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September 14, 2015

VIA ELECTRONIC MAIL

Jeffrey E. Trad, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7017

Re: Farrand Controls Site
NYSDEC Site No. 360046
Environmental Sampling and Implementation Program
Final Report
D&B No. 3150-16

Dear Mr. Trad:

Attached please find an electronic copy of the Final Report for the Environmental Sampling and Implementation Program recently completed at the Farrand Controls Site. The Final Report incorporates all comments received from the New York State Department of Environmental Conservation to date on the Draft Report.

If you have any questions or comments, please do not hesitate to contact me at (315) 437-1142, ext. 3992

Very truly yours,

James J. Magda
Associate

JM/jm
Attachment
cc: G. Burke (NYSDEC)
D. Crosby (NYSDEC)
S. Priore (NYSDEC)
R. Walka (D&B)
M. Wright (D&B)
♦3150\091415_JT Ltr

SEPTEMBER 2015

New York State Department of Environmental Conservation

Division of Environmental Remediation

Farrand Controls Site

Environmental Sampling and Implementation Program

Site No. 360046







D&B Engineers and Architects, P.C.

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ENVIRONMENTAL SAMPLING AND IMPLEMENTATION PROGRAM
FINAL REPORT
FARRAND CONTROLS SITE
WESTCHESTER COUNTY, NEW YORK

NYSDEC SITE NO. 360046

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

Prepared by:

D&B ENGINEERS AND ARCHITECTS, P.C.
WOODBURY, NEW YORK 11797

SEPTEMBER 2015

ENVIRONMENTAL SAMPLING AND IMPLEMENTATION PROGRAM
FINAL REPORT
FARRAND CONTROLS SITE
NYSDEC SITE NO. 360046

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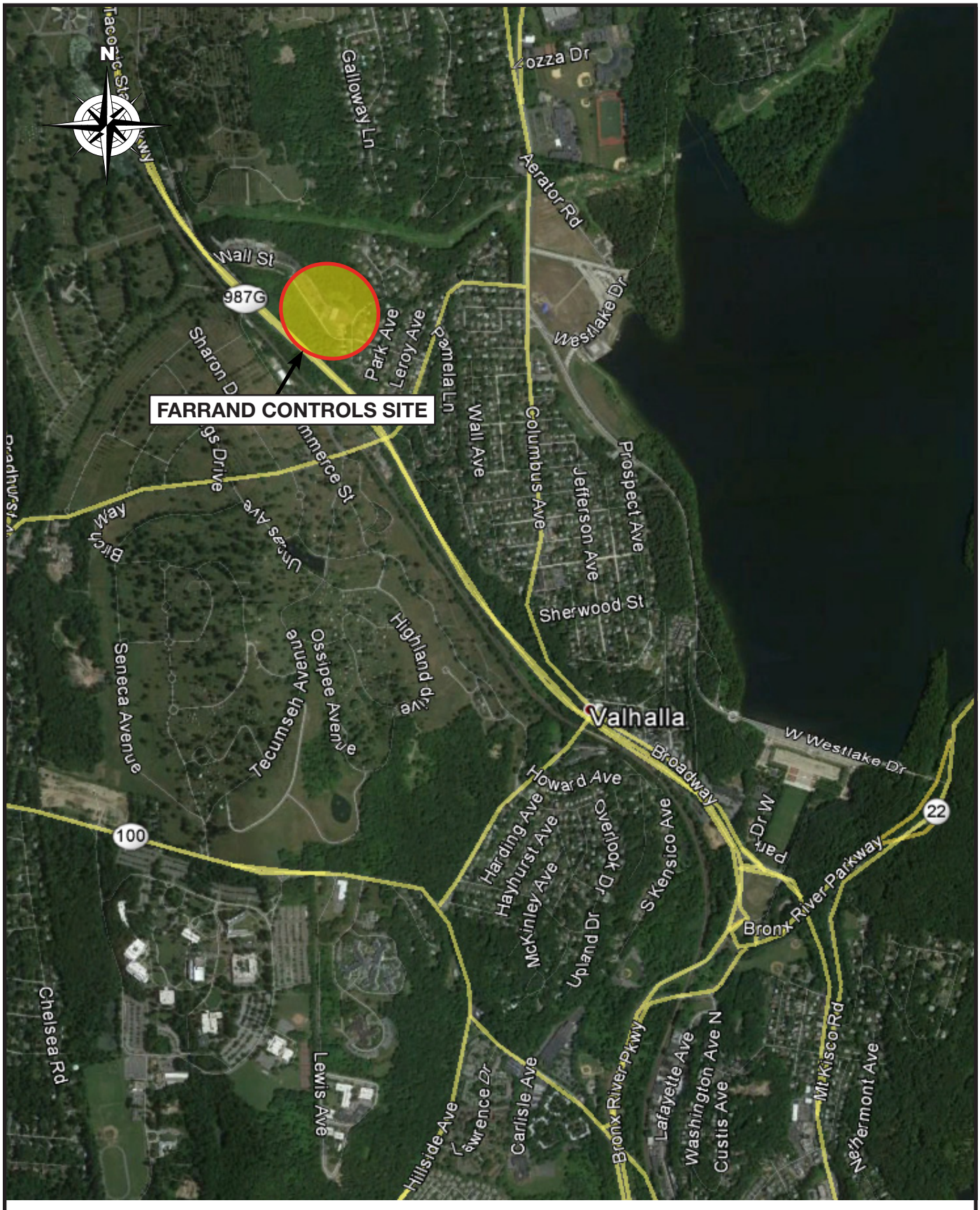
Summary of Historical Analytical Results ..... End of Section 3

1.0 INTRODUCTION

This report presents the analytical results, findings, conclusions and recommendations associated with the environmental sampling program recently completed at the Farrand Controls Site (Site), located in Valhalla, Westchester County, New York. A site location map is provided as Figure 1-1. The purpose of the program was to further evaluate volatile organic compound (VOC) concentrations in groundwater, surface water and sediment in the vicinity of the Site to support the screening of monitored natural attenuation as a potentially viable remediation option for contaminated groundwater beneath the Site. The New York State Department of Environmental Conservation (NYSDEC) issued a Remedial Design Work Assignment (WA) to D&B Engineers and Architects, P.C. (D&B) to complete the environmental sampling program. This report is a deliverable under the WA.

1.1 Project Background and Objectives

The Farrand Controls Site is listed as a Class 2 site in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites. A Class 2 site is one that represents a "significant threat to the public health or environment - action required." The Site is currently owned by Farrand Controls, Inc., a Division of Ruhle Companies, Inc., and is an active electronic component manufacturing facility which has operated at this location since 1959. Operations at the Site have included machining of metals, photolithographic processing (including cupric etching), soldering, and electronic and mechanical assembly. In the basement of the original building, a sump was used to collect liquids from various floor drains. When the building was expanded in 1972, this sump was reportedly deactivated and a number of floor drains that emptied into the sump were plugged. Spent solvents (primarily trichloroethene [TCE]) were apparently historically released to the subsurface through the basement sump. As a result, VOCs have impacted overburden groundwater, bedrock groundwater, surface water and indoor air at the Site.



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FARRAND CONTROLS SITE
VALHALLA, NEW YORK

SCALE: NTS

SITE LOCATION MAP

FIGURE 1-1

The following VOCs have been identified as contaminants of concern (COC) at the Site: 1,1,2-trichloroethane; vinyl chloride; 1,1,1-trichloroethane; 1,1,2-trichloro-1,2,2-trifluoroethane (Freon®113); 1,1-dichloroethane; 1,1-dichloroethene; cis-1,2-dichloroethene; dichlorodifluoromethane; trans-1,2-dichloroethene; and TCE.

In addition to the basement sump, additional suspected source areas at the Site included a storm water catch basin in the parking lot and suspected dense non-aqueous phase liquids (DNAPL) on and/or within fractured bedrock. Two of the three potential source areas have been addressed through Interim Remedial Measures (IRMs). The basement sump was cleaned and subsurface soil was removed by the owner prior to NYSDEC's involvement at the Site. Contaminated soil located within and adjacent to the parking lot catch basin was addressed by NYSDEC in May 2008. The catch basin and associated storm water piping were also replaced in-kind as part of the work.

In October 2000, D&B prepared a Feasibility Study (FS) on remedial measures which could address the groundwater contamination in the overburden and fractured bedrock. The remedial measures evaluated included groundwater extraction and treatment, in-well air stripping, in-situ chemical oxidation and monitored natural attenuation. Based upon the recommendations of the FS, a bench scale treatability study utilizing permanganate oxidation and zero-valent iron chemical reduction was conducted in December 2001, the results of which suggested that zero-valent iron chemical reduction could be a feasible remedy for the contaminated groundwater at the Site. Subsequently, in accordance with the 2002 NYSDEC Record of Decision (ROD), two on-site pilot studies were conducted in May 2005 (smaller scale) and November/December 2008 (larger scale). Although the larger scale pilot study successfully injected the zero-valent iron into the subsurface environment, the laboratory analytical results for the post-injection groundwater sampling indicated that the zero valent iron injections had limited impact on improving groundwater quality. Therefore, it was concluded that this technology is not capable of achieving the desired contaminant reduction at the Site.

As a result, NYSDEC requested that D&B evaluate the feasibility of using thermal treatment (e.g., Electric Resistance Heating [ERH]) in the secondary source area downgradient

of the storm drain, groundwater extraction and treatment at the storm drain source area using existing monitoring wells, and monitored natural attenuation with a bioreactor cell at the outfall in the wetland. Based on the results of that evaluation, the following conclusions were made:

- Thermal treatment may be effective at treating DNAPL and DNAPL-residuals in bedrock at the Site. However, an alternate technology may also be required to treat the dissolved plume since application of this technology across the entire Site would not be practical. Also, the cost of implementing thermal treatment would be high since this alternative requires a significant amount of energy, a co-technology such as soil vapor extraction to capture and treat off-gas, and a method of controlling groundwater entering the treatment area such as injection of steam. A pilot study would be required to determine the effectiveness of the technology. The initial cost estimate for design, implementation and operation of the pilot study system was $4.8 million.

- Groundwater extraction and treatment may not be effective at remediating DNAPL in bedrock at the Site due to difficulties associated with locating and extracting free phase product in bedrock. Extensive site characterization activities would be required to locate the contaminant mass and to design a system capable of capturing and treating the contaminant mass. These activities alone would likely be time consuming, expensive and may not generate the data required to design a system. Unless the source area is removed or contained, DNAPL will continue to dissolve, causing a groundwater contaminant plume for an extended period of time. Assuming the bulk of contaminant mass could be located and extracted, a timeframe of 30 years or more may be required for this technology to achieve cleanup goals for the Site. The initial cost estimate for design, implementation and operation of the pilot study system, excluding the cost of treatment equipment and site characterization activities was $1.4 million.

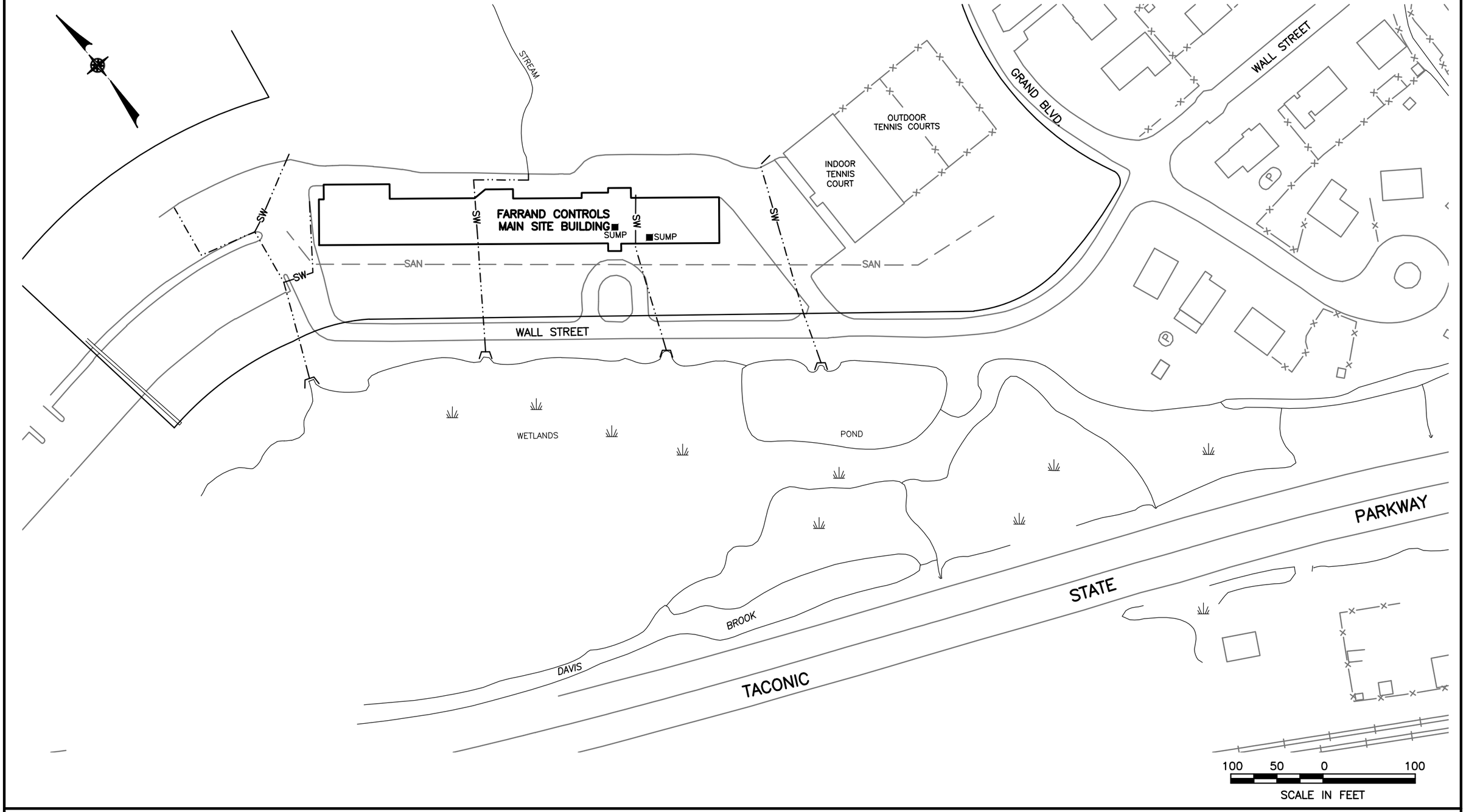
- Although monitored natural attenuation would not directly address the DNAPL or DNAPL-residuals within bedrock at the Site, it may be possible to utilize the downgradient wetland area and natural processes within the wetland to control contaminant migration and/or reduce contaminant concentrations in groundwater discharging to the wetland. Historic water level data shows that deep groundwater from the Site is upwelling from the bedrock, into the overburden and likely discharging to the wetland area. Additionally, historic analytical data shows VOC concentrations in surface water and sediment are lower than groundwater contaminant concentrations, which suggests natural attenuation may be occurring. Additional surface water and sediment data are needed to further evaluate natural attenuation using the wetland area. As a result, an initial cost estimate was not prepared for this alternative.

In August 2013, in fulfillment of a NYSDEC WA, D&B developed a scope of work (SOW) in consultation with the NYSDEC to investigate the current VOC concentrations at key areas of the Site including the downgradient wetland area, downgradient groundwater and basement sumps to support the screening of monitored natural attenuation as a potentially viable remediation option for contaminated groundwater. The SOW included surface water and sediment sampling, installation and sampling of four monitoring well pairs south of the Site along the Taconic State Parkway, sampling of 15 existing monitoring wells, sampling of 8 commercial wells located downgradient of the Site, a well pumping analysis using 4 existing monitoring wells and disposal of investigation-derived waste.

This report presents a summary of all data obtained during this most recent investigation, including identification and location of contaminants of concern, and comparison of contaminant concentrations to applicable standards, criteria and guidance (SCGs). The report includes a description of the field procedures, a discussion of geology and hydrogeology for the targeted areas of the Site, and a discussion of the findings of the investigation. This report also includes conclusions based on the findings of the investigation, and recommendations with respect to future cleanup approaches/strategies.

1.2 Site Description

The Farrand Controls Site is approximately 6 acres in size. The northeastern area, approximately 60 percent of the Site, is a hill with a bedrock outcrop at its base, and is undeveloped. The developed areas of the property extend from the bedrock outcrop to the property boundaries to the northwest, west and south, and is referred to as the "Site" in this report. The Site currently consists of a 28,255 square foot, one-story block and steel framed manufacturing building constructed in 1958. There is also an 8,312 square foot, wood frame Quonset style building on the Site, which was constructed in 1958 as an indoor tennis court. A wetland area and Davis Brook lie to the west, between Wall Street and Taconic State Parkway. A residential area adjoins the Site to the south and a light industrial park is located to the north. Figure 1-2 presents a site layout map. Due to high groundwater at the Site, three active sumps



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FARRAND CONTROLS SITE
VALHALLA, NEW YORK

SITE LAYOUT MAP

FIGURE 1-2

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are located in the basement of the building. The sumps are used to collect groundwater infiltration and convey it via pumps to the adjacent wetlands via the site storm sewer system.

The Farrand Controls Site has been served by municipal water and sanitary sewer systems since 1958, when the facility was constructed. The surrounding residential and commercial/industrial area is also served by public water and municipal sanitary sewers. Storm water is collected by an on-site storm sewer system that discharges into the wetlands located to the south and west of the facility.

2.0 COMPLETED INVESTIGATION ACTIVITIES

The investigation activities completed as part of the 2014 Environmental Sampling and Implementation Program consisted of surface water and sediment sampling, sampling of two existing basement sumps, installation of new monitoring wells, sampling of groundwater monitoring and commercial wells, and a groundwater well pumping analysis. All samples collected were sent to a laboratory for chemical analysis, as discussed below. All investigation activities were completed in accordance with the NYSDEC-approved Site-Specific Environmental Sampling and Implementation Scope of Work (dated August 2013), and subsequent email correspondence.

D&B utilized SJB Services, Inc. and Parratt-Wolff, Inc., licensed well drillers (under subcontract to D&B), to collect all soil borings and install all groundwater monitoring wells included in this program. Aztech Technologies, Inc., a "call-out" contractor retained by the NYSDEC, assisted with the groundwater well pumping analysis. Surface water and sediment sampling, as well as sampling of water within two existing basement sumps were completed in January 2014. Installation of new groundwater monitoring wells, well development, groundwater sampling, groundwater well pumping analysis and water level measurements were completed between April and June 2014. A survey of all on-site groundwater monitoring wells was completed in June 2014. Sampling of commercial wells located downgradient of the Site was completed in August 2014.

2.1 Surface Water and Sediment Sampling

In order to assess current VOC concentrations in surface water on and adjacent to the Farrand Controls Site, eleven (11) samples were collected for chemical analysis. The surface water samples were collected from several locations assessed as part of previous investigations as well as newly proposed locations. A background sample was collected from the so-called "Farrand Falls" located in the rear of the main building. Four (4) samples were collected at each of the existing stormwater/groundwater infiltration outfalls located south of Wall Street. Two (2) samples were collected at downstream locations east of the pond. These surface water sampling

locations are the same locations sampled during previous investigations. Four (4) samples were collected from new locations along various portions of Davis Brook. The surface water samples were collected utilizing a decontaminated polyethylene hand dipper and transferred directly into laboratory-supplied containers. The surface water sample locations are presented on Figure 2-1.

Seventeen (17) sediment samples were collected from various locations within the wetlands, pond, downstream of the pond, and Davis Brook. Ten (10) of the sediment sample locations were paired with the surface water sample locations discussed above. At paired surface water/sediment sampling points, the water samples were collected first. Seven (7) additional samples were collected within the wetlands area. The sediment samples were collected using a decontaminated hand auger. The sediment sample locations are presented on Figure 2-1.

A handheld Global Positioning System (GPS) was utilized to document the spatial position of the surface water and sediment sample locations. A table summarizing the sample identification numbers and associated horizontal coordinates for the surface water and sediment samples is provided in Appendix A. Analytical results for the surface water and sediment sampling are discussed in Section 3.0. Tabulated analytical data tables are also provided in Section 3.0.

2.2 Sump Sampling

In order to assess VOC concentrations in water currently being collected within two of the basement sumps and discharged to the nearby wetland area, one sample was collected from each sump for chemical analysis. The sump water sampling locations are the same locations sampled during previous investigations. The sump water samples were collected by utilizing a decontaminated polyethylene hand dipper and transferred into laboratory-supplied containers. It should be noted that the third active basement sump is located in the far northwest corner of the building, not adjacent to the Site study area. Accordingly, this sump was not sampled as part of the program. The sump sample locations are presented on Figure 2-1. Analytical results for the sump sampling are discussed in Section 3.0. Tabulated analytical data tables are also provided in Section 3.0.

LEGEND:
- MONITORING WELL SAMPLE LOCATION
- SURFACE WATER SAMPLE LOCATION
- SEDIMENT SAMPLE LOCATION
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION

SE-7
SE-1
WS-2
SE-13
WS-1
SE-2
WS-3
SE-8
SUMP 2
SUMP 3
SE-14
WS-8
OC-19S
OC-19D
MW-21R
MW-21S
SE-3
WS-4
MW-22R
MW-22S
SE-15
WS-9
SE-9
MW-27
OC-17S
OC-17D
MW-32S
MW-32D
SE-16
WS-10
SE-4
WS-5
MW-10D
MW-10S
MW-10R
SE-10
MW-31S
MW-31D
SE-17
WS-11
MW-30S
MW-30D
SE-11
SE-5
WS-6
MW-29D
MW-29S
SE-12
MW-20R
MW-20D
MW-20S
SE-6
WS-7

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FARRAND CONTROLS SITE
WESTCHESTER COUNTY — NEW YORK
VALHALLA, NEW YORK

SAMPLE LOCATION MAP

PROJECT NO.	DRAWING NO.
3150	2-1
DATE: OCTOBER 2014	
SCALE: 1"=60'	

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2.3 Soil Boring and Monitoring Well Installation

In order to collect data regarding potential migration of contaminants beyond the wetland area, four (4) monitoring well pairs (shallow [S] and deep [D]) (MW-29S, MW-29D, MW-30S, MW-30D, MW-31S, MW-31D, MW-32S and MW-32D) were installed south of the Site along the Taconic State Parkway (TSP). Each well pair consists of one shallow and one deep monitoring well in overburden to better target the vertical extent of contamination. The shallow wells were installed approximately 10 feet into the saturated zone, or approximately 15 feet below ground surface (bgs). The deep wells were completed in overburden and screened on top of bedrock, which ranged from approximately 36 feet to 70 feet bgs. Prior to initiation of any intrusive activities, Dig Safely New York, Inc. was contacted and utility mark outs were completed at the Site.

Soil borings (SB-29S, SB-29D, SB-30S, SB-30D, SB-31S, SB-31D, SB-32S and SB-32D) were advanced at each monitoring well location to determine geology and confirm bedrock depth in the deep soil borings. D&B retained SJB Services, Inc. and Parratt-Wolff, Inc. for the soil boring and monitoring well installation activities. The soil borings were advanced utilizing hollow-stem augers and the rock coring was advanced using mud rotary and rock core equipment. In general, split spoon samples were collected from each of the four deep (SB-29D through SB-32D) soil borings at 2-foot intervals. Each sample was logged for geology and screened for VOCs using photoionization detector (PID). In addition, with the approval of the NYSDEC, at each of the deep soil borings, a 5-foot rock core was obtained to confirm the presence of bedrock.

Upon completion of each soil boring, a monitoring well was installed at each location. Each well was constructed utilizing a 2-inch diameter polyvinyl chloride (PVC) well screen (10 feet) and PVC riser. A sand pack was placed around each well screen, to an approximate depth of 6 inches above the top and below the bottom extent of each well screen. A bentonite seal was placed above the sand pack. Protective flush mounted casings with locking covers were installed in concrete surface pads at each well. The monitoring well locations are depicted on Figure 2-1.

Following installation of the groundwater wells, and at least 48 hours after well completion, the wells were developed in order to remove foreign materials from the groundwater, well annulus, or well screen introduced during and/or after well installation, and to facilitate hydraulic communication between the formation and the well screen. The wells were developed by surging and evacuating groundwater using submersible pumps and dedicated tubing. Well development water was monitored for pH, temperature, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP) and turbidity utilizing a calibrated Horbia water quality meter.

Soil cuttings generated from the soil boring processes were containerized in 55-gallon drums for off-site disposal. Boring and monitoring well construction logs for each completed monitoring well location are provided in Appendix B.

2.4 Monitoring Well Sampling

A total of 23 groundwater samples were collected from the eight (8) newly installed monitoring wells (MW-29S, MW-29D, MW-30S, MW-30D, MW-31S, MW-31D, MW-32S and MW-32D) and 15 existing monitoring wells (MW-10S, MW-10D, MW-10R, OC-17S, OC-17D, OC-19S, OC-19D, MW-20S, MW-20D, MW-20R, MW-21S, MW-21R, MW-22S, MW-22R and MW-27) and analyzed for VOCs. The monitoring wells were sampled via low-flow sampling techniques (500 ml/min or less) utilizing a low-flow bladder pump with disposable tubing to purge and sample each well. During the well purging process, field measurements of pH, temperature, specific conductivity, ORP, dissolved oxygen and turbidity were recorded using a calibrated Horiba U52 water quality meter with a flow-through cell. Groundwater samples were collected in precleaned, laboratory-supplied sample containers after the field parameter values had stabilized. The sample containers were labeled and placed in a cooler with bagged ice sufficient to cool the samples to 4 degrees Celsius.

All non-dedicated sampling equipment (e.g., low-flow bladder pump) was properly decontaminated between sampling locations and all disposable sampling equipment was properly disposed following its one-time use.

The analytical results of the samples are discussed in Section 3.0. Tabulated analytical data tables are also provided in Section 3.0.

2.5 Well Pumping Analysis

The NYSDEC retained a "call-out" contractor, Aztech Technologies, Inc., to purge, containerize and treat water generated during the sampling activities and well pumping analysis at select existing monitoring wells (MW-22R, MW-22S and MW-21R). Following treatment via carbon units, and per the approval of the NYSDEC, the treated water was discharged to the ground in the vicinity of these wells. D&B provided oversight of the call-out contractor. Existing monitoring wells MW-21R, MW-22R and MW-22S were purged and sampled for VOC analysis over the course of three evacuations cycles to determine if contaminant characteristics/concentrations would remain consistent during extended pumping. Each well was purged of approximately three well volumes, allowed to recharge and sampled for VOCs directly from the pump discharge tubing using laboratory-supplied containers. The sample containers were labeled and placed in a cooler with bagged ice sufficient to cool the samples to 4 degrees Celsius. This process was repeated over the course of three cycles at each of the wells. The results of the groundwater sampling for the well pumping analysis are discussed in Section 3.0 of this report. Field documentation of the groundwater well pumping analysis is provided in Appendix C.

2.6 Water Level Monitoring

On June 20, 2014, synoptic groundwater level measurements were obtained from all existing and newly installed groundwater wells for determining groundwater elevations and flow direction. Groundwater level measurements were obtained from a surveyed measuring point on each well using an electronic water level indicator to an accuracy of 0.01 foot. A discussion of the groundwater level measurements and associated groundwater flow direction at the Site is provided in Section 3.0.

2.7 Commercial Well Sampling

A total of eight (8) groundwater samples were collected from eight (8) existing commercial wells located downgradient of the Site for VOC analysis on August 8, 2014. Samples were collected from faucets inside local businesses directly supplied by the commercial wells using laboratory-supplied containers. The commercial well sample locations are presented on Figure 2-2.

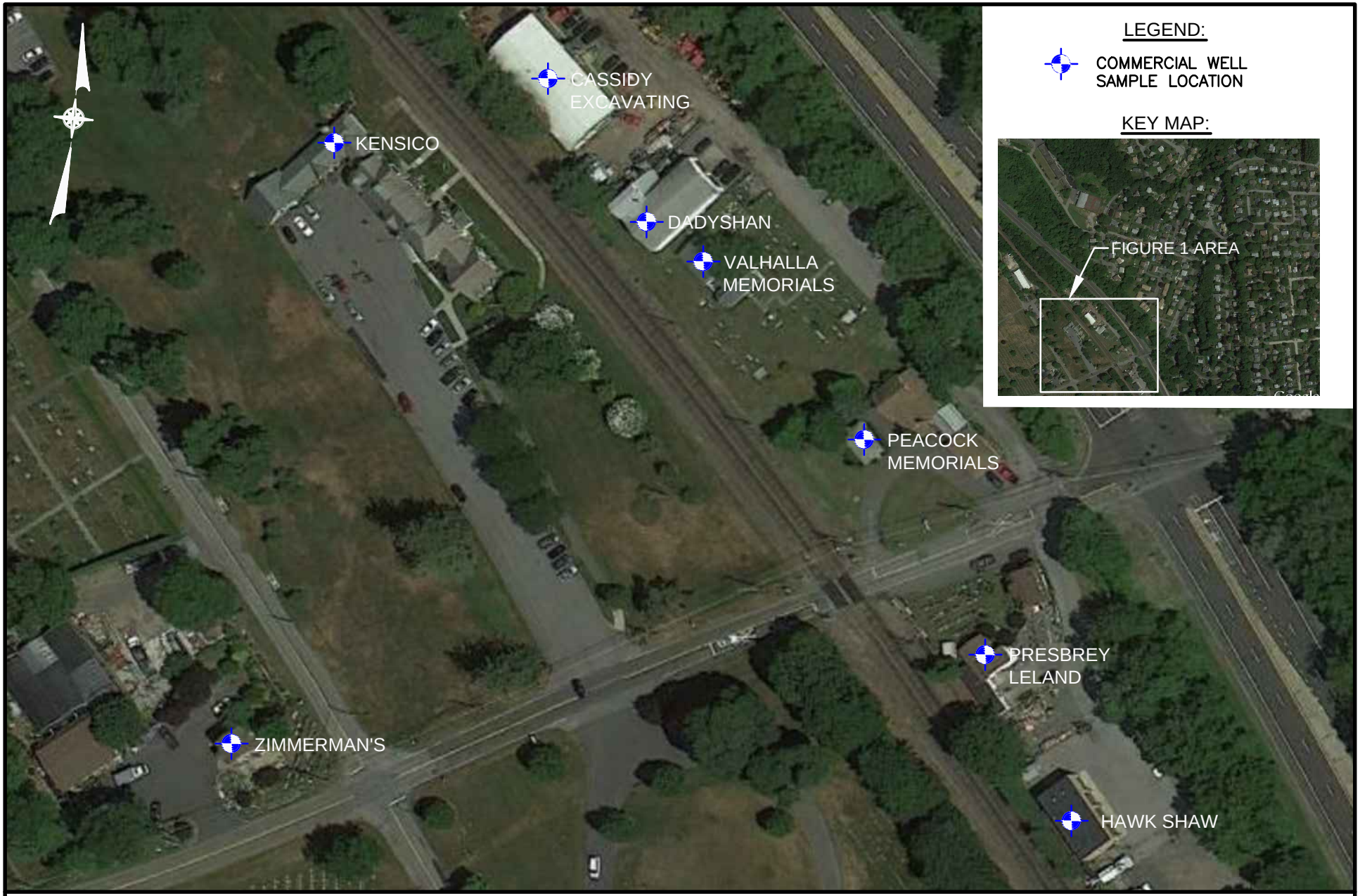
2.8 Site Survey

Following installation of the monitoring wells, a site survey was completed by a licensed surveyor. Top of casing elevations and the spatial position of the new and existing monitoring wells were collected. Survey data for the site monitoring well network is provided in Appendix D.

2.9 Management of Investigation-Derived Waste

A temporary decontamination pad was constructed on-site for equipment decontamination. All cleanup of equipment utilized to handle contaminated materials was performed at the temporary equipment decontamination pad. Gross removal of bulk debris was performed by brushing/scraping, followed by thorough decontamination with a pressure washer/steam cleaner.

In conformance with NYSDEC remedial program guidance, water generated during well development, and purging activities was disposed of at the site-specific work areas, with the exception of purge water generated during sampling of MW-10D, MW-10R, MW-21S, MW-21R, MW-22S and MW-22R. Since the groundwater contaminant concentrations at these locations are elevated, purge water generated during sample collection at these monitoring wells was temporarily containerized and processed through the carbon treatment units on-site for the well pumping analysis prior to discharging the water on the ground in conformance with



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APPROX. SCALE: 1"=100'

COMMERCIAL WELL SAMPLE LOCATION MAP

FIGURE 2-2

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NYSDEC remedial program guidance. Soil cuttings, drilling fluids and decontamination waste were segregated based on their physical state and properly containerized in 55-gallon drums. The containers were sealed at the end of each workday and labeled with the date, well or boring number (s), type of waste and the name of a point-of-contact. The waste was then sampled, profiled and properly disposed of off-site at an approved facility. A copy of waste manifests and disposal receipts is provided in Appendix E.

2.10 Sample Analysis

All of the samples collected as part of the field investigation activities were submitted under chain-of-custody procedures for laboratory analysis at Spectrum Analytical, Inc. (Spectrum) located in North Kingstown, Rhode Island. Spectrum participates in the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP). All samples were analyzed using a standard turnaround time (TAT). Complete analytical laboratory reports for all samples collected as part of this program are included as Appendix F.

3.0 FINDINGS

The following summarizes the findings of the 2014 Environmental Sampling and Implementation Program completed at the Site. All figures and analytical data tables referenced herein are provided at the end of this section of the report.

It should be noted that, subsequent to the completion of the Remedial Investigation at the Site in 1999, sampling for VOCs at the Site has been limited to the following specific site-related contaminants:

Site-Related Contaminants
1,1,2-Trichloroethane
Vinyl Chloride (VC)
1,1,1-Trichloroethane (TCA)
1,1,2-Trichloro-1,2,2-trifluoroethane
1,1-Dichloroethane (DCA)
1,1-Dichloroethene
cis-1,2-Dichloroethene (c-DCE)
Dichlorodifluoromethane
trans-1,2-Dichloroethene
Trichloroethene (TCE)
1,2-Dichloro-1,1,2-trifluoroethane

During this program, and in coordination with the NYSDEC, VOC sampling included these site-related contaminants as well as the full Target Compound List (TCL) of VOCs, in order to confirm previous conclusions regarding the above subset of contaminants. Where the term “site-related contaminants” is utilized in this report, it is intended to encompass the above-outlined list.

All surface water and sediment samples collected as part of this program were labeled with a sample identification code that is compatible with the NYSDEC EQuIS format. The code identifies the remedial program, sample location, sample matrix and series number. For ease of

reference and discussion in this report, surface water and sediment sample identification codes have been abbreviated consistent with the following examples:

Sample Type	EQuIS Identification Code	Report Identification Code
Surface Water	HW-WET-WS-1	WS-1
Sediment	HW-WET-SE-1	SE-1

Consistent with previous investigations, groundwater samples collected as part of this program were labeled with the monitoring well identification number from which the samples were collected. Accordingly, groundwater sampling results are discussed in this report referencing the monitoring well identification numbers.

3.1 Surface Water and Sediment Sampling

Surface Water Samples

As outlined in Section 2.1, a total of 11 surface water samples were collected for VOC analysis as part of this program. Analytical results for the surface water samples are provided in Table 3-1. Consistent with the 1999 Remedial Investigation, the surface water sample results are compared to the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Class C Surface Water Standard or Guidance Values.

As shown in Table 3-1, TCE was the only constituent detected at a concentration above its NYSDEC Class C Surface Water Standard or Guidance Value. TCE was detected in surface water sample WS-4 at a concentration of 66 ug/L, which exceeds the Class C surface Water Standard of 40 ug/L. It should be noted that several other VOCs were detected in WS-4, however, these VOCs do not have a NYSDEC Class C Surface Water Standard or Guidance Value. Most significantly, 1,1,1-Trichloroethene was detected at a concentration of 570 ug/L, 1,1,2-Trichloro-1,2,2-trifluoroethane was detected at a concentration of 39 ug/L, 1,1-Dichloroethane was detected at a concentration of 150 ug/L, Chloroethane was detected at a concentration of 160 ug/L, cis-1,2-Dichloroethene was detected at a concentration of 78 ug/L

and Vinyl Chloride was detected at a concentration of 26 ug/L. These constituents are all site-related contaminants or their breakdown products. Sample WS-4 was collected at one of the existing stormwater/groundwater infiltration outfalls located south of Wall Street.

Site-related contaminants were also detected at lower concentrations in surface water samples WS-2, WS-3, WS-5, WS-6 and WS-7. Surface water samples WS-2, WS-3 and WS-5 correspond to the other three existing stormwater/groundwater infiltration outfalls located south of Wall Street, while WS-6 and WS-7 were collected downgradient of the outfalls with respect to the local direction of surface water flow in the wetland area. The table below provides a summary of the total VOC concentrations in the surface water samples where VOCs were detected:

Sample ID	Total VOC Concentration (ug/L)	Sample Location
WS-2	1.2	Stormwater Outfall
WS-3	20.9	Stormwater Outfall
WS-4	1,097.2	Stormwater Outfall
WS-5	17.1	Stormwater Outfall
WS-6	2.99	Downgradient Surface Water
WS-7	2.85	Downgradient Surface Water

As shown by the table presented above, the highest surface water VOC concentrations were detected at the existing stormwater/groundwater infiltration outfalls located south of Wall Street. These results are consistent with the surface water sample results obtained during the 1999 Remedial Investigation, which also showed VOC contamination in surface water near the existing stormwater/groundwater infiltration outfalls, with the maximum concentrations occurring at surface water sample location WS-4.

A summary of the surface water sample exceedances is presented on Figure 3-1.

Sediment Samples

As outlined in Section 2.1, a total of 17 sediment samples were collected for VOC analysis as part of this program. Analytical results for the sediment samples are provided in Table 3-2. The sediment sample results are compared to the NYSDEC January 1999 Technical Guidance for Screening Contaminated Sediments (NYSDEC Sediment Criteria).

As shown in Table 3-2, benzene, toluene and xylene (BTEX) and several benzene related compounds were detected at concentrations above their respective NYSDEC Sediment Criteria in sediment sample SE-3. It should be noted that sediment sample SE-3 was paired with surface water sample WS-4, which was the surface water sample collected as part of this program that exhibited the highest VOC concentrations. As previously indicated, this sample location (SE-3/WS-4) corresponds to one of the existing storm water/groundwater infiltration outfalls located south of Wall Street. It should also be noted that several of the site-related contaminants were detected in this sample at elevated concentrations; however, these VOCs do not have any corresponding NYSDEC Sediment Criteria. Most significantly, this includes detections of 1,1,1-Trichloroethane at 190,000 ug/kg and 1,1,2-Trichloro-1,2,2-trifluoroethane at 60,000 ug/kg. As outlined above, several benzene compounds, toluene and xylene were detected at elevated concentrations in this sample, indicative of petroleum contamination. These constituents are not COCs as described in the ROD and have not historically been detected at the Site, and are most likely attributed to the fact that this sample was collected near a storm water outfall that receives runoff from streets and parking areas.

Although no VOCs were detected in any of the other sediment samples at concentrations exceeding the NYSDEC Sediment Criteria, 1,1,1-Trichloroethane was detected at a concentration of 23,000 ug/kg and 1,1,2-Trichloro-1,2,2-trifluoroethane was detected at a concentration of 6,100 ug/kg in sediment sample SE-4. It should be noted that sediment sample SE-4 was collected at one of the existing storm water/groundwater infiltration outfalls located south of Wall Street.

Elevated VOC concentrations were not detected in any of the other sediment samples collected as part of the program. A summary of the sediment sample exceedances is presented on Figure 3-1.

3.2 Sump Sampling

As outlined in Section 2.2, one sample was collected from two of the building basement sumps for VOC analysis. Analytical results for the sump samples are provided in Table 3-3. Since water which accumulates within the sump is discharged into the wetland area, the sump sample results are compared to NYSDEC TOGS 1.1.1 Class C Surface Water Standard or Guidance Values. As shown in Table 3-3, Trichloroethene was detected at a concentration of 130 ug/L in Sump 2 and 54 ug/L in Sump 3, both above its NYSDEC Class C Surface Water Standard or Guidance Value of 40 ug/L. In addition, several other VOCs were detected in the sump samples; however, these VOCs do not have a NYSDEC Class C Surface Water Standard or Guidance Value. These detections included site related contaminants 1,1,1-Trichloroethane (Sump 2: 230 ug/L; Sump 3: 36 ug/L), 1,1,2-Trichloro-1,2,2-trifluoroethane (Sump 2: 97 ug/L; Sump 3: 44 ug/L) and cis-1,2-Dichloroethene (Sump 2: 20 ug/L; Sump 3: 31ug/L).

The above outlined sump sampling results are similar to the results obtained during sampling completed by D&B at the Site in 2004 as part of the Pre-Design Investigation.

No other VOCs were detected above their respective NYSDEC Class C Surface Water Standard or Guidance Value in the two sump samples. A summary of the sump sample exceedances are presented on Figure 3-1.

3.3 Groundwater Monitoring Well Sampling

As outlined in Section 2.4, a total of 15 groundwater samples were collected from existing groundwater monitoring wells for VOC analysis as part of this program. Analytical results for these groundwater samples are provided in Table 3-4. The groundwater sample results are compared to the NYSDEC TOGS 1.1.1 Class GA Groundwater Standard or Guidance

Values. As shown in Table 3-4, several VOCs (including all the Site contaminants of concern, with the exception of Dichlorodifluoromethane) were detected at concentrations above their respective NYSDEC Class GA Groundwater Standard or Guidance Value in all the groundwater samples, with the exception of groundwater sample MW-20R. Monitoring well MW-20R, located off the Taconic State Parkway, is a bedrock monitoring well and is the farthest downgradient well south of the Site.

As detailed in Section 2.3, a total of eight (8) new groundwater monitoring wells were installed south of the Site along the Taconic State Parkway as part of this program. A groundwater sample was collected from each of the new monitoring wells for VOC analysis. Analytical results for these groundwater samples are provided in Table 3-4. The groundwater sample results are compared to the NYSDEC Class GA Groundwater Standard or Guidance Values. As shown in Table 3-4, several VOCs (including some of the site-related contaminants) were detected at concentrations above their respective NYSDEC Class GA Groundwater Standard or Guidance Values in one groundwater sample (MW-29S). Monitoring well MW-29S is located south of the Site, along the Taconic State Parkway, and is the easternmost of the newly installed wells. No other VOCs were detected above their respective NYSDEC Class GA Groundwater Standard or Guidance Value in the remaining groundwater samples.

The groundwater sample results obtained during this program are consistent with prior sampling rounds completed at the Site. The highest VOC concentrations at the Site exist in the bedrock monitoring wells located southeast of the facility building (MW-21R and MW-22R). MW-10R, which is also a bedrock monitoring well and is located southeast of the facility building just south of Wall Street, also exhibited elevated VOCs. However, MW-20R, which is a bedrock well located southeast of the wetland area along the Taconic State Parkway, did not exhibit any detectable VOCs.

VOC contamination was also detected in shallow and deep overburden groundwater on-site, again, consistent with previous sampling rounds. Sampling results obtained from the newly installed monitoring wells along the Taconic State Parkway, showed that shallow and deep overburden groundwater southwest of the Site is not impacted by site-related VOCs. However, sampling at newly installed MW-29S, as well as existing monitoring wells MW-20S and MW-

20D, which are located farther southeast of the Site along the Taconic State Parkway, shows low levels of site-related VOCs.

For comparison purposes, tables summarizing the site-related contaminants detected during this program as well as prior historical sampling events are provided at the end of this section of the report.

3.4 Well Pumping Analysis

As detailed in Section 2.5, in order to determine if contaminant characteristics/ concentrations in groundwater remain the same during extended pumping, a well pumping analysis was performed on three existing monitoring wells (MW-21R, MW-22R and MW-22S). Each well was purged, allowed to recharge and sampled for VOCs analysis over the course of three evacuation cycles.

Analytical results for the well pumping analysis samples are provided at the end of this Section in Table 3-5. The groundwater sample results obtained during the well pumping analysis are compared to the NYSDEC TOGS 1.1.1 Class GA Groundwater Standard or Guidance Values. As shown in Table 3-5, and similar to the groundwater samples collected from these wells using standard low-flow sampling techniques, several site-related contaminants were detected during the well pumping analysis at elevated concentrations. Provided below is a table summarizing the total site-related contaminant concentration in each of the samples collected during the well pumping analysis, as well as the results from the low-flow sampling, for comparison purposes.

Groundwater Sampling Method Comparison
Extended Pumping vs. Low-Flow Sampling

Monitoring Well No.	Total Site-Related Contaminant Concentrations			
	Evacuation Cycle 1	Evacuation Cycle 2	Evacuation Cycle 3	Low-Flow Sampling
MW-21R	178,874	216,202	230,295	85,000
MW-22S	3,668	3,778	3,352	2,848
MW-22R	33,955	36,232	37,111	20,629

Note: All concentrations presented in ug/L.

As shown by the table above, the total site-related VOC contamination in the bedrock monitoring wells included in the well pumping analysis increased with each evacuation cycle. In addition, all of the samples collected during the well pumping analysis from the bedrock monitoring wells contained significantly higher concentrations when compared to the results obtained using standard low-flow sampling techniques. It should be noted that the results obtained during this round of sampling using standard low-flow sampling techniques were consistent with prior sampling events completed over the period from 1999 through 2011. These results indicate that, when stressed, the bedrock wells yield increasingly more contamination, which is consistent with the current understanding of the site conceptual model and conclusions made during previous investigations that the bedrock likely contains DNAPL. When the bedrock wells are pumped more aggressively, the contaminated groundwater, and possible DNAPL trapped within the bedrock fractures is released, resulting in higher concentrations when compared to less aggressive pumping, such as purging the wells using low-flow sampling techniques.

In contrast, the total site-related contaminant VOC concentration in the shallow overburden monitoring well (MW-22S) included in the well pumping analysis decreased by the third evacuation cycle when compared to the first cycle. In addition, the sample collected after the third evacuation cycle approached and was only slightly higher than the result obtained using standard low-flow sampling techniques.

A summary of the groundwater sample exceedances is presented on Figure 3-1.

3.5 Soil Borings

Deep soil borings (SB-29D, SB-30D, SB-31D and SB-32D) were advanced to determine the geology and confirm bedrock depth at the locations selected for the installation of the new monitoring wells along the TSP. The soil borings were logged for geology, as well as screened in the field for VOCs using PID. Soil boring logs, including the PID screening results, are provided in Appendix B.

The unconsolidated deposits encountered as part of the soil boring program generally consisted of fine-medium grained sand and silty-sand with some fine sub-rounded gravel. The fine-grained deposits ranged in thickness from approximately 30 feet at SB-32D increasing to approximately 60 feet at SB-29D. Typically, the fine-grained deposits ranged in color from brown to gray-brown to olive-green. Gray and green tones typically indicate deposition in a reducing environment, such as an oxygen-depleted bog or marsh.

A basal glacial till was identified in each of the deep soil borings (SB-29D through SB-32D) beneath the fine-grained deposits. In general, the glacial till consisted of varying amounts of dense, tightly compacted gray sands, silt, clay, gravel and weathered bedrock. In general, the glacial till varied in thickness between 5 to 10 feet.

Beneath the glacial till, bedrock was encountered in each of the four deep soil borings. Based on the inspection of rock cores collected at each boring location, the bedrock consisted of black and white banded gneiss with both horizontal and vertical fractures noted throughout the rock core samples. Competent bedrock surface was encountered at 71 feet bgs in soil boring SB-29D, 55 feet bgs in soil boring SB-30D, 41 feet bgs in soil boring SB-31D and 36 feet bgs in soil boring SB-32D.

Based upon the rock-core samples collected from these borings and a review of existing boring logs and regional geology for the area, the bedrock surface is consistent with an east-west trending steep-sided valley, most likely formed by glaciers, which subsequent to the retreat of the glaciers, was filled with fluvial and lacustrine sediments.

3.6 Water Level Monitoring

As detailed in Section 2.6, as part of this environmental sampling program, a synoptic round of groundwater level measurements was obtained from all existing and newly installed groundwater wells. Table 3-6 summarizes the water level elevations recorded. The results of the water level monitoring indicates that local groundwater flow patterns in shallow overburden groundwater in the vicinity of the existing facility building are likely influenced by the presence

of the building foundation and associated basement sump pumps. Near the building, groundwater generally flows from northwest to southeast, perpendicular with the orientation of the building. However, southeast of the facility building, where the majority of site-related contamination has historically been detected, groundwater flows in a south-southwestern direction toward the wetland area. Within the wetland area, groundwater generally flows from northwest to southeast, along the line of the presumed east-west trending steep-sided valley described in Section 3.4 above.

A groundwater contour map is presented as Figure 3-2.

3.7 Commercial Well Sampling

As outlined in Section 2.7, a total of eight (8) groundwater samples were collected from eight (8) existing commercial wells located downgradient of the Site for VOC analysis. Analytical results for the commercial well samples are provided in Table 3-7. The commercial well sample results are compared to NYSDEC Class GA Groundwater Standards or Guidance Values. As shown in Table 3-7, no VOCs were detected above NYSDEC Class GA Groundwater Standards or Guidance Values in any of the commercial well samples. In addition, no site-related contaminants were detected in any of the commercial well samples.

TABLE 3-1
FARRAND CONTROLS SITE
SURFACE WATER SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID	WS-1	WS-2	WS-3	WS-4	WS-5	WS-6	NYSDEC Class C Surface Water Standard or Guidance Value
Sampling Date	01/15/14	01/15/14	01/15/14	01/15/14	01/15/14	01/15/14	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l
VOLATILE COMPOUNDS							
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1,1-Trichloroethane	1.0 U	1.0 U	5.7	570 D	8.4	1.2	--
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	4.3	39	1.1	1.0 U	--
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	150	3.8	0.89 J	--
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,4-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,3,5-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,3-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
2,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
2-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
4-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
4-Isopropyltoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-

See next page for Footnotes/Qualifiers

TABLE 3-1
FARRAND CONTROLS SITE
SURFACE WATER SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID	WS-1	WS-2	WS-3	WS-4	WS-5	WS-6	NYSDEC Class C Surface Water Standard or Guidance Value
Sampling Date	01/15/14	01/15/14	01/15/14	01/15/14	01/15/14	01/15/14	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l
COMPOUNDS CONTINUED							
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.6	1.0 U	1.0 U	400*/5**
Chloroethane	1.0 U	1.0 U	1.0 U	160	1.0 U	1.0 U	--
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
cis-1,2-Dichloroethene	1.0 U	1.0 U	3.9	78	1.7	0.90 J	--
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Hexachlorobutadiene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Iodomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Methyl tert-butyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Methylene chloride	1.0 U	1.0 U	1.0 U	3.1	1.0 U	1.0 U	200*
n-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
n-Propylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
sec-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
tert-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	3.5	1.0 U	1.0 U	--
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Trichloroethene	1.0 U	1.2	7.0	***66***	2.1	1.0 U	40*
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Vinyl acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Vinyl chloride	1.0 U	1.0 U	1.0 U	26	1.0 U	1.0 U	--
Xylene (Total)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value or limit
D: Result reported from a secondary dilution

*: Human Consumption of Fish in fresh water
**: Fish Propagation in fresh water
-: Standard not required compound not detected
--: No standard
Exceed Class C Human Consumption of Fish in fresh water

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TABLE 3-1
FARRAND CONTROLS SITE
SURFACE WATER SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID	WS-7	WS-8	WS-9	WS-10	WS-11	NYSDEC Class C Surface Water Standard or Guidance Value
Sampling Date	01/15/14	01/16/14	01/16/14	01/16/14	01/16/14	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l
VOLATILE COMPOUNDS						
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1,1-Trichloroethane	1.1	1.0 U	1.0 U	1.0 U	1.0 U	--
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1-Dichloroethane	0.90 J	1.0 U	1.0 U	1.0 U	1.0 U	--
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,1-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2,4-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,3,5-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,3-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
2,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
2-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
4-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
4-Isopropyltoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
4-Methyl-2-pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-

See next page for Footnotes/Qualifiers

TABLE 3-1
FARRAND CONTROLS SITE
SURFACE WATER SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID	WS-7	WS-8	WS-9	WS-10	WS-11	NYSDEC Class C Surface Water Standard or Guidance Value
Sampling Date	01/15/14	01/16/14	01/16/14	01/16/14	01/16/14	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l
COMPOUNDS CONTINUED						
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	400*/5**
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
cis-1,2-Dichloroethene	0.85 J	1.0 U	1.0 U	1.0 U	1.0 U	--
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Hexachlorobutadiene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Iodomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
m,p-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Methyl tert-butyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Methylene chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	200*
n-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
n-Propylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
sec-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
tert-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	40*
Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Vinyl acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-
Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--
Xylene (Total)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value or limit
D: Result reported from a secondary dilution

*: Human Consumption of Fish in fresh water
**: Fish Propagation in fresh water
-: Standard not required compound not detected
--: No standard
Exceed Class C Human Consumption of Fish in fresh water

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

TABLE 3-2
FARRAND CONTROLS SITE
SEDIMENT SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SE-1 01/15/14 ug/Kg	SE-2 01/15/14 ug/Kg	SE-3 01/15/14 ug/Kg	SE-4 01/15/14 ug/Kg	SE-5 01/15/14 ug/Kg	SE-6 01/15/14 ug/Kg	NYSDCE Sediment Criteria
VOLATILE COMPOUNDS							
1,1,1,2-Tetrachloroethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,1,1-Trichloroethane	9.2 U	6.0 U	190000 D	23000 D	7.4 U	7.3 U	--
1,1,2,2-Tetrachloroethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,1,2-Trichloro-1,2,2-trifluoroethane	9.2 U	6.0 U	60000 D	6100 D	7.4 U	7.3 U	--
1,1,2-Trichloroethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,1-Dichloroethane	9.2 U	6.0 U	2900	2500 D	7.4 U	7.3 U	--
1,1-Dichloroethene	9.2 U	6.0 U	1400	15 U	7.4 U	7.3 U	--
1,1-Dichloropropene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2,3-Trichlorobenzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2,3-Trichloropropane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2,4-Trichlorobenzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2,4-Trimethylbenzene	9.2 U	6.0 U	1200	15 U	7.4 U	7.3 U	10471.8[A]/2008.8[B]/1860[C]
1,2-Dibromo-3-chloropropane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2-Dibromoethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2-Dichlorobenzene	9.2 U	6.0 U	**13000**	22 J	7.4 U	7.3 U	675.6[A]/129.6[B]/120[C]
1,2-Dichloroethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,2-Dichloropropane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,3,5-Trimethylbenzene	9.2 U	6.0 U	580 J	15 U	7.4 U	7.3 U	--
1,3-Dichlorobenzene	9.2 U	6.0 U	320 J	15 U	7.4 U	7.3 U	675.6[A]/129.6[B]/120[C]
1,3-Dichloropropane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
1,4-Dichlorobenzene	9.2 U	6.0 U	**1600**	15 U	7.4 U	7.3 U	675.6[A]/129.6[B]/120[C]
2,2-Dichloropropane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
2-Butanone	4.7 J	6.0 U	910 U	15 U	7.4 U	7.3 U	--
2-Chlorotoluene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
2-Hexanone	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
4-Chlorotoluene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
4-Isopropyltoluene	9.2 U	6.0 U	370 J	15 U	7.4 U	7.3 U	--
4-Methyl-2-pentanone	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Acetone	25 J	5.6 J	4400	15 U	10 J	11 J	--
Benzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Bromobenzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Bromochloromethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Bromodichloromethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Bromoform	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Bromomethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Carbon disulfide	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Carbon tetrachloride	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Chlorobenzene	9.2 U	6.0 U	**9500**	25 J	7.4 U	7.3 U	197.05[A]/37.8[B]/35[C]
Chloroethane	9.2 U	6.0 U	910 U	550	7.4 U	7.3 U	--
Chloroform	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Chloromethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--

See next page for Footnotes/Qualifiers

TABLE 3-2
FARRAND CONTROLS SITE
SEDIMENT SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SE-1 01/15/14 ug/Kg	SE-2 01/15/14 ug/Kg	SE-3 01/15/14 ug/Kg	SE-4 01/15/14 ug/Kg	SE-5 01/15/14 ug/Kg	SE-6 01/15/14 ug/Kg	NYSDCE Sediment Criteria
COMPOUNDS CONTINUED							
cis-1,2-Dichloroethene	9.2 U	6.0 U	210 J	12 J	7.4 U	7.3 U	--
cis-1,3-Dichloropropene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Dibromochloromethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Dibromomethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Dichlorodifluoromethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Ethylbenzene	9.2 U	6.0 U	**12000**	27 J	7.4 U	7.3 U	1351.2[A]/259.2[B]/240[C]
Hexachlorobutadiene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Iodomethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Isopropylbenzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
m,p-Xylene	9.2 U	6.0 U	**30000**	77 J	7.4 U	7.3 U	5179.6[A]/993.6[B]/920[C]
Methyl tert-butyl ether	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Methylene chloride	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
n-Butylbenzene	9.2 U	6.0 U	770 J	15 U	7.4 U	7.3 U	--
n-Propylbenzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Naphthalene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
o-Xylene	9.2 U	6.0 U	**7300**	17 J	7.4 U	7.3 U	5179.6[A]/993.6[B]/920[C]
sec-Butylbenzene	9.2 U	6.0 U	310 J	15 U	7.4 U	7.3 U	--
Styrene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
tert-Butylbenzene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Tetrachloroethene	9.2 U	6.0 U	1800	7.0 J	7.4 U	7.3 U	--
Toluene	9.2 U	6.0 U	2300	12 J	7.4 U	7.3 U	2758.7[A]/529.2[B]/490[C]
trans-1,2-Dichloroethene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
trans-1,3-Dichloropropene	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Trichloroethene	9.2 U	6.0 U	1200	19 J	7.4 U	7.3 U	--
Trichlorofluoromethane	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Vinyl acetate	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Vinyl chloride	9.2 U	6.0 U	910 U	15 U	7.4 U	7.3 U	--
Xylene (Total)	9.2 U	6.0 U	**37000**	94 J	7.4 U	7.3 U	5179.6[A]/993.6[B]/920[C]

Footnotes/Qualifiers:

ug/kg: Micrograms per kilogram
U: Analyzed for but not detected
J: Estimated value or limit
D: Result reported from a secondary dilution

Exceeds all three calculated criteria.
Exceeds two of the calculated criteria.

[A] Value derived using Equilbrium Partitioning method and appropriate surface water criteria (NYSEDC division of Fish, Wildlife and Marine Resources "Technical Guidance for Screening Contaminated Sediment" January 1999, for sample SED-OF-1 (3/26/99), based on fraction organic carbon=5.63%

[B] Value derived using method and sources described above, for sample SED-OF-3 (3/25/99), based on fraction organic carbon=1.08%

[C] Value derived using method and sources described above, for default fraction organic carbon=1%, for samples were TOC was not analyzed

TABLE 3-2
FARRAND CONTROLS SITE
SEDIMENT SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SE-7 01/15/14 ug/Kg	SE-8 01/15/14 ug/Kg	SE-9 01/15/14 ug/Kg	SE-10 01/15/14 ug/Kg	SE-11 01/15/14 ug/Kg	SE-12 01/15/14 ug/Kg	NYSDCE Sediment Criteria
VOLATILE COMPOUNDS							
1,1,1,2-Tetrachloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1,1-Trichloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1,2,2-Tetrachloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1,2-Trichloro-1,2,2-trifluoroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1,2-Trichloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1-Dichloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1-Dichloroethene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,1-Dichloropropene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2,3-Trichlorobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2,3-Trichloropropane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2,4-Trichlorobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2,4-Trimethylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	10471.8[A]/2008.8[B]/1860[C]
1,2-Dibromo-3-chloropropane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2-Dibromoethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2-Dichlorobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	675.6[A]/129.6[B]/120[C]
1,2-Dichloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,2-Dichloropropane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,3,5-Trimethylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,3-Dichlorobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	675.6[A]/129.6[B]/120[C]
1,3-Dichloropropane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
1,4-Dichlorobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	675.6[A]/129.6[B]/120[C]
2,2-Dichloropropane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
2-Butanone	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
2-Chlorotoluene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
2-Hexanone	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
4-Chlorotoluene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
4-Isopropyltoluene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
4-Methyl-2-pentanone	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Acetone	12 J	10 U	8.9 J	7.9 U	10 J	9.1 U	--
Benzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Bromobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Bromochloromethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Bromodichloromethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Bromoform	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Bromomethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Carbon disulfide	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Carbon tetrachloride	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Chlorobenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	197.05[A]/37.8[B]/35[C]
Chloroethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Chloroform	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Chloromethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--

See next page for Footnotes/Qualifiers

TABLE 3-2
FARRAND CONTROLS SITE
SEDIMENT SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SE-7 01/15/14 ug/Kg	SE-8 01/15/14 ug/Kg	SE-9 01/15/14 ug/Kg	SE-10 01/15/14 ug/Kg	SE-11 01/15/14 ug/Kg	SE-12 01/15/14 ug/Kg	NYSDCE Sediment Criteria
COMPOUNDS CONTINUED							
cis-1,2-Dichloroethene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
cis-1,3-Dichloropropene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Dibromochloromethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Dibromomethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Dichlorodifluoromethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Ethylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	1351.2[A]/259.2[B]/240[C]
Hexachlorobutadiene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Iodomethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Isopropylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
m,p-Xylene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	5179.6[A]/993.6[B]/920[C]
Methyl tert-butyl ether	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Methylene chloride	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
n-Butylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
n-Propylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Naphthalene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
o-Xylene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	5179.6[A]/993.6[B]/920[C]
sec-Butylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Styrene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
tert-Butylbenzene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Tetrachloroethene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Toluene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	2758.7[A]/529.2[B]/490[C]
trans-1,2-Dichloroethene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
trans-1,3-Dichloropropene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Trichloroethene	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Trichlorofluoromethane	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Vinyl acetate	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Vinyl chloride	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	--
Xylene (Total)	10 U	10 U	7.6 U	7.9 U	7.1 U	9.1 U	5179.6[A]/993.6[B]/920[C]

Footnotes/Qualifiers:

ug/kg: Micrograms per kilogram

U: Analyzed for but not detected

J: Estimated value or limit

D: Result reported from a secondary dilution

[A] Value derived using Equilbrium Partitioning method and appropriate surface water criteria (NYSEDC division of Fish, Wildlife and Marine Resources "Technical Guidance for Screening Contaminated Sediment" January 1999, for sample SED-OF-1 (3/26/99), based on fraction organic carbon=5.63%

[B] Value derived using method and sources described above, for sample SED-OF-3 (3/25/99), based on fraction organic carbon=1.08%

[C] Value derived using method and sources described above, for default fraction organic carbon=1%, for samples were TOC was not analyzed

TABLE 3-2
FARRAND CONTROLS SITE
SEDIMENT SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SE-13 01/16/14 ug/Kg	SE-14 01/16/14 ug/Kg	SE-15 01/16/14 ug/Kg	SE-16 01/16/14 ug/Kg	SE-17 01/16/14 ug/Kg	NYSDCE Sediment Criteria
VOLATILE COMPOUNDS						
1,1,1,2-Tetrachloroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,1,1-Trichloroethane	6.0 U	5.2 U	4.7 J	9.2 U	7.7 U	--
1,1,2,2-Tetrachloroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,1,2-Trichloro-1,2,2-trifluoroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,1,2-Trichloroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,1-Dichloroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,1-Dichloroethene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,1-Dichloropropene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2,3-Trichlorobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2,3-Trichloropropane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2,4-Trichlorobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2,4-Trimethylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	10471.8[A]/2008.8[B]/1860[C]
1,2-Dibromo-3-chloropropane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2-Dibromoethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2-Dichlorobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	675.6[A]/129.6[B]/120[C]
1,2-Dichloroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,2-Dichloropropane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,3,5-Trimethylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,3-Dichlorobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	675.6[A]/129.6[B]/120[C]
1,3-Dichloropropane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
1,4-Dichlorobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	675.6[A]/129.6[B]/120[C]
2,2-Dichloropropane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
2-Butanone	6.0 U	5.2 U	9.1 U	9.2 U	5.5 J	--
2-Chlorotoluene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
2-Hexanone	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
4-Chlorotoluene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
4-Isopropyltoluene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
4-Methyl-2-pentanone	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Acetone	6.0 U	5.2 U	9.1 U	9.2 U	12 J	--
Benzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Bromobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Bromochloromethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Bromodichloromethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Bromoform	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Bromomethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Carbon disulfide	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Carbon tetrachloride	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Chlorobenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	197.05[A]/37.8[B]/35[C]
Chloroethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Chloroform	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Chloromethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--

See next page for Footnotes/Qualifiers

TABLE 3-2
FARRAND CONTROLS SITE
SEDIMENT SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SE-13 01/16/14 ug/Kg	SE-14 01/16/14 ug/Kg	SE-15 01/16/14 ug/Kg	SE-16 01/16/14 ug/Kg	SE-17 01/16/14 ug/Kg	NYSDCE Sediment Criteria
COMPOUNDS CONTINUED						
cis-1,2-Dichloroethene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
cis-1,3-Dichloropropene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Dibromochloromethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Dibromomethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Dichlorodifluoromethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Ethylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	1351.2[A]/259.2[B]/240[C]
Hexachlorobutadiene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Iodomethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Isopropylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
m,p-Xylene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	5179.6[A]/993.6[B]/920[C]
Methyl tert-butyl ether	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Methylene chloride	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
n-Butylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
n-Propylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Naphthalene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
o-Xylene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	5179.6[A]/993.6[B]/920[C]
sec-Butylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Styrene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
tert-Butylbenzene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Tetrachloroethene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Toluene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	2758.7[A]/529.2[B]/490[C]
trans-1,2-Dichloroethene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
trans-1,3-Dichloropropene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Trichloroethene	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Trichlorofluoromethane	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Vinyl acetate	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Vinyl chloride	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	--
Xylene (Total)	6.0 U	5.2 U	9.1 U	9.2 U	7.7 U	5179.6[A]/993.6[B]/920[C]

Footnotes/Qualifiers:

ug/kg: Micrograms per kilogram
U: Analyzed for but not detected
J: Estimated value or limit
D: Result reported from a secondary dilution

[A] Value derived using Equilbrium Partitioning method and appropriate surface water criteria (NYSEDC division of Fish, Wildlife and Marine Resources "Technical Guidance for Screening Contaminated Sediment" January 1999, for sample SED-OF-1 (3/26/99), based on fraction organic carbon=5.63%

[B] Value derived using method and sources described above, for sample SED-OF-3 (3/25/99), based on fraction organic carbon=1.08%

[C] Value derived using method and sources described above, for default fraction organic carbon=1%, for samples were TOC was not analyzed

TABLE 3-3
FARRAND CONTROLS SITE
SUMP SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SUMP 2 01/16/14 ug/L	SUMP 3 01/16/14 ug/L	NYSDEC Class C Surface Water Standard or Guidance Value ug/l
VOLATILE COMPOUNDS			
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	--
1,1,1-Trichloroethane	230 D	36	--
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	-
1,1,2-Trichloro-1,2,2-trifluoroethane	97	44	--
1,1,2-Trichloroethane	1.0 U	1.0 U	-
1,1-Dichloroethane	6.5	3.4	--
1,1-Dichloroethene	1.0 U	1.0 U	-
1,1-Dichloropropene	1.0 U	1.0 U	-
1,2,3-Trichlorobenzene	1.0 U	1.0 U	-
1,2,3-Trichloropropane	1.0 U	1.0 U	-
1,2,4-Trichlorobenzene	1.0 U	1.0 U	-
1,2,4-Trimethylbenzene	1.0 U	1.0 U	-
1,2-Dibromo-3-chloropropane	1.0 U	1.0 U	-
1,2-Dibromoethane	1.0 U	1.0 U	-
1,2-Dichlorobenzene	1.0 U	1.0 U	-
1,2-Dichloroethane	1.0 U	1.0 U	-
1,2-Dichloropropane	1.0 U	1.0 U	-
1,3,5-Trimethylbenzene	1.0 U	1.0 U	-
1,3-Dichlorobenzene	1.0 U	1.0 U	-
1,3-Dichloropropane	1.0 U	1.0 U	-
1,4-Dichlorobenzene	1.0 U	1.0 U	-
2,2-Dichloropropane	1.0 U	1.0 U	-
2-Butanone	5.0 U	5.0 U	-
2-Chlorotoluene	1.0 U	1.0 U	-
2-Hexanone	5.0 U	5.0 U	-
4-Chlorotoluene	1.0 U	1.0 U	-
4-Isopropyltoluene	1.0 U	1.0 U	-
4-Methyl-2-pentanone	5.0 U	5.0 U	-
Acetone	5.0 U	5.0 U	-
Benzene	1.0 U	1.0 U	-
Bromobenzene	1.0 U	1.0 U	-
Bromochloromethane	1.0 U	1.0 U	-
Bromodichloromethane	1.0 U	1.0 U	-
Bromoform	1.0 U	1.0 U	-
Bromomethane	1.0 U	1.0 U	-
Carbon disulfide	1.0 U	1.0 U	-
Carbon tetrachloride	1.0 U	1.0 U	-

See next page for Footnotes/Qualifiers

TABLE 3-3
FARRAND CONTROLS SITE
SUMP SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Sample ID Sampling Date Units	SUMP 2 01/16/14 ug/L	SUMP 3 01/16/14 ug/L	NYSDEC Class C Surface Water Standard or Guidance Value ug/l
COMPOUNDS CONTINUED			
Chlorobenzene	1.0 U	1.0 U	400*/5**
Chloroethane	1.0 U	1.0 U	--
Chloroform	1.0 U	1.0 U	-
Chloromethane	1.0 U	1.0 U	-
cis-1,2-Dichloroethene	20	31	--
cis-1,3-Dichloropropene	1.0 U	1.0 U	-
Dibromochloromethane	1.0 U	1.0 U	-
Dibromomethane	1.0 U	1.0 U	-
Dichlorodifluoromethane	1.0 U	1.0 U	-
Ethylbenzene	1.0 U	1.0 U	-
Hexachlorobutadiene	1.0 U	1.0 U	-
Iodomethane	1.0 U	1.0 U	-
Isopropylbenzene	1.0 U	1.0 U	-
m,p-Xylene	1.0 U	1.0 U	-
Methyl tert-butyl ether	1.0 U	1.0 U	-
Methylene chloride	1.0 U	1.0 U	200*
n-Butylbenzene	1.0 U	1.0 U	-
n-Propylbenzene	1.0 U	1.0 U	-
Naphthalene	1.0 U	1.0 U	-
o-Xylene	1.0 U	1.0 U	-
sec-Butylbenzene	1.0 U	1.0 U	-
Styrene	1.0 U	1.0 U	-
tert-Butylbenzene	1.0 U	1.0 U	-
Tetrachloroethene	1.0 U	1.0 U	-
Toluene	1.0 U	1.0 U	-
trans-1,2-Dichloroethene	1.0 U	1.0 U	--
trans-1,3-Dichloropropene	1.0 U	1.0 U	-
Trichloroethene	***130***	***54***	40*
Trichlorofluoromethane	1.0 U	1.0 U	-
Vinyl acetate	1.0 U	1.0 U	-
Vinyl chloride	0.85 J	0.53 J	--
Xylene (Total)	1.0 U	1.0 U	-

Footnotes/Qualifiers:
ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value or limit

D: Result reported from a secondary dilution
*: Human Consumption of Fish in fresh water
**: Fish Propagation in fresh water
- Standard not required compound not detected
--: No standard

Exceed Class C Human Consumption of Fish in fresh water

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KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-10D	MW-10R	MW-10S	MW-20D	MW-20R	MW-20S	MW-21R	NYSDEC Class GA Standard or Guidance Value
Sample ID	MW-10D_61614	MW-10R_61614	MW-10S_61614	MW-20D_61714	MW-20R_61714	MW-20S_61714	MW-21R_61914	
Sampling Date	6/16/14	6/16/14	6/16/14	6/17/14	6/17/14	6/17/14	6/19/14	
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS								
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,1,1-Trichloroethane	1100 D	200 D	2.7	1 U	1 U	1 U	25000	5
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	3000 D	1700 D	1.2	2.6	1 U	1 U	48000	5
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	1
1,1-Dichloroethane	110	420 D	12	7	1 U	14	1000 J	5
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	5.5	1000 U	5
1,1-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,2,3-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.04
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,2,4-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.04
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.0006
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	3
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.6
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	1
1,3,5-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	3
1,3-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	3
2,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	50
2-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	50
4-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
4-Isopropyltoluene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	--
Acetone	5 U	5 U	5 U	5 U	5 U	5 U	5000 U	50
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	1
Bromobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	50
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	50
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	60
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5

See next page for Footnotes/Qualifiers

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-10D	MW-10R	MW-10S	MW-20D	MW-20R	MW-20S	MW-21R	NYSDEC Class GA
Sample ID	MW-10D_61614	MW-10R_61614	MW-10S_61614	MW-20D_61714	MW-20R_61714	MW-20S_61714	MW-21R_61914	Standard
Sampling Date	6/16/14	6/16/14	6/16/14	6/17/14	6/17/14	6/17/14	6/19/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
COMPOUNDS CONTINUED								
Chlorobenzene	1.1	17	1 U	1 U	1 U	1 U	1000 U	5
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	7
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
cis-1,2-Dichloroethene	9.5	42	7.2	10	1 U	43	1000 U	5
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.4
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	50
Dibromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Hexachlorobutadiene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.5
Iodomethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
m,p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Methyl tert-butyl ether	1 U	1.6	1 U	1 U	1 U	1 U	1000 U	10
Methylene chloride	6.9	0.79 J	1 U	1 U	1 U	1 U	6400	5
n-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
n-Propylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Naphthalene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	10
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
sec-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
tert-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Tetrachloroethene	1 U	0.82 J	1 U	1 U	1 U	1 U	1000 U	5
Toluene	1 U	1 U	0.51 J	1 U	1 U	1 U	1000 U	5
trans-1,2-Dichloroethene	1 U	2	1 U	1 U	1 U	1 U	1000 U	5
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	0.4
Trichloroethene	760 D	1200 D	9.2	110	1 U	1 U	11000	5
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	--
Vinyl chloride	0.72 J	4.8	1.5	1 U	1 U	15	1000 U	2
Xylene (Total)	1 U	1 U	1 U	1 U	1 U	1 U	1000 U	5

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
D: Result reported from a secondary dilution
--: No standard
Exceed Class GA Value

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-21S	MW-22R	MW-22S	MW-27	MW-29D	MW-29S	MW-30D	NYSDEC Class GA Standard or Guidance Value
Sample ID	MW-21S_61914	MW-22R_61914	MW-22S_61914	MW-27_61714	MW-29D_61814	MW-29S_61714	MW-30D_61814	
Sampling Date	6/19/14	6/19/14	6/19/14	6/17/14	6/18/14	6/17/14	6/18/14	
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS								
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,1,1-Trichloroethane	66	6200 D	680 D	980 D	1 U	36	1 U	5
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	300 D	11000 D	1500 D	2200 D	1 U	100	1 U	5
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
1,1-Dichloroethane	1.5	500 E	150	87	1 U	8	1 U	5
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,1-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2,3-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.04
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2,4-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.04
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.0006
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
1,3,5-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3
1,3-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3
2,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50
2-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50
4-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
4-Isopropyltoluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	--
Acetone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
Bromobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	50
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	50
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	60
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5

See next page for Footnotes/Qualifiers

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-21S	MW-22R	MW-22S	MW-27	MW-29D	MW-29S	MW-30D	NYSDEC Class GA
Sample ID	MW-21S_61914	MW-22R_61914	MW-22S_61914	MW-27_61714	MW-29D_61814	MW-29S_61714	MW-30D_61814	Standard
Sampling Date	6/19/14	6/19/14	6/19/14	6/17/14	6/18/14	6/17/14	6/18/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
COMPOUNDS CONTINUED								
Chlorobenzene	1 U	40	2.7	1 U	1 U	1 U	1 U	5
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Chloroform	1 U	0.64 J	1 U	1 U	1 U	1 U	1 U	7
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
cis-1,2-Dichloroethene	1 U	22	7.4	7	1.6	10	1 U	5
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	50
Dibromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Hexachlorobutadiene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5
Iodomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
m,p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Methyl tert-butyl ether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10
Methylene chloride	1 U	12	1 U	1 U	1 U	1 U	1 U	5
n-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
n-Propylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Naphthalene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10
o-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
sec-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
tert-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Tetrachloroethene	1 U	2.9	1 U	1 U	1 U	1 U	1 U	5
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
trans-1,2-Dichloroethene	1 U	3	1 U	1 U	1 U	1 U	1 U	5
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4
Trichloroethene	18	3400 D	510 D	710 D	1 U	91	1 U	5
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--
Vinyl chloride	1 U	3.7	0.76 J	1 U	1 U	1 U	1 U	2
Xylene (Total)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
D: Result reported from a secondary dilution
--: No standard
Exceed Class GA Value

E: Exceeds calibration range, value estimated.

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-30S	MW-31D	MW-31S	MW-32D	MW-32S	NYSDEC Class GA
Sample ID	MW-30S_61814	MW-31D_61814	MW-31S_61814	MW-32D_61814	MW-32S_61814	Standard
Sampling Date	6/18/14	6/18/14	6/18/14	6/18/14	6/18/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS						
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	5
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	5
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	5
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	5
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	5
1,1-Dichloropropene	1 U	1 U	1 U	1 U	1 U	5
1,2,3-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	5
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	0.04
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	5
1,2,4-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	5
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U	1 U	0.04
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	0.0006
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	3
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.6
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1
1,3,5-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	5
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	3
1,3-Dichloropropane	1 U	1 U	1 U	1 U	1 U	5
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	3
2,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	5
2-Butanone	5 U	5 U	5 U	5 U	5 U	50
2-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	5
2-Hexanone	5 U	5 U	5 U	5 U	5 U	50
4-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	5
4-Isopropyltoluene	1 U	1 U	1 U	1 U	1 U	5
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	--
Acetone	5 U	5 U	5 U	5 U	5 U	50
Benzene	1 U	1 U	1 U	1 U	1 U	1
Bromobenzene	1 U	1 U	1 U	1 U	1 U	5
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	5
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	50
Bromoform	1 U	1 U	1 U	1 U	1 U	50
Bromomethane	1 U	1 U	1 U	1 U	1 U	5
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	60
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	5

See next page for Footnotes/Qualifiers

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-30S	MW-31D	MW-31S	MW-32D	MW-32S	NYSDEC Class GA
Sample ID	MW-30S_61814	MW-31D_61814	MW-31S_61814	MW-32D_61814	MW-32S_61814	Standard
Sampling Date	6/18/14	6/18/14	6/18/14	6/18/14	6/18/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
COMPOUNDS CONTINUED						
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	5
Chloroethane	1 U	1 U	1 U	1 U	1 U	5
Chloroform	1 U	1 U	1 U	1.9	1 U	7
Chloromethane	1 U	1 U	1 U	1 U	1 U	5
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	5
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	0.4
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	50
Dibromomethane	1 U	1 U	1 U	1 U	1 U	5
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	5
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	5
Hexachlorobutadiene	1 U	1 U	1 U	1 U	1 U	0.5
Iodomethane	1 U	1 U	1 U	1 U	1 U	5
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	5
m,p-Xylene	1 U	1 U	1 U	1 U	1 U	5
Methyl tert-butyl ether	1 U	1 U	1 U	1 U	1 U	10
Methylene chloride	1 U	1 U	1 U	1 U	1 U	5
n-Butylbenzene	1 U	1 U	1 U	1 U	1 U	5
n-Propylbenzene	1 U	1 U	1 U	1 U	1 U	5
Naphthalene	1 U	1 U	1 U	1 U	1 U	10
o-Xylene	1 U	1 U	1 U	1 U	1 U	5
sec-Butylbenzene	1 U	1 U	1 U	1 U	1 U	5
Styrene	1 U	1 U	1 U	1 U	1 U	5
tert-Butylbenzene	1 U	1 U	1 U	1 U	1 U	5
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	5
Toluene	1 U	1 U	1 U	1 U	1 U	5
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	5
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	0.4
Trichloroethene	1.3	1 U	1 U	1 U	1 U	5
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	5
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	--
Vinyl chloride	1 U	1 U	1 U	1 U	1 U	2
Xylene (Total)	1 U	1 U	1 U	1 U	1 U	5

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
D: Result reported from a secondary dilution
--: No standard
Exceed Class GA Value

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	OC-17D	OC-17S	OC-19D	OC-19S	NYSDEC Class GA Standard or Guidance Value
Sample ID	OC-17D_61614	OC-17S_61614	OC-19D_61614	OC-19S_61614	
Sampling Date	6/16/14	6/16/14	6/16/14	6/16/14	
Units	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS					
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	5
1,1,1-Trichloroethane	540 D	80	1000 D	1	5
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1100 D	250 D	2100 D	9.7	5
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1
1,1-Dichloroethane	110	83	67	1 U	5
1,1-Dichloroethene	1 U	1 U	1 U	1 U	5
1,1-Dichloropropene	1 U	1 U	1 U	1 U	5
1,2,3-Trichlorobenzene	1 U	1 U	1 U	1 U	5
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	0.04
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	5
1,2,4-Trimethylbenzene	1 U	1 U	1 U	1 U	5
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U	0.04
1,2-Dibromoethane	1 U	1 U	1 U	1 U	0.0006
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	3
1,2-Dichloroethane	1 U	1 U	1 U	1 U	0.6
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1
1,3,5-Trimethylbenzene	1 U	1 U	1 U	1 U	5
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	3
1,3-Dichloropropane	1 U	1 U	1 U	1 U	5
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	3
2,2-Dichloropropane	1 U	1 U	1 U	1 U	5
2-Butanone	5 U	5 U	5 U	5 U	50
2-Chlorotoluene	1 U	1 U	1 U	1 U	5
2-Hexanone	5 U	5 U	5 U	5 U	50
4-Chlorotoluene	1 U	1 U	1 U	1 U	5
4-Isopropyltoluene	1 U	1 U	1 U	1 U	5
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	--
Acetone	5 U	5 U	5 U	5 U	50
Benzene	1 U	1 U	1 U	1 U	1
Bromobenzene	1 U	1 U	1 U	1 U	5
Bromochloromethane	1 U	1 U	1 U	1 U	5
Bromodichloromethane	1 U	1 U	1 U	1 U	50
Bromoform	1 U	1 U	1 U	1 U	50
Bromomethane	1 U	1 U	1 U	1 U	5
Carbon disulfide	1 U	1 U	1 U	1 U	60
Carbon tetrachloride	1 U	1 U	1 U	1 U	5

See next page for Footnotes/Qualifiers

TABLE 3-4
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	OC-17D	OC-17S	OC-19D	OC-19S	NYSDEC Class GA Standard or Guidance Value
Sample ID	OC-17D_61614	OC-17S_61614	OC-19D_61614	OC-19S_61614	
Sampling Date	6/16/14	6/16/14	6/16/14	6/16/14	
Units	ug/l	ug/l	ug/l	ug/l	ug/l
COMPOUNDS CONTINUED					
Chlorobenzene	1 U	1 U	1 U	1 U	5
Chloroethane	1 U	1 U	1 U	1 U	5
Chloroform	1 U	1 U	1 U	1 U	7
Chloromethane	1 U	1 U	1 U	1 U	5
cis-1,2-Dichloroethene	3.3	9.5	2.3	1 U	5
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	0.4
Dibromochloromethane	1 U	1 U	1 U	1 U	50
Dibromomethane	1 U	1 U	1 U	1 U	5
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	5
Ethylbenzene	1 U	1 U	1 U	1 U	5
Hexachlorobutadiene	1 U	1 U	1 U	1 U	0.5
Iodomethane	1 U	1 U	1 U	1 U	5
Isopropylbenzene	1 U	1 U	1 U	1 U	5
m,p-Xylene	1 U	1 U	1 U	1 U	5
Methyl tert-butyl ether	1 U	1 U	1 U	1 U	10
Methylene chloride	2.8	4.4	2.1	1 U	5
n-Butylbenzene	1 U	1 U	1 U	1 U	5
n-Propylbenzene	1 U	1 U	1 U	1 U	5
Naphthalene	1 U	1 U	1 U	1 U	10
o-Xylene	1 U	1 U	1 U	1 U	5
sec-Butylbenzene	1 U	1 U	1 U	1 U	5
Styrene	1 U	1 U	1 U	1 U	5
tert-Butylbenzene	1 U	1 U	1 U	1 U	5
Tetrachloroethene	1 U	1 U	1 U	1 U	5
Toluene	1 U	1 U	1 U	1 U	5
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	5
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	0.4
Trichloroethene	300 D	75	420 D	1.6	5
Trichlorofluoromethane	1 U	1 U	1 U	1 U	5
Vinyl acetate	1 U	1 U	1 U	1 U	--
Vinyl chloride	1 U	1.7	1 U	1 U	2
Xylene (Total)	1 U	1 U	1 U	1 U	5

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
D: Result reported from a secondary dilution
--: No standard
Exceed Class GA Value

TABLE 3-5
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL PUMPING SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-21R	MW-21R	MW-21R	MW-22R	MW-22R	MW-22R	NYSDEC Class GA
Sample ID	MW-21R(1)_61714	MW-21R(2)_61714	MW-21R(3)_61714	MW-22R(1)_61614	MW-22R(2)_61614	MW-22R(3)_61614	Standard
Sampling Date	6/17/14	6/17/14	6/17/14	6/16/14	6/16/14	6/16/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS							
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	5
1,1,1-Trichloroethane	55000 D	67000 D	69000 D	9900 D	11000 D	11000 D	5
1,1,2,2-Tetrachloroethane	1 U	3.8	3.5	1 U	1 U	1 U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	100000 D	120000 D	130000 D	18000 D	19000 D	20000 D	5
1,1,2-Trichloroethane	1 U	11	11	1 U	1 U	1 U	1
1,1-Dichloroethane	2800 D	3000 D	3100 D	620 D	600 D	580 D	5
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	5
1,1-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2,3-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	0.04
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
1,2,4-Trimethylbenzene	1 U	1.2	1.2	1 U	1 U	1 U	5
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	1 U	1 U	1 U	0.04
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	0.0006
1,2-Dichlorobenzene	1 U	1.2	1.2	1 U	1 U	1 U	3
1,2-Dichloroethane	1 U	7.6	1 U	1 U	1 U	1 U	0.6
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1
1,3,5-Trimethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	3
1,3-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	5
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	3
2,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	5
2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	50
2-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	5
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	50
4-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	5
4-Isopropyltoluene	1 U	1 U	1 U	1 U	1 U	1 U	5
4-Methyl-2-pentanone	5 U	15	5 U	5 U	5 U	5 U	--
Acetone	5 U	5 U	5 U	5 U	5 U	5 U	50
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1
Bromobenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
Bromochloromethane	23	37	24	1 U	1 U	1 U	5
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	50
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	50
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	5
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	1 U	60
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	5

See next page for Footnotes/Qualifiers

TABLE 3-5
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL PUMPING SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-21R	MW-21R	MW-21R	MW-22R	MW-22R	MW-22R	NYSDEC Class GA
Sample ID	MW-21R(1)_61714	MW-21R(2)_61714	MW-21R(3)_61714	MW-22R(1)_61614	MW-22R(2)_61614	MW-22R(3)_61614	Standard
Sampling Date	6/17/14	6/17/14	6/17/14	6/16/14	6/16/14	6/16/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
COMPOUNDS CONTINUED							
Chlorobenzene	1200 D	1600 D	1400 D	120	82	69	5
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	5
Chloroform	2.8	7	6.4	0.8 J	0.75 J	0.67 J	7
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	5
cis-1,2-Dichloroethene	47	130	130	26	25	22	5
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	0.4
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	50
Dibromomethane	1 U	1 U	1 U	1 U	1 U	1 U	5
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	5
Ethylbenzene	9.9	29	27	1 U	1 U	1 U	5
Hexachlorobutadiene	1 U	1 U	1 U	1 U	1 U	1 U	0.5
Iodomethane	1 U	1 U	1 U	1 U	1 U	1 U	5
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
m,p-Xylene	55	150	140	1 U	1 U	1 U	5
Methyl tert-butyl ether	1 U	1 U	1 U	1 U	1 U	1 U	10
Methylene chloride	17000 D	18000 D	18000 D	11	8.9	9.9	5
n-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
n-Propylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
Naphthalene	1 U	1 U	1 U	1 U	1 U	1 U	10
o-Xylene	24	71	68	1 U	1 U	1 U	5
sec-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	5
tert-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	5
Tetrachloroethene	7.9	21	20	3.9	3.8	3.4	5
Toluene	11	28	25	1 U	1 U	1 U	5
trans-1,2-Dichloroethene	18	41	36	4.2	3.5	4.6	5
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	0.4
Trichloroethene	21000 D	26000 D	28000 D	5400 D	5600 D	5500 D	5
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	5
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	1 U	--
Vinyl chloride	8.5	20	18	4.5	3.8	4	2
Xylene (Total)	79	220	210	1 U	1 U	1 U	5

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
D: Result reported from a secondary dilution
--: No standard
Exceed Class GA Value

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

TABLE 3-5
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL PUMPING SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-22S	MW-22S	MW-22S	NYSDEC Class GA
Sample ID	MW-22S(1)_61614	MW-22S(2)_61614	MW-22S(3)_61614	Standard
Sampling Date	6/16/14	6/16/14	6/16/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS				
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	5
1,1,1-Trichloroethane	850 D	870 D	870 D	5
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	2000 D	2100 D	1800 D	5
1,1,2-Trichloroethane	1 U	1 U	1 U	1
1,1-Dichloroethane	150	130	98	5
1,1-Dichloroethene	1 U	1 U	1 U	5
1,1-Dichloropropene	1 U	1 U	1 U	5
1,2,3-Trichlorobenzene	1 U	1 U	1 U	5
1,2,3-Trichloropropane	1 U	1 U	1 U	0.04
1,2,4-Trichlorobenzene	1 U	1 U	1 U	5
1,2,4-Trimethylbenzene	1 U	1 U	1 U	5
1,2-Dibromo-3-chloropropane	1 U	1 U	1 U	0.04
1,2-Dibromoethane	1 U	1 U	1 U	0.0006
1,2-Dichlorobenzene	1 U	1 U	1 U	3
1,2-Dichloroethane	1 U	1 U	1 U	0.6
1,2-Dichloropropane	1 U	1 U	1 U	1
1,3,5-Trimethylbenzene	1 U	1 U	1 U	5
1,3-Dichlorobenzene	1 U	1 U	1 U	3
1,3-Dichloropropane	1 U	1 U	1 U	5
1,4-Dichlorobenzene	1 U	1 U	1 U	3
2,2-Dichloropropane	1 U	1 U	1 U	5
2-Butanone	5 U	5 U	5 U	50
2-Chlorotoluene	1 U	1 U	1 U	5
2-Hexanone	5 U	5 U	5 U	50
4-Chlorotoluene	1 U	1 U	1 U	5
4-Isopropyltoluene	1 U	1 U	1 U	5
4-Methyl-2-pentanone	5 U	5 U	5 U	--
Acetone	5 U	5 U	5 U	50
Benzene	1 U	1 U	1 U	1
Bromobenzene	1 U	1 U	1 U	5
Bromochloromethane	1 U	1 U	1 U	5
Bromodichloromethane	1 U	1 U	1 U	50
Bromoform	1 U	1 U	1 U	50
Bromomethane	1 U	1 U	1 U	5
Carbon disulfide	1 U	1 U	1 U	60
Carbon tetrachloride	1 U	1 U	1 U	5

See next page for Footnotes/Qualifiers

TABLE 3-5
FARRAND CONTROLS SITE
GROUNDWATER MONITORING WELL PUMPING SAMPLING ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID	MW-22S	MW-22S	MW-22S	NYSDEC Class GA
Sample ID	MW-22S(1)_61614	MW-22S(2)_61614	MW-22S(3)_61614	Standard
Sampling Date	6/16/14	6/16/14	6/16/14	or Guidance Value
Units	ug/l	ug/l	ug/l	ug/l
COMPOUNDS CONTINUED				
Chlorobenzene	2.5	2.7	2.5	5
Chloroethane	1 U	1 U	1 U	5
Chloroform	1 U	1 U	1 U	7
Chloromethane	1 U	1 U	1 U	5
cis-1,2-Dichloroethene	7.2	6.8	4.1	5
cis-1,3-Dichloropropene	1 U	1 U	1 U	0.4
Dibromochloromethane	1 U	1 U	1 U	50
Dibromomethane	1 U	1 U	1 U	5
Dichlorodifluoromethane	1 U	1 U	1 U	5
Ethylbenzene	1 U	1 U	1 U	5
Hexachlorobutadiene	1 U	1 U	1 U	0.5
Iodomethane	1 U	1 U	1 U	5
Isopropylbenzene	1 U	1 U	1 U	5
m,p-Xylene	1 U	1 U	1 U	5
Methyl tert-butyl ether	1 U	1 U	1 U	10
Methylene chloride	1 U	1 U	1 U	5
n-Butylbenzene	1 U	1 U	1 U	5
n-Propylbenzene	1 U	1 U	1 U	5
Naphthalene	1 U	1 U	1 U	10
o-Xylene	1 U	1 U	1 U	5
sec-Butylbenzene	1 U	1 U	1 U	5
Styrene	1 U	1 U	1 U	5
tert-Butylbenzene	1 U	1 U	1 U	5
Tetrachloroethene	1 U	1 U	1 U	5
Toluene	1 U	1 U	1 U	5
trans-1,2-Dichloroethene	1 U	1 U	1 U	5
trans-1,3-Dichloropropene	1 U	1 U	1 U	0.4
Trichloroethene	660 D	670 D	580 D	5
Trichlorofluoromethane	1 U	1 U	1 U	5
Vinyl acetate	1 U	1 U	1 U	--
Vinyl chloride	0.88 J	0.81 J	1 U	2
Xylene (Total)	1 U	1 U	1 U	5

Footnotes/Qualifiers:

ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
D: Result reported from a secondary dilution
--: No standard
Exceed Class GA Value

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Table 3-6

FARRAND CONTROLS

MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS

Well Designation	Measuring Point Elevation (feet)	Depth Water from Measuring Point (feet)	Groundwater Elevation (feet)
MW-1	247.42	3.16	244.26
MW-2	252.76	10.77	241.99
MW-4	246.71	5.40	241.31
MW-P5S	251.74	10.35	241.39
MW-P5I	251.65	10.29	241.36
MW-P5D	251.60	10.38	241.22
MW-P6	243.89	1.42	242.47
MW-P7	252.16	10.71	241.45
MW-P8	247.99	6.69	241.30
MW-8D	245.99	4.64	241.35
MW-8R	246.19	4.63	241.56
MW-P9	249.75	8.15	241.60
MW-P10	247.41	7.10	240.31
MW-10D	244.70	3.45	241.25
MW-10R	245.19	3.95	241.24
MW-P11	248.13	6.82	241.31
MW-P12	253.12	11.60	241.52
MW-P14	248.41	6.70	241.71
MW-P15	253.33	7.81	245.52
MW-P16	249.44	7.19	242.25
MW-OC17D	247.07	5.76	241.31
MW-OC17S	246.86	5.57	241.29
MW-OC18D	249.25	7.94	241.31
MW-OC18S	249.27	7.91	241.36
MW-OC19D	247.69	6.30	241.39
MW-OC19S	247.56	6.25	241.31
MW-20D	243.02	2.36	240.66
MW-20R	242.83	21.35	221.48
MW-20S	243.15	4.41	238.74
MW-21R	248.72	7.14	241.58
MW-21S	248.76	6.90	241.86
MW-22R	247.58	6.11	241.47
MW-22S	247.10	5.67	241.43
MW-23D	246.75	5.39	241.36
MW-23S	246.81	5.49	241.32
MW-24D	246.87	5.43	241.44
MW-24S	246.44	5.14	241.30
MW-25D	245.63	4.34	241.29
MW-25S	245.35	4.06	241.29
MW-26D	244.86	3.47	241.39
MW-26S	244.85	3.50	241.35

HORIZONTAL DATUM: NAD 83

VERTICAL DATUM: NAVD 88

Table 3-6

FARRAND CONTROLS

MONITORING WELL GROUNDWATER ELEVATION MEASUREMENTS

Well Designation	Measuring Point Elevation (feet)	Depth Water from Measuring Point (feet)	Groundwater Elevation (feet)
MW-27	244.96	4.60	240.36
MW-28D	246.09	4.75	241.34
MW-28S	245.75	4.42	241.33
MW-29D	243.04	2.12	240.92
MW-29S	243.02	2.28	240.74
MW-30D	243.60	2.30	241.30
MW-30S	243.90	2.93	240.97
MW-31D	243.50	2.11	241.39
MW-31S	243.43	2.21	241.22
MW-32D	244.30	2.95	241.35
MW-32S	244.46	2.88	241.58

HORIZONTAL DATUM: NAD 83

VERTICAL DATUM: NAVD 88

TABLE 3-7
FARRAND CONTROLS SITE
COMMERCIAL WELL SAMPLING ANAYLTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID / Sampling Date / Units	PRESBREY LELAND 8/8/2014 ug/l	CASSIDY EXCAVATING 8/8/2014 ug/l	HAWK SHAW 8/8/2014 ug/l	KENSICO 8/8/2014 ug/l	PEACOCK MEMORIALS 8/8/2014 ug/l	DADYSHAN 8/8/2014 ug/l	ZIMMERMAN'S 8/8/2014 ug/l	VALHALLA MEMORIALS 8/8/2014 ug/l	NYSDEC Class GA Standard or Guidance Value ug/l
VOLATILE COMPOUNDS									
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	U	5
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	U	U	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	1
1,1-Dichloroethane	U	U	U	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	U	U	U	U	5
1,1-Dichloropropene	U	U	U	U	U	U	U	U	5
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	U	5
1,2,3-Trichloropropane	U	U	U	U	U	U	U	U	0.04
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	5
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	U	5
1,2-Dibromo-3-chloropropane	U	U	U	U	U	U	U	U	0.04
1,2-Dibromoethane	U	U	U	U	U	U	U	U	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	3
1,2-Dichloroethane	U	U	U	U	U	U	U	U	0.6
1,2-Dichloropropane	U	U	U	U	U	U	U	U	1
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U	U	5
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	3
1,3-Dichloropropane	U	U	U	U	U	U	U	U	5
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	3
2,2-Dichloropropane	U	U	U	U	U	U	U	U	5
2-Butanone	U	U	U	U	U	U	U	U	50
2-Chlorotoluene	U	U	U	U	U	U	U	U	5
2-Hexanone	U	U	U	U	U	U	U	U	50
4-Chlorotoluene	U	U	U	U	U	U	U	U	5
4-Isopropyltoluene	U	U	U	U	U	U	U	U	5
4-Methyl-2-pentanone	U	U	U	U	U	U	U	U	--
Acetone	U	U	U	U	U	U	U	U	50
Benzene	U	U	U	U	U	U	U	U	1
Bromobenzene	U	U	U	U	U	U	U	U	5
Bromochloromethane	U	U	U	U	U	U	U	U	5
Bromodichloromethane	U	U	U	U	U	U	U	U	50
Bromoform	U	U	U	U	U	U	U	U	50
Bromomethane	U	U	U	U	U	U	U	U	5
Carbon disulfide	U	U	U	U	U	U	U	U	60
Carbon tetrachloride	U	U	U	U	U	U	U	U	5

See next page for Footnotes/Qualifiers

TABLE 3-7
FARRAND CONTROLS SITE
COMMERCIAL WELL SAMPLING ANAYLTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS (VOCs)

Site ID / Sampling Date / Units	PRESBREY LELAND 8/8/2014 ug/l	CASSIDY EXCAVATING 8/8/2014 ug/l	HAWK SHAW 8/8/2014 ug/l	KENSICO 8/8/2014 ug/l	PEACOCK MEMORIALS 8/8/2014 ug/l	DADYSHAN 8/8/2014 ug/l	ZIMMERMAN'S 8/8/2014 ug/l	VALHALLA MEMORIALS 8/8/2014 ug/l	NYSDEC Class GA Standard or Guidance Value ug/l
COMPOUNDS CONTINUED									
Chlorobenzene	U	U	U	U	U	U	U	U	5
Chloroethane	U	U	U	U	U	U	U	U	5
Chloroform	1.3	3.4	2.1	1.7	U	0.63 J	U	0.71 J	7
Chloromethane	U	U	U	U	U	U	U	U	5
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	0.4
Dibromochloromethane	U	U	U	U	U	U	U	U	50
Dibromomethane	U	U	U	U	U	U	U	U	5
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	5
Ethylbenzene	U	U	U	U	U	U	U	U	5
Hexachlorobutadiene	U	U	U	U	U	U	U	U	0.5
Iodomethane	U	U	U	U	U	U	U	U	5
Isopropylbenzene	U	U	U	U	U	U	U	U	5
m,p-Xylene	U	U	U	U	U	U	U	U	5
Methyl tert-butyl ether	U	U	U	U	U	U	U	U	10
Methylene chloride	U	U	U	U	U	U	U	U	5
n-Butylbenzene	U	U	U	U	U	U	U	U	5
n-Propylbenzene	U	U	U	U	U	U	U	U	5
Naphthalene	U	U	U	U	U	U	U	U	10
o-Xylene	U	U	U	U	U	U	U	U	5
sec-Butylbenzene	U	U	U	U	U	U	U	U	5
Styrene	U	U	U	U	U	U	U	U	5
tert-Butylbenzene	U	U	U	U	U	U	U	U	5
Tetrachloroethene	U	U	U	U	U	U	U	U	5
Toluene	U	U	U	U	U	U	U	U	5
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	U	0.4
Trichloroethene	U	U	U	U	U	U	U	U	5
Trichlorofluoromethane	U	U	U	U	U	U	U	U	5
Vinyl acetate	U	U	U	U	U	U	U	U	--
Vinyl chloride	U	U	U	U	U	U	U	U	2
Xylene (Total)	U	U	U	U	U	U	U	U	5

Footnotes/Qualifiers:
ug/l: Micrograms per liter
U: Analyzed for but not detected
J: Estimated value
--: No standard or not analyzed

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

LEGEND:

- MONITORING WELL SAMPLE LOCATION
- SURFACE WATER SAMPLE LOCATION
- SEDIMENT SAMPLE LOCATION
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION

MW-21S		
Analyte	6/19/2014	GW STD
1,1,1-Trichloroethane	66	5
1,1,2-Trichloro-1,2,2-trifluoroethane	300 D	5

SAMPLE DATE
SAMPLE ID
NYSDEC CLASS GA GROUNDWATER STANDARD OR GUIDANCE VALUE IN MICROGRAMS PER LITER (UG/L) OR NYSDEC "SEDIMENT CRITERIA" IN MICROGRAMS PER KILOGRAM (UG/KG)
CONCENTRATION IN UG/L

SE-7
SE-1
WS-2
SE-13
WS-1
SE-2
WS-3
SE-8
SUMP 2
SUMP 3
SE-14
WS-8
OC-19S
OC-19D
MW-21R
MW-21S
SE-3
WS-4
MW-22R
MW-22S
SE-9
MW-27
SE-15
WS-9
OC-17S
OC-17D
MW-32S
MW-32D
SE-4
WS-5
MW-10D
MW-10S
MW-10R
SE-16
WS-10
SE-10
MW-31S
MW-31D
SE-17
WS-11
MW-30S
MW-30D
SE-11
SE-5
WS-6
MW-29D
MW-29S
SE-12
MW-20R
MW-20D
MW-20S
SE-6

OC-19S		
Analyte	6/16/2014	GW STD
1,1,2-Trichloro-1,2,2-trifluoroethane	9.7	5

OC-19D		
Analyte	6/16/2014	GW STD
1,1,1-Trichloroethane	1,000 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	2,100 D	5
1,1-Dichloroethane	67	5
Trichloroethene	420 D	5

SE-3		
Analyte	1/15/2014	Sediment Criteria
1,2-Dichlorobenzene	13,000	675.6A/129.6B/120C
1,3-Dichlorobenzene	320 J	675.6A/129.6B/120C
1,4-Dichlorobenzene	1,600	675.6A/129.6B/120C
Chlorobenzene	9,500	197.05A/37.8B/35C
Ethyl benzene	12,000	1351.2A/259.2B/240C
m,p-Xylene	30,000	5179.6A/993.6B/920C
o-Xylene	7,300	5179.6A/993.6B/920C
Toluene	2,300	2758.7A/529.2B/490C
Xylene (total)	37,000	5179.6A/993.6B/920C

WS-4		
Analyte	1/15/2014	GW STD
Trichloroethene	66	5

MW-27		
Analyte	6/17/2014	GW STD
1,1,1-Trichloroethane	980 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	2,200 D	5
1,1-Dichloroethane	87	5
cis-1,2-Dichloroethene	7	5
Trichloroethene	710 D	5

MW-29S		
Analyte	6/17/2014	GW STD
1,1,1-Trichloroethane	36	5
1,1,2-Trichloro-1,2,2-trifluoroethane	100	5
1,1-Dichloroethane	8	5
cis-1,2-Dichloroethene	10	5
Trichloroethene	91	5

MW-20D		
Analyte	6/17/2014	GW STD
1,1-Dichloroethane	7	5
cis-1,2-Dichloroethene	10	5
Trichloroethene	110	5

MW-20S		
Analyte	6/17/2014	GW STD
1,1-Dichloroethane	14	5
1,1-Dichloroethene	5.5	5
cis-1,2-Dichloroethene	43	5
Vinyl Chloride	15	2

MW-21R		
	6/19/2014	GW STD
1,1,1-Trichloroethane	25,000	5
1,1,2-Trichloro-1,2,2-trifluoroethane	48,000	5
1,1-Dichloroethane	1,000 J	5
Methylene Chloride	6,400	5
Trichloroethene	11,000	5

MW-21S		
Analyte	6/19/2014	GW STD
1,1,1-Trichloroethane	66	5
1,1,2-Trichloro-1,2,2-trifluoroethane	300 D	5
Trichloroethene	18	5

MW-22R		
Analyte	6/19/2014	GW STD
1,1,1-Trichloroethane	6,200 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	11,000 D	5
1,1-Dichloroethane	570 E	5
Chlorobenzene	40	5
cis-1,2-Dichloroethene	22	5
Methylene Chloride	12	5
Trichloroethene	3,400 D	5

MW-22S		
Analyte	6/19/2014	GW STD
1,1,1-Trichloroethane	680 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1,500 D	5
1,1-Dichloroethane	150	5
cis-1,2-Dichloroethene	7.4	5
Trichloroethene	510 D	5

OC-17S		
Analyte	6/16/2014	GW STD
1,1,1-Trichloroethane	80	5
1,1,2-Trichloro-1,2,2-trifluoroethane	250 D	5
1,1-Dichloroethane	83	5
cis-1,2-Dichloroethene	9.5	5
Trichloroethene	75	5

OC-17D		
Analyte	6/16/2014	GW STD
1,1,1-Trichloroethane	540 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1,100 D	5
1,1-Dichloroethane	110	5
Trichloroethene	300 D	5

MW-10D		
Analyte	6/16/2014	GW STD
1,1,1-Trichloroethane	1,100 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	3,000 D	5
1,1-Dichloroethane	110	5
cis-1,2-Dichloroethene	9.5	5
Methylene Chloride	6.9	5
Trichloroethene	760 D	5

MW-10S		
Analyte	6/16/2014	GW STD
1,1-Dichloroethane	12	5
cis-1,2-Dichloroethene	7.2	5
Trichloroethene	9.2	5

MW-10R		
Analyte	6/16/2014	GW STD
1,1,1-Trichloroethane	200 D	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1,700 D	5
1,1-Dichloroethane	420 D	5
Chlorobenzene	17	5
cis-1,2-Dichloroethene	42	5
Trichloroethene	1,200 D	5
Vinyl Chloride	4.8	2

NO.	DATE	REVISION	INT.

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MD	LP
DESIGNED BY:	CHECKED BY:
LP	MD

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

FARRAND CONTROLS SITE
WESTCHESTER COUNTY — NEW YORK
VALHALLA, NEW YORK

CONTAMINANT EXCEEDANCE SUMMARY MAP

PROJECT NO.: 3150
DATE: OCTOBER 2014
SCALE: 1"=60'
DRAWING NO.: 3-1

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6/17/2010

LEGEND:
MONITORING WELL LOCATION
PIEZOMETER LOCATION

MW-01 (244.26)
P-15 (245.52)
244.50'
245.00'
245.00'
244.00'
243.50'
243.00'
(241.36)
242.50'
242.00'
P-05D (242.50)
OC-19S (241.31)
P-11 (241.31)
P-12 (241.52)
MW-23S (241.32)
MW-21S (241.86)
MW-22S (241.43)
P-06 (241.4)
MW-24S (241.30)
MW-25S (241.29)
OC-17S (241.33)
P-07
MW-32S (241.58)
241.50'
MW-04 (241.31)
MW-10S (240.31)
MW-31S (241.22)
MW-08S (240.30)
P-09 (241.60)
241.00'
MW-30S (240.97)
MW-29S (240.74)
240.50'
240.00'
239.50'
MW-20S (238.74)
239.00'

NO.	DATE	REVISION	INT.

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FARRAND CONTROLS SITE
WESTCHESTER COUNTY — NEW YORK
VALHALLA, NEW YORK

WATER TABLE CONTOUR MAP
JUNE, 2014

PROJECT NO.	DRAWING NO.
3150	3-2
DATE: DECEMBER 2014	
SCALE: 1"=60'	

F:\3150-16\DWG\3150-16D-FIG-1.dwg, 12/10/2014 5:33:01 PM, DBCadd

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-1	MW-1	MW-1	MW-1	MW-1
		DATE OF COLLECTION	11/2/1999	1/28/2000	12/14/2004	4/22/2010	5/16/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value					
1,1,2-Trichloroethane	10	1 ST	NA	NA	U	U	U
Vinyl Chloride	10	2 ST	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U	2 J	U	U
1,1-Dichloroethane	10	5 ST	U	U	U	U	U
1,1-Dichloroethene	10	5 ST	U	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	1 J*	1 J	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U
Trichloroethene	10	5 ST	2 J	U	U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	U	U
Total Targeted VOCs:			**3**	**1**	**2**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-2	MW-2
		DATE OF COLLECTION	12/14/2004	9/10/2009
Units in ug/L		DILUTION FACTOR	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value		
1,1,2-Trichloroethane	10	1 ST	U	U
Vinyl Chloride	10	2 ST	U	U
1,1,1-Trichloroethane	10	5 ST	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U
1,1-Dichloroethane	10	5 ST	U	U
1,1-Dichloroethene	10	5 ST	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U
Dichlorodifluoromethane	10	5 ST	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U
Trichloroethene	10	5 ST	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	U	U
Total Targeted VOCs:			**0**	**0**

ug/l: Micrograms per liter
U: Not detected
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-3 4/9/1999 200	MW-3 11/2/1999 100	MW-3 1/28/2000 100	MW-3 4/15/2001 80
1,1,2-Trichloroethane	10	1 ST		NA	NA	NA	U
Vinyl Chloride	10	2 ST		U	U	**280 J**	U
1,1,1-Trichloroethane	10	5 ST		**6700**	**13000**	**9800**	**11000**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**640**	**440 J**	U	**520 J**
1,1-Dichloroethane	10	5 ST		U	**110 J**	U	U
1,1-Dichloroethene	10	5 ST		**490**	**670 J**	**360 J**	**620 J**
cis-1,2-Dichloroethene	10	5 ST		U	**200 J***	U	U
Dichlorodifluoromethane	10	5 ST		NA	U	NA	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U
Trichloroethene	10	5 ST		**830**	**1700**	**930 J**	**950 J**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	NA	NA
Total Targeted VOCs:				**8660**	**16120**	**11370**	**13090**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-4 1/28/2001 1	MW-4 12/13/2004 1	MW-4 9/10/2009 1
1,1,2-Trichloroethane	10	1 ST		U	U	U
Vinyl Chloride	10	2 ST		U	U	U
1,1,1-Trichloroethane	10	5 ST		**7 J**	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**9 J**	U	**15**
1,1-Dichloroethane	10	5 ST		2 J	U	U
1,1-Dichloroethene	10	5 ST		1 J	U	U
cis-1,2-Dichloroethene	10	5 ST		4	U	U
Dichlorodifluoromethane	10	5 ST		U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U
Trichloroethene	10	5 ST		**9 J**	1 J	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	U	U
Total Targeted VOCs:				**32**	**1**	**15**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-8S	MW-8S	MW-8S	MW-8S
		DATE OF COLLECTION	11/2/1999	1/27/2000	12/13/2004	5/12/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value				
1,1,2-Trichloroethane	10	1 ST	NA	NA	U	U
Vinyl Chloride	10	2 ST	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	0.8 J	U	U	U
1,1-Dichloroethane	10	5 ST	U	U	U	U
1,1-Dichloroethene	10	5 ST	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U
Trichloroethene	10	5 ST	1 J	U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	U
Total Targeted VOCs:			**1.8**	**0**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-8D	MW-8D	MW-8D	MW-8D
		DATE OF COLLECTION	11/1/1999	1/27/2000	12/14/2004	5/16/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value				
1,1,2-Trichloroethane	10	1 ST	NA	NA	U	U
Vinyl Chloride	10	2 ST	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	5 J	U	U	U
1,1-Dichloroethane	10	5 ST	U	U	1 J	U
1,1-Dichloroethene	10	5 ST	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	NA	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U
Trichloroethene	10	5 ST	3 J	U	2 J	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	U
Total Targeted VOCs:			**8**	**0**	**3**	**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-8R	MW-8R	MW-8R	MW-8R
		DATE OF COLLECTION	11/2/1999	1/27/2000	12/15/2004	5/12/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value				
1,1,2-Trichloroethane	10	1 ST	NA	NA	U	U
Vinyl Chloride	10	2 ST	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U	**6 JB**	U
1,1-Dichloroethane	10	5 ST	U	1 J	4 J	**6.3 J**
1,1-Dichloroethene	10	5 ST	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	NA	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U
Trichloroethene	10	5 ST	U	U	1 J	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	15 J
Total Targeted VOCs:			**0**	**1**	**11**	**21.3**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S
		DATE OF COLLECTION	11/2/1999	1/27/2000	4/9/2001	12/14/2004	9/10/2009	5/12/2011	6/16/2014
Units in ug/L		DILUTION FACTOR	1	1	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value							
1,1,2-Trichloroethane	10	1 ST	NA	NA	U	U	U	U	U
Vinyl Chloride	10	2 ST	**5 J**	**14**	U	U	**2.9 J**	**4.2 J**	1.5
1,1,1-Trichloroethane	10	5 ST	3 J	**14**	3 J	U	4 J	**23**	2.7
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	1 J	4 J	U	U	**7.4 J**	**46**	1.2
1,1-Dichloroethane	10	5 ST	**12**	**26**	3 J	U	**7.1 J**	**13**	**12**
1,1-Dichloroethene	10	5 ST	2 J	**11**	U	U	U	4.6 J	U
cis-1,2-Dichloroethene	10	5 ST	**10 ***	**32 ***	2 J	U	**9.1 J***	**13**	**7.2**
Dichlorodifluoromethane	10	5 ST	NA	U	U	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U	U
Trichloroethene	10	5 ST	**9 J**	**36**	4 J	U	**9.2 J**	**24**	**9.2**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	NA	U	U	41 J	NA
Total Targeted VOCs:			**42**	**137**	**12**	**0**	**39.7**	**168.8**	**33.8**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-10D 11/2/1999 2	MW-10D 1/27/2000 2	MW-10D 4/19/2001 1	MW-10D 12/15/2004 1/10	MW-10D 9/15/2009 1	MW-10D 5/12/2011 16	MW-10D 6/16/2014 1/10
1,1,2-Trichloroethane	10	1 ST		NA	NA	U	U	U	U	U
Vinyl Chloride	10	2 ST		**33**	**27**	**20 J**	**10**	**2.5 J**	U	0.72 J
1,1,1-Trichloroethane	10	5 ST		**130**	**280**	**390**	**410 D**	**380 D**	**690**	**1100 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**200**	**390**	**750**	**820 DB**	**1200 D**	**1800**	**3000 D**
1,1-Dichloroethane	10	5 ST		**65**	**75**	**61**	**40**	**44**	**42 J**	**110**
1,1-Dichloroethene	10	5 ST		**30**	**40**	**57 J**	U	**61**	**100 J**	U
cis-1,2-Dichloroethene	10	5 ST		**190 ***	**190 ***	**220**	**100**	**51**	**35 J**	**9.5**
Dichlorodifluoromethane	10	5 ST		NA	NA	U	**16**	U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U	U
Trichloroethene	10	5 ST		**230**	**260**	**380**	**260 D**	**390 D**	**460**	**760 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	U	18 J	U	90 J	NA
Total Targeted VOCs:				**878**	**1262**	**1878**	**1674**	**2128.5**	**3217**	**4980.22**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
B: Detected in associated blank
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-10R 11/2/1999 1	MW-10R 1/27/2000 1	MW-10R 4/19/2001 1	MW-10R 12/15/2004 1/20	MW-10R 5/12/2011 20	MW-10R 6/16/2014 1/20
1,1,2-Trichloroethane	10	1 ST		NA	NA	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	**9 J**	U	**4.8**
1,1,1-Trichloroethane	10	5 ST		**180**	**290**	**560**	**390 D**	**280**	**200 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**470**	**780**	**1900**	**1,500 DB**	**1800**	**1700 D**
1,1-Dichloroethane	10	5 ST		**270**	**350**	**470**	**360 D**	**290**	**420 D**
1,1-Dichloroethene	10	5 ST		**200**	**230**	**380 J**	U	**340**	U
cis-1,2-Dichloroethene	10	5 ST		**23 J***	**29 J***	**51 J***	**84**	U	**42**
Dichlorodifluoromethane	10	5 ST		NA	NA	**360**	**310 D**	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	2 J	U	2
Trichloroethene	10	5 ST		**610**	**630**	**1300**	**1,000 D**	**1300**	**1200 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	U	370 J	540 J	NA
Total Targeted VOCs:				**1753**	**2309**	**5021**	**4025**	**4550**	**3564**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-20S 11/1/1999 1	MW-20S 1/28/2000 1	MW-20S 12/16/2004 1	MW-20S 5/14/2011 1	MW-20S 6/17/2014 1
1,1,2-Trichloroethane	10	1 ST		NA	NA	U	U	U
Vinyl Chloride	10	2 ST		**6 J**	**7 J**	**12**	**11**	**15**
1,1,1-Trichloroethane	10	5 ST		U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		U	U	U	U	U
1,1-Dichloroethane	10	5 ST		**24**	**23**	**24**	**15**	**14**
1,1-Dichloroethene	10	5 ST		**15**	**11**	**6 J**	**5.3 J**	**5.5**
cis-1,2-Dichloroethene	10	5 ST		**64 ***	**53 ***	**33**	**34**	**43**
Dichlorodifluoromethane	10	5 ST		NA	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U
Trichloroethene	10	5 ST		U	U	2 J	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	8 J	12 J	NA
Total Targeted VOCs:				**109**	**94**	**85**	**77.3**	**77.5**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-20D 11/1/1999 1	MW-20D 1/28/2000 1	MW-20D 12/16/2004 1	MW-20D 5/14/2011 1	MW-20D 6/17/2014 1
1,1,2-Trichloroethane	10	1 ST		NA	NA	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		U	U	U	U	2.6
1,1-Dichloroethane	10	5 ST		4 J	4 J	2 J	3.2 J	**7**
1,1-Dichloroethene	10	5 ST		2	2 J	1 J	U	U
cis-1,2-Dichloroethene	10	5 ST		4 J*	3 J*	3 J	**7.8 J**	**10**
Dichlorodifluoromethane	10	5 ST		NA	NA	U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U
Trichloroethene	10	5 ST		**32**	**15**	**29**	**81**	**110**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	U	U	NA
Total Targeted VOCs:				**42**	**24**	**35**	**92**	**129.6**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-20R	MW-20R	MW-20R	MW-20R	MW-20R
		DATE OF COLLECTION	11/1/1999	1/28/2000	12/16/2004	5/14/2011	6/17/2014
Units in ug/L		DILUTION FACTOR	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value					
1,1,2-Trichloroethane	10	1 ST	NA	NA	U	U	U
Vinyl Chloride	10	2 ST	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U	U	U	U
1,1-Dichloroethane	10	5 ST	U	U	U	U	U
1,1-Dichloroethene	10	5 ST	U	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	NA	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U
Trichloroethene	10	5 ST	U	U	U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	U	NA
Total Targeted VOCs:			**0**	**0**	**0**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
NA: Not analyzed
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-21S 4/19/2001 80	MW-21S 12/15/2004 25	MW-21S 7/14/2005 20	MW-21S 9/23/2005 20	MW-21S 12/28/2005 1	MW-21S 9/10/2009 1	MW-21S 5/10/2011 1	MW-21S 6/19/2014 1
1,1,2-Trichloroethane	10	1 ST		U	NA	NA	NA	NA	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**1,300**	**470 DB**	**460 D**	**270**	**3,900 D**	**89**	**94**	**66**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**4,000**	**2,100 DB**	**2,900 D**	**2,200 B**	**7,400 DB**	**590 D**	**550 D**	**300 D**
1,1-Dichloroethane	10	5 ST		U	**9 J**	**9 J**	U	**51**	U	U	2
1,1-Dichloroethene	10	5 ST		U	U	**57**	U	U	2.9 J	**5.7 J**	U
cis-1,2-Dichloroethene	10	5 ST		U	2 J	U	U	**7 J**	U	U	U
Dichlorodifluoromethane	10	5 ST		U	U	U	U	**16**	U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U	U	U
Trichloroethene	10	5 ST		**220 J**	**150**	**130**	**99 J**	**880 D**	**20**	**31**	**18**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	11 J	U	U	28	U	U	NA
Total Targeted VOCs:				**5520**	**2742**	**3556**	**2569**	**12282**	**701.9**	**680.7**	**385.5**

ug/l: Micrograms per liter
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D: Compound detected at secondary dilution
NA: Not analyzed
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-21R	MW-21R	MW-21R	MW-21R	MW-21R	MW-21R	MW-21R
		DATE OF COLLECTION	4/19/2001	12/15/2004	7/14/2005	9/23/2005	12/28/2005	9/11/2009	5/10/2011
Units in ug/L		DILUTION FACTOR	100	200	250	1000	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value							
1,1,2-Trichloroethane	10	1 ST	U	NA	NA	NA	NA	**7.4 J**	**3.1 J**
Vinyl Chloride	10	2 ST	U	**3 J**	U	**14**	**5 J**	**12**	**7.5 J**
1,1,1-Trichloroethane	10	5 ST	**12,000**	**19,000 D**	**19,000 D**	**35,000 D**	**27,000 D**	**28000 D**	**17000 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**16,000**	**34,000 DB**	**32,000 D**	**57,000 DB**	**54,000 DB**	**48000 D**	**28000 D**
1,1-Dichloroethane	10	5 ST	**410 J**	**370 DJ**	**310 DJ**	**1,100 DJ**	**790 DJ**	**1100 DJ**	**840 D**
1,1-Dichloroethene	10	5 ST	**740 J**	U	U	U	**780 E**	**560 E**	**1000 D**
cis-1,2-Dichloroethene	10	5 ST	U	**9 J**	**10**	**90**	**34**	**59**	**43**
Dichlorodifluoromethane	10	5 ST	U	U	U	U	**210 E**	**840 E**	U
trans-1,2-Dichloroethene	10	5 ST	U	3 J	U	U	**10**	**9.9 J**	**7.1 J**
Trichloroethene	10	5 ST	**3,000**	**7,200 D**	**5,700 D**	**13,000 D**	**9,900 D**	**13000 D**	**8200 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	140 J	U	U	270 E	680 J	440 J
Total Targeted VOCs:			**32150**	**60725**	**57020**	**106204**	**92999**	**92268.3**	**55540.7**

		SAMPLE ID	MW-21R*	MW-21R*	MW-21R*	MW-21R
		DATE OF COLLECTION	6/17/2014	6/17/2014	6/17/2014	6/19/2014
Units in ug/L		DILUTION FACTOR	1/100	1/100	1/100	1/100
	CRDL	NYSDEC Class GA Groundwater Standard Value				
1,1,2-Trichloroethane	10	1 ST	U	**11**	**11**	U
Vinyl Chloride	10	2 ST	**8.5**	**20**	**18**	U
1,1,1-Trichloroethane	10	5 ST	**55000 D**	**67,000 D**	**69,000 D**	**25,000**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**100000 D**	**120,000 D**	**130,000 D**	**48,000**
1,1-Dichloroethane	10	5 ST	**2800 D**	**3,000 D**	**3,100 D**	**1,000 J**
1,1-Dichloroethene	10	5 ST	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	**47**	130	**130**	U
Dichlorodifluoromethane	10	5 ST	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	**18**	**41**	**36**	U
Trichloroethene	10	5 ST	**21000 D**	**26,000 D**	**28,000 D**	**11,000**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	NA	NA
Total Targeted VOCs:			**178873.5**	**216202**	**230295**	**85000**

ug/l: Micrograms per liter
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D: Compound detected at secondary dilution
NA: Not analyzed
B: Detected in associated blank
E: Exceeded calibration range
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-22S 4/19/2001 80	MW-22S 12/15/2004 4	MW-22S 7/14/2005 50	MW-22S 9/23/2005 50	MW-22S 12/28/2005 1	MW-22S 1/31/2008 400	MW-22S 12/29/2008 1
1,1,2-Trichloroethane	10	1 ST		U	NA	NA	NA	NA	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	2 J	1.5	**3.3** J
1,1,1-Trichloroethane	10	5 ST		**1,800**	**180**	**1,800 D**	**2,500**	**3,700 D**	**2,100 DJ**	**3,000 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**3,800**	**400**	**3,800 D**	**4,900 B**	**6,600 DB**	**5,400 DJ**	**7,600 D**
1,1-Dichloroethane	10	5 ST		U	**13 J**	**170**	**220 J**	**250 DJ**	**220 DJ**	**290 DJ**
1,1-Dichloroethene	10	5 ST		U	U	U	U	**420 DJ**	**330 DJ**	**510 DJ**
cis-1,2-Dichloroethene	10	5 ST		U	U	**6 J**	U	**15**	**12**	**13**
Dichlorodifluoromethane	10	5 ST		U	U	**24**	U	**140**	**100 DJ**	**650 DJ**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	3 J	2.4	2 J
Trichloroethene	10	5 ST		**900**	**110**	**1,100 D**	**1,900**	**2,300 D**	**1,700 DJ**	**2,300 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	U	U	U	150	U	150 J
Total Targeted VOCs:				**6500**	**703**	**6900**	**9520**	**13580**	**9865.9**	**14518.5**

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-22S 1/14/2009 1	MW-22S 4/1/2009 1	MW-22S 9/10/2009 1	MW-22S 5/10/2011 1	MW-22S* 6/16/14 1	MW-22S* 6/16/14 1	MW-22S* 6/16/14 1	MW-22S 6/19/14 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	0.88 J	0.81 J	U	0.76 J
1,1,1-Trichloroethane	10	5 ST		**1,000 D**	**1,100 D**	**1100 D**	**590 D**	**850 D**	**870 D**	**870 D**	**680 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**2,900 D**	**3,200 D**	**2300 D**	**1300 D**	**2,000 D**	**2,100 D**	**1800 D**	**1500 D**
1,1-Dichloroethane	10	5 ST		**170**	**86**	**110**	**94**	**150**	**130**	**98**	**150**
1,1-Dichloroethene	10	5 ST		**180 DJ**	**110**	**130**	**140**	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST		**6.4 J**	3.2 J	**5.5 J**	4.3 J	**7.2**	**6.8**	**4.1**	**7.4**
Dichlorodifluoromethane	10	5 ST		**320 D**	**47**	**87**	**77**	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U	U	U
Trichloroethene	10	5 ST		**810 D**	**660 D**	**860 D**	**630 D**	**660 D**	**670 D**	**580 D**	**510 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		96 J	50 J	76 J	78 J	NA	NA	NA	NA
Total Targeted VOCs:				**5482.4**	**5256.2**	**4668.5**	**2913.3**	**3668.08**	**3777.61**	**3352.1**	**2848.16**

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--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-22R	MW-22R	MW-22R	MW-22R	MW-22R	MW-22R	MW-22R
		DATE OF COLLECTION	4/19/2001	12/15/2004	7/14/2005	9/23/2005	12/28/2005	1/31/2008	12/29/2008
Units in ug/L		DILUTION FACTOR	100	100	200	200	1	2000	1
	CRDL	NYSDEC Class GA Groundwater Standard Value							
1,1,2-Trichloroethane	10	1 ST	U	NA	NA	NA	NA	**3**	U
Vinyl Chloride	10	2 ST	U	**4 J**	2 J	U	**5 J**	**9**	**6.3 J**
1,1,1-Trichloroethane	10	5 ST	**6,600**	**8,900 D**	**12,000 D**	**8,800**	**11,000 D**	**15,000 D**	**7,600 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**10,000**	**13,000 DB**	**21,000 D**	**15,000 B**	**16,000 DB**	**29,000 D**	**16,000 D**
1,1-Dichloroethane	10	5 ST	**350 J**	**540 DJ**	**650 DJ**	**580 J**	**610 DJ**	**1,000 D**	**560 DJ**
1,1-Dichloroethene	10	5 ST	**730 J**	U	U	U	**980 DJ**	**1,700 D**	**920 DJ**
cis-1,2-Dichloroethene	10	5 ST	U	**22**	**21**	U	**30**	U	**21**
Dichlorodifluoromethane	10	5 ST	U	**190 DJ**	**65**	U	**200**	U	**730 DJ**
trans-1,2-Dichloroethene	10	5 ST	U	4 J	U	U	U	U	U
Trichloroethene	10	5 ST	**3,800**	**5,200 D**	**7,300 D**	**5,600**	**6,600 D**	**11,000 D**	**4,800 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	210 J	U	U	200 DJ	110 J	150 J
Total Targeted VOCs:			**21480**	**28070**	**41038**	**29980**	**35625**	**57822.4**	**30787.3**

		SAMPLE ID	MW-22R	MW-22R	MW-22R	MW-22R	MW-22R*	MW-22R*	MW-22R*	MW-22R
		DATE OF COLLECTION	1/14/2009	4/1/2009	9/11/2009	5/10/2011	6/16/14	6/16/14	6/16/14	6/19/14
Units in ug/L		DILUTION FACTOR	1	1	1	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value								
1,1,2-Trichloroethane	10	1 ST	U	U	U	U	U	U	U	U
Vinyl Chloride	10	2 ST	**5.8 J**	U	**2.4 J**	**4.4 J**	**4.5**	**3.8**	**4.0**	**3.7**
1,1,1-Trichloroethane	10	5 ST	**4,600 D**	**8,000 D**	**5,100 D**	**6,600 D**	**9,900 D**	**11,000 D**	**11,000 D**	**6,200 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**11,000 D**	**16,000 D**	**10,000 D**	**11,000 D**	**18,000 D**	**19,000 D**	**20,000 D**	**11,000 D**
1,1-Dichloroethane	10	5 ST	**280 DJ**	**470 DJ**	**390 DJ**	**470 D**	**620 D**	**600 D**	**580 D**	U
1,1-Dichloroethene	10	5 ST	**570 DJ**	**750 D**	**530 DJ**	**700 D**	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	**16**	**20**	**13**	**19**	**26**	**25**	**22**	**22**
Dichlorodifluoromethane	10	5 ST	**1,100 D**	**180**	**190**	**180**	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	2.5 J	U	2.5 J	2.7 J	4.2	4	4.6	3
Trichloroethene	10	5 ST	**2,700 D**	**5,500 D**	**3,500 D**	**4,800 D**	**5,400 D**	**5,600 D**	**5,500 D**	**3,400 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	160 J	150 J	130 J	200 J	NA	NA	NA	NA
Total Targeted VOCs:			**20434.3**	**31070**	**19857.9**	**23976.1**	**33954.7**	**36232.3**	**37110.6**	**20628.7**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S
		DATE OF COLLECTION	1/31/2008	12/22/2008	1/12/2009	3/31/2009	9/8/2009	5/10/2011
Units in ug/L		DILUTION FACTOR	50	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value						
1,1,2-Trichloroethane	10	1 ST	U	U	U	U	U	U
Vinyl Chloride	10	2 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	**330**	**1,500 D**	**2,400 D**	**1,600 D**	**1000 D**	**580 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**800 B**	**3,100 D**	**3,600 D**	**3,800 D**	**2400 D**	**1100 D**
1,1-Dichloroethane	10	5 ST	**24 J**	**120**	**190**	**130**	**68**	**41**
1,1-Dichloroethene	10	5 ST	**39**	**120**	**280**	**110**	**56**	**46**
cis-1,2-Dichloroethene	10	5 ST	U	**14**	**16**	**16**	**15**	**7.3 J**
Dichlorodifluoromethane	10	5 ST	**11 J**	**180 U**	**470**	**71**	**25**	**18**
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U
Trichloroethene	10	5 ST	**190**	**970 D**	**1,600 D**	**860 D**	**540 D**	**360 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	U	53 J	110 J	79 J	78 J	120 J
Total Targeted VOCs:			**1394**	**6057**	**8666**	**6666**	**4182**	**2272.3**

ug/l: Micrograms per liter
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FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-23D 1/31/2008 400	MW-23D 12/22/2008 1	MW-23D 1/12/2009 1	MW-23D 3/30/2009 1	MW-23D 9/14/2009 1	MW-23D 5/10/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**2,100**	**1,900 D**	**1,600 D**	**1,400 D**	**1100 D**	**800 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**4,800**	**5,100 D**	**3,400 D**	**3,100 D**	**2100 D**	**1500 D**
1,1-Dichloroethane	10	5 ST		**160 J**	**150**	**120**	**99**	**58**	**45**
1,1-Dichloroethene	10	5 ST		**190 J**	**120**	**120**	**98**	**62**	**51**
cis-1,2-Dichloroethene	10	5 ST		U	**5.9 J**	4.3 J	3.4 J	2.8 J	U
Dichlorodifluoromethane	10	5 ST		U	**340 DJ**	**420 D**	**54**	**37**	**24**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		**1,300**	**1100 D**	**820 D**	**730 D**	**600 D**	**410 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		U	77 J	72 J	50 J	33 J	30 J
Total Targeted VOCs:				**8550**	**8792.9**	**6556.3**	**5534.4**	**3992.8**	**2860**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-24S 1/31/2008 1	MW-24S 12/23/2008 1	MW-24S 1/13/2009 1	MW-24S 3/27/2009 1	MW-24S 9/8/2009 1	MW-24S 5/9/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**37 D**	**350 D**	**260 D**	**1,500 D**	**120**	**13**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**120 DB**	**400 D**	**400 D**	**3,600 D**	**550 D**	**42**
1,1-Dichloroethane	10	5 ST		**9.4 D**	**55**	**46**	**120**	**39**	**5.1 J**
1,1-Dichloroethene	10	5 ST		**14**	**72**	**83**	**97**	**39**	4.7 J
cis-1,2-Dichloroethene	10	5 ST		**14**	**7.4 J**	**11 J**	**11**	**29**	3.4 J
Dichlorodifluoromethane	10	5 ST		2.2	**43 U**	**76**	**94**	**19**	U
trans-1,2-Dichloroethene	10	5 ST		1.2	U	U	U	U	U
Trichloroethene	10	5 ST		**54 D**	**290 D**	**190 D**	**830 D**	**130**	**23**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		30 J	34 J	96 J	78 J	140 J	76 J
Total Targeted VOCs:				**281.8**	**1251.4**	**1162**	**6330**	**1066**	**167.2**

ug/l: Micrograms per liter
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B: Detected in associated blank
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: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-24D 1/31/2008 1	MW-24D 12/23/2008 1	MW-24D 1/13/2009 1	MW-24D 3/31/2009 1	MW-24D 9/14/2009 1	MW-24D 5/9/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		1	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**1,500 D**	**1,300 D**	**1,300 D**	**1,200 D**	**760 D**	**730 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**4,500 D**	**3,100 D**	**3,700 D**	**3,200 D**	**1600 D**	**1300 D**
1,1-Dichloroethane	10	5 ST		**160 DJ**	**310 D**	**230 DJ**	**130**	**100**	**47**
1,1-Dichloroethene	10	5 ST		**170 DJ**	**92**	**100**	**57**	**52**	**43**
cis-1,2-Dichloroethene	10	5 ST		5	5 J	5 J	3.8 J	**8.3 J**	2.1 J
Dichlorodifluoromethane	10	5 ST		**88 DJ**	**570 D**	**1,200 D**	**88**	**64**	**22**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		**940 D**	**790 D**	**730 D**	**480 D**	**390 D**	**380 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		43 J	210 J	210 J	240 J	350 J	56 J
Total Targeted VOCs:				**7407.13**	**6377.4**	**7474.7**	**5398.8**	**3324.3**	**2580.1**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-25S 1/31/2008 1	MW-25S 12/23/2008 1	MW-25S 1/13/2009 1	MW-25S 3/30/2009 1	MW-25S 9/8/2009 1	MW-25S 5/9/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		2.4	**15**	**24**	**420 D**	**470 D**	**14**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		4.4 B	**14**	**80**	**610 D**	**1000 D**	**13**
1,1-Dichloroethane	10	5 ST		0.5	**22**	**11**	**53**	**72**	**5.2 J**
1,1-Dichloroethene	10	5 ST		0.54	**10**	**9.2 J**	**65**	**55**	2.5 J
cis-1,2-Dichloroethene	10	5 ST		U	**5.7 J**	3.2 J	**10**	**12**	3.5 J
Dichlorodifluoromethane	10	5 ST		U	4.6 U	**8 J**	**8.3 J**	**15**	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		2	**26**	**20**	**180 D**	**320 D**	**24**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		0.76 J	62 J	36 J	85 J	81 J	17 J
Total Targeted VOCs:				**10.6**	**159.3**	**191.4**	**1431.3**	**2025**	**79.2**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-25D 1/31/2008 400	MW-25D 12/23/2008 1	MW-25D 1/14/2009 1	MW-25D 3/30/2009 1	MW-25D 9/15/2009 1	MW-25D 5/9/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**1,300**	**1,100 D**	**880 D**	**1,200 D**	**1000 D**	**170**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**3,600**	**3,300 D**	**3,300 D**	**2,900 D**	**1700 D**	**510 D**
1,1-Dichloroethane	10	5 ST		**150 J**	**100**	**170**	**110**	**120**	**54**
1,1-Dichloroethene	10	5 ST		**320**	**150**	**240 DJ**	**120**	**84**	**46**
cis-1,2-Dichloroethene	10	5 ST		U	4.7 J	**8.4 J**	4 J	4.1 J	**8 J**
Dichlorodifluoromethane	10	5 ST		U	**170**	**320 D**	**50**	**110**	**21**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		**1,300**	**950 D**	**910 D**	**820 D**	**620 D**	**180**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		U	44 J	110 J	U	140 J	230 J
Total Targeted VOCs:				**6670**	**5818.7**	**5938.4**	**5204**	**3778.1**	**1219**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-26S	MW-26S	MW-26S	MW-26S	MW-26S	MW-26S
		DATE OF COLLECTION	2/1/2008	12/29/2008	1/14/2009	3/27/2009	9/9/2009	5/11/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value						
1,1,2-Trichloroethane	10	1 ST	U	U	U	U	U	U
Vinyl Chloride	10	2 ST	0.36 J	2.0 J	**3.0 J**	U	U	U
1,1,1-Trichloroethane	10	5 ST	**6.1**	U	U	**9.1 J**	3.5 J	4.9 J
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	3.4 B	**6.5 J**	4.4 J	**38**	**8.2 J**	**15**
1,1-Dichloroethane	10	5 ST	3.1	**5.4 J**	**6.8 J**	**14**	**8.1 J**	**6.1 J**
1,1-Dichloroethene	10	5 ST	1.2	U	U	4.1 J	2.1 J	U
cis-1,2-Dichloroethene	10	5 ST	1.4	3.2 J	3.8 J	**6.5 J**	**6.8 J**	U
Dichlorodifluoromethane	10	5 ST	U	U	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U
Trichloroethene	10	5 ST	**6.8**	**6.5 J**	**8.6 J**	**19**	**6.9 J**	3.7 J
1,2-Dichloro-1,1,2-trifluoroethane	10	--	2 J	39 J	42 J	52 J	63 J	30 J
Total Targeted VOCs:			**24.66**	**62.6**	**68.6**	**142.7**	**98.6**	**59.7**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-26D	MW-26D	MW-26D	MW-26D	MW-26D	MW-26D
		DATE OF COLLECTION	1/31/2008	12/29/2008	1/14/2009	3/31/2009	9/15/2009	5/11/2011
Units in ug/L		DILUTION FACTOR	400	1	1	1	1	5
	CRDL	NYSDEC Class GA Groundwater Standard Value						
1,1,2-Trichloroethane	10	1 ST	U	U	U	U	U	U
Vinyl Chloride	10	2 ST	U	**2.1 J**	**3.4 J**	U	U	U
1,1,1-Trichloroethane	10	5 ST	**1,200**	**170**	**180 D**	**750 D**	**820 D**	**380**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**2,900**	**580 D**	**620 D**	**1700 D**	**2,100 D**	**870**
1,1-Dichloroethane	10	5 ST	**130 J**	**28**	**41**	**160**	**100**	**60**
1,1-Dichloroethene	10	5 ST	**160 J**	**27**	**42**	**62**	**53**	**59**
cis-1,2-Dichloroethene	10	5 ST	U	**38**	**48**	**18**	**5.8 J**	**23 J**
Dichlorodifluoromethane	10	5 ST	U	**120**	**130**	**34**	U	**27 J**
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U
Trichloroethene	10	5 ST	**780**	**190**	**150 D**	**520 D**	**420 D**	**270**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	U	31 J	84 J	130 J	270 J	120 J
Total Targeted VOCs:			**5170**	**1186.1**	**1298.4**	**3374**	**3768.8**	**1809**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27
		DATE OF COLLECTION	1/31/2008	12/22/2008	1/13/2009	3/27/2009	9/15/2009	5/11/2011	6/17/2014
Units in ug/L		DILUTION FACTOR	40	1	1	1	1	40	40
	CRDL	NYSDEC Class GA Groundwater Standard Value							
1,1,2-Trichloroethane	10	1 ST	U	U	U	U	U	U	U
Vinyl Chloride	10	2 ST	U	U	**3.6 J**	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	**170**	**95**	**190**	**360 D**	**890 D**	**2500**	**980** D
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**420 B**	**180**	**440 D**	**1,100 D**	**2,500 D**	**5700**	**2200** D
1,1-Dichloroethane	10	5 ST	**17 J**	**9.6 J**	**20**	**33**	**63**	**230 J**	**87**
1,1-Dichloroethene	10	5 ST	**23**	**16**	**30**	**43**	**79**	**660**	U
cis-1,2-Dichloroethene	10	5 ST	**53**	**21**	**56**	**64**	**36**	U	**7**
Dichlorodifluoromethane	10	5 ST	U	**11**	**41** U	**16**	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U	U
Trichloroethene	10	5 ST	**130**	**94**	**190**	**280 D**	**590 D**	**2600**	**710** D
1,2-Dichloro-1,1,2-trifluoroethane	10	--	U	U	9 J	11 J	32 J	270 J	NA
Total Targeted VOCs:			**813**	**426.6**	**979.4**	**1907**	**4190**	**11960**	**3984**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-28S 2/1/2008 1	MW-28S 12/23/2008 1	MW-28S 1/13/2009 1	MW-28S 3/27/2009 1	MW-28S 9/9/2009 1	MW-28S 5/10/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		0.49 J	U	**5.90 J**	U	U	U
1,1,1-Trichloroethane	10	5 ST		**5.4**	**19.0**	**180 D**	**360 D**	**140**	**29**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**5.8 B**	**140.0**	**590 D**	**670 D**	**300 D**	**72**
1,1-Dichloroethane	10	5 ST		2.4	**13.0**	**55**	**46**	**35**	**26**
1,1-Dichloroethene	10	5 ST		1.1	**9.6 J**	**65**	**32**	**20**	**6.1 J**
cis-1,2-Dichloroethene	10	5 ST		2.4	**10.0 J**	**21**	**11**	**15**	**19**
Dichlorodifluoromethane	10	5 ST		U	**48** U	**120**	**7.4 J**	**11**	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		4.5	**10.0 J**	**170**	**220 D**	**100**	**28**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		2.5 J	59 J	160 J	99 J	110 J	120 J
Total Targeted VOCs:				**24.59**	**308.6**	**1366.9**	**1445.4**	**731**	**300.1**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	MW-28D 2/1/2008 400	MW-28D 12/23/2008 1	MW-28D 1/13/2009 1	MW-28D 3/30/2009 1	MW-28D 9/14/2009 1	MW-28D 5/10/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**2,200**	**330 D**	**280 D**	**620 D**	**450 D**	**830 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**4,300**	**1,600 D**	**1,100 D**	**2,000 D**	**1,000 D**	**1600 D**
1,1-Dichloroethane	10	5 ST		**150 J**	**530 D**	**320 D**	**220 DJ**	**140**	**74**
1,1-Dichloroethene	10	5 ST		**210**	**57**	**67**	**67**	**37**	**57**
cis-1,2-Dichloroethene	10	5 ST		U	4 J	4.6 J	**6.1 J**	**6.5 J**	**25**
Dichlorodifluoromethane	10	5 ST		U	**2,700 D**	**2500 D**	**190 DJ**	**91**	**31**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		**1,200**	**650 D**	**360 D**	**400 D**	**250 D**	**440 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		U	450 J	530 J	570 J	600 J	140 J
Total Targeted VOCs:				**8060**	**6321**	**5161.6**	**4073.1**	**2574.5**	**3197**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-29S DATE OF COLLECTION: 6/17/2014 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	**36**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**100**
1,1-Dichloroethane	10	5 ST	**8**
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	**10**
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	**91**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**245**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-29D DATE OF COLLECTION: 6/18/2014 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	1.6
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**1.6**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-30S DATE OF COLLECTION: 6/18/14 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	1.3
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**1.3**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-30D DATE OF COLLECTION: 6/18/2014 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	MW-31S
		DATE OF COLLECTION	6/18/2014
Units in ug/L		DILUTION FACTOR	1
	CRDL	NYSDEC Class GA Groundwater Standard Value	
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-31D DATE OF COLLECTION: 6/18/2014 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-32S DATE OF COLLECTION: 6/18/2014 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: MW-32D DATE OF COLLECTION: 6/18/2014 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
--: Not established
: Exceeds Class GA Groundwater Standards
NA: Not analyzed

