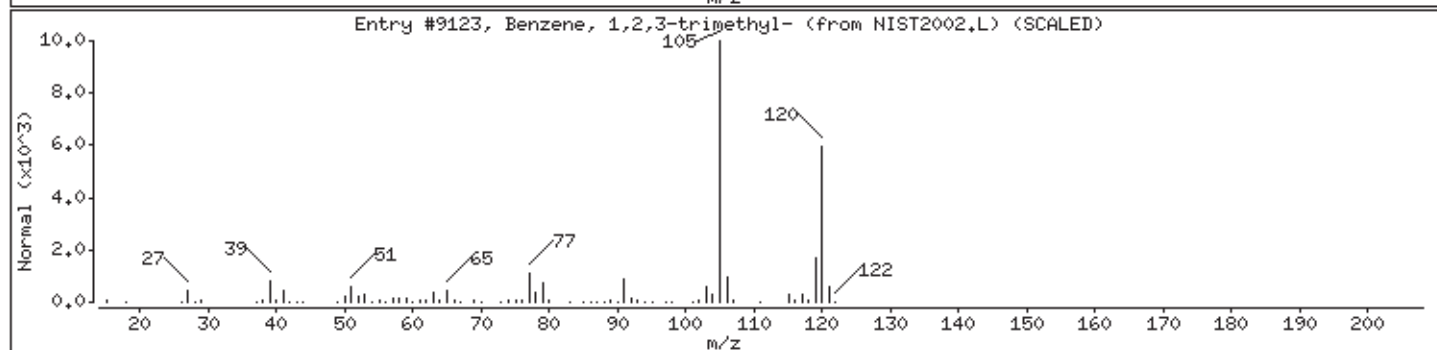
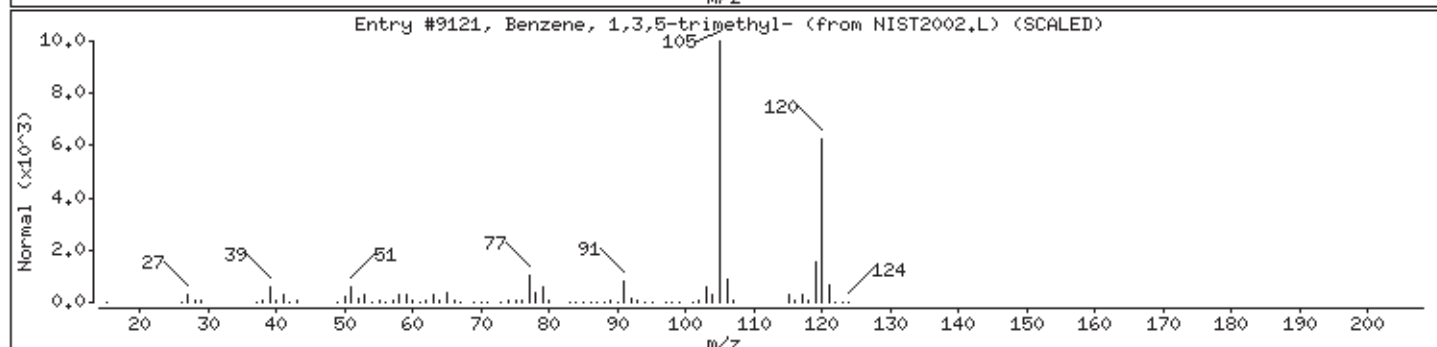
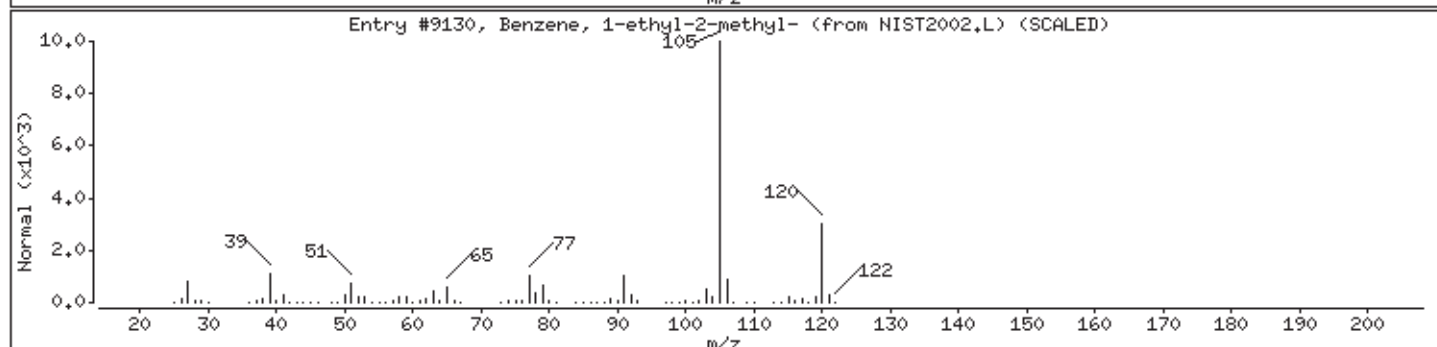
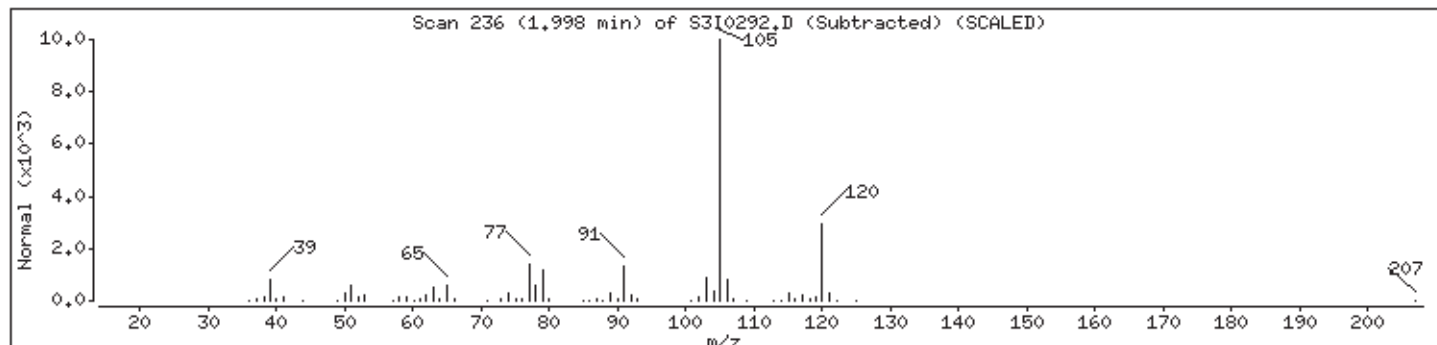
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9130	95	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9121	91	C9H12	120
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	91	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

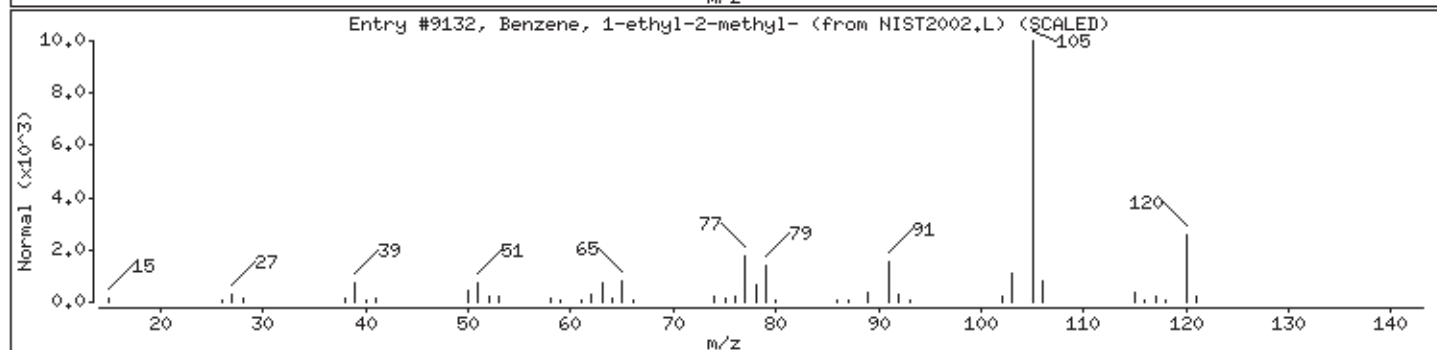
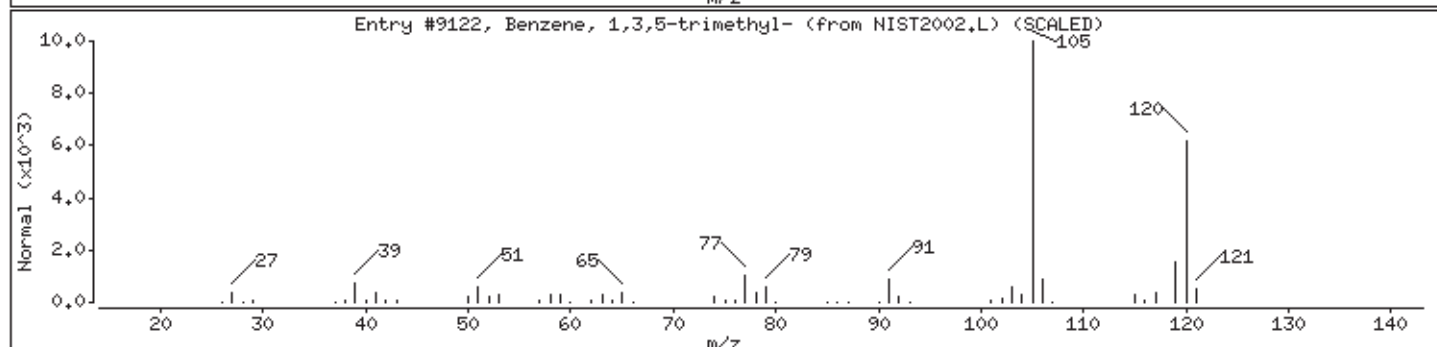
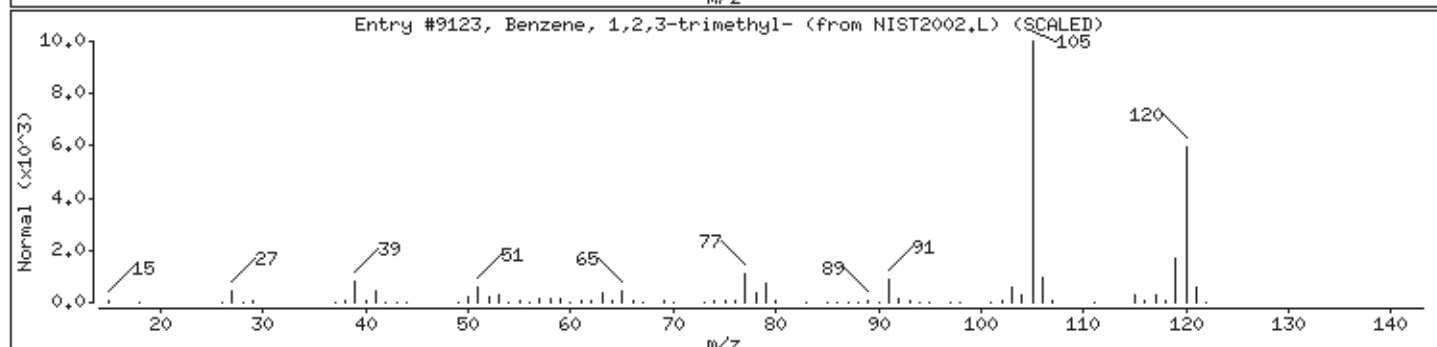
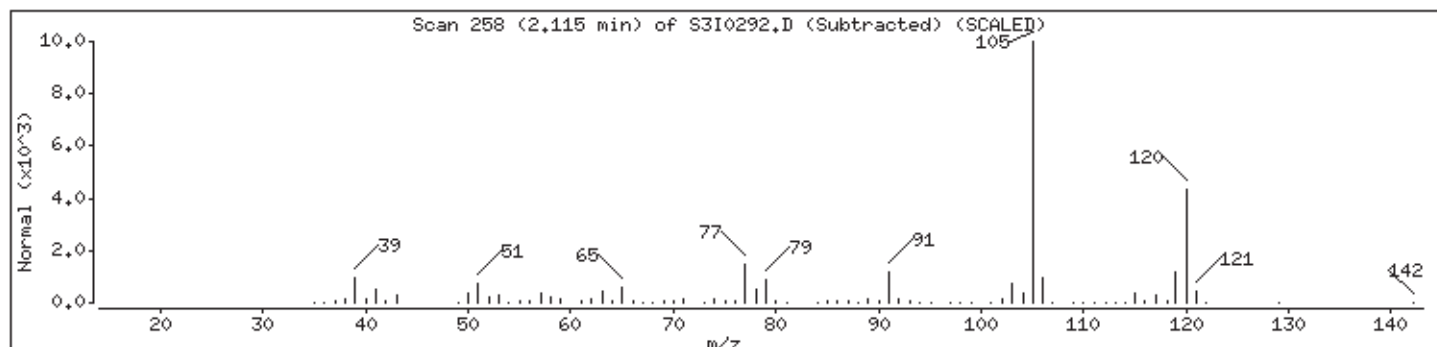
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1,2,3-trimethyl-	526-73-8	NIST2002.L	9123	97	C9H12	120
Benzene, 1,3,5-trimethyl-	108-67-8	NIST2002.L	9122	97	C9H12	120
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST2002.L	9132	95	C9H12	120



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

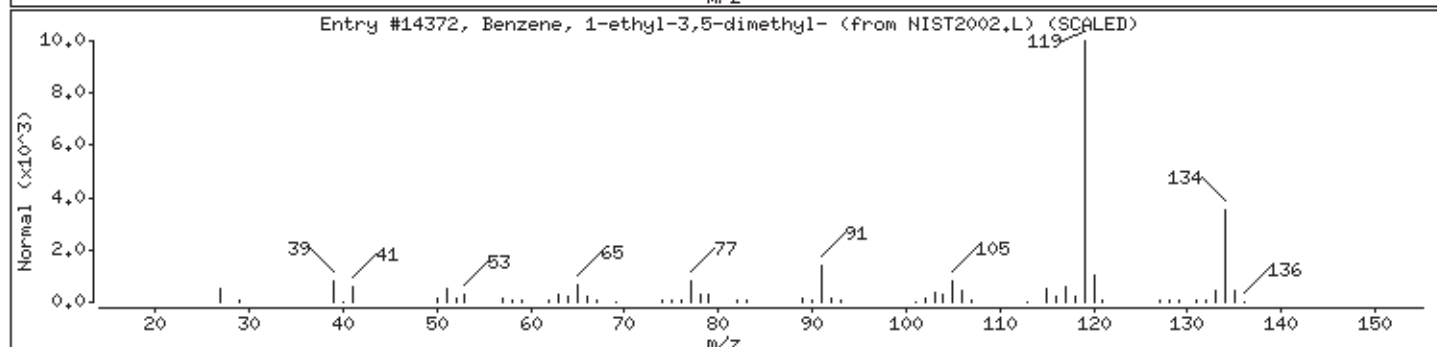
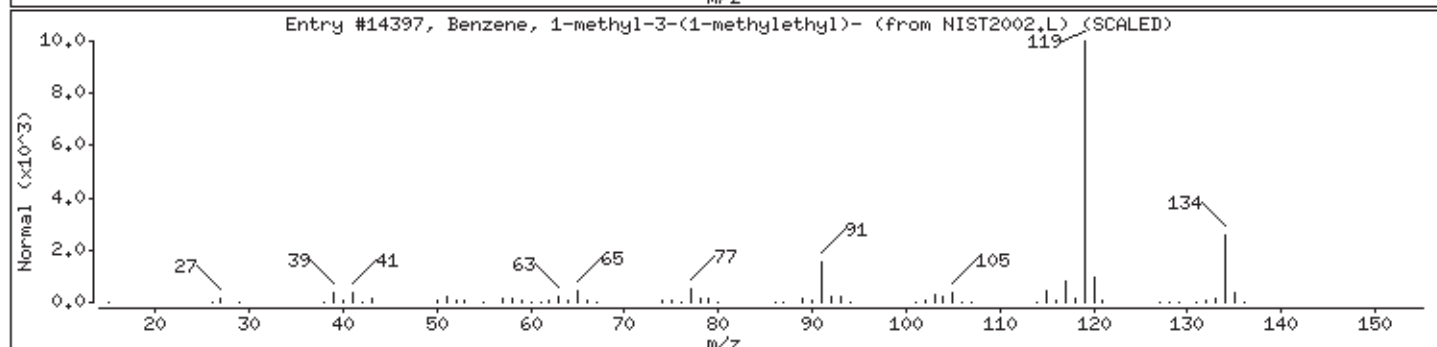
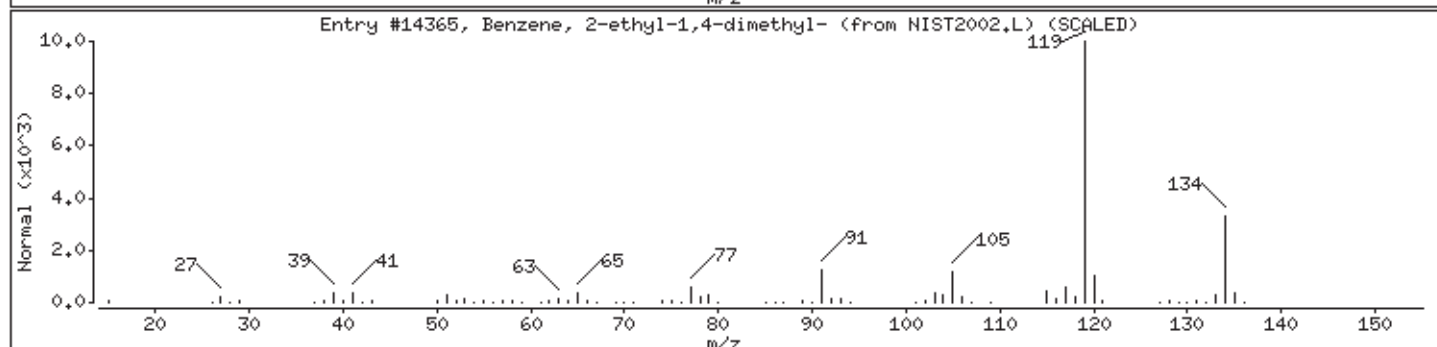
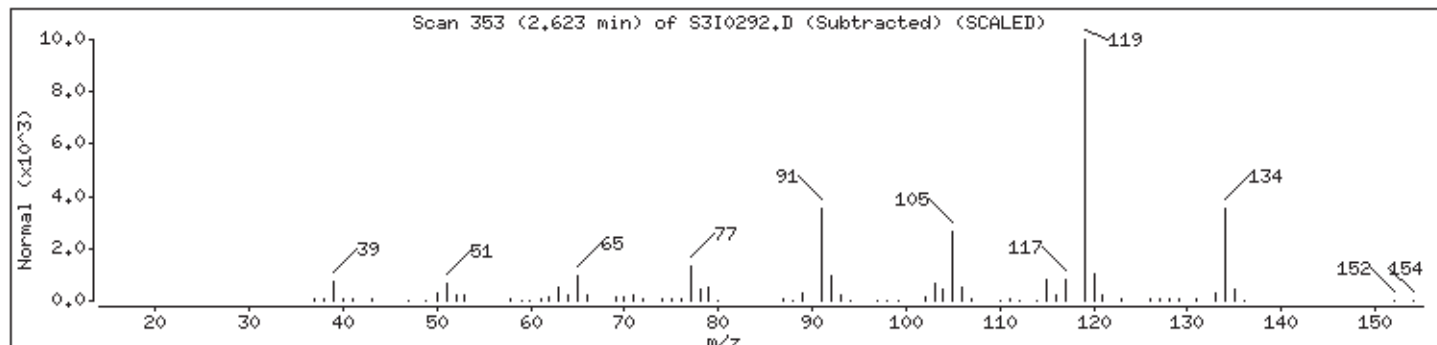
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NIST2002.L	14365	95	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST2002.L	14397	93	C10H14	134
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST2002.L	14372	93	C10H14	134



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

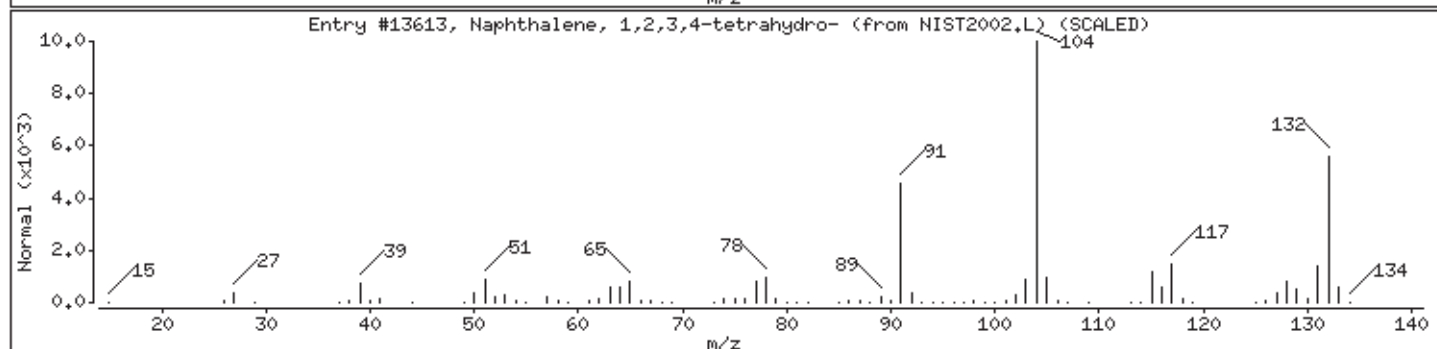
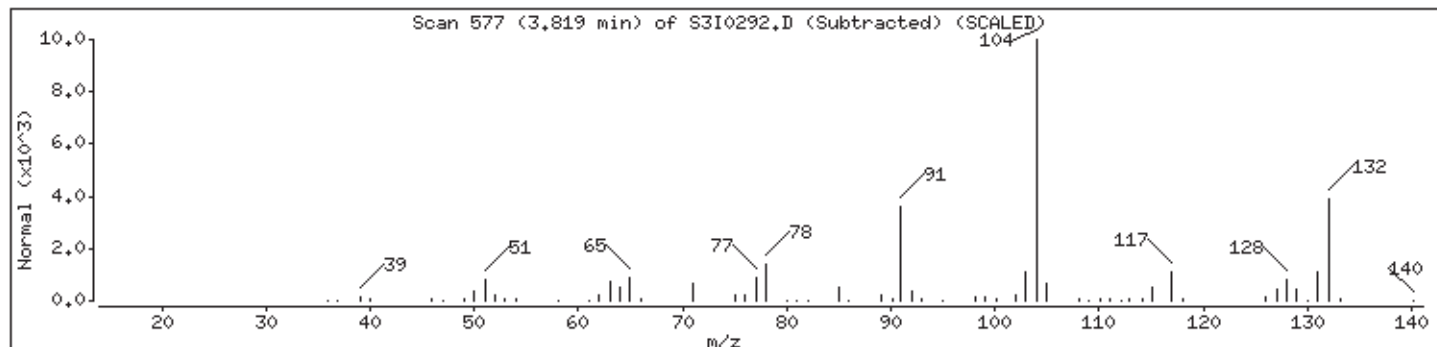
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,4-tetrahydro-	119-64-2	NIST2002.L	13613	93	C10H12	132



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

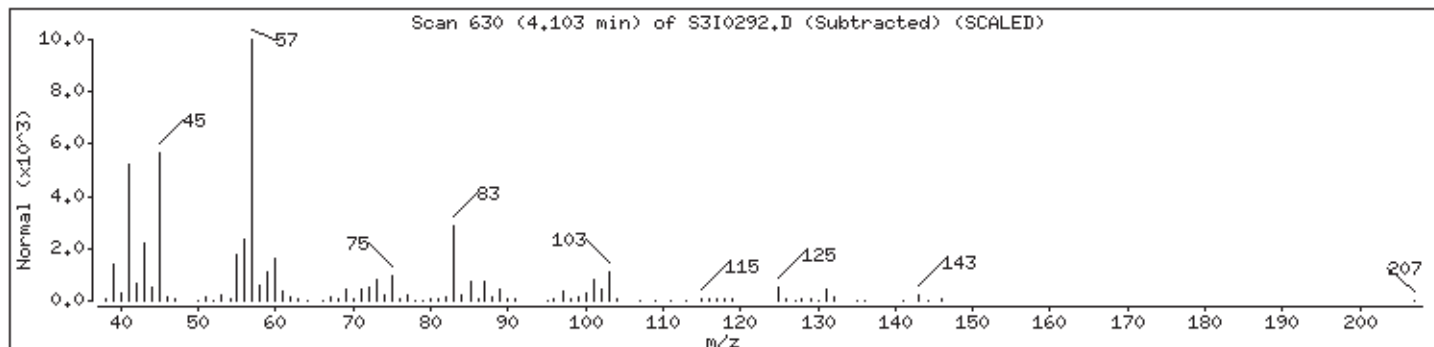
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

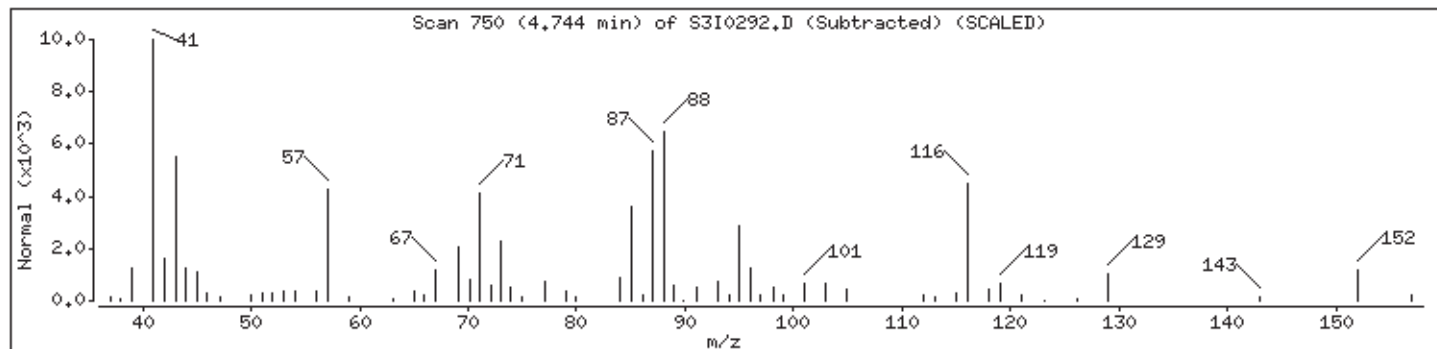
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

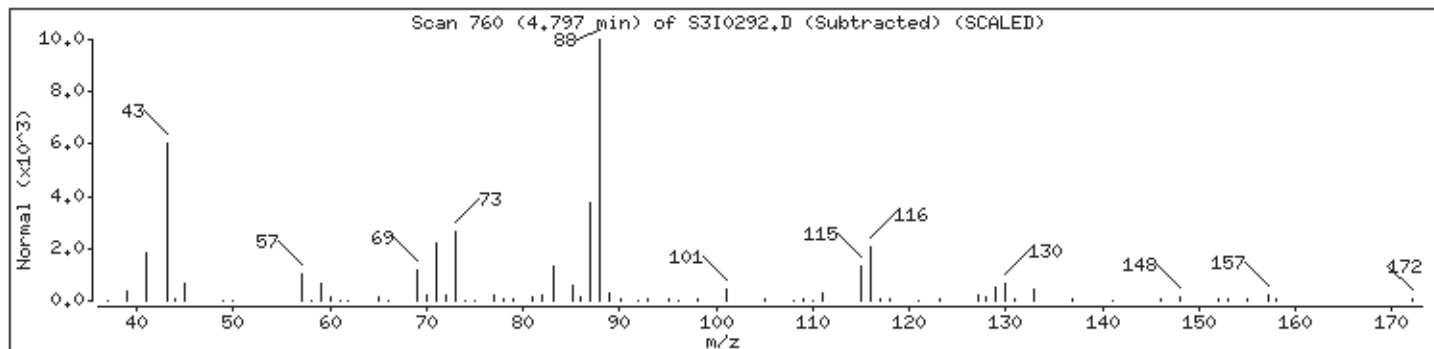
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Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

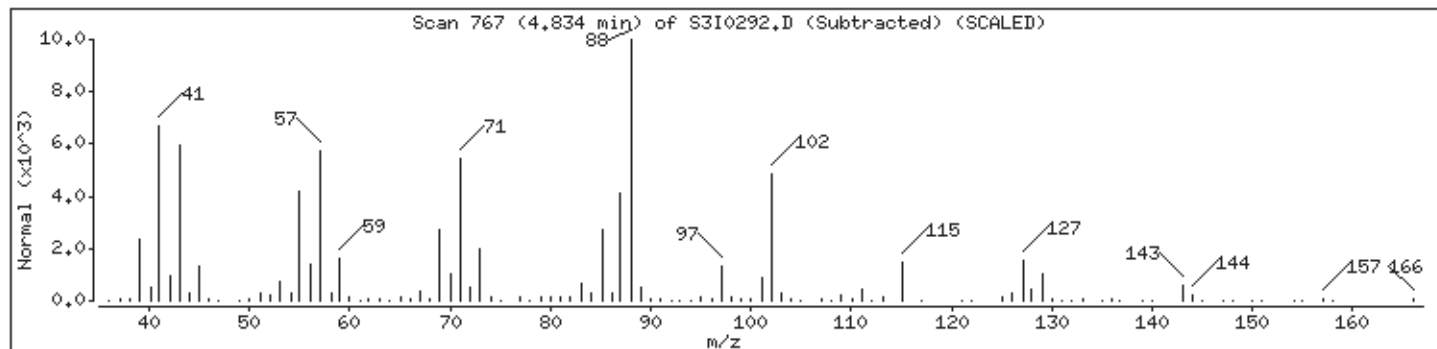
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

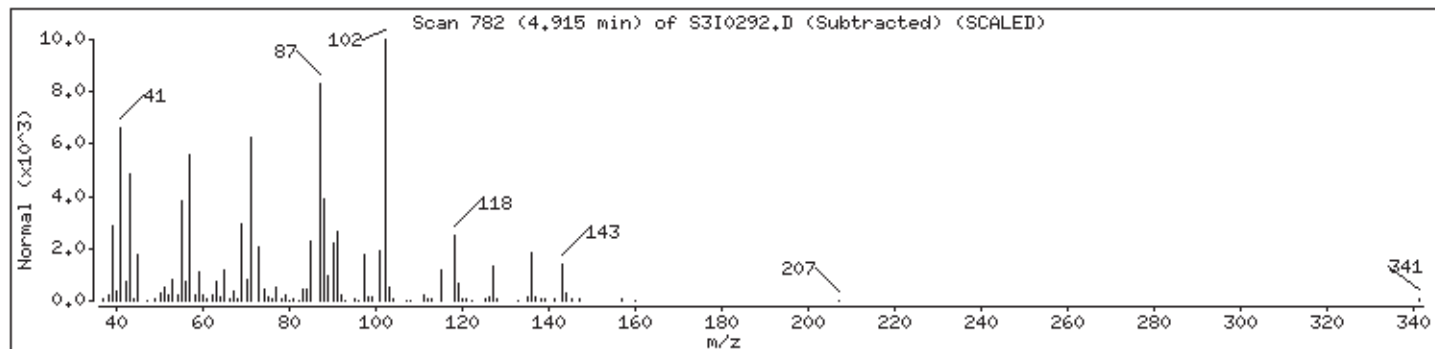
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

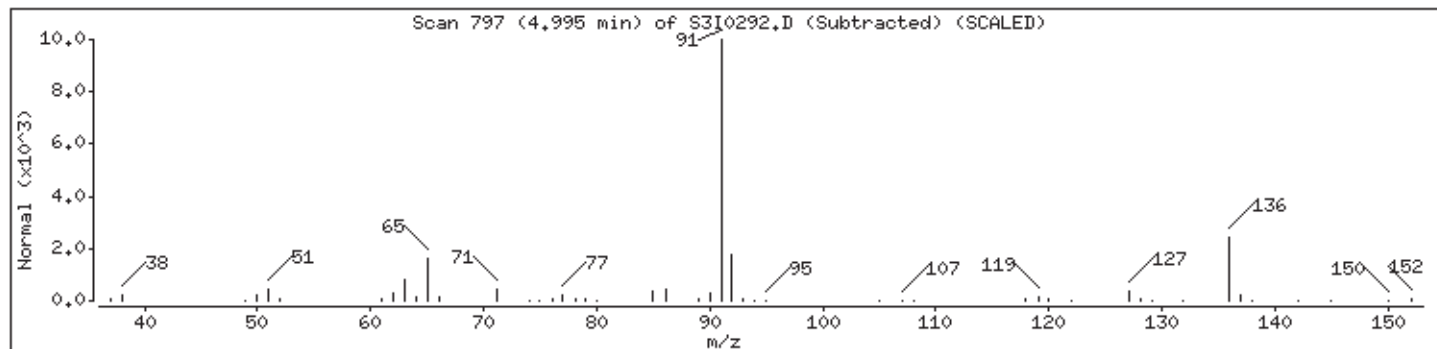
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

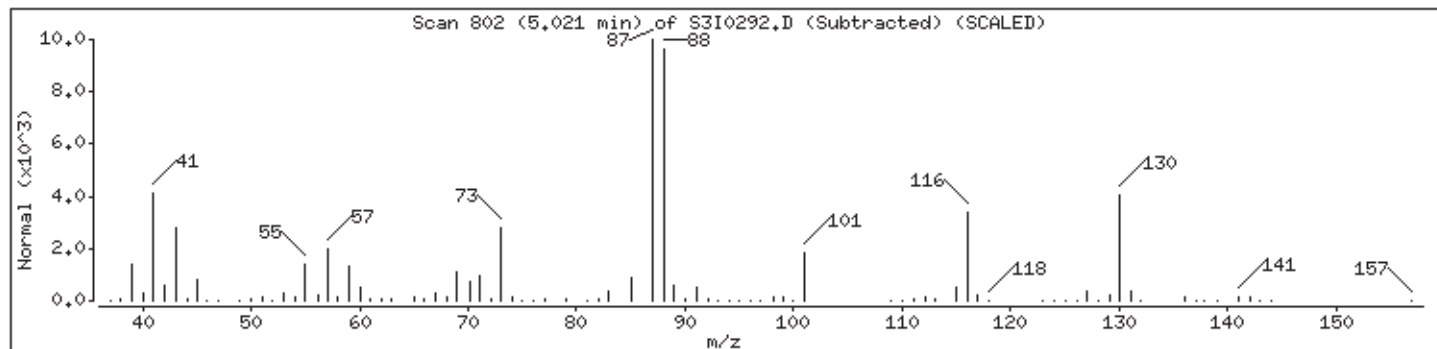
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

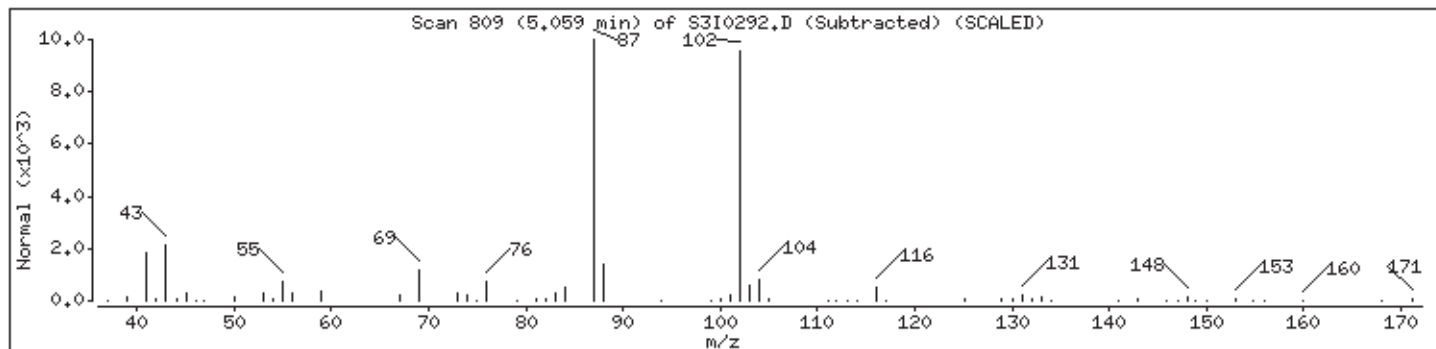
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

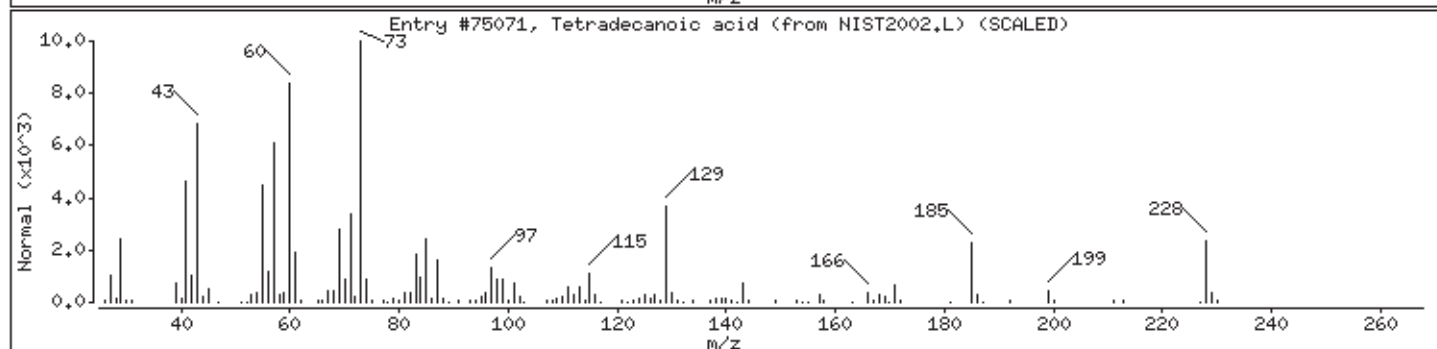
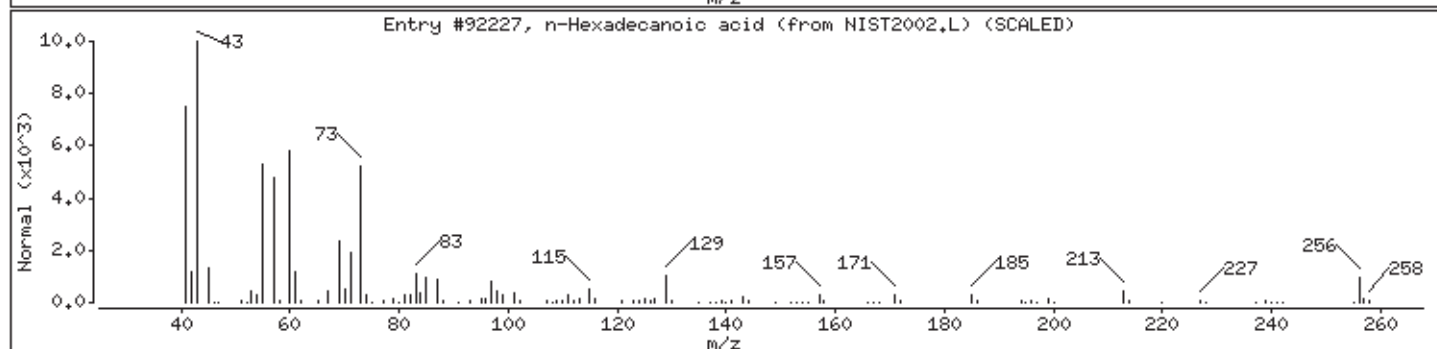
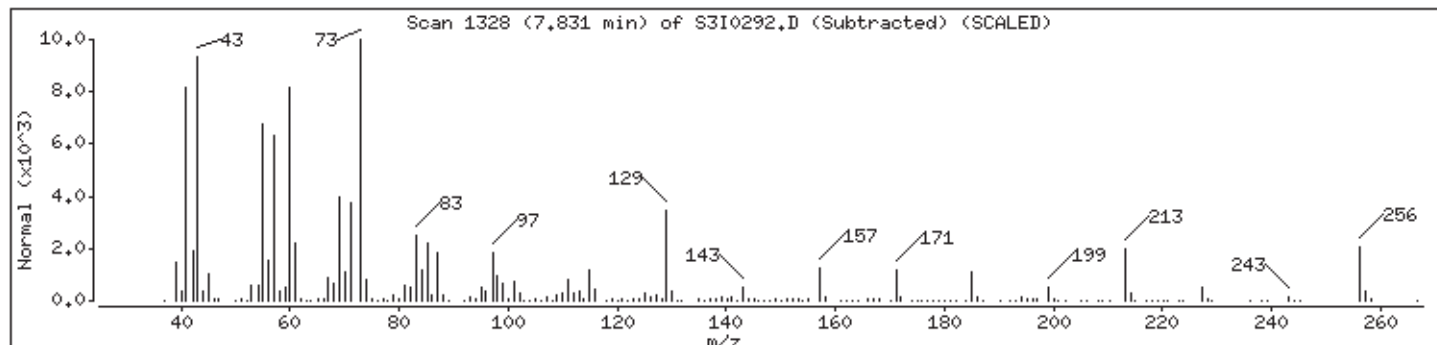
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST2002.L	92227	96	C16H32O2	256
Tetradecanoic acid	544-63-8	NIST2002.L	75071	94	C14H28O2	228



Data File: \\avogadro\organics\S3.I\120511.B\S3I0292.D

Date : 11-MAY-2012 15:16

Client ID: DUP-1

Instrument: S3.i

Sample Info: L0935-05B,,66049

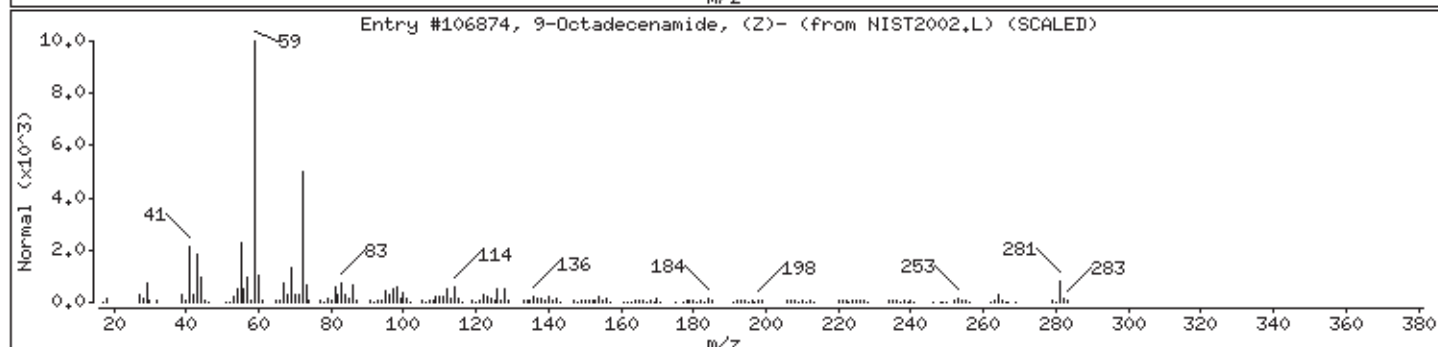
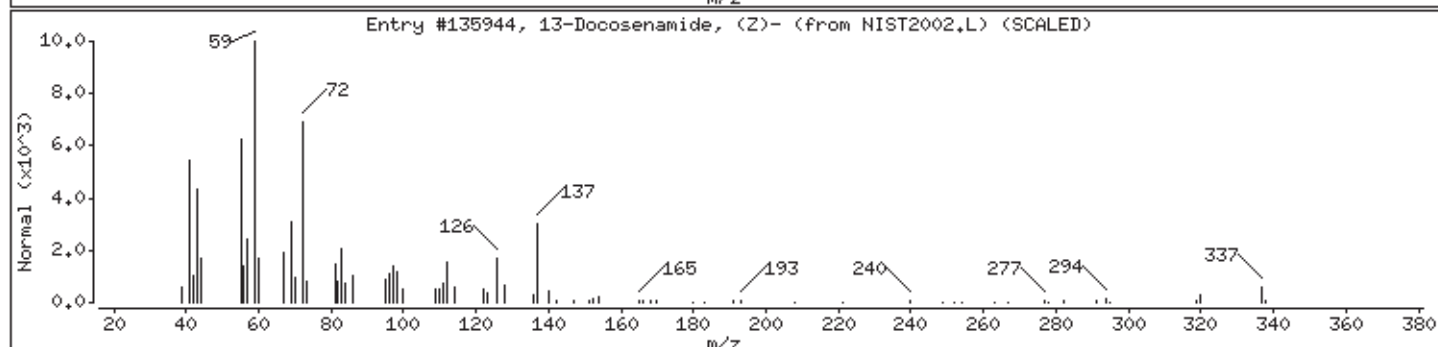
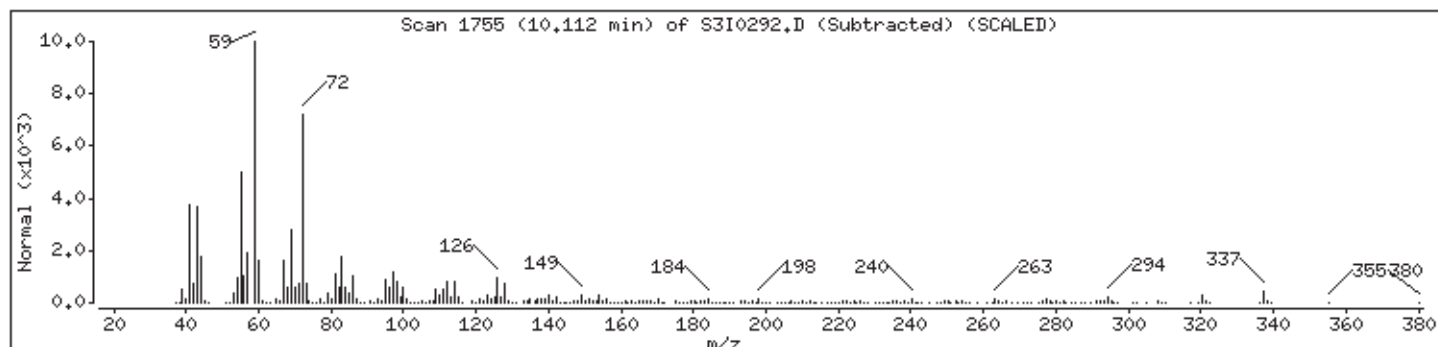
Volume Injected (uL): 1.0

Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST2002.L	135944	95	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST2002.L	106874	86	C18H35NO	281



Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM Case No.: L0935 SAS No.: SDG No.: SL0935

Instrument ID: S3 Calibration Date(s): 05/03/2012 05/03/2012

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm) Calibration Times: 12:40 14:19

LAB FILE ID: RRF005 = S3I0125.D RRF010 = S3I0123.D RRF025 = S3I0121A.D RRF040 = S3I0126.D RRF060 = S3I0124.D
RRF080 = S3I0122.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
Phenol	1.739	2.127	2.030	1.971	2.036	2.018			1.987	6.6
Bis(2-chloroethyl)ether	1.162	1.400	1.307	1.248	1.277	1.252			1.274	6.1
2-Chlorophenol	1.264	1.558	1.431	1.412	1.468	1.436			1.428	6.7
1,3-Dichlorobenzene	1.358	1.665	1.513	1.445	1.483	1.441			1.484	6.9
1,4-Dichlorobenzene	1.392	1.707	1.539	1.479	1.516	1.470			1.517	7.0
1,2-Dichlorobenzene	1.308	1.610	1.479	1.411	1.462	1.413			1.447	6.9
2-Methylphenol	1.203	1.466	1.444	1.401	1.449	1.412			1.396	7.0
2,2'-oxybis(1-Chloropropane)	2.035	2.453	2.229	2.174	2.191	2.154			2.206	6.2
4-Methylphenol	1.359	1.611	1.564	1.544	1.589	1.540			1.535	5.9
N-Nitroso-di-n-propylamine	1.268	1.507	1.390	1.355	1.375	1.318			1.369	5.9
Hexachloroethane	0.522	0.610	0.573	0.540	0.563	0.536			0.557	5.7
Nitrobenzene	0.438	0.526	0.486	0.460	0.482	0.458			0.475	6.4
Isophorone	0.791	0.956	0.876	0.828	0.862	0.809			0.854	6.9
2-Nitrophenol	0.193	0.231	0.215	0.211	0.221	0.211			0.214	5.9
2,4-Dimethylphenol	0.444	0.352	0.424	0.366	0.403	0.388			0.396	8.8
2,4-Dichlorophenol	0.282	0.341	0.323	0.318	0.336	0.323			0.320	6.6
1,2,4-Trichlorobenzene	0.313	0.377	0.347	0.329	0.349	0.329			0.341	6.6
Naphthalene	1.004	1.213	1.087	1.025	1.036	0.966			1.055	8.2
4-Chloroaniline	0.446	0.536	0.486	0.479	0.493	0.456			0.483	6.6
Bis(2-chloroethoxy)methane	0.439	0.524	0.481	0.453	0.470	0.448			0.469	6.6
Hexachlorobutadiene	0.174	0.218	0.201	0.192	0.204	0.197			0.198	7.3
4-Chloro-3-methylphenol	0.361	0.431	0.398	0.383	0.397	0.373			0.391	6.2
2-Methylnaphthalene	0.709	0.857	0.774	0.730	0.750	0.694			0.752	7.8
Hexachlorocyclopentadiene	0.164	0.197	0.269	0.257	0.273	0.277			0.240	19.8
2,4,6-Trichlorophenol	0.340	0.403	0.391	0.374	0.387	0.389			0.380	5.8
2,4,5-Trichlorophenol		0.427	0.402	0.396	0.408	0.406			0.408	2.9
2-Chloronaphthalene	1.061	1.247	1.157	1.082	1.086	1.030			1.110	7.1

Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Case No.: L0935

SAS No.:

SDG No.: SL0935

Instrument ID: S3

Calibration Date(s): 05/03/2012

05/03/2012

Calibration Times:

12:40

14:19

GC Column: Rxi-5sil MS

ID: 0.25

(mm) Length: 30

(mm)

LAB FILE ID: RRF005 = S3I0125.D RRF010 = S3I0123.D RRF025 = S3I0121A.D RRF040 = S3I0126.D RRF060 = S3I0124.D
RRF080 = S3I0122.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080						RRF	% RSD
2-Nitroaniline		0.498	0.457	0.440	0.448	0.432						0.455	5.7
Dimethylphthalate	1.321	1.560	1.396	1.355	1.350	1.310						1.382	6.7
Acenaphthylene	1.804	2.105	1.921	1.801	1.778	1.682						1.848	8.0
2,6-Dinitrotoluene	0.311	0.366	0.335	0.328	0.335	0.326						0.333	5.4
3-Nitroaniline		0.413	0.367	0.356	0.366	0.359						0.372	6.3
Acenaphthene	1.115	1.289	1.160	1.095	1.093	1.043						1.133	7.5
2,4-Dinitrophenol		0.096	0.140	0.189	0.174	0.186						0.157	25.0
4-Nitrophenol		0.207	0.203	0.193	0.203	0.148						0.191	12.8
Dibenzofuran	1.585	1.874	1.715	1.593	1.566	1.502						1.639	8.2
2,4-Dinitrotoluene	0.428	0.515	0.467	0.451	0.466	0.455						0.464	6.2
Diethylphthalate	1.325	1.561	1.385	1.318	1.318	1.248						1.359	8.0
4-Chlorophenyl-phenylether	0.677	0.801	0.710	0.701	0.708	0.696						0.715	6.1
Fluorene	1.357	1.584	1.423	1.354	1.339	1.279						1.389	7.6
4-Nitroaniline		0.449	0.399	0.383	0.388	0.377						0.399	7.3
4,6-Dinitro-2-methylphenol		0.136	0.139	0.156	0.166	0.163						0.152	9.2
N-Nitrosodiphenylamine	0.589	0.686	0.612	0.609	0.611	0.582						0.615	6.0
4-Bromophenyl-phenylether	0.207	0.238	0.215	0.218	0.226	0.222						0.221	4.8
Hexachlorobenzene	0.223	0.262	0.239	0.235	0.251	0.244						0.242	5.6
Pentachlorophenol		0.067	0.096	0.101	0.122	0.128						0.103	23.6
Phenanthrene	0.988	1.140	1.013	0.968	0.982	0.911						1.001	7.6
Anthracene	1.031	1.174	1.055	1.017	1.006	0.937						1.037	7.5
Carbazole	1.001	1.155	1.016	0.976	0.971	0.903						1.004	8.3
Di-n-butylphthalate	1.132	1.322	1.189	1.104	1.105	1.029						1.147	8.7
Fluoranthene	1.201	1.365	1.210	1.168	1.173	1.089						1.201	7.6
Pyrene	0.995	1.150	1.008	0.973	0.957	0.886						0.995	8.8
Butylbenzylphthalate	0.431	0.508	0.448	0.443	0.451	0.420						0.450	6.8
3,3'-Dichlorobenzidine	0.412	0.473	0.447	0.422	0.420	0.364						0.423	8.6

Lab Code: MITKEM

Case No.: L0935

SAS No.:

SDG No.: SL0935

Instrument ID: S3

Calibration Date(s): 05/03/2012

05/03/2012

GC Column: Rxi-5sil MS

ID: 0.25

(mm)

Length: 30

(mm)

Calibration Times: 12:40

14:19

LAB FILE ID: RRF005 = S3I0125.D RRF010 = S3I0123.D RRF025 = S3I0121A.D RRF040 = S3I0126.D RRF060 = S3I0124.D
RRF080 = S3I0122.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Benzo(a)anthracene	1.069	1.225	1.061	1.053	1.060	0.978		1.074	7.5
Chrysene	0.952	1.123	1.016	0.993	0.935	0.860		0.980	9.0
Bis(2-ethylhexyl)phthalate	0.594	0.702	0.624	0.609	0.611	0.564		0.617	7.5
Di-n-octylphthalate	1.014	1.224	1.050	1.036	1.015	0.944		1.047	9.0
Benzo(b)fluoranthene	1.019	1.282	1.075	1.201	1.127	1.149		1.142	8.1
Benzo(k)fluoranthene	1.107	1.301	1.125	1.070	1.154	0.982		1.123	9.4
Benzo(a)pyrene	0.959	1.154	1.002	1.029	1.030	0.989		1.027	6.6
Indeno(1,2,3-cd)pyrene	1.208	1.444	1.265	1.299	1.358	1.335		1.318	6.2
Dibenzo(a,h)anthracene	1.003	1.226	1.063	1.095	1.141	1.096		1.104	6.8
Benzo(g,h,i)perylene	1.009	1.228	1.054	1.090	1.132	1.102		1.102	6.8

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc.

Contract:

Lab Code: MITKEM Case No.: L0935 SAS No.: SDG No.: SL0935

Instrument ID: S3 Calibration Date(s): 05/03/2012 05/03/2012

Calibration Times: 12:40 14:19

GC Column: Rxi-5sil MS ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = S3I0125.D RRF010 = S3I0123.D RRF025 = S3I0121A.D RRF040 = S3I0126.D RRF060 = S3I0124.DRRF080 = S3I0122.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Nitrobenzene-d5	0.423	0.500	0.467	0.446	0.467	0.447		0.458	5.7
2-Fluorobiphenyl	1.291	1.486	1.350	1.287	1.289	1.220		1.320	6.9
Terphenyl-d14	0.694	0.822	0.724	0.729	0.726	0.670		0.728	7.1
Phenol-d5	1.676	2.037	1.914	1.880	1.945	1.918		1.895	6.3
2-Fluorophenol	1.182	1.450	1.372	1.337	1.413	1.394		1.358	7.0
2,4,6-Tribromophenol	0.086	0.101	0.098	0.103	0.110	0.110		0.101	8.7

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0121A.D
Lab Smp Id: SST0253U Client Smp ID: SST0253U
Inj Date : 03-MAY-2012 12:40
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0253U, SST0253U
Misc Info : 2,3
Comment :
Method : \\avogadro\organics\S3.I\120503A.B\s3_8270C_N.m
Meth Date : 07-May-2012 10:06 pkaczorows Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 N-Nitrosodimethylamine	74	0.943	0.943	(0.379)	205599	25.0000	26
2 Pyridine	79	0.954	0.954	(0.383)	337850	25.0000	25
\$ 3 2-Fluorophenol	112	1.761	1.761	(0.706)	267805	25.0000	25
101 Benzaldehyde	77	2.103	2.103	(0.844)	262686	25.0000	27
\$ 5 Phenol-d5	99	2.696	2.696	(1.081)	373509	25.0000	25
6 Phenol	94	2.712	2.712	(1.088)	396164	25.0000	26
7 Aniline	66	2.268	2.268	(0.910)	202345	25.0000	25
8 bis(2-Chloroethyl)Ether	63	2.268	2.268	(0.910)	255008	25.0000	26
10 2-Chlorophenol	128	2.503	2.503	(1.004)	279244	25.0000	25
11 1,3-Dichlorobenzene	146	2.434	2.434	(0.976)	295346	25.0000	25
* 12 1,4-Dichlorobenzene-d4	152	2.493	2.493	(1.000)	312246	40.0000	(Q)
13 1,4-Dichlorobenzene	146	2.514	2.514	(1.009)	300419	25.0000	25
117 2-Ethyl-1-hexanol	57	2.664	2.664	(1.069)	331094	25.0000	25
15 Benzyl Alcohol	108	2.867	2.867	(1.150)	208173	25.0000	25
16 1,2-Dichlorobenzene	146	2.680	2.680	(1.075)	288613	25.0000	26
17 2-Methylphenol	108	3.401	3.401	(1.364)	281710	25.0000	26
18 2,2'-oxybis(1-Chloropropane)	45	2.851	2.851	(1.144)	434920	25.0000	25
99 Acetophenone	105	3.032	3.032	(1.216)	458568	25.0000	25
19 N-Nitroso-di-n-propylamine	70	3.048	3.048	(1.223)	271249	25.0000	25
20 4-Methylphenol	108	3.721	3.721	(1.493)	305187	25.0000	25

Data File: \\avogadro\organics\S3.I\120503A.B\S3I0121A.D
Report Date: 07-May-2012 10:07

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ng)	ON - COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
21 Hexachloroethane	117	3.107	3.107	(1.246)	111814		25.0000	26
\$ 22 Nitrobenzene-d5	82	3.273	3.273	(0.761)	364025		25.0000	25
23 Nitrobenzene	77	3.305	3.305	(0.769)	379408		25.0000	26
24 Isophorone	82	3.700	3.700	(0.861)	683537		25.0000	26
25 2-Nitrophenol	139	3.823	3.823	(0.889)	167631		25.0000	25
26 2,4-Dimethylphenol	107	4.304	4.304	(1.001)	330427		25.0000	27
27 bis(2-Chloroethoxy)methane	93	4.090	4.090	(0.952)	375243		25.0000	26
28 Benzoic Acid	105	4.758	4.758	(1.107)	255988		25.0000	29
29 2,4-Dichlorophenol	162	4.501	4.501	(1.047)	251598		25.0000	25
30 1,2,4-Trichlorobenzene	180	4.240	4.240	(0.986)	270685		25.0000	25
* 31 Naphthalene-d8	136	4.298	4.298	(1.000)	1248024		40.0000	
32 Naphthalene	128	4.325	4.325	(1.006)	848222		25.0000	26
115 alpha-Terpineol	59	4.427	4.427	(1.030)	216016		25.0000	26
33 4-Chloroaniline	127	4.571	4.571	(1.063)	379140		25.0000	25
34 Hexachlorobutadiene	225	4.491	4.491	(1.045)	156456		25.0000	25
102 Caprolactam	113	4.977	4.977	(1.158)	126862		25.0000	26
35 4-Chloro-3-Methylphenol	107	5.452	5.452	(1.268)	310789		25.0000	25
36 2-Methylnaphthalene	142	5.132	5.132	(1.194)	603764		25.0000	26
114 1-Methylnaphthalene	142	5.233	5.233	(1.217)	568864		25.0000	26
38 Hexachlorocyclopentadiene	237	5.292	5.292	(0.862)	139200		25.0000	28
112 1,2,4,5-Tetrachlorobenzene	216	5.308	5.308	(0.865)	301098		25.0000	25
39 2,4,6-Trichlorophenol	196	5.602	5.602	(0.913)	202241		25.0000	26
40 2,4,5-Trichlorophenol	196	5.783	5.783	(0.943)	208035		25.0000	25
\$ 41 2-Fluorobiphenyl	172	5.532	5.532	(0.902)	698977		25.0000	26
98 1,1'-Biphenyl	154	5.623	5.623	(0.916)	788332		25.0000	26
42 2-Chloronaphthalene	162	5.623	5.623	(0.916)	599193		25.0000	26
43 2-Nitroaniline	65	5.858	5.858	(0.955)	236732		25.0000	25
44 Dimethylphthalate	163	5.976	5.976	(0.974)	723055		25.0000	25
45 2,6-Dinitrotoluene	165	6.035	6.035	(0.983)	173735		25.0000	25
46 Acenaphthylene	152	6.008	6.008	(0.979)	994820		25.0000	26
47 3-Nitroaniline	138	6.264	6.264	(1.021)	190281		25.0000	25
* 48 Acenaphthene-d10	164	6.136	6.136	(1.000)	828629		40.0000	
49 Acenaphthene	153	6.163	6.163	(1.004)	600875		25.0000	26
50 2,4-Dinitrophenol	184	6.296	6.296	(1.026)	72659		25.0000	22
51 4-Nitrophenol	109	6.788	6.788	(1.106)	105082		25.0000	26(Q)
53 2,4-Dinitrotoluene	165	6.382	6.382	(1.040)	241870		25.0000	25
52 Dibenzofuran	168	6.323	6.323	(1.030)	888440		25.0000	26
110 2,3,4,6-Tetrachlorophenol	232	6.569	6.569	(1.071)	154754		25.0000	25
54 Diethylphthalate	149	6.590	6.590	(1.074)	717312		25.0000	25
56 4-Chlorophenyl-phenylether	204	6.644	6.644	(1.083)	367547		25.0000	25
55 Fluorene	166	6.622	6.622	(1.079)	736883		25.0000	26
57 4-Nitroaniline	138	6.804	6.804	(1.109)	206476		25.0000	25
58 4,6-Dinitro-2-methylphenol	198	6.734	6.734	(0.908)	146144		25.0000	23
59 N-Nitrosodiphenylamine	169	6.788	6.788	(0.916)	643496		25.0000	25
97 Azobenzene	77	6.777	6.777	(0.914)	931202		25.0000	25
\$ 60 2,4,6-Tribromophenol	330	6.895	6.895	(0.930)	103121		25.0000	24
61 4-Bromophenyl-phenylether	248	7.055	7.055	(0.952)	225938		25.0000	24
62 Hexachlorobenzene	284	7.082	7.082	(0.955)	251073		25.0000	25
100 Atrazine	200	7.279	7.279	(0.982)	241203		25.0000	25
63 Pentachlorophenol	266	7.370	7.370	(0.994)	100624		25.0000	23
111 Pentachloronitrobenzene	237	7.274	7.274	(0.981)	101678		25.0000	25
* 64 Phenanthrene-d10	188	7.413	7.413	(1.000)	1682222		40.0000	
65 Phenanthrene	178	7.434	7.434	(1.003)	1065546		25.0000	25
66 Anthracene	178	7.472	7.472	(1.008)	1109343		25.0000	25

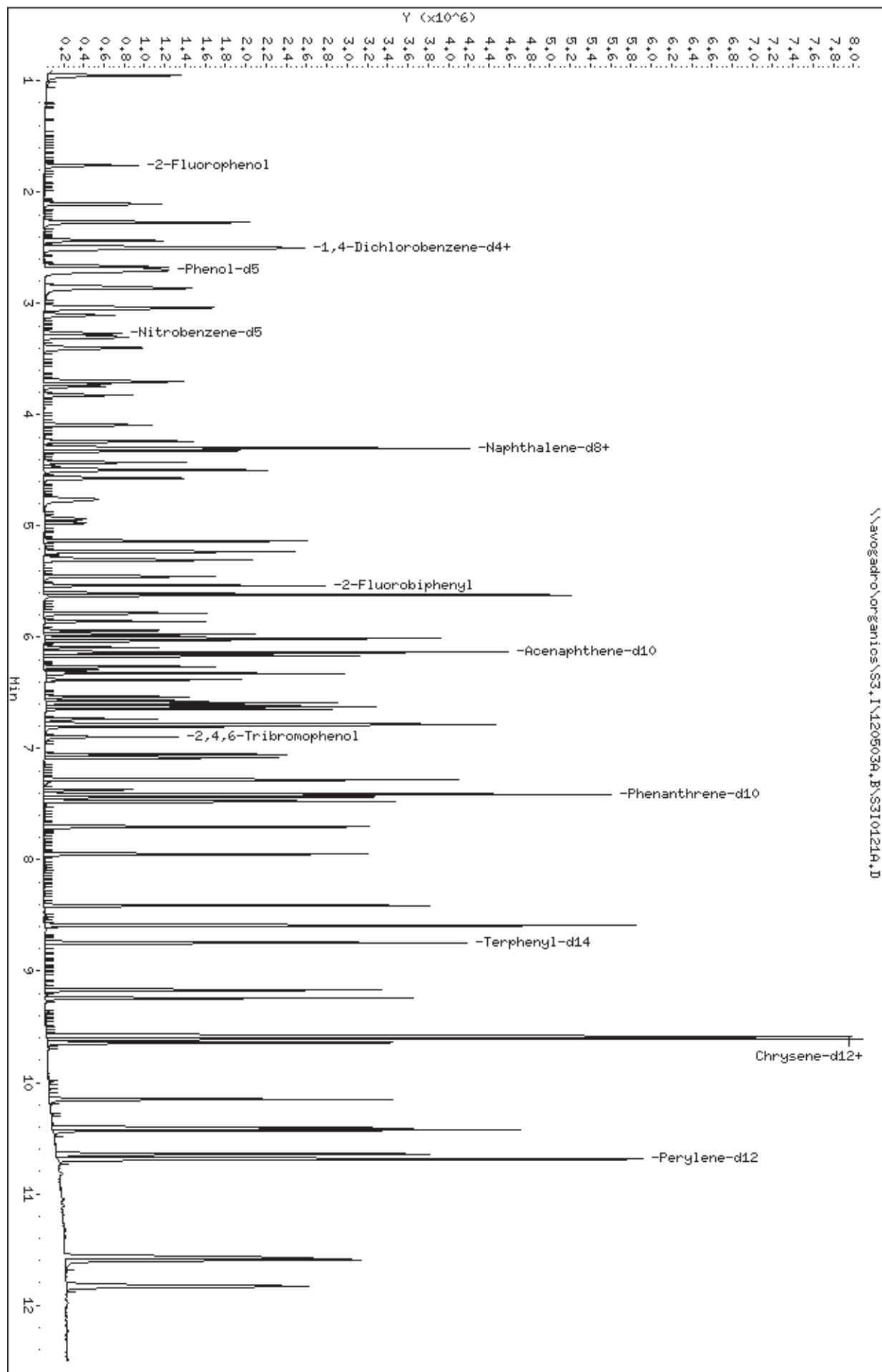
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
67 Carbazole	167	7.701	7.701	(1.039)	1067970		25.0000	25
68 Di-n-butylphthalate	149	7.947	7.947	(1.072)	1249795		25.0000	26
69 Fluoranthene	202	8.412	8.412	(1.135)	1272283		25.0000	25
70 Benzidine	184	8.588	8.588	(0.896)	658952		25.0000	31
71 Pyrene	202	8.588	8.588	(0.896)	1319072		25.0000	25
\$ 72 Terphenyl-d14	244	8.743	8.743	(0.912)	947187		25.0000	25
73 Butylbenzylphthalate	149	9.170	9.170	(0.957)	586347		25.0000	25
74 3,3'-Dichlorobenzidine	252	9.608	9.608	(1.002)	584282		25.0000	26
78 bis(2-Ethylhexyl)phthalate	149	9.646	9.646	(1.006)	816765		25.0000	25
75 Benzo(a)anthracene	228	9.576	9.576	(0.999)	1388922		25.0000	25
* 76 Chrysene-d12	240	9.587	9.587	(1.000)	2093663		40.0000	
77 Chrysene	228	9.608	9.608	(1.002)	1329770		25.0000	26
79 Di-n-octylphthalate	149	10.153	10.153	(0.950)	1429438		25.0000	25
80 Benzo(b)fluoranthene	252	10.410	10.410	(0.974)	1463470		25.0000	24
81 Benzo(k)fluoranthene	252	10.431	10.431	(0.976)	1531252		25.0000	25
82 Benzo(a)pyrene	252	10.645	10.645	(0.996)	1363517		25.0000	24
* 83 Perylene-d12	264	10.693	10.693	(1.000)	2177488		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.574	11.574	(1.082)	1720943		25.0000	24
85 Dibenzo(a,h)anthracene	278	11.596	11.596	(1.084)	1445991		25.0000	24
86 Benzo(g,h,i)perylene	276	11.836	11.836	(1.107)	1434896		25.0000	24

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,I\1205034,B\S3I01214.D
 Date : 03-May-2012 12:40
 Client ID: SSTID0253U
 Sample Info: SSTID0253U,SSTID0253U
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120503A.B\S3I0122.D
Report Date: 07-May-2012 10:07

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0122.D
Lab Smp Id: SST0803U Client Smp ID: SST0803U
Inj Date : 03-MAY-2012 13:02
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0803U, SST0803U
Misc Info : 1,6
Comment :
Method : \\avogadro\organics\S3.I\120503A.B\s3_8270C_N.m
Meth Date : 07-May-2012 10:06 pkaczorows Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 N-Nitrosodimethylamine	74		0.947	0.943 (0.379)		640396	80.0000	79
2 Pyridine	79		0.952	0.954 (0.382)		1036291	80.0000	76
\$ 3 2-Fluorophenol	112		1.753	1.761 (0.703)		882138	80.0000	82
101 Benzaldehyde	77		2.106	2.103 (0.844)		476732	80.0000	49
\$ 5 Phenol-d5	99		2.688	2.696 (1.077)		1214224	80.0000	81
6 Phenol	94		2.704	2.712 (1.083)		1277387	80.0000	81(A)
7 Aniline	66		2.277	2.268 (0.912)		652491	80.0000	79
8 bis(2-Chloroethyl)Ether	63		2.272	2.268 (0.910)		792434	80.0000	78
10 2-Chlorophenol	128		2.501	2.503 (1.002)		909146	80.0000	80(A)
11 1,3-Dichlorobenzene	146		2.437	2.434 (0.976)		912414	80.0000	78
* 12 1,4-Dichlorobenzene-d4	152		2.496	2.493 (1.000)		316495	40.0000	
13 1,4-Dichlorobenzene	146		2.512	2.514 (1.006)		930638	80.0000	78
117 2-Ethyl-1-hexanol	57		2.667	2.664 (1.068)		1045241	80.0000	77
15 Benzyl Alcohol	108		2.881	2.867 (1.154)		676118	80.0000	81(A)
16 1,2-Dichlorobenzene	146		2.683	2.680 (1.075)		894700	80.0000	78
17 2-Methylphenol	108		3.388	3.401 (1.357)		893929	80.0000	81(A)
18 2,2'-oxybis(1-Chloropropane)	45		2.859	2.851 (1.146)		1363652	80.0000	78
99 Acetophenone	105		3.046	3.032 (1.220)		1429257	80.0000	78
19 N-Nitroso-di-n-propylamine	70		3.062	3.048 (1.227)		834573	80.0000	77
20 4-Methylphenol	108		3.719	3.721 (1.490)		975030	80.0000	80(A)

Data File: \\avogadro\organics\S3.I\120503A.B\S3I0122.D
Report Date: 07-May-2012 10:07

						AMOUNTS			
		QUANT	SIG			CAL -AMT	ON -COL		
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)	
=====		=====	=====	=====	=====	=====	=====	=====	
	21	Hexachloroethane	117	3.110	3.107	(1.246)	339125	80.0000	77
\$	22	Nitrobenzene-d5	82	3.287	3.273	(0.764)	1148376	80.0000	78
	23	Nitrobenzene	77	3.319	3.305	(0.772)	1175394	80.0000	77
	24	Isophorone	82	3.714	3.700	(0.863)	2076725	80.0000	76
	25	2-Nitrophenol	139	3.832	3.823	(0.891)	542609	80.0000	79
	26	2,4-Dimethylphenol	107	4.307	4.304	(1.001)	995315	80.0000	78
	27	bis(2-Chloroethoxy)methane	93	4.099	4.090	(0.953)	1149017	80.0000	76
	28	Benzoic Acid	105	4.847	4.758	(1.127)	534311	80.0000	60(H)
	29	2,4-Dichlorophenol	162	4.494	4.501	(1.045)	828274	80.0000	80(A)
	30	1,2,4-Trichlorobenzene	180	4.243	4.240	(0.986)	845463	80.0000	77
*	31	Naphthalene-d8	136	4.302	4.298	(1.000)	1283602	40.0000	
	32	Naphthalene	128	4.328	4.325	(1.006)	2479113	80.0000	73
	115	alpha-Terpineol	59	4.435	4.427	(1.031)	676812	80.0000	78
	33	4-Chloroaniline	127	4.574	4.571	(1.063)	1171452	80.0000	76
	34	Hexachlorobutadiene	225	4.494	4.491	(1.045)	505581	80.0000	80
	102	Caprolactam	113	5.028	4.977	(1.169)	405427	80.0000	81(A)
	35	4-Chloro-3-Methylphenol	107	5.445	5.452	(1.266)	958779	80.0000	76
	36	2-Methylnaphthalene	142	5.140	5.132	(1.195)	1782449	80.0000	74
	114	1-Methylnaphthalene	142	5.237	5.233	(1.217)	1669873	80.0000	74
	38	Hexachlorocyclopentadiene	237	5.295	5.292	(0.863)	475235	80.0000	92(A)
	112	1,2,4,5-Tetrachlorobenzene	216	5.311	5.308	(0.865)	969409	80.0000	79
	39	2,4,6-Trichlorophenol	196	5.605	5.602	(0.913)	666011	80.0000	82(A)
	40	2,4,5-Trichlorophenol	196	5.781	5.783	(0.942)	696043	80.0000	81(A)
\$	41	2-Fluorobiphenyl	172	5.541	5.532	(0.903)	2091372	80.0000	74
	98	1,1'-Biphenyl	154	5.626	5.623	(0.916)	2243855	80.0000	72
	42	2-Chloronaphthalene	162	5.626	5.623	(0.916)	1765490	80.0000	74
	43	2-Nitroaniline	65	5.867	5.858	(0.956)	740033	80.0000	76
	44	Dimethylphthalate	163	5.984	5.976	(0.975)	2245045	80.0000	76
	45	2,6-Dinitrotoluene	165	6.043	6.035	(0.984)	559325	80.0000	78
	46	Acenaphthylene	152	6.011	6.008	(0.979)	2882840	80.0000	73
	47	3-Nitroaniline	138	6.278	6.264	(1.023)	614700	80.0000	77
*	48	Acenaphthene-d10	164	6.139	6.136	(1.000)	857112	40.0000	
	49	Acenaphthene	153	6.171	6.163	(1.005)	1788514	80.0000	74
	50	2,4-Dinitrophenol	184	6.305	6.296	(1.027)	318123	80.0000	94(A)
	51	4-Nitrophenol	109	6.780	6.788	(1.104)	253877	80.0000	62
	53	2,4-Dinitrotoluene	165	6.396	6.382	(1.042)	779116	80.0000	78
	52	Dibenzofuran	168	6.332	6.323	(1.031)	2574312	80.0000	73
	110	2,3,4,6-Tetrachlorophenol	232	6.572	6.569	(1.070)	563417	80.0000	89(A)
	54	Diethylphthalate	149	6.599	6.590	(1.075)	2140036	80.0000	73
	56	4-Chlorophenyl-phenylether	204	6.652	6.644	(1.084)	1192887	80.0000	78
	55	Fluorene	166	6.631	6.622	(1.080)	2193106	80.0000	74
	57	4-Nitroaniline	138	6.823	6.804	(1.111)	646967	80.0000	77
	58	4,6-Dinitro-2-methylphenol	198	6.743	6.734	(0.909)	555849	80.0000	86(A)
	59	N-Nitrosodiphenylamine	169	6.791	6.788	(0.916)	1979605	80.0000	76
	97	Azobenzene	77	6.780	6.777	(0.914)	2615834	80.0000	71
\$	60	2,4,6-Tribromophenol	330	6.903	6.895	(0.931)	372913	80.0000	87
	61	4-Bromophenyl-phenylether	248	7.058	7.055	(0.952)	756172	80.0000	80(A)
	62	Hexachlorobenzene	284	7.090	7.082	(0.956)	830900	80.0000	80(A)
	100	Atrazine	200	7.293	7.279	(0.983)	704058	80.0000	73
	63	Pentachlorophenol	266	7.379	7.370	(0.995)	436934	80.0000	100(A)
	111	Pentachloronitrobenzene	237	7.283	7.274	(0.982)	324988	80.0000	79
*	64	Phenanthrene-d10	188	7.416	7.413	(1.000)	1701669	40.0000	
	65	Phenanthrene	178	7.437	7.434	(1.003)	3101844	80.0000	73
	66	Anthracene	178	7.480	7.472	(1.009)	3188954	80.0000	72

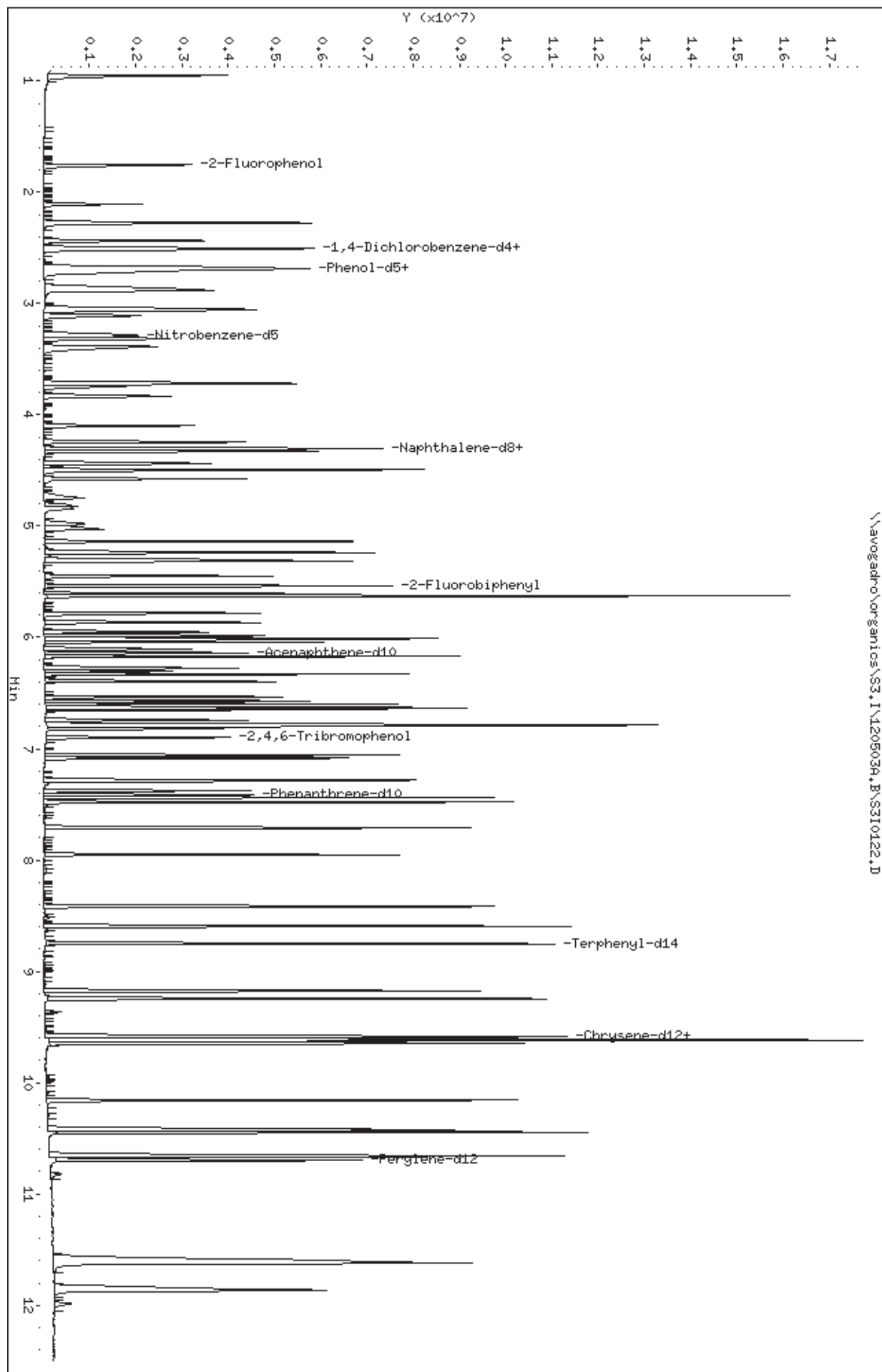
Compounds	QUANT SIG							AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
								(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
67 Carbazole	167	7.710	7.701	(1.040)	3073999	80.0000		72	
68 Di-n-butylphthalate	149	7.956	7.947	(1.073)	3500550	80.0000		72	
69 Fluoranthene	202	8.415	8.412	(1.135)	3705884	80.0000		72	
70 Benzidine	184	8.591	8.588	(0.895)	1310313	80.0000		60	
71 Pyrene	202	8.597	8.588	(0.896)	3820867	80.0000		71	
\$ 72 Terphenyl-d14	244	8.752	8.743	(0.912)	2887401	80.0000		74	
73 Butylbenzylphthalate	149	9.174	9.170	(0.956)	1812217	80.0000		75	
74 3,3'-Dichlorobenzidine	252	9.617	9.608	(1.002)	1568865	80.0000		69	
78 bis(2-Ethylhexyl)phthalate	149	9.649	9.646	(1.006)	2431412	80.0000		73	
75 Benzo(a)anthracene	228	9.585	9.576	(0.999)	4215506	80.0000		73	
* 76 Chrysene-d12	240	9.596	9.587	(1.000)	2155402	40.0000			
77 Chrysene	228	9.617	9.608	(1.002)	3707015	80.0000		70	
79 Di-n-octylphthalate	149	10.157	10.153	(0.950)	4021062	80.0000		72	
80 Benzo(b)fluoranthene	252	10.424	10.410	(0.975)	4897492	80.0000		80(A)	
81 Benzo(k)fluoranthene	252	10.445	10.431	(0.977)	4184915	80.0000		70(H)	
82 Benzo(a)pyrene	252	10.659	10.645	(0.997)	4215185	80.0000		77	
* 83 Perylene-d12	264	10.696	10.693	(1.000)	2130622	40.0000			
84 Indeno(1,2,3-cd)pyrene	276	11.599	11.574	(1.084)	5688123	80.0000		81(A)	
85 Dibenzo(a,h)anthracene	278	11.626	11.596	(1.087)	4669486	80.0000		79	
86 Benzo(g,h,i)perylene	276	11.866	11.836	(1.109)	4694818	80.0000		80	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.1\1205034.B\S310122.D
 Date : 03-MAY-2012 13:02
 Client ID: SSTD0803U
 Sample Info: SSTD0803U,SSTD0803U
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0123.D
 Lab Smp Id: SST00103U Client Smp ID: SST00103U
 Inj Date : 03-MAY-2012 13:21
 Operator : PK SRC: PK Inst ID: S3.i
 Smp Info : SST00103U, SST00103U
 Misc Info : 1,2
 Comment :
 Method : \\avogadro\organics\S3.I\120503A.B\s3_8270C_N.m
 Meth Date : 07-May-2012 10:06 pkaczorows Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 3 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: allnew.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
1 N-Nitrosodimethylamine	74	0.947	0.943	(0.379)	90579	10.0000	11
2 Pyridine	79	0.952	0.954	(0.382)	149648	10.0000	11
\$ 3 2-Fluorophenol	112	1.759	1.761	(0.705)	113411	10.0000	11
101 Benzaldehyde	77	2.106	2.103	(0.844)	122239	10.0000	13
\$ 5 Phenol-d5	99	2.699	2.696	(1.081)	159244	10.0000	11
6 Phenol	94	2.715	2.712	(1.088)	166346	10.0000	11
7 Aniline	66	2.272	2.268	(0.910)	90609	10.0000	11
8 bis(2-Chloroethyl)Ether	63	2.266	2.268	(0.908)	109504	10.0000	11
10 2-Chlorophenol	128	2.501	2.503	(1.002)	121797	10.0000	11
11 1,3-Dichlorobenzene	146	2.432	2.434	(0.974)	130216	10.0000	11
* 12 1,4-Dichlorobenzene-d4	152	2.496	2.493	(1.000)	312771	40.0000	(Q)
13 1,4-Dichlorobenzene	146	2.512	2.514	(1.006)	133496	10.0000	11
117 2-Ethyl-1-hexanol	57	2.662	2.664	(1.066)	152834	10.0000	11(Q)
15 Benzyl Alcohol	108	2.859	2.867	(1.146)	88259	10.0000	11
16 1,2-Dichlorobenzene	146	2.683	2.680	(1.075)	125914	10.0000	11
17 2-Methylphenol	108	3.393	3.401	(1.360)	114605	10.0000	10
18 2,2'-oxybis(1-Chloropropane)	45	2.849	2.851	(1.141)	191842	10.0000	11
99 Acetophenone	105	3.030	3.032	(1.214)	199901	10.0000	11
19 N-Nitroso-di-n-propylamine	70	3.041	3.048	(1.218)	117865	10.0000	11
20 4-Methylphenol	108	3.741	3.721	(1.499)	125946	10.0000	10

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====		=====	=====	=====	=====	=====	=====	=====
21 Hexachloroethane	117		3.105	3.107	(1.244)		47709	10.0000	11
\$ 22 Nitrobenzene-d5	82		3.271	3.273	(0.761)		155380	10.0000	11
23 Nitrobenzene	77		3.297	3.305	(0.768)		163345	10.0000	11
24 Isophorone	82		3.693	3.700	(0.860)		296795	10.0000	11
25 2-Nitrophenol	139		3.826	3.823	(0.891)		71604	10.0000	11
26 2,4-Dimethylphenol	107		4.302	4.304	(1.001)		109212	10.0000	9(a)
27 bis(2-Chloroethoxy)methane	93		4.088	4.090	(0.952)		162621	10.0000	11
28 Benzoic Acid	105		4.734	4.758	(1.102)		87374	10.0000	10(a)
29 2,4-Dichlorophenol	162		4.499	4.501	(1.047)		105986	10.0000	11
30 1,2,4-Trichlorobenzene	180		4.238	4.240	(0.986)		117212	10.0000	11
* 31 Naphthalene-d8	136		4.296	4.298	(1.000)		1242368	40.0000	
32 Naphthalene	128		4.323	4.325	(1.006)		376645	10.0000	11
115 alpha-Terpineol	59		4.424	4.427	(1.030)		92158	10.0000	11
33 4-Chloroaniline	127		4.569	4.571	(1.063)		166495	10.0000	11
34 Hexachlorobutadiene	225		4.494	4.491	(1.046)		67722	10.0000	11
102 Caprolactam	113		4.916	4.977	(1.144)		44543	10.0000	9(aH)
35 4-Chloro-3-Methylphenol	107		5.450	5.452	(1.269)		133971	10.0000	11
36 2-Methylnaphthalene	142		5.130	5.132	(1.194)		266093	10.0000	11
114 1-Methylnaphthalene	142		5.231	5.233	(1.218)		248196	10.0000	11
38 Hexachlorocyclopentadiene	237		5.295	5.292	(0.863)		41328	10.0000	8(a)
112 1,2,4,5-Tetrachlorobenzene	216		5.306	5.308	(0.865)		131611	10.0000	11
39 2,4,6-Trichlorophenol	196		5.600	5.602	(0.913)		84591	10.0000	10
40 2,4,5-Trichlorophenol	196		5.787	5.783	(0.943)		89580	10.0000	11(a)
\$ 41 2-Fluorobiphenyl	172		5.530	5.532	(0.902)		311777	10.0000	11
98 1,1'-Biphenyl	154		5.616	5.623	(0.916)		345332	10.0000	11
42 2-Chloronaphthalene	162		5.621	5.623	(0.916)		261557	10.0000	11
43 2-Nitroaniline	65		5.851	5.858	(0.954)		104456	10.0000	11(a)
44 Dimethylphthalate	163		5.968	5.976	(0.973)		327409	10.0000	11
45 2,6-Dinitrotoluene	165		6.027	6.035	(0.983)		76705	10.0000	11
46 Acenaphthylene	152		6.006	6.008	(0.979)		441729	10.0000	11
47 3-Nitroaniline	138		6.262	6.264	(1.021)		86751	10.0000	11(a)
* 48 Acenaphthene-d10	164		6.134	6.136	(1.000)		839297	40.0000	
49 Acenaphthene	153		6.161	6.163	(1.004)		270387	10.0000	11
50 2,4-Dinitrophenol	184		6.294	6.296	(1.026)		20102	10.0000	6(a)
51 4-Nitrophenol	109		6.791	6.788	(1.107)		43372	10.0000	11(aQ)
53 2,4-Dinitrotoluene	165		6.380	6.382	(1.040)		108071	10.0000	11
52 Dibenzofuran	168		6.321	6.323	(1.030)		393109	10.0000	11
110 2,3,4,6-Tetrachlorophenol	232		6.567	6.569	(1.071)		60703	10.0000	10
54 Diethylphthalate	149		6.588	6.590	(1.074)		327638	10.0000	11
56 4-Chlorophenyl-phenylether	204		6.641	6.644	(1.083)		167973	10.0000	11
55 Fluorene	166		6.620	6.622	(1.079)		332326	10.0000	11
57 4-Nitroaniline	138		6.802	6.804	(1.109)		94302	10.0000	11(a)
58 4,6-Dinitro-2-methylphenol	198		6.727	6.734	(0.908)		57732	10.0000	9(a)
59 N-Nitrosodiphenylamine	169		6.780	6.788	(0.915)		290940	10.0000	11
97 Azobenzene	77		6.775	6.777	(0.914)		424705	10.0000	12
\$ 60 2,4,6-Tribromophenol	330		6.893	6.895	(0.930)		42733	10.0000	10
61 4-Bromophenyl-phenylether	248		7.053	7.055	(0.952)		100860	10.0000	11
62 Hexachlorobenzene	284		7.080	7.082	(0.955)		111261	10.0000	11
100 Atrazine	200		7.277	7.279	(0.982)		107917	10.0000	11
63 Pentachlorophenol	266		7.373	7.370	(0.995)		28381	10.0000	6(a)
111 Pentachloronitrobenzene	237		7.272	7.274	(0.981)		44768	10.0000	11
* 64 Phenanthrene-d10	188		7.411	7.413	(1.000)		1696749	40.0000	
65 Phenanthrene	178		7.427	7.434	(1.002)		483529	10.0000	11
66 Anthracene	178		7.470	7.472	(1.008)		498150	10.0000	11

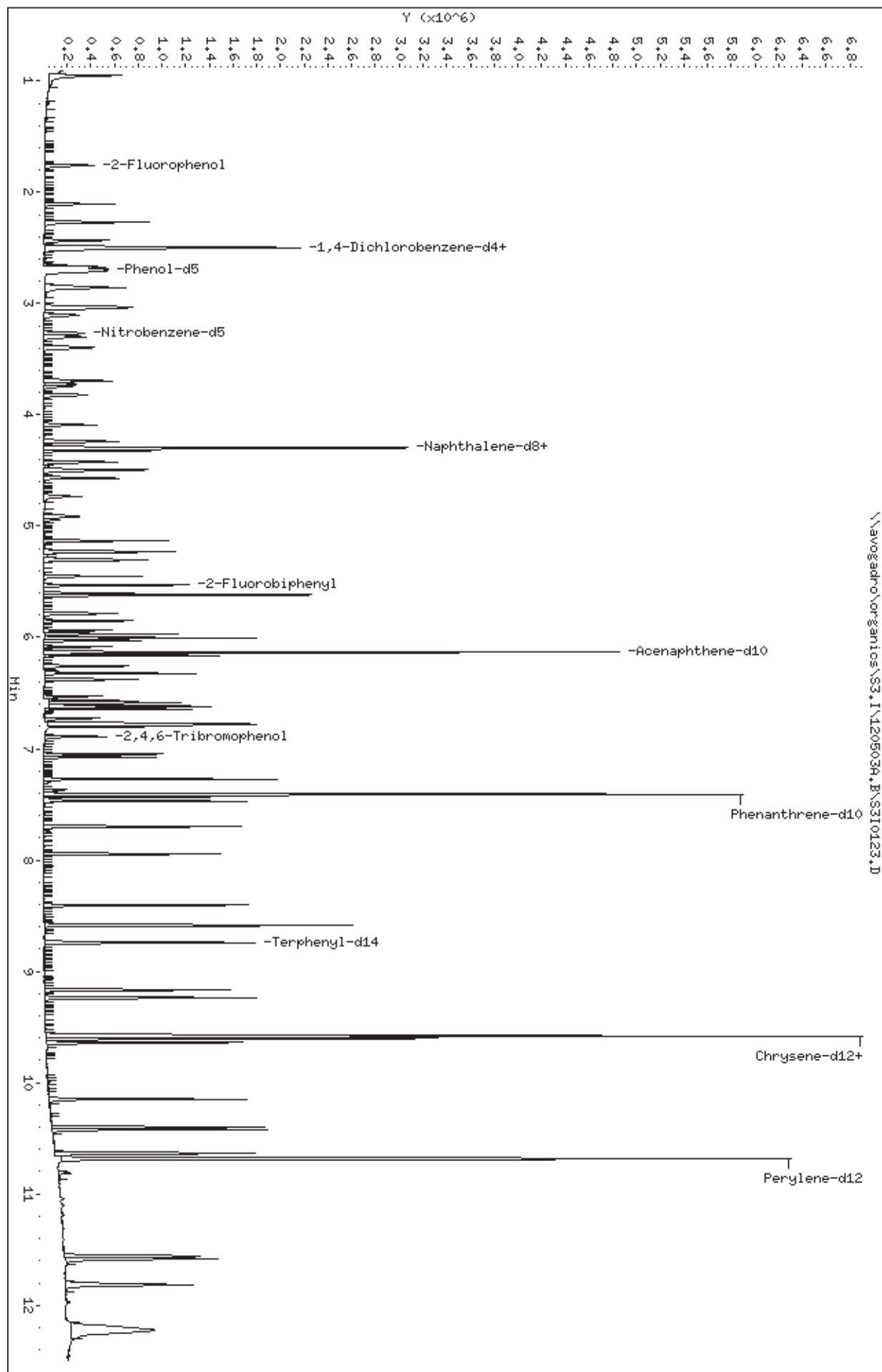
Compounds	QUANT SIG	AMOUNTS					
		CAL - AMT	ON - COL		RESPONSE		
	MASS	RT	EXP RT	REL RT		(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
67 Carbazole	167	7.699	7.701 (1.039)		490119	10.0000	12
68 Di-n-butylphthalate	149	7.945	7.947 (1.072)		560870	10.0000	12
69 Fluoranthene	202	8.404	8.412 (1.134)		579099	10.0000	11
70 Benzidine	184	8.581	8.588 (0.895)		238562	10.0000	11(a)
71 Pyrene	202	8.586	8.588 (0.896)		600596	10.0000	12
\$ 72 Terphenyl-d14	244	8.741	8.743 (0.912)		428985	10.0000	11
73 Butylbenzylphthalate	149	9.168	9.170 (0.957)		265448	10.0000	11
74 3,3'-Dichlorobenzidine	252	9.606	9.608 (1.002)		246844	10.0000	11
78 bis(2-Ethylhexyl)phthalate	149	9.638	9.646 (1.006)		366686	10.0000	11
75 Benzo(a)anthracene	228	9.574	9.576 (0.999)		639405	10.0000	11
* 76 Chrysene-d12	240	9.585	9.587 (1.000)		2088134	40.0000	
77 Chrysene	228	9.601	9.608 (1.002)		585990	10.0000	11
79 Di-n-octylphthalate	149	10.146	10.153 (0.950)		643621	10.0000	12
80 Benzo(b)fluoranthene	252	10.402	10.410 (0.974)		674456	10.0000	11
81 Benzo(k)fluoranthene	252	10.424	10.431 (0.976)		684200	10.0000	12
82 Benzo(a)pyrene	252	10.637	10.645 (0.996)		607003	10.0000	11
* 83 Perylene-d12	264	10.685	10.693 (1.000)		2103676	40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.562	11.574 (1.082)		759662	10.0000	11
85 Dibenzo(a,h)anthracene	278	11.583	11.596 (1.084)		644589	10.0000	11
86 Benzo(g,h,i)perylene	276	11.818	11.836 (1.106)		645669	10.0000	11

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3,I\1205034,B\S310123.D
 Date : 03-May-2012 13:21
 Client ID: SSTD0103U
 Sample Info: SSTD0103U,SSTD0103U
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0124.D
Lab Smp Id: SST0603U Client Smp ID: SST0603U
Inj Date : 03-MAY-2012 13:40
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0603U, SST0603U
Misc Info : 1,5
Comment :
Method : \\avogadro\organics\S3.I\120503A.B\s3_8270C_N.m
Meth Date : 07-May-2012 10:06 pkaczorows Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
1 N-Nitrosodimethylamine	74	0.948	0.943 (0.380)		484467	60.0000	61
2 Pyridine	79	0.954	0.954 (0.382)		789283	60.0000	59
\$ 3 2-Fluorophenol	112	1.755	1.761 (0.703)		659699	60.0000	62
101 Benzaldehyde	77	2.107	2.103 (0.844)		435598	60.0000	45
\$ 5 Phenol-d5	99	2.690	2.696 (1.077)		907725	60.0000	62
6 Phenol	94	2.706	2.712 (1.083)		950314	60.0000	61
7 Aniline	66	2.273	2.268 (0.910)		492703	60.0000	61
8 bis(2-Chloroethyl)Ether	63	2.268	2.268 (0.908)		595889	60.0000	60
10 2-Chlorophenol	128	2.503	2.503 (1.002)		685035	60.0000	62
11 1,3-Dichlorobenzene	146	2.433	2.434 (0.974)		692288	60.0000	60
* 12 1,4-Dichlorobenzene-d4	152	2.497	2.493 (1.000)		311155	40.0000	
13 1,4-Dichlorobenzene	146	2.513	2.514 (1.006)		707711	60.0000	60
117 2-Ethyl-1-hexanol	57	2.668	2.664 (1.068)		810746	60.0000	61
15 Benzyl Alcohol	108	2.877	2.867 (1.152)		507396	60.0000	62
16 1,2-Dichlorobenzene	146	2.684	2.680 (1.075)		682441	60.0000	61
17 2-Methylphenol	108	3.384	3.401 (1.355)		676134	60.0000	62
18 2,2'-oxybis(1-Chloropropane)	45	2.855	2.851 (1.143)		1022646	60.0000	60
99 Acetophenone	105	3.042	3.032 (1.218)		1089035	60.0000	60
19 N-Nitroso-di-n-propylamine	70	3.058	3.048 (1.225)		641525	60.0000	60
20 4-Methylphenol	108	3.715	3.721 (1.488)		741839	60.0000	62

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ng)	ON - COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
21 Hexachloroethane	117	3.106	3.107	(1.244)	262645		60.0000	60
\$ 22 Nitrobenzene-d5	82	3.277	3.273	(0.763)	868061		60.0000	61
23 Nitrobenzene	77	3.309	3.305	(0.770)	896051		60.0000	61
24 Isophorone	82	3.710	3.700	(0.863)	1602032		60.0000	60
25 2-Nitrophenol	139	3.828	3.823	(0.891)	411334		60.0000	62
26 2,4-Dimethylphenol	107	4.303	4.304	(1.001)	749001		60.0000	61
27 bis(2-Chloroethoxy)methane	93	4.095	4.090	(0.953)	874089		60.0000	60
28 Benzoic Acid	105	4.795	4.758	(1.116)	501823		60.0000	58(H)
29 2,4-Dichlorophenol	162	4.495	4.501	(1.046)	625217		60.0000	63
30 1,2,4-Trichlorobenzene	180	4.244	4.240	(0.988)	648807		60.0000	61
* 31 Naphthalene-d8	136	4.298	4.298	(1.000)	1239633		40.0000	
32 Naphthalene	128	4.324	4.325	(1.006)	1927313		60.0000	59
115 alpha-Terpeneol	59	4.431	4.427	(1.031)	512831		60.0000	61
33 4-Chloroaniline	127	4.570	4.571	(1.063)	916004		60.0000	61
34 Hexachlorobutadiene	225	4.495	4.491	(1.046)	379082		60.0000	62
102 Caprolactam	113	5.014	4.977	(1.167)	302867		60.0000	63
35 4-Chloro-3-Methylphenol	107	5.441	5.452	(1.266)	739074		60.0000	61
36 2-Methylnaphthalene	142	5.136	5.132	(1.195)	1393725		60.0000	60
114 1-Methylnaphthalene	142	5.233	5.233	(1.218)	1296826		60.0000	59
38 Hexachlorocyclopentadiene	237	5.297	5.292	(0.863)	344625		60.0000	68
112 1,2,4,5-Tetrachlorobenzene	216	5.307	5.308	(0.865)	729985		60.0000	60
39 2,4,6-Trichlorophenol	196	5.601	5.602	(0.913)	488110		60.0000	61
40 2,4,5-Trichlorophenol	196	5.778	5.783	(0.942)	514410		60.0000	61
\$ 41 2-Fluorobiphenyl	172	5.537	5.532	(0.902)	1625055		60.0000	58
98 1,1'-Biphenyl	154	5.623	5.623	(0.916)	1750224		60.0000	57
42 2-Chloronaphthalene	162	5.623	5.623	(0.916)	1368962		60.0000	59
43 2-Nitroaniline	65	5.858	5.858	(0.955)	564421		60.0000	59
44 Dimethylphthalate	163	5.981	5.976	(0.975)	1701914		60.0000	58
45 2,6-Dinitrotoluene	165	6.039	6.035	(0.984)	422069		60.0000	60
46 Acenaphthylene	152	6.007	6.008	(0.979)	2241526		60.0000	58
47 3-Nitroaniline	138	6.269	6.264	(1.022)	461549		60.0000	59
* 48 Acenaphthene-d10	164	6.135	6.136	(1.000)	840678		40.0000	
49 Acenaphthene	153	6.167	6.163	(1.005)	1378665		60.0000	58
50 2,4-Dinitrophenol	184	6.301	6.296	(1.027)	219509		60.0000	66
51 4-Nitrophenol	109	6.782	6.788	(1.105)	255780		60.0000	64(Q)
53 2,4-Dinitrotoluene	165	6.387	6.382	(1.041)	587770		60.0000	60
52 Dibenzofuran	168	6.328	6.323	(1.031)	1974936		60.0000	57
110 2,3,4,6-Tetrachlorophenol	232	6.568	6.569	(1.071)	410597		60.0000	66
54 Diethylphthalate	149	6.595	6.590	(1.075)	1661466		60.0000	58
56 4-Chlorophenyl-phenylether	204	6.648	6.644	(1.084)	892677		60.0000	59
55 Fluorene	166	6.627	6.622	(1.080)	1688104		60.0000	58
57 4-Nitroaniline	138	6.814	6.804	(1.111)	489369		60.0000	59
58 4,6-Dinitro-2-methylphenol	198	6.739	6.734	(0.909)	413677		60.0000	66
59 N-Nitrosodiphenylamine	169	6.787	6.788	(0.916)	1518016		60.0000	60
97 Azobenzene	77	6.776	6.777	(0.914)	2087393		60.0000	58
\$ 60 2,4,6-Tribromophenol	330	6.899	6.895	(0.931)	272971		60.0000	65
61 4-Bromophenyl-phenylether	248	7.054	7.055	(0.952)	562749		60.0000	61
62 Hexachlorobenzene	284	7.081	7.082	(0.955)	624467		60.0000	62
100 Atrazine	200	7.284	7.279	(0.983)	578075		60.0000	61
63 Pentachlorophenol	266	7.375	7.370	(0.995)	302455		60.0000	71
111 Pentachloronitrobenzene	237	7.279	7.274	(0.982)	246899		60.0000	61
* 64 Phenanthrene-d10	188	7.412	7.413	(1.000)	1656853		40.0000	
65 Phenanthrene	178	7.434	7.434	(1.003)	2440068		60.0000	59
66 Anthracene	178	7.476	7.472	(1.009)	2500280		60.0000	58

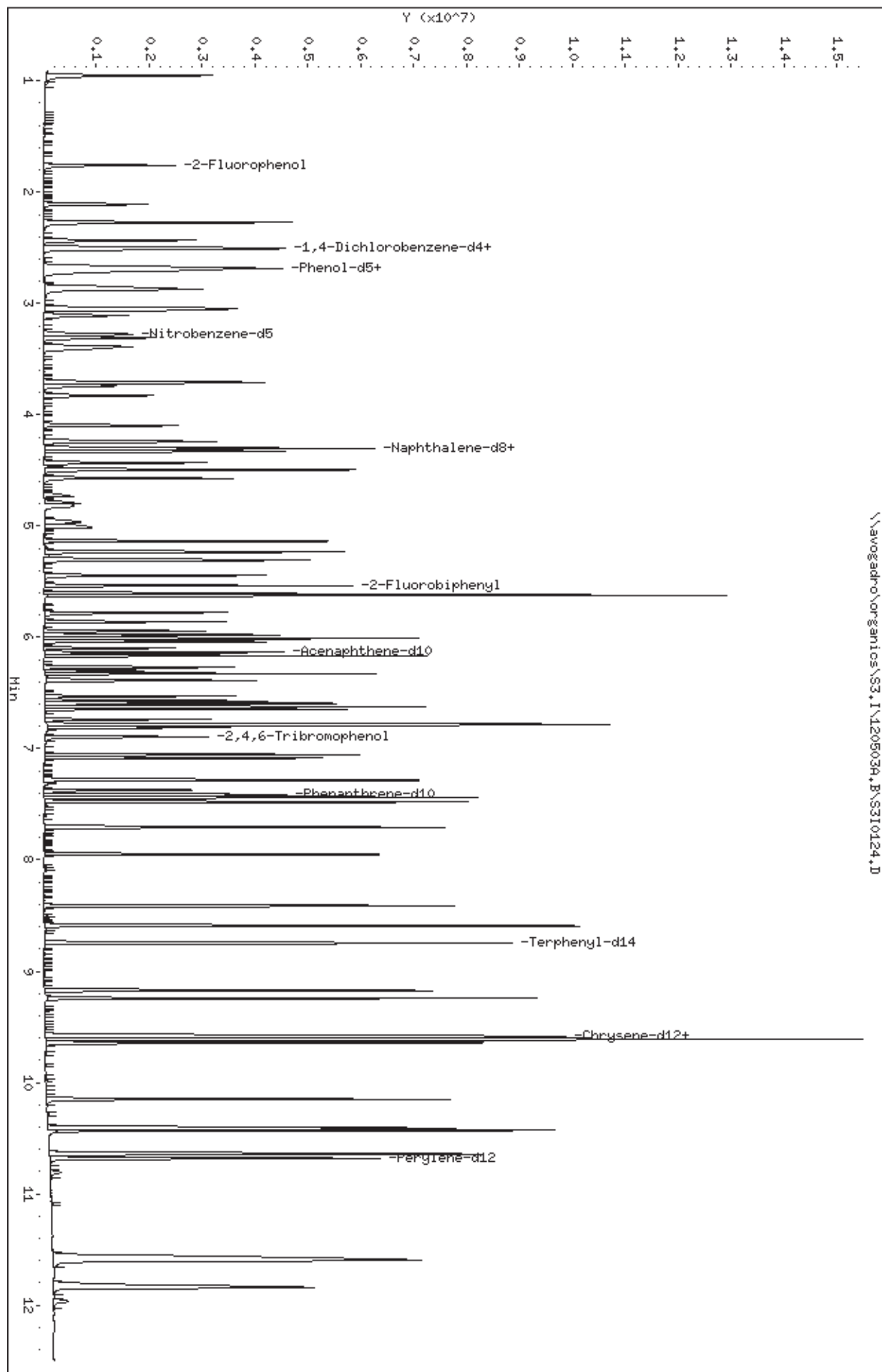
Compounds	QUANT SIG	AMOUNTS					
		CAL - AMT	ON - COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
67 Carbazole	167	7.706	7.701 (1.040)	2413431	60.0000	58	
68 Di-n-butylphthalate	149	7.952	7.947 (1.073)	2746682	60.0000	58	
69 Fluoranthene	202	8.417	8.412 (1.135)	2915501	60.0000	59	
70 Benzidine	184	8.587	8.588 (0.895)	1080540	60.0000	52	
71 Pyrene	202	8.593	8.588 (0.896)	2980525	60.0000	58	
\$ 72 Terphenyl-d14	244	8.748	8.743 (0.912)	2263227	60.0000	60	
73 Butylbenzylphthalate	149	9.175	9.170 (0.957)	1404360	60.0000	60	
74 3,3'-Dichlorobenzidine	252	9.613	9.608 (1.002)	1307382	60.0000	60	
78 bis(2-Ethylhexyl)phthalate	149	9.645	9.646 (1.006)	1903283	60.0000	59	
75 Benzo(a)anthracene	228	9.581	9.576 (0.999)	3302005	60.0000	59	
* 76 Chrysene-d12	240	9.592	9.587 (1.000)	2076998	40.0000		
77 Chrysene	228	9.613	9.608 (1.002)	2913141	60.0000	57	
79 Di-n-octylphthalate	149	10.147	10.153 (0.950)	3189047	60.0000	58	
80 Benzo(b)fluoranthene	252	10.409	10.410 (0.974)	3542491	60.0000	59	
81 Benzo(k)fluoranthene	252	10.431	10.431 (0.976)	3625652	60.0000	62	
82 Benzo(a)pyrene	252	10.644	10.645 (0.996)	3238284	60.0000	60	
* 83 Perylene-d12	264	10.682	10.693 (1.000)	2095290	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	11.574	11.574 (1.084)	4266804	60.0000	62	
85 Dibenzo(a,h)anthracene	278	11.600	11.596 (1.086)	3586084	60.0000	62	
86 Benzo(g,h,i)perylene	276	11.841	11.836 (1.109)	3558010	60.0000	62	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
 H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3.1\1205034.B\S310124.D
 Date : 03-MAY-2012 13:40
 Client ID: SSTD0603U
 Sample Info: SSTD0603U,SSTD0603U
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120503A.B\S3I0125.D
Report Date: 07-May-2012 10:08

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0125.D
Lab Smp Id: SST00053U Client Smp ID: SST00053U
Inj Date : 03-MAY-2012 14:00
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST00053U, SST00053U
Misc Info : 1,1
Comment :
Method : \\avogadro\organics\S3.I\120503A.B\s3_8270C_N.m
Meth Date : 07-May-2012 10:06 pkaczorows Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
1 N-Nitrosodimethylamine	74	0.951	0.943	(0.381)	43628	5.00000	4(a)
2 Pyridine	79	0.957	0.954	(0.384)	78568	5.00000	4(a)
\$ 3 2-Fluorophenol	112	1.758	1.761	(0.705)	59196	5.00000	4(a)
101 Benzaldehyde	77	2.105	2.103	(0.844)	87225	5.00000	7(a)
\$ 5 Phenol-d5	99	2.698	2.696	(1.081)	83974	5.00000	4(a)
6 Phenol	94	2.714	2.712	(1.088)	87104	5.00000	4(a)
7 Aniline	66	2.271	2.268	(0.910)	46503	5.00000	4(aQ)
8 bis(2-Chloroethyl)Ether	63	2.265	2.268	(0.908)	58233	5.00000	4(a)
10 2-Chlorophenol	128	2.500	2.503	(1.002)	63330	5.00000	4(a)
11 1,3-Dichlorobenzene	146	2.436	2.434	(0.976)	68026	5.00000	4(a)
* 12 1,4-Dichlorobenzene-d4	152	2.495	2.493	(1.000)	400771	40.0000	(Q)
13 1,4-Dichlorobenzene	146	2.511	2.514	(1.006)	69749	5.00000	4(a)
117 2-Ethyl-1-hexanol	57	2.661	2.664	(1.066)	78912	5.00000	5(aQ)
15 Benzyl Alcohol	108	2.858	2.867	(1.146)	45118	5.00000	4(a)
16 1,2-Dichlorobenzene	146	2.682	2.680	(1.075)	65519	5.00000	4(a)
17 2-Methylphenol	108	3.393	3.401	(1.360)	60249	5.00000	4(a)
18 2,2'-oxybis(1-Chloropropane)	45	2.853	2.851	(1.143)	101933	5.00000	5(a)
99 Acetophenone	105	3.029	3.032	(1.214)	107165	5.00000	5(a)
19 N-Nitroso-di-n-propylamine	70	3.040	3.048	(1.218)	63543	5.00000	5(a)
20 4-Methylphenol	108	3.740	3.721	(1.499)	68084	5.00000	4(a)

Data File: \\avogadro\organics\S3.I\120503A.B\S3I0125.D
Report Date: 07-May-2012 10:08

						AMOUNTS		
		QUANT SIG					CAL - AMT	ON - COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)	
=====	=====	=====	=====	=====	=====	=====	=====	
21 Hexachloroethane	117	3.104	3.107	(1.244)	26155	5.00000	5(a)	
\$ 22 Nitrobenzene-d5	82	3.264	3.273	(0.760)	84101	5.00000	5(a)	
23 Nitrobenzene	77	3.296	3.305	(0.767)	87076	5.00000	5(a)	
24 Isophorone	82	3.692	3.700	(0.859)	157251	5.00000	5(a)	
25 2-Nitrophenol	139	3.820	3.823	(0.889)	38265	5.00000	4(a)	
26 2,4-Dimethylphenol	107	4.301	4.304	(1.001)	88267	5.00000	6(a)	
27 bis(2-Chloroethoxy)methane	93	4.087	4.090	(0.952)	87184	5.00000	5(a)	
28 Benzoic Acid	105	4.717	4.758	(1.098)	37863	5.00000	3(a)	
29 2,4-Dichlorophenol	162	4.498	4.501	(1.047)	55983	5.00000	4(a)	
30 1,2,4-Trichlorobenzene	180	4.237	4.240	(0.986)	62180	5.00000	4(a)	
* 31 Naphthalene-d8	136	4.295	4.298	(1.000)	1590124	40.0000		
32 Naphthalene	128	4.322	4.325	(1.006)	199623	5.00000	5(a)	
115 alpha-Terpineol	59	4.424	4.427	(1.030)	47821	5.00000	4(a)	
33 4-Chloroaniline	127	4.563	4.571	(1.062)	88649	5.00000	5(a)	
34 Hexachlorobutadiene	225	4.493	4.491	(1.046)	34627	5.00000	4(a)	
102 Caprolactam	113	4.899	4.977	(1.141)	30291	5.00000	5(a)	
35 4-Chloro-3-Methylphenol	107	5.449	5.452	(1.269)	71830	5.00000	5(a)	
36 2-Methylnaphthalene	142	5.129	5.132	(1.194)	140901	5.00000	5(a)	
114 1-Methylnaphthalene	142	5.230	5.233	(1.218)	132481	5.00000	5(a)	
38 Hexachlorocyclopentadiene	237	5.289	5.292	(0.862)	21818	5.00000	3(a)	
112 1,2,4,5-Tetrachlorobenzene	216	5.305	5.308	(0.865)	70356	5.00000	4(a)	
39 2,4,6-Trichlorophenol	196	5.599	5.602	(0.913)	45337	5.00000	4(a)	
40 2,4,5-Trichlorophenol	196	5.786	5.783	(0.943)	47720	5.00000	4(a)	
\$ 41 2-Fluorobiphenyl	172	5.529	5.532	(0.902)	172056	5.00000	5(a)	
98 1,1'-Biphenyl	154	5.615	5.623	(0.916)	188641	5.00000	5(a)	
42 2-Chloronaphthalene	162	5.615	5.623	(0.916)	141410	5.00000	5(a)	
43 2-Nitroaniline	65	5.850	5.858	(0.954)	54541	5.00000	4(a)	
44 Dimethylphthalate	163	5.968	5.976	(0.973)	176153	5.00000	5(a)	
45 2,6-Dinitrotoluene	165	6.026	6.035	(0.983)	41439	5.00000	5(a)	
46 Acenaphthylene	152	6.000	6.008	(0.978)	240442	5.00000	5(a)	
47 3-Nitroaniline	138	6.256	6.264	(1.020)	46871	5.00000	5(a)	
* 48 Acenaphthene-d10	164	6.133	6.136	(1.000)	1066510	40.0000		
49 Acenaphthene	153	6.160	6.163	(1.004)	148668	5.00000	5(a)	
51 4-Nitrophenol	109	6.790	6.788	(1.107)	22121	5.00000	4(aQ)	
53 2,4-Dinitrotoluene	165	6.374	6.382	(1.039)	57085	5.00000	5(a)	
52 Dibenzofuran	168	6.320	6.323	(1.030)	211297	5.00000	5(a)	
110 2,3,4,6-Tetrachlorophenol	232	6.566	6.569	(1.071)	29850	5.00000	4(a)	
54 Diethylphthalate	149	6.582	6.590	(1.073)	176581	5.00000	5(a)	
56 4-Chlorophenyl-phenylether	204	6.641	6.644	(1.083)	90207	5.00000	5(a)	
55 Fluorene	166	6.619	6.622	(1.079)	180915	5.00000	5(a)	
57 4-Nitroaniline	138	6.796	6.804	(1.108)	48604	5.00000	5(a)	
58 4,6-Dinitro-2-methylphenol	198	6.726	6.734	(0.908)	24951	5.00000	3(aQ)	
59 N-Nitrosodiphenylamine	169	6.780	6.788	(0.915)	156538	5.00000	5(a)	
97 Azobenzene	77	6.769	6.777	(0.913)	232249	5.00000	5(a)	
\$ 60 2,4,6-Tribromophenol	330	6.892	6.895	(0.930)	22905	5.00000	4(a)	
61 4-Bromophenyl-phenylether	248	7.052	7.055	(0.952)	54944	5.00000	5(a)	
62 Hexachlorobenzene	284	7.079	7.082	(0.955)	59207	5.00000	4(a)	
100 Atrazine	200	7.271	7.279	(0.981)	54883	5.00000	4(a)	
63 Pentachlorophenol	266	7.373	7.370	(0.995)	8750	5.00000	2(a)	
111 Pentachloronitrobenzene	237	7.271	7.274	(0.981)	24055	5.00000	5(a)	
* 64 Phenanthrene-d10	188	7.410	7.413	(1.000)	2127411	40.0000		
65 Phenanthrene	178	7.426	7.434	(1.002)	262857	5.00000	5(a)	
66 Anthracene	178	7.469	7.472	(1.008)	274267	5.00000	5(a)	
67 Carbazole	167	7.698	7.701	(1.039)	266297	5.00000	5(a)	

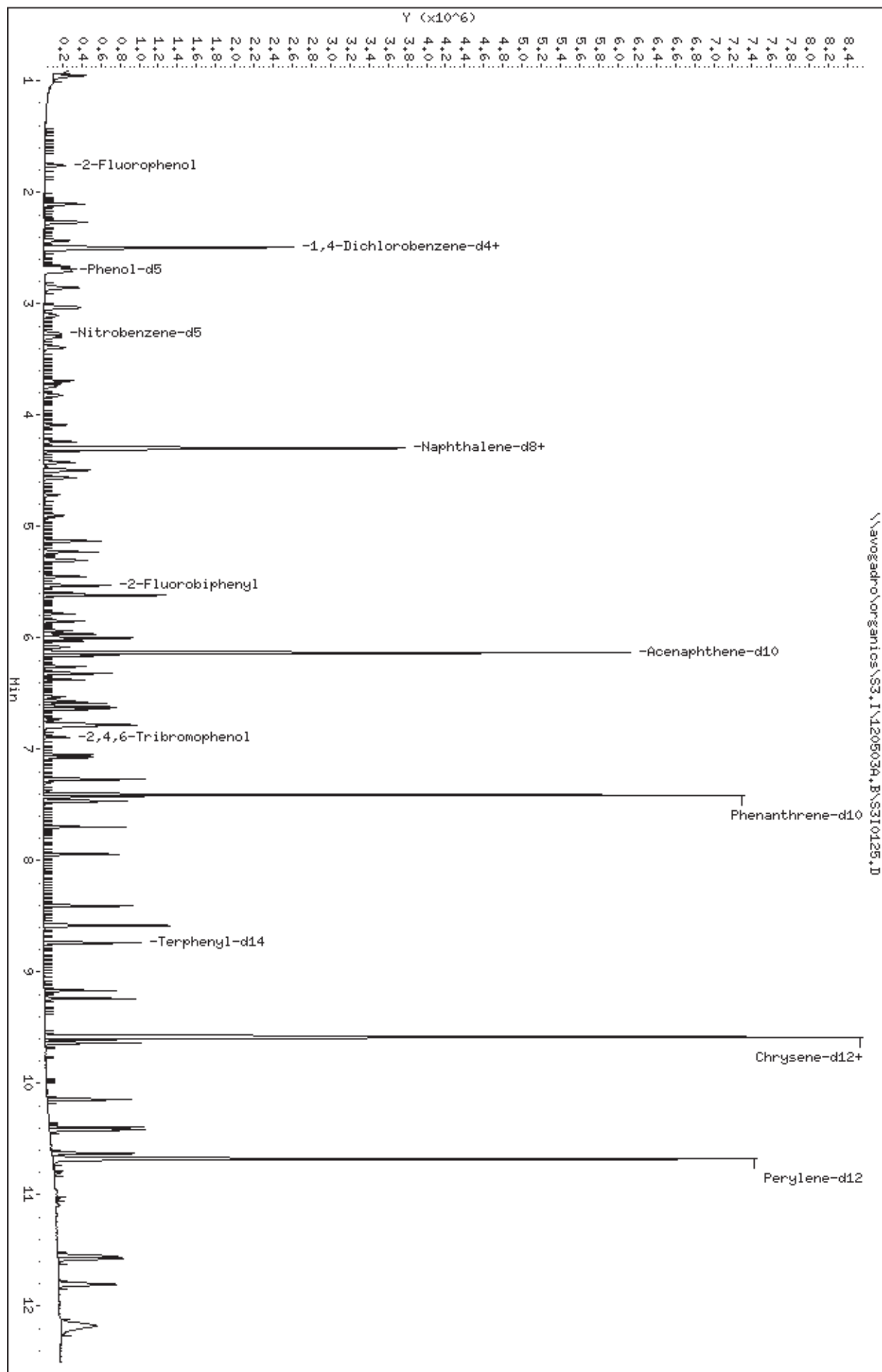
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
68 Di-n-butylphthalate	149	7.944	7.947 (1.072)		300982		5.00000	5(a)
69 Fluoranthene	202	8.404	8.412 (1.134)		319394		5.00000	5(a)
70 Benzidine	184	8.580	8.588 (0.895)		137555		5.00000	5(a)
71 Pyrene	202	8.585	8.588 (0.896)		328330		5.00000	5(a)
\$ 72 Terphenyl-d14	244	8.740	8.743 (0.912)		229043		5.00000	5(a)
73 Butylbenzylphthalate	149	9.167	9.170 (0.957)		142141		5.00000	5(a)
74 3,3'-Dichlorobenzidine	252	9.600	9.608 (1.002)		135920		5.00000	5(a)
78 bis(2-Ethylhexyl)phthalate	149	9.638	9.646 (1.006)		196084		5.00000	5(a)
75 Benzo(a)anthracene	228	9.573	9.576 (0.999)		352815		5.00000	5(a)
* 76 Chrysene-d12	240	9.584	9.587 (1.000)		2639275		40.0000	
77 Chrysene	228	9.600	9.608 (1.002)		313992		5.00000	5(a)
79 Di-n-octylphthalate	149	10.145	10.153 (0.950)		345221		5.00000	5(a)
80 Benzo(b)fluoranthene	252	10.396	10.410 (0.973)		347118		5.00000	4(a)
81 Benzo(k)fluoranthene	252	10.418	10.431 (0.975)		377028		5.00000	5(a)
82 Benzo(a)pyrene	252	10.631	10.645 (0.995)		326471		5.00000	5(a)
* 83 Perylene-d12	264	10.679	10.693 (1.000)		2723935		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.550	11.574 (1.082)		411206		5.00000	4(a)
85 Dibenzo(a,h)anthracene	278	11.571	11.596 (1.084)		341352		5.00000	4(a)
86 Benzo(g,h,i)perylene	276	11.806	11.836 (1.106)		343559		5.00000	4(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,1\1205034,B\S310125.D
 Date : 03-MAY-2012 14:00
 Client ID: SSTID0053U
 Sample Info: SSTID0053U,SSTID0053U
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3,i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0126.D
Lab Smp Id: SST0403U Client Smp ID: SST0403U
Inj Date : 03-MAY-2012 14:19
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0403U, SST0403U
Misc Info : 1,4
Comment :
Method : \\avogadro\organics\S3.I\120503A.B\s3_8270C_N.m
Meth Date : 07-May-2012 10:06 pkaczorows Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====	
1 N-Nitrosodimethylamine	74	0.947	0.943	(0.379)	325951	40.0000	39	
2 Pyridine	79	0.952	0.954	(0.382)	532098	40.0000	38	
\$ 3 2-Fluorophenol	112	1.754	1.761	(0.703)	433571	40.0000	39	
101 Benzaldehyde	77	2.106	2.103	(0.844)	348855	40.0000	35	
\$ 5 Phenol-d5	99	2.688	2.696	(1.077)	609502	40.0000	40	
6 Phenol	94	2.704	2.712	(1.083)	639029	40.0000	40	
7 Aniline	66	2.272	2.268	(0.910)	335509	40.0000	40	
8 bis(2-Chloroethyl)Ether	63	2.266	2.268	(0.908)	404531	40.0000	39	
10 2-Chlorophenol	128	2.501	2.503	(1.002)	457823	40.0000	40	
11 1,3-Dichlorobenzene	146	2.432	2.434	(0.974)	468527	40.0000	39	
* 12 1,4-Dichlorobenzene-d4	152	2.496	2.493	(1.000)	324252	40.0000		
13 1,4-Dichlorobenzene	146	2.512	2.514	(1.006)	479533	40.0000	39	
117 2-Ethyl-1-hexanol	57	2.667	2.664	(1.068)	525891	40.0000	38	
15 Benzyl Alcohol	108	2.870	2.867	(1.150)	342224	40.0000	40	
16 1,2-Dichlorobenzene	146	2.683	2.680	(1.075)	457449	40.0000	39	
17 2-Methylphenol	108	3.394	3.401	(1.359)	454140	40.0000	40	
18 2,2'-oxybis(1-Chloropropane)	45	2.854	2.851	(1.143)	704845	40.0000	39	
99 Acetophenone	105	3.036	3.032	(1.216)	747227	40.0000	40	
19 N-Nitroso-di-n-propylamine	70	3.052	3.048	(1.223)	439228	40.0000	40	
20 4-Methylphenol	108	3.714	3.721	(1.488)	500605	40.0000	40	

Data File: \\avogadro\organics\S3.I\120503A.B\S3I0126.D
Report Date: 07-May-2012 10:08

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ng)	ON - COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
21 Hexachloroethane	117	3.105	3.107	(1.244)	175088		40.0000	39
\$ 22 Nitrobenzene-d5	82	3.276	3.273	(0.762)	589662		40.0000	39
23 Nitrobenzene	77	3.308	3.305	(0.769)	607384		40.0000	39
24 Isophorone	82	3.703	3.700	(0.861)	1094695		40.0000	39
25 2-Nitrophenol	139	3.826	3.823	(0.889)	278692		40.0000	39
26 2,4-Dimethylphenol	107	4.302	4.304	(1.000)	484211		40.0000	37
27 bis(2-Chloroethoxy)methane	93	4.093	4.090	(0.952)	599148		40.0000	39
28 Benzoic Acid	105	4.777	4.758	(1.111)	401997		40.0000	44
29 2,4-Dichlorophenol	162	4.494	4.501	(1.045)	420059		40.0000	40
30 1,2,4-Trichlorobenzene	180	4.243	4.240	(0.986)	434565		40.0000	38
* 31 Naphthalene-d8	136	4.302	4.298	(1.000)	1321807		40.0000	
32 Naphthalene	128	4.323	4.325	(1.005)	1354998		40.0000	39
115 alpha-Terpineol	59	4.430	4.427	(1.030)	346987		40.0000	39
33 4-Chloroaniline	127	4.569	4.571	(1.062)	633191		40.0000	40
34 Hexachlorobutadiene	225	4.494	4.491	(1.045)	254215		40.0000	39
102 Caprolactam	113	4.991	4.977	(1.160)	207317		40.0000	40
35 4-Chloro-3-Methylphenol	107	5.445	5.452	(1.266)	506308		40.0000	39
36 2-Methylnaphthalene	142	5.135	5.132	(1.194)	964530		40.0000	39
114 1-Methylnaphthalene	142	5.231	5.233	(1.216)	909698		40.0000	39
38 Hexachlorocyclopentadiene	237	5.295	5.292	(0.863)	224707		40.0000	43
112 1,2,4,5-Tetrachlorobenzene	216	5.306	5.308	(0.865)	497728		40.0000	40
39 2,4,6-Trichlorophenol	196	5.600	5.602	(0.913)	326369		40.0000	39
40 2,4,5-Trichlorophenol	196	5.782	5.783	(0.943)	345566		40.0000	40
\$ 41 2-Fluorobiphenyl	172	5.536	5.532	(0.902)	1124755		40.0000	39
98 1,1'-Biphenyl	154	5.621	5.623	(0.916)	1239879		40.0000	39
42 2-Chloronaphthalene	162	5.621	5.623	(0.916)	945020		40.0000	39
43 2-Nitroaniline	65	5.856	5.858	(0.955)	384072		40.0000	39
44 Dimethylphthalate	163	5.974	5.976	(0.974)	1184094		40.0000	39
45 2,6-Dinitrotoluene	165	6.033	6.035	(0.983)	286610		40.0000	39
46 Acenaphthylene	152	6.006	6.008	(0.979)	1573601		40.0000	39
47 3-Nitroaniline	138	6.268	6.264	(1.022)	311128		40.0000	38
* 48 Acenaphthene-d10	164	6.134	6.136	(1.000)	873625		40.0000	
49 Acenaphthene	153	6.166	6.163	(1.005)	956242		40.0000	39
50 2,4-Dinitrophenol	184	6.294	6.296	(1.026)	165303		40.0000	48
51 4-Nitrophenol	109	6.781	6.788	(1.105)	168904		40.0000	40(Q)
53 2,4-Dinitrotoluene	165	6.385	6.382	(1.041)	393897		40.0000	39
52 Dibenzofuran	168	6.326	6.323	(1.031)	1391998		40.0000	39
110 2,3,4,6-Tetrachlorophenol	232	6.567	6.569	(1.071)	266196		40.0000	41
54 Diethylphthalate	149	6.588	6.590	(1.074)	1151323		40.0000	39
56 4-Chlorophenyl-phenylether	204	6.642	6.644	(1.083)	612070		40.0000	39
55 Fluorene	166	6.626	6.622	(1.080)	1183211		40.0000	39
57 4-Nitroaniline	138	6.807	6.804	(1.110)	334705		40.0000	39
58 4,6-Dinitro-2-methylphenol	198	6.732	6.734	(0.908)	270335		40.0000	41
59 N-Nitrosodiphenylamine	169	6.786	6.788	(0.916)	1054750		40.0000	40
97 Azobenzene	77	6.775	6.777	(0.914)	1475957		40.0000	39
\$ 60 2,4,6-Tribromophenol	330	6.893	6.895	(0.930)	178033		40.0000	41
61 4-Bromophenyl-phenylether	248	7.053	7.055	(0.952)	377835		40.0000	39
62 Hexachlorobenzene	284	7.080	7.082	(0.955)	407466		40.0000	39
100 Atrazine	200	7.283	7.279	(0.983)	408452		40.0000	41
63 Pentachlorophenol	266	7.368	7.370	(0.994)	175392		40.0000	39
111 Pentachloronitrobenzene	237	7.277	7.274	(0.982)	165131		40.0000	39
* 64 Phenanthrene-d10	188	7.411	7.413	(1.000)	1731186		40.0000	
65 Phenanthrene	178	7.432	7.434	(1.003)	1675915		40.0000	39
66 Anthracene	178	7.475	7.472	(1.009)	1760416		40.0000	39

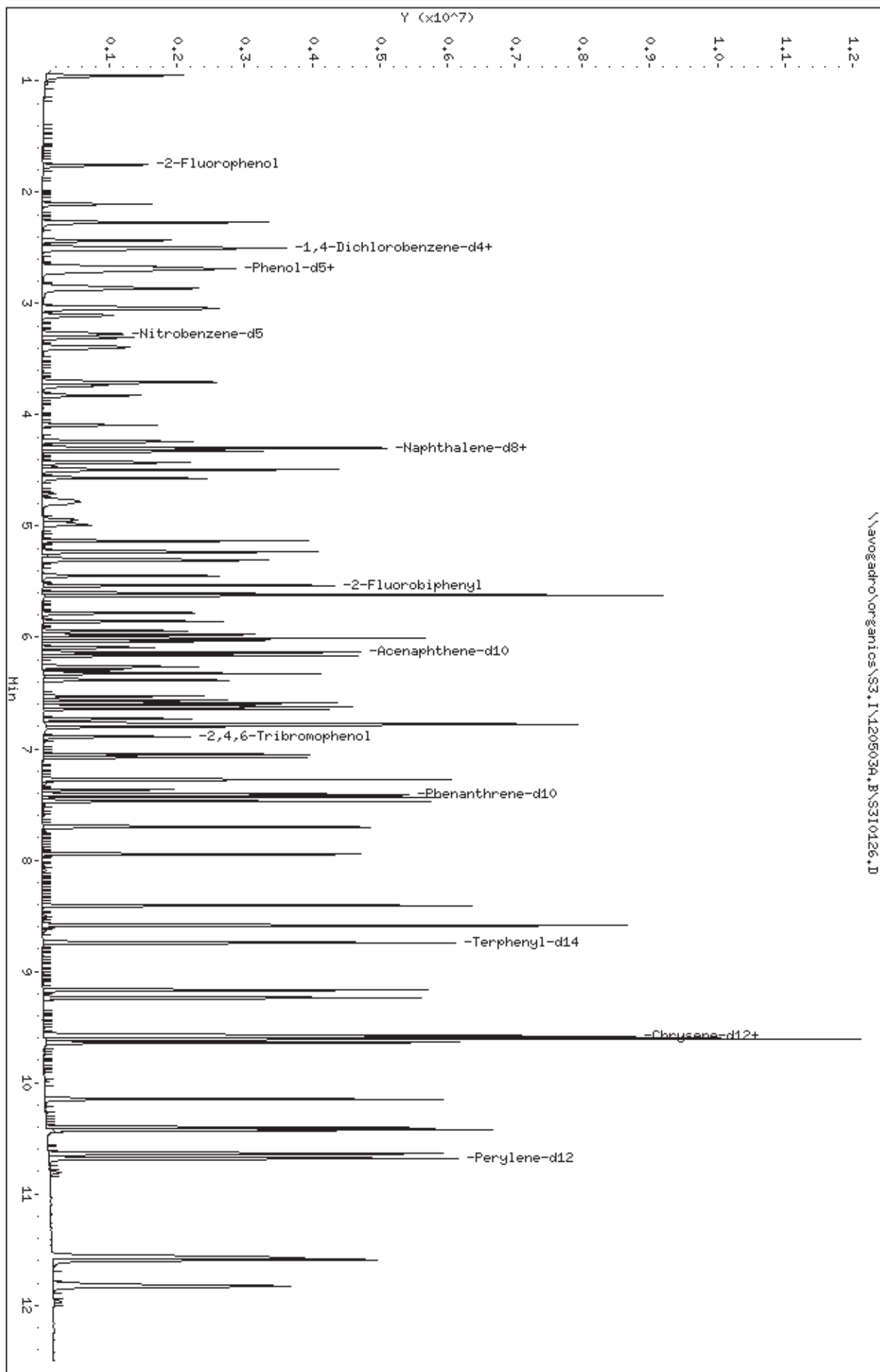
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
67 Carbazole	167	7.705	7.701	(1.040)	1689267		40.0000	39
68 Di-n-butylphthalate	149	7.945	7.947	(1.072)	1910889		40.0000	38
69 Fluoranthene	202	8.410	8.412	(1.135)	2021522		40.0000	39
70 Benzidine	184	8.586	8.588	(0.896)	839241		40.0000	39
71 Pyrene	202	8.586	8.588	(0.896)	2079787		40.0000	39
\$ 72 Terphenyl-d14	244	8.741	8.743	(0.912)	1557693		40.0000	40
73 Butylbenzylphthalate	149	9.168	9.170	(0.957)	946245		40.0000	39
74 3,3'-Dichlorobenzidine	252	9.607	9.608	(1.002)	902187		40.0000	40
78 bis(2-Ethylhexyl)phthalate	149	9.639	9.646	(1.006)	1301431		40.0000	39
75 Benzo(a)anthracene	228	9.574	9.576	(0.999)	2249513		40.0000	39
* 76 Chrysene-d12	240	9.585	9.587	(1.000)	2136713		40.0000	
77 Chrysene	228	9.607	9.608	(1.002)	2121752		40.0000	40
79 Di-n-octylphthalate	149	10.146	10.153	(0.950)	2230194		40.0000	40
80 Benzo(b)fluoranthene	252	10.408	10.410	(0.974)	2585273		40.0000	42
81 Benzo(k)fluoranthene	252	10.429	10.431	(0.976)	2301764		40.0000	38
82 Benzo(a)pyrene	252	10.638	10.645	(0.996)	2214968		40.0000	40
* 83 Perylene-d12	264	10.680	10.693	(1.000)	2152068		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.567	11.574	(1.083)	2795804		40.0000	39
85 Dibenzo(a,h)anthracene	278	11.594	11.596	(1.086)	2356410		40.0000	40
86 Benzo(g,h,i)perylene	276	11.834	11.836	(1.108)	2345492		40.0000	40

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3.1\1205034.B\S310126.D
 Date : 03-MAY-2012 14:19
 Client ID: SSTID0403U
 Sample Info: SSTID0403U,SSTID0403U
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0935</u>	Mod. Ref No.: _____ SDG No.: <u>SL0935</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>05/11/2012</u> Time: <u>11:32</u>
Lab File ID: <u>S3I0281.D</u>	Init. Calib. Date(s): <u>05/03/2012</u> <u>05/03/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253A</u>	Init. Calib. Time(s): <u>12:40</u> <u>14:19</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.987	2.035	0.010	2.4	20.0
Bis(2-chloroethyl)ether	1.274	1.297	0.010	1.8	20.0
2-Chlorophenol	1.428	1.442	0.010	1.0	20.0
1,3-Dichlorobenzene	1.484	1.504	0.010	1.3	20.0
1,4-Dichlorobenzene	1.517	1.544	0.010	1.8	20.0
1,2-Dichlorobenzene	1.447	1.463	0.010	1.1	20.0
2-Methylphenol	1.396	1.448	0.010	3.8	20.0
2,2'-oxybis(1-Chloropropane)	2.206	2.250	0.010	2.0	20.0
4-Methylphenol	1.535	1.590	0.010	3.6	20.0
N-Nitroso-di-n-propylamine	1.369	1.413	0.050	3.2	20.0
Hexachloroethane	0.557	0.555	0.010	-0.4	20.0
Nitrobenzene	0.475	0.503	0.010	6.0	20.0
Isophorone	0.854	0.872	0.010	2.2	20.0
2-Nitrophenol	0.214	0.217	0.010	1.4	20.0
2,4-Dimethylphenol	0.396	0.414	0.010	4.5	20.0
2,4-Dichlorophenol	0.320	0.329	0.010	2.6	20.0
1,2,4-Trichlorobenzene	0.341	0.350	0.010	2.6	20.0
Naphthalene	1.055	1.090	0.010	3.3	20.0
4-Chloroaniline	0.483	0.477	0.010	-1.2	20.0
Bis(2-chloroethoxy)methane	0.469	0.472	0.010	0.6	20.0
Hexachlorobutadiene	0.198	0.205	0.010	3.6	20.0
4-Chloro-3-methylphenol	0.391	0.400	0.010	2.4	20.0
2-Methylnaphthalene	0.752	0.763	0.010	1.4	20.0
Hexachlorocyclopentadiene	0.240	0.258	0.050	7.6	20.0
2,4,6-Trichlorophenol	0.380	0.398	0.010	4.5	20.0
2,4,5-Trichlorophenol	0.408	0.409	0.010	0.4	20.0
2-Chloronaphthalene	1.110	1.104	0.010	-0.6	20.0
2-Nitroaniline	0.455	0.456	0.010	0.3	20.0
Dimethylphthalate	1.382	1.405	0.010	1.6	20.0
Acenaphthylene	1.848	1.887	0.010	2.1	20.0
2,6-Dinitrotoluene	0.333	0.337	0.010	1.0	20.0
3-Nitroaniline	0.372	0.371	0.010	-0.4	20.0
Acenaphthene	1.133	1.160	0.010	2.5	20.0
2,4-Dinitrophenol	0.157	0.151	0.050	-3.7	20.0
4-Nitrophenol	0.191	0.190	0.050	-0.4	20.0
Dibenzofuran	1.639	1.661	0.010	1.3	20.0
2,4-Dinitrotoluene	0.464	0.468	0.010	1.0	20.0
Diethylphthalate	1.359	1.385	0.010	1.9	20.0
4-Chlorophenyl-phenylether	0.715	0.718	0.010	0.3	20.0
Fluorene	1.389	1.402	0.010	0.9	20.0
4-Nitroaniline	0.399	0.400	0.010	0.3	20.0
4,6-Dinitro-2-methylphenol	0.152	0.150	0.010	-1.2	20.0

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0935</u>	Mod. Ref No.: _____ SDG No.: <u>SL0935</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>05/11/2012</u> Time: <u>11:32</u>
Lab File ID: <u>S3I0281.D</u>	Init. Calib. Date(s): <u>05/03/2012</u> <u>05/03/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253A</u>	Init. Calib. Time(s): <u>12:40</u> <u>14:19</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.615	0.631	0.010	2.6	20.0
4-Bromophenyl-phenylether	0.221	0.229	0.010	3.8	20.0
Hexachlorobenzene	0.242	0.249	0.010	2.5	20.0
Pentachlorophenol	0.103	0.083	0.010	-19.3	20.0
Phenanthrene	1.001	1.024	0.010	2.4	20.0
Anthracene	1.037	1.051	0.010	1.4	20.0
Carbazole	1.004	1.028	0.010	2.4	20.0
Di-n-butylphthalate	1.147	1.181	0.010	2.9	20.0
Fluoranthene	1.201	1.243	0.010	3.5	20.0
Pyrene	0.995	1.030	0.010	3.6	20.0
Butylbenzylphthalate	0.450	0.461	0.010	2.3	20.0
3,3'-Dichlorobenzidine	0.423	0.434	0.010	2.5	20.0
Benzo(a)anthracene	1.074	1.084	0.010	0.9	20.0
Chrysene	0.980	1.040	0.010	6.1	20.0
Bis(2-ethylhexyl)phthalate	0.617	0.642	0.010	4.0	20.0
Di-n-octylphthalate	1.047	1.071	0.010	2.2	20.0
Benzo(b)fluoranthene	1.142	1.128	0.010	-1.3	20.0
Benzo(k)fluoranthene	1.123	1.159	0.010	3.2	20.0
Benzo(a)pyrene	1.027	1.042	0.010	1.4	20.0
Indeno(1,2,3-cd)pyrene	1.318	1.279	0.010	-2.9	20.0
Dibenzo(a,h)anthracene	1.104	1.083	0.010	-1.9	20.0
Benzo(g,h,i)perylene	1.102	1.080	0.010	-2.0	20.0

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0935</u>	Mod. Ref No.: _____ SDG No.: <u>SL0935</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>05/11/2012</u> Time: <u>11:32</u>
Lab File ID: <u>S3I0281.D</u>	Init. Calib. Date(s): <u>05/03/2012</u> <u>05/03/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253A</u>	Init. Calib. Time(s): <u>12:40</u> <u>14:19</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.458	0.471	0.010	2.8	20.0
2-Fluorobiphenyl	1.320	1.376	0.010	4.2	20.0
Terphenyl-d14	0.728	0.757	0.010	4.1	20.0
Phenol-d5	1.895	1.975	0.010	4.2	20.0
2-Fluorophenol	1.358	1.403	0.010	3.3	20.0
2,4,6-Tribromophenol	0.101	0.104	0.010	2.8	20.0

7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0935</u>	Mod. Ref No.: _____ SDG No.: <u>SL0935</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>05/16/2012</u> Time: <u>14:22</u>
Lab File ID: <u>S3I0401.D</u>	Init. Calib. Date(s): <u>05/03/2012</u> <u>05/03/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253E</u>	Init. Calib. Time(s): <u>12:40</u> <u>14:19</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.987	1.966	0.010	-1.1	20.0
Bis(2-chloroethyl)ether	1.274	1.262	0.010	-1.0	20.0
2-Chlorophenol	1.428	1.421	0.010	-0.5	20.0
1,3-Dichlorobenzene	1.484	1.504	0.010	1.3	20.0
1,4-Dichlorobenzene	1.517	1.528	0.010	0.7	20.0
1,2-Dichlorobenzene	1.447	1.464	0.010	1.2	20.0
2-Methylphenol	1.396	1.394	0.010	-0.1	20.0
2,2'-oxybis(1-Chloropropane)	2.206	2.150	0.010	-2.5	20.0
4-Methylphenol	1.535	1.535	0.010	0.0	20.0
N-Nitroso-di-n-propylamine	1.369	1.321	0.050	-3.5	20.0
Hexachloroethane	0.557	0.553	0.010	-0.8	20.0
Nitrobenzene	0.475	0.485	0.010	2.2	20.0
Isophorone	0.854	0.874	0.010	2.4	20.0
2-Nitrophenol	0.214	0.217	0.010	1.6	20.0
2,4-Dimethylphenol	0.396	0.402	0.010	1.6	20.0
2,4-Dichlorophenol	0.320	0.328	0.010	2.3	20.0
1,2,4-Trichlorobenzene	0.341	0.355	0.010	4.1	20.0
Naphthalene	1.055	1.084	0.010	2.7	20.0
4-Chloroaniline	0.483	0.442	0.010	-8.5	20.0
Bis(2-chloroethoxy)methane	0.469	0.476	0.010	1.4	20.0
Hexachlorobutadiene	0.198	0.212	0.010	7.2	20.0
4-Chloro-3-methylphenol	0.391	0.393	0.010	0.5	20.0
2-Methylnaphthalene	0.752	0.769	0.010	2.3	20.0
Hexachlorocyclopentadiene	0.240	0.256	0.050	6.9	20.0
2,4,6-Trichlorophenol	0.380	0.411	0.010	8.0	20.0
2,4,5-Trichlorophenol	0.408	0.423	0.010	3.8	20.0
2-Chloronaphthalene	1.110	1.147	0.010	3.3	20.0
2-Nitroaniline	0.455	0.448	0.010	-1.5	20.0
Dimethylphthalate	1.382	1.408	0.010	1.9	20.0
Acenaphthylene	1.848	1.862	0.010	0.8	20.0
2,6-Dinitrotoluene	0.333	0.346	0.010	3.6	20.0
3-Nitroaniline	0.372	0.358	0.010	-3.8	20.0
Acenaphthene	1.133	1.152	0.010	1.7	20.0
2,4-Dinitrophenol	0.157	0.126	0.050	-19.6	20.0
4-Nitrophenol	0.191	0.215	0.050	12.5	20.0
Dibenzofuran	1.639	1.664	0.010	1.5	20.0
2,4-Dinitrotoluene	0.464	0.478	0.010	3.2	20.0
Diethylphthalate	1.359	1.401	0.010	3.1	20.0
4-Chlorophenyl-phenylether	0.715	0.745	0.010	4.1	20.0
Fluorene	1.389	1.414	0.010	1.8	20.0
4-Nitroaniline	0.399	0.374	0.010	-6.4	20.0
4,6-Dinitro-2-methylphenol	0.152	0.146	0.010	-4.0	20.0

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0935</u>	Mod. Ref No.: _____ SDG No.: <u>SL0935</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>05/16/2012</u> Time: <u>14:22</u>
Lab File ID: <u>S3I0401.D</u>	Init. Calib. Date(s): <u>05/03/2012</u> <u>05/03/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253E</u>	Init. Calib. Time(s): <u>12:40</u> <u>14:19</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.615	0.615	0.010	0.0	20.0
4-Bromophenyl-phenylether	0.221	0.238	0.010	7.7	20.0
Hexachlorobenzene	0.242	0.255	0.010	5.4	20.0
Pentachlorophenol	0.103	0.117	0.010	13.9	20.0
Phenanthrene	1.001	1.015	0.010	1.4	20.0
Anthracene	1.037	1.062	0.010	2.5	20.0
Carbazole	1.004	0.979	0.010	-2.5	20.0
Di-n-butylphthalate	1.147	1.173	0.010	2.3	20.0
Fluoranthene	1.201	1.283	0.010	6.8	20.0
Pyrene	0.995	0.990	0.010	-0.5	20.0
Butylbenzylphthalate	0.450	0.456	0.010	1.3	20.0
3,3'-Dichlorobenzidine	0.423	0.442	0.010	4.6	20.0
Benzo(a)anthracene	1.074	1.121	0.010	4.4	20.0
Chrysene	0.980	0.999	0.010	2.0	20.0
Bis(2-ethylhexyl)phthalate	0.617	0.632	0.010	2.4	20.0
Di-n-octylphthalate	1.047	1.054	0.010	0.7	20.0
Benzo(b)fluoranthene	1.142	1.120	0.010	-1.9	20.0
Benzo(k)fluoranthene	1.123	1.274	0.010	13.4	20.0
Benzo(a)pyrene	1.027	1.082	0.010	5.3	20.0
Indeno(1,2,3-cd)pyrene	1.318	1.384	0.010	5.0	20.0
Dibenzo(a,h)anthracene	1.104	1.166	0.010	5.7	20.0
Benzo(g,h,i)perylene	1.102	1.173	0.010	6.4	20.0

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Instrument ID: S3 Calibration Date: 05/16/2012 Time: 14:22
Lab File ID: S3I0401.D Init. Calib. Date(s): 05/03/2012 05/03/2012
EPA Sample No.(SSTD020##) SSTD0253E Init. Calib. Time(s): 12:40 14:19
GC Column: Rxi-5sil MS ID: 0.25 (mm)

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.458	0.473	0.010	3.2	20.0
2-Fluorobiphenyl	1.320	1.354	0.010	2.5	20.0
Terphenyl-d14	0.728	0.748	0.010	2.8	20.0
Phenol-d5	1.895	1.917	0.010	1.1	20.0
2-Fluorophenol	1.358	1.357	0.010	-0.1	20.0
2,4,6-Tribromophenol	0.101	0.106	0.010	4.9	20.0

Data File: \\avogadro\organics\S3.I\120511.B\S3I0281.D
 Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0281.D
 Lab Smp Id: SST0253A Client Smp ID: SST0253A
 Inj Date : 11-MAY-2012 11:32
 Operator : PK Inst ID: S3.i
 Smp Info : SST0253A, ,SST0253A
 Misc Info : 2,3
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
 Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: allnew.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					CAL-AMT (ng)	ON-COL (ng)
		MASS	RT	EXP RT	REL RT	RESPONSE		
1 N-Nitrosodimethylamine	74	0.834	0.834	(0.366)	266991	25.0000	26	
2 Pyridine	79	0.845	0.845	(0.370)	436826	25.0000	25	
\$ 3 2-Fluorophenol	112	1.518	1.518	(0.665)	354805	25.0000	26	
101 Benzaldehyde	77	1.908	1.908	(0.836)	276233	25.0000	22	
\$ 5 Phenol-d5	99	2.346	2.346	(1.028)	499280	25.0000	26	
6 Phenol	94	2.357	2.357	(1.033)	514429	25.0000	26	
7 Aniline	66	2.047	2.047	(0.897)	265860	25.0000	25	
8 bis(2-Chloroethyl)Ether	63	2.063	2.063	(0.904)	327834	25.0000	25	
10 2-Chlorophenol	128	2.234	2.234	(0.979)	364627	25.0000	25	
11 1,3-Dichlorobenzene	146	2.223	2.223	(0.974)	380328	25.0000	25	
* 12 1,4-Dichlorobenzene-d4	152	2.282	2.282	(1.000)	404510	40.0000		
13 1,4-Dichlorobenzene	146	2.298	2.298	(1.007)	390454	25.0000	25	
117 2-Ethyl-1-hexanol	57	2.426	2.426	(1.063)	434841	25.0000	25	
15 Benzyl Alcohol	108	2.565	2.565	(1.124)	273417	25.0000	26	
16 1,2-Dichlorobenzene	146	2.442	2.442	(1.070)	369880	25.0000	25	
17 2-Methylphenol	108	2.944	2.944	(1.290)	366135	25.0000	26	
18 2,2'-oxybis(1-Chloropropane)	45	2.597	2.597	(1.138)	568853	25.0000	25	
99 Acetophenone	105	2.747	2.747	(1.204)	592201	25.0000	25	
19 N-Nitroso-di-n-propylamine	70	2.768	2.768	(1.213)	357191	25.0000	26	
20 4-Methylphenol	108	3.260	3.260	(1.428)	402103	25.0000	26	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0281.D
Report Date: 15-May-2012 17:17

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ng)	ON - COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
21 Hexachloroethane	117	2.821	2.821	(1.236)	140334		25.0000	25
\$ 22 Nitrobenzene-d5	82	2.955	2.955	(0.729)	473370		25.0000	26
23 Nitrobenzene	77	2.982	2.982	(0.735)	505464		25.0000	26
24 Isophorone	82	3.388	3.388	(0.835)	876144		25.0000	26
25 2-Nitrophenol	139	3.527	3.527	(0.870)	217443		25.0000	25
26 2,4-Dimethylphenol	107	3.981	3.981	(0.982)	415619		25.0000	26
27 bis(2-Chloroethoxy)methane	93	3.831	3.831	(0.945)	473645		25.0000	25
28 Benzoic Acid	105	4.462	4.462	(1.100)	132359		25.0000	12(a)
29 2,4-Dichlorophenol	162	4.184	4.184	(1.032)	330151		25.0000	26
30 1,2,4-Trichlorobenzene	180	3.991	3.991	(0.984)	351193		25.0000	26
* 31 Naphthalene-d8	136	4.056	4.056	(1.000)	1606715		40.0000	
32 Naphthalene	128	4.082	4.082	(1.007)	1094560		25.0000	26
115 alpha-Terpineol	59	4.189	4.189	(1.033)	279310		25.0000	26
33 4-Chloroaniline	127	4.312	4.312	(1.063)	478742		25.0000	25
34 Hexachlorobutadiene	225	4.275	4.275	(1.054)	205542		25.0000	26
102 Caprolactam	113	4.734	4.734	(1.167)	163859		25.0000	26
35 4-Chloro-3-Methylphenol	107	5.183	5.183	(1.278)	402029		25.0000	26
36 2-Methylnaphthalene	142	4.932	4.932	(1.216)	765722		25.0000	25
114 1-Methylnaphthalene	142	5.033	5.033	(1.241)	720164		25.0000	25
38 Hexachlorocyclopentadiene	237	5.103	5.103	(0.857)	170553		25.0000	27
112 1,2,4,5-Tetrachlorobenzene	216	5.113	5.113	(0.859)	397390		25.0000	26
39 2,4,6-Trichlorophenol	196	5.380	5.380	(0.904)	263035		25.0000	26
40 2,4,5-Trichlorophenol	196	5.530	5.530	(0.929)	270810		25.0000	26
\$ 41 2-Fluorobiphenyl	172	5.348	5.348	(0.899)	910174		25.0000	26
98 1,1'-Biphenyl	154	5.434	5.434	(0.913)	975923		25.0000	25
42 2-Chloronaphthalene	162	5.428	5.428	(0.912)	730252		25.0000	25
43 2-Nitroaniline	65	5.647	5.647	(0.949)	301846		25.0000	25
44 Dimethylphthalate	163	5.797	5.797	(0.974)	929285		25.0000	25
45 2,6-Dinitrotoluene	165	5.845	5.845	(0.982)	222839		25.0000	25
46 Acenaphthylene	152	5.818	5.818	(0.978)	1248081		25.0000	26
47 3-Nitroaniline	138	6.053	6.053	(1.017)	245192		25.0000	25
* 48 Acenaphthene-d10	164	5.952	5.952	(1.000)	1058363		40.0000	
49 Acenaphthene	153	5.979	5.979	(1.004)	767638		25.0000	26
50 2,4-Dinitrophenol	184	6.102	6.102	(1.025)	99958		25.0000	24
51 4-Nitrophenol	109	6.524	6.524	(1.096)	125733		25.0000	25
53 2,4-Dinitrotoluene	165	6.198	6.198	(1.041)	309660		25.0000	25
52 Dibenzofuran	168	6.139	6.139	(1.031)	1098693		25.0000	25
110 2,3,4,6-Tetrachlorophenol	232	6.358	6.358	(1.068)	203673		25.0000	26
54 Diethylphthalate	149	6.417	6.417	(1.078)	916367		25.0000	25
56 4-Chlorophenyl-phenylether	204	6.465	6.465	(1.086)	474702		25.0000	25
55 Fluorene	166	6.438	6.438	(1.082)	927297		25.0000	25
57 4-Nitroaniline	138	6.598	6.598	(1.109)	264842		25.0000	25
58 4,6-Dinitro-2-methylphenol	198	6.550	6.550	(0.906)	196844		25.0000	25
59 N-Nitrosodiphenylamine	169	6.604	6.604	(0.914)	826379		25.0000	26
97 Azobenzene	77	6.598	6.598	(0.913)	1165183		25.0000	26
\$ 60 2,4,6-Tribromophenol	330	6.700	6.700	(0.927)	136182		25.0000	26
61 4-Bromophenyl-phenylether	248	6.876	6.876	(0.951)	300529		25.0000	26
62 Hexachlorobenzene	284	6.898	6.898	(0.954)	325514		25.0000	26
100 Atrazine	200	7.095	7.095	(0.982)	307432		25.0000	26
63 Pentachlorophenol	266	7.165	7.165	(0.991)	108596		25.0000	20
111 Pentachloronitrobenzene	237	7.095	7.095	(0.982)	129876		25.0000	26
* 64 Phenanthrene-d10	188	7.229	7.229	(1.000)	2095410		40.0000	
65 Phenanthrene	178	7.245	7.245	(1.002)	1341300		25.0000	26
66 Anthracene	178	7.287	7.287	(1.008)	1376350		25.0000	25

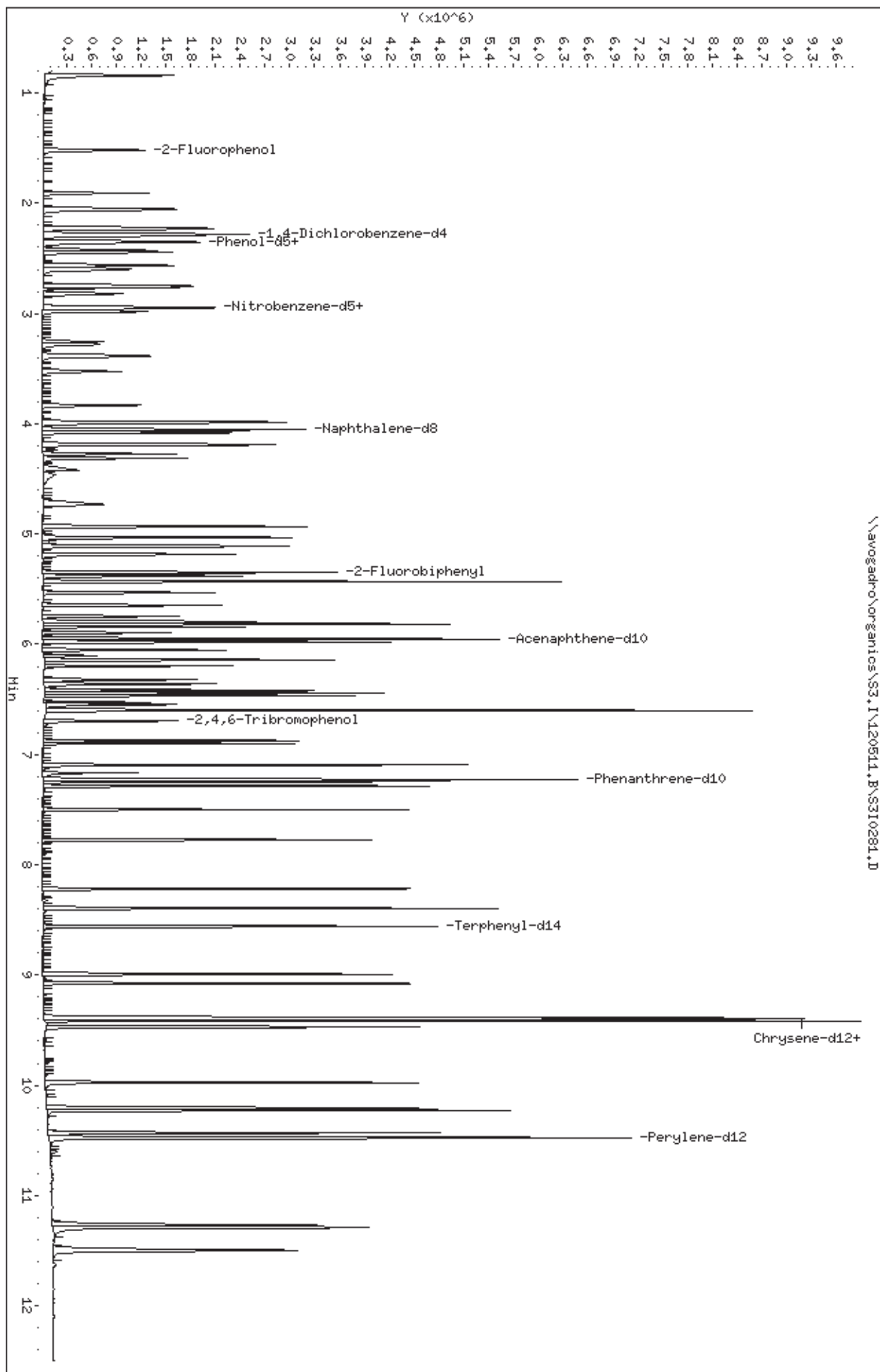
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
67 Carbazole	167	7.501	7.501	(1.038)	1345835		25.0000	26
68 Di-n-butylphthalate	149	7.774	7.774	(1.075)	1546054		25.0000	26
69 Fluoranthene	202	8.222	8.222	(1.137)	1627551		25.0000	26
70 Benzidine	184	8.393	8.393	(0.893)	545081		25.0000	21
71 Pyrene	202	8.399	8.399	(0.894)	1676202		25.0000	26
\$ 72 Terphenyl-d14	244	8.559	8.559	(0.911)	1232036		25.0000	26
73 Butylbenzylphthalate	149	8.992	8.992	(0.957)	749285		25.0000	26
74 3,3'-Dichlorobenzidine	252	9.414	9.414	(1.002)	705295		25.0000	26
78 bis(2-Ethylhexyl)phthalate	149	9.472	9.472	(1.008)	1045024		25.0000	26
75 Benzo(a)anthracene	228	9.382	9.382	(0.998)	1762834		25.0000	25
* 76 Chrysene-d12	240	9.398	9.398	(1.000)	2602695		40.0000	
77 Chrysene	228	9.414	9.414	(1.002)	1691178		25.0000	26
79 Di-n-octylphthalate	149	9.975	9.975	(0.952)	1777691		25.0000	26
80 Benzo(b)fluoranthene	252	10.204	10.204	(0.973)	1872262		25.0000	25
81 Benzo(k)fluoranthene	252	10.226	10.226	(0.976)	1924436		25.0000	26
82 Benzo(a)pyrene	252	10.434	10.434	(0.995)	1729940		25.0000	25
* 83 Perylene-d12	264	10.482	10.482	(1.000)	2656606		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.267	11.267	(1.075)	2124439		25.0000	24
85 Dibenzo(a,h)anthracene	278	11.289	11.289	(1.077)	1797594		25.0000	24
86 Benzo(g,h,i)perylene	276	11.497	11.497	(1.097)	1793866		25.0000	24

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\S3,I\120511,B\S3I0281.D
 Date : 11-May-2012 11:32
 Client ID: SSTID0253A
 Sample Info: SSTID0253A, SSTID0253A
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0401.D
Lab Smp Id: SST0253E Client Smp ID: SST0253E
Inj Date : 16-MAY-2012 14:22
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0253E, SST0253E
Misc Info : 2,3
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 N-Nitrosodimethylamine	74	0.786	0.786 (0.362)		267660	25.0000	25
2 Pyridine	79	0.786	0.786 (0.362)		440030	25.0000	24
\$ 3 2-Fluorophenol	112	1.507	1.507 (0.695)		357120	25.0000	25
101 Benzaldehyde	77	1.811	1.811 (0.835)		277830	25.0000	21
\$ 5 Phenol-d5	99	2.383	2.383 (1.098)		504525	25.0000	25
6 Phenol	94	2.399	2.399 (1.106)		517412	25.0000	25
7 Aniline	66	1.972	1.972 (0.909)		259853	25.0000	24
8 bis(2-Chloroethyl)Ether	63	1.966	1.966 (0.906)		332228	25.0000	25
10 2-Chlorophenol	128	2.191	2.191 (1.010)		374183	25.0000	25
11 1,3-Dichlorobenzene	146	2.110	2.110 (0.973)		395947	25.0000	25
* 12 1,4-Dichlorobenzene-d4	152	2.169	2.169 (1.000)		421193	40.0000	
13 1,4-Dichlorobenzene	146	2.185	2.185 (1.007)		402322	25.0000	25
117 2-Ethyl-1-hexanol	57	2.330	2.330 (1.074)		429949	25.0000	24
15 Benzyl Alcohol	108	2.506	2.506 (1.155)		275472	25.0000	25
16 1,2-Dichlorobenzene	146	2.330	2.330 (1.074)		385436	25.0000	25
17 2-Methylphenol	108	2.965	2.965 (1.367)		366875	25.0000	25
18 2,2'-oxybis(1-Chloropropane)	45	2.479	2.479 (1.143)		565997	25.0000	24
99 Acetophenone	105	2.629	2.629 (1.212)		596731	25.0000	24
19 N-Nitroso-di-n-propylamine	70	2.645	2.645 (1.219)		347796	25.0000	24
20 4-Methylphenol	108	3.291	3.291 (1.517)		404158	25.0000	25

Data File: \\avogadro\organics\S3.I\120516.B\S3I0401.D
Report Date: 17-May-2012 13:17

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ng)	ON - COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
21 Hexachloroethane	117	2.671	2.671	(1.231)	145536		25.0000	25
\$ 22 Nitrobenzene-d5	82	2.821	2.821	(0.719)	479864		25.0000	26
23 Nitrobenzene	77	2.848	2.848	(0.726)	492398		25.0000	26
24 Isophorone	82	3.232	3.232	(0.824)	886729		25.0000	26
25 2-Nitrophenol	139	3.366	3.366	(0.858)	220154		25.0000	25
26 2,4-Dimethylphenol	107	3.975	3.975	(1.014)	408015		25.0000	25
27 bis(2-Chloroethoxy)methane	93	3.708	3.708	(0.946)	482381		25.0000	25
28 Benzoic Acid	105	4.525	4.525	(1.154)	278710		25.0000	25
29 2,4-Dichlorophenol	162	4.183	4.183	(1.067)	332544		25.0000	26
30 1,2,4-Trichlorobenzene	180	3.857	3.857	(0.984)	359592		25.0000	26
* 31 Naphthalene-d8	136	3.921	3.921	(1.000)	1622909		40.0000	
32 Naphthalene	128	3.948	3.948	(1.007)	1099802		25.0000	26
115 alpha-Terpineol	59	4.082	4.082	(1.041)	274378		25.0000	25
33 4-Chloroaniline	127	4.242	4.242	(1.082)	447904		25.0000	23
34 Hexachlorobutadiene	225	4.140	4.140	(1.056)	215004		25.0000	27
102 Caprolactam	113	4.723	4.723	(1.204)	164236		25.0000	26
35 4-Chloro-3-Methylphenol	107	5.204	5.204	(1.327)	398599		25.0000	25
36 2-Methylnaphthalene	142	4.830	4.830	(1.232)	780184		25.0000	26
114 1-Methylnaphthalene	142	4.931	4.931	(1.257)	729103		25.0000	25
38 Hexachlorocyclopentadiene	237	4.995	4.995	(0.852)	172310		25.0000	27
112 1,2,4,5-Tetrachlorobenzene	216	5.011	5.011	(0.855)	415328		25.0000	27
39 2,4,6-Trichlorophenol	196	5.337	5.337	(0.911)	276756		25.0000	27
40 2,4,5-Trichlorophenol	196	5.535	5.535	(0.944)	284913		25.0000	26
\$ 41 2-Fluorobiphenyl	172	5.252	5.252	(0.896)	911508		25.0000	26
98 1,1'-Biphenyl	154	5.337	5.337	(0.911)	996555		25.0000	26
42 2-Chloronaphthalene	162	5.332	5.332	(0.910)	772359		25.0000	26
43 2-Nitroaniline	65	5.594	5.594	(0.954)	301596		25.0000	25
44 Dimethylphthalate	163	5.716	5.716	(0.975)	947679		25.0000	25
45 2,6-Dinitrotoluene	165	5.770	5.770	(0.985)	232676		25.0000	26
46 Acenaphthylene	152	5.722	5.722	(0.976)	1253673		25.0000	25
47 3-Nitroaniline	138	6.010	6.010	(1.026)	241153		25.0000	24
* 48 Acenaphthene-d10	164	5.861	5.861	(1.000)	1077134		40.0000	
49 Acenaphthene	153	5.887	5.887	(1.005)	775400		25.0000	25
50 2,4-Dinitrophenol	184	6.037	6.037	(1.030)	84929		25.0000	20
51 4-Nitrophenol	109	6.560	6.560	(1.119)	144440		25.0000	28
53 2,4-Dinitrotoluene	165	6.122	6.122	(1.045)	322113		25.0000	26
52 Dibenzofuran	168	6.048	6.048	(1.032)	1120031		25.0000	25
110 2,3,4,6-Tetrachlorophenol	232	6.309	6.309	(1.077)	219525		25.0000	28(H)
54 Diethylphthalate	149	6.336	6.336	(1.081)	943321		25.0000	26
56 4-Chlorophenyl-phenylether	204	6.379	6.379	(1.088)	501322		25.0000	26
55 Fluorene	166	6.347	6.347	(1.083)	951697		25.0000	25
57 4-Nitroaniline	138	6.555	6.555	(1.118)	251744		25.0000	24
58 4,6-Dinitro-2-methylphenol	198	6.470	6.470	(0.906)	199432		25.0000	24
59 N-Nitrosodiphenylamine	169	6.523	6.523	(0.914)	838802		25.0000	25
97 Azobenzene	77	6.507	6.507	(0.912)	1148293		25.0000	24
\$ 60 2,4,6-Tribromophenol	330	6.630	6.630	(0.929)	144945		25.0000	26
61 4-Bromophenyl-phenylether	248	6.785	6.785	(0.951)	324994		25.0000	27
62 Hexachlorobenzene	284	6.806	6.806	(0.954)	348714		25.0000	26
100 Atrazine	200	7.031	7.031	(0.985)	305159		25.0000	24
63 Pentachlorophenol	266	7.111	7.111	(0.996)	159889		25.0000	28
111 Pentachloronitrobenzene	237	7.004	7.004	(0.981)	139701		25.0000	26
* 64 Phenanthrene-d10	188	7.137	7.137	(1.000)	2183918		40.0000	
65 Phenanthrene	178	7.159	7.159	(1.003)	1384898		25.0000	25
66 Anthracene	178	7.196	7.196	(1.008)	1450065		25.0000	26

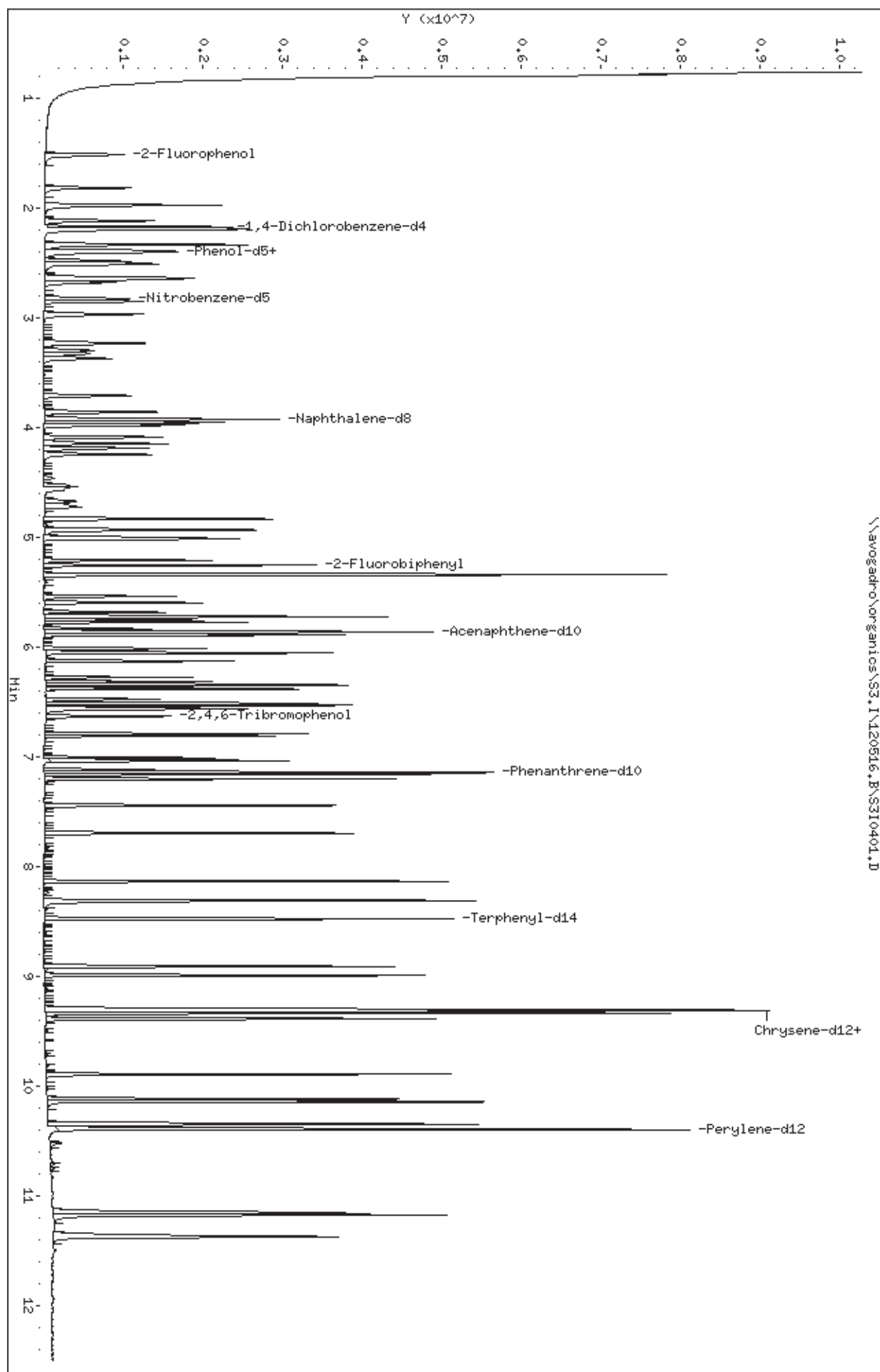
Compounds	QUANT SIG							AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
								(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====		=====	=====
67 Carbazole	167	7.442	7.442	(1.043)	1336057	25.0000		24	
68 Di-n-butylphthalate	149	7.693	7.693	(1.078)	1600607	25.0000		26	
69 Fluoranthene	202	8.131	8.131	(1.139)	1751316	25.0000		27	
70 Benzidine	184	8.318	8.318	(0.894)	376901	25.0000		13(a)	
71 Pyrene	202	8.307	8.307	(0.893)	1789573	25.0000		25	
\$ 72 Terphenyl-d14	244	8.473	8.473	(0.910)	1351313	25.0000		26	
73 Butylbenzylphthalate	149	8.906	8.906	(0.957)	824066	25.0000		25	
74 3,3'-Dichlorobenzidine	252	9.333	9.333	(1.003)	799266	25.0000		26	
78 bis(2-Ethylhexyl)phthalate	149	9.381	9.381	(1.008)	1142443	25.0000		26	
75 Benzo(a)anthracene	228	9.296	9.296	(0.999)	2026906	25.0000		26	
* 76 Chrysene-d12	240	9.306	9.306	(1.000)	2892035	40.0000			
77 Chrysene	228	9.328	9.328	(1.002)	1805782	25.0000		25	
79 Di-n-octylphthalate	149	9.889	9.889	(0.952)	1974113	25.0000		25	
80 Benzo(b)fluoranthene	252	10.118	10.118	(0.974)	2097944	25.0000		24	
81 Benzo(k)fluoranthene	252	10.140	10.140	(0.976)	2385662	25.0000		28	
82 Benzo(a)pyrene	252	10.343	10.343	(0.995)	2025670	25.0000		26	
* 83 Perylene-d12	264	10.391	10.391	(1.000)	2995870	40.0000			
84 Indeno(1,2,3-cd)pyrene	276	11.149	11.149	(1.073)	2591175	25.0000		26	
85 Dibenzo(a,h)anthracene	278	11.171	11.171	(1.075)	2183722	25.0000		26	
86 Benzo(g,h,i)perylene	276	11.368	11.368	(1.094)	2197153	25.0000		27	

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3,I\120516,B\S3I0401.D
 Date : 16-May-2012 14:22
 Client ID: SSTID0253E
 Sample Info: SSTID0253E,SSTID0253E
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120503A.B\S3I0120.D
 Lab Smp Id: DFTPP3U Client Smp ID: DFTPP3U
 Inj Date : 03-MAY-2012 12:04
 Operator : PK SRC: PK Inst ID: S3.i
 Smp Info : DFTPP3U, DFTPP3U
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120503A.B\S3_dftppSOM.m
 Meth Date : 02-Apr-2012 12:14 pkaczorows Quant Type: ESTD
 Cal Date : Cal File:
 Als bottle: 100 QC Sample: DFTPP
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	DLT RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 dftpp					CAS #: 5074-71-5				
3.083	3.840	-0.757	198	296320			0.00-	100.00	100.00
3.083	3.840	-0.757	51	126872			10.00-	80.00	42.82
3.083	3.840	-0.757	68	0	0.0	0.0	0.00-	2.00	0.00
3.083	3.840	-0.757	69	139648			0.00-	0.00	47.13
3.083	3.840	-0.757	70	666			0.00-	2.00	0.48
3.083	3.840	-0.757	127	141888			10.00-	80.00	47.88
3.083	3.840	-0.757	197	363			0.00-	2.00	0.12
3.083	3.840	-0.757	199	20592			5.00-	9.00	6.95
3.083	3.840	-0.757	275	87240			10.00-	60.00	29.44
3.083	3.840	-0.757	365	11570			1.00-	0.00	3.90
3.083	3.840	-0.757	441	33592			0.01-	99.99	75.20
3.083	3.840	-0.757	442	223936			50.00-	100.00	75.57
3.083	3.840	-0.757	443	44672			15.00-	24.00	19.95

Date : 03-MAY-2012 12:04

Client ID: DFTPP3U

Instrument: S3.i

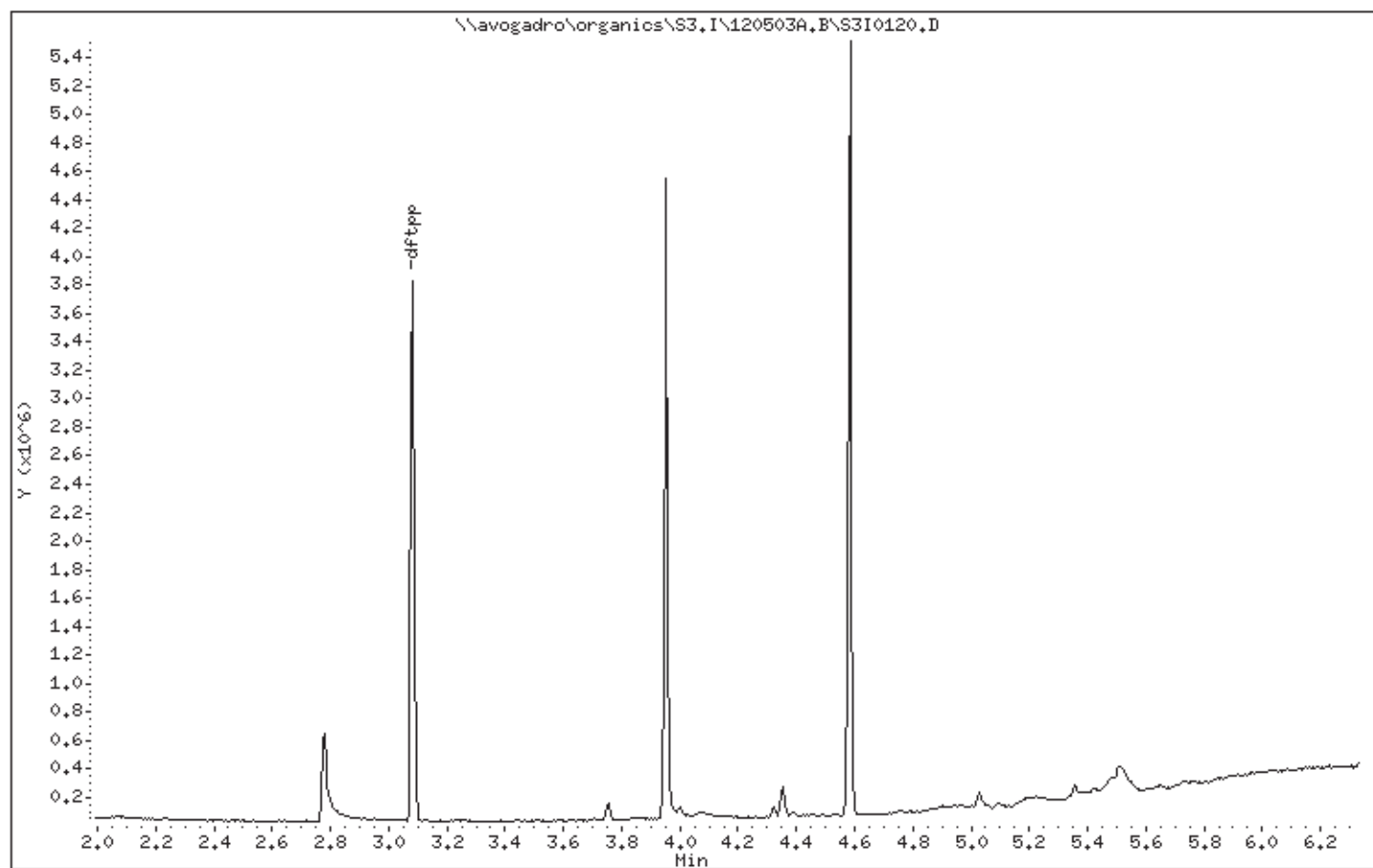
Sample Info: DFTPP3U,DFTPP3U

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 03-MAY-2012 12:04

Client ID: DFTPP3U

Instrument: S3.i

Sample Info: DFTPP3U,DFTPP3U

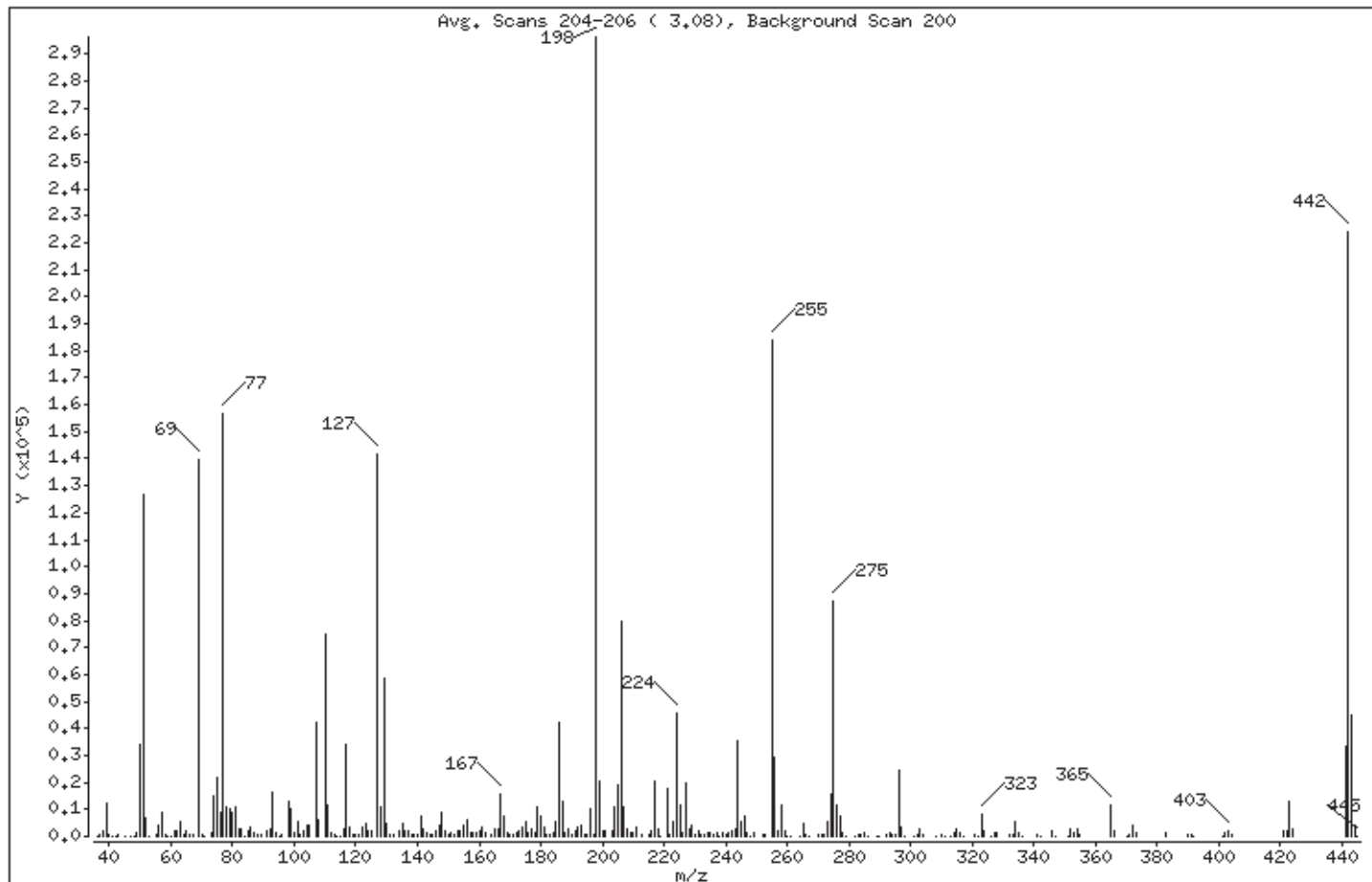
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	42.82
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	47.13
70	Less than 2.00% of mass 69	0.22 (0.48)
127	10.00 - 80.00% of mass 198	47.88
197	Less than 2.00% of mass 198	0.12
199	5.00 - 9.00% of mass 198	6.95
275	10.00 - 60.00% of mass 198	29.44
365	Greater than 1.00% of mass 198	3.90
441	Present, but less than mass 443	11.34
442	50.00 - 100.00% of mass 198	75.57
443	15.00 - 24.00% of mass 442	15.08 (19.95)

Date : 03-MAY-2012 12:04

Client ID: DFTPP3U

Instrument: S3.i

Sample Info: DFTPP3U,DFTPP3U

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: Rxi-5SILMS

Column diameter: 0.25

Data File: S3I0120.D

Spectrum: Avg. Scans 204-206 (3.08), Background Scan 200

Location of Maximum: 198.00

Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	13	118.00	3099	194.00	940	278.00	1500
37.00	932	119.00	627	195.00	581	279.00	215
38.00	1803	120.00	653	196.00	10353	282.00	106
39.00	12176	121.00	429	197.00	363	283.00	908
40.00	746	122.00	3413	198.00	296320	284.00	719

41.00	147	123.00	4946	199.00	20592	285.00	1395
42.00	58	124.00	1880	200.00	1781	286.00	192
43.00	479	125.00	1930	201.00	1810	289.00	238
45.00	319	127.00	141888	203.00	1901	290.00	251
47.00	238	128.00	11087	204.00	11100	292.00	427

48.00	166	129.00	58328	205.00	19096	293.00	1547
49.00	1363	130.00	4997	206.00	79600	294.00	488
50.00	34008	131.00	867	207.00	10966	295.00	407
51.00	126872	132.00	1019	208.00	2804	296.00	24592
52.00	7020	134.00	2022	209.00	1093	297.00	3533

53.00	176	135.00	4685	210.00	1088	298.00	238
55.00	535	136.00	2067	211.00	3444	301.00	168
56.00	3922	137.00	2345	213.00	355	302.00	564
57.00	8724	138.00	663	215.00	1009	303.00	2919
58.00	638	139.00	539	216.00	1773	304.00	996

59.00	126	140.00	888	217.00	20232	308.00	294
60.00	82	141.00	7354	218.00	2812	310.00	429
61.00	2283	142.00	2786	219.00	280	311.00	141
62.00	2211	143.00	1578	221.00	17632	313.00	129
63.00	5345	144.00	631	222.00	631	314.00	1299

64.00	647	145.00	476	223.00	5321	315.00	2706
65.00	1982	146.00	1703	224.00	45416	316.00	1286
66.00	345	147.00	3902	225.00	11805	317.00	256
67.00	524	148.00	8656	226.00	1312	321.00	635
69.00	139648	149.00	2252	227.00	19608	322.00	340

70.00	666	150.00	506	228.00	2506	323.00	8296
71.00	284	151.00	1114	229.00	4172	324.00	1705
73.00	1205	152.00	843	230.00	357	326.00	132
74.00	14936	153.00	2222	231.00	1705	327.00	1536
75.00	22024	154.00	1847	232.00	470	328.00	1131

Date : 03-MAY-2012 12:04

Client ID: DFTPP3U

Instrument: S3.i

Sample Info: DFTPP3U,DFTPP3U

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3I0120.D

Spectrum: Avg. Scans 204-206 (3.08), Background Scan 200

Location of Maximum: 198.00

Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y

76.00	8686	155.00	3847	233.00	575	332.00	524
77.00	156800	156.00	6194	234.00	1313	333.00	842
78.00	10932	157.00	1427	235.00	1461	334.00	5471
79.00	10428	158.00	1357	236.00	946	335.00	1519
80.00	8695	159.00	1142	237.00	1512	336.00	143

81.00	10771	160.00	2376	238.00	105	341.00	782
82.00	2508	161.00	3413	239.00	1091	342.00	143
83.00	2622	162.00	1174	240.00	602	346.00	1781
84.00	340	164.00	539	241.00	1069	347.00	252
85.00	2102	165.00	3037	242.00	2314	351.00	216

86.00	3334	166.00	2818	243.00	2768	352.00	2628
87.00	1348	167.00	15929	244.00	35592	353.00	1563
88.00	819	168.00	7390	245.00	5196	354.00	2612
89.00	561	169.00	1533	246.00	7257	355.00	531
91.00	1960	170.00	603	247.00	1270	365.00	11570

92.00	3008	171.00	803	248.00	138	366.00	1746
93.00	16234	172.00	1549	249.00	1305	370.00	244
94.00	1407	173.00	1801	252.00	440	371.00	812
95.00	99	174.00	3198	253.00	840	372.00	4064
96.00	840	175.00	5716	255.00	183936	373.00	1103

98.00	13136	176.00	1436	256.00	29184	383.00	1140
99.00	10020	177.00	2733	257.00	2162	390.00	578
100.00	1057	178.00	1213	258.00	11551	391.00	558
101.00	5179	179.00	11025	259.00	1942	392.00	125
102.00	535	180.00	7809	260.00	332	401.00	255

103.00	1978	181.00	3637	261.00	174	402.00	1655
104.00	4113	182.00	786	264.00	115	403.00	2268
105.00	3811	183.00	481	265.00	4894	404.00	781
107.00	42488	184.00	1074	266.00	933	421.00	1981
108.00	6469	185.00	5562	267.00	286	422.00	1933

110.00	74616	186.00	42376	270.00	462	423.00	13060
111.00	11627	187.00	13050	271.00	345	424.00	2547
112.00	1557	188.00	1329	272.00	495	441.00	33592
113.00	868	189.00	2792	273.00	5486	442.00	223936
114.00	115	190.00	521	274.00	15703	443.00	44672

Date : 03-MAY-2012 12:04

Client ID: DFTPP3U

Instrument: S3.i

Sample Info: DFTPP3U,DFTPP3U

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3I0120.D

Spectrum: Avg. Scans 204-206 (3.08), Background Scan 200

Location of Maximum: 198.00

Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	54	191.00	1901	275.00	87240	444.00	4215
116.00	2514	192.00	3677	276.00	11897	445.00	138
117.00	34040	193.00	4079	277.00	7282		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0280.D
 Lab Smp Id: DFTPP3A Client Smp ID: DFTPP3A
 Inj Date : 11-MAY-2012 11:19
 Operator : PK Inst ID: S3.i
 Smp Info : DFTPP3A, DFTPP3A
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\S3_dftppSOM.m
 Meth Date : 11-May-2012 11:27 pkaczorows Quant Type: ESTD
 Cal Date : Cal File:
 Als bottle: 100 QC Sample: DFTPP
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	DLT RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 dftpp					CAS #: 5074-71-5				
2.906	2.907	-0.001	198	597568			0.00-	100.00	100.00
2.906	2.907	-0.001	51	242688			10.00-	80.00	40.61
2.906	2.907	-0.001	68	0	0.0	0.0	0.00-	2.00	0.00
2.906	2.907	-0.001	69	273600			0.00-	0.00	45.79
2.906	2.907	-0.001	70	1479			0.00-	2.00	0.54
2.906	2.907	-0.001	127	276800			10.00-	80.00	46.32
2.906	2.907	-0.001	197	0	0.0	0.0	0.00-	2.00	0.00
2.906	2.907	-0.001	199	42664			5.00-	9.00	7.14
2.906	2.907	-0.001	275	174592			10.00-	60.00	29.22
2.906	2.907	-0.001	365	22056			1.00-	0.00	3.69
2.906	2.907	-0.001	441	66088			0.01-	99.99	74.97
2.906	2.907	-0.001	442	446144			50.00-	100.00	74.66
2.906	2.907	-0.001	443	88152			15.00-	24.00	19.76

Date : 11-MAY-2012 11:19

Client ID: DFTPP3A

Instrument: S3.i

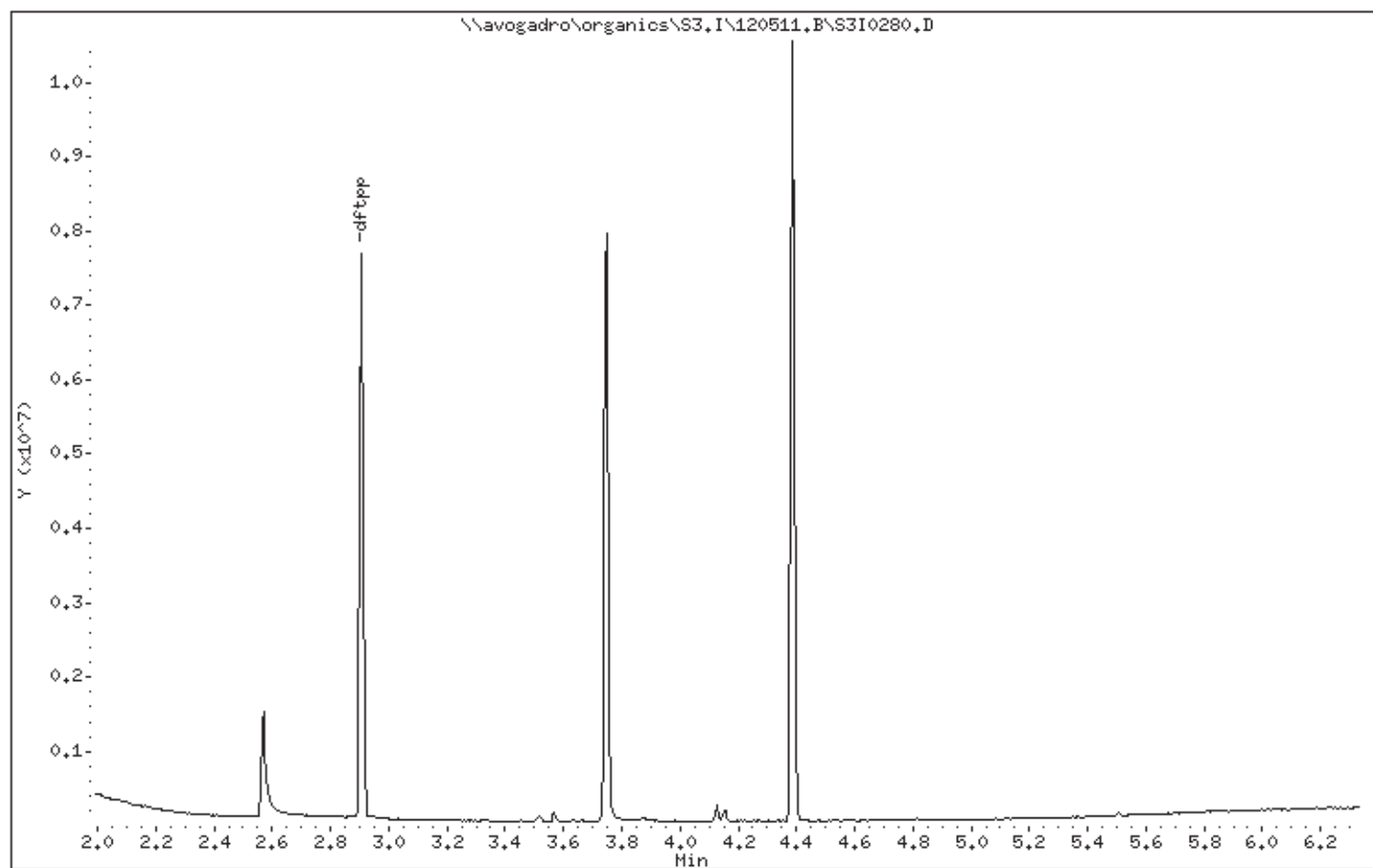
Sample Info: DFTPP3A,DFTPP3A

Volume Injected (uL): 2.0

Operator: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 11-MAY-2012 11:19

Client ID: DFTPP3A

Instrument: S3.i

Sample Info: DFTPP3A,DFTPP3A

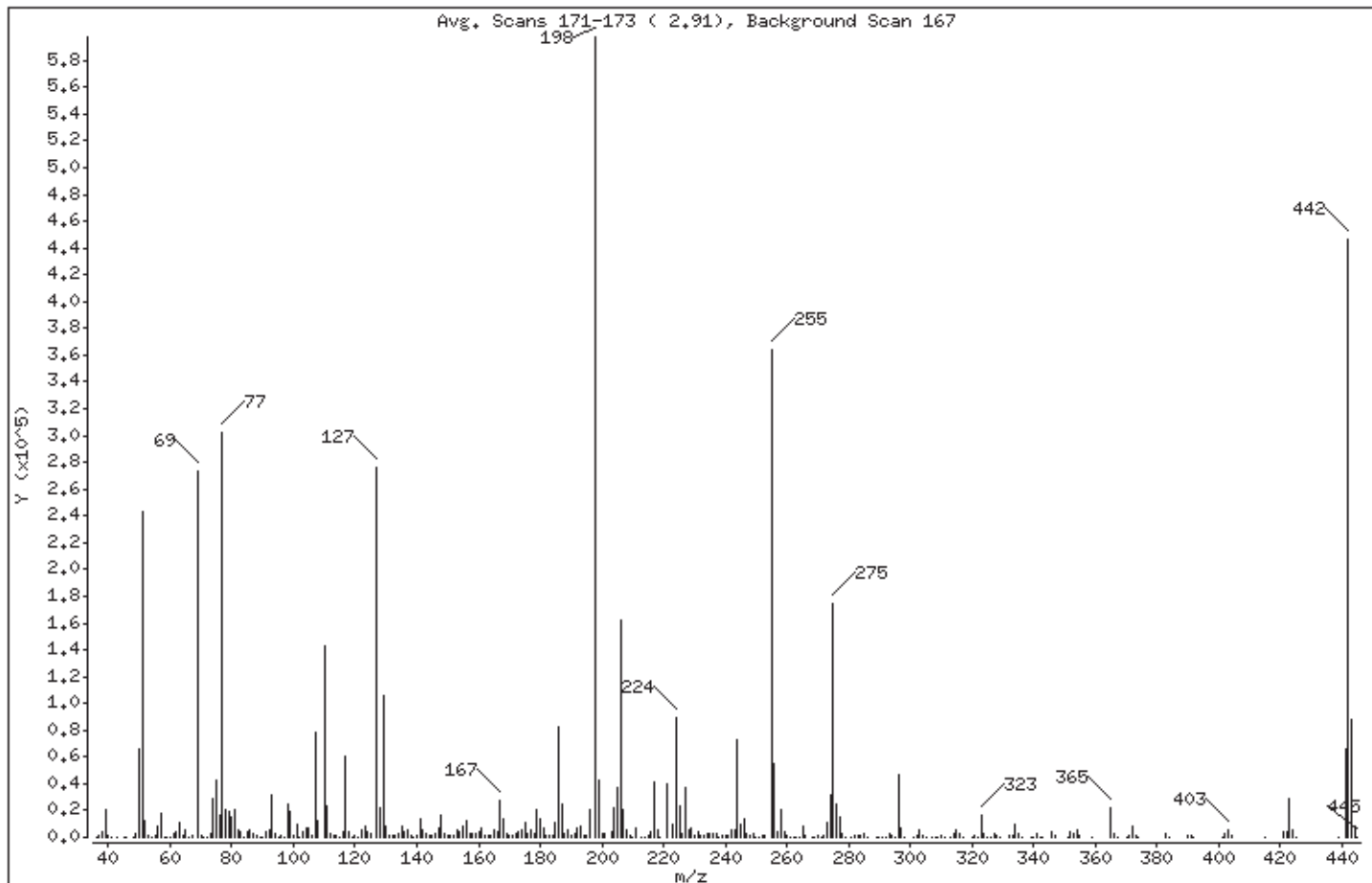
Volume Injected (uL): 2.0

Operator: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	40.61
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	45.79
70	Less than 2.00% of mass 69	0.25 (0.54)
127	10.00 - 80.00% of mass 198	46.32
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.14
275	10.00 - 60.00% of mass 198	29.22
365	Greater than 1.00% of mass 198	3.69
441	Present, but less than mass 443	11.06
442	50.00 - 100.00% of mass 198	74.66
443	15.00 - 24.00% of mass 442	14.75 (19.76)

Date : 11-MAY-2012 11:19

Client ID: DFTPP3A

Instrument: S3.i

Sample Info: DFTPP3A,DFTPP3A

Volume Injected (uL): 2.0

Operator: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3I0280.D

Spectrum: Avg. Scans 171-173 (2.91), Background Scan 167

Location of Maximum: 198.00

Number of points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	661	121.00	552	204.00	21344	292.00	478
37.00	1440	122.00	5907	205.00	37280	293.00	3344
38.00	3596	123.00	8179	206.00	162176	294.00	862
39.00	20504	124.00	4116	207.00	20560	295.00	299
40.00	754	125.00	3432	208.00	5316	296.00	46712

41.00	452	127.00	276800	209.00	1805	297.00	6422
43.00	208	128.00	22104	210.00	425	298.00	364
45.00	91	129.00	105888	211.00	6865	301.00	632
46.00	152	130.00	8610	213.00	627	302.00	921
48.00	422	131.00	1625	214.00	303	303.00	5610

49.00	2282	132.00	1523	215.00	1723	304.00	1628
50.00	66600	133.00	772	216.00	3663	305.00	168
51.00	242688	134.00	3229	217.00	41432	307.00	106
52.00	12622	135.00	8779	218.00	5558	308.00	647
53.00	695	136.00	3571	219.00	369	309.00	521

54.00	90	137.00	4811	221.00	39504	310.00	1049
55.00	1272	138.00	1189	223.00	9474	311.00	117
56.00	7590	139.00	672	224.00	89056	313.00	256
57.00	18024	140.00	1426	225.00	23376	314.00	2652
58.00	440	141.00	14247	226.00	2083	315.00	4835

59.00	186	142.00	5006	227.00	36440	316.00	2664
60.00	367	143.00	3351	228.00	5516	317.00	636
61.00	3387	144.00	838	229.00	7265	320.00	105
62.00	4357	145.00	1139	230.00	1344	321.00	1616
63.00	10611	146.00	3301	231.00	3469	322.00	434

64.00	1928	147.00	7132	232.00	787	323.00	16038
65.00	5425	148.00	16187	233.00	813	324.00	3008
66.00	58	149.00	3030	234.00	2296	325.00	317
67.00	794	150.00	984	235.00	3111	326.00	447
69.00	273600	151.00	1761	236.00	2117	327.00	2924

70.00	1479	152.00	1248	237.00	2912	328.00	1511
71.00	323	153.00	4905	238.00	527	329.00	356
72.00	254	154.00	3599	239.00	1509	332.00	1085
73.00	2342	155.00	8673	240.00	1125	333.00	1657
74.00	28768	156.00	12457	241.00	1914	334.00	9913

Date : 11-MAY-2012 11:19

Client ID: DFTPP3A

Instrument: S3.i

Sample Info: DFTPP3A,DFTPP3A

Volume Injected (uL): 2.0

Operator: PK

Column phase: Rxi-5SILMS

Column diameter: 0.25

Data File: S3I0280.D

Spectrum: Avg. Scans 171-173 (2.91), Background Scan 167

Location of Maximum: 198.00

Number of points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y

75.00	42808	157.00	2569	242.00	5567	335.00	3062
76.00	16341	158.00	2851	243.00	5879	336.00	327
77.00	302720	159.00	2406	244.00	73312	339.00	110
78.00	20816	160.00	4524	245.00	9830	340.00	231
79.00	19264	161.00	6796	246.00	14136	341.00	2206

80.00	14973	162.00	2051	247.00	2666	342.00	420
81.00	20432	163.00	925	248.00	873	343.00	107
82.00	5033	164.00	955	249.00	2769	346.00	3511
83.00	4342	165.00	5767	250.00	530	347.00	832
84.00	185	166.00	3945	251.00	682	351.00	134

85.00	3835	167.00	27192	252.00	785	352.00	4031
86.00	6135	168.00	14166	253.00	1683	353.00	2918
87.00	2621	169.00	2414	255.00	364480	354.00	5260
88.00	781	170.00	1019	256.00	54320	355.00	1132
89.00	369	171.00	1345	257.00	4396	359.00	182

90.00	236	172.00	2771	258.00	21272	365.00	22056
91.00	4498	173.00	3595	259.00	3634	366.00	3136
92.00	5198	174.00	6158	260.00	711	367.00	113
93.00	31296	175.00	11422	261.00	530	370.00	405
94.00	2391	176.00	3385	262.00	127	371.00	1196

95.00	481	177.00	5335	263.00	267	372.00	8503
96.00	1546	178.00	2148	264.00	383	373.00	2029
97.00	251	179.00	20488	265.00	8199	374.00	163
98.00	24664	180.00	14302	266.00	982	383.00	2184
99.00	18760	181.00	7496	268.00	441	384.00	532

100.00	1636	182.00	1391	269.00	105	390.00	999
101.00	10171	183.00	819	270.00	692	391.00	804
102.00	458	184.00	1577	271.00	681	392.00	573
103.00	3758	185.00	10407	272.00	1310	401.00	679
104.00	7519	186.00	82896	273.00	11659	402.00	3108

105.00	6531	187.00	24920	274.00	31088	403.00	4837
106.00	1222	188.00	2420	275.00	174592	404.00	1661
107.00	78424	189.00	5279	276.00	24056	415.00	116
108.00	12454	190.00	1069	277.00	14608	421.00	3666
110.00	143552	191.00	2469	278.00	2574	422.00	4066

Date : 11-MAY-2012 11:19

Client ID: DFTPP3A

Instrument: S3.i

Sample Info: DFTPP3A,DFTPP3A

Volume Injected (uL): 2.0

Operator: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3I0280.D

Spectrum: Avg. Scans 171-173 (2.91), Background Scan 167

Location of Maximum: 198.00

Number of points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	22760	192.00	6969	279.00	465	423.00	28408
112.00	3298	193.00	7875	281.00	313	424.00	5794
113.00	870	194.00	1978	282.00	720	425.00	331
114.00	706	195.00	1650	283.00	1942	439.00	127
115.00	200	196.00	19992	284.00	1124	441.00	66088
116.00	4802	198.00	597568	285.00	2660	442.00	446144
117.00	61040	199.00	42664	286.00	582	443.00	88152
118.00	4802	200.00	3151	289.00	627	444.00	8835
119.00	140	201.00	3356	290.00	524	445.00	468
120.00	1329	203.00	3963	291.00	572		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0400A.D
Lab Smp Id: DFTPP3E Client Smp ID: DFTPP3E
Inj Date : 16-MAY-2012 14:09
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : DFTPP3E, DFTPP3E
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\S3_dftppSOM.m
Meth Date : 11-May-2012 11:27 pkaczorows Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	DLT RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 dftpp					CAS #: 5074-71-5				
2.821	2.907	-0.086	198	730368			0.00-	100.00	100.00
2.821	2.907	-0.086	51	294144			10.00-	80.00	40.27
2.821	2.907	-0.086	68	0	0.0	0.0	0.00-	2.00	0.00
2.821	2.907	-0.086	69	326208			0.00-	0.00	44.66
2.821	2.907	-0.086	70	1710			0.00-	2.00	0.52
2.821	2.907	-0.086	127	333056			10.00-	80.00	45.60
2.821	2.907	-0.086	197	0	0.0	0.0	0.00-	2.00	0.00
2.821	2.907	-0.086	199	51280			5.00-	9.00	7.02
2.821	2.907	-0.086	275	223680			10.00-	60.00	30.63
2.821	2.907	-0.086	365	27664			1.00-	0.00	3.79
2.821	2.907	-0.086	441	93368			0.01-	99.99	77.19
2.821	2.907	-0.086	442	611584			50.00-	100.00	83.74
2.821	2.907	-0.086	443	120960			15.00-	24.00	19.78

Date : 16-MAY-2012 14:09

Client ID: DFTPP3E

Instrument: S3.i

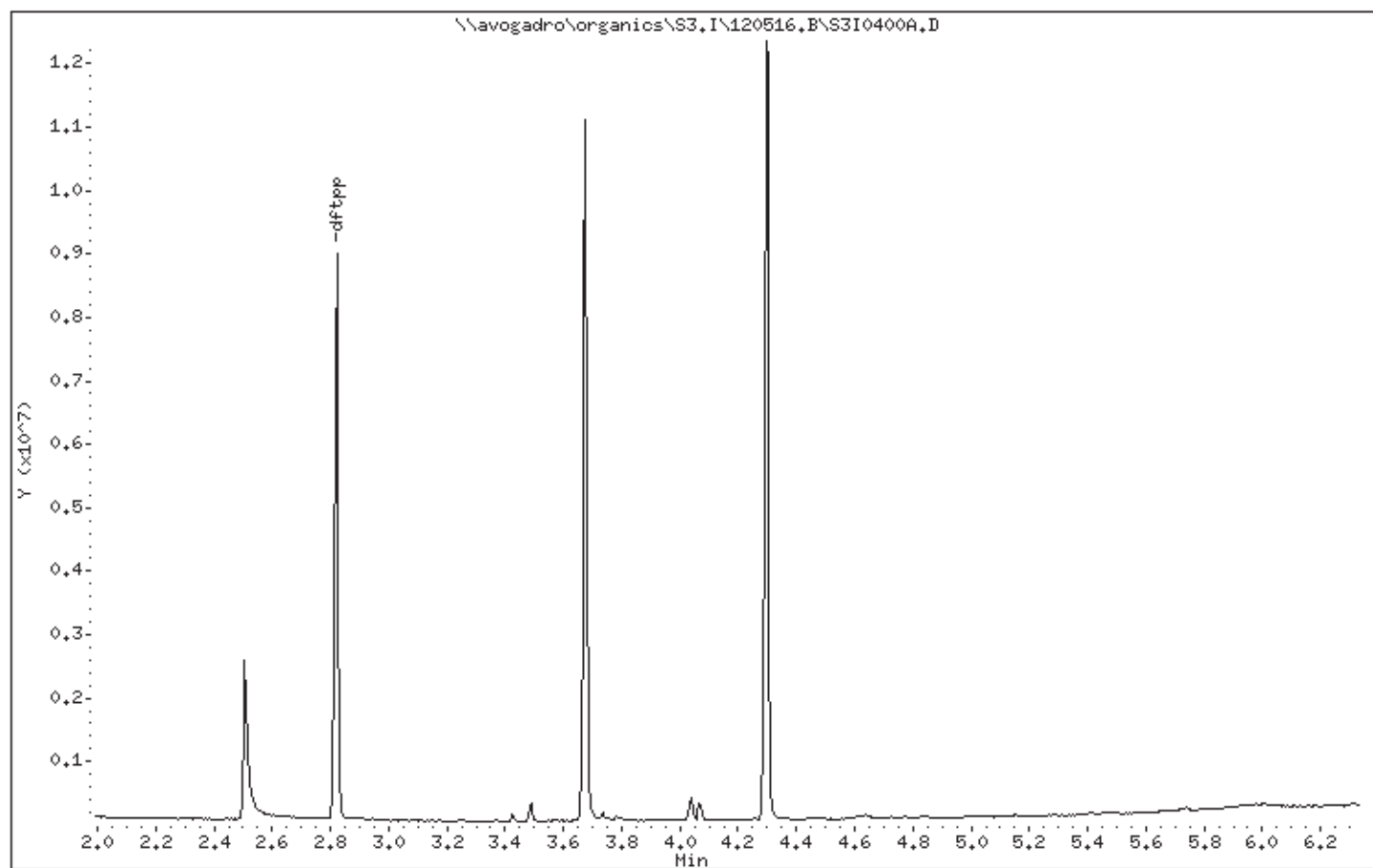
Sample Info: DFTPP3E,DFTPP3E

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 16-MAY-2012 14:09

Client ID: DFTPP3E

Instrument: S3.i

Sample Info: DFTPP3E,DFTPP3E

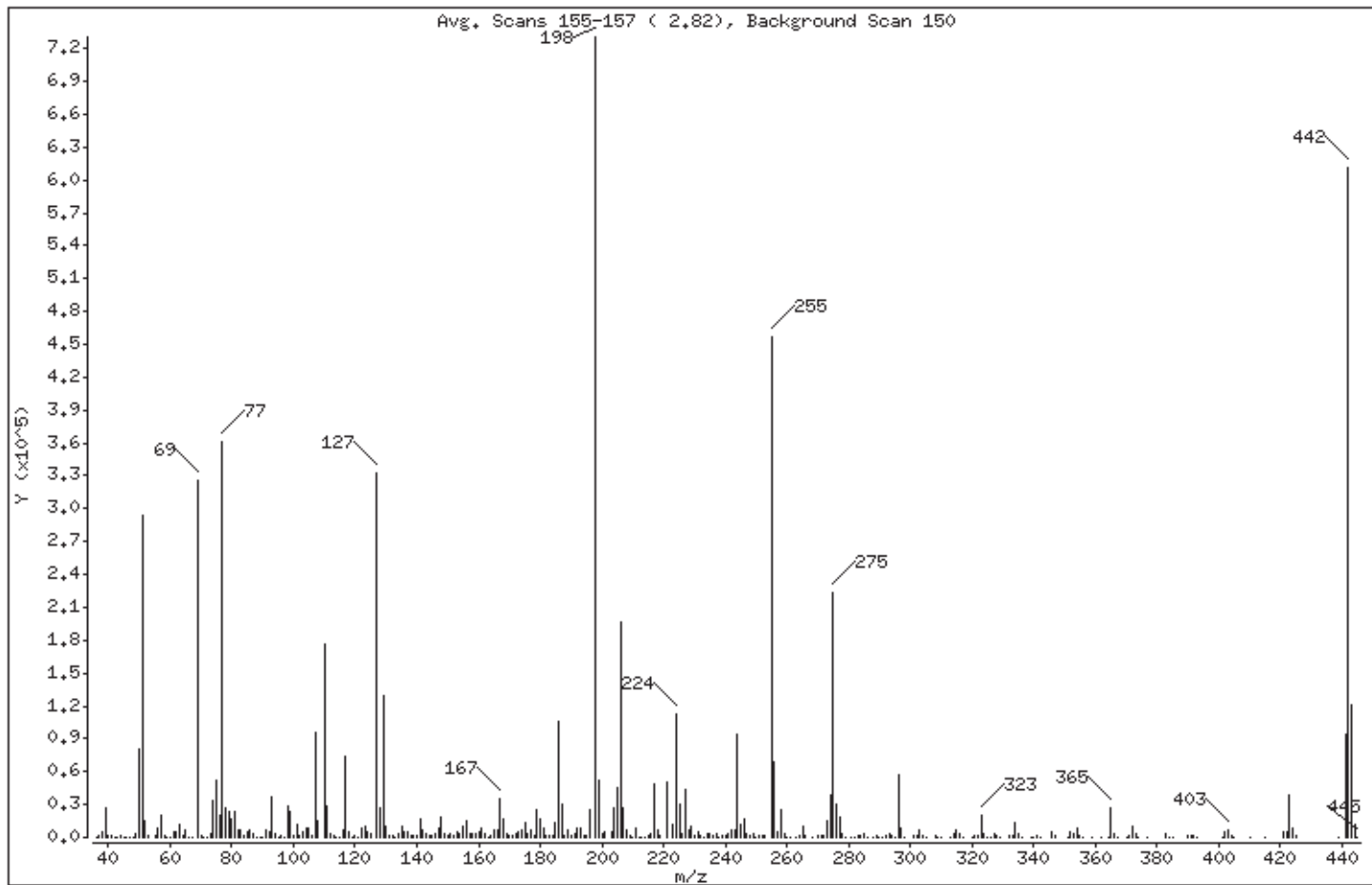
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	40.27
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	44.66
70	Less than 2.00% of mass 69	0.23 (0.52)
127	10.00 - 80.00% of mass 198	45.60
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.02
275	10.00 - 60.00% of mass 198	30.63
365	Greater than 1.00% of mass 198	3.79
441	Present, but less than mass 443	12.78
442	50.00 - 100.00% of mass 198	83.74
443	15.00 - 24.00% of mass 442	16.56 (19.78)

Date : 16-MAY-2012 14:09

Client ID: DFTPP3E

Instrument: S3.i

Sample Info: DFTPP3E,DFTPP3E

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S3I0400A.D

Spectrum: Avg. Scans 155-157 (2.82), Background Scan 150

Location of Maximum: 198.00

Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	504	121.00	418	206.00	196992	296.00	56992
37.00	1499	122.00	7822	207.00	26472	297.00	8214
38.00	4686	123.00	9866	208.00	6970	298.00	592
39.00	26592	124.00	4217	209.00	1901	301.00	971
40.00	1268	125.00	4126	210.00	784	302.00	1096

41.00	1427	127.00	333056	211.00	7703	303.00	7169
42.00	23	128.00	26936	212.00	723	304.00	2074
43.00	527	129.00	129616	213.00	639	305.00	298
44.00	1642	130.00	10275	214.00	216	308.00	1146
45.00	122	131.00	1972	215.00	2264	309.00	676

46.00	489	132.00	1468	216.00	4172	310.00	814
47.00	164	133.00	484	217.00	48248	313.00	567
48.00	281	134.00	4021	218.00	6446	314.00	2780
49.00	2782	135.00	10797	219.00	981	315.00	6559
50.00	80624	136.00	4578	221.00	50360	316.00	4128

51.00	294144	137.00	5172	223.00	11285	317.00	667
52.00	15616	138.00	1420	224.00	111928	320.00	118
53.00	846	139.00	1270	225.00	29640	321.00	2249
55.00	2340	140.00	1671	226.00	3631	322.00	1134
56.00	9117	141.00	16816	227.00	43496	323.00	20648

57.00	20320	142.00	6001	228.00	6512	324.00	3987
58.00	893	143.00	3647	229.00	10078	325.00	512
59.00	87	144.00	1543	230.00	1707	326.00	546
60.00	82	145.00	1045	231.00	4291	327.00	3615
61.00	4570	146.00	3524	232.00	859	328.00	2048

62.00	4744	147.00	8912	233.00	814	329.00	225
63.00	12302	148.00	18304	234.00	3016	332.00	1446
64.00	1799	149.00	4183	235.00	3461	333.00	2318
65.00	6400	150.00	1381	236.00	2339	334.00	13126
66.00	328	151.00	2675	237.00	3852	335.00	3919

67.00	569	152.00	1119	238.00	797	336.00	379
69.00	326208	153.00	5811	239.00	2388	339.00	126
70.00	1710	154.00	3774	240.00	1282	340.00	227
71.00	302	155.00	9336	241.00	2614	341.00	2467
72.00	372	156.00	14553	242.00	5899	342.00	645

Date : 16-MAY-2012 14:09

Client ID: DFTPP3E

Instrument: S3.i

Sample Info: DFTPP3E,DFTPP3E

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3I0400A.D

Spectrum: Avg. Scans 155-157 (2.82), Background Scan 150

Location of Maximum: 198.00

Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y

73.00	2598	157.00	3372	243.00	6683	346.00	5008
74.00	34032	158.00	3735	244.00	93632	347.00	1001
75.00	51976	159.00	2812	245.00	12281	351.00	389
76.00	20112	160.00	5288	246.00	17624	352.00	5706
77.00	361600	161.00	8430	247.00	3231	353.00	4196

78.00	26384	162.00	2662	248.00	1012	354.00	7602
79.00	23872	163.00	827	249.00	2886	355.00	1318
80.00	17112	164.00	1315	250.00	748	356.00	119
81.00	23752	165.00	6006	251.00	863	359.00	195
82.00	6280	166.00	5994	252.00	942	362.00	130

83.00	5949	167.00	34880	253.00	1836	364.00	142
84.00	877	168.00	16952	255.00	455872	365.00	27664
85.00	4720	169.00	3389	256.00	69088	366.00	3841
86.00	7207	170.00	1267	257.00	5636	367.00	110
87.00	3153	171.00	1771	258.00	25792	370.00	726

88.00	760	172.00	3233	259.00	3959	371.00	1570
89.00	739	173.00	4384	260.00	488	372.00	10255
90.00	384	174.00	7296	261.00	674	373.00	2818
91.00	6180	175.00	13566	263.00	318	374.00	203
92.00	5690	176.00	4147	264.00	1070	377.00	105

93.00	36888	177.00	7234	265.00	9980	383.00	3084
94.00	3122	178.00	2510	266.00	1353	384.00	780
95.00	296	179.00	25536	268.00	187	385.00	107
96.00	2071	180.00	17112	270.00	986	390.00	1451
97.00	405	181.00	9058	271.00	880	391.00	1205

98.00	28472	182.00	1614	272.00	1214	392.00	897
99.00	22736	183.00	988	273.00	14620	393.00	132
100.00	2354	184.00	2072	274.00	39088	401.00	649
101.00	11967	185.00	13108	275.00	223680	402.00	4661
102.00	1016	186.00	106096	276.00	29840	403.00	5991

103.00	4526	187.00	29440	277.00	19024	404.00	2241
104.00	8488	188.00	2454	278.00	3435	405.00	149
105.00	7795	189.00	6298	279.00	745	410.00	134
106.00	1442	190.00	1158	281.00	35	415.00	278
107.00	95688	191.00	3015	282.00	604	421.00	5673

Date : 16-MAY-2012 14:09

Client ID: DFTPP3E

Instrument: S3.i

Sample Info: DFTPP3E,DFTPP3E

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3I0400A.D

Spectrum: Avg. Scans 155-157 (2.82), Background Scan 150

Location of Maximum: 198.00

Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	15366	192.00	8275	283.00	1910	422.00	5391
110.00	175680	193.00	8841	284.00	1633	423.00	38040
111.00	27712	194.00	2189	285.00	3293	424.00	8598
112.00	3981	195.00	1918	286.00	628	425.00	908
113.00	1393	196.00	25968	288.00	250	439.00	106
114.00	133	198.00	730368	289.00	952	441.00	93368
115.00	614	199.00	51280	290.00	692	442.00	611584
116.00	6464	200.00	3864	291.00	298	443.00	120960
117.00	73480	201.00	4244	292.00	1015	444.00	11432
118.00	5771	203.00	4839	293.00	4171	445.00	790
119.00	370	204.00	26904	294.00	943		
120.00	1772	205.00	45904	295.00	613		

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66049

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0284.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66049

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0284.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
121-14-2	2,4-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine	10	U	
101-55-3	4-Bromophenyl-phenylether	10	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
86-74-8	Carbazole	10	U	
84-74-2	Di-n-butylphthalate	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	10	U	
56-55-3	Benzo(a)anthracene	10	U	
218-01-9	Chrysene	10	U	
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	
117-84-0	Di-n-octylphthalate	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenzo(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66049
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0284.D
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

²EPA-designated Registry Number.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0284.D
 Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0284.D
 Lab Smp Id: MB-66049 Client Smp ID: MB-66049
 Inj Date : 11-MAY-2012 12:42
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : MB-66049,MB-66049,66049
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
 Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
 Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
 Als bottle: 4 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8270C.sub
 Target Version: 4.14
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.512	1.518	(0.664)	372742	35.6984	36
\$ 5 Phenol-d5	99	2.340	2.346	(1.028)	568283	39.0068	39
* 12 1,4-Dichlorobenzene-d4	152	2.276	2.282	(1.000)	307534	40.0000	
\$ 22 Nitrobenzene-d5	82	2.954	2.955	(0.730)	554633	38.8624	39
* 31 Naphthalene-d8	136	4.050	4.056	(1.000)	1245376	40.0000	
\$ 41 2-Fluorobiphenyl	172	5.348	5.348	(0.899)	1100765	39.3031	39
* 48 Acenaphthene-d10	164	5.946	5.952	(1.000)	848452	40.0000	
\$ 60 2,4,6-Tribromophenol	330	6.694	6.700	(0.927)	192870	43.9245	44
* 64 Phenanthrene-d10	188	7.223	7.229	(1.000)	1735548	40.0000	
\$ 72 Terphenyl-d14	244	8.558	8.559	(0.911)	1659282	41.7710	42
* 76 Chrysene-d12	240	9.392	9.398	(1.000)	2184033	40.0000	
* 83 Perylene-d12	264	10.476	10.482	(1.000)	2207348	40.0000	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0284.D
Report Date: 15-May-2012 17:17

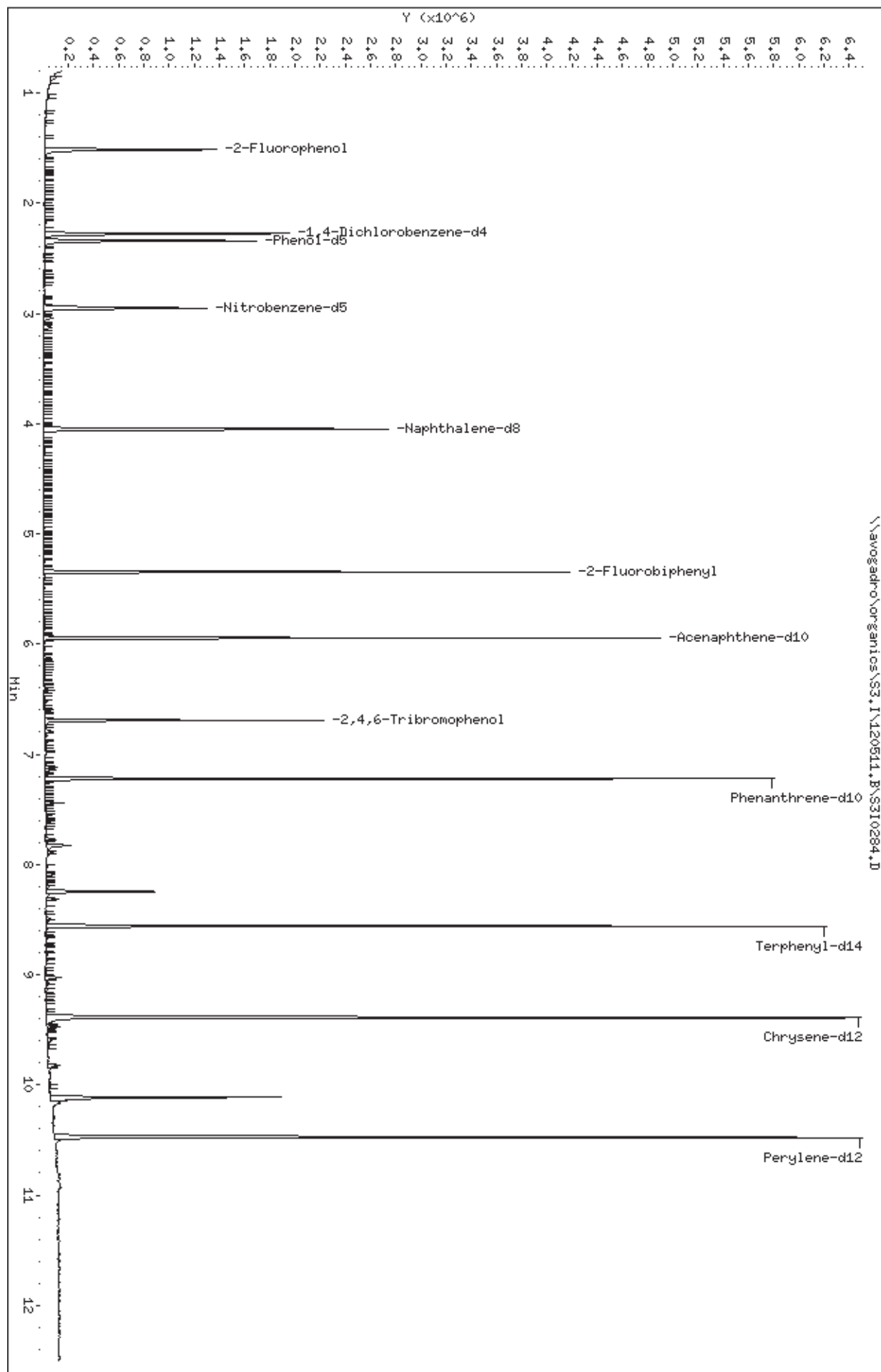
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0284.D
Lab Smp Id: MB-66049 Client Smp ID: MB-66049
Inj Date : 11-MAY-2012 12:42
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : MB-66049,MB-66049,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3,I\120511,B\S3I0284.D
 Date : 11-May-2012 12:42
 Client ID: MB-66049
 Sample Info: MB-66049,MB-66049,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66186

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0402.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66186

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0402.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66186
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0402.D
Level: (TRACE or LOW/MED) LOW Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

²EPA-designated Registry Number.