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	P-5S 12/14/2004 1	P-5S 5/14/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U
Vinyl Chloride	10	2 ST		U	U
1,1,1-Trichloroethane	10	5 ST		U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		U	U
1,1-Dichloroethane	10	5 ST		2 J	3.4 J
1,1-Dichloroethene	10	5 ST		U	U
cis-1,2-Dichloroethene	10	5 ST		**12**	**33**
Dichlorodifluoromethane	10	5 ST		U	U
trans-1,2-Dichloroethene	10	5 ST		U	U
Trichloroethene	10	5 ST		**17**	**31**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		U	U
Total Targeted VOCs:				**31**	**67.4**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L		SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	P-5I 4/9/1999 200	P-5I 12/14/2004 1	P-5I 5/14/2011 1
	CRDL	NYSDEC Class GA Groundwater Standard Value			
1,1,2-Trichloroethane	10	1 ST	NA	U	U
Vinyl Chloride	10	2 ST	U	2 J	U
1,1,1-Trichloroethane	10	5 ST	U	2 J	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U	U
1,1-Dichloroethane	10	5 ST	U	4 J	4.1 J
1,1-Dichloroethene	10	5 ST	U	U	U
cis-1,2-Dichloroethene	10	5 ST	**390**	**31**	**43**
Dichlorodifluoromethane	10	5 ST	NA	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U
Trichloroethene	10	5 ST	**680**	**30**	**49**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	U	U
Total Targeted VOCs:			**1070**	**69**	**96.1**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L		SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	P-5D 4/9/1999 250	P-5D 12/14/2004 1/20	P-5D 5/13/2011 1
	CRDL	NYSDEC Class GA Groundwater Standard Value			
1,1,2-Trichloroethane	10	1 ST	NA	U	U
Vinyl Chloride	10	2 ST	U	**3** J	U
1,1,1-Trichloroethane	10	5 ST	**900**	**760 D**	**790**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**1,800**	**2,000 D**	**1,900**
1,1-Dichloroethane	10	5 ST	U	**72**	**50**
1,1-Dichloroethene	10	5 ST	U	U	**59**
cis-1,2-Dichloroethene	10	5 ST	U	**47**	**13**
Dichlorodifluoromethane	10	5 ST	NA	**25**	**27**
trans-1,2-Dichloroethene	10	5 ST	**310**	U	U
Trichloroethene	10	5 ST	**750**	**570 D**	**490**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	37 J	37 J
Total Targeted VOCs:			**3760**	**3514**	**3366**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	P-6	P-6	P-6	P-6
		DATE OF COLLECTION	4/12/1999	4/19/2001	12/14/2004	5/11/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value				
1,1,2-Trichloroethane	10	1 ST	NA	U	U	U
Vinyl Chloride	10	2 ST	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U	U	U
1,1-Dichloroethane	10	5 ST	U	U	U	U
1,1-Dichloroethene	10	5 ST	U	U	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U
Trichloroethene	10	5 ST	U	U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	U
Total Targeted VOCs:			**0**	**0**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	P-7 4/18/2001 1	P-7 12/13/2004 1	P-7 5/12/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U
Vinyl Chloride	10	2 ST		U	U	U
1,1,1-Trichloroethane	10	5 ST		2 J	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**10**	**17**	4.3 J
1,1-Dichloroethane	10	5 ST		4 J	**8 J**	U
1,1-Dichloroethene	10	5 ST		1 J	3 J	U
cis-1,2-Dichloroethene	10	5 ST		U	U	U
Dichlorodifluoromethane	10	5 ST		U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U
Trichloroethene	10	5 ST		**10**	**16**	2.9 J
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	U	8.9 J
Total Targeted VOCs:				**27**	**44**	**16.1**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	P-9 11/4/1999 1	P-9 1/28/2000 1	P-9 12/13/2004 1
1,1,2-Trichloroethane	10	1 ST		NA	NA	U
Vinyl Chloride	10	2 ST		U	U	U
1,1,1-Trichloroethane	10	5 ST		U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		U	U	U
1,1-Dichloroethane	10	5 ST		U	U	U
1,1-Dichloroethene	10	5 ST		U	U	U
cis-1,2-Dichloroethene	10	5 ST		U	U	U
Dichlorodifluoromethane	10	5 ST		NA	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U
Trichloroethene	10	5 ST		U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	U
Total Targeted VOCs:				**0**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
NA: Not analyzed
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: P-10 DATE OF COLLECTION: 4/12/1999 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	NA
Vinyl Chloride	10	2 ST	3.9
1,1,1-Trichloroethane	10	5 ST	3.4
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	1.4
1,1-Dichloroethane	10	5 ST	**9.8**
1,1-Dichloroethene	10	5 ST	3.5
cis-1,2-Dichloroethene	10	5 ST	**11**
Dichlorodifluoromethane	10	5 ST	NA
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	**12**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**45**

ug/l: Micrograms per liter
U: Not detected
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: P-11	P-11	P-11	P-11	P-11	P-11	P-11
			DATE OF COLLECTION: 4/12/1999	4/18/2001	12/13/2004	1/31/2008	12/22/2008	1/13/2009	3/27/2009
			DILUTION FACTOR: 1	1	1	1	1	1	1
1,1,2-Trichloroethane	10	1 ST	NA	U	U	U	U	U	U
Vinyl Chloride	10	2 ST	U	U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	**850**	**200 J**	**23**	**20**	**19**	**23**	**29**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**98**	**52**	**15**	**13 B**	**46**	**93**	**80**
1,1-Dichloroethane	10	5 ST	U	3 J	1 J	0.75	U	2.1 J	U
1,1-Dichloroethene	10	5 ST	**72**	**15**	U	2.4	2.4 J	3.3 J	3.2 J
cis-1,2-Dichloroethene	10	5 ST	U	2 J	U	0.76	U	U	U
Dichlorodifluoromethane	10	5 ST	NA	U	U	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U	U
Trichloroethene	10	5 ST	**210**	**51**	**19**	**9.6**	**13**	**14**	**14**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	U	0.68 J	U	9.1 J	U
Total Targeted VOCs:			**1230**	**323**	**58**	**47.19**	**80.4**	**144.5**	**126.2**

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: P-11	P-11
			DATE OF COLLECTION: 9/9/2009	5/11/2011
			DILUTION FACTOR: 1	1
1,1,2-Trichloroethane	10	1 ST	U	U
Vinyl Chloride	10	2 ST	U	U
1,1,1-Trichloroethane	10	5 ST	**38**	**32**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**98**	**160**
1,1-Dichloroethane	10	5 ST	3.6 J	4.7 J
1,1-Dichloroethene	10	5 ST	**7.2 J**	**10**
cis-1,2-Dichloroethene	10	5 ST	U	3.5 J
Dichlorodifluoromethane	10	5 ST	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U
Trichloroethene	10	5 ST	**28**	**48**
1,2-Dichloro-1,1,2-trifluoroethane	10	--	7.5 J	24 J
Total Targeted VOCs:			**182.3**	**282.2**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	P-12	P-12	P-12	P-12	P-12	P-12
		DATE OF COLLECTION	11/3/1999	1/28/2000	4/18/2001	12/13/2004	9/11/2009	5/16/2011
Units in ug/L		DILUTION FACTOR	1	1	1	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value						
1,1,2-Trichloroethane	10	1 ST	NA	NA	U		U	U
Vinyl Chloride	10	2 ST	U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST	**34**	**100**	**53 J**	**44**	**76.0**	**14**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	**66**	**120**	**73**	**85**	**170.0**	**80**
1,1-Dichloroethane	10	5 ST	2 J	4 J	2 J	2 J	3.2 J	U
1,1-Dichloroethene	10	5 ST	U	U	2 J	U	3.8 J	U
cis-1,2-Dichloroethene	10	5 ST	4 J*	U	U	1 J	3.6 J	U
Dichlorodifluoromethane	10	5 ST	NA	U	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U	U	U	U
Trichloroethene	10	5 ST	**24**	**14**	**9 J**	**15**	**27.0**	4.6 J
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA	NA	NA	U	U	U
Total Targeted VOCs:			**130**	**238**	**139**	**147**	**283.6**	**98.6**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards
*: Sum of cis and trans reported

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: P-13 DATE OF COLLECTION: 4/18/2001 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	NA
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
NA: Not analyzed
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	P-14 11/4/1999 1	P-14 1/28/2000 1	P-14 12/14/2004 1
1,1,2-Trichloroethane	10	1 ST		NA	NA	U
Vinyl Chloride	10	2 ST		U	U	U
1,1,1-Trichloroethane	10	5 ST		0.4 J	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		U	U	U
1,1-Dichloroethane	10	5 ST		2 J	U	U
1,1-Dichloroethene	10	5 ST		U	U	U
cis-1,2-Dichloroethene	10	5 ST		U	U	U
Dichlorodifluoromethane	10	5 ST		NA	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U
Trichloroethene	10	5 ST		U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	U
Total Targeted VOCs:				**2.4**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

		SAMPLE ID	P-15	P-15	P-15
		DATE OF COLLECTION	12/14/2004	9/11/2009	5/16/2011
Units in ug/L		DILUTION FACTOR	1	1	1
	CRDL	NYSDEC Class GA Groundwater Standard Value			
1,1,2-Trichloroethane	10	1 ST	U	U	U
Vinyl Chloride	10	2 ST	U	U	U
1,1,1-Trichloroethane	10	5 ST	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U	U	U
1,1-Dichloroethane	10	5 ST	U	U	U
1,1-Dichloroethene	10	5 ST	U	U	U
cis-1,2-Dichloroethene	10	5 ST	U	U	U
Dichlorodifluoromethane	10	5 ST	U	U	U
trans-1,2-Dichloroethene	10	5 ST	U	U	U
Trichloroethene	10	5 ST	U	U	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	U	U	U
Total Targeted VOCs:			**0**	**0**	**0**

ug/l: Micrograms per liter
U: Not detected
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID: P-16 DATE OF COLLECTION: 12/14/2004 DILUTION FACTOR: 1
1,1,2-Trichloroethane	10	1 ST	U
Vinyl Chloride	10	2 ST	U
1,1,1-Trichloroethane	10	5 ST	U
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST	U
1,1-Dichloroethane	10	5 ST	U
1,1-Dichloroethene	10	5 ST	U
cis-1,2-Dichloroethene	10	5 ST	U
Dichlorodifluoromethane	10	5 ST	U
trans-1,2-Dichloroethene	10	5 ST	U
Trichloroethene	10	5 ST	U
1,2-Dichloro-1,1,2-trifluoroethane	10	--	U
Total Targeted VOCs:			**0**

ug/l: Micrograms per liter
U: Not detected
--: Not established

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-17S 4/8/1999 20	OC-17S 12/13/2004 1	OC-17S 1/31/2008 2	OC-17S 12/23/2008 1	OC-17S 1/14/2009 1	OC-17S 3/30/2009 1	OC-17S 9/8/2009 1
1,1,2-Trichloroethane	10	1 ST		NA	U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**760**	**500 E**	**34**	**74**	**120**	**200 D**	**400 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**120**	**39**	**5.3 B**	**100**	**140**	**250 D**	**370 D**
1,1-Dichloroethane	10	5 ST		**32**	**10**	1.4	**14**	**18**	**26**	**65**
1,1-Dichloroethene	10	5 ST		**85**	**28**	3.6	**18**	**27**	**43**	**100**
cis-1,2-Dichloroethene	10	5 ST		**57**	**9 J**	4.6	**9.1 J**	**8.4 J**	**7.6 J**	**6.9 J**
Dichlorodifluoromethane	10	5 ST		NA	U	U	**5.5 J**	**11 J**	U	**11**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U	U
Trichloroethene	10	5 ST		**290**	**110**	**15**	**42**	**74**	**150**	**300 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	U	U	24 J	42 J	31 J	72 J
Total Targeted VOCs:				**1344**	**696**	**63.9**	**286.6**	**440.4**	**707.6**	**1324.9**

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-17S 5/11/2011 1	OC-17S 6/16/14 1
1,1,2-Trichloroethane	10	1 ST		U	U
Vinyl Chloride	10	2 ST		U	1.7
1,1,1-Trichloroethane	10	5 ST		**24**	**80**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**100**	**250 D**
1,1-Dichloroethane	10	5 ST		**24**	**83**
1,1-Dichloroethene	10	5 ST		**8.4 J**	U
cis-1,2-Dichloroethene	10	5 ST		**10**	**10**
Dichlorodifluoromethane	10	5 ST		**7 J**	U
trans-1,2-Dichloroethene	10	5 ST		U	U
Trichloroethene	10	5 ST		**37**	**75**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		130 J	130 J
Total Targeted VOCs:				**340.2**	**629.2**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
B: Detected in associated blank
E: Exceeded calibration range
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID	OC-17D	OC-17D	OC-17D	OC-17D	OC-17D	OC-17D
			DATE OF COLLECTION	4/8/1999	12/13/2004	2/1/2008	12/23/2008	1/14/2009	3/30/2009	9/14/2009
			DILUTION FACTOR	200	1	400	1	1	1	1
1,1,2-Trichloroethane	10	1 ST		NA	U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	**10**	U	**2.7 J**	**3.6 J**	U	U
1,1,1-Trichloroethane	10	5 ST		**840**	**1,100 D**	**1,300**	**760 D**	**540 D**	**450 D**	**630 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**1,500**	**2,100 D**	**3,100**	**2,300 D**	**1,800 D**	**710 D**	**1,300 D**
1,1-Dichloroethane	10	5 ST		**130**	**81**	**97 J**	**69**	**190**	**170 DJ**	**110**
1,1-Dichloroethene	10	5 ST		**220**	**130**	**160 J**	**87**	**110**	**64**	**53**
cis-1,2-Dichloroethene	10	5 ST		**230**	**130**	U	**36**	**44**	**15**	3.5 J
Dichlorodifluoromethane	10	5 ST		NA	**20**	U	**130**	**1,100 D**	**160**	**87**
trans-1,2-Dichloroethene	10	5 ST		U	1 J	U	U	U	U	U
Trichloroethene	10	5 ST		**680**	**730 D**	**790**	**510 D**	**440 D**	**360 D**	**370 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	32 J	32 J	32 J	240 J	320 J	240 J
Total Targeted VOCs:				**3600**	**4334**	**5479**	**3926.7**	**4467.6**	**2249**	**2793.5**

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID	OC-17D	OC-17D
			DATE OF COLLECTION	5/11/2011	6/16/2014
			DILUTION FACTOR	16	1
1,1,2-Trichloroethane	10	1 ST		U	U
Vinyl Chloride	10	2 ST		U	U
1,1,1-Trichloroethane	10	5 ST		**980**	**540** D
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**2600**	**1100** D
1,1-Dichloroethane	10	5 ST		**140 J**	**110**
1,1-Dichloroethene	10	5 ST		**100 J**	U
cis-1,2-Dichloroethene	10	5 ST		U	3.3
Dichlorodifluoromethane	10	5 ST		**57 J**	U
trans-1,2-Dichloroethene	10	5 ST		U	U
Trichloroethene	10	5 ST		**520**	**300** D
1,2-Dichloro-1,1,2-trifluoroethane	10	--		490 J	NA
Total Targeted VOCs:				**4887**	**2053.3**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-18S 4/8/1999 200	OC-18S 12/13/2004 1	OC-18S 2/1/2008 1	OC-18S 12/22/2008 1	OC-18S 1/12/2009 1	OC-18S 3/27/2009 1	OC-18S 9/9/2009 1
1,1,2-Trichloroethane	10	1 ST		NA	U	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**250**	**310 D**	2.7	**160**	**68**	**83**	**1,000 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**300**	**370 D**	4 B	**600 D**	**220 D**	**290 D**	**2,000 D**
1,1-Dichloroethane	10	5 ST		U	**18**	0.21 J	**19**	**7.8 J**	**9 J**	**180**
1,1-Dichloroethene	10	5 ST		**64**	**56**	0.44 J	**51**	**27**	**30**	**430 D**
cis-1,2-Dichloroethene	10	5 ST		U	1 J	U	U	2 J	3 J	**8.1 J**
Dichlorodifluoromethane	10	5 ST		NA	U	U	**37**	**24**	4 J	**34**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U	U
Trichloroethene	10	5 ST		**230**	**180 D**	1.8	**210 D**	**99**	**120**	**1,800 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	U	U	12 J	U	10 J	72 J
Total Targeted VOCs:				**844**	**935**	**9.15**	**1089**	**447.8**	**548.1**	**5524.1**

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-18S 5/11/2011 1
1,1,2-Trichloroethane	10	1 ST		U
Vinyl Chloride	10	2 ST		U
1,1,1-Trichloroethane	10	5 ST		**6.7 J**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**36**
1,1-Dichloroethane	10	5 ST		U
1,1-Dichloroethene	10	5 ST		U
cis-1,2-Dichloroethene	10	5 ST		4.6 J
Dichlorodifluoromethane	10	5 ST		U
trans-1,2-Dichloroethene	10	5 ST		U
Trichloroethene	10	5 ST		**14**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		14 J
Total Targeted VOCs:				**75.3**

ug/l: Micrograms per liter
U: Not detected
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D: Compound detected at secondary dilution
NA: Not analyzed
B: Detected in associated blank
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-18D 4/8/1999 200	OC-18D 12/13/2004 1	OC-18D 1/31/2008 400	OC-18D 12/22/2008 1	OC-18D 1/12/2009 1	OC-18D 3/31/2009 1
1,1,2-Trichloroethane	10	1 ST		NA	U	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**3,100**	**1,800 D**	**200**	**2,400 D**	**1,300 D**	**1,900 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**5,600**	**4,300 D**	**5,100**	**7,500 D**	**4,000 D**	**4,700 D**
1,1-Dichloroethane	10	5 ST		**250**	**140**	**160 J**	**140**	**130**	**94**
1,1-Dichloroethene	10	5 ST		**600**	**190**	**210**	**120**	**140**	**110**
cis-1,2-Dichloroethene	10	5 ST		U	5 J	U	**5.9 J**	4.6 J	3 J
Dichlorodifluoromethane	10	5 ST		NA	**43**	U	**340 DJ**	**390 E**	**40**
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U	U
Trichloroethene	10	5 ST		**1,800**	**1,100 D**	**1,300**	**1,400 D**	**660 D**	**960 D**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	66 J	U	60 J	63 J	U
Total Targeted VOCs:				**11350**	**7644**	**6970**	**11965.9**	**6687.6**	**7807.3**

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-18D 9/15/2009 1	OC-18D 5/11/2011 16
1,1,2-Trichloroethane	10	1 ST		U	U
Vinyl Chloride	10	2 ST		U	U
1,1,1-Trichloroethane	10	5 ST		**1,200 D**	**760**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**2,700 D**	**1,600**
1,1-Dichloroethane	10	5 ST		**57**	**43 J**
1,1-Dichloroethene	10	5 ST		**61**	**73 J**
cis-1,2-Dichloroethene	10	5 ST		2.7 J	U
Dichlorodifluoromethane	10	5 ST		U	U
trans-1,2-Dichloroethene	10	5 ST		U	U
Trichloroethene	10	5 ST		**600 D**	**370**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		U	U
Total Targeted VOCs:				**4620.7**	**2846**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
E: Exceeded calibration range
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-19S 4/9/1999 50	OC-19S 12/13/2004 1	OC-19S 9/9/2009 1.0	OC-19S 5/16/2011 1	OC-19S 6/16/2014 1
1,1,2-Trichloroethane	10	1 ST		NA	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	**4.1 J**	U	U
1,1,1-Trichloroethane	10	5 ST		**1,100**	**7 J**	**140**	2.6 J	1
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**1,600**	**28**	**470 D**	**7.8 J**	**9.7**
1,1-Dichloroethane	10	5 ST		**110**	5 J	**17**	U	U
1,1-Dichloroethene	10	5 ST		**180**	2 J	**10**	U	U
cis-1,2-Dichloroethene	10	5 ST		U	**15**	**45**	4.3 J	U
Dichlorodifluoromethane	10	5 ST		NA	U	U	U	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U
Trichloroethene	10	5 ST		**640**	**11**	**70**	4.7 J	1.6
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	U	U	U	NA
Total Targeted VOCs:				**3630**	**68**	**756.1**	**19.4**	**12.3**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	OC-19D 4/9/1999 200	OC-19D 12/13/2004 1	OC-19D 9/15/2009 1.0	OC-19D 5/16/2011 16	OC-19D 6/16/2014 16
1,1,2-Trichloroethane	10	1 ST		NA	U	U	U	U
Vinyl Chloride	10	2 ST		U	U	U	U	U
1,1,1-Trichloroethane	10	5 ST		**4,000**	**1,500 D**	**980 D**	**1,100**	**1,000 D**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**6,700**	**2,000 D**	**1900 D**	**1,900**	**2,100 D**
1,1-Dichloroethane	10	5 ST		**310**	**140**	**51**	**89 J**	**67**
1,1-Dichloroethene	10	5 ST		**810**	U	**56**	**110 J**	U
cis-1,2-Dichloroethene	10	5 ST		U	**6 J**	**15**	U	2.3
Dichlorodifluoromethane	10	5 ST		NA	U	U	**48 J**	U
trans-1,2-Dichloroethene	10	5 ST		U	U	U	U	U
Trichloroethene	10	5 ST		**2,400**	**830 D**	**520 D**	**620**	**420** D
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	58	U	U	NA
Total Targeted VOCs:				**14220**	**4534**	**3522**	**3867**	**3589.3**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
D: Compound detected at secondary dilution
NA: Not analyzed
--: Not established
: Exceeds Class GA Groundwater Standards

FARRAND CONTROLS SITE
GROUNDWATER SAMPLE RESULTS
SELECTED VOLATILE ORGANIC COMPOUNDS (VOCs)

Units in ug/L	CRDL	NYSDEC Class GA Groundwater Standard Value	SAMPLE ID DATE OF COLLECTION DILUTION FACTOR	DRUM COMPOSITE 5/16/2011 1	DRUM COMPOSITE 5/16/2011 1	DRUM COMPOSITE 5/16/2011 1
1,1,2-Trichloroethane	10	1 ST		U	U	U
Vinyl Chloride	10	2 ST		U	U	U
1,1,1-Trichloroethane	10	5 ST		**610** D	**68**	**800**
1,1,2-Trichloro-1,2,2-trifluoroethane	10	5 ST		**1300** D	**200**	**1600**
1,1-Dichloroethane	10	5 ST		**100**	**66**	**83** J
1,1-Dichloroethene	10	5 ST		**100**	**7.6** J	**87** J
cis-1,2-Dichloroethene	10	5 ST		5 J	U	U
Dichlorodifluoromethane	10	5 ST		**160** D	**35**	**38** J
trans-1,2-Dichloroethene	10	5 ST		U	U	U
Trichloroethene	10	5 ST		**440** D	**110**	**500**
1,2-Dichloro-1,1,2-trifluoroethane	10	--		NA	NA	U
Total Targeted VOCs:				**2715**	**486.6**	**3108**

ug/l: Micrograms per liter
U: Not detected
J: Estimated value
--: Not established
: Exceeds Class GA Groundwater Standards

4.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of this program was to collect additional data from the downgradient wetland area and downgradient groundwater to further evaluate VOC concentrations in groundwater, surface water and sediment in the vicinity of the Site to support the screening of monitored natural attenuation as a potentially viable remediation option for contaminated groundwater beneath the Site. The SOW included surface water and sediment sampling, installation and sampling of four monitoring well pairs south of the Site along the Taconic State Parkway, sampling of 15 existing monitoring wells, sampling of 8 commercial wells located downgradient of the Site, groundwater well pumping analysis of 4 existing monitoring wells and disposal of investigation-derived waste.

4.1 Conclusions

The following conclusions are based on the findings of this investigation, as well as a review of historical data obtained during prior investigations completed at the Site:

- Source Areas: The former basement sump associated with the manufacturing operations, DNAPL on and/or within fractured bedrock and the storm water catch basin in the parking lot are suspected contaminant source areas at the Site. The former basement sump and parking lot catch basin have been addressed through IRMs. Successful remediation of DNAPL or DNAPL-residual implies removing DNAPL mass from the subsurface or treating it in place. However, there are virtually no technologies available that have demonstrated the ability to efficiently remove or destroy DNAPL in a cost-effective manner, especially in fractured bedrock. It should also be noted that the main basement sump (i.e., the sump closest to Wall Street) was sealed by the Responsible Party and a sub-slab depressurization system was installed and operational in 2015.

- Remedial Technology Evaluation: A number of groundwater remediation technologies have been evaluated as part of previous studies associated with this Site. Most of these technologies have been eliminated from further consideration due to site limiting factors.

  Chemical reduction using zero valent iron was considered a potentially applicable groundwater remediation technology. However, pilot studies have proven this technology is ineffective at this location.

Initial assessments of other potentially applicable remedial technologies such as thermal treatment and groundwater extraction and treatment suggest that these technologies may not be capable of achieving the desired contaminant reduction or achieving cleanup goals in a cost-effective and timely manner due to complex site conditions.

Several conditions exist at the Site that align with commonly cited factors in groundwater Technical Impracticability Waivers granted by the USEPA, including complex geology and hydrogeology (fractured bedrock and heterogeneous soils), potential presence of DNAPL or DNAPL-residuals, relative contaminant immobility, extended cleanup timeframes and economic factors.

- Exposure Pathways: Based on the results of this sampling program, there are currently no complete human exposure pathways for contamination in media on or migrating from the Site.

- Shallow and Deep Overburden Groundwater: Shallow and deep overburden groundwater at the Site remains contaminated with VOCs, consistent with the 1999 Remedial Investigation and subsequent sampling programs. The shallow and deep overburden contaminant plumes migrate from the southern portion of the facility building and adjacent parking lot in a generally southerly direction and appear to discharge to the wetland area. The absence of VOC contamination in the newly installed monitoring well pairs MW-32S/D, MW-31S/D and MW-30S/D confirm prior investigation results and assumptions that the shallow and deep overburden plumes discharge to the wetland area and do not significantly migrate in a southerly direction under the wetland. However, the presence of VOCs in newly installed monitoring well MW-29S as well as existing monitoring wells MW-20S and MW-20D indicates that the eastern edges of the shallow and deep overburden plumes extends past the adjacent pond and wetlands area

- Bedrock Groundwater: Consistent with previous sampling events, the results of this investigation indicate that the groundwater contamination has migrated into the bedrock with contaminant concentrations higher in the bedrock groundwater samples than the overburden groundwater samples. Sampling of the commercial wells located in bedrock downgradient of the Site, indicates that contamination in the bedrock aquifer has not impacted these commercial wells.

- Well Pumping Analysis: The results of the well pumping analysis appears to confirm prior conclusions that DNAPL likely exists in the bedrock, since stressing the bedrock with more aggressive pumping resulted in a significant increase in site-related VOC concentrations detected in the samples collected as part of the program.

- Building Sumps: Groundwater in the building sumps is contaminated with site-related VOCs. As the groundwater from these sumps is pumped to the wetlands, it is acting as a source of surface water and sediment contamination in the wetland area.

- Surface Water: Surface water in the wetlands area remains contaminated with site-related VOCs, similar to the findings of the 1999 Remedial Investigation. However,

this contamination appears to be limited to the area just south of Wall Street in the vicinity of the existing storm water/groundwater infiltration outfalls, since the surface water samples collected farther to the south in the vicinity of Davis Brook did not contain any significant concentrations of site-related VOCs. As mentioned above, the suspected sources of contamination in surface water at the Site include discharges of contaminated groundwater to the surface water and possible discharges from the storm water outfalls, including discharges from the building sumps.

- Sediment: The results of this investigation indicated that sediment in the wetland area is contaminated with site-related VOCs. Similar to the surface water sample results, sediment contamination appears to be limited to the area just south of Wall Street in the vicinity of the existing storm water/groundwater infiltration outfalls, since the sediment samples collected farther to the south did not contain any significant concentrations of site-related VOCs. The suspected sources of contamination include discharge of contaminated groundwater and possible discharges from the storm water outfalls, including discharges from the building sumps.

  The sediment in the vicinity of the storm water/groundwater infiltration outfall associated with SE-3 was also found to be contaminated with several petroleum-related compounds (benzene compounds, toluene and xylene), which may indicate that a petroleum release occurred on the paved streets or parking areas that drain to this outfall.

- Natural Attenuation: The natural processes that typically reduce contaminant levels within a wetland environment include biodegradation, dilution, dispersion, sorption, volatilization and sedimentation. Other processes, such as plant uptake may also be relevant if certain types of plant and organic compounds are present or are introduced into the wetland. Because biodegradation is the primary destructive process for many organic groundwater contaminants, it is commonly cited as the most critical process to demonstrate as operational in order for natural attenuation to be considered a feasible remedial option. However, the physical (or physical-chemical) processes have been demonstrated to account for up to 95% of contaminant removal in some wetland environments. This is due primarily to the conditions intrinsic to wetland environments such as, organic rich sediment, flowing surface water, flooding, seasonal water level fluctuations, etc. These physical attenuation processes are typically acceptable means of contaminant removal assuming the risk of human exposure to contamination is low.

4.2 Recommendations

Based upon the findings of this investigation, as well as the results of previous investigations and studies, it is recommended that monitored natural attenuation and long term

site management, including the remedial actions specified below, be implemented to address groundwater contamination at the Site:

- A remedial action such as a weir and/or engineered wetland should be implemented to accept and treat the discharge from the basement sumps, since the sumps are required to prevent the building from flooding and are a potential source of contamination of the wetland.

- Sediment in the vicinity of sample location SE-3/WS-4 should be properly characterized and removed during implementation of the remedial action associated with the discharge from the basement sumps, since several site-related contaminants were detected at elevated concentrations in sediment near the outfalls located south of Wall Street.

- Pathways for human exposure to contamination that could potentially become complete in the future should be monitored via long term site management activities (e.g., site inspections and surface water, sediment, groundwater and commercial well sampling) and controlled via institutional and/or engineering controls.

- Corrective measures should be implemented if potential risks to public health and/or the environment are detected as part of the long term site management activities.

It is important to note, the 2002 ROD for the Site specifies a remedy involving in-situ chemical reduction via zero valent iron injection. Implementation of the recommendations presented above would represent a fundamental change to the existing ROD. As such, a ROD amendment would likely be required to formally document and change the Site remedy.

APPENDIX A

GPS COORDINATE DATA

APPENDIX A
SURFACE WATER, SEDIMENT AND SUMP SAMPLE COORDINATES

Matrix Type	Existing Sample Location Name	New Sample Location Name	Northing	Easting	Longitude	Latitude
Surface Water	SW-W-OF-1	HW-WET-WS-1-(1)	4549122.16	602027.28	-73.758274	41.086966
Surface Water	SW-W-OF-0	HW-WET-WS-2-(1)	4549140.00 m N	601925.00 m E	-73.78648488	41.08714061
Surface Water	SW/SED-OF-1	HW-WET-WS-3-(1)	4549101.00 m N	601962.00 m E	-73.78605092	41.08678473
Surface Water	SW-W-OF-2	HW-WET-WS-4-(1)	4549052.00 m	601995.00 m E	-73.78566624	41.0863393
Surface Water	SW/SED-OF-3	HW-WET-WS-5-(1)	4549007.00 m N	602021.00 m E	-73.78536422	41.08593076
Surface Water	SW/SED-XA-175	HW-WET-WS-6-(1)	4548914.00 m N	602070.00 m E	-73.78479639	41.08508704
Surface Water	SW-W-OS-2	HW-WET-WS-7-(1)	4548848.00 m N	602123.00 m E	-73.78417649	41.08448599
Surface Water	New Location in Davis Brook (west)	HW-WET-WS-8-(1)	4549073.00 m N	601846.00 m E	-73.78743635	41.0865471
Surface Water	New Location in Davis Brook	HW-WET-WS-9-(1)	4549029.00 m N	601891.00 m E	-73.78690799	41.0861452
Surface Water	New Location in Davis Brook	HW-WET-WS-10-(1)	4548995.00 m N	601933.00 m E	-73.78641368	41.08583373
Surface Water	New Location in Davis Brook	HW-WET-WS-11-(1)	4548963.00 m N	601973.00 m E	-73.78594286	41.08554051
Sediment	SW-W-OF-0	HW-WET-SE-1-(1)	4549140.00 m N	601925.00 m E	-73.78648488	41.08714061
Sediment	SW/SED-OF-1	HW-WET-SE-2-(1)	4549101.00 m N	601962.00 m E	-73.78605092	41.08678473
Sediment	SW-W-OF-2	HW-WET-SE-3-(1)	4549052.00 m	601995.00 m E	-73.78566624	41.0863393
Sediment	SW/SED-OF-3	HW-WET-SE-4-(1)	4549007.00 m N	602021.00 m E	-73.78536422	41.08593076
Sediment	SW/SED-XA-175	HW-WET-SE-5-(1)	4548914.00 m N	602070.00 m E	-73.78479639	41.08508704
Sediment	SW-W-OS-2	HW-WET-SE-6-(1)	4548848.00 m N	602123.00 m E	-73.78417649	41.08448599
Sediment	New Location Middle Row (west)	HW-WET-SE-7-(1)	4549148.00 m N	601855.00 m E	-73.7873168	41.08722143
Sediment	New Location Middle Row	HW-WET-SE-8-(1)	4549091.00 m N	601905.00 m E	-73.78673107	41.08670182
Sediment	New Location Middle Row	HW-WET-SE-9-(1)	4549043.00 m N	601942.00 m E	-73.7862986	41.08626489
Sediment	New Location Middle Row	HW-WET-SE-10-(1)	4548995.00 m N	601979.00 m E	-73.78586614	41.08582796
Sediment	New Location Middle Row	HW-WET-SE-11-(1)	4548934.00 m N	602026.00 m E	-73.78531681	41.08527269
Sediment	New Location Middle Row	HW-WET-SE-12-(1)	4548883.00 m N	602065.00 m E	-73.78486105	41.08480848
Sediment	New Location in Davis Brook (west)	HW-WET-SE-13-(1)	4549115.00 m N	601813.00 m E	-73.7878222	41.08692949
Sediment	New Location in Davis Brook	HW-WET-SE-14-(1)	4549073.00 m N	601846.00 m E	-73.78743635	41.0865471
Sediment	New Location in Davis Brook	HW-WET-SE-15-(1)	4549029.00 m N	601891.00 m E	-73.78690799	41.0861452
Sediment	New Location in Davis Brook	HW-WET-SE-16-(1)	4548995.00 m N	601933.00 m E	-73.78641368	41.08583373
Sediment	New Location in Davis Brook	HW-WET-SE-17-(1)	4548963.00 m N	601973.00 m E	-73.78594286	41.08554051
Groundwater	Sump (west)	HW-MW-WG-1-(1)	4549090.00 m N	602024.00 m E	-73.78531474	41.08667789
Groundwater	Sump (east)	HW-MW-WG-2-(1)	4549079.00 m N	602027.00 m E	-73.78528085	41.08657844

APPENDIX B

SOIL BORING AND MONITORING WELL CONTRUCTION LOGS

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-29D
Sheet 1 **of** 3
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 5/6/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/7/14

Boring Completion Depth: 76'
Ground Surface Elevation: 243.34
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Type	Rec. (inches)	PID (ppm)	Blows	Sample Description
0'-2'	1	SS	18"	0.0	3,3 2,4	0-18": Brown Silt, some organics, roots, grass, twigs, dry-damp, soft, no odor, no staining.
5'-7'	2	SS	12"	0.0	3,2 1,1	0-6": Gray medium to coarse Sand, well sorted, loose, wet. 6"-12": Dark Brown-Black silty Clay, soft, moist, no odor, no staining.
10'-12'	3	SS	20"	0.0	1,1	0-20": Dark Gray-Olive clayey Silt, soft, wet, slightly plastic, trace organic, bog marsh odor, no staining.
15'-17'	4	SS	-	-	6,7 6,7	No recovery.
20'-22'	5	SS	8"	0.0	6,6 5,6	0-8": Olive-Brown coarse Sand, some sub-rounded gravel, poorly sorted, loose, wet, no odor, no staining.
25'-27'	6	SS	6"	0.0	15,10 9,9	0-6": Olive-Brown medium to coarse Sand, some fine to coarse sub-rounded-sub-angular gravel, poorly sorted, loose wet, no odor, no staining.
30'-32'	7	SS	14"	0.0	2,2 3,2	0-10": Olive-Brown fine to medium Sand, well sorted, loose, wet. 10"-14": Brown fine to very fine Sand, trace silt, very loose, wet, no odor, no staining.
35'-37'	8	SS	12"	0.0	5,4 5,7	0-12": Brown medium to coarse quartz Sand, some fine sub-rounded gravel, poorly sorted, loose, wet, no odor, no staining.
40'-42'	9	SS	16"	0.0	7,9 13,12	0-16": Brown-Olive medium to coarse quartz Sand, trace fine sand, little medium to small sub-rounded white black gravel, poorly sorted, loose, wet, no odor, no staining.
45'-47'	10	SS	17"	0.0	5,8 13,12	0-17": Brown-Olive medium to fine Sand, well sorted, trace muscovite flakes, medium-loose, wet, no odor, no staining.
50'-52'	11	SS	18"	0.0	3,4 5,6	0-18":Gray-Dark Gray, fine to very fine Sand, well sorted, loose, wet, no odor, no staining.
55'-57'	12	SS	20"	0.0	2,2 2,2	0-20": Gray-Dark Gray, fine to very fine Sand, well sorted, loose, little to trace silt, wet, no odor, no staining.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.	**Project No.:** 3150-16 **Project Name:** Farrand Controls 99 Wall Street Valhalla, NY 10595	**Boring No.:** MW-29D **Sheet** 2 **of** 3 **By:** C. Schmidlapp
Drilling Contractor: Parrat-Wolff **Drill Rig:** Drill Rig CME 75 **Date Started:** 5/6/14	**Geologist:** K. Robins **Drilling Method:** 4 ¼ HSA **Drive Hammer Weight:** 140lbs **Date Completed:** 5/7/14	**Boring Completion Depth:** 76' **Ground Surface Elevation:** 243.34 **Boring Diameter:** 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
60'-62'	13	SS	12"	0.0	8,20 28,27	0-12": Light Gray-Brown silty Sand, medium-dense, some sub-rounded gravel, sub-angular rock fragments, trace coarse to medium sand, poorly sorted, wet, no odor, no staining.
65'-67'	14	SS	6"	0.0	10,12 21,50	0-4": Gray Silt, sand, gravel, medium dense, sub-rounded poorly sorted, wet, no odor, no staining. 4"-6": Gray weathered Gneiss bedrock, some silt, gravel compacted-tight.
70'-70.6'	15	SS	4"	-	100	Gray Sand, silt gravel, dense, Glacial Till.
71'-76'	-	RC	-	0.0		Gneiss black-white bedrock, highly fractured with foliated banning, some pink porphyro blasts, some vertical quartz veins, green serpentine, calcite, talc, minerals within fractures.
71.4'-71.6'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
71.6'-71.8'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fracture.
71.8'-72.2'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree shear fracture.
72.2'-72.6'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
72.6'-73'	-	RC	-	0.0	-	Gneiss bedrock, broken up pieces, with vertical fracture.
73'-73.6'	-	RC	-	0.0	-	Moderately weathered brittle bedrock, small-medium rock pieces. Note: small pieces can be broken with hand pressure.
73.6'-74'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fractures.
74'-74.6'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.

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Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-29D
Sheet 3 **of** 3
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 5/6/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/7/14

Boring Completion Depth: 76'
Ground Surface Elevation: 243.34
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
74.6-75.5'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.
75.5'-75.8'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture along silt seam.
75.8'-76'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fracture.

Sample Types:
RC = Rock Core
SS = Split Spoon

NOTES: Cored bedrock from 71'-76'

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-30D
Sheet 1 **of** 4
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 5/2/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/6/14

Boring Completion Depth: 60'
Ground Surface Elevation: 244.05
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Type	Rec. (inches)	PID (ppm)	Blows	Sample Description
0'-2'	1	SS	6"	0.0	2,6 6,6	0-6": Dark Brown, Silt and organics, roots, grass, trace fine to medium sand, trace gravel, poorly sorted, loose, very moist, no odor, no staining.
2'-4'	2	SS	12"	0.0	5,8 12,13	0-12": Brown medium to coarse Sand, trace fine gravel sub-rounded, well sorted, medium-dense, wet, no odor, no staining.
4'-6'	3	SS	13"	0.0	5,4 4,4	0-13": Brown medium to coarse Sand, trace fine gravel, trace coarse sand, well sorted, loose, wet, no odor, no staining.
6'-8'	4	SS	12"	0.0	5,6 4,3	0-12": Dark Brown-Light Red medium to fine Sand, trace sub-rounded to flat gravel, trace silt, well sorted, loose, wet, no odor, no staining.
8'-10'	5	SS	12"	0.0	1,2 2,2	0-12": Dark Brown-Light Red medium to fine Sand, trace white sub-rounded gravel, well sorted, very loose, wet, no odor, no staining.
10'-12'	6	SS	18"	0.0	1,3 5,8	0-6": Brown coarse Sand and fine gravel, loose, wet. 6"-18": Brown-Light Red fine to medium Sand, trace medium sub-rounded gravel, well sorted, loose, no odor, no staining.
12'-14'	7	SS	12"	0.0	1,2 1,2	0-12": Dark Brown medium to coarse Sand, little fine sub-rounded black and white gravel, poorly sorted, very loose, wet, no odor, no staining.
14'-16'	8	SS	18"	0.0	1,1 2,2	0-15": Dark Brown, medium to coarse Sand, some gravel, poorly sorted very loose, wet, no odor, no staining. 15"-18": Brown very fine Sand, well sorted, loose, wet, no odor, no staining.
16'-18'	9	SS	18"	0.0	4,4 5,7	0-18": Brown-Gray fine Sand, trace silt, trace gold flakes, well sorted, loose, wet, no odor, no staining.
18'-20'	10	SS	20"	0.0	2,4 8,10	0-20": Brown-Gray, medium fine Sand, trace coarse sand, well sorted, loose, wet, no odor, no staining.
20'-22'	11	SS	15"	0.0	6,7 10,9	0-15": Dark Brown coarse to medium Sand, trace fine gravel sub-rounded, poorly sorted, loose, wet, no odor, no staining.
22'-24'	12	SS	NA	0.0	2,5 6,7	Brown-Gray fine medium Sand, trace sub-rounded flat black and white gravel, well sorted, loose, wet, no odor, no staining.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-30D
Sheet 2 **of** 4
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 5/2/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/6/14

Boring Completion Depth: 60'
Ground Surface Elevation: 244.05
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Type	Rec. (inches)	PID (ppm)	Blows	Sample Description
24'-26'	13	SS	15"	0.0	3,4 5,8	0-15": Gray-Brown fine Sand, trace muscovite flakes, loose, wet, no odor, no staining.
26'-28'	14	SS	12"	0.0	2,2 7,8	0-12": Gray-Brown fine Sand, trace silt, trace muscovite flakes, well sorted, loose, wet, no odor, no staining.
28'-30'	15	SS	18"	0.0	3,4 5,8	0-8": Dark Gray silty Sand, loose. 8"-18": Dark Gray clayey Silt, some fine sub-angular gravel, rock fragments, medium dense.
30'-32'	16	SS	10"	0.0	7,50/ 4"	0-10": Dark Gray silty Sand, some gravel, angular rock fragments, gneiss pieces, trace clay, dense, poorly sorted, wet, no odor, no staining.
32'-34'	17	SS	4"	0.0	20,50/ 4"	0-4": Gray-Brown sandy Silt and crushed angular gravel, gneiss and granite rock fragments.
34'-36'	18	SS	6"	0.0	38,31 16,13	0-4": Rock fragments and fine crushed rock, wet. 4"-6": Dark Brown Silt, medium-dense, no odor, no staining.
36'-38'	19	SS	-	-	6,5 8,10	No recovery just wash and drilling fluids with stone and rock fragments in tip of spoon.
38'-40'	20	SS	9"	0.0	7,18 15,31	0-9": Olive-Gray medium to fine Sand, trace fine sub-rounded gravel, poorly sorted, medium to dense, trace gneiss rock fragments, no odor, no staining.
40'-42'	21	SS	4"	0.0	50,50/ 4"	0-4": Gray Silt, trace fine gravel, compacted, wet, no odor, no staining.
42'-44'	22	SS	12"	0.0	25,48 50/4"	0-10": Gray-Olive Green silty Sand, trace sub-rounded gravel, compacted, poorly sorted, wet. 10-12": Brown-Gray, medium to fine Sand, trace sub-rounded gravel, weathered rock fragments, wet, no odor, no staining.
44'-46'	23	SS	2"	0.0	23,32 31,29	0-2": Gray Silt, small piece of rock fragment at tip of split spoon.
46'-48'	24	SS	2"	0.0	5,10 19,50	0-2": Dark Gray-Olive Silt, some coarse sand, some crushed gneiss, quartz rock fragments, compacted-dense, poorly sorted, wet, no odor, no staining.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.	**Project No.:** 3150-16 **Project Name:** Farrand Controls 99 Wall Street Valhalla, NY 10595	**Boring No.:** MW-30D **Sheet** 3 **of** 4 **By:** C. Schmidlapp
Drilling Contractor: Parrat-Wolff **Drill Rig:** Drill Rig CME 75 **Date Started:** 5/2/14	**Geologist:** K. Robins **Drilling Method:** 4 ¼ HSA **Drive Hammer Weight:** 140lbs **Date Completed:** 5/6/14	**Boring Completion Depth:** 60' **Ground Surface Elevation:** 244.05 **Boring Diameter:** 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
50'-52'	25	SS	6"	0.0	50/6"	0-4": Drilling wash, slough, not representative. 4"-6": Crushed gneiss rock fragments, trace silt with weathered rock in tip of spoon, dry.
55'-57'	-	-	-	-	-	No split spoon collected. Driller noted real hard drilling, slight drill chatter from 53'-55'.
55'-60'	-	RC	-	0.0	-	Gneiss black gray bedrock, highly fractured rock, with both horizontal and vertical fractures, foliated, banning, trace pink porphyro blasts, with areas of quartz, green-white serpentine-talc mineral within fractures.
55'-55.3'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
55.3'-56'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
56'-56.5'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fracture.
56.5'-56.6'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
56.6'-57'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fracture.
57'-57.6'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.
57.6'-58'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fracture.
58'-58.6'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
58.6'-59.6'	-	RC	-	0.0	-	Gneiss bedrock, with vertical fracture.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
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Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-30D
Sheet 4 **of** 4
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 5/2/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/6/14

Boring Completion Depth: 60'
Ground Surface Elevation: 244.05
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
59'6-59.8'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.
59.8'-60'	-	RC	-	0.0	-	Gneiss bedrock, brittle.

Sample Types:
RC = Rock Core
SS = Split Spoon

NOTES: Cored bedrock from 55'-60'.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-31D
Sheet 1 **of** 3
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 4/29/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 4/30/14

Boring Completion Depth: 45.7'
Ground Surface Elevation: 243.87
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Type	Rec. (inches)	PID (ppm)	Blows	Sample Description
0'-2'	1	SS	20"	0.0	3,3 4,5	0-6": Dark Brown fine Sand, organics, roots, gravel, damp. 6"-12": Dark Brown fine Sand, trace silt, trace fine sub-rounded gravel, poorly sorted, loose, no odor, no staining.
2'-4'	2	SS	12"	0.0	11,11 9,8	0-2": Lumber 2"-4": Dark Green silty Sand. 4"-8": Brown to fine-medium Sand, trace fine gravel. 8"-12": Dark Brown Silt, wet, no odor, no staining.
4'-6'	3	SS	8"	0.0	3,4 4,5	0-8": Tan medium to fine Sand, trace sub-rounded, sub-angular gravel, well sorted, loose, wet, no odor, no staining.
6'-8'	4	SS	12"	0.0	3,3 3,2	0-12": Olive-Gray, fine to medium Sand, some sub-rounded gravel, well sorted, loose, no odor, no staining.
8'-10'	5	SS	6"	0.0	2,3 4,8	0-4": Slough running sands. 4"-6": Brown medium to coarse Sand, some gravel, wet.
10'-12'	6	SS	-	-	-	No recovery, running sands within augers.
12'-14'	7	SS	6"	0.0	1,2 3,3	0-6": Brown medium to fine Sand (running wash sand), wet, no odor, no staining.
14'-16'	8	SS	6"	0.0	3,3 5,3	0-6": Brown fine Sand, loose, appears to be sluff, wet, no odor, no staining.
16'-18'	9	SS	6"	0.0	1,1 1,1	0-6": Dark Brown fine to medium Sand, loose, wet, no odor, no staining.
18'-20'	10	SS	12"	0.0	1,1 1,1	0-12": Dark Brown fine to medium Sand, trace fine gravel, well sorted, wet, no odor, no staining.
20'-22'	11	SS	NA	0.0	1,2 7,7	Brown-Olive Gray fine to medium Sand, trace fine gravel, well sorted, loose, wet, no odor, no staining.
22'-24'	12	SS	12"	0.0	1,5 5,5	0-12": Brown-Olive Gray fine Sand, well sorted, loose, wet, no odor, no staining.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.	**Project No.:** 3150-16 **Project Name:** Farrand Controls 99 Wall Street Valhalla, NY 10595	**Boring No.:** MW-31D **Sheet** 2 **of** 3 **By:** C. Schmidlapp
Drilling Contractor: Parrat-Wolff **Drill Rig:** Drill Rig CME 75 **Date Started:** 4/29/14	**Geologist:** K. Robins **Drilling Method:** 4 ¼ HSA **Drive Hammer Weight:** 140lbs **Date Completed:** 4/30/14	**Boring Completion Depth:** 45.7' **Ground Surface Elevation:** 243.87 **Boring Diameter:** 8"

Depth (ft.)	Soil Sample No.	Type	Rec. (inches)	PID (ppm)	Blows	Sample Description
24'-26'	13	SS	12"	0.0	6,7 7,10	0-12": Brown-Olive Gray medium to coarse Sand, trace fine sand, trace fine sub-rounded gravel, well sorted, medium-loose, wet, no odor, no staining.
26'-28'	14	SS	10"	0.0	9,11 22,13	0-6": Brown medium to coarse Sand, some fine to medium sub-rounded gravel, poorly sorted. 8": Olive-Gray-Green sand. 8"-10": Gray Silt, medium-dense.
28'-30'	15	SS	10"	0.0	4,7 32,25	0-7": Gray Silt, trace clay, medium to dense, moist, poorly sorted. 7"-10": Rock fragment crushed gneiss pieces, dry-damp, no odor, no staining.
30'-32'	16	SS	15"	0.0	12,13 18,17	0-3": Rock fragments crushed black gneiss pieces with quartz and feldspar. 3"-15": Gray silty Sand, trace rock fragments, medium to dense, poorly sorted, wet, no odor, no staining.
32'-34'	17	SS	6"	0.0	12,18 23,24	0-6": Dark Gray Silt, some gneiss rock fragments, medium to dense, wet, no odor, no staining.
34'-36'	18	SS	3"	0.0	13,8 8,7	0-3"- Dark Gray silty Sand, some sub-angular rock fragments, poorly sorted, medium-loose, poorly sorted, wet, no odor, no staining.
36'-38'	19	SS	18"	0.0	2,10 38,40	0-18": Gray-Brown Silt and gneiss rock fragments, trace clay, poorly sorted, some weathered rock, medium-dense, wet.
38'-40'	20	SS	6"	0.0	23,50	0-6": Olive-Gray Silt and crushed gneiss rock fragments, trace coarse sand, trace clay, medium-dense, poorly sorted.
40'-41'	21	SS	-	0.0	50/0"	Rock fragments stuck in tip of spoon, crushed rock gneiss piece.
41'-46'	-	RC	-	0.0	-	Gneiss bedrock, foliated black-white genesis with pale pink porphyro-blasts and vertical dipping schistosty, tightly foliated bands of white quartz and biotite, trace talc and serpentine mineral within fractures.
41.3'-41.9'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
41.9'-42.5'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-31D
Sheet 3 **of** 3
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 4/29/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 4/30/14

Boring Completion Depth: 45.7'
Ground Surface Elevation: 243.87
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
42.5'-43.5	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.
43.5'-44'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.
44'-44.5'	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.
44.5'-45'	-	RC	-	0.0	-	Gneiss bedrock, with horizontal fracture.
45'-45.7	-	RC	-	0.0	-	Gneiss bedrock, with 45 degree fracture.

Sample Types:
RC = Rock Core
SS = Split Spoon

NOTES: Cored bedrock from 41'-46'

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-32D
Sheet 1 **of** 3
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 4/2/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/1/14

Boring Completion Depth: 41.6'
Ground Surface Elevation: 244.76
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Type	Rec. (inches)	PID (ppm)	Blows	Sample Description
0'-2'	1	SS	12"	0.0	3,4 4,5	0"-3": Dark Brown silty Sand, loose, some organics, roots, twigs, very moist no odor, no staining. 3"-12": Brown Silt, some fine Sand, some fine-coarse angular gravel, well sorted, damp, no odor, no staining.
2'-4'	2	SS	17"	0.0	2,2 1,1	0-7": Light Brown fine Sand, trace coarse sand, trace silt, loose, well sorted, moist. 7"-17": Dark Brown silty fine Sand, well sorted, trace organics, roots, moist, no odor, no staining.
4'-6'	3	SS	14"	0.0	1,1 4,11	0-10": Dark Brown-Olive silty Sand, trace fine gravel, well sorted, very moist. 10"-14": Gray-Brown medium to coarse Sand, trace fine gravel, poorly sorted, very wet/moist, no odor, no staining.
6'-8'	4	SS	10"	0.0	12,11 9,11	0-3": Olive-Gray fine Sand, well sorted, wet. 3"-10": Brown-Dark Brown medium to coarse Sand, trace gravel, poorly sorted, medium to loose, wet, no odor, no staining.
8'-10'	5	SS	7"	0.0	2,3 3,2	0-7": Tan-Light Brown medium to coarse Sand, poorly sorted, trace fine gravel, very loose, saturated, no odor, no staining.
10'-12'	6	SS	6"	0.0	5,6 3,2	0-6": Brown-Gray fine Sand, some silt, trace fine gravel, loose, wet, no odor, no staining.
12'-14'	7	SS	6"	0.0	1,1 2,2	0-6": Dark Brown, medium to fine Sand, poorly sorted, very loose, wet, no odor, no staining.
14'-16'	8	SS	9"	0.0	1,1 2,4	0-9": Dark Brown fine Sand, trace fine gravel, well sorted, very loose, wet, no odor, no staining.
16'-18'	-	-	-	-	-	No sample collected.
18'-20'	9	SS	12"	0.0	6,9 11,12	0-12": Dark Brown fine Sand, medium to dense, trace fine gravel, trace silt, trace gneiss rock, wet, no odor, no staining.
20'-22'	10	SS	10"	0.0	12,16 21,21	0-10": Dark Gray silty Sand, some fine to coarse sub-rounded gravel, gneiss rock fragments, trace clay, medium to dense, poorly sorted, wet, no odor, no staining.
22'-24'	11	SS	7"	0.0	4,5 10,30	0-7": Olive-Gray, medium to fine Sand, medium to dense, some medium to coarse gravel, sub-angular to sub-rounded, trace silt, poorly sorted, wet, no odor, no staining.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.	**Project No.:** 3150-16 **Project Name:** Farrand Controls 99 Wall Street Valhalla, NY 10595	**Boring No.:** MW-32D **Sheet** 2 **of** 3 **By:** C. Schmidlapp
Drilling Contractor: Parrat-Wolff **Drill Rig:** Drill Rig CME 75 **Date Started:** 4/2/14	**Geologist:** K. Robins **Drilling Method:** 4 ¼ HSA **Drive Hammer Weight:** 140lbs **Date Completed:** 5/1/14	**Boring Completion Depth:** 41.6' **Ground Surface Elevation:** 244.76 **Boring Diameter:** 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
24'-26'	12	SS	14"	0.0	10,9 10,8	0-14": Olive-Gray silty fine Sand, medium to dense, trace fine to medium gravel sub-angular, gneiss fragments, trace clay well sorted, wet, no odor, no staining.
27'-29'	13	SS	12"	0.0	4,5 8,18	0-12": Light Gray-Olive Gray, fine silty Sand, trace fine gravel, well sorted, medium to dense, wet, no odor, no staining.
29'-31'	14	SS	18"	0.0	41,35 40,50	0-18": Olive-Gray-Light Gray, silty fine Sand, dense, well sorted, some gneiss weathered rock fragments, moist to wet, no odor, no staining.
32'	15	SS	4"	-	200	No recovery, driller noted hard drilling, weathered bedrock surface, advance auger to 34 feet.
34'-36'	-	-	6"	-	100	Gneiss Black-Gray, with white quartz, fragmented hard rock, dry, no odor, no staining.
36.5'-37'	-	RC	-	0.0	-	Gneiss bedrock, horizontal fracture.
37'-37.3'	-	RC	-	0.0	-	Gneiss bedrock, 45 degree fracture.
37.3'-37.9'	-	RC	-	0.0	-	Gneiss bedrock, 45 degree fracture.
37.9'-38'	-	RC	-	0.0	-	Gneiss bedrock, broken up pieces.
38'-38.3'	-	RC	-	0.0	-	Gneiss bedrock, weathered with talc greasy feel.
38.3'-39'	-	RC	-	0.0	-	Gneiss bedrock, 45 degree fracture.
39'-39.2'	-	RC	-	0.0	-	Gneiss bedrock, brittle weathered rock.

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF D&B ENGINEERS AND ARCHITECTS, P.C.

Project No.: 3150-16
Project Name: Farrand Controls

99 Wall Street
Valhalla, NY 10595

Boring No.: MW-32D
Sheet 3 **of** 3
By: C. Schmidlapp

Drilling Contractor: Parrat-Wolff
Drill Rig: Drill Rig CME 75
Date Started: 4/2/14

Geologist: K. Robins
Drilling Method: 4 ¼ HSA
Drive Hammer Weight: 140lbs
Date Completed: 5/1/14

Boring Completion Depth: 41.6'
Ground Surface Elevation: 244.76
Boring Diameter: 8"

Depth (ft.)	Soil Sample No.	Soil Sample Type	Soil Sample Rec. (inches)	PID (ppm)	Blows	Sample Description
39.2'-41.6'	-	RC	-	-	-	No Recovery.

Sample Types:
RC = Rock Core
SS = Split Spoon

NOTES: Cored bedrock from 36.5' to 41.6'.

D&B ENGINEERS AND ARCHITECTS, P.C.
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Well Construction Log

Site Farrand Controls Job No. 3150-16 Well No. MW-29S

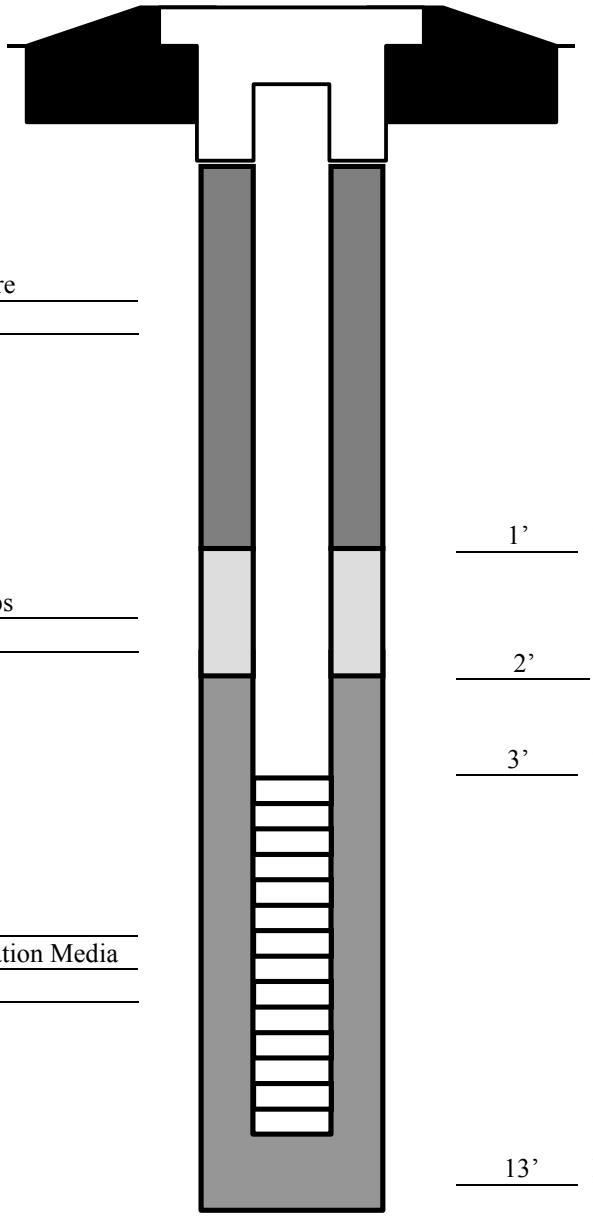
Total Depth 13' Surface Elevation 243.36 Top Riser Elevation 243.02

Water Levels (Depth) 2.28' (6/20/14) Date Installed 5/8/14

Riser Dia. 2 in. Material sch 40 PVC Length 3 ft.
Screen Dia. 2 in. Material sch 40 PVC Length 10 ft. Slot Size 0.010 in

SCHEMATIC

Surface Seal Type
Flush Mounted
Manhole Cover



Grout Type Cement Mixture

1' Top Seal

Seal Type Bentonite Chips

2' Top Sand Pack

3' Top Screen

Sand Pack Type Fillpro
Quartz Filtration Media
Size #0

13' Bottom Screen

14' Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

Site: Farrand Controls | Job No. 3150-16 | Well No. MW-29D

Total Depth 71' | Surface Elevation 243.34 | Top Riser Elevation 243.04

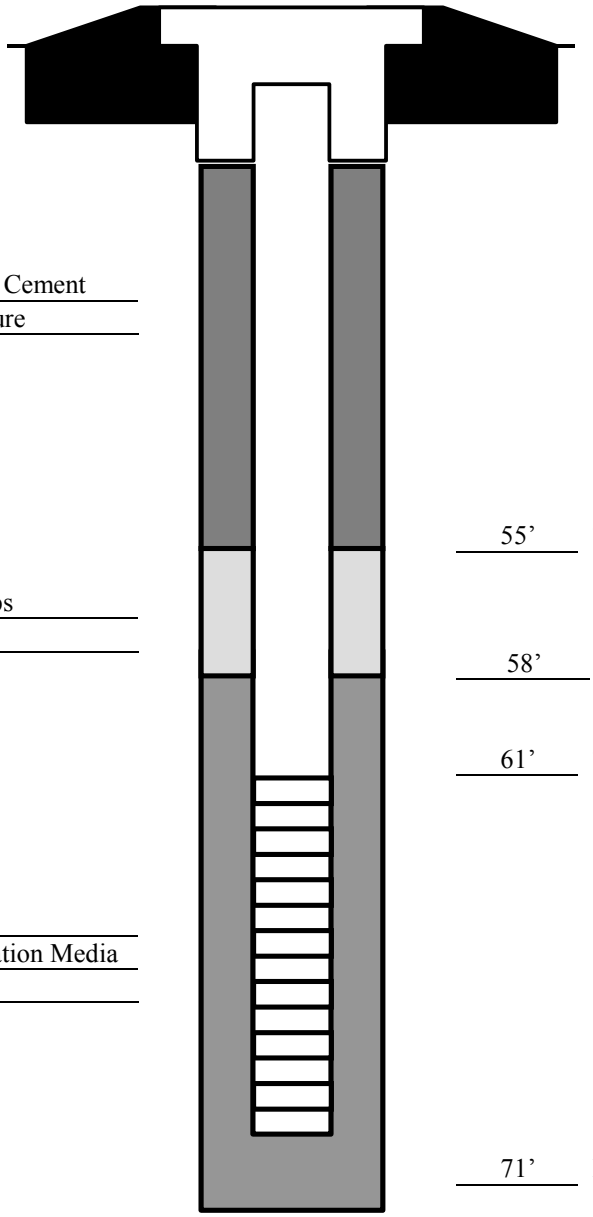
Water Levels (Depth) 2.12' (6/20/14) | Date Installed 5/8/14

Riser Dia. 2 in. | Material sch 40 PVC | Length 61 ft.

Screen Dia. 2 in. | Material sch 40 PVC | Length 10 ft. | Slot Size 0.010 in

SCHEMATIC

Surface Seal Type: Flush Mounted Manhole Cover



Grout Type: Bentonite / Cement Mixture

55' Top Seal

Seal Type: Bentonite Chips

58' Top Sand Pack

61' Top Screen

Sand Pack Type: Fillpro Quartz Filtration Media

Size: #0

71' Bottom Screen

76' Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

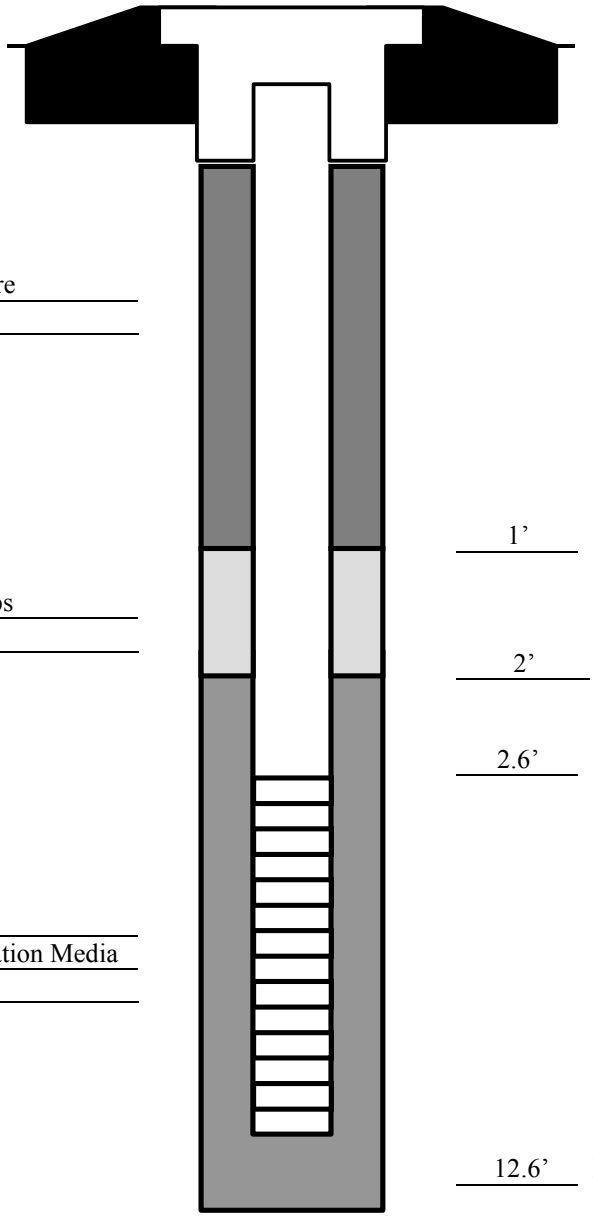
Site Farrand Controls Job No. 3150-16 Well No. MW-30S

Total Depth 12.6' Surface Elevation 244.16 Top Riser Elevation 243.90

Water Levels (Depth) 2.93' (6/20/14) Date Installed 5/6/14

Riser Dia. 2 in. Material sch 40 PVC Length 2.6 ft.
Screen Dia. 2 in. Material sch 40 PVC Length 10 ft. Slot Size 0.010 in

SCHEMATIC



Surface Seal Type
Flush Mounted
Manhole Cover

Grout Type Cement Mixture

1' Top Seal

Seal Type Bentonite Chips

2' Top Sand Pack

2.6' Top Screen

Sand Pack Type Fillpro
Quartz Filtration Media
Size #0

12.6' Bottom Screen

14' Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

Site: Farrand Controls | Job No.: 3150-16 | Well No.: MW-30D

Total Depth: 55’ | Surface Elevation: 244.05 | Top Riser Elevation: 243.60

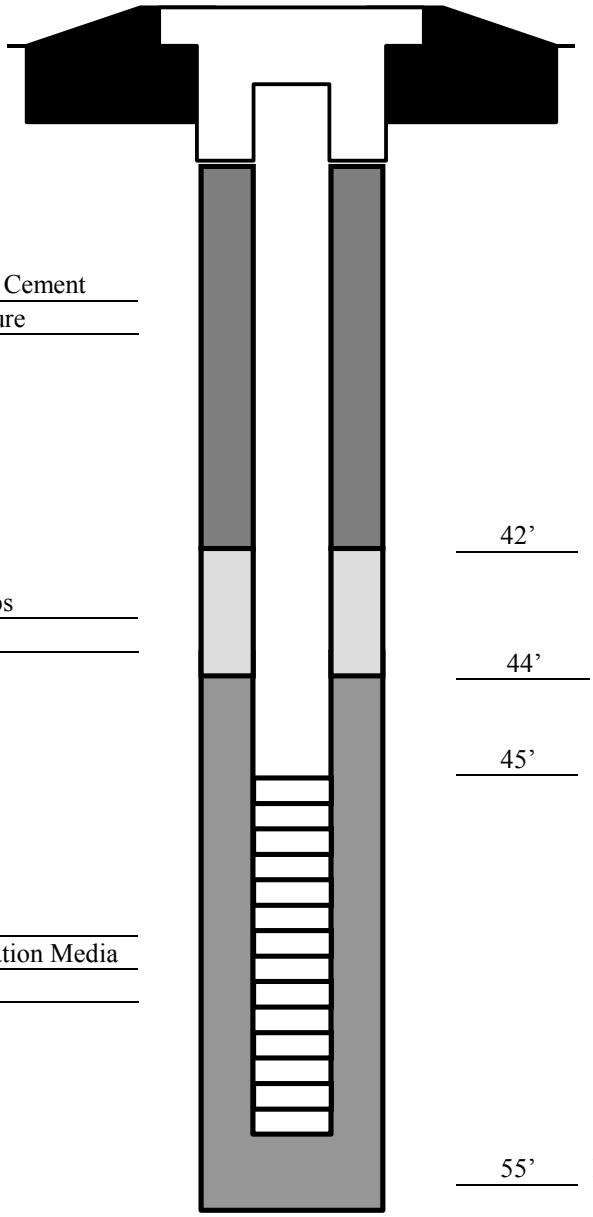
Water Levels (Depth): 2.30’ (6/20/14) | Date Installed: 4/30/14

Riser Dia. 2 in. | Material sch 40 PVC | Length 45 ft.

Screen Dia. 2 in. | Material sch 40 PVC | Length 10 ft. | Slot Size 0.010 in

SCHEMATIC

Surface Seal Type: Flush Mounted Manhole Cover



Grout Type: Bentonite / Cement Mixture

42’ Top Seal

Seal Type: Bentonite Chips

44’ Top Sand Pack

45’ Top Screen

Sand Pack Type: Fillpro Quartz Filtration Media

Size: #0

55’ Bottom Screen

60’ Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

Site Farrand Controls Job No. 3150-16 Well No. MW-31S

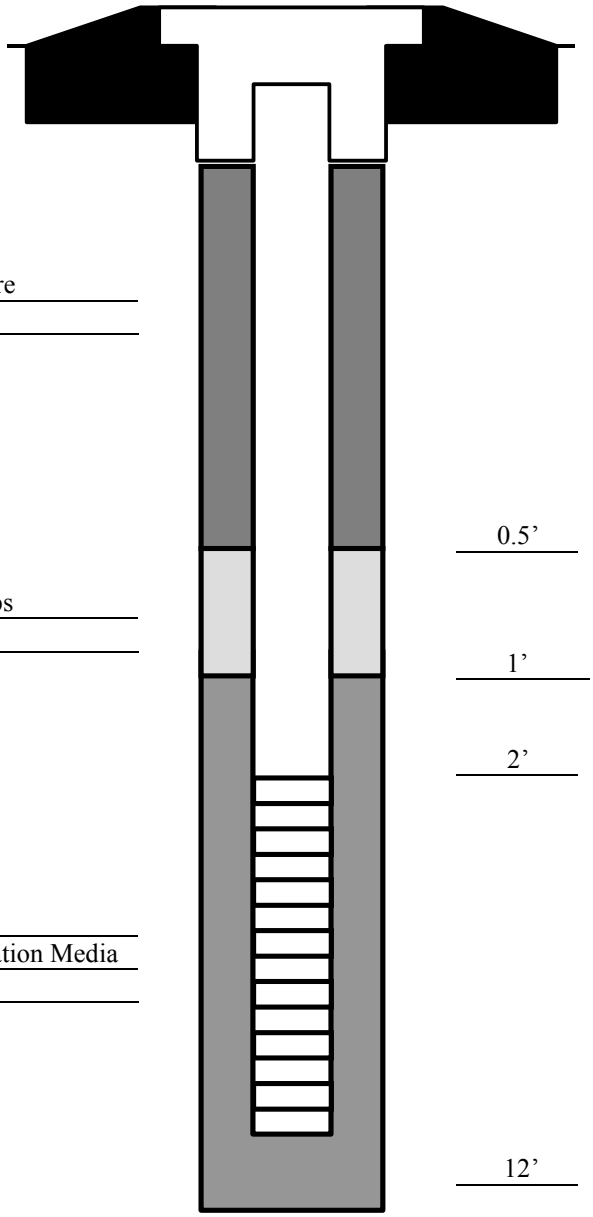
Total Depth 12' Surface Elevation 243.83 Top Riser Elevation 243.50

Water Levels (Depth) 2.21' (6/20/14) Date Installed 5/1/14

Riser Dia. 2 in. Material sch 40 PVC Length 2 ft.
Screen Dia. 2 in. Material sch 40 PVC Length 10 ft. Slot Size 0.010 in

SCHEMATIC

Surface Seal Type
Flush Mounted
Manhole Cover



Grout Type Cement Mixture

Seal Type Bentonite Chips

Sand Pack Type Fillpro
Quartz Filtration Media
Size #0

0.5' Top Seal

1' Top Sand Pack

2' Top Screen

12' Bottom Screen

14' Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

Site: Farrand Controls | Job No.: 3150-16 | Well No.: MW-31D

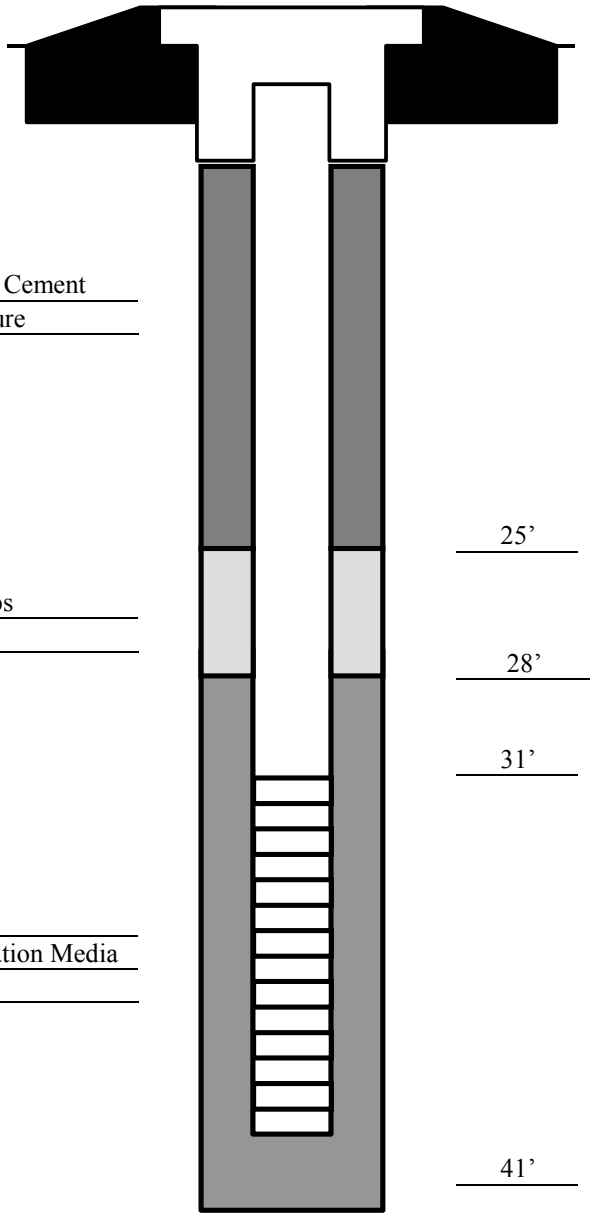
Total Depth: 41’ | Surface Elevation: 243.87 | Top Riser Elevation: 243.50

Water Levels (Depth): 2.11’ (6/20/14) | Date Installed: 4/30/14

Riser Dia. 2 in. Material sch 40 PVC Length 31 ft.
Screen Dia. 2 in. Material sch 40 PVC Length 10 ft. Slot Size 0.010 in

SCHEMATIC

Surface Seal Type: Flush Mounted Manhole Cover



Grout Type: Bentonite / Cement Mixture

25’ Top Seal

Seal Type: Bentonite Chips

28’ Top Sand Pack

31’ Top Screen

Sand Pack Type: Fillpro Quartz Filtration Media
Size: #0

41’ Bottom Screen

46’ Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

Site Farrand Controls Job No. 3150-16 Well No. MW-32S

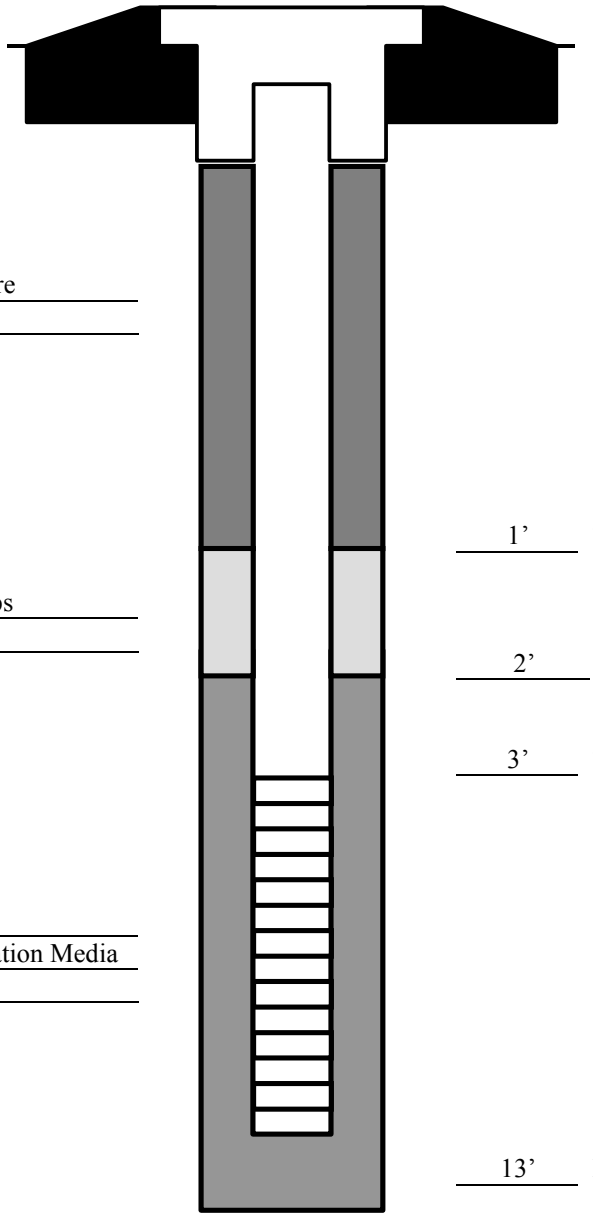
Total Depth 13' Surface Elevation 243.83 Top Riser Elevation 244.46

Water Levels (Depth) 2.88' (6/20/14) Date Installed 4/2/14

Riser Dia. 2 in. Material sch 40 PVC Length 3 ft.
Screen Dia. 2 in. Material sch 40 PVC Length 10 ft. Slot Size 0.010 in

SCHEMATIC

Surface Seal Type
Flush Mounted
Manhole Cover



Grout Type Cement Mixture

Seal Type Bentonite Chips

Sand Pack Type Fillpro
Quartz Filtration Media
Size #0

1' Top Seal

2' Top Sand Pack

3' Top Screen

13' Bottom Screen

14' Total Depth of Boring

D&B ENGINEERS AND ARCHITECTS, P.C.
KNOWN AS DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

Well Construction Log

Site: Farrand Controls | Job No. 3150-16 | Well No. MW-32D

Total Depth 36' | Surface Elevation 244.76 | Top Riser Elevation 244.30

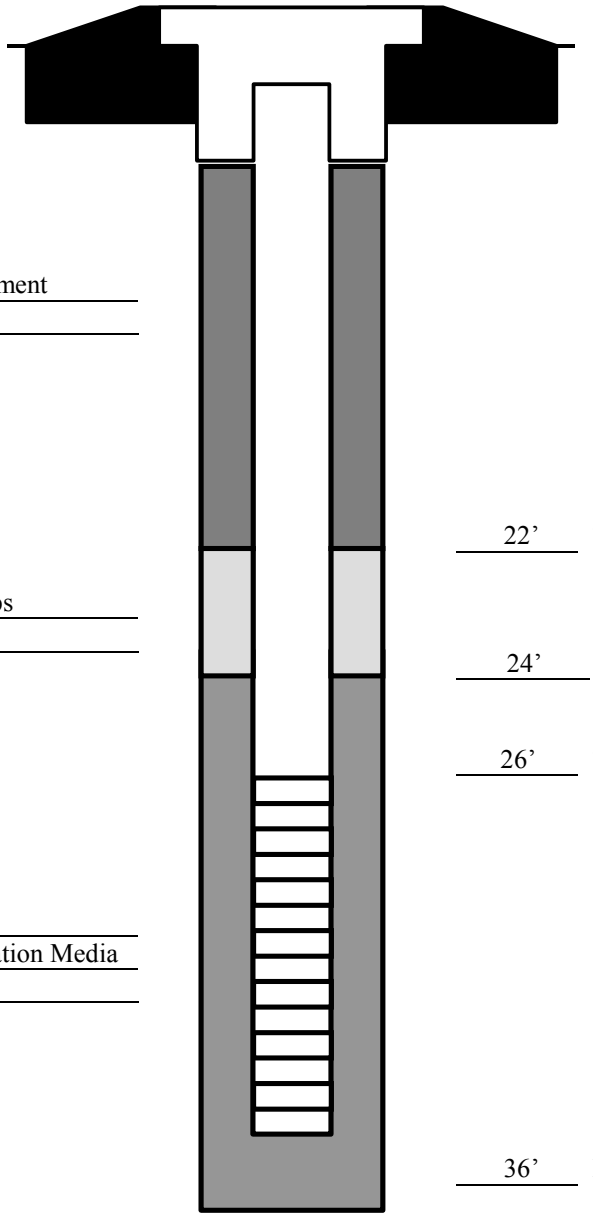
Water Levels (Depth) 2.95' (6/20/14) | Date Installed 5/1/14

Riser Dia. 2 in. | Material sch 40 PVC | Length 26 ft.

Screen Dia. 2 in. | Material sch 40 PVC | Length 10 ft. | Slot Size 0.010 in

SCHEMATIC

Surface Seal Type
Flush Mounted
Manhole Cover



Grout Type Bentonite / Cement Mixture

22' Top Seal

Seal Type Bentonite Chips

24' Top Sand Pack

26' Top Screen

Sand Pack Type Fillpro Quartz Filtration Media
Size #0

36' Bottom Screen

41.6' Total Depth of Boring

APPENDIX C

WELL PUMPING ANALYSIS FIELD DOCUMENTATION

Sampling Data
Farrand Controls
99 Wall Street, Valhalla, New York

Well ID	Diam. (in)	Depth (ft)	Est. Well Vol. (gallons)	Static DTW (ft)	Notes
MW-21R	2"	~~28.8~~ 28.42	4.6	7.01	Purge-1: 3 well volumes = ~~13.8~~ 11 gallons START: 7:48 STOP: 9:00 SAMPLED 9:42
Volume Purged: 11 gal		Odor: N/A			
Color: DARK GREY		Sheen: N/A			
MW-21R	2"	~~28.8~~	4.6	7.01	Purge 2: 3 well volumes = ~~13.8~~ 11 gallons L2 19.66 L3 20.77 START: 9:43 STOP: 10:34 SAMPLED 11:04
Volume Purged: 11 gal		Odor: N/A			
Color: LT. GREY - CLEAR		Sheen: N/A			
MW-22R	2"	35	16.8	5.93	Purge 1: 3 well volumes = 50.4 gallons START: 11:51 STOP ≈ 12:05 SAMPLED: 12:305
Volume Purged: 14g		Odor: N/A			
Color: CLEAR		Sheen: N/A			
MW-22R	2"	35	16.8	6.20	Purge 2: 3 well volumes = 50.4 gallons START: 12:40 STOP ≈ ~~1145~~ 1:15 SAMPLED: 1:45
Volume Purged: 14g		Odor: N/A			
Color: CLEAR		Sheen: N/A			
MW-22R	2"	35	16.8	6.45	Purge 3: 3 well volumes = 50.4 gallons START: 1:46 STOP ≈ 2:10 SAMPLED: 2:32
Volume Purged: 14g		Odor: N/A			
Color: CLOUDY		Sheen: N/A			

Notes: CARBON UNIT SPECS: 25.13 gpm

11:24 L1 16.80

MW-21R 3rd PURGE DATA DTW 7.50 START 11:05, STOP 12:02 12:02 L3 18.12

COLOR - CLEAR NO ODOR NO SHEEN SAMPLED: 12:43

Sampling Data
Farrand Controls
99 Wall Street, Valhalla, New York
(Continued)

Well ID	Diam. (in)	Depth (ft)	Est. Well Vol. (gallons)	Static DTW (ft)	Notes
MW-22S	2"	15	2.4	5.42	Purge 1: 3 well volumes = ~~7.2~~ 5 gallons
Volume Purged: 5g		Odor: N/A			START @ 2:38 STOP @ 3:10
Color: BROWN		Sheen: N/A			SAMPLED @ 3:40
MW-22S	2"	15	2.4	6.00	Purge 2: 3 well volumes = ~~7.2~~ 5 gallons
Volume Purged: 5g		Odor: N/A			START @ ~~4~~ 3:41 STOP @ 4:09
Color: CLEAR		Sheen: N/A			SAMPLED @ 4:36
MW-22S	2"	15	2.4	6.00	Purge 3: 3 well volumes = ~~7.2~~ 5 gallons
Volume Purged: 5g		Odor: N/A			START @ ~~BLANK~~ 4:37 STOP
Color: ~~LIGHT~~ BRN		Sheen: N/A			SAMPLED @ 5:35

Notes:

Date Completed: 6-16/17-2014 Completed By: TR/BG

APPENDIX D

SITE SURVEY DOCUMENTATION

APPENDIX D
MONITORING WELL SURVEY DATA

	HORIZONTAL COORDINATES				ELEVATIONS		
WELL I.D.	NORTHING	EASTING	LONGITUDE	LATITUDE	CASING	PVC	GROUND
MW-1	821886.80	688728.49	-73.786747	41.0875187	247.36	247.42	245.37
MW-2	821778.05	688975.63	-73.7858537	41.0872146	252.92	252.76	250.56
MW-4	821318.11	689230.05	-73.7849445	41.0859466	246.74	246.71	244.43
MW-P5	821540.18	689127.69	-73.7853092	41.0865584	252.00	A- 251.74	250.03
MW-P5	821540.18	689127.69	-73.7853092	41.0865584	252.00	B- 251.65	250.03
MW-P5	821540.18	689127.69	-73.7853092	41.0865584	252.00	C- 251.60	250.03
MW-P6	821440.38	689079.92	-73.7854854	41.0862855	243.94	243.89	243.94
MW-P7	821328.27	689301.59	-73.7846847	41.0859728	252.15	252.16	249.63
MW-P8	821174.03	689326.46	-73.784599	41.0855489	248.10	247.99	246.29
MW-8D	821170.42	689332.29	-73.784578	41.0855389	246.36	245.99	246.36
MW-8R	821168.04	689339.03	-73.7845536	41.0855322	246.47	246.19	246.47
MW-P9	821180.36	689444.55	-73.7841705	41.0855637	249.73	249.75	247.66
MW-P10	821325.91	689152.66	-73.785225	41.0859697	247.45	247.41	245.26
MW-10D	821329.05	689147.78	-73.7852426	41.0859784	244.87	244.70	244.87
MW-10R	821320.43	689157.52	-73.7852075	41.0859546	245.38	245.19	245.38
MW-P11	821453.04	689138.22	-73.7852736	41.086319	248.48	248.13	246.45
MW-P12	821501.60	689218.32	-73.7849816	41.0864504	253.16	253.12	250.97
MW-P14	821641.28	689014.61	-73.7857164	41.0868384	248.62	248.41	246.93
MW-P15	821866.42	688961.00	-73.7859042	41.0874575	253.45	253.33	251.23
MW-P16	821744.14	688950.72	-73.7859451	41.0871221	249.46	249.44	247.70
MW-OC17	821398.95	689154.47	-73.7852162	41.0861701	247.65	D- 247.07	245.49
MW-OC17	821398.95	689154.47	-73.7852162	41.0861701	247.65	S- 246.86	245.49
MW-OC18	821460.12	689154.17	-73.7852155	41.086338	249.73	D- 249.25	247.66
MW-OC18	821460.12	689154.17	-73.7852155	41.086338	249.73	S- 249.27	247.66
MW-OC19	821475.46	689105.21	-73.7853927	41.0863812	248.08	D- 247.69	245.71
MW-OC19	821475.46	689105.21	-73.7853927	41.0863812	248.08	S- 247.56	245.71
MW-20D	820852.78	689259.99	-73.7848497	41.0846687	243.29	243.02	243.29
MW-20R	820857.80	689255.00	-73.7848677	41.0846826	242.99	242.83	242.99
MW-20S	820848.33	689265.11	-73.7848313	41.0846564	243.28	243.15	243.28
MW-21R	821463.69	689250.11	-73.7848674	41.0863457	249.01	248.72	249.01
MW-21S	821459.25	689245.59	-73.7848839	41.0863336	248.91	248.76	248.91
MW-22R	821438.19	689203.94	-73.7850356	41.0862767	247.81	247.58	247.81
MW-22S	821433.55	689202.05	-73.7850426	41.086264	247.61	247.10	247.61
MW-23D	821443.72	689165.55	-73.7851747	41.0862928	247.15	246.75	247.15
MW-23S	821440.21	689167.63	-73.7851673	41.0862831	247.24	246.81	247.24
MW-24D	821416.30	689184.80	-73.7851057	41.0862171	247.16	246.87	247.16
MW-24S	821418.15	689182.60	-73.7851136	41.0862222	247.01	246.44	247.01
MW-25D	821395.34	689176.01	-73.7851382	41.0861597	245.78	245.63	245.78
MW-25S	821392.09	689174.18	-73.7851449	41.0861509	245.57	245.35	245.57
MW-26D	821425.60	689135.73	-73.7852834	41.0862437	245.40	244.86	245.40
MW-26S	821428.21	689133.59	-73.7852911	41.0862509	245.35	244.85	245.35
MW-27	821451.79	689133.68	-73.7852901	41.0863156	246.28	244.96	246.28
MW-28D	821427.44	689155.43	-73.7852119	41.0862483	246.29	246.09	246.29
MW-28S	821424.54	689157.74	-73.7852036	41.0862403	246.36	245.75	246.36
MW-29D	820976.40	689118.56	-73.7853591	41.0850112	243.34	243.04	243.34
MW-29S	820974.19	689121.57	-73.7853482	41.0850051	243.36	243.02	243.36
MW-30D	821098.90	688975.25	-73.7858753	41.0853506	244.05	243.60	244.05
MW-30S	821096.59	688977.72	-73.7858664	41.0853442	244.16	243.90	244.16
MW-31D	821211.77	688844.91	-73.7863447	41.0856634	243.87	243.50	243.87
MW-31S	821209.93	688847.06	-73.786337	41.0856583	243.83	243.43	243.83
MW-32D	821329.46	688712.82	-73.7868204	41.0859893	244.76	244.30	244.76
MW-32S	821332.68	688710.37	-73.7868292	41.0859982	244.83	244.46	244.83

DATE OF FIELD SURVEY: MAY 29, 2014
HORIZONTAL DATUM: NAD 83 FROM GPS OBSERVATIONS
VERTICAL DATUM: NAVD 88 FROM GPS OBSERVATIONS

APPENDIX E

WASTE MANIFESTS AND DISPOSAL RECEIPTS

OF VERMONT, INC.

1-800-843-8265

Please print or type

BILL OF LADING

1. Document No. MET2452

2. Page 1 of 1

3. Generator's Name and Mailing Address

NYS DEC ATTN JEFFERY TRAD
625 BROADWAY, 12TH FLOOR
ALBANY NY 12233

4. Generator's Phone (518) 402-9814

Site Address

99 WALL STREET
VALHALLA NY 10595

5. Transporter 1 Company Name

ENVIRONMENTAL PROD & SVCS OF VT. INC

6. NYR000115733

A. State Transporter's ID 28 D18-07

B. Transporter 1 Phone

C. State Transporter's ID 800 843-8265

7. Transporter 2 Company Name

8.

D. Transporter 2 Phone

9. Designated Facility Name and Site Address

ENVIRONMENTAL PROD & SVCS OF VT, INC
532 STATE FAIR BLVD.
HM SYRACUSE NY 13204

10. NYR000115733

E. State Facility's ID

F. Facility's Phone 800 843-8265

GENERATOR

	11. Shipping Name	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a.	NON-RCRA, NON-DOT SOLIDS, N.O.S. (IDW SOIL BORINGS)	4	DF	1600	P
b.					
c.					
d.					

G. Additional Descriptions for Materials Listed Above

a. APP#: 0515125-DT, 4 X 55 GAL IN 85 GAL OVERPACK

c.

b.

d.

15. Special Handling Instructions and Additional Information

1)JOB#W6063

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this document are not subject to federal manifest requirements.

Printed/Typed Name	Signature	Date Month	Day	Year
Keith Robins	Keith Robins agent for NYSDEC	5	15	15

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
Kenneth W. Mills	Kenneth W. Mills	05	15	15

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the materials covered by this bill of lading except as noted in Item 19.

Printed/Typed Name	Signature	Date Month	Day	Year

BILL OF LADING

Please print or type

BILL OF LADING

1. Document No. MET2451 | 2. Page 1 of 1

3. Generator's Name and Mailing Address
NYS DEC ATTN JEFFERY TRAD
625 BROADWAY, 12TH FLOOR
ALBANY NY 12233

4. Generator's Phone (518) 402-9814

Site Address
99 WALL STREET
VALHALLA NY 10595

5. Transporter 1 Company Name: ENVIRONMENTAL PROD & SVCS OF VT, INC
6. NYR000115733
A. State Transporter's ID 28016-VT
B. Transporter 1 Phone
C. State Transporter's ID 800 843-8265

7. Transporter 2 Company Name
8.
D. Transporter 2 Phone

9. Designated Facility Name and Site Address
ENVIRONMENTAL PROD & SVCS OF VT, INC
532 STATE FAIR BLVD.
HM SYRACUSE NY 13204
10. NYR000115733
E. State Facility's ID
F. Facility's Phone 800 843-8265

GENERATOR

	11. Shipping Name	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a.	NON-RCRA, NON-DOT, LIQUIDS, N.O.S. (NON HAZ IDW MONITORING WELL WATER)	20	DM	2,750	G
b.	NON-RCRA, NON-DOT SOLIDS, N.O.S. (IDW SOIL BORINGS)	2	DM	600	P
c.	NON-RCRA, NON-DOT SOLIDS, N.O.S. (EMPTY DRUMS)	3	DM	90	P
d.	~~NON-RCRA, NON-DOT, LIQUIDS, N.O.S. (NON HAZ IDW MONITORING WELL WATER)~~		DF		G

G. Additional Descriptions for Materials Listed Above

a. APP#: 0515126-OT, 20 X 55 GAL
b. APP#: 0515125-DT, 2 X 55 GAL
c. APP#: 0515131-MT, 3 X 55 GAL
d. ~~APP#: 0515126-OT, ___ X ___ GAL IN ___ GAL~~ OVERPACK

15. Special Handling Instructions and Additional Information
1) 2) 3) 4) JOB# W6063

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this document are not subject to federal manifest requirements.

Printed/Typed Name: Keith Robins | Signature: Keith Robins agent for NYSDEC | Date: Month 5 Day 15 Year 15

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Kenneth W. Mills | Signature: Kenneth W. Mills | Date: Month 05 Day 15 Year 15

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the materials covered by this bill of lading except as noted in Item 19.

Printed/Typed Name | Signature | Date: Month Day Year

BILL OF LADING

ENVIRONMENTAL PRODUCTS & SERVICES OF VERMONT, INC.

24-Hour Emergency Phone Number
1-800-843-8265

Please print or type

BILL OF LADING

1. Document No. MET2455 | 2. Page 1 of 1

3. Generator's Name and Mailing Address
NYS DEC ATTN JEFFERY TRAD
625 BROADWAY, 12TH FLOOR
ALBANY NY 12233

4. Generator's Phone (518) 402-9814

Site Address
99 WALL STREET
VALHALLA NY 10595

5. Transporter 1 Company Name
ENVIRONMENTAL PROD & SVCS OF VT, INC

6. NYR000115733

A. State Transporter's ID 47565-MC-NY
B. Transporter 1 Phone 800 843-8265

7. Transporter 2 Company Name

8.

C. State Transporter's ID
D. Transporter 2 Phone

9. Designated Facility Name and Site Address
ENVIRONMENTAL PROD & SVCS OF VT, INC
532 STATE FAIR BLVD.
SYRACUSE NY 13204
HM

10. NYR000115733

E. State Facility's ID
F. Facility's Phone 800 843-8265

GENERATOR

	11. Shipping Name	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a.	NON-RCRA, NON-DOT SOLIDS, N.O.S. (IDW SOIL BORINGS)	1	DF	450	P
b.	NON-RCRA, NON-DOT, LIQUIDS, N.O.S. (NON HAZ IDW MONITORING WELL WATER)	2	DM	100	G
c.					
d.					

G. Additional Descriptions for Materials Listed Above

a. APP#: 0515125-DT, 1 X 55 GAL IN 85 GAL OVERPACK

b. APP#: 0515126-OT, 2 X 55 GAL IN 85 GAL OVERPACK

c.

d.

15. Special Handling Instructions and Additional Information
1) 2)JOB#W6063

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this document are not subject to federal manifest requirements.

Printed/Typed Name	Signature	Date Month	Day	Year
Brian Ramich	On Behalf of	5	26	15

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
Timothy McDougall		5	26	15

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the materials covered by this bill of lading except as noted in Item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
RON POKRZYWINSKI		6	4	15

BILL OF LADING

APPENDIX F

ANALYTICAL LABORATORY REPORTS

Report Date:
03-Feb-14 15:24

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Work Order: N0058
Project : Farrand Controls
Project #:

Attn: Robbin Petrella

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N0058-01	HW-WET-SE-6-(1)_01/15/14	Soil	15-Jan-14 08:20	17-Jan-14 11:30
N0058-02	HW-WET-SE-5-(1)_01/15/14	Soil	15-Jan-14 08:55	17-Jan-14 11:30
N0058-03	HW-WET-SE-12-(1)_01/15/14	Soil	15-Jan-14 09:15	17-Jan-14 11:30
N0058-04	HW-WET-SE-11-(1)_01/15/14	Soil	15-Jan-14 09:39	17-Jan-14 11:30
N0058-05	HW-WET-SE-10-(1)_01/15/14	Soil	15-Jan-14 10:15	17-Jan-14 11:30
N0058-06	HW-WET-SE-9-(1)_01/15/14	Soil	15-Jan-14 10:30	17-Jan-14 11:30
N0058-07	HW-WET-SE-8-(1)_01/15/14	Soil	15-Jan-14 11:00	17-Jan-14 11:30
N0058-08	HW-WET-SE-7-(1)_01/15/14	Soil	15-Jan-14 11:55	17-Jan-14 11:30
N0058-09	HW-WET-SE-(1)_01/15/14	Soil	15-Jan-14 12:35	17-Jan-14 11:30
N0058-10	HW-WET-SE-2-(1)_01/15/14	Soil	15-Jan-14 12:50	17-Jan-14 11:30
N0058-11	HW-WET-SE-3-(1)_01/15/14	Soil	15-Jan-14 13:15	17-Jan-14 11:30
N0058-12	HW-WET-SE-4-(1)_01/15/14	Soil	15-Jan-14 13:55	17-Jan-14 11:30
N0058-13	HW-WET-SE-17-(1)_01/16/14	Soil	16-Jan-14 08:30	17-Jan-14 11:30
N0058-14	HW-WET-SE-16-(1)_01/16/14	Soil	16-Jan-14 09:15	17-Jan-14 11:30
N0058-15	HW-WET-SE-15-(1)_01/16/14	Soil	16-Jan-14 09:30	17-Jan-14 11:30
N0058-16	HW-WET-SE-14-(1)_01/16/14	Soil	16-Jan-14 09:45	17-Jan-14 11:30
N0058-17	HW-WET-SE-13-(1)_01/16/14	Soil	16-Jan-14 10:10	17-Jan-14 11:30

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 requirments have been meet.

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
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
DoD ELAP
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N0058

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
HW-WET-SE-6-(1)_01/15/14	N0058-01	SW8260_LOW_S				
HW-WET-SE-5-(1)_01/15/14	N0058-02	SW8260_LOW_S				
HW-WET-SE-12-(1)_01/15/14	N0058-03	SW8260_LOW_S				
HW-WET-SE-11-(1)_01/15/14	N0058-04	SW8260_LOW_S				
HW-WET-SE-10-(1)_01/15/14	N0058-05	SW8260_LOW_S				
HW-WET-SE-9-(1)_01/15/14	N0058-06	SW8260_LOW_S				
HW-WET-SE-8-(1)_01/15/14	N0058-07	SW8260_LOW_S				
HW-WET-SE-7-(1)_01/15/14	N0058-08	SW8260_LOW_S				
HW-WET-SE-(1)_01/15/14	N0058-09	SW8260_LOW_S				
HW-WET-SE-2-(1)_01/15/14	N0058-10	SW8260_LOW_S				
HW-WET-SE-3-(1)_01/15/14	N0058-11	SW8260_MED_S				
HW-WET-SE-4-(1)_01/15/14	N0058-12	SW8260_LOW_S				
HW-WET-SE-4-(1)_01/15/14	N0058-12	SW8260_MED_S				
HW-WET-SE-17-(1)_01/16/14	N0058-13	SW8260_LOW_S				
HW-WET-SE-16-(1)_01/16/14	N0058-14	SW8260_LOW_S				
HW-WET-SE-15-(1)_01/16/14	N0058-15	SW8260_LOW_S				
HW-WET-SE-14-(1)_01/16/14	N0058-16	SW8260_LOW_S				
HW-WET-SE-13-(1)_01/16/14	N0058-17	SW8260_LOW_S				

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N0058

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_LOW_S					
N0058-01A	SL	1/15/2014	1/17/2014	NA	1/20/2014
N0058-02A	SL	1/15/2014	1/17/2014	NA	1/20/2014
N0058-03A	SL	1/15/2014	1/17/2014	NA	1/20/2014
N0058-04A	SL	1/15/2014	1/17/2014	NA	1/20/2014
N0058-05A	SL	1/15/2014	1/17/2014	NA	1/20/2014
N0058-06A	SL	1/15/2014	1/17/2014	NA	1/23/2014
N0058-07A	SL	1/15/2014	1/17/2014	NA	1/20/2014
N0058-08A	SL	1/15/2014	1/17/2014	NA	1/22/2014
N0058-09A	SL	1/15/2014	1/17/2014	NA	1/21/2014
N0058-10A	SL	1/15/2014	1/17/2014	NA	1/21/2014
N0058-12A	SL	1/15/2014	1/17/2014	NA	1/21/2014
N0058-12AMS	SL	1/15/2014	1/17/2014	NA	1/22/2014
N0058-12AMSD	SL	1/15/2014	1/17/2014	NA	1/22/2014
N0058-13A	SL	1/16/2014	1/17/2014	NA	1/22/2014
N0058-14A	SL	1/16/2014	1/17/2014	NA	1/22/2014
N0058-15A	SL	1/16/2014	1/17/2014	NA	1/21/2014
N0058-16A	SL	1/16/2014	1/17/2014	NA	1/21/2014
N0058-17A	SL	1/16/2014	1/17/2014	NA	1/21/2014
SW8260_MED_S					
N0058-11A	SL	1/15/2014	1/17/2014	1/22/2014	1/22/2014
N0058-11ADL	SL	1/15/2014	1/17/2014	1/22/2014	1/22/2014
N0058-12A	SL	1/15/2014	1/17/2014	1/22/2014	1/22/2014

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N0058

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_LOW_S					
N0058-01A	SL	SW8260_LOW_S	NA	LOW	1
N0058-02A	SL	SW8260_LOW_S	NA	LOW	1
N0058-03A	SL	SW8260_LOW_S	NA	LOW	1
N0058-04A	SL	SW8260_LOW_S	NA	LOW	1
N0058-05A	SL	SW8260_LOW_S	NA	LOW	1
N0058-06A	SL	SW8260_LOW_S	NA	LOW	1
N0058-07A	SL	SW8260_LOW_S	NA	LOW	1
N0058-08A	SL	SW8260_LOW_S	NA	LOW	1
N0058-09A	SL	SW8260_LOW_S	NA	LOW	1
N0058-10A	SL	SW8260_LOW_S	NA	LOW	1
N0058-12A	SL	SW8260_LOW_S	NA	LOW	1
N0058-12AMS	SL	SW8260_LOW_S	NA	LOW	1
N0058-12AMSD	SL	SW8260_LOW_S	NA	LOW	1
N0058-13A	SL	SW8260_LOW_S	NA	LOW	1
N0058-14A	SL	SW8260_LOW_S	NA	LOW	1
N0058-15A	SL	SW8260_LOW_S	NA	LOW	1
N0058-16A	SL	SW8260_LOW_S	NA	LOW	1
N0058-17A	SL	SW8260_LOW_S	NA	LOW	1
SW8260_MED_S					
N0058-11A	SL	SW8260_MED_S	SW5035_MED_PR	MED	1
N0058-11ADL	SL	SW8260_MED_S	SW5035_MED_PR	MED	10
N0058-12A	SL	SW8260_MED_S	SW5035_MED_PR	MED	1

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N0058

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3050

HC Due: 01/31/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0058-01A	HW-WET-SE-6-(1)_01/15/14	01/15/2014 08:20	01/17/2014	Soil	PMoist	/					VOA
N0058-01A	HW-WET-SE-6-(1)_01/15/14	01/15/2014 08:20	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-01A	HW-WET-SE-6-(1)_01/15/14	01/15/2014 08:20	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-02A	HW-WET-SE-5-(1)_01/15/14	01/15/2014 08:55	01/17/2014	Soil	PMoist	/					VOA
N0058-02A	HW-WET-SE-5-(1)_01/15/14	01/15/2014 08:55	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-02A	HW-WET-SE-5-(1)_01/15/14	01/15/2014 08:55	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-03A	HW-WET-SE-12-(1)_01/15/14	01/15/2014 09:15	01/17/2014	Soil	PMoist	/					VOA
N0058-03A	HW-WET-SE-12-(1)_01/15/14	01/15/2014 09:15	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-03A	HW-WET-SE-12-(1)_01/15/14	01/15/2014 09:15	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-04A	HW-WET-SE-11-(1)_01/15/14	01/15/2014 09:39	01/17/2014	Soil	PMoist	/					VOA
N0058-04A	HW-WET-SE-11-(1)_01/15/14	01/15/2014 09:39	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-04A	HW-WET-SE-11-(1)_01/15/14	01/15/2014 09:39	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-05A	HW-WET-SE-10-(1)_01/15/14	01/15/2014 10:15	01/17/2014	Soil	PMoist	/					VOA
N0058-05A	HW-WET-SE-10-(1)_01/15/14	01/15/2014 10:15	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-05A	HW-WET-SE-10-(1)_01/15/14	01/15/2014 10:15	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-06A	HW-WET-SE-9-(1)_01/15/14	01/15/2014 10:30	01/17/2014	Soil	PMoist	/					VOA
N0058-06A	HW-WET-SE-9-(1)_01/15/14	01/15/2014 10:30	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-06A	HW-WET-SE-9-(1)_01/15/14	01/15/2014 10:30	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-07A	HW-WET-SE-8-(1)_01/15/14	01/15/2014 11:00	01/17/2014	Soil	PMoist	/					VOA
N0058-07A	HW-WET-SE-8-(1)_01/15/14	01/15/2014 11:00	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-07A	HW-WET-SE-8-(1)_01/15/14	01/15/2014 11:00	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-08A	HW-WET-SE-7-(1)_01/15/14	01/15/2014 11:55	01/17/2014	Soil	PMoist	/					VOA
N0058-08A	HW-WET-SE-7-(1)_01/15/14	01/15/2014 11:55	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA

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

HT = Test logged in but has been placed on hold

01/31/2014 09:08 Lab Client Rep: Agnes R Huntley

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N0058

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3050

HC Due: 01/31/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0058-08A	HW-WET-SE-7-(1)_01/15/14	01/15/2014 11:55	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-09A	HW-WET-SE-(1)_01/15/14	01/15/2014 12:35	01/17/2014	Soil	PMoist	/					VOA
N0058-09A	HW-WET-SE-(1)_01/15/14	01/15/2014 12:35	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-09A	HW-WET-SE-(1)_01/15/14	01/15/2014 12:35	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-10A	HW-WET-SE-2-(1)_01/15/14	01/15/2014 12:50	01/17/2014	Soil	PMoist	/					VOA
N0058-10A	HW-WET-SE-2-(1)_01/15/14	01/15/2014 12:50	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-10A	HW-WET-SE-2-(1)_01/15/14	01/15/2014 12:50	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-11A	HW-WET-SE-3-(1)_01/15/14	01/15/2014 13:15	01/17/2014	Soil	PMoist	/					VOA
N0058-11A	HW-WET-SE-3-(1)_01/15/14	01/15/2014 13:15	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-11A	HW-WET-SE-3-(1)_01/15/14	01/15/2014 13:15	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-12A	HW-WET-SE-4-(1)_01/15/14	01/15/2014 13:55	01/17/2014	Soil	PMoist	/			Y		VOA
N0058-12A	HW-WET-SE-4-(1)_01/15/14	01/15/2014 13:55	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC			Y	Y	VOA
N0058-12A	HW-WET-SE-4-(1)_01/15/14	01/15/2014 13:55	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC			Y	Y	VOA
N0058-13A	HW-WET-SE-17-(1)_01/16/14	01/16/2014 08:30	01/17/2014	Soil	PMoist	/					VOA
N0058-13A	HW-WET-SE-17-(1)_01/16/14	01/16/2014 08:30	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-13A	HW-WET-SE-17-(1)_01/16/14	01/16/2014 08:30	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-14A	HW-WET-SE-16-(1)_01/16/14	01/16/2014 09:15	01/17/2014	Soil	PMoist	/					VOA
N0058-14A	HW-WET-SE-16-(1)_01/16/14	01/16/2014 09:15	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-14A	HW-WET-SE-16-(1)_01/16/14	01/16/2014 09:15	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-15A	HW-WET-SE-15-(1)_01/16/14	01/16/2014 09:30	01/17/2014	Soil	PMoist	/					VOA
N0058-15A	HW-WET-SE-15-(1)_01/16/14	01/16/2014 09:30	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-15A	HW-WET-SE-15-(1)_01/16/14	01/16/2014 09:30	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA

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

HT = Test logged in but has been placed on hold

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N0058

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3050

HC Due: 01/31/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0058-16A	HW-WET-SE-14-(1)_01/16/14	01/16/2014 09:45	01/17/2014	Soil	PMoist	/					VOA
N0058-16A	HW-WET-SE-14-(1)_01/16/14	01/16/2014 09:45	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-16A	HW-WET-SE-14-(1)_01/16/14	01/16/2014 09:45	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA
N0058-17A	HW-WET-SE-13-(1)_01/16/14	01/16/2014 10:10	01/17/2014	Soil	PMoist	/					VOA
N0058-17A	HW-WET-SE-13-(1)_01/16/14	01/16/2014 10:10	01/17/2014	Soil	SW8260_LOW_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0058-17A	HW-WET-SE-13-(1)_01/16/14	01/16/2014 10:10	01/17/2014	Soil	SW8260_MED_S	/ 1,2-Dichloro-1,1,2-trifluroethane as TIC		Y		Y	VOA

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Huntley

Sample Transmittal Documentation

N0058

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 4

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci
330 Crossways Park Drive
Woodbury NY 11797
Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dvirka Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797
P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Ferrand Control Site
Location: 99 Wall Street State: NY
Sampler(s): Keith Robins / Paul Bernard

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

N0058

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs TCL + 10 (8260B)
01	HW-WET-SE-6-(1)_01/15/14	01/15/14	820 am	G	SO		1			✓
	HW-WET-WS-7-(1)_01/15/14	01/15/14	815 am	G	SW	2				✓
02	HW-WET-SE-5-(1)_01/15/14	01/15/14	855 am	G	SO		1			✓
	HW-WET-WS-6-(1)-01/15/14	01/15/14	850 am	G	SW	2				✓
03	HW-WET-SE-12-(1)_01/15/14	01/15/14	915 am	G	SO		1			✓
04	HW-WET-SE-11-(1)_01/15/14	01/15/14	939 am	G	SO		1			✓
05	HW-WET-SE-10-(1)_01/15/14	01/15/14	1015 am	G	SO		1			✓
06	HW-WET-SE-9-(1)_01/15/14	01/15/14	1030 am	G	SO		1			✓
07	HW-WET-SE-8-(1)_01/15/14	01/15/14	1100 am	G	SO		1			✓
08	HW-WET-SE-7-(1)_01/15/14	01/15/14	1155 am	G	SO		1			✓

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category B Deliverables
State-specific reporting standards: EQuIS

2-9-1-1-9 IR-01
SUH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins		01/16/14	1240	
	Subcat	1/16/14	1530	
Subcat		1-17-14	800	
		1/17/14	11:30	

☐ EDD Format _____
☐ E-mail to MDeVinney@dvirka.com
NOTE: 8260B - Soil / Surface water

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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N0058

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 2 of 4

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

TAT- Indicate Date Needed: Standard
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dvirka + Bartilucci Engineers
330 crossways Park Drive
Woodbury NY 11797

P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Farrand Control Site
Location: 99 Wall Street State: NY
Sampler(s): Keith Rubins / Paul Burnish

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

N0058

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs TCL 1,10 (8260B)
	HW-WET-WS-2-(1)_01	01/15/14	01/15/14 1230 pm	G	SW	2				✓
09	HW-WET-SE-(1)_01	01/15/14	01/15/14 1235 pm	G	SO		1			✓
	HW-WET-WS-3-(1)	01/15/14	01/15/14 1245 pm	G	SW	2				✓
10	HW-WET-SE-2-(1)_01	01/15/14	01/15/14 1250 pm	G	SO		1			✓
	HW-WET-WS-4-(1)_01	01/15/14	01/15/14 110 pm	G	SW	2				✓
11	HW-WET-SE-3-(1)_01	01/15/14	01/15/14 115 pm	G	SO		1			✓
	HW-WET-WS-5-(1)_01	01/15/14	01/15/14 152 pm	G	SW	2				✓
12	HW-WET-SE-4-(1)_01	01/15/14	01/15/14 155 pm	G	SO		1			✓
	HW-WET-WS-1-(1)_01	01/15/14	01/15/14 245 pm	G	SW	2				✓
13	HW-WET-SE-17-(1)_01	01/16/14	01/16/14 830 pm	G	SO		1			✓

29-1 / 1.9 IRC 1
SH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Rubins		01/16/14	1240 pm	
	Subcont	1/16/14	1530	
Subcont		1-17-14	800	
		1/17/14	11:30	

☐ EDD Format _____
☐ E-mail to Matt DeVinney @ db-eng.com
NOTE 8260B soil / surface water

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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Revised Feb 2013

N0058

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka and Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797
Telephone #: 516 364-9850
Project Mgr. Matt DeVinney

Invoice To: Dvirka Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797
P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Farrand Controls Site
Location: 99 Wall street State: NY
Sampler(s): Keith Robins / Paul Barsych

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☑ Other Category B

State-specific reporting standards: EQuIS

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TCL VOCs (8260B)							
	HW-WET-WS-11-(1)	01/16/14	820am	G	SW	2	1			✓							
14	HW-WET-SE-16-(1)	01/16/14	915am	G	SO			1		✓							
	HW-WET-WS-10-(1)	01/16/14	910am	G	SW	2	2			✓							
15	HW-WET-SE-15-(1)	01/16/14	930am	G	SO			1		✓							
	HW-WET-WS-9-(1)	01/16/14	925am	G	SW	2				✓							
16	HW-WET-SE-14-(1)	01/16/14	945am	G	SO			1		✓							
	HW-WET-WS-8-(1)	01/16/14	940am	G	SW	2				✓							
17	HW-WET-SE-13-(1)	01/16/14	1010am	G	SO			1		✓							
	Sump 2_01/16/13	01/16/14	1050am	G	SW	2				✓							
	Sump 3_01/16/13	01/16/14	1100am	G	GW	2				✓							

29-1 1.9 IR 01
JH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Kathy Kilmer	Dan Kist	01/16/14	1240	
Dan Kist	Sylvest	1/16/14	1530	
Sylvest	Paul Barsych	1-17-14	806	
Paul Barsych	[signature]	1/17/14	11:30	

☐ EDD Format _____
☑ E-mail to MDeVinney@dvb-eng.com
NOTE (Soil/sediment) on SW/GW = 8260B

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

N0058

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 4 of 4

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci Engineers, 330 Crossways Park Drive, Woodbury NY 11797
Telephone #: 516 364-9890
Project Mgr. MATT DeVinney

Invoice To: Dvirka + Bartilucci Engineers, 330 Crossways Park Drive, Woodbury NY 11797
P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Farrand Control Site
Location: 99 Wall street State: NY
Sampler(s): Keith Robins / Paul Barush

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TCL VOCs 8260B	
N0058											
	HW-WET-WS-5-(1)_01/15/14(MS)	01/15/14	1520	G	SW	2				✓	
	HW-WET-WS-5-(1)_01/15/14(MSD)	01/15/14	1520	G	SW	2				✓	
12	HW-WET-SE-4-(1)_01/15/14(MS)	01/15/14	1535	G	SO			1		✓	
12	HW-WET-SE-4-(1)_01/15/14(MSD)	01/15/14	1535	G	SO			1		✓	
	Trip Blank_01/15/14	01/15/14	—		AQ	—	2			✓	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category "B"
State-specific reporting standards: EQuIS

date 01/15/14
date 01/15/14

29/1/14 F01
JSH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins	Subcat	01/16/14	1240pm	
Subcat	Subcat	1/16/14	1535	
		1-17-14	800	
		1/17/14	11:30	

☐ EDD Format _____
☒ E-mail to MDeVinney@dvirka-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

Received By: MJL	Page 01 of 00
Reviewed By: JGB	Log-in Date 01/17/2014
Work Order: N0058	Client Name: Dvirka & Bartilucci
Project Name/Event: Farrand Controls	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

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 N/A
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: 2.3 °C
10. Does information on TR/COCs and sample tags agree? Yes / No
11. Date Received at Laboratory: 01/17/2014
12. Time Received: 11:30

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
N0058-01						US	
N0058-02						US	
N0058-03						US	
N0058-04						US	
N0058-05						US	
N0058-06						US	
N0058-07						US	
N0058-08						US	
N0058-09						US	
N0058-10						US	
N0058-11						US	
N0058-12						US	
N0058-13						US	
N0058-14						US	
N0058-15						US	
N0058-16						US	
N0058-17						US	

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-74

CoolantCondition: 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

Rad OK — Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : Dvirka & Bartilucci

Project: Farrand Controls

Laboratory Workorder / SDG #: N0058

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

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: V5
Instrument Type: GCMS-VOA
Description: HP6890 / HP6890
Manufacturer: Hewlett-Packard
Model: 6890 / 6890
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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

(LCS-75665), recovery is above criteria for 1,2-Dichloroethane-d4 at 118% with criteria of (88-110).

HW-WET-SE-12-(1)_01/15/14 (N0058-03A), recovery is above criteria for 1,2-Dichloroethane-d4 at 111% with criteria of (88-110).

HW-WET-SE-8-(1)_01/15/14 (N0058-07A), recovery is above criteria for 1,2-Dichloroethane-d4 at 111% with criteria of (88-110).

HW-WET-SE-4-(1)_01/15/14 (N0058-12A), recovery is above criteria for 1,2-Dichloroethane-d4 at 117% with criteria of (88-110).

HW-WET-SE-4-(1)_01/15/14 (N0058-12AMS), recovery is above criteria for 1,2-Dichloroethane-d4 at 116% with criteria of (88-110).

HW-WET-SE-4-(1)_01/15/14 (N0058-12AMSD), recovery is above criteria for 1,2-Dichloroethane-d4 at 123% with criteria of (88-110).

HW-WET-SE-16-(1)_01/16/14 (N0058-14A), recovery is above criteria for 1,2-Dichloroethane-d4 at 121% with criteria of (88-110).

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.

LCSD-75643 in batch 75643, recovery is below criteria for Iodomethane at 29% with criteria of (70-126).

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

Matrix spikes were performed on samples:
HW-WET-SE-4-(1)_01/15/14 (N0058-12AMS) and
HW-WET-SE-4-(1)_01/15/14 (N0058-12AMSD).

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

HW-WET-SE-4-(1)_01/15/14 (N0058-12AMS), recovery is above criteria for 1,1-Dichloroethene at 145% with criteria of (65-135), recovery is below criteria for 1,1,1,2-Tetrachloroethane at 64% with criteria of (75-125), 1,1,1-Trichloroethane at 0% with criteria of (70-135), 1,1,2-Trichloro-1,2,2-trifluoroethane at 0% with criteria of (70-130), 1,1-Dichloroethane at 0% with criteria of (75-125), 1,2,3-Trichlorobenzene at 19% with criteria of (60-135), 1,2,3-Trichloropropane at 62% with criteria of (65-130), 1,2,4-Trichlorobenzene at 24% with criteria of (65-130), 1,2,4-Trimethylbenzene at 55% with criteria of (65-135), 1,2-Dichlorobenzene at 30% with criteria of (75-120), 1,3,5-Trimethylbenzene at 60% with criteria of (65-135), 1,3-Dichlorobenzene at 44% with criteria of (70-125), 1,4-Dichlorobenzene at 45% with criteria of (70-125), 2-Chlorotoluene at 55% with criteria of (70-130), 4-Chlorotoluene at 54% with criteria of (75-125), 4-Isopropyltoluene at 59% with criteria of (75-135), Bromobenzene at 56% with criteria of (65-120), Bromodichloromethane at 67% with criteria of (70-130), Bromoform at 41% with criteria of (55-135), Chlorobenzene at 53% with criteria of (75-125), Chloroethane at 0% with criteria of (40-155), cis-1,3-Dichloropropene at 62% with criteria of (70-125),

Dibromochloromethane at 56% with criteria of (65-130), Ethylbenzene at 56% with criteria of (75-125), Hexachlorobutadiene at 37% with criteria of (55-140), Iodomethane at 55% with criteria of (70-126), Isopropylbenzene at 66% with criteria of (75-130), m,p-Xylene at 48% with criteria of (80-125), Naphthalene at 24% with criteria of (40-125), n-Butylbenzene at 54% with criteria of (65-140), n-Propylbenzene at 63% with criteria of (65-135), o-Xylene at 56% with criteria of (75-125), sec-Butylbenzene at 61% with criteria of (65-130), Styrene at 44% with criteria of (75-125), tert-Butylbenzene at 61% with criteria of (65-130), trans-1,3-Dichloropropene at 61% with criteria of (65-125), Trichloroethene at 71% with criteria of (75-125), Vinyl acetate at 45% with criteria of (65-138) and Xylene (Total) at 51% with criteria of (83-125).

HW-WET-SE-4-(1)_01/15/14 (N0058-12AMSD), recovery is above criteria for 1,1-Dichloroethene at 168% with criteria of (65-135), recovery is below criteria for 1,1,1,2-Tetrachloroethane at 51% with criteria of (75-125), 1,1,1-Trichloroethane at 0% with criteria of (70-135), 1,1,2,2-Tetrachloroethane at 47% with criteria of (55-130), 1,1,2-Trichloro-1,2,2-trifluoroethane at 0% with criteria of (70-130), 1,1-Dichloroethane at 0% with criteria of (75-125), 1,2,3-Trichlorobenzene at 10% with criteria of (60-135), 1,2,3-Trichloropropane at 45% with criteria of (65-130), 1,2,4-Trichlorobenzene at 12% with criteria of (65-130), 1,2,4-Trimethylbenzene at 37% with criteria of (65-135), 1,2-Dibromo-3-chloropropane at 32% with criteria of (40-135), 1,2-Dibromoethane at 59% with criteria of (70-125), 1,2-Dichlorobenzene at 14% with criteria of (75-120), 1,3,5-Trimethylbenzene at 42% with criteria of (65-135), 1,3-Dichlorobenzene at 28% with criteria of (70-125), 1,3-Dichloropropane at 67% with criteria of (75-125), 1,4-Dichlorobenzene at 27% with criteria of (70-125), 2-Chlorotoluene at 40% with criteria of (70-130), 4-Chlorotoluene at 37% with criteria of (75-125), 4-Isopropyltoluene at 40% with criteria of (75-135), Bromobenzene at 40% with criteria of (65-120), Bromodichloromethane at 54% with criteria of (70-130), Bromoform at 33% with criteria of (55-135), Chlorobenzene at 43% with criteria of (75-125), Chloroethane at 0% with criteria of (40-155), cis-1,3-Dichloropropene at 51% with criteria of (70-125), Dibromochloromethane at 42% with criteria of (65-130), Dibromomethane at 71% with criteria of (75-130), Ethylbenzene at 44% with criteria of (75-125), Hexachlorobutadiene at 26% with criteria of (55-140), Iodomethane at 55% with criteria of (70-126), Isopropylbenzene at 50% with criteria of (75-130), m,p-Xylene at 38% with criteria of (80-125), Naphthalene at 14% with criteria of (40-125), n-Butylbenzene at 34% with criteria of (65-140),

n-Propylbenzene at 49% with criteria of (65-135), o-Xylene at 42% with criteria of (75-125), sec-Butylbenzene at 44% with criteria of (65-130), Styrene at 22% with criteria of (75-125), tert-Butylbenzene at 43% with criteria of (65-130), Tetrachloroethene at 60% with criteria of (65-140), Toluene at 62% with criteria of (70-125), trans-1,3-Dichloropropene at 48% with criteria of (65-125), Trichloroethene at 65% with criteria of (75-125), Vinyl acetate at 43% with criteria of (65-138) and Xylene (Total) at 39% with criteria of (83-125).

Replicate RPDs were within the advisory QC limits with the exception of the following:

HW-WET-SE-4-(1)_01/15/14 (N0058-12AMSD), Relative Percent Difference is greater than RPD limit for 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Carbon disulfide, Chloroethane, Naphthalene, n-Butylbenzene, Styrene.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

HW-WET-SE-3-(1)_01/15/14 (N0058-11ADL) : Dilution Factor: 10

G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting
- M2 peak co-elution
- M3 rising or falling baseline
- M4 retention time shift

· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integration was performed on the following:

LCS-75643 Dichlorodifluoromethane due to M7

LCS-75665 Dichlorodifluoromethane due to M7

LCS-75681 Dichlorodifluoromethane due to M7

LCSD-75643 Dichlorodifluoromethane due to M7

LCSD-75688 Dichlorodifluoromethane due to M7

HW-WET-SE-4-(1)_01/15/14 (N0058-12A)
1,1,2-Trichloro-1,2,2-trifluoroethane due to M6

VSTD0015K 1,2-Dibromo-3-chloropropane due to M6

VSTD0051W Iodomethane due to M7

VSTD0051Z Dichlorodifluoromethane due to M7

VSTD0201Z Dichlorodifluoromethane due to M7

VSTD0501A Dichlorodifluoromethane due to M7

VSTD0501B Dichlorodifluoromethane due to M7

VSTD0501W Dichlorodifluoromethane due to M7

VSTD0501Y Dichlorodifluoromethane , Vinyl chloride due to M7

VSTD0501Z Dichlorodifluoromethane due to M7

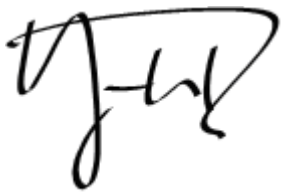
VSTD1001W 1,1-Dichloroethene due to M7

VSTD1001Z Dichlorodifluoromethane due to M7

VSTD2001W Dichlorodifluoromethane due to M7

VSTD2001Z Dichlorodifluoromethane due to M7

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:_____2/3/2014_____

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 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 an aldol condensation by-product.

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

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-75643	101	92	100	100				0
02	LCSD-75643	98	100	100	104				0
03	MB-75643	99	94	100	99				0
04	HW-WET-SE-6-(1)_01/	102	98	100	98				0
05	HW-WET-SE-5-(1)_01/	101	106	100	95				0
06	HW-WET-SE-12-(1)_01	106	111 *	99	99				1
07	HW-WET-SE-11-(1)_01	104	97	99	98				0
08	HW-WET-SE-10-(1)_01	101	99	101	97				0
09	HW-WET-SE-8-(1)_01/	107	111 *	96	100				1
10	LCS-75665	101	118 *	100	99				1
11	MB-75665	104	101	100	94				0
12	HW-WET-SE-(1)_01/15	104	108	102	97				0
13	HW-WET-SE-2-(1)_01/	103	105	98	97				0
14	HW-WET-SE-4-(1)_01/	103	117 *	111	88				1
15	HW-WET-SE-15-(1)_01	104	105	102	100				0
16	HW-WET-SE-14-(1)_01	102	102	101	97				0
17	HW-WET-SE-13-(1)_01	103	104	99	98				0
18	LCS-75681	100	105	104	101				0
19	MB-75681	98	103	102	99				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(76-128)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(88-110)
VDMC3	(TOL) = Toluene-d8	(85-115)
VDMC4	(BFB) = Bromofluorobenzene	(85-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.12.31.1153

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
20	HW-WET-SE-7-(1)_01/	101	101	100	99				0
21	HW-WET-SE-17-(1)_01	103	109	100	99				0
22	HW-WET-SE-16-(1)_01	105	121 *	97	99				1
23	HW-WET-SE-4-(1)_01/	105	116 *	102	99				1
24	HW-WET-SE-4-(1)_01/	101	123 *	101	94				1
25	LCS-75688	105	105	101	101				0
26	LCSD-75688	104	109	102	100				0
27	MB-75688	99	103	100	96				0
28	HW-WET-SE-9-(1)_01/	103	106	100	95				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(76-128)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(88-110)
VDMC3	(TOL) = Toluene-d8	(85-115)
VDMC4	(BFB) = Bromofluorobenzene	(85-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.12.31.1153

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Level: (LOW/MED) MED

	CLIENT SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-75683	102	102	99	100				0
02	LCSD-75683	98	108	98	99				0
03	MB-75683	102	93	97	98				0
04	HW-WET-SE-4-(1)_01/MEMEME	100	104	100	100				0
05	HW-WET-SE-3-(1)_01/	99	104	98	99				0
06	HW-WET-SE-3-(1)_01/	103	103	96	104				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(76-128)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(88-110)
VDMC3	(TOL) = Toluene-d8	(85-115)
VDMC4	(BFB) = Bromofluorobenzene	(85-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.12.31.1153

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix Spike - EPA Sample No.: HW-WET-SE-4-(1)_01/ Level: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	181.2821	0.0000	114.7259	63		35-135
Chloromethane	181.2821	0.0000	157.2421	87		50-130
Vinyl chloride	181.2821	0.0000	167.0145	92		60-125
Bromomethane	181.2821	0.0000	151.9104	84		30-160
Chloroethane	181.2821	548.7890	78.1174	-260	*	40-155
Trichlorofluoromethane	181.2821	0.0000	153.1441	84		25-185
1,1-Dichloroethene	181.2821	0.0000	262.9435	145	*	65-135
Acetone	181.2821	0.0000	110.0590	61		20-160
Iodomethane	181.2821	0.0000	99.3240	55	*	70-126
Carbon disulfide	181.2821	0.0000	210.2324	116		45-160
Methylene chloride	181.2821	0.0000	163.4700	90		55-140
trans-1,2-Dichloroethen	181.2821	0.0000	129.8921	72		65-135
Methyl tert-butyl ether	181.2821	0.0000	161.8944	89		75-126
1,1-Dichloroethane	181.2821	1358.4165	438.6532	-507	*	75-125
Vinyl acetate	181.2821	0.0000	81.8820	45	*	65-138
2-Butanone	181.2821	0.0000	124.4129	69		30-160
cis-1,2-Dichloroethene	181.2821	11.8518	142.6453	72		65-125
2,2-Dichloropropane	181.2821	0.0000	143.6910	79		65-135
Bromochloromethane	181.2821	0.0000	144.9975	80		70-125
Chloroform	181.2821	0.0000	142.4978	79		70-125
1,1,1-Trichloroethane	181.2821	4498.2721	1129.8599	-1858	*	70-135
1,1-Dichloropropene	181.2821	0.0000	142.8839	79		70-135
Carbon tetrachloride	181.2821	0.0000	151.8953	84		65-135
1,2-Dichloroethane	181.2821	0.0000	141.4400	78		70-135
Benzene	181.2821	0.0000	145.7799	80		75-125
Trichloroethene	181.2821	19.0170	147.8643	71	*	75-125
1,2-Dichloropropane	181.2821	0.0000	145.4829	80		70-120
Dibromomethane	181.2821	0.0000	152.5784	84		75-130
Bromodichloromethane	181.2821	0.0000	121.1760	67	*	70-130
cis-1,3-Dichloropropene	181.2821	0.0000	113.2598	62	*	70-125
4-Methyl-2-pentanone	181.2821	0.0000	147.8011	82		45-145
Toluene	181.2821	12.0040	141.1733	71		70-125
trans-1,3-Dichloroprope	181.2821	0.0000	111.2708	61	*	65-125
1,1,2-Trichloroethane	181.2821	0.0000	136.0002	75		60-125
1,3-Dichloropropane	181.2821	0.0000	137.6622	76		75-125
Tetrachloroethene	181.2821	7.0454	134.8853	71		65-140
2-Hexanone	181.2821	0.0000	102.2732	56		45-145
Dibromochloromethane	181.2821	0.0000	101.0769	56	*	65-130
1,2-Dibromoethane	181.2821	0.0000	129.3794	71		70-125
Chlorobenzene	181.2821	24.7397	121.4494	53	*	75-125
1,1,1,2-Tetrachloroetha	181.2821	0.0000	116.6303	64	*	75-125
Ethylbenzene	181.2821	27.4878	128.1051	56	*	75-125
m,p-Xylene	362.5641	76.7789	252.5165	48	*	80-125
o-Xylene	181.2821	16.9038	118.1569	56	*	75-125

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix Spike - EPA Sample No.: HW-WET-SE-4-(1)_01/ Level: (LOW/MED) LOW

Xylene (Total)	543.8462	93.6827	370.6735	51	*	83-125
Styrene	181.2821	0.0000	79.9002	44	*	75-125
Bromoform	181.2821	0.0000	73.4972	41	*	55-135
Isopropylbenzene	181.2821	0.0000	119.5717	66	*	75-130
1,1,2,2-Tetrachloroetha	181.2821	0.0000	114.4448	63		55-130
Bromobenzene	181.2821	0.0000	101.6034	56	*	65-120
1,2,3-Trichloropropane	181.2821	0.0000	112.4388	62	*	65-130
n-Propylbenzene	181.2821	0.0000	113.6315	63	*	65-135
2-Chlorotoluene	181.2821	0.0000	100.5310	55	*	70-130
1,3,5-Trimethylbenzene	181.2821	0.0000	108.0478	60	*	65-135
4-Chlorotoluene	181.2821	0.0000	97.7282	54	*	75-125
tert-Butylbenzene	181.2821	0.0000	110.2527	61	*	65-130
1,2,4-Trimethylbenzene	181.2821	0.0000	98.8135	55	*	65-135
sec-Butylbenzene	181.2821	0.0000	109.9736	61	*	65-130
4-Isopropyltoluene	181.2821	0.0000	106.3950	59	*	75-135
1,3-Dichlorobenzene	181.2821	0.0000	79.9612	44	*	70-125
1,4-Dichlorobenzene	181.2821	0.0000	82.1267	45	*	70-125
n-Butylbenzene	181.2821	0.0000	98.0329	54	*	65-140
1,2-Dichlorobenzene	181.2821	21.8931	75.5648	30	*	75-120
1,2-Dibromo-3-chloropro	181.2821	0.0000	81.5633	45		40-135
1,2,4-Trichlorobenzene	181.2821	0.0000	43.9750	24	*	65-130
Hexachlorobutadiene	181.2821	0.0000	66.8478	37	*	55-140
1,2,3-Trichlorobenzene	181.2821	0.0000	34.8395	19	*	60-135
Naphthalene	181.2821	0.0000	43.1742	24	*	40-125
1,1,2-Trichloro-1,2,2-trifluoroethane	181.2821	1737.3998	420.2832	-727	*	70-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	181.2821	105.5071	58		8		0-40	35-135
Chloromethane	181.2821	148.2390	82		6		0-40	50-130
Vinyl chloride	181.2821	161.9430	89		3		0-40	60-125
Bromomethane	181.2821	131.3138	72		15		0-40	30-160
Chloroethane	181.2821	232.9383	-174	*	-39	*	0-40	40-155
Trichlorofluoromethane	181.2821	155.2891	86		1		0-40	25-185
1,1-Dichloroethene	181.2821	305.1391	168	*	15		0-40	65-135
Acetone	181.2821	148.1105	82		29		0-40	20-160
Iodomethane	181.2821	100.0246	55	*	1		0-40	70-126
Carbon disulfide	181.2821	127.1373	70		49	*	0-40	45-160
Methylene chloride	181.2821	145.7934	80		11		0-40	55-140
trans-1,2-Dichloroethen	181.2821	147.7573	82		13		0-40	65-135
Methyl tert-butyl ether	181.2821	145.0372	80		11		0-40	75-126
1,1-Dichloroethane	181.2821	469.4962	-490	*	-3	*	0-40	75-125
Vinyl acetate	181.2821	78.2475	43	*	5		0-40	65-138
2-Butanone	181.2821	123.5220	68		1		0-40	30-160
cis-1,2-Dichloroethene	181.2821	136.9727	69		4		0-40	65-125
2,2-Dichloropropane	181.2821	143.4491	79		0		0-40	65-135

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix Spike - EPA Sample No.: HW-WET-SE-4-(1)_01/ Level: (LOW/MED) LOW

Bromochloromethane	181.2821	143.8394	79		1		0-40	70-125
Chloroform	181.2821	134.1246	74		6		0-40	70-125
1,1,1-Trichloroethane	181.2821	1484.8900	-1662	*	-11	*	0-40	70-135
1,1-Dichloropropene	181.2821	138.2699	76		3		0-40	70-135
Carbon tetrachloride	181.2821	147.3309	81		3		0-40	65-135
1,2-Dichloroethane	181.2821	133.3695	74		6		0-40	70-135
Benzene	181.2821	139.5812	77		4		0-40	75-125
Trichloroethene	181.2821	135.9911	65	*	10		0-40	75-125
1,2-Dichloropropane	181.2821	129.7822	72		11		0-40	70-120
Dibromomethane	181.2821	128.6213	71	*	17		0-40	75-130
Bromodichloromethane	181.2821	97.8346	54	*	21		0-40	70-130
cis-1,3-Dichloropropene	181.2821	92.1786	51	*	21		0-40	70-125
4-Methyl-2-pentanone	181.2821	126.9399	70		15		0-40	45-145
Toluene	181.2821	124.6964	62	*	14		0-40	70-125
trans-1,3-Dichloroprope	181.2821	87.5978	48	*	24		0-40	65-125
1,1,2-Trichloroethane	181.2821	116.0466	64		16		0-40	60-125
1,3-Dichloropropane	181.2821	121.7478	67	*	12		0-40	75-125
Tetrachloroethene	181.2821	115.8949	60	*	16		0-40	65-140
2-Hexanone	181.2821	87.5453	48		16		0-40	45-145
Dibromochloromethane	181.2821	75.9362	42	*	28		0-40	65-130
1,2-Dibromoethane	181.2821	107.4296	59	*	19		0-40	70-125
Chlorobenzene	181.2821	101.8466	43	*	23		0-40	75-125
1,1,1,2-Tetrachloroetha	181.2821	92.1286	51	*	23		0-40	75-125
Ethylbenzene	181.2821	107.8331	44	*	22		0-40	75-125
m,p-Xylene	362.5641	214.4613	38	*	24		0-40	80-125
o-Xylene	181.2821	93.0824	42	*	28		0-40	75-125
Xylene (Total)	543.8462	307.5437	39	*	26		0-40	83-125
Styrene	181.2821	40.7260	22	*	65	*	0-40	75-125
Bromoform	181.2821	60.5248	33	*	19		0-40	55-135
Isopropylbenzene	181.2821	89.7944	50	*	28		0-40	75-130
1,1,2,2-Tetrachloroetha	181.2821	85.7831	47	*	29		0-40	55-130
Bromobenzene	181.2821	72.1300	40	*	34		0-40	65-120
1,2,3-Trichloropropane	181.2821	82.2947	45	*	31		0-40	65-130
n-Propylbenzene	181.2821	88.1266	49	*	25		0-40	65-135
2-Chlorotoluene	181.2821	73.3334	40	*	31		0-40	70-130
1,3,5-Trimethylbenzene	181.2821	75.7162	42	*	35		0-40	65-135
4-Chlorotoluene	181.2821	66.8009	37	*	38		0-40	75-125
tert-Butylbenzene	181.2821	77.1581	43	*	35		0-40	65-130
1,2,4-Trimethylbenzene	181.2821	67.5567	37	*	38		0-40	65-135
sec-Butylbenzene	181.2821	79.7466	44	*	32		0-40	65-130
4-Isopropyltoluene	181.2821	71.7365	40	*	39		0-40	75-135
1,3-Dichlorobenzene	181.2821	50.8627	28	*	44	*	0-40	70-125
1,4-Dichlorobenzene	181.2821	48.9142	27	*	51	*	0-40	70-125
n-Butylbenzene	181.2821	62.3995	34	*	44	*	0-40	65-140
1,2-Dichlorobenzene	181.2821	47.4415	14	*	71	*	0-40	75-120
1,2-Dibromo-3-chloropro	181.2821	57.6971	32	*	34		0-40	40-135
1,2,4-Trichlorobenzene	181.2821	21.7459	12	*	68	*	0-40	65-130

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix Spike - EPA Sample No.: HW-WET-SE-4-(1)_01/ Level: (LOW/MED) LOW

Hexachlorobutadiene	181.2821	46.6679	26	*	36		0-40	55-140
1,2,3-Trichlorobenzene	181.2821	18.5881	10	*	61	*	0-40	60-135
Naphthalene	181.2821	25.5980	14	*	51	*	0-40	40-125
1,1,2-Trichloro-1,2,2-trifluoroethane	181.2821	702.8048	-571	*	-24	*	0-40	70-130

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

* Values outside of QC limits

RPD: 13 out of 69 outside limits

Spike Recovery: 85 out of 138 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75643 LCS Lot No.:

Date Extracted: 01/20/2014 Date Analyzed (1): 01/20/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	40.8642	82		35 - 135
Chloromethane	50.0000	0.0000	54.6266	109		50 - 130
Vinyl chloride	50.0000	0.0000	58.1543	116		60 - 125
Bromomethane	50.0000	0.0000	53.1468	106		30 - 160
Chloroethane	50.0000	0.0000	52.8064	106		40 - 155
Trichlorofluoromethane	50.0000	0.0000	59.3847	119		25 - 185
1,1-Dichloroethene	50.0000	0.0000	56.0820	112		65 - 135
Acetone	50.0000	0.0000	49.1938	98		20 - 160
Iodomethane	50.0000	0.0000	55.3620	111		70 - 126
Carbon disulfide	50.0000	0.0000	54.3173	109		45 - 160
Methylene chloride	50.0000	0.0000	49.5710	99		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.6524	105		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	48.4006	97		75 - 126
1,1-Dichloroethane	50.0000	0.0000	51.0376	102		75 - 125
Vinyl acetate	50.0000	0.0000	48.7979	98		65 - 138
2-Butanone	50.0000	0.0000	53.0517	106		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	51.0726	102		65 - 125
2,2-Dichloropropane	50.0000	0.0000	52.6035	105		65 - 135
Bromochloromethane	50.0000	0.0000	49.4198	99		70 - 125
Chloroform	50.0000	0.0000	50.3143	101		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	53.2579	107		70 - 135
1,1-Dichloropropene	50.0000	0.0000	51.1475	102		70 - 135
Carbon tetrachloride	50.0000	0.0000	55.0873	110		65 - 135
1,2-Dichloroethane	50.0000	0.0000	49.5722	99		70 - 135
Benzene	50.0000	0.0000	52.0581	104		75 - 125
Trichloroethene	50.0000	0.0000	52.1223	104		75 - 125
1,2-Dichloropropane	50.0000	0.0000	48.4150	97		70 - 120
Dibromomethane	50.0000	0.0000	51.0493	102		75 - 130
Bromodichloromethane	50.0000	0.0000	49.6746	99		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	51.1262	102		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	50.3935	101		45 - 145
Toluene	50.0000	0.0000	51.3963	103		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	50.9969	102		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	52.2066	104		60 - 125
1,3-Dichloropropane	50.0000	0.0000	50.8739	102		75 - 125
Tetrachloroethene	50.0000	0.0000	53.7250	107		65 - 140
2-Hexanone	50.0000	0.0000	54.4556	109		45 - 145
Dibromochloromethane	50.0000	0.0000	51.8416	104		65 - 130
1,2-Dibromoethane	50.0000	0.0000	49.2088	98		70 - 125
Chlorobenzene	50.0000	0.0000	51.2619	103		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	49.9823	100		75 - 125
Ethylbenzene	50.0000	0.0000	52.4086	105		75 - 125
m,p-Xylene	100.0000	0.0000	103.7006	104		80 - 125
o-Xylene	50.0000	0.0000	51.6194	103		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75643 LCS Lot No.:

Date Extracted: 01/20/2014 Date Analyzed (1): 01/20/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	155.3200	104		83 - 125
Styrene	50.0000	0.0000	52.3087	105		75 - 125
Bromoform	50.0000	0.0000	52.0703	104		55 - 135
Isopropylbenzene	50.0000	0.0000	54.2779	109		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	49.5579	99		55 - 130
Bromobenzene	50.0000	0.0000	49.4661	99		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	51.1434	102		65 - 130
n-Propylbenzene	50.0000	0.0000	52.8204	106		65 - 135
2-Chlorotoluene	50.0000	0.0000	51.4860	103		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	52.4363	105		65 - 135
4-Chlorotoluene	50.0000	0.0000	49.8875	100		75 - 125
tert-Butylbenzene	50.0000	0.0000	53.7101	107		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	51.7417	103		65 - 135
sec-Butylbenzene	50.0000	0.0000	54.5219	109		65 - 130
4-Isopropyltoluene	50.0000	0.0000	54.2500	108		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	51.7562	104		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	51.2634	103		70 - 125
n-Butylbenzene	50.0000	0.0000	54.5156	109		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	50.7286	101		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	53.5435	107		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	52.1260	104		65 - 130
Hexachlorobutadiene	50.0000	0.0000	54.2871	109		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	51.3275	103		60 - 135
Naphthalene	50.0000	0.0000	53.7025	107		40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	53.8518	108		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75665 LCS Lot No.:

Date Extracted: 01/21/2014 Date Analyzed (1): 01/21/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	47.2778	95		35 - 135
Chloromethane	50.0000	0.0000	50.1435	100		50 - 130
Vinyl chloride	50.0000	0.0000	50.3057	101		60 - 125
Bromomethane	50.0000	0.0000	51.0956	102		30 - 160
Chloroethane	50.0000	0.0000	50.9357	102		40 - 155
Trichlorofluoromethane	50.0000	0.0000	50.8460	102		25 - 185
1,1-Dichloroethene	50.0000	0.0000	50.3179	101		65 - 135
Acetone	50.0000	0.0000	36.2767	73		20 - 160
Iodomethane	50.0000	0.0000	48.3371	97		70 - 126
Carbon disulfide	50.0000	0.0000	48.1593	96		45 - 160
Methylene chloride	50.0000	0.0000	45.8439	92		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	45.4049	91		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	49.5186	99		75 - 126
1,1-Dichloroethane	50.0000	0.0000	49.5239	99		75 - 125
Vinyl acetate	50.0000	0.0000	49.4171	99		65 - 138
2-Butanone	50.0000	0.0000	42.8703	86		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	49.3387	99		65 - 125
2,2-Dichloropropane	50.0000	0.0000	49.0875	98		65 - 135
Bromochloromethane	50.0000	0.0000	49.7766	100		70 - 125
Chloroform	50.0000	0.0000	48.0644	96		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	50.5089	101		70 - 135
1,1-Dichloropropene	50.0000	0.0000	46.8397	94		70 - 135
Carbon tetrachloride	50.0000	0.0000	50.6146	101		65 - 135
1,2-Dichloroethane	50.0000	0.0000	49.4833	99		70 - 135
Benzene	50.0000	0.0000	50.1242	100		75 - 125
Trichloroethene	50.0000	0.0000	48.6249	97		75 - 125
1,2-Dichloropropane	50.0000	0.0000	49.9520	100		70 - 120
Dibromomethane	50.0000	0.0000	47.2990	95		75 - 130
Bromodichloromethane	50.0000	0.0000	50.2650	101		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	49.0710	98		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	48.9058	98		45 - 145
Toluene	50.0000	0.0000	49.5123	99		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	49.5412	99		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	49.2566	99		60 - 125
1,3-Dichloropropane	50.0000	0.0000	47.9848	96		75 - 125
Tetrachloroethene	50.0000	0.0000	48.2406	96		65 - 140
2-Hexanone	50.0000	0.0000	46.3232	93		45 - 145
Dibromochloromethane	50.0000	0.0000	47.2536	95		65 - 130
1,2-Dibromoethane	50.0000	0.0000	48.5745	97		70 - 125
Chlorobenzene	50.0000	0.0000	49.2239	98		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	46.9489	94		75 - 125
Ethylbenzene	50.0000	0.0000	48.3114	97		75 - 125
m,p-Xylene	100.0000	0.0000	96.6226	97		80 - 125
o-Xylene	50.0000	0.0000	49.0154	98		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75665 LCS Lot No.:

Date Extracted: 01/21/2014 Date Analyzed (1): 01/21/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	145.6381	97		83 - 125
Styrene	50.0000	0.0000	48.3138	97		75 - 125
Bromoform	50.0000	0.0000	49.2199	98		55 - 135
Isopropylbenzene	50.0000	0.0000	48.2486	96		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.1445	94		55 - 130
Bromobenzene	50.0000	0.0000	46.1911	92		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	50.6220	101		65 - 130
n-Propylbenzene	50.0000	0.0000	47.5443	95		65 - 135
2-Chlorotoluene	50.0000	0.0000	46.3277	93		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	48.3071	97		65 - 135
4-Chlorotoluene	50.0000	0.0000	46.9094	94		75 - 125
tert-Butylbenzene	50.0000	0.0000	48.7387	97		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.8857	96		65 - 135
sec-Butylbenzene	50.0000	0.0000	48.5877	97		65 - 130
4-Isopropyltoluene	50.0000	0.0000	49.5696	99		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	48.0528	96		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.4068	95		70 - 125
n-Butylbenzene	50.0000	0.0000	50.2403	100		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	47.8899	96		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	44.1193	88		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	49.0244	98		65 - 130
Hexachlorobutadiene	50.0000	0.0000	51.9512	104		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	51.5556	103		60 - 135
Naphthalene	50.0000	0.0000	49.9688	100		40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	54.5160	109		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75681 LCS Lot No.:

Date Extracted: 01/22/2014 Date Analyzed (1): 01/22/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	50.3296	101		35 - 135
Chloromethane	50.0000	0.0000	56.1461	112		50 - 130
Vinyl chloride	50.0000	0.0000	55.3852	111		60 - 125
Bromomethane	50.0000	0.0000	54.0387	108		30 - 160
Chloroethane	50.0000	0.0000	52.9269	106		40 - 155
Trichlorofluoromethane	50.0000	0.0000	54.7231	109		25 - 185
1,1-Dichloroethene	50.0000	0.0000	53.6199	107		65 - 135
Acetone	50.0000	0.0000	50.8241	102		20 - 160
Iodomethane	50.0000	0.0000	44.1450	88		70 - 126
Carbon disulfide	50.0000	0.0000	53.6213	107		45 - 160
Methylene chloride	50.0000	0.0000	48.2924	97		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.9933	106		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	49.1649	98		75 - 126
1,1-Dichloroethane	50.0000	0.0000	49.8797	100		75 - 125
Vinyl acetate	50.0000	0.0000	48.8425	98		65 - 138
2-Butanone	50.0000	0.0000	50.9762	102		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	51.1911	102		65 - 125
2,2-Dichloropropane	50.0000	0.0000	53.7307	107		65 - 135
Bromochloromethane	50.0000	0.0000	47.5084	95		70 - 125
Chloroform	50.0000	0.0000	49.9787	100		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	55.2295	110		70 - 135
1,1-Dichloropropene	50.0000	0.0000	52.8305	106		70 - 135
Carbon tetrachloride	50.0000	0.0000	57.0368	114		65 - 135
1,2-Dichloroethane	50.0000	0.0000	48.3082	97		70 - 135
Benzene	50.0000	0.0000	51.4989	103		75 - 125
Trichloroethene	50.0000	0.0000	51.0513	102		75 - 125
1,2-Dichloropropane	50.0000	0.0000	48.6354	97		70 - 120
Dibromomethane	50.0000	0.0000	49.5539	99		75 - 130
Bromodichloromethane	50.0000	0.0000	49.5754	99		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	48.5168	97		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	51.0828	102		45 - 145
Toluene	50.0000	0.0000	51.2710	103		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	48.4913	97		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	49.1360	98		60 - 125
1,3-Dichloropropane	50.0000	0.0000	51.6502	103		75 - 125
Tetrachloroethene	50.0000	0.0000	54.6908	109		65 - 140
2-Hexanone	50.0000	0.0000	59.6411	119		45 - 145
Dibromochloromethane	50.0000	0.0000	49.6088	99		65 - 130
1,2-Dibromoethane	50.0000	0.0000	50.0413	100		70 - 125
Chlorobenzene	50.0000	0.0000	51.7671	104		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.4637	103		75 - 125
Ethylbenzene	50.0000	0.0000	53.5624	107		75 - 125
m,p-Xylene	100.0000	0.0000	108.4984	108		80 - 125
o-Xylene	50.0000	0.0000	52.0977	104		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75681 LCS Lot No.:

Date Extracted: 01/22/2014 Date Analyzed (1): 01/22/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	160.5961	107		83 - 125
Styrene	50.0000	0.0000	52.2474	104		75 - 125
Bromoform	50.0000	0.0000	51.3432	103		55 - 135
Isopropylbenzene	50.0000	0.0000	53.9452	108		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	49.5829	99		55 - 130
Bromobenzene	50.0000	0.0000	52.1032	104		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	54.0492	108		65 - 130
n-Propylbenzene	50.0000	0.0000	53.6591	107		65 - 135
2-Chlorotoluene	50.0000	0.0000	49.7077	99		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	52.1454	104		65 - 135
4-Chlorotoluene	50.0000	0.0000	50.5351	101		75 - 125
tert-Butylbenzene	50.0000	0.0000	53.3026	107		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	50.7780	102		65 - 135
sec-Butylbenzene	50.0000	0.0000	53.8543	108		65 - 130
4-Isopropyltoluene	50.0000	0.0000	54.8004	110		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	51.4443	103		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	50.7747	102		70 - 125
n-Butylbenzene	50.0000	0.0000	55.7827	112		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	48.4295	97		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	60.6961	121		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	52.6874	105		65 - 130
Hexachlorobutadiene	50.0000	0.0000	54.0017	108		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	52.2240	104		60 - 135
Naphthalene	50.0000	0.0000	50.3282	101		40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	41.1218	82		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75683 LCS Lot No.:

Date Extracted: 01/22/2014 Date Analyzed (1): 01/22/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2500.0000	0.0000	1957.1282	78		35 - 135
Chloromethane	2500.0000	0.0000	1983.4291	79		50 - 130
Vinyl chloride	2500.0000	0.0000	2020.6633	81		60 - 125
Bromomethane	2500.0000	0.0000	1747.3513	70		30 - 160
Chloroethane	2500.0000	0.0000	1906.4328	76		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2342.3641	94		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2214.8638	89		65 - 135
Acetone	2500.0000	0.0000	2894.9107	116		20 - 160
Iodomethane	2500.0000	0.0000	2383.2805	95		70 - 126
Carbon disulfide	2500.0000	0.0000	2092.8060	84		45 - 160
Methylene chloride	2500.0000	0.0000	2293.7079	92		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2271.6325	91		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2359.9216	94		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2253.2994	90		75 - 125
Vinyl acetate	2500.0000	0.0000	2297.3002	92		65 - 138
2-Butanone	2500.0000	0.0000	2695.0385	108		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2230.1924	89		65 - 125
2,2-Dichloropropane	2500.0000	0.0000	2121.0737	85		65 - 135
Bromochloromethane	2500.0000	0.0000	2360.0523	94		70 - 125
Chloroform	2500.0000	0.0000	2257.3788	90		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2230.7592	89		70 - 135
1,1-Dichloropropene	2500.0000	0.0000	2121.2412	85		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2250.4102	90		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2393.9007	96		70 - 135
Benzene	2500.0000	0.0000	2269.5971	91		75 - 125
Trichloroethene	2500.0000	0.0000	2324.7900	93		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2243.1320	90		70 - 120
Dibromomethane	2500.0000	0.0000	2585.6160	103		75 - 130
Bromodichloromethane	2500.0000	0.0000	2300.8582	92		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2351.1418	94		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2556.3145	102		45 - 145
Toluene	2500.0000	0.0000	2292.5264	92		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2446.7702	98		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2375.6671	95		60 - 125
1,3-Dichloropropane	2500.0000	0.0000	2336.4560	93		75 - 125
Tetrachloroethene	2500.0000	0.0000	2156.0289	86		65 - 140
2-Hexanone	2500.0000	0.0000	2266.9815	91		45 - 145
Dibromochloromethane	2500.0000	0.0000	2332.3285	93		65 - 130
1,2-Dibromoethane	2500.0000	0.0000	2483.9694	99		70 - 125
Chlorobenzene	2500.0000	0.0000	2322.5133	93		75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	0.0000	2240.5892	90		75 - 125
Ethylbenzene	2500.0000	0.0000	2236.6866	89		75 - 125
m,p-Xylene	5000.0000	0.0000	4576.9784	92		80 - 125
o-Xylene	2500.0000	0.0000	2340.8015	94		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75683 LCS Lot No.:

Date Extracted: 01/22/2014 Date Analyzed (1): 01/22/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	7500.0000	0.0000	6917.7798	92		75 - 125
Styrene	2500.0000	0.0000	2300.3791	92		75 - 125
Bromoform	2500.0000	0.0000	2643.5456	106		55 - 135
Isopropylbenzene	2500.0000	0.0000	2248.8348	90		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2377.3295	95		55 - 130
Bromobenzene	2500.0000	0.0000	2254.9191	90		65 - 120
1,2,3-Trichloropropane	2500.0000	0.0000	2394.6851	96		65 - 130
n-Propylbenzene	2500.0000	0.0000	2213.5521	89		65 - 135
2-Chlorotoluene	2500.0000	0.0000	2251.4447	90		70 - 130
1,3,5-Trimethylbenzene	2500.0000	0.0000	2144.6338	86		65 - 135
4-Chlorotoluene	2500.0000	0.0000	2213.6564	89		75 - 125
tert-Butylbenzene	2500.0000	0.0000	2168.7904	87		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2150.3755	86		65 - 135
sec-Butylbenzene	2500.0000	0.0000	2168.5951	87		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2145.3990	86		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2210.2605	88		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2174.1870	87		70 - 125
n-Butylbenzene	2500.0000	0.0000	2144.1882	86		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2299.7109	92		75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	0.0000	2769.2194	111		40 - 135
1,2,4-Trichlorobenzene	2500.0000	0.0000	2378.3964	95		65 - 130
Hexachlorobutadiene	2500.0000	0.0000	2142.2523	86		55 - 140
1,2,3-Trichlorobenzene	2500.0000	0.0000	2604.6952	104		60 - 135
Naphthalene	2500.0000	0.0000	2802.8261	112		40 - 125
1,1,2-Trichloro-1,2,2-trif	2500.0000	0.0000	2024.6622	81		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75688 LCS Lot No.:

Date Extracted: 01/23/2014 Date Analyzed (1): 01/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	47.1446	94		35 - 135
Chloromethane	50.0000	0.0000	53.1832	106		50 - 130
Vinyl chloride	50.0000	0.0000	52.9041	106		60 - 125
Bromomethane	50.0000	0.0000	50.7292	101		30 - 160
Chloroethane	50.0000	0.0000	52.3946	105		40 - 155
Trichlorofluoromethane	50.0000	0.0000	53.0251	106		25 - 185
1,1-Dichloroethene	50.0000	0.0000	54.3746	109		65 - 135
Acetone	50.0000	0.0000	55.8282	112		20 - 160
Iodomethane	50.0000	0.0000	56.2382	112		70 - 126
Carbon disulfide	50.0000	0.0000	53.6797	107		45 - 160
Methylene chloride	50.0000	0.0000	49.6870	99		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	53.6700	107		65 - 135
Methyl tert-butyl ether	50.0000	0.0000	48.0960	96		75 - 126
1,1-Dichloroethane	50.0000	0.0000	50.1128	100		75 - 125
Vinyl acetate	50.0000	0.0000	48.0870	96		65 - 138
2-Butanone	50.0000	0.0000	49.2405	98		30 - 160
cis-1,2-Dichloroethene	50.0000	0.0000	50.0804	100		65 - 125
2,2-Dichloropropane	50.0000	0.0000	48.8246	98		65 - 135
Bromochloromethane	50.0000	0.0000	47.8482	96		70 - 125
Chloroform	50.0000	0.0000	49.2680	99		70 - 125
1,1,1-Trichloroethane	50.0000	0.0000	52.3466	105		70 - 135
1,1-Dichloropropene	50.0000	0.0000	50.3414	101		70 - 135
Carbon tetrachloride	50.0000	0.0000	54.5329	109		65 - 135
1,2-Dichloroethane	50.0000	0.0000	49.0658	98		70 - 135
Benzene	50.0000	0.0000	51.4890	103		75 - 125
Trichloroethene	50.0000	0.0000	50.6276	101		75 - 125
1,2-Dichloropropane	50.0000	0.0000	48.1333	96		70 - 120
Dibromomethane	50.0000	0.0000	48.3900	97		75 - 130
Bromodichloromethane	50.0000	0.0000	48.8642	98		70 - 130
cis-1,3-Dichloropropene	50.0000	0.0000	48.2270	96		70 - 125
4-Methyl-2-pentanone	50.0000	0.0000	47.9115	96		45 - 145
Toluene	50.0000	0.0000	50.5181	101		70 - 125
trans-1,3-Dichloropropene	50.0000	0.0000	48.9156	98		65 - 125
1,1,2-Trichloroethane	50.0000	0.0000	49.4965	99		60 - 125
1,3-Dichloropropane	50.0000	0.0000	48.4004	97		75 - 125
Tetrachloroethene	50.0000	0.0000	50.0050	100		65 - 140
2-Hexanone	50.0000	0.0000	51.3749	103		45 - 145
Dibromochloromethane	50.0000	0.0000	47.0146	94		65 - 130
1,2-Dibromoethane	50.0000	0.0000	49.0994	98		70 - 125
Chlorobenzene	50.0000	0.0000	48.7424	97		75 - 125
1,1,1,2-Tetrachloroethane	50.0000	0.0000	48.8678	98		75 - 125
Ethylbenzene	50.0000	0.0000	49.2616	99		75 - 125
m,p-Xylene	100.0000	0.0000	101.0279	101		80 - 125
o-Xylene	50.0000	0.0000	49.6226	99		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCS-75688 LCS Lot No.:

Date Extracted: 01/23/2014 Date Analyzed (1): 01/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	150.6505	100		83 - 125
Styrene	50.0000	0.0000	49.3751	99		75 - 125
Bromoform	50.0000	0.0000	47.8726	96		55 - 135
Isopropylbenzene	50.0000	0.0000	51.0012	102		75 - 130
1,1,2,2-Tetrachloroethane	50.0000	0.0000	46.4066	93		55 - 130
Bromobenzene	50.0000	0.0000	47.1132	94		65 - 120
1,2,3-Trichloropropane	50.0000	0.0000	48.5558	97		65 - 130
n-Propylbenzene	50.0000	0.0000	49.1894	98		65 - 135
2-Chlorotoluene	50.0000	0.0000	46.2852	93		70 - 130
1,3,5-Trimethylbenzene	50.0000	0.0000	48.7315	97		65 - 135
4-Chlorotoluene	50.0000	0.0000	45.7926	92		75 - 125
tert-Butylbenzene	50.0000	0.0000	50.0544	100		65 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.6746	97		65 - 135
sec-Butylbenzene	50.0000	0.0000	49.9475	100		65 - 130
4-Isopropyltoluene	50.0000	0.0000	51.3006	103		75 - 135
1,3-Dichlorobenzene	50.0000	0.0000	48.4178	97		70 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.2543	95		70 - 125
n-Butylbenzene	50.0000	0.0000	52.7385	105		65 - 140
1,2-Dichlorobenzene	50.0000	0.0000	45.9549	92		75 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	45.2138	90		40 - 135
1,2,4-Trichlorobenzene	50.0000	0.0000	51.3275	103		65 - 130
Hexachlorobutadiene	50.0000	0.0000	51.9203	104		55 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	49.2298	98		60 - 135
Naphthalene	50.0000	0.0000	48.0247	96		40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	41.2710	83		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCSD-75643 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	40.8423	82		0		40	35 - 135
Chloromethane	50.0000	52.2746	105		4		40	50 - 130
Vinyl chloride	50.0000	54.5626	109		6		40	60 - 125
Bromomethane	50.0000	48.8409	98		8		40	30 - 160
Chloroethane	50.0000	48.6731	97		9		40	40 - 155
Trichlorofluoromethane	50.0000	56.1674	112		6		40	25 - 185
1,1-Dichloroethene	50.0000	52.4706	105		6		40	65 - 135
Acetone	50.0000	50.1085	100		2		40	20 - 160
Iodomethane	50.0000	14.3113	29	*	117	*	40	70 - 126
Carbon disulfide	50.0000	53.2615	107		2		40	45 - 160
Methylene chloride	50.0000	48.7960	98		1		40	55 - 140
trans-1,2-Dichloroethene	50.0000	50.9224	102		3		40	65 - 135
Methyl tert-butyl ether	50.0000	51.3567	103		6		40	75 - 126
1,1-Dichloroethane	50.0000	52.6012	105		3		40	75 - 125
Vinyl acetate	50.0000	50.2080	100		2		40	65 - 138
2-Butanone	50.0000	50.4406	101		5		40	30 - 160
cis-1,2-Dichloroethene	50.0000	51.5936	103		1		40	65 - 125
2,2-Dichloropropane	50.0000	56.3267	113		7		40	65 - 135
Bromochloromethane	50.0000	50.6513	101		2		40	70 - 125
Chloroform	50.0000	52.0616	104		3		40	70 - 125
1,1,1-Trichloroethane	50.0000	55.2341	110		3		40	70 - 135
1,1-Dichloropropene	50.0000	55.2121	110		8		40	70 - 135
Carbon tetrachloride	50.0000	55.1628	110		0		40	65 - 135
1,2-Dichloroethane	50.0000	50.6668	101		2		40	70 - 135
Benzene	50.0000	53.5065	107		3		40	75 - 125
Trichloroethene	50.0000	52.8003	106		2		40	75 - 125
1,2-Dichloropropane	50.0000	51.3064	103		6		40	70 - 120
Dibromomethane	50.0000	52.1152	104		2		40	75 - 130
Bromodichloromethane	50.0000	50.3949	101		2		40	70 - 130
cis-1,3-Dichloropropene	50.0000	52.9189	106		4		40	70 - 125
4-Methyl-2-pentanone	50.0000	49.8856	100		1		40	45 - 145
Toluene	50.0000	53.6613	107		4		40	70 - 125
trans-1,3-Dichloropropene	50.0000	53.0907	106		4		40	65 - 125
1,1,2-Trichloroethane	50.0000	52.3606	105		1		40	60 - 125
1,3-Dichloropropane	50.0000	51.0164	102		0		40	75 - 125
Tetrachloroethene	50.0000	54.9661	110		3		40	65 - 140
2-Hexanone	50.0000	45.8448	92		17		40	45 - 145
Dibromochloromethane	50.0000	53.9013	108		4		40	65 - 130
1,2-Dibromoethane	50.0000	51.0684	102		4		40	70 - 125
Chlorobenzene	50.0000	53.6436	107		4		40	75 - 125
1,1,1,2-Tetrachloroethane	50.0000	52.4549	105		5		40	75 - 125
Ethylbenzene	50.0000	54.1750	108		3		40	75 - 125
m,p-Xylene	100.0000	108.2333	108		4		40	80 - 125
o-Xylene	50.0000	53.5860	107		4		40	75 - 125
Xylene (Total)	150.0000	161.8193	108		4		40	83 - 125
Styrene	50.0000	53.4128	107		2		40	75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCSD-75643 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	56.8635	114		9		40	55 - 135
Isopropylbenzene	50.0000	57.0476	114		4		40	75 - 130
1,1,2,2-Tetrachloroethane	50.0000	53.0592	106		7		40	55 - 130
Bromobenzene	50.0000	53.9736	108		9		40	65 - 120
1,2,3-Trichloropropane	50.0000	53.5202	107		5		40	65 - 130
n-Propylbenzene	50.0000	57.1858	114		7		40	65 - 135
2-Chlorotoluene	50.0000	55.1856	110		7		40	70 - 130
1,3,5-Trimethylbenzene	50.0000	56.2533	113		7		40	65 - 135
4-Chlorotoluene	50.0000	52.9390	106		6		40	75 - 125
tert-Butylbenzene	50.0000	56.5569	113		5		40	65 - 130
1,2,4-Trimethylbenzene	50.0000	55.1815	110		7		40	65 - 135
sec-Butylbenzene	50.0000	57.3707	115		5		40	65 - 130
4-Isopropyltoluene	50.0000	55.9620	112		4		40	75 - 135
1,3-Dichlorobenzene	50.0000	53.7116	107		3		40	70 - 125
1,4-Dichlorobenzene	50.0000	53.3948	107		4		40	70 - 125
n-Butylbenzene	50.0000	56.6724	113		4		40	65 - 140
1,2-Dichlorobenzene	50.0000	52.6652	105		4		40	75 - 120
1,2-Dibromo-3-chloropropan	50.0000	51.3483	103		4		40	40 - 135
1,2,4-Trichlorobenzene	50.0000	45.5499	91		13		40	65 - 130
Hexachlorobutadiene	50.0000	48.8053	98		11		40	55 - 140
1,2,3-Trichlorobenzene	50.0000	46.3087	93		10		40	60 - 135
Naphthalene	50.0000	50.3482	101		6		40	40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	64.0944	128		17		40	70 - 130

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

* Values outside of QC limits

RPD: 1 out of 69 outside limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCSD-75683 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2500.0000	2149.3609	86		10		40	35 - 135
Chloromethane	2500.0000	2126.7108	85		7		40	50 - 130
Vinyl chloride	2500.0000	2206.0282	88		8		40	60 - 125
Bromomethane	2500.0000	2116.7923	85		19		40	30 - 160
Chloroethane	2500.0000	2193.6074	88		15		40	40 - 155
Trichlorofluoromethane	2500.0000	2510.5977	100		6		40	25 - 185
1,1-Dichloroethene	2500.0000	2385.0286	95		7		40	65 - 135
Acetone	2500.0000	3688.1031	148		24		40	20 - 160
Iodomethane	2500.0000	2497.7169	100		5		40	70 - 126
Carbon disulfide	2500.0000	2322.0552	93		10		40	45 - 160
Methylene chloride	2500.0000	2314.4957	93		1		40	55 - 140
trans-1,2-Dichloroethene	2500.0000	2347.9759	94		3		40	65 - 135
Methyl tert-butyl ether	2500.0000	2349.5230	94		0		40	75 - 126
1,1-Dichloroethane	2500.0000	2294.0882	92		2		40	75 - 125
Vinyl acetate	2500.0000	2317.0634	93		1		40	65 - 138
2-Butanone	2500.0000	3227.6354	129		18		40	30 - 160
cis-1,2-Dichloroethene	2500.0000	2331.3855	93		4		40	65 - 125
2,2-Dichloropropane	2500.0000	2321.2862	93		9		40	65 - 135
Bromochloromethane	2500.0000	2453.1776	98		4		40	70 - 125
Chloroform	2500.0000	2337.4771	93		3		40	70 - 125
1,1,1-Trichloroethane	2500.0000	2343.5441	94		5		40	70 - 135
1,1-Dichloropropene	2500.0000	2324.1959	93		9		40	70 - 135
Carbon tetrachloride	2500.0000	2435.7171	97		7		40	65 - 135
1,2-Dichloroethane	2500.0000	2376.5385	95		1		40	70 - 135
Benzene	2500.0000	2352.4969	94		3		40	75 - 125
Trichloroethene	2500.0000	2532.2375	101		8		40	75 - 125
1,2-Dichloropropane	2500.0000	2425.2417	97		7		40	70 - 120
Dibromomethane	2500.0000	2600.7044	104		1		40	75 - 130
Bromodichloromethane	2500.0000	2405.1586	96		4		40	70 - 130
cis-1,3-Dichloropropene	2500.0000	2442.9502	98		4		40	70 - 125
4-Methyl-2-pentanone	2500.0000	2524.9893	101		1		40	45 - 145
Toluene	2500.0000	2411.1190	96		4		40	70 - 125
trans-1,3-Dichloropropene	2500.0000	2437.9795	98		0		40	65 - 125
1,1,2-Trichloroethane	2500.0000	2426.1656	97		2		40	60 - 125
1,3-Dichloropropane	2500.0000	2368.6721	95		2		40	75 - 125
Tetrachloroethene	2500.0000	2386.1960	95		10		40	65 - 140
2-Hexanone	2500.0000	2544.3291	102		11		40	45 - 145
Dibromochloromethane	2500.0000	2442.3594	98		5		40	65 - 130
1,2-Dibromoethane	2500.0000	2597.5175	104		5		40	70 - 125
Chlorobenzene	2500.0000	2433.0763	97		4		40	75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	2404.0649	96		6		40	75 - 125
Ethylbenzene	2500.0000	2347.4569	94		5		40	75 - 125
m,p-Xylene	5000.0000	4811.6034	96		4		40	80 - 125
o-Xylene	2500.0000	2514.1924	101		7		40	75 - 125
Xylene (Total)	7500.0000	7325.7958	98		6		40	75 - 125
Styrene	2500.0000	2484.2531	99		7		40	75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCSD-75683 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	2500.0000	2669.2465	107		1		40	55 - 135
Isopropylbenzene	2500.0000	2453.8060	98		9		40	75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	2477.7433	99		4		40	55 - 130
Bromobenzene	2500.0000	2398.2256	96		6		40	65 - 120
1,2,3-Trichloropropane	2500.0000	2541.3300	102		6		40	65 - 130
n-Propylbenzene	2500.0000	2316.7949	93		4		40	65 - 135
2-Chlorotoluene	2500.0000	2470.1164	99		10		40	70 - 130
1,3,5-Trimethylbenzene	2500.0000	2363.4944	95		10		40	65 - 135
4-Chlorotoluene	2500.0000	2437.4120	97		9		40	75 - 125
tert-Butylbenzene	2500.0000	2434.5770	97		11		40	65 - 130
1,2,4-Trimethylbenzene	2500.0000	2362.0647	94		9		40	65 - 135
sec-Butylbenzene	2500.0000	2350.7317	94		8		40	65 - 130
4-Isopropyltoluene	2500.0000	2369.5750	95		10		40	75 - 135
1,3-Dichlorobenzene	2500.0000	2452.1398	98		11		40	70 - 125
1,4-Dichlorobenzene	2500.0000	2326.9926	93		7		40	70 - 125
n-Butylbenzene	2500.0000	2484.4227	99		14		40	65 - 140
1,2-Dichlorobenzene	2500.0000	2475.2193	99		7		40	75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	2905.3249	116		4		40	40 - 135
1,2,4-Trichlorobenzene	2500.0000	2613.4620	105		10		40	65 - 130
Hexachlorobutadiene	2500.0000	2503.2967	100		15		40	55 - 140
1,2,3-Trichlorobenzene	2500.0000	2752.5315	110		6		40	60 - 135
Naphthalene	2500.0000	2980.4164	119		6		40	40 - 125
1,1,2-Trichloro-1,2,2-trif	2500.0000	2277.9024	91		12		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCSD-75688 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	58.5886	117		22		40	35 - 135
Chloromethane	50.0000	59.3430	119		12		40	50 - 130
Vinyl chloride	50.0000	57.5390	115		8		40	60 - 125
Bromomethane	50.0000	55.2082	110		9		40	30 - 160
Chloroethane	50.0000	58.8436	118		12		40	40 - 155
Trichlorofluoromethane	50.0000	58.7075	117		10		40	25 - 185
1,1-Dichloroethene	50.0000	55.4093	111		2		40	65 - 135
Acetone	50.0000	57.9260	116		4		40	20 - 160
Iodomethane	50.0000	62.2407	124		10		40	70 - 126
Carbon disulfide	50.0000	56.9919	114		6		40	45 - 160
Methylene chloride	50.0000	55.0203	110		11		40	55 - 140
trans-1,2-Dichloroethene	50.0000	57.1079	114		6		40	65 - 135
Methyl tert-butyl ether	50.0000	56.0446	112		15		40	75 - 126
1,1-Dichloroethane	50.0000	57.4917	115		14		40	75 - 125
Vinyl acetate	50.0000	54.9060	110		14		40	65 - 138
2-Butanone	50.0000	54.2340	108		10		40	30 - 160
cis-1,2-Dichloroethene	50.0000	57.1112	114		13		40	65 - 125
2,2-Dichloropropane	50.0000	58.5350	117		18		40	65 - 135
Bromochloromethane	50.0000	54.6183	109		13		40	70 - 125
Chloroform	50.0000	54.8124	110		11		40	70 - 125
1,1,1-Trichloroethane	50.0000	59.0935	118		12		40	70 - 135
1,1-Dichloropropene	50.0000	57.3142	115		13		40	70 - 135
Carbon tetrachloride	50.0000	60.8778	122		11		40	65 - 135
1,2-Dichloroethane	50.0000	55.2544	111		12		40	70 - 135
Benzene	50.0000	57.9829	116		12		40	75 - 125
Trichloroethene	50.0000	56.8994	114		12		40	75 - 125
1,2-Dichloropropane	50.0000	56.4275	113		16		40	70 - 120
Dibromomethane	50.0000	54.6161	109		12		40	75 - 130
Bromodichloromethane	50.0000	56.4749	113		14		40	70 - 130
cis-1,3-Dichloropropene	50.0000	54.8828	110		14		40	70 - 125
4-Methyl-2-pentanone	50.0000	57.6371	115		18		40	45 - 145
Toluene	50.0000	58.0634	116		14		40	70 - 125
trans-1,3-Dichloropropene	50.0000	55.9860	112		13		40	65 - 125
1,1,2-Trichloroethane	50.0000	56.2187	112		12		40	60 - 125
1,3-Dichloropropane	50.0000	54.8091	110		13		40	75 - 125
Tetrachloroethene	50.0000	56.7521	114		13		40	65 - 140
2-Hexanone	50.0000	59.7390	119		14		40	45 - 145
Dibromochloromethane	50.0000	53.9270	108		14		40	65 - 130
1,2-Dibromoethane	50.0000	54.8260	110		12		40	70 - 125
Chlorobenzene	50.0000	55.2359	110		13		40	75 - 125
1,1,1,2-Tetrachloroethane	50.0000	54.1756	108		10		40	75 - 125
Ethylbenzene	50.0000	55.5140	111		11		40	75 - 125
m,p-Xylene	100.0000	112.2164	112		10		40	80 - 125
o-Xylene	50.0000	55.1837	110		11		40	75 - 125
Xylene (Total)	150.0000	167.4001	112		11		40	83 - 125
Styrene	50.0000	55.3416	111		11		40	75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab Sample ID: LCSD-75688 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	55.6073	111		14		40	55 - 135
Isopropylbenzene	50.0000	56.9564	114		11		40	75 - 130
1,1,2,2-Tetrachloroethane	50.0000	54.2189	108		15		40	55 - 130
Bromobenzene	50.0000	53.0049	106		12		40	65 - 120
1,2,3-Trichloropropane	50.0000	59.5730	119		20		40	65 - 130
n-Propylbenzene	50.0000	55.8545	112		13		40	65 - 135
2-Chlorotoluene	50.0000	55.0644	110		17		40	70 - 130
1,3,5-Trimethylbenzene	50.0000	56.1444	112		14		40	65 - 135
4-Chlorotoluene	50.0000	52.1377	104		12		40	75 - 125
tert-Butylbenzene	50.0000	56.8911	114		13		40	65 - 130
1,2,4-Trimethylbenzene	50.0000	55.7330	111		13		40	65 - 135
sec-Butylbenzene	50.0000	56.9624	114		13		40	65 - 130
4-Isopropyltoluene	50.0000	58.1295	116		12		40	75 - 135
1,3-Dichlorobenzene	50.0000	55.1222	110		13		40	70 - 125
1,4-Dichlorobenzene	50.0000	53.6517	107		12		40	70 - 125
n-Butylbenzene	50.0000	58.7943	118		12		40	65 - 140
1,2-Dichlorobenzene	50.0000	55.0508	110		18		40	75 - 120
1,2-Dibromo-3-chloropropan	50.0000	64.0248	128		35		40	40 - 135
1,2,4-Trichlorobenzene	50.0000	58.4628	117		13		40	65 - 130
Hexachlorobutadiene	50.0000	60.3515	121		15		40	55 - 140
1,2,3-Trichlorobenzene	50.0000	60.9615	122		22		40	60 - 135
Naphthalene	50.0000	58.1810	116		19		40	40 - 125
1,1,2-Trichloro-1,2,2-trif	50.0000	43.2485	86		4		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7477.D Lab Sample ID: MB-75643

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 01/20/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:17

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-75643	LCS-75643	V1M7474.D	9:51
02	LCSD-75643	LCSD-75643	V1M7475.D	10:20
03	HW-WET-SE-6-(1)_01/	N0058-01A	V1M7478.D	11:45
04	HW-WET-SE-5-(1)_01/	N0058-02A	V1M7479.D	12:14
05	HW-WET-SE-12-(1)_01	N0058-03A	V1M7480.D	12:42
06	HW-WET-SE-11-(1)_01	N0058-04A	V1M7481.D	13:10
07	HW-WET-SE-10-(1)_01	N0058-05A	V1M7482.D	13:42
08	HW-WET-SE-8-(1)_01/	N0058-07A	V1M7484.D	14:45

COMMENTS:

som13.12.31.1153

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
MB-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7505.D Lab Sample ID: MB-75665

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 01/21/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:24

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-75665	LCS-75665	V1M7503.D	16:28
02	HW-WET-SE-(1)_01/15	N0058-09A	V1M7506.D	17:53
03	HW-WET-SE-2-(1)_01/	N0058-10A	V1M7507.D	18:21
04	HW-WET-SE-4-(1)_01/	N0058-12A	V1M7509.D	19:17
05	HW-WET-SE-15-(1)_01	N0058-15A	V1M7512.D	20:42
06	HW-WET-SE-14-(1)_01	N0058-16A	V1M7513.D	21:10
07	HW-WET-SE-13-(1)_01	N0058-17A	V1M7514.D	21:38

COMMENTS:

som13.12.31.1153

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7527.D Lab Sample ID: MB-75681

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 01/22/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:02

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-75681	LCS-75681	V1M7523.D	12:05
02	HW-WET-SE-7-(1)_01/	N0058-08A	V1M7531.D	14:55
03	HW-WET-SE-17-(1)_01	N0058-13A	V1M7537.D	17:44
04	HW-WET-SE-16-(1)_01	N0058-14A	V1M7538.D	18:13
05	HW-WET-SE-4-(1)_01/	N0058-12AMS	V1M7544.D	21:01
06	HW-WET-SE-4-(1)_01/	N0058-12AMSD	V1M7545.D	21:29

COMMENTS:

som13.12.31.1153

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
MB-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7555.D Lab Sample ID: MB-75688

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 01/23/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:53

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-75688	LCS-75688	V1M7552.D	10:19
02	LCSD-75688	LCSD-75688	V1M7553.D	10:47
03	HW-WET-SE-9-(1)_01/	N0058-06A	V1M7556.D	12:34

COMMENTS:

som13.12.31.1153

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
MB-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V5O9554.D Lab Sample ID: MB-75683

Instrument ID: V5

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 01/22/2014

Level: (TRACE or LOW/MED) MED Time Analyzed: 15:41

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-75683	LCS-75683	V5O9552.D	14:24
02	LCSD-75683	LCSD-75683	V5O9553.D	14:50
03	HW-WET-SE-4-(1)_01/MEMEME	N0058-12A	V5O9555.D	16:06
04	HW-WET-SE-3-(1)_01/	N0058-11A	V5O9556.D	16:32
05	HW-WET-SE-3-(1)_01/	N0058-11ADL	V5O9563.D	19:28

COMMENTS:

som13.12.31.1153

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB1W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7417.D BFB Injection Date: 01/16/2014

Instrument ID: V1 BFB Injection Time: 12:23

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.7
75	30.0 - 60.0% of mass 95	39.2
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	0.1 (0.1)1
174	Greater than 50.0% of mass 95	63.5
175	5.0 - 9.0% of mass 174	5.0 (7.8)1
176	95.0 - 101.0% of mass 174	62.7 (98.8)1
177	5.0 - 9.0% of mass 176	3.9 (6.2)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	VSTD0051W	VSTD0051W	V1M7418.D	01/16/2014	12:54
02	VSTD0201W	VSTD0201W	V1M7419.D	01/16/2014	13:22
03	VSTD0501W	VSTD0501W	V1M7420.D	01/16/2014	13:50
04	VSTD1001W	VSTD1001W	V1M7421.D	01/16/2014	14:18
05	VSTD2001W	VSTD2001W	V1M7422.D	01/16/2014	14:46

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.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7472.D BFB Injection Date: 01/20/2014

Instrument ID: V1 BFB Injection Time: 8:34

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	39.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	65.9
175	5.0 - 9.0% of mass 174	3.7 (5.6)1
176	95.0 - 101.0% of mass 174	63.1 (95.8)1
177	5.0 - 9.0% of mass 176	4.1 (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	VSTD0501Y	VSTD0501Y	V1M7473.D	01/20/2014	9:11
02	LCS-75643	LCS-75643	V1M7474.D	01/20/2014	9:51
03	LCSD-75643	LCSD-75643	V1M7475.D	01/20/2014	10:20
04	MB-75643	MB-75643	V1M7477.D	01/20/2014	11:17
05	HW-WET-SE-6-(1)_01/	N0058-01A	V1M7478.D	01/20/2014	11:45
06	HW-WET-SE-5-(1)_01/	N0058-02A	V1M7479.D	01/20/2014	12:14
07	HW-WET-SE-12-(1)_01	N0058-03A	V1M7480.D	01/20/2014	12:42
08	HW-WET-SE-11-(1)_01	N0058-04A	V1M7481.D	01/20/2014	13:10
09	HW-WET-SE-10-(1)_01	N0058-05A	V1M7482.D	01/20/2014	13:42
10	HW-WET-SE-8-(1)_01/	N0058-07A	V1M7484.D	01/20/2014	14:45

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.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7496.D BFB Injection Date: 01/21/2014

Instrument ID: V1 BFB Injection Time: 13:10

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	36.3
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	79.7
175	5.0 - 9.0% of mass 174	5.8 (7.3)1
176	95.0 - 101.0% of mass 174	79.0 (99.0)1
177	5.0 - 9.0% of mass 176	5.0 (6.3)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	VSTD0051Z	VSTD0051Z	V1M7497.D	01/21/2014	13:38
02	VSTD0201Z	VSTD0201Z	V1M7498.D	01/21/2014	14:06
03	VSTD0501Z	VSTD0501Z	V1M7499.D	01/21/2014	14:35
04	VSTD1001Z	VSTD1001Z	V1M7500.D	01/21/2014	15:03
05	VSTD2001Z	VSTD2001Z	V1M7501.D	01/21/2014	15:31
06	LCS-75665	LCS-75665	V1M7503.D	01/21/2014	16:28
07	MB-75665	MB-75665	V1M7505.D	01/21/2014	17:24
08	HW-WET-SE-(1)_01/15	N0058-09A	V1M7506.D	01/21/2014	17:53
09	HW-WET-SE-2-(1)_01/	N0058-10A	V1M7507.D	01/21/2014	18:21
10	HW-WET-SE-4-(1)_01/	N0058-12A	V1M7509.D	01/21/2014	19:17
11	HW-WET-SE-15-(1)_01	N0058-15A	V1M7512.D	01/21/2014	20:42
12	HW-WET-SE-14-(1)_01	N0058-16A	V1M7513.D	01/21/2014	21:10
13	HW-WET-SE-13-(1)_01	N0058-17A	V1M7514.D	01/21/2014	21:38

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

CLIENT SAMPLE NO.
BFB1A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7520.D BFB Injection Date: 01/22/2014

Instrument ID: V1 BFB Injection Time: 10:33

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.4
75	30.0 - 60.0% of mass 95	39.7
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	0.0 (0.0)1
174	Greater than 50.0% of mass 95	68.4
175	5.0 - 9.0% of mass 174	5.5 (8.1)1
176	95.0 - 101.0% of mass 174	66.4 (97.0)1
177	5.0 - 9.0% of mass 176	4.3 (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	VSTD0501A	VSTD0501A	V1M7522.D	01/22/2014	11:27
02	LCS-75681	LCS-75681	V1M7523.D	01/22/2014	12:05
03	MB-75681	MB-75681	V1M7527.D	01/22/2014	13:02
04	HW-WET-SE-7-(1)_01/	N0058-08A	V1M7531.D	01/22/2014	14:55
05	HW-WET-SE-17-(1)_01	N0058-13A	V1M7537.D	01/22/2014	17:44
06	HW-WET-SE-16-(1)_01	N0058-14A	V1M7538.D	01/22/2014	18:13
07	HW-WET-SE-4-(1)_01/	N0058-12AMS	V1M7544.D	01/22/2014	21:01
08	HW-WET-SE-4-(1)_01/	N0058-12AMSD	V1M7545.D	01/22/2014	21:29

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

CLIENT SAMPLE NO.
BFB1B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V1M7550.D BFB Injection Date: 01/23/2014

Instrument ID: V1 BFB Injection Time: 8:43

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	39.8
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	0.0 (0.0)1
174	Greater than 50.0% of mass 95	67.8
175	5.0 - 9.0% of mass 174	5.3 (7.9)1
176	95.0 - 101.0% of mass 174	66.3 (97.8)1
177	5.0 - 9.0% of mass 176	4.6 (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	VSTD0501B	VSTD0501B	V1M7551.D	01/23/2014	9:37
02	LCS-75688	LCS-75688	V1M7552.D	01/23/2014	10:19
03	LCSD-75688	LCSD-75688	V1M7553.D	01/23/2014	10:47
04	MB-75688	MB-75688	V1M7555.D	01/23/2014	11:53
05	HW-WET-SE-9-(1)_01/	N0058-06A	V1M7556.D	01/23/2014	12:34

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFB5K

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V5O9510.D BFB Injection Date: 01/21/2014

Instrument ID: V5 BFB Injection Time: 10:34

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.0
75	30.0 - 60.0% of mass 95	47.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	92.0
175	5.0 - 9.0% of mass 174	8.2 (9.0)1
176	95.0 - 101.0% of mass 174	88.9 (96.6)1
177	5.0 - 9.0% of mass 176	5.9 (6.6)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	VSTD0015K	VSTD0015K	V5O9511.D	01/21/2014	10:59
02	VSTD0055K	VSTD0055K	V5O9512.D	01/21/2014	11:24
03	VSTD0205K	VSTD0205K	V5O9513.D	01/21/2014	11:50
04	VSTD0505K	VSTD0505K	V5O9514.D	01/21/2014	12:16
05	VSTD1005K	VSTD1005K	V5O9515.D	01/21/2014	12:41
06	VSTD2005K	VSTD2005K	V5O9516.D	01/21/2014	13:07

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

CLIENT SAMPLE NO.
BFB5M

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Lab File ID: V5O9550.D BFB Injection Date: 01/22/2014

Instrument ID: V5 BFB Injection Time: 13:15

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.7
75	30.0 - 60.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	94.0
175	5.0 - 9.0% of mass 174	5.9 (6.2)1
176	95.0 - 101.0% of mass 174	91.5 (97.4)1
177	5.0 - 9.0% of mass 176	6.7 (7.3)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	VSTD0505M	VSTD0505M	V5O9551.D	01/22/2014	13:59
02	LCS-75683	LCS-75683	V5O9552.D	01/22/2014	14:24
03	LCSD-75683	LCSD-75683	V5O9553.D	01/22/2014	14:50
04	MB-75683	MB-75683	V5O9554.D	01/22/2014	15:41
05	HW-WET-SE-4-(1)_01/MEMEME	N0058-12A	V5O9555.D	01/22/2014	16:06
06	HW-WET-SE-3-(1)_01/	N0058-11A	V5O9556.D	01/22/2014	16:32
07	HW-WET-SE-3-(1)_01/	N0058-11ADL	V5O9563.D	01/22/2014	19:28

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/16/2014 01/16/2014

EPA Sample No.(VSTD#####): VSTD0501Y Date Analyzed: 01/20/2014

Lab File ID (Standard): V1M7473.D Time Analyzed: 9:11

Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1) AREA #	RT #	IS2 (S2) AREA #	RT #	IS3 (S3) AREA #	RT #
	12 HOUR STD	538202	4.48	356845	7.336	150174	9.907
	UPPER LIMIT	1076404	4.98	713690	7.836	300348	10.407
	LOWER LIMIT	269101	3.98	178423	6.836	75087	9.407
	SAMPLE NO.						
01	LCS-75643	535014	4.483	353927	7.340	150099	9.910
02	LCSD-75643	607967	4.484	406003	7.351	166046	9.912
03	MB-75643	455082	4.478	305104	7.345	125685	9.915
04	HW-WET-SE-6-(1)_01/	502341	4.493	334607	7.359	138326	9.910
05	HW-WET-SE-5-(1)_01/	493794	4.485	332633	7.351	130516	9.912
06	HW-WET-SE-12-(1)_01	501278	4.480	340210	7.346	134284	9.917
07	HW-WET-SE-11-(1)_01	481254	4.479	332430	7.355	136506	9.916
08	HW-WET-SE-10-(1)_01	444382	4.478	292151	7.345	109015	9.915
09	HW-WET-SE-8-(1)_01/	442609	4.484	309716	7.350	130553	9.911

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.: N0058 Mod. Ref No.: SDG No.: SN0058

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####): VSTD0501Z Date Analyzed: 01/21/2014

Lab File ID (Standard): V1M7499.D Time Analyzed: 14:35

Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1) AREA #	RT #	IS2 (S2) AREA #	RT #	IS3 (S3) AREA #	RT #
	12 HOUR STD	526156	4.474	351619	7.33	152520	9.901
	UPPER LIMIT	1052312	4.974	703238	7.83	305040	10.401
	LOWER LIMIT	263078	3.974	175810	6.83	76260	9.401
	SAMPLE NO.						
01	LCS-75665	503453	4.470	349577	7.336	153999	9.897
02	MB-75665	470221	4.469	322092	7.335	132635	9.896
03	HW-WET-SE-(1)_01/15	501373	4.454	332338	7.330	132784	9.891
04	HW-WET-SE-2-(1)_01/	512504	4.473	358177	7.339	147697	9.900
05	HW-WET-SE-4-(1)_01/	436550	4.469	262430	7.325	83364	9.896
06	HW-WET-SE-15-(1)_01	505700	4.473	334717	7.329	140091	9.900
07	HW-WET-SE-14-(1)_01	526560	4.479	356829	7.335	142056	9.896
08	HW-WET-SE-13-(1)_01	499035	4.479	344293	7.336	145861	9.896

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.

som13.12.31.1153

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####): VSTD0501A Date Analyzed: 01/22/2014

Lab File ID (Standard): V1M7522.D Time Analyzed: 11:27

Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	516647		4.488		355856		7.354		156172		9.915	
	UPPER LIMIT	1033294		4.988		711712		7.854		312344		10.415	
	LOWER LIMIT	258324		3.988		177928		6.854		78086		9.415	
	SAMPLE NO.												
01	LCS-75681	510174		4.495		334265		7.352		148238		9.922	
02	MB-75681	490673		4.489		330146		7.355		137857		9.916	
03	HW-WET-SE-7-(1)_01/	488954		4.479		327346		7.346		135048		9.907	
04	HW-WET-SE-17-(1)_01	494109		4.488		330753		7.345		140557		9.916	
05	HW-WET-SE-16-(1)_01	462005		4.479		326059		7.345		132430		9.906	
06	HW-WET-SE-4-(1)_01/	480638		4.485		327967		7.342		135995		9.903	
07	HW-WET-SE-4-(1)_01/	508261		4.468		339638		7.335		138283		9.905	

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.

som13.12.31.1153

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####): VSTD0501B Date Analyzed: 01/23/2014

Lab File ID (Standard): V1M7551.D Time Analyzed: 9:37

Instrument ID: V1 Heated Purge: (Y/N) Y

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	560135		4.468		397658		7.335		172875		9.905	
	UPPER LIMIT	1120270		4.968		795316		7.835		345750		10.405	
	LOWER LIMIT	280068		3.968		198829		6.835		86438		9.405	
	SAMPLE NO.												
01	LCS-75688	500192		4.469		342213		7.335		152611		9.896	
02	LCSD-75688	448760		4.466		310433		7.332		136801		9.903	
03	MB-75688	473476		4.467		326482		7.333		135707		9.894	
04	HW-WET-SE-9-(1)_01/	482095		4.466		329764		7.332		129362		9.893	

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.

som13.12.31.1153

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####): VSTD0505M Date Analyzed: 01/22/2014

Lab File ID (Standard): V5O9551.D Time Analyzed: 13:59

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	101397		5.586		129906		9.045		82685		12.203	
	UPPER LIMIT	202794		6.086		259812		9.545		165370		12.703	
	LOWER LIMIT	50699		5.086		64953		8.545		41343		11.703	
	SAMPLE NO.												
01	LCS-75683	99354		5.575		127506		9.046		86083		12.204	
02	LCSD-75683	102730		5.580		129075		9.051		85552		12.209	
03	MB-75683	104121		5.576		132447		9.047		86037		12.205	
04	HW-WET-SE-4-(1)_01/MEMEME	97620		5.575		125747		9.047		83802		12.204	
05	HW-WET-SE-3-(1)_01/	101456		5.579		128882		9.050		85035		12.208	
06	HW-WET-SE-3-(1)_01/	101614		5.582		133704		9.041		88354		12.199	

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.

som13.12.31.1153

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-6-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-01A

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V1M7478.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 33 Date Analyzed: 01/20/2014

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	7.3	U
74-87-3	Chloromethane	7.3	U
75-01-4	Vinyl chloride	7.3	U
74-83-9	Bromomethane	7.3	U
75-00-3	Chloroethane	7.3	U
75-69-4	Trichlorofluoromethane	7.3	U
75-35-4	1,1-Dichloroethene	7.3	U
67-64-1	Acetone	11	JL
74-88-4	Iodomethane	7.3	U
75-15-0	Carbon disulfide	7.3	U
75-09-2	Methylene chloride	7.3	U
156-60-5	trans-1,2-Dichloroethene	7.3	U
1634-04-4	Methyl tert-butyl ether	7.3	U
75-34-3	1,1-Dichloroethane	7.3	U
108-05-4	Vinyl acetate	7.3	U
78-93-3	2-Butanone	7.3	U
156-59-2	cis-1,2-Dichloroethene	7.3	U
594-20-7	2,2-Dichloropropane	7.3	U
74-97-5	Bromochloromethane	7.3	U
67-66-3	Chloroform	7.3	U
71-55-6	1,1,1-Trichloroethane	7.3	U
563-58-6	1,1-Dichloropropene	7.3	U
56-23-5	Carbon tetrachloride	7.3	U
107-06-2	1,2-Dichloroethane	7.3	U
71-43-2	Benzene	7.3	U
79-01-6	Trichloroethene	7.3	U
78-87-5	1,2-Dichloropropane	7.3	U
74-95-3	Dibromomethane	7.3	U
75-27-4	Bromodichloromethane	7.3	U
10061-01-5	cis-1,3-Dichloropropene	7.3	U
108-10-1	4-Methyl-2-pentanone	7.3	U
108-88-3	Toluene	7.3	U
10061-02-6	trans-1,3-Dichloropropene	7.3	U
79-00-5	1,1,2-Trichloroethane	7.3	U
142-28-9	1,3-Dichloropropane	7.3	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-6-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-01A

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V1M7478.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 33 Date Analyzed: 01/20/2014

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	7.3	U
591-78-6	2-Hexanone	7.3	U
124-48-1	Dibromochloromethane	7.3	U
106-93-4	1,2-Dibromoethane	7.3	U
108-90-7	Chlorobenzene	7.3	U
630-20-6	1,1,1,2-Tetrachloroethane	7.3	U
100-41-4	Ethylbenzene	7.3	U
179601-23-1	m,p-Xylene	7.3	U
95-47-6	o-Xylene	7.3	U
1330-20-7	Xylene (Total)	7.3	U
100-42-5	Styrene	7.3	U
75-25-2	Bromoform	7.3	U
98-82-8	Isopropylbenzene	7.3	U
79-34-5	1,1,2,2-Tetrachloroethane	7.3	U
108-86-1	Bromobenzene	7.3	U
96-18-4	1,2,3-Trichloropropane	7.3	U
103-65-1	n-Propylbenzene	7.3	U
95-49-8	2-Chlorotoluene	7.3	U
108-67-8	1,3,5-Trimethylbenzene	7.3	U
106-43-4	4-Chlorotoluene	7.3	U
98-06-6	tert-Butylbenzene	7.3	U
95-63-6	1,2,4-Trimethylbenzene	7.3	U
135-98-8	sec-Butylbenzene	7.3	U
99-87-6	4-Isopropyltoluene	7.3	U
541-73-1	1,3-Dichlorobenzene	7.3	U
106-46-7	1,4-Dichlorobenzene	7.3	U
104-51-8	n-Butylbenzene	7.3	U
95-50-1	1,2-Dichlorobenzene	7.3	U
96-12-8	1,2-Dibromo-3-chloropropane	7.3	U
120-82-1	1,2,4-Trichlorobenzene	7.3	U
87-68-3	Hexachlorobutadiene	7.3	U
87-61-6	1,2,3-Trichlorobenzene	7.3	U
91-20-3	Naphthalene	7.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.3	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7478.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7478.D
Lab Smp Id: N0058-01A Client Smp ID: HW-WET-SE-6-(1)_01/
Inj Date : 20-JAN-2014 11:45
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-01A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	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)
	11 Acetone	58	2.325	2.322	(0.518)	5302	7.42377	7(Q)
$	32 Dibromofluoromethane	113	3.941	3.918	(0.877)	131374	50.9595	50
$	37 1,2-Dichloroethane-d4	102	4.207	4.194	(0.936)	33792	49.2139	48
*	41 Fluorobenzene	96	4.492	4.479	(1.000)	502341	50.0000	
$	51 Toluene-d8	98	5.911	5.888	(0.803)	467661	49.8797	49
*	60 Chlorobenzene-d5	117	7.359	7.336	(1.000)	334607	50.0000	
$	70 Bromofluorobenzene	95	8.639	8.626	(1.174)	179593	49.1471	48
*	84 1,4-Dichlorobenzene-d4	152	9.910	9.906	(1.000)	138326	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7478.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7478.D
Lab Smp Id: N0058-01A Client Smp ID: HW-WET-SE-6-(1)_01/
Inj Date : 20-JAN-2014 11:45
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-01A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

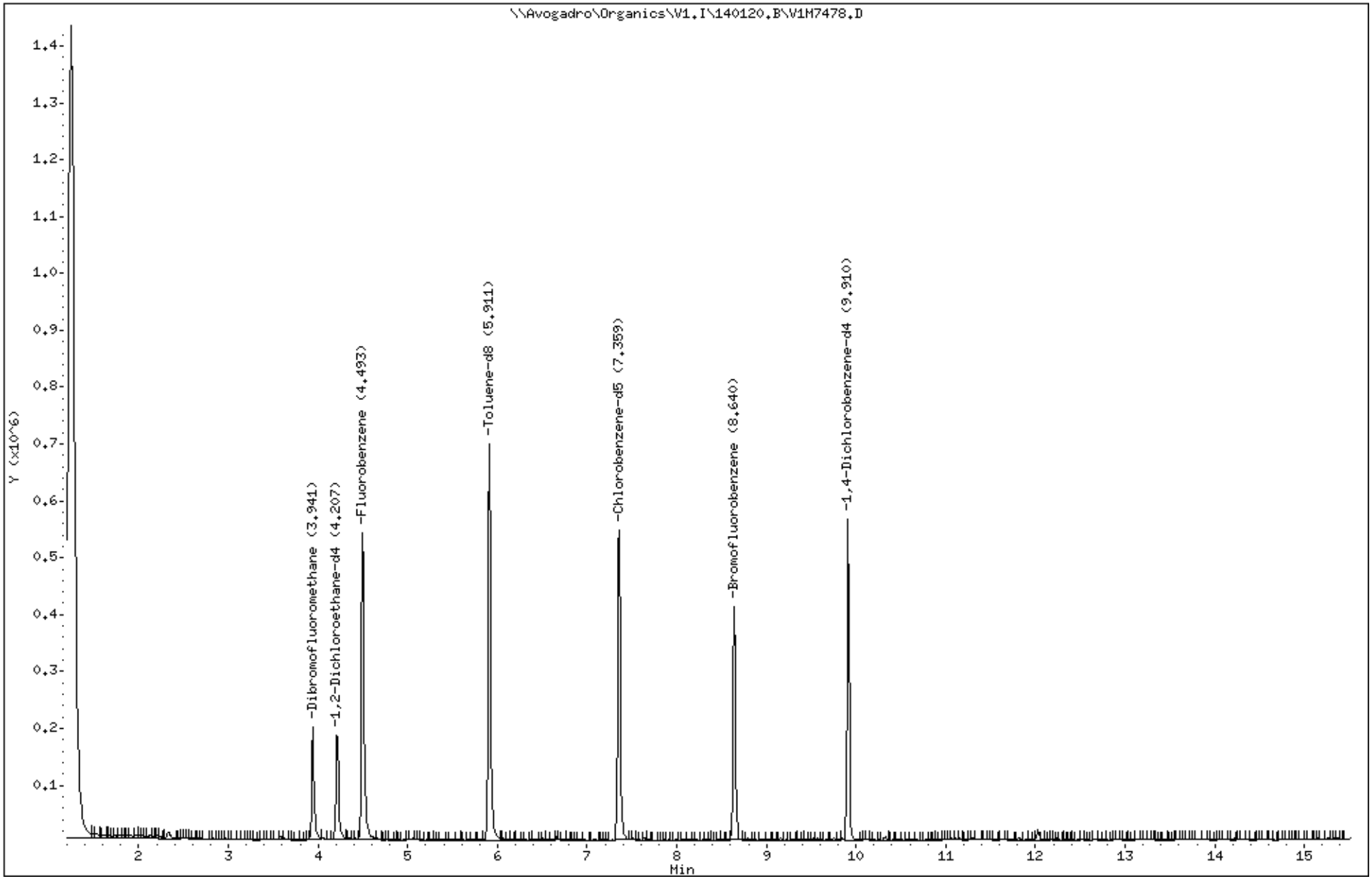
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7478.D
Date : 20-JAN-2014 11:45
Client ID: HW-WET-SE-6-(1)_01/
Sample Info: 5ML,N0058-01A,,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7478.D

Date : 20-JAN-2014 11:45

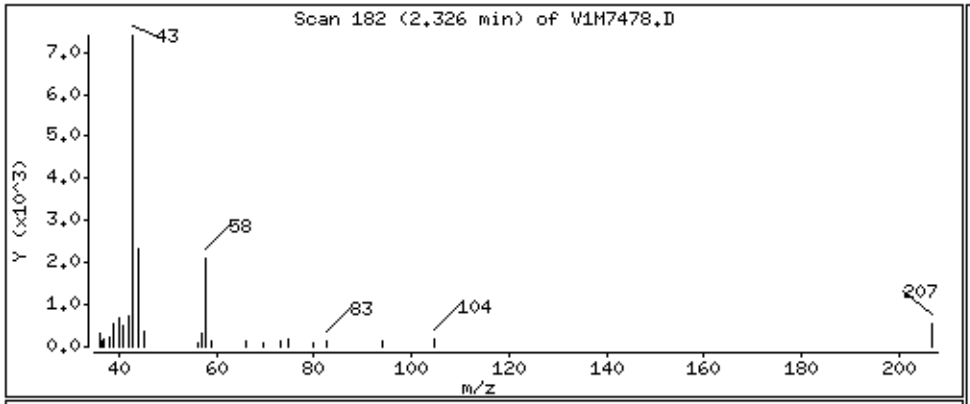
Client ID: HW-WET-SE-6-(1)_01/ Instrument: V1.i

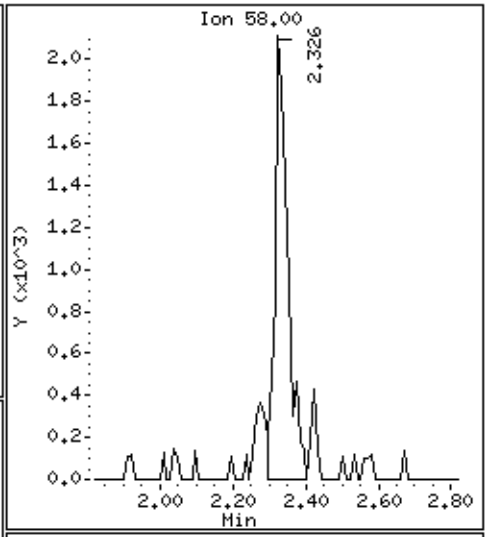
Sample Info: 5ML,N0058-01A,,75643

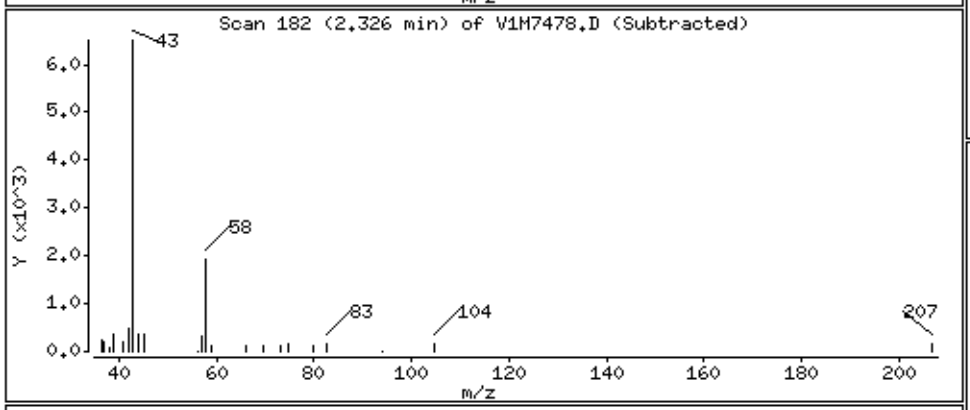
Operator: WL SRC: LIMS

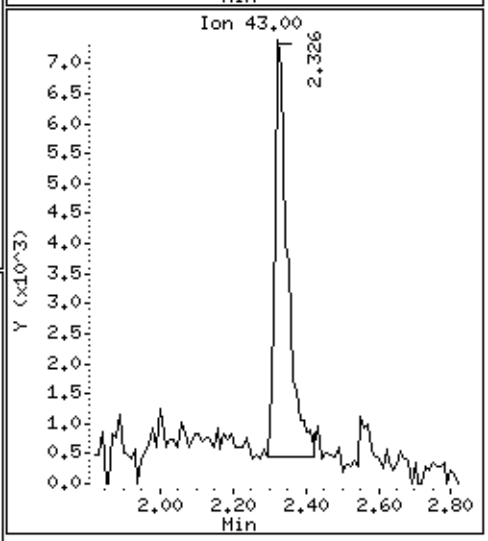
Column phase: DB-624 Column diameter: 0.25

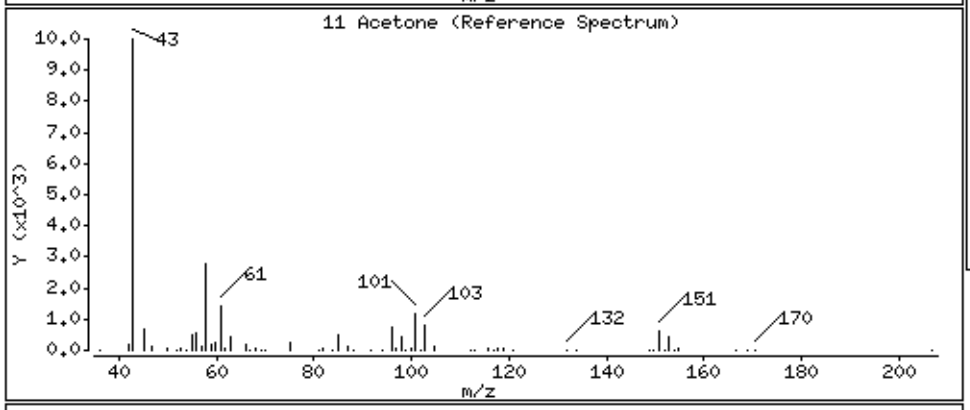
11 Acetone Concentration: 7 ug/Kg

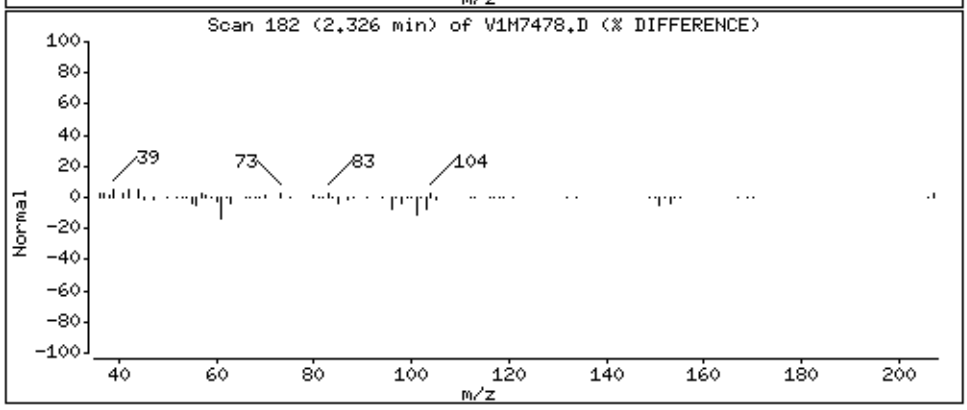












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-02A

Sample wt/vol: 6.80 (g/mL) G Lab File ID: V1M7479.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 50 Date Analyzed: 01/20/2014

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	7.4	U
74-87-3	Chloromethane	7.4	U
75-01-4	Vinyl chloride	7.4	U
74-83-9	Bromomethane	7.4	U
75-00-3	Chloroethane	7.4	U
75-69-4	Trichlorofluoromethane	7.4	U
75-35-4	1,1-Dichloroethene	7.4	U
67-64-1	Acetone	10	JL
74-88-4	Iodomethane	7.4	U
75-15-0	Carbon disulfide	7.4	U
75-09-2	Methylene chloride	7.4	U
156-60-5	trans-1,2-Dichloroethene	7.4	U
1634-04-4	Methyl tert-butyl ether	7.4	U
75-34-3	1,1-Dichloroethane	7.4	U
108-05-4	Vinyl acetate	7.4	U
78-93-3	2-Butanone	7.4	U
156-59-2	cis-1,2-Dichloroethene	7.4	U
594-20-7	2,2-Dichloropropane	7.4	U
74-97-5	Bromochloromethane	7.4	U
67-66-3	Chloroform	7.4	U
71-55-6	1,1,1-Trichloroethane	7.4	U
563-58-6	1,1-Dichloropropene	7.4	U
56-23-5	Carbon tetrachloride	7.4	U
107-06-2	1,2-Dichloroethane	7.4	U
71-43-2	Benzene	7.4	U
79-01-6	Trichloroethene	7.4	U
78-87-5	1,2-Dichloropropane	7.4	U
74-95-3	Dibromomethane	7.4	U
75-27-4	Bromodichloromethane	7.4	U
10061-01-5	cis-1,3-Dichloropropene	7.4	U
108-10-1	4-Methyl-2-pentanone	7.4	U
108-88-3	Toluene	7.4	U
10061-02-6	trans-1,3-Dichloropropene	7.4	U
79-00-5	1,1,2-Trichloroethane	7.4	U
142-28-9	1,3-Dichloropropane	7.4	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-02A

Sample wt/vol: 6.80 (g/mL) G Lab File ID: V1M7479.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 50 Date Analyzed: 01/20/2014

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	7.4	U
591-78-6	2-Hexanone	7.4	U
124-48-1	Dibromochloromethane	7.4	U
106-93-4	1,2-Dibromoethane	7.4	U
108-90-7	Chlorobenzene	7.4	U
630-20-6	1,1,1,2-Tetrachloroethane	7.4	U
100-41-4	Ethylbenzene	7.4	U
179601-23-1	m,p-Xylene	7.4	U
95-47-6	o-Xylene	7.4	U
1330-20-7	Xylene (Total)	7.4	U
100-42-5	Styrene	7.4	U
75-25-2	Bromoform	7.4	U
98-82-8	Isopropylbenzene	7.4	U
79-34-5	1,1,2,2-Tetrachloroethane	7.4	U
108-86-1	Bromobenzene	7.4	U
96-18-4	1,2,3-Trichloropropane	7.4	U
103-65-1	n-Propylbenzene	7.4	U
95-49-8	2-Chlorotoluene	7.4	U
108-67-8	1,3,5-Trimethylbenzene	7.4	U
106-43-4	4-Chlorotoluene	7.4	U
98-06-6	tert-Butylbenzene	7.4	U
95-63-6	1,2,4-Trimethylbenzene	7.4	U
135-98-8	sec-Butylbenzene	7.4	U
99-87-6	4-Isopropyltoluene	7.4	U
541-73-1	1,3-Dichlorobenzene	7.4	U
106-46-7	1,4-Dichlorobenzene	7.4	U
104-51-8	n-Butylbenzene	7.4	U
95-50-1	1,2-Dichlorobenzene	7.4	U
96-12-8	1,2-Dibromo-3-chloropropane	7.4	U
120-82-1	1,2,4-Trichlorobenzene	7.4	U
87-68-3	Hexachlorobutadiene	7.4	U
87-61-6	1,2,3-Trichlorobenzene	7.4	U
91-20-3	Naphthalene	7.4	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.4	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7479.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7479.D
Lab Smp Id: N0058-02A Client Smp ID: HW-WET-SE-5-(1)_01/
Inj Date : 20-JAN-2014 12:14
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-02A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.800	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)	CONCENTRATIONS FINAL (ug/Kg)
	11 Acetone	58	2.327	2.322	(0.519)	4821	6.86712	5
$	32 Dibromofluoromethane	113	3.923	3.918	(0.875)	128310	50.6324	37
$	37 1,2-Dichloroethane-d4	102	4.199	4.194	(0.936)	35634	52.7948	39
*	41 Fluorobenzene	96	4.484	4.479	(1.000)	493794	50.0000	
$	51 Toluene-d8	98	5.903	5.888	(0.803)	464480	49.8344	37
*	60 Chlorobenzene-d5	117	7.350	7.336	(1.000)	332633	50.0000	
$	70 Bromofluorobenzene	95	8.631	8.626	(1.174)	172561	47.5030	35
*	84 1,4-Dichlorobenzene-d4	152	9.911	9.906	(1.000)	130516	50.0000	

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7479.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7479.D
Lab Smp Id: N0058-02A Client Smp ID: HW-WET-SE-5-(1)_01/
Inj Date : 20-JAN-2014 12:14
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-02A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

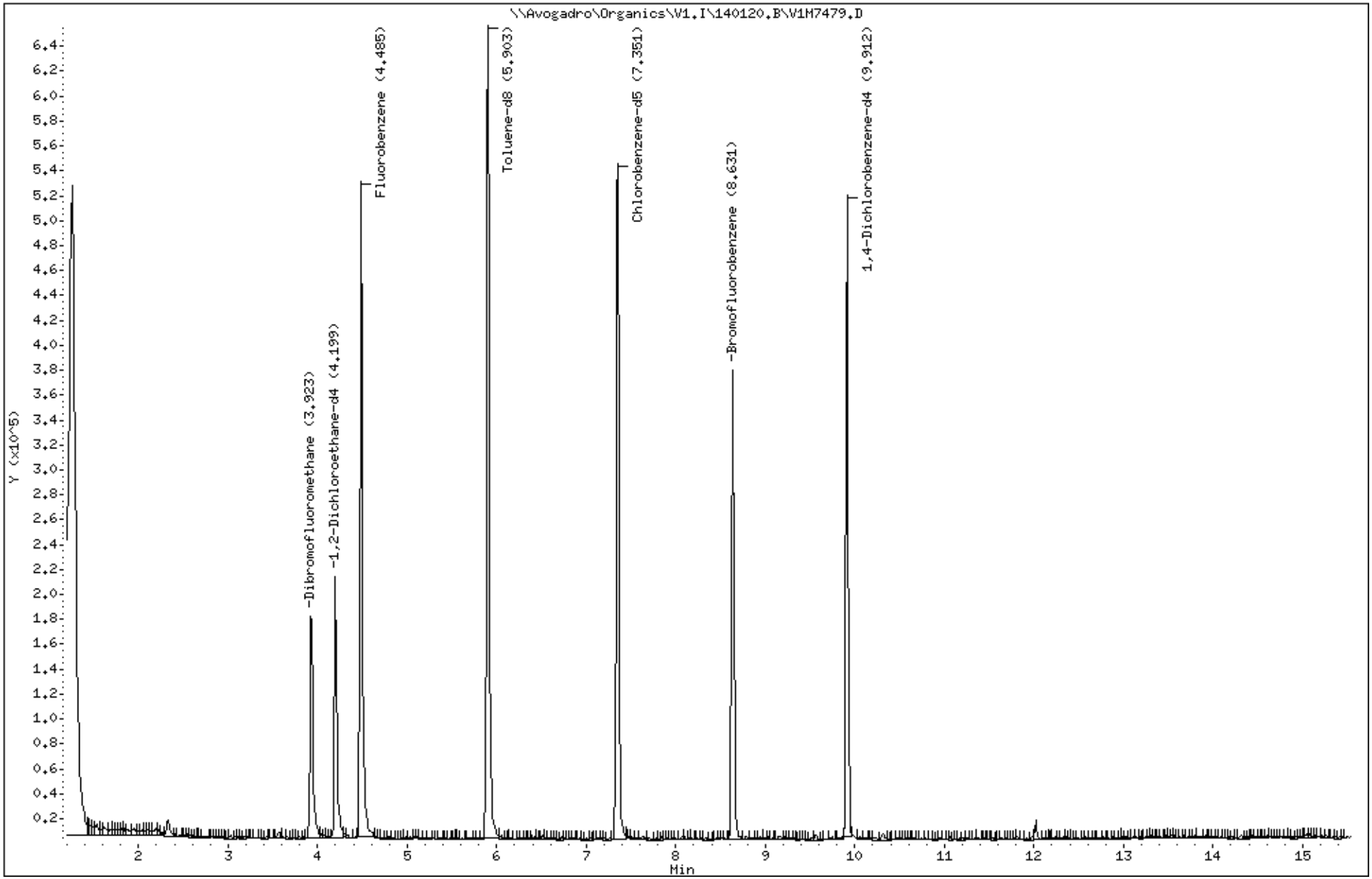
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7479.D
Date : 20-JAN-2014 12:14
Client ID: HW-WET-SE-5-(1)_01/
Sample Info: 5ML,N0058-02A,,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7479.D

Date : 20-JAN-2014 12:14

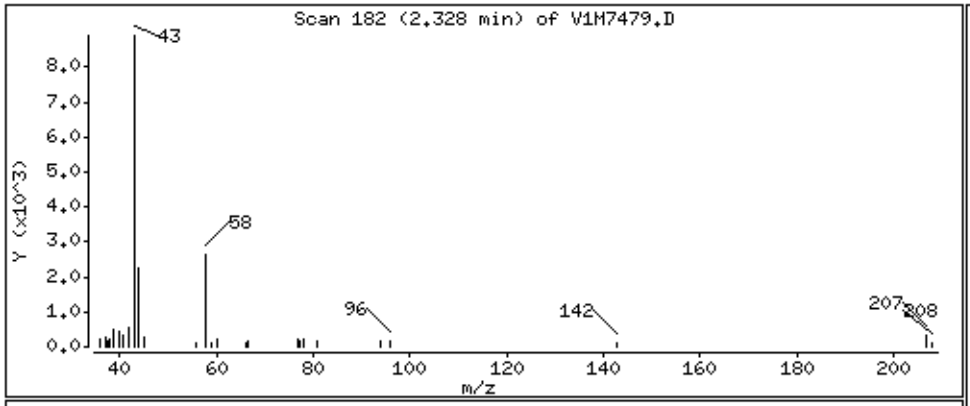
Client ID: HW-WET-SE-5-(1)_01/ Instrument: V1.i

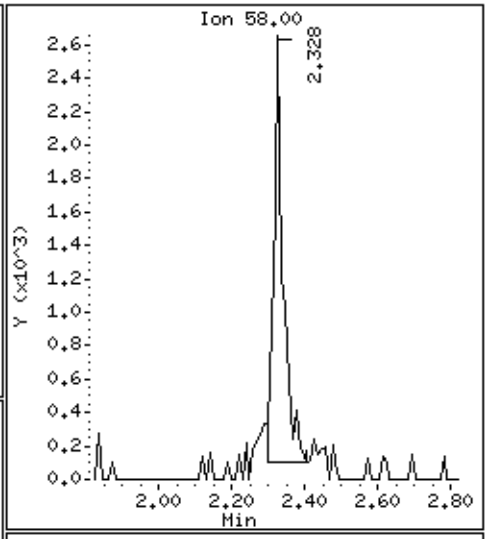
Sample Info: 5ML,N0058-02A,,75643

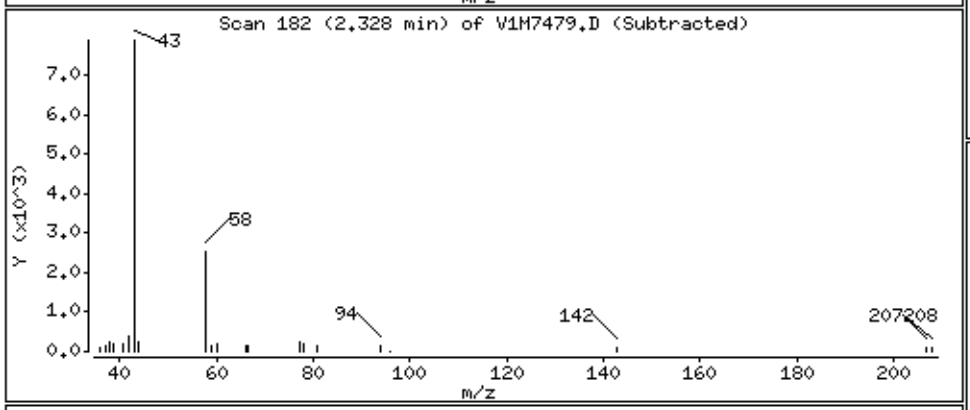
Operator: WL SRC: LIMS

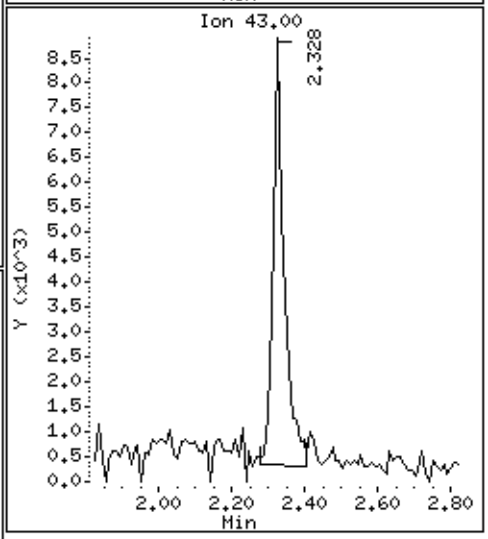
Column phase: DB-624 Column diameter: 0.25

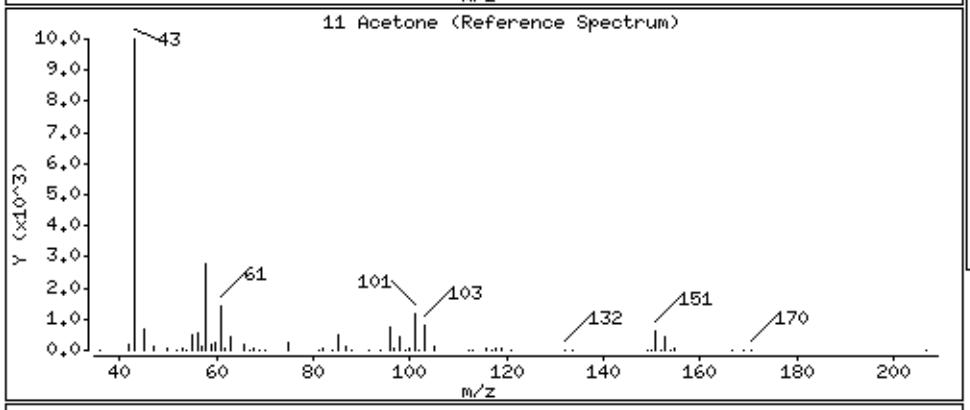
11 Acetone Concentration: 5 ug/Kg

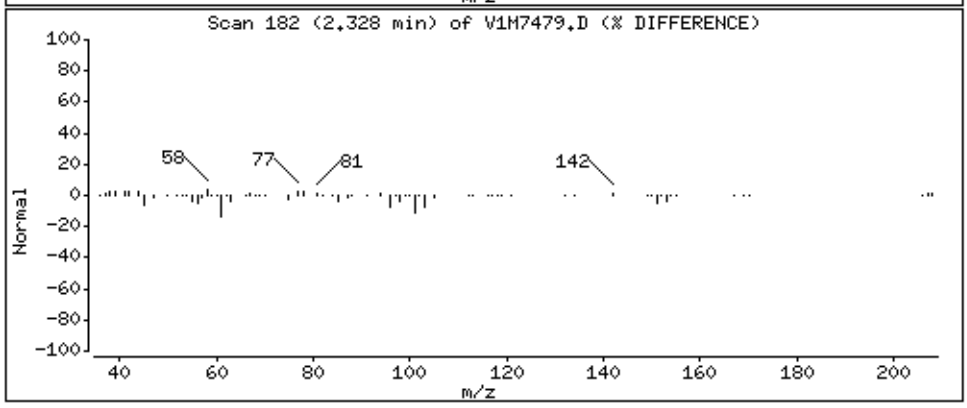












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-12-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-03A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M7480.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 47 Date Analyzed: 01/20/2014

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	9.1	U
74-87-3	Chloromethane	9.1	U
75-01-4	Vinyl chloride	9.1	U
74-83-9	Bromomethane	9.1	U
75-00-3	Chloroethane	9.1	U
75-69-4	Trichlorofluoromethane	9.1	U
75-35-4	1,1-Dichloroethene	9.1	U
67-64-1	Acetone	9.1	U
74-88-4	Iodomethane	9.1	U
75-15-0	Carbon disulfide	9.1	U
75-09-2	Methylene chloride	9.1	U
156-60-5	trans-1,2-Dichloroethene	9.1	U
1634-04-4	Methyl tert-butyl ether	9.1	U
75-34-3	1,1-Dichloroethane	9.1	U
108-05-4	Vinyl acetate	9.1	U
78-93-3	2-Butanone	9.1	U
156-59-2	cis-1,2-Dichloroethene	9.1	U
594-20-7	2,2-Dichloropropane	9.1	U
74-97-5	Bromochloromethane	9.1	U
67-66-3	Chloroform	9.1	U
71-55-6	1,1,1-Trichloroethane	9.1	U
563-58-6	1,1-Dichloropropene	9.1	U
56-23-5	Carbon tetrachloride	9.1	U
107-06-2	1,2-Dichloroethane	9.1	U
71-43-2	Benzene	9.1	U
79-01-6	Trichloroethene	9.1	U
78-87-5	1,2-Dichloropropane	9.1	U
74-95-3	Dibromomethane	9.1	U
75-27-4	Bromodichloromethane	9.1	U
10061-01-5	cis-1,3-Dichloropropene	9.1	U
108-10-1	4-Methyl-2-pentanone	9.1	U
108-88-3	Toluene	9.1	U
10061-02-6	trans-1,3-Dichloropropene	9.1	U
79-00-5	1,1,2-Trichloroethane	9.1	U
142-28-9	1,3-Dichloropropane	9.1	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-12-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-03A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M7480.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 47 Date Analyzed: 01/20/2014

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	9.1	U
591-78-6	2-Hexanone	9.1	U
124-48-1	Dibromochloromethane	9.1	U
106-93-4	1,2-Dibromoethane	9.1	U
108-90-7	Chlorobenzene	9.1	U
630-20-6	1,1,1,2-Tetrachloroethane	9.1	U
100-41-4	Ethylbenzene	9.1	U
179601-23-1	m,p-Xylene	9.1	U
95-47-6	o-Xylene	9.1	U
1330-20-7	Xylene (Total)	9.1	U
100-42-5	Styrene	9.1	U
75-25-2	Bromoform	9.1	U
98-82-8	Isopropylbenzene	9.1	U
79-34-5	1,1,2,2-Tetrachloroethane	9.1	U
108-86-1	Bromobenzene	9.1	U
96-18-4	1,2,3-Trichloropropane	9.1	U
103-65-1	n-Propylbenzene	9.1	U
95-49-8	2-Chlorotoluene	9.1	U
108-67-8	1,3,5-Trimethylbenzene	9.1	U
106-43-4	4-Chlorotoluene	9.1	U
98-06-6	tert-Butylbenzene	9.1	U
95-63-6	1,2,4-Trimethylbenzene	9.1	U
135-98-8	sec-Butylbenzene	9.1	U
99-87-6	4-Isopropyltoluene	9.1	U
541-73-1	1,3-Dichlorobenzene	9.1	U
106-46-7	1,4-Dichlorobenzene	9.1	U
104-51-8	n-Butylbenzene	9.1	U
95-50-1	1,2-Dichlorobenzene	9.1	U
96-12-8	1,2-Dibromo-3-chloropropane	9.1	U
120-82-1	1,2,4-Trichlorobenzene	9.1	U
87-68-3	Hexachlorobutadiene	9.1	U
87-61-6	1,2,3-Trichlorobenzene	9.1	U
91-20-3	Naphthalene	9.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.1	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7480.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7480.D
Lab Smp Id: N0058-03A Client Smp ID: HW-WET-SE-12-(1)_01
Inj Date : 20-JAN-2014 12:42
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-03A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	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)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	3.918	3.918	(0.875)	136135	52.9182	51
$ 37 1,2-Dichloroethane-d4	102	4.194	4.194	(0.936)	38042	55.5209	53(R)
* 41 Fluorobenzene	96	4.479	4.479	(1.000)	501278	50.0000	
$ 51 Toluene-d8	98	5.898	5.888	(0.803)	470935	49.4016	48
* 60 Chlorobenzene-d5	117	7.345	7.336	(1.000)	340210	50.0000	
$ 70 Bromofluorobenzene	95	8.636	8.626	(1.176)	184173	49.5704	48
* 84 1,4-Dichlorobenzene-d4	152	9.916	9.906	(1.000)	134284	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7480.D
Report Date: 31-Jan-2014 09:47

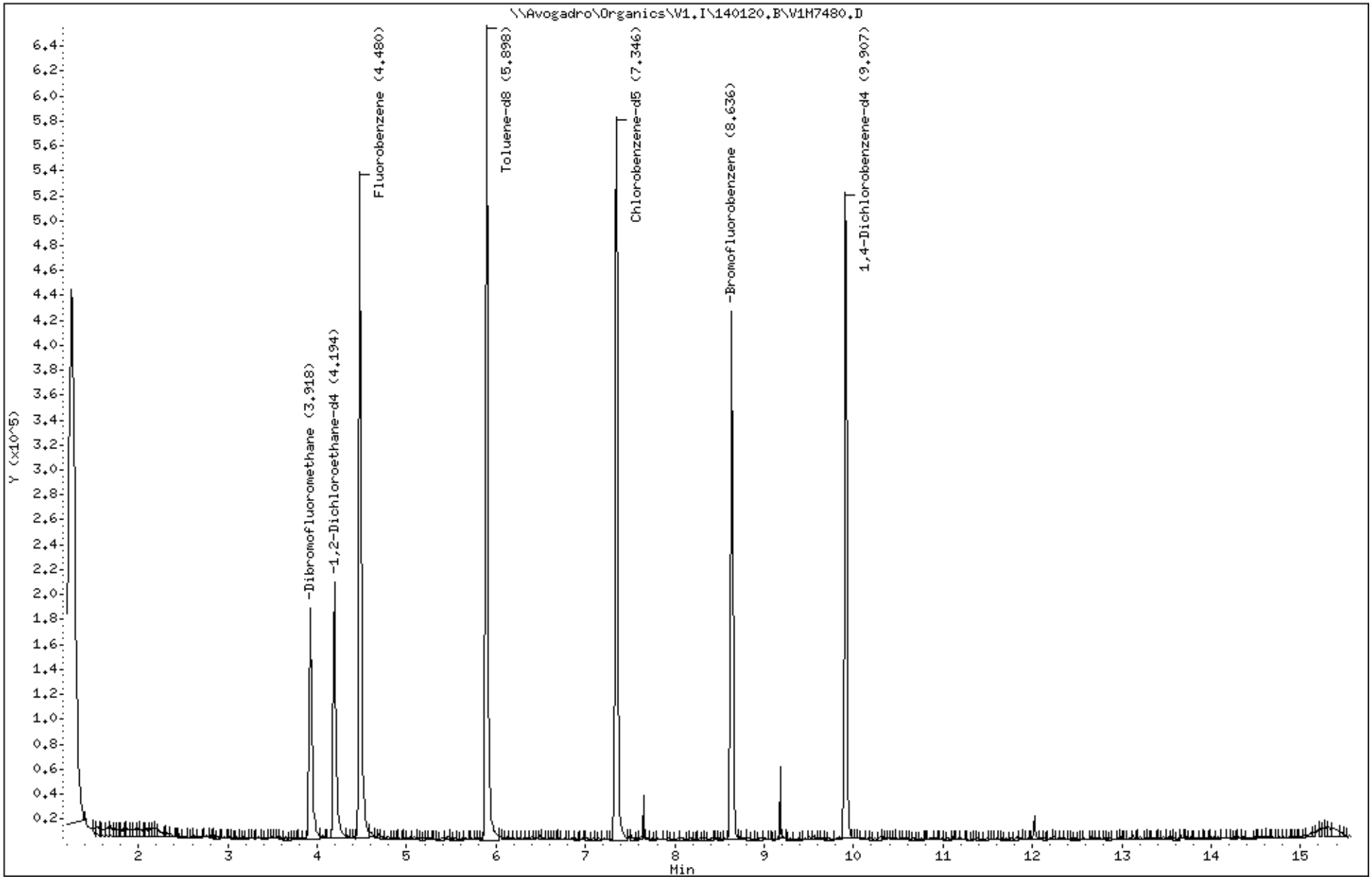
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7480.D
Lab Smp Id: N0058-03A Client Smp ID: HW-WET-SE-12-(1)_01
Inj Date : 20-JAN-2014 12:42
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-03A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7480.D
Date : 20-JAN-2014 12:42
Client ID: HW-WET-SE-12-(1)_01
Instrument: V1.i
Sample Info: 5ML,N0058-03A,,75643
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-11-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-04A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7481.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 34 Date Analyzed: 01/20/2014

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	7.1	U
74-87-3	Chloromethane	7.1	U
75-01-4	Vinyl chloride	7.1	U
74-83-9	Bromomethane	7.1	U
75-00-3	Chloroethane	7.1	U
75-69-4	Trichlorofluoromethane	7.1	U
75-35-4	1,1-Dichloroethene	7.1	U
67-64-1	Acetone	10	JL
74-88-4	Iodomethane	7.1	U
75-15-0	Carbon disulfide	7.1	U
75-09-2	Methylene chloride	7.1	U
156-60-5	trans-1,2-Dichloroethene	7.1	U
1634-04-4	Methyl tert-butyl ether	7.1	U
75-34-3	1,1-Dichloroethane	7.1	U
108-05-4	Vinyl acetate	7.1	U
78-93-3	2-Butanone	7.1	U
156-59-2	cis-1,2-Dichloroethene	7.1	U
594-20-7	2,2-Dichloropropane	7.1	U
74-97-5	Bromochloromethane	7.1	U
67-66-3	Chloroform	7.1	U
71-55-6	1,1,1-Trichloroethane	7.1	U
563-58-6	1,1-Dichloropropene	7.1	U
56-23-5	Carbon tetrachloride	7.1	U
107-06-2	1,2-Dichloroethane	7.1	U
71-43-2	Benzene	7.1	U
79-01-6	Trichloroethene	7.1	U
78-87-5	1,2-Dichloropropane	7.1	U
74-95-3	Dibromomethane	7.1	U
75-27-4	Bromodichloromethane	7.1	U
10061-01-5	cis-1,3-Dichloropropene	7.1	U
108-10-1	4-Methyl-2-pentanone	7.1	U
108-88-3	Toluene	7.1	U
10061-02-6	trans-1,3-Dichloropropene	7.1	U
79-00-5	1,1,2-Trichloroethane	7.1	U
142-28-9	1,3-Dichloropropane	7.1	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-11-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-04A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7481.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 34 Date Analyzed: 01/20/2014

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	7.1	U
591-78-6	2-Hexanone	7.1	U
124-48-1	Dibromochloromethane	7.1	U
106-93-4	1,2-Dibromoethane	7.1	U
108-90-7	Chlorobenzene	7.1	U
630-20-6	1,1,1,2-Tetrachloroethane	7.1	U
100-41-4	Ethylbenzene	7.1	U
179601-23-1	m,p-Xylene	7.1	U
95-47-6	o-Xylene	7.1	U
1330-20-7	Xylene (Total)	7.1	U
100-42-5	Styrene	7.1	U
75-25-2	Bromoform	7.1	U
98-82-8	Isopropylbenzene	7.1	U
79-34-5	1,1,2,2-Tetrachloroethane	7.1	U
108-86-1	Bromobenzene	7.1	U
96-18-4	1,2,3-Trichloropropane	7.1	U
103-65-1	n-Propylbenzene	7.1	U
95-49-8	2-Chlorotoluene	7.1	U
108-67-8	1,3,5-Trimethylbenzene	7.1	U
106-43-4	4-Chlorotoluene	7.1	U
98-06-6	tert-Butylbenzene	7.1	U
95-63-6	1,2,4-Trimethylbenzene	7.1	U
135-98-8	sec-Butylbenzene	7.1	U
99-87-6	4-Isopropyltoluene	7.1	U
541-73-1	1,3-Dichlorobenzene	7.1	U
106-46-7	1,4-Dichlorobenzene	7.1	U
104-51-8	n-Butylbenzene	7.1	U
95-50-1	1,2-Dichlorobenzene	7.1	U
96-12-8	1,2-Dibromo-3-chloropropane	7.1	U
120-82-1	1,2,4-Trichlorobenzene	7.1	U
87-68-3	Hexachlorobutadiene	7.1	U
87-61-6	1,2,3-Trichlorobenzene	7.1	U
91-20-3	Naphthalene	7.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.1	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7481.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7481.D
Lab Smp Id: N0058-04A Client Smp ID: HW-WET-SE-11-(1)_01
Inj Date : 20-JAN-2014 13:10
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-04A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.300	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)	CONCENTRATIONS FINAL (ug/Kg)
	11 Acetone	58	2.322	2.322	(0.518)	4915	7.18344	7
$	32 Dibromofluoromethane	113	3.927	3.918	(0.877)	128829	52.1619	49
$	37 1,2-Dichloroethane-d4	102	4.203	4.194	(0.938)	31808	48.3542	46
*	41 Fluorobenzene	96	4.479	4.479	(1.000)	481254	50.0000	
$	51 Toluene-d8	98	5.897	5.888	(0.802)	460672	49.4560	47
*	60 Chlorobenzene-d5	117	7.355	7.336	(1.000)	332430	50.0000	
$	70 Bromofluorobenzene	95	8.645	8.626	(1.175)	178278	49.1068	46
*	84 1,4-Dichlorobenzene-d4	152	9.916	9.906	(1.000)	136506	50.0000	

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7481.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7481.D
Lab Smp Id: N0058-04A Client Smp ID: HW-WET-SE-11-(1)_01
Inj Date : 20-JAN-2014 13:10
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-04A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

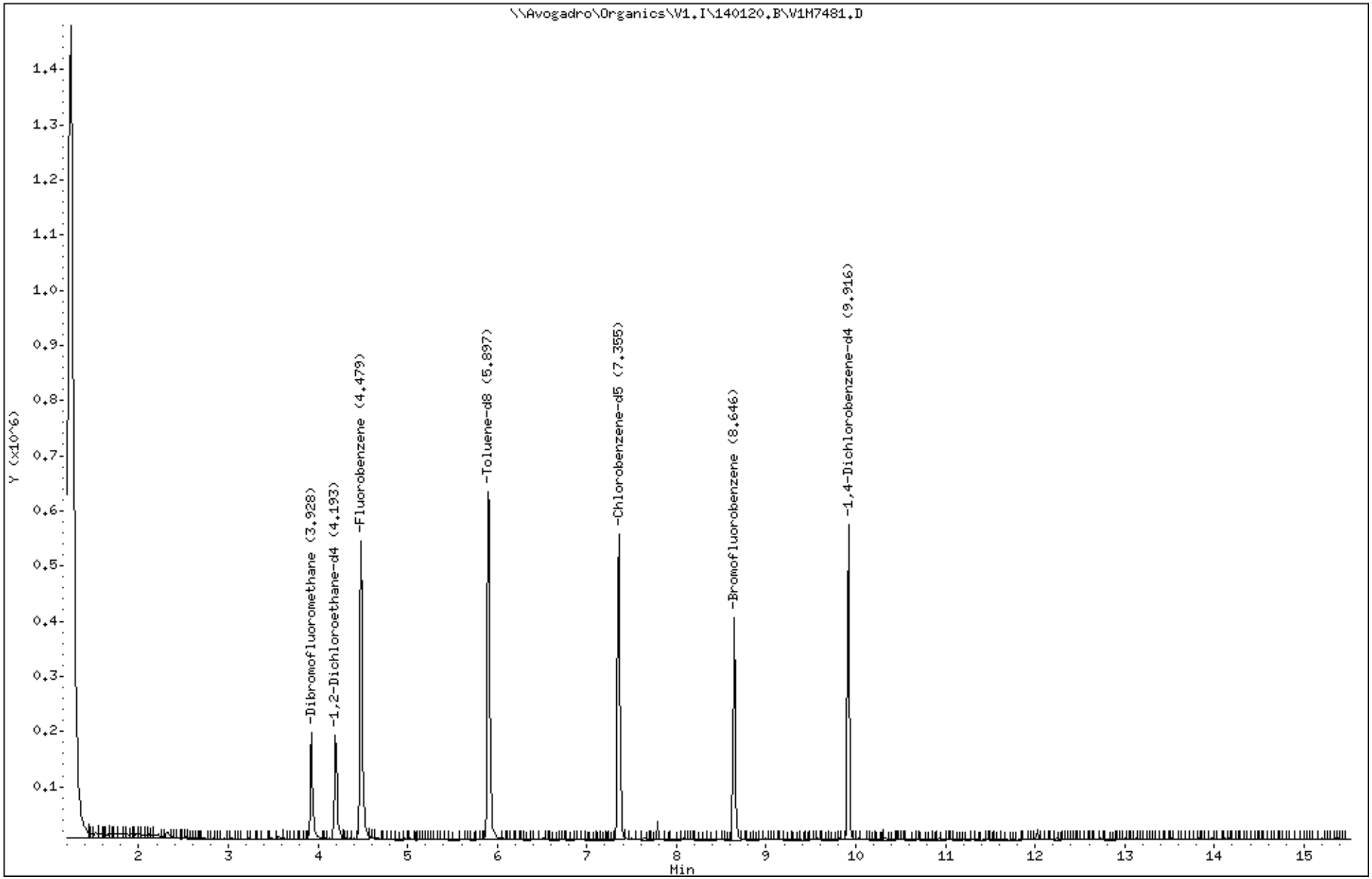
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7481.D
Date : 20-JAN-2014 13:10
Client ID: HW-WET-SE-11-(1)_01
Sample Info: 5ML,N0058-04A,,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7481.D

Date : 20-JAN-2014 13:10

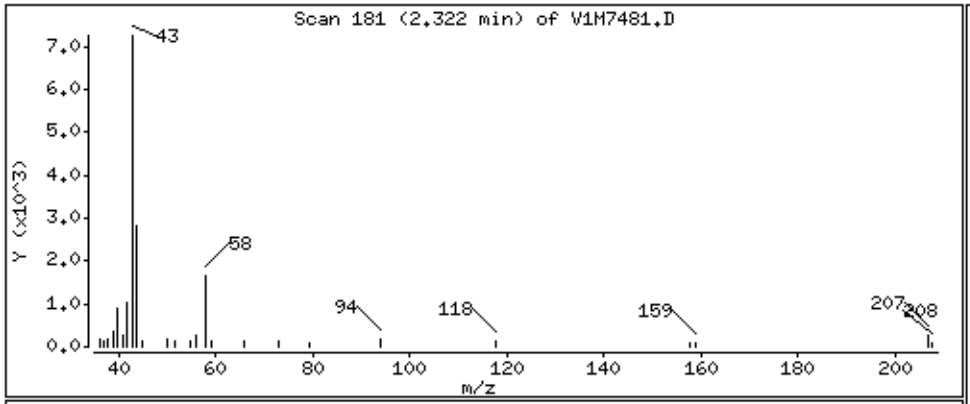
Client ID: HW-WET-SE-11-(1)_01 Instrument: V1.i

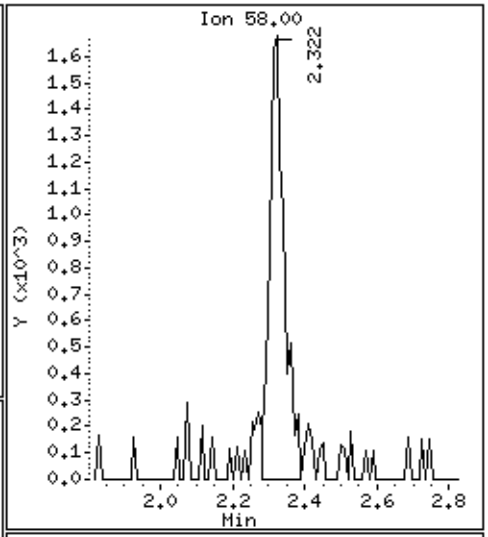
Sample Info: 5ML,N0058-04A,,75643

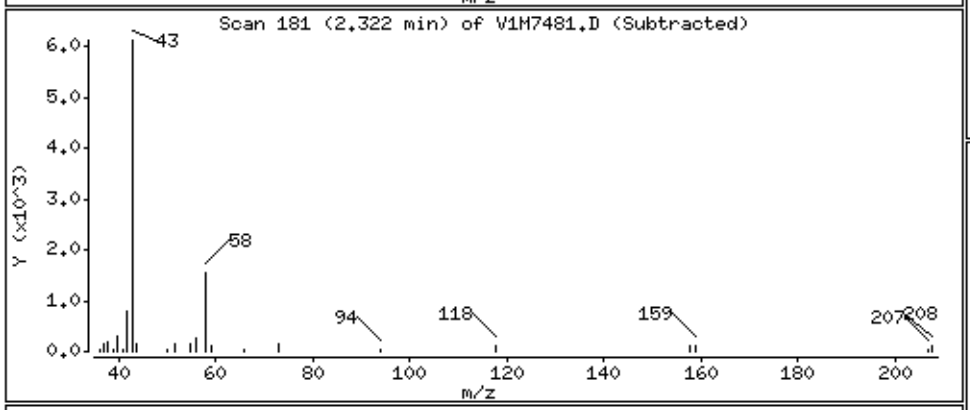
Operator: WL SRC: LIMS

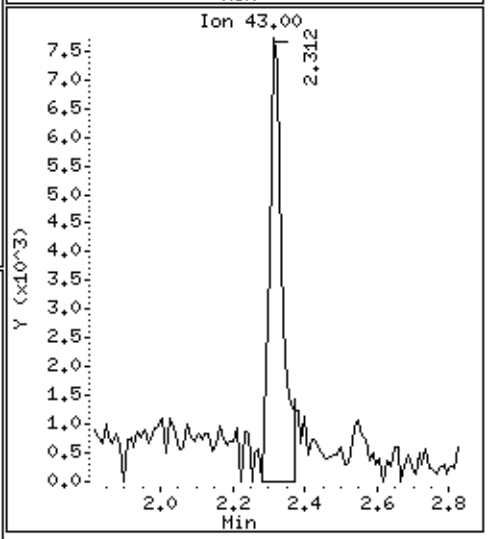
Column phase: DB-624 Column diameter: 0.25

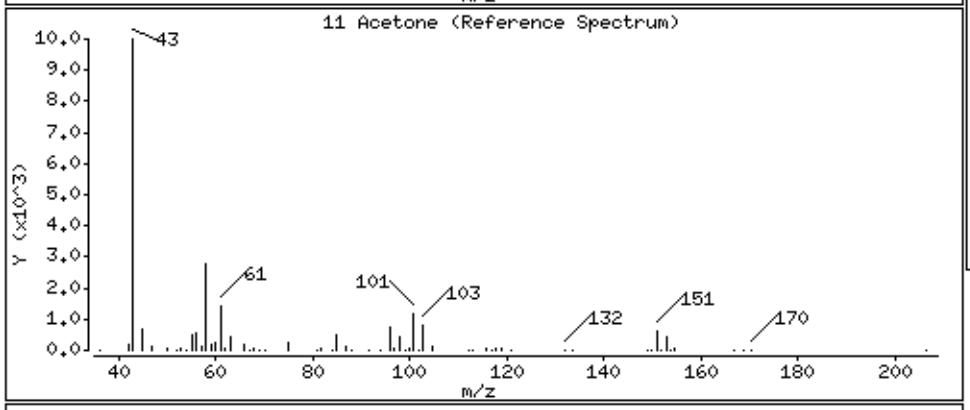
11 Acetone Concentration: 7 ug/Kg

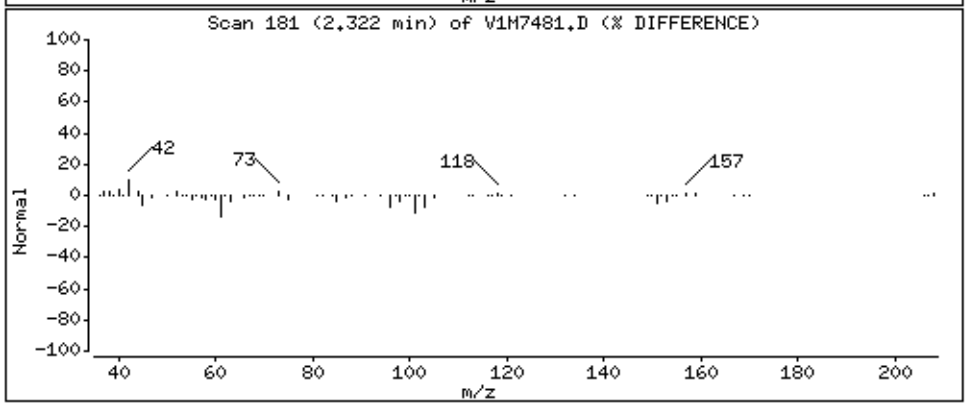












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-10-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-05A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M7482.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 39 Date Analyzed: 01/20/2014

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	7.9	U
74-87-3	Chloromethane	7.9	U
75-01-4	Vinyl chloride	7.9	U
74-83-9	Bromomethane	7.9	U
75-00-3	Chloroethane	7.9	U
75-69-4	Trichlorofluoromethane	7.9	U
75-35-4	1,1-Dichloroethene	7.9	U
67-64-1	Acetone	7.9	U
74-88-4	Iodomethane	7.9	U
75-15-0	Carbon disulfide	7.9	U
75-09-2	Methylene chloride	7.9	U
156-60-5	trans-1,2-Dichloroethene	7.9	U
1634-04-4	Methyl tert-butyl ether	7.9	U
75-34-3	1,1-Dichloroethane	7.9	U
108-05-4	Vinyl acetate	7.9	U
78-93-3	2-Butanone	7.9	U
156-59-2	cis-1,2-Dichloroethene	7.9	U
594-20-7	2,2-Dichloropropane	7.9	U
74-97-5	Bromochloromethane	7.9	U
67-66-3	Chloroform	7.9	U
71-55-6	1,1,1-Trichloroethane	7.9	U
563-58-6	1,1-Dichloropropene	7.9	U
56-23-5	Carbon tetrachloride	7.9	U
107-06-2	1,2-Dichloroethane	7.9	U
71-43-2	Benzene	7.9	U
79-01-6	Trichloroethene	7.9	U
78-87-5	1,2-Dichloropropane	7.9	U
74-95-3	Dibromomethane	7.9	U
75-27-4	Bromodichloromethane	7.9	U
10061-01-5	cis-1,3-Dichloropropene	7.9	U
108-10-1	4-Methyl-2-pentanone	7.9	U
108-88-3	Toluene	7.9	U
10061-02-6	trans-1,3-Dichloropropene	7.9	U
79-00-5	1,1,2-Trichloroethane	7.9	U
142-28-9	1,3-Dichloropropane	7.9	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-10-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-05A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M7482.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 39 Date Analyzed: 01/20/2014

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	7.9	U
591-78-6	2-Hexanone	7.9	U
124-48-1	Dibromochloromethane	7.9	U
106-93-4	1,2-Dibromoethane	7.9	U
108-90-7	Chlorobenzene	7.9	U
630-20-6	1,1,1,2-Tetrachloroethane	7.9	U
100-41-4	Ethylbenzene	7.9	U
179601-23-1	m,p-Xylene	7.9	U
95-47-6	o-Xylene	7.9	U
1330-20-7	Xylene (Total)	7.9	U
100-42-5	Styrene	7.9	U
75-25-2	Bromoform	7.9	U
98-82-8	Isopropylbenzene	7.9	U
79-34-5	1,1,2,2-Tetrachloroethane	7.9	U
108-86-1	Bromobenzene	7.9	U
96-18-4	1,2,3-Trichloropropane	7.9	U
103-65-1	n-Propylbenzene	7.9	U
95-49-8	2-Chlorotoluene	7.9	U
108-67-8	1,3,5-Trimethylbenzene	7.9	U
106-43-4	4-Chlorotoluene	7.9	U
98-06-6	tert-Butylbenzene	7.9	U
95-63-6	1,2,4-Trimethylbenzene	7.9	U
135-98-8	sec-Butylbenzene	7.9	U
99-87-6	4-Isopropyltoluene	7.9	U
541-73-1	1,3-Dichlorobenzene	7.9	U
106-46-7	1,4-Dichlorobenzene	7.9	U
104-51-8	n-Butylbenzene	7.9	U
95-50-1	1,2-Dichlorobenzene	7.9	U
96-12-8	1,2-Dibromo-3-chloropropane	7.9	U
120-82-1	1,2,4-Trichlorobenzene	7.9	U
87-68-3	Hexachlorobutadiene	7.9	U
87-61-6	1,2,3-Trichlorobenzene	7.9	U
91-20-3	Naphthalene	7.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.9	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7482.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7482.D
Lab Smp Id: N0058-05A Client Smp ID: HW-WET-SE-10-(1)_01
Inj Date : 20-JAN-2014 13:42
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-05A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	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)
$ 32 Dibromofluoromethane	113	3.926	3.918	(0.877)	115113	50.4757	48
$ 37 1,2-Dichloroethane-d4	102	4.192	4.194	(0.936)	30095	49.5462	48
* 41 Fluorobenzene	96	4.478	4.479	(1.000)	444382	50.0000	
$ 51 Toluene-d8	98	5.896	5.888	(0.803)	414805	50.6715	49
* 60 Chlorobenzene-d5	117	7.344	7.336	(1.000)	292151	50.0000	
$ 70 Bromofluorobenzene	95	8.634	8.626	(1.176)	155506	48.7398	47
* 84 1,4-Dichlorobenzene-d4	152	9.915	9.906	(1.000)	109015	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7482.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7482.D
Lab Smp Id: N0058-05A Client Smp ID: HW-WET-SE-10-(1)_01
Inj Date : 20-JAN-2014 13:42
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-05A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

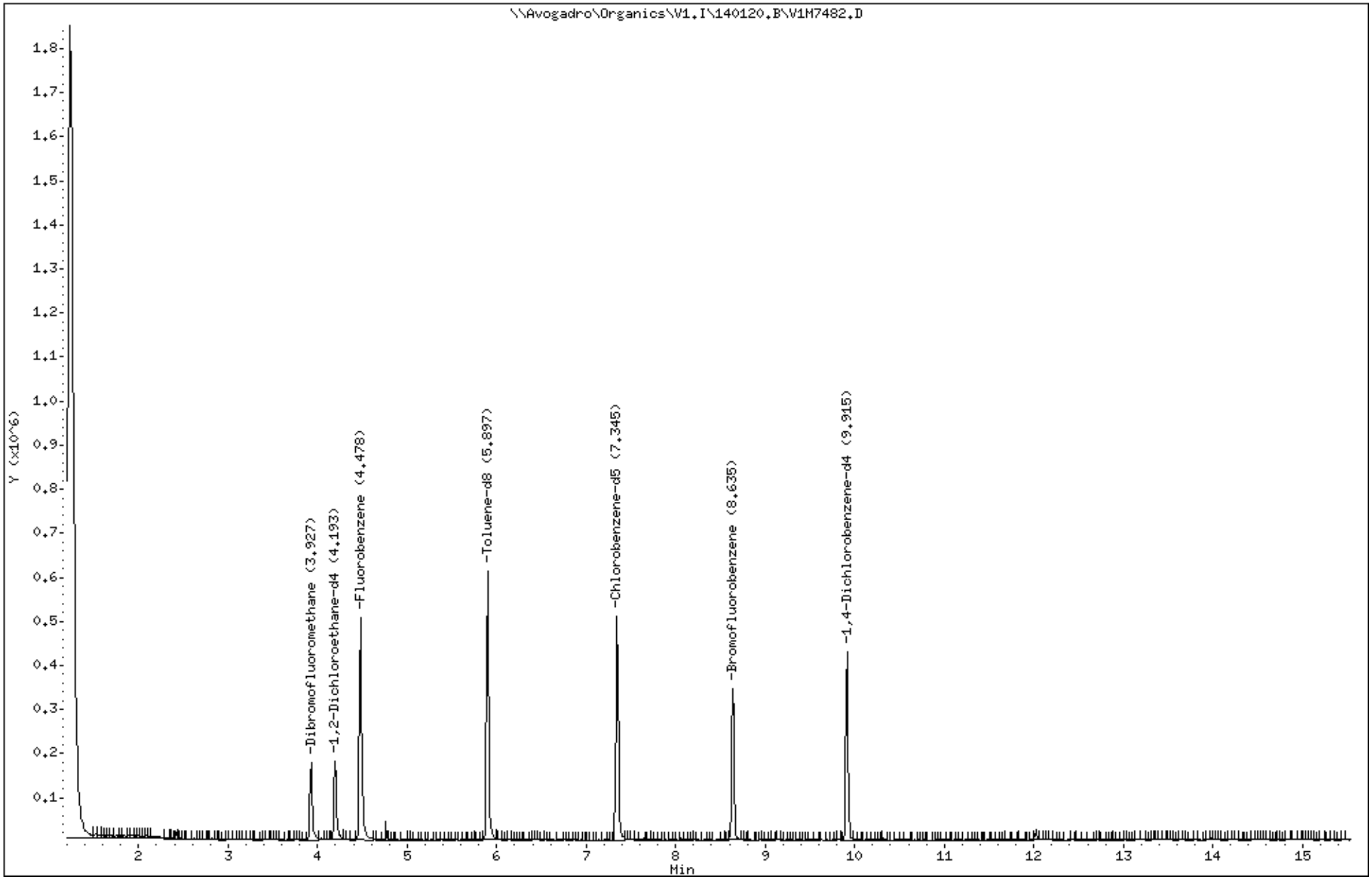
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7482.D
Date : 20-JAN-2014 13:42
Client ID: HW-WET-SE-10-(1)_01
Sample Info: 5ML,N0058-05A,,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-9-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-06A

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M7556.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 40 Date Analyzed: 01/23/2014

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	7.6	U
74-87-3	Chloromethane	7.6	U
75-01-4	Vinyl chloride	7.6	U
74-83-9	Bromomethane	7.6	U
75-00-3	Chloroethane	7.6	U
75-69-4	Trichlorofluoromethane	7.6	U
75-35-4	1,1-Dichloroethene	7.6	U
67-64-1	Acetone	8.9	JL
74-88-4	Iodomethane	7.6	U
75-15-0	Carbon disulfide	7.6	U
75-09-2	Methylene chloride	7.6	U
156-60-5	trans-1,2-Dichloroethene	7.6	U
1634-04-4	Methyl tert-butyl ether	7.6	U
75-34-3	1,1-Dichloroethane	7.6	U
108-05-4	Vinyl acetate	7.6	U
78-93-3	2-Butanone	7.6	U
156-59-2	cis-1,2-Dichloroethene	7.6	U
594-20-7	2,2-Dichloropropane	7.6	U
74-97-5	Bromochloromethane	7.6	U
67-66-3	Chloroform	7.6	U
71-55-6	1,1,1-Trichloroethane	7.6	U
563-58-6	1,1-Dichloropropene	7.6	U
56-23-5	Carbon tetrachloride	7.6	U
107-06-2	1,2-Dichloroethane	7.6	U
71-43-2	Benzene	7.6	U
79-01-6	Trichloroethene	7.6	U
78-87-5	1,2-Dichloropropane	7.6	U
74-95-3	Dibromomethane	7.6	U
75-27-4	Bromodichloromethane	7.6	U
10061-01-5	cis-1,3-Dichloropropene	7.6	U
108-10-1	4-Methyl-2-pentanone	7.6	U
108-88-3	Toluene	7.6	U
10061-02-6	trans-1,3-Dichloropropene	7.6	U
79-00-5	1,1,2-Trichloroethane	7.6	U
142-28-9	1,3-Dichloropropane	7.6	U

CLIENT SAMPLE NO.
HW-WET-SE-9-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-06A

Sample wt/vol: 5.50 (g/mL) G Lab File ID: V1M7556.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 40 Date Analyzed: 01/23/2014

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	7.6	U
591-78-6	2-Hexanone	7.6	U
124-48-1	Dibromochloromethane	7.6	U
106-93-4	1,2-Dibromoethane	7.6	U
108-90-7	Chlorobenzene	7.6	U
630-20-6	1,1,1,2-Tetrachloroethane	7.6	U
100-41-4	Ethylbenzene	7.6	U
179601-23-1	m,p-Xylene	7.6	U
95-47-6	o-Xylene	7.6	U
1330-20-7	Xylene (Total)	7.6	U
100-42-5	Styrene	7.6	U
75-25-2	Bromoform	7.6	U
98-82-8	Isopropylbenzene	7.6	U
79-34-5	1,1,2,2-Tetrachloroethane	7.6	U
108-86-1	Bromobenzene	7.6	U
96-18-4	1,2,3-Trichloropropane	7.6	U
103-65-1	n-Propylbenzene	7.6	U
95-49-8	2-Chlorotoluene	7.6	U
108-67-8	1,3,5-Trimethylbenzene	7.6	U
106-43-4	4-Chlorotoluene	7.6	U
98-06-6	tert-Butylbenzene	7.6	U
95-63-6	1,2,4-Trimethylbenzene	7.6	U
135-98-8	sec-Butylbenzene	7.6	U
99-87-6	4-Isopropyltoluene	7.6	U
541-73-1	1,3-Dichlorobenzene	7.6	U
106-46-7	1,4-Dichlorobenzene	7.6	U
104-51-8	n-Butylbenzene	7.6	U
95-50-1	1,2-Dichlorobenzene	7.6	U
96-12-8	1,2-Dibromo-3-chloropropane	7.6	U
120-82-1	1,2,4-Trichlorobenzene	7.6	U
87-68-3	Hexachlorobutadiene	7.6	U
87-61-6	1,2,3-Trichlorobenzene	7.6	U
91-20-3	Naphthalene	7.6	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.6	U

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7556.D
Report Date: 31-Jan-2014 09:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7556.D
Lab Smp Id: N0058-06A Client Smp ID: HW-WET-SE-9-(1)_01/
Inj Date : 23-JAN-2014 12:34
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-06A,,75688
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 31-Jan-2014 09:55 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)
	11 Acetone	58	2.309	2.311	(0.517)	4391	5.87304	5(Q)
$	32 Dibromofluoromethane	113	3.914	3.916	(0.876)	128209	51.4415	47
$	37 1,2-Dichloroethane-d4	102	4.180	4.182	(0.936)	32949	53.0351	48
*	41 Fluorobenzene	96	4.466	4.468	(1.000)	482095	50.0000	
$	51 Toluene-d8	98	5.884	5.886	(0.803)	456059	50.0840	46
*	60 Chlorobenzene-d5	117	7.332	7.334	(1.000)	329764	50.0000	
$	70 Bromofluorobenzene	95	8.622	8.614	(1.176)	173902	47.6221	43
*	84 1,4-Dichlorobenzene-d4	152	9.893	9.905	(1.000)	129362	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7556.D
Report Date: 31-Jan-2014 09:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

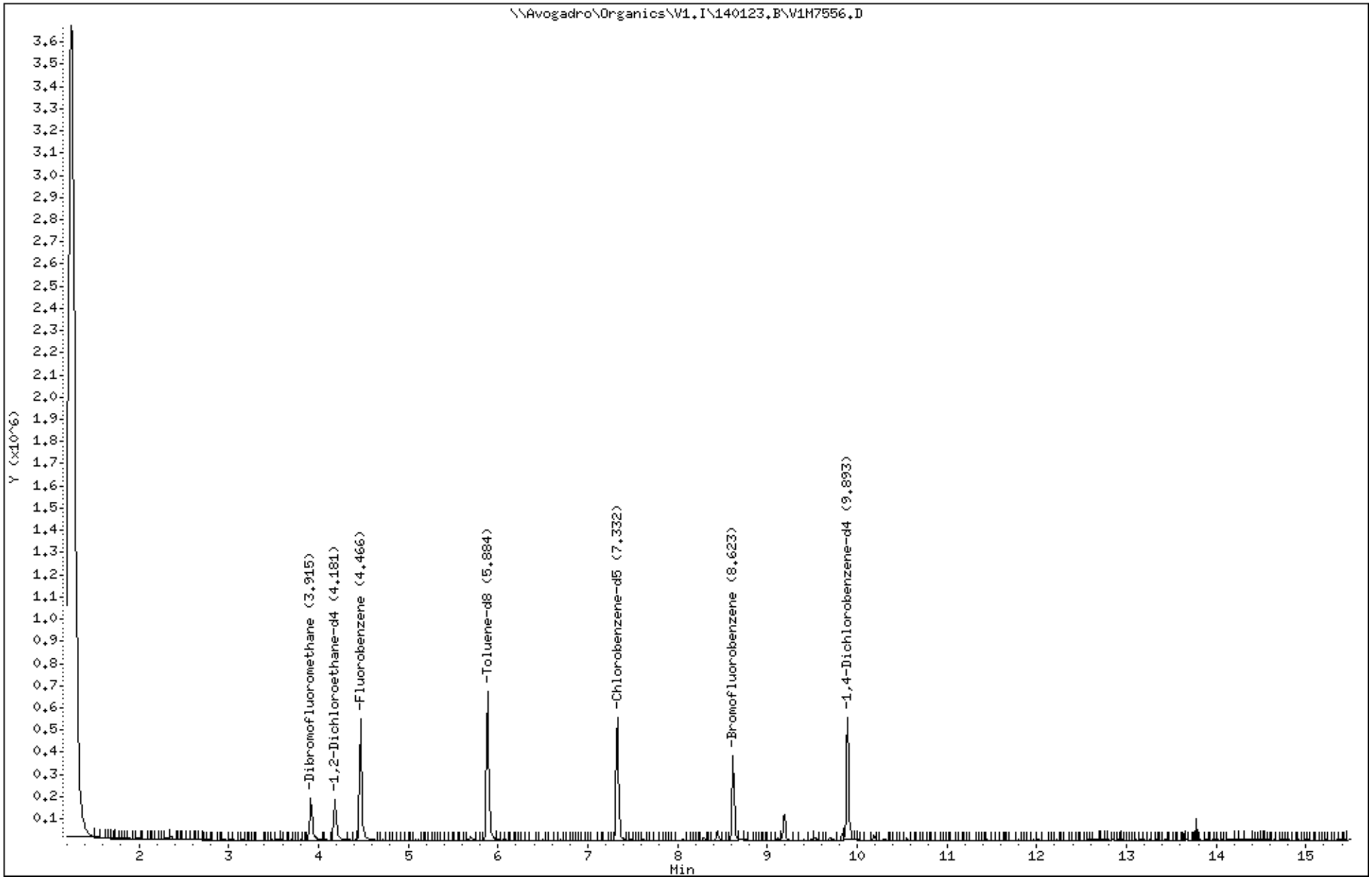
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Inj Date : 23-JAN-2014 12:34
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-06A,,75688
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 31-Jan-2014 09:55 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7556.D
Date : 23-JAN-2014 12:34
Client ID: HW-WET-SE-9-(1)_01/
Sample Info: 5ML,N0058-06A,,75688

Instrument: V1.i
Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7556.D

Date : 23-JAN-2014 12:34

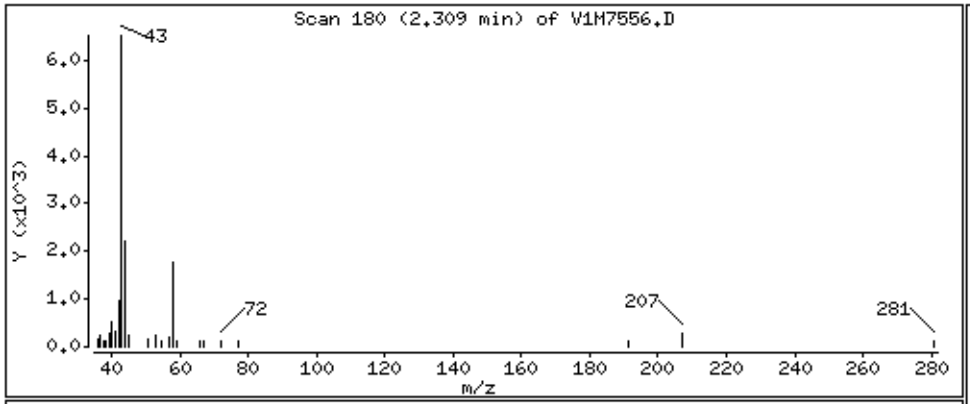
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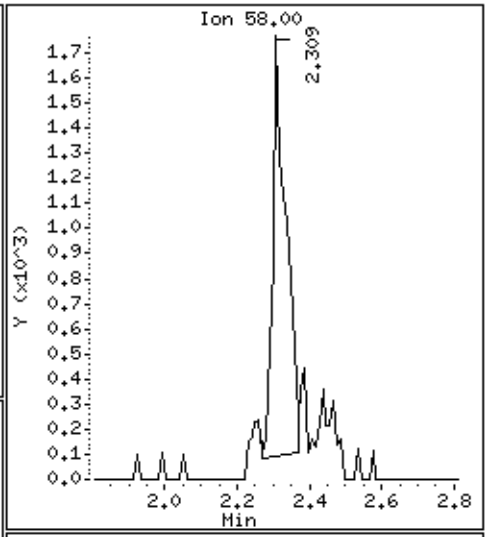
Sample Info: 5ML,N0058-06A,,75688

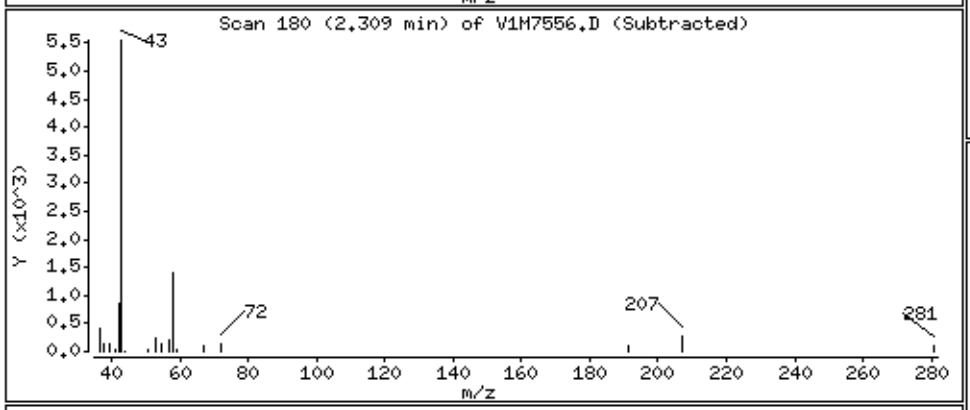
Operator: WL SRC: LIMS

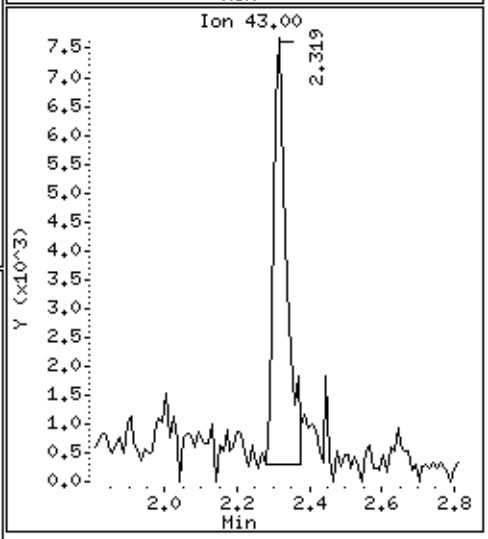
Column phase: DB-624 Column diameter: 0.25

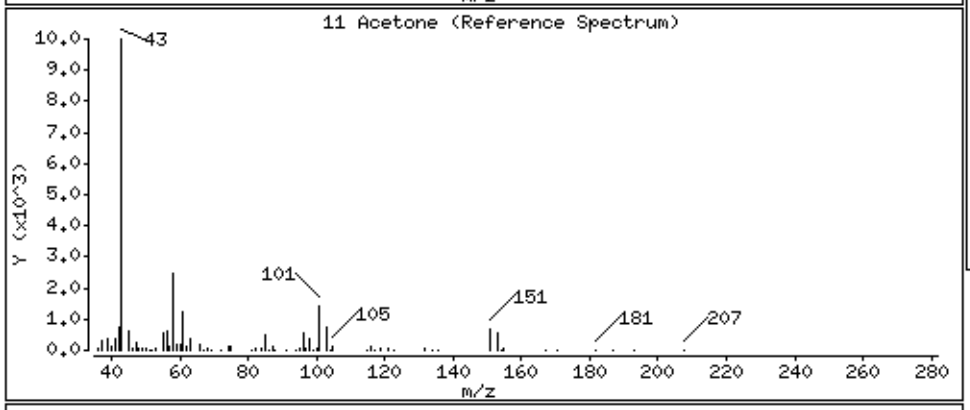
11 Acetone Concentration: 5 ug/Kg

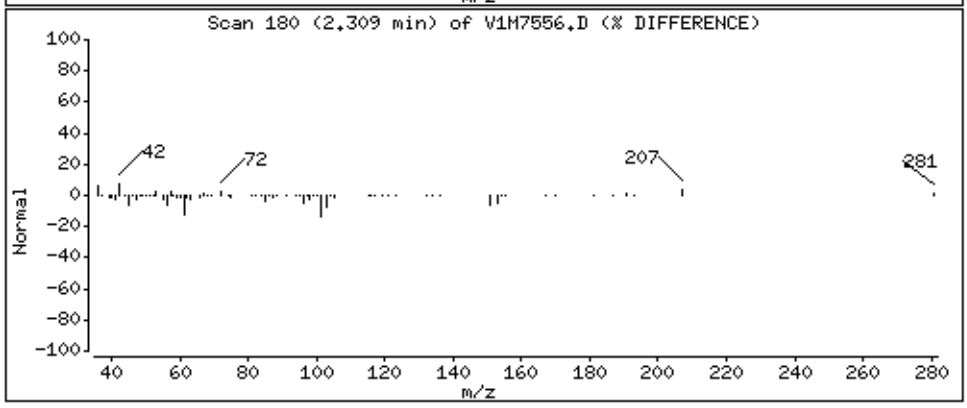












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-8-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-07A

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V1M7484.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 53 Date Analyzed: 01/20/2014

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	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	10	U
74-88-4	Iodomethane	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
594-20-7	2,2-Dichloropropane	10	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
563-58-6	1,1-Dichloropropene	10	U
56-23-5	Carbon tetrachloride	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
142-28-9	1,3-Dichloropropane	10	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-8-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-07A

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V1M7484.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 53 Date Analyzed: 01/20/2014

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	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-86-1	Bromobenzene	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
95-49-8	2-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
106-43-4	4-Chlorotoluene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
104-51-8	n-Butylbenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7484.D
Report Date: 31-Jan-2014 09:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7484.D
Lab Smp Id: N0058-07A Client Smp ID: HW-WET-SE-8-(1)_01/
Inj Date : 20-JAN-2014 14:45
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-07A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	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)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	3.922	3.918	(0.875)	121964	53.6940	53
$ 37 1,2-Dichloroethane-d4	102	4.198	4.194	(0.936)	33592	55.5249	54(R)
* 41 Fluorobenzene	96	4.483	4.479	(1.000)	442609	50.0000	
$ 51 Toluene-d8	98	5.902	5.888	(0.803)	417624	48.1226	47
* 60 Chlorobenzene-d5	117	7.349	7.336	(1.000)	309716	50.0000	
$ 70 Bromofluorobenzene	95	8.630	8.626	(1.174)	169377	50.0766	49
* 84 1,4-Dichlorobenzene-d4	152	9.910	9.906	(1.000)	130553	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7484.D
Report Date: 31-Jan-2014 09:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7484.D
Lab Smp Id: N0058-07A Client Smp ID: HW-WET-SE-8-(1)_01/
Inj Date : 20-JAN-2014 14:45
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-07A,,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

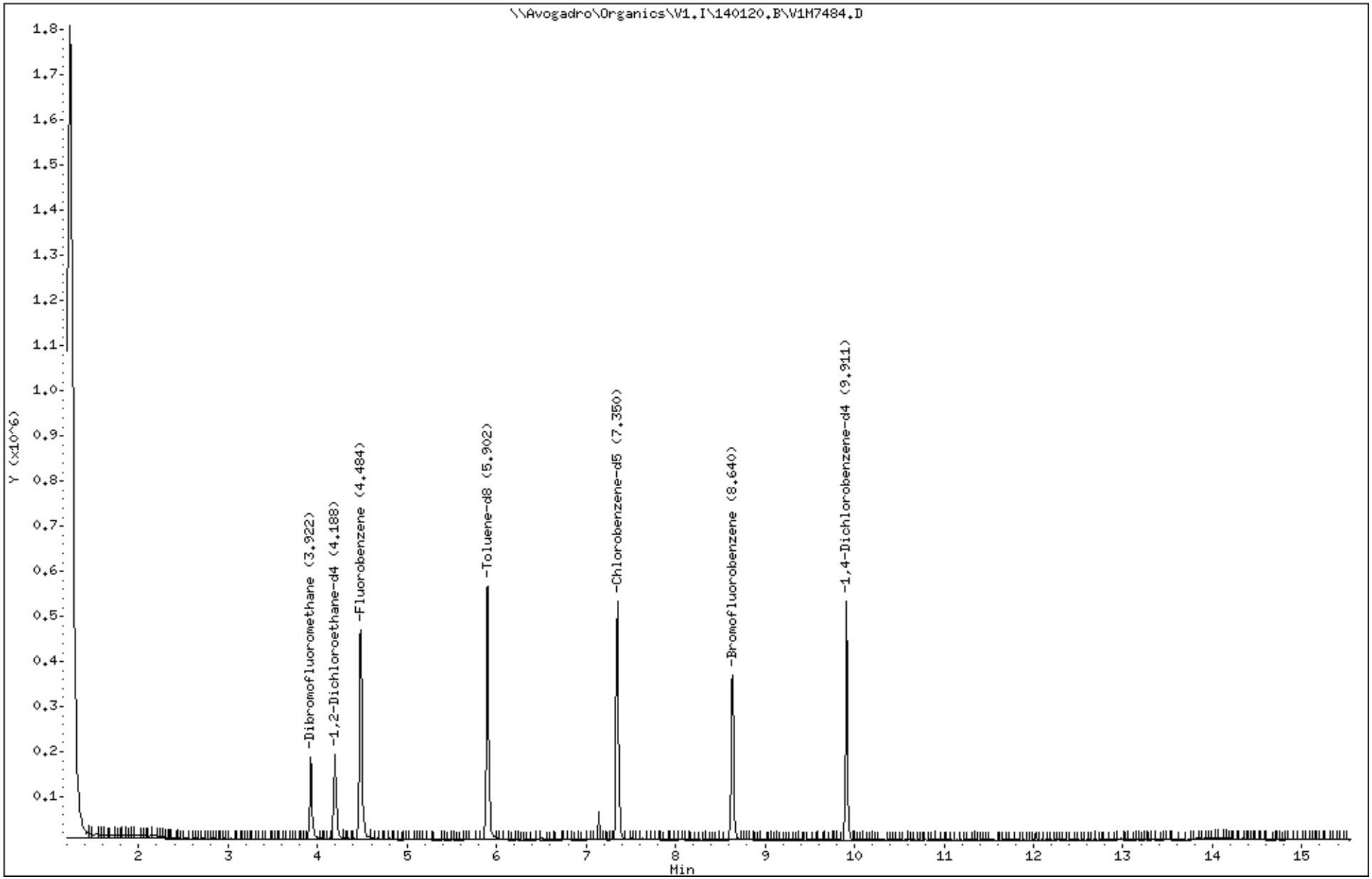
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7484.D
Date : 20-JAN-2014 14:45
Client ID: HW-WET-SE-8-(1)_01/
Sample Info: 5ML,N0058-07A,,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-7-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-08A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7531.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 53 Date Analyzed: 01/22/2014