Data File: \\avogadro\organics\S3.I\120516.B\S3I0402.D
Report Date: 17-May-2012 13:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0402.D
Lab Smp Id: MB-66186 Client Smp ID: MB-66186
Inj Date : 16-MAY-2012 15:00
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : MB-66186,MB-66186,66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.502	1.507	(0.694)	467771	40.5726	40
\$ 5 Phenol-d5	99	2.378	2.383	(1.099)	661641	41.1299	41
* 12 1,4-Dichlorobenzene-d4	152	2.165	2.169	(1.000)	339573	40.0000	
\$ 22 Nitrobenzene-d5	82	2.816	2.821	(0.719)	634643	42.5006	42
* 31 Naphthalene-d8	136	3.917	3.921	(1.000)	1303044	40.0000	
\$ 41 2-Fluorobiphenyl	172	5.252	5.252	(0.898)	1220165	41.8653	42
* 48 Acenaphthene-d10	164	5.851	5.861	(1.000)	882925	40.0000	
\$ 60 2,4,6-Tribromophenol	330	6.625	6.630	(0.928)	222372	48.1663	48
* 64 Phenanthrene-d10	188	7.138	7.137	(1.000)	1824802	40.0000	
\$ 72 Terphenyl-d14	244	8.474	8.473	(0.911)	1939280	43.6846	44
* 76 Chrysene-d12	240	9.302	9.306	(1.000)	2440769	40.0000	
* 83 Perylene-d12	264	10.397	10.391	(1.000)	2510364	40.0000	

Data File: \\avogadro\organics\S3.I\120516.B\S3I0402.D
Report Date: 17-May-2012 13:17

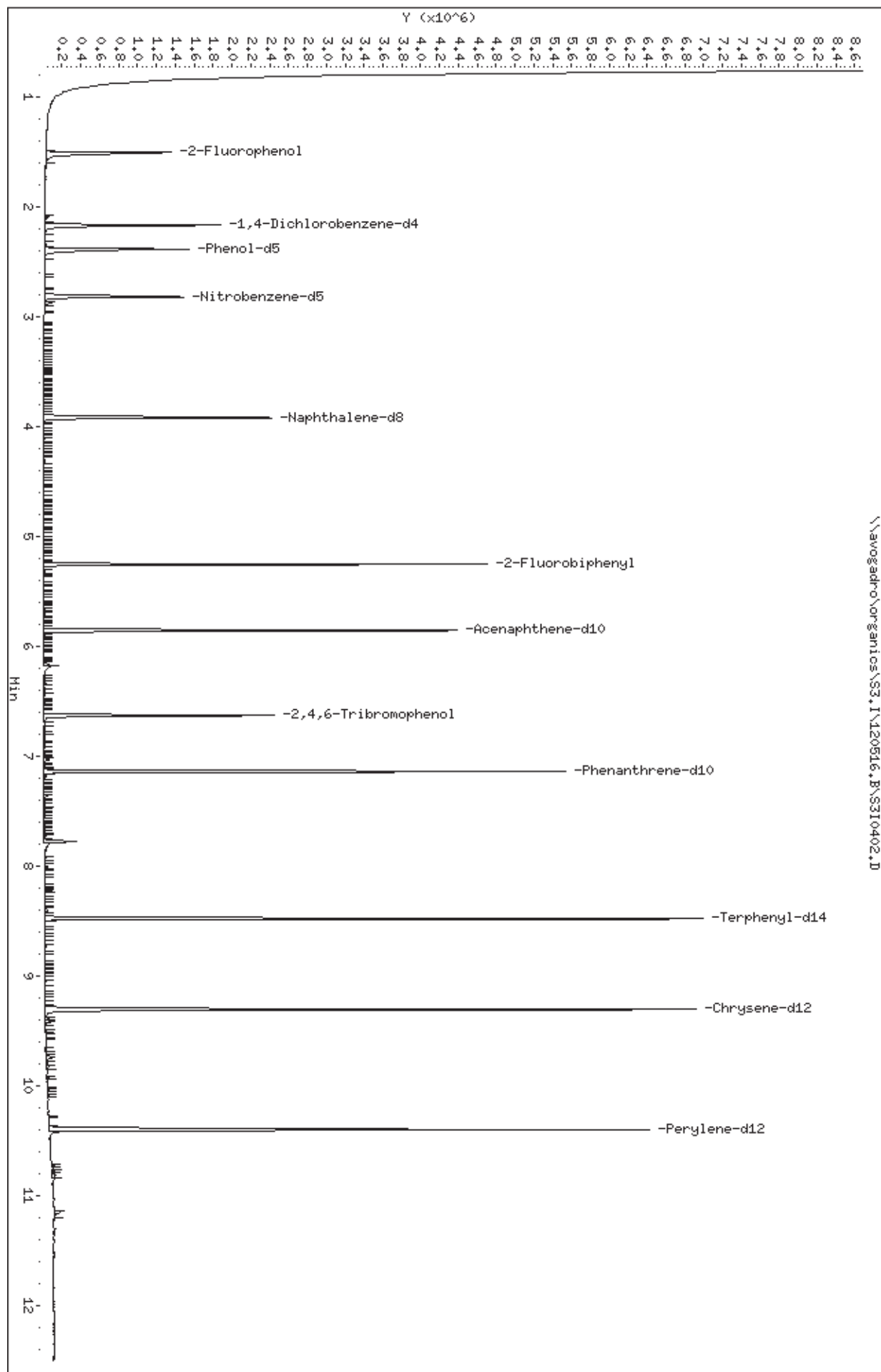
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0402.D
Lab Smp Id: MB-66186 Client Smp ID: MB-66186
Inj Date : 16-MAY-2012 15:00
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : MB-66186,MB-66186,66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3,I\120516,B\S3I0402.D
 Date : 16-May-2012 15:00
 Client ID: MB-66186
 Sample Info: MB-66186,MB-66186,66186
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1MS

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01BMS
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0288.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup:(Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	15	
111-44-4	Bis(2-chloroethyl)ether	40	
95-57-8	2-Chlorophenol	33	
541-73-1	1,3-Dichlorobenzene	40	
106-46-7	1,4-Dichlorobenzene	40	
95-50-1	1,2-Dichlorobenzene	40	
95-48-7	2-Methylphenol	21	
108-60-1	2,2'-oxybis(1-Chloropropane)	41	
106-44-5	4-Methylphenol	17	
621-64-7	N-Nitroso-di-n-propylamine	42	
67-72-1	Hexachloroethane	40	
98-95-3	Nitrobenzene	40	
78-59-1	Isophorone	40	
88-75-5	2-Nitrophenol	43	
105-67-9	2,4-Dimethylphenol	5.0	J
120-83-2	2,4-Dichlorophenol	33	
120-82-1	1,2,4-Trichlorobenzene	40	
91-20-3	Naphthalene	41	
106-47-8	4-Chloroaniline	34	
111-91-1	Bis(2-chloroethoxy)methane	41	
87-68-3	Hexachlorobutadiene	42	
59-50-7	4-Chloro-3-methylphenol	24	
91-57-6	2-Methylnaphthalene	41	
77-47-4	Hexachlorocyclopentadiene	55	
88-06-2	2,4,6-Trichlorophenol	34	
95-95-4	2,4,5-Trichlorophenol	38	
91-58-7	2-Chloronaphthalene	41	
88-74-4	2-Nitroaniline	42	
131-11-3	Dimethylphthalate	40	
208-96-8	Acenaphthylene	41	
606-20-2	2,6-Dinitrotoluene	43	
99-09-2	3-Nitroaniline	34	
83-32-9	Acenaphthene	42	
51-28-5	2,4-Dinitrophenol	57	
100-02-7	4-Nitrophenol	21	
132-64-9	Dibenzofuran	43	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1MS

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0935	Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L0935-01BMS
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: S3I0288.D
Level: (LOW/MED) LOW	Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____	Date Received: 05/05/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 05/11/2012
GPC Cleanup: (Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
121-14-2	2,4-Dinitrotoluene		43	
84-66-2	Diethylphthalate		42	
7005-72-3	4-Chlorophenyl-phenylether		43	
86-73-7	Fluorene		43	
100-01-6	4-Nitroaniline		36	
534-52-1	4,6-Dinitro-2-methylphenol		47	
86-30-6	N-Nitrosodiphenylamine		40	
101-55-3	4-Bromophenyl-phenylether		43	
118-74-1	Hexachlorobenzene		44	
87-86-5	Pentachlorophenol		31	
85-01-8	Phenanthrene		43	
120-12-7	Anthracene		42	
86-74-8	Carbazole		42	
84-74-2	Di-n-butylphthalate		45	
206-44-0	Fluoranthene		44	
129-00-0	Pyrene		42	
85-68-7	Butylbenzylphthalate		43	
91-94-1	3,3'-Dichlorobenzidine		21	
56-55-3	Benzo(a)anthracene		42	
218-01-9	Chrysene		44	
117-81-7	Bis(2-ethylhexyl)phthalate		44	
117-84-0	Di-n-octylphthalate		45	
205-99-2	Benzo(b)fluoranthene		44	
207-08-9	Benzo(k)fluoranthene		47	
50-32-8	Benzo(a)pyrene		44	
193-39-5	Indeno(1,2,3-cd)pyrene		43	
53-70-3	Dibenzo(a,h)anthracene		44	
191-24-2	Benzo(g,h,i)perylene		43	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0288.D
Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0288.D
Lab Smp Id: L0935-01BMS Client Smp ID: MW-1MS
Inj Date : 11-MAY-2012 13:59
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-01BMS, 66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.512	1.518	(0.663)	195187	19.3521	19
\$ 5 Phenol-d5	99	2.340	2.346	(1.026)	190500	13.5365	14
6 Phenol	94	2.356	2.357	(1.033)	214426	14.5318	14
8 bis(2-Chloroethyl)Ether	63	2.063	2.063	(0.904)	376899	39.8254	40(Q)
10 2-Chlorophenol	128	2.234	2.234	(0.979)	351822	33.1716	33
11 1,3-Dichlorobenzene	146	2.223	2.223	(0.974)	440548	39.9625	40
* 12 1,4-Dichlorobenzene-d4	152	2.282	2.282	(1.000)	297068	40.0000	
13 1,4-Dichlorobenzene	146	2.292	2.298	(1.005)	448667	39.8134	40
16 1,2-Dichlorobenzene	146	2.442	2.442	(1.070)	433107	40.2956	40
17 2-Methylphenol	108	2.939	2.944	(1.288)	215296	20.7727	21
18 2,2'-oxybis(1-Chloropropane)	45	2.602	2.597	(1.140)	667755	40.7585	41
20 4-Methylphenol	108	3.275	3.260	(1.435)	198096	17.3820	17
19 N-Nitroso-di-n-propylamine	70	2.768	2.768	(1.213)	422189	41.5286	42
21 Hexachloroethane	117	2.821	2.821	(1.236)	166630	40.2613	40
\$ 22 Nitrobenzene-d5	82	2.955	2.955	(0.730)	554269	39.0456	39
23 Nitrobenzene	77	2.981	2.982	(0.736)	594183	40.3986	40
24 Isophorone	82	3.382	3.388	(0.835)	1051527	39.7781	40
25 2-Nitrophenol	139	3.526	3.527	(0.871)	284375	42.9985	43
26 2,4-Dimethylphenol	107	3.980	3.981	(0.983)	60967	4.97117	5(aR)
27 bis(2-Chloroethoxy)methane	93	3.831	3.831	(0.946)	588437	40.5118	40

Data File: \\avogadro\organics\S3.I\120511.B\S3I0288.D
Report Date: 15-May-2012 17:17

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
29 2,4-Dichlorophenol	162		4.178	4.184	(1.032)		324193	32.6786	33
30 1,2,4-Trichlorobenzene	180		3.991	3.991	(0.985)		427100	40.4792	40
* 31 Naphthalene-d8	136		4.050	4.056	(1.000)		1238718	40.0000	
32 Naphthalene	128		4.082	4.082	(1.008)		1335497	40.8658	41
33 4-Chloroaniline	127		4.312	4.312	(1.065)		507541	33.9545	34
34 Hexachlorobutadiene	225		4.274	4.275	(1.055)		255539	41.7470	42
35 4-Chloro-3-Methylphenol	107		5.177	5.183	(1.278)		294636	24.3419	24
36 2-Methylnaphthalene	142		4.931	4.932	(1.218)		952711	40.8992	41
38 Hexachlorocyclopentadiene	237		5.102	5.103	(0.857)		270667	55.4299	55
39 2,4,6-Trichlorophenol	196		5.375	5.380	(0.903)		263283	33.9423	34
40 2,4,5-Trichlorophenol	196		5.524	5.530	(0.928)		312032	38.3267	38
\$ 41 2-Fluorobiphenyl	172		5.348	5.348	(0.899)		1086270	40.3546	40
42 2-Chloronaphthalene	162		5.428	5.428	(0.912)		922792	40.7699	41
43 2-Nitroaniline	65		5.647	5.647	(0.949)		384821	41.5071	42
44 Dimethylphthalate	163		5.797	5.797	(0.974)		1135713	40.3077	40
45 2,6-Dinitrotoluene	165		5.845	5.845	(0.982)		289668	42.6065	43
46 Acenaphthylene	152		5.818	5.818	(0.978)		1549303	41.1153	41
47 3-Nitroaniline	138		6.053	6.053	(1.017)		255282	33.6327	34
* 48 Acenaphthene-d10	164		5.952	5.952	(1.000)		815462	40.0000	
49 Acenaphthene	153		5.978	5.979	(1.004)		970265	42.0236	42
50 2,4-Dinitrophenol	184		6.101	6.102	(1.025)		181425	56.6854	57
51 4-Nitrophenol	109		6.523	6.524	(1.096)		82162	21.1253	21(Q)
53 2,4-Dinitrotoluene	165		6.197	6.198	(1.041)		405592	42.9117	43
52 Dibenzofuran	168		6.139	6.139	(1.031)		1434781	42.9348	43
54 Diethylphthalate	149		6.416	6.417	(1.078)		1170240	42.2340	42
56 4-Chlorophenyl-phenylether	204		6.465	6.465	(1.086)		633678	43.4600	43
55 Fluorene	166		6.438	6.438	(1.082)		1223940	43.2118	43
57 4-Nitroaniline	138		6.598	6.598	(1.109)		285841	35.6270	36
58 4,6-Dinitro-2-methylphenol	198		6.550	6.550	(0.907)		299945	47.3609	47
59 N-Nitrosodiphenylamine	169		6.603	6.604	(0.914)		1025451	40.0914	40
\$ 60 2,4,6-Tribromophenol	330		6.694	6.700	(0.927)		139328	33.0879	33
61 4-Bromophenyl-phenylether	248		6.876	6.876	(0.952)		399124	43.3988	43
62 Hexachlorobenzene	284		6.897	6.898	(0.955)		442970	43.9156	44
63 Pentachlorophenol	266		7.164	7.165	(0.992)		132085	30.8791	31
* 64 Phenanthrene-d10	188		7.223	7.229	(1.000)		1664364	40.0000	
65 Phenanthrene	178		7.244	7.245	(1.003)		1780216	42.7621	43
66 Anthracene	178		7.287	7.287	(1.009)		1805862	41.8603	42
67 Carbazole	167		7.501	7.501	(1.038)		1756041	42.0442	42
68 Di-n-butylphthalate	149		7.779	7.774	(1.077)		2133552	44.7155	45
69 Fluoranthene	202		8.222	8.222	(1.138)		2182896	43.6815	44
71 Pyrene	202		8.398	8.399	(0.894)		2245861	41.9429	42
\$ 72 Terphenyl-d14	244		8.559	8.559	(0.911)		1659343	42.3837	42
73 Butylbenzylphthalate	149		8.991	8.992	(0.957)		1045855	43.1655	43
74 3,3'-Dichlorobenzidine	252		9.408	9.414	(1.002)		473190	20.7944	21
75 Benzo(a)anthracene	228		9.381	9.382	(0.999)		2448416	42.3486	42
* 76 Chrysene-d12	240		9.392	9.398	(1.000)		2152539	40.0000	
78 bis(2-Ethylhexyl)phthalate	149		9.472	9.472	(1.009)		1457631	43.8655	44
77 Chrysene	228		9.413	9.414	(1.002)		2306004	43.7377	44
79 Di-n-octylphthalate	149		9.974	9.975	(0.953)		2471458	44.9806	45
80 Benzo(b)fluoranthene	252		10.204	10.204	(0.974)		2638863	44.0175	44
81 Benzo(k)fluoranthene	252		10.225	10.226	(0.977)		2760496	46.8412	47
82 Benzo(a)pyrene	252		10.434	10.434	(0.996)		2370403	43.9742	44
* 83 Perylene-d12	264		10.471	10.482	(1.000)		2098926	40.0000	
84 Indeno(1,2,3-cd)pyrene	276		11.267	11.267	(1.076)		3001870	43.4037	43

Data File: \\avogadro\organics\S3.I\120511.B\S3I0288.D
 Report Date: 15-May-2012 17:17

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
85 Dibenzo(a,h)anthracene	278	11.288	11.289	(1.078)	2527298		43.6369	44
86 Benzo(g,h,i)perylene	276	11.497	11.497	(1.098)	2504581		43.2948	43

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.
 R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0288.D
Report Date: 15-May-2012 17:17

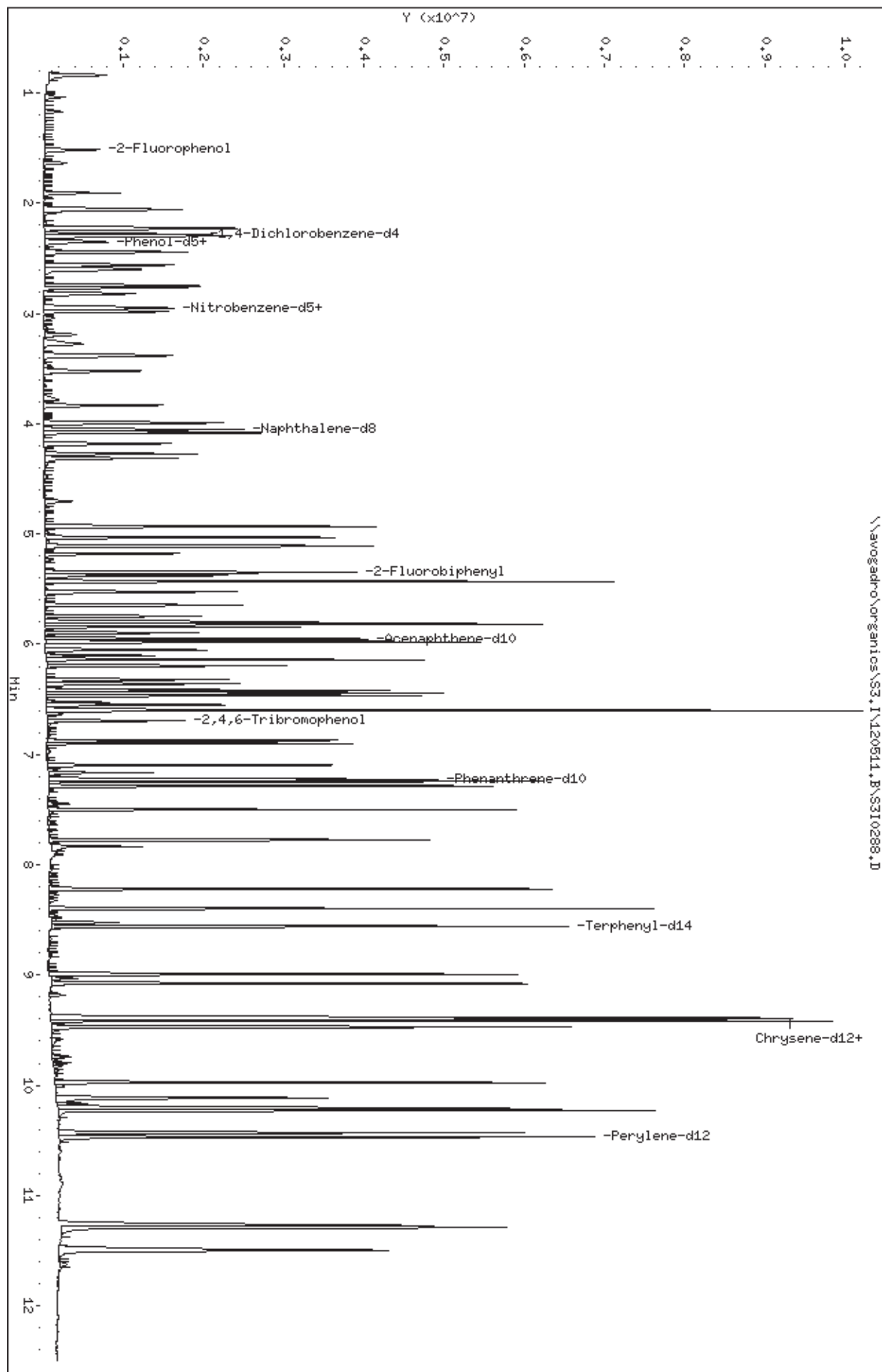
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0288.D
Lab Smp Id: L0935-01BMS Client Smp ID: MW-1MS
Inj Date : 11-MAY-2012 13:59
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-01BMS,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3.1\120511.B\S310288.D
 Date : 11-May-2012 13:59
 Client ID: MW-LMS
 Sample Info: L0935-01BMS,,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-01BMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0289.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	12	
111-44-4	Bis(2-chloroethyl)ether	36	
95-57-8	2-Chlorophenol	28	
541-73-1	1,3-Dichlorobenzene	36	
106-46-7	1,4-Dichlorobenzene	37	
95-50-1	1,2-Dichlorobenzene	37	
95-48-7	2-Methylphenol	17	
108-60-1	2,2'-oxybis(1-Chloropropane)	37	
106-44-5	4-Methylphenol	15	
621-64-7	N-Nitroso-di-n-propylamine	39	
67-72-1	Hexachloroethane	37	
98-95-3	Nitrobenzene	39	
78-59-1	Isophorone	39	
88-75-5	2-Nitrophenol	40	
105-67-9	2,4-Dimethylphenol	4.6	J
120-83-2	2,4-Dichlorophenol	29	
120-82-1	1,2,4-Trichlorobenzene	38	
91-20-3	Naphthalene	39	
106-47-8	4-Chloroaniline	33	
111-91-1	Bis(2-chloroethoxy)methane	38	
87-68-3	Hexachlorobutadiene	38	
59-50-7	4-Chloro-3-methylphenol	23	
91-57-6	2-Methylnaphthalene	39	
77-47-4	Hexachlorocyclopentadiene	52	
88-06-2	2,4,6-Trichlorophenol	31	
95-95-4	2,4,5-Trichlorophenol	35	
91-58-7	2-Chloronaphthalene	39	
88-74-4	2-Nitroaniline	40	
131-11-3	Dimethylphthalate	39	
208-96-8	Acenaphthylene	40	
606-20-2	2,6-Dinitrotoluene	42	
99-09-2	3-Nitroaniline	34	
83-32-9	Acenaphthene	41	
51-28-5	2,4-Dinitrophenol	51	
100-02-7	4-Nitrophenol	21	
132-64-9	Dibenzofuran	41	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0935-01BMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0289.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 05/05/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	42	
84-66-2	Diethylphthalate	41	
7005-72-3	4-Chlorophenyl-phenylether	42	
86-73-7	Fluorene	41	
100-01-6	4-Nitroaniline	35	
534-52-1	4,6-Dinitro-2-methylphenol	46	
86-30-6	N-Nitrosodiphenylamine	39	
101-55-3	4-Bromophenyl-phenylether	42	
118-74-1	Hexachlorobenzene	42	
87-86-5	Pentachlorophenol	28	
85-01-8	Phenanthrene	41	
120-12-7	Anthracene	41	
86-74-8	Carbazole	41	
84-74-2	Di-n-butylphthalate	43	
206-44-0	Fluoranthene	43	
129-00-0	Pyrene	40	
85-68-7	Butylbenzylphthalate	41	
91-94-1	3,3'-Dichlorobenzidine	21	
56-55-3	Benzo(a)anthracene	41	
218-01-9	Chrysene	41	
117-81-7	Bis(2-ethylhexyl)phthalate	42	
117-84-0	Di-n-octylphthalate	41	
205-99-2	Benzo(b)fluoranthene	41	
207-08-9	Benzo(k)fluoranthene	44	
50-32-8	Benzo(a)pyrene	41	
193-39-5	Indeno(1,2,3-cd)pyrene	41	
53-70-3	Dibenzo(a,h)anthracene	41	
191-24-2	Benzo(g,h,i)perylene	41	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0289.D
Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0289.D
Lab Smp Id: L0935-01BMSD Client Smp ID: MW-1MSD
Inj Date : 11-MAY-2012 14:18
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-01BMSD,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol	112	1.514	1.518 (0.665)	152131	15.2958	15	
\$ 5 Phenol-d5	99	2.342	2.346 (1.028)	160013	11.5304	12	
6 Phenol	94	2.353	2.357 (1.033)	181386	12.4659	12	
8 bis(2-Chloroethyl)Ether	63	2.059	2.063 (0.904)	338863	36.3108	36(Q)	
10 2-Chlorophenol	128	2.230	2.234 (0.979)	295698	28.2728	28	
11 1,3-Dichlorobenzene	146	2.219	2.223 (0.974)	392309	36.0882	36	
* 12 1,4-Dichlorobenzene-d4	152	2.278	2.282 (1.000)	292940	40.0000		
13 1,4-Dichlorobenzene	146	2.294	2.298 (1.007)	409661	36.8643	37	
16 1,2-Dichlorobenzene	146	2.443	2.442 (1.073)	387865	36.5949	36	
17 2-Methylphenol	108	2.940	2.944 (1.291)	171720	16.8018	17(R)	
18 2,2'-oxybis(1-Chloropropane)	45	2.598	2.597 (1.141)	603652	37.3650	37	
20 4-Methylphenol	108	3.271	3.260 (1.436)	163299	14.5307	14(R)	
19 N-Nitroso-di-n-propylamine	70	2.764	2.768 (1.213)	392928	39.1950	39	
21 Hexachloroethane	117	2.817	2.821 (1.237)	149056	36.5226	36	
\$ 22 Nitrobenzene-d5	82	2.951	2.955 (0.728)	505273	36.6325	37	
23 Nitrobenzene	77	2.983	2.982 (0.736)	551347	38.5797	38	
24 Isophorone	82	3.384	3.388 (0.835)	992822	38.6530	39	
25 2-Nitrophenol	139	3.522	3.527 (0.869)	256873	39.9732	40	
26 2,4-Dimethylphenol	107	3.977	3.981 (0.982)	54301	4.55680	4(aR)	
27 bis(2-Chloroethoxy)methane	93	3.832	3.831 (0.946)	536691	38.0272	38	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0289.D
Report Date: 15-May-2012 17:17

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
29 2,4-Dichlorophenol	162		4.180	4.184	(1.032)		275780	28.6096	29
30 1,2,4-Trichlorobenzene	180		3.993	3.991	(0.985)		385202	37.5733	38
* 31 Naphthalene-d8	136		4.051	4.056	(1.000)		1203605	40.0000	
32 Naphthalene	128		4.078	4.082	(1.007)		1222947	38.5135	38
33 4-Chloroaniline	127		4.313	4.312	(1.065)		478592	32.9519	33
34 Hexachlorobutadiene	225		4.270	4.275	(1.054)		226140	38.0219	38
35 4-Chloro-3-Methylphenol	107		5.178	5.183	(1.278)		265349	22.5619	22
36 2-Methylnaphthalene	142		4.933	4.932	(1.218)		883156	39.0193	39
38 Hexachlorocyclopentadiene	237		5.104	5.103	(0.858)		250088	52.0616	52
39 2,4,6-Trichlorophenol	196		5.376	5.380	(0.904)		235756	30.8956	31
40 2,4,5-Trichlorophenol	196		5.526	5.530	(0.929)		281440	35.1402	35
\$ 41 2-Fluorobiphenyl	172		5.344	5.348	(0.899)		1029906	38.8928	39
42 2-Chloronaphthalene	162		5.430	5.428	(0.913)		861837	38.7059	39
43 2-Nitroaniline	65		5.643	5.647	(0.949)		364627	39.9787	40
44 Dimethylphthalate	163		5.793	5.797	(0.974)		1094705	39.4941	39
45 2,6-Dinitrotoluene	165		5.846	5.845	(0.983)		280408	41.9259	42
46 Acenaphthylene	152		5.814	5.818	(0.978)		1501149	40.4956	40
47 3-Nitroaniline	138		6.049	6.053	(1.017)		253952	34.0102	34
* 48 Acenaphthene-d10	164		5.948	5.952	(1.000)		802209	40.0000	
49 Acenaphthene	153		5.980	5.979	(1.005)		931139	40.9952	41
50 2,4-Dinitrophenol	184		6.103	6.102	(1.026)		161709	51.3600	51
51 4-Nitrophenol	109		6.519	6.524	(1.096)		81824	21.3859	21(Q)
53 2,4-Dinitrotoluene	165		6.199	6.198	(1.042)		394486	42.4262	42
52 Dibenzofuran	168		6.140	6.139	(1.032)		1351408	41.1080	41
54 Diethylphthalate	149		6.413	6.417	(1.078)		1124582	41.2567	41
56 4-Chlorophenyl-phenylether	204		6.466	6.465	(1.087)		595964	41.5487	42
55 Fluorene	166		6.439	6.438	(1.083)		1153238	41.3882	41
57 4-Nitroaniline	138		6.594	6.598	(1.109)		273964	34.7108	35
58 4,6-Dinitro-2-methylphenol	198		6.546	6.550	(0.906)		289190	46.3775	46
59 N-Nitrosodiphenylamine	169		6.600	6.604	(0.913)		975764	38.7460	39
\$ 60 2,4,6-Tribromophenol	330		6.696	6.700	(0.927)		125588	30.2917	30
61 4-Bromophenyl-phenylether	248		6.872	6.876	(0.951)		381723	42.1564	42
62 Hexachlorobenzene	284		6.899	6.898	(0.955)		417725	42.0611	42
63 Pentachlorophenol	266		7.166	7.165	(0.992)		119100	28.2793	28
* 64 Phenanthrene-d10	188		7.225	7.229	(1.000)		1638713	40.0000	
65 Phenanthrene	178		7.246	7.245	(1.003)		1697137	41.4046	41
66 Anthracene	178		7.289	7.287	(1.009)		1758694	41.4051	41
67 Carbazole	167		7.502	7.501	(1.038)		1693832	41.1896	41
68 Di-n-butylphthalate	149		7.775	7.774	(1.076)		2027229	43.1523	43
69 Fluoranthene	202		8.224	8.222	(1.138)		2108001	42.8431	43
71 Pyrene	202		8.400	8.399	(0.894)		2140431	39.9454	40
\$ 72 Terphenyl-d14	244		8.560	8.559	(0.911)		1493371	38.1171	38
73 Butylbenzylphthalate	149		8.993	8.992	(0.957)		994465	41.0152	41
74 3,3'-Dichlorobenzidine	252		9.409	9.414	(1.002)		477353	20.9624	21
75 Benzo(a)anthracene	228		9.383	9.382	(0.999)		2384988	41.2220	41
* 76 Chrysene-d12	240		9.393	9.398	(1.000)		2154078	40.0000	
78 bis(2-Ethylhexyl)phthalate	149		9.474	9.472	(1.009)		1404592	42.2391	42
77 Chrysene	228		9.415	9.414	(1.002)		2139101	40.5431	40
79 Di-n-octylphthalate	149		9.976	9.975	(0.953)		2325928	41.3594	41
80 Benzo(b)fluoranthene	252		10.205	10.204	(0.974)		2530433	41.2391	41
81 Benzo(k)fluoranthene	252		10.227	10.226	(0.977)		2651047	43.9506	44
82 Benzo(a)pyrene	252		10.435	10.434	(0.996)		2265123	41.0558	41
* 83 Perylene-d12	264		10.473	10.482	(1.000)		2148279	40.0000	
84 Indeno(1,2,3-cd)pyrene	276		11.269	11.267	(1.076)		2913993	41.1652	41

Data File: \\avogadro\organics\S3.I\120511.B\S3I0289.D
 Report Date: 15-May-2012 17:17

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
85 Dibenzo(a,h)anthracene	278	11.290	11.289	(1.078)	2457180		41.4515	41
86 Benzo(g,h,i)perylene	276	11.498	11.497	(1.098)	2428507		41.0154	41

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.
 R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\S3.I\120511.B\S3I0289.D
Report Date: 15-May-2012 17:17

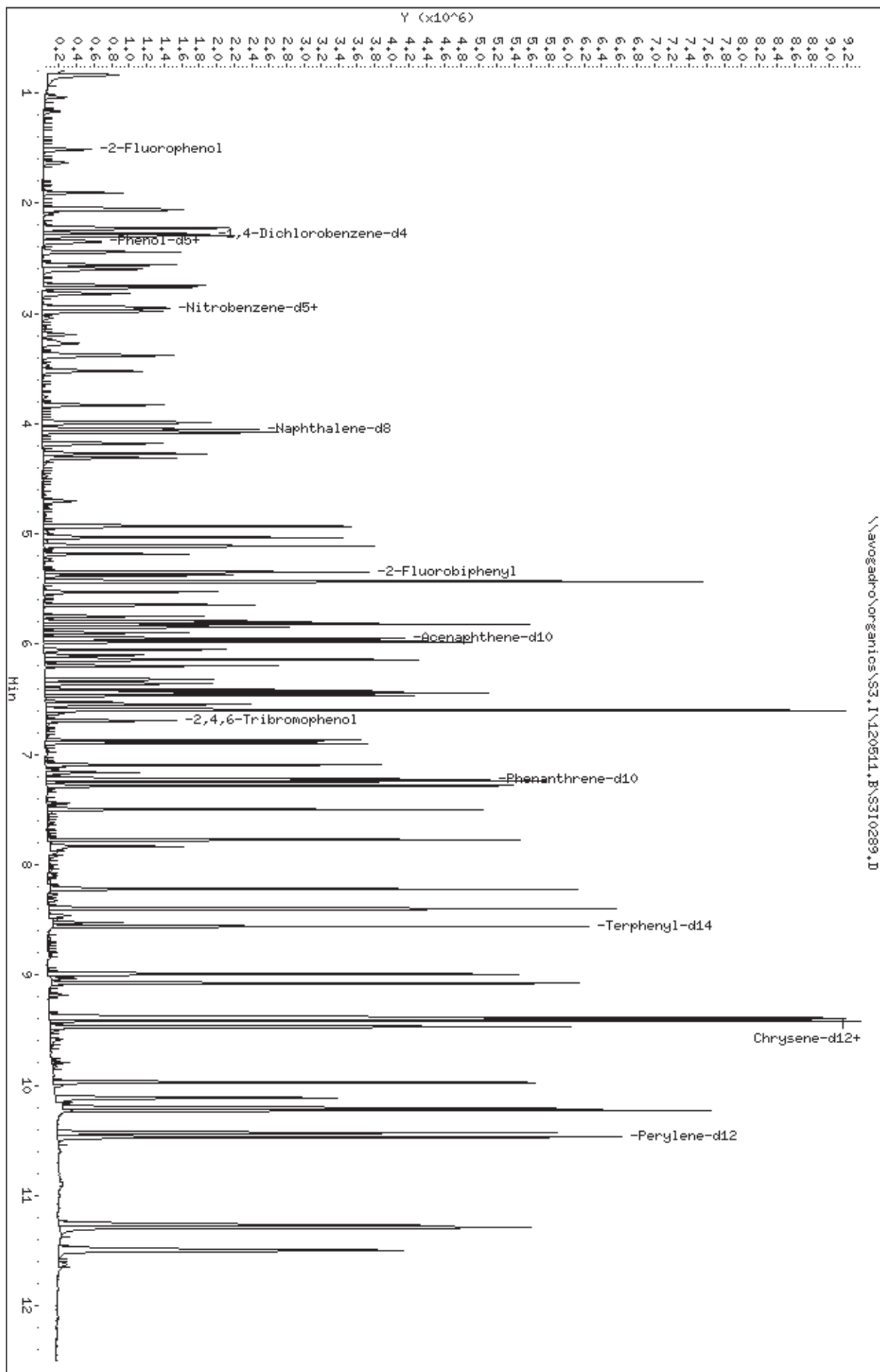
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0289.D
Lab Smp Id: L0935-01BMSD Client Smp ID: MW-1MSD
Inj Date : 11-MAY-2012 14:18
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0935-01BMSD,,66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3.1\120511.B\S310289.D
 Date : 11-May-2012 14:18
 Client ID: MW-LMSD
 Sample Info: L0935-01BMSD,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66049

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0285.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	39	
111-44-4	Bis(2-chloroethyl)ether	40	
95-57-8	2-Chlorophenol	39	
541-73-1	1,3-Dichlorobenzene	40	
106-46-7	1,4-Dichlorobenzene	39	
95-50-1	1,2-Dichlorobenzene	40	
95-48-7	2-Methylphenol	40	
108-60-1	2,2'-oxybis(1-Chloropropane)	39	
106-44-5	4-Methylphenol	40	
621-64-7	N-Nitroso-di-n-propylamine	40	
67-72-1	Hexachloroethane	40	
98-95-3	Nitrobenzene	41	
78-59-1	Isophorone	39	
88-75-5	2-Nitrophenol	41	
105-67-9	2,4-Dimethylphenol	36	
120-83-2	2,4-Dichlorophenol	40	
120-82-1	1,2,4-Trichlorobenzene	40	
91-20-3	Naphthalene	40	
106-47-8	4-Chloroaniline	39	
111-91-1	Bis(2-chloroethoxy)methane	40	
87-68-3	Hexachlorobutadiene	41	
59-50-7	4-Chloro-3-methylphenol	41	
91-57-6	2-Methylnaphthalene	40	
77-47-4	Hexachlorocyclopentadiene	51	
88-06-2	2,4,6-Trichlorophenol	43	
95-95-4	2,4,5-Trichlorophenol	42	
91-58-7	2-Chloronaphthalene	40	
88-74-4	2-Nitroaniline	40	
131-11-3	Dimethylphthalate	42	
208-96-8	Acenaphthylene	41	
606-20-2	2,6-Dinitrotoluene	41	
99-09-2	3-Nitroaniline	33	
83-32-9	Acenaphthene	41	
51-28-5	2,4-Dinitrophenol	46	
100-02-7	4-Nitrophenol	42	
132-64-9	Dibenzofuran	41	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66049

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66049
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0285.D
Level: (LOW/MED) LOW Extraction: (Type) SEPF
% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/09/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/11/2012
GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	42	
84-66-2	Diethylphthalate	41	
7005-72-3	4-Chlorophenyl-phenylether	42	
86-73-7	Fluorene	42	
100-01-6	4-Nitroaniline	32	
534-52-1	4,6-Dinitro-2-methylphenol	45	
86-30-6	N-Nitrosodiphenylamine	43	
101-55-3	4-Bromophenyl-phenylether	43	
118-74-1	Hexachlorobenzene	44	
87-86-5	Pentachlorophenol	41	
85-01-8	Phenanthrene	42	
120-12-7	Anthracene	42	
86-74-8	Carbazole	41	
84-74-2	Di-n-butylphthalate	43	
206-44-0	Fluoranthene	42	
129-00-0	Pyrene	42	
85-68-7	Butylbenzylphthalate	43	
91-94-1	3,3'-Dichlorobenzidine	27	
56-55-3	Benzo(a)anthracene	42	
218-01-9	Chrysene	44	
117-81-7	Bis(2-ethylhexyl)phthalate	44	
117-84-0	Di-n-octylphthalate	43	
205-99-2	Benzo(b)fluoranthene	40	
207-08-9	Benzo(k)fluoranthene	48	
50-32-8	Benzo(a)pyrene	44	
193-39-5	Indeno(1,2,3-cd)pyrene	42	
53-70-3	Dibenzo(a,h)anthracene	42	
191-24-2	Benzo(g,h,i)perylene	42	

Data File: \\avogadro\organics\S3.I\120511.B\S3I0285.D
Report Date: 15-May-2012 17:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0285.D
Lab Smp Id: LCS-66049 Client Smp ID: LCS-66049
Inj Date : 11-MAY-2012 13:01
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-66049, LCS-66049, 66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol		112	1.513	1.518	(0.665)	426528	36.7790	37
\$ 5 Phenol-d5		99	2.336	2.346	(1.026)	646608	39.9603	40
6 Phenol		94	2.352	2.357	(1.033)	658280	38.7996	39
8 bis(2-Chloroethyl)Ether		63	2.063	2.063	(0.906)	435682	40.0386	40
10 2-Chlorophenol		128	2.234	2.234	(0.981)	481332	39.4696	39
11 1,3-Dichlorobenzene		146	2.223	2.223	(0.977)	501310	39.5495	40
* 12 1,4-Dichlorobenzene-d4		152	2.277	2.282	(1.000)	341571	40.0000	
13 1,4-Dichlorobenzene		146	2.293	2.298	(1.007)	511103	39.4446	39
16 1,2-Dichlorobenzene		146	2.442	2.442	(1.073)	494729	40.0318	40
17 2-Methylphenol		108	2.939	2.944	(1.291)	477453	40.0648	40
18 2,2'-oxybis(1-Chloropropane)		45	2.603	2.597	(1.143)	743517	39.4700	39
20 4-Methylphenol		108	3.254	3.260	(1.429)	529237	40.3878	40
19 N-Nitroso-di-n-propylamine		70	2.768	2.768	(1.216)	469255	40.1443	40
21 Hexachloroethane		117	2.822	2.821	(1.239)	188575	39.6272	40
\$ 22 Nitrobenzene-d5		82	2.955	2.955	(0.730)	617590	39.0729	39
23 Nitrobenzene		77	2.982	2.982	(0.736)	666523	40.6990	41
24 Isophorone		82	3.388	3.388	(0.836)	1155234	39.2479	39
25 2-Nitrophenol		139	3.527	3.527	(0.871)	298546	40.5412	40
26 2,4-Dimethylphenol		107	3.981	3.981	(0.983)	496640	36.3688	36
27 bis(2-Chloroethoxy)methane		93	3.831	3.831	(0.946)	648851	40.1189	40

Data File: \\avogadro\organics\S3.I\120511.B\S3I0285.D
Report Date: 15-May-2012 17:17

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
29 2,4-Dichlorophenol	162		4.179	4.184	(1.032)		438599	39.7055	40
30 1,2,4-Trichlorobenzene	180		3.992	3.991	(0.985)		475568	40.4798	40
* 31 Naphthalene-d8	136		4.050	4.056	(1.000)		1379270	40.0000	
32 Naphthalene	128		4.082	4.082	(1.008)		1450090	39.8506	40
33 4-Chloroaniline	127		4.312	4.312	(1.065)		651329	39.1336	39
34 Hexachlorobutadiene	225		4.275	4.275	(1.055)		282785	41.4904	41
35 4-Chloro-3-Methylphenol	107		5.183	5.183	(1.280)		546867	40.5764	40
36 2-Methylnaphthalene	142		4.932	4.932	(1.218)		1030695	39.7381	40
38 Hexachlorocyclopentadiene	237		5.103	5.103	(0.857)		274351	50.9450	51
39 2,4,6-Trichlorophenol	196		5.381	5.380	(0.904)		364973	42.6643	43
40 2,4,5-Trichlorophenol	196		5.525	5.530	(0.928)		378051	42.1055	42
\$ 41 2-Fluorobiphenyl	172		5.349	5.348	(0.899)		1190170	40.0913	40
42 2-Chloronaphthalene	162		5.429	5.428	(0.912)		1003512	40.2017	40
43 2-Nitroaniline	65		5.648	5.647	(0.949)		410928	40.1897	40
44 Dimethylphthalate	163		5.797	5.797	(0.974)		1296604	41.7265	42
45 2,6-Dinitrotoluene	165		5.845	5.845	(0.982)		309509	41.2795	41
46 Acenaphthylene	152		5.819	5.818	(0.978)		1686512	40.5829	40
47 3-Nitroaniline	138		6.054	6.053	(1.017)		278324	33.2489	33
* 48 Acenaphthene-d10	164		5.952	5.952	(1.000)		899327	40.0000	
49 Acenaphthene	153		5.979	5.979	(1.004)		1044226	41.0094	41
50 2,4-Dinitrophenol	184		6.102	6.102	(1.025)		163424	46.2995	46
51 4-Nitrophenol	109		6.518	6.524	(1.095)		180903	42.1758	42
53 2,4-Dinitrotoluene	165		6.198	6.198	(1.041)		437505	41.9716	42
52 Dibenzofuran	168		6.139	6.139	(1.031)		1523027	41.3255	41
54 Diethylphthalate	149		6.417	6.417	(1.078)		1266834	41.4566	41
56 4-Chlorophenyl-phenylether	204		6.465	6.465	(1.086)		675834	42.0288	42
55 Fluorene	166		6.438	6.438	(1.082)		1297560	41.5389	42
57 4-Nitroaniline	138		6.599	6.598	(1.109)		280088	31.6545	32
58 4,6-Dinitro-2-methylphenol	198		6.551	6.550	(0.907)		299050	44.6501	45
59 N-Nitrosodiphenylamine	169		6.604	6.604	(0.914)		1151840	42.5823	42
\$ 60 2,4,6-Tribromophenol	330		6.700	6.700	(0.928)		198408	44.5544	44
61 4-Bromophenyl-phenylether	248		6.876	6.876	(0.952)		414761	42.6450	43
62 Hexachlorobenzene	284		6.898	6.898	(0.955)		469787	44.0399	44
63 Pentachlorophenol	266		7.165	7.165	(0.992)		183257	40.5110	40
* 64 Phenanthrene-d10	188		7.224	7.229	(1.000)		1760142	40.0000	
65 Phenanthrene	178		7.245	7.245	(1.003)		1867904	42.4269	42
66 Anthracene	178		7.288	7.287	(1.009)		1907659	41.8138	42
67 Carbazole	167		7.501	7.501	(1.038)		1816293	41.1205	41
68 Di-n-butylphthalate	149		7.779	7.774	(1.077)		2158804	42.7828	43
69 Fluoranthene	202		8.223	8.222	(1.138)		2245095	42.4815	42
71 Pyrene	202		8.399	8.399	(0.894)		2281948	42.4084	42
\$ 72 Terphenyl-d14	244		8.559	8.559	(0.911)		1686717	42.8722	43
73 Butylbenzylphthalate	149		8.992	8.992	(0.957)		1058348	43.4674	43
74 3,3'-Dichlorobenzidine	252		9.414	9.414	(1.002)		613323	26.8207	27
75 Benzo(a)anthracene	228		9.387	9.382	(0.999)		2454098	42.2392	42
* 76 Chrysene-d12	240		9.398	9.398	(1.000)		2163122	40.0000	
78 bis(2-Ethylhexyl)phthalate	149		9.473	9.472	(1.008)		1473075	44.1133	44
77 Chrysene	228		9.414	9.414	(1.002)		2351220	44.3771	44
79 Di-n-octylphthalate	149		9.975	9.975	(0.952)		2435594	43.1471	43
80 Benzo(b)fluoranthene	252		10.205	10.204	(0.974)		2466502	40.0465	40
81 Benzo(k)fluoranthene	252		10.231	10.226	(0.977)		2887712	47.6947	48
82 Benzo(a)pyrene	252		10.434	10.434	(0.996)		2415720	43.6211	44
* 83 Perylene-d12	264		10.477	10.482	(1.000)		2156366	40.0000	
84 Indeno(1,2,3-cd)pyrene	276		11.273	11.267	(1.076)		2991161	42.0968	42

Data File: \\avogadro\organics\S3.I\120511.B\S3I0285.D
 Report Date: 15-May-2012 17:17

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
85 Dibenzo(a,h)anthracene	278	11.294	11.289	(1.078)	2509608		42.1772	42
86 Benzo(g,h,i)perylene	276	11.503	11.497	(1.098)	2512975		42.2828	42

Data File: \\avogadro\organics\S3.I\120511.B\S3I0285.D
Report Date: 15-May-2012 17:17

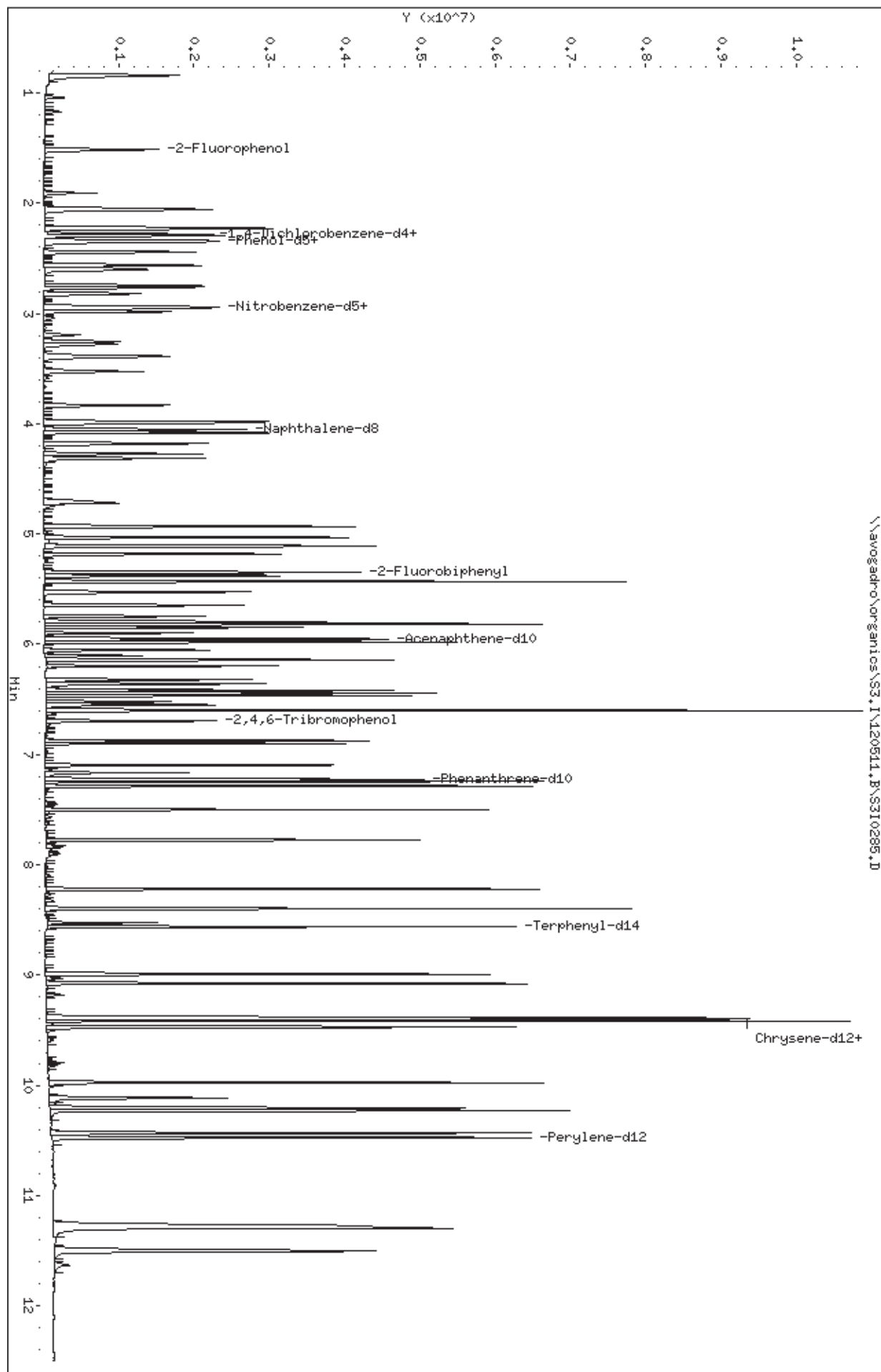
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120511.B\S3I0285.D
Lab Smp Id: LCS-66049 Client Smp ID: LCS-66049
Inj Date : 11-MAY-2012 13:01
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-66049, LCS-66049, 66049
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120511.B\s3_8270C_N.m
Meth Date : 15-May-2012 17:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3.1\120511.B\S310285.D
 Date : 11-May-2012 13:01
 Client ID: LCS-66049
 Sample Info: LCS-66049,LCS-66049,66049
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66186

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0403.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	41	
111-44-4	Bis(2-chloroethyl)ether	43	
95-57-8	2-Chlorophenol	42	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	44	
95-50-1	1,2-Dichlorobenzene	43	
95-48-7	2-Methylphenol	43	
108-60-1	2,2'-oxybis(1-Chloropropane)	41	
106-44-5	4-Methylphenol	42	
621-64-7	N-Nitroso-di-n-propylamine	42	
67-72-1	Hexachloroethane	43	
98-95-3	Nitrobenzene	44	
78-59-1	Isophorone	44	
88-75-5	2-Nitrophenol	45	
105-67-9	2,4-Dimethylphenol	45	
120-83-2	2,4-Dichlorophenol	44	
120-82-1	1,2,4-Trichlorobenzene	43	
91-20-3	Naphthalene	44	
106-47-8	4-Chloroaniline	40	
111-91-1	Bis(2-chloroethoxy)methane	43	
87-68-3	Hexachlorobutadiene	47	
59-50-7	4-Chloro-3-methylphenol	43	
91-57-6	2-Methylnaphthalene	44	
77-47-4	Hexachlorocyclopentadiene	59	
88-06-2	2,4,6-Trichlorophenol	48	
95-95-4	2,4,5-Trichlorophenol	48	
91-58-7	2-Chloronaphthalene	45	
88-74-4	2-Nitroaniline	44	
131-11-3	Dimethylphthalate	46	
208-96-8	Acenaphthylene	43	
606-20-2	2,6-Dinitrotoluene	47	
99-09-2	3-Nitroaniline	43	
83-32-9	Acenaphthene	44	
51-28-5	2,4-Dinitrophenol	55	
100-02-7	4-Nitrophenol	52	
132-64-9	Dibenzofuran	45	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66186

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0403.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
121-14-2	2,4-Dinitrotoluene	47	
84-66-2	Diethylphthalate	45	
7005-72-3	4-Chlorophenyl-phenylether	47	
86-73-7	Fluorene	45	
100-01-6	4-Nitroaniline	43	
534-52-1	4,6-Dinitro-2-methylphenol	48	
86-30-6	N-Nitrosodiphenylamine	44	
101-55-3	4-Bromophenyl-phenylether	48	
118-74-1	Hexachlorobenzene	49	
87-86-5	Pentachlorophenol	53	
85-01-8	Phenanthrene	45	
120-12-7	Anthracene	45	
86-74-8	Carbazole	44	
84-74-2	Di-n-butylphthalate	45	
206-44-0	Fluoranthene	46	
129-00-0	Pyrene	44	
85-68-7	Butylbenzylphthalate	46	
91-94-1	3,3'-Dichlorobenzidine	40	
56-55-3	Benzo(a)anthracene	48	
218-01-9	Chrysene	43	
117-81-7	Bis(2-ethylhexyl)phthalate	46	
117-84-0	Di-n-octylphthalate	45	
205-99-2	Benzo(b)fluoranthene	48	
207-08-9	Benzo(k)fluoranthene	48	
50-32-8	Benzo(a)pyrene	47	
193-39-5	Indeno(1,2,3-cd)pyrene	49	
53-70-3	Dibenzo(a,h)anthracene	48	
191-24-2	Benzo(g,h,i)perylene	49	

Data File: \\avogadro\organics\S3.I\120516.B\S3I0403.D
Report Date: 17-May-2012 13:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0403.D
Lab Smp Id: LCS-66186 Client Smp ID: LCS-66186
Inj Date : 16-MAY-2012 15:19
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-66186, LCS-66186, 66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol		112	1.506	1.507	(0.695)	549525	41.7018	42
\$ 5 Phenol-d5		99	2.377	2.383	(1.096)	787462	42.8284	43
6 Phenol		94	2.393	2.399	(1.103)	797399	41.3626	41
8 bis(2-Chloroethyl)Ether		63	1.971	1.966	(0.909)	531314	42.9711	43
10 2-Chlorophenol		128	2.190	2.191	(1.010)	585905	42.2825	42
11 1,3-Dichlorobenzene		146	2.110	2.110	(0.973)	620087	43.0528	43
* 12 1,4-Dichlorobenzene-d4		152	2.168	2.169	(1.000)	388120	40.0000	
13 1,4-Dichlorobenzene		146	2.184	2.185	(1.007)	640883	43.5285	44
16 1,2-Dichlorobenzene		146	2.329	2.330	(1.074)	607375	43.2523	43
17 2-Methylphenol		108	2.964	2.965	(1.367)	576088	42.5438	42
18 2,2'-oxybis(1-Chloropropane)		45	2.484	2.479	(1.145)	886775	41.4290	41
20 4-Methylphenol		108	3.285	3.291	(1.515)	632708	42.4931	42
19 N-Nitroso-di-n-propylamine		70	2.655	2.645	(1.224)	559286	42.1079	42
21 Hexachloroethane		117	2.676	2.671	(1.234)	234416	43.3522	43
\$ 22 Nitrobenzene-d5		82	2.825	2.821	(0.721)	746269	43.3360	43
23 Nitrobenzene		77	2.852	2.848	(0.728)	784303	43.9573	44
24 Isophorone		82	3.237	3.232	(0.826)	1399219	43.6325	44
25 2-Nitrophenol		139	3.370	3.366	(0.860)	358858	44.7287	45
26 2,4-Dimethylphenol		107	3.969	3.975	(1.012)	676275	45.4558	45(Q)
27 bis(2-Chloroethoxy)methane		93	3.712	3.708	(0.947)	761099	43.1941	43

Data File: \\avogadro\organics\S3.I\120516.B\S3I0403.D
Report Date: 17-May-2012 13:17

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
29 2,4-Dichlorophenol	162		4.177	4.183	(1.065)		526953	43.7858	44
30 1,2,4-Trichlorobenzene	180		3.857	3.857	(0.984)		555161	43.3734	43
* 31 Naphthalene-d8	136		3.921	3.921	(1.000)		1502695	40.0000	
32 Naphthalene	128		3.953	3.948	(1.008)		1724819	43.5073	44
33 4-Chloroaniline	127		4.241	4.242	(1.082)		719605	39.6846	40
34 Hexachlorobutadiene	225		4.140	4.140	(1.056)		350804	47.2426	47
35 4-Chloro-3-Methylphenol	107		5.197	5.204	(1.326)		624647	42.5408	42
36 2-Methylnaphthalene	142		4.829	4.830	(1.232)		1233398	43.6474	44
38 Hexachlorocyclopentadiene	237		5.000	4.995	(0.853)		346696	59.2682	59
39 2,4,6-Trichlorophenol	196		5.336	5.337	(0.911)		442986	47.6729	48
40 2,4,5-Trichlorophenol	196		5.529	5.535	(0.943)		465596	47.7392	48
\$ 41 2-Fluorobiphenyl	172		5.256	5.252	(0.897)		1414390	43.8620	44
42 2-Chloronaphthalene	162		5.336	5.332	(0.911)		1227607	45.2751	45
43 2-Nitroaniline	65		5.598	5.594	(0.955)		492818	44.3725	44
44 Dimethylphthalate	163		5.721	5.716	(0.976)		1538283	45.5742	46
45 2,6-Dinitrotoluene	165		5.774	5.770	(0.985)		381056	46.7873	47
46 Acenaphthylene	152		5.726	5.722	(0.977)		1955142	43.3121	43
47 3-Nitroaniline	138		6.015	6.010	(1.026)		393356	43.2604	43
* 48 Acenaphthene-d10	164		5.860	5.861	(1.000)		976877	40.0000	
49 Acenaphthene	153		5.892	5.887	(1.005)		1224410	44.2684	44
50 2,4-Dinitrophenol	184		6.041	6.037	(1.031)		209087	54.5337	54
51 4-Nitrophenol	109		6.554	6.560	(1.119)		243799	52.3271	52
53 2,4-Dinitrotoluene	165		6.127	6.122	(1.046)		531228	46.9171	47
52 Dibenzofuran	168		6.052	6.048	(1.033)		1786825	44.6344	45
54 Diethylphthalate	149		6.341	6.336	(1.082)		1493230	44.9861	45
56 4-Chlorophenyl-phenylether	204		6.378	6.379	(1.088)		821318	47.0215	47
55 Fluorene	166		6.351	6.347	(1.084)		1539592	45.3745	45
57 4-Nitroaniline	138		6.560	6.555	(1.119)		411193	42.7823	43
58 4,6-Dinitro-2-methylphenol	198		6.480	6.470	(0.907)		361379	48.4956	48
59 N-Nitrosodiphenylamine	169		6.528	6.523	(0.914)		1332232	44.2667	44
\$ 60 2,4,6-Tribromophenol	330		6.629	6.630	(0.928)		257432	51.9582	52
61 4-Bromophenyl-phenylether	248		6.789	6.785	(0.951)		514087	47.5081	48
62 Hexachlorobenzene	284		6.811	6.806	(0.954)		587488	49.4999	49
63 Pentachlorophenol	266		7.115	7.111	(0.996)		268199	53.2880	53
* 64 Phenanthrene-d10	188		7.142	7.137	(1.000)		1958337	40.0000	
65 Phenanthrene	178		7.163	7.159	(1.003)		2198704	44.8863	45
66 Anthracene	178		7.201	7.196	(1.008)		2274178	44.8026	45
67 Carbazole	167		7.441	7.442	(1.042)		2147065	43.6896	44
68 Di-n-butylphthalate	149		7.692	7.693	(1.077)		2511386	44.7332	45
69 Fluoranthene	202		8.136	8.131	(1.139)		2691673	45.7770	46
71 Pyrene	202		8.312	8.307	(0.893)		2797616	44.1343	44
\$ 72 Terphenyl-d14	244		8.477	8.473	(0.910)		2152704	46.4472	46
73 Butylbenzylphthalate	149		8.910	8.906	(0.957)		1306880	45.5631	46
74 3,3'-Dichlorobenzidine	252		9.338	9.333	(1.003)		1083240	40.2113	40
75 Benzo(a)anthracene	228		9.295	9.296	(0.998)		3265306	47.7078	48
* 76 Chrysene-d12	240		9.311	9.306	(1.000)		2548232	40.0000	
78 bis(2-Ethylhexyl)phthalate	149		9.386	9.381	(1.008)		1804658	45.8756	46
77 Chrysene	228		9.332	9.328	(1.002)		2668491	42.7537	43
79 Di-n-octylphthalate	149		9.893	9.889	(0.952)		3031895	44.9947	45
80 Benzo(b)fluoranthene	252		10.128	10.118	(0.974)		3517379	47.8412	48
81 Benzo(k)fluoranthene	252		10.150	10.140	(0.976)		3484274	48.2090	48
82 Benzo(a)pyrene	252		10.353	10.343	(0.996)		3121800	47.2232	47
* 83 Perylene-d12	264		10.395	10.391	(1.000)		2574081	40.0000	
84 Indeno(1,2,3-cd)pyrene	276		11.165	11.149	(1.074)		4139606	48.8055	49

Data File: \\avogadro\organics\S3.I\120516.B\S3I0403.D
 Report Date: 17-May-2012 13:17

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
85 Dibenzo(a,h)anthracene	278	11.186	11.171	(1.076)	3404081		47.9261	48
86 Benzo(g,h,i)perylene	276	11.389	11.368	(1.096)	3450848		48.6409	49

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3.I\120516.B\S3I0403.D
Report Date: 17-May-2012 13:17

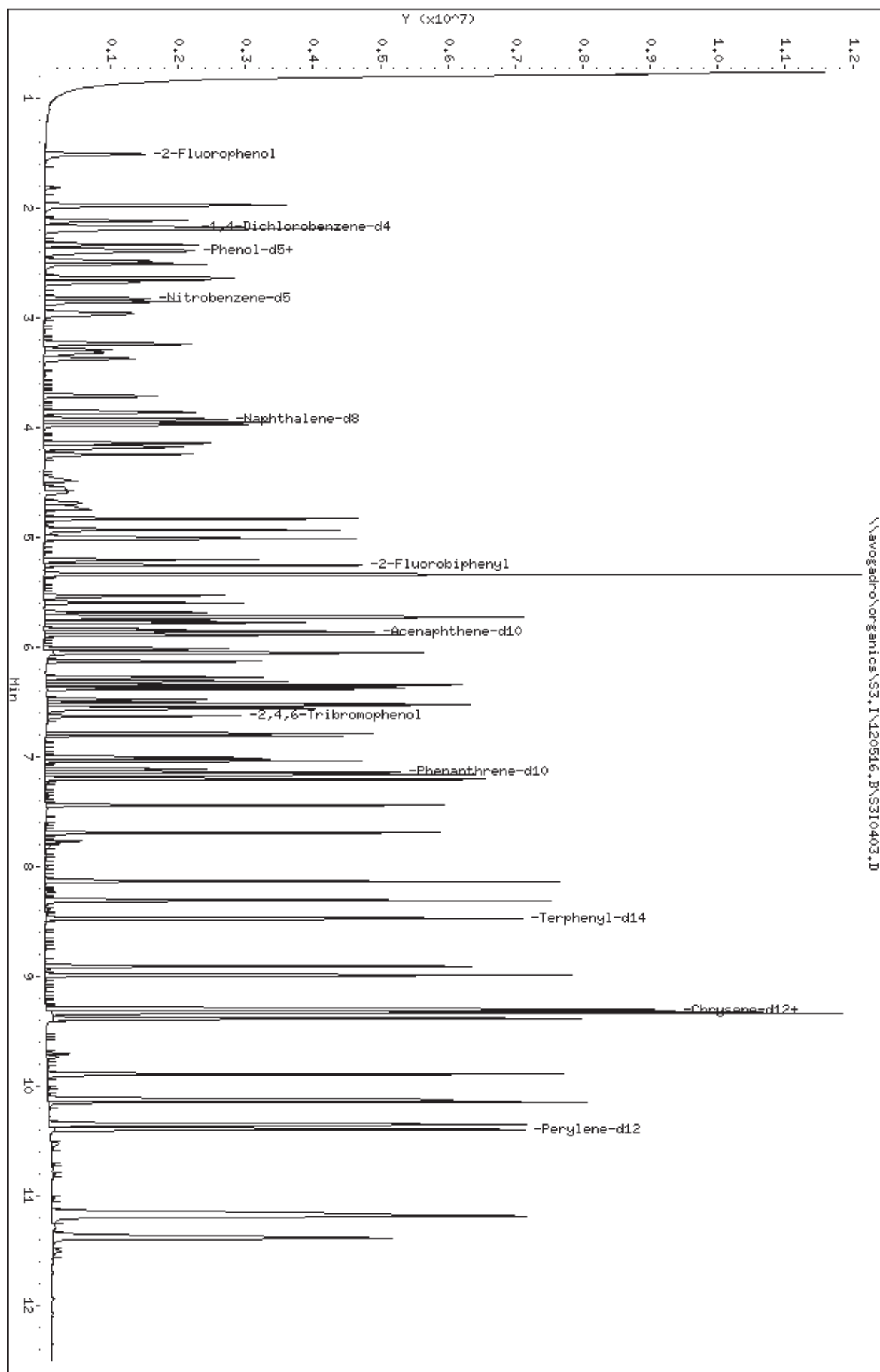
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0403.D
Lab Smp Id: LCS-66186 Client Smp ID: LCS-66186
Inj Date : 16-MAY-2012 15:19
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-66186, LCS-66186, 66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3,I\120516,B\S3I0403.D
 Date : 16-MAY-2012 15:19
 Client ID: LCS-66186
 Sample Info: LCS-66186,LCS-66186,66186
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66186

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0404.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	40	
111-44-4	Bis(2-chloroethyl)ether	41	
95-57-8	2-Chlorophenol	40	
541-73-1	1,3-Dichlorobenzene	42	
106-46-7	1,4-Dichlorobenzene	42	
95-50-1	1,2-Dichlorobenzene	42	
95-48-7	2-Methylphenol	41	
108-60-1	2,2'-oxybis(1-Chloropropane)	40	
106-44-5	4-Methylphenol	40	
621-64-7	N-Nitroso-di-n-propylamine	41	
67-72-1	Hexachloroethane	41	
98-95-3	Nitrobenzene	42	
78-59-1	Isophorone	42	
88-75-5	2-Nitrophenol	43	
105-67-9	2,4-Dimethylphenol	43	
120-83-2	2,4-Dichlorophenol	43	
120-82-1	1,2,4-Trichlorobenzene	41	
91-20-3	Naphthalene	41	
106-47-8	4-Chloroaniline	40	
111-91-1	Bis(2-chloroethoxy)methane	42	
87-68-3	Hexachlorobutadiene	46	
59-50-7	4-Chloro-3-methylphenol	43	
91-57-6	2-Methylnaphthalene	42	
77-47-4	Hexachlorocyclopentadiene	55	
88-06-2	2,4,6-Trichlorophenol	45	
95-95-4	2,4,5-Trichlorophenol	45	
91-58-7	2-Chloronaphthalene	43	
88-74-4	2-Nitroaniline	43	
131-11-3	Dimethylphthalate	43	
208-96-8	Acenaphthylene	41	
606-20-2	2,6-Dinitrotoluene	45	
99-09-2	3-Nitroaniline	42	
83-32-9	Acenaphthene	42	
51-28-5	2,4-Dinitrophenol	41	
100-02-7	4-Nitrophenol	49	
132-64-9	Dibenzofuran	43	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66186

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0935 Mod. Ref No.: _____ SDG No.: SL0935

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66186

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S3I0404.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 05/16/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 05/16/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
121-14-2	2,4-Dinitrotoluene	45		
84-66-2	Diethylphthalate	43		
7005-72-3	4-Chlorophenyl-phenylether	45		
86-73-7	Fluorene	43		
100-01-6	4-Nitroaniline	43		
534-52-1	4,6-Dinitro-2-methylphenol	46		
86-30-6	N-Nitrosodiphenylamine	42		
101-55-3	4-Bromophenyl-phenylether	45		
118-74-1	Hexachlorobenzene	47		
87-86-5	Pentachlorophenol	57		
85-01-8	Phenanthrene	43		
120-12-7	Anthracene	42		
86-74-8	Carbazole	42		
84-74-2	Di-n-butylphthalate	43		
206-44-0	Fluoranthene	44		
129-00-0	Pyrene	42		
85-68-7	Butylbenzylphthalate	44		
91-94-1	3,3'-Dichlorobenzidine	39		
56-55-3	Benzo(a)anthracene	45		
218-01-9	Chrysene	42		
117-81-7	Bis(2-ethylhexyl)phthalate	44		
117-84-0	Di-n-octylphthalate	43		
205-99-2	Benzo(b)fluoranthene	45		
207-08-9	Benzo(k)fluoranthene	47		
50-32-8	Benzo(a)pyrene	45		
193-39-5	Indeno(1,2,3-cd)pyrene	47		
53-70-3	Dibenzo(a,h)anthracene	46		
191-24-2	Benzo(g,h,i)perylene	46		

Data File: \\avogadro\organics\S3.I\120516.B\S3I0404.D
Report Date: 17-May-2012 13:17

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0404.D
Lab Smp Id: LCSD-66186 Client Smp ID: LCSD-66186
Inj Date : 16-MAY-2012 15:38
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCSD-66186,LCSD-66186,66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 4 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Vo}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (ug/L)
\$ 3 2-Fluorophenol		112	1.504	1.507	(0.694)	503986	39.4980	39
\$ 5 Phenol-d5		99	2.375	2.383	(1.096)	734427	41.2516	41
6 Phenol		94	2.385	2.399	(1.101)	743704	39.8402	40
8 bis(2-Chloroethyl)Ether		63	1.969	1.966	(0.909)	485548	40.5552	40
10 2-Chlorophenol		128	2.188	2.191	(1.010)	541070	40.3252	40
11 1,3-Dichlorobenzene		146	2.113	2.110	(0.975)	578793	41.5013	42
* 12 1,4-Dichlorobenzene-d4		152	2.166	2.169	(1.000)	375817	40.0000	
13 1,4-Dichlorobenzene		146	2.182	2.185	(1.007)	591706	41.5040	42
16 1,2-Dichlorobenzene		146	2.327	2.330	(1.074)	564863	41.5418	42
17 2-Methylphenol		108	2.962	2.965	(1.367)	542480	41.3733	41
18 2,2'-oxybis(1-Chloropropane)		45	2.481	2.479	(1.145)	818945	39.5126	40
20 4-Methylphenol		108	3.283	3.291	(1.515)	580265	40.2467	40
19 N-Nitroso-di-n-propylamine		70	2.652	2.645	(1.224)	525121	40.8299	41
21 Hexachloroethane		117	2.674	2.671	(1.234)	216774	41.4020	41
\$ 22 Nitrobenzene-d5		82	2.823	2.821	(0.720)	703434	42.2711	42
23 Nitrobenzene		77	2.850	2.848	(0.726)	731934	42.4508	42
24 Isophorone		82	3.235	3.232	(0.824)	1311108	42.3087	42
25 2-Nitrophenol		139	3.368	3.366	(0.858)	331550	42.7640	43
26 2,4-Dimethylphenol		107	3.967	3.975	(1.011)	618673	43.0322	43
27 bis(2-Chloroethoxy)methane		93	3.710	3.708	(0.946)	711183	41.7667	42

Data File: \\avogadro\organics\S3.I\120516.B\S3I0404.D
Report Date: 17-May-2012 13:17

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
29 2,4-Dichlorophenol	162		4.175	4.183	(1.064)		498449	42.8596	43
30 1,2,4-Trichlorobenzene	180		3.854	3.857	(0.982)		512226	41.4125	41
* 31 Naphthalene-d8	136		3.924	3.921	(1.000)		1452127	40.0000	
32 Naphthalene	128		3.951	3.948	(1.007)		1589718	41.4959	41
33 4-Chloroaniline	127		4.244	4.242	(1.082)		702504	40.0906	40
34 Hexachlorobutadiene	225		4.143	4.140	(1.056)		327813	45.6837	46
35 4-Chloro-3-Methylphenol	107		5.195	5.204	(1.324)		608968	42.9172	43
36 2-Methylnaphthalene	142		4.827	4.830	(1.230)		1156425	42.3486	42
38 Hexachlorocyclopentadiene	237		4.998	4.995	(0.853)		320390	55.1702	55
39 2,4,6-Trichlorophenol	196		5.334	5.337	(0.911)		419548	45.4796	45
40 2,4,5-Trichlorophenol	196		5.526	5.535	(0.943)		439549	45.3969	45
\$ 41 2-Fluorobiphenyl	172		5.254	5.252	(0.897)		1372142	42.8619	43
42 2-Chloronaphthalene	162		5.334	5.332	(0.911)		1161941	43.1655	43
43 2-Nitroaniline	65		5.596	5.594	(0.955)		471079	42.7242	43
44 Dimethylphthalate	163		5.719	5.716	(0.976)		1452357	43.3420	43
45 2,6-Dinitrotoluene	165		5.778	5.770	(0.986)		360728	44.6141	45
46 Acenaphthylene	152		5.724	5.722	(0.977)		1834326	40.9318	41
47 3-Nitroaniline	138		6.013	6.010	(1.026)		376194	41.6745	42
* 48 Acenaphthene-d10	164		5.858	5.861	(1.000)		969810	40.0000	
49 Acenaphthene	153		5.890	5.887	(1.005)		1166943	42.4981	42
50 2,4-Dinitrophenol	184		6.039	6.037	(1.031)		157680	41.4255	41
51 4-Nitrophenol	109		6.557	6.560	(1.119)		228209	49.3380	49
53 2,4-Dinitrotoluene	165		6.130	6.122	(1.047)		506228	45.0350	45
52 Dibenzofuran	168		6.050	6.048	(1.033)		1709276	43.0084	43
54 Diethylphthalate	149		6.338	6.336	(1.082)		1423078	43.1850	43
56 4-Chlorophenyl-phenylether	204		6.381	6.379	(1.089)		771818	44.5095	44
55 Fluorene	166		6.354	6.347	(1.085)		1462836	43.4265	43
57 4-Nitroaniline	138		6.557	6.555	(1.119)		408474	42.8091	43
58 4,6-Dinitro-2-methylphenol	198		6.477	6.470	(0.907)		343902	45.8703	46
59 N-Nitrosodiphenylamine	169		6.525	6.523	(0.914)		1280449	42.2880	42
\$ 60 2,4,6-Tribromophenol	330		6.632	6.630	(0.929)		244489	49.0465	49
61 4-Bromophenyl-phenylether	248		6.787	6.785	(0.951)		490593	45.0619	45
62 Hexachlorobenzene	284		6.809	6.806	(0.954)		555387	46.5113	46
63 Pentachlorophenol	266		7.113	7.111	(0.996)		287999	56.8749	57
* 64 Phenanthrene-d10	188		7.140	7.137	(1.000)		1970289	40.0000	
65 Phenanthrene	178		7.161	7.159	(1.003)		2106819	42.7496	43
66 Anthracene	178		7.204	7.196	(1.009)		2148632	42.0725	42
67 Carbazole	167		7.444	7.442	(1.043)		2077139	42.0103	42
68 Di-n-butylphthalate	149		7.695	7.693	(1.078)		2420520	42.8531	43
69 Fluoranthene	202		8.133	8.131	(1.139)		2600260	43.9541	44
71 Pyrene	202		8.310	8.307	(0.893)		2692056	42.1152	42
\$ 72 Terphenyl-d14	244		8.475	8.473	(0.910)		2064619	44.1755	44
73 Butylbenzylphthalate	149		8.908	8.906	(0.957)		1271664	43.9660	44
74 3,3'-Dichlorobenzidine	252		9.335	9.333	(1.003)		1061585	39.0791	39
75 Benzo(a)anthracene	228		9.298	9.296	(0.999)		3107947	45.0304	45
* 76 Chrysene-d12	240		9.309	9.306	(1.000)		2569641	40.0000	
78 bis(2-Ethylhexyl)phthalate	149		9.383	9.381	(1.008)		1744777	43.9839	44
77 Chrysene	228		9.330	9.328	(1.002)		2630952	41.8010	42
79 Di-n-octylphthalate	149		9.891	9.889	(0.952)		2936234	42.8210	43
80 Benzo(b)fluoranthene	252		10.126	10.118	(0.974)		3365959	44.9895	45
81 Benzo(k)fluoranthene	252		10.147	10.140	(0.976)		3454538	46.9705	47
82 Benzo(a)pyrene	252		10.350	10.343	(0.996)		3031489	45.0636	45
* 83 Perylene-d12	264		10.393	10.391	(1.000)		2619407	40.0000	
84 Indeno(1,2,3-cd)pyrene	276		11.162	11.149	(1.074)		4051251	46.9373	47

Data File: \\avogadro\organics\S3.I\120516.B\S3I0404.D
 Report Date: 17-May-2012 13:17

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng)	(ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
85 Dibenzo(a,h)anthracene	278	11.184	11.171	(1.076)	3336336		46.1595	46
86 Benzo(g,h,i)perylene	276	11.381	11.368	(1.095)	3335069		46.1955	46

Data File: \\avogadro\organics\S3.I\120516.B\S3I0404.D
Report Date: 17-May-2012 13:17

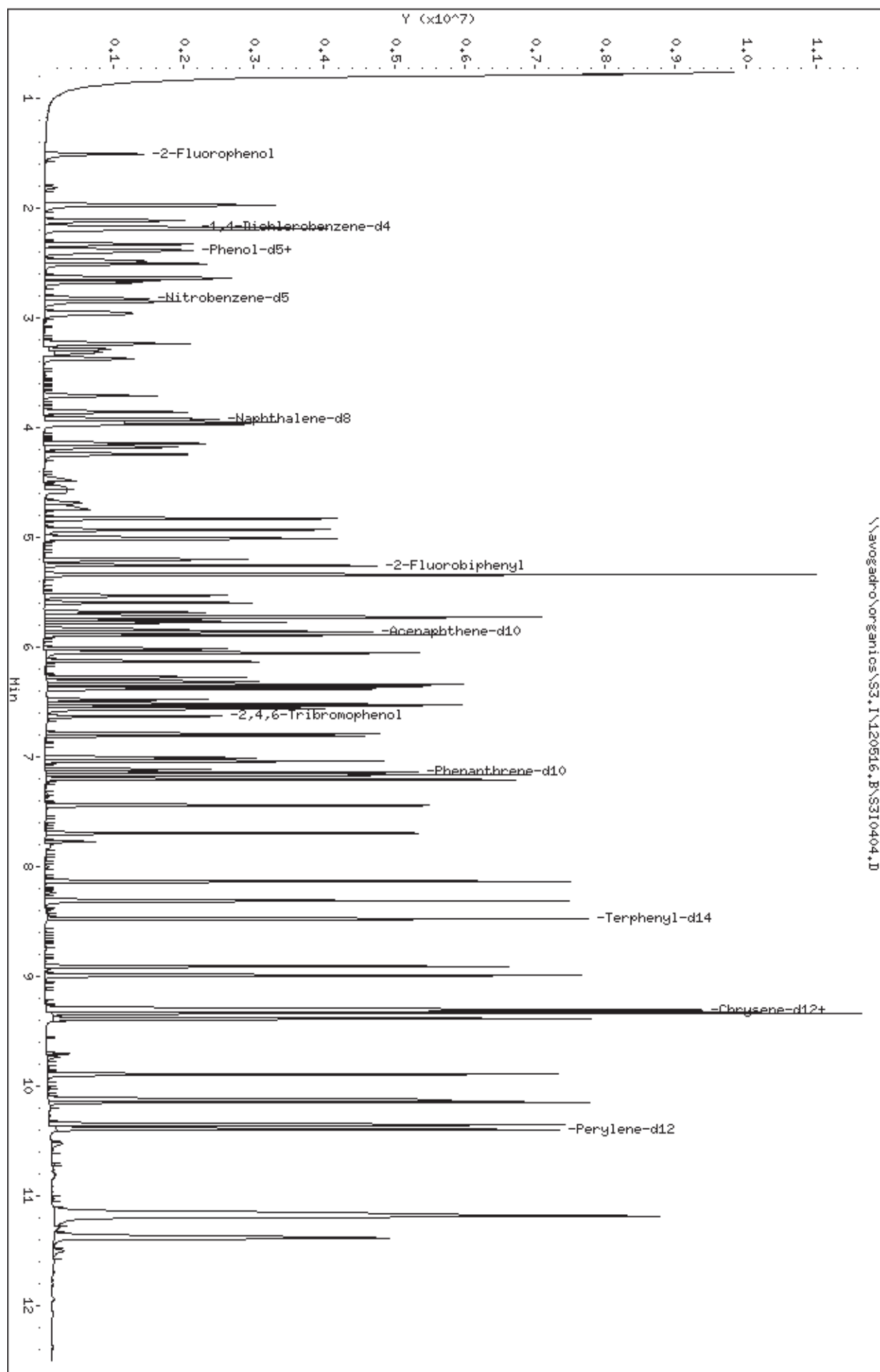
Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120516.B\S3I0404.D
Lab Smp Id: LCSD-66186 Client Smp ID: LCSD-66186
Inj Date : 16-MAY-2012 15:38
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCSD-66186,LCSD-66186,66186
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120516.B\s3_8270C_N.m
Meth Date : 17-May-2012 13:17 S3.i Quant Type: ISTD
Cal Date : 03-MAY-2012 13:02 Cal File: S3I0122.D
Als bottle: 4 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\S3,I\120516,B\S3I0404.D
 Date : 16-May-2012 15:38
 Client ID: LCSD-66186
 Sample Info: LCSD-66186,LCSD-66186,66186
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Wednesday, May 09, 2012 12:13

Page 01 of 01

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: 05/09/2012 07:58

Prep End Date: 05/09/2012 12:12

Prep Batch ID: 66049

Prep Code: BNA_W_PR

Prep Type: SEPF/SW3510C

Prep Factor Units:
mL / mL

Technician: Jodie B Warner

QC Matrix: NA2SO4
QC Matrix Lot: 115711

Solvent (1): MECL2
Solvent (1) Lot: DF 656

Solvent (3): N/A
Solvent (3) Lot: N/A

Clean Up (1): N/A
Clean Up (1) Lot: N/A

Solvent (4): N/A
Solvent (4) Lot: N/A

Clean Up (2): N/A
Clean Up (2) Lot: N/A

Clean Up (3): N/A
Clean Up (3) Lot: N/A

Clean Up (4): N/A
Clean Up (4) Lot: N/A

Start Time: N/A
End Time: N/A

Cycles/Hour 0

Sonicator Tuned? N/A

Bath Temp1 (C): 87

Therm ID1: MT-88

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH	CNCNTR Unit
MB-66049	BatchQC		1000	1	OSW110920A	1			JBW	TM			05/09/12	JBW	R7	11.0	>11	KD 1
LCS-66049	BatchQC		1000	1	OSW110920A	1	OSW110920B	1	JBW	TM			05/09/12	JBW	R7	7.0	<2	KD 1
L0915-09B	SP-7-GW-050212	A	1000	1	OSW110920A	1			JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1
L0935-01B	MW-1	A	1000	1	OSW110920A	1			JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1
L0935-01BMS	MW-1	A	1000	1	OSW110920A	1	OSW110920B	1	JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1
L0935-01BMSD	MW-1	A	1000	1	OSW110920A	1	OSW110920B	1	JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1
L0935-02B	MW-2	A	1000	1	OSW110920A	1			JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1
L0935-03B	MW-3	A	1000	1	OSW110920A	1			JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1
L0935-05B	DUP-1	A	1000	1	OSW110920A	1			JBW	TM	05/24/12	01	05/09/12	JBW	R7	7.0	<2	KD 1

05/09/2012

Timothy McDaniel

Date

Manager Reviewed

Date

Analyst Reviewed

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

5/9/12

Logbook ID: 50.0147-04/12

Thursday, May 24, 2012 10:53

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Page 01 of 01

Prep Start Date: 05/16/2012 08:29

Prep End Date: 05/16/2012 09:50

Prep Batch ID: 66186

Prep Code: BNA_W_PR

Technician: Jodie B Warner

Prep Type: SEPF/SW3510C

Prep Factor Units:
mL / mL

QC Matrix: NA2SO4
QC Matrix Lot: 115711

Filter?: FILTER

Filter Lot: FC003284

Solvent (1): MECL2
Solvent (1) Lot: DF 914

Solvent (2): N/A
Solvent (2) Lot: N/A

Solvent (3): N/A
Solvent (3) Lot: N/A

Solvent (4): N/A
Solvent (4) Lot: N/A

Solvent (5): N/A
Solvent (5) Lot: N/A

Solvent (6): N/A
Solvent (6) Lot: N/A

Clean Up (1): N/A
Clean Up (1) Lot: N/A

Clean Up (2): N/A
Clean Up (2) Lot: N/A

Clean Up (3): N/A
Clean Up (3) Lot: N/A

Bath Temp1 (C): 87

Therm ID1: MT-88

Start Time: N/A
End Time: N/A

Sonicator Tuned? N/A

Cycles/Hour 0

Mitkem Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH	CNCNTR Unit
MB-66186	BatchQC		1000	1	OSW111221A	1			JBW	TM			05/16/12	JBW	R7	>11	<2	KD 1
LCS-66186	BatchQC		1000	1	OSW111221A	1	OSW120206A	1	JBW	TM			05/16/12	JBW	R7	7.0	✓	KD 1
LCS-66186	BatchQC		1000	1	OSW111221A	1	OSW120206A	1	JBW	TM			05/16/12	JBW	R7	7.0	✓	KD 1
L0935-03BRE	MW-3	A	700	1	OSW111221A	1			JBW	TM	05/24/12	01	05/16/12	JBW	R7	7.0	✓	KD 1
Jodie B Warner					Timothy McDaniel				JBW	TM			05/16/12	JBW	R7	7.0	✓	KD 1

Analyst Reviewed

Date

Manager Reviewed

Date

Comments: Only 700ml of sample left. Used 700ml and consumed sample.

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

JBW
5/16/12

Logbook ID: 50.0147-05/12

Spectrum Analytical, Inc. RI Division S3 Injection Log
SemiVolatiles Laboratory
METHOD: 8220 ANALYST: PK
ICAL DATE: 5/3/12 ENV: 2224
BATCH: 120503A.B
Start: 03-MAY-12 12:04
End: 03-MAY-12 21:13

Internal Standard:
Comments:

Inlet Maintenance By: PK
Liner : clean
Column: C18
Inlet Seal: clean
Septum : new

Time-12/2022A

#8676

Reviewed By: 05/04/12 BM
Manual Integration: PK
ICU - 50/203136
MI Review: 05/04/12 BM

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BATCH	DCB	NPT	ANT	PHN	CRY	PRY	NBZ	FBP	BN	TPH	PHL	2FP	ACID	OLM	DILN	FLG	COMMENTS
S3I0120	12:04	DFTPP3U																					
S3I0121A	12:40	SSTD0253U																					
S3I0122	13:02	SSTD0803U																					
S3I0123	13:21	SSTD0103U																					
S3I0124	13:40	SSTD0603U																					
S3I0125	14:00	SSTD0053U																					
S3I0126	14:19	SSTD0403U																					
S3I0127A	16:35	SICV0253U																					
S3I0128	16:55	MB-65903																					
S3I0129	17:14	LCS-65903																					
S3I0130	17:35	MB-65875																					
S3I0131	17:56	LCS-65875																					
S3I0132	18:16	LCS-65875																					
S3I0133	18:36	L0801-04D																					
S3I0134	18:55	L0801-05D																					
S3I0135	19:15	L0879-01A																					
S3I0136	19:35	L0879-02A																					
S3I0137	19:54	L0879-03A																					
S3I0138	20:14	L0879-04A																					
S3I0139	20:34	L0879-05A																					
S3I0140	20:53	L0879-05AMS																					
S3I0141	21:13	L0879-05AMS																					

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limits
Surrogates are diluted

1 pk 5/4/12

05/04/12 BM

MI 10_6_17_20 Re-estv. OK
MI 10_17_20 Re-estv. OK
confirmed

Logbook ID: 70.0192-12/11

Spectrum Analytical, Inc. RI Division
Semi-volatiles Laboratory

Instrument S3

METHOD: 8220
ICAL DATE: 5/3/12

Spectrum Analytical, Inc. RI Div

BATCH: 120511.B
Start: 11-MAY-12 11:19
End: 11-MAY-12 23:16

Internal Standard: 5C120103A

Comments:

Inlet Maintenance By: PK
Liner : cleaned
Column : changed
Inlet Seal: cleaned
Septum : new

#8676
Tune - 5/12/2021
L3-SW120313C

Reviewed By: 05/14/12 BM Manual Integration: PK

MI Review: 05/14/12 BM

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BATCH	DCB	NPT	ANT	PHN	CRY	PRY	NBZ	FBP	BN	TPH	PHL	2PP	ACID	OLM	DCB	TBP	DIILN	FLG	COMMENTS
S3I0280	11:19	DFTPP3A	DFTPP3A																						
S3I0281	11:32	SSTD0253A	SSTD0253A																						
S3I0282	12:03	MB-66087	MB-66087																						
S3I0283	12:23	LCS-66087	LCS-66087																						
S3I0284	12:42	MB-66049	MB-66049																						
S3I0285	13:01	LCS-66049	LCS-66049																						
S3I0286	13:20	L0915-09B	SP-7-GW-050212																						
S3I0287	13:40	L0935-01B	MW-1																						
S3I0288	13:59	L0935-01BMS	MW-LMS																						
S3I0289	14:18	L0935-01BMSD	MW-LMSD																						
S3I0290	14:37	L0935-02B	MW-2																						
S3I0291	14:56	L0935-03B	MW-3																						
S3I0292	15:16	L0935-05B	DUP-1																						
S3I0293	15:35	L0828-12ADL	D078-727DL																						
S3I0294	15:54	L0903-19BDL	SP-28-GW-050112																						
S3I0295	16:13	L0865-01ADL	SP-1-2-4DL																						
S3I0296	16:32	L0963-04A	B-11/5'																						
S3I0296A	16:52	OSW120511A																							
S3I0297	17:11	L0915-01A	SP-44-4-6																						
S3I0298	17:30	L0915-04A	SP-49-1-3																						
S3I0299	17:49	L0915-05A																							
S3I0300	18:08	L0915-08A	SP-57-0-4																						
S3I0301	18:27	L0971-01A	SBM-TP2																						
S3I0302	18:47	L0971-02A	SBM-TP10																						
S3I0303	19:06	L0971-03A	SBM-TP5																						
S3I0304	19:25	L0971-04A	TFPD050712																						
S3I0305	19:44	L0971-05A	SBM-TP9																						
S3I0306	20:03	L0971-06A	SBM-TP8																						
S3I0307	20:23	L0971-06BMS	SBM-TP8MS																						
S3I0308	20:42	L0971-06BMSD	SBM-TP8MSD																						
S3I0309	21:01	L0903-01A	SP-17-3-5-4																						
S3I0310	21:20	L0903-03A	SP-26-1-3																						
S3I0311	21:39	L0903-11A	SP-35-0-4																						
S3I0312	21:59	L0903-13A	SP-38-4-8																						
S3I0313	22:18	L0903-05A	SP-22-1-4																						
S3I0314	22:37	L0903-07A	SP-27-1-4																						
S3I0315	22:56	L0903-09A	SP-32-2-4																						
S3I0316	23:16	L0930-03BDL	BMA-SOA-3-D21DL																						

MI 75_77_81_80_86 OL unitry

MI 80_81_86

MI 80_81_86

MI 80_81_86

MI 80_81_86

MI 80_81_86

Logbook ID: 70.0192-12/11

Spectrum Analytical, Inc. RI Division
Semi-volatile Laboratory

Injection Log

METHOD: 8220
ICAL DATE: 5/3/12

Instrument S3

ANALYST: ME
EMV: 2424

Spectrum Analytical, Inc. RI Div

BATCH: 120516.B
Start: 16-MAY-12 14:09
End: 17-MAY-12 01:11

Internal Standard: SI 40103A

Comments:

Inlet Maintenance By: pk
Liner : clean
Column : clean
Inlet Seal: clean
Septum : new

Tune-SD120221A

L3-SL/20313C

8676

Reviewed By: 05/17/12 BM

Manual Integration: pk

MT Review: 05/17/12 BM

FILE	TIME	LAB ID	CLIENT ID	PREP MT	BATCH	COB	NPT	ANT	PHN	CRY	PRY	NBZ	FBP	TPH	PHL	2FP	ACID	OLM	DILN	FLG	COMMENTS
S310400A	14:09	DFTPP3E																			
S310401	14:22	SST0253E																			
S310402	15:00	MB-66186																			
S310403	15:19	LCS-66186																			
S310404	15:38	LCS-66186																			
S310405	15:57	MB-66090																			
S310406	16:16	LCS-66090																			
S310407	16:36	LCS-66090																			
S310408	16:55	MB-66158																			
S310409	17:14	LCS-66158																			
S310410	17:33	LCS-66158																			
S310411	17:52	MB-66141																			
S310412	18:11	LCS-66141																			
S310413	18:30	L1014-01B																			
S310414	18:49	L1014-01BMS																			
S310415	19:08	L1014-01BMSD																			
S310416	19:27	L1014-02B																			
S310417	19:46	L1014-03B																			
S310418	20:05	L1014-04B																			
S310419	20:24	L1014-05B																			
S310420	20:43	L1014-06B																			
S310421	21:02	L1014-08B																			
S310422	21:21	L0935-03BDE																			
S310423	21:40	L0951-01B																			
S310424	21:59	L0952-01B																			
S310425	22:19	L0952-02B																			
S310426	22:38	L1025-01B																			
S310427	22:57	L1025-02B																			
S310428	23:16	L1025-03B																			
S310429	23:35	L0930-01BDL																			
S310430	23:54	L0930-02BDL																			
S310431	00:13	L0930-05B																			
S310432	00:32	L0930-06B																			
S310433	00:52	L0930-07B																			
S310434	01:11	L0917-01CDL																			



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L0935

SW846 6010C, SW846 7470A

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 6010C, SW846 7470A

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

V. INSTRUMENTATION

The following instrumentation was used to perform analysis:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

Matrix spikes were performed on sample: MW-1 (L0935-01CMS).

Percent recoveries were within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

Duplicate analyses were performed on sample: MW-1 (L0935-01CDUP).

Relative percent differences were within the QC limits.

F. Serial Dilution (SD):

Serial Dilution analysis was performed on sample: MW-1 (L0935-01CSD).

Percent differences were within the QC limits.

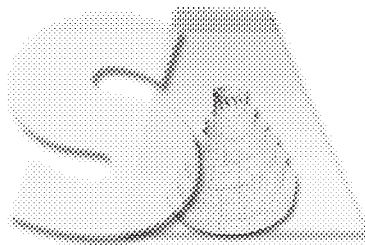
G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: _____

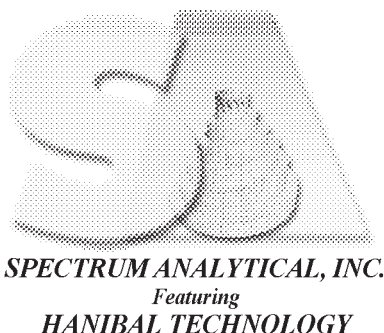
Date: 05/24/12



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

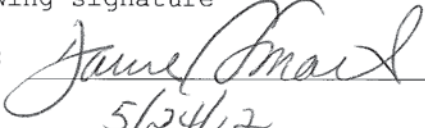
Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0935
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>DUP-1</u>	<u>L0935-05</u>
<u>MW-1</u>	<u>L0935-01</u>
<u>MW-1D</u>	<u>L0935-01DUP</u>
<u>MW-1S</u>	<u>L0935-01MS</u>
<u>MW-2</u>	<u>L0935-02</u>
<u>MW-3</u>	<u>L0935-03</u>

Were ICP interelement corrections applied? Yes/No Yes
Were background corrections applied? Yes/No Yes
If yes-were raw data generated before application of background corrections? Yes/No No

Comments:

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:  Name: Dawn E. Smart
Date: 5/24/12 Title: _____

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DUP-1

Lab Name: Spectrum Analytical, Inc.Contract: 2011-31Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SL0935Matrix (soil/water): WATERLab Sample ID: L0935-05Level (low/med): MEDDate Received: 05/05/2012% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	5570			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	139000			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	58.2	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	43600			P
7439-96-5	Manganese	1300			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	2.3	B		P
7440-09-7	Potassium	11900			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	80100			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	5.4	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-1

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL0935

Matrix (soil/water): WATER

Lab Sample ID: L0935-01

Level (low/med): MED

Date Received: 05/05/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	465			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	7.6	B		P
7440-39-3	Barium	889			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	48600			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	13100			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	12600			P
7439-96-5	Manganese	1710			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium	4790			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	6400			P
7440-28-0	Thallium	10.7	B		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	8.1	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-2

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL0935

Matrix (soil/water): WATER

Lab Sample ID: L0935-02

Level (low/med): MED

Date Received: 05/05/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	11.7	B		P
7440-38-2	Arsenic	5.2	B		P
7440-39-3	Barium	5460			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	135000			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	128	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	42800			P
7439-96-5	Manganese	1270			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	2.7	B		P
7440-09-7	Potassium	11700			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	79200			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	6.0	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-3

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL0935

Matrix (soil/water): WATER

Lab Sample ID: L0935-03

Level (low/med): MED

Date Received: 05/05/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	6.3	B		P
7440-39-3	Barium	732			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	159000			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	77.8	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	43700			P
7439-96-5	Manganese	1090			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium	6530			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	102000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	35.6	B		P

Comments:

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935Initial Calibration Source: Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	05/15/12 9:38				05/15/12 9:56		05/15/12 10:15		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury	5.0	4.88	97.6	5.0	4.82	96.4	4.64	92.8	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	05/21/12 10:47				05/21/12 11:06		05/21/12 11:46		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	10229.52	102.3	10000.0	10190.50	101.9	10000.08	100.0	P
Antimony	500.0	502.59	100.5	500.0	475.83	95.2	475.36	95.1	P
Arsenic	500.0	508.13	101.6	500.0	492.68	98.5	497.40	99.5	P
Barium	10000.0	10622.86	106.2	10000.0	10480.08	104.8	10424.20	104.2	P
Beryllium	250.0	255.42	102.2	250.0	252.21	100.9	250.33	100.1	P
Cadmium	250.0	248.18	99.3	250.0	246.33	98.5	246.16	98.5	P
Calcium	25000.0	24901.96	99.6	25000.0	24178.27	96.7	24084.23	96.3	P
Chromium	1000.0	1022.43	102.2	1000.0	989.43	98.9	992.21	99.2	P
Cobalt	2500.0	2672.27	106.9	2500.0	2599.09	104.0	2594.46	103.8	P
Copper	1250.0	1292.38	103.4	1250.0	1278.11	102.2	1267.68	101.4	P
Iron	5000.0	5201.79	104.0	5000.0	5085.86	101.7	5034.79	100.7	P
Lead	500.0	510.33	102.1	500.0	490.37	98.1	492.89	98.6	P
Magnesium	25000.0	26079.61	104.3	25000.0	25797.29	103.2	25495.65	102.0	P
Manganese	2500.0	2607.15	104.3	2500.0	2571.45	102.9	2551.40	102.1	P
Nickel	2500.0	2635.09	105.4	2500.0	2560.84	102.4	2558.51	102.3	P
Potassium	25000.0	25355.88	101.4	25000.0	24968.95	99.9	24955.75	99.8	P
Selenium	500.0	509.48	101.9	500.0	493.85	98.8	491.48	98.3	P
Silver	1250.0	1328.92	106.3	1250.0	1316.72	105.3	1311.30	104.9	P
Sodium	25000.0	25233.86	100.9	25000.0	24735.32	98.9	24770.91	99.1	P
Thallium	500.0	478.51	95.7	500.0	468.22	93.6	462.14	92.4	P
Vanadium	2500.0	2600.30	104.0	2500.0	2567.66	102.7	2549.47	102.0	P
Zinc	2500.0	2629.87	105.2	2500.0	2562.83	102.5	2569.24	102.8	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					05/21/12 12:26		05/21/12 12:59		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10086.23	100.9	9998.44	100	P
Antimony				500.0	492.34	98.5	481.42	96.3	P
Arsenic				500.0	499.25	99.9	490.58	98.1	P
Barium				10000.0	10492.26	104.9	10442.99	104.4	P
Beryllium				250.0	250.61	100.2	249.64	99.9	P
Cadmium				250.0	249.25	99.7	246.67	98.7	P
Calcium				25000.0	25093.13	100.4	23972.02	95.9	P
Chromium				1000.0	999.43	99.9	975.57	97.6	P
Cobalt				2500.0	2621.49	104.9	2571.74	102.9	P
Copper				1250.0	1278.04	102.2	1268.09	101.4	P
Iron				5000.0	5100.45	102.0	4978.60	99.6	P
Lead				500.0	509.49	101.9	489.69	97.9	P
Magnesium				25000.0	25547.50	102.2	25525.80	102.1	P
Manganese				2500.0	2557.78	102.3	2544.60	101.8	P
Nickel				2500.0	2584.50	103.4	2533.32	101.3	P
Potassium				25000.0	24880.78	99.5	25293.68	101.2	P
Selenium				500.0	500.38	100.1	497.02	99.4	P
Silver				1250.0	1313.09	105.0	1306.02	104.5	P
Sodium				25000.0	24568.43	98.3	25262.33	101.0	P
Thallium				500.0	477.67	95.5	464.56	92.9	P
Vanadium				2500.0	2542.70	101.7	2535.27	101.4	P
Zinc				2500.0	2611.87	104.5	2572.80	102.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					05/21/12 13:32		05/21/12 14:06		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10159.79	101.6	9726.41	97.3	P
Antimony				500.0	495.78	99.2	470.56	94.1	P
Arsenic				500.0	499.05	99.8	469.07	93.8	P
Barium				10000.0	10634.95	106.3	10218.20	102.2	P
Beryllium				250.0	254.22	101.7	243.55	97.4	P
Cadmium				250.0	258.82	103.5	249.01	99.6	P
Calcium				25000.0	24616.85	98.5	23477.96	93.9	P
Chromium				1000.0	1010.09	101.0	972.74	97.3	P
Cobalt				2500.0	2668.50	106.7	2566.79	102.7	P
Copper				1250.0	1298.27	103.9	1243.71	99.5	P
Iron				5000.0	5171.21	103.4	4963.84	99.3	P
Lead				500.0	501.39	100.3	480.31	96.1	P
Magnesium				25000.0	25876.47	103.5	24757.00	99.0	P
Manganese				2500.0	2584.51	103.4	2474.73	99.0	P
Nickel				2500.0	2632.82	105.3	2534.21	101.4	P
Potassium				25000.0	24932.05	99.7	24833.91	99.3	P
Selenium				500.0	507.19	101.4	489.17	97.8	P
Silver				1250.0	1333.02	106.6	1277.79	102.2	P
Sodium				25000.0	25114.66	100.5	24834.14	99.3	P
Thallium				500.0	473.01	94.6	452.55	90.5	P
Vanadium				2500.0	2572.52	102.9	2459.20	98.4	P
Zinc				2500.0	2687.20	107.5	2589.45	103.6	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					05/21/12 14:43				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	9846.19	98.5			P
Antimony				500.0	483.60	96.7			P
Arsenic				500.0	476.56	95.3			P
Barium				10000.0	10376.84	103.8			P
Beryllium				250.0	245.95	98.4			P
Cadmium				250.0	246.68	98.7			P
Calcium				25000.0	23861.95	95.4			P
Chromium				1000.0	961.30	96.1			P
Cobalt				2500.0	2539.89	101.6			P
Copper				1250.0	1260.02	100.8			P
Iron				5000.0	4896.35	97.9			P
Lead				500.0	486.48	97.3			P
Magnesium				25000.0	25073.52	100.3			P
Manganese				2500.0	2499.98	100			P
Nickel				2500.0	2507.41	100.3			P
Potassium				25000.0	24822.31	99.3			P
Selenium				500.0	492.10	98.4			P
Silver				1250.0	1290.26	103.2			P
Sodium				25000.0	24794.08	99.2			P
Thallium				500.0	459.10	91.8			P
Vanadium				2500.0	2469.42	98.8			P
Zinc				2500.0	2585.61	103.4			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

MB-66154**FIMS2_120515A**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	05/15/12 9:58	C	05/15/12 10:17	C		C		C	
Mercury	0.028	U	0.028	U	0.028	U			0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

MB-66229

OPTIMA3_120521B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	05/21/12 11:09	C	05/21/12 11:49	C	05/21/12 12:29	C		C	
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	11.2	B	9.3	U	10.0	B	9.300	U	P
Arsenic	7.0	B	4.3	U	8.2	B	5.7	B	5.835	B	P
Barium	2.1	B	2.1	B	1.8	B	1.7	B	1.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	110.0	U	110.0	U	110.0	U	110.0	U	110.000	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.8	B	0.8	B	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Potassium	76.0	U	291.2	B	76.0	U	76.0	U	76.000	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P
Sodium	29.0	U	29.0	U	-40.7	B	-44.8	B	46.067	B	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	4.900	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120521B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	05/21/12 13:03	C	05/21/12 13:36	C	05/21/12 14:10	C		C	
Aluminum			66.0	U	66.0	U	66.0	U			P
Antimony			9.3	U	9.3	U	9.3	U			P
Arsenic			7.3	B	4.3	U	4.3	U			P
Barium			3.3	B	1.4	B	1.1	U			P
Beryllium			0.3	U	0.3	U	0.3	U			P
Cadmium			0.9	U	0.9	U	0.9	U			P
Calcium			110.0	U	110.0	U	110.0	U			P
Chromium			0.6	U	0.6	U	0.6	U			P
Cobalt			1.0	B	0.7	U	0.7	U			P
Copper			3.6	U	3.6	U	3.6	U			P
Iron			31.0	U	31.0	U	31.0	U			P
Lead			4.2	U	4.2	U	4.2	U			P
Magnesium			76.0	U	76.0	U	76.0	U			P
Manganese			10.0	U	10.0	U	10.0	U			P
Nickel			0.8	U	0.8	U	0.8	U			P
Potassium			76.0	U	76.0	U	76.0	U			P
Selenium			12.0	U	12.0	U	12.0	U			P
Silver			6.9	U	6.9	U	6.9	U			P
Sodium			29.0	U	135.5	B	33.4	B			P
Thallium			6.2	U	6.2	U	6.2	U			P
Vanadium			1.1	U	1.1	U	1.1	U			P
Zinc			4.9	U	4.9	U	4.9	U			P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120521B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	05/21/12 14:47	C		C		C		C	
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			4.5	B							P
Barium			1.1	U							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U							P
Chromium			0.6	U							P
Cobalt			0.7	U							P
Copper			3.6	U							P
Iron			31.0	U							P
Lead			4.2	U							P
Magnesium			76.0	U							P
Manganese			10.0	U							P
Nickel			0.8	U							P
Potassium			76.0	U							P
Selenium			12.0	U							P
Silver			6.9	U							P
Sodium			88.8	B							P
Thallium			6.2	U							P
Vanadium			1.1	U							P
Zinc			4.9	U							P

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935ICP ID Number: OPTIMA3 ICS Source:

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found			
	Sol.	Sol.	Sol.	Sol.		Sol.		Sol.	
	A	AB	A	AB	%R	A	%R	AB	%R
Aluminum	500000	500000	535881	528735.8	105.7				
Antimony	0	600	9	640.5	106.7				
Arsenic	0	100	7	106.4	106.4				
Barium	0	500	2	538.4	107.7				
Beryllium	0	500	0	504.6	100.9				
Cadmium	0	1000	7	918.6	91.9				
Calcium	500000	500000	548550	543279.7	108.7				
Chromium	0	500	1	500.5	100.1				
Cobalt	0	500	1	474.3	94.9				
Copper	0	500	6	550.8	110.2				
Iron	200000	200000	191917	190185.3	95.1				
Lead	0	500	-4	489.5	97.9				
Magnesium	500000	500000	510730	500301.2	100.1				
Manganese	0	500	-6	502	100.4				
Nickel	0	1000	-3	919.8	92.0				
Potassium	0	25000	142	25849.4	103.4				
Selenium	0	500	-13	478.8	95.8				
Silver	0	200	-3	222.7	111.3				
Sodium	0	25000	70	24519.7	98.1				
Thallium	0	100	12	97.6	97.6				
Vanadium	0	500	-6	497.7	99.5				
Zinc	0	1000	13	951.2	95.1				

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

MW-1S

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL0935

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	9660	465	9100	101		P
Antimony	75-125	472	9.3 U	456	104		P
Arsenic	75-125	460	7.6 B	456	99		P
Barium	75-125	10400	889	9100	105		P
Beryllium	75-125	235	0.26 U	227	104		P
Cadmium	75-125	227	0.89 U	227	100		P
Chromium	75-125	922	0.64 U	910	101		P
Cobalt	75-125	2290	0.67 U	2270	101		P
Copper	75-125	1150	3.6 U	1130	102		P
Iron	75-125	17300	13100	4550	92		P
Lead	75-125	454	4.2 U	455	100		P
Manganese	75-125	3980	1710	2270	100		P
Nickel	75-125	2310	1.2 B	2270	102		P
Selenium	75-125	441	12.0 U	455	97		P
Silver	75-125	1190	6.9 U	1130	105		P
Thallium	75-125	430	10.7 B	455	92		P
Vanadium	75-125	2270	1.1 U	2270	100		P
Zinc	75-125	2350	8.1 B	2270	103		P
Mercury	75-125	5.3	0.028 U	4.6	116		CV

Comments:

U.S. EPA - CLP

6

EPA SAMPLE NO.

DUPLICATES

MW-1D

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL0935

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	464.8767		466.8086		0.4		P
Antimony		9.3000	U	9.3000	U			P
Arsenic		7.5890	B	12.6818	B	50.2		P
Barium	200.0	888.6501		889.9039		0.1		P
Beryllium		0.2600	U	0.2600	U			P
Cadmium		0.8900	U	0.8900	U			P
Calcium		48642.5597		48798.4226		0.3		P
Chromium		0.6400	U	0.6400	U			P
Cobalt		0.6700	U	0.6700	U			P
Copper		3.6000	U	3.6000	U			P
Iron		13075.5945		12959.8599		0.9		P
Lead		4.2000	U	4.2000	U			P
Magnesium		12571.5600		12461.8086		0.9		P
Manganese		1712.1768		1698.0659		0.8		P
Nickel		1.2025	B	1.1788	B	2		P
Potassium	1000.0	4787.8362		4673.5571		2.4		P
Selenium		12.0000	U	12.0000	U			P
Silver		6.9000	U	6.9000	U			P
Sodium		6395.0571		6298.0372		1.5		P
Thallium		10.6626	B	6.2000	U	200		P
Vanadium		1.1000	U	1.1000	U			P
Zinc		8.0542	B	7.8628	B	2.4		P
Mercury		0.0280	U	0.0280	U			CV

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0935

Solid LCS Source: _____ LCS(D) ID: _____

Aqueous LCS Source: _____ **LCS-66154**

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	4.78	103.9						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	2011-31
Lab Code:	MITKEM	Case No.:	
		SAS No.:	
		SDG No.:	SL0935
Solid LCS Source:			
			LCS(D) ID:
Aqueous LCS Source:			LCS-66229

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	8874.81	97.5						
Antimony	455.0	465.41	102.3						
Arsenic	455.0	447.27	98.3						
Barium	9100.0	9257.72	101.7						
Beryllium	227.0	226.92	100.0						
Cadmium	227.0	228.95	100.9						
Calcium	22700.0	21417.07	94.3						
Chromium	910.0	888.45	97.6						
Cobalt	2270.0	2243.94	98.9						
Copper	1130.0	1126.68	99.7						
Iron	4550.0	4485.57	98.6						
Lead	455.0	446.05	98.0						
Magnesium	22700.0	22652.30	99.8						
Manganese	2270.0	2245.20	98.9						
Nickel	2270.0	2265.93	99.8						
Potassium	22700.0	22296.73	98.2						
Selenium	455.0	445.30	97.9						
Silver	1130.0	1157.29	102.4						
Sodium	22700.0	22501.12	99.1						
Thallium	455.0	424.98	93.4						
Vanadium	2270.0	2222.56	97.9						
Zinc	2270.0	2305.15	101.5						

U.S. EPA - CLP

9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

MW-1

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Matrix (soil/water): WATER Level (low/med): MED

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	464.88		482.19		4		P
Antimony	9.30	U	46.50	U			P
Arsenic	7.59	B	30.71		305		P
Barium	888.65		892.57		0		P
Beryllium	0.26	U	1.30	U			P
Cadmium	0.89	U	4.45	U			P
Calcium	48642.56		46778.55		4		P
Chromium	0.64	U	13.92	B			P
Cobalt	0.67	U	3.35	U			P
Copper	3.60	U	18.00	U			P
Iron	13075.59		13000.14		1		P
Lead	4.20	U	21.00	U			P
Magnesium	12571.56		12530.30		0		P
Manganese	1712.18		1703.74		1		P
Nickel	1.20	B	4.25	U	100		P
Potassium	4787.84		4996.61		4		P
Selenium	12.00	U	60.00	U			P
Silver	6.90	U	34.50	U			P
Sodium	6395.06		6653.54		4		P
Thallium	10.66	B	31.00	U	100		P
Vanadium	1.10	U	5.50	U			P
Zinc	8.05	B	24.50	U	100		P

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10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Instrument Type: CV InstrumentID: FIMS2 Date: 03/04/2010

Preparation Method: 7470A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.2	0.028

Comments:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935

Instrument Type: P InstrumentID: OPTIMA3 Date: 03/03/2010

Preparation Method: 3005A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	200	66.0
Antimony	206.83	20	9.3
Arsenic	188.98	20	4.3
Barium	233.53	200	1.1
Beryllium	313.11	5.0	0.26
Cadmium	226.50	5.0	0.89
Calcium	227.54	800	110
Chromium	267.72	20	0.64
Cobalt	228.62	50	0.67
Copper	324.75	30	3.6
Iron	273.96	200	31.0
Lead	220.35	10	4.2
Magnesium	279.08	500	76.0
Manganese	257.61	50	10.0
Nickel	231.60	50	0.85
Potassium	766.49	1000	76.0
Selenium	196.03	30	12.0
Silver	328.07	30	6.9
Sodium	589.59	1000	29.0
Thallium	190.80	20	6.2
Vanadium	292.40	50	1.1
Zinc	206.20	50	4.9

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.1950780	0.0000000	0.0689271	0.0000000
Antimony	206.83	0.0581013	0.0000000	0.0549587	0.0214185	0.0000000
Arsenic	188.97	0.0098790	-0.0124040	-0.0756686	0.0157247	0.1927900
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0025914	0.0749299	0.0000000	-0.0433049
Calcium	227.54	0.0000000		7.8420900	0.5637690	253.7870000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0064696	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0241432	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.0922443	0.0000000	-0.1349370
Iron	273.95	0.0000000	0.0000000		0.0000000	0.0000000
Lead	220.35	-0.1032270	-0.0123272	0.0209682	-0.0064852	-0.0680890
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0301633	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0042808	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0219452	0.0000000	-0.3855700	0.0000000	-0.7432810
Silver	328.06	0.0000000	0.0000000	-0.0362359	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	-0.0153767	-0.0040303	-0.1223880	-0.0549555	5.8333800
Titanium	334.94	0.0000000	-0.0167659	0.0000000	0.0182020	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0307673	0.0000000	0.0000000
Zinc	206.20	-0.0121647	-0.0130048	-0.0501268	-0.0144316	-0.3012520

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	1.5401500	0.0000000	0.0000000
Antimony	206.83	18.3748000	0.3246940	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.8838000	0.0000000	0.2489140	0.0999179	0.1051500
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	-0.2126510	0.0000000
Calcium	227.54	5.3533500	3.5228400	3.8819800	26.7628000	0.0000000
Chromium	267.71		0.0000000	0.2043740	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1584950	0.0000000
Copper	324.75	0.0000000		0.0000000	0.0000000	0.0000000
Iron	273.95	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0447064	0.3133570	-0.0606043	-0.1219210	-0.1744540
Magnesium	279.07	2.4873800	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0474986	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2920460
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.2759200	-0.2480870	0.0000000	-0.1215600	-0.4373880
Silver	328.06	0.0000000	0.0000000	0.2125900	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0860847	-0.1533400	-0.3345200	-0.0729483	
Titanium	334.94	0.1475450	0.0000000	0.0000000	0.0000000	0.1490420
Vanadium	292.40	-2.2898300	0.3129820	0.0000000	0.0000000	0.0000000
Zinc	206.20	-1.8283200	-0.3316020	-0.4006130	-0.1453040	-0.4071760

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0935

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	1.6328600	-0.3229200			
Antimony	206.83	-2.3648000	-1.1022500			
Arsenic	188.97	-0.2598760	0.0000000			
Barium	233.52	0.0000000	-1.4206100			
Beryllium	313.10	-1.8417600	-0.0298256			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	7.1850200	24.4780000			
Chromium	267.71	0.0000000	-0.3095710			
Cobalt	228.61	2.3045300	0.0000000			
Copper	324.75	0.0000000	-0.1578650			
Iron	273.95	0.0000000	-1.6429000			
Lead	220.35	-0.9907230	-0.0982908			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.5886010	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	-0.6097280	0.0000000			
Silver	328.06	0.0000000	-1.9059700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	-0.2863380	4.5539900			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.3967000				
Zinc	206.20	-0.8719450	-0.1607790			

Comments:

U.S. EPA - CLP
12
ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935
ICP ID Number: OPTIMA3 Date: 5/10/2012

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	0.20	500000	P
Antimony	0.20	50000	P
Arsenic	0.20	50000	P
Barium	0.20	100000	P
Beryllium	0.20	5000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	P
Cobalt	0.20	100000	P
Copper	0.20	50000	P
Iron	0.20	500000	P
Lead	0.20	100000	P
Magnesium	0.20	500000	P
Manganese	0.20	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935
Preparation Method: 7470A Batch ID: 66154

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	05/14/2012		100
CCV	05/14/2012		100
ICB	05/14/2012		100
ICV	05/14/2012		100
S0	05/14/2012		100
S0.2	05/14/2012		100
S1.0	05/14/2012		100
S10.0	05/14/2012		100
S2.0	05/14/2012		100
S5.0	05/14/2012		100
DUP-1	05/14/2012		100
LCSW	05/14/2012		100
MW-1	05/14/2012		100
MW-1D	05/14/2012		100
MW-1S	05/14/2012		100
MW-2	05/14/2012		100
MW-3	05/14/2012		100
PBW	05/14/2012		100

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935
Preparation Method: 3005A Batch ID: 66229

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
DUP-1	05/18/2012		50
LCSW	05/18/2012		50
MW-1	05/18/2012		50
MW-1D	05/18/2012		50
MW-1S	05/18/2012		50
MW-2	05/18/2012		50
MW-3	05/18/2012		50
PBW	05/18/2012		50

Comments:

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 05/15/2012 End Date: 05/15/2012

FIMS2_120515A

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.0	0928															X												
S0.2	1.0	0930															X												
S1.0	1.0	0932															X												
S2.0	1.0	0933															X												
S5.0	1.0	0935															X												
S10.0	1.0	0937															X												
ICV	1.0	0938															X												
ICB	1.0	0940															X												
PBW	1.0	0942															X												
LCSW	1.0	0943															X												
ZZZZZZ	1.0	0945																											
ZZZZZZ	1.0	0947																											
ZZZZZZ	1.0	0948																											
ZZZZZZ	1.0	0950																											
ZZZZZZ	1.0	0952																											
ZZZZZZ	1.0	0953																											
ZZZZZZ	1.0	0955																											
CCV	1.0	0956															X												
CCB	1.0	0958															X												
ZZZZZZ	1.0	1000																											
ZZZZZZ	1.0	1002																											
MW-1	1.0	1003															X												
MW-1D	1.0	1005															X												
MW-1S	1.0	1007															X												
MW-2	1.0	1008															X												
MW-3	1.0	1010															X												
DUP-1	1.0	1012															X												
ZZZZZZ	1.0	1013																											
CCV	1.0	1015															X												
CCB	1.0	1017															X												

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0935
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 05/21/2012 End Date: 05/21/2012

OPTIMA3_120521B

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.0	1033		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
S1	1.0	1036		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
S2	1.0	1040		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
S3	1.0	1044		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICV	1.0	1047		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICB	1.0	1051		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1055																													
ICSA	1.0	1058		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICSAB	1.0	1102		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCV	1.0	1106		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCB	1.0	1109		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1113																													
ZZZZZZ	1.0	1117																													
ZZZZZZ	1.0	1120																													
ZZZZZZ	1.0	1124																													
ZZZZZZ	1.0	1127																													
ZZZZZZ	1.0	1131																													
ZZZZZZ	1.0	1135																													
ZZZZZZ	1.0	1138																													
ZZZZZZ	5.0	1142																													
CCV	1.0	1146		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCB	1.0	1149		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1153																													
ZZZZZZ	1.0	1157																													
ZZZZZZ	1.0	1201																													
ZZZZZZ	1.0	1204																													
ZZZZZZ	1.0	1208																													
ZZZZZZ	1.0	1211																													
ZZZZZZ	1.0	1215																													
ZZZZZZ	1.0	1218																													
ZZZZZZ	5.0	1222																													
CCV	1.0	1226		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 05/21/2012 End Date: 05/21/2012

OPTIMA3_120521B

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
CCB	1.0	1229		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1233																													
ZZZZZZ	1.0	1236																													
ZZZZZZ	1.0	1240																													
ZZZZZZ	1.0	1244																													
ZZZZZZ	1.0	1248																													
ZZZZZZ	1.0	1252																													
ZZZZZZ	1.0	1255																													
CCV	1.0	1259		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1303		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1306																													
ZZZZZZ	1.0	1310																													
ZZZZZZ	1.0	1314																													
ZZZZZZ	1.0	1318																													
ZZZZZZ	1.0	1321																													
ZZZZZZ	1.0	1325																													
ZZZZZZ	20.0	1329																													
CCV	1.0	1332		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1336		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1340																													
LCSW	1.0	1343		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
PBW	1.0	1348		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
MW-1	1.0	1351		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
MW-1D	1.0	1355		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
MW-1S	1.0	1359		X	X	X	X	X	X		X	X	X	X	X	X		X		X	X		X	X	X	X					
MW-1L	5.0	1402		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCV	1.0	1406		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1410		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1413																													
MW-2	1.0	1417		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
MW-3	1.0	1421		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
DUP-1	1.0	1424		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0935
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 05/21/2012 End Date: 05/21/2012

OPTIMA3_120521B

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
ZZZZZZ	1.0	1428																											
ZZZZZZ	1.0	1432																											
ZZZZZZ	1.0	1435																											
ZZZZZZ	1.0	1439																											
CCV	1.0	1443		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.0	1447		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				

Instrument Raw Data

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Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B12052103

Results Library (original): C:\pe\Administrator\Results\Results.mdb

Results Data Set (reprocessed): B12052103A

Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 5/21/2012 10:33:16 AM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:13:33 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Y 360.073	820239.4	8372.72	1.02%	100.000	%
Lu 261.542	697660.9	7637.99	1.09%	100.0	%
Ag 328.068†	-1242.7	72.35	5.82%	[0.00]	mg/L
Al 308.215†	8520.7	152.58	1.79%	[0.00]	mg/L
As 188.979†	0.0	1.47	>999.9%	[0.00]	mg/L
Ba 233.527†	-63.5	1.78	2.80%	[0.00]	mg/L
Be 313.107†	-606.1	82.56	13.62%	[0.00]	mg/L
Co 228.616†	-22.8	0.85	3.73%	[0.00]	mg/L
Cr 267.716†	24.0	6.52	27.18%	[0.00]	mg/L
Cu 324.752†	1402.9	21.83	1.56%	[0.00]	mg/L
Fe 273.955†	-613.9	9.57	1.56%	[0.00]	mg/L
Mg 279.077†	-736.9	26.05	3.54%	[0.00]	mg/L
Mn 257.610†	-122.1	4.78	3.92%	[0.00]	mg/L
Ni 231.604†	-39.1	3.09	7.91%	[0.00]	mg/L
Pb 220.353†	13.8	2.15	15.59%	[0.00]	mg/L
Sb 206.836†	18.9	7.34	38.93%	[0.00]	mg/L
Se 196.026†	-6.8	3.67	54.11%	[0.00]	mg/L
Tl 190.801†	-20.8	3.70	17.78%	[0.00]	mg/L
V 292.402†	12.1	23.72	196.50%	[0.00]	mg/L
Zn 206.200†	19.1	2.52	13.14%	[0.00]	mg/L
Cd 226.502†	-8.3	1.15	13.89%	[0.00]	mg/L
Ti 334.940†	-78.1	19.34	24.75%	[0.00]	mg/L
Ca 227.546†	69.1	9.74	14.09%	[0.00]	mg/L
Na 589.592	369.5	31.33	8.48%	[0.00]	mg/L
K 766.490	1120.5	100.75	8.99%	[0.00]	mg/L

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Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 5/21/2012 10:36:52 AM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:13:35 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Y 360.073	784253.5	9221.30	1.18%	95.613	%
Lu 261.542	666128.4	6581.47	0.99%	95.48	%
Ag 328.068†	412830.0	313.84	0.08%	[2.5]	mg/L
Al 308.215†	392249.9	1342.43	0.34%	[20]	mg/L
As 188.979†	693.3	7.03	1.01%	[1]	mg/L
Ba 233.527†	1083948.2	4225.33	0.39%	[20]	mg/L
Be 313.107†	1248735.5	2436.48	0.20%	[0.5]	mg/L
Co 228.616†	126534.5	2287.55	1.81%	[5]	mg/L
Cr 267.716†	104397.3	1700.12	1.63%	[2]	mg/L
Cu 324.752†	453798.2	1196.29	0.26%	[2.5]	mg/L
Fe 273.955†	223641.1	3733.77	1.67%	[10]	mg/L

Mg 279.077†	804316.2	1279.22	0.16%	[50]	mg/L
Mn 257.610†	2704789.4	8047.05	0.30%	[5]	mg/L
Ni 231.604†	106994.6	1782.41	1.67%	[5]	mg/L
Pb 220.353†	3854.1	49.60	1.29%	[1]	mg/L
Sb 206.836†	1055.6	12.13	1.15%	[1]	mg/L
Se 196.026†	462.6	6.29	1.36%	[1]	mg/L
Tl 190.801†	974.8	10.27	1.05%	[1]	mg/L
V 292.402†	420690.0	1040.70	0.25%	[5]	mg/L
Zn 206.200†	57206.1	957.14	1.67%	[5]	mg/L
Cd 226.502†	13606.8	243.15	1.79%	[0.5]	mg/L
Ti 334.940†	451354.3	1464.22	0.32%	[1]	mg/L
Ca 227.546†	7246.3	86.98	1.20%	[50]	mg/L
Na 589.592	230198.0	794.45	0.35%	[50]	mg/L
K 766.490	62133.2	194.60	0.31%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 5/21/2012 10:40:35 AM

Data Type: Reprocessed on 5/22/2012 7:13:35 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Y 360.073	784859.5	13308.85	1.70%	95.687	%
Lu 261.542	674539.5	12240.03	1.81%	96.69	%
Ag 328.068†	207982.2	5247.72	2.52%	[1.25]	mg/L
Al 308.215†	194367.0	3893.57	2.00%	[10]	mg/L
As 188.979†	351.8	6.00	1.71%	[0.5]	mg/L
Ba 233.527†	557742.6	8346.08	1.50%	[10]	mg/L
Be 313.107†	631448.7	10664.00	1.69%	[0.25]	mg/L
Co 228.616†	64793.0	1593.22	2.46%	[2.5]	mg/L
Cr 267.716†	52805.6	1476.19	2.80%	[1]	mg/L
Cu 324.752†	227018.0	3682.40	1.62%	[1.25]	mg/L
Fe 273.955†	113711.3	2886.42	2.54%	[5]	mg/L
Mg 279.077†	409738.5	6912.23	1.69%	[25]	mg/L
Mn 257.610†	1380828.7	24281.48	1.76%	[2.5]	mg/L
Ni 231.604†	54867.7	1331.62	2.43%	[2.5]	mg/L
Pb 220.353†	1959.4	31.80	1.62%	[0.5]	mg/L
Sb 206.836†	541.6	12.02	2.22%	[0.5]	mg/L
Se 196.026†	234.6	1.36	0.58%	[0.5]	mg/L
Tl 190.801†	500.3	8.25	1.65%	[0.5]	mg/L
V 292.402†	212488.0	3699.69	1.74%	[2.5]	mg/L
Zn 206.200†	29551.1	624.47	2.11%	[2.5]	mg/L
Cd 226.502†	6976.1	139.68	2.00%	[0.25]	mg/L
Ti 334.940†	227408.1	2913.64	1.28%	[0.5]	mg/L
Ca 227.546†	3591.8	69.70	1.94%	[25]	mg/L
Na 589.592	113178.9	1165.30	1.03%	[25]	mg/L
K 766.490	30770.2	368.21	1.20%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 5/21/2012 10:44:15 AM

Data Type: Reprocessed on 5/22/2012 7:13:36 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Y 360.073	800216.1	10915.15	1.36%	97.559	%
Lu 261.542	683322.4	9325.91	1.36%	97.94	%
Ag 328.068†	4642.5	438.80	9.45%	[0.025]	mg/L
Al 308.215†	3989.0	191.33	4.80%	[0.2]	mg/L
As 188.979†	10.5	2.98	28.43%	[0.01]	mg/L
Ba 233.527†	11829.2	207.73	1.76%	[0.2]	mg/L

Be 313.107†	12820.3	109.97	0.86%	[0.005]	mg/L
Co 228.616†	1362.5	11.41	0.84%	[0.05]	mg/L
Cr 267.716†	1109.8	16.31	1.47%	[0.02]	mg/L
Cu 324.752†	4560.8	62.42	1.37%	[0.025]	mg/L
Fe 273.955†	2372.2	49.61	2.09%	[0.1]	mg/L
Mg 279.077†	8612.8	166.76	1.94%	[0.5]	mg/L
Mn 257.610†	29363.0	376.11	1.28%	[0.05]	mg/L
Ni 231.604†	1146.8	10.72	0.93%	[0.05]	mg/L
Pb 220.353†	44.6	2.89	6.49%	[0.01]	mg/L
Sb 206.836†	20.4	4.94	24.16%	[0.01]	mg/L
Se 196.026†	7.7	2.04	26.64%	[0.01]	mg/L
Tl 190.801†	13.3	3.65	27.48%	[0.01]	mg/L
V 292.402†	4335.3	79.64	1.84%	[0.05]	mg/L
Zn 206.200†	634.9	8.09	1.27%	[0.05]	mg/L
Cd 226.502†	143.0	1.75	1.23%	[0.005]	mg/L
Ti 334.940†	4643.3	192.85	4.15%	[0.01]	mg/L
Ca 227.546†	73.3	2.75	3.75%	[0.5]	mg/L
Na 589.592	2466.2	96.06	3.90%	[0.5]	mg/L
K 766.490	771.8	63.83	8.27%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	165400	0.00000	0.999995	
Al 308.215	3	Lin Thru 0	0.0	19580	0.00000	0.999994	
As 188.979	3	Lin Thru 0	0.0	695.4	0.00000	0.999972	
Ba 233.527	3	Lin Thru 0	0.0	54510	0.00000	0.999933	
Be 313.107	3	Lin Thru 0	0.0	2503000	0.00000	0.999990	
Co 228.616	3	Lin Thru 0	0.0	25430	0.00000	0.999954	
Cr 267.716	3	Lin Thru 0	0.0	52320	0.00000	0.999989	
Cu 324.752	3	Lin Thru 0	0.0	181500	0.00000	1.000000	
Fe 273.955	3	Lin Thru 0	0.0	22440	0.00000	0.999977	
Mg 279.077	3	Lin Thru 0	0.0	16150	0.00000	0.999972	
Mn 257.610	3	Lin Thru 0	0.0	543200	0.00000	0.999965	
Ni 231.604	3	Lin Thru 0	0.0	21510	0.00000	0.999948	
Pb 220.353	3	Lin Thru 0	0.0	3867	0.00000	0.999977	
Sb 206.836	3	Lin Thru 0	0.0	1061	0.00000	0.999912	
Se 196.026	3	Lin Thru 0	0.0	464.0	0.00000	0.999967	
Tl 190.801	3	Lin Thru 0	0.0	980.0	0.00000	0.999939	
V 292.402	3	Lin Thru 0	0.0	84310	0.00000	0.999992	
Zn 206.200	3	Lin Thru 0	0.0	11520	0.00000	0.999913	
Cd 226.502	3	Lin Thru 0	0.0	27350	0.00000	0.999949	
Ti 334.940	3	Lin Thru 0	0.0	452000	0.00000	0.999995	
Ca 227.546	3	Lin Thru 0	0.0	144.7	0.00000	0.999994	
Na 589.592	3	Lin Thru 0	0.0	4589	0.00000	0.999977	
K 766.490	3	Lin Thru 0	0.0	1240	0.00000	0.999990	

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Sequence No.: 5	Autosampler Location: 3
Sample ID: ICV	Date Collected: 5/21/2012 10:47:54 AM
Analyst:	Data Type: Reprocessed on 5/22/2012 7:13:37 AM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	766838.8	93.490	%	0.9718			1.04%
Lu 261.542	660217.2	94.63	%	1.092			1.15%
Ag 328.068†	219055.3	1.3289	mg/L	0.00150	1.3289 mg/L	0.00150	0.11%
QC value within limits for Ag 328.068 Recovery = 106.31%							
Al 308.215†	200479.9	10.230	mg/L	0.0308	10.230 mg/L	0.0308	0.30%
QC value within limits for Al 308.215 Recovery = 102.30%							
As 188.979†	347.5	0.50813	mg/L	0.010880	0.50813 mg/L	0.010880	2.14%
QC value within limits for As 188.979 Recovery = 101.63%							
Ba 233.527†	578884.4	10.623	mg/L	0.0241	10.623 mg/L	0.0241	0.23%
QC value within limits for Ba 233.527 Recovery = 106.23%							
Be 313.107†	636722.2	0.25542	mg/L	0.000870	0.25542 mg/L	0.000870	0.34%

QC value within limits for Be 313.107 Recovery = 102.17%
 Co 228.616† 67998.3 2.6723 mg/L 0.00919 2.6723 mg/L 0.00919 0.34%
 QC value within limits for Co 228.616 Recovery = 106.89%
 Cr 267.716† 53488.6 1.0224 mg/L 0.00231 1.0224 mg/L 0.00231 0.23%
 QC value within limits for Cr 267.716 Recovery = 102.24%
 Cu 324.752† 234390.1 1.2924 mg/L 0.00364 1.2924 mg/L 0.00364 0.28%
 QC value within limits for Cu 324.752 Recovery = 103.39%
 Fe 273.955† 116631.4 5.2018 mg/L 0.01488 5.2018 mg/L 0.01488 0.29%
 QC value within limits for Fe 273.955 Recovery = 104.04%
 Mg 279.077† 421149.9 26.080 mg/L 0.0885 26.080 mg/L 0.0885 0.34%
 QC value within limits for Mg 279.077 Recovery = 104.32%
 Mn 257.610† 1416505.5 2.6071 mg/L 0.00582 2.6071 mg/L 0.00582 0.22%
 QC value within limits for Mn 257.610 Recovery = 104.29%
 Ni 231.604† 56689.6 2.6351 mg/L 0.00518 2.6351 mg/L 0.00518 0.20%
 QC value within limits for Ni 231.604 Recovery = 105.40%
 Pb 220.353† 1965.3 0.51033 mg/L 0.002885 0.51033 mg/L 0.002885 0.57%
 QC value within limits for Pb 220.353 Recovery = 102.07%
 Sb 206.836† 550.1 0.50259 mg/L 0.004402 0.50259 mg/L 0.004402 0.88%
 QC value within limits for Sb 206.836 Recovery = 100.52%
 Se 196.026† 233.8 0.50948 mg/L 0.013702 0.50948 mg/L 0.013702 2.69%
 QC value within limits for Se 196.026 Recovery = 101.90%
 Tl 190.801† 492.8 0.47851 mg/L 0.009661 0.47851 mg/L 0.009661 2.02%
 QC value within limits for Tl 190.801 Recovery = 95.70%
 V 292.402† 219116.3 2.6003 mg/L 0.00789 2.6003 mg/L 0.00789 0.30%
 QC value within limits for V 292.402 Recovery = 104.01%
 Zn 206.200† 30220.9 2.6299 mg/L 0.01846 2.6299 mg/L 0.01846 0.70%
 QC value within limits for Zn 206.200 Recovery = 105.19%
 Cd 226.502† 6782.3 0.24818 mg/L 0.001638 0.24818 mg/L 0.001638 0.66%
 QC value within limits for Cd 226.502 Recovery = 99.27%
 Ti 334.940† 239647.9 0.52987 mg/L 0.002740 0.52987 mg/L 0.002740 0.52%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 3731.8 24.902 mg/L 0.1857 24.902 mg/L 0.1857 0.75%
 QC value within limits for Ca 227.546 Recovery = 99.61%
 Na 589.592 115788.8 25.234 mg/L 0.1830 25.234 mg/L 0.1830 0.73%
 QC value within limits for Na 589.592 Recovery = 100.94%
 K 766.490 31449.3 25.356 mg/L 0.1255 25.356 mg/L 0.1255 0.49%
 QC value within limits for K 766.490 Recovery = 101.42%
 All analyte(s) passed QC.

Sequence No.: 6

Autosampler Location: 4

Sample ID: ICB

Date Collected: 5/21/2012 10:51:29 AM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:13:38 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	817053.9	99.612 %	1.2636			1.27%
Lu 261.542	697186.7	99.93 %	1.120			1.12%
Ag 328.068†	204.3	0.00124 mg/L	0.000163	0.00124 mg/L	0.000163	13.14%
QC value within limits for Ag 328.068						Not calculated
Al 308.215†	149.3	0.00764 mg/L	0.010201	0.00764 mg/L	0.010201	133.47%
QC value within limits for Al 308.215						Not calculated
As 188.979†	4.9	0.00701 mg/L	0.002490	0.00701 mg/L	0.002490	35.53%
QC value within limits for As 188.979						Not calculated
Ba 233.527†	114.3	0.00210 mg/L	0.000590	0.00210 mg/L	0.000590	28.10%
QC value within limits for Ba 233.527						Not calculated
Be 313.107†	108.2	0.00004 mg/L	0.000016	0.00004 mg/L	0.000016	37.15%
QC value within limits for Be 313.107						Not calculated
Co 228.616†	20.2	0.00079 mg/L	0.000202	0.00079 mg/L	0.000202	25.39%
QC value within limits for Co 228.616						Not calculated
Cr 267.716†	11.2	0.00021 mg/L	0.000029	0.00021 mg/L	0.000029	13.51%
QC value within limits for Cr 267.716						Not calculated
Cu 324.752†	107.6	0.00059 mg/L	0.000204	0.00059 mg/L	0.000204	34.31%
QC value within limits for Cu 324.752						Not calculated
Fe 273.955†	77.6	0.00346 mg/L	0.000994	0.00346 mg/L	0.000994	28.71%
QC value within limits for Fe 273.955						Not calculated

Mg 279.077†	195.9	0.01213 mg/L	0.002608	0.01213 mg/L	0.002608	21.50%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	284.9	0.00052 mg/L	0.000136	0.00052 mg/L	0.000136	26.00%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604†	7.8	0.00036 mg/L	0.000347	0.00036 mg/L	0.000347	95.65%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	4.0	0.00104 mg/L	0.001007	0.00104 mg/L	0.001007	97.23%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	7.5	0.00706 mg/L	0.002548	0.00706 mg/L	0.002548	36.09%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.6	0.00343 mg/L	0.006000	0.00343 mg/L	0.006000	174.93%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801†	3.7	0.00376 mg/L	0.002867	0.00376 mg/L	0.002867	76.25%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	60.9	0.00072 mg/L	0.000062	0.00072 mg/L	0.000062	8.53%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	15.3	0.00133 mg/L	0.000348	0.00133 mg/L	0.000348	26.17%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502†	1.7	0.00006 mg/L	0.000173	0.00006 mg/L	0.000173	282.52%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940†	82.0	0.00018 mg/L	0.000110	0.00018 mg/L	0.000110	61.81%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	-15.6	-0.10838 mg/L	0.093632	-0.10838 mg/L	0.093632	86.39%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Na 589.592	-11.2	-0.00245 mg/L	0.026610	-0.00245 mg/L	0.026610	>999.9%
QC value within limits for Na 589.592 Recovery = Not calculated						
K 766.490	84.2	0.06785 mg/L	0.060196	0.06785 mg/L	0.060196	88.72%
QC value within limits for K 766.490 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 5/21/2012 10:55:08 AM

Data Type: Reprocessed on 5/22/2012 7:13:38 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	804303.4	98.057 %	0.9879			1.01%
Lu 261.542	687749.2	98.58 %	0.978			0.99%
Ag 328.068†	5318.3	0.03224 mg/L	0.000526	0.03224 mg/L	0.000526	1.63%
QC value within limits for Ag 328.068 Recovery = 107.48%						
Al 308.215†	3673.8	0.18736 mg/L	0.004712	0.18736 mg/L	0.004712	2.52%
QC value within limits for Al 308.215 Recovery = 93.68%						
As 188.979†	17.0	0.02463 mg/L	0.003062	0.02463 mg/L	0.003062	12.43%
QC value within limits for As 188.979 Recovery = 123.13%						
Ba 233.527†	11629.5	0.21341 mg/L	0.002393	0.21341 mg/L	0.002393	1.12%
QC value within limits for Ba 233.527 Recovery = 106.70%						
Be 313.107†	12592.1	0.00507 mg/L	0.000075	0.00507 mg/L	0.000075	1.48%
QC value within limits for Be 313.107 Recovery = 101.36%						
Co 228.616†	1375.0	0.05401 mg/L	0.000595	0.05401 mg/L	0.000595	1.10%
QC value within limits for Co 228.616 Recovery = 108.03%						
Cr 267.716†	1082.4	0.02069 mg/L	0.000399	0.02069 mg/L	0.000399	1.93%
QC value within limits for Cr 267.716 Recovery = 103.45%						
Cu 324.752†	5428.3	0.02994 mg/L	0.000475	0.02994 mg/L	0.000475	1.59%
QC value within limits for Cu 324.752 Recovery = 99.79%						
Fe 273.955†	4594.8	0.20485 mg/L	0.002228	0.20485 mg/L	0.002228	1.09%
QC value within limits for Fe 273.955 Recovery = 102.42%						
Mg 279.077†	8584.6	0.53160 mg/L	0.004420	0.53160 mg/L	0.004420	0.83%
QC value within limits for Mg 279.077 Recovery = 106.32%						
Mn 257.610†	28685.1	0.05280 mg/L	0.000511	0.05280 mg/L	0.000511	0.97%
QC value within limits for Mn 257.610 Recovery = 105.59%						
Ni 231.604†	1172.2	0.05448 mg/L	0.000141	0.05448 mg/L	0.000141	0.26%
QC value within limits for Ni 231.604 Recovery = 108.96%						
Pb 220.353†	41.1	0.01067 mg/L	0.001106	0.01067 mg/L	0.001106	10.36%
QC value within limits for Pb 220.353 Recovery = 106.67%						
Sb 206.836†	22.8	0.02120 mg/L	0.002581	0.02120 mg/L	0.002581	12.17%

QC value within limits for Sb 206.836 Recovery = 106.01%
 Se 196.026† 16.8 0.03641 mg/L 0.006404 0.03641 mg/L 0.006404 17.59%
 QC value within limits for Se 196.026 Recovery = 121.35%
 Tl 190.801† 22.3 0.02230 mg/L 0.002970 0.02230 mg/L 0.002970 13.32%
 QC value within limits for Tl 190.801 Recovery = 111.49%
 V 292.402† 4291.4 0.05092 mg/L 0.000413 0.05092 mg/L 0.000413 0.81%
 QC value within limits for V 292.402 Recovery = 101.84%
 Zn 206.200† 624.2 0.05434 mg/L 0.000705 0.05434 mg/L 0.000705 1.30%
 QC value within limits for Zn 206.200 Recovery = 108.68%
 Cd 226.502† 143.1 0.00523 mg/L 0.000086 0.00523 mg/L 0.000086 1.65%
 QC value within limits for Cd 226.502 Recovery = 104.53%
 Ti 334.940† 8831.9 0.01954 mg/L 0.000156 0.01954 mg/L 0.000156 0.80%
 QC value within limits for Ti 334.940 Recovery = 97.68%
 Ca 227.546† 120.5 0.81431 mg/L 0.037815 0.81431 mg/L 0.037815 4.64%
 QC value within limits for Ca 227.546 Recovery = 101.79%
 Na 589.592 4699.0 1.0241 mg/L 0.02490 1.0241 mg/L 0.02490 2.43%
 QC value within limits for Na 589.592 Recovery = 102.41%
 K 766.490 1257.1 1.0136 mg/L 0.05089 1.0136 mg/L 0.05089 5.02%
 QC value within limits for K 766.490 Recovery = 101.36%
 All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 5

Sample ID: ICSCA

Date Collected: 5/21/2012 10:58:45 AM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:13:41 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICSCA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	695367.6	84.776 %	0.3285			0.39%
Lu 261.542	592116.4	84.87 %	0.329			0.39%
Ag 328.068†	-491.0	-0.00299 mg/L	0.000623	-0.00299 mg/L	0.000623	20.81%
QC value within limits for Ag 328.068		Recovery =	Not calculated			
Al 308.215†	10493925.0	535.88 mg/L	1.292	535.88 mg/L	1.292	0.24%
QC value within limits for Al 308.215		Recovery =	107.18%			
As 188.979†	-6.0	0.00741 mg/L	0.012230	0.00741 mg/L	0.012230	165.12%
QC value within limits for As 188.979		Recovery =	Not calculated			
Ba 233.527†	119.1	0.00217 mg/L	0.000083	0.00217 mg/L	0.000083	3.83%
QC value within limits for Ba 233.527		Recovery =	Not calculated			
Be 313.107†	-140.4	-0.00008 mg/L	0.000013	-0.00008 mg/L	0.000013	15.62%
QC value within limits for Be 313.107		Recovery =	Not calculated			
Co 228.616†	136.3	0.00076 mg/L	0.000362	0.00076 mg/L	0.000362	47.78%
QC value within limits for Co 228.616		Recovery =	Not calculated			
Cr 267.716†	230.9	0.00111 mg/L	0.000212	0.00111 mg/L	0.000212	19.21%
QC value within limits for Cr 267.716		Recovery =	Not calculated			
Cu 324.752†	-2207.4	0.00554 mg/L	0.000220	0.00554 mg/L	0.000220	3.96%
QC value within limits for Cu 324.752		Recovery =	Not calculated			
Fe 273.955†	4306578.7	191.92 mg/L	0.062	191.92 mg/L	0.062	0.03%
QC value within limits for Fe 273.955		Recovery =	95.96%			
Mg 279.077†	8246781.2	510.73 mg/L	1.072	510.73 mg/L	1.072	0.21%
QC value within limits for Mg 279.077		Recovery =	102.15%			
Mn 257.610†	-559.2	-0.00614 mg/L	0.000083	-0.00614 mg/L	0.000083	1.35%
QC value within limits for Mn 257.610		Recovery =	Not calculated			
Ni 231.604†	-28.2	-0.00348 mg/L	0.000355	-0.00348 mg/L	0.000355	10.21%
QC value within limits for Ni 231.604		Recovery =	Not calculated			
Pb 220.353†	-212.2	-0.00358 mg/L	0.001053	-0.00358 mg/L	0.001053	29.39%
QC value within limits for Pb 220.353		Recovery =	Not calculated			
Sb 206.836†	38.2	0.00891 mg/L	0.004493	0.00891 mg/L	0.004493	50.43%
QC value within limits for Sb 206.836		Recovery =	Not calculated			
Se 196.026†	-42.6	-0.01257 mg/L	0.012888	-0.01257 mg/L	0.012888	102.54%
QC value within limits for Se 196.026		Recovery =	Not calculated			
Tl 190.801†	-34.9	0.01226 mg/L	0.002198	0.01226 mg/L	0.002198	17.93%
QC value within limits for Tl 190.801		Recovery =	Not calculated			
V 292.402†	-1046.9	-0.00648 mg/L	0.000130	-0.00648 mg/L	0.000130	2.01%
QC value within limits for V 292.402		Recovery =	Not calculated			
Zn 206.200†	38.1	0.01290 mg/L	0.000643	0.01290 mg/L	0.000643	4.98%
QC value within limits for Zn 206.200		Recovery =	Not calculated			

Cd 226.502† 622.2 0.00694 mg/L 0.000097 0.00694 mg/L 0.000097 1.39%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† -6350.9 -0.01411 mg/L 0.000083 -0.01411 mg/L 0.000083 0.59%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 79620.8 548.55 mg/L 0.748 548.55 mg/L 0.748 0.14%
 QC value within limits for Ca 227.546 Recovery = 109.71%
 Na 589.592 320.3 0.06979 mg/L 0.004783 0.06979 mg/L 0.004783 6.85%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 175.6 0.14154 mg/L 0.020196 0.14154 mg/L 0.020196 14.27%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 5/21/2012 11:02:31 AM

Data Type: Reprocessed on 5/22/2012 7:13:41 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	691456.9	84.299 %	0.1639			0.19%
Lu 261.542	588898.7	84.41 %	0.099			0.12%
Ag 328.068†	36686.4	0.22265 mg/L	0.000262	0.22265 mg/L	0.000262	0.12%
QC value within limits for Ag 328.068		Recovery = 111.33%				
Al 308.215†	10354024.1	528.74 mg/L	1.638	528.74 mg/L	1.638	0.31%
QC value within limits for Al 308.215		Recovery = 105.75%				
As 188.979†	60.0	0.10641 mg/L	0.008100	0.10641 mg/L	0.008100	7.61%
QC value within limits for As 188.979		Recovery = 106.41%				
Ba 233.527†	29311.1	0.53839 mg/L	0.002453	0.53839 mg/L	0.002453	0.46%
QC value within limits for Ba 233.527		Recovery = 107.68%				
Be 313.107†	1263180.6	0.50463 mg/L	0.000660	0.50463 mg/L	0.000660	0.13%
QC value within limits for Be 313.107		Recovery = 100.93%				
Co 228.616†	12180.2	0.47428 mg/L	0.001383	0.47428 mg/L	0.001383	0.29%
QC value within limits for Co 228.616		Recovery = 94.86%				
Cr 267.716†	26351.4	0.50047 mg/L	0.000844	0.50047 mg/L	0.000844	0.17%
QC value within limits for Cr 267.716		Recovery = 100.09%				
Cu 324.752†	96781.7	0.55081 mg/L	0.001569	0.55081 mg/L	0.001569	0.28%
QC value within limits for Cu 324.752		Recovery = 110.16%				
Fe 273.955†	4267709.3	190.19 mg/L	0.495	190.19 mg/L	0.495	0.26%
QC value within limits for Fe 273.955		Recovery = 95.09%				
Mg 279.077†	8078409.6	500.30 mg/L	2.304	500.30 mg/L	2.304	0.46%
QC value within limits for Mg 279.077		Recovery = 100.06%				
Mn 257.610†	275434.0	0.50198 mg/L	0.001523	0.50198 mg/L	0.001523	0.30%
QC value within limits for Mn 257.610		Recovery = 100.40%				
Ni 231.604†	19829.9	0.91980 mg/L	0.002318	0.91980 mg/L	0.002318	0.25%
QC value within limits for Ni 231.604		Recovery = 91.98%				
Pb 220.353†	1696.8	0.48947 mg/L	0.002491	0.48947 mg/L	0.002491	0.51%
QC value within limits for Pb 220.353		Recovery = 97.89%				
Sb 206.836†	717.4	0.64054 mg/L	0.005820	0.64054 mg/L	0.005820	0.91%
QC value within limits for Sb 206.836		Recovery = 106.76%				
Se 196.026†	185.3	0.47880 mg/L	0.002100	0.47880 mg/L	0.002100	0.44%
QC value within limits for Se 196.026		Recovery = 95.76%				
Tl 190.801†	54.0	0.09755 mg/L	0.008806	0.09755 mg/L	0.008806	9.03%
QC value within limits for Tl 190.801		Recovery = 97.55%				
V 292.402†	41381.9	0.49769 mg/L	0.001922	0.49769 mg/L	0.001922	0.39%
QC value within limits for V 292.402		Recovery = 99.54%				
Zn 206.200†	10825.6	0.95115 mg/L	0.005191	0.95115 mg/L	0.005191	0.55%
QC value within limits for Zn 206.200		Recovery = 95.12%				
Cd 226.502†	25548.0	0.91860 mg/L	0.003968	0.91860 mg/L	0.003968	0.43%
QC value within limits for Cd 226.502		Recovery = 91.86%				
Ti 334.940†	-6212.3	-0.01379 mg/L	0.000091	-0.01379 mg/L	0.000091	0.66%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Ca 227.546†	78879.2	543.28 mg/L	1.762	543.28 mg/L	1.762	0.32%
QC value within limits for Ca 227.546		Recovery = 108.66%				
Na 589.592	112511.6	24.520 mg/L	0.0716	24.520 mg/L	0.0716	0.29%
QC value within limits for Na 589.592		Recovery = 98.08%				
K 766.490	32061.5	25.849 mg/L	0.1641	25.849 mg/L	0.1641	0.63%

QC value within limits for K 766.490 Recovery = 103.40%
All analyte(s) passed QC.

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Sequence No.: 10                               Autosampler Location: 3
Sample ID: CCV                               Date Collected: 5/21/2012 11:06:16 AM
Analyst:                                       Data Type: Reprocessed on 5/22/2012 7:13:42 AM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	772854.1	94.223 %		0.4834			0.51%
Lu 261.542	664689.7	95.27 %		0.404			0.42%
Ag 328.068†	217045.7	1.3167 mg/L		0.00111	1.3167 mg/L	0.00111	0.08%
QC value within limits for Ag 328.068 Recovery = 105.34%							
Al 308.215†	199711.7	10.191 mg/L		0.0243	10.191 mg/L	0.0243	0.24%
QC value within limits for Al 308.215 Recovery = 101.91%							
As 188.979†	337.0	0.49268 mg/L		0.009730	0.49268 mg/L	0.009730	1.97%
QC value within limits for As 188.979 Recovery = 98.54%							
Ba 233.527†	571103.2	10.480 mg/L		0.0162	10.480 mg/L	0.0162	0.15%
QC value within limits for Ba 233.527 Recovery = 104.80%							
Be 313.107†	628704.6	0.25221 mg/L		0.000195	0.25221 mg/L	0.000195	0.08%
QC value within limits for Be 313.107 Recovery = 100.88%							
Co 228.616†	66136.6	2.5991 mg/L		0.01978	2.5991 mg/L	0.01978	0.76%
QC value within limits for Co 228.616 Recovery = 103.96%							
Cr 267.716†	51762.1	0.98943 mg/L		0.006875	0.98943 mg/L	0.006875	0.69%
QC value within limits for Cr 267.716 Recovery = 98.94%							
Cu 324.752†	231803.4	1.2781 mg/L		0.00472	1.2781 mg/L	0.00472	0.37%
QC value within limits for Cu 324.752 Recovery = 102.25%							
Fe 273.955†	114031.2	5.0859 mg/L		0.03104	5.0859 mg/L	0.03104	0.61%
QC value within limits for Fe 273.955 Recovery = 101.72%							
Mg 279.077†	416589.9	25.797 mg/L		0.0292	25.797 mg/L	0.0292	0.11%
QC value within limits for Mg 279.077 Recovery = 103.19%							
Mn 257.610†	1397110.5	2.5714 mg/L		0.00117	2.5714 mg/L	0.00117	0.05%
QC value within limits for Mn 257.610 Recovery = 102.86%							
Ni 231.604†	55092.4	2.5608 mg/L		0.02144	2.5608 mg/L	0.02144	0.84%
QC value within limits for Ni 231.604 Recovery = 102.43%							
Pb 220.353†	1888.2	0.49037 mg/L		0.002535	0.49037 mg/L	0.002535	0.52%
QC value within limits for Pb 220.353 Recovery = 98.07%							
Sb 206.836†	521.1	0.47583 mg/L		0.003066	0.47583 mg/L	0.003066	0.64%
QC value within limits for Sb 206.836 Recovery = 95.17%							
Se 196.026†	226.6	0.49385 mg/L		0.011162	0.49385 mg/L	0.011162	2.26%
QC value within limits for Se 196.026 Recovery = 98.77%							
Tl 190.801†	482.2	0.46822 mg/L		0.001075	0.46822 mg/L	0.001075	0.23%
QC value within limits for Tl 190.801 Recovery = 93.64%							
V 292.402†	216369.5	2.5677 mg/L		0.00439	2.5677 mg/L	0.00439	0.17%
QC value within limits for V 292.402 Recovery = 102.71%							
Zn 206.200†	29450.4	2.5628 mg/L		0.02005	2.5628 mg/L	0.02005	0.78%
QC value within limits for Zn 206.200 Recovery = 102.51%							
Cd 226.502†	6731.9	0.24633 mg/L		0.002612	0.24633 mg/L	0.002612	1.06%
QC value within limits for Cd 226.502 Recovery = 98.53%							
Ti 334.940†	236624.3	0.52318 mg/L		0.002634	0.52318 mg/L	0.002634	0.50%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	3623.8	24.178 mg/L		0.0682	24.178 mg/L	0.0682	0.28%
QC value within limits for Ca 227.546 Recovery = 96.71%							
Na 589.592	113501.2	24.735 mg/L		0.0647	24.735 mg/L	0.0647	0.26%
QC value within limits for Na 589.592 Recovery = 98.94%							
K 766.490	30969.4	24.969 mg/L		0.0256	24.969 mg/L	0.0256	0.10%
QC value within limits for K 766.490 Recovery = 99.88%							

All analyte(s) passed QC.

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Sequence No.: 11                               Autosampler Location: 4
Sample ID: CCB                               Date Collected: 5/21/2012 11:09:56 AM
Analyst:                                       Data Type: Reprocessed on 5/22/2012 7:13:43 AM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
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Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	804844.4	98.123	%	0.6756			0.69%
Lu 261.542	687397.1	98.53	%	0.551			0.56%
Ag 328.068†	100.7	0.00061	mg/L	0.000101	0.00061 mg/L	0.000101	16.56%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	969.1	0.04948	mg/L	0.018154	0.04948 mg/L	0.018154	36.69%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	2.2	0.00310	mg/L	0.002695	0.00310 mg/L	0.002695	86.85%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	113.0	0.00207	mg/L	0.000741	0.00207 mg/L	0.000741	35.73%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	150.0	0.00006	mg/L	0.000039	0.00006 mg/L	0.000039	64.93%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	20.5	0.00080	mg/L	0.000049	0.00080 mg/L	0.000049	6.08%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	14.7	0.00028	mg/L	0.000100	0.00028 mg/L	0.000100	35.65%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	150.4	0.00083	mg/L	0.000074	0.00083 mg/L	0.000074	8.94%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	378.2	0.01685	mg/L	0.006038	0.01685 mg/L	0.006038	35.82%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	757.6	0.04692	mg/L	0.016629	0.04692 mg/L	0.016629	35.44%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	294.1	0.00054	mg/L	0.000204	0.00054 mg/L	0.000204	37.64%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	8.9	0.00041	mg/L	0.000380	0.00041 mg/L	0.000380	92.07%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	1.1	0.00029	mg/L	0.002605	0.00029 mg/L	0.002605	909.60%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	11.9	0.01118	mg/L	0.003172	0.01118 mg/L	0.003172	28.36%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	4.6	0.00984	mg/L	0.003569	0.00984 mg/L	0.003569	36.27%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801†	2.9	0.00295	mg/L	0.005763	0.00295 mg/L	0.005763	195.23%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	51.9	0.00062	mg/L	0.000150	0.00062 mg/L	0.000150	24.33%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	17.9	0.00156	mg/L	0.000325	0.00156 mg/L	0.000325	20.84%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	3.2	0.00012	mg/L	0.000023	0.00012 mg/L	0.000023	20.21%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	95.5	0.00021	mg/L	0.000087	0.00021 mg/L	0.000087	41.30%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	15.4	0.10634	mg/L	0.077975	0.10634 mg/L	0.077975	73.33%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592	-107.9	-0.02351	mg/L	0.015451	-0.02351 mg/L	0.015451	65.73%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	361.2	0.29119	mg/L	0.102466	0.29119 mg/L	0.102466	35.19%
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: MB-66232~PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 5/21/2012 11:13:35 AM

Data Type: Reprocessed on 5/22/2012 7:13:43 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-66232~PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	798531.0	97.353	%	0.7219			0.74%
Lu 261.542	683209.4	97.93	%	0.627			0.64%
Ag 328.068†	146.1	0.00088	mg/L	0.000583	0.00088 mg/L	0.000583	65.94%

Al 308.215†	383.8	0.01960 mg/L	0.004181	0.01960 mg/L	0.004181	21.33%
As 188.979†	3.1	0.00447 mg/L	0.001274	0.00447 mg/L	0.001274	28.48%
Ba 233.527†	12.8	0.00023 mg/L	0.000115	0.00023 mg/L	0.000115	48.83%
Be 313.107†	-5.3	0.00000 mg/L	0.000041	0.00000 mg/L	0.000041	>999.9%
Co 228.616†	9.0	0.00035 mg/L	0.000169	0.00035 mg/L	0.000169	47.77%
Cr 267.716†	-1.5	-0.00003 mg/L	0.000032	-0.00003 mg/L	0.000032	111.27%
Cu 324.752†	167.7	0.00093 mg/L	0.000120	0.00093 mg/L	0.000120	12.92%
Fe 273.955†	1811.4	0.08072 mg/L	0.001775	0.08072 mg/L	0.001775	2.20%
Mg 279.077†	192.2	0.01190 mg/L	0.002299	0.01190 mg/L	0.002299	19.32%
Mn 257.610†	568.5	0.00105 mg/L	0.000029	0.00105 mg/L	0.000029	2.82%
Ni 231.604†	15.5	0.00072 mg/L	0.000237	0.00072 mg/L	0.000237	32.90%
Pb 220.353†	1.3	0.00034 mg/L	0.000682	0.00034 mg/L	0.000682	199.46%
Sb 206.836†	8.4	0.00793 mg/L	0.003571	0.00793 mg/L	0.003571	45.04%
Se 196.026†	2.4	0.00516 mg/L	0.009465	0.00516 mg/L	0.009465	183.54%
Tl 190.801†	1.3	0.00138 mg/L	0.005503	0.00138 mg/L	0.005503	399.42%
V 292.402†	5.0	0.00006 mg/L	0.000266	0.00006 mg/L	0.000266	433.69%
Zn 206.200†	23.1	0.00201 mg/L	0.000223	0.00201 mg/L	0.000223	11.07%
Cd 226.502†	-0.0	-0.00001 mg/L	0.000067	-0.00001 mg/L	0.000067	>999.9%
Ti 334.940†	43.9	0.00010 mg/L	0.000100	0.00010 mg/L	0.000100	103.07%
Ca 227.546†	2.4	0.01607 mg/L	0.088719	0.01607 mg/L	0.088719	552.02%
Na 589.592	-224.7	-0.04897 mg/L	0.015080	-0.04897 mg/L	0.015080	30.80%
K 766.490	52.4	0.04222 mg/L	0.042065	0.04222 mg/L	0.042065	99.64%

Sequence No.: 13

Sample ID: LCS-66232~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 5/21/2012 11:17:13 AM

Data Type: Reprocessed on 5/22/2012 7:13:44 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-66232~LCS

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	768671.2	93.713 %		0.0728			0.08%
Lu 261.542	663450.7	95.10 %		0.243			0.26%
Ag 328.068†	194132.1	1.1777 mg/L		0.00592	1.1777 mg/L	0.00592	0.50%
Al 308.215†	178382.9	9.1028 mg/L		0.06733	9.1028 mg/L	0.06733	0.74%
As 188.979†	314.3	0.45938 mg/L		0.008464	0.45938 mg/L	0.008464	1.84%
Ba 233.527†	513436.2	9.4218 mg/L		0.05239	9.4218 mg/L	0.05239	0.56%
Be 313.107†	581866.4	0.23252 mg/L		0.001255	0.23252 mg/L	0.001255	0.54%
Co 228.616†	58814.5	2.3124 mg/L		0.01068	2.3124 mg/L	0.01068	0.46%
Cr 267.716†	47883.5	0.91528 mg/L		0.006263	0.91528 mg/L	0.006263	0.68%
Cu 324.752†	207963.7	1.1467 mg/L		0.00493	1.1467 mg/L	0.00493	0.43%
Fe 273.955†	103647.1	4.6226 mg/L		0.02031	4.6226 mg/L	0.02031	0.44%
Mg 279.077†	374941.3	23.218 mg/L		0.1287	23.218 mg/L	0.1287	0.55%
Mn 257.610†	1253116.1	2.3064 mg/L		0.01487	2.3064 mg/L	0.01487	0.64%
Ni 231.604†	50075.4	2.3279 mg/L		0.01107	2.3279 mg/L	0.01107	0.48%
Pb 220.353†	1754.7	0.45517 mg/L		0.002457	0.45517 mg/L	0.002457	0.54%
Sb 206.836†	520.1	0.47481 mg/L		0.001143	0.47481 mg/L	0.001143	0.24%
Se 196.026†	209.6	0.45636 mg/L		0.013940	0.45636 mg/L	0.013940	3.05%
Tl 190.801†	443.7	0.43146 mg/L		0.003155	0.43146 mg/L	0.003155	0.73%
V 292.402†	192361.7	2.2835 mg/L		0.01727	2.2835 mg/L	0.01727	0.76%
Zn 206.200†	26834.9	2.3348 mg/L		0.01475	2.3348 mg/L	0.01475	0.63%
Cd 226.502†	6279.0	0.22975 mg/L		0.001979	0.22975 mg/L	0.001979	0.86%
Ti 334.940†	198.7	0.00020 mg/L		0.000158	0.00020 mg/L	0.000158	80.34%
Ca 227.546†	3296.4	22.013 mg/L		0.0942	22.013 mg/L	0.0942	0.43%
Na 589.592	105921.3	23.083 mg/L		0.1106	23.083 mg/L	0.1106	0.48%
K 766.490	28603.4	23.061 mg/L		0.0200	23.061 mg/L	0.0200	0.09%

Sequence No.: 14

Sample ID: L0970-01B~SBM-TP1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 5/21/2012 11:20:52 AM

Data Type: Reprocessed on 5/22/2012 7:13:45 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0970-01B~SBM-TP1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	791849.3	96.539	%	0.2482				0.26%
Lu 261.542	663044.9	95.04	%	0.228				0.24%
Ag 328.068†	-66.4	-0.00047	mg/L	0.000521	-0.00047	mg/L	0.000521	110.71%
Al 308.215†	616878.1	31.494	mg/L	0.1806	31.494	mg/L	0.1806	0.57%
As 188.979†	6.1	0.01355	mg/L	0.004073	0.01355	mg/L	0.004073	30.06%
Ba 233.527†	22528.4	0.41334	mg/L	0.003967	0.41334	mg/L	0.003967	0.96%
Be 313.107†	2536.8	0.00146	mg/L	0.000020	0.00146	mg/L	0.000020	1.38%
Co 228.616†	589.2	0.02132	mg/L	0.000218	0.02132	mg/L	0.000218	1.02%
Cr 267.716†	2357.7	0.04482	mg/L	0.000238	0.04482	mg/L	0.000238	0.53%
Cu 324.752†	11206.6	0.06664	mg/L	0.000552	0.06664	mg/L	0.000552	0.83%
Fe 273.955†	1192354.0	53.136	mg/L	0.3283	53.136	mg/L	0.3283	0.62%
Mg 279.077†	250588.6	15.519	mg/L	0.1168	15.519	mg/L	0.1168	0.75%
Mn 257.610†	419231.9	0.77157	mg/L	0.004736	0.77157	mg/L	0.004736	0.61%
Ni 231.604†	1123.1	0.05201	mg/L	0.000566	0.05201	mg/L	0.000566	1.09%
Pb 220.353†	124.9	0.03472	mg/L	0.001276	0.03472	mg/L	0.001276	3.67%
Sb 206.836†	8.5	0.00507	mg/L	0.003133	0.00507	mg/L	0.003133	61.76%
Se 196.026†	-9.3	0.00088	mg/L	0.004300	0.00088	mg/L	0.004300	490.37%
Tl 190.801†	0.9	0.00727	mg/L	0.007021	0.00727	mg/L	0.007021	96.54%
V 292.402†	4207.7	0.05129	mg/L	0.000501	0.05129	mg/L	0.000501	0.98%
Zn 206.200†	2255.0	0.19910	mg/L	0.001233	0.19910	mg/L	0.001233	0.62%
Cd 226.502†	176.6	0.00232	mg/L	0.000081	0.00232	mg/L	0.000081	3.48%
Ti 334.940†	109169.5	0.24230	mg/L	0.003064	0.24230	mg/L	0.003064	1.26%
Ca 227.546†	9377.0	64.375	mg/L	0.0649	64.375	mg/L	0.0649	0.10%
Na 589.592	27189.2	5.9254	mg/L	0.06431	5.9254	mg/L	0.06431	1.09%
K 766.490	7547.6	6.0852	mg/L	0.05165	6.0852	mg/L	0.05165	0.85%

Sequence No.: 15

Sample ID: L0970-03B-GWFD050712

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 5/21/2012 11:24:25 AM

Data Type: Reprocessed on 5/22/2012 7:13:45 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0970-03B-GWFD050712

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	800735.2	97.622	%	1.0051				1.03%
Lu 261.542	666321.5	95.51	%	1.026				1.07%
Ag 328.068†	-118.4	-0.00080	mg/L	0.000077	-0.00080	mg/L	0.000077	9.56%
Al 308.215†	678944.2	34.664	mg/L	0.1978	34.664	mg/L	0.1978	0.57%
As 188.979†	5.7	0.01340	mg/L	0.002948	0.01340	mg/L	0.002948	22.00%
Ba 233.527†	24893.4	0.45673	mg/L	0.001068	0.45673	mg/L	0.001068	0.23%
Be 313.107†	2716.3	0.00159	mg/L	0.000026	0.00159	mg/L	0.000026	1.64%
Co 228.616†	653.8	0.02366	mg/L	0.000335	0.02366	mg/L	0.000335	1.42%
Cr 267.716†	2623.8	0.04987	mg/L	0.000439	0.04987	mg/L	0.000439	0.88%
Cu 324.752†	12534.5	0.07447	mg/L	0.000214	0.07447	mg/L	0.000214	0.29%
Fe 273.955†	1315429.1	58.620	mg/L	0.2983	58.620	mg/L	0.2983	0.51%
Mg 279.077†	270350.8	16.743	mg/L	0.0721	16.743	mg/L	0.0721	0.43%
Mn 257.610†	488527.9	0.89912	mg/L	0.004596	0.89912	mg/L	0.004596	0.51%
Ni 231.604†	1238.1	0.05733	mg/L	0.000799	0.05733	mg/L	0.000799	1.39%
Pb 220.353†	147.9	0.04093	mg/L	0.002213	0.04093	mg/L	0.002213	5.41%
Sb 206.836†	2.4	-0.00091	mg/L	0.003428	-0.00091	mg/L	0.003428	376.51%
Se 196.026†	-7.3	0.00733	mg/L	0.010161	0.00733	mg/L	0.010161	138.59%
Tl 190.801†	-2.8	0.00419	mg/L	0.001193	0.00419	mg/L	0.001193	28.44%
V 292.402†	4635.8	0.05650	mg/L	0.000448	0.05650	mg/L	0.000448	0.79%
Zn 206.200†	2481.6	0.21915	mg/L	0.002133	0.21915	mg/L	0.002133	0.97%
Cd 226.502†	190.7	0.00242	mg/L	0.000072	0.00242	mg/L	0.000072	2.98%
Ti 334.940†	123858.4	0.27478	mg/L	0.014085	0.27478	mg/L	0.014085	5.13%
Ca 227.546†	9473.5	64.997	mg/L	0.7968	64.997	mg/L	0.7968	1.23%
Na 589.592	27002.9	5.8848	mg/L	0.04940	5.8848	mg/L	0.04940	0.84%
K 766.490	7643.4	6.1625	mg/L	0.07492	6.1625	mg/L	0.07492	1.22%

Sequence No.: 16

Sample ID: L0970-04B-GWEB050712

Analyst:

Logged In Analyst (Original) : mitOptima3

Autosampler Location: 42

Date Collected: 5/21/2012 11:27:58 AM

Data Type: Reprocessed on 5/22/2012 7:13:46 AM

Initial Sample Wt:
Dilution:

Initial Sample Vol:
Sample Prep Vol:

Mean Data: L0970-04B~GWEB050712

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	805676.5	98.225	%	1.1534				1.17%
Lu 261.542	686846.7	98.45	%	1.151				1.17%
Ag 328.068†	53.3	0.00032	mg/L	0.000518	0.00032	mg/L	0.000518	160.79%
Al 308.215†	319.1	0.01629	mg/L	0.007831	0.01629	mg/L	0.007831	48.06%
As 188.979†	3.5	0.00498	mg/L	0.000844	0.00498	mg/L	0.000844	16.95%
Ba 233.527†	9.6	0.00018	mg/L	0.000032	0.00018	mg/L	0.000032	17.88%
Be 313.107†	20.7	0.00001	mg/L	0.000016	0.00001	mg/L	0.000016	183.77%
Co 228.616†	3.1	0.00012	mg/L	0.000267	0.00012	mg/L	0.000267	218.72%
Cr 267.716†	12.1	0.00023	mg/L	0.000050	0.00023	mg/L	0.000050	21.60%
Cu 324.752†	75.9	0.00042	mg/L	0.000240	0.00042	mg/L	0.000240	57.14%
Fe 273.955†	425.4	0.01896	mg/L	0.004682	0.01896	mg/L	0.004682	24.70%
Mg 279.077†	90.8	0.00563	mg/L	0.002284	0.00563	mg/L	0.002284	40.61%
Mn 257.610†	429.6	0.00079	mg/L	0.000049	0.00079	mg/L	0.000049	6.22%
Ni 231.604†	-2.1	-0.00010	mg/L	0.000274	-0.00010	mg/L	0.000274	283.91%
Pb 220.353†	-1.9	-0.00048	mg/L	0.001363	-0.00048	mg/L	0.001363	283.74%
Sb 206.836†	0.7	0.00067	mg/L	0.000616	0.00067	mg/L	0.000616	91.53%
Se 196.026†	0.3	0.00057	mg/L	0.004043	0.00057	mg/L	0.004043	703.48%
Tl 190.801†	2.1	0.00217	mg/L	0.002410	0.00217	mg/L	0.002410	110.92%
V 292.402†	22.3	0.00027	mg/L	0.000258	0.00027	mg/L	0.000258	97.24%
Zn 206.200†	10.2	0.00089	mg/L	0.000083	0.00089	mg/L	0.000083	9.32%
Cd 226.502†	-1.2	-0.00005	mg/L	0.000057	-0.00005	mg/L	0.000057	125.07%
Ti 334.940†	83.8	0.00019	mg/L	0.000062	0.00019	mg/L	0.000062	33.37%
Ca 227.546†	3.7	0.02564	mg/L	0.140481	0.02564	mg/L	0.140481	547.89%
Na 589.592	-181.2	-0.03949	mg/L	0.007811	-0.03949	mg/L	0.007811	19.78%
K 766.490	-68.9	-0.05559	mg/L	0.043103	-0.05559	mg/L	0.043103	77.54%

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Sequence No.: 17

Sample ID: L0970-05B~SBM-TP10

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 5/21/2012 11:31:36 AM

Data Type: Reprocessed on 5/22/2012 7:13:47 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0970-05B~SBM-TP10

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	833421.4	101.61	%	0.291				0.29%
Lu 261.542	661022.1	94.75	%	0.222				0.23%
Ag 328.068†	-230.0	-0.00213	mg/L	0.000455	-0.00213	mg/L	0.000455	21.38%
Al 308.215†	862671.4	44.029	mg/L	0.1513	44.029	mg/L	0.1513	0.34%
As 188.979†	21.4	0.03877	mg/L	0.007199	0.03877	mg/L	0.007199	18.57%
Ba 233.527†	43765.8	0.80292	mg/L	0.007282	0.80292	mg/L	0.007282	0.91%
Be 313.107†	5169.3	0.00253	mg/L	0.000024	0.00253	mg/L	0.000024	0.95%
Co 228.616†	1434.0	0.05349	mg/L	0.000046	0.05349	mg/L	0.000046	0.09%
Cr 267.716†	2562.2	0.04793	mg/L	0.000120	0.04793	mg/L	0.000120	0.25%
Cu 324.752†	25636.6	0.15002	mg/L	0.001470	0.15002	mg/L	0.001470	0.98%
Fe 273.955†	2136795.0	95.223	mg/L	0.3046	95.223	mg/L	0.3046	0.32%
Mg 279.077†	630593.9	39.053	mg/L	0.1443	39.053	mg/L	0.1443	0.37%
Mn 257.610†	2125377.3	3.9120	mg/L	0.01228	3.9120	mg/L	0.01228	0.31%
Ni 231.604†	2256.1	0.10458	mg/L	0.000190	0.10458	mg/L	0.000190	0.18%
Pb 220.353†	208.9	0.05705	mg/L	0.001419	0.05705	mg/L	0.001419	2.49%
Sb 206.836†	10.1	0.00461	mg/L	0.001914	0.00461	mg/L	0.001914	41.51%
Se 196.026†	-15.4	0.00418	mg/L	0.007453	0.00418	mg/L	0.007453	178.16%
Tl 190.801†	-4.0	0.00854	mg/L	0.002555	0.00854	mg/L	0.002555	29.90%
V 292.402†	4090.9	0.05117	mg/L	0.000539	0.05117	mg/L	0.000539	1.05%
Zn 206.200†	4266.6	0.37719	mg/L	0.002019	0.37719	mg/L	0.002019	0.54%
Cd 226.502†	322.9	0.00434	mg/L	0.000007	0.00434	mg/L	0.000007	0.17%
Ti 334.940†	114794.7	0.25554	mg/L	0.002312	0.25554	mg/L	0.002312	0.90%
Ca 227.546†	20002.6	137.45	mg/L	1.304	137.45	mg/L	1.304	0.95%
Na 589.592	134498.2	29.311	mg/L	0.0638	29.311	mg/L	0.0638	0.22%
K 766.490	62936.4	50.742	mg/L	0.1435	50.742	mg/L	0.1435	0.28%

Sequence No.: 18
 Sample ID: L0970-05BDUP~SBM-TP10D
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 5/21/2012 11:35:17 AM
 Data Type: Reprocessed on 5/22/2012 7:13:47 AM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L0970-05BDUP~SBM-TP10D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	818193.9	99.751	%	0.8721				0.87%
Lu 261.542	644857.9	92.43	%	0.662				0.72%
Ag 328.068†	-306.6	-0.00266	mg/L	0.000581	-0.00266	mg/L	0.000581	21.88%
Al 308.215†	944941.5	48.228	mg/L	0.2071	48.228	mg/L	0.2071	0.43%
As 188.979†	17.4	0.03363	mg/L	0.000697	0.03363	mg/L	0.000697	2.07%
Ba 233.527†	47112.8	0.86432	mg/L	0.001706	0.86432	mg/L	0.001706	0.20%
Be 313.107†	5551.8	0.00274	mg/L	0.000020	0.00274	mg/L	0.000020	0.75%
Co 228.616†	1576.0	0.05883	mg/L	0.000567	0.05883	mg/L	0.000567	0.96%
Cr 267.716†	2812.3	0.05263	mg/L	0.000527	0.05263	mg/L	0.000527	1.00%
Cu 324.752†	27665.2	0.16186	mg/L	0.000358	0.16186	mg/L	0.000358	0.22%
Fe 273.955†	2298893.6	102.45	mg/L	0.364	102.45	mg/L	0.364	0.35%
Mg 279.077†	685141.0	42.431	mg/L	0.1807	42.431	mg/L	0.1807	0.43%
Mn 257.610†	2306071.3	4.2446	mg/L	0.01538	4.2446	mg/L	0.01538	0.36%
Ni 231.604†	2456.6	0.11387	mg/L	0.001179	0.11387	mg/L	0.001179	1.03%
Pb 220.353†	223.9	0.06125	mg/L	0.000548	0.06125	mg/L	0.000548	0.89%
Sb 206.836†	12.1	0.00613	mg/L	0.002332	0.00613	mg/L	0.002332	38.03%
Se 196.026†	-16.9	0.00379	mg/L	0.014029	0.00379	mg/L	0.014029	370.06%
Tl 190.801†	-8.7	0.00470	mg/L	0.006207	0.00470	mg/L	0.006207	131.93%
V 292.402†	4471.5	0.05587	mg/L	0.000327	0.05587	mg/L	0.000327	0.58%
Zn 206.200†	4565.8	0.40371	mg/L	0.004112	0.40371	mg/L	0.004112	1.02%
Cd 226.502†	354.9	0.00493	mg/L	0.000234	0.00493	mg/L	0.000234	4.74%
Ti 334.940†	128905.4	0.28692	mg/L	0.001546	0.28692	mg/L	0.001546	0.54%
Ca 227.546†	21922.8	150.67	mg/L	0.053	150.67	mg/L	0.053	0.04%
Na 589.592	144881.0	31.574	mg/L	0.4016	31.574	mg/L	0.4016	1.27%
K 766.490	67700.7	54.583	mg/L	0.7206	54.583	mg/L	0.7206	1.32%

Sequence No.: 19
 Sample ID: L0970-05BMS~SBM-TP10S
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 45
 Date Collected: 5/21/2012 11:38:58 AM
 Data Type: Reprocessed on 5/22/2012 7:13:48 AM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L0970-05BMS~SBM-TP10S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	808052.2	98.514	%	0.2795				0.28%
Lu 261.542	636939.2	91.30	%	0.546				0.60%
Ag 328.068†	200322.7	1.2144	mg/L	0.02042	1.2144	mg/L	0.02042	1.68%
Al 308.215†	1169789.0	59.703	mg/L	0.2426	59.703	mg/L	0.2426	0.41%
As 188.979†	338.7	0.50311	mg/L	0.008831	0.50311	mg/L	0.008831	1.76%
Ba 233.527†	566559.9	10.396	mg/L	0.0304	10.396	mg/L	0.0304	0.29%
Be 313.107†	590107.4	0.23637	mg/L	0.001143	0.23637	mg/L	0.001143	0.48%
Co 228.616†	60505.9	2.3758	mg/L	0.04245	2.3758	mg/L	0.04245	1.79%
Cr 267.716†	51481.0	0.98294	mg/L	0.018919	0.98294	mg/L	0.018919	1.92%
Cu 324.752†	244344.5	1.3564	mg/L	0.02140	1.3564	mg/L	0.02140	1.58%
Fe 273.955†	2367664.9	105.52	mg/L	0.400	105.52	mg/L	0.400	0.38%
Mg 279.077†	1054247.1	65.288	mg/L	0.2038	65.288	mg/L	0.2038	0.31%
Mn 257.610†	3514170.7	6.4682	mg/L	0.02532	6.4682	mg/L	0.02532	0.39%
Ni 231.604†	52274.1	2.4298	mg/L	0.04418	2.4298	mg/L	0.04418	1.82%
Pb 220.353†	1934.2	0.50519	mg/L	0.002158	0.50519	mg/L	0.002158	0.43%
Sb 206.836†	468.1	0.42030	mg/L	0.002248	0.42030	mg/L	0.002248	0.53%
Se 196.026†	181.0	0.43437	mg/L	0.014431	0.43437	mg/L	0.014431	3.32%
Tl 190.801†	422.4	0.42311	mg/L	0.002291	0.42311	mg/L	0.002291	0.54%
V 292.402†	198296.1	2.3567	mg/L	0.04581	2.3567	mg/L	0.04581	1.94%
Zn 206.200†	31266.0	2.7267	mg/L	0.03538	2.7267	mg/L	0.03538	1.30%
Cd 226.502†	6316.3	0.22317	mg/L	0.000609	0.22317	mg/L	0.000609	0.27%

Ti 334.940†	135489.0	0.30135 mg/L	0.004455	0.30135 mg/L	0.004455	1.48%
Ca 227.546†	26111.2	178.85 mg/L	3.115	178.85 mg/L	3.115	1.74%
Na 589.592	243756.0	53.122 mg/L	0.1793	53.122 mg/L	0.1793	0.34%
K 766.490	95590.3	77.069 mg/L	0.2244	77.069 mg/L	0.2244	0.29%

Sequence No.: 20

Autosampler Location: 46

Sample ID: L0970-05BSD~SBM-TP10

Date Collected: 5/21/2012 11:42:40 AM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:13:49 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L0970-05BSD~SBM-TP10

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	785457.4	95.760 %		0.1957			0.20%
Lu 261.542	665736.0	95.42 %		0.143			0.15%
Ag 328.068†	-33.1	-0.00035 mg/L		0.000639	-0.00035 mg/L	0.000639	179.98%
Al 308.215†	169363.2	8.6438 mg/L		0.07064	8.6438 mg/L	0.07064	0.82%
As 188.979†	12.1	0.01912 mg/L		0.002381	0.01912 mg/L	0.002381	12.46%
Ba 233.527†	9215.1	0.16906 mg/L		0.000803	0.16906 mg/L	0.000803	0.47%
Be 313.107†	1173.9	0.00057 mg/L		0.000031	0.00057 mg/L	0.000031	5.42%
Co 228.616†	315.8	0.01181 mg/L		0.000205	0.01181 mg/L	0.000205	1.73%
Cr 267.716†	544.3	0.01019 mg/L		0.000043	0.01019 mg/L	0.000043	0.42%
Cu 324.752†	5227.6	0.03065 mg/L		0.000196	0.03065 mg/L	0.000196	0.64%
Fe 273.955†	449795.6	20.045 mg/L		0.1370	20.045 mg/L	0.1370	0.68%
Mg 279.077†	130530.4	8.0838 mg/L		0.02429	8.0838 mg/L	0.02429	0.30%
Mn 257.610†	445116.0	0.81930 mg/L		0.005224	0.81930 mg/L	0.005224	0.64%
Ni 231.604†	484.7	0.02247 mg/L		0.000081	0.02247 mg/L	0.000081	0.36%
Pb 220.353†	43.8	0.01190 mg/L		0.001094	0.01190 mg/L	0.001094	9.19%
Sb 206.836†	4.3	0.00301 mg/L		0.001248	0.00301 mg/L	0.001248	41.53%
Se 196.026†	2.5	0.01323 mg/L		0.005548	0.01323 mg/L	0.005548	41.95%
Tl 190.801†	-2.5	0.00008 mg/L		0.002830	0.00008 mg/L	0.002830	>999.9%
V 292.402†	857.4	0.01073 mg/L		0.000650	0.01073 mg/L	0.000650	6.06%
Zn 206.200†	962.2	0.08496 mg/L		0.000451	0.08496 mg/L	0.000451	0.53%
Cd 226.502†	67.9	0.00092 mg/L		0.000255	0.00092 mg/L	0.000255	27.83%
Ti 334.940†	23549.6	0.05240 mg/L		0.000419	0.05240 mg/L	0.000419	0.80%
Ca 227.546†	3940.2	27.066 mg/L		0.1273	27.066 mg/L	0.1273	0.47%
Na 589.592	27678.4	6.0320 mg/L		0.09788	6.0320 mg/L	0.09788	1.62%
K 766.490	12863.8	10.371 mg/L		0.1977	10.371 mg/L	0.1977	1.91%

Sequence No.: 21

Autosampler Location: 3

Sample ID: CCV

Date Collected: 5/21/2012 11:46:19 AM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:13:49 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	769676.2	93.836 %		0.5044			0.54%
Lu 261.542	662698.7	94.99 %		0.500			0.53%
Ag 328.068†	216155.0	1.3113 mg/L		0.00086	1.3113 mg/L	0.00086	0.07%
QC value within limits for Ag 328.068 Recovery = 104.90%							
Al 308.215†	195982.5	10.000 mg/L		0.0159	10.000 mg/L	0.0159	0.16%
QC value within limits for Al 308.215 Recovery = 100.00%							
As 188.979†	340.3	0.49740 mg/L		0.003239	0.49740 mg/L	0.003239	0.65%
QC value within limits for As 188.979 Recovery = 99.48%							
Ba 233.527†	568058.7	10.424 mg/L		0.0165	10.424 mg/L	0.0165	0.16%
QC value within limits for Ba 233.527 Recovery = 104.24%							
Be 313.107†	624009.6	0.25033 mg/L		0.000489	0.25033 mg/L	0.000489	0.20%
QC value within limits for Be 313.107 Recovery = 100.13%							
Co 228.616†	66018.8	2.5945 mg/L		0.03530	2.5945 mg/L	0.03530	1.36%
QC value within limits for Co 228.616 Recovery = 103.78%							
Cr 267.716†	51907.1	0.99221 mg/L		0.012901	0.99221 mg/L	0.012901	1.30%
QC value within limits for Cr 267.716 Recovery = 99.22%							

Cu	324.752†	229912.3	1.2677 mg/L	0.00219	1.2677 mg/L	0.00219	0.17%
	QC value within limits for Cu	324.752	Recovery =	101.41%			
Fe	273.955†	112885.9	5.0348 mg/L	0.06180	5.0348 mg/L	0.06180	1.23%
	QC value within limits for Fe	273.955	Recovery =	100.70%			
Mg	279.077†	411719.5	25.496 mg/L	0.0673	25.496 mg/L	0.0673	0.26%
	QC value within limits for Mg	279.077	Recovery =	101.98%			
Mn	257.610†	1386219.6	2.5514 mg/L	0.00372	2.5514 mg/L	0.00372	0.15%
	QC value within limits for Mn	257.610	Recovery =	102.06%			
Ni	231.604†	55042.2	2.5585 mg/L	0.03446	2.5585 mg/L	0.03446	1.35%
	QC value within limits for Ni	231.604	Recovery =	102.34%			
Pb	220.353†	1898.0	0.49289 mg/L	0.004949	0.49289 mg/L	0.004949	1.00%
	QC value within limits for Pb	220.353	Recovery =	98.58%			
Sb	206.836†	520.7	0.47536 mg/L	0.008308	0.47536 mg/L	0.008308	1.75%
	QC value within limits for Sb	206.836	Recovery =	95.07%			
Se	196.026†	225.5	0.49148 mg/L	0.018069	0.49148 mg/L	0.018069	3.68%
	QC value within limits for Se	196.026	Recovery =	98.30%			
Tl	190.801†	476.2	0.46214 mg/L	0.002846	0.46214 mg/L	0.002846	0.62%
	QC value within limits for Tl	190.801	Recovery =	92.43%			
V	292.402†	214834.9	2.5495 mg/L	0.00516	2.5495 mg/L	0.00516	0.20%
	QC value within limits for V	292.402	Recovery =	101.98%			
Zn	206.200†	29524.4	2.5692 mg/L	0.04596	2.5692 mg/L	0.04596	1.79%
	QC value within limits for Zn	206.200	Recovery =	102.77%			
Cd	226.502†	6727.1	0.24616 mg/L	0.003758	0.24616 mg/L	0.003758	1.53%
	QC value within limits for Cd	226.502	Recovery =	98.46%			
Ti	334.940†	235800.2	0.52136 mg/L	0.000764	0.52136 mg/L	0.000764	0.15%
	QC value within limits for Ti	334.940	Recovery =	Not calculated			
Ca	227.546†	3609.8	24.084 mg/L	0.3311	24.084 mg/L	0.3311	1.37%
	QC value within limits for Ca	227.546	Recovery =	96.34%			
Na	589.592	113664.4	24.771 mg/L	0.3096	24.771 mg/L	0.3096	1.25%
	QC value within limits for Na	589.592	Recovery =	99.08%			
K	766.490	30953.0	24.956 mg/L	0.3225	24.956 mg/L	0.3225	1.29%
	QC value within limits for K	766.490	Recovery =	99.82%			
All analyte(s) passed QC.							