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	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	12	JL
74-88-4	Iodomethane	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
594-20-7	2,2-Dichloropropane	10	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
563-58-6	1,1-Dichloropropene	10	U
56-23-5	Carbon tetrachloride	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
142-28-9	1,3-Dichloropropane	10	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-7-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-08A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7531.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 53 Date Analyzed: 01/22/2014

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	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-86-1	Bromobenzene	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
95-49-8	2-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
106-43-4	4-Chlorotoluene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
104-51-8	n-Butylbenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7531.D
Report Date: 31-Jan-2014 09:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7531.D
Lab Smp Id: N0058-08A Client Smp ID: HW-WET-SE-7-(1)_01/
Inj Date : 22-JAN-2014 14:55
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-08A,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.300	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)	
	11 Acetone	58	2.332	2.321	(0.521)	4373	5.76691	5	
$	32 Dibromofluoromethane	113	3.917	3.936	(0.875)	127712	50.5233	48	
$	37 1,2-Dichloroethane-d4	102	4.193	4.202	(0.936)	31889	50.6088	48	
*	41 Fluorobenzene	96	4.479	4.487	(1.000)	488954	50.0000		
$	51 Toluene-d8	98	5.897	5.906	(0.803)	450372	49.8248	47	
*	60 Chlorobenzene-d5	117	7.345	7.354	(1.000)	327346	50.0000		
$	70 Bromofluorobenzene	95	8.635	8.644	(1.176)	178886	49.3487	46	
*	84 1,4-Dichlorobenzene-d4	152	9.906	9.915	(1.000)	135048	50.0000		(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7531.D
Report Date: 31-Jan-2014 09:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7531.D
Lab Smp Id: N0058-08A Client Smp ID: HW-WET-SE-7-(1)_01/
Inj Date : 22-JAN-2014 14:55
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-08A,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

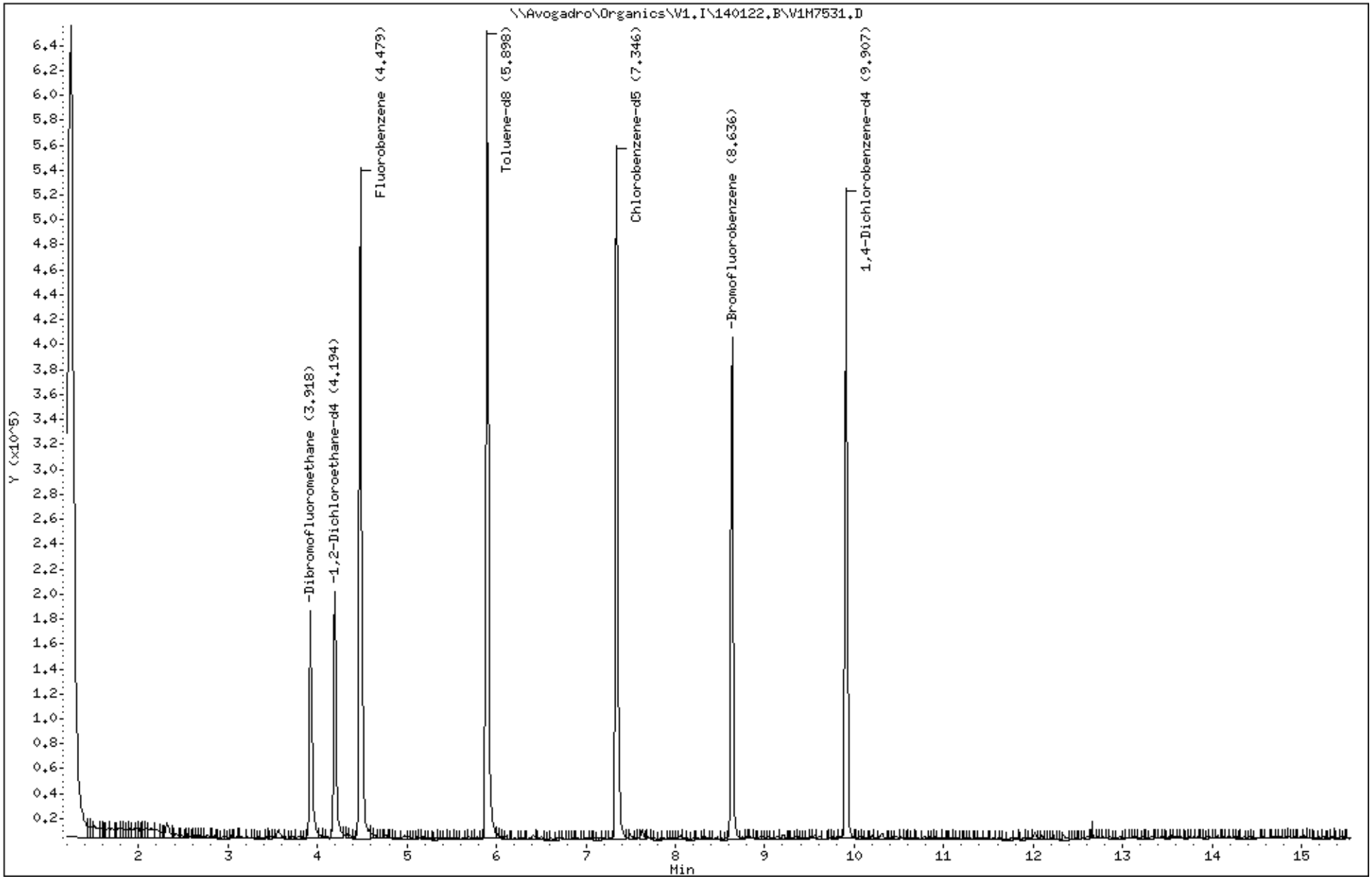
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7531.D
Date : 22-JAN-2014 14:55
Client ID: HW-WET-SE-7-(1)_01/
Sample Info: 5ML,N0058-08A,,75681

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7531.D

Date : 22-JAN-2014 14:55

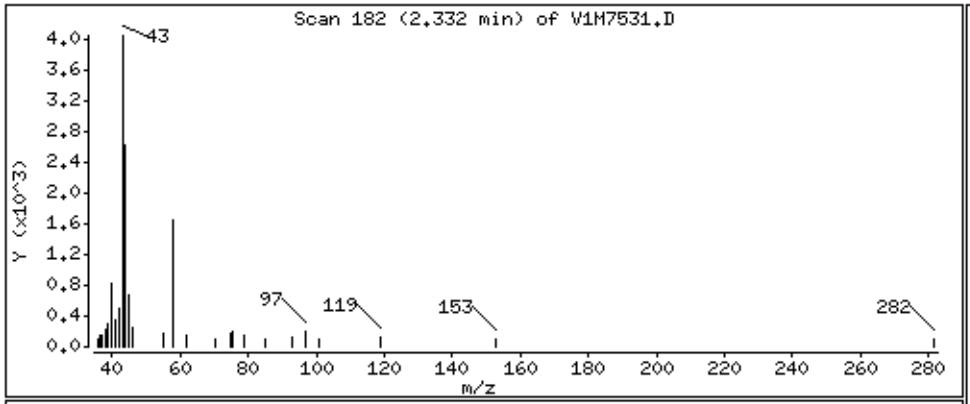
Client ID: HW-WET-SE-7-(1)_01/ Instrument: V1.i

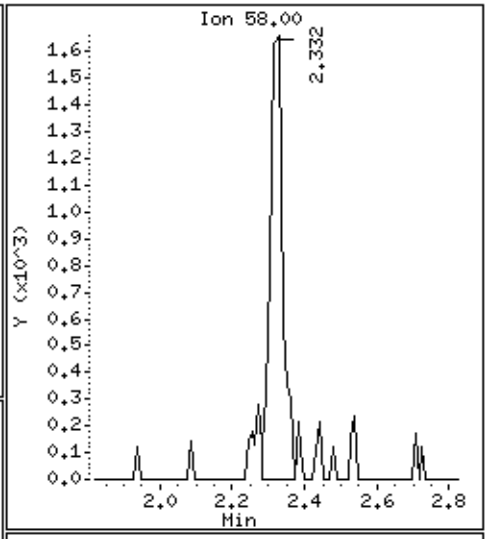
Sample Info: 5ML,N0058-08A,,75681

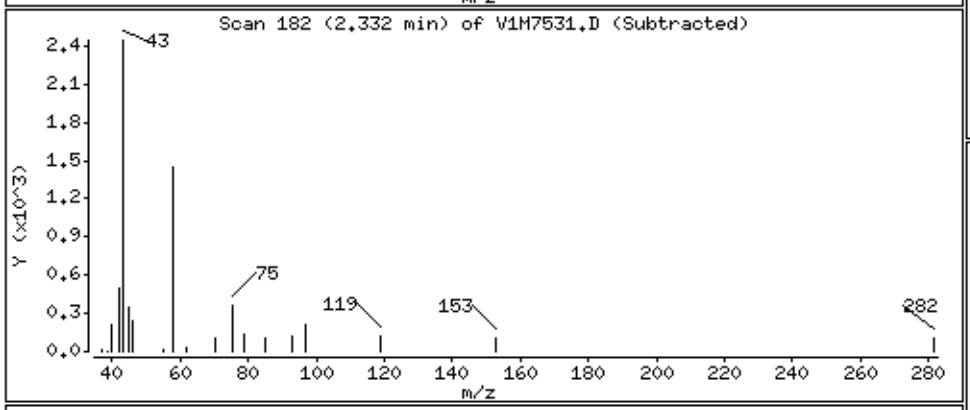
Operator: WL SRC: LIMS

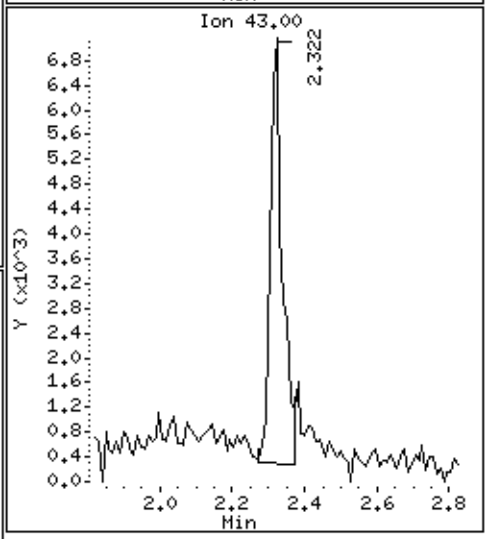
Column phase: DB-624 Column diameter: 0.25

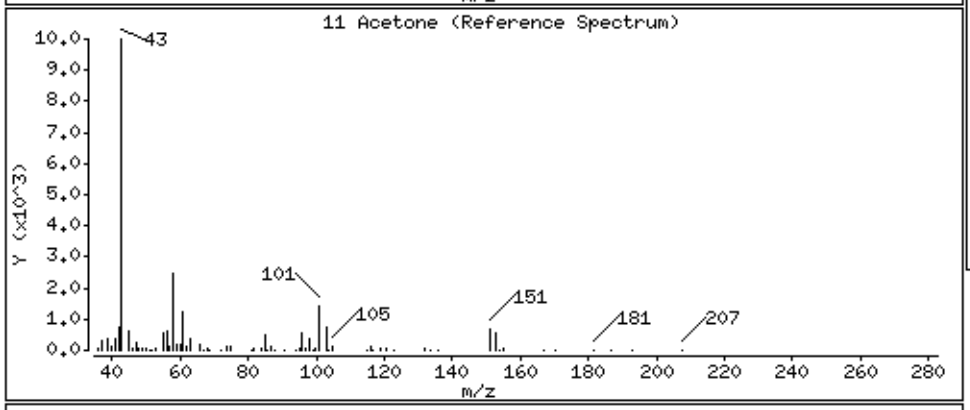
11 Acetone Concentration: 5 ug/Kg

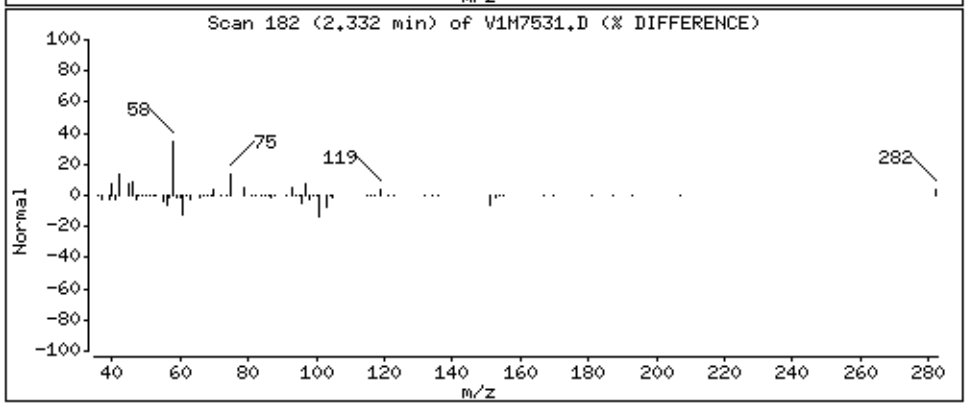












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-(1)_01/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-09A

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7506.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 46 Date Analyzed: 01/21/2014

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	9.2	U
74-87-3	Chloromethane	9.2	U
75-01-4	Vinyl chloride	9.2	U
74-83-9	Bromomethane	9.2	U
75-00-3	Chloroethane	9.2	U
75-69-4	Trichlorofluoromethane	9.2	U
75-35-4	1,1-Dichloroethene	9.2	U
67-64-1	Acetone	25	JL
74-88-4	Iodomethane	9.2	U
75-15-0	Carbon disulfide	9.2	U
75-09-2	Methylene chloride	9.2	U
156-60-5	trans-1,2-Dichloroethene	9.2	U
1634-04-4	Methyl tert-butyl ether	9.2	U
75-34-3	1,1-Dichloroethane	9.2	U
108-05-4	Vinyl acetate	9.2	U
78-93-3	2-Butanone	4.7	JL
156-59-2	cis-1,2-Dichloroethene	9.2	U
594-20-7	2,2-Dichloropropane	9.2	U
74-97-5	Bromochloromethane	9.2	U
67-66-3	Chloroform	9.2	U
71-55-6	1,1,1-Trichloroethane	9.2	U
563-58-6	1,1-Dichloropropene	9.2	U
56-23-5	Carbon tetrachloride	9.2	U
107-06-2	1,2-Dichloroethane	9.2	U
71-43-2	Benzene	9.2	U
79-01-6	Trichloroethene	9.2	U
78-87-5	1,2-Dichloropropane	9.2	U
74-95-3	Dibromomethane	9.2	U
75-27-4	Bromodichloromethane	9.2	U
10061-01-5	cis-1,3-Dichloropropene	9.2	U
108-10-1	4-Methyl-2-pentanone	9.2	U
108-88-3	Toluene	9.2	U
10061-02-6	trans-1,3-Dichloropropene	9.2	U
79-00-5	1,1,2-Trichloroethane	9.2	U
142-28-9	1,3-Dichloropropane	9.2	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-(1)_01/15

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-09A

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7506.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 46 Date Analyzed: 01/21/2014

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	9.2	U
591-78-6	2-Hexanone	9.2	U
124-48-1	Dibromochloromethane	9.2	U
106-93-4	1,2-Dibromoethane	9.2	U
108-90-7	Chlorobenzene	9.2	U
630-20-6	1,1,1,2-Tetrachloroethane	9.2	U
100-41-4	Ethylbenzene	9.2	U
179601-23-1	m,p-Xylene	9.2	U
95-47-6	o-Xylene	9.2	U
1330-20-7	Xylene (Total)	9.2	U
100-42-5	Styrene	9.2	U
75-25-2	Bromoform	9.2	U
98-82-8	Isopropylbenzene	9.2	U
79-34-5	1,1,2,2-Tetrachloroethane	9.2	U
108-86-1	Bromobenzene	9.2	U
96-18-4	1,2,3-Trichloropropane	9.2	U
103-65-1	n-Propylbenzene	9.2	U
95-49-8	2-Chlorotoluene	9.2	U
108-67-8	1,3,5-Trimethylbenzene	9.2	U
106-43-4	4-Chlorotoluene	9.2	U
98-06-6	tert-Butylbenzene	9.2	U
95-63-6	1,2,4-Trimethylbenzene	9.2	U
135-98-8	sec-Butylbenzene	9.2	U
99-87-6	4-Isopropyltoluene	9.2	U
541-73-1	1,3-Dichlorobenzene	9.2	U
106-46-7	1,4-Dichlorobenzene	9.2	U
104-51-8	n-Butylbenzene	9.2	U
95-50-1	1,2-Dichlorobenzene	9.2	U
96-12-8	1,2-Dibromo-3-chloropropane	9.2	U
120-82-1	1,2,4-Trichlorobenzene	9.2	U
87-68-3	Hexachlorobutadiene	9.2	U
87-61-6	1,2,3-Trichlorobenzene	9.2	U
91-20-3	Naphthalene	9.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.2	U

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7506.D
Report Date: 31-Jan-2014 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7506.D
Lab Smp Id: N0058-09A Client Smp ID: HW-WET-SE-(1)_01/15
Inj Date : 21-JAN-2014 17:53
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-09A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)
	11 Acetone	58	2.316	2.307	(0.520)	10585	13.6133	14(Q)
	28 2-Butanone	72	3.548	3.548	(0.797)	1589	2.56722	2(Q)
$	32 Dibromofluoromethane	113	3.902	3.913	(0.876)	134632	51.9416	52
$	37 1,2-Dichloroethane-d4	102	4.178	4.187	(0.938)	34984	54.1454	54
*	41 Fluorobenzene	96	4.454	4.474	(1.000)	501373	50.0000	
$	51 Toluene-d8	98	5.872	5.892	(0.801)	465894	50.7678	51
*	60 Chlorobenzene-d5	117	7.330	7.331	(1.000)	332338	50.0000	
$	70 Bromofluorobenzene	95	8.610	8.621	(1.175)	178688	48.5537	48
*	84 1,4-Dichlorobenzene-d4	152	9.891	9.901	(1.000)	132784	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7506.D
Report Date: 31-Jan-2014 09:50

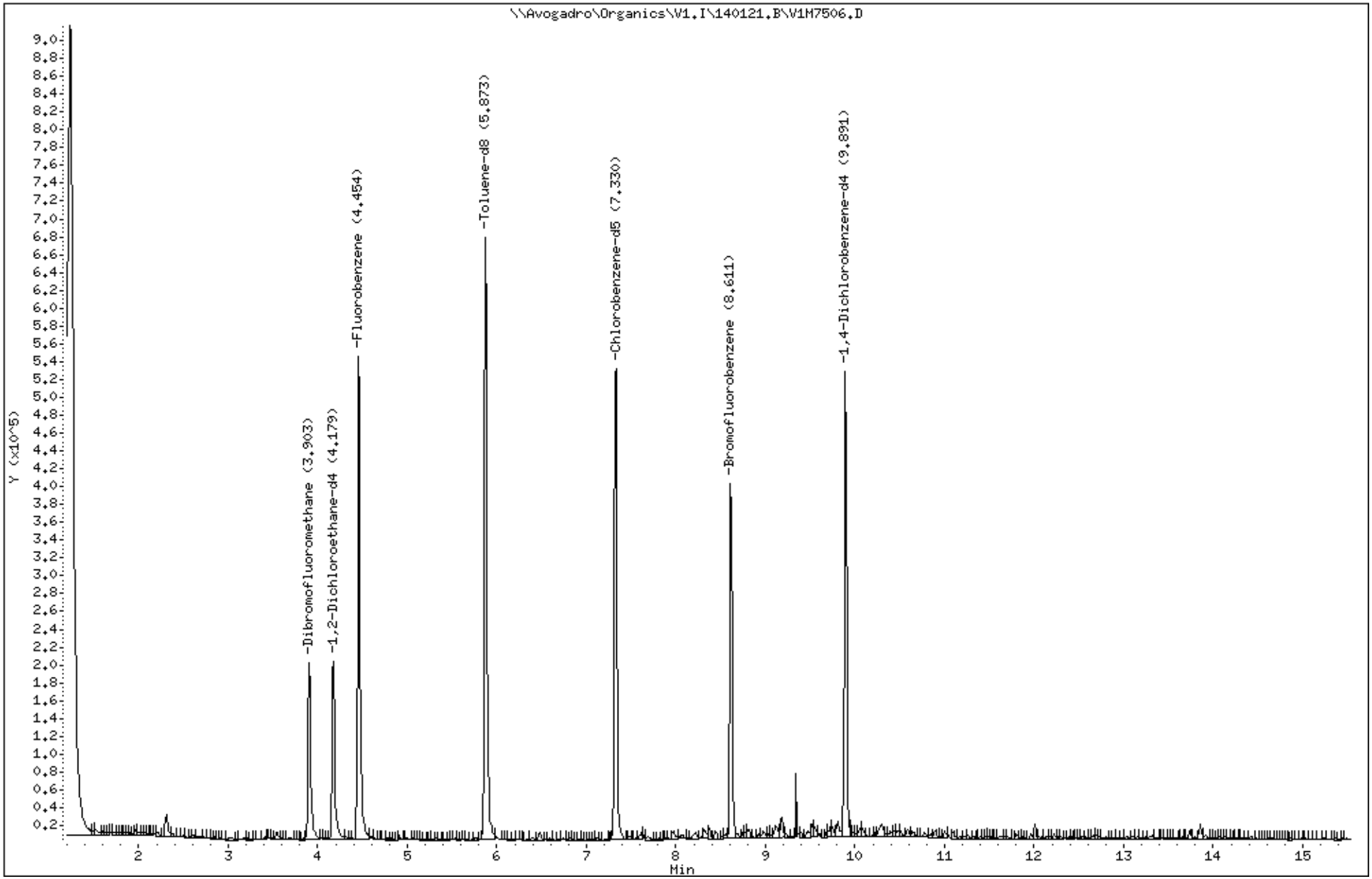
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7506.D
Lab Smp Id: N0058-09A Client Smp ID: HW-WET-SE-(1)_01/15
Inj Date : 21-JAN-2014 17:53
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-09A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7506.D
Date : 21-JAN-2014 17:53
Client ID: HW-WET-SE-(1)_01/15
Instrument: V1.i
Sample Info: 5ML,N0058-09A,,75665
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7506.D

Date : 21-JAN-2014 17:53

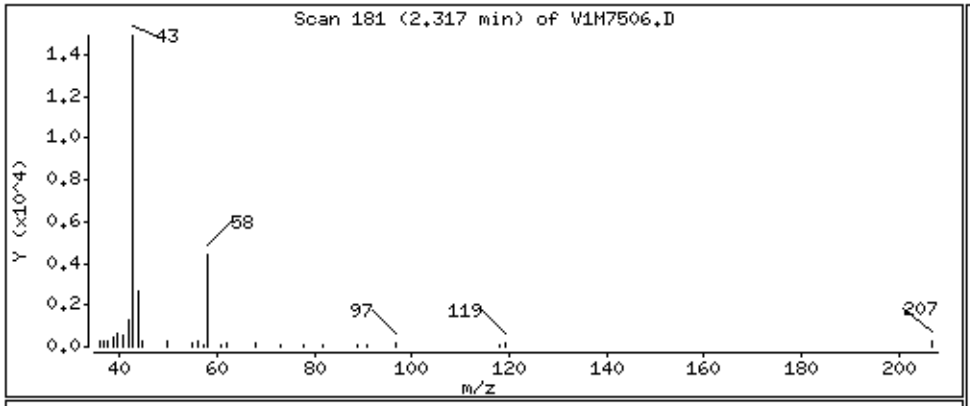
Client ID: HW-WET-SE-(1)_01/15 Instrument: V1.i

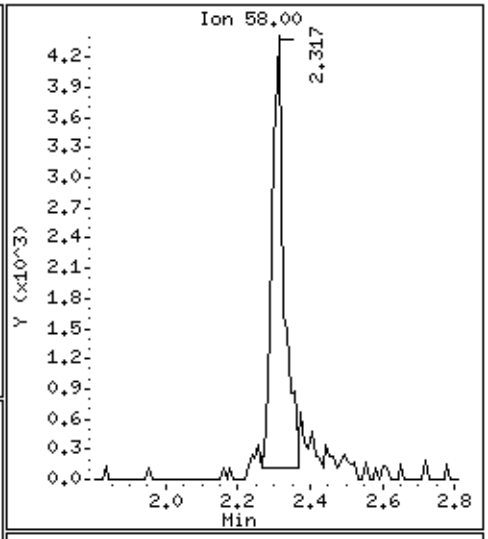
Sample Info: 5ML,N0058-09A,,75665

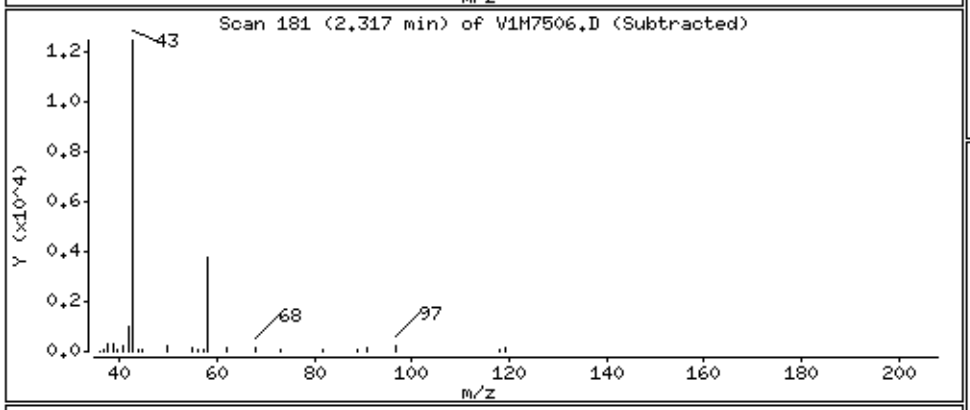
Operator: WL SRC: LIMS

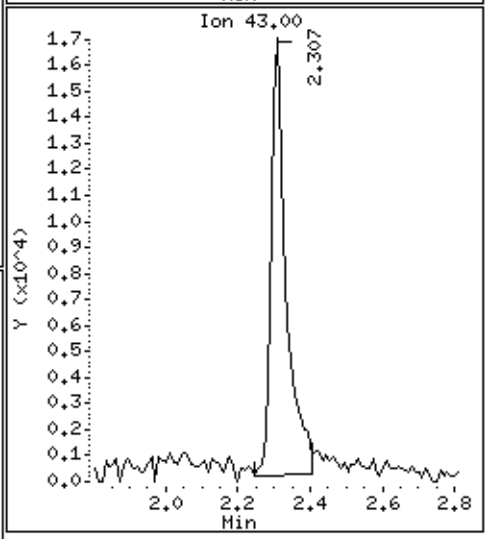
Column phase: DB-624 Column diameter: 0.25

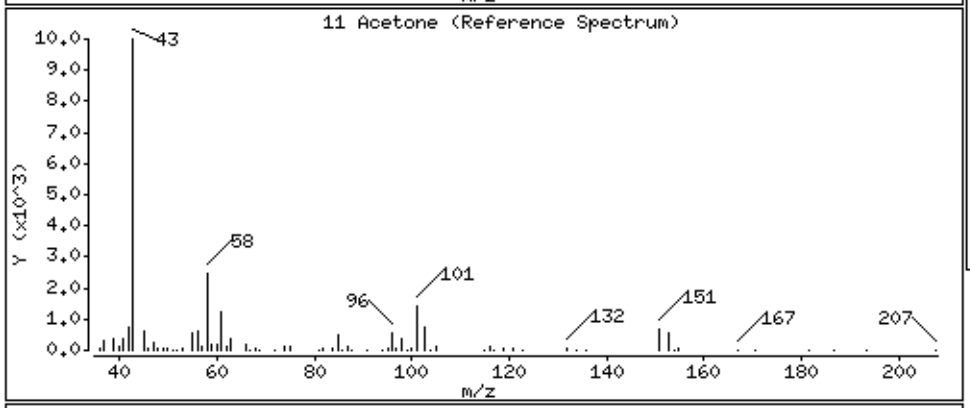
11 Acetone Concentration: 14 ug/Kg

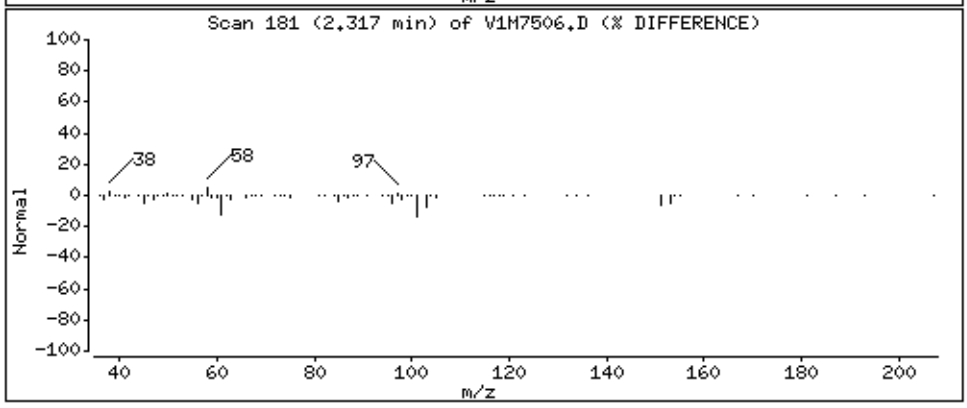












Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7506.D

Date : 21-JAN-2014 17:53

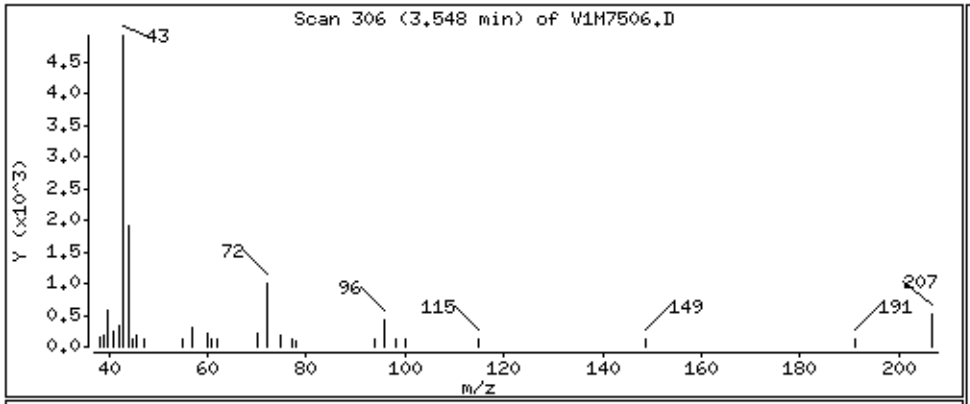
Client ID: HW-WET-SE-(1)_01/15 Instrument: V1.i

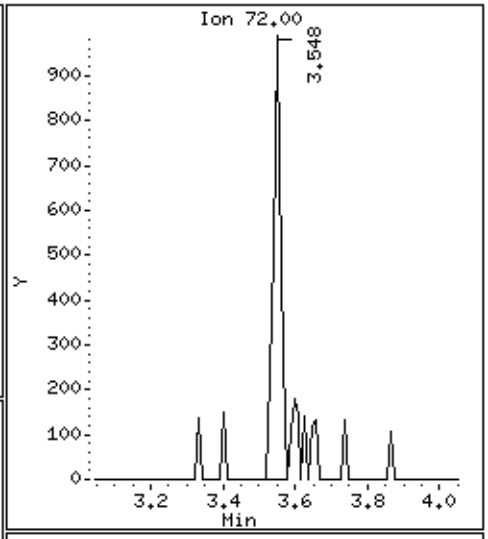
Sample Info: 5ML,N0058-09A,,75665

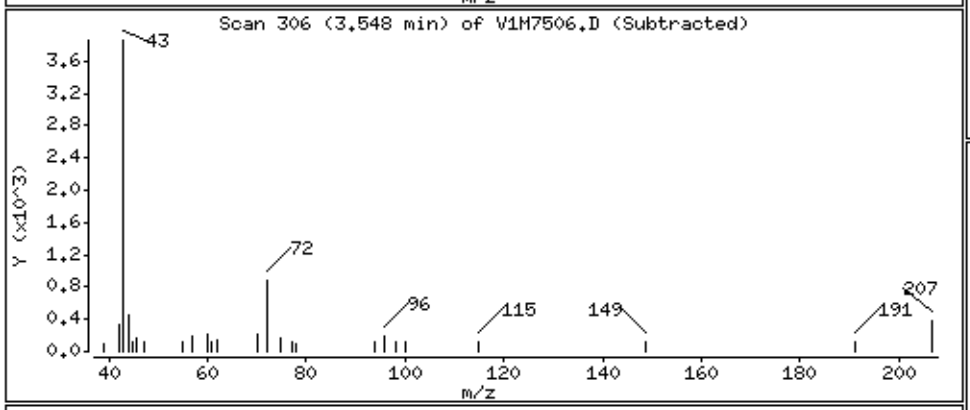
Operator: WL SRC: LIMS

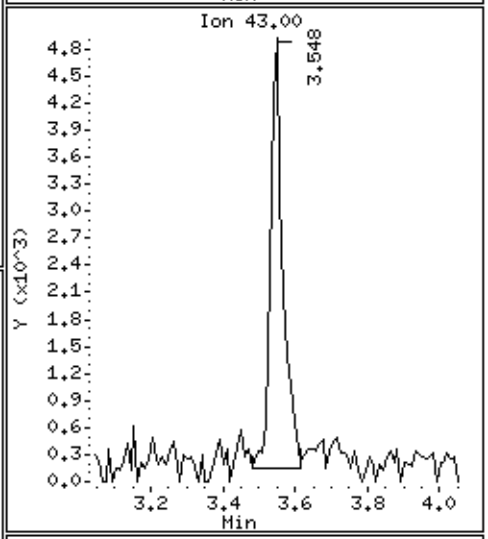
Column phase: DB-624 Column diameter: 0.25

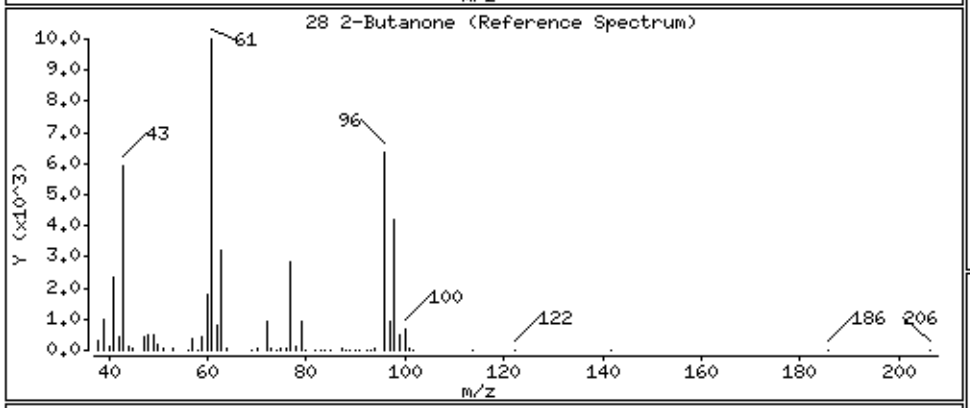
28 2-Butanone Concentration: 2 ug/Kg

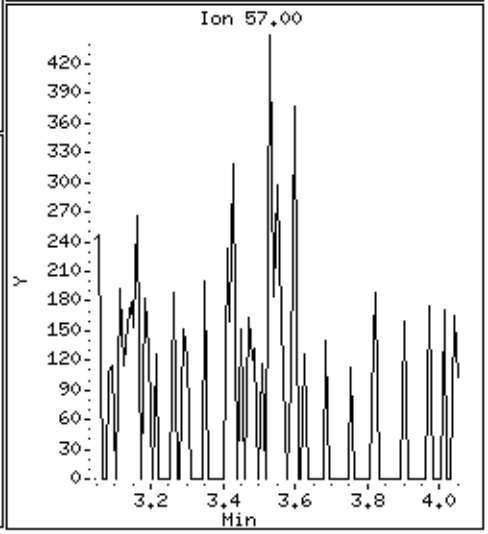


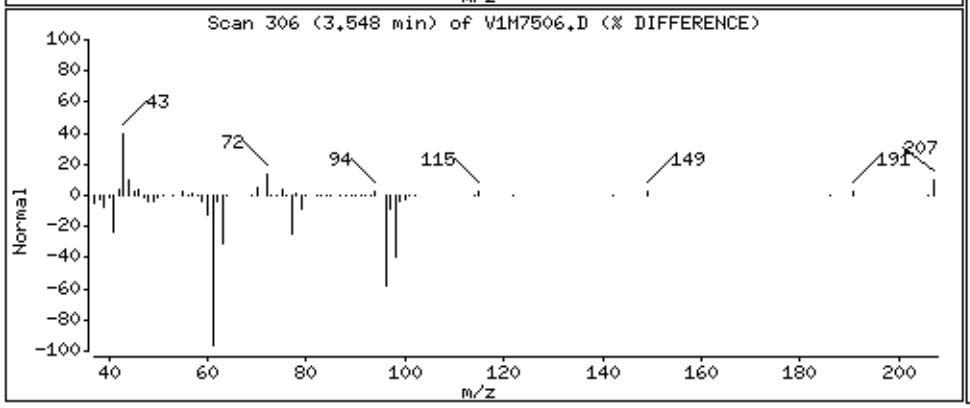












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-2-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-10A

Sample wt/vol: 5.70 (g/mL) G Lab File ID: V1M7507.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 27 Date Analyzed: 01/21/2014

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	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	6.0	U
67-64-1	Acetone	5.6	JL
74-88-4	Iodomethane	6.0	U
75-15-0	Carbon disulfide	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
108-05-4	Vinyl acetate	6.0	U
78-93-3	2-Butanone	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
594-20-7	2,2-Dichloropropane	6.0	U
74-97-5	Bromochloromethane	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
563-58-6	1,1-Dichloropropene	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
107-06-2	1,2-Dichloroethane	6.0	U
71-43-2	Benzene	6.0	U
79-01-6	Trichloroethene	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
74-95-3	Dibromomethane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-10-1	4-Methyl-2-pentanone	6.0	U
108-88-3	Toluene	6.0	U
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
142-28-9	1,3-Dichloropropane	6.0	U

CLIENT SAMPLE NO.
HW-WET-SE-2-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-10A

Sample wt/vol: 5.70 (g/mL) G Lab File ID: V1M7507.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 27 Date Analyzed: 01/21/2014

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	6.0	U
591-78-6	2-Hexanone	6.0	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	6.0	U
630-20-6	1,1,1,2-Tetrachloroethane	6.0	U
100-41-4	Ethylbenzene	6.0	U
179601-23-1	m,p-Xylene	6.0	U
95-47-6	o-Xylene	6.0	U
1330-20-7	Xylene (Total)	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U
98-82-8	Isopropylbenzene	6.0	U
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
108-86-1	Bromobenzene	6.0	U
96-18-4	1,2,3-Trichloropropane	6.0	U
103-65-1	n-Propylbenzene	6.0	U
95-49-8	2-Chlorotoluene	6.0	U
108-67-8	1,3,5-Trimethylbenzene	6.0	U
106-43-4	4-Chlorotoluene	6.0	U
98-06-6	tert-Butylbenzene	6.0	U
95-63-6	1,2,4-Trimethylbenzene	6.0	U
135-98-8	sec-Butylbenzene	6.0	U
99-87-6	4-Isopropyltoluene	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
104-51-8	n-Butylbenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
87-68-3	Hexachlorobutadiene	6.0	U
87-61-6	1,2,3-Trichlorobenzene	6.0	U
91-20-3	Naphthalene	6.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7507.D
Report Date: 31-Jan-2014 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7507.D
Lab Smp Id: N0058-10A Client Smp ID: HW-WET-SE-2-(1)_01/
Inj Date : 21-JAN-2014 18:21
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-10A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.700	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)
	11 Acetone	58	2.316	2.307	(0.518)	3700	4.65518	4(Q)
$	32 Dibromofluoromethane	113	3.911	3.913	(0.874)	136112	51.3721	45
$	37 1,2-Dichloroethane-d4	102	4.187	4.187	(0.936)	34757	52.6258	46
*	41 Fluorobenzene	96	4.473	4.474	(1.000)	512504	50.0000	
$	51 Toluene-d8	98	5.881	5.892	(0.801)	484291	48.9655	43
*	60 Chlorobenzene-d5	117	7.339	7.331	(1.000)	358177	50.0000	
$	70 Bromofluorobenzene	95	8.629	8.621	(1.176)	193105	48.6858	43
*	84 1,4-Dichlorobenzene-d4	152	9.900	9.901	(1.000)	147697	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7507.D
Report Date: 31-Jan-2014 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

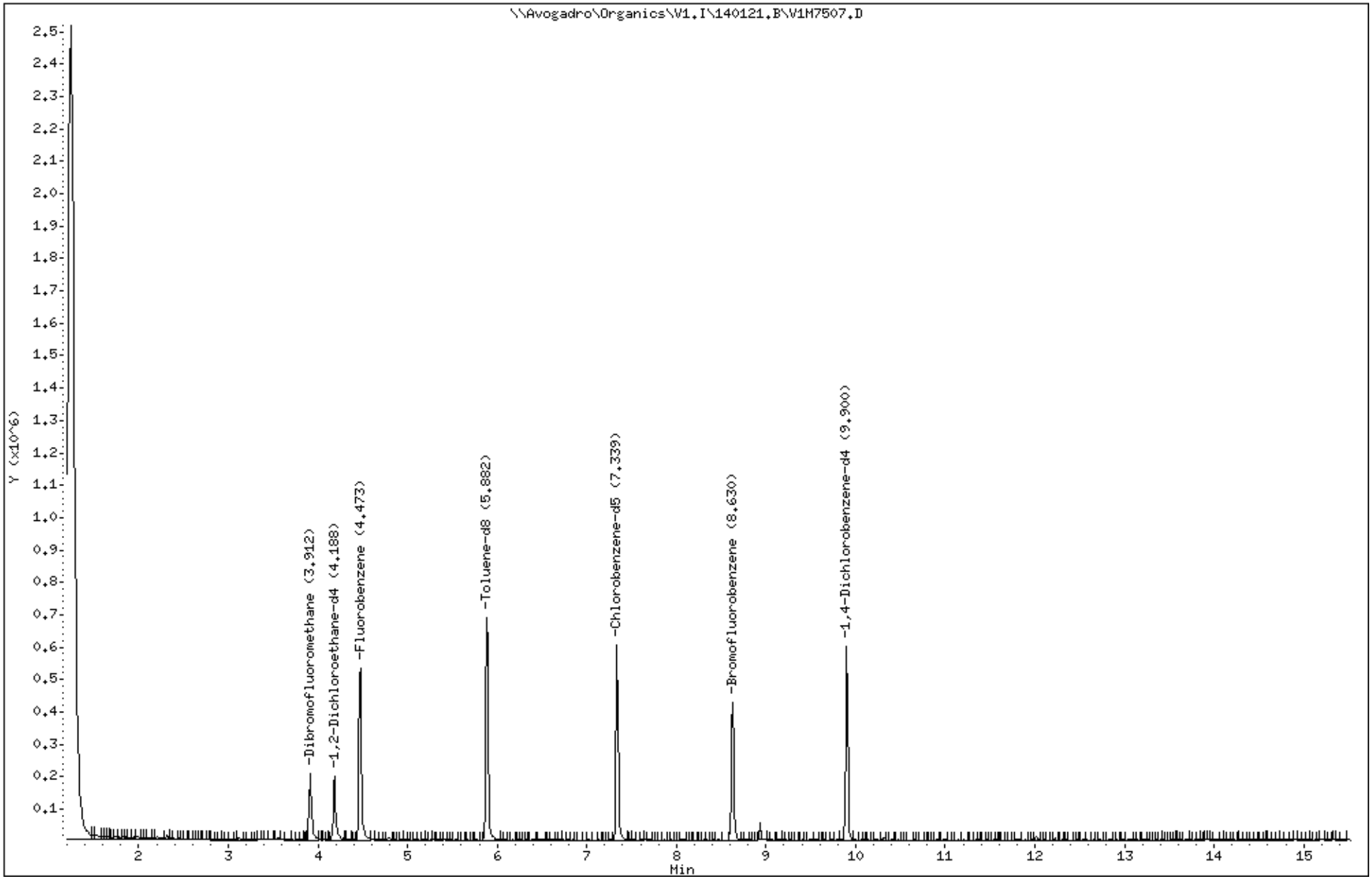
Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7507.D
Lab Smp Id: N0058-10A Client Smp ID: HW-WET-SE-2-(1)_01/
Inj Date : 21-JAN-2014 18:21
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-10A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7507.D
Date : 21-JAN-2014 18:21
Client ID: HW-WET-SE-2-(1)_01/
Sample Info: 5ML,N0058-10A,,75665

Instrument: V1.i
Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7507.D

Date : 21-JAN-2014 18:21

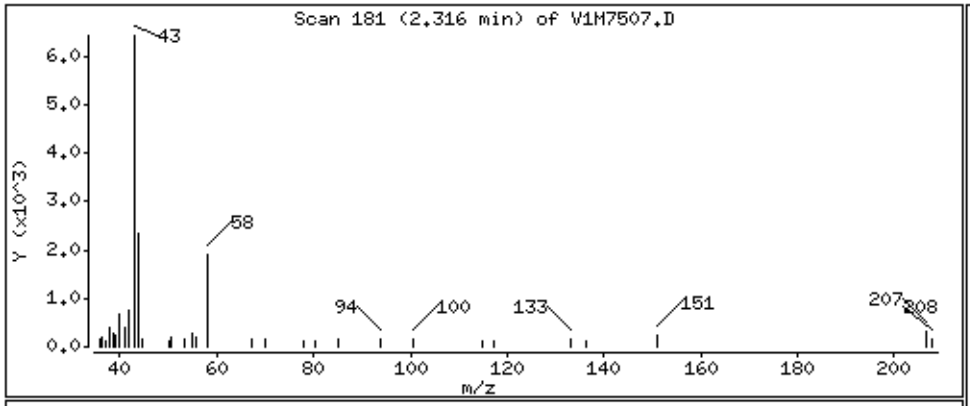
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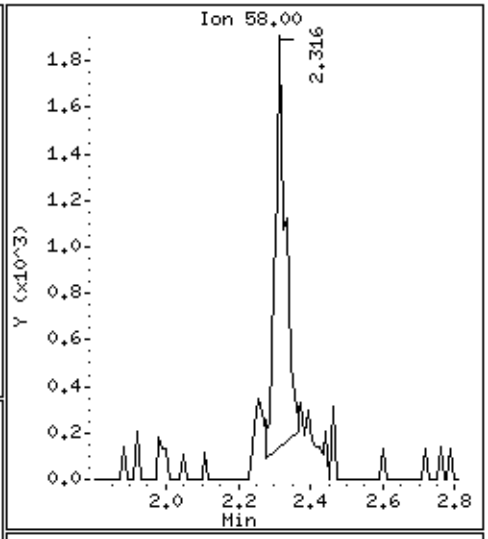
Sample Info: 5ML,N0058-10A,,75665

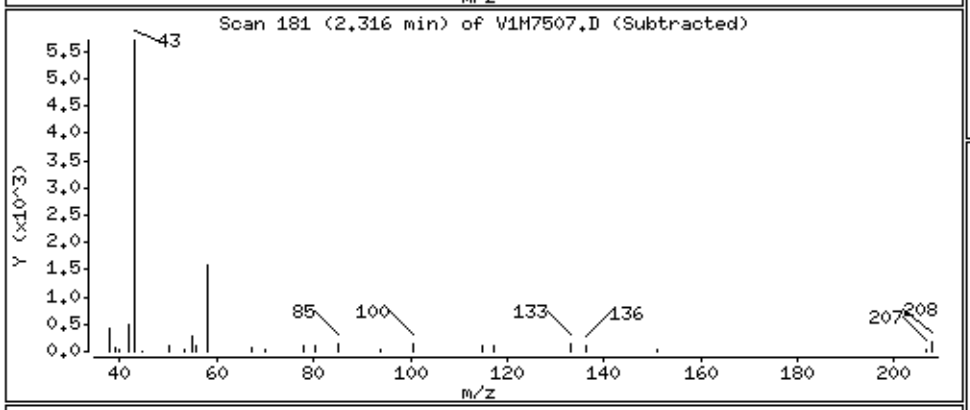
Operator: WL SRC: LIMS

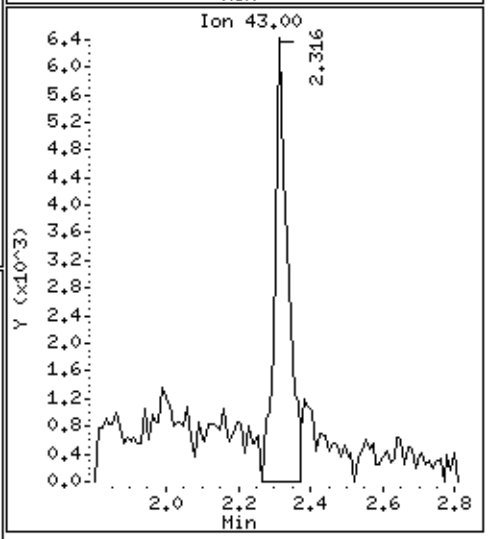
Column phase: DB-624 Column diameter: 0.25

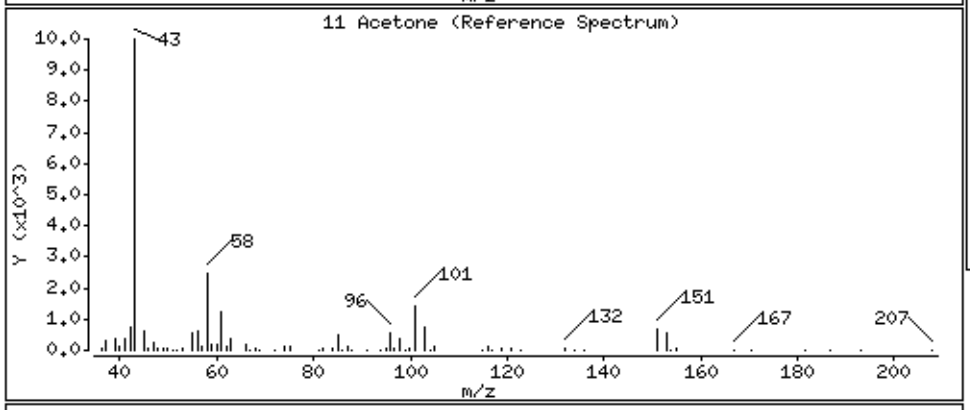
11 Acetone Concentration: 4 ug/Kg

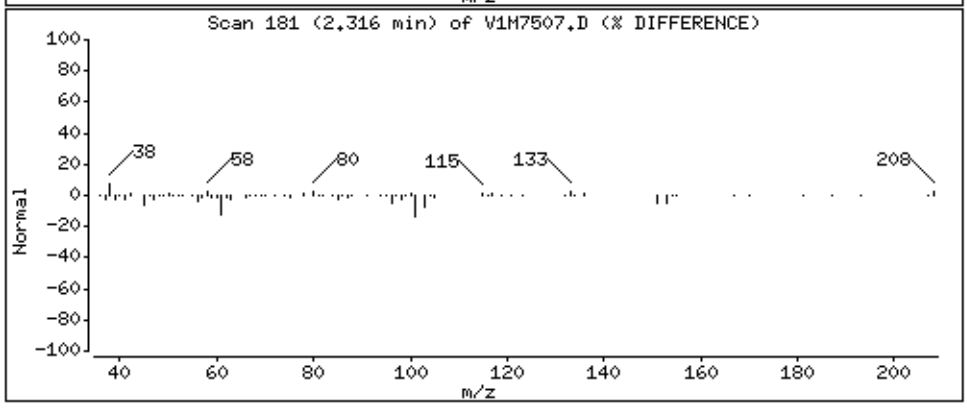












CLIENT SAMPLE NO.
HW-WET-SE-3-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-11A

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5O9556.D

Level: (TRACE/LOW/MED) MED Date Received: 01/17/2014

% Moisture: not dec. 57 Date Analyzed: 01/22/2014

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	910	U
74-87-3	Chloromethane	910	U
75-01-4	Vinyl chloride	910	U
74-83-9	Bromomethane	910	U
75-00-3	Chloroethane	910	U
75-69-4	Trichlorofluoromethane	910	U
75-35-4	1,1-Dichloroethene	1400	
67-64-1	Acetone	4400	
74-88-4	Iodomethane	910	U
75-15-0	Carbon disulfide	910	U
75-09-2	Methylene chloride	910	U
156-60-5	trans-1,2-Dichloroethene	910	U
1634-04-4	Methyl tert-butyl ether	910	U
75-34-3	1,1-Dichloroethane	2900	
108-05-4	Vinyl acetate	910	U
78-93-3	2-Butanone	910	U
156-59-2	cis-1,2-Dichloroethene	210	J
594-20-7	2,2-Dichloropropane	910	U
74-97-5	Bromochloromethane	910	U
67-66-3	Chloroform	910	U
71-55-6	1,1,1-Trichloroethane	220000	E
563-58-6	1,1-Dichloropropene	910	U
56-23-5	Carbon tetrachloride	910	U
107-06-2	1,2-Dichloroethane	910	U
71-43-2	Benzene	910	U
79-01-6	Trichloroethene	1200	
78-87-5	1,2-Dichloropropane	910	U
74-95-3	Dibromomethane	910	U
75-27-4	Bromodichloromethane	910	U
10061-01-5	cis-1,3-Dichloropropene	910	U
108-10-1	4-Methyl-2-pentanone	910	U
108-88-3	Toluene	2300	
10061-02-6	trans-1,3-Dichloropropene	910	U
79-00-5	1,1,2-Trichloroethane	910	U
142-28-9	1,3-Dichloropropane	910	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-3-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-11A

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5O9556.D

Level: (TRACE/LOW/MED) MED Date Received: 01/17/2014

% Moisture: not dec. 57 Date Analyzed: 01/22/2014

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	1800	
591-78-6	2-Hexanone	910	U
124-48-1	Dibromochloromethane	910	U
106-93-4	1,2-Dibromoethane	910	U
108-90-7	Chlorobenzene	9500	
630-20-6	1,1,1,2-Tetrachloroethane	910	U
100-41-4	Ethylbenzene	12000	
179601-23-1	m,p-Xylene	30000	
95-47-6	o-Xylene	7300	
1330-20-7	Xylene (Total)	37000	
100-42-5	Styrene	910	U
75-25-2	Bromoform	910	U
98-82-8	Isopropylbenzene	910	U
79-34-5	1,1,2,2-Tetrachloroethane	910	U
108-86-1	Bromobenzene	910	U
96-18-4	1,2,3-Trichloropropane	910	U
103-65-1	n-Propylbenzene	910	U
95-49-8	2-Chlorotoluene	910	U
108-67-8	1,3,5-Trimethylbenzene	580	J
106-43-4	4-Chlorotoluene	910	U
98-06-6	tert-Butylbenzene	910	U
95-63-6	1,2,4-Trimethylbenzene	1200	
135-98-8	sec-Butylbenzene	310	J
99-87-6	4-Isopropyltoluene	370	J
541-73-1	1,3-Dichlorobenzene	320	J
106-46-7	1,4-Dichlorobenzene	1600	
104-51-8	n-Butylbenzene	770	J
95-50-1	1,2-Dichlorobenzene	13000	
96-12-8	1,2-Dibromo-3-chloropropane	910	U
120-82-1	1,2,4-Trichlorobenzene	910	U
87-68-3	Hexachlorobutadiene	910	U
87-61-6	1,2,3-Trichlorobenzene	910	U
91-20-3	Naphthalene	910	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	120000	E

Data File: \\Avogadro\Organics\V5.I\140122.B\V5O9556.D
Report Date: 31-Jan-2014 09:56

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V5.I\140122.B\V5O9556.D
Lab Smp Id: N0058-11A Client Smp ID: HW-WET-SE-3-(1)_01/
Inj Date : 22-JAN-2014 16:32
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,N0058-11A,,75683,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V5.I\140122.B\v5_8260W.m
Meth Date : 31-Jan-2014 09:56 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
11	1,1-Dichloroethene	96	2.908	2.903	(0.521)	9536	7.91056	390(Q)
13	Acetone	58	2.931	2.938	(0.526)	2570	24.3590	1200(Q)
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.931	2.938	(0.526)	913540	637.150	31000(A)
24	1,1-Dichloroethane	63	3.930	3.925	(0.705)	36132	15.8366	780
29	cis-1,2-Dichloroethene	96	4.464	4.459	(0.800)	1650	1.13783	56(Q)
$ 37	Dibromofluoromethane	113	4.905	4.912	(0.879)	40511	49.3527	2400
38	1,1,1-Trichloroethane	97	4.952	4.947	(0.888)	2527527	1202.23	59000(A)
$ 43	1,2-Dichloroethane-d4	102	5.242	5.237	(0.940)	7418	51.9612	2500
* 47	Fluorobenzene	96	5.578	5.585	(1.000)	101456	50.0000	
48	Trichloroethene	130	5.962	5.957	(1.069)	9222	6.47096	320
$ 59	Toluene-d8	98	7.297	7.292	(0.806)	116651	48.9097	2400
60	Toluene	91	7.366	7.373	(1.320)	59796	12.8131	630
64	Tetrachloroethene	164	8.016	8.023	(0.886)	13893	9.91565	490
* 69	Chlorobenzene-d5	117	9.050	9.045	(1.000)	128882	50.0000	
71	Chlorobenzene	112	9.085	9.080	(1.004)	175508	52.4873	2600
73	Ethylbenzene	106	9.235	9.231	(1.021)	105736	65.2481	3200
74	m,p-Xylene	106	9.386	9.393	(1.037)	322282	164.246	8000
75	o-Xylene	106	9.909	9.904	(1.095)	76603	40.3889	2000
$ 80	Bromofluorobenzene	95	10.605	10.600	(1.172)	70222	49.3361	2400

Data File: \\Avogadro\Organics\V5.I\140122.B\V5O9556.D
Report Date: 31-Jan-2014 09:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
87	1,3,5-Trimethylbenzene	105	11.221	11.227	(0.919)	12033	3.20486	160(H)
89	1,2,4-Trimethylbenzene	105	11.743	11.738	(0.962)	26863	6.75419	330
90	sec-Butylbenzene	105	11.975	11.982	(0.981)	7483	1.72257	84
91	1,3-Dichlorobenzene	146	12.115	12.110	(0.992)	4840	1.73541	85(Q)
92	4-Isopropyltoluene	119	12.196	12.191	(0.999)	7376	2.01242	99
* 93	1,4-Dichlorobenzene-d4	152	12.207	12.203	(1.000)	85035	50.0000	
94	1,4-Dichlorobenzene	146	12.242	12.237	(1.003)	26766	8.96408	440
96	1,2-Dichlorobenzene	146	12.765	12.760	(1.046)	190191	70.0621	3400
97	n-Butylbenzene	91	12.776	12.783	(1.047)	13446	4.22647	210(Q)

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\V5.I\140122.B\V5O9556.D
Report Date: 31-Jan-2014 09:56

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V5.I\140122.B\V5O9556.D
Lab Smp Id: N0058-11A Client Smp ID: HW-WET-SE-3-(1)_01/
Inj Date : 22-JAN-2014 16:32
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,N0058-11A,,75683,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V5.I\140122.B\v5_8260W.m
Meth Date : 31-Jan-2014 09:56 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	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

ISTD	RT	AREA	AMOUNT
* 47 Fluorobenzene	5.579	222773	50.000

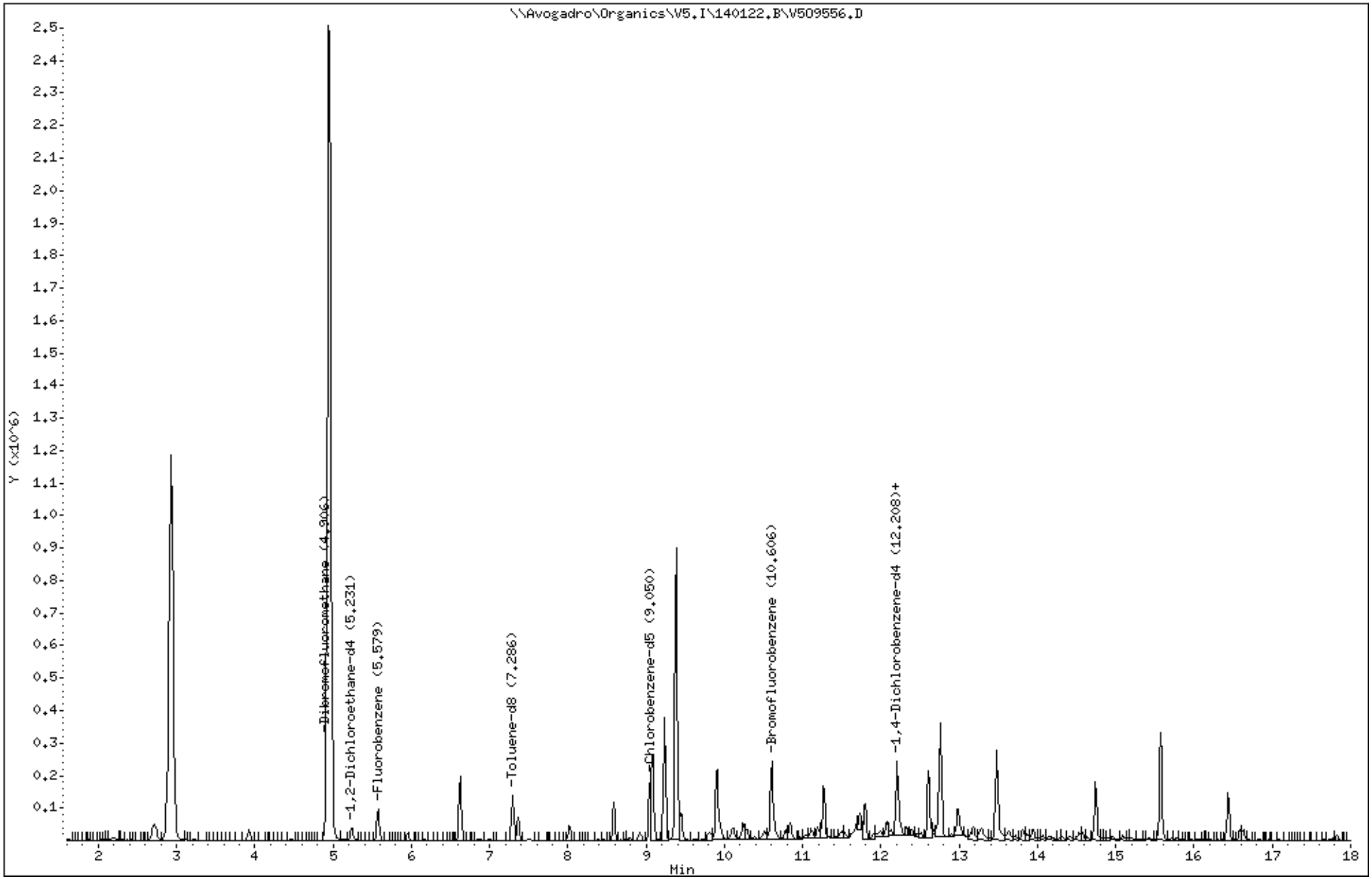
	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.711	218482	49.0367650	2400	91	NIST2002.L	24345	47

Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D
Date : 22-JAN-2014 16:32
Client ID: HW-WET-SE-3-(1)_01/
Sample Info: 5ML,N0058-11A,,75683,

Instrument: V5.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

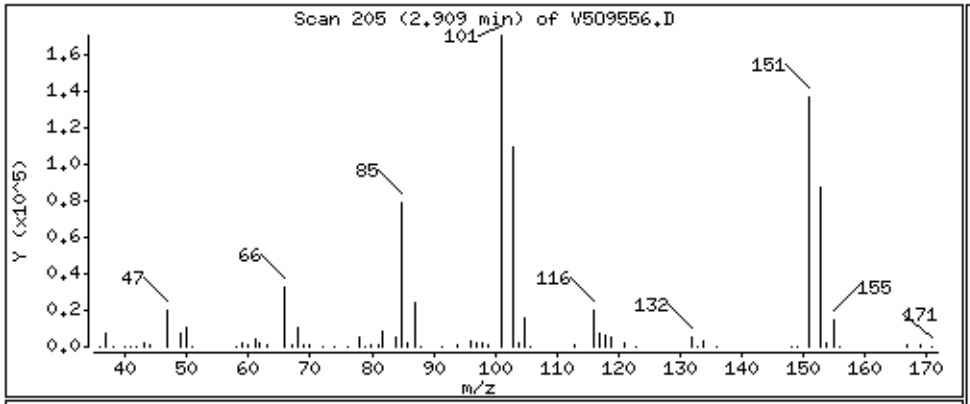
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

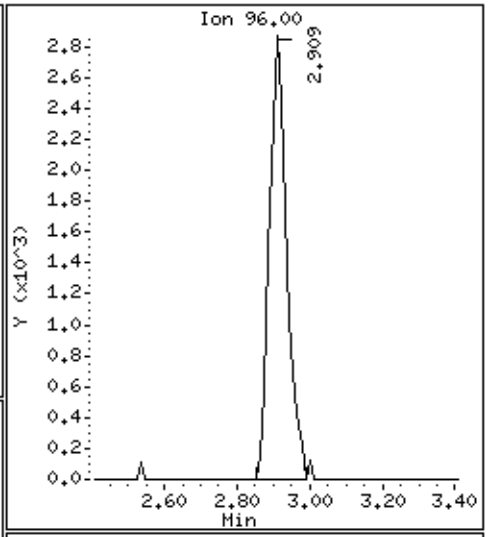
Sample Info: 5ML,N0058-11A,,75683,

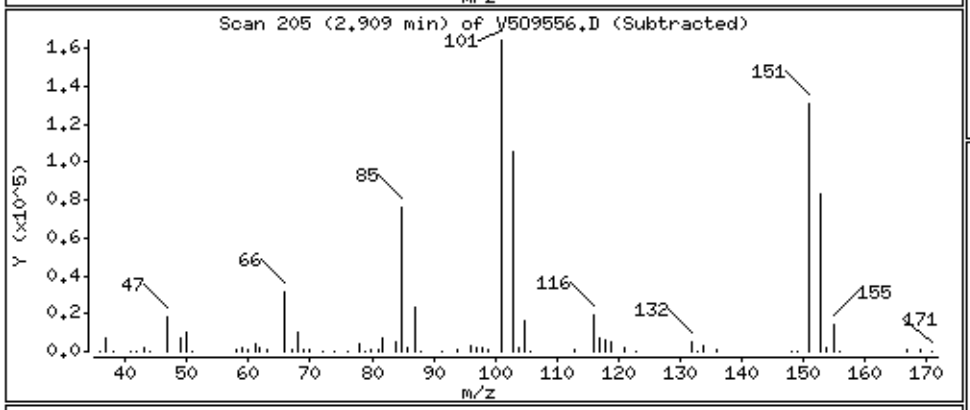
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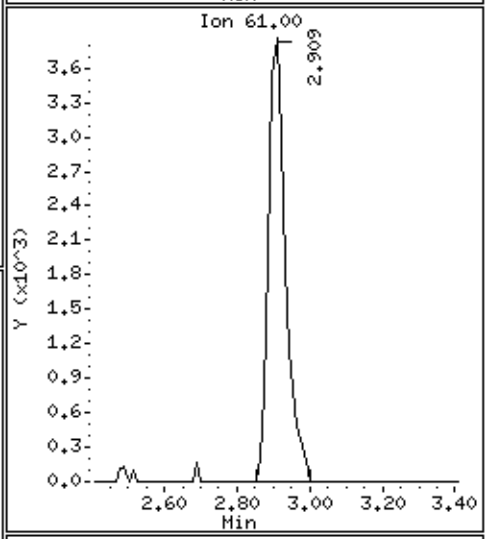
Column phase: DB-624 Column diameter: 0.25

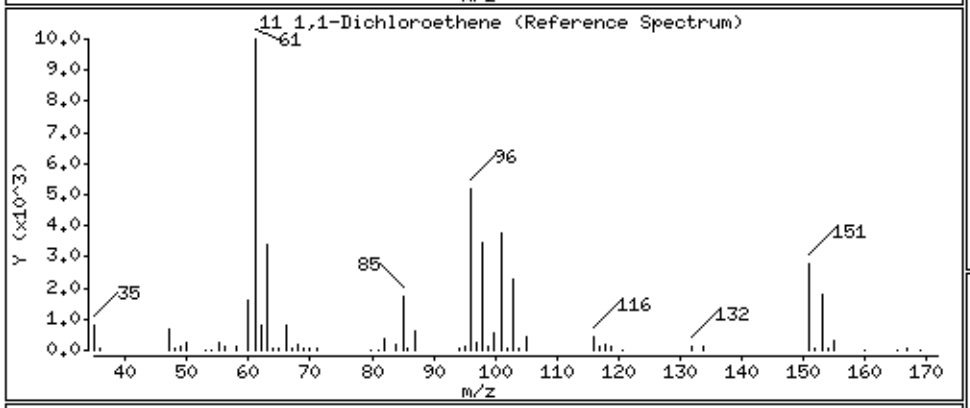
11 1,1-Dichloroethene Concentration: 390 ug/Kg

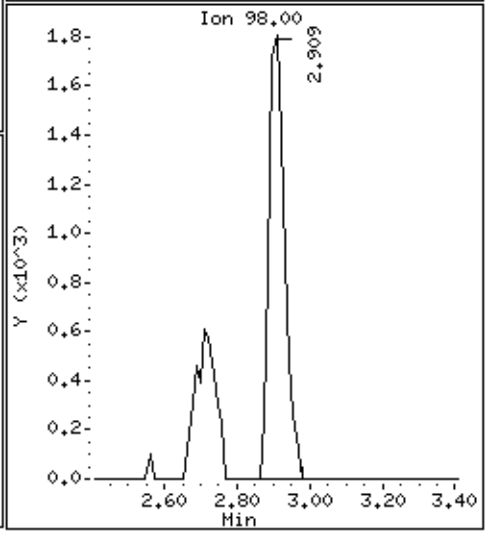


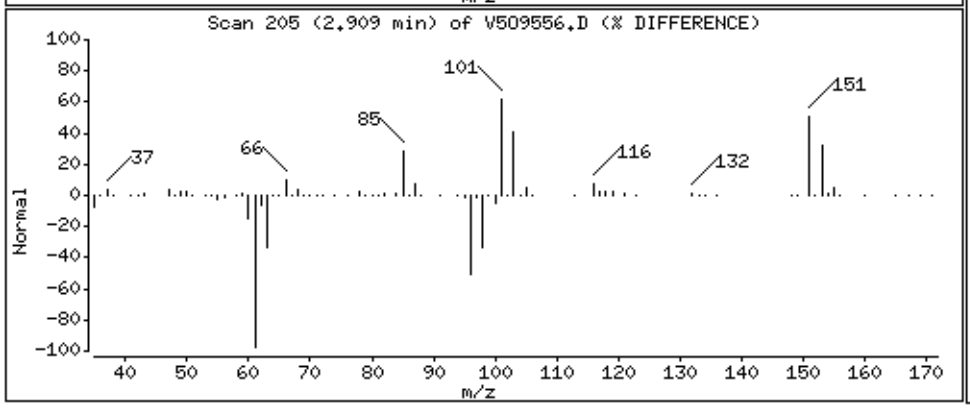












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

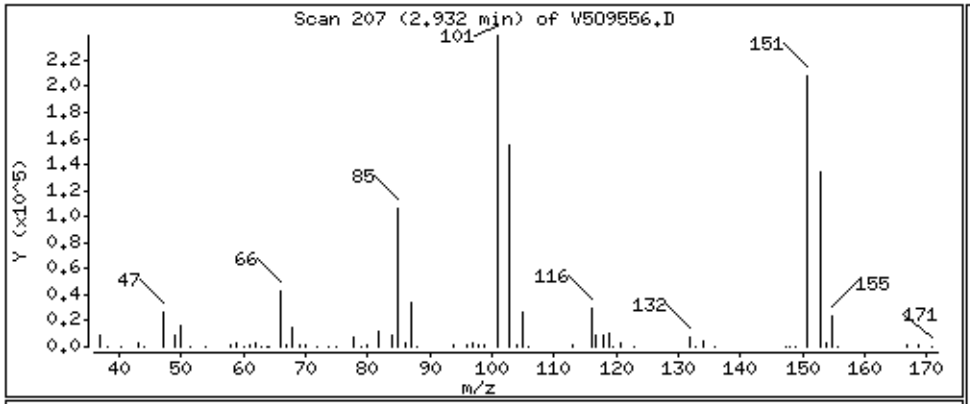
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

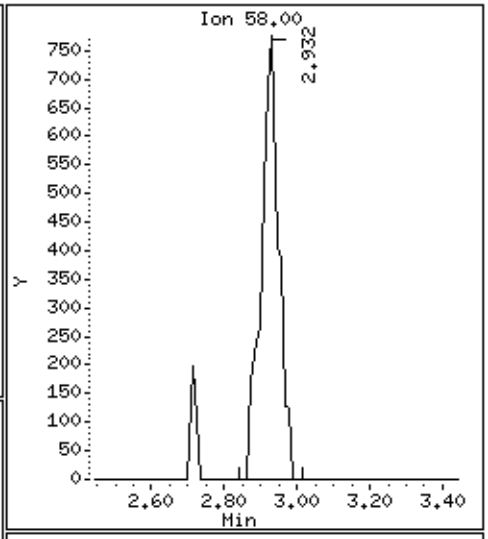
Sample Info: 5ML,N0058-11A,,75683,

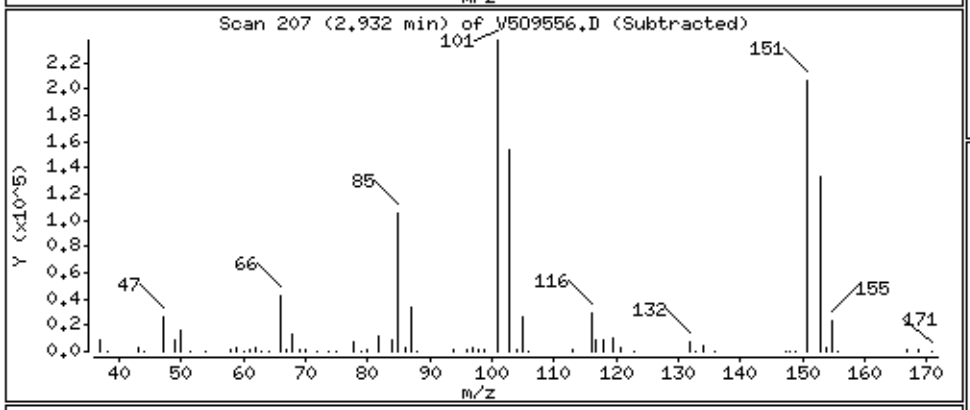
Operator: WL SRC: LIMS

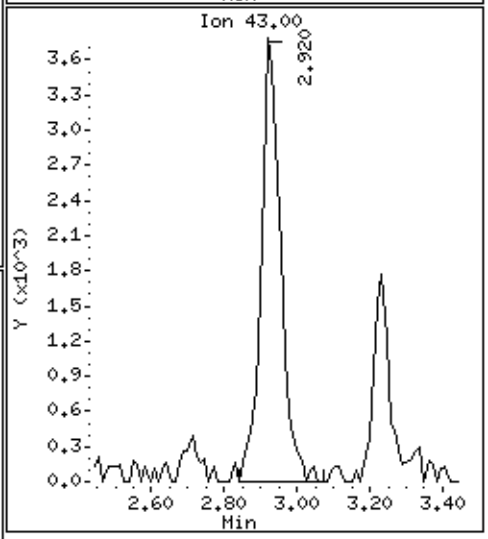
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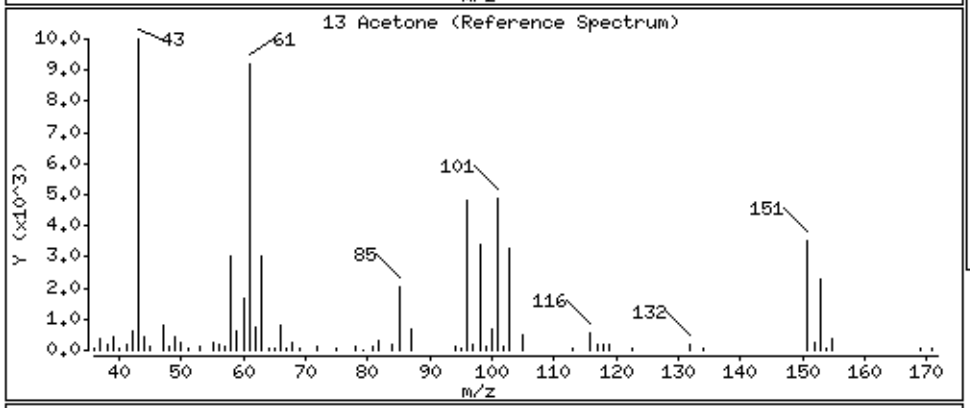
13 Acetone Concentration: 1200 ug/Kg

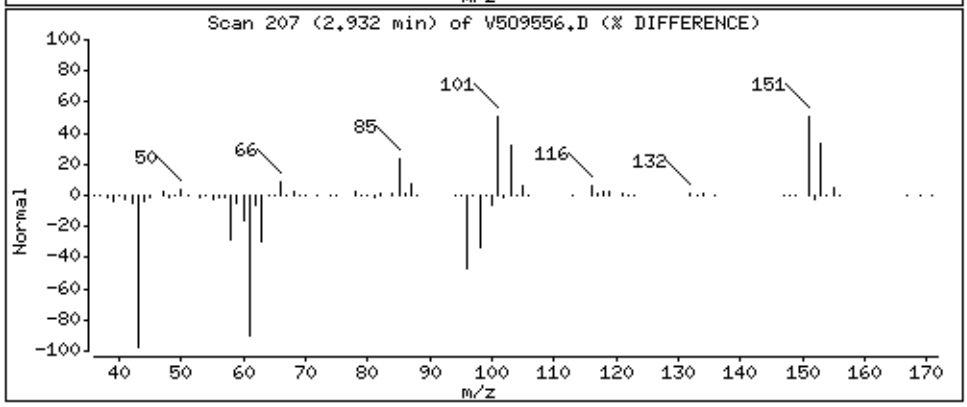












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

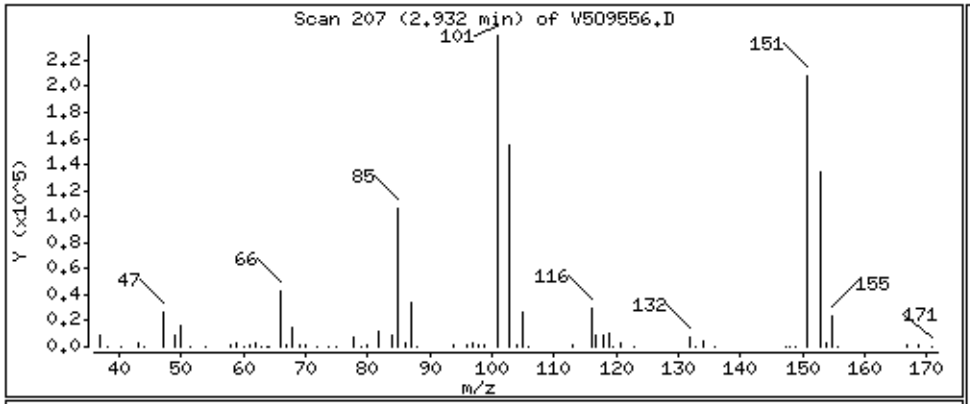
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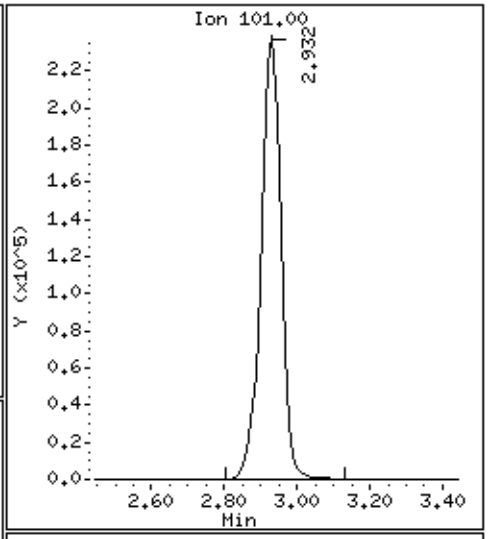
Sample Info: 5ML,N0058-11A,,75683,

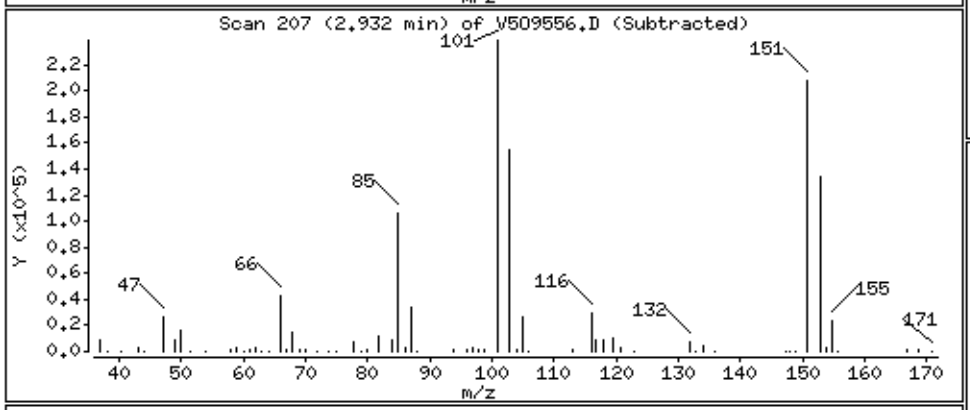
Operator: WL SRC: LIMS

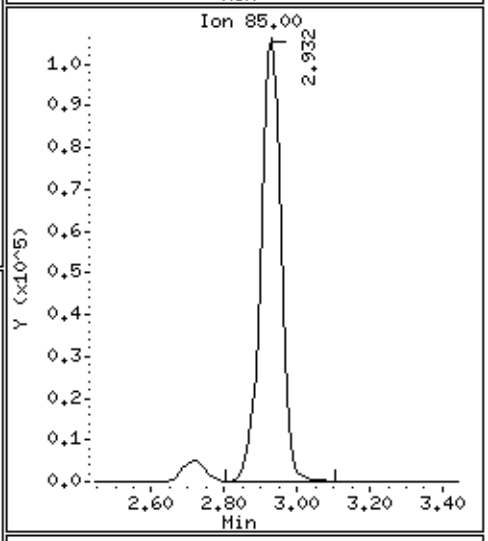
Column phase: DB-624 Column diameter: 0.25

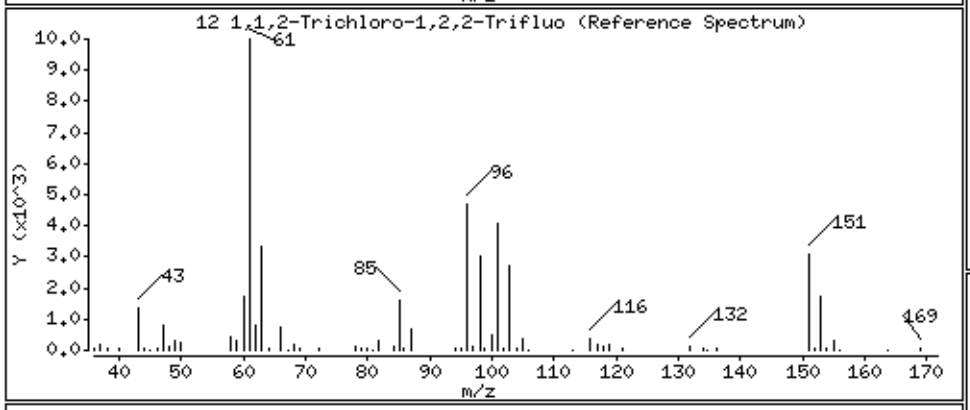
12 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 31000 ug/Kg

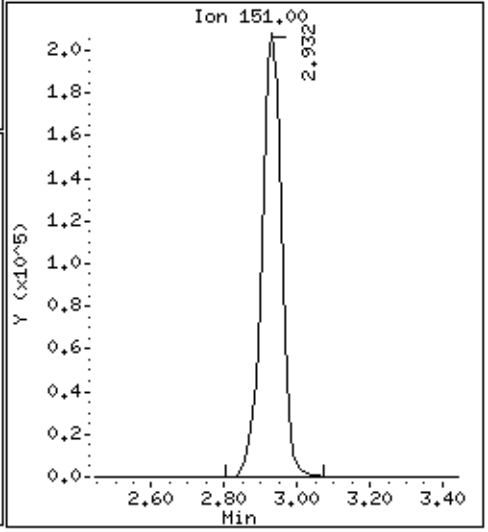


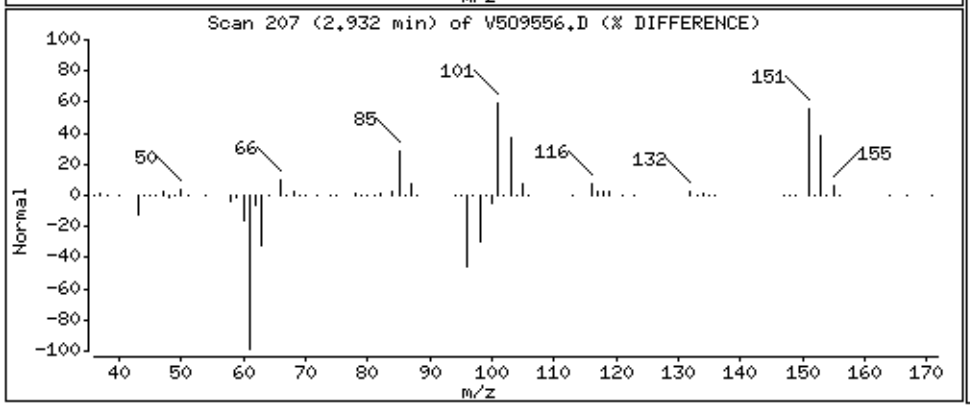












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

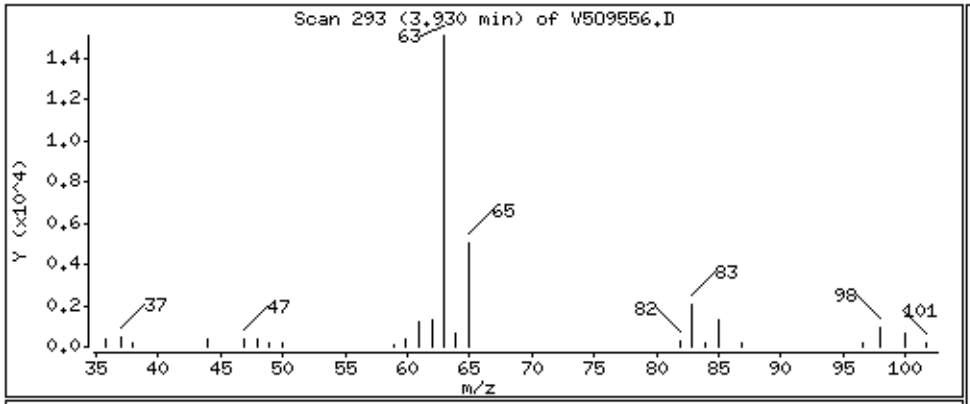
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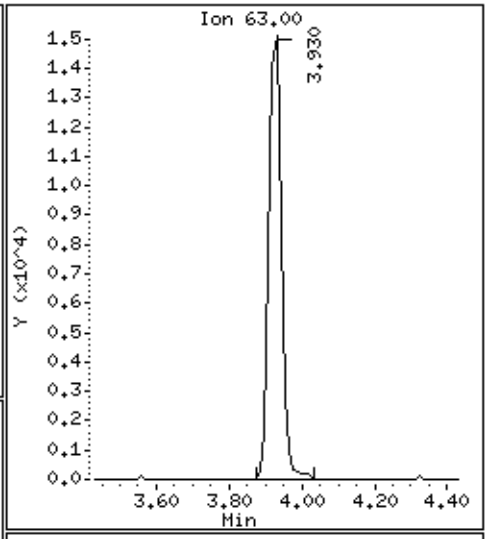
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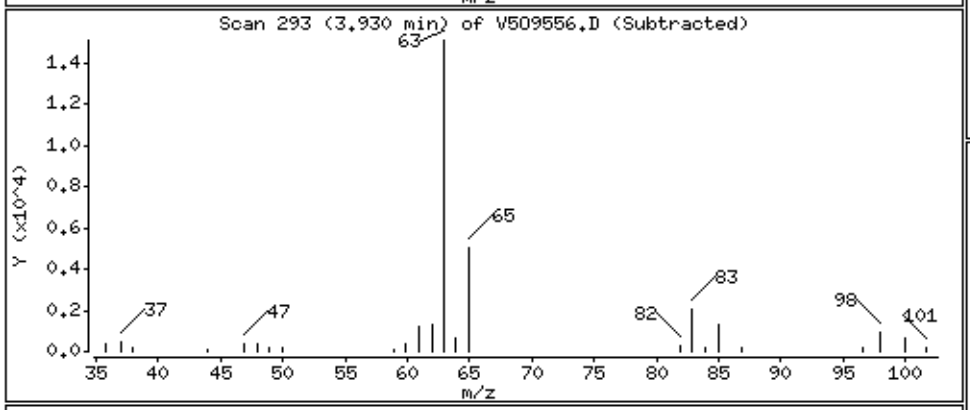
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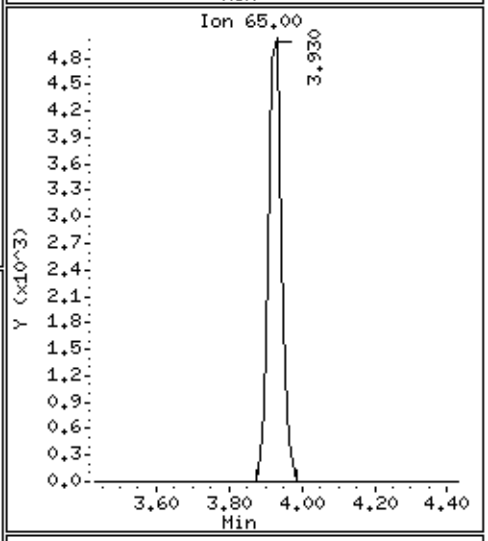
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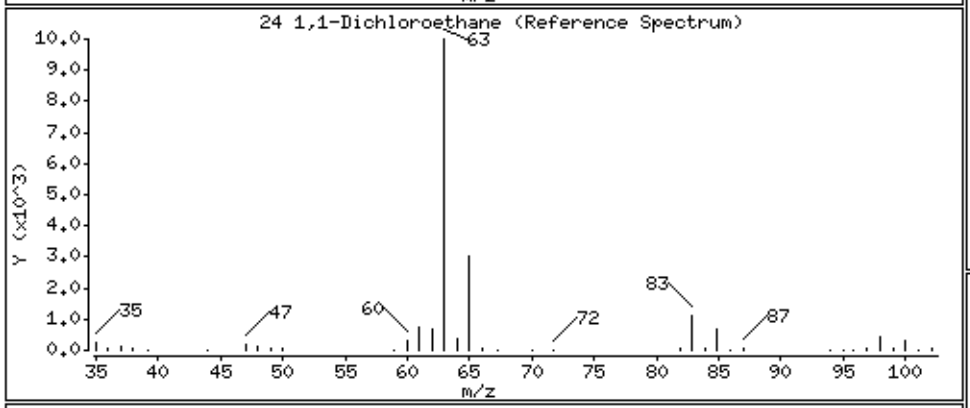
24 1,1-Dichloroethane Concentration: 780 ug/Kg

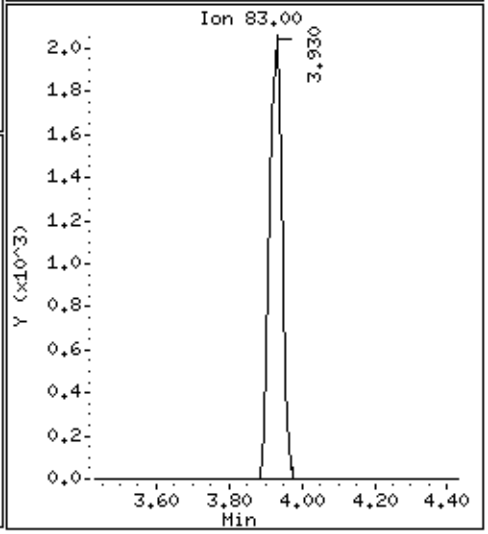


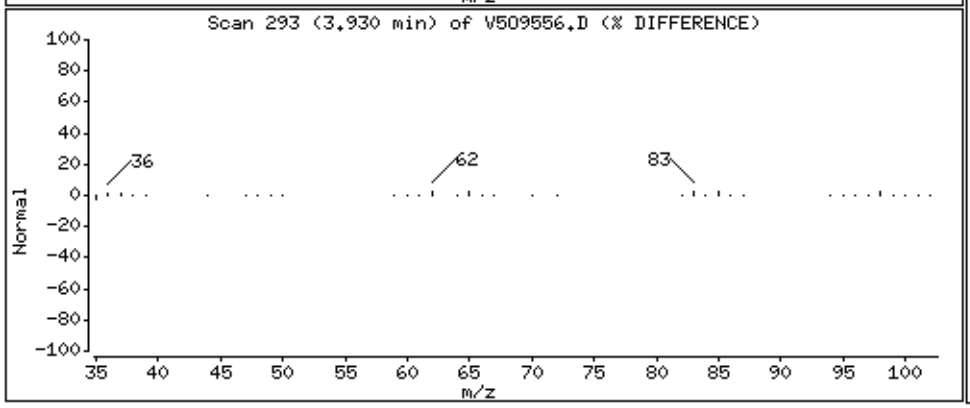












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

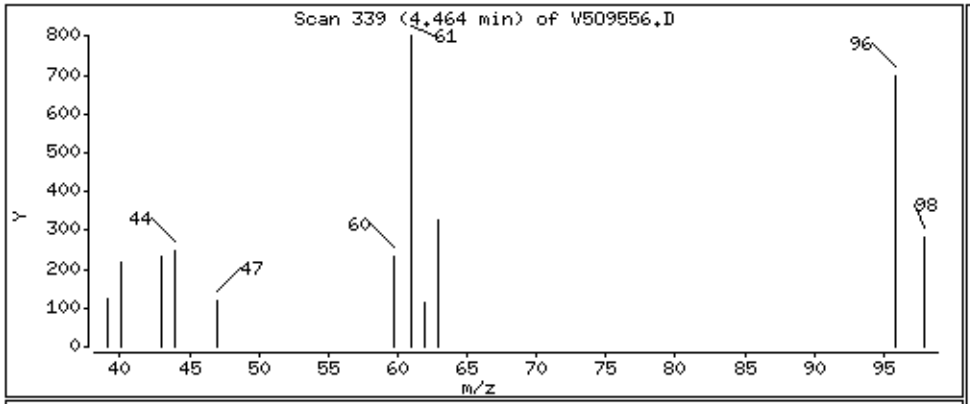
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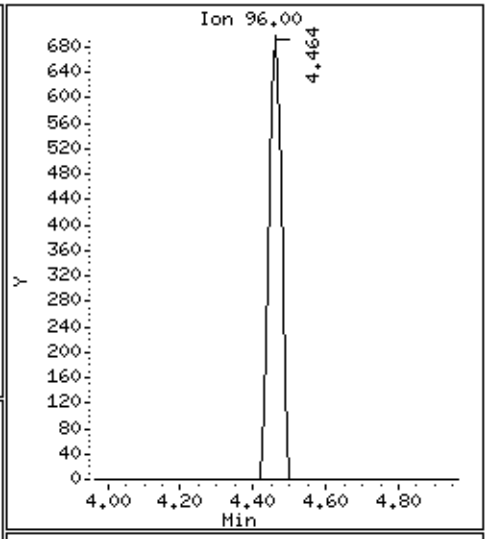
Sample Info: 5ML,N0058-11A,,75683,

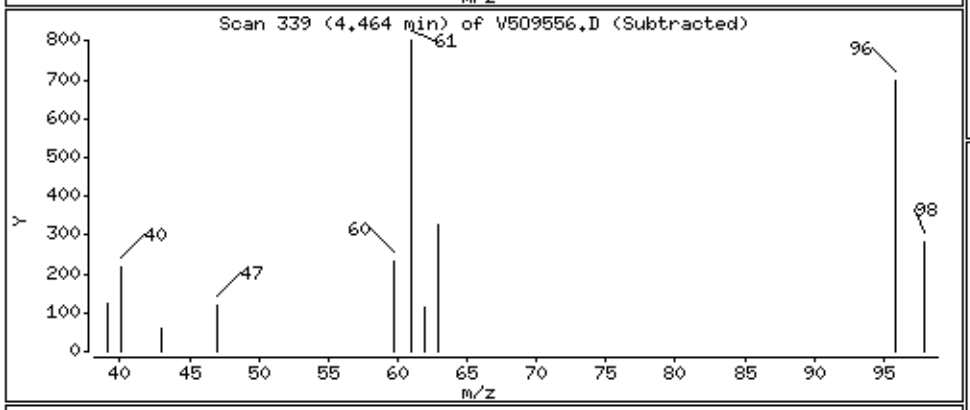
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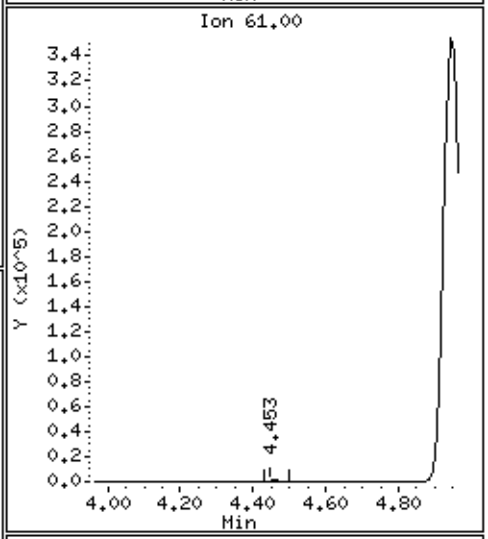
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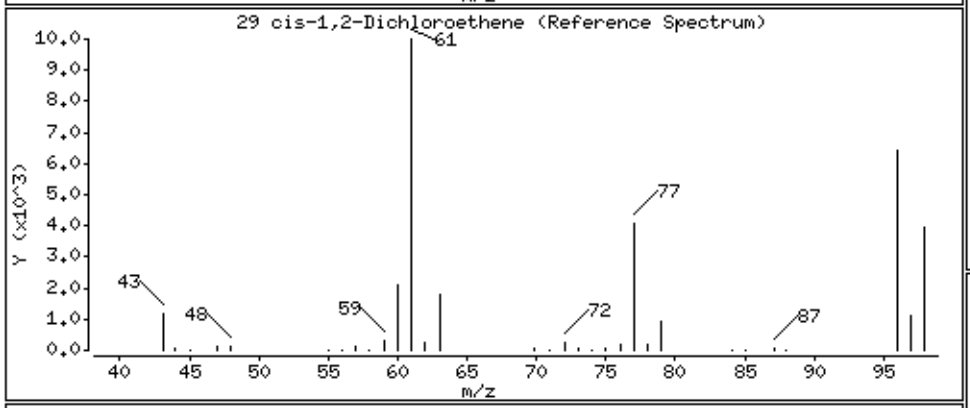
29 cis-1,2-Dichloroethene Concentration: 56 ug/Kg

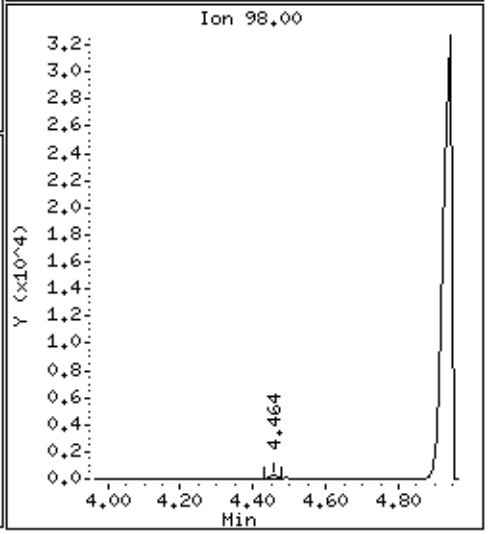


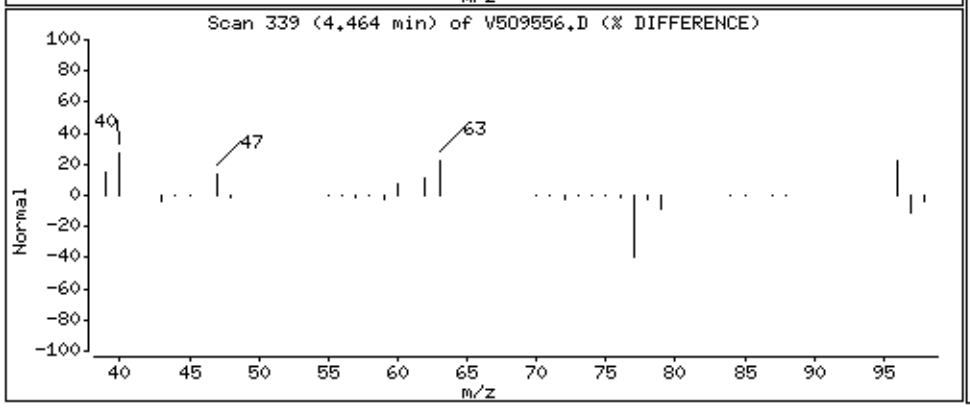












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

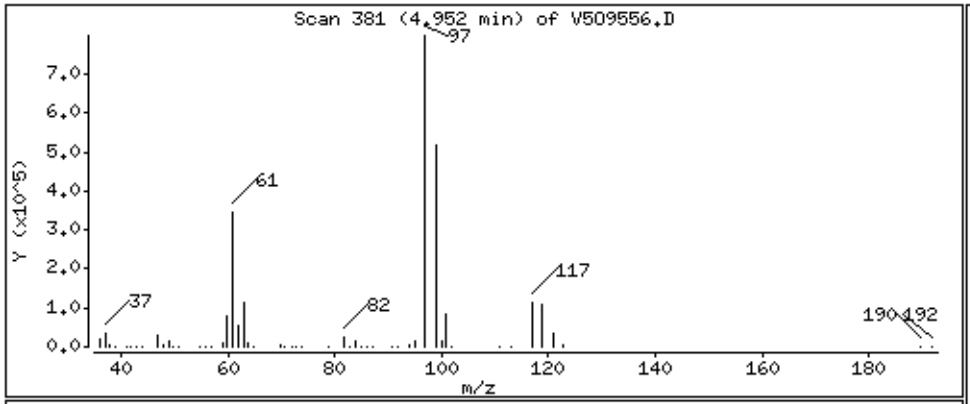
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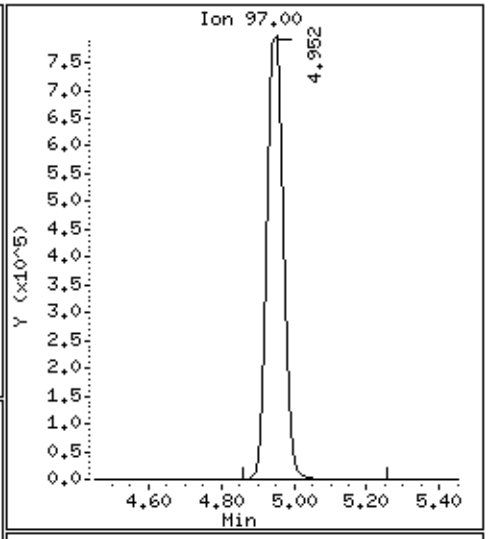
Sample Info: 5ML,N0058-11A,,75683,

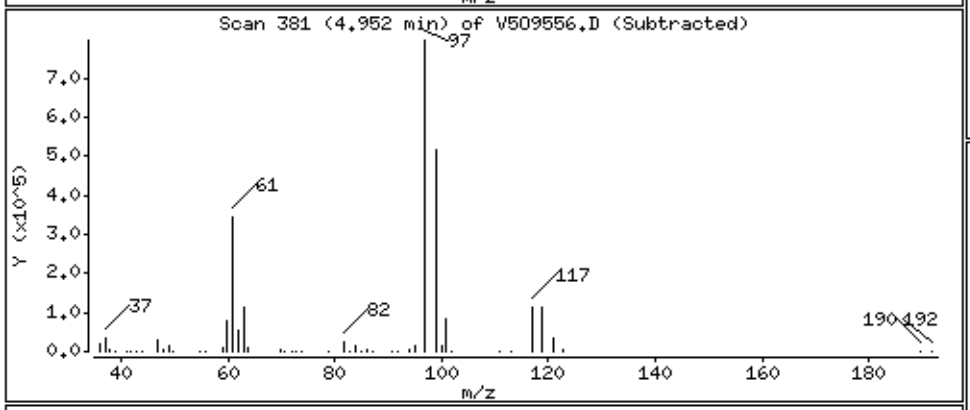
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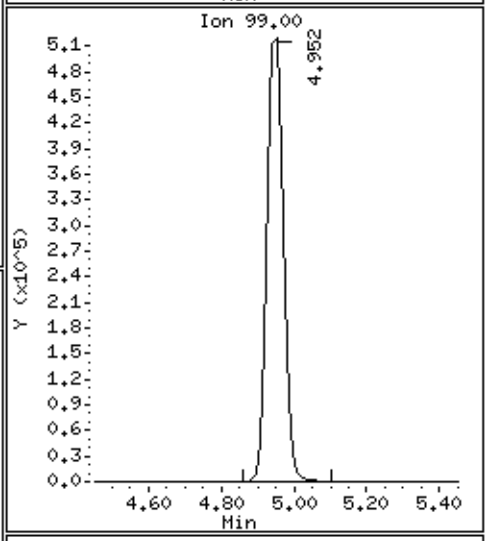
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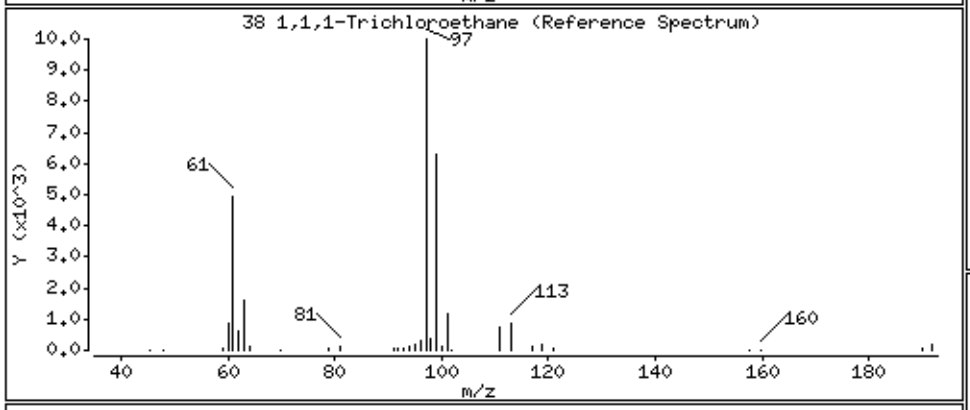
38 1,1,1-Trichloroethane Concentration: 59000 ug/Kg

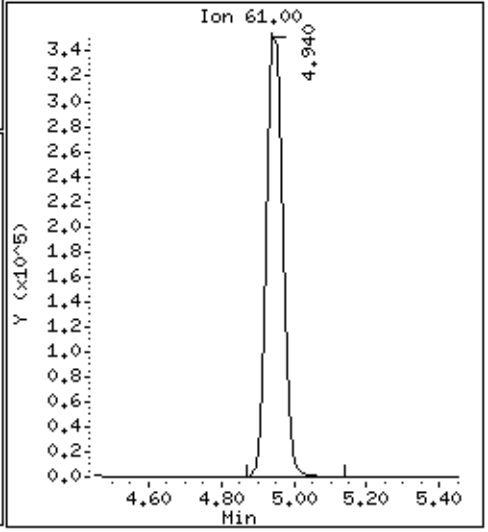


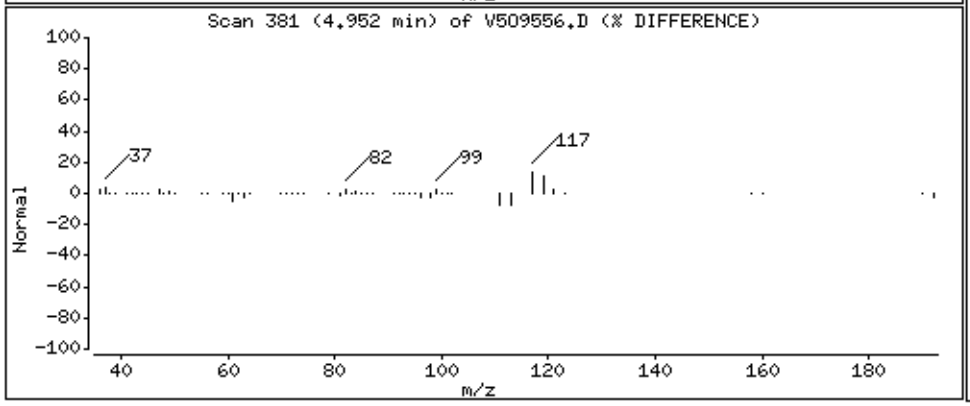












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

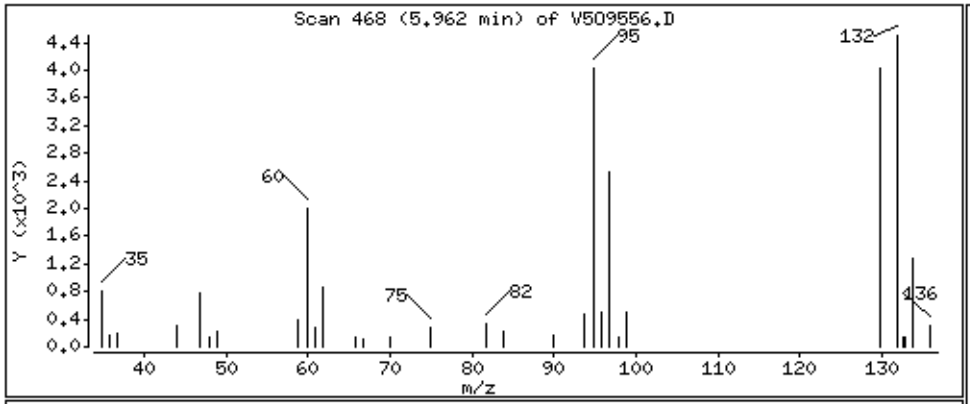
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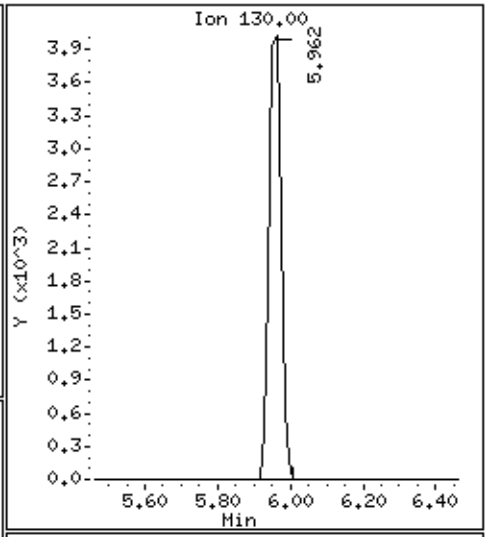
Sample Info: 5ML,N0058-11A,,75683,

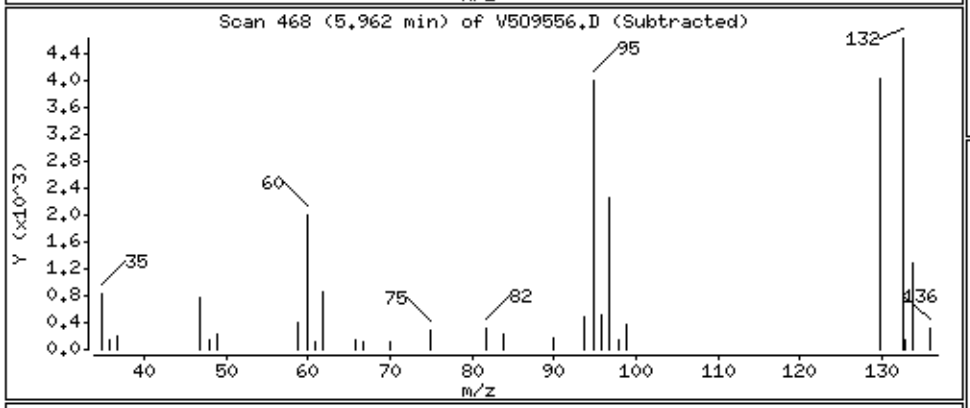
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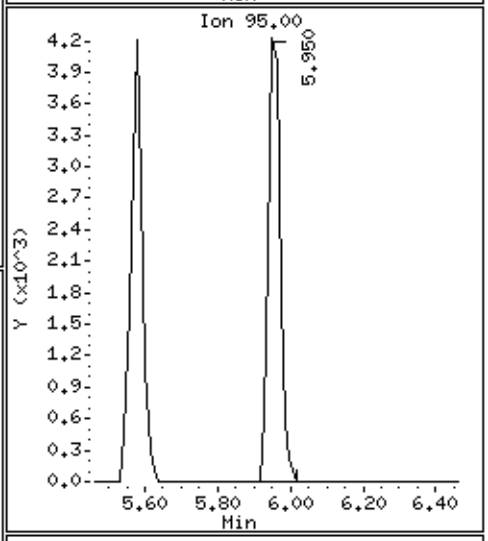
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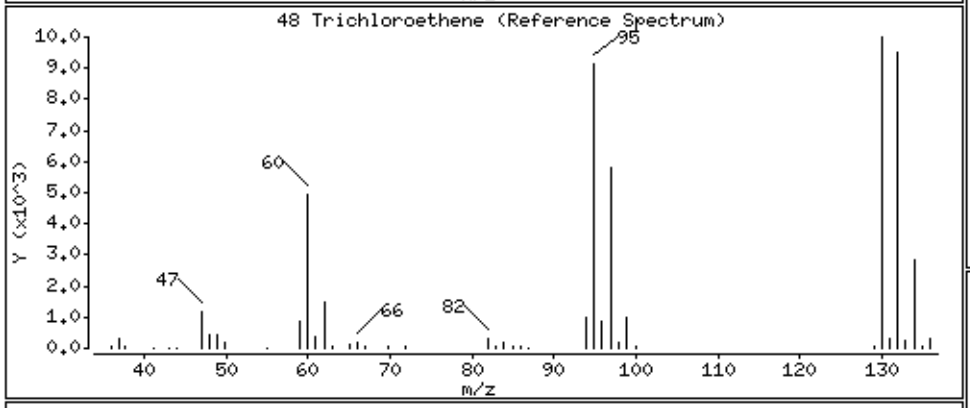
48 Trichloroethene Concentration: 320 ug/Kg

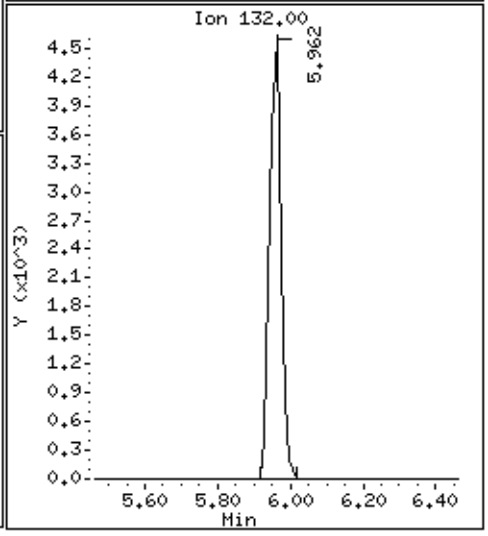


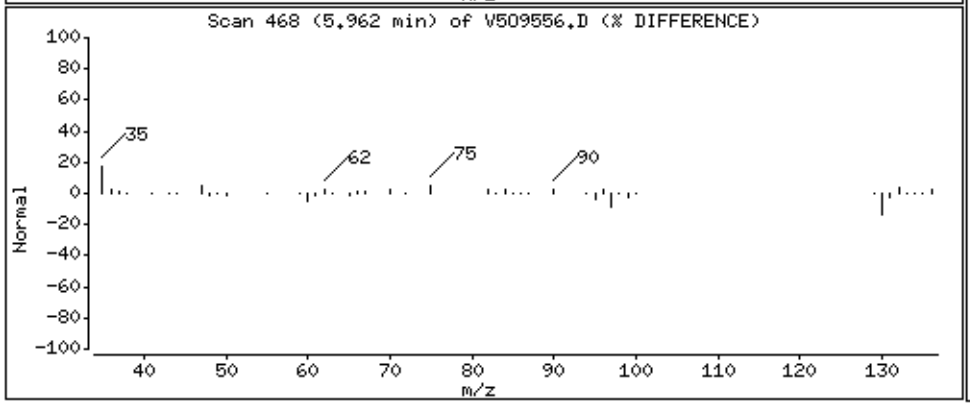












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

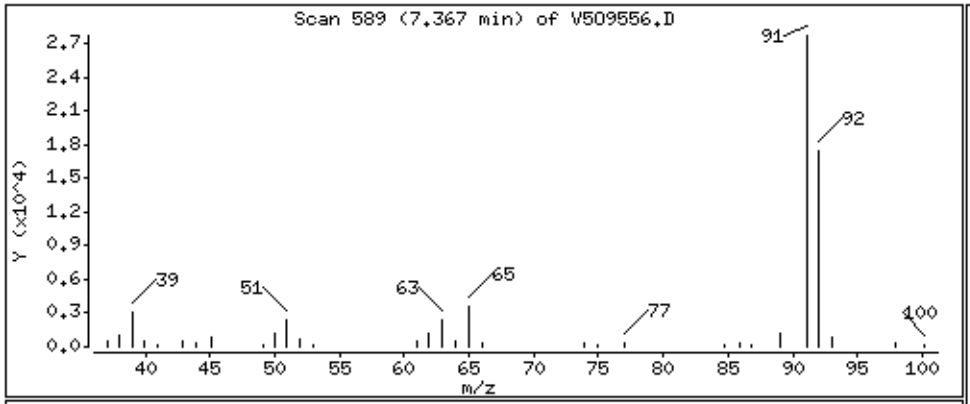
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

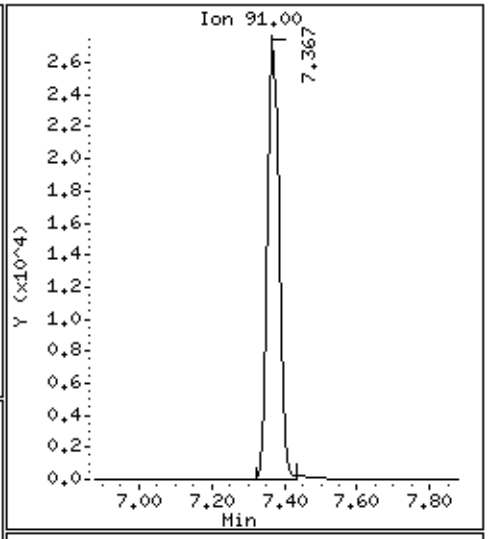
Sample Info: 5ML,N0058-11A,,75683,

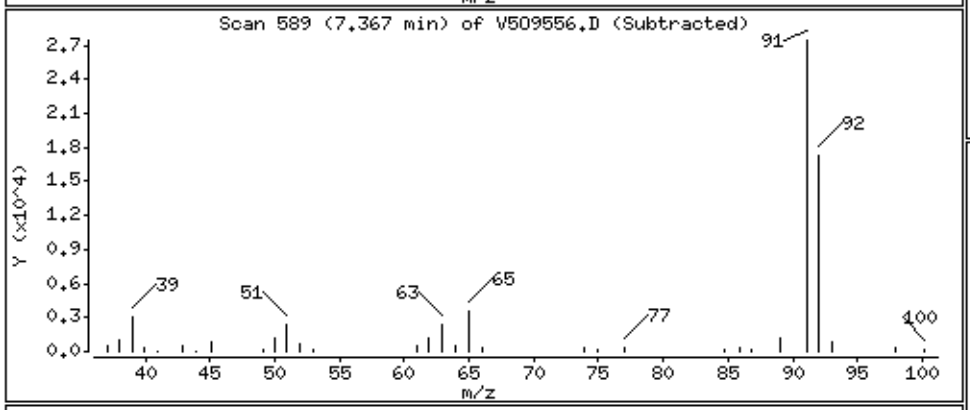
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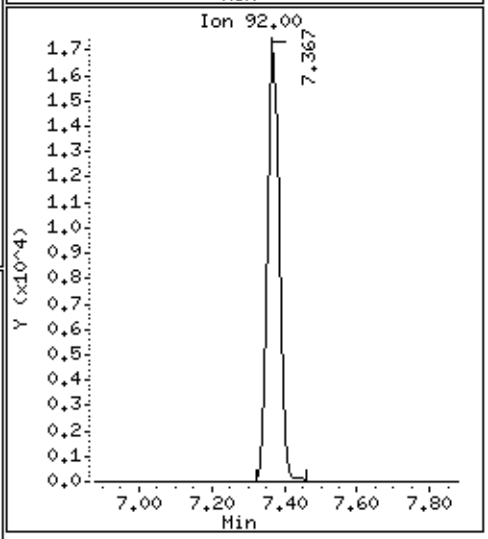
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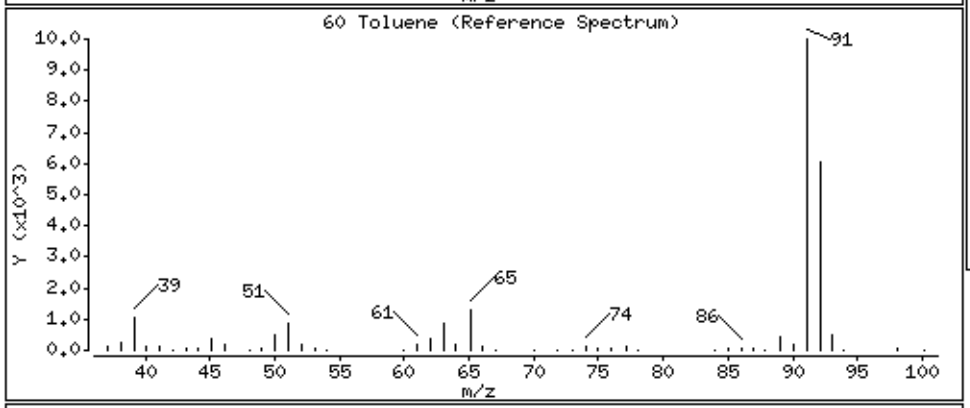
60 Toluene Concentration: 630 ug/Kg

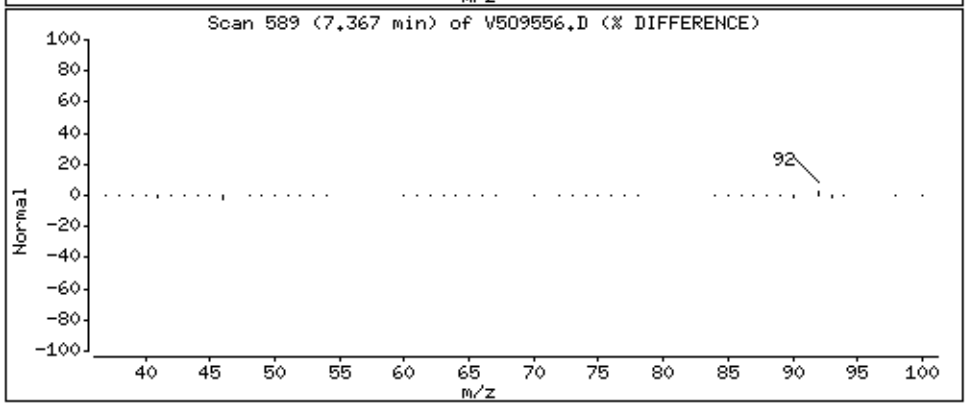












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Date : 22-JAN-2014 16:32

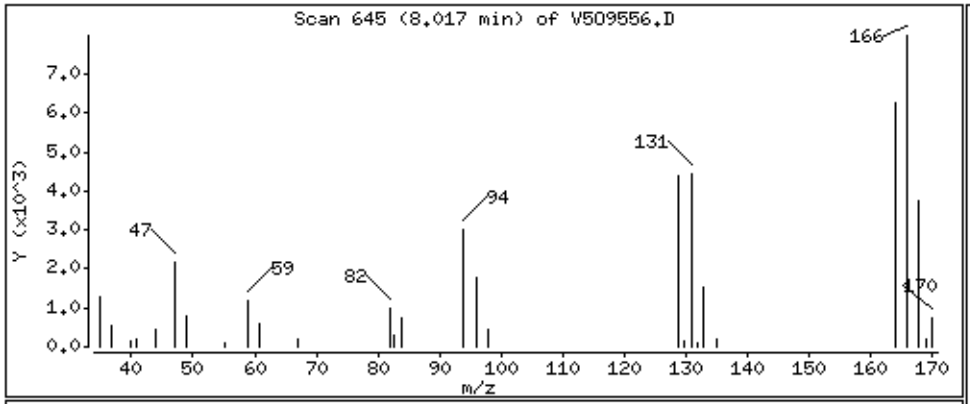
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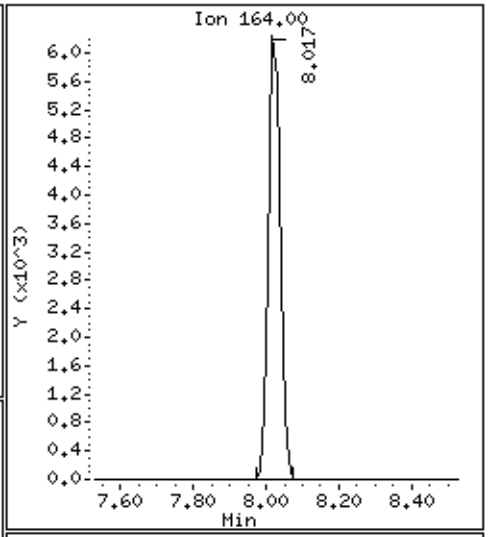
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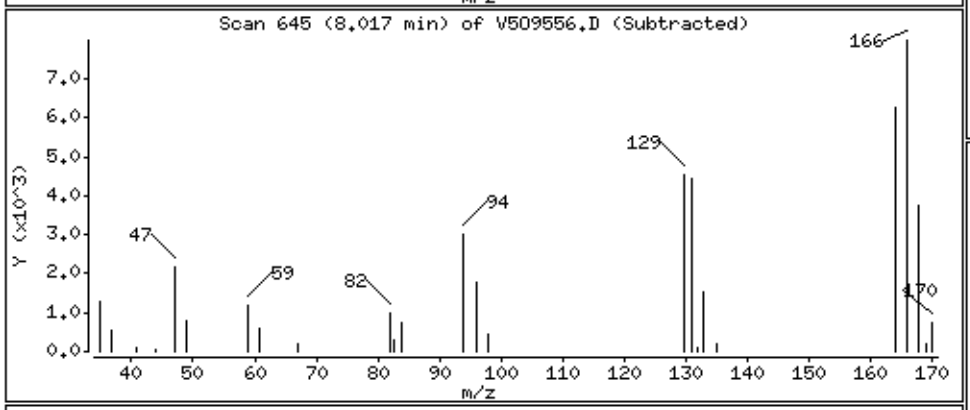
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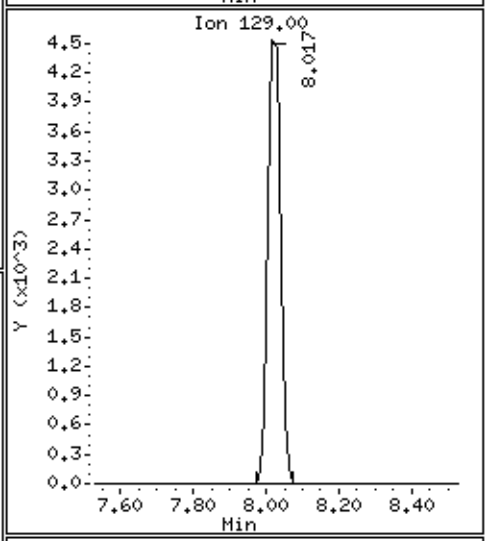
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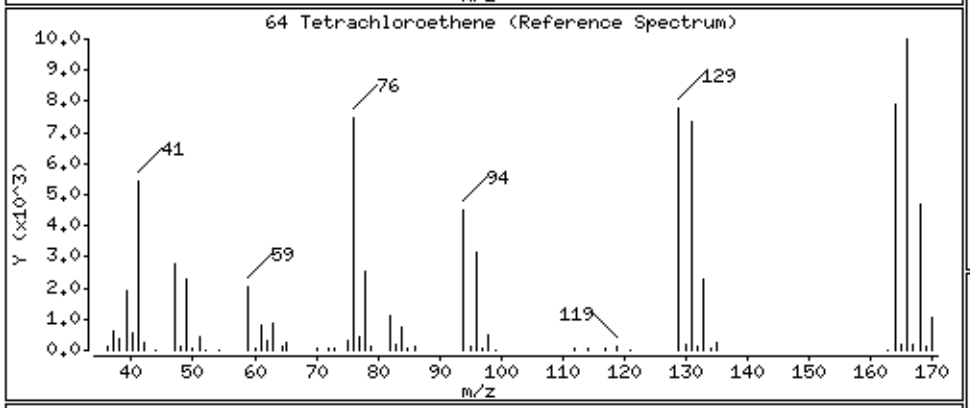
64 Tetrachloroethene Concentration: 490 ug/Kg

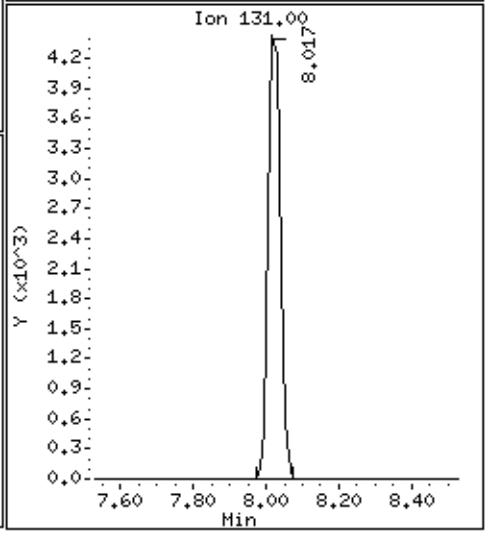


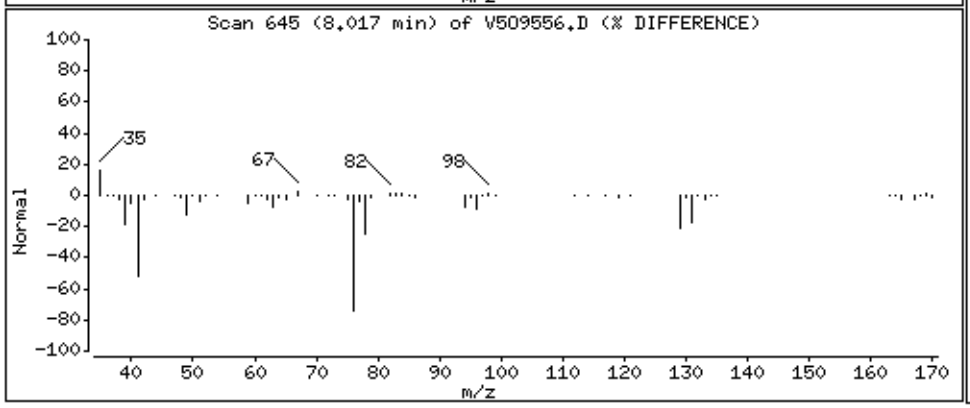












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

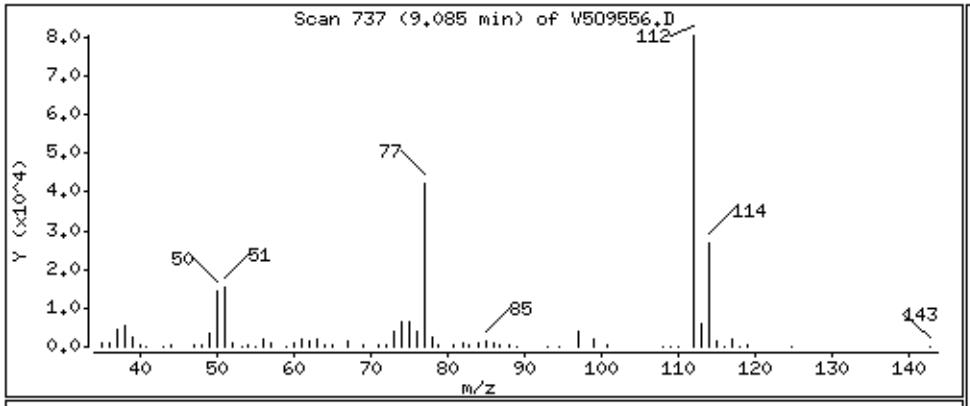
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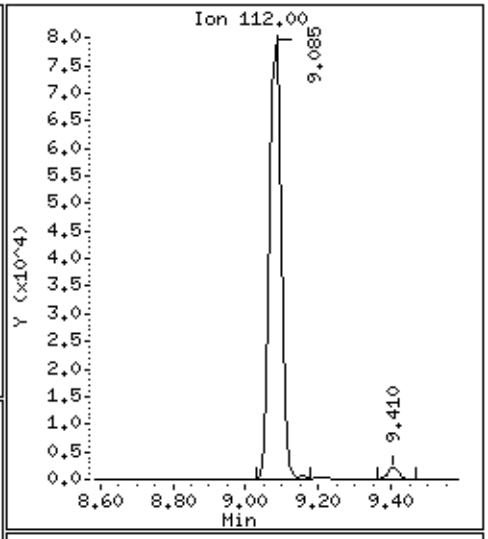
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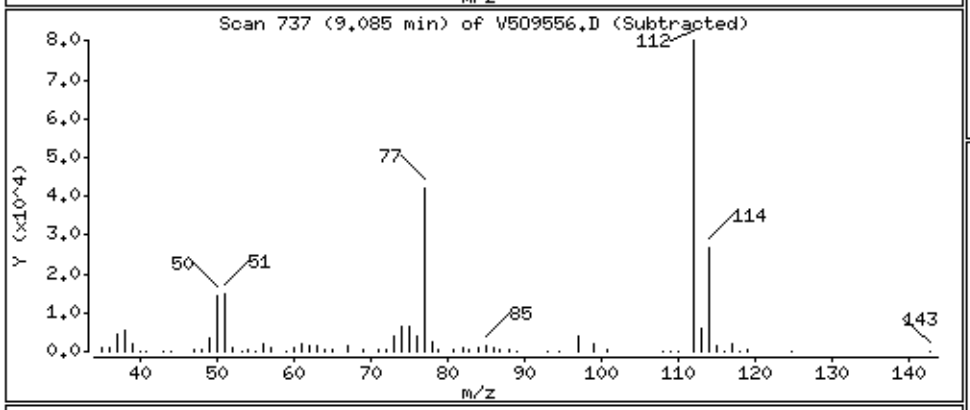
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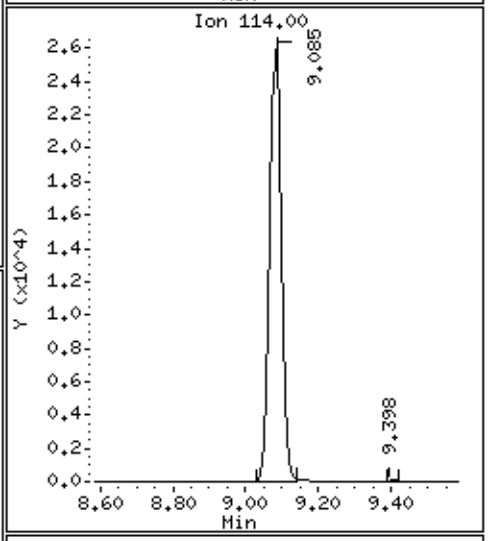
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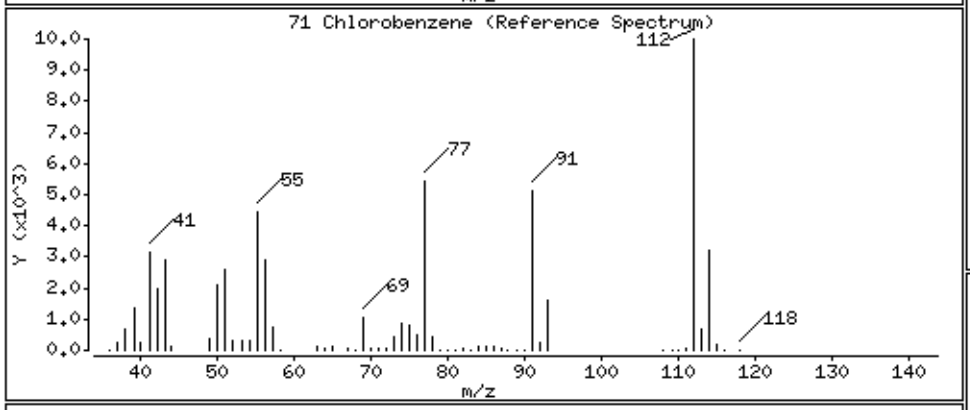
71 Chlorobenzene Concentration: 2600 ug/Kg

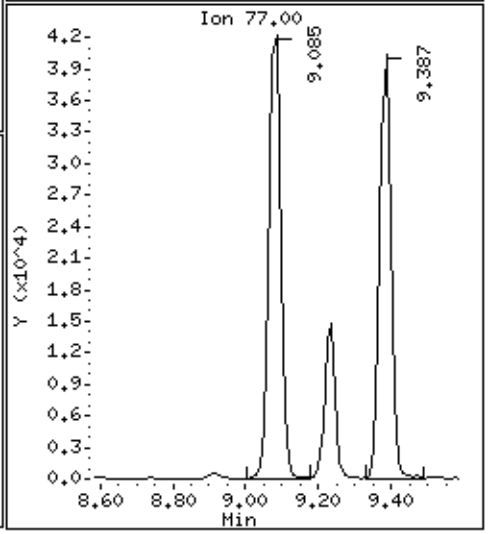


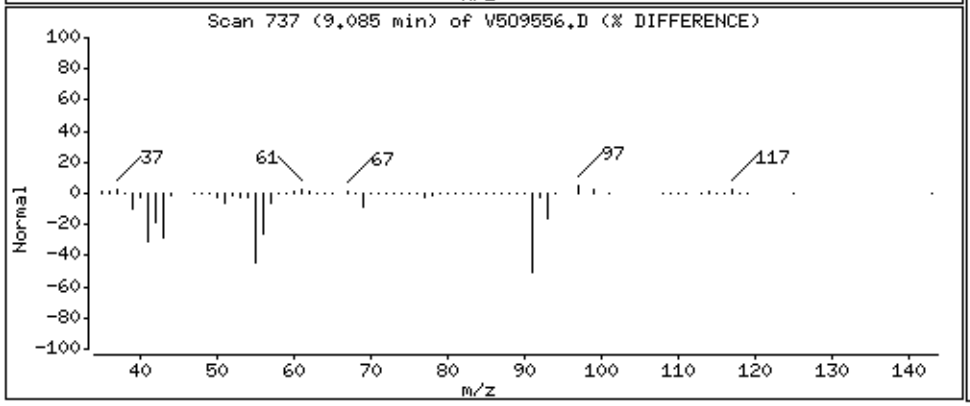












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

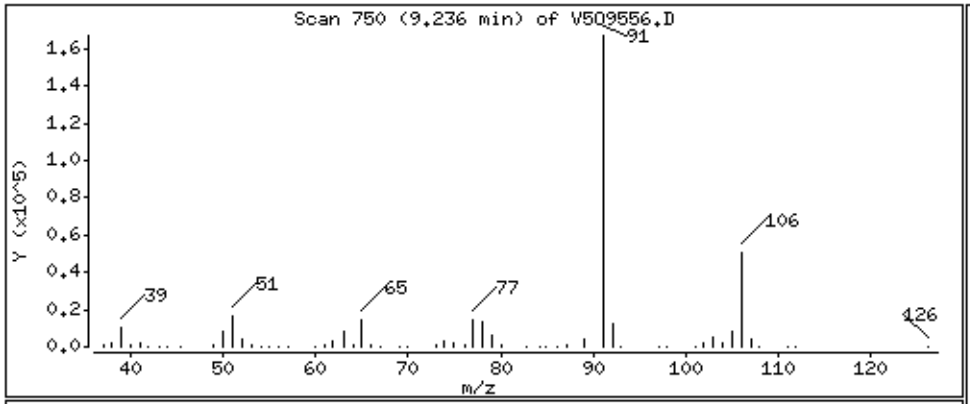
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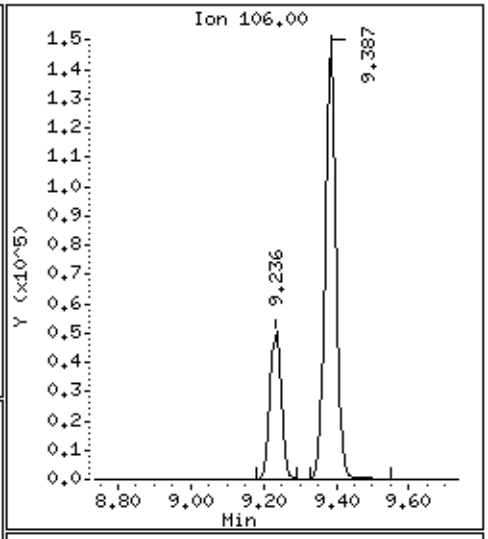
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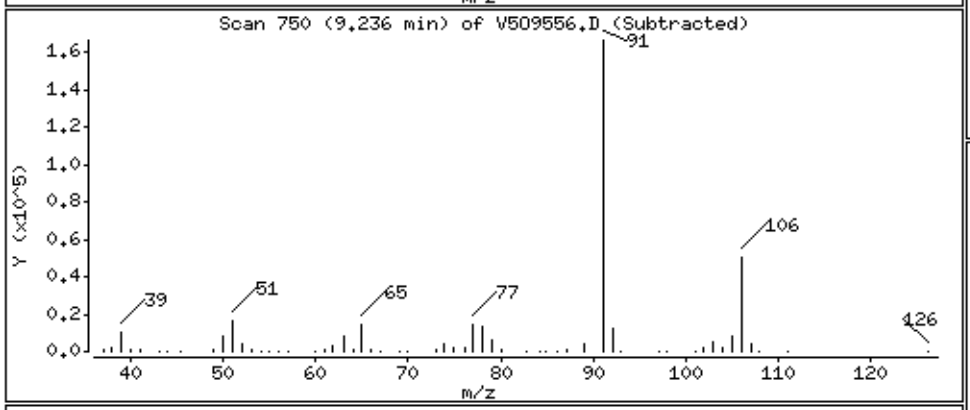
Operator: WL SRC: LIMS