Sequence No.: 22

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/21/2012 11:49:59 AM

Data Type: Reprocessed on 5/22/2012 7:13:50 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	785811.9	95.803 %	1.8037			1.88%
Lu 261.542	669183.8	95.92 %	1.761			1.84%
Ag 328.068†	37.5	0.00023 mg/L	0.000395	0.00023 mg/L	0.000395	173.96%
	QC value within limits for Ag	328.068	Recovery =	Not calculated		
Al 308.215†	376.3	0.01921 mg/L	0.005485	0.01921 mg/L	0.005485	28.55%
	QC value within limits for Al	308.215	Recovery =	Not calculated		
As 188.979†	5.7	0.00819 mg/L	0.004460	0.00819 mg/L	0.004460	54.48%
	QC value within limits for As	188.979	Recovery =	Not calculated		
Ba 233.527†	97.4	0.00179 mg/L	0.000608	0.00179 mg/L	0.000608	33.98%
	QC value within limits for Ba	233.527	Recovery =	Not calculated		
Be 313.107†	182.7	0.00007 mg/L	0.000006	0.00007 mg/L	0.000006	8.61%
	QC value within limits for Be	313.107	Recovery =	Not calculated		
Co 228.616†	16.5	0.00065 mg/L	0.000324	0.00065 mg/L	0.000324	49.89%
	QC value within limits for Co	228.616	Recovery =	Not calculated		
Cr 267.716†	7.5	0.00014 mg/L	0.000129	0.00014 mg/L	0.000129	89.78%
	QC value within limits for Cr	267.716	Recovery =	Not calculated		
Cu 324.752†	120.1	0.00066 mg/L	0.000177	0.00066 mg/L	0.000177	26.72%
	QC value within limits for Cu	324.752	Recovery =	Not calculated		
Fe 273.955†	100.4	0.00447 mg/L	0.000796	0.00447 mg/L	0.000796	17.80%
	QC value within limits for Fe	273.955	Recovery =	Not calculated		
Mg 279.077†	90.2	0.00558 mg/L	0.002958	0.00558 mg/L	0.002958	52.98%
	QC value within limits for Mg	279.077	Recovery =	Not calculated		
Mn 257.610†	265.3	0.00049 mg/L	0.000150	0.00049 mg/L	0.000150	30.62%
	QC value within limits for Mn	257.610	Recovery =	Not calculated		
Ni 231.604†	12.2	0.00057 mg/L	0.000638	0.00057 mg/L	0.000638	112.05%

QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 3.7 0.00096 mg/L 0.002541 0.00096 mg/L 0.002541 263.88%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 9.6 0.00902 mg/L 0.003020 0.00902 mg/L 0.003020 33.49%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 3.2 0.00681 mg/L 0.008611 0.00681 mg/L 0.008611 126.37%
QC value within limits for Se 196.026 Recovery = Not calculated
Tl 190.801† 0.1 0.00009 mg/L 0.000665 0.00009 mg/L 0.000665 719.66%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 292.402† 29.5 0.00035 mg/L 0.000217 0.00035 mg/L 0.000217 62.23%
QC value within limits for V 292.402 Recovery = Not calculated
Zn 206.200† 14.1 0.00123 mg/L 0.000383 0.00123 mg/L 0.000383 31.21%
QC value within limits for Zn 206.200 Recovery = Not calculated
Cd 226.502† -2.0 -0.00007 mg/L 0.000162 -0.00007 mg/L 0.000162 224.35%
QC value within limits for Cd 226.502 Recovery = Not calculated
Ti 334.940† 71.4 0.00016 mg/L 0.000187 0.00016 mg/L 0.000187 118.24%
QC value within limits for Ti 334.940 Recovery = Not calculated
Ca 227.546† 3.0 0.02048 mg/L 0.018427 0.02048 mg/L 0.018427 90.00%
QC value within limits for Ca 227.546 Recovery = Not calculated
Na 589.592 -186.9 -0.04072 mg/L 0.012832 -0.04072 mg/L 0.012832 31.51%
QC value within limits for Na 589.592 Recovery = Not calculated
K 766.490 52.1 0.04203 mg/L 0.087798 0.04203 mg/L 0.087798 208.88%
QC value within limits for K 766.490 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23

Sample ID: L0970-05BPDS~SBM-TP10

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 5/21/2012 11:53:38 AM

Data Type: Reprocessed on 5/22/2012 7:13:51 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0970-05BPDS~SBM-TP10

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	808421.7	98.559 %	1.0533			1.07%
Lu 261.542	640352.4	91.79 %	0.917			1.00%
Ag 328.068†	197530.9	1.1976 mg/L	0.01129	1.1976 mg/L	0.01129	0.94%
Al 308.215†	1090016.7	55.632 mg/L	0.1463	55.632 mg/L	0.1463	0.26%
As 188.979†	327.5	0.48643 mg/L	0.002492	0.48643 mg/L	0.002492	0.51%
Ba 233.527†	571907.0	10.495 mg/L	0.0238	10.495 mg/L	0.0238	0.23%
Be 313.107†	599324.8	0.24025 mg/L	0.000540	0.24025 mg/L	0.000540	0.22%
Co 228.616†	60257.3	2.3659 mg/L	0.02342	2.3659 mg/L	0.02342	0.99%
Cr 267.716†	51336.6	0.98027 mg/L	0.009520	0.98027 mg/L	0.009520	0.97%
Cu 324.752†	240305.9	1.3335 mg/L	0.01391	1.3335 mg/L	0.01391	1.04%
Fe 273.955†	2215852.6	98.750 mg/L	0.2557	98.750 mg/L	0.2557	0.26%
Mg 279.077†	1006617.4	62.338 mg/L	0.2170	62.338 mg/L	0.2170	0.35%
Mn 257.610†	3342881.8	6.1529 mg/L	0.01286	6.1529 mg/L	0.01286	0.21%
Ni 231.604†	52127.3	2.4229 mg/L	0.02508	2.4229 mg/L	0.02508	1.04%
Pb 220.353†	1914.2	0.49985 mg/L	0.003133	0.49985 mg/L	0.003133	0.63%
Sb 206.836†	524.9	0.47447 mg/L	0.003926	0.47447 mg/L	0.003926	0.83%
Se 196.026†	191.6	0.45462 mg/L	0.017179	0.45462 mg/L	0.017179	3.78%
Tl 190.801†	419.8	0.41951 mg/L	0.004308	0.41951 mg/L	0.004308	1.03%
V 292.402†	198979.1	2.3644 mg/L	0.02489	2.3644 mg/L	0.02489	1.05%
Zn 206.200†	30790.7	2.6851 mg/L	0.02206	2.6851 mg/L	0.02206	0.82%
Cd 226.502†	6235.8	0.22078 mg/L	0.002688	0.22078 mg/L	0.002688	1.22%
Ti 334.940†	183213.3	0.40668 mg/L	0.012889	0.40668 mg/L	0.012889	3.17%
Ca 227.546†	23491.9	160.81 mg/L	1.018	160.81 mg/L	1.018	0.63%
Na 589.592	230813.4	50.301 mg/L	0.1573	50.301 mg/L	0.1573	0.31%
K 766.490	89568.7	72.214 mg/L	0.3285	72.214 mg/L	0.3285	0.45%

Sequence No.: 24

Sample ID: L0970-06B~TPEB050712

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 5/21/2012 11:57:21 AM

Data Type: Reprocessed on 5/22/2012 7:13:52 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0970-06B-TPEB050712

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Y 360.073	792512.4	96.620	%	0.8376			0.87%
Lu 261.542	677819.5	97.16	%	0.694			0.71%
Ag 328.068†	79.0	0.00048	mg/L	0.000470	0.00048	mg/L	98.26%
Al 308.215†	417.1	0.02130	mg/L	0.004567	0.02130	mg/L	21.44%
As 188.979†	3.1	0.00448	mg/L	0.005572	0.00448	mg/L	124.33%
Ba 233.527†	70.7	0.00130	mg/L	0.000444	0.00130	mg/L	34.20%
Be 313.107†	70.8	0.00003	mg/L	0.000014	0.00003	mg/L	48.56%
Co 228.616†	9.1	0.00036	mg/L	0.000149	0.00036	mg/L	41.76%
Cr 267.716†	19.2	0.00037	mg/L	0.000142	0.00037	mg/L	38.76%
Cu 324.752†	141.4	0.00078	mg/L	0.000150	0.00078	mg/L	19.19%
Fe 273.955†	459.1	0.02046	mg/L	0.007243	0.02046	mg/L	35.40%
Mg 279.077†	169.3	0.01048	mg/L	0.007197	0.01048	mg/L	68.65%
Mn 257.610†	715.8	0.00132	mg/L	0.000211	0.00132	mg/L	16.04%
Ni 231.604†	10.8	0.00050	mg/L	0.000019	0.00050	mg/L	3.82%
Pb 220.353†	0.3	0.00007	mg/L	0.000888	0.00007	mg/L	>999.9%
Sb 206.836†	3.2	0.00301	mg/L	0.002251	0.00301	mg/L	74.83%
Se 196.026†	7.3	0.01581	mg/L	0.015529	0.01581	mg/L	98.19%
Tl 190.801†	0.8	0.00082	mg/L	0.000493	0.00082	mg/L	60.25%
V 292.402†	55.1	0.00065	mg/L	0.000345	0.00065	mg/L	52.72%
Zn 206.200†	22.0	0.00192	mg/L	0.000147	0.00192	mg/L	7.64%
Cd 226.502†	0.9	0.00003	mg/L	0.000191	0.00003	mg/L	586.50%
Ti 334.940†	62.6	0.00014	mg/L	0.000118	0.00014	mg/L	85.44%
Ca 227.546†	-0.0	-0.00055	mg/L	0.073933	-0.00055	mg/L	>999.9%
Na 589.592	-175.9	-0.03833	mg/L	0.015693	-0.03833	mg/L	40.94%
K 766.490	-2.4	-0.00193	mg/L	0.068653	-0.00193	mg/L	>999.9%

Sequence No.: 25

Sample ID: L0991-01C-DEC-046

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 5/21/2012 12:01:00 PM

Data Type: Reprocessed on 5/22/2012 7:13:52 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0991-01C-DEC-046

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Y 360.073	758582.7	92.483	%	0.3389			0.37%
Lu 261.542	652803.6	93.57	%	0.279			0.30%
Ag 328.068†	-50.5	-0.00039	mg/L	0.000112	-0.00039	mg/L	29.09%
Al 308.215†	940.2	0.02341	mg/L	0.001344	0.02341	mg/L	5.74%
As 188.979†	5.5	0.00996	mg/L	0.002128	0.00996	mg/L	21.37%
Ba 233.527†	9901.6	0.18164	mg/L	0.000512	0.18164	mg/L	0.28%
Be 313.107†	-82.9	-0.00004	mg/L	0.000018	-0.00004	mg/L	47.87%
Co 228.616†	15.8	0.00043	mg/L	0.000176	0.00043	mg/L	40.74%
Cr 267.716†	28.0	0.00036	mg/L	0.000081	0.00036	mg/L	22.41%
Cu 324.752†	527.1	0.00366	mg/L	0.000080	0.00366	mg/L	2.17%
Fe 273.955†	183836.5	8.1924	mg/L	0.00516	8.1924	mg/L	0.06%
Mg 279.077†	214478.9	13.283	mg/L	0.0191	13.283	mg/L	0.14%
Mn 257.610†	232034.3	0.42700	mg/L	0.000408	0.42700	mg/L	0.10%
Ni 231.604†	15.2	0.00065	mg/L	0.000450	0.00065	mg/L	69.10%
Pb 220.353†	26.7	0.00677	mg/L	0.000888	0.00677	mg/L	13.11%
Sb 206.836†	2.1	0.00157	mg/L	0.002478	0.00157	mg/L	157.79%
Se 196.026†	-3.7	-0.00473	mg/L	0.011136	-0.00473	mg/L	235.32%
Tl 190.801†	2.3	0.00380	mg/L	0.002998	0.00380	mg/L	78.92%
V 292.402†	478.9	0.00594	mg/L	0.000115	0.00594	mg/L	1.94%
Zn 206.200†	324.5	0.02876	mg/L	0.000377	0.02876	mg/L	1.31%
Cd 226.502†	28.5	0.00012	mg/L	0.000112	0.00012	mg/L	90.78%
Ti 334.940†	-1229.5	-0.00098	mg/L	0.000159	-0.00098	mg/L	16.20%
Ca 227.546†	17096.4	118.10	mg/L	0.493	118.10	mg/L	0.42%
Na 589.592	182037.0	39.671	mg/L	0.4000	39.671	mg/L	1.01%
K 766.490	8153.8	6.5739	mg/L	0.12965	6.5739	mg/L	1.97%

Sequence No.: 26

Sample ID: L0991-02C-DEC-045

Autosampler Location: 50

Date Collected: 5/21/2012 12:04:34 PM

Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Data Type: Reprocessed on 5/22/2012 7:13:53 AM

Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: L0991-02C-DEC-045

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	760629.1	92.733 %		0.8187			0.88%
Lu 261.542	655966.3	94.02 %		0.839			0.89%
Ag 328.068†	-26.2	-0.00024 mg/L		0.000315	-0.00024 mg/L	0.000315	133.29%
Al 308.215†	1427.2	0.04343 mg/L		0.002134	0.04343 mg/L	0.002134	4.91%
As 188.979†	1.9	0.00449 mg/L		0.001740	0.00449 mg/L	0.001740	38.77%
Ba 233.527†	9737.6	0.17863 mg/L		0.000324	0.17863 mg/L	0.000324	0.18%
Be 313.107†	-12.4	-0.00001 mg/L		0.000012	-0.00001 mg/L	0.000012	153.09%
Co 228.616†	8.4	0.00030 mg/L		0.000142	0.00030 mg/L	0.000142	47.46%
Cr 267.716†	30.2	0.00039 mg/L		0.000094	0.00039 mg/L	0.000094	23.93%
Cu 324.752†	147.8	0.00094 mg/L		0.000078	0.00094 mg/L	0.000078	8.30%
Fe 273.955†	31224.8	1.3915 mg/L		0.00215	1.3915 mg/L	0.00215	0.15%
Mg 279.077†	261996.6	16.226 mg/L		0.0399	16.226 mg/L	0.0399	0.25%
Mn 257.610†	214067.8	0.39390 mg/L		0.000777	0.39390 mg/L	0.000777	0.20%
Ni 231.604†	18.1	0.00077 mg/L		0.000342	0.00077 mg/L	0.000342	44.36%
Pb 220.353†	-0.2	-0.00006 mg/L		0.002412	-0.00006 mg/L	0.002412	>999.9%
Sb 206.836†	1.6	0.00132 mg/L		0.001516	0.00132 mg/L	0.001516	114.65%
Se 196.026†	-3.4	-0.00673 mg/L		0.018200	-0.00673 mg/L	0.018200	270.51%
Tl 190.801†	0.5	0.00140 mg/L		0.001830	0.00140 mg/L	0.001830	130.62%
V 292.402†	282.7	0.00340 mg/L		0.000086	0.00340 mg/L	0.000086	2.54%
Zn 206.200†	101.3	0.00902 mg/L		0.000062	0.00902 mg/L	0.000062	0.69%
Cd 226.502†	1.6	-0.00041 mg/L		0.000033	-0.00041 mg/L	0.000033	7.96%
Ti 334.940†	-654.7	0.00064 mg/L		0.000037	0.00064 mg/L	0.000037	5.84%
Ca 227.546†	20574.7	142.19 mg/L		0.191	142.19 mg/L	0.191	0.13%
Na 589.592	156610.5	34.130 mg/L		0.2539	34.130 mg/L	0.2539	0.74%
K 766.490	8329.6	6.7157 mg/L		0.08069	6.7157 mg/L	0.08069	1.20%

Sequence No.: 27
 Sample ID: L0991-03C-DUP-050912
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 5/21/2012 12:08:08 PM
 Data Type: Reprocessed on 5/22/2012 7:13:54 AM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: L0991-03C-DUP-050912

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	769269.2	93.786 %		1.2627			1.35%
Lu 261.542	661658.2	94.84 %		1.645			1.73%
Ag 328.068†	-78.9	-0.00056 mg/L		0.000152	-0.00056 mg/L	0.000152	27.27%
Al 308.215†	771.3	0.01424 mg/L		0.006430	0.01424 mg/L	0.006430	45.17%
As 188.979†	2.4	0.00545 mg/L		0.003628	0.00545 mg/L	0.003628	66.54%
Ba 233.527†	10035.0	0.18409 mg/L		0.000556	0.18409 mg/L	0.000556	0.30%
Be 313.107†	-84.7	-0.00004 mg/L		0.000009	-0.00004 mg/L	0.000009	23.98%
Co 228.616†	11.7	0.00026 mg/L		0.000275	0.00026 mg/L	0.000275	103.70%
Cr 267.716†	24.4	0.00029 mg/L		0.000201	0.00029 mg/L	0.000201	68.71%
Cu 324.752†	409.6	0.00303 mg/L		0.000180	0.00303 mg/L	0.000180	5.96%
Fe 273.955†	186945.1	8.3310 mg/L		0.01756	8.3310 mg/L	0.01756	0.21%
Mg 279.077†	218492.1	13.531 mg/L		0.0082	13.531 mg/L	0.0082	0.06%
Mn 257.610†	236605.1	0.43541 mg/L		0.001698	0.43541 mg/L	0.001698	0.39%
Ni 231.604†	22.4	0.00099 mg/L		0.000261	0.00099 mg/L	0.000261	26.51%
Pb 220.353†	27.3	0.00691 mg/L		0.000666	0.00691 mg/L	0.000666	9.64%
Sb 206.836†	2.9	0.00235 mg/L		0.002097	0.00235 mg/L	0.002097	89.35%
Se 196.026†	-1.1	0.00091 mg/L		0.016270	0.00091 mg/L	0.016270	>999.9%
Tl 190.801†	1.9	0.00348 mg/L		0.007902	0.00348 mg/L	0.007902	227.28%
V 292.402†	487.5	0.00604 mg/L		0.000126	0.00604 mg/L	0.000126	2.08%
Zn 206.200†	325.2	0.02883 mg/L		0.000308	0.02883 mg/L	0.000308	1.07%
Cd 226.502†	21.1	-0.00017 mg/L		0.000127	-0.00017 mg/L	0.000127	76.75%
Ti 334.940†	-1272.4	-0.00104 mg/L		0.000172	-0.00104 mg/L	0.000172	16.57%
Ca 227.546†	17476.8	120.73 mg/L		0.680	120.73 mg/L	0.680	0.56%
Na 589.592	187341.5	40.827 mg/L		0.5215	40.827 mg/L	0.5215	1.28%

K 766.490 8374.9 6.7522 mg/L 0.14241 6.7522 mg/L 0.14241 2.11%

Sequence No.: 28

Sample ID: L1014-01C~SBM-SW2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 5/21/2012 12:11:41 PM

Data Type: Reprocessed on 5/22/2012 7:13:54 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-01C~SBM-SW2

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	788958.4	96.186 %		0.3225			0.34%
Lu 261.542	677877.7	97.16 %		0.229			0.24%
Ag 328.068†	42.2	0.00022 mg/L		0.000436	0.00022 mg/L	0.000436	200.61%
Al 308.215†	2903.7	0.13804 mg/L		0.001745	0.13804 mg/L	0.001745	1.26%
As 188.979†	2.2	0.00431 mg/L		0.002723	0.00431 mg/L	0.002723	63.13%
Ba 233.527†	2754.3	0.05052 mg/L		0.000349	0.05052 mg/L	0.000349	0.69%
Be 313.107†	-47.5	-0.00002 mg/L		0.000006	-0.00002 mg/L	0.000006	33.11%
Co 228.616†	15.1	0.00056 mg/L		0.000159	0.00056 mg/L	0.000159	28.44%
Cr 267.716†	2586.8	0.04937 mg/L		0.004370	0.04937 mg/L	0.004370	8.85%
Cu 324.752†	814.0	0.00460 mg/L		0.000638	0.00460 mg/L	0.000638	13.86%
Fe 273.955†	29364.5	1.3086 mg/L		0.02796	1.3086 mg/L	0.02796	2.14%
Mg 279.077†	86053.8	5.3293 mg/L		0.06055	5.3293 mg/L	0.06055	1.14%
Mn 257.610†	97336.8	0.17913 mg/L		0.001660	0.17913 mg/L	0.001660	0.93%
Ni 231.604†	36.5	0.00167 mg/L		0.000299	0.00167 mg/L	0.000299	17.85%
Pb 220.353†	-1.4	-0.00035 mg/L		0.002067	-0.00035 mg/L	0.002067	591.37%
Sb 206.836†	0.9	-0.00020 mg/L		0.004505	-0.00020 mg/L	0.004505	>999.9%
Se 196.026†	-1.7	-0.00317 mg/L		0.006747	-0.00317 mg/L	0.006747	212.57%
Tl 190.801†	2.0	0.00247 mg/L		0.002879	0.00247 mg/L	0.002879	116.67%
V 292.402†	9.1	0.00026 mg/L		0.000448	0.00026 mg/L	0.000448	172.66%
Zn 206.200†	40.1	0.00372 mg/L		0.000088	0.00372 mg/L	0.000088	2.38%
Cd 226.502†	3.0	-0.00012 mg/L		0.000151	-0.00012 mg/L	0.000151	130.31%
Ti 334.940†	192.1	0.00115 mg/L		0.000103	0.00115 mg/L	0.000103	8.95%
Ca 227.546†	7148.0	49.393 mg/L		0.0988	49.393 mg/L	0.0988	0.20%
Na 589.592	33285.4	7.2539 mg/L		0.08661	7.2539 mg/L	0.08661	1.19%
K 766.490	2369.5	1.9104 mg/L		0.01632	1.9104 mg/L	0.01632	0.85%

Sequence No.: 29

Sample ID: L1014-01CDUP~SBM-SW2D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 5/21/2012 12:15:19 PM

Data Type: Reprocessed on 5/22/2012 7:13:55 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-01CDUP~SBM-SW2D

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	773955.9	94.357 %		1.3743			1.46%
Lu 261.542	666780.7	95.57 %		1.239			1.30%
Ag 328.068†	38.2	0.00019 mg/L		0.000755	0.00019 mg/L	0.000755	388.61%
Al 308.215†	3019.6	0.14395 mg/L		0.006564	0.14395 mg/L	0.006564	4.56%
As 188.979†	5.3	0.00828 mg/L		0.004626	0.00828 mg/L	0.004626	55.87%
Ba 233.527†	2779.0	0.05098 mg/L		0.000625	0.05098 mg/L	0.000625	1.23%
Be 313.107†	-17.8	-0.00001 mg/L		0.000011	-0.00001 mg/L	0.000011	175.20%
Co 228.616†	10.0	0.00037 mg/L		0.000025	0.00037 mg/L	0.000025	6.67%
Cr 267.716†	25.7	0.00042 mg/L		0.000067	0.00042 mg/L	0.000067	15.83%
Cu 324.752†	214.9	0.00127 mg/L		0.000140	0.00127 mg/L	0.000140	11.02%
Fe 273.955†	21903.0	0.97608 mg/L		0.014902	0.97608 mg/L	0.014902	1.53%
Mg 279.077†	86509.5	5.3576 mg/L		0.08640	5.3576 mg/L	0.08640	1.61%
Mn 257.610†	95435.8	0.17563 mg/L		0.002680	0.17563 mg/L	0.002680	1.53%
Ni 231.604†	12.0	0.00053 mg/L		0.000143	0.00053 mg/L	0.000143	26.85%
Pb 220.353†	1.9	0.00051 mg/L		0.001229	0.00051 mg/L	0.001229	240.79%
Sb 206.836†	1.4	0.00125 mg/L		0.006104	0.00125 mg/L	0.006104	489.21%
Se 196.026†	-1.9	-0.00364 mg/L		0.012624	-0.00364 mg/L	0.012624	346.75%
Tl 190.801†	3.7	0.00412 mg/L		0.003586	0.00412 mg/L	0.003586	86.98%
V 292.402†	14.5	0.00020 mg/L		0.000232	0.00020 mg/L	0.000232	114.60%

Zn 206.200†	25.8	0.00236 mg/L	0.000100	0.00236 mg/L	0.000100	4.22%
Cd 226.502†	2.8	-0.00010 mg/L	0.000083	-0.00010 mg/L	0.000083	83.17%
Ti 334.940†	153.8	0.00107 mg/L	0.000134	0.00107 mg/L	0.000134	12.52%
Ca 227.546†	7159.6	49.476 mg/L	0.4183	49.476 mg/L	0.4183	0.85%
Na 589.592	33309.9	7.2592 mg/L	0.03845	7.2592 mg/L	0.03845	0.53%
K 766.490	2335.0	1.8826 mg/L	0.07768	1.8826 mg/L	0.07768	4.13%

Sequence No.: 30

Sample ID: L1014-01CMS~SBM-SW2S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 5/21/2012 12:18:57 PM

Data Type: Reprocessed on 5/22/2012 7:13:56 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-01CMS~SBM-SW2S

Analyte	Mean	Corrected	Calib.	Std.Dev.	Sample			RSD
	Intensity	Conc.			Units	Conc.	Units	
Y 360.073	755893.8	92.155	%	0.4438				0.48%
Lu 261.542	651101.6	93.33	%	0.477				0.51%
Ag 328.068†	197706.4	1.1993	mg/L	0.00493	1.1993	mg/L	0.00493	0.41%
Al 308.215†	185475.2	9.4546	mg/L	0.03281	9.4546	mg/L	0.03281	0.35%
As 188.979†	316.3	0.46309	mg/L	0.001902	0.46309	mg/L	0.001902	0.41%
Ba 233.527†	520610.1	9.5535	mg/L	0.02891	9.5535	mg/L	0.02891	0.30%
Be 313.107†	592122.1	0.23662	mg/L	0.000619	0.23662	mg/L	0.000619	0.26%
Co 228.616†	58819.3	2.3126	mg/L	0.00658	2.3126	mg/L	0.00658	0.28%
Cr 267.716†	48783.4	0.93243	mg/L	0.002696	0.93243	mg/L	0.002696	0.29%
Cu 324.752†	212189.5	1.1700	mg/L	0.00496	1.1700	mg/L	0.00496	0.42%
Fe 273.955†	126220.0	5.6286	mg/L	0.02288	5.6286	mg/L	0.02288	0.41%
Mg 279.077†	460486.1	28.516	mg/L	0.0793	28.516	mg/L	0.0793	0.28%
Mn 257.610†	1361813.6	2.5065	mg/L	0.00734	2.5065	mg/L	0.00734	0.29%
Ni 231.604†	49944.7	2.3218	mg/L	0.00697	2.3218	mg/L	0.00697	0.30%
Pb 220.353†	1767.9	0.45861	mg/L	0.000625	0.45861	mg/L	0.000625	0.14%
Sb 206.836†	524.0	0.47806	mg/L	0.005620	0.47806	mg/L	0.005620	1.18%
Se 196.026†	212.6	0.46326	mg/L	0.002399	0.46326	mg/L	0.002399	0.52%
Tl 190.801†	440.6	0.42844	mg/L	0.000101	0.42844	mg/L	0.000101	0.02%
V 292.402†	196674.6	2.3347	mg/L	0.00689	2.3347	mg/L	0.00689	0.30%
Zn 206.200†	26602.0	2.3147	mg/L	0.00316	2.3147	mg/L	0.00316	0.14%
Cd 226.502†	6177.2	0.22582	mg/L	0.000549	0.22582	mg/L	0.000549	0.24%
Ti 334.940†	421.7	0.00144	mg/L	0.000201	0.00144	mg/L	0.000201	13.98%
Ca 227.546†	10606.7	72.529	mg/L	0.2214	72.529	mg/L	0.2214	0.31%
Na 589.592	132998.6	28.984	mg/L	0.4214	28.984	mg/L	0.4214	1.45%
K 766.490	29672.6	23.923	mg/L	0.3208	23.923	mg/L	0.3208	1.34%

Sequence No.: 31

Sample ID: L1014-01CSD~SBM-SW2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 5/21/2012 12:22:31 PM

Data Type: Reprocessed on 5/22/2012 7:13:56 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-01CSD~SBM-SW2

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Units	Conc.		
Y 360.073	794777.9	96.896	%	1.3742				1.42%
Lu 261.542	680176.0	97.49	%	1.355				1.39%
Ag 328.068†	98.4	0.00059	mg/L	0.000240	0.00059	mg/L	0.000240	40.81%
Al 308.215†	891.0	0.04344	mg/L	0.003049	0.04344	mg/L	0.003049	7.02%
As 188.979†	1.9	0.00281	mg/L	0.004084	0.00281	mg/L	0.004084	145.47%
Ba 233.527†	648.1	0.01189	mg/L	0.000511	0.01189	mg/L	0.000511	4.30%
Be 313.107†	110.4	0.00004	mg/L	0.000045	0.00004	mg/L	0.000045	101.51%
Co 228.616†	10.4	0.00040	mg/L	0.000211	0.00040	mg/L	0.000211	52.37%
Cr 267.716†	16.4	0.00030	mg/L	0.000086	0.00030	mg/L	0.000086	28.68%
Cu 324.752†	147.5	0.00083	mg/L	0.000098	0.00083	mg/L	0.000098	11.81%
Fe 273.955†	4456.2	0.19858	mg/L	0.000120	0.19858	mg/L	0.000120	0.06%
Mg 279.077†	17943.2	1.1112	mg/L	0.00720	1.1112	mg/L	0.00720	0.65%
Mn 257.610†	19769.0	0.03638	mg/L	0.000123	0.03638	mg/L	0.000123	0.34%
Ni 231.604†	5.8	0.00027	mg/L	0.000156	0.00027	mg/L	0.000156	58.57%

Pb 220.353†	5.0	0.00129 mg/L	0.001020	0.00129 mg/L	0.001020	79.29%
Sb 206.836†	-1.9	-0.00184 mg/L	0.005336	-0.00184 mg/L	0.005336	289.23%
Se 196.026†	3.1	0.00671 mg/L	0.016706	0.00671 mg/L	0.016706	249.04%
Tl 190.801†	1.0	0.00109 mg/L	0.002478	0.00109 mg/L	0.002478	227.21%
V 292.402†	33.1	0.00040 mg/L	0.000168	0.00040 mg/L	0.000168	42.25%
Zn 206.200†	17.7	0.00156 mg/L	0.000081	0.00156 mg/L	0.000081	5.16%
Cd 226.502†	2.2	0.00004 mg/L	0.000068	0.00004 mg/L	0.000068	177.97%
Ti 334.940†	11.3	0.00017 mg/L	0.000127	0.00017 mg/L	0.000127	74.01%
Ca 227.546†	1437.4	9.9326 mg/L	0.29523	9.9326 mg/L	0.29523	2.97%
Na 589.592	6696.9	1.4595 mg/L	0.01452	1.4595 mg/L	0.01452	1.00%
K 766.490	448.3	0.36142 mg/L	0.023256	0.36142 mg/L	0.023256	6.43%

Sequence No.: 32

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/21/2012 12:26:09 PM

Data Type: Reprocessed on 5/22/2012 7:13:57 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	759247.6	92.564 %	1.1179			1.21%
Lu 261.542	656385.0	94.08 %	1.101			1.17%
Ag 328.068†	216453.1	1.3131 mg/L	0.00223	1.3131 mg/L	0.00223	0.17%
QC value within limits for Ag 328.068		Recovery = 105.05%				
Al 308.215†	197673.5	10.086 mg/L	0.0064	10.086 mg/L	0.0064	0.06%
QC value within limits for Al 308.215		Recovery = 100.86%				
As 188.979†	341.5	0.49925 mg/L	0.004343	0.49925 mg/L	0.004343	0.87%
QC value within limits for As 188.979		Recovery = 99.85%				
Ba 233.527†	571769.4	10.492 mg/L	0.0054	10.492 mg/L	0.0054	0.05%
QC value within limits for Ba 233.527		Recovery = 104.92%				
Be 313.107†	624682.1	0.25061 mg/L	0.000261	0.25061 mg/L	0.000261	0.10%
QC value within limits for Be 313.107		Recovery = 100.24%				
Co 228.616†	66706.8	2.6215 mg/L	0.00226	2.6215 mg/L	0.00226	0.09%
QC value within limits for Co 228.616		Recovery = 104.86%				
Cr 267.716†	52285.3	0.99943 mg/L	0.004188	0.99943 mg/L	0.004188	0.42%
QC value within limits for Cr 267.716		Recovery = 99.94%				
Cu 324.752†	231790.8	1.2780 mg/L	0.00192	1.2780 mg/L	0.00192	0.15%
QC value within limits for Cu 324.752		Recovery = 102.24%				
Fe 273.955†	114359.6	5.1004 mg/L	0.00808	5.1004 mg/L	0.00808	0.16%
QC value within limits for Fe 273.955		Recovery = 102.01%				
Mg 279.077†	412557.0	25.548 mg/L	0.0571	25.548 mg/L	0.0571	0.22%
QC value within limits for Mg 279.077		Recovery = 102.19%				
Mn 257.610†	1389685.1	2.5578 mg/L	0.00207	2.5578 mg/L	0.00207	0.08%
QC value within limits for Mn 257.610		Recovery = 102.31%				
Ni 231.604†	55601.4	2.5845 mg/L	0.00731	2.5845 mg/L	0.00731	0.28%
QC value within limits for Ni 231.604		Recovery = 103.38%				
Pb 220.353†	1962.1	0.50949 mg/L	0.006992	0.50949 mg/L	0.006992	1.37%
QC value within limits for Pb 220.353		Recovery = 101.90%				
Sb 206.836†	538.8	0.49234 mg/L	0.005207	0.49234 mg/L	0.005207	1.06%
QC value within limits for Sb 206.836		Recovery = 98.47%				
Se 196.026†	229.6	0.50038 mg/L	0.009845	0.50038 mg/L	0.009845	1.97%
QC value within limits for Se 196.026		Recovery = 100.08%				
Tl 190.801†	491.5	0.47767 mg/L	0.001389	0.47767 mg/L	0.001389	0.29%
QC value within limits for Tl 190.801		Recovery = 95.53%				
V 292.402†	214264.2	2.5427 mg/L	0.00809	2.5427 mg/L	0.00809	0.32%
QC value within limits for V 292.402		Recovery = 101.71%				
Zn 206.200†	30014.8	2.6119 mg/L	0.00826	2.6119 mg/L	0.00826	0.32%
QC value within limits for Zn 206.200		Recovery = 104.47%				
Cd 226.502†	6811.6	0.24925 mg/L	0.003119	0.24925 mg/L	0.003119	1.25%
QC value within limits for Cd 226.502		Recovery = 99.70%				
Ti 334.940†	239305.0	0.52913 mg/L	0.000907	0.52913 mg/L	0.000907	0.17%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Ca 227.546†	3756.9	25.093 mg/L	0.3271	25.093 mg/L	0.3271	1.30%
QC value within limits for Ca 227.546		Recovery = 100.37%				
Na 589.592	112735.3	24.568 mg/L	0.1779	24.568 mg/L	0.1779	0.72%
QC value within limits for Na 589.592		Recovery = 98.27%				
K 766.490	30860.1	24.881 mg/L	0.1278	24.881 mg/L	0.1278	0.51%

QC value within limits for K 766.490 Recovery = 99.52%
All analyte(s) passed QC.

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Sequence No.: 33                               Autosampler Location: 4
Sample ID: CCB                               Date Collected: 5/21/2012 12:29:43 PM
Analyst:                                       Data Type: Reprocessed on 5/22/2012 7:13:58 AM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
Dilution:                                     Sample Prep Vol:
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Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	791544.2	96.502 %		0.4466			0.46%
Lu 261.542	676323.2	96.94 %		0.359			0.37%
Ag 328.068†	36.1	0.00022 mg/L		0.000074	0.00022 mg/L	0.000074	33.96%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	444.0	0.02267 mg/L		0.005147	0.02267 mg/L	0.005147	22.70%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	4.0	0.00572 mg/L		0.003940	0.00572 mg/L	0.003940	68.94%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	95.0	0.00174 mg/L		0.000506	0.00174 mg/L	0.000506	29.00%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	89.8	0.00004 mg/L		0.000013	0.00004 mg/L	0.000013	36.88%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	13.5	0.00053 mg/L		0.000231	0.00053 mg/L	0.000231	43.63%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	7.6	0.00015 mg/L		0.000127	0.00015 mg/L	0.000127	87.22%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	112.1	0.00062 mg/L		0.000376	0.00062 mg/L	0.000376	60.94%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	56.6	0.00252 mg/L		0.000608	0.00252 mg/L	0.000608	24.10%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	124.4	0.00770 mg/L		0.005708	0.00770 mg/L	0.005708	74.11%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	237.3	0.00044 mg/L		0.000122	0.00044 mg/L	0.000122	27.95%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	8.0	0.00037 mg/L		0.000306	0.00037 mg/L	0.000306	82.76%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	2.6	0.00069 mg/L		0.000078	0.00069 mg/L	0.000078	11.40%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	10.6	0.00997 mg/L		0.001182	0.00997 mg/L	0.001182	11.85%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.1	0.00670 mg/L		0.004373	0.00670 mg/L	0.004373	65.23%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801†	3.9	0.00393 mg/L		0.001163	0.00393 mg/L	0.001163	29.58%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	40.8	0.00048 mg/L		0.000249	0.00048 mg/L	0.000249	51.44%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	11.5	0.00100 mg/L		0.000358	0.00100 mg/L	0.000358	35.69%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	-0.5	-0.00002 mg/L		0.000193	-0.00002 mg/L	0.000193	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	86.9	0.00019 mg/L		0.000265	0.00019 mg/L	0.000265	137.84%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	3.6	0.02498 mg/L		0.047499	0.02498 mg/L	0.047499	190.11%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592	-205.5	-0.04479 mg/L		0.007122	-0.04479 mg/L	0.007122	15.90%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	28.5	0.02295 mg/L		0.049939	0.02295 mg/L	0.049939	217.60%
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 34                               Autosampler Location: 56
Sample ID: L1014-01CPDS~SBM-SW2             Date Collected: 5/21/2012 12:33:22 PM
Analyst:                                       Data Type: Reprocessed on 5/22/2012 7:13:58 AM
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:                             Initial Sample Vol:
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Dilution:

Sample Prep Vol:

Mean Data: L1014-01CPDS~SBM-SW2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	756695.9	92.253	%	0.8220			0.89%
Lu 261.542	654436.0	93.80	%	1.107			1.18%
Ag 328.068†	198484.7	1.2041	mg/L	0.00442	1.2041 mg/L	0.00442	0.37%
Al 308.215†	189753.6	9.6728	mg/L	0.03172	9.6728 mg/L	0.03172	0.33%
As 188.979†	317.6	0.46506	mg/L	0.002796	0.46506 mg/L	0.002796	0.60%
Ba 233.527†	534232.9	9.8035	mg/L	0.03344	9.8035 mg/L	0.03344	0.34%
Be 313.107†	605702.3	0.24205	mg/L	0.000824	0.24205 mg/L	0.000824	0.34%
Co 228.616†	60505.8	2.3789	mg/L	0.00735	2.3789 mg/L	0.00735	0.31%
Cr 267.716†	49751.6	0.95093	mg/L	0.002752	0.95093 mg/L	0.002752	0.29%
Cu 324.752†	216672.2	1.1948	mg/L	0.00331	1.1948 mg/L	0.00331	0.28%
Fe 273.955†	129544.4	5.7769	mg/L	0.02927	5.7769 mg/L	0.02927	0.51%
Mg 279.077†	472036.5	29.231	mg/L	0.1547	29.231 mg/L	0.1547	0.53%
Mn 257.610†	1394517.2	2.5666	mg/L	0.00810	2.5666 mg/L	0.00810	0.32%
Ni 231.604†	51322.3	2.3859	mg/L	0.01051	2.3859 mg/L	0.01051	0.44%
Pb 220.353†	1763.4	0.45749	mg/L	0.005864	0.45749 mg/L	0.005864	1.28%
Sb 206.836†	491.3	0.44694	mg/L	0.007329	0.44694 mg/L	0.007329	1.64%
Se 196.026†	209.5	0.45663	mg/L	0.008356	0.45663 mg/L	0.008356	1.83%
Tl 190.801†	447.4	0.43490	mg/L	0.007713	0.43490 mg/L	0.007713	1.77%
V 292.402†	200751.7	2.3831	mg/L	0.00336	2.3831 mg/L	0.00336	0.14%
Zn 206.200†	27493.8	2.3923	mg/L	0.01882	2.3923 mg/L	0.01882	0.79%
Cd 226.502†	6133.0	0.22421	mg/L	0.003258	0.22421 mg/L	0.003258	1.45%
Ti 334.940†	553.2	0.00173	mg/L	0.000082	0.00173 mg/L	0.000082	4.75%
Ca 227.546†	10722.0	73.304	mg/L	0.9133	73.304 mg/L	0.9133	1.25%
Na 589.592	137504.8	29.966	mg/L	0.0288	29.966 mg/L	0.0288	0.10%
K 766.490	30813.5	24.843	mg/L	0.0268	24.843 mg/L	0.0268	0.11%

Sequence No.: 35

Sample ID: L1014-02C~SWEB050912

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 5/21/2012 12:36:57 PM

Data Type: Reprocessed on 5/22/2012 7:13:59 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-02C~SWEB050912

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	786295.4	95.862	%	0.4618			0.48%
Lu 261.542	673711.4	96.57	%	0.379			0.39%
Ag 328.068†	85.9	0.00052	mg/L	0.000460	0.00052 mg/L	0.000460	88.61%
Al 308.215†	290.9	0.01486	mg/L	0.005112	0.01486 mg/L	0.005112	34.41%
As 188.979†	3.4	0.00496	mg/L	0.001947	0.00496 mg/L	0.001947	39.24%
Ba 233.527†	76.9	0.00141	mg/L	0.000341	0.00141 mg/L	0.000341	24.17%
Be 313.107†	42.1	0.00002	mg/L	0.000031	0.00002 mg/L	0.000031	182.63%
Co 228.616†	8.4	0.00033	mg/L	0.000187	0.00033 mg/L	0.000187	56.46%
Cr 267.716†	20.2	0.00039	mg/L	0.000033	0.00039 mg/L	0.000033	8.64%
Cu 324.752†	187.0	0.00103	mg/L	0.000176	0.00103 mg/L	0.000176	17.05%
Fe 273.955†	1104.8	0.04924	mg/L	0.000084	0.04924 mg/L	0.000084	0.17%
Mg 279.077†	79.8	0.00494	mg/L	0.005843	0.00494 mg/L	0.005843	118.22%
Mn 257.610†	540.2	0.00099	mg/L	0.000091	0.00099 mg/L	0.000091	9.14%
Ni 231.604†	17.2	0.00080	mg/L	0.000162	0.00080 mg/L	0.000162	20.28%
Pb 220.353†	1.6	0.00041	mg/L	0.002500	0.00041 mg/L	0.002500	609.62%
Sb 206.836†	5.3	0.00500	mg/L	0.007392	0.00500 mg/L	0.007392	147.78%
Se 196.026†	4.3	0.00937	mg/L	0.002348	0.00937 mg/L	0.002348	25.06%
Tl 190.801†	2.8	0.00288	mg/L	0.004257	0.00288 mg/L	0.004257	147.81%
V 292.402†	22.2	0.00026	mg/L	0.000164	0.00026 mg/L	0.000164	61.98%
Zn 206.200†	15.2	0.00133	mg/L	0.000199	0.00133 mg/L	0.000199	14.98%
Cd 226.502†	-2.0	-0.00008	mg/L	0.000054	-0.00008 mg/L	0.000054	70.57%
Ti 334.940†	40.9	0.00009	mg/L	0.000058	0.00009 mg/L	0.000058	64.80%
Ca 227.546†	2.2	0.01503	mg/L	0.052017	0.01503 mg/L	0.052017	346.09%
Na 589.592	-84.2	-0.01835	mg/L	0.009429	-0.01835 mg/L	0.009429	51.39%
K 766.490	-55.1	-0.04445	mg/L	0.045535	-0.04445 mg/L	0.045535	102.43%

Sequence No.: 36

Autosampler Location: 58

Sample ID: L1014-03C~SEDEB050912

Date Collected: 5/21/2012 12:40:41 PM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:14:00 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1014-03C~SEDEB050912

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	796916.4	97.157	%	0.4331			0.45%
Lu 261.542	681800.0	97.73	%	0.395			0.40%
Ag 328.068†	-12.0	-0.00007	mg/L	0.000325	-0.00007 mg/L	0.000325	444.60%
Al 308.215†	264.5	0.01351	mg/L	0.002873	0.01351 mg/L	0.002873	21.27%
As 188.979†	1.6	0.00226	mg/L	0.006093	0.00226 mg/L	0.006093	269.89%
Ba 233.527†	18.0	0.00033	mg/L	0.000020	0.00033 mg/L	0.000020	6.12%
Be 313.107†	30.3	0.00001	mg/L	0.000017	0.00001 mg/L	0.000017	139.80%
Co 228.616†	5.0	0.00019	mg/L	0.000198	0.00019 mg/L	0.000198	101.71%
Cr 267.716†	12.3	0.00024	mg/L	0.000083	0.00024 mg/L	0.000083	35.42%
Cu 324.752†	381.1	0.00210	mg/L	0.000058	0.00210 mg/L	0.000058	2.78%
Fe 273.955†	111.1	0.00495	mg/L	0.000276	0.00495 mg/L	0.000276	5.56%
Mg 279.077†	64.1	0.00397	mg/L	0.003176	0.00397 mg/L	0.003176	80.01%
Mn 257.610†	436.4	0.00080	mg/L	0.000012	0.00080 mg/L	0.000012	1.50%
Ni 231.604†	-1.3	-0.00006	mg/L	0.000265	-0.00006 mg/L	0.000265	444.28%
Pb 220.353†	2.1	0.00054	mg/L	0.001114	0.00054 mg/L	0.001114	206.25%
Sb 206.836†	4.7	0.00447	mg/L	0.001524	0.00447 mg/L	0.001524	34.12%
Se 196.026†	-0.7	-0.00141	mg/L	0.000848	-0.00141 mg/L	0.000848	60.16%
Tl 190.801†	0.5	0.00054	mg/L	0.004005	0.00054 mg/L	0.004005	744.35%
V 292.402†	-0.6	-0.00001	mg/L	0.000308	-0.00001 mg/L	0.000308	>999.9%
Zn 206.200†	13.5	0.00117	mg/L	0.000239	0.00117 mg/L	0.000239	20.43%
Cd 226.502†	1.7	0.00006	mg/L	0.000121	0.00006 mg/L	0.000121	199.75%
Ti 334.940†	19.6	0.00004	mg/L	0.000086	0.00004 mg/L	0.000086	198.78%
Ca 227.546†	1.5	0.01061	mg/L	0.158398	0.01061 mg/L	0.158398	>999.9%
Na 589.592	-384.6	-0.08383	mg/L	0.002022	-0.08383 mg/L	0.002022	2.41%
K 766.490	-89.1	-0.07183	mg/L	0.055104	-0.07183 mg/L	0.055104	76.71%

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Autosampler Location: 59

Sequence No.: 37

Date Collected: 5/21/2012 12:44:20 PM

Sample ID: L1014-04C~SBM-SW3

Data Type: Reprocessed on 5/22/2012 7:14:01 AM

Analyst:

Initial Sample Vol:

Logged In Analyst (Original) : mitOptima3

Sample Prep Vol:

Initial Sample Wt:

Dilution:

Mean Data: L1014-04C~SBM-SW3

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	762485.0	92.959	%	1.0690			1.15%
Lu 261.542	548605.0	78.63	%	1.227			1.56%
Ag 328.068†	-1072.1	-0.01001	mg/L	0.000576	-0.01001 mg/L	0.000576	5.76%
Al 308.215†	3743736.9	191.12	mg/L	4.470	191.12 mg/L	4.470	2.34%
As 188.979†	106.0	0.20105	mg/L	0.007669	0.20105 mg/L	0.007669	3.81%
Ba 233.527†	237264.8	4.3530	mg/L	0.09974	4.3530 mg/L	0.09974	2.29%
Be 313.107†	29183.4	0.01303	mg/L	0.000304	0.01303 mg/L	0.000304	2.33%
Co 228.616†	4372.2	0.15454	mg/L	0.003832	0.15454 mg/L	0.003832	2.48%
Cr 267.716†	12645.6	0.23733	mg/L	0.006030	0.23733 mg/L	0.006030	2.54%
Cu 324.752†	65103.7	0.41852	mg/L	0.008238	0.41852 mg/L	0.008238	1.97%
Fe 273.955†	14550409.7	648.42	mg/L	8.422	648.42 mg/L	8.422	1.30%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	867026.2	53.695	mg/L	1.2832	53.695 mg/L	1.2832	2.39%
Mn 257.610†	11032457.5	20.308	mg/L	0.2693	20.308 mg/L	0.2693	1.33%
Ni 231.604†	5828.4	0.27033	mg/L	0.006005	0.27033 mg/L	0.006005	2.22%
Pb 220.353†	4287.0	1.1167	mg/L	0.02552	1.1167 mg/L	0.02552	2.29%
Sb 206.836†	47.0	0.01625	mg/L	0.006833	0.01625 mg/L	0.006833	42.04%
Se 196.026†	-127.5	-0.02224	mg/L	0.001137	-0.02224 mg/L	0.001137	5.11%
Tl 190.801†	-50.0	0.02305	mg/L	0.005617	0.02305 mg/L	0.005617	24.37%
V 292.402†	34919.6	0.43354	mg/L	0.009763	0.43354 mg/L	0.009763	2.25%
Zn 206.200†	20799.1	1.8479	mg/L	0.03993	1.8479 mg/L	0.03993	2.16%
Cd 226.502†	2594.9	0.04546	mg/L	0.002060	0.04546 mg/L	0.002060	4.53%

Ti 334.940†	333563.8	0.74266 mg/L	0.010981	0.74266 mg/L	0.010981	1.48%
Ca 227.546†	49786.5	338.86 mg/L	8.265	338.86 mg/L	8.265	2.44%
Na 589.592	886452.1	193.18 mg/L	1.910	193.18 mg/L	1.910	0.99%
K 766.490	14966.5	12.067 mg/L	0.0907	12.067 mg/L	0.0907	0.75%

Sequence No.: 38

Autosampler Location: 60

Sample ID: L1014-05C-SWFD050912

Date Collected: 5/21/2012 12:48:15 PM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:14:01 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1014-05C-SWFD050912

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	783917.2	95.572 %		0.4386			0.46%
Lu 261.542	603652.3	86.53 %		0.463			0.54%
Ag 328.068†	-564.3	-0.00515 mg/L		0.000461	-0.00515 mg/L	0.000461	8.95%
Al 308.215†	2197352.4	112.18 mg/L		0.142	112.18 mg/L	0.142	0.13%
As 188.979†	53.8	0.10454 mg/L		0.004093	0.10454 mg/L	0.004093	3.92%
Ba 233.527†	132705.2	2.4347 mg/L		0.04053	2.4347 mg/L	0.04053	1.66%
Be 313.107†	15017.8	0.00700 mg/L		0.000106	0.00700 mg/L	0.000106	1.52%
Co 228.616†	2370.6	0.08331 mg/L		0.000149	0.08331 mg/L	0.000149	0.18%
Cr 267.716†	6738.3	0.12653 mg/L		0.002106	0.12653 mg/L	0.002106	1.66%
Cu 324.752†	34940.7	0.22558 mg/L		0.003312	0.22558 mg/L	0.003312	1.47%
Fe 273.955†	8041443.6	358.36 mg/L		0.338	358.36 mg/L	0.338	0.09%
Mg 279.077†	558320.0	34.577 mg/L		0.0082	34.577 mg/L	0.0082	0.02%
Mn 257.610†	5599155.6	10.307 mg/L		0.0118	10.307 mg/L	0.0118	0.11%
Ni 231.604†	3228.3	0.14964 mg/L		0.000239	0.14964 mg/L	0.000239	0.16%
Pb 220.353†	2633.9	0.68633 mg/L		0.002304	0.68633 mg/L	0.002304	0.34%
Sb 206.836†	25.8	0.00895 mg/L		0.003770	0.00895 mg/L	0.003770	42.11%
Se 196.026†	-66.6	-0.00381 mg/L		0.011109	-0.00381 mg/L	0.011109	291.30%
Tl 190.801†	-21.5	0.01900 mg/L		0.011261	0.01900 mg/L	0.011261	59.27%
V 292.402†	19874.2	0.24624 mg/L		0.004537	0.24624 mg/L	0.004537	1.84%
Zn 206.200†	12106.3	1.0741 mg/L		0.01809	1.0741 mg/L	0.01809	1.68%
Cd 226.502†	1329.0	0.02127 mg/L		0.000061	0.02127 mg/L	0.000061	0.29%
Ti 334.940†	243012.1	0.54021 mg/L		0.012633	0.54021 mg/L	0.012633	2.34%
Ca 227.546†	28273.1	192.52 mg/L		4.058	192.52 mg/L	4.058	2.11%
Na 589.592	910265.7	198.37 mg/L		0.770	198.37 mg/L	0.770	0.39%
K 766.490	11171.5	9.0070 mg/L		0.09119	9.0070 mg/L	0.09119	1.01%

Sequence No.: 39

Autosampler Location: 61

Sample ID: L1014-06C-SBM-SW1

Date Collected: 5/21/2012 12:52:06 PM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:14:02 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1014-06C-SBM-SW1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	791000.5	96.435 %		0.5115			0.53%
Lu 261.542	670271.7	96.07 %		0.337			0.35%
Ag 328.068†	78.0	-0.00075 mg/L		0.000176	-0.00075 mg/L	0.000176	23.60%
Al 308.215†	145362.3	7.3993 mg/L		0.03477	7.3993 mg/L	0.03477	0.47%
As 188.979†	6.5	0.01062 mg/L		0.006745	0.01062 mg/L	0.006745	63.51%
Ba 233.527†	18279.3	0.33533 mg/L		0.002466	0.33533 mg/L	0.002466	0.74%
Be 313.107†	125.4	0.00021 mg/L		0.000020	0.00021 mg/L	0.000020	9.68%
Co 228.616†	192.5	0.00683 mg/L		0.000132	0.00683 mg/L	0.000132	1.93%
Cr 267.716†	460.8	0.00751 mg/L		0.000103	0.00751 mg/L	0.000103	1.37%
Cu 324.752†	2519.6	0.01593 mg/L		0.000377	0.01593 mg/L	0.000377	2.37%
Fe 273.955†	499423.0	22.256 mg/L		0.0739	22.256 mg/L	0.0739	0.33%
Mg 279.077†	282274.4	17.481 mg/L		0.1199	17.481 mg/L	0.1199	0.69%
Mn 257.610†	3166193.7	5.8282 mg/L		0.01034	5.8282 mg/L	0.01034	0.18%
Ni 231.604†	267.5	0.01231 mg/L		0.000539	0.01231 mg/L	0.000539	4.38%
Pb 220.353†	81.7	0.02187 mg/L		0.000765	0.02187 mg/L	0.000765	3.50%
Sb 206.836†	6.5	0.00510 mg/L		0.001830	0.00510 mg/L	0.001830	35.87%

Se 196.026†	-0.1	0.00861 mg/L	0.004990	0.00861 mg/L	0.004990	57.97%
Tl 190.801†	5.2	0.01018 mg/L	0.003556	0.01018 mg/L	0.003556	34.92%
V 292.402†	920.4	0.01150 mg/L	0.000031	0.01150 mg/L	0.000031	0.27%
Zn 206.200†	1046.3	0.09440 mg/L	0.000170	0.09440 mg/L	0.000170	0.18%
Cd 226.502†	73.4	0.00082 mg/L	0.000136	0.00082 mg/L	0.000136	16.66%
Ti 334.940†	39171.9	0.08766 mg/L	0.001108	0.08766 mg/L	0.001108	1.26%
Ca 227.546†	11404.2	78.616 mg/L	0.2307	78.616 mg/L	0.2307	0.29%
Na 589.592	62614.1	13.646 mg/L	0.1839	13.646 mg/L	0.1839	1.35%
K 766.490	18783.5	15.144 mg/L	0.1961	15.144 mg/L	0.1961	1.29%

Sequence No.: 40

Sample ID: L1014-08C~SSEB050912

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 5/21/2012 12:55:47 PM

Data Type: Reprocessed on 5/22/2012 7:14:03 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-08C~SSEB050912

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	799861.9	97.516 %		0.1956			0.20%
Lu 261.542	685917.3	98.32 %		0.292			0.30%
Ag 328.068†	-25.4	-0.00015 mg/L		0.000623	-0.00015 mg/L	0.000623	403.13%
Al 308.215†	1328.8	0.06786 mg/L		0.003210	0.06786 mg/L	0.003210	4.73%
As 188.979†	2.0	0.00283 mg/L		0.004652	0.00283 mg/L	0.004652	164.52%
Ba 233.527†	51.6	0.00095 mg/L		0.000052	0.00095 mg/L	0.000052	5.49%
Be 313.107†	-49.3	-0.00001 mg/L		0.000024	-0.00001 mg/L	0.000024	207.77%
Co 228.616†	5.6	0.00021 mg/L		0.000164	0.00021 mg/L	0.000164	78.51%
Cr 267.716†	18.5	0.00035 mg/L		0.000017	0.00035 mg/L	0.000017	4.69%
Cu 324.752†	329.1	0.00182 mg/L		0.000389	0.00182 mg/L	0.000389	21.35%
Fe 273.955†	2021.3	0.09008 mg/L		0.004864	0.09008 mg/L	0.004864	5.40%
Mg 279.077†	350.7	0.02172 mg/L		0.002477	0.02172 mg/L	0.002477	11.41%
Mn 257.610†	2094.9	0.00386 mg/L		0.000522	0.00386 mg/L	0.000522	13.53%
Ni 231.604†	6.2	0.00028 mg/L		0.000344	0.00028 mg/L	0.000344	120.88%
Pb 220.353†	-2.6	-0.00065 mg/L		0.000643	-0.00065 mg/L	0.000643	98.37%
Sb 206.836†	3.4	0.00317 mg/L		0.004346	0.00317 mg/L	0.004346	137.25%
Se 196.026†	1.6	0.00353 mg/L		0.004514	0.00353 mg/L	0.004514	127.83%
Tl 190.801†	-0.1	-0.00014 mg/L		0.000165	-0.00014 mg/L	0.000165	120.65%
V 292.402†	3.0	0.00003 mg/L		0.000180	0.00003 mg/L	0.000180	544.31%
Zn 206.200†	85.7	0.00745 mg/L		0.000084	0.00745 mg/L	0.000084	1.12%
Cd 226.502†	4.8	0.00017 mg/L		0.000044	0.00017 mg/L	0.000044	26.32%
Ti 334.940†	1940.3	0.00429 mg/L		0.006055	0.00429 mg/L	0.006055	141.07%
Ca 227.546†	3.0	0.02000 mg/L		0.038162	0.02000 mg/L	0.038162	190.86%
Na 589.592	60.4	0.01316 mg/L		0.008876	0.01316 mg/L	0.008876	67.45%
K 766.490	-45.9	-0.03701 mg/L		0.103951	-0.03701 mg/L	0.103951	280.91%

Sequence No.: 41

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/21/2012 12:59:26 PM

Data Type: Reprocessed on 5/22/2012 7:14:03 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	788023.5	96.072 %		1.0022			1.04%
Lu 261.542	680277.0	97.51 %		1.053			1.08%
Ag 328.068†	215285.8	1.3060 mg/L		0.00933	1.3060 mg/L	0.00933	0.71%
QC value within limits for Ag 328.068 Recovery = 104.48%							
Al 308.215†	195950.0	9.9984 mg/L		0.07681	9.9984 mg/L	0.07681	0.77%
QC value within limits for Al 308.215 Recovery = 99.98%							
As 188.979†	335.6	0.49058 mg/L		0.006503	0.49058 mg/L	0.006503	1.33%
QC value within limits for As 188.979 Recovery = 98.12%							
Ba 233.527†	569084.0	10.443 mg/L		0.0898	10.443 mg/L	0.0898	0.86%
QC value within limits for Ba 233.527 Recovery = 104.43%							
Be 313.107†	622280.8	0.24964 mg/L		0.001885	0.24964 mg/L	0.001885	0.76%

QC value within limits for Be 313.107 Recovery = 99.86%
 Co 228.616† 65441.1 2.5717 mg/L 0.03463 2.5717 mg/L 0.03463 1.35%
 QC value within limits for Co 228.616 Recovery = 102.87%
 Cr 267.716† 51036.8 0.97557 mg/L 0.014580 0.97557 mg/L 0.014580 1.49%
 QC value within limits for Cr 267.716 Recovery = 97.56%
 Cu 324.752† 229987.9 1.2681 mg/L 0.01086 1.2681 mg/L 0.01086 0.86%
 QC value within limits for Cu 324.752 Recovery = 101.45%
 Fe 273.955† 111625.5 4.9786 mg/L 0.07035 4.9786 mg/L 0.07035 1.41%
 QC value within limits for Fe 273.955 Recovery = 99.57%
 Mg 279.077† 412205.6 25.526 mg/L 0.1869 25.526 mg/L 0.1869 0.73%
 QC value within limits for Mg 279.077 Recovery = 102.10%
 Mn 257.610† 1382520.8 2.5446 mg/L 0.01848 2.5446 mg/L 0.01848 0.73%
 QC value within limits for Mn 257.610 Recovery = 101.78%
 Ni 231.604† 54500.5 2.5333 mg/L 0.03415 2.5333 mg/L 0.03415 1.35%
 QC value within limits for Ni 231.604 Recovery = 101.33%
 Pb 220.353† 1885.7 0.48969 mg/L 0.007599 0.48969 mg/L 0.007599 1.55%
 QC value within limits for Pb 220.353 Recovery = 97.94%
 Sb 206.836† 526.8 0.48142 mg/L 0.007780 0.48142 mg/L 0.007780 1.62%
 QC value within limits for Sb 206.836 Recovery = 96.28%
 Se 196.026† 228.1 0.49702 mg/L 0.016810 0.49702 mg/L 0.016810 3.38%
 QC value within limits for Se 196.026 Recovery = 99.40%
 Tl 190.801† 478.4 0.46456 mg/L 0.004543 0.46456 mg/L 0.004543 0.98%
 QC value within limits for Tl 190.801 Recovery = 92.91%
 V 292.402† 213641.4 2.5353 mg/L 0.01529 2.5353 mg/L 0.01529 0.60%
 QC value within limits for V 292.402 Recovery = 101.41%
 Zn 206.200† 29565.9 2.5728 mg/L 0.04010 2.5728 mg/L 0.04010 1.56%
 QC value within limits for Zn 206.200 Recovery = 102.91%
 Cd 226.502† 6740.9 0.24667 mg/L 0.003470 0.24667 mg/L 0.003470 1.41%
 QC value within limits for Cd 226.502 Recovery = 98.67%
 Ti 334.940† 237318.7 0.52472 mg/L 0.005567 0.52472 mg/L 0.005567 1.06%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 3592.5 23.972 mg/L 0.3618 23.972 mg/L 0.3618 1.51%
 QC value within limits for Ca 227.546 Recovery = 95.89%
 Na 589.592 115919.4 25.262 mg/L 0.3426 25.262 mg/L 0.3426 1.36%
 QC value within limits for Na 589.592 Recovery = 101.05%
 K 766.490 31372.2 25.294 mg/L 0.3946 25.294 mg/L 0.3946 1.56%
 QC value within limits for K 766.490 Recovery = 101.17%
 All analyte(s) passed QC.

Sequence No.: 42

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/21/2012 1:03:06 PM

Data Type: Reprocessed on 5/22/2012 7:14:04 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	814194.4	99.263 %	0.1704			0.17%
Lu 261.542	698172.7	100.1 %	0.32			0.32%
Ag 328.068†	72.9	0.00044 mg/L	0.000309	0.00044 mg/L	0.000309	69.88%
QC value within limits for Ag 328.068						Recovery = Not calculated
Al 308.215†	184.0	0.00939 mg/L	0.005046	0.00939 mg/L	0.005046	53.74%
QC value within limits for Al 308.215						Recovery = Not calculated
As 188.979†	5.0	0.00726 mg/L	0.005395	0.00726 mg/L	0.005395	74.35%
QC value within limits for As 188.979						Recovery = Not calculated
Ba 233.527†	178.6	0.00328 mg/L	0.000415	0.00328 mg/L	0.000415	12.66%
QC value within limits for Ba 233.527						Recovery = Not calculated
Be 313.107†	233.7	0.00009 mg/L	0.000022	0.00009 mg/L	0.000022	23.84%
QC value within limits for Be 313.107						Recovery = Not calculated
Co 228.616†	25.5	0.00100 mg/L	0.000054	0.00100 mg/L	0.000054	5.41%
QC value within limits for Co 228.616						Recovery = Not calculated
Cr 267.716†	17.6	0.00034 mg/L	0.000142	0.00034 mg/L	0.000142	42.31%
QC value within limits for Cr 267.716						Recovery = Not calculated
Cu 324.752†	43.5	0.00024 mg/L	0.000148	0.00024 mg/L	0.000148	61.64%
QC value within limits for Cu 324.752						Recovery = Not calculated
Fe 273.955†	191.0	0.00851 mg/L	0.001495	0.00851 mg/L	0.001495	17.56%
QC value within limits for Fe 273.955						Recovery = Not calculated

Mg 279.077† 201.0 0.01245 mg/L 0.003338 0.01245 mg/L 0.003338 26.82%
 QC value within limits for Mg 279.077 Recovery = Not calculated
 Mn 257.610† 639.4 0.00118 mg/L 0.000288 0.00118 mg/L 0.000288 24.50%
 QC value within limits for Mn 257.610 Recovery = Not calculated
 Ni 231.604† 16.6 0.00077 mg/L 0.000277 0.00077 mg/L 0.000277 35.83%
 QC value within limits for Ni 231.604 Recovery = Not calculated
 Pb 220.353† 4.2 0.00108 mg/L 0.000898 0.00108 mg/L 0.000898 83.36%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 Sb 206.836† 7.9 0.00742 mg/L 0.002166 0.00742 mg/L 0.002166 29.21%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026† 0.0 0.00010 mg/L 0.007055 0.00010 mg/L 0.007055 >999.9%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Tl 190.801† 4.8 0.00491 mg/L 0.002847 0.00491 mg/L 0.002847 57.93%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 292.402† 91.1 0.00108 mg/L 0.000276 0.00108 mg/L 0.000276 25.55%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200† 15.2 0.00133 mg/L 0.000387 0.00133 mg/L 0.000387 29.16%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502† 2.2 0.00008 mg/L 0.000210 0.00008 mg/L 0.000210 260.15%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† 104.3 0.00023 mg/L 0.000081 0.00023 mg/L 0.000081 35.09%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 5.3 0.03623 mg/L 0.123913 0.03623 mg/L 0.123913 341.98%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 -3.9 -0.00084 mg/L 0.042030 -0.00084 mg/L 0.042030 >999.9%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 55.0 0.04435 mg/L 0.050282 0.04435 mg/L 0.050282 113.37%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 43

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/21/2012 1:06:59 PM

Data Type: Reprocessed on 5/22/2012 7:14:05 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	768500.7	93.692 %	0.4595			0.49%
Lu 261.542	663628.4	95.12 %	0.291			0.31%
Ag 328.068†	216623.2	1.3141 mg/L	0.00337	1.3141 mg/L	0.00337	0.26%
QC value within limits for Ag 328.068			105.13%			
Al 308.215†	197162.2	10.060 mg/L	0.0246	10.060 mg/L	0.0246	0.24%
QC value within limits for Al 308.215			100.60%			
As 188.979†	336.0	0.49128 mg/L	0.001060	0.49128 mg/L	0.001060	0.22%
QC value within limits for As 188.979			98.26%			
Ba 233.527†	572573.1	10.507 mg/L	0.0047	10.507 mg/L	0.0047	0.04%
QC value within limits for Ba 233.527			105.07%			
Be 313.107†	626581.9	0.25137 mg/L	0.000087	0.25137 mg/L	0.000087	0.03%
QC value within limits for Be 313.107			100.55%			
Co 228.616†	66319.0	2.6062 mg/L	0.01310	2.6062 mg/L	0.01310	0.50%
QC value within limits for Co 228.616			104.25%			
Cr 267.716†	51650.8	0.98730 mg/L	0.001032	0.98730 mg/L	0.001032	0.10%
QC value within limits for Cr 267.716			98.73%			
Cu 324.752†	231741.9	1.2778 mg/L	0.00056	1.2778 mg/L	0.00056	0.04%
QC value within limits for Cu 324.752			102.22%			
Fe 273.955†	113026.2	5.0410 mg/L	0.02151	5.0410 mg/L	0.02151	0.43%
QC value within limits for Fe 273.955			100.82%			
Mg 279.077†	413651.0	25.615 mg/L	0.0117	25.615 mg/L	0.0117	0.05%
QC value within limits for Mg 279.077			102.46%			
Mn 257.610†	1390950.9	2.5601 mg/L	0.00118	2.5601 mg/L	0.00118	0.05%
QC value within limits for Mn 257.610			102.40%			
Ni 231.604†	55246.0	2.5680 mg/L	0.01076	2.5680 mg/L	0.01076	0.42%
QC value within limits for Ni 231.604			102.72%			
Pb 220.353†	1906.5	0.49508 mg/L	0.004341	0.49508 mg/L	0.004341	0.88%
QC value within limits for Pb 220.353			99.02%			
Sb 206.836†	532.7	0.48677 mg/L	0.003249	0.48677 mg/L	0.003249	0.67%

QC value within limits for Sb 206.836 Recovery = 97.35%
 Se 196.026† 223.9 0.48802 mg/L 0.003435 0.48802 mg/L 0.003435 0.70%
 QC value within limits for Se 196.026 Recovery = 97.60%
 Tl 190.801† 479.4 0.46540 mg/L 0.003241 0.46540 mg/L 0.003241 0.70%
 QC value within limits for Tl 190.801 Recovery = 93.08%
 V 292.402† 214950.8 2.5508 mg/L 0.00411 2.5508 mg/L 0.00411 0.16%
 QC value within limits for V 292.402 Recovery = 102.03%
 Zn 206.200† 30023.9 2.6126 mg/L 0.01315 2.6126 mg/L 0.01315 0.50%
 QC value within limits for Zn 206.200 Recovery = 104.50%
 Cd 226.502† 6816.0 0.24941 mg/L 0.000603 0.24941 mg/L 0.000603 0.24%
 QC value within limits for Cd 226.502 Recovery = 99.76%
 Ti 334.940† 239233.5 0.52896 mg/L 0.001650 0.52896 mg/L 0.001650 0.31%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 3629.5 24.217 mg/L 0.0191 24.217 mg/L 0.0191 0.08%
 QC value within limits for Ca 227.546 Recovery = 96.87%
 Na 589.592 113798.2 24.800 mg/L 0.1073 24.800 mg/L 0.1073 0.43%
 QC value within limits for Na 589.592 Recovery = 99.20%
 K 766.490 30807.5 24.838 mg/L 0.0595 24.838 mg/L 0.0595 0.24%
 QC value within limits for K 766.490 Recovery = 99.35%
 All analyte(s) passed QC.

Sequence No.: 44

Autosampler Location: 4

Sample ID: CCB

Date Collected: 5/21/2012 1:10:39 PM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:14:05 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	796913.7	97.156 %	1.0654			1.10%
Lu 261.542	683147.5	97.92 %	1.094			1.12%
Ag 328.068†	-22.7	-0.00014 mg/L	0.000283	-0.00014 mg/L	0.000283	206.84%
QC value within limits for Ag 328.068		Recovery =	Not calculated			
Al 308.215†	361.5	0.01847 mg/L	0.009512	0.01847 mg/L	0.009512	51.50%
QC value within limits for Al 308.215		Recovery =	Not calculated			
As 188.979†	1.9	0.00267 mg/L	0.002803	0.00267 mg/L	0.002803	105.18%
QC value within limits for As 188.979		Recovery =	Not calculated			
Ba 233.527†	92.4	0.00169 mg/L	0.000351	0.00169 mg/L	0.000351	20.71%
QC value within limits for Ba 233.527		Recovery =	Not calculated			
Be 313.107†	64.9	0.00003 mg/L	0.000029	0.00003 mg/L	0.000029	108.79%
QC value within limits for Be 313.107		Recovery =	Not calculated			
Co 228.616†	15.1	0.00059 mg/L	0.000353	0.00059 mg/L	0.000353	59.42%
QC value within limits for Co 228.616		Recovery =	Not calculated			
Cr 267.716†	9.5	0.00018 mg/L	0.000060	0.00018 mg/L	0.000060	33.11%
QC value within limits for Cr 267.716		Recovery =	Not calculated			
Cu 324.752†	85.7	0.00047 mg/L	0.000059	0.00047 mg/L	0.000059	12.57%
QC value within limits for Cu 324.752		Recovery =	Not calculated			
Fe 273.955†	107.2	0.00478 mg/L	0.000346	0.00478 mg/L	0.000346	7.24%
QC value within limits for Fe 273.955		Recovery =	Not calculated			
Mg 279.077†	95.5	0.00592 mg/L	0.001051	0.00592 mg/L	0.001051	17.77%
QC value within limits for Mg 279.077		Recovery =	Not calculated			
Mn 257.610†	250.7	0.00046 mg/L	0.000093	0.00046 mg/L	0.000093	20.16%
QC value within limits for Mn 257.610		Recovery =	Not calculated			
Ni 231.604†	0.5	0.00002 mg/L	0.000164	0.00002 mg/L	0.000164	781.56%
QC value within limits for Ni 231.604		Recovery =	Not calculated			
Pb 220.353†	2.3	0.00059 mg/L	0.000563	0.00059 mg/L	0.000563	96.10%
QC value within limits for Pb 220.353		Recovery =	Not calculated			
Sb 206.836†	10.6	0.00999 mg/L	0.005886	0.00999 mg/L	0.005886	58.92%
QC value within limits for Sb 206.836		Recovery =	Not calculated			
Se 196.026†	2.0	0.00426 mg/L	0.004402	0.00426 mg/L	0.004402	103.26%
QC value within limits for Se 196.026		Recovery =	Not calculated			
Tl 190.801†	3.4	0.00343 mg/L	0.001751	0.00343 mg/L	0.001751	50.98%
QC value within limits for Tl 190.801		Recovery =	Not calculated			
V 292.402†	29.2	0.00035 mg/L	0.000314	0.00035 mg/L	0.000314	90.65%
QC value within limits for V 292.402		Recovery =	Not calculated			
Zn 206.200†	13.6	0.00119 mg/L	0.000246	0.00119 mg/L	0.000246	20.71%
QC value within limits for Zn 206.200		Recovery =	Not calculated			

Cd 226.502† -0.5 -0.00002 mg/L 0.000064 -0.00002 mg/L 0.000064 327.77%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† 118.2 0.00026 mg/L 0.000081 0.00026 mg/L 0.000081 30.94%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† -5.4 -0.03725 mg/L 0.067267 -0.03725 mg/L 0.067267 180.59%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 -162.9 -0.03549 mg/L 0.017569 -0.03549 mg/L 0.017569 49.50%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 68.3 0.05507 mg/L 0.020277 0.05507 mg/L 0.020277 36.82%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 45

Sample ID: L1032-01D-002-05-12

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 63

Date Collected: 5/21/2012 1:14:18 PM

Data Type: Reprocessed on 5/22/2012 7:14:06 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1032-01D-002-05-12

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Units	Conc.		
Y 360.073	610313.7	74.407	%	0.4929				0.66%
Lu 261.542	522031.8	74.83	%	0.367				0.49%
Ag 328.068†	-129.2	-0.00084	mg/L	0.000525	-0.00084	mg/L	0.000525	62.25%
Al 308.215†	7445.6	0.31392	mg/L	0.007270	0.31392	mg/L	0.007270	2.32%
As 188.979†	10.4	0.01690	mg/L	0.004983	0.01690	mg/L	0.004983	29.48%
Ba 233.527†	5326.6	0.09773	mg/L	0.000915	0.09773	mg/L	0.000915	0.94%
Be 313.107†	-165.2	-0.00007	mg/L	0.000030	-0.00007	mg/L	0.000030	40.39%
Co 228.616†	20.3	0.00080	mg/L	0.000187	0.00080	mg/L	0.000187	23.35%
Cr 267.716†	151.2	-0.00036	mg/L	0.000201	-0.00036	mg/L	0.000201	55.21%
Cu 324.752†	1325.5	0.00733	mg/L	0.000452	0.00733	mg/L	0.000452	6.17%
Fe 273.955†	7379.8	0.32888	mg/L	0.003160	0.32888	mg/L	0.003160	0.96%
Mg 279.077†	7935887.1	491.48	mg/L	0.339	491.48	mg/L	0.339	0.07%
Mn 257.610†	201933.8	0.36681	mg/L	0.002618	0.36681	mg/L	0.002618	0.71%
Ni 231.604†	90.1	0.00209	mg/L	0.000394	0.00209	mg/L	0.000394	18.84%
Pb 220.353†	-5.0	-0.00124	mg/L	0.001151	-0.00124	mg/L	0.001151	93.08%
Sb 206.836†	19.2	0.01308	mg/L	0.003537	0.01308	mg/L	0.003537	27.04%
Se 196.026†	-0.2	-0.00032	mg/L	0.005901	-0.00032	mg/L	0.005901	>999.9%
Tl 190.801†	-7.0	0.01259	mg/L	0.004741	0.01259	mg/L	0.004741	37.65%
V 292.402†	760.9	0.00905	mg/L	0.000066	0.00905	mg/L	0.000066	0.73%
Zn 206.200†	1170.6	0.10181	mg/L	0.001296	0.10181	mg/L	0.001296	1.27%
Cd 226.502†	-10.4	-0.00083	mg/L	0.000159	-0.00083	mg/L	0.000159	19.19%
Ti 334.940†	-1885.1	-0.01037	mg/L	0.000104	-0.01037	mg/L	0.000104	1.00%
Ca 227.546†	23698.8	163.53	mg/L	1.010	163.53	mg/L	1.010	0.62%
Na 589.592	Saturated2							
K 766.490	200102.7	161.33	mg/L	1.834	161.33	mg/L	1.834	1.14%

Sequence No.: 46

Sample ID: L1043-04C-COLUMN2 FLUSH

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 5/21/2012 1:18:00 PM

Data Type: Reprocessed on 5/22/2012 7:14:07 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1043-04C-COLUMN2 FLUSH

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Units	Conc.		
Y 360.073	686097.2	83.646	%	0.8138				0.97%
Lu 261.542	549775.9	78.80	%	0.579				0.73%
Ag 328.068†	-648.6	-0.00329	mg/L	0.000411	-0.00329	mg/L	0.000411	12.50%
Al 308.215†	8665486.7	442.62	mg/L	0.367	442.62	mg/L	0.367	0.08%
As 188.979†	34.7	0.05487	mg/L	0.012197	0.05487	mg/L	0.012197	22.23%
Ba 233.527†	31871.5	0.58518	mg/L	0.007583	0.58518	mg/L	0.007583	1.30%
Be 313.107†	6294.6	0.00339	mg/L	0.000051	0.00339	mg/L	0.000051	1.51%
Co 228.616†	469.7	0.01574	mg/L	0.000367	0.01574	mg/L	0.000367	2.33%
Cr 267.716†	24555.2	0.46934	mg/L	0.004530	0.46934	mg/L	0.004530	0.97%

Cu 324.752†	42291.1	0.23921 mg/L	0.002211	0.23921 mg/L	0.002211	0.92%
Fe 273.955†	1506671.1	67.143 mg/L	0.0854	67.143 mg/L	0.0854	0.13%
Mg 279.077†	83623.9	5.1777 mg/L	0.08862	5.1777 mg/L	0.08862	1.71%
Mn 257.610†	161194.2	0.29667 mg/L	0.003495	0.29667 mg/L	0.003495	1.18%
Ni 231.604†	3507.5	0.16278 mg/L	0.000573	0.16278 mg/L	0.000573	0.35%
Pb 220.353†	702.4	0.22640 mg/L	0.001264	0.22640 mg/L	0.001264	0.56%
Sb 206.836†	38.0	0.01331 mg/L	0.006154	0.01331 mg/L	0.006154	46.23%
Se 196.026†	-11.2	0.00673 mg/L	0.014305	0.00673 mg/L	0.014305	212.46%
Tl 190.801†	-9.3	0.00269 mg/L	0.002751	0.00269 mg/L	0.002751	102.20%
V 292.402†	30763.0	0.36729 mg/L	0.003586	0.36729 mg/L	0.003586	0.98%
Zn 206.200†	3000.4	0.26543 mg/L	0.002708	0.26543 mg/L	0.002708	1.02%
Cd 226.502†	196.2	0.00215 mg/L	0.000198	0.00215 mg/L	0.000198	9.19%
Ti 334.940†	213147.7	0.47152 mg/L	0.006488	0.47152 mg/L	0.006488	1.38%
Ca 227.546†	1442.7	9.4168 mg/L	0.11703	9.4168 mg/L	0.11703	1.24%
Na 589.592	106994.0	23.317 mg/L	0.2663	23.317 mg/L	0.2663	1.14%
K 766.490	7910.8	6.3780 mg/L	0.09925	6.3780 mg/L	0.09925	1.56%

Sequence No.: 47

Sample ID: L1043-05C-COLUMN3 FLUSH

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 5/21/2012 1:21:42 PM

Data Type: Reprocessed on 5/22/2012 7:14:08 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1043-05C-COLUMN3 FLUSH

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	635438.9	77.470	%	0.1823				0.24%
Lu 261.542	543431.0	77.89	%	0.225				0.29%
Ag 328.068†	62.8	0.00054 mg/L		0.000551	0.00054 mg/L		0.000551	102.88%
Al 308.215†	1144745.2	58.472 mg/L		0.2717	58.472 mg/L		0.2717	0.46%
As 188.979†	13.8	0.02090 mg/L		0.001627	0.02090 mg/L		0.001627	7.79%
Ba 233.527†	2428.5	0.04467 mg/L		0.000145	0.04467 mg/L		0.000145	0.33%
Be 313.107†	-121.9	0.00026 mg/L		0.000020	0.00026 mg/L		0.000020	7.69%
Co 228.616†	63.4	0.00185 mg/L		0.000318	0.00185 mg/L		0.000318	17.19%
Cr 267.716†	4614.0	0.08819 mg/L		0.000872	0.08819 mg/L		0.000872	0.99%
Cu 324.752†	4973.8	0.02838 mg/L		0.000322	0.02838 mg/L		0.000322	1.13%
Fe 273.955†	234873.0	10.467 mg/L		0.0595	10.467 mg/L		0.0595	0.57%
Mg 279.077†	22169.5	1.3728 mg/L		0.00656	1.3728 mg/L		0.00656	0.48%
Mn 257.610†	34675.4	0.06382 mg/L		0.000235	0.06382 mg/L		0.000235	0.37%
Ni 231.604†	694.1	0.03217 mg/L		0.000166	0.03217 mg/L		0.000166	0.52%
Pb 220.353†	80.4	0.02678 mg/L		0.000359	0.02678 mg/L		0.000359	1.34%
Sb 206.836†	29.1	0.02421 mg/L		0.006604	0.02421 mg/L		0.006604	27.27%
Se 196.026†	2.1	0.00930 mg/L		0.007888	0.00930 mg/L		0.007888	84.78%
Tl 190.801†	-0.8	0.00080 mg/L		0.005094	0.00080 mg/L		0.005094	639.96%
V 292.402†	7494.2	0.08917 mg/L		0.000591	0.08917 mg/L		0.000591	0.66%
Zn 206.200†	632.9	0.05584 mg/L		0.000574	0.05584 mg/L		0.000574	1.03%
Cd 226.502†	34.4	0.00047 mg/L		0.000099	0.00047 mg/L		0.000099	20.82%
Ti 334.940†	75543.9	0.16712 mg/L		0.001118	0.16712 mg/L		0.001118	0.67%
Ca 227.546†	412.2	2.7604 mg/L		0.07469	2.7604 mg/L		0.07469	2.71%
Na 589.592	1858205.0	404.96 mg/L		2.963	404.96 mg/L		2.963	0.73%
K 766.490	2572.1	2.0738 mg/L		0.08757	2.0738 mg/L		0.08757	4.22%

Sequence No.: 48

Sample ID: L1048-03A-50PPB-AS-STD-0

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 5/21/2012 1:25:28 PM

Data Type: Reprocessed on 5/22/2012 7:14:08 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1048-03A-50PPB-AS-STD-0

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	793919.5	96.791	%	1.0950				1.13%
Lu 261.542	684450.7	98.11	%	1.039				1.06%
Ag 328.068†	39.0	0.00024 mg/L		0.000463	0.00024 mg/L		0.000463	196.85%
Al 308.215†	1080.3	0.05442 mg/L		0.004150	0.05442 mg/L		0.004150	7.63%

As 188.979†	37.6	0.05444 mg/L	0.000197	0.05444 mg/L	0.000197	0.36%
Ba 233.527†	1020.3	0.01872 mg/L	0.000184	0.01872 mg/L	0.000184	0.98%
Be 313.107†	7.5	0.00000 mg/L	0.000013	0.00000 mg/L	0.000013	393.84%
Co 228.616†	8.3	0.00032 mg/L	0.000295	0.00032 mg/L	0.000295	91.56%
Cr 267.716†	1538.2	0.02939 mg/L	0.000849	0.02939 mg/L	0.000849	2.89%
Cu 324.752†	313.0	0.00174 mg/L	0.000345	0.00174 mg/L	0.000345	19.88%
Fe 273.955†	2742.8	0.12223 mg/L	0.002398	0.12223 mg/L	0.002398	1.96%
Mg 279.077†	15120.5	0.93635 mg/L	0.010722	0.93635 mg/L	0.010722	1.15%
Mn 257.610†	1783.8	0.00327 mg/L	0.000070	0.00327 mg/L	0.000070	2.13%
Ni 231.604†	236.2	0.01098 mg/L	0.000495	0.01098 mg/L	0.000495	4.51%
Pb 220.353†	0.6	0.00016 mg/L	0.001205	0.00016 mg/L	0.001205	739.91%
Sb 206.836†	1.5	0.00083 mg/L	0.001333	0.00083 mg/L	0.001333	160.14%
Se 196.026†	0.6	0.00131 mg/L	0.004238	0.00131 mg/L	0.004238	322.77%
Tl 190.801†	6.6	0.00682 mg/L	0.004238	0.00682 mg/L	0.004238	62.13%
V 292.402†	2.0	0.00009 mg/L	0.000168	0.00009 mg/L	0.000168	177.62%
Zn 206.200†	119.3	0.01043 mg/L	0.000456	0.01043 mg/L	0.000456	4.38%
Cd 226.502†	-2.9	-0.00012 mg/L	0.000114	-0.00012 mg/L	0.000114	93.68%
Ti 334.940†	71.0	0.00019 mg/L	0.000121	0.00019 mg/L	0.000121	62.51%
Ca 227.546†	514.6	3.5546 mg/L	0.07934	3.5546 mg/L	0.07934	2.23%
Na 589.592	28898.5	6.2979 mg/L	0.04312	6.2979 mg/L	0.04312	0.68%
K 766.490	2090.2	1.6852 mg/L	0.14066	1.6852 mg/L	0.14066	8.35%

Sequence No.: 49

Sample ID: L1014-04C-SBM-SW3 20X

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 5/21/2012 1:29:07 PM

Data Type: Reprocessed on 5/22/2012 7:14:09 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1014-04C-SBM-SW3 20X

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		
	Intensity	Conc. Units			Conc. Units	Std.Dev.	RSD
Y 360.073	792981.2	96.677 %		0.6831			0.71%
Lu 261.542	678442.5	97.25 %		0.551			0.57%
Ag 328.068†	-86.6	-0.00072 mg/L		0.000379	-0.00072 mg/L	0.000379	52.46%
Al 308.215†	177710.7	9.0722 mg/L		0.02396	9.0722 mg/L	0.02396	0.26%
As 188.979†	8.4	0.01491 mg/L		0.003650	0.01491 mg/L	0.003650	24.48%
Ba 233.527†	12487.6	0.22911 mg/L		0.002282	0.22911 mg/L	0.002282	1.00%
Be 313.107†	1497.3	0.00066 mg/L		0.000009	0.00066 mg/L	0.000009	1.31%
Co 228.616†	244.4	0.00862 mg/L		0.000240	0.00862 mg/L	0.000240	2.78%
Cr 267.716†	663.2	0.01243 mg/L		0.000133	0.01243 mg/L	0.000133	1.07%
Cu 324.752†	3008.5	0.02004 mg/L		0.000307	0.02004 mg/L	0.000307	1.53%
Fe 273.955†	843432.9	37.586 mg/L		0.0872	37.586 mg/L	0.0872	0.23%
Mg 279.077†	48115.8	2.9798 mg/L		0.03435	2.9798 mg/L	0.03435	1.15%
Mn 257.610†	609317.8	1.1216 mg/L		0.00256	1.1216 mg/L	0.00256	0.23%
Ni 231.604†	315.6	0.01464 mg/L		0.000401	0.01464 mg/L	0.000401	2.74%
Pb 220.353†	237.8	0.06175 mg/L		0.001413	0.06175 mg/L	0.001413	2.29%
Sb 206.836†	4.3	0.00252 mg/L		0.002129	0.00252 mg/L	0.002129	84.54%
Se 196.026†	-5.6	0.00263 mg/L		0.005729	0.00263 mg/L	0.005729	217.52%
Tl 190.801†	1.0	0.00529 mg/L		0.001179	0.00529 mg/L	0.001179	22.30%
V 292.402†	1769.9	0.02212 mg/L		0.000256	0.02212 mg/L	0.000256	1.16%
Zn 206.200†	1181.9	0.10503 mg/L		0.001192	0.10503 mg/L	0.001192	1.13%
Cd 226.502†	127.6	0.00181 mg/L		0.000131	0.00181 mg/L	0.000131	7.25%
Ti 334.940†	16220.6	0.03610 mg/L		0.000564	0.03610 mg/L	0.000564	1.56%
Ca 227.546†	2360.2	16.010 mg/L		0.1195	16.010 mg/L	0.1195	0.75%
Na 589.592	55400.3	12.073 mg/L		0.1498	12.073 mg/L	0.1498	1.24%
K 766.490	893.6	0.72042 mg/L		0.110027	0.72042 mg/L	0.110027	15.27%

Sequence No.: 50

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/21/2012 1:32:47 PM

Data Type: Reprocessed on 5/22/2012 7:14:10 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Mean Corrected

Calib.

Sample

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	757710.4	92.377 %	1.0327			1.12%
Lu 261.542	655786.2	94.00 %	1.013			1.08%
Ag 328.068†	219741.6	1.3330 mg/L	0.00042	1.3330 mg/L	0.00042	0.03%
QC value within limits for Ag 328.068 Recovery = 106.64%						
Al 308.215†	199113.1	10.160 mg/L	0.0105	10.160 mg/L	0.0105	0.10%
QC value within limits for Al 308.215 Recovery = 101.60%						
As 188.979†	341.3	0.49905 mg/L	0.007386	0.49905 mg/L	0.007386	1.48%
QC value within limits for As 188.979 Recovery = 99.81%						
Ba 233.527†	579545.3	10.635 mg/L	0.0275	10.635 mg/L	0.0275	0.26%
QC value within limits for Ba 233.527 Recovery = 106.35%						
Be 313.107†	633663.8	0.25422 mg/L	0.000228	0.25422 mg/L	0.000228	0.09%
QC value within limits for Be 313.107 Recovery = 101.69%						
Co 228.616†	67903.1	2.6685 mg/L	0.01114	2.6685 mg/L	0.01114	0.42%
QC value within limits for Co 228.616 Recovery = 106.74%						
Cr 267.716†	52842.7	1.0101 mg/L	0.00482	1.0101 mg/L	0.00482	0.48%
QC value within limits for Cr 267.716 Recovery = 101.01%						
Cu 324.752†	235460.2	1.2983 mg/L	0.00097	1.2983 mg/L	0.00097	0.07%
QC value within limits for Cu 324.752 Recovery = 103.86%						
Fe 273.955†	115946.3	5.1712 mg/L	0.01441	5.1712 mg/L	0.01441	0.28%
QC value within limits for Fe 273.955 Recovery = 103.42%						
Mg 279.077†	417869.3	25.876 mg/L	0.0407	25.876 mg/L	0.0407	0.16%
QC value within limits for Mg 279.077 Recovery = 103.51%						
Mn 257.610†	1404206.6	2.5845 mg/L	0.00311	2.5845 mg/L	0.00311	0.12%
QC value within limits for Mn 257.610 Recovery = 103.38%						
Ni 231.604†	56640.8	2.6328 mg/L	0.01149	2.6328 mg/L	0.01149	0.44%
QC value within limits for Ni 231.604 Recovery = 105.31%						
Pb 220.353†	1930.7	0.50139 mg/L	0.004395	0.50139 mg/L	0.004395	0.88%
QC value within limits for Pb 220.353 Recovery = 100.28%						
Sb 206.836†	542.7	0.49578 mg/L	0.008593	0.49578 mg/L	0.008593	1.73%
QC value within limits for Sb 206.836 Recovery = 99.16%						
Se 196.026†	232.7	0.50719 mg/L	0.009284	0.50719 mg/L	0.009284	1.83%
QC value within limits for Se 196.026 Recovery = 101.44%						
Tl 190.801†	487.3	0.47301 mg/L	0.011801	0.47301 mg/L	0.011801	2.49%
QC value within limits for Tl 190.801 Recovery = 94.60%						
V 292.402†	216777.4	2.5725 mg/L	0.00293	2.5725 mg/L	0.00293	0.11%
QC value within limits for V 292.402 Recovery = 102.90%						
Zn 206.200†	30881.6	2.6872 mg/L	0.01743	2.6872 mg/L	0.01743	0.65%
QC value within limits for Zn 206.200 Recovery = 107.49%						
Cd 226.502†	7073.1	0.25882 mg/L	0.002003	0.25882 mg/L	0.002003	0.77%
QC value within limits for Cd 226.502 Recovery = 103.53%						
Ti 334.940†	243741.7	0.53893 mg/L	0.001309	0.53893 mg/L	0.001309	0.24%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	3690.2	24.617 mg/L	0.3525	24.617 mg/L	0.3525	1.43%
QC value within limits for Ca 227.546 Recovery = 98.47%						
Na 589.592	115241.8	25.115 mg/L	0.1366	25.115 mg/L	0.1366	0.54%
QC value within limits for Na 589.592 Recovery = 100.46%						
K 766.490	30923.6	24.932 mg/L	0.1548	24.932 mg/L	0.1548	0.62%
QC value within limits for K 766.490 Recovery = 99.73%						
All analyte(s) passed QC.						

Sequence No.: 51

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/21/2012 1:36:28 PM

Data Type: Reprocessed on 5/22/2012 7:14:10 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	794834.5	96.903 %	0.5905			0.61%
Lu 261.542	681903.4	97.74 %	0.559			0.57%
Ag 328.068†	-4.4	-0.00003 mg/L	0.000134	-0.00003 mg/L	0.000134	520.37%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	417.6	0.02133 mg/L	0.005601	0.02133 mg/L	0.005601	26.26%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	2.9	0.00415 mg/L	0.001127	0.00415 mg/L	0.001127	27.15%
QC value within limits for As 188.979 Recovery = Not calculated						

Ba 233.527†	78.8	0.00145 mg/L	0.000374	0.00145 mg/L	0.000374	25.89%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	2.0	0.00000 mg/L	0.000012	0.00000 mg/L	0.000012	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616†	8.1	0.00032 mg/L	0.000085	0.00032 mg/L	0.000085	26.45%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	9.9	0.00019 mg/L	0.000093	0.00019 mg/L	0.000093	49.30%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	13.1	0.00007 mg/L	0.000152	0.00007 mg/L	0.000152	209.34%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955†	99.8	0.00445 mg/L	0.000119	0.00445 mg/L	0.000119	2.68%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	114.5	0.00709 mg/L	0.003809	0.00709 mg/L	0.003809	53.70%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	205.7	0.00038 mg/L	0.000090	0.00038 mg/L	0.000090	23.82%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604†	2.9	0.00013 mg/L	0.000325	0.00013 mg/L	0.000325	245.68%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-0.4	-0.00009 mg/L	0.000830	-0.00009 mg/L	0.000830	881.25%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	6.7	0.00630 mg/L	0.003409	0.00630 mg/L	0.003409	54.16%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.3	0.00703 mg/L	0.003930	0.00703 mg/L	0.003930	55.92%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801†	3.8	0.00389 mg/L	0.001179	0.00389 mg/L	0.001179	30.32%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	34.0	0.00040 mg/L	0.000150	0.00040 mg/L	0.000150	37.11%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	8.6	0.00075 mg/L	0.000072	0.00075 mg/L	0.000072	9.58%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502†	0.8	0.00003 mg/L	0.000072	0.00003 mg/L	0.000072	243.47%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940†	70.0	0.00015 mg/L	0.000028	0.00015 mg/L	0.000028	17.99%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	1.4	0.00971 mg/L	0.050961	0.00971 mg/L	0.050961	524.62%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Na 589.592	621.8	0.13551 mg/L	0.017210	0.13551 mg/L	0.017210	12.70%
QC value within limits for Na 589.592 Recovery = Not calculated						
K 766.490	-36.7	-0.02960 mg/L	0.049038	-0.02960 mg/L	0.049038	165.68%
QC value within limits for K 766.490 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 52

Sample ID: MB-66229-PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 5/21/2012 1:40:07 PM

Data Type: Reprocessed on 5/22/2012 7:14:11 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-66229-PBW

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Units	Conc.		
Y 360.073	781568.8	95.285	%	0.3272				0.34%
Lu 261.542	672694.3	96.42	%	0.362				0.38%
Ag 328.068†	-17.2	-0.00011	mg/L	0.000449	-0.00011	mg/L	0.000449	427.18%
Al 308.215†	373.0	0.01904	mg/L	0.003950	0.01904	mg/L	0.003950	20.75%
As 188.979†	2.2	0.00363	mg/L	0.003811	0.00363	mg/L	0.003811	105.01%
Ba 233.527†	10.5	0.00019	mg/L	0.000065	0.00019	mg/L	0.000065	33.49%
Be 313.107†	-25.1	-0.00001	mg/L	0.000004	-0.00001	mg/L	0.000004	39.17%
Co 228.616†	9.1	0.00035	mg/L	0.000182	0.00035	mg/L	0.000182	52.28%
Cr 267.716†	2447.5	0.04678	mg/L	0.009892	0.04678	mg/L	0.009892	21.15%
Cu 324.752†	494.9	0.00276	mg/L	0.000707	0.00276	mg/L	0.000707	25.65%
Fe 273.955†	7542.9	0.33614	mg/L	0.071583	0.33614	mg/L	0.071583	21.30%
Mg 279.077†	28.6	0.00166	mg/L	0.002488	0.00166	mg/L	0.002488	150.12%
Mn 257.610†	2740.3	0.00504	mg/L	0.000813	0.00504	mg/L	0.000813	16.12%
Ni 231.604†	34.6	0.00161	mg/L	0.000108	0.00161	mg/L	0.000108	6.73%
Pb 220.353†	-1.5	-0.00039	mg/L	0.001387	-0.00039	mg/L	0.001387	354.49%
Sb 206.836†	7.7	0.00635	mg/L	0.001639	0.00635	mg/L	0.001639	25.81%
Se 196.026†	2.1	0.00473	mg/L	0.010471	0.00473	mg/L	0.010471	221.29%

Tl 190.801†	2.0	0.00210 mg/L	0.001737	0.00210 mg/L	0.001737	82.71%
V 292.402†	8.1	0.00021 mg/L	0.000323	0.00021 mg/L	0.000323	152.24%
Zn 206.200†	12.1	0.00116 mg/L	0.000461	0.00116 mg/L	0.000461	39.87%
Cd 226.502†	-3.8	-0.00016 mg/L	0.000138	-0.00016 mg/L	0.000138	83.66%
Ti 334.940†	62.0	0.00013 mg/L	0.000029	0.00013 mg/L	0.000029	21.87%
Ca 227.546†	5.8	0.03703 mg/L	0.053074	0.03703 mg/L	0.053074	143.32%
Na 589.592	365.9	0.07973 mg/L	0.030489	0.07973 mg/L	0.030489	38.24%
K 766.490	-72.3	-0.05826 mg/L	0.050594	-0.05826 mg/L	0.050594	86.85%

Sequence No.: 53

Sample ID: LCS-66229~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 68

Date Collected: 5/21/2012 1:43:46 PM

Data Type: Reprocessed on 5/22/2012 7:14:12 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-66229~LCS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	784977.3	95.701 %	%	1.2362			1.29%
Lu 261.542	678983.8	97.32 %	%	1.248			1.28%
Ag 328.068†	190777.0	1.1573 mg/L	mg/L	0.01430	1.1573 mg/L	0.01430	1.24%
Al 308.215†	173914.3	8.8748 mg/L	mg/L	0.12021	8.8748 mg/L	0.12021	1.35%
As 188.979†	306.1	0.44727 mg/L	mg/L	0.004683	0.44727 mg/L	0.004683	1.05%
Ba 233.527†	504495.4	9.2577 mg/L	mg/L	0.10075	9.2577 mg/L	0.10075	1.09%
Be 313.107†	567833.4	0.22692 mg/L	mg/L	0.002781	0.22692 mg/L	0.002781	1.23%
Co 228.616†	57073.3	2.2439 mg/L	mg/L	0.07350	2.2439 mg/L	0.07350	3.28%
Cr 267.716†	46479.4	0.88845 mg/L	mg/L	0.031880	0.88845 mg/L	0.031880	3.59%
Cu 324.752†	204342.5	1.1267 mg/L	mg/L	0.01471	1.1267 mg/L	0.01471	1.31%
Fe 273.955†	100573.7	4.4856 mg/L	mg/L	0.15176	4.4856 mg/L	0.15176	3.38%
Mg 279.077†	365803.6	22.652 mg/L	mg/L	0.2570	22.652 mg/L	0.2570	1.13%
Mn 257.610†	1219854.9	2.2452 mg/L	mg/L	0.02761	2.2452 mg/L	0.02761	1.23%
Ni 231.604†	48742.1	2.2659 mg/L	mg/L	0.07562	2.2659 mg/L	0.07562	3.34%
Pb 220.353†	1719.6	0.44605 mg/L	mg/L	0.005337	0.44605 mg/L	0.005337	1.20%
Sb 206.836†	509.7	0.46541 mg/L	mg/L	0.002432	0.46541 mg/L	0.002432	0.52%
Se 196.026†	204.5	0.44530 mg/L	mg/L	0.004280	0.44530 mg/L	0.004280	0.96%
Tl 190.801†	436.8	0.42498 mg/L	mg/L	0.005173	0.42498 mg/L	0.005173	1.22%
V 292.402†	187230.0	2.2226 mg/L	mg/L	0.02582	2.2226 mg/L	0.02582	1.16%
Zn 206.200†	26495.0	2.3051 mg/L	mg/L	0.07205	2.3051 mg/L	0.07205	3.13%
Cd 226.502†	6257.2	0.22895 mg/L	mg/L	0.009071	0.22895 mg/L	0.009071	3.96%
Ti 334.940†	245.5	0.00030 mg/L	mg/L	0.000057	0.00030 mg/L	0.000057	18.83%
Ca 227.546†	3207.0	21.417 mg/L	mg/L	0.2091	21.417 mg/L	0.2091	0.98%
Na 589.592	103249.2	22.501 mg/L	mg/L	0.2515	22.501 mg/L	0.2515	1.12%
K 766.490	27655.0	22.297 mg/L	mg/L	0.2794	22.297 mg/L	0.2794	1.25%

Sequence No.: 54

Sample ID: MB-66229~PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 5/21/2012 1:48:16 PM

Data Type: Reprocessed on 5/22/2012 7:14:12 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-66229~PBW

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	792868.3	96.663 %	%	1.1577			1.20%
Lu 261.542	681533.1	97.69 %	%	0.980			1.00%
Ag 328.068†	66.5	0.00040 mg/L	mg/L	0.000511	0.00040 mg/L	0.000511	127.10%
Al 308.215†	177.6	0.00907 mg/L	mg/L	0.005423	0.00907 mg/L	0.005423	59.78%
As 188.979†	4.1	0.00583 mg/L	mg/L	0.001025	0.00583 mg/L	0.001025	17.57%
Ba 233.527†	14.1	0.00026 mg/L	mg/L	0.000034	0.00026 mg/L	0.000034	13.04%
Be 313.107†	9.0	0.00000 mg/L	mg/L	0.000011	0.00000 mg/L	0.000011	295.87%
Co 228.616†	6.7	0.00026 mg/L	mg/L	0.000185	0.00026 mg/L	0.000185	70.34%
Cr 267.716†	7.0	0.00013 mg/L	mg/L	0.000074	0.00013 mg/L	0.000074	55.43%
Cu 324.752†	48.6	0.00027 mg/L	mg/L	0.000181	0.00027 mg/L	0.000181	67.48%
Fe 273.955†	43.7	0.00195 mg/L	mg/L	0.000836	0.00195 mg/L	0.000836	42.87%
Mg 279.077†	-36.3	-0.00225 mg/L	mg/L	0.004991	-0.00225 mg/L	0.004991	221.90%

Mn 257.610†	392.8	0.00072 mg/L	0.000010	0.00072 mg/L	0.000010	1.43%
Ni 231.604†	15.1	0.00070 mg/L	0.000193	0.00070 mg/L	0.000193	27.52%
Pb 220.353†	-2.0	-0.00051 mg/L	0.002001	-0.00051 mg/L	0.002001	389.52%
Sb 206.836†	-0.1	-0.00007 mg/L	0.003412	-0.00007 mg/L	0.003412	>999.9%
Se 196.026†	2.8	0.00603 mg/L	0.007031	0.00603 mg/L	0.007031	116.67%
Tl 190.801†	-0.9	-0.00093 mg/L	0.003299	-0.00093 mg/L	0.003299	354.61%
V 292.402†	7.3	0.00009 mg/L	0.000299	0.00009 mg/L	0.000299	343.18%
Zn 206.200†	6.9	0.00060 mg/L	0.000096	0.00060 mg/L	0.000096	15.94%
Cd 226.502†	2.9	0.00010 mg/L	0.000163	0.00010 mg/L	0.000163	155.00%
Ti 334.940†	2.3	0.00001 mg/L	0.000020	0.00001 mg/L	0.000020	371.04%
Ca 227.546†	1.3	0.00906 mg/L	0.056559	0.00906 mg/L	0.056559	624.28%
Na 589.592	211.4	0.04607 mg/L	0.020534	0.04607 mg/L	0.020534	44.57%
K 766.490	-19.8	-0.01593 mg/L	0.042411	-0.01593 mg/L	0.042411	266.25%

Sequence No.: 55

Sample ID: L0935-01C-MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 5/21/2012 1:51:55 PM

Data Type: Reprocessed on 5/22/2012 7:14:13 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-01C-MW-1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	763465.1	93.078 %		0.3019			0.32%
Lu 261.542	660070.2	94.61 %		0.449			0.47%
Ag 328.068†	-29.2	-0.00054 mg/L		0.000061	-0.00054 mg/L	0.000061	11.26%
Al 308.215†	9355.9	0.46488 mg/L		0.012760	0.46488 mg/L	0.012760	2.74%
As 188.979†	4.5	0.00759 mg/L		0.002507	0.00759 mg/L	0.002507	33.03%
Ba 233.527†	48443.1	0.88865 mg/L		0.009827	0.88865 mg/L	0.009827	1.11%
Be 313.107†	28.9	0.00002 mg/L		0.000031	0.00002 mg/L	0.000031	195.16%
Co 228.616†	5.8	-0.00009 mg/L		0.000343	-0.00009 mg/L	0.000343	373.91%
Cr 267.716†	52.5	0.00057 mg/L		0.000051	0.00057 mg/L	0.000051	8.95%
Cu 324.752†	40.4	0.00143 mg/L		0.000110	0.00143 mg/L	0.000110	7.72%
Fe 273.955†	293414.3	13.076 mg/L		0.0141	13.076 mg/L	0.0141	0.11%
Mg 279.077†	202993.7	12.572 mg/L		0.0075	12.572 mg/L	0.0075	0.06%
Mn 257.610†	930184.6	1.7122 mg/L		0.00185	1.7122 mg/L	0.00185	0.11%
Ni 231.604†	27.1	0.00120 mg/L		0.000231	0.00120 mg/L	0.000231	19.22%
Pb 220.353†	3.0	0.00065 mg/L		0.002032	0.00065 mg/L	0.002032	314.20%
Sb 206.836†	0.8	0.00018 mg/L		0.002312	0.00018 mg/L	0.002312	>999.9%
Se 196.026†	0.7	0.00666 mg/L		0.018213	0.00666 mg/L	0.018213	273.49%
Tl 190.801†	8.1	0.01066 mg/L		0.005460	0.01066 mg/L	0.005460	51.21%
V 292.402†	13.1	0.00056 mg/L		0.000379	0.00056 mg/L	0.000379	68.03%
Zn 206.200†	77.2	0.00805 mg/L		0.000099	0.00805 mg/L	0.000099	1.23%
Cd 226.502†	37.9	0.00028 mg/L		0.000140	0.00028 mg/L	0.000140	50.25%
Ti 334.940†	1091.2	0.00300 mg/L		0.000538	0.00300 mg/L	0.000538	17.94%
Ca 227.546†	7054.2	48.643 mg/L		0.4373	48.643 mg/L	0.4373	0.90%
Na 589.592	29344.5	6.3951 mg/L		0.08507	6.3951 mg/L	0.08507	1.33%
K 766.490	5938.4	4.7878 mg/L		0.02897	4.7878 mg/L	0.02897	0.61%

Sequence No.: 56

Sample ID: L0935-01CDUP-MW-1D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 5/21/2012 1:55:34 PM

Data Type: Reprocessed on 5/22/2012 7:14:14 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-01CDUP-MW-1D

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	767009.0	93.510 %		1.0455			1.12%
Lu 261.542	661855.5	94.87 %		1.041			1.10%
Ag 328.068†	-77.5	-0.00083 mg/L		0.000511	-0.00083 mg/L	0.000511	61.60%
Al 308.215†	9393.8	0.46681 mg/L		0.013694	0.46681 mg/L	0.013694	2.93%
As 188.979†	8.0	0.01268 mg/L		0.003109	0.01268 mg/L	0.003109	24.51%
Ba 233.527†	48511.4	0.88990 mg/L		0.016046	0.88990 mg/L	0.016046	1.80%
Be 313.107†	5.0	0.00001 mg/L		0.000006	0.00001 mg/L	0.000006	90.24%

Co	228.616†	5.2	-0.00011	mg/L	0.000136	-0.00011	mg/L	0.000136	119.87%
Cr	267.716†	48.8	0.00051	mg/L	0.000077	0.00051	mg/L	0.000077	15.33%
Cu	324.752†	21.5	0.00131	mg/L	0.000143	0.00131	mg/L	0.000143	10.88%
Fe	273.955†	290817.2	12.960	mg/L	0.0729	12.960	mg/L	0.0729	0.56%
Mg	279.077†	201221.5	12.462	mg/L	0.0752	12.462	mg/L	0.0752	0.60%
Mn	257.610†	922518.5	1.6981	mg/L	0.00943	1.6981	mg/L	0.00943	0.56%
Ni	231.604†	26.5	0.00118	mg/L	0.000426	0.00118	mg/L	0.000426	36.15%
Pb	220.353†	-7.0	-0.00192	mg/L	0.000849	-0.00192	mg/L	0.000849	44.22%
Sb	206.836†	0.7	0.00014	mg/L	0.003784	0.00014	mg/L	0.003784	>999.9%
Se	196.026†	-2.1	0.00043	mg/L	0.000995	0.00043	mg/L	0.000995	229.31%
Tl	190.801†	-0.7	0.00167	mg/L	0.001079	0.00167	mg/L	0.001079	64.59%
V	292.402†	23.5	0.00068	mg/L	0.000565	0.00068	mg/L	0.000565	83.65%
Zn	206.200†	75.2	0.00786	mg/L	0.000164	0.00786	mg/L	0.000164	2.09%
Cd	226.502†	39.2	0.00033	mg/L	0.000110	0.00033	mg/L	0.000110	32.97%
Ti	334.940†	1241.0	0.00334	mg/L	0.000448	0.00334	mg/L	0.000448	13.43%
Ca	227.546†	7076.6	48.798	mg/L	1.6313	48.798	mg/L	1.6313	3.34%
Na	589.592	28899.3	6.2980	mg/L	0.04573	6.2980	mg/L	0.04573	0.73%
K	766.490	5796.7	4.6736	mg/L	0.05997	4.6736	mg/L	0.05997	1.28%

Sequence No.: 57

Sample ID: L0935-01CMS-MW-1S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 5/21/2012 1:59:13 PM

Data Type: Reprocessed on 5/22/2012 7:14:15 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-01CMS-MW-1S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	762248.2	92.930	%	0.9536				1.03%
Lu 261.542	652394.2	93.51	%	0.803				0.86%
Ag 328.068†	195449.7	1.1853	mg/L	0.00881	1.1853	mg/L	0.00881	0.74%
Al 308.215†	189507.0	9.6580	mg/L	0.07769	9.6580	mg/L	0.07769	0.80%
As 188.979†	314.0	0.46016	mg/L	0.002761	0.46016	mg/L	0.002761	0.60%
Ba 233.527†	567951.8	10.422	mg/L	0.0176	10.422	mg/L	0.0176	0.17%
Be 313.107†	588920.9	0.23535	mg/L	0.000400	0.23535	mg/L	0.000400	0.17%
Co 228.616†	58245.2	2.2897	mg/L	0.01820	2.2897	mg/L	0.01820	0.79%
Cr 267.716†	48262.2	0.92210	mg/L	0.006518	0.92210	mg/L	0.006518	0.71%
Cu 324.752†	208303.2	1.1497	mg/L	0.00846	1.1497	mg/L	0.00846	0.74%
Fe 273.955†	387308.8	17.264	mg/L	0.1415	17.264	mg/L	0.1415	0.82%
Mg 279.077†	573945.8	35.543	mg/L	0.1307	35.543	mg/L	0.1307	0.37%
Mn 257.610†	2161151.5	3.9778	mg/L	0.01484	3.9778	mg/L	0.01484	0.37%
Ni 231.604†	49774.0	2.3139	mg/L	0.02238	2.3139	mg/L	0.02238	0.97%
Pb 220.353†	1749.1	0.45360	mg/L	0.007822	0.45360	mg/L	0.007822	1.72%
Sb 206.836†	517.9	0.47206	mg/L	0.006783	0.47206	mg/L	0.006783	1.44%
Se 196.026†	200.1	0.44087	mg/L	0.008541	0.44087	mg/L	0.008541	1.94%
Tl 190.801†	439.3	0.42950	mg/L	0.003698	0.42950	mg/L	0.003698	0.86%
V 292.402†	191360.6	2.2720	mg/L	0.01235	2.2720	mg/L	0.01235	0.54%
Zn 206.200†	27008.5	2.3512	mg/L	0.03161	2.3512	mg/L	0.03161	1.34%
Cd 226.502†	6223.3	0.22664	mg/L	0.003902	0.22664	mg/L	0.003902	1.72%
Ti 334.940†	1530.3	0.00374	mg/L	0.000125	0.00374	mg/L	0.000125	3.35%
Ca 227.546†	10404.4	71.037	mg/L	0.7741	71.037	mg/L	0.7741	1.09%
Na 589.592	129824.5	28.293	mg/L	0.2000	28.293	mg/L	0.2000	0.71%
K 766.490	33696.8	27.168	mg/L	0.2006	27.168	mg/L	0.2006	0.74%

Sequence No.: 58

Sample ID: L0935-01CSD-MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 5/21/2012 2:02:55 PM

Data Type: Reprocessed on 5/22/2012 7:14:15 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-01CSD-MW-1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	802741.8	97.867	%	1.5988				1.63%
Lu 261.542	690554.7	98.98	%	1.421				1.44%

Ag	328.068†	-29.9	-0.00025 mg/L	0.000377	-0.00025 mg/L	0.000377	149.46%
Al	308.215†	1937.5	0.09644 mg/L	0.007284	0.09644 mg/L	0.007284	7.55%
As	188.979†	4.1	0.00614 mg/L	0.007148	0.00614 mg/L	0.007148	116.39%
Ba	233.527†	9731.3	0.17851 mg/L	0.001903	0.17851 mg/L	0.001903	1.07%
Be	313.107†	142.9	0.00006 mg/L	0.000004	0.00006 mg/L	0.000004	6.29%
Co	228.616†	7.6	0.00024 mg/L	0.000087	0.00024 mg/L	0.000087	36.78%
Cr	267.716†	150.2	0.00278 mg/L	0.000782	0.00278 mg/L	0.000782	28.07%
Cu	324.752†	9.7	0.00029 mg/L	0.000417	0.00029 mg/L	0.000417	142.11%
Fe	273.955†	58344.2	2.6000 mg/L	0.01989	2.6000 mg/L	0.01989	0.76%
Mg	279.077†	40465.6	2.5061 mg/L	0.01905	2.5061 mg/L	0.01905	0.76%
Mn	257.610†	185120.4	0.34075 mg/L	0.000530	0.34075 mg/L	0.000530	0.16%
Ni	231.604†	11.6	0.00053 mg/L	0.000252	0.00053 mg/L	0.000252	47.69%
Pb	220.353†	-0.8	-0.00023 mg/L	0.000981	-0.00023 mg/L	0.000981	425.97%
Sb	206.836†	-3.3	-0.00322 mg/L	0.000488	-0.00322 mg/L	0.000488	15.15%
Se	196.026†	3.8	0.00909 mg/L	0.008166	0.00909 mg/L	0.008166	89.79%
Tl	190.801†	5.1	0.00571 mg/L	0.005662	0.00571 mg/L	0.005662	99.07%
V	292.402†	21.2	0.00034 mg/L	0.000348	0.00034 mg/L	0.000348	103.22%
Zn	206.200†	24.8	0.00243 mg/L	0.000170	0.00243 mg/L	0.000170	7.00%
Cd	226.502†	10.3	0.00016 mg/L	0.000113	0.00016 mg/L	0.000113	72.32%
Ti	334.940†	189.9	0.00053 mg/L	0.000046	0.00053 mg/L	0.000046	8.67%
Ca	227.546†	1356.9	9.3557 mg/L	0.20559	9.3557 mg/L	0.20559	2.20%
Na	589.592	6106.1	1.3307 mg/L	0.03184	1.3307 mg/L	0.03184	2.39%
K	766.490	1239.5	0.99932 mg/L	0.078548	0.99932 mg/L	0.078548	7.86%

Sequence No.: 59

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/21/2012 2:06:35 PM

Data Type: Reprocessed on 5/22/2012 7:14:16 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	780429.1	95.147 %	2.0426			2.15%
Lu 261.542	676100.9	96.91 %	2.037			2.10%
Ag 328.068†	210638.3	1.2778 mg/L	0.01380	1.2778 mg/L	0.01380	1.08%
QC value within limits for Ag 328.068 Recovery = 102.22%						
Al 308.215†	190619.3	9.7264 mg/L	0.09574	9.7264 mg/L	0.09574	0.98%
QC value within limits for Al 308.215 Recovery = 97.26%						
As 188.979†	320.7	0.46907 mg/L	0.012715	0.46907 mg/L	0.012715	2.71%
QC value within limits for As 188.979 Recovery = 93.81%						
Ba 233.527†	556835.7	10.218 mg/L	0.1014	10.218 mg/L	0.1014	0.99%
QC value within limits for Ba 233.527 Recovery = 102.18%						
Be 313.107†	607102.9	0.24355 mg/L	0.002887	0.24355 mg/L	0.002887	1.19%
QC value within limits for Be 313.107 Recovery = 97.42%						
Co 228.616†	65314.5	2.5668 mg/L	0.04516	2.5668 mg/L	0.04516	1.76%
QC value within limits for Co 228.616 Recovery = 102.67%						
Cr 267.716†	50889.2	0.97274 mg/L	0.016866	0.97274 mg/L	0.016866	1.73%
QC value within limits for Cr 267.716 Recovery = 97.27%						
Cu 324.752†	225565.4	1.2437 mg/L	0.01234	1.2437 mg/L	0.01234	0.99%
QC value within limits for Cu 324.752 Recovery = 99.50%						
Fe 273.955†	111297.1	4.9638 mg/L	0.08402	4.9638 mg/L	0.08402	1.69%
QC value within limits for Fe 273.955 Recovery = 99.28%						
Mg 279.077†	399791.6	24.757 mg/L	0.2238	24.757 mg/L	0.2238	0.90%
QC value within limits for Mg 279.077 Recovery = 99.03%						
Mn 257.610†	1344562.6	2.4747 mg/L	0.02518	2.4747 mg/L	0.02518	1.02%
QC value within limits for Mn 257.610 Recovery = 98.99%						
Ni 231.604†	54519.2	2.5342 mg/L	0.04019	2.5342 mg/L	0.04019	1.59%
QC value within limits for Ni 231.604 Recovery = 101.37%						
Pb 220.353†	1849.6	0.48031 mg/L	0.009255	0.48031 mg/L	0.009255	1.93%
QC value within limits for Pb 220.353 Recovery = 96.06%						
Sb 206.836†	515.3	0.47056 mg/L	0.009900	0.47056 mg/L	0.009900	2.10%
QC value within limits for Sb 206.836 Recovery = 94.11%						
Se 196.026†	224.5	0.48917 mg/L	0.011133	0.48917 mg/L	0.011133	2.28%
QC value within limits for Se 196.026 Recovery = 97.83%						
Tl 190.801†	466.3	0.45255 mg/L	0.010968	0.45255 mg/L	0.010968	2.42%
QC value within limits for Tl 190.801 Recovery = 90.51%						
V 292.402†	207226.4	2.4592 mg/L	0.02910	2.4592 mg/L	0.02910	1.18%

QC value within limits for V 292.402 Recovery = 98.37%

Zn 206.200† 29758.5 2.5894 mg/L 0.04155 2.5894 mg/L 0.04155 1.60%

QC value within limits for Zn 206.200 Recovery = 103.58%

Cd 226.502† 6805.1 0.24901 mg/L 0.004326 0.24901 mg/L 0.004326 1.74%

QC value within limits for Cd 226.502 Recovery = 99.60%

Ti 334.940† 231838.7 0.51261 mg/L 0.004958 0.51261 mg/L 0.004958 0.97%

QC value within limits for Ti 334.940 Recovery = Not calculated

Ca 227.546† 3520.4 23.478 mg/L 0.6284 23.478 mg/L 0.6284 2.68%

QC value within limits for Ca 227.546 Recovery = 93.91%

Na 589.592 113954.6 24.834 mg/L 0.2400 24.834 mg/L 0.2400 0.97%

QC value within limits for Na 589.592 Recovery = 99.34%

K 766.490 30801.9 24.834 mg/L 0.2559 24.834 mg/L 0.2559 1.03%

QC value within limits for K 766.490 Recovery = 99.34%

All analyte(s) passed QC.

Sequence No.: 60

Autosampler Location: 4

Sample ID: CCB

Date Collected: 5/21/2012 2:10:16 PM

Analyst:

Data Type: Reprocessed on 5/22/2012 7:14:17 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	793229.9	96.707	%	0.3292			0.34%
Lu 261.542	681894.9	97.74	%	0.518			0.53%
Ag 328.068†	18.3	0.00011	mg/L	0.000078	0.00011 mg/L	0.000078	69.70%
QC value within limits for Ag 328.068							Recovery = Not calculated
Al 308.215†	773.5	0.03951	mg/L	0.003554	0.03951 mg/L	0.003554	9.00%
QC value within limits for Al 308.215							Recovery = Not calculated
As 188.979†	2.2	0.00323	mg/L	0.003976	0.00323 mg/L	0.003976	123.03%
QC value within limits for As 188.979							Recovery = Not calculated
Ba 233.527†	53.2	0.00098	mg/L	0.000252	0.00098 mg/L	0.000252	25.82%
QC value within limits for Ba 233.527							Recovery = Not calculated
Be 313.107†	64.3	0.00003	mg/L	0.000048	0.00003 mg/L	0.000048	186.18%
QC value within limits for Be 313.107							Recovery = Not calculated
Co 228.616†	14.5	0.00057	mg/L	0.000149	0.00057 mg/L	0.000149	26.12%
QC value within limits for Co 228.616							Recovery = Not calculated
Cr 267.716†	10.7	0.00020	mg/L	0.000060	0.00020 mg/L	0.000060	29.08%
QC value within limits for Cr 267.716							Recovery = Not calculated
Cu 324.752†	-6.4	-0.00004	mg/L	0.000069	-0.00004 mg/L	0.000069	197.06%
QC value within limits for Cu 324.752							Recovery = Not calculated
Fe 273.955†	40.5	0.00181	mg/L	0.000488	0.00181 mg/L	0.000488	27.01%
QC value within limits for Fe 273.955							Recovery = Not calculated
Mg 279.077†	54.1	0.00335	mg/L	0.001300	0.00335 mg/L	0.001300	38.76%
QC value within limits for Mg 279.077							Recovery = Not calculated
Mn 257.610†	105.6	0.00019	mg/L	0.000053	0.00019 mg/L	0.000053	27.47%
QC value within limits for Mn 257.610							Recovery = Not calculated
Ni 231.604†	5.4	0.00025	mg/L	0.000521	0.00025 mg/L	0.000521	208.77%
QC value within limits for Ni 231.604							Recovery = Not calculated
Pb 220.353†	5.7	0.00149	mg/L	0.001507	0.00149 mg/L	0.001507	101.50%
QC value within limits for Pb 220.353							Recovery = Not calculated
Sb 206.836†	5.0	0.00472	mg/L	0.002009	0.00472 mg/L	0.002009	42.57%
QC value within limits for Sb 206.836							Recovery = Not calculated
Se 196.026†	1.7	0.00371	mg/L	0.019233	0.00371 mg/L	0.019233	518.92%
QC value within limits for Se 196.026							Recovery = Not calculated
Tl 190.801†	1.0	0.00105	mg/L	0.004099	0.00105 mg/L	0.004099	390.94%
QC value within limits for Tl 190.801							Recovery = Not calculated
V 292.402†	56.7	0.00067	mg/L	0.000153	0.00067 mg/L	0.000153	22.67%
QC value within limits for V 292.402							Recovery = Not calculated
Zn 206.200†	13.8	0.00120	mg/L	0.000105	0.00120 mg/L	0.000105	8.75%
QC value within limits for Zn 206.200							Recovery = Not calculated
Cd 226.502†	-1.0	-0.00004	mg/L	0.000086	-0.00004 mg/L	0.000086	237.80%
QC value within limits for Cd 226.502							Recovery = Not calculated
Ti 334.940†	41.2	0.00009	mg/L	0.000027	0.00009 mg/L	0.000027	29.56%
QC value within limits for Ti 334.940							Recovery = Not calculated
Ca 227.546†	2.0	0.01379	mg/L	0.026045	0.01379 mg/L	0.026045	188.92%
QC value within limits for Ca 227.546							Recovery = Not calculated

Na 589.592 153.1 0.03336 mg/L 0.008390 0.03336 mg/L 0.008390 25.15%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 -52.5 -0.04234 mg/L 0.042737 -0.04234 mg/L 0.042737 100.94%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 61

Sample ID: L0935-01CPDS~MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 5/21/2012 2:13:55 PM

Data Type: Reprocessed on 5/22/2012 7:14:17 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-01CPDS~MW-1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	769125.4	93.768	%	0.7905			0.84%
Lu 261.542	658781.3	94.43	%	0.764			0.81%
Ag 328.068†	195345.6	1.1847	mg/L	0.00978	1.1847 mg/L	0.00978	0.83%
Al 308.215†	190415.2	9.7045	mg/L	0.09661	9.7045 mg/L	0.09661	1.00%
As 188.979†	310.1	0.45451	mg/L	0.002120	0.45451 mg/L	0.002120	0.47%
Ba 233.527†	575687.4	10.564	mg/L	0.0898	10.564 mg/L	0.0898	0.85%
Be 313.107†	597640.2	0.23883	mg/L	0.001668	0.23883 mg/L	0.001668	0.70%
Co 228.616†	59219.6	2.3280	mg/L	0.02345	2.3280 mg/L	0.02345	1.01%
Cr 267.716†	48596.4	0.92849	mg/L	0.008575	0.92849 mg/L	0.008575	0.92%
Cu 324.752†	210875.4	1.1639	mg/L	0.01086	1.1639 mg/L	0.01086	0.93%
Fe 273.955†	382663.4	17.057	mg/L	0.1725	17.057 mg/L	0.1725	1.01%
Mg 279.077†	577701.8	35.775	mg/L	0.2834	35.775 mg/L	0.2834	0.79%
Mn 257.610†	2163726.6	3.9826	mg/L	0.03101	3.9826 mg/L	0.03101	0.78%
Ni 231.604†	50437.0	2.3447	mg/L	0.02587	2.3447 mg/L	0.02587	1.10%
Pb 220.353†	1731.9	0.44917	mg/L	0.005096	0.44917 mg/L	0.005096	1.13%
Sb 206.836†	503.4	0.45828	mg/L	0.004486	0.45828 mg/L	0.004486	0.98%
Se 196.026†	199.1	0.43855	mg/L	0.005138	0.43855 mg/L	0.005138	1.17%
Tl 190.801†	435.0	0.42479	mg/L	0.002770	0.42479 mg/L	0.002770	0.65%
V 292.402†	192768.8	2.2887	mg/L	0.01771	2.2887 mg/L	0.01771	0.77%
Zn 206.200†	27469.8	2.3912	mg/L	0.01890	2.3912 mg/L	0.01890	0.79%
Cd 226.502†	6162.0	0.22442	mg/L	0.002366	0.22442 mg/L	0.002366	1.05%
Ti 334.940†	1364.4	0.00336	mg/L	0.000264	0.00336 mg/L	0.000264	7.86%
Ca 227.546†	10296.3	70.280	mg/L	0.5867	70.280 mg/L	0.5867	0.83%
Na 589.592	131811.1	28.726	mg/L	0.2381	28.726 mg/L	0.2381	0.83%
K 766.490	34056.0	27.458	mg/L	0.1471	27.458 mg/L	0.1471	0.54%

Sequence No.: 62

Sample ID: L0935-02C~MW-2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 5/21/2012 2:17:37 PM

Data Type: Reprocessed on 5/22/2012 7:14:18 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-02C~MW-2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	748457.1	91.249	%	0.9564			1.05%
Lu 261.542	650148.7	93.19	%	0.805			0.86%
Ag 328.068†	-49.3	-0.00057	mg/L	0.000611	-0.00057 mg/L	0.000611	107.60%
Al 308.215†	1342.6	0.03724	mg/L	0.003755	0.03724 mg/L	0.003755	10.08%
As 188.979†	2.7	0.00522	mg/L	0.010354	0.00522 mg/L	0.010354	198.48%
Ba 233.527†	297460.0	5.4567	mg/L	0.00202	5.4567 mg/L	0.00202	0.04%
Be 313.107†	1.3	-0.00001	mg/L	0.000029	-0.00001 mg/L	0.000029	518.19%
Co 228.616†	-90.5	-0.00356	mg/L	0.000216	-0.00356 mg/L	0.000216	6.08%
Cr 267.716†	22.7	-0.00010	mg/L	0.000032	-0.00010 mg/L	0.000032	30.72%
Cu 324.752†	329.3	0.00183	mg/L	0.000126	0.00183 mg/L	0.000126	6.88%
Fe 273.955†	2867.8	0.12780	mg/L	0.003269	0.12780 mg/L	0.003269	2.56%
Mg 279.077†	691194.8	42.806	mg/L	0.0143	42.806 mg/L	0.0143	0.03%
Mn 257.610†	691840.1	1.2731	mg/L	0.00078	1.2731 mg/L	0.00078	0.06%
Ni 231.604†	61.7	0.00269	mg/L	0.000458	0.00269 mg/L	0.000458	17.05%
Pb 220.353†	-8.4	-0.00211	mg/L	0.000417	-0.00211 mg/L	0.000417	19.83%

Sb 206.836†	12.9	0.01174 mg/L	0.003514	0.01174 mg/L	0.003514	29.94%
Se 196.026†	1.0	0.00219 mg/L	0.012835	0.00219 mg/L	0.012835	586.09%
Tl 190.801†	-2.3	-0.00016 mg/L	0.005971	-0.00016 mg/L	0.005971	>999.9%
V 292.402†	54.6	0.00066 mg/L	0.000185	0.00066 mg/L	0.000185	28.22%
Zn 206.200†	62.7	0.00596 mg/L	0.000355	0.00596 mg/L	0.000355	5.95%
Cd 226.502†	-0.7	-0.00039 mg/L	0.000055	-0.00039 mg/L	0.000055	14.25%
Ti 334.940†	-1502.8	-0.00183 mg/L	0.000137	-0.00183 mg/L	0.000137	7.45%
Ca 227.546†	19602.7	135.47 mg/L	0.292	135.47 mg/L	0.292	0.22%
Na 589.592	363591.8	79.238 mg/L	0.3208	79.238 mg/L	0.3208	0.40%
K 766.490	14553.3	11.734 mg/L	0.0899	11.734 mg/L	0.0899	0.77%

Sequence No.: 63

Sample ID: L0935-03C-MW-3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 5/21/2012 2:21:12 PM

Data Type: Reprocessed on 5/22/2012 7:14:19 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-03C-MW-3

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	733455.1	89.420 %	%	0.1845			0.21%
Lu 261.542	638025.0	91.45 %	%	0.312			0.34%
Ag 328.068†	-89.1	-0.00077 mg/L	mg/L	0.000367	-0.00077 mg/L	0.000367	47.65%
Al 308.215†	1056.7	0.01835 mg/L	mg/L	0.000693	0.01835 mg/L	0.000693	3.78%
As 188.979†	3.2	0.00626 mg/L	mg/L	0.004186	0.00626 mg/L	0.004186	66.84%
Ba 233.527†	39928.3	0.73245 mg/L	mg/L	0.002269	0.73245 mg/L	0.002269	0.31%
Be 313.107†	-47.1	-0.00003 mg/L	mg/L	0.000025	-0.00003 mg/L	0.000025	94.31%
Co 228.616†	0.8	0.00004 mg/L	mg/L	0.000351	0.00004 mg/L	0.000351	900.91%
Cr 267.716†	19.4	-0.00013 mg/L	mg/L	0.000134	-0.00013 mg/L	0.000134	99.52%
Cu 324.752†	183.3	0.00102 mg/L	mg/L	0.000216	0.00102 mg/L	0.000216	21.27%
Fe 273.955†	1746.2	0.07782 mg/L	mg/L	0.000777	0.07782 mg/L	0.000777	1.00%
Mg 279.077†	706102.4	43.729 mg/L	mg/L	0.1199	43.729 mg/L	0.1199	0.27%
Mn 257.610†	591581.1	1.0886 mg/L	mg/L	0.00317	1.0886 mg/L	0.00317	0.29%
Ni 231.604†	29.2	0.00117 mg/L	mg/L	0.000212	0.00117 mg/L	0.000212	18.07%
Pb 220.353†	-10.2	-0.00258 mg/L	mg/L	0.001441	-0.00258 mg/L	0.001441	55.94%
Sb 206.836†	5.5	0.00477 mg/L	mg/L	0.002879	0.00477 mg/L	0.002879	60.39%
Se 196.026†	2.6	0.00557 mg/L	mg/L	0.011006	0.00557 mg/L	0.011006	197.73%
Tl 190.801†	-0.7	0.00137 mg/L	mg/L	0.002702	0.00137 mg/L	0.002702	197.89%
V 292.402†	23.6	0.00029 mg/L	mg/L	0.000123	0.00029 mg/L	0.000123	42.66%
Zn 206.200†	405.5	0.03564 mg/L	mg/L	0.000252	0.03564 mg/L	0.000252	0.71%
Cd 226.502†	-3.7	-0.00055 mg/L	mg/L	0.000120	-0.00055 mg/L	0.000120	21.73%
Ti 334.940†	-1950.3	-0.00245 mg/L	mg/L	0.000089	-0.00245 mg/L	0.000089	3.63%
Ca 227.546†	22944.6	158.57 mg/L	mg/L	0.720	158.57 mg/L	0.720	0.45%
Na 589.592	466715.4	101.71 mg/L	mg/L	0.305	101.71 mg/L	0.305	0.30%
K 766.490	8095.5	6.5270 mg/L	mg/L	0.03076	6.5270 mg/L	0.03076	0.47%

Sequence No.: 64

Sample ID: L0935-05C-DUP-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 76

Date Collected: 5/21/2012 2:24:48 PM

Data Type: Reprocessed on 5/22/2012 7:14:19 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0935-05C-DUP-1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	746309.6	90.987 %	%	0.4336			0.48%
Lu 261.542	649792.3	93.14 %	%	0.518			0.56%
Ag 328.068†	-38.3	-0.00051 mg/L	mg/L	0.000152	-0.00051 mg/L	0.000152	30.00%
Al 308.215†	1210.0	0.02971 mg/L	mg/L	0.008990	0.02971 mg/L	0.008990	30.26%
As 188.979†	1.3	0.00322 mg/L	mg/L	0.006741	0.00322 mg/L	0.006741	209.35%
Ba 233.527†	303851.6	5.5739 mg/L	mg/L	0.00804	5.5739 mg/L	0.00804	0.14%
Be 313.107†	32.2	0.00001 mg/L	mg/L	0.000011	0.00001 mg/L	0.000011	157.46%
Co 228.616†	-101.9	-0.00400 mg/L	mg/L	0.000266	-0.00400 mg/L	0.000266	6.65%
Cr 267.716†	13.9	-0.00028 mg/L	mg/L	0.000080	-0.00028 mg/L	0.000080	28.41%
Cu 324.752†	142.8	0.00079 mg/L	mg/L	0.000308	0.00079 mg/L	0.000308	38.96%

Fe 273.955†	1306.2	0.05821 mg/L	0.001152	0.05821 mg/L	0.001152	1.98%
Mg 279.077†	703587.1	43.574 mg/L	0.0689	43.574 mg/L	0.0689	0.16%
Mn 257.610†	705002.2	1.2973 mg/L	0.00242	1.2973 mg/L	0.00242	0.19%
Ni 231.604†	53.3	0.00230 mg/L	0.000291	0.00230 mg/L	0.000291	12.68%
Pb 220.353†	-6.0	-0.00147 mg/L	0.000863	-0.00147 mg/L	0.000863	58.76%
Sb 206.836†	9.1	0.00809 mg/L	0.001421	0.00809 mg/L	0.001421	17.56%
Se 196.026†	1.0	0.00213 mg/L	0.003784	0.00213 mg/L	0.003784	177.38%
Tl 190.801†	-3.2	-0.00101 mg/L	0.001513	-0.00101 mg/L	0.001513	149.47%
V 292.402†	33.0	0.00040 mg/L	0.000180	0.00040 mg/L	0.000180	45.17%
Zn 206.200†	56.4	0.00541 mg/L	0.000402	0.00541 mg/L	0.000402	7.43%
Cd 226.502†	-1.0	-0.00040 mg/L	0.000129	-0.00040 mg/L	0.000129	32.20%
Ti 334.940†	-1465.6	-0.00171 mg/L	0.000083	-0.00171 mg/L	0.000083	4.86%
Ca 227.546†	20097.8	138.89 mg/L	0.279	138.89 mg/L	0.279	0.20%
Na 589.592	367478.7	80.085 mg/L	0.6512	80.085 mg/L	0.6512	0.81%
K 766.490	14757.6	11.898 mg/L	0.0798	11.898 mg/L	0.0798	0.67%

Sequence No.: 65

Sample ID: L0998-01C-WG-7462-050812

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 77

Date Collected: 5/21/2012 2:28:22 PM

Data Type: Reprocessed on 5/22/2012 7:14:20 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0998-01C-WG-7462-050812

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	736670.1	89.812 %	%	0.6785			0.76%
Lu 261.542	624635.9	89.53 %	%	0.874			0.98%
Ag 328.068†	-158.4	-0.00099 mg/L	mg/L	0.000206	-0.00099 mg/L	0.000206	20.69%
Al 308.215†	1152.0	0.04792 mg/L	mg/L	0.001409	0.04792 mg/L	0.001409	2.94%
As 188.979†	7.4	0.01105 mg/L	mg/L	0.005508	0.01105 mg/L	0.005508	49.86%
Ba 233.527†	1453.2	0.02666 mg/L	mg/L	0.000027	0.02666 mg/L	0.000027	0.10%
Be 313.107†	14.9	0.00000 mg/L	mg/L	0.000038	0.00000 mg/L	0.000038	853.36%
Co 228.616†	-0.8	-0.00003 mg/L	mg/L	0.000348	-0.00003 mg/L	0.000348	>999.9%
Cr 267.716†	107.5	0.00167 mg/L	mg/L	0.000161	0.00167 mg/L	0.000161	9.63%
Cu 324.752†	117.5	0.00065 mg/L	mg/L	0.000362	0.00065 mg/L	0.000362	55.85%
Fe 273.955†	286.4	0.01276 mg/L	mg/L	0.000943	0.01276 mg/L	0.000943	7.39%
Mg 279.077†	877431.4	54.340 mg/L	mg/L	0.2105	54.340 mg/L	0.2105	0.39%
Mn 257.610†	92207.3	0.16919 mg/L	mg/L	0.000562	0.16919 mg/L	0.000562	0.33%
Ni 231.604†	79.2	0.00345 mg/L	mg/L	0.000122	0.00345 mg/L	0.000122	3.53%
Pb 220.353†	-8.6	-0.00221 mg/L	mg/L	0.000694	-0.00221 mg/L	0.000694	31.41%
Sb 206.836†	2.2	0.00148 mg/L	mg/L	0.004274	0.00148 mg/L	0.004274	288.72%
Se 196.026†	1.5	0.00321 mg/L	mg/L	0.007233	0.00321 mg/L	0.007233	225.44%
Tl 190.801†	-1.7	0.00048 mg/L	mg/L	0.004075	0.00048 mg/L	0.004075	842.43%
V 292.402†	27.9	0.00034 mg/L	mg/L	0.000120	0.00034 mg/L	0.000120	35.55%
Zn 206.200†	148.1	0.01293 mg/L	mg/L	0.000047	0.01293 mg/L	0.000047	0.36%
Cd 226.502†	-3.8	-0.00023 mg/L	mg/L	0.000240	-0.00023 mg/L	0.000240	104.10%
Ti 334.940†	-376.5	-0.00123 mg/L	mg/L	0.000066	-0.00123 mg/L	0.000066	5.37%
Ca 227.546†	5126.4	35.402 mg/L	mg/L	0.2427	35.402 mg/L	0.2427	0.69%
Na 589.592	1797969.0	391.83 mg/L	mg/L	1.525	391.83 mg/L	1.525	0.39%
K 766.490	23698.2	19.107 mg/L	mg/L	0.1314	19.107 mg/L	0.1314	0.69%

Sequence No.: 66

Sample ID: L0998-02C-WG-7462-050812

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 78

Date Collected: 5/21/2012 2:32:13 PM

Data Type: Reprocessed on 5/22/2012 7:14:21 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0998-02C-WG-7462-050812

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	754575.8	91.995 %	%	1.0881			1.18%
Lu 261.542	648154.7	92.90 %	%	1.185			1.28%
Ag 328.068†	-122.4	-0.00088 mg/L	mg/L	0.000542	-0.00088 mg/L	0.000542	61.69%
Al 308.215†	819.7	0.03289 mg/L	mg/L	0.008394	0.03289 mg/L	0.008394	25.53%
As 188.979†	3.3	0.00501 mg/L	mg/L	0.004849	0.00501 mg/L	0.004849	96.86%

Ba 233.527†	1465.2	0.02688 mg/L	0.000367	0.02688 mg/L	0.000367	1.37%
Be 313.107†	41.1	0.00001 mg/L	0.000035	0.00001 mg/L	0.000035	235.12%
Co 228.616†	83.4	0.00328 mg/L	0.000229	0.00328 mg/L	0.000229	6.97%
Cr 267.716†	21.2	0.00008 mg/L	0.000035	0.00008 mg/L	0.000035	45.43%
Cu 324.752†	93.1	0.00051 mg/L	0.000242	0.00051 mg/L	0.000242	47.13%
Fe 273.955†	5.7	0.00025 mg/L	0.000585	0.00025 mg/L	0.000585	231.06%
Mg 279.077†	484133.4	29.983 mg/L	0.0466	29.983 mg/L	0.0466	0.16%
Mn 257.610†	355731.1	0.65454 mg/L	0.000940	0.65454 mg/L	0.000940	0.14%
Ni 231.604†	437.6	0.02022 mg/L	0.000355	0.02022 mg/L	0.000355	1.75%
Pb 220.353†	-0.6	-0.00010 mg/L	0.001045	-0.00010 mg/L	0.001045	>999.9%
Sb 206.836†	3.6	0.00312 mg/L	0.002679	0.00312 mg/L	0.002679	85.98%
Se 196.026†	-1.6	-0.00352 mg/L	0.005040	-0.00352 mg/L	0.005040	143.16%
Tl 190.801†	5.3	0.00676 mg/L	0.002344	0.00676 mg/L	0.002344	34.64%
V 292.402†	19.2	0.00023 mg/L	0.000054	0.00023 mg/L	0.000054	23.41%
Zn 206.200†	227.8	0.02005 mg/L	0.000357	0.02005 mg/L	0.000357	1.78%
Cd 226.502†	11.0	0.00033 mg/L	0.000188	0.00033 mg/L	0.000188	57.73%
Ti 334.940†	-368.2	-0.00085 mg/L	0.000021	-0.00085 mg/L	0.000021	2.46%
Ca 227.546†	4382.6	30.272 mg/L	0.4565	30.272 mg/L	0.4565	1.51%
Na 589.592	813107.8	177.20 mg/L	1.112	177.20 mg/L	1.112	0.63%
K 766.490	17837.5	14.381 mg/L	0.1028	14.381 mg/L	0.1028	0.71%

Sequence No.: 67

Sample ID: L0998-03C-WS-7462-050812

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 79

Date Collected: 5/21/2012 2:35:59 PM

Data Type: Reprocessed on 5/22/2012 7:14:22 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0998-03C-WS-7462-050812

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	763504.3	93.083	%	0.3782			0.41%
Lu 261.542	650771.6	93.28	%	0.524			0.56%
Ag 328.068†	-94.9	-0.00065	mg/L	0.000359	-0.00065	mg/L	55.47%
Al 308.215†	742.2	0.03241	mg/L	0.003213	0.03241	mg/L	9.91%
As 188.979†	1.6	0.00246	mg/L	0.004181	0.00246	mg/L	170.28%
Ba 233.527†	2551.0	0.04680	mg/L	0.000479	0.04680	mg/L	1.02%
Be 313.107†	35.6	0.00001	mg/L	0.000026	0.00001	mg/L	0.000026 193.05%
Co 228.616†	14.2	0.00055	mg/L	0.000161	0.00055	mg/L	0.000161 29.04%
Cr 267.716†	24.2	0.00027	mg/L	0.000154	0.00027	mg/L	0.000154 58.00%
Cu 324.752†	110.3	0.00062	mg/L	0.000336	0.00062	mg/L	0.000336 54.51%
Fe 273.955†	1979.4	0.08821	mg/L	0.002817	0.08821	mg/L	0.002817 3.19%
Mg 279.077†	313740.7	19.430	mg/L	0.0888	19.430	mg/L	0.0888 0.46%
Mn 257.610†	185593.7	0.34145	mg/L	0.001630	0.34145	mg/L	0.001630 0.48%
Ni 231.604†	580.5	0.02691	mg/L	0.000349	0.02691	mg/L	0.000349 1.30%
Pb 220.353†	-4.8	-0.00121	mg/L	0.000983	-0.00121	mg/L	0.000983 81.49%
Sb 206.836†	3.5	0.00308	mg/L	0.004862	0.00308	mg/L	0.004862 157.88%
Se 196.026†	-0.3	-0.00055	mg/L	0.009481	-0.00055	mg/L	0.009481 >999.9%
Tl 190.801†	-2.2	-0.00138	mg/L	0.007263	-0.00138	mg/L	0.007263 526.28%
V 292.402†	-0.1	0.00000	mg/L	0.000173	0.00000	mg/L	0.000173 >999.9%
Zn 206.200†	1838.8	0.15980	mg/L	0.001616	0.15980	mg/L	0.001616 1.01%
Cd 226.502†	13.5	0.00044	mg/L	0.000137	0.00044	mg/L	0.000137 30.89%
Ti 334.940†	-179.8	-0.00044	mg/L	0.000094	-0.00044	mg/L	0.000094 21.46%
Ca 227.546†	2697.0	18.628	mg/L	0.1608	18.628	mg/L	0.1608 0.86%
Na 589.592	493931.8	107.64	mg/L	0.722	107.64	mg/L	0.722 0.67%
K 766.490	7818.5	6.3036	mg/L	0.08984	6.3036	mg/L	0.08984 1.43%

Sequence No.: 68

Sample ID: L0998-04C-WS-7462-050812

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 80

Date Collected: 5/21/2012 2:39:45 PM

Data Type: Reprocessed on 5/22/2012 7:14:22 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0998-04C-WS-7462-050812

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD

Y 360.073	772953.7	94.235 %	0.4933			0.52%
Lu 261.542	659463.9	94.52 %	0.564			0.60%
Ag 328.068†	-72.0	-0.00044 mg/L	0.000149	-0.00044 mg/L	0.000149	34.27%
Al 308.215†	690.1	0.02341 mg/L	0.002100	0.02341 mg/L	0.002100	8.97%
As 188.979†	5.3	0.00815 mg/L	0.004193	0.00815 mg/L	0.004193	51.42%
Ba 233.527†	833.1	0.01528 mg/L	0.000120	0.01528 mg/L	0.000120	0.79%
Be 313.107†	168.7	0.00007 mg/L	0.000003	0.00007 mg/L	0.000003	4.86%
Co 228.616†	4.9	0.00020 mg/L	0.000155	0.00020 mg/L	0.000155	78.81%
Cr 267.716†	37.1	0.00047 mg/L	0.000025	0.00047 mg/L	0.000025	5.39%
Cu 324.752†	-2.8	-0.00001 mg/L	0.000164	-0.00001 mg/L	0.000164	>999.9%
Fe 273.955†	156.6	0.00698 mg/L	0.000273	0.00698 mg/L	0.000273	3.92%
Mg 279.077†	592089.9	36.669 mg/L	0.1402	36.669 mg/L	0.1402	0.38%
Mn 257.610†	1927.5	0.00318 mg/L	0.000078	0.00318 mg/L	0.000078	2.44%
Ni 231.604†	32.3	0.00135 mg/L	0.000239	0.00135 mg/L	0.000239	17.77%
Pb 220.353†	-4.2	-0.00109 mg/L	0.000351	-0.00109 mg/L	0.000351	32.09%
Sb 206.836†	3.3	0.00275 mg/L	0.000938	0.00275 mg/L	0.000938	34.05%
Se 196.026†	7.1	0.01536 mg/L	0.010340	0.01536 mg/L	0.010340	67.30%
Tl 190.801†	-3.9	-0.00254 mg/L	0.003690	-0.00254 mg/L	0.003690	145.32%
V 292.402†	18.5	0.00022 mg/L	0.000355	0.00022 mg/L	0.000355	159.53%
Zn 206.200†	71.1	0.00617 mg/L	0.000226	0.00617 mg/L	0.000226	3.67%
Cd 226.502†	0.9	-0.00009 mg/L	0.000074	-0.00009 mg/L	0.000074	81.72%
Ti 334.940†	-542.1	-0.00107 mg/L	0.000130	-0.00107 mg/L	0.000130	12.21%
Ca 227.546†	6901.5	47.683 mg/L	0.2316	47.683 mg/L	0.2316	0.49%
Na 589.592	465650.6	101.48 mg/L	0.461	101.48 mg/L	0.461	0.45%
K 766.490	8557.3	6.8993 mg/L	0.06315	6.8993 mg/L	0.06315	0.92%

Sequence No.: 69

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/21/2012 2:43:31 PM

Data Type: Reprocessed on 5/22/2012 7:14:23 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	764165.6	93.164 %	1.5236			1.64%
Lu 261.542	665941.2	95.45 %	1.461			1.53%
Ag 328.068†	212698.7	1.2903 mg/L	0.01608	1.2903 mg/L	0.01608	1.25%
QC value within limits for Ag 328.068		Recovery = 103.22%				
Al 308.215†	192967.2	9.8462 mg/L	0.14094	9.8462 mg/L	0.14094	1.43%
QC value within limits for Al 308.215		Recovery = 98.46%				
As 188.979†	325.9	0.47656 mg/L	0.010298	0.47656 mg/L	0.010298	2.16%
QC value within limits for As 188.979		Recovery = 95.31%				
Ba 233.527†	565483.1	10.377 mg/L	0.1331	10.377 mg/L	0.1331	1.28%
QC value within limits for Ba 233.527		Recovery = 103.77%				
Be 313.107†	613044.2	0.24595 mg/L	0.003380	0.24595 mg/L	0.003380	1.37%
QC value within limits for Be 313.107		Recovery = 98.38%				
Co 228.616†	64630.8	2.5399 mg/L	0.03651	2.5399 mg/L	0.03651	1.44%
QC value within limits for Co 228.616		Recovery = 101.60%				
Cr 267.716†	50290.5	0.96130 mg/L	0.015624	0.96130 mg/L	0.015624	1.63%
QC value within limits for Cr 267.716		Recovery = 96.13%				
Cu 324.752†	228527.0	1.2600 mg/L	0.01931	1.2600 mg/L	0.01931	1.53%
QC value within limits for Cu 324.752		Recovery = 100.80%				
Fe 273.955†	109782.4	4.8964 mg/L	0.07873	4.8964 mg/L	0.07873	1.61%
QC value within limits for Fe 273.955		Recovery = 97.93%				
Mg 279.077†	404902.1	25.074 mg/L	0.3128	25.074 mg/L	0.3128	1.25%
QC value within limits for Mg 279.077		Recovery = 100.29%				
Mn 257.610†	1358281.7	2.5000 mg/L	0.03335	2.5000 mg/L	0.03335	1.33%
QC value within limits for Mn 257.610		Recovery = 100.00%				
Ni 231.604†	53943.1	2.5074 mg/L	0.03841	2.5074 mg/L	0.03841	1.53%
QC value within limits for Ni 231.604		Recovery = 100.30%				
Pb 220.353†	1873.4	0.48648 mg/L	0.008007	0.48648 mg/L	0.008007	1.65%
QC value within limits for Pb 220.353		Recovery = 97.30%				
Sb 206.836†	528.9	0.48360 mg/L	0.013998	0.48360 mg/L	0.013998	2.89%
QC value within limits for Sb 206.836		Recovery = 96.72%				
Se 196.026†	225.9	0.49210 mg/L	0.012154	0.49210 mg/L	0.012154	2.47%
QC value within limits for Se 196.026		Recovery = 98.42%				
Tl 190.801†	472.6	0.45910 mg/L	0.010746	0.45910 mg/L	0.010746	2.34%

QC value within limits for Tl 190.801 Recovery = 91.82%
 V 292.402† 208092.9 2.4694 mg/L 0.03156 2.4694 mg/L 0.03156 1.28%
 QC value within limits for V 292.402 Recovery = 98.78%
 Zn 206.200† 29714.4 2.5856 mg/L 0.04826 2.5856 mg/L 0.04826 1.87%
 QC value within limits for Zn 206.200 Recovery = 103.42%
 Cd 226.502† 6741.4 0.24668 mg/L 0.006228 0.24668 mg/L 0.006228 2.52%
 QC value within limits for Cd 226.502 Recovery = 98.67%
 Ti 334.940† 236748.8 0.52347 mg/L 0.007727 0.52347 mg/L 0.007727 1.48%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 3574.9 23.862 mg/L 0.2687 23.862 mg/L 0.2687 1.13%
 QC value within limits for Ca 227.546 Recovery = 95.45%
 Na 589.592 113770.8 24.794 mg/L 0.1515 24.794 mg/L 0.1515 0.61%
 QC value within limits for Na 589.592 Recovery = 99.18%
 K 766.490 30787.5 24.822 mg/L 0.1570 24.822 mg/L 0.1570 0.63%
 QC value within limits for K 766.490 Recovery = 99.29%
 All analyte(s) passed QC.

Sequence No.: 70

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/21/2012 2:47:11 PM

Data Type: Reprocessed on 5/22/2012 7:14:24 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	784848.5	95.685 %	1.0505			1.10%
Lu 261.542	677521.2	97.11 %	0.974			1.00%
Ag 328.068†	-1.6	-0.00001 mg/L	0.000190	-0.00001 mg/L	0.000190	>999.9%
QC value within limits for Ag 328.068						
Al 308.215†	438.8	0.02243 mg/L	0.006865	0.02243 mg/L	0.006865	30.61%
QC value within limits for Al 308.215						
As 188.979†	3.2	0.00454 mg/L	0.004002	0.00454 mg/L	0.004002	88.05%
QC value within limits for As 188.979						
Ba 233.527†	54.6	0.00100 mg/L	0.000321	0.00100 mg/L	0.000321	32.08%
QC value within limits for Ba 233.527						
Be 313.107†	47.0	0.00002 mg/L	0.000014	0.00002 mg/L	0.000014	76.63%
QC value within limits for Be 313.107						
Co 228.616†	8.5	0.00033 mg/L	0.000244	0.00033 mg/L	0.000244	72.74%
QC value within limits for Co 228.616						
Cr 267.716†	6.1	0.00012 mg/L	0.000134	0.00012 mg/L	0.000134	114.02%
QC value within limits for Cr 267.716						
Cu 324.752†	0.0	0.00000 mg/L	0.000139	0.00000 mg/L	0.000139	>999.9%
QC value within limits for Cu 324.752						
Fe 273.955†	4.0	0.00018 mg/L	0.000879	0.00018 mg/L	0.000879	491.38%
QC value within limits for Fe 273.955						
Mg 279.077†	123.3	0.00764 mg/L	0.005863	0.00764 mg/L	0.005863	76.78%
QC value within limits for Mg 279.077						
Mn 257.610†	98.2	0.00018 mg/L	0.000091	0.00018 mg/L	0.000091	50.37%
QC value within limits for Mn 257.610						
Ni 231.604†	2.5	0.00012 mg/L	0.000364	0.00012 mg/L	0.000364	310.88%
QC value within limits for Ni 231.604						
Pb 220.353†	2.5	0.00064 mg/L	0.000886	0.00064 mg/L	0.000886	138.51%
QC value within limits for Pb 220.353						
Sb 206.836†	6.4	0.00604 mg/L	0.002450	0.00604 mg/L	0.002450	40.54%
QC value within limits for Sb 206.836						
Se 196.026†	3.8	0.00828 mg/L	0.005715	0.00828 mg/L	0.005715	69.06%
QC value within limits for Se 196.026						
Tl 190.801†	4.0	0.00406 mg/L	0.003309	0.00406 mg/L	0.003309	81.42%
QC value within limits for Tl 190.801						
V 292.402†	33.0	0.00039 mg/L	0.000193	0.00039 mg/L	0.000193	49.29%
QC value within limits for V 292.402						
Zn 206.200†	9.2	0.00080 mg/L	0.000287	0.00080 mg/L	0.000287	35.89%
QC value within limits for Zn 206.200						
Cd 226.502†	0.9	0.00003 mg/L	0.000093	0.00003 mg/L	0.000093	294.64%
QC value within limits for Cd 226.502						
Ti 334.940†	26.3	0.00006 mg/L	0.000084	0.00006 mg/L	0.000084	148.61%
QC value within limits for Ti 334.940						

Ca 227.546† -9.7 -0.06746 mg/L 0.145921 -0.06746 mg/L 0.145921 216.32%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 407.4 0.08878 mg/L 0.009568 0.08878 mg/L 0.009568 10.78%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 17.1 0.01377 mg/L 0.082899 0.01377 mg/L 0.082899 602.13%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 71
 Sample ID: L0998-05C-WS-7462-050812
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 5/21/2012 2:50:50 PM
 Data Type: Reprocessed on 5/22/2012 7:14:24 AM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L0998-05C-WS-7462-050812

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	763370.6	93.067	%	0.3625				0.39%
Lu 261.542	664185.8	95.20	%	0.437				0.46%
Ag 328.068†	23.6	-0.00009	mg/L	0.000142	-0.00009	mg/L	0.000142	163.95%
Al 308.215†	611.1	0.02454	mg/L	0.002843	0.02454	mg/L	0.002843	11.59%
As 188.979†	3.1	0.00450	mg/L	0.002221	0.00450	mg/L	0.002221	49.37%
Ba 233.527†	2259.9	0.04146	mg/L	0.000158	0.04146	mg/L	0.000158	0.38%
Be 313.107†	111.1	0.00004	mg/L	0.000016	0.00004	mg/L	0.000016	35.91%
Co 228.616†	50.0	0.00196	mg/L	0.000082	0.00196	mg/L	0.000082	4.16%
Cr 267.716†	34.5	0.00033	mg/L	0.000026	0.00033	mg/L	0.000026	7.82%
Cu 324.752†	368.6	0.00203	mg/L	0.000295	0.00203	mg/L	0.000295	14.51%
Fe 273.955†	193.0	0.00860	mg/L	0.000167	0.00860	mg/L	0.000167	1.94%
Mg 279.077†	274833.4	17.021	mg/L	0.0384	17.021	mg/L	0.0384	0.23%
Mn 257.610†	586949.5	1.0803	mg/L	0.00315	1.0803	mg/L	0.00315	0.29%
Ni 231.604†	191.9	0.00885	mg/L	0.000059	0.00885	mg/L	0.000059	0.66%
Pb 220.353†	-1.5	-0.00031	mg/L	0.000144	-0.00031	mg/L	0.000144	46.05%
Sb 206.836†	5.2	0.00467	mg/L	0.001525	0.00467	mg/L	0.001525	32.66%
Se 196.026†	1.5	0.00328	mg/L	0.006989	0.00328	mg/L	0.006989	213.22%
Tl 190.801†	-4.5	-0.00355	mg/L	0.002632	-0.00355	mg/L	0.002632	74.16%
V 292.402†	14.0	0.00017	mg/L	0.000468	0.00017	mg/L	0.000468	278.44%
Zn 206.200†	194.4	0.01732	mg/L	0.000349	0.01732	mg/L	0.000349	2.02%
Cd 226.502†	2.8	0.00005	mg/L	0.000082	0.00005	mg/L	0.000082	156.89%
Ti 334.940†	-198.1	-0.00042	mg/L	0.000095	-0.00042	mg/L	0.000095	22.86%
Ca 227.546†	2846.0	19.657	mg/L	0.1473	19.657	mg/L	0.1473	0.75%
Na 589.592	205679.6	44.824	mg/L	0.1960	44.824	mg/L	0.1960	0.44%
K 766.490	4662.7	3.7592	mg/L	0.03666	3.7592	mg/L	0.03666	0.98%

Sequence No.: 72
 Sample ID: L0998-06C-WS-7462-050812
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 5/21/2012 2:54:29 PM
 Data Type: Reprocessed on 5/22/2012 7:14:25 AM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L0998-06C-WS-7462-050812

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	758969.3	92.530	%	0.8300				0.90%
Lu 261.542	659174.4	94.48	%	0.991				1.05%
Ag 328.068†	-50.0	-0.00031	mg/L	0.000423	-0.00031	mg/L	0.000423	137.75%
Al 308.215†	575.9	0.02512	mg/L	0.005146	0.02512	mg/L	0.005146	20.48%
As 188.979†	1.8	0.00283	mg/L	0.002634	0.00283	mg/L	0.002634	93.08%
Ba 233.527†	4226.4	0.07753	mg/L	0.001010	0.07753	mg/L	0.001010	1.30%
Be 313.107†	190.7	0.00008	mg/L	0.000014	0.00008	mg/L	0.000014	19.11%
Co 228.616†	1.5	0.00005	mg/L	0.000146	0.00005	mg/L	0.000146	266.99%
Cr 267.716†	195.4	0.00362	mg/L	0.000068	0.00362	mg/L	0.000068	1.88%
Cu 324.752†	237.5	0.00131	mg/L	0.000249	0.00131	mg/L	0.000249	18.99%
Fe 273.955†	1216.5	0.05421	mg/L	0.000457	0.05421	mg/L	0.000457	0.84%
Mg 279.077†	283355.2	17.548	mg/L	0.0403	17.548	mg/L	0.0403	0.23%
Mn 257.610†	12580.9	0.02298	mg/L	0.000314	0.02298	mg/L	0.000314	1.37%

=====
Analysis BegunLogged In Analyst: mitFIMS2
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: AS-90Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0515A.sif
Batch ID: Null
Results Data Set: HG12051502
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb=====
Sequence No.: 1
Sample ID: S0
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 5/15/2012 9:28:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:-----
Replicate Data: S0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0010	0.0056	0.0010	09:29:40	Yes
2		[0.00]	0.0010	0.0061	0.0010	09:30:20	Yes
Mean:		[0.00]	0.0010				
SD:		0.00	0.0000				
%RSD:		0.00	1.75				

Auto-zero performed.

=====
Sequence No.: 2
Sample ID: S0.20
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 5/15/2012 9:30:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:-----
Replicate Data: S0.20

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0021	0.0176	0.0031	09:31:20	Yes
2		[0.2]	0.0021	0.0175	0.0032	09:32:00	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0000				
%RSD:		0.0	2.12				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01056 Intercept: 0.00000

=====
Sequence No.: 3
Sample ID: S1.0
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 5/15/2012 9:32:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:-----
Replicate Data: S1.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0103	0.0632	0.0113	09:33:00	Yes
2		[1]	0.0104	0.0636	0.0114	09:33:40	Yes
Mean:		[1]	0.0103				
SD:		0	0.0001				
%RSD:		0	0.99				

Standard number 2 applied. [1]
Correlation Coef.: 0.999968 Slope: 0.01034 Intercept: 0.00000

=====
Sequence No.: 4
Sample ID: S2.0
Autosampler Location: 4
Date Collected: 5/15/2012 9:33:42 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0206	0.1206	0.0216	09:34:40	Yes
2		[2]	0.0209	0.1219	0.0219	09:35:20	Yes
Mean:		[2]	0.0208				
SD:		0	0.0002				
%RSD:		0	0.99				

Standard number 3 applied. [2]
Correlation Coef.: 0.999989 Slope: 0.01037 Intercept: 0.00000

=====

Sequence No.: 5	Autosampler Location: 5
Sample ID: S5.0	Date Collected: 5/15/2012 9:35:22 AM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0514	0.2915	0.0524	09:36:19	Yes
2		[5]	0.0521	0.2932	0.0532	09:36:59	Yes
Mean:		[5]	0.0518				
SD:		0	0.0005				
%RSD:		0	0.99				

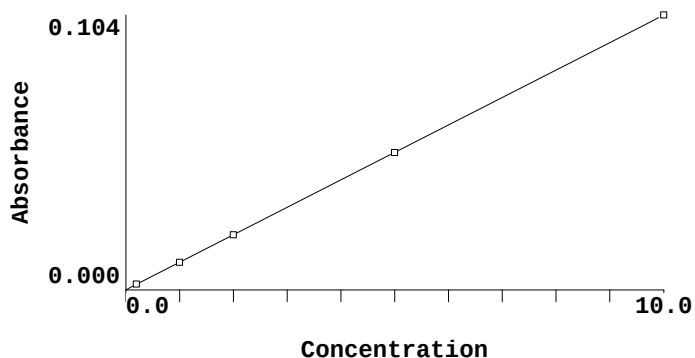
Standard number 4 applied. [5]
Correlation Coef.: 0.999998 Slope: 0.01036 Intercept: 0.00000

=====

Sequence No.: 6	Autosampler Location: 6
Sample ID: S10.0	Date Collected: 5/15/2012 9:37:01 AM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1036	0.5807	0.1046	09:37:59	Yes
2		[10]	0.1040	0.5817	0.1050	09:38:39	Yes
Mean:		[10]	0.1038				
SD:		0	0.0003				
%RSD:		0	0.26				

Standard number 5 applied. [10]
Correlation Coef.: 0.999999 Slope: 0.01037 Intercept: 0.00000



ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
S0	0.0000	0	0.000	0.00	1.7
S0.20	0.0021	0.2	0.204	0.00	2.1
S1.0	0.0103	1.0	0.996	0.00	1.0
S2.0	0.0208	2.0	2.001	0.00	1.0
S5.0	0.0518	5.0	4.991	0.00	1.0
S10.0	0.1038	10.0	10.005	0.00	0.3

Correlation Coef.: 0.999999 Slope: 0.01037 Intercept: 0.00000

Sequence No.: 7
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 5/15/2012 9:38:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.937	4.937	0.0512	0.2871	0.0522	09:39:39	Yes
2	4.819	4.819	0.0500	0.2809	0.0510	09:40:19	Yes
Mean:	4.878	4.878	0.0506				
SD:	0.084	0.084	0.0009				
%RSD:	1.717	1.717	1.72				

QC value within limits for Hg 253.7 Recovery = 97.56%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/15/2012 9:40:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0044	0.0010	09:41:21	Yes
2	0.003	0.003	0.0000	0.0048	0.0011	09:42:01	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	29.33	29.33	29.33				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9
Sample ID: MB-66154~PBW
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 5/15/2012 9:42:03 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: MB-66154~PBW

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.071	-0.071	-0.0007	-0.0008	0.0003	09:43:01	Yes
2	-0.072	-0.072	-0.0007	-0.0011	0.0003	09:43:41	Yes
Mean:	-0.071	-0.071	-0.0007				
SD:	0.000	0.000	0.0000				
%RSD:	0.342	0.342	0.34				

Sequence No.: 10
Sample ID: LCS-66154~LCS
Analyst:
Initial Sample Wt:

Autosampler Location: 18
Date Collected: 5/15/2012 9:43:43 AM
Data Type: Original
Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: LCS-66154~LCS

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.815	4.815	0.0499	0.2760	0.0510	09:44:41	Yes
2	4.750	4.750	0.0493	0.2744	0.0503	09:45:21	Yes
Mean:	4.783	4.783	0.0496				
SD:	0.046	0.046	0.0005				
%RSD:	0.960	0.960	0.96				

=====

Sequence No.: 11
Sample ID: IPANDA 1~
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 5/15/2012 9:45:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: IPANDA 1~

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.752	4.752	0.0493	0.2772	0.0503	09:46:20	Yes
2	4.737	4.737	0.0491	0.2767	0.0502	09:47:00	Yes
Mean:	4.744	4.744	0.0492				
SD:	0.011	0.011	0.0001				
%RSD:	0.226	0.226	0.23				

=====

Sequence No.: 12
Sample ID: IPANDA 2~
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 5/15/2012 9:47:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: IPANDA 2~

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.704	4.704	0.0488	0.2746	0.0498	09:47:59	Yes
2	4.677	4.677	0.0485	0.2716	0.0495	09:48:39	Yes
Mean:	4.691	4.691	0.0487				
SD:	0.019	0.019	0.0002				
%RSD:	0.398	0.398	0.40				

=====

Sequence No.: 13
Sample ID: IPANDA 3~
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 5/15/2012 9:48:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: IPANDA 3~

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.683	4.683	0.0486	0.2743	0.0496	09:49:38	Yes
2	4.638	4.638	0.0481	0.2701	0.0491	09:50:18	Yes
Mean:	4.661	4.661	0.0483				
SD:	0.032	0.032	0.0003				
%RSD:	0.686	0.686	0.69				

=====

Sequence No.: 14
Sample ID: L0903-15C-MW-1-050112
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 5/15/2012 9:50:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0903-15C-MW-1-050112

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.072	-0.072	-0.0007	0.0011	0.0003	09:51:18	Yes
2	-0.074	-0.074	-0.0008	0.0006	0.0003	09:51:58	Yes
Mean:	-0.073	-0.073	-0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	2.368	2.368	2.37				

Sequence No.: 15

Sample ID: L0903-16C-MW-2-050112

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 23

Date Collected: 5/15/2012 9:52:00 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0903-16C-MW-2-050112

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0008	0.0016	0.0002	09:52:57	Yes
2	-0.082	-0.082	-0.0008	0.0008	0.0002	09:53:38	Yes
Mean:	-0.081	-0.081	-0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	1.531	1.531	1.53				

Sequence No.: 16

Sample ID: L0903-17C-MW-3-050112

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 24

Date Collected: 5/15/2012 9:53:39 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0903-17C-MW-3-050112

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0008	0.0005	0.0002	09:54:37	Yes
2	-0.075	-0.075	-0.0008	0.0016	0.0003	09:55:17	Yes
Mean:	-0.076	-0.076	-0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	1.949	1.949	1.95				

Sequence No.: 17

Sample ID: L0903-18C-MW-4-050112

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 25

Date Collected: 5/15/2012 9:55:19 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0903-18C-MW-4-050112

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.078	-0.078	-0.0008	0.0007	0.0002	09:56:16	Yes
2	-0.077	-0.077	-0.0008	0.0006	0.0002	09:56:56	Yes
Mean:	-0.077	-0.077	-0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	1.180	1.180	1.18				

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 5/15/2012 9:56:58 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	4.824	4.824	0.0500	0.2814	0.0511	09:57:57	Yes
2	4.820	4.820	0.0500	0.2800	0.0510	09:58:37	Yes
Mean:	4.822	4.822	0.0500				
SD:	0.002	0.002	0.0000				
%RSD:	0.047	0.047	0.05				

QC value within limits for Hg 253.7 Recovery = 96.44%
All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 5/15/2012 9:58:39 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.010	0.010	0.0001	0.0051	0.0011	09:59:39	Yes
2	0.013	0.013	0.0001	0.0051	0.0012	10:00:19	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	21.20	21.20	21.20				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L0903-19C~SP-28-GW-05011

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 5/15/2012 10:00:21 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0903-19C~SP-28-GW-05011

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.990	0.990	0.0103	0.0605	0.0113	10:01:21	Yes
2	0.992	0.992	0.0103	0.0608	0.0113	10:02:01	Yes
Mean:	0.991	0.991	0.0103				
SD:	0.002	0.002	0.0000				
%RSD:	0.159	0.159	0.16				

Sequence No.: 21

Sample ID: L0915-09C~SP-7-GW-050212

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 5/15/2012 10:02:03 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0915-09C~SP-7-GW-050212

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.068	-0.068	-0.0007	0.0008	0.0003	10:03:01	Yes
2	-0.067	-0.067	-0.0007	-0.0000	0.0003	10:03:41	Yes
Mean:	-0.068	-0.068	-0.0007				
SD:	0.000	0.000	0.0000				
%RSD:	0.485	0.485	0.48				

Sequence No.: 22

Sample ID: L0935-01C~MW-1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 28

Date Collected: 5/15/2012 10:03:43 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0935-01C~MW-1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.078	-0.078	-0.0008	-0.0006	0.0002	10:04:40	Yes
2	-0.081	-0.081	-0.0008	-0.0010	0.0002	10:05:20	Yes
Mean:	-0.080	-0.080	-0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	2.261	2.261	2.26				

Sequence No.: 23
Sample ID: L0935-01CDUP~MW-1D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 5/15/2012 10:05:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0935-01CDUP~MW-1D

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.076	-0.076	-0.0008	-0.0002	0.0002	10:06:20	Yes
2	-0.080	-0.080	-0.0008	-0.0005	0.0002	10:06:59	Yes
Mean:	-0.078	-0.078	-0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	2.853	2.853	2.85				

Sequence No.: 24
Sample ID: L0935-01CMS~MW-1S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 5/15/2012 10:07:01 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0935-01CMS~MW-1S

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.274	5.274	0.0547	0.3078	0.0557	10:07:58	Yes
2	5.264	5.264	0.0546	0.3068	0.0556	10:08:38	Yes
Mean:	5.269	5.269	0.0547				
SD:	0.007	0.007	0.0001				
%RSD:	0.125	0.125	0.12				

Sequence No.: 25
Sample ID: L0935-02C~MW-2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 5/15/2012 10:08:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0935-02C~MW-2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.083	-0.083	-0.0009	-0.0025	0.0002	10:09:37	Yes
2	-0.073	-0.073	-0.0008	-0.0009	0.0003	10:10:17	Yes
Mean:	-0.078	-0.078	-0.0008				
SD:	0.007	0.007	0.0001				
%RSD:	8.894	8.894	8.89				

Sequence No.: 26
Sample ID: L0935-03C~MW-3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 5/15/2012 10:10:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0935-03C~MW-3

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.080	-0.080	-0.0008	0.0003	0.0002	10:11:21	Yes
2	-0.074	-0.074	-0.0008	0.0017	0.0003	10:12:01	Yes

Mean: -0.077 -0.077 -0.0008
SD: 0.004 0.004 0.0000
%RSD: 5.263 5.263 5.26

Sequence No.: 27

Sample ID: L0935-05C-DUP-1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 33

Date Collected: 5/15/2012 10:12:03 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0935-05C-DUP-1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0008	-0.0006	0.0002	10:13:00	Yes
2	-0.077	-0.077	-0.0008	0.0005	0.0002	10:13:40	Yes
Mean:	-0.079	-0.079	-0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	2.812	2.812	2.81				

Sequence No.: 28

Sample ID: L0970-01B-SBM-TP1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 34

Date Collected: 5/15/2012 10:13:42 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0970-01B-SBM-TP1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.132	0.132	0.0014	0.0152	0.0024	10:14:40	Yes
2	0.149	0.149	0.0015	0.0155	0.0026	10:15:20	Yes
Mean:	0.140	0.140	0.0015				
SD:	0.012	0.012	0.0001				
%RSD:	8.393	8.393	8.39				

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 5/15/2012 10:15:22 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.662	4.662	0.0484	0.2742	0.0494	10:16:22	Yes
2	4.621	4.621	0.0479	0.2696	0.0490	10:17:02	Yes
Mean:	4.642	4.642	0.0481				
SD:	0.029	0.029	0.0003				
%RSD:	0.616	0.616	0.62				

QC value within limits for Hg 253.7 Recovery = 92.83%
All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 5/15/2012 10:17:04 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0001	0.0065	0.0011	10:18:05	Yes
2	0.019	0.019	0.0002	0.0082	0.0012	10:18:44	Yes
Mean:	0.015	0.015	0.0002				

SD: 0.007 0.007 0.0001

%RSD: 46.39 46.39 46.39

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: L0970-03B-GWFD050712

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 35

Date Collected: 5/15/2012 10:18:47 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0970-03B-GWFD050712

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.183	0.183	0.0019	0.0166	0.0029	10:19:45	Yes
2	0.186	0.186	0.0019	0.0165	0.0030	10:20:25	Yes
Mean:	0.184	0.184	0.0019				
SD:	0.003	0.003	0.0000				
%RSD:	1.469	1.469	1.47				

Sequence No.: 32

Sample ID: L0970-04B-GWEB050712

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 5/15/2012 10:20:27 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0970-04B-GWEB050712

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.067	-0.067	-0.0007	0.0022	0.0003	10:21:25	Yes
2	-0.068	-0.068	-0.0007	0.0025	0.0003	10:22:05	Yes
Mean:	-0.068	-0.068	-0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	0.776	0.776	0.78				

Sequence No.: 33

Sample ID: L0970-05B-SBM-TP10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 5/15/2012 10:22:07 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0970-05B-SBM-TP10

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.131	0.131	0.0014	0.0143	0.0024	10:23:04	Yes
2	0.131	0.131	0.0014	0.0142	0.0024	10:23:44	Yes
Mean:	0.131	0.131	0.0014				
SD:	0.001	0.001	0.0000				
%RSD:	0.396	0.396	0.40				

Sequence No.: 34

Sample ID: L0970-05BDUP~SBM-TP10D

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 5/15/2012 10:23:46 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L0970-05BDUP~SBM-TP10D

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.133	0.133	0.0014	0.0141	0.0024	10:24:43	Yes
2	0.141	0.141	0.0015	0.0149	0.0025	10:25:23	Yes
Mean:	0.137	0.137	0.0014				
SD:	0.006	0.006	0.0001				

Prep Start Date: 5/14/2012 12:45:00

Prep End Date: 5/14/2012 2:45:00 P

Prep Batch ID: 66154

Prep Code: SW7470A_PR

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

Technician: David T Camara/Jill Cartwright

QC Matrix: N/A

5% KMnO4 IR12051006

Reagent 5 Lot: N/A

QC Matrix Lot: N/A

5% KMnO4 (mL): 15.0

Reagent 5 (mL): N/A

Filter?: N/A

5% K2S2O8 IR12051007

Reagent 6 Lot: N/A

Filter Lot: N/A

5% K2S2O8 (mL): 8.0

Reagent 6 (mL): N/A

Digestion Start Time 1: 05/14/2012 12:45

Digestion Start Time 2: N/A

Therm ID1: MT-47

Digestion End Time 1: 05/14/2012 14:45

Digestion End Time 2: N/A

Block Temp (C): 95

Corr Fac-3

Mikem Sample ID	Client Samp ID	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
S0		100	--	--	--	--		05/14/12	DTC	HgLab	2	>11 <2	HB-A
S0.2		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
40 uL III120509A													
S1.0		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
200 uL III120509A													
S2.0		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
400 uL III120509A													
S5.0		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
1000 uL III120509A													
S10.0		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
2000 uL III120509A													
ICV		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
1000 uL III120508B													
ICB		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
CCV		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
1000 uL III120508B													
CCB		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
MB-66154		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
LCS-66154		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
1000 uL III120508C													
IPANDA 1		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
IPANDA 2		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
IPANDA 3		100	--	--	--	--		05/14/12	DTC	HgLab	2		HB-A
L0903-15C	MW-1-050112	100	--	--	--	--	05/23/12	01	05/14/12	DTC	HgLab	2	HB-2
L0903-16C	MW-2-050112	100	--	--	--	--	05/23/12	01	05/14/12	DTC	HgLab	2	HB-2
L0903-17C	MW-3-050112	100	--	--	--	--	05/23/12	01	05/14/12	DTC	HgLab	2	HB-2
L0903-18C	MW-4-050112	100	--	--	--	--	05/23/12	01	05/14/12	DTC	HgLab	2	HB-2
L0903-19C	SP-28-GW-050112	100	--	--	--	--	05/23/12	01	05/14/12	DTC	HgLab	2	HB-2
L0915-09C	SP-7-GW-050212	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	HB-2
L0935-01C	MW-1	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	HB-2
L0935-01CDUP	MW-1	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	HB-2
Logbook ID: 100.0128 -04/12													

Tuesday, May 15, 2012 10:50

Page 02 of 02

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: 5/14/2012 12:45:00

Prep End Date: 5/14/2012 2:45:00 P

Prep Batch ID: 66154

Prep Code: SW7470A_PR

Technician: David T Camara

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

QC Matrix: N/A Conc H2SO4 3110100

QC Matrix Lot: N/A Conc H2SO4 (mL): 5.0

Filter?: N/A Conc HNO3 1111101

Filter Lot: N/A Conc HNO3 (mL): 2.5

Digestion Start Time 1: 05/14/2012 12:45

Digestion End Time 1: 05/14/2012 14:45

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Digestion Start Time 2: N/A

Digestion End Time 2: N/A

Block Temp (C): 95

Therm ID1: MT-47

Corr Fac -3

Mitkem Sample ID	Client Samp ID	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
L0935-01CMS	MW-1	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
1000 uL III120508C														
L0935-02C	MW-2	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0935-03C	MW-3	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0935-05C	DUP-1	100	--	--	--	--	05/24/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0970-01B	SBM-TP1	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0970-03B	GWFD050712	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0970-04B	GWFB050712	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0970-05B	SBM-TP10	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-2
L0970-05BDUP	SBM-TP10	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-J
L0970-05BMS	SBM-TP10	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-J
1000 uL III120508C														
L0970-06B	TPEB050712	100	--	--	--	--	05/28/12	01	05/14/12	DTC	HgLab	2	☐	HB-J
L0991-01C	DEC-046	100	--	--	--	--	05/25/12	01	05/14/12	DTC	HgLab	2	☐	HB-J
TAL														
L0991-02C	DEC-045	100	--	--	--	--	05/25/12	01	05/14/12	DTC	HgLab	2	☐	HB-J
TAL														
L0991-03C	DUP-050912	100	--	--	--	--	05/25/12	01	05/14/12	DTC	HgLab	2	☐	HB-J
TAL														

David T Camara 5/14/12 05/14/2012

Date

Manager Reviewed

5/15/12

Date

Comments:

DEC 5/14/12

Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook

Start time:

Prep Start Date: 5/18/2012 10:45:00

Prep End Date: 5/18/2012 2:45:00 P

Prep Batch ID: 66229

Prep Code: ICP_W_PR

Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:

mL / mL

QC Matrix: N/A

Conc HNO3 1111101

QC Matrix Lot: N/A

Conc HNO3 (mL): 1.0

Filter?: N/A

Conc HCl 4110110

Filter Lot: N/A

Conc HCl (mL): 2.5

Digestion Start Time 1: 05/18/2012 10:45

Digestion Start Time 2: N/A

Digestion End Time 1: 05/18/2012 14:45

Digestion End Time 2: N/A

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Block Temp (C): 96

Therm ID1: MT-92

Corr Fac-3

Reviewed: HZA 5/21/12

Mitkem Sample ID	Client Samp ID	tial L/g	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
MB66229		50	50	--	--	--	--			05/18/12	DTC	ICPLab	2	☐	HB-5
LCS-66229		50	50	--	--	--	--			05/18/12	DTC	ICPLab	2	☐	HB-5
455 uL III20416A, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP111220B															
MB66216		50	50	--	--	--	--			05/18/12	DTC	ICPLab	2	☐	HB-5
L0935-01C	MW-1	50	50	--	--	--	--	05/24/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0935-01CDUP	MW-1	50	50	--	--	--	--	05/24/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0935-01CMS	MW-1	50	50	--	--	--	--	05/24/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
455 uL III20416A, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP111220B															
L0935-02C	MW-2	50	50	--	--	--	--	05/24/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0935-03C	MW-3	50	50	--	--	--	--	05/24/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0935-05C	DUP-1	50	50	--	--	--	--	05/24/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-01C	WG-7462-050812-MM-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-02C	WG-7462-050812-MM-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-03C	WS-7462-050812-MM-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-04C	WS-7462-050812-RM-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-05C	WS-7462-050812-AH-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-06C	WS-7462-050812-AH-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-07C	WS-7462-050812-AH-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-08C	WS-7462-050812-MM-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-09C	WS-7462-050812-AH-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-10C	WS-7462-050812-AH-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-11C	WS-7462-050812-MM-	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L0998-12C	RB-7462-050812-AH-1	50	50	--	--	--	--	05/23/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
L1028-01A	ASR	50	50	--	--	--	--	05/21/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
TCLP Cd & Pb															
L1030-01A	FLUFF	M	50	--	--	--	--	05/21/12	01	05/18/12	DTC	ICPLab	2	☐	HB-5
TCLP Cd & Pb															
L1030-01AMS	FLUFF	M	50	--	--	--	--	05/21/12		05/18/12	DTC	ICPLab	2	☐	HB-5
455 uL III20416A, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP111220B, TCLP Cd & Pb															

Logbook ID 100.0125-01/12

Client: STERLING

Work Order: L0935

Profile Name: STERLING_COLONIE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01A	002	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01A	003	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01A	004	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01A	005	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01A	006	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01B	001	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01B	001	SW8270_W	Consumed	Jodie B Warner	5/9/2012 8:09:00 AM
01B	002	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01B	002	SW8270_W	Consumed	Jodie B Warner	5/9/2012 8:09:00 AM
01B	003	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01B	004	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01B	004	SW8270_W	Consumed	Jodie B Warner	5/9/2012 8:09:00 AM
01B	005	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01B	006	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01C	001	SW6010_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01C	001	SW7470	In	LOGIN: vbrizard	5/7/2012 12:46:00 PM
01C	002	SW6010_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01C	002	SW7470	In	LOGIN: vbrizard	5/7/2012 12:46:00 PM
01C	003	SW6010_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
01C	003	SW7470	In	LOGIN: vbrizard	5/7/2012 12:46:00 PM
02A	001	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
02A	002	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
02B	001	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
02B	001	SW8270_W	Consumed	Jodie B Warner	5/9/2012 8:09:00 AM
02B	002	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
02C	001	SW6010_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
02C	001	SW7470	In	LOGIN: vbrizard	5/7/2012 12:46:00 PM
03A	001	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
03A	002	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM

Client: STERLING

Work Order: L0935

Profile Name: STERLING_COLONIE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
03B	001	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
03B	001	SW8270_W	Out	Jodie B Warner	5/16/2012 8:33:09 AM
03B	001	SW8270_W	In	Jodie B Warner	5/16/2012 8:44:50 AM
03B	001	SW8270_W	Consumed	Jodie B Warner	5/16/2012 8:45:00 AM
03B	002	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
03B	002	SW8270_W	Consumed	Jodie B Warner	5/9/2012 8:09:00 AM
03C	001	SW6010_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
03C	001	SW7470	In	LOGIN: vbrizard	5/7/2012 12:46:00 PM
04A	001	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
05A	001	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
05A	002	SW8260_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
05B	001	SW8270_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
05B	001	SW8270_W	Consumed	Jodie B Warner	5/9/2012 8:09:00 AM
05C	001	SW6010_W	In	LOGIN: kpierce	5/7/2012 8:09:00 AM
05C	001	SW7470	In	LOGIN: vbrizard	5/7/2012 12:46:00 PM

Last Page of Data Report

Report Date:
11-May-12 11:49



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sterling Environmental Engineering P.C.
24 Wade Road
Latham, NY 12110

Work Order: L0782
Project : Town of Colonie
Project #:

Attn: Rodney Aldrich

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L0782-01	SO4-MW2	Soil	18-Apr-12 08:30	20-Apr-12 08:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the sample(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Town of Colonie

SDG : L0782

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
SO4-MW2	L0782-01	SW8260_LOW_S	SW8270_S		SW6010_S	
SO4-MW2	L0782-01	SW8260_MED_S			SW7471	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Town of Colonie

SDG : L0782

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_LOW_S					
L0782-01B	SL	4/18/2012	4/20/2012	NA	4/24/2012
SW8260_MED_S					
L0782-01B	SL	4/18/2012	4/20/2012	4/30/2012	4/30/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSSEMI

Project Name : Town of Colonie

SDG : L0782

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_S					
L0782-01A	SL	4/18/2012	4/20/2012	4/22/2012	4/24/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Town of Colonie

SDG : L0782

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_LOW_S					
L0782-01B	SL	SW8260_LOW_S	NA	LOW	1
SW8260_MED_S					
L0782-01B	SL	SW8260_MED_S	SW5035_MED_PR	MED	2

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSSEMI

Project Name : Town of Colonie

SDG : L0782

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_S					
L0782-01A	SL	SW8270_S	3550B	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary ME

Project Name : Town of Colonie

SDG : L0782

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_S				
L0782-01A	SL	SW6010_S	4/20/2012	5/2/2012
SW7471				
L0782-01A	SL	SW7471	4/20/2012	5/8/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0782

Client ID: STERLING

Project: Town of Colonie

WO Name: Town of Colonie

Location: STERLING_COLONIE,

Comments: N/A

Case:

SDG:

PO: 2011-31

HC Due: 05/09/12

Fax Due:

☐

Fax Report:

Report Level: ASP-B

Special Program:

EDD: EQUIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0782-01A	SO4-MW2	04/18/2012 08:30	04/20/2012	Soil	PMoist	/					A4
L0782-01A	SO4-MW2	04/18/2012 08:30	04/20/2012	Soil	SW6010_S	/ TAL,				Y	A4
L0782-01A	SO4-MW2	04/18/2012 08:30	04/20/2012	Soil	SW7471	/					A4
L0782-01A	SO4-MW2	04/18/2012 08:30	04/20/2012	Soil	SW8270_S	/					A4
L0782-01B	SO4-MW2	04/18/2012 08:30	04/20/2012	Soil	SW8260_LOW_S	/					VOA
L0782-01B	SO4-MW2	04/18/2012 08:30	04/20/2012	Soil	SW8260_MED_S	/					VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation



CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
 TAT- Indicate Date Needed: Standard
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 30 days unless otherwise instructed.

Report To: Liz Davis
Sterling Environmental Engineering PC
24 Hale Road
Watson, NY 12110

Invoice To: same

 P.O. No.: _____ RQN: _____

Project No.: 2011-31
 Site Name: Tray Beltry
 Location: 70 Echoes Road State: NY
 Sampler(s): * Nathan Jones Staff

1=Na₂SO₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=None 10=11

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
 X1= _____ X2= _____ X3= _____

List preservative code below:

9 9 9 9

Notes:

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Analyses:

Mercury by ICP

Metals by ICP

VOC by GC/MS

SVDA by GC/MS

QA/QC Reporting Level

☐ Level I

☐ Level II

☐ Level III

☐ Level IV

☒ Other

State specific reporting standards:

NY ASP Cat B

See Quote

MIT 1357

(Attached)

G=Grab C=Composite

Lab Id: 504 - MW2 4/18/12 8:30
502 4/18/12 8:30

Time:

Date:

Sample Id:

E-mail to liz.davis@sterlingenvironmental.com
 EDD Format _____

Relinquished by

Received by:

Time:

Date:

4/28/12 8:45

Condition upon receipt: ☒ Field ☐ Ambient Ac 3

Received By: <i>[Signature]</i>		Page 01 of 00																						
Reviewed By: <i>[Signature]</i>		Log-in Date 04/20/2012																						
Work Order: L0782		Client Name: Sterling Environmental Engineering P.C.																						
Project Name/Event: Town of Colonie																								
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">Lab Sample ID</th> <th colspan="5">Preservation (pH)</th> <th rowspan="2">VOA Matrix</th> <th rowspan="2">Soil HeadSpace or Air Bubble > or equal to 1/4"</th> </tr> <tr> <th>HNO3</th> <th>H2SO4</th> <th>HCl</th> <th>NaOH</th> <th>H3PO4</th> </tr> <tr> <td>L0782-01</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>US</td> <td></td> </tr> </table>		Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"	HNO3	H2SO4	HCl	NaOH	H3PO4	L0782-01						US	
Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"																	
	HNO3	H2SO4	HCl	NaOH	H3PO4																			
L0782-01						US																		
1. Custody Seal(s)		Present / Absent																						
		Intact / Broken																						
2. Custody Seal Nos.		N/A																						
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists		Present / Absent																						
4. Airbill		AirBill / Sticker																						
		Present / Absent																						
5. Airbill No.		FedEx 8987 3044 2386																						
6. Sample Tags		Present / Absent																						
Sample Tag Numbers		Listed /																						
		Not Listed on Chain-of-Custody																						
7. Sample Condition		Intact / Broken / Leaking																						
8. Cooler Temperature Indicator Bottle		Present / Absent																						
9. Cooler Temperature		3.0 °C																						
10. Does information on TR/COCs and sample tags agree?		Yes / No																						
11. Date Received at Laboratory		04/20/2012																						
12. Time Received		08:45																						
Sample Transfer																								
Fraction (1) TVOA/VOA		Fraction (2) SVOA/PEST/ARO																						
Area #		Area #																						
By		By																						
On		On																						
IR Temp Gun ID: MT-1		VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze																						
Coolant Condition: ICE																								
Preservative Name/Lot No:																								
		See Sample Condition Notification/Corrective Action Form Yes / No																						
		Rad OK Yes / No																						



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L0782

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 8260C

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW5035

Soil Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1

Instrument Type: GCMS-VOA

Description: HP5890 II / HP5972

Manufacturer: Hewlett-Packard

Model: 5890 / 5972

GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

Instrument Code: V10

Instrument Type: GCMS-VOA

Description: HP7890A

Manufacturer: Agilent

Model: 7890A / 5975C

GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

SO4-MW2 (L0782-01B) : Dilution Factor: 2

G. Samples:

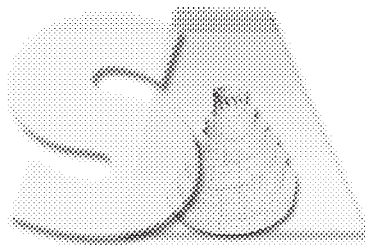
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.', written over a horizontal line.

Signed: _____

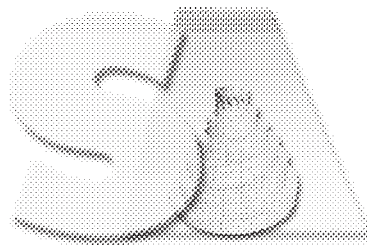
Date: _____ 5/8/2012 _____



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

2D - FORM II VOA-4
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-65753	100	105	98	100				0
02	LCSD-65753	98	97	103	98				0
03	MB-65753	101	104	99	95				0
04	S04-MW2	103	106	100	93				0

VDMC1 (DBFM) Dibromofluoromethane
 VDMC2 (DCE) = 1,2-Dichloroethane-d4
 VDMC3 (TOL) = Toluene-d8
 VDMC4 (BFB) = Bromofluorobenzene

QC LIMITS
 (65-132)
 (65-128)
 (85-115)
 (77-111)

Column to be used to flag recovery values
 * Values outside of contract required QC limits

som111.10.27.A

2D - FORM II VOA-4
SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 Level: (LOW/MED) MED

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-65899	99	99	100	99				0
02	MB-65899	99	99	101	96				0
03	S04-MW2ME	98	99	98	99				0

QC LIMITS
 (65-132)
 (65-128)
 (85-115)
 (77-111)

VDMC1 (DBFM) Dibromofluoromethane
 VDMC2 (DCE) = 1,2-Dichloroethane-d4
 VDMC3 (TOL) = Toluene-d8
 VDMC4 (BFB) = Bromofluorobenzene

Column to be used to flag recovery values
 * Values outside of contract required QC limits

som111.10.27.A

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-65753

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCS-65753 LCS Lot No.: _____
Date Extracted: 04/23/2012 Date Analyzed (1): 04/23/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	52.7279	105		35 - 135
Chloromethane	50.0000	0.0000	54.0750	108		50 - 130
Vinyl chloride	50.0000	0.0000	54.3706	109		60 - 125
Bromomethane	50.0000	0.0000	51.4446	103		30 - 160
Chloroethane	50.0000	0.0000	56.8150	114		40 - 155
Trichlorofluoromethane	50.0000	0.0000	52.1731	104		25 - 185
1,1-Dichloroethene	50.0000	0.0000	53.2878	107		65 - 135
Acetone	50.0000	0.0000	39.1951	78		20 - 160
Iodomethane	50.0000	0.0000	54.9656	110		70 - 126
Carbon disulfide	50.0000	0.0000	54.0374	108		45 - 160
Methylene chloride	50.0000	0.0000	51.4101	103		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.6538	105		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	55.9182	112		75 - 126
1,1-Dichloroethane	50.0000	0.0000	54.4076	109		75 - 125
Vinyl acetate	50.0000	0.0000	55.9845	112		65 - 138
2-Butanone	50.0000	0.0000	50.5596	101		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	53.3688	107		65 - 125
2,2-Dichloropropane	50.0000	0.0000	55.0941	110		65 - 135
Bromochloromethane	50.0000	0.0000	52.0615	104		70 - 125
Chloroform	50.0000	0.0000	52.5213	105		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	55.8004	112		70 - 135
1,1-Dichloropropene	50.0000	0.0000	52.7516	106		70 - 135
Carbon tetrachloride	50.0000	0.0000	55.1525	110		65 - 135
1,2-Dichloroethane	50.0000	0.0000	54.1658	108		70 - 135
Benzene	50.0000	0.0000	53.5090	107		75 - 125
Trichloroethene	50.0000	0.0000	53.0185	106		75 - 125
1,2-Dichloropropane	50.0000	0.0000	55.9810	112		70 - 120
Dibromomethane	50.0000	0.0000	54.6489	109		75 - 130
Bromodichloromethane	50.0000	0.0000	53.6505	107		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	49.6932	99		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	58.5398	117		45 - 145
Toluene	50.0000	0.0000	52.3404	105		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	54.2562	109		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	55.0126	110		60 - 125
1,3-Dichloropropane	50.0000	0.0000	55.8429	112		75 - 125
Tetrachloroethene	50.0000	0.0000	52.2558	105		65 - 140
2-Hexanone	50.0000	0.0000	56.7589	114		45 - 145
Dibromochloromethane	50.0000	0.0000	54.2350	108		65 - 130
1,2-Dibromoethane	50.0000	0.0000	57.4965	115		70 - 125
Chlorobenzene	50.0000	0.0000	51.3232	103		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	52.1624	104		75 - 125
Ethylbenzene	50.0000	0.0000	52.5728	105		75 - 125
m,p-Xylene	100.0000	0.0000	102.6109	103		80 - 125
o-Xylene	50.0000	0.0000	52.1903	104		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-65753

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCS-65753 LCS Lot No.: _____
Date Extracted: 04/23/2012 Date Analyzed (1): 04/23/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	154.8012	103		83 - 125
Styrene	50.0000	0.0000	51.7910	104		75 - 125
Bromoform	50.0000	0.0000	54.1386	108		55 - 135
Isopropylbenzene	50.0000	0.0000	51.4505	103		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	57.7528	116		55 - 130
Bromobenzene	50.0000	0.0000	53.8510	108		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	58.5461	117		65 - 130
n-Propylbenzene	50.0000	0.0000	53.9353	108		65 - 135
2-Chlorotoluene	50.0000	0.0000	52.0848	104		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	52.7615	106		65 - 135
4-Chlorotoluene	50.0000	0.0000	55.1641	110		75 - 125
tert-Butylbenzene	50.0000	0.0000	52.5409	105		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	53.4795	107		65 - 135
sec-Butylbenzene	50.0000	0.0000	53.1280	106		65 - 130
4-Isopropyltoluene	50.0000	0.0000	51.9467	104		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	53.2037	106		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	52.0283	104		70 - 125
n-Butylbenzene	50.0000	0.0000	52.2671	105		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	53.7719	108		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	62.2479	124		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	49.8390	100		65 - 130
Hexachlorobutadiene	50.0000	0.0000	51.7342	103		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	49.9909	100		60 - 135
Naphthalene	50.0000	0.0000	50.0308	100		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-65899

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCS-65899 LCS Lot No.: _____
Date Extracted: 04/30/2012 Date Analyzed (1): 04/30/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2500.0000	0.0000	2433.6653	97		35 - 135
Chloromethane	2500.0000	0.0000	2513.8944	101		50 - 130
Vinyl chloride	2500.0000	0.0000	2463.2648	99		60 - 125
Bromomethane	2500.0000	0.0000	2972.1043	119		30 - 160
Chloroethane	2500.0000	0.0000	2401.9067	96		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2464.6325	99		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2406.1791	96		65 - 135
Acetone	2500.0000	0.0000	2509.0994	100		20 - 160
Iodomethane	2500.0000	0.0000	3125.5610	125		70 - 126
Carbon disulfide	2500.0000	0.0000	2269.5574	91		45 - 160
Methylene chloride	2500.0000	0.0000	2267.9731	91		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2440.1173	98		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2448.6401	98		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2482.0562	99		75 - 125
Vinyl acetate	2500.0000	0.0000	2602.4380	104		65 - 138
2-Butanone	2500.0000	0.0000	2566.0097	103		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2497.8519	100		65 - 125
2,2-Dichloropropane	2500.0000	0.0000	2525.0611	101		65 - 135
Bromochloromethane	2500.0000	0.0000	2506.1320	100		70 - 125
Chloroform	2500.0000	0.0000	2503.3090	100		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2460.9367	98		70 - 135
1,1-Dichloropropene	2500.0000	0.0000	2449.7857	98		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2459.6532	98		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2452.4325	98		70 - 135
Benzene	2500.0000	0.0000	2494.2837	100		75 - 125
Trichloroethene	2500.0000	0.0000	2424.3344	97		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2520.2729	101		70 - 120
Dibromomethane	2500.0000	0.0000	2458.2526	98		75 - 130
Bromodichloromethane	2500.0000	0.0000	2549.7816	102		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2595.7869	104		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2348.5168	94		45 - 145
Toluene	2500.0000	0.0000	2473.7897	99		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2567.3613	103		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2488.0086	100		60 - 125
1,3-Dichloropropane	2500.0000	0.0000	2475.4552	99		75 - 125
Tetrachloroethene	2500.0000	0.0000	2347.9619	94		65 - 140
2-Hexanone	2500.0000	0.0000	2448.5425	98		45 - 145
Dibromochloromethane	2500.0000	0.0000	2543.6837	102		65 - 130
1,2-Dibromoethane	2500.0000	0.0000	2487.0487	99		70 - 125
Chlorobenzene	2500.0000	0.0000	2442.3961	98		75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	0.0000	2499.2940	100		75 - 125
Ethylbenzene	2500.0000	0.0000	2456.3451	98		75 - 125
m,p-Xylene	5000.0000	0.0000	4971.8838	99		80 - 125
o-Xylene	2500.0000	0.0000	2490.0744	100		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-65899

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCS-65899 LCS Lot No.: _____
Date Extracted: 04/30/2012 Date Analyzed (1): 04/30/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	7500.0000	0.0000	7461.9582	99		75 - 125
Styrene	2500.0000	0.0000	2503.6751	100		75 - 125
Bromoform	2500.0000	0.0000	2523.8957	101		55 - 135
Isopropylbenzene	2500.0000	0.0000	2475.5793	99		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2376.5712	95		55 - 130
Bromobenzene	2500.0000	0.0000	2442.8939	98		65 - 120
1,2,3-Trichloropropane	2500.0000	0.0000	2363.6611	95		65 - 130
n-Propylbenzene	2500.0000	0.0000	2455.2139	98		65 - 135
2-Chlorotoluene	2500.0000	0.0000	2406.4926	96		70 - 130
1,3,5-Trimethylbenzene	2500.0000	0.0000	2472.3768	99		65 - 135
4-Chlorotoluene	2500.0000	0.0000	2435.7097	97		75 - 125
tert-Butylbenzene	2500.0000	0.0000	2419.3018	97		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2455.3661	98		65 - 135
sec-Butylbenzene	2500.0000	0.0000	2420.4894	97		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2425.2787	97		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2376.0990	95		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2344.1044	94		70 - 125
n-Butylbenzene	2500.0000	0.0000	2441.1474	98		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2389.7873	96		75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	0.0000	2268.1697	91		40 - 135
1,2,4-Trichlorobenzene	2500.0000	0.0000	2299.3674	92		65 - 130
Hexachlorobutadiene	2500.0000	0.0000	2103.1568	84		55 - 140
1,2,3-Trichlorobenzene	2500.0000	0.0000	2240.0245	90		60 - 135
Naphthalene	2500.0000	0.0000	2297.2134	92		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-65753

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L0782

Mod. Ref No.:

SDG No.: SL0782

Lab Sample ID: LCSD-65753

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #	QC LIMITS	
						RPD	REC.
Dichlorodifluoromethane	50.0000	46.6565	93		12	40	35 - 135
Chloromethane	50.0000	52.4311	105		3	40	50 - 130
Vinyl chloride	50.0000	52.4904	105		4	40	60 - 125
Bromomethane	50.0000	48.6263	97		6	40	30 - 160
Chloroethane	50.0000	49.9588	100		13	40	40 - 155
Trichlorofluoromethane	50.0000	50.3433	101		3	40	25 - 185
1,1-Dichloroethene	50.0000	50.1486	100		7	40	65 - 135
Acetone	50.0000	40.5932	81		4	40	20 - 160
Iodomethane	50.0000	50.9540	102		8	40	70 - 126
Carbon disulfide	50.0000	52.0574	104		4	40	45 - 160
Methylene chloride	50.0000	50.2172	100		3	40	55 - 140
trans-1,2-Dichloroethene	50.0000	50.2648	101		4	40	65 - 135
Methyl tert-butyl ether	50.0000	53.1970	106		6	40	75 - 126
1,1-Dichloroethane	50.0000	53.1278	106		3	40	75 - 125
Vinyl acetate	50.0000	52.9783	106		6	40	65 - 138
2-Butanone	50.0000	46.8133	94		7	40	30 - 160
cis-1,2-Dichloroethene	50.0000	51.1442	102		5	40	65 - 125
2,2-Dichloropropane	50.0000	51.9742	104		6	40	65 - 135
Bromochloromethane	50.0000	49.5433	99		5	40	70 - 125
Chloroform	50.0000	51.6537	103		2	40	70 - 125
1,1,1-Trichloroethane	50.0000	54.3845	109		3	40	70 - 135
1,1-Dichloropropene	50.0000	48.5171	97		9	40	70 - 135
Carbon tetrachloride	50.0000	51.1722	102		8	40	65 - 135
1,2-Dichloroethane	50.0000	53.3146	107		1	40	70 - 135
Benzene	50.0000	51.8627	104		3	40	75 - 125
Trichloroethene	50.0000	52.0850	104		2	40	75 - 125
1,2-Dichloropropane	50.0000	54.8052	110		2	40	70 - 120
Dibromomethane	50.0000	52.5347	105		4	40	75 - 130
Bromodichloromethane	50.0000	53.4156	107		0	40	70 - 130
cis-1,3-Dichloropropene	50.0000	53.2848	107		8	40	70 - 125
4-Methyl-2-pentanone	50.0000	53.2386	106		10	40	45 - 145
Toluene	50.0000	52.5064	105		0	40	70 - 125
trans-1,3-Dichloropropene	50.0000	52.4657	105		4	40	65 - 125
1,1,2-Trichloroethane	50.0000	53.7252	107		3	40	60 - 125
1,3-Dichloropropane	50.0000	55.5396	111		1	40	75 - 125
Tetrachloroethene	50.0000	55.1508	110		5	40	65 - 140
2-Hexanone	50.0000	53.9896	108		5	40	45 - 145
Dibromochloromethane	50.0000	55.9718	112		4	40	65 - 130
1,2-Dibromoethane	50.0000	56.8891	114		1	40	70 - 125
Chlorobenzene	50.0000	53.8974	108		5	40	75 - 125
1,1,1,2-Tetrachloroethane	50.0000	53.9108	108		4	40	75 - 125
Ethylbenzene	50.0000	53.5609	107		2	40	75 - 125
m,p-Xylene	100.0000	104.3143	104		1	40	80 - 125
o-Xylene	50.0000	52.3971	105		1	40	75 - 125
Xylene (Total)	150.0000	156.7115	104		1	40	83 - 125
Styrene	50.0000	53.8101	108		4	40	75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-65753

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L0782

Mod. Ref No.:

SDG No.: SL0782

Lab Sample ID: LCSD-65753

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Bromoform	50.0000	53.8740	108		0		40	55 - 135
Isopropylbenzene	50.0000	53.8523	108		5		40	75 - 130
1,1,2,2-Tetrachloroethane	50.0000	52.6302	105		10		40	55 - 130
Bromobenzene	50.0000	52.8958	106		2		40	65 - 120
1,2,3-Trichloropropane	50.0000	54.8906	110		6		40	65 - 130
n-Propylbenzene	50.0000	53.3743	107		1		40	65 - 135
2-Chlorotoluene	50.0000	52.0813	104		0		40	70 - 130
1,3,5-Trimethylbenzene	50.0000	50.7847	102		4		40	65 - 135
4-Chlorotoluene	50.0000	50.8596	102		8		40	75 - 125
tert-Butylbenzene	50.0000	48.9704	98		7		40	65 - 130
1,2,4-Trimethylbenzene	50.0000	50.8525	102		5		40	65 - 135
sec-Butylbenzene	50.0000	52.2454	104		2		40	65 - 130
4-Isopropyltoluene	50.0000	49.7871	100		4		40	75 - 135
1,3-Dichlorobenzene	50.0000	51.1407	102		4		40	70 - 125
1,4-Dichlorobenzene	50.0000	50.5901	101		3		40	70 - 125
n-Butylbenzene	50.0000	51.4981	103		2		40	65 - 140
1,2-Dichlorobenzene	50.0000	52.2511	105		3		40	75 - 120
1,2-Dibromo-3-chloropropan	50.0000	55.4362	111		11		40	40 - 135
1,2,4-Trichlorobenzene	50.0000	48.0684	96		4		40	65 - 130
Hexachlorobutadiene	50.0000	50.1091	100		3		40	55 - 140
1,2,3-Trichlorobenzene	50.0000	48.2845	97		3		40	60 - 135
Naphthalene	50.0000	48.7214	97		3		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-65753

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: V1M6297.D Lab Sample ID: MB-65753
Instrument ID: V1
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 04/23/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:37
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-65753	LCS-65753	V1M6293.D	15:46
02	LCSD-65753	LCSD-65753	V1M6294.D	16:13
03	S04-MW2	L0782-01B	V1M6313.D	1:08

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-65899

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: V8B1086.D Lab Sample ID: MB-65899
Instrument ID: V10
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 04/30/2012
Level: (TRACE or LOW/MED) MED Time Analyzed: 17:30
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-65899	LCS-65899	V8B1084.D	16:37
02	S04-MW2ME	L0782-01B	V8B1093.D	20:30

COMMENTS: _____

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB1Y

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: V1M6283.D BFB Injection Date: 04/23/2012
Instrument ID: V1 BFB Injection Time: 10:20
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	43.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	79.6
175	5.0 - 9.0% of mass 174	6.1 (7.6)1
176	95.0 - 101.0% of mass 174	78.0 (98.0)1
177	5.0 - 9.0% of mass 176	5.9 (7.6)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0501Y	VSTD0501Y	V1M6284.D	04/23/2012	11:05
02	VSTD0201Y	VSTD0201Y	V1M6285.D	04/23/2012	11:34
03	VSTD0051Y	VSTD0051Y	V1M6286.D	04/23/2012	12:02
04	VSTD2001Y	VSTD2001Y	V1M6287.D	04/23/2012	13:07
05	VSTD1001Y	VSTD1001Y	V1M6288.D	04/23/2012	13:36

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB1Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: V1M6290.D BFB Injection Date: 04/23/2012
Instrument ID: V1 BFB Injection Time: 14:32
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 60.0% of mass 95	44.4
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	0.0 (0.0)1
174	Greater than 50.0% of mass 95	75.5
175	5.0 - 9.0% of mass 174	6.0 (8.0)1
176	95.0 - 101.0% of mass 174	75.8 (100.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.5)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0501Z	VSTD0501Z	V1M6291.D	04/23/2012	14:48
02	LCS-65753	LCS-65753	V1M6293.D	04/23/2012	15:46
03	LCSD-65753	LCSD-65753	V1M6294.D	04/23/2012	16:13
04	MB-65753	MB-65753	V1M6297.D	04/23/2012	17:37
05	S04-MW2	L0782-01B	V1M6313.D	04/24/2012	1:08

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB10N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: V8B1070.D BFB Injection Date: 04/30/2012
Instrument ID: V10 BFB Injection Time: 8:37
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.1
75	30.0 - 80.0% of mass 95	53.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.5 (0.8)1
174	50.0 - 120% of mass 95	59.4
175	5.0 - 9.0% of mass 174	4.4 (7.4)1
176	95.0 - 101% of mass 174	58.5 (98.5)1
177	5.0 - 9.0% of mass 176	3.8 (6.5)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD05010N	VSTD05010N	V8B1073.D	04/30/2012	11:22
02	VSTD02010N	VSTD02010N	V8B1074.D	04/30/2012	11:48
03	VSTD00510N	VSTD00510N	V8B1075.D	04/30/2012	12:14
04	VSTD00110N	VSTD00110N	V8B1077.D	04/30/2012	13:07
05	VSTD20010N	VSTD20010N	V8B1078.D	04/30/2012	13:33
06	VSTD10010N	VSTD10010N	V8B1079.D	04/30/2012	13:59

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB100

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: V8B1081.D BFB Injection Date: 04/30/2012
Instrument ID: V10 BFB Injection Time: 15:02
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.4
75	30.0 - 80.0% of mass 95	53.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 (0.8)1
174	50.0 -120% of mass 95	58.1
175	5.0 - 9.0% of mass 174	4.4 (7.6)1
176	95.0 - 101% of mass 174	57.5 (99.0)1
177	5.0 - 9.0% of mass 176	3.7 (6.4)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050100	VSTD050100	V8B1082.D	04/30/2012	15:30
02	LCS-65899	LCS-65899	V8B1084.D	04/30/2012	16:37
03	MB-65899	MB-65899	V8B1086.D	04/30/2012	17:30
04	S04-MW2ME	L0782-01B	V8B1093.D	04/30/2012	20:30

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/23/2012 04/23/2012
 EPA Sample No.(VSTD#####): VSTD0501Z Date Analyzed: 04/23/2012
 Lab File ID (Standard): V1M6291.D Time Analyzed: 14:48
 Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1)		IS2 (S2)		IS3 (S3)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	517666	6.402	365404	10.086	206822	12.933
	UPPER LIMIT	1035332	6.902	730808	10.586	413644	13.433
	LOWER LIMIT	258833	5.902	182702	9.586	103411	12.433
	SAMPLE NO.						
01	LCS-65753	523461	6.407	355293	10.081	194901	12.928
02	LCSD-65753	535080	6.412	349994	10.086	199013	12.922
03	MB-65753	491898	6.393	343721	10.086	190326	12.923
04	S04-MW2	532552	6.407	373686	10.081	198746	12.927

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 04/30/2012 04/30/2012
 EPA Sample No.(VSTD#####): VSTD050100 Date Analyzed: 04/30/2012
 Lab File ID (Standard): V8B1082.D Time Analyzed: 15:30
 Instrument ID: V10 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA	#	RT	#	AREA	#
12 HOUR STD	594232		5.3		196925	10.779
UPPER LIMIT	1188464		5.8		393850	11.279
LOWER LIMIT	297116		4.8		98463	10.279
SAMPLE NO.						
01 LCS-65899	600706		5.301		203267	10.779
02 MB-65899	585408		5.301		173526	10.783
03 S04-MW2ME	561715		5.300		177563	10.779

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S04-MW2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L0782-01B
Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M6313.D
Level: (TRACE/LOW/MED) LOW Date Received: 04/20/2012
% Moisture: not dec. 8.1 Date Analyzed: 04/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	4.9	U
74-87-3	Chloromethane	4.9	U
75-01-4	Vinyl chloride	34	
74-83-9	Bromomethane	4.9	U
75-00-3	Chloroethane	4.9	U
75-69-4	Trichlorofluoromethane	4.9	U
75-35-4	1,1-Dichloroethene	5.1	
67-64-1	Acetone	19	
74-88-4	Iodomethane	4.9	U
75-15-0	Carbon disulfide	4.9	U
75-09-2	Methylene chloride	2.9	J
156-60-5	trans-1,2-Dichloroethene	20	
1634-04-4	Methyl tert-butyl ether	4.9	U
75-34-3	1,1-Dichloroethane	4.0	J
108-05-4	Vinyl acetate	4.9	U
78-93-3	2-Butanone	4.9	U
156-59-2	cis-1,2-Dichloroethene	2600	E
594-20-7	2,2-Dichloropropane	4.9	U
74-97-5	Bromochloromethane	4.9	U
67-66-3	Chloroform	4.9	U
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	4.9	U
56-23-5	Carbon tetrachloride	4.9	U
107-06-2	1,2-Dichloroethane	4.9	U
71-43-2	Benzene	4.9	U
79-01-6	Trichloroethene	4400	E
78-87-5	1,2-Dichloropropane	4.9	U
74-95-3	Dibromomethane	4.9	U
75-27-4	Bromodichloromethane	4.9	U
10061-01-5	cis-1,3-Dichloropropene	4.9	U
108-10-1	4-Methyl-2-pentanone	4.9	U
108-88-3	Toluene	12	
10061-02-6	trans-1,3-Dichloropropene	4.9	U
79-00-5	1,1,2-Trichloroethane	4.9	U
142-28-9	1,3-Dichloropropane	4.9	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S04-MW2

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: L0782-01B
Sample wt/vol: 5.50 (g/mL) G	Lab File ID: V1M6313.D
Level: (TRACE/LOW/MED) LOW	Date Received: 04/20/2012
% Moisture: not dec. 8.1	Date Analyzed: 04/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	530	E
591-78-6	2-Hexanone	4.9	U
124-48-1	Dibromochloromethane	4.9	U
106-93-4	1,2-Dibromoethane	4.9	U
108-90-7	Chlorobenzene	4.9	U
630-20-6	1,1,1,2-Tetrachloroethane	4.9	U
100-41-4	Ethylbenzene	2.8	J
179601-23-1	m,p-Xylene	7.0	
95-47-6	o-Xylene	5.5	
1330-20-7	Xylene (Total)	12	
100-42-5	Styrene	4.9	U
75-25-2	Bromoform	4.9	U
98-82-8	Isopropylbenzene	4.9	U
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U
108-86-1	Bromobenzene	4.9	U
96-18-4	1,2,3-Trichloropropane	4.9	U
103-65-1	n-Propylbenzene	1.5	J
95-49-8	2-Chlorotoluene	4.9	U
108-67-8	1,3,5-Trimethylbenzene	5.0	
106-43-4	4-Chlorotoluene	4.9	U
98-06-6	tert-Butylbenzene	4.9	U
95-63-6	1,2,4-Trimethylbenzene	13	
135-98-8	sec-Butylbenzene	1.1	J
99-87-6	4-Isopropyltoluene	1.8	J
541-73-1	1,3-Dichlorobenzene	4.9	U
106-46-7	1,4-Dichlorobenzene	4.9	U
104-51-8	n-Butylbenzene	2.0	J
95-50-1	1,2-Dichlorobenzene	4.9	U
96-12-8	1,2-Dibromo-3-chloropropane	4.9	U
120-82-1	1,2,4-Trichlorobenzene	4.9	U
87-68-3	Hexachlorobutadiene	4.9	U
87-61-6	1,2,3-Trichlorobenzene	4.9	U
91-20-3	Naphthalene	1.4	J

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D
Lab Smp Id: L0782-01B Client Smp ID: S04-MW2
Inj Date : 24-APR-2012 01:08
Operator : V1 SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,L0782-01B,,65753
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423A.B\v18260GH.m
Meth Date : 02-May-2012 09:33 amarquis Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.14
Compound Sublist: all.sub

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * 5 / (\text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.500	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON - COLUMN (ug/L)	FINAL (ug/Kg)
3 Vinyl Chloride	62	1.994	1.999 (0.311)		130755	33.8745	31
9 1,1-Dichloroethene	96	3.294	3.309 (0.514)		16670	5.12875	5
11 Acetone	58	3.333	3.348 (0.520)		6868	18.9975	17(Q)
16 Methylene Chloride	84	3.796	3.811 (0.593)		10983	2.90236	3(a)
19 trans-1,2-Dichloroethene	96	4.082	4.097 (0.637)		68088	19.8218	18
21 1,1-Dichloroethane	63	4.525	4.540 (0.706)		21982	4.01373	4(a)
M 27 1,2-dichloroethene, (Total)	100				10000427	2772.65	2500(A)
25 cis-1,2-Dichloroethene	96	5.136	5.151 (0.802)		9932339	2628.58	2400(A)
\$ 32 Dibromofluoromethane	113	5.648	5.663 (0.882)		153929	51.3340	47
33 1,1,1-Trichloroethane	97	5.687	5.702 (0.888)		238654	53.8734	49
\$ 37 1,2-Dichloroethane-d4	102	6.022	6.037 (0.940)		30679	52.8246	48
* 41 Fluorobenzene	96	6.406	6.411 (1.000)		532552	50.0000	
42 Trichloroethene	130	6.830	6.825 (1.066)		15560564	4461.46	4000(A)
\$ 51 Toluene-d8	98	8.258	8.253 (0.819)		514486	50.1421	46
52 Toluene	91	8.337	8.342 (1.301)		158473	12.1968	11
55 Tetrachloroethene	164	9.026	9.021 (0.895)		1779869	539.066	490(A)
* 60 Chlorobenzene-d5	117	10.080	10.085 (1.000)		373686	50.0000	
64 Ethylbenzene	106	10.267	10.262 (1.019)		13091	2.80070	2(aQ)
65 m,p-Xylene	106	10.415	10.420 (1.033)		42085	7.09264	6
66 o-Xylene	106	10.927	10.922 (1.084)		31522	5.53437	5
\$ 70 Bromofluorobenzene	95	11.567	11.553 (1.148)		176438	46.4769	42

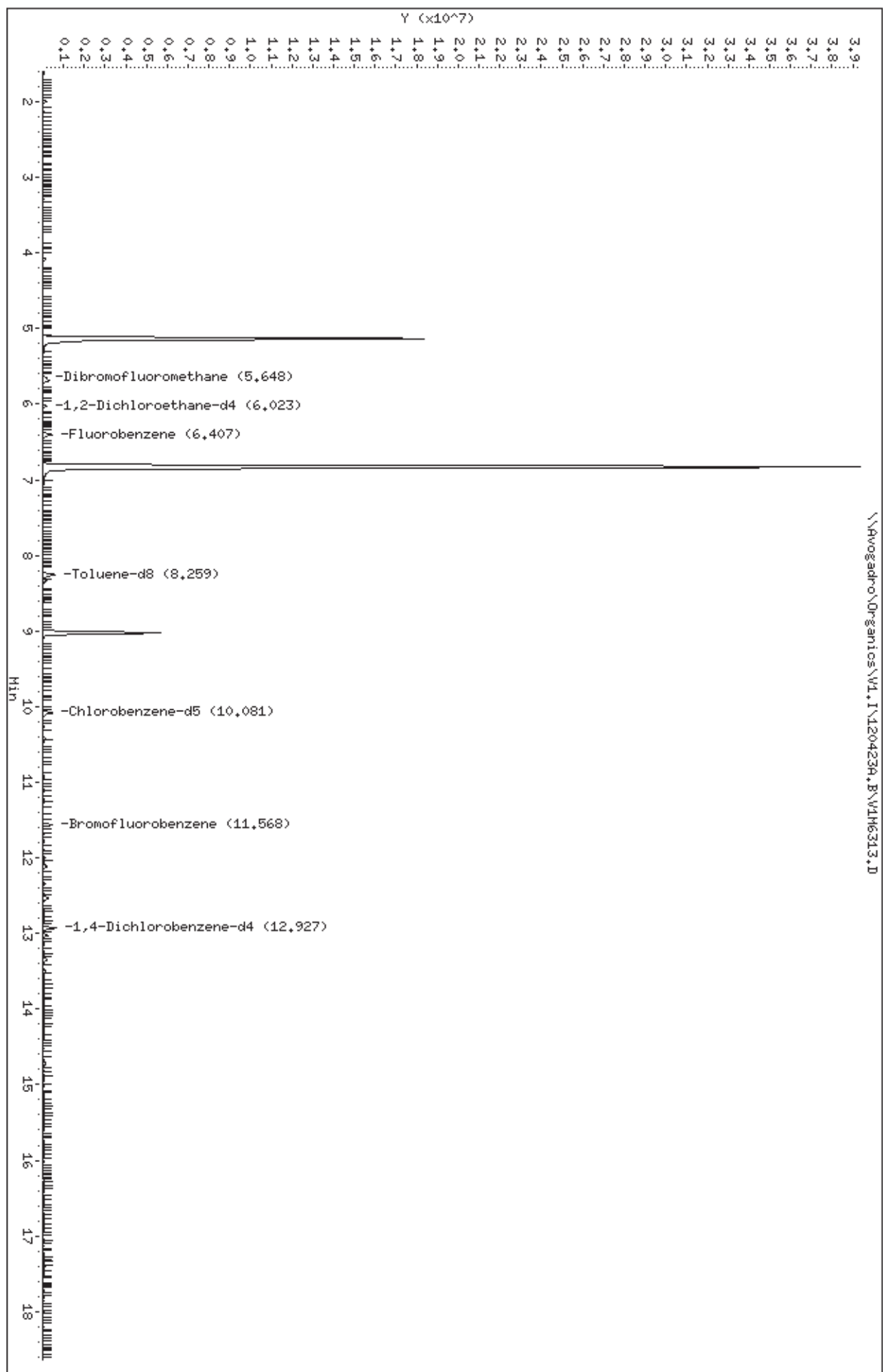
Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON - COLUMN	FINAL	
=====	=====	=====	=====	=====	=====	(ug/L)	(ug/Kg)	=====
74 n-Propylbenzene	120	11.883	11.878 (0.919)		5666	1.56294	1(a)	
76 1,3,5-Trimethylbenzene	105	12.099	12.094 (0.936)		57971	5.01406	4(a)	
79 1,2,4-Trimethylbenzene	105	12.533	12.528 (0.970)		159956	13.5892	12	
M 81 Xylene (Total)	106				73607	12.6270	11	
80 sec-Butylbenzene	105	12.730	12.735 (0.985)		17089	1.10937	1(a)	
83 4-Isopropyltoluene	119	12.907	12.902 (0.998)		21706	1.77681	2(a)	
* 84 1,4-Dichlorobenzene-d4	152	12.927	12.922 (1.000)		198746	50.0000		
86 n-Butylbenzene	91	13.370	13.365 (1.034)		26054	2.06205	2(aQ)	
91 Naphthalene	128	15.409	15.404 (1.192)		14709	1.45597	1(a)	

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1,I\120423A,B\VIH6313.D
Date : 24-APR-2012 01:08
Client ID: S04-VM2
Sample Info: SHL,L0782-01B,65753
Column phase: DB-624

Instrument: V1.i
Operator: V1 SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML,L0782-01B,,65753

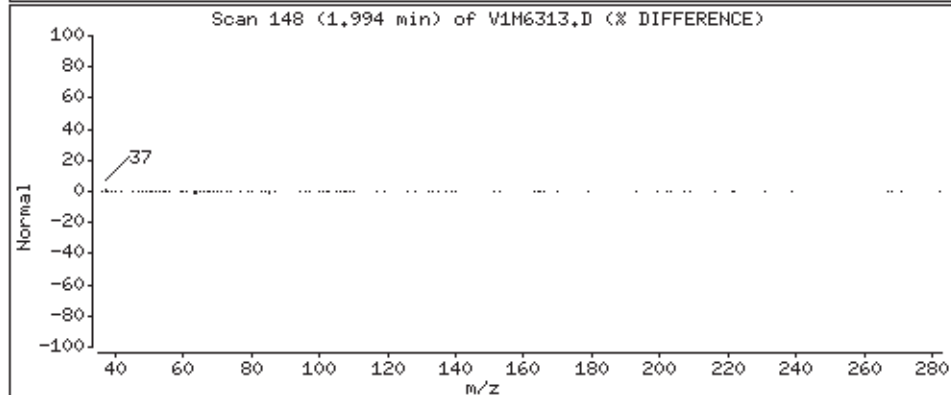
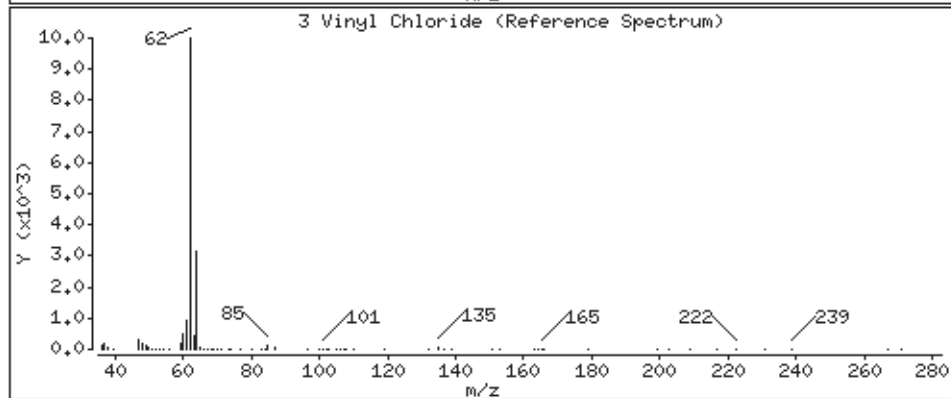
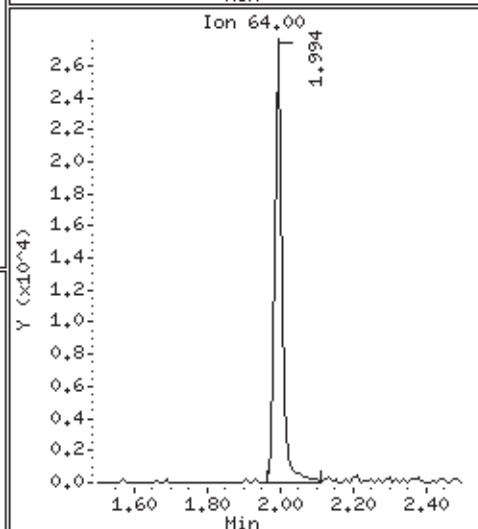
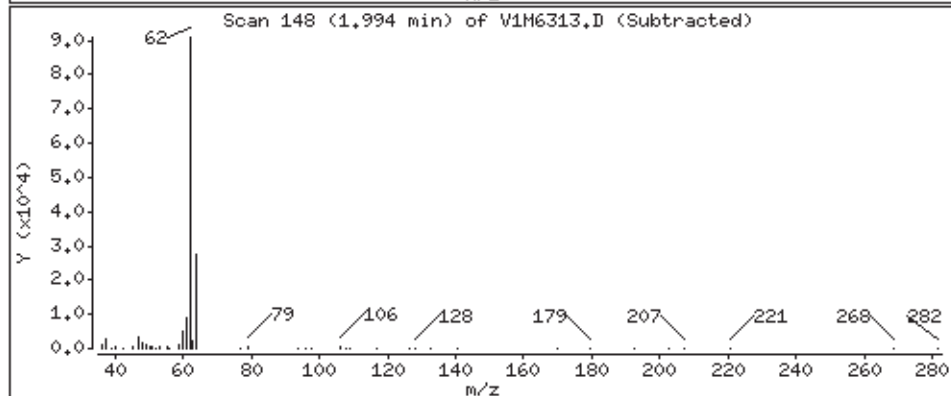
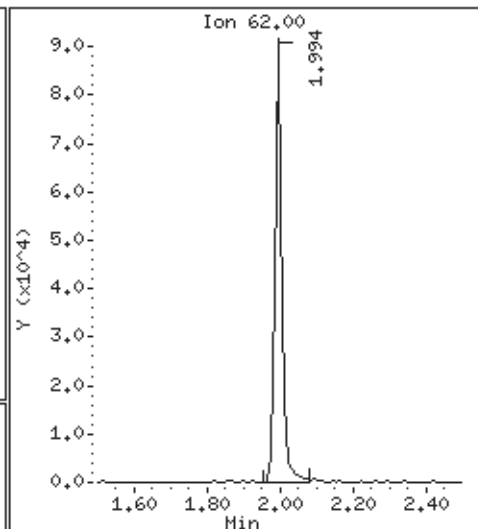
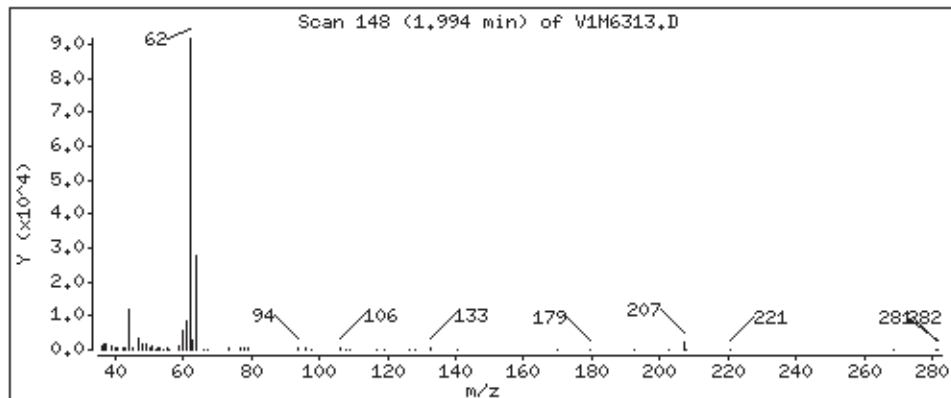
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

3 Vinyl Chloride

Concentration: 31 ug/Kg



Data File: \\Avogadro\Organics\V1,I\120423A,B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML,L0782-01B,,65753

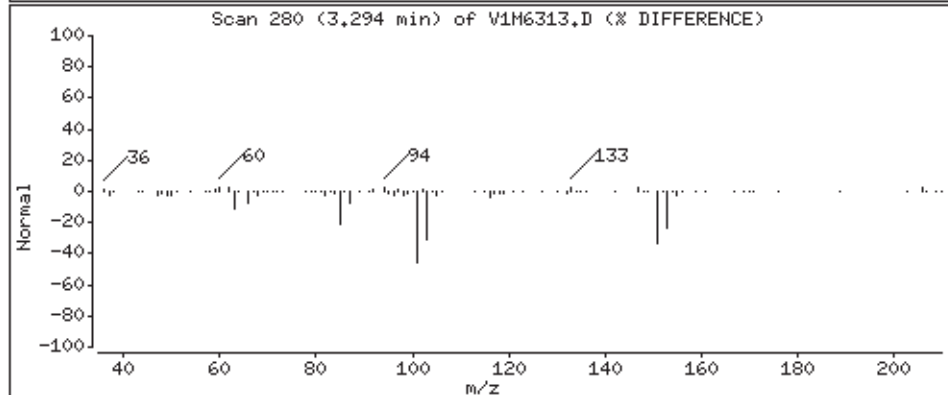
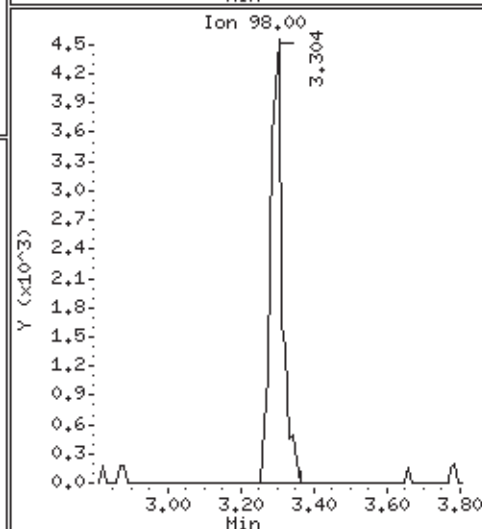
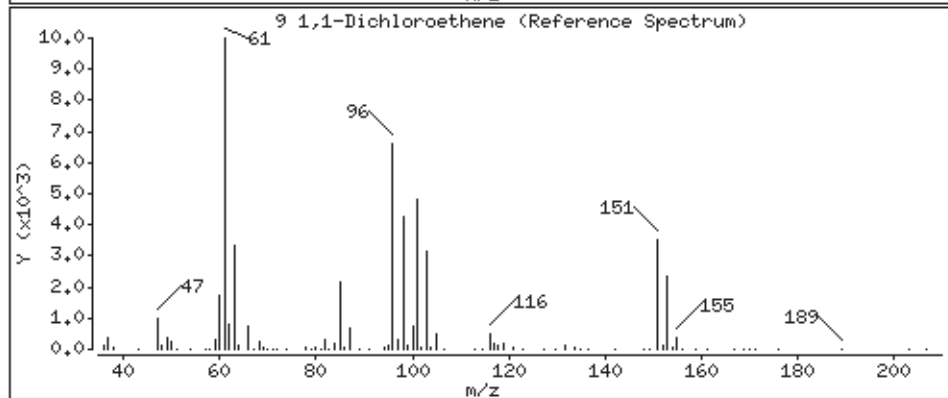
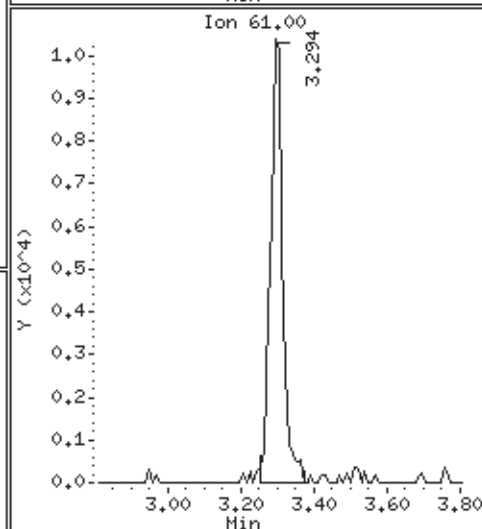
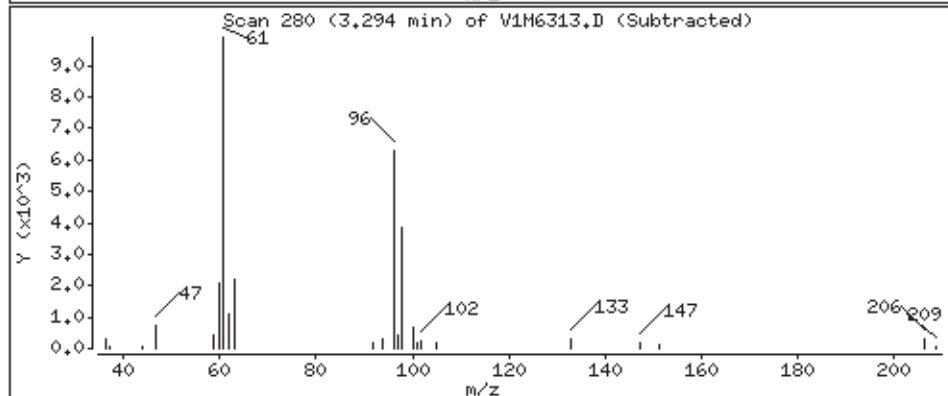
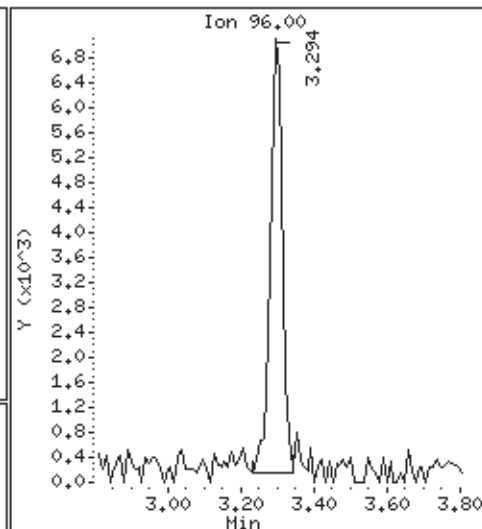
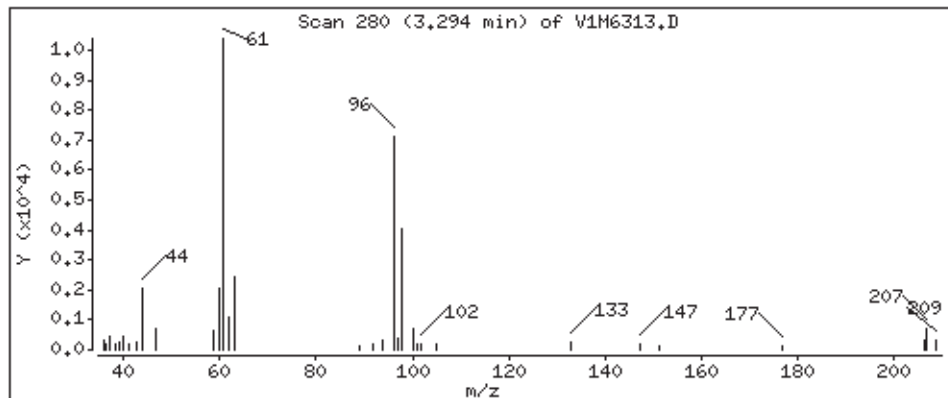
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

9 1,1-Dichloroethene

Concentration: 5 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

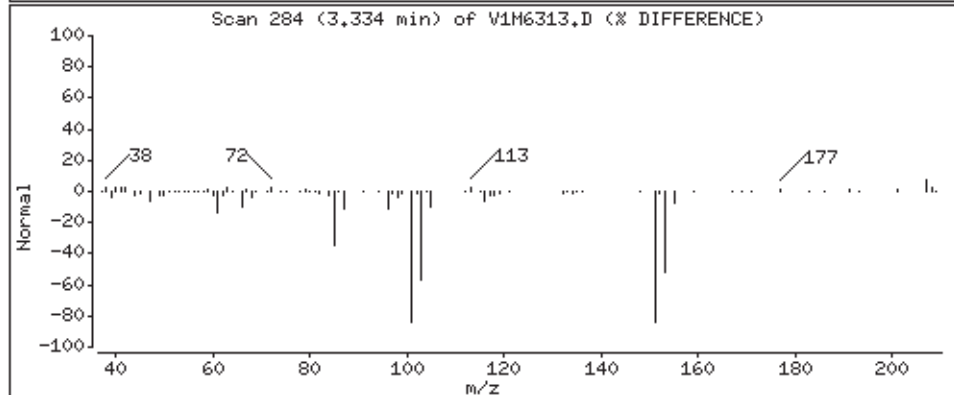
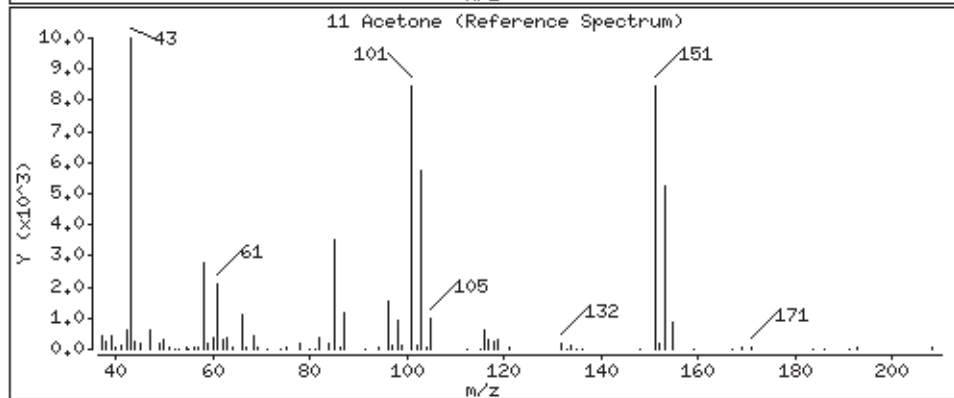
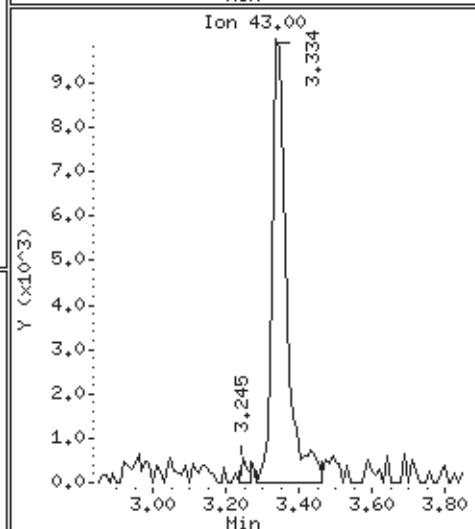
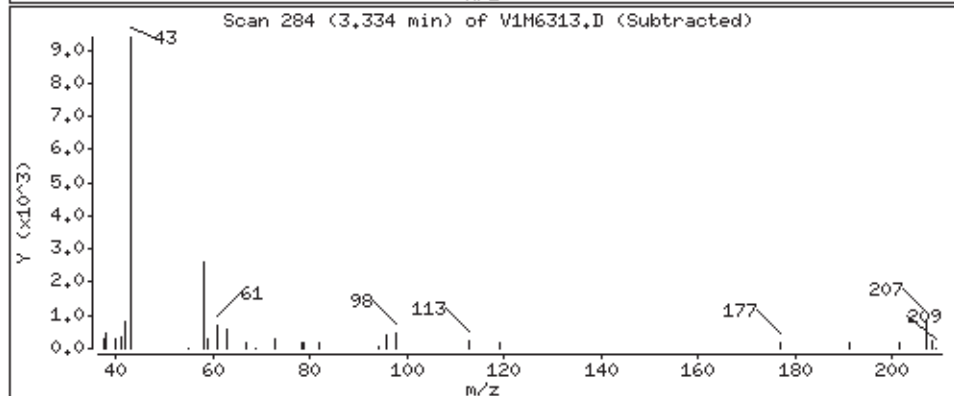
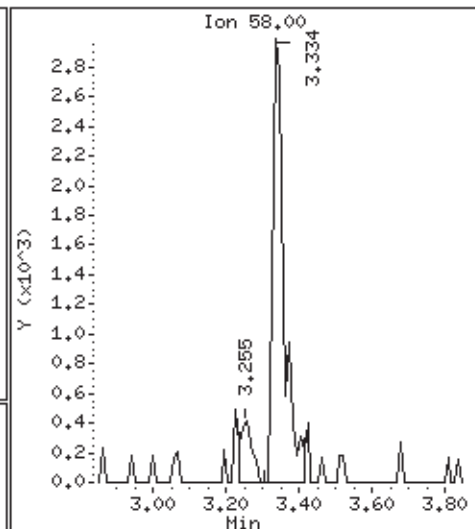
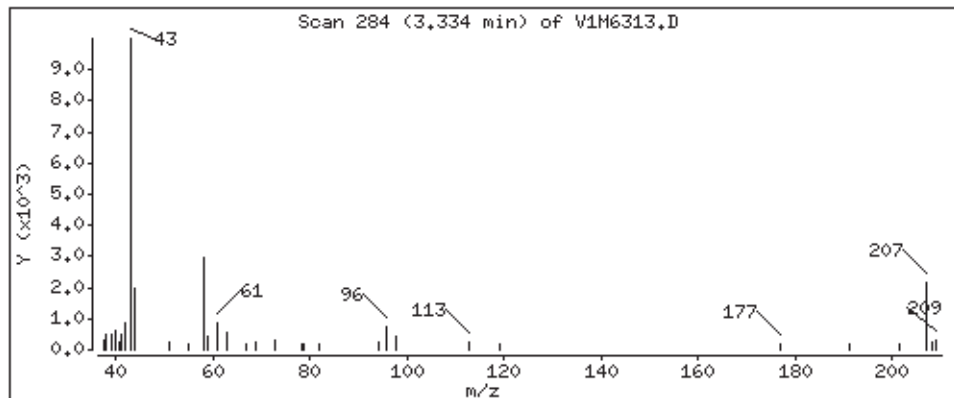
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

11 Acetone

Concentration: 17 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

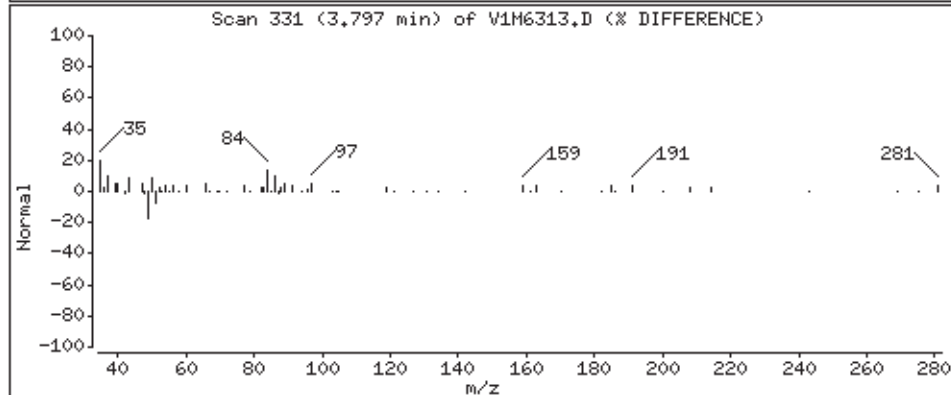
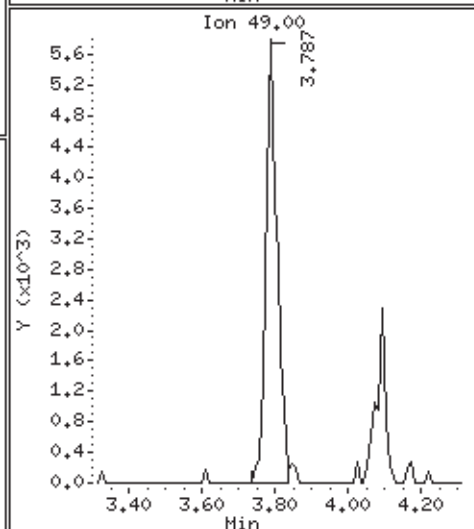
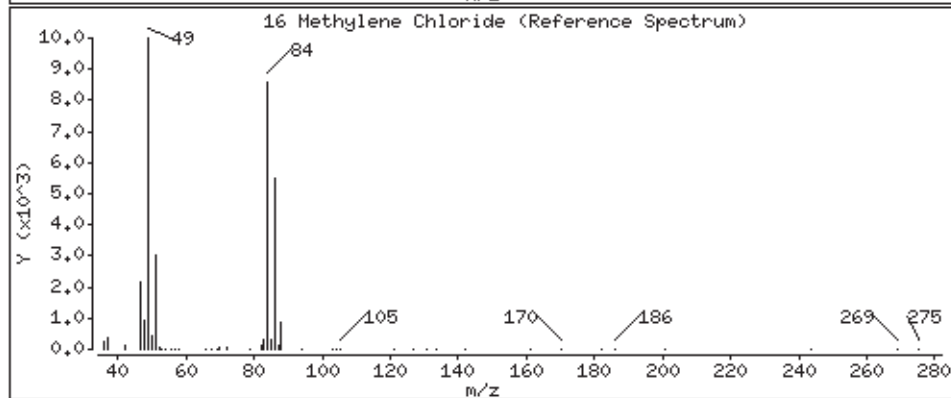
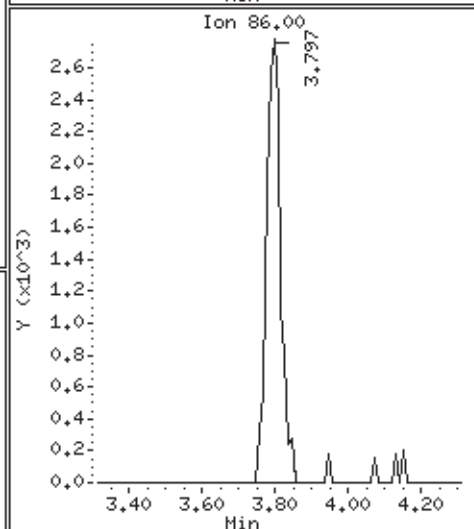
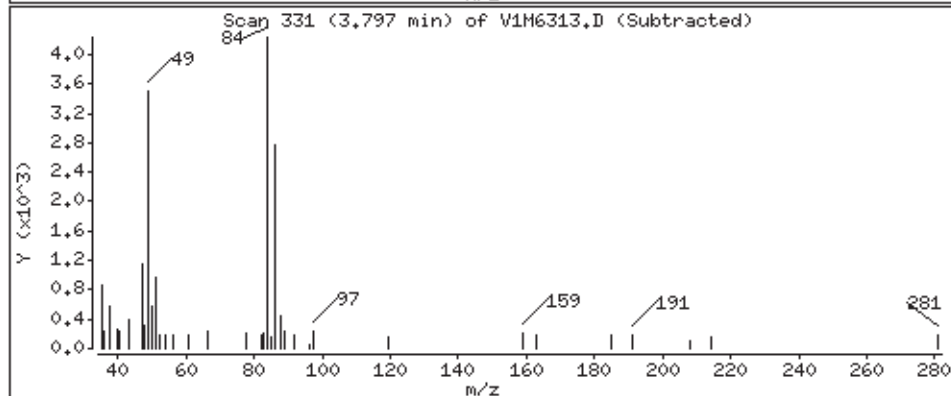
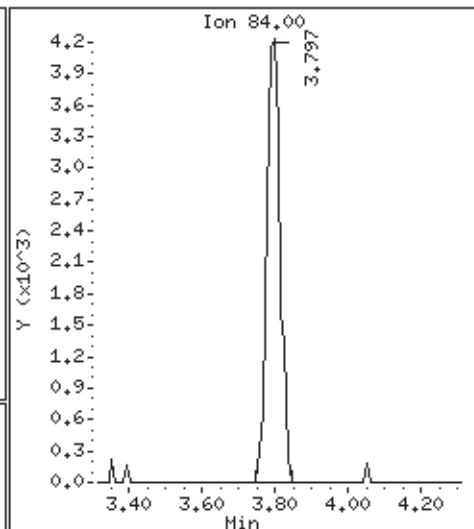
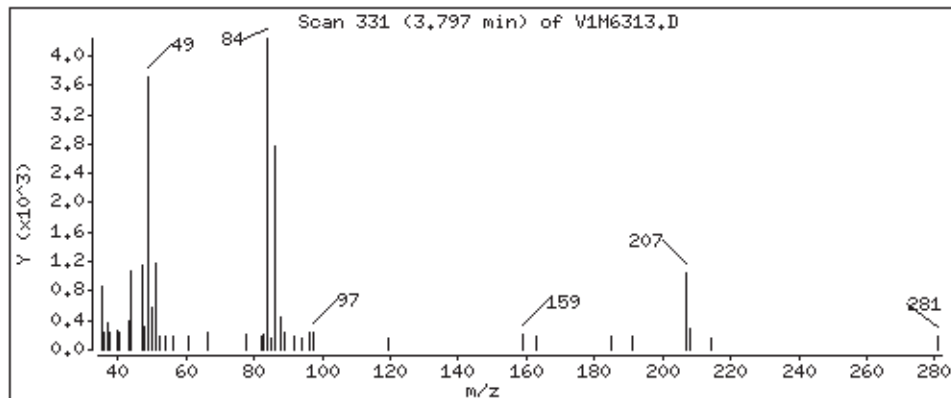
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

16 Methylene Chloride

Concentration: 3 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

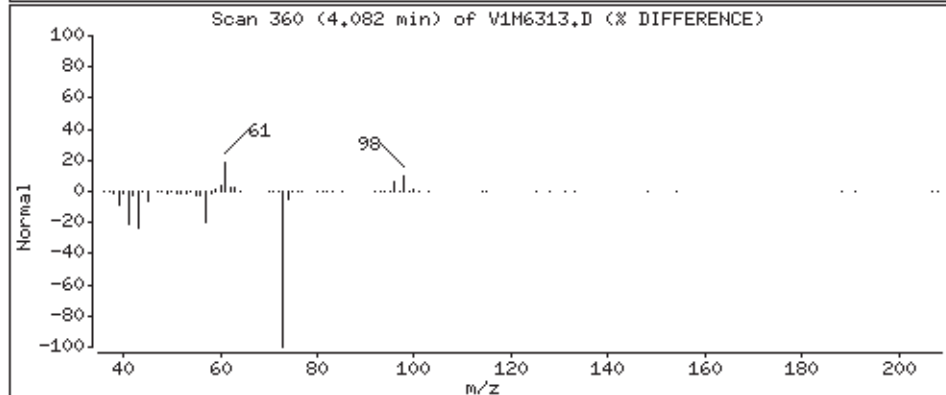
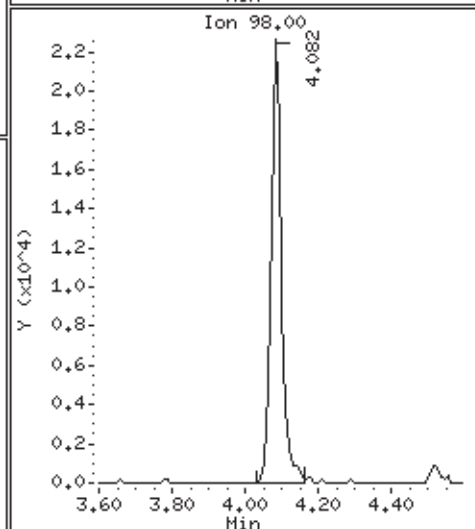
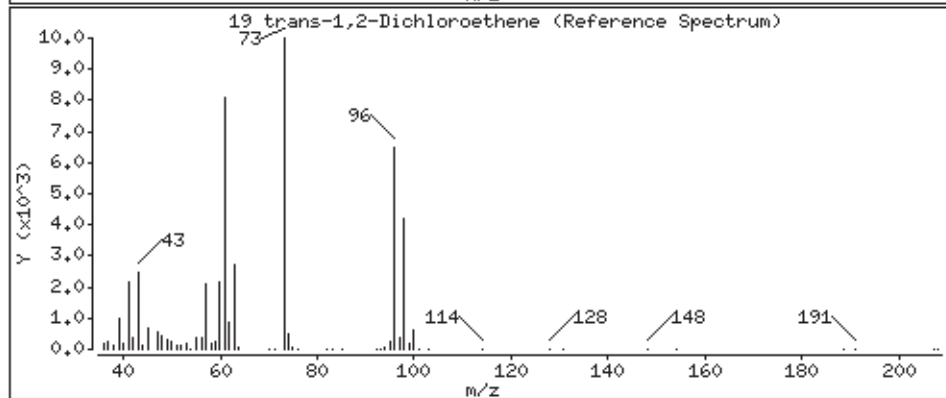
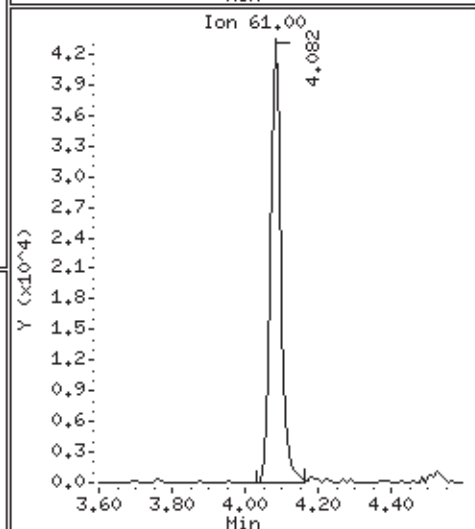
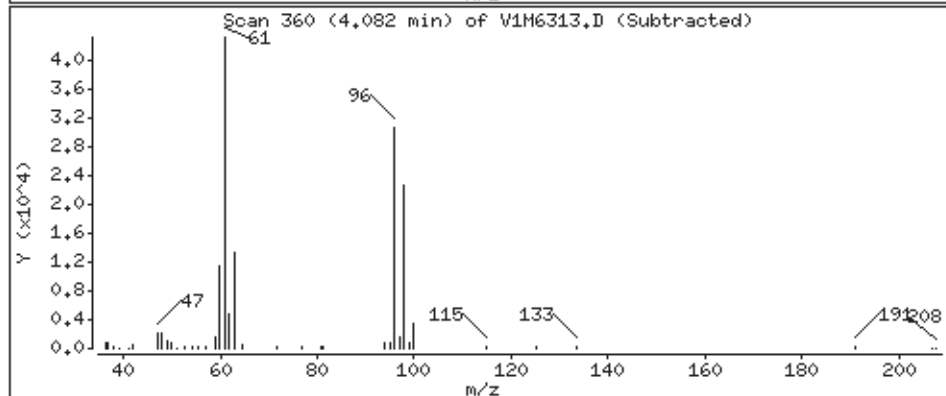
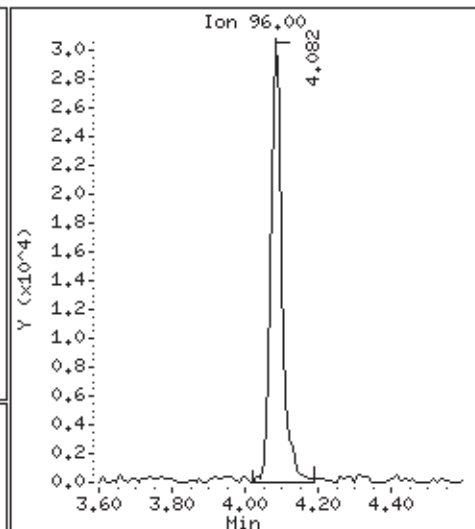
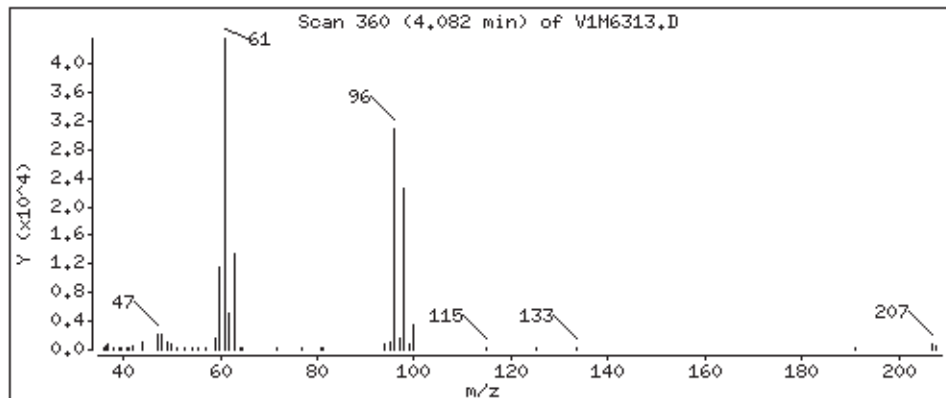
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

19 trans-1,2-Dichloroethene

Concentration: 18 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

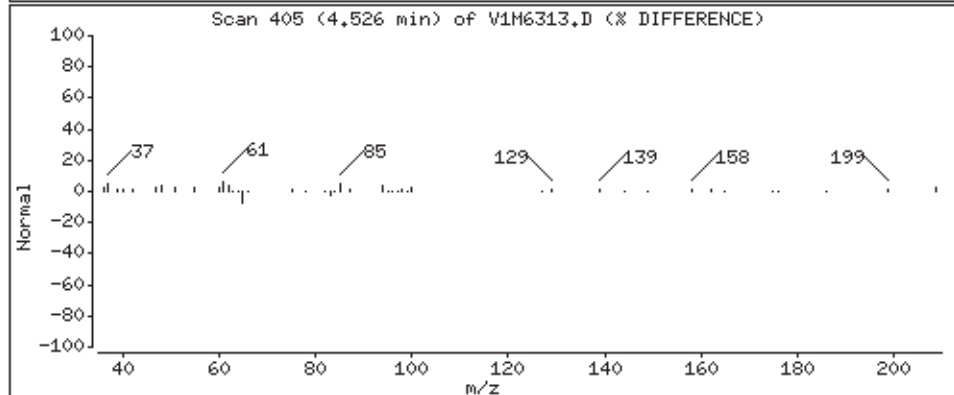
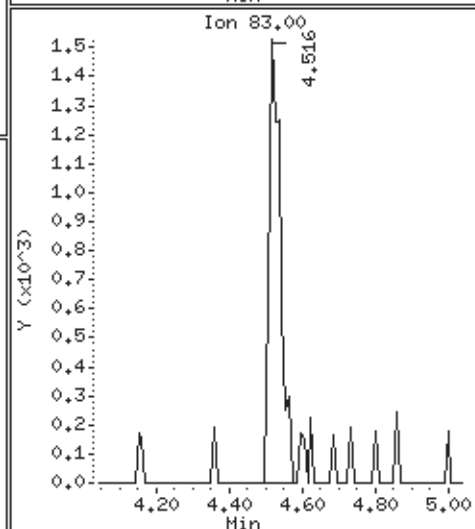
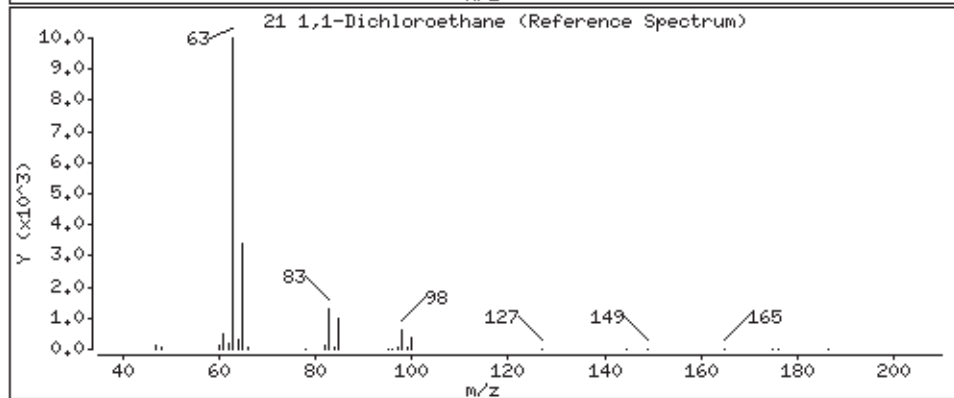
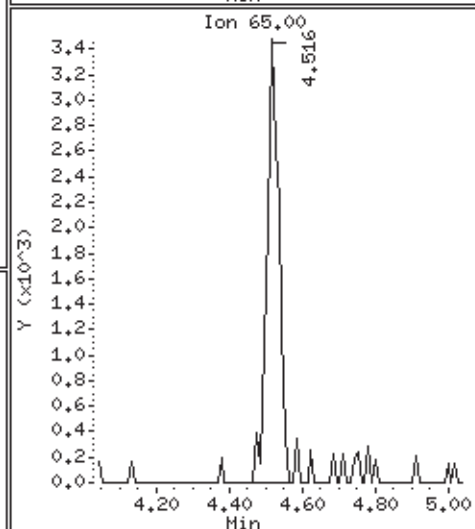
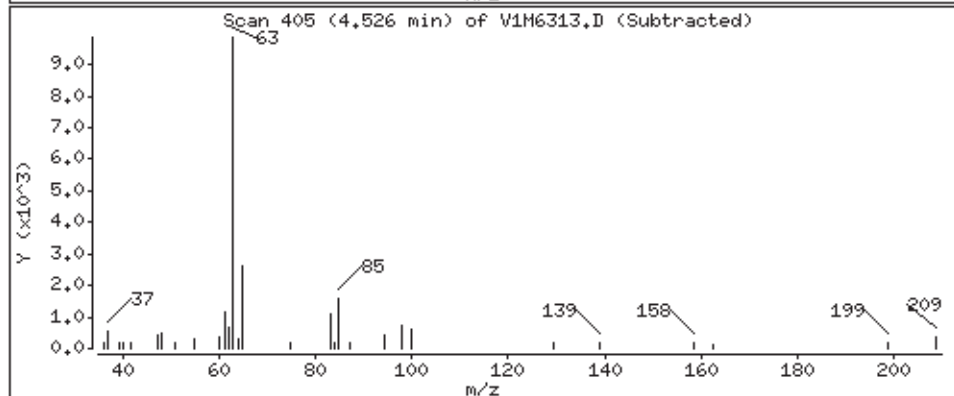
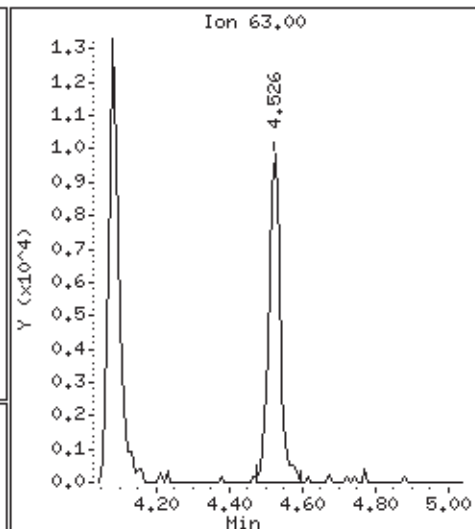
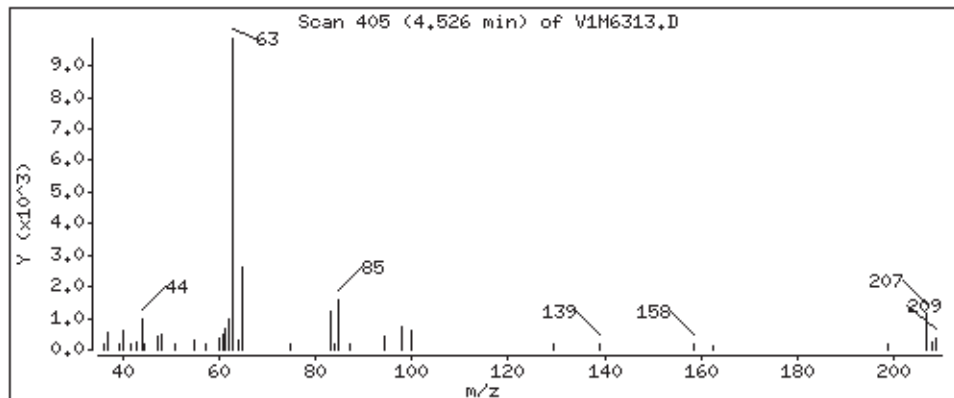
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

21 1,1-Dichloroethane

Concentration: 4 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML,L0782-01B,,65753

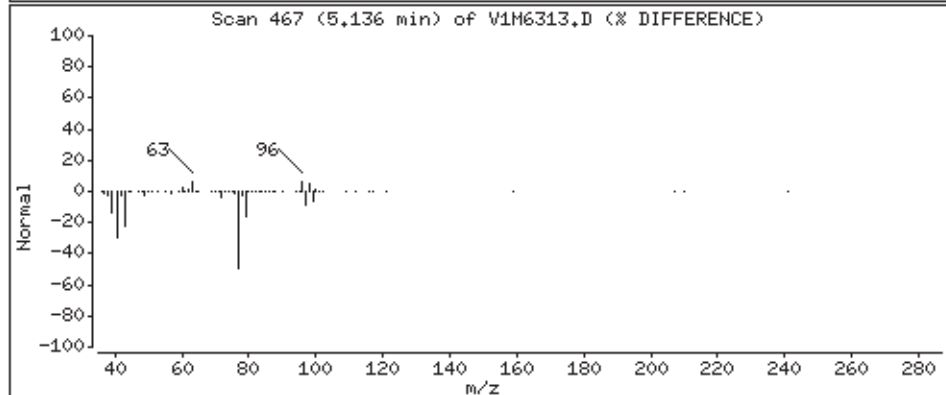
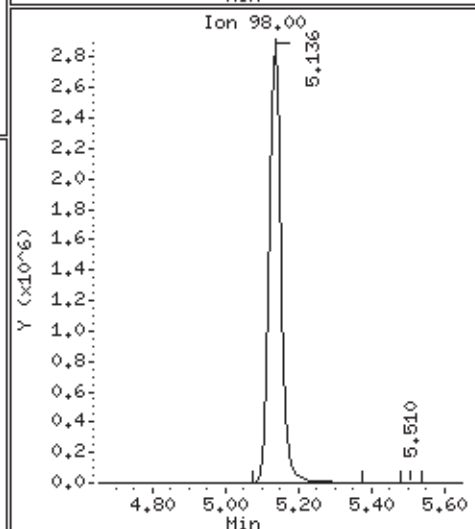
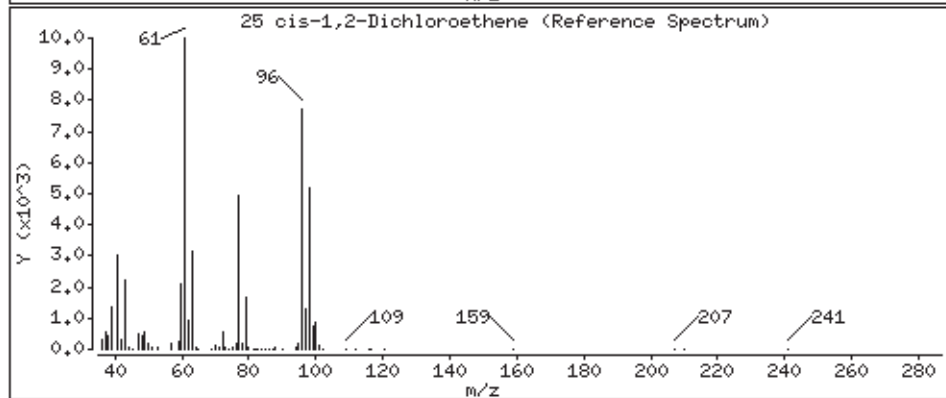
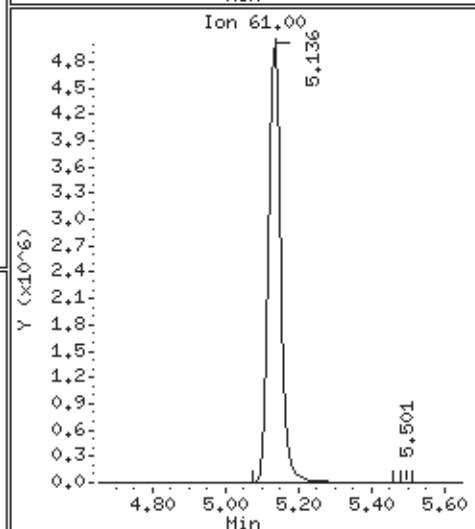
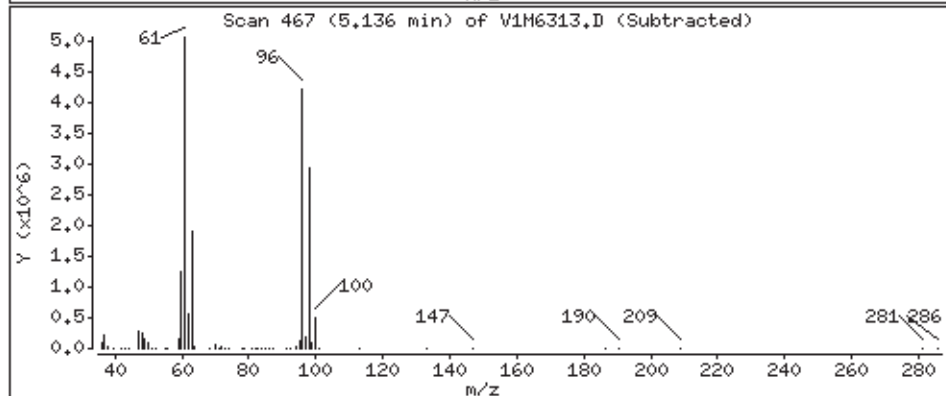
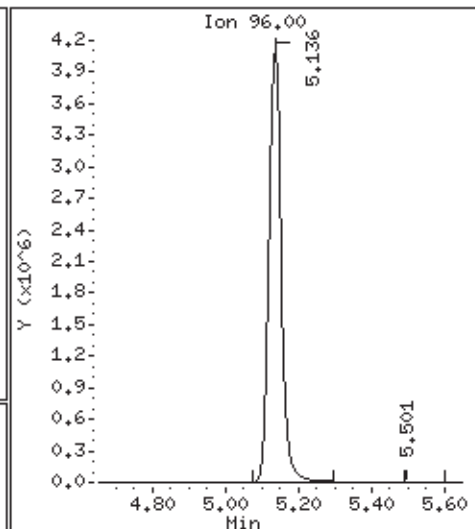
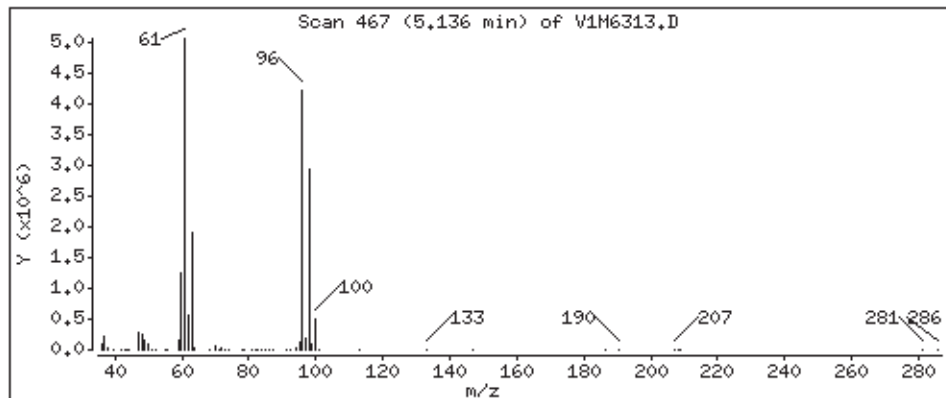
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

25 cis-1,2-Dichloroethene

Concentration: 2400 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5HL, L0782-01B, 65753

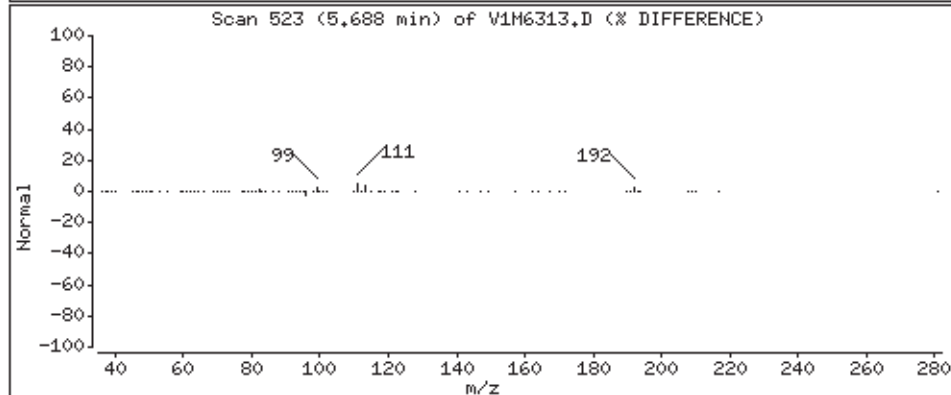
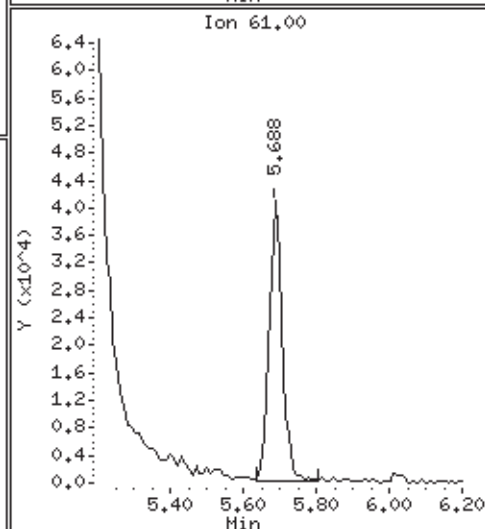
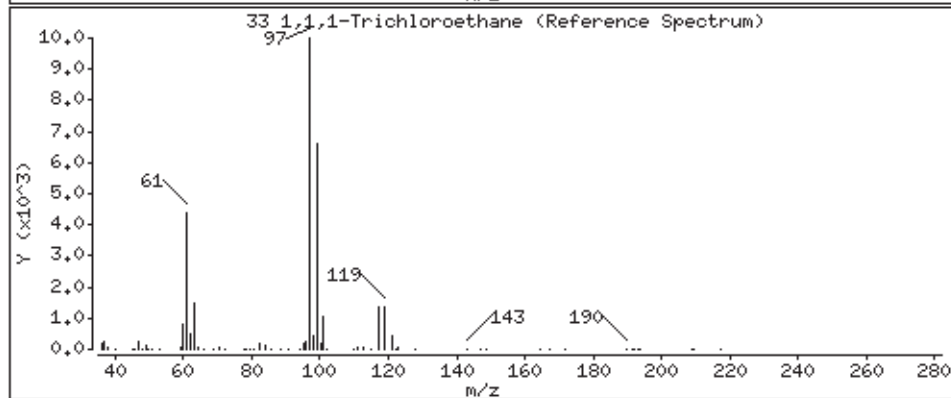
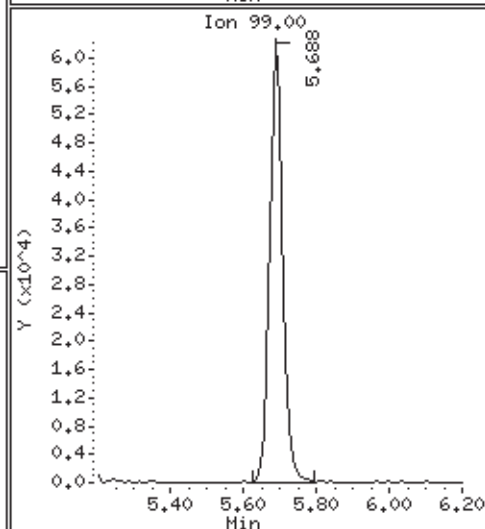
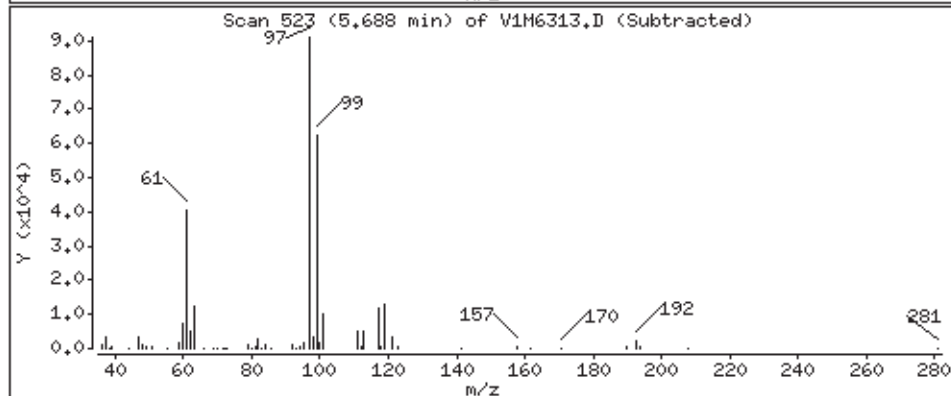
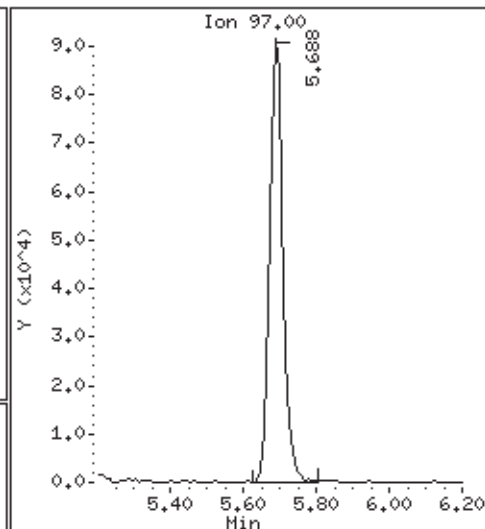
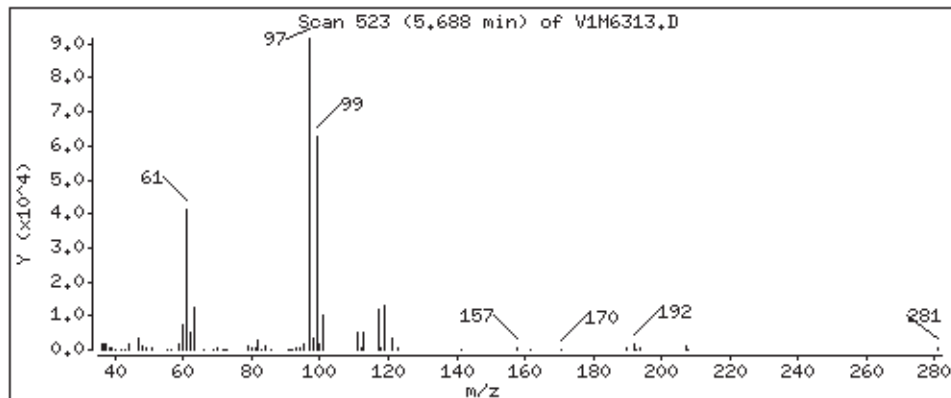
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

33 1,1,1-Trichloroethane

Concentration: 49 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

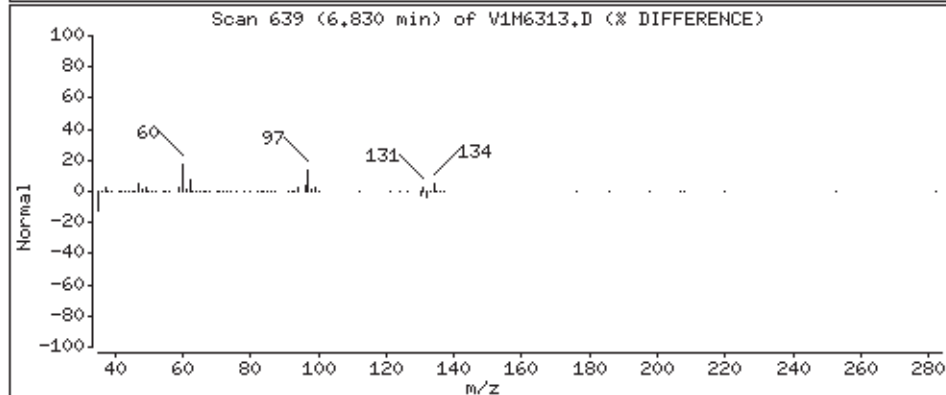
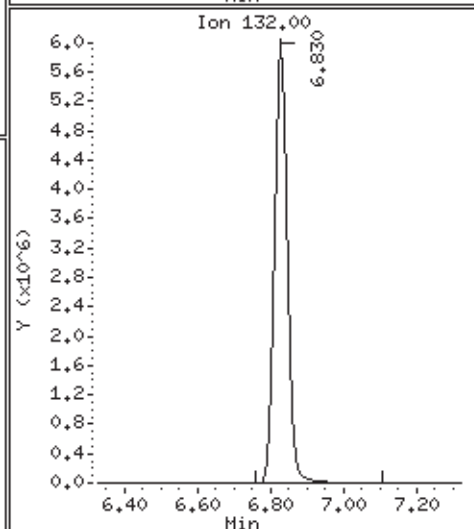
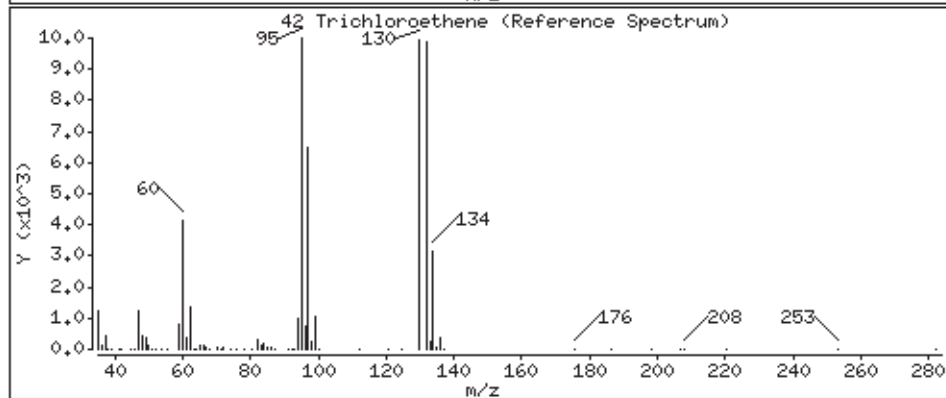
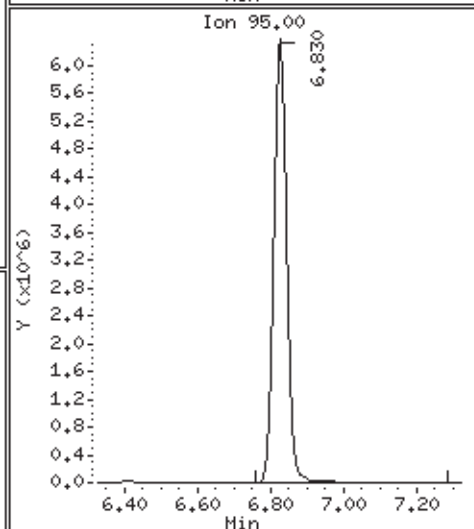
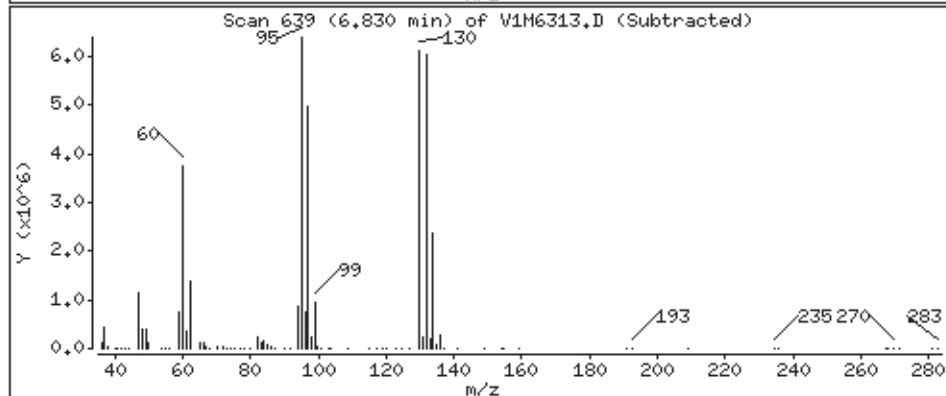
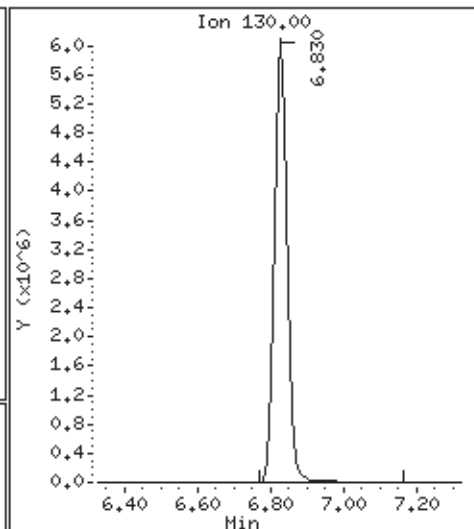
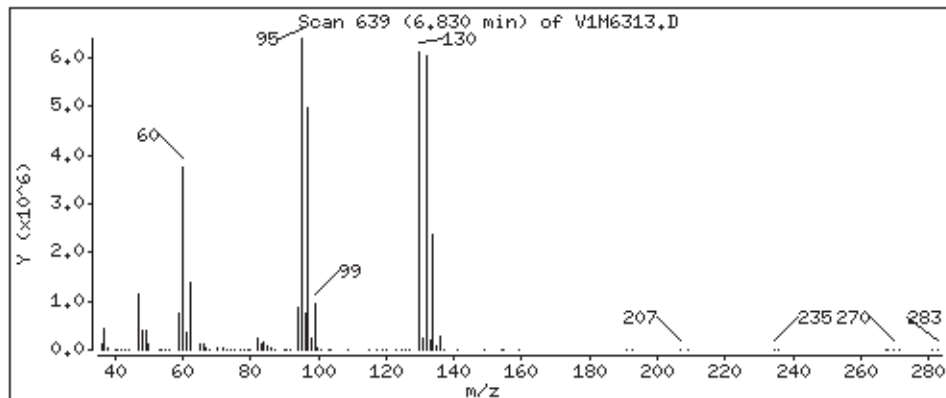
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

42 Trichloroethene

Concentration: 4000 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5HL,L0782-01B,,65753

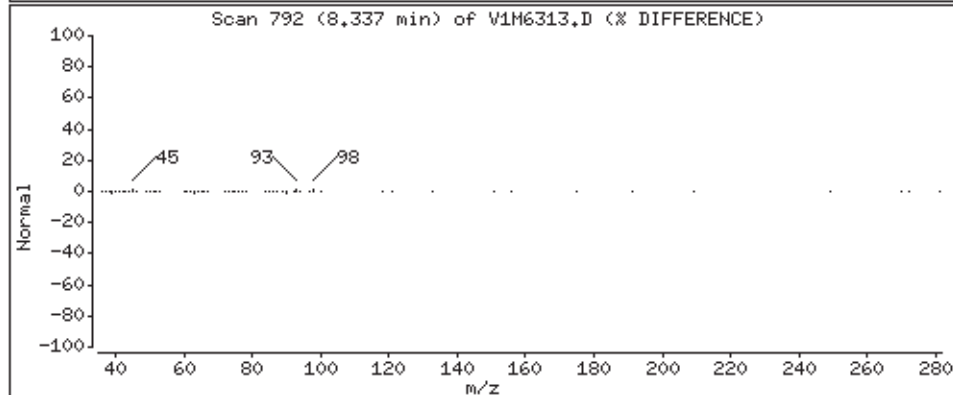
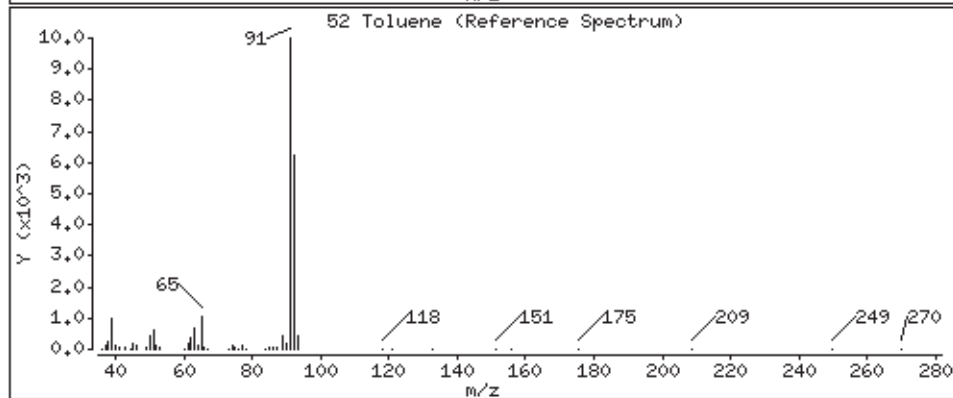
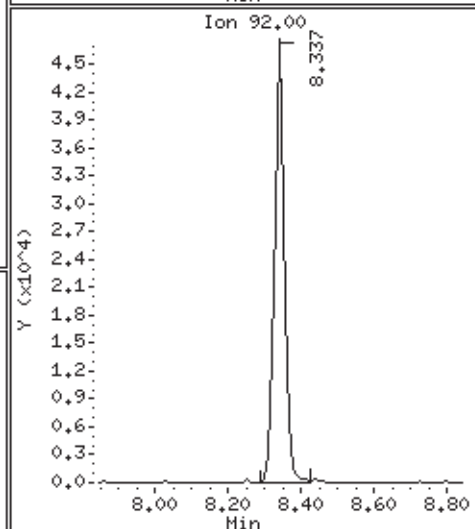
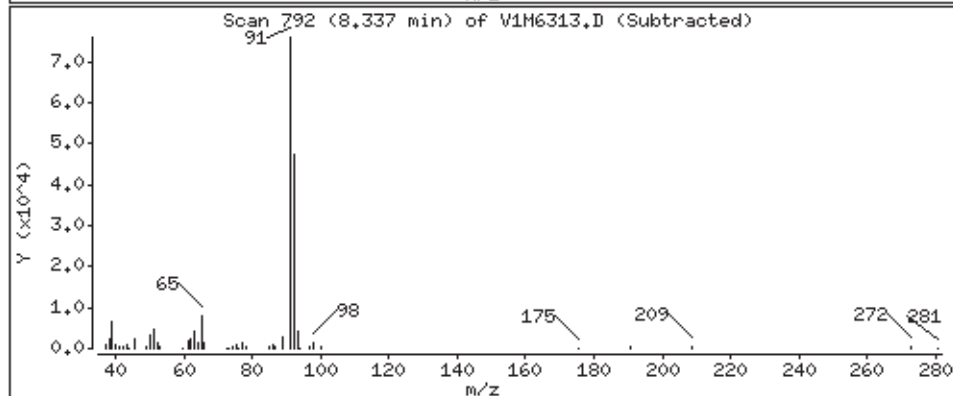
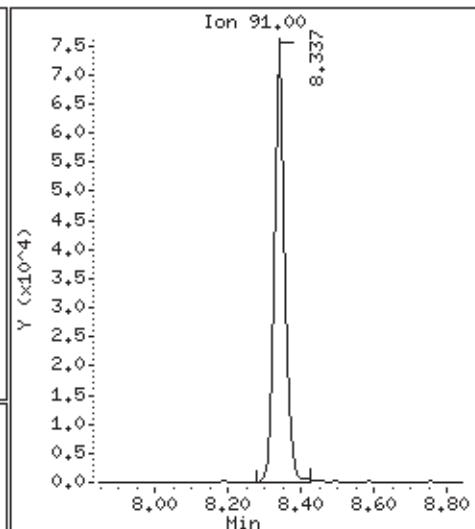
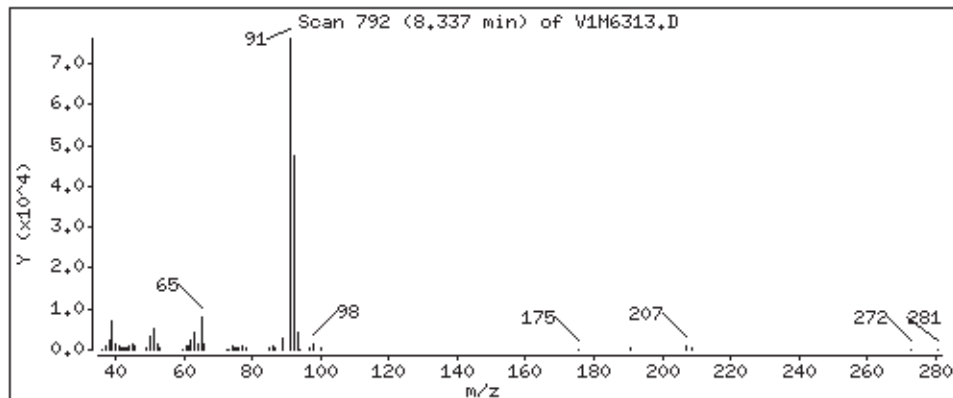
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

52 Toluene

Concentration: 11 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5HL,L0782-01B,,65753

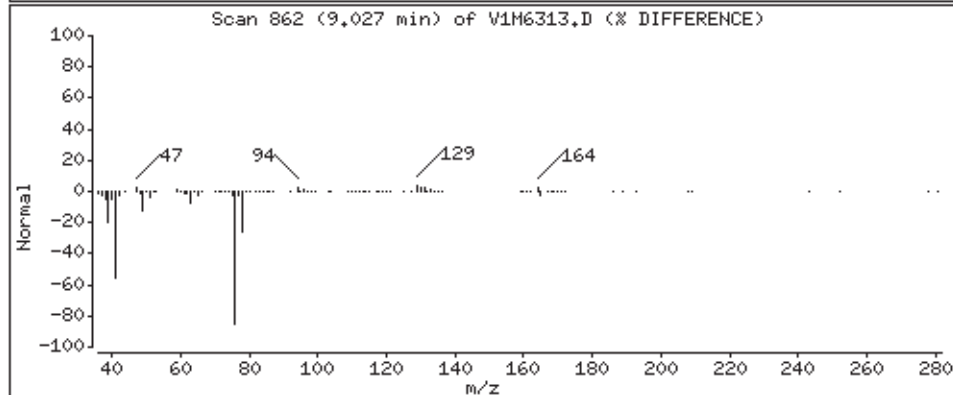
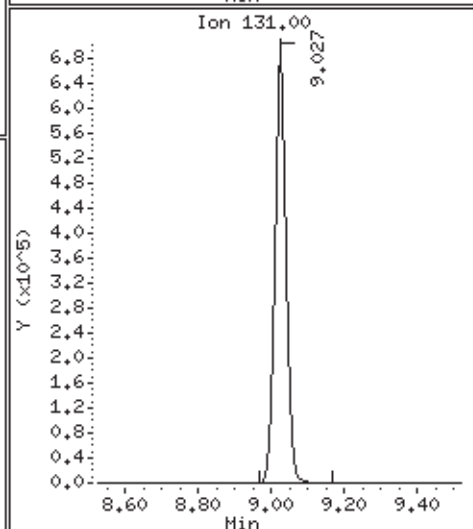
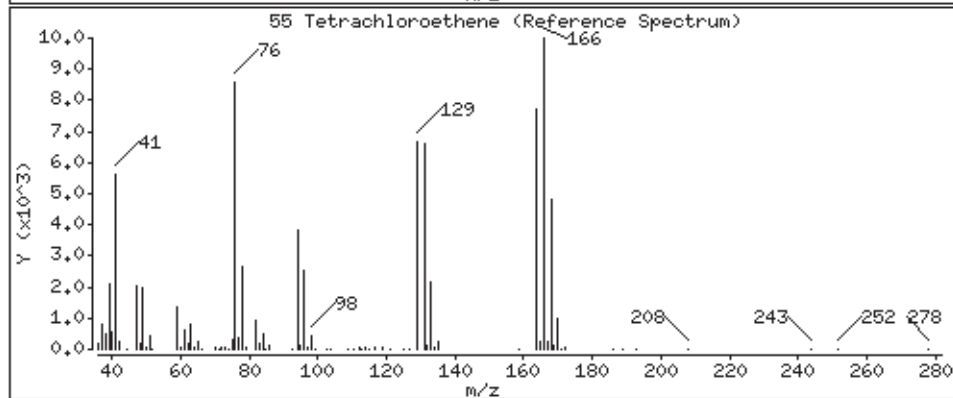
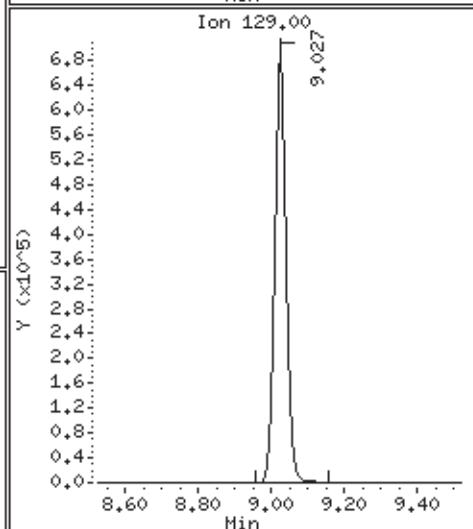
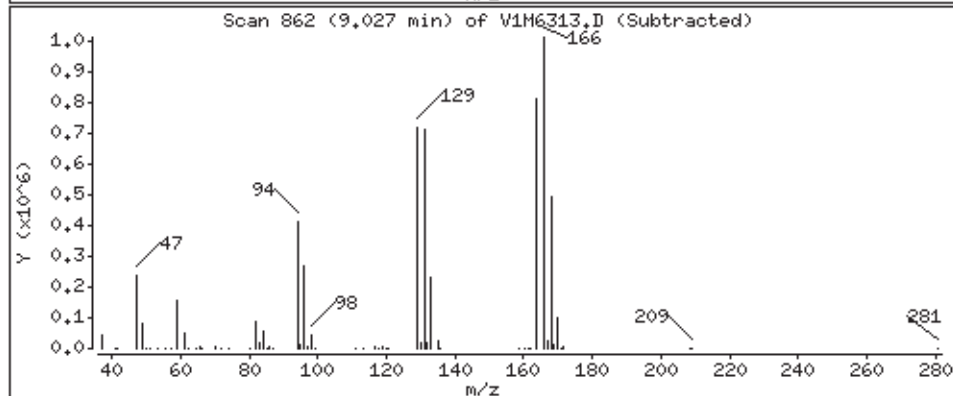
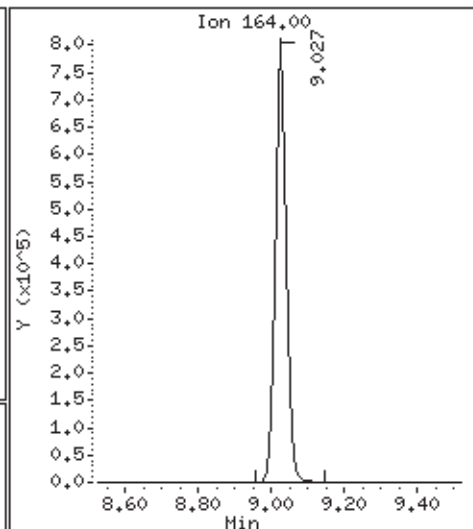
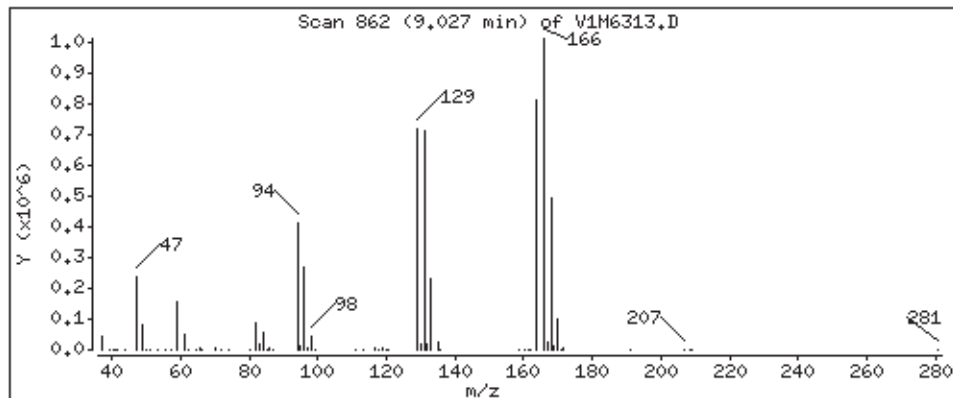
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

55 Tetrachloroethene

Concentration: 490 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML,L0782-01B,,65753

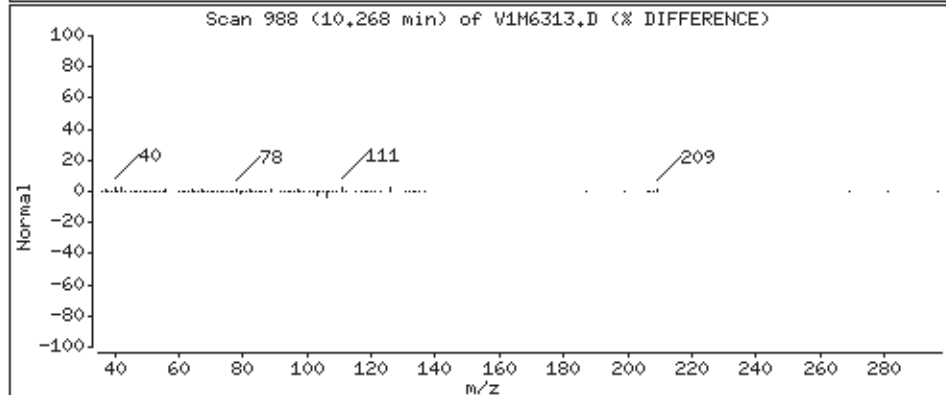
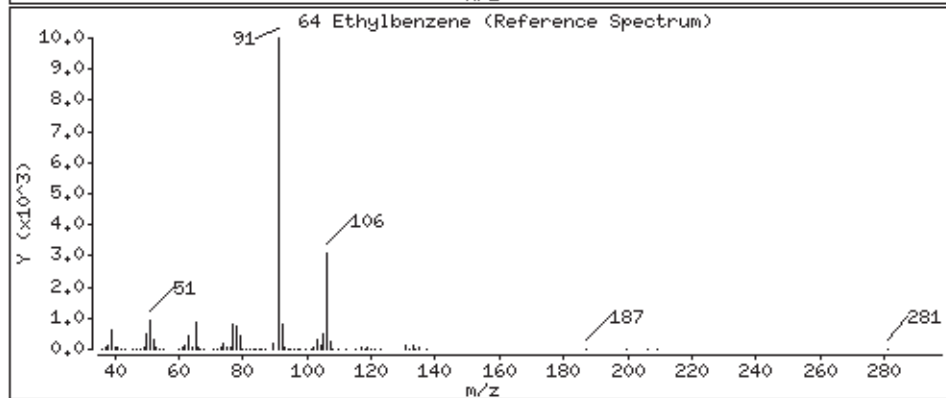
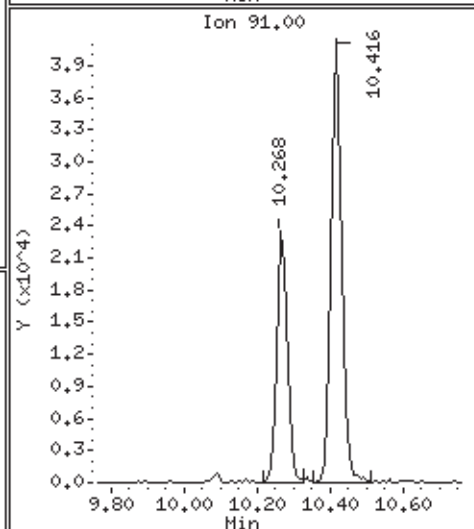
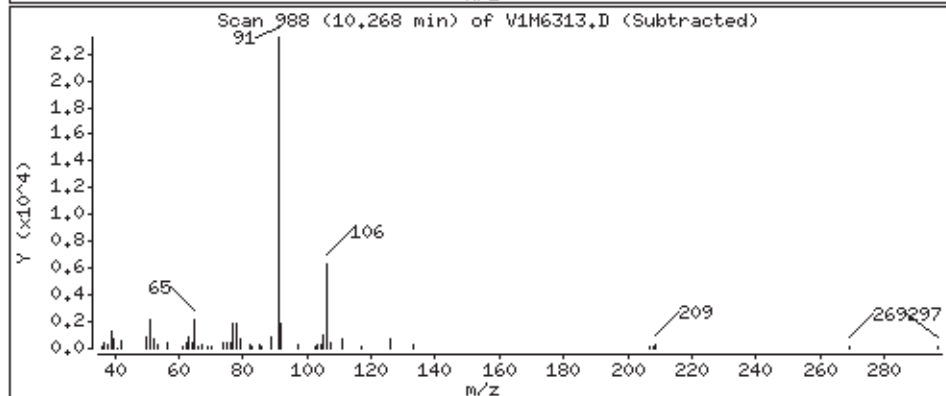
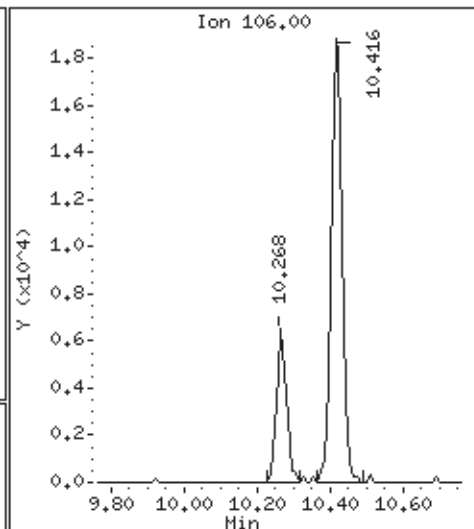
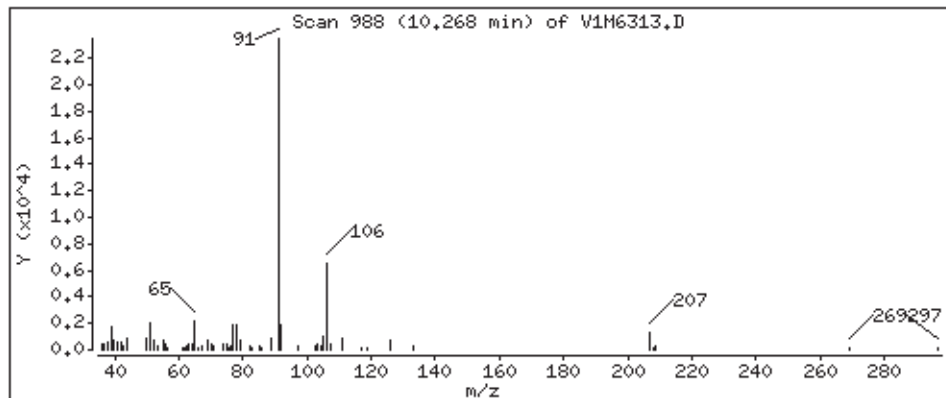
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

64 Ethylbenzene

Concentration: 2 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-HM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

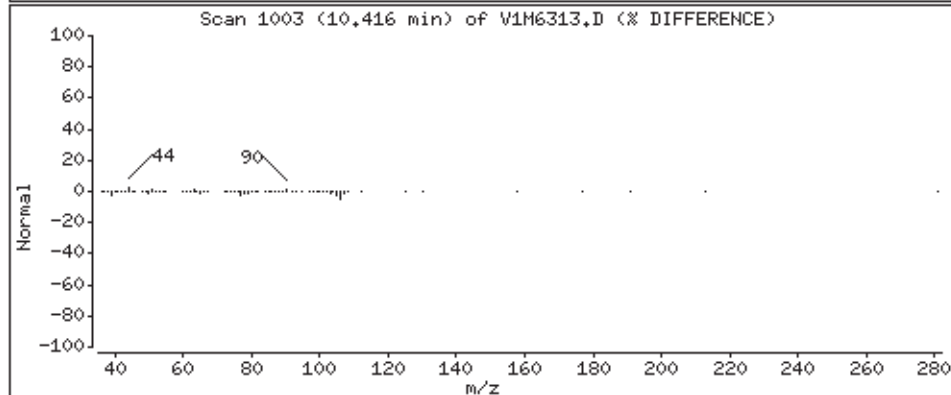
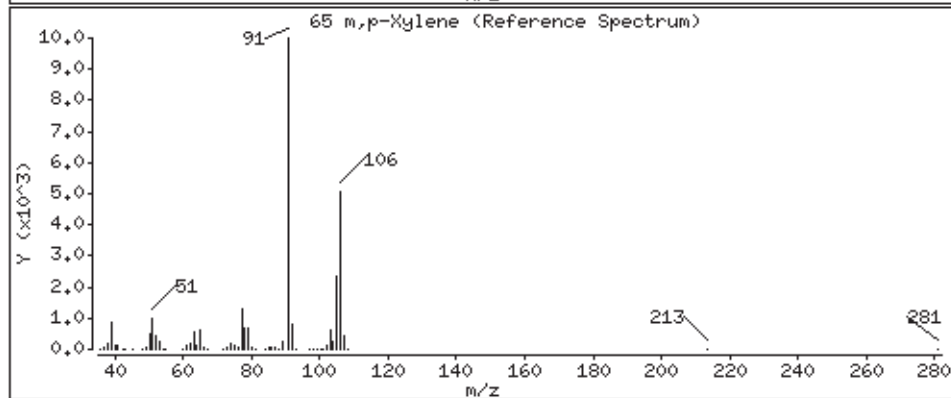
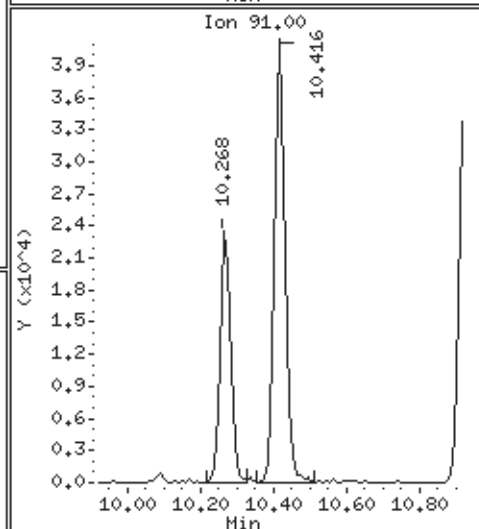
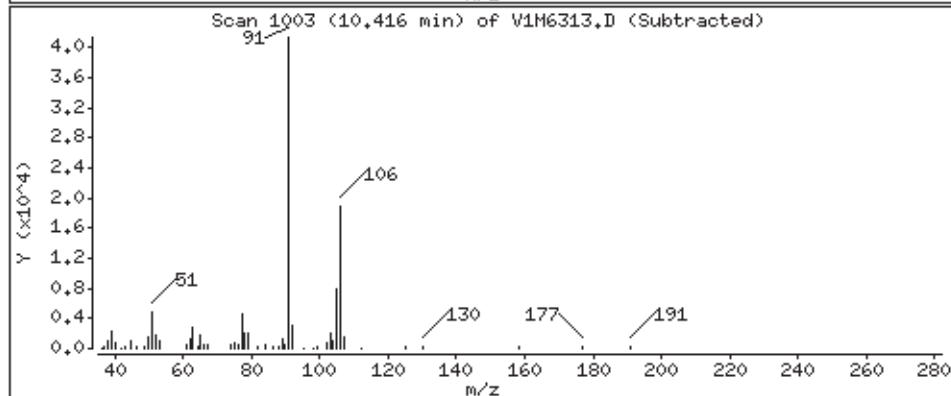
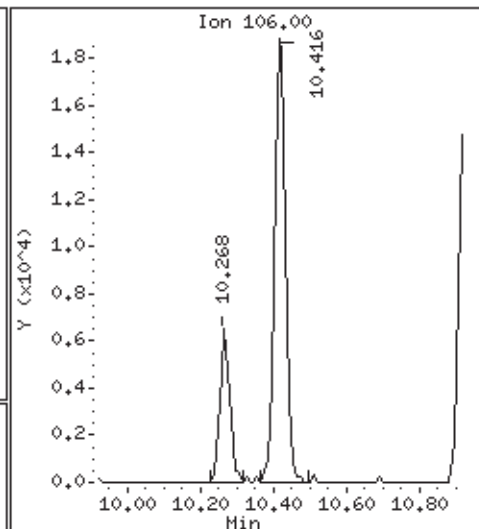
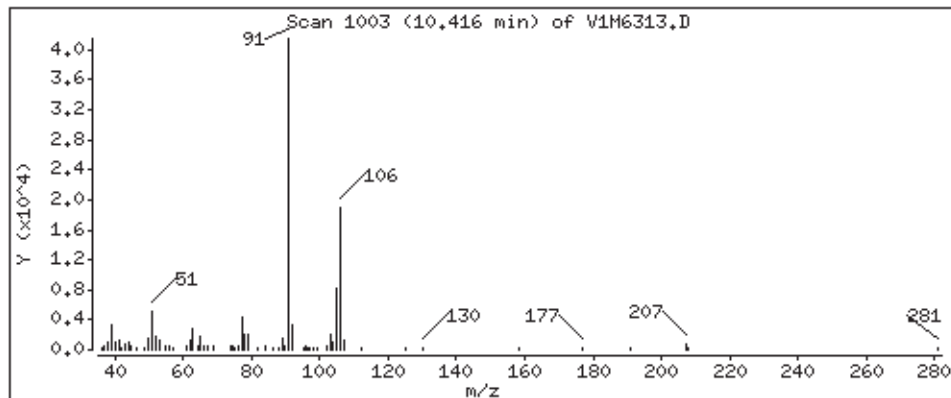
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

65 m,p-Xylene

Concentration: 6 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

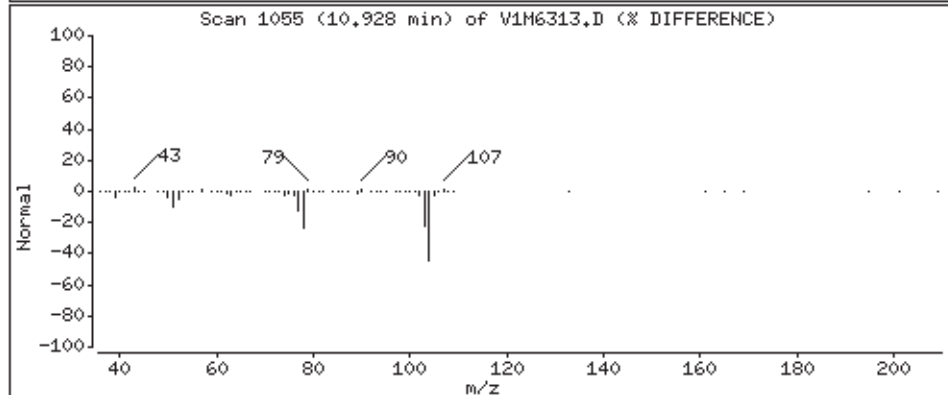
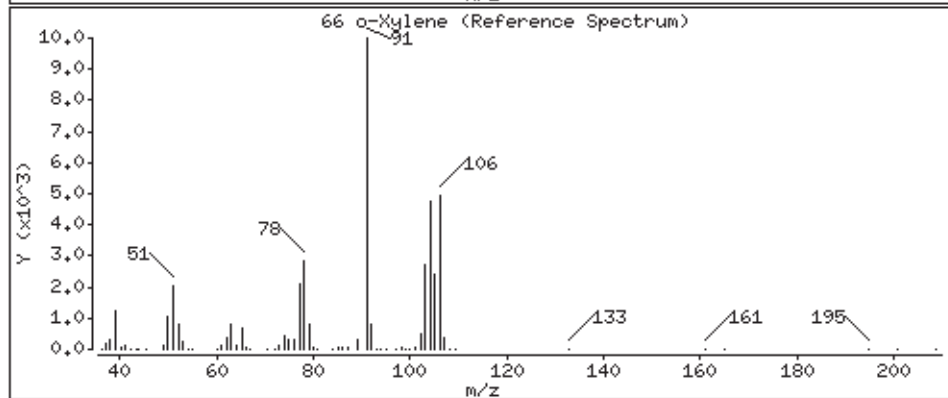
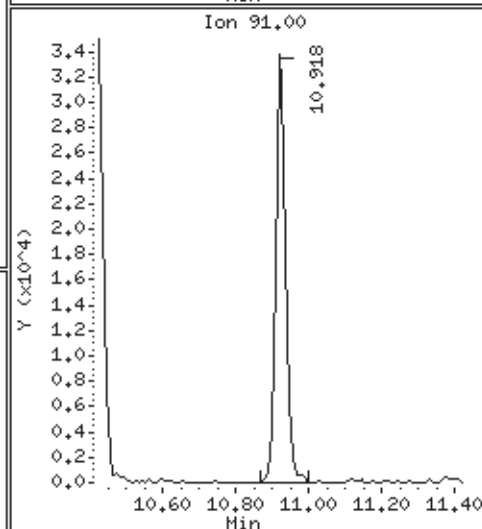
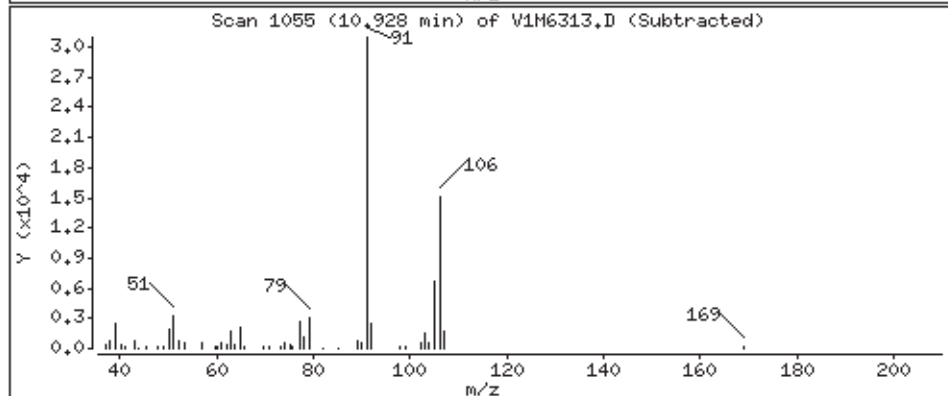
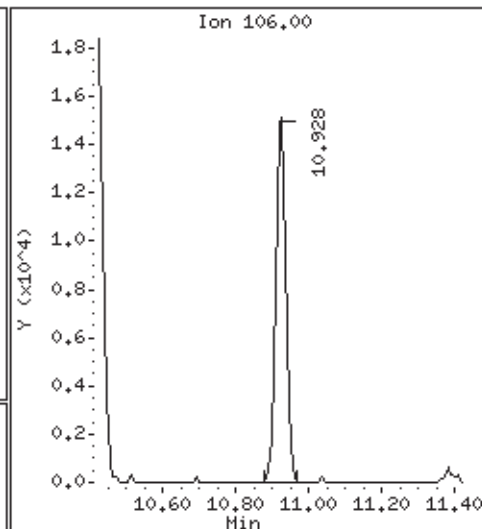
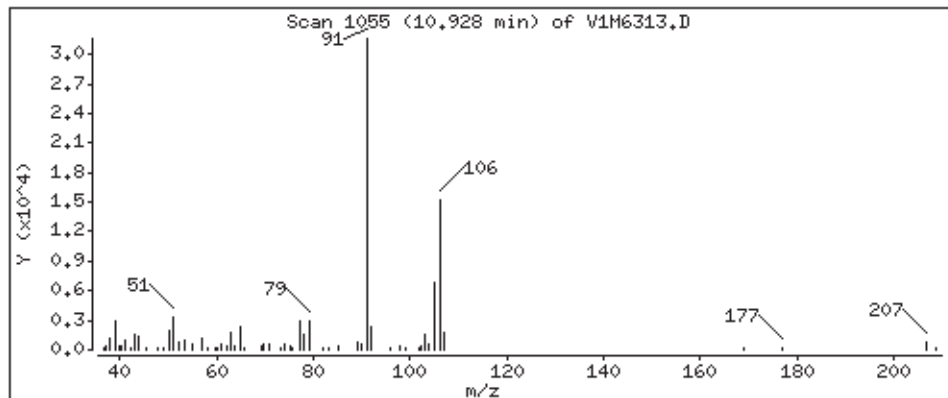
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

66 o-Xylene

Concentration: 5 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

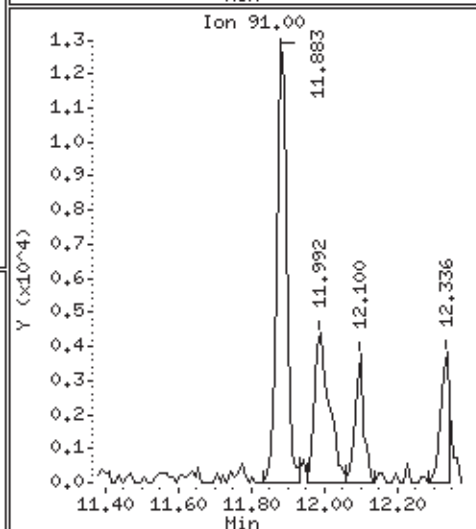
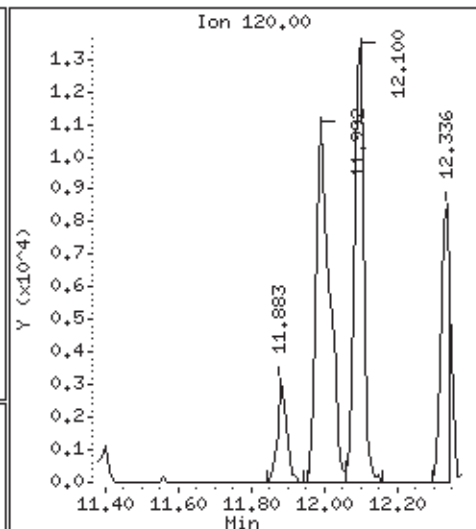
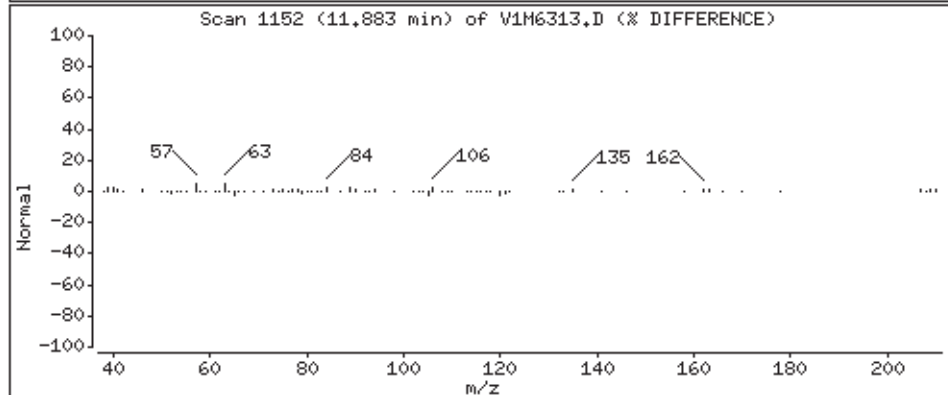
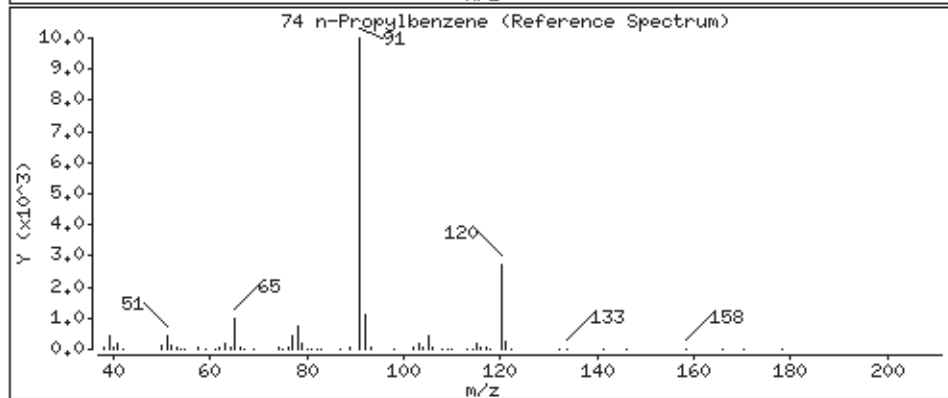
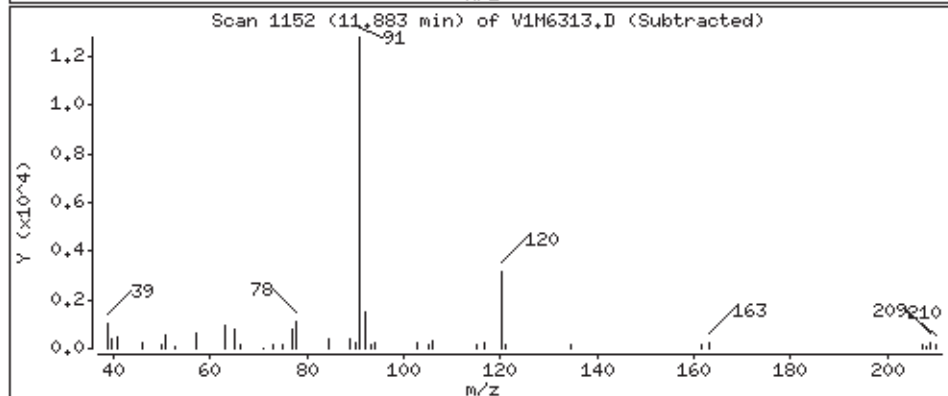
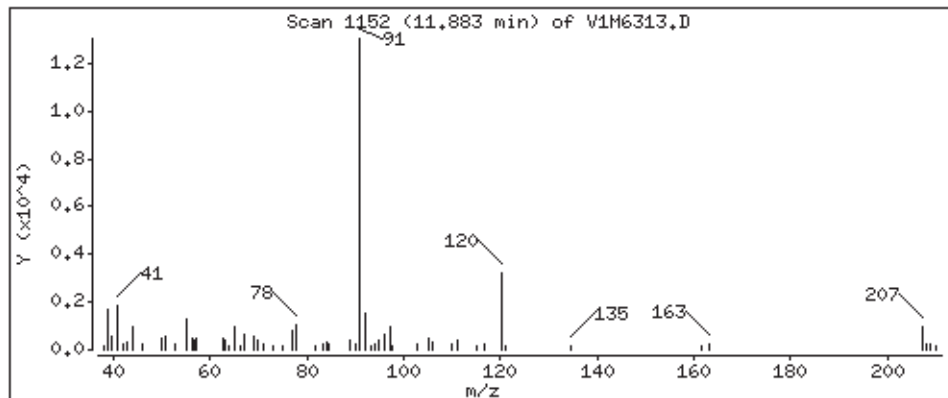
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

74 n-Propylbenzene

Concentration: 1 ug/Kg



Data File: \\Avogadro\Organics\V1,I\120423A,B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5HL,L0782-01B,,65753

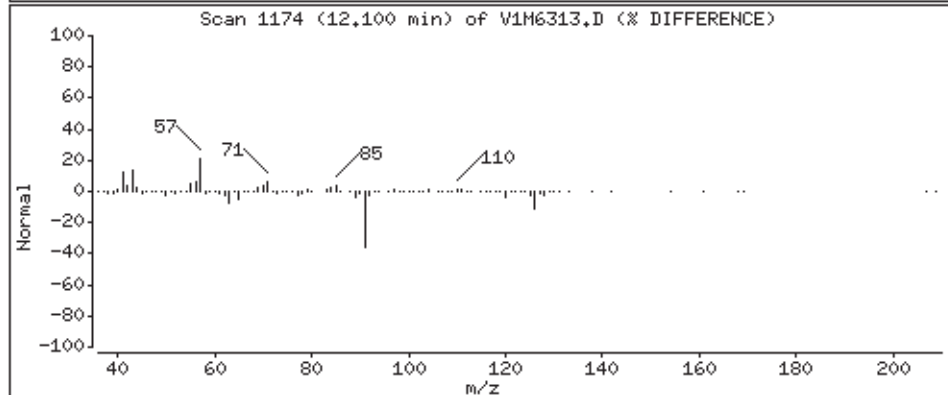
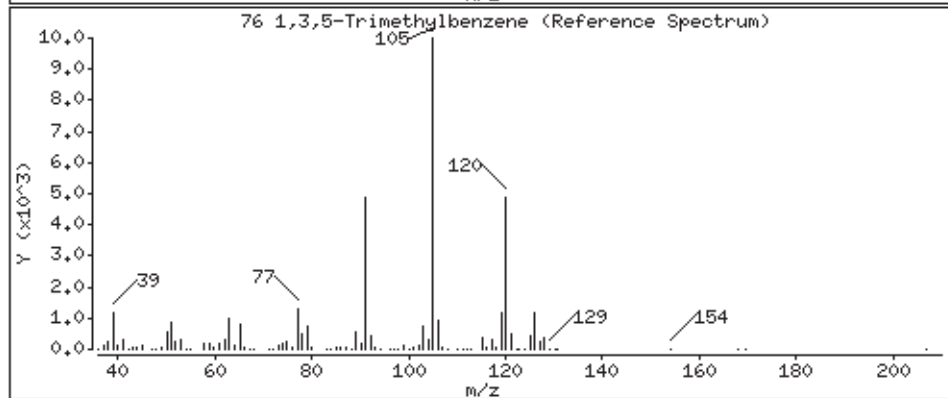
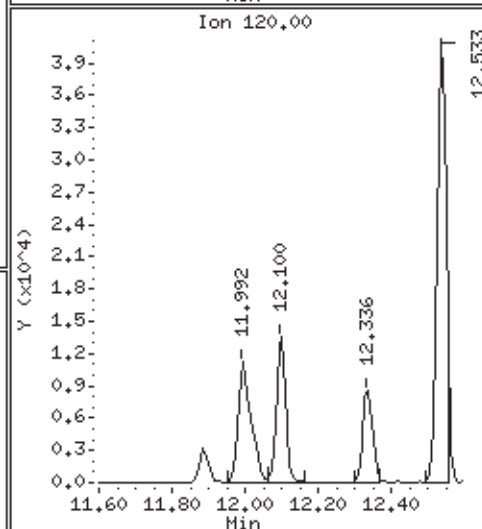
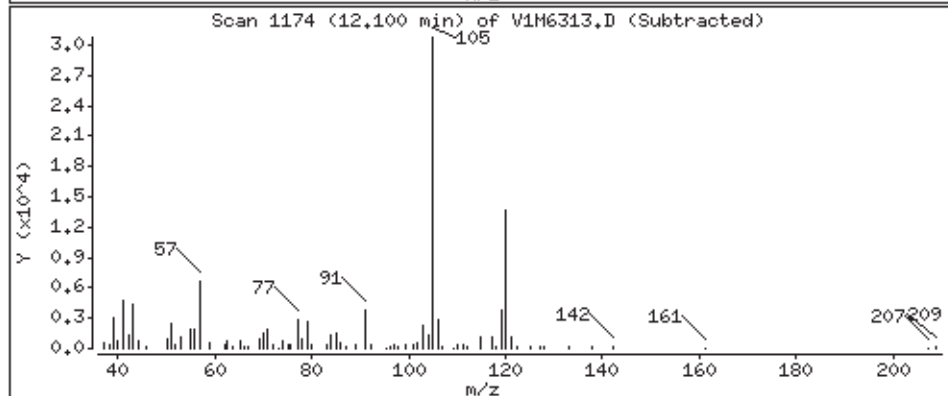
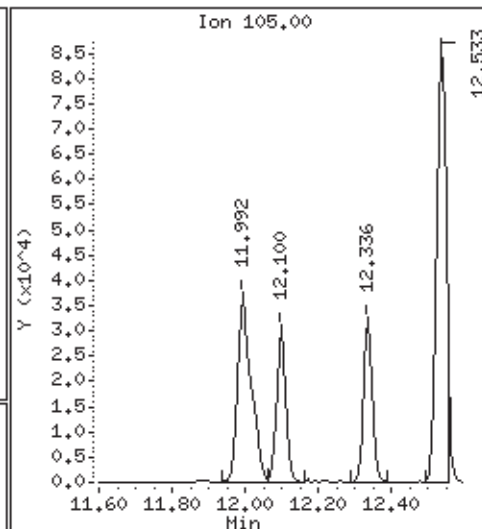
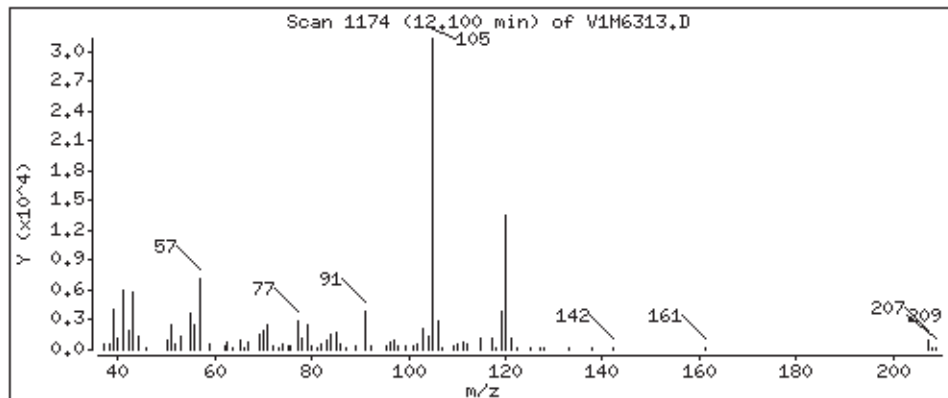
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

76 1,3,5-Trimethylbenzene

Concentration: 4 ug/Kg



Data File: \\Avogadro\Organics\V1,I\120423A,B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML,L0782-01B,,65753

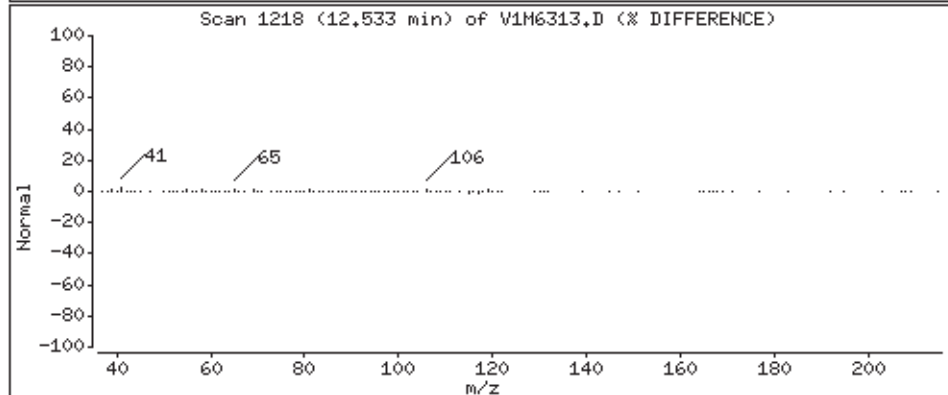
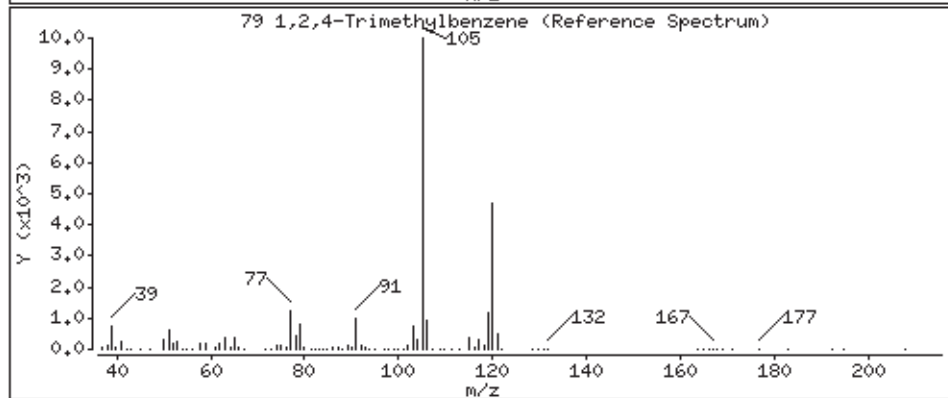
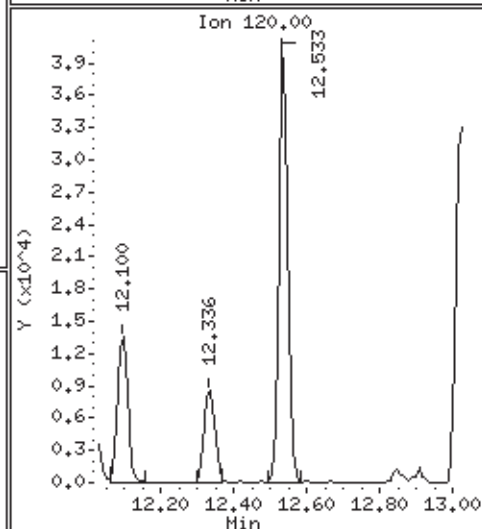
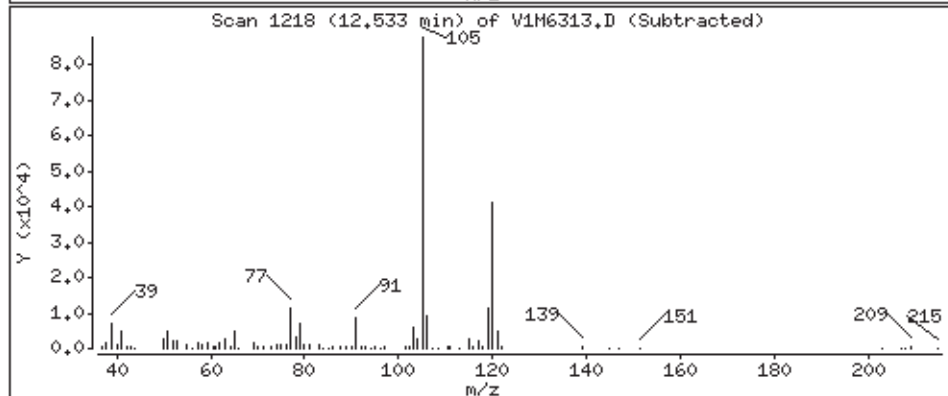
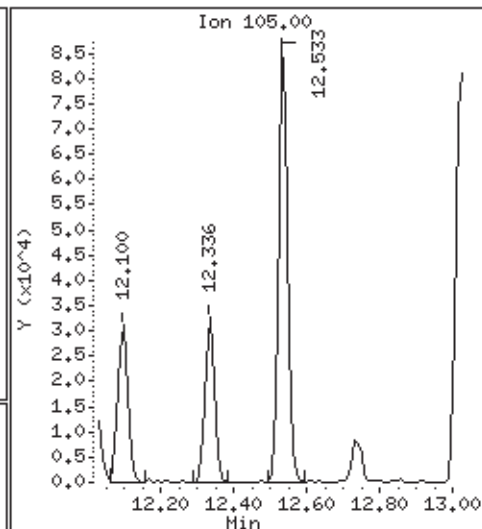
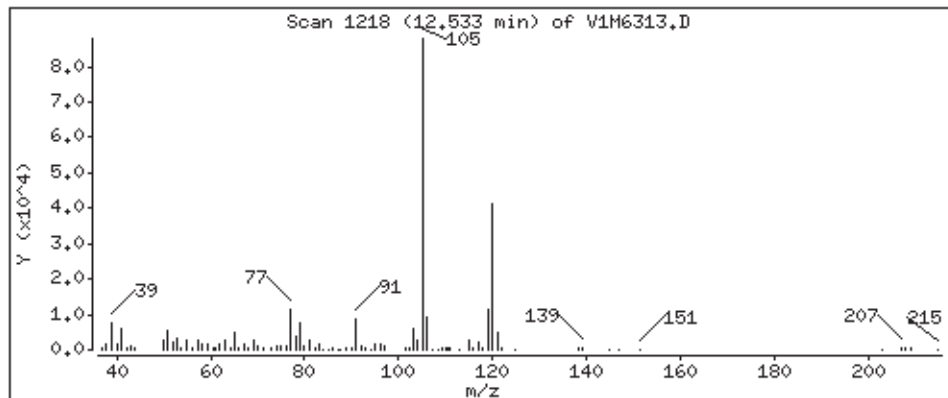
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

79 1,2,4-Trimethylbenzene

Concentration: 12 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MW2

Instrument: V1.i

Sample Info: 5HL,L0782-01B,,65753

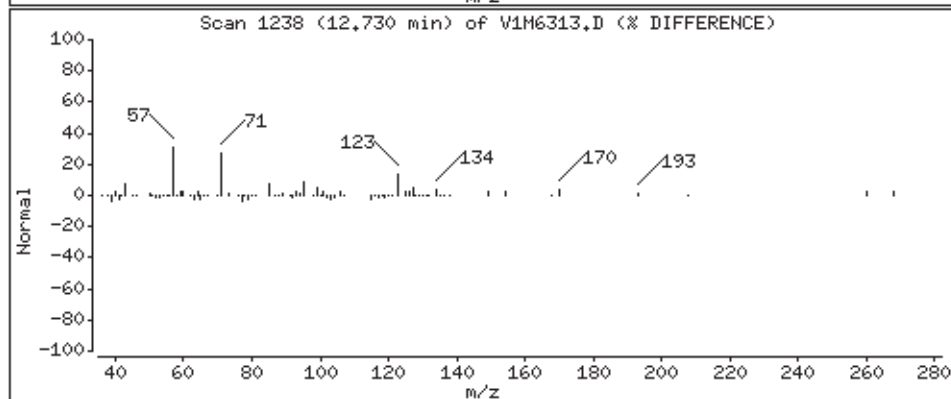
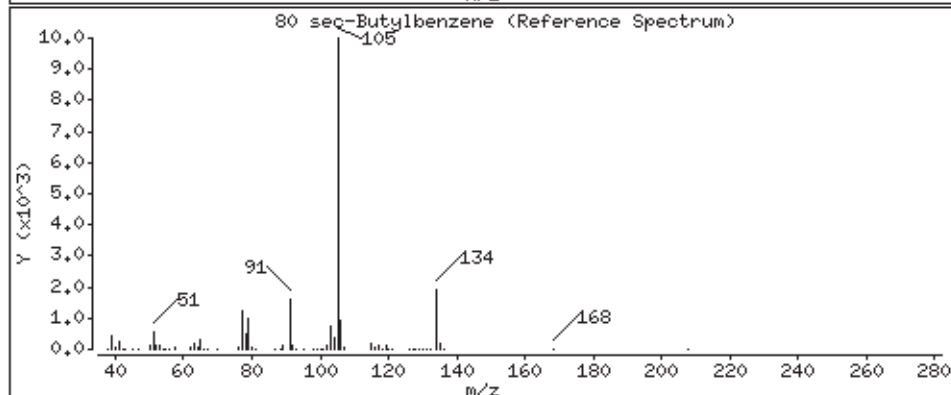
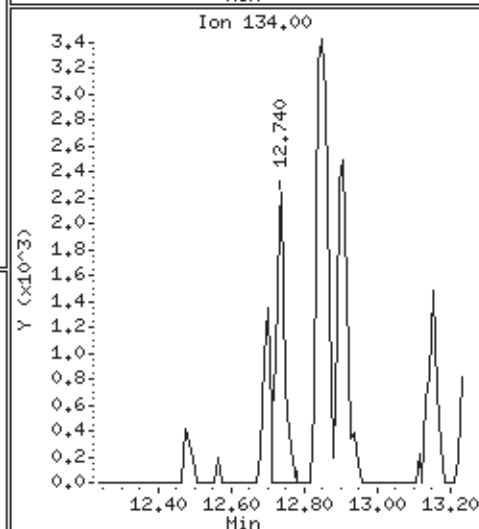
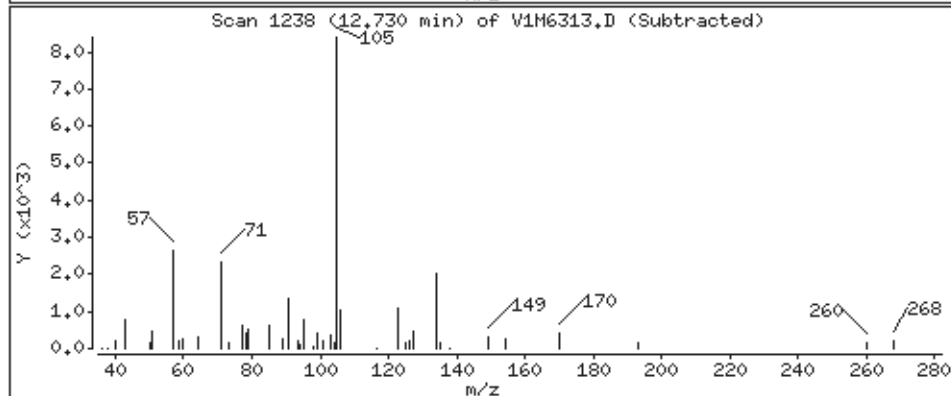
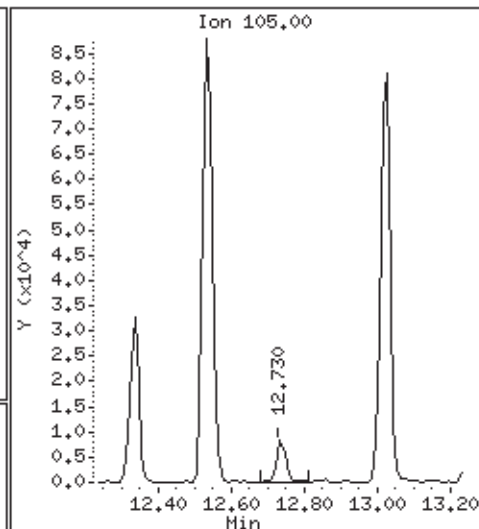
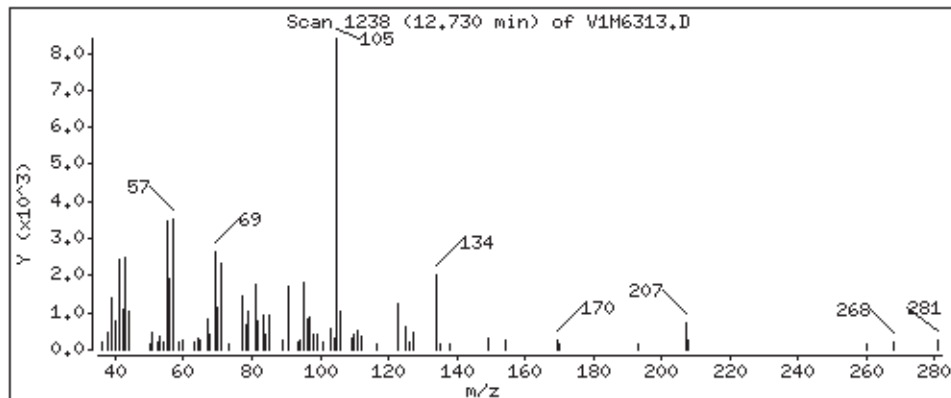
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

80 sec-Butylbenzene

Concentration: 1 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML, L0782-01B,, 65753

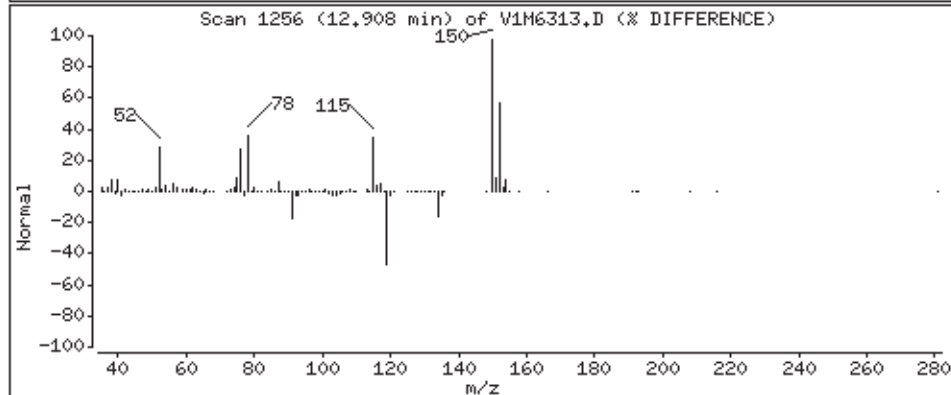
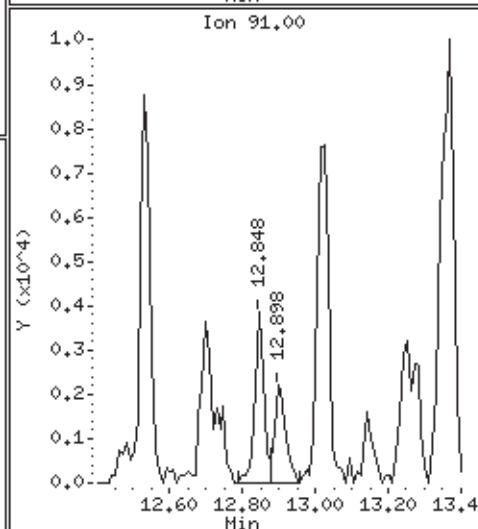
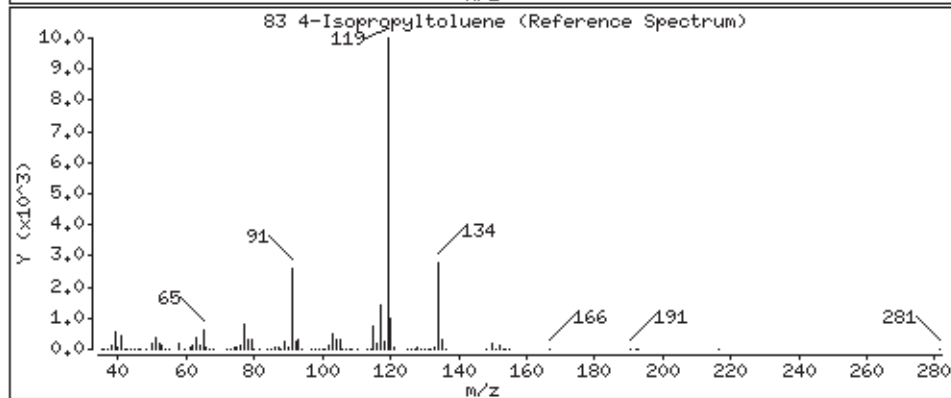
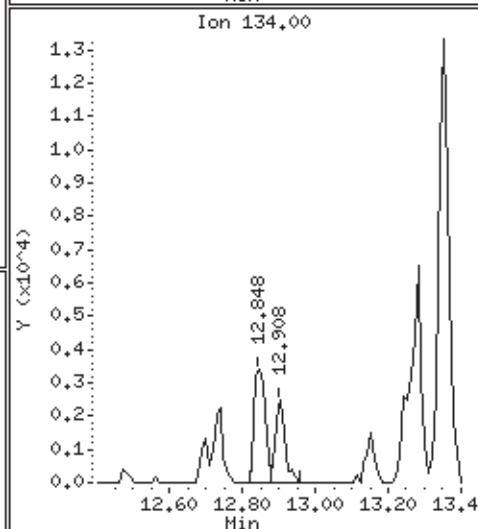
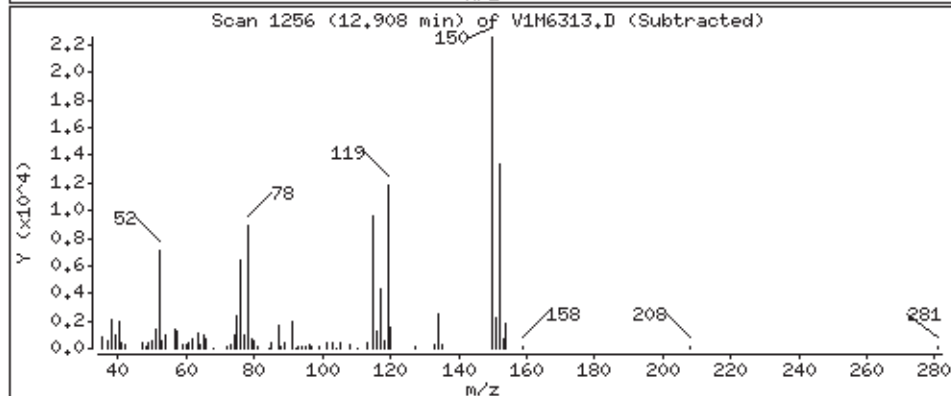
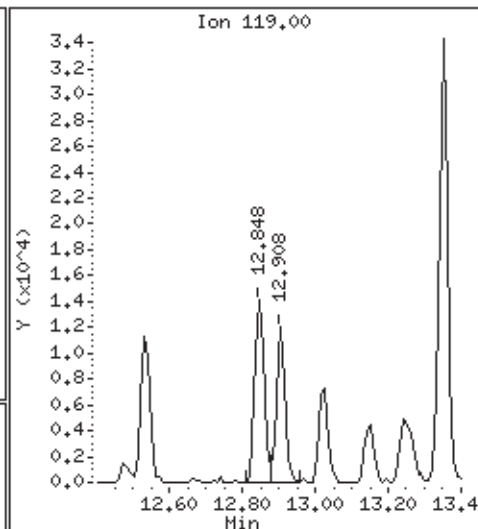
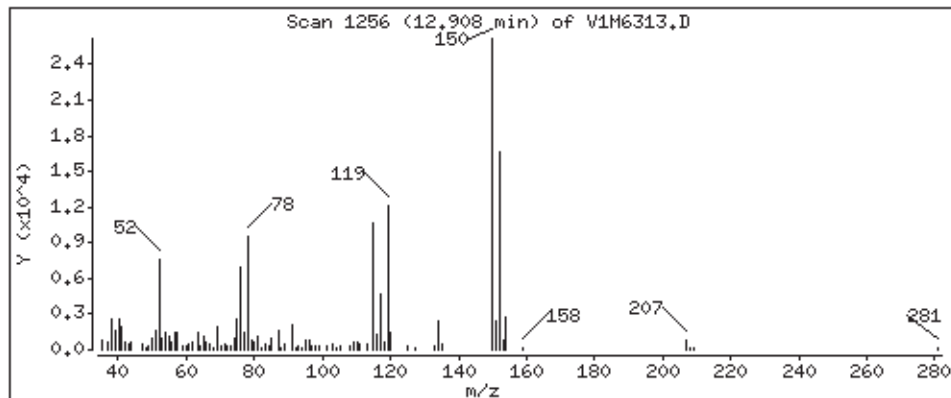
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

83 4-Isopropyltoluene

Concentration: 2 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5ML,L0782-01B,,65753

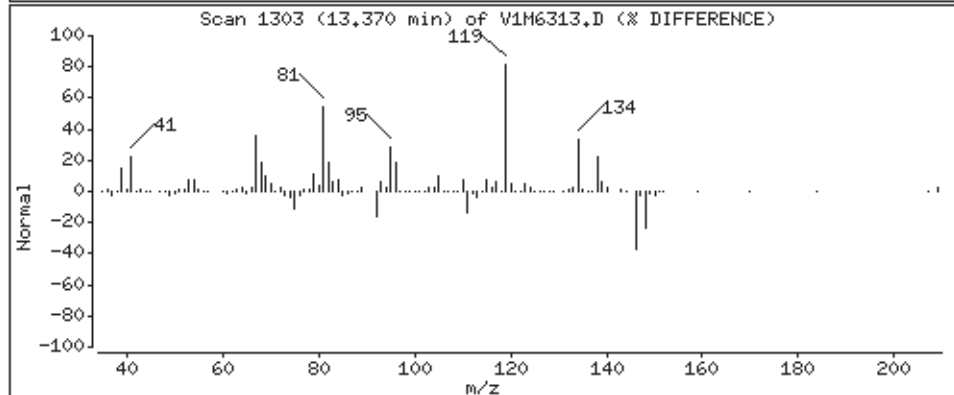
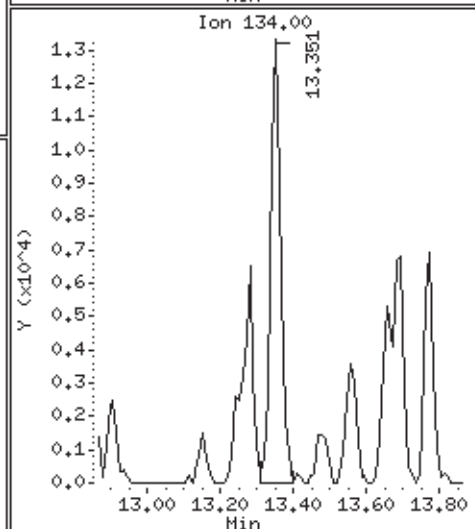
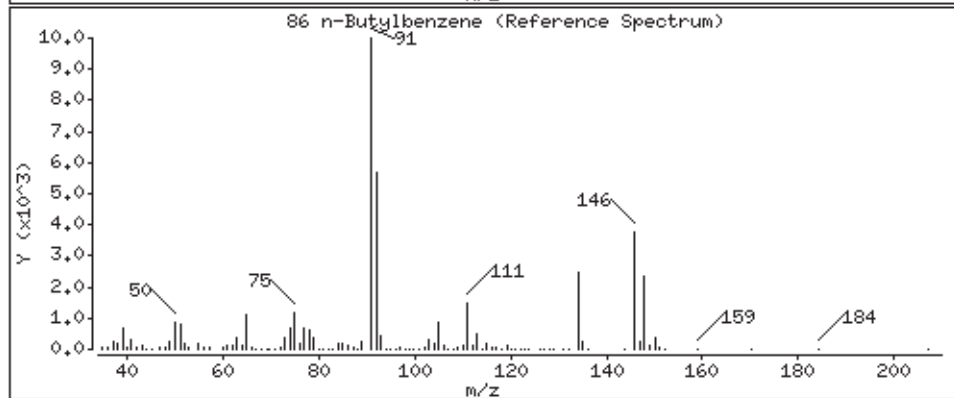
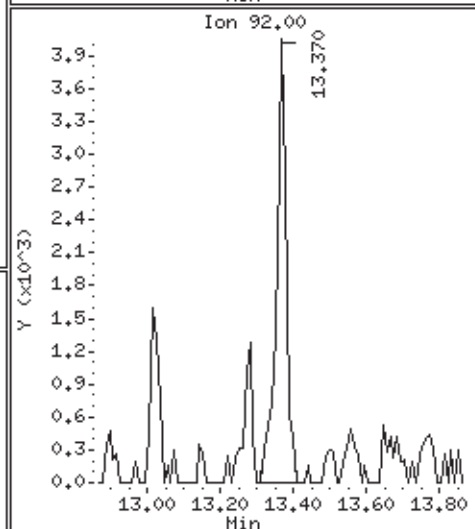
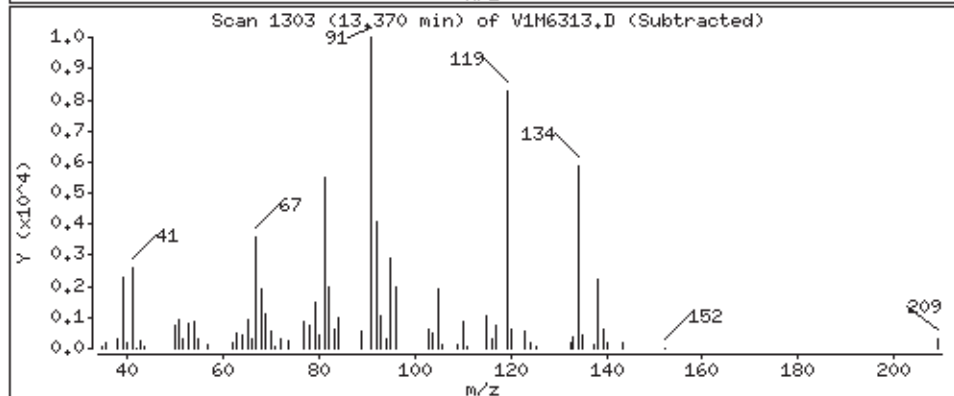
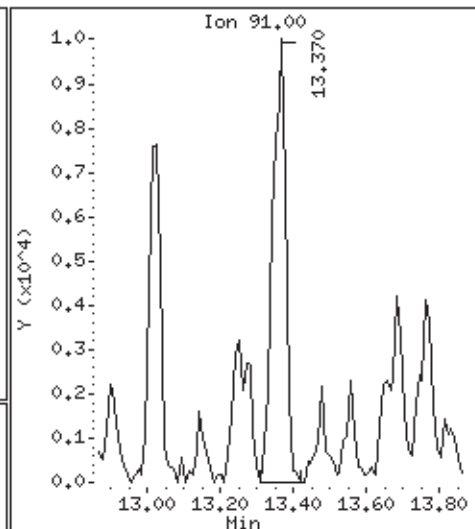
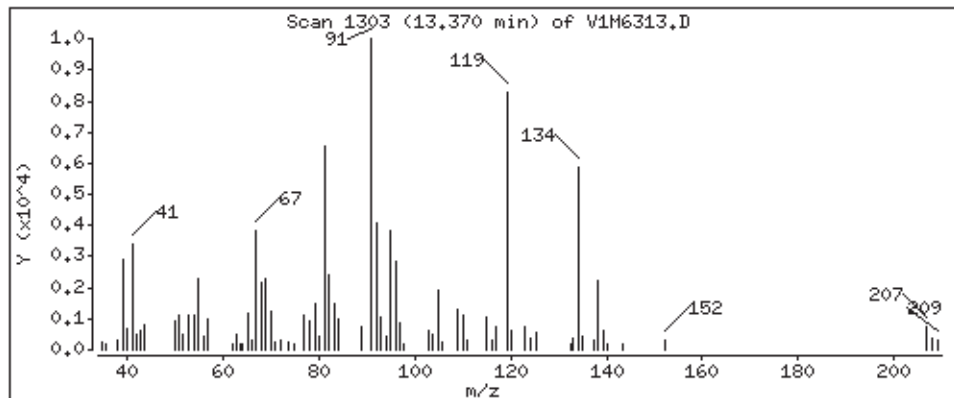
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

86 n-Butylbenzene

Concentration: 2 ug/Kg



Data File: \\Avogadro\Organics\V1.I\120423A.B\V1M6313.D

Date : 24-APR-2012 01:08

Client ID: S04-MM2

Instrument: V1.i

Sample Info: 5HL,L0782-01B,,65753

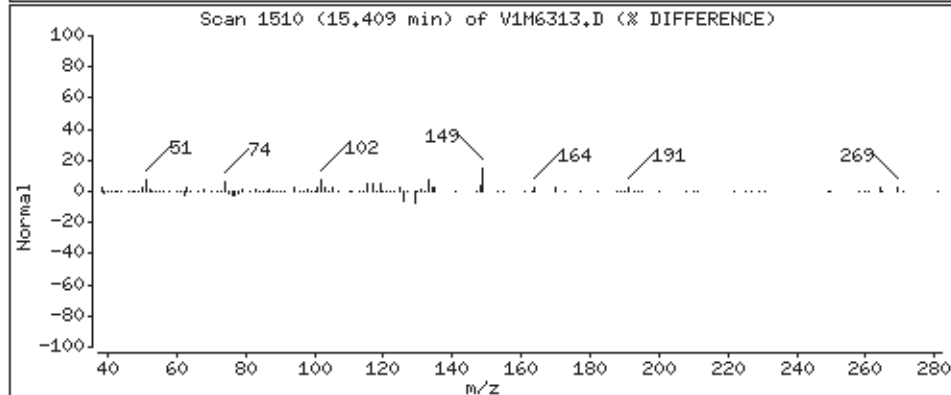
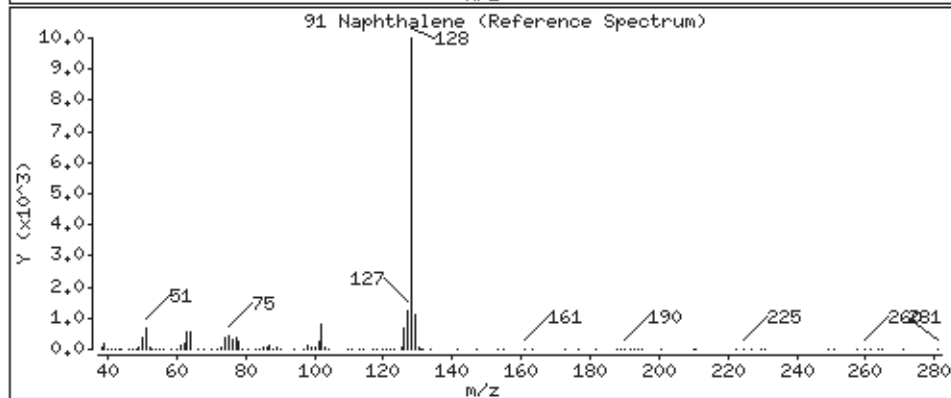
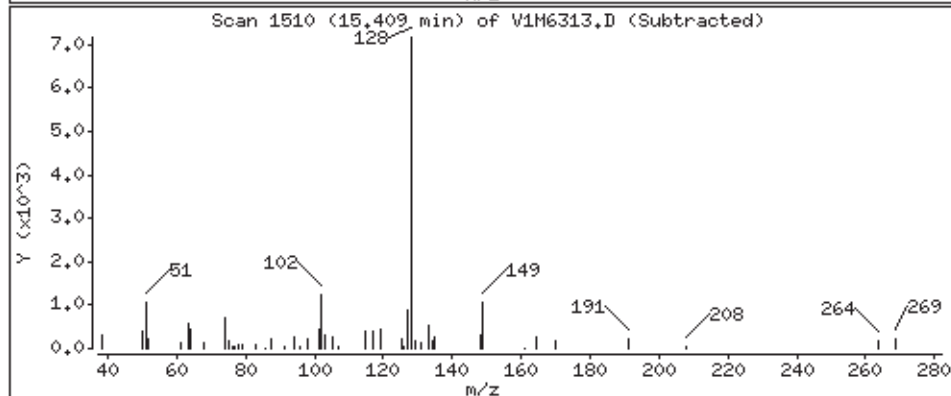
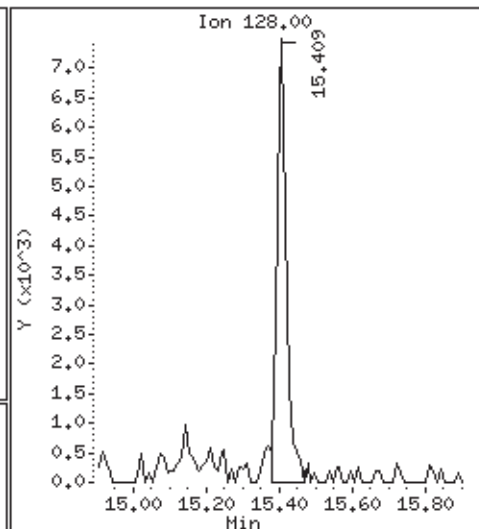
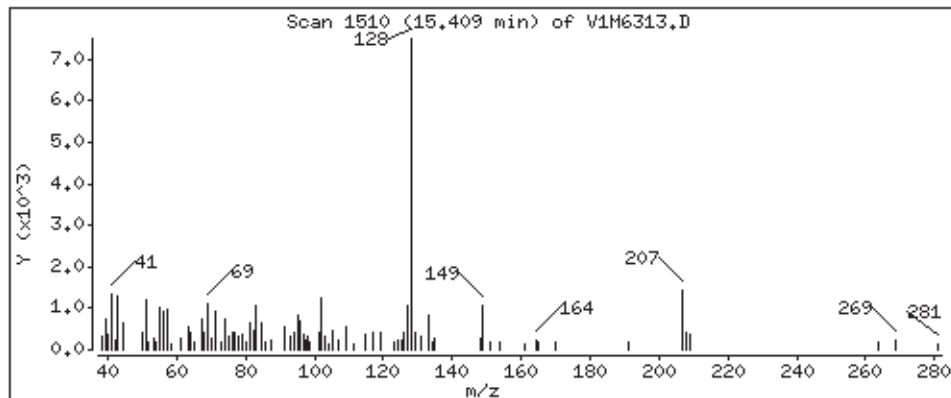
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

91 Naphthalene

Concentration: 1 ug/Kg



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S04-MW2ME

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: L0782-01B
Sample wt/vol: 5.10 (g/mL) G	Lab File ID: V8B1093.D
Level: (TRACE/LOW/MED) MED	Date Received: 04/20/2012
% Moisture: not dec.	Date Analyzed: 04/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 2.0
Soil Extract Volume: 10000 (uL)	Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	980	U
74-87-3	Chloromethane	980	U
75-01-4	Vinyl chloride	980	U
74-83-9	Bromomethane	980	U
75-00-3	Chloroethane	980	U
75-69-4	Trichlorofluoromethane	980	U
75-35-4	1,1-Dichloroethene	980	U
67-64-1	Acetone	2500	
74-88-4	Iodomethane	980	U
75-15-0	Carbon disulfide	980	U
75-09-2	Methylene chloride	980	U
156-60-5	trans-1,2-Dichloroethene	980	U
1634-04-4	Methyl tert-butyl ether	980	U
75-34-3	1,1-Dichloroethane	980	U
108-05-4	Vinyl acetate	980	U
78-93-3	2-Butanone	980	U
156-59-2	cis-1,2-Dichloroethene	5200	
594-20-7	2,2-Dichloropropane	980	U
74-97-5	Bromochloromethane	980	U
67-66-3	Chloroform	980	U
71-55-6	1,1,1-Trichloroethane	360	J
563-58-6	1,1-Dichloropropene	980	U
56-23-5	Carbon tetrachloride	980	U
107-06-2	1,2-Dichloroethane	980	U
71-43-2	Benzene	980	U
79-01-6	Trichloroethene	25000	
78-87-5	1,2-Dichloropropane	980	U
74-95-3	Dibromomethane	980	U
75-27-4	Bromodichloromethane	980	U
10061-01-5	cis-1,3-Dichloropropene	980	U
108-10-1	4-Methyl-2-pentanone	980	U
108-88-3	Toluene	980	U
10061-02-6	trans-1,3-Dichloropropene	980	U
79-00-5	1,1,2-Trichloroethane	980	U
142-28-9	1,3-Dichloropropane	980	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S04-MW2ME

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: _____ SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: L0782-01B
Sample wt/vol: 5.10 (g/mL) G	Lab File ID: V8B1093.D
Level: (TRACE/LOW/MED) MED	Date Received: 04/20/2012
% Moisture: not dec.	Date Analyzed: 04/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 2.0
Soil Extract Volume: 10000 (uL)	Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	6900	
591-78-6	2-Hexanone	980	U
124-48-1	Dibromochloromethane	980	U
106-93-4	1,2-Dibromoethane	980	U
108-90-7	Chlorobenzene	980	U
630-20-6	1,1,1,2-Tetrachloroethane	980	U
100-41-4	Ethylbenzene	980	U
179601-23-1	m,p-Xylene	980	U
95-47-6	o-Xylene	980	U
1330-20-7	Xylene (Total)	980	U
100-42-5	Styrene	980	U
75-25-2	Bromoform	980	U
98-82-8	Isopropylbenzene	980	U
79-34-5	1,1,2,2-Tetrachloroethane	980	U
108-86-1	Bromobenzene	980	U
96-18-4	1,2,3-Trichloropropane	980	U
103-65-1	n-Propylbenzene	980	U
95-49-8	2-Chlorotoluene	980	U
108-67-8	1,3,5-Trimethylbenzene	980	U
106-43-4	4-Chlorotoluene	980	U
98-06-6	tert-Butylbenzene	980	U
95-63-6	1,2,4-Trimethylbenzene	620	J
135-98-8	sec-Butylbenzene	980	U
99-87-6	4-Isopropyltoluene	160	J
541-73-1	1,3-Dichlorobenzene	980	U
106-46-7	1,4-Dichlorobenzene	980	U
104-51-8	n-Butylbenzene	150	J
95-50-1	1,2-Dichlorobenzene	980	U
96-12-8	1,2-Dibromo-3-chloropropane	980	U
120-82-1	1,2,4-Trichlorobenzene	980	U
87-68-3	Hexachlorobutadiene	980	U
87-61-6	1,2,3-Trichlorobenzene	980	U
91-20-3	Naphthalene	310	BJ

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\Avogadro\Organics\V8.I\120430A.B\V8B1093.d
Lab Smp Id: L0782-01B Client Smp ID: S04-MW2
Inj Date : 30-APR-2012 20:30
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,L0782-01B,, 65899
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\120430A.B\v108260Gadd-6lvl.m
Meth Date : 02-May-2012 09:37 amarquis Quant Type: ISTD
Cal Date : 30-APR-2012 13:59 Cal File: V8B1079.d
Als bottle: 100
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:

$$\text{Amt} * \text{DF} * \text{Uf} * ((\text{Vt} + (\text{Ws} * \text{M} / 100)) * 5000) / (\text{Va} * \text{Ws} * ((100 - \text{M}) / 100)) * \text{CpndVariable}$$

Name	Value	Description
DF	2.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	10.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

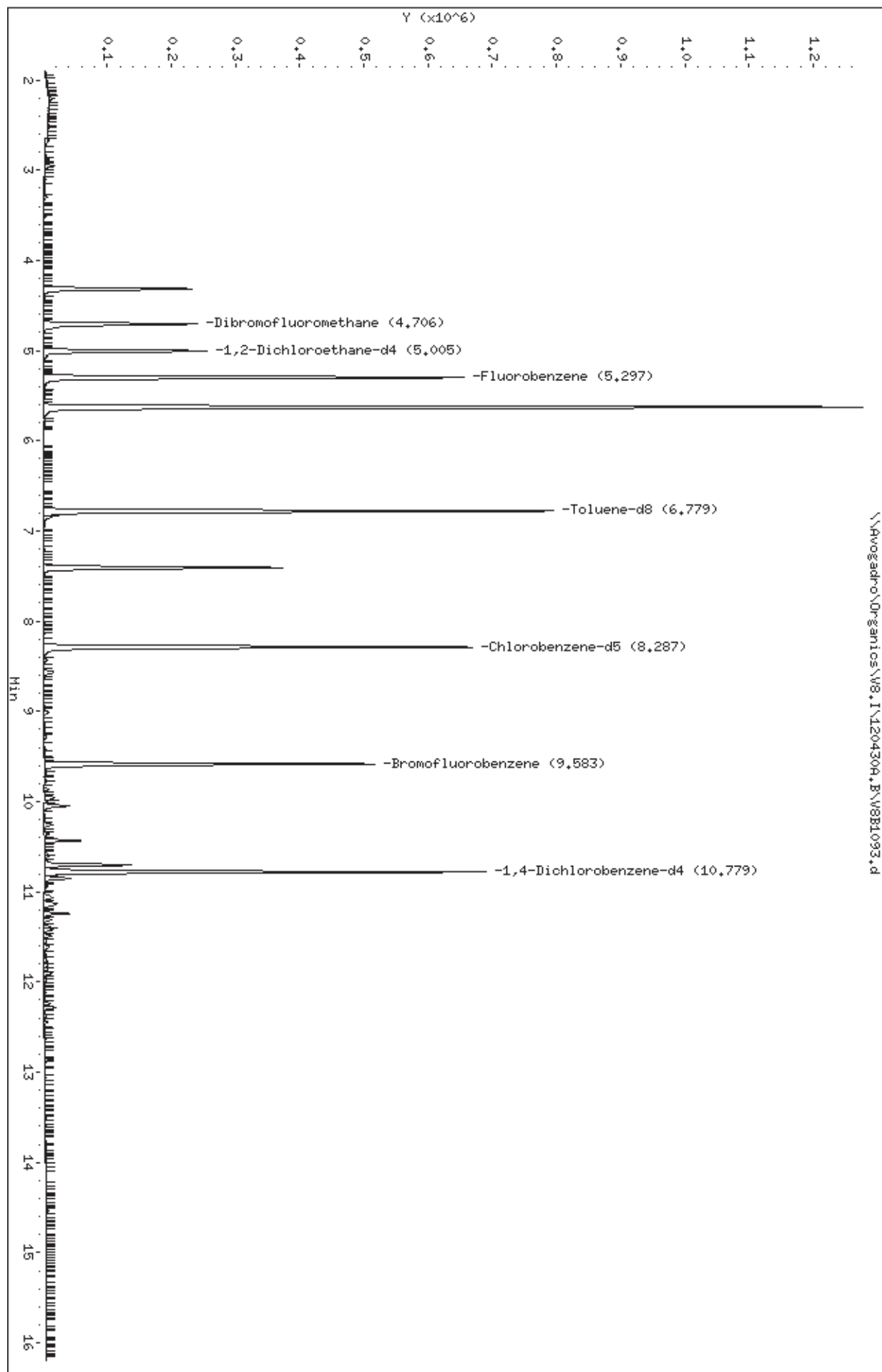
Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
12 Acetone	58		2.956	2.953	(0.558)		6594	12.9258	2500
28 cis-1,2-Dichloroethene	96		4.316	4.319	(0.814)		92227	26.3508	5200
\$ 36 Dibromofluoromethane	113		4.705	4.705	(0.888)		135731	48.9265	4800
\$ 42 1,2-Dichloroethane-d4	102		5.007	5.004	(0.945)		33024	49.5259	4800
M 50 1,2-Dichloroethene (Total)	96						92227	26.3508	5200
* 46 Fluorobenzene	96		5.300	5.300	(1.000)		561715	50.0000	
47 Trichloroethene	130		5.628	5.628	(1.062)		406640	126.815	25000
\$ 58 Toluene-d8	98		6.779	6.779	(0.818)		544337	49.2059	4800
63 Tetrachloroethene	164		7.409	7.409	(0.894)		89258	35.0952	6900
* 68 Chlorobenzene-d5	117		8.287	8.284	(1.000)		402618	50.0000	
\$ 79 Bromofluorobenzene	95		9.583	9.583	(1.156)		196489	49.4219	4800
88 1,2,4-Trimethylbenzene	105		10.432	10.432	(0.968)		31010	3.15814	620(a)
* 92 1,4-Dichlorobenzene-d4	152		10.779	10.779	(1.000)		177563	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\Avogadro\Organics\W8.1\1204304.B\W8B1093.d
Date : 30-APR-2012 20:30
Client ID: S04-HM2
Sample Info: 5HL, L0782-01B, 65899
Column phase: DB-624

Instrument: W8.i
Operator: SRC; LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\120430A.B\V8B1093.d

Date : 30-APR-2012 20:30

Client ID: S04-MW2

Instrument: V8.i

Sample Info: 5HL,L0782-01B,,65899

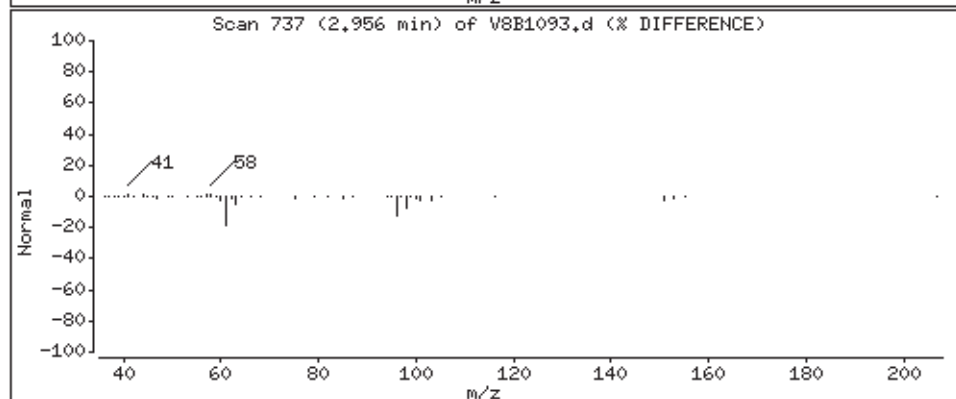
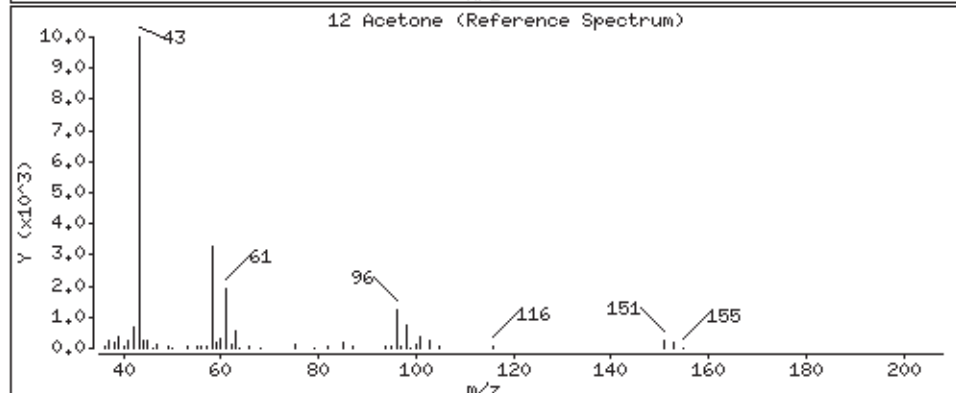
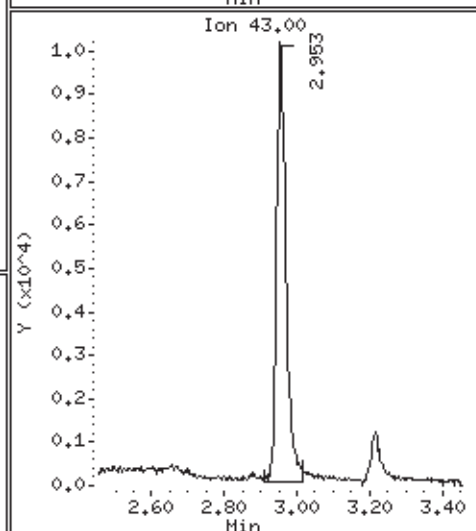
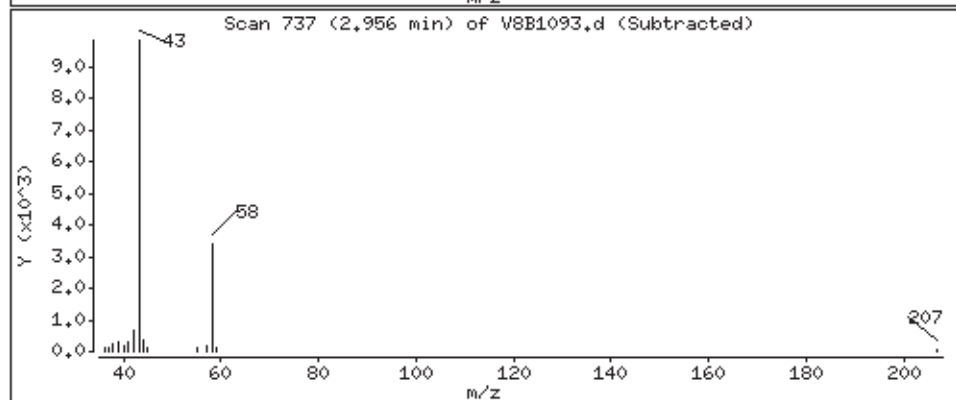
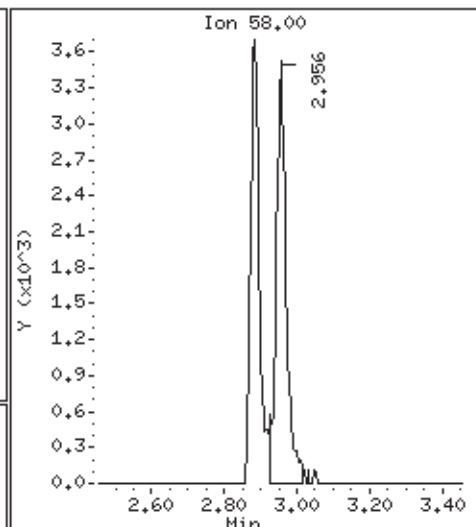
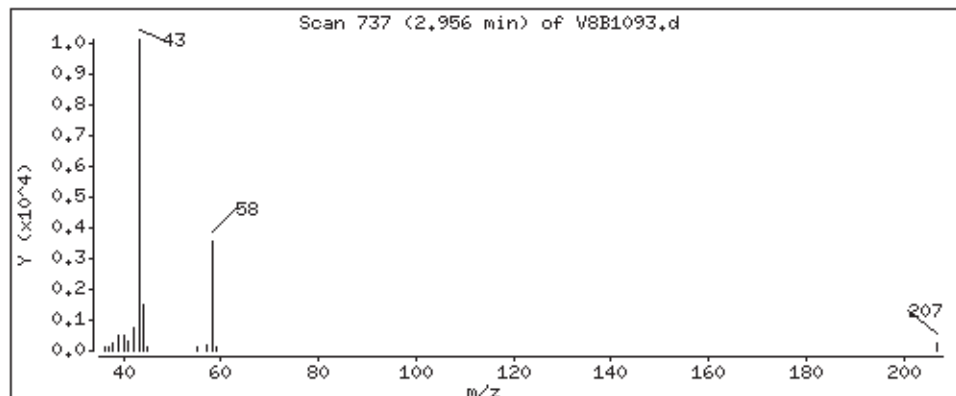
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

12 Acetone

Concentration: 2500 ug/Kg



Data File: \\Avogadro\Organics\V8,I\120430A,B\V8B1093.d

Date : 30-APR-2012 20:30

Client ID: S04-MW2

Instrument: V8.i

Sample Info: 5HL,L0782-01B,,65899

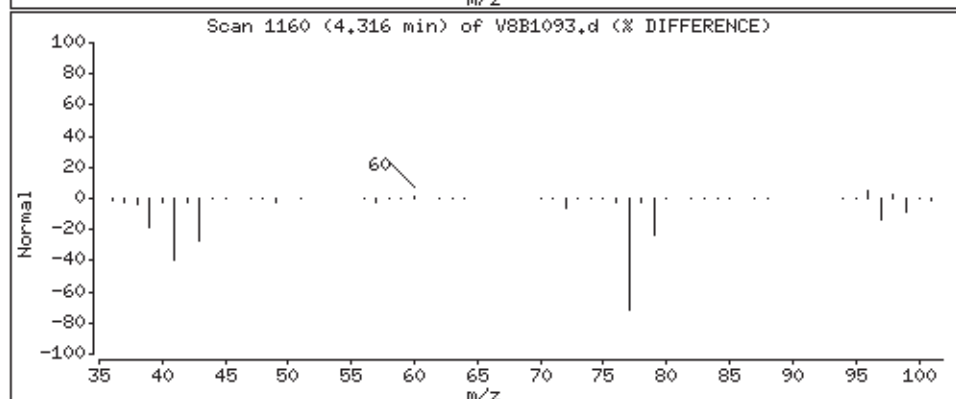
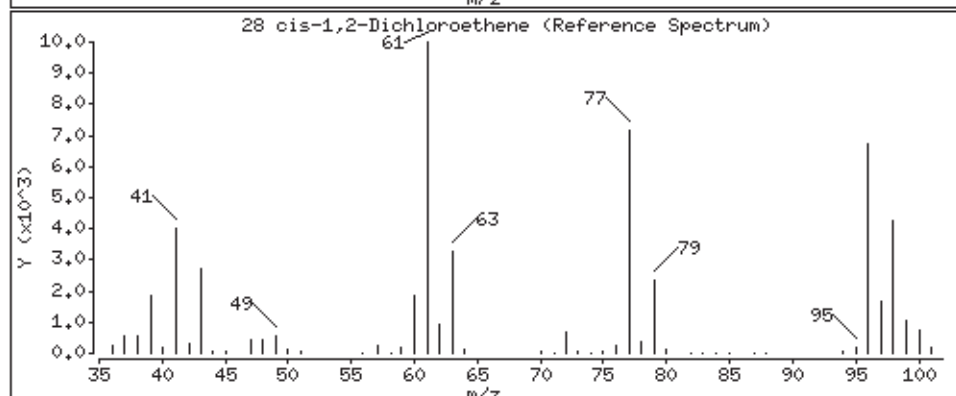
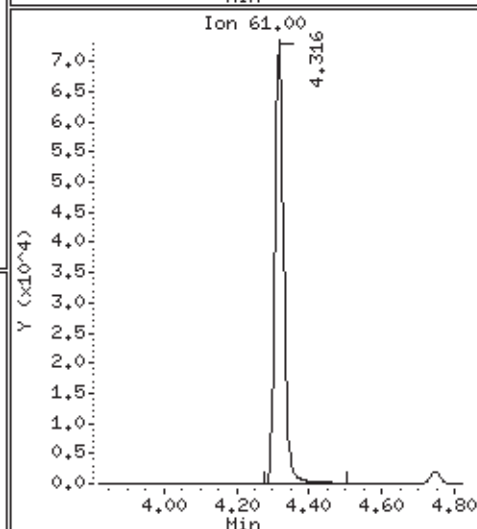
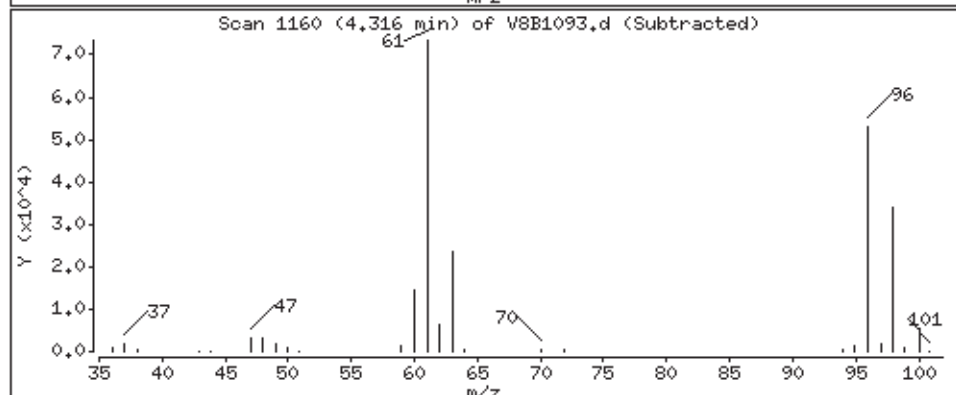
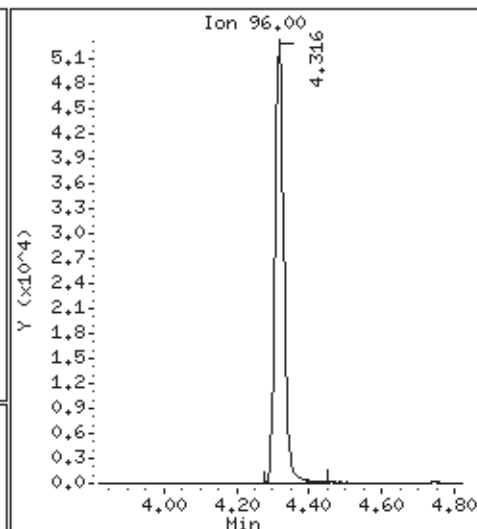
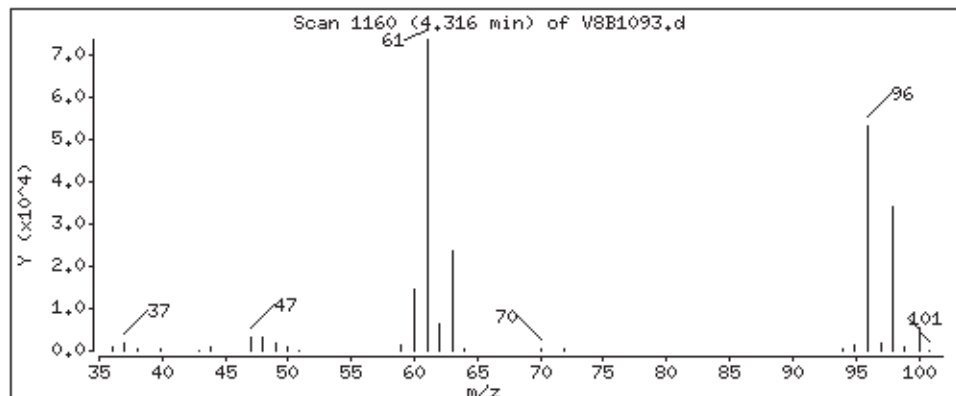
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 5200 ug/Kg



Data File: \\Avogadro\Organics\V8.I\120430A.B\V8B1093.d

Date : 30-APR-2012 20:30

Client ID: S04-MW2

Instrument: V8.i

Sample Info: 5HL,L0782-01B,,65899

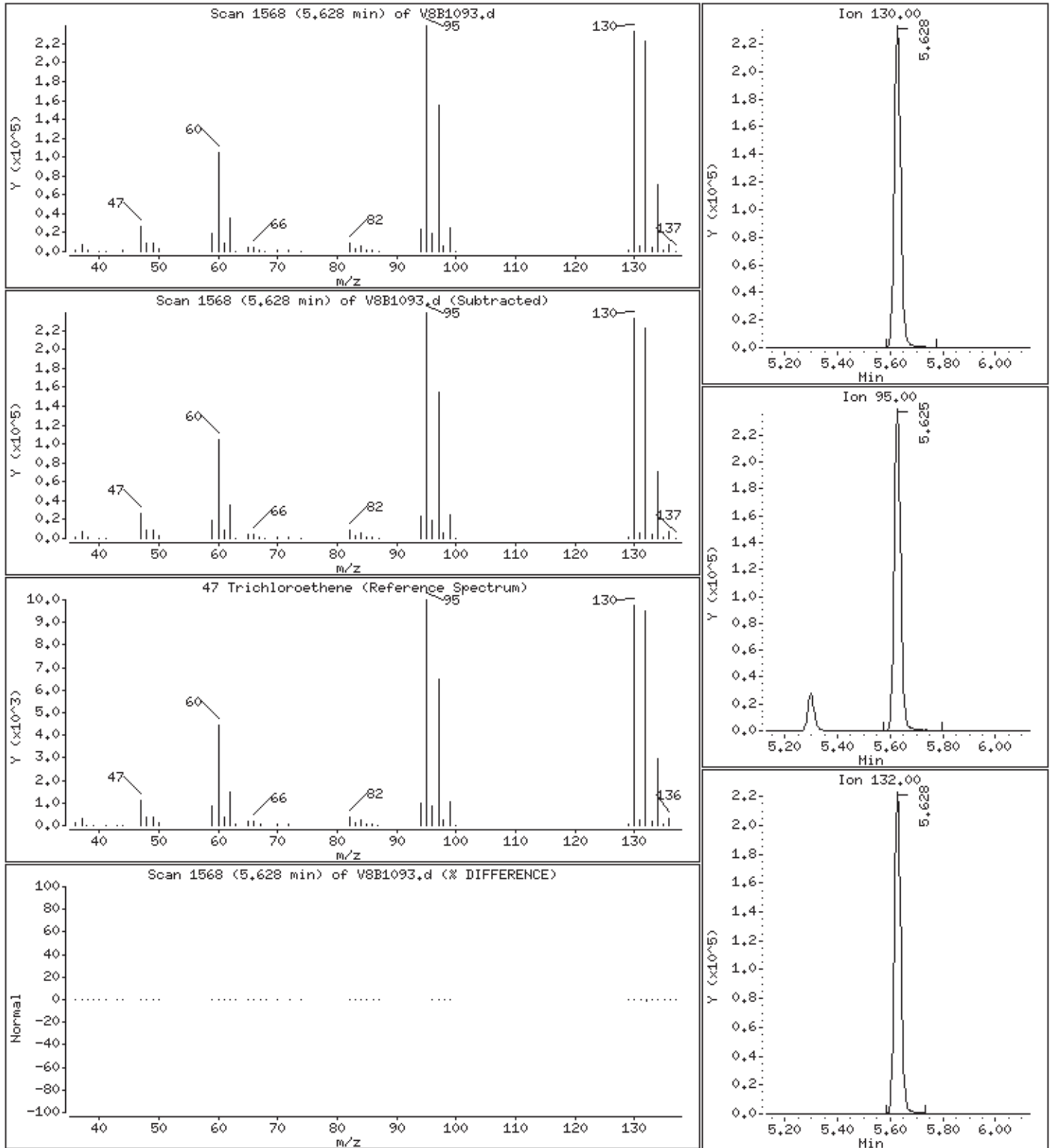
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 25000 ug/Kg



Data File: \\Avogadro\Organics\V8.I\120430A.B\V8B1093.d

Date : 30-APR-2012 20:30

Client ID: S04-MW2

Instrument: V8.i

Sample Info: 5HL,L0782-01B,,65899

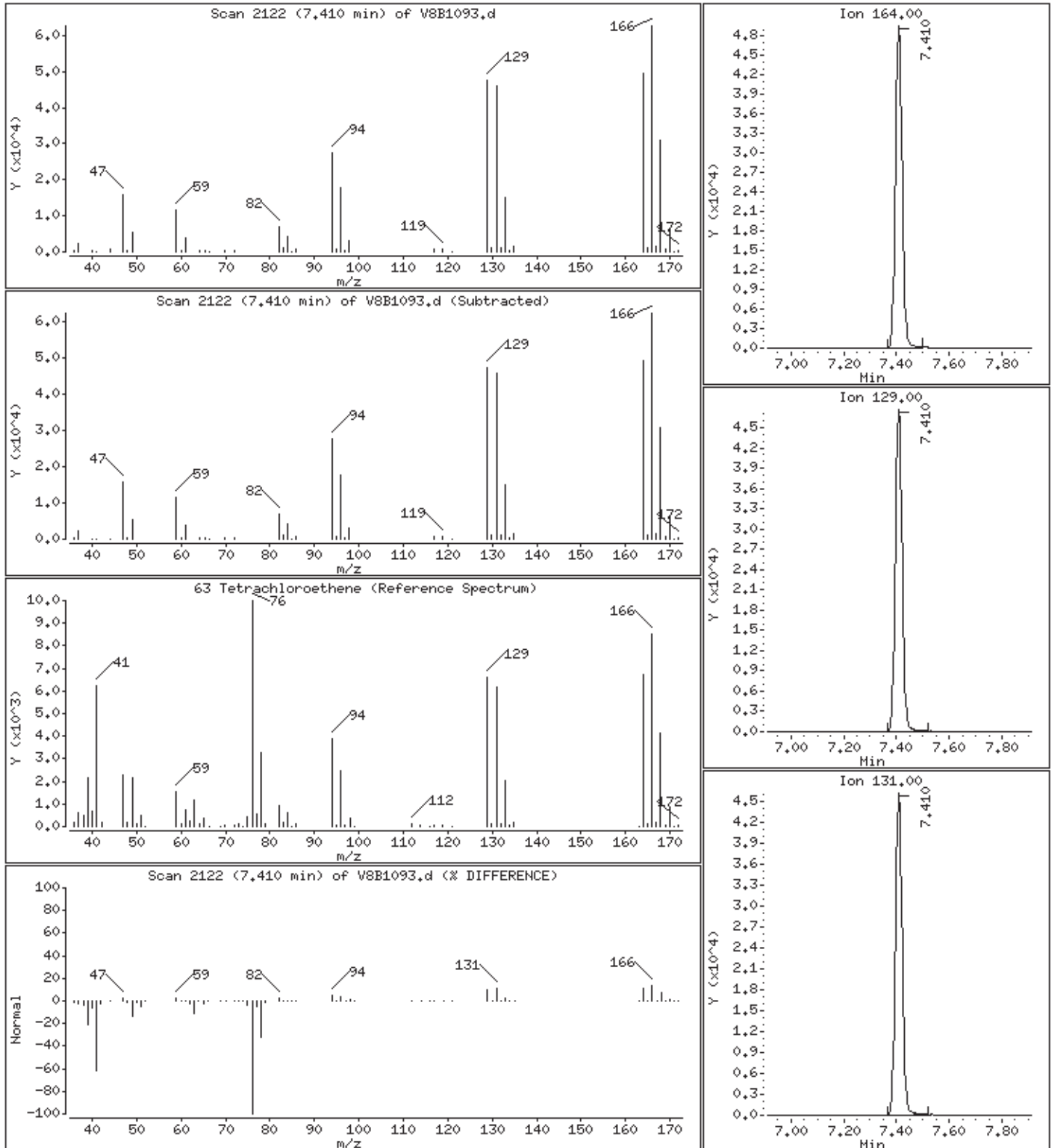
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 6900 ug/Kg



Data File: \\Avogadro\Organics\V8,I\120430A,B\V8B1093.d

Date : 30-APR-2012 20:30

Client ID: S04-MW2

Instrument: V8.i

Sample Info: 5HL,L0782-01B,,65899

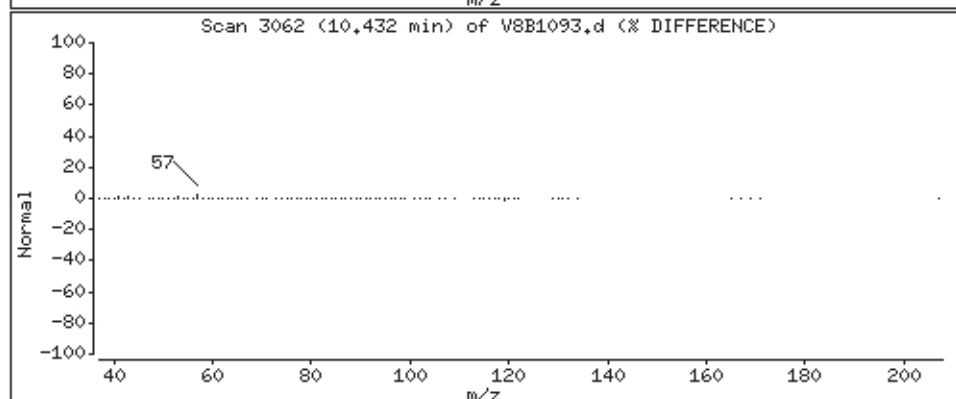
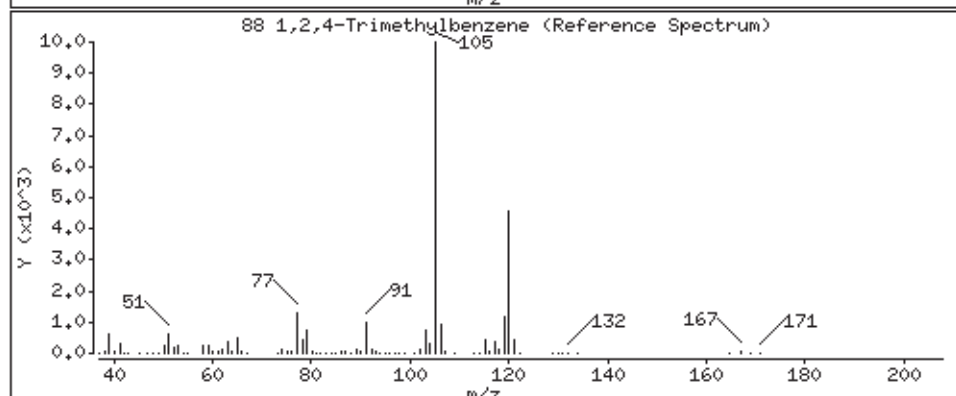
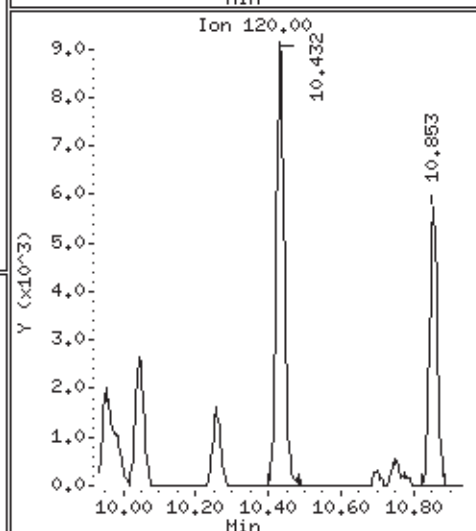
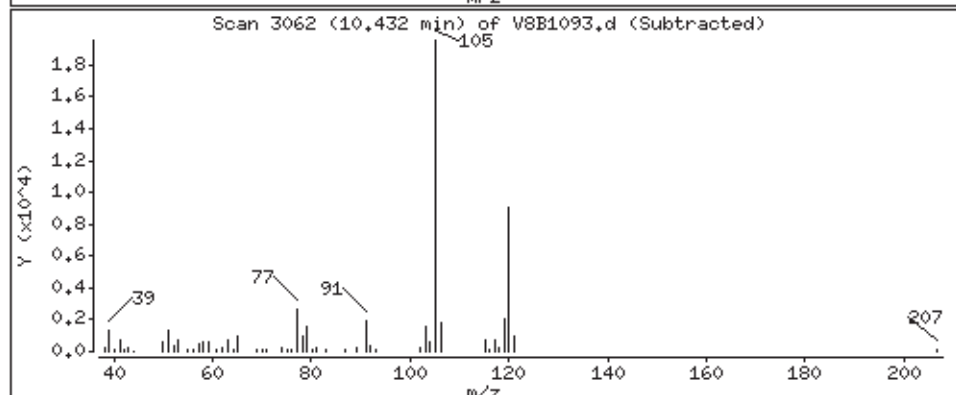
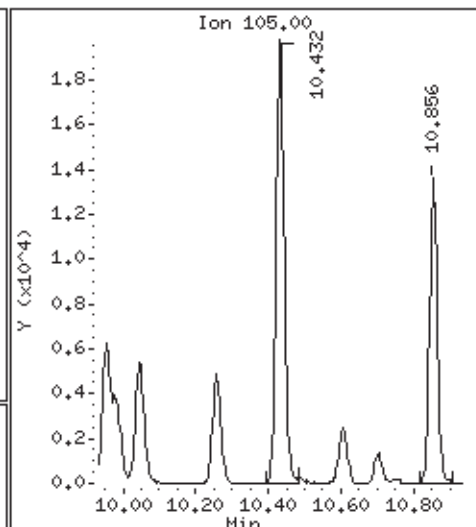
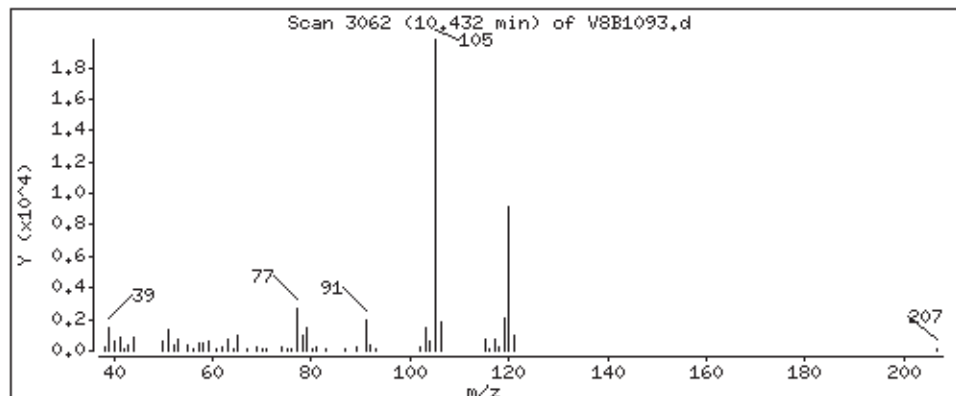
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

88 1,2,4-Trimethylbenzene

Concentration: 620 ug/Kg



6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V1 Calibration Date(s): 04/23/2012 04/23/2012

Heated Purge: (Y/N) Y Calibration Time(s): 11:05 13:36

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 =	V1M6286.D	RRF020 =	V1M6285.D			
RRF050 =	V1M6284.D	RRF100 =	V1M6288.D	RRF200 =	V1M6287.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.340	0.341	0.336	0.371	0.357	0.349	4.2
Chloromethane	0.359	0.384	0.374	0.412	0.398	0.385	5.3
Vinyl chloride	0.372	0.351	0.332	0.389	0.369	0.362	6.1
Bromomethane	0.368	0.308	0.280	0.327	0.304	0.317	10.4
Chloroethane	0.189	0.198	0.189	0.216	0.197	0.198	5.5
Trichlorofluoromethane	0.450	0.453	0.424	0.499	0.497	0.465	7.0
1,1-Dichloroethene	0.321	0.290	0.276	0.318	0.321	0.305	6.9
Acetone	0.059	0.029	0.030	0.027	0.025	0.034	41.5
Iodomethane	0.636	0.659	0.584	0.690	0.631	0.640	6.1
Carbon disulfide	1.013	0.969	0.907	1.056	1.014	0.992	5.7
Methylene chloride	0.458	0.335	0.320	0.340	0.323	0.355	16.3
trans-1,2-Dichloroethene	0.334	0.302	0.306	0.341	0.330	0.323	5.5
Methyl tert-butyl ether	0.875	0.874	0.772	0.886	0.817	0.845	5.8
1,1-Dichloroethane	0.500	0.497	0.483	0.565	0.526	0.514	6.3
Vinyl acetate	1.098	1.086	1.022	1.158	1.066	1.086	4.6
2-Butanone	0.044	0.034	0.028	0.033	0.031	0.034	18.1
cis-1,2-Dichloroethene	0.336	0.364	0.341	0.372	0.362	0.355	4.4
2,2-Dichloropropane	0.314	0.301	0.268	0.298	0.269	0.290	7.1
Bromochloromethane	0.181	0.186	0.160	0.181	0.175	0.177	5.7
Chloroform	0.580	0.557	0.528	0.576	0.570	0.562	3.8
1,1,1-Trichloroethane	0.397	0.421	0.388	0.461	0.412	0.416	6.8
1,1-Dichloropropene	0.174	0.139	0.136	0.158	0.158	0.153	10.2
Carbon tetrachloride	0.344	0.369	0.336	0.410	0.399	0.372	8.8
1,2-Dichloroethane	0.427	0.423	0.379	0.425	0.414	0.414	4.8
Benzene	1.242	1.073	1.051	1.188	1.163	1.143	7.0
Trichloroethene	0.307	0.318	0.319	0.346	0.348	0.327	5.7
1,2-Dichloropropane	0.290	0.288	0.257	0.298	0.285	0.284	5.5
Dibromomethane	0.235	0.203	0.195	0.223	0.210	0.213	7.5
Bromodichloromethane	0.430	0.408	0.403	0.442	0.428	0.422	3.8
cis-1,3-Dichloropropene	0.487	0.495	0.434	0.523	0.506	0.489	6.9
4-Methyl-2-pentanone	0.325	0.293	0.244	0.294	0.256	0.283	11.5
Toluene	1.258	1.202	1.126	1.269	1.245	1.220	4.8
trans-1,3-Dichloropropene	0.456	0.453	0.416	0.471	0.450	0.449	4.5
1,1,2-Trichloroethane	0.268	0.264	0.244	0.273	0.256	0.261	4.4
1,3-Dichloropropane	0.623	0.627	0.569	0.640	0.616	0.615	4.4
Tetrachloroethene	0.456	0.502	0.379	0.433	0.439	0.442	10.0
2-Hexanone	0.365	0.281	0.282	0.303	0.274	0.301	12.4
Dibromochloromethane	0.452	0.490	0.463	0.514	0.511	0.486	5.8
1,2-Dibromoethane	0.422	0.437	0.398	0.449	0.428	0.427	4.5

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V1 Calibration Date(s): 04/23/2012 04/23/2012