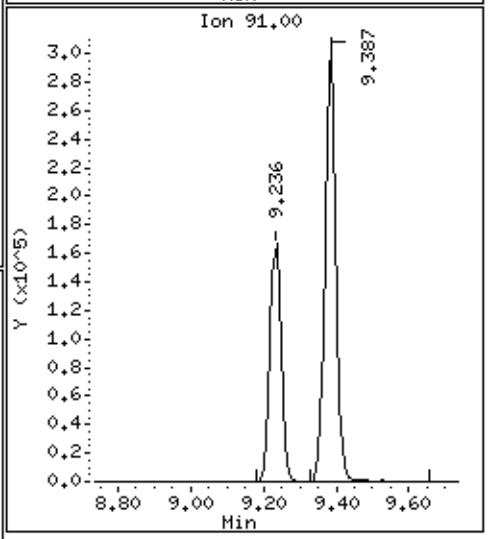
Column phase: DB-624 Column diameter: 0.25

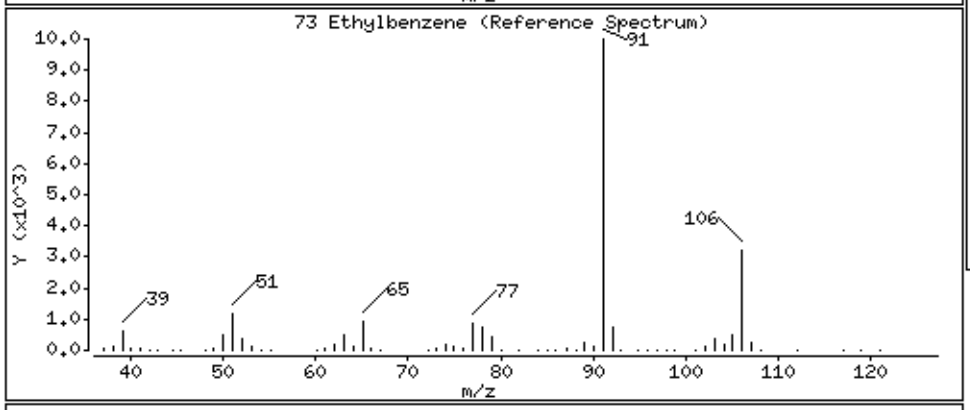
73 Ethylbenzene Concentration: 3200 ug/Kg

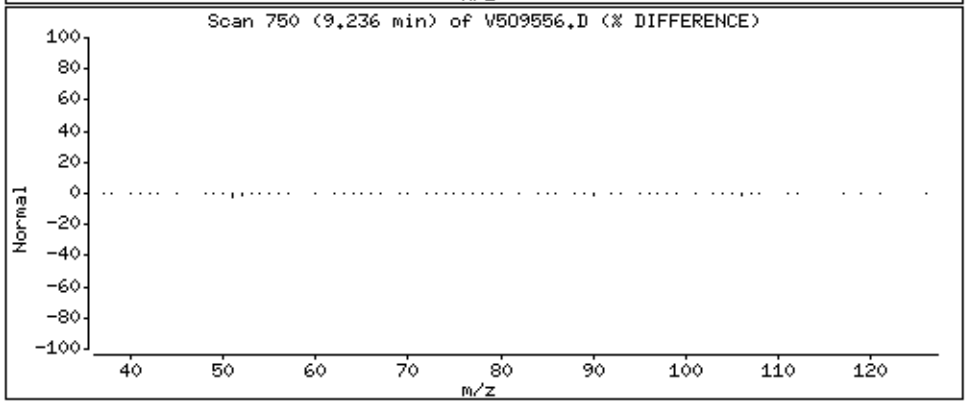












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

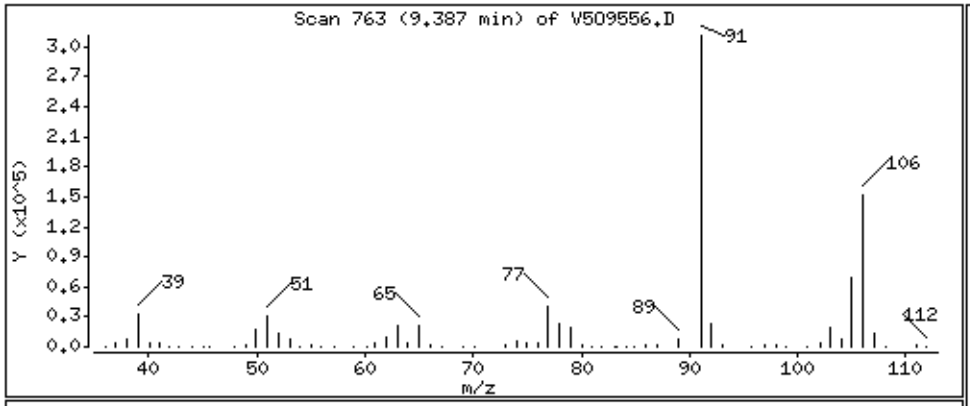
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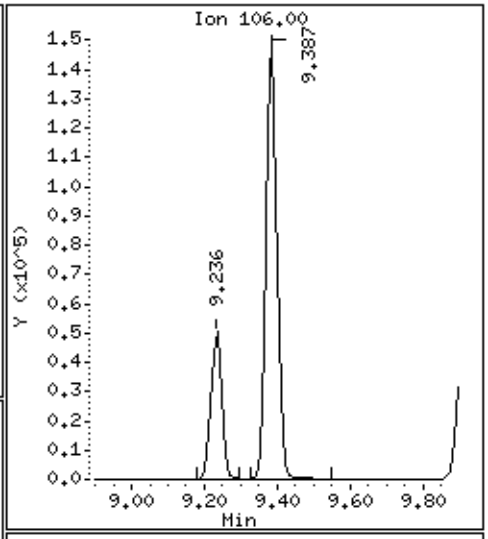
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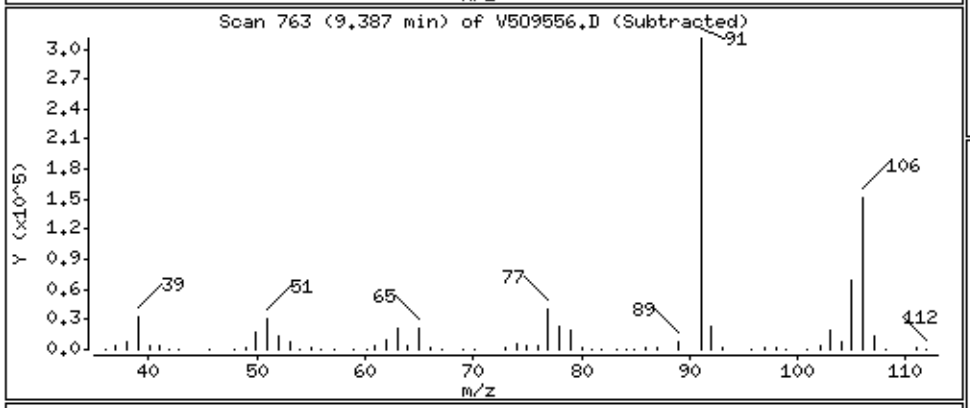
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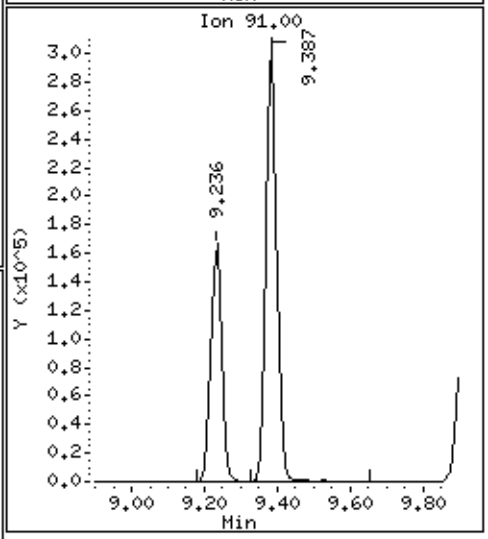
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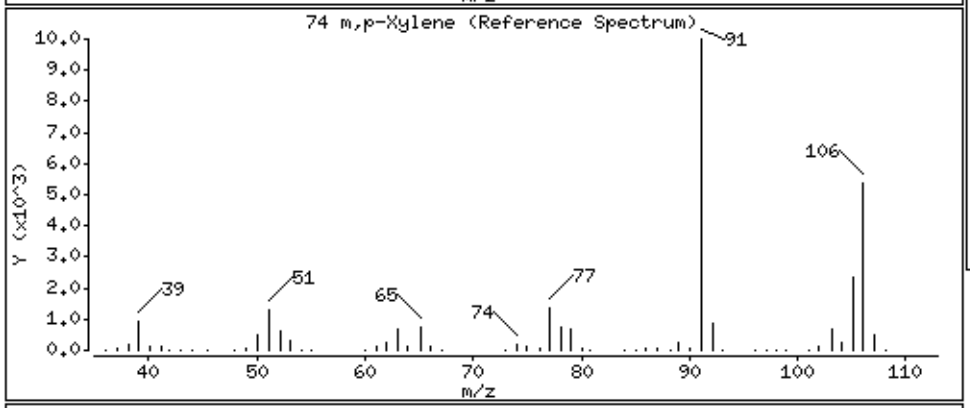
74 m,p-Xylene Concentration: 8000 ug/Kg

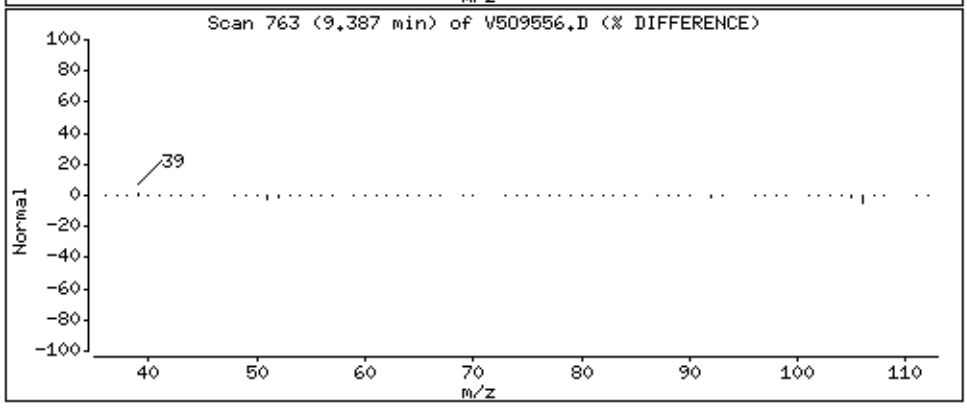












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Date : 22-JAN-2014 16:32

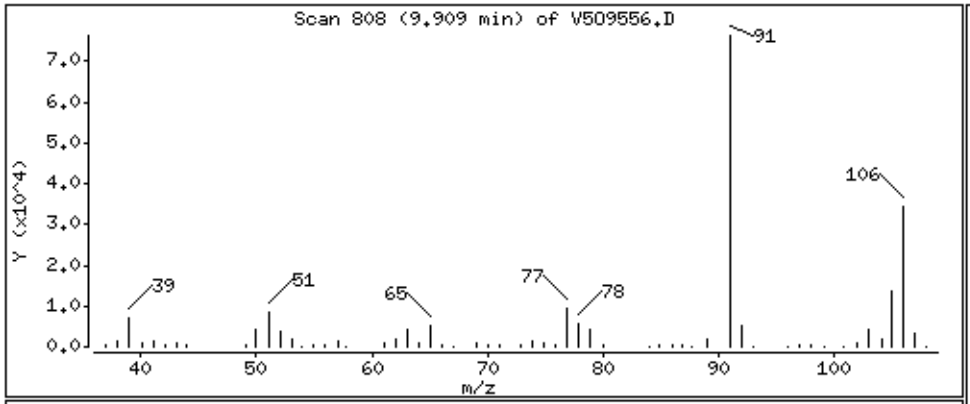
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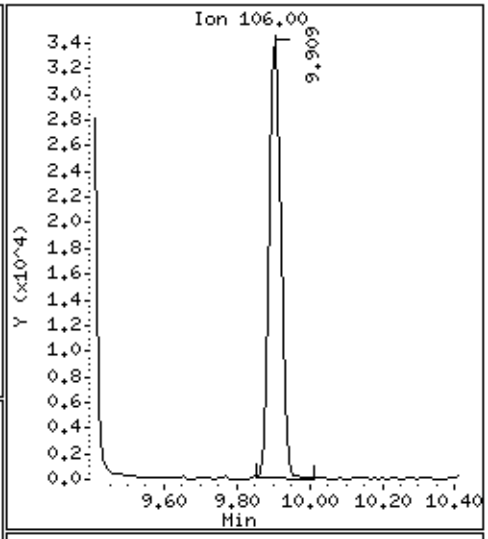
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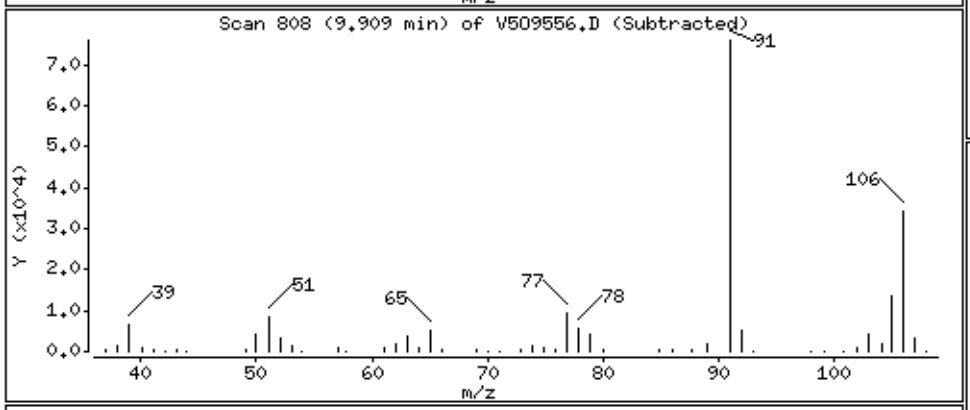
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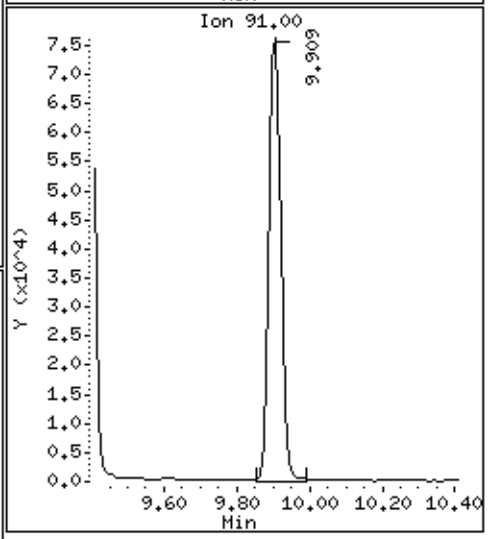
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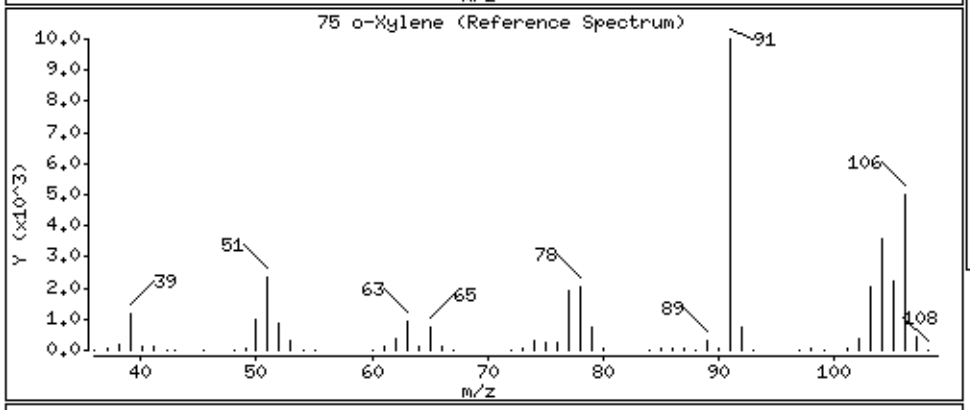
75 o-Xylene Concentration: 2000 ug/Kg

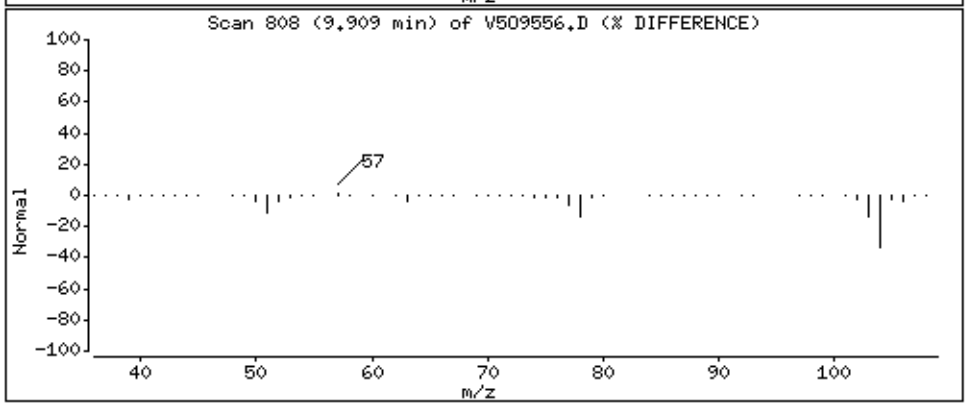












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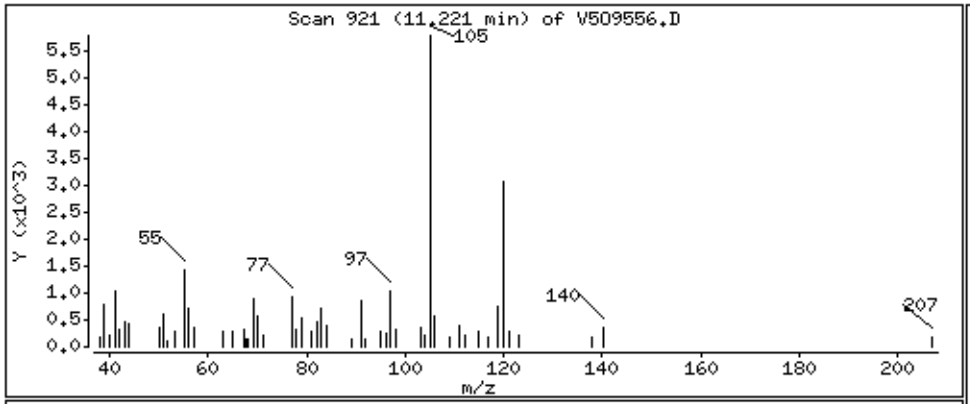
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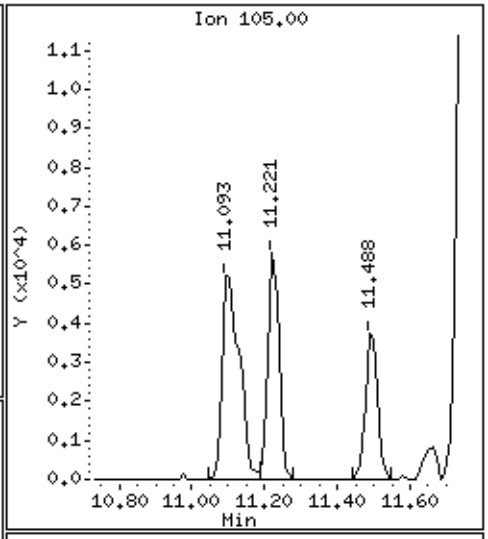
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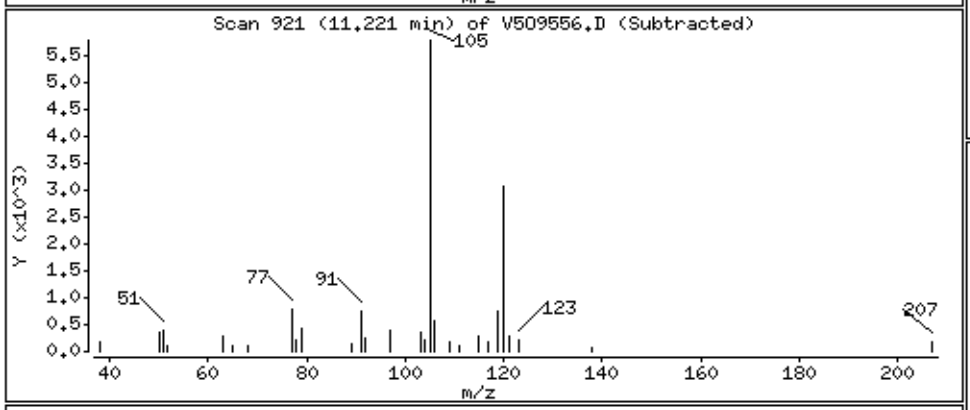
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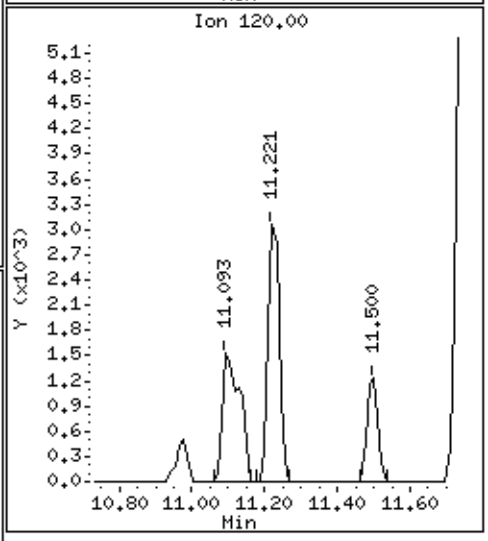
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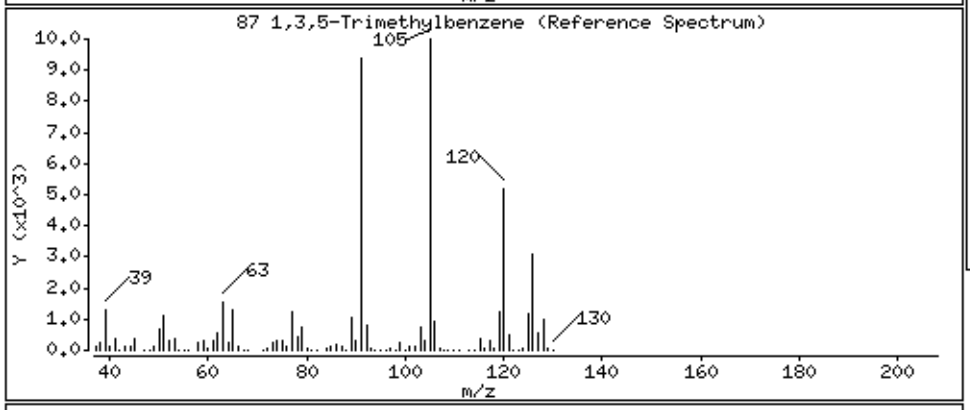
87 1,3,5-Trimethylbenzene Concentration: 160 ug/Kg

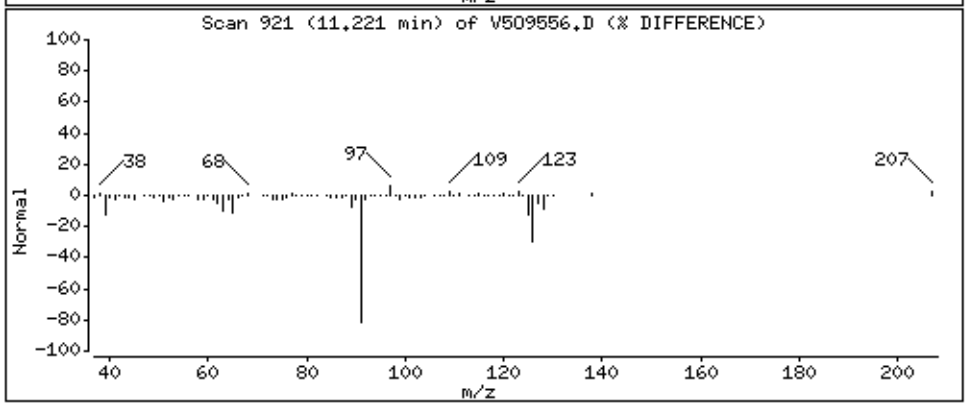












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Date : 22-JAN-2014 16:32

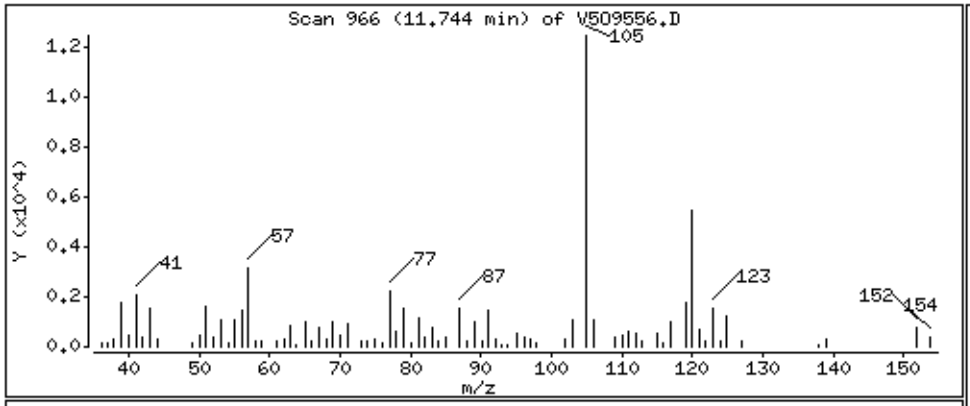
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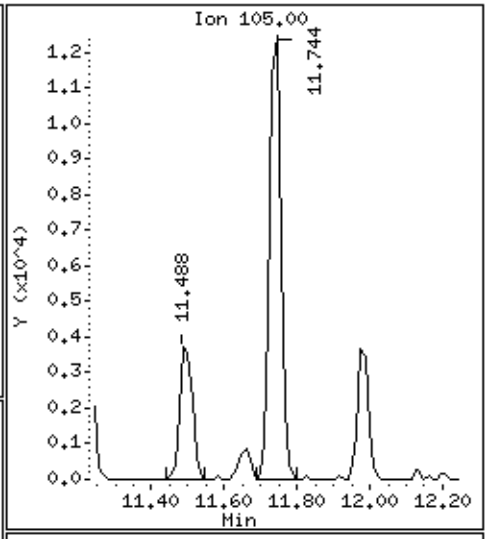
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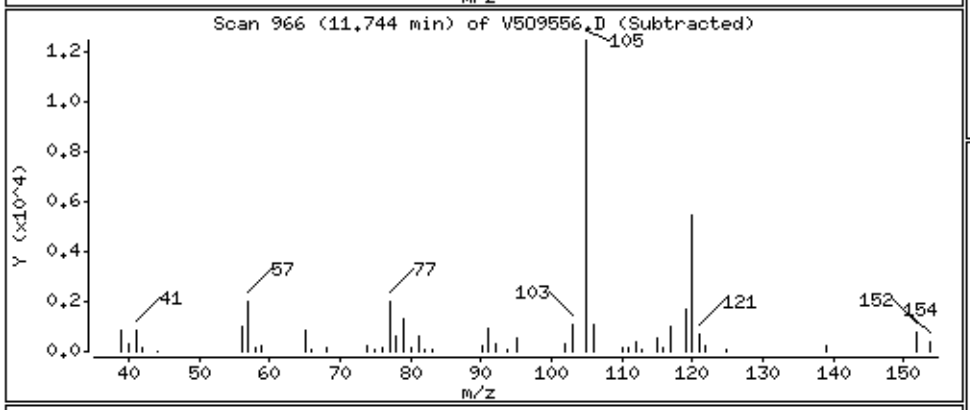
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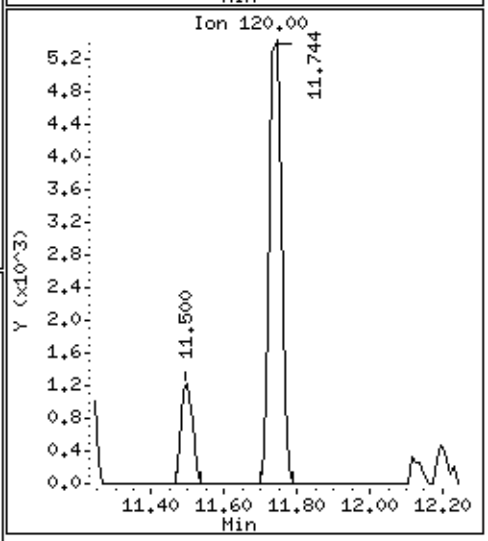
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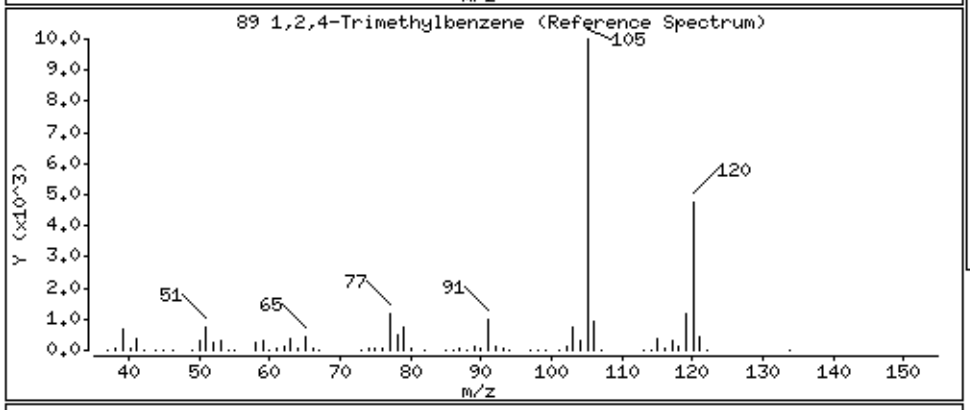
89 1,2,4-Trimethylbenzene Concentration: 330 ug/Kg

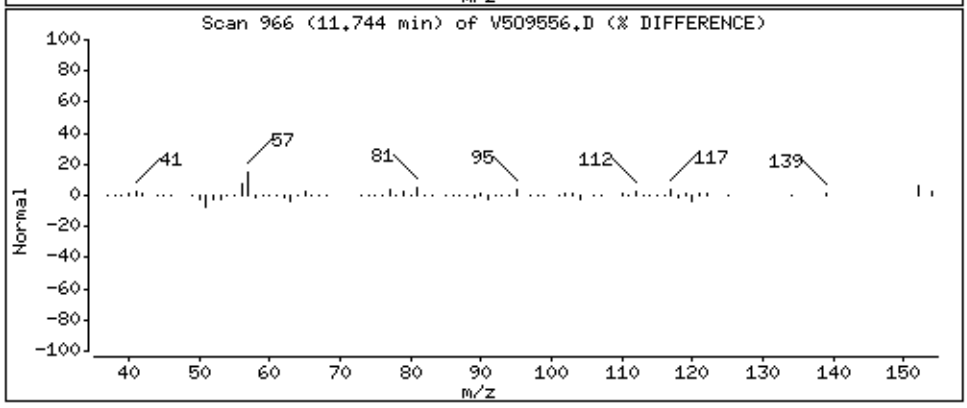












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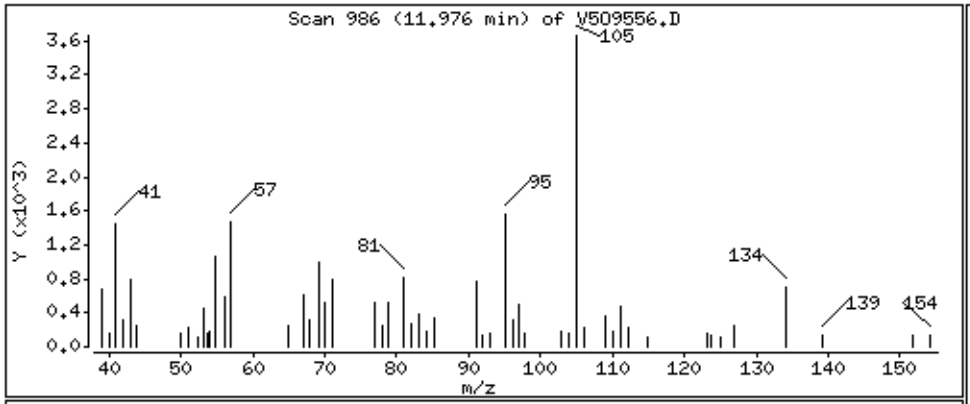
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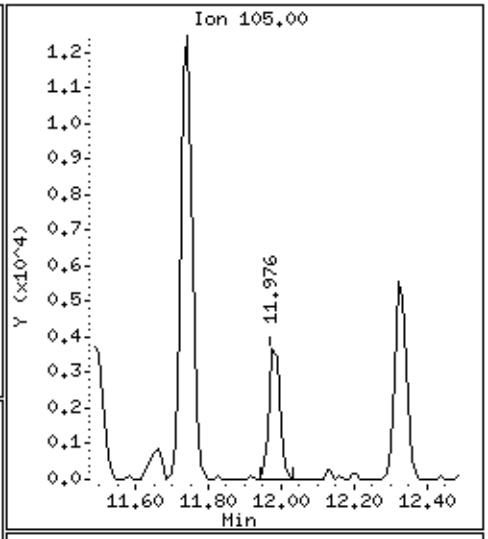
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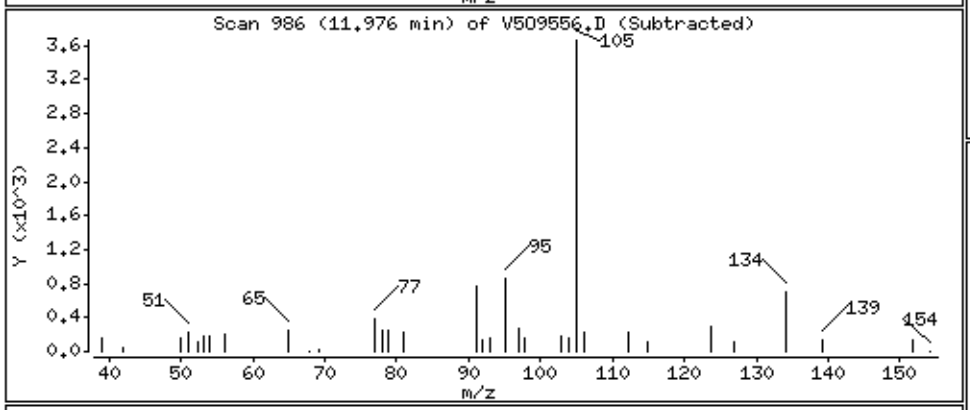
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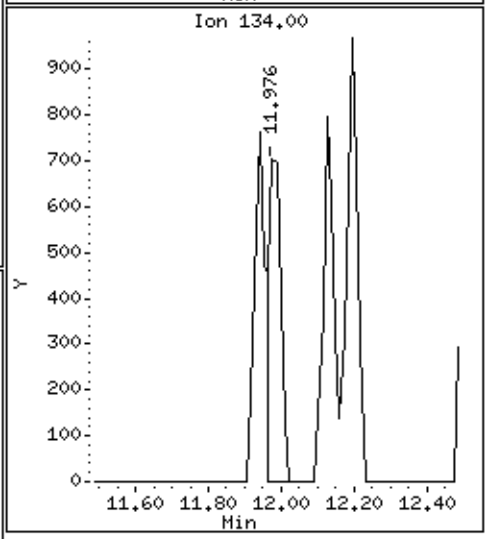
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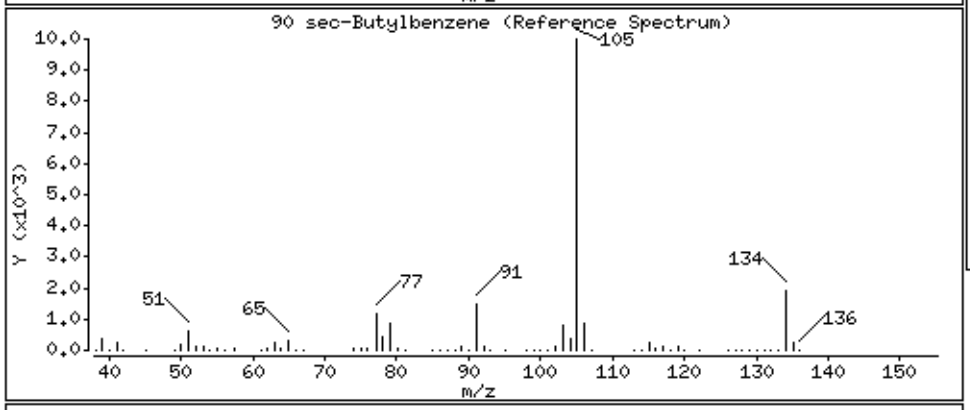
90 sec-Butylbenzene Concentration: 84 ug/Kg

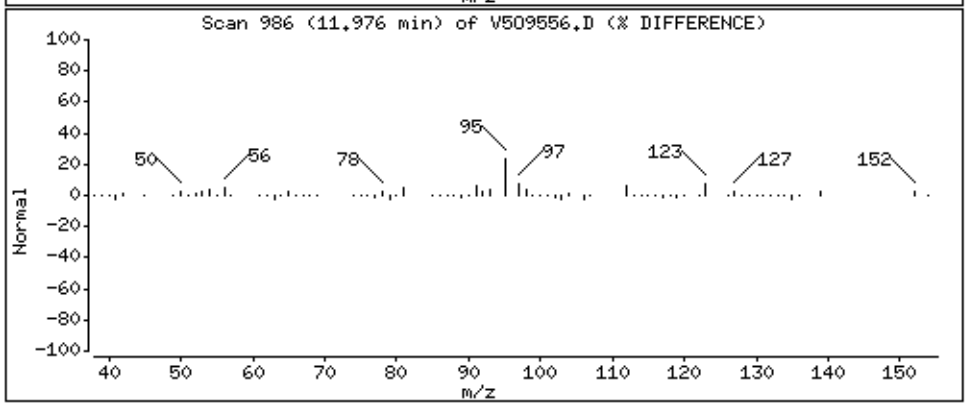












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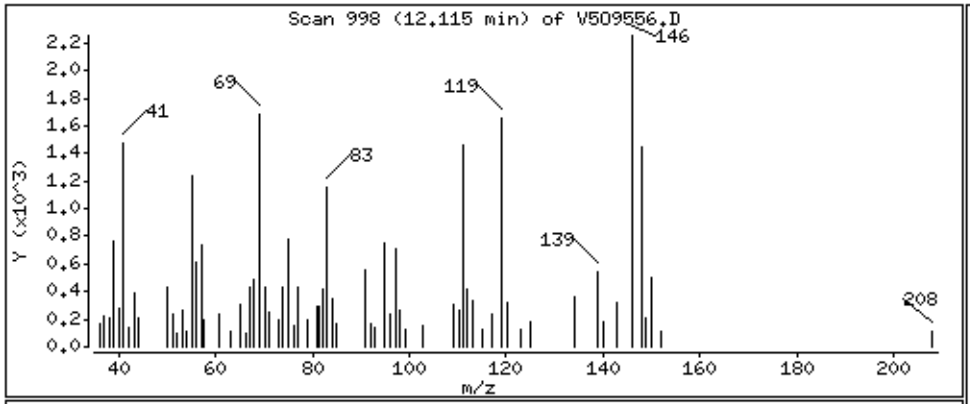
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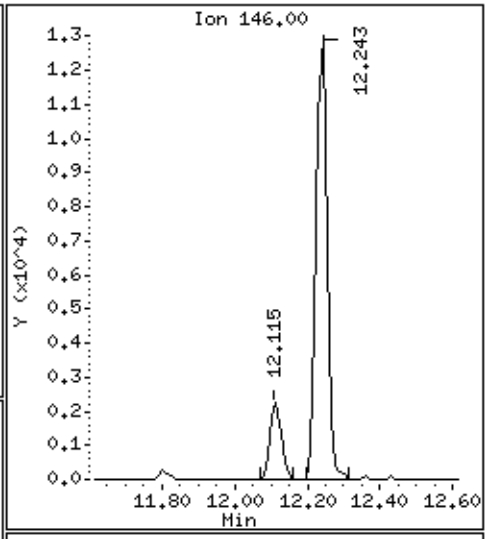
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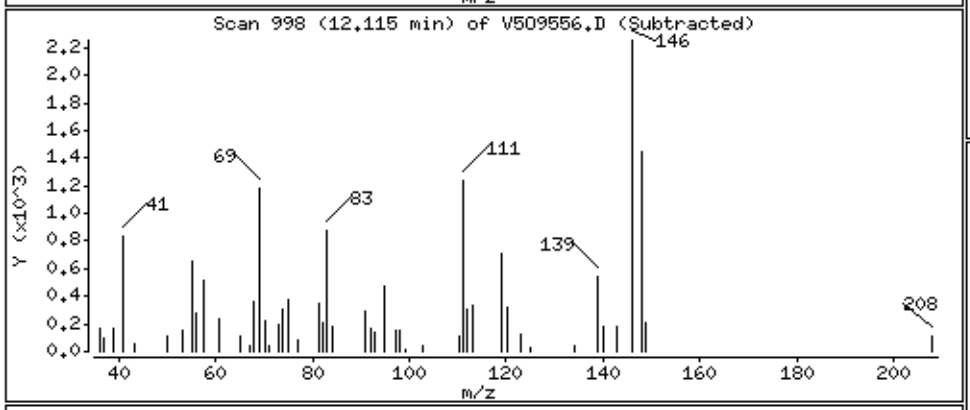
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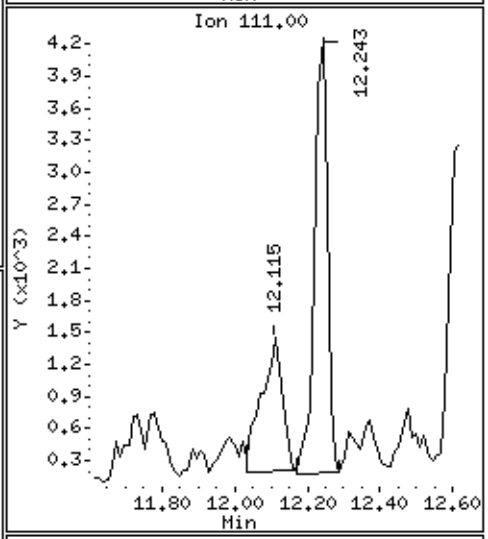
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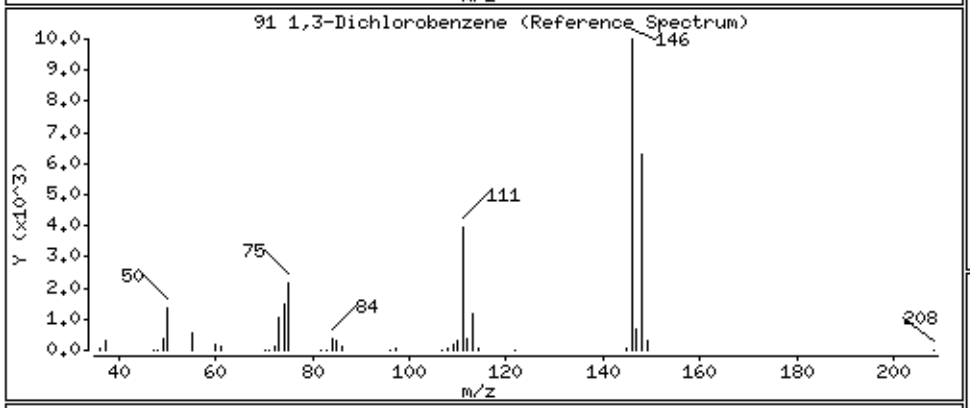
91 1,3-Dichlorobenzene Concentration: 85 ug/Kg

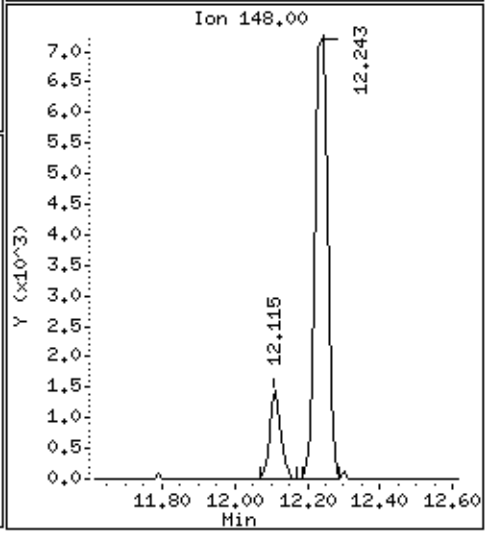


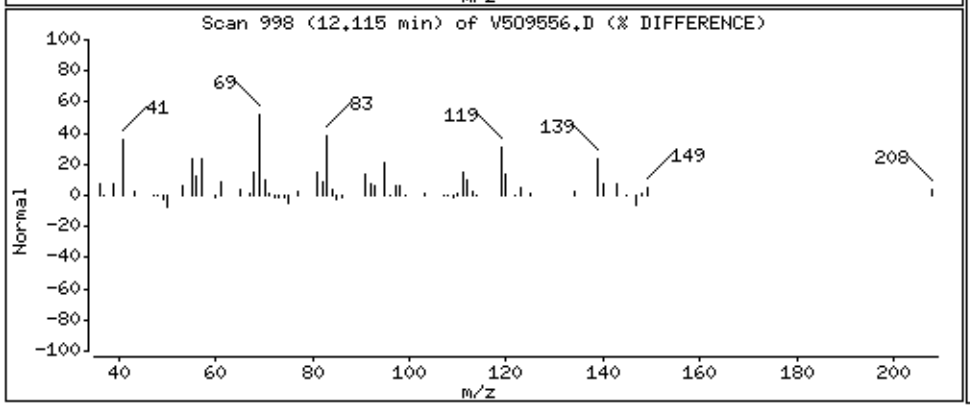












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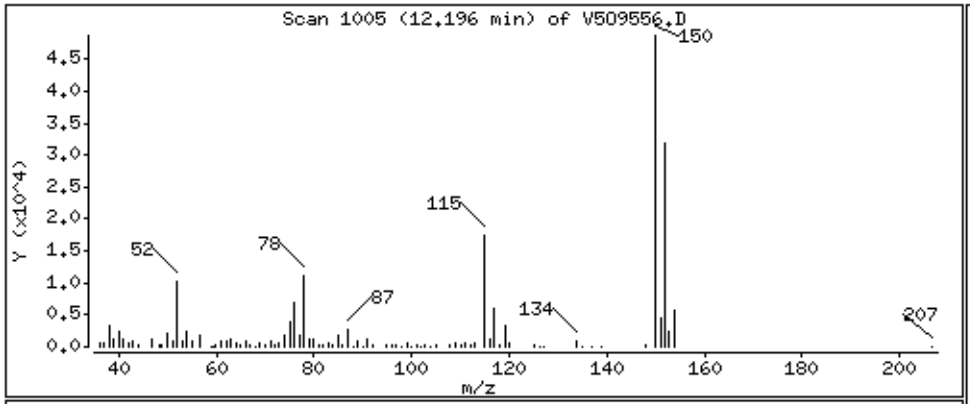
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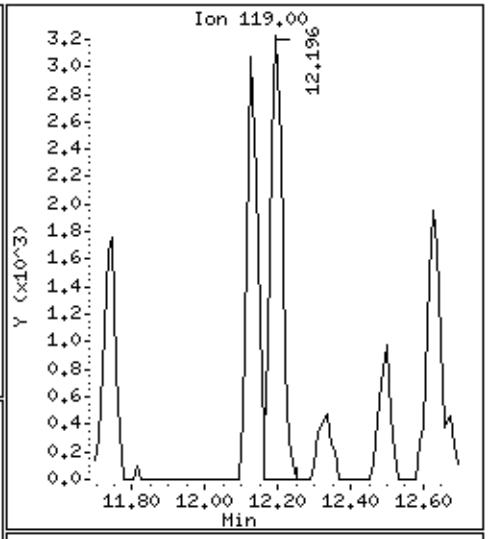
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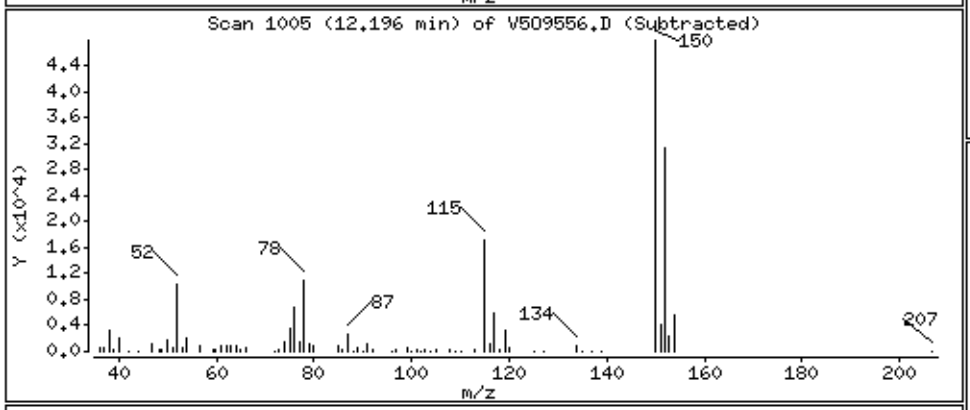
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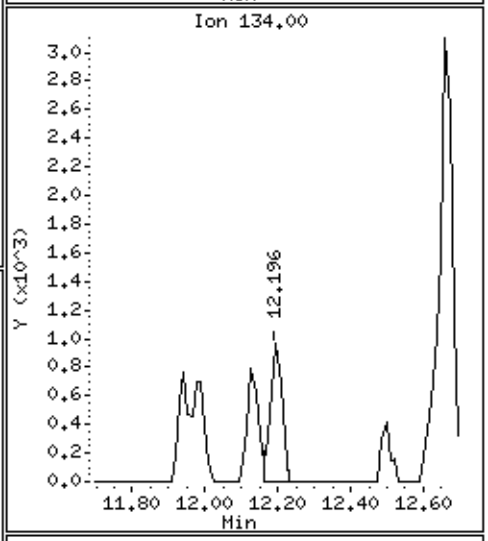
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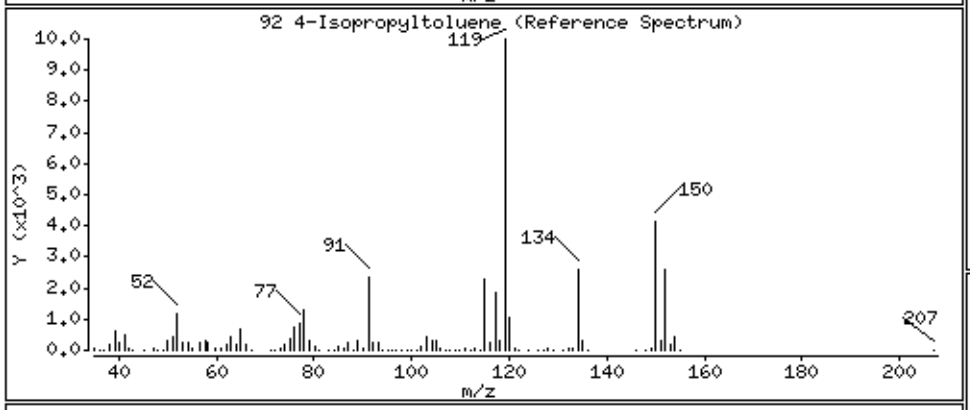
92 4-Isopropyltoluene Concentration: 99 ug/Kg

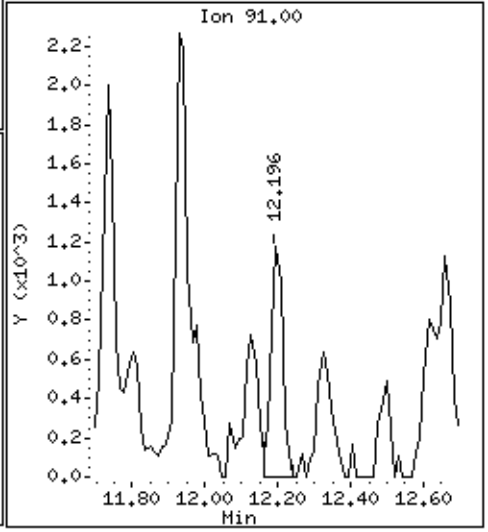


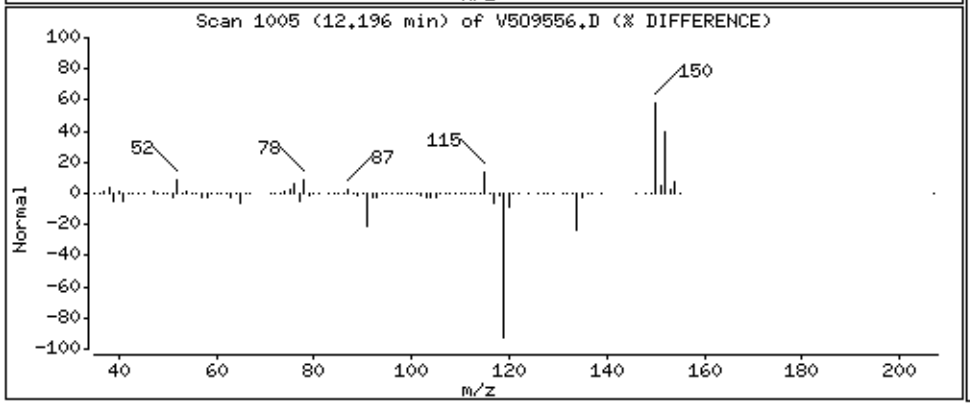












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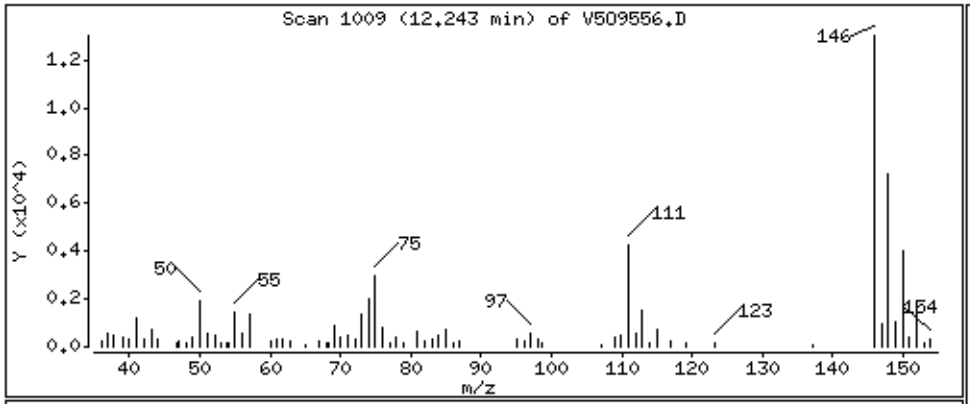
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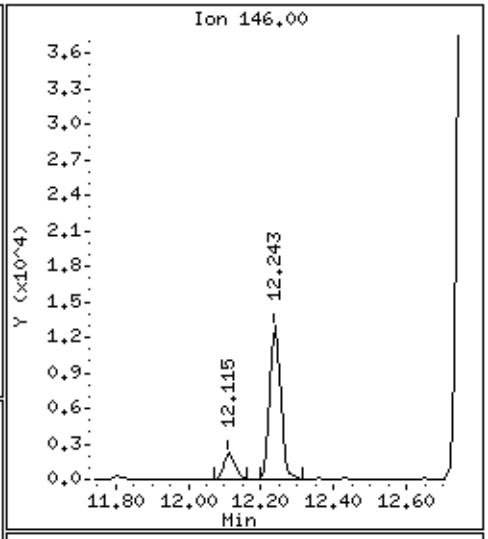
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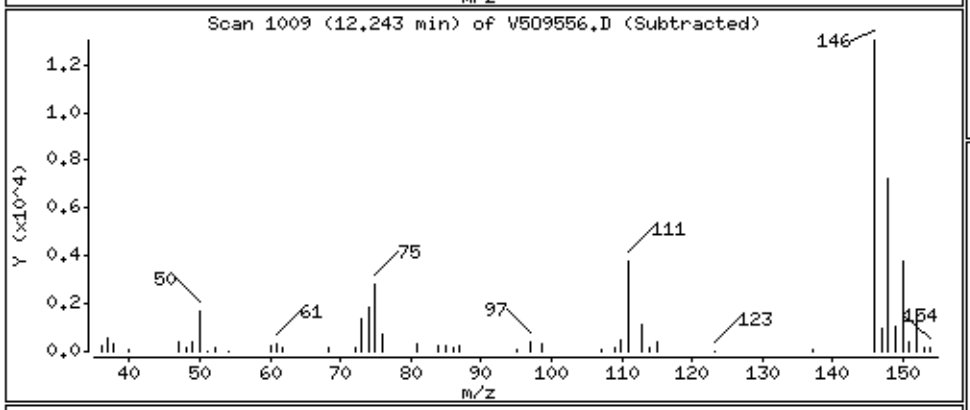
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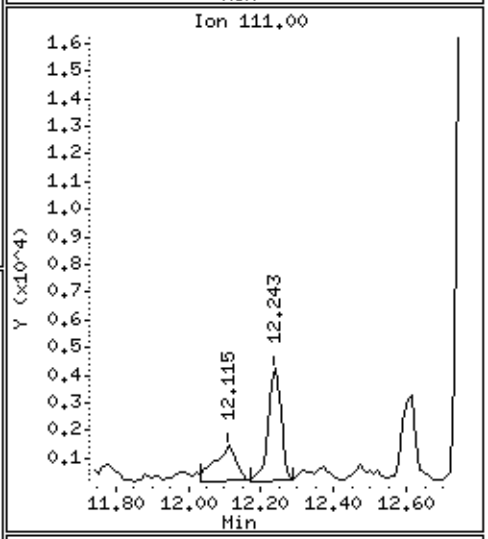
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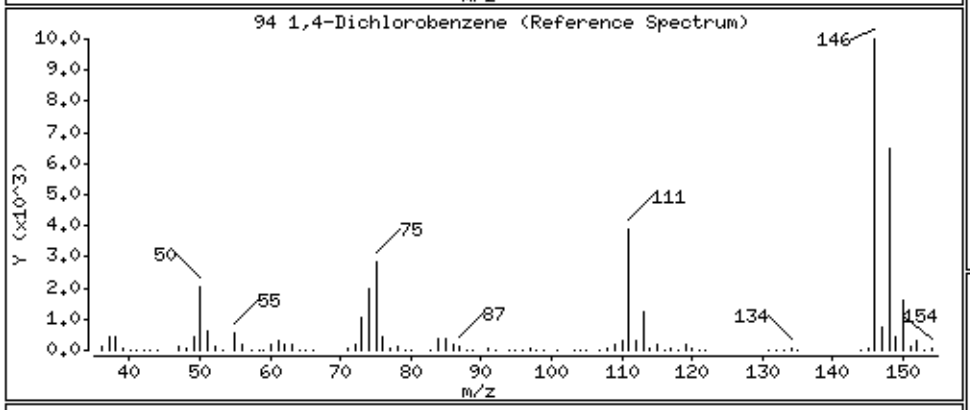
94 1,4-Dichlorobenzene Concentration: 440 ug/Kg

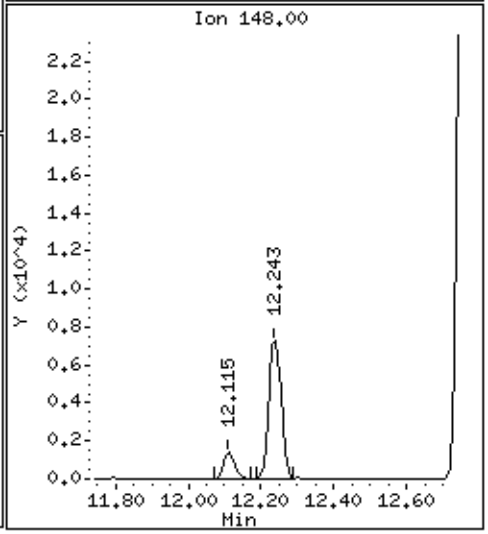


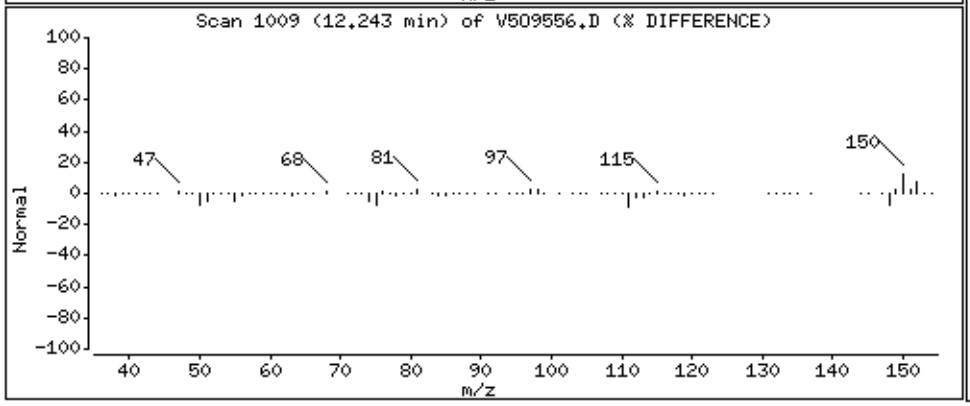












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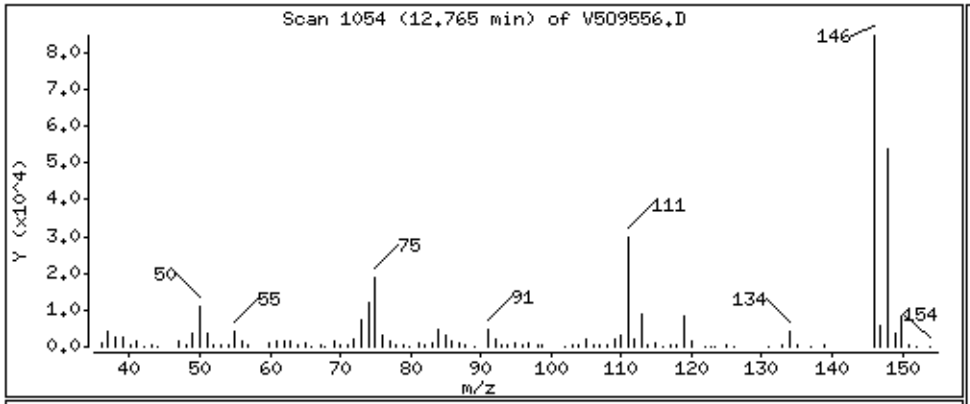
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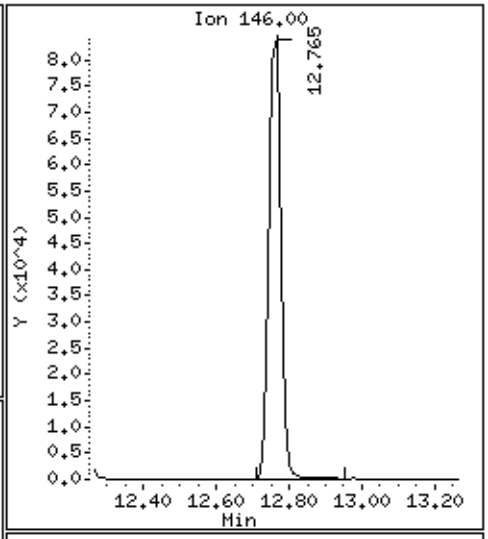
Sample Info: 5ML,N0058-11A,,75683,

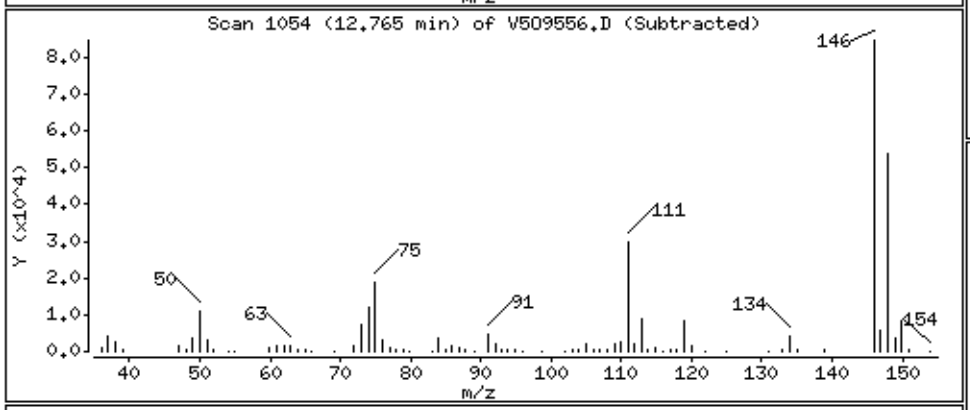
Operator: WL SRC: LIMS

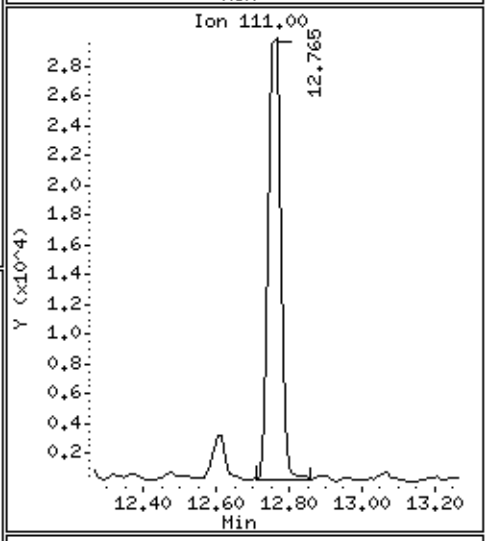
Column phase: DB-624 Column diameter: 0.25

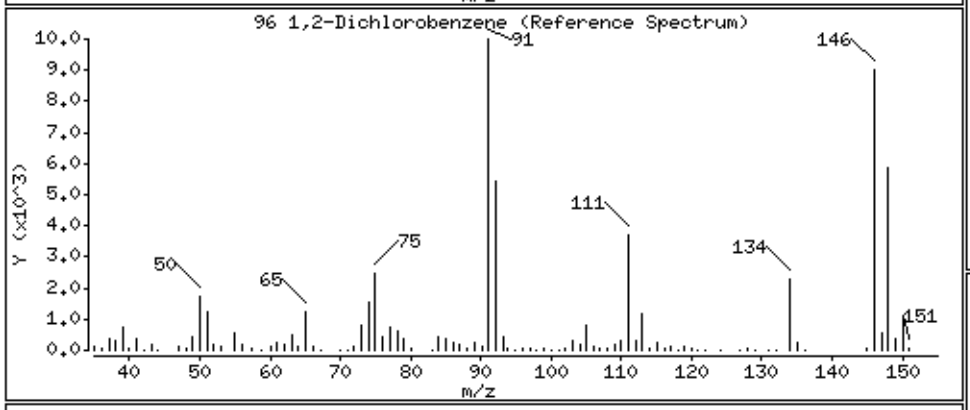
96 1,2-Dichlorobenzene Concentration: 3400 ug/Kg

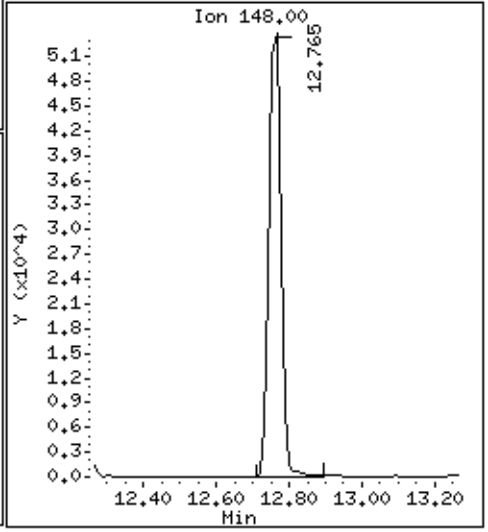


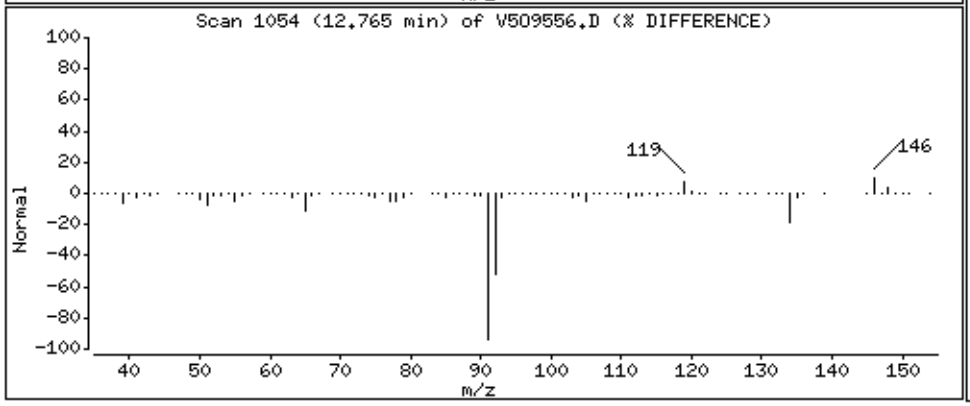












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

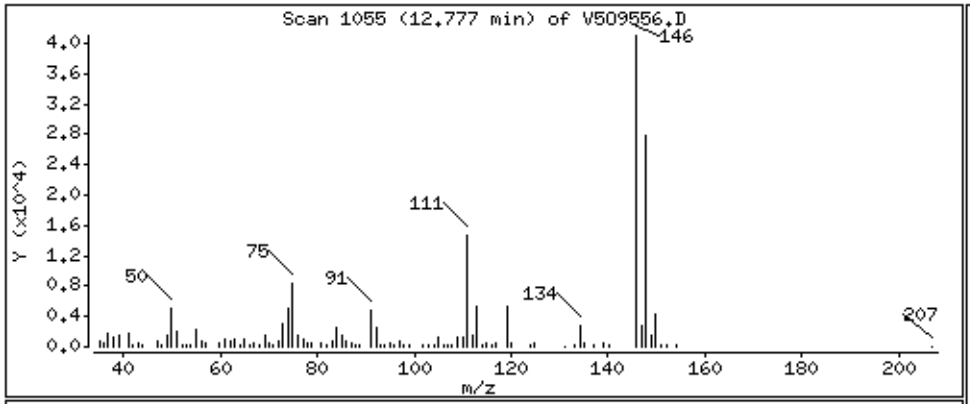
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

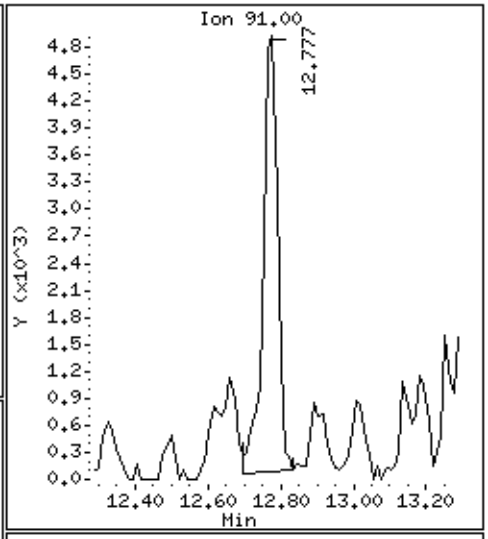
Sample Info: 5ML,N0058-11A,,75683,

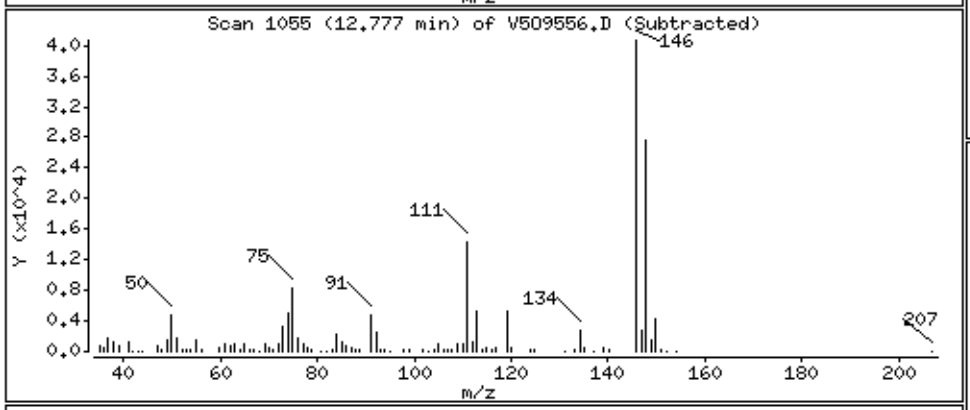
Operator: WL SRC: LIMS

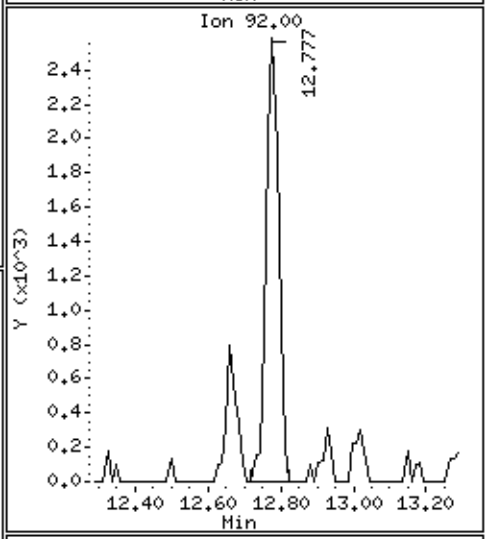
Column phase: DB-624 Column diameter: 0.25

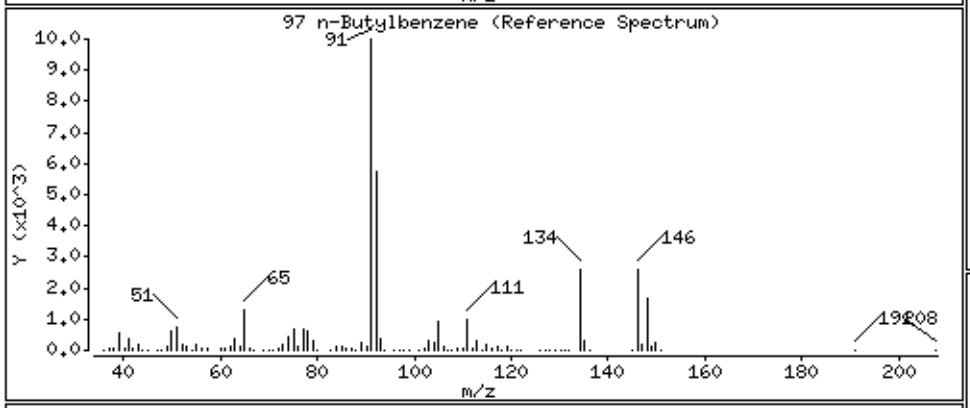
97 n-Butylbenzene Concentration: 210 ug/Kg

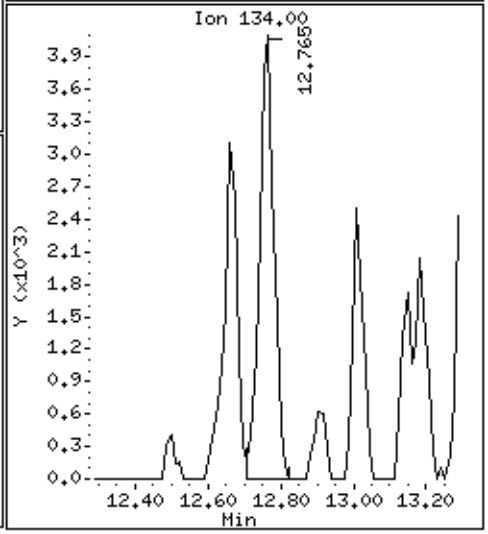


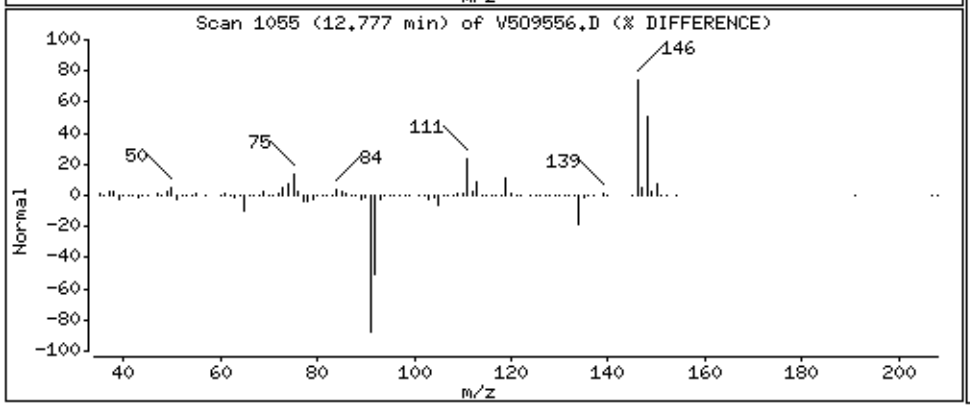












Data File: \\Avogadro\Organics\V5.I\140122.B\V509556.D

Date : 22-JAN-2014 16:32

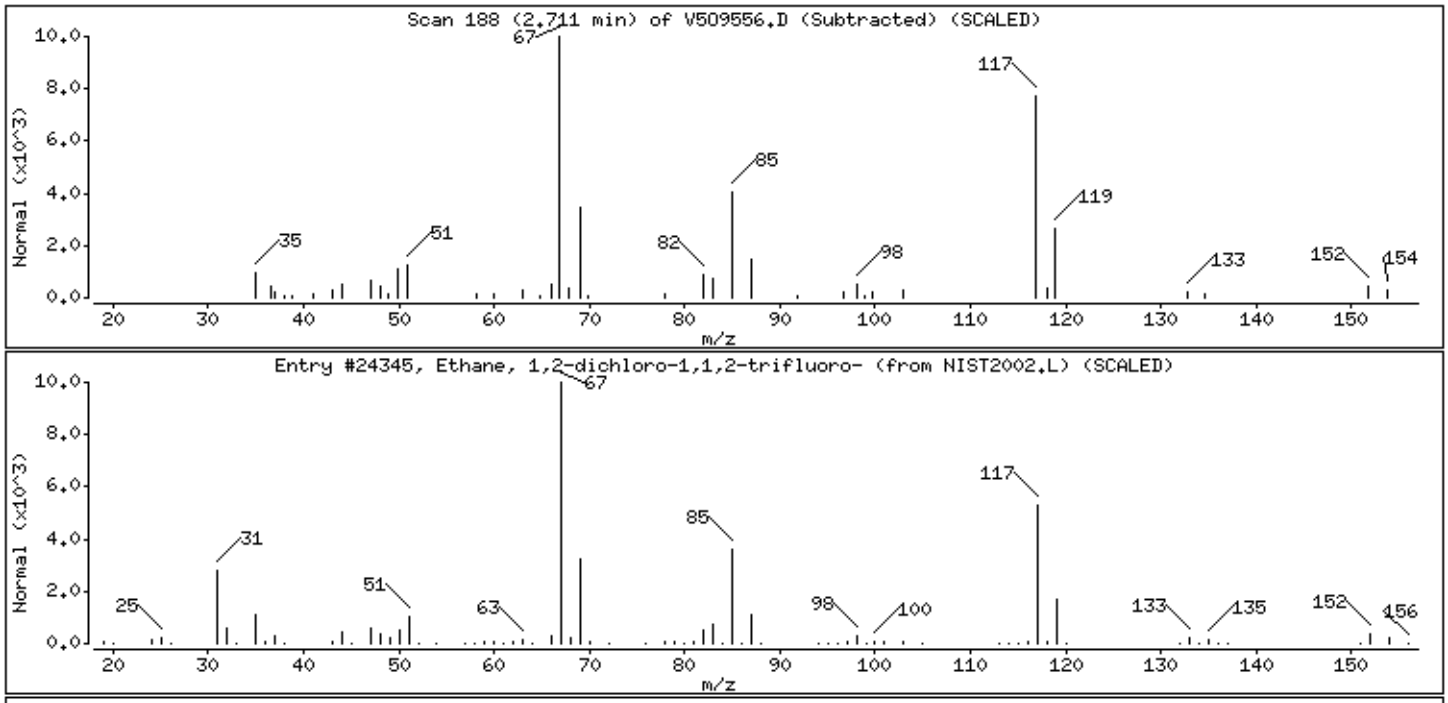
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

Sample Info: 5ML,N0058-11A,,75683,

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	91	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-3-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-11ADL

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5O9563.D

Level: (TRACE/LOW/MED) MED Date Received: 01/17/2014

% Moisture: not dec. 57 Date Analyzed: 01/22/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

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	9100	U
74-87-3	Chloromethane	9100	U
75-01-4	Vinyl chloride	9100	U
74-83-9	Bromomethane	9100	U
75-00-3	Chloroethane	9100	U
75-69-4	Trichlorofluoromethane	9100	U
75-35-4	1,1-Dichloroethene	9100	U
67-64-1	Acetone	9100	U
74-88-4	Iodomethane	9100	U
75-15-0	Carbon disulfide	9100	U
75-09-2	Methylene chloride	9100	U
156-60-5	trans-1,2-Dichloroethene	9100	U
1634-04-4	Methyl tert-butyl ether	9100	U
75-34-3	1,1-Dichloroethane	2900	DJ
108-05-4	Vinyl acetate	9100	U
78-93-3	2-Butanone	9100	U
156-59-2	cis-1,2-Dichloroethene	9100	U
594-20-7	2,2-Dichloropropane	9100	U
74-97-5	Bromochloromethane	9100	U
67-66-3	Chloroform	9100	U
71-55-6	1,1,1-Trichloroethane	190000	D
563-58-6	1,1-Dichloropropene	9100	U
56-23-5	Carbon tetrachloride	9100	U
107-06-2	1,2-Dichloroethane	9100	U
71-43-2	Benzene	9100	U
79-01-6	Trichloroethene	9100	U
78-87-5	1,2-Dichloropropane	9100	U
74-95-3	Dibromomethane	9100	U
75-27-4	Bromodichloromethane	9100	U
10061-01-5	cis-1,3-Dichloropropene	9100	U
108-10-1	4-Methyl-2-pentanone	9100	U
108-88-3	Toluene	1900	DJ
10061-02-6	trans-1,3-Dichloropropene	9100	U
79-00-5	1,1,2-Trichloroethane	9100	U
142-28-9	1,3-Dichloropropane	9100	U

CLIENT SAMPLE NO.
HW-WET-SE-3-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-11ADL

Sample wt/vol: 5.10 (g/mL) G Lab File ID: V5O9563.D

Level: (TRACE/LOW/MED) MED Date Received: 01/17/2014

% Moisture: not dec. 57 Date Analyzed: 01/22/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

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	9100	U
591-78-6	2-Hexanone	9100	U
124-48-1	Dibromochloromethane	9100	U
106-93-4	1,2-Dibromoethane	9100	U
108-90-7	Chlorobenzene	6900	DJ
630-20-6	1,1,1,2-Tetrachloroethane	9100	U
100-41-4	Ethylbenzene	8500	DJ
179601-23-1	m,p-Xylene	19000	D
95-47-6	o-Xylene	5000	DJ
1330-20-7	Xylene (Total)	24000	D
100-42-5	Styrene	9100	U
75-25-2	Bromoform	9100	U
98-82-8	Isopropylbenzene	9100	U
79-34-5	1,1,2,2-Tetrachloroethane	9100	U
108-86-1	Bromobenzene	9100	U
96-18-4	1,2,3-Trichloropropane	9100	U
103-65-1	n-Propylbenzene	9100	U
95-49-8	2-Chlorotoluene	9100	U
108-67-8	1,3,5-Trimethylbenzene	9100	U
106-43-4	4-Chlorotoluene	9100	U
98-06-6	tert-Butylbenzene	9100	U
95-63-6	1,2,4-Trimethylbenzene	9100	U
135-98-8	sec-Butylbenzene	9100	U
99-87-6	4-Isopropyltoluene	9100	U
541-73-1	1,3-Dichlorobenzene	9100	U
106-46-7	1,4-Dichlorobenzene	9100	U
104-51-8	n-Butylbenzene	9100	U
95-50-1	1,2-Dichlorobenzene	7700	DJ
96-12-8	1,2-Dibromo-3-chloropropane	9100	U
120-82-1	1,2,4-Trichlorobenzene	9100	U
87-68-3	Hexachlorobutadiene	9100	U
87-61-6	1,2,3-Trichlorobenzene	9100	U
91-20-3	Naphthalene	9100	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	60000	D

Data File: \\Avogadro\Organics\V5.I\140122.B\V5O9563.D
Report Date: 31-Jan-2014 09:56

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V5.I\140122.B\V5O9563.D
Lab Smp Id: N0058-11ADL Client Smp ID: HW-WET-SE-3-(1)_01/
Inj Date : 22-JAN-2014 19:28
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,N0058-11ADL,,75683,10
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V5.I\140122.B\v5_8260W.m
Meth Date : 31-Jan-2014 09:56 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 18
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	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

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/Kg)
	12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.934	2.938	(0.526)	47380	32.9939	16000
	24	1,1-Dichloroethane	63	3.921	3.925	(0.703)	3602	1.57630	770
$	37	Dibromofluoromethane	113	4.908	4.912	(0.879)	42326	51.4837	2500
	38	1,1,1-Trichloroethane	97	4.943	4.947	(0.886)	216957	103.036	50000
$	43	1,2-Dichloroethane-d4	102	5.233	5.237	(0.938)	7394	51.7126	2500
*	47	Fluorobenzene	96	5.581	5.585	(1.000)	101614	50.0000	
$	59	Toluene-d8	98	7.288	7.292	(0.806)	119203	48.1772	2400
	60	Toluene	91	7.369	7.373	(1.320)	4967	1.06268	520
*	69	Chlorobenzene-d5	117	9.041	9.045	(1.000)	133704	50.0000	
	71	Chlorobenzene	112	9.076	9.080	(1.004)	13258	3.82193	1900
	73	Ethylbenzene	106	9.227	9.231	(1.021)	7853	4.67120	2300
	74	m,p-Xylene	106	9.389	9.393	(1.039)	21647	10.6342	5200
	75	o-Xylene	106	9.900	9.904	(1.095)	5378	2.73328	1300
$	80	Bromofluorobenzene	95	10.597	10.600	(1.172)	76443	51.7699	2500
*	93	1,4-Dichlorobenzene-d4	152	12.199	12.203	(1.000)	88354	50.0000	
	96	1,2-Dichlorobenzene	146	12.756	12.760	(1.046)	12026	4.26369	2100

Data File: \\Avogadro\Organics\V5.I\140122.B\V5O9563.D
Report Date: 31-Jan-2014 09:56

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V5.I\140122.B\V5O9563.D
Lab Smp Id: N0058-11ADL Client Smp ID: HW-WET-SE-3-(1)_01/
Inj Date : 22-JAN-2014 19:28
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,N0058-11ADL,,75683,10
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V5.I\140122.B\v5_8260W.m
Meth Date : 31-Jan-2014 09:56 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 18
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.100	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

ISTD	RT	AREA	AMOUNT
* 47 Fluorobenzene	5.582	219768	50.000

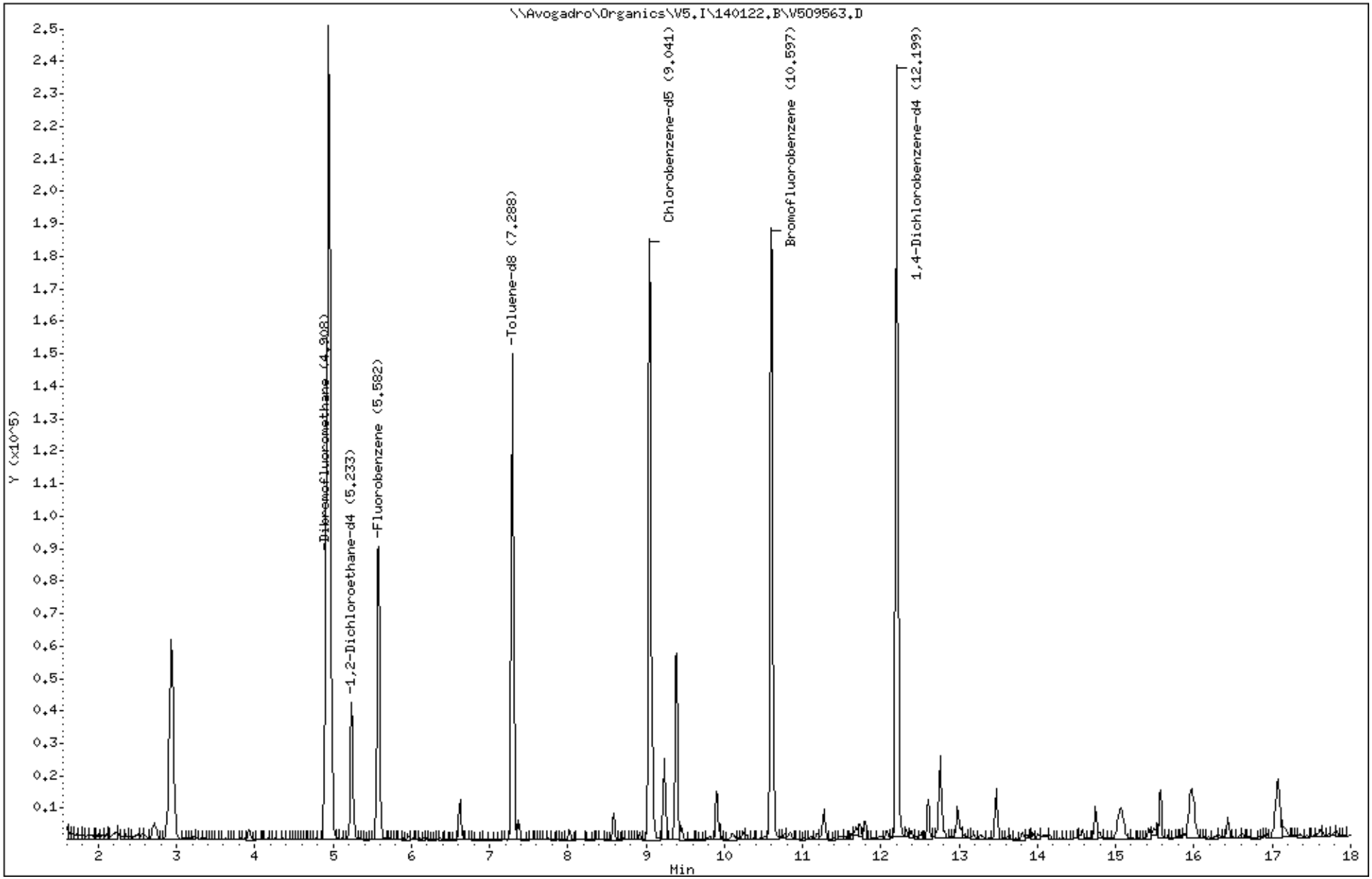
		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.714	20039	4.55918113	2200	50	NIST2002.L	24345	47

Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D
Date : 22-JAN-2014 19:28
Client ID: HW-WET-SE-3-(1)_01/
Sample Info: 5ML,N0058-11ADL,,75683,10

Instrument: V5.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

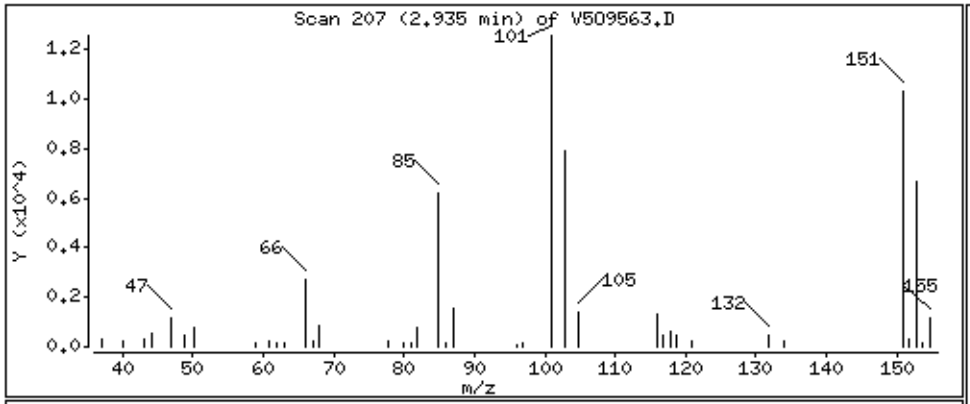
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

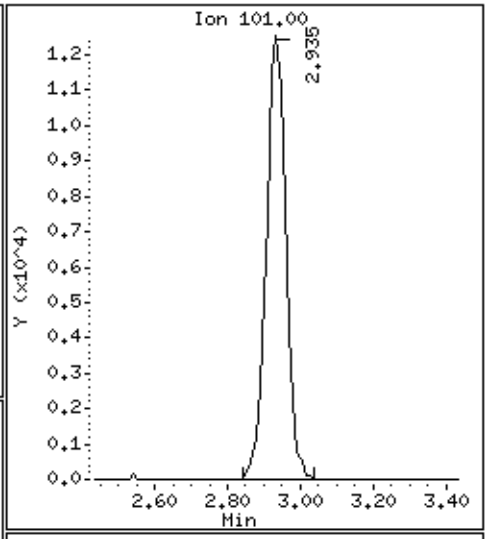
Sample Info: 5ML,N0058-11ADL,,75683,10

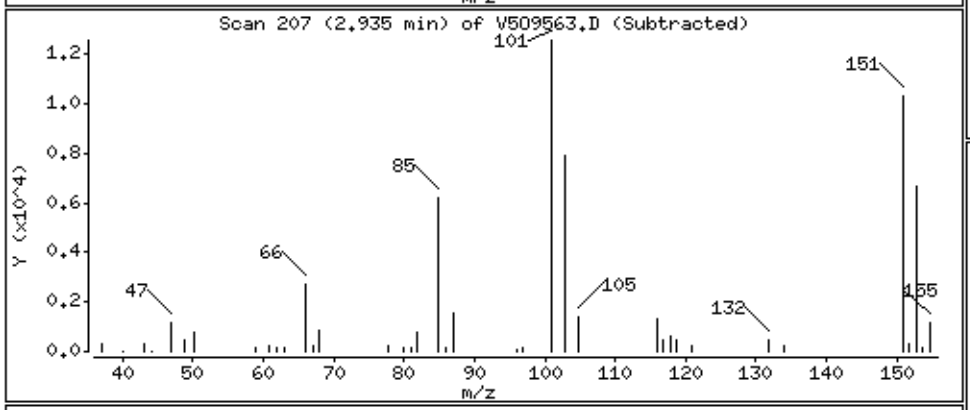
Operator: WL SRC: LIMS

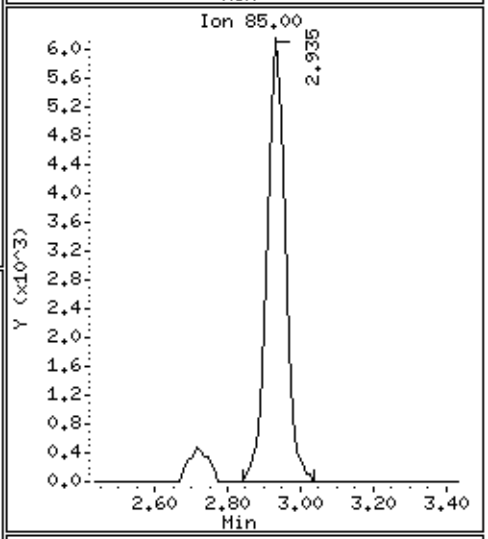
Column phase: DB-624 Column diameter: 0.25

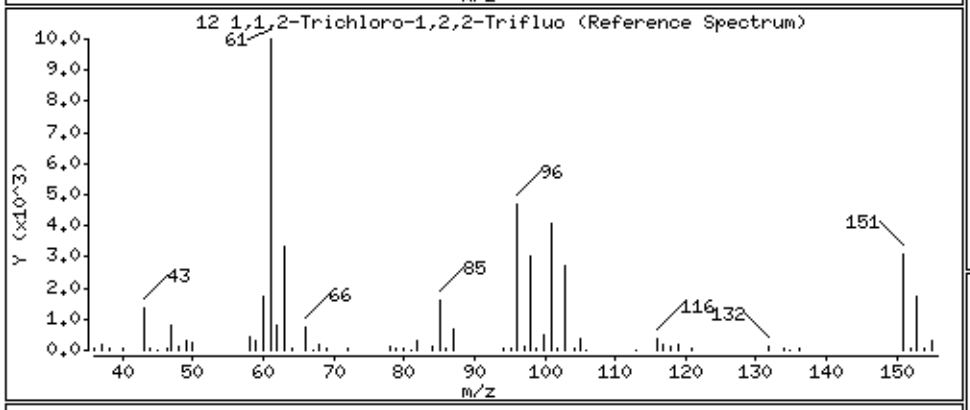
12 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 16000 ug/Kg

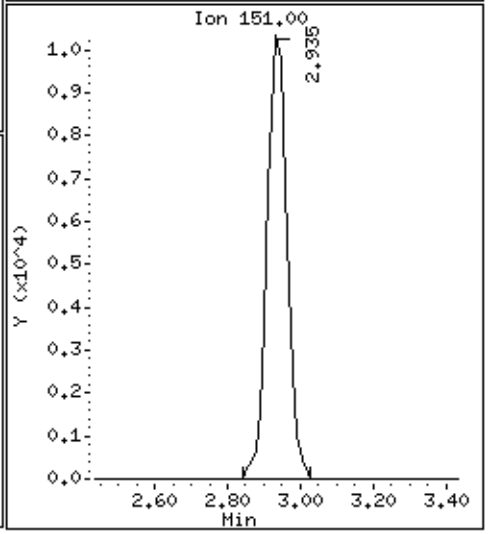


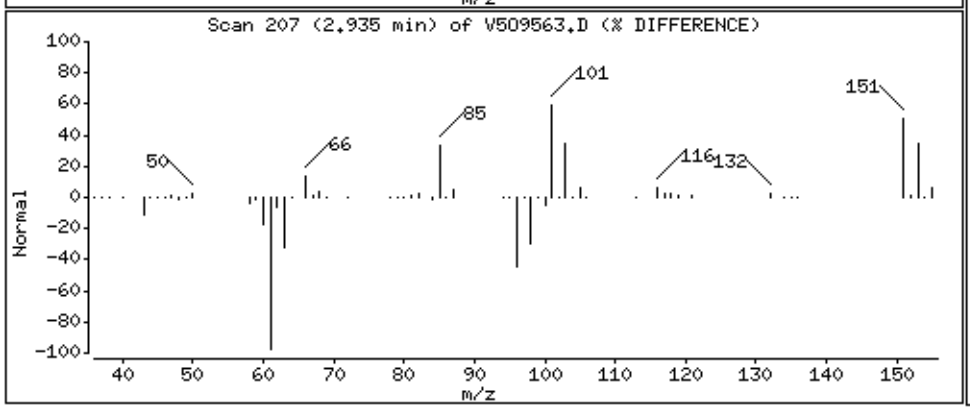












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

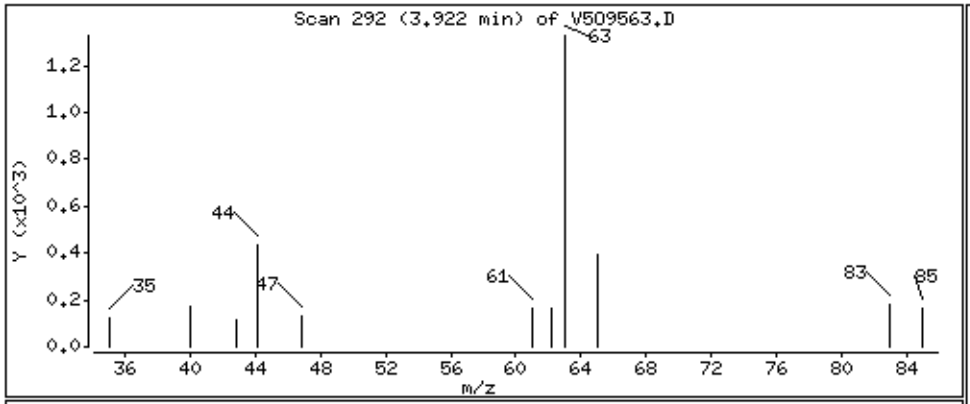
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

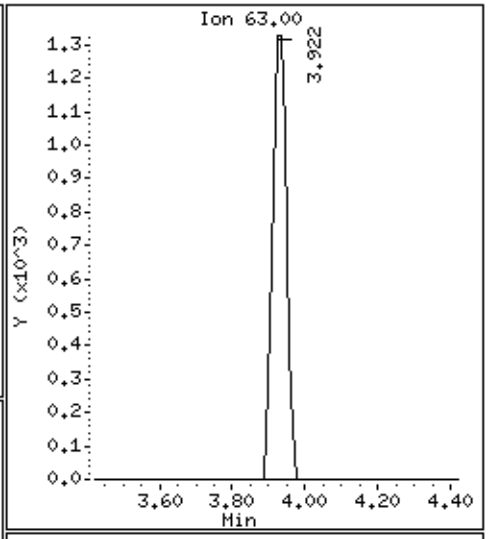
Sample Info: 5ML,N0058-11ADL,,75683,10

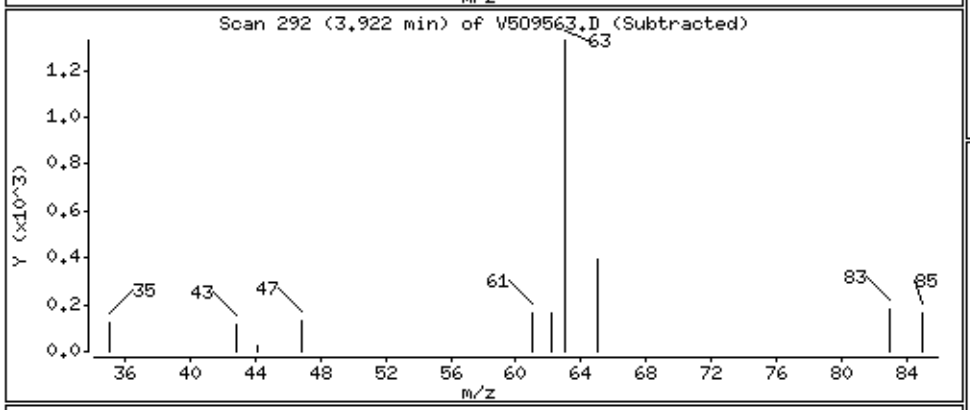
Operator: WL SRC: LIMS

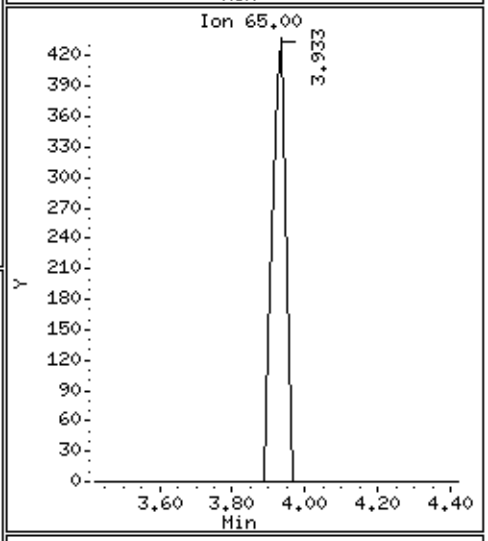
Column phase: DB-624 Column diameter: 0.25

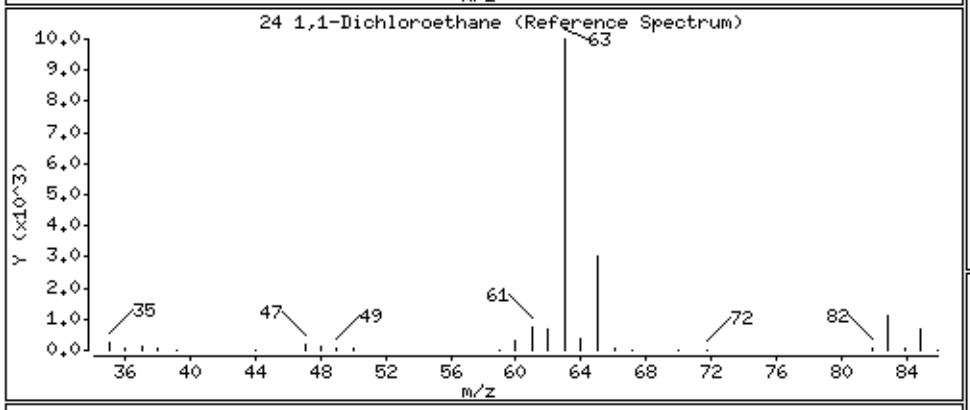
24 1,1-Dichloroethane Concentration: 770 ug/Kg

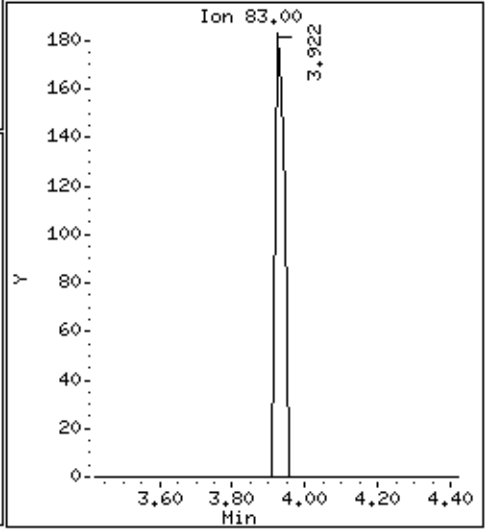


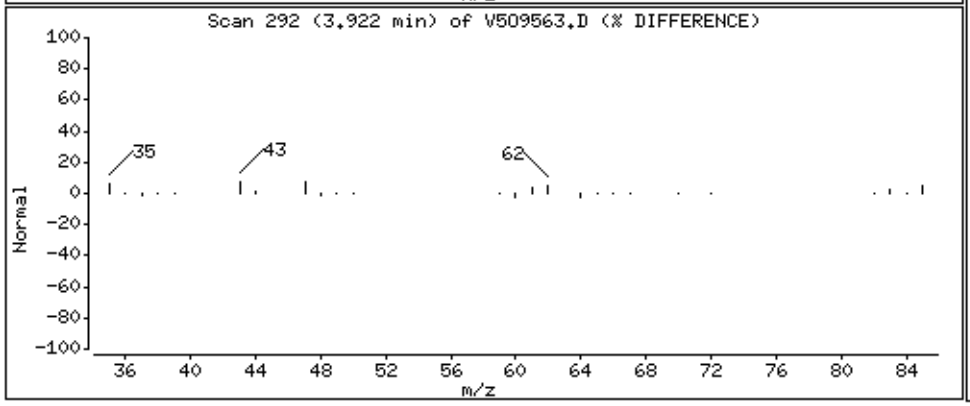












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

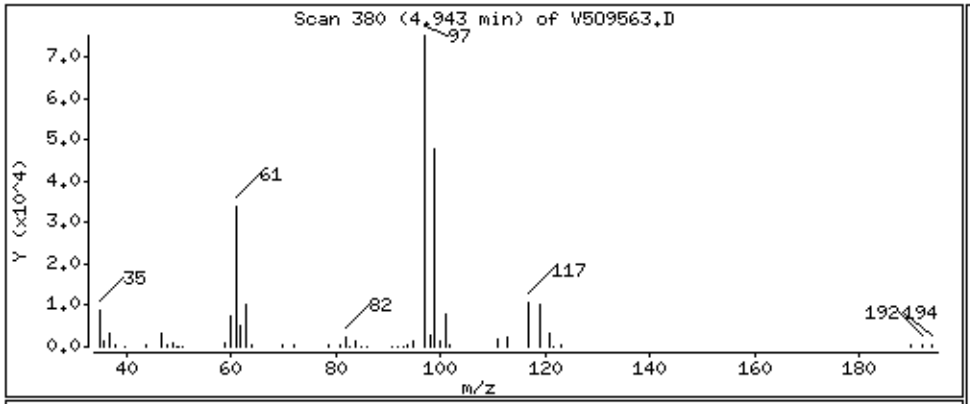
Client ID: HW-WET-SE-3-(1)_01/ Instrument: V5.i

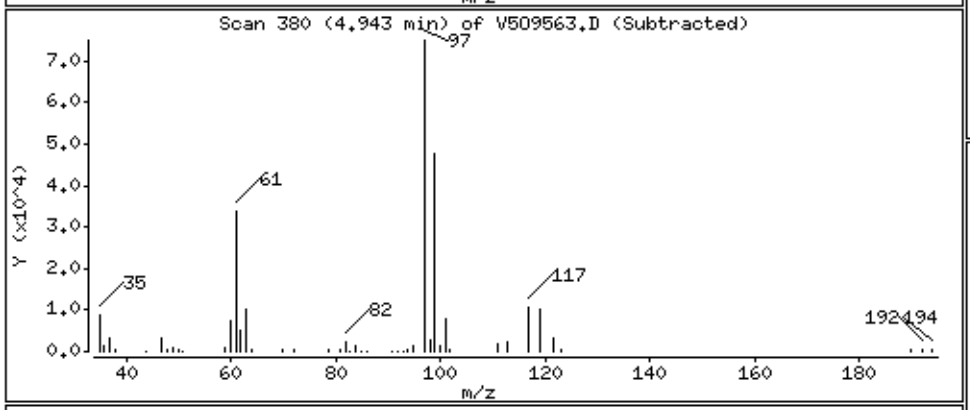
Sample Info: 5ML,N0058-11ADL,,75683,10

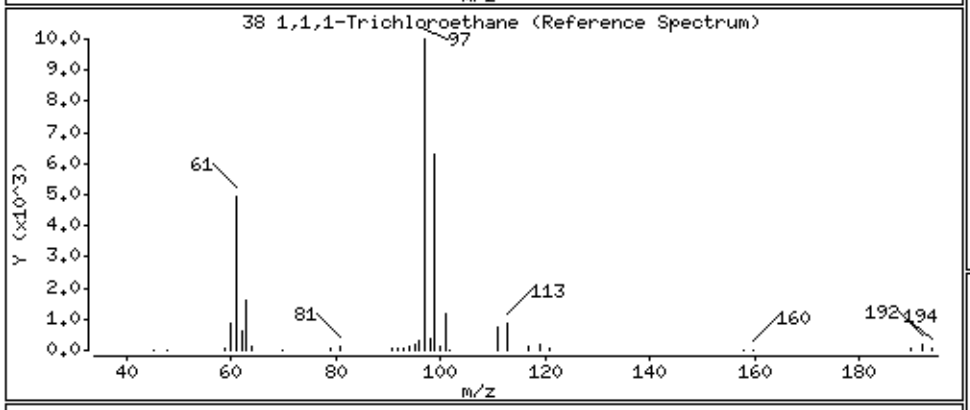
Operator: WL SRC: LIMS

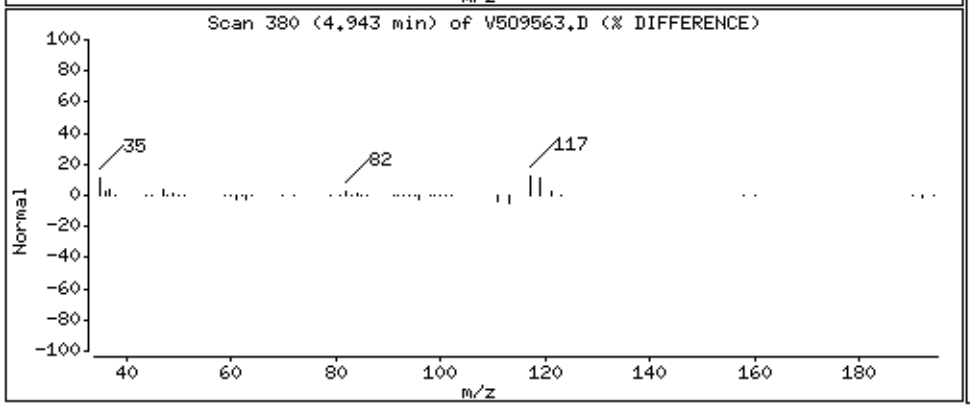
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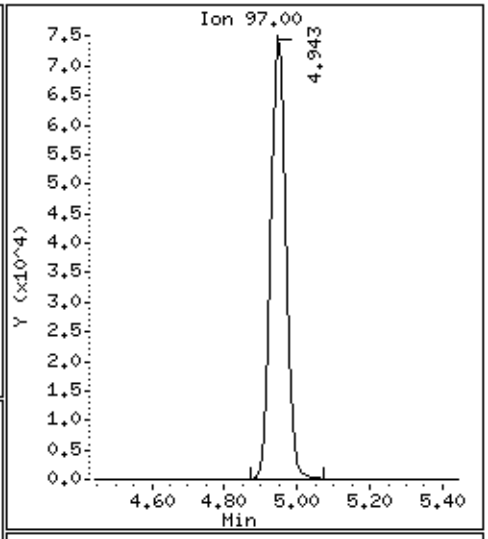
38 1,1,1-Trichloroethane Concentration: 50000 ug/Kg

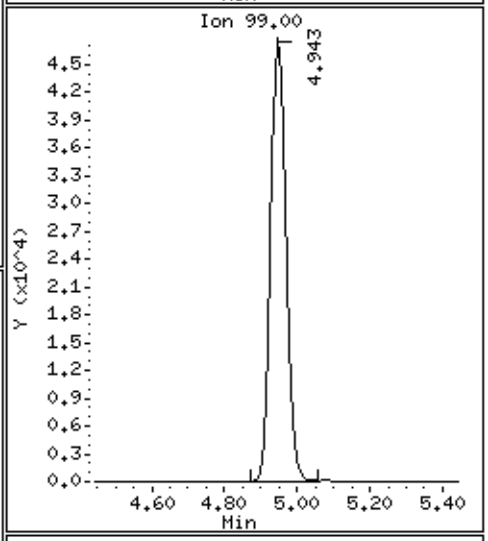


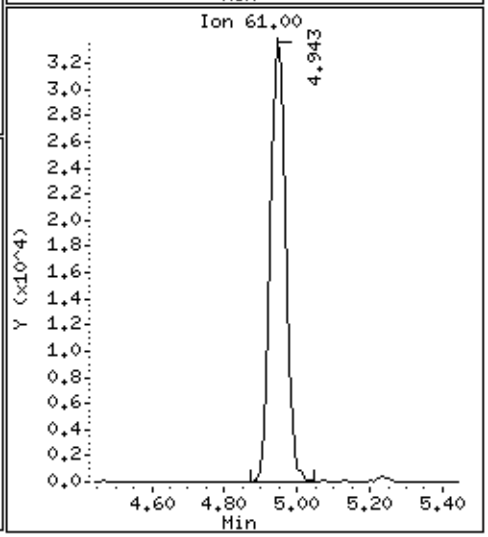












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

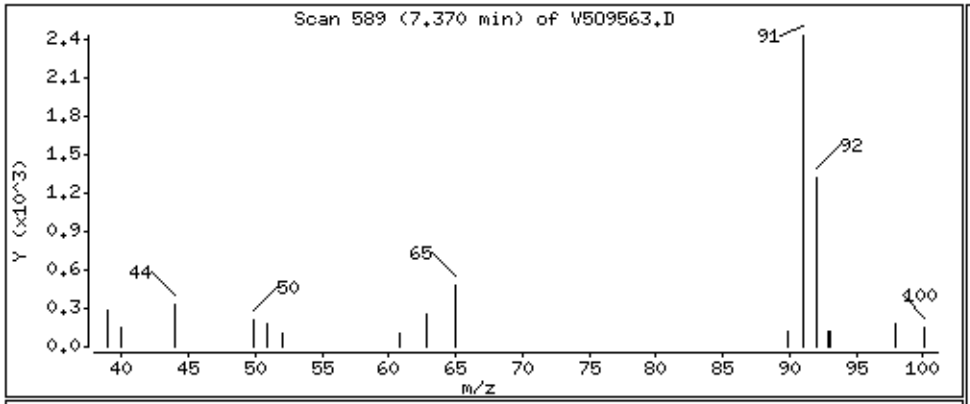
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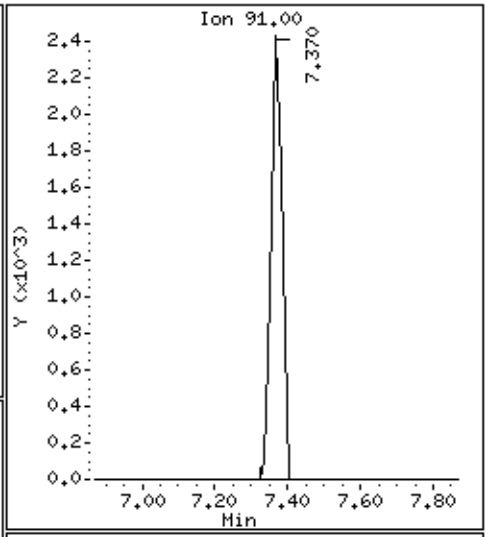
Sample Info: 5ML,N0058-11ADL,,75683,10

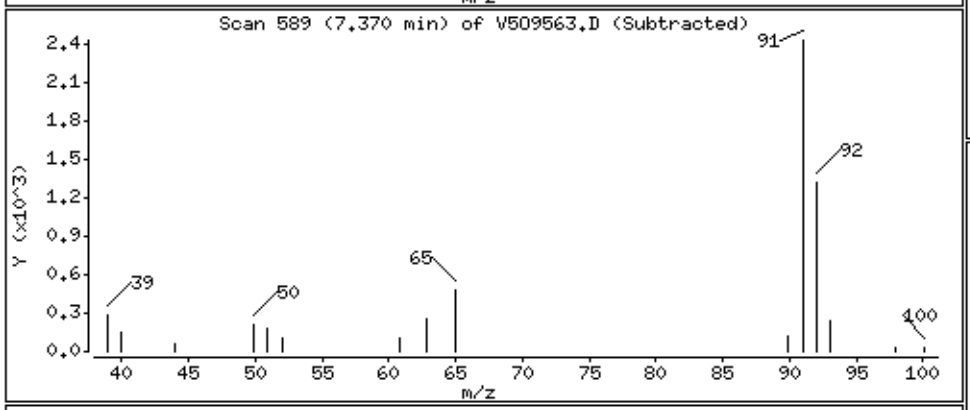
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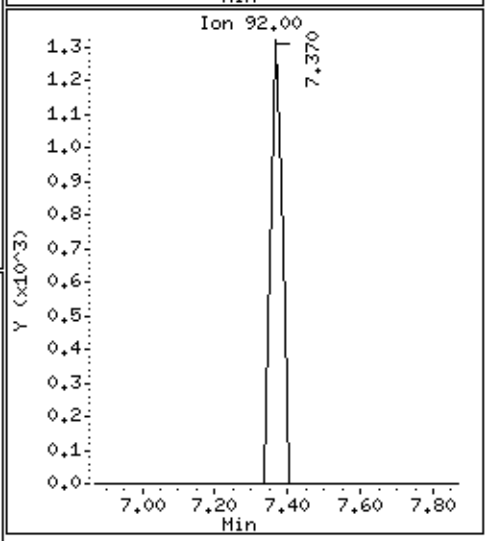
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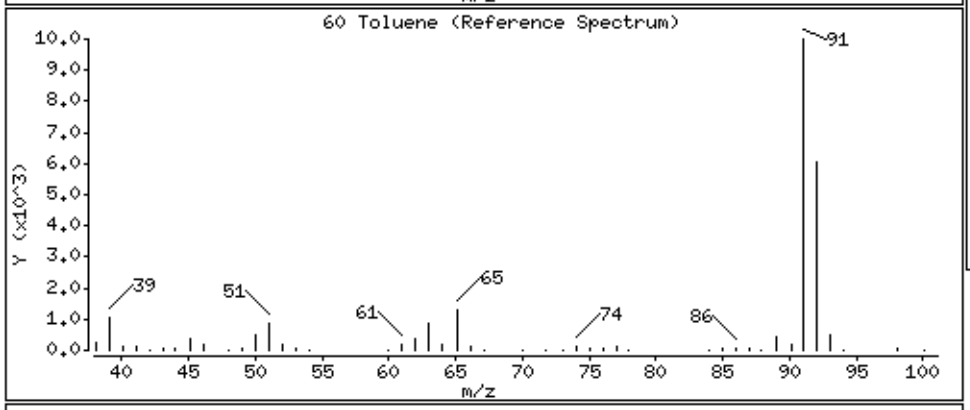
60 Toluene Concentration: 520 ug/Kg

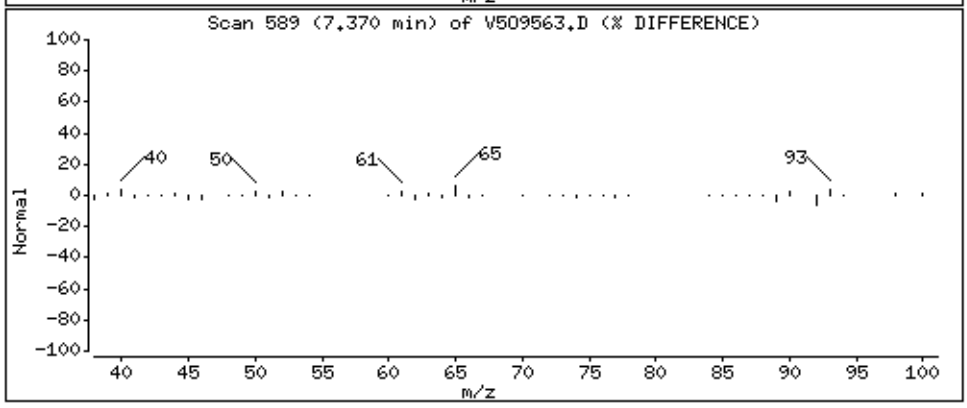












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

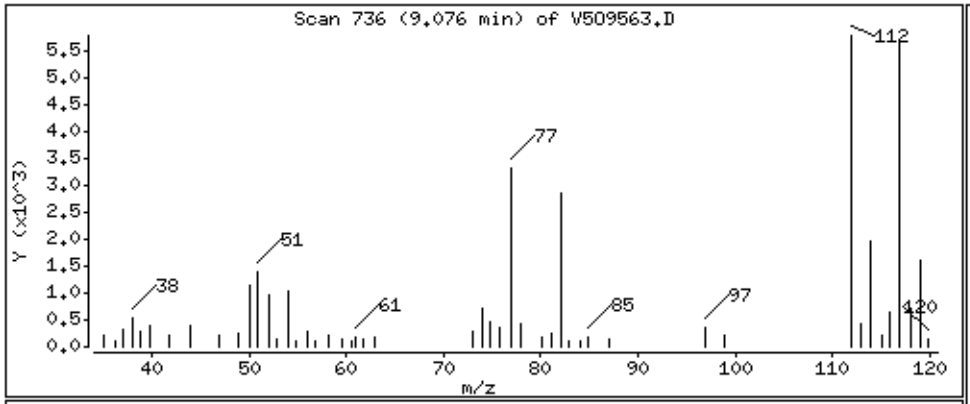
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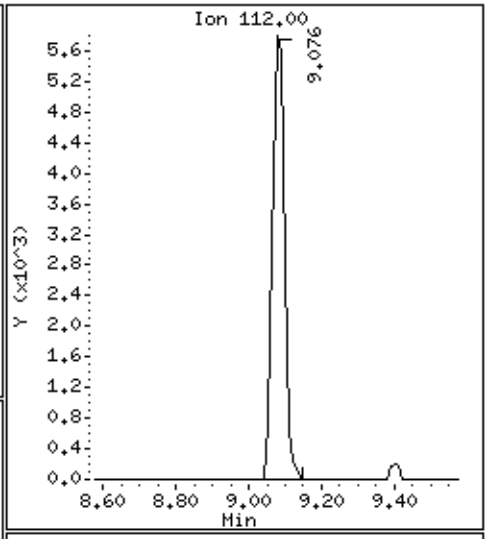
Sample Info: 5ML,N0058-11ADL,,75683,10

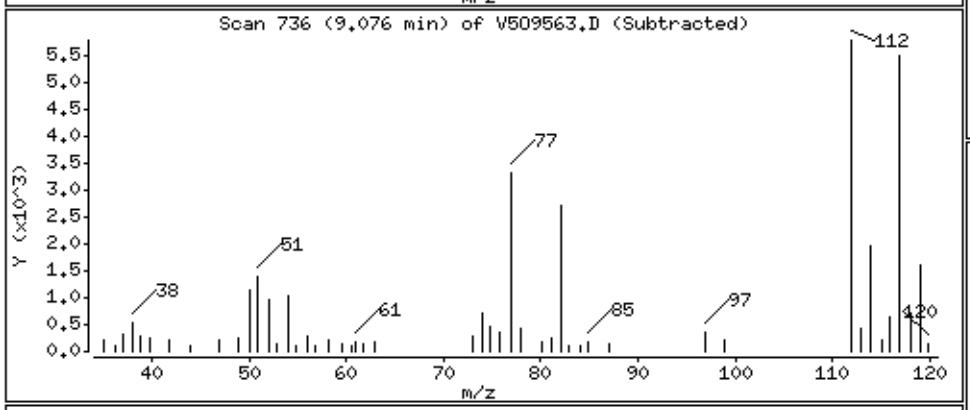
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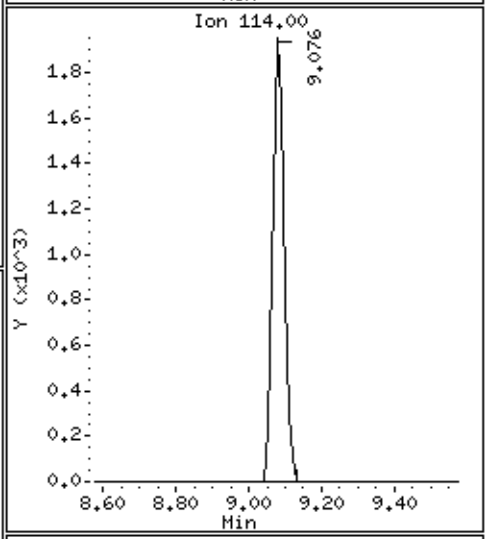
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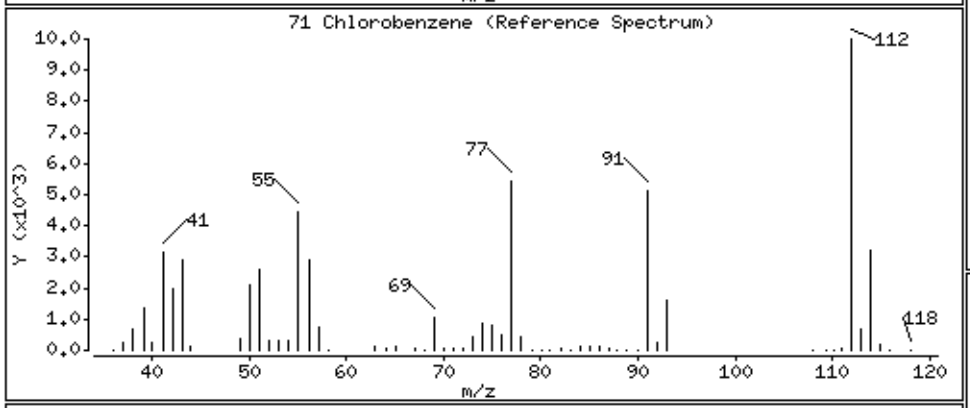
71 Chlorobenzene Concentration: 1900 ug/Kg

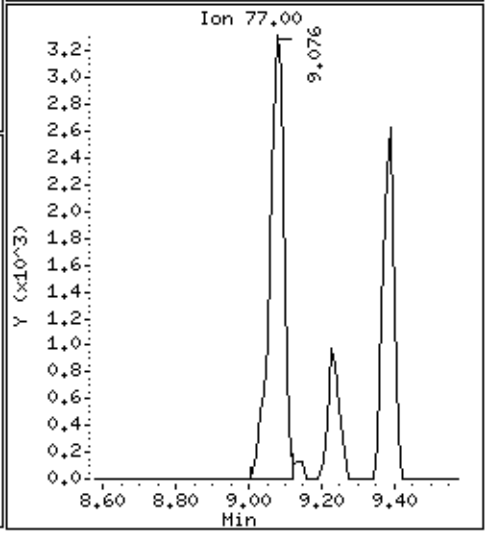


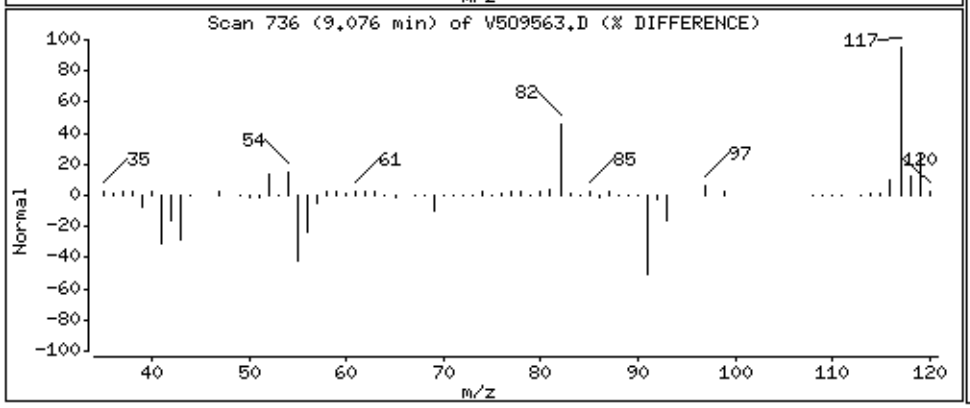












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

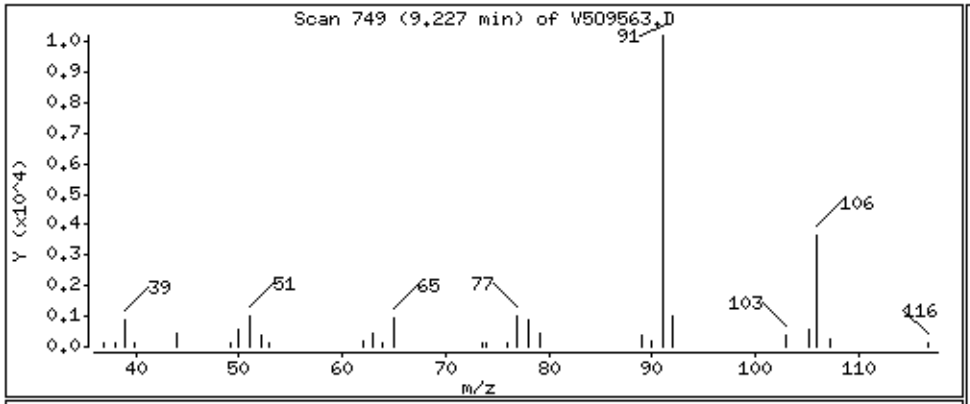
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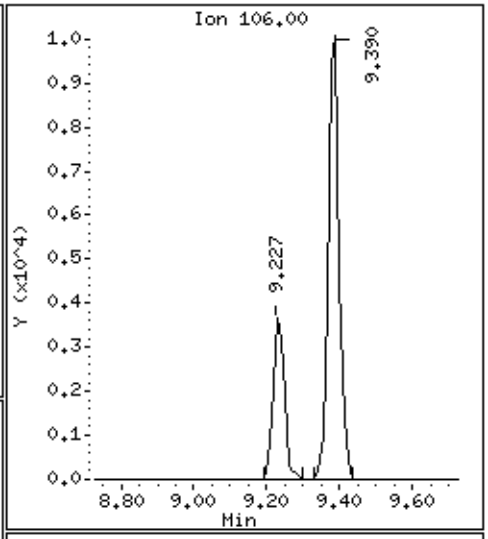
Sample Info: 5ML,N0058-11ADL,,75683,10

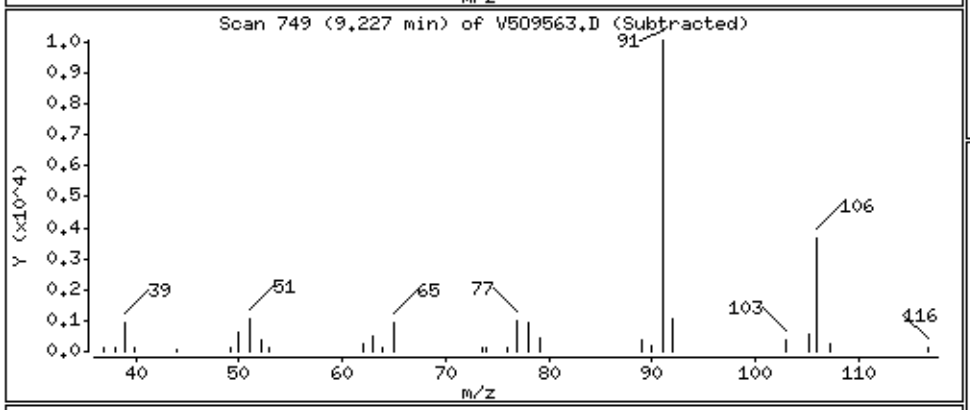
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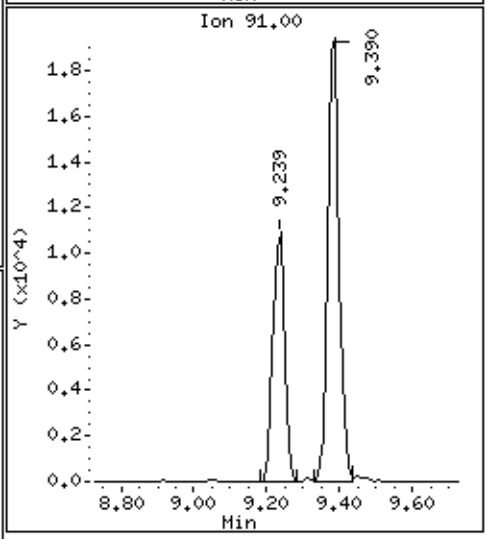
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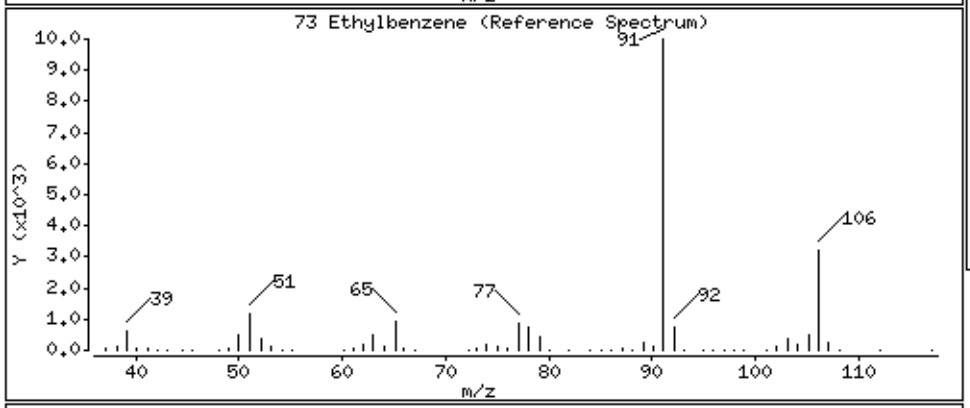
73 Ethylbenzene Concentration: 2300 ug/Kg

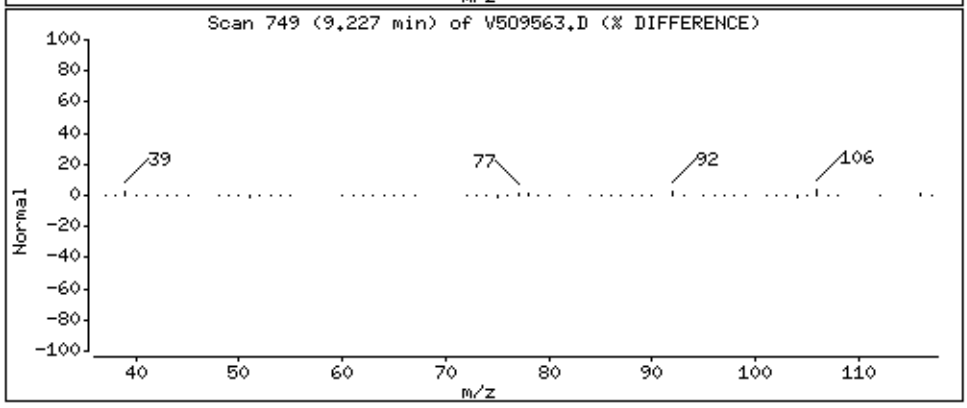












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

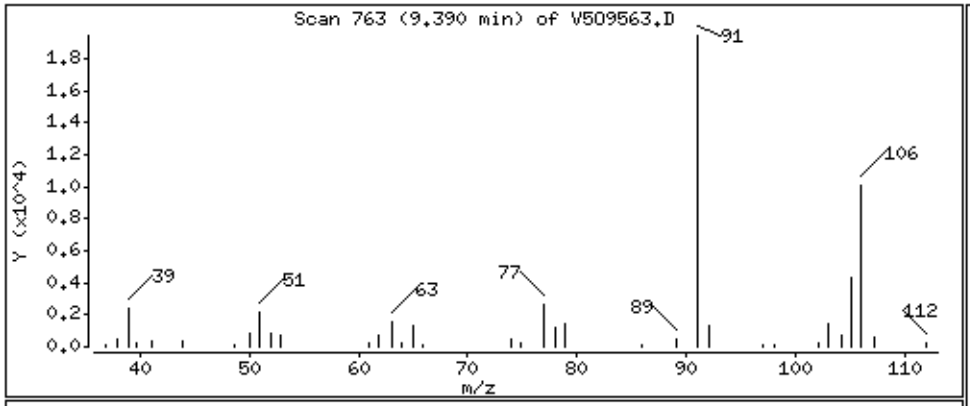
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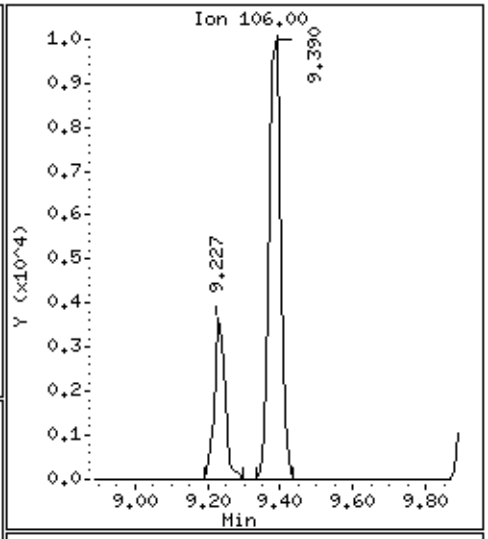
Sample Info: 5ML,N0058-11ADL,,75683,10

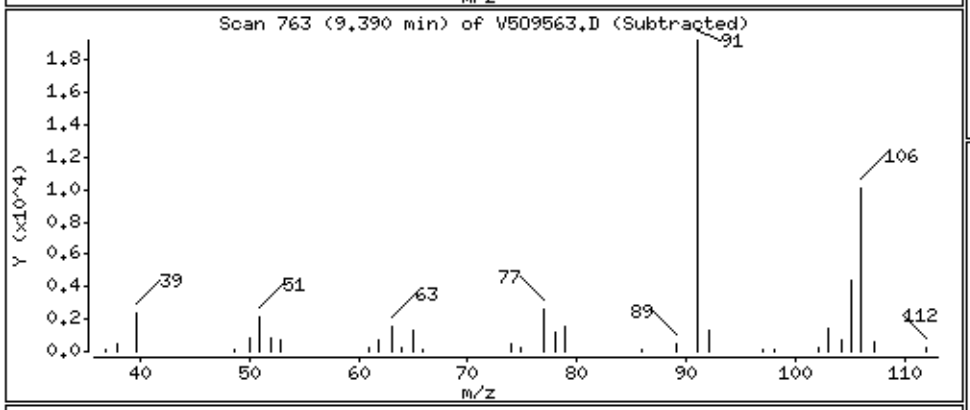
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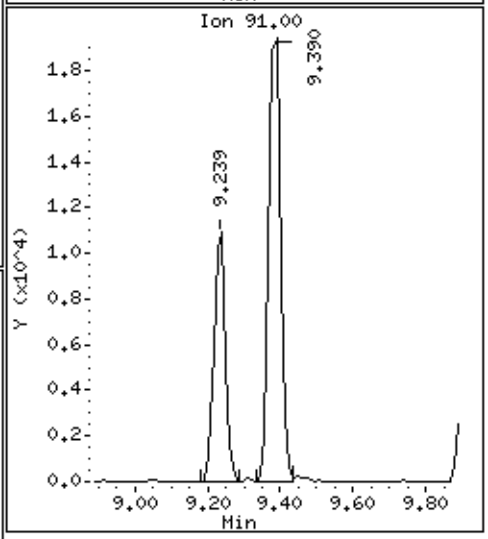
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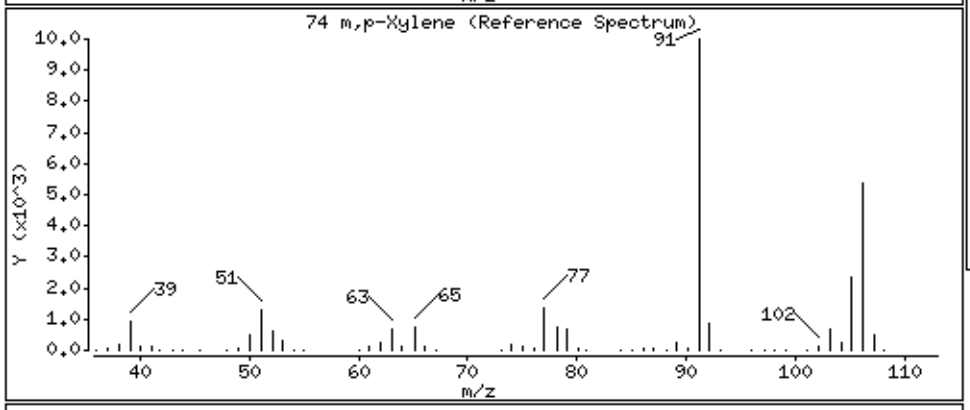
74 m,p-Xylene Concentration: 5200 ug/Kg

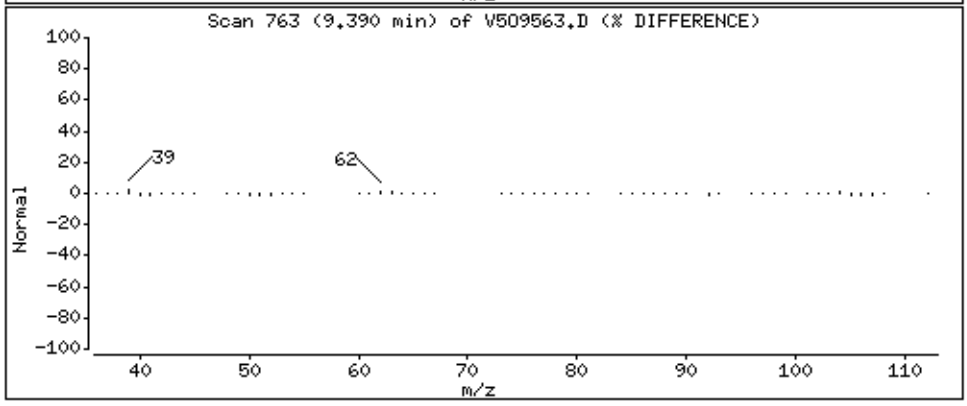












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

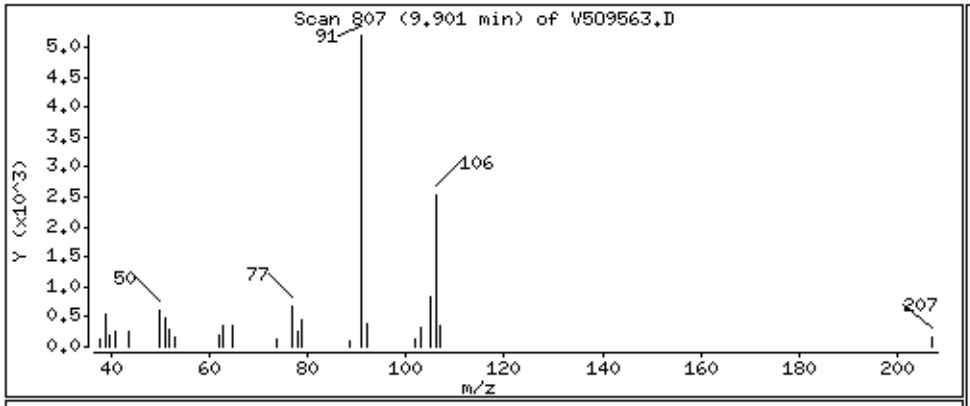
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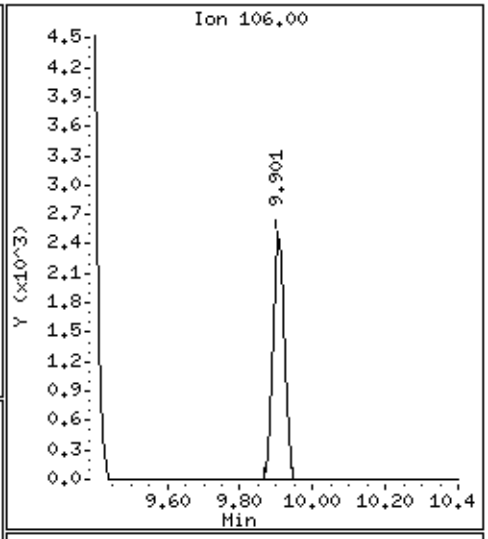
Sample Info: 5ML,N0058-11ADL,,75683,10