Heated Purge: (Y/N) Y Calibration Time(s): 11:05 13:36

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____	RRF005 =	V1M6286.D	RRF020 =	V1M6285.D			
RRF050 =	V1M6284.D	RRF100 =	V1M6288.D	RRF200 =	V1M6287.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Chlorobenzene	1.261	1.144	1.101	1.230	1.189	1.185	5.4
1,1,1,2-Tetrachloroethane	0.454	0.436	0.427	0.464	0.451	0.446	3.3
Ethylbenzene	0.621	0.608	0.579	0.663	0.656	0.625	5.6
m,p-Xylene	0.838	0.753	0.739	0.820	0.820	0.794	5.7
o-Xylene	0.751	0.765	0.706	0.797	0.792	0.762	4.8
Xylene (Total)	0.809	0.757	0.728	0.812	0.811	0.783	5.0
Styrene	1.332	1.255	1.188	1.351	1.360	1.297	5.7
Bromoform	0.321	0.308	0.308	0.343	0.341	0.324	5.3
Isopropylbenzene	1.874	1.907	1.758	2.057	2.064	1.932	6.7
1,1,2,2-Tetrachloroethane	1.041	0.945	0.821	0.948	0.816	0.914	10.4
Bromobenzene	1.057	1.007	0.886	0.998	0.950	0.980	6.6
1,2,3-Trichloropropane	1.037	1.196	0.958	1.107	0.983	1.056	9.1
n-Propylbenzene	0.983	0.887	0.802	0.951	0.937	0.912	7.7
2-Chlorotoluene	0.926	0.890	0.754	0.866	0.822	0.852	7.8
1,3,5-Trimethylbenzene	3.105	2.981	2.563	3.023	2.872	2.909	7.2
4-Chlorotoluene	0.931	0.863	0.782	0.906	0.861	0.869	6.5
tert-Butylbenzene	3.074	2.930	2.573	3.008	2.813	2.879	6.8
1,2,4-Trimethylbenzene	3.083	3.056	2.666	3.084	2.916	2.961	6.0
sec-Butylbenzene	4.268	3.864	3.382	4.026	3.837	3.875	8.4
4-Isopropyltoluene	3.339	3.155	2.708	3.180	2.985	3.073	7.8
1,3-Dichlorobenzene	2.035	1.901	1.629	1.892	1.788	1.849	8.2
1,4-Dichlorobenzene	1.967	1.994	1.727	1.958	1.829	1.895	6.0
n-Butylbenzene	3.506	3.198	2.773	3.332	3.084	3.179	8.7
1,2-Dichlorobenzene	1.772	1.709	1.558	1.764	1.622	1.685	5.5
1,2-Dibromo-3-chloropropane	0.154	0.133	0.114	0.142	0.132	0.135	11.0
1,2,4-Trichlorobenzene	1.275	1.201	0.966	1.144	1.050	1.127	10.8
Hexachlorobutadiene	0.726	0.645	0.556	0.681	0.626	0.647	9.8
1,2,3-Trichlorobenzene	1.172	1.018	0.861	1.003	0.941	0.999	11.5
Naphthalene	3.248	2.579	2.089	2.556	2.237	2.542	17.6

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V1 Calibration Date(s): 04/23/2012 04/23/2012

Heated Purge: (Y/N) Y Calibration Time(s): 11:05 13:36

Purge Volume: 5.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: _____		RRF005 = <u>V1M6286.D</u>	RRF020 = <u>V1M6285.D</u>				
RRF050 = <u>V1M6284.D</u>		RRF100 = <u>V1M6288.D</u>	RRF200 = <u>V1M6287.D</u>				
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dibromofluoromethane	0.288	0.285	0.274	0.278	0.284	0.282	2.0
1,2-Dichloroethane-d4	0.054	0.055	0.055	0.056	0.053	0.055	1.8
Toluene-d8	1.333	1.370	1.399	1.387	1.376	1.373	1.8
Bromofluorobenzene	0.504	0.500	0.505	0.512	0.519	0.508	1.5

Case No.: L0782

SAS No.:

SDG No.: SL0782

Calibration Date(s): 04/30/2012

Calibration Times: 11:22

13:59

(mL)

(mm)

Length: 30

LAB FILE ID: RRF005 = <u>V8B1075.D</u> RRF020 = <u>V8B1074.D</u> RRF050 = <u>V8B1073.D</u> RRF100 = <u>V8B1079.D</u> RRF200 = <u>V8B1078.D</u> RRF001 = <u>V8B1077.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					
										RRF	% RSD
Dichlorodifluoromethane	0.270	0.264	0.273	0.254	0.252	0.260				0.262	3.2
Chloromethane	0.352	0.337	0.328	0.339	0.344	0.367				0.344	4.0
Vinyl chloride	0.317	0.301	0.311	0.308	0.306	0.315				0.310	1.9
Bromomethane	0.097	0.113	0.116	0.133	0.078	0.108				0.108	17.3
Chloroethane	0.166	0.149	0.149	0.141	0.143	0.186				0.156	10.9
Trichlorofluoromethane	0.329	0.322	0.331	0.314	0.311	0.303				0.318	3.4
1,1-Dichloroethene	0.287	0.265	0.271	0.263	0.266	0.286				0.273	3.9
Acetone	0.046	0.051	0.050	0.039	0.041					0.045	12.2
Iodomethane	0.077	0.104	0.126	0.163	0.148	0.054				0.112	37.4
Carbon disulfide	0.862	0.749	0.782	0.737	0.732	0.997				0.810	12.8
Methylene chloride	0.342	0.306	0.300	0.298	0.308	0.458				0.335	18.5
trans-1,2-Dichloroethene	0.301	0.280	0.284	0.279	0.282	0.301				0.288	3.6
Methyl tert-butyl ether	0.748	0.733	0.707	0.723	0.728	0.697				0.723	2.5
1,1-Dichloroethane	0.567	0.536	0.534	0.526	0.537	0.537				0.540	2.6
Vinyl acetate	0.890	0.905	0.904	0.901	0.907	0.759				0.878	6.6
2-Butanone	0.036	0.044	0.044	0.040	0.042					0.041	8.1
cis-1,2-Dichloroethene	0.323	0.311	0.308	0.308	0.315	0.304				0.311	2.2
2,2-Dichloropropane	0.429	0.420	0.431	0.394	0.406	0.391				0.412	4.2
Bromochloromethane	0.141	0.135	0.131	0.133	0.136	0.127				0.134	3.5
Chloroform	0.522	0.504	0.495	0.494	0.508	0.486				0.501	2.5
1,1,1-Trichloroethane	0.435	0.417	0.423	0.416	0.422	0.401				0.419	2.7
1,1-Dichloropropene	0.144	0.138	0.141	0.139	0.141	0.128				0.139	4.0
Carbon tetrachloride	0.354	0.350	0.359	0.351	0.355	0.312				0.347	5.0
1,2-Dichloroethane	0.409	0.387	0.378	0.384	0.388	0.381				0.388	2.9
Benzene	1.234	1.172	1.165	1.155	1.162	1.162				1.175	2.5
Trichloroethene	0.296	0.280	0.281	0.279	0.283	0.294				0.285	2.6
1,2-Dichloropropane	0.325	0.313	0.307	0.307	0.310	0.284				0.308	4.3

Lab Name:	Spectrum Analytical, Inc.	Case No.:	L0782	SAS No.:	SDG No.:	SL0782
Lab Code:	MITKEM					
Instrument ID:	V10	Calibration Date(s): 04/30/2012 04/30/2012				
Heated Purge: (Y/N)	N	Calibration Times: 11:22 13:59				
Purge Volume:	5	(mL)				
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30 (mm)

LAB FILE ID: RRF005 = V8B1075.D RRF020 = V8B1074.D RRF050 = V8B1073.D RRF100 = V8B1079.D RRF200 = V8B1078.D									
RRF001 = V8B1077.D									
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001			
							RRF		% RSD
Dibromomethane	0.190	0.182	0.177	0.182	0.185	0.174		0.182	3.1
Bromodichloromethane	0.379	0.380	0.380	0.384	0.397	0.353		0.379	3.8
cis-1,3-Dichloropropene	0.454	0.462	0.469	0.474	0.487	0.388		0.456	7.7
4-Methyl-2-pentanone	0.269	0.279	0.266	0.280	0.286			0.276	3.0
Toluene	1.237	1.169	1.175	1.162	1.177	1.170		1.182	2.3
trans-1,3-Dichloropropene	0.398	0.411	0.412	0.425	0.439	0.337		0.404	8.8
1,1,2-Trichloroethane	0.262	0.256	0.250	0.256	0.264	0.243		0.255	3.0
1,3-Dichloropropane	0.651	0.636	0.617	0.620	0.616	0.618		0.626	2.2
Tetrachloroethene	0.325	0.305	0.311	0.302	0.304	0.349		0.316	5.7
2-Hexanone	0.261	0.303	0.306	0.282	0.288			0.288	6.3
Dibromochloromethane	0.380	0.393	0.392	0.403	0.415	0.329		0.385	7.8
1,2-Dibromoethane	0.382	0.376	0.363	0.373	0.378	0.331		0.367	5.1
Chlorobenzene	1.102	1.031	1.026	1.011	1.015	1.049		1.039	3.2
1,1,1,2-Tetrachloroethane	0.360	0.357	0.357	0.354	0.362	0.326		0.353	3.8
Ethylbenzene	0.563	0.553	0.548	0.540	0.546	0.526		0.546	2.3
m,p-Xylene	0.707	0.675	0.685	0.660	0.655	0.665		0.675	2.8
o-Xylene	0.689	0.658	0.660	0.647	0.640	0.618		0.652	3.6
Xylene (Total)	0.701	0.669	0.677	0.656	0.650	0.649		0.667	3.0
Styrene	1.079	1.067	1.100	1.098	1.094	0.919		1.060	6.6
Bromoform	0.218	0.237	0.238	0.254	0.260	0.182		0.231	12.3
Isopropylbenzene	1.659	1.628	1.645	1.592	1.584	1.576		1.614	2.1
1,1,2,2-Tetrachloroethane	1.118	1.064	0.963	1.000	0.952	1.048		1.024	6.3
Bromobenzene	0.912	0.857	0.831	0.823	0.814	0.892		0.855	4.7
1,2,3-Trichloropropane	1.286	1.249	1.156	1.208	1.158	1.270		1.221	4.6
n-Propylbenzene	0.919	0.889	0.898	0.852	0.839	0.907		0.884	3.6
2-Chlorotoluene	0.863	0.805	0.805	0.767	0.748	0.879		0.811	6.4
1,3,5-Trimethylbenzene	2.908	2.779	2.760	2.631	2.557	2.882		2.753	5.0

Lab Name: MITKEM

Lab Code: MTKEM

Instrument ID: V10

Heated Purge: (Y/N) N

Purge Volume: 5

GC Column: DB-624

Case No.: L0782

SAS No.:

Calibration Date(s): 04/30/2012

Calibration Times: 11:22

ID: 0.25

Length: 30

SDG No.: SL0782

04/30/2012

13:59

(mm)

(mm)

LAB FILE ID: RRF005 = <u>V8B1075.D</u> RRF020 = <u>V8B1074.D</u> RRF050 = <u>V8B1073.D</u> RRF100 = <u>V8B1079.D</u> RRF200 = <u>V8B1078.D</u> RRF001 = <u>V8B1077.D</u>												
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.890	0.834	0.817	0.792	0.776	0.874					0.830	5.4
tert-Butylbenzene	2.780	2.653	2.671	2.522	2.506	2.799					2.655	4.7
1,2,4-Trimethylbenzene	2.939	2.778	2.776	2.667	2.585	2.845					2.765	4.5
sec-Butylbenzene	3.499	3.364	3.425	3.213	3.086	3.499					3.348	5.0
4-Isopropyltoluene	2.793	2.649	2.734	2.565	2.474	2.786					2.667	4.8
1,3-Dichlorobenzene	1.611	1.487	1.454	1.420	1.388	1.679					1.506	7.6
1,4-Dichlorobenzene	1.689	1.518	1.490	1.449	1.417	1.809					1.562	9.8
n-Butylbenzene	2.550	2.427	2.520	2.377	2.277	2.456					2.434	4.1
1,2-Dichlorobenzene	1.594	1.443	1.389	1.367	1.323	1.503					1.436	6.9
1,2-Dibromo-3-chloropropane	0.175	0.162	0.139	0.162	0.146	0.133					0.153	10.5
1,2,4-Trichlorobenzene	0.885	0.755	0.672	0.739	0.681	0.616					0.725	12.9
Hexachlorobutadiene	0.419	0.346	0.331	0.306	0.284	0.432					0.353	17.1
1,2,3-Trichlorobenzene	0.868	0.704	0.574	0.656	0.563	0.522					0.648	19.6
Naphthalene	2.169	1.984	1.585	2.022	1.655	1.282					1.783	18.6

Contract:

Lab Code: MITKEM

Case No.: L0782

SAS No.:

SDG No.: SL0782

Instrument ID: V10

Calibration Date(s): 04/30/2012

04/30/2012

Heated Purge: (Y/N) N

Calibration Times: 11:22

13:59

Purge Volume: 5

(mL)

GC Column: DB-624

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = <u>V8B1075.D</u> RRF020 = <u>V8B1074.D</u> RRF050 = <u>V8B1073.D</u> RRF100 = <u>V8B1079.D</u> RRF200 = <u>V8B1078.D</u> RRF001 = <u>V8B1077.D</u>									
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001			
							RRF		% RSD
Dibromofluoromethane	0.246	0.247	0.248	0.245	0.250	0.245		0.247	0.8
1,2-Dichloroethane-d4	0.059	0.059	0.060	0.060	0.060			0.059	1.0
Toluene-d8	1.391	1.376	1.382	1.366	1.353			1.374	1.1
Bromofluorobenzene	0.487	0.492	0.494	0.497	0.498			0.494	0.9

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V1.I\120423.B\V1M6284.D
 Lab Smp Id: VSTD0501Y Client Smp ID: VSTD0501Y
 Inj Date : 23-APR-2012 11:05
 Operator : V1 SRC: V1 Inst ID: V1.i
 Smp Info : 5ML,VSTD0501Y,VSTD0501Y
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V1.I\120423.B\v18260GH.m
 Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 16 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.684	1.684 (0.263)		178857	50.0000	48
2 Chloromethane	50	1.881	1.881 (0.294)		199335	50.0000	48
3 Vinyl Chloride	62	2.009	2.009 (0.314)		176758	50.0000	46
4 Bromomethane	94	2.373	2.373 (0.371)		149101	50.0000	44
5 Chloroethane	64	2.491	2.491 (0.389)		100716	50.0000	48(Q)
6 Trichlorofluoromethane	101	2.748	2.748 (0.429)		225881	50.0000	46
127 Ethanol	46	2.935	2.935 (0.458)		52210	5000.00	4100(Q)
7 Ether	59	3.043	3.043 (0.475)		115626	50.0000	47(Q)
8 Acrolein	56	3.181	3.181 (0.497)		19906	250.000	270(Q)
9 1,1-Dichloroethene	96	3.289	3.289 (0.514)		146892	50.0000	45
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.329	3.329 (0.520)		144028	50.0000	42
11 Acetone	58	3.339	3.339 (0.522)		16024	50.0000	44(Q)
12 Iodomethane	142	3.457	3.457 (0.540)		311245	50.0000	46
13 Carbon Disulfide	76	3.526	3.526 (0.551)		483358	50.0000	46
14 Acetonitrile	40	3.614	3.614 (0.565)		100274	500.000	400(Q)
15 Methyl Acetate	43	3.683	3.683 (0.575)		102505	50.0000	45
16 Methylene Chloride	84	3.792	3.792 (0.592)		170536	50.0000	45
17 tert-Butanol	59	3.910	3.910 (0.611)		30326	100.000	78
18 Acrylonitrile	53	4.038	4.038 (0.631)		48703	50.0000	50
20 Methyl tert-butyl ether	73	4.087	4.087 (0.638)		411525	50.0000	46
19 trans-1,2-Dichloroethene	96	4.077	4.077 (0.637)		163160	50.0000	47
21 1,1-Dichloroethane	63	4.521	4.521 (0.706)		257456	50.0000	47
22 Vinyl acetate	43	4.580	4.580 (0.715)		544745	50.0000	47

						AMOUNTS		
		QUANT	SIG			CAL -AMT	ON -COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	=====	=====	=====	=====	=====	=====
	23 Diisopropyl Ether	45	4.599	4.599	(0.718)	510816	50.0000	46
	24 Ethyl tert-butyl ether	59	4.983	4.983	(0.778)	453296	50.0000	46
M	27 1,2-dichloroethene, (Total)	100				345018	100.000	(a)
	25 cis-1,2-Dichloroethene	96	5.131	5.131	(0.802)	181858	50.0000	48
	26 2,2-Dichloropropane	77	5.141	5.141	(0.803)	143090	50.0000	46
	28 2-Butanone	72	5.141	5.141	(0.803)	14754	50.0000	41(Q)
	29 Bromochloromethane	128	5.387	5.387	(0.842)	85156	50.0000	45
	30 Tetrahydrofuran	72	5.446	5.446	(0.851)	31603	100.000	84(Q)
	31 Chloroform	83	5.476	5.476	(0.855)	281264	50.0000	47
\$	32 Dibromofluoromethane	113	5.643	5.643	(0.882)	146123	50.0000	49
	33 1,1,1-Trichloroethane	97	5.683	5.683	(0.888)	206779	50.0000	47
	34 Cyclohexane	56	5.752	5.752	(0.898)	213304	50.0000	43
	36 Carbon Tetrachloride	117	5.870	5.870	(0.917)	179191	50.0000	45
	35 1,1-Dichloropropene	110	5.860	5.860	(0.915)	72354	50.0000	44(Q)
\$	37 1,2-Dichloroethane-d4	102	6.018	6.018	(0.940)	29182	50.0000	50
	38 Benzene	78	6.096	6.096	(0.952)	560112	50.0000	46
	39 1,2-Dichloroethane	62	6.096	6.096	(0.952)	202198	50.0000	46
	40 tert-Amyl methyl ether	73	6.215	6.215	(0.971)	434618	50.0000	46
*	41 Fluorobenzene	96	6.402	6.402	(1.000)	533075	50.0000	
	42 Trichloroethene	130	6.815	6.815	(1.065)	170105	50.0000	49
	43 Methylcyclohexane	83	7.042	7.042	(1.100)	245389	50.0000	44
	44 1,2-Dichloropropane	63	7.062	7.062	(1.103)	137228	50.0000	45
	46 Dibromomethane	93	7.200	7.200	(1.125)	104041	50.0000	46
	47 1,4-Dioxane	88	7.219	7.219	(1.128)	32415	1000.00	840
	48 Bromodichloromethane	83	7.377	7.377	(1.152)	214836	50.0000	48
	45 2-Chloroethyl vinyl ether	63	7.741	7.741	(1.209)	50766	50.0000	48
	49 cis-1,3-Dichloropropene	75	7.919	7.919	(1.237)	231235	50.0000	44
	50 4-Methyl-2-pentanone	43	8.106	8.106	(1.266)	130161	50.0000	43
\$	51 Toluene-d8	98	8.254	8.254	(0.818)	494539	50.0000	51
	52 Toluene	91	8.332	8.332	(1.302)	600293	50.0000	46
	53 trans-1,3-Dichloropropene	75	8.598	8.598	(1.343)	221917	50.0000	46
	54 1,1,2-Trichloroethane	97	8.825	8.825	(1.378)	129829	50.0000	47
	55 Tetrachloroethene	164	9.022	9.022	(0.895)	134136	50.0000	43
	56 1,3-Dichloropropane	76	9.041	9.041	(0.896)	201181	50.0000	46
	57 2-Hexanone	43	9.140	9.140	(0.906)	99529	50.0000	47
	58 Dibromochloromethane	129	9.327	9.327	(0.925)	163605	50.0000	48(T)
	59 1,2-Dibromoethane	107	9.475	9.475	(0.939)	140633	50.0000	46
*	60 Chlorobenzene-d5	117	10.086	10.086	(1.000)	353524	50.0000	
	63 1-Chlorohexane	91	10.095	10.095	(1.001)	215729	50.0000	45(Q)
	61 Chlorobenzene	112	10.125	10.125	(1.004)	389140	50.0000	46
	62 1,1,1,2-Tetrachloroethane	131	10.223	10.223	(1.014)	151094	50.0000	48
	64 Ethylbenzene	106	10.263	10.263	(1.018)	204684	50.0000	46
	65 m,p-Xylene	106	10.420	10.420	(1.033)	522279	100.000	93
	66 o-Xylene	106	10.923	10.923	(1.083)	249491	50.0000	46
	67 Styrene	104	10.933	10.933	(1.084)	419925	50.0000	46
	68 Bromoform	173	11.159	11.159	(1.106)	108738	50.0000	47
	69 Isopropylbenzene	105	11.386	11.386	(1.129)	621387	50.0000	45
	126 trans-1,4-Dichloro-2-butene	75	11.455	11.455	(1.136)	53522	50.0000	45
\$	70 Bromofluorobenzene	95	11.563	11.563	(1.146)	178694	50.0000	50
	72 Bromobenzene	156	11.740	11.740	(0.908)	180645	50.0000	45(Q)
	71 1,1,2,2-Tetrachloroethane	83	11.730	11.730	(0.907)	167362	50.0000	45
	73 1,2,3-Trichloropropane	75	11.790	11.790	(0.912)	195302	50.0000	45(H)
	74 n-Propylbenzene	120	11.878	11.878	(0.919)	163540	50.0000	44
	75 2-Chlorotoluene	126	11.977	11.977	(0.926)	153733	50.0000	44

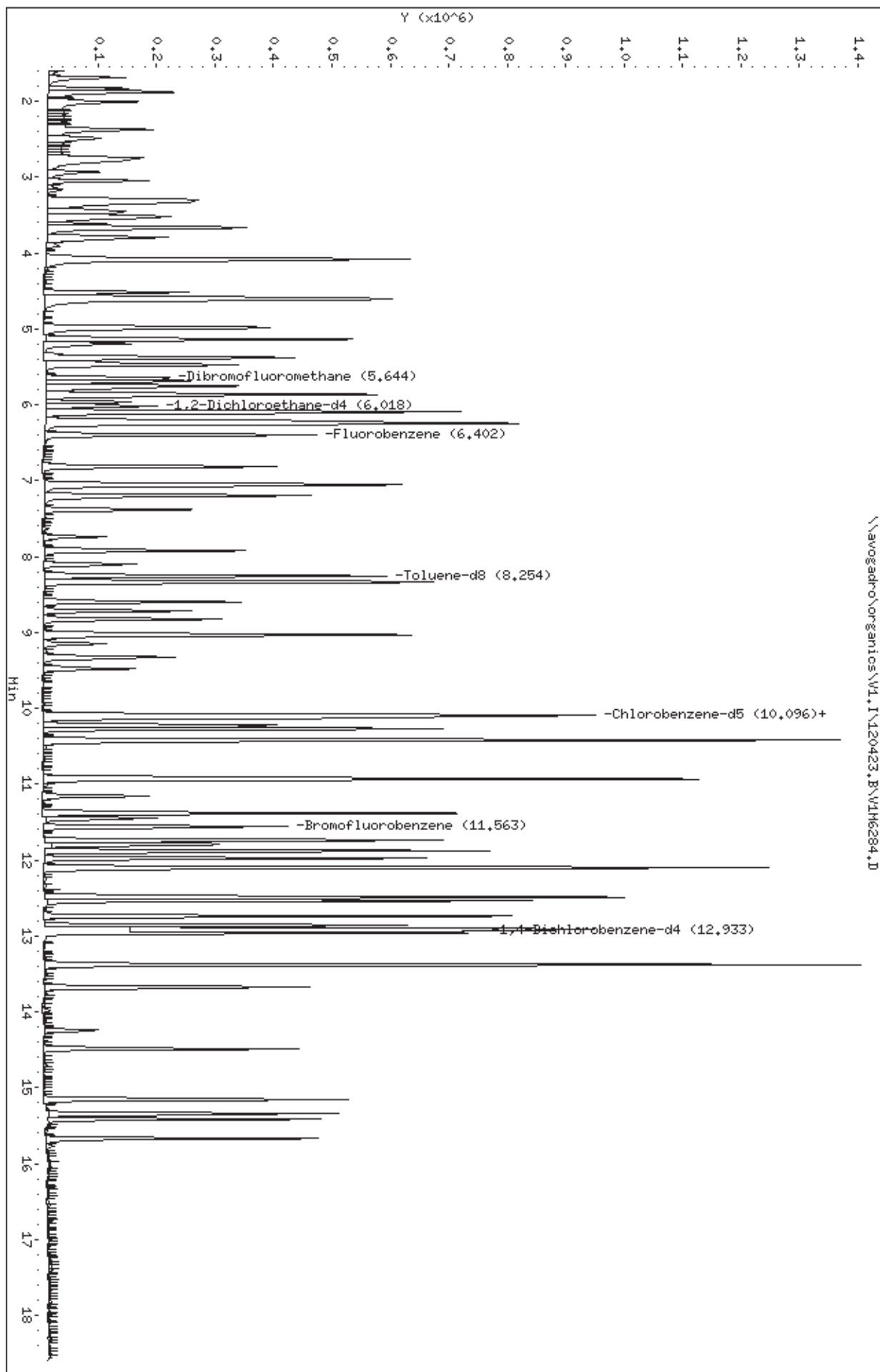
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 1,3,5-Trimethylbenzene	105	12.095	12.095	(0.935)	522425		50.0000	44
77 4-Chlorotoluene	126	12.105	12.105	(0.936)	159404		50.0000	45
78 tert-Butylbenzene	119	12.479	12.479	(0.965)	524510		50.0000	45
79 1,2,4-Trimethylbenzene	105	12.538	12.538	(0.970)	543554		50.0000	45
M 81 Xylene (Total)	106				771770		150.000	(a)
80 sec-Butylbenzene	105	12.735	12.735	(0.985)	689518		50.0000	44
82 1,3-Dichlorobenzene	146	12.863	12.863	(0.995)	332052		50.0000	44
83 4-Isopropyltoluene	119	12.912	12.912	(0.998)	552046		50.0000	44
* 84 1,4-Dichlorobenzene-d4	152	12.932	12.932	(1.000)	203856		50.0000	
85 1,4-Dichlorobenzene	146	12.962	12.962	(1.002)	352083		50.0000	46
86 n-Butylbenzene	91	13.375	13.375	(1.034)	565294		50.0000	44
87 1,2-Dichlorobenzene	146	13.385	13.385	(1.035)	317603		50.0000	46
88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.101)	23162		50.0000	42(Q)
128 1,3,5-Trichlorobenzene	180	15.158	15.158	(2.368)	196984		50.0000	43(A)
89 1,2,4-Trichlorobenzene	180	15.158	15.158	(1.172)	196984		50.0000	43
90 Hexachlorobutadiene	225	15.345	15.345	(1.187)	113312		50.0000	43
91 Naphthalene	128	15.414	15.414	(1.192)	425806		50.0000	41
92 1,2,3-Trichlorobenzene	180	15.670	15.670	(1.212)	175615		50.0000	43

QC Flag Legend

T - Target compound detected outside RT window.
 a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 A - Target compound detected but, quantitated amount
 exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.
 H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1,I\120423,B\VIH6284.D
Date : 23-APR-2012 11:05
Client ID: VSTD0501Y
Sample Info: 5HL,VSTD0501Y,VSTD0501Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: VI.i
Operator: V1 SRC: V1
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423.B\V1M6285.D
Lab Smp Id: VSTD0201Y Client Smp ID: VSTD0201Y
Inj Date : 23-APR-2012 11:34
Operator : V1 SRC: V1 Inst ID: V1.i
Smp Info : 5ML,VSTD0201Y,VSTD0201Y
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\120423.B\v18260GH.m
Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
Cal Date : 23-APR-2012 11:34 Cal File: V1M6285.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.684	1.684 (0.263)		73243	20.0000	20
2 Chloromethane	50	1.871	1.881 (0.292)		82569	20.0000	20
3 Vinyl Chloride	62	1.999	2.009 (0.312)		75318	20.0000	19
4 Bromomethane	94	2.373	2.373 (0.370)		66130	20.0000	19
5 Chloroethane	64	2.482	2.491 (0.387)		42578	20.0000	20
6 Trichlorofluoromethane	101	2.757	2.748 (0.430)		97369	20.0000	20
127 Ethanol	46	2.935	2.935 (0.458)		21907	2000.00	1700(Q)
7 Ether	59	3.053	3.043 (0.476)		47803	20.0000	19
8 Acrolein	56	3.181	3.181 (0.496)		6102	100.000	82(Q)
9 1,1-Dichloroethene	96	3.299	3.289 (0.515)		62319	20.0000	19
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.319	3.329 (0.518)		70048	20.0000	20
11 Acetone	58	3.339	3.339 (0.521)		6190	20.0000	17(Q)
12 Iodomethane	142	3.467	3.457 (0.541)		141643	20.0000	21
13 Carbon Disulfide	76	3.526	3.526 (0.550)		208217	20.0000	20
14 Acetonitrile	40	3.634	3.614 (0.567)		44683	200.000	180(TQ)
15 Methyl Acetate	43	3.693	3.683 (0.576)		45741	20.0000	20
16 Methylene Chloride	84	3.801	3.792 (0.593)		71973	20.0000	19
17 tert-Butanol	59	3.920	3.910 (0.611)		14143	40.0000	36
18 Acrylonitrile	53	4.048	4.038 (0.631)		19583	20.0000	20
20 Methyl tert-butyl ether	73	4.097	4.087 (0.639)		187739	20.0000	21
19 trans-1,2-Dichloroethene	96	4.097	4.077 (0.639)		64794	20.0000	19
21 1,1-Dichloroethane	63	4.530	4.521 (0.707)		106693	20.0000	19
22 Vinyl acetate	43	4.589	4.580 (0.716)		233363	20.0000	20

						AMOUNTS		
		QUANT	SIG			CAL-AMT	ON-COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	=====	=====	=====	=====	=====	=====
	23 Diisopropyl Ether	45	4.609	4.599	(0.719)	225806	20.0000	20
	24 Ethyl tert-butyl ether	59	4.993	4.983	(0.779)	201864	20.0000	20
M	27 1,2-dichloroethene, (Total)	100				142960	40.0000	(a)
	25 cis-1,2-Dichloroethene	96	5.141	5.131	(0.802)	78166	20.0000	20
	26 2,2-Dichloropropane	77	5.151	5.141	(0.803)	64733	20.0000	21
	28 2-Butanone	72	5.161	5.141	(0.805)	7380	20.0000	20
	29 Bromochloromethane	128	5.407	5.387	(0.843)	39870	20.0000	21
	30 Tetrahydrofuran	72	5.466	5.446	(0.853)	16196	40.0000	43
	31 Chloroform	83	5.486	5.476	(0.856)	119737	20.0000	20
\$	32 Dibromofluoromethane	113	5.653	5.643	(0.882)	152955	50.0000	50
	33 1,1,1-Trichloroethane	97	5.693	5.683	(0.888)	90532	20.0000	20
	34 Cyclohexane	56	5.762	5.752	(0.899)	99685	20.0000	20
	36 Carbon Tetrachloride	117	5.880	5.870	(0.917)	79376	20.0000	20
	35 1,1-Dichloropropene	110	5.880	5.860	(0.917)	29826	20.0000	18
\$	37 1,2-Dichloroethane-d4	102	6.027	6.018	(0.940)	29371	50.0000	50
	38 Benzene	78	6.106	6.096	(0.952)	230553	20.0000	19
	39 1,2-Dichloroethane	62	6.106	6.096	(0.952)	90885	20.0000	20
	40 tert-Amyl methyl ether	73	6.224	6.215	(0.971)	185891	20.0000	20
*	41 Fluorobenzene	96	6.412	6.402	(1.000)	537205	50.0000	
	42 Trichloroethene	130	6.825	6.815	(1.065)	68246	20.0000	19
	43 Methylcyclohexane	83	7.052	7.042	(1.100)	108021	20.0000	19
	44 1,2-Dichloropropane	63	7.081	7.062	(1.104)	61940	20.0000	20
	46 Dibromomethane	93	7.209	7.200	(1.124)	43653	20.0000	19
	47 1,4-Dioxane	88	7.239	7.219	(1.129)	13906	400.000	360
	48 Bromodichloromethane	83	7.387	7.377	(1.152)	87740	20.0000	19
	45 2-Chloroethyl vinyl ether	63	7.751	7.741	(1.209)	21806	20.0000	20
	49 cis-1,3-Dichloropropene	75	7.928	7.919	(1.237)	106401	20.0000	20
	50 4-Methyl-2-pentanone	43	8.116	8.106	(1.266)	62982	20.0000	21
\$	51 Toluene-d8	98	8.263	8.254	(0.819)	495880	50.0000	50
	52 Toluene	91	8.342	8.332	(1.301)	258207	20.0000	20
	53 trans-1,3-Dichloropropene	75	8.608	8.598	(1.343)	97376	20.0000	20
	54 1,1,2-Trichloroethane	97	8.835	8.825	(1.378)	56721	20.0000	20
	55 Tetrachloroethene	164	9.032	9.022	(0.896)	72722	20.0000	23
	56 1,3-Dichloropropane	76	9.041	9.041	(0.896)	90787	20.0000	20
	57 2-Hexanone	43	9.150	9.140	(0.907)	40655	20.0000	19
	58 Dibromochloromethane	129	9.337	9.327	(0.926)	70974	20.0000	20
	59 1,2-Dibromoethane	107	9.485	9.475	(0.940)	63258	20.0000	20
*	60 Chlorobenzene-d5	117	10.085	10.086	(1.000)	361973	50.0000	
	63 1-Chlorohexane	91	10.105	10.095	(1.002)	93253	20.0000	19(Q)
	61 Chlorobenzene	112	10.125	10.125	(1.004)	165625	20.0000	19
	62 1,1,1,2-Tetrachloroethane	131	10.233	10.223	(1.015)	63060	20.0000	20
	64 Ethylbenzene	106	10.273	10.263	(1.019)	87999	20.0000	19
	65 m,p-Xylene	106	10.420	10.420	(1.033)	217957	40.0000	38
	66 o-Xylene	106	10.923	10.923	(1.083)	110732	20.0000	20
	67 Styrene	104	10.942	10.933	(1.085)	181660	20.0000	19
	68 Bromoform	173	11.159	11.159	(1.106)	44653	20.0000	19
	69 Isopropylbenzene	105	11.386	11.386	(1.129)	276171	20.0000	20
	126 trans-1,4-Dichloro-2-butene	75	11.455	11.455	(1.136)	24977	20.0000	21
\$	70 Bromofluorobenzene	95	11.563	11.563	(1.146)	180821	50.0000	49
	72 Bromobenzene	156	11.740	11.740	(0.908)	79143	20.0000	20
	71 1,1,2,2-Tetrachloroethane	83	11.730	11.730	(0.907)	74278	20.0000	21
	73 1,2,3-Trichloropropane	75	11.789	11.790	(0.912)	93963	20.0000	23(H)
	74 n-Propylbenzene	120	11.878	11.878	(0.919)	69681	20.0000	19(Q)
	75 2-Chlorotoluene	126	11.977	11.977	(0.926)	69943	20.0000	21

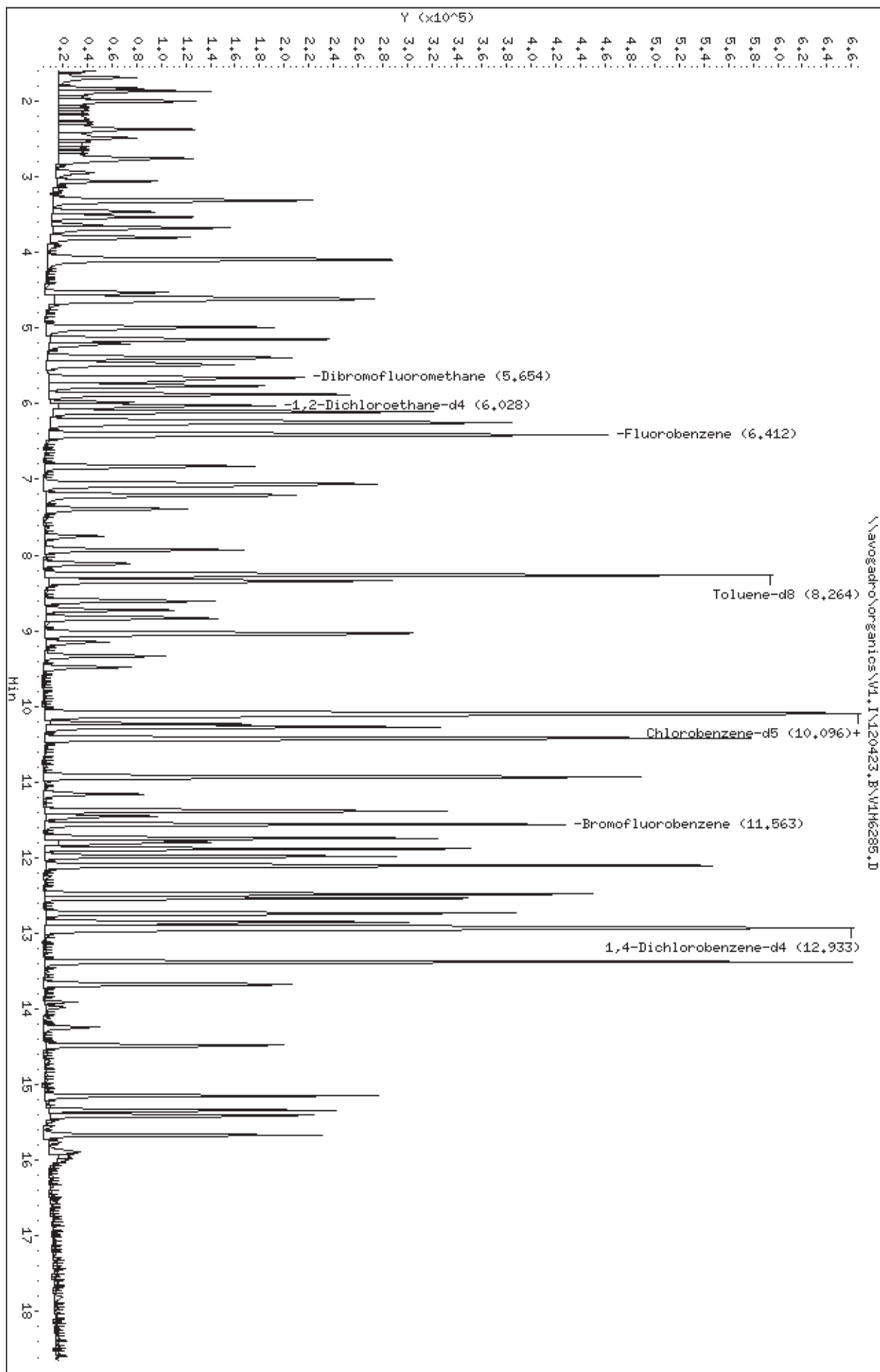
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 1,3,5-Trimethylbenzene	105	12.095	12.095	(0.935)	234244		20.0000	20
77 4-Chlorotoluene	126	12.115	12.105	(0.937)	67832		20.0000	20
78 tert-Butylbenzene	119	12.479	12.479	(0.965)	230234		20.0000	20
79 1,2,4-Trimethylbenzene	105	12.538	12.538	(0.970)	240155		20.0000	21
M 81 Xylene (Total)	106				328689		60.0000	(a)
80 sec-Butylbenzene	105	12.735	12.735	(0.985)	303647		20.0000	20
82 1,3-Dichlorobenzene	146	12.853	12.863	(0.994)	149361		20.0000	20
83 4-Isopropyltoluene	119	12.902	12.912	(0.998)	247956		20.0000	20
* 84 1,4-Dichlorobenzene-d4	152	12.932	12.932	(1.000)	196459		50.0000	
85 1,4-Dichlorobenzene	146	12.952	12.962	(1.002)	156719		20.0000	21
86 n-Butylbenzene	91	13.375	13.375	(1.034)	251320		20.0000	20
87 1,2-Dichlorobenzene	146	13.385	13.385	(1.035)	134300		20.0000	20
88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.101)	10455		20.0000	20
128 1,3,5-Trichlorobenzene	180	15.148	15.158	(2.363)	94352		20.0000	20(A)
89 1,2,4-Trichlorobenzene	180	15.148	15.158	(1.171)	94352		20.0000	21
90 Hexachlorobutadiene	225	15.335	15.345	(1.186)	50697		20.0000	20
91 Naphthalene	128	15.404	15.414	(1.191)	202649		20.0000	20
92 1,2,3-Trichlorobenzene	180	15.660	15.670	(1.211)	80016		20.0000	20

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\VL.I\120423.B\VLH6285.D
Date : 23-APR-2012 11:34
Client ID: VSTD0201Y
Sample Info: 5HL,VSTD0201Y,VSTD0201Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: VL.i
Operator: V1 SRC: V1
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\120423.B\V1M6286.D
Report Date: 23-Apr-2012 16:04

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423.B\V1M6286.D
Lab Smp Id: VSTD0051Y Client Smp ID: VSTD0051Y
Inj Date : 23-APR-2012 12:02
Operator : V1 SRC: V1 Inst ID: V1.i
Smp Info : 5ML,VSTD0051Y,VSTD0051Y
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\120423.B\v18260GH.m
Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
Cal Date : 23-APR-2012 11:34 Cal File: V1M6285.D
Als bottle: 18 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.683	1.684 (0.263)		17663	5.00000	5
2 Chloromethane	50	1.871	1.881 (0.292)		18628	5.00000	5
3 Vinyl Chloride	62	1.999	2.009 (0.312)		19283	5.00000	5
4 Bromomethane	94	2.363	2.373 (0.369)		19084	5.00000	6
5 Chloroethane	64	2.481	2.491 (0.387)		9794	5.00000	5
6 Trichlorofluoromethane	101	2.757	2.748 (0.430)		23356	5.00000	5
127 Ethanol	46	2.934	2.935 (0.458)		8908	500.000	720
7 Ether	59	3.053	3.043 (0.476)		12812	5.00000	5(Q)
8 Acrolein	56	3.181	3.181 (0.496)		2115	25.0000	30
9 1,1-Dichloroethene	96	3.299	3.289 (0.515)		16638	5.00000	5
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.319	3.329 (0.518)		17730	5.00000	5
11 Acetone	58	3.338	3.339 (0.521)		3055	5.00000	9(Q)
12 Iodomethane	142	3.466	3.457 (0.541)		32977	5.00000	5
13 Carbon Disulfide	76	3.535	3.526 (0.551)		52578	5.00000	5
14 Acetonitrile	40	3.644	3.614 (0.568)		18756	50.0000	78(TQ)
15 Methyl Acetate	43	3.703	3.683 (0.578)		12893	5.00000	6
16 Methylene Chloride	84	3.801	3.792 (0.593)		23758	5.00000	6
17 tert-Butanol	59	3.909	3.910 (0.610)		5586	10.0000	15
18 Acrylonitrile	53	4.067	4.038 (0.634)		4695	5.00000	5
20 Methyl tert-butyl ether	73	4.097	4.087 (0.639)		45417	5.00000	5
19 trans-1,2-Dichloroethene	96	4.097	4.077 (0.639)		17313	5.00000	5
21 1,1-Dichloroethane	63	4.530	4.521 (0.707)		25944	5.00000	5
22 Vinyl acetate	43	4.599	4.580 (0.717)		56982	5.00000	5

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====		=====	=====	=====	=====	=====	=====	=====
23 Diisopropyl Ether	45			4.609	4.599 (0.719)		57028	5.00000	5
24 Ethyl tert-butyl ether	59			4.993	4.983 (0.779)		50419	5.00000	5
M 27 1,2-dichloroethene, (Total)	100						34730	10.0000	(a)
25 cis-1,2-Dichloroethene	96			5.151	5.131 (0.803)		17417	5.00000	5
26 2,2-Dichloropropane	77			5.141	5.141 (0.802)		16303	5.00000	5
28 2-Butanone	72			5.170	5.141 (0.806)		2282	5.00000	6(TQ)
29 Bromochloromethane	128			5.407	5.387 (0.843)		9386	5.00000	5
30 Tetrahydrofuran	72			5.466	5.446 (0.853)		4124	10.0000	11
31 Chloroform	83			5.485	5.476 (0.856)		30066	5.00000	5
\$ 32 Dibromofluoromethane	113			5.653	5.643 (0.882)		149159	50.0000	51
33 1,1,1-Trichloroethane	97			5.702	5.683 (0.889)		20596	5.00000	5
34 Cyclohexane	56			5.761	5.752 (0.899)		25570	5.00000	5
36 Carbon Tetrachloride	117			5.889	5.870 (0.919)		17834	5.00000	5
35 1,1-Dichloropropene	110			5.879	5.860 (0.917)		9009	5.00000	6(Q)
\$ 37 1,2-Dichloroethane-d4	102			6.027	6.018 (0.940)		28063	50.0000	50
38 Benzene	78			6.106	6.096 (0.952)		64458	5.00000	5
39 1,2-Dichloroethane	62			6.116	6.096 (0.954)		22164	5.00000	5
40 tert-Amyl methyl ether	73			6.224	6.215 (0.971)		48660	5.00000	5
* 41 Fluorobenzene	96			6.411	6.402 (1.000)		518794	50.0000	
42 Trichloroethene	130			6.825	6.815 (1.065)		15902	5.00000	5
43 Methylcyclohexane	83			7.061	7.042 (1.101)		27280	5.00000	5
44 1,2-Dichloropropane	63			7.081	7.062 (1.104)		15048	5.00000	5(T)
46 Dibromomethane	93			7.219	7.200 (1.126)		12212	5.00000	6
47 1,4-Dioxane	88			7.248	7.219 (1.131)		5920	100.000	160
48 Bromodichloromethane	83			7.396	7.377 (1.154)		22302	5.00000	5
45 2-Chloroethyl vinyl ether	63			7.761	7.741 (1.210)		4837	5.00000	5
49 cis-1,3-Dichloropropene	75			7.938	7.919 (1.238)		25242	5.00000	5
50 4-Methyl-2-pentanone	43			8.115	8.106 (1.266)		16875	5.00000	6
\$ 51 Toluene-d8	98			8.263	8.254 (0.819)		469690	50.0000	48
52 Toluene	91			8.352	8.332 (1.303)		65239	5.00000	5
53 trans-1,3-Dichloropropene	75			8.608	8.598 (1.343)		23655	5.00000	5
54 1,1,2-Trichloroethane	97			8.834	8.825 (1.378)		13908	5.00000	5
55 Tetrachloroethene	164			9.031	9.022 (0.895)		16065	5.00000	5
56 1,3-Dichloropropane	76			9.051	9.041 (0.897)		21937	5.00000	5
57 2-Hexanone	43			9.159	9.140 (0.907)		12851	5.00000	6
58 Dibromochloromethane	129			9.346	9.327 (0.926)		15920	5.00000	5(T)
59 1,2-Dibromoethane	107			9.484	9.475 (0.940)		14886	5.00000	5
* 60 Chlorobenzene-d5	117			10.095	10.086 (1.000)		352338	50.0000	
63 1-Chlorohexane	91			10.105	10.095 (1.001)		24175	5.00000	5(Q)
61 Chlorobenzene	112			10.134	10.125 (1.004)		44434	5.00000	5
62 1,1,1,2-Tetrachloroethane	131			10.243	10.223 (1.015)		15994	5.00000	5
64 Ethylbenzene	106			10.282	10.263 (1.019)		21884	5.00000	5
65 m,p-Xylene	106			10.430	10.420 (1.033)		59075	10.0000	10
66 o-Xylene	106			10.922	10.923 (1.082)		26462	5.00000	5
67 Styrene	104			10.942	10.933 (1.084)		46928	5.00000	5
68 Bromoform	173			11.169	11.159 (1.106)		11296	5.00000	5
69 Isopropylbenzene	105			11.385	11.386 (1.128)		66030	5.00000	5
126 trans-1,4-Dichloro-2-butene	75			11.454	11.455 (1.135)		5495	5.00000	5(Q)
\$ 70 Bromofluorobenzene	95			11.563	11.563 (1.145)		177710	50.0000	50
72 Bromobenzene	156			11.750	11.740 (0.909)		20417	5.00000	5(Q)
71 1,1,2,2-Tetrachloroethane	83			11.740	11.730 (0.908)		20110	5.00000	6
73 1,2,3-Trichloropropane	75			11.789	11.790 (0.912)		20030	5.00000	5(M)M6 CJA 04/23
74 n-Propylbenzene	120			11.888	11.878 (0.919)		18991	5.00000	5(Q)
75 2-Chlorotoluene	126			11.986	11.977 (0.927)		17889	5.00000	5

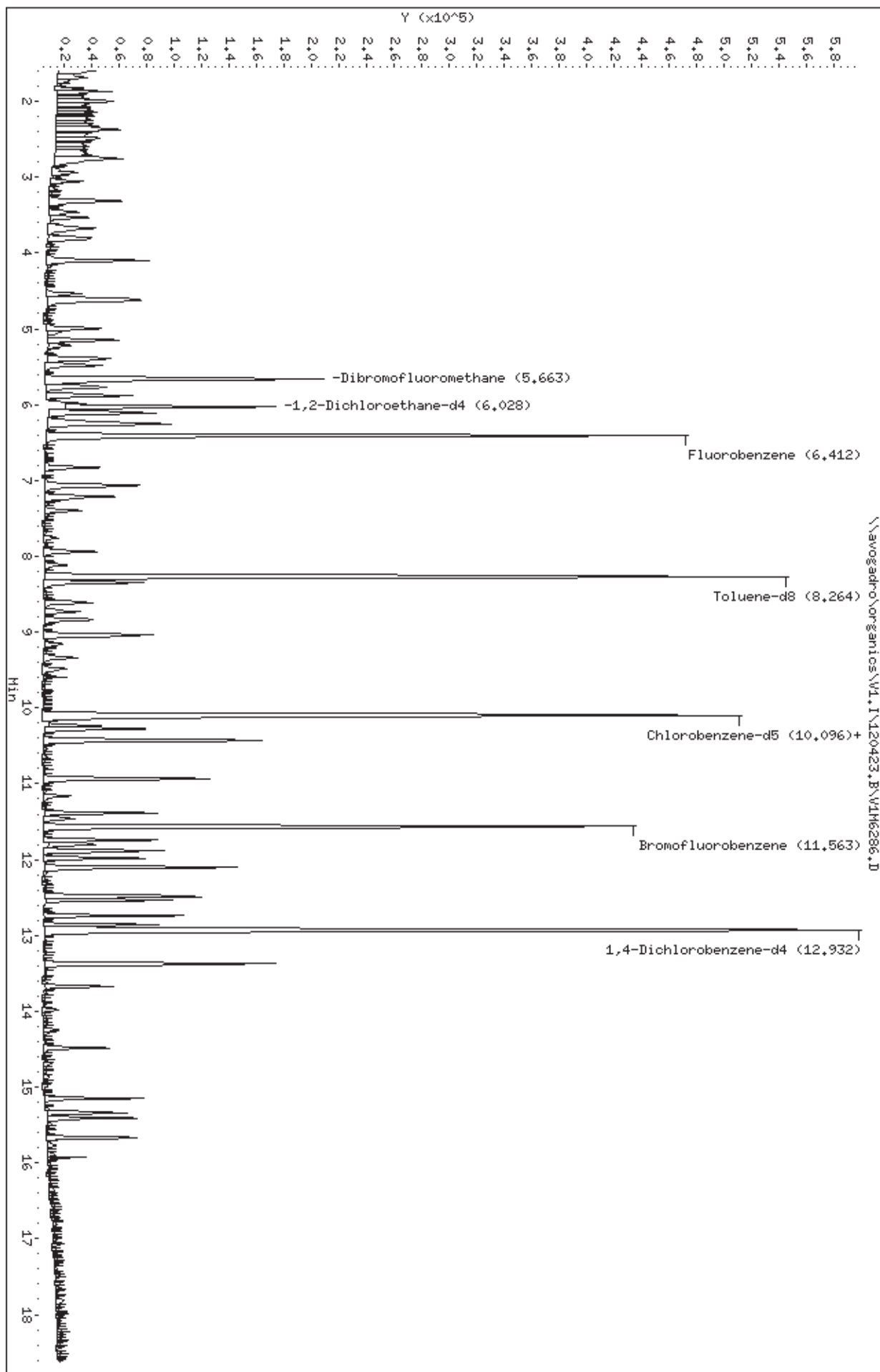
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 1,3,5-Trimethylbenzene	105	12.094	12.095	(0.935)	59981		5.00000	5
77 4-Chlorotoluene	126	12.114	12.105	(0.937)	17987		5.00000	5(Q)
78 tert-Butylbenzene	119	12.479	12.479	(0.965)	59379		5.00000	5
79 1,2,4-Trimethylbenzene	105	12.538	12.538	(0.970)	59567		5.00000	5
M 81 Xylene (Total)	106				85537		15.0000	(a)
80 sec-Butylbenzene	105	12.735	12.735	(0.985)	82446		5.00000	6
82 1,3-Dichlorobenzene	146	12.853	12.863	(0.994)	39322		5.00000	6
83 4-Isopropyltoluene	119	12.902	12.912	(0.998)	64500		5.00000	5
* 84 1,4-Dichlorobenzene-d4	152	12.932	12.932	(1.000)	193195		50.0000	
85 1,4-Dichlorobenzene	146	12.961	12.962	(1.002)	38010		5.00000	5
86 n-Butylbenzene	91	13.365	13.375	(1.034)	67732		5.00000	6
87 1,2-Dichlorobenzene	146	13.385	13.385	(1.035)	34228		5.00000	5
88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.101)	2981		5.00000	6(Q)
128 1,3,5-Trichlorobenzene	180	15.148	15.158	(2.363)	24629		5.00000	5(A)
89 1,2,4-Trichlorobenzene	180	15.148	15.158	(1.171)	24629		5.00000	6
90 Hexachlorobutadiene	225	15.335	15.345	(1.186)	14018		5.00000	6
91 Naphthalene	128	15.414	15.414	(1.192)	62746		5.00000	6
92 1,2,3-Trichlorobenzene	180	15.670	15.670	(1.212)	22637		5.00000	6

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\avogadro\organics\VL.I\120423.B\VLH6286.D
Date : 23-APR-2012 12:02
Client ID: VSTD0051Y
Sample Info: 5HL,VSTD0051Y,VSTD0051Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: VL.i
Operator: V1 SRC: V1
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\120423.B\V1M6287.D
Report Date: 23-Apr-2012 16:04

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423.B\V1M6287.D
Lab Smp Id: VSTD2001Y Client Smp ID: VSTD2001Y
Inj Date : 23-APR-2012 13:07
Operator : V1 SRC: V1 Inst ID: V1.i
Smp Info : 5ML,VSTD2001Y,VSTD2001Y
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\120423.B\v18260GH.m
Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
Cal Date : 23-APR-2012 12:02 Cal File: V1M6286.D
Als bottle: 19 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.680	1.684 (0.263)		795469	200.000	200
2 Chloromethane	50	1.877	1.881 (0.293)		887127	200.000	210(A)
3 Vinyl Chloride	62	2.005	2.009 (0.313)		824124	200.000	200
4 Bromomethane	94	2.369	2.373 (0.370)		678066	200.000	190
5 Chloroethane	64	2.487	2.491 (0.389)		440363	200.000	200(Q)
6 Trichlorofluoromethane	101	2.753	2.748 (0.430)		1108606	200.000	210(A)
127 Ethanol	46	2.931	2.935 (0.458)		258932	20000.0	19000(Q)
7 Ether	59	3.049	3.043 (0.477)		490011	200.000	190
8 Acrolein	56	3.177	3.181 (0.497)		70940	1000.00	920(Q)
9 1,1-Dichloroethene	96	3.295	3.289 (0.515)		717011	200.000	210(A)
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.315	3.329 (0.518)		724188	200.000	200(A)
11 Acetone	58	3.334	3.339 (0.521)		55621	200.000	150(Q)
12 Iodomethane	142	3.462	3.457 (0.541)		1406987	200.000	200
13 Carbon Disulfide	76	3.522	3.526 (0.550)		2261530	200.000	200(A)
14 Acetonitrile	40	3.620	3.614 (0.566)		448279	2000.00	1700(Q)
15 Methyl Acetate	43	3.679	3.683 (0.575)		428971	200.000	180
16 Methylene Chloride	84	3.787	3.792 (0.592)		720947	200.000	180
17 tert-Butanol	59	3.906	3.910 (0.611)		139134	400.000	340
18 Acrylonitrile	53	4.034	4.038 (0.631)		200633	200.000	200
20 Methyl tert-butyl ether	73	4.083	4.087 (0.638)		1821690	200.000	190
19 trans-1,2-Dichloroethene	96	4.083	4.077 (0.638)		736484	200.000	200(A)
21 1,1-Dichloroethane	63	4.516	4.521 (0.706)		1174012	200.000	200(A)
22 Vinyl acetate	43	4.575	4.580 (0.715)		2377584	200.000	200

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====		=====	=====	=====	=====	=====	=====	=====
23 Diisopropyl Ether	45			4.595	4.599 (0.718)		2242674	200.000	190
24 Ethyl tert-butyl ether	59			4.979	4.983 (0.778)		2011284	200.000	190
M 27 1,2-dichloroethene, (Total)	100						1543160	400.000	(a)
25 cis-1,2-Dichloroethene	96			5.137	5.131 (0.803)		806676	200.000	200
26 2,2-Dichloropropane	77			5.137	5.141 (0.803)		599444	200.000	180
28 2-Butanone	72			5.137	5.141 (0.803)		69333	200.000	180(Q)
29 Bromochloromethane	128			5.393	5.387 (0.843)		391015	200.000	200
30 Tetrahydrofuran	72			5.442	5.446 (0.851)		142737	400.000	360
31 Chloroform	83			5.472	5.476 (0.855)		1272811	200.000	200(A)
\$ 32 Dibromofluoromethane	113			5.649	5.643 (0.883)		158269	50.0000	50
33 1,1,1-Trichloroethane	97			5.688	5.683 (0.889)		920254	200.000	200
34 Cyclohexane	56			5.757	5.752 (0.900)		1064298	200.000	200(A)
36 Carbon Tetrachloride	117			5.866	5.870 (0.917)		891230	200.000	210(A)
35 1,1-Dichloropropene	110			5.866	5.860 (0.917)		352997	200.000	210(AQ)
\$ 37 1,2-Dichloroethane-d4	102			6.013	6.018 (0.940)		29708	50.0000	49
38 Benzene	78			6.092	6.096 (0.952)		2595017	200.000	200(A)
39 1,2-Dichloroethane	62			6.102	6.096 (0.954)		924262	200.000	200(A)
40 tert-Amyl methyl ether	73			6.210	6.215 (0.971)		1943967	200.000	200
* 41 Fluorobenzene	96			6.398	6.402 (1.000)		557768	50.0000	
42 Trichloroethene	130			6.811	6.815 (1.065)		777279	200.000	210(A)
43 Methylcyclohexane	83			7.048	7.042 (1.102)		1205512	200.000	210(A)
44 1,2-Dichloropropane	63			7.067	7.062 (1.105)		636826	200.000	200(A)
46 Dibromomethane	93			7.205	7.200 (1.126)		468622	200.000	200
47 1,4-Dioxane	88			7.215	7.219 (1.128)		152382	4000.00	3800(Q)
48 Bromodichloromethane	83			7.383	7.377 (1.154)		953795	200.000	200(A)
45 2-Chloroethyl vinyl ether	63			7.737	7.741 (1.209)		220198	200.000	200
49 cis-1,3-Dichloropropene	75			7.914	7.919 (1.237)		1129798	200.000	210(A)
50 4-Methyl-2-pentanone	43			8.102	8.106 (1.266)		571797	200.000	180
\$ 51 Toluene-d8	98			8.249	8.254 (0.818)		519016	50.0000	50
52 Toluene	91			8.328	8.332 (1.302)		2777101	200.000	200(A)
53 trans-1,3-Dichloropropene	75			8.594	8.598 (1.343)		1004710	200.000	200(A)
54 1,1,2-Trichloroethane	97			8.821	8.825 (1.379)		571750	200.000	200
55 Tetrachloroethene	164			9.018	9.022 (0.894)		661734	200.000	200
56 1,3-Dichloropropane	76			9.027	9.041 (0.895)		929093	200.000	200(A)
57 2-Hexanone	43			9.136	9.140 (0.906)		413032	200.000	180
58 Dibromochloromethane	129			9.323	9.327 (0.925)		770627	200.000	210(A)
59 1,2-Dibromoethane	107			9.471	9.475 (0.939)		646371	200.000	200(A)
* 60 Chlorobenzene-d5	117			10.081	10.086 (1.000)		377199	50.0000	
63 1-Chlorohexane	91			10.091	10.095 (1.001)		1083878	200.000	210(AQ)
61 Chlorobenzene	112			10.121	10.125 (1.004)		1794380	200.000	200(A)
62 1,1,1,2-Tetrachloroethane	131			10.219	10.223 (1.014)		680827	200.000	200(A)
64 Ethylbenzene	106			10.259	10.263 (1.018)		990169	200.000	210(A)
65 m,p-Xylene	106			10.416	10.420 (1.033)		2473963	400.000	410(A)
66 o-Xylene	106			10.919	10.923 (1.083)		1195083	200.000	210(A)
67 Styrene	104			10.928	10.933 (1.084)		2052655	200.000	210(A)
68 Bromoform	173			11.155	11.159 (1.106)		514365	200.000	210(A)
69 Isopropylbenzene	105			11.372	11.386 (1.128)		3113685	200.000	210(A)
126 trans-1,4-Dichloro-2-butene	75			11.441	11.455 (1.135)		261219	200.000	210(A)
\$ 70 Bromofluorobenzene	95			11.559	11.563 (1.147)		195667	50.0000	51
72 Bromobenzene	156			11.736	11.740 (0.908)		871220	200.000	190(Q)
71 1,1,2,2-Tetrachloroethane	83			11.726	11.730 (0.907)		748347	200.000	180
73 1,2,3-Trichloropropane	75			11.785	11.790 (0.912)		901852	200.000	190(QH)
74 n-Propylbenzene	120			11.874	11.878 (0.918)		859255	200.000	200(A)
75 2-Chlorotoluene	126			11.972	11.977 (0.926)		754279	200.000	190

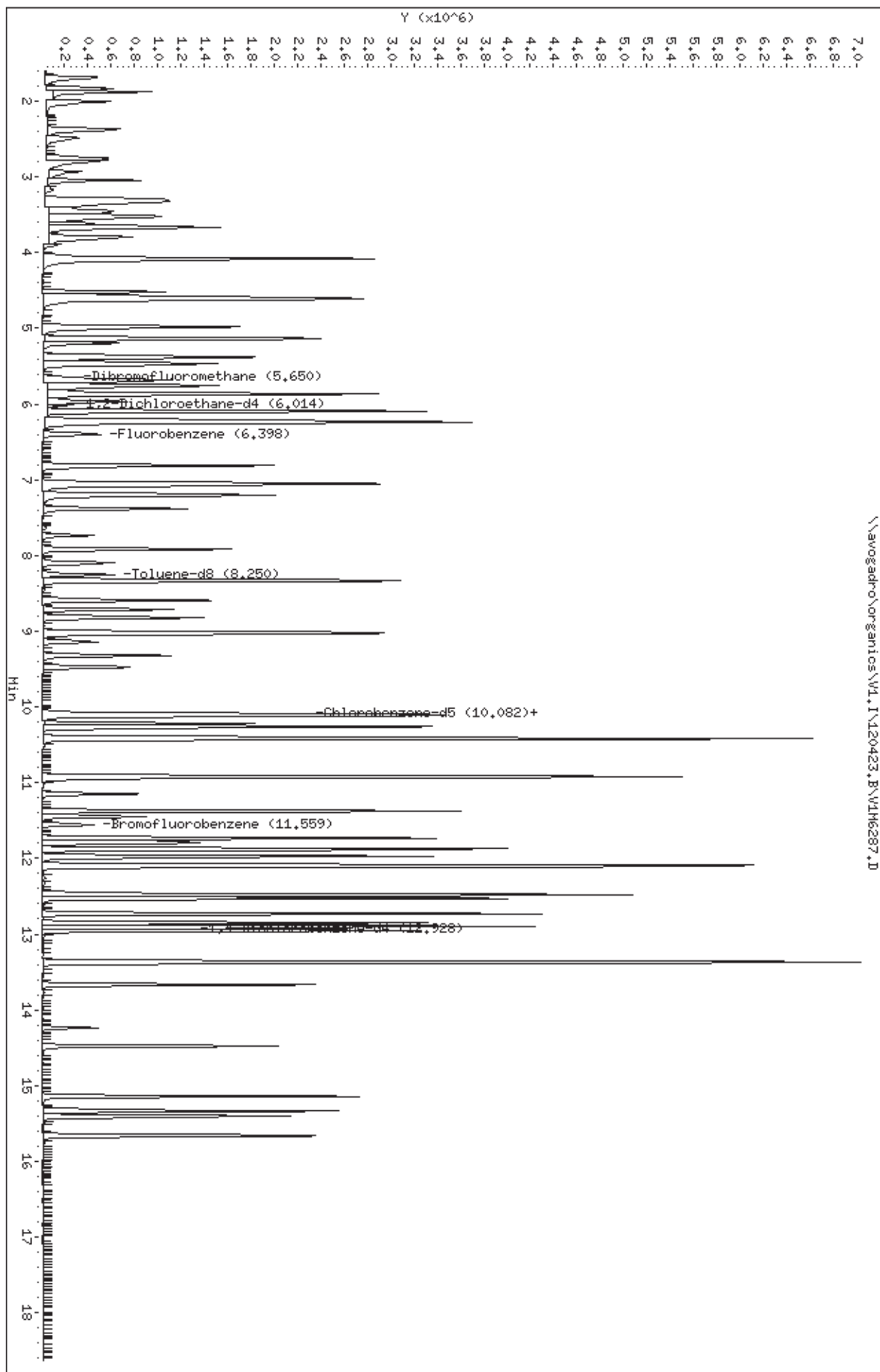
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 1,3,5-Trimethylbenzene	105	12.091	12.095	(0.935)	2634403	200.000	200
77 4-Chlorotoluene	126	12.101	12.105	(0.936)	789389	200.000	200
78 tert-Butylbenzene	119	12.475	12.479	(0.965)	2580268	200.000	200
79 1,2,4-Trimethylbenzene	105	12.534	12.538	(0.970)	2674521	200.000	200
M 81 Xylene (Total)	106				3669046	600.000	(a)
80 sec-Butylbenzene	105	12.731	12.735	(0.985)	3518761	200.000	200
82 1,3-Dichlorobenzene	146	12.849	12.863	(0.994)	1639355	200.000	190
83 4-Isopropyltoluene	119	12.898	12.912	(0.998)	2737456	200.000	190
* 84 1,4-Dichlorobenzene-d4	152	12.928	12.932	(1.000)	229280	50.0000	(Q)
85 1,4-Dichlorobenzene	146	12.957	12.962	(1.002)	1677790	200.000	190
86 n-Butylbenzene	91	13.371	13.375	(1.034)	2828627	200.000	190
87 1,2-Dichlorobenzene	146	13.371	13.385	(1.034)	1487417	200.000	190
88 1,2-Dibromo-3-chloropropane	75	14.238	14.242	(1.101)	120828	200.000	200
128 1,3,5-Trichlorobenzene	180	15.144	15.158	(2.367)	963308	200.000	200(A)
89 1,2,4-Trichlorobenzene	180	15.144	15.158	(1.171)	963301	200.000	190
90 Hexachlorobutadiene	225	15.331	15.345	(1.186)	574528	200.000	190
91 Naphthalene	128	15.410	15.414	(1.192)	2051429	200.000	180
92 1,2,3-Trichlorobenzene	180	15.666	15.670	(1.212)	862880	200.000	190

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\VL1\120423.B\VLH6287.D
Date : 23-APR-2012 13:07
Client ID: VSTD001Y
Sample Info: 5HL,VSTD001Y,VSTD001Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: VL.i
Operator: V1 SRC: V1
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V1.I\120423.B\V1M6288.D
 Lab Smp Id: VSTD1001Y Client Smp ID: VSTD1001Y
 Inj Date : 23-APR-2012 13:36
 Operator : V1 SRC: V1 Inst ID: V1.i
 Smp Info : 5ML,VSTD1001Y,VSTD1001Y
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V1.I\120423.B\v18260GH.m
 Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
 Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
 Als bottle: 20 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.683	1.684 (0.263)		400183	100.000	110
2 Chloromethane	50	1.870	1.881 (0.292)		443721	100.000	110
3 Vinyl Chloride	62	1.998	2.009 (0.312)		419108	100.000	110
4 Bromomethane	94	2.363	2.373 (0.369)		351999	100.000	100
5 Chloroethane	64	2.481	2.491 (0.388)		232416	100.000	110
6 Trichlorofluoromethane	101	2.756	2.748 (0.431)		537979	100.000	110
127 Ethanol	46	2.934	2.935 (0.458)		117408	10000.0	9100
7 Ether	59	3.052	3.043 (0.477)		259354	100.000	100
8 Acrolein	56	3.180	3.181 (0.497)		36995	500.000	500
9 1,1-Dichloroethene	96	3.298	3.289 (0.515)		342915	100.000	100
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.308	3.329 (0.517)		385993	100.000	110
11 Acetone	58	3.338	3.339 (0.521)		29132	100.000	80
12 Iodomethane	142	3.456	3.457 (0.540)		743320	100.000	110
13 Carbon Disulfide	76	3.525	3.526 (0.551)		1138500	100.000	110
14 Acetonitrile	40	3.623	3.614 (0.566)		221710	1000.00	880
15 Methyl Acetate	43	3.682	3.683 (0.575)		235278	100.000	100
16 Methylene Chloride	84	3.801	3.792 (0.594)		366976	100.000	96
17 tert-Butanol	59	3.899	3.910 (0.609)		75743	200.000	190
18 Acrylonitrile	53	4.037	4.038 (0.631)		101878	100.000	100
20 Methyl tert-butyl ether	73	4.086	4.087 (0.638)		955111	100.000	100
19 trans-1,2-Dichloroethene	96	4.076	4.077 (0.637)		367635	100.000	100
21 1,1-Dichloroethane	63	4.520	4.521 (0.706)		609160	100.000	110
22 Vinyl acetate	43	4.569	4.580 (0.714)		1248314	100.000	110

Data File: \\avogadro\organics\V1.I\120423.B\V1M6288.D
Report Date: 23-Apr-2012 16:04

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====		=====	=====	=====	=====	=====	=====	=====
23 Diisopropyl Ether	45			4.598	4.599 (0.718)		1154988	100.000	100
24 Ethyl tert-butyl ether	59			4.983	4.983 (0.778)		1036535	100.000	100
M 27 1,2-dichloroethene, (Total)	100						768166	200.000	(a)
25 cis-1,2-Dichloroethene	96			5.130	5.131 (0.801)		400531	100.000	100
26 2,2-Dichloropropane	77			5.140	5.141 (0.803)		321630	100.000	100
28 2-Butanone	72			5.140	5.141 (0.803)		35162	100.000	96(Q)
29 Bromochloromethane	128			5.386	5.387 (0.842)		195411	100.000	100
30 Tetrahydrofuran	72			5.445	5.446 (0.851)		79619	200.000	210
31 Chloroform	83			5.475	5.476 (0.855)		621082	100.000	100
\$ 32 Dibromofluoromethane	113			5.642	5.643 (0.882)		149567	50.0000	49
33 1,1,1-Trichloroethane	97			5.682	5.683 (0.888)		496742	100.000	110
34 Cyclohexane	56			5.751	5.752 (0.898)		533929	100.000	110
36 Carbon Tetrachloride	117			5.869	5.870 (0.917)		441800	100.000	110
35 1,1-Dichloropropene	110			5.869	5.860 (0.917)		170155	100.000	100
\$ 37 1,2-Dichloroethane-d4	102			6.017	6.018 (0.940)		30105	50.0000	51
38 Benzene	78			6.096	6.096 (0.952)		1280679	100.000	100
39 1,2-Dichloroethane	62			6.105	6.096 (0.954)		457896	100.000	100
40 tert-Amyl methyl ether	73			6.214	6.215 (0.971)		961606	100.000	100
* 41 Fluorobenzene	96			6.401	6.402 (1.000)		538897	50.0000	
42 Trichloroethene	130			6.815	6.815 (1.065)		372580	100.000	100
43 Methylcyclohexane	83			7.051	7.042 (1.102)		601827	100.000	110
44 1,2-Dichloropropane	63			7.061	7.062 (1.103)		321470	100.000	100
46 Dibromomethane	93			7.199	7.200 (1.125)		240595	100.000	100
47 1,4-Dioxane	88			7.228	7.219 (1.129)		58647	2000.00	1500
48 Bromodichloromethane	83			7.376	7.377 (1.152)		476115	100.000	100
45 2-Chloroethyl vinyl ether	63			7.740	7.741 (1.209)		116082	100.000	110
49 cis-1,3-Dichloropropene	75			7.918	7.919 (1.237)		563271	100.000	110
50 4-Methyl-2-pentanone	43			8.105	8.106 (1.266)		317070	100.000	100
\$ 51 Toluene-d8	98			8.253	8.254 (0.818)		510054	50.0000	50
52 Toluene	91			8.331	8.332 (1.302)		1368197	100.000	100
53 trans-1,3-Dichloropropene	75			8.597	8.598 (1.343)		507763	100.000	100
54 1,1,2-Trichloroethane	97			8.824	8.825 (1.379)		294079	100.000	100
55 Tetrachloroethene	164			9.021	9.022 (0.895)		318333	100.000	98
56 1,3-Dichloropropane	76			9.031	9.041 (0.895)		471062	100.000	100
57 2-Hexanone	43			9.139	9.140 (0.906)		222580	100.000	100
58 Dibromochloromethane	129			9.326	9.327 (0.925)		378492	100.000	100
59 1,2-Dibromoethane	107			9.474	9.475 (0.939)		330116	100.000	100
* 60 Chlorobenzene-d5	117			10.085	10.086 (1.000)		367853	50.0000	
63 1-Chlorohexane	91			10.104	10.095 (1.002)		520509	100.000	100
61 Chlorobenzene	112			10.124	10.125 (1.004)		904575	100.000	100
62 1,1,1,2-Tetrachloroethane	131			10.222	10.223 (1.014)		341522	100.000	100
64 Ethylbenzene	106			10.272	10.263 (1.019)		487739	100.000	110
65 m,p-Xylene	106			10.419	10.420 (1.033)		1206749	200.000	210
66 o-Xylene	106			10.922	10.923 (1.083)		586244	100.000	100
67 Styrene	104			10.932	10.933 (1.084)		994223	100.000	100
68 Bromoform	173			11.148	11.159 (1.105)		252450	100.000	100
69 Isopropylbenzene	105			11.375	11.386 (1.128)		1513464	100.000	110
126 trans-1,4-Dichloro-2-butene	75			11.444	11.455 (1.135)		132844	100.000	110
\$ 70 Bromofluorobenzene	95			11.562	11.563 (1.146)		188199	50.0000	50
72 Bromobenzene	156			11.739	11.740 (0.909)		424888	100.000	100(Q)
71 1,1,2,2-Tetrachloroethane	83			11.729	11.730 (0.908)		403659	100.000	100
73 1,2,3-Trichloropropane	75			11.779	11.790 (0.912)		471181	100.000	100(QH)
74 n-Propylbenzene	120			11.877	11.878 (0.919)		405035	100.000	100
75 2-Chlorotoluene	126			11.976	11.977 (0.927)		368529	100.000	100

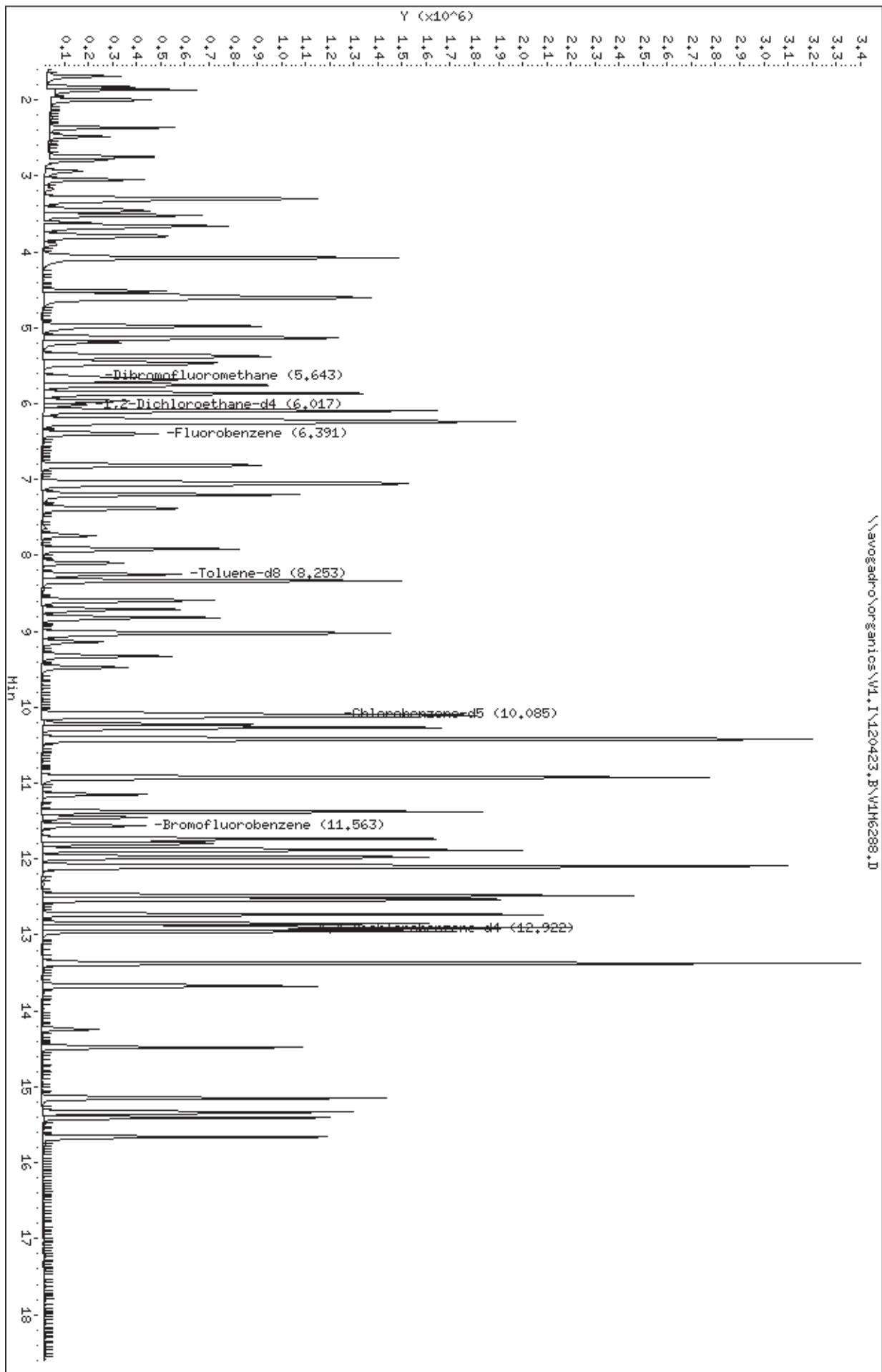
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 1,3,5-Trimethylbenzene	105	12.094	12.095	(0.936)	1286955		100.000	100
77 4-Chlorotoluene	126	12.104	12.105	(0.937)	385926		100.000	100
78 tert-Butylbenzene	119	12.478	12.479	(0.966)	1280536		100.000	100
79 1,2,4-Trimethylbenzene	105	12.537	12.538	(0.970)	1313286		100.000	100
M 81 Xylene (Total)	106				1792993		300.000	(a)
80 sec-Butylbenzene	105	12.734	12.735	(0.986)	1714238		100.000	100
82 1,3-Dichlorobenzene	146	12.852	12.863	(0.995)	805536		100.000	100
83 4-Isopropyltoluene	119	12.902	12.912	(0.998)	1353937		100.000	100
* 84 1,4-Dichlorobenzene-d4	152	12.921	12.932	(1.000)	212889		50.0000	(Q)
85 1,4-Dichlorobenzene	146	12.951	12.962	(1.002)	833827		100.000	100
86 n-Butylbenzene	91	13.365	13.375	(1.034)	1418760		100.000	100
87 1,2-Dichlorobenzene	146	13.374	13.385	(1.035)	751135		100.000	100
88 1,2-Dibromo-3-chloropropane	75	14.241	14.242	(1.102)	60287		100.000	100
128 1,3,5-Trichlorobenzene	180	15.147	15.158	(2.366)	487079		100.000	100(A)
89 1,2,4-Trichlorobenzene	180	15.147	15.158	(1.172)	487079		100.000	100
90 Hexachlorobutadiene	225	15.334	15.345	(1.187)	290135		100.000	100
91 Naphthalene	128	15.403	15.414	(1.192)	1088171		100.000	100
92 1,2,3-Trichlorobenzene	180	15.669	15.670	(1.213)	426979		100.000	100

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\V1, I\120423, B\V1H6288.D
Date : 23-APR-2012 13:36
Client ID: WSTD1001Y
Sample Info: 5HL, WSTD1001Y, WSTD1001Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: V1.i
Operator: V1 SRC: V1
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423.B\V1M6289.D
Lab Smp Id: VICV0501Y Client Smp ID: VICV0501Y
Inj Date : 23-APR-2012 14:07
Operator : V1 SRC: V1 Inst ID: V1.i
Smp Info : 5ML,VICV0501Y,VICV0501Y
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423.B\v18260GH.m
Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85	1.684	1.684	(0.263)	174678	50.0000	48
2 Chloromethane	50	1.871	1.871	(0.292)	197956	50.0000	49
3 Vinyl Chloride	62	1.999	1.999	(0.312)	183509	50.0000	48
4 Bromomethane	94	2.373	2.373	(0.371)	146793	50.0000	44
5 Chloroethane	64	2.492	2.492	(0.389)	94533	50.0000	46
6 Trichlorofluoromethane	101	2.748	2.748	(0.429)	224247	50.0000	46
127 Ethanol	46	2.935	2.935	(0.458)	50549	5000.00	4000(Q)
7 Ether	59	3.053	3.053	(0.477)	108702	50.0000	45
8 Acrolein	56	3.181	3.181	(0.497)	17806	250.000	240
9 1,1-Dichloroethene	96	3.299	3.299	(0.515)	150242	50.0000	47
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.319	3.319	(0.518)	150689	50.0000	44
11 Acetone	58	3.339	3.339	(0.522)	14057	50.0000	39
12 Iodomethane	142	3.447	3.447	(0.538)	293644	50.0000	44
13 Carbon Disulfide	76	3.526	3.526	(0.551)	498081	50.0000	48
14 Acetonitrile	40	3.624	3.624	(0.566)	98520	500.000	400
15 Methyl Acetate	43	3.693	3.693	(0.577)	100431	50.0000	45
16 Methylene Chloride	84	3.802	3.802	(0.594)	161811	50.0000	43
17 tert-Butanol	59	3.910	3.910	(0.611)	27524	100.000	72
18 Acrylonitrile	53	4.048	4.048	(0.632)	48518	50.0000	50
20 Methyl tert-butyl ether	73	4.087	4.087	(0.638)	399033	50.0000	45
19 trans-1,2-Dichloroethene	96	4.087	4.087	(0.638)	155804	50.0000	46
21 1,1-Dichloroethane	63	4.530	4.530	(0.708)	248913	50.0000	46
22 Vinyl acetate	43	4.580	4.580	(0.715)	538903	50.0000	47

						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
23 Diisopropyl Ether	45	4.599	4.599	(0.718)	493154	50.0000	45	
24 Ethyl tert-butyl ether	59	4.983	4.983	(0.778)	435873	50.0000	45	
M 27 1,2-dichloroethene, (Total)	100				322785	100.000	91	
25 cis-1,2-Dichloroethene	96	5.141	5.141	(0.803)	166981	50.0000	45	
26 2,2-Dichloropropane	77	5.141	5.141	(0.803)	135713	50.0000	44	
28 2-Butanone	72	5.151	5.151	(0.805)	15395	50.0000	43	
29 Bromochloromethane	128	5.397	5.397	(0.843)	79326	50.0000	43	
30 Tetrahydrofuran	72	5.456	5.456	(0.852)	31655	100.000	86	
31 Chloroform	83	5.486	5.486	(0.857)	267401	50.0000	45	
\$ 32 Dibromofluoromethane	113	5.653	5.653	(0.883)	140837	50.0000	48	
33 1,1,1-Trichloroethane	97	5.693	5.693	(0.889)	196145	50.0000	45	
34 Cyclohexane	56	5.762	5.762	(0.900)	217472	50.0000	44	
36 Carbon Tetrachloride	117	5.880	5.880	(0.918)	177517	50.0000	45	
35 1,1-Dichloropropene	110	5.870	5.870	(0.917)	71276	50.0000	44	
\$ 37 1,2-Dichloroethane-d4	102	6.028	6.028	(0.942)	28342	50.0000	50	
38 Benzene	78	6.096	6.096	(0.952)	546173	50.0000	45	
39 1,2-Dichloroethane	62	6.106	6.106	(0.954)	192772	50.0000	44	
40 tert-Amyl methyl ether	73	6.215	6.215	(0.971)	405126	50.0000	44	
* 41 Fluorobenzene	96	6.402	6.402	(1.000)	524896	50.0000		
42 Trichloroethene	130	6.816	6.816	(1.065)	154297	50.0000	45	
43 Methylcyclohexane	83	7.052	7.052	(1.102)	242379	50.0000	45	
44 1,2-Dichloropropane	63	7.072	7.072	(1.105)	136414	50.0000	46	
46 Dibromomethane	93	7.200	7.200	(1.125)	102138	50.0000	46	
47 1,4-Dioxane	88	7.229	7.229	(1.129)	33002	1000.00	870	
48 Bromodichloromethane	83	7.387	7.387	(1.154)	197288	50.0000	44	
45 2-Chloroethyl vinyl ether	63	7.741	7.741	(1.209)	47051	50.0000	45	
49 cis-1,3-Dichloropropene	75	7.919	7.919	(1.237)	235492	50.0000	46	
50 4-Methyl-2-pentanone	43	8.106	8.106	(1.266)	134650	50.0000	45	
\$ 51 Toluene-d8	98	8.254	8.254	(0.818)	495242	50.0000	51	
52 Toluene	91	8.332	8.332	(1.302)	582279	50.0000	45	
53 trans-1,3-Dichloropropene	75	8.598	8.598	(1.343)	213550	50.0000	45	
54 1,1,2-Trichloroethane	97	8.825	8.825	(1.378)	124064	50.0000	45	
55 Tetrachloroethene	164	9.022	9.022	(0.895)	132953	50.0000	42	
56 1,3-Dichloropropane	76	9.042	9.042	(0.896)	207300	50.0000	48	
57 2-Hexanone	43	9.150	9.150	(0.907)	91868	50.0000	43	
58 Dibromochloromethane	129	9.327	9.327	(0.925)	152402	50.0000	44	
59 1,2-Dibromoethane	107	9.475	9.475	(0.939)	130771	50.0000	43	
* 60 Chlorobenzene-d5	117	10.086	10.086	(1.000)	354684	50.0000		
63 1-Chlorohexane	91	10.095	10.095	(1.001)	212190	50.0000	44	
61 Chlorobenzene	112	10.125	10.125	(1.004)	369755	50.0000	44	
62 1,1,1,2-Tetrachloroethane	131	10.223	10.223	(1.014)	136162	50.0000	43	
64 Ethylbenzene	106	10.273	10.273	(1.019)	199424	50.0000	45	
65 m,p-Xylene	106	10.420	10.420	(1.033)	502067	100.000	89	
66 o-Xylene	106	10.923	10.923	(1.083)	241702	50.0000	45	
67 Styrene	104	10.933	10.933	(1.084)	416489	50.0000	45	
68 Bromoform	173	11.159	11.159	(1.106)	99487	50.0000	43	
69 Isopropylbenzene	105	11.376	11.376	(1.128)	621130	50.0000	45	
126 trans-1,4-Dichloro-2-butene	75	11.455	11.455	(1.136)	53298	50.0000	45	
\$ 70 Bromofluorobenzene	95	11.563	11.563	(1.146)	175396	50.0000	49	
72 Bromobenzene	156	11.740	11.740	(0.908)	171601	50.0000	45	
71 1,1,2,2-Tetrachloroethane	83	11.730	11.730	(0.907)	162093	50.0000	46	
73 1,2,3-Trichloropropane	75	11.790	11.790	(0.912)	191414	50.0000	47	
74 n-Propylbenzene	120	11.878	11.878	(0.919)	162956	50.0000	46	
75 2-Chlorotoluene	126	11.977	11.977	(0.926)	144739	50.0000	44	

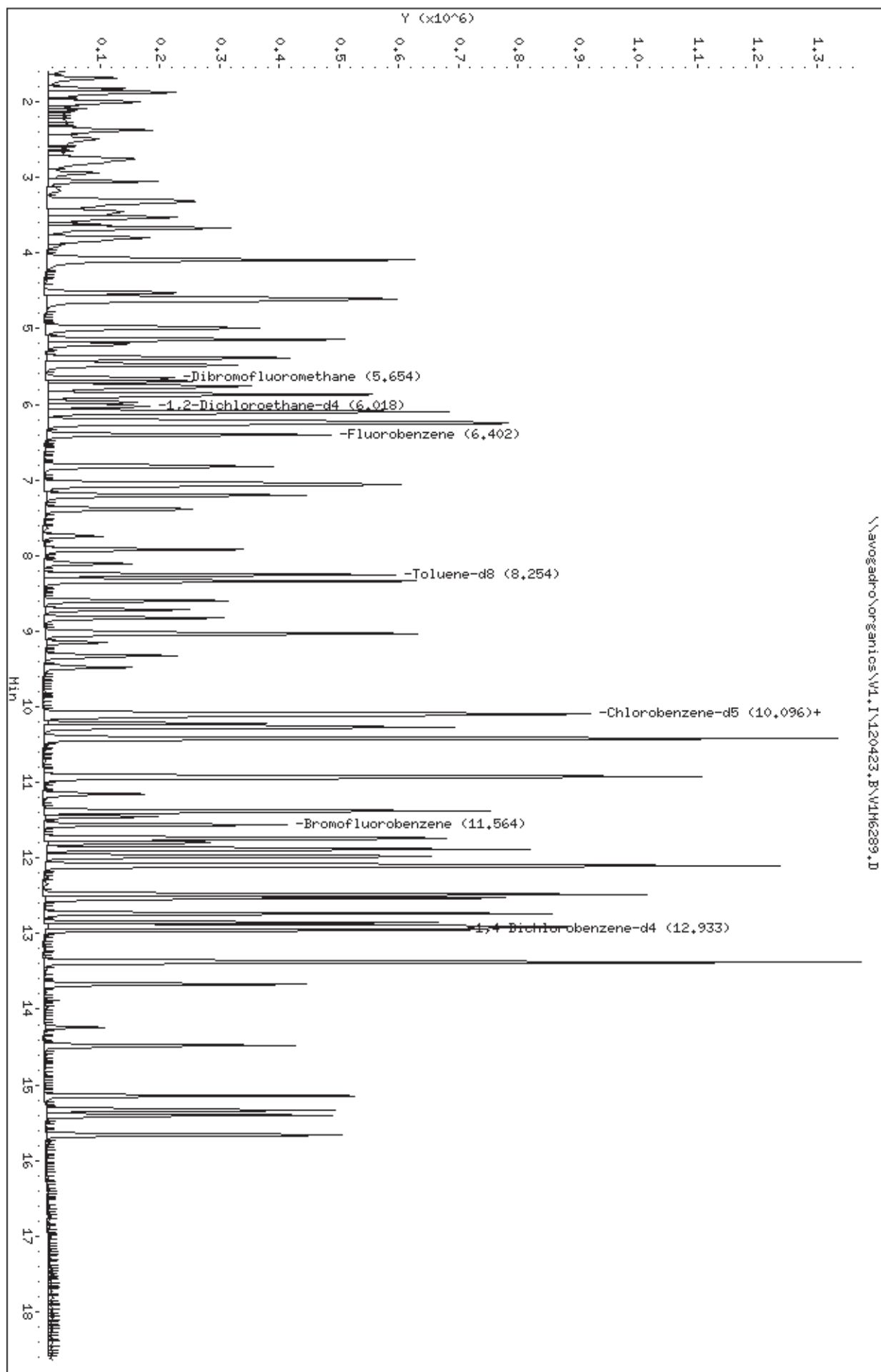
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 1,3,5-Trimethylbenzene	105	12.095	12.095	(0.935)	530874	50.0000	47
77 4-Chlorotoluene	126	12.105	12.105	(0.936)	154691	50.0000	46
78 tert-Butylbenzene	119	12.479	12.479	(0.965)	506515	50.0000	46
79 1,2,4-Trimethylbenzene	105	12.528	12.528	(0.969)	528787	50.0000	46
M 81 Xylene (Total)	106				743769	150.000	130
80 sec-Butylbenzene	105	12.735	12.735	(0.985)	690699	50.0000	46
82 1,3-Dichlorobenzene	146	12.853	12.853	(0.994)	328048	50.0000	46
83 4-Isopropyltoluene	119	12.903	12.903	(0.998)	532029	50.0000	45
* 84 1,4-Dichlorobenzene-d4	152	12.932	12.932	(1.000)	192544	50.0000	
85 1,4-Dichlorobenzene	146	12.952	12.952	(1.002)	327663	50.0000	45
86 n-Butylbenzene	91	13.365	13.365	(1.034)	574123	50.0000	47
87 1,2-Dichlorobenzene	146	13.375	13.375	(1.034)	297991	50.0000	46
88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.101)	26024	50.0000	50
128 1,3,5-Trichlorobenzene	180	15.148	15.148	(2.366)	192234	50.0000	42(A)
89 1,2,4-Trichlorobenzene	180	15.148	15.148	(1.171)	192234	50.0000	44
90 Hexachlorobutadiene	225	15.335	15.335	(1.186)	113227	50.0000	45
91 Naphthalene	128	15.404	15.404	(1.191)	423059	50.0000	43
92 1,2,3-Trichlorobenzene	180	15.660	15.660	(1.211)	175095	50.0000	46

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\120423.B\VM6289.D
Date : 23-APR-2012 14:07
Client ID: VICW0501Y
Sample Info: 5HL,VICW0501Y,VICW0501Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: V1.i
Operator: V1 SRC: V1
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V8.I\120430.B\V8B1073.d
 Lab Smp Id: VSTD05010N Client Smp ID: VSTD05010N
 Inj Date : 30-APR-2012 11:22
 Operator : SRC: Inst ID: V8.i
 Smp Info : 5ML,VSTD05010N,VSTD05010N
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
 Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
 Cal Date : 30-APR-2012 11:22 Cal File: V8B1073.d
 Als bottle: 100 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.647	1.647	(0.311)	161838	50.0000	52
2 Freon114	85		1.766	1.766	(0.333)	142130	50.0000	53
3 Chloromethane	50		1.818	1.818	(0.343)	194449	50.0000	48
4 Vinyl Chloride	62		1.917	1.918	(0.362)	184749	50.0000	50
5 Bromomethane	94		2.207	2.207	(0.416)	68859	50.0000	54
6 Chloroethane	64		2.294	2.294	(0.433)	88695	50.0000	48
7 Trichlorofluoromethane	101		2.506	2.509	(0.473)	196294	50.0000	52
126 Ethanol	46		2.628	2.628	(0.496)	50574	5000.00	4900(A)
8 Ether	59		2.731	2.731	(0.515)	124596	50.0000	49
9 Acrolein	56		2.834	2.834	(0.535)	168207	250.000	240(A)
10 1,1-Dichloroethene	96		2.924	2.924	(0.552)	160798	50.0000	50
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.917	2.914	(0.550)	138854	50.0000	52
12 Acetone	58		2.949	2.950	(0.557)	29627	50.0000	55
13 Iodomethane	142		3.052	3.053	(0.576)	74727	50.0000	56
14 Carbon Disulfide	76		3.113	3.114	(0.588)	463975	50.0000	48
15 Acetonitrile	41		3.203	3.204	(0.604)	265182	500.000	490(A)
16 Allyl Chloride	39		3.203	3.204	(0.604)	154005	50.0000	50
17 Methyl Acetate	43		3.210	3.210	(0.606)	111156	50.0000	48
18 Methylene Chloride	84		3.297	3.297	(0.622)	178102	50.0000	45
19 tert-Butanol	59		3.358	3.358	(0.634)	28434	100.000	92
20 Acrylonitrile	53		3.483	3.487	(0.657)	54970	50.0000	49
21 trans-1,2-Dichloroethene	96		3.519	3.519	(0.664)	168729	50.0000	49

						AMOUNTS	
QUANT SIG						CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
22 Methyl tert-butyl ether	73	3.509	3.509	(0.662)	419957	50.0000	49
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	316703	50.0000	49
24 Vinyl acetate	43	3.875	3.879	(0.731)	536394	50.0000	51
25 Diisopropyl Ether	45	3.885	3.885	(0.733)	499894	50.0000	49
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	225726	50.0000	50
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	453157	50.0000	50
29 2,2-Dichloropropane	77	4.322	4.326	(0.816)	256099	50.0000	52
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	182549	50.0000	49
30 2-Butanone	72	4.319	4.316	(0.815)	26365	50.0000	54
32 Propionitrile	54	4.364	4.364	(0.823)	213308	500.000	480(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	174044	100.000	96
34 Bromochloromethane	128	4.519	4.519	(0.853)	77720	50.0000	49
31 Tetrahydrofuran	72	4.560	4.561	(0.860)	39063	100.000	93
35 Chloroform	83	4.570	4.570	(0.862)	293741	50.0000	49
\$ 36 Dibromofluoromethane	113	4.708	4.705	(0.888)	146921	50.0000	50
37 1,1,1-Trichloroethane	97	4.747	4.747	(0.896)	250859	50.0000	50
38 Cyclohexane	56	4.805	4.805	(0.907)	264352	50.0000	52
39 1,1-Dichloropropene	110	4.885	4.885	(0.922)	83876	50.0000	51
40 Carbon Tetrachloride	117	4.895	4.892	(0.924)	213069	50.0000	52
41 Isobutyl Alcohol	43	4.920	4.924	(0.928)	132826	1000.00	940(A)
\$ 42 1,2-Dichloroethane-d4	102	5.004	5.004	(0.944)	35362	50.0000	50
43 Benzene	78	5.068	5.069	(0.956)	691593	50.0000	50
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	224337	50.0000	49
45 tert-Amyl methyl ether	73	5.139	5.139	(0.970)	423581	50.0000	50
M 50 1,2-Dichloroethene (Total)	96				351278	100.000	99
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	593583	50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	166609	50.0000	49
48 Methylcyclohexane	83	5.818	5.818	(1.098)	244333	50.0000	54
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	182076	50.0000	49
51 Methyl Methacrylate	69	5.908	5.908	(1.115)	115773	50.0000	48
52 Dibromomethane	93	5.943	5.943	(1.121)	105093	50.0000	49
53 1,4-Dioxane	88	5.943	5.943	(1.121)	35790	1000.00	920(A)
54 Bromodichloromethane	83	6.075	6.075	(1.146)	225285	50.0000	50
55 2-Chloroethyl vinyl ether	63	6.506	6.506	(1.227)	1472	50.0000	35(T)
56 cis-1,3-Dichloropropene	75	6.502	6.506	(1.227)	278189	50.0000	51
57 4-Methyl-2-pentanone	43	6.641	6.641	(1.253)	157854	50.0000	48
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	579697	50.0000	50
59 Toluene	91	6.846	6.847	(1.292)	697674	50.0000	50
60 trans-1,3-Dichloropropene	75	7.046	7.046	(1.329)	244815	50.0000	51
61 Ethyl Methacrylate	69	7.126	7.126	(1.345)	166004	50.0000	49
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	148150	50.0000	49
63 Tetrachloroethene	164	7.409	7.409	(0.894)	130285	50.0000	49
64 1,3-Dichloropropane	76	7.416	7.419	(0.895)	258750	50.0000	49
65 2-Hexanone	43	7.489	7.490	(0.904)	128575	50.0000	53
66 Dibromochloromethane	129	7.657	7.657	(0.924)	164592	50.0000	51
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	152094	50.0000	49
69 1-Chlorohexane	91	8.277	8.277	(0.999)	200221	50.0000	49
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	419561	50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	430611	50.0000	49
71 1,1,1,2-Tetrachloroethane	131	8.396	8.400	(1.013)	149758	50.0000	51
72 Ethylbenzene	106	8.432	8.432	(1.017)	230046	50.0000	50
73 m,p-Xylene	106	8.560	8.560	(1.033)	575147	100.000	100
74 o-Xylene	106	9.007	9.007	(1.087)	277091	50.0000	51
75 Styrene	104	9.020	9.020	(1.088)	461690	50.0000	50

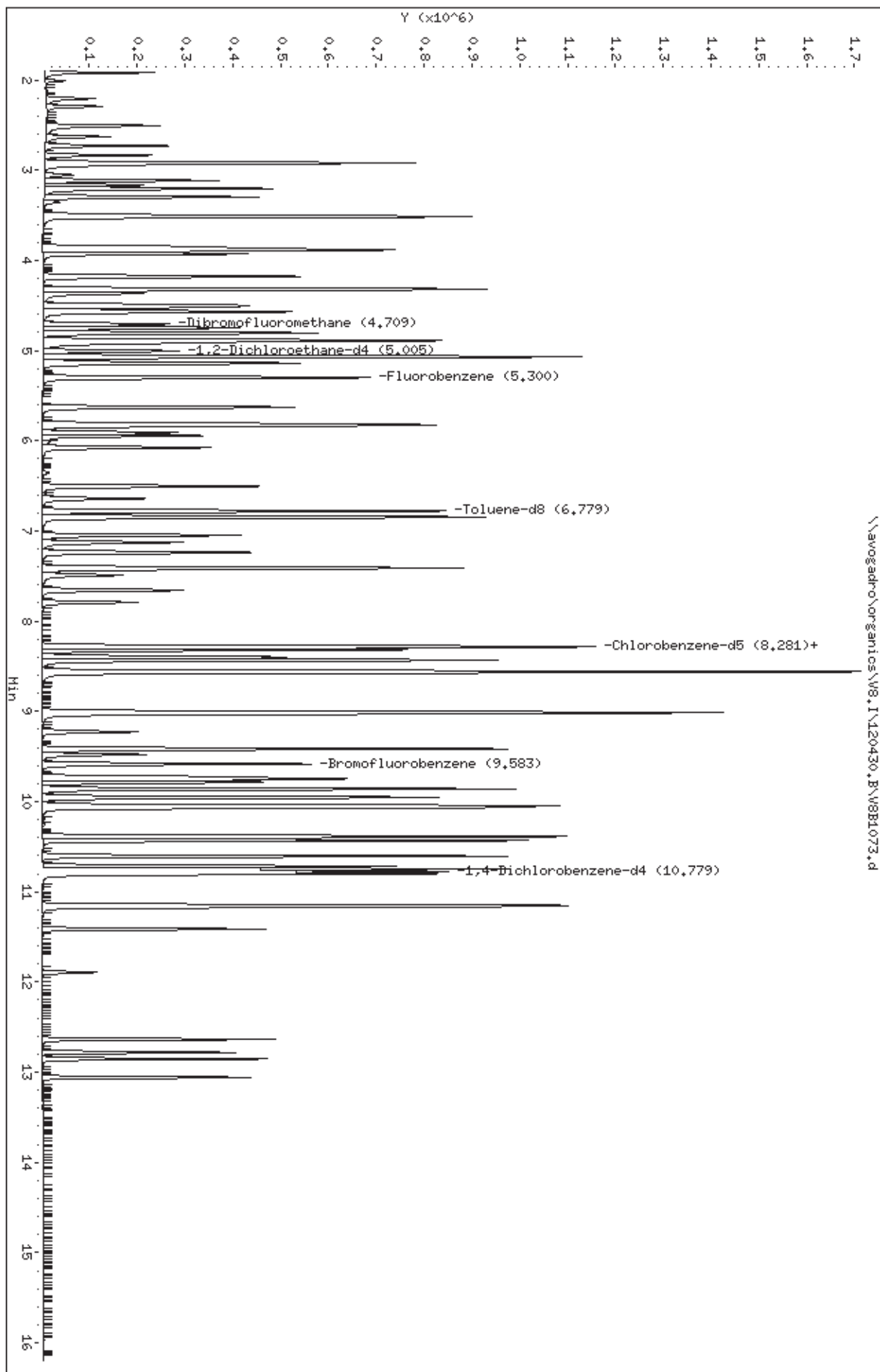
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.226	9.226 (1.113)		99809		50.0000	51
77 Isopropylbenzene	105	9.415	9.416 (1.136)		690104		50.0000	51
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		57927		50.0000	50
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.156)		207350		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.728 (0.902)		193559		50.0000	47
81 Bromobenzene	156	9.750	9.750 (0.905)		167012		50.0000	49
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		232268		50.0000	47
83 n-Propylbenzene	120	9.859	9.859 (0.915)		180386		50.0000	51
84 2-Chlorotoluene	126	9.952	9.953 (0.923)		161692		50.0000	50
85 1,3,5-Trimethylbenzene	105	10.042	10.043 (0.932)		554594		50.0000	51
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		164214		50.0000	49
M 94 Xylene (Total)	106				852238		150.000	150
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		536665		50.0000	50
88 1,2,4-Trimethylbenzene	105	10.432	10.432 (0.968)		557912		50.0000	50
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		688315		50.0000	51
90 1,3-Dichlorobenzene	146	10.714	10.715 (0.994)		292105		50.0000	48
91 4-Isopropyltoluene	119	10.747	10.750 (0.997)		549398		50.0000	51
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		200945		50.0000	
93 1,4-Dichlorobenzene	146	10.801	10.801 (1.002)		299468		50.0000	48
95 n-Butylbenzene	91	11.149	11.149 (1.034)		506326		50.0000	52
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		279037		50.0000	48
97 Hexachloroethane	117	11.415	11.412 (1.059)		94122		50.0000	52
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891 (1.103)		27951		50.0000	46
99 1,2,4-Trichlorobenzene	180	12.637	12.634 (1.172)		135026		50.0000	46
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		66533		50.0000	47
101 Naphthalene	128	12.853	12.853 (1.192)		318440		50.0000	44
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		115324		50.0000	44

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8,I\120430.B\W8B1073.d
Date : 30-APR-2012 11:22
Client ID: WSTD05010N
Sample Info: 5HL,WSTD05010N,WSTD05010N
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430.B\V8B1074.d
Report Date: 01-May-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430.B\V8B1074.d
Lab Smp Id: VSTD02010N Client Smp ID: VSTD02010N
Inj Date : 30-APR-2012 11:48
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD02010N,VSTD02010N
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 11:48 Cal File: V8B1074.d
Als bottle: 100 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL -AMT	ON -COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	62854	20.0000	20	
2 Freon114	85	1.766	1.766	(0.333)	54389	20.0000	20	
3 Chloromethane	50	1.818	1.818	(0.343)	80193	20.0000	20	
4 Vinyl Chloride	62	1.917	1.918	(0.362)	71621	20.0000	19	
5 Bromomethane	94	2.207	2.207	(0.416)	26943	20.0000	21	
6 Chloroethane	64	2.293	2.294	(0.433)	35412	20.0000	19	
7 Trichlorofluoromethane	101	2.506	2.509	(0.473)	76735	20.0000	20	
126 Ethanol	46	2.628	2.628	(0.496)	22345	2000.00	2200(A)	
8 Ether	59	2.731	2.731	(0.515)	51728	20.0000	20	
9 Acrolein	56	2.834	2.834	(0.535)	73346	100.000	100	
10 1,1-Dichloroethene	96	2.924	2.924	(0.552)	63160	20.0000	19	
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.914	(0.550)	53772	20.0000	20	
12 Acetone	58	2.953	2.950	(0.557)	12216	20.0000	23	
13 Iodomethane	142	3.052	3.053	(0.576)	24779	20.0000	19	
14 Carbon Disulfide	76	3.117	3.114	(0.588)	178158	20.0000	18	
15 Acetonitrile	41	3.203	3.204	(0.604)	114506	200.000	210(A)	
16 Allyl Chloride	39	3.203	3.204	(0.604)	63564	20.0000	21	
17 Methyl Acetate	43	3.210	3.210	(0.606)	47791	20.0000	20	
18 Methylene Chloride	84	3.297	3.297	(0.622)	72877	20.0000	18	
19 tert-Butanol	59	3.355	3.358	(0.633)	12469	40.0000	40	
20 Acrylonitrile	53	3.490	3.487	(0.658)	23327	20.0000	21	
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	66715	20.0000	19	

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
22 Methyl tert-butyl ether	73		3.509	3.509 (0.662)		174571	20.0000	20
23 1,1-Dichloroethane	63		3.850	3.850 (0.726)		127482	20.0000	20
24 Vinyl acetate	43		3.879	3.879 (0.732)		215399	20.0000	21
25 Diisopropyl Ether	45		3.888	3.885 (0.734)		207786	20.0000	20
26 2-Chloro-1,3-Butadiene	53		3.927	3.927 (0.741)		88533	20.0000	20
27 Ethyl tert-butyl ether	59		4.178	4.178 (0.788)		184326	20.0000	20
29 2,2-Dichloropropane	77		4.326	4.326 (0.816)		99867	20.0000	20
28 cis-1,2-Dichloroethene	96		4.319	4.319 (0.815)		73917	20.0000	20
30 2-Butanone	72		4.322	4.316 (0.816)		10426	20.0000	21
32 Propionitrile	54		4.367	4.364 (0.824)		92762	200.000	210(A)
33 Methacrylonitrile	41		4.496	4.496 (0.848)		72838	40.0000	40
34 Bromochloromethane	128		4.518	4.519 (0.853)		32204	20.0000	20
31 Tetrahydrofuran	72		4.563	4.561 (0.861)		17040	40.0000	41
35 Chloroform	83		4.573	4.570 (0.863)		120006	20.0000	20
\$ 36 Dibromofluoromethane	113		4.705	4.705 (0.888)		146761	50.0000	50
37 1,1,1-Trichloroethane	97		4.750	4.747 (0.896)		99190	20.0000	20
38 Cyclohexane	56		4.805	4.805 (0.907)		101444	20.0000	20
39 1,1-Dichloropropene	110		4.888	4.885 (0.922)		32950	20.0000	20
40 Carbon Tetrachloride	117		4.895	4.892 (0.924)		83238	20.0000	20
41 Isobutyl Alcohol	43		4.924	4.924 (0.929)		56089	400.000	400(A)
\$ 42 1,2-Dichloroethane-d4	102		5.004	5.004 (0.944)		35057	50.0000	50
43 Benzene	78		5.068	5.069 (0.956)		278876	20.0000	20
44 1,2-Dichloroethane	62		5.071	5.072 (0.957)		92104	20.0000	20
45 tert-Amyl methyl ether	73		5.142	5.139 (0.970)		175882	20.0000	21
M 50 1,2-Dichloroethene (Total)	96					140632	40.0000	39
* 46 Fluorobenzene	96		5.300	5.300 (1.000)		595013	50.0000	
47 Trichloroethene	130		5.628	5.628 (1.062)		66658	20.0000	20
48 Methylcyclohexane	83		5.814	5.818 (1.097)		90678	20.0000	20
49 1,2-Dichloropropane	63		5.834	5.834 (1.101)		74403	20.0000	20
51 Methyl Methacrylate	69		5.911	5.908 (1.115)		47459	20.0000	20
52 Dibromomethane	93		5.946	5.943 (1.122)		43266	20.0000	20
53 1,4-Dioxane	88		5.946	5.943 (1.122)		15791	400.000	400(A)
54 Bromodichloromethane	83		6.078	6.075 (1.147)		90423	20.0000	20
55 2-Chloroethyl vinyl ether	63		6.509	6.506 (1.228)		510	20.0000	12(T)
56 cis-1,3-Dichloropropene	75		6.506	6.506 (1.227)		109989	20.0000	20
57 4-Methyl-2-pentanone	43		6.644	6.641 (1.254)		66305	20.0000	20
\$ 58 Toluene-d8	98		6.779	6.779 (0.818)		574910	50.0000	50
59 Toluene	91		6.846	6.847 (1.292)		278245	20.0000	20
60 trans-1,3-Dichloropropene	75		7.049	7.046 (1.330)		97734	20.0000	20
61 Ethyl Methacrylate	69		7.129	7.126 (1.345)		67704	20.0000	20
62 1,1,2-Trichloroethane	97		7.239	7.239 (1.366)		60980	20.0000	20
63 Tetrachloroethene	164		7.409	7.409 (0.894)		50990	20.0000	19
64 1,3-Dichloropropane	76		7.419	7.419 (0.895)		106205	20.0000	20
65 2-Hexanone	43		7.493	7.490 (0.904)		50557	20.0000	21
66 Dibromochloromethane	129		7.657	7.657 (0.924)		65715	20.0000	20
67 1,2-Dibromoethane	107		7.792	7.792 (0.940)		62819	20.0000	20
69 1-Chlorohexane	91		8.277	8.277 (0.999)		76937	20.0000	19
* 68 Chlorobenzene-d5	117		8.287	8.287 (1.000)		417698	50.0000	
70 Chlorobenzene	112		8.316	8.319 (1.003)		172294	20.0000	20
71 1,1,1,2-Tetrachloroethane	131		8.399	8.400 (1.014)		59618	20.0000	20
72 Ethylbenzene	106		8.435	8.432 (1.018)		92436	20.0000	20
73 m,p-Xylene	106		8.560	8.560 (1.033)		225602	40.0000	40
74 o-Xylene	106		9.007	9.007 (1.087)		109945	20.0000	20
75 Styrene	104		9.023	9.020 (1.089)		178318	20.0000	20

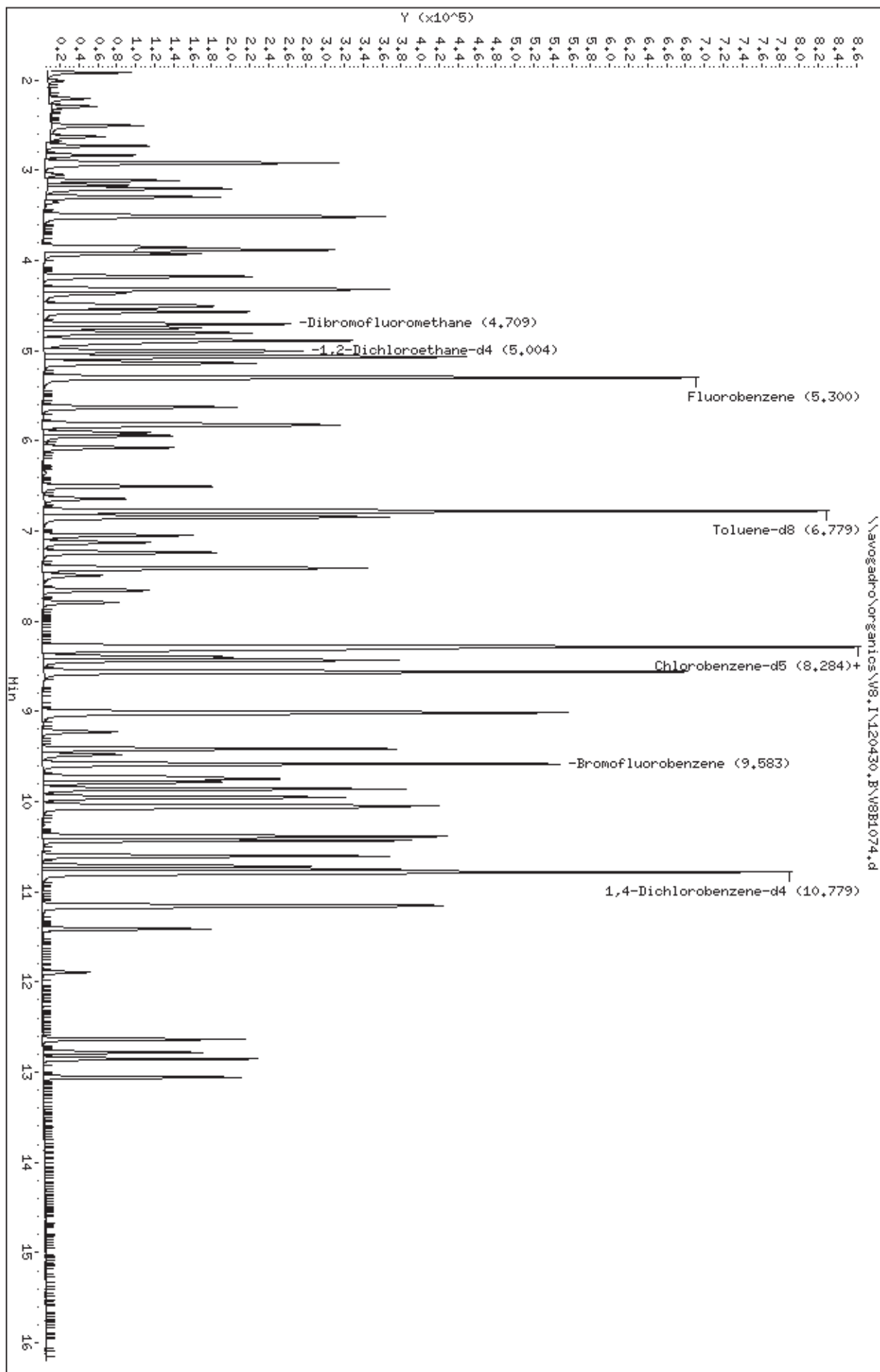
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.226	9.226 (1.113)		39609		20.0000	20
77 Isopropylbenzene	105	9.415	9.416 (1.136)		272055		20.0000	20
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		22216		20.0000	19
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.156)		205699		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.728 (0.902)		83054		20.0000	21
81 Bromobenzene	156	9.750	9.750 (0.905)		66930		20.0000	20
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		97518		20.0000	20
83 n-Propylbenzene	120	9.859	9.859 (0.915)		69373		20.0000	20
84 2-Chlorotoluene	126	9.952	9.953 (0.923)		62848		20.0000	20
85 1,3,5-Trimethylbenzene	105	10.046	10.043 (0.932)		216908		20.0000	20
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		65077		20.0000	20
M 94 Xylene (Total)	106				335547		60.0000	60
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		207098		20.0000	20
88 1,2,4-Trimethylbenzene	105	10.431	10.432 (0.968)		216807		20.0000	20
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		262558		20.0000	20
90 1,3-Dichlorobenzene	146	10.714	10.715 (0.994)		116052		20.0000	20
91 4-Isopropyltoluene	119	10.747	10.750 (0.997)		206775		20.0000	20
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		195133		50.0000	
93 1,4-Dichlorobenzene	146	10.801	10.801 (1.002)		118523		20.0000	19
95 n-Butylbenzene	91	11.148	11.149 (1.034)		189419		20.0000	20
96 1,2-Dichlorobenzene	146	11.165	11.168 (1.036)		112615		20.0000	20
97 Hexachloroethane	117	11.412	11.412 (1.059)		34586		20.0000	20
98 1,2-Dibromo-3-chloropropane	75	11.894	11.891 (1.104)		12682		20.0000	21
99 1,2,4-Trichlorobenzene	180	12.634	12.634 (1.172)		58949		20.0000	21
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		26998		20.0000	20
101 Naphthalene	128	12.853	12.853 (1.192)		154871		20.0000	22
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		54959		20.0000	22

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8.1\120430.B\W8B1074.d
Date : 30-APR-2012 11:48
Client ID: WSTD02010N
Sample Info: 5M, WSTD02010N, WSTD02010N
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430.B\V8B1075.d
Report Date: 01-May-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430.B\V8B1075.d
Lab Smp Id: VSTD00510N Client Smp ID: VSTD00510N
Inj Date : 30-APR-2012 12:14
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD00510N,VSTD00510N
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 12:14 Cal File: V8B1075.d
Als bottle: 100 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.647	1.647 (0.311)		16063	5.00000	5
2 Freon114	85		1.766	1.766 (0.333)		13816	5.00000	5
3 Chloromethane	50		1.818	1.818 (0.343)		20928	5.00000	5
4 Vinyl Chloride	62		1.917	1.918 (0.362)		18857	5.00000	5
5 Bromomethane	94		2.207	2.207 (0.416)		5775	5.00000	4
6 Chloroethane	64		2.294	2.294 (0.433)		9861	5.00000	5
7 Trichlorofluoromethane	101		2.506	2.509 (0.473)		19554	5.00000	5
126 Ethanol	46		2.631	2.628 (0.497)		5671	500.000	520(A)
8 Ether	59		2.731	2.731 (0.515)		13206	5.00000	5
9 Acrolein	56		2.837	2.834 (0.535)		17638	25.0000	25
10 1,1-Dichloroethene	96		2.924	2.924 (0.552)		17060	5.00000	5
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.917	2.914 (0.550)		13751	5.00000	5
12 Acetone	58		2.953	2.950 (0.557)		2731	5.00000	5
13 Iodomethane	142		3.052	3.053 (0.576)		4575	5.00000	4
14 Carbon Disulfide	76		3.117	3.114 (0.588)		51228	5.00000	5
15 Acetonitrile	41		3.204	3.204 (0.604)		31374	50.0000	54
16 Allyl Chloride	39		3.207	3.204 (0.605)		17500	5.00000	5
17 Methyl Acetate	43		3.213	3.210 (0.606)		11687	5.00000	5
18 Methylene Chloride	84		3.297	3.297 (0.622)		20335	5.00000	5
19 tert-Butanol	59		3.361	3.358 (0.634)		2992	10.0000	10
20 Acrylonitrile	53		3.493	3.487 (0.659)		5761	5.00000	5
21 trans-1,2-Dichloroethene	96		3.519	3.519 (0.664)		17919	5.00000	5

						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
22 Methyl tert-butyl ether	73	3.509	3.509	(0.662)	44448	5.00000	5	
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	33711	5.00000	5	
24 Vinyl acetate	43	3.882	3.879	(0.732)	52890	5.00000	5	
25 Diisopropyl Ether	45	3.885	3.885	(0.733)	53664	5.00000	5	
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	22216	5.00000	5	
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	47261	5.00000	5	
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	25473	5.00000	5	
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	19206	5.00000	5	
30 2-Butanone	72	4.332	4.316	(0.817)	2144	5.00000	4	
32 Propionitrile	54	4.371	4.364	(0.825)	20700	50.0000	48	
33 Methacrylonitrile	41	4.499	4.496	(0.849)	17367	10.0000	10	
34 Bromochloromethane	128	4.519	4.519	(0.853)	8387	5.00000	5	
31 Tetrahydrofuran	72	4.564	4.561	(0.861)	4308	10.0000	10	
35 Chloroform	83	4.570	4.570	(0.862)	31013	5.00000	5	
\$ 36 Dibromofluoromethane	113	4.708	4.705	(0.888)	146255	50.0000	50	
37 1,1,1-Trichloroethane	97	4.747	4.747	(0.896)	25862	5.00000	5	
38 Cyclohexane	56	4.805	4.805	(0.907)	26424	5.00000	5	
39 1,1-Dichloropropene	110	4.888	4.885	(0.922)	8531	5.00000	5	
40 Carbon Tetrachloride	117	4.895	4.892	(0.924)	21053	5.00000	5	
41 Isobutyl Alcohol	43	4.924	4.924	(0.929)	13132	100.000	98	
\$ 42 1,2-Dichloroethane-d4	102	5.004	5.004	(0.944)	34952	50.0000	50	
43 Benzene	78	5.068	5.069	(0.956)	73372	5.00000	5	
44 1,2-Dichloroethane	62	5.075	5.072	(0.958)	24324	5.00000	5	
45 tert-Amyl methyl ether	73	5.142	5.139	(0.970)	43822	5.00000	5	
M 50 1,2-Dichloroethene (Total)	96				37125	10.0000	10	
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	594405	50.0000		
47 Trichloroethene	130	5.631	5.628	(1.062)	17583	5.00000	5	
48 Methylcyclohexane	83	5.821	5.818	(1.098)	23178	5.00000	5	
49 1,2-Dichloropropane	63	5.837	5.834	(1.101)	19313	5.00000	5	
51 Methyl Methacrylate	69	5.911	5.908	(1.115)	11332	5.00000	5	
52 Dibromomethane	93	5.946	5.943	(1.122)	11283	5.00000	5	
53 1,4-Dioxane	88	5.946	5.943	(1.122)	3977	100.000	100	
54 Bromodichloromethane	83	6.078	6.075	(1.147)	22529	5.00000	5	
55 2-Chloroethyl vinyl ether	63	6.779	6.506	(1.279)	471	5.00000	9(T)	
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	26993	5.00000	5	
57 4-Methyl-2-pentanone	43	6.647	6.641	(1.254)	15983	5.00000	5	
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	573322	50.0000	50	
59 Toluene	91	6.850	6.847	(1.292)	73536	5.00000	5	
60 trans-1,3-Dichloropropene	75	7.052	7.046	(1.331)	23647	5.00000	5	
61 Ethyl Methacrylate	69	7.129	7.126	(1.345)	14600	5.00000	4	
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	15544	5.00000	5	
63 Tetrachloroethene	164	7.412	7.409	(0.894)	13383	5.00000	5	
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	26830	5.00000	5	
65 2-Hexanone	43	7.496	7.490	(0.905)	10764	5.00000	4	
66 Dibromochloromethane	129	7.657	7.657	(0.924)	15661	5.00000	5	
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	15764	5.00000	5	
69 1-Chlorohexane	91	8.277	8.277	(0.999)	20465	5.00000	5	
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	412275	50.0000		
70 Chlorobenzene	112	8.319	8.319	(1.004)	45418	5.00000	5	
71 1,1,1,2-Tetrachloroethane	131	8.403	8.400	(1.014)	14827	5.00000	5	
72 Ethylbenzene	106	8.435	8.432	(1.018)	23208	5.00000	5	
73 m,p-Xylene	106	8.560	8.560	(1.033)	58271	10.0000	10	
74 o-Xylene	106	9.010	9.007	(1.087)	28402	5.00000	5	
75 Styrene	104	9.023	9.020	(1.089)	44494	5.00000	5	

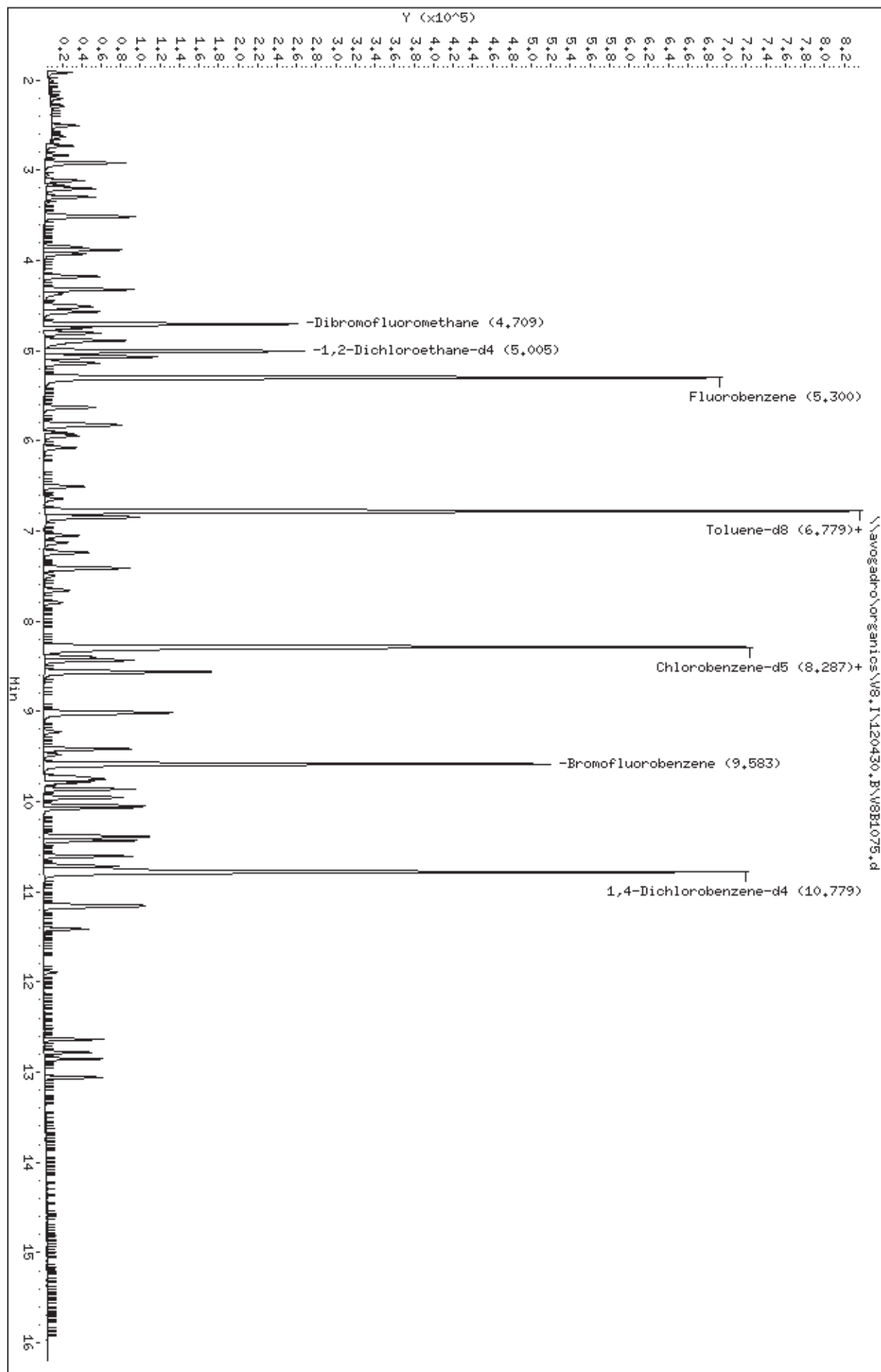
Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 Bromoform	173	9.226	9.226 (1.113)		8975	5.00000	5
77 Isopropylbenzene	105	9.419	9.416 (1.137)		68392	5.00000	5
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		4665	5.00000	4
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.156)		200823	50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.724	9.728 (0.902)		21002	5.00000	5
81 Bromobenzene	156	9.750	9.750 (0.905)		17124	5.00000	5
82 1,2,3-Trichloropropane	75	9.779	9.782 (0.907)		24151	5.00000	5
83 n-Propylbenzene	120	9.862	9.859 (0.915)		17267	5.00000	5
84 2-Chlorotoluene	126	9.952	9.953 (0.923)		16213	5.00000	5
85 1,3,5-Trimethylbenzene	105	10.046	10.043 (0.932)		54622	5.00000	5
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		16713	5.00000	5
M 94 Xylene (Total)	106				86673	15.0000	15
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		52219	5.00000	5
88 1,2,4-Trimethylbenzene	105	10.432	10.432 (0.968)		55204	5.00000	5
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		65727	5.00000	5
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		30252	5.00000	5
91 4-Isopropyltoluene	119	10.747	10.750 (0.997)		52468	5.00000	5
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		187839	50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.801 (1.002)		31721	5.00000	5
95 n-Butylbenzene	91	11.149	11.149 (1.034)		47898	5.00000	5
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		29933	5.00000	5
97 Hexachloroethane	117	11.412	11.412 (1.059)		8619	5.00000	5
98 1,2-Dibromo-3-chloropropane	75	11.895	11.891 (1.104)		3282	5.00000	6
99 1,2,4-Trichlorobenzene	180	12.637	12.634 (1.172)		16625	5.00000	6
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		7864	5.00000	6
101 Naphthalene	128	12.853	12.853 (1.192)		40738	5.00000	6
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		16309	5.00000	6

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8, I\120430, B\W8B1075.d
Date : 30-APR-2012 12:14
Client ID: WSTD00510N
Sample Info: 5M, WSTD00510N, WSTD00510N
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430.B\V8B1077.d
Report Date: 01-May-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430.B\V8B1077.d
Lab Smp Id: VSTD00110N Client Smp ID: VSTD00110N
Inj Date : 30-APR-2012 13:07
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD00110N,VSTD00110N
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 13:07 Cal File: V8B1077.d
Als bottle: 100 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL - AMT (ug/L)	ON - COL (ug/L)
1 Dichlorodifluoromethane	85	1.650	1.647 (0.311)		3055	1.00000	1.0
2 Freon114	85	1.769	1.766 (0.334)		2110	1.00000	0.8
3 Chloromethane	50	1.818	1.818 (0.343)		4319	1.00000	1
4 Vinyl Chloride	62	1.917	1.918 (0.362)		3704	1.00000	1
5 Bromomethane	94	2.203	2.207 (0.416)		1271	1.00000	1
6 Chloroethane	64	2.294	2.294 (0.433)		2183	1.00000	1
7 Trichlorofluoromethane	101	2.506	2.509 (0.473)		3562	1.00000	0.9
126 Ethanol	46	2.631	2.628 (0.496)		993	500.000	96
8 Ether	59	2.731	2.731 (0.515)		2394	1.00000	1.0
9 Acrolein	56	2.840	2.834 (0.536)		3402	5.00000	5
10 1,1-Dichloroethene	96	2.920	2.924 (0.551)		3362	1.00000	1
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.920	2.914 (0.551)		2715	1.00000	1
12 Acetone	58	2.956	2.950 (0.558)		527	1.00000	1.0
13 Iodomethane	142	3.052	3.053 (0.576)		631	1.00000	0.5
14 Carbon Disulfide	76	3.113	3.114 (0.587)		11733	1.00000	1
15 Acetonitrile	41	3.203	3.204 (0.604)		4866	1.00000	9
16 Allyl Chloride	39	3.207	3.204 (0.605)		3982	1.00000	1
17 Methyl Acetate	43	3.220	3.210 (0.608)		2262	1.00000	1.0
18 Methylene Chloride	84	3.300	3.297 (0.623)		5387	1.00000	1
19 tert-Butanol	59	3.358	3.358 (0.634)		584	1.00000	2
20 Acrylonitrile	53	3.506	3.487 (0.661)		818	1.00000	0.8
21 trans-1,2-Dichloroethene	96	3.522	3.519 (0.665)		3539	1.00000	1

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.512	3.509 (0.663)		8204		1.00000	1.0
23 1,1-Dichloroethane	63	3.853	3.850 (0.727)		6318		1.00000	1.0
24 Vinyl acetate	43	3.885	3.879 (0.733)		8933		1.00000	0.9
25 Diisopropyl Ether	45	3.892	3.885 (0.734)		9840		1.00000	1.0
26 2-Chloro-1,3-Butadiene	53	3.930	3.927 (0.742)		3945		1.00000	0.9
27 Ethyl tert-butyl ether	59	4.178	4.178 (0.788)		8249		1.00000	0.9
29 2,2-Dichloropropane	77	4.326	4.326 (0.816)		4604		1.00000	0.9
28 cis-1,2-Dichloroethene	96	4.319	4.319 (0.815)		3572		1.00000	1.0
30 2-Butanone	72	4.332	4.316 (0.817)		93		1.00000	0.2(Ta)
32 Propionitrile	54	4.377	4.364 (0.826)		3908		1.00000	9
33 Methacrylonitrile	41	4.506	4.496 (0.850)		3088		1.00000	2
34 Bromochloromethane	128	4.522	4.519 (0.853)		1500		1.00000	1.0
31 Tetrahydrofuran	72	4.570	4.561 (0.862)		641		1.00000	2
35 Chloroform	83	4.576	4.570 (0.864)		5721		1.00000	1.0
\$ 36 Dibromofluoromethane	113	4.708	4.705 (0.888)		144061		1.00000	49
37 1,1,1-Trichloroethane	97	4.750	4.747 (0.896)		4716		1.00000	1.0
38 Cyclohexane	56	4.805	4.805 (0.907)		4874		1.00000	1.0
39 1,1-Dichloropropene	110	4.888	4.885 (0.922)		1503		1.00000	0.9
40 Carbon Tetrachloride	117	4.891	4.892 (0.923)		3671		1.00000	0.9
41 Isobutyl Alcohol	43	4.930	4.924 (0.930)		2089		1.00000	15
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.004 (0.945)		34849		1.00000	50
43 Benzene	78	5.072	5.069 (0.957)		13679		1.00000	1.0
44 1,2-Dichloroethane	62	5.072	5.072 (0.957)		4482		1.00000	1.0
45 tert-Amyl methyl ether	73	5.142	5.139 (0.970)		7626		1.00000	0.9
M 50 1,2-Dichloroethene (Total)	96				7111		2.00000	2
* 46 Fluorobenzene	96	5.300	5.300 (1.000)		588379	50.0000		
47 Trichloroethene	130	5.628	5.628 (1.062)		3460		1.00000	1
48 Methylcyclohexane	83	5.817	5.818 (1.098)		4402		1.00000	1.0
49 1,2-Dichloropropane	63	5.837	5.834 (1.101)		3344		1.00000	0.9
51 Methyl Methacrylate	69	5.920	5.908 (1.117)		1801		1.00000	0.8
52 Dibromomethane	93	5.949	5.943 (1.123)		2048		1.00000	1.0
53 1,4-Dioxane	88	5.949	5.943 (1.123)		706		1.00000	18
54 Bromodichloromethane	83	6.075	6.075 (1.146)		4151		1.00000	0.9
55 2-Chloroethyl vinyl ether	63	6.769	6.506 (1.277)		96		1.00000	2(T)
56 cis-1,3-Dichloropropene	75	6.512	6.506 (1.229)		4565		1.00000	0.8
57 4-Methyl-2-pentanone	43	6.647	6.641 (1.254)		2908		1.00000	0.9
\$ 58 Toluene-d8	98	6.779	6.779 (0.818)		565480		1.00000	50
59 Toluene	91	6.853	6.847 (1.293)		13767		1.00000	1.0
60 trans-1,3-Dichloropropene	75	7.055	7.046 (1.331)		3966		1.00000	0.8
61 Ethyl Methacrylate	69	7.136	7.126 (1.346)		2079		1.00000	0.6
62 1,1,2-Trichloroethane	97	7.242	7.239 (1.366)		2856		1.00000	1.0
63 Tetrachloroethene	164	7.409	7.409 (0.894)		2834		1.00000	1
64 1,3-Dichloropropane	76	7.422	7.419 (0.896)		5027		1.00000	1.0
65 2-Hexanone	43	7.512	7.490 (0.906)		1724		1.00000	0.7(T)
66 Dibromochloromethane	129	7.657	7.657 (0.924)		2675		1.00000	0.9(T)
67 1,2-Dibromoethane	107	7.795	7.792 (0.941)		2695		1.00000	0.9(T)
69 1-Chlorohexane	91	8.280	8.277 (0.999)		4707		1.00000	1
* 68 Chlorobenzene-d5	117	8.287	8.287 (1.000)		406569	50.0000		
70 Chlorobenzene	112	8.319	8.319 (1.004)		8527		1.00000	1
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400 (1.014)		2650		1.00000	0.9
72 Ethylbenzene	106	8.438	8.432 (1.018)		4279		1.00000	1.0
73 m,p-Xylene	106	8.563	8.560 (1.033)		10807		2.00000	2
74 o-Xylene	106	9.007	9.007 (1.087)		5024		1.00000	0.9
75 Styrene	104	9.030	9.020 (1.090)		7474		1.00000	0.8

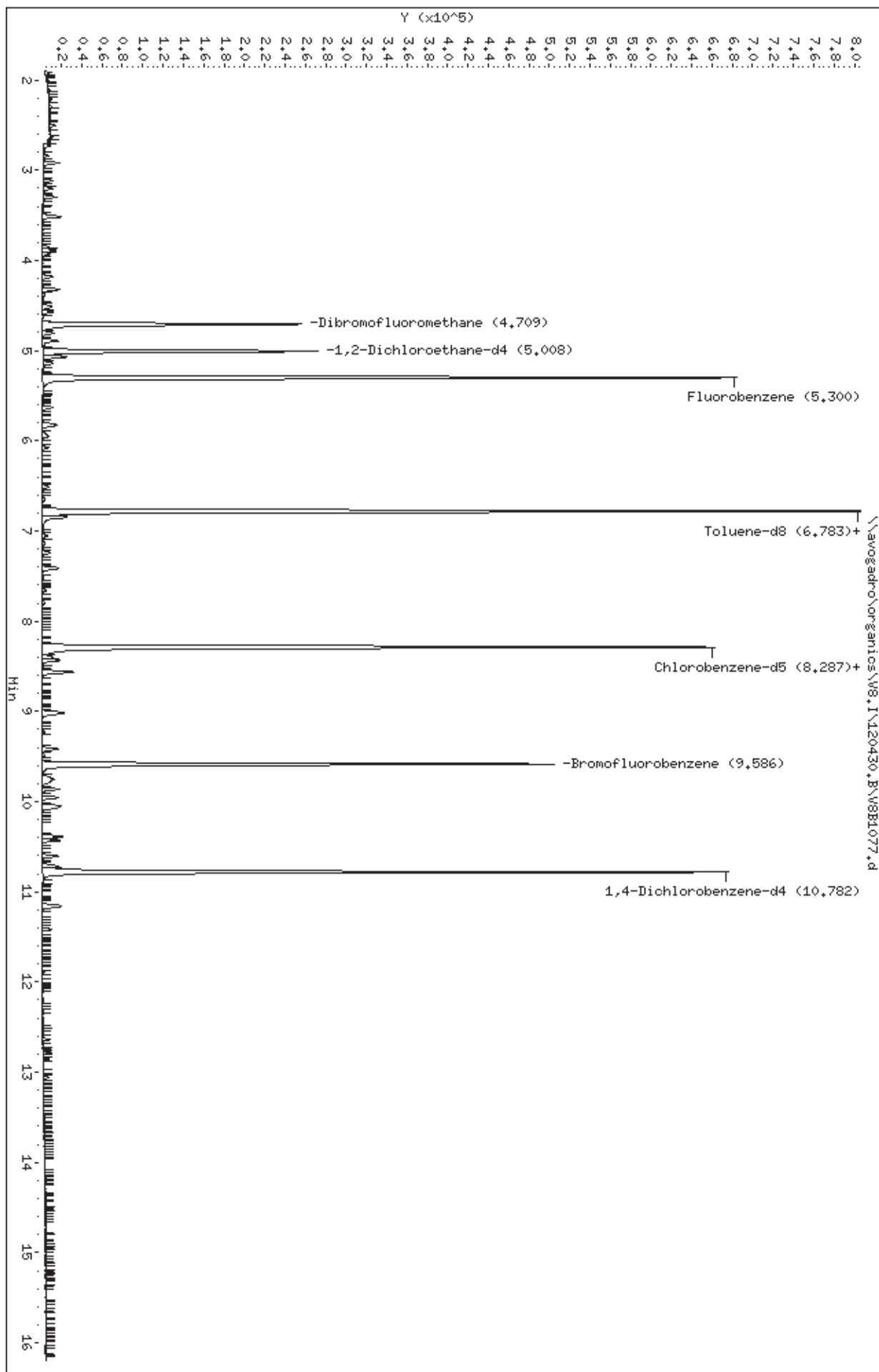
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.232	9.226 (1.114)		1478		1.00000	0.8(T)
77 Isopropylbenzene	105	9.419	9.416 (1.137)		12816		1.00000	1.0
78 trans-1,4-Dichloro-2-butene	75	9.483	9.480 (1.144)		653		1.00000	0.6
\$ 79 Bromofluorobenzene	95	9.586	9.583 (1.157)		194901		1.00000	49
80 1,1,2,2-Tetrachloroethane	83	9.731	9.728 (0.902)		3723		1.00000	1
81 Bromobenzene	156	9.756	9.750 (0.905)		3171		1.00000	1
82 1,2,3-Trichloropropane	75	9.779	9.782 (0.907)		4511		1.00000	1
83 n-Propylbenzene	120	9.862	9.859 (0.915)		3222		1.00000	1
84 2-Chlorotoluene	126	9.952	9.953 (0.923)		3124		1.00000	1
85 1,3,5-Trimethylbenzene	105	10.049	10.043 (0.932)		10239		1.00000	1
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		3107		1.00000	1
M 94 Xylene (Total)	106				15831		3.00000	3
87 tert-Butylbenzene	119	10.386	10.383 (0.963)		9946		1.00000	1
88 1,2,4-Trimethylbenzene	105	10.435	10.432 (0.968)		10109		1.00000	1
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		12432		1.00000	1
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		5964		1.00000	1
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		9899		1.00000	1
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779 (1.000)		177657		50.0000	
93 1,4-Dichlorobenzene	146	10.804	10.801 (1.002)		6429		1.00000	1
95 n-Butylbenzene	91	11.148	11.149 (1.034)		8727		1.00000	1
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		5341		1.00000	1
97 Hexachloroethane	117	11.409	11.412 (1.058)		1475		1.00000	0.9
98 1,2-Dibromo-3-chloropropane	75	11.894	11.891 (1.103)		472		1.00000	0.9
99 1,2,4-Trichlorobenzene	180	12.640	12.634 (1.172)		2187		1.00000	0.8
100 Hexachlorobutadiene	225	12.782	12.782 (1.185)		1536		1.00000	1
101 Naphthalene	128	12.856	12.853 (1.192)		4556		1.00000	0.7
102 1,2,3-Trichlorobenzene	180	13.062	13.059 (1.211)		1856		1.00000	0.8

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\W8, I\120430, B\W8B1077.d
Date : 30-APR-2012 13:07
Client ID: WSTD00110N
Sample Info: 5HL, WSTD00110N, WSTD00110N
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430.B\V8B1078.d
Report Date: 01-May-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430.B\V8B1078.d
Lab Smp Id: VSTD20010N Client Smp ID: VSTD20010N
Inj Date : 30-APR-2012 13:33
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD20010N,VSTD20010N
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 13:33 Cal File: V8B1078.d
Als bottle: 100 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	600595	200.000	190
2 Freon114	85	1.766	1.766	(0.333)	507856	200.000	190
3 Chloromethane	50	1.814	1.818	(0.342)	820671	200.000	200
4 Vinyl Chloride	62	1.917	1.918	(0.362)	730800	200.000	190
5 Bromomethane	94	2.194	2.207	(0.414)	186362	200.000	160
6 Chloroethane	64	2.287	2.294	(0.432)	340622	200.000	180
7 Trichlorofluoromethane	101	2.506	2.509	(0.473)	741991	200.000	190
126 Ethanol	46	2.638	2.628	(0.498)	186028	20000.0	18000(A)
8 Ether	59	2.728	2.731	(0.515)	515205	200.000	200
9 Acrolein	56	2.830	2.834	(0.534)	712970	1000.00	1000(A)
10 1,1-Dichloroethene	96	2.924	2.924	(0.552)	634591	200.000	190
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.914	2.914	(0.550)	500765	200.000	180
12 Acetone	58	2.949	2.950	(0.557)	96786	200.000	170
13 Iodomethane	142	3.049	3.053	(0.575)	353458	200.000	290(A)
14 Carbon Disulfide	76	3.113	3.114	(0.587)	1746982	200.000	170
15 Acetonitrile	41	3.203	3.204	(0.604)	941154	2000.00	1700(A)
16 Allyl Chloride	39	3.203	3.204	(0.604)	555834	200.000	180
17 Methyl Acetate	43	3.210	3.210	(0.606)	475282	200.000	210(A)
18 Methylene Chloride	84	3.297	3.297	(0.622)	735462	200.000	180
19 tert-Butanol	59	3.361	3.358	(0.634)	129990	400.000	420(A)
20 Acrylonitrile	53	3.483	3.487	(0.657)	247975	200.000	220(A)
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	672842	200.000	190

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.509	3.509	(0.662)	1735654		200.000	200
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	1282027		200.000	200
24 Vinyl acetate	43	3.875	3.879	(0.731)	2163954		200.000	200
25 Diisopropyl Ether	45	3.888	3.885	(0.734)	1989740		200.000	190
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	898715		200.000	200
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	1847040		200.000	200
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	967374		200.000	190
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	751064		200.000	200
30 2-Butanone	72	4.316	4.316	(0.814)	99724		200.000	200
32 Propionitrile	54	4.364	4.364	(0.823)	929482		2000.00	2100(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	748354		400.000	420(A)
34 Bromochloromethane	128	4.519	4.519	(0.853)	325459		200.000	200
31 Tetrahydrofuran	72	4.560	4.561	(0.860)	168341		400.000	400(A)
35 Chloroform	83	4.573	4.570	(0.863)	1211211		200.000	200
\$ 36 Dibromofluoromethane	113	4.708	4.705	(0.888)	148908		50.0000	50
37 1,1,1-Trichloroethane	97	4.747	4.747	(0.896)	1007170		200.000	200
38 Cyclohexane	56	4.805	4.805	(0.907)	952673		200.000	180
39 1,1-Dichloropropene	110	4.885	4.885	(0.922)	336349		200.000	200
40 Carbon Tetrachloride	117	4.895	4.892	(0.924)	846922		200.000	200
41 Isobutyl Alcohol	43	4.927	4.924	(0.930)	605043		4000.00	4300(A)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.004	(0.945)	35583		50.0000	50
43 Benzene	78	5.068	5.069	(0.956)	2772053		200.000	190
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	925938		200.000	200
45 tert-Amyl methyl ether	73	5.142	5.139	(0.970)	1756014		200.000	200
M 50 1,2-Dichloroethene (Total)	96				1423906		400.000	390
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	596354		50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	675525		200.000	190
48 Methylcyclohexane	83	5.818	5.818	(1.098)	855018		200.000	180
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	740341		200.000	200
51 Methyl Methacrylate	69	5.908	5.908	(1.115)	512295		200.000	210(A)
52 Dibromomethane	93	5.943	5.943	(1.121)	441195		200.000	200
53 1,4-Dioxane	88	5.946	5.943	(1.122)	161271		4000.00	4100(A)
54 Bromodichloromethane	83	6.075	6.075	(1.146)	946817		200.000	210(A)
55 2-Chloroethyl vinyl ether	63	6.502	6.506	(1.227)	6115		200.000	140(T)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	1161917		200.000	210(A)
57 4-Methyl-2-pentanone	43	6.641	6.641	(1.253)	682485		200.000	210(A)
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	589459		50.0000	49
59 Toluene	91	6.846	6.847	(1.292)	2807752		200.000	190
60 trans-1,3-Dichloropropene	75	7.046	7.046	(1.329)	1048045		200.000	220(A)
61 Ethyl Methacrylate	69	7.129	7.126	(1.345)	733430		200.000	220(A)
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	628564		200.000	200
63 Tetrachloroethene	164	7.409	7.409	(0.894)	530090		200.000	190
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	1073576		200.000	200
65 2-Hexanone	43	7.489	7.490	(0.904)	501108		200.000	200
66 Dibromochloromethane	129	7.657	7.657	(0.924)	722590		200.000	210(A)
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	658259		200.000	200
69 1-Chlorohexane	91	8.277	8.277	(0.999)	775285		200.000	180
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	435666		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	1769111		200.000	190
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	630554		200.000	200
72 Ethylbenzene	106	8.435	8.432	(1.018)	951871		200.000	190
73 m,p-Xylene	106	8.563	8.560	(1.033)	2283395		400.000	380(A)
74 o-Xylene	106	9.007	9.007	(1.087)	1115499		200.000	190
75 Styrene	104	9.020	9.020	(1.088)	1905665		200.000	200

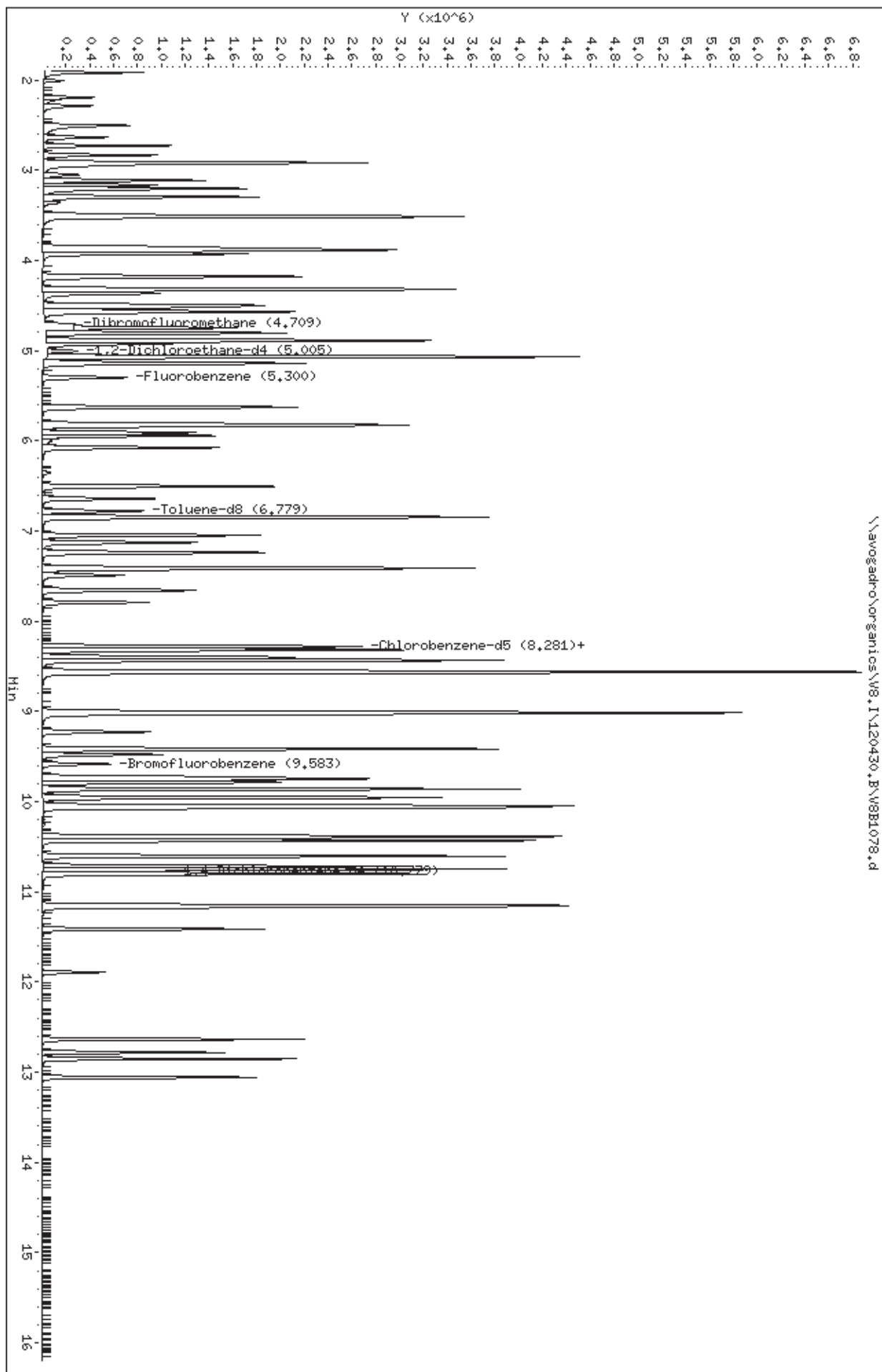
Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 Bromoform	173	9.226	9.226 (1.113)		452432	200.000	220(A)
77 Isopropylbenzene	105	9.419	9.416 (1.137)		2760838	200.000	190
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		264639	200.000	230(A)
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.156)		216751	50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.728 (0.902)		826086	200.000	180
81 Bromobenzene	156	9.750	9.750 (0.905)		706543	200.000	180
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		1004851	200.000	180
83 n-Propylbenzene	120	9.862	9.859 (0.915)		728646	200.000	180
84 2-Chlorotoluene	126	9.956	9.953 (0.924)		649509	200.000	180
85 1,3,5-Trimethylbenzene	105	10.046	10.043 (0.932)		2219991	200.000	180
86 4-Chlorotoluene	126	10.068	10.068 (0.934)		673590	200.000	180
M 94 Xylene (Total)	106				3398894	600.000	560
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		2175804	200.000	180
88 1,2,4-Trimethylbenzene	105	10.431	10.432 (0.968)		2243661	200.000	180
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		2678588	200.000	180
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		1204994	200.000	170
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		2147696	200.000	180
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		217023	50.0000	
93 1,4-Dichlorobenzene	146	10.801	10.801 (1.002)		1230487	200.000	170
95 n-Butylbenzene	91	11.148	11.149 (1.034)		1976298	200.000	180
96 1,2-Dichlorobenzene	146	11.168	11.168 (1.036)		1148744	200.000	170
97 Hexachloroethane	117	11.415	11.412 (1.059)		386289	200.000	190
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891 (1.103)		126487	200.000	180
99 1,2,4-Trichlorobenzene	180	12.634	12.634 (1.172)		591308	200.000	160
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		246200	200.000	140
101 Naphthalene	128	12.853	12.853 (1.192)		1436872	200.000	160
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		488420	200.000	140

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8,I\120430.B\W8B1078.d
Date : 30-APR-2012 13:33
Client ID: WSTD20010N
Sample Info: 5M,WSTD20010N,WSTD20010N
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430.B\V8B1079.d
Report Date: 01-May-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430.B\V8B1079.d
Lab Smp Id: VSTD10010N Client Smp ID: VSTD10010N
Inj Date : 30-APR-2012 13:59
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD10010N,VSTD10010N
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 13:59 Cal File: V8B1079.d
Als bottle: 100 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	303845	100.000	97
2 Freon114	85	1.766	1.766	(0.333)	259766	100.000	96
3 Chloromethane	50	1.818	1.818	(0.343)	404589	100.000	98
4 Vinyl Chloride	62	1.917	1.918	(0.362)	368468	100.000	100
5 Bromomethane	94	2.200	2.207	(0.415)	159305	100.000	120
6 Chloroethane	64	2.290	2.294	(0.432)	168974	100.000	91
7 Trichlorofluoromethane	101	2.506	2.509	(0.473)	375256	100.000	99
126 Ethanol	46	2.631	2.628	(0.497)	95415	10000.0	9300(A)
8 Ether	59	2.728	2.731	(0.515)	255766	100.000	100
9 Acrolein	56	2.834	2.834	(0.535)	357914	500.000	510(A)
10 1,1-Dichloroethene	96	2.924	2.924	(0.552)	314734	100.000	96
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.914	(0.550)	256674	100.000	96
12 Acetone	58	2.953	2.950	(0.557)	46437	100.000	86
13 Iodomethane	142	3.052	3.053	(0.576)	194369	100.000	140
14 Carbon Disulfide	76	3.113	3.114	(0.587)	880320	100.000	91
15 Acetonitrile	41	3.204	3.204	(0.604)	490682	1000.00	910(A)
16 Allyl Chloride	39	3.204	3.204	(0.604)	286618	100.000	93
17 Methyl Acetate	43	3.210	3.210	(0.606)	239667	100.000	100
18 Methylene Chloride	84	3.297	3.297	(0.622)	356150	100.000	89
19 tert-Butanol	59	3.361	3.358	(0.634)	64196	200.000	210(A)
20 Acrylonitrile	53	3.483	3.487	(0.657)	123241	100.000	110
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	333931	100.000	97

Data File: \\avogadro\organics\V8.I\120430.B\V8B1079.d
Report Date: 01-May-2012 10:44

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.509	3.509	(0.662)	863353		100.000	100
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	629007		100.000	98
24 Vinyl acetate	43	3.876	3.879	(0.731)	1076186		100.000	100
25 Diisopropyl Ether	45	3.888	3.885	(0.734)	1001709		100.000	98
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	449395		100.000	100
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	912932		100.000	100
29 2,2-Dichloropropane	77	4.322	4.326	(0.816)	471304		100.000	96
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	368395		100.000	99
30 2-Butanone	72	4.316	4.316	(0.814)	48233		100.000	98
32 Propionitrile	54	4.364	4.364	(0.823)	463181		1000.00	1000(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	375122		200.000	210(A)
34 Bromochloromethane	128	4.519	4.519	(0.853)	158979		100.000	99
31 Tetrahydrofuran	72	4.560	4.561	(0.860)	85132		200.000	200
35 Chloroform	83	4.573	4.570	(0.863)	589868		100.000	98
\$ 36 Dibromofluoromethane	113	4.708	4.705	(0.888)	146233		50.0000	50
37 1,1,1-Trichloroethane	97	4.750	4.747	(0.896)	496573		100.000	99
38 Cyclohexane	56	4.805	4.805	(0.907)	493329		100.000	97
39 1,1-Dichloropropene	110	4.885	4.885	(0.922)	166526		100.000	100
40 Carbon Tetrachloride	117	4.895	4.892	(0.924)	419940		100.000	100
41 Isobutyl Alcohol	43	4.924	4.924	(0.929)	300449		2000.00	2100(A)
\$ 42 1,2-Dichloroethane-d4	102	5.004	5.004	(0.944)	35962		50.0000	51
43 Benzene	78	5.068	5.069	(0.956)	1379467		100.000	98
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	458294		100.000	99
45 tert-Amyl methyl ether	73	5.139	5.139	(0.970)	866103		100.000	100
M 50 1,2-Dichloroethene (Total)	96				702326		200.000	200
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	597417		50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	333095		100.000	98
48 Methylcyclohexane	83	5.818	5.818	(1.098)	445421		100.000	98
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	367169		100.000	98
51 Methyl Methacrylate	69	5.908	5.908	(1.115)	249457		100.000	100
52 Dibromomethane	93	5.943	5.943	(1.121)	217421		100.000	100
53 1,4-Dioxane	88	5.946	5.943	(1.122)	80551		2000.00	2000(A)
54 Bromodichloromethane	83	6.078	6.075	(1.147)	458347		100.000	100
55 2-Chloroethyl vinyl ether	63	6.502	6.506	(1.227)	2955		100.000	70(T)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	566237		100.000	100
57 4-Methyl-2-pentanone	43	6.641	6.641	(1.253)	334538		100.000	100
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	583813		50.0000	50
59 Toluene	91	6.846	6.847	(1.292)	1388561		100.000	98
60 trans-1,3-Dichloropropene	75	7.046	7.046	(1.329)	507935		100.000	100
61 Ethyl Methacrylate	69	7.126	7.126	(1.345)	355590		100.000	100
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	305299		100.000	100
63 Tetrachloroethene	164	7.409	7.409	(0.894)	257874		100.000	96
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	530180		100.000	99
65 2-Hexanone	43	7.490	7.490	(0.904)	240938		100.000	98
66 Dibromochloromethane	129	7.657	7.657	(0.924)	344215		100.000	100
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	318683		100.000	100
69 1-Chlorohexane	91	8.277	8.277	(0.999)	384434		100.000	93
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	427432		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	864531		100.000	97
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	302689		100.000	100
72 Ethylbenzene	106	8.432	8.432	(1.017)	461858		100.000	99
73 m,p-Xylene	106	8.560	8.560	(1.033)	1129245		200.000	200
74 o-Xylene	106	9.007	9.007	(1.087)	552672		100.000	99
75 Styrene	104	9.020	9.020	(1.088)	938519		100.000	100

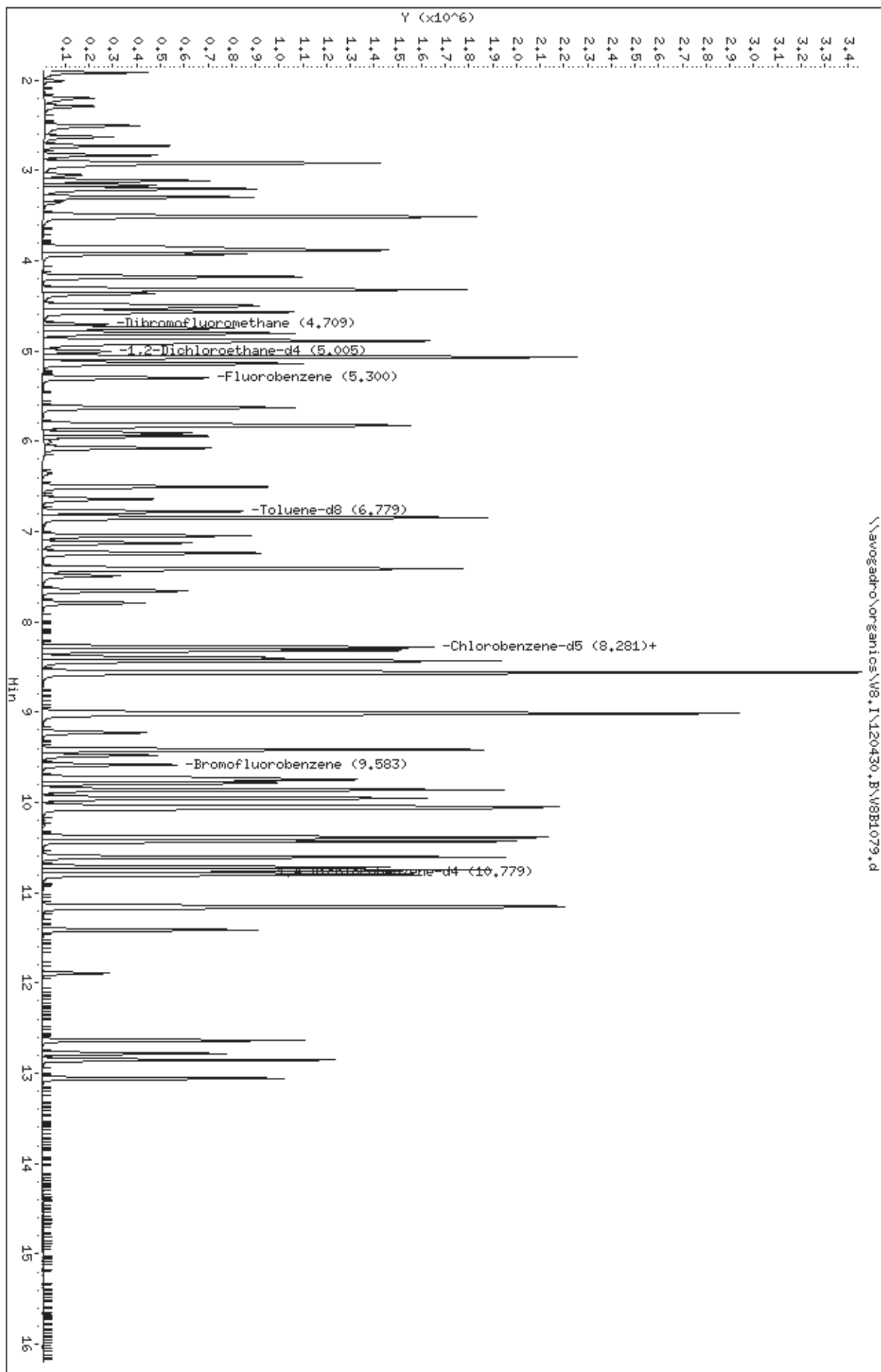
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 Bromoform	173	9.226	9.226	(1.113)	216929	100.000	110
77 Isopropylbenzene	105	9.415	9.416	(1.136)	1361134	100.000	99
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480	(1.144)	127794	100.000	110
\$ 79 Bromofluorobenzene	95	9.583	9.583	(1.156)	212602	50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.728	(0.902)	415008	100.000	98
81 Bromobenzene	156	9.750	9.750	(0.905)	341460	100.000	96
82 1,2,3-Trichloropropane	75	9.782	9.782	(0.908)	501546	100.000	99
83 n-Propylbenzene	120	9.862	9.859	(0.915)	353621	100.000	96
84 2-Chlorotoluene	126	9.956	9.953	(0.924)	318543	100.000	94
85 1,3,5-Trimethylbenzene	105	10.046	10.043	(0.932)	1092181	100.000	96
86 4-Chlorotoluene	126	10.068	10.068	(0.934)	328640	100.000	95
M 94 Xylene (Total)	106				1681917	300.000	290
87 tert-Butylbenzene	119	10.383	10.383	(0.963)	1046777	100.000	95
88 1,2,4-Trimethylbenzene	105	10.432	10.432	(0.968)	1106970	100.000	96
89 sec-Butylbenzene	105	10.605	10.605	(0.984)	1333754	100.000	96
90 1,3-Dichlorobenzene	146	10.714	10.715	(0.994)	589249	100.000	94
91 4-Isopropyltoluene	119	10.747	10.750	(0.997)	1064525	100.000	96
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779	(1.000)	207531	50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.801	(1.002)	601430	100.000	93
95 n-Butylbenzene	91	11.149	11.149	(1.034)	986780	100.000	98
96 1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	567384	100.000	95
97 Hexachloroethane	117	11.412	11.412	(1.059)	187277	100.000	100
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891	(1.103)	67274	100.000	110
99 1,2,4-Trichlorobenzene	180	12.637	12.634	(1.172)	306659	100.000	100
100 Hexachlorobutadiene	225	12.782	12.782	(1.186)	126971	100.000	87
101 Naphthalene	128	12.853	12.853	(1.192)	839157	100.000	110
102 1,2,3-Trichlorobenzene	180	13.058	13.059	(1.211)	272138	100.000	100

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8,I\120430.B\W8B1079.d
 Date : 30-APR-2012 13:59
 Client ID: WSTD10010N
 Sample Info: 5M,WSTD10010N,WSTD10010N
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W8.i
 Operator: SRC:
 Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V1 Calibration Date: 04/23/2012 Time: 14:48

Lab File ID: V1M6291.D Init. Calib. Date(s): 04/23/2012 04/23/2012

EPA Sample No.(VSTD####) VSTD0501Z Init. Calib. Time(s): 11:05 13:36

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.349	0.391	0.100	12.0	20.0
Chloromethane	0.385	0.459	0.010	19.1	20.0
Vinyl chloride	0.362	0.424	0.010	17.0	20.0
Bromomethane	0.317	0.342	0.010	7.8	20.0
Chloroethane	0.198	0.195	0.010	-1.5	20.0
Trichlorofluoromethane	0.465	0.510	0.010	9.9	20.0
1,1-Dichloroethene	0.305	0.342	0.100	12.0	20.0
Acetone	0.034	0.032	0.010	-6.8	20.0
Iodomethane	0.640	0.717	0.010	12.1	20.0
Carbon disulfide	0.992	1.129	0.010	13.9	20.0
Methylene chloride	0.355	0.373	0.010	5.1	20.0
trans-1,2-Dichloroethene	0.323	0.352	0.010	9.1	20.0
Methyl tert-butyl ether	0.845	0.930	0.010	10.1	20.0
1,1-Dichloroethane	0.514	0.590	0.010	14.8	20.0
Vinyl acetate	1.086	1.246	0.010	14.8	20.0
2-Butanone	0.034	0.030	0.010	-12.4	20.0
cis-1,2-Dichloroethene	0.355	0.391	0.010	10.2	20.0
2,2-Dichloropropane	0.290	0.325	0.010	12.1	20.0
Bromochloromethane	0.177	0.185	0.010	4.5	20.0
Chloroform	0.562	0.599	0.010	6.5	20.0
1,1,1-Trichloroethane	0.416	0.475	0.010	14.3	20.0
1,1-Dichloropropene	0.153	0.166	0.010	8.6	20.0
Carbon tetrachloride	0.372	0.428	0.010	15.1	20.0
1,2-Dichloroethane	0.414	0.445	0.010	7.5	20.0
Benzene	1.143	1.252	0.010	9.5	20.0
Trichloroethene	0.327	0.365	0.010	11.5	20.0
1,2-Dichloropropane	0.284	0.318	0.010	12.2	20.0
Dibromomethane	0.213	0.229	0.010	7.1	20.0
Bromodichloromethane	0.422	0.460	0.010	9.1	20.0
cis-1,3-Dichloropropene	0.489	0.534	0.010	9.1	20.0
4-Methyl-2-pentanone	0.283	0.301	0.010	6.3	20.0
Toluene	1.220	1.369	0.010	12.3	20.0
trans-1,3-Dichloropropene	0.449	0.472	0.010	5.1	20.0
1,1,2-Trichloroethane	0.261	0.272	0.010	4.3	20.0
1,3-Dichloropropane	0.615	0.655	0.010	6.5	20.0
Tetrachloroethene	0.442	0.444	0.010	0.5	20.0
2-Hexanone	0.301	0.302	0.010	0.4	20.0
Dibromochloromethane	0.486	0.494	0.010	1.7	20.0
1,2-Dibromoethane	0.427	0.388	0.010	-9.0	20.0
Chlorobenzene	1.185	1.213	0.010	2.4	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V1 Calibration Date: 04/23/2012 Time: 14:48

Lab File ID: V1M6291.D Init. Calib. Date(s): 04/23/2012 04/23/2012

EPA Sample No.(VSTD####) VSTD0501Z Init. Calib. Time(s): 11:05 13:36

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.446	0.454	0.010	1.7	20.0
Ethylbenzene	0.625	0.657	0.010	5.1	20.0
m,p-Xylene	0.794	0.820	0.010	3.3	20.0
o-Xylene	0.762	0.791	0.010	3.8	20.0
Xylene (Total)	0.783	0.811	0.010	3.5	20.0
Styrene	1.297	1.384	0.010	6.7	20.0
Bromoform	0.324	0.328	0.010	1.2	20.0
Isopropylbenzene	1.932	2.077	0.300	7.5	20.0
1,1,2,2-Tetrachloroethane	0.914	0.947	0.300	3.5	20.0
Bromobenzene	0.980	1.013	0.010	3.4	20.0
1,2,3-Trichloropropane	1.056	1.071	0.010	1.4	20.0
n-Propylbenzene	0.912	0.943	0.010	3.4	20.0
2-Chlorotoluene	0.852	0.876	0.010	2.9	20.0
1,3,5-Trimethylbenzene	2.909	3.070	0.010	5.6	20.0
4-Chlorotoluene	0.869	0.925	0.010	6.5	20.0
tert-Butylbenzene	2.879	2.989	0.010	3.8	20.0
1,2,4-Trimethylbenzene	2.961	3.071	0.010	3.7	20.0
sec-Butylbenzene	3.875	4.149	0.010	7.1	20.0
4-Isopropyltoluene	3.073	3.200	0.010	4.1	20.0
1,3-Dichlorobenzene	1.849	1.898	0.010	2.7	20.0
1,4-Dichlorobenzene	1.895	1.941	0.010	2.4	20.0
n-Butylbenzene	3.179	3.289	0.100	3.5	20.0
1,2-Dichlorobenzene	1.685	1.739	0.010	3.2	20.0
1,2-Dibromo-3-chloropropane	0.135	0.145	0.010	7.6	20.0
1,2,4-Trichlorobenzene	1.127	1.118	0.010	-0.8	20.0
Hexachlorobutadiene	0.647	0.659	0.010	1.9	20.0
1,2,3-Trichlorobenzene	0.999	0.974	0.010	-2.5	20.0
Naphthalene	2.542	2.477	0.010	-2.5	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V1 Calibration Date: 04/23/2012 Time: 14:48

Lab File ID: V1M6291.D Init. Calib. Date(s): 04/23/2012 04/23/2012

EPA Sample No.(VSTD####) VSTD0501Z Init. Calib. Time(s): 11:05 13:36

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.282	0.278	0.010	-1.2	20.0
1,2-Dichloroethane-d4	0.055	0.054	0.010	-0.9	20.0
Toluene-d8	1.373	1.315	0.010	-4.2	20.0
Bromofluorobenzene	0.508	0.513	0.010	0.9	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V10 Calibration Date: 04/30/2012 Time: 15:30

Lab File ID: V8B1082.D Init. Calib. Date(s): 04/30/2012 04/30/2012

EPA Sample No.(VSTD####) VSTD050100 Init. Calib. Time(s): 11:22 13:59

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.262	0.241	0.100	-8.0	20.0
Chloromethane	0.344	0.325	0.010	-5.5	20.0
Vinyl chloride	0.310	0.291	0.010	-5.9	20.0
Bromomethane	0.108	0.120	0.010	11.4	20.0
Chloroethane	0.156	0.140	0.010	-9.8	20.0
Trichlorofluoromethane	0.318	0.304	0.010	-4.5	20.0
1,1-Dichloroethene	0.273	0.256	0.100	-6.3	20.0
Acetone	0.045	0.042	0.010	-6.5	20.0
Iodomethane	0.112	0.128	0.010	14.1	20.0
Carbon disulfide	0.810	0.737	0.010	-9.0	20.0
Methylene chloride	0.335	0.293	0.010	-12.7	20.0
trans-1,2-Dichloroethene	0.288	0.272	0.010	-5.4	20.0
Methyl tert-butyl ether	0.723	0.694	0.010	-3.9	20.0
1,1-Dichloroethane	0.540	0.515	0.010	-4.5	20.0
Vinyl acetate	0.878	0.891	0.010	1.5	20.0
2-Butanone	0.041	0.039	0.010	-6.4	20.0
cis-1,2-Dichloroethene	0.311	0.297	0.010	-4.5	20.0
2,2-Dichloropropane	0.412	0.397	0.010	-3.7	20.0
Bromochloromethane	0.134	0.128	0.010	-4.4	20.0
Chloroform	0.501	0.482	0.010	-3.8	20.0
1,1,1-Trichloroethane	0.419	0.401	0.010	-4.3	20.0
1,1-Dichloropropene	0.139	0.134	0.010	-3.7	20.0
Carbon tetrachloride	0.347	0.338	0.010	-2.6	20.0
1,2-Dichloroethane	0.388	0.371	0.010	-4.3	20.0
Benzene	1.175	1.125	0.010	-4.2	20.0
Trichloroethene	0.285	0.267	0.010	-6.5	20.0
1,2-Dichloropropane	0.308	0.302	0.010	-1.9	20.0
Dibromomethane	0.182	0.174	0.010	-4.2	20.0
Bromodichloromethane	0.379	0.372	0.010	-1.8	20.0
cis-1,3-Dichloropropene	0.456	0.456	0.010	0.1	20.0
4-Methyl-2-pentanone	0.276	0.254	0.010	-8.0	20.0
Toluene	1.182	1.123	0.010	-5.0	20.0
trans-1,3-Dichloropropene	0.404	0.401	0.010	-0.7	20.0
1,1,2-Trichloroethane	0.255	0.246	0.010	-3.6	20.0
1,3-Dichloropropane	0.626	0.608	0.010	-2.9	20.0
Tetrachloroethene	0.316	0.295	0.010	-6.5	20.0
2-Hexanone	0.288	0.270	0.010	-6.1	20.0
Dibromochloromethane	0.385	0.386	0.010	0.1	20.0
1,2-Dibromoethane	0.367	0.358	0.010	-2.5	20.0
Chlorobenzene	1.039	0.993	0.010	-4.5	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V10 Calibration Date: 04/30/2012 Time: 15:30

Lab File ID: V8B1082.D Init. Calib. Date(s): 04/30/2012 04/30/2012

EPA Sample No.(VSTD####) VSTD050100 Init. Calib. Time(s): 11:22 13:59

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.353	0.347	0.010	-1.6	20.0
Ethylbenzene	0.546	0.533	0.010	-2.4	20.0
m,p-Xylene	0.675	0.658	0.010	-2.5	20.0
o-Xylene	0.652	0.640	0.010	-1.8	20.0
Xylene (Total)	0.667	0.652	0.010	-2.3	20.0
Styrene	1.060	1.067	0.010	0.7	20.0
Bromoform	0.231	0.229	0.010	-1.0	20.0
Isopropylbenzene	1.614	1.583	0.300	-1.9	20.0
1,1,2,2-Tetrachloroethane	1.024	0.956	0.300	-6.7	20.0
Bromobenzene	0.855	0.818	0.010	-4.3	20.0
1,2,3-Trichloropropane	1.221	1.129	0.010	-7.5	20.0
n-Propylbenzene	0.884	0.866	0.010	-2.1	20.0
2-Chlorotoluene	0.811	0.776	0.010	-4.4	20.0
1,3,5-Trimethylbenzene	2.753	2.683	0.010	-2.5	20.0
4-Chlorotoluene	0.830	0.791	0.010	-4.8	20.0
tert-Butylbenzene	2.655	2.584	0.010	-2.7	20.0
1,2,4-Trimethylbenzene	2.765	2.687	0.010	-2.8	20.0
sec-Butylbenzene	3.348	3.290	0.010	-1.7	20.0
4-Isopropyltoluene	2.667	2.621	0.010	-1.7	20.0
1,3-Dichlorobenzene	1.506	1.411	0.010	-6.3	20.0
1,4-Dichlorobenzene	1.562	1.441	0.010	-7.8	20.0
n-Butylbenzene	2.434	2.424	0.100	-0.4	20.0
1,2-Dichlorobenzene	1.436	1.352	0.010	-5.9	20.0
1,2-Dibromo-3-chloropropane	0.153	0.134	0.010	-12.4	20.0
1,2,4-Trichlorobenzene	0.725	0.654	0.010	-9.7	20.0
Hexachlorobutadiene	0.353	0.312	0.010	-11.6	20.0
1,2,3-Trichlorobenzene	0.648	0.567	0.010	-12.5	20.0
Naphthalene	1.783	1.562	0.010	-12.4	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Instrument ID: V10 Calibration Date: 04/30/2012 Time: 15:30

Lab File ID: V8B1082.D Init. Calib. Date(s): 04/30/2012 04/30/2012

EPA Sample No.(VSTD####) VSTD050100 Init. Calib. Time(s): 11:22 13:59

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.247	0.247	0.010	0.2	20.0
1,2-Dichloroethane-d4	0.059	0.059	0.010	-1.2	20.0
Toluene-d8	1.374	1.385	0.010	0.9	20.0
Bromofluorobenzene	0.494	0.491	0.010	-0.5	20.0

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423.B\V1M6289.D
Lab Smp Id: VICV0501Y Client Smp ID: VICV0501Y
Inj Date : 23-APR-2012 14:07
Operator : V1 SRC: V1 Inst ID: V1.i
Smp Info : 5ML,VICV0501Y,VICV0501Y
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423.B\v18260GH.m
Meth Date : 23-Apr-2012 14:06 amarquis Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85	1.684	1.684	(0.263)	174678	50.0000	48
2 Chloromethane	50	1.871	1.871	(0.292)	197956	50.0000	49
3 Vinyl Chloride	62	1.999	1.999	(0.312)	183509	50.0000	48
4 Bromomethane	94	2.373	2.373	(0.371)	146793	50.0000	44
5 Chloroethane	64	2.492	2.492	(0.389)	94533	50.0000	46
6 Trichlorofluoromethane	101	2.748	2.748	(0.429)	224247	50.0000	46
127 Ethanol	46	2.935	2.935	(0.458)	50549	5000.00	4000(Q)
7 Ether	59	3.053	3.053	(0.477)	108702	50.0000	45
8 Acrolein	56	3.181	3.181	(0.497)	17806	250.000	240
9 1,1-Dichloroethene	96	3.299	3.299	(0.515)	150242	50.0000	47
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.319	3.319	(0.518)	150689	50.0000	44
11 Acetone	58	3.339	3.339	(0.522)	14057	50.0000	39
12 Iodomethane	142	3.447	3.447	(0.538)	293644	50.0000	44
13 Carbon Disulfide	76	3.526	3.526	(0.551)	498081	50.0000	48
14 Acetonitrile	40	3.624	3.624	(0.566)	98520	500.000	400
15 Methyl Acetate	43	3.693	3.693	(0.577)	100431	50.0000	45
16 Methylene Chloride	84	3.802	3.802	(0.594)	161811	50.0000	43
17 tert-Butanol	59	3.910	3.910	(0.611)	27524	100.000	72
18 Acrylonitrile	53	4.048	4.048	(0.632)	48518	50.0000	50
20 Methyl tert-butyl ether	73	4.087	4.087	(0.638)	399033	50.0000	45
19 trans-1,2-Dichloroethene	96	4.087	4.087	(0.638)	155804	50.0000	46
21 1,1-Dichloroethane	63	4.530	4.530	(0.708)	248913	50.0000	46
22 Vinyl acetate	43	4.580	4.580	(0.715)	538903	50.0000	47

						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
23 Diisopropyl Ether	45	4.599	4.599	(0.718)	493154	50.0000	45	
24 Ethyl tert-butyl ether	59	4.983	4.983	(0.778)	435873	50.0000	45	
M 27 1,2-dichloroethene, (Total)	100				322785	100.000	91	
25 cis-1,2-Dichloroethene	96	5.141	5.141	(0.803)	166981	50.0000	45	
26 2,2-Dichloropropane	77	5.141	5.141	(0.803)	135713	50.0000	44	
28 2-Butanone	72	5.151	5.151	(0.805)	15395	50.0000	43	
29 Bromochloromethane	128	5.397	5.397	(0.843)	79326	50.0000	43	
30 Tetrahydrofuran	72	5.456	5.456	(0.852)	31655	100.000	86	
31 Chloroform	83	5.486	5.486	(0.857)	267401	50.0000	45	
\$ 32 Dibromofluoromethane	113	5.653	5.653	(0.883)	140837	50.0000	48	
33 1,1,1-Trichloroethane	97	5.693	5.693	(0.889)	196145	50.0000	45	
34 Cyclohexane	56	5.762	5.762	(0.900)	217472	50.0000	44	
36 Carbon Tetrachloride	117	5.880	5.880	(0.918)	177517	50.0000	45	
35 1,1-Dichloropropene	110	5.870	5.870	(0.917)	71276	50.0000	44	
\$ 37 1,2-Dichloroethane-d4	102	6.028	6.028	(0.942)	28342	50.0000	50	
38 Benzene	78	6.096	6.096	(0.952)	546173	50.0000	45	
39 1,2-Dichloroethane	62	6.106	6.106	(0.954)	192772	50.0000	44	
40 tert-Amyl methyl ether	73	6.215	6.215	(0.971)	405126	50.0000	44	
* 41 Fluorobenzene	96	6.402	6.402	(1.000)	524896	50.0000		
42 Trichloroethene	130	6.816	6.816	(1.065)	154297	50.0000	45	
43 Methylcyclohexane	83	7.052	7.052	(1.102)	242379	50.0000	45	
44 1,2-Dichloropropane	63	7.072	7.072	(1.105)	136414	50.0000	46	
46 Dibromomethane	93	7.200	7.200	(1.125)	102138	50.0000	46	
47 1,4-Dioxane	88	7.229	7.229	(1.129)	33002	1000.00	870	
48 Bromodichloromethane	83	7.387	7.387	(1.154)	197288	50.0000	44	
45 2-Chloroethyl vinyl ether	63	7.741	7.741	(1.209)	47051	50.0000	45	
49 cis-1,3-Dichloropropene	75	7.919	7.919	(1.237)	235492	50.0000	46	
50 4-Methyl-2-pentanone	43	8.106	8.106	(1.266)	134650	50.0000	45	
\$ 51 Toluene-d8	98	8.254	8.254	(0.818)	495242	50.0000	51	
52 Toluene	91	8.332	8.332	(1.302)	582279	50.0000	45	
53 trans-1,3-Dichloropropene	75	8.598	8.598	(1.343)	213550	50.0000	45	
54 1,1,2-Trichloroethane	97	8.825	8.825	(1.378)	124064	50.0000	45	
55 Tetrachloroethene	164	9.022	9.022	(0.895)	132953	50.0000	42	
56 1,3-Dichloropropane	76	9.042	9.042	(0.896)	207300	50.0000	48	
57 2-Hexanone	43	9.150	9.150	(0.907)	91868	50.0000	43	
58 Dibromochloromethane	129	9.327	9.327	(0.925)	152402	50.0000	44	
59 1,2-Dibromoethane	107	9.475	9.475	(0.939)	130771	50.0000	43	
* 60 Chlorobenzene-d5	117	10.086	10.086	(1.000)	354684	50.0000		
63 1-Chlorohexane	91	10.095	10.095	(1.001)	212190	50.0000	44	
61 Chlorobenzene	112	10.125	10.125	(1.004)	369755	50.0000	44	
62 1,1,1,2-Tetrachloroethane	131	10.223	10.223	(1.014)	136162	50.0000	43	
64 Ethylbenzene	106	10.273	10.273	(1.019)	199424	50.0000	45	
65 m,p-Xylene	106	10.420	10.420	(1.033)	502067	100.000	89	
66 o-Xylene	106	10.923	10.923	(1.083)	241702	50.0000	45	
67 Styrene	104	10.933	10.933	(1.084)	416489	50.0000	45	
68 Bromoform	173	11.159	11.159	(1.106)	99487	50.0000	43	
69 Isopropylbenzene	105	11.376	11.376	(1.128)	621130	50.0000	45	
126 trans-1,4-Dichloro-2-butene	75	11.455	11.455	(1.136)	53298	50.0000	45	
\$ 70 Bromofluorobenzene	95	11.563	11.563	(1.146)	175396	50.0000	49	
72 Bromobenzene	156	11.740	11.740	(0.908)	171601	50.0000	45	
71 1,1,2,2-Tetrachloroethane	83	11.730	11.730	(0.907)	162093	50.0000	46	
73 1,2,3-Trichloropropane	75	11.790	11.790	(0.912)	191414	50.0000	47	
74 n-Propylbenzene	120	11.878	11.878	(0.919)	162956	50.0000	46	
75 2-Chlorotoluene	126	11.977	11.977	(0.926)	144739	50.0000	44	

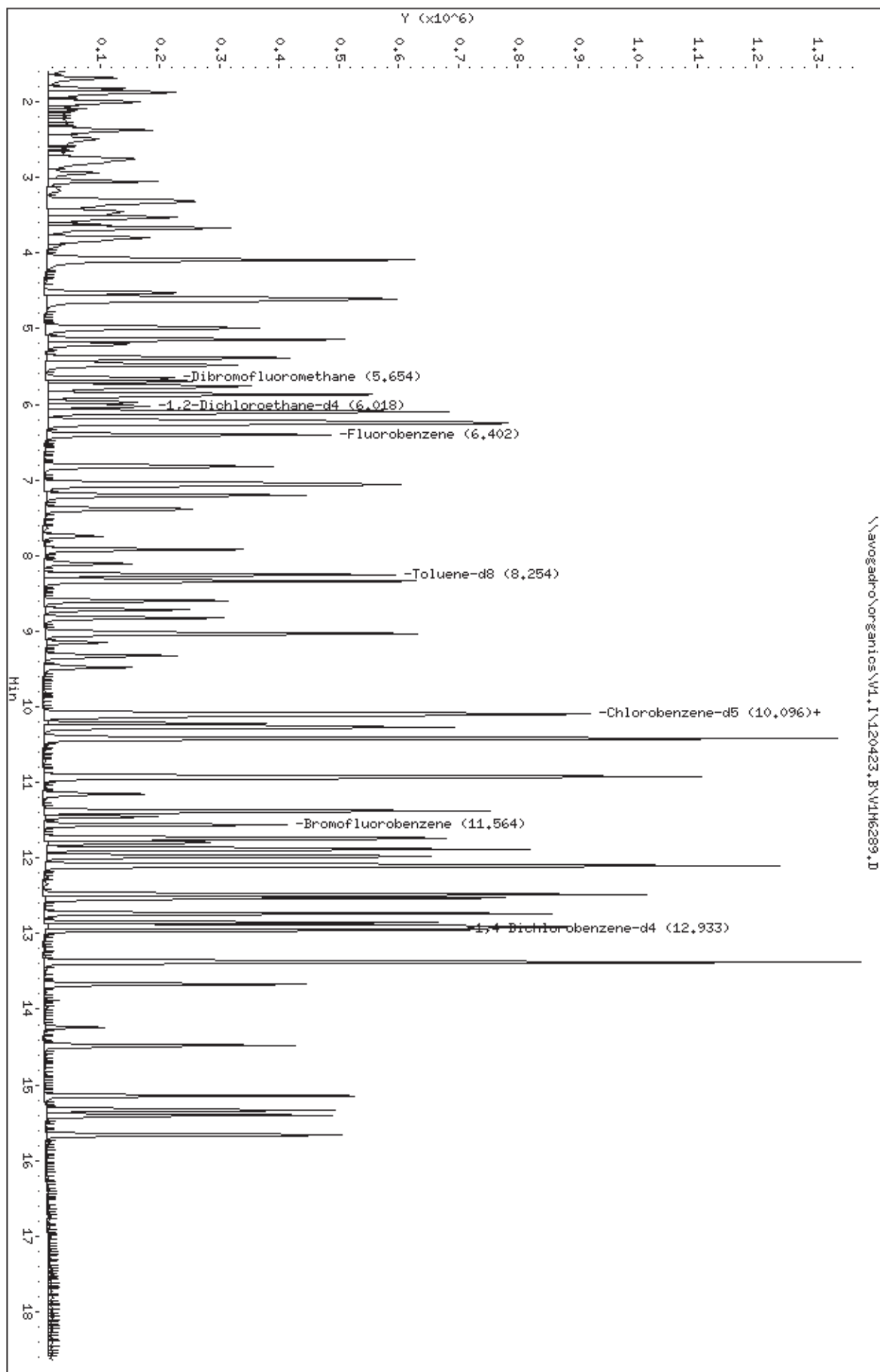
						AMOUNTS			
		QUANT	SIG					CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====		=====	=====	=====	=====	=====	=====	=====	
	76 1,3,5-Trimethylbenzene	105	12.095	12.095	(0.935)	530874	50.0000	47	
	77 4-Chlorotoluene	126	12.105	12.105	(0.936)	154691	50.0000	46	
	78 tert-Butylbenzene	119	12.479	12.479	(0.965)	506515	50.0000	46	
	79 1,2,4-Trimethylbenzene	105	12.528	12.528	(0.969)	528787	50.0000	46	
M	81 Xylene (Total)	106				743769	150.000	130	
	80 sec-Butylbenzene	105	12.735	12.735	(0.985)	690699	50.0000	46	
	82 1,3-Dichlorobenzene	146	12.853	12.853	(0.994)	328048	50.0000	46	
	83 4-Isopropyltoluene	119	12.903	12.903	(0.998)	532029	50.0000	45	
*	84 1,4-Dichlorobenzene-d4	152	12.932	12.932	(1.000)	192544	50.0000		
	85 1,4-Dichlorobenzene	146	12.952	12.952	(1.002)	327663	50.0000	45	
	86 n-Butylbenzene	91	13.365	13.365	(1.034)	574123	50.0000	47	
	87 1,2-Dichlorobenzene	146	13.375	13.375	(1.034)	297991	50.0000	46	
	88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.101)	26024	50.0000	50	
	128 1,3,5-Trichlorobenzene	180	15.148	15.148	(2.366)	192234	50.0000	42(A)	
	89 1,2,4-Trichlorobenzene	180	15.148	15.148	(1.171)	192234	50.0000	44	
	90 Hexachlorobutadiene	225	15.335	15.335	(1.186)	113227	50.0000	45	
	91 Naphthalene	128	15.404	15.404	(1.191)	423059	50.0000	43	
	92 1,2,3-Trichlorobenzene	180	15.660	15.660	(1.211)	175095	50.0000	46	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1.I\120423.B\VM6289.D
Date : 23-APR-2012 14:07
Client ID: VICW0501Y
Sample Info: SHL,VICW0501Y,VICW0501Y
Purge Volume: 5.0
Column phase: DB-624

Instrument: V1.i
Operator: V1 SRC: V1
Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\120423A.B\V1M6291.D
Report Date: 24-Apr-2012 09:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423A.B\V1M6291.D
Lab Smp Id: VSTD0501Z Client Smp ID: VSTD0501Z
Inj Date : 23-APR-2012 14:48
Operator : V1 SRC: V1 Inst ID: V1.i
Smp Info : 5ML,VSTD0501Z,VSTD0501Z
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423A.B\v18260GH.m
Meth Date : 24-Apr-2012 09:38 canderson Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET102

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.684	1.683 (0.263)		202341	50.0000	56
2 Chloromethane	50		1.871	1.871 (0.292)		237578	50.0000	60
3 Vinyl Chloride	62		1.999	1.999 (0.312)		219522	50.0000	58
4 Bromomethane	94		2.363	2.373 (0.369)		177057	50.0000	54
5 Chloroethane	64		2.472	2.491 (0.386)		100821	50.0000	49
6 Trichlorofluoromethane	101		2.748	2.757 (0.429)		264263	50.0000	55
127 Ethanol	46		2.935	2.944 (0.458)		48599	5000.00	3900(Q)
7 Ether	59		3.053	3.062 (0.477)		133705	50.0000	56
8 Acrolein	56		3.181	3.190 (0.497)		19793	250.000	280
9 1,1-Dichloroethene	96		3.299	3.309 (0.515)		176992	50.0000	56
10 1,1,2-Trichloro-1,2,2-trifluo	101		3.309	3.328 (0.517)		202587	50.0000	60
11 Acetone	58		3.339	3.348 (0.522)		16377	50.0000	47
12 Iodomethane	142		3.457	3.466 (0.540)		371365	50.0000	56
13 Carbon Disulfide	76		3.526	3.535 (0.551)		584586	50.0000	57
14 Acetonitrile	40		3.624	3.634 (0.566)		116750	500.000	480
15 Methyl Acetate	43		3.683	3.703 (0.575)		119966	50.0000	54
16 Methylene Chloride	84		3.802	3.811 (0.594)		193323	50.0000	52
17 tert-Butanol	59		3.910	3.919 (0.611)		33668	100.000	90
18 Acrylonitrile	53		4.038	4.057 (0.631)		51519	50.0000	54
20 Methyl tert-butyl ether	73		4.087	4.097 (0.638)		481284	50.0000	55
19 trans-1,2-Dichloroethene	96		4.087	4.097 (0.638)		182121	50.0000	54
21 1,1-Dichloroethane	63		4.521	4.540 (0.706)		305659	50.0000	57

						AMOUNTS		
		QUANT	SIG			CAL -AMT	ON -COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	=====	=====	=====	=====	=====	=====
	22 Vinyl acetate	43	4.580	4.589	(0.715)	645212	50.0000	57
	23 Diisopropyl Ether	45	4.599	4.619	(0.718)	597981	50.0000	56
	24 Ethyl tert-butyl ether	59	4.983	4.993	(0.778)	523130	50.0000	55
M	27 1,2-dichloroethene, (Total)	100				384483	100.000	110
	25 cis-1,2-Dichloroethene	96	5.141	5.151	(0.803)	202362	50.0000	55
	26 2,2-Dichloropropane	77	5.141	5.151	(0.803)	168333	50.0000	56
	28 2-Butanone	72	5.151	5.160	(0.805)	15392	50.0000	44(Q)
	29 Bromochloromethane	128	5.397	5.407	(0.843)	95521	50.0000	52
	30 Tetrahydrofuran	72	5.446	5.456	(0.851)	39498	100.000	110
	31 Chloroform	83	5.476	5.485	(0.855)	310091	50.0000	53
\$	32 Dibromofluoromethane	113	5.653	5.663	(0.883)	143962	50.0000	49
	33 1,1,1-Trichloroethane	97	5.693	5.702	(0.889)	246011	50.0000	57
	34 Cyclohexane	56	5.762	5.771	(0.900)	288397	50.0000	60
	36 Carbon Tetrachloride	117	5.880	5.879	(0.918)	221569	50.0000	58
	35 1,1-Dichloropropene	110	5.870	5.879	(0.917)	85915	50.0000	54
\$	37 1,2-Dichloroethane-d4	102	6.028	6.037	(0.942)	27969	50.0000	50
	38 Benzene	78	6.096	6.106	(0.952)	648156	50.0000	55
	39 1,2-Dichloroethane	62	6.106	6.116	(0.954)	230182	50.0000	54
	40 tert-Amyl methyl ether	73	6.215	6.224	(0.971)	494002	50.0000	54
*	41 Fluorobenzene	96	6.402	6.411	(1.000)	517666	50.0000	
	42 Trichloroethene	130	6.815	6.825	(1.065)	189004	50.0000	56
	43 Methylcyclohexane	83	7.052	7.052	(1.102)	311148	50.0000	58
	44 1,2-Dichloropropane	63	7.072	7.071	(1.105)	164845	50.0000	56
	46 Dibromomethane	93	7.209	7.209	(1.126)	118340	50.0000	54
	47 1,4-Dioxane	88	7.219	7.239	(1.128)	26804	1000.00	710
	48 Bromodichloromethane	83	7.387	7.386	(1.154)	238336	50.0000	54
	45 2-Chloroethyl vinyl ether	63	7.741	7.741	(1.209)	56467	50.0000	55
	49 cis-1,3-Dichloropropene	75	7.919	7.918	(1.237)	276210	50.0000	54
	50 4-Methyl-2-pentanone	43	8.106	8.105	(1.266)	155576	50.0000	53
\$	51 Toluene-d8	98	8.254	8.253	(0.818)	480609	50.0000	48
	52 Toluene	91	8.342	8.342	(1.303)	708891	50.0000	56
	53 trans-1,3-Dichloropropene	75	8.598	8.598	(1.343)	244593	50.0000	52
	54 1,1,2-Trichloroethane	97	8.825	8.824	(1.378)	140951	50.0000	52
	55 Tetrachloroethene	164	9.022	9.021	(0.895)	162189	50.0000	50
	56 1,3-Dichloropropane	76	9.041	9.041	(0.896)	239297	50.0000	53
	57 2-Hexanone	43	9.150	9.149	(0.907)	110306	50.0000	50
	58 Dibromochloromethane	129	9.327	9.327	(0.925)	180535	50.0000	51
	59 1,2-Dibromoethane	107	9.485	9.475	(0.940)	141905	50.0000	45
*	60 Chlorobenzene-d5	117	10.086	10.085	(1.000)	365404	50.0000	
	63 1-Chlorohexane	91	10.095	10.095	(1.001)	260953	50.0000	53
	61 Chlorobenzene	112	10.125	10.125	(1.004)	443413	50.0000	51
	62 1,1,1,2-Tetrachloroethane	131	10.223	10.223	(1.014)	165854	50.0000	51
	64 Ethylbenzene	106	10.273	10.262	(1.019)	240168	50.0000	52
	65 m,p-Xylene	106	10.420	10.420	(1.033)	599567	100.000	100
	66 o-Xylene	106	10.923	10.922	(1.083)	289032	50.0000	52
	67 Styrene	104	10.933	10.932	(1.084)	505765	50.0000	53
	68 Bromoform	173	11.159	11.149	(1.106)	119808	50.0000	50
	69 Isopropylbenzene	105	11.376	11.375	(1.128)	759044	50.0000	54
	126 trans-1,4-Dichloro-2-butene	75	11.455	11.444	(1.136)	66729	50.0000	55
\$	70 Bromofluorobenzene	95	11.563	11.553	(1.146)	187298	50.0000	50
	72 Bromobenzene	156	11.740	11.740	(0.908)	209561	50.0000	52
	71 1,1,2,2-Tetrachloroethane	83	11.730	11.730	(0.907)	195759	50.0000	52
	73 1,2,3-Trichloropropane	75	11.790	11.779	(0.912)	221554	50.0000	51
	74 n-Propylbenzene	120	11.888	11.878	(0.919)	195104	50.0000	52

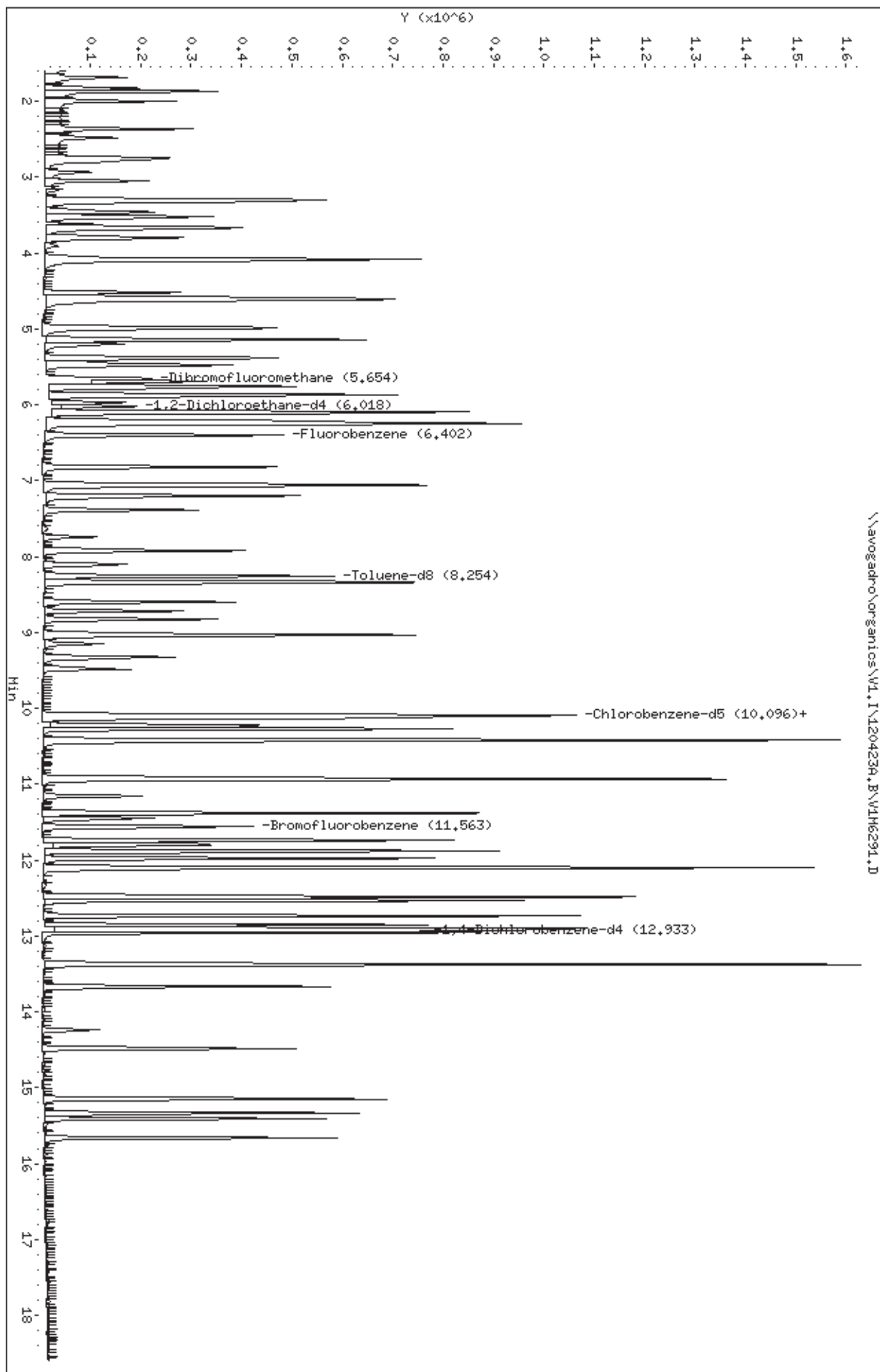
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
75 2-Chlorotoluene	126	11.977	11.976	(0.926)	181214		50.0000	51
76 1,3,5-Trimethylbenzene	105	12.095	12.094	(0.935)	634967		50.0000	53
77 4-Chlorotoluene	126	12.115	12.104	(0.937)	191253		50.0000	53
78 tert-Butylbenzene	119	12.479	12.479	(0.965)	618271		50.0000	52
79 1,2,4-Trimethylbenzene	105	12.538	12.528	(0.970)	635238		50.0000	52
M 81 Xylene (Total)	106				888599		150.000	160
80 sec-Butylbenzene	105	12.735	12.735	(0.985)	858048		50.0000	54
82 1,3-Dichlorobenzene	146	12.853	12.853	(0.994)	392574		50.0000	51
83 4-Isopropyltoluene	119	12.903	12.902	(0.998)	661821		50.0000	52
* 84 1,4-Dichlorobenzene-d4	152	12.932	12.922	(1.000)	206822		50.0000	
85 1,4-Dichlorobenzene	146	12.952	12.951	(1.002)	401355		50.0000	51
86 n-Butylbenzene	91	13.365	13.365	(1.034)	680190		50.0000	52
87 1,2-Dichlorobenzene	146	13.375	13.375	(1.034)	359682		50.0000	52
88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.101)	30009		50.0000	54
128 1,3,5-Trichlorobenzene	180	15.148	15.148	(2.366)	231302		50.0000	52(A)
89 1,2,4-Trichlorobenzene	180	15.148	15.148	(1.171)	231302		50.0000	50
90 Hexachlorobutadiene	225	15.335	15.335	(1.186)	136311		50.0000	51
91 Naphthalene	128	15.404	15.404	(1.191)	512327		50.0000	49
92 1,2,3-Trichlorobenzene	180	15.660	15.660	(1.211)	201439		50.0000	49

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1, I\1204234, B\116291.D
Date : 23-APR-2012 14:48
Client ID: VSTD0501Z
Sample Info: 5HL, VSTD0501Z, VSTD0501Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: V1.i
Operator: V1 SRC: V1
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430.B\V8B1080.d
Report Date: 01-May-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430.B\V8B1080.d
Lab Smp Id: VICV05010N Client Smp ID: VICV05010N
Inj Date : 30-APR-2012 14:38
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VICV05010N,VICV05010N
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 11:48 Cal File: V8B1074.d
Als bottle: 100 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.647 (0.311)		151742	50.0000	49
2 Freon114	85	1.766	1.766 (0.333)		132404	50.0000	50
3 Chloromethane	50	1.818	1.818 (0.343)		197071	50.0000	49
4 Vinyl Chloride	62	1.918	1.918 (0.362)		187673	50.0000	51
5 Bromomethane	94	2.207	2.207 (0.416)		76663	50.0000	60
6 Chloroethane	64	2.294	2.294 (0.433)		89087	50.0000	49
7 Trichlorofluoromethane	101	2.509	2.509 (0.473)		194727	50.0000	52
126 Ethanol	46	2.628	2.628 (0.496)		50744	5000.00	5000(A)
8 Ether	59	2.731	2.731 (0.515)		125440	50.0000	50
9 Acrolein	56	2.834	2.834 (0.535)		165918	250.000	240(A)
10 1,1-Dichloroethene	96	2.924	2.924 (0.552)		159570	50.0000	50
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.914	2.914 (0.550)		131939	50.0000	50
12 Acetone	58	2.950	2.950 (0.557)		28117	50.0000	53
13 Iodomethane	142	3.053	3.053 (0.576)		84986	50.0000	64
14 Carbon Disulfide	76	3.114	3.114 (0.588)		469958	50.0000	49
15 Acetonitrile	41	3.204	3.204 (0.604)		264623	500.000	500(A)
16 Allyl Chloride	39	3.204	3.204 (0.604)		156688	50.0000	51
17 Methyl Acetate	43	3.210	3.210 (0.606)		109954	50.0000	48
18 Methylene Chloride	84	3.297	3.297 (0.622)		178846	50.0000	45
19 tert-Butanol	59	3.358	3.358 (0.634)		27907	100.000	92
20 Acrylonitrile	53	3.487	3.487 (0.658)		55434	50.0000	50
21 trans-1,2-Dichloroethene	96	3.519	3.519 (0.664)		168411	50.0000	50
22 Methyl tert-butyl ether	73	3.509	3.509 (0.662)		415507	50.0000	49

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	315976		50.0000	50
24 Vinyl acetate	43	3.879	3.879	(0.732)	536274		50.0000	52
25 Diisopropyl Ether	45	3.885	3.885	(0.733)	503332		50.0000	50
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	225998		50.0000	51
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	451801		50.0000	50
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	254221		50.0000	52
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	183971		50.0000	50
30 2-Butanone	72	4.316	4.316	(0.814)	24949		50.0000	51
32 Propionitrile	54	4.364	4.364	(0.823)	208267		500.000	470(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	172642		100.000	97
34 Bromochloromethane	128	4.519	4.519	(0.853)	78454		50.0000	50
31 Tetrahydrofuran	72	4.561	4.561	(0.860)	38287		100.000	92
35 Chloroform	83	4.570	4.570	(0.862)	295219		50.0000	50
\$ 36 Dibromofluoromethane	113	4.705	4.705	(0.888)	143939		50.0000	50
37 1,1,1-Trichloroethane	97	4.747	4.747	(0.896)	250140		50.0000	51
38 Cyclohexane	56	4.805	4.805	(0.907)	258610		50.0000	52
39 1,1-Dichloropropene	110	4.885	4.885	(0.922)	82963		50.0000	51
40 Carbon Tetrachloride	117	4.892	4.892	(0.923)	210632		50.0000	52
41 Isobutyl Alcohol	43	4.924	4.924	(0.929)	128492		1000.00	920(A)
\$ 42 1,2-Dichloroethane-d4	102	5.004	5.004	(0.944)	34353		50.0000	49
43 Benzene	78	5.069	5.069	(0.956)	691795		50.0000	50
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	224026		50.0000	49
45 tert-Amyl methyl ether	73	5.139	5.139	(0.970)	421088		50.0000	50
M 50 1,2-Dichloroethene (Total)	96				352382		100.000	100
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	588181		50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	167063		50.0000	50
48 Methylcyclohexane	83	5.818	5.818	(1.098)	237029		50.0000	53
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	184501		50.0000	50
51 Methyl Methacrylate	69	5.908	5.908	(1.115)	113952		50.0000	48
52 Dibromomethane	93	5.943	5.943	(1.121)	105115		50.0000	49
53 1,4-Dioxane	88	5.943	5.943	(1.121)	35079		1000.00	910(A)
54 Bromodichloromethane	83	6.075	6.075	(1.146)	226712		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.506	6.506	(1.227)	1502		50.0000	36(TQ)
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	278187		50.0000	52
57 4-Methyl-2-pentanone	43	6.641	6.641	(1.253)	154749		50.0000	48
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	570205		50.0000	50
59 Toluene	91	6.847	6.847	(1.292)	698201		50.0000	50
60 trans-1,3-Dichloropropene	75	7.046	7.046	(1.329)	245947		50.0000	52
61 Ethyl Methacrylate	69	7.126	7.126	(1.345)	161203		50.0000	48
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	147853		50.0000	49
63 Tetrachloroethene	164	7.409	7.409	(0.894)	129716		50.0000	50
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	258538		50.0000	50
65 2-Hexanone	43	7.490	7.490	(0.904)	126340		50.0000	53
66 Dibromochloromethane	129	7.657	7.657	(0.924)	165255		50.0000	52
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	151691		50.0000	50
69 1-Chlorohexane	91	8.277	8.277	(0.999)	201410		50.0000	50
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	413963		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	435960		50.0000	51
71 1,1,1,2-Tetrachloroethane	131	8.400	8.400	(1.014)	149533		50.0000	51
72 Ethylbenzene	106	8.432	8.432	(1.017)	234235		50.0000	52
73 m,p-Xylene	106	8.560	8.560	(1.033)	578930		100.000	100
74 o-Xylene	106	9.007	9.007	(1.087)	278042		50.0000	52
75 Styrene	104	9.020	9.020	(1.088)	462925		50.0000	51
76 Bromoform	173	9.226	9.226	(1.113)	98001		50.0000	51