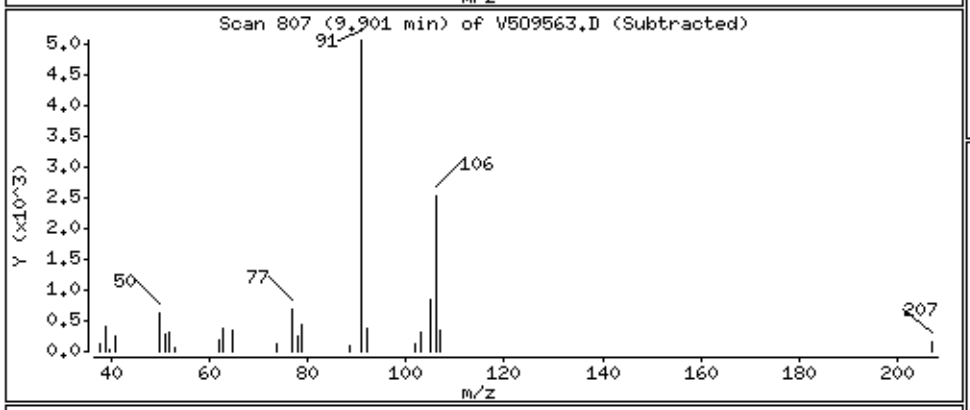
Operator: WL SRC: LIMS

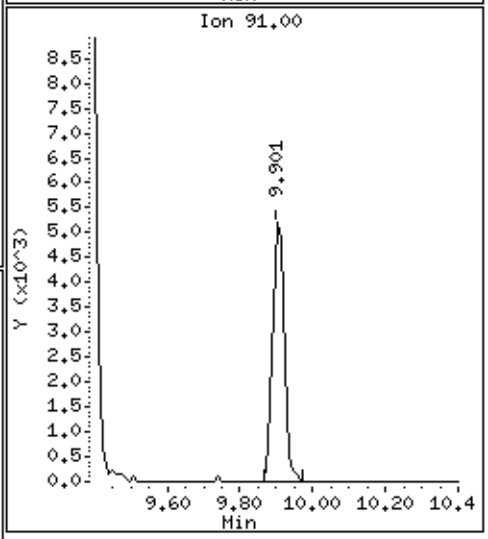
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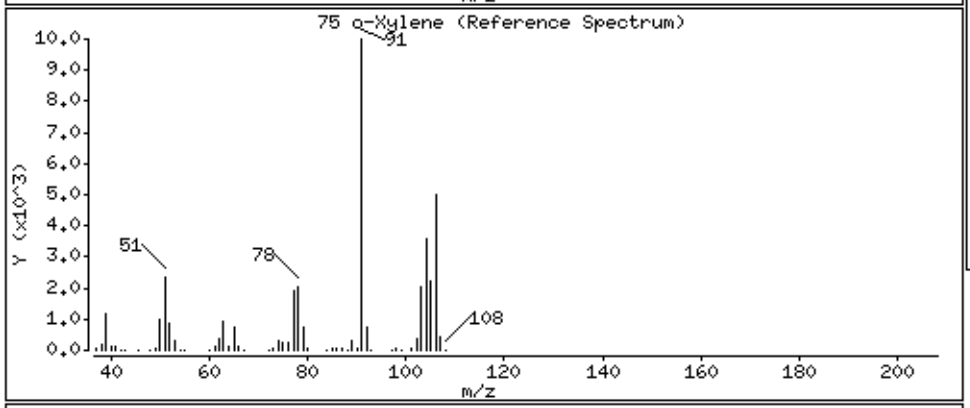
75 o-Xylene Concentration: 1300 ug/Kg

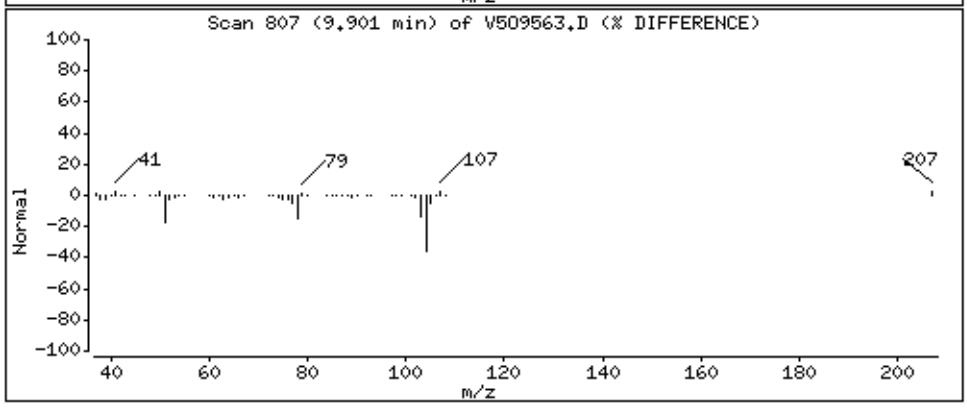












Data File: \\Avogadro\Organics\V5.I\140122.B\V509563.D

Date : 22-JAN-2014 19:28

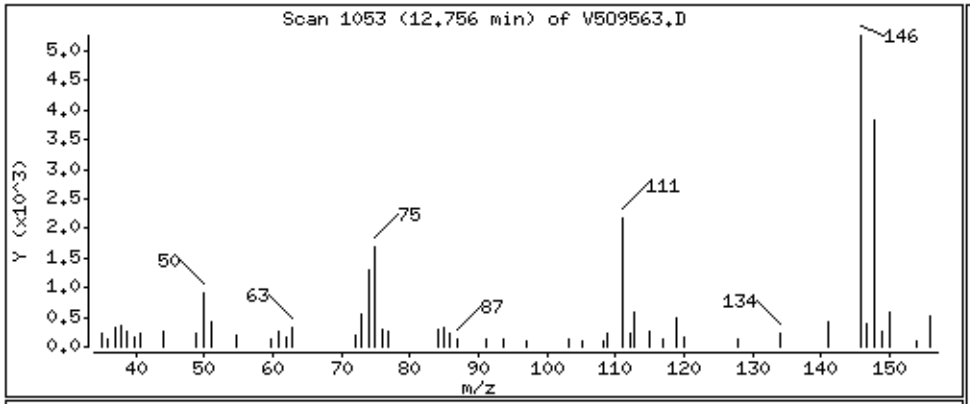
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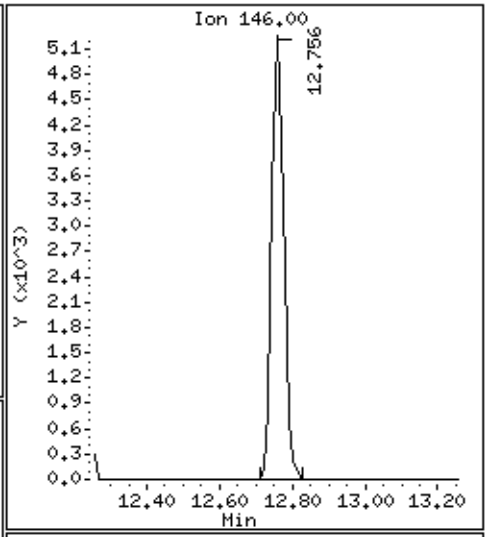
Sample Info: 5ML,N0058-11ADL,,75683,10

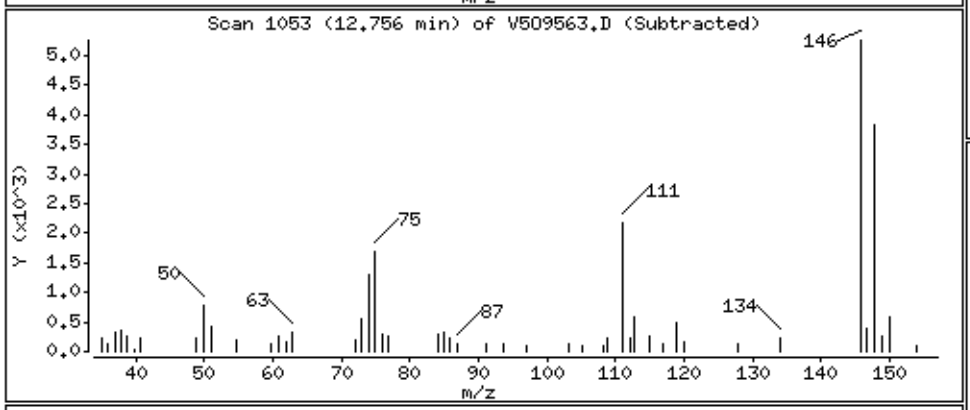
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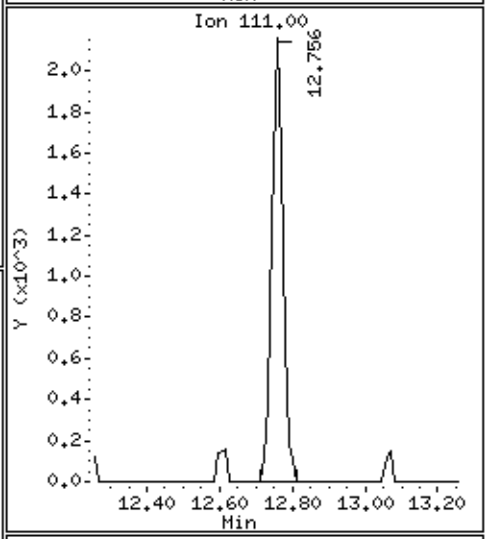
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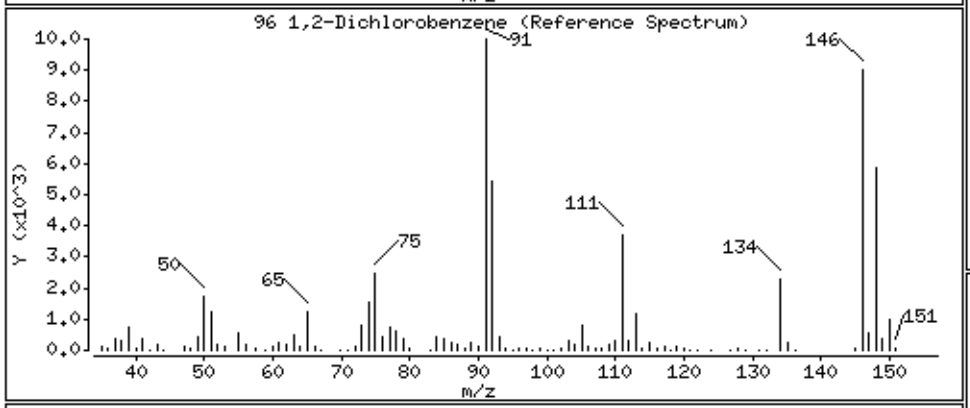
96 1,2-Dichlorobenzene Concentration: 2100 ug/Kg

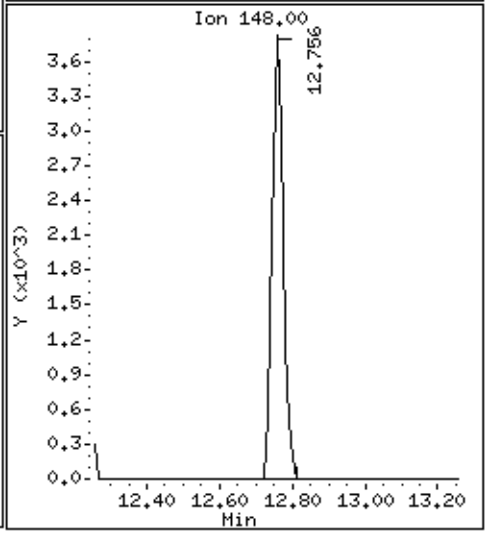


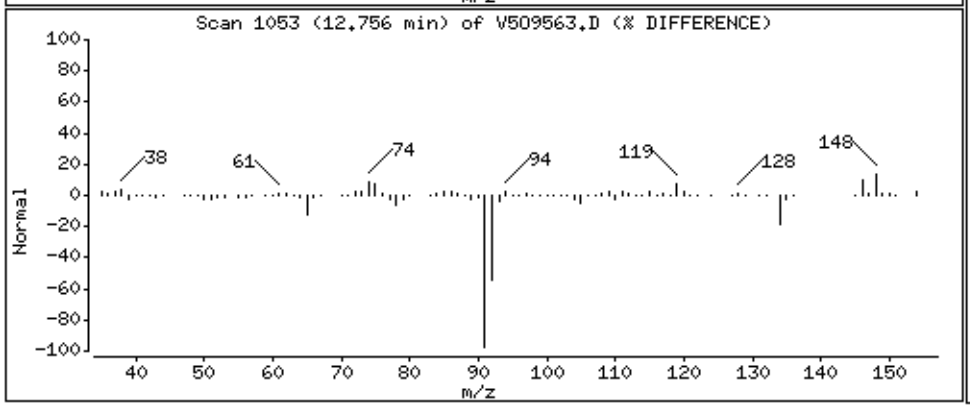












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Date : 22-JAN-2014 19:28

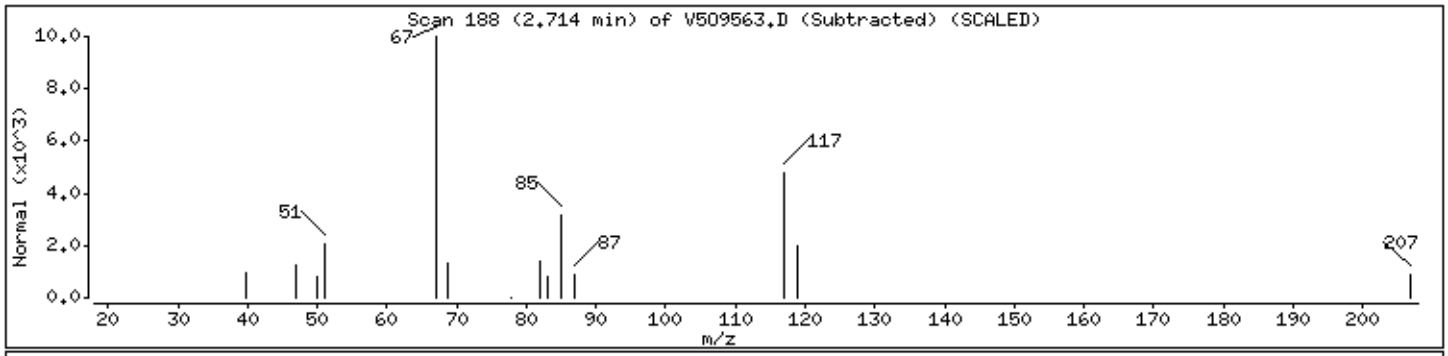
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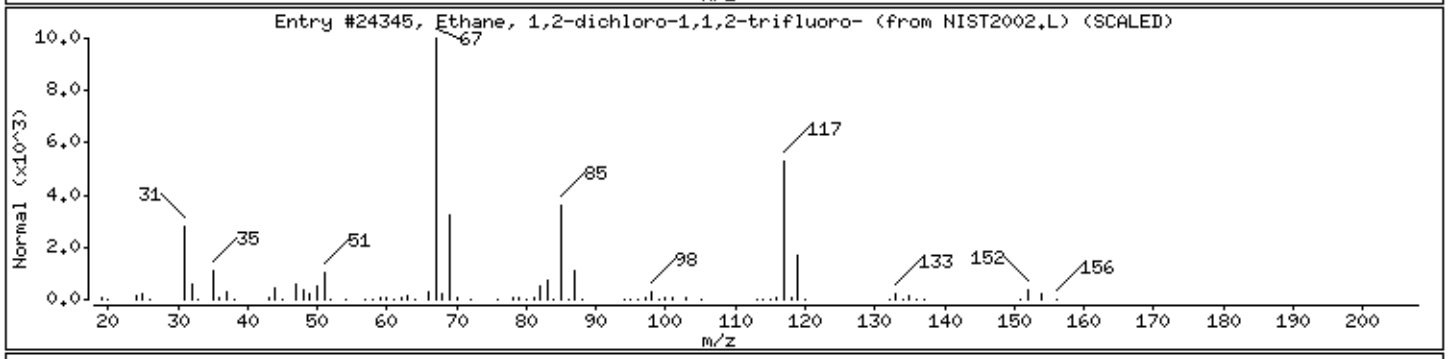
Sample Info: 5ML,N0058-11ADL,,75683,10

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	50	C2HCl2F3	152





1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12A

Sample wt/vol: 6.10 (g/mL) G Lab File ID: V1M7509.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/21/2014

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	15	U
74-87-3	Chloromethane	15	U
75-01-4	Vinyl chloride	15	U
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	550	
75-69-4	Trichlorofluoromethane	15	U
75-35-4	1,1-Dichloroethene	15	U
67-64-1	Acetone	15	U
74-88-4	Iodomethane	15	U
75-15-0	Carbon disulfide	15	U
75-09-2	Methylene chloride	15	U
156-60-5	trans-1,2-Dichloroethene	15	U
1634-04-4	Methyl tert-butyl ether	15	U
75-34-3	1,1-Dichloroethane	1400	E
108-05-4	Vinyl acetate	15	U
78-93-3	2-Butanone	15	U
156-59-2	cis-1,2-Dichloroethene	12	JL
594-20-7	2,2-Dichloropropane	15	U
74-97-5	Bromochloromethane	15	U
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	4500	E
563-58-6	1,1-Dichloropropene	15	U
56-23-5	Carbon tetrachloride	15	U
107-06-2	1,2-Dichloroethane	15	U
71-43-2	Benzene	15	U
79-01-6	Trichloroethene	19	JL
78-87-5	1,2-Dichloropropane	15	U
74-95-3	Dibromomethane	15	U
75-27-4	Bromodichloromethane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	12	JL
10061-02-6	trans-1,3-Dichloropropene	15	U
79-00-5	1,1,2-Trichloroethane	15	U
142-28-9	1,3-Dichloropropane	15	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12A

Sample wt/vol: 6.10 (g/mL) G Lab File ID: V1M7509.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/21/2014

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	7.0	JL
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	25	JL
630-20-6	1,1,1,2-Tetrachloroethane	15	U
100-41-4	Ethylbenzene	27	JL
179601-23-1	m,p-Xylene	77	JL
95-47-6	o-Xylene	17	JL
1330-20-7	Xylene (Total)	94	JL
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
108-86-1	Bromobenzene	15	U
96-18-4	1,2,3-Trichloropropane	15	U
103-65-1	n-Propylbenzene	15	U
95-49-8	2-Chlorotoluene	15	U
108-67-8	1,3,5-Trimethylbenzene	15	U
106-43-4	4-Chlorotoluene	15	U
98-06-6	tert-Butylbenzene	15	U
95-63-6	1,2,4-Trimethylbenzene	15	U
135-98-8	sec-Butylbenzene	15	U
99-87-6	4-Isopropyltoluene	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
104-51-8	n-Butylbenzene	15	U
95-50-1	1,2-Dichlorobenzene	22	JL
96-12-8	1,2-Dibromo-3-chloropropane	15	U
120-82-1	1,2,4-Trichlorobenzene	15	U
87-68-3	Hexachlorobutadiene	15	U
87-61-6	1,2,3-Trichlorobenzene	15	U
91-20-3	Naphthalene	15	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1700	E

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D
Report Date: 31-Jan-2014 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7509.D
Lab Smp Id: N0058-12A Client Smp ID: HW-WET-SE-4-(1)_01/
Inj Date : 21-JAN-2014 19:17
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-12A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.100	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)	CONCENTRATIONS FINAL (ug/Kg)
5	Chloroethane	64	1.819	1.825	(0.407)	486293	184.663	150
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.311	2.307	(0.517)	1197748	584.622	480(AQM)
21	1,1-Dichloroethane	63	3.119	3.115	(0.698)	2887681	457.097	370(A)
M 27	1,2-dichloroethene, (Total)	100				13656	4.30214	4
25	cis-1,2-Dichloroethene	96	3.543	3.548	(0.793)	13656	3.98805	3
$ 32	Dibromofluoromethane	113	3.917	3.913	(0.877)	116255	51.5116	42
33	1,1,1-Trichloroethane	97	3.946	3.952	(0.883)	4637336	1513.63	1200(A)
$ 37	1,2-Dichloroethane-d4	102	4.183	4.187	(0.936)	32915	58.5077	48(R)
* 41	Fluorobenzene	96	4.469	4.474	(1.000)	436550	50.0000	
42	Trichloroethene	130	4.784	4.779	(1.071)	17159	6.39908	5
$ 51	Toluene-d8	98	5.887	5.892	(0.804)	401174	55.3606	45
52	Toluene	91	5.946	5.952	(1.331)	47688	4.03925	3
55	Tetrachloroethene	164	6.488	6.493	(0.886)	4273	2.37072	2
* 60	Chlorobenzene-d5	117	7.325	7.331	(1.000)	262430	50.0000	
61	Chlorobenzene	112	7.364	7.360	(1.005)	53405	8.32472	7
64	Ethylbenzene	106	7.482	7.488	(1.022)	30931	9.24942	8(Q)
65	m,p-Xylene	106	7.611	7.616	(1.039)	107986	25.8355	21
66	o-Xylene	106	8.044	8.050	(1.098)	23358	5.68801	5
$ 70	Bromofluorobenzene	95	8.615	8.621	(1.176)	128495	44.2160	36
M 81	Xylene (Total)	106				131344	31.5235	26
* 84	1,4-Dichlorobenzene-d4	152	9.896	9.901	(1.000)	83364	50.0000	(Q)

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D
Report Date: 31-Jan-2014 09:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
87 1,2-Dichlorobenzene	146	10.290	10.295	(1.040)	21615	7.36685	6

QC Flag Legend

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

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D
Report Date: 31-Jan-2014 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7509.D
Lab Smp Id: N0058-12A Client Smp ID: HW-WET-SE-4-(1)_01/
Inj Date : 21-JAN-2014 19:17
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-12A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

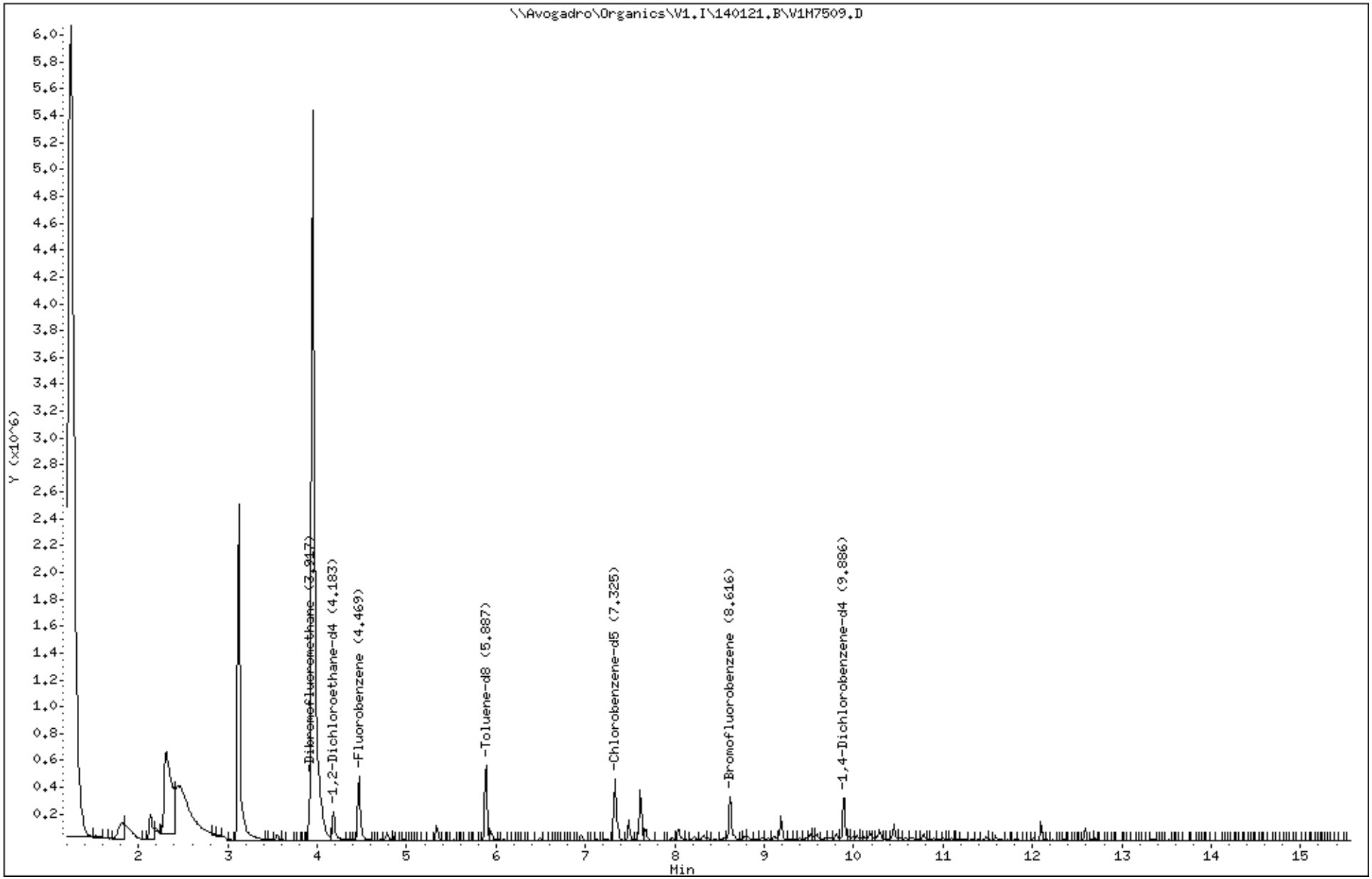
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

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Sample Info: 5ML,N0058-12A,,75665

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



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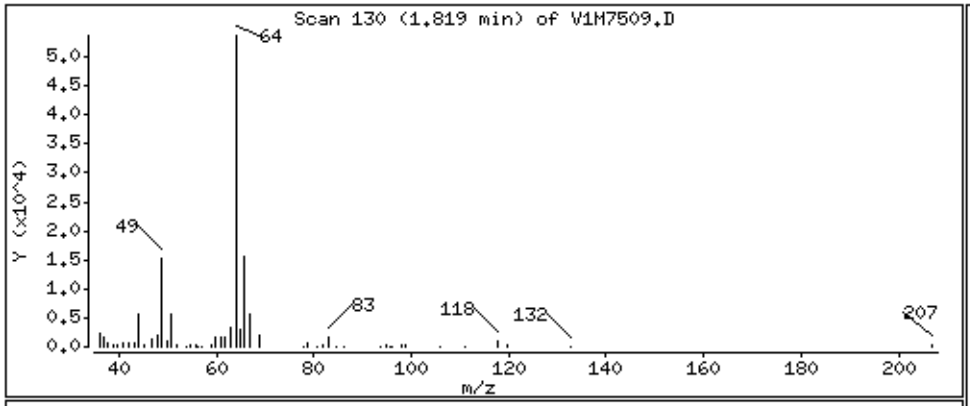
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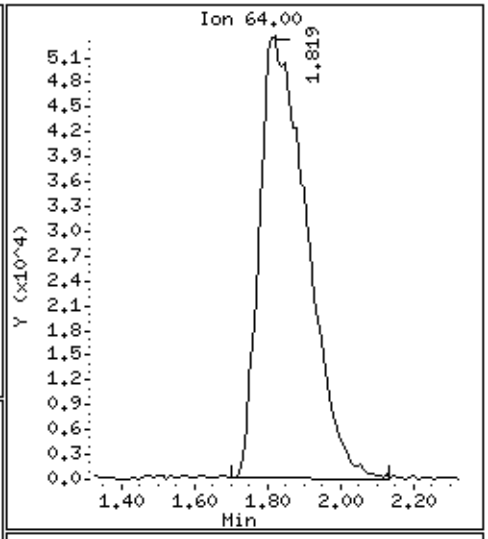
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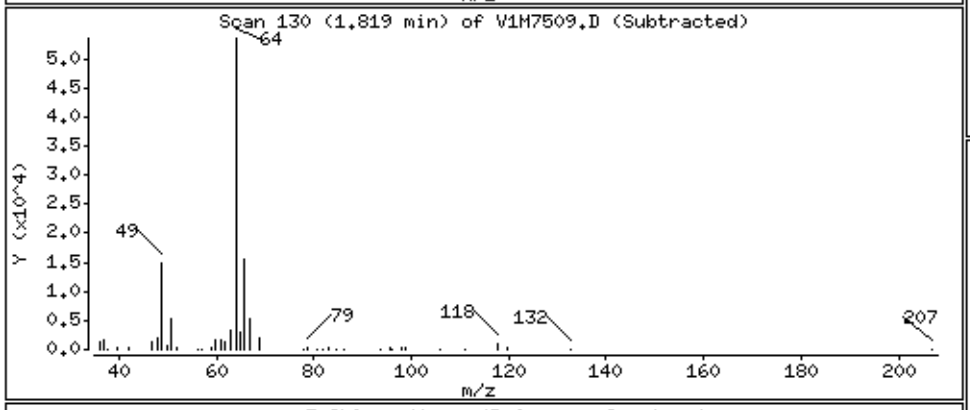
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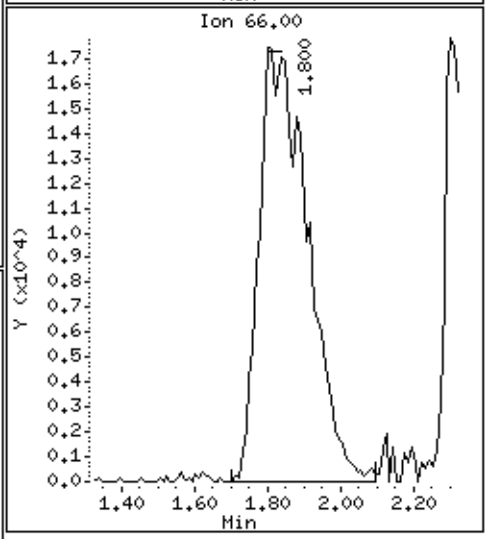
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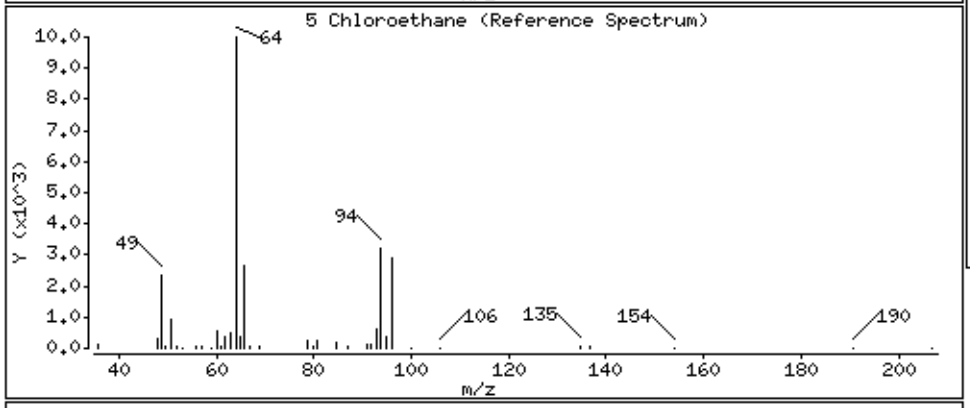
5 Chloroethane Concentration: 150 ug/Kg

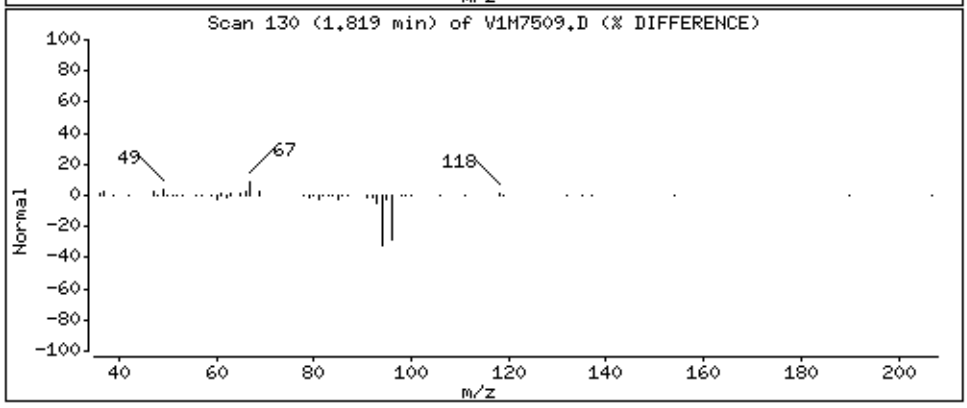












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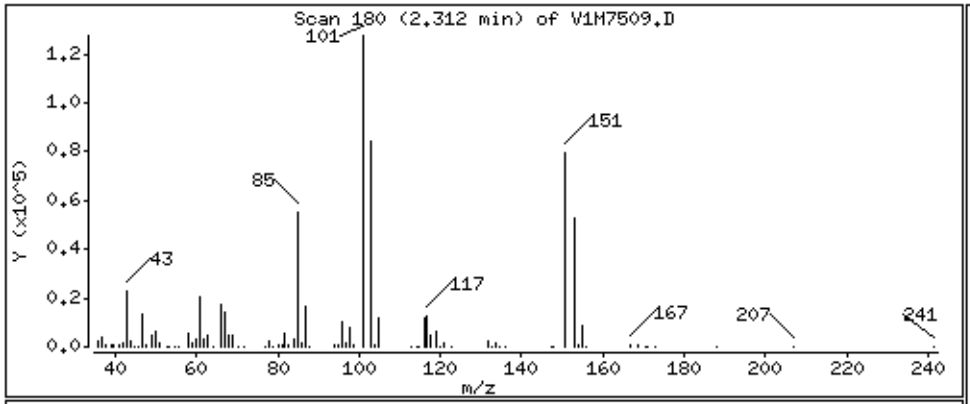
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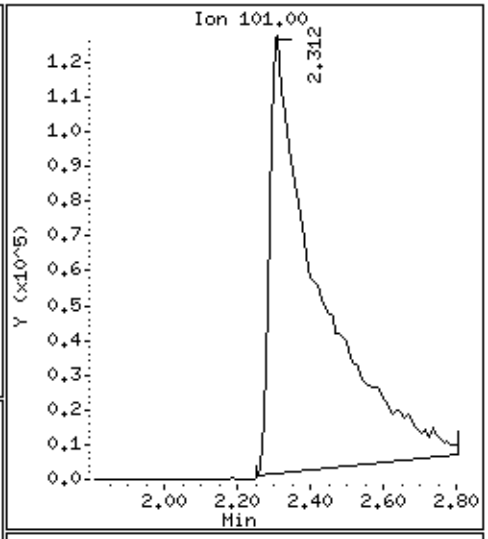
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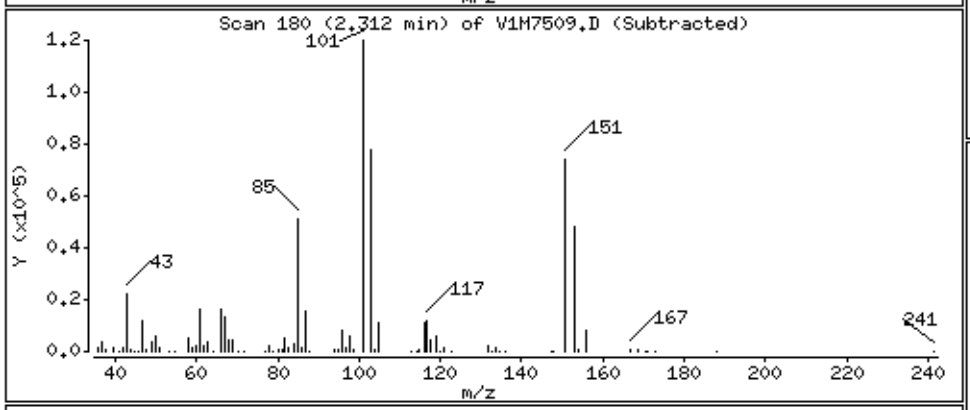
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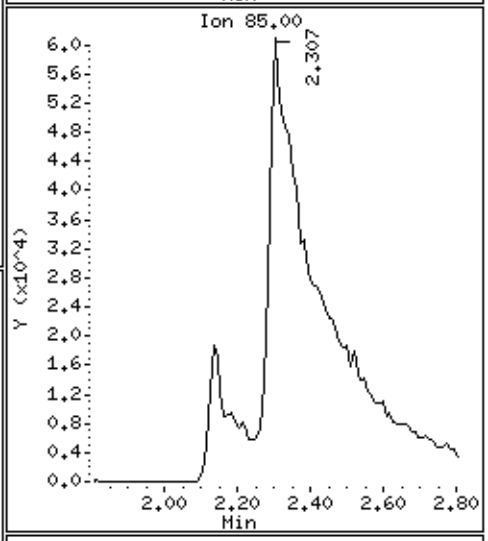
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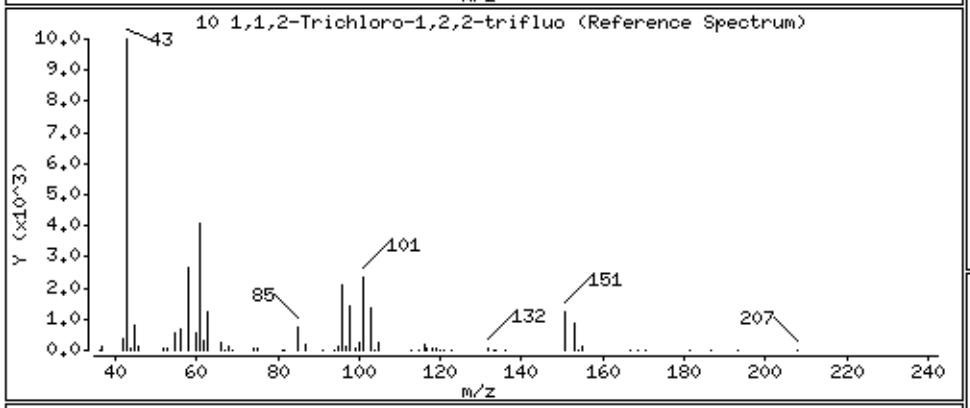
10 1,1,2-Trichloro-1,2,2-trifluo Concentration: 480 ug/Kg

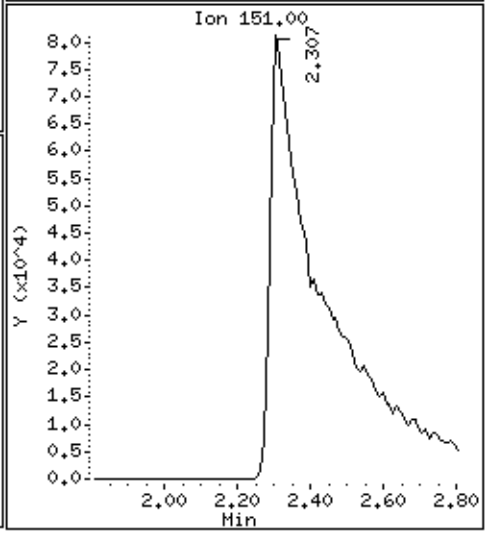


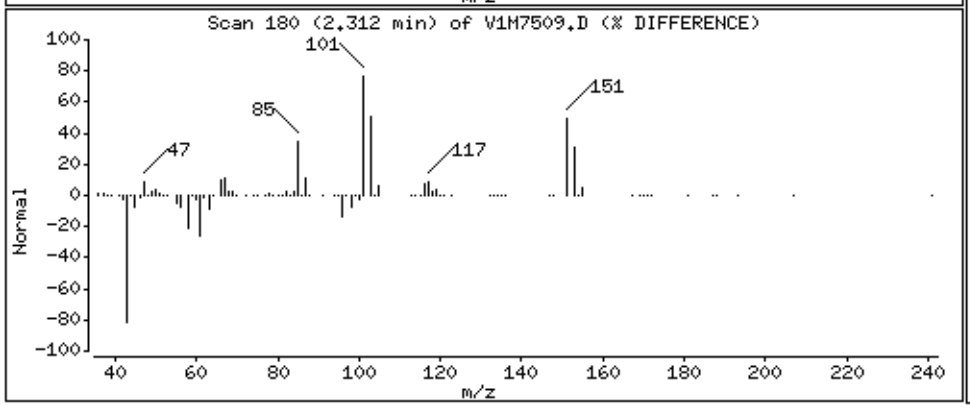












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Date : 21-JAN-2014 19:17

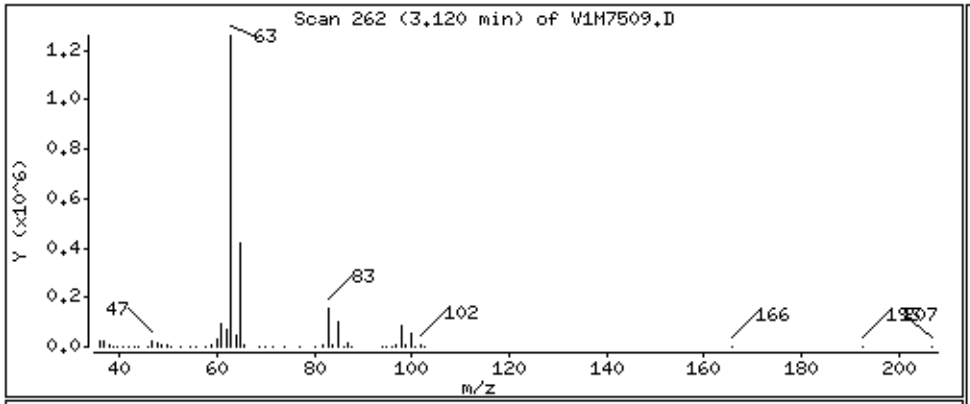
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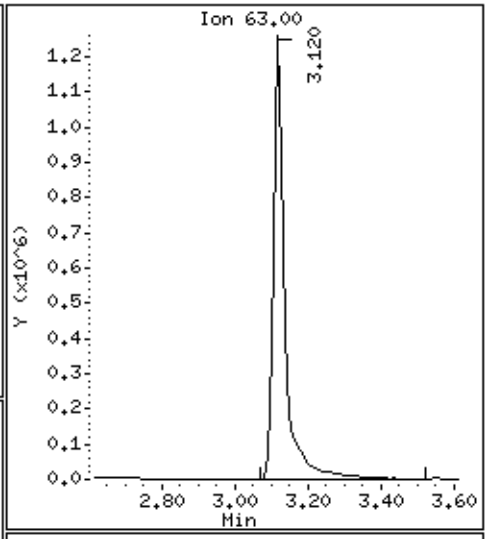
Sample Info: 5ML,N0058-12A,,75665

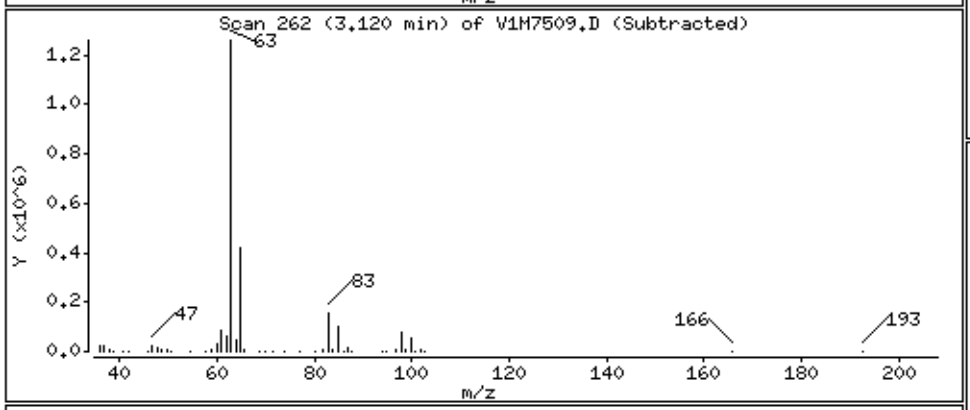
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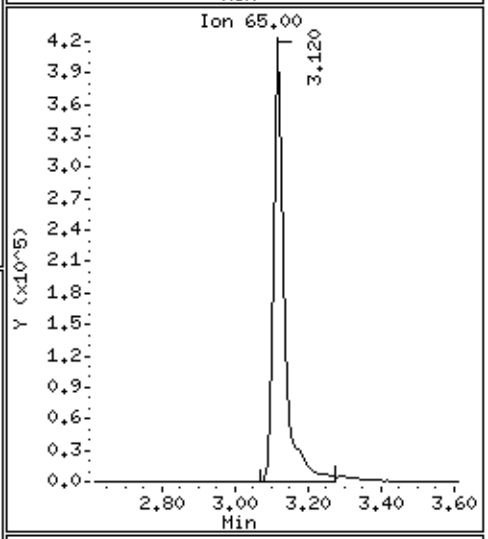
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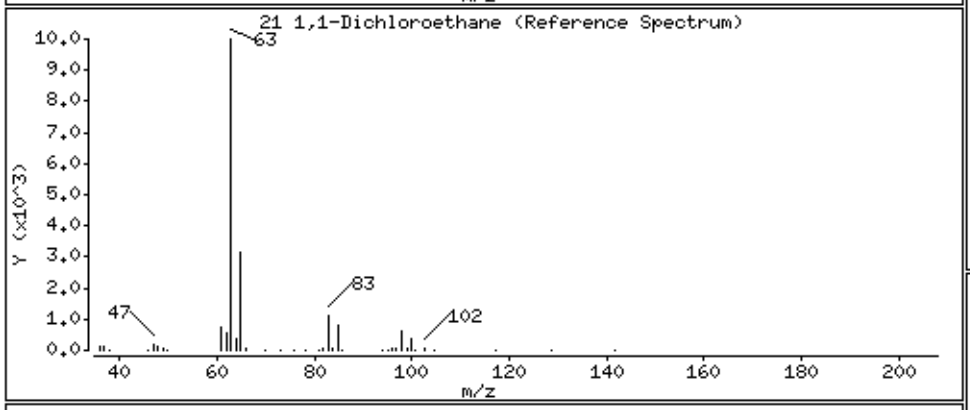
21 1,1-Dichloroethane Concentration: 370 ug/Kg

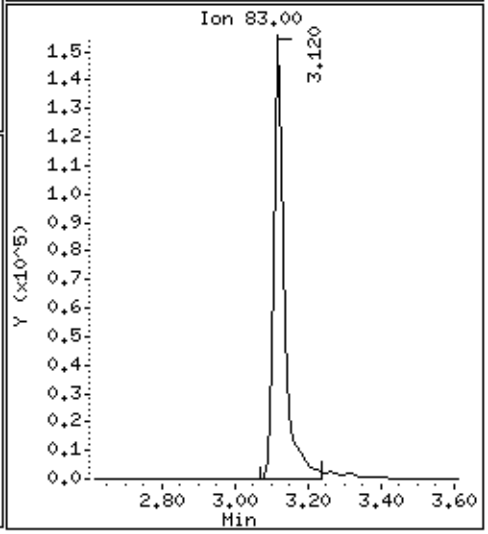


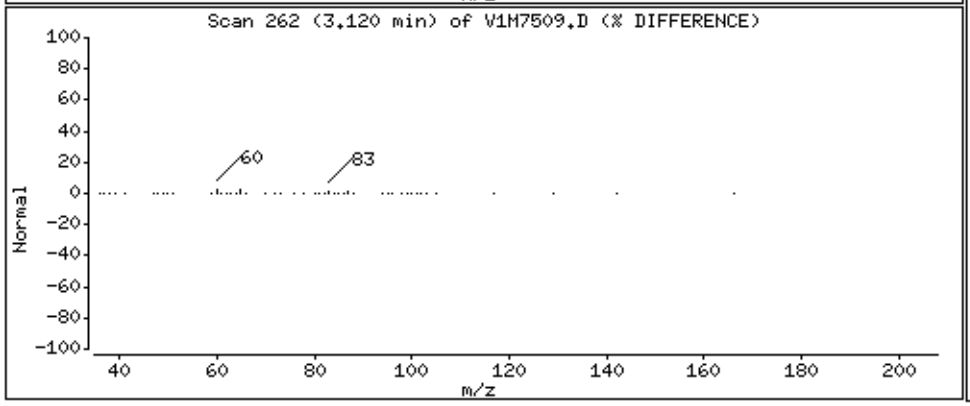












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Date : 21-JAN-2014 19:17

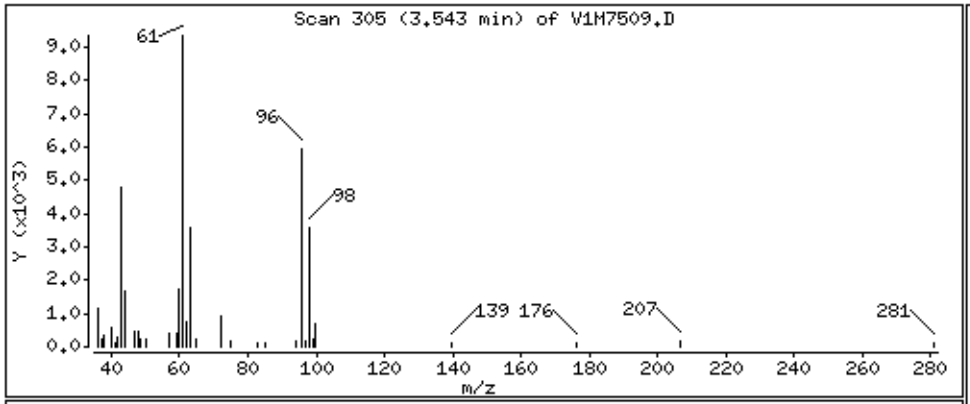
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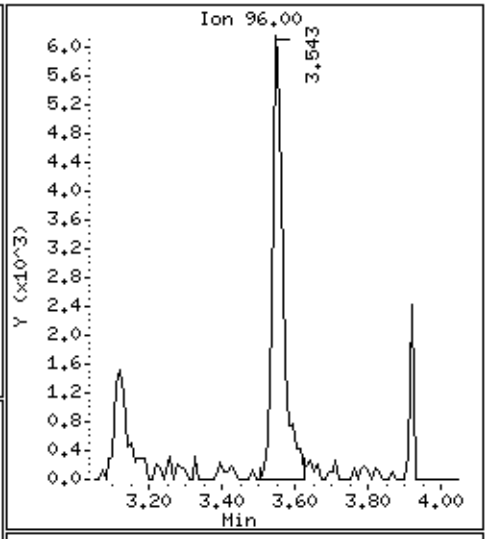
Sample Info: 5ML,N0058-12A,,75665

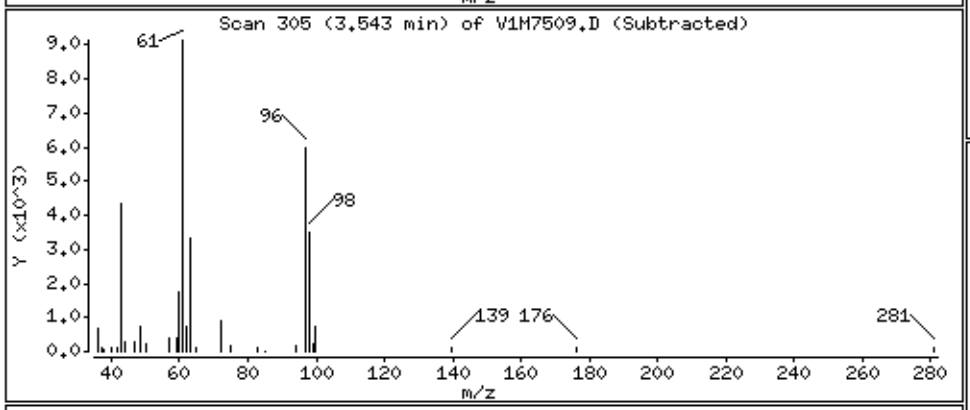
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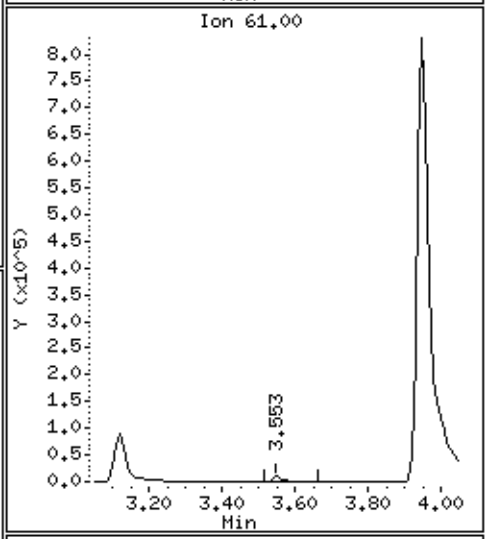
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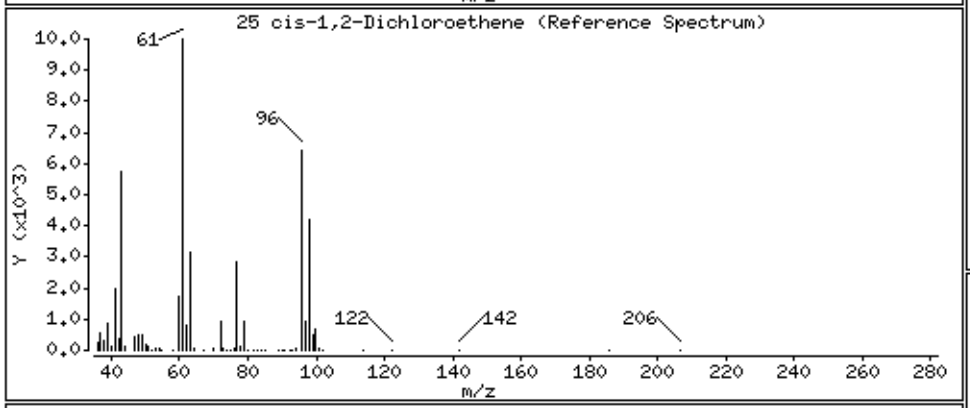
25 cis-1,2-Dichloroethene Concentration: 3 ug/Kg

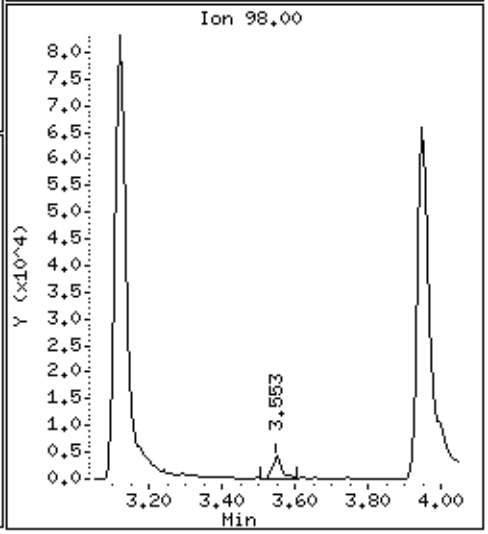


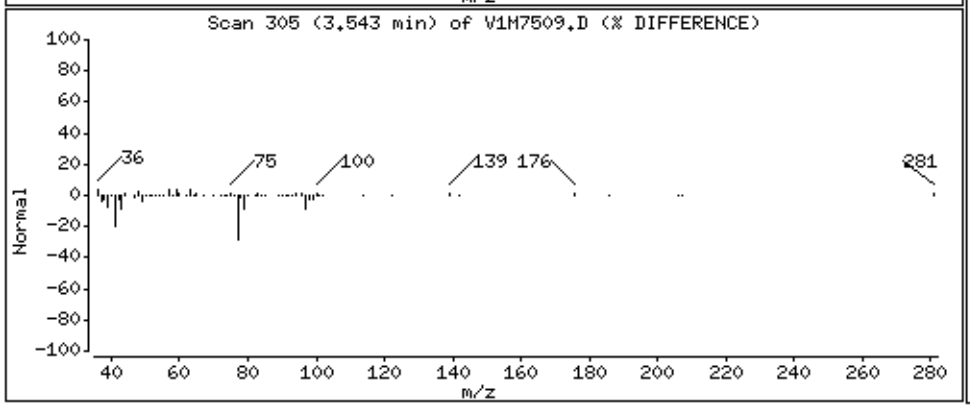












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Date : 21-JAN-2014 19:17

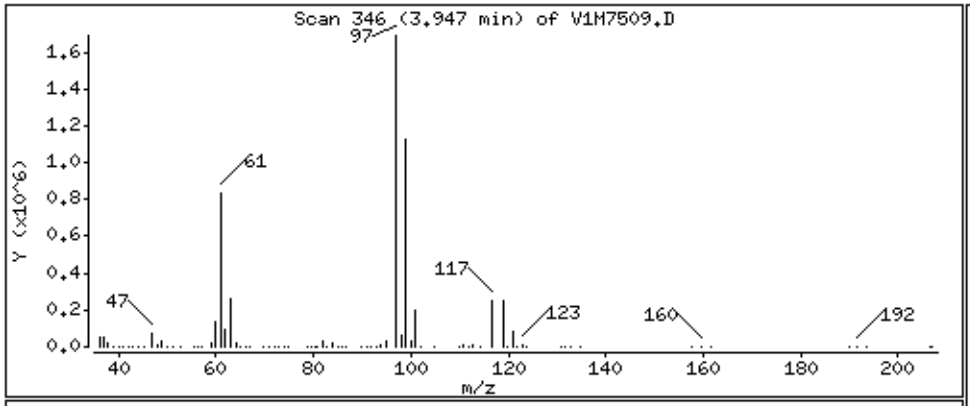
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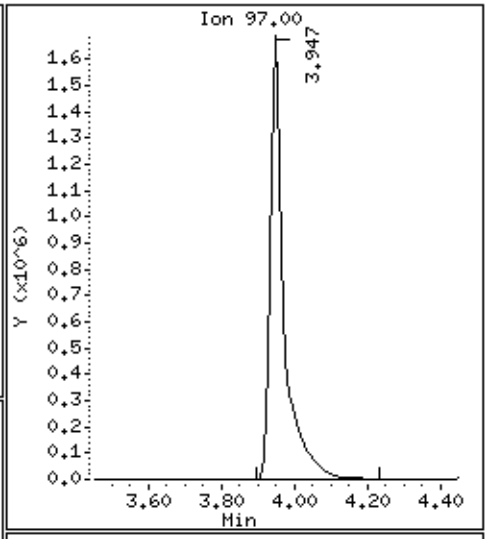
Sample Info: 5ML,N0058-12A,,75665

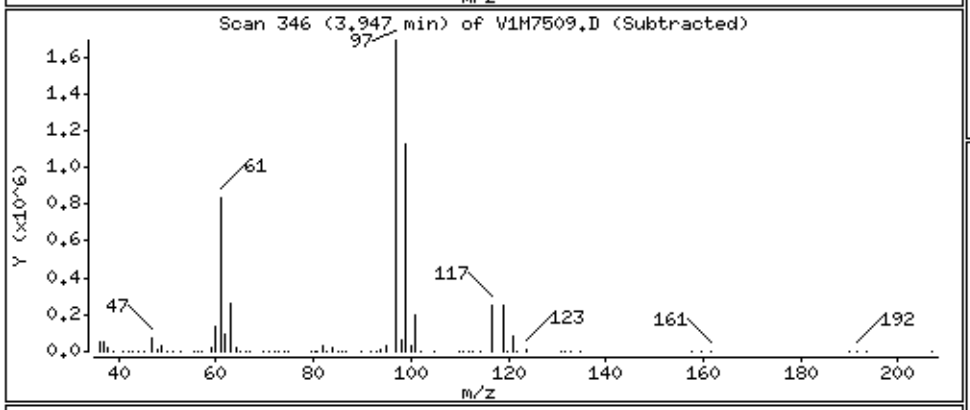
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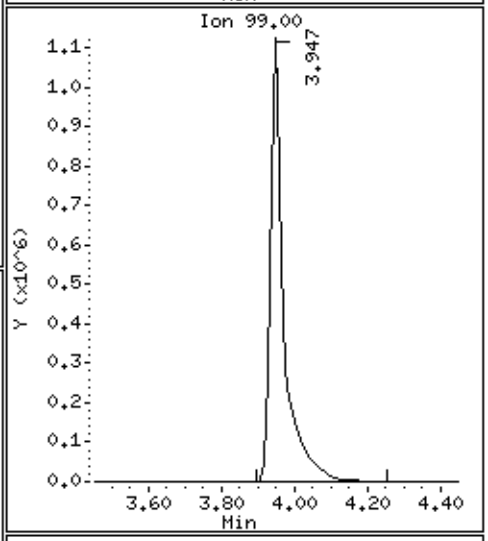
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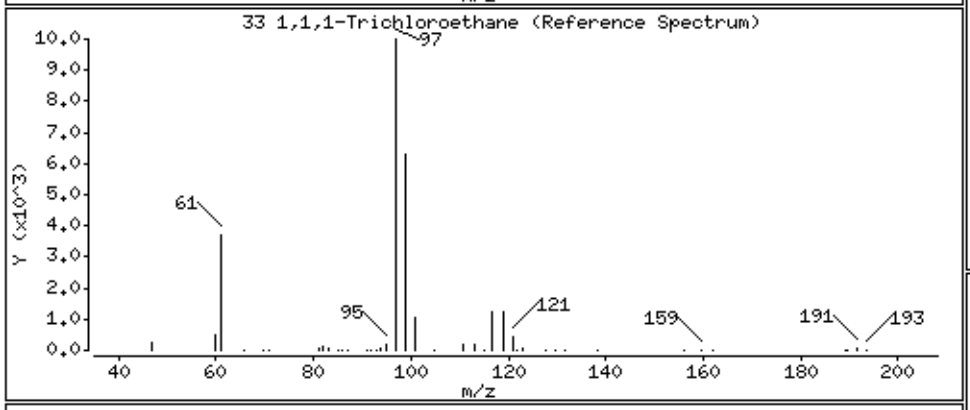
33 1,1,1-Trichloroethane Concentration: 1200 ug/Kg

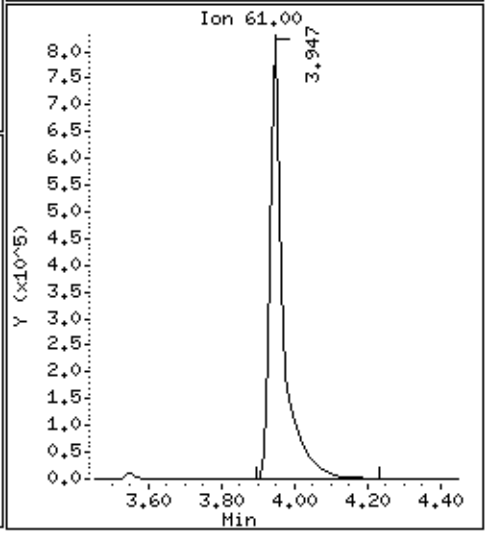


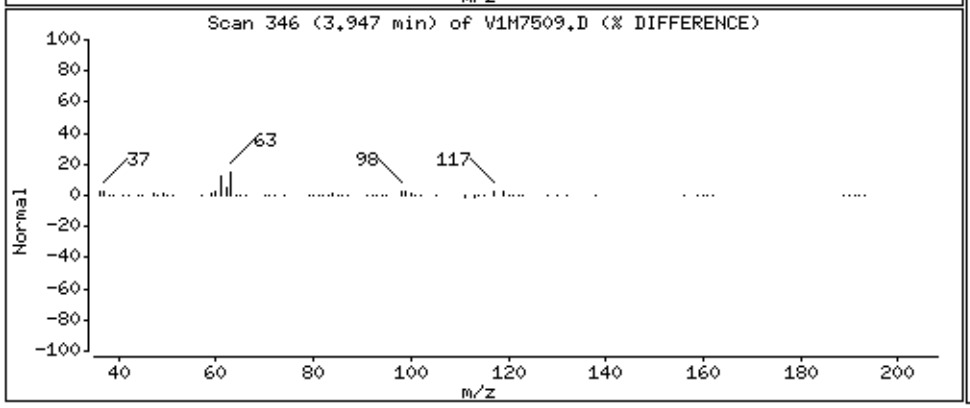












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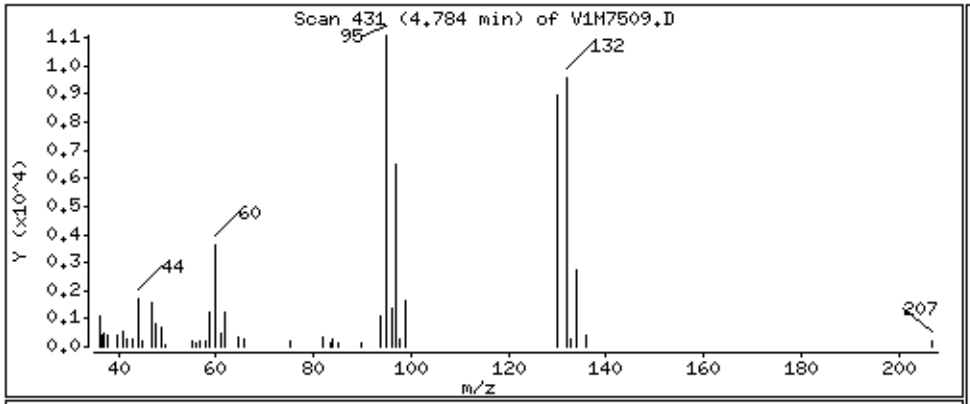
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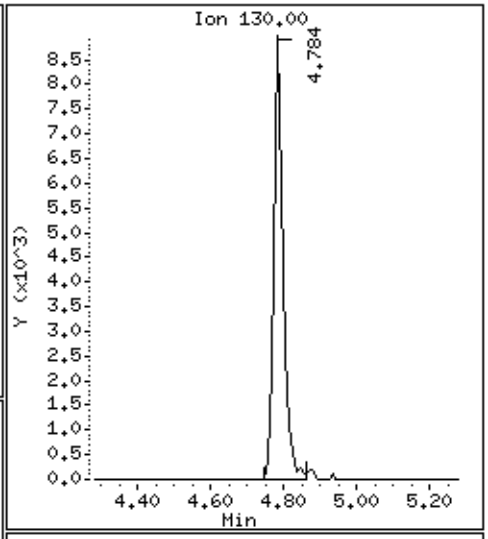
Sample Info: 5ML,N0058-12A,,75665

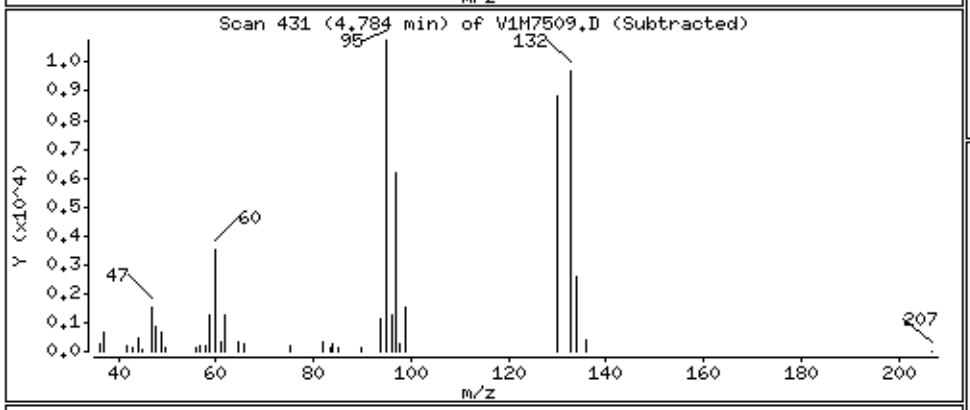
Operator: WL SRC: LIMS

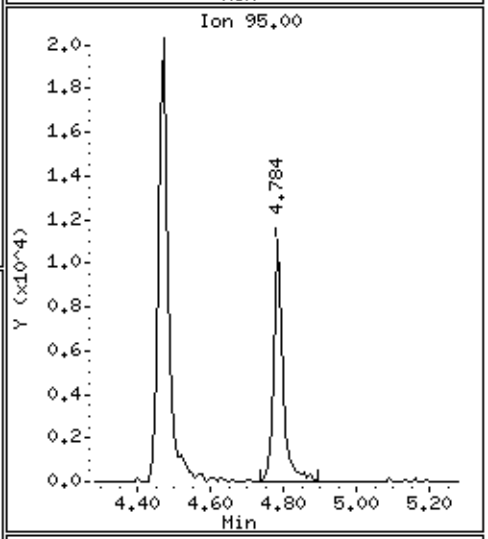
Column phase: DB-624 Column diameter: 0.25

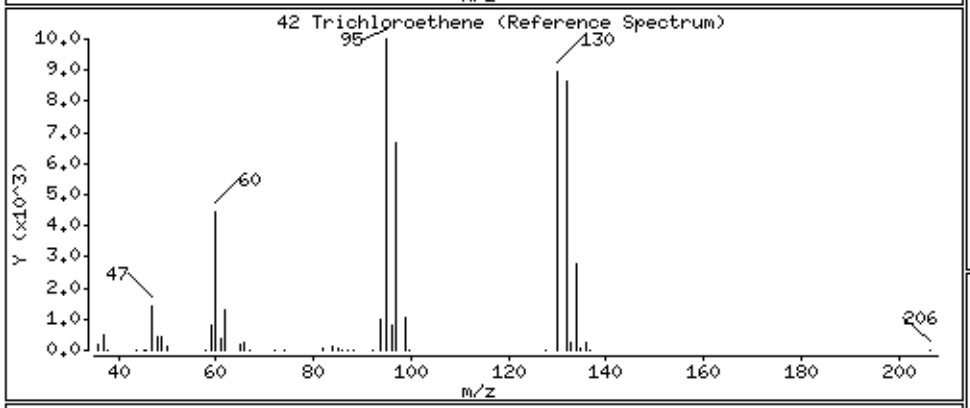
42 Trichloroethene Concentration: 5 ug/Kg

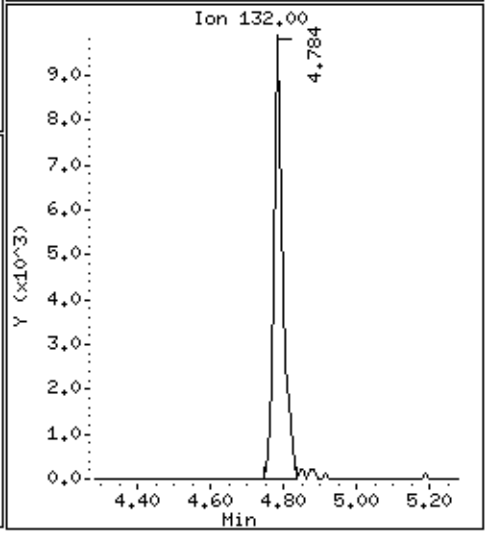


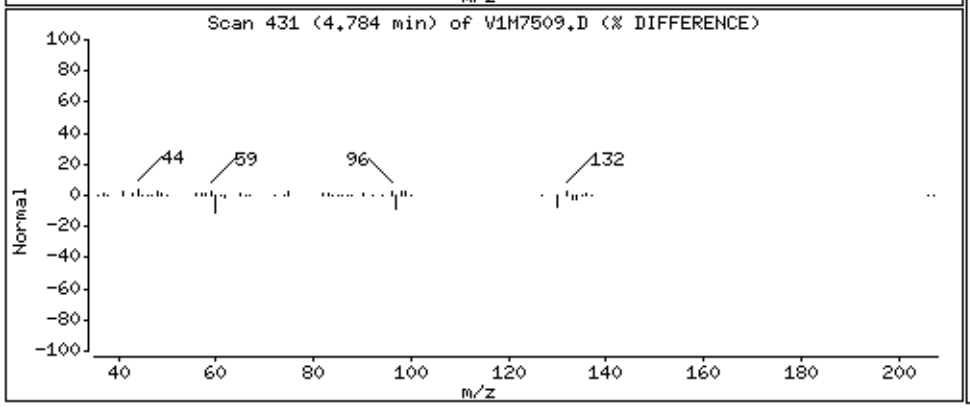












Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D

Date : 21-JAN-2014 19:17

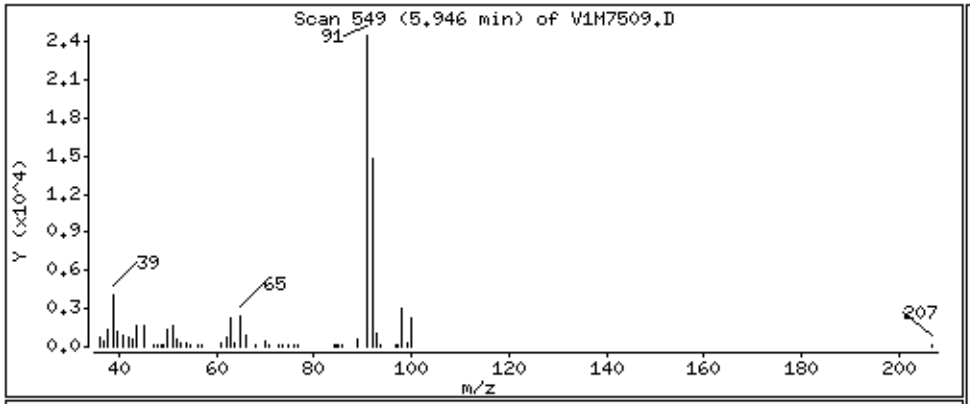
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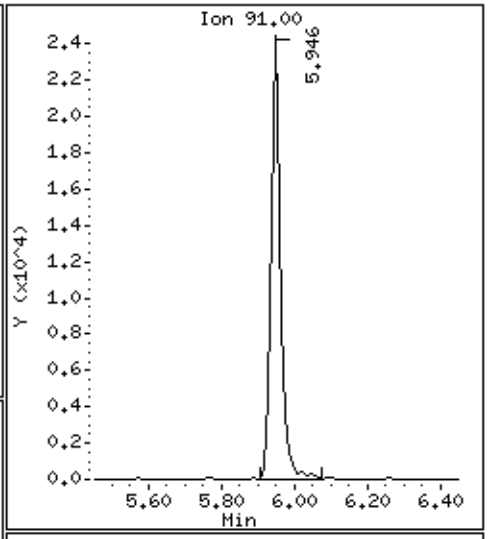
Sample Info: 5ML,N0058-12A,,75665

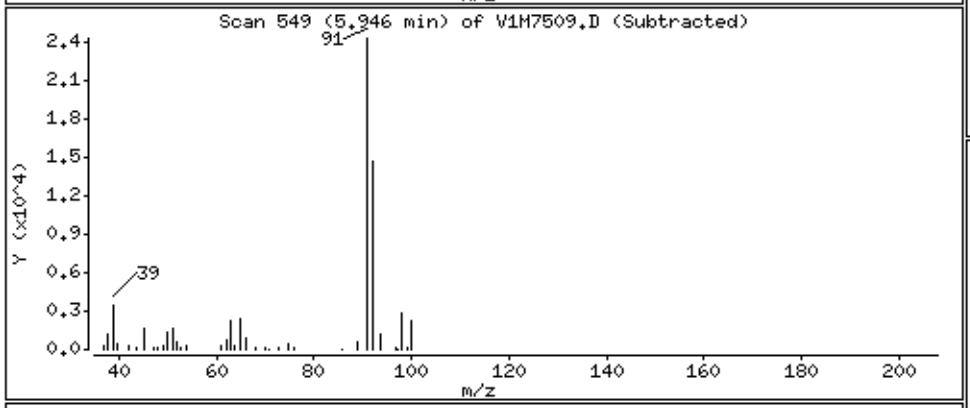
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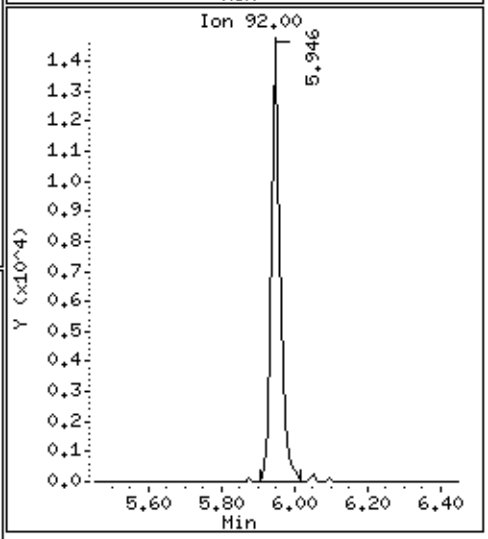
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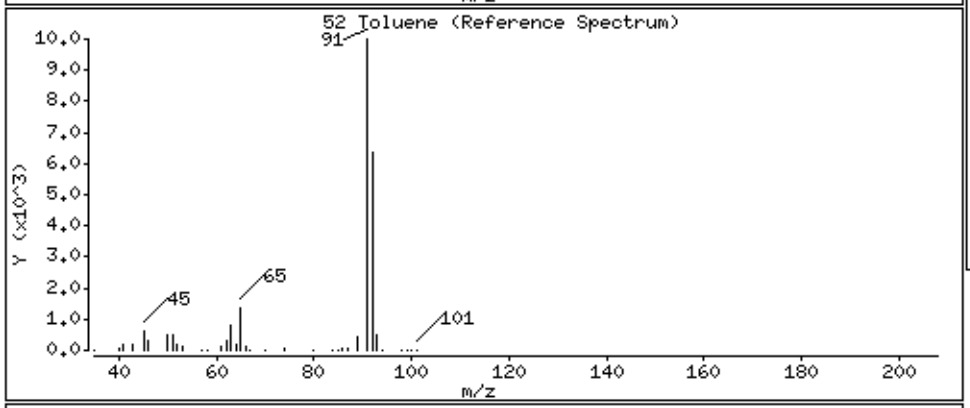
52 Toluene Concentration: 3 ug/Kg

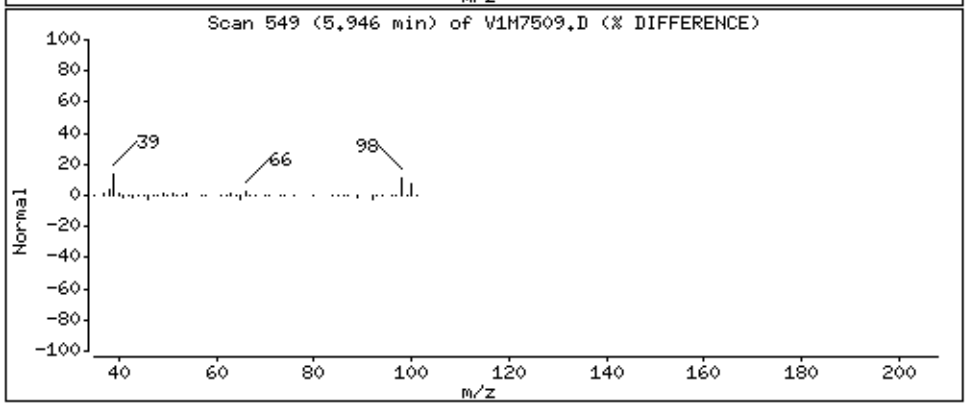












Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D

Date : 21-JAN-2014 19:17

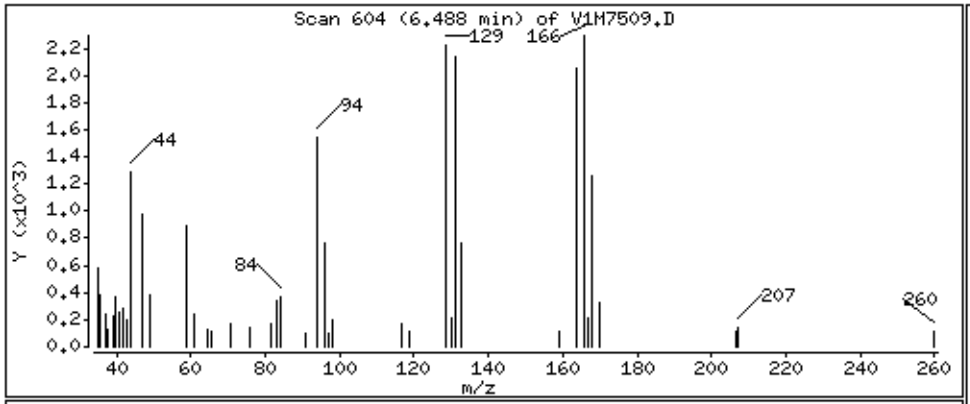
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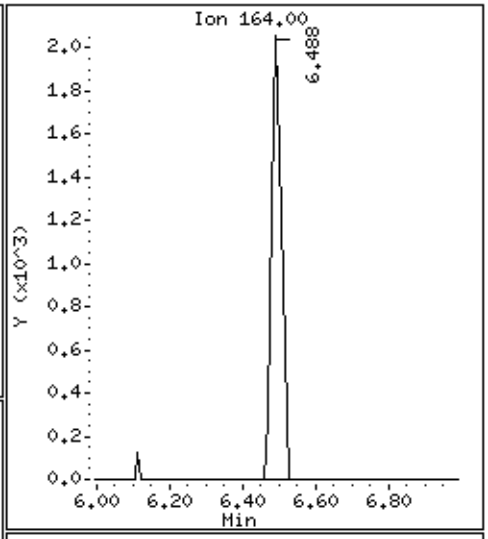
Sample Info: 5ML,N0058-12A,,75665

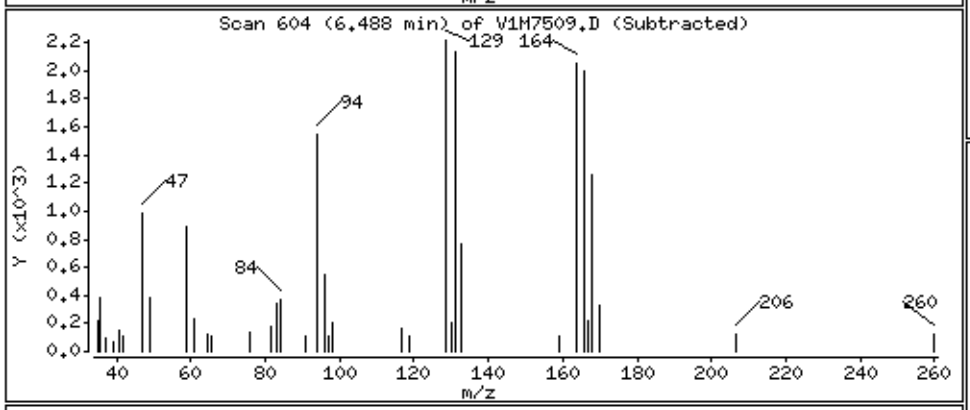
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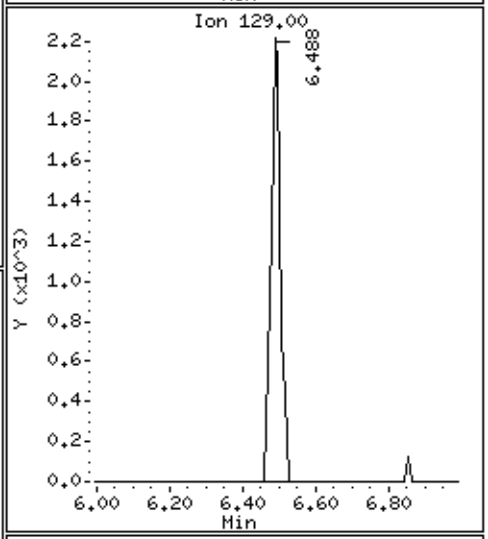
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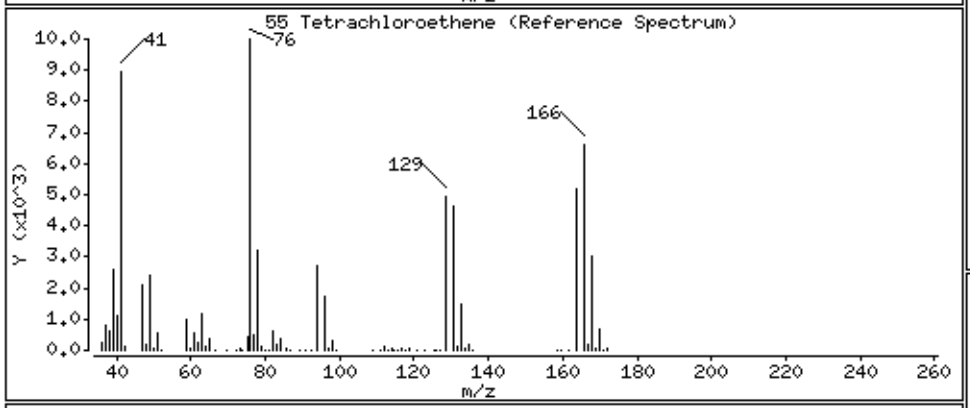
55 Tetrachloroethene Concentration: 2 ug/Kg

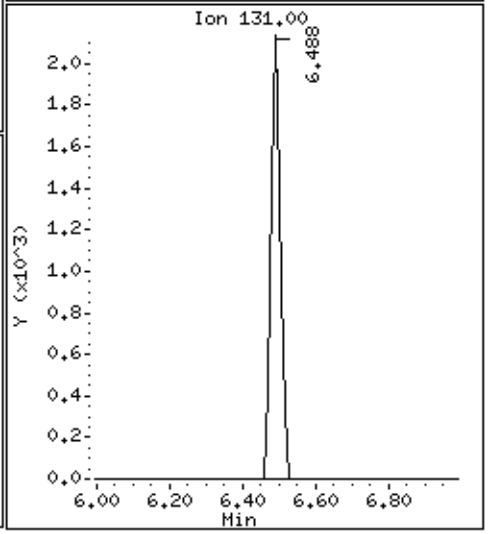


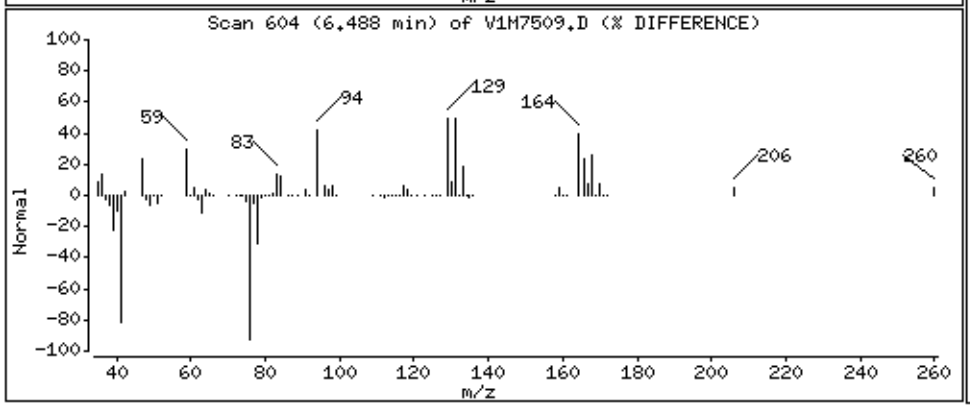












Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D

Date : 21-JAN-2014 19:17

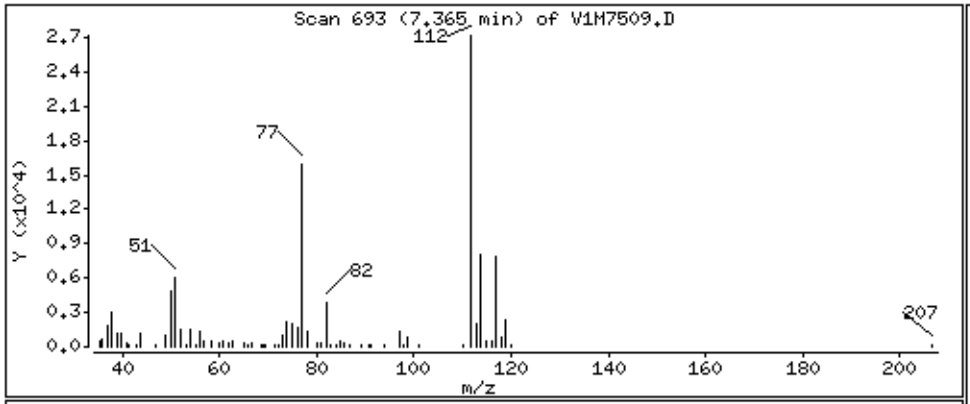
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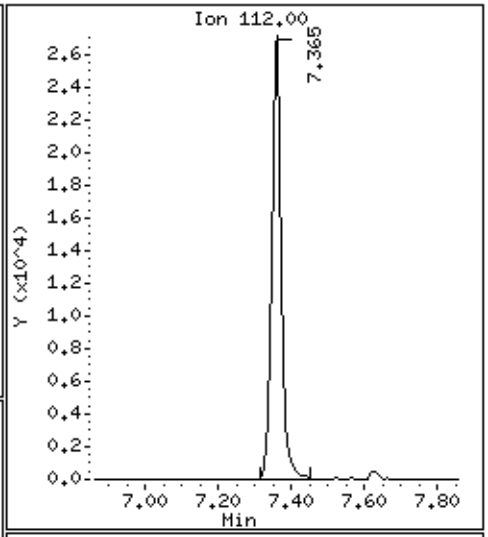
Sample Info: 5ML,N0058-12A,,75665

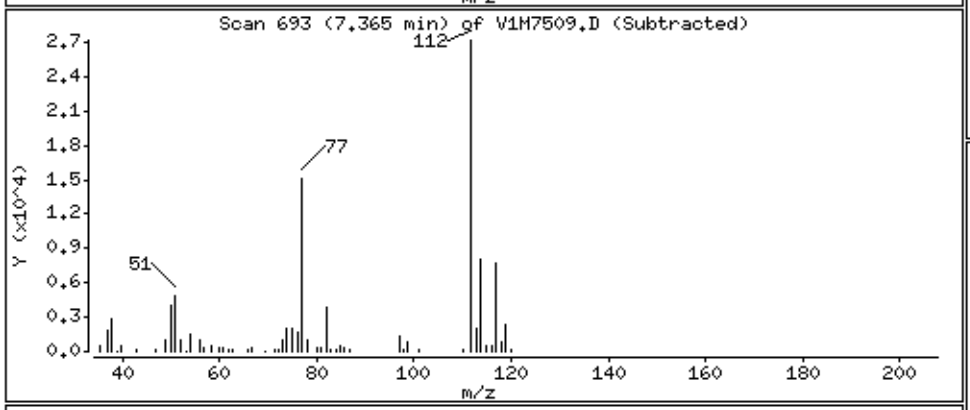
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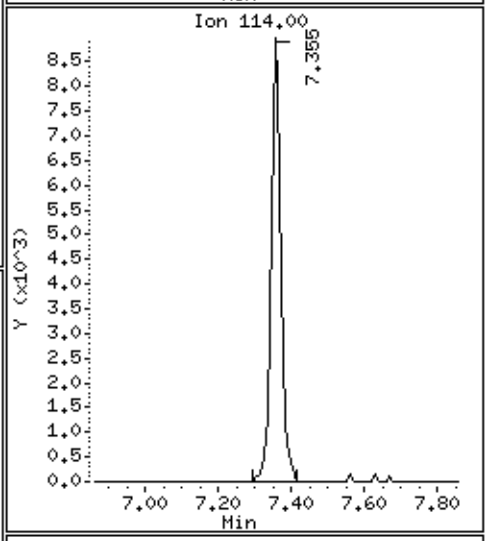
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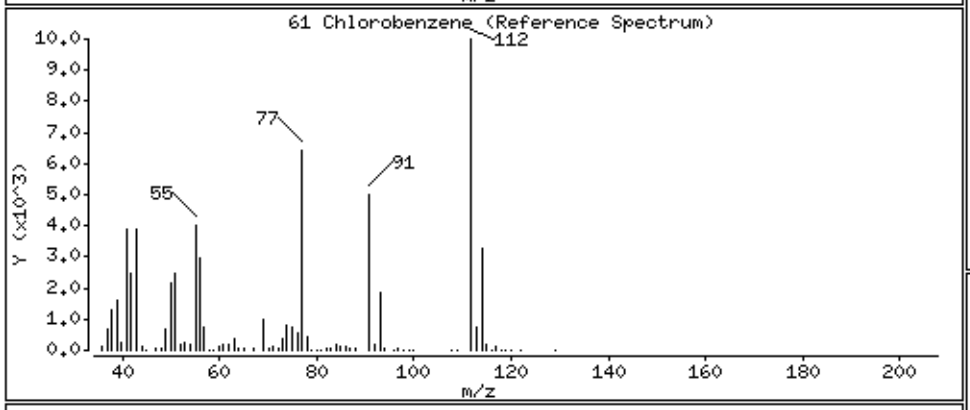
61 Chlorobenzene Concentration: 7 ug/Kg

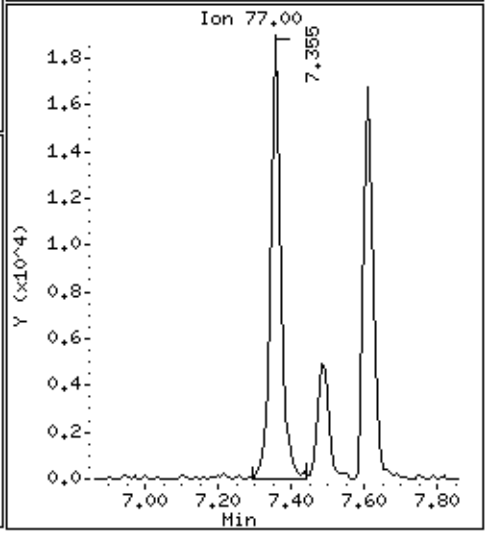


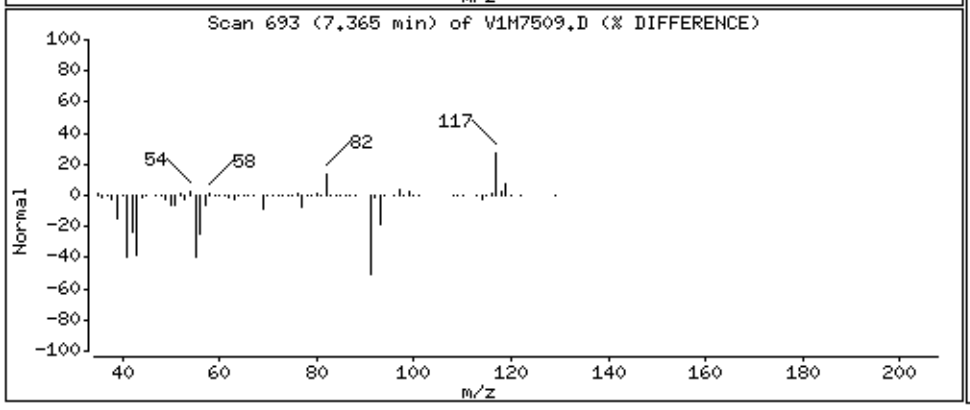












Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7509.D

Date : 21-JAN-2014 19:17

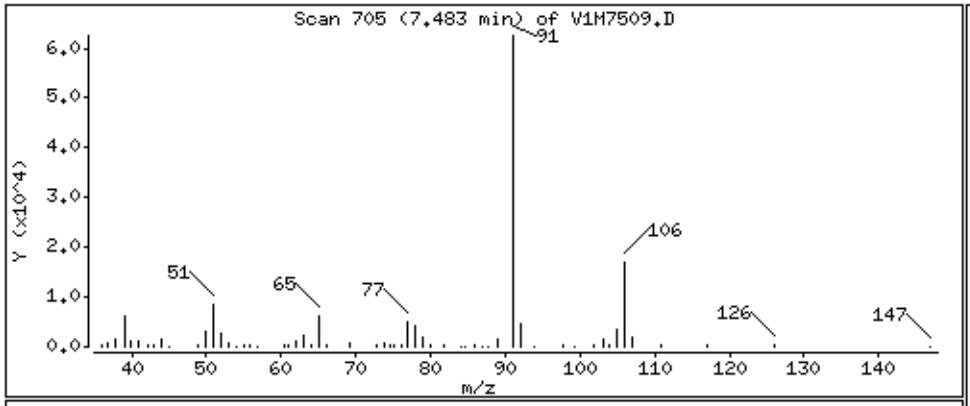
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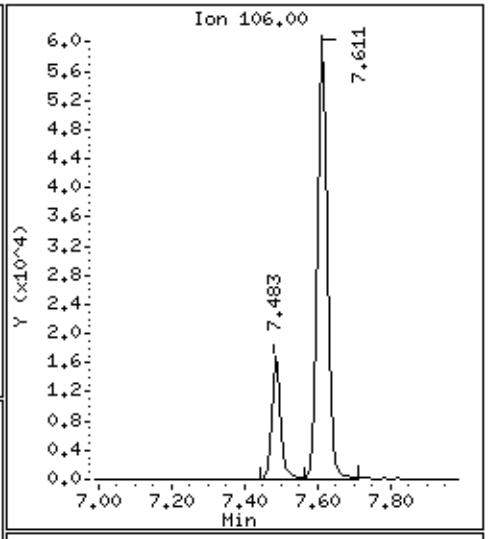
Sample Info: 5ML,N0058-12A,,75665

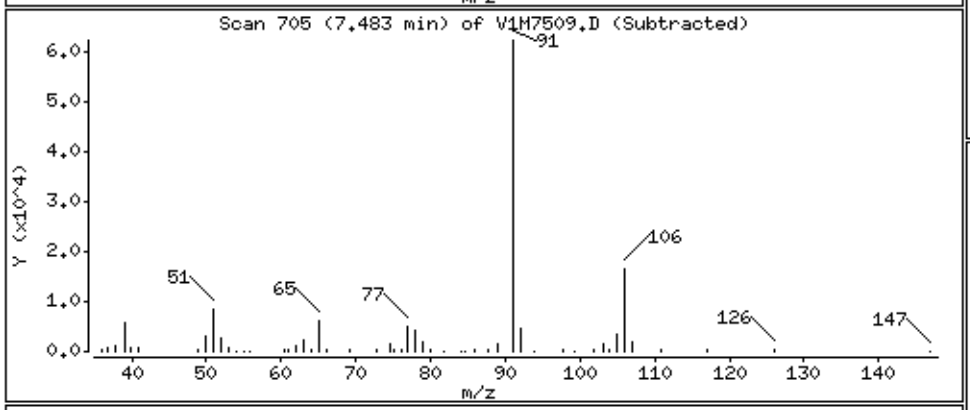
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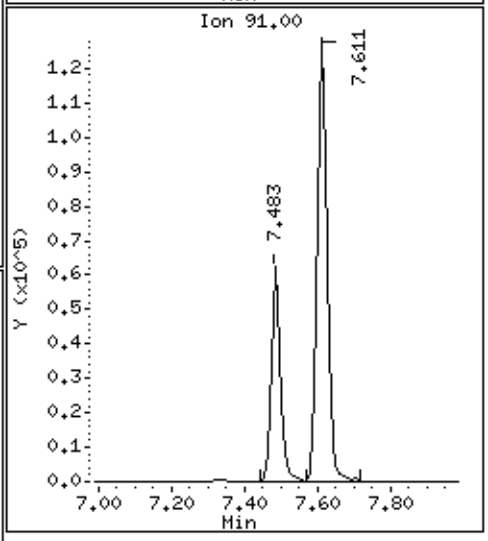
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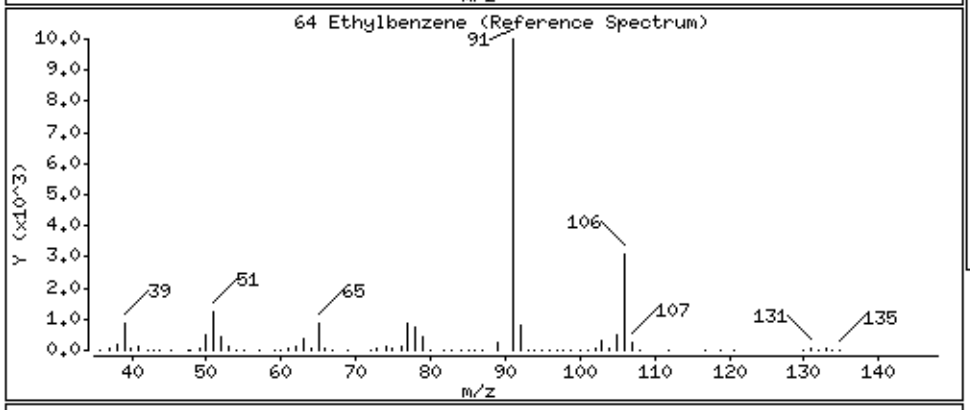
64 Ethylbenzene Concentration: 8 ug/Kg

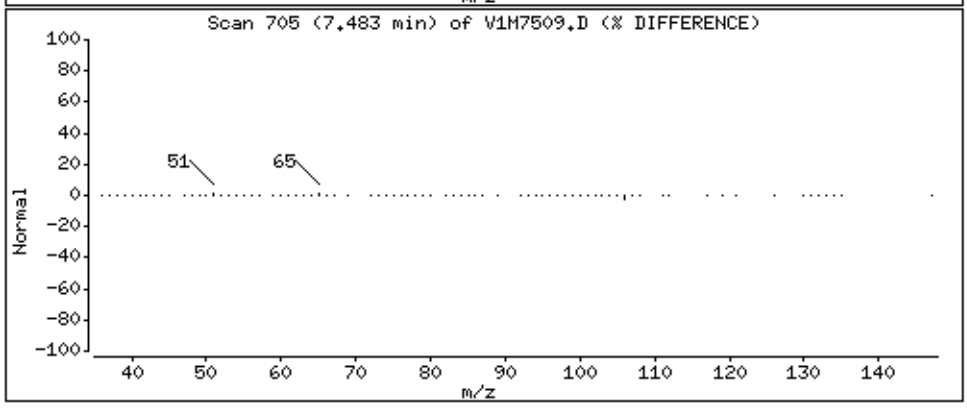












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Date : 21-JAN-2014 19:17

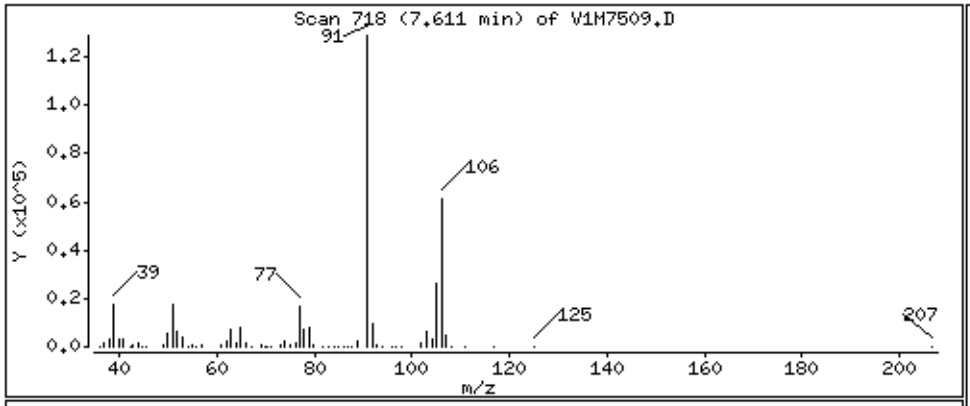
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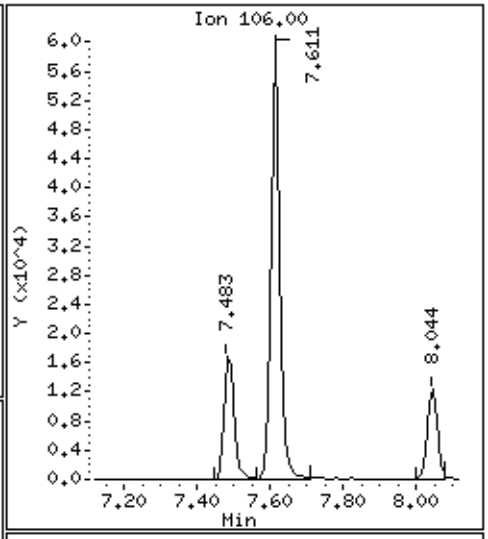
Sample Info: 5ML,N0058-12A,,75665

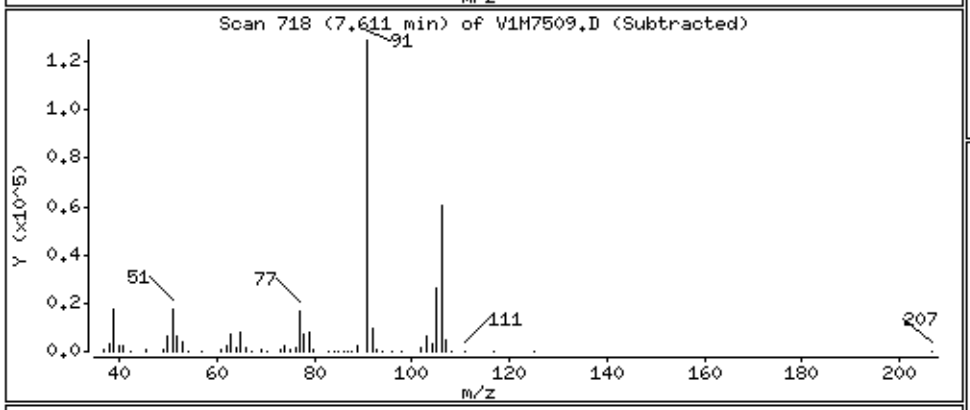
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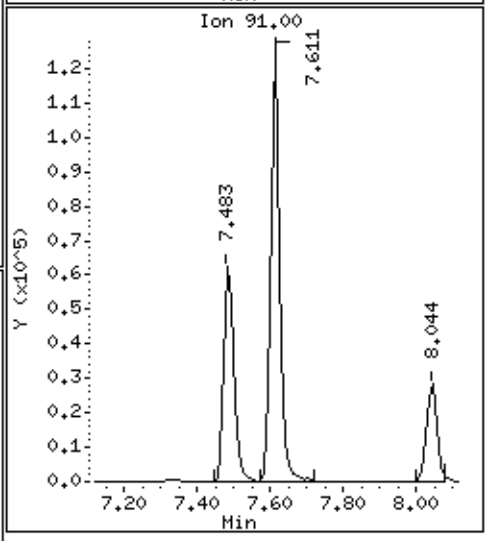
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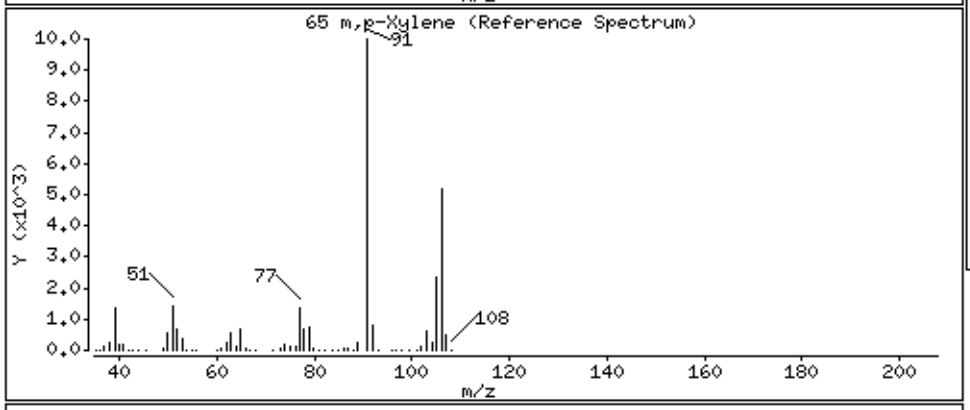
65 m,p-Xylene Concentration: 21 ug/Kg

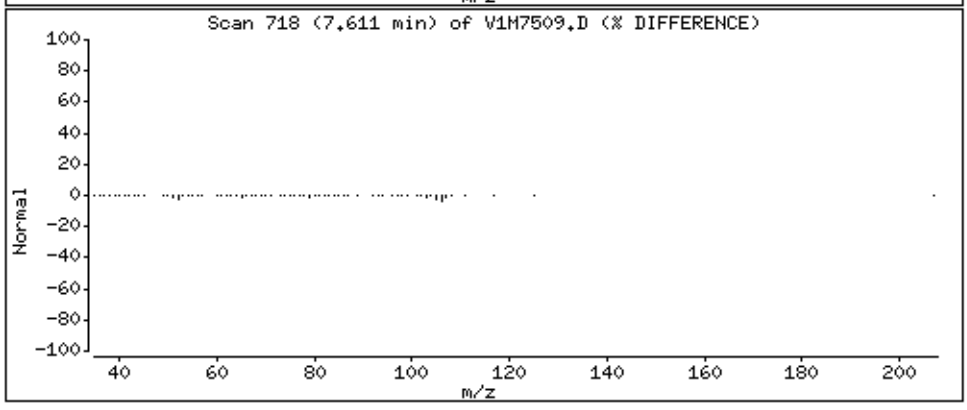












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Date : 21-JAN-2014 19:17

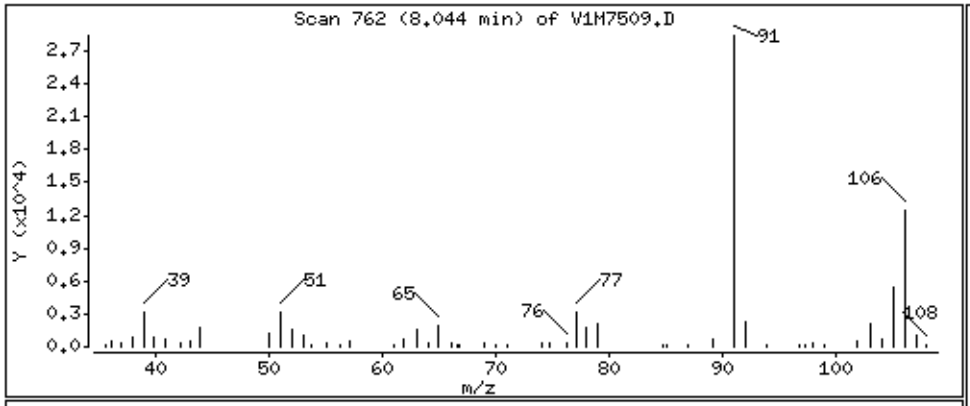
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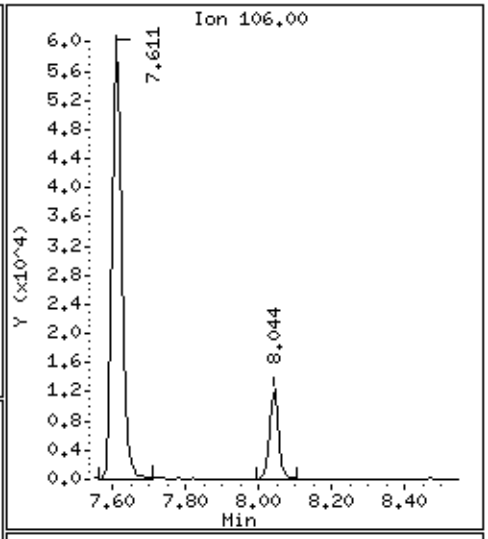
Sample Info: 5ML,N0058-12A,,75665

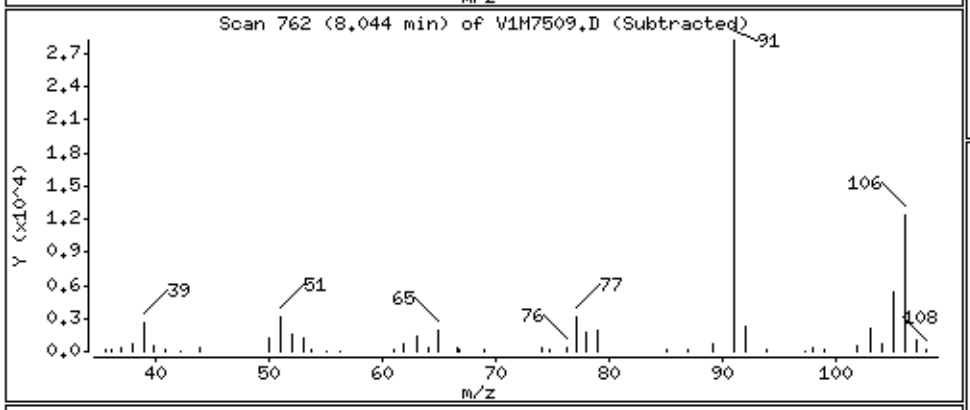
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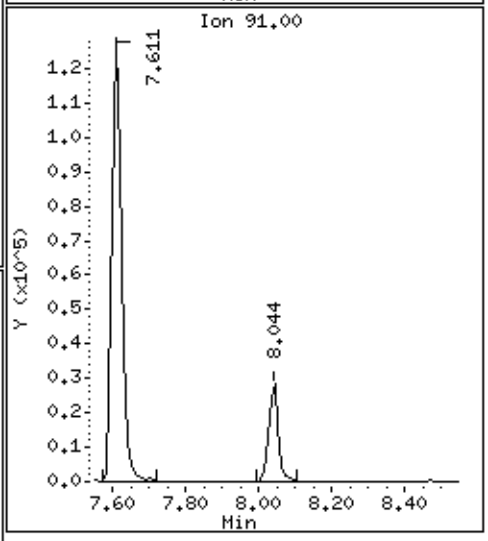
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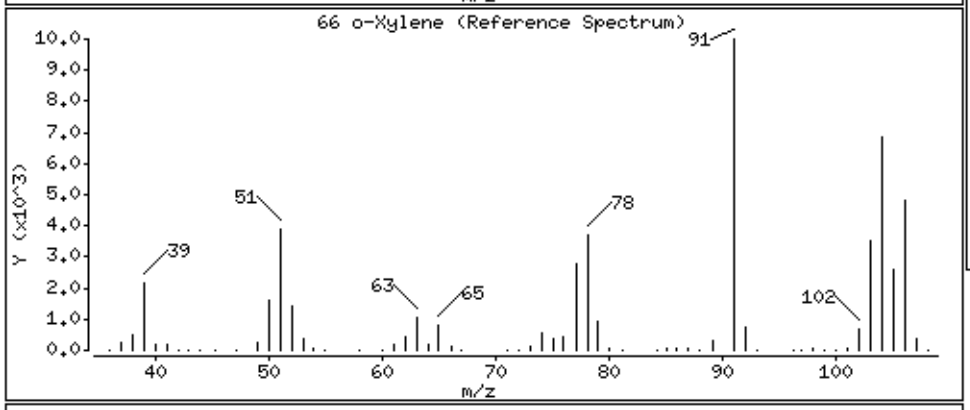
66 o-Xylene Concentration: 5 ug/Kg

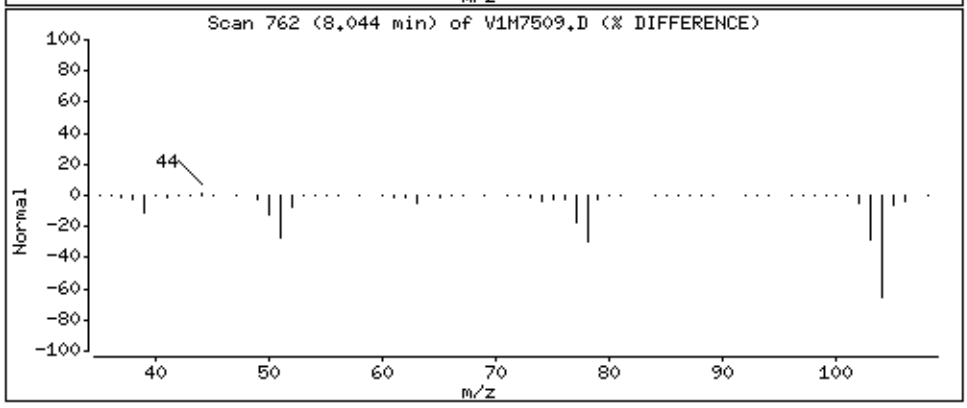












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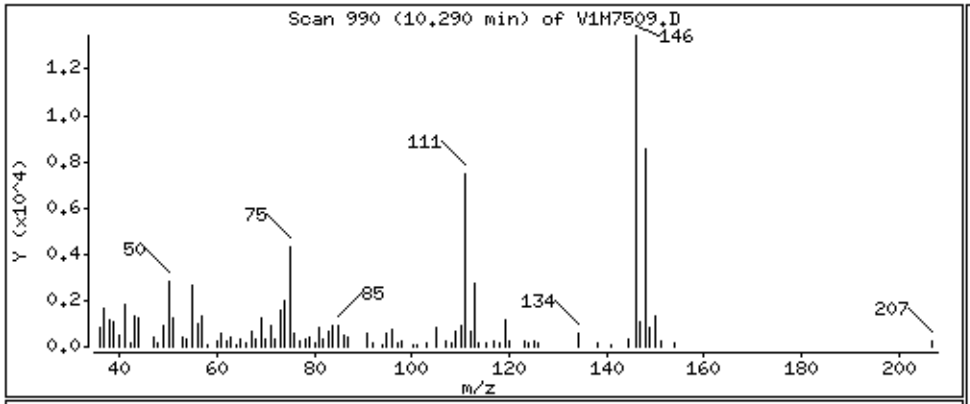
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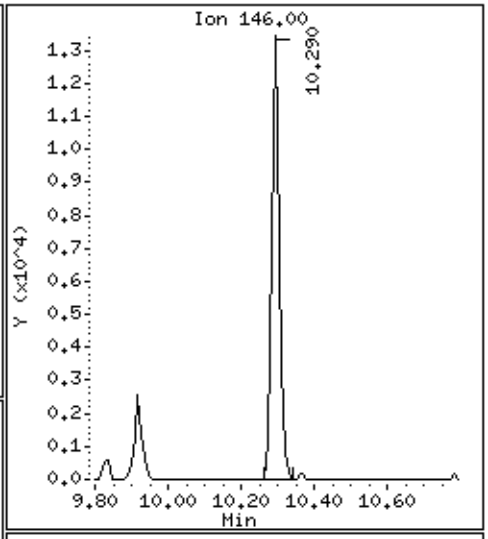
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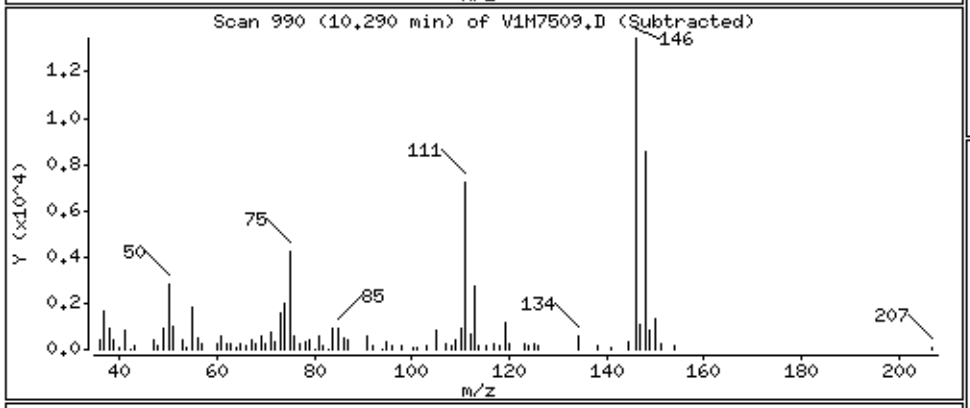
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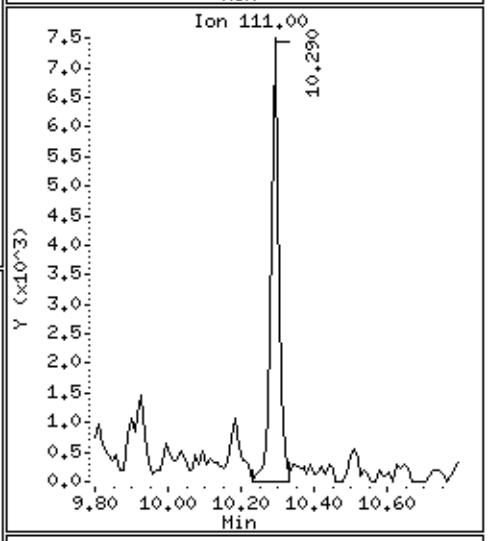
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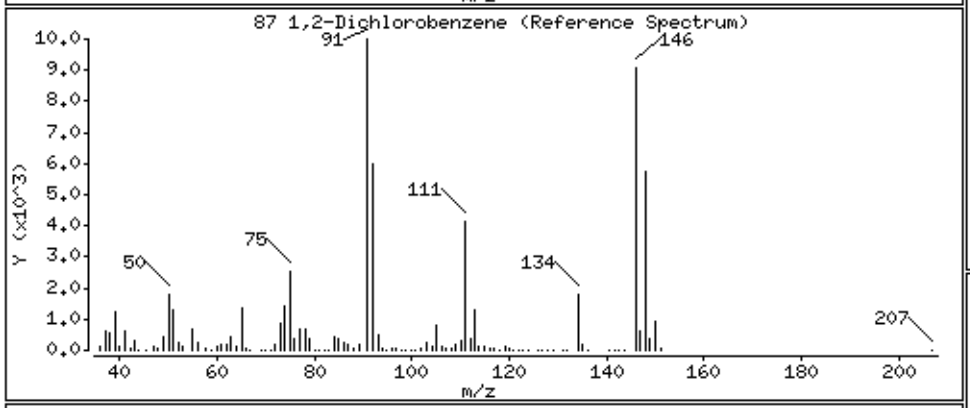
87 1,2-Dichlorobenzene Concentration: 6 ug/Kg

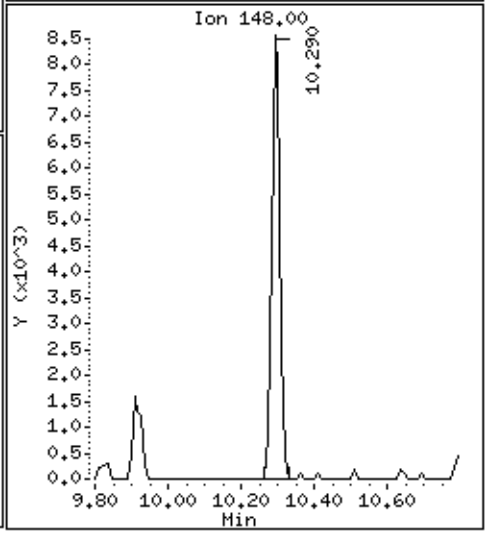


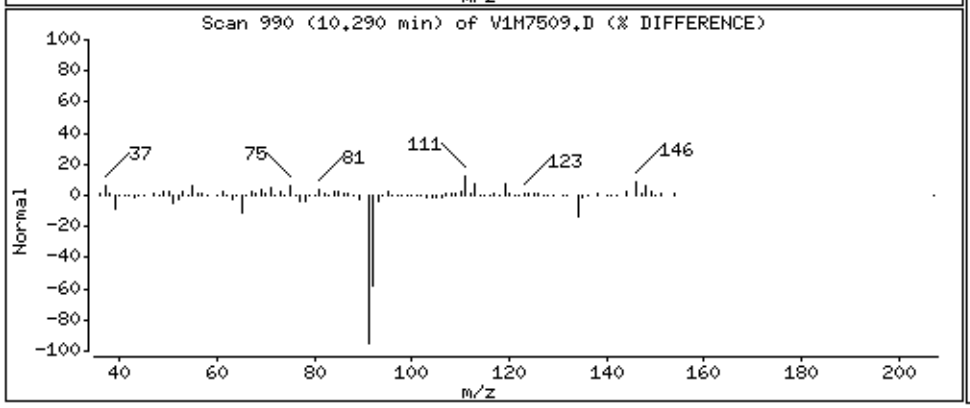












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/MEMEME

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5O9555.D

Level: (TRACE/LOW/MED) MED Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/22/2014

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	1500	U
74-87-3	Chloromethane	1500	U
75-01-4	Vinyl chloride	1500	U
74-83-9	Bromomethane	1500	U
75-00-3	Chloroethane	1500	U
75-69-4	Trichlorofluoromethane	1500	U
75-35-4	1,1-Dichloroethene	1500	U
67-64-1	Acetone	1500	U
74-88-4	Iodomethane	1500	U
75-15-0	Carbon disulfide	1500	U
75-09-2	Methylene chloride	1500	U
156-60-5	trans-1,2-Dichloroethene	1500	U
1634-04-4	Methyl tert-butyl ether	1500	U
75-34-3	1,1-Dichloroethane	2500	
108-05-4	Vinyl acetate	1500	U
78-93-3	2-Butanone	1500	U
156-59-2	cis-1,2-Dichloroethene	1500	U
594-20-7	2,2-Dichloropropane	1500	U
74-97-5	Bromochloromethane	1500	U
67-66-3	Chloroform	1500	U
71-55-6	1,1,1-Trichloroethane	23000	
563-58-6	1,1-Dichloropropene	1500	U
56-23-5	Carbon tetrachloride	1500	U
107-06-2	1,2-Dichloroethane	1500	U
71-43-2	Benzene	1500	U
79-01-6	Trichloroethene	1500	U
78-87-5	1,2-Dichloropropane	1500	U
74-95-3	Dibromomethane	1500	U
75-27-4	Bromodichloromethane	1500	U
10061-01-5	cis-1,3-Dichloropropene	1500	U
108-10-1	4-Methyl-2-pentanone	1500	U
108-88-3	Toluene	1500	U
10061-02-6	trans-1,3-Dichloropropene	1500	U
79-00-5	1,1,2-Trichloroethane	1500	U
142-28-9	1,3-Dichloropropane	1500	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/MEMEME

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V5O9555.D

Level: (TRACE/LOW/MED) MED Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/22/2014

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	1500	U
591-78-6	2-Hexanone	1500	U
124-48-1	Dibromochloromethane	1500	U
106-93-4	1,2-Dibromoethane	1500	U
108-90-7	Chlorobenzene	330	J
630-20-6	1,1,1,2-Tetrachloroethane	1500	U
100-41-4	Ethylbenzene	1500	U
179601-23-1	m,p-Xylene	730	J
95-47-6	o-Xylene	1500	U
1330-20-7	Xylene (Total)	730	J
100-42-5	Styrene	1500	U
75-25-2	Bromoform	1500	U
98-82-8	Isopropylbenzene	1500	U
79-34-5	1,1,2,2-Tetrachloroethane	1500	U
108-86-1	Bromobenzene	1500	U
96-18-4	1,2,3-Trichloropropane	1500	U
103-65-1	n-Propylbenzene	1500	U
95-49-8	2-Chlorotoluene	1500	U
108-67-8	1,3,5-Trimethylbenzene	1500	U
106-43-4	4-Chlorotoluene	1500	U
98-06-6	tert-Butylbenzene	1500	U
95-63-6	1,2,4-Trimethylbenzene	1500	U
135-98-8	sec-Butylbenzene	1500	U
99-87-6	4-Isopropyltoluene	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
104-51-8	n-Butylbenzene	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
96-12-8	1,2-Dibromo-3-chloropropane	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U
87-68-3	Hexachlorobutadiene	1500	U
87-61-6	1,2,3-Trichlorobenzene	1500	U
91-20-3	Naphthalene	1500	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6100	

Data File: \\Avogadro\Organics\V5.I\140122.B\V5O9555.D
Report Date: 31-Jan-2014 09:56

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V5.I\140122.B\V5O9555.D
Lab Smp Id: N0058-12A Client Smp ID: HW-WET-SE-4-(1)_01/
Inj Date : 22-JAN-2014 16:06
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,N0058-12A,,75683
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V5.I\140122.B\v5_8260W.m
Meth Date : 31-Jan-2014 09:56 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	12 1,1,2-Trichloro-1,2,2-Trifluo	101	2.916	2.938	(0.523)	27507	19.9387	960
	24 1,1-Dichloroethane	63	3.915	3.925	(0.702)	18157	8.27091	400
$	37 Dibromofluoromethane	113	4.902	4.912	(0.879)	39562	50.0905	2400
	38 1,1,1-Trichloroethane	97	4.936	4.947	(0.885)	154894	76.5713	3700
$	43 1,2-Dichloroethane-d4	102	5.238	5.237	(0.940)	7137	51.9574	2500
*	47 Fluorobenzene	96	5.575	5.585	(1.000)	97620	50.0000	
$	59 Toluene-d8	98	7.293	7.292	(0.806)	116563	50.0913	2400
*	69 Chlorobenzene-d5	117	9.046	9.045	(1.000)	125747	50.0000	
	71 Chlorobenzene	112	9.081	9.080	(1.004)	3517	1.07801	52(Q)
	74 m,p-Xylene	106	9.383	9.393	(1.037)	4553	2.37822	110
$	80 Bromofluorobenzene	95	10.602	10.600	(1.172)	69448	50.0088	2400
*	93 1,4-Dichlorobenzene-d4	152	12.204	12.203	(1.000)	83802	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\140122.B\V5O9555.D
Report Date: 31-Jan-2014 09:56

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V5.I\140122.B\V5O9555.D
Lab Smp Id: N0058-12A Client Smp ID: HW-WET-SE-4-(1)_01/
Inj Date : 22-JAN-2014 16:06
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,N0058-12A,,75683
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V5.I\140122.B\v5_8260W.m
Meth Date : 31-Jan-2014 09:56 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

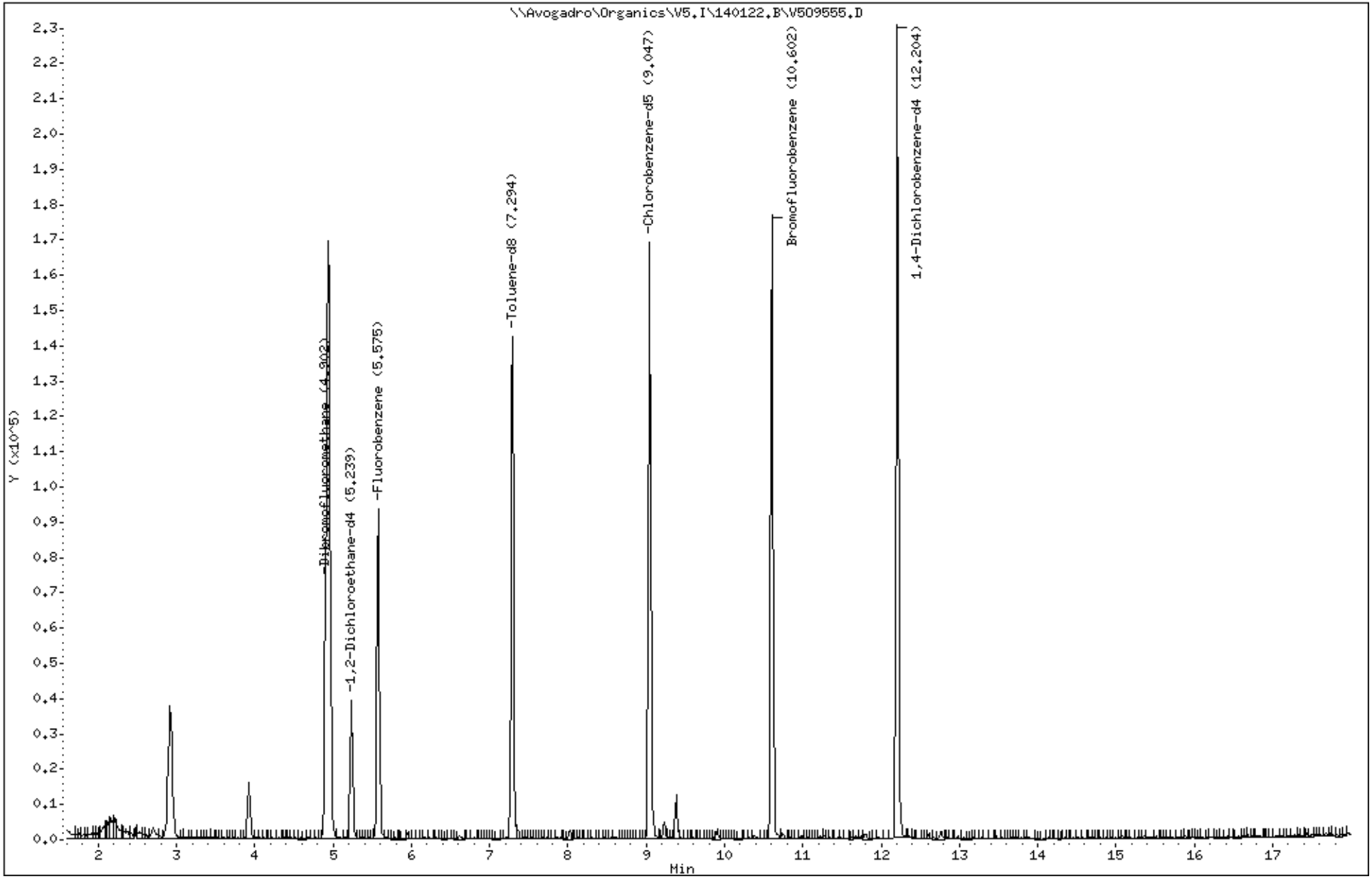
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V5.I\140122.B\V509555.D
Date : 22-JAN-2014 16:06
Client ID: HW-WET-SE-4-(1)_01/
Sample Info: 5ML,N0058-12A,,75683

Instrument: V5.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V5.I\140122.B\V509555.D

Date : 22-JAN-2014 16:06

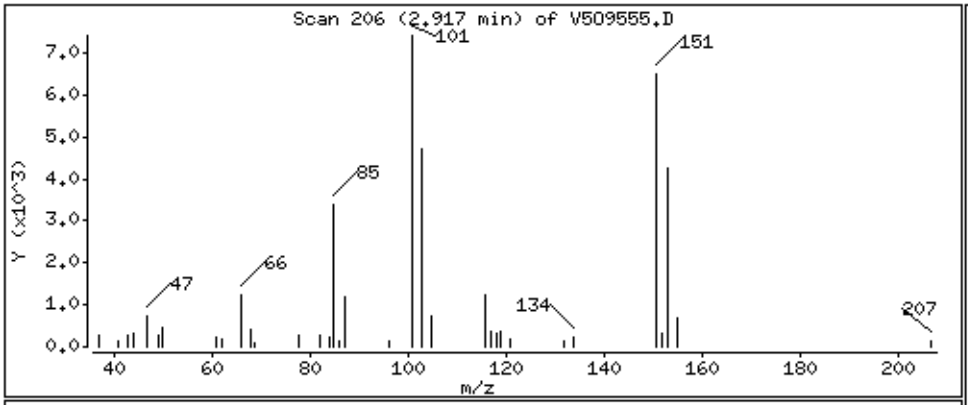
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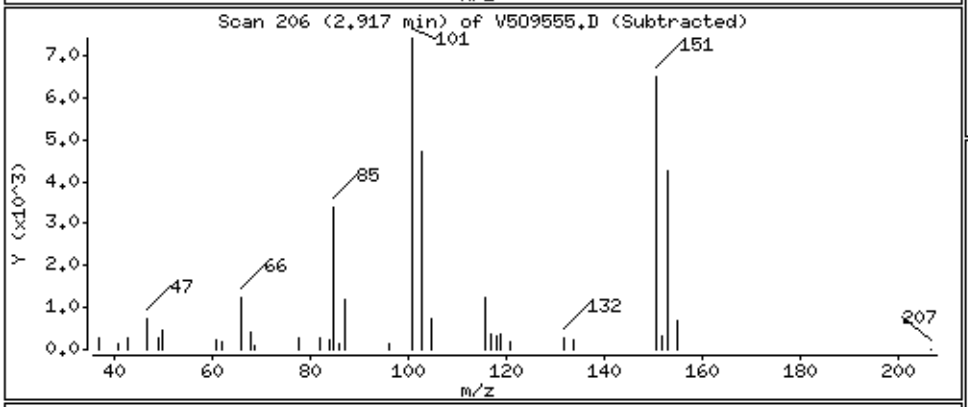
Sample Info: 5ML,N0058-12A,,75683

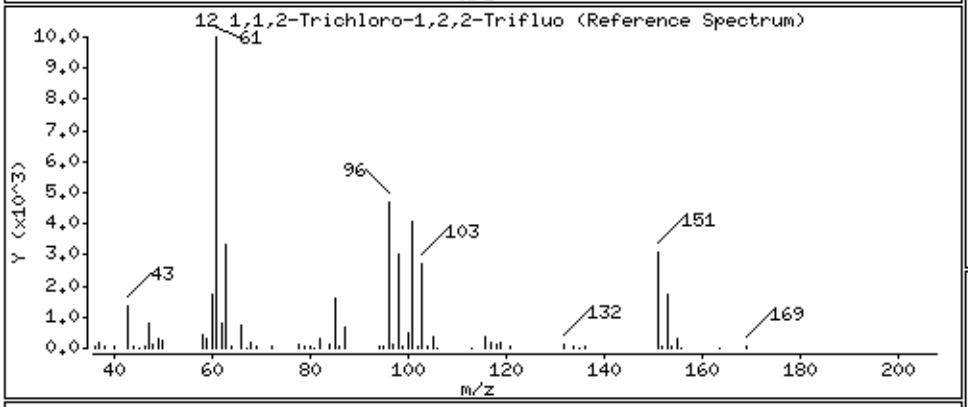
Operator: WL SRC: LIMS

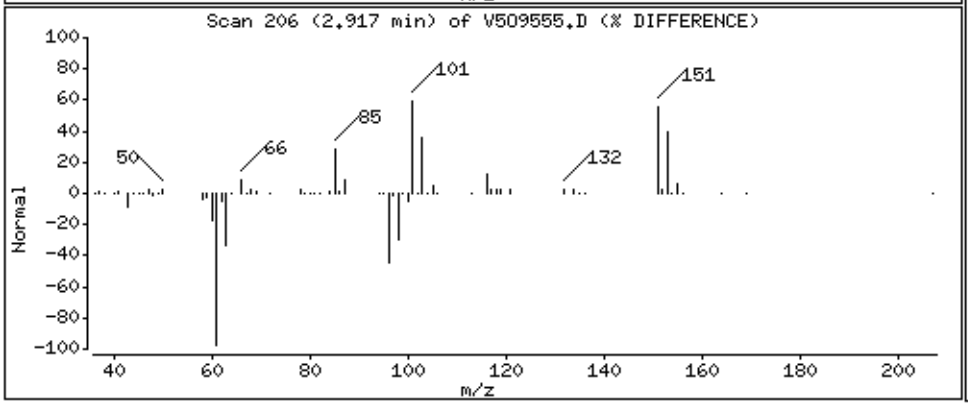
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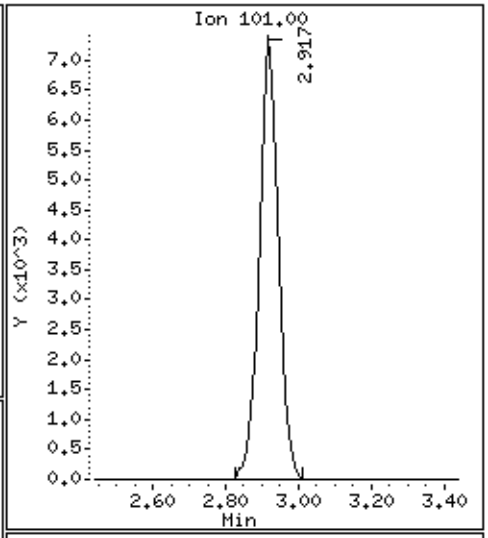
12 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 960 ug/Kg

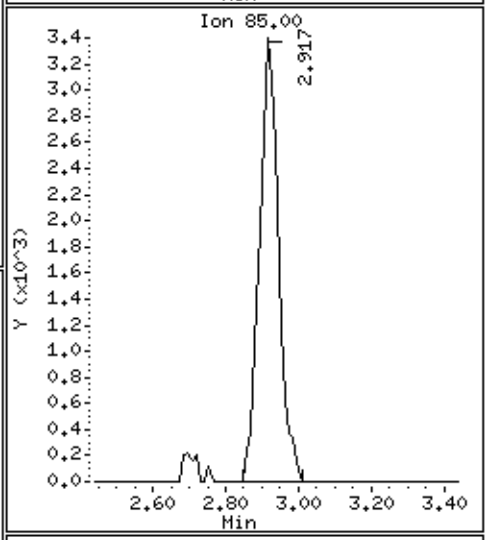


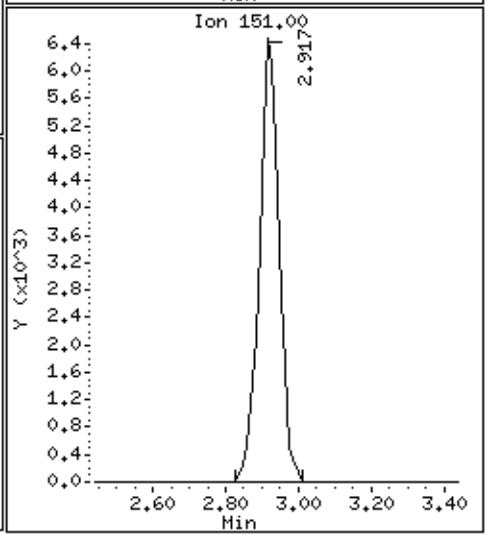












Data File: \\Avogadro\Organics\V5.I\140122.B\V509555.D

Date : 22-JAN-2014 16:06

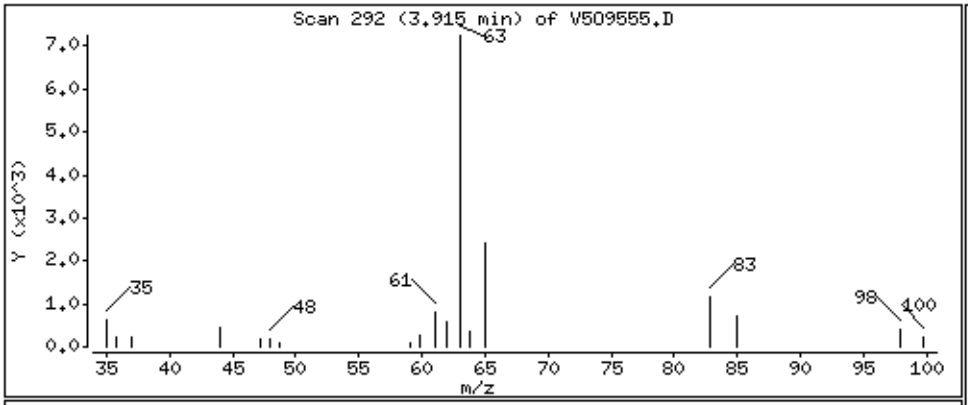
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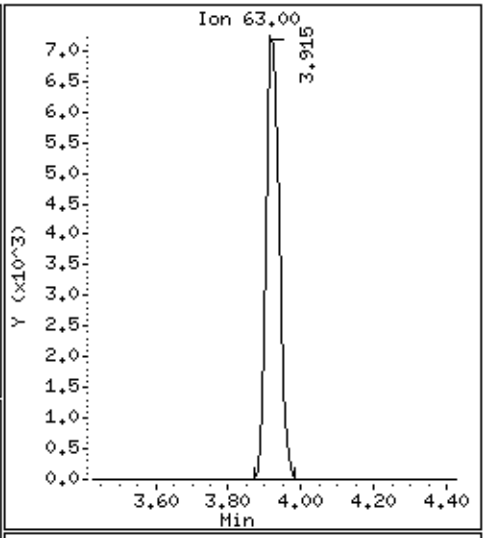
Sample Info: 5ML,N0058-12A,,75683