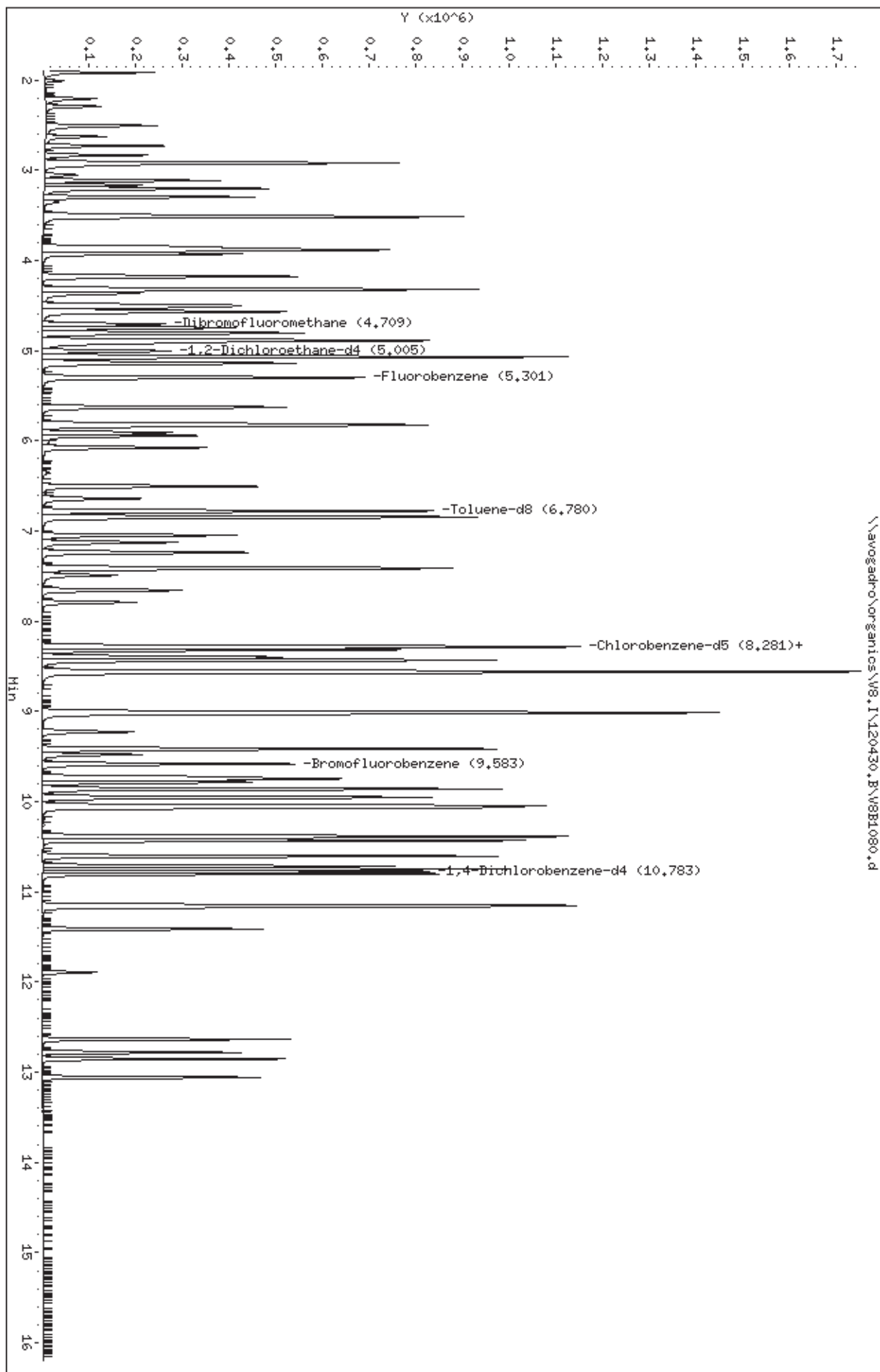
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.416	9.416	(1.136)	698852		50.0000	52
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480	(1.144)	55607		50.0000	49
\$ 79 Bromofluorobenzene	95	9.583	9.583	(1.156)	203324		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.728	9.728	(0.902)	193770		50.0000	48
81 Bromobenzene	156	9.750	9.750	(0.905)	168974		50.0000	50
82 1,2,3-Trichloropropane	75	9.782	9.782	(0.908)	230081		50.0000	48
83 n-Propylbenzene	120	9.859	9.859	(0.915)	182074		50.0000	52
84 2-Chlorotoluene	126	9.953	9.953	(0.923)	160238		50.0000	50
85 1,3,5-Trimethylbenzene	105	10.043	10.043	(0.932)	556597		50.0000	52
86 4-Chlorotoluene	126	10.068	10.068	(0.934)	165378		50.0000	51
M 94 Xylene (Total)	106				856972		150.000	160
87 tert-Butylbenzene	119	10.383	10.383	(0.963)	543022		50.0000	52
88 1,2,4-Trimethylbenzene	105	10.432	10.432	(0.968)	562270		50.0000	52
89 sec-Butylbenzene	105	10.605	10.605	(0.984)	696311		50.0000	53
90 1,3-Dichlorobenzene	146	10.715	10.715	(0.994)	296215		50.0000	50
91 4-Isopropyltoluene	119	10.750	10.750	(0.997)	552312		50.0000	53
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779	(1.000)	196588		50.0000	
93 1,4-Dichlorobenzene	146	10.801	10.801	(1.002)	303687		50.0000	49
95 n-Butylbenzene	91	11.149	11.149	(1.034)	517638		50.0000	54
96 1,2-Dichlorobenzene	146	11.168	11.168	(1.036)	282089		50.0000	50
97 Hexachloroethane	117	11.412	11.412	(1.059)	93972		50.0000	53
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891	(1.103)	28395		50.0000	47
99 1,2,4-Trichlorobenzene	180	12.634	12.634	(1.172)	144078		50.0000	50
100 Hexachlorobutadiene	225	12.782	12.782	(1.186)	69749		50.0000	50
101 Naphthalene	128	12.853	12.853	(1.192)	350164		50.0000	50
102 1,2,3-Trichlorobenzene	180	13.059	13.059	(1.211)	126034		50.0000	49

QC Flag Legend

- T - Target compound detected outside RT window.
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W8,I\120430.B\W8B1080.d
Date : 30-APR-2012 14:38
Client ID: VICV05010N
Sample Info: 5HL,VICV05010N,VICV05010N
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430A.B\V8B1082.d
Report Date: 01-May-2012 11:08

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430A.B\V8B1082.d
Lab Smp Id: VSTD050100 Client Smp ID: VSTD050100
Inj Date : 30-APR-2012 15:30
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,VSTD050100,VSTD050100
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430A.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 11:06 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 13:59 Cal File: V8B1079.d
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	143219	50.0000	46
2 Freon114	85	1.766	1.766	(0.333)	124646	50.0000	46
3 Chloromethane	50	1.818	1.818	(0.343)	193316	50.0000	47
4 Vinyl Chloride	62	1.917	1.918	(0.362)	173197	50.0000	47
5 Bromomethane	94	2.207	2.204	(0.416)	71256	50.0000	56
6 Chloroethane	64	2.294	2.294	(0.433)	83458	50.0000	45
7 Trichlorofluoromethane	101	2.506	2.506	(0.473)	180630	50.0000	48
126 Ethanol	46	2.628	2.628	(0.496)	43889	5000.00	4300(A)
8 Ether	59	2.731	2.731	(0.515)	124579	50.0000	49
9 Acrolein	56	2.834	2.834	(0.535)	164712	250.000	240(A)
10 1,1-Dichloroethene	96	2.924	2.924	(0.552)	152031	50.0000	47
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.917	2.918	(0.550)	124579	50.0000	47
12 Acetone	58	2.953	2.953	(0.557)	25191	50.0000	47
13 Iodomethane	142	3.052	3.053	(0.576)	75857	50.0000	57
14 Carbon Disulfide	76	3.113	3.114	(0.587)	438061	50.0000	46
15 Acetonitrile	41	3.203	3.204	(0.604)	259376	500.000	480(A)
16 Allyl Chloride	39	3.203	3.204	(0.604)	148561	50.0000	48
17 Methyl Acetate	43	3.210	3.210	(0.606)	106954	50.0000	46
18 Methylene Chloride	84	3.297	3.297	(0.622)	173923	50.0000	44
19 tert-Butanol	59	3.355	3.358	(0.633)	27512	100.000	89
20 Acrylonitrile	53	3.486	3.487	(0.658)	56004	50.0000	50
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	161862	50.0000	47

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
22 Methyl tert-butyl ether	73	3.509	3.509	(0.662)	412547	50.0000	48
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	306182	50.0000	48
24 Vinyl acetate	43	3.879	3.879	(0.732)	529173	50.0000	51
25 Diisopropyl Ether	45	3.885	3.889	(0.733)	494794	50.0000	49
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	211577	50.0000	47
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	447516	50.0000	49
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	235636	50.0000	48
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	176688	50.0000	48
30 2-Butanone	72	4.316	4.319	(0.814)	22979	50.0000	47
32 Propionitrile	54	4.364	4.364	(0.823)	208918	500.000	470(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	171798	100.000	95
34 Bromochloromethane	128	4.519	4.519	(0.853)	76154	50.0000	48
31 Tetrahydrofuran	72	4.564	4.561	(0.861)	38802	100.000	92
35 Chloroform	83	4.573	4.573	(0.863)	286514	50.0000	48
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	146753	50.0000	50
37 1,1,1-Trichloroethane	97	4.747	4.750	(0.896)	238306	50.0000	48
38 Cyclohexane	56	4.805	4.805	(0.907)	243991	50.0000	48
39 1,1-Dichloropropene	110	4.885	4.885	(0.922)	79332	50.0000	48
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	200692	50.0000	49
41 Isobutyl Alcohol	43	4.920	4.924	(0.928)	125325	1000.00	890(A)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	34901	50.0000	49
43 Benzene	78	5.068	5.069	(0.956)	668606	50.0000	48
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	220622	50.0000	48
45 tert-Amyl methyl ether	73	5.142	5.143	(0.970)	413771	50.0000	49
M 50 1,2-Dichloroethene (Total)	96				338550	100.000	95
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	594232	50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	158618	50.0000	47
48 Methylcyclohexane	83	5.818	5.818	(1.098)	221183	50.0000	49
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	179317	50.0000	48
51 Methyl Methacrylate	69	5.911	5.908	(1.115)	112853	50.0000	47
52 Dibromomethane	93	5.943	5.943	(1.121)	103384	50.0000	48
53 1,4-Dioxane	88	5.946	5.946	(1.122)	34635	1000.00	890(A)
54 Bromodichloromethane	83	6.078	6.078	(1.147)	220830	50.0000	49
55 2-Chloroethyl vinyl ether	63	6.506	6.509	(1.227)	1372	50.0000	33
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	270944	50.0000	50
57 4-Methyl-2-pentanone	43	6.641	6.641	(1.253)	150803	50.0000	46
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	577929	50.0000	50
59 Toluene	91	6.846	6.847	(1.292)	667395	50.0000	48
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.330)	238135	50.0000	50
61 Ethyl Methacrylate	69	7.126	7.126	(1.345)	163892	50.0000	49
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	146038	50.0000	48
63 Tetrachloroethene	164	7.409	7.409	(0.894)	123164	50.0000	47
64 1,3-Dichloropropane	76	7.419	7.419	(0.896)	253735	50.0000	48
65 2-Hexanone	43	7.489	7.490	(0.904)	112773	50.0000	47
66 Dibromochloromethane	129	7.657	7.657	(0.924)	160932	50.0000	50
67 1,2-Dibromoethane	107	7.792	7.792	(0.941)	149399	50.0000	49
69 1-Chlorohexane	91	8.277	8.277	(0.999)	189089	50.0000	47
* 68 Chlorobenzene-d5	117	8.284	8.287	(1.000)	417196	50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	414085	50.0000	48
71 1,1,1,2-Tetrachloroethane	131	8.399	8.400	(1.014)	144673	50.0000	49
72 Ethylbenzene	106	8.435	8.435	(1.018)	222328	50.0000	49
73 m,p-Xylene	106	8.560	8.560	(1.033)	548622	100.000	97
74 o-Xylene	106	9.007	9.007	(1.087)	267058	50.0000	49
75 Styrene	104	9.020	9.020	(1.089)	445343	50.0000	49

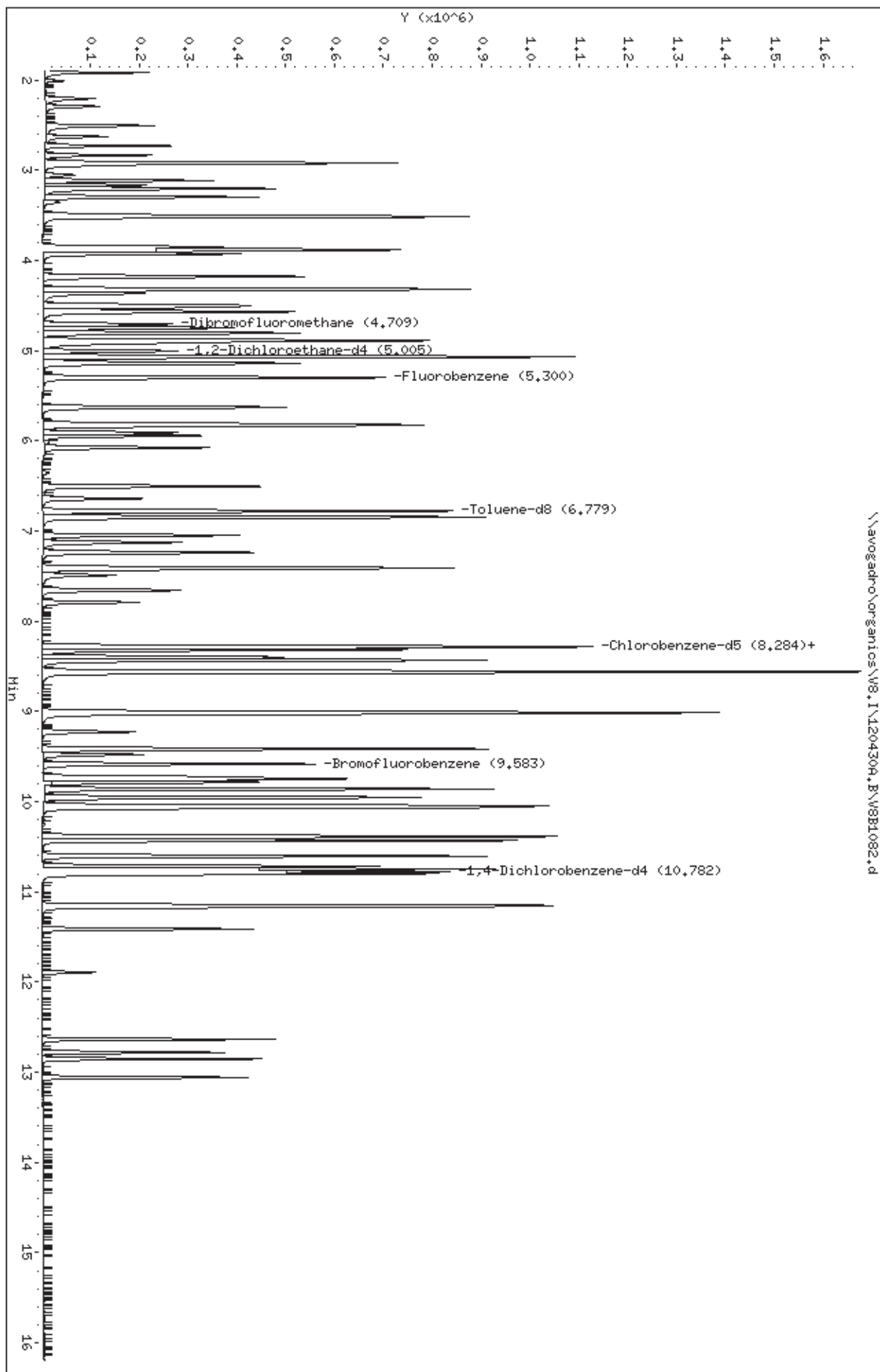
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.226	9.226 (1.114)		95504		50.0000	49
77 Isopropylbenzene	105	9.415	9.416 (1.137)		660324		50.0000	49
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480 (1.144)		54143		50.0000	47
\$ 79 Bromofluorobenzene	95	9.583	9.583 (1.157)		205030		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.727	9.728 (0.902)		188191		50.0000	47
81 Bromobenzene	156	9.750	9.750 (0.905)		161108		50.0000	48
82 1,2,3-Trichloropropane	75	9.782	9.782 (0.908)		222389		50.0000	46
83 n-Propylbenzene	120	9.862	9.859 (0.915)		170496		50.0000	49
84 2-Chlorotoluene	126	9.956	9.953 (0.924)		152780		50.0000	48
85 1,3,5-Trimethylbenzene	105	10.046	10.043 (0.932)		528369		50.0000	49
86 4-Chlorotoluene	126	10.065	10.068 (0.934)		155721		50.0000	48
M 94 Xylene (Total)	106				815680		150.000	150
87 tert-Butylbenzene	119	10.383	10.383 (0.963)		508878		50.0000	49
88 1,2,4-Trimethylbenzene	105	10.431	10.432 (0.968)		529075		50.0000	48
89 sec-Butylbenzene	105	10.605	10.605 (0.984)		647891		50.0000	49
90 1,3-Dichlorobenzene	146	10.718	10.715 (0.994)		277954		50.0000	47
91 4-Isopropyltoluene	119	10.750	10.750 (0.997)		516185		50.0000	49
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779 (1.000)		196925		50.0000	
93 1,4-Dichlorobenzene	146	10.804	10.805 (1.002)		283691		50.0000	46
95 n-Butylbenzene	91	11.148	11.149 (1.034)		477284		50.0000	50
96 1,2-Dichlorobenzene	146	11.168	11.165 (1.036)		266213		50.0000	47
97 Hexachloroethane	117	11.412	11.412 (1.059)		87656		50.0000	50
98 1,2-Dibromo-3-chloropropane	75	11.894	11.891 (1.104)		26372		50.0000	44
99 1,2,4-Trichlorobenzene	180	12.637	12.634 (1.172)		128869		50.0000	45
100 Hexachlorobutadiene	225	12.782	12.782 (1.186)		61465		50.0000	44
101 Naphthalene	128	12.853	12.853 (1.192)		307636		50.0000	44
102 1,2,3-Trichlorobenzene	180	13.058	13.059 (1.211)		111609		50.0000	44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W8.1\1204304.B\W8B1082.d
Date : 30-APR-2012 15:30
Client ID: WSTD050100
Sample Info: 5HL,WSTD050100,WSTD050100
Purge Volume: 5.0
Column phase: DB-624

Instrument: W8.i
Operator: SRC:
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V1.I\120423.B\V1M6283.D
 Lab Smp Id: BFB1Y Client Smp ID: BFB1Y
 Inj Date : 23-APR-2012 10:20
 Operator : V1 SRC: V1 Inst ID: V1.i
 Smp Info : 5ML,BFB1Y,BFB1Y
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V1.I\120423.B\bfb8260.m
 Meth Date : 23-Apr-2012 09:34 canderson Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 15 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf / Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS		TARGET RANGE	RATIO
					ON-COL (ug/L)	FINAL (ug/L)		
11.558	11.544 (0.000)	95	77096				0.00- 100.00	100.00
11.558	11.544 (0.000)	50	12947				15.00- 40.00	16.79
11.558	11.544 (0.000)	75	33448				30.00- 60.00	43.38
11.558	11.544 (0.000)	96	4685				5.00- 9.00	6.08
11.558	11.544 (0.000)	173	0	0.0	0.0		0.00- 2.00	0.00
11.558	11.544 (0.000)	174	61360				50.00- 0.00	79.59
11.558	11.544 (0.000)	175	4692				5.00- 9.00	7.65
11.558	11.544 (0.000)	176	60112				95.00- 101.00	97.97
11.558	11.544 (0.000)	177	4583				5.00- 9.00	7.62

CAS #: 460-00-4

Date : 23-APR-2012 10:20

Client ID: BFB1Y

Instrument: V1.i

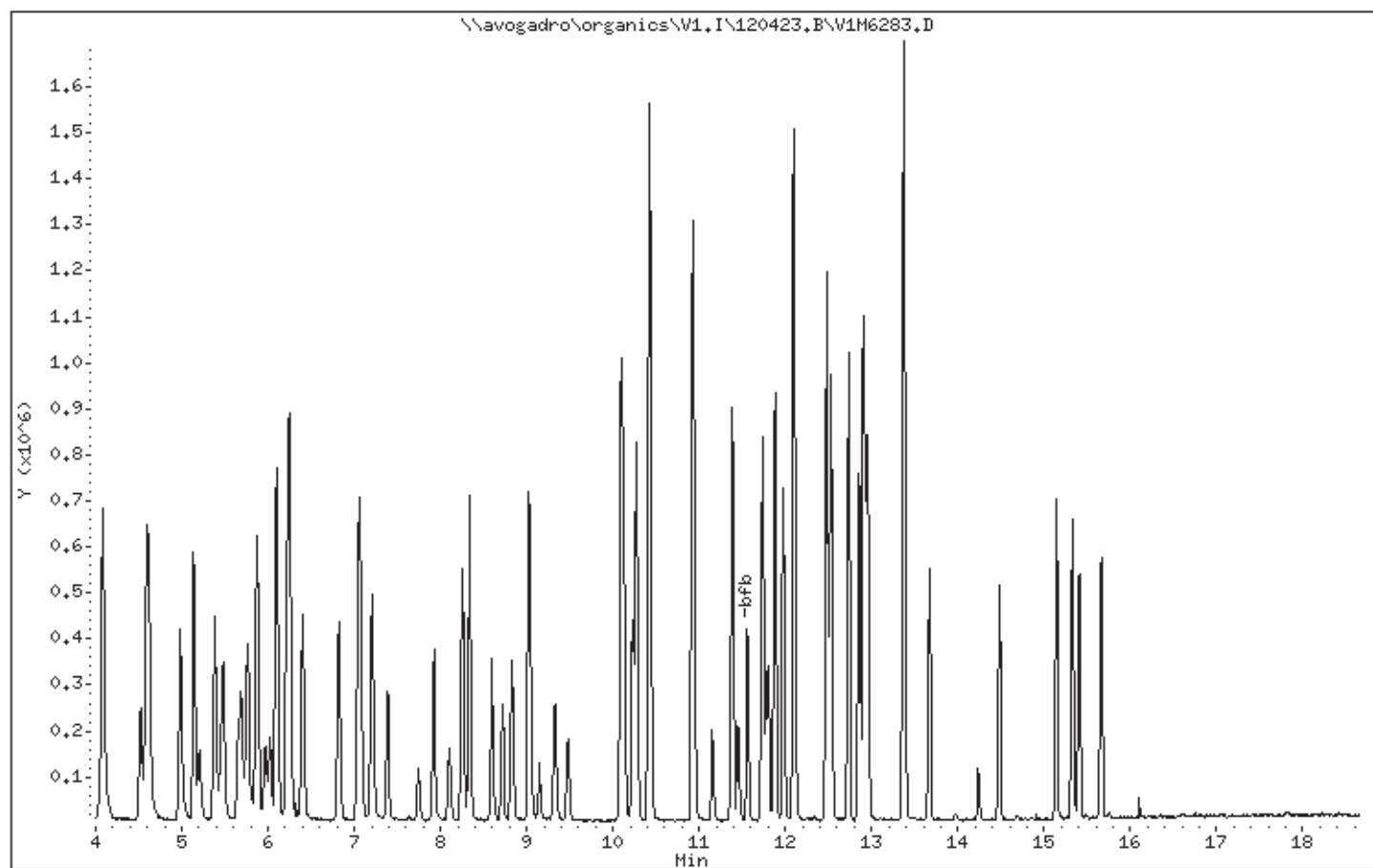
Sample Info: 5ML,BFB1Y,BFB1Y

Volume Injected (uL): 2.0

Operator: V1 SRC: V1

Column phase: DB-624

Column diameter: 0.25



Date : 23-APR-2012 10:20

Client ID: BFB1Y

Instrument: V1.i

Sample Info: 5HL,BFB1Y,BFB1Y

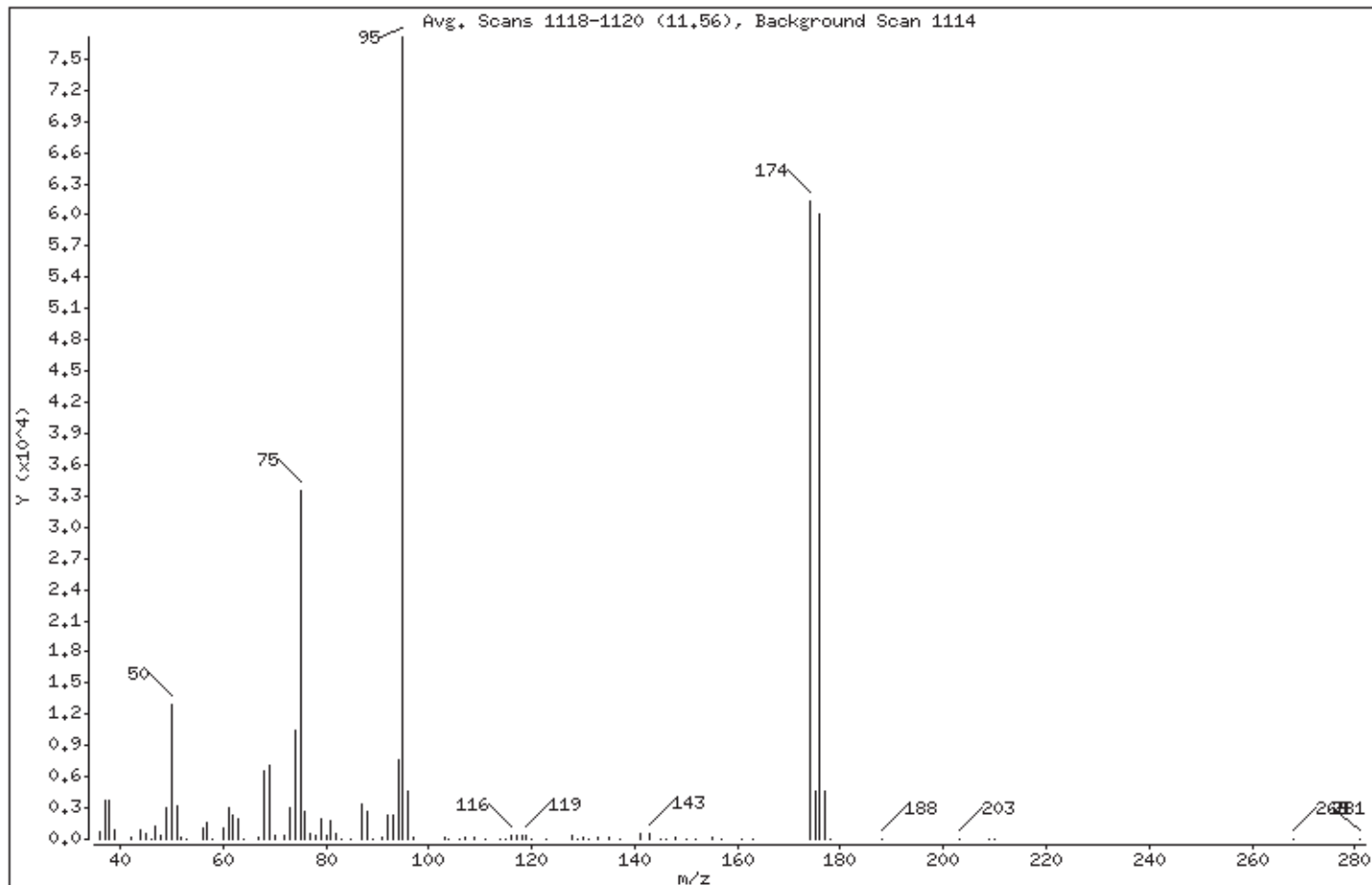
Volume Injected (uL): 2.0

Operator: V1 SRC: V1

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.79
75	30.00 - 60.00% of mass 95	43.38
96	5.00 - 9.00% of mass 95	6.08
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	79.59
175	5.00 - 9.00% of mass 174	6.09 (7.65)
176	95.00 - 101.00% of mass 174	77.97 (97.97)
177	5.00 - 9.00% of mass 176	5.94 (7.62)

Date : 23-APR-2012 10:20

Client ID: BFB1Y

Instrument: V1.i

Sample Info: 5HL,BFB1Y,BFB1Y

Volume Injected (uL): 2.0

Operator: V1 SRC: V1

Column phase: DB-624

Column diameter: 0.25

Data File: V1M6283.D

Spectrum: Avg. Scans 1118-1120 (11.56), Background Scan 1114

Location of Maximum: 95.00

Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	672	68.00	6472	96.00	4685	143.00	582
37.00	3710	69.00	7072	97.00	143	145.00	63
38.00	3640	70.00	277	103.00	140	146.00	86
39.00	926	72.00	384	104.00	7	148.00	180
42.00	124	73.00	3054	106.00	65	150.00	82

44.00	862	74.00	10443	107.00	107	152.00	85
45.00	598	75.00	33448	109.00	137	155.00	153
46.00	67	76.00	2572	111.00	74	157.00	54
47.00	1175	77.00	607	114.00	56	161.00	67
48.00	298	78.00	409	115.00	53	163.00	60

49.00	3066	79.00	2005	116.00	407	174.00	61360
50.00	12947	80.00	310	117.00	399	175.00	4692
51.00	3277	81.00	1691	118.00	288	176.00	60112
52.00	165	82.00	527	119.00	309	177.00	4583
53.00	10	83.00	53	120.00	52	178.00	84

56.00	1089	85.00	65	123.00	62	188.00	53
57.00	1610	87.00	3339	128.00	286	203.00	78
58.00	60	88.00	2729	129.00	88	209.00	55
60.00	978	89.00	69	130.00	255	210.00	54
61.00	3065	91.00	146	131.00	71	268.00	58

62.00	2330	92.00	2306	133.00	137	281.00	50
63.00	1972	93.00	2245	135.00	105		
64.00	25	94.00	7681	137.00	52		
67.00	245	95.00	77096	141.00	467		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V1.I\120423A.B\V1M6290.D
 Lab Smp Id: BFB1Z Client Smp ID: BFB1Z
 Inj Date : 23-APR-2012 14:32
 Operator : V1 SRC: V1 Inst ID: V1.i
 Smp Info : 5ML,BFB1Z,BFB1Z
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V1.I\120423A.B\bfb8260.m
 Meth Date : 24-Apr-2012 09:38 canderson Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: SOIL
 Processing Host: TARGET102

Concentration Formula: Amt * DF * Uf * Vf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	REL RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
					(ug/L)	(ug/Kg)			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
5.945	6.000	(0.000)	95	113456			0.00-	100.00	100.00
5.945	6.000	(0.000)	50	19312			15.00-	40.00	17.02
5.945	6.000	(0.000)	75	50424			30.00-	60.00	44.44
5.945	6.000	(0.000)	96	7289			5.00-	9.00	6.42
5.945	6.000	(0.000)	173	0	0.0	0.0	0.00-	2.00	0.00
5.945	6.000	(0.000)	174	85704			50.00-	0.00	75.54
5.945	6.000	(0.000)	175	6836			5.00-	9.00	7.98
5.945	6.000	(0.000)	176	85968			95.00-	101.00	100.31
5.945	6.000	(0.000)	177	5572			5.00-	9.00	6.48

Date : 23-APR-2012 14:32

Client ID: BFB1Z

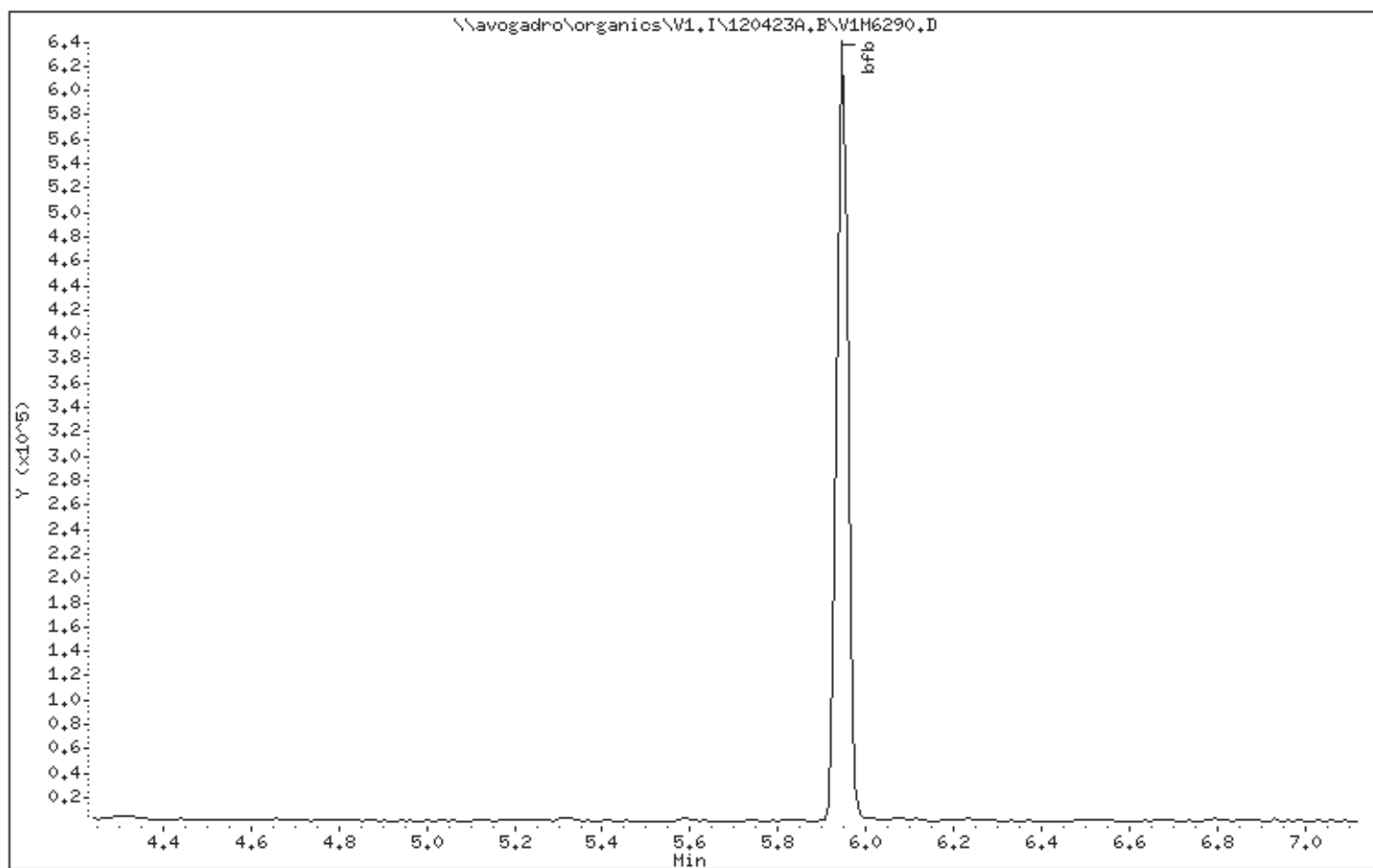
Instrument: V1.i

Sample Info: 5HL,BFB1Z,BFB1Z

Operator: V1 SRC: V1

Column phase: DB-624

Column diameter: 0.25



Date : 23-APR-2012 14:32

Client ID: BFB1Z

Instrument: V1.i

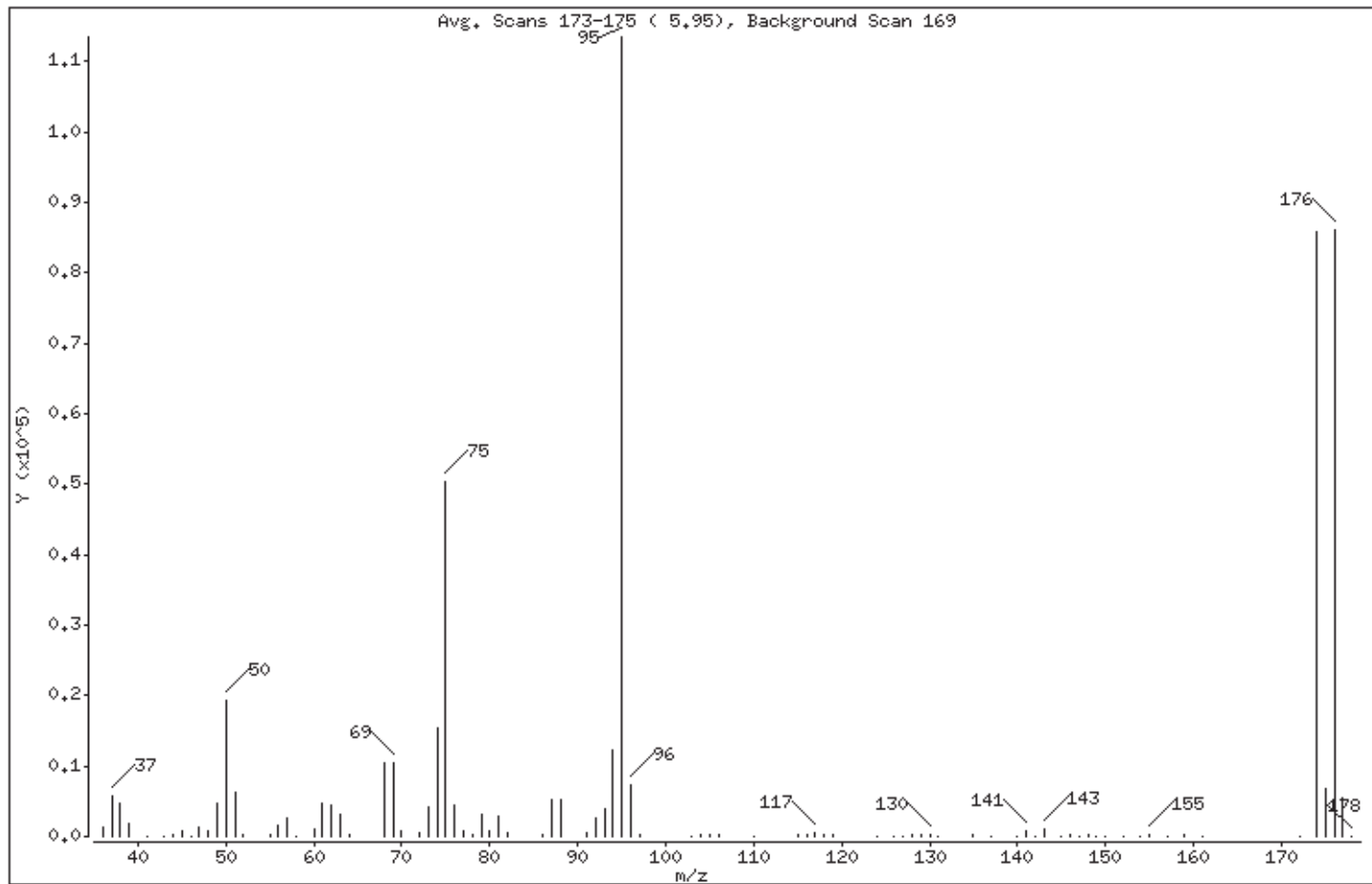
Sample Info: 5HL,BFB1Z,BFB1Z

Operator: V1 SRC: V1

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.02
75	30.00 - 60.00% of mass 95	44.44
96	5.00 - 9.00% of mass 95	6.42
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	75.54
175	5.00 - 9.00% of mass 174	6.03 (7.98)
176	95.00 - 101.00% of mass 174	75.77 (100.31)
177	5.00 - 9.00% of mass 176	4.91 (6.48)

Date : 23-APR-2012 14:32

Client ID: BFB1Z

Instrument: V1.i

Sample Info: 5HL,BFB1Z,BFB1Z

Operator: V1 SRC: V1

Column phase: DB-624

Column diameter: 0.25

Data File: V1M6290.D

Spectrum: Avg. Scans 173-175 (5.95), Background Scan 169

Location of Maximum: 95.00

Number of points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	1323	64.00	353	96.00	7289	142.00	88
37.00	5694	68.00	10310	97.00	229	143.00	1010
38.00	4663	69.00	10434	103.00	35	145.00	54
39.00	1916	70.00	720	104.00	352	146.00	237
41.00	106	72.00	472	105.00	230	147.00	35

43.00	89	73.00	4102	106.00	388	148.00	189
44.00	272	74.00	15384	110.00	35	149.00	96
45.00	911	75.00	50424	115.00	151	150.00	78
46.00	39	76.00	4419	116.00	285	152.00	57
47.00	1226	77.00	698	117.00	632	154.00	70

48.00	905	78.00	340	118.00	294	155.00	286
49.00	4657	79.00	3162	119.00	369	157.00	119
50.00	19312	80.00	821	124.00	37	159.00	171
51.00	6299	81.00	2922	126.00	41	161.00	47
52.00	342	82.00	552	127.00	47	172.00	92

55.00	187	86.00	176	128.00	383	174.00	85704
56.00	1635	87.00	5332	129.00	156	175.00	6836
57.00	2669	88.00	5260	130.00	388	176.00	85968
58.00	105	91.00	442	131.00	72	177.00	5572
60.00	1071	92.00	2609	135.00	199	178.00	35

61.00	4584	93.00	3969	137.00	98		
62.00	4304	94.00	12277	140.00	62		
63.00	3059	95.00	113456	141.00	857		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V8.I\120430.B\V8B1070.d
 Lab Smp Id: BFB10N Client Smp ID: BFB10N
 Inj Date : 30-APR-2012 08:37
 Operator : SRC: Inst ID: V8.i
 Smp Info : 5ML,BFB10N,BFB10N
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V8.I\120430.B\BFBSOM_V10.m
 Meth Date : 01-May-2012 10:42 adatta Quant Type: ISTD
 Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	REL RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
					(ug/L)				
1 bfb									
						CAS #: 460-00-4			
4.874	4.800 (0.000)	95	1736192				0.00- 100.00	100.00	
4.874	4.800 (0.000)	50	453440				15.00- 40.00	26.12	
4.874	4.800 (0.000)	75	923392				30.00- 80.00	53.18	
4.874	4.800 (0.000)	96	113408				5.00- 9.00	6.53	
4.874	4.800 (0.000)	173	8235				0.00- 2.00	0.80	
4.874	4.800 (0.000)	174	1030976				50.00- 120.00	59.38	
4.874	4.800 (0.000)	175	76632				5.00- 9.00	7.43	
4.874	4.800 (0.000)	176	1015808				95.00- 101.00	98.53	
4.874	4.800 (0.000)	177	65688				5.00- 9.00	6.47	

Date : 30-APR-2012 08:37

Client ID: BFB10N

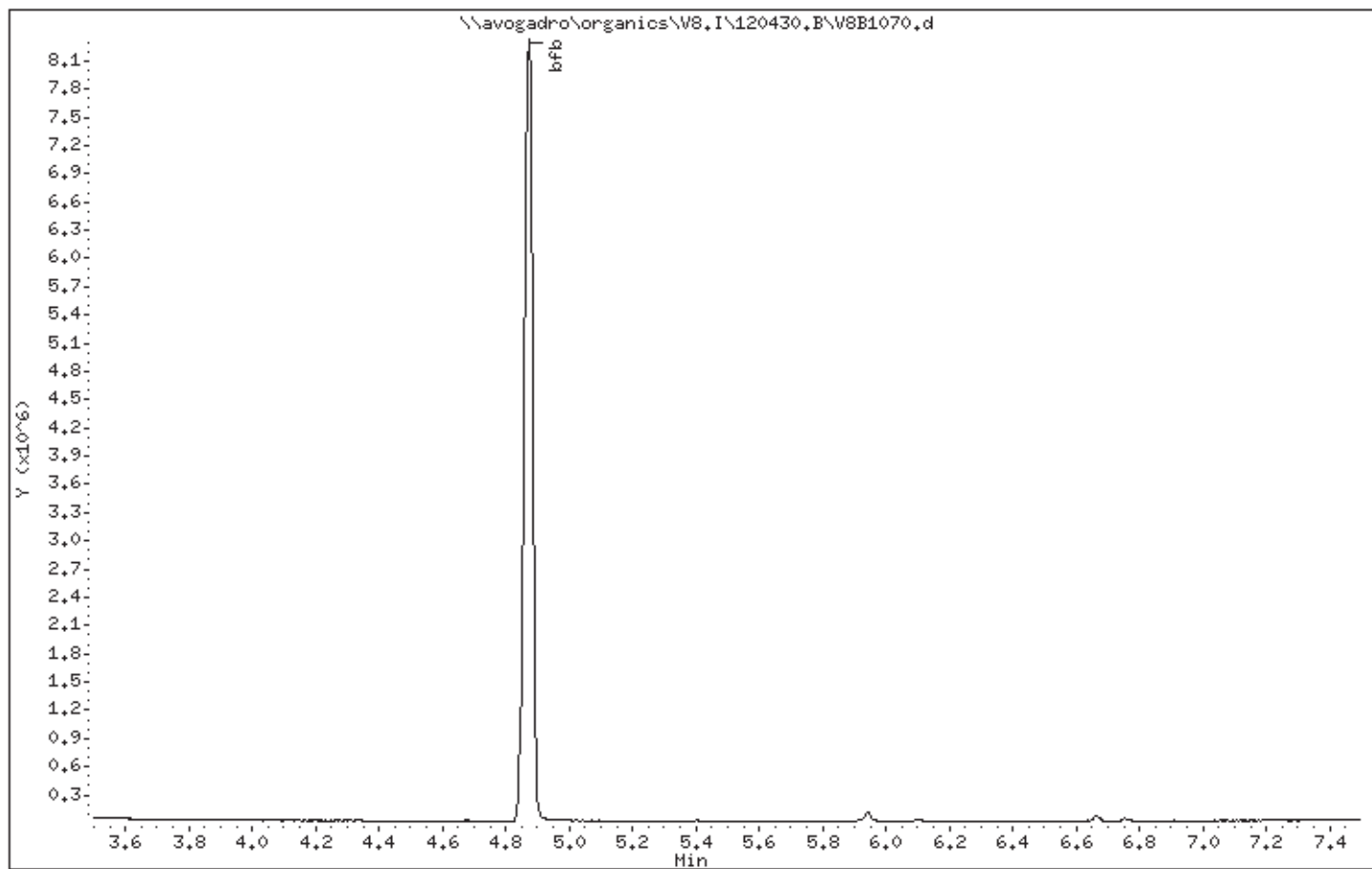
Instrument: V8.i

Sample Info: 5HL,BFB10N,BFB10N

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Date : 30-APR-2012 08:37

Client ID: BFB10N

Instrument: V8.i

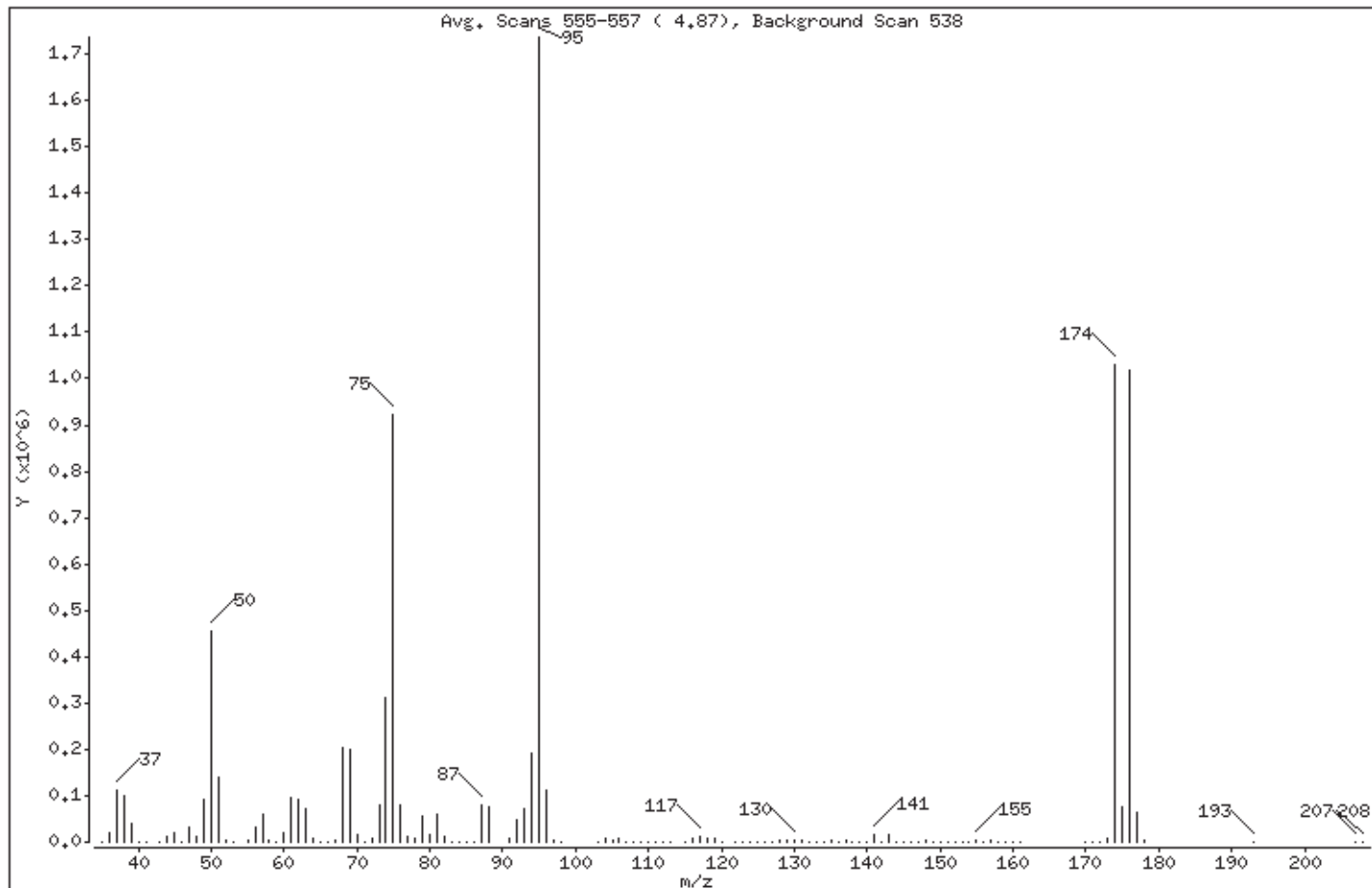
Sample Info: 5HL,BFB10N,BFB10N

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.12
75	30.00 - 80.00% of mass 95	53.18
96	5.00 - 9.00% of mass 95	6.53
173	Less than 2.00% of mass 174	0.47 (0.80)
174	50.00 - 120.00% of mass 95	59.38
175	5.00 - 9.00% of mass 174	4.41 (7.43)
176	95.00 - 101.00% of mass 174	58.51 (98.53)
177	5.00 - 9.00% of mass 176	3.78 (6.47)

Date : 30-APR-2012 08:37

Client ID: BFB10N

Instrument: V8.i

Sample Info: 5HL,BFB10N,BFB10N

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

Data File: V8B1070.d

Spectrum: Avg. Scans 555-557 (4.87), Background Scan 538

Location of Maximum: 95.00

Number of points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y

35.00	62	70.00	14751	109.00	134	144.00	1073
36.00	19960	71.00	581	110.00	1050	145.00	1217
37.00	112904	72.00	9037	111.00	1438	146.00	1644
38.00	101104	73.00	78384	112.00	1189	147.00	904
39.00	40768	74.00	312512	113.00	1488	148.00	3391

40.00	929	75.00	923392	115.00	1530	149.00	880
41.00	409	76.00	78152	116.00	6029	150.00	1579
43.00	940	77.00	10347	117.00	10093	151.00	134
44.00	13325	78.00	6749	118.00	6022	152.00	488
45.00	20320	79.00	55320	119.00	8245	153.00	918

46.00	1363	80.00	15135	120.00	317	154.00	756
47.00	32248	81.00	58136	122.00	285	155.00	3232
48.00	12543	82.00	11514	123.00	504	156.00	491
49.00	92144	83.00	1354	124.00	953	157.00	2119
50.00	453440	84.00	272	125.00	457	158.00	118

51.00	138304	85.00	89	126.00	766	159.00	1583
52.00	5508	86.00	1770	127.00	384	160.00	115
53.00	165	87.00	79776	128.00	5723	161.00	1445
55.00	5600	88.00	73920	129.00	2467	170.00	225
56.00	30880	91.00	6112	130.00	5742	171.00	60

57.00	58520	92.00	45936	131.00	2053	172.00	410
58.00	2384	93.00	71152	132.00	306	173.00	8235
59.00	306	94.00	193536	133.00	140	174.00	1030976
60.00	18312	95.00	1736192	134.00	347	175.00	76632
61.00	95248	96.00	113408	135.00	2809	176.00	1015808

62.00	92032	97.00	3081	136.00	505	177.00	65688
63.00	70776	98.00	20	137.00	2683	178.00	2146
64.00	6425	103.00	803	138.00	115	193.00	58
65.00	395	104.00	6861	139.00	417	207.00	68
66.00	157	105.00	2038	140.00	876	208.00	50

67.00	4175	106.00	7099	141.00	15755		
68.00	202368	107.00	1562	142.00	1747		
69.00	200640	108.00	51	143.00	15570		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V8.I\120430A.B\V8B1081.d
Lab Smp Id: BFB100 Client Smp ID: BFB100
Inj Date : 30-APR-2012 15:02
Operator : SRC: Inst ID: V8.i
Smp Info : 5ML,BFB100,BFB100
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430A.B\BFBSOM_V10.m
Meth Date : 01-May-2012 11:05 adatta Quant Type: ISTD
Cal Date : 25-JAN-2006 16:13 Cal File: V5G4422.D
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb						CAS #: 460-00-4			
4.867	4.800 (0.000)		95	1399808			0.00-	100.00	100.00
4.867	4.800 (0.000)		50	369216			15.00-	40.00	26.38
4.867	4.800 (0.000)		75	753536			30.00-	80.00	53.83
4.867	4.800 (0.000)		96	92264			5.00-	9.00	6.59
4.867	4.800 (0.000)		173	6097			0.00-	2.00	0.75
4.867	4.800 (0.000)		174	812736			50.00-	120.00	58.06
4.867	4.800 (0.000)		175	61760			5.00-	9.00	7.60
4.867	4.800 (0.000)		176	804800			95.00-	101.00	99.02
4.867	4.800 (0.000)		177	51472			5.00-	9.00	6.40

Date : 30-APR-2012 15:02

Client ID: BFB100

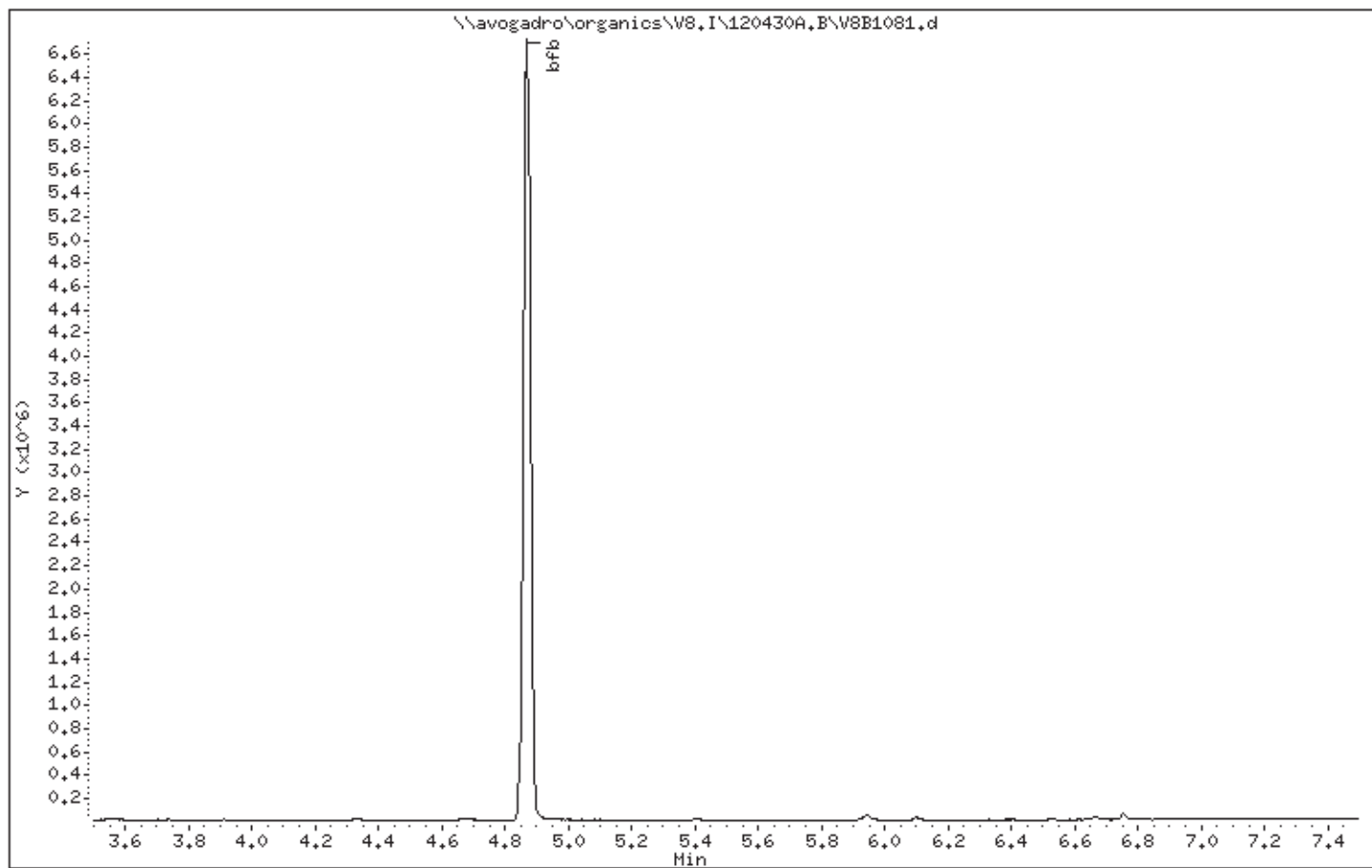
Instrument: V8.i

Sample Info: 5HL,BFB100,BFB100

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Date : 30-APR-2012 15:02

Client ID: BFB100

Instrument: V8.i

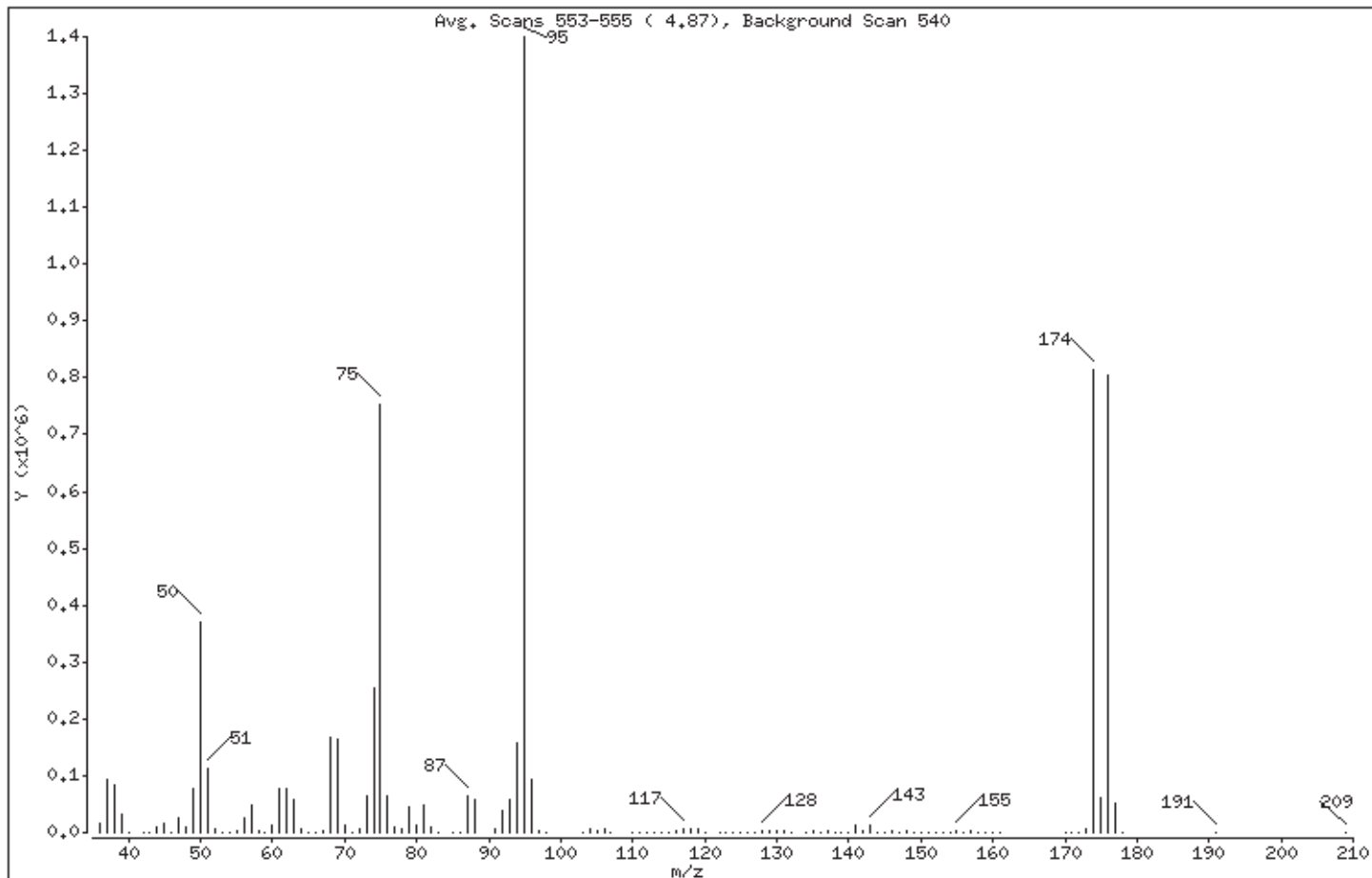
Sample Info: 5HL,BFB100,BFB100

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.38
75	30.00 - 80.00% of mass 95	53.83
96	5.00 - 9.00% of mass 95	6.59
173	Less than 2.00% of mass 174	0.44 (0.75)
174	50.00 - 120.00% of mass 95	58.06
175	5.00 - 9.00% of mass 174	4.41 (7.60)
176	95.00 - 101.00% of mass 174	57.49 (99.02)
177	5.00 - 9.00% of mass 176	3.68 (6.40)

Date : 30-APR-2012 15:02

Client ID: BFB100

Instrument: V8.i

Sample Info: 5HL,BFB100,BFB100

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

Data File: V8B1081.d

Spectrum: Avg. Scans 553-555 (4.87), Background Scan 540

Location of Maximum: 95.00

Number of points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	16744	69.00	165440	110.00	656	144.00	981
37.00	94864	70.00	12301	111.00	1203	145.00	1023
38.00	83920	71.00	540	112.00	903	146.00	1651
39.00	32744	72.00	7423	113.00	1001	147.00	830
40.00	1068	73.00	64856	114.00	63	148.00	2593

42.00	140	74.00	254592	115.00	1291	149.00	781
43.00	672	75.00	753536	116.00	4448	150.00	1316
44.00	11049	76.00	63912	117.00	7628	151.00	69
45.00	17008	77.00	8551	118.00	5206	152.00	511
46.00	821	78.00	5562	119.00	6641	153.00	654

47.00	25432	79.00	45520	120.00	313	154.00	588
48.00	11019	80.00	11923	122.00	215	155.00	2378
49.00	76856	81.00	47096	123.00	438	156.00	312
50.00	369216	82.00	9889	124.00	909	157.00	1696
51.00	112552	83.00	833	125.00	356	158.00	106

52.00	4919	85.00	53	126.00	532	159.00	1332
53.00	102	86.00	1255	127.00	375	160.00	117
54.00	57	87.00	63968	128.00	4599	161.00	960
55.00	4138	88.00	59296	129.00	1905	170.00	123
56.00	25984	91.00	5102	130.00	4539	171.00	51

57.00	49856	92.00	38896	131.00	1684	172.00	574
58.00	2100	93.00	58120	132.00	221	173.00	6097
59.00	294	94.00	158912	134.00	284	174.00	812736
60.00	14199	95.00	1399808	135.00	2293	175.00	61760
61.00	75672	96.00	92264	136.00	271	176.00	804800

62.00	76032	97.00	2642	137.00	1964	177.00	51472
63.00	58272	98.00	107	138.00	121	178.00	1200
64.00	5223	103.00	694	139.00	426	191.00	64
65.00	368	104.00	6504	140.00	869	209.00	50
66.00	183	105.00	1955	141.00	12198		

67.00	3642	106.00	6023	142.00	1685		
68.00	166208	107.00	1405	143.00	12958		

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-65753

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: MB-65753
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V1M6297.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-65753

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: _____ SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: MB-65753
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V1M6297.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec. 0.0	Date Analyzed: 04/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 10.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

Data File: \\avogadro\organics\V1.I\120423A.B\V1M6297.D
Report Date: 24-Apr-2012 09:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423A.B\V1M6297.D
Lab Smp Id: MB-65753 Client Smp ID: MB-65753
Inj Date : 23-APR-2012 17:37
Operator : V1 SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-65753,MB-65753,65753
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423A.B\v18260GH.m
Meth Date : 24-Apr-2012 09:38 canderson Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 19 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * 5 / (\text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/Kg)
16 Methylene Chloride	84	3.792	3.811	(0.593)	3555	1.01709	1(a)
\$ 32 Dibromofluoromethane	113	5.644	5.663	(0.883)	139598	50.4024	50
\$ 37 1,2-Dichloroethane-d4	102	6.018	6.037	(0.941)	27774	51.7751	52
* 41 Fluorobenzene	96	6.392	6.411	(1.000)	491898	50.0000	
\$ 51 Toluene-d8	98	8.254	8.253	(0.818)	466396	49.4179	49
* 60 Chlorobenzene-d5	117	10.086	10.085	(1.000)	343721	50.0000	
\$ 70 Bromofluorobenzene	95	11.553	11.553	(1.146)	166132	47.5772	48
* 84 1,4-Dichlorobenzene-d4	152	12.922	12.922	(1.000)	190326	50.0000	(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\VL1\1204234.B\VL1M6297.D

Date : 23-APR-2012 17:37

Client ID: MB-65753

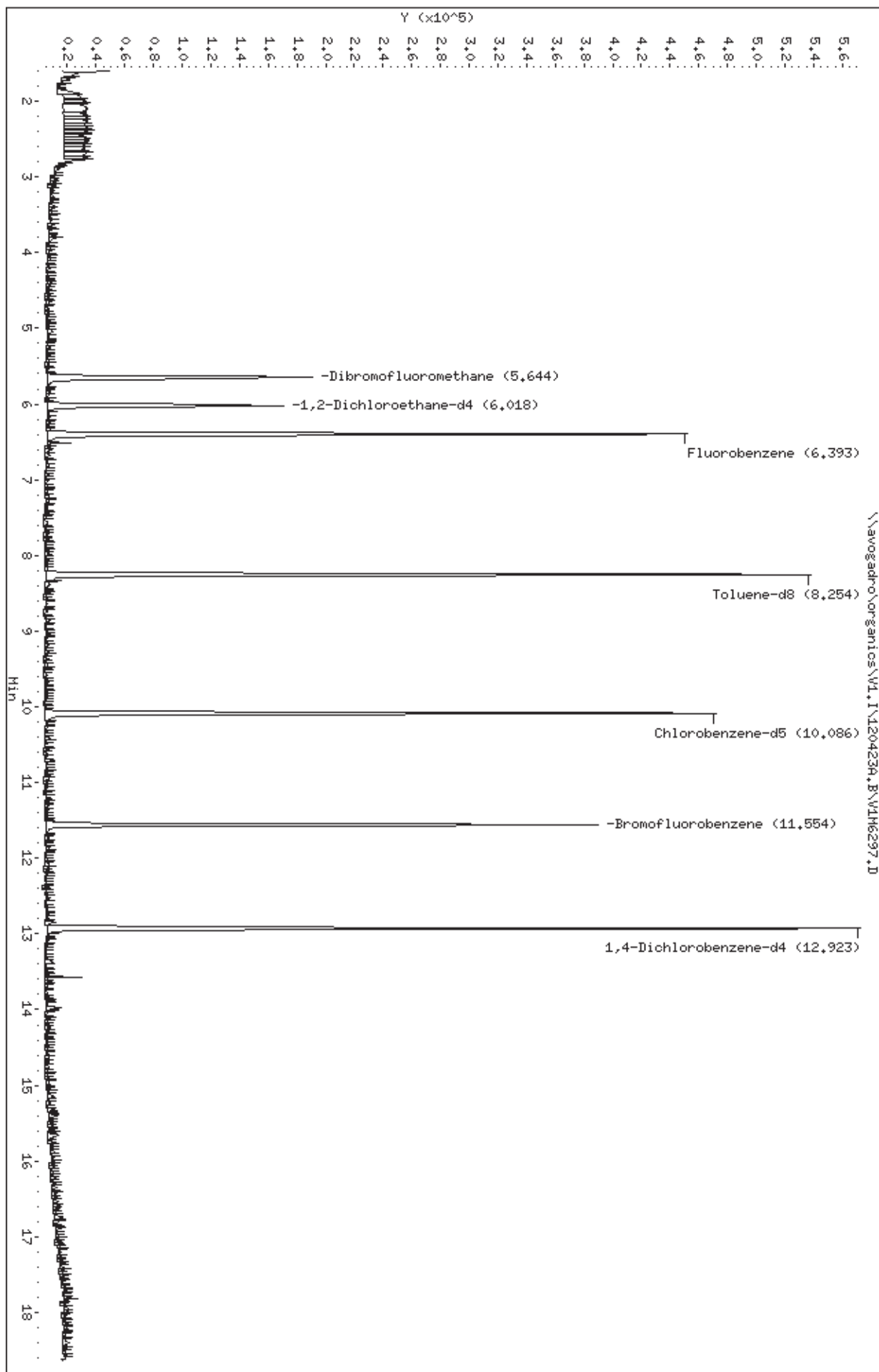
Sample Info: 5HL,MB-65753,MB-65753,65753

Column phase: DB-624

Instrument: VL.i

Operator: VL SRC: LIMS

Column diameter: 0.25



Data File: \\avogadro\organics\V1.I\120423A.B\V1M6297.D

Date : 23-APR-2012 17:37

Client ID: MB-65753

Instrument: V1.i

Sample Info: 5HL,MB-65753,MB-65753,65753

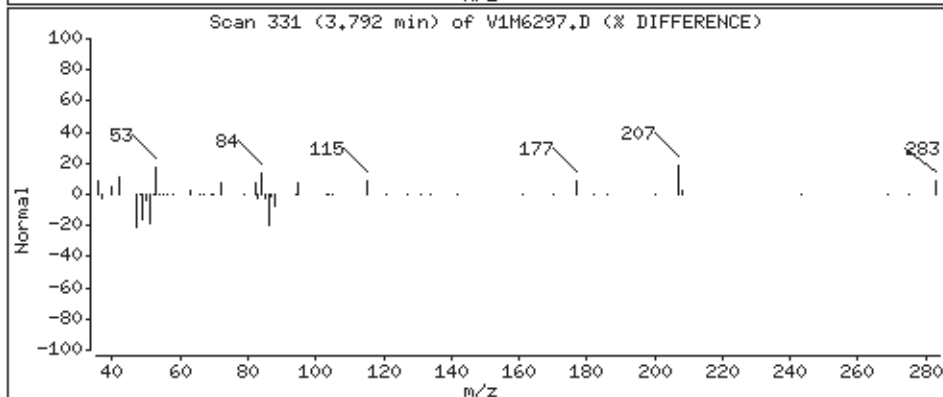
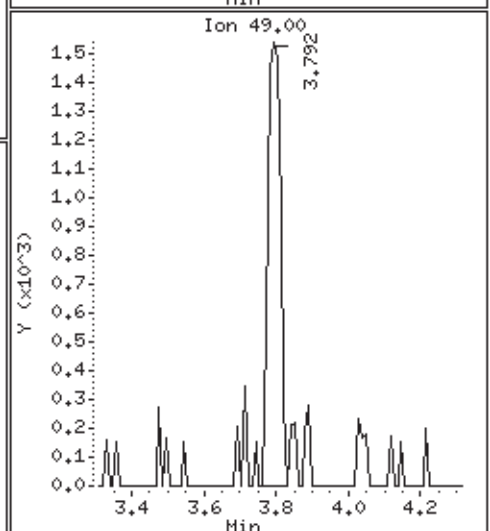
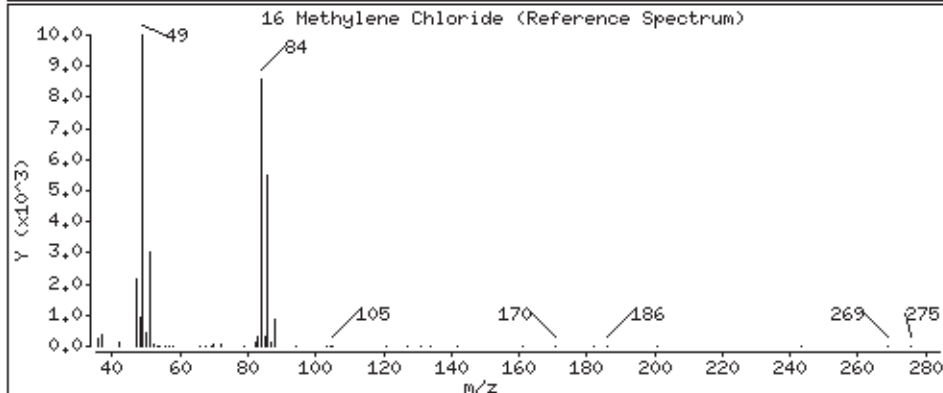
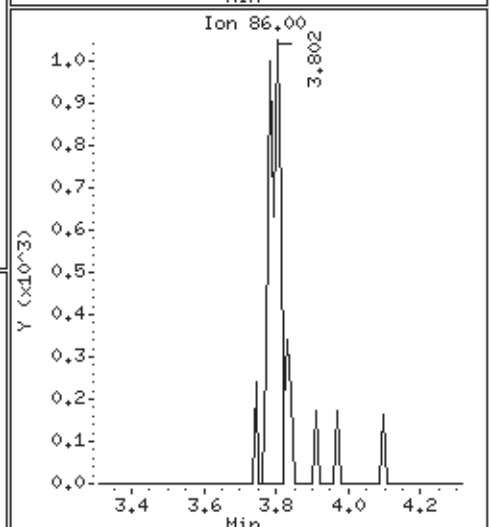
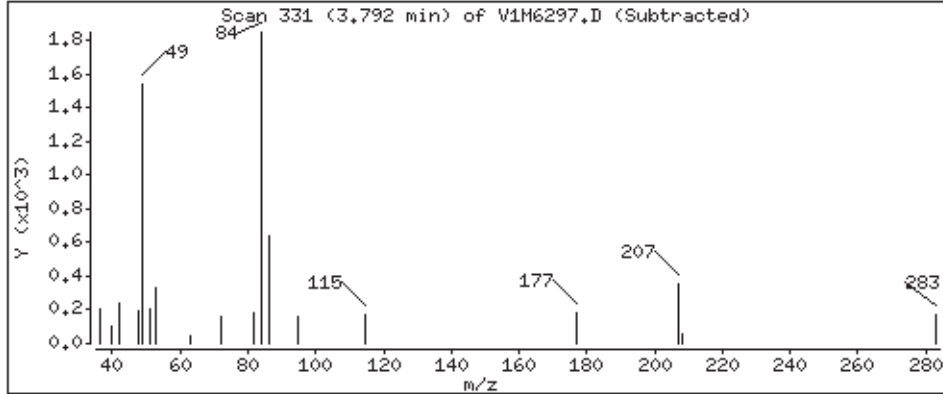
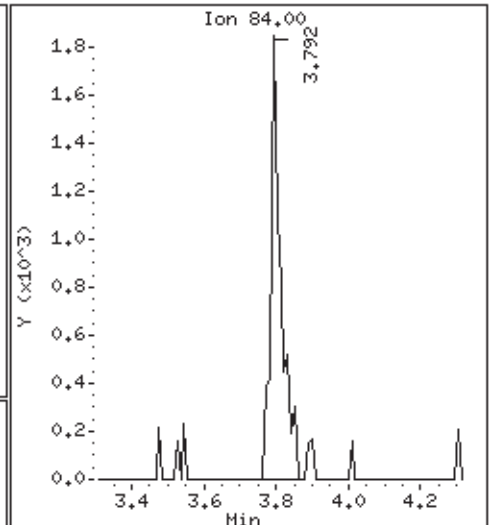
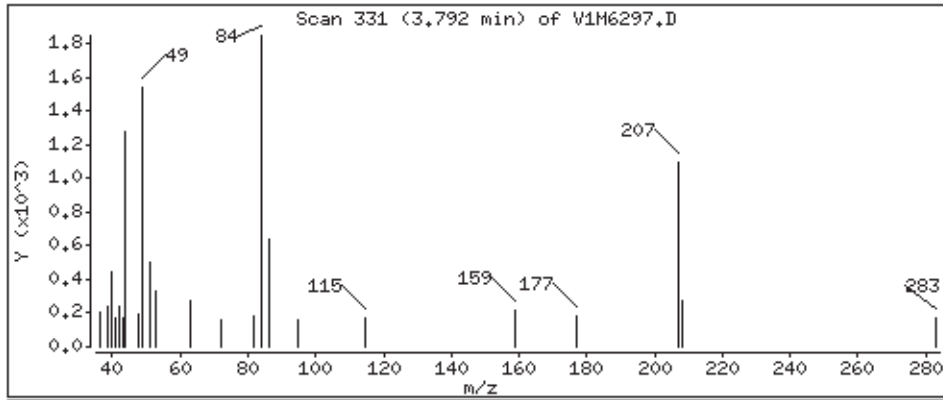
Operator: V1 SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

16 Methylene Chloride

Concentration: 1 ug/Kg



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-65899

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: MB-65899
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V8B1086.D
Level: (TRACE/LOW/MED) MED	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL)	Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	250	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U
74-88-4	Iodomethane	250	U
75-15-0	Carbon disulfide	250	U
75-09-2	Methylene chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
78-93-3	2-Butanone	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
594-20-7	2,2-Dichloropropane	250	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
563-58-6	1,1-Dichloropropene	250	U
56-23-5	Carbon tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
74-95-3	Dibromomethane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
142-28-9	1,3-Dichloropropane	250	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-65899

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: _____ SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: MB-65899
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V8B1086.D
Level: (TRACE/LOW/MED) MED	Date Received: _____
% Moisture: not dec. 0.0	Date Analyzed: 04/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL)	Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
179601-23-1	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
1330-20-7	Xylene (Total)	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
103-65-1	n-Propylbenzene	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	59	J
87-68-3	Hexachlorobutadiene	58	J
87-61-6	1,2,3-Trichlorobenzene	70	J
91-20-3	Naphthalene	56	J

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430A.B\V8B1086.d
Lab Smp Id: MB-65899 Client Smp ID: MB-65899
Inj Date : 30-APR-2012 17:30
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-65899,MB-65899,65899
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430A.B\v108260Gadd-6lvl.m
Meth Date : 04-May-2012 11:04 canderson Quant Type: ISTD
Cal Date : 30-APR-2012 13:59 Cal File: V8B1079.d
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:

$$\text{Amt} * \text{DF} * \text{Uf} * ((\text{Vt} + (\text{Ws} * \text{M} / 100)) * 5000) / (\text{Va} * \text{Ws} * ((100 - \text{M}) / 100)) * \text{CpndVariable}$$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ug/L)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 36 Dibromofluoromethane	113	4.708	4.705	(0.888)	143214	49.5345	2500	
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.004	(0.945)	34265	49.3073	2500	
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	585408	50.0000		
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	564095	50.6571	2500	
* 68 Chlorobenzene-d5	117	8.287	8.284	(1.000)	405279	50.0000		
\$ 79 Bromofluorobenzene	95	9.586	9.583	(1.157)	191873	47.9440	2400	
* 92 1,4-Dichlorobenzene-d4	152	10.782	10.779	(1.000)	173526	50.0000		
99 1,2,4-Trichlorobenzene	180	12.634	12.637	(1.172)	2946	1.17145	58(a)	
100 Hexachlorobutadiene	225	12.785	12.782	(1.186)	1421	1.16021	58(a)	
101 Naphthalene	128	12.856	12.853	(1.192)	6907	1.11632	56(a)	
102 1,2,3-Trichlorobenzene	180	13.062	13.058	(1.211)	3135	1.39440	70(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\V8.I\120430A.B\V8B1086.d
Report Date: 04-May-2012 11:04

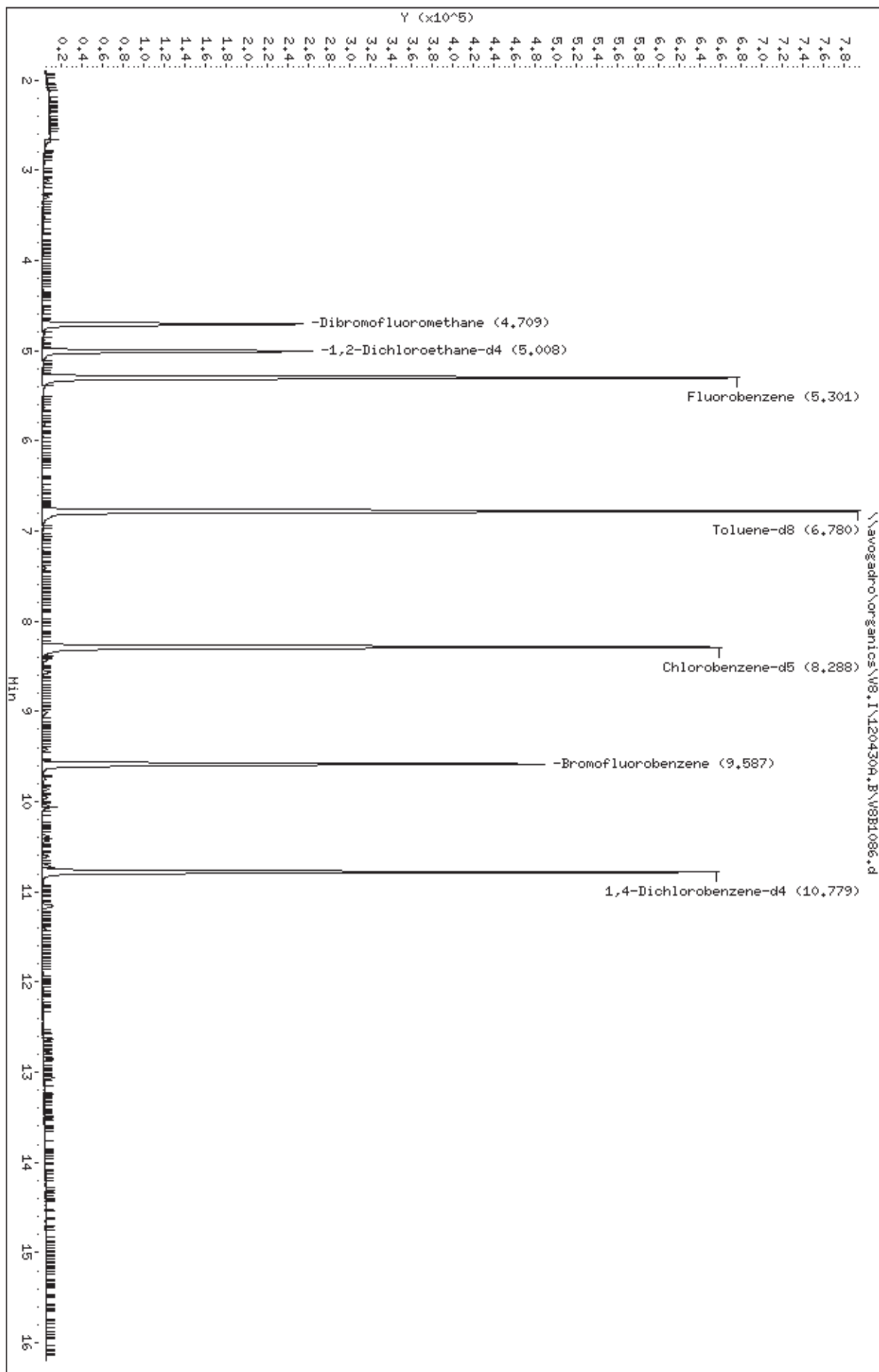
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430A.B\V8B1086.d
Lab Smp Id: MB-65899 Client Smp ID: MB-65899
Inj Date : 30-APR-2012 17:30
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML, MB-65899, MB-65899, 65899
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430A.B\v108260Gadd-6lvl.m
Meth Date : 04-May-2012 11:04 canderson Quant Type: ISTD
Cal Date : 30-APR-2012 13:59 Cal File: V8B1079.d
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W8,1\1204304,B\W8B1086.d
Date : 30-APR-2012 17:30
Client ID: MB-65899
Sample Info: 5HL,MB-65899,MB-65899,65899
Column phase: DB-624

Instrument: W8.i
Operator: SRC; LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V8.I\120430A.B\V8B1086.d

Date : 30-APR-2012 17:30

Client ID: MB-65899

Instrument: V8.i

Sample Info: 5HL,MB-65899,MB-65899,65899

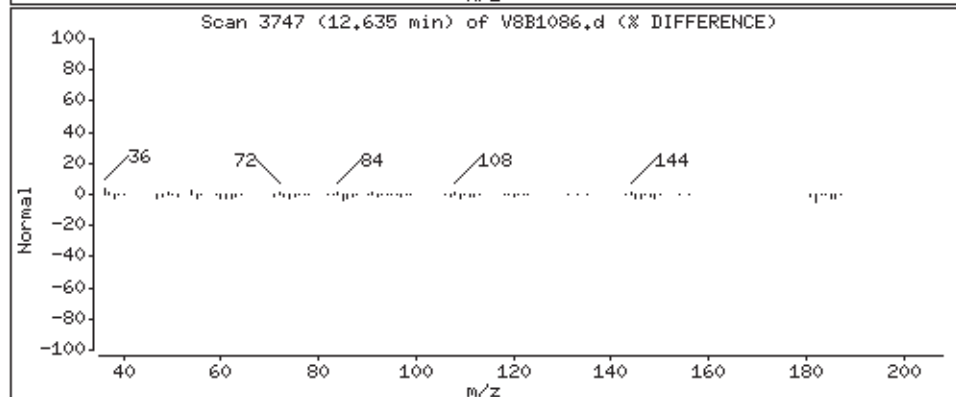
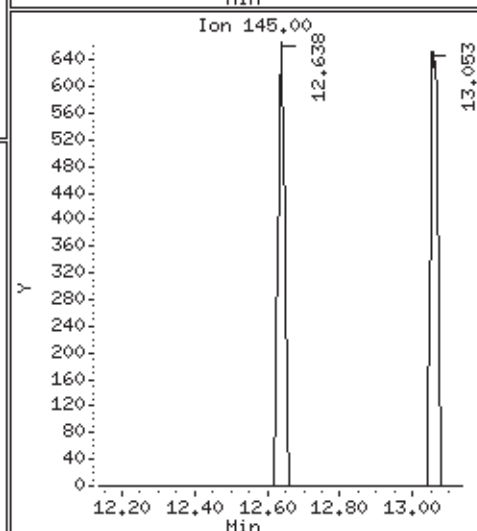
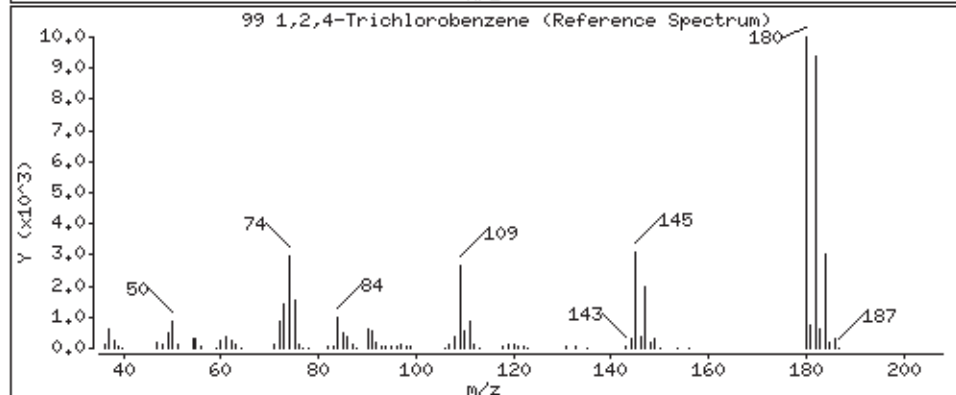
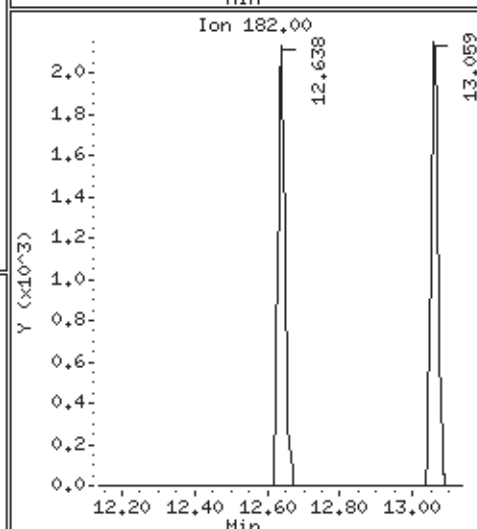
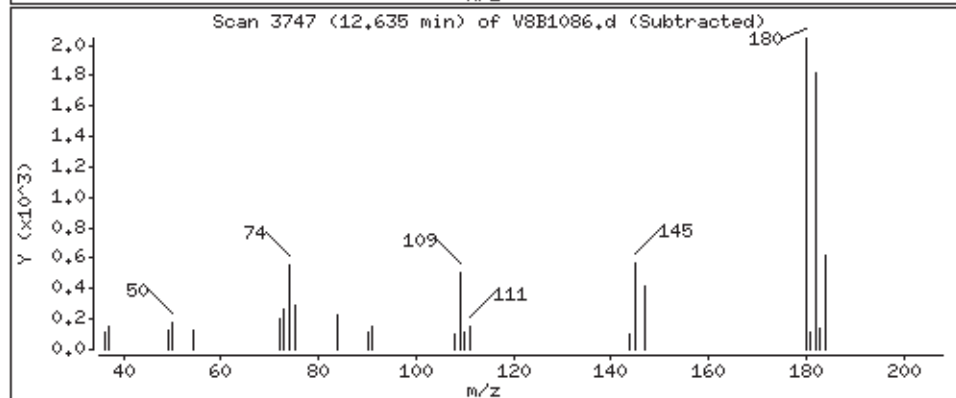
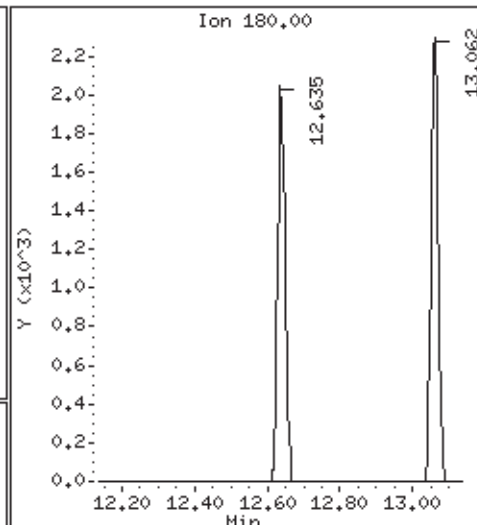
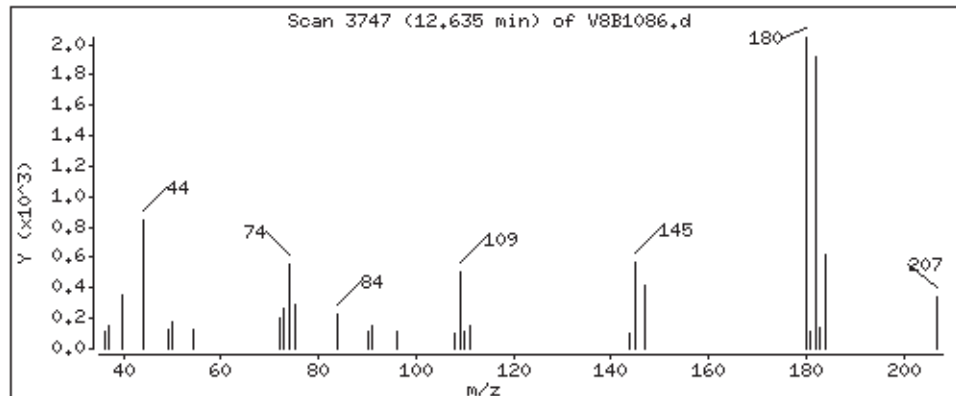
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

99 1,2,4-Trichlorobenzene

Concentration: 58 ug/Kg



Data File: \\avogadro\organics\V8.I\120430A.B\V8B1086.d

Date : 30-APR-2012 17:30

Client ID: MB-65899

Instrument: V8.i

Sample Info: 5HL,MB-65899,MB-65899,65899

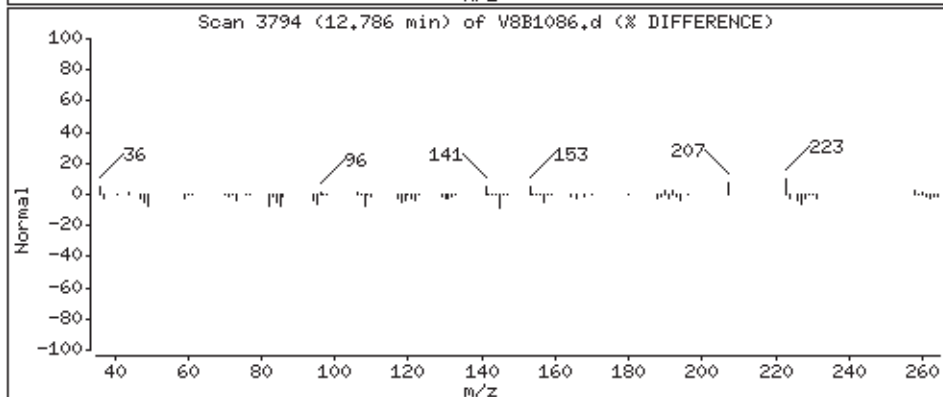
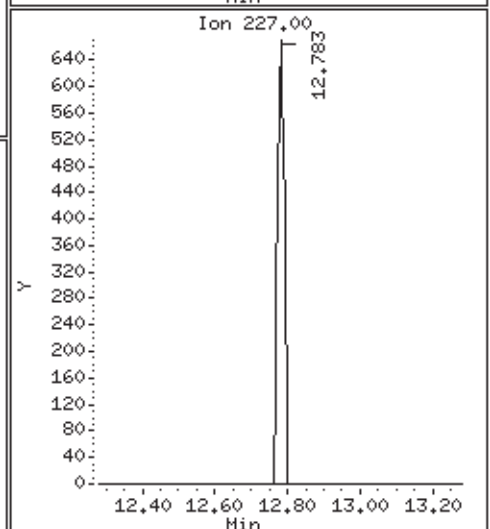
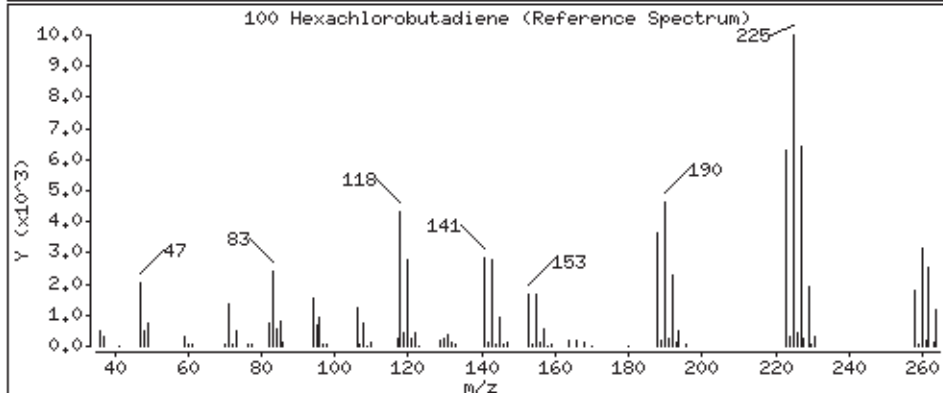
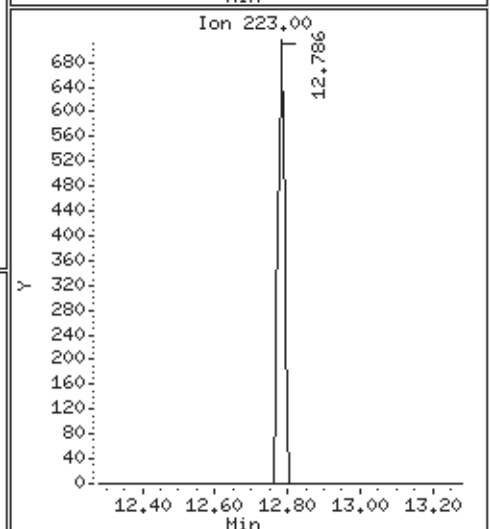
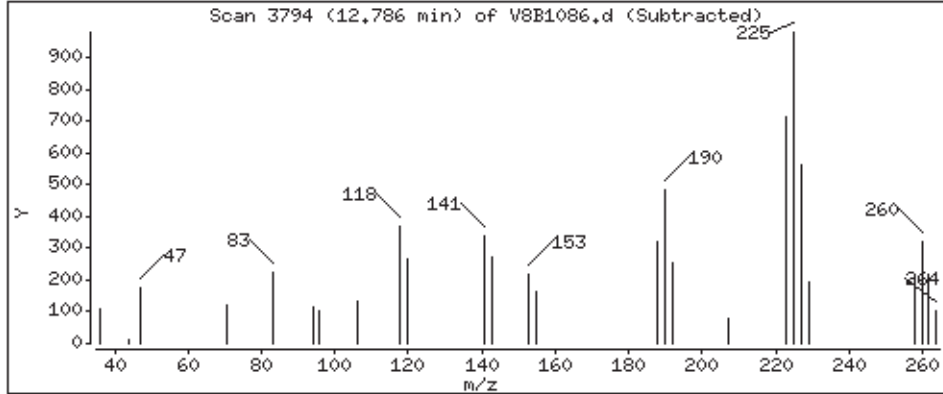
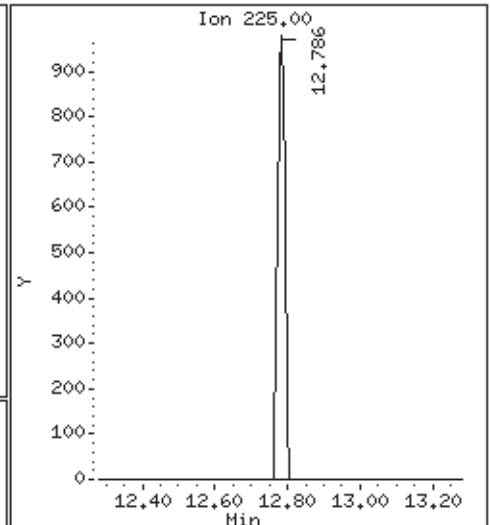
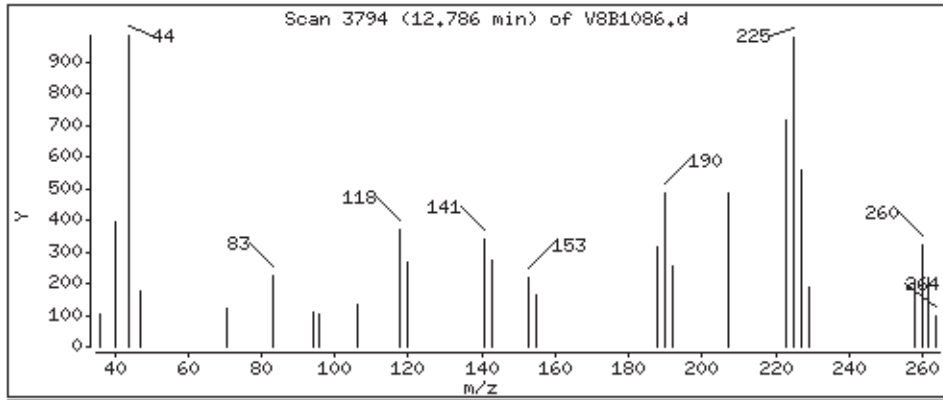
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

100 Hexachlorobutadiene

Concentration: 58 ug/Kg



Data File: \\avogadro\organics\V8.I\120430A.B\V8B1086.d

Date : 30-APR-2012 17:30

Client ID: MB-65899

Instrument: V8.i

Sample Info: 5HL,MB-65899,MB-65899,65899

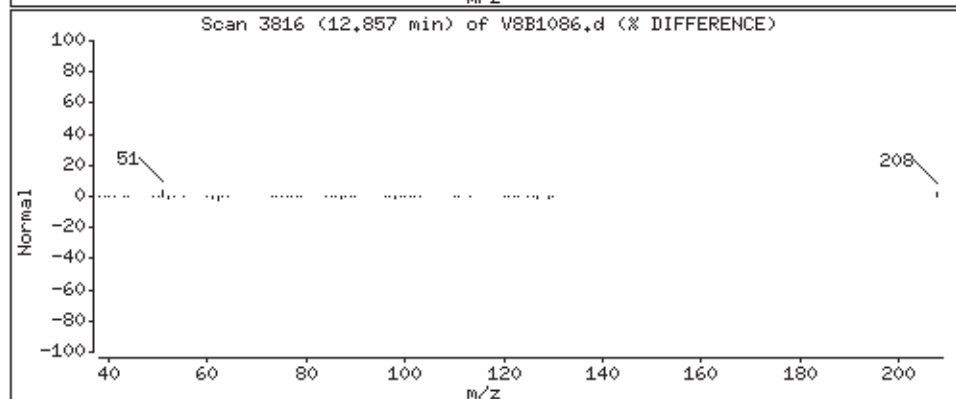
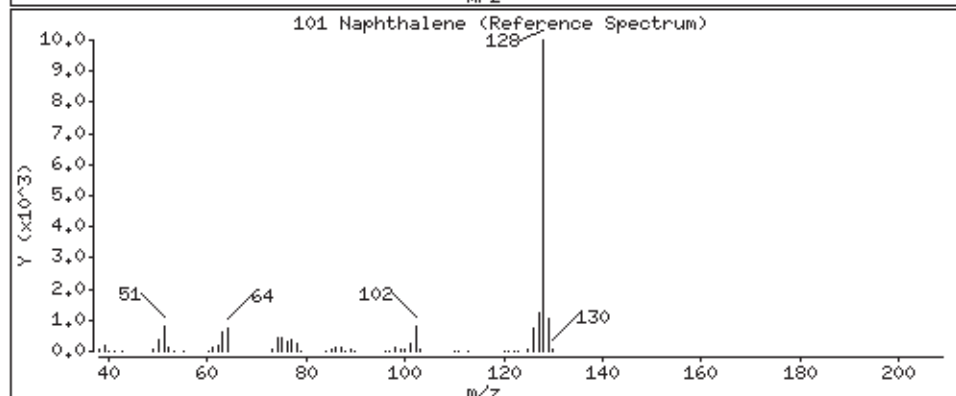
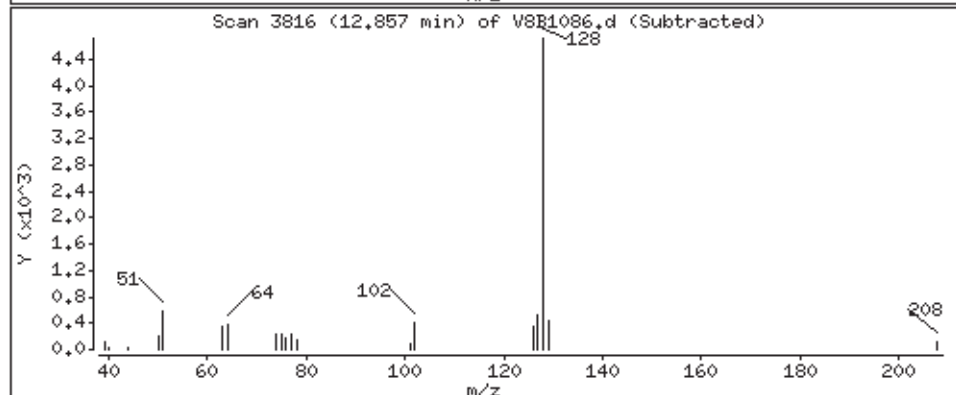
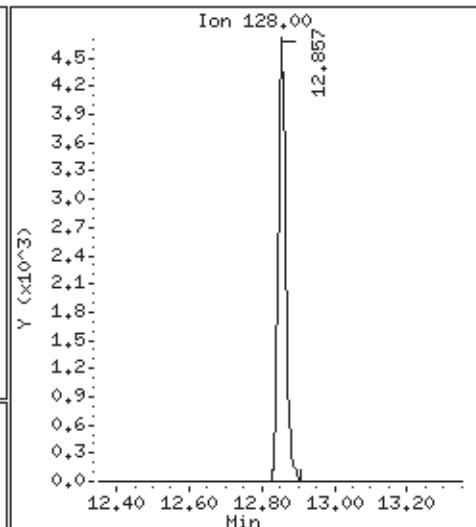
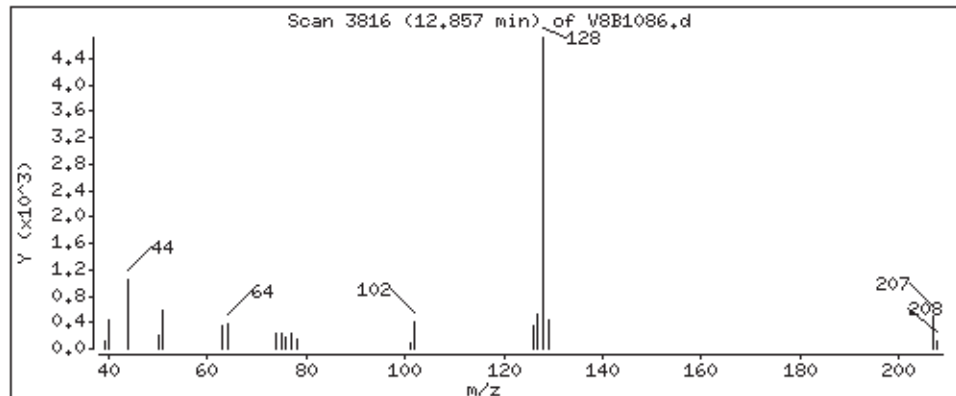
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

101 Naphthalene

Concentration: 56 ug/Kg



Data File: \\avogadro\organics\V8.I\120430A.B\V8B1086.d

Date : 30-APR-2012 17:30

Client ID: MB-65899

Instrument: V8.i

Sample Info: 5HL,MB-65899,MB-65899,65899

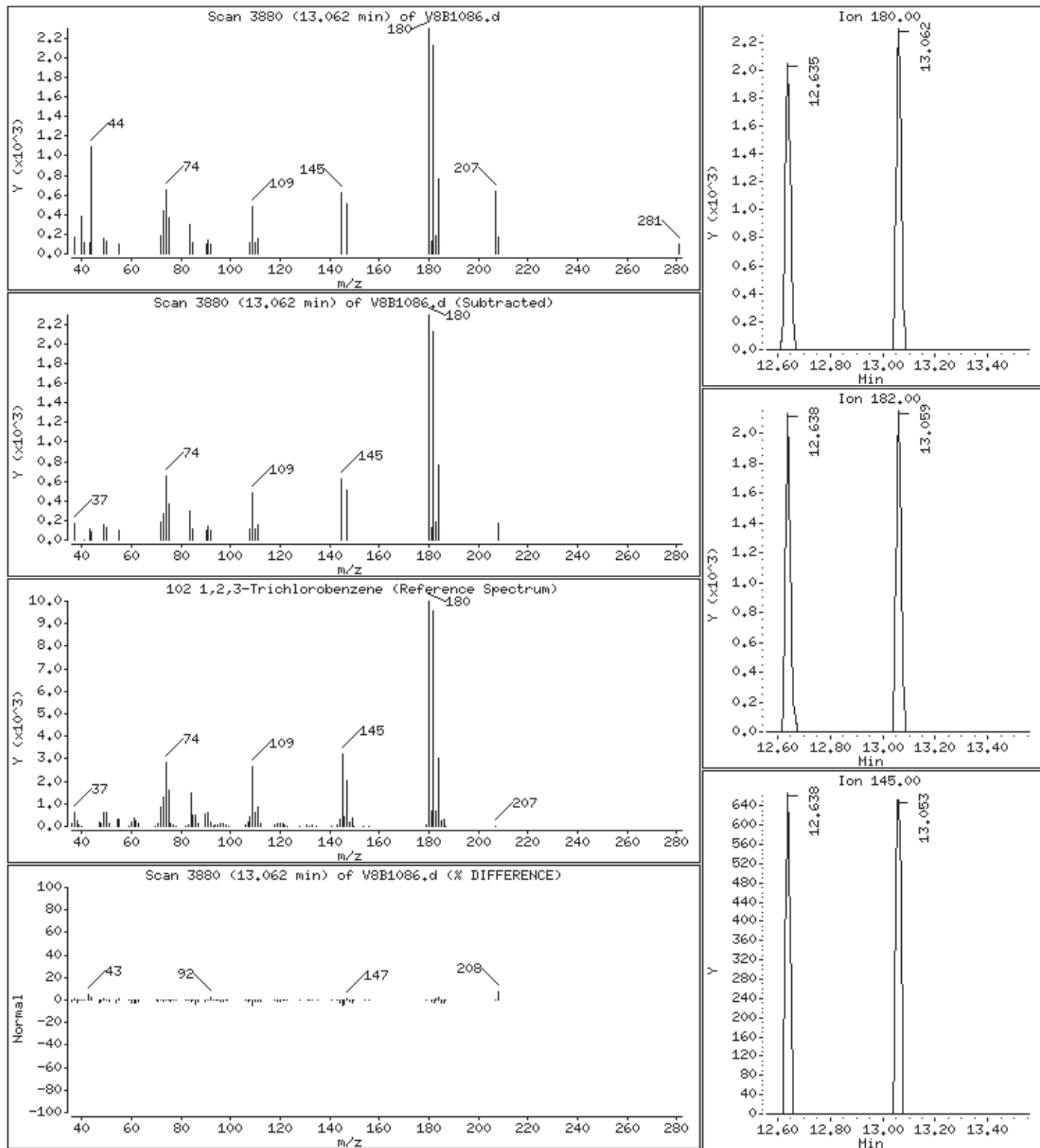
Operator: SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

102 1,2,3-Trichlorobenzene

Concentration: 70 ug/Kg



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-65753

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: LCS-65753
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V1M6293.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	53	
74-87-3	Chloromethane	54	
75-01-4	Vinyl chloride	54	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	57	
75-69-4	Trichlorofluoromethane	52	
75-35-4	1,1-Dichloroethene	53	
67-64-1	Acetone	39	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	51	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	56	
75-34-3	1,1-Dichloroethane	54	
108-05-4	Vinyl acetate	56	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	53	
594-20-7	2,2-Dichloropropane	55	
74-97-5	Bromochloromethane	52	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	56	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	55	
107-06-2	1,2-Dichloroethane	54	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	56	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	54	
10061-01-5	cis-1,3-Dichloropropene	50	
108-10-1	4-Methyl-2-pentanone	59	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	54	
79-00-5	1,1,2-Trichloroethane	55	
142-28-9	1,3-Dichloropropane	56	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCS-65753

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0782</u>	Mod. Ref No.: _____ SDG No.: <u>SL0782</u>
Matrix: (SOIL/SED/WATER) <u>SOIL</u>	Lab Sample ID: <u>LCS-65753</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>G</u>	Lab File ID: <u>V1M6293.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: _____
% Moisture: not dec. <u>0.0</u>	Date Analyzed: <u>04/23/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>10.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
127-18-4	Tetrachloroethene	52	
591-78-6	2-Hexanone	57	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	57	
108-90-7	Chlorobenzene	51	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	53	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	52	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	58	
108-86-1	Bromobenzene	54	
96-18-4	1,2,3-Trichloropropane	59	
103-65-1	n-Propylbenzene	54	
95-49-8	2-Chlorotoluene	52	
108-67-8	1,3,5-Trimethylbenzene	53	
106-43-4	4-Chlorotoluene	55	
98-06-6	tert-Butylbenzene	53	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	53	
99-87-6	4-Isopropyltoluene	52	
541-73-1	1,3-Dichlorobenzene	53	
106-46-7	1,4-Dichlorobenzene	52	
104-51-8	n-Butylbenzene	52	
95-50-1	1,2-Dichlorobenzene	54	
96-12-8	1,2-Dibromo-3-chloropropane	62	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	50	
91-20-3	Naphthalene	50	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423A.B\V1M6293.D
Lab Smp Id: LCS-65753 Client Smp ID: LCS-65753
Inj Date : 23-APR-2012 15:46
Operator : V1 SRC: LIMS Inst ID: V1.i
Smp Info : 5ML, LCS-65753, LCS-65753, 65753
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423A.B\v18260GH.m
Meth Date : 24-Apr-2012 09:38 canderson Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * 5 / (\text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.679	1.683 (0.262)		192619	50.0000	53
2 Chloromethane	50		1.866	1.871 (0.291)		218135	50.0000	54
3 Vinyl Chloride	62		1.994	1.999 (0.311)		206287	50.0000	54
4 Bromomethane	94		2.368	2.373 (0.370)		170819	50.0000	51
5 Chloroethane	64		2.487	2.491 (0.388)		117639	50.0000	57
6 Trichlorofluoromethane	101		2.753	2.757 (0.430)		253781	50.0000	52
127 Ethanol	46		2.940	2.944 (0.459)		56553	5000.00	4500
7 Ether	59		3.058	3.062 (0.477)		140252	50.0000	58
8 Acrolein	56		3.186	3.190 (0.497)		16617	250.000	230
9 1,1-Dichloroethene	96		3.304	3.309 (0.516)		170245	50.0000	53
10 1,1,2-Trichloro-1,2,2-trifluo	101		3.314	3.328 (0.517)		183158	50.0000	54
11 Acetone	58		3.344	3.348 (0.522)		13928	50.0000	39
12 Iodomethane	142		3.462	3.466 (0.540)		368169	50.0000	55
13 Carbon Disulfide	76		3.531	3.535 (0.551)		561109	50.0000	54
14 Acetonitrile	40		3.629	3.634 (0.566)		129287	500.000	530(Q)
15 Methyl Acetate	43		3.698	3.703 (0.577)		129244	50.0000	58
16 Methylene Chloride	84		3.797	3.811 (0.593)		191223	50.0000	51
17 tert-Butanol	59		3.915	3.919 (0.611)		37922	100.000	100
18 Acrylonitrile	53		4.053	4.057 (0.633)		54895	50.0000	57
20 Methyl tert-butyl ether	73		4.092	4.097 (0.639)		494537	50.0000	56
19 trans-1,2-Dichloroethene	96		4.092	4.097 (0.639)		177779	50.0000	53

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
21 1,1-Dichloroethane	63	4.526	4.540	(0.706)	292887		50.0000	54
22 Vinyl acetate	43	4.585	4.589	(0.716)	636535		50.0000	56
23 Diisopropyl Ether	45	4.614	4.619	(0.720)	599914		50.0000	55
24 Ethyl tert-butyl ether	59	4.988	4.993	(0.779)	529869		50.0000	55
M 27 1,2-dichloroethene, (Total)	100				375996		100.000	110
25 cis-1,2-Dichloroethene	96	5.146	5.151	(0.803)	198217		50.0000	53
26 2,2-Dichloropropane	77	5.146	5.151	(0.803)	167387		50.0000	55
28 2-Butanone	72	5.156	5.160	(0.805)	17966		50.0000	50(Q)
29 Bromochloromethane	128	5.392	5.407	(0.842)	96230		50.0000	52
30 Tetrahydrofuran	72	5.451	5.456	(0.851)	42125		100.000	110
31 Chloroform	83	5.481	5.485	(0.855)	309144		50.0000	52
\$ 32 Dibromofluoromethane	113	5.658	5.663	(0.883)	147750		50.0000	50
33 1,1,1-Trichloroethane	97	5.698	5.702	(0.889)	242971		50.0000	56
34 Cyclohexane	56	5.767	5.771	(0.900)	262449		50.0000	54
36 Carbon Tetrachloride	117	5.885	5.879	(0.919)	214641		50.0000	55
35 1,1-Dichloropropene	110	5.875	5.879	(0.917)	84417		50.0000	53
\$ 37 1,2-Dichloroethane-d4	102	6.023	6.037	(0.940)	29922		50.0000	52
38 Benzene	78	6.101	6.106	(0.952)	640583		50.0000	54
39 1,2-Dichloroethane	62	6.111	6.116	(0.954)	234609		50.0000	54
40 tert-Amyl methyl ether	73	6.220	6.224	(0.971)	495489		50.0000	54
* 41 Fluorobenzene	96	6.407	6.411	(1.000)	523461		50.0000	
42 Trichloroethene	130	6.821	6.825	(1.065)	181760		50.0000	53
43 Methylcyclohexane	83	7.057	7.052	(1.101)	279560		50.0000	52
44 1,2-Dichloropropane	63	7.077	7.071	(1.105)	166380		50.0000	56
46 Dibromomethane	93	7.205	7.209	(1.125)	122091		50.0000	55
47 1,4-Dioxane	88	7.234	7.239	(1.129)	25964		1000.00	680
48 Bromodichloromethane	83	7.392	7.386	(1.154)	237081		50.0000	54
45 2-Chloroethyl vinyl ether	63	7.746	7.741	(1.209)	52129		50.0000	50
49 cis-1,3-Dichloropropene	75	7.924	7.918	(1.237)	254349		50.0000	50
50 4-Methyl-2-pentanone	43	8.101	8.105	(1.264)	173198		50.0000	58
\$ 51 Toluene-d8	98	8.259	8.253	(0.819)	478609		50.0000	49
52 Toluene	91	8.337	8.342	(1.301)	668450		50.0000	52
53 trans-1,3-Dichloropropene	75	8.593	8.598	(1.341)	255252		50.0000	54
54 1,1,2-Trichloroethane	97	8.830	8.824	(1.378)	150287		50.0000	55
55 Tetrachloroethene	164	9.027	9.021	(0.895)	164044		50.0000	52
56 1,3-Dichloropropane	76	9.047	9.041	(0.897)	244022		50.0000	56
57 2-Hexanone	43	9.145	9.149	(0.907)	121266		50.0000	57
58 Dibromochloromethane	129	9.332	9.327	(0.926)	187300		50.0000	54
59 1,2-Dibromoethane	107	9.480	9.475	(0.940)	174399		50.0000	57
* 60 Chlorobenzene-d5	117	10.081	10.085	(1.000)	355293		50.0000	
63 1-Chlorohexane	91	10.100	10.095	(1.002)	240310		50.0000	50
61 Chlorobenzene	112	10.120	10.125	(1.004)	432134		50.0000	51
62 1,1,1,2-Tetrachloroethane	131	10.228	10.223	(1.015)	165485		50.0000	52
64 Ethylbenzene	106	10.268	10.262	(1.019)	233640		50.0000	52
65 m,p-Xylene	106	10.425	10.420	(1.034)	578885		100.000	100
66 o-Xylene	106	10.918	10.922	(1.083)	282628		50.0000	52
67 Styrene	104	10.938	10.932	(1.085)	477412		50.0000	52
68 Bromoform	173	11.154	11.149	(1.106)	124692		50.0000	54
69 Isopropylbenzene	105	11.381	11.375	(1.129)	706339		50.0000	51
126 trans-1,4-Dichloro-2-butene	75	11.450	11.444	(1.136)	64715		50.0000	55
\$ 70 Bromofluorobenzene	95	11.558	11.553	(1.147)	179614		50.0000	50
72 Bromobenzene	156	11.735	11.740	(0.908)	205627		50.0000	54
71 1,1,2,2-Tetrachloroethane	83	11.726	11.730	(0.907)	205812		50.0000	58
73 1,2,3-Trichloropropane	75	11.785	11.779	(0.912)	241017		50.0000	58

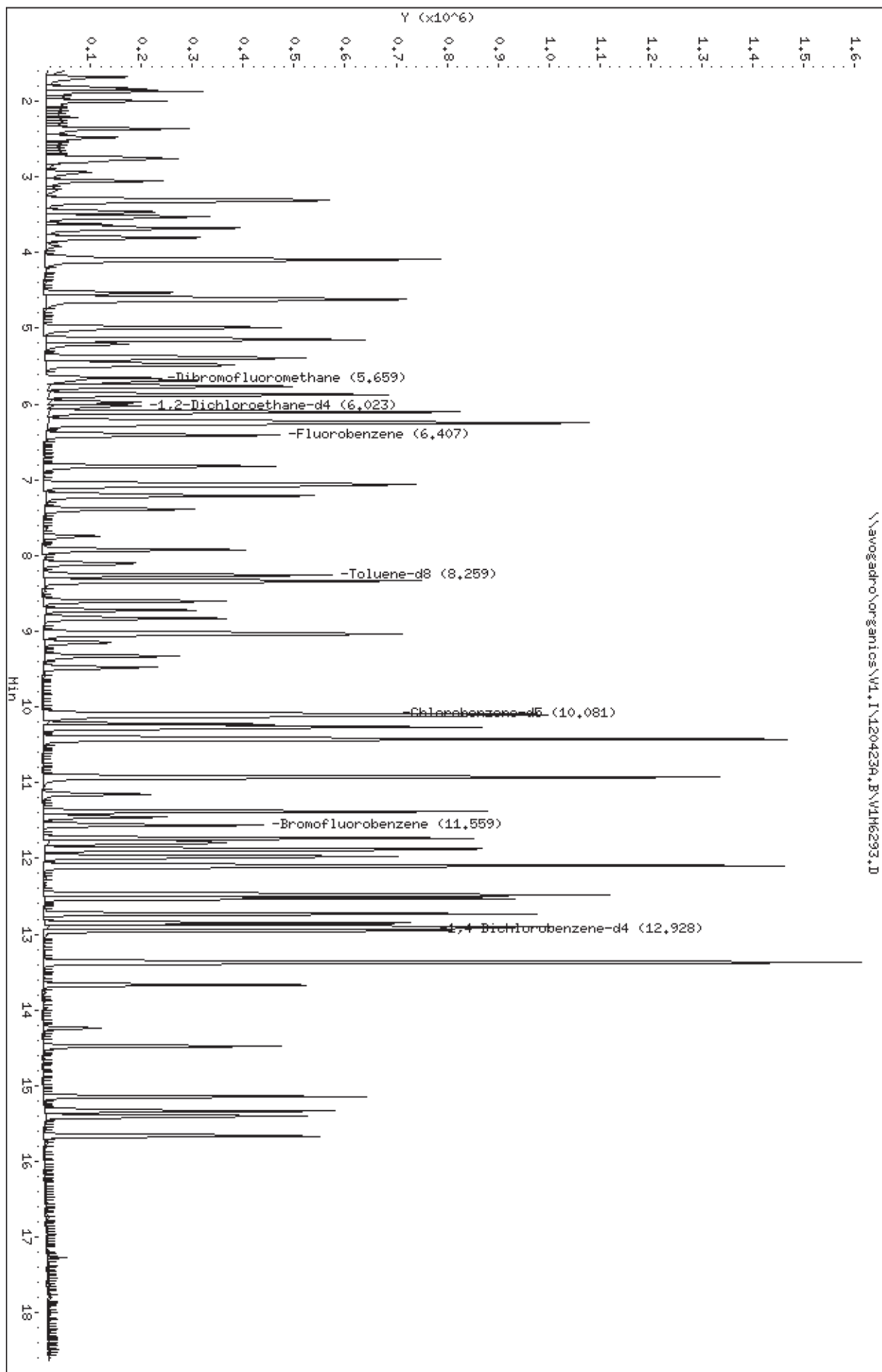
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
74 n-Propylbenzene	120	11.883	11.878 (0.919)		191745		50.0000	54
75 2-Chlorotoluene	126	11.982	11.976 (0.927)		172903		50.0000	52
76 1,3,5-Trimethylbenzene	105	12.090	12.094 (0.935)		598211		50.0000	53
77 4-Chlorotoluene	126	12.110	12.104 (0.937)		186788		50.0000	55
78 tert-Butylbenzene	119	12.474	12.479 (0.965)		589726		50.0000	52
79 1,2,4-Trimethylbenzene	105	12.533	12.528 (0.970)		617318		50.0000	53
M 81 Xylene (Total)	106				861513		150.000	150
80 sec-Butylbenzene	105	12.730	12.735 (0.985)		802562		50.0000	53
82 1,3-Dichlorobenzene	146	12.848	12.853 (0.994)		383433		50.0000	53
83 4-Isopropyltoluene	119	12.908	12.902 (0.998)		622318		50.0000	52
* 84 1,4-Dichlorobenzene-d4	152	12.927	12.922 (1.000)		194901		50.0000	
85 1,4-Dichlorobenzene	146	12.957	12.951 (1.002)		384386		50.0000	52
86 n-Butylbenzene	91	13.370	13.365 (1.034)		647620		50.0000	52
87 1,2-Dichlorobenzene	146	13.380	13.375 (1.035)		353168		50.0000	54
88 1,2-Dibromo-3-chloropropane	75	14.237	14.242 (1.101)		32723		50.0000	62
128 1,3,5-Trichlorobenzene	180	15.143	15.148 (2.364)		218989		50.0000	48(A)
89 1,2,4-Trichlorobenzene	180	15.143	15.148 (1.171)		218989		50.0000	50
90 Hexachlorobutadiene	225	15.331	15.335 (1.186)		130452		50.0000	52
91 Naphthalene	128	15.409	15.404 (1.192)		495661		50.0000	50
92 1,2,3-Trichlorobenzene	180	15.665	15.660 (1.212)		194674		50.0000	50

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\VL1\1204234.B\VL1M6293.D
Date : 23-APR-2012 15:46
Client ID: LCS-65753
Sample Info: 5HL,LCS-65753,LCS-65753,65753
Column phase: DB-624

Instrument: VL1
Operator: VL SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-65899

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: LCS-65899
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V8B1084.D
Level: (TRACE/LOW/MED) MED	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL)	Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	2400	
74-87-3	Chloromethane	2500	
75-01-4	Vinyl chloride	2500	
74-83-9	Bromomethane	3000	
75-00-3	Chloroethane	2400	
75-69-4	Trichlorofluoromethane	2500	
75-35-4	1,1-Dichloroethene	2400	
67-64-1	Acetone	2500	
74-88-4	Iodomethane	3100	
75-15-0	Carbon disulfide	2300	
75-09-2	Methylene chloride	2300	
156-60-5	trans-1,2-Dichloroethene	2400	
1634-04-4	Methyl tert-butyl ether	2400	
75-34-3	1,1-Dichloroethane	2500	
108-05-4	Vinyl acetate	2600	
78-93-3	2-Butanone	2600	
156-59-2	cis-1,2-Dichloroethene	2500	
594-20-7	2,2-Dichloropropane	2500	
74-97-5	Bromochloromethane	2500	
67-66-3	Chloroform	2500	
71-55-6	1,1,1-Trichloroethane	2500	
563-58-6	1,1-Dichloropropene	2400	
56-23-5	Carbon tetrachloride	2500	
107-06-2	1,2-Dichloroethane	2500	
71-43-2	Benzene	2500	
79-01-6	Trichloroethene	2400	
78-87-5	1,2-Dichloropropane	2500	
74-95-3	Dibromomethane	2500	
75-27-4	Bromodichloromethane	2500	
10061-01-5	cis-1,3-Dichloropropene	2600	
108-10-1	4-Methyl-2-pentanone	2300	
108-88-3	Toluene	2500	
10061-02-6	trans-1,3-Dichloropropene	2600	
79-00-5	1,1,2-Trichloroethane	2500	
142-28-9	1,3-Dichloropropane	2500	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-65899

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: LCS-65899
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V8B1084.D
Level: (TRACE/LOW/MED) MED	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: 5000 (uL)	Soil Aliquot Volume: 100.00 (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	2300	
591-78-6	2-Hexanone	2400	
124-48-1	Dibromochloromethane	2500	
106-93-4	1,2-Dibromoethane	2500	
108-90-7	Chlorobenzene	2400	
630-20-6	1,1,1,2-Tetrachloroethane	2500	
100-41-4	Ethylbenzene	2500	
179601-23-1	m,p-Xylene	5000	
95-47-6	o-Xylene	2500	
1330-20-7	Xylene (Total)	7500	
100-42-5	Styrene	2500	
75-25-2	Bromoform	2500	
98-82-8	Isopropylbenzene	2500	
79-34-5	1,1,2,2-Tetrachloroethane	2400	
108-86-1	Bromobenzene	2400	
96-18-4	1,2,3-Trichloropropane	2400	
103-65-1	n-Propylbenzene	2500	
95-49-8	2-Chlorotoluene	2400	
108-67-8	1,3,5-Trimethylbenzene	2500	
106-43-4	4-Chlorotoluene	2400	
98-06-6	tert-Butylbenzene	2400	
95-63-6	1,2,4-Trimethylbenzene	2500	
135-98-8	sec-Butylbenzene	2400	
99-87-6	4-Isopropyltoluene	2400	
541-73-1	1,3-Dichlorobenzene	2400	
106-46-7	1,4-Dichlorobenzene	2300	
104-51-8	n-Butylbenzene	2400	
95-50-1	1,2-Dichlorobenzene	2400	
96-12-8	1,2-Dibromo-3-chloropropane	2300	
120-82-1	1,2,4-Trichlorobenzene	2300	B
87-68-3	Hexachlorobutadiene	2100	B
87-61-6	1,2,3-Trichlorobenzene	2200	B
91-20-3	Naphthalene	2300	B

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V8.I\120430A.B\V8B1084.d
Lab Smp Id: LCS-65899 Client Smp ID: LCS-65899
Inj Date : 30-APR-2012 16:37
Operator : SRC: LIMS Inst ID: V8.i
Smp Info : 5ML, LCS-65899, LCS-65899, 65899
Misc Info :
Comment :
Method : \\avogadro\organics\V8.I\120430A.B\v108260Gadd-6lvl.m
Meth Date : 01-May-2012 11:06 adatta Quant Type: ISTD
Cal Date : 30-APR-2012 13:59 Cal File: V8B1079.d
Als bottle: 100 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:

$$\text{Amt} * \text{DF} * \text{Uf} * ((\text{Vt} + (\text{Ws} * \text{M} / 100)) * 5000) / (\text{Va} * \text{Ws} * ((100 - \text{M}) / 100)) * \text{CpndVariable}$$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL -AMT	ON -COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Dichlorodifluoromethane	85	1.647	1.647	(0.311)	153273	50.0000	49	
2 Freon114	85	1.766	1.766	(0.333)	133166	50.0000	49	
3 Chloromethane	50	1.818	1.818	(0.343)	207925	50.0000	50	
4 Vinyl Chloride	62	1.918	1.918	(0.362)	183137	50.0000	49	
5 Bromomethane	94	2.204	2.204	(0.416)	76869	50.0000	59	
6 Chloroethane	64	2.294	2.294	(0.433)	89825	50.0000	48	
7 Trichlorofluoromethane	101	2.506	2.506	(0.473)	188501	50.0000	49	
126 Ethanol	46	2.628	2.628	(0.496)	45411	5000.00	4400(A)	
8 Ether	59	2.731	2.731	(0.515)	128483	50.0000	50	
9 Acrolein	56	2.834	2.834	(0.535)	169388	250.000	240(A)	
10 1,1-Dichloroethene	96	2.924	2.924	(0.552)	158180	50.0000	48	
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.918	2.918	(0.550)	130071	50.0000	48	
12 Acetone	58	2.953	2.953	(0.557)	27377	50.0000	50	
13 Iodomethane	142	3.053	3.053	(0.576)	84044	50.0000	62	
14 Carbon Disulfide	76	3.114	3.114	(0.588)	441560	50.0000	45	
15 Acetonitrile	41	3.204	3.204	(0.604)	271775	500.000	500(AQ)	
16 Allyl Chloride	39	3.204	3.204	(0.604)	150084	50.0000	48	
17 Methyl Acetate	43	3.210	3.210	(0.606)	113222	50.0000	48	
18 Methylene Chloride	84	3.297	3.297	(0.622)	182789	50.0000	45	

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL - AMT (ug/L)	ON - COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
19 tert-Butanol	59	3.358	3.358	(0.634)	28364		100.000	91
20 Acrylonitrile	53	3.487	3.487	(0.658)	57518		50.0000	51
21 trans-1,2-Dichloroethene	96	3.519	3.519	(0.664)	168752		50.0000	49
22 Methyl tert-butyl ether	73	3.509	3.509	(0.662)	425240		50.0000	49
23 1,1-Dichloroethane	63	3.850	3.850	(0.726)	321674		50.0000	50
24 Vinyl acetate	43	3.879	3.879	(0.732)	548602		50.0000	52
25 Diisopropyl Ether	45	3.889	3.889	(0.734)	516492		50.0000	50
26 2-Chloro-1,3-Butadiene	53	3.927	3.927	(0.741)	221776		50.0000	49
27 Ethyl tert-butyl ether	59	4.178	4.178	(0.788)	462051		50.0000	50
29 2,2-Dichloropropane	77	4.326	4.326	(0.816)	249853		50.0000	50
28 cis-1,2-Dichloroethene	96	4.319	4.319	(0.815)	186985		50.0000	50
30 2-Butanone	72	4.319	4.319	(0.815)	25460		50.0000	51
32 Propionitrile	54	4.364	4.364	(0.823)	216454		500.000	480(A)
33 Methacrylonitrile	41	4.496	4.496	(0.848)	176979		100.000	97
34 Bromochloromethane	128	4.519	4.519	(0.853)	80668		50.0000	50
31 Tetrahydrofuran	72	4.561	4.561	(0.860)	39364		100.000	93
35 Chloroform	83	4.573	4.573	(0.863)	301365		50.0000	50
\$ 36 Dibromofluoromethane	113	4.708	4.708	(0.888)	147504		50.0000	50
37 1,1,1-Trichloroethane	97	4.750	4.750	(0.896)	247669		50.0000	49
38 Cyclohexane	56	4.805	4.805	(0.907)	249285		50.0000	49
39 1,1-Dichloropropene	110	4.885	4.885	(0.922)	81466		50.0000	49
40 Carbon Tetrachloride	117	4.895	4.895	(0.924)	204981		50.0000	49
41 Isobutyl Alcohol	43	4.924	4.924	(0.929)	127379		1000.00	890(A)
\$ 42 1,2-Dichloroethane-d4	102	5.007	5.007	(0.945)	35186		50.0000	49
43 Benzene	78	5.069	5.069	(0.956)	703969		50.0000	50
44 1,2-Dichloroethane	62	5.072	5.072	(0.957)	228825		50.0000	49
45 tert-Amyl methyl ether	73	5.143	5.143	(0.970)	430153		50.0000	50
M 50 1,2-Dichloroethene (Total)	96				355737		100.000	99
* 46 Fluorobenzene	96	5.300	5.300	(1.000)	600706		50.0000	
47 Trichloroethene	130	5.628	5.628	(1.062)	166268		50.0000	48
48 Methylcyclohexane	83	5.818	5.818	(1.098)	224606		50.0000	49
49 1,2-Dichloropropane	63	5.834	5.834	(1.101)	189173		50.0000	50
51 Methyl Methacrylate	69	5.908	5.908	(1.115)	116928		50.0000	48
52 Dibromomethane	93	5.943	5.943	(1.121)	107268		50.0000	49
53 1,4-Dioxane	88	5.946	5.946	(1.122)	36309		1000.00	920(A)
54 Bromodichloromethane	83	6.078	6.078	(1.147)	231971		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.509	6.509	(1.228)	1501		50.0000	36
56 cis-1,3-Dichloropropene	75	6.506	6.506	(1.227)	284192		50.0000	52
57 4-Methyl-2-pentanone	43	6.641	6.641	(1.253)	155693		50.0000	47
\$ 58 Toluene-d8	98	6.779	6.779	(0.818)	586813		50.0000	50
59 Toluene	91	6.847	6.847	(1.292)	702458		50.0000	49
60 trans-1,3-Dichloropropene	75	7.049	7.049	(1.330)	249059		50.0000	51
61 Ethyl Methacrylate	69	7.126	7.126	(1.345)	169309		50.0000	50
62 1,1,2-Trichloroethane	97	7.239	7.239	(1.366)	152348		50.0000	50
63 Tetrachloroethene	164	7.409	7.409	(0.894)	126755		50.0000	47
64 1,3-Dichloropropane	76	7.419	7.419	(0.895)	264981		50.0000	50
65 2-Hexanone	43	7.490	7.490	(0.904)	120867		50.0000	49
66 Dibromochloromethane	129	7.657	7.657	(0.924)	167547		50.0000	51
67 1,2-Dibromoethane	107	7.792	7.792	(0.940)	156051		50.0000	50
69 1-Chlorohexane	91	8.277	8.277	(0.999)	191801		50.0000	46
* 68 Chlorobenzene-d5	117	8.287	8.287	(1.000)	427305		50.0000	
70 Chlorobenzene	112	8.319	8.319	(1.004)	433779		50.0000	49
71 1,1,1,2-Tetrachloroethane	131	8.400	8.400	(1.014)	150610		50.0000	50
72 Ethylbenzene	106	8.435	8.435	(1.018)	229318		50.0000	49

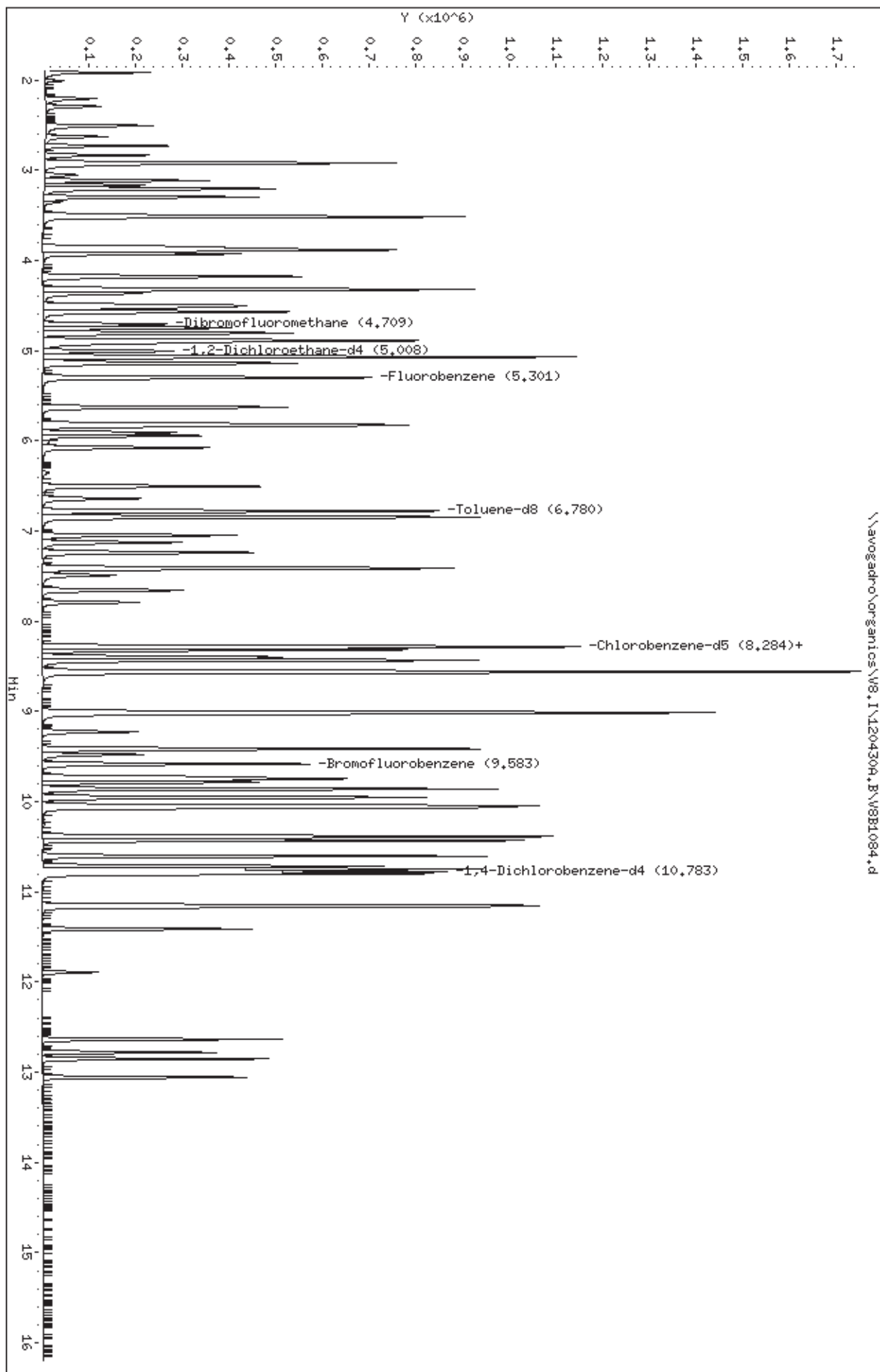
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
73 m,p-Xylene	106	8.560	8.560	(1.033)	573250		100.000	99
74 o-Xylene	106	9.007	9.007	(1.087)	277486		50.0000	50
75 Styrene	104	9.020	9.020	(1.088)	465446		50.0000	50
76 Bromoform	173	9.226	9.226	(1.113)	99780		50.0000	50
77 Isopropylbenzene	105	9.416	9.416	(1.136)	682977		50.0000	50
78 trans-1,4-Dichloro-2-butene	75	9.480	9.480	(1.144)	56215		50.0000	48
\$ 79 Bromofluorobenzene	95	9.583	9.583	(1.156)	209913		50.0000	50
80 1,1,2,2-Tetrachloroethane	83	9.728	9.728	(0.902)	197891		50.0000	48
81 Bromobenzene	156	9.750	9.750	(0.905)	169800		50.0000	49
82 1,2,3-Trichloropropane	75	9.782	9.782	(0.908)	234505		50.0000	47
83 n-Propylbenzene	120	9.859	9.859	(0.915)	176486		50.0000	49
84 2-Chlorotoluene	126	9.953	9.953	(0.923)	158896		50.0000	48
85 1,3,5-Trimethylbenzene	105	10.043	10.043	(0.932)	548505		50.0000	49
86 4-Chlorotoluene	126	10.068	10.068	(0.934)	164468		50.0000	49
M 94 Xylene (Total)	106				850736		150.000	150
87 tert-Butylbenzene	119	10.383	10.383	(0.963)	522306		50.0000	48
88 1,2,4-Trimethylbenzene	105	10.432	10.432	(0.968)	551989		50.0000	49
89 sec-Butylbenzene	105	10.605	10.605	(0.984)	658835		50.0000	48
90 1,3-Dichlorobenzene	146	10.715	10.715	(0.994)	290942		50.0000	48
91 4-Isopropyltoluene	119	10.750	10.750	(0.997)	525885		50.0000	48
* 92 1,4-Dichlorobenzene-d4	152	10.779	10.779	(1.000)	203267		50.0000	
93 1,4-Dichlorobenzene	146	10.805	10.805	(1.002)	297748		50.0000	47
95 n-Butylbenzene	91	11.149	11.149	(1.034)	483192		50.0000	49
96 1,2-Dichlorobenzene	146	11.165	11.165	(1.036)	279102		50.0000	48
97 Hexachloroethane	117	11.412	11.412	(1.059)	89054		50.0000	49
98 1,2-Dibromo-3-chloropropane	75	11.891	11.891	(1.103)	28183		50.0000	45
99 1,2,4-Trichlorobenzene	180	12.634	12.634	(1.172)	135472		50.0000	46
100 Hexachlorobutadiene	225	12.782	12.782	(1.186)	60348		50.0000	42
101 Naphthalene	128	12.853	12.853	(1.192)	332992		50.0000	46
102 1,2,3-Trichlorobenzene	180	13.059	13.059	(1.211)	117987		50.0000	45

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W8.1\1204304.B\W8B1084.d
Date : 30-APR-2012 16:37
Client ID: LCS-65899
Sample Info: 5HL,LCS-65899,LCS-65899,65899
Column phase: DB-624

Instrument: W8.i
Operator: SRC; LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-65753

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: LCSD-65753
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V1M6294.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	47	
74-87-3	Chloromethane	52	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	50	
75-35-4	1,1-Dichloroethene	50	
67-64-1	Acetone	41	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	52	
75-09-2	Methylene chloride	50	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	53	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	53	
78-93-3	2-Butanone	47	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	54	
563-58-6	1,1-Dichloropropene	49	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	55	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	53	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	56	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-65753

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: LCSD-65753
Sample wt/vol: 5.00 (g/mL) G	Lab File ID: V1M6294.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec. 0.0	Date Analyzed: 04/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 10.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	55	
591-78-6	2-Hexanone	54	
124-48-1	Dibromochloromethane	56	
106-93-4	1,2-Dibromoethane	57	
108-90-7	Chlorobenzene	54	
630-20-6	1,1,1,2-Tetrachloroethane	54	
100-41-4	Ethylbenzene	54	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	54	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	53	
108-86-1	Bromobenzene	53	
96-18-4	1,2,3-Trichloropropane	55	
103-65-1	n-Propylbenzene	53	
95-49-8	2-Chlorotoluene	52	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	52	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	51	
95-50-1	1,2-Dichlorobenzene	52	
96-12-8	1,2-Dibromo-3-chloropropane	55	
120-82-1	1,2,4-Trichlorobenzene	48	
87-68-3	Hexachlorobutadiene	50	
87-61-6	1,2,3-Trichlorobenzene	48	
91-20-3	Naphthalene	49	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V1.I\120423A.B\V1M6294.D
Lab Smp Id: LCSD-65753 Client Smp ID: LCSD-65753
Inj Date : 23-APR-2012 16:13
Operator : V1 SRC: LIMS Inst ID: V1.i
Smp Info : 5ML, LCSD-65753, LCSD-65753, 65753
Misc Info :
Comment :
Method : \\avogadro\organics\V1.I\120423A.B\v18260GH.m
Meth Date : 24-Apr-2012 09:38 canderson Quant Type: ISTD
Cal Date : 23-APR-2012 13:36 Cal File: V1M6288.D
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * 5 / (\text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

						AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
1 Dichlorodifluoromethane	85	1.683	1.683	(0.263)	174223	50.0000	47	
2 Chloromethane	50	1.871	1.871	(0.292)	216198	50.0000	52	
3 Vinyl Chloride	62	1.999	1.999	(0.312)	203574	50.0000	52	
4 Bromomethane	94	2.373	2.373	(0.370)	165045	50.0000	49	
5 Chloroethane	64	2.491	2.491	(0.389)	105739	50.0000	50	
6 Trichlorofluoromethane	101	2.757	2.757	(0.430)	250316	50.0000	50	
127 Ethanol	46	2.944	2.944	(0.459)	55692	5000.00	4400(Q)	
7 Ether	59	3.062	3.062	(0.478)	132357	50.0000	54	
8 Acrolein	56	3.190	3.190	(0.498)	18545	250.000	250	
9 1,1-Dichloroethene	96	3.309	3.309	(0.516)	163772	50.0000	50	
10 1,1,2-Trichloro-1,2,2-trifluo	101	3.328	3.328	(0.519)	169082	50.0000	49	
11 Acetone	58	3.348	3.348	(0.522)	14745	50.0000	40(Q)	
12 Iodomethane	142	3.466	3.466	(0.541)	348874	50.0000	51	
13 Carbon Disulfide	76	3.535	3.535	(0.551)	552547	50.0000	52	
14 Acetonitrile	40	3.634	3.634	(0.567)	122728	500.000	490	
15 Methyl Acetate	43	3.703	3.703	(0.578)	125059	50.0000	55	
16 Methylene Chloride	84	3.811	3.811	(0.594)	190932	50.0000	50	
17 tert-Butanol	59	3.919	3.919	(0.611)	36862	100.000	95	
18 Acrylonitrile	53	4.057	4.057	(0.633)	53928	50.0000	55	
20 Methyl tert-butyl ether	73	4.097	4.097	(0.639)	480914	50.0000	53	
19 trans-1,2-Dichloroethene	96	4.097	4.097	(0.639)	173480	50.0000	50	

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
21 1,1-Dichloroethane	63	4.540	4.540	(0.708)	292346		50.0000	53
22 Vinyl acetate	43	4.589	4.589	(0.716)	615726		50.0000	53
23 Diisopropyl Ether	45	4.619	4.619	(0.720)	603377		50.0000	54
24 Ethyl tert-butyl ether	59	4.993	4.993	(0.779)	536279		50.0000	54
M 27 1,2-dichloroethene, (Total)	100				367651		100.000	100
25 cis-1,2-Dichloroethene	96	5.151	5.151	(0.803)	194171		50.0000	51
26 2,2-Dichloropropane	77	5.151	5.151	(0.803)	161413		50.0000	52
28 2-Butanone	72	5.160	5.160	(0.805)	17004		50.0000	47(Q)
29 Bromochloromethane	128	5.407	5.407	(0.843)	93608		50.0000	50
30 Tetrahydrofuran	72	5.456	5.456	(0.851)	34721		100.000	92
31 Chloroform	83	5.485	5.485	(0.856)	310786		50.0000	52
\$ 32 Dibromofluoromethane	113	5.663	5.663	(0.883)	147994		50.0000	49
33 1,1,1-Trichloroethane	97	5.702	5.702	(0.889)	242062		50.0000	54
34 Cyclohexane	56	5.771	5.771	(0.900)	256833		50.0000	52
36 Carbon Tetrachloride	117	5.879	5.879	(0.917)	203571		50.0000	51
35 1,1-Dichloropropene	110	5.879	5.879	(0.917)	79364		50.0000	48
\$ 37 1,2-Dichloroethane-d4	102	6.037	6.037	(0.942)	28418		50.0000	49
38 Benzene	78	6.106	6.106	(0.952)	634655		50.0000	52
39 1,2-Dichloroethane	62	6.116	6.116	(0.954)	236048		50.0000	53
40 tert-Amyl methyl ether	73	6.224	6.224	(0.971)	493069		50.0000	52
* 41 Fluorobenzene	96	6.411	6.411	(1.000)	535080		50.0000	
42 Trichloroethene	130	6.825	6.825	(1.065)	182523		50.0000	52
43 Methylcyclohexane	83	7.052	7.052	(1.100)	286611		50.0000	52
44 1,2-Dichloropropane	63	7.071	7.071	(1.103)	166501		50.0000	55
46 Dibromomethane	93	7.209	7.209	(1.124)	119973		50.0000	52
47 1,4-Dioxane	88	7.239	7.239	(1.129)	30966		1000.00	800
48 Bromodichloromethane	83	7.386	7.386	(1.152)	241282		50.0000	53
45 2-Chloroethyl vinyl ether	63	7.741	7.741	(1.207)	56439		50.0000	53
49 cis-1,3-Dichloropropene	75	7.918	7.918	(1.235)	278786		50.0000	53
50 4-Methyl-2-pentanone	43	8.105	8.105	(1.264)	161010		50.0000	53
\$ 51 Toluene-d8	98	8.253	8.253	(0.818)	494951		50.0000	52
52 Toluene	91	8.342	8.342	(1.301)	685455		50.0000	52
53 trans-1,3-Dichloropropene	75	8.598	8.598	(1.341)	252307		50.0000	52
54 1,1,2-Trichloroethane	97	8.824	8.824	(1.376)	150028		50.0000	54
55 Tetrachloroethene	164	9.021	9.021	(0.895)	170550		50.0000	55
56 1,3-Dichloropropane	76	9.041	9.041	(0.896)	239077		50.0000	56
57 2-Hexanone	43	9.149	9.149	(0.907)	113629		50.0000	54
58 Dibromochloromethane	129	9.327	9.327	(0.925)	190415		50.0000	56
59 1,2-Dibromoethane	107	9.475	9.475	(0.939)	169983		50.0000	57
* 60 Chlorobenzene-d5	117	10.085	10.085	(1.000)	349994		50.0000	
63 1-Chlorohexane	91	10.095	10.095	(1.001)	247586		50.0000	52
61 Chlorobenzene	112	10.125	10.125	(1.004)	447040		50.0000	54
62 1,1,1,2-Tetrachloroethane	131	10.223	10.223	(1.014)	168481		50.0000	54
64 Ethylbenzene	106	10.262	10.262	(1.018)	234481		50.0000	54
65 m,p-Xylene	106	10.420	10.420	(1.033)	579718		100.000	100
66 o-Xylene	106	10.922	10.922	(1.083)	279516		50.0000	52
67 Styrene	104	10.932	10.932	(1.084)	488626		50.0000	54
68 Bromoform	173	11.149	11.149	(1.105)	122232		50.0000	54
69 Isopropylbenzene	105	11.375	11.375	(1.128)	728285		50.0000	54
126 trans-1,4-Dichloro-2-butene	75	11.444	11.444	(1.135)	65651		50.0000	56
\$ 70 Bromofluorobenzene	95	11.553	11.553	(1.146)	173970		50.0000	49
72 Bromobenzene	156	11.740	11.740	(0.909)	206241		50.0000	53
71 1,1,2,2-Tetrachloroethane	83	11.730	11.730	(0.908)	191514		50.0000	53
73 1,2,3-Trichloropropane	75	11.779	11.779	(0.912)	230736		50.0000	55

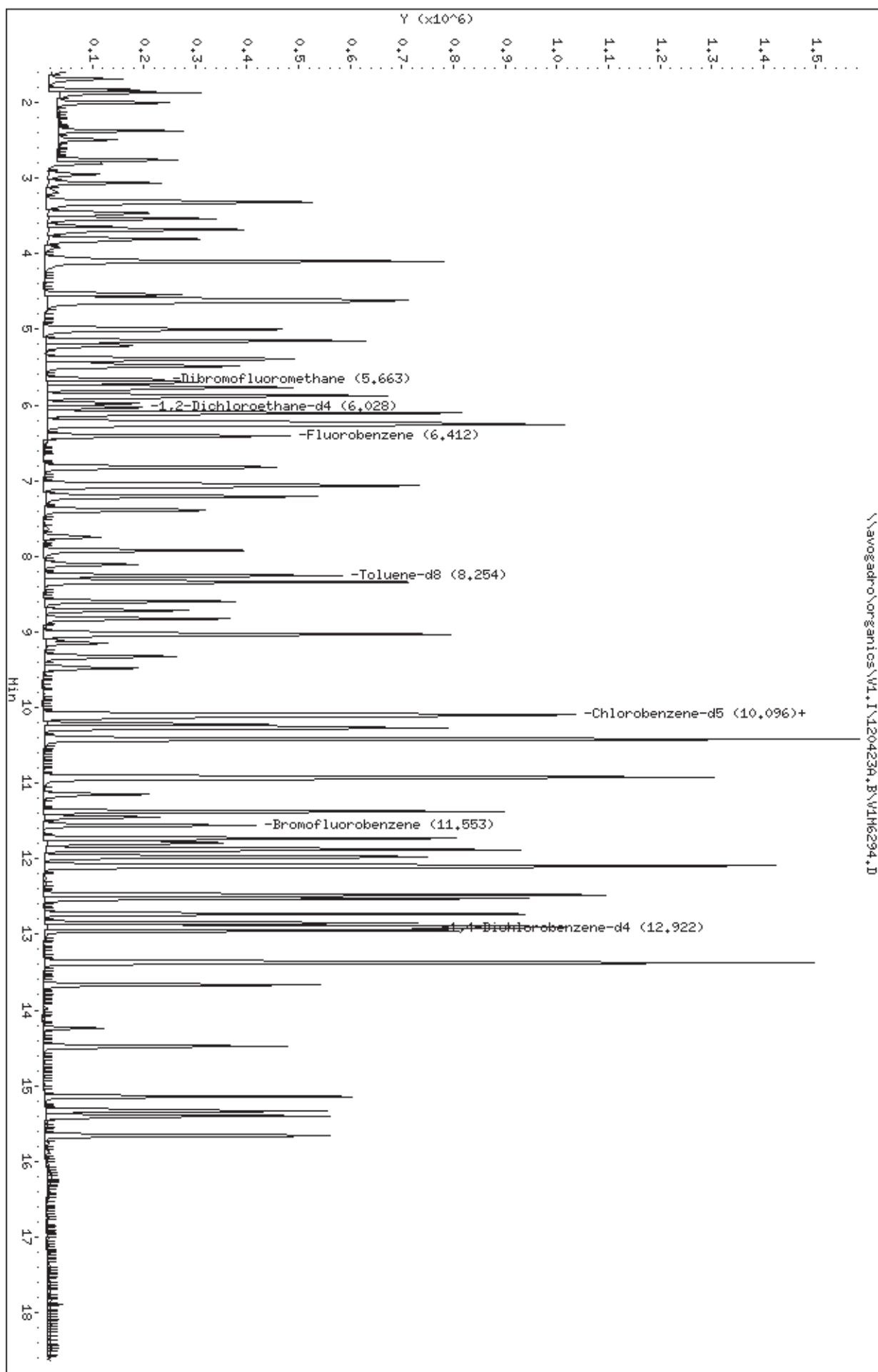
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
74 n-Propylbenzene	120	11.878	11.878	(0.919)	193754		50.0000	53
75 2-Chlorotoluene	126	11.976	11.976	(0.927)	176539		50.0000	52
76 1,3,5-Trimethylbenzene	105	12.094	12.094	(0.936)	587946		50.0000	51
77 4-Chlorotoluene	126	12.104	12.104	(0.937)	175846		50.0000	51
78 tert-Butylbenzene	119	12.479	12.479	(0.966)	561247		50.0000	49
79 1,2,4-Trimethylbenzene	105	12.528	12.528	(0.970)	599378		50.0000	51
M 81 Xylene (Total)	106				859234		150.000	160
80 sec-Butylbenzene	105	12.735	12.735	(0.986)	805881		50.0000	52
82 1,3-Dichlorobenzene	146	12.853	12.853	(0.995)	376341		50.0000	51
83 4-Isopropyltoluene	119	12.902	12.902	(0.998)	609029		50.0000	50
* 84 1,4-Dichlorobenzene-d4	152	12.922	12.922	(1.000)	199013		50.0000	
85 1,4-Dichlorobenzene	146	12.951	12.951	(1.002)	381646		50.0000	50
86 n-Butylbenzene	91	13.365	13.365	(1.034)	651554		50.0000	51
87 1,2-Dichlorobenzene	146	13.375	13.375	(1.035)	350420		50.0000	52
88 1,2-Dibromo-3-chloropropane	75	14.242	14.242	(1.102)	29757		50.0000	55
128 1,3,5-Trichlorobenzene	180	15.148	15.148	(2.363)	215665		50.0000	46(A)
89 1,2,4-Trichlorobenzene	180	15.148	15.148	(1.172)	215665		50.0000	48
90 Hexachlorobutadiene	225	15.335	15.335	(1.187)	129020		50.0000	50
91 Naphthalene	128	15.404	15.404	(1.192)	492872		50.0000	49
92 1,2,3-Trichlorobenzene	180	15.660	15.660	(1.212)	191996		50.0000	48

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V1, I\1204234, B\116294.D
 Date : 23-APR-2012 16:13
 Client ID: LCSD-65753
 Sample Info: 5HL, LCSD-65753, LCSD-65753, 65753
 Column phase: DB-624

Instrument: V1.i
 Operator: V1 SRC: LIMS
 Column diameter: 0.25



Percent Moisture and Percent Solids Report

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
<i>L0782-01A</i>	<i>SO4-MW2</i>	<i>04/24/2012</i>	<i>8.096</i>	<i>91.904</i>	<i>Yes</i>

INJECTION LOG

Spectrum Analytical, Inc. RI Division VI Injection Log
Volatiles Laboratory

METHOD: 8260 L
ANALYST: CJA
CAL DATE: 4-23-12

Comments:

standards: BFBW120404A 2 uL
255W120416A Auto uL
3TDW120419A 20 uL
20W120419B 7A uL

Reviewed By: 423W Manual Integration: CPA MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP			INTERNAL STDS			SURROGATES				DIIN	FLG	COMMENTS	pH
				BATCH	MT	BN	FBZ	CBZ	DCB	DFM	DCE	TOL	BFB				
VLM6283	10:20	BFBLY	BFBLY		AQ										1	OK	
VLM6284	11:05	VSTD0501Y	VSTD0501Y		AQ		100	100		100					1	OK	
VLM6285	11:34	VSTD0201Y	VSTD0201Y		AQ		101	102	96						1	OK	
VLM6286	12:02	VSTD0051Y	VSTD0051Y		AQ		97	100	95						1	OK MI_73	
VLM6287	13:07	VSTD2001Y	VSTD2001Y		AQ		105	107	112						1	OK	
VLM6288	13:36	VSTD1001Y	VSTD1001Y		AQ		101	104	104						1	OK	
VLM6289	14:07	VICV0501Y	VICV0501Y		AQ		98	100	94		95	99	102	97	1	OK	

- E - One or more target compounds are above the calibration range
- R - One or more spike compounds are outside of control limits
- T - Sample was injected outside of the 12 hour sequence
- * - Internal Standard or Surrogate outside of control limit
- Surrogates are diluted

4/23/12 *CP*

Start: 23-APR-12 14:32
End: 24-APR-12 01:08

BATCH: 120423A.B

ANALYST: GJA

METHOD: 8260.L
ICAL DATE: 4-23-12

Spectrum Analytical, Inc. RI Division VI Injection Log
Volatiles Laboratory

Comments:

Standards: BFB W120404A 2 uL
LSIS W120410A uL
STD W120419A 20 uL
uL

Reviewed By: 4-24-12 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL	STDS	SURROGATES	DIILN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DFM	DCE	TOL	BFB	
VLM6290	14:32	BFB1Z	BFB1Z		SL								
VLM6291	14:48	VSTD0501Z	VSTD0501Z		AQ		100	100					
VLM6293	15:46	LCS-65753	LCS-65753		65753	SL	101	97	94	100	105	98	100
VLM6294	16:13	LCS-65753	LCS-65753		65753	SL	103	96	96	98	97	103	98
VLM6295	16:41	MB-65753	MB-65753		65753	SL	99	92	88	97	92	101	100
VLM6296	17:09	MB-65753	MB-65753		65753	SL	96	93	91	98	104	101	98
VLM6297	17:37	MB-65753	MB-65753		65753	SL	95	94	92	101	104	99	95
VLM6298	18:05	L0798-01A	1204-07843-001		65753	SL	97	95	87	106	113	99	95
VLM6299	18:33	L0749-01B	WALL COMPOSITE		65753	SL	94	96	91	102	112	96	98
VLM6300	19:02	L0749-02B	BOTTOM COMPOSITE		65753	SL	94	92	89	98	98	97	95
VLM6301	19:30	L0761-01B	L1SS-01-041712-		65753	SL	82	85	84	12*	109	97	99
VLM6302	19:59	L0770-01C	DB-1 (0-6")		65753	SL	93	87	82	101	119	99	92
VLM6303	20:27	L0770-02C	DB-2 (0-6")		65753	SL	93	92	91	98	95	97	97
VLM6304	20:55	L0770-03C	DB-3 (0-6")		65753	SL	93	94	90	102	105	95	92
VLM6305	21:24	L0770-04C	DB-4 (0-6")		65753	SL	93	92	90	102	101	97	96
VLM6306	21:52	L0770-05C	DB-5 (0-6")		65753	SL	92	94	89	105	107	97	91
VLM6307	22:21	L0770-06C	DB-6 (0-6")		65753	SL	91	94	89	105	94	93	97
VLM6308	22:49	L0770-07C	GP-1 (0-6")		65753	SL	91	88	84	106	88	98	92
VLM6309	23:17	L0770-08C	GP-8 (0-6")		65753	SL	88	86	83	106	100	98	96
VLM6310	23:44	L0770-09C	GP-7 (0-6")		65753	SL	88	88	88	104	111	94	94
VLM6311	00:12	L0770-10C	GP-2 (0-6")		65753	SL	61	59	56	102	102	100	96
VLM6312	00:40	L0771-04A	RO-01-041812		65753	SL	82	82	76	107	105	95	92
VLM6313	01:08	L0782-01B	SO4-MW2		65753	SL	103	102	96	103	106	100	93

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory
METHOD: 82600 ANALYST: AEO
BATCH: 120430.B
Start: 30-APR-12 08:37
End: 30-APR-12 14:38

Comments:

Standards: BFB VW120430A 2 uL
1S15 VW120430B 20 uL
SD VW120430A 20 uL
1CV VW120430C 20 uL

Reviewed By: A51R Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL	STDS	DFM	DCE	TOL	BFB	DIIN	FLG	COMMENTS	pH
V8B1070	08:37	BFB10N														
V8B1073	11:22	VSTD05010N														
V8B1074	11:48	VSTD02010N														
V8B1075	12:14	VSTD00510N														
V8B1076	12:40	VSTD00110N														
V8B1077	13:07	VSTD00110N														
V8B1078	13:33	VSTD20010N														
V8B1079	13:59	VSTD10010N														
V8B1080	14:38	VICV05010N														

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AEO 4/30/12

INJECTION LOG

Comments:

Standards: BFB VW120404A 2 UL
BSS VW120430B AUTO UL
STD VW120430A 20 UL

Reviewed By: JAS-HZ Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	pH
				BATCH			PBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V8B1081	15:02	BFB100	BFB100	AQ											1		OK	
V8B1082	15:30	VSTD050100	VSTD050100	AQ			100	100	100	100	100	100	100		1		OK	
V8B1083	16:11	LCS-65897	LCS-65897	65897	AQ		100	100	100	100	100	100	100		1	E	OK	
V8B1084	16:37	LCS-65899	LCS-65899	65899	SL		101	102	103	99	99	100	99		1	ER	OK	
V8B1085	17:04	MB-65899	MB-65899	65899	SL		100	98	90	98	98	102	97		1		NOT USED	
V8B1086	17:30	MB-65899	MB-65899	65899	SL		99	97	88	99	99	101	96		1		OK	
V8B1087	17:56	MB-65897	MB-65897	65897	AQ		98	98	87	99	99	101	95		1		OK	
V8B1088	18:21	L0824-02A	TRIP BLANK	65897	AQ		99	97	87	99	98	101	96		1		OK	
V8B1089	18:47	L0875-08A	TRIP BLANK	65897	AQ		98	97	86	99	100	102	96		1		OK	2
V8B1090	19:12	L0871-04A	TRIP BLANK	65897	AQ		97	96	85	99	98	102	96		1		OK	2
V8B1091	19:38	L0787-07A	BMA-SOA-7-D7	65897	AQ		97	96	94	99	98	101	100		1000		OK, High TICs	2
V8B1092	20:04	L0768-02C	UKDS-02-041812-	65897	AQ		2	102	101	97	99	99	101		98	10	OK, 2-Butanone = 72	
V8B1093	20:30	L0782-01B	SO4-MW2	65899	SL		95	97	90	98	99	98	99		1		OK	2
V8B1094	20:56	L0824-01A	SRW1	65897	AQ		97	97	90	99	99	102	96		1		OK	
V8B1095	21:22	L0875-01A	MW-1	65897	AQ		98	97	95	98	97	101	99		1		OK	
V8B1096	21:48	L0875-02A	MW-2	65897	AQ		98	97	89	98	98	101	96		1		OK	
V8B1097	22:14	L0875-03A	DW-3	65897	AQ		97	95	87	98	98	101	96		1		OK	
V8B1098	22:40	L0875-04A	RW-1	65897	AQ		97	97	98	99	97	101	99		1		OK	
V8B1099	23:06	L0875-05A	MW-5R	65897	AQ		99	97	92	98	98	100	97		1		OK	
V8B1100	23:32	L0875-06A	MW-6R	65897	AQ		98	97	91	99	100	101	97		1		OK	
V8B1101	23:57	L0875-07A	MW-4	65897	AQ		97	95	89	99	98	102	97		1		OK	
V8B1102	00:23	L0871-01A	MW-7A	65897	AQ		98	97	93	99	100	101	99		1		OK	
V8B1103	00:49	L0871-02A	MW-12	65897	AQ		97	96	89	99	98	101	97		1		OK	
V8B1104	01:15	L0871-03A	MW-15	65897	AQ		98	96	90	98	98	100	97		1		OK	
V8B1105	01:41	L0872-01A	INF TS001 GW356	65897	AQ		96	96	89	99	99	101	97		1		OK	4
V8B1106	02:07	L0872-02A	EFF TS002 GW357	65897	AQ		96	95	87	100	99	101	96		1		OK	2
V8B1107	02:33	L0797-01B	DEC-044 (11-13)	65899	SL		95	95	93	99	98	101	99		50		OK, Night balance = 55	
V8B1108	02:59	VBLX	VBLX	AQ			95	94	88	100	99	100	97		1		NOT USED	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
- Surrogates are diluted

AED 5/1/12

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID	Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
4/23/12	L0770-05C	8260L	-	-	5.5	5.0	E	D1 H2O		Gps
					5.8					
					5.0					
					5.2					
					6.0					
					5.0					
					5.3					
4/23/12	L0782-01B	8260L	-	-	5.5	5.0	E	D1 H2O		Gps
4/23/12	L0798-01A	8260L	-	-	5.4	5.0	E	D1 H2O		Gps
4/24/12	M3	8260L	-	-		5.0	E	DI H2O		Gps
					5.4					
					5.2					
					5.1					
4/24/12	L0795-10C	8260L	-	-	5.6	5.0	E	D1 H2O		Gps

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Spectrum Analytical, Inc. RI Division: Volatile Organics Low/Medium Level Soil Extraction Log

Date	Lab ID	Analysis	Initial Wt. (g)	Final Wt. (g)	Sample Wt. (g)	Extraction Volume (mL)	Sample Type	Solvent&Lot# by/Date*	Comments/ Time of Encore transfer	Analyst
4/24/12	L0795-	7211C 74C 4/24/12 ca	-	-	5.0	5.0	E	DI H2O		gms
		12C			5.1					
		13C 18C 4/24/12 ca			5.5					
		14C			5.8					
		15C			5.1					
		16C			5.0					
		17C			5.1					
		18C			5.4					
		19C			5.9					
	L0795-	19C MS 20C			5.9					
	L0795-	19C MS 22C			5.2					
	L0797-	02B			5.3					
	L0770-	01C	-	-	5.0			DI H2O		
	L0761-	01B	-	-	5.1	5.0		MEOH 5118A		
4/24/12	L0782	01B	-	-	5.1	5.0	E	MEOH 5118A		gms

4/24/12

*=Date added, if different than Rec. date

Sample Type: A. MeOH Pre-preserved; B. DI H2O/Freeze; C. NaHSO4 Pre-preserved; D. Encore; E. Unpreserved Jars

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK						
VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used
4/19/12	60739	Selva	01-03	CPA	AED	US
4/20/12	60782	Sterling	01	JV		US
	60787	Veritek	01A-07A	JV		H
	60787	Veritek	01B-07B	JV		H
	60790	Pel	01-09	JV		H
	60791	Pel	01-06	JV		H
	60792	Pel	01-14	JV		H
4/20/12	60793	Pel	01-07	JV		H
4/23/12	60639	URS	16	VEB		H
	60795	Dvirka	01-06			UA
	60795	Dvirka	07-20			US
	60786	Spectrum	01			US
	60742	EPA	07-13			Σ
4/23/12	60741	EPA	05-08	VEB	AED	H

Reviewed By: AED 4/23/12

"Preservative Used" Key

UA = Unpreserved Aqueous

E = Encore

US = Unpreserved Soil

F = Freeze

T = Trace, HCL

Logbook ID 90.0191-07/11



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Semivolatile Organics ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L0782

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 8270D

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S3
Instrument Type: GCMS-SEMI
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 5973

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

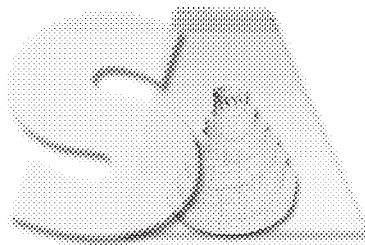
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.' or similar, written in a cursive style.

Signed: _____

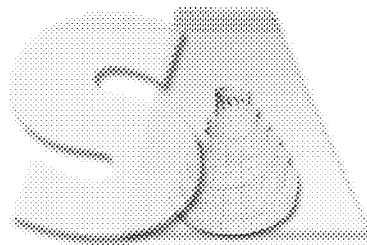
Date: _____ 5/8/2012 _____



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

2K - FORM II SV-4
SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-65732	75	73	75	74	72	87			0
02	LCS-65732	82	79	80	78	80	94			0
03	LCSD-65732	83	81	81	80	81	99			0
04	S04-MW2	63	62	70	63	62	78			0

QC LIMITS

SDMC1	(NBZ) = Nitrobenzene-d5	(35-100)
SDMC2	(FBP) = 2-Fluorobiphenyl	(45-105)
SDMC3	(TPH) = Terphenyl-d14	(30-125)
SDMC4	(PHL) = Phenol-d5	(40-100)
SDMC5	(2FP) = 2-Fluorophenol	(35-105)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(35-125)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D DMC diluted out

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCS-65732 LCS Lot No.: A084216
Date Extracted: 04/22/2012 Date Analyzed (1): 04/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	3333.0000	0.0000	2429.7876	73		40 - 100
Bis(2-chloroethyl)ether	3333.0000	0.0000	2753.3848	83		40 - 105
2-Chlorophenol	3333.0000	0.0000	2557.7579	77		45 - 105
1,3-Dichlorobenzene	3333.0000	0.0000	2470.3114	74		40 - 100
1,4-Dichlorobenzene	3333.0000	0.0000	2475.0234	74		35 - 105
1,2-Dichlorobenzene	3333.0000	0.0000	2486.8583	75		45 - 95
2-Methylphenol	3333.0000	0.0000	2608.2225	78		40 - 105
2,2'-oxybis(1-Chloropropan	3333.0000	0.0000	2913.7191	87		20 - 115
4-Methylphenol	3333.0000	0.0000	2527.6494	76		40 - 105
N-Nitroso-di-n-propylamine	3333.0000	0.0000	2599.5651	78		40 - 115
Hexachloroethane	3333.0000	0.0000	2548.5505	76		35 - 110
Nitrobenzene	3333.0000	0.0000	3601.7268	108		40 - 115
Isophorone	3333.0000	0.0000	2544.6074	76		45 - 110
2-Nitrophenol	3333.0000	0.0000	2626.6674	79		40 - 110
2,4-Dimethylphenol	3333.0000	0.0000	3231.8508	97		30 - 105
2,4-Dichlorophenol	3333.0000	0.0000	2586.7096	78		45 - 110
1,2,4-Trichlorobenzene	3333.0000	0.0000	2531.9852	76		45 - 110
Naphthalene	3333.0000	0.0000	2515.3546	75		40 - 105
4-Chloroaniline	3333.0000	0.0000	1955.3936	59		10 - 100
Bis(2-chloroethoxy)methane	3333.0000	0.0000	2619.3495	79		45 - 110
Hexachlorobutadiene	3333.0000	0.0000	2670.8358	80		40 - 115
4-Chloro-3-methylphenol	3333.0000	0.0000	2415.0466	72		45 - 115
2-Methylnaphthalene	3333.0000	0.0000	2448.5025	73		45 - 105
Hexachlorocyclopentadiene	3333.0000	0.0000	3382.3831	101		8 - 148
2,4,6-Trichlorophenol	3333.0000	0.0000	2708.8686	81		45 - 110
2,4,5-Trichlorophenol	3333.0000	0.0000	2673.8493	80		50 - 110
2-Chloronaphthalene	3333.0000	0.0000	2614.4589	78		45 - 105
2-Nitroaniline	3333.0000	0.0000	2787.1230	84		45 - 120
Dimethylphthalate	3333.0000	0.0000	2409.9156	72		50 - 110
Acenaphthylene	3333.0000	0.0000	2506.6786	75		45 - 105
2,6-Dinitrotoluene	3333.0000	0.0000	2478.6323	74		50 - 110
3-Nitroaniline	3333.0000	0.0000	1632.3207	49		25 - 110
Acenaphthene	3333.0000	0.0000	2492.3904	75		45 - 110
2,4-Dinitrophenol	3333.0000	0.0000	3786.5159	114		15 - 130
4-Nitrophenol	3333.0000	0.0000	2624.0959	79		15 - 140
Dibenzofuran	3333.0000	0.0000	2501.2965	75		50 - 105
2,4-Dinitrotoluene	3333.0000	0.0000	2477.7064	74		50 - 115
Diethylphthalate	3333.0000	0.0000	2334.5539	70		50 - 115
4-Chlorophenyl-phenylether	3333.0000	0.0000	2509.1816	75		45 - 110
Fluorene	3333.0000	0.0000	2460.4612	74		50 - 110
4-Nitroaniline	3333.0000	0.0000	1495.2187	45		35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	0.0000	3056.0076	92		30 - 135
N-Nitrosodiphenylamine	3333.0000	0.0000	2648.2119	79		50 - 115
4-Bromophenyl-phenylether	3333.0000	0.0000	2738.7781	82		45 - 115

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCS-65732 LCS Lot No.: A084216
Date Extracted: 04/22/2012 Date Analyzed (1): 04/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	3333.0000	0.0000	2805.6715	84		45 - 120
Pentachlorophenol	3333.0000	0.0000	3474.9486	104		25 - 120
Phenanthrene	3333.0000	0.0000	2567.0494	77		50 - 110
Anthracene	3333.0000	0.0000	2559.2982	77		55 - 105
Carbazole	3333.0000	0.0000	2480.2893	74		45 - 115
Di-n-butylphthalate	3333.0000	0.0000	2507.8917	75		55 - 110
Fluoranthene	3333.0000	0.0000	2520.7225	76		55 - 115
Pyrene	3333.0000	0.0000	2631.4906	79		45 - 125
Butylbenzylphthalate	3333.0000	0.0000	2548.3205	76		50 - 125
3,3'-Dichlorobenzidine	3333.0000	0.0000	1447.6236	43		10 - 130
Benzo(a)anthracene	3333.0000	0.0000	2650.6511	80		50 - 110
Chrysene	3333.0000	0.0000	2598.4699	78		55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	0.0000	2498.1051	75		45 - 125
Di-n-octylphthalate	3333.0000	0.0000	2444.5538	73		40 - 130
Benzo(b)fluoranthene	3333.0000	0.0000	2546.8867	76		45 - 115
Benzo(k)fluoranthene	3333.0000	0.0000	2541.1462	76		45 - 125
Benzo(a)pyrene	3333.0000	0.0000	2572.8313	77		50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	0.0000	2659.0893	80		40 - 120
Dibenzo(a,h)anthracene	3333.0000	0.0000	2723.3777	82		40 - 125
Benzo(g,h,i)perylene	3333.0000	0.0000	2677.5554	80		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-65732

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L0782

Mod. Ref No.:

SDG No.: SL0782

Lab Sample ID: LCSD-65732

LCS Lot No.:

A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #	QC LIMITS	
						RPD	REC.
Phenol	3333.0000	2513.5717	75		3	40	40 - 100
Bis(2-chloroethyl)ether	3333.0000	2903.1387	87		5	40	40 - 105
2-Chlorophenol	3333.0000	2660.7122	80		4	40	45 - 105
1,3-Dichlorobenzene	3333.0000	2564.2325	77		4	40	40 - 100
1,4-Dichlorobenzene	3333.0000	2556.4156	77		4	40	35 - 105
1,2-Dichlorobenzene	3333.0000	2610.4982	78		4	40	45 - 95
2-Methylphenol	3333.0000	2724.8192	82		5	40	40 - 105
2,2'-oxybis(1-Chloropropan	3333.0000	3010.1365	90		3	40	20 - 115
4-Methylphenol	3333.0000	2638.4932	79		4	40	40 - 105
N-Nitroso-di-n-propylamine	3333.0000	2728.4009	82		5	40	40 - 115
Hexachloroethane	3333.0000	2630.5015	79		4	40	35 - 110
Nitrobenzene	3333.0000	3712.3250	111		3	40	40 - 115
Isophorone	3333.0000	2653.1352	80		5	40	45 - 110
2-Nitrophenol	3333.0000	2755.6043	83		5	40	40 - 110
2,4-Dimethylphenol	3333.0000	3317.2306	100		3	40	30 - 105
2,4-Dichlorophenol	3333.0000	2677.3772	80		3	40	45 - 110
1,2,4-Trichlorobenzene	3333.0000	2673.5979	80		5	40	45 - 110
Naphthalene	3333.0000	2636.9820	79		5	40	40 - 105
4-Chloroaniline	3333.0000	1970.7493	59		0	40	10 - 100
Bis(2-chloroethoxy)methane	3333.0000	2712.9210	81		3	40	45 - 110
Hexachlorobutadiene	3333.0000	2804.3110	84		5	40	40 - 115
4-Chloro-3-methylphenol	3333.0000	2618.7528	79		9	40	45 - 115
2-Methylnaphthalene	3333.0000	2533.8972	76		4	40	45 - 105
Hexachlorocyclopentadiene	3333.0000	3433.4658	103		2	40	8 - 148
2,4,6-Trichlorophenol	3333.0000	2895.1493	87		7	40	45 - 110
2,4,5-Trichlorophenol	3333.0000	2775.6108	83		4	40	50 - 110
2-Chloronaphthalene	3333.0000	2700.6714	81		4	40	45 - 105
2-Nitroaniline	3333.0000	2863.0759	86		2	40	45 - 120
Dimethylphthalate	3333.0000	2543.0412	76		5	40	50 - 110
Acenaphthylene	3333.0000	2607.5237	78		4	40	45 - 105
2,6-Dinitrotoluene	3333.0000	2581.9759	77		4	40	50 - 110
3-Nitroaniline	3333.0000	1655.8391	50		2	40	25 - 110
Acenaphthene	3333.0000	2569.5211	77		3	40	45 - 110
2,4-Dinitrophenol	3333.0000	3888.5719	117		3	40	15 - 130
4-Nitrophenol	3333.0000	2839.9643	85		7	40	15 - 140
Dibenzofuran	3333.0000	2560.4851	77		3	40	50 - 105
2,4-Dinitrotoluene	3333.0000	2611.8615	78		5	40	50 - 115
Diethylphthalate	3333.0000	2481.8310	74		6	40	50 - 115
4-Chlorophenyl-phenylether	3333.0000	2645.0832	79		5	40	45 - 110
Fluorene	3333.0000	2560.8623	77		4	40	50 - 110
4-Nitroaniline	3333.0000	1515.1536	45		0	40	35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	3283.0605	99		7	40	30 - 135
N-Nitrosodiphenylamine	3333.0000	2702.5007	81		3	40	50 - 115
4-Bromophenyl-phenylether	3333.0000	2888.8430	87		6	40	45 - 115
Hexachlorobenzene	3333.0000	2924.7614	88		5	40	45 - 120
Pentachlorophenol	3333.0000	3614.1074	108		4	40	25 - 120

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab Sample ID: LCSD-65732 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Phenanthrene	3333.0000	2636.7817	79		3		40	50 - 110
Anthracene	3333.0000	2656.3408	80		4		40	55 - 105
Carbazole	3333.0000	2567.9685	77		4		40	45 - 115
Di-n-butylphthalate	3333.0000	2598.5052	78		4		40	55 - 110
Fluoranthene	3333.0000	2584.8619	78		3		40	55 - 115
Pyrene	3333.0000	2636.4088	79		0		40	45 - 125
Butylbenzylphthalate	3333.0000	2610.2474	78		3		40	50 - 125
3,3'-Dichlorobenzidine	3333.0000	1455.3214	44		2		40	10 - 130
Benzo(a)anthracene	3333.0000	2626.4559	79		1		40	50 - 110
Chrysene	3333.0000	2749.4660	82		5		40	55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	2585.7346	78		4		40	45 - 125
Di-n-octylphthalate	3333.0000	2548.8014	76		4		40	40 - 130
Benzo(b)fluoranthene	3333.0000	2747.4733	82		8		40	45 - 115
Benzo(k)fluoranthene	3333.0000	2589.6943	78		3		40	45 - 125
Benzo(a)pyrene	3333.0000	2715.9817	81		5		40	50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	2799.8506	84		5		40	40 - 120
Dibenzo(a,h)anthracene	3333.0000	2838.7393	85		4		40	40 - 125
Benzo(g,h,i)perylene	3333.0000	2837.9518	85		6		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

4C - FORM IV SV
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: S3H9923.D Lab Sample ID: MB-65732
Instrument ID: S3 Date Extracted: 04/22/2012
Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 04/24/2012
Level: (LOW/MED) LOW Time Analyzed: 14:54
Extraction: (Type) SONC GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-65732	LCS-65732	S3H9924.D	04/24/2012
02	LCSD-65732	LCSD-65732	S3H9925.D	04/24/2012
03	S04-MW2	L0782-01A	S3H9936.D	04/24/2012

COMMENTS:

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP3N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: S3H9410A.D DFTPP Injection Date: 03/23/2012
Instrument ID: S3 DFTPP Injection Time: 14:40

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	36.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	42.1
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	45.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	29.0
365	Greater than 1.0% of mass 198	3.3
441	Present, but less than mass 443	11.8
442	50.0 - 100% of mass 198	80.5
443	15.0 - 24.0% of mass 442	16.0 (19.9)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253N	SSTD0253N	S3H9411.D	03/23/2012	15:03
02	SSTD0803N	SSTD0803N	S3H9412.D	03/23/2012	15:32
03	SSTD0103N	SSTD0103N	S3H9413.D	03/23/2012	15:51
04	SSTD0603N	SSTD0603N	S3H9414.D	03/23/2012	16:11
05	SSTD0053N	SSTD0053N	S3H9415.D	03/23/2012	16:30
06	SSTD0403N	SSTD0403N	S3H9416.D	03/23/2012	16:50

5B - FORM V SV
SEMIVOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CLIENT SAMPLE NO.

DFTPP3L

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
Lab File ID: S3H9910.D DFTPP Injection Date: 04/24/2012
Instrument ID: S3 DFTPP Injection Time: 10:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	37.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	41.4
70	Less than 2.0% of mass 69	0.3 (0.8)1
127	10.0 - 80.0% of mass 198	44.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	29.9
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than mass 443	10.4
442	50.0 - 100% of mass 198	74.3
443	15.0 - 24.0% of mass 442	15.2 (20.5)2

1 - Value is % mass 69

2 - Value is % mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD0253L	SSTD0253L	S3H9911.D	04/24/2012	10:48
02	MB-65732	MB-65732	S3H9923.D	04/24/2012	14:54
03	LCS-65732	LCS-65732	S3H9924.D	04/24/2012	15:13
04	LCSD-65732	LCSD-65732	S3H9925.D	04/24/2012	15:33
05	S04-MW2	L0782-01A	S3H9936.D	04/24/2012	19:05

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 03/23/2012 03/23/2012
 EPA Sample No.(SSTD020##) SSTD0253L Date Analyzed: 04/24/2012
 Lab File ID (Standard): S3H9911.D Time Analyzed: 10:48
 Instrument ID: S3

		IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
		AREA	#	AREA	#	AREA	#
12 HOUR STD		180611	2.239	668393	3.997	416133	5.92
UPPER LIMIT		361222	2.739	1336786	4.497	832266	6.42
LOWER LIMIT		90306	1.739	334197	3.497	208067	5.42
SAMPLE NO.							
01	MB-65732	218933	2.243	781065	3.995	455609	5.913
02	LCS-65732	229705	2.242	822315	3.999	480621	5.917
03	LCSD-65732	225208	2.243	811955	4.001	483742	5.918
04	S04-MW2	224572	2.239	801249	3.996	469667	5.914

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% 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 contract required QC limits with an asterisk.