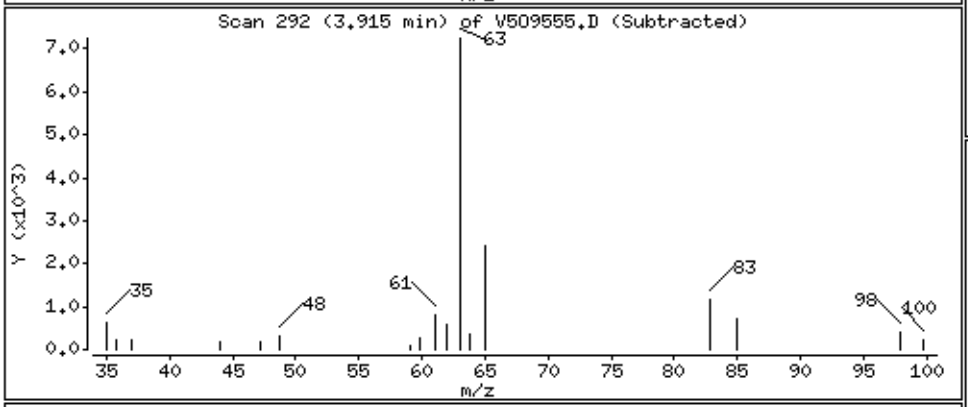
Operator: WL SRC: LIMS

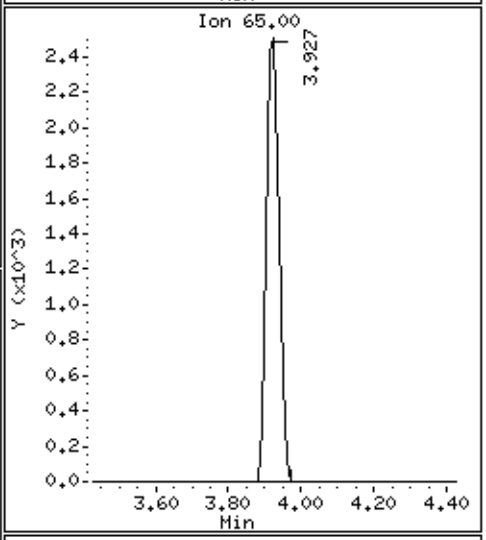
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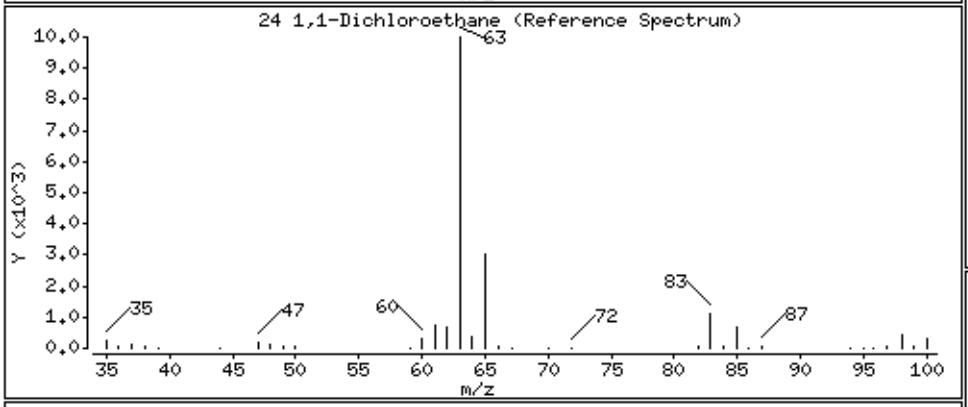
24 1,1-Dichloroethane Concentration: 400 ug/Kg

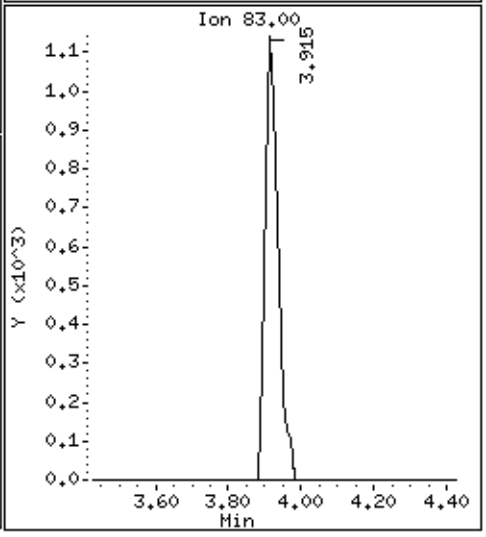


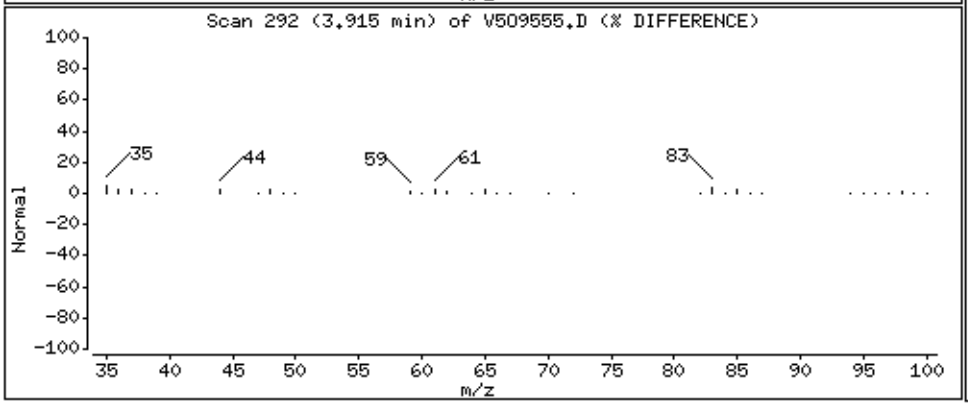












Data File: \\Avogadro\Organics\V5.I\140122.B\V509555.D

Date : 22-JAN-2014 16:06

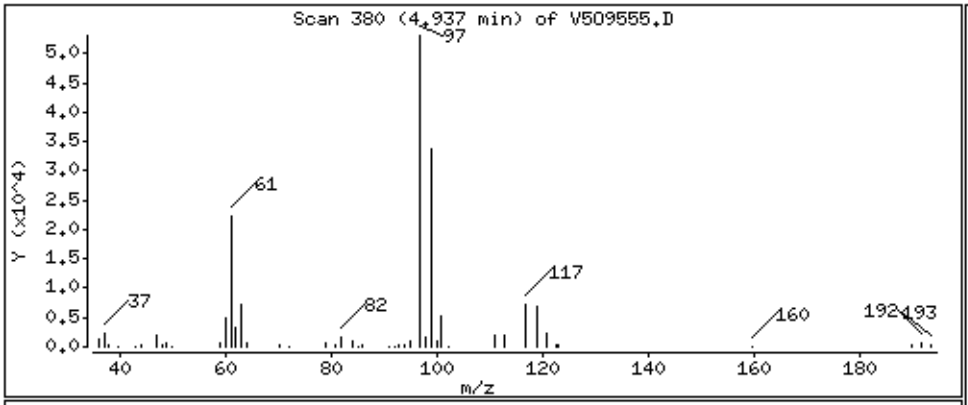
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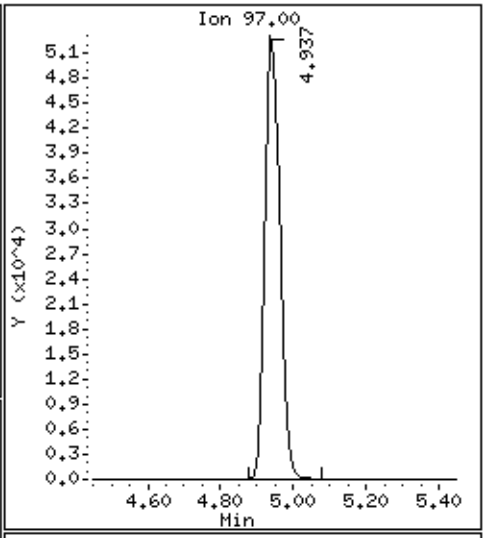
Sample Info: 5ML,N0058-12A,,75683

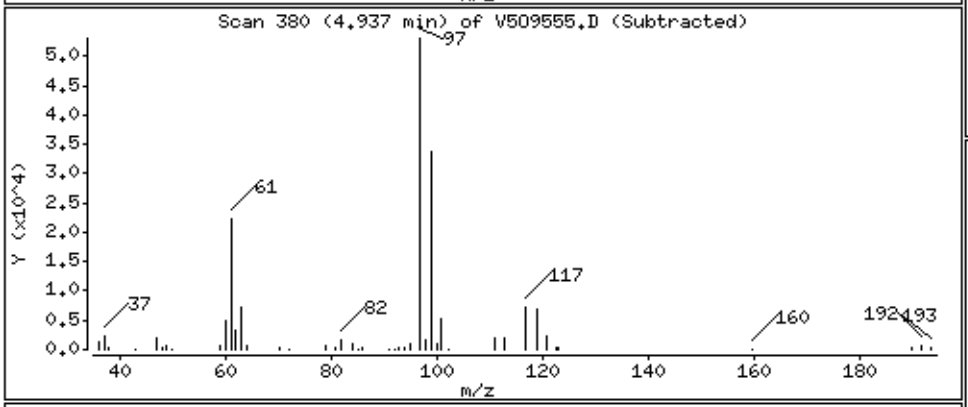
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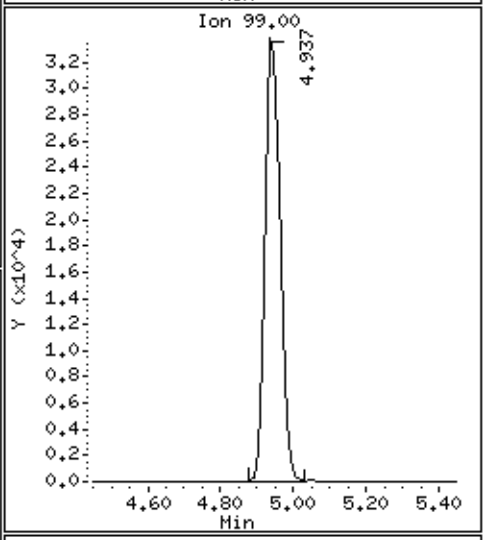
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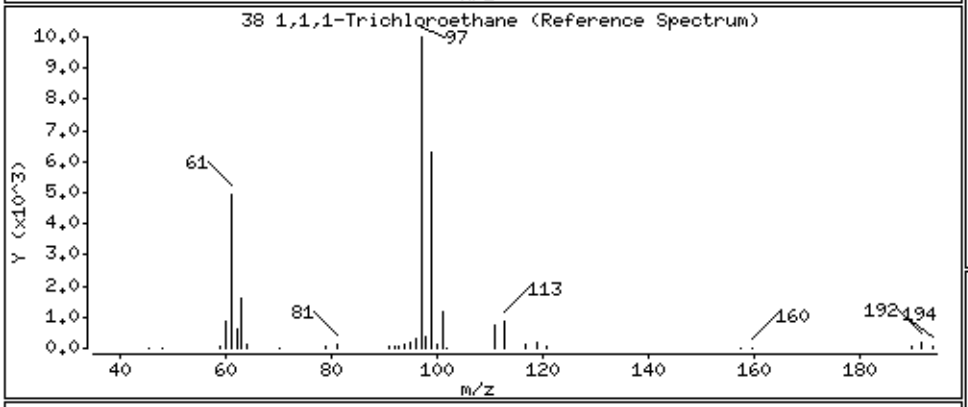
38 1,1,1-Trichloroethane Concentration: 3700 ug/Kg

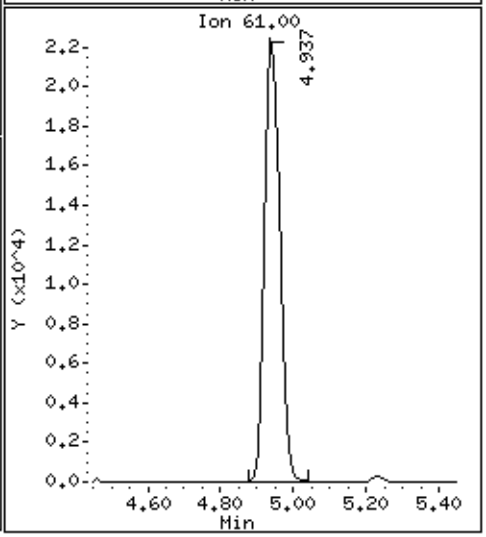


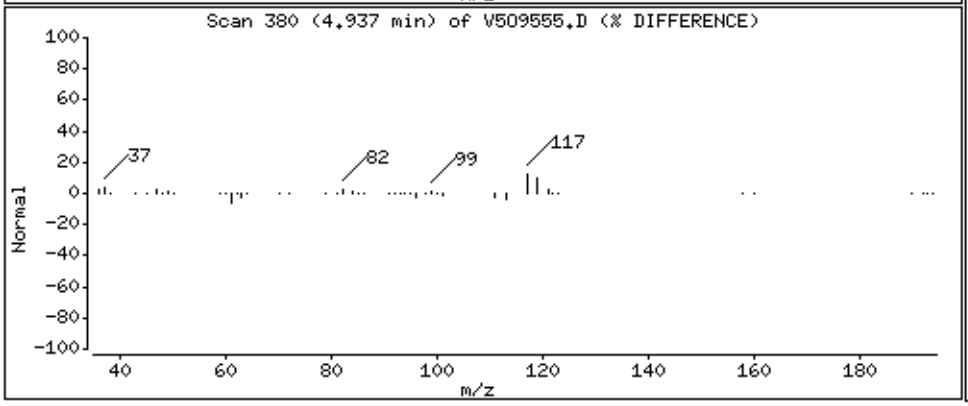












Data File: \\Avogadro\Organics\V5.I\140122.B\V509555.D

Date : 22-JAN-2014 16:06

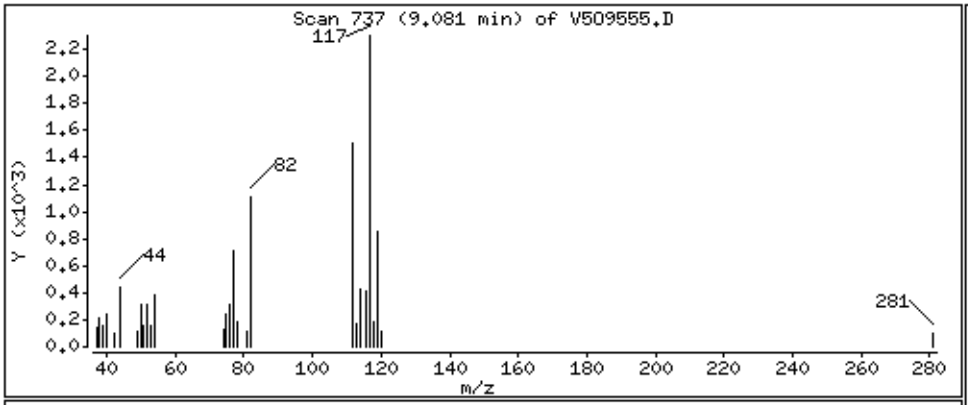
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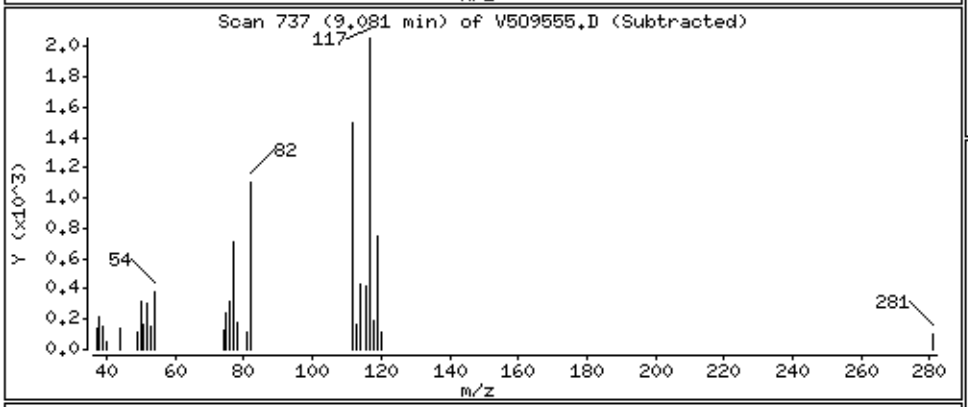
Sample Info: 5ML,N0058-12A,,75683

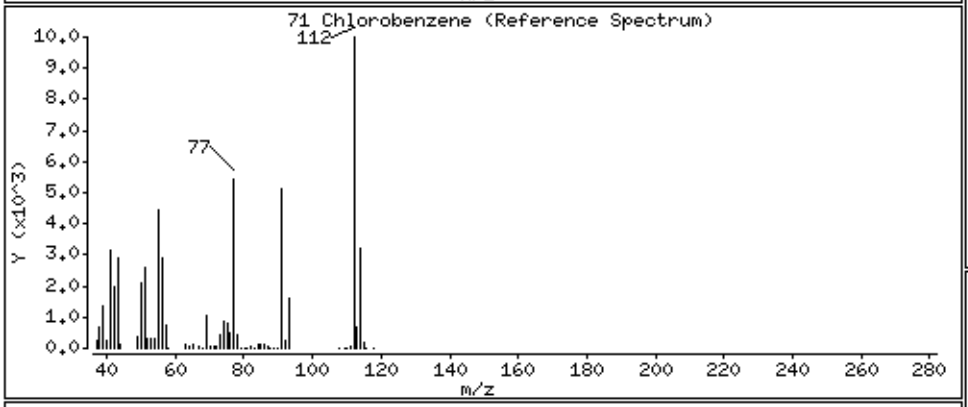
Operator: WL SRC: LIMS

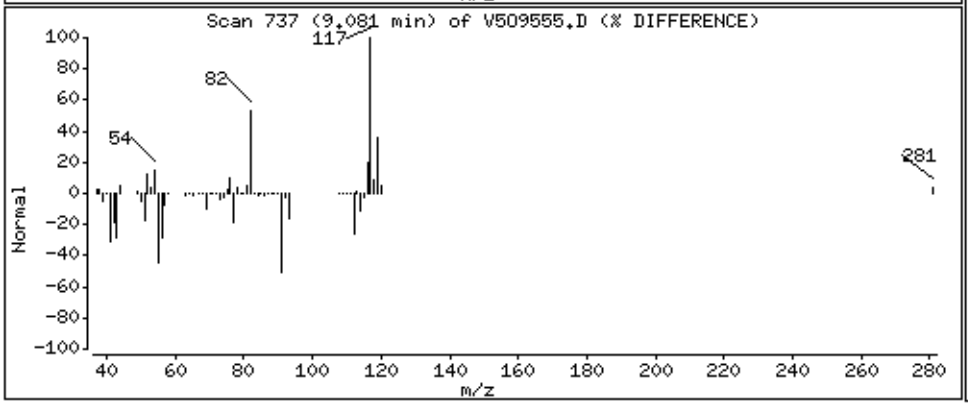
Column phase: DB-624 Column diameter: 0.25

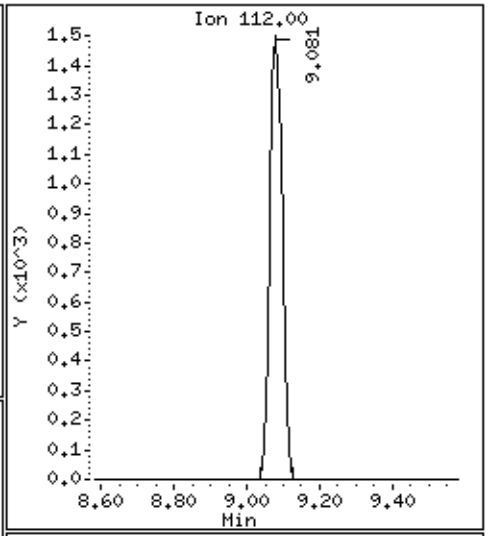
71 Chlorobenzene Concentration: 52 ug/Kg

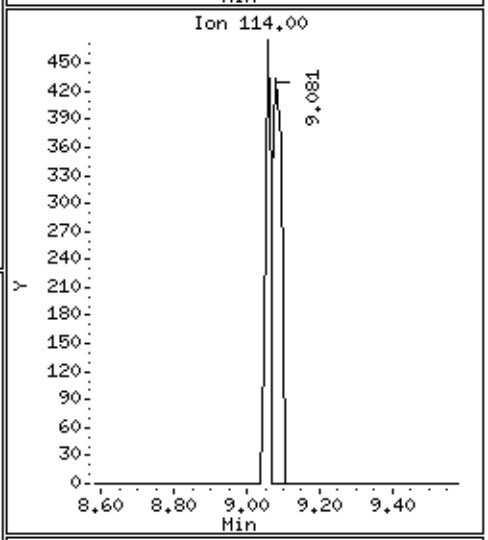


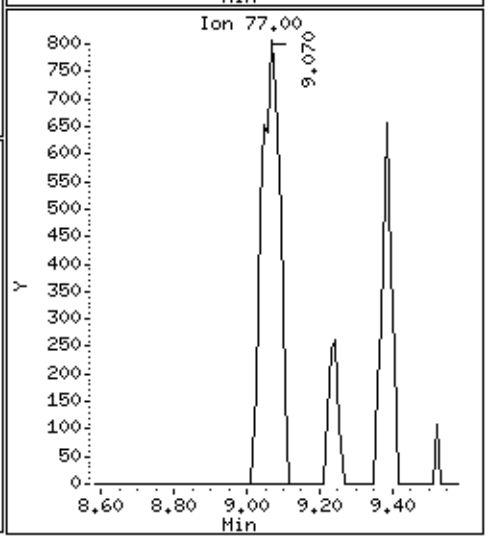












Data File: \\Avogadro\Organics\V5.I\140122.B\V509555.D

Date : 22-JAN-2014 16:06

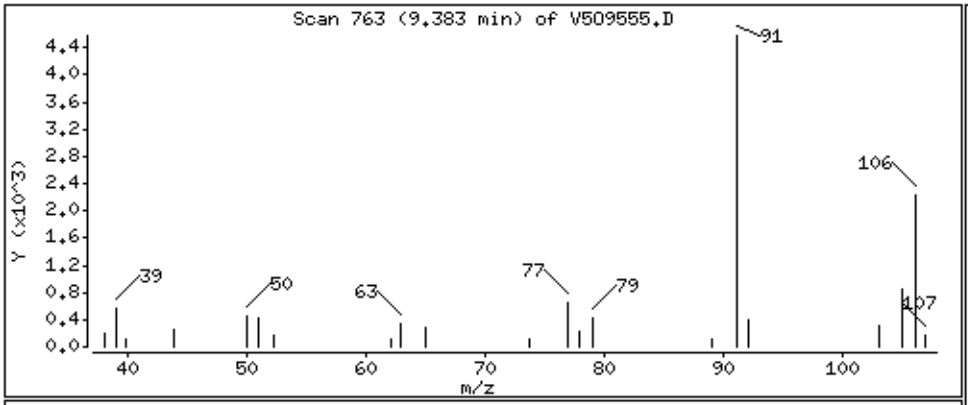
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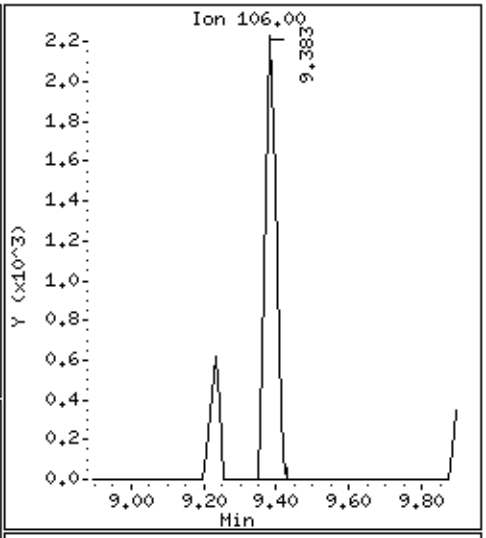
Sample Info: 5ML,N0058-12A,,75683

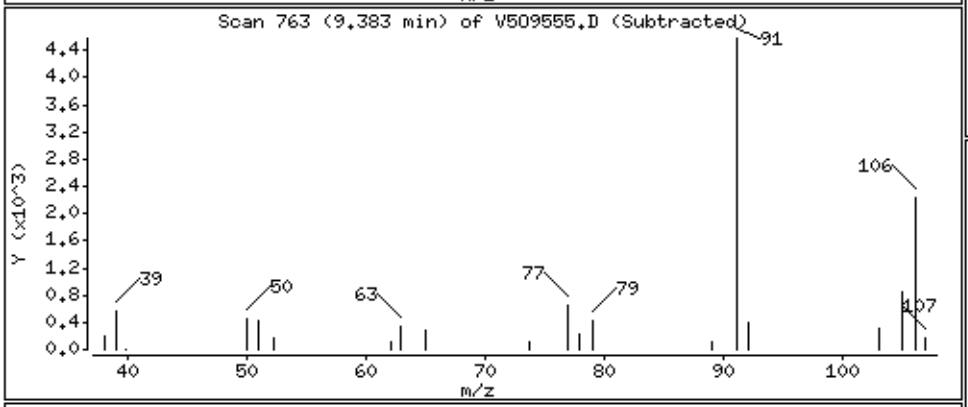
Operator: WL SRC: LIMS

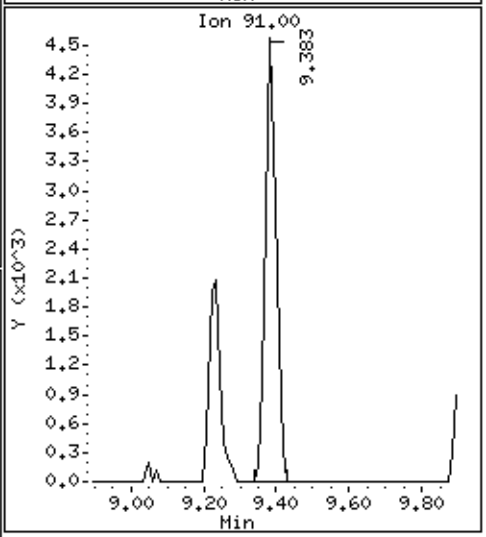
Column phase: DB-624 Column diameter: 0.25

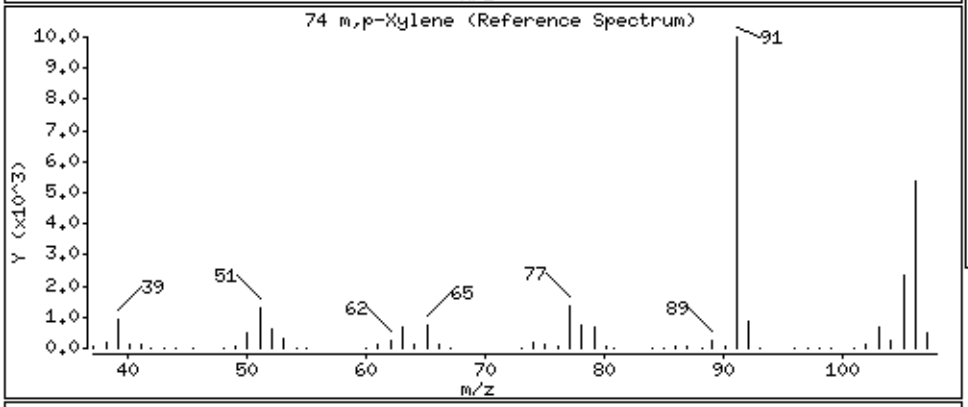
74 m,p-Xylene Concentration: 110 ug/Kg

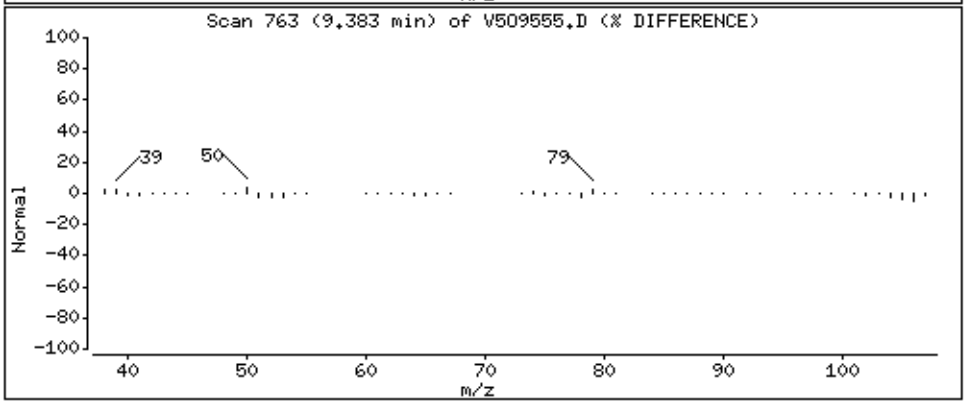












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-17-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-13A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M7537.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 38 Date Analyzed: 01/22/2014

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	7.7	U
74-87-3	Chloromethane	7.7	U
75-01-4	Vinyl chloride	7.7	U
74-83-9	Bromomethane	7.7	U
75-00-3	Chloroethane	7.7	U
75-69-4	Trichlorofluoromethane	7.7	U
75-35-4	1,1-Dichloroethene	7.7	U
67-64-1	Acetone	12	JL
74-88-4	Iodomethane	7.7	U
75-15-0	Carbon disulfide	7.7	U
75-09-2	Methylene chloride	7.7	U
156-60-5	trans-1,2-Dichloroethene	7.7	U
1634-04-4	Methyl tert-butyl ether	7.7	U
75-34-3	1,1-Dichloroethane	7.7	U
108-05-4	Vinyl acetate	7.7	U
78-93-3	2-Butanone	5.5	JL
156-59-2	cis-1,2-Dichloroethene	7.7	U
594-20-7	2,2-Dichloropropane	7.7	U
74-97-5	Bromochloromethane	7.7	U
67-66-3	Chloroform	7.7	U
71-55-6	1,1,1-Trichloroethane	7.7	U
563-58-6	1,1-Dichloropropene	7.7	U
56-23-5	Carbon tetrachloride	7.7	U
107-06-2	1,2-Dichloroethane	7.7	U
71-43-2	Benzene	7.7	U
79-01-6	Trichloroethene	7.7	U
78-87-5	1,2-Dichloropropane	7.7	U
74-95-3	Dibromomethane	7.7	U
75-27-4	Bromodichloromethane	7.7	U
10061-01-5	cis-1,3-Dichloropropene	7.7	U
108-10-1	4-Methyl-2-pentanone	7.7	U
108-88-3	Toluene	7.7	U
10061-02-6	trans-1,3-Dichloropropene	7.7	U
79-00-5	1,1,2-Trichloroethane	7.7	U
142-28-9	1,3-Dichloropropane	7.7	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-17-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-13A

Sample wt/vol: 5.20 (g/mL) G Lab File ID: V1M7537.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 38 Date Analyzed: 01/22/2014

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	7.7	U
591-78-6	2-Hexanone	7.7	U
124-48-1	Dibromochloromethane	7.7	U
106-93-4	1,2-Dibromoethane	7.7	U
108-90-7	Chlorobenzene	7.7	U
630-20-6	1,1,1,2-Tetrachloroethane	7.7	U
100-41-4	Ethylbenzene	7.7	U
179601-23-1	m,p-Xylene	7.7	U
95-47-6	o-Xylene	7.7	U
1330-20-7	Xylene (Total)	7.7	U
100-42-5	Styrene	7.7	U
75-25-2	Bromoform	7.7	U
98-82-8	Isopropylbenzene	7.7	U
79-34-5	1,1,2,2-Tetrachloroethane	7.7	U
108-86-1	Bromobenzene	7.7	U
96-18-4	1,2,3-Trichloropropane	7.7	U
103-65-1	n-Propylbenzene	7.7	U
95-49-8	2-Chlorotoluene	7.7	U
108-67-8	1,3,5-Trimethylbenzene	7.7	U
106-43-4	4-Chlorotoluene	7.7	U
98-06-6	tert-Butylbenzene	7.7	U
95-63-6	1,2,4-Trimethylbenzene	7.7	U
135-98-8	sec-Butylbenzene	7.7	U
99-87-6	4-Isopropyltoluene	7.7	U
541-73-1	1,3-Dichlorobenzene	7.7	U
106-46-7	1,4-Dichlorobenzene	7.7	U
104-51-8	n-Butylbenzene	7.7	U
95-50-1	1,2-Dichlorobenzene	7.7	U
96-12-8	1,2-Dibromo-3-chloropropane	7.7	U
120-82-1	1,2,4-Trichlorobenzene	7.7	U
87-68-3	Hexachlorobutadiene	7.7	U
87-61-6	1,2,3-Trichlorobenzene	7.7	U
91-20-3	Naphthalene	7.7	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.7	U

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7537.D
Report Date: 31-Jan-2014 09:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7537.D
Lab Smp Id: N0058-13A Client Smp ID: HW-WET-SE-17-(1)_01
Inj Date : 22-JAN-2014 17:44
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-13A,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.200	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)
	11 Acetone	58	2.321	2.321	(0.517)	5755	7.51025	7
	28 2-Butanone	72	3.572	3.562	(0.796)	2160	3.54104	3(Q)
$	32 Dibromofluoromethane	113	3.927	3.936	(0.875)	132096	51.7124	50
$	37 1,2-Dichloroethane-d4	102	4.202	4.202	(0.936)	34593	54.3274	52
*	41 Fluorobenzene	96	4.488	4.487	(1.000)	494109	50.0000	
$	51 Toluene-d8	98	5.896	5.906	(0.803)	456751	50.0100	48
*	60 Chlorobenzene-d5	117	7.344	7.354	(1.000)	330753	50.0000	
$	70 Bromofluorobenzene	95	8.635	8.644	(1.176)	181403	49.5276	48
*	84 1,4-Dichlorobenzene-d4	152	9.915	9.915	(1.000)	140557	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7537.D
Report Date: 31-Jan-2014 09:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7537.D
Lab Smp Id: N0058-13A Client Smp ID: HW-WET-SE-17-(1)_01
Inj Date : 22-JAN-2014 17:44
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-13A,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

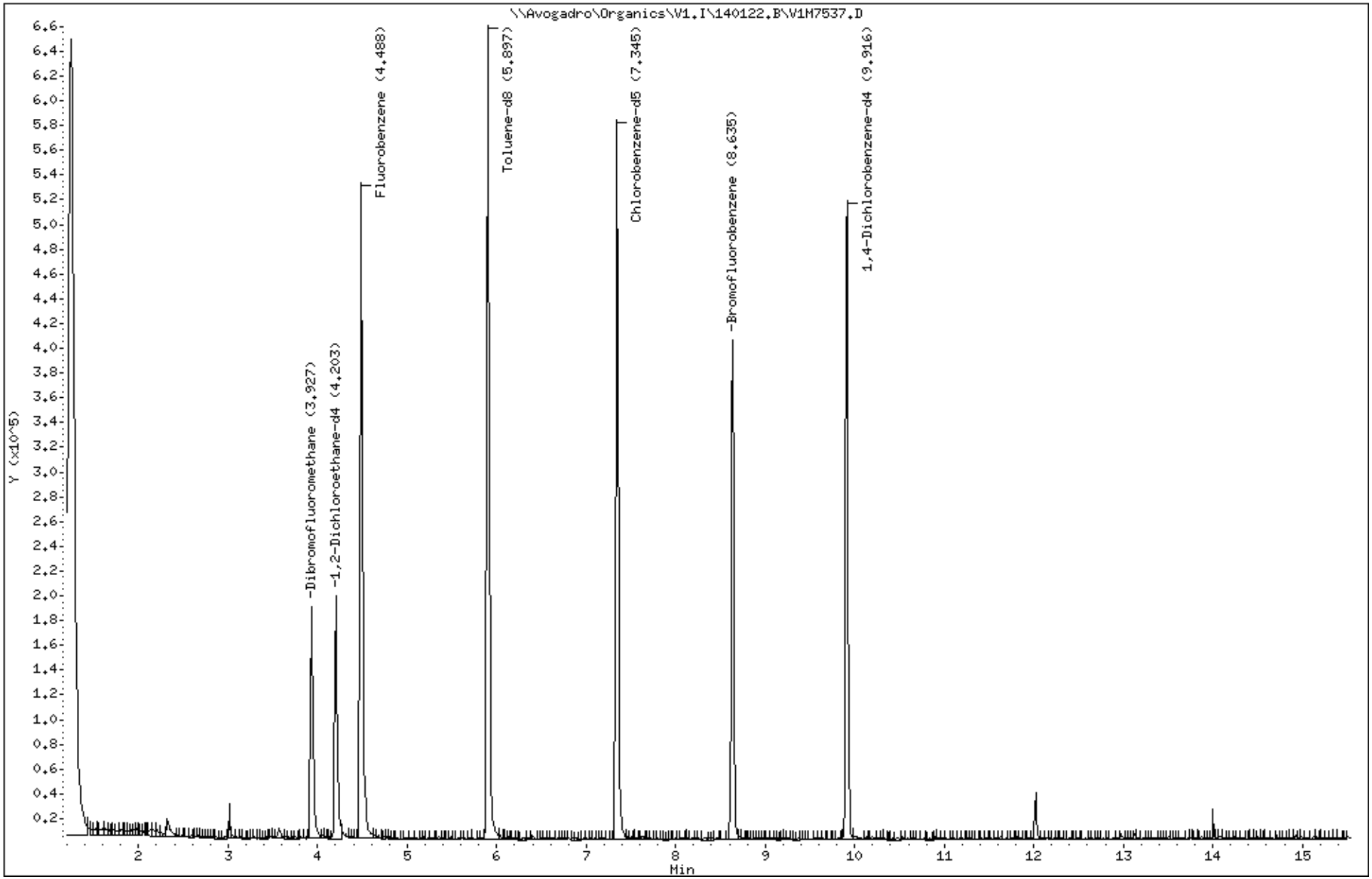
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Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7537.D
Date : 22-JAN-2014 17:44
Client ID: HW-WET-SE-17-(1)_01
Sample Info: 5ML,N0058-13A,,75681

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7537.D

Date : 22-JAN-2014 17:44

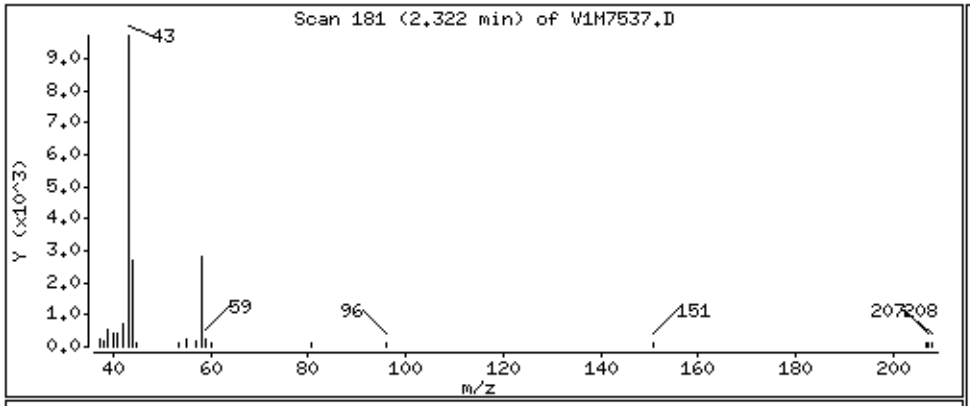
Client ID: HW-WET-SE-17-(1)_01 Instrument: V1.i

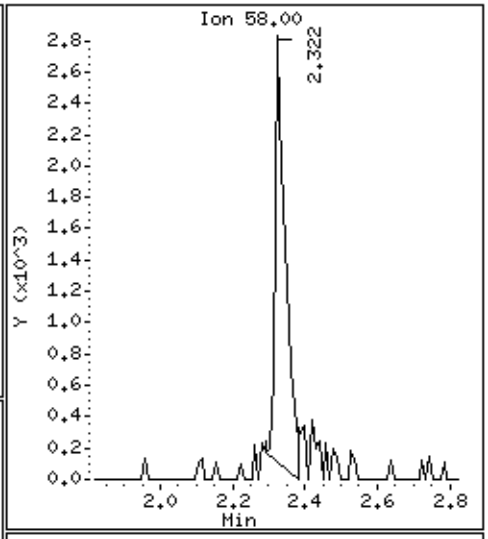
Sample Info: 5ML,N0058-13A,,75681

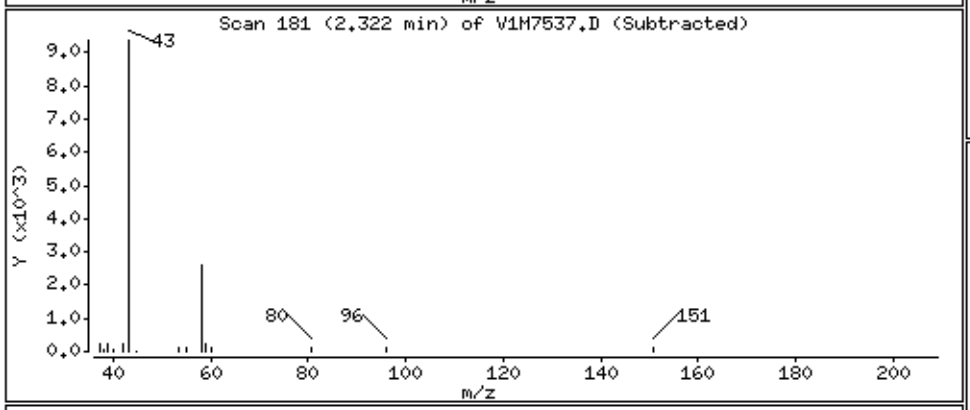
Operator: WL SRC: LIMS

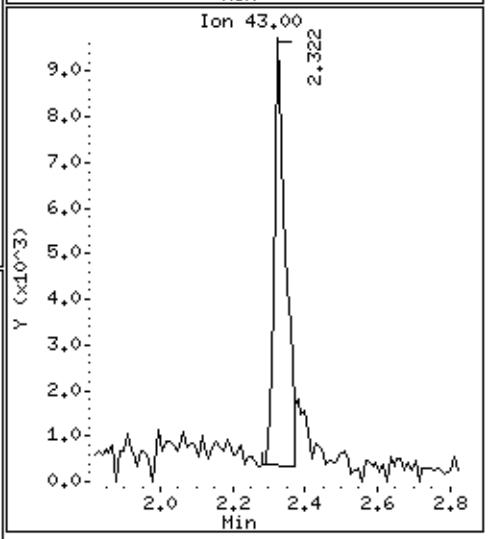
Column phase: DB-624 Column diameter: 0.25

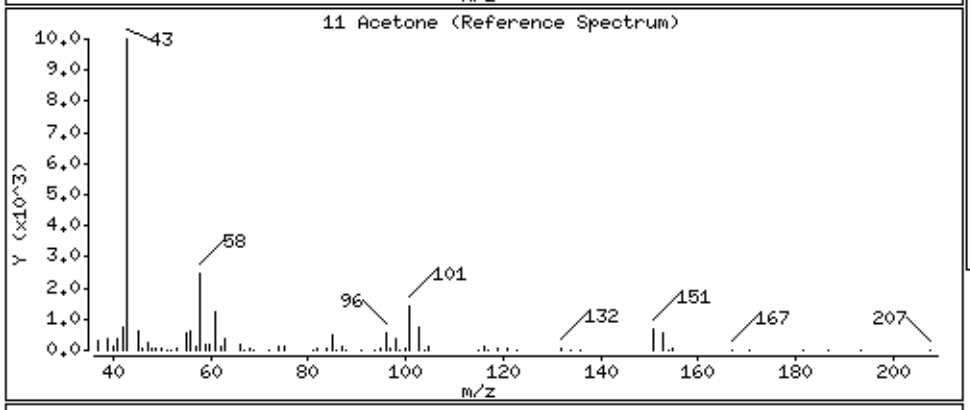
11 Acetone Concentration: 7 ug/Kg

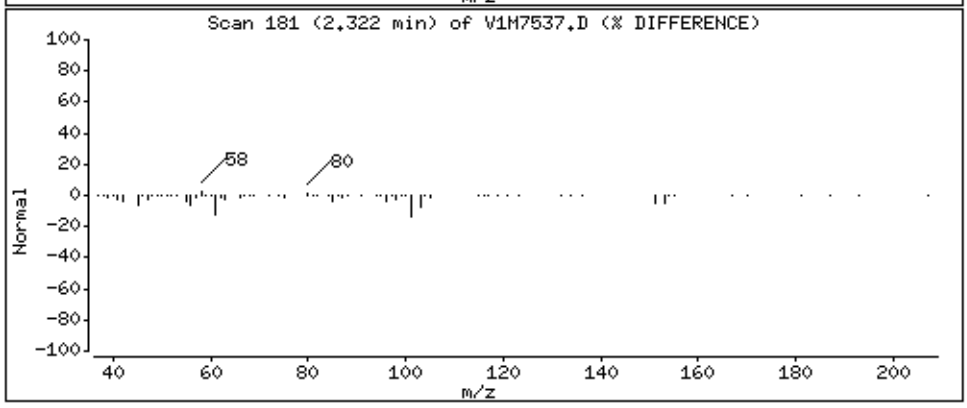












Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7537.D

Date : 22-JAN-2014 17:44

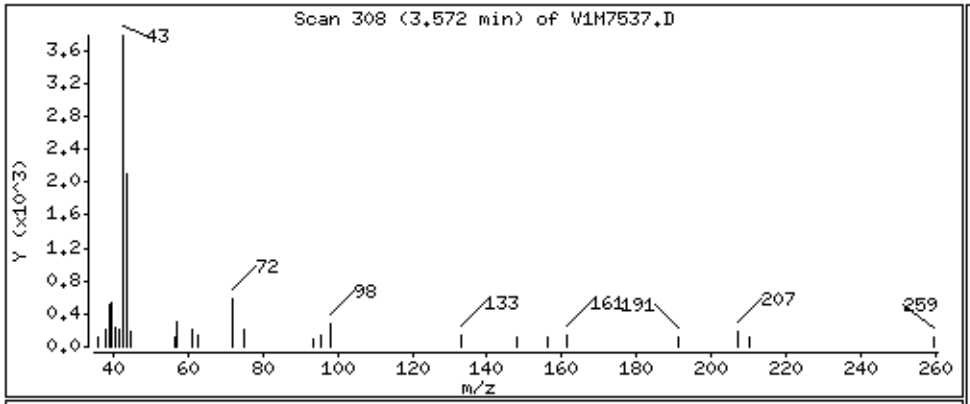
Client ID: HW-WET-SE-17-(1)_01 Instrument: V1.i

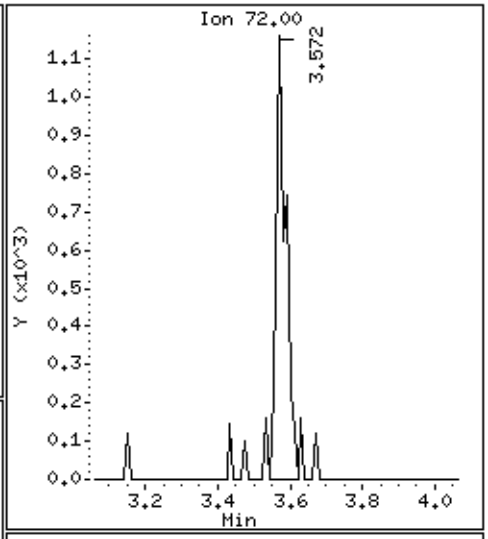
Sample Info: 5ML,N0058-13A,,75681

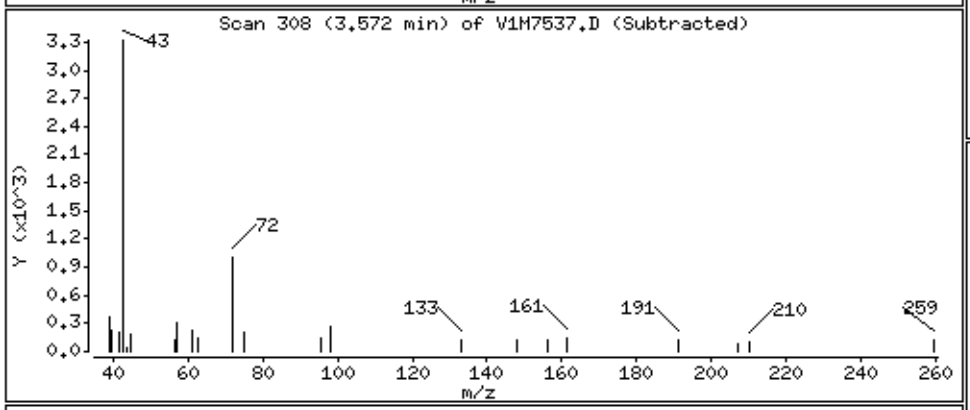
Operator: WL SRC: LIMS

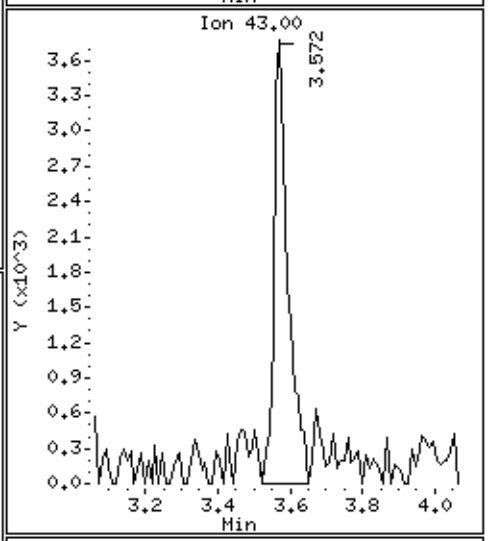
Column phase: DB-624 Column diameter: 0.25

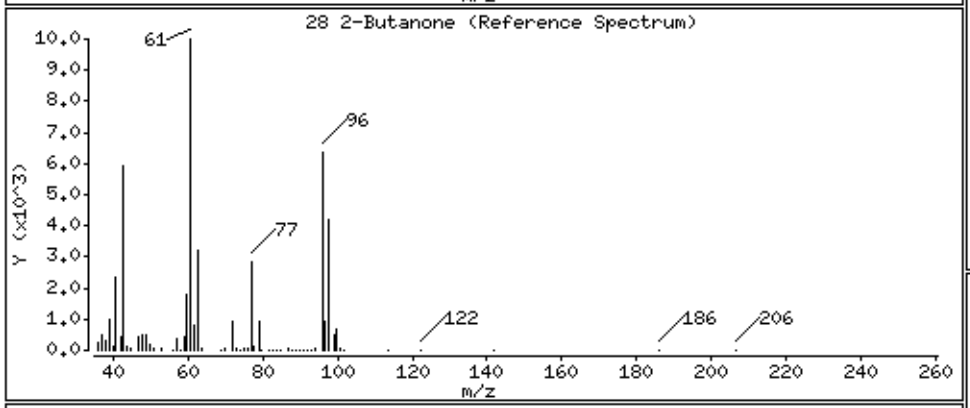
28 2-Butanone Concentration: 3 ug/Kg

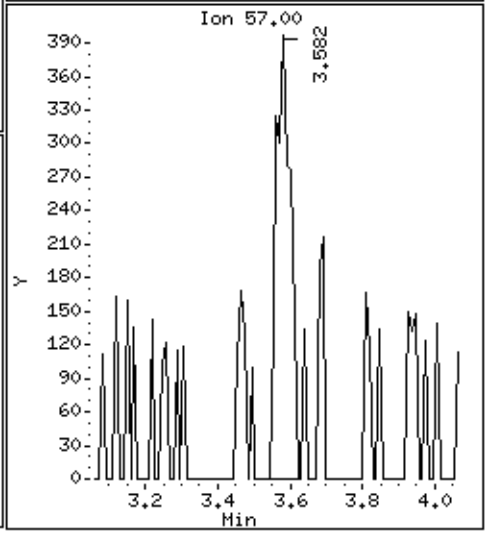


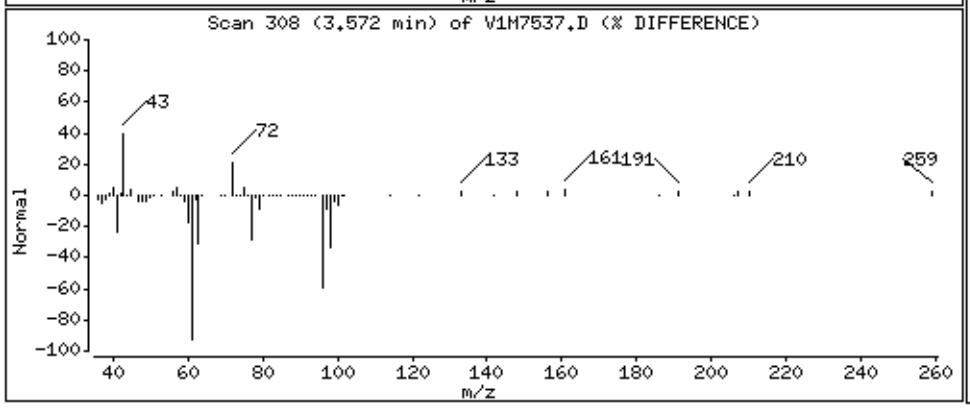












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-16-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-14A

Sample wt/vol: 5.40 (g/mL) G Lab File ID: V1M7538.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 50 Date Analyzed: 01/22/2014

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	9.2	U
74-87-3	Chloromethane	9.2	U
75-01-4	Vinyl chloride	9.2	U
74-83-9	Bromomethane	9.2	U
75-00-3	Chloroethane	9.2	U
75-69-4	Trichlorofluoromethane	9.2	U
75-35-4	1,1-Dichloroethene	9.2	U
67-64-1	Acetone	9.2	U
74-88-4	Iodomethane	9.2	U
75-15-0	Carbon disulfide	9.2	U
75-09-2	Methylene chloride	9.2	U
156-60-5	trans-1,2-Dichloroethene	9.2	U
1634-04-4	Methyl tert-butyl ether	9.2	U
75-34-3	1,1-Dichloroethane	9.2	U
108-05-4	Vinyl acetate	9.2	U
78-93-3	2-Butanone	9.2	U
156-59-2	cis-1,2-Dichloroethene	9.2	U
594-20-7	2,2-Dichloropropane	9.2	U
74-97-5	Bromochloromethane	9.2	U
67-66-3	Chloroform	9.2	U
71-55-6	1,1,1-Trichloroethane	9.2	U
563-58-6	1,1-Dichloropropene	9.2	U
56-23-5	Carbon tetrachloride	9.2	U
107-06-2	1,2-Dichloroethane	9.2	U
71-43-2	Benzene	9.2	U
79-01-6	Trichloroethene	9.2	U
78-87-5	1,2-Dichloropropane	9.2	U
74-95-3	Dibromomethane	9.2	U
75-27-4	Bromodichloromethane	9.2	U
10061-01-5	cis-1,3-Dichloropropene	9.2	U
108-10-1	4-Methyl-2-pentanone	9.2	U
108-88-3	Toluene	9.2	U
10061-02-6	trans-1,3-Dichloropropene	9.2	U
79-00-5	1,1,2-Trichloroethane	9.2	U
142-28-9	1,3-Dichloropropane	9.2	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-16-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-14A

Sample wt/vol: 5.40 (g/mL) G Lab File ID: V1M7538.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 50 Date Analyzed: 01/22/2014

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	9.2	U
591-78-6	2-Hexanone	9.2	U
124-48-1	Dibromochloromethane	9.2	U
106-93-4	1,2-Dibromoethane	9.2	U
108-90-7	Chlorobenzene	9.2	U
630-20-6	1,1,1,2-Tetrachloroethane	9.2	U
100-41-4	Ethylbenzene	9.2	U
179601-23-1	m,p-Xylene	9.2	U
95-47-6	o-Xylene	9.2	U
1330-20-7	Xylene (Total)	9.2	U
100-42-5	Styrene	9.2	U
75-25-2	Bromoform	9.2	U
98-82-8	Isopropylbenzene	9.2	U
79-34-5	1,1,2,2-Tetrachloroethane	9.2	U
108-86-1	Bromobenzene	9.2	U
96-18-4	1,2,3-Trichloropropane	9.2	U
103-65-1	n-Propylbenzene	9.2	U
95-49-8	2-Chlorotoluene	9.2	U
108-67-8	1,3,5-Trimethylbenzene	9.2	U
106-43-4	4-Chlorotoluene	9.2	U
98-06-6	tert-Butylbenzene	9.2	U
95-63-6	1,2,4-Trimethylbenzene	9.2	U
135-98-8	sec-Butylbenzene	9.2	U
99-87-6	4-Isopropyltoluene	9.2	U
541-73-1	1,3-Dichlorobenzene	9.2	U
106-46-7	1,4-Dichlorobenzene	9.2	U
104-51-8	n-Butylbenzene	9.2	U
95-50-1	1,2-Dichlorobenzene	9.2	U
96-12-8	1,2-Dibromo-3-chloropropane	9.2	U
120-82-1	1,2,4-Trichlorobenzene	9.2	U
87-68-3	Hexachlorobutadiene	9.2	U
87-61-6	1,2,3-Trichlorobenzene	9.2	U
91-20-3	Naphthalene	9.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.2	U

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7538.D
Report Date: 31-Jan-2014 09:54

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7538.D
Lab Smp Id: N0058-14A Client Smp ID: HW-WET-SE-16-(1)_01
Inj Date : 22-JAN-2014 18:13
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-14A,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.400	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)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	3.927	3.936	(0.877)	125696	52.6263	49
$ 37 1,2-Dichloroethane-d4	102	4.193	4.202	(0.936)	35975	60.4237	56(R)
* 41 Fluorobenzene	96	4.479	4.487	(1.000)	462005	50.0000	
$ 51 Toluene-d8	98	5.897	5.906	(0.803)	438751	48.7308	45
* 60 Chlorobenzene-d5	117	7.345	7.354	(1.000)	326059	50.0000	
$ 70 Bromofluorobenzene	95	8.625	8.644	(1.174)	178747	49.5050	46
* 84 1,4-Dichlorobenzene-d4	152	9.906	9.915	(1.000)	132430	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7538.D
Report Date: 31-Jan-2014 09:54

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7538.D
Lab Smp Id: N0058-14A Client Smp ID: HW-WET-SE-16-(1)_01
Inj Date : 22-JAN-2014 18:13
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-14A,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

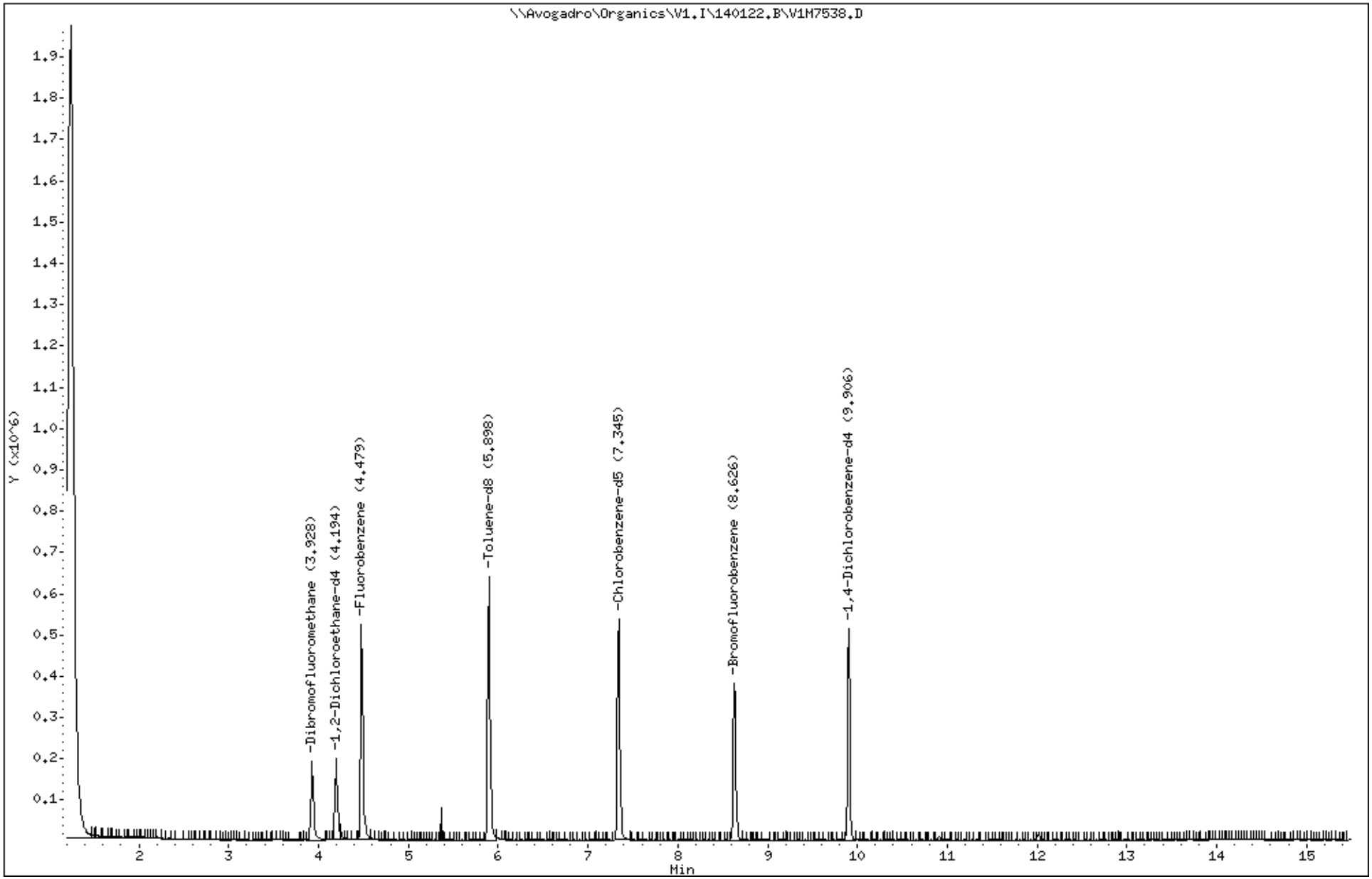
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7538.D
Date : 22-JAN-2014 18:13
Client ID: HW-WET-SE-16-(1)_01
Sample Info: 5ML,N0058-14A,,75681

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-15-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-15A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7512.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 48 Date Analyzed: 01/21/2014

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	9.1	U
74-87-3	Chloromethane	9.1	U
75-01-4	Vinyl chloride	9.1	U
74-83-9	Bromomethane	9.1	U
75-00-3	Chloroethane	9.1	U
75-69-4	Trichlorofluoromethane	9.1	U
75-35-4	1,1-Dichloroethene	9.1	U
67-64-1	Acetone	9.1	U
74-88-4	Iodomethane	9.1	U
75-15-0	Carbon disulfide	9.1	U
75-09-2	Methylene chloride	9.1	U
156-60-5	trans-1,2-Dichloroethene	9.1	U
1634-04-4	Methyl tert-butyl ether	9.1	U
75-34-3	1,1-Dichloroethane	9.1	U
108-05-4	Vinyl acetate	9.1	U
78-93-3	2-Butanone	9.1	U
156-59-2	cis-1,2-Dichloroethene	9.1	U
594-20-7	2,2-Dichloropropane	9.1	U
74-97-5	Bromochloromethane	9.1	U
67-66-3	Chloroform	9.1	U
71-55-6	1,1,1-Trichloroethane	4.7	JL
563-58-6	1,1-Dichloropropene	9.1	U
56-23-5	Carbon tetrachloride	9.1	U
107-06-2	1,2-Dichloroethane	9.1	U
71-43-2	Benzene	9.1	U
79-01-6	Trichloroethene	9.1	U
78-87-5	1,2-Dichloropropane	9.1	U
74-95-3	Dibromomethane	9.1	U
75-27-4	Bromodichloromethane	9.1	U
10061-01-5	cis-1,3-Dichloropropene	9.1	U
108-10-1	4-Methyl-2-pentanone	9.1	U
108-88-3	Toluene	9.1	U
10061-02-6	trans-1,3-Dichloropropene	9.1	U
79-00-5	1,1,2-Trichloroethane	9.1	U
142-28-9	1,3-Dichloropropane	9.1	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-15-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-15A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7512.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 48 Date Analyzed: 01/21/2014

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	9.1	U
591-78-6	2-Hexanone	9.1	U
124-48-1	Dibromochloromethane	9.1	U
106-93-4	1,2-Dibromoethane	9.1	U
108-90-7	Chlorobenzene	9.1	U
630-20-6	1,1,1,2-Tetrachloroethane	9.1	U
100-41-4	Ethylbenzene	9.1	U
179601-23-1	m,p-Xylene	9.1	U
95-47-6	o-Xylene	9.1	U
1330-20-7	Xylene (Total)	9.1	U
100-42-5	Styrene	9.1	U
75-25-2	Bromoform	9.1	U
98-82-8	Isopropylbenzene	9.1	U
79-34-5	1,1,2,2-Tetrachloroethane	9.1	U
108-86-1	Bromobenzene	9.1	U
96-18-4	1,2,3-Trichloropropane	9.1	U
103-65-1	n-Propylbenzene	9.1	U
95-49-8	2-Chlorotoluene	9.1	U
108-67-8	1,3,5-Trimethylbenzene	9.1	U
106-43-4	4-Chlorotoluene	9.1	U
98-06-6	tert-Butylbenzene	9.1	U
95-63-6	1,2,4-Trimethylbenzene	9.1	U
135-98-8	sec-Butylbenzene	9.1	U
99-87-6	4-Isopropyltoluene	9.1	U
541-73-1	1,3-Dichlorobenzene	9.1	U
106-46-7	1,4-Dichlorobenzene	9.1	U
104-51-8	n-Butylbenzene	9.1	U
95-50-1	1,2-Dichlorobenzene	9.1	U
96-12-8	1,2-Dibromo-3-chloropropane	9.1	U
120-82-1	1,2,4-Trichlorobenzene	9.1	U
87-68-3	Hexachlorobutadiene	9.1	U
87-61-6	1,2,3-Trichlorobenzene	9.1	U
91-20-3	Naphthalene	9.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.1	U

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7512.D
Report Date: 31-Jan-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7512.D
Lab Smp Id: N0058-15A Client Smp ID: HW-WET-SE-15-(1)_01
Inj Date : 21-JAN-2014 20:42
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-15A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.300	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)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	3.921	3.913	(0.877)	135602	51.8682	49
33 1,1,1-Trichloroethane	97	3.950	3.952	(0.883)	9074	2.55677	2
$ 37 1,2-Dichloroethane-d4	102	4.187	4.187	(0.936)	34120	52.3564	49
* 41 Fluorobenzene	96	4.472	4.474	(1.000)	505700	50.0000	
$ 51 Toluene-d8	98	5.891	5.892	(0.804)	470038	50.8554	48
* 60 Chlorobenzene-d5	117	7.329	7.331	(1.000)	334717	50.0000	
$ 70 Bromofluorobenzene	95	8.619	8.621	(1.176)	184980	49.9061	47
* 84 1,4-Dichlorobenzene-d4	152	9.899	9.901	(1.000)	140091	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7512.D
Report Date: 31-Jan-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

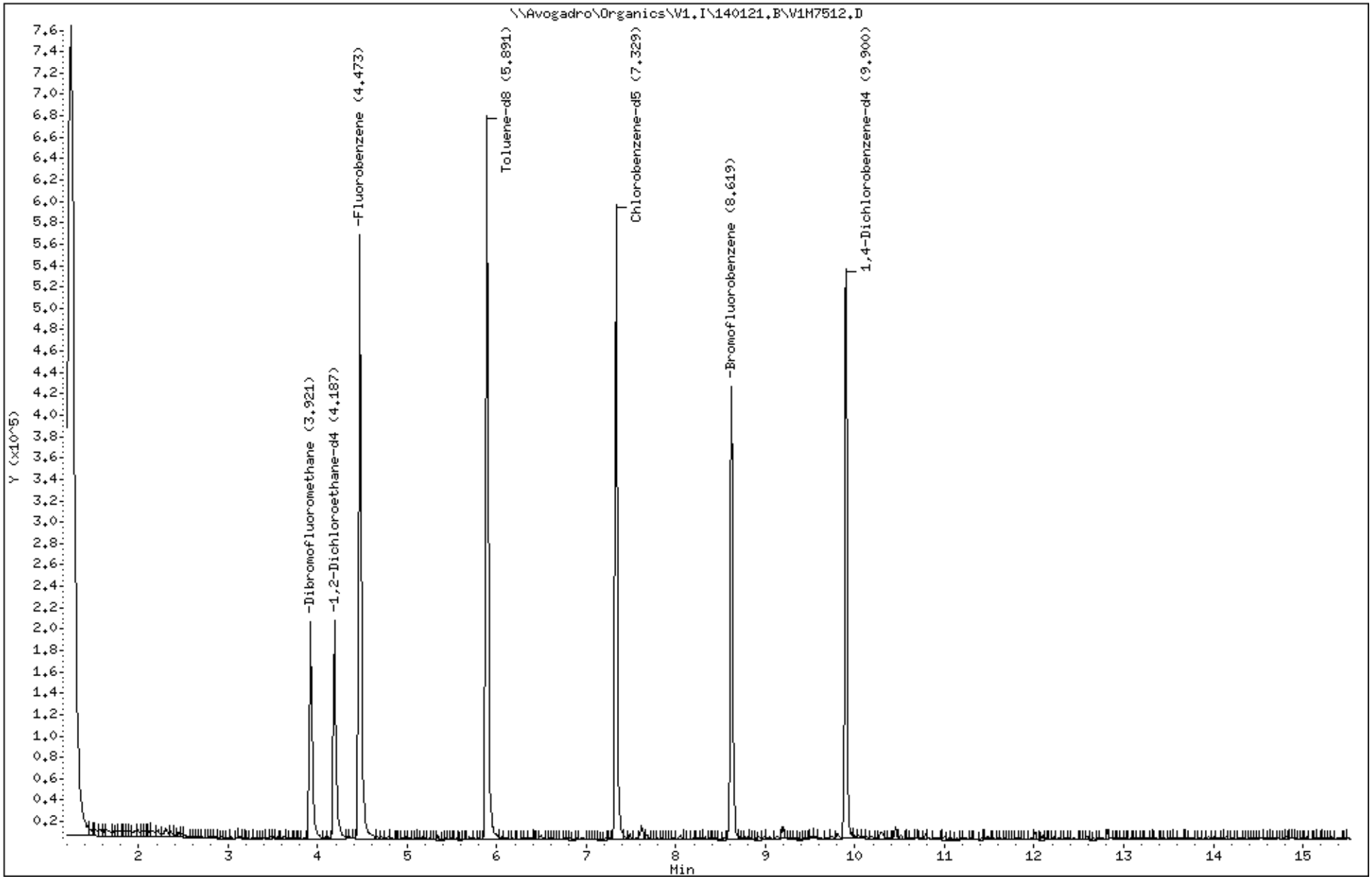
Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7512.D
Lab Smp Id: N0058-15A Client Smp ID: HW-WET-SE-15-(1)_01
Inj Date : 21-JAN-2014 20:42
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-15A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7512.D
Date : 21-JAN-2014 20:42
Client ID: HW-WET-SE-15-(1)_01
Sample Info: 5ML,N0058-15A,,75665

Instrument: V1.i

Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7512.D

Date : 21-JAN-2014 20:42

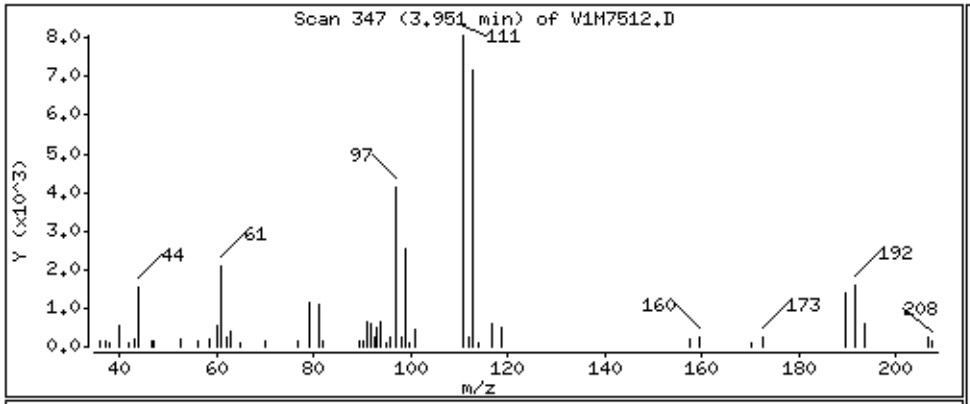
Client ID: HW-WET-SE-15-(1)_01 Instrument: V1.i

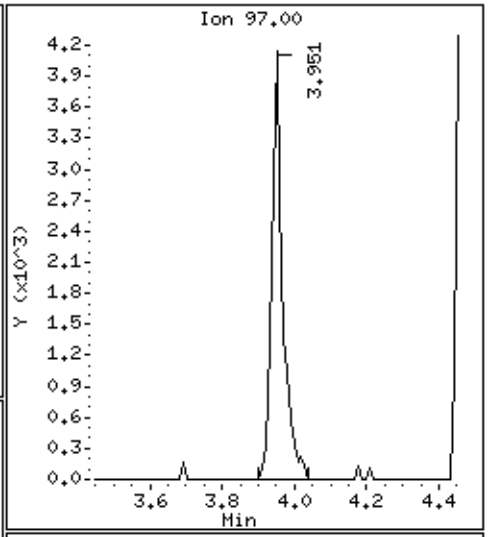
Sample Info: 5ML,N0058-15A,,75665

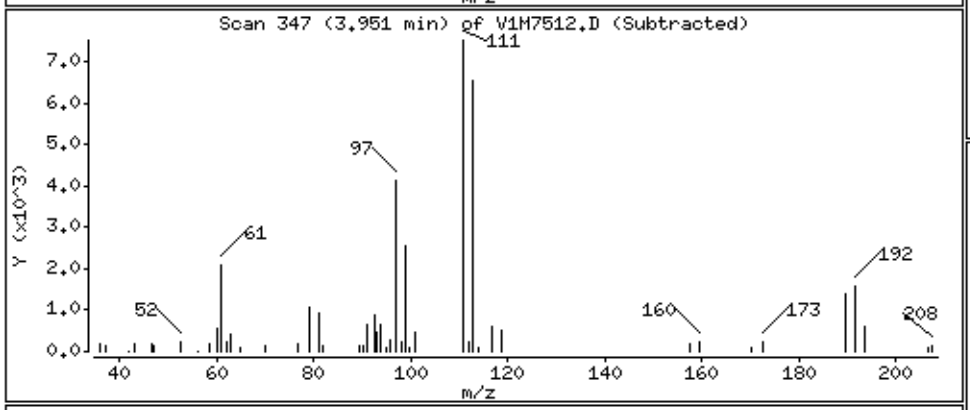
Operator: WL SRC: LIMS

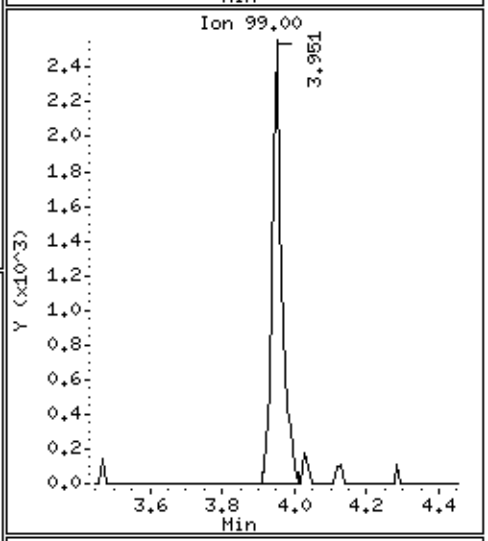
Column phase: DB-624 Column diameter: 0.25

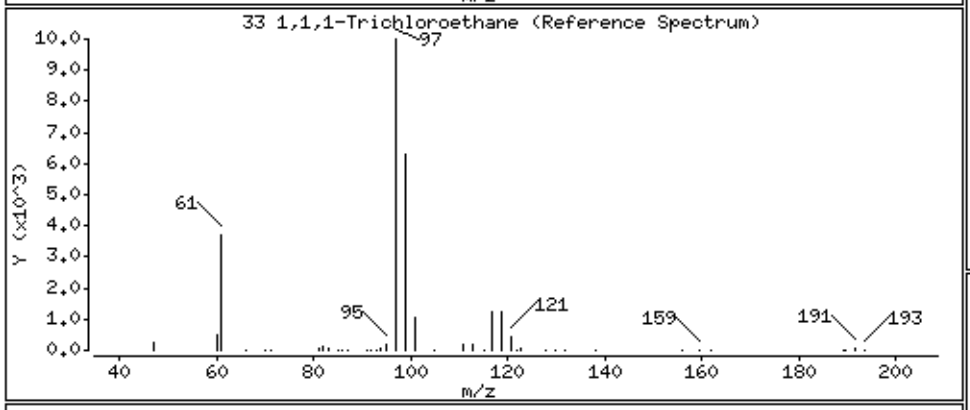
33 1,1,1-Trichloroethane Concentration: 2 ug/Kg

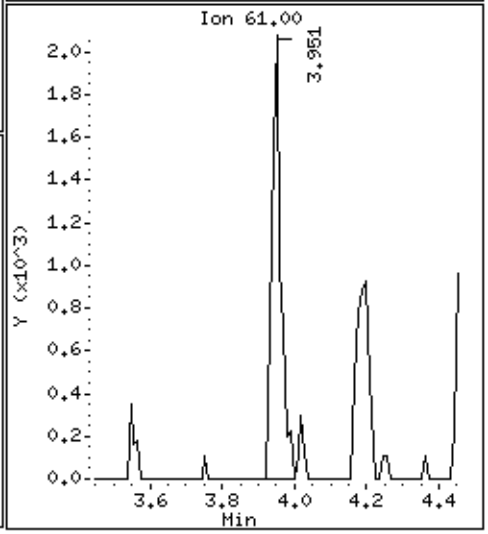


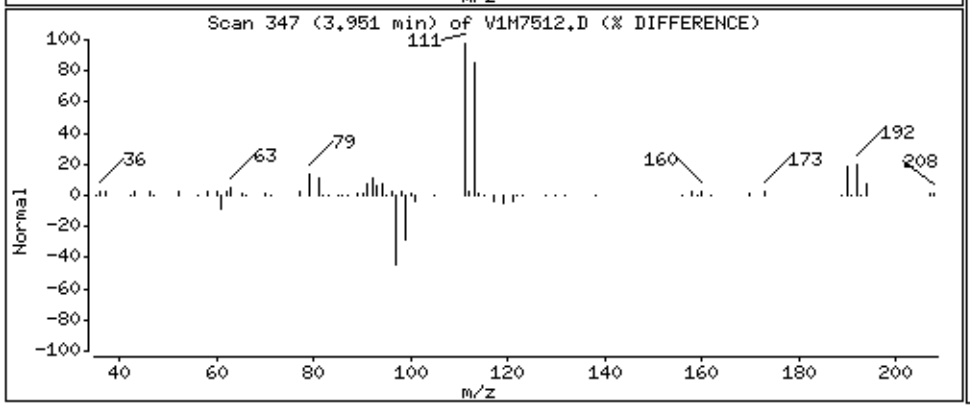












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-14-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-16A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7513.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 9.5 Date Analyzed: 01/21/2014

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	5.2	U
74-87-3	Chloromethane	5.2	U
75-01-4	Vinyl chloride	5.2	U
74-83-9	Bromomethane	5.2	U
75-00-3	Chloroethane	5.2	U
75-69-4	Trichlorofluoromethane	5.2	U
75-35-4	1,1-Dichloroethene	5.2	U
67-64-1	Acetone	5.2	U
74-88-4	Iodomethane	5.2	U
75-15-0	Carbon disulfide	5.2	U
75-09-2	Methylene chloride	5.2	U
156-60-5	trans-1,2-Dichloroethene	5.2	U
1634-04-4	Methyl tert-butyl ether	5.2	U
75-34-3	1,1-Dichloroethane	5.2	U
108-05-4	Vinyl acetate	5.2	U
78-93-3	2-Butanone	5.2	U
156-59-2	cis-1,2-Dichloroethene	5.2	U
594-20-7	2,2-Dichloropropane	5.2	U
74-97-5	Bromochloromethane	5.2	U
67-66-3	Chloroform	5.2	U
71-55-6	1,1,1-Trichloroethane	5.2	U
563-58-6	1,1-Dichloropropene	5.2	U
56-23-5	Carbon tetrachloride	5.2	U
107-06-2	1,2-Dichloroethane	5.2	U
71-43-2	Benzene	5.2	U
79-01-6	Trichloroethene	5.2	U
78-87-5	1,2-Dichloropropane	5.2	U
74-95-3	Dibromomethane	5.2	U
75-27-4	Bromodichloromethane	5.2	U
10061-01-5	cis-1,3-Dichloropropene	5.2	U
108-10-1	4-Methyl-2-pentanone	5.2	U
108-88-3	Toluene	5.2	U
10061-02-6	trans-1,3-Dichloropropene	5.2	U
79-00-5	1,1,2-Trichloroethane	5.2	U
142-28-9	1,3-Dichloropropane	5.2	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-14-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-16A

Sample wt/vol: 5.30 (g/mL) G Lab File ID: V1M7513.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 9.5 Date Analyzed: 01/21/2014

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	5.2	U
591-78-6	2-Hexanone	5.2	U
124-48-1	Dibromochloromethane	5.2	U
106-93-4	1,2-Dibromoethane	5.2	U
108-90-7	Chlorobenzene	5.2	U
630-20-6	1,1,1,2-Tetrachloroethane	5.2	U
100-41-4	Ethylbenzene	5.2	U
179601-23-1	m,p-Xylene	5.2	U
95-47-6	o-Xylene	5.2	U
1330-20-7	Xylene (Total)	5.2	U
100-42-5	Styrene	5.2	U
75-25-2	Bromoform	5.2	U
98-82-8	Isopropylbenzene	5.2	U
79-34-5	1,1,2,2-Tetrachloroethane	5.2	U
108-86-1	Bromobenzene	5.2	U
96-18-4	1,2,3-Trichloropropane	5.2	U
103-65-1	n-Propylbenzene	5.2	U
95-49-8	2-Chlorotoluene	5.2	U
108-67-8	1,3,5-Trimethylbenzene	5.2	U
106-43-4	4-Chlorotoluene	5.2	U
98-06-6	tert-Butylbenzene	5.2	U
95-63-6	1,2,4-Trimethylbenzene	5.2	U
135-98-8	sec-Butylbenzene	5.2	U
99-87-6	4-Isopropyltoluene	5.2	U
541-73-1	1,3-Dichlorobenzene	5.2	U
106-46-7	1,4-Dichlorobenzene	5.2	U
104-51-8	n-Butylbenzene	5.2	U
95-50-1	1,2-Dichlorobenzene	5.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.2	U
120-82-1	1,2,4-Trichlorobenzene	5.2	U
87-68-3	Hexachlorobutadiene	5.2	U
87-61-6	1,2,3-Trichlorobenzene	5.2	U
91-20-3	Naphthalene	5.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.2	U

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7513.D
Report Date: 31-Jan-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7513.D
Lab Smp Id: N0058-16A Client Smp ID: HW-WET-SE-14-(1)_01
Inj Date : 21-JAN-2014 21:10
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-16A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.300	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)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	3.917	3.913	(0.875)	138517	50.8842	48
$ 37 1,2-Dichloroethane-d4	102	4.192	4.187	(0.936)	34600	50.9896	48
* 41 Fluorobenzene	96	4.478	4.474	(1.000)	526560	50.0000	
$ 51 Toluene-d8	98	5.886	5.892	(0.803)	496407	50.3801	48
* 60 Chlorobenzene-d5	117	7.334	7.331	(1.000)	356829	50.0000	
$ 70 Bromofluorobenzene	95	8.625	8.621	(1.176)	191773	48.5327	46
* 84 1,4-Dichlorobenzene-d4	152	9.895	9.901	(1.000)	142056	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7513.D
Report Date: 31-Jan-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7513.D
Lab Smp Id: N0058-16A Client Smp ID: HW-WET-SE-14-(1)_01
Inj Date : 21-JAN-2014 21:10
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-16A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

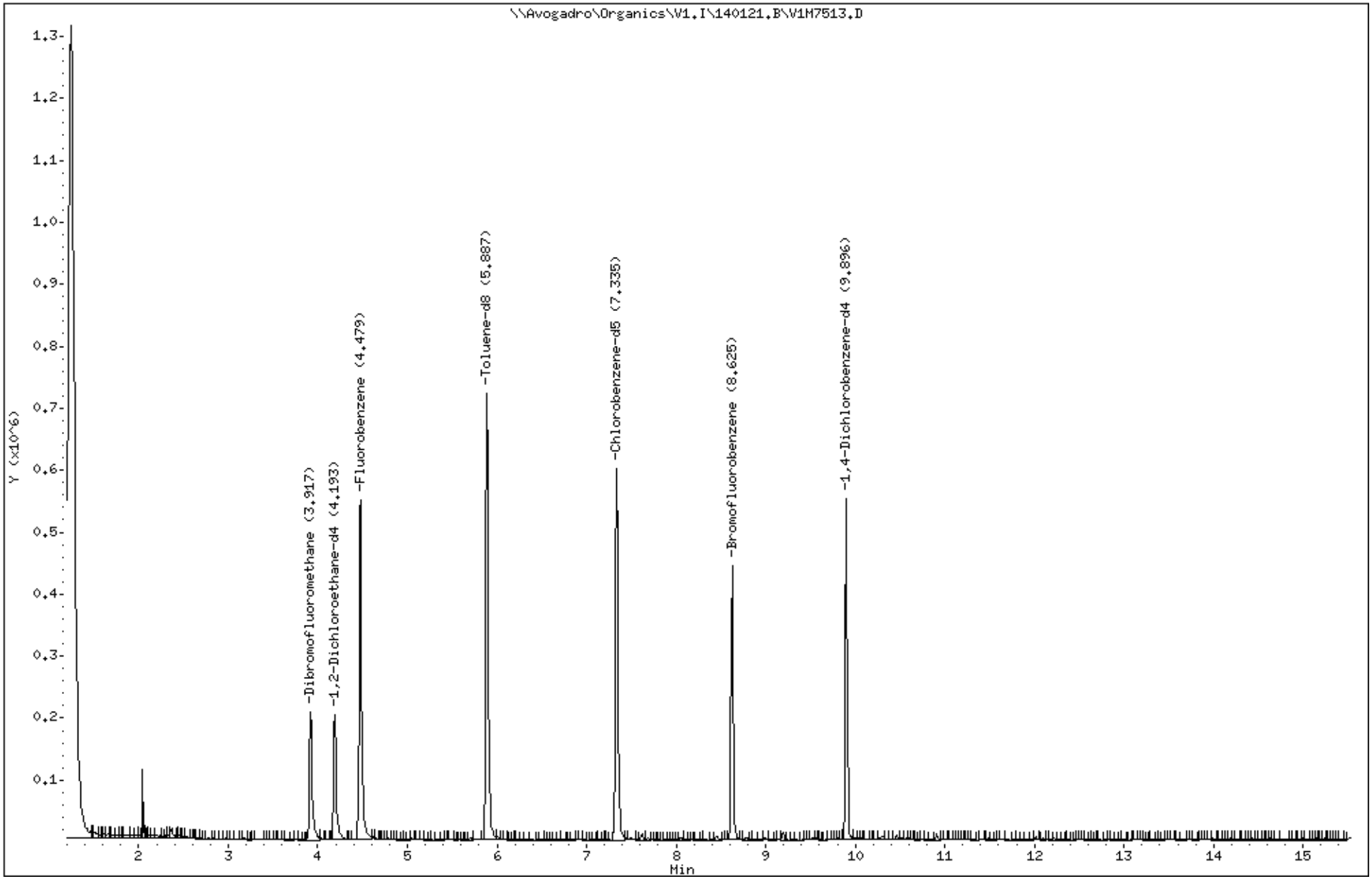
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7513.D
Date : 21-JAN-2014 21:10
Client ID: HW-WET-SE-14-(1)_01
Sample Info: 5ML,N0058-16A,,75665

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-13-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-17A

Sample wt/vol: 6.10 (g/mL) G Lab File ID: V1M7514.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 31 Date Analyzed: 01/21/2014

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	6.0	U
74-87-3	Chloromethane	6.0	U
75-01-4	Vinyl chloride	6.0	U
74-83-9	Bromomethane	6.0	U
75-00-3	Chloroethane	6.0	U
75-69-4	Trichlorofluoromethane	6.0	U
75-35-4	1,1-Dichloroethene	6.0	U
67-64-1	Acetone	6.0	U
74-88-4	Iodomethane	6.0	U
75-15-0	Carbon disulfide	6.0	U
75-09-2	Methylene chloride	6.0	U
156-60-5	trans-1,2-Dichloroethene	6.0	U
1634-04-4	Methyl tert-butyl ether	6.0	U
75-34-3	1,1-Dichloroethane	6.0	U
108-05-4	Vinyl acetate	6.0	U
78-93-3	2-Butanone	6.0	U
156-59-2	cis-1,2-Dichloroethene	6.0	U
594-20-7	2,2-Dichloropropane	6.0	U
74-97-5	Bromochloromethane	6.0	U
67-66-3	Chloroform	6.0	U
71-55-6	1,1,1-Trichloroethane	6.0	U
563-58-6	1,1-Dichloropropene	6.0	U
56-23-5	Carbon tetrachloride	6.0	U
107-06-2	1,2-Dichloroethane	6.0	U
71-43-2	Benzene	6.0	U
79-01-6	Trichloroethene	6.0	U
78-87-5	1,2-Dichloropropane	6.0	U
74-95-3	Dibromomethane	6.0	U
75-27-4	Bromodichloromethane	6.0	U
10061-01-5	cis-1,3-Dichloropropene	6.0	U
108-10-1	4-Methyl-2-pentanone	6.0	U
108-88-3	Toluene	6.0	U
10061-02-6	trans-1,3-Dichloropropene	6.0	U
79-00-5	1,1,2-Trichloroethane	6.0	U
142-28-9	1,3-Dichloropropane	6.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-13-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-17A

Sample wt/vol: 6.10 (g/mL) G Lab File ID: V1M7514.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 31 Date Analyzed: 01/21/2014

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	6.0	U
591-78-6	2-Hexanone	6.0	U
124-48-1	Dibromochloromethane	6.0	U
106-93-4	1,2-Dibromoethane	6.0	U
108-90-7	Chlorobenzene	6.0	U
630-20-6	1,1,1,2-Tetrachloroethane	6.0	U
100-41-4	Ethylbenzene	6.0	U
179601-23-1	m,p-Xylene	6.0	U
95-47-6	o-Xylene	6.0	U
1330-20-7	Xylene (Total)	6.0	U
100-42-5	Styrene	6.0	U
75-25-2	Bromoform	6.0	U
98-82-8	Isopropylbenzene	6.0	U
79-34-5	1,1,2,2-Tetrachloroethane	6.0	U
108-86-1	Bromobenzene	6.0	U
96-18-4	1,2,3-Trichloropropane	6.0	U
103-65-1	n-Propylbenzene	6.0	U
95-49-8	2-Chlorotoluene	6.0	U
108-67-8	1,3,5-Trimethylbenzene	6.0	U
106-43-4	4-Chlorotoluene	6.0	U
98-06-6	tert-Butylbenzene	6.0	U
95-63-6	1,2,4-Trimethylbenzene	6.0	U
135-98-8	sec-Butylbenzene	6.0	U
99-87-6	4-Isopropyltoluene	6.0	U
541-73-1	1,3-Dichlorobenzene	6.0	U
106-46-7	1,4-Dichlorobenzene	6.0	U
104-51-8	n-Butylbenzene	6.0	U
95-50-1	1,2-Dichlorobenzene	6.0	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	U
120-82-1	1,2,4-Trichlorobenzene	6.0	U
87-68-3	Hexachlorobutadiene	6.0	U
87-61-6	1,2,3-Trichlorobenzene	6.0	U
91-20-3	Naphthalene	6.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7514.D
Report Date: 31-Jan-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7514.D
Lab Smp Id: N0058-17A Client Smp ID: HW-WET-SE-13-(1)_01
Inj Date : 21-JAN-2014 21:38
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-17A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.100	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)	CONCENTRATIONS FINAL (ug/Kg)
$ 32 Dibromofluoromethane	113	3.917	3.913	(0.875)	133420	51.7151	42
$ 37 1,2-Dichloroethane-d4	102	4.193	4.187	(0.936)	33480	52.0604	43
* 41 Fluorobenzene	96	4.479	4.474	(1.000)	499035	50.0000	
$ 51 Toluene-d8	98	5.887	5.892	(0.803)	470074	49.4447	40
* 60 Chlorobenzene-d5	117	7.335	7.331	(1.000)	344293	50.0000	
$ 70 Bromofluorobenzene	95	8.625	8.621	(1.176)	186032	48.7940	40
* 84 1,4-Dichlorobenzene-d4	152	9.896	9.901	(1.000)	145861	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7514.D
Report Date: 31-Jan-2014 09:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7514.D
Lab Smp Id: N0058-17A Client Smp ID: HW-WET-SE-13-(1)_01
Inj Date : 21-JAN-2014 21:38
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-17A,,75665
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

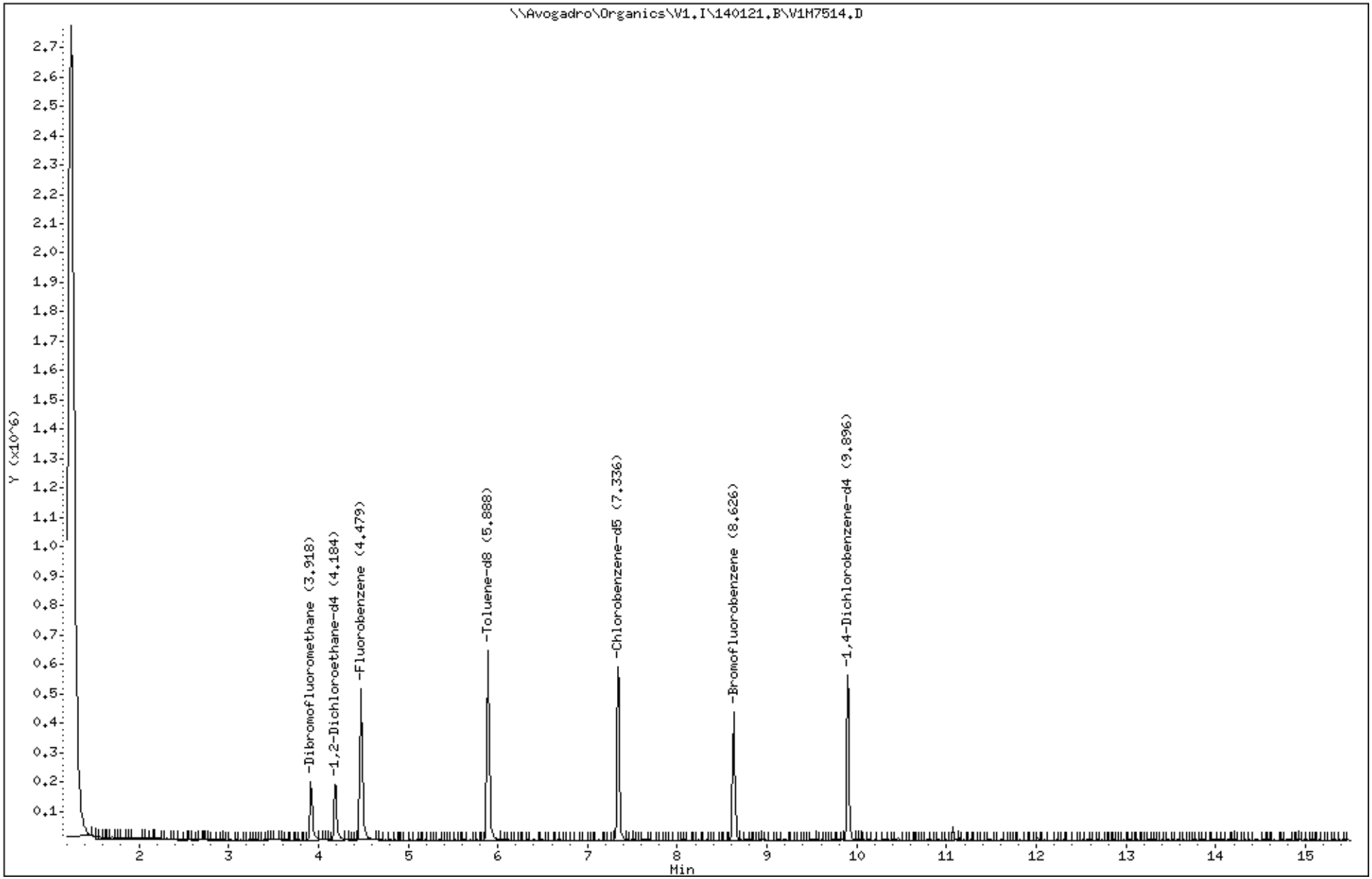
- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7514.D
Date : 21-JAN-2014 21:38
Client ID: HW-WET-SE-13-(1)_01
Sample Info: 5ML,N0058-17A,,75665

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date(s): 01/16/2014 01/16/2014

Heated Purge: (Y/N) Y Calibration Time(s): 12:54 14:46

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M7418.D RRF020 = V1M7419.D

RRF050 = V1M7420.D RRF100 = V1M7421.D RRF200 = V1M7422.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF	%RSD
Dichlorodifluoromethane	0.075	0.106	0.099	0.101	0.116	0.099	15.4
Chloromethane	0.701	0.600	0.629	0.547	0.603	0.616	9.1
Vinyl chloride	0.356	0.371	0.407	0.348	0.389	0.374	6.5
Bromomethane	0.291	0.272	0.267	0.227	0.245	0.260	9.6
Chloroethane	0.289	0.269	0.274	0.224	0.250	0.261	9.6
Trichlorofluoromethane	0.214	0.286	0.280	0.262	0.282	0.265	11.3
1,1-Dichloroethene	0.316	0.227	0.291	0.262	0.278	0.275	12.2
Acetone	0.073	0.065	0.068	0.062	0.088	0.071	14.1
Iodomethane	0.276	0.152	0.400	0.322	0.325	0.295	31.0
Carbon disulfide	0.905	0.767	0.829	0.751	0.848	0.820	7.6
Methylene chloride	0.264	0.282	0.304	0.249	0.264	0.273	7.7
trans-1,2-Dichloroethene	0.303	0.283	0.301	0.262	0.315	0.293	7.1
Methyl tert-butyl ether	0.952	0.922	1.055	0.816	0.982	0.946	9.3
1,1-Dichloroethane	0.655	0.608	0.683	0.549	0.667	0.632	8.6
Vinyl acetate	1.603	1.598	1.760	1.380	1.641	1.596	8.6
2-Butanone	0.052	0.046	0.058	0.047	0.063	0.053	13.2
cis-1,2-Dichloroethene	0.347	0.337	0.370	0.291	0.360	0.341	9.0
2,2-Dichloropropane	0.212	0.207	0.213	0.179	0.199	0.202	7.0
Bromochloromethane	0.152	0.148	0.164	0.131	0.163	0.151	8.9
Chloroform	0.561	0.516	0.559	0.463	0.544	0.529	7.7
1,1,1-Trichloroethane	0.318	0.290	0.324	0.275	0.315	0.304	6.8
1,1-Dichloropropene	0.132	0.121	0.130	0.118	0.138	0.128	6.5
Carbon tetrachloride	0.268	0.259	0.276	0.236	0.278	0.263	6.5
1,2-Dichloroethane	0.376	0.341	0.395	0.301	0.363	0.355	10.1
Benzene	1.276	1.233	1.328	1.113	1.291	1.248	6.7
Trichloroethene	0.262	0.251	0.273	0.240	0.274	0.260	5.6
1,2-Dichloropropane	0.404	0.389	0.422	0.333	0.400	0.390	8.7
Dibromomethane	0.182	0.180	0.205	0.166	0.200	0.187	8.3
Bromodichloromethane	0.412	0.389	0.442	0.354	0.432	0.406	8.7
cis-1,3-Dichloropropene	0.477	0.519	0.587	0.474	0.575	0.527	10.0
4-Methyl-2-pentanone	0.513	0.444	0.537	0.458	0.561	0.503	10.0
Toluene	1.242	1.194	1.266	1.059	1.191	1.190	6.7
trans-1,3-Dichloropropene	0.373	0.421	0.483	0.388	0.466	0.426	11.1
1,1,2-Trichloroethane	0.244	0.234	0.274	0.220	0.264	0.247	8.8
1,3-Dichloropropane	0.739	0.703	0.811	0.639	0.763	0.731	8.9
Tetrachloroethene	0.293	0.290	0.306	0.274	0.321	0.297	5.9
2-Hexanone	0.583	0.475	0.656	0.610	0.768	0.618	17.3
Dibromochloromethane	0.364	0.403	0.463	0.379	0.469	0.416	11.5
1,2-Dibromoethane	0.376	0.387	0.452	0.353	0.431	0.400	10.2

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date(s): 01/16/2014 01/16/2014

Heated Purge: (Y/N) Y Calibration Time(s): 12:54 14:46

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M7418.D RRF020 = V1M7419.D

RRF050 = V1M7420.D RRF100 = V1M7421.D RRF200 = V1M7422.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Chlorobenzene	1.065	1.048	1.158	0.955	1.106	1.067	7.1
1,1,1,2-Tetrachloroethane	0.350	0.375	0.405	0.332	0.398	0.372	8.3
Ethylbenzene	0.540	0.530	0.591	0.504	0.593	0.552	7.1
m,p-Xylene	0.719	0.701	0.737	0.635	0.721	0.703	5.7
o-Xylene	0.697	0.679	0.734	0.617	0.712	0.688	6.4
Xylene (Total)	0.712	0.694	0.736	0.629	0.718	0.698	5.9
Styrene	1.189	1.158	1.326	1.077	1.238	1.197	7.7
Bromoform	0.190	0.229	0.276	0.227	0.278	0.240	15.5
Isopropylbenzene	1.660	1.697	1.814	1.598	1.779	1.710	5.1
1,1,2,2-Tetrachloroethane	1.236	1.180	1.354	1.072	1.315	1.232	9.1
Bromobenzene	0.932	0.924	1.008	0.819	0.998	0.936	8.1
1,2,3-Trichloropropane	1.304	1.228	1.444	1.148	1.491	1.323	10.9
n-Propylbenzene	1.003	0.947	1.036	0.899	1.093	0.996	7.6
2-Chlorotoluene	0.913	0.870	0.926	0.806	0.965	0.896	6.7
1,3,5-Trimethylbenzene	3.555	3.317	3.582	3.078	3.421	3.391	6.0
4-Chlorotoluene	0.932	0.913	0.998	0.826	0.975	0.929	7.2
tert-Butylbenzene	3.318	3.263	3.421	3.002	3.353	3.272	4.9
1,2,4-Trimethylbenzene	3.465	3.345	3.621	3.091	3.511	3.406	5.9
sec-Butylbenzene	4.347	4.391	4.539	4.097	4.526	4.380	4.1
4-Isopropyltoluene	3.426	3.305	3.425	3.079	3.407	3.329	4.4
1,3-Dichlorobenzene	1.689	1.611	1.753	1.481	1.737	1.654	6.7
1,4-Dichlorobenzene	1.726	1.632	1.766	1.508	1.761	1.678	6.5
n-Butylbenzene	3.473	3.309	3.488	3.212	3.491	3.394	3.7
1,2-Dichlorobenzene	1.523	1.604	1.645	1.388	1.600	1.552	6.6
1,2-Dibromo-3-chloropropane	0.128	0.143	0.165	0.126	0.155	0.143	11.9
1,2,4-Trichlorobenzene	0.924	0.870	0.951	0.856	0.994	0.919	6.3
Hexachlorobutadiene	0.477	0.438	0.457	0.418	0.446	0.447	4.9
1,2,3-Trichlorobenzene	0.694	0.712	0.802	0.714	0.803	0.745	7.1
Naphthalene	2.061	1.841	2.102	1.839	2.154	1.999	7.5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.187	0.153	0.231	0.143	0.178	0.178	19.2

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date(s): 01/16/2014 01/16/2014

Heated Purge: (Y/N) Y Calibration Time(s): 12:54 14:46

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M7418.D RRF020 = V1M7419.D

RRF050 = V1M7420.D RRF100 = V1M7421.D RRF200 = V1M7422.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dibromofluoromethane	0.254	0.262	0.258	0.256	0.254	0.257	1.3
1,2-Dichloroethane-d4	0.067	0.071	0.065	0.075	0.064	0.068	6.7
Toluene-d8	1.423	1.367	1.401	1.401	1.413	1.401	1.5
Bromofluorobenzene	0.534	0.546	0.536	0.559	0.555	0.546	2.0

6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) Y Calibration Time(s): 13:38 15:31

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M7497.D RRF020 = V1M7498.D

RRF050 = V1M7499.D RRF100 = V1M7500.D RRF200 = V1M7501.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.104	0.131	0.143	0.148	0.129	0.131	13.0
Chloromethane	0.616	0.619	0.674	0.859	0.702	0.694	14.3
Vinyl chloride	0.392	0.420	0.429	0.573	0.460	0.455	15.5
Bromomethane	0.291	0.271	0.291	0.375	0.296	0.305	13.3
Chloroethane	0.284	0.272	0.285	0.374	0.293	0.302	13.7
Trichlorofluoromethane	0.287	0.290	0.314	0.404	0.336	0.326	14.7
1,1-Dichloroethene	0.307	0.295	0.303	0.397	0.331	0.327	12.8
Acetone	0.078	0.067	0.069	0.098	0.075	0.078	16.0
Iodomethane	0.383	0.307	0.354	0.501	0.414	0.392	18.6
Carbon disulfide	0.860	0.848	0.942	1.233	0.922	0.961	16.3
Methylene chloride	0.305	0.266	0.327	0.426	0.348	0.335	17.8
trans-1,2-Dichloroethene	0.301	0.287	0.322	0.416	0.349	0.335	15.1
Methyl tert-butyl ether	0.908	1.008	1.060	1.389	1.148	1.103	16.5
1,1-Dichloroethane	0.645	0.662	0.695	0.891	0.724	0.724	13.6
Vinyl acetate	1.589	1.626	1.750	2.235	1.791	1.798	14.4
2-Butanone	0.051	0.060	0.058	0.079	0.060	0.062	17.1
cis-1,2-Dichloroethene	0.357	0.352	0.371	0.486	0.396	0.392	14.0
2,2-Dichloropropane	0.237	0.232	0.219	0.272	0.210	0.234	10.3
Bromochloromethane	0.156	0.155	0.170	0.224	0.182	0.177	15.9
Chloroform	0.556	0.554	0.578	0.731	0.597	0.603	12.2
1,1,1-Trichloroethane	0.328	0.319	0.333	0.429	0.345	0.351	12.7
1,1-Dichloropropene	0.150	0.144	0.140	0.185	0.150	0.154	11.5
Carbon tetrachloride	0.252	0.289	0.285	0.375	0.296	0.299	15.2
1,2-Dichloroethane	0.365	0.356	0.396	0.495	0.406	0.404	13.7
Benzene	1.302	1.323	1.382	1.744	1.404	1.431	12.6
Trichloroethene	0.292	0.292	0.287	0.365	0.299	0.307	10.7
1,2-Dichloropropane	0.385	0.401	0.424	0.543	0.437	0.438	14.2
Dibromomethane	0.200	0.203	0.219	0.275	0.226	0.224	13.5
Bromodichloromethane	0.396	0.418	0.447	0.582	0.477	0.464	15.6
cis-1,3-Dichloropropene	0.527	0.573	0.610	0.779	0.640	0.626	15.2
4-Methyl-2-pentanone	0.493	0.527	0.589	0.800	0.652	0.612	19.8
Toluene	1.235	1.272	1.291	1.649	1.315	1.352	12.4
trans-1,3-Dichloropropene	0.408	0.454	0.484	0.661	0.538	0.509	19.1
1,1,2-Trichloroethane	0.236	0.252	0.283	0.373	0.307	0.290	18.5
1,3-Dichloropropane	0.684	0.758	0.811	1.041	0.853	0.829	16.2
Tetrachloroethene	0.308	0.320	0.320	0.423	0.347	0.343	13.5
2-Hexanone	0.583	0.648	0.692	0.896	0.698	0.703	16.7
Dibromochloromethane	0.410	0.441	0.484	0.639	0.530	0.501	17.9
1,2-Dibromoethane	0.346	0.422	0.459	0.585	0.493	0.461	19.1

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) Y Calibration Time(s): 13:38 15:31

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M7497.D RRF020 = V1M7498.D

RRF050 = V1M7499.D RRF100 = V1M7500.D RRF200 = V1M7501.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Chlorobenzene	1.095	1.133	1.170	1.501	1.212	1.222	13.2
1,1,1,2-Tetrachloroethane	0.338	0.402	0.422	0.537	0.444	0.429	16.9
Ethylbenzene	0.574	0.582	0.614	0.773	0.642	0.637	12.7
m,p-Xylene	0.701	0.767	0.764	0.967	0.782	0.796	12.6
o-Xylene	0.697	0.716	0.762	0.958	0.778	0.782	13.2
Xylene (Total)	0.700	0.750	0.763	0.964	0.781	0.792	12.8
Styrene	1.211	1.245	1.338	1.701	1.368	1.373	14.2
Bromoform	0.198	0.263	0.298	0.403	0.342	0.301	25.8
Isopropylbenzene	1.766	1.866	1.866	2.413	1.936	1.969	13.0
1,1,2,2-Tetrachloroethane	1.163	1.266	1.378	1.765	1.564	1.427	16.8
Bromobenzene	0.880	0.993	0.993	1.278	1.119	1.053	14.4
1,2,3-Trichloropropane	1.291	1.366	1.497	1.972	1.181	1.461	21.1
n-Propylbenzene	0.886	1.061	1.017	1.320	1.127	1.082	14.7
2-Chlorotoluene	0.858	0.930	0.961	1.230	1.039	1.004	14.2
1,3,5-Trimethylbenzene	3.286	3.458	3.538	4.434	3.689	3.681	12.1
4-Chlorotoluene	0.963	0.960	0.987	1.255	1.066	1.046	11.9
tert-Butylbenzene	3.092	3.383	3.460	4.391	3.586	3.582	13.6
1,2,4-Trimethylbenzene	3.329	3.592	3.597	4.529	3.770	3.763	12.1
sec-Butylbenzene	4.279	4.644	4.577	5.817	4.814	4.826	12.2
4-Isopropyltoluene	3.025	3.499	3.449	4.410	3.618	3.600	14.0
1,3-Dichlorobenzene	1.514	1.757	1.764	2.247	1.934	1.843	14.7
1,4-Dichlorobenzene	1.605	1.747	1.808	2.335	1.951	1.889	14.7
n-Butylbenzene	3.074	3.549	3.554	4.537	3.617	3.666	14.6
1,2-Dichlorobenzene	1.507	1.649	1.676	2.142	1.825	1.760	13.7
1,2-Dibromo-3-chloropropane	0.138	0.154	0.170	0.228	0.191	0.176	19.9
1,2,4-Trichlorobenzene	0.741	0.946	1.010	1.326	1.072	1.019	20.8
Hexachlorobutadiene	0.377	0.506	0.484	0.599	0.442	0.482	17.1
1,2,3-Trichlorobenzene	0.574	0.764	0.868	1.140	0.904	0.850	24.3
Naphthalene	1.915	2.044	2.331	3.070	2.580	2.388	19.3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.174	0.200	0.235	0.313	0.250	0.235	22.6

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) Y Calibration Time(s): 13:38 15:31

Purge Volume: 10.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF005 = V1M7497.D RRF020 = V1M7498.D

RRF050 = V1M7499.D RRF100 = V1M7500.D RRF200 = V1M7501.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
Dibromofluoromethane	0.257	0.257	0.252	0.265	0.261	0.258	2.0
1,2-Dichloroethane-d4	0.065	0.066	0.063	0.063	0.065	0.064	2.5
Toluene-d8	1.375	1.399	1.390	1.367	1.373	1.381	1.0
Bromofluorobenzene	0.534	0.543	0.560	0.569	0.562	0.554	2.6

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0058 SAS No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) N Calibration Times: 10:59 13:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5O9512.D RRF020 = V5O9513.D RRF050 = V5O9514.D RRF100 = V5O9515.D RRF200 = V5O9516.D
RRF001 = V5O9511.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.590	0.583	0.632	0.580	0.551	0.529					0.577	6.1
Chloromethane	0.819	0.802	0.763	0.768	0.769	0.802					0.787	3.0
Vinyl chloride	0.614	0.636	0.624	0.603	0.583	0.694					0.626	6.1
Bromomethane	0.598	0.525	0.486	0.483	0.433	0.674					0.533	16.6
Chloroethane	0.349	0.324	0.310	0.309	0.303	0.347					0.324	6.2
Trichlorofluoromethane	0.769	0.804	0.779	0.743	0.800	0.577					0.745	11.4
1,1-Dichloroethene	0.598	0.595	0.600	0.554	0.581	0.636					0.594	4.5
Acetone	0.039	0.055	0.058	0.052	0.056						0.052	14.2
Iodomethane	1.679	1.625	1.635	1.519	1.618	1.717					1.632	4.1
Carbon disulfide	2.330	2.346	2.336	2.271	2.283	2.735					2.384	7.3
Methylene chloride	0.705	0.694	0.696	0.671	0.651	0.813					0.705	8.0
trans-1,2-Dichloroethene	0.666	0.650	0.673	0.625	0.627	0.708					0.658	4.7
Methyl tert-butyl ether	1.978	1.999	1.945	1.870	1.836	1.966					1.932	3.4
1,1-Dichloroethane	1.116	1.099	1.120	1.067	1.049	1.296					1.124	7.9
Vinyl acetate	2.054	2.048	2.041	1.950	1.917	2.107					2.019	3.5
2-Butanone	0.050	0.073	0.075	0.076	0.069						0.069	15.4
cis-1,2-Dichloroethene	0.723	0.715	0.715	0.674	0.676	0.785					0.715	5.7
2,2-Dichloropropane	0.961	0.934	0.928	0.874	0.865	1.196					0.960	12.7
Bromochloromethane	0.410	0.402	0.420	0.404	0.406	0.452					0.415	4.5
Chloroform	1.245	1.162	1.139	1.101	1.098	1.203					1.158	5.0
1,1,1-Trichloroethane	1.035	1.015	1.039	1.024	1.016	1.087					1.036	2.6
1,1-Dichloropropene	0.328	0.284	0.315	0.301	0.300	0.434					0.327	16.7
Carbon tetrachloride	0.926	0.954	0.967	0.946	0.948	0.974					0.953	1.8
1,2-Dichloroethane	0.867	0.882	0.905	0.846	0.826	0.907					0.872	3.7
Benzene	2.373	2.202	2.260	2.139	2.115	2.242					2.222	4.2
Trichloroethene	0.652	0.718	0.751	0.697	0.705	0.692					0.702	4.6
1,2-Dichloropropane	0.555	0.608	0.606	0.574	0.579	0.599					0.587	3.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0058 SAS No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) N Calibration Times: 10:59 13:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5O9512.D RRF020 = V5O9513.D RRF050 = V5O9514.D RRF100 = V5O9515.D RRF200 = V5O9516.D
RRF001 = V5O9511.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.464	0.525	0.488	0.476	0.480	0.379					0.469	10.4
Bromodichloromethane	0.920	0.874	0.884	0.852	0.862	0.931					0.887	3.6
cis-1,3-Dichloropropene	1.049	1.026	1.018	0.976	1.011	0.834					0.986	7.9
4-Methyl-2-pentanone	0.610	0.665	0.702	0.657	0.656						0.658	5.0
Toluene	2.254	2.300	2.305	2.209	2.229	2.502					2.300	4.6
trans-1,3-Dichloropropene	0.842	0.891	0.942	0.903	0.908	0.919					0.901	3.7
1,1,2-Trichloroethane	0.563	0.558	0.555	0.538	0.545	0.598					0.560	3.8
1,3-Dichloropropane	0.747	0.775	0.756	0.727	0.683	0.840					0.755	6.9
Tetrachloroethene	0.550	0.528	0.529	0.525	0.501	0.629					0.544	8.2
2-Hexanone	0.340	0.373	0.386	0.374	0.356						0.366	4.9
Dibromochloromethane	0.643	0.657	0.676	0.676	0.661	0.674					0.665	2.0
1,2-Dibromoethane	0.532	0.536	0.558	0.544	0.527	0.474					0.528	5.5
Chlorobenzene	1.351	1.298	1.289	1.276	1.220	1.350					1.297	3.8
1,1,1,2-Tetrachloroethane	0.566	0.535	0.554	0.557	0.538	0.574					0.554	2.8
Ethylbenzene	0.628	0.599	0.623	0.626	0.587	0.709					0.629	6.8
m,p-Xylene	0.793	0.757	0.765	0.761	0.704	0.787					0.761	4.1
o-Xylene	0.723	0.764	0.756	0.756	0.708	0.708					0.736	3.5
Xylene (Total)	0.770	0.760	0.762	0.759	0.706	0.760					0.753	3.1
Styrene	1.240	1.295	1.307	1.317	1.250	1.245					1.276	2.7
Bromoform	0.502	0.547	0.558	0.558	0.559	0.329					0.509	17.9
Isopropylbenzene	1.823	1.821	1.898	1.877	1.808	1.873					1.850	2.0
1,1,2,2-Tetrachloroethane	0.934	0.962	0.927	0.916	0.867	1.029					0.939	5.7
Bromobenzene	1.081	1.010	1.027	1.036	1.006	1.076					1.039	3.1
1,2,3-Trichloropropane	1.037	1.004	1.062	1.071	0.971	1.063					1.035	3.8
n-Propylbenzene	0.738	0.706	0.727	0.745	0.705	0.700					0.720	2.7
2-Chlorotoluene	0.795	0.743	0.743	0.745	0.716	0.722					0.744	3.7
1,3,5-Trimethylbenzene	2.255	2.202	2.222	2.235	2.094	2.239					2.208	2.7

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0058 SAS No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) N Calibration Times: 10:59 13:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5O9512.D RRF020 = V5O9513.D RRF050 = V5O9514.D RRF100 = V5O9515.D RRF200 = V5O9516.D
RRF001 = V5O9511.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.798	0.777	0.754	0.765	0.729	0.697					0.753	4.8
tert-Butylbenzene	2.368	2.319	2.321	2.275	2.175	2.190					2.275	3.4
1,2,4-Trimethylbenzene	2.447	2.329	2.321	2.306	2.194	2.435					2.339	4.0
sec-Butylbenzene	2.547	2.506	2.579	2.565	2.423	2.706					2.554	3.6
4-Isopropyltoluene	2.279	2.110	2.148	2.175	2.035	2.184					2.155	3.8
1,3-Dichlorobenzene	1.709	1.587	1.630	1.624	1.573	1.716					1.640	3.7
1,4-Dichlorobenzene	1.801	1.702	1.705	1.708	1.637	1.982					1.756	7.0
n-Butylbenzene	1.825	1.814	1.892	1.855	1.849	1.988					1.871	3.4
1,2-Dichlorobenzene	1.581	1.618	1.611	1.590	1.549	1.628					1.596	1.8
1,2-Dibromo-3-chloropropane	0.130	0.143	0.151	0.135	0.127	0.056					0.124	27.8
1,2,4-Trichlorobenzene	1.023	0.984	1.037	0.984	0.922	0.981					0.989	4.0
Hexachlorobutadiene	0.594	0.588	0.587	0.578	0.542	0.627					0.586	4.7
1,2,3-Trichlorobenzene	0.765	0.748	0.819	0.750	0.647	0.818					0.758	8.3
Naphthalene	1.707	1.799	1.886	1.723	1.521	1.537					1.696	8.5
1,1,2-Trichloro-1,2,2-trifluoroe	0.718	0.753	0.743	0.695	0.670	0.660					0.707	5.4

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0058 SAS No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date(s): 01/21/2014 01/21/2014

Heated Purge: (Y/N) N Calibration Times: 10:59 13:07

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V5O9512.D RRF020 = V5O9513.D RRF050 = V5O9514.D RRF100 = V5O9515.D RRF200 = V5O9516.D
RRF001 = V5O9511.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.407	0.404	0.401	0.393	0.417	0.406					0.405	2.0
1,2-Dichloroethane-d4	0.071	0.070	0.070	0.069	0.073	0.071					0.070	2.0
Toluene-d8	0.898	0.936	0.921	0.936	0.940	0.921					0.925	1.7
Bromofluorobenzene	0.547	0.559	0.559	0.549	0.563	0.536					0.552	1.9

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\avogadro\organics\V5.I\140121.B\V5O9511.D
Report Date: 22-Jan-2014 15:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140121.B\V5O9511.D
Lab Smp Id: VSTD0015K Client Smp ID: VSTD0015K
Inj Date : 21-JAN-2014 10:59
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD0015K,VSTD0015K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140121.B\v5_8260W.m
Meth Date : 22-Jan-2014 14:03 wluo Quant Type: ISTD
Cal Date : 21-JAN-2014 10:59 Cal File: V5O9511.D
Als bottle: 2 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	1.618	1.609	(0.290)	1183	1.00000	0.9
2	Freon114	85	1.723	1.737	(0.309)	801	1.00000	0.6
3	Chloromethane	50	1.699	1.725	(0.305)	1793	1.00000	1
4	Vinyl Chloride	62	1.839	1.853	(0.330)	1551	1.00000	1
5	Bromomethane	94	2.129	2.143	(0.382)	1506	1.00000	1
6	Chloroethane	64	2.233	2.225	(0.401)	775	1.00000	1
7	Trichlorofluoromethane	101	2.477	2.492	(0.444)	1290	1.00000	0.8(Q)
9	Ether	59	2.686	2.689	(0.482)	808	1.00000	0.8(Q)
11	1,1-Dichloroethene	96	2.884	2.886	(0.517)	1421	1.00000	1
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.918	2.933	(0.523)	1475	1.00000	0.9
14	Iodomethane	142	3.034	3.026	(0.544)	3838	1.00000	1
15	Carbon Disulfide	76	3.093	3.084	(0.555)	6115	1.00000	1
16	Acetonitrile	41	3.197	3.200	(0.573)	4043	1.00000	10
17	Allyl Chloride	39	3.209	3.200	(0.575)	2441	1.00000	1(Q)
18	Methyl Acetate	43	3.232	3.211	(0.580)	1621	1.00000	1
19	Methylene Chloride	84	3.313	3.304	(0.594)	1817	1.00000	1
21	Acrylonitrile	53	3.522	3.513	(0.632)	462	1.00000	0.8(TQ)
22	trans-1,2-Dichloroethene	96	3.557	3.548	(0.638)	1582	1.00000	1
23	Methyl tert-butyl ether	73	3.557	3.560	(0.638)	4395	1.00000	1
24	1,1-Dichloroethane	63	3.928	3.920	(0.704)	2897	1.00000	1
25	Vinyl acetate	43	3.986	3.978	(0.715)	4709	1.00000	1(T)
26	Diisopropyl Ether	45	3.986	3.989	(0.715)	5626	1.00000	1
27	2-Chloro-1,3-Butadiene	53	4.010	4.012	(0.719)	2187	1.00000	1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	28 Ethyl tert-butyl ether	59	4.323	4.326	(0.775)	4878	1.00000	1
	29 cis-1,2-Dichloroethene	96	4.462	4.454	(0.800)	1755	1.00000	1
	31 2,2-Dichloropropane	77	4.474	4.465	(0.802)	2674	1.00000	1
	33 Methacrylonitrile	41	4.660	4.663	(0.836)	1407	1.00000	2
	34 Bromochloromethane	128	4.683	4.686	(0.840)	1010	1.00000	1(Q)
	36 Chloroform	83	4.753	4.755	(0.852)	2690	1.00000	1
$	37 Dibromofluoromethane	113	4.904	4.906	(0.879)	45351	50.0000	50
	38 1,1,1-Trichloroethane	97	4.950	4.941	(0.888)	2431	1.00000	1
	39 Cyclohexane	56	4.997	5.011	(0.896)	1977	1.00000	1.0
	40 1,1-Dichloropropene	110	5.089	5.104	(0.913)	971	1.00000	1(Q)
	41 Carbon Tetrachloride	117	5.113	5.104	(0.917)	2178	1.00000	1
	42 Isobutyl Alcohol	43	5.217	5.197	(0.935)	851	1.00000	17(T)
$	43 1,2-Dichloroethane-d4	102	5.240	5.231	(0.940)	7953	50.0000	50
	44 Benzene	78	5.298	5.301	(0.950)	5011	1.00000	1
	45 1,2-Dichloroethane	62	5.310	5.313	(0.952)	2027	1.00000	1(T)
	46 tert-Amyl methyl ether	73	5.426	5.417	(0.973)	4804	1.00000	1
*	47 Fluorobenzene	96	5.577	5.580	(1.000)	111773	50.0000	
	48 Trichloroethene	130	5.948	5.951	(1.067)	1547	1.00000	1.0
	49 Methylcyclohexane	83	6.169	6.172	(1.106)	1951	1.00000	1
	50 1,2-Dichloropropane	63	6.181	6.183	(1.108)	1340	1.00000	1
	51 Methyl Methacrylate	69	6.320	6.311	(1.133)	836	1.00000	0.7(Q)
	52 Dibromomethane	93	6.297	6.311	(1.129)	847	1.00000	0.8(Q)
	54 Bromodichloromethane	83	6.483	6.474	(1.162)	2082	1.00000	1
M	55 1,2-Dichloroethene (Total)	96				3337	1.00000	2
	57 cis-1,3-Dichloropropene	75	6.970	6.973	(1.250)	1865	1.00000	0.8
	58 4-Methyl-2-pentanone	43	7.156	7.159	(1.283)	1420	1.00000	1.0(TQ)
$	59 Toluene-d8	98	7.295	7.286	(0.806)	124826	50.0000	50
	60 Toluene	91	7.365	7.368	(1.321)	5594	1.00000	1
	61 trans-1,3-Dichloropropene	75	7.620	7.623	(1.366)	2054	1.00000	1
	62 Ethyl Methacrylate	69	7.295	7.739	(1.308)	305	1.00000	0.2(TaQ)
	63 1,1,2-Trichloroethane	97	7.829	7.832	(1.404)	1337	1.00000	1
	64 Tetrachloroethene	164	8.027	8.018	(0.887)	1705	1.00000	1
	65 1,3-Dichloropropane	76	8.038	8.041	(0.888)	2276	1.00000	1
	66 2-Hexanone	43	8.154	8.145	(0.901)	803	1.00000	0.8(TQ)
	67 Dibromochloromethane	129	8.305	8.308	(0.918)	1828	1.00000	1(T)
	68 1,2-Dibromoethane	107	8.456	8.447	(0.935)	1284	1.00000	0.9(T)
*	69 Chlorobenzene-d5	117	9.048	9.039	(1.000)	135525	50.0000	
	70 1-Chlorohexane	91	9.071	9.063	(1.003)	1830	1.00000	1(Q)
	71 Chlorobenzene	112	9.083	9.074	(1.004)	3658	1.00000	1(Q)
	72 1,1,1,2-Tetrachloroethane	131	9.188	9.190	(1.015)	1557	1.00000	1
	73 Ethylbenzene	106	9.222	9.237	(1.019)	1922	1.00000	1
	74 m,p-Xylene	106	9.397	9.388	(1.038)	4266	2.00000	2
	75 o-Xylene	106	9.907	9.910	(1.095)	1918	1.00000	1.0(Q)
	76 Styrene	104	9.919	9.922	(1.096)	3374	1.00000	1.0
	77 Bromoform	173	10.140	10.142	(1.121)	891	1.00000	0.6(TQ)
	78 Isopropylbenzene	105	10.407	10.409	(1.150)	5078	1.00000	1
	79 trans-1,4-Dichloro-2-butene	75	10.499	10.491	(1.160)	358	1.00000	0.6(Q)
$	80 Bromofluorobenzene	95	10.604	10.595	(1.172)	72590	50.0000	48
	81 Bromobenzene	156	10.790	10.792	(0.884)	1909	1.00000	1
	82 1,1,2,2-Tetrachloroethane	83	10.801	10.804	(0.885)	1826	1.00000	1(T)
	83 1,2,3-Trichloropropane	75	10.848	10.862	(0.889)	1887	1.00000	1
	84 n-Propylbenzene	120	10.975	10.967	(0.899)	1243	1.00000	1.0
	85 2-Chlorotoluene	126	11.080	11.071	(0.908)	1282	1.00000	1.0(Q)
	86 4-Chlorotoluene	126	11.219	11.222	(0.919)	1237	1.00000	0.9(Q)

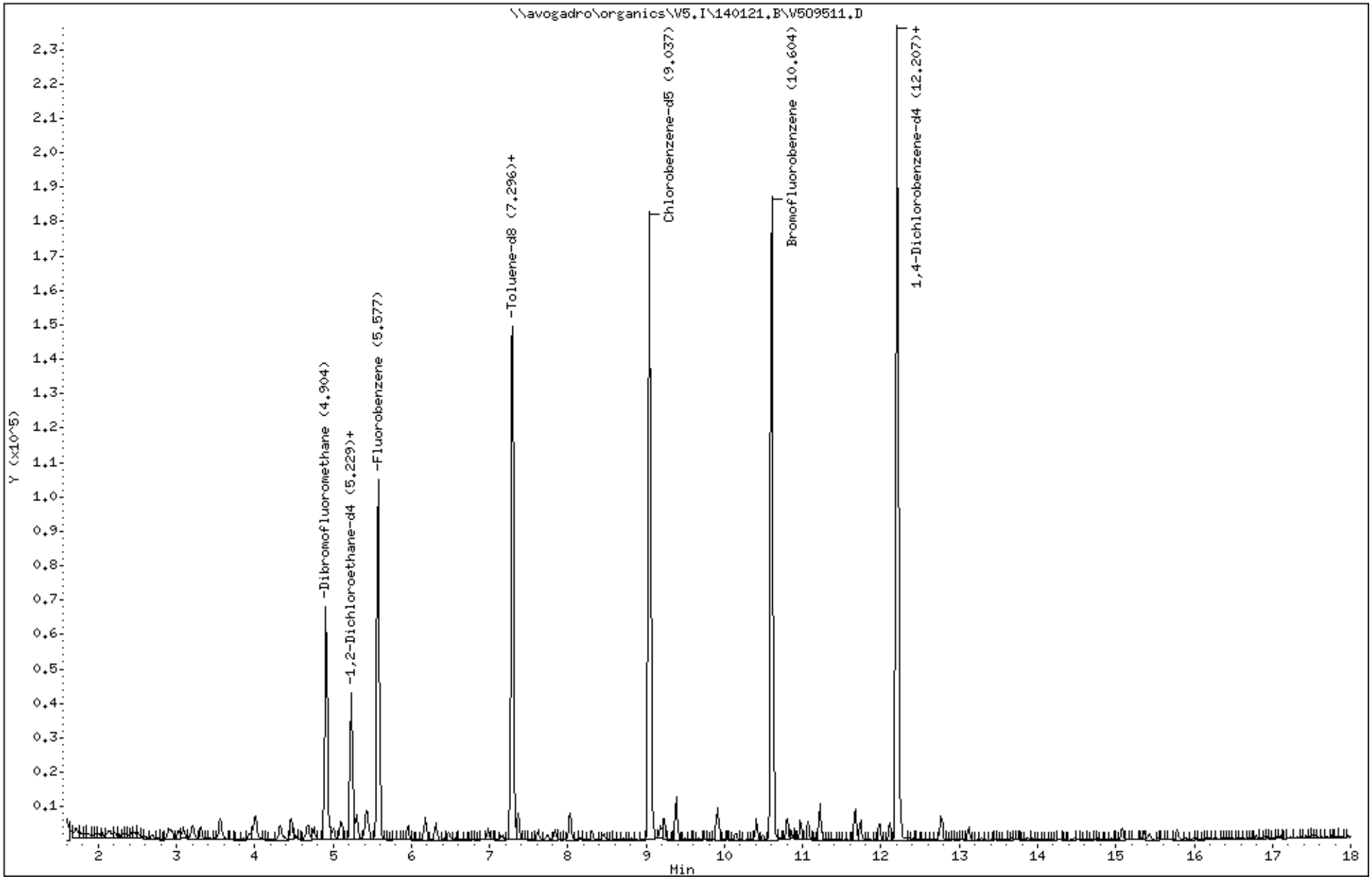
Data File: \\avogadro\organics\V5.I\140121.B\V5O9511.D
Report Date: 22-Jan-2014 15:00

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	87	1,3,5-Trimethylbenzene	105	11.219	11.222	(0.919)	3973	1.00000	1
	88	tert-Butylbenzene	119	11.672	11.675	(0.956)	3886	1.00000	1.0
	89	1,2,4-Trimethylbenzene	105	11.742	11.744	(0.962)	4322	1.00000	1
	90	sec-Butylbenzene	105	11.985	11.977	(0.982)	4802	1.00000	1
	91	1,3-Dichlorobenzene	146	12.113	12.116	(0.992)	3046	1.00000	1
	92	4-Isopropyltoluene	119	12.194	12.197	(0.999)	3876	1.00000	1
*	93	1,4-Dichlorobenzene-d4	152	12.206	12.209	(1.000)	88732	50.0000	(Q)
	94	1,4-Dichlorobenzene	146	12.241	12.232	(1.003)	3518	1.00000	1
M	95	Xylene (Total)	106				6184	3.00000	3
	96	1,2-Dichlorobenzene	146	12.763	12.754	(1.046)	2889	1.00000	1
	97	n-Butylbenzene	91	12.787	12.778	(1.048)	3528	1.00000	1
	98	Hexachloroethane	117	13.112	13.126	(1.074)	729	1.00000	0.8
	99	1,2-Dibromo-3-chloropropane	75	13.855	13.869	(1.135)	99	1.00000	0.4(QM)M6 WL 01/22
	100	1,3,5-Trichlorobenzene	182	15.097	15.088	(2.707)	1673	1.00000	1.0
	101	1,2,4-Trichlorobenzene	180	15.085	15.088	(1.236)	1741	1.00000	1.0
	102	Hexachlorobutadiene	225	15.364	15.367	(1.259)	1113	1.00000	1
	103	Naphthalene	128	15.433	15.425	(1.264)	2727	1.00000	0.9
	104	1,2,3-Trichlorobenzene	180	15.782	15.784	(1.293)	1452	1.00000	1

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.
M - Compound response manually integrated.