8D - FORM VIII SV-2
SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 EPA Sample No.(SSTD020##) SSTD0253L Date Analyzed: 04/24/2012
 Lab File ID (Standard): S3H9911.D Time Analyzed: 10:48
 Instrument ID: S3 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	836695	7.191	1023998	9.355	1082796	10.439
	UPPER LIMIT	1673390	7.691	2047996	9.855	2165592	10.939
	LOWER LIMIT	418348	6.691	511999	8.855	541398	9.939
	SAMPLE NO.						
01	MB-65732	879768	7.185	1014491	9.348	1033351	10.427
02	LCS-65732	889778	7.189	1016104	9.352	1121387	10.426
03	LCSD-65732	905119	7.190	1054460	9.348	1126635	10.427
04	S04-MW2	902555	7.185	1075575	9.349	1117845	10.423

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area

AREA LOWER LIMIT = 50% 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 contract required QC limits with an asterisk.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S04-MW2

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: _____ SDG No.: SL0782
Matrix: (SOIL/SED/WATER) SOIL	Lab Sample ID: L0782-01A
Sample wt/vol: 15.3 (g/mL) G	Lab File ID: S3H9936.D
Level: (LOW/MED) LOW	Extraction: (Type) SONC
% Moisture: 8.1 Decanted: (Y/N) N	Date Received: 04/20/2012
Concentrated Extract Volume: 1000 (uL)	Date Extracted: 04/22/2012
Injection Volume: 1.0 (uL) GPC Factor: 1.00	Date Analyzed: 04/24/2012
GPC Cleanup: (Y/N) N pH: _____	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	710	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	710	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	710	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	710	U
100-02-7	4-Nitrophenol	710	U
132-64-9	Dibenzofuran	350	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S04-MW2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L0782-01A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S3H9936.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.1 Decanted: (Y/N) N Date Received: 04/20/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	710	U
534-52-1	4,6-Dinitro-2-methylphenol	710	U
86-30-6	N-Nitrosodiphenylamine	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	710	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	Bis(2-ethylhexyl)phthalate	730	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

Data File: \\avogadro\organics\S3.I\120424.B\S3H9936.D
Report Date: 25-Apr-2012 17:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120424.B\S3H9936.D
Lab Smp Id: L0782-01A Client Smp ID: S04-MW2
Inj Date : 24-APR-2012 19:05
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : L0782-01A,,65732
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120424.B\s3_8270C_N.m
Meth Date : 25-Apr-2012 17:13 S3.i Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270C.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Ws}) * (100/(100-\text{M})) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.300	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

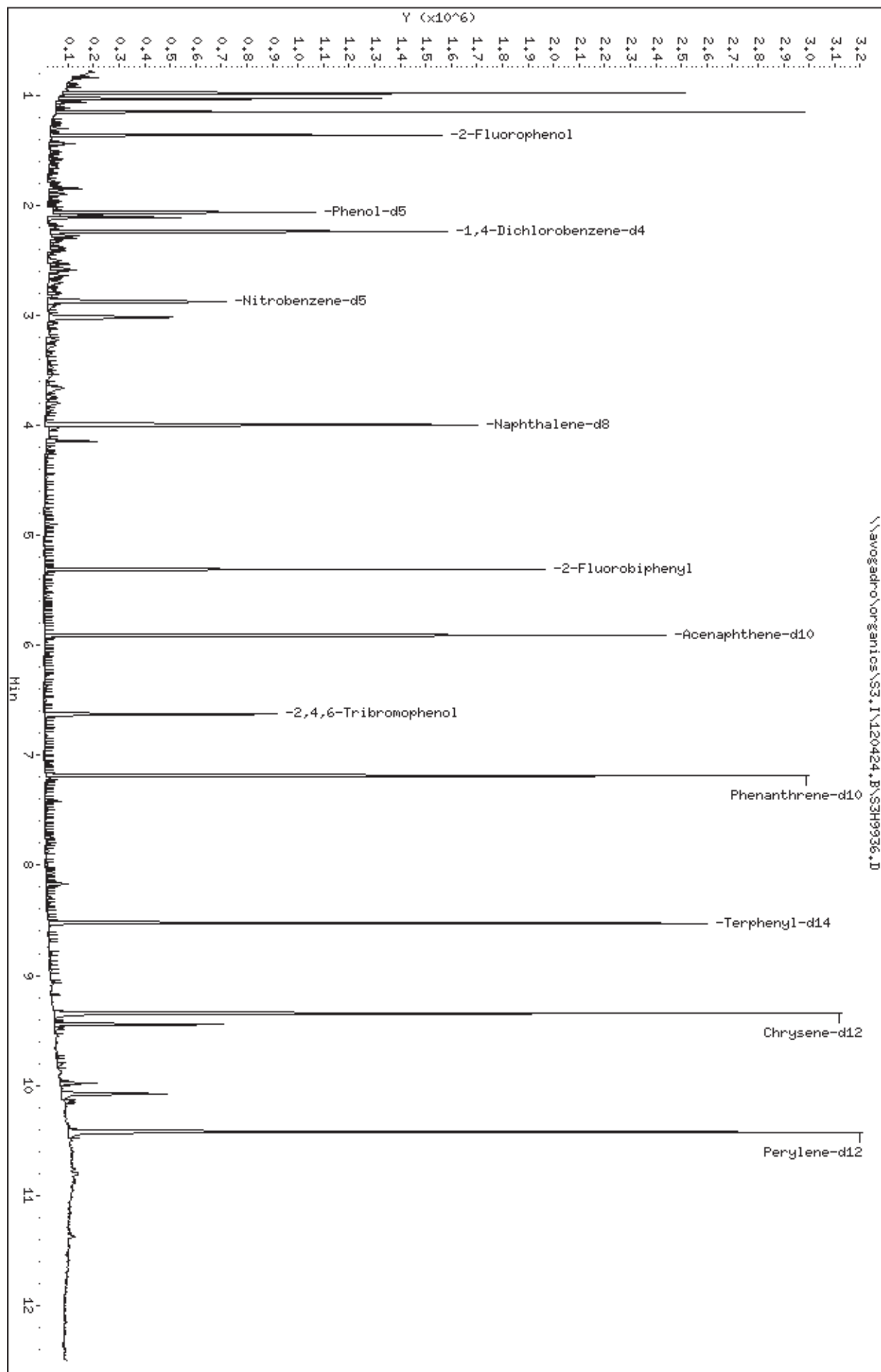
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/Kg)
\$ 3 2-Fluorophenol	112	1.362	1.362	(0.609)	233917	30.8873	2000
\$ 5 Phenol-d5	99	2.062	2.068	(0.921)	310684	31.3909	2000
* 12 1,4-Dichlorobenzene-d4	152	2.238	2.239	(1.000)	224572	40.0000	
\$ 22 Nitrobenzene-d5	82	2.879	2.880	(0.721)	252493	31.3116	2000
* 31 Naphthalene-d8	136	3.996	3.996	(1.000)	801249	40.0000	
\$ 41 2-Fluorobiphenyl	172	5.310	5.316	(0.898)	508380	31.1738	2000
* 48 Acenaphthene-d10	164	5.913	5.919	(1.000)	469667	40.0000	
\$ 60 2,4,6-Tribromophenol	330	6.629	6.635	(0.923)	96121	39.0502	2600
* 64 Phenanthrene-d10	188	7.185	7.191	(1.000)	902555	40.0000	
\$ 72 Terphenyl-d14	244	8.526	8.532	(0.912)	712087	34.8245	2300
* 76 Chrysene-d12	240	9.348	9.354	(1.000)	1075575	40.0000	
78 bis(2-Ethylhexyl)phthalate	149	9.445	9.450	(1.010)	159877	10.2135	670(H)
* 83 Perylene-d12	264	10.422	10.439	(1.000)	1117845	40.0000	

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\S3,I\120424,B\SH9936.D
 Date : 24-APR-2012 19:05
 Client ID: S04-HM2
 Sample Info: L0782-01A,65732
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Data File: \\avogadro\organics\S3.I\120424.B\S3H9936.D

Date : 24-APR-2012 19:05

Client ID: S04-MW2

Instrument: S3.i

Sample Info: L0782-01A,,65732

Volume Injected (uL): 1.0

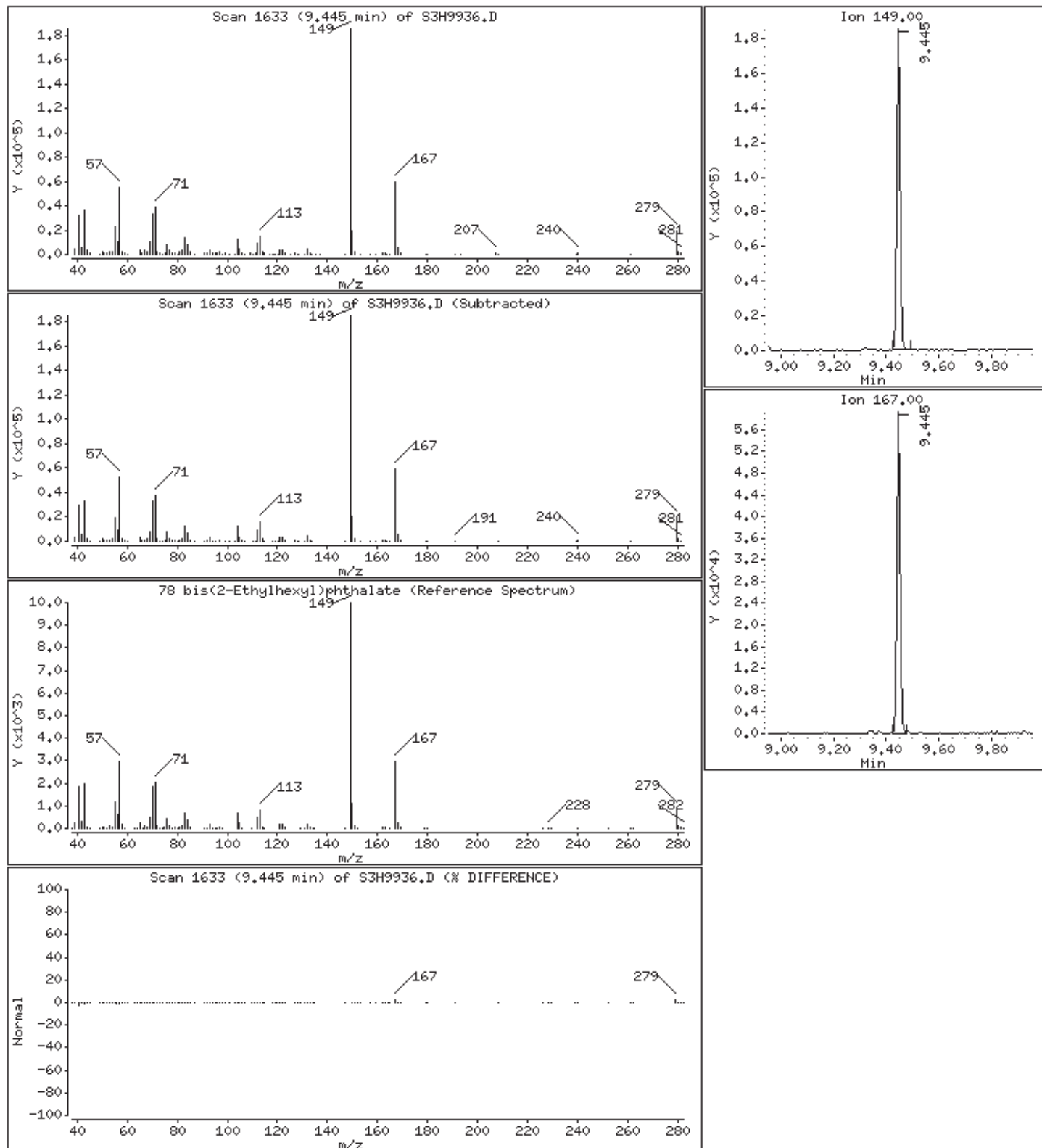
Operator: PK SRC: LIMS

Column phase: Rxi-5Sil MS

Column diameter: 0.25

78 bis(2-Ethylhexyl)phthalate

Concentration: 670 ug/Kg



Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Instrument ID: S3

Case No.: L0782

SAS No.:

SDG No.: SL0782

Calibration Date(s): 03/23/2012

03/23/2012

Calibration Times: 15:03

16:50

GC Column: Rxi-5sil MS

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = S3H9415.D RRF010 = S3H9413.D RRF025 = S3H9411.D RRF040 = S3H9416.D RRF060 = S3H9414.D

RRF080 = S3H9412.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080				RRF	% RSD
Phenol	2.007	2.109	1.913	1.885	1.978	1.899				1.965	4.3
Bis(2-chloroethyl)ether	0.971	1.043	0.936	0.919	0.943	0.920				0.956	4.9
2-Chlorophenol	1.381	1.474	1.403	1.328	1.383	1.345				1.386	3.7
1,3-Dichlorobenzene	1.569	1.631	1.518	1.440	1.480	1.407				1.507	5.5
1,4-Dichlorobenzene	1.627	1.678	1.567	1.463	1.492	1.433				1.543	6.3
1,2-Dichlorobenzene	1.480	1.580	1.453	1.389	1.417	1.370				1.448	5.3
2-Methylphenol	1.206	1.325	1.255	1.252	1.299	1.268				1.268	3.3
2,2'-oxybis(1-Chloropropane)	1.719	1.822	1.677	1.604	1.652	1.631				1.684	4.6
4-Methylphenol	1.328	1.432	1.379	1.352	1.398	1.372				1.377	2.6
N-Nitroso-di-n-propylamine	1.094	1.152	1.057	1.042	1.068	1.038				1.075	4.0
Hexachloroethane	0.552	0.568	0.532	0.508	0.522	0.502				0.531	4.8
Nitrobenzene	0.425	0.451	0.404	0.395	0.402	0.392				0.412	5.4
Isophorone	0.768	0.800	0.729	0.718	0.714	0.704				0.739	5.0
2-Nitrophenol	0.204	0.217	0.205	0.202	0.205	0.204				0.206	2.7
2,4-Dimethylphenol	0.215	0.297	0.278	0.329	0.343	0.343				0.301	16.3
2,4-Dichlorophenol	0.325	0.347	0.319	0.316	0.320	0.310				0.323	4.0
1,2,4-Trichlorobenzene	0.384	0.398	0.362	0.354	0.351	0.336				0.364	6.3
Naphthalene	1.149	1.180	1.068	1.024	1.010	0.972				1.067	7.7
4-Chloroaniline	0.493	0.528	0.414	0.470	0.461	0.456				0.470	8.2
Bis(2-chloroethoxy)methane	0.458	0.482	0.441	0.425	0.432	0.426				0.444	5.0
Hexachlorobutadiene	0.218	0.223	0.203	0.204	0.199	0.191				0.206	5.8
4-Chloro-3-methylphenol	0.344	0.369	0.345	0.340	0.338	0.328				0.344	4.0
2-Methylnaphthalene	0.780	0.826	0.730	0.725	0.710	0.682				0.742	7.0
Hexachlorocyclopentadiene	0.224	0.289	0.273	0.319	0.336	0.325				0.294	14.2
2,4,6-Trichlorophenol	0.388	0.420	0.405	0.387	0.400	0.392				0.399	3.2
2,4,5-Trichlorophenol		0.461	0.428	0.401	0.416	0.416				0.424	5.3
2-Chloronaphthalene	1.217	1.265	1.129	1.063	1.062	0.988				1.121	9.3

Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Case No.: L0782

SAS No.:

SDG No.: SL0782

Instrument ID: S3

Calibration Date(s): 03/23/2012

03/23/2012

Calibration Times:

15:03

16:50

GC Column: Rxi-5sil MS

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = S3H9415.D RRF010 = S3H9413.D RRF025 = S3H9411.D RRF040 = S3H9416.D RRF060 = S3H9414.D
RRF080 = S3H9412.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD	
2-Nitroaniline		0.378	0.347	0.341	0.356	0.345			0.353	4.1
Dimethylphthalate	1.465	1.548	1.377	1.303	1.328	1.248			1.378	8.0
Acenaphthylene	1.986	2.086	1.929	1.805	1.821	1.711			1.890	7.2
2,6-Dinitrotoluene	0.325	0.355	0.313	0.315	0.333	0.321			0.327	4.7
3-Nitroaniline		0.407	0.346	0.363	0.373	0.366			0.371	6.0
Acenaphthene	1.261	1.301	1.182	1.113	1.126	1.065			1.175	7.8
2,4-Dinitrophenol		0.054	0.116	0.132	0.176	0.182			0.132	39.3
4-Nitrophenol		0.152	0.152	0.141	0.152	0.150			0.149	3.2
Dibenzofuran	1.828	1.873	1.724	1.620	1.621	1.532			1.700	7.8
2,4-Dinitrotoluene	0.407	0.458	0.425	0.425	0.445	0.431			0.432	4.1
Diethylphthalate	1.421	1.466	1.333	1.262	1.282	1.230			1.332	7.0
4-Chlorophenyl-phenylether	0.764	0.803	0.722	0.689	0.709	0.669			0.726	6.8
Fluorene	1.514	1.592	1.433	1.348	1.345	1.277			1.418	8.3
4-Nitroaniline		0.389	0.356	0.357	0.385	0.366			0.371	4.2
4,6-Dinitro-2-methylphenol		0.102	0.119	0.135	0.144	0.143			0.129	14.0
N-Nitrosodiphenylamine	0.649	0.676	0.616	0.582	0.587	0.553			0.610	7.5
4-Bromophenyl-phenylether	0.241	0.250	0.227	0.220	0.223	0.214			0.229	5.9
Hexachlorobenzene	0.271	0.284	0.250	0.252	0.253	0.238			0.258	6.5
Pentachlorophenol		0.043	0.101	0.095	0.118	0.134			0.098	34.8
Phenanthrene	1.144	1.164	1.035	0.972	0.952	0.901			1.028	10.4
Anthracene	1.162	1.179	1.045	1.001	0.993	0.934			1.052	9.3
Carbazole	1.118	1.142	1.012	0.962	0.951	0.893			1.013	9.7
Di-n-butylphthalate	1.160	1.209	1.105	1.061	1.053	0.986			1.096	7.3
Fluoranthene	1.351	1.416	1.238	1.175	1.153	1.081			1.236	10.3
Pyrene	1.113	1.177	1.031	1.003	0.978	0.925			1.038	8.9
Butylbenzylphthalate	0.420	0.457	0.420	0.416	0.419	0.410			0.424	3.9
3,3'-Dichlorobenzidine	0.443	0.468	0.384	0.404	0.401	0.373			0.412	8.8

Lab Code: MITKEM

Case No.: L0782

SAS No.:

SDG No.: SL0782

Instrument ID: S3

Calibration Date(s): 03/23/2012

03/23/2012

GC Column: Rxi-5sil MS

ID: 0.25

(mm)

Length: 30

(mm)

Calibration Times: 15:03

16:50

LAB FILE ID: RRF005 = S3H9415.D RRF010 = S3H9413.D RRF025 = S3H9411.D RRF040 = S3H9416.D RRF060 = S3H9414.D

RRF080 = S3H9412.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Benzo(a)anthracene	1.172	1.210	1.062	1.035	1.023	0.960		1.077	8.8
Chrysene	1.117	1.155	1.015	0.940	0.950	0.904		1.013	10.1
Bis(2-ethylhexyl)phthalate	0.582	0.626	0.579	0.572	0.576	0.559		0.582	3.9
Di-n-octylphthalate	0.868	0.988	0.966	0.917	0.916	0.884		0.923	5.0
Benzo(b)fluoranthene	1.144	1.178	1.194	1.123	1.017	1.071		1.121	6.0
Benzo(k)fluoranthene	1.319	1.414	1.190	1.121	1.189	1.021		1.209	11.6
Benzo(a)pyrene	1.072	1.135	1.094	1.040	1.029	0.978		1.058	5.2
Indeno(1,2,3-cd)pyrene	1.323	1.416	1.318	1.282	1.300	1.246		1.314	4.4
Dibenzo(a,h)anthracene	1.058	1.181	1.094	1.067	1.083	1.033		1.086	4.7
Benzo(g,h,i)perylene	1.141	1.221	1.127	1.090	1.111	1.065		1.126	4.8

Lab Code: MITKEM

Case No.: L0782

SAS No.:

SDG No.: SL0782

Instrument ID: S3

Calibration Date(s): 03/23/2012

03/23/2012

GC Column: Rxi-5sil MS

ID: 0.25

(mm)

Length: 30

(mm)

Calibration Times: 15:03

16:50

LAB FILE ID: RRF005 = S3H9415.D RRF010 = S3H9413.D RRF025 = S3H9411.D RRF040 = S3H9416.D RRF060 = S3H9414.D

RRF080 = S3H9412.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080	RRF		% RSD
Nitrobenzene-d5	0.417	0.432	0.396	0.389	0.394	0.387		0.403	4.5
2-Fluorobiphenyl	1.440	1.538	1.404	1.342	1.330	1.278		1.389	6.7
Terphenyl-d14	0.788	0.844	0.752	0.752	0.735	0.692		0.760	6.8
Phenol-d5	1.787	1.941	1.744	1.682	1.737	1.687		1.763	5.4
2-Fluorophenol	1.373	1.441	1.338	1.285	1.334	1.322		1.349	3.9
2,4,6-Tribromophenol	0.101	0.108	0.110	0.111	0.114	0.111		0.109	4.1

Data File: \\avogadro\organics\S3.I\120323.B\S3H9411.D
Report Date: 28-Mar-2012 16:25

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9411.D
Lab Smp Id: SST0253N Client Smp ID: SST0253N
Inj Date : 23-MAR-2012 15:03
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0253N, SST0253N
Misc Info : 2,3
Comment :
Method : \\avogadro\organics\S3.I\120323.B\s3_8270C_N.m
Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
\$ 109 1,4-Dioxane-d8	96	1.017	1.017	(0.362)	45900	25.0000	25
108 1,4-Dioxane	58	1.022	1.022	(0.364)	31238	25.0000	24
1 N-Nitrosodimethylamine	74	1.113	1.113	(0.396)	106334	25.0000	25
2 Pyridine	79	1.134	1.134	(0.404)	155453	25.0000	22
\$ 3 2-Fluorophenol	112	1.722	1.722	(0.612)	161242	25.0000	25
101 Benzaldehyde	77	2.358	2.358	(0.839)	139291	25.0000	27
\$ 5 Phenol-d5	99	2.459	2.459	(0.875)	210154	25.0000	25
6 Phenol	94	2.470	2.470	(0.878)	230478	25.0000	24
7 Aniline	66	2.459	2.459	(0.875)	162064	25.0000	22
8 bis(2-Chloroethyl)Ether	63	2.523	2.523	(0.897)	112780	25.0000	24
10 2-Chlorophenol	128	2.587	2.587	(0.920)	169065	25.0000	25
11 1,3-Dichlorobenzene	146	2.748	2.748	(0.977)	182900	25.0000	25
* 12 1,4-Dichlorobenzene-d4	152	2.812	2.812	(1.000)	192755	40.0000	
13 1,4-Dichlorobenzene	146	2.833	2.833	(1.008)	188757	25.0000	25
117 2-Ethyl-1-hexanol	57	2.924	2.924	(1.040)	153996	25.0000	25
15 Benzyl Alcohol	108	3.015	3.015	(1.072)	110810	25.0000	25
16 1,2-Dichlorobenzene	146	3.031	3.031	(1.078)	175022	25.0000	25
17 2-Methylphenol	108	3.229	3.229	(1.148)	151199	25.0000	25
18 2,2'-oxybis(1-Chloropropane)	45	3.218	3.218	(1.144)	202010	25.0000	25
99 Acetophenone	105	3.405	3.405	(1.211)	244667	25.0000	25

						AMOUNTS	
						CAL - AMT	ON - COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
19 N-Nitroso-di-n-propylamine	70	3.432	3.432	(1.220)	127368	25.0000	24
20 4-Methylphenol	108	3.501	3.501	(1.245)	166176	25.0000	25
21 Hexachloroethane	117	3.544	3.544	(1.260)	64076	25.0000	25
\$ 22 Nitrobenzene-d5	82	3.635	3.635	(0.793)	179187	25.0000	25
23 Nitrobenzene	77	3.661	3.661	(0.798)	182788	25.0000	24
24 Isophorone	82	4.019	4.019	(0.877)	329798	25.0000	25
25 2-Nitrophenol	139	4.121	4.121	(0.899)	92515	25.0000	25
26 2,4-Dimethylphenol	107	4.260	4.260	(0.929)	125922	25.0000	23
27 bis(2-Chloroethoxy)methane	93	4.350	4.350	(0.949)	199585	25.0000	25
28 Benzoic Acid	105	4.436	4.436	(0.967)	112347	25.0000	26
29 2,4-Dichlorophenol	162	4.463	4.463	(0.973)	144191	25.0000	25
30 1,2,4-Trichlorobenzene	180	4.532	4.532	(0.988)	163557	25.0000	25
* 31 Naphthalene-d8	136	4.585	4.585	(1.000)	723739	40.0000	
32 Naphthalene	128	4.607	4.607	(1.005)	483306	25.0000	25
115 alpha-Terpineol	59	4.671	4.671	(1.019)	96031	25.0000	24
33 4-Chloroaniline	127	4.714	4.714	(1.028)	187234	25.0000	22
34 Hexachlorobutadiene	225	4.794	4.794	(1.045)	91645	25.0000	24
102 Caprolactam	113	5.088	5.088	(1.110)	63323	25.0000	25
35 4-Chloro-3-Methylphenol	107	5.328	5.328	(1.162)	156170	25.0000	25
36 2-Methylnaphthalene	142	5.387	5.387	(1.175)	330276	25.0000	24
114 1-Methylnaphthalene	142	5.483	5.483	(1.196)	312038	25.0000	25
38 Hexachlorocyclopentadiene	237	5.563	5.563	(0.873)	76886	25.0000	23
112 1,2,4,5-Tetrachlorobenzene	216	5.563	5.563	(0.873)	176662	25.0000	25
39 2,4,6-Trichlorophenol	196	5.702	5.702	(0.894)	113986	25.0000	25
40 2,4,5-Trichlorophenol	196	5.745	5.745	(0.901)	120678	25.0000	25
\$ 41 2-Fluorobiphenyl	172	5.777	5.777	(0.906)	395595	25.0000	25
98 1,1'-Biphenyl	154	5.862	5.862	(0.920)	424527	25.0000	26
42 2-Chloronaphthalene	162	5.862	5.862	(0.920)	318131	25.0000	25
43 2-Nitroaniline	65	5.985	5.985	(0.939)	97773	25.0000	24
44 Dimethylphthalate	163	6.177	6.177	(0.969)	387962	25.0000	25
45 2,6-Dinitrotoluene	165	6.220	6.220	(0.976)	88082	25.0000	24
46 Acenaphthylene	152	6.241	6.241	(0.979)	543478	25.0000	26
47 3-Nitroaniline	138	6.364	6.364	(0.998)	97602	25.0000	23
* 48 Acenaphthene-d10	164	6.375	6.375	(1.000)	450702	40.0000	
49 Acenaphthene	153	6.402	6.402	(1.004)	333048	25.0000	25
50 2,4-Dinitrophenol	184	6.460	6.460	(1.013)	32573	25.0000	22
51 4-Nitrophenol	109	6.589	6.589	(1.034)	42685	25.0000	25
53 2,4-Dinitrotoluene	165	6.573	6.573	(1.031)	119695	25.0000	24(Q)
52 Dibenzofuran	168	6.557	6.557	(1.028)	485671	25.0000	25
110 2,3,4,6-Tetrachlorophenol	232	6.690	6.690	(1.049)	93863	25.0000	26
54 Diethylphthalate	149	6.802	6.802	(1.067)	375585	25.0000	25
56 4-Chlorophenyl-phenylether	204	6.877	6.877	(1.079)	203416	25.0000	25
55 Fluorene	166	6.856	6.856	(1.075)	403604	25.0000	25
57 4-Nitroaniline	138	6.899	6.899	(1.082)	100398	25.0000	24
58 4,6-Dinitro-2-methylphenol	198	6.925	6.925	(0.906)	68230	25.0000	23
59 N-Nitrosodiphenylamine	169	6.984	6.984	(0.913)	351629	25.0000	25
97 Azobenzene	77	7.005	7.005	(0.916)	398239	25.0000	25
\$ 60 2,4,6-Tribromophenol	330	7.070	7.070	(0.925)	63100	25.0000	25
61 4-Bromophenyl-phenylether	248	7.283	7.283	(0.952)	129496	25.0000	25
62 Hexachlorobenzene	284	7.326	7.326	(0.958)	142630	25.0000	24
100 Atrazine	200	7.454	7.454	(0.975)	121686	25.0000	25
63 Pentachlorophenol	266	7.508	7.508	(0.982)	57466	25.0000	26
111 Pentachloronitrobenzene	237	7.513	7.513	(0.983)	48552	25.0000	24
* 64 Phenanthrene-d10	188	7.646	7.646	(1.000)	913824	40.0000	

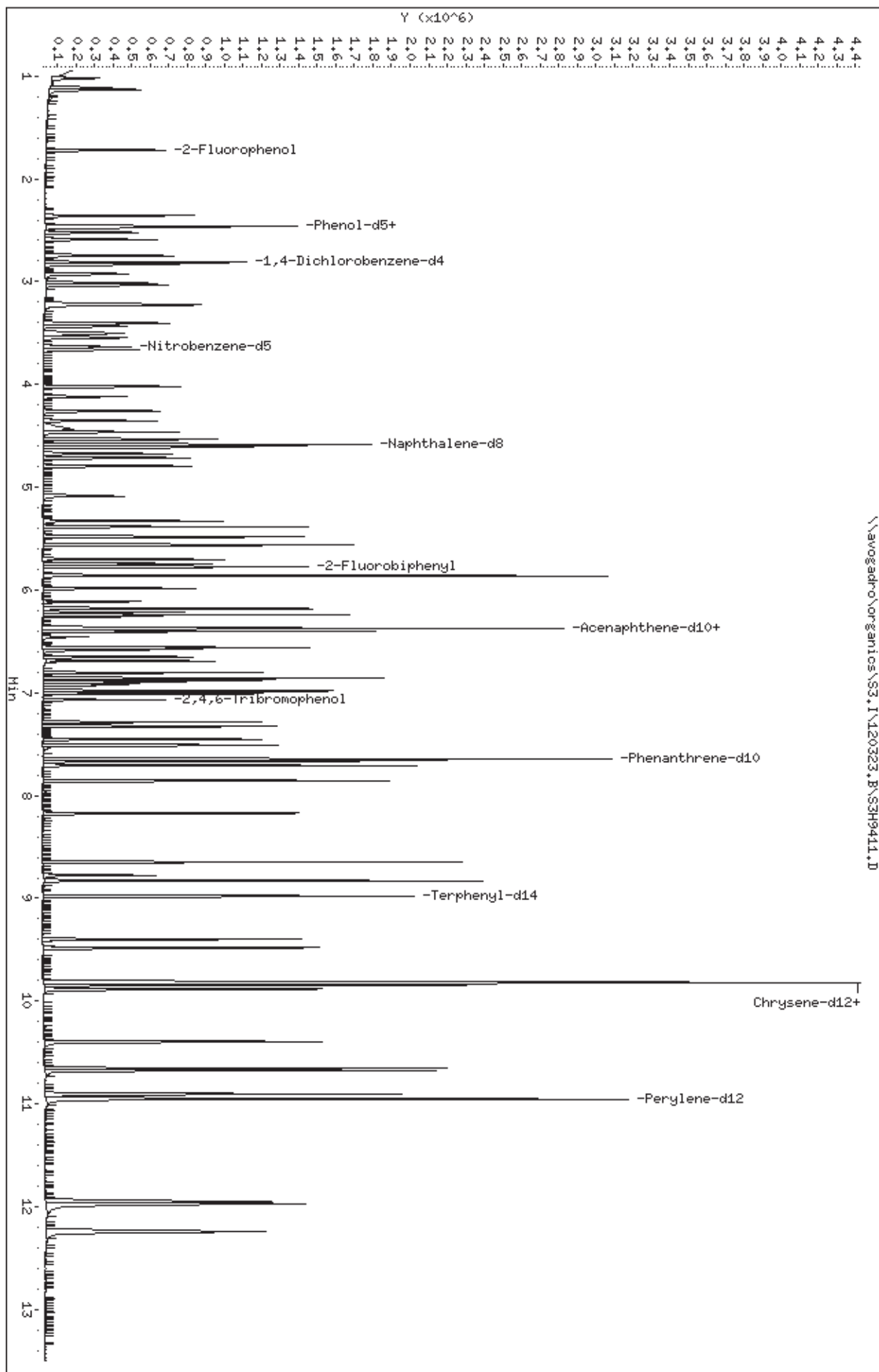
Compounds	QUANT SIG							AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
								(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====		=====	=====
65 Phenanthrene	178	7.662	7.662	(1.002)	591093	25.0000		25	
66 Anthracene	178	7.705	7.705	(1.008)	596701	25.0000		25	
67 Carbazole	167	7.855	7.855	(1.027)	577726	25.0000		25	
68 Di-n-butylphthalate	149	8.175	8.175	(1.069)	630958	25.0000		25	
69 Fluoranthene	202	8.645	8.645	(1.131)	707260	25.0000		25	
70 Benzidine	184	8.774	8.774	(0.893)	201185	25.0000		17(a)	
71 Pyrene	202	8.827	8.827	(0.898)	719956	25.0000		25	
\$ 72 Terphenyl-d14	244	8.977	8.977	(0.914)	525113	25.0000		25	
73 Butylbenzylphthalate	149	9.399	9.399	(0.957)	293473	25.0000		25	
74 3,3'-Dichlorobenzidine	252	9.810	9.810	(0.998)	267794	25.0000		23	
78 bis(2-Ethylhexyl)phthalate	149	9.885	9.885	(1.006)	404264	25.0000		25	
75 Benzo(a)anthracene	228	9.815	9.815	(0.999)	741440	25.0000		25	
* 76 Chrysene-d12	240	9.826	9.826	(1.000)	1117150	40.0000			
77 Chrysene	228	9.842	9.842	(1.002)	708624	25.0000		25	
79 Di-n-octylphthalate	149	10.392	10.392	(0.949)	674747	25.0000		26	
80 Benzo(b)fluoranthene	252	10.654	10.654	(0.973)	834477	25.0000		27	
81 Benzo(k)fluoranthene	252	10.675	10.675	(0.975)	831746	25.0000		25	
82 Benzo(a)pyrene	252	10.905	10.905	(0.996)	764685	25.0000		26	
* 83 Perylene-d12	264	10.953	10.953	(1.000)	1117983	40.0000			
84 Indeno(1,2,3-cd)pyrene	276	11.952	11.952	(1.091)	920714	25.0000		25	
85 Dibenzo(a,h)anthracene	278	11.974	11.974	(1.093)	764546	25.0000		25	
86 Benzo(g,h,i)perylene	276	12.241	12.241	(1.118)	787631	25.0000		25	

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,I\120323,B\SH9411.D
 Date : 23-MAR-2012 15:03
 Client ID: SSTID0253N
 Sample Info: SSTID0253N,SSTID0253N
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9412.D
Lab Smp Id: SST0803N Client Smp ID: SST0803N
Inj Date : 23-MAR-2012 15:32
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0803N, SST0803N
Misc Info : 1,6
Comment :
Method : \\avogadro\organics\S3.I\120323.B\s3_8270C_N.m
Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
\$ 109 1,4-Dioxane-d8	96	1.017	1.017 (0.361)		180352	80.0000	77
108 1,4-Dioxane	58	1.028	1.022 (0.365)		123596	80.0000	75
1 N-Nitrosodimethylamine	74	1.113	1.113 (0.395)		434468	80.0000	78
2 Pyridine	79	1.129	1.134 (0.401)		747039	80.0000	80(A)
\$ 3 2-Fluorophenol	112	1.722	1.722 (0.611)		659165	80.0000	78
101 Benzaldehyde	77	2.358	2.358 (0.837)		377424	80.0000	57
\$ 5 Phenol-d5	99	2.465	2.459 (0.875)		840756	80.0000	76
6 Phenol	94	2.481	2.470 (0.881)		946387	80.0000	77
7 Aniline	66	2.465	2.459 (0.875)		732396	80.0000	78
8 bis(2-Chloroethyl)Ether	63	2.529	2.523 (0.898)		458762	80.0000	77
10 2-Chlorophenol	128	2.593	2.587 (0.920)		670229	80.0000	78
11 1,3-Dichlorobenzene	146	2.748	2.748 (0.975)		701515	80.0000	75
* 12 1,4-Dichlorobenzene-d4	152	2.817	2.812 (1.000)		249232	40.0000	(Q)
13 1,4-Dichlorobenzene	146	2.839	2.833 (1.008)		714336	80.0000	74
117 2-Ethyl-1-hexanol	57	2.929	2.924 (1.040)		659953	80.0000	82(A)
15 Benzyl Alcohol	108	3.026	3.015 (1.074)		465537	80.0000	80(A)
16 1,2-Dichlorobenzene	146	3.036	3.031 (1.078)		682765	80.0000	76
17 2-Methylphenol	108	3.234	3.229 (1.148)		631894	80.0000	80(A)
18 2,2'-oxybis(1-Chloropropane)	45	3.218	3.218 (1.142)		812991	80.0000	77
99 Acetophenone	105	3.416	3.405 (1.212)		976109	80.0000	76

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
19 N-Nitroso-di-n-propylamine	70		3.442	3.432	(1.222)		517645	80.0000	77
20 4-Methylphenol	108		3.517	3.501	(1.248)		683866	80.0000	80
21 Hexachloroethane	117		3.544	3.544	(1.258)		250364	80.0000	76
\$ 22 Nitrobenzene-d5	82		3.640	3.635	(0.793)		721816	80.0000	77
23 Nitrobenzene	77		3.672	3.661	(0.800)		731103	80.0000	76
24 Isophorone	82		4.030	4.019	(0.878)		1314142	80.0000	76
25 2-Nitrophenol	139		4.126	4.121	(0.899)		379992	80.0000	79
26 2,4-Dimethylphenol	107		4.265	4.260	(0.929)		639209	80.0000	91(A)
27 bis(2-Chloroethoxy)methane	93		4.356	4.350	(0.949)		794005	80.0000	77
28 Benzoic Acid	105		4.516	4.436	(0.984)		494099	80.0000	88(A)
29 2,4-Dichlorophenol	162		4.468	4.463	(0.973)		577757	80.0000	77
30 1,2,4-Trichlorobenzene	180		4.537	4.532	(0.988)		626768	80.0000	74
* 31 Naphthalene-d8	136		4.591	4.585	(1.000)		932926	40.0000	
32 Naphthalene	128		4.612	4.607	(1.005)		1814335	80.0000	73
115 alpha-Terpineol	59		4.676	4.671	(1.019)		402517	80.0000	78
33 4-Chloroaniline	127		4.719	4.714	(1.028)		849967	80.0000	77
34 Hexachlorobutadiene	225		4.794	4.794	(1.044)		356386	80.0000	74
102 Caprolactam	113		5.136	5.088	(1.119)		262728	80.0000	80
35 4-Chloro-3-Methylphenol	107		5.339	5.328	(1.163)		611250	80.0000	76
36 2-Methylnaphthalene	142		5.387	5.387	(1.173)		1272888	80.0000	74
114 1-Methylnaphthalene	142		5.488	5.483	(1.195)		1171288	80.0000	72
38 Hexachlorocyclopentadiene	237		5.563	5.563	(0.872)		378615	80.0000	88(A)
112 1,2,4,5-Tetrachlorobenzene	216		5.568	5.563	(0.873)		664736	80.0000	74
39 2,4,6-Trichlorophenol	196		5.707	5.702	(0.895)		456739	80.0000	79
40 2,4,5-Trichlorophenol	196		5.750	5.745	(0.901)		484545	80.0000	78
\$ 41 2-Fluorobiphenyl	172		5.777	5.777	(0.905)		1488977	80.0000	74
98 1,1'-Biphenyl	154		5.868	5.862	(0.920)		1496119	80.0000	70
42 2-Chloronaphthalene	162		5.868	5.862	(0.920)		1151491	80.0000	70
43 2-Nitroaniline	65		5.990	5.985	(0.939)		401926	80.0000	78
44 Dimethylphthalate	163		6.188	6.177	(0.970)		1453992	80.0000	72
45 2,6-Dinitrotoluene	165		6.231	6.220	(0.977)		373709	80.0000	78
46 Acenaphthylene	152		6.247	6.241	(0.979)		1993693	80.0000	72
47 3-Nitroaniline	138		6.375	6.364	(0.999)		426170	80.0000	79
* 48 Acenaphthene-d10	164		6.380	6.375	(1.000)		582494	40.0000	
49 Acenaphthene	153		6.407	6.402	(1.004)		1240207	80.0000	72
50 2,4-Dinitrophenol	184		6.466	6.460	(1.013)		212468	80.0000	110(A)
51 4-Nitrophenol	109		6.594	6.589	(1.033)		174972	80.0000	80(A)
53 2,4-Dinitrotoluene	165		6.583	6.573	(1.032)		502313	80.0000	80(Q)
52 Dibenzofuran	168		6.562	6.557	(1.028)		1785296	80.0000	72
110 2,3,4,6-Tetrachlorophenol	232		6.696	6.690	(1.049)		388481	80.0000	85(A)
54 Diethylphthalate	149		6.813	6.802	(1.068)		1432754	80.0000	74
56 4-Chlorophenyl-phenylether	204		6.877	6.877	(1.078)		779610	80.0000	74
55 Fluorene	166		6.861	6.856	(1.075)		1487319	80.0000	72
57 4-Nitroaniline	138		6.920	6.899	(1.085)		426934	80.0000	79
58 4,6-Dinitro-2-methylphenol	198		6.936	6.925	(0.906)		338064	80.0000	89(A)
59 N-Nitrosodiphenylamine	169		6.989	6.984	(0.913)		1302892	80.0000	72
97 Azobenzene	77		7.016	7.005	(0.917)		1520104	80.0000	75
\$ 60 2,4,6-Tribromophenol	330		7.075	7.070	(0.925)		261589	80.0000	81
61 4-Bromophenyl-phenylether	248		7.289	7.283	(0.953)		504024	80.0000	75
62 Hexachlorobenzene	284		7.331	7.326	(0.958)		561372	80.0000	74
100 Atrazine	200		7.465	7.454	(0.976)		455769	80.0000	73
63 Pentachlorophenol	266		7.513	7.508	(0.982)		315126	80.0000	110(A)
111 Pentachloronitrobenzene	237		7.518	7.513	(0.983)		204929	80.0000	78
* 64 Phenanthrene-d10	188		7.652	7.646	(1.000)		1178893	40.0000	

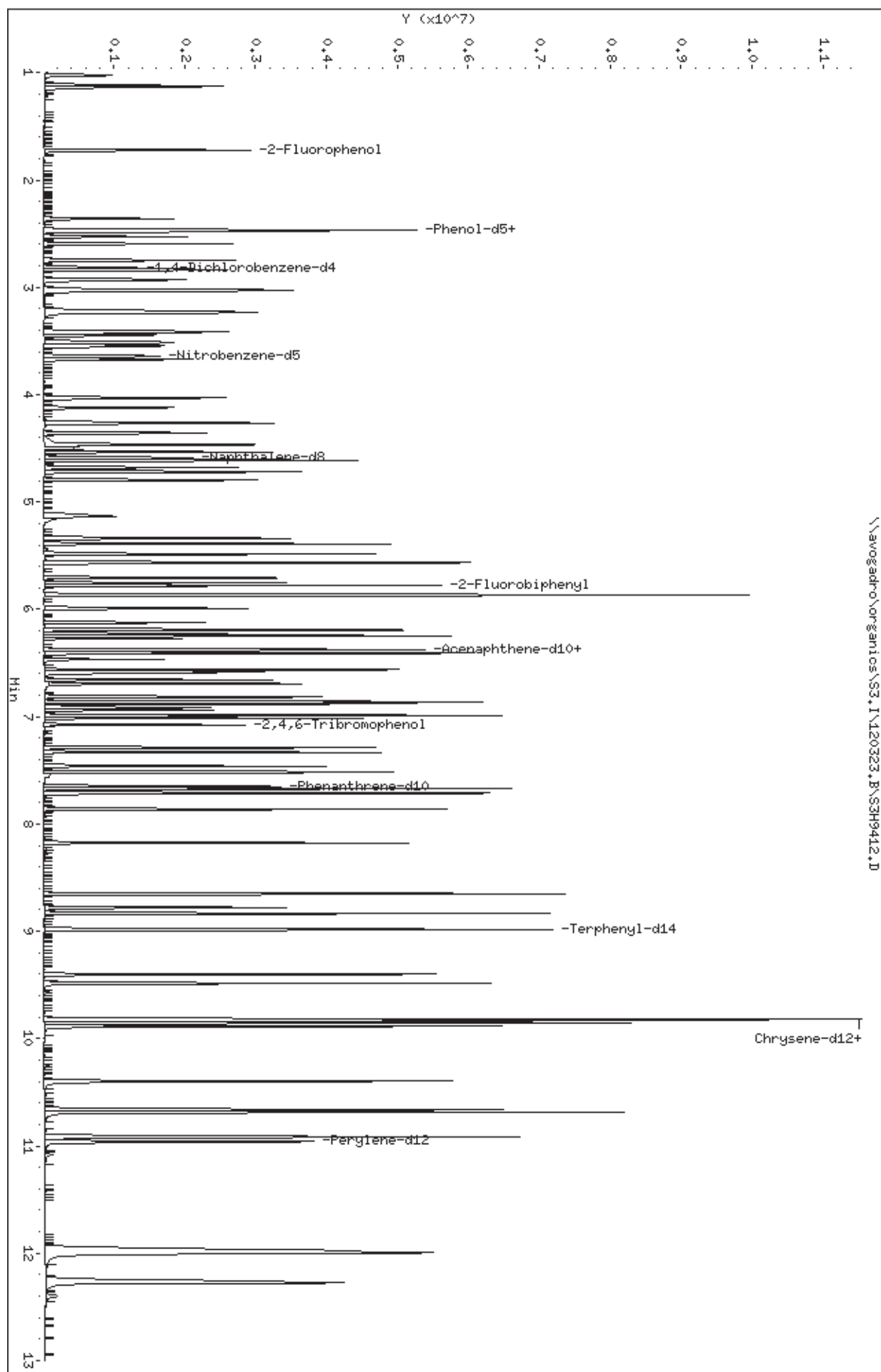
Compounds	QUANT SIG	AMOUNTS					
		CAL - AMT	ON - COL		RESPONSE		
	MASS	RT	EXP RT	REL RT		(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
65 Phenanthrene	178	7.673	7.662 (1.003)	2124546	80.0000	70	
66 Anthracene	178	7.716	7.705 (1.008)	2202451	80.0000	71	
67 Carbazole	167	7.866	7.855 (1.028)	2106359	80.0000	70	
68 Di-n-butylphthalate	149	8.175	8.175 (1.068)	2324295	80.0000	72	
69 Fluoranthene	202	8.651	8.645 (1.131)	2547853	80.0000	70	
70 Benzidine	184	8.779	8.774 (0.893)	1045919	80.0000	72	
71 Pyrene	202	8.838	8.827 (0.899)	2568677	80.0000	71	
\$ 72 Terphenyl-d14	244	8.982	8.977 (0.914)	1921317	80.0000	73	
73 Butylbenzylphthalate	149	9.399	9.399 (0.956)	1140048	80.0000	77	
74 3,3'-Dichlorobenzidine	252	9.821	9.810 (0.999)	1036135	80.0000	72	
78 bis(2-Ethylhexyl)phthalate	149	9.885	9.885 (1.005)	1552151	80.0000	77	
75 Benzo(a)anthracene	228	9.821	9.815 (0.999)	2666408	80.0000	71	
* 76 Chrysene-d12	240	9.831	9.826 (1.000)	1389092	40.0000		
77 Chrysene	228	9.853	9.842 (1.002)	2510821	80.0000	71	
79 Di-n-octylphthalate	149	10.398	10.392 (0.949)	2639836	80.0000	77	
80 Benzo(b)fluoranthene	252	10.665	10.654 (0.973)	3198793	80.0000	76	
81 Benzo(k)fluoranthene	252	10.686	10.675 (0.975)	3047974	80.0000	68	
82 Benzo(a)pyrene	252	10.916	10.905 (0.996)	2918404	80.0000	74	
* 83 Perylene-d12	264	10.959	10.953 (1.000)	1492722	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	11.974	11.952 (1.093)	3720034	80.0000	76	
85 Dibenzo(a,h)anthracene	278	12.000	11.974 (1.095)	3082598	80.0000	76	
86 Benzo(g,h,i)perylene	276	12.273	12.241 (1.120)	3180575	80.0000	76	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,I\120323,B\S3H9412.D
 Date : 23-MAR-2012 15:32
 Client ID: SSTID0803N
 Sample Info: SSTID0803N,SSTID0803N
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9413.D
Lab Smp Id: SST0103N Client Smp ID: SST0103N
Inj Date : 23-MAR-2012 15:51
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0103N, SST0103N
Misc Info : 1,2
Comment :
Method : \\avogadro\organics\S3.I\120323.B\s3_8270C_N.m
Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====	=====	=====
\$ 109 1,4-Dioxane-d8	96	1.019	1.017 (0.362)		24404	10.0000	11
108 1,4-Dioxane	58	1.024	1.022 (0.364)		17502	10.0000	11
1 N-Nitrosodimethylamine	74	1.110	1.113 (0.394)		57503	10.0000	11
2 Pyridine	79	1.131	1.134 (0.402)		99878	10.0000	11
\$ 3 2-Fluorophenol	112	1.719	1.722 (0.611)		85212	10.0000	11
101 Benzaldehyde	77	2.360	2.358 (0.839)		79868	10.0000	13
\$ 5 Phenol-d5	99	2.456	2.459 (0.873)		114793	10.0000	11
6 Phenol	94	2.472	2.470 (0.879)		124732	10.0000	11
7 Aniline	66	2.461	2.459 (0.875)		97463	10.0000	11
8 bis(2-Chloroethyl)Ether	63	2.520	2.523 (0.896)		61707	10.0000	11
10 2-Chlorophenol	128	2.590	2.587 (0.920)		87196	10.0000	11
11 1,3-Dichlorobenzene	146	2.744	2.748 (0.975)		96468	10.0000	11
* 12 1,4-Dichlorobenzene-d4	152	2.814	2.812 (1.000)		236567	40.0000	
13 1,4-Dichlorobenzene	146	2.835	2.833 (1.008)		99226	10.0000	11
117 2-Ethyl-1-hexanol	57	2.921	2.924 (1.038)		82239	10.0000	11
15 Benzyl Alcohol	108	3.012	3.015 (1.070)		59029	10.0000	11
16 1,2-Dichlorobenzene	146	3.033	3.031 (1.078)		93468	10.0000	11
17 2-Methylphenol	108	3.225	3.229 (1.146)		78377	10.0000	10
18 2,2'-oxybis(1-Chloropropane)	45	3.215	3.218 (1.142)		107784	10.0000	11
99 Acetophenone	105	3.402	3.405 (1.209)		133689	10.0000	11

						AMOUNTS			
		QUANT	SIG					CAL - AMT	ON - COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)		
=====	=====	=====	=====	=====	=====	=====	=====		
19 N-Nitroso-di-n-propylamine	70	3.428	3.432	(1.218)	68154	10.0000	11		
20 4-Methylphenol	108	3.503	3.501	(1.245)	84706	10.0000	10		
21 Hexachloroethane	117	3.546	3.544	(1.260)	33575	10.0000	11		
\$ 22 Nitrobenzene-d5	82	3.631	3.635	(0.792)	95020	10.0000	11		
23 Nitrobenzene	77	3.658	3.661	(0.798)	99152	10.0000	11		
24 Isophorone	82	4.021	4.019	(0.878)	176057	10.0000	11		
25 2-Nitrophenol	139	4.117	4.121	(0.899)	47710	10.0000	10		
26 2,4-Dimethylphenol	107	4.256	4.260	(0.929)	65426	10.0000	10		
27 bis(2-Chloroethoxy)methane	93	4.352	4.350	(0.950)	105920	10.0000	11		
28 Benzoic Acid	105	4.417	4.436	(0.964)	48385	10.0000	9(a)		
29 2,4-Dichlorophenol	162	4.459	4.463	(0.973)	76297	10.0000	11		
30 1,2,4-Trichlorobenzene	180	4.529	4.532	(0.988)	87518	10.0000	11		
* 31 Naphthalene-d8	136	4.582	4.585	(1.000)	879812	40.0000			
32 Naphthalene	128	4.609	4.607	(1.006)	259638	10.0000	11		
115 alpha-Terpineol	59	4.668	4.671	(1.019)	51925	10.0000	11		
33 4-Chloroaniline	127	4.710	4.714	(1.028)	116212	10.0000	11		
34 Hexachlorobutadiene	225	4.790	4.794	(1.045)	49016	10.0000	11		
102 Caprolactam	113	5.079	5.088	(1.108)	32347	10.0000	10		
35 4-Chloro-3-Methylphenol	107	5.325	5.328	(1.162)	81184	10.0000	11		
36 2-Methylnaphthalene	142	5.383	5.387	(1.175)	181752	10.0000	11		
114 1-Methylnaphthalene	142	5.480	5.483	(1.196)	169586	10.0000	11		
38 Hexachlorocyclopentadiene	237	5.560	5.563	(0.873)	40504	10.0000	10		
112 1,2,4,5-Tetrachlorobenzene	216	5.560	5.563	(0.873)	93474	10.0000	11		
39 2,4,6-Trichlorophenol	196	5.699	5.702	(0.894)	58760	10.0000	10		
40 2,4,5-Trichlorophenol	196	5.747	5.745	(0.902)	64446	10.0000	11(a)		
\$ 41 2-Fluorobiphenyl	172	5.773	5.777	(0.906)	215192	10.0000	11		
98 1,1'-Biphenyl	154	5.859	5.862	(0.920)	233144	10.0000	11		
42 2-Chloronaphthalene	162	5.859	5.862	(0.920)	177048	10.0000	11		
43 2-Nitroaniline	65	5.982	5.985	(0.939)	52843	10.0000	11(a)		
44 Dimethylphthalate	163	6.174	6.177	(0.969)	216639	10.0000	11		
45 2,6-Dinitrotoluene	165	6.217	6.220	(0.976)	49643	10.0000	11		
46 Acenaphthylene	152	6.238	6.241	(0.979)	291874	10.0000	11		
47 3-Nitroaniline	138	6.361	6.364	(0.998)	56897	10.0000	11(a)		
* 48 Acenaphthene-d10	164	6.372	6.375	(1.000)	559694	40.0000			
49 Acenaphthene	153	6.404	6.402	(1.005)	182090	10.0000	11		
50 2,4-Dinitrophenol	184	6.457	6.460	(1.013)	7579	10.0000	4(a)		
51 4-Nitrophenol	109	6.585	6.589	(1.034)	21244	10.0000	10(aQ)		
53 2,4-Dinitrotoluene	165	6.569	6.573	(1.031)	64129	10.0000	11(Q)		
52 Dibenzofuran	168	6.559	6.557	(1.029)	262023	10.0000	11		
110 2,3,4,6-Tetrachlorophenol	232	6.687	6.690	(1.049)	44430	10.0000	10		
54 Diethylphthalate	149	6.804	6.802	(1.068)	205105	10.0000	11		
56 4-Chlorophenyl-phenylether	204	6.874	6.877	(1.079)	112293	10.0000	11		
55 Fluorene	166	6.853	6.856	(1.075)	222808	10.0000	11		
57 4-Nitroaniline	138	6.895	6.899	(1.082)	54478	10.0000	10(a)		
58 4,6-Dinitro-2-methylphenol	198	6.922	6.925	(0.906)	28621	10.0000	8(aQ)		
59 N-Nitrosodiphenylamine	169	6.981	6.984	(0.913)	190061	10.0000	11		
97 Azobenzene	77	7.007	7.005	(0.917)	213011	10.0000	11		
\$ 60 2,4,6-Tribromophenol	330	7.066	7.070	(0.925)	30261	10.0000	10		
61 4-Bromophenyl-phenylether	248	7.285	7.283	(0.953)	70124	10.0000	11		
62 Hexachlorobenzene	284	7.328	7.326	(0.959)	79929	10.0000	11		
100 Atrazine	200	7.451	7.454	(0.975)	65094	10.0000	11		
63 Pentachlorophenol	266	7.510	7.508	(0.983)	12210	10.0000	4(a)		
111 Pentachloronitrobenzene	237	7.510	7.513	(0.983)	26364	10.0000	10		
* 64 Phenanthrene-d10	188	7.643	7.646	(1.000)	1123836	40.0000			

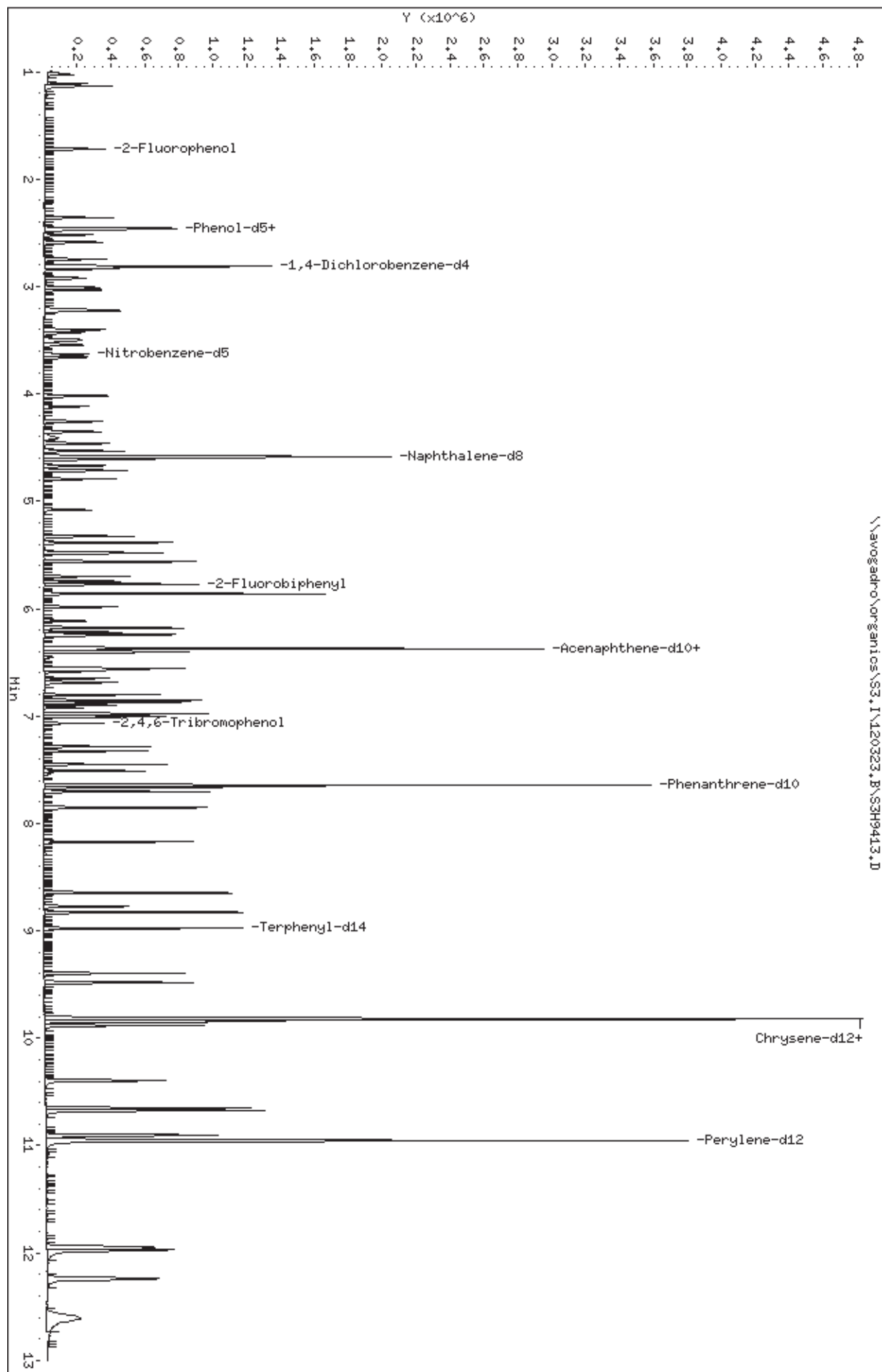
						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)	
=====	=====	=====	=====	=====	=====	=====	=====	
65 Phenanthrene	178	7.665	7.662	(1.003)	327022	10.0000	11	
66 Anthracene	178	7.707	7.705	(1.008)	331160	10.0000	11	
67 Carbazole	167	7.852	7.855	(1.027)	320818	10.0000	11	
68 Di-n-butylphthalate	149	8.172	8.175	(1.069)	339694	10.0000	11	
69 Fluoranthene	202	8.647	8.645	(1.131)	397969	10.0000	11	
70 Benzidine	184	8.776	8.774	(0.893)	177187	10.0000	12(a)	
71 Pyrene	202	8.829	8.827	(0.899)	412350	10.0000	11	
\$ 72 Terphenyl-d14	244	8.979	8.977	(0.914)	295861	10.0000	11	
73 Butylbenzylphthalate	149	9.395	9.399	(0.956)	160148	10.0000	11	
74 3,3'-Dichlorobenzidine	252	9.812	9.810	(0.999)	163898	10.0000	11	
78 bis(2-Ethylhexyl)phthalate	149	9.882	9.885	(1.006)	219241	10.0000	11	
75 Benzo(a)anthracene	228	9.817	9.815	(0.999)	423904	10.0000	11	
* 76 Chrysene-d12	240	9.823	9.826	(1.000)	1401638	40.0000		
77 Chrysene	228	9.844	9.842	(1.002)	404765	10.0000	11	
79 Di-n-octylphthalate	149	10.394	10.392	(0.949)	362808	10.0000	11	
80 Benzo(b)fluoranthene	252	10.651	10.654	(0.972)	432242	10.0000	10	
81 Benzo(k)fluoranthene	252	10.672	10.675	(0.974)	518997	10.0000	12	
82 Benzo(a)pyrene	252	10.902	10.905	(0.995)	416741	10.0000	11	
* 83 Perylene-d12	264	10.955	10.953	(1.000)	1468178	40.0000		
84 Indeno(1,2,3-cd)pyrene	276	11.949	11.952	(1.091)	519769	10.0000	11	
85 Dibenzo(a,h)anthracene	278	11.970	11.974	(1.093)	433383	10.0000	11	
86 Benzo(g,h,i)perylene	276	12.243	12.241	(1.118)	448208	10.0000	11	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,I\120323,B\SH9413.D
 Date : 23-MAR-2012 15:51
 Client ID: SSTD0103N
 Sample Info: SSTD0103N,SSTD0103N
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9414.D
Lab Smp Id: SST0603N Client Smp ID: SST0603N
Inj Date : 23-MAR-2012 16:11
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0603N, SST0603N
Misc Info : 1,5
Comment :
Method : \\avogadro\organics\S3.I\120323.B\s3_8270C_N.m
Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 109 1,4-Dioxane-d8	96	1.015	1.017	(0.361)	135931	60.0000	59	
108 1,4-Dioxane	58	1.026	1.022	(0.364)	93145	60.0000	58	
1 N-Nitrosodimethylamine	74	1.111	1.113	(0.395)	320736	60.0000	59	
2 Pyridine	79	1.132	1.134	(0.402)	559133	60.0000	62	
\$ 3 2-Fluorophenol	112	1.720	1.722	(0.611)	487135	60.0000	59	
101 Benzaldehyde	77	2.361	2.358	(0.839)	335337	60.0000	52	
\$ 5 Phenol-d5	99	2.463	2.459	(0.875)	633953	60.0000	59	
6 Phenol	94	2.473	2.470	(0.879)	722086	60.0000	60	
7 Aniline	66	2.463	2.459	(0.875)	550202	60.0000	60	
8 bis(2-Chloroethyl)Ether	63	2.527	2.523	(0.898)	344318	60.0000	59	
10 2-Chlorophenol	128	2.591	2.587	(0.920)	504939	60.0000	60	
11 1,3-Dichlorobenzene	146	2.746	2.748	(0.975)	540105	60.0000	59	
* 12 1,4-Dichlorobenzene-d4	152	2.815	2.812	(1.000)	243360	40.0000		
13 1,4-Dichlorobenzene	146	2.837	2.833	(1.008)	544570	60.0000	58	
117 2-Ethyl-1-hexanol	57	2.927	2.924	(1.040)	483565	60.0000	61	
15 Benzyl Alcohol	108	3.018	3.015	(1.072)	347048	60.0000	61	
16 1,2-Dichlorobenzene	146	3.034	3.031	(1.078)	517331	60.0000	59	
17 2-Methylphenol	108	3.232	3.229	(1.148)	474325	60.0000	62	
18 2,2'-oxybis(1-Chloropropane)	45	3.216	3.218	(1.142)	603184	60.0000	59	
99 Acetophenone	105	3.408	3.405	(1.211)	734795	60.0000	59	

						AMOUNTS		
		QUANT	SIG			CAL -AMT	ON -COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====		=====	=====	=====	=====	=====	=====	=====
	19 N-Nitroso-di-n-propylamine	70	3.440	3.432	(1.222)	389792	60.0000	60
	20 4-Methylphenol	108	3.510	3.501	(1.247)	510428	60.0000	61
	21 Hexachloroethane	117	3.547	3.544	(1.260)	190571	60.0000	59
\$	22 Nitrobenzene-d5	82	3.638	3.635	(0.793)	546817	60.0000	59
	23 Nitrobenzene	77	3.670	3.661	(0.800)	558042	60.0000	59
	24 Isophorone	82	4.028	4.019	(0.878)	990888	60.0000	58
	25 2-Nitrophenol	139	4.124	4.121	(0.899)	283959	60.0000	60
	26 2,4-Dimethylphenol	107	4.263	4.260	(0.929)	475265	60.0000	68
	27 bis(2-Chloroethoxy)methane	93	4.354	4.350	(0.949)	599938	60.0000	58
	28 Benzoic Acid	105	4.493	4.436	(0.979)	322592	60.0000	58
	29 2,4-Dichlorophenol	162	4.466	4.463	(0.973)	444272	60.0000	60
	30 1,2,4-Trichlorobenzene	180	4.535	4.532	(0.988)	487104	60.0000	58
*	31 Naphthalene-d8	136	4.589	4.585	(1.000)	924781	40.0000	
	32 Naphthalene	128	4.610	4.607	(1.005)	1401164	60.0000	57
	115 alpha-Terpineol	59	4.674	4.671	(1.019)	300490	60.0000	59
	33 4-Chloroaniline	127	4.717	4.714	(1.028)	639859	60.0000	59
	34 Hexachlorobutadiene	225	4.792	4.794	(1.044)	275699	60.0000	58
	102 Caprolactam	113	5.118	5.088	(1.115)	195670	60.0000	60
	35 4-Chloro-3-Methylphenol	107	5.331	5.328	(1.162)	468173	60.0000	59
	36 2-Methylnaphthalene	142	5.390	5.387	(1.175)	985088	60.0000	57
	114 1-Methylnaphthalene	142	5.486	5.483	(1.196)	901061	60.0000	56
	38 Hexachlorocyclopentadiene	237	5.566	5.563	(0.873)	286521	60.0000	68
	112 1,2,4,5-Tetrachlorobenzene	216	5.566	5.563	(0.873)	510910	60.0000	58
	39 2,4,6-Trichlorophenol	196	5.705	5.702	(0.894)	341771	60.0000	60
	40 2,4,5-Trichlorophenol	196	5.748	5.745	(0.901)	354901	60.0000	59
\$	41 2-Fluorobiphenyl	172	5.775	5.777	(0.905)	1135995	60.0000	57
	98 1,1'-Biphenyl	154	5.866	5.862	(0.920)	1180727	60.0000	56
	42 2-Chloronaphthalene	162	5.866	5.862	(0.920)	906509	60.0000	57
	43 2-Nitroaniline	65	5.988	5.985	(0.939)	303614	60.0000	60
	44 Dimethylphthalate	163	6.186	6.177	(0.970)	1134086	60.0000	58
	45 2,6-Dinitrotoluene	165	6.223	6.220	(0.976)	284023	60.0000	61
	46 Acenaphthylene	152	6.245	6.241	(0.979)	1555025	60.0000	58
	47 3-Nitroaniline	138	6.373	6.364	(0.999)	318464	60.0000	60
*	48 Acenaphthene-d10	164	6.378	6.375	(1.000)	569270	40.0000	
	49 Acenaphthene	153	6.405	6.402	(1.004)	961794	60.0000	58
	50 2,4-Dinitrophenol	184	6.464	6.460	(1.013)	149902	60.0000	80
	51 4-Nitrophenol	109	6.592	6.589	(1.033)	130112	60.0000	61
	53 2,4-Dinitrotoluene	165	6.581	6.573	(1.032)	379896	60.0000	62(Q)
	52 Dibenzofuran	168	6.560	6.557	(1.028)	1384226	60.0000	57
	110 2,3,4,6-Tetrachlorophenol	232	6.694	6.690	(1.049)	287421	60.0000	64
	54 Diethylphthalate	149	6.811	6.802	(1.068)	1094468	60.0000	58
	56 4-Chlorophenyl-phenylether	204	6.875	6.877	(1.078)	605669	60.0000	59
	55 Fluorene	166	6.859	6.856	(1.075)	1148448	60.0000	57
	57 4-Nitroaniline	138	6.913	6.899	(1.084)	329056	60.0000	62
	58 4,6-Dinitro-2-methylphenol	198	6.934	6.925	(0.906)	250216	60.0000	67
	59 N-Nitrosodiphenylamine	169	6.987	6.984	(0.913)	1020881	60.0000	58
	97 Azobenzene	77	7.014	7.005	(0.917)	1160212	60.0000	58
\$	60 2,4,6-Tribromophenol	330	7.073	7.070	(0.925)	198404	60.0000	63
	61 4-Bromophenyl-phenylether	248	7.287	7.283	(0.953)	388860	60.0000	58
	62 Hexachlorobenzene	284	7.329	7.326	(0.958)	440627	60.0000	59
	100 Atrazine	200	7.463	7.454	(0.976)	358372	60.0000	58
	63 Pentachlorophenol	266	7.511	7.508	(0.982)	206006	60.0000	72
	111 Pentachloronitrobenzene	237	7.516	7.513	(0.983)	159986	60.0000	62
*	64 Phenanthrene-d10	188	7.650	7.646	(1.000)	1160350	40.0000	

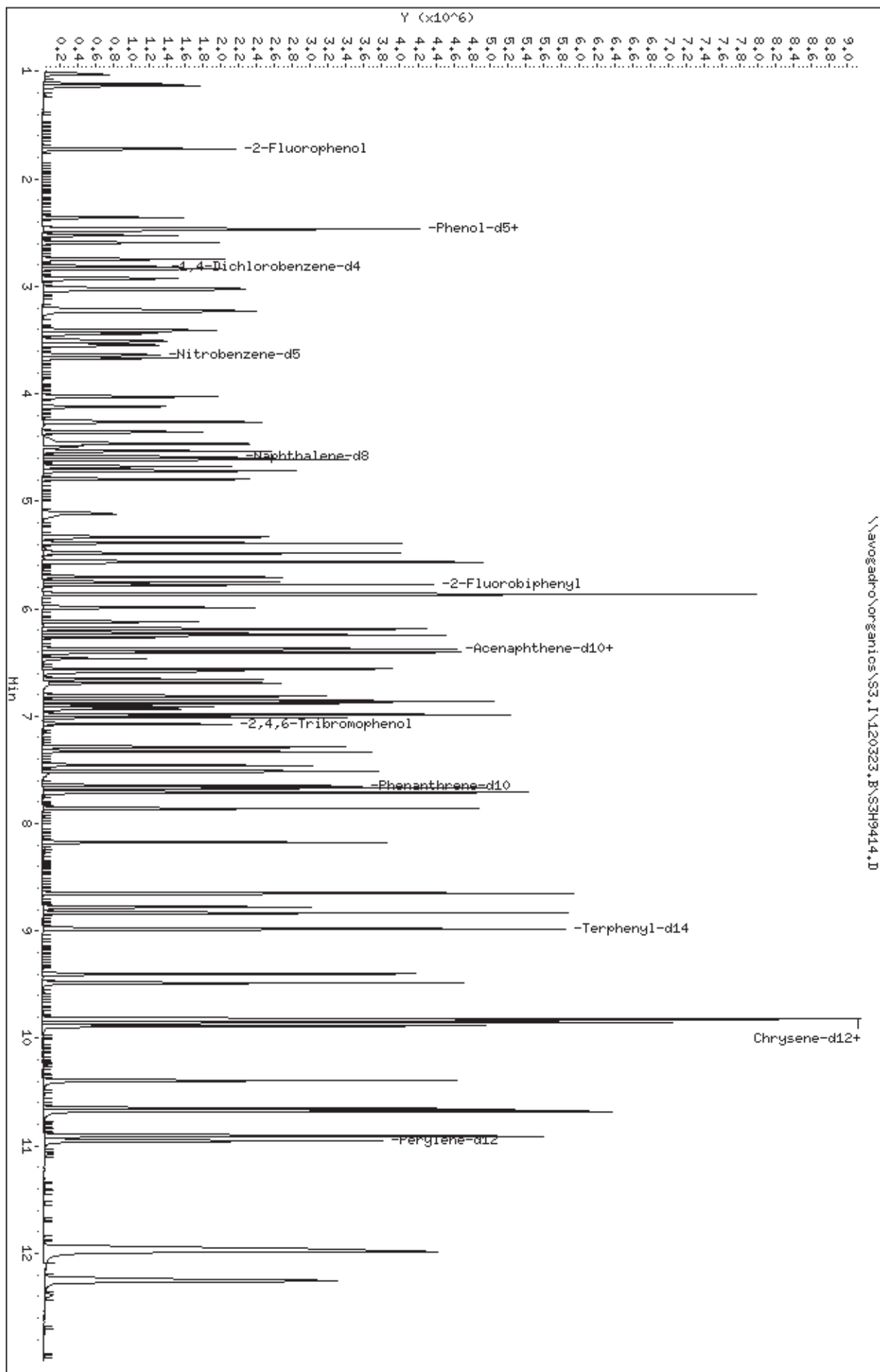
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
65 Phenanthrene	178	7.671	7.662 (1.003)		1656862		60.0000	56
66 Anthracene	178	7.709	7.705 (1.008)		1728760		60.0000	57
67 Carbazole	167	7.858	7.855 (1.027)		1654803		60.0000	56
68 Di-n-butylphthalate	149	8.173	8.175 (1.068)		1832033		60.0000	58
69 Fluoranthene	202	8.649	8.645 (1.131)		2006826		60.0000	56
70 Benzidine	184	8.777	8.774 (0.893)		956397		60.0000	65
71 Pyrene	202	8.830	8.827 (0.898)		2067277		60.0000	56
\$ 72 Terphenyl-d14	244	8.980	8.977 (0.914)		1552523		60.0000	58
73 Butylbenzylphthalate	149	9.397	9.399 (0.956)		885752		60.0000	59
74 3,3'-Dichlorobenzidine	252	9.813	9.810 (0.998)		847780		60.0000	58
78 bis(2-Ethylhexyl)phthalate	149	9.883	9.885 (1.005)		1217832		60.0000	59
75 Benzo(a)anthracene	228	9.819	9.815 (0.999)		2161376		60.0000	57
* 76 Chrysene-d12	240	9.829	9.826 (1.000)		1408852		40.0000	
77 Chrysene	228	9.851	9.842 (1.002)		2007663		60.0000	56
79 Di-n-octylphthalate	149	10.390	10.392 (0.949)		2069489		60.0000	60
80 Benzo(b)fluoranthene	252	10.652	10.654 (0.973)		2297298		60.0000	54
81 Benzo(k)fluoranthene	252	10.679	10.675 (0.975)		2686085		60.0000	59
82 Benzo(a)pyrene	252	10.908	10.905 (0.996)		2324772		60.0000	58
* 83 Perylene-d12	264	10.951	10.953 (1.000)		1506214		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.961	11.952 (1.092)		2936943		60.0000	59
85 Dibenzo(a,h)anthracene	278	11.982	11.974 (1.094)		2446231		60.0000	60
86 Benzo(g,h,i)perylene	276	12.260	12.241 (1.120)		2510211		60.0000	59

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,I\120323,B\SH9414.D
 Date : 23-MAR-2012 16:11
 Client ID: SSTID0603N
 Sample Info: SSTID0603N,SSTID0603N
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9415.D
Lab Smp Id: SST0053N Client Smp ID: SST0053N
Inj Date : 23-MAR-2012 16:30
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0053N, SST0053N
Misc Info : 1,1
Comment :
Method : \\avogadro\organics\S3.I\120323.B\s3_8270C_N.m
Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL -AMT	ON -COL
							(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 109 1,4-Dioxane-d8	96	1.017	1.017	(0.362)	10824	5.00000	5(a)	
108 1,4-Dioxane	58	1.023	1.022	(0.364)	7862	5.00000	5(a)	
1 N-Nitrosodimethylamine	74	1.108	1.113	(0.394)	25802	5.00000	5(a)	
2 Pyridine	79	1.135	1.134	(0.404)	43401	5.00000	5(a)	
\$ 3 2-Fluorophenol	112	1.717	1.722	(0.611)	38636	5.00000	5(a)	
101 Benzaldehyde	77	2.358	2.358	(0.839)	37076	5.00000	6(a)	
\$ 5 Phenol-d5	99	2.454	2.459	(0.873)	50288	5.00000	5(a)	
6 Phenol	94	2.470	2.470	(0.878)	56483	5.00000	5(a)	
7 Aniline	66	2.460	2.459	(0.875)	43713	5.00000	5(a)	
8 bis(2-Chloroethyl)Ether	63	2.518	2.523	(0.896)	27332	5.00000	5(a)	
10 2-Chlorophenol	128	2.588	2.587	(0.920)	38865	5.00000	5(a)	
11 1,3-Dichlorobenzene	146	2.743	2.748	(0.975)	44147	5.00000	5(a)	
* 12 1,4-Dichlorobenzene-d4	152	2.812	2.812	(1.000)	225143	40.0000		
13 1,4-Dichlorobenzene	146	2.834	2.833	(1.008)	45797	5.00000	5(a)	
117 2-Ethyl-1-hexanol	57	2.919	2.924	(1.038)	33881	5.00000	5(a)	
15 Benzyl Alcohol	108	3.010	3.015	(1.070)	23929	5.00000	4(a)	
16 1,2-Dichlorobenzene	146	3.031	3.031	(1.078)	41643	5.00000	5(a)	
17 2-Methylphenol	108	3.224	3.229	(1.146)	33938	5.00000	5(a)	
18 2,2'-oxybis(1-Chloropropane)	45	3.213	3.218	(1.142)	48388	5.00000	5(a)	
99 Acetophenone	105	3.400	3.405	(1.209)	59275	5.00000	5(a)	

						AMOUNTS	
		QUANT	SIG			CAL - AMT	ON - COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====
19 N-Nitroso-di-n-propylamine	70	3.427	3.432	(1.218)	30801	5.00000	5(a)
20 4-Methylphenol	108	3.496	3.501	(1.243)	37365	5.00000	5(a)
21 Hexachloroethane	117	3.544	3.544	(1.260)	15529	5.00000	5(a)
\$ 22 Nitrobenzene-d5	82	3.630	3.635	(0.792)	42901	5.00000	5(a)
23 Nitrobenzene	77	3.662	3.661	(0.798)	43733	5.00000	5(a)
24 Isophorone	82	4.020	4.019	(0.877)	78986	5.00000	5(a)
25 2-Nitrophenol	139	4.116	4.121	(0.897)	20977	5.00000	5(a)
26 2,4-Dimethylphenol	107	4.255	4.260	(0.928)	22158	5.00000	4(a)
27 bis(2-Chloroethoxy)methane	93	4.351	4.350	(0.949)	47076	5.00000	5(a)
28 Benzoic Acid	105	4.388	4.436	(0.957)	20312	5.00000	4(a)
29 2,4-Dichlorophenol	162	4.458	4.463	(0.972)	33397	5.00000	5(a)
30 1,2,4-Trichlorobenzene	180	4.532	4.532	(0.988)	39548	5.00000	5(a)
* 31 Naphthalene-d8	136	4.586	4.585	(1.000)	823000	40.0000	
32 Naphthalene	128	4.607	4.607	(1.005)	118162	5.00000	5(a)
115 alpha-Terpineol	59	4.671	4.671	(1.019)	23827	5.00000	5(a)
33 4-Chloroaniline	127	4.714	4.714	(1.028)	50759	5.00000	5(a)
34 Hexachlorobutadiene	225	4.794	4.794	(1.045)	22442	5.00000	5(a)
102 Caprolactam	113	5.072	5.088	(1.106)	14394	5.00000	5(a)
35 4-Chloro-3-Methylphenol	107	5.323	5.328	(1.161)	35440	5.00000	5(a)
36 2-Methylnaphthalene	142	5.387	5.387	(1.175)	80293	5.00000	5(a)
114 1-Methylnaphthalene	142	5.483	5.483	(1.196)	77927	5.00000	5(a)
38 Hexachlorocyclopentadiene	237	5.563	5.563	(0.873)	14913	5.00000	4(a)
112 1,2,4,5-Tetrachlorobenzene	216	5.558	5.563	(0.872)	43310	5.00000	5(a)
39 2,4,6-Trichlorophenol	196	5.697	5.702	(0.894)	25844	5.00000	5(a)
40 2,4,5-Trichlorophenol	196	5.745	5.745	(0.901)	27932	5.00000	5(a)
\$ 41 2-Fluorobiphenyl	172	5.772	5.777	(0.905)	95977	5.00000	5(a)
98 1,1'-Biphenyl	154	5.857	5.862	(0.919)	107422	5.00000	5(a)
42 2-Chloronaphthalene	162	5.857	5.862	(0.919)	81109	5.00000	5(a)
43 2-Nitroaniline	65	5.980	5.985	(0.938)	22297	5.00000	5(a)
44 Dimethylphthalate	163	6.172	6.177	(0.968)	97623	5.00000	5(a)
45 2,6-Dinitrotoluene	165	6.215	6.220	(0.975)	21666	5.00000	5(a)
46 Acenaphthylene	152	6.242	6.241	(0.979)	132388	5.00000	5(a)
47 3-Nitroaniline	138	6.359	6.364	(0.997)	24716	5.00000	5(a)
* 48 Acenaphthene-d10	164	6.375	6.375	(1.000)	533164	40.0000	
49 Acenaphthene	153	6.402	6.402	(1.004)	84058	5.00000	5(a)
51 4-Nitrophenol	109	6.584	6.589	(1.033)	8728	5.00000	4(aQ)
53 2,4-Dinitrotoluene	165	6.568	6.573	(1.030)	27138	5.00000	5(aQ)
52 Dibenzofuran	168	6.557	6.557	(1.028)	121811	5.00000	5(a)
110 2,3,4,6-Tetrachlorophenol	232	6.685	6.690	(1.049)	16854	5.00000	4(a)
54 Diethylphthalate	149	6.797	6.802	(1.066)	94733	5.00000	5(a)
56 4-Chlorophenyl-phenylether	204	6.872	6.877	(1.078)	50892	5.00000	5(a)
55 Fluorene	166	6.856	6.856	(1.075)	100922	5.00000	5(a)
57 4-Nitroaniline	138	6.894	6.899	(1.081)	24340	5.00000	5(a)
58 4,6-Dinitro-2-methylphenol	198	6.920	6.925	(0.906)	8643	5.00000	2(aQ)
59 N-Nitrosodiphenylamine	169	6.979	6.984	(0.913)	87199	5.00000	5(a)
97 Azobenzene	77	7.006	7.005	(0.917)	96391	5.00000	5(a)
\$ 60 2,4,6-Tribromophenol	330	7.065	7.070	(0.925)	13546	5.00000	5(a)
61 4-Bromophenyl-phenylether	248	7.284	7.283	(0.953)	32370	5.00000	5(a)
62 Hexachlorobenzene	284	7.326	7.326	(0.959)	36437	5.00000	5(a)
100 Atrazine	200	7.449	7.454	(0.975)	29483	5.00000	5(a)
111 Pentachloronitrobenzene	237	7.508	7.513	(0.983)	11722	5.00000	5(a)
* 64 Phenanthrene-d10	188	7.642	7.646	(1.000)	1074327	40.0000	
65 Phenanthrene	178	7.663	7.662	(1.003)	153619	5.00000	6(a)
66 Anthracene	178	7.700	7.705	(1.008)	156039	5.00000	6(a)

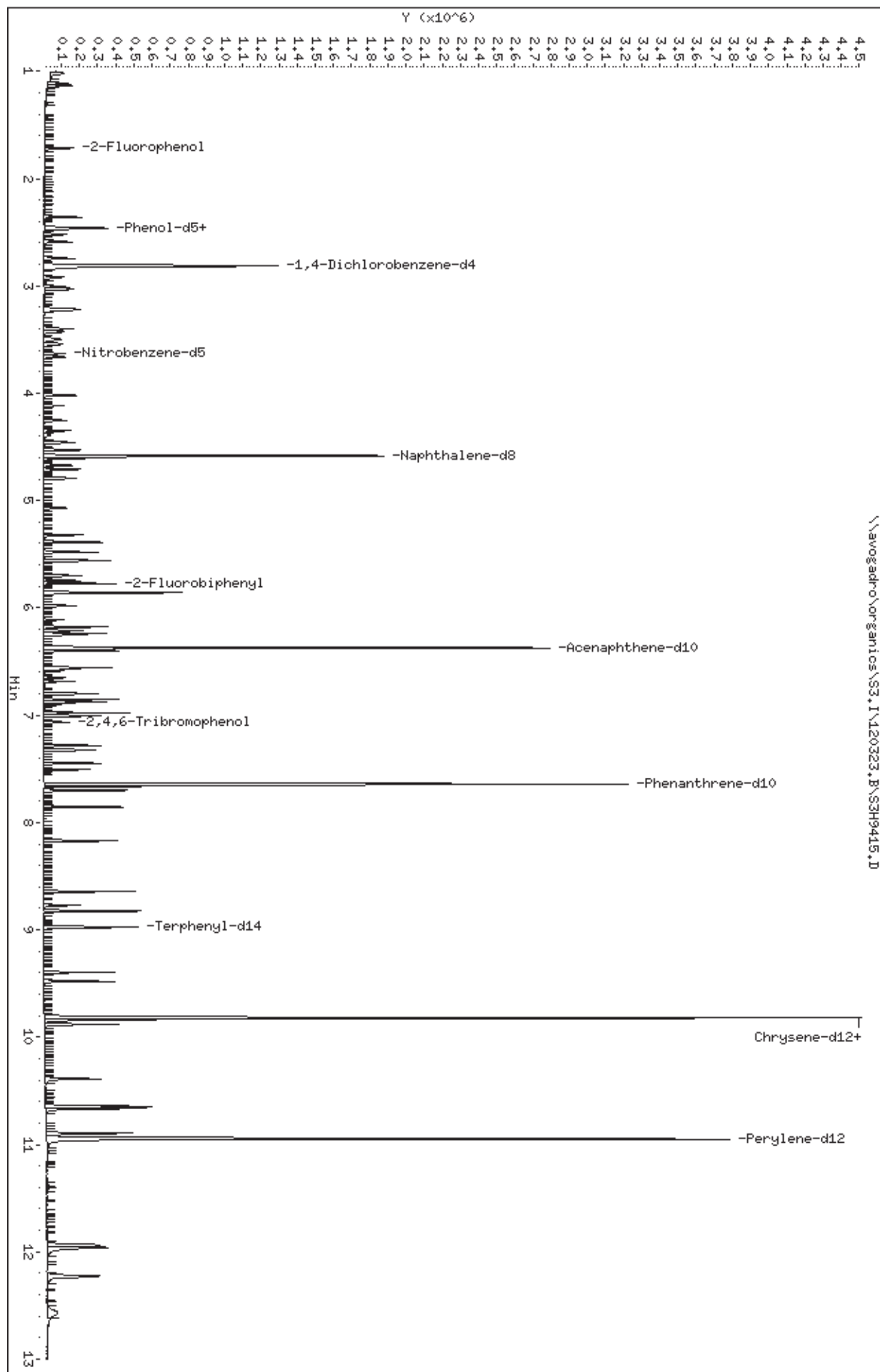
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
67 Carbazole	167	7.855	7.855	(1.028)	150145		5.00000	6(a)
68 Di-n-butylphthalate	149	8.170	8.175	(1.069)	155751		5.00000	5(a)
69 Fluoranthene	202	8.646	8.645	(1.131)	181404		5.00000	5(a)
70 Benzidine	184	8.774	8.774	(0.893)	73365		5.00000	5(a)
71 Pyrene	202	8.827	8.827	(0.899)	189308		5.00000	5(a)
\$ 72 Terphenyl-d14	244	8.977	8.977	(0.914)	134021		5.00000	5(a)
73 Butylbenzylphthalate	149	9.394	9.399	(0.956)	71377		5.00000	5(a)
74 3,3'-Dichlorobenzidine	252	9.810	9.810	(0.999)	75433		5.00000	5(a)
78 bis(2-Ethylhexyl)phthalate	149	9.880	9.885	(1.006)	98942		5.00000	5(a)
75 Benzo(a)anthracene	228	9.810	9.815	(0.999)	199399		5.00000	5(a)
* 76 Chrysene-d12	240	9.821	9.826	(1.000)	1360933		40.0000	
77 Chrysene	228	9.842	9.842	(1.002)	189982		5.00000	6(a)
79 Di-n-octylphthalate	149	10.387	10.392	(0.949)	155759		5.00000	5(a)
80 Benzo(b)fluoranthene	252	10.644	10.654	(0.972)	205265		5.00000	5(a)
81 Benzo(k)fluoranthene	252	10.665	10.675	(0.974)	236783		5.00000	5(a)
82 Benzo(a)pyrene	252	10.895	10.905	(0.995)	192472		5.00000	5(a)
* 83 Perylene-d12	264	10.948	10.953	(1.000)	1435804		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.937	11.952	(1.090)	237511		5.00000	5(a)
85 Dibenzo(a,h)anthracene	278	11.958	11.974	(1.092)	189925		5.00000	5(a)
86 Benzo(g,h,i)perylene	276	12.225	12.241	(1.117)	204795		5.00000	5(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\S3,I\120323,B\SH9415.D
 Date : 23-MAR-2012 16:30
 Client ID: SSTID0053N
 Sample Info: SSTID0053N,SSTID0053N
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9416.D
Lab Smp Id: SST0403N Client Smp ID: SST0403N
Inj Date : 23-MAR-2012 16:50
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0403N, SST0403N
Misc Info : 1,4
Comment :
Method : \\avogadro\organics\S3.I\120323.B\s3_8270C_N.m
Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

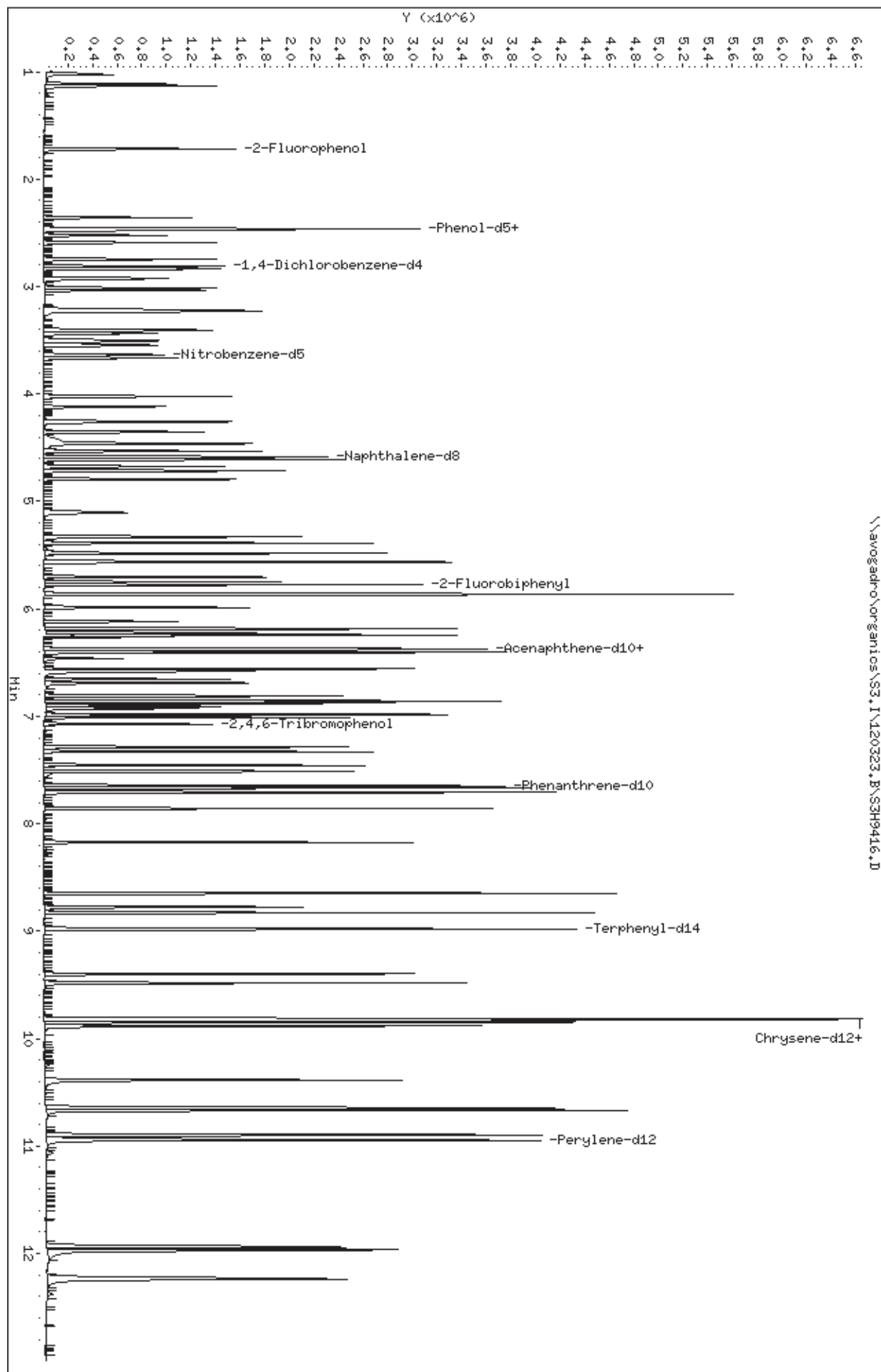
Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng)	(ng)
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 109 1,4-Dioxane-d8	96	1.014	1.017	(0.360)	90030	40.0000	37	
108 1,4-Dioxane	58	1.024	1.022	(0.364)	62901	40.0000	37	
1 N-Nitrosodimethylamine	74	1.110	1.113	(0.394)	220494	40.0000	38	
2 Pyridine	79	1.131	1.134	(0.402)	371371	40.0000	39	
\$ 3 2-Fluorophenol	112	1.719	1.722	(0.611)	331143	40.0000	38	
101 Benzaldehyde	77	2.360	2.358	(0.839)	234041	40.0000	34	
\$ 5 Phenol-d5	99	2.461	2.459	(0.875)	433473	40.0000	38	
6 Phenol	94	2.472	2.470	(0.879)	486040	40.0000	38	
7 Aniline	66	2.461	2.459	(0.875)	378217	40.0000	39	
8 bis(2-Chloroethyl)Ether	63	2.520	2.523	(0.896)	236874	40.0000	38	
10 2-Chlorophenol	128	2.590	2.587	(0.920)	342464	40.0000	38	
11 1,3-Dichlorobenzene	146	2.744	2.748	(0.975)	371097	40.0000	38	
* 12 1,4-Dichlorobenzene-d4	152	2.814	2.812	(1.000)	257783	40.0000		
13 1,4-Dichlorobenzene	146	2.835	2.833	(1.008)	377204	40.0000	38	
117 2-Ethyl-1-hexanol	57	2.926	2.924	(1.040)	327648	40.0000	39	
15 Benzyl Alcohol	108	3.017	3.015	(1.072)	236770	40.0000	40	
16 1,2-Dichlorobenzene	146	3.033	3.031	(1.078)	358073	40.0000	38	
17 2-Methylphenol	108	3.225	3.229	(1.146)	322680	40.0000	40	
18 2,2'-oxybis(1-Chloropropane)	45	3.220	3.218	(1.144)	413519	40.0000	38	
99 Acetophenone	105	3.407	3.405	(1.211)	504518	40.0000	38	

						AMOUNTS		
		QUANT SIG					CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)	
=====	=====	=====	=====	=====	=====	=====	=====	
19 N-Nitroso-di-n-propylamine	70	3.434	3.432	(1.220)	268482	40.0000	39	
20 4-Methylphenol	108	3.503	3.501	(1.245)	348438	40.0000	39	
21 Hexachloroethane	117	3.546	3.544	(1.260)	131007	40.0000	38	
\$ 22 Nitrobenzene-d5	82	3.637	3.635	(0.793)	372742	40.0000	39	
23 Nitrobenzene	77	3.663	3.661	(0.799)	378678	40.0000	38	
24 Isophorone	82	4.021	4.019	(0.877)	687825	40.0000	39	
25 2-Nitrophenol	139	4.117	4.121	(0.898)	193112	40.0000	39	
26 2,4-Dimethylphenol	107	4.256	4.260	(0.928)	314916	40.0000	44	
27 bis(2-Chloroethoxy)methane	93	4.352	4.350	(0.949)	407357	40.0000	38	
28 Benzoic Acid	105	4.470	4.436	(0.974)	232518	40.0000	40	
29 2,4-Dichlorophenol	162	4.465	4.463	(0.973)	302723	40.0000	39	
30 1,2,4-Trichlorobenzene	180	4.534	4.532	(0.988)	339221	40.0000	39	
* 31 Naphthalene-d8	136	4.587	4.585	(1.000)	957757	40.0000		
32 Naphthalene	128	4.609	4.607	(1.005)	980795	40.0000	38	
115 alpha-Terpineol	59	4.673	4.671	(1.019)	202083	40.0000	38	
33 4-Chloroaniline	127	4.716	4.714	(1.028)	449850	40.0000	40	
34 Hexachlorobutadiene	225	4.796	4.794	(1.045)	194933	40.0000	39	
102 Caprolactam	113	5.106	5.088	(1.113)	133805	40.0000	40	
35 4-Chloro-3-Methylphenol	107	5.330	5.328	(1.162)	325792	40.0000	40	
36 2-Methylnaphthalene	142	5.389	5.387	(1.175)	694704	40.0000	39	
114 1-Methylnaphthalene	142	5.485	5.483	(1.196)	643785	40.0000	39	
38 Hexachlorocyclopentadiene	237	5.565	5.563	(0.873)	194743	40.0000	43	
112 1,2,4,5-Tetrachlorobenzene	216	5.565	5.563	(0.873)	362340	40.0000	38	
39 2,4,6-Trichlorophenol	196	5.704	5.702	(0.894)	235857	40.0000	39	
40 2,4,5-Trichlorophenol	196	5.747	5.745	(0.901)	244155	40.0000	38	
\$ 41 2-Fluorobiphenyl	172	5.773	5.777	(0.905)	818402	40.0000	39	
98 1,1'-Biphenyl	154	5.864	5.862	(0.920)	853440	40.0000	38	
42 2-Chloronaphthalene	162	5.864	5.862	(0.920)	647875	40.0000	38	
43 2-Nitroaniline	65	5.987	5.985	(0.939)	207946	40.0000	39	
44 Dimethylphthalate	163	6.185	6.177	(0.970)	794406	40.0000	38	
45 2,6-Dinitrotoluene	165	6.222	6.220	(0.976)	192009	40.0000	38	
46 Acenaphthylene	152	6.244	6.241	(0.979)	1100383	40.0000	38	
47 3-Nitroaniline	138	6.372	6.364	(0.999)	221079	40.0000	39	
* 48 Acenaphthene-d10	164	6.377	6.375	(1.000)	609619	40.0000		
49 Acenaphthene	153	6.404	6.402	(1.004)	678371	40.0000	38	
50 2,4-Dinitrophenol	184	6.457	6.460	(1.013)	80672	40.0000	40	
51 4-Nitrophenol	109	6.591	6.589	(1.034)	85987	40.0000	38	
53 2,4-Dinitrotoluene	165	6.575	6.573	(1.031)	259264	40.0000	39	
52 Dibenzofuran	168	6.559	6.557	(1.028)	987836	40.0000	38	
110 2,3,4,6-Tetrachlorophenol	232	6.692	6.690	(1.049)	187711	40.0000	39	
54 Diethylphthalate	149	6.810	6.802	(1.068)	769393	40.0000	38	
56 4-Chlorophenyl-phenylether	204	6.874	6.877	(1.078)	420017	40.0000	38	
55 Fluorene	166	6.858	6.856	(1.075)	822056	40.0000	38	
57 4-Nitroaniline	138	6.906	6.899	(1.083)	217413	40.0000	38	
58 4,6-Dinitro-2-methylphenol	198	6.927	6.925	(0.906)	164854	40.0000	42	
59 N-Nitrosodiphenylamine	169	6.986	6.984	(0.913)	708510	40.0000	38	
97 Azobenzene	77	7.007	7.005	(0.916)	800980	40.0000	38	
\$ 60 2,4,6-Tribromophenol	330	7.072	7.070	(0.925)	134488	40.0000	40	
61 4-Bromophenyl-phenylether	248	7.285	7.283	(0.953)	267519	40.0000	38	
62 Hexachlorobenzene	284	7.328	7.326	(0.958)	306657	40.0000	39	
100 Atrazine	200	7.456	7.454	(0.975)	255090	40.0000	40	
63 Pentachlorophenol	266	7.510	7.508	(0.982)	116072	40.0000	39	
111 Pentachloronitrobenzene	237	7.515	7.513	(0.983)	106709	40.0000	40	
* 64 Phenanthrene-d10	188	7.649	7.646	(1.000)	1216646	40.0000		

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
65 Phenanthrene	178	7.665	7.662 (1.002)		1182865		40.0000	38
66 Anthracene	178	7.707	7.705 (1.008)		1217455		40.0000	38
67 Carbazole	167	7.857	7.855 (1.027)		1170075		40.0000	38
68 Di-n-butylphthalate	149	8.172	8.175 (1.068)		1290967		40.0000	39
69 Fluoranthene	202	8.647	8.645 (1.131)		1429754		40.0000	38
70 Benzidine	184	8.776	8.774 (0.893)		659915		40.0000	43
71 Pyrene	202	8.829	8.827 (0.898)		1464369		40.0000	39
\$ 72 Terphenyl-d14	244	8.979	8.977 (0.914)		1098768		40.0000	40
73 Butylbenzylphthalate	149	9.395	9.399 (0.956)		607697		40.0000	39
74 3,3'-Dichlorobenzidine	252	9.812	9.810 (0.998)		589784		40.0000	39
78 bis(2-Ethylhexyl)phthalate	149	9.882	9.885 (1.005)		834968		40.0000	39
75 Benzo(a)anthracene	228	9.817	9.815 (0.999)		1512153		40.0000	38
* 76 Chrysene-d12	240	9.828	9.826 (1.000)		1460703		40.0000	
77 Chrysene	228	9.849	9.842 (1.002)		1373040		40.0000	37
79 Di-n-octylphthalate	149	10.384	10.392 (0.949)		1413814		40.0000	40
80 Benzo(b)fluoranthene	252	10.645	10.654 (0.973)		1730487		40.0000	40
81 Benzo(k)fluoranthene	252	10.667	10.675 (0.975)		1728854		40.0000	37
82 Benzo(a)pyrene	252	10.897	10.905 (0.996)		1603867		40.0000	39
* 83 Perylene-d12	264	10.945	10.953 (1.000)		1541610		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.944	11.952 (1.091)		1975939		40.0000	39
85 Dibenzo(a,h)anthracene	278	11.965	11.974 (1.093)		1645636		40.0000	39
86 Benzo(g,h,i)perylene	276	12.237	12.241 (1.118)		1679935		40.0000	39

Data File: \\avogadro\organics\S3,I\120323,B\SH9416.D
 Date : 23-MAR-2012 16:50
 Client ID: SSTID0403N
 Sample Info: SSTID0403N,SSTID0403N
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



7E - FORM VII SV-1
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L0782	Mod. Ref No.: SDG No.: SL0782
Instrument ID: S3	Calibration Date: 04/24/2012 Time: 10:48
Lab File ID: S3H9911.D	Init. Calib. Date(s): 03/23/2012 03/23/2012
EPA Sample No.(SSTD020##) SSTD0253L	Init. Calib. Time(s): 15:03 16:50
GC Column: Rxi-5sil MS ID: 0.25 (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.965	1.894	0.010	-3.6	20.0
Bis(2-chloroethyl)ether	0.956	1.116	0.010	16.8	20.0
2-Chlorophenol	1.386	1.369	0.010	-1.2	20.0
1,3-Dichlorobenzene	1.507	1.501	0.010	-0.4	20.0
1,4-Dichlorobenzene	1.543	1.497	0.010	-3.0	20.0
1,2-Dichlorobenzene	1.448	1.452	0.010	0.2	20.0
2-Methylphenol	1.268	1.264	0.010	-0.2	20.0
2,2'-oxybis(1-Chloropropane)	1.684	2.102	0.010	24.8	20.0
4-Methylphenol	1.377	1.387	0.010	0.7	20.0
N-Nitroso-di-n-propylamine	1.075	1.165	0.050	8.4	20.0
Hexachloroethane	0.531	0.526	0.010	-0.9	20.0
Nitrobenzene	0.412	0.589	0.010	43.1	20.0
Isophorone	0.739	0.793	0.010	7.3	20.0
2-Nitrophenol	0.206	0.207	0.010	0.7	20.0
2,4-Dimethylphenol	0.301	0.257	0.010	-14.4	20.0
2,4-Dichlorophenol	0.323	0.310	0.010	-3.8	20.0
1,2,4-Trichlorobenzene	0.364	0.362	0.010	-0.7	20.0
Naphthalene	1.067	1.071	0.010	0.3	20.0
4-Chloroaniline	0.470	0.399	0.010	-15.3	20.0
Bis(2-chloroethoxy)methane	0.444	0.472	0.010	6.2	20.0
Hexachlorobutadiene	0.206	0.208	0.010	0.7	20.0
4-Chloro-3-methylphenol	0.344	0.348	0.010	1.2	20.0
2-Methylnaphthalene	0.742	0.736	0.010	-0.8	20.0
Hexachlorocyclopentadiene	0.294	0.216	0.050	-26.7	20.0
2,4,6-Trichlorophenol	0.399	0.405	0.010	1.5	20.0
2,4,5-Trichlorophenol	0.424	0.418	0.010	-1.6	20.0
2-Chloronaphthalene	1.121	1.141	0.010	1.8	20.0
2-Nitroaniline	0.353	0.407	0.010	15.1	20.0
Dimethylphthalate	1.378	1.394	0.010	1.1	20.0
Acenaphthylene	1.890	1.877	0.010	-0.7	20.0
2,6-Dinitrotoluene	0.327	0.330	0.010	0.8	20.0
3-Nitroaniline	0.371	0.343	0.010	-7.5	20.0
Acenaphthene	1.175	1.184	0.010	0.7	20.0
2,4-Dinitrophenol	0.132	0.154	0.050	16.7	20.0
4-Nitrophenol	0.149	0.147	0.050	-1.9	20.0
Dibenzofuran	1.700	1.735	0.010	2.1	20.0
2,4-Dinitrotoluene	0.432	0.440	0.010	1.9	20.0
Diethylphthalate	1.332	1.305	0.010	-2.1	20.0
4-Chlorophenyl-phenylether	0.726	0.735	0.010	1.3	20.0
Fluorene	1.418	1.427	0.010	0.6	20.0
4-Nitroaniline	0.371	0.364	0.010	-1.8	20.0
4,6-Dinitro-2-methylphenol	0.129	0.144	0.010	11.5	20.0

7F - FORM VII SV-2
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0782</u>	Mod. Ref No.: _____ SDG No.: <u>SL0782</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>04/24/2012</u> Time: <u>10:48</u>
Lab File ID: <u>S3H9911.D</u>	Init. Calib. Date(s): <u>03/23/2012</u> <u>03/23/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253L</u>	Init. Calib. Time(s): <u>15:03</u> <u>16:50</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX	%D
N-Nitrosodiphenylamine	0.610	0.607	0.010	-0.5	20.0	
4-Bromophenyl-phenylether	0.229	0.233	0.010	1.8	20.0	
Hexachlorobenzene	0.258	0.270	0.010	4.5	20.0	
Pentachlorophenol	0.098	0.088	0.010	-10.7	20.0	
Phenanthrene	1.028	1.049	0.010	2.1	20.0	
Anthracene	1.052	1.043	0.010	-0.8	20.0	
Carbazole	1.013	1.033	0.010	1.9	20.0	
Di-n-butylphthalate	1.096	1.098	0.010	0.2	20.0	
Fluoranthene	1.236	1.265	0.010	2.4	20.0	
Pyrene	1.038	1.064	0.010	2.5	20.0	
Butylbenzylphthalate	0.424	0.421	0.010	-0.7	20.0	
3,3'-Dichlorobenzidine	0.412	0.382	0.010	-7.3	20.0	
Benzo(a)anthracene	1.077	1.082	0.010	0.4	20.0	
Chrysene	1.013	1.029	0.010	1.6	20.0	
Bis(2-ethylhexyl)phthalate	0.582	0.570	0.010	-2.1	20.0	
Di-n-octylphthalate	0.923	0.906	0.010	-1.9	20.0	
Benzo(b)fluoranthene	1.121	1.138	0.010	1.5	20.0	
Benzo(k)fluoranthene	1.209	1.265	0.010	4.6	20.0	
Benzo(a)pyrene	1.058	1.093	0.010	3.3	20.0	
Indeno(1,2,3-cd)pyrene	1.314	1.377	0.010	4.8	20.0	
Dibenzo(a,h)anthracene	1.086	1.158	0.010	6.7	20.0	
Benzo(g,h,i)perylene	1.126	1.175	0.010	4.4	20.0	

7G - FORM VII SV-3
SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L0782</u>	Mod. Ref No.: _____ SDG No.: <u>SL0782</u>
Instrument ID: <u>S3</u>	Calibration Date: <u>04/24/2012</u> Time: <u>10:48</u>
Lab File ID: <u>S3H9911.D</u>	Init. Calib. Date(s): <u>03/23/2012</u> <u>03/23/2012</u>
EPA Sample No.(SSTD020##) <u>SSTD0253L</u>	Init. Calib. Time(s): <u>15:03</u> <u>16:50</u>
GC Column: <u>Rxi-5sil MS</u> ID: <u>0.25</u> (mm)	

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.403	0.432	0.010	7.3	20.0
2-Fluorobiphenyl	1.389	1.428	0.010	2.8	20.0
Terphenyl-d14	0.760	0.785	0.010	3.2	20.0
Phenol-d5	1.763	1.738	0.010	-1.4	20.0
2-Fluorophenol	1.349	1.343	0.010	-0.4	20.0
2,4,6-Tribromophenol	0.109	0.117	0.010	6.9	20.0

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120424.B\S3H9911.D
Lab Smp Id: SST0253L Client Smp ID: SST0253L
Inj Date : 24-APR-2012 10:48
Operator : PK SRC: PK Inst ID: S3.i
Smp Info : SST0253L, SST0253L
Misc Info : 2,3
Comment :
Method : \\avogadro\organics\S3.I\120424.B\s3_8270C_N.m
Meth Date : 25-Apr-2012 17:13 S3.i Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf*(Vt/Vi)*(1/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC Correction Factor
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
108 1,4-Dioxane	58	0.743	0.743 (0.332)		33790	25.0000	28
1 N-Nitrosodimethylamine	74	0.812	0.812 (0.363)		115441	25.0000	28
2 Pyridine	79	0.828	0.828 (0.370)		152165	25.0000	23
\$ 3 2-Fluorophenol	112	1.362	1.362 (0.609)		151590	25.0000	25
101 Benzaldehyde	77	1.865	1.865 (0.833)		143161	25.0000	30
\$ 5 Phenol-d5	99	2.068	2.068 (0.924)		196144	25.0000	25
6 Phenol	94	2.084	2.084 (0.931)		213844	25.0000	24
7 Aniline	66	1.966	1.966 (0.878)		85300	25.0000	13
8 bis(2-Chloroethyl)Ether	63	2.014	2.014 (0.900)		125973	25.0000	29
10 2-Chlorophenol	128	2.100	2.100 (0.938)		154574	25.0000	25
11 1,3-Dichlorobenzene	146	2.185	2.185 (0.976)		169474	25.0000	25
* 12 1,4-Dichlorobenzene-d4	152	2.239	2.239 (1.000)		180611	40.0000	
13 1,4-Dichlorobenzene	146	2.255	2.255 (1.007)		168943	25.0000	24
117 2-Ethyl-1-hexanol	57	2.351	2.351 (1.050)		172115	25.0000	29
15 Benzyl Alcohol	108	2.431	2.431 (1.086)		109482	25.0000	26
16 1,2-Dichlorobenzene	146	2.404	2.404 (1.074)		163871	25.0000	25
17 2-Methylphenol	108	2.661	2.661 (1.188)		142735	25.0000	25
18 2,2'-oxybis(1-Chloropropane)	45	2.554	2.554 (1.141)		237241	25.0000	31
99 Acetophenone	105	2.687	2.687 (1.200)		234818	25.0000	25
19 N-Nitroso-di-n-propylamine	70	2.714	2.714 (1.212)		131538	25.0000	27

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL -AMT	ON -COL
								(ng)	(ng)
=====	=====		=====	=====	=====	=====	=====	=====	
20 4-Methylphenol	108		2.901	2.901	(1.296)	156547	25.0000	25	
21 Hexachloroethane	117		2.783	2.783	(1.243)	59345	25.0000	25	
\$ 22 Nitrobenzene-d5	82		2.880	2.880	(0.721)	180415	25.0000	27	
23 Nitrobenzene	77		2.906	2.906	(0.727)	246038	25.0000	36	
24 Isophorone	82		3.307	3.307	(0.828)	331140	25.0000	27	
25 2-Nitrophenol	139		3.441	3.441	(0.861)	86629	25.0000	25	
26 2,4-Dimethylphenol	107		3.734	3.734	(0.935)	107529	25.0000	21	
27 bis(2-Chloroethoxy)methane	93		3.761	3.761	(0.941)	196975	25.0000	26	
28 Benzoic Acid	105		4.060	4.060	(1.016)	99719	25.0000	25	
29 2,4-Dichlorophenol	162		3.953	3.953	(0.989)	129685	25.0000	24	
30 1,2,4-Trichlorobenzene	180		3.943	3.943	(0.987)	151071	25.0000	25	
* 31 Naphthalene-d8	136		3.996	3.996	(1.000)	668393	40.0000		
32 Naphthalene	128		4.023	4.023	(1.007)	447427	25.0000	25	
115 alpha-Terpineol	59		4.124	4.124	(1.032)	105447	25.0000	29	
33 4-Chloroaniline	127		4.194	4.194	(1.049)	166492	25.0000	21	
34 Hexachlorobutadiene	225		4.247	4.247	(1.063)	86731	25.0000	25	
102 Caprolactam	113		4.616	4.616	(1.155)	56512	25.0000	24	
35 4-Chloro-3-Methylphenol	107		4.963	4.963	(1.242)	145477	25.0000	25	
36 2-Methylnaphthalene	142		4.894	4.894	(1.225)	307532	25.0000	25	
114 1-Methylnaphthalene	142		4.995	4.995	(1.250)	298542	25.0000	26	
38 Hexachlorocyclopentadiene	237		5.081	5.081	(0.858)	56148	25.0000	18	
112 1,2,4,5-Tetrachlorobenzene	216		5.081	5.081	(0.858)	165044	25.0000	26	
39 2,4,6-Trichlorophenol	196		5.273	5.273	(0.891)	105261	25.0000	25	
40 2,4,5-Trichlorophenol	196		5.358	5.358	(0.905)	108615	25.0000	25	
\$ 41 2-Fluorobiphenyl	172		5.316	5.316	(0.898)	371271	25.0000	26	
98 1,1'-Biphenyl	154		5.401	5.401	(0.912)	393466	25.0000	26	
42 2-Chloronaphthalene	162		5.390	5.390	(0.911)	296775	25.0000	25	
43 2-Nitroaniline	65		5.556	5.556	(0.939)	105772	25.0000	29	
44 Dimethylphthalate	163		5.748	5.748	(0.971)	362514	25.0000	25	
45 2,6-Dinitrotoluene	165		5.786	5.786	(0.977)	85707	25.0000	25	
46 Acenaphthylene	152		5.780	5.780	(0.977)	488085	25.0000	25	
47 3-Nitroaniline	138		5.951	5.951	(1.005)	89218	25.0000	23	
* 48 Acenaphthene-d10	164		5.919	5.919	(1.000)	416133	40.0000		
49 Acenaphthene	153		5.946	5.946	(1.004)	307812	25.0000	25	
50 2,4-Dinitrophenol	184		6.031	6.031	(1.019)	40064	25.0000	29	
51 4-Nitrophenol	109		6.293	6.293	(1.063)	38133	25.0000	24	
53 2,4-Dinitrotoluene	165		6.144	6.144	(1.038)	114450	25.0000	25	
52 Dibenzofuran	168		6.106	6.106	(1.032)	451198	25.0000	26	
110 2,3,4,6-Tetrachlorophenol	232		6.272	6.272	(1.060)	81817	25.0000	25	
54 Diethylphthalate	149		6.384	6.384	(1.079)	339401	25.0000	24	
56 4-Chlorophenyl-phenylether	204		6.437	6.437	(1.088)	191271	25.0000	25	
55 Fluorene	166		6.405	6.405	(1.082)	371200	25.0000	25	
57 4-Nitroaniline	138		6.491	6.491	(1.097)	94695	25.0000	25	
58 4,6-Dinitro-2-methylphenol	198		6.496	6.496	(0.903)	75064	25.0000	28	
59 N-Nitrosodiphenylamine	169		6.555	6.555	(0.912)	317564	25.0000	25	
97 Azobenzene	77		6.566	6.566	(0.913)	427624	25.0000	30	
\$ 60 2,4,6-Tribromophenol	330		6.635	6.635	(0.923)	60984	25.0000	27	
61 4-Bromophenyl-phenylether	248		6.843	6.843	(0.952)	121950	25.0000	25	
62 Hexachlorobenzene	284		6.876	6.876	(0.956)	141121	25.0000	26	
100 Atrazine	200		7.041	7.041	(0.979)	112693	25.0000	25	
63 Pentachlorophenol	266		7.084	7.084	(0.985)	45906	25.0000	22	
111 Pentachloronitrobenzene	237		7.063	7.063	(0.982)	47262	25.0000	25	
* 64 Phenanthrene-d10	188		7.191	7.191	(1.000)	836695	40.0000		
65 Phenanthrene	178		7.212	7.212	(1.003)	548712	25.0000	26	

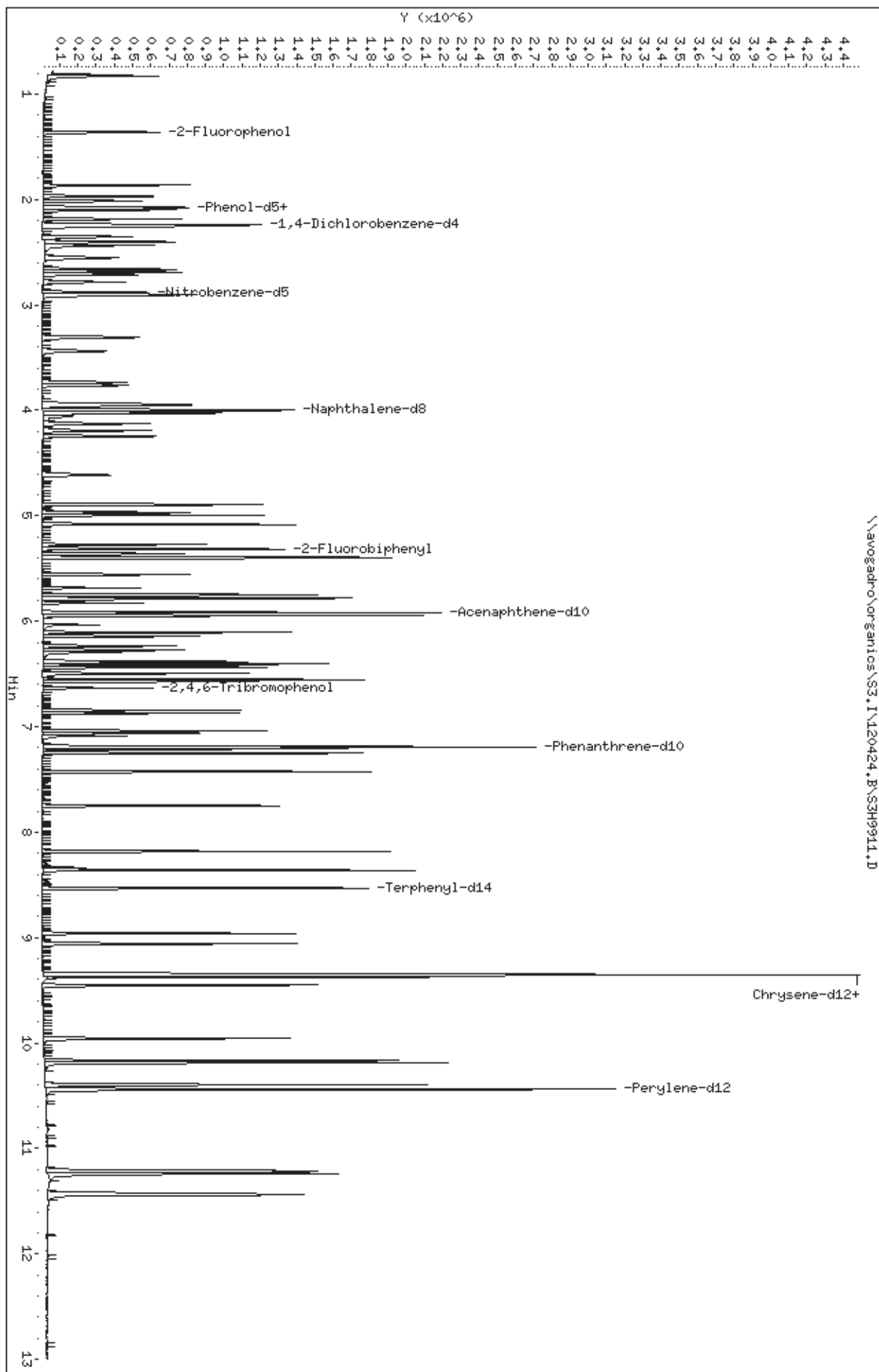
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
=====	=====	=====	=====	=====	=====		=====	=====
66 Anthracene	178	7.249	7.249	(1.008)	545612		25.0000	25
67 Carbazole	167	7.426	7.426	(1.033)	539933		25.0000	25
68 Di-n-butylphthalate	149	7.752	7.752	(1.078)	574010		25.0000	25
69 Fluoranthene	202	8.184	8.184	(1.138)	661641		25.0000	26
70 Benzidine	184	8.334	8.334	(0.891)	71329		25.0000	7(a)
71 Pyrene	202	8.361	8.361	(0.894)	680935		25.0000	26
\$ 72 Terphenyl-d14	244	8.532	8.532	(0.912)	502331		25.0000	26
73 Butylbenzylphthalate	149	8.959	8.959	(0.958)	269277		25.0000	25
74 3,3'-Dichlorobenzidine	252	9.360	9.360	(1.001)	244441		25.0000	23
78 bis(2-Ethylhexyl)phthalate	149	9.450	9.450	(1.010)	364660		25.0000	24
75 Benzo(a)anthracene	228	9.344	9.344	(0.999)	692233		25.0000	25
* 76 Chrysene-d12	240	9.354	9.354	(1.000)	1023998		40.0000	
77 Chrysene	228	9.376	9.376	(1.002)	658801		25.0000	25
79 Di-n-octylphthalate	149	9.958	9.958	(0.954)	613076		25.0000	24
80 Benzo(b)fluoranthene	252	10.166	10.166	(0.974)	770301		25.0000	25
81 Benzo(k)fluoranthene	252	10.188	10.188	(0.976)	856251		25.0000	26
82 Benzo(a)pyrene	252	10.396	10.396	(0.996)	740010		25.0000	26
* 83 Perylene-d12	264	10.439	10.439	(1.000)	1082796		40.0000	
84 Indeno(1,2,3-cd)pyrene	276	11.213	11.213	(1.074)	931614		25.0000	26
85 Dibenzo(a,h)anthracene	278	11.240	11.240	(1.077)	783952		25.0000	27
86 Benzo(g,h,i)perylene	276	11.438	11.438	(1.096)	795483		25.0000	26

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\S3,I\120424,B\SH9911.D
 Date : 24-APR-2012 10:48
 Client ID: SSTID0253L
 Sample Info: SSTID0253L,SSTID0253L
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Si1 MS

Instrument: S3.i
 Operator: PK SRC: PK
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120323.B\S3H9410A.D
 Lab Smp Id: DFTPP3N Client Smp ID: DFTPP3N
 Inj Date : 23-MAR-2012 14:40
 Operator : PK SRC: PK Inst ID: S3.i
 Smp Info : DFTPP3N, DFTPP3N
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120323.B\S3_dftppSOM.m
 Meth Date : 28-Mar-2012 16:24 pkaczorows Quant Type: ESTD
 Cal Date : Cal File:
 Als bottle: 100 QC Sample: DFTPP
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
				ON-COL		FINAL			
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 dftpp				CAS #: 5074-71-5					
3.747	3.840	-0.093	198	681728			0.00-	100.00	100.00
3.747	3.840	-0.093	51	247488			10.00-	80.00	36.30
3.747	3.840	-0.093	68	0	0.0	0.0	0.00-	2.00	0.00
3.747	3.840	-0.093	69	286912			0.00-	0.00	42.09
3.747	3.840	-0.093	70	1506			0.00-	2.00	0.52
3.747	3.840	-0.093	127	312768			10.00-	80.00	45.88
3.747	3.840	-0.093	197	0	0.0	0.0	0.00-	2.00	0.00
3.747	3.840	-0.093	199	46936			5.00-	9.00	6.88
3.747	3.840	-0.093	275	197760			10.00-	60.00	29.01
3.747	3.840	-0.093	365	22280			1.00-	0.00	3.27
3.747	3.840	-0.093	441	80424			0.01-	99.99	73.77
3.747	3.840	-0.093	442	548736			50.00-	100.00	80.49
3.747	3.840	-0.093	443	109024			15.00-	24.00	19.87

Date : 23-MAR-2012 14:40

Client ID: DFTPP3N

Instrument: S3.i

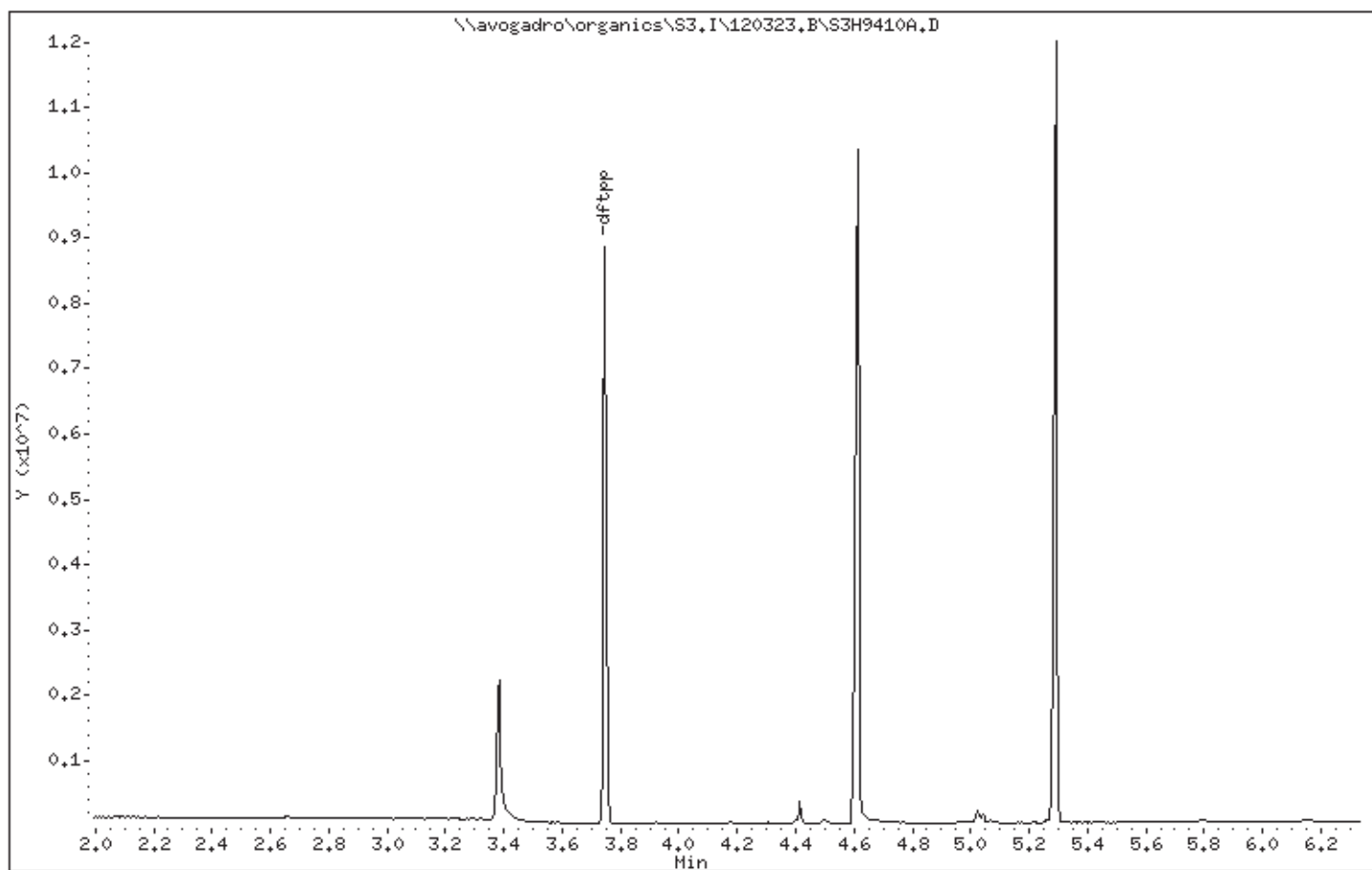
Sample Info: DFTPP3N,DFTPP3N

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 23-MAR-2012 14:40

Client ID: DFTPP3N

Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

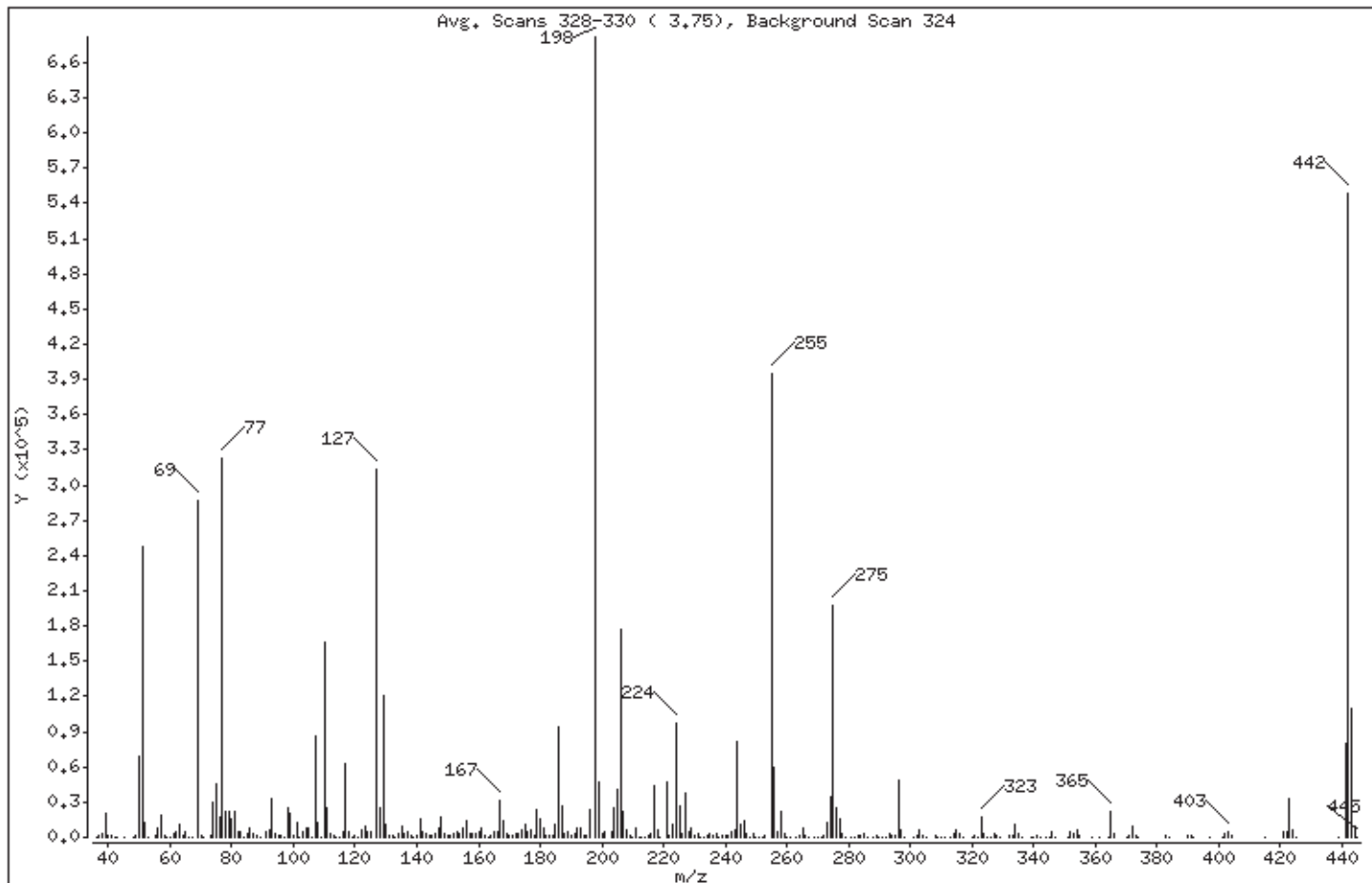
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	36.30
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	42.09
70	Less than 2.00% of mass 69	0.22 (0.52)
127	10.00 - 80.00% of mass 198	45.88
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
275	10.00 - 60.00% of mass 198	29.01
365	Greater than 1.00% of mass 198	3.27
441	Present, but less than mass 443	11.80
442	50.00 - 100.00% of mass 198	80.49
443	15.00 - 24.00% of mass 442	15.99 (19.87)

Date : 23-MAR-2012 14:40

Client ID: DFTPP3N

Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3H9410A.D

Spectrum: Avg. Scans 328-330 (3.75), Background Scan 324

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	265	124.00	3928	208.00	5881	295.00	972
37.00	1279	125.00	3943	209.00	2040	296.00	48368
38.00	3814	127.00	312768	210.00	701	297.00	6428
39.00	21152	128.00	25136	211.00	7299	298.00	520
40.00	856	129.00	120272	212.00	369	301.00	669

41.00	924	130.00	10462	213.00	411	302.00	1303
42.00	54	131.00	2085	214.00	262	303.00	6162
43.00	56	132.00	1423	215.00	2010	304.00	1763
45.00	224	133.00	315	216.00	3612	305.00	230
48.00	96	134.00	3298	217.00	44032	308.00	818

49.00	1592	135.00	9823	218.00	6532	309.00	486
50.00	68720	136.00	3453	219.00	646	310.00	767
51.00	247488	137.00	4831	221.00	47104	311.00	118
52.00	13052	138.00	1158	222.00	1825	313.00	573
53.00	435	139.00	617	223.00	10198	314.00	2414

55.00	1246	140.00	1771	224.00	97328	315.00	5626
56.00	8037	141.00	15452	225.00	26200	316.00	2974
57.00	18064	142.00	5073	226.00	2845	317.00	635
58.00	912	143.00	3435	227.00	37560	320.00	220
59.00	384	144.00	952	228.00	5297	321.00	1741

60.00	429	145.00	871	229.00	7929	322.00	606
61.00	3668	146.00	2953	230.00	1288	323.00	17152
62.00	4357	147.00	8114	231.00	3280	324.00	2963
63.00	10281	148.00	16648	232.00	752	325.00	518
64.00	1901	149.00	3742	233.00	766	326.00	155

65.00	5389	150.00	817	234.00	2319	327.00	2820
66.00	313	151.00	1875	235.00	2840	328.00	1618
67.00	449	152.00	2360	236.00	1549	329.00	320
69.00	286912	153.00	4642	237.00	3148	332.00	1193
70.00	1506	154.00	3901	238.00	553	333.00	2036

71.00	276	155.00	7988	239.00	1633	334.00	11279
73.00	1817	156.00	13796	240.00	1328	335.00	3080
74.00	30008	157.00	2766	241.00	2131	336.00	332
75.00	44904	158.00	2948	242.00	4716	339.00	211
76.00	16712	159.00	2414	243.00	6131	340.00	153

Date : 23-MAR-2012 14:40

Client ID: DFTPP3N

Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3H9410A.D

Spectrum: Avg. Scans 328-330 (3.75), Background Scan 324

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y

77.00	323072	160.00	4813	244.00	81592	341.00	1758
78.00	21472	161.00	7639	245.00	10991	342.00	557
79.00	21360	162.00	2258	246.00	14265	344.00	106
80.00	15229	163.00	621	247.00	3317	345.00	134
81.00	21776	164.00	905	248.00	691	346.00	4009

82.00	5469	165.00	5452	249.00	3031	347.00	701
83.00	5122	166.00	5208	250.00	551	351.00	292
84.00	512	167.00	30968	251.00	528	352.00	4622
85.00	3814	168.00	14462	252.00	679	353.00	3467
86.00	7168	169.00	2480	253.00	1873	354.00	6011

87.00	2644	170.00	1117	255.00	394560	355.00	1072
88.00	1001	171.00	1717	256.00	59000	359.00	314
89.00	748	172.00	2766	257.00	4851	361.00	121
91.00	4938	173.00	3614	258.00	21448	364.00	117
92.00	5570	174.00	6870	259.00	3572	365.00	22280

93.00	32128	175.00	11188	260.00	634	366.00	3207
94.00	2488	176.00	4259	261.00	520	370.00	414
95.00	856	177.00	6630	263.00	360	371.00	1008
96.00	1684	178.00	2275	264.00	916	372.00	9432
97.00	277	179.00	23616	265.00	7482	373.00	2159

98.00	25736	180.00	15292	266.00	1602	374.00	139
99.00	20528	181.00	8336	267.00	286	383.00	2298
100.00	1976	182.00	1124	269.00	125	384.00	586
101.00	12206	183.00	1000	270.00	682	390.00	915
102.00	745	184.00	2055	271.00	684	391.00	928

103.00	4094	185.00	11066	272.00	1155	392.00	670
104.00	7423	186.00	94384	273.00	12619	397.00	116
105.00	7533	187.00	26240	274.00	33696	401.00	499
106.00	533	188.00	2612	275.00	197760	402.00	3240
107.00	85640	189.00	5325	276.00	25752	403.00	4940

108.00	12703	190.00	992	277.00	15656	404.00	1555
109.00	520	191.00	2701	278.00	2555	415.00	121
110.00	166528	192.00	7498	279.00	355	421.00	4188
111.00	24832	193.00	7280	281.00	107	422.00	4614
112.00	3197	194.00	1815	282.00	404	423.00	33032

Date : 23-MAR-2012 14:40

Client ID: DFTPP3N

Instrument: S3.i

Sample Info: DFTPP3N,DFTPP3N

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3H9410A.D

Spectrum: Avg. Scans 328-330 (3.75), Background Scan 324

Location of Maximum: 198.00

Number of points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	870	195.00	1112	283.00	1680	424.00	6993
114.00	340	196.00	23184	284.00	1201	425.00	483
115.00	357	198.00	681728	285.00	2802	439.00	136
116.00	5381	199.00	46936	286.00	610	441.00	80424
117.00	62464	200.00	3129	288.00	129	442.00	548736
118.00	4706	201.00	3928	289.00	806	443.00	109024
119.00	673	203.00	4556	290.00	356	444.00	9779
120.00	1160	204.00	24512	291.00	168	445.00	549
121.00	586	205.00	41424	292.00	566		
122.00	6290	206.00	177152	293.00	3216		
123.00	8751	207.00	22696	294.00	784		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120424.B\S3H9910.D
 Lab Smp Id: DFTPP3L Client Smp ID: DFTPP3L
 Inj Date : 24-APR-2012 10:24
 Operator : PK SRC: PK Inst ID: S3.i
 Smp Info : DFTPP3L,DFTPP3L
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120424.B\S3_dftppSOM.m
 Meth Date : 02-Apr-2012 12:14 pkaczorows Quant Type: ESTD
 Cal Date : Cal File:
 Als bottle: 100 QC Sample: DFTPP
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vf/Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
RT	EXP RT	DLT RT	MASS	RESPONSE	ON-COL		TARGET	RANGE	RATIO
					(ug/L)	FINAL			
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 dftpp					CAS #: 5074-71-5				
4.103	3.840	0.263	198	560512			0.00-	100.00	100.00
4.103	3.840	0.263	51	207616			10.00-	80.00	37.04
4.103	3.840	0.263	68	0	0.0	0.0	0.00-	2.00	0.00
4.103	3.840	0.263	69	232000			0.00-	0.00	41.39
4.103	3.840	0.263	70	1953			0.00-	2.00	0.84
4.103	3.840	0.263	127	251648			10.00-	80.00	44.90
4.103	3.840	0.263	197	0	0.0	0.0	0.00-	2.00	0.00
4.103	3.840	0.263	199	37672			5.00-	9.00	6.72
4.103	3.840	0.263	275	167488			10.00-	60.00	29.88
4.103	3.840	0.263	365	19856			1.00-	0.00	3.54
4.103	3.840	0.263	441	58280			0.01-	99.99	68.38
4.103	3.840	0.263	442	416384			50.00-	100.00	74.29
4.103	3.840	0.263	443	85224			15.00-	24.00	20.47

Date : 24-APR-2012 10:24

Client ID: DFTPP3L

Instrument: S3.i

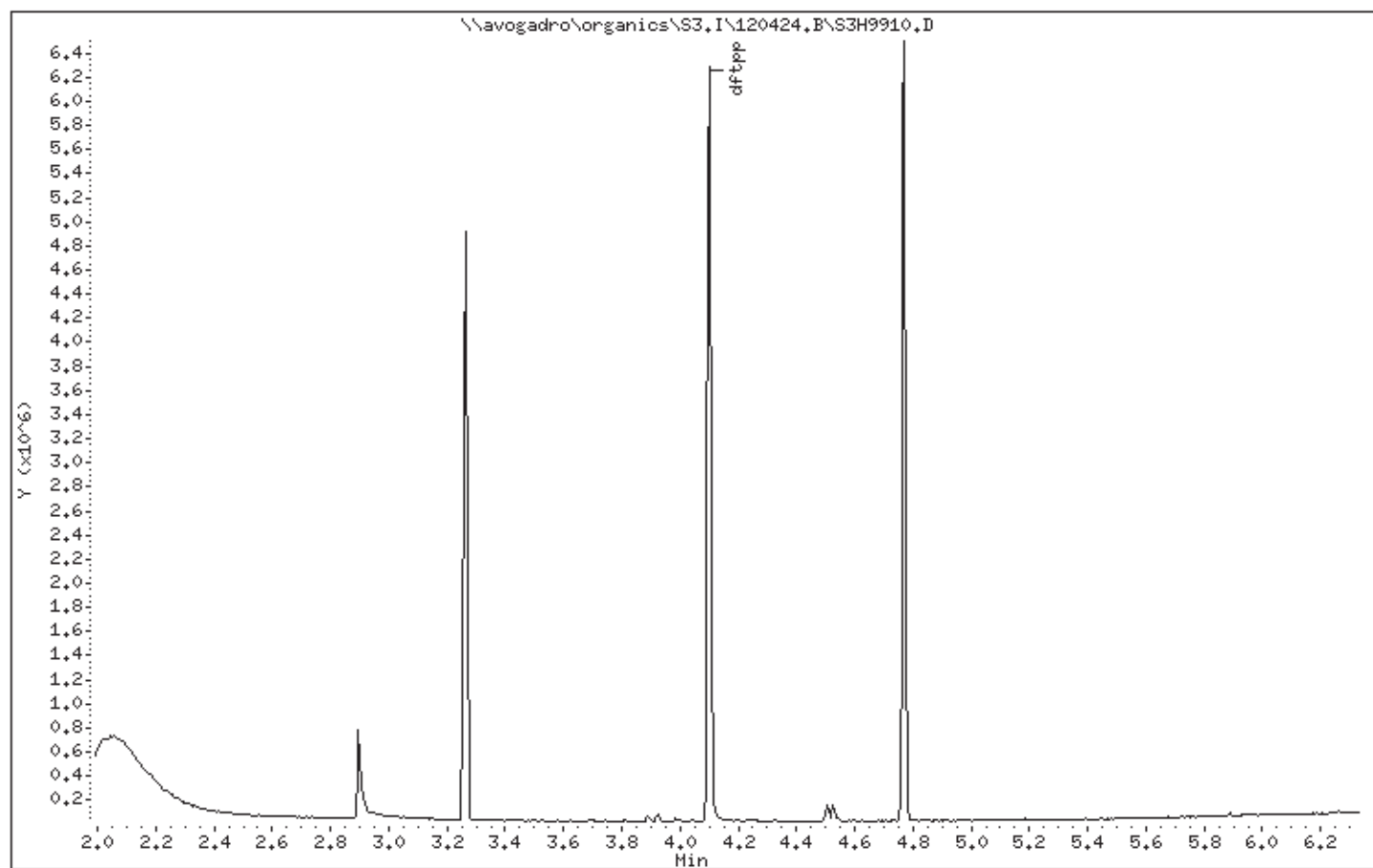
Sample Info: DFTPP3L,DFTPP3L

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25



Date : 24-APR-2012 10:24

Client ID: DFTPP3L

Instrument: S3.i

Sample Info: DFTPP3L,DFTPP3L

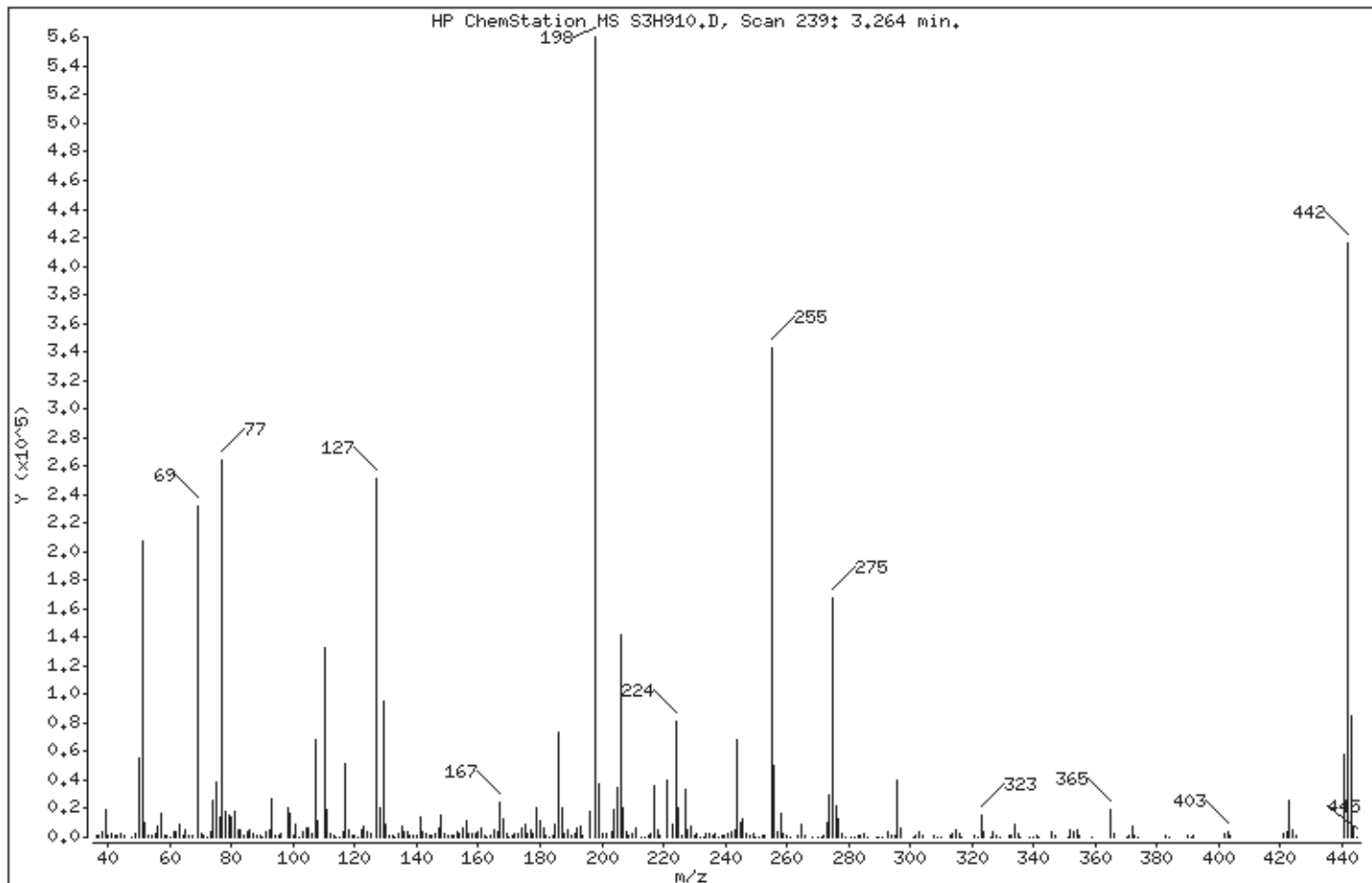
Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: Rxi-5SILMS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	37.04
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.39
70	Less than 2.00% of mass 69	0.35 (0.84)
127	10.00 - 80.00% of mass 198	44.90
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
275	10.00 - 60.00% of mass 198	29.88
365	Greater than 1.00% of mass 198	3.54
441	Present, but less than mass 443	10.40
442	50.00 - 100.00% of mass 198	74.29
443	15.00 - 24.00% of mass 442	15.20 (20.47)

Date : 24-APR-2012 10:24

Client ID: DFTPP3L

Instrument: S3.i

Sample Info: DFTPP3L,DFTPP3L

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-5SILMS

Column diameter: 0.25

Data File: S3H9910.D

Spectrum: HP ChemStation MS S3H910.D, Scan 239: 3.264 min.

Location of Maximum: 197.90

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	938	116.90	51440	194.00	1562	282.00	631
37.00	1311	118.00	4547	196.00	17856	283.00	1414
38.00	3385	118.90	734	197.90	560512	283.90	1139
39.00	19832	120.00	918	198.90	37672	285.00	2471
40.00	1422	121.00	474	200.00	2886	286.00	624

41.00	2253	122.00	4910	201.40	3016	288.90	596
42.10	817	123.00	7532	203.00	4083	289.90	342
43.00	1771	123.90	3249	204.00	19008	291.10	468
44.00	3184	125.00	2867	205.00	34344	293.00	3596
45.00	1791	127.00	251648	206.00	141376	294.00	931

47.80	384	128.00	20912	207.00	20392	294.90	1224
49.00	2430	129.00	95376	207.90	4449	295.90	39408
50.00	55584	130.00	8877	208.90	1662	296.90	6119
51.00	207616	131.00	1623	209.90	2178	300.90	598
52.00	10322	132.00	1149	210.90	5883	302.00	924

53.00	1011	133.00	625	212.90	315	303.00	4401
54.00	668	134.00	2879	213.80	430	303.90	1608
55.00	2394	135.00	7989	214.90	1666	307.90	779
56.00	7231	136.00	3426	215.90	3137	309.00	361
57.00	17032	137.00	4167	216.90	35616	309.90	575

58.00	895	137.90	1062	217.90	5093	312.90	706
58.90	766	139.00	945	219.00	763	313.90	2552
60.10	435	139.90	1134	221.00	40128	315.00	4833
61.00	3807	141.00	14072	223.00	8463	315.90	2920
62.00	3283	142.00	3878	224.00	81752	316.80	423

63.00	8823	142.90	2896	225.00	20808	321.00	1678
64.00	1319	144.00	1345	226.10	1889	322.00	554
65.00	5367	144.80	953	226.90	33184	323.00	15629
66.10	715	146.00	2478	227.90	4996	324.00	3377
67.00	1597	146.90	6610	228.90	7097	325.90	352

69.00	232000	147.90	14848	230.00	890	326.90	3430
70.00	1953	148.90	2918	231.00	2880	327.90	1650
70.90	919	150.10	734	232.00	597	328.90	315
72.20	612	151.10	1721	232.90	454	332.00	995
73.00	3508	151.80	1178	233.90	2475	333.00	1468

Date : 24-APR-2012 10:24

Client ID: DFTPP3L

Instrument: S3.i

Sample Info: DFTPP3L,DFTPP3L

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: RXi-SSILMS

Column diameter: 0.25

Data File: S3H9910.D

Spectrum: HP ChemStation MS S3H910.D, Scan 239: 3.264 min.

Location of Maximum: 197.90

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y

74.00	26064	153.00	3834	234.90	2255	334.00	9119
75.00	38424	153.90	2886	236.00	1345	335.00	2664
76.10	13587	155.00	6850	236.90	2845	336.00	402
77.00	264128	156.00	11446	237.80	456	338.90	458
78.00	18112	157.00	2953	238.80	1257	339.90	377

79.00	15747	157.70	2632	239.90	705	340.90	1684
80.00	13673	159.00	2350	240.90	2364	341.80	407
81.00	17984	159.90	3948	241.90	3988	346.00	3736
82.00	4785	161.00	6487	243.00	5678	346.90	720
83.00	5407	161.80	1904	244.00	67680	351.00	332

84.00	1098	162.90	609	245.00	10280	352.00	4547
85.00	3800	163.90	866	245.90	12988	353.00	3611
86.00	5566	164.90	4549	246.90	2316	354.00	5225
86.90	2670	166.00	3924	247.90	856	354.90	881
88.00	1043	167.00	24888	249.00	2597	358.90	451

89.10	974	168.00	12457	249.90	593	364.90	19856
90.00	318	169.00	2910	250.80	567	365.90	2883
91.00	4308	169.90	608	252.00	672	370.10	546
92.00	4546	170.90	1383	252.90	1127	370.90	1522
93.00	27448	171.90	2337	255.00	342272	372.00	7794

93.90	1917	173.00	3215	255.90	50776	373.00	1614
95.00	796	174.00	6081	257.00	3960	373.80	470
96.00	2269	175.00	9357	258.00	17384	382.90	1693
98.00	21248	175.90	2613	258.90	2085	383.90	436
99.00	16808	176.90	5203	260.00	968	389.90	795

100.00	1641	177.90	2499	260.90	598	391.10	578
100.90	8954	178.90	20176	263.80	1026	391.80	750
102.10	605	179.90	11967	265.00	8512	402.00	2664
102.90	3960	181.00	6617	265.90	1744	403.00	4286
104.00	6322	181.90	1084	268.00	490	403.90	1297

104.90	6396	183.20	519	269.80	605	421.00	3200
106.00	2036	183.90	1542	271.00	600	422.00	3431
107.00	68728	185.00	9174	272.00	970	423.00	25984
108.00	11626	186.00	73440	273.00	10458	423.90	5128
109.90	132160	186.90	20448	273.90	29208	425.00	753

Date : 24-APR-2012 10:24

Client ID: DFTPP3L

Instrument: S3.i

Sample Info: DFTPP3L,DFTPP3L

Volume Injected (uL): 2.0

Operator: PK SRC: PK

Column phase: Rxi-SSILMS

Column diameter: 0.25

Data File: S3H9910.D

Spectrum: HP ChemStation MS S3H910.D, Scan 239: 3.264 min.

Location of Maximum: 197.90

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.90	19696	187.90	2478	275.00	167488	441.00	58280
111.90	2691	189.00	4876	276.00	21472	442.00	416384
113.10	978	189.90	676	276.90	12479	443.00	85224
114.00	303	191.10	2052	277.90	2140	444.00	7760
115.00	539	191.90	6023	279.00	336	445.10	409
116.00	4411	193.00	7196	281.10	323		

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-65732

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3H9923.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	Bis(2-chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-65732

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3H9923.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

Data File: \\avogadro\organics\S3.I\120424.B\S3H9923.D
 Report Date: 25-Apr-2012 17:14

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120424.B\S3H9923.D
 Lab Smp Id: MB-65732 Client Smp ID: MB-65732
 Inj Date : 24-APR-2012 14:54
 Operator : PK SRC: LIMS Inst ID: S3.i
 Smp Info : MB-65732,MB-65732,65732
 Misc Info :
 Comment :
 Method : \\avogadro\organics\S3.I\120424.B\s3_8270C_N.m
 Meth Date : 25-Apr-2012 17:13 S3.i Quant Type: ISTD
 Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
 Als bottle: 13 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: allnew.sub
 Target Version: 4.14
 Processing Host: TARGET113

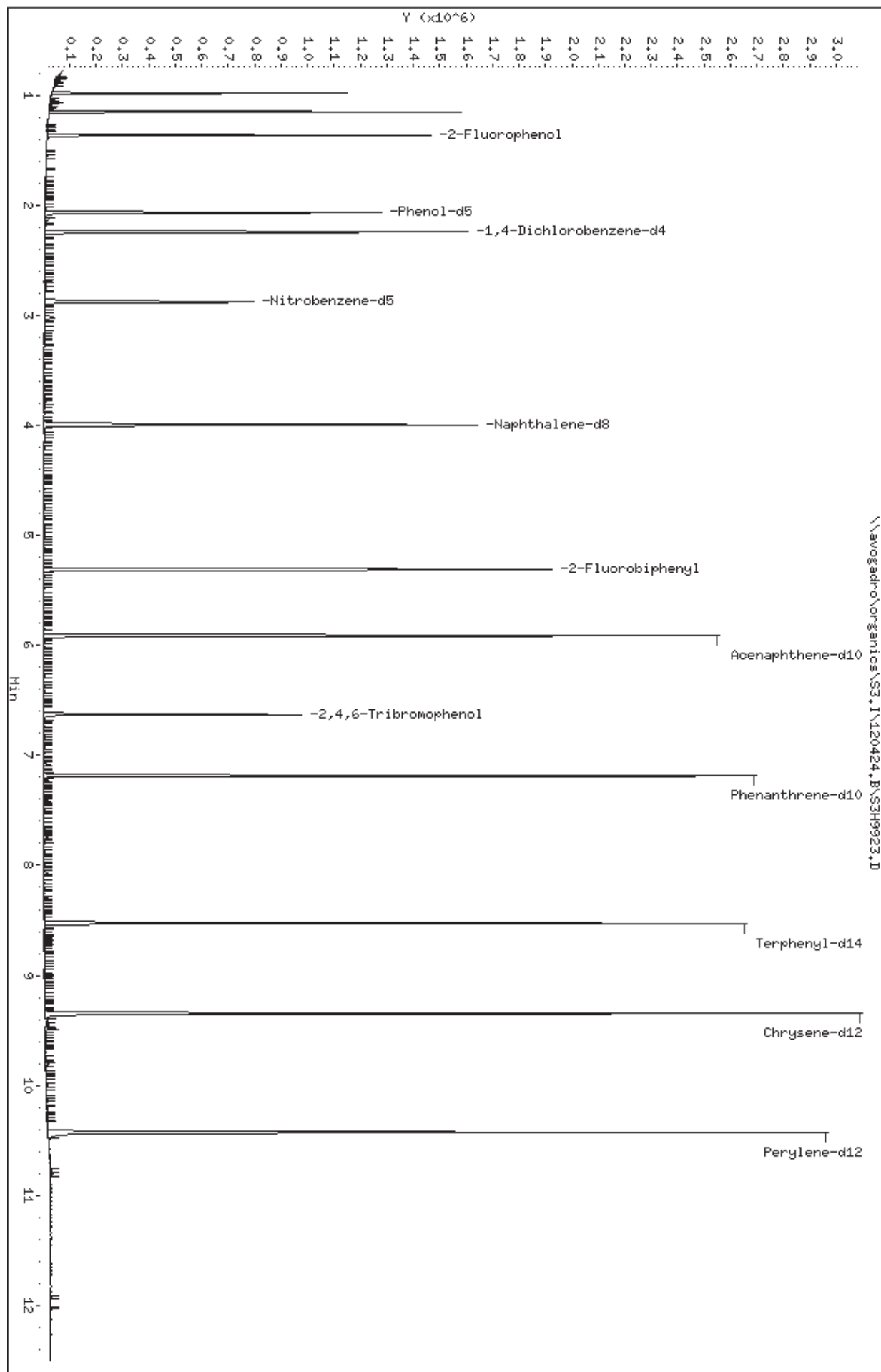
Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Ws}) * (100/(100-\text{M})) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/Kg)
\$ 3 2-Fluorophenol	112	1.361	1.362	(0.607)	267535	36.2362	2400
\$ 5 Phenol-d5	99	2.066	2.068	(0.921)	358573	37.1627	2500
* 12 1,4-Dichlorobenzene-d4	152	2.243	2.239	(1.000)	218933	40.0000	
\$ 22 Nitrobenzene-d5	82	2.878	2.880	(0.721)	292898	37.2609	2500
* 31 Naphthalene-d8	136	3.995	3.996	(1.000)	781065	40.0000	
\$ 41 2-Fluorobiphenyl	172	5.314	5.316	(0.899)	579991	36.6624	2400
* 48 Acenaphthene-d10	164	5.913	5.919	(1.000)	455609	40.0000	
\$ 60 2,4,6-Tribromophenol	330	6.629	6.635	(0.923)	103949	43.3242	2900
* 64 Phenanthrene-d10	188	7.184	7.191	(1.000)	879768	40.0000	
\$ 72 Terphenyl-d14	244	8.525	8.532	(0.912)	722519	37.4622	2500
* 76 Chrysene-d12	240	9.348	9.354	(1.000)	1014491	40.0000	
* 83 Perylene-d12	264	10.427	10.439	(1.000)	1033351	40.0000	

Data File: \\avogadro\organics\S3,I\120424,B\SH9923.D
 Date : 24-APR-2012 14:54
 Client ID: MB-65732
 Sample Info: MB-65732,MB-65732,65732
 Volume Injected (uL): 1.0
 Column phase: Rxi-5Sil MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782
 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-65732
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3H9924.D
 Level: (LOW/MED) LOW Extraction: (Type) SONC
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
 Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2400	
111-44-4	Bis(2-chloroethyl)ether	2800	
95-57-8	2-Chlorophenol	2600	
541-73-1	1,3-Dichlorobenzene	2500	
106-46-7	1,4-Dichlorobenzene	2500	
95-50-1	1,2-Dichlorobenzene	2500	
95-48-7	2-Methylphenol	2600	
108-60-1	2,2'-oxybis(1-Chloropropane)	2900	
106-44-5	4-Methylphenol	2500	
621-64-7	N-Nitroso-di-n-propylamine	2600	
67-72-1	Hexachloroethane	2500	
98-95-3	Nitrobenzene	3600	
78-59-1	Isophorone	2500	
88-75-5	2-Nitrophenol	2600	
105-67-9	2,4-Dimethylphenol	3200	
120-83-2	2,4-Dichlorophenol	2600	
120-82-1	1,2,4-Trichlorobenzene	2500	
91-20-3	Naphthalene	2500	
106-47-8	4-Chloroaniline	2000	
111-91-1	Bis(2-chloroethoxy)methane	2600	
87-68-3	Hexachlorobutadiene	2700	
59-50-7	4-Chloro-3-methylphenol	2400	
91-57-6	2-Methylnaphthalene	2400	
77-47-4	Hexachlorocyclopentadiene	3400	
88-06-2	2,4,6-Trichlorophenol	2700	
95-95-4	2,4,5-Trichlorophenol	2700	
91-58-7	2-Chloronaphthalene	2600	
88-74-4	2-Nitroaniline	2800	
131-11-3	Dimethylphthalate	2400	
208-96-8	Acenaphthylene	2500	
606-20-2	2,6-Dinitrotoluene	2500	
99-09-2	3-Nitroaniline	1600	
83-32-9	Acenaphthene	2500	
51-28-5	2,4-Dinitrophenol	3800	
100-02-7	4-Nitrophenol	2600	
132-64-9	Dibenzofuran	2500	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-65732

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3H9924.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2500	
84-66-2	Diethylphthalate	2300	
7005-72-3	4-Chlorophenyl-phenylether	2500	
86-73-7	Fluorene	2500	
100-01-6	4-Nitroaniline	1500	
534-52-1	4,6-Dinitro-2-methylphenol	3100	
86-30-6	N-Nitrosodiphenylamine	2600	
101-55-3	4-Bromophenyl-phenylether	2700	
118-74-1	Hexachlorobenzene	2800	
87-86-5	Pentachlorophenol	3500	
85-01-8	Phenanthrene	2600	
120-12-7	Anthracene	2600	
86-74-8	Carbazole	2500	
84-74-2	Di-n-butylphthalate	2500	
206-44-0	Fluoranthene	2500	
129-00-0	Pyrene	2600	
85-68-7	Butylbenzylphthalate	2500	
91-94-1	3,3'-Dichlorobenzidine	1400	
56-55-3	Benzo(a)anthracene	2700	
218-01-9	Chrysene	2600	
117-81-7	Bis(2-ethylhexyl)phthalate	2500	
117-84-0	Di-n-octylphthalate	2400	
205-99-2	Benzo(b)fluoranthene	2500	
207-08-9	Benzo(k)fluoranthene	2500	
50-32-8	Benzo(a)pyrene	2600	
193-39-5	Indeno(1,2,3-cd)pyrene	2700	
53-70-3	Dibenzo(a,h)anthracene	2700	
191-24-2	Benzo(g,h,i)perylene	2700	

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120424.B\S3H9924.D
Lab Smp Id: LCS-65732 Client Smp ID: LCS-65732
Inj Date : 24-APR-2012 15:13
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCS-65732, LCS-65732, 65732
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120424.B\s3_8270C_N.m
Meth Date : 25-Apr-2012 17:13 S3.i Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Ws}) * (100/(100-\text{M})) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		ON-COLUMN	FINAL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
1 N-Nitrosodimethylamine	74	0.815	0.812	(0.364)	193660	37.6281	2500
2 Pyridine	79	0.831	0.828	(0.371)	338464	39.5554	2600
\$ 3 2-Fluorophenol	112	1.365	1.362	(0.609)	308690	39.8498	2600
101 Benzaldehyde	77	1.867	1.865	(0.833)	56866	9.27226	620(a)
\$ 5 Phenol-d5	99	2.065	2.068	(0.921)	394579	38.9766	2600
6 Phenol	94	2.076	2.084	(0.926)	411322	36.4468	2400
7 Aniline	66	1.969	1.966	(0.878)	158457	18.4155	1200(R)
8 bis(2-Chloroethyl)Ether	63	2.017	2.014	(0.900)	226628	41.3008	2800
10 2-Chlorophenol	128	2.103	2.100	(0.938)	305333	38.3664	2600
11 1,3-Dichlorobenzene	146	2.188	2.185	(0.976)	320765	37.0547	2500
* 12 1,4-Dichlorobenzene-d4	152	2.241	2.239	(1.000)	229705	40.0000	
13 1,4-Dichlorobenzene	146	2.257	2.255	(1.007)	329035	37.1254	2500
15 Benzyl Alcohol	108	2.434	2.431	(1.086)	205264	38.4943	2600
16 1,2-Dichlorobenzene	146	2.407	2.404	(1.074)	310217	37.3029	2500
17 2-Methylphenol	108	2.658	2.661	(1.186)	284771	39.1233	2600
18 2,2'-oxybis(1-Chloropropane)	45	2.551	2.554	(1.138)	422751	43.7058	2900
99 Acetophenone	105	2.690	2.687	(1.200)	390125	33.0694	2200
19 N-Nitroso-di-n-propylamine	70	2.717	2.714	(1.212)	240789	38.9935	2600
20 4-Methylphenol	108	2.893	2.901	(1.291)	299786	37.9147	2500

Data File: \\avogadro\organics\S3.I\120424.B\S3H9924.D
Report Date: 25-Apr-2012 17:14

						CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/Kg)	
=====	=====	=====	=====	=====	=====	=====	=====	
21 Hexachloroethane	117	2.786	2.783	(1.243)	116494	38.2283	2500	
\$ 22 Nitrobenzene-d5	82	2.882	2.880	(0.721)	337235	40.7491	2700	
23 Nitrobenzene	77	2.909	2.906	(0.728)	457127	54.0259	3600	
24 Isophorone	82	3.310	3.307	(0.828)	579890	38.1691	2500	
25 2-Nitrophenol	139	3.438	3.441	(0.860)	166766	39.4000	2600	
26 2,4-Dimethylphenol	107	3.732	3.734	(0.933)	299848	48.4778	3200	
27 bis(2-Chloroethoxy)methane	93	3.764	3.761	(0.941)	358596	39.2902	2600	
29 2,4-Dichlorophenol	162	3.946	3.953	(0.987)	257415	38.8006	2600	
30 1,2,4-Trichlorobenzene	180	3.940	3.943	(0.985)	284355	37.9798	2500	
* 31 Naphthalene-d8	136	3.999	3.996	(1.000)	822315	40.0000		
32 Naphthalene	128	4.026	4.023	(1.007)	827885	37.7303	2500	
33 4-Chloroaniline	127	4.191	4.194	(1.048)	283620	29.3309	2000	
34 Hexachlorobutadiene	225	4.245	4.247	(1.061)	169783	40.0625	2700	
102 Caprolactam	113	4.619	4.616	(1.155)	89291	30.7119	2000	
35 4-Chloro-3-Methylphenol	107	4.961	4.963	(1.240)	256198	36.2257	2400	
36 2-Methylnaphthalene	142	4.891	4.894	(1.223)	560574	36.7275	2400	
114 1-Methylnaphthalene	142	4.993	4.995	(1.248)	524563	36.7333	2400	
38 Hexachlorocyclopentadiene	237	5.078	5.081	(0.858)	179448	50.7357	3400	
112 1,2,4,5-Tetrachlorobenzene	216	5.078	5.081	(0.858)	339127	45.6659	3000	
39 2,4,6-Trichlorophenol	196	5.270	5.273	(0.891)	194605	40.6330	2700	
40 2,4,5-Trichlorophenol	196	5.356	5.358	(0.905)	204023	40.1077	2700	
\$ 41 2-Fluorobiphenyl	172	5.313	5.316	(0.898)	662460	39.6962	2600	
98 1,1'-Biphenyl	154	5.399	5.401	(0.912)	650948	36.7206	2400	
42 2-Chloronaphthalene	162	5.393	5.390	(0.912)	528109	39.2169	2600	
43 2-Nitroaniline	65	5.554	5.556	(0.939)	177466	41.8068	2800	
44 Dimethylphthalate	163	5.751	5.748	(0.972)	598649	36.1487	2400	
45 2,6-Dinitrotoluene	165	5.789	5.786	(0.978)	146002	37.1795	2500	
46 Acenaphthylene	152	5.778	5.780	(0.977)	853816	37.6002	2500	
47 3-Nitroaniline	138	5.949	5.951	(1.005)	109120	24.4848	1600	
* 48 Acenaphthene-d10	164	5.917	5.919	(1.000)	480621	40.0000		
49 Acenaphthene	153	5.944	5.946	(1.004)	527721	37.3859	2500	
50 2,4-Dinitrophenol	184	6.029	6.031	(1.019)	90092	56.7977	3800	
51 4-Nitrophenol	109	6.280	6.293	(1.061)	70656	39.3614	2600	
53 2,4-Dinitrotoluene	165	6.141	6.144	(1.038)	192900	37.1656	2500	
52 Dibenzofuran	168	6.104	6.106	(1.032)	766269	37.5194	2500	
110 2,3,4,6-Tetrachlorophenol	232	6.269	6.272	(1.060)	155890	41.3711	2800	
54 Diethylphthalate	149	6.382	6.384	(1.079)	560616	35.0183	2300	
56 4-Chlorophenyl-phenylether	204	6.435	6.437	(1.088)	328306	37.6377	2500	
55 Fluorene	166	6.403	6.405	(1.082)	628936	36.9069	2500	
57 4-Nitroaniline	138	6.488	6.491	(1.097)	99685	22.4283	1500	
58 4,6-Dinitro-2-methylphenol	198	6.494	6.496	(0.903)	131330	45.8401	3000	
59 N-Nitrosodiphenylamine	169	6.553	6.555	(0.912)	539441	39.7232	2600	
97 Azobenzene	77	6.563	6.566	(0.913)	703972	45.8337	3000	
\$ 60 2,4,6-Tribromophenol	330	6.633	6.635	(0.923)	114046	46.9977	3100	
61 4-Bromophenyl-phenylether	248	6.841	6.843	(0.952)	209335	41.0817	2700	
62 Hexachlorobenzene	284	6.868	6.876	(0.955)	241661	42.0851	2800	
100 Atrazine	200	7.039	7.041	(0.979)	189053	40.0526	2700	
63 Pentachlorophenol	266	7.081	7.084	(0.985)	113974	52.1242	3500	
* 64 Phenanthrene-d10	188	7.188	7.191	(1.000)	889778	40.0000		
65 Phenanthrene	178	7.204	7.212	(1.002)	880530	38.5057	2600	
66 Anthracene	178	7.247	7.249	(1.008)	898558	38.3895	2600	
67 Carbazole	167	7.423	7.426	(1.033)	838251	37.2043	2500	
68 Di-n-butylphthalate	149	7.744	7.752	(1.077)	916721	37.6184	2500	
69 Fluoranthene	202	8.182	8.184	(1.138)	1039352	37.8108	2500	

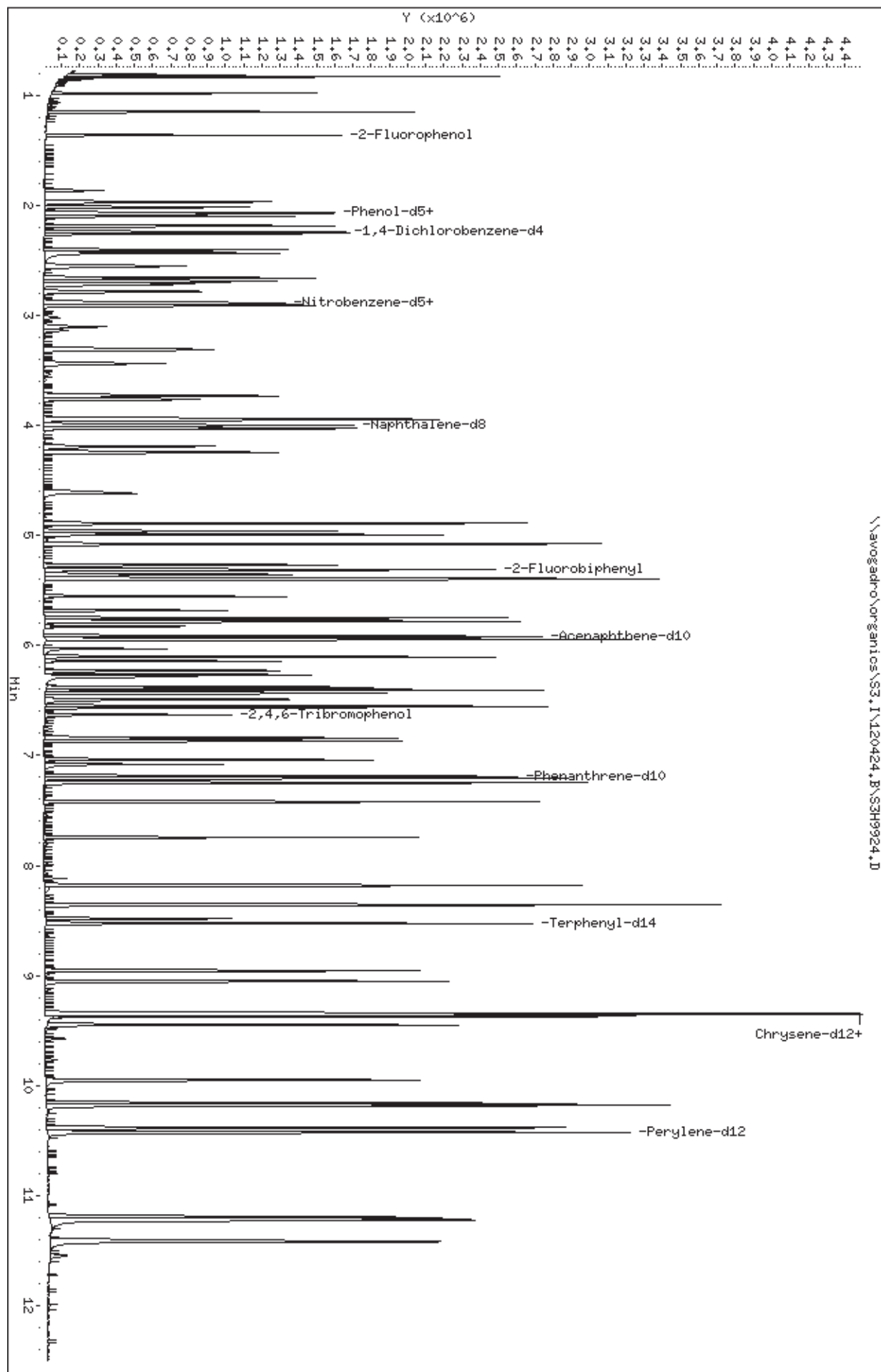
Compounds	QUANT SIG							CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
							(ng)	(ug/Kg)	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
71 Pyrene	202	8.358	8.361	(0.894)	1040476	39.4724	2600		
\$ 72 Terphenyl-d14	244	8.524	8.532	(0.911)	774517	40.0946	2700		
73 Butylbenzylphthalate	149	8.956	8.959	(0.958)	411457	38.2248	2500		
74 3,3'-Dichlorobenzidine	252	9.357	9.360	(1.001)	227313	21.7144	1400		
78 bis(2-Ethylhexyl)phthalate	149	9.448	9.450	(1.010)	554129	37.4716	2500		
75 Benzo(a)anthracene	228	9.341	9.344	(0.999)	1087691	39.7598	2600		
* 76 Chrysene-d12	240	9.352	9.354	(1.000)	1016104	40.0000			
77 Chrysene	228	9.368	9.376	(1.002)	1003414	38.9770	2600		
79 Di-n-octylphthalate	149	9.950	9.958	(0.954)	949051	36.6683	2400		
80 Benzo(b)fluoranthene	252	10.158	10.166	(0.974)	1200677	38.2033	2500		
81 Benzo(k)fluoranthene	252	10.180	10.188	(0.976)	1292109	38.1172	2500		
82 Benzo(a)pyrene	252	10.383	10.396	(0.996)	1144875	38.5925	2600		
* 83 Perylene-d12	264	10.426	10.439	(1.000)	1121387	40.0000			
84 Indeno(1,2,3-cd)pyrene	276	11.195	11.213	(1.074)	1469474	39.8863	2600		
85 Dibenzo(a,h)anthracene	278	11.222	11.240	(1.076)	1243704	40.8507	2700		
86 Benzo(g,h,i)perylene	276	11.419	11.438	(1.095)	1267754	40.1633	2700		

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\S3,I\120424,B\SH9924.D
 Date : 24-APR-2012 15:13
 Client ID: LCS-65732
 Sample Info: LCS-65732,LCS-65732,65732
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-65732

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3H9925.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2500	
111-44-4	Bis(2-chloroethyl)ether	2900	
95-57-8	2-Chlorophenol	2700	
541-73-1	1,3-Dichlorobenzene	2600	
106-46-7	1,4-Dichlorobenzene	2600	
95-50-1	1,2-Dichlorobenzene	2600	
95-48-7	2-Methylphenol	2700	
108-60-1	2,2'-oxybis(1-Chloropropane)	3000	
106-44-5	4-Methylphenol	2600	
621-64-7	N-Nitroso-di-n-propylamine	2700	
67-72-1	Hexachloroethane	2600	
98-95-3	Nitrobenzene	3700	
78-59-1	Isophorone	2700	
88-75-5	2-Nitrophenol	2800	
105-67-9	2,4-Dimethylphenol	3300	
120-83-2	2,4-Dichlorophenol	2700	
120-82-1	1,2,4-Trichlorobenzene	2700	
91-20-3	Naphthalene	2600	
106-47-8	4-Chloroaniline	2000	
111-91-1	Bis(2-chloroethoxy)methane	2700	
87-68-3	Hexachlorobutadiene	2800	
59-50-7	4-Chloro-3-methylphenol	2600	
91-57-6	2-Methylnaphthalene	2500	
77-47-4	Hexachlorocyclopentadiene	3400	
88-06-2	2,4,6-Trichlorophenol	2900	
95-95-4	2,4,5-Trichlorophenol	2800	
91-58-7	2-Chloronaphthalene	2700	
88-74-4	2-Nitroaniline	2900	
131-11-3	Dimethylphthalate	2500	
208-96-8	Acenaphthylene	2600	
606-20-2	2,6-Dinitrotoluene	2600	
99-09-2	3-Nitroaniline	1700	
83-32-9	Acenaphthene	2600	
51-28-5	2,4-Dinitrophenol	3900	
100-02-7	4-Nitrophenol	2800	
132-64-9	Dibenzofuran	2600	

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-65732

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L0782 Mod. Ref No.: _____ SDG No.: SL0782

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-65732

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S3H9925.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____

Concentrated Extract Volume: 1000 (uL) Date Extracted: 04/22/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 04/24/2012

GPC Cleanup:(Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2600	
84-66-2	Diethylphthalate	2500	
7005-72-3	4-Chlorophenyl-phenylether	2600	
86-73-7	Fluorene	2600	
100-01-6	4-Nitroaniline	1500	
534-52-1	4,6-Dinitro-2-methylphenol	3300	
86-30-6	N-Nitrosodiphenylamine	2700	
101-55-3	4-Bromophenyl-phenylether	2900	
118-74-1	Hexachlorobenzene	2900	
87-86-5	Pentachlorophenol	3600	
85-01-8	Phenanthrene	2600	
120-12-7	Anthracene	2700	
86-74-8	Carbazole	2600	
84-74-2	Di-n-butylphthalate	2600	
206-44-0	Fluoranthene	2600	
129-00-0	Pyrene	2600	
85-68-7	Butylbenzylphthalate	2600	
91-94-1	3,3'-Dichlorobenzidine	1500	
56-55-3	Benzo(a)anthracene	2600	
218-01-9	Chrysene	2700	
117-81-7	Bis(2-ethylhexyl)phthalate	2600	
117-84-0	Di-n-octylphthalate	2500	
205-99-2	Benzo(b)fluoranthene	2700	
207-08-9	Benzo(k)fluoranthene	2600	
50-32-8	Benzo(a)pyrene	2700	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2800	
191-24-2	Benzo(g,h,i)perylene	2800	

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\S3.I\120424.B\S3H9925.D
Lab Smp Id: LCSD-65732 Client Smp ID: LCSD-65732
Inj Date : 24-APR-2012 15:33
Operator : PK SRC: LIMS Inst ID: S3.i
Smp Info : LCSD-65732,LCSD-65732,65732
Misc Info :
Comment :
Method : \\avogadro\organics\S3.I\120424.B\s3_8270C_N.m
Meth Date : 25-Apr-2012 17:13 S3.i Quant Type: ISTD
Cal Date : 23-MAR-2012 16:50 Cal File: S3H9416.D
Als bottle: 15 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allnew.sub
Target Version: 4.14
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * (\text{Vt}/\text{Vi}) * (1/\text{Ws}) * (100/(100-\text{M})) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	GPC correction factor
Vt	1000.000	Volume of final extract (uL)(1000 low, 2
Vi	1.000	Volume injected (uL)
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		ON-COLUMN	FINAL				
	MASS	(ng)	(ug/Kg)	RT	EXP RT	REL RT	RESPONSE
=====	=====	=====	=====	=====	=====	=====	=====
1 N-Nitrosodimethylamine	74	43.7000	2900	0.816	0.812	(0.364)	220507
2 Pyridine	79	35.7038	2400	0.832	0.828	(0.371)	299526
\$ 3 2-Fluorophenol	112	40.6777	2700	1.361	1.362	(0.607)	308935
101 Benzaldehyde	77	7.38584	490(a)	1.863	1.865	(0.831)	44410
\$ 5 Phenol-d5	99	40.2133	2700	2.066	2.068	(0.921)	399128
6 Phenol	94	37.7036	2500	2.077	2.084	(0.926)	417175
7 Aniline	66	18.7593	1200(R)	1.970	1.966	(0.879)	158255
8 bis(2-Chloroethyl)Ether	63	43.5471	2900	2.018	2.014	(0.900)	234276
10 2-Chlorophenol	128	39.9107	2700	2.098	2.100	(0.936)	311405
11 1,3-Dichlorobenzene	146	38.4635	2600	2.189	2.185	(0.976)	326442
* 12 1,4-Dichlorobenzene-d4	152	40.0000		2.243	2.239	(1.000)	225208
13 1,4-Dichlorobenzene	146	38.3462	2600	2.259	2.255	(1.007)	333202
15 Benzyl Alcohol	108	40.2383	2700	2.435	2.431	(1.086)	210363
16 1,2-Dichlorobenzene	146	39.1575	2600	2.403	2.404	(1.071)	319265
17 2-Methylphenol	108	40.8723	2700	2.659	2.661	(1.186)	291677
18 2,2'-oxybis(1-Chloropropane)	45	45.1520	3000	2.552	2.554	(1.138)	428190
99 Acetophenone	105	34.4630	2300	2.691	2.687	(1.200)	398606
19 N-Nitroso-di-n-propylamine	70	40.9260	2700	2.718	2.714	(1.212)	247775
20 4-Methylphenol	108	39.5774	2600	2.900	2.901	(1.293)	306806

Data File: \\avogadro\organics\S3.I\120424.B\S3H9925.D
Report Date: 25-Apr-2012 17:14

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)
							FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
21 Hexachloroethane	117	2.782	2.783	(1.241)	117886	39.4575	2600
\$ 22 Nitrobenzene-d5	82	2.884	2.880	(0.721)	340339	41.6489	2800
23 Nitrobenzene	77	2.910	2.906	(0.728)	465228	55.6849	3700
24 Isophorone	82	3.311	3.307	(0.828)	597005	39.7970	2600
25 2-Nitrophenol	139	3.439	3.441	(0.860)	172748	41.3341	2800
26 2,4-Dimethylphenol	107	3.733	3.734	(0.933)	303892	49.7585	3300
27 bis(2-Chloroethoxy)methane	93	3.760	3.761	(0.940)	366727	40.6938	2700
29 2,4-Dichlorophenol	162	3.947	3.953	(0.987)	263081	40.1607	2700
30 1,2,4-Trichlorobenzene	180	3.941	3.943	(0.985)	296476	40.1040	2700
* 31 Naphthalene-d8	136	4.000	3.996	(1.000)	811955	40.0000	
32 Naphthalene	128	4.027	4.023	(1.007)	856982	39.5547	2600
33 4-Chloroaniline	127	4.192	4.194	(1.048)	282246	29.5612	2000
34 Hexachlorobutadiene	225	4.246	4.247	(1.061)	176022	42.0647	2800
102 Caprolactam	113	4.620	4.616	(1.155)	94995	33.0907	2200
35 4-Chloro-3-Methylphenol	107	4.962	4.963	(1.240)	274308	39.2813	2600
36 2-Methylnaphthalene	142	4.892	4.894	(1.223)	572816	38.0085	2500
114 1-Methylnaphthalene	142	4.994	4.995	(1.248)	538209	38.1698	2500
38 Hexachlorocyclopentadiene	237	5.079	5.081	(0.858)	183341	51.5020	3400
112 1,2,4,5-Tetrachlorobenzene	216	5.079	5.081	(0.858)	345878	46.2745	3100
39 2,4,6-Trichlorophenol	196	5.271	5.273	(0.891)	209338	43.4272	2900
40 2,4,5-Trichlorophenol	196	5.352	5.358	(0.904)	213163	41.6342	2800
\$ 41 2-Fluorobiphenyl	172	5.314	5.316	(0.898)	677403	40.3297	2700
98 1,1'-Biphenyl	154	5.400	5.401	(0.912)	665199	37.2824	2500
42 2-Chloronaphthalene	162	5.389	5.390	(0.911)	549066	40.5101	2700
43 2-Nitroaniline	65	5.555	5.556	(0.939)	183486	42.9461	2900
44 Dimethylphthalate	163	5.747	5.748	(0.971)	635821	38.1456	2500
45 2,6-Dinitrotoluene	165	5.790	5.786	(0.978)	153077	38.7296	2600
46 Acenaphthylene	152	5.779	5.780	(0.977)	893933	39.1129	2600
47 3-Nitroaniline	138	5.950	5.951	(1.005)	111411	24.8376	1600
* 48 Acenaphthene-d10	164	5.918	5.919	(1.000)	483742	40.0000	
49 Acenaphthene	153	5.945	5.946	(1.004)	547585	38.5428	2600
50 2,4-Dinitrophenol	184	6.030	6.031	(1.019)	93121	58.3286	3900
51 4-Nitrophenol	109	6.281	6.293	(1.061)	76965	42.5995	2800(Q)
53 2,4-Dinitrotoluene	165	6.142	6.144	(1.038)	204665	39.1779	2600
52 Dibenzofuran	168	6.105	6.106	(1.032)	789495	38.4073	2600
110 2,3,4,6-Tetrachlorophenol	232	6.270	6.272	(1.060)	164203	43.2961	2900
54 Diethylphthalate	149	6.383	6.384	(1.079)	599853	37.2275	2500
56 4-Chlorophenyl-phenylether	204	6.431	6.437	(1.087)	348335	39.6762	2600
55 Fluorene	166	6.404	6.405	(1.082)	658851	38.4129	2600
57 4-Nitroaniline	138	6.490	6.491	(1.097)	101670	22.7273	1500
58 4,6-Dinitro-2-methylphenol	198	6.495	6.496	(0.903)	143520	49.2459	3300
59 N-Nitrosodiphenylamine	169	6.554	6.555	(0.912)	559991	40.5375	2700
97 Azobenzene	77	6.564	6.566	(0.913)	737015	47.1717	3100
\$ 60 2,4,6-Tribromophenol	330	6.628	6.635	(0.922)	122606	49.6689	3300
61 4-Bromophenyl-phenylether	248	6.842	6.843	(0.952)	224612	43.3326	2900
62 Hexachlorobenzene	284	6.869	6.876	(0.955)	256262	43.8714	2900
100 Atrazine	200	7.040	7.041	(0.979)	199383	41.5252	2800
63 Pentachlorophenol	266	7.082	7.084	(0.985)	120582	54.2116	3600
* 64 Phenanthrene-d10	188	7.189	7.191	(1.000)	905119	40.0000	
65 Phenanthrene	178	7.205	7.212	(1.002)	920043	39.5517	2600
66 Anthracene	178	7.248	7.249	(1.008)	948709	39.8451	2600
67 Carbazole	167	7.419	7.426	(1.032)	882847	38.5195	2600
68 Di-n-butylphthalate	149	7.745	7.752	(1.077)	966220	38.9776	2600
69 Fluoranthene	202	8.178	8.184	(1.137)	1084174	38.7729	2600

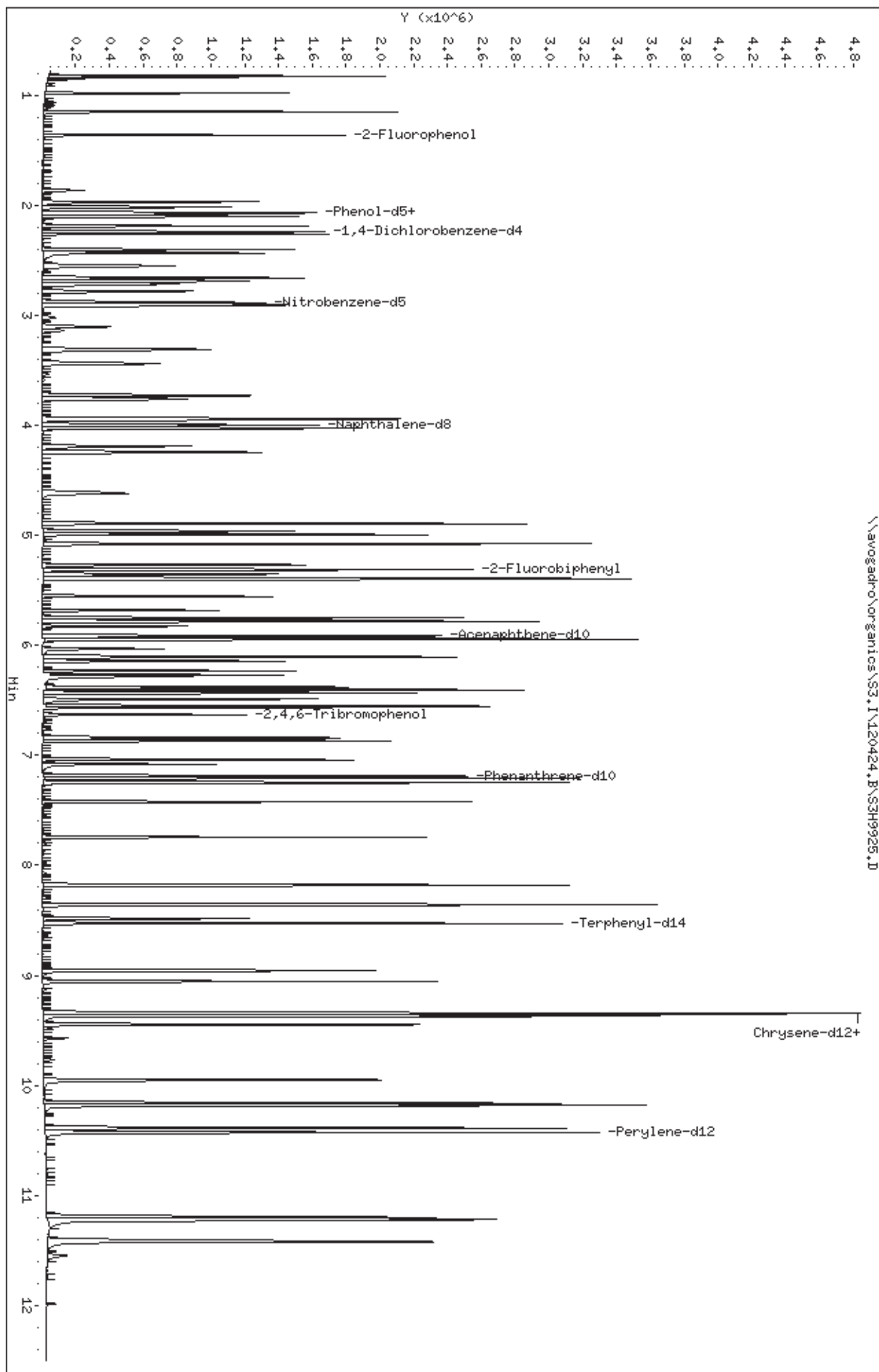
Compounds	QUANT SIG							CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
							(ng)	(ug/Kg)	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
71 Pyrene	202	8.359	8.361	(0.894)	1081770	39.5461	2600		
\$ 72 Terphenyl-d14	244	8.525	8.532	(0.912)	807587	40.2858	2700		
73 Butylbenzylphthalate	149	8.958	8.959	(0.958)	437365	39.1537	2600		
74 3,3'-Dichlorobenzidine	252	9.353	9.360	(1.001)	237148	21.8298	1400		
78 bis(2-Ethylhexyl)phthalate	149	9.449	9.450	(1.011)	595218	38.7860	2600		
75 Benzo(a)anthracene	228	9.342	9.344	(0.999)	1118446	39.3968	2600		
* 76 Chrysene-d12	240	9.348	9.354	(1.000)	1054460	40.0000			
77 Chrysene	228	9.369	9.376	(1.002)	1101800	41.2420	2700		
79 Di-n-octylphthalate	149	9.951	9.958	(0.954)	994154	38.2320	2500		
80 Benzo(b)fluoranthene	252	10.160	10.166	(0.974)	1301301	41.2121	2700		
81 Benzo(k)fluoranthene	252	10.181	10.188	(0.976)	1322957	38.8454	2600		
82 Benzo(a)pyrene	252	10.384	10.396	(0.996)	1214231	40.7397	2700		
* 83 Perylene-d12	264	10.427	10.439	(1.000)	1126635	40.0000			
84 Indeno(1,2,3-cd)pyrene	276	11.196	11.213	(1.074)	1554503	41.9978	2800		
85 Dibenzo(a,h)anthracene	278	11.217	11.240	(1.076)	1302454	42.5811	2800		
86 Benzo(g,h,i)perylene	276	11.420	11.438	(1.095)	1349986	42.5693	2800		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\S3,I\120424,B\SH9925.D
 Date : 24-APR-2012 15:33
 Client ID: LCSD-65732
 Sample Info: LCSD-65732,LCSD-65732,65732
 Volume Injected (uL): 1.0
 Column phase: Rxi-5S11 MS

Instrument: S3.i
 Operator: PK SRC: LIMS
 Column diameter: 0.25



Percent Moisture and Percent Solids Report

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
L0782-01A	SO4-MW2	04/24/2012	8.096	91.904	Yes

Instrument S3
Injection Log

Spectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Spectrum Analytical, Inc. RI Division S3
SemiVolatiles Laboratory

Internal Standard: 50120103A

Comments: 21-54120313A
22
23
24
25
26
100

Reviewed By: 03/28/12 BM

Manual Integration: NU

METHOD: 8220
ICAL DATE: 3/23/12

ANALYST: NU
EMV: 2209

BATCH: 120323.B

Start: 23-MAR-12 14:40
End: 23-MAR-12 17:10

Inlet Maintenance By: NU
Liner : cleaned
Column : checked
Inlet Seal: checked
Septum : new

Tune-SD120221A

#8497

MI Review: 03/28/12 BM

FILE	TIME	LAB ID	CLIENT ID	INTERNAL STANDARDS										SURROGATES										COMMENTS
				PREP	MT	DCB	NPT	ANT	PHN	CRY	PRY	NBZ	FBP	BN	TPH	PHL	2FP	ACID	OLM	DCB	2CP	DILN	FLG	
S3H9410A	14:40	DFTPP3N																						
S3H9411	15:03	SSTD0253N				AQ	100	100	100	100	100													
S3H9412	15:32	SSTD0803N				AQ	129	129	129	124	134													
S3H9413	15:51	SSTD0103N				AQ	123	122	124	123	125	131												
S3H9414	16:11	SSTD0603N				AQ	126	128	126	127	126	135												
S3H9415	16:30	SSTD0053N				AQ	117	114	118	118	122	128												
S3H9416	16:50	SSTD0403N				AQ	134	132	135	133	131	138												
S3H9417	17:10	SICVD0253N				AQ	112	116	121	120	121	127	0*	0*	0*	0*								

MI Review: *copy to Bill*

Septum : *new*

WT 108

de

de

de

- One or more target compounds are above the calibration range

One or more target compounds are above the calibration range

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limits
D - Surrogates are diluted

11/26/12

Instrument S3
Injection LogSpectrum Analytical, Inc. RI Division
SemiVolatiles LaboratorySpectrum Analytical, Inc. RI Div
SemiVolatiles Laboratory

Injection Log

METHOD: 8220

ICAL DATE: 3/23/12

ANALYST: ME

EMV: 24/9

BATCH: 120424.B

Start: 24-APR-12 10:24
End: 24-APR-12 23:15

Internal Standard: SD 120103A

Comments:

#8497

Time - SD 12022107

L3-SX 120515C

Reviewed By: 04/25/12 13M

Manual Integration: ME

MI Review: 04/25/12 8M

Inlet Maintenance By: ME
Liner : cleaned
Column : changed
Inlet Seal: cleaned
Septum : new

FILE	TIME	LAB ID	CLIENT ID	INTERNAL STANDARDS										SURROGATES										COMMENTS			
				PREP	MT	BATCH	DCB	NPT	ANT	PHN	CRY	PRY	NBZ	FBP	BN	TPH	PHL	2FP	TBP	DCB	2CP	DILN	FIG				
S3H910	10:24	DFTPP3L	DFTPP3L			AO	100	100	100	100	100	100															
S3H911	10:48	SSTD0253L	SSTD0253L			AO	100	100	100	100	100	100														1	ae
S3H912	11:22	MB-65721	MB-65721			65721	SL	139	134	125	114	104	94	80	76	80	78	78	96							1	ae
S3H913	11:41	LCS-65721	LCS-65721			65721	SL	125	123	115	111	107	59	72	72	77	71	71	95							1	ae
S3H914	12:00	LCS-65721	LCS-65721			65721	SL	123	122	118	115	112	108	78	79	85	79	78	103							1	R
S3H915	12:19	MB-65745	MB-65745			65745	AO	111	111	111	114	117	113	85	82	86	82	79	97							1	R
S3H916	12:39	LCS-65745	LCS-65745			65745	AO	119	124	123	123	119	121	80	79	86	76	74	101							1	ae
S3H917	12:58	MB-65731	MB-65731			65731	AO	118	120	121	120	122	121	94	88	91	95	90	117							1	R
S3H918	13:17	LCS-65731	LCS-65731			65731	AO	124	128	129	125	118	124	92	86	94	88	86	111							1	R
S3H919	13:36	LCS-65731	LCS-65731			65731	AO	135	139	139	135	128	132	93	86	94	89	86	114							1	R
S3H920	13:56	L0761-01A	L0761-01A			65721	SL	118	117	115	114	115	110	56	55	60	58	57	66							1	R
S3H921	14:15	L0749-01A	L0749-01A			65721	SL	123	121	118	115	116	113	66	65	68										1	
S3H922	14:34	L0749-02A	L0749-02A			65721	SL	131	130	122	113	101	99	58	58	62										1	
S3H923	14:54	MB-65732	MB-65732			65732	SL	121	117	109	105	99	95	74	73	75	74	72	87							1	
S3H924	15:13	LCS-65732	LCS-65732			65732	SL	127	123	115	106	99	104	81	79	80	78	80	94							1	
S3H925	15:33	LCS-65732	LCS-65732			65732	SL	125	121	116	108	103	104	83	81	80	80	81	99							1	R
S3H926	15:52	MB-65732	MB-65732			65737	AO	114	115	119	120	121	117	81	76	82	79	74	99							1	R
S3H927	16:12	LCS-65737	LCS-65737			65737	AO	117	120	123	120	118	119	74	73	77	72	68	92							1	V
S3H928	16:31	L0769-01C	L0769-01C			65737	AO	117	120	123	120	118	119	74	73	77	72	68	92							1	ae
S3H929	16:50	L0795-02B	L0795-02B			65745	AO	113	116	119	122	124	123	77	72	69	+++*	+++*	6.0*							1	MI 72 Re-cvt.
S3H930	17:10	L0795-03B	L0795-03B			65745	AO	107	108	108	110	113	114	70	70	75	38	55	100							1	MI 72 Re-cvt.
S3H931	17:30	L0795-03BMS	L0795-03BMS			65745	AO	110	113	115	114	109	113	76	72	81	39	57	99							1	ae
S3H932	17:49	L0795-03BMSD	L0795-03BMSD			65745	AO	115	119	122	121	118	121	78	75	81	41	60	106							1	R
S3H933	18:08	L0795-04B	L0795-04B			65745	AO	112	112	115	116	117	121	67	66	70	45	58	102							1	R
S3H934	18:27	L0795-05B	L0795-05B			65745	AO	111	112	115	117	120	121	66	65	69	37	51	94							1	
S3H935	18:46	L0795-06B	L0795-06B			65745	AO	108	110	114	115	118	116	53	53	70	39	54	100							1	
S3H936	19:05	L0782-01A	L0782-01A			65732	SL	124	120	113	108	105	103	63	62	70	63	62	78							1	
S3H937	19:25	L0770-01A	L0770-01A			65732	SL	124	122	112	106	105	110	63	65	64	64	63	80							1	V
																									1	ae MI 80 81	

One or more target compounds are above the

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal standard or Surrogate outside of control limits
D - Surrogates are diluted

ME 4/25/12

Spectrum Analytical, Inc. RI Division S3 Injection Log
 METHOD: 8270 ANALYST: *pk* BATCH: 120424.B Start: 24-APR-12 10:24
 SEMI-VOLATILES LABORATORY ICAL DATE: 3/25/12 EMV: 2294 End: 24-APR-12 23:15

Internal Standard: *SD-120103A*

Comments:

Tune - *SD-120221A*

#8497

Inlet Maintenance By: *pk*
 Liner : *cleaned*
 Column : *changed*
 Inlet Seal: *cleaned*
 Septum : *new*

23-54 (20313C)

Reviewed By: *04/25/12 B.M.* Manual Integration: *pk* MI Review: *04/25/12 B.M.*

FILE	TIME	LAB ID	CLIENT ID	INTERNAL STANDARDS										SURROGATES							COMMENTS
				PREP	MT	BATCH	DCB	NPT	ANT	PHN	CRY	PRY	NBZ	FBP	BN	TPH	PHL	2FP	ACID	OLM	
S3H9938	19:44	L0770-02A	DB-2 (0-6")	65732	SL	127	121	114	106	106	110	66	66	67	64	66	81				OL MI 80_81
S3H9939	20:03	L0770-03A	DB-3 (0-6")	65732	SL	123	119	111	107	107	114	63	66	66	65	64	80				MI 80_81
S3H9940	20:22	L0770-04A	DB-4 (0-6")	65732	SL	123	119	112	106	106	111	70	70	71	69	70	86				MI 80_81
S3H9941	20:41	L0770-05A	DB-5 (0-6")	65732	SL	130	124	117	110	108	116	71	69	72	70	71	88				
S3H9942	21:00	L0770-06A	DB-6 (0-6")	65732	SL	125	122	111	104	104	113	68	67	67	67	67	83				OL MI 80_81
S3H9943	21:20	L0770-07A	GP-1 (0-6")	65732	SL	127	123	115	106	106	113	67	69	70	69	66	88				
S3H9944	21:39	L0787-03C	BMA-SOA-3-D7	65731	AQ	138	134	117	76	98	16*	42	90	102	90	88	186*				MI 5_80_81 84 85 10
S3H9945	21:58	L0787-04C	BMA-SOA-4-D7	65731	AQ	131	126	108	70	95	17*	59	69	95	86	180*				MI 3_80_81 85 10	
S3H9946	22:17	L0740-01BDL	ET01 GRABDL	65655	AQ	144	144	143	140	142	126	44	44D	59	30	41	75				OL
S3H9947	22:36	L0740-05BDL	FD03DL	65655	AQ	142	141	139	137	139	130	75	72	72	43	62	84				T MI 5 625
S3H9948	22:56	L0740-06BDL	INT-1DL	65655	AQ	142	144	142	140	142	135	67	66	71	46	53	64				T MI 5 625
S3H9949	23:15	L0740-07BDL	INT-2DL	65655	AQ	142	145	142	142	143	139	68	68	69	36	54	65				OL

04/25/12 B.M.

E - One or more target compounds are above the calibration range
 R - One or more spike compounds are outside of control limits
 T - Sample was injected outside of the 12 hour sequence
 * - Internal Standard or Surrogate outside of control limits
 D - Surrogates are diluted

04/25/12



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L0782

SW846 6010C, SW846 7471B

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 6010C, SW846 7471B

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3050B

Soil Samples were prepared following procedures in laboratory test code: SW7471B

V. INSTRUMENTATION

The following instrumentation was used to perform analysis:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

Method blanks were within the acceptance criteria except for the following:

MB-65830 in batch 65830: Iron > 10mg/Kg reporting limit at 11mg/Kg. Since all associated samples had greater than ten times these method blank concentrations for these elements, no corrective action was taken.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

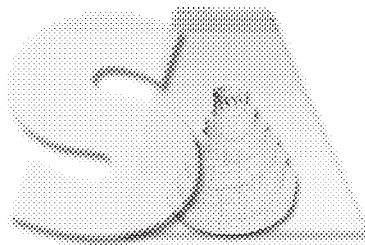
G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:  _____

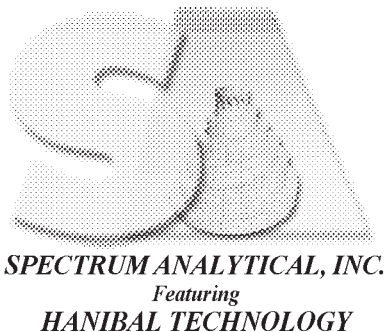
Date: 05/11/12



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0782
SOW No.: SW846
EPA Sample No. SO4-MW2 Lab Sample ID L0782-01

Were ICP interelement corrections applied? Yes/No Yes
Were background corrections applied? Yes/No Yes
If yes-were raw data generated before application of background corrections? Yes/No No

Comments:

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: *Diane E. Smart* Name: *Diane E. Smart*
Date: *5/11/12* Title: _____

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

S04-MW2

Lab Name: Spectrum Analytical, Inc.Contract: 2011-31Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SL0782Matrix (soil/water): SOILLab Sample ID: L0782-01Level (low/med): MEDDate Received: 04/20/2012% Solids: 91.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15800			P
7440-36-0	Antimony	1.0			P
7440-38-2	Arsenic	12.7			P
7440-39-3	Barium	347			P
7440-41-7	Beryllium	0.76			P
7440-43-9	Cadmium	0.24			P
7440-70-2	Calcium	2380			P
7440-47-3	Chromium	23.4			P
7440-48-4	Cobalt	19.2			P
7440-50-8	Copper	50.2			P
7439-89-6	Iron	40200			P
7439-92-1	Lead	18.6			P
7439-95-4	Magnesium	7630			P
7439-96-5	Manganese	1740			P
7439-97-6	Mercury	0.027	B		CV
7440-02-0	Nickel	37.1			P
7440-09-7	Potassium	1390			P
7782-49-2	Selenium	2.8			P
7440-22-4	Silver	0.060	U		P
7440-23-5	Sodium	86.5			P
7440-28-0	Thallium	2.2			P
7440-62-2	Vanadium	23.6			P
7440-66-6	Zinc	83.2			P

Comments:

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0782

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	05/02/12 8:18				05/02/12 8:37		05/02/12 09:11		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	9907.88	99.1	10000.0	10084.92	100.8	10003.25	100.0	P
Antimony	500.0	493.99	98.8	500.0	489.34	97.9	486.70	97.3	P
Arsenic	500.0	495.05	99.0	500.0	500.60	100.1	499.34	99.9	P
Barium	10000.0	10223.08	102.2	10000.0	10263.83	102.6	10310.73	103.1	P
Beryllium	250.0	244.93	98.0	250.0	247.07	98.8	247.01	98.8	P
Cadmium	250.0	238.44	95.4	250.0	240.99	96.4	241.20	96.5	P
Calcium	25000.0	24351.48	97.4	25000.0	24516.90	98.1	24571.20	98.3	P
Chromium	1000.0	978.45	97.8	1000.0	997.29	99.7	998.93	99.9	P
Cobalt	2500.0	2563.29	102.5	2500.0	2607.22	104.3	2592.54	103.7	P
Copper	1250.0	1225.56	98.0	1250.0	1243.32	99.5	1238.62	99.1	P
Iron	5000.0	4978.02	99.6	5000.0	5101.16	102.0	5069.32	101.4	P
Lead	500.0	494.39	98.9	500.0	501.45	100.3	498.43	99.7	P
Magnesium	25000.0	25104.64	100.4	25000.0	25378.29	101.5	25391.14	101.6	P
Manganese	2500.0	2514.09	100.6	2500.0	2524.81	101.0	2547.92	101.9	P
Nickel	2500.0	2525.10	101.0	2500.0	2569.81	102.8	2555.47	102.2	P
Potassium	25000.0	25024.04	100.1	25000.0	24713.66	98.9	25037.65	100.2	P
Selenium	500.0	485.09	97.0	500.0	501.23	100.2	492.15	98.4	P
Silver	1250.0	1251.85	100.1	1250.0	1272.59	101.8	1268.51	101.5	P
Sodium	25000.0	24978.22	99.9	25000.0	24553.71	98.2	24899.80	99.6	P
Thallium	500.0	462.46	92.5	500.0	463.43	92.7	469.67	93.9	P
Vanadium	2500.0	2476.99	99.1	2500.0	2520.81	100.8	2535.90	101.4	P
Zinc	2500.0	2512.44	100.5	2500.0	2559.73	102.4	2504.98	100.2	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0782

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					05/02/12 9:45		05/02/12 10:23		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10030.12	100.3	9943.77	99.4	P
Antimony				500.0	473.25	94.7	472.86	94.6	P
Arsenic				500.0	484.40	96.9	489.21	97.8	P
Barium				10000.0	10064.85	100.6	10140.24	101.4	P
Beryllium				250.0	237.92	95.2	237.47	95.0	P
Cadmium				250.0	236.09	94.4	239.34	95.7	P
Calcium				25000.0	24604.27	98.4	24464.53	97.9	P
Chromium				1000.0	993.08	99.3	991.37	99.1	P
Cobalt				2500.0	2570.33	102.8	2561.80	102.5	P
Copper				1250.0	1225.49	98.0	1212.45	97.0	P
Iron				5000.0	5091.04	101.8	5049.14	101.0	P
Lead				500.0	487.01	97.4	495.70	99.1	P
Magnesium				25000.0	25004.30	100.0	25191.03	100.8	P
Manganese				2500.0	2521.67	100.9	2542.95	101.7	P
Nickel				2500.0	2523.55	100.9	2515.06	100.6	P
Potassium				25000.0	24558.85	98.2	24701.86	98.8	P
Selenium				500.0	480.91	96.2	485.83	97.2	P
Silver				1250.0	1254.68	100.4	1245.25	99.6	P
Sodium				25000.0	24467.58	97.9	24343.15	97.4	P
Thallium				500.0	449.85	90.0	466.41	93.3	P
Vanadium				2500.0	2532.37	101.3	2538.00	101.5	P
Zinc				2500.0	2415.60	96.6	2394.47	95.8	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782Initial Calibration Source: Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					05/02/12 11:00		05/02/12 11:45		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Iron				5000.0	5054.65	101.1	4987.34	99.7	P
Manganese				2500.0	2550.14	102.0	2517.41	100.7	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

MB-66039**FIMS2_120508B**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	05/08/12 17:40	C		C		C		C	
Mercury	0.028	U	0.028	U					0.002	U	CV

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

MB-65830

OPTIMA3_120502A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	05/02/12 8:41	C	05/02/12 9:14	C	05/02/12 9:48	C		C	
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	2.618	B	P
Antimony	9.7	B	10.2	B	9.3	U	9.3	U	0.425	B	P
Arsenic	4.3	U	4.3	U	4.3	U	5.2	B	0.410	U	P
Barium	1.5	B	1.4	B	1.1	U	1.3	B	0.386	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.002	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.015	U	P
Calcium	110.0	U	110.0	U	135.9	B	216.7	B	7.147	B	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.019	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.8	B	0.044	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	0.110	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	11.439		P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	0.170	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	0.663	B	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	0.500	B	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.043	U	P
Potassium	82.0	B	179.7	B	76.0	U	163.9	B	4.684	B	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	0.640	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	0.094	B	P
Sodium	29.0	U	29.0	U	-53.7	B	29.0	U	1.100	U	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	0.220	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	0.060	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	0.281	B	P

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120502A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	05/02/12 10:26	C		C		C		C	
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			9.1	B							P
Barium			1.3	B							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U							P
Chromium			0.6	U							P
Cobalt			0.9	B							P
Copper			3.6	U							P
Iron			31.0	U	31.0	U	31.0	U			P
Lead			4.2	U							P
Magnesium			76.0	U							P
Manganese			10.0	U	10.0	U	10.0	U			P
Nickel			1.3	B							P
Potassium			76.0	U							P
Selenium			12.0	U							P
Silver			6.9	U							P
Sodium			-61.8	B							P
Thallium			6.2	U							P
Vanadium			1.1	U							P
Zinc			4.9	U							P

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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782ICP ID Number: OPTIMA3 ICS Source:

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found			
	Sol.	Sol.	Sol.	Sol.		Sol.		Sol.	
	A	AB	A	AB	%R	A	%R	AB	%R
Aluminum	500000	500000	470941	469385.3	93.9				
Antimony	0	600	3	615.7	102.6				
Arsenic	0	100	3	90.9	90.9				
Barium	0	500	1	504.8	101.0				
Beryllium	0	500	0	480.4	96.1				
Cadmium	0	1000	-2	893.9	89.4				
Calcium	500000	500000	494827	489477.4	97.9				
Chromium	0	500	1	476.9	95.4				
Cobalt	0	500	0	452.8	90.6				
Copper	0	500	2	507.4	101.5				
Iron	200000	200000	179427	179681	89.8				
Lead	0	500	-10	463.7	92.7				
Magnesium	500000	500000	463291	461676.5	92.3				
Manganese	0	500	-6	473.7	94.7				
Nickel	0	1000	-2	885.7	88.6				
Potassium	0	25000	237	26823.1	107.3				
Selenium	0	500	7	499.7	99.9				
Silver	0	200	-1	205.7	102.8				
Sodium	0	25000	113	26130	104.5				
Thallium	0	100	10	90.1	90.1				
Vanadium	0	500	-5	475.2	95.0				
Zinc	0	1000	11	918	91.8				

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7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: LCS-65830

Analyte	Aqueous (ug/L)			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				455.0	444.6		364 546.0	97.7
Antimony				22.8	23.0		18.2 27.3	100.9
Arsenic				22.8	22.5		18.2 27.3	98.7
Barium				455.0	451.4		364 546.0	99.2
Beryllium				11.4	10.7		9.1 13.6	93.9
Cadmium				11.4	10.9		9.1 13.6	95.6
Calcium				1135.0	1092.0		908 1362.0	96.2
Chromium				45.5	45.6		36.4 54.6	100.2
Cobalt				113.5	111.6		90.8 136.2	98.3
Copper				56.5	54.6		45.2 67.8	96.6
Iron				227.5	232.0		182 273.0	102.0
Lead				22.8	22.4		18.2 27.3	98.2
Magnesium				1135.0	1120.4		908 1362.0	98.7
Manganese				113.5	113.5		90.8 136.2	100.0
Nickel				113.5	111.8		90.8 136.2	98.5
Potassium				1135.0	1091.5		908 1362.0	96.2
Selenium				22.8	21.4		18.2 27.3	93.9
Silver				56.5	55.0		42.4 67.8	97.3
Sodium				1135.0	1089.8		908 1362.0	96.0
Thallium				22.8	20.9		18.2 27.3	91.7
Vanadium				113.5	113.9		90.8 136.2	100.4
Zinc				113.5	105.0		90.8 136.2	92.5

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: <u>Spectrum Analytical, Inc.</u>		Contract: <u>2011-31</u>	
Lab Code: <u>MITKEM</u>	Case No.: <u></u>	SAS No.: <u></u>	SDG No.: <u>SL0782</u>
Solid LCS Source: <u></u>		LCS(D) ID: <u></u>	
Aqueous LCS Source: <u></u>		LCS-66039	

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury				0.8	0.8		0.6	0.9	100.0

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Instrument Type: CV InstrumentID: FIMS2 Date: 03/04/2010

Preparation Method: 7470A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.2	0.028

Comments:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Instrument Type: CV InstrumentID: FIMS2 Date: 02/09/2011

Preparation Method: 7471B

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

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.03	0.0021

Comments:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Instrument Type: P InstrumentID: OPTIMA3 Date: 06/03/2010

Preparation Method: 3050B

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

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	10	1.2
Antimony	206.83	1.0	0.38
Arsenic	188.98	1.0	0.41
Barium	233.53	10	0.031
Beryllium	313.11	0.25	0.0015
Cadmium	226.50	0.25	0.015
Calcium	227.54	40	6.1
Chromium	267.72	1.0	0.019
Cobalt	228.62	2.5	0.044
Copper	324.75	1.5	0.11
Iron	273.96	10	1.5
Lead	220.35	0.50	0.17
Magnesium	279.08	25	0.63
Manganese	257.61	2.5	0.13
Nickel	231.60	2.5	0.043
Potassium	766.49	50	3.4
Selenium	196.03	1.5	0.64
Silver	328.07	1.5	0.064
Sodium	589.59	50	1.1
Thallium	190.80	1.0	0.22
Vanadium	292.40	2.5	0.060
Zinc	206.20	2.5	0.18

Comments:

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782

Instrument Type: P InstrumentID: OPTIMA3 Date: 03/03/2010

Preparation Method: 3005A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	200	66.0
Antimony	206.83	20	9.3
Arsenic	188.98	20	4.3
Barium	233.53	200	1.1
Beryllium	313.11	5.0	0.26
Cadmium	226.50	5.0	0.89
Calcium	227.54	800	110
Chromium	267.72	20	0.64
Cobalt	228.62	50	0.67
Copper	324.75	30	3.6
Iron	273.96	200	31.0
Lead	220.35	10	4.2
Magnesium	279.08	500	76.0
Manganese	257.61	50	10.0
Nickel	231.60	50	0.85
Potassium	766.49	1000	76.0
Selenium	196.03	30	12.0
Silver	328.07	30	6.9
Sodium	589.59	1000	29.0
Thallium	190.80	20	6.2
Vanadium	292.40	50	1.1
Zinc	206.20	50	4.9

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0782

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.1950780	0.0000000	0.0689271	0.0000000
Antimony	206.83	0.0581013	0.0000000	0.0549587	0.0214185	0.0000000
Arsenic	188.97	0.0098790	-0.0124040	-0.0756686	0.0157247	0.1927900
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0025914	0.0749299	0.0000000	-0.0433049
Calcium	227.54	0.0000000		7.8420900	0.5637690	253.7870000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0064696	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0241432	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.0922443	0.0000000	-0.1349370
Iron	273.95	0.0000000	0.0000000		0.0000000	0.0000000
Lead	220.35	-0.1032270	-0.0123272	0.0209682	-0.0064852	-0.0680890
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0301633	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0042808	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0219452	0.0000000	-0.3855700	0.0000000	-0.7432810
Silver	328.06	0.0000000	0.0000000	-0.0362359	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	-0.0153767	-0.0040303	-0.1223880	-0.0549555	5.8333800
Titanium	334.94	0.0000000	-0.0167659	0.0000000	0.0182020	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0307673	0.0000000	0.0000000
Zinc	206.20	-0.0121647	-0.0130048	-0.0501268	-0.0144316	-0.3012520

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0782

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	1.5401500	0.0000000	0.0000000
Antimony	206.83	18.3748000	0.3246940	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.8838000	0.0000000	0.2489140	0.0999179	0.1051500
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	-0.2126510	0.0000000
Calcium	227.54	5.3533500	3.5228400	3.8819800	26.7628000	0.0000000
Chromium	267.71		0.0000000	0.2043740	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1584950	0.0000000
Copper	324.75	0.0000000		0.0000000	0.0000000	0.0000000
Iron	273.95	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0447064	0.3133570	-0.0606043	-0.1219210	-0.1744540
Magnesium	279.07	2.4873800	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0474986	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2920460
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.2759200	-0.2480870	0.0000000	-0.1215600	-0.4373880
Silver	328.06	0.0000000	0.0000000	0.2125900	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0860847	-0.1533400	-0.3345200	-0.0729483	
Titanium	334.94	0.1475450	0.0000000	0.0000000	0.0000000	0.1490420
Vanadium	292.40	-2.2898300	0.3129820	0.0000000	0.0000000	0.0000000
Zinc	206.20	-1.8283200	-0.3316020	-0.4006130	-0.1453040	-0.4071760

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 2011-31

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SL0782

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	1.6328600	-0.3229200			
Antimony	206.83	-2.3648000	-1.1022500			
Arsenic	188.97	-0.2598760	0.0000000			
Barium	233.52	0.0000000	-1.4206100			
Beryllium	313.10	-1.8417600	-0.0298256			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	7.1850200	24.4780000			
Chromium	267.71	0.0000000	-0.3095710			
Cobalt	228.61	2.3045300	0.0000000			
Copper	324.75	0.0000000	-0.1578650			
Iron	273.95	0.0000000	-1.6429000			
Lead	220.35	-0.9907230	-0.0982908			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.5886010	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	-0.6097280	0.0000000			
Silver	328.06	0.0000000	-1.9059700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	-0.2863380	4.5539900			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.3967000				
Zinc	206.20	-0.8719450	-0.1607790			

Comments:

U.S. EPA - CLP
12
ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0782
ICP ID Number: OPTIMA3 Date: 2/7/2012

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	0.20	500000	P
Antimony	0.20	50000	P
Arsenic	0.20	50000	P
Barium	0.20	100000	P
Beryllium	0.20	5000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	P
Cobalt	0.20	100000	P
Copper	0.20	50000	P
Iron	0.20	500000	P
Lead	0.20	100000	P
Magnesium	0.20	500000	P
Manganese	0.20	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P
Zinc	0.20	50000	P

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782
Preparation Method: 3050B Batch ID: 65830

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	04/30/2012	1.00	50
PBS	04/30/2012	1.00	50
S04-MW2	04/30/2012	1.17	50

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782
Preparation Method: 7471B Batch ID: 66039

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	05/08/2012	0.60	100
PBS	05/08/2012	0.60	100
S04-MW2	05/08/2012	0.55	100

Comments:

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0782
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 05/08/2012 End Date: 05/08/2012

FIMS2_120508B

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.0	1710															X												
S0.2	1.0	1712															X												
S1.0	1.0	1714															X												
S2.0	1.0	1715															X												
S5.0	1.0	1717															X												
S10.0	1.0	1719															X												
ICV	1.0	1720															X												
ICB	1.0	1722															X												
PBS	1.0	1724															X												
LCSS	1.0	1725															X												
S04-MW2	1.0	1727															X												
ZZZZZZ	1.0	1729																											
ZZZZZZ	1.0	1730																											
ZZZZZZ	1.0	1732																											
ZZZZZZ	1.0	1733																											
ZZZZZZ	1.0	1735																											
ZZZZZZ	1.0	1737																											
CCV	1.0	1738															X												
CCB	1.0	1740															X												

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL0782
Instrument ID Number: OPTIMA3 Method: P
Start Date: 05/02/2012 End Date: 05/02/2012

OPTIMA3_120502A

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.0	0804		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
S1	1.0	0807		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
S2	1.0	0811		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
S3	1.0	0815		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICV	1.0	0818		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICB	1.0	0822		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	0826																													
ICSA	1.0	0829		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ICSAB	1.0	0833		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCV	1.0	0837		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCB	1.0	0841		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	0844																													
ZZZZZZ	1.0	0848																													
ZZZZZZ	1.0	0852																													
ZZZZZZ	1.0	0856																													
ZZZZZZ	1.0	0900																													
ZZZZZZ	1.0	0903																													
ZZZZZZ	1.0	0907																													
CCV	1.0	0911		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCB	1.0	0914		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	0918																													
ZZZZZZ	1.0	0922																													
ZZZZZZ	1.0	0926																													
ZZZZZZ	5.0	0929																													
ZZZZZZ	1.0	0933																													
ZZZZZZ	1.0	0937																													
ZZZZZZ	1.0	0941																													
CCV	1.0	0945		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
CCB	1.0	0948		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
PBS	1.0	0952		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
LCSS	1.0	0956		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	0959																													

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0782
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 05/02/2012 End Date: 05/02/2012

OPTIMA3_120502A

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S04-MW2	1.0	1004		X	X	X	X	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1008																											
ZZZZZZ	1.0	1011																											
ZZZZZZ	1.0	1015																											
ZZZZZZ	1.0	1019																											
CCV	1.0	1023		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB	1.0	1026		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1030																											
ZZZZZZ	1.0	1034																											
ZZZZZZ	1.0	1037																											
ZZZZZZ	1.0	1041																											
ZZZZZZ	1.0	1045																											
ZZZZZZ	1.0	1049																											
ZZZZZZ	1.0	1052																											
ZZZZZZ	1.0	1056																											
CCV	1.0	1100											X			X													
CCB	1.0	1103											X			X													
ZZZZZZ	1.0	1107																											
ZZZZZZ	1.0	1111																											
ZZZZZZ	1.0	1115																											
ZZZZZZ	5.0	1119																											
ZZZZZZ	1.0	1122																											
ZZZZZZ	1.0	1126																											
ZZZZZZ	1.0	1130																											
ZZZZZZ	1.0	1133																											
S04-MW2	20.0	1137											X			X													
ZZZZZZ	20.0	1141																											
CCV	1.0	1145											X			X													
CCB	1.0	1148											X			X													

Instrument Raw Data

=====

Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B12050201

Results Library (original): C:\pe\Administrator\Results\Results.mdb

Results Data Set (reprocessed): B12050201A

Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 5/2/2012 8:04:01 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:53:49 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Y 360.073	1234411.2	11137.00	0.90%	100.00	%
Lu 261.542	1128758.4	11030.16	0.98%	100.0	%
Ag 328.068	-2589.4	20.38	0.79%	[0.00]	mg/L
Al 308.215	6906.2	55.45	0.80%	[0.00]	mg/L
As 188.979	-4.6	4.29	92.44%	[0.00]	mg/L
Ba 233.527	-66.6	3.17	4.76%	[0.00]	mg/L
Be 313.107	-425.1	30.14	7.09%	[0.00]	mg/L
Co 228.616	-18.4	8.88	48.35%	[0.00]	mg/L
Cr 267.716	46.5	6.35	13.65%	[0.00]	mg/L
Cu 324.752	1082.7	79.48	7.34%	[0.00]	mg/L
Fe 273.955	-1001.9	15.12	1.51%	[0.00]	mg/L
Mg 279.077	-1101.6	64.82	5.88%	[0.00]	mg/L
Mn 257.610	-352.4	18.89	5.36%	[0.00]	mg/L
Ni 231.604	-41.6	4.95	11.91%	[0.00]	mg/L
Pb 220.353	30.7	4.27	13.89%	[0.00]	mg/L
Sb 206.836	29.8	3.00	10.08%	[0.00]	mg/L
Se 196.026	-9.3	3.01	32.49%	[0.00]	mg/L
Tl 190.801	-21.3	2.93	13.78%	[0.00]	mg/L
V 292.402	34.8	36.78	105.55%	[0.00]	mg/L
Zn 206.200	45.7	2.88	6.30%	[0.00]	mg/L
Cd 226.502	-46.3	2.36	5.10%	[0.00]	mg/L
Ti 334.940	-290.0	41.86	14.43%	[0.00]	mg/L
Ca 227.546	120.3	8.29	6.89%	[0.00]	mg/L
Na 589.592	0.3	98.20	>999.9%	[0.00]	mg/L
K 766.490	1071.2	131.38	12.26%	[0.00]	mg/L

=====

Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 5/2/2012 8:07:39 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:53:51 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Y 360.073	1136138.4	6869.59	0.60%	92.039	%
Lu 261.542	1056000.9	6561.91	0.62%	93.55	%
Ag 328.068	376492.2	1328.51	0.35%	[2.5]	mg/L
Al 308.215	382839.6	1747.57	0.46%	[20]	mg/L
As 188.979	871.5	2.94	0.34%	[1]	mg/L
Ba 233.527	1081025.4	5507.65	0.51%	[20]	mg/L
Be 313.107	594076.5	4723.05	0.80%	[0.5]	mg/L
Co 228.616	129164.5	521.35	0.40%	[5]	mg/L
Cr 267.716	96691.6	291.27	0.30%	[2]	mg/L
Cu 324.752	396764.0	3130.29	0.79%	[2.5]	mg/L
Fe 273.955	217439.6	973.75	0.45%	[10]	mg/L

Mg 279.077	860391.9	4308.74	0.50%	[50]	mg/L
Mn 257.610	2538695.9	11593.17	0.46%	[5]	mg/L
Ni 231.604	108518.7	513.63	0.47%	[5]	mg/L
Pb 220.353	4236.4	2.38	0.06%	[1]	mg/L
Sb 206.836	1104.0	14.41	1.31%	[1]	mg/L
Se 196.026	531.9	7.61	1.43%	[1]	mg/L
Tl 190.801	1047.5	3.73	0.36%	[1]	mg/L
V 292.402	364445.2	1773.16	0.49%	[5]	mg/L
Zn 206.200	73230.6	577.77	0.79%	[5]	mg/L
Cd 226.502	21693.5	63.08	0.29%	[0.5]	mg/L
Ti 334.940	426807.8	4253.34	1.00%	[1]	mg/L
Ca 227.546	6781.4	10.08	0.15%	[50]	mg/L
Na 589.592	173587.2	857.53	0.49%	[50]	mg/L
K 766.490	53537.1	392.42	0.73%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 5/2/2012 8:11:22 AM

Data Type: Reprocessed on 5/2/2012 11:53:52 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Y 360.073	1169379.4	8644.48	0.74%	94.732	%
Lu 261.542	1083747.8	5609.18	0.52%	96.01	%
Ag 328.068	187699.9	587.82	0.31%	[1.25]	mg/L
Al 308.215	193052.1	778.83	0.40%	[10]	mg/L
As 188.979	440.1	2.65	0.60%	[0.5]	mg/L
Ba 233.527	554286.1	3534.77	0.64%	[10]	mg/L
Be 313.107	297052.0	1861.30	0.63%	[0.25]	mg/L
Co 228.616	65895.5	283.99	0.43%	[2.5]	mg/L
Cr 267.716	49139.5	246.35	0.50%	[1]	mg/L
Cu 324.752	195168.2	1028.60	0.53%	[1.25]	mg/L
Fe 273.955	110885.0	701.15	0.63%	[5]	mg/L
Mg 279.077	436705.0	3156.89	0.72%	[25]	mg/L
Mn 257.610	1293661.6	9189.58	0.71%	[2.5]	mg/L
Ni 231.604	55500.8	130.68	0.24%	[2.5]	mg/L
Pb 220.353	2166.7	11.00	0.51%	[0.5]	mg/L
Sb 206.836	568.4	3.19	0.56%	[0.5]	mg/L
Se 196.026	266.2	4.47	1.68%	[0.5]	mg/L
Tl 190.801	532.3	2.65	0.50%	[0.5]	mg/L
V 292.402	181860.4	1027.16	0.56%	[2.5]	mg/L
Zn 206.200	37441.1	295.05	0.79%	[2.5]	mg/L
Cd 226.502	10825.0	24.09	0.22%	[0.25]	mg/L
Ti 334.940	211033.7	1749.25	0.83%	[0.5]	mg/L
Ca 227.546	3433.2	13.75	0.40%	[25]	mg/L
Na 589.592	87203.0	555.13	0.64%	[25]	mg/L
K 766.490	26788.7	180.18	0.67%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 5/2/2012 8:15:03 AM

Data Type: Reprocessed on 5/2/2012 11:53:53 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Y 360.073	1222968.2	2449.44	0.20%	99.073	%
Lu 261.542	1117314.6	2487.13	0.22%	98.99	%
Ag 328.068	4083.4	46.98	1.15%	[0.025]	mg/L
Al 308.215	4106.5	82.76	2.02%	[0.2]	mg/L
As 188.979	13.4	4.42	32.99%	[0.01]	mg/L
Ba 233.527	12215.7	101.18	0.83%	[0.2]	mg/L

Be 313.107	6256.7	36.65	0.59%	[0.005]	mg/L
Co 228.616	1414.7	8.10	0.57%	[0.05]	mg/L
Cr 267.716	1037.4	5.45	0.53%	[0.02]	mg/L
Cu 324.752	4109.4	23.85	0.58%	[0.025]	mg/L
Fe 273.955	2334.2	24.28	1.04%	[0.1]	mg/L
Mg 279.077	9487.0	55.41	0.58%	[0.5]	mg/L
Mn 257.610	28532.9	204.10	0.72%	[0.05]	mg/L
Ni 231.604	1182.9	7.36	0.62%	[0.05]	mg/L
Pb 220.353	50.9	1.89	3.72%	[0.01]	mg/L
Sb 206.836	20.9	4.49	21.46%	[0.01]	mg/L
Se 196.026	4.6	4.15	90.66%	[0.01]	mg/L
Tl 190.801	2.5	4.68	185.21%	[0.01]	mg/L
V 292.402	3867.8	20.51	0.53%	[0.05]	mg/L
Zn 206.200	805.5	3.13	0.39%	[0.05]	mg/L
Cd 226.502	240.7	5.63	2.34%	[0.005]	mg/L
Ti 334.940	4646.4	55.87	1.20%	[0.01]	mg/L
Ca 227.546	104.9	22.81	21.74%	[0.5]	mg/L
Na 589.592	1838.2	20.21	1.10%	[0.5]	mg/L
K 766.490	707.7	181.37	25.63%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	150500	0.00000	0.999999	
Al 308.215	3	Lin Thru 0	0.0	19170	0.00000	0.999994	
As 188.979	3	Lin Thru 0	0.0	873.3	0.00000	0.999981	
Ba 233.527	3	Lin Thru 0	0.0	54330	0.00000	0.999948	
Be 313.107	3	Lin Thru 0	0.0	1188000	0.00000	1.000000	
Co 228.616	3	Lin Thru 0	0.0	25940	0.00000	0.999967	
Cr 267.716	3	Lin Thru 0	0.0	48500	0.00000	0.999978	
Cu 324.752	3	Lin Thru 0	0.0	158200	0.00000	0.999979	
Fe 273.955	3	Lin Thru 0	0.0	21830	0.00000	0.999968	
Mg 279.077	3	Lin Thru 0	0.0	17260	0.00000	0.999981	
Mn 257.610	3	Lin Thru 0	0.0	509700	0.00000	0.999970	
Ni 231.604	3	Lin Thru 0	0.0	21800	0.00000	0.999958	
Pb 220.353	3	Lin Thru 0	0.0	4256	0.00000	0.999957	
Sb 206.836	3	Lin Thru 0	0.0	1111	0.00000	0.999899	
Se 196.026	3	Lin Thru 0	0.0	532.0	0.00000	0.999999	
Tl 190.801	3	Lin Thru 0	0.0	1051	0.00000	0.999956	
V 292.402	3	Lin Thru 0	0.0	72860	0.00000	1.000000	
Zn 206.200	3	Lin Thru 0	0.0	14710	0.00000	0.999959	
Cd 226.502	3	Lin Thru 0	0.0	43370	0.00000	0.999999	
Ti 334.940	3	Lin Thru 0	0.0	425900	0.00000	0.999990	
Ca 227.546	3	Lin Thru 0	0.0	136.0	0.00000	0.999976	
Na 589.592	3	Lin Thru 0	0.0	3475	0.00000	0.999998	
K 766.490	3	Lin Thru 0	0.0	1071	0.00000	0.999996	

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Sequence No.: 5

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 8:18:43 AM

Data Type: Reprocessed on 5/2/2012 11:53:54 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1202871.5	97.445 %	0.4536			0.47%
Lu 261.542	1113853.9	98.68 %	0.614			0.62%
Ag 328.068	187786.8	1.2518 mg/L	0.00488	1.2518 mg/L	0.00488	0.39%
QC value within limits for Ag 328.068 Recovery = 100.15%						
Al 308.215	190182.7	9.9079 mg/L	0.01759	9.9079 mg/L	0.01759	0.18%
QC value within limits for Al 308.215 Recovery = 99.08%						
As 188.979	425.1	0.49505 mg/L	0.003964	0.49505 mg/L	0.003964	0.80%
QC value within limits for As 188.979 Recovery = 99.01%						
Ba 233.527	555201.2	10.223 mg/L	0.1226	10.223 mg/L	0.1226	1.20%
QC value within limits for Ba 233.527 Recovery = 102.23%						
Be 313.107	289854.2	0.24493 mg/L	0.003553	0.24493 mg/L	0.003553	1.45%

QC value within limits for Be 313.107 Recovery = 97.97%

Co 228.616 66530.0 2.5633 mg/L 0.00801 2.5633 mg/L 0.00801 0.31%

QC value within limits for Co 228.616 Recovery = 102.53%

Cr 267.716 47455.1 0.97845 mg/L 0.001087 0.97845 mg/L 0.001087 0.11%

QC value within limits for Cr 267.716 Recovery = 97.84%

Cu 324.752 193684.6 1.2256 mg/L 0.00341 1.2256 mg/L 0.00341 0.28%

QC value within limits for Cu 324.752 Recovery = 98.04%

Fe 273.955 108584.8 4.9780 mg/L 0.01655 4.9780 mg/L 0.01655 0.33%

QC value within limits for Fe 273.955 Recovery = 99.56%

Mg 279.077 433349.3 25.105 mg/L 0.3160 25.105 mg/L 0.3160 1.26%

QC value within limits for Mg 279.077 Recovery = 100.42%

Mn 257.610 1281595.9 2.5141 mg/L 0.02758 2.5141 mg/L 0.02758 1.10%

QC value within limits for Mn 257.610 Recovery = 100.56%

Ni 231.604 55066.9 2.5251 mg/L 0.00742 2.5251 mg/L 0.00742 0.29%

QC value within limits for Ni 231.604 Recovery = 101.00%

Pb 220.353 2095.4 0.49439 mg/L 0.002426 0.49439 mg/L 0.002426 0.49%

QC value within limits for Pb 220.353 Recovery = 98.88%

Sb 206.836 565.5 0.49399 mg/L 0.000976 0.49399 mg/L 0.000976 0.20%

QC value within limits for Sb 206.836 Recovery = 98.80%

Se 196.026 255.1 0.48509 mg/L 0.004252 0.48509 mg/L 0.004252 0.88%

QC value within limits for Se 196.026 Recovery = 97.02%

Tl 190.801 510.5 0.46246 mg/L 0.007547 0.46246 mg/L 0.007547 1.63%

QC value within limits for Tl 190.801 Recovery = 92.49%

V 292.402 180378.1 2.4770 mg/L 0.00279 2.4770 mg/L 0.00279 0.11%

QC value within limits for V 292.402 Recovery = 99.08%

Zn 206.200 36881.2 2.5124 mg/L 0.00886 2.5124 mg/L 0.00886 0.35%

QC value within limits for Zn 206.200 Recovery = 100.50%

Cd 226.502 10332.2 0.23844 mg/L 0.000527 0.23844 mg/L 0.000527 0.22%

QC value within limits for Cd 226.502 Recovery = 95.38%

Ti 334.940 209241.6 0.49108 mg/L 0.001973 0.49108 mg/L 0.001973 0.40%

QC value within limits for Ti 334.940 Recovery = Not calculated

Ca 227.546 3427.4 24.351 mg/L 0.0725 24.351 mg/L 0.0725 0.30%

QC value within limits for Ca 227.546 Recovery = 97.41%

Na 589.592 86800.2 24.978 mg/L 0.1829 24.978 mg/L 0.1829 0.73%

QC value within limits for Na 589.592 Recovery = 99.91%

K 766.490 26799.0 25.024 mg/L 0.1030 25.024 mg/L 0.1030 0.41%

QC value within limits for K 766.490 Recovery = 100.10%

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/2/2012 8:22:24 AM

Data Type: Reprocessed on 5/2/2012 11:53:56 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1271106.6	102.97 %	0.579			0.56%
Lu 261.542	1157811.8	102.6 %	0.58			0.57%
Ag 328.068	-39.3	-0.00026 mg/L	0.000495	-0.00026 mg/L	0.000495	188.79%
QC value within limits for Ag 328.068						Not calculated
Al 308.215	157.8	0.00823 mg/L	0.000657	0.00823 mg/L	0.000657	7.98%
QC value within limits for Al 308.215						Not calculated
As 188.979	1.1	0.00123 mg/L	0.006692	0.00123 mg/L	0.006692	542.82%
QC value within limits for As 188.979						Not calculated
Ba 233.527	83.4	0.00153 mg/L	0.000175	0.00153 mg/L	0.000175	11.40%
QC value within limits for Ba 233.527						Not calculated
Be 313.107	60.3	0.00005 mg/L	0.000018	0.00005 mg/L	0.000018	35.22%
QC value within limits for Be 313.107						Not calculated
Co 228.616	14.2	0.00055 mg/L	0.000292	0.00055 mg/L	0.000292	53.44%
QC value within limits for Co 228.616						Not calculated
Cr 267.716	21.1	0.00043 mg/L	0.000245	0.00043 mg/L	0.000245	56.42%
QC value within limits for Cr 267.716						Not calculated
Cu 324.752	92.5	0.00058 mg/L	0.000311	0.00058 mg/L	0.000311	53.22%
QC value within limits for Cu 324.752						Not calculated
Fe 273.955	10.9	0.00050 mg/L	0.001692	0.00050 mg/L	0.001692	340.11%
QC value within limits for Fe 273.955						Not calculated

Mg 279.077	-22.1	-0.00128 mg/L	0.001492	-0.00128 mg/L	0.001492	116.22%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	119.6	0.00023 mg/L	0.000078	0.00023 mg/L	0.000078	33.12%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604	11.6	0.00053 mg/L	0.000251	0.00053 mg/L	0.000251	46.89%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353	0.7	0.00016 mg/L	0.000805	0.00016 mg/L	0.000805	492.17%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836	10.7	0.00966 mg/L	0.001418	0.00966 mg/L	0.001418	14.69%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026	2.7	0.00504 mg/L	0.005578	0.00504 mg/L	0.005578	110.77%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801	-4.4	-0.00414 mg/L	0.000785	-0.00414 mg/L	0.000785	18.96%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402	-28.9	-0.00040 mg/L	0.000549	-0.00040 mg/L	0.000549	138.58%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200	20.7	0.00141 mg/L	0.000245	0.00141 mg/L	0.000245	17.39%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502	-4.1	-0.00009 mg/L	0.000105	-0.00009 mg/L	0.000105	110.83%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940	107.1	0.00025 mg/L	0.000014	0.00025 mg/L	0.000014	5.46%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	0.1	0.00072 mg/L	0.112021	0.00072 mg/L	0.112021	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Na 589.592	-12.7	-0.00365 mg/L	0.049951	-0.00365 mg/L	0.049951	>999.9%
QC value within limits for Na 589.592 Recovery = Not calculated						
K 766.490	87.8	0.08202 mg/L	0.084192	0.08202 mg/L	0.084192	102.65%
QC value within limits for K 766.490 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 5/2/2012 8:26:12 AM

Data Type: Reprocessed on 5/2/2012 11:53:56 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1259795.1	102.06 %	%	0.779			0.76%
Lu 261.542	1151780.1	102.0 %	%	0.87			0.86%
Ag 328.068	5115.4	0.03408 mg/L	mg/L	0.000348	0.03408 mg/L	0.000348	1.02%
QC value within limits for Ag 328.068 Recovery = 113.60%							
Al 308.215	4403.0	0.22931 mg/L	mg/L	0.003417	0.22931 mg/L	0.003417	1.49%
QC value within limits for Al 308.215 Recovery = 114.66%							
As 188.979	20.8	0.02399 mg/L	mg/L	0.000870	0.02399 mg/L	0.000870	3.62%
QC value within limits for As 188.979 Recovery = 119.97%							
Ba 233.527	12701.9	0.23388 mg/L	mg/L	0.001185	0.23388 mg/L	0.001185	0.51%
QC value within limits for Ba 233.527 Recovery = 116.94%							
Be 313.107	6547.5	0.00555 mg/L	mg/L	0.000097	0.00555 mg/L	0.000097	1.75%
QC value within limits for Be 313.107 Recovery = 111.02%							
Co 228.616	1495.7	0.05760 mg/L	mg/L	0.000185	0.05760 mg/L	0.000185	0.32%
QC value within limits for Co 228.616 Recovery = 115.20%							
Cr 267.716	1099.7	0.02267 mg/L	mg/L	0.000682	0.02267 mg/L	0.000682	3.01%
QC value within limits for Cr 267.716 Recovery = 113.37%							
Cu 324.752	5055.7	0.03200 mg/L	mg/L	0.000521	0.03200 mg/L	0.000521	1.63%
QC value within limits for Cu 324.752 Recovery = 106.66%							
Fe 273.955	4849.5	0.22223 mg/L	mg/L	0.002055	0.22223 mg/L	0.002055	0.92%
QC value within limits for Fe 273.955 Recovery = 111.12%							
Mg 279.077	9809.7	0.56829 mg/L	mg/L	0.003071	0.56829 mg/L	0.003071	0.54%
QC value within limits for Mg 279.077 Recovery = 113.66%							
Mn 257.610	29065.8	0.05702 mg/L	mg/L	0.000433	0.05702 mg/L	0.000433	0.76%
QC value within limits for Mn 257.610 Recovery = 114.04%							
Ni 231.604	1257.3	0.05764 mg/L	mg/L	0.000331	0.05764 mg/L	0.000331	0.57%
QC value within limits for Ni 231.604 Recovery = 115.29%							
Pb 220.353	48.9	0.01154 mg/L	mg/L	0.003077	0.01154 mg/L	0.003077	26.66%
QC value within limits for Pb 220.353 Recovery = 115.40%							
Sb 206.836	34.1	0.03034 mg/L	mg/L	0.003221	0.03034 mg/L	0.003221	10.62%

QC value greater than the upper limit for Sb 206.836 Recovery = 151.70%

Se 196.026 16.0 0.03019 mg/L 0.004213 0.03019 mg/L 0.004213 13.95%

QC value within limits for Se 196.026 Recovery = 100.65%

Tl 190.801 18.4 0.01698 mg/L 0.003932 0.01698 mg/L 0.003932 23.16%

QC value within limits for Tl 190.801 Recovery = 84.90%

V 292.402 4015.6 0.05513 mg/L 0.000860 0.05513 mg/L 0.000860 1.56%

QC value within limits for V 292.402 Recovery = 110.27%

Zn 206.200 827.3 0.05638 mg/L 0.000194 0.05638 mg/L 0.000194 0.34%

QC value within limits for Zn 206.200 Recovery = 112.76%

Cd 226.502 236.5 0.00545 mg/L 0.000136 0.00545 mg/L 0.000136 2.49%

QC value within limits for Cd 226.502 Recovery = 108.97%

Ti 334.940 9009.3 0.02115 mg/L 0.000200 0.02115 mg/L 0.000200 0.94%

QC value within limits for Ti 334.940 Recovery = 105.77%

Ca 227.546 116.5 0.83690 mg/L 0.067343 0.83690 mg/L 0.067343 8.05%

QC value within limits for Ca 227.546 Recovery = 104.61%

Na 589.592 3947.2 1.1359 mg/L 0.01933 1.1359 mg/L 0.01933 1.70%

QC value within limits for Na 589.592 Recovery = 113.59%

K 766.490 1262.1 1.1785 mg/L 0.04572 1.1785 mg/L 0.04572 3.88%

QC value within limits for K 766.490 Recovery = 117.85%

QC Failed. Continue with analysis.

Sequence No.: 8

Autosampler Location: 5

Sample ID: ICSCA

Date Collected: 5/2/2012 8:29:51 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:53:57 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICSCA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1081471.7	87.610 %	0.1367			0.16%
Lu 261.542	1004290.9	88.97 %	0.056			0.06%
Ag 328.068	-185.6	-0.00125 mg/L	0.000317	-0.00125 mg/L	0.000317	25.28%
QC value within limits for Ag 328.068						Recovery = Not calculated
Al 308.215	9032646.2	470.94 mg/L	1.984	470.94 mg/L	1.984	0.42%
QC value within limits for Al 308.215						Recovery = 94.19%
As 188.979	-19.9	0.00299 mg/L	0.002400	0.00299 mg/L	0.002400	80.30%
QC value within limits for As 188.979						Recovery = Not calculated
Ba 233.527	60.9	0.00111 mg/L	0.000123	0.00111 mg/L	0.000123	11.16%
QC value within limits for Ba 233.527						Recovery = Not calculated
Be 313.107	-53.0	-0.00007 mg/L	0.000057	-0.00007 mg/L	0.000057	87.88%
QC value within limits for Be 313.107						Recovery = Not calculated
Co 228.616	109.9	-0.00007 mg/L	0.000162	-0.00007 mg/L	0.000162	234.40%
QC value within limits for Co 228.616						Recovery = Not calculated
Cr 267.716	176.7	0.00064 mg/L	0.000095	0.00064 mg/L	0.000095	14.72%
QC value within limits for Cr 267.716						Recovery = Not calculated
Cu 324.752	-2311.2	0.00194 mg/L	0.000207	0.00194 mg/L	0.000207	10.66%
QC value within limits for Cu 324.752						Recovery = Not calculated
Fe 273.955	3917020.4	179.43 mg/L	1.211	179.43 mg/L	1.211	0.67%
QC value within limits for Fe 273.955						Recovery = 89.71%
Mg 279.077	7996421.6	463.29 mg/L	3.043	463.29 mg/L	3.043	0.66%
QC value within limits for Mg 279.077						Recovery = 92.66%
Mn 257.610	-771.0	-0.00615 mg/L	0.000109	-0.00615 mg/L	0.000109	1.77%
QC value within limits for Mn 257.610						Recovery = Not calculated
Ni 231.604	-6.1	-0.00225 mg/L	0.000406	-0.00225 mg/L	0.000406	18.07%
QC value within limits for Ni 231.604						Recovery = Not calculated
Pb 220.353	-232.4	-0.00976 mg/L	0.002844	-0.00976 mg/L	0.002844	29.15%
QC value within limits for Pb 220.353						Recovery = Not calculated
Sb 206.836	30.6	0.00332 mg/L	0.007769	0.00332 mg/L	0.007769	233.72%
QC value within limits for Sb 206.836						Recovery = Not calculated
Se 196.026	-39.1	0.00657 mg/L	0.016429	0.00657 mg/L	0.016429	250.24%
QC value within limits for Se 196.026						Recovery = Not calculated
Tl 190.801	-35.6	0.00985 mg/L	0.002045	0.00985 mg/L	0.002045	20.76%
QC value within limits for Tl 190.801						Recovery = Not calculated
V 292.402	-789.0	-0.00528 mg/L	0.000154	-0.00528 mg/L	0.000154	2.91%
QC value within limits for V 292.402						Recovery = Not calculated
Zn 206.200	29.5	0.01098 mg/L	0.000128	0.01098 mg/L	0.000128	1.17%
QC value within limits for Zn 206.200						Recovery = Not calculated

Cd 226.502 535.4 -0.00239 mg/L 0.000159 -0.00239 mg/L 0.000159 6.67%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940 -4688.6 -0.01111 mg/L 0.000092 -0.01111 mg/L 0.000092 0.82%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 67509.9 494.83 mg/L 2.128 494.83 mg/L 2.128 0.43%
 QC value within limits for Ca 227.546 Recovery = 98.97%
 Na 589.592 392.7 0.11302 mg/L 0.020991 0.11302 mg/L 0.020991 18.57%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 253.6 0.23679 mg/L 0.062200 0.23679 mg/L 0.062200 26.27%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 5/2/2012 8:33:42 AM

Data Type: Reprocessed on 5/2/2012 11:53:58 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1064594.2	86.243 %		0.3929			0.46%
Lu 261.542	990090.6	87.72 %		0.391			0.45%
Ag 328.068	30839.9	0.20569 mg/L		0.001277	0.20569 mg/L	0.001277	0.62%
		QC value within limits for Ag 328.068	Recovery = 102.85%				
Al 308.215	9002796.2	469.39 mg/L		2.687	469.39 mg/L	2.687	0.57%
		QC value within limits for Al 308.215	Recovery = 93.88%				
As 188.979	53.5	0.09094 mg/L		0.007467	0.09094 mg/L	0.007467	8.21%
		QC value within limits for As 188.979	Recovery = 90.94%				
Ba 233.527	27386.4	0.50477 mg/L		0.002400	0.50477 mg/L	0.002400	0.48%
		QC value within limits for Ba 233.527	Recovery = 100.95%				
Be 313.107	570840.9	0.48043 mg/L		0.001786	0.48043 mg/L	0.001786	0.37%
		QC value within limits for Be 313.107	Recovery = 96.09%				
Co 228.616	11859.8	0.45278 mg/L		0.001972	0.45278 mg/L	0.001972	0.44%
		QC value within limits for Co 228.616	Recovery = 90.56%				
Cr 267.716	23273.2	0.47687 mg/L		0.001444	0.47687 mg/L	0.001444	0.30%
		QC value within limits for Cr 267.716	Recovery = 95.37%				
Cu 324.752	77628.4	0.50743 mg/L		0.001539	0.50743 mg/L	0.001539	0.30%
		QC value within limits for Cu 324.752	Recovery = 101.49%				
Fe 273.955	3922542.6	179.68 mg/L		1.230	179.68 mg/L	1.230	0.68%
		QC value within limits for Fe 273.955	Recovery = 89.84%				
Mg 279.077	7968579.6	461.68 mg/L		3.627	461.68 mg/L	3.627	0.79%
		QC value within limits for Mg 279.077	Recovery = 92.34%				
Mn 257.610	243814.7	0.47370 mg/L		0.001955	0.47370 mg/L	0.001955	0.41%
		QC value within limits for Mn 257.610	Recovery = 94.74%				
Ni 231.604	19355.4	0.88574 mg/L		0.004329	0.88574 mg/L	0.004329	0.49%
		QC value within limits for Ni 231.604	Recovery = 88.57%				
Pb 220.353	1783.0	0.46373 mg/L		0.000675	0.46373 mg/L	0.000675	0.15%
		QC value within limits for Pb 220.353	Recovery = 92.75%				
Sb 206.836	720.0	0.61566 mg/L		0.003986	0.61566 mg/L	0.003986	0.65%
		QC value within limits for Sb 206.836	Recovery = 102.61%				
Se 196.026	222.8	0.49965 mg/L		0.004194	0.49965 mg/L	0.004194	0.84%
		QC value within limits for Se 196.026	Recovery = 99.93%				
Tl 190.801	53.6	0.09009 mg/L		0.010181	0.09009 mg/L	0.010181	11.30%
		QC value within limits for Tl 190.801	Recovery = 90.09%				
V 292.402	34148.0	0.47517 mg/L		0.001314	0.47517 mg/L	0.001314	0.28%
		QC value within limits for V 292.402	Recovery = 95.03%				
Zn 206.200	13350.3	0.91802 mg/L		0.007625	0.91802 mg/L	0.007625	0.83%
		QC value within limits for Zn 206.200	Recovery = 91.80%				
Cd 226.502	39399.3	0.89392 mg/L		0.006082	0.89392 mg/L	0.006082	0.68%
		QC value within limits for Cd 226.502	Recovery = 89.39%				
Ti 334.940	-4628.1	-0.01111 mg/L		0.000117	-0.01111 mg/L	0.000117	1.05%
		QC value within limits for Ti 334.940	Recovery = Not calculated				
Ca 227.546	66804.0	489.48 mg/L		1.791	489.48 mg/L	1.791	0.37%
		QC value within limits for Ca 227.546	Recovery = 97.90%				
Na 589.592	90802.5	26.130 mg/L		0.1830	26.130 mg/L	0.1830	0.70%
		QC value within limits for Na 589.592	Recovery = 104.52%				
K 766.490	28725.7	26.823 mg/L		0.2357	26.823 mg/L	0.2357	0.88%

QC value within limits for K 766.490 Recovery = 107.29%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 8:37:27 AM

Data Type: Reprocessed on 5/2/2012 11:53:59 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1207848.2	97.848 %		0.7524			0.77%
Lu 261.542	1117796.7	99.03 %		0.917			0.93%
Ag 328.068	190895.9	1.2726 mg/L		0.01430	1.2726 mg/L	0.01430	1.12%
QC value within limits for Ag 328.068 Recovery = 101.81%							
Al 308.215	193578.7	10.085 mg/L		0.1036	10.085 mg/L	0.1036	1.03%
QC value within limits for Al 308.215 Recovery = 100.85%							
As 188.979	429.8	0.50060 mg/L		0.004587	0.50060 mg/L	0.004587	0.92%
QC value within limits for As 188.979 Recovery = 100.12%							
Ba 233.527	557411.7	10.264 mg/L		0.1160	10.264 mg/L	0.1160	1.13%
QC value within limits for Ba 233.527 Recovery = 102.64%							
Be 313.107	292380.5	0.24707 mg/L		0.003518	0.24707 mg/L	0.003518	1.42%
QC value within limits for Be 313.107 Recovery = 98.83%							
Co 228.616	67669.9	2.6072 mg/L		0.03313	2.6072 mg/L	0.03313	1.27%
QC value within limits for Co 228.616 Recovery = 104.29%							
Cr 267.716	48368.6	0.99729 mg/L		0.015292	0.99729 mg/L	0.015292	1.53%
QC value within limits for Cr 267.716 Recovery = 99.73%							
Cu 324.752	196489.8	1.2433 mg/L		0.01776	1.2433 mg/L	0.01776	1.43%
QC value within limits for Cu 324.752 Recovery = 99.47%							
Fe 273.955	111271.6	5.1012 mg/L		0.05884	5.1012 mg/L	0.05884	1.15%
QC value within limits for Fe 273.955 Recovery = 102.02%							
Mg 279.077	438073.3	25.378 mg/L		0.3428	25.378 mg/L	0.3428	1.35%
QC value within limits for Mg 279.077 Recovery = 101.51%							
Mn 257.610	1287058.1	2.5248 mg/L		0.02989	2.5248 mg/L	0.02989	1.18%
QC value within limits for Mn 257.610 Recovery = 100.99%							
Ni 231.604	56041.8	2.5698 mg/L		0.03788	2.5698 mg/L	0.03788	1.47%
QC value within limits for Ni 231.604 Recovery = 102.79%							
Pb 220.353	2125.3	0.50145 mg/L		0.000977	0.50145 mg/L	0.000977	0.19%
QC value within limits for Pb 220.353 Recovery = 100.29%							
Sb 206.836	560.7	0.48934 mg/L		0.005077	0.48934 mg/L	0.005077	1.04%
QC value within limits for Sb 206.836 Recovery = 97.87%							
Se 196.026	263.7	0.50123 mg/L		0.020509	0.50123 mg/L	0.020509	4.09%
QC value within limits for Se 196.026 Recovery = 100.25%							
Tl 190.801	511.9	0.46343 mg/L		0.004881	0.46343 mg/L	0.004881	1.05%
QC value within limits for Tl 190.801 Recovery = 92.69%							
V 292.402	183568.6	2.5208 mg/L		0.03715	2.5208 mg/L	0.03715	1.47%
QC value within limits for V 292.402 Recovery = 100.83%							
Zn 206.200	37575.7	2.5597 mg/L		0.03957	2.5597 mg/L	0.03957	1.55%
QC value within limits for Zn 206.200 Recovery = 102.39%							
Cd 226.502	10442.5	0.24099 mg/L		0.000212	0.24099 mg/L	0.000212	0.09%
QC value within limits for Cd 226.502 Recovery = 96.40%							
Ti 334.940	211989.5	0.49753 mg/L		0.006889	0.49753 mg/L	0.006889	1.38%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546	3451.9	24.517 mg/L		0.3094	24.517 mg/L	0.3094	1.26%
QC value within limits for Ca 227.546 Recovery = 98.07%							
Na 589.592	85325.0	24.554 mg/L		0.2544	24.554 mg/L	0.2544	1.04%
QC value within limits for Na 589.592 Recovery = 98.21%							
K 766.490	26466.6	24.714 mg/L		0.3824	24.714 mg/L	0.3824	1.55%
QC value within limits for K 766.490 Recovery = 98.85%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 4

Date Collected: 5/2/2012 8:41:08 AM

Data Type: Reprocessed on 5/2/2012 11:53:59 AM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1263269.4	102.34	%	0.594			0.58%
Lu 261.542	1150381.6	101.9	%	0.57			0.56%
Ag 328.068	13.3	0.00009	mg/L	0.000332	0.00009 mg/L	0.000332	376.27%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215	186.0	0.00969	mg/L	0.004416	0.00969 mg/L	0.004416	45.56%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979	3.4	0.00390	mg/L	0.004400	0.00390 mg/L	0.004400	112.74%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527	74.8	0.00138	mg/L	0.000212	0.00138 mg/L	0.000212	15.44%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107	57.8	0.00005	mg/L	0.000046	0.00005 mg/L	0.000046	94.02%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616	14.9	0.00057	mg/L	0.000355	0.00057 mg/L	0.000355	61.99%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716	2.6	0.00005	mg/L	0.000146	0.00005 mg/L	0.000146	274.12%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752	33.4	0.00021	mg/L	0.000250	0.00021 mg/L	0.000250	117.83%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955	200.8	0.00920	mg/L	0.001342	0.00920 mg/L	0.001342	14.59%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077	268.9	0.01558	mg/L	0.004094	0.01558 mg/L	0.004094	26.28%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610	136.6	0.00027	mg/L	0.000061	0.00027 mg/L	0.000061	22.60%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604	5.8	0.00027	mg/L	0.000208	0.00027 mg/L	0.000208	77.65%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353	4.3	0.00101	mg/L	0.001273	0.00101 mg/L	0.001273	125.44%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836	11.3	0.01021	mg/L	0.003009	0.01021 mg/L	0.003009	29.47%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026	-0.4	-0.00077	mg/L	0.007744	-0.00077 mg/L	0.007744	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-6.1	-0.00585	mg/L	0.000773	-0.00585 mg/L	0.000773	13.22%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402	-1.1	-0.00002	mg/L	0.001104	-0.00002 mg/L	0.001104	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200	25.5	0.00173	mg/L	0.000238	0.00173 mg/L	0.000238	13.70%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502	-0.6	-0.00001	mg/L	0.000177	-0.00001 mg/L	0.000177	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940	103.6	0.00024	mg/L	0.000066	0.00024 mg/L	0.000066	26.87%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546	3.0	0.02190	mg/L	0.108481	0.02190 mg/L	0.108481	495.25%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592	-7.3	-0.00210	mg/L	0.010973	-0.00210 mg/L	0.010973	523.12%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	192.4	0.17968	mg/L	0.143359	0.17968 mg/L	0.143359	79.79%
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: MB-65907~PBS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 5/2/2012 8:44:53 AM

Data Type: Reprocessed on 5/2/2012 11:54:00 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-65907~PBS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1278002.9	103.53	%	0.865			0.84%
Lu 261.542	1170461.7	103.7	%	0.70			0.67%
Ag 328.068	-34.3	-0.00023	mg/L	0.000446	-0.00023 mg/L	0.000446	195.22%

Al 308.215	200.9	0.01043 mg/L	0.000144	0.01043 mg/L	0.000144	1.38%
As 188.979	2.0	0.00232 mg/L	0.003137	0.00232 mg/L	0.003137	135.40%
Ba 233.527	147.0	0.00271 mg/L	0.000121	0.00271 mg/L	0.000121	4.49%
Be 313.107	59.4	0.00005 mg/L	0.000013	0.00005 mg/L	0.000013	25.56%
Co 228.616	4.1	0.00016 mg/L	0.000229	0.00016 mg/L	0.000229	144.71%
Cr 267.716	15.1	0.00031 mg/L	0.000097	0.00031 mg/L	0.000097	31.36%
Cu 324.752	408.9	0.00259 mg/L	0.000311	0.00259 mg/L	0.000311	12.02%
Fe 273.955	852.8	0.03906 mg/L	0.000832	0.03906 mg/L	0.000832	2.13%
Mg 279.077	34.8	0.00202 mg/L	0.004844	0.00202 mg/L	0.004844	240.31%
Mn 257.610	2989.4	0.00587 mg/L	0.000046	0.00587 mg/L	0.000046	0.79%
Ni 231.604	18.0	0.00083 mg/L	0.000450	0.00083 mg/L	0.000450	54.43%
Pb 220.353	22.4	0.00527 mg/L	0.000146	0.00527 mg/L	0.000146	2.78%
Sb 206.836	15.6	0.01406 mg/L	0.004576	0.01406 mg/L	0.004576	32.55%
Se 196.026	2.3	0.00438 mg/L	0.004619	0.00438 mg/L	0.004619	105.54%
Tl 190.801	-5.2	-0.00496 mg/L	0.005729	-0.00496 mg/L	0.005729	115.51%
V 292.402	15.3	0.00021 mg/L	0.000657	0.00021 mg/L	0.000657	312.87%
Zn 206.200	74.6	0.00508 mg/L	0.000195	0.00508 mg/L	0.000195	3.85%
Cd 226.502	-2.5	-0.00006 mg/L	0.000215	-0.00006 mg/L	0.000215	351.35%
Ti 334.940	139.2	0.00033 mg/L	0.000011	0.00033 mg/L	0.000011	3.35%
Ca 227.546	22.4	0.16468 mg/L	0.095844	0.16468 mg/L	0.095844	58.20%
Na 589.592	-70.4	-0.02025 mg/L	0.005624	-0.02025 mg/L	0.005624	27.77%
K 766.490	55.4	0.05171 mg/L	0.121748	0.05171 mg/L	0.121748	235.42%

Sequence No.: 13

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 5/2/2012 8:48:38 AM

Data Type: Reprocessed on 5/2/2012 11:54:01 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1257311.7	101.86 %		0.776			0.76%
Lu 261.542	1145820.4	101.5 %		0.77			0.76%
Ag 328.068	5268.9	0.03510 mg/L		0.000383	0.03510 mg/L	0.000383	1.09%
QC value within limits for Ag 328.068 Recovery = 117.01%							
Al 308.215	4494.9	0.23408 mg/L		0.001718	0.23408 mg/L	0.001718	0.73%
QC value within limits for Al 308.215 Recovery = 117.04%							
As 188.979	20.6	0.02375 mg/L		0.001133	0.02375 mg/L	0.001133	4.77%
QC value within limits for As 188.979 Recovery = 118.73%							
Ba 233.527	12661.0	0.23313 mg/L		0.001093	0.23313 mg/L	0.001093	0.47%
QC value within limits for Ba 233.527 Recovery = 116.57%							
Be 313.107	6571.3	0.00557 mg/L		0.000026	0.00557 mg/L	0.000026	0.46%
QC value within limits for Be 313.107 Recovery = 111.44%							
Co 228.616	1521.0	0.05858 mg/L		0.000083	0.05858 mg/L	0.000083	0.14%
QC value within limits for Co 228.616 Recovery = 117.15%							
Cr 267.716	1089.9	0.02247 mg/L		0.000129	0.02247 mg/L	0.000129	0.57%
QC value within limits for Cr 267.716 Recovery = 112.36%							
Cu 324.752	5275.6	0.03339 mg/L		0.000324	0.03339 mg/L	0.000324	0.97%
QC value within limits for Cu 324.752 Recovery = 111.29%							
Fe 273.955	4808.0	0.22033 mg/L		0.000475	0.22033 mg/L	0.000475	0.22%
QC value within limits for Fe 273.955 Recovery = 110.17%							
Mg 279.077	9903.6	0.57373 mg/L		0.002418	0.57373 mg/L	0.002418	0.42%
QC value within limits for Mg 279.077 Recovery = 114.75%							
Mn 257.610	29081.6	0.05705 mg/L		0.000368	0.05705 mg/L	0.000368	0.64%
QC value within limits for Mn 257.610 Recovery = 114.10%							
Ni 231.604	1285.0	0.05892 mg/L		0.000514	0.05892 mg/L	0.000514	0.87%
QC value within limits for Ni 231.604 Recovery = 117.84%							
Pb 220.353	54.5	0.01286 mg/L		0.000402	0.01286 mg/L	0.000402	3.13%
QC value within limits for Pb 220.353 Recovery = 128.65%							
Sb 206.836	28.0	0.02492 mg/L		0.002669	0.02492 mg/L	0.002669	10.71%
QC value within limits for Sb 206.836 Recovery = 124.61%							
Se 196.026	20.3	0.03831 mg/L		0.006836	0.03831 mg/L	0.006836	17.85%
QC value within limits for Se 196.026 Recovery = 127.69%							
Tl 190.801	15.8	0.01449 mg/L		0.000957	0.01449 mg/L	0.000957	6.60%
QC value within limits for Tl 190.801 Recovery = 72.47%							
V 292.402	4086.5	0.05610 mg/L		0.000433	0.05610 mg/L	0.000433	0.77%
QC value within limits for V 292.402 Recovery = 112.21%							

Zn 206.200 826.5 0.05632 mg/L 0.000237 0.05632 mg/L 0.000237 0.42%
 QC value within limits for Zn 206.200 Recovery = 112.65%
 Cd 226.502 251.7 0.00580 mg/L 0.000060 0.00580 mg/L 0.000060 1.03%
 QC value within limits for Cd 226.502 Recovery = 116.00%
 Ti 334.940 9192.4 0.02159 mg/L 0.000131 0.02159 mg/L 0.000131 0.61%
 QC value within limits for Ti 334.940 Recovery = 107.93%
 Ca 227.546 135.7 0.97714 mg/L 0.077100 0.97714 mg/L 0.077100 7.89%
 QC value within limits for Ca 227.546 Recovery = 122.14%
 Na 589.592 3883.0 1.1174 mg/L 0.02681 1.1174 mg/L 0.02681 2.40%
 QC value within limits for Na 589.592 Recovery = 111.74%
 K 766.490 1213.2 1.1329 mg/L 0.02394 1.1329 mg/L 0.02394 2.11%
 QC value within limits for K 766.490 Recovery = 113.29%
 All analyte(s) passed QC.

Sequence No.: 14

Autosampler Location: 39

Sample ID: LCS-65907~LCS

Date Collected: 5/2/2012 8:52:20 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:54:01 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Vol:

Initial Sample Wt:

Sample Prep Vol:

Dilution:

Mean Data: LCS-65907~LCS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1210021.3	98.024 %		0.1790			0.18%
Lu 261.542	1114628.7	98.75 %		0.259			0.26%
Ag 328.068	177451.7	1.1831 mg/L		0.00403	1.1831 mg/L	0.00403	0.34%
Al 308.215	181570.7	9.4600 mg/L		0.04904	9.4600 mg/L	0.04904	0.52%
As 188.979	404.0	0.47076 mg/L		0.000483	0.47076 mg/L	0.000483	0.10%
Ba 233.527	529192.8	9.7442 mg/L		0.02869	9.7442 mg/L	0.02869	0.29%
Be 313.107	280251.1	0.23594 mg/L		0.001958	0.23594 mg/L	0.001958	0.83%
Co 228.616	62048.0	2.3916 mg/L		0.01118	2.3916 mg/L	0.01118	0.47%
Cr 267.716	46825.0	0.96546 mg/L		0.001807	0.96546 mg/L	0.001807	0.19%
Cu 324.752	186175.1	1.1780 mg/L		0.00597	1.1780 mg/L	0.00597	0.51%
Fe 273.955	106259.1	4.8714 mg/L		0.03504	4.8714 mg/L	0.03504	0.72%
Mg 279.077	415298.1	24.059 mg/L		0.1009	24.059 mg/L	0.1009	0.42%
Mn 257.610	1227197.5	2.4074 mg/L		0.00732	2.4074 mg/L	0.00732	0.30%
Ni 231.604	52427.7	2.4043 mg/L		0.01423	2.4043 mg/L	0.01423	0.59%
Pb 220.353	2013.8	0.47465 mg/L		0.001790	0.47465 mg/L	0.001790	0.38%
Sb 206.836	545.7	0.47517 mg/L		0.001529	0.47517 mg/L	0.001529	0.32%
Se 196.026	237.6	0.45158 mg/L		0.012777	0.45158 mg/L	0.012777	2.83%
Tl 190.801	484.2	0.43858 mg/L		0.005431	0.43858 mg/L	0.005431	1.24%
V 292.402	174766.5	2.4006 mg/L		0.00721	2.4006 mg/L	0.00721	0.30%
Zn 206.200	34231.1	2.3317 mg/L		0.00752	2.3317 mg/L	0.00752	0.32%
Cd 226.502	9889.7	0.22822 mg/L		0.000277	0.22822 mg/L	0.000277	0.12%
Ti 334.940	403.5	0.00070 mg/L		0.000203	0.00070 mg/L	0.000203	29.03%
Ca 227.546	3259.0	23.168 mg/L		0.0853	23.168 mg/L	0.0853	0.37%
Na 589.592	80555.2	23.181 mg/L		0.0871	23.181 mg/L	0.0871	0.38%
K 766.490	25020.9	23.364 mg/L		0.1614	23.364 mg/L	0.1614	0.69%

Sequence No.: 15

Autosampler Location: 40

Sample ID: L0878-01A~SO-077318-0426

Date Collected: 5/2/2012 8:56:25 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:54:02 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Vol:

Initial Sample Wt:

Sample Prep Vol:

Dilution:

Mean Data: L0878-01A~SO-077318-0426

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1225515.5	99.279 %		0.5906			0.59%
Lu 261.542	1068666.2	94.68 %		0.595			0.63%
Ag 328.068	-1041.6	-0.00657 mg/L		0.000600	-0.00657 mg/L	0.000600	9.13%
Al 308.215	6372558.0	332.32 mg/L		2.520	332.32 mg/L	2.520	0.76%
As 188.979	118.1	0.18438 mg/L		0.003708	0.18438 mg/L	0.003708	2.01%
Ba 233.527	47811.2	0.88086 mg/L		0.001987	0.88086 mg/L	0.001987	0.23%
Be 313.107	-9487.4	0.00790 mg/L		0.000214	0.00790 mg/L	0.000214	2.71%

Co	228.616	3763.4	0.11669 mg/L	0.000292	0.11669 mg/L	0.000292	0.25%
Cr	267.716	17949.1	0.36921 mg/L	0.001365	0.36921 mg/L	0.001365	0.37%
Cu	324.752	34693.2	0.25196 mg/L	0.000416	0.25196 mg/L	0.000416	0.17%
Fe	273.955	7700745.0	352.75 mg/L	3.071	352.75 mg/L	3.071	0.87%
Mg	279.077	843968.0	48.896 mg/L	0.5211	48.896 mg/L	0.5211	1.07%
Mn	257.610	1739443.7	3.4123 mg/L	0.02983	3.4123 mg/L	0.02983	0.87%
Ni	231.604	4744.3	0.21233 mg/L	0.001073	0.21233 mg/L	0.001073	0.51%
Pb	220.353	1442.6	0.37465 mg/L	0.003084	0.37465 mg/L	0.003084	0.82%
Sb	206.836	31.9	0.02183 mg/L	0.003539	0.02183 mg/L	0.003539	16.21%
Se	196.026	-65.7	0.03344 mg/L	0.006508	0.03344 mg/L	0.006508	19.46%
Tl	190.801	-34.7	0.00954 mg/L	0.009170	0.00954 mg/L	0.009170	96.16%
V	292.402	41129.9	0.56410 mg/L	0.002387	0.56410 mg/L	0.002387	0.42%
Zn	206.200	9588.4	0.67919 mg/L	0.002435	0.67919 mg/L	0.002435	0.36%
Cd	226.502	1167.9	0.00052 mg/L	0.000372	0.00052 mg/L	0.000372	71.98%
Ti	334.940	3668934.0	8.6146 mg/L	0.10332	8.6146 mg/L	0.10332	1.20%
Ca	227.546	1802.7	10.330 mg/L	0.0682	10.330 mg/L	0.0682	0.66%
Na	589.592	3579.9	1.0302 mg/L	0.01281	1.0302 mg/L	0.01281	1.24%
K	766.490	10125.0	9.4544 mg/L	0.08435	9.4544 mg/L	0.08435	0.89%

Sequence No.: 16

Sample ID: L0878-02A-SO-077318-0426

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 5/2/2012 9:00:10 AM

Data Type: Reprocessed on 5/2/2012 11:54:03 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-02A-SO-077318-0426

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y	360.073	1235204.3	100.06 %	1.455				1.45%
Lu	261.542	1121291.6	99.34 %	1.593				1.60%
Ag	328.068	-219.1	-0.00159 mg/L	0.001219	-0.00159 mg/L	0.001219		76.85%
Al	308.215	1177749.7	61.414 mg/L	0.7227	61.414 mg/L	0.7227		1.18%
As	188.979	22.8	0.04399 mg/L	0.003643	0.04399 mg/L	0.003643		8.28%
Ba	233.527	9040.8	0.16658 mg/L	0.001875	0.16658 mg/L	0.001875		1.13%
Be	313.107	-1816.9	0.00313 mg/L	0.000027	0.00313 mg/L	0.000027		0.85%
Co	228.616	1116.0	0.03407 mg/L	0.000186	0.03407 mg/L	0.000186		0.55%
Cr	267.716	4296.9	0.08822 mg/L	0.000602	0.08822 mg/L	0.000602		0.68%
Cu	324.752	9187.5	0.07003 mg/L	0.000456	0.07003 mg/L	0.000456		0.65%
Fe	273.955	2822469.4	129.29 mg/L	1.519	129.29 mg/L	1.519		1.18%
Mg	279.077	164135.1	9.5093 mg/L	0.08165	9.5093 mg/L	0.08165		0.86%
Mn	257.610	851065.7	1.6697 mg/L	0.01918	1.6697 mg/L	0.01918		1.15%
Ni	231.604	1305.3	0.05834 mg/L	0.000212	0.05834 mg/L	0.000212		0.36%
Pb	220.353	254.3	0.06601 mg/L	0.001594	0.06601 mg/L	0.001594		2.42%
Sb	206.836	15.9	0.01292 mg/L	0.002770	0.01292 mg/L	0.002770		21.44%
Se	196.026	-19.7	0.01951 mg/L	0.003714	0.01951 mg/L	0.003714		19.04%
Tl	190.801	-13.9	0.00150 mg/L	0.007594	0.00150 mg/L	0.007594		504.99%
V	292.402	8558.8	0.11810 mg/L	0.001322	0.11810 mg/L	0.001322		1.12%
Zn	206.200	2544.5	0.18252 mg/L	0.000975	0.18252 mg/L	0.000975		0.53%
Cd	226.502	392.5	-0.00063 mg/L	0.000316	-0.00063 mg/L	0.000316		50.29%
Ti	334.940	1077109.9	2.5291 mg/L	0.01100	2.5291 mg/L	0.01100		0.44%
Ca	227.546	385.5	1.7753 mg/L	0.13694	1.7753 mg/L	0.13694		7.71%
Na	589.592	649.5	0.18691 mg/L	0.011017	0.18691 mg/L	0.011017		5.89%
K	766.490	3760.6	3.5115 mg/L	0.05014	3.5115 mg/L	0.05014		1.43%

Sequence No.: 17

Sample ID: L0878-03A-SO-077318-0426

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 42

Date Collected: 5/2/2012 9:03:50 AM

Data Type: Reprocessed on 5/2/2012 11:54:04 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-03A-SO-077318-0426

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y	360.073	1246099.6	100.95 %	0.392				0.39%
Lu	261.542	1132778.8	100.4 %	0.34				0.34%

Ag	328.068	-298.4	-0.00206 mg/L	0.000624	-0.00206 mg/L	0.000624	30.33%
Al	308.215	1020951.4	53.238 mg/L	0.3011	53.238 mg/L	0.3011	0.57%
As	188.979	17.3	0.03820 mg/L	0.006405	0.03820 mg/L	0.006405	16.77%
Ba	233.527	7985.1	0.14712 mg/L	0.002105	0.14712 mg/L	0.002105	1.43%
Be	313.107	-817.2	0.00323 mg/L	0.000035	0.00323 mg/L	0.000035	1.07%
Co	228.616	1029.8	0.03157 mg/L	0.000242	0.03157 mg/L	0.000242	0.77%
Cr	267.716	3092.7	0.06348 mg/L	0.000615	0.06348 mg/L	0.000615	0.97%
Cu	324.752	8559.5	0.06646 mg/L	0.000658	0.06646 mg/L	0.000658	0.99%
Fe	273.955	2917892.7	133.66 mg/L	0.877	133.66 mg/L	0.877	0.66%
Mg	279.077	142846.5	8.2760 mg/L	0.11811	8.2760 mg/L	0.11811	1.43%
Mn	257.610	637772.9	1.2512 mg/L	0.00746	1.2512 mg/L	0.00746	0.60%
Ni	231.604	981.2	0.04372 mg/L	0.000364	0.04372 mg/L	0.000364	0.83%
Pb	220.353	140.6	0.03791 mg/L	0.001170	0.03791 mg/L	0.001170	3.09%
Sb	206.836	13.3	0.01021 mg/L	0.000240	0.01021 mg/L	0.000240	2.35%
Se	196.026	-24.0	0.01300 mg/L	0.009820	0.01300 mg/L	0.009820	75.56%
Tl	190.801	-10.2	0.00516 mg/L	0.002204	0.00516 mg/L	0.002204	42.68%
V	292.402	7267.7	0.10102 mg/L	0.000956	0.10102 mg/L	0.000956	0.95%
Zn	206.200	1943.2	0.14130 mg/L	0.000257	0.14130 mg/L	0.000257	0.18%
Cd	226.502	407.4	-0.00061 mg/L	0.000124	-0.00061 mg/L	0.000124	20.12%
Ti	334.940	904958.1	2.1249 mg/L	0.00976	2.1249 mg/L	0.00976	0.46%
Ca	227.546	247.9	0.73627 mg/L	0.147386	0.73627 mg/L	0.147386	20.02%
Na	589.592	558.1	0.16061 mg/L	0.013794	0.16061 mg/L	0.013794	8.59%
K	766.490	3785.9	3.5351 mg/L	0.09376	3.5351 mg/L	0.09376	2.65%

Sequence No.: 18

Sample ID: L0878-04A-SO-077318-0426

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 5/2/2012 9:07:31 AM

Data Type: Reprocessed on 5/2/2012 11:54:04 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-04A-SO-077318-0426

Analyte	Mean	Corrected	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity	Conc.	Units			Units		
Y 360.073	1252083.4	101.43	%	0.095				0.09%
Lu 261.542	1120847.7	99.30	%	0.287				0.29%
Ag 328.068	-286.0	-0.00280	mg/L	0.000639	-0.00280	mg/L	0.000639	22.78%
Al 308.215	1524513.2	79.491	mg/L	0.2359	79.491	mg/L	0.2359	0.30%
As 188.979	53.0	0.08455	mg/L	0.006859	0.08455	mg/L	0.006859	8.11%
Ba 233.527	15994.1	0.29462	mg/L	0.001056	0.29462	mg/L	0.001056	0.36%
Be 313.107	-2245.8	0.00359	mg/L	0.000064	0.00359	mg/L	0.000064	1.78%
Co 228.616	2031.5	0.06720	mg/L	0.000123	0.06720	mg/L	0.000123	0.18%
Cr 267.716	8207.1	0.16802	mg/L	0.000286	0.16802	mg/L	0.000286	0.17%
Cu 324.752	21803.9	0.15411	mg/L	0.000349	0.15411	mg/L	0.000349	0.23%
Fe 273.955	3843524.8	176.06	mg/L	0.664	176.06	mg/L	0.664	0.38%
Mg 279.077	213477.7	12.368	mg/L	0.0211	12.368	mg/L	0.0211	0.17%
Mn 257.610	2858807.0	5.6088	mg/L	0.01918	5.6088	mg/L	0.01918	0.34%
Ni 231.604	1753.0	0.07860	mg/L	0.000501	0.07860	mg/L	0.000501	0.64%
Pb 220.353	402.3	0.10233	mg/L	0.000991	0.10233	mg/L	0.000991	0.97%
Sb 206.836	19.5	0.01381	mg/L	0.004483	0.01381	mg/L	0.004483	32.47%
Se 196.026	-32.5	0.01570	mg/L	0.008991	0.01570	mg/L	0.008991	57.28%
Tl 190.801	-11.6	0.00992	mg/L	0.006221	0.00992	mg/L	0.006221	62.72%
V 292.402	11049.7	0.15326	mg/L	0.001775	0.15326	mg/L	0.001775	1.16%
Zn 206.200	3070.3	0.22276	mg/L	0.000644	0.22276	mg/L	0.000644	0.29%
Cd 226.502	561.7	-0.00023	mg/L	0.000139	-0.00023	mg/L	0.000139	60.79%
Ti 334.940	1266429.0	2.9736	mg/L	0.01829	2.9736	mg/L	0.01829	0.62%
Ca 227.546	455.3	1.8907	mg/L	0.21603	1.8907	mg/L	0.21603	11.43%
Na 589.592	1086.8	0.31276	mg/L	0.022385	0.31276	mg/L	0.022385	7.16%
K 766.490	3738.8	3.4912	mg/L	0.08185	3.4912	mg/L	0.08185	2.34%

Sequence No.: 19

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 9:11:14 AM

Data Type: Reprocessed on 5/2/2012 11:54:05 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1217369.1	98.619 %	0.4691			0.48%
Lu 261.542	1121073.8	99.32 %	0.290			0.29%
Ag 328.068	190278.2	1.2685 mg/L	0.00219	1.2685 mg/L	0.00219	0.17%
QC value within limits for Ag 328.068 Recovery = 101.48%						
Al 308.215	192013.4	10.003 mg/L	0.0154	10.003 mg/L	0.0154	0.15%
QC value within limits for Al 308.215 Recovery = 100.03%						
As 188.979	428.7	0.49934 mg/L	0.003153	0.49934 mg/L	0.003153	0.63%
QC value within limits for As 188.979 Recovery = 99.87%						
Ba 233.527	559958.5	10.311 mg/L	0.0586	10.311 mg/L	0.0586	0.57%
QC value within limits for Ba 233.527 Recovery = 103.11%						
Be 313.107	292317.5	0.24701 mg/L	0.000690	0.24701 mg/L	0.000690	0.28%
QC value within limits for Be 313.107 Recovery = 98.80%						
Co 228.616	67288.8	2.5925 mg/L	0.00336	2.5925 mg/L	0.00336	0.13%
QC value within limits for Co 228.616 Recovery = 103.70%						
Cr 267.716	48448.2	0.99893 mg/L	0.002003	0.99893 mg/L	0.002003	0.20%
QC value within limits for Cr 267.716 Recovery = 99.89%						
Cu 324.752	195746.5	1.2386 mg/L	0.00359	1.2386 mg/L	0.00359	0.29%
QC value within limits for Cu 324.752 Recovery = 99.09%						
Fe 273.955	110575.8	5.0693 mg/L	0.01017	5.0693 mg/L	0.01017	0.20%
QC value within limits for Fe 273.955 Recovery = 101.39%						
Mg 279.077	438295.2	25.391 mg/L	0.1350	25.391 mg/L	0.1350	0.53%
QC value within limits for Mg 279.077 Recovery = 101.56%						
Mn 257.610	1298840.6	2.5479 mg/L	0.01467	2.5479 mg/L	0.01467	0.58%
QC value within limits for Mn 257.610 Recovery = 101.92%						
Ni 231.604	55729.4	2.5555 mg/L	0.00594	2.5555 mg/L	0.00594	0.23%
QC value within limits for Ni 231.604 Recovery = 102.22%						
Pb 220.353	2112.5	0.49843 mg/L	0.002606	0.49843 mg/L	0.002606	0.52%
QC value within limits for Pb 220.353 Recovery = 99.69%						
Sb 206.836	557.8	0.48670 mg/L	0.003897	0.48670 mg/L	0.003897	0.80%
QC value within limits for Sb 206.836 Recovery = 97.34%						
Se 196.026	258.9	0.49215 mg/L	0.002379	0.49215 mg/L	0.002379	0.48%
QC value within limits for Se 196.026 Recovery = 98.43%						
Tl 190.801	518.5	0.46967 mg/L	0.001306	0.46967 mg/L	0.001306	0.28%
QC value within limits for Tl 190.801 Recovery = 93.93%						
V 292.402	184667.4	2.5359 mg/L	0.00497	2.5359 mg/L	0.00497	0.20%
QC value within limits for V 292.402 Recovery = 101.44%						
Zn 206.200	36770.1	2.5050 mg/L	0.00763	2.5050 mg/L	0.00763	0.30%
QC value within limits for Zn 206.200 Recovery = 100.20%						
Cd 226.502	10451.7	0.24120 mg/L	0.000341	0.24120 mg/L	0.000341	0.14%
QC value within limits for Cd 226.502 Recovery = 96.48%						
Ti 334.940	209719.7	0.49220 mg/L	0.001989	0.49220 mg/L	0.001989	0.40%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	3458.8	24.571 mg/L	0.0726	24.571 mg/L	0.0726	0.30%
QC value within limits for Ca 227.546 Recovery = 98.28%						
Na 589.592	86527.7	24.900 mg/L	0.1575	24.900 mg/L	0.1575	0.63%
QC value within limits for Na 589.592 Recovery = 99.60%						
K 766.490	26813.6	25.038 mg/L	0.2040	25.038 mg/L	0.2040	0.81%
QC value within limits for K 766.490 Recovery = 100.15%						
All analyte(s) passed QC.						

Sequence No.: 20

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/2/2012 9:14:56 AM

Data Type: Reprocessed on 5/2/2012 11:54:06 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1263926.5	102.39 %	0.279			0.27%
Lu 261.542	1143098.2	101.3 %	0.41			0.41%
Ag 328.068	111.0	0.00074 mg/L	0.000341	0.00074 mg/L	0.000341	46.19%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215	134.0	0.00696 mg/L	0.008258	0.00696 mg/L	0.008258	118.61%
QC value within limits for Al 308.215 Recovery = Not calculated						

As 188.979	-0.1	-0.00013 mg/L	0.003385	-0.00013 mg/L	0.003385	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527	57.1	0.00105 mg/L	0.000222	0.00105 mg/L	0.000222	21.15%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107	9.1	0.00001 mg/L	0.000054	0.00001 mg/L	0.000054	644.72%
QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616	16.2	0.00062 mg/L	0.000219	0.00062 mg/L	0.000219	35.17%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716	6.8	0.00014 mg/L	0.000129	0.00014 mg/L	0.000129	91.96%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752	96.7	0.00061 mg/L	0.000504	0.00061 mg/L	0.000504	82.25%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955	164.6	0.00754 mg/L	0.002040	0.00754 mg/L	0.002040	27.05%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	85.3	0.00494 mg/L	0.006200	0.00494 mg/L	0.006200	125.49%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	208.2	0.00041 mg/L	0.000089	0.00041 mg/L	0.000089	21.83%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604	11.8	0.00054 mg/L	0.000363	0.00054 mg/L	0.000363	66.82%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353	8.0	0.00188 mg/L	0.001372	0.00188 mg/L	0.001372	73.03%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836	8.7	0.00786 mg/L	0.001739	0.00786 mg/L	0.001739	22.14%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026	-0.5	-0.00095 mg/L	0.018015	-0.00095 mg/L	0.018015	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801	-3.4	-0.00327 mg/L	0.002315	-0.00327 mg/L	0.002315	70.75%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402	-1.1	-0.00002 mg/L	0.000172	-0.00002 mg/L	0.000172	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200	10.7	0.00073 mg/L	0.000190	0.00073 mg/L	0.000190	26.15%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502	-1.4	-0.00003 mg/L	0.000081	-0.00003 mg/L	0.000081	249.38%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940	185.4	0.00044 mg/L	0.000114	0.00044 mg/L	0.000114	25.99%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	18.5	0.13590 mg/L	0.086062	0.13590 mg/L	0.086062	63.33%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Na 589.592	-186.6	-0.05369 mg/L	0.027149	-0.05369 mg/L	0.027149	50.57%
QC value within limits for Na 589.592 Recovery = Not calculated						
K 766.490	37.8	0.03526 mg/L	0.141452	0.03526 mg/L	0.141452	401.20%
QC value within limits for K 766.490 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: L0878-05A-SO-077318-0426

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 5/2/2012 9:18:44 AM

Data Type: Reprocessed on 5/2/2012 11:54:07 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-05A-SO-077318-0426

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1208075.1	97.867 %		1.2541			1.28%
Lu 261.542	1067563.3	94.58 %		1.192			1.26%
Ag 328.068	-341.3	-0.00213 mg/L		0.000432	-0.00213 mg/L	0.000432	20.34%
Al 308.215	3416659.2	178.17 mg/L		1.438	178.17 mg/L	1.438	0.81%
As 188.979	54.5	0.09398 mg/L		0.003761	0.09398 mg/L	0.003761	4.00%
Ba 233.527	26672.1	0.49147 mg/L		0.002589	0.49147 mg/L	0.002589	0.53%
Be 313.107	-6310.1	0.00453 mg/L		0.000054	0.00453 mg/L	0.000054	1.18%
Co 228.616	2402.1	0.07487 mg/L		0.000460	0.07487 mg/L	0.000460	0.61%
Cr 267.716	12081.5	0.24849 mg/L		0.001629	0.24849 mg/L	0.001629	0.66%
Cu 324.752	31023.9	0.21686 mg/L		0.000835	0.21686 mg/L	0.000835	0.39%
Fe 273.955	4893164.4	224.14 mg/L		2.017	224.14 mg/L	2.017	0.90%
Mg 279.077	453843.3	26.294 mg/L		0.2569	26.294 mg/L	0.2569	0.98%
Mn 257.610	1334435.1	2.6179 mg/L		0.02472	2.6179 mg/L	0.02472	0.94%
Ni 231.604	2964.8	0.13273 mg/L		0.000337	0.13273 mg/L	0.000337	0.25%
Pb 220.353	1912.3	0.46848 mg/L		0.002085	0.46848 mg/L	0.002085	0.44%

Sb 206.836	31.2	0.02415 mg/L	0.004759	0.02415 mg/L	0.004759	19.70%
Se 196.026	-37.4	0.02914 mg/L	0.013399	0.02914 mg/L	0.013399	45.98%
Tl 190.801	-18.7	0.00859 mg/L	0.001269	0.00859 mg/L	0.001269	14.77%
V 292.402	26734.6	0.36688 mg/L	0.000728	0.36688 mg/L	0.000728	0.20%
Zn 206.200	8455.3	0.59227 mg/L	0.004294	0.59227 mg/L	0.004294	0.73%
Cd 226.502	784.9	0.00130 mg/L	0.000035	0.00130 mg/L	0.000035	2.71%
Ti 334.940	2273835.2	5.3391 mg/L	0.03977	5.3391 mg/L	0.03977	0.74%
Ca 227.546	1700.6	10.647 mg/L	0.0618	10.647 mg/L	0.0618	0.58%
Na 589.592	1462.2	0.42077 mg/L	0.023508	0.42077 mg/L	0.023508	5.59%
K 766.490	7155.7	6.6817 mg/L	0.07862	6.6817 mg/L	0.07862	1.18%

Sequence No.: 22

Sample ID: L0878-05ADUP~SO-077318-0

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 5/2/2012 9:22:27 AM

Data Type: Reprocessed on 5/2/2012 11:54:07 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-05ADUP~SO-077318-0

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1186737.9	96.138 %	%	0.9586			1.00%
Lu 261.542	1050319.7	93.05 %	%	0.896			0.96%
Ag 328.068	-243.2	-0.00143 mg/L	mg/L	0.000418	-0.00143 mg/L	0.000418	29.22%
Al 308.215	3281331.1	171.11 mg/L	mg/L	1.483	171.11 mg/L	1.483	0.87%
As 188.979	43.8	0.07863 mg/L	mg/L	0.000942	0.07863 mg/L	0.000942	1.20%
Ba 233.527	26247.2	0.48366 mg/L	mg/L	0.001276	0.48366 mg/L	0.001276	0.26%
Be 313.107	-5970.6	0.00450 mg/L	mg/L	0.000100	0.00450 mg/L	0.000100	2.22%
Co 228.616	2265.1	0.07054 mg/L	mg/L	0.000081	0.07054 mg/L	0.000081	0.11%
Cr 267.716	11563.3	0.23784 mg/L	mg/L	0.002342	0.23784 mg/L	0.002342	0.98%
Cu 324.752	30436.0	0.21107 mg/L	mg/L	0.000592	0.21107 mg/L	0.000592	0.28%
Fe 273.955	4402609.9	201.67 mg/L	mg/L	1.895	201.67 mg/L	1.895	0.94%
Mg 279.077	448630.9	25.992 mg/L	mg/L	0.2605	25.992 mg/L	0.2605	1.00%
Mn 257.610	1250949.2	2.4541 mg/L	mg/L	0.02138	2.4541 mg/L	0.02138	0.87%
Ni 231.604	2846.6	0.12741 mg/L	mg/L	0.000682	0.12741 mg/L	0.000682	0.54%
Pb 220.353	1787.9	0.43880 mg/L	mg/L	0.001872	0.43880 mg/L	0.001872	0.43%
Sb 206.836	25.2	0.01938 mg/L	mg/L	0.008266	0.01938 mg/L	0.008266	42.65%
Se 196.026	-36.8	0.02058 mg/L	mg/L	0.013520	0.02058 mg/L	0.013520	65.70%
Tl 190.801	-15.3	0.00939 mg/L	mg/L	0.008502	0.00939 mg/L	0.008502	90.51%
V 292.402	27062.0	0.37090 mg/L	mg/L	0.001365	0.37090 mg/L	0.001365	0.37%
Zn 206.200	8133.1	0.56900 mg/L	mg/L	0.003117	0.56900 mg/L	0.003117	0.55%
Cd 226.502	709.6	0.00125 mg/L	mg/L	0.000334	0.00125 mg/L	0.000334	26.71%
Ti 334.940	2199278.3	5.1640 mg/L	mg/L	0.04165	5.1640 mg/L	0.04165	0.81%
Ca 227.546	1639.1	10.375 mg/L	mg/L	0.1293	10.375 mg/L	0.1293	1.25%
Na 589.592	1350.5	0.38863 mg/L	mg/L	0.019424	0.38863 mg/L	0.019424	5.00%
K 766.490	7579.0	7.0770 mg/L	mg/L	0.12574	7.0770 mg/L	0.12574	1.78%

Sequence No.: 23

Sample ID: L0878-05AMS~SO-077318-04

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 5/2/2012 9:26:11 AM

Data Type: Reprocessed on 5/2/2012 11:54:08 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-05AMS~SO-077318-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1183458.2	95.872 %	%	0.5415			0.56%
Lu 261.542	1048107.6	92.85 %	%	0.701			0.75%
Ag 328.068	179095.7	1.1942 mg/L	mg/L	0.00521	1.1942 mg/L	0.00521	0.44%
Al 308.215	3727289.9	194.36 mg/L	mg/L	0.337	194.36 mg/L	0.337	0.17%
As 188.979	449.0	0.55184 mg/L	mg/L	0.003627	0.55184 mg/L	0.003627	0.66%
Ba 233.527	560004.6	10.312 mg/L	mg/L	0.0246	10.312 mg/L	0.0246	0.24%
Be 313.107	272682.9	0.23903 mg/L	mg/L	0.000104	0.23903 mg/L	0.000104	0.04%
Co 228.616	64500.5	2.4693 mg/L	mg/L	0.00854	2.4693 mg/L	0.00854	0.35%
Cr 267.716	58662.8	1.2090 mg/L	mg/L	0.00440	1.2090 mg/L	0.00440	0.36%
Cu 324.752	225226.0	1.4444 mg/L	mg/L	0.00319	1.4444 mg/L	0.00319	0.22%

Fe 273.955	4699008.0	215.25 mg/L	0.353	215.25 mg/L	0.353	0.16%
Mg 279.077	862110.8	49.945 mg/L	0.0828	49.945 mg/L	0.0828	0.17%
Mn 257.610	2435653.3	4.7781 mg/L	0.00779	4.7781 mg/L	0.00779	0.16%
Ni 231.604	55238.9	2.5302 mg/L	0.00598	2.5302 mg/L	0.00598	0.24%
Pb 220.353	3968.4	0.95382 mg/L	0.003389	0.95382 mg/L	0.003389	0.36%
Sb 206.836	325.7	0.27298 mg/L	0.003630	0.27298 mg/L	0.003630	1.33%
Se 196.026	195.2	0.46550 mg/L	0.014257	0.46550 mg/L	0.014257	3.06%
Tl 190.801	458.7	0.43929 mg/L	0.003319	0.43929 mg/L	0.003319	0.76%
V 292.402	201960.4	2.7737 mg/L	0.00621	2.7737 mg/L	0.00621	0.22%
Zn 206.200	41902.5	2.8697 mg/L	0.01136	2.8697 mg/L	0.01136	0.40%
Cd 226.502	10622.7	0.22935 mg/L	0.000623	0.22935 mg/L	0.000623	0.27%
Ti 334.940	2184499.5	5.1291 mg/L	0.01545	5.1291 mg/L	0.01545	0.30%
Ca 227.546	5014.5	34.329 mg/L	0.1694	34.329 mg/L	0.1694	0.49%
Na 589.592	83806.0	24.117 mg/L	0.2079	24.117 mg/L	0.2079	0.86%
K 766.490	32565.3	30.408 mg/L	0.1863	30.408 mg/L	0.1863	0.61%

Sequence No.: 24

Sample ID: L0878-05ASD~SO-077318-04

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 5/2/2012 9:29:57 AM

Data Type: Reprocessed on 5/2/2012 11:54:09 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-05ASD~SO-077318-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1274512.8	103.25 %	%	0.734			0.71%
Lu 261.542	1156309.9	102.4 %	%	0.88			0.86%
Ag 328.068	40.9	0.00030 mg/L	mg/L	0.000576	0.00030 mg/L	0.000576	192.27%
Al 308.215	717032.9	37.391 mg/L	mg/L	0.2481	37.391 mg/L	0.2481	0.66%
As 188.979	13.9	0.02264 mg/L	mg/L	0.001532	0.02264 mg/L	0.001532	6.77%
Ba 233.527	5489.2	0.10115 mg/L	mg/L	0.000625	0.10115 mg/L	0.000625	0.62%
Be 313.107	-1313.5	0.00094 mg/L	mg/L	0.000015	0.00094 mg/L	0.000015	1.56%
Co 228.616	514.9	0.01613 mg/L	mg/L	0.000186	0.01613 mg/L	0.000186	1.15%
Cr 267.716	2486.3	0.05114 mg/L	mg/L	0.000252	0.05114 mg/L	0.000252	0.49%
Cu 324.752	6320.6	0.04441 mg/L	mg/L	0.000528	0.04441 mg/L	0.000528	1.19%
Fe 273.955	1050389.4	48.115 mg/L	mg/L	0.3180	48.115 mg/L	0.3180	0.66%
Mg 279.077	95019.0	5.5050 mg/L	mg/L	0.03240	5.5050 mg/L	0.03240	0.59%
Mn 257.610	276139.7	0.54172 mg/L	mg/L	0.003213	0.54172 mg/L	0.003213	0.59%
Ni 231.604	639.6	0.02866 mg/L	mg/L	0.000472	0.02866 mg/L	0.000472	1.65%
Pb 220.353	402.7	0.09862 mg/L	mg/L	0.002435	0.09862 mg/L	0.002435	2.47%
Sb 206.836	7.7	0.00610 mg/L	mg/L	0.004329	0.00610 mg/L	0.004329	71.00%
Se 196.026	-4.4	0.01295 mg/L	mg/L	0.009887	0.01295 mg/L	0.009887	76.33%
Tl 190.801	-9.5	-0.00336 mg/L	mg/L	0.004435	-0.00336 mg/L	0.004435	131.84%
V 292.402	5483.4	0.07530 mg/L	mg/L	0.001127	0.07530 mg/L	0.001127	1.50%
Zn 206.200	1767.8	0.12388 mg/L	mg/L	0.000453	0.12388 mg/L	0.000453	0.37%
Cd 226.502	165.3	0.00020 mg/L	mg/L	0.000217	0.00020 mg/L	0.000217	105.86%
Ti 334.940	471749.3	1.1077 mg/L	mg/L	0.01610	1.1077 mg/L	0.01610	1.45%
Ca 227.546	375.2	2.3608 mg/L	mg/L	0.10182	2.3608 mg/L	0.10182	4.31%
Na 589.592	99.4	0.02862 mg/L	mg/L	0.024623	0.02862 mg/L	0.024623	86.05%
K 766.490	1585.6	1.4806 mg/L	mg/L	0.02278	1.4806 mg/L	0.02278	1.54%

Sequence No.: 25

Sample ID: L0878-05APDS~SO-077318-04

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 5/2/2012 9:33:38 AM

Data Type: Reprocessed on 5/2/2012 11:54:09 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0878-05APDS~SO-077318-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1213944.9	98.342 %	%	0.2101			0.21%
Lu 261.542	1074465.4	95.19 %	%	0.229			0.24%
Ag 328.068	170705.2	1.1382 mg/L	mg/L	0.00495	1.1382 mg/L	0.00495	0.44%
Al 308.215	3412047.5	177.92 mg/L	mg/L	0.590	177.92 mg/L	0.590	0.33%
As 188.979	418.8	0.51683 mg/L	mg/L	0.003128	0.51683 mg/L	0.003128	0.61%

Ba 233.527	534485.5	9.8420 mg/L	0.03694	9.8420 mg/L	0.03694	0.38%
Be 313.107	258020.1	0.22660 mg/L	0.002496	0.22660 mg/L	0.002496	1.10%
Co 228.616	61798.3	2.3652 mg/L	0.00853	2.3652 mg/L	0.00853	0.36%
Cr 267.716	55539.2	1.1446 mg/L	0.00309	1.1446 mg/L	0.00309	0.27%
Cu 324.752	212940.8	1.3666 mg/L	0.00545	1.3666 mg/L	0.00545	0.40%
Fe 273.955	4681784.8	214.46 mg/L	0.939	214.46 mg/L	0.939	0.44%
Mg 279.077	818946.9	47.445 mg/L	0.2546	47.445 mg/L	0.2546	0.54%
Mn 257.610	2403740.1	4.7155 mg/L	0.01799	4.7155 mg/L	0.01799	0.38%
Ni 231.604	52869.7	2.4215 mg/L	0.00677	2.4215 mg/L	0.00677	0.28%
Pb 220.353	3640.0	0.87492 mg/L	0.005907	0.87492 mg/L	0.005907	0.68%
Sb 206.836	544.6	0.47152 mg/L	0.005392	0.47152 mg/L	0.005392	1.14%
Se 196.026	182.5	0.44085 mg/L	0.000218	0.44085 mg/L	0.000218	0.05%
Tl 190.801	430.0	0.41272 mg/L	0.003285	0.41272 mg/L	0.003285	0.80%
V 292.402	191984.3	2.6367 mg/L	0.00655	2.6367 mg/L	0.00655	0.25%
Zn 206.200	39536.5	2.7086 mg/L	0.01285	2.7086 mg/L	0.01285	0.47%
Cd 226.502	9884.7	0.21237 mg/L	0.000838	0.21237 mg/L	0.000838	0.39%
Ti 334.940	2165126.1	5.0836 mg/L	0.03507	5.0836 mg/L	0.03507	0.69%
Ca 227.546	4795.8	32.762 mg/L	0.1970	32.762 mg/L	0.1970	0.60%
Na 589.592	80849.2	23.266 mg/L	0.2129	23.266 mg/L	0.2129	0.92%
K 766.490	31115.9	29.055 mg/L	0.3681	29.055 mg/L	0.3681	1.27%

Sequence No.: 26

Sample ID: L0865-02A-SP-3-0-4

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 5/2/2012 9:37:25 AM

Data Type: Reprocessed on 5/2/2012 11:54:10 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0865-02A-SP-3-0-4

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1049097.2	84.988	%	0.2976				0.35%
Lu 261.542	913743.8	80.95	%	0.208				0.26%
Ag 328.068	-47.8	-0.00084	mg/L	0.000294	-0.00084	mg/L	0.000294	34.99%
Al 308.215	1278442.5	66.334	mg/L	0.2959	66.334	mg/L	0.2959	0.45%
As 188.979	-4.7	0.02766	mg/L	0.006915	0.02766	mg/L	0.006915	25.00%
Ba 233.527	16591.8	0.30560	mg/L	0.000481	0.30560	mg/L	0.000481	0.16%
Be 313.107	-800.1	0.00252	mg/L	0.000033	0.00252	mg/L	0.000033	1.32%
Co 228.616	1240.9	0.04120	mg/L	0.000271	0.04120	mg/L	0.000271	0.66%
Cr 267.716	4531.8	0.08916	mg/L	0.000120	0.08916	mg/L	0.000120	0.13%
Cu 324.752	21741.5	0.14754	mg/L	0.000809	0.14754	mg/L	0.000809	0.55%
Fe 273.955	2385386.2	109.27	mg/L	0.413	109.27	mg/L	0.413	0.38%
Mg 279.077	9505191.0	550.70	mg/L	1.981	550.70	mg/L	1.981	0.36%
Concentration greater than upper limit for Mg 279.077.								
Mn 257.610	1873003.9	3.6693	mg/L	0.01639	3.6693	mg/L	0.01639	0.45%
Ni 231.604	2201.9	0.09762	mg/L	0.000486	0.09762	mg/L	0.000486	0.50%
Pb 220.353	346.1	0.08784	mg/L	0.001393	0.08784	mg/L	0.001393	1.59%
Sb 206.836	7.8	-0.00128	mg/L	0.007207	-0.00128	mg/L	0.007207	565.20%
Se 196.026	-16.8	0.01620	mg/L	0.008615	0.01620	mg/L	0.008615	53.18%
Tl 190.801	-24.6	0.01145	mg/L	0.008136	0.01145	mg/L	0.008136	71.03%
V 292.402	9910.1	0.13713	mg/L	0.001021	0.13713	mg/L	0.001021	0.74%
Zn 206.200	11745.8	0.80708	mg/L	0.003500	0.80708	mg/L	0.003500	0.43%
Cd 226.502	450.5	-0.00166	mg/L	0.000129	-0.00166	mg/L	0.000129	7.78%
Ti 334.940	737125.7	1.7460	mg/L	0.00946	1.7460	mg/L	0.00946	0.54%
Ca 227.546	203846.3	1498.0	mg/L	7.98	1498.0	mg/L	7.98	0.53%
Concentration greater than upper limit for Ca 227.546.								
Na 589.592	12733.1	3.6642	mg/L	0.02022	3.6642	mg/L	0.02022	0.55%
K 766.490	21277.7	19.868	mg/L	0.1643	19.868	mg/L	0.1643	0.83%

Sequence No.: 27

Sample ID: L0865-03B-SP-4-0-4

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 50

Date Collected: 5/2/2012 9:41:12 AM

Data Type: Reprocessed on 5/2/2012 11:54:11 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0865-03B-SP-4-0-4

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1117577.8	90.535	%	1.2915				1.43%
Lu 261.542	917465.2	81.28	%	0.664				0.82%
Ag 328.068	-716.3	-0.00657	mg/L	0.000680	-0.00657	mg/L	0.000680	10.35%
Al 308.215	2674804.3	139.03	mg/L	1.641	139.03	mg/L	1.641	1.18%
As 188.979	54.5	0.13691	mg/L	0.004591	0.13691	mg/L	0.004591	3.35%
Ba 233.527	49683.9	0.91490	mg/L	0.010289	0.91490	mg/L	0.010289	1.12%
Be 313.107	6947.8	0.00740	mg/L	0.000139	0.00740	mg/L	0.000139	1.88%
Co 228.616	4502.3	0.16275	mg/L	0.000817	0.16275	mg/L	0.000817	0.50%
Cr 267.716	11525.1	0.23355	mg/L	0.001241	0.23355	mg/L	0.001241	0.53%
Cu 324.752	153854.5	1.0063	mg/L	0.01187	1.0063	mg/L	0.01187	1.18%
Fe 273.955	7959094.3	364.58	mg/L	1.103	364.58	mg/L	1.103	0.30%
Mg 279.077	5103880.4	295.70	mg/L	0.799	295.70	mg/L	0.799	0.27%
Mn 257.610	5558239.5	10.902	mg/L	0.0416	10.902	mg/L	0.0416	0.38%
Ni 231.604	11522.5	0.52673	mg/L	0.002875	0.52673	mg/L	0.002875	0.55%
Pb 220.353	862.2	0.21063	mg/L	0.000549	0.21063	mg/L	0.000549	0.26%
Sb 206.836	27.2	0.00403	mg/L	0.007495	0.00403	mg/L	0.007495	186.07%
Se 196.026	-59.6	0.04342	mg/L	0.003610	0.04342	mg/L	0.003610	8.31%
Tl 190.801	-30.7	0.02302	mg/L	0.003574	0.02302	mg/L	0.003574	15.52%
V 292.402	19257.6	0.27459	mg/L	0.004285	0.27459	mg/L	0.004285	1.56%
Zn 206.200	24656.8	1.7002	mg/L	0.01705	1.7002	mg/L	0.01705	1.00%
Cd 226.502	2008.9	0.01345	mg/L	0.000122	0.01345	mg/L	0.000122	0.90%
Ti 334.940	358262.1	0.87254	mg/L	0.007133	0.87254	mg/L	0.007133	0.82%
Ca 227.546	297568.0	2185.3	mg/L	28.08	2185.3	mg/L	28.08	1.29%
Concentration greater than upper limit for Ca 227.546.								
Na 589.592	12861.0	3.7010	mg/L	0.05889	3.7010	mg/L	0.05889	1.59%
K 766.490	26398.0	24.650	mg/L	0.1672	24.650	mg/L	0.1672	0.68%

Sequence No.: 28

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 9:45:00 AM

Data Type: Reprocessed on 5/2/2012 11:54:12 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1189003.7	96.322	%	0.2066				0.21%
Lu 261.542	1085415.7	96.16	%	0.446				0.46%
Ag 328.068	188197.8	1.2547	mg/L	0.00400	1.2547	mg/L	0.00400	0.32%
QC value within limits for Ag 328.068 Recovery = 100.37%								
Al 308.215	192527.0	10.030	mg/L	0.0197	10.030	mg/L	0.0197	0.20%
QC value within limits for Al 308.215 Recovery = 100.30%								
As 188.979	415.7	0.48440	mg/L	0.008179	0.48440	mg/L	0.008179	1.69%
QC value within limits for As 188.979 Recovery = 96.88%								
Ba 233.527	546600.7	10.065	mg/L	0.0929	10.065	mg/L	0.0929	0.92%
QC value within limits for Ba 233.527 Recovery = 100.65%								
Be 313.107	281551.3	0.23792	mg/L	0.004271	0.23792	mg/L	0.004271	1.80%
QC value within limits for Be 313.107 Recovery = 95.17%								
Co 228.616	66711.7	2.5703	mg/L	0.01013	2.5703	mg/L	0.01013	0.39%
QC value within limits for Co 228.616 Recovery = 102.81%								
Cr 267.716	48163.8	0.99308	mg/L	0.004770	0.99308	mg/L	0.004770	0.48%
QC value within limits for Cr 267.716 Recovery = 99.31%								
Cu 324.752	193670.2	1.2255	mg/L	0.00301	1.2255	mg/L	0.00301	0.25%
QC value within limits for Cu 324.752 Recovery = 98.04%								
Fe 273.955	111050.1	5.0910	mg/L	0.03000	5.0910	mg/L	0.03000	0.59%
QC value within limits for Fe 273.955 Recovery = 101.82%								
Mg 279.077	431618.1	25.004	mg/L	0.1845	25.004	mg/L	0.1845	0.74%
QC value within limits for Mg 279.077 Recovery = 100.02%								
Mn 257.610	1285458.9	2.5217	mg/L	0.01858	2.5217	mg/L	0.01858	0.74%
QC value within limits for Mn 257.610 Recovery = 100.87%								
Ni 231.604	55033.0	2.5236	mg/L	0.00967	2.5236	mg/L	0.00967	0.38%
QC value within limits for Ni 231.604 Recovery = 100.94%								
Pb 220.353	2064.0	0.48701	mg/L	0.002252	0.48701	mg/L	0.002252	0.46%
QC value within limits for Pb 220.353 Recovery = 97.40%								
Sb 206.836	542.7	0.47325	mg/L	0.002091	0.47325	mg/L	0.002091	0.44%
QC value within limits for Sb 206.836 Recovery = 94.65%								

Se 196.026	252.9	0.48091 mg/L	0.011348	0.48091 mg/L	0.011348	2.36%
QC value within limits for Se 196.026 Recovery = 96.18%						
Tl 190.801	497.5	0.44985 mg/L	0.003305	0.44985 mg/L	0.003305	0.73%
QC value within limits for Tl 190.801 Recovery = 89.97%						
V 292.402	184409.4	2.5324 mg/L	0.01144	2.5324 mg/L	0.01144	0.45%
QC value within limits for V 292.402 Recovery = 101.29%						
Zn 206.200	35456.0	2.4156 mg/L	0.01023	2.4156 mg/L	0.01023	0.42%
QC value within limits for Zn 206.200 Recovery = 96.62%						
Cd 226.502	10230.4	0.23609 mg/L	0.000428	0.23609 mg/L	0.000428	0.18%
QC value within limits for Cd 226.502 Recovery = 94.44%						
Ti 334.940	203885.6	0.47851 mg/L	0.000622	0.47851 mg/L	0.000622	0.13%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	3462.3	24.604 mg/L	0.1891	24.604 mg/L	0.1891	0.77%
QC value within limits for Ca 227.546 Recovery = 98.42%						
Na 589.592	85025.7	24.468 mg/L	0.4438	24.468 mg/L	0.4438	1.81%
QC value within limits for Na 589.592 Recovery = 97.87%						
K 766.490	26300.8	24.559 mg/L	0.4443	24.559 mg/L	0.4443	1.81%
QC value within limits for K 766.490 Recovery = 98.24%						

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/2/2012 9:48:42 AM

Data Type: Reprocessed on 5/2/2012 11:54:12 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1243618.2	100.75 %	%	0.518			0.51%
Lu 261.542	1119196.4	99.15 %	%	0.563			0.57%
Ag 328.068	154.0	0.00102 mg/L	mg/L	0.000256	0.00102 mg/L	0.000256	25.07%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215	-3.4	-0.00022 mg/L	mg/L	0.005149	-0.00022 mg/L	0.005149	>999.9%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979	4.5	0.00520 mg/L	mg/L	0.001334	0.00520 mg/L	0.001334	25.62%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527	71.2	0.00131 mg/L	mg/L	0.000256	0.00131 mg/L	0.000256	19.53%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107	95.1	0.00008 mg/L	mg/L	0.000031	0.00008 mg/L	0.000031	38.36%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616	19.6	0.00075 mg/L	mg/L	0.000114	0.00075 mg/L	0.000114	15.14%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716	9.1	0.00019 mg/L	mg/L	0.000059	0.00019 mg/L	0.000059	31.17%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752	162.1	0.00103 mg/L	mg/L	0.000192	0.00103 mg/L	0.000192	18.72%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955	352.8	0.01616 mg/L	mg/L	0.001777	0.01616 mg/L	0.001777	11.00%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077	245.7	0.01424 mg/L	mg/L	0.001709	0.01424 mg/L	0.001709	12.00%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610	348.0	0.00068 mg/L	mg/L	0.000106	0.00068 mg/L	0.000106	15.56%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604	13.4	0.00062 mg/L	mg/L	0.000295	0.00062 mg/L	0.000295	47.74%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353	6.2	0.00146 mg/L	mg/L	0.002081	0.00146 mg/L	0.002081	142.73%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836	5.3	0.00473 mg/L	mg/L	0.002281	0.00473 mg/L	0.002281	48.27%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026	-0.3	-0.00056 mg/L	mg/L	0.008058	-0.00056 mg/L	0.008058	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-4.8	-0.00456 mg/L	mg/L	0.003305	-0.00456 mg/L	0.003305	72.41%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402	-6.0	-0.00008 mg/L	mg/L	0.000585	-0.00008 mg/L	0.000585	703.89%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200	19.6	0.00133 mg/L	mg/L	0.000120	0.00133 mg/L	0.000120	9.04%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502	-0.9	-0.00002 mg/L	mg/L	0.000228	-0.00002 mg/L	0.000228	993.71%

QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940 292.4 0.00069 mg/L 0.000214 0.00069 mg/L 0.000214 31.00%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 29.5 0.21668 mg/L 0.128715 0.21668 mg/L 0.128715 59.40%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 8.3 0.00238 mg/L 0.029731 0.00238 mg/L 0.029731 >999.9%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 175.5 0.16389 mg/L 0.137284 0.16389 mg/L 0.137284 83.77%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 30

Sample ID: MB-65830~PBS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 51

Date Collected: 5/2/2012 9:52:22 AM

Data Type: Reprocessed on 5/2/2012 11:54:13 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-65830~PBS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1225230.6	99.256	%	0.6597				0.66%
Lu 261.542	1103545.7	97.77	%	0.576				0.59%
Ag 328.068	282.3	0.00187	mg/L	0.000412	0.00187	mg/L	0.000412	22.02%
Al 308.215	1004.9	0.05236	mg/L	0.008971	0.05236	mg/L	0.008971	17.13%
As 188.979	-1.1	-0.00126	mg/L	0.002486	-0.00126	mg/L	0.002486	197.88%
Ba 233.527	419.4	0.00772	mg/L	0.000194	0.00772	mg/L	0.000194	2.52%
Be 313.107	18.1	0.00002	mg/L	0.000024	0.00002	mg/L	0.000024	110.64%
Co 228.616	7.4	0.00027	mg/L	0.000077	0.00027	mg/L	0.000077	28.41%
Cr 267.716	15.2	0.00031	mg/L	0.000150	0.00031	mg/L	0.000150	48.29%
Cu 324.752	324.0	0.00207	mg/L	0.000242	0.00207	mg/L	0.000242	11.71%
Fe 273.955	4994.4	0.22878	mg/L	0.002718	0.22878	mg/L	0.002718	1.19%
Mg 279.077	229.0	0.01327	mg/L	0.001256	0.01327	mg/L	0.001256	9.47%
Mn 257.610	5092.7	0.00999	mg/L	0.000026	0.00999	mg/L	0.000026	0.26%
Ni 231.604	11.8	0.00054	mg/L	0.000286	0.00054	mg/L	0.000286	52.80%
Pb 220.353	11.9	0.00280	mg/L	0.000992	0.00280	mg/L	0.000992	35.46%
Sb 206.836	9.4	0.00850	mg/L	0.002746	0.00850	mg/L	0.002746	32.30%
Se 196.026	-2.1	-0.00388	mg/L	0.008116	-0.00388	mg/L	0.008116	209.41%
Tl 190.801	-10.0	-0.00950	mg/L	0.003720	-0.00950	mg/L	0.003720	39.18%
V 292.402	-17.2	-0.00023	mg/L	0.000354	-0.00023	mg/L	0.000354	151.41%
Zn 206.200	82.6	0.00563	mg/L	0.000162	0.00563	mg/L	0.000162	2.88%
Cd 226.502	-1.9	-0.00006	mg/L	0.000049	-0.00006	mg/L	0.000049	80.00%
Ti 334.940	1433.9	0.00337	mg/L	0.000249	0.00337	mg/L	0.000249	7.38%
Ca 227.546	19.7	0.14293	mg/L	0.128007	0.14293	mg/L	0.128007	89.56%
Na 589.592	-168.8	-0.04857	mg/L	0.026919	-0.04857	mg/L	0.026919	55.42%
K 766.490	100.3	0.09367	mg/L	0.040524	0.09367	mg/L	0.040524	43.26%

Sequence No.: 31

Sample ID: LCS-65830~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 5/2/2012 9:56:01 AM

Data Type: Reprocessed on 5/2/2012 11:54:14 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-65830~LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1184288.0	95.940	%	0.2613				0.27%
Lu 261.542	1077750.8	95.48	%	0.357				0.37%
Ag 328.068	164979.8	1.1000	mg/L	0.00521	1.1000	mg/L	0.00521	0.47%
Al 308.215	170671.4	8.8921	mg/L	0.03525	8.8921	mg/L	0.03525	0.40%
As 188.979	385.8	0.44941	mg/L	0.002988	0.44941	mg/L	0.002988	0.66%
Ba 233.527	490292.9	9.0280	mg/L	0.03467	9.0280	mg/L	0.03467	0.38%
Be 313.107	254922.6	0.21462	mg/L	0.001371	0.21462	mg/L	0.001371	0.64%
Co 228.616	57910.8	2.2322	mg/L	0.00886	2.2322	mg/L	0.00886	0.40%
Cr 267.716	44197.2	0.91129	mg/L	0.003684	0.91129	mg/L	0.003684	0.40%
Cu 324.752	172512.4	1.0916	mg/L	0.00463	1.0916	mg/L	0.00463	0.42%

Fe 273.955	101216.8	4.6402 mg/L	0.01828	4.6402 mg/L	0.01828	0.39%
Mg 279.077	386785.3	22.407 mg/L	0.0548	22.407 mg/L	0.0548	0.24%
Mn 257.610	1156782.0	2.2693 mg/L	0.00721	2.2693 mg/L	0.00721	0.32%
Ni 231.604	48755.8	2.2360 mg/L	0.01602	2.2360 mg/L	0.01602	0.72%
Pb 220.353	1901.3	0.44812 mg/L	0.003194	0.44812 mg/L	0.003194	0.71%
Sb 206.836	528.4	0.46050 mg/L	0.006009	0.46050 mg/L	0.006009	1.30%
Se 196.026	225.5	0.42848 mg/L	0.008501	0.42848 mg/L	0.008501	1.98%
Tl 190.801	460.8	0.41764 mg/L	0.008213	0.41764 mg/L	0.008213	1.97%
V 292.402	165833.8	2.2779 mg/L	0.00359	2.2779 mg/L	0.00359	0.16%
Zn 206.200	30836.5	2.1007 mg/L	0.01550	2.1007 mg/L	0.01550	0.74%
Cd 226.502	9414.3	0.21724 mg/L	0.000706	0.21724 mg/L	0.000706	0.32%
Ti 334.940	660.9	0.00132 mg/L	0.000258	0.00132 mg/L	0.000258	19.51%
Ca 227.546	3071.4	21.840 mg/L	0.1294	21.840 mg/L	0.1294	0.59%
Na 589.592	75742.2	21.796 mg/L	0.1464	21.796 mg/L	0.1464	0.67%
K 766.490	23377.7	21.829 mg/L	0.1221	21.829 mg/L	0.1221	0.56%

Sequence No.: 32

Sample ID: L0771-04E-RO-01-041812

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 5/2/2012 9:59:43 AM

Data Type: Reprocessed on 5/2/2012 11:54:14 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0771-04E-RO-01-041812

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1165409.3	94.410	%	0.6856				0.73%
Lu 261.542	1030113.3	91.26	%	0.506				0.55%
Ag 328.068	-5797.5	-0.04061	mg/L	0.001144	-0.04061	mg/L	0.001144	2.82%
Al 308.215	363873.3	18.950	mg/L	0.0980	18.950	mg/L	0.0980	0.52%
As 188.979	20725.5	24.010	mg/L	0.1442	24.010	mg/L	0.1442	0.60%
Ba 233.527	80838.7	1.4880	mg/L	0.00448	1.4880	mg/L	0.00448	0.30%
Be 313.107	1910.4	0.00231	mg/L	0.000011	0.00231	mg/L	0.000011	0.48%
Co 228.616	3854.0	0.10000	mg/L	0.001472	0.10000	mg/L	0.001472	1.47%
Cr 267.716	68528.7	1.4107	mg/L	0.00851	1.4107	mg/L	0.00851	0.60%
Cu 324.752	148695.4	1.1219	mg/L	0.00491	1.1219	mg/L	0.00491	0.44%
Fe 273.955	43060744.0	1972.5	mg/L	14.53	1972.5	mg/L	14.53	0.74%
Concentration greater than upper limit for Fe 273.955.								
Mg 279.077	118457.0	6.8596	mg/L	0.04189	6.8596	mg/L	0.04189	0.61%
Mn 257.610	5116084.2	10.038	mg/L	0.0754	10.038	mg/L	0.0754	0.75%
Ni 231.604	10381.1	0.47592	mg/L	0.002933	0.47592	mg/L	0.002933	0.62%
Pb 220.353	371.6	0.04871	mg/L	0.002148	0.04871	mg/L	0.002148	4.41%
Sb 206.836	423.9	0.29653	mg/L	0.011118	0.29653	mg/L	0.011118	3.75%
Se 196.026	-437.1	0.00793	mg/L	0.013964	0.00793	mg/L	0.013964	176.02%
Tl 190.801	-183.3	0.02592	mg/L	0.003197	0.02592	mg/L	0.003197	12.33%
V 292.402	1574.3	0.08470	mg/L	0.001301	0.08470	mg/L	0.001301	1.54%
Zn 206.200	12205.8	0.93581	mg/L	0.006730	0.93581	mg/L	0.006730	0.72%
Cd 226.502	9780.5	0.07768	mg/L	0.000568	0.07768	mg/L	0.000568	0.73%
Ti 334.940	163204.5	0.38381	mg/L	0.001562	0.38381	mg/L	0.001562	0.41%
Ca 227.546	7206.6	37.424	mg/L	0.3449	37.424	mg/L	0.3449	0.92%
Na 589.592	8733.8	2.5133	mg/L	0.03409	2.5133	mg/L	0.03409	1.36%
K 766.490	365.4	0.34121	mg/L	0.103276	0.34121	mg/L	0.103276	30.27%

Sequence No.: 33

Sample ID: L0782-01A-SO4-MW2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 5/2/2012 10:04:01 AM

Data Type: Reprocessed on 5/2/2012 11:54:15 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0782-01A-SO4-MW2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1269526.1	102.84	%	0.780				0.76%
Lu 261.542	1016966.7	90.10	%	0.982				1.09%
Ag 328.068	-382.5	-0.00822	mg/L	0.000997	-0.00822	mg/L	0.000997	12.13%
Al 308.215	6505154.8	339.18	mg/L	1.050	339.18	mg/L	1.050	0.31%

As 188.979	162.1	0.27288 mg/L	0.005511	0.27288 mg/L	0.005511	2.02%
Ba 233.527	405895.8	7.4720 mg/L	0.04595	7.4720 mg/L	0.04595	0.61%
Be 313.107	16976.3	0.01635 mg/L	0.000155	0.01635 mg/L	0.000155	0.95%
Co 228.616	11222.9	0.41337 mg/L	0.000310	0.41337 mg/L	0.000310	0.07%
Cr 267.716	24733.5	0.50265 mg/L	0.002931	0.50265 mg/L	0.002931	0.58%
Cu 324.752	160579.5	1.0787 mg/L	0.00516	1.0787 mg/L	0.00516	0.48%
Fe 273.955	15030948.7	688.52 mg/L	3.006	688.52 mg/L	3.006	0.44%
Concentration greater than upper limit for Fe 273.955.						
Mg 279.077	2833538.1	164.17 mg/L	0.867	164.17 mg/L	0.867	0.53%
Mn 257.610	15846591.8	31.089 mg/L	0.1423	31.089 mg/L	0.1423	0.46%
Concentration greater than upper limit for Mn 257.610.						
Ni 231.604	17411.3	0.79722 mg/L	0.000492	0.79722 mg/L	0.000492	0.06%
Pb 220.353	1600.3	0.39947 mg/L	0.001667	0.39947 mg/L	0.001667	0.42%
Sb 206.836	67.6	0.02187 mg/L	0.005708	0.02187 mg/L	0.005708	26.10%
Se 196.026	-124.1	0.06084 mg/L	0.004924	0.06084 mg/L	0.004924	8.09%
Tl 190.801	-40.9	0.04787 mg/L	0.005964	0.04787 mg/L	0.005964	12.46%
V 292.402	35475.8	0.50738 mg/L	0.002651	0.50738 mg/L	0.002651	0.52%
Zn 206.200	25597.4	1.7894 mg/L	0.01390	1.7894 mg/L	0.01390	0.78%
Cd 226.502	2461.1	0.00520 mg/L	0.000127	0.00520 mg/L	0.000127	2.44%
Ti 334.940	473090.8	1.1088 mg/L	0.00861	1.1088 mg/L	0.00861	0.78%
Ca 227.546	7730.1	51.080 mg/L	0.2919	51.080 mg/L	0.2919	0.57%
Na 589.592	6461.6	1.8594 mg/L	0.04477	1.8594 mg/L	0.04477	2.41%
K 766.490	32118.9	29.992 mg/L	0.2908	29.992 mg/L	0.2908	0.97%

Sequence No.: 34

Sample ID: L0795-07A~SD-1(7')

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 5/2/2012 10:08:03 AM

Data Type: Reprocessed on 5/2/2012 11:54:16 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-07A~SD-1(7')

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1182832.9	95.822	%	1.2498				1.30%
Lu 261.542	1060863.1	93.98	%	1.203				1.28%
Ag 328.068	2.1	0.00012	mg/L	0.000277	0.00012	mg/L	0.000277	228.99%
Al 308.215	975831.9	50.858	mg/L	0.4436	50.858	mg/L	0.4436	0.87%
As 188.979	77.7	0.11187	mg/L	0.002152	0.11187	mg/L	0.002152	1.92%
Ba 233.527	27526.3	0.50692	mg/L	0.002258	0.50692	mg/L	0.002258	0.45%
Be 313.107	-1533.4	0.00253	mg/L	0.000052	0.00253	mg/L	0.000052	2.06%
Co 228.616	1257.7	0.04012	mg/L	0.000531	0.04012	mg/L	0.000531	1.32%
Cr 267.716	8850.5	0.18184	mg/L	0.001413	0.18184	mg/L	0.001413	0.78%
Cu 324.752	47966.0	0.31692	mg/L	0.001222	0.31692	mg/L	0.001222	0.39%
Fe 273.955	3235314.1	148.20	mg/L	1.418	148.20	mg/L	1.418	0.96%
Mg 279.077	1241014.4	71.901	mg/L	0.7349	71.901	mg/L	0.7349	1.02%
Mn 257.610	530422.1	1.0400	mg/L	0.00897	1.0400	mg/L	0.00897	0.86%
Ni 231.604	1960.2	0.08838	mg/L	0.000476	0.08838	mg/L	0.000476	0.54%
Pb 220.353	8709.3	2.0506	mg/L	0.01178	2.0506	mg/L	0.01178	0.57%
Sb 206.836	15.2	0.00862	mg/L	0.001580	0.00862	mg/L	0.001580	18.34%
Se 196.026	-26.1	0.01511	mg/L	0.014785	0.01511	mg/L	0.014785	97.85%
Tl 190.801	-9.1	0.00977	mg/L	0.005126	0.00977	mg/L	0.005126	52.48%
V 292.402	12554.6	0.17430	mg/L	0.001123	0.17430	mg/L	0.001123	0.64%
Zn 206.200	11812.8	0.81306	mg/L	0.003501	0.81306	mg/L	0.003501	0.43%
Cd 226.502	622.4	0.00295	mg/L	0.000052	0.00295	mg/L	0.000052	1.77%
Ti 334.940	883018.5	2.0742	mg/L	0.02801	2.0742	mg/L	0.02801	1.35%
Ca 227.546	16722.9	121.74	mg/L	0.859	121.74	mg/L	0.859	0.71%
Na 589.592	1691.6	0.48679	mg/L	0.021767	0.48679	mg/L	0.021767	4.47%
K 766.490	4208.4	3.9297	mg/L	0.06645	3.9297	mg/L	0.06645	1.69%

Sequence No.: 35

Sample ID: L0795-08A~SD-2 (7')

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 5/2/2012 10:11:49 AM

Data Type: Reprocessed on 5/2/2012 11:54:17 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-08A-SD-2 (7')

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1241808.3	100.60	%	0.541				0.54%
Lu 261.542	1108329.4	98.19	%	0.477				0.49%
Ag 328.068	-86.8	-0.00044	mg/L	0.000476	-0.00044	mg/L	0.000476	107.20%
Al 308.215	766072.9	39.944	mg/L	0.1521	39.944	mg/L	0.1521	0.38%
As 188.979	253.0	0.31789	mg/L	0.002528	0.31789	mg/L	0.002528	0.80%
Ba 233.527	18478.7	0.34036	mg/L	0.002015	0.34036	mg/L	0.002015	0.59%
Be 313.107	-3281.5	0.00133	mg/L	0.000032	0.00133	mg/L	0.000032	2.37%
Co 228.616	1101.8	0.03247	mg/L	0.000443	0.03247	mg/L	0.000443	1.36%
Cr 267.716	3958.8	0.08145	mg/L	0.000745	0.08145	mg/L	0.000745	0.91%
Cu 324.752	29114.3	0.20274	mg/L	0.001269	0.20274	mg/L	0.001269	0.63%
Fe 273.955	4417131.8	202.34	mg/L	0.893	202.34	mg/L	0.893	0.44%
Mg 279.077	140678.3	8.1503	mg/L	0.04008	8.1503	mg/L	0.04008	0.49%
Mn 257.610	403824.2	0.79221	mg/L	0.003412	0.79221	mg/L	0.003412	0.43%
Ni 231.604	1352.9	0.06071	mg/L	0.001053	0.06071	mg/L	0.001053	1.73%
Pb 220.353	3125.5	0.73650	mg/L	0.005041	0.73650	mg/L	0.005041	0.68%
Sb 206.836	13.8	0.00896	mg/L	0.003358	0.00896	mg/L	0.003358	37.48%
Se 196.026	-27.5	0.03512	mg/L	0.006622	0.03512	mg/L	0.006622	18.86%
Tl 190.801	-12.9	0.00883	mg/L	0.005131	0.00883	mg/L	0.005131	58.11%
V 292.402	11519.2	0.16135	mg/L	0.000235	0.16135	mg/L	0.000235	0.15%
Zn 206.200	5998.8	0.42039	mg/L	0.005127	0.42039	mg/L	0.005127	1.22%
Cd 226.502	697.5	0.00089	mg/L	0.000403	0.00089	mg/L	0.000403	45.09%
Ti 334.940	945474.5	2.2203	mg/L	0.01179	2.2203	mg/L	0.01179	0.53%
Ca 227.546	2258.9	14.985	mg/L	0.2431	14.985	mg/L	0.2431	1.62%
Na 589.592	1215.5	0.34978	mg/L	0.010411	0.34978	mg/L	0.010411	2.98%
K 766.490	3474.9	3.2447	mg/L	0.06304	3.2447	mg/L	0.06304	1.94%

Sequence No.: 36

Sample ID: L0795-09A-GP-5 (0-6")

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 5/2/2012 10:15:31 AM

Data Type: Reprocessed on 5/2/2012 11:54:17 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-09A-GP-5 (0-6")

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1253574.1	101.55	%	0.797				0.78%
Lu 261.542	1091907.0	96.74	%	0.818				0.85%
Ag 328.068	48.9	0.00018	mg/L	0.000512	0.00018	mg/L	0.000512	288.25%
Al 308.215	1660771.7	86.593	mg/L	0.2672	86.593	mg/L	0.2672	0.31%
As 188.979	63.6	0.10123	mg/L	0.005887	0.10123	mg/L	0.005887	5.82%
Ba 233.527	28272.3	0.52070	mg/L	0.007826	0.52070	mg/L	0.007826	1.50%
Be 313.107	-1989.5	0.00358	mg/L	0.000043	0.00358	mg/L	0.000043	1.21%
Co 228.616	1927.1	0.06288	mg/L	0.000476	0.06288	mg/L	0.000476	0.76%
Cr 267.716	8225.3	0.16900	mg/L	0.003320	0.16900	mg/L	0.003320	1.96%
Cu 324.752	63465.5	0.41970	mg/L	0.005671	0.41970	mg/L	0.005671	1.35%
Fe 273.955	4369578.4	200.16	mg/L	0.652	200.16	mg/L	0.652	0.33%
Mg 279.077	322667.6	18.694	mg/L	0.3295	18.694	mg/L	0.3295	1.76%
Mn 257.610	1307092.9	2.5643	mg/L	0.01000	2.5643	mg/L	0.01000	0.39%
Ni 231.604	2617.6	0.11830	mg/L	0.000747	0.11830	mg/L	0.000747	0.63%
Pb 220.353	5091.9	1.2041	mg/L	0.00529	1.2041	mg/L	0.00529	0.44%
Sb 206.836	18.9	0.01198	mg/L	0.001921	0.01198	mg/L	0.001921	16.03%
Se 196.026	-31.0	0.02860	mg/L	0.013512	0.02860	mg/L	0.013512	47.25%
Tl 190.801	-18.2	0.00514	mg/L	0.004477	0.00514	mg/L	0.004477	87.11%
V 292.402	15203.6	0.21111	mg/L	0.002749	0.21111	mg/L	0.002749	1.30%
Zn 206.200	15693.2	1.0807	mg/L	0.01763	1.0807	mg/L	0.01763	1.63%
Cd 226.502	831.6	0.00407	mg/L	0.000188	0.00407	mg/L	0.000188	4.62%
Ti 334.940	1213509.0	2.8500	mg/L	0.01611	2.8500	mg/L	0.01611	0.57%
Ca 227.546	7059.3	50.277	mg/L	0.0397	50.277	mg/L	0.0397	0.08%
Na 589.592	1432.7	0.41228	mg/L	0.002123	0.41228	mg/L	0.002123	0.51%
K 766.490	5806.1	5.4216	mg/L	0.12017	5.4216	mg/L	0.12017	2.22%

Sequence No.: 37

Sample ID: L0795-10A-GP-5 (0-6")

Analyst:

Autosampler Location: 58

Date Collected: 5/2/2012 10:19:14 AM

Data Type: Reprocessed on 5/2/2012 11:54:18 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-10A-GP-5 (0-6")

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1234867.0	100.04	%	0.332				0.33%
Lu 261.542	1072297.7	95.00	%	0.274				0.29%
Ag 328.068	-57.8	-0.00093	mg/L	0.000434	-0.00093	mg/L	0.000434	46.57%
Al 308.215	2937890.7	153.19	mg/L	0.580	153.19	mg/L	0.580	0.38%
As 188.979	71.1	0.11475	mg/L	0.009923	0.11475	mg/L	0.009923	8.65%
Ba 233.527	39754.9	0.73235	mg/L	0.003849	0.73235	mg/L	0.003849	0.53%
Be 313.107	-3235.8	0.00514	mg/L	0.000025	0.00514	mg/L	0.000025	0.49%
Co 228.616	3044.7	0.10158	mg/L	0.000511	0.10158	mg/L	0.000511	0.50%
Cr 267.716	9472.3	0.19400	mg/L	0.001824	0.19400	mg/L	0.001824	0.94%
Cu 324.752	70610.4	0.46919	mg/L	0.002691	0.46919	mg/L	0.002691	0.57%
Fe 273.955	5383543.0	246.61	mg/L	1.230	246.61	mg/L	1.230	0.50%
Mg 279.077	363935.2	21.085	mg/L	0.1256	21.085	mg/L	0.1256	0.60%
Mn 257.610	3190615.1	6.2597	mg/L	0.02886	6.2597	mg/L	0.02886	0.46%
Ni 231.604	3947.0	0.17843	mg/L	0.000113	0.17843	mg/L	0.000113	0.06%
Pb 220.353	5361.5	1.2750	mg/L	0.00137	1.2750	mg/L	0.00137	0.11%
Sb 206.836	22.0	0.01445	mg/L	0.003016	0.01445	mg/L	0.003016	20.88%
Se 196.026	-27.5	0.05631	mg/L	0.016037	0.05631	mg/L	0.016037	28.48%
Tl 190.801	-8.7	0.02036	mg/L	0.002497	0.02036	mg/L	0.002497	12.26%
V 292.402	29959.8	0.41314	mg/L	0.002381	0.41314	mg/L	0.002381	0.58%
Zn 206.200	11269.5	0.78521	mg/L	0.008727	0.78521	mg/L	0.008727	1.11%
Cd 226.502	960.8	0.00367	mg/L	0.000358	0.00367	mg/L	0.000358	9.77%
Ti 334.940	1815611.7	4.2633	mg/L	0.01974	4.2633	mg/L	0.01974	0.46%
Ca 227.546	2810.8	18.624	mg/L	0.1138	18.624	mg/L	0.1138	0.61%
Na 589.592	1206.2	0.34712	mg/L	0.014813	0.34712	mg/L	0.014813	4.27%
K 766.490	7607.8	7.1039	mg/L	0.06330	7.1039	mg/L	0.06330	0.89%

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Sequence No.: 38

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 10:23:04 AM

Data Type: Reprocessed on 5/2/2012 11:54:19 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1207081.0	97.786	%	0.3280				0.34%
Lu 261.542	1097635.1	97.24	%	0.197				0.20%
Ag 328.068	186776.7	1.2452	mg/L	0.00048	1.2452	mg/L	0.00048	0.04%
QC value within limits for Ag 328.068 Recovery = 99.62%								
Al 308.215	190871.3	9.9438	mg/L	0.02308	9.9438	mg/L	0.02308	0.23%
QC value within limits for Al 308.215 Recovery = 99.44%								
As 188.979	419.9	0.48921	mg/L	0.002116	0.48921	mg/L	0.002116	0.43%
QC value within limits for As 188.979 Recovery = 97.84%								
Ba 233.527	550696.0	10.140	mg/L	0.0221	10.140	mg/L	0.0221	0.22%
QC value within limits for Ba 233.527 Recovery = 101.40%								
Be 313.107	281032.9	0.23747	mg/L	0.001577	0.23747	mg/L	0.001577	0.66%
QC value within limits for Be 313.107 Recovery = 94.99%								
Co 228.616	66489.9	2.5618	mg/L	0.00785	2.5618	mg/L	0.00785	0.31%
QC value within limits for Co 228.616 Recovery = 102.47%								
Cr 267.716	48081.4	0.99137	mg/L	0.001989	0.99137	mg/L	0.001989	0.20%
QC value within limits for Cr 267.716 Recovery = 99.14%								
Cu 324.752	191607.9	1.2124	mg/L	0.00142	1.2124	mg/L	0.00142	0.12%
QC value within limits for Cu 324.752 Recovery = 97.00%								
Fe 273.955	110135.2	5.0491	mg/L	0.00445	5.0491	mg/L	0.00445	0.09%
QC value within limits for Fe 273.955 Recovery = 100.98%								
Mg 279.077	434840.9	25.191	mg/L	0.0765	25.191	mg/L	0.0765	0.30%
QC value within limits for Mg 279.077 Recovery = 100.76%								
Mn 257.610	1296301.8	2.5429	mg/L	0.01129	2.5429	mg/L	0.01129	0.44%
QC value within limits for Mn 257.610 Recovery = 101.72%								
Ni 231.604	54847.9	2.5151	mg/L	0.00859	2.5151	mg/L	0.00859	0.34%

QC value within limits for Ni 231.604 Recovery = 100.60%

Pb 220.353 2101.0 0.49570 mg/L 0.005368 0.49570 mg/L 0.005368 1.08%

QC value within limits for Pb 220.353 Recovery = 99.14%

Sb 206.836 542.3 0.47286 mg/L 0.001879 0.47286 mg/L 0.001879 0.40%

QC value within limits for Sb 206.836 Recovery = 94.57%

Se 196.026 255.5 0.48583 mg/L 0.003626 0.48583 mg/L 0.003626 0.75%

QC value within limits for Se 196.026 Recovery = 97.17%

Tl 190.801 514.9 0.46641 mg/L 0.003262 0.46641 mg/L 0.003262 0.70%

QC value within limits for Tl 190.801 Recovery = 93.28%

V 292.402 184818.8 2.5380 mg/L 0.00804 2.5380 mg/L 0.00804 0.32%

QC value within limits for V 292.402 Recovery = 101.52%

Zn 206.200 35145.1 2.3945 mg/L 0.00593 2.3945 mg/L 0.00593 0.25%

QC value within limits for Zn 206.200 Recovery = 95.78%

Cd 226.502 10371.3 0.23934 mg/L 0.000645 0.23934 mg/L 0.000645 0.27%

QC value within limits for Cd 226.502 Recovery = 95.74%

Ti 334.940 200701.7 0.47103 mg/L 0.000639 0.47103 mg/L 0.000639 0.14%

QC value within limits for Ti 334.940 Recovery = Not calculated

Ca 227.546 3443.0 24.465 mg/L 0.1163 24.465 mg/L 0.1163 0.48%

QC value within limits for Ca 227.546 Recovery = 97.86%

Na 589.592 84593.3 24.343 mg/L 0.1284 24.343 mg/L 0.1284 0.53%

QC value within limits for Na 589.592 Recovery = 97.37%

K 766.490 26454.0 24.702 mg/L 0.2255 24.702 mg/L 0.2255 0.91%

QC value within limits for K 766.490 Recovery = 98.81%

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/2/2012 10:26:45 AM

Data Type: Reprocessed on 5/2/2012 11:54:20 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1281156.9	103.79 %	%	0.994			0.96%
Lu 261.542	1148082.5	101.7 %	%	0.98			0.96%
Ag 328.068	237.0	0.00157 mg/L	mg/L	0.000594	0.00157 mg/L	0.000594	37.71%
QC value within limits for Ag 328.068							Recovery = Not calculated
Al 308.215	62.2	0.00323 mg/L	mg/L	0.003416	0.00323 mg/L	0.003416	105.64%
QC value within limits for Al 308.215							Recovery = Not calculated
As 188.979	8.0	0.00911 mg/L	mg/L	0.004971	0.00911 mg/L	0.004971	54.59%
QC value within limits for As 188.979							Recovery = Not calculated
Ba 233.527	68.0	0.00125 mg/L	mg/L	0.000448	0.00125 mg/L	0.000448	35.77%
QC value within limits for Ba 233.527							Recovery = Not calculated
Be 313.107	74.0	0.00006 mg/L	mg/L	0.000045	0.00006 mg/L	0.000045	71.27%
QC value within limits for Be 313.107							Recovery = Not calculated
Co 228.616	22.4	0.00086 mg/L	mg/L	0.000349	0.00086 mg/L	0.000349	40.45%
QC value within limits for Co 228.616							Recovery = Not calculated
Cr 267.716	-6.9	-0.00014 mg/L	mg/L	0.000259	-0.00014 mg/L	0.000259	181.74%
QC value within limits for Cr 267.716							Recovery = Not calculated
Cu 324.752	144.3	0.00091 mg/L	mg/L	0.000443	0.00091 mg/L	0.000443	48.50%
QC value within limits for Cu 324.752							Recovery = Not calculated
Fe 273.955	357.9	0.01640 mg/L	mg/L	0.006881	0.01640 mg/L	0.006881	41.97%
QC value within limits for Fe 273.955							Recovery = Not calculated
Mg 279.077	32.2	0.00187 mg/L	mg/L	0.004542	0.00187 mg/L	0.004542	243.37%
QC value within limits for Mg 279.077							Recovery = Not calculated
Mn 257.610	312.4	0.00061 mg/L	mg/L	0.000214	0.00061 mg/L	0.000214	34.94%
QC value within limits for Mn 257.610							Recovery = Not calculated
Ni 231.604	28.2	0.00130 mg/L	mg/L	0.000281	0.00130 mg/L	0.000281	21.65%
QC value within limits for Ni 231.604							Recovery = Not calculated
Pb 220.353	1.6	0.00037 mg/L	mg/L	0.001662	0.00037 mg/L	0.001662	453.69%
QC value within limits for Pb 220.353							Recovery = Not calculated
Sb 206.836	6.6	0.00599 mg/L	mg/L	0.001548	0.00599 mg/L	0.001548	25.85%
QC value within limits for Sb 206.836							Recovery = Not calculated
Se 196.026	3.1	0.00587 mg/L	mg/L	0.004896	0.00587 mg/L	0.004896	83.36%
QC value within limits for Se 196.026							Recovery = Not calculated
Tl 190.801	-4.2	-0.00396 mg/L	mg/L	0.002550	-0.00396 mg/L	0.002550	64.40%
QC value within limits for Tl 190.801							Recovery = Not calculated

V 292.402 5.9 0.00008 mg/L 0.000504 0.00008 mg/L 0.000504 633.64%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200 12.7 0.00086 mg/L 0.000249 0.00086 mg/L 0.000249 28.86%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502 -3.6 -0.00008 mg/L 0.000170 -0.00008 mg/L 0.000170 205.12%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940 294.3 0.00069 mg/L 0.000129 0.00069 mg/L 0.000129 18.67%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 6.5 0.04746 mg/L 0.021519 0.04746 mg/L 0.021519 45.34%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 -214.8 -0.06182 mg/L 0.013251 -0.06182 mg/L 0.013251 21.44%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 -3.8 -0.00356 mg/L 0.061797 -0.00356 mg/L 0.061797 >999.9%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 40

Sample ID: L0795-11A-GP-1 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 5/2/2012 10:30:30 AM

Data Type: Reprocessed on 5/2/2012 11:54:20 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-11A-GP-1 (7-8)

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1231532.3	99.767	%	0.7282			0.73%
Lu 261.542	1103585.6	97.77	%	0.695			0.71%
Ag 328.068	-211.7	-0.00117	mg/L	0.000202	-0.00117	0.000202	17.25%
Al 308.215	1452352.7	75.736	mg/L	0.3568	75.736	0.3568	0.47%
As 188.979	131.7	0.17970	mg/L	0.003551	0.17970	0.003551	1.98%
Ba 233.527	21646.3	0.39868	mg/L	0.000142	0.39868	0.000142	0.04%
Be 313.107	-4964.8	0.00091	mg/L	0.000049	0.00091	0.000049	5.38%
Co 228.616	755.0	0.01799	mg/L	0.000293	0.01799	0.000293	1.63%
Cr 267.716	12727.9	0.26232	mg/L	0.000863	0.26232	0.000863	0.33%
Cu 324.752	30737.7	0.21248	mg/L	0.000458	0.21248	0.000458	0.22%
Fe 273.955	4292762.0	196.64	mg/L	0.773	196.64	0.773	0.39%
Mg 279.077	144599.1	8.3770	mg/L	0.02386	8.3770	0.02386	0.28%
Mn 257.610	209807.0	0.41155	mg/L	0.000777	0.41155	0.000777	0.19%
Ni 231.604	1092.8	0.04846	mg/L	0.000773	0.04846	0.000773	1.59%
Pb 220.353	451.1	0.11243	mg/L	0.002996	0.11243	0.002996	2.66%
Sb 206.836	23.5	0.01475	mg/L	0.002071	0.01475	0.002071	14.04%
Se 196.026	-28.0	0.03249	mg/L	0.006910	0.03249	0.006910	21.27%
Tl 190.801	-17.1	0.00485	mg/L	0.001738	0.00485	0.001738	35.84%
V 292.402	12313.6	0.17173	mg/L	0.001069	0.17173	0.001069	0.62%
Zn 206.200	1796.3	0.13511	mg/L	0.000957	0.13511	0.000957	0.71%
Cd 226.502	613.9	-0.00059	mg/L	0.000096	-0.00059	0.000096	16.21%
Ti 334.940	1176490.0	2.7626	mg/L	0.01831	2.7626	0.01831	0.66%
Ca 227.546	1240.5	7.5403	mg/L	0.04898	7.5403	0.04898	0.65%
Na 589.592	3347.3	0.96324	mg/L	0.027318	0.96324	0.027318	2.84%
K 766.490	3832.3	3.5785	mg/L	0.05839	3.5785	0.05839	1.63%

Sequence No.: 41

Sample ID: L0795-12A-GP-2 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 5/2/2012 10:34:13 AM

Data Type: Reprocessed on 5/2/2012 11:54:21 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-12A-GP-2 (7-8)

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1226154.9	99.331	%	0.3305			0.33%
Lu 261.542	1102245.5	97.65	%	0.547			0.56%
Ag 328.068	-11.8	0.00010	mg/L	0.000921	0.00010	0.000921	927.84%
Al 308.215	908499.1	47.374	mg/L	0.1665	47.374	0.1665	0.35%
As 188.979	90.7	0.11783	mg/L	0.007092	0.11783	0.007092	6.02%

Ba 233.527	4605.5	0.08492 mg/L	0.000447	0.08492 mg/L	0.000447	0.53%
Be 313.107	-2083.5	0.00140 mg/L	0.000043	0.00140 mg/L	0.000043	3.11%
Co 228.616	299.2	0.00524 mg/L	0.000079	0.00524 mg/L	0.000079	1.52%
Cr 267.716	3501.2	0.07218 mg/L	0.000826	0.07218 mg/L	0.000826	1.14%
Cu 324.752	17325.3	0.11856 mg/L	0.000766	0.11856 mg/L	0.000766	0.65%
Fe 273.955	2135035.4	97.800 mg/L	0.4483	97.800 mg/L	0.4483	0.46%
Mg 279.077	46019.8	2.6661 mg/L	0.00725	2.6661 mg/L	0.00725	0.27%
Mn 257.610	44959.3	0.08818 mg/L	0.000442	0.08818 mg/L	0.000442	0.50%
Ni 231.604	327.3	0.01400 mg/L	0.000786	0.01400 mg/L	0.000786	5.62%
Pb 220.353	278.4	0.06993 mg/L	0.000501	0.06993 mg/L	0.000501	0.72%
Sb 206.836	14.1	0.01112 mg/L	0.006156	0.01112 mg/L	0.006156	55.38%
Se 196.026	-10.3	0.02334 mg/L	0.009155	0.02334 mg/L	0.009155	39.22%
Tl 190.801	-14.8	-0.00350 mg/L	0.006493	-0.00350 mg/L	0.006493	185.48%
V 292.402	7509.5	0.10382 mg/L	0.001306	0.10382 mg/L	0.001306	1.26%
Zn 206.200	631.0	0.04950 mg/L	0.000240	0.04950 mg/L	0.000240	0.48%
Cd 226.502	294.4	-0.00057 mg/L	0.000104	-0.00057 mg/L	0.000104	18.11%
Ti 334.940	727403.4	1.7083 mg/L	0.00574	1.7083 mg/L	0.00574	0.34%
Ca 227.546	2012.7	14.015 mg/L	0.1061	14.015 mg/L	0.1061	0.76%
Na 589.592	294.4	0.08473 mg/L	0.019770	0.08473 mg/L	0.019770	23.33%
K 766.490	1449.7	1.3537 mg/L	0.03149	1.3537 mg/L	0.03149	2.33%

Sequence No.: 42

Sample ID: L0795-13A-GP-3 (8-9)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 5/2/2012 10:37:54 AM

Data Type: Reprocessed on 5/2/2012 11:54:22 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-13A-GP-3 (8-9)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1224625.7	99.207	%	0.4850				0.49%
Lu 261.542	1095605.8	97.06	%	0.464				0.48%
Ag 328.068	-380.9	-0.00237	mg/L	0.000453	-0.00237	mg/L	0.000453	19.12%
Al 308.215	1041735.5	54.319	mg/L	0.2130	54.319	mg/L	0.2130	0.39%
As 188.979	367.2	0.46280	mg/L	0.009014	0.46280	mg/L	0.009014	1.95%
Ba 233.527	23414.3	0.43122	mg/L	0.005815	0.43122	mg/L	0.005815	1.35%
Be 313.107	-5552.9	0.00147	mg/L	0.000099	0.00147	mg/L	0.000099	6.70%
Co 228.616	1392.6	0.03866	mg/L	0.000370	0.03866	mg/L	0.000370	0.96%
Cr 267.716	5206.7	0.10719	mg/L	0.000864	0.10719	mg/L	0.000864	0.81%
Cu 324.752	19296.8	0.15007	mg/L	0.001096	0.15007	mg/L	0.001096	0.73%
Fe 273.955	6638884.2	304.11	mg/L	1.367	304.11	mg/L	1.367	0.45%
Mg 279.077	148616.4	8.6102	mg/L	0.11841	8.6102	mg/L	0.11841	1.38%
Mn 257.610	369439.8	0.72474	mg/L	0.009132	0.72474	mg/L	0.009132	1.26%
Saturated outside survey window (code 6)								
Ni 231.604	1561.5	0.06962	mg/L	0.000561	0.06962	mg/L	0.000561	0.81%
Pb 220.353	1640.3	0.38798	mg/L	0.002423	0.38798	mg/L	0.002423	0.62%
Sb 206.836	25.1	0.01784	mg/L	0.001520	0.01784	mg/L	0.001520	8.52%
Se 196.026	-43.0	0.04964	mg/L	0.009692	0.04964	mg/L	0.009692	19.53%
Tl 190.801	-21.0	0.01176	mg/L	0.003051	0.01176	mg/L	0.003051	25.94%
V 292.402	12075.4	0.17064	mg/L	0.002088	0.17064	mg/L	0.002088	1.22%
Zn 206.200	2860.0	0.21312	mg/L	0.000615	0.21312	mg/L	0.000615	0.29%
Cd 226.502	980.4	-0.00020	mg/L	0.000154	-0.00020	mg/L	0.000154	76.49%
Ti 334.940	1419590.0	3.3335	mg/L	0.01660	3.3335	mg/L	0.01660	0.50%
Ca 227.546	1940.1	11.831	mg/L	0.0705	11.831	mg/L	0.0705	0.60%
Na 589.592	6423.9	1.8486	mg/L	0.02517	1.8486	mg/L	0.02517	1.36%
K 766.490	5444.8	5.0842	mg/L	0.08010	5.0842	mg/L	0.08010	1.58%

Sequence No.: 43

Sample ID: L0795-14A-GP-4 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 5/2/2012 10:41:38 AM

Data Type: Reprocessed on 5/2/2012 11:54:22 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-14A-GP-4 (7-8)

Mean Corrected

Calib.

Sample

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1207885.4	97.851 %	0.3217			0.33%
Lu 261.542	1074461.0	95.19 %	0.283			0.30%
Ag 328.068	-91.1	-0.00072 mg/L	0.000378	-0.00072 mg/L	0.000378	52.78%
Al 308.215	1987548.8	103.64 mg/L	0.439	103.64 mg/L	0.439	0.42%
As 188.979	25.9	0.04765 mg/L	0.005184	0.04765 mg/L	0.005184	10.88%
Ba 233.527	19619.5	0.36139 mg/L	0.005285	0.36139 mg/L	0.005285	1.46%
Be 313.107	-2985.2	0.00288 mg/L	0.000062	0.00288 mg/L	0.000062	2.16%
Co 228.616	1791.3	0.05919 mg/L	0.000112	0.05919 mg/L	0.000112	0.19%
Cr 267.716	6269.6	0.12879 mg/L	0.001322	0.12879 mg/L	0.001322	1.03%
Cu 324.752	27280.8	0.18439 mg/L	0.002619	0.18439 mg/L	0.002619	1.42%
Fe 273.955	2815330.6	128.96 mg/L	0.550	128.96 mg/L	0.550	0.43%
Mg 279.077	254763.1	14.760 mg/L	0.1869	14.760 mg/L	0.1869	1.27%
Mn 257.610	1076093.0	2.1111 mg/L	0.00938	2.1111 mg/L	0.00938	0.44%
Ni 231.604	1977.4	0.08891 mg/L	0.000117	0.08891 mg/L	0.000117	0.13%
Pb 220.353	448.0	0.11626 mg/L	0.001906	0.11626 mg/L	0.001906	1.64%
Sb 206.836	14.9	0.01101 mg/L	0.008214	0.01101 mg/L	0.008214	74.60%
Se 196.026	-21.8	0.01622 mg/L	0.011374	0.01622 mg/L	0.011374	70.11%
Tl 190.801	-19.4	-0.00299 mg/L	0.002954	-0.00299 mg/L	0.002954	98.74%
V 292.402	12885.2	0.17697 mg/L	0.002290	0.17697 mg/L	0.002290	1.29%
Zn 206.200	3587.1	0.25402 mg/L	0.000714	0.25402 mg/L	0.000714	0.28%
Cd 226.502	409.4	-0.00024 mg/L	0.000240	-0.00024 mg/L	0.000240	100.29%
Ti 334.940	1245771.0	2.9253 mg/L	0.02378	2.9253 mg/L	0.02378	0.81%
Ca 227.546	2075.0	14.186 mg/L	0.0383	14.186 mg/L	0.0383	0.27%
Na 589.592	947.8	0.27275 mg/L	0.025585	0.27275 mg/L	0.025585	9.38%
K 766.490	6576.2	6.1407 mg/L	0.06918	6.1407 mg/L	0.06918	1.13%

Sequence No.: 44

Sample ID: L0795-15A-GP-5 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 63

Date Collected: 5/2/2012 10:45:20 AM

Data Type: Reprocessed on 5/2/2012 11:54:23 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-15A-GP-5 (7-8)

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1251656.3	101.40 %	0.275			0.27%
Lu 261.542	1082877.3	95.94 %	0.162			0.17%
Ag 328.068	-182.2	-0.00109 mg/L	0.000687	-0.00109 mg/L	0.000687	63.25%
Al 308.215	2606210.6	135.91 mg/L	0.430	135.91 mg/L	0.430	0.32%
As 188.979	126.3	0.17119 mg/L	0.002518	0.17119 mg/L	0.002518	1.47%
Ba 233.527	42597.6	0.78457 mg/L	0.007938	0.78457 mg/L	0.007938	1.01%
Be 313.107	-673.5	0.00683 mg/L	0.000077	0.00683 mg/L	0.000077	1.13%
Co 228.616	2182.3	0.07027 mg/L	0.000171	0.07027 mg/L	0.000171	0.24%
Cr 267.716	9259.5	0.19039 mg/L	0.003243	0.19039 mg/L	0.003243	1.70%
Cu 324.752	336075.1	2.1421 mg/L	0.00780	2.1421 mg/L	0.00780	0.36%
Fe 273.955	4161038.7	190.61 mg/L	0.508	190.61 mg/L	0.508	0.27%
Mg 279.077	293979.4	17.032 mg/L	0.2079	17.032 mg/L	0.2079	1.22%
Mn 257.610	1245033.3	2.4426 mg/L	0.00716	2.4426 mg/L	0.00716	0.29%
Ni 231.604	3331.0	0.15035 mg/L	0.000647	0.15035 mg/L	0.000647	0.43%
Pb 220.353	5181.5	1.2310 mg/L	0.00264	1.2310 mg/L	0.00264	0.21%
Sb 206.836	23.0	0.01642 mg/L	0.003531	0.01642 mg/L	0.003531	21.51%
Se 196.026	-24.9	0.03774 mg/L	0.002829	0.03774 mg/L	0.002829	7.50%
Tl 190.801	-11.7	0.01099 mg/L	0.001946	0.01099 mg/L	0.001946	17.71%
V 292.402	24595.1	0.33760 mg/L	0.004553	0.33760 mg/L	0.004553	1.35%
Zn 206.200	24447.5	1.6769 mg/L	0.02034	1.6769 mg/L	0.02034	1.21%
Cd 226.502	831.7	0.00491 mg/L	0.000056	0.00491 mg/L	0.000056	1.13%
Ti 334.940	1707035.3	4.0082 mg/L	0.01796	4.0082 mg/L	0.01796	0.45%
Ca 227.546	1097.7	6.4881 mg/L	0.11582	6.4881 mg/L	0.11582	1.79%
Na 589.592	1301.9	0.37463 mg/L	0.031466	0.37463 mg/L	0.031466	8.40%
K 766.490	7044.7	6.5781 mg/L	0.11316	6.5781 mg/L	0.11316	1.72%

Sequence No.: 45

Sample ID: L0795-16A-GP-6 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 64

Date Collected: 5/2/2012 10:49:04 AM

Data Type: Reprocessed on 5/2/2012 11:54:24 AM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L0795-16A-GP-6 (7-8)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1244524.7	100.82	%	0.162				0.16%
Lu 261.542	1106257.8	98.01	%	0.273				0.28%
Ag 328.068	87.6	-0.00168	mg/L	0.000771	-0.00168	mg/L	0.000771	45.86%
Al 308.215	1773299.1	92.456	mg/L	0.0492	92.456	mg/L	0.0492	0.05%
As 188.979	14.4	0.03652	mg/L	0.002322	0.03652	mg/L	0.002322	6.36%
Ba 233.527	16793.4	0.30934	mg/L	0.002816	0.30934	mg/L	0.002816	0.91%
Be 313.107	-4063.4	0.00233	mg/L	0.000076	0.00233	mg/L	0.000076	3.25%
Co 228.616	3924.5	0.14014	mg/L	0.000403	0.14014	mg/L	0.000403	0.29%
Cr 267.716	5773.9	0.11655	mg/L	0.002099	0.11655	mg/L	0.002099	1.80%
Cu 324.752	13716.0	0.10185	mg/L	0.001303	0.10185	mg/L	0.001303	1.28%
Fe 273.955	3574458.2	163.74	mg/L	0.246	163.74	mg/L	0.246	0.15%
Mg 279.077	190398.7	11.031	mg/L	0.1331	11.031	mg/L	0.1331	1.21%
Mn 257.610	6157595.6	12.081	mg/L	0.0133	12.081	mg/L	0.0133	0.11%
Ni 231.604	3576.0	0.16213	mg/L	0.000685	0.16213	mg/L	0.000685	0.42%
Pb 220.353	748.1	0.18575	mg/L	0.003251	0.18575	mg/L	0.003251	1.75%
Sb 206.836	15.4	0.01140	mg/L	0.006756	0.01140	mg/L	0.006756	59.25%
Se 196.026	-31.2	0.01311	mg/L	0.014963	0.01311	mg/L	0.014963	114.10%
Tl 190.801	-4.4	0.01735	mg/L	0.002412	0.01735	mg/L	0.002412	13.90%
V 292.402	11639.7	0.16068	mg/L	0.001867	0.16068	mg/L	0.001867	1.16%
Zn 206.200	2766.8	0.20417	mg/L	0.000528	0.20417	mg/L	0.000528	0.26%
Cd 226.502	533.9	0.00007	mg/L	0.000155	0.00007	mg/L	0.000155	209.84%
Ti 334.940	1327388.8	3.1168	mg/L	0.00545	3.1168	mg/L	0.00545	0.17%
Ca 227.546	428.3	1.7425	mg/L	0.06887	1.7425	mg/L	0.06887	3.95%
Na 589.592	394.7	0.11359	mg/L	0.038994	0.11359	mg/L	0.038994	34.33%
K 766.490	4947.3	4.6196	mg/L	0.10458	4.6196	mg/L	0.10458	2.26%

Sequence No.: 46

Sample ID: L0795-17A-GP-7 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 5/2/2012 10:52:47 AM

Data Type: Reprocessed on 5/2/2012 11:54:25 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-17A-GP-7 (7-8)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1244676.3	100.83	%	1.081				1.07%
Lu 261.542	1120460.4	99.26	%	1.197				1.21%
Ag 328.068	-79.0	-0.00042	mg/L	0.000369	-0.00042	mg/L	0.000369	88.14%
Al 308.215	1699678.7	88.636	mg/L	0.9717	88.636	mg/L	0.9717	1.10%
As 188.979	14.0	0.03101	mg/L	0.006716	0.03101	mg/L	0.006716	21.66%
Ba 233.527	11017.0	0.20299	mg/L	0.001742	0.20299	mg/L	0.001742	0.86%
Be 313.107	-1957.0	0.00236	mg/L	0.000071	0.00236	mg/L	0.000071	3.01%
Co 228.616	962.9	0.02950	mg/L	0.000096	0.02950	mg/L	0.000096	0.33%
Cr 267.716	4895.9	0.10076	mg/L	0.001226	0.10076	mg/L	0.001226	1.22%
Cu 324.752	6584.2	0.05161	mg/L	0.000232	0.05161	mg/L	0.000232	0.45%
Fe 273.955	2358284.9	108.03	mg/L	1.366	108.03	mg/L	1.366	1.26%
Mg 279.077	162514.9	9.4154	mg/L	0.09599	9.4154	mg/L	0.09599	1.02%
Mn 257.610	388366.4	0.76187	mg/L	0.007424	0.76187	mg/L	0.007424	0.97%
Ni 231.604	1290.5	0.05787	mg/L	0.000181	0.05787	mg/L	0.000181	0.31%
Pb 220.353	172.9	0.04972	mg/L	0.000596	0.04972	mg/L	0.000596	1.20%
Sb 206.836	12.7	0.00887	mg/L	0.002966	0.00887	mg/L	0.002966	33.46%
Se 196.026	-13.1	0.02300	mg/L	0.007953	0.02300	mg/L	0.007953	34.57%
Tl 190.801	-11.7	0.00141	mg/L	0.003013	0.00141	mg/L	0.003013	213.97%
V 292.402	10263.5	0.14137	mg/L	0.001160	0.14137	mg/L	0.001160	0.82%
Zn 206.200	1660.9	0.12074	mg/L	0.000300	0.12074	mg/L	0.000300	0.25%
Cd 226.502	314.9	-0.00083	mg/L	0.000116	-0.00083	mg/L	0.000116	14.01%
Ti 334.940	924416.4	2.1706	mg/L	0.02709	2.1706	mg/L	0.02709	1.25%
Ca 227.546	457.9	2.4813	mg/L	0.08623	2.4813	mg/L	0.08623	3.47%
Na 589.592	425.2	0.12236	mg/L	0.064563	0.12236	mg/L	0.064563	52.77%
K 766.490	3203.1	2.9910	mg/L	0.13260	2.9910	mg/L	0.13260	4.43%

Sequence No.: 47

Sample ID: L0795-18A-GP-8 (7-8)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 5/2/2012 10:56:28 AM

Data Type: Reprocessed on 5/2/2012 11:54:25 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-18A-GP-8 (7-8)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1207545.3	97.824	%	0.5690				0.58%
Lu 261.542	1066334.9	94.47	%	0.442				0.47%
Ag 328.068	-85.5	-0.00050	mg/L	0.001053	-0.00050	mg/L	0.001053	212.43%
Al 308.215	1723145.5	89.851	mg/L	0.5433	89.851	mg/L	0.5433	0.60%
As 188.979	7.3	0.03000	mg/L	0.004984	0.03000	mg/L	0.004984	16.61%
Ba 233.527	17697.3	0.32602	mg/L	0.002443	0.32602	mg/L	0.002443	0.75%
Be 313.107	-10674.8	0.00139	mg/L	0.000103	0.00139	mg/L	0.000103	7.42%
Co 228.616	2358.3	0.07437	mg/L	0.000384	0.07437	mg/L	0.000384	0.52%
Cr 267.716	7795.9	0.16036	mg/L	0.001117	0.16036	mg/L	0.001117	0.70%
Cu 324.752	19315.8	0.13572	mg/L	0.001204	0.13572	mg/L	0.001204	0.89%
Fe 273.955	3213037.9	147.18	mg/L	0.977	147.18	mg/L	0.977	0.66%
Mg 279.077	377027.9	21.844	mg/L	0.1503	21.844	mg/L	0.1503	0.69%
Mn 257.610	692977.9	1.3594	mg/L	0.00948	1.3594	mg/L	0.00948	0.70%
Ni 231.604	2842.6	0.12697	mg/L	0.000392	0.12697	mg/L	0.000392	0.31%
Pb 220.353	153.6	0.04795	mg/L	0.000761	0.04795	mg/L	0.000761	1.59%
Sb 206.836	12.5	0.01443	mg/L	0.008679	0.01443	mg/L	0.008679	60.13%
Se 196.026	-23.0	0.02311	mg/L	0.019098	0.02311	mg/L	0.019098	82.66%
Tl 190.801	-17.5	0.00102	mg/L	0.006090	0.00102	mg/L	0.006090	597.58%
V 292.402	13814.1	0.18659	mg/L	0.001064	0.18659	mg/L	0.001064	0.57%
Zn 206.200	3251.4	0.23424	mg/L	0.001074	0.23424	mg/L	0.001074	0.46%
Cd 226.502	466.0	-0.00028	mg/L	0.000140	-0.00028	mg/L	0.000140	51.04%
Ti 334.940	2397233.9	5.6289	mg/L	0.02136	5.6289	mg/L	0.02136	0.38%
Ca 227.546	1267.9	8.0797	mg/L	0.02557	8.0797	mg/L	0.02557	0.32%
Na 589.592	613.1	0.17642	mg/L	0.011889	0.17642	mg/L	0.011889	6.74%
K 766.490	16882.2	15.764	mg/L	0.0768	15.764	mg/L	0.0768	0.49%

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Sequence No.: 48

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 11:00:15 AM

Data Type: Reprocessed on 5/2/2012 11:54:26 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1198806.3	97.116	%	0.4212				0.43%
Lu 261.542	1087855.5	96.38	%	0.362				0.38%
Ag 328.068	187546.9	1.2504	mg/L	0.00899	1.2504	mg/L	0.00899	0.72%
QC value within limits for Ag 328.068 Recovery = 100.03%								
Al 308.215	191487.0	9.9758	mg/L	0.07069	9.9758	mg/L	0.07069	0.71%
QC value within limits for Al 308.215 Recovery = 99.76%								
As 188.979	420.1	0.48947	mg/L	0.002720	0.48947	mg/L	0.002720	0.56%
QC value within limits for As 188.979 Recovery = 97.89%								
Ba 233.527	551628.4	10.157	mg/L	0.0474	10.157	mg/L	0.0474	0.47%
QC value within limits for Ba 233.527 Recovery = 101.57%								
Be 313.107	282329.6	0.23857	mg/L	0.001119	0.23857	mg/L	0.001119	0.47%
QC value within limits for Be 313.107 Recovery = 95.43%								
Co 228.616	66829.6	2.5749	mg/L	0.02167	2.5749	mg/L	0.02167	0.84%
QC value within limits for Co 228.616 Recovery = 103.00%								
Cr 267.716	48419.2	0.99834	mg/L	0.009063	0.99834	mg/L	0.009063	0.91%
QC value within limits for Cr 267.716 Recovery = 99.83%								
Cu 324.752	192649.3	1.2190	mg/L	0.00764	1.2190	mg/L	0.00764	0.63%
QC value within limits for Cu 324.752 Recovery = 97.52%								
Fe 273.955	110255.0	5.0546	mg/L	0.04361	5.0546	mg/L	0.04361	0.86%
QC value within limits for Fe 273.955 Recovery = 101.09%								
Mg 279.077	436546.9	25.290	mg/L	0.1522	25.290	mg/L	0.1522	0.60%
QC value within limits for Mg 279.077 Recovery = 101.16%								

Mn	257.610	1299970.3	2.5501 mg/L	0.01316	2.5501 mg/L	0.01316	0.52%
	QC value within limits for Mn 257.610 Recovery = 102.01%						
Ni	231.604	55111.9	2.5272 mg/L	0.01993	2.5272 mg/L	0.01993	0.79%
	QC value within limits for Ni 231.604 Recovery = 101.09%						
Pb	220.353	2103.1	0.49619 mg/L	0.002379	0.49619 mg/L	0.002379	0.48%
	QC value within limits for Pb 220.353 Recovery = 99.24%						
Sb	206.836	548.5	0.47831 mg/L	0.006927	0.47831 mg/L	0.006927	1.45%
	QC value within limits for Sb 206.836 Recovery = 95.66%						
Se	196.026	267.7	0.50877 mg/L	0.001897	0.50877 mg/L	0.001897	0.37%
	QC value within limits for Se 196.026 Recovery = 101.75%						
Tl	190.801	510.0	0.46165 mg/L	0.003559	0.46165 mg/L	0.003559	0.77%
	QC value within limits for Tl 190.801 Recovery = 92.33%						
V	292.402	185658.4	2.5495 mg/L	0.01667	2.5495 mg/L	0.01667	0.65%
	QC value within limits for V 292.402 Recovery = 101.98%						
Zn	206.200	35215.2	2.3993 mg/L	0.02478	2.3993 mg/L	0.02478	1.03%
	QC value within limits for Zn 206.200 Recovery = 95.97%						
Cd	226.502	10428.3	0.24065 mg/L	0.000619	0.24065 mg/L	0.000619	0.26%
	QC value within limits for Cd 226.502 Recovery = 96.26%						
Ti	334.940	201946.0	0.47395 mg/L	0.002714	0.47395 mg/L	0.002714	0.57%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca	227.546	3467.5	24.641 mg/L	0.1449	24.641 mg/L	0.1449	0.59%
	QC value within limits for Ca 227.546 Recovery = 98.56%						
Na	589.592	85107.7	24.491 mg/L	0.2447	24.491 mg/L	0.2447	1.00%
	QC value within limits for Na 589.592 Recovery = 97.96%						
K	766.490	26411.2	24.662 mg/L	0.2614	24.662 mg/L	0.2614	1.06%
	QC value within limits for K 766.490 Recovery = 98.65%						

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/2/2012 11:03:56 AM

Data Type: Reprocessed on 5/2/2012 11:54:27 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1288858.1	104.41 %		0.806			0.77%
Lu 261.542	1151412.1	102.0 %		0.59			0.58%
Ag 328.068	278.6	0.00185 mg/L		0.000482	0.00185 mg/L	0.000482	26.06%
	QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215	103.3	0.00534 mg/L		0.004384	0.00534 mg/L	0.004384	82.02%
	QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979	-0.1	-0.00013 mg/L		0.000271	-0.00013 mg/L	0.000271	203.78%
	QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527	66.0	0.00121 mg/L		0.000245	0.00121 mg/L	0.000245	20.16%
	QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107	-5.8	0.00000 mg/L		0.000045	0.00000 mg/L	0.000045	>999.9%
	QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616	14.1	0.00054 mg/L		0.000210	0.00054 mg/L	0.000210	38.85%
	QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716	2.8	0.00006 mg/L		0.000135	0.00006 mg/L	0.000135	231.16%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752	179.0	0.00113 mg/L		0.000265	0.00113 mg/L	0.000265	23.42%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955	267.8	0.01226 mg/L		0.000415	0.01226 mg/L	0.000415	3.39%
	QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	26.7	0.00155 mg/L		0.001404	0.00155 mg/L	0.001404	90.72%
	QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	234.1	0.00046 mg/L		0.000084	0.00046 mg/L	0.000084	18.37%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604	22.5	0.00103 mg/L		0.000610	0.00103 mg/L	0.000610	59.08%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353	3.8	0.00090 mg/L		0.000610	0.00090 mg/L	0.000610	67.39%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836	8.5	0.00764 mg/L		0.004626	0.00764 mg/L	0.004626	60.53%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026	-0.5	-0.00101 mg/L		0.003936	-0.00101 mg/L	0.003936	390.89%

QC value within limits for Se 196.026 Recovery = Not calculated
 Tl 190.801 -4.5 -0.00425 mg/L 0.003266 -0.00425 mg/L 0.003266 76.76%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 292.402 -12.4 -0.00017 mg/L 0.000136 -0.00017 mg/L 0.000136 79.48%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200 6.1 0.00042 mg/L 0.000126 0.00042 mg/L 0.000126 30.12%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502 2.4 0.00005 mg/L 0.000260 0.00005 mg/L 0.000260 481.55%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940 307.5 0.00073 mg/L 0.000121 0.00073 mg/L 0.000121 16.63%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 26.8 0.19718 mg/L 0.063352 0.19718 mg/L 0.063352 32.13%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 -368.2 -0.10595 mg/L 0.008114 -0.10595 mg/L 0.008114 7.66%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 30.9 0.02883 mg/L 0.079158 0.02883 mg/L 0.079158 274.53%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 50

Autosampler Location: 67

Sample ID: L0795-19A-GP-3 (0-6")

Date Collected: 5/2/2012 11:07:35 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:54:27 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Vol:

Initial Sample Wt:

Sample Prep Vol:

Dilution:

Mean Data: L0795-19A-GP-3 (0-6")

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1182075.7	95.760	%	1.1179			1.17%
Lu 261.542	1065206.8	94.37	%	1.905			2.02%
Ag 328.068	-487.0	-0.00302	mg/L	0.000359	-0.00302	0.000359	11.87%
Al 308.215	1269845.4	66.211	mg/L	0.6674	66.211	0.6674	1.01%
As 188.979	573.4	0.71055	mg/L	0.006157	0.71055	0.006157	0.87%
Ba 233.527	29149.2	0.53695	mg/L	0.003648	0.53695	0.003648	0.68%
Be 313.107	-6767.5	0.00164	mg/L	0.000129	0.00164	0.000129	7.87%
Co 228.616	1623.8	0.04407	mg/L	0.000421	0.04407	0.000421	0.96%
Cr 267.716	7931.4	0.16321	mg/L	0.001290	0.16321	0.001290	0.79%
Cu 324.752	37238.9	0.27117	mg/L	0.000761	0.27117	0.000761	0.28%
Fe 273.955	8452521.3	387.19	mg/L	1.578	387.19	1.578	0.41%
Mg 279.077	222604.0	12.897	mg/L	0.0618	12.897	0.0618	0.48%
Mn 257.610	769795.0	1.5102	mg/L	0.01448	1.5102	0.01448	0.96%
Ni 231.604	1956.2	0.08733	mg/L	0.000438	0.08733	0.000438	0.50%
Pb 220.353	4532.4	1.0677	mg/L	0.00363	1.0677	0.00363	0.34%
Sb 206.836	33.7	0.02321	mg/L	0.006593	0.02321	0.006593	28.41%
Se 196.026	-35.7	0.09881	mg/L	0.019187	0.09881	0.019187	19.42%
Tl 190.801	-31.7	0.01014	mg/L	0.000743	0.01014	0.000743	7.33%
V 292.402	20378.7	0.28635	mg/L	0.001574	0.28635	0.001574	0.55%
Zn 206.200	6527.3	0.46759	mg/L	0.001697	0.46759	0.001697	0.36%
Cd 226.502	1336.2	0.00176	mg/L	0.000116	0.00176	0.000116	6.60%
Ti 334.940	1693994.8	3.9779	mg/L	0.05348	3.9779	0.05348	1.34%
Ca 227.546	2987.0	18.863	mg/L	0.0325	18.863	0.0325	0.17%
Na 589.592	8007.1	2.3042	mg/L	0.03191	2.3042	0.03191	1.38%
K 766.490	5937.4	5.5442	mg/L	0.08790	5.5442	0.08790	1.59%

Sequence No.: 51

Autosampler Location: 68

Sample ID: L0795-19ADUP~GP-3 (0-6")

Date Collected: 5/2/2012 11:11:26 AM

Analyst:

Data Type: Reprocessed on 5/2/2012 11:54:28 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Vol:

Initial Sample Wt:

Sample Prep Vol:

Dilution:

Mean Data: L0795-19ADUP~GP-3 (0-6")

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1195517.8	96.849	%	0.2512			0.26%
Lu 261.542	1059352.3	93.85	%	0.234			0.25%

Ag 328.068	-597.0	-0.00381 mg/L	0.001009	-0.00381 mg/L	0.001009	26.48%
Al 308.215	1540809.5	80.339 mg/L	0.2310	80.339 mg/L	0.2310	0.29%
As 188.979	726.6	0.89420 mg/L	0.003977	0.89420 mg/L	0.003977	0.44%
Ba 233.527	33797.0	0.62255 mg/L	0.000399	0.62255 mg/L	0.000399	0.06%
Be 313.107	-8153.7	0.00172 mg/L	0.000025	0.00172 mg/L	0.000025	1.46%
Co 228.616	2029.1	0.05666 mg/L	0.000305	0.05666 mg/L	0.000305	0.54%
Cr 267.716	8094.2	0.16644 mg/L	0.000260	0.16644 mg/L	0.000260	0.16%
Cu 324.752	42670.1	0.31114 mg/L	0.000290	0.31114 mg/L	0.000290	0.09%
Fe 273.955	9783647.5	448.16 mg/L	2.317	448.16 mg/L	2.317	0.52%
Mg 279.077	262930.2	15.233 mg/L	0.0342	15.233 mg/L	0.0342	0.22%
Mn 257.610	1088318.5	2.1351 mg/L	0.00432	2.1351 mg/L	0.00432	0.20%
Ni 231.604	2402.5	0.10740 mg/L	0.000209	0.10740 mg/L	0.000209	0.19%
Pb 220.353	5119.0	1.2064 mg/L	0.00388	1.2064 mg/L	0.00388	0.32%
Sb 206.836	21.4	0.01150 mg/L	0.003986	0.01150 mg/L	0.003986	34.66%
Se 196.026	-51.6	0.09509 mg/L	0.010928	0.09509 mg/L	0.010928	11.49%
Tl 190.801	-35.8	0.01276 mg/L	0.005137	0.01276 mg/L	0.005137	40.25%
V 292.402	23291.2	0.32726 mg/L	0.000998	0.32726 mg/L	0.000998	0.30%
Zn 206.200	7669.5	0.54915 mg/L	0.003874	0.54915 mg/L	0.003874	0.71%
Cd 226.502	1567.7	0.00252 mg/L	0.000236	0.00252 mg/L	0.000236	9.37%
Ti 334.940	1981882.5	4.6540 mg/L	0.01153	4.6540 mg/L	0.01153	0.25%
Ca 227.546	3917.0	25.210 mg/L	0.2496	25.210 mg/L	0.2496	0.99%
Na 589.592	7912.3	2.2769 mg/L	0.05831	2.2769 mg/L	0.05831	2.56%
K 766.490	6729.8	6.2840 mg/L	0.06901	6.2840 mg/L	0.06901	1.10%

Sequence No.: 52

Sample ID: L0795-19AMS~GP-3 (0-6")S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 5/2/2012 11:15:12 AM

Data Type: Reprocessed on 5/2/2012 11:54:29 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-19AMS~GP-3 (0-6")S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1160588.0	94.020	%	0.5796				0.62%
Lu 261.542	1033709.7	91.58	%	0.765				0.84%
Ag 328.068	168012.1	1.1204	mg/L	0.00536	1.1204	mg/L	0.00536	0.48%
Al 308.215	1699881.8	88.627	mg/L	0.4230	88.627	mg/L	0.4230	0.48%
As 188.979	1069.9	1.2917	mg/L	0.00529	1.2917	mg/L	0.00529	0.41%
Ba 233.527	528636.1	9.7343	mg/L	0.05379	9.7343	mg/L	0.05379	0.55%
Be 313.107	246900.3	0.21642	mg/L	0.001192	0.21642	mg/L	0.001192	0.55%
Co 228.616	60338.9	2.3049	mg/L	0.01349	2.3049	mg/L	0.01349	0.59%
Cr 267.716	52414.9	1.0804	mg/L	0.00477	1.0804	mg/L	0.00477	0.44%
Cu 324.752	227436.2	1.4778	mg/L	0.00659	1.4778	mg/L	0.00659	0.45%
Fe 273.955	9317946.3	426.83	mg/L	4.295	426.83	mg/L	4.295	1.01%
Mg 279.077	649644.1	37.636	mg/L	0.2488	37.636	mg/L	0.2488	0.66%
Mn 257.610	1963892.7	3.8526	mg/L	0.02388	3.8526	mg/L	0.02388	0.62%
Ni 231.604	50762.3	2.3252	mg/L	0.01414	2.3252	mg/L	0.01414	0.61%
Pb 220.353	7175.8	1.6915	mg/L	0.00509	1.6915	mg/L	0.00509	0.30%
Sb 206.836	243.9	0.19729	mg/L	0.004826	0.19729	mg/L	0.004826	2.45%
Se 196.026	173.6	0.51214	mg/L	0.004518	0.51214	mg/L	0.004518	0.88%
Tl 190.801	369.4	0.37462	mg/L	0.003496	0.37462	mg/L	0.003496	0.93%
V 292.402	188631.5	2.5976	mg/L	0.01270	2.5976	mg/L	0.01270	0.49%
Zn 206.200	39970.5	2.7478	mg/L	0.01491	2.7478	mg/L	0.01491	0.54%
Cd 226.502	10845.0	0.21854	mg/L	0.000541	0.21854	mg/L	0.000541	0.25%
Ti 334.940	1974956.9	4.6375	mg/L	0.02056	4.6375	mg/L	0.02056	0.44%
Ca 227.546	6815.6	45.981	mg/L	0.1429	45.981	mg/L	0.1429	0.31%
Na 589.592	88031.9	25.333	mg/L	0.1209	25.333	mg/L	0.1209	0.48%
K 766.490	30996.8	28.944	mg/L	0.1449	28.944	mg/L	0.1449	0.50%

Sequence No.: 53

Sample ID: L0795-19ASD~GP-3 (0-6")

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 5/2/2012 11:19:00 AM

Data Type: Reprocessed on 5/2/2012 11:54:30 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-19ASD~GP-3 (0-6")

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1244481.7	100.82	%	0.301				0.30%
Lu 261.542	1123155.1	99.50	%	0.223				0.22%
Ag 328.068	85.1	0.00061	mg/L	0.000494	0.00061	mg/L	0.000494	81.28%
Al 308.215	262531.6	13.689	mg/L	0.1474	13.689	mg/L	0.1474	1.08%
As 188.979	122.8	0.15254	mg/L	0.005744	0.15254	mg/L	0.005744	3.77%
Ba 233.527	6037.1	0.11121	mg/L	0.000531	0.11121	mg/L	0.000531	0.48%
Be 313.107	-1368.9	0.00039	mg/L	0.000024	0.00039	mg/L	0.000024	6.12%
Co 228.616	364.8	0.01006	mg/L	0.000294	0.01006	mg/L	0.000294	2.92%
Cr 267.716	1620.9	0.03335	mg/L	0.000078	0.03335	mg/L	0.000078	0.24%
Cu 324.752	7621.3	0.05610	mg/L	0.000693	0.05610	mg/L	0.000693	1.24%
Fe 273.955	1871932.8	85.748	mg/L	0.0949	85.748	mg/L	0.0949	0.11%
Mg 279.077	47697.5	2.7634	mg/L	0.03711	2.7634	mg/L	0.03711	1.34%
Mn 257.610	160755.1	0.31537	mg/L	0.003364	0.31537	mg/L	0.003364	1.07%
Ni 231.604	448.5	0.02007	mg/L	0.000412	0.02007	mg/L	0.000412	2.05%
Pb 220.353	970.7	0.22855	mg/L	0.000437	0.22855	mg/L	0.000437	0.19%
Sb 206.836	8.9	0.00645	mg/L	0.004987	0.00645	mg/L	0.004987	77.29%
Se 196.026	-13.6	0.01108	mg/L	0.005917	0.01108	mg/L	0.005917	53.40%
Tl 190.801	-8.3	0.00104	mg/L	0.001151	0.00104	mg/L	0.001151	110.19%
V 292.402	4176.0	0.05884	mg/L	0.001149	0.05884	mg/L	0.001149	1.95%
Zn 206.200	1406.3	0.10083	mg/L	0.000458	0.10083	mg/L	0.000458	0.45%
Cd 226.502	281.4	0.00006	mg/L	0.000092	0.00006	mg/L	0.000092	167.46%
Ti 334.940	357005.4	0.83834	mg/L	0.001742	0.83834	mg/L	0.001742	0.21%
Ca 227.546	640.6	4.0244	mg/L	0.02466	4.0244	mg/L	0.02466	0.61%
Na 589.592	1411.4	0.40616	mg/L	0.012746	0.40616	mg/L	0.012746	3.14%
K 766.490	1276.0	1.1915	mg/L	0.03083	1.1915	mg/L	0.03083	2.59%

Sequence No.: 54

Sample ID: L0795-19APDS~GP-3 (0-6")

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 5/2/2012 11:22:40 AM

Data Type: Reprocessed on 5/2/2012 11:54:30 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-19APDS~GP-3 (0-6")

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1174830.4	95.173	%	0.4908				0.52%
Lu 261.542	1056927.0	93.64	%	0.730				0.78%
Ag 328.068	165831.0	1.1058	mg/L	0.00016	1.1058	mg/L	0.00016	0.01%
Al 308.215	1370704.8	71.463	mg/L	0.0628	71.463	mg/L	0.0628	0.09%
As 188.979	921.5	1.1143	mg/L	0.00389	1.1143	mg/L	0.00389	0.35%
Ba 233.527	520790.2	9.5897	mg/L	0.01743	9.5897	mg/L	0.01743	0.18%
Be 313.107	245563.1	0.21374	mg/L	0.000305	0.21374	mg/L	0.000305	0.14%
Co 228.616	59802.9	2.2874	mg/L	0.00768	2.2874	mg/L	0.00768	0.34%
Cr 267.716	50670.2	1.0445	mg/L	0.00370	1.0445	mg/L	0.00370	0.35%
Cu 324.752	218659.5	1.4175	mg/L	0.00097	1.4175	mg/L	0.00097	0.07%
Fe 273.955	8180244.0	374.72	mg/L	2.221	374.72	mg/L	2.221	0.59%
Mg 279.077	595692.2	34.510	mg/L	0.1259	34.510	mg/L	0.1259	0.36%
Mn 257.610	1858748.4	3.6464	mg/L	0.00967	3.6464	mg/L	0.00967	0.27%
Ni 231.604	50378.0	2.3081	mg/L	0.00745	2.3081	mg/L	0.00745	0.32%
Pb 220.353	6177.7	1.4554	mg/L	0.00422	1.4554	mg/L	0.00422	0.29%
Sb 206.836	535.8	0.46079	mg/L	0.007405	0.46079	mg/L	0.007405	1.61%
Se 196.026	177.9	0.49758	mg/L	0.016890	0.49758	mg/L	0.016890	3.39%
Tl 190.801	413.2	0.41085	mg/L	0.009968	0.41085	mg/L	0.009968	2.43%
V 292.402	183749.4	2.5301	mg/L	0.00960	2.5301	mg/L	0.00960	0.38%
Zn 206.200	37083.0	2.5481	mg/L	0.00988	2.5481	mg/L	0.00988	0.39%
Cd 226.502	10376.1	0.21165	mg/L	0.000916	0.21165	mg/L	0.000916	0.43%
Ti 334.940	1615763.6	3.7940	mg/L	0.00412	3.7940	mg/L	0.00412	0.11%
Ca 227.546	6000.5	40.412	mg/L	0.1846	40.412	mg/L	0.1846	0.46%
Na 589.592	85833.3	24.700	mg/L	0.2062	24.700	mg/L	0.2062	0.83%
K 766.490	29675.9	27.710	mg/L	0.2752	27.710	mg/L	0.2752	0.99%

Sequence No.: 55

Sample ID: L0795-20A~GP-4 (0-6")

Analyst:

Autosampler Location: 72

Date Collected: 5/2/2012 11:26:28 AM

Data Type: Reprocessed on 5/2/2012 11:54:31 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0795-20A-GP-4 (0-6")

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1225093.7	99.245	%	0.2598				0.26%
Lu 261.542	1064925.2	94.34	%	0.086				0.09%
Ag 328.068	-133.7	-0.00116	mg/L	0.000660	-0.00116	mg/L	0.000660	57.01%
Al 308.215	2524807.6	131.65	mg/L	0.230	131.65	mg/L	0.230	0.17%
As 188.979	58.0	0.09579	mg/L	0.000891	0.09579	mg/L	0.000891	0.93%
Ba 233.527	56276.5	1.0363	mg/L	0.00576	1.0363	mg/L	0.00576	0.56%
Be 313.107	-3731.1	0.00444	mg/L	0.000044	0.00444	mg/L	0.000044	1.00%
Co 228.616	2568.5	0.08441	mg/L	0.000443	0.08441	mg/L	0.000443	0.53%
Cr 267.716	9651.7	0.19811	mg/L	0.000406	0.19811	mg/L	0.000406	0.20%
Cu 324.752	51403.1	0.34457	mg/L	0.002091	0.34457	mg/L	0.002091	0.61%
Fe 273.955	4629068.1	212.04	mg/L	0.223	212.04	mg/L	0.223	0.11%
Mg 279.077	354666.5	20.548	mg/L	0.0136	20.548	mg/L	0.0136	0.07%
Mn 257.610	2108730.4	4.1371	mg/L	0.00612	4.1371	mg/L	0.00612	0.15%
Ni 231.604	3136.4	0.14135	mg/L	0.000272	0.14135	mg/L	0.000272	0.19%
Pb 220.353	3540.8	0.84540	mg/L	0.003989	0.84540	mg/L	0.003989	0.47%
Sb 206.836	21.4	0.01509	mg/L	0.004046	0.01509	mg/L	0.004046	26.82%
Se 196.026	-29.7	0.03730	mg/L	0.004336	0.03730	mg/L	0.004336	11.62%
Tl 190.801	-19.0	0.00652	mg/L	0.002131	0.00652	mg/L	0.002131	32.66%
V 292.402	23304.7	0.32099	mg/L	0.001541	0.32099	mg/L	0.001541	0.48%
Zn 206.200	7860.9	0.55074	mg/L	0.001804	0.55074	mg/L	0.001804	0.33%
Cd 226.502	722.8	0.00074	mg/L	0.000092	0.00074	mg/L	0.000092	12.29%
Ti 334.940	1750591.1	4.1107	mg/L	0.01769	4.1107	mg/L	0.01769	0.43%
Ca 227.546	3579.1	24.563	mg/L	0.1526	24.563	mg/L	0.1526	0.62%
Na 589.592	2025.3	0.58280	mg/L	0.031927	0.58280	mg/L	0.031927	5.48%
K 766.490	5824.4	5.4386	mg/L	0.19182	5.4386	mg/L	0.19182	3.53%

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Sequence No.: 56

Sample ID: L0797-02A-DEC-045 (13-15)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 5/2/2012 11:30:13 AM

Data Type: Reprocessed on 5/2/2012 11:54:32 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0797-02A-DEC-045 (13-15)

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1146019.4	92.839	%	0.7589				0.82%
Lu 261.542	988956.9	87.61	%	0.796				0.91%
Ag 328.068	-115.6	-0.00085	mg/L	0.000993	-0.00085	mg/L	0.000993	117.33%
Al 308.215	2244779.3	116.89	mg/L	1.126	116.89	mg/L	1.126	0.96%
As 188.979	27.3	0.07412	mg/L	0.001019	0.07412	mg/L	0.001019	1.37%
Ba 233.527	80137.6	1.4757	mg/L	0.02066	1.4757	mg/L	0.02066	1.40%
Be 313.107	-7971.5	0.00350	mg/L	0.000091	0.00350	mg/L	0.000091	2.62%
Co 228.616	2602.7	0.08189	mg/L	0.000223	0.08189	mg/L	0.000223	0.27%
Cr 267.716	13742.8	0.28133	mg/L	0.001201	0.28133	mg/L	0.001201	0.43%
Cu 324.752	85783.3	0.56399	mg/L	0.008231	0.56399	mg/L	0.008231	1.46%
Fe 273.955	5120055.0	234.54	mg/L	2.246	234.54	mg/L	2.246	0.96%
Mg 279.077	3352560.6	194.24	mg/L	1.995	194.24	mg/L	1.995	1.03%
Mn 257.610	2188869.2	4.2926	mg/L	0.04153	4.2926	mg/L	0.04153	0.97%
Ni 231.604	4585.2	0.20622	mg/L	0.000362	0.20622	mg/L	0.000362	0.18%
Pb 220.353	9247.6	2.1857	mg/L	0.00801	2.1857	mg/L	0.00801	0.37%
Sb 206.836	21.9	0.01538	mg/L	0.006996	0.01538	mg/L	0.006996	45.49%
Se 196.026	-34.1	0.03917	mg/L	0.015139	0.03917	mg/L	0.015139	38.65%
Tl 190.801	-18.5	0.01597	mg/L	0.000778	0.01597	mg/L	0.000778	4.87%
V 292.402	31889.8	0.43765	mg/L	0.004529	0.43765	mg/L	0.004529	1.03%
Zn 206.200	27033.4	1.8566	mg/L	0.02736	1.8566	mg/L	0.02736	1.47%
Cd 226.502	1003.8	0.00364	mg/L	0.000155	0.00364	mg/L	0.000155	4.25%
Ti 334.940	2356764.1	5.5433	mg/L	0.06348	5.5433	mg/L	0.06348	1.15%
Ca 227.546	103816.3	761.46	mg/L	8.431	761.46	mg/L	8.431	1.11%
Concentration greater than upper limit for Ca 227.546.								
Na 589.592	15811.5	4.5500	mg/L	0.01666	4.5500	mg/L	0.01666	0.37%

K 766.490 21779.6 20.337 mg/L 0.0355 20.337 mg/L 0.0355 0.17%

Sequence No.: 57

Sample ID: L0810-01B-DEC-046(13-14.

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 5/2/2012 11:33:58 AM

Data Type: Reprocessed on 5/2/2012 11:54:32 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0810-01B-DEC-046(13-14.

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	1189650.1	96.374 %		0.3854			0.40%
Lu 261.542	1009358.3	89.42 %		0.325			0.36%
Ag 328.068	-365.9	-0.00229 mg/L		0.000175	-0.00229 mg/L	0.000175	7.65%
Al 308.215	2475016.1	128.96 mg/L		0.484	128.96 mg/L	0.484	0.38%
As 188.979	73.3	0.13880 mg/L		0.007332	0.13880 mg/L	0.007332	5.28%
Ba 233.527	88689.0	1.6334 mg/L		0.01411	1.6334 mg/L	0.01411	0.86%
Be 313.107	-4460.1	0.00628 mg/L		0.000070	0.00628 mg/L	0.000070	1.12%
Co 228.616	3979.7	0.13264 mg/L		0.000138	0.13264 mg/L	0.000138	0.10%
Cr 267.716	25370.2	0.52090 mg/L		0.005674	0.52090 mg/L	0.005674	1.09%
Cu 324.752	195174.0	1.2653 mg/L		0.01356	1.2653 mg/L	0.01356	1.07%
Fe 273.955	7419968.4	339.89 mg/L		1.516	339.89 mg/L	1.516	0.45%
Mg 279.077	3539253.6	205.05 mg/L		1.075	205.05 mg/L	1.075	0.52%
Mn 257.610	2516491.5	4.9352 mg/L		0.02090	4.9352 mg/L	0.02090	0.42%
Ni 231.604	8148.9	0.36968 mg/L		0.000678	0.36968 mg/L	0.000678	0.18%
Pb 220.353	15261.2	3.5976 mg/L		0.00592	3.5976 mg/L	0.00592	0.16%
Sb 206.836	36.4	0.02021 mg/L		0.003167	0.02021 mg/L	0.003167	15.67%
Se 196.026	-56.2	0.04230 mg/L		0.014872	0.04230 mg/L	0.014872	35.16%
Tl 190.801	-30.1	0.01522 mg/L		0.007911	0.01522 mg/L	0.007911	51.99%
V 292.402	45467.3	0.62771 mg/L		0.007707	0.62771 mg/L	0.007707	1.23%
Zn 206.200	49371.2	3.3811 mg/L		0.04504	3.3811 mg/L	0.04504	1.33%
Cd 226.502	1457.6	0.00709 mg/L		0.000141	0.00709 mg/L	0.000141	1.99%
Ti 334.940	2314876.0	5.4393 mg/L		0.01281	5.4393 mg/L	0.01281	0.24%
Ca 227.546	59749.2	436.51 mg/L		3.937	436.51 mg/L	3.937	0.90%
Na 589.592	13012.0	3.7444 mg/L		0.03867	3.7444 mg/L	0.03867	1.03%
K 766.490	20164.7	18.829 mg/L		0.1481	18.829 mg/L	0.1481	0.79%

Sequence No.: 58

Sample ID: L0782-01A-SO4-MW2 20XFeMn

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 5/2/2012 11:37:43 AM

Data Type: Reprocessed on 5/2/2012 11:54:33 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0782-01A-SO4-MW2 20XFeMn

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	1231220.0	99.741 %		0.4883			0.49%
Lu 261.542	1104723.5	97.87 %		0.646			0.66%
Ag 328.068	320.7	0.00178 mg/L		0.000675	0.00178 mg/L	0.000675	37.90%
Al 308.215	362159.5	18.883 mg/L		0.2178	18.883 mg/L	0.2178	1.15%
As 188.979	9.5	0.01636 mg/L		0.006601	0.01636 mg/L	0.006601	40.36%
Ba 233.527	22659.8	0.41714 mg/L		0.005075	0.41714 mg/L	0.005075	1.22%
Be 313.107	920.1	0.00089 mg/L		0.000008	0.00089 mg/L	0.000008	0.94%
Co 228.616	659.0	0.02421 mg/L		0.000250	0.02421 mg/L	0.000250	1.03%
Cr 267.716	1347.6	0.02735 mg/L		0.000091	0.02735 mg/L	0.000091	0.33%
Cu 324.752	8415.7	0.05719 mg/L		0.000491	0.05719 mg/L	0.000491	0.86%
Fe 273.955	943703.3	43.228 mg/L		0.5146	43.228 mg/L	0.5146	1.19%
Mg 279.077	161284.0	9.3443 mg/L		0.11595	9.3443 mg/L	0.11595	1.24%
Mn 257.610	956334.9	1.8762 mg/L		0.02153	1.8762 mg/L	0.02153	1.15%
Ni 231.604	1037.5	0.04751 mg/L		0.000132	0.04751 mg/L	0.000132	0.28%
Pb 220.353	102.9	0.02539 mg/L		0.001481	0.02539 mg/L	0.001481	5.83%
Sb 206.836	5.0	0.00221 mg/L		0.002241	0.00221 mg/L	0.002241	101.47%
Se 196.026	-4.0	0.01095 mg/L		0.008239	0.01095 mg/L	0.008239	75.23%
Tl 190.801	-9.4	-0.00359 mg/L		0.002067	-0.00359 mg/L	0.002067	57.55%
V 292.402	1865.8	0.02690 mg/L		0.000272	0.02690 mg/L	0.000272	1.01%

Zn 206.200	1489.3	0.10428 mg/L	0.000338	0.10428 mg/L	0.000338	0.32%
Cd 226.502	139.0	-0.00003 mg/L	0.000141	-0.00003 mg/L	0.000141	449.33%
Ti 334.940	26815.4	0.06285 mg/L	0.005005	0.06285 mg/L	0.005005	7.96%
Ca 227.546	440.4	2.8780 mg/L	0.01641	2.8780 mg/L	0.01641	0.57%
Na 589.592	-22.6	-0.00649 mg/L	0.015364	-0.00649 mg/L	0.015364	236.65%
K 766.490	1649.5	1.5403 mg/L	0.12296	1.5403 mg/L	0.12296	7.98%

Sequence No.: 59

Sample ID: L0797-02A-DEC-045 20X Ca

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 76

Date Collected: 5/2/2012 11:41:31 AM

Data Type: Reprocessed on 5/2/2012 11:54:34 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L0797-02A-DEC-045 20X Ca

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	1197676.5	97.024 %		0.1638			0.17%
Lu 261.542	1075775.6	95.31 %		0.134			0.14%
Ag 328.068	375.3	0.00249 mg/L		0.000117	0.00249 mg/L	0.000117	4.70%
Al 308.215	127706.8	6.6503 mg/L		0.00672	6.6503 mg/L	0.00672	0.10%
As 188.979	4.5	0.00772 mg/L		0.005690	0.00772 mg/L	0.005690	73.71%
Ba 233.527	4593.1	0.08458 mg/L		0.000055	0.08458 mg/L	0.000055	0.07%
Be 313.107	-459.0	0.00019 mg/L		0.000059	0.00019 mg/L	0.000059	32.08%
Co 228.616	155.4	0.00493 mg/L		0.000155	0.00493 mg/L	0.000155	3.15%
Cr 267.716	802.9	0.01643 mg/L		0.000245	0.01643 mg/L	0.000245	1.49%
Cu 324.752	4701.0	0.03104 mg/L		0.000477	0.03104 mg/L	0.000477	1.54%
Fe 273.955	311535.9	14.271 mg/L		0.0127	14.271 mg/L	0.0127	0.09%
Mg 279.077	201675.4	11.684 mg/L		0.0078	11.684 mg/L	0.0078	0.07%
Mn 257.610	129794.6	0.25454 mg/L		0.000373	0.25454 mg/L	0.000373	0.15%
Ni 231.604	289.5	0.01305 mg/L		0.000295	0.01305 mg/L	0.000295	2.26%
Pb 220.353	559.7	0.13221 mg/L		0.001434	0.13221 mg/L	0.001434	1.08%
Sb 206.836	-3.3	-0.00331 mg/L		0.001980	-0.00331 mg/L	0.001980	59.81%
Se 196.026	-2.1	0.00227 mg/L		0.009505	0.00227 mg/L	0.009505	417.80%
Tl 190.801	-8.1	-0.00565 mg/L		0.005467	-0.00565 mg/L	0.005467	96.72%
V 292.402	1799.5	0.02473 mg/L		0.000369	0.02473 mg/L	0.000369	1.49%
Zn 206.200	1648.1	0.11315 mg/L		0.000176	0.11315 mg/L	0.000176	0.16%
Cd 226.502	53.1	0.00005 mg/L		0.000174	0.00005 mg/L	0.000174	351.09%
Ti 334.940	131947.1	0.31032 mg/L		0.001293	0.31032 mg/L	0.001293	0.42%
Ca 227.546	5667.2	41.554 mg/L		0.1149	41.554 mg/L	0.1149	0.28%
Na 589.592	507.4	0.14600 mg/L		0.034599	0.14600 mg/L	0.034599	23.70%
K 766.490	1161.6	1.0847 mg/L		0.03505	1.0847 mg/L	0.03505	3.23%

Sequence No.: 60

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 5/2/2012 11:45:11 AM

Data Type: Reprocessed on 5/2/2012 11:54:35 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 360.073	1171046.1	94.867 %		0.5122			0.54%
Lu 261.542	1062862.4	94.16 %		0.622			0.66%
Ag 328.068	186418.7	1.2429 mg/L		0.02321	1.2429 mg/L	0.02321	1.87%
QC value within limits for Ag 328.068 Recovery = 99.43%							
Al 308.215	189485.2	9.8716 mg/L		0.15837	9.8716 mg/L	0.15837	1.60%
QC value within limits for Al 308.215 Recovery = 98.72%							
As 188.979	416.5	0.48537 mg/L		0.007262	0.48537 mg/L	0.007262	1.50%
QC value within limits for As 188.979 Recovery = 97.07%							
Ba 233.527	544725.5	10.030 mg/L		0.1000	10.030 mg/L	0.1000	1.00%
QC value within limits for Ba 233.527 Recovery = 100.30%							
Be 313.107	279585.8	0.23625 mg/L		0.002654	0.23625 mg/L	0.002654	1.12%
QC value within limits for Be 313.107 Recovery = 94.50%							
Co 228.616	66257.1	2.5528 mg/L		0.04945	2.5528 mg/L	0.04945	1.94%
QC value within limits for Co 228.616 Recovery = 102.11%							

Cr	267.716	47957.8	0.98883 mg/L	0.017723	0.98883 mg/L	0.017723	1.79%
	QC value within limits for Cr	267.716	Recovery = 98.88%				
Cu	324.752	191321.0	1.2106 mg/L	0.02207	1.2106 mg/L	0.02207	1.82%
	QC value within limits for Cu	324.752	Recovery = 96.85%				
Fe	273.955	108786.4	4.9873 mg/L	0.09073	4.9873 mg/L	0.09073	1.82%
	QC value within limits for Fe	273.955	Recovery = 99.75%				
Mg	279.077	430274.3	24.926 mg/L	0.3080	24.926 mg/L	0.3080	1.24%
	QC value within limits for Mg	279.077	Recovery = 99.71%				
Mn	257.610	1283285.7	2.5174 mg/L	0.02809	2.5174 mg/L	0.02809	1.12%
	QC value within limits for Mn	257.610	Recovery = 100.70%				
Ni	231.604	54684.5	2.5076 mg/L	0.04383	2.5076 mg/L	0.04383	1.75%
	QC value within limits for Ni	231.604	Recovery = 100.30%				
Pb	220.353	2096.5	0.49462 mg/L	0.001487	0.49462 mg/L	0.001487	0.30%
	QC value within limits for Pb	220.353	Recovery = 98.92%				
Sb	206.836	547.8	0.47783 mg/L	0.003510	0.47783 mg/L	0.003510	0.73%
	QC value within limits for Sb	206.836	Recovery = 95.57%				
Se	196.026	262.6	0.49900 mg/L	0.006245	0.49900 mg/L	0.006245	1.25%
	QC value within limits for Se	196.026	Recovery = 99.80%				
Tl	190.801	510.8	0.46263 mg/L	0.002210	0.46263 mg/L	0.002210	0.48%
	QC value within limits for Tl	190.801	Recovery = 92.53%				
V	292.402	184086.7	2.5279 mg/L	0.04165	2.5279 mg/L	0.04165	1.65%
	QC value within limits for V	292.402	Recovery = 101.12%				
Zn	206.200	35094.7	2.3910 mg/L	0.04763	2.3910 mg/L	0.04763	1.99%
	QC value within limits for Zn	206.200	Recovery = 95.64%				
Cd	226.502	10354.5	0.23895 mg/L	0.001116	0.23895 mg/L	0.001116	0.47%
	QC value within limits for Cd	226.502	Recovery = 95.58%				
Ti	334.940	200434.2	0.47040 mg/L	0.008041	0.47040 mg/L	0.008041	1.71%
	QC value within limits for Ti	334.940	Recovery = Not calculated				
Ca	227.546	3422.6	24.318 mg/L	0.1842	24.318 mg/L	0.1842	0.76%
	QC value within limits for Ca	227.546	Recovery = 97.27%				
Na	589.592	85697.7	24.661 mg/L	0.1304	24.661 mg/L	0.1304	0.53%
	QC value within limits for Na	589.592	Recovery = 98.64%				
K	766.490	26563.9	24.804 mg/L	0.1643	24.804 mg/L	0.1643	0.66%
	QC value within limits for K	766.490	Recovery = 99.22%				

All analyte(s) passed QC.

Sequence No.: 61

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 5/2/2012 11:48:52 AM

Data Type: Reprocessed on 5/2/2012 11:54:35 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1261889.5	102.23 %	0.237			0.23%
Lu 261.542	1126142.0	99.77 %	0.297			0.30%
Ag 328.068	286.4	0.00190 mg/L	0.000073	0.00190 mg/L	0.000073	3.83%
	QC value within limits for Ag	328.068	Recovery = Not calculated			
Al 308.215	144.4	0.00754 mg/L	0.004850	0.00754 mg/L	0.004850	64.35%
	QC value within limits for Al	308.215	Recovery = Not calculated			
As 188.979	-0.8	-0.00096 mg/L	0.006903	-0.00096 mg/L	0.006903	721.50%
	QC value within limits for As	188.979	Recovery = Not calculated			
Ba 233.527	48.9	0.00090 mg/L	0.000306	0.00090 mg/L	0.000306	33.98%
	QC value within limits for Ba	233.527	Recovery = Not calculated			
Be 313.107	97.6	0.00008 mg/L	0.000056	0.00008 mg/L	0.000056	68.13%
	QC value within limits for Be	313.107	Recovery = Not calculated			
Co 228.616	18.2	0.00070 mg/L	0.000216	0.00070 mg/L	0.000216	30.81%
	QC value within limits for Co	228.616	Recovery = Not calculated			
Cr 267.716	8.9	0.00018 mg/L	0.000602	0.00018 mg/L	0.000602	328.53%
	QC value within limits for Cr	267.716	Recovery = Not calculated			
Cu 324.752	133.1	0.00084 mg/L	0.000627	0.00084 mg/L	0.000627	74.50%
	QC value within limits for Cu	324.752	Recovery = Not calculated			
Fe 273.955	139.0	0.00637 mg/L	0.001495	0.00637 mg/L	0.001495	23.48%
	QC value within limits for Fe	273.955	Recovery = Not calculated			
Mg 279.077	-8.4	-0.00049 mg/L	0.001692	-0.00049 mg/L	0.001692	346.76%
	QC value within limits for Mg	279.077	Recovery = Not calculated			
Mn 257.610	190.7	0.00037 mg/L	0.000103	0.00037 mg/L	0.000103	27.56%

QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni	231.604	6.7	0.00031 mg/L	0.000133	0.00031 mg/L	0.000133	43.38%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb	220.353	9.5	0.00224 mg/L	0.000346	0.00224 mg/L	0.000346	15.46%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb	206.836	11.4	0.01029 mg/L	0.003128	0.01029 mg/L	0.003128	30.40%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026	3.7	0.00696 mg/L	0.009542	0.00696 mg/L	0.009542	137.08%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl	190.801	-3.6	-0.00342 mg/L	0.003513	-0.00342 mg/L	0.003513	102.65%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V	292.402	2.6	0.00004 mg/L	0.000404	0.00004 mg/L	0.000404	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	206.200	9.1	0.00062 mg/L	0.000136	0.00062 mg/L	0.000136	21.86%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd	226.502	-3.2	-0.00007 mg/L	0.000111	-0.00007 mg/L	0.000111	147.95%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti	334.940	159.4	0.00037 mg/L	0.000110	0.00037 mg/L	0.000110	29.43%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca	227.546	-4.5	-0.03344 mg/L	0.056885	-0.03344 mg/L	0.056885	170.09%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na	589.592	-460.2	-0.13244 mg/L	0.018003	-0.13244 mg/L	0.018003	13.59%
QC value within limits for Na 589.592 Recovery = Not calculated							
K	766.490	49.5	0.04624 mg/L	0.083265	0.04624 mg/L	0.083265	180.09%
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

=====
Analysis Begun

Logged In Analyst: mitFIMS2 Technique: AA FIMS-MHS
Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-90

Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0508B.sif
Batch ID: Null
Results Data Set: HG12050802
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb

=====
Method Loaded

Method Name: Comm Hg Method Last Saved: 7/27/2011 10:10:28 AM
Method Description: Hg Analysis by Cold Vapor AA

Analyte	Calibration Equation	Wavelength
Hg 253.7	Lin Thru 0	253.7

Sequence No.: 1 Autosampler Location: 1
Sample ID: S0 Date Collected: 5/8/2012 5:10:44 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0006	0.0002	17:11:42	Yes
2		[0.00]	0.0002	0.0025	0.0002	17:12:22	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	8.62				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: S0.20 Date Collected: 5/8/2012 5:12:24 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0.20

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0024	0.0161	0.0026	17:13:22	Yes
2		[0.2]	0.0023	0.0152	0.0025	17:14:02	Yes
Mean:		[0.2]	0.0023				
SD:		0.0	0.0001				
%RSD:		0.0	3.50				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01163 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: S1.0 Date Collected: 5/8/2012 5:14:04 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S1.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0119	0.0717	0.0122	17:15:01	Yes
2		[1]	0.0118	0.0695	0.0120	17:15:41	Yes
Mean:		[1]	0.0119				

SD: 0 0.0001
%RSD: 0 0.98
Standard number 2 applied. [1]
Correlation Coef.: 0.999976 Slope: 0.01186 Intercept: 0.00000

=====

Sequence No.: 4	Autosampler Location: 4
Sample ID: S2.0	Date Collected: 5/8/2012 5:15:43 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0240	0.1414	0.0242	17:16:41	Yes
2		[2]	0.0237	0.1380	0.0239	17:17:21	Yes
Mean:		[2]	0.0238				
SD:		0	0.0002				
%RSD:		0	0.92				

Standard number 3 applied. [2]
Correlation Coef.: 0.999989 Slope: 0.01190 Intercept: 0.00000

=====

Sequence No.: 5	Autosampler Location: 5
Sample ID: S5.0	Date Collected: 5/8/2012 5:17:22 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0598	0.3469	0.0600	17:18:21	Yes
2		[5]	0.0598	0.3438	0.0600	17:19:00	Yes
Mean:		[5]	0.0598				
SD:		0	0.0000				
%RSD:		0	0.03				

Standard number 4 applied. [5]
Correlation Coef.: 0.999995 Slope: 0.01195 Intercept: 0.00000

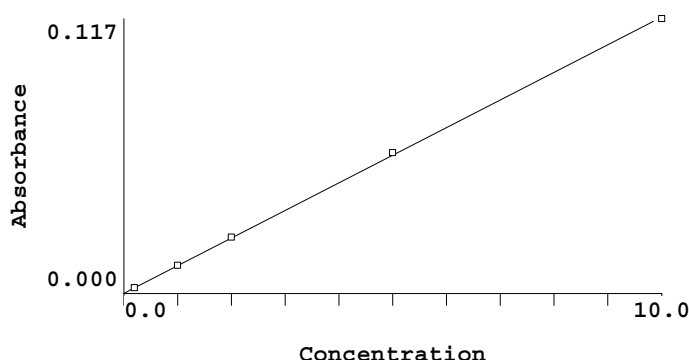
=====

Sequence No.: 6	Autosampler Location: 6
Sample ID: S10.0	Date Collected: 5/8/2012 5:19:02 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1169	0.6737	0.1171	17:20:00	Yes
2		[10]	0.1170	0.6735	0.1172	17:20:39	Yes
Mean:		[10]	0.1170				
SD:		0	0.0000				
%RSD:		0	0.03				

Standard number 5 applied. [10]
Correlation Coef.: 0.999914 Slope: 0.01176 Intercept: 0.00000



Calibration data for Hg 253.7

Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
S0	0.0000	0	0.000	0.00	8.6
S0.20	0.0023	0.2	0.198	0.00	3.5
S1.0	0.0119	1.0	1.009	0.00	1.0
S2.0	0.0238	2.0	2.027	0.00	0.9
S5.0	0.0598	5.0	5.087	0.00	0.0
S10.0	0.1170	10.0	9.949	0.00	0.0

Correlation Coef.: 0.999914 Slope: 0.01176 Intercept: 0.00000

Sequence No.: 7

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 5/8/2012 5:20:42 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl	SampleConc # ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.172	5.172	0.0608	0.3461	0.0610	17:21:40	Yes
2	5.209	5.209	0.0612	0.3473	0.0614	17:22:19	Yes
Mean:	5.190	5.190	0.0610				
SD:	0.026	0.026	0.0003				
%RSD:	0.504	0.504	0.50				

QC value within limits for Hg 253.7 Recovery = 103.80%

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 5/8/2012 5:22:21 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl	SampleConc # ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0000	0.0002	0.0002	17:23:21	Yes
2	-0.003	-0.003	-0.0000	-0.0000	0.0002	17:24:00	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: MB-66039~PBS

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 17

Date Collected: 5/8/2012 5:24:02 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-66039~PBS

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.011	-0.011	-0.0001	-0.0007	0.0001	17:25:00	Yes
2	-0.014	-0.014	-0.0002	-0.0020	0.0000	17:25:40	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	18.50	18.50	18.50				

Sequence No.: 10

Autosampler Location: 18

Sample ID: LCS-66039~LCS

Date Collected: 5/8/2012 5:25:42 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: LCS-66039~LCS

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.958	4.958	0.0583	0.3289	0.0585	17:26:40	Yes
2	4.887	4.887	0.0575	0.3247	0.0577	17:27:19	Yes
Mean:	4.923	4.923	0.0579				
SD:	0.050	0.050	0.0006				
%RSD:	1.007	1.007	1.01				

Sequence No.: 11

Autosampler Location: 19

Sample ID: L0782-01A~SO4-MW2

Date Collected: 5/8/2012 5:27:21 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: L0782-01A~SO4-MW2

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.137	0.137	0.0016	0.0081	0.0018	17:28:19	Yes
2	0.134	0.134	0.0016	0.0076	0.0018	17:28:59	Yes
Mean:	0.135	0.135	0.0016				
SD:	0.002	0.002	0.0000				
%RSD:	1.579	1.579	1.58				

Sequence No.: 12

Autosampler Location: 20

Sample ID: L0797-02A~DEC-045 (13-15

Date Collected: 5/8/2012 5:29:01 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: L0797-02A~DEC-045 (13-15

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.739	1.739	0.0204	0.1152	0.0206	17:29:58	Yes
2	1.754	1.754	0.0206	0.1164	0.0208	17:30:38	Yes
Mean:	1.746	1.746	0.0205				
SD:	0.011	0.011	0.0001				
%RSD:	0.612	0.612	0.61				

Sequence No.: 13

Autosampler Location: 21

Sample ID: L0810-01B~DEC-046(13-14.

Date Collected: 5/8/2012 5:30:40 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: L0810-01B~DEC-046(13-14.

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.156	1.156	0.0136	0.0754	0.0138	17:31:38	Yes
2	1.138	1.138	0.0134	0.0730	0.0136	17:32:18	Yes
Mean:	1.147	1.147	0.0135				
SD:	0.013	0.013	0.0002				
%RSD:	1.129	1.129	1.13				

Sequence No.: 14
Sample ID: L0865-02A~SP-3-0-4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 5/8/2012 5:32:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0865-02A~SP-3-0-4

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.031	0.031	0.0004	0.0033	0.0006	17:33:17	Yes
2	0.027	0.027	0.0003	0.0023	0.0005	17:33:57	Yes
Mean:	0.029	0.029	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	10.05	10.05	10.05				

Sequence No.: 15
Sample ID: L0865-03B~SP-4-0-4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 5/8/2012 5:33:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0865-03B~SP-4-0-4

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.070	0.070	0.0008	0.0059	0.0010	17:34:56	Yes
2	0.072	0.072	0.0009	0.0070	0.0011	17:35:36	Yes
Mean:	0.071	0.071	0.0008				
SD:	0.002	0.002	0.0000				
%RSD:	2.538	2.538	2.54				

Sequence No.: 16
Sample ID: L0865-05B~SP-13-1-4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 5/8/2012 5:35:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0865-05B~SP-13-1-4

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.089	0.089	0.0010	0.0082	0.0013	17:36:36	Yes
2	0.086	0.086	0.0010	0.0076	0.0012	17:37:16	Yes
Mean:	0.088	0.088	0.0010				
SD:	0.002	0.002	0.0000				
%RSD:	2.321	2.321	2.32				

Sequence No.: 17
Sample ID: L0898-02A~RDA-SD-DUP01-0
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 5/8/2012 5:37:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0898-02A~RDA-SD-DUP01-0

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.113	0.113	0.0013	0.0094	0.0015	17:38:15	Yes

2	0.108	0.108	0.0013	0.0102	0.0015	17:38:55	Yes
Mean:	0.110	0.110	0.0013				
SD:	0.003	0.003	0.0000				
%RSD:	3.097	3.097	3.10				

Sequence No.: 18
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 5/8/2012 5:38:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.959	4.959	0.0583	0.3412	0.0585	17:39:56	Yes
2	4.944	4.944	0.0581	0.3357	0.0583	17:40:35	Yes
Mean:	4.951	4.951	0.0582				
SD:	0.011	0.011	0.0001				
%RSD:	0.219	0.219	0.22				

QC value within limits for Hg 253.7 Recovery = 99.02%
All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/8/2012 5:40:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	0.0000	0.0003	0.0002	17:41:37	Yes
2	-0.001	-0.001	-0.0000	-0.0001	0.0002	17:42:17	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	184.3	184.3	184.33				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20
Sample ID: L0898-03A~RDA-SD-SD02-52
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 5/8/2012 5:42:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0898-03A~RDA-SD-SD02-52

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.085	0.085	0.0010	0.0053	0.0012	17:43:20	Yes
2	0.088	0.088	0.0010	0.0059	0.0012	17:43:59	Yes
Mean:	0.086	0.086	0.0010				
SD:	0.003	0.003	0.0000				
%RSD:	2.981	2.981	2.98				

Sequence No.: 21
Sample ID: L0898-03ADUP~RDA-SD-SD02
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 5/8/2012 5:44:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0898-03ADUP~RDA-SD-SD02

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

Start time:
Prep Start Date: 4/30/2012 1:45:00 P

Prep End Date: 4/30/2012 4:30:00 P

Prep Batch ID: 65830

Prep Code: ICP_S_PR

Technician: David T Camara

Prep Type: 3050B/SW3050B

Prep Factor Units:
mL / g

QC Matrix: N/A
QC Matrix Lot: N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 04/30/2012 13:45
Digestion End Time 1: 04/30/2012 14:30

Digestion Start Time 2: 04/30/2012 16:15
Digestion End Time 2: 04/30/2012 16:30

Block Temp (C): 97

Therm ID1: MT-92
Corr Fac:-3

Mitkem Sample ID	Client Samp ID	Initial L/g	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
MB-65830		1	50	--	--	--	--			04/30/12	DTC	ICPLab			HB-5
LCS-65830		1	50	--	--	--	--			04/30/12	DTC	ICPLab			HB-5
455 uL III20416A, 45.5 uL IP110822C, 45.5 uL IP111220B															
L0782-01A	SO4-MW2	S	1.17	--	--	--	--	05/09/12	01	04/30/12	DTC	ICPLab			HB-5
L0795-07A	SD-1(7')	S	1.35	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-08A	SD-2 (7'')	S	1.3	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-09A	GP-5 (0-6'')	S	1.25	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-10A	GP-5 (0-6'')	S	1.52	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-11A	GP-1 (7-8)	S	1.24	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-12A	GP-2 (7-8)	S	1.32	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-13A	GP-3 (8-9)	S	1.27	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-14A	GP-4 (7-8)	S	1.03	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-15A	GP-5 (7-8)	S	1.23	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-16A	GP-6 (7-8)	S	1.5	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-17A	GP-7 (7-8)	S	1.01	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-18A	GP-8 (7-8)	S	1.19	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-19A	GP-3 (0-6'')	S	1.35	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL															
L0795-19ADUP	GP-3 (0-6'')	S	1.36	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5

Logbook ID 100.0124-09/11

Start time: Spectrum Analytical, Inc. RI Division: Soil/Solid Metals Prep Logbook

Monday, April 30, 2012 17:06

Page 02 of 02

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: 4/30/2012 1:45:00 P
 Prep End Date: 4/30/2012 4:30:00 P
 Prep Batch ID: 65830

Prep Code: ICP_S_PR
 Technician: David T Camara

Prep Type: 3050B/SW3050B
 Prep Factor Units: mL / g

QC Matrix: N/A 1:1 HNO3 1111101 30% H2O2 111035 Reagent 5 Lot: N/A
 QC Matrix Lot: N/A 1:1 HNO3 (mL): 5.0 30% H2O2 (mL): 5.0 Reagent 5 (mL): N/A
 Filter?: N/A Conc HNO3 1111101 Conc HCl 4110110 Reagent 6 Lot: N/A
 Filter Lot: N/A Conc HNO3 (mL): 2.5 Conc HCl (mL): 5.0 Reagent 6 (mL): N/A

Digestion Start Time 1: 04/30/2012 13:45 Digestion Start Time 2: 04/30/2012 16:15
 Digestion End Time 1: 04/30/2012 14:30 Digestion End Time 2: 04/30/2012 16:30

Block Temp (C): 97 Therm ID1: MT-92
 Corr Fac -3

Mikem Sample ID	Client Samp ID	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH	HOT BLOCK
L0795-19AMS	GP-3 (0-6")	1.34	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab	>11	<2	HB-5
455 uL III20416A, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP111220B														
L0795-20A	GP-4 (0-6")	1.35	--	--	--	--	05/07/12	01	04/30/12	DTC	ICPLab			HB-5
TAL														
L0797-02A	DEC-045 (13-15)	1.1	--	--	--	--	05/10/12	01	04/30/12	DTC	ICPLab			HB-5
TAL														
L0810-01B	DEC-046(13-14.5)	1.34	--	--	--	--	05/11/12	01	04/30/12	DTC	ICPLab			HB-5
TAL														
L0771-04E	RO-01-041812	1.01	--	--	--	--	05/03/12	01	04/30/12	DTC	ICPLab			HB-5

David T Camara 04/30/2012 HZA 5/1/12
 Analyst Reviewed Date Manager Reviewed Date

Comments:

12/4/30/12

Prep Start Date: 5/8/2012 3:41:00 P
Prep End Date: 5/8/2012 4:30:00 P
Prep Batch ID: 66039

Prep Code: SW7471A_PR
Technician: David T Camara

Prep Type: 7471B/METHOD

Prep Factor Units:
mL / g

QC Matrix: N/A
QC Matrix Lot: N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 05/08/2012 15:41
Digestion End Time 1: 05/08/2012 15:43

Digestion Start Time 2: 05/08/2012 16:00
Digestion End Time 2: 05/08/2012 16:30

Block Temp (C): 97
Therm ID1: MT-47
Corr Fac-3

Mitkem Sample ID	Client Samp ID	tial L/g	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
40 uL III20508A															
S0		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
S0.2		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
200 uL III20508A															
S1.0		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
S2.0		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
400 uL III20508A															
S5.0		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
1000 uL III20508A															
S10.0		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
2000 uL III20508A															
ICV		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
1 mL III20508B															
ICB		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
CCV		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
1 mL III20508B															
CCB		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
MB-66039		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
LCS-66039		0.6	100	--	--	--	--			05/08/12	DTC	HgLab			HB-A
1 mL III20508C															
L0782-01A	SO4-MW2	S	0.55	100	--	--	--	05/09/12	01	05/08/12	DTC	HgLab			HB-A
L0797-02A	DEC-045 (13-15)	S	0.57	100	--	--	--	05/10/12	01	05/08/12	DTC	HgLab			HB-A
TAL															
L0810-01B	DEC-046(13-14.5)	S	0.53	100	--	--	--	05/11/12	01	05/08/12	DTC	HgLab			HB-A
TAL															
L0865-02A	SP-3-0-4	S	0.55	100	--	--	--	05/21/12	01	05/08/12	DTC	HgLab			HB-2
L0865-03B	SP-4-0-4	S	0.59	100	--	--	--	05/21/12	01	05/08/12	DTC	HgLab			HB-2
L0865-05B	SP-13-1-4	S	0.54	100	--	--	--	05/21/12	01	05/08/12	DTC	HgLab			HB-2
L0898-02A	RDA-SD-DUP01-0501	S	0.59	100	--	--	--	05/22/12	01	05/08/12	DTC	HgLab			HB-2
TAL															
L0898-03A	RDA-SD-SD02-52012	S	0.53	100	--	--	--	05/22/12	01	05/08/12	DTC	HgLab			HB-2
TAL															

Logbook ID: 100.0128 -04/12

Tuesday, May 08, 2012 17:01

Page 02 of 02

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: 5/8/2012 3:41:00 P

Prep End Date: 5/8/2012 4:30:00 P

Prep Batch ID: 66039

Prep Code: SW7471A_PR

Prep Type: 7471B/METHOD

Technician: David T Camara

Prep Factor Units:
mL / g

QC Matrix: N/A Conc HNO3 1111101

QC Matrix Lot: N/A Conc HNO3 (mL): 1.25

Filter?: N/A Conc HCl 4110110

Filter Lot: N/A Conc HCl (mL): 3.75

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 4 Lot: N/A

Reagent 4 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Digestion Start Time 1: 05/08/2012 15:41

Digestion End Time 1: 05/08/2012 15:43

Digestion Start Time 2: 05/08/2012 16:00

Digestion End Time 2: 05/08/2012 16:30

Block Temp (C): 97

Therm ID1: MT-47
Corr Fac-3

Mikem Sample ID	Client Samp ID	Initial (L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
L0898-03ADUP	RDA-SD-SD02-52012	S 0.52	100	--	--	--	--	05/22/12	01	05/08/12	DTC	HgLab	>11	<2	HB-2
L0898-03AMS	RDA-SD-SD02-52012	S 0.52	100	--	--	--	--	05/22/12	01	05/08/12	DTC	HgLab			HB-2
1 mL III20508C															
L0898-05A	RDA-SD-SD01-52012	S 0.56	100	--	--	--	--	05/22/12	01	05/08/12	DTC	HgLab			HB-2
TAL															
L0903-05B	SP-22-1-4	S 0.59	100	--	--	--	--	05/23/12	01	05/08/12	DTC	HgLab			HB-2
L0903-07B	SP-27-1-4	S 0.52	100	--	--	--	--	05/23/12	01	05/08/12	DTC	HgLab			HB-2
L0903-09B	SP-32-2-4	S 0.57	100	--	--	--	--	05/23/12	01	05/08/12	DTC	HgLab			HB-2
L0903-13B	SP-38-4-8	S 0.59	100	--	--	--	--	05/23/12	01	05/08/12	DTC	HgLab			HB-2
L0903-14A	SP-41-0-2	S 0.53	100	--	--	--	--	05/23/12	01	05/08/12	DTC	HgLab			HB-2
L0865-01B	SP-1-2-4	S 0.53	100	--	--	--	--	05/21/12	01	05/08/12	DTC	HgLab			HB-2

HZA 5/9/12

David T Camara 05/08/2012

Analyst Reviewed

Date

Manager Reviewed

Date

Comments:

1255/8/12

Percent Moisture and Percent Solids Report

<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Analyzed</i>	<i>Percent Moisture</i>	<i>Percent Solids</i>	<i>Validated</i>
<i>L0782-01A</i>	<i>SO4-MW2</i>	<i>04/24/2012</i>	<i>8.096</i>	<i>91.904</i>	<i>Yes</i>

Client: STERLING

Work Order: L0782

Profile Name: STERLING_COLONIE

MATRIX Soil

Samp #	Bottle	Test	Status	Received	Date
01A	001	PMoist	In	LOGIN: kpierce	4/20/2012 9:57:00 AM
01A	001	PMoist	Out	Jonathan M Vales	4/24/2012 2:17:53 PM
01A	001	PMoist	In	Jonathan M Vales	4/24/2012 4:14:40 PM
01A	001	PMoist	In	David T Camara	4/30/2012 1:52:27 PM
01A	001	SW6010_S	In	LOGIN: kpierce	4/20/2012 9:57:00 AM
01A	001	SW6010_S	Out	David T Camara	4/30/2012 9:54:53 AM
01A	001	SW6010_S	In	David T Camara	4/30/2012 1:52:27 PM
01A	001	SW7471	In	LOGIN: kpierce	4/20/2012 9:57:00 AM
01A	001	SW7471	Out	David T Camara	5/8/2012 1:37:01 PM
01A	001	SW7471	In	David T Camara	5/8/2012 4:16:51 PM
01A	001	SW8270_S	In	LOGIN: kpierce	4/20/2012 9:57:00 AM
01A	001	SW8270_S	Out	James Kyle Dorsey	4/22/2012 9:25:20 PM
01A	001	SW8270_S	In	James Kyle Dorsey	4/22/2012 10:50:15 PM
01A	001	SW8270_S	In	David T Camara	4/30/2012 1:52:27 PM
01B	001	SW8260_LOW_S	In	LOGIN: kpierce	4/20/2012 9:57:00 AM

Last Page of Data Report