Data File: \\avogadro\organics\V5.I\140121.B\V509511.D
Date : 21-JAN-2014 10:59
Client ID: VSTD0015K
Instrument: V5.i
Sample Info: 5ML,VSTD0015K,VSTD0015K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7418.D
Report Date: 31-Jan-2014 11:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140116.B\V1M7418.D
Lab Smp Id: VSTD0051W Client Smp ID: VSTD0051W
Inj Date : 16-JAN-2014 12:54
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0051W,VSTD0051W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140116.B\v18260GH.m
Meth Date : 22-Jan-2014 12:29 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 12:54 Cal File: V1M7418.D
Als bottle: 13 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.268	1.288	(0.283)	3812	5.00000	4
2	Chloromethane	50	1.415	1.406	(0.316)	35679	5.00000	5
3	Vinyl Chloride	62	1.494	1.495	(0.334)	18134	5.00000	5
4	Bromomethane	94	1.780	1.741	(0.397)	14814	5.00000	5
5	Chloroethane	64	1.908	1.820	(0.426)	14708	5.00000	5
6	Trichlorofluoromethane	101	1.947	1.948	(0.435)	10879	5.00000	4(Q)
7	Ether	59	2.134	2.135	(0.477)	18921	5.00000	5(Q)
8	Acrolein	56	2.213	2.214	(0.494)	18443	25.0000	22
9	1,1-Dichloroethene	96	2.312	2.332	(0.516)	16089	5.00000	5(Q)
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.341	2.312	(0.523)	9509	5.00000	5
11	Acetone	58	2.322	2.322	(0.518)	3691	5.00000	5
12	Iodomethane	142	2.400	2.460	(0.536)	14035	5.00000	4(M)M7 AM 01/31
13	Carbon Disulfide	76	2.538	2.539	(0.567)	46067	5.00000	5
14	Acetonitrile	40	2.538	2.509	(0.567)	25782	50.0000	53(Q)
15	Methyl Acetate	43	2.548	2.549	(0.569)	30144	5.00000	5
16	Methylene Chloride	84	2.627	2.696	(0.587)	13429	5.00000	6(Q)
17	tert-Butanol	59	2.706	2.696	(0.604)	4431	10.0000	13
18	Acrylonitrile	53	2.785	2.785	(0.622)	7041	5.00000	4
20	Methyl tert-butyl ether	73	2.824	2.824	(0.631)	48467	5.00000	5
19	trans-1,2-Dichloroethene	96	2.824	2.824	(0.631)	15415	5.00000	5(Q)
21	1,1-Dichloroethane	63	3.119	3.120	(0.697)	33329	5.00000	5

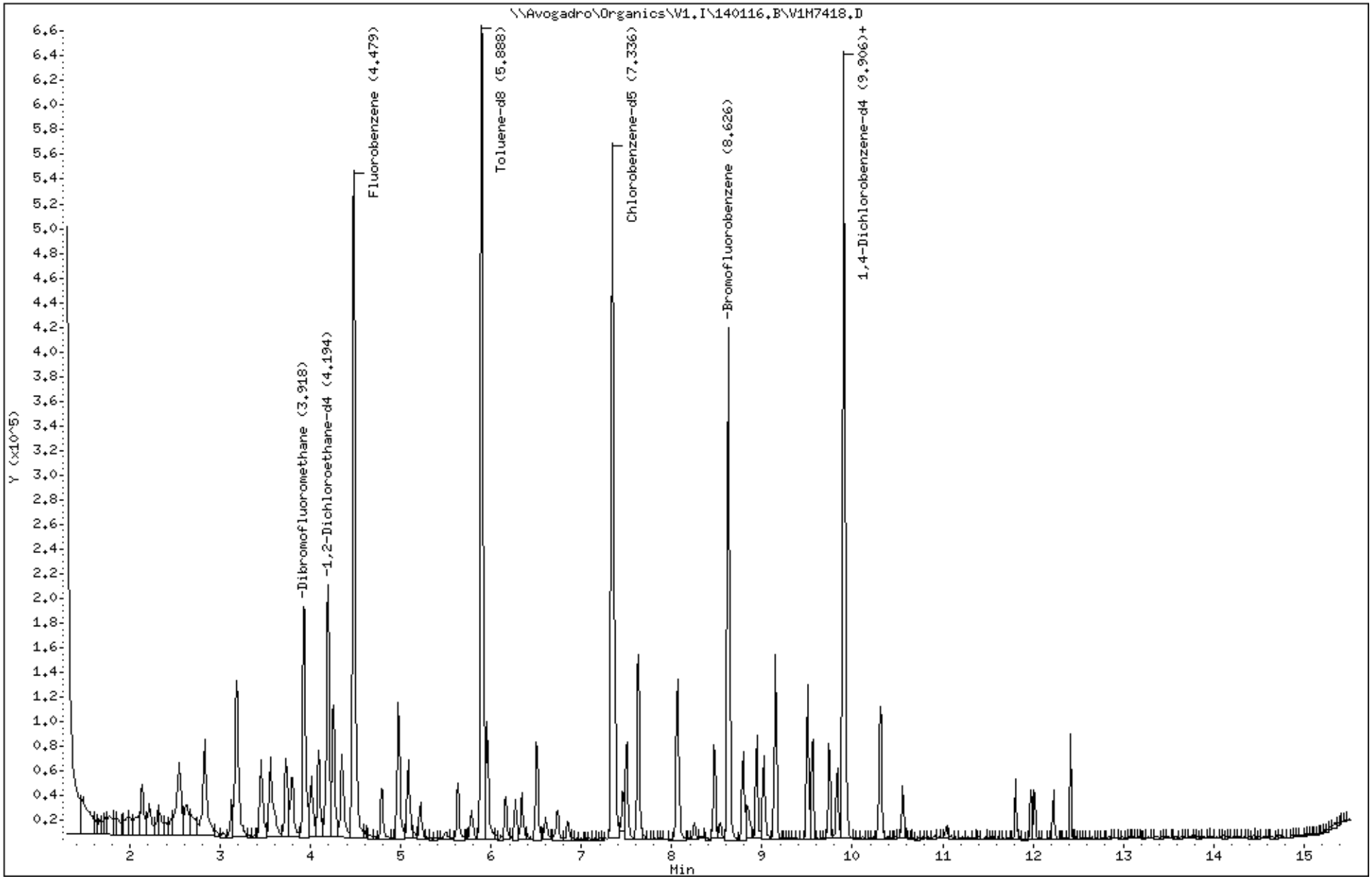
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Vinyl acetate	43	3.169	3.169	(0.708)	81598	5.00000	5
	23 Diisopropyl Ether	45	3.179	3.179	(0.710)	113965	5.00000	5
	24 Ethyl tert-butyl ether	59	3.444	3.445	(0.769)	64927	5.00000	5
M	27 1,2-dichloroethene, (Total)	100				33049	10.0000	(a)
	25 cis-1,2-Dichloroethene	96	3.553	3.553	(0.793)	17634	5.00000	5
	26 2,2-Dichloropropane	77	3.563	3.563	(0.795)	10790	5.00000	5
	28 2-Butanone	72	3.553	3.553	(0.793)	2667	5.00000	5(Q)
	29 Bromochloromethane	128	3.740	3.740	(0.835)	7723	5.00000	5
	30 Tetrahydrofuran	72	3.779	3.770	(0.844)	4280	10.0000	10
	31 Chloroform	83	3.799	3.790	(0.848)	28531	5.00000	5
$	32 Dibromofluoromethane	113	3.917	3.918	(0.875)	129148	50.0000	49
	33 1,1,1-Trichloroethane	97	3.957	3.947	(0.883)	16172	5.00000	5
	34 Cyclohexane	56	4.006	4.006	(0.894)	29523	5.00000	5
	36 Carbon Tetrachloride	117	4.095	4.095	(0.914)	13627	5.00000	5
	35 1,1-Dichloropropene	110	4.085	4.085	(0.912)	6718	5.00000	5
$	37 1,2-Dichloroethane-d4	102	4.193	4.193	(0.936)	33896	50.0000	49
	38 Benzene	78	4.252	4.253	(0.949)	64922	5.00000	5
	39 1,2-Dichloroethane	62	4.252	4.253	(0.949)	19139	5.00000	5
	40 tert-Amyl methyl ether	73	4.341	4.341	(0.969)	53132	5.00000	5
*	41 Fluorobenzene	96	4.479	4.469	(1.000)	508890	50.0000	
	42 Trichloroethene	130	4.794	4.784	(1.070)	13312	5.00000	5
	43 Methylcyclohexane	83	4.971	4.962	(1.110)	26083	5.00000	5
	44 1,2-Dichloropropane	63	4.971	4.972	(1.110)	20567	5.00000	5(T)
	46 Dibromomethane	93	5.079	5.070	(1.134)	9259	5.00000	5
	47 1,4-Dioxane	88	5.099	5.090	(1.139)	1667	100.000	110(Q)
	48 Bromodichloromethane	83	5.217	5.218	(1.165)	20957	5.00000	5
	45 2-Chloroethyl vinyl ether	63	5.503	5.494	(1.229)	2548	5.00000	5(T)
	49 cis-1,3-Dichloropropene	75	5.631	5.631	(1.257)	24288	5.00000	4
	50 4-Methyl-2-pentanone	43	5.779	5.779	(1.290)	26113	5.00000	5
$	51 Toluene-d8	98	5.897	5.897	(0.804)	479553	50.0000	51
	52 Toluene	91	5.956	5.957	(1.330)	63193	5.00000	5
	53 trans-1,3-Dichloropropene	75	6.163	6.154	(1.376)	18990	5.00000	4
	54 1,1,2-Trichloroethane	97	6.340	6.341	(1.416)	12429	5.00000	5
	55 Tetrachloroethene	164	6.498	6.498	(0.886)	9879	5.00000	5
	56 1,3-Dichloropropane	76	6.508	6.508	(0.887)	24882	5.00000	5
	57 2-Hexanone	43	6.606	6.597	(0.901)	19646	5.00000	5
	58 Dibromochloromethane	129	6.734	6.735	(0.918)	12272	5.00000	4(T)
	59 1,2-Dibromoethane	107	6.852	6.843	(0.934)	12675	5.00000	5(T)
*	60 Chlorobenzene-d5	117	7.335	7.345	(1.000)	336923	50.0000	
	63 1-Chlorohexane	91	7.365	7.365	(1.004)	24364	5.00000	5(Q)
	61 Chlorobenzene	112	7.374	7.375	(1.005)	35876	5.00000	5
	62 1,1,1,2-Tetrachloroethane	131	7.453	7.463	(1.016)	11776	5.00000	5
	64 Ethylbenzene	106	7.503	7.503	(1.023)	18210	5.00000	5
	65 m,p-Xylene	106	7.631	7.631	(1.040)	48430	10.0000	10
	66 o-Xylene	106	8.054	8.064	(1.098)	23491	5.00000	5
	67 Styrene	104	8.074	8.074	(1.101)	40044	5.00000	5
	68 Bromoform	173	8.251	8.261	(1.125)	6402	5.00000	4(T)
	69 Isopropylbenzene	105	8.468	8.478	(1.154)	55938	5.00000	5
	126 trans-1,4-Dichloro-2-butene	75	8.537	8.537	(1.164)	3927	5.00000	4
$	70 Bromofluorobenzene	95	8.625	8.636	(1.176)	179869	50.0000	50
	72 Bromobenzene	156	8.793	8.793	(0.888)	12778	5.00000	5
	71 1,1,2,2-Tetrachloroethane	83	8.803	8.803	(0.889)	16942	5.00000	5
	73 1,2,3-Trichloropropane	75	8.842	8.842	(0.893)	17875	5.00000	5
	74 n-Propylbenzene	120	8.941	8.951	(0.903)	13742	5.00000	5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	75 2-Chlorotoluene	126	9.019	9.030	(0.911)	12517	5.00000	5	
	76 1,3,5-Trimethylbenzene	105	9.147	9.158	(0.923)	48714	5.00000	5	
	77 4-Chlorotoluene	126	9.147	9.148	(0.923)	12770	5.00000	5	
	78 tert-Butylbenzene	119	9.502	9.512	(0.959)	45475	5.00000	5	
	79 1,2,4-Trimethylbenzene	105	9.561	9.561	(0.965)	47483	5.00000	5	
M	81 Xylene (Total)	106				71921	15.0000		(a)
	80 sec-Butylbenzene	105	9.738	9.749	(0.983)	59565	5.00000	5	
	82 1,3-Dichlorobenzene	146	9.837	9.837	(0.993)	23151	5.00000	5	
	83 4-Isopropyltoluene	119	9.906	9.906	(1.000)	46950	5.00000	5	
*	84 1,4-Dichlorobenzene-d4	152	9.906	9.906	(1.000)	137038	50.0000		
	85 1,4-Dichlorobenzene	146	9.925	9.936	(1.002)	23647	5.00000	5	
	86 n-Butylbenzene	91	10.319	10.320	(1.042)	47589	5.00000	5	
	87 1,2-Dichlorobenzene	146	10.300	10.300	(1.040)	20868	5.00000	5	
	88 1,2-Dibromo-3-chloropropane	75	11.048	11.049	(1.115)	1748	5.00000	4	
	89 1,2,4-Trichlorobenzene	180	11.807	11.807	(1.192)	12657	5.00000	5	
	90 Hexachlorobutadiene	225	11.984	11.975	(1.210)	6532	5.00000	5	
	91 Naphthalene	128	12.023	12.014	(1.214)	28240	5.00000	5	
	92 1,2,3-Trichlorobenzene	180	12.230	12.231	(1.235)	9514	5.00000	5	

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.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7418.D
Date : 16-JAN-2014 12:54
Client ID: VSTD0051W
Instrument: V1.i
Sample Info: 5ML,VSTD0051W,VSTD0051W
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7497.D
Report Date: 30-Jan-2014 10:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7497.D
Lab Smp Id: VSTD0051Z Client Smp ID: VSTD0051Z
Inj Date : 21-JAN-2014 13:38
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0051Z,VSTD0051Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 30-Jan-2014 10:54 mscarpaci Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 12 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.261	1.273	(0.282)	5664	5.00000	4(QM)M7 AM 01/30	
2	Chloromethane	50	1.399	1.401	(0.313)	33533	5.00000	4	
3	Vinyl Chloride	62	1.488	1.480	(0.333)	21318	5.00000	4	
4	Bromomethane	94	1.754	1.716	(0.392)	15823	5.00000	5	
5	Chloroethane	64	1.813	1.825	(0.405)	15425	5.00000	5	
6	Trichlorofluoromethane	101	1.951	1.943	(0.436)	15604	5.00000	4	
7	Ether	59	2.138	2.130	(0.478)	19634	5.00000	4	
8	Acrolein	56	2.217	2.209	(0.496)	22214	25.0000	19	
9	1,1-Dichloroethene	96	2.335	2.327	(0.522)	16679	5.00000	5(Q)	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.335	2.307	(0.522)	9482	5.00000	4	
11	Acetone	58	2.315	2.307	(0.518)	4254	5.00000	5	
12	Iodomethane	142	2.493	2.455	(0.557)	20854	5.00000	5(Q)	
13	Carbon Disulfide	76	2.542	2.534	(0.568)	46813	5.00000	4	
14	Acetonitrile	40	2.512	2.494	(0.562)	24428	50.0000	42(Q)	
15	Methyl Acetate	43	2.552	2.544	(0.571)	33509	5.00000	4	
16	Methylene Chloride	84	2.680	2.681	(0.599)	16610	5.00000	4	
17	tert-Butanol	59	2.699	2.681	(0.604)	2176	10.0000	5	
18	Acrylonitrile	53	2.788	2.780	(0.623)	7995	5.00000	4	
20	Methyl tert-butyl ether	73	2.827	2.819	(0.632)	49417	5.00000	4	
19	trans-1,2-Dichloroethene	96	2.827	2.819	(0.632)	16373	5.00000	4	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	21 1,1-Dichloroethane	63	3.123	3.115	(0.698)	35105	5.00000	4	
	22 Vinyl acetate	43	3.172	3.164	(0.709)	86449	5.00000	4	
	23 Diisopropyl Ether	45	3.172	3.174	(0.709)	114795	5.00000	4	
	24 Ethyl tert-butyl ether	59	3.448	3.440	(0.771)	66917	5.00000	4	
M	27 1,2-dichloroethene, (Total)	100				35769	10.0000	9	
	25 cis-1,2-Dichloroethene	96	3.546	3.548	(0.793)	19396	5.00000	4	
	26 2,2-Dichloropropane	77	3.556	3.558	(0.795)	12910	5.00000	5	
	28 2-Butanone	72	3.546	3.548	(0.793)	2767	5.00000	4(Q)	
	29 Bromochloromethane	128	3.734	3.735	(0.835)	8503	5.00000	4	
	30 Tetrahydrofuran	72	3.773	3.775	(0.844)	3678	10.0000	7(Q)	
	31 Chloroform	83	3.793	3.795	(0.848)	30227	5.00000	5	
$	32 Dibromofluoromethane	113	3.911	3.913	(0.874)	139795	50.0000	50	
	33 1,1,1-Trichloroethane	97	3.950	3.952	(0.883)	17870	5.00000	5	
	34 Cyclohexane	56	4.009	4.001	(0.897)	27453	5.00000	4	
	36 Carbon Tetrachloride	117	4.088	4.090	(0.914)	13685	5.00000	4	
	35 1,1-Dichloropropene	110	4.078	4.080	(0.912)	8135	5.00000	5	
$	37 1,2-Dichloroethane-d4	102	4.187	4.187	(0.936)	35422	50.0000	50	
	38 Benzene	78	4.246	4.248	(0.949)	70818	5.00000	4	
	39 1,2-Dichloroethane	62	4.246	4.248	(0.949)	19883	5.00000	4	
	40 tert-Amyl methyl ether	73	4.344	4.336	(0.971)	51022	5.00000	4	
*	41 Fluorobenzene	96	4.472	4.474	(1.000)	544032	50.0000		
	42 Trichloroethene	130	4.788	4.779	(1.070)	15903	5.00000	5	
	43 Methylcyclohexane	83	4.965	4.967	(1.110)	28440	5.00000	4	
	44 1,2-Dichloropropane	63	4.965	4.967	(1.110)	20928	5.00000	4(T)	
	46 Dibromomethane	93	5.073	5.075	(1.134)	10864	5.00000	4	
	47 1,4-Dioxane	88	5.083	5.085	(1.137)	1645	100.000	67(Q)	
	48 Bromodichloromethane	83	5.211	5.213	(1.165)	21536	5.00000	4	
	45 2-Chloroethyl vinyl ether	63	5.487	5.489	(1.227)	648	5.00000	6(TQM)M7 AM 01/30	
	49 cis-1,3-Dichloropropene	75	5.615	5.627	(1.255)	28688	5.00000	4	
	50 4-Methyl-2-pentanone	43	5.772	5.774	(1.291)	26845	5.00000	4	
$	51 Toluene-d8	98	5.881	5.892	(0.802)	506081	50.0000	50	
	52 Toluene	91	5.950	5.952	(1.330)	67168	5.00000	4	
	53 trans-1,3-Dichloropropene	75	6.147	6.149	(1.374)	22177	5.00000	4	
	54 1,1,2-Trichloroethane	97	6.324	6.336	(1.414)	12858	5.00000	4	
	55 Tetrachloroethene	164	6.492	6.493	(0.886)	11345	5.00000	4	
	56 1,3-Dichloropropane	76	6.492	6.493	(0.886)	25162	5.00000	4	
	57 2-Hexanone	43	6.590	6.592	(0.899)	21449	5.00000	4	
	58 Dibromochloromethane	129	6.718	6.730	(0.917)	15081	5.00000	4(T)	
	59 1,2-Dibromoethane	107	6.836	6.838	(0.933)	12738	5.00000	4(T)	
*	60 Chlorobenzene-d5	117	7.329	7.331	(1.000)	368114	50.0000		
	63 1-Chlorohexane	91	7.358	7.360	(1.004)	24940	5.00000	4(Q)	
	61 Chlorobenzene	112	7.368	7.360	(1.005)	40306	5.00000	4	
	62 1,1,1,2-Tetrachloroethane	131	7.447	7.449	(1.016)	12458	5.00000	4	
	64 Ethylbenzene	106	7.496	7.488	(1.023)	21147	5.00000	4	
	65 m,p-Xylene	106	7.624	7.616	(1.040)	51638	10.0000	9	
	66 o-Xylene	106	8.048	8.050	(1.098)	25662	5.00000	4	
	67 Styrene	104	8.058	8.058	(1.099)	44588	5.00000	4	
	68 Bromoform	173	8.245	8.247	(1.125)	7283	5.00000	3(T)	
	69 Isopropylbenzene	105	8.461	8.462	(1.155)	65009	5.00000	4	
	126 trans-1,4-Dichloro-2-butene	75	8.530	8.532	(1.164)	5636	5.00000	3	
$	70 Bromofluorobenzene	95	8.619	8.621	(1.176)	196645	50.0000	48	
	72 Bromobenzene	156	8.777	8.778	(0.887)	13572	5.00000	4	
	71 1,1,2,2-Tetrachloroethane	83	8.786	8.788	(0.888)	17929	5.00000	4	
	73 1,2,3-Trichloropropane	75	8.836	8.828	(0.893)	19912	5.00000	4	

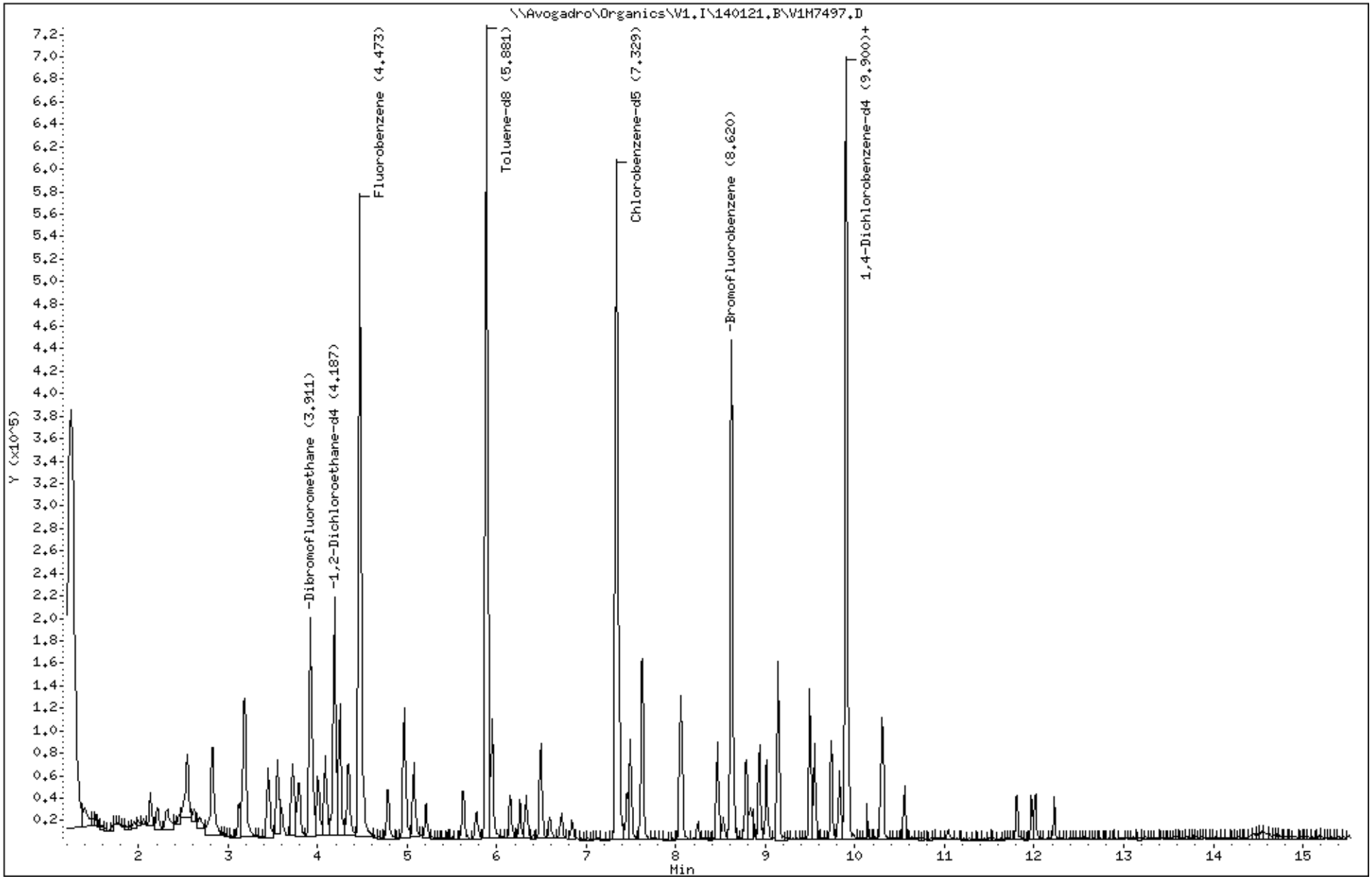
Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7497.D
Report Date: 30-Jan-2014 10:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 n-Propylbenzene	120	8.934	8.936	(0.902)	13657	5.00000	4(Q)
	75 2-Chlorotoluene	126	9.013	9.015	(0.910)	13232	5.00000	4(Q)
	76 1,3,5-Trimethylbenzene	105	9.141	9.143	(0.923)	50674	5.00000	4
	77 4-Chlorotoluene	126	9.141	9.143	(0.923)	14846	5.00000	5
	78 tert-Butylbenzene	119	9.496	9.497	(0.959)	47673	5.00000	4
	79 1,2,4-Trimethylbenzene	105	9.545	9.547	(0.964)	51334	5.00000	4
M	81 Xylene (Total)	106				77300	15.0000	13
	80 sec-Butylbenzene	105	9.732	9.734	(0.983)	65981	5.00000	4
	82 1,3-Dichlorobenzene	146	9.831	9.832	(0.993)	23354	5.00000	4
	83 4-Isopropyltoluene	119	9.899	9.901	(1.000)	46652	5.00000	4
*	84 1,4-Dichlorobenzene-d4	152	9.899	9.901	(1.000)	154206	50.0000	(Q)
	85 1,4-Dichlorobenzene	146	9.919	9.921	(1.002)	24755	5.00000	4
	86 n-Butylbenzene	91	10.313	10.315	(1.042)	47401	5.00000	4
	87 1,2-Dichlorobenzene	146	10.293	10.295	(1.040)	23236	5.00000	4
	88 1,2-Dibromo-3-chloropropane	75	11.032	11.044	(1.114)	2129	5.00000	4
	89 1,2,4-Trichlorobenzene	180	11.810	11.802	(1.193)	11432	5.00000	4
	90 Hexachlorobutadiene	225	11.978	11.970	(1.210)	5807	5.00000	4(TQ)
	91 Naphthalene	128	12.017	12.009	(1.214)	29536	5.00000	4
	92 1,2,3-Trichlorobenzene	180	12.224	12.226	(1.235)	8856	5.00000	3

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7497.D
Date : 21-JAN-2014 13:38
Client ID: VSTD0051Z
Instrument: V1.i
Sample Info: 5ML,VSTD0051Z,VSTD0051Z
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140121.B\V5O9512.D
Report Date: 22-Jan-2014 15:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140121.B\V5O9512.D
Lab Smp Id: VSTD0055K Client Smp ID: VSTD0055K
Inj Date : 21-JAN-2014 11:24
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD0055K,VSTD0055K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140121.B\v5_8260W.m
Meth Date : 22-Jan-2014 14:03 wluo Quant Type: ISTD
Cal Date : 21-JAN-2014 11:24 Cal File: V5O9512.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.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	1.621	1.609	(0.291)	6445	5.00000	5
2	Freon114	85	1.749	1.737	(0.313)	6650	5.00000	5
3	Chloromethane	50	1.702	1.725	(0.305)	8944	5.00000	5
4	Vinyl Chloride	62	1.830	1.853	(0.328)	6707	5.00000	5
5	Bromomethane	94	2.132	2.143	(0.382)	6538	5.00000	6
6	Chloroethane	64	2.236	2.225	(0.401)	3815	5.00000	5
7	Trichlorofluoromethane	101	2.503	2.492	(0.449)	8398	5.00000	5
8	Ethanol	46	2.608	2.608	(0.467)	1974	500.000	480(Q)
9	Ether	59	2.701	2.689	(0.484)	5437	5.00000	5
10	Acrolein	56	2.805	2.793	(0.503)	771	25.0000	19(Q)
11	1,1-Dichloroethene	96	2.898	2.886	(0.519)	6538	5.00000	5
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.944	2.933	(0.528)	7843	5.00000	5
13	Acetone	58	2.933	2.921	(0.526)	429	5.00000	4(Q)
14	Iodomethane	142	3.037	3.026	(0.544)	18340	5.00000	5
15	Carbon Disulfide	76	3.095	3.084	(0.555)	25455	5.00000	5
16	Acetonitrile	41	3.200	3.200	(0.574)	19825	50.0000	49
17	Allyl Chloride	39	3.200	3.200	(0.574)	9701	5.00000	5
18	Methyl Acetate	43	3.223	3.211	(0.578)	7864	5.00000	5
19	Methylene Chloride	84	3.316	3.304	(0.594)	7698	5.00000	5
20	tert-Butanol	59	3.409	3.420	(0.611)	1179	10.0000	9
21	Acrylonitrile	53	3.525	3.513	(0.632)	2665	5.00000	5
22	trans-1,2-Dichloroethene	96	3.560	3.548	(0.638)	7277	5.00000	5
23	Methyl tert-butyl ether	73	3.560	3.560	(0.638)	21603	5.00000	5

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	1,1-Dichloroethane	63	3.931	3.920	(0.705)	12188	5.00000	5
	25	Vinyl acetate	43	3.989	3.978	(0.715)	22441	5.00000	5
	26	Diisopropyl Ether	45	4.001	3.989	(0.717)	28801	5.00000	5
	27	2-Chloro-1,3-Butadiene	53	4.013	4.012	(0.719)	9903	5.00000	5
	28	Ethyl tert-butyl ether	59	4.326	4.326	(0.775)	25245	5.00000	5
	29	cis-1,2-Dichloroethene	96	4.465	4.454	(0.800)	7893	5.00000	5
	30	2-Butanone	72	4.465	4.465	(0.800)	548	5.00000	4(Q)
	31	2,2-Dichloropropane	77	4.465	4.465	(0.800)	10500	5.00000	5
	32	Propionitrile	54	4.523	4.512	(0.811)	8133	50.0000	45
	33	Methacrylonitrile	41	4.663	4.663	(0.836)	9422	10.0000	10
	34	Bromochloromethane	128	4.686	4.686	(0.840)	4475	5.00000	5
	35	Tetrahydrofuran	72	4.732	4.732	(0.848)	1602	10.0000	9
	36	Chloroform	83	4.756	4.755	(0.852)	13597	5.00000	5
$	37	Dibromofluoromethane	113	4.906	4.906	(0.879)	44452	50.0000	50
	38	1,1,1-Trichloroethane	97	4.953	4.941	(0.888)	11307	5.00000	5
	39	Cyclohexane	56	5.011	5.011	(0.898)	10826	5.00000	5
	40	1,1-Dichloropropene	110	5.092	5.104	(0.913)	3586	5.00000	5
	41	Carbon Tetrachloride	117	5.115	5.104	(0.917)	10119	5.00000	5
	42	Isobutyl Alcohol	43	5.197	5.197	(0.931)	4505	100.000	90
$	43	1,2-Dichloroethane-d4	102	5.232	5.231	(0.938)	7707	50.0000	50
	44	Benzene	78	5.301	5.301	(0.950)	25922	5.00000	5
	45	1,2-Dichloroethane	62	5.313	5.313	(0.952)	9467	5.00000	5
	46	tert-Amyl methyl ether	73	5.417	5.417	(0.971)	21403	5.00000	5
*	47	Fluorobenzene	96	5.580	5.580	(1.000)	109241	50.0000	
	48	Trichloroethene	130	5.963	5.951	(1.069)	7118	5.00000	5
	49	Methylcyclohexane	83	6.172	6.172	(1.106)	7821	5.00000	5
	50	1,2-Dichloropropane	63	6.183	6.183	(1.108)	6058	5.00000	5
	51	Methyl Methacrylate	69	6.300	6.311	(1.129)	5896	5.00000	5
	52	Dibromomethane	93	6.311	6.311	(1.131)	5064	5.00000	5
	53	1,4-Dioxane	88	6.346	6.334	(1.137)	1016	100.000	94
	54	Bromodichloromethane	83	6.485	6.474	(1.162)	10053	5.00000	5
M	55	1,2-Dichloroethene (Total)	96				15170	10.0000	10
	56	2-Chloroethyl vinyl ether	63	6.799	6.810	(1.218)	642	5.00000	5(TQ)
	57	cis-1,3-Dichloropropene	75	6.973	6.973	(1.250)	11463	5.00000	5
	58	4-Methyl-2-pentanone	43	7.159	7.159	(1.283)	6668	5.00000	5
$	59	Toluene-d8	98	7.286	7.286	(0.806)	122163	50.0000	48
	60	Toluene	91	7.368	7.368	(1.320)	24620	5.00000	5
	61	trans-1,3-Dichloropropene	75	7.623	7.623	(1.366)	9196	5.00000	5
	62	Ethyl Methacrylate	69	7.739	7.739	(1.387)	6992	5.00000	5
	63	1,1,2-Trichloroethane	97	7.832	7.832	(1.404)	6152	5.00000	5
	64	Tetrachloroethene	164	8.018	8.018	(0.887)	7481	5.00000	5
	65	1,3-Dichloropropane	76	8.041	8.041	(0.890)	10157	5.00000	5
	66	2-Hexanone	43	8.146	8.145	(0.901)	4623	5.00000	5
	67	Dibromochloromethane	129	8.308	8.308	(0.919)	8752	5.00000	5(T)
	68	1,2-Dibromoethane	107	8.447	8.447	(0.935)	7232	5.00000	5(T)
*	69	Chlorobenzene-d5	117	9.039	9.039	(1.000)	136012	50.0000	
	70	1-Chlorohexane	91	9.063	9.063	(1.003)	8739	5.00000	5(Q)
	71	Chlorobenzene	112	9.086	9.074	(1.005)	18382	5.00000	5
	72	1,1,1,2-Tetrachloroethane	131	9.190	9.190	(1.017)	7693	5.00000	5
	73	Ethylbenzene	106	9.237	9.237	(1.022)	8547	5.00000	5
	74	m,p-Xylene	106	9.388	9.388	(1.039)	21569	10.0000	10
	75	o-Xylene	106	9.910	9.910	(1.096)	9836	5.00000	5
	76	Styrene	104	9.922	9.922	(1.098)	16867	5.00000	5
	77	Bromoform	173	10.142	10.142	(1.122)	6828	5.00000	5

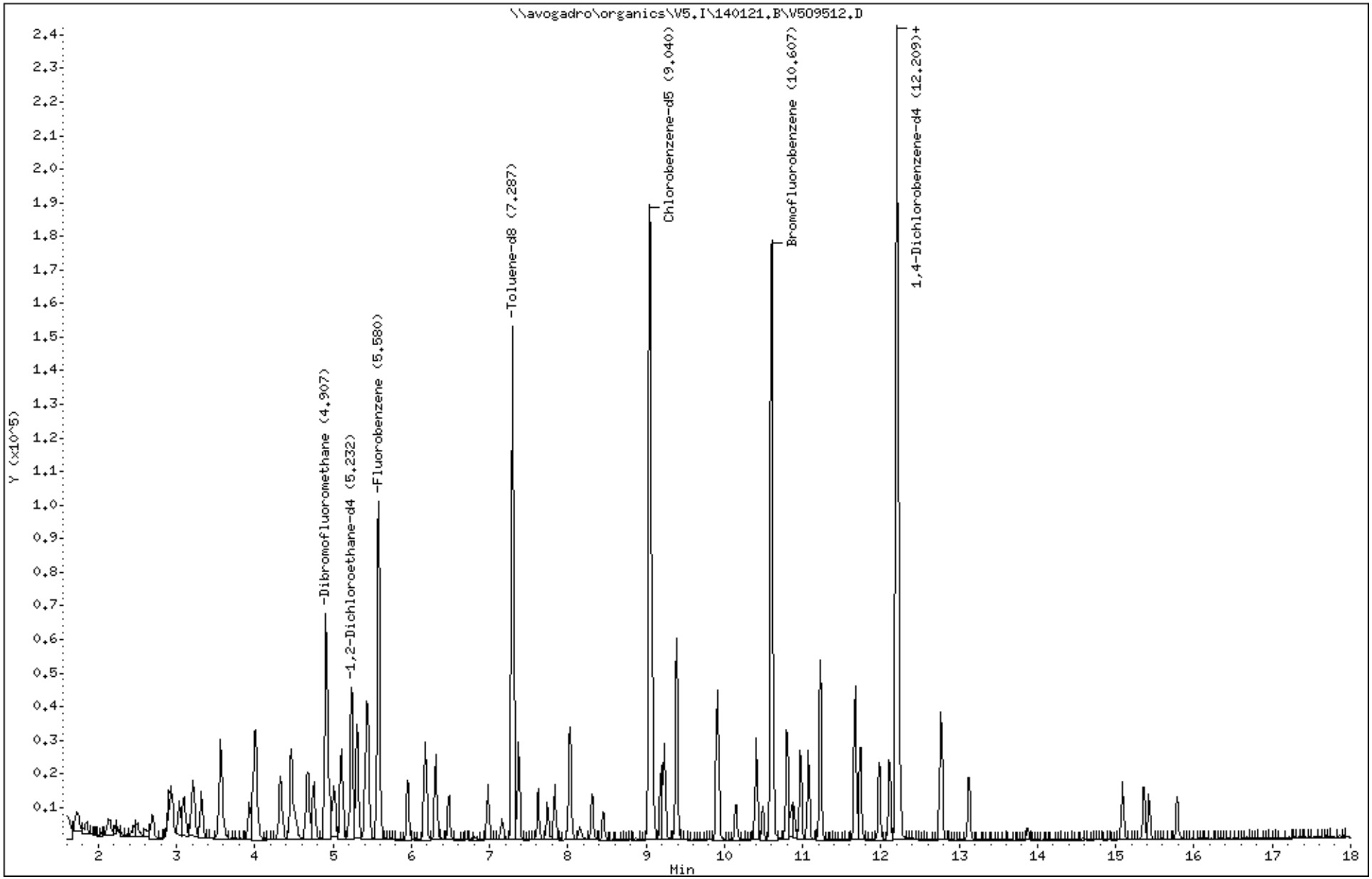
Data File: \\avogadro\organics\V5.I\140121.B\V5O9512.D
Report Date: 22-Jan-2014 15:00

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 Isopropylbenzene	105	10.409	10.409	(1.152)	24798	5.00000	5
	79 trans-1,4-Dichloro-2-butene	75	10.491	10.491	(1.161)	2639	5.00000	4
$	80 Bromofluorobenzene	95	10.595	10.595	(1.172)	74416	50.0000	50
	81 Bromobenzene	156	10.792	10.792	(0.884)	9381	5.00000	5
	82 1,1,2,2-Tetrachloroethane	83	10.804	10.804	(0.885)	8100	5.00000	5
	83 1,2,3-Trichloropropane	75	10.862	10.862	(0.890)	8995	5.00000	5
	84 n-Propylbenzene	120	10.967	10.967	(0.898)	6405	5.00000	5
	85 2-Chlorotoluene	126	11.071	11.071	(0.907)	6895	5.00000	5
	86 4-Chlorotoluene	126	11.222	11.222	(0.919)	6921	5.00000	5
	87 1,3,5-Trimethylbenzene	105	11.222	11.222	(0.919)	19562	5.00000	5
	88 tert-Butylbenzene	119	11.675	11.675	(0.956)	20544	5.00000	5
	89 1,2,4-Trimethylbenzene	105	11.744	11.744	(0.962)	21223	5.00000	5
	90 sec-Butylbenzene	105	11.977	11.977	(0.981)	22096	5.00000	5
	91 1,3-Dichlorobenzene	146	12.104	12.116	(0.991)	14826	5.00000	5
	92 4-Isopropyltoluene	119	12.197	12.197	(0.999)	19768	5.00000	5
*	93 1,4-Dichlorobenzene-d4	152	12.209	12.209	(1.000)	86748	50.0000	(Q)
	94 1,4-Dichlorobenzene	146	12.244	12.232	(1.003)	15619	5.00000	5
M	95 Xylene (Total)	106				31405	15.0000	15
	96 1,2-Dichlorobenzene	146	12.754	12.754	(1.045)	13718	5.00000	5
	97 n-Butylbenzene	91	12.778	12.778	(1.047)	15834	5.00000	5
	98 Hexachloroethane	117	13.126	13.126	(1.075)	4935	5.00000	5
	99 1,2-Dibromo-3-chloropropane	75	13.881	13.869	(1.137)	1128	5.00000	5
	100 1,3,5-Trichlorobenzene	182	15.088	15.088	(2.704)	8232	5.00000	5
	101 1,2,4-Trichlorobenzene	180	15.088	15.088	(1.236)	8878	5.00000	5
	102 Hexachlorobutadiene	225	15.367	15.367	(1.259)	5149	5.00000	5
	103 Naphthalene	128	15.425	15.425	(1.263)	14808	5.00000	5
	104 1,2,3-Trichlorobenzene	180	15.785	15.784	(1.293)	6639	5.00000	5

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\140121.B\V509512.D
Date : 21-JAN-2014 11:24
Client ID: VSTD0055K
Instrument: V5.i
Sample Info: 5ML,VSTD0055K,VSTD0055K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7419.D
Report Date: 31-Jan-2014 11:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140116.B\V1M7419.D
Lab Smp Id: VSTD0201W Client Smp ID: VSTD0201W
Inj Date : 16-JAN-2014 13:22
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0201W,VSTD0201W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140116.B\v18260GH.m
Meth Date : 22-Jan-2014 12:29 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 14 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.277	1.288	(0.285)	22200	20.0000	21
2	Chloromethane	50	1.415	1.406	(0.316)	126139	20.0000	19
3	Vinyl Chloride	62	1.504	1.495	(0.336)	77928	20.0000	20
4	Bromomethane	94	1.740	1.741	(0.389)	57108	20.0000	21
5	Chloroethane	64	1.858	1.820	(0.415)	56496	20.0000	20
6	Trichlorofluoromethane	101	1.947	1.948	(0.435)	60221	20.0000	22
127	Ethanol	46	2.065	2.056	(0.461)	25835	2000.00	1700
7	Ether	59	2.134	2.135	(0.477)	71269	20.0000	18
8	Acrolein	56	2.213	2.214	(0.494)	85537	100.000	98
9	1,1-Dichloroethene	96	2.331	2.332	(0.521)	47658	20.0000	16
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.321	2.312	(0.518)	32111	20.0000	17
11	Acetone	58	2.321	2.322	(0.518)	13563	20.0000	18
12	Iodomethane	142	2.469	2.460	(0.551)	32019	20.0000	10
13	Carbon Disulfide	76	2.548	2.539	(0.569)	161315	20.0000	19
14	Acetonitrile	40	2.508	2.509	(0.560)	92568	200.000	190
15	Methyl Acetate	43	2.548	2.549	(0.569)	122929	20.0000	20
16	Methylene Chloride	84	2.705	2.696	(0.604)	59350	20.0000	21
17	tert-Butanol	59	2.696	2.696	(0.602)	11414	40.0000	34
18	Acrylonitrile	53	2.784	2.785	(0.622)	35420	20.0000	21
20	Methyl tert-butyl ether	73	2.824	2.824	(0.631)	193826	20.0000	20
19	trans-1,2-Dichloroethene	96	2.824	2.824	(0.631)	59471	20.0000	19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.119	3.120	(0.697)	127906	20.0000	19
	22 Vinyl acetate	43	3.168	3.169	(0.708)	335961	20.0000	20
	23 Diisopropyl Ether	45	3.178	3.179	(0.710)	454564	20.0000	20
	24 Ethyl tert-butyl ether	59	3.444	3.445	(0.769)	262535	20.0000	20
M	27 1,2-dichloroethene, (Total)	100				130358	40.0000	(a)
	25 cis-1,2-Dichloroethene	96	3.553	3.553	(0.793)	70887	20.0000	20
	26 2,2-Dichloropropane	77	3.562	3.563	(0.795)	43452	20.0000	20
	28 2-Butanone	72	3.553	3.553	(0.793)	9721	20.0000	17
	29 Bromochloromethane	128	3.740	3.740	(0.835)	31023	20.0000	19
	30 Tetrahydrofuran	72	3.779	3.770	(0.844)	15470	40.0000	37
	31 Chloroform	83	3.799	3.790	(0.848)	108566	20.0000	20
$	32 Dibromofluoromethane	113	3.917	3.918	(0.875)	137468	50.0000	51
	33 1,1,1-Trichloroethane	97	3.956	3.947	(0.883)	60930	20.0000	19
	34 Cyclohexane	56	4.006	4.006	(0.894)	113790	20.0000	18
	36 Carbon Tetrachloride	117	4.094	4.095	(0.914)	54428	20.0000	20
	35 1,1-Dichloropropene	110	4.084	4.085	(0.912)	25452	20.0000	19
$	37 1,2-Dichloroethane-d4	102	4.193	4.193	(0.936)	37566	50.0000	52
	38 Benzene	78	4.252	4.253	(0.949)	259263	20.0000	20
	39 1,2-Dichloroethane	62	4.252	4.253	(0.949)	71678	20.0000	19
	40 tert-Amyl methyl ether	73	4.341	4.341	(0.969)	202012	20.0000	19
*	41 Fluorobenzene	96	4.478	4.469	(1.000)	525530	50.0000	
	42 Trichloroethene	130	4.794	4.784	(1.070)	52697	20.0000	19
	43 Methylcyclohexane	83	4.971	4.962	(1.110)	110481	20.0000	20
	44 1,2-Dichloropropane	63	4.981	4.972	(1.112)	81797	20.0000	20
	46 Dibromomethane	93	5.079	5.070	(1.134)	37894	20.0000	19
	47 1,4-Dioxane	88	5.099	5.090	(1.139)	5957	400.000	350
	48 Bromodichloromethane	83	5.217	5.218	(1.165)	81788	20.0000	19
	45 2-Chloroethyl vinyl ether	63	5.493	5.494	(1.227)	8597	20.0000	18
	49 cis-1,3-Dichloropropene	75	5.631	5.631	(1.257)	109194	20.0000	20
	50 4-Methyl-2-pentanone	43	5.779	5.779	(1.290)	93356	20.0000	18
$	51 Toluene-d8	98	5.897	5.897	(0.803)	489904	50.0000	49
	52 Toluene	91	5.956	5.957	(1.330)	250985	20.0000	20
	53 trans-1,3-Dichloropropene	75	6.163	6.154	(1.376)	88508	20.0000	20
	54 1,1,2-Trichloroethane	97	6.340	6.341	(1.416)	49262	20.0000	19
	55 Tetrachloroethene	164	6.507	6.498	(0.886)	41630	20.0000	20
	56 1,3-Dichloropropane	76	6.507	6.508	(0.886)	100748	20.0000	19
	57 2-Hexanone	43	6.606	6.597	(0.899)	68022	20.0000	15
	58 Dibromochloromethane	129	6.734	6.735	(0.917)	57761	20.0000	19(T)
	59 1,2-Dibromoethane	107	6.852	6.843	(0.933)	55532	20.0000	19
*	60 Chlorobenzene-d5	117	7.345	7.345	(1.000)	358291	50.0000	
	63 1-Chlorohexane	91	7.364	7.365	(1.003)	96548	20.0000	19
	61 Chlorobenzene	112	7.374	7.375	(1.004)	150225	20.0000	20
	62 1,1,1,2-Tetrachloroethane	131	7.453	7.463	(1.015)	53714	20.0000	20
	64 Ethylbenzene	106	7.502	7.503	(1.021)	75911	20.0000	19
	65 m,p-Xylene	106	7.630	7.631	(1.039)	200933	40.0000	40
	66 o-Xylene	106	8.054	8.064	(1.097)	97334	20.0000	20
	67 Styrene	104	8.074	8.074	(1.099)	165982	20.0000	19
	68 Bromoform	173	8.251	8.261	(1.123)	32751	20.0000	19(T)
	69 Isopropylbenzene	105	8.477	8.478	(1.154)	243226	20.0000	20
	126 trans-1,4-Dichloro-2-butene	75	8.536	8.537	(1.162)	19935	20.0000	17
$	70 Bromofluorobenzene	95	8.635	8.636	(1.176)	195489	50.0000	50
	72 Bromobenzene	156	8.793	8.793	(0.888)	55373	20.0000	20
	71 1,1,2,2-Tetrachloroethane	83	8.802	8.803	(0.889)	70754	20.0000	19
	73 1,2,3-Trichloropropane	75	8.842	8.842	(0.893)	73593	20.0000	18

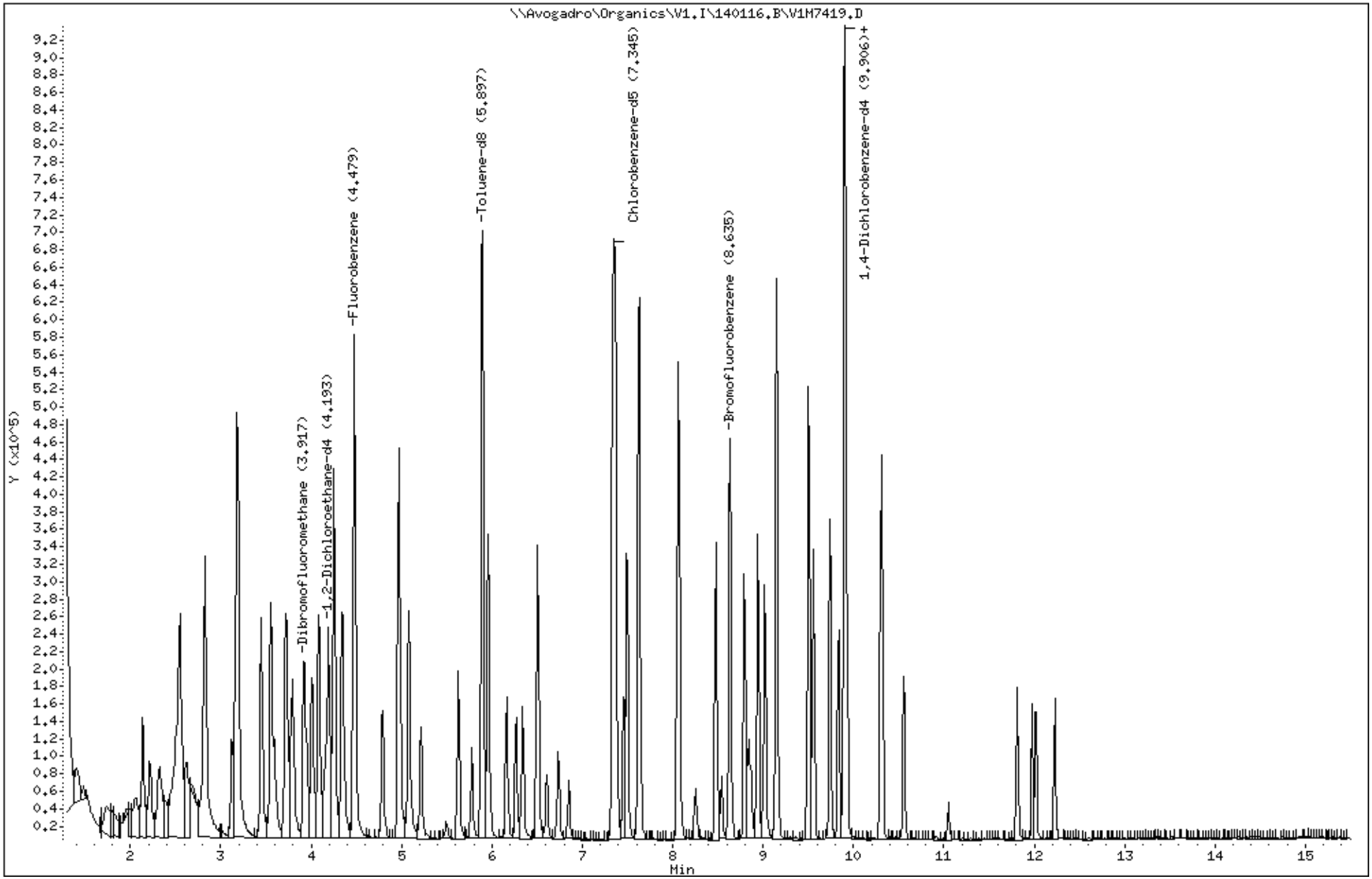
Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7419.D
Report Date: 31-Jan-2014 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	74 n-Propylbenzene	120	8.940	8.951	(0.903)	56788	20.0000	19	
	75 2-Chlorotoluene	126	9.019	9.030	(0.911)	52174	20.0000	19	
	76 1,3,5-Trimethylbenzene	105	9.147	9.158	(0.923)	198851	20.0000	20	
	77 4-Chlorotoluene	126	9.147	9.148	(0.923)	54731	20.0000	20	
	78 tert-Butylbenzene	119	9.502	9.512	(0.959)	195635	20.0000	20	
	79 1,2,4-Trimethylbenzene	105	9.561	9.561	(0.965)	200539	20.0000	20	
M	81 Xylene (Total)	106				298267	60.0000	(a)	
	80 sec-Butylbenzene	105	9.738	9.749	(0.983)	263243	20.0000	20	
	82 1,3-Dichlorobenzene	146	9.837	9.837	(0.993)	96561	20.0000	19	
	83 4-Isopropyltoluene	119	9.896	9.906	(0.999)	198163	20.0000	20	
*	84 1,4-Dichlorobenzene-d4	152	9.906	9.906	(1.000)	149878	50.0000		
	85 1,4-Dichlorobenzene	146	9.925	9.936	(1.002)	97852	20.0000	19	
	86 n-Butylbenzene	91	10.319	10.320	(1.042)	198351	20.0000	19	
	87 1,2-Dichlorobenzene	146	10.300	10.300	(1.040)	96167	20.0000	21	
	88 1,2-Dibromo-3-chloropropane	75	11.048	11.049	(1.115)	8551	20.0000	20	
	89 1,2,4-Trichlorobenzene	180	11.816	11.807	(1.193)	52135	20.0000	19	
	90 Hexachlorobutadiene	225	11.984	11.975	(1.210)	26267	20.0000	20	
	91 Naphthalene	128	12.023	12.014	(1.214)	110392	20.0000	18	
	92 1,2,3-Trichlorobenzene	180	12.230	12.231	(1.235)	42673	20.0000	19	

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\V1.I\140116.B\V1M7419.D
Date : 16-JAN-2014 13:22
Client ID: VSTD0201W
Instrument: V1.i
Sample Info: 5ML,VSTD0201W,VSTD0201W
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7498.D
Report Date: 30-Jan-2014 10:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7498.D
Lab Smp Id: VSTD0201Z Client Smp ID: VSTD0201Z
Inj Date : 21-JAN-2014 14:06
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0201Z,VSTD0201Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 30-Jan-2014 10:54 mscarpaci Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 13 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.272	1.273	(0.284)	27846	20.0000	20(M)M7 AM 01/30
2	Chloromethane	50	1.400	1.401	(0.313)	131922	20.0000	18
3	Vinyl Chloride	62	1.479	1.480	(0.331)	89558	20.0000	18
4	Bromomethane	94	1.745	1.716	(0.390)	57801	20.0000	18
5	Chloroethane	64	1.814	1.825	(0.406)	57919	20.0000	18
6	Trichlorofluoromethane	101	1.951	1.943	(0.436)	61768	20.0000	18
127	Ethanol	46	2.050	2.041	(0.458)	25521	2000.00	1200(Q)
7	Ether	59	2.129	2.130	(0.476)	81089	20.0000	18
8	Acrolein	56	2.207	2.209	(0.494)	93734	100.000	84
9	1,1-Dichloroethene	96	2.296	2.327	(0.513)	62789	20.0000	18(Q)
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.316	2.307	(0.518)	42692	20.0000	17(Q)
11	Acetone	58	2.316	2.307	(0.518)	14257	20.0000	17(Q)
12	Iodomethane	142	2.444	2.455	(0.546)	65351	20.0000	16
13	Carbon Disulfide	76	2.533	2.534	(0.566)	180732	20.0000	18
14	Acetonitrile	40	2.503	2.494	(0.560)	104662	200.000	180(Q)
15	Methyl Acetate	43	2.542	2.544	(0.568)	130091	20.0000	17
16	Methylene Chloride	84	2.700	2.681	(0.604)	56684	20.0000	16(Q)
17	tert-Butanol	59	2.690	2.681	(0.601)	15401	40.0000	40
18	Acrylonitrile	53	2.789	2.780	(0.623)	36026	20.0000	17
20	Methyl tert-butyl ether	73	2.818	2.819	(0.630)	214723	20.0000	18

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7498.D
Report Date: 30-Jan-2014 10:55

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	19	trans-1,2-Dichloroethene	96	2.818	2.819	(0.630)	61177	20.0000	17
	21	1,1-Dichloroethane	63	3.114	3.115	(0.696)	140978	20.0000	18
	22	Vinyl acetate	43	3.173	3.164	(0.709)	346430	20.0000	18
	23	Diisopropyl Ether	45	3.173	3.174	(0.709)	476223	20.0000	19
	24	Ethyl tert-butyl ether	59	3.449	3.440	(0.771)	284644	20.0000	18
M	27	1,2-dichloroethene, (Total)	100				136189	40.0000	35
	25	cis-1,2-Dichloroethene	96	3.547	3.548	(0.793)	75012	20.0000	18
	26	2,2-Dichloropropane	77	3.557	3.558	(0.795)	49347	20.0000	20
	28	2-Butanone	72	3.557	3.548	(0.795)	12839	20.0000	20(Q)
	29	Bromochloromethane	128	3.734	3.735	(0.835)	33092	20.0000	18
	30	Tetrahydrofuran	72	3.774	3.775	(0.844)	18334	40.0000	35
	31	Chloroform	83	3.793	3.795	(0.848)	117938	20.0000	18
$	32	Dibromofluoromethane	113	3.911	3.913	(0.874)	137013	50.0000	50
	33	1,1,1-Trichloroethane	97	3.951	3.952	(0.883)	67980	20.0000	18
	34	Cyclohexane	56	4.000	4.001	(0.894)	151777	20.0000	20
	36	Carbon Tetrachloride	117	4.089	4.090	(0.914)	61612	20.0000	19
	35	1,1-Dichloropropene	110	4.079	4.080	(0.912)	30720	20.0000	19
$	37	1,2-Dichloroethane-d4	102	4.187	4.187	(0.936)	35397	50.0000	52
	38	Benzene	78	4.246	4.248	(0.949)	281741	20.0000	18
	39	1,2-Dichloroethane	62	4.246	4.248	(0.949)	75812	20.0000	18
	40	tert-Amyl methyl ether	73	4.335	4.336	(0.969)	217052	20.0000	18
*	41	Fluorobenzene	96	4.473	4.474	(1.000)	532572	50.0000	
	42	Trichloroethene	130	4.778	4.779	(1.068)	62105	20.0000	19
	43	Methylcyclohexane	83	4.965	4.967	(1.110)	121268	20.0000	19
	44	1,2-Dichloropropane	63	4.965	4.967	(1.110)	85475	20.0000	18
	46	Dibromomethane	93	5.064	5.075	(1.132)	43232	20.0000	18
	47	1,4-Dioxane	88	5.084	5.085	(1.137)	7472	400.000	310
	48	Bromodichloromethane	83	5.212	5.213	(1.165)	89100	20.0000	18
	45	2-Chloroethyl vinyl ether	63	5.497	5.489	(1.229)	1721	20.0000	16(T)
	49	cis-1,3-Dichloropropene	75	5.625	5.627	(1.258)	122170	20.0000	18
	50	4-Methyl-2-pentanone	43	5.773	5.774	(1.291)	112205	20.0000	17
$	51	Toluene-d8	98	5.881	5.892	(0.802)	501900	50.0000	51
	52	Toluene	91	5.950	5.952	(1.330)	270889	20.0000	19
	53	trans-1,3-Dichloropropene	75	6.147	6.149	(1.374)	96812	20.0000	18
	54	1,1,2-Trichloroethane	97	6.325	6.336	(1.414)	53734	20.0000	17
	55	Tetrachloroethene	164	6.492	6.493	(0.886)	45899	20.0000	19
	56	1,3-Dichloropropane	76	6.492	6.493	(0.886)	108735	20.0000	18
	57	2-Hexanone	43	6.591	6.592	(0.899)	92943	20.0000	18
	58	Dibromochloromethane	129	6.728	6.730	(0.918)	63238	20.0000	18
	59	1,2-Dibromoethane	107	6.837	6.838	(0.933)	60582	20.0000	18
*	60	Chlorobenzene-d5	117	7.329	7.331	(1.000)	358699	50.0000	
	63	1-Chlorohexane	91	7.349	7.360	(1.003)	110310	20.0000	19(Q)
	61	Chlorobenzene	112	7.359	7.360	(1.004)	162629	20.0000	18
	62	1,1,1,2-Tetrachloroethane	131	7.447	7.449	(1.016)	57673	20.0000	19
	64	Ethylbenzene	106	7.487	7.488	(1.022)	83544	20.0000	18
	65	m,p-Xylene	106	7.615	7.616	(1.039)	220041	40.0000	38
	66	o-Xylene	106	8.048	8.050	(1.098)	102795	20.0000	18
	67	Styrene	104	8.058	8.058	(1.099)	178643	20.0000	18
	68	Bromoform	173	8.245	8.247	(1.125)	37743	20.0000	17(T)
	69	Isopropylbenzene	105	8.462	8.462	(1.155)	267751	20.0000	19
	126	trans-1,4-Dichloro-2-butene	75	8.531	8.532	(1.164)	25595	20.0000	16
$	70	Bromofluorobenzene	95	8.620	8.621	(1.176)	194811	50.0000	49
	72	Bromobenzene	156	8.787	8.778	(0.888)	60247	20.0000	19
	71	1,1,2,2-Tetrachloroethane	83	8.787	8.788	(0.888)	76810	20.0000	18

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7498.D
Report Date: 30-Jan-2014 10:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
73	1,2,3-Trichloropropane	75	8.826	8.828	(0.892)	82868	20.0000	19
74	n-Propylbenzene	120	8.935	8.936	(0.903)	64394	20.0000	20
75	2-Chlorotoluene	126	9.014	9.015	(0.911)	56427	20.0000	18
76	1,3,5-Trimethylbenzene	105	9.142	9.143	(0.924)	209835	20.0000	19
77	4-Chlorotoluene	126	9.142	9.143	(0.924)	58262	20.0000	18(Q)
78	tert-Butylbenzene	119	9.496	9.497	(0.960)	205288	20.0000	19
79	1,2,4-Trimethylbenzene	105	9.545	9.547	(0.965)	217978	20.0000	19
M 81	Xylene (Total)	106				322836	60.0000	57
80	sec-Butylbenzene	105	9.733	9.734	(0.984)	281756	20.0000	19
82	1,3-Dichlorobenzene	146	9.821	9.832	(0.993)	106589	20.0000	19
83	4-Isopropyltoluene	119	9.890	9.901	(1.000)	212311	20.0000	19
* 84	1,4-Dichlorobenzene-d4	152	9.890	9.901	(1.000)	151692	50.0000	(Q)
85	1,4-Dichlorobenzene	146	9.920	9.921	(1.003)	106020	20.0000	18
86	n-Butylbenzene	91	10.304	10.315	(1.042)	215359	20.0000	19
87	1,2-Dichlorobenzene	146	10.294	10.295	(1.041)	100071	20.0000	19
88	1,2-Dibromo-3-chloropropane	75	11.043	11.044	(1.117)	9336	20.0000	17
89	1,2,4-Trichlorobenzene	180	11.801	11.802	(1.193)	57379	20.0000	18
90	Hexachlorobutadiene	225	11.968	11.970	(1.210)	30716	20.0000	21
91	Naphthalene	128	12.018	12.009	(1.215)	124041	20.0000	17
92	1,2,3-Trichlorobenzene	180	12.225	12.226	(1.236)	46360	20.0000	18

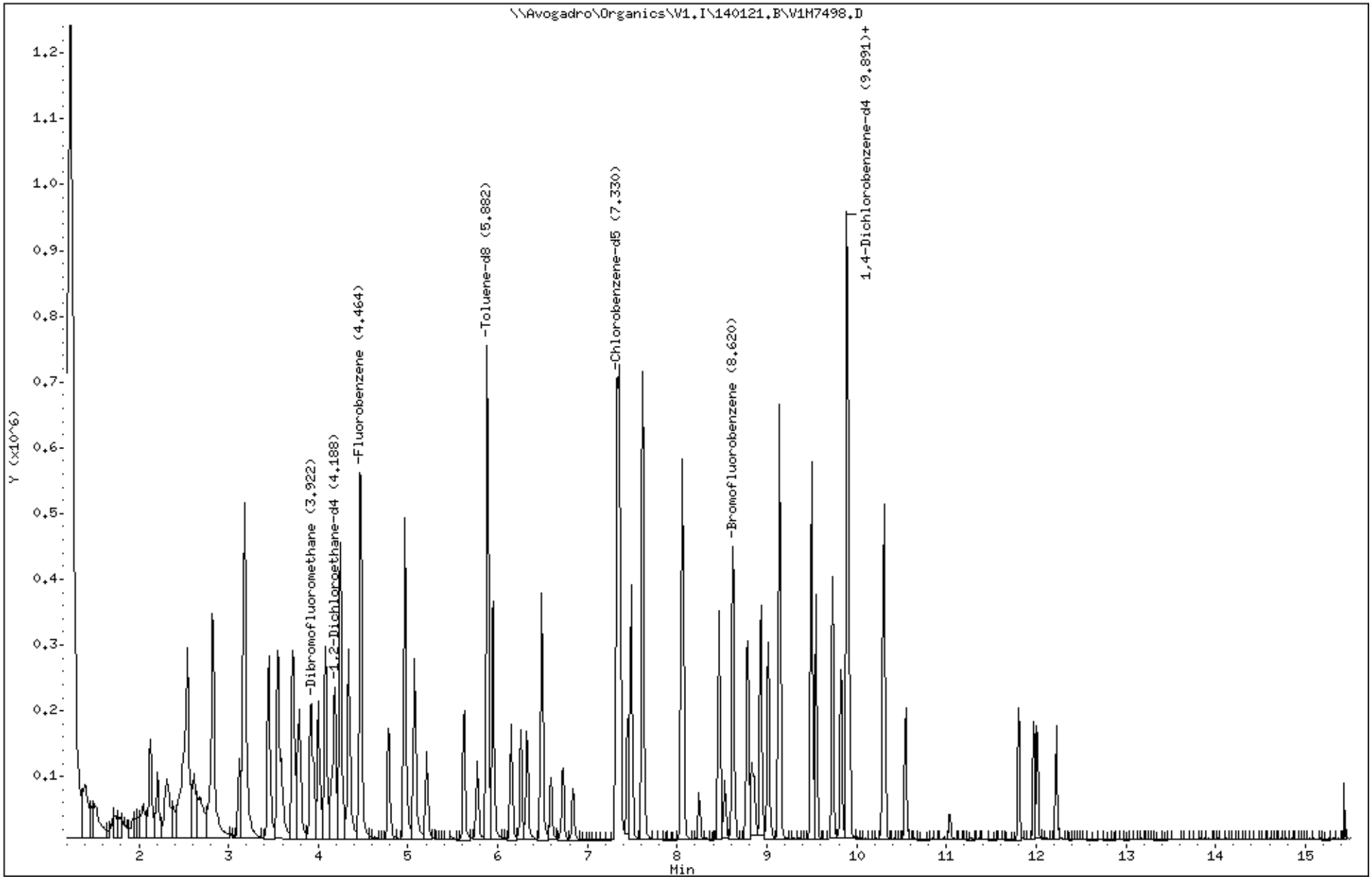
QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7498.D
Date : 21-JAN-2014 14:06
Client ID: VSTD0201Z
Sample Info: 5ML,VSTD0201Z,VSTD0201Z

Instrument: V1.i

Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140121.B\V5O9513.D
Report Date: 22-Jan-2014 15:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140121.B\V5O9513.D
Lab Smp Id: VSTD0205K Client Smp ID: VSTD0205K
Inj Date : 21-JAN-2014 11:50
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD0205K,VSTD0205K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140121.B\v5_8260W.m
Meth Date : 22-Jan-2014 14:03 wluo Quant Type: ISTD
Cal Date : 21-JAN-2014 11:50 Cal File: V5O9513.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.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	1.608	1.609	(0.288)	25079	20.0000	20
2	Freon114	85	1.736	1.737	(0.311)	26919	20.0000	21
3	Chloromethane	50	1.712	1.725	(0.307)	34494	20.0000	20
4	Vinyl Chloride	62	1.840	1.853	(0.330)	27372	20.0000	20
5	Bromomethane	94	2.130	2.143	(0.382)	22603	20.0000	20
6	Chloroethane	64	2.223	2.225	(0.399)	13943	20.0000	20
7	Trichlorofluoromethane	101	2.490	2.492	(0.446)	34573	20.0000	22
8	Ethanol	46	2.606	2.608	(0.467)	10570	2000.00	2600
9	Ether	59	2.688	2.689	(0.482)	22154	20.0000	22
10	Acrolein	56	2.792	2.793	(0.501)	3994	100.000	99
11	1,1-Dichloroethene	96	2.897	2.886	(0.519)	25591	20.0000	20
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.931	2.933	(0.526)	32405	20.0000	21
13	Acetone	58	2.931	2.921	(0.526)	2372	20.0000	21(Q)
14	Iodomethane	142	3.024	3.026	(0.542)	69883	20.0000	20
15	Carbon Disulfide	76	3.094	3.084	(0.555)	100909	20.0000	20
16	Acetonitrile	41	3.198	3.200	(0.573)	81009	200.000	200
17	Allyl Chloride	39	3.198	3.200	(0.573)	37446	20.0000	20
18	Methyl Acetate	43	3.222	3.211	(0.578)	31943	20.0000	20
19	Methylene Chloride	84	3.315	3.304	(0.594)	29852	20.0000	20
20	tert-Butanol	59	3.407	3.420	(0.611)	5152	40.0000	41
21	Acrylonitrile	53	3.524	3.513	(0.632)	10570	20.0000	20
22	trans-1,2-Dichloroethene	96	3.547	3.548	(0.636)	27978	20.0000	20
23	Methyl tert-butyl ether	73	3.558	3.560	(0.638)	85989	20.0000	21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 1,1-Dichloroethane	63	3.930	3.920	(0.705)	47260	20.0000	20
	25 Vinyl acetate	43	3.976	3.978	(0.713)	88082	20.0000	20
	26 Diisopropyl Ether	45	3.988	3.989	(0.715)	103686	20.0000	20
	27 2-Chloro-1,3-Butadiene	53	4.011	4.012	(0.719)	38293	20.0000	20
	28 Ethyl tert-butyl ether	59	4.325	4.326	(0.775)	95181	20.0000	20
	29 cis-1,2-Dichloroethene	96	4.452	4.454	(0.798)	30767	20.0000	20
	30 2-Butanone	72	4.464	4.465	(0.800)	3134	20.0000	21(Q)
	31 2,2-Dichloropropane	77	4.464	4.465	(0.800)	40185	20.0000	19
	32 Propionitrile	54	4.510	4.512	(0.809)	35229	200.000	200
	33 Methacrylonitrile	41	4.661	4.663	(0.836)	35946	40.0000	41
	34 Bromochloromethane	128	4.685	4.686	(0.840)	17282	20.0000	19
	35 Tetrahydrofuran	72	4.731	4.732	(0.848)	7182	40.0000	41
	36 Chloroform	83	4.754	4.755	(0.852)	49973	20.0000	20
$	37 Dibromofluoromethane	113	4.905	4.906	(0.879)	43435	50.0000	50
	38 1,1,1-Trichloroethane	97	4.940	4.941	(0.886)	43662	20.0000	20
	39 Cyclohexane	56	5.010	5.011	(0.898)	41094	20.0000	21
	40 1,1-Dichloropropene	110	5.102	5.104	(0.915)	12225	20.0000	17
	41 Carbon Tetrachloride	117	5.114	5.104	(0.917)	41023	20.0000	20
	42 Isobutyl Alcohol	43	5.195	5.197	(0.931)	20972	400.000	430
$	43 1,2-Dichloroethane-d4	102	5.242	5.231	(0.940)	7480	50.0000	49
	44 Benzene	78	5.300	5.301	(0.950)	94710	20.0000	20
	45 1,2-Dichloroethane	62	5.311	5.313	(0.952)	37958	20.0000	20
	46 tert-Amyl methyl ether	73	5.416	5.417	(0.971)	82269	20.0000	20
*	47 Fluorobenzene	96	5.578	5.580	(1.000)	107534	50.0000	
	48 Trichloroethene	130	5.950	5.951	(1.067)	30872	20.0000	20
	49 Methylcyclohexane	83	6.171	6.172	(1.106)	31660	20.0000	20
	50 1,2-Dichloropropane	63	6.182	6.183	(1.108)	26170	20.0000	21
	51 Methyl Methacrylate	69	6.310	6.311	(1.131)	23569	20.0000	20
	52 Dibromomethane	93	6.310	6.311	(1.131)	22575	20.0000	22
	53 1,4-Dioxane	88	6.321	6.334	(1.133)	4209	400.000	400
	54 Bromodichloromethane	83	6.472	6.474	(1.160)	37585	20.0000	20
M	55 1,2-Dichloroethene (Total)	96				58745	40.0000	40
	56 2-Chloroethyl vinyl ether	63	6.809	6.810	(1.221)	2452	20.0000	19
	57 cis-1,3-Dichloropropene	75	6.972	6.973	(1.250)	44151	20.0000	21
	58 4-Methyl-2-pentanone	43	7.157	7.159	(1.283)	28608	20.0000	20
$	59 Toluene-d8	98	7.285	7.286	(0.806)	122968	50.0000	50
	60 Toluene	91	7.366	7.368	(1.320)	98929	20.0000	20
	61 trans-1,3-Dichloropropene	75	7.622	7.623	(1.366)	38340	20.0000	20
	62 Ethyl Methacrylate	69	7.738	7.739	(1.387)	28141	20.0000	20
	63 1,1,2-Trichloroethane	97	7.831	7.832	(1.404)	24013	20.0000	20
	64 Tetrachloroethene	164	8.016	8.018	(0.887)	27747	20.0000	19
	65 1,3-Dichloropropane	76	8.040	8.041	(0.890)	40768	20.0000	20
	66 2-Hexanone	43	8.144	8.145	(0.901)	19605	20.0000	20
	67 Dibromochloromethane	129	8.307	8.308	(0.919)	34539	20.0000	20
	68 1,2-Dibromoethane	107	8.458	8.447	(0.936)	28187	20.0000	20
*	69 Chlorobenzene-d5	117	9.038	9.039	(1.000)	131433	50.0000	
	70 1-Chlorohexane	91	9.061	9.063	(1.003)	33353	20.0000	20(Q)
	71 Chlorobenzene	112	9.085	9.074	(1.005)	68239	20.0000	20
	72 1,1,1,2-Tetrachloroethane	131	9.189	9.190	(1.017)	28119	20.0000	19
	73 Ethylbenzene	106	9.235	9.237	(1.022)	31503	20.0000	19
	74 m,p-Xylene	106	9.386	9.388	(1.039)	79624	40.0000	40
	75 o-Xylene	106	9.909	9.910	(1.096)	40168	20.0000	21
	76 Styrene	104	9.920	9.922	(1.098)	68097	20.0000	20
	77 Bromoform	173	10.153	10.142	(1.123)	28749	20.0000	21

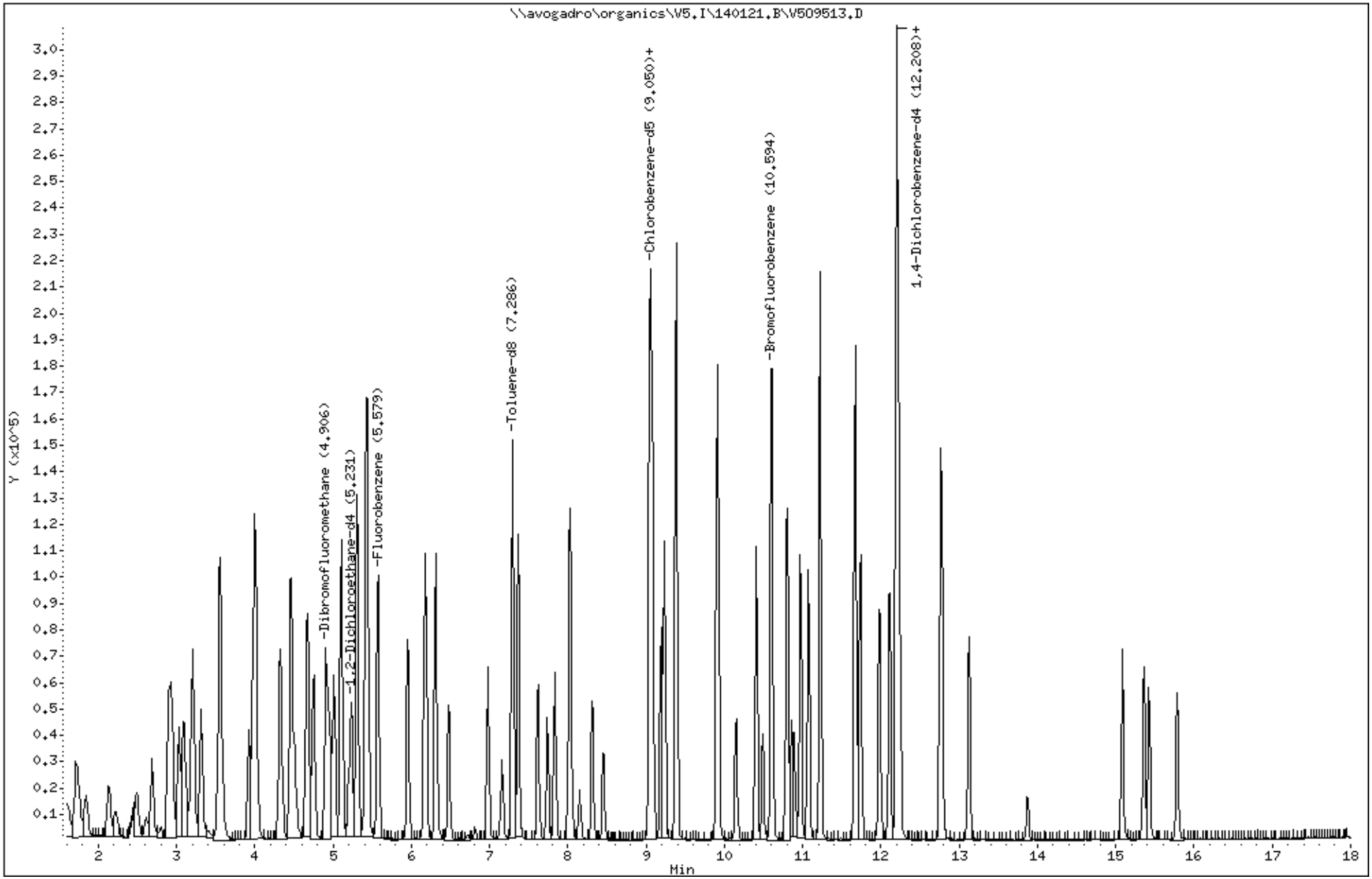
Data File: \\avogadro\organics\V5.I\140121.B\V5O9513.D
Report Date: 22-Jan-2014 15:01

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 Isopropylbenzene	105	10.408	10.409	(1.152)	95762	20.0000	20
	79 trans-1,4-Dichloro-2-butene	75	10.489	10.491	(1.161)	11039	20.0000	20
$	80 Bromofluorobenzene	95	10.605	10.595	(1.173)	73501	50.0000	51
	81 Bromobenzene	156	10.791	10.792	(0.884)	35757	20.0000	19
	82 1,1,2,2-Tetrachloroethane	83	10.803	10.804	(0.885)	34068	20.0000	20
	83 1,2,3-Trichloropropane	75	10.861	10.862	(0.890)	35563	20.0000	19
	84 n-Propylbenzene	120	10.965	10.967	(0.898)	25000	20.0000	20
	85 2-Chlorotoluene	126	11.070	11.071	(0.907)	26327	20.0000	20
	86 4-Chlorotoluene	126	11.221	11.222	(0.919)	27518	20.0000	21
	87 1,3,5-Trimethylbenzene	105	11.221	11.222	(0.919)	78007	20.0000	20
	88 tert-Butylbenzene	119	11.673	11.675	(0.956)	82136	20.0000	20
	89 1,2,4-Trimethylbenzene	105	11.743	11.744	(0.962)	82477	20.0000	20
	90 sec-Butylbenzene	105	11.987	11.977	(0.982)	88759	20.0000	20
	91 1,3-Dichlorobenzene	146	12.115	12.116	(0.992)	56203	20.0000	19
	92 4-Isopropyltoluene	119	12.196	12.197	(0.999)	74735	20.0000	20
*	93 1,4-Dichlorobenzene-d4	152	12.207	12.209	(1.000)	88550	50.0000	(Q)
	94 1,4-Dichlorobenzene	146	12.242	12.232	(1.003)	60283	20.0000	19
M	95 Xylene (Total)	106				119792	60.0000	60
	96 1,2-Dichlorobenzene	146	12.753	12.754	(1.045)	57314	20.0000	20
	97 n-Butylbenzene	91	12.776	12.778	(1.047)	64264	20.0000	19
	98 Hexachloroethane	117	13.125	13.126	(1.075)	20365	20.0000	21
	99 1,2-Dibromo-3-chloropropane	75	13.868	13.869	(1.136)	5069	20.0000	23
	100 1,3,5-Trichlorobenzene	182	15.087	15.088	(2.704)	32892	20.0000	20
	101 1,2,4-Trichlorobenzene	180	15.087	15.088	(1.236)	34864	20.0000	20
	102 Hexachlorobutadiene	225	15.365	15.367	(1.259)	20838	20.0000	20
	103 Naphthalene	128	15.423	15.425	(1.263)	63714	20.0000	21
	104 1,2,3-Trichlorobenzene	180	15.783	15.784	(1.293)	26480	20.0000	20

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\140121.B\V509513.D
Date : 21-JAN-2014 11:50
Client ID: VSTD0205K
Instrument: V5.i
Sample Info: 5ML,VSTD0205K,VSTD0205K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7420.D
Report Date: 31-Jan-2014 11:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140116.B\V1M7420.D
Lab Smp Id: VSTD0501W Client Smp ID: VSTD0501W
Inj Date : 16-JAN-2014 13:50
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501W,VSTD0501W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140116.B\v18260GH.m
Meth Date : 22-Jan-2014 12:29 amarquis Quant Type: ISTD
Cal Date : 09-JAN-2014 11:42 Cal File: V1M7357.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: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.272	1.288	(0.284)	53687	50.0000		(aQM)M7 AM 01/31
2	Chloromethane	50	1.419	1.406	(0.317)	340057	50.0000		(aQ)
3	Vinyl Chloride	62	1.498	1.495	(0.334)	220329	50.0000		(aQ)
4	Bromomethane	94	1.745	1.741	(0.389)	144367	50.0000		(aQ)
5	Chloroethane	64	1.843	1.820	(0.411)	148159	50.0000		(aQ)
6	Trichlorofluoromethane	101	1.951	1.948	(0.435)	151294	50.0000		(aQ)
7	Ether	59	2.138	2.135	(0.477)	222023	50.0000		(aQ)
8	Acrolein	56	2.217	2.214	(0.495)	252996	250.000		(aQ)
9	1,1-Dichloroethene	96	2.326	2.332	(0.519)	157577	50.0000		(aQ)
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.316	2.312	(0.517)	124696	50.0000		(aQ)
11	Acetone	58	2.316	2.322	(0.517)	36988	50.0000		(aQ)
12	Iodomethane	142	2.464	2.460	(0.550)	216500	50.0000		(aQ)
13	Carbon Disulfide	76	2.542	2.539	(0.567)	448424	50.0000		(aQ)
14	Acetonitrile	40	2.513	2.509	(0.561)	263701	500.000		(aQ)
15	Methyl Acetate	43	2.552	2.549	(0.569)	352861	50.0000		(aQ)
16	Methylene Chloride	84	2.700	2.696	(0.602)	164326	50.0000		(aQ)
17	tert-Butanol	59	2.690	2.696	(0.600)	34967	100.000		(a)
18	Acrylonitrile	53	2.789	2.785	(0.622)	98676	50.0000		(a)
20	Methyl tert-butyl ether	73	2.828	2.824	(0.631)	570589	50.0000		(aQ)
19	trans-1,2-Dichloroethene	96	2.828	2.824	(0.631)	162674	50.0000		(aQ)
21	1,1-Dichloroethane	63	3.123	3.120	(0.697)	369418	50.0000		(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	22 Vinyl acetate	43	3.173	3.169	(0.708)	951855	50.0000		(aQ)
	23 Diisopropyl Ether	45	3.183	3.179	(0.710)	1287885	50.0000		(aQ)
	24 Ethyl tert-butyl ether	59	3.458	3.445	(0.772)	768891	50.0000		(aQ)
M	27 1,2-dichloroethene, (Total)	100				362842	100.000		(a)
	25 cis-1,2-Dichloroethene	96	3.557	3.553	(0.793)	200168	50.0000		(aQ)
	26 2,2-Dichloropropane	77	3.567	3.563	(0.796)	115082	50.0000		(aQ)
	28 2-Butanone	72	3.557	3.553	(0.793)	31304	50.0000		(aQ)
	29 Bromochloromethane	128	3.734	3.740	(0.833)	88719	50.0000		(aQ)
	30 Tetrahydrofuran	72	3.783	3.770	(0.844)	45823	100.000		(aQ)
	31 Chloroform	83	3.803	3.790	(0.848)	302222	50.0000		(aQ)
$	32 Dibromofluoromethane	113	3.921	3.918	(0.875)	139491	50.0000		(a)
	33 1,1,1-Trichloroethane	97	3.961	3.947	(0.884)	175017	50.0000		(aQ)
	34 Cyclohexane	56	4.010	4.006	(0.895)	314332	50.0000		(aQ)
	36 Carbon Tetrachloride	117	4.089	4.095	(0.912)	149545	50.0000		(aQ)
	35 1,1-Dichloropropene	110	4.089	4.085	(0.912)	70454	50.0000		(aQ)
$	37 1,2-Dichloroethane-d4	102	4.197	4.193	(0.936)	34910	50.0000		(a)
	38 Benzene	78	4.256	4.253	(0.949)	718399	50.0000		(a)
	39 1,2-Dichloroethane	62	4.256	4.253	(0.949)	213729	50.0000		(aQ)
	40 tert-Amyl methyl ether	73	4.345	4.341	(0.969)	598242	50.0000		(aQ)
*	41 Fluorobenzene	96	4.483	4.469	(1.000)	540894	50.0000		(Q)
	42 Trichloroethene	130	4.788	4.784	(1.068)	147465	50.0000		(aQ)
	43 Methylcyclohexane	83	4.975	4.962	(1.110)	289447	50.0000		(aQ)
	44 1,2-Dichloropropane	63	4.975	4.972	(1.110)	228447	50.0000		(aQ)
	46 Dibromomethane	93	5.074	5.070	(1.132)	110807	50.0000		(aQ)
	47 1,4-Dioxane	88	5.103	5.090	(1.138)	14725	1000.00		(aQ)
	48 Bromodichloromethane	83	5.212	5.218	(1.163)	238916	50.0000		(aQ)
	45 2-Chloroethyl vinyl ether	63	5.497	5.494	(1.226)	27607	50.0000		(aQH)
	49 cis-1,3-Dichloropropene	75	5.625	5.631	(1.255)	317401	50.0000		(aQ)
	50 4-Methyl-2-pentanone	43	5.773	5.779	(1.288)	290585	50.0000		(aQ)
$	51 Toluene-d8	98	5.891	5.897	(0.803)	505498	50.0000		(a)
	52 Toluene	91	5.950	5.957	(1.327)	684594	50.0000		(aQ)
	53 trans-1,3-Dichloropropene	75	6.157	6.154	(1.373)	261134	50.0000		(aQ)
	54 1,1,2-Trichloroethane	97	6.334	6.341	(1.413)	147964	50.0000		(aQ)
	55 Tetrachloroethene	164	6.492	6.498	(0.885)	110526	50.0000		(aQ)
	56 1,3-Dichloropropane	76	6.502	6.508	(0.886)	292793	50.0000		(aQ)
	57 2-Hexanone	43	6.591	6.597	(0.898)	236594	50.0000		(aQ)
	58 Dibromochloromethane	129	6.728	6.735	(0.917)	167194	50.0000		(aQ)
	59 1,2-Dibromoethane	107	6.847	6.843	(0.933)	163084	50.0000		(aQ)
*	60 Chlorobenzene-d5	117	7.339	7.345	(1.000)	360850	50.0000		(Q)
	63 1-Chlorohexane	91	7.359	7.365	(1.003)	256544	50.0000		(aQ)
	61 Chlorobenzene	112	7.369	7.375	(1.004)	417996	50.0000		(aQ)
	62 1,1,1,2-Tetrachloroethane	131	7.457	7.463	(1.016)	146286	50.0000		(aQ)
	64 Ethylbenzene	106	7.497	7.503	(1.021)	213283	50.0000		(aQ)
	65 m,p-Xylene	106	7.625	7.631	(1.039)	531983	100.000		(aQ)
	66 o-Xylene	106	8.048	8.064	(1.097)	264872	50.0000		(aQ)
	67 Styrene	104	8.068	8.074	(1.099)	478313	50.0000		(aQ)
	68 Bromoform	173	8.245	8.261	(1.123)	99642	50.0000		(aQ)
	69 Isopropylbenzene	105	8.472	8.478	(1.154)	654412	50.0000		(aQ)
	126 trans-1,4-Dichloro-2-butene	75	8.531	8.537	(1.162)	66777	50.0000		(aQ)
$	70 Bromofluorobenzene	95	8.629	8.636	(1.176)	193557	50.0000		(aQ)
	72 Bromobenzene	156	8.787	8.793	(0.888)	150940	50.0000		(aQ)
	71 1,1,2,2-Tetrachloroethane	83	8.797	8.803	(0.889)	202757	50.0000		(aQ)
	73 1,2,3-Trichloropropane	75	8.836	8.842	(0.893)	216336	50.0000		(aQ)
	74 n-Propylbenzene	120	8.935	8.951	(0.903)	155181	50.0000		(aQ)

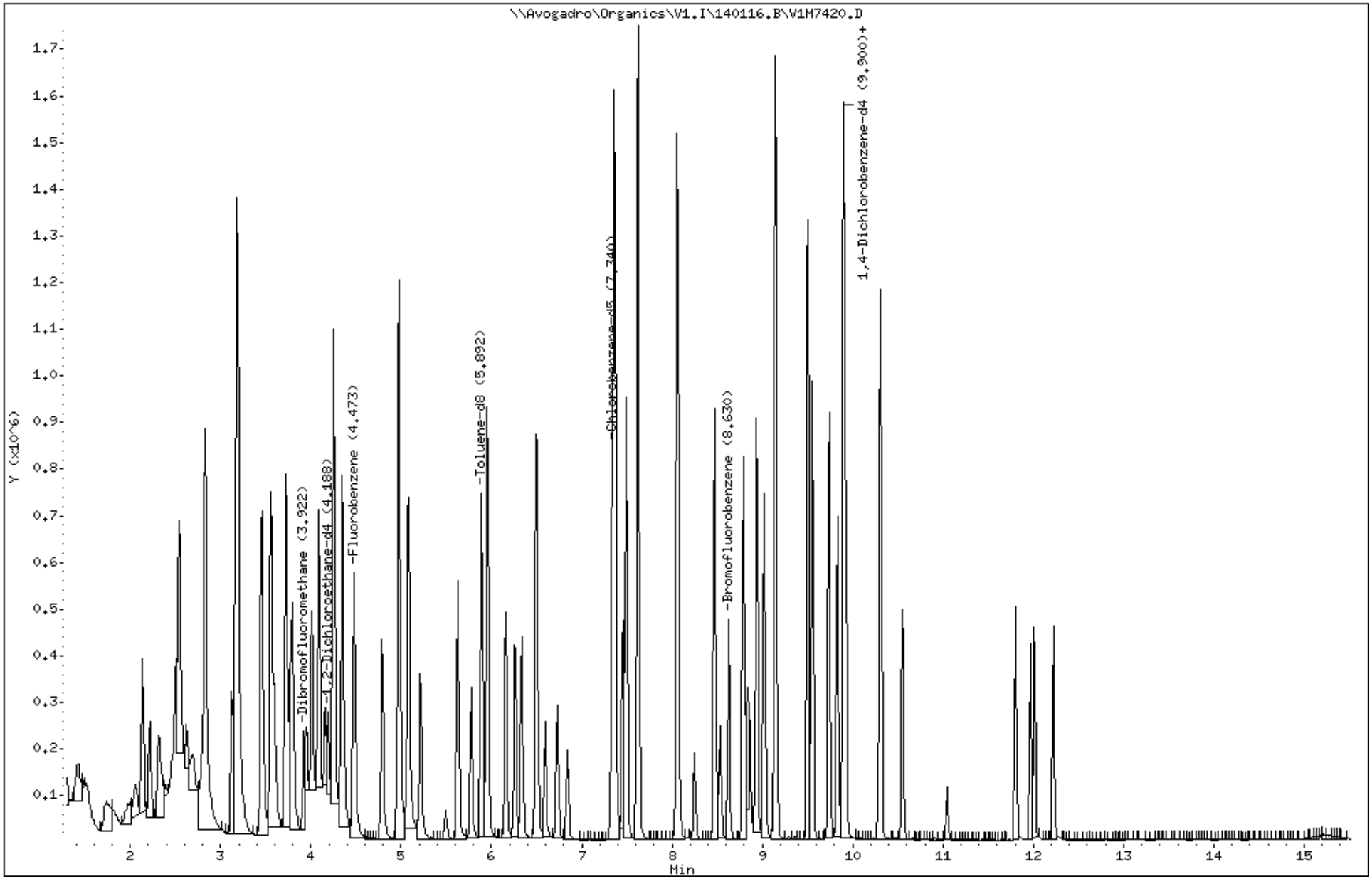
Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7420.D
Report Date: 31-Jan-2014 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	75 2-Chlorotoluene	126	9.023	9.030	(0.911)	138622	50.0000		(aQ)
	76 1,3,5-Trimethylbenzene	105	9.142	9.158	(0.923)	536484	50.0000		(aQ)
	77 4-Chlorotoluene	126	9.142	9.148	(0.923)	149440	50.0000		(aQ)
	78 tert-Butylbenzene	119	9.506	9.512	(0.960)	512391	50.0000		(aQ)
	79 1,2,4-Trimethylbenzene	105	9.555	9.561	(0.965)	542310	50.0000		(aQ)
M	81 Xylene (Total)	106				796855	150.000		(a)
	80 sec-Butylbenzene	105	9.742	9.749	(0.984)	679818	50.0000		(aQ)
	82 1,3-Dichlorobenzene	146	9.831	9.837	(0.993)	262546	50.0000		(aQ)
	83 4-Isopropyltoluene	119	9.900	9.906	(1.000)	512996	50.0000		(aQ)
*	84 1,4-Dichlorobenzene-d4	152	9.900	9.906	(1.000)	149780	50.0000		(Q)
	85 1,4-Dichlorobenzene	146	9.930	9.936	(1.003)	264508	50.0000		(aQ)
	86 n-Butylbenzene	91	10.314	10.320	(1.042)	522397	50.0000		(aQ)
	87 1,2-Dichlorobenzene	146	10.294	10.300	(1.040)	246381	50.0000		(aQ)
	88 1,2-Dibromo-3-chloropropane	75	11.043	11.049	(1.115)	24723	50.0000		(aQ)
	89 1,2,4-Trichlorobenzene	180	11.811	11.807	(1.193)	142501	50.0000		(aQ)
	90 Hexachlorobutadiene	225	11.978	11.975	(1.210)	68491	50.0000		(aQ)
	91 Naphthalene	128	12.008	12.014	(1.213)	314850	50.0000		(a)
	92 1,2,3-Trichlorobenzene	180	12.224	12.231	(1.235)	120175	50.0000		(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7420.D
Date : 16-JAN-2014 13:50
Client ID: VSTD0501W
Instrument: V1.i
Sample Info: 5ML,VSTD0501W,VSTD0501W
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7499.D
Report Date: 30-Jan-2014 10:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7499.D
Lab Smp Id: VSTD0501Z Client Smp ID: VSTD0501Z
Inj Date : 21-JAN-2014 14:35
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501Z,VSTD0501Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 30-Jan-2014 10:54 mscarpaci Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.273	1.273	(0.285)	75404	50.0000	55(QM)M7 AM 01/30
2	Chloromethane	50	1.401	1.401	(0.313)	354655	50.0000	48
3	Vinyl Chloride	62	1.479	1.480	(0.331)	225601	50.0000	47
4	Bromomethane	94	1.716	1.716	(0.384)	153042	50.0000	48
5	Chloroethane	64	1.824	1.825	(0.408)	150129	50.0000	47
6	Trichlorofluoromethane	101	1.942	1.943	(0.434)	165278	50.0000	48
127	Ethanol	46	2.041	2.041	(0.456)	103904	5000.00	5100
7	Ether	59	2.129	2.130	(0.476)	222093	50.0000	49
8	Acrolein	56	2.208	2.209	(0.494)	271402	250.000	240
9	1,1-Dichloroethene	96	2.326	2.327	(0.520)	159565	50.0000	46
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.307	2.307	(0.516)	123596	50.0000	50
11	Acetone	58	2.307	2.307	(0.516)	36540	50.0000	45(Q)
12	Iodomethane	142	2.454	2.455	(0.549)	186344	50.0000	45
13	Carbon Disulfide	76	2.533	2.534	(0.566)	495494	50.0000	49
14	Acetonitrile	40	2.494	2.494	(0.558)	278514	500.000	490(Q)
15	Methyl Acetate	43	2.543	2.544	(0.569)	366132	50.0000	49
16	Methylene Chloride	84	2.681	2.681	(0.599)	172301	50.0000	49
17	tert-Butanol	59	2.681	2.681	(0.599)	40783	100.000	110
18	Acrylonitrile	53	2.779	2.780	(0.621)	103039	50.0000	50
20	Methyl tert-butyl ether	73	2.819	2.819	(0.630)	557963	50.0000	48

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	19 trans-1,2-Dichloroethene	96	2.819	2.819	(0.630)	169618	50.0000	48
	21 1,1-Dichloroethane	63	3.114	3.115	(0.696)	365847	50.0000	48
	22 Vinyl acetate	43	3.164	3.164	(0.707)	920514	50.0000	49
	23 Diisopropyl Ether	45	3.173	3.174	(0.709)	1235092	50.0000	49
	24 Ethyl tert-butyl ether	59	3.439	3.440	(0.769)	743610	50.0000	48
M	27 1,2-dichloroethene, (Total)	100				364562	100.000	95
	25 cis-1,2-Dichloroethene	96	3.548	3.548	(0.793)	194944	50.0000	47
	26 2,2-Dichloropropane	77	3.558	3.558	(0.795)	114989	50.0000	47
	28 2-Butanone	72	3.548	3.548	(0.793)	30687	50.0000	47
	29 Bromochloromethane	128	3.735	3.735	(0.835)	89401	50.0000	48
	30 Tetrahydrofuran	72	3.774	3.775	(0.844)	50607	100.000	98
	31 Chloroform	83	3.794	3.795	(0.848)	304164	50.0000	48
$	32 Dibromofluoromethane	113	3.912	3.913	(0.875)	132498	50.0000	49
	33 1,1,1-Trichloroethane	97	3.952	3.952	(0.883)	175045	50.0000	47
	34 Cyclohexane	56	4.001	4.001	(0.894)	368346	50.0000	49
	36 Carbon Tetrachloride	117	4.089	4.090	(0.914)	150063	50.0000	48
	35 1,1-Dichloropropene	110	4.080	4.080	(0.912)	73843	50.0000	46
$	37 1,2-Dichloroethane-d4	102	4.188	4.187	(0.936)	33233	50.0000	49
	38 Benzene	78	4.247	4.248	(0.949)	726961	50.0000	48
	39 1,2-Dichloroethane	62	4.247	4.248	(0.949)	208140	50.0000	49
	40 tert-Amyl methyl ether	73	4.336	4.336	(0.969)	581608	50.0000	48
*	41 Fluorobenzene	96	4.474	4.474	(1.000)	526156	50.0000	
	42 Trichloroethene	130	4.779	4.779	(1.068)	151214	50.0000	47
	43 Methylcyclohexane	83	4.966	4.967	(1.110)	294265	50.0000	47
	44 1,2-Dichloropropane	63	4.966	4.967	(1.110)	223235	50.0000	48
	46 Dibromomethane	93	5.074	5.075	(1.134)	115070	50.0000	49
	47 1,4-Dioxane	88	5.084	5.085	(1.136)	25524	1000.00	1100
	48 Bromodichloromethane	83	5.212	5.213	(1.165)	235426	50.0000	48
	45 2-Chloroethyl vinyl ether	63	5.488	5.489	(1.227)	4948	50.0000	47
	49 cis-1,3-Dichloropropene	75	5.626	5.627	(1.258)	321045	50.0000	49
	50 4-Methyl-2-pentanone	43	5.774	5.774	(1.291)	309942	50.0000	48
$	51 Toluene-d8	98	5.892	5.892	(0.804)	488644	50.0000	50
	52 Toluene	91	5.951	5.952	(1.330)	679106	50.0000	48
	53 trans-1,3-Dichloropropene	75	6.148	6.149	(1.374)	254572	50.0000	48
	54 1,1,2-Trichloroethane	97	6.335	6.336	(1.416)	148881	50.0000	49
	55 Tetrachloroethene	164	6.493	6.493	(0.886)	112428	50.0000	46
	56 1,3-Dichloropropane	76	6.493	6.493	(0.886)	285119	50.0000	49
	57 2-Hexanone	43	6.591	6.592	(0.899)	243284	50.0000	49
	58 Dibromochloromethane	129	6.729	6.730	(0.918)	170319	50.0000	48
	59 1,2-Dibromoethane	107	6.838	6.838	(0.933)	161247	50.0000	50
*	60 Chlorobenzene-d5	117	7.330	7.331	(1.000)	351619	50.0000	
	63 1-Chlorohexane	91	7.360	7.360	(1.004)	266218	50.0000	48(Q)
	61 Chlorobenzene	112	7.360	7.360	(1.004)	411518	50.0000	48
	62 1,1,1,2-Tetrachloroethane	131	7.448	7.449	(1.016)	148413	50.0000	49
	64 Ethylbenzene	106	7.488	7.488	(1.021)	215852	50.0000	48
	65 m,p-Xylene	106	7.616	7.616	(1.039)	537278	100.000	96
	66 o-Xylene	106	8.049	8.050	(1.098)	267978	50.0000	49
	67 Styrene	104	8.059	8.058	(1.099)	470516	50.0000	49
	68 Bromoform	173	8.246	8.247	(1.125)	104693	50.0000	50(T)
	69 Isopropylbenzene	105	8.463	8.462	(1.155)	656246	50.0000	47
	126 trans-1,4-Dichloro-2-butene	75	8.532	8.532	(1.164)	77448	50.0000	50
$	70 Bromofluorobenzene	95	8.620	8.621	(1.176)	196837	50.0000	50
	72 Bromobenzene	156	8.778	8.778	(0.887)	151463	50.0000	47
	71 1,1,2,2-Tetrachloroethane	83	8.788	8.788	(0.888)	210208	50.0000	48

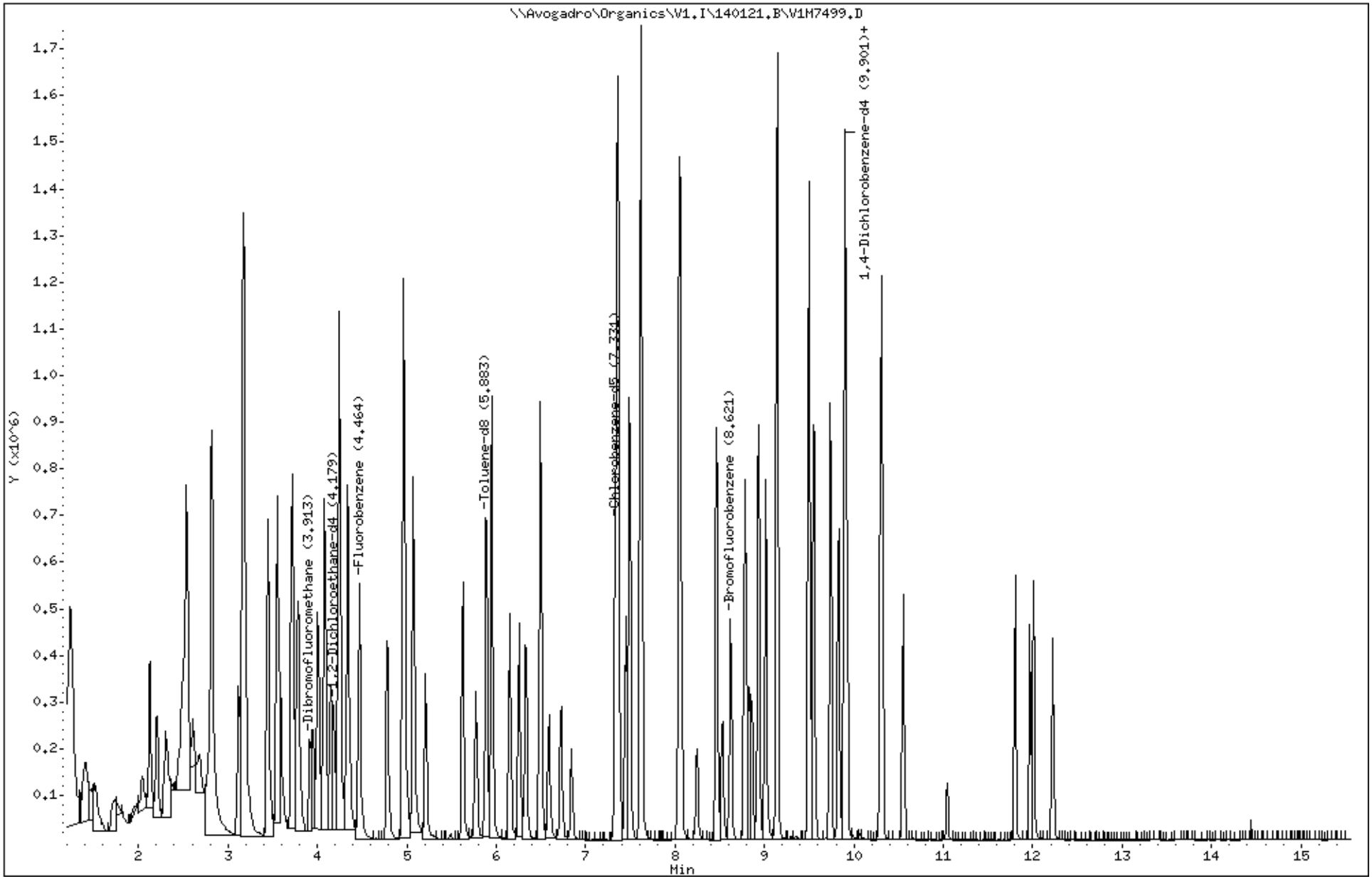
Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7499.D
Report Date: 30-Jan-2014 10:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	73 1,2,3-Trichloropropane	75	8.827	8.828	(0.892)	228383	50.0000	51(Q)
	74 n-Propylbenzene	120	8.935	8.936	(0.903)	155188	50.0000	47
	75 2-Chlorotoluene	126	9.014	9.015	(0.910)	146542	50.0000	48
	76 1,3,5-Trimethylbenzene	105	9.142	9.143	(0.923)	539663	50.0000	48
	77 4-Chlorotoluene	126	9.142	9.143	(0.923)	150600	50.0000	47
	78 tert-Butylbenzene	119	9.497	9.497	(0.959)	527722	50.0000	48
	79 1,2,4-Trimethylbenzene	105	9.546	9.547	(0.964)	548595	50.0000	48
M	81 Xylene (Total)	106				805256	150.000	140
	80 sec-Butylbenzene	105	9.733	9.734	(0.983)	698144	50.0000	47
	82 1,3-Dichlorobenzene	146	9.832	9.832	(0.993)	269097	50.0000	48
	83 4-Isopropyltoluene	119	9.901	9.901	(1.000)	525995	50.0000	48
*	84 1,4-Dichlorobenzene-d4	152	9.901	9.901	(1.000)	152520	50.0000	(Q)
	85 1,4-Dichlorobenzene	146	9.920	9.921	(1.002)	275722	50.0000	48
	86 n-Butylbenzene	91	10.314	10.315	(1.042)	542011	50.0000	48
	87 1,2-Dichlorobenzene	146	10.295	10.295	(1.040)	255626	50.0000	48
	88 1,2-Dibromo-3-chloropropane	75	11.043	11.044	(1.115)	25926	50.0000	48
	89 1,2,4-Trichlorobenzene	180	11.802	11.802	(1.192)	154010	50.0000	50
	90 Hexachlorobutadiene	225	11.969	11.970	(1.209)	73784	50.0000	50
	91 Naphthalene	128	12.009	12.009	(1.213)	355598	50.0000	49
	92 1,2,3-Trichlorobenzene	180	12.225	12.226	(1.235)	132426	50.0000	51

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7499.D
Date : 21-JAN-2014 14:35
Client ID: VSTD0501Z
Instrument: V1.i
Sample Info: 5ML,VSTD0501Z,VSTD0501Z
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140121.B\V5O9514.D
Report Date: 22-Jan-2014 15:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140121.B\V5O9514.D
Lab Smp Id: VSTD0505K Client Smp ID: VSTD0505K
Inj Date : 21-JAN-2014 12:16
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD0505K,VSTD0505K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140121.B\v5_8260W.m
Meth Date : 22-Jan-2014 14:03 wluo Quant Type: ISTD
Cal Date : 21-JAN-2014 12:16 Cal File: V5O9514.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.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	1.609	1.609	(0.288)	67357	50.0000	55
2	Freon114	85	1.737	1.737	(0.311)	64735	50.0000	51
3	Chloromethane	50	1.725	1.725	(0.309)	81272	50.0000	48
4	Vinyl Chloride	62	1.853	1.853	(0.332)	66430	50.0000	50
5	Bromomethane	94	2.143	2.143	(0.384)	51802	50.0000	46
6	Chloroethane	64	2.225	2.225	(0.399)	33054	50.0000	48
7	Trichlorofluoromethane	101	2.492	2.492	(0.447)	82947	50.0000	52
8	Ethanol	46	2.608	2.608	(0.467)	12439	5000.00	3100(Q)
9	Ether	59	2.689	2.689	(0.482)	52934	50.0000	53
10	Acrolein	56	2.793	2.793	(0.501)	9972	250.000	250
11	1,1-Dichloroethene	96	2.886	2.886	(0.517)	63969	50.0000	50
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.933	2.933	(0.526)	79156	50.0000	52
13	Acetone	58	2.921	2.921	(0.524)	6138	50.0000	55(Q)
14	Iodomethane	142	3.026	3.026	(0.542)	174231	50.0000	51
15	Carbon Disulfide	76	3.084	3.084	(0.553)	248928	50.0000	49
16	Acetonitrile	41	3.200	3.200	(0.573)	198170	500.000	500
17	Allyl Chloride	39	3.200	3.200	(0.573)	95001	50.0000	50
18	Methyl Acetate	43	3.211	3.211	(0.576)	79870	50.0000	52
19	Methylene Chloride	84	3.304	3.304	(0.592)	74203	50.0000	49
20	tert-Butanol	59	3.420	3.420	(0.613)	13275	100.000	110
21	Acrylonitrile	53	3.513	3.513	(0.630)	27548	50.0000	54
22	trans-1,2-Dichloroethene	96	3.548	3.548	(0.636)	71696	50.0000	51
23	Methyl tert-butyl ether	73	3.560	3.560	(0.638)	207223	50.0000	50

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	1,1-Dichloroethane	63	3.920	3.920	(0.702)	119339	50.0000	50
	25	Vinyl acetate	43	3.978	3.978	(0.713)	217412	50.0000	50
	26	Diisopropyl Ether	45	3.989	3.989	(0.715)	255092	50.0000	50
	27	2-Chloro-1,3-Butadiene	53	4.012	4.012	(0.719)	96452	50.0000	51
	28	Ethyl tert-butyl ether	59	4.326	4.326	(0.775)	229889	50.0000	49
	29	cis-1,2-Dichloroethene	96	4.454	4.454	(0.798)	76215	50.0000	50
	30	2-Butanone	72	4.465	4.465	(0.800)	7975	50.0000	55
	31	2,2-Dichloropropane	77	4.465	4.465	(0.800)	98866	50.0000	48
	32	Propionitrile	54	4.512	4.512	(0.809)	96845	500.000	550
	33	Methacrylonitrile	41	4.663	4.663	(0.836)	89235	100.000	100
	34	Bromochloromethane	128	4.686	4.686	(0.840)	44709	50.0000	50
	35	Tetrahydrofuran	72	4.732	4.732	(0.848)	18187	100.000	100
	36	Chloroform	83	4.755	4.755	(0.852)	121393	50.0000	49
$	37	Dibromofluoromethane	113	4.906	4.906	(0.879)	42742	50.0000	50
	38	1,1,1-Trichloroethane	97	4.941	4.941	(0.886)	110717	50.0000	50
	39	Cyclohexane	56	5.011	5.011	(0.898)	100378	50.0000	51
	40	1,1-Dichloropropene	110	5.104	5.104	(0.915)	33601	50.0000	48
	41	Carbon Tetrachloride	117	5.104	5.104	(0.915)	103032	50.0000	51
	42	Isobutyl Alcohol	43	5.197	5.197	(0.931)	51472	1000.00	1000
$	43	1,2-Dichloroethane-d4	102	5.231	5.231	(0.938)	7432	50.0000	50
	44	Benzene	78	5.301	5.301	(0.950)	240735	50.0000	51
	45	1,2-Dichloroethane	62	5.313	5.313	(0.952)	96378	50.0000	52
	46	tert-Amyl methyl ether	73	5.417	5.417	(0.971)	204504	50.0000	51
*	47	Fluorobenzene	96	5.580	5.580	(1.000)	106542	50.0000	
	48	Trichloroethene	130	5.951	5.951	(1.067)	79993	50.0000	53
	49	Methylcyclohexane	83	6.172	6.172	(1.106)	80135	50.0000	50
	50	1,2-Dichloropropane	63	6.183	6.183	(1.108)	64580	50.0000	52
	51	Methyl Methacrylate	69	6.311	6.311	(1.131)	59161	50.0000	52
	52	Dibromomethane	93	6.311	6.311	(1.131)	52022	50.0000	52
	53	1,4-Dioxane	88	6.334	6.334	(1.135)	12429	1000.00	1200
	54	Bromodichloromethane	83	6.474	6.474	(1.160)	94228	50.0000	50
M	55	1,2-Dichloroethene (Total)	96				147911	100.000	100
	56	2-Chloroethyl vinyl ether	63	6.810	6.810	(1.221)	6510	50.0000	50
	57	cis-1,3-Dichloropropene	75	6.973	6.973	(1.250)	108419	50.0000	52
	58	4-Methyl-2-pentanone	43	7.159	7.159	(1.283)	74809	50.0000	53
$	59	Toluene-d8	98	7.286	7.286	(0.806)	120997	50.0000	50
	60	Toluene	91	7.368	7.368	(1.320)	245609	50.0000	50
	61	trans-1,3-Dichloropropene	75	7.623	7.623	(1.366)	100373	50.0000	52
	62	Ethyl Methacrylate	69	7.739	7.739	(1.387)	72885	50.0000	52
	63	1,1,2-Trichloroethane	97	7.832	7.832	(1.404)	59177	50.0000	50
	64	Tetrachloroethene	164	8.018	8.018	(0.887)	69470	50.0000	49
	65	1,3-Dichloropropane	76	8.041	8.041	(0.890)	99349	50.0000	50
	66	2-Hexanone	43	8.145	8.145	(0.901)	50690	50.0000	53
	67	Dibromochloromethane	129	8.308	8.308	(0.919)	88820	50.0000	51
	68	1,2-Dibromoethane	107	8.447	8.447	(0.935)	73361	50.0000	53
*	69	Chlorobenzene-d5	117	9.039	9.039	(1.000)	131404	50.0000	
	70	1-Chlorohexane	91	9.063	9.063	(1.003)	85481	50.0000	51
	71	Chlorobenzene	112	9.074	9.074	(1.004)	169324	50.0000	50
	72	1,1,1,2-Tetrachloroethane	131	9.190	9.190	(1.017)	72861	50.0000	50
	73	Ethylbenzene	106	9.237	9.237	(1.022)	81830	50.0000	50
	74	m,p-Xylene	106	9.388	9.388	(1.039)	200993	100.000	100
	75	o-Xylene	106	9.910	9.910	(1.096)	99296	50.0000	51
	76	Styrene	104	9.922	9.922	(1.098)	171755	50.0000	51
	77	Bromoform	173	10.142	10.142	(1.122)	73311	50.0000	55

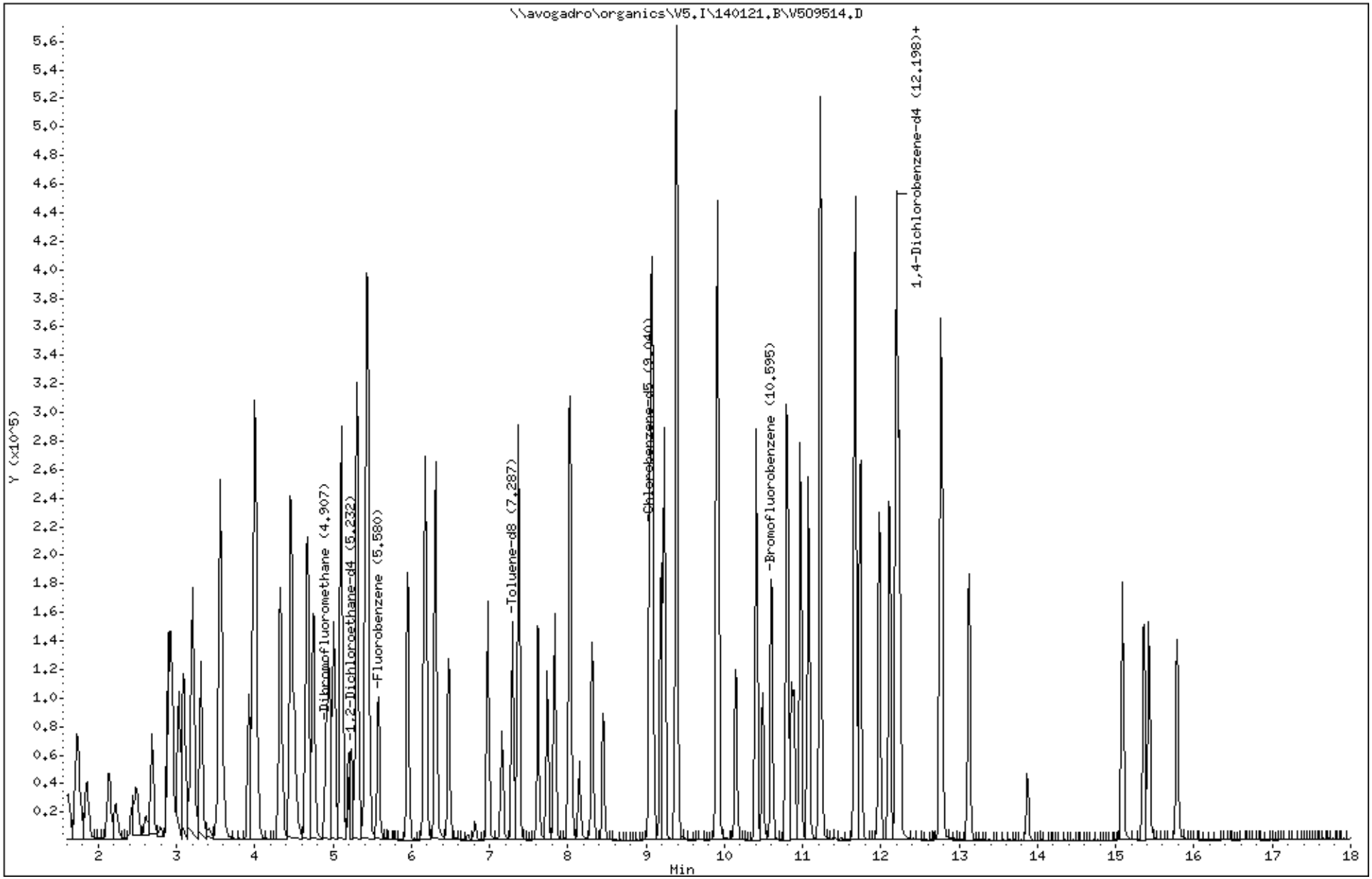
Data File: \\avogadro\organics\V5.I\140121.B\V5O9514.D
Report Date: 22-Jan-2014 15:01

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	78	Isopropylbenzene	105	10.409	10.409	(1.152)	249420	50.0000	51	
	79	trans-1,4-Dichloro-2-butene	75	10.491	10.491	(1.161)	29034	50.0000	52	
$	80	Bromofluorobenzene	95	10.595	10.595	(1.172)	73517	50.0000	51	
	81	Bromobenzene	156	10.792	10.792	(0.884)	89285	50.0000	49	
	82	1,1,2,2-Tetrachloroethane	83	10.804	10.804	(0.885)	80629	50.0000	49	
	83	1,2,3-Trichloropropane	75	10.862	10.862	(0.890)	92372	50.0000	51	
	84	n-Propylbenzene	120	10.967	10.967	(0.898)	63191	50.0000	50	
	85	2-Chlorotoluene	126	11.071	11.071	(0.907)	64599	50.0000	50	
	86	4-Chlorotoluene	126	11.222	11.222	(0.919)	65602	50.0000	50	
	87	1,3,5-Trimethylbenzene	105	11.222	11.222	(0.919)	193207	50.0000	50	
	88	tert-Butylbenzene	119	11.675	11.675	(0.956)	201882	50.0000	51	
	89	1,2,4-Trimethylbenzene	105	11.744	11.744	(0.962)	201827	50.0000	50	
	90	sec-Butylbenzene	105	11.977	11.977	(0.981)	224277	50.0000	50	
	91	1,3-Dichlorobenzene	146	12.116	12.116	(0.992)	141745	50.0000	50	
	92	4-Isopropyltoluene	119	12.197	12.197	(0.999)	186812	50.0000	50	
*	93	1,4-Dichlorobenzene-d4	152	12.209	12.209	(1.000)	86964	50.0000	(Q)	
	94	1,4-Dichlorobenzene	146	12.232	12.232	(1.002)	148261	50.0000	48	
M	95	Xylene (Total)	106				300289	150.000	150	
	96	1,2-Dichlorobenzene	146	12.754	12.754	(1.045)	140082	50.0000	50	
	97	n-Butylbenzene	91	12.778	12.778	(1.047)	164570	50.0000	50	
	98	Hexachloroethane	117	13.126	13.126	(1.075)	49319	50.0000	52	
	99	1,2-Dibromo-3-chloropropane	75	13.869	13.869	(1.136)	13121	50.0000	61	
	100	1,3,5-Trichlorobenzene	182	15.088	15.088	(2.704)	88181	50.0000	54	
	101	1,2,4-Trichlorobenzene	180	15.088	15.088	(1.236)	90142	50.0000	52	
	102	Hexachlorobutadiene	225	15.367	15.367	(1.259)	51049	50.0000	50	
	103	Naphthalene	128	15.425	15.425	(1.263)	164036	50.0000	56	
	104	1,2,3-Trichlorobenzene	180	15.784	15.784	(1.293)	71232	50.0000	54	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\140121.B\V509514.D
Date : 21-JAN-2014 12:16
Client ID: VSTD0505K
Instrument: V5.i
Sample Info: 5ML,VSTD0505K,VSTD0505K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7421.D
Report Date: 31-Jan-2014 11:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140116.B\V1M7421.D
Lab Smp Id: VSTD1001W Client Smp ID: VSTD1001W
Inj Date : 16-JAN-2014 14:18
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD1001W,VSTD1001W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140116.B\v18260GH.m
Meth Date : 22-Jan-2014 12:29 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 14:18 Cal File: V1M7421.D
Als bottle: 16 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.277	1.288	(0.285)	106618	100.000	110	
2	Chloromethane	50	1.405	1.406	(0.314)	578115	100.000	88	
3	Vinyl Chloride	62	1.504	1.495	(0.336)	367436	100.000	94	
4	Bromomethane	94	1.740	1.741	(0.389)	239684	100.000	87	
5	Chloroethane	64	1.829	1.820	(0.408)	236921	100.000	86	
6	Trichlorofluoromethane	101	1.947	1.948	(0.435)	276917	100.000	110	
127	Ethanol	46	2.055	2.056	(0.459)	197551	10000.0	13000	
7	Ether	59	2.134	2.135	(0.477)	346729	100.000	90	
8	Acrolein	56	2.213	2.214	(0.494)	391403	500.000	460	
9	1,1-Dichloroethene	96	2.321	2.332	(0.518)	276613	100.000	92	(M)M7 AM 01/31
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.321	2.312	(0.518)	151244	100.000	82	
11	Acetone	58	2.321	2.322	(0.518)	65990	100.000	93	
12	Iodomethane	142	2.459	2.460	(0.549)	340350	100.000	97	
13	Carbon Disulfide	76	2.548	2.539	(0.569)	794238	100.000	92	
14	Acetonitrile	40	2.508	2.509	(0.560)	407593	1000.00	850	
15	Methyl Acetate	43	2.548	2.549	(0.569)	540654	100.000	87	
16	Methylene Chloride	84	2.685	2.696	(0.600)	262994	100.000	110	
17	tert-Butanol	59	2.695	2.696	(0.602)	60059	200.000	170	
18	Acrylonitrile	53	2.784	2.785	(0.622)	153750	100.000	92	
20	Methyl tert-butyl ether	73	2.833	2.824	(0.633)	862934	100.000	87	
19	trans-1,2-Dichloroethene	96	2.823	2.824	(0.631)	276640	100.000	91	

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	21 1,1-Dichloroethane	63	3.129	3.120	(0.699)	580620	100.000	88
	22 Vinyl acetate	43	3.178	3.169	(0.710)	1458765	100.000	87
	23 Diisopropyl Ether	45	3.178	3.179	(0.710)	1955647	100.000	86
	24 Ethyl tert-butyl ether	59	3.454	3.445	(0.771)	1174438	100.000	88
M	27 1,2-dichloroethene, (Total)	100				584461	200.000	(a)
	25 cis-1,2-Dichloroethene	96	3.552	3.553	(0.793)	307821	100.000	86
	26 2,2-Dichloropropane	77	3.562	3.563	(0.795)	188770	100.000	88
	28 2-Butanone	72	3.552	3.553	(0.793)	49657	100.000	92
	29 Bromochloromethane	128	3.739	3.740	(0.835)	138241	100.000	88
	30 Tetrahydrofuran	72	3.779	3.770	(0.844)	74535	200.000	180
	31 Chloroform	83	3.798	3.790	(0.848)	489048	100.000	88
$	32 Dibromofluoromethane	113	3.927	3.918	(0.877)	135358	50.0000	50
	33 1,1,1-Trichloroethane	97	3.956	3.947	(0.883)	291164	100.000	91
	34 Cyclohexane	56	4.005	4.006	(0.894)	651358	100.000	110
	36 Carbon Tetrachloride	117	4.094	4.095	(0.914)	249647	100.000	91
	35 1,1-Dichloropropene	110	4.084	4.085	(0.912)	124645	100.000	94
$	37 1,2-Dichloroethane-d4	102	4.192	4.193	(0.936)	39475	50.0000	54
	38 Benzene	78	4.252	4.253	(0.949)	1176505	100.000	90
	39 1,2-Dichloroethane	62	4.252	4.253	(0.949)	318673	100.000	85
	40 tert-Amyl methyl ether	73	4.340	4.341	(0.969)	931955	100.000	88
*	41 Fluorobenzene	96	4.478	4.469	(1.000)	528633	50.0000	
	42 Trichloroethene	130	4.793	4.784	(1.070)	253986	100.000	94
	43 Methylcyclohexane	83	4.971	4.962	(1.110)	507250	100.000	93
	44 1,2-Dichloropropane	63	4.971	4.972	(1.110)	351704	100.000	86
	46 Dibromomethane	93	5.069	5.070	(1.132)	176034	100.000	91
	47 1,4-Dioxane	88	5.089	5.090	(1.136)	40228	2000.00	2400
	48 Bromodichloromethane	83	5.217	5.218	(1.165)	374064	100.000	89
	45 2-Chloroethyl vinyl ether	63	5.493	5.494	(1.227)	39545	100.000	83
	49 cis-1,3-Dichloropropene	75	5.630	5.631	(1.257)	501387	100.000	92
	50 4-Methyl-2-pentanone	43	5.778	5.779	(1.290)	484501	100.000	94
$	51 Toluene-d8	98	5.887	5.897	(0.803)	495594	50.0000	50
	52 Toluene	91	5.956	5.957	(1.330)	1119989	100.000	89
	53 trans-1,3-Dichloropropene	75	6.162	6.154	(1.376)	410548	100.000	93
	54 1,1,2-Trichloroethane	97	6.340	6.341	(1.416)	233095	100.000	91
	55 Tetrachloroethene	164	6.497	6.498	(0.886)	194198	100.000	94
	56 1,3-Dichloropropane	76	6.507	6.508	(0.887)	452036	100.000	88
	57 2-Hexanone	43	6.596	6.597	(0.899)	431884	100.000	100
	58 Dibromochloromethane	129	6.734	6.735	(0.918)	268379	100.000	94
	59 1,2-Dibromoethane	107	6.842	6.843	(0.933)	249685	100.000	90
*	60 Chlorobenzene-d5	117	7.334	7.345	(1.000)	353816	50.0000	
	63 1-Chlorohexane	91	7.364	7.365	(1.004)	458358	100.000	94
	61 Chlorobenzene	112	7.364	7.375	(1.004)	675652	100.000	90
	62 1,1,1,2-Tetrachloroethane	131	7.453	7.463	(1.016)	235244	100.000	91
	64 Ethylbenzene	106	7.492	7.503	(1.021)	356903	100.000	93
	65 m,p-Xylene	106	7.620	7.631	(1.039)	898722	200.000	180
	66 o-Xylene	106	8.053	8.064	(1.098)	436780	100.000	90
	67 Styrene	104	8.063	8.074	(1.099)	761923	100.000	91
	68 Bromoform	173	8.250	8.261	(1.125)	160938	100.000	99
	69 Isopropylbenzene	105	8.467	8.478	(1.154)	1130859	100.000	94
	126 trans-1,4-Dichloro-2-butene	75	8.526	8.537	(1.162)	109648	100.000	100
$	70 Bromofluorobenzene	95	8.625	8.636	(1.176)	197766	50.0000	51
	72 Bromobenzene	156	8.782	8.793	(0.887)	245490	100.000	89
	71 1,1,2,2-Tetrachloroethane	83	8.792	8.803	(0.888)	321304	100.000	88
	73 1,2,3-Trichloropropane	75	8.832	8.842	(0.892)	343950	100.000	90

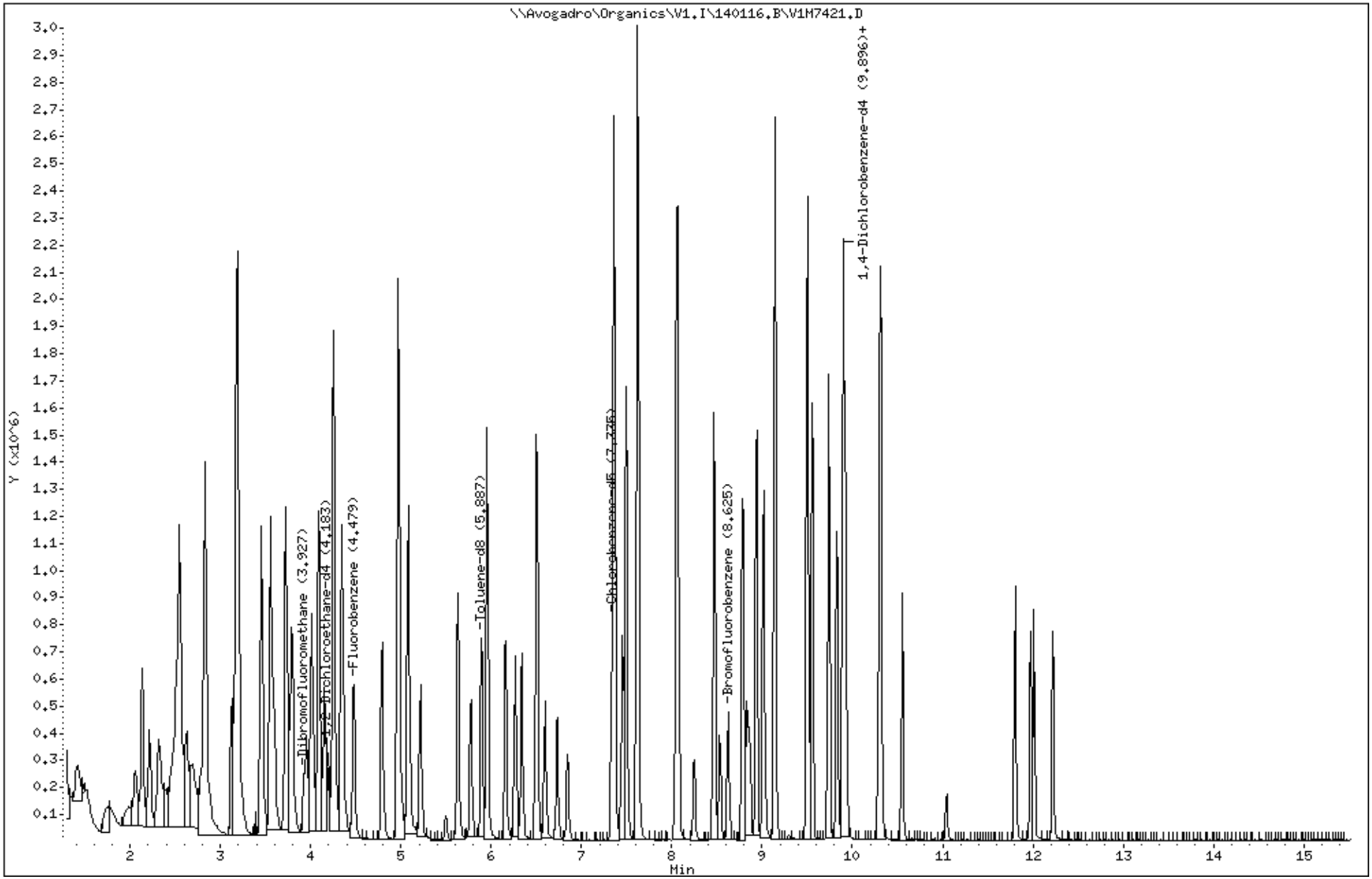
Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7421.D
Report Date: 31-Jan-2014 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	74 n-Propylbenzene	120	8.940	8.951	(0.903)	269258	100.000	92	
	75 2-Chlorotoluene	126	9.019	9.030	(0.911)	241644	100.000	92	
	76 1,3,5-Trimethylbenzene	105	9.147	9.158	(0.923)	922469	100.000	91	
	77 4-Chlorotoluene	126	9.137	9.148	(0.922)	247394	100.000	90	
	78 tert-Butylbenzene	119	9.501	9.512	(0.959)	899461	100.000	92	
	79 1,2,4-Trimethylbenzene	105	9.551	9.561	(0.964)	926305	100.000	91	
M	81 Xylene (Total)	106				1335502	300.000		(a)
	80 sec-Butylbenzene	105	9.738	9.749	(0.983)	1227788	100.000	94	
	82 1,3-Dichlorobenzene	146	9.826	9.837	(0.992)	443725	100.000	91	
	83 4-Isopropyltoluene	119	9.895	9.906	(0.999)	922813	100.000	93	
*	84 1,4-Dichlorobenzene-d4	152	9.905	9.906	(1.000)	149833	50.0000		
	85 1,4-Dichlorobenzene	146	9.925	9.936	(1.002)	451875	100.000	91	
	86 n-Butylbenzene	91	10.319	10.320	(1.042)	962609	100.000	95	
	87 1,2-Dichlorobenzene	146	10.299	10.300	(1.040)	415944	100.000	90	
	88 1,2-Dibromo-3-chloropropane	75	11.048	11.049	(1.115)	37792	100.000	90	
	89 1,2,4-Trichlorobenzene	180	11.806	11.807	(1.192)	256454	100.000	95	
	90 Hexachlorobutadiene	225	11.974	11.975	(1.209)	125146	100.000	93	
	91 Naphthalene	128	12.013	12.014	(1.213)	550970	100.000	94	
	92 1,2,3-Trichlorobenzene	180	12.220	12.231	(1.234)	213994	100.000	98	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7421.D
Date : 16-JAN-2014 14:18
Client ID: VSTD1001W
Instrument: V1.i
Sample Info: 5ML,VSTD1001W,VSTD1001W
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7500.D
Report Date: 30-Jan-2014 10:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7500.D
Lab Smp Id: VSTD1001Z Client Smp ID: VSTD1001Z
Inj Date : 21-JAN-2014 15:03
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD1001Z,VSTD1001Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 30-Jan-2014 10:54 mscarpaci Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.261	1.273	(0.283)	150561	100.000	110(TQMH)M7 AM 01/30	
2	Chloromethane	50	1.399	1.401	(0.314)	876520	100.000	120	
3	Vinyl Chloride	62	1.488	1.480	(0.334)	584105	100.000	120	
4	Bromomethane	94	1.724	1.716	(0.386)	382700	100.000	120	
5	Chloroethane	64	1.823	1.825	(0.409)	381448	100.000	120	
6	Trichlorofluoromethane	101	1.941	1.943	(0.435)	412351	100.000	120	
127	Ethanol	46	2.040	2.041	(0.457)	282558	10000.0	14000	
7	Ether	59	2.128	2.130	(0.477)	563918	100.000	130	
8	Acrolein	56	2.207	2.209	(0.495)	706193	500.000	660	
9	1,1-Dichloroethene	96	2.325	2.327	(0.521)	405096	100.000	120	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.315	2.307	(0.519)	319514	100.000	130	
11	Acetone	58	2.306	2.307	(0.517)	100219	100.000	130	
12	Iodomethane	142	2.453	2.455	(0.550)	511199	100.000	130	
13	Carbon Disulfide	76	2.532	2.534	(0.567)	1257340	100.000	130	
14	Acetonitrile	40	2.493	2.494	(0.559)	691780	1000.00	1300(Q)	
15	Methyl Acetate	43	2.542	2.544	(0.570)	922210	100.000	130	
16	Methylene Chloride	84	2.680	2.681	(0.601)	434349	100.000	130	
17	tert-Butanol	59	2.690	2.681	(0.603)	101174	200.000	270	
18	Acrylonitrile	53	2.778	2.780	(0.623)	259955	100.000	130	
20	Methyl tert-butyl ether	73	2.818	2.819	(0.631)	1416822	100.000	120	

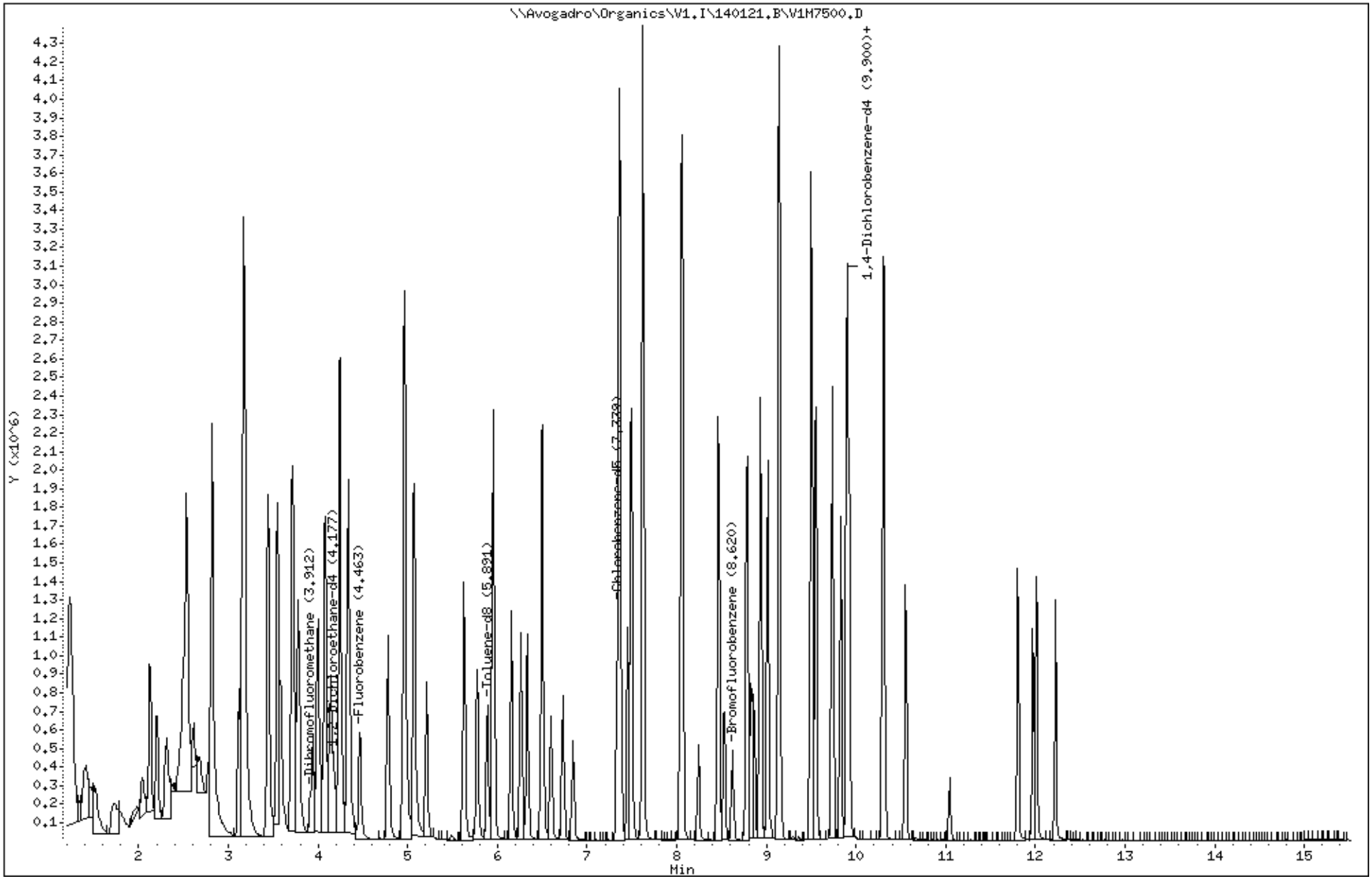
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	19 trans-1,2-Dichloroethene	96	2.818	2.819	(0.631)	423879	100.000	120
	21 1,1-Dichloroethane	63	3.113	3.115	(0.698)	908736	100.000	120
	22 Vinyl acetate	43	3.162	3.164	(0.709)	2279973	100.000	120
	23 Diisopropyl Ether	45	3.172	3.174	(0.711)	3009456	100.000	120
	24 Ethyl tert-butyl ether	59	3.438	3.440	(0.770)	1889290	100.000	130
M	27 1,2-dichloroethene, (Total)	100				919282	200.000	250
	25 cis-1,2-Dichloroethene	96	3.547	3.548	(0.795)	495403	100.000	120
	26 2,2-Dichloropropane	77	3.547	3.558	(0.795)	277554	100.000	120
	28 2-Butanone	72	3.547	3.548	(0.795)	80953	100.000	130
	29 Bromochloromethane	128	3.724	3.735	(0.834)	228473	100.000	130
	30 Tetrahydrofuran	72	3.763	3.775	(0.843)	133791	200.000	270
	31 Chloroform	83	3.783	3.795	(0.848)	745368	100.000	120
$	32 Dibromofluoromethane	113	3.911	3.913	(0.876)	135336	50.0000	51
	33 1,1,1-Trichloroethane	97	3.941	3.952	(0.883)	437310	100.000	120
	34 Cyclohexane	56	4.000	4.001	(0.896)	936706	100.000	130
	36 Carbon Tetrachloride	117	4.078	4.090	(0.914)	382434	100.000	120
	35 1,1-Dichloropropene	110	4.078	4.080	(0.914)	188277	100.000	120
$	37 1,2-Dichloroethane-d4	102	4.177	4.187	(0.936)	31883	50.0000	48
	38 Benzene	78	4.236	4.248	(0.949)	1778328	100.000	120
	39 1,2-Dichloroethane	62	4.246	4.248	(0.951)	505079	100.000	120
	40 tert-Amyl methyl ether	73	4.335	4.336	(0.971)	1504833	100.000	130
*	41 Fluorobenzene	96	4.463	4.474	(1.000)	509961	50.0000	
	42 Trichloroethene	130	4.778	4.779	(1.071)	372672	100.000	120
	43 Methylcyclohexane	83	4.955	4.967	(1.110)	760674	100.000	120
	44 1,2-Dichloropropane	63	4.965	4.967	(1.113)	553823	100.000	120
	46 Dibromomethane	93	5.063	5.075	(1.135)	280605	100.000	120
	47 1,4-Dioxane	88	5.083	5.085	(1.139)	61476	2000.00	2700
	48 Bromodichloromethane	83	5.211	5.213	(1.168)	593445	100.000	120
	45 2-Chloroethyl vinyl ether	63	5.497	5.489	(1.232)	11176	100.000	110
	49 cis-1,3-Dichloropropene	75	5.625	5.627	(1.260)	794019	100.000	120
	50 4-Methyl-2-pentanone	43	5.773	5.774	(1.294)	816396	100.000	130
$	51 Toluene-d8	98	5.891	5.892	(0.803)	478227	50.0000	49
	52 Toluene	91	5.950	5.952	(1.333)	1681561	100.000	120
	53 trans-1,3-Dichloropropene	75	6.157	6.149	(1.380)	674051	100.000	130
	54 1,1,2-Trichloroethane	97	6.334	6.336	(1.419)	380313	100.000	130
	55 Tetrachloroethene	164	6.492	6.493	(0.885)	295741	100.000	120
	56 1,3-Dichloropropane	76	6.501	6.493	(0.886)	728856	100.000	120
	57 2-Hexanone	43	6.590	6.592	(0.898)	627265	100.000	130
	58 Dibromochloromethane	129	6.728	6.730	(0.917)	447339	100.000	130
	59 1,2-Dibromoethane	107	6.846	6.838	(0.933)	409079	100.000	130
*	60 Chlorobenzene-d5	117	7.339	7.331	(1.000)	349920	50.0000	
	63 1-Chlorohexane	91	7.358	7.360	(1.003)	681128	100.000	120
	61 Chlorobenzene	112	7.368	7.360	(1.004)	1050218	100.000	120
	62 1,1,1,2-Tetrachloroethane	131	7.457	7.449	(1.016)	376010	100.000	120
	64 Ethylbenzene	106	7.496	7.488	(1.021)	541320	100.000	120
	65 m,p-Xylene	106	7.624	7.616	(1.039)	1353960	200.000	240
	66 o-Xylene	106	8.048	8.050	(1.097)	670572	100.000	120
	67 Styrene	104	8.058	8.058	(1.098)	1190120	100.000	120
	68 Bromoform	173	8.245	8.247	(1.123)	281787	100.000	130(T)
	69 Isopropylbenzene	105	8.462	8.462	(1.153)	1688604	100.000	120
	126 trans-1,4-Dichloro-2-butene	75	8.530	8.532	(1.162)	208073	100.000	130
$	70 Bromofluorobenzene	95	8.619	8.621	(1.174)	199146	50.0000	51
	72 Bromobenzene	156	8.777	8.778	(0.887)	398971	100.000	120
	71 1,1,2,2-Tetrachloroethane	83	8.787	8.788	(0.888)	551032	100.000	120

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	73 1,2,3-Trichloropropane	75	8.826	8.828	(0.892)	615630	100.000	130(Q)
	74 n-Propylbenzene	120	8.934	8.936	(0.902)	412207	100.000	120
	75 2-Chlorotoluene	126	9.013	9.015	(0.910)	384052	100.000	120
	76 1,3,5-Trimethylbenzene	105	9.141	9.143	(0.923)	1384404	100.000	120
	77 4-Chlorotoluene	126	9.141	9.143	(0.923)	391868	100.000	120
	78 tert-Butylbenzene	119	9.496	9.497	(0.959)	1370937	100.000	120
	79 1,2,4-Trimethylbenzene	105	9.555	9.547	(0.965)	1413924	100.000	120
M	81 Xylene (Total)	106				2024532	300.000	360
	80 sec-Butylbenzene	105	9.732	9.734	(0.983)	1816218	100.000	120
	82 1,3-Dichlorobenzene	146	9.831	9.832	(0.993)	701579	100.000	120
	83 4-Isopropyltoluene	119	9.900	9.901	(1.000)	1377026	100.000	120
*	84 1,4-Dichlorobenzene-d4	152	9.900	9.901	(1.000)	156111	50.0000	(Q)
	85 1,4-Dichlorobenzene	146	9.919	9.921	(1.002)	728905	100.000	120
	86 n-Butylbenzene	91	10.313	10.315	(1.042)	1416614	100.000	120
	87 1,2-Dichlorobenzene	146	10.294	10.295	(1.040)	668783	100.000	120
	88 1,2-Dibromo-3-chloropropane	75	11.042	11.044	(1.115)	71299	100.000	130
	89 1,2,4-Trichlorobenzene	180	11.801	11.802	(1.192)	414132	100.000	130
	90 Hexachlorobutadiene	225	11.968	11.970	(1.209)	187081	100.000	120
	91 Naphthalene	128	12.007	12.009	(1.213)	958641	100.000	130
	92 1,2,3-Trichlorobenzene	180	12.224	12.226	(1.235)	355832	100.000	130

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7500.D
Date : 21-JAN-2014 15:03
Client ID: VSTD1001Z
Instrument: V1.i
Sample Info: 5ML,VSTD1001Z,VSTD1001Z
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140121.B\V5O9515.D
Report Date: 22-Jan-2014 15:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140121.B\V5O9515.D
Lab Smp Id: VSTD1005K Client Smp ID: VSTD1005K
Inj Date : 21-JAN-2014 12:41
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD1005K,VSTD1005K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140121.B\v5_8260W.m
Meth Date : 22-Jan-2014 14:03 wluo Quant Type: ISTD
Cal Date : 21-JAN-2014 12:41 Cal File: V5O9515.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.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	1.610	1.609	(0.289)	127298	100.000	100
2	Freon114	85	1.738	1.737	(0.311)	130311	100.000	100
3	Chloromethane	50	1.738	1.725	(0.311)	168575	100.000	98
4	Vinyl Chloride	62	1.865	1.853	(0.334)	132404	100.000	96
5	Bromomethane	94	2.144	2.143	(0.384)	105912	100.000	90
6	Chloroethane	64	2.225	2.225	(0.399)	67859	100.000	96
7	Trichlorofluoromethane	101	2.492	2.492	(0.447)	163078	100.000	100
8	Ethanol	46	2.608	2.608	(0.467)	37101	10000.0	9000(Q)
9	Ether	59	2.690	2.689	(0.482)	91234	100.000	89
10	Acrolein	56	2.794	2.793	(0.501)	21405	500.000	520
11	1,1-Dichloroethene	96	2.899	2.886	(0.519)	121637	100.000	93
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.933	2.933	(0.526)	152619	100.000	98
13	Acetone	58	2.933	2.921	(0.526)	11399	100.000	100
14	Iodomethane	142	3.026	3.026	(0.542)	333522	100.000	94
15	Carbon Disulfide	76	3.084	3.084	(0.553)	498436	100.000	95
16	Acetonitrile	41	3.201	3.200	(0.574)	401433	1000.00	990
17	Allyl Chloride	39	3.201	3.200	(0.574)	193217	100.000	100
18	Methyl Acetate	43	3.224	3.211	(0.578)	154799	100.000	98
19	Methylene Chloride	84	3.317	3.304	(0.594)	147355	100.000	95
20	tert-Butanol	59	3.409	3.420	(0.611)	24955	200.000	190
21	Acrylonitrile	53	3.514	3.513	(0.630)	53066	100.000	100
22	trans-1,2-Dichloroethene	96	3.560	3.548	(0.638)	137262	100.000	95
23	Methyl tert-butyl ether	73	3.560	3.560	(0.638)	410457	100.000	97

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	1,1-Dichloroethane	63	3.932	3.920	(0.705)	234131	100.000	95
	25	Vinyl acetate	43	3.978	3.978	(0.713)	428081	100.000	96
	26	Diisopropyl Ether	45	4.002	3.989	(0.717)	489133	100.000	93
	27	2-Chloro-1,3-Butadiene	53	4.013	4.012	(0.719)	190814	100.000	98
	28	Ethyl tert-butyl ether	59	4.327	4.326	(0.775)	465474	100.000	97
	29	cis-1,2-Dichloroethene	96	4.454	4.454	(0.798)	147861	100.000	94
	30	2-Butanone	72	4.466	4.465	(0.800)	16600	100.000	110(Q)
	31	2,2-Dichloropropane	77	4.466	4.465	(0.800)	191807	100.000	91
	32	Propionitrile	54	4.512	4.512	(0.809)	181797	1000.00	1000
	33	Methacrylonitrile	41	4.663	4.663	(0.836)	172917	200.000	190
	34	Bromochloromethane	128	4.687	4.686	(0.840)	88656	100.000	97
	35	Tetrahydrofuran	72	4.733	4.732	(0.848)	36550	200.000	210
	36	Chloroform	83	4.756	4.755	(0.852)	241613	100.000	95
$	37	Dibromofluoromethane	113	4.907	4.906	(0.879)	43089	50.0000	48
	38	1,1,1-Trichloroethane	97	4.954	4.941	(0.888)	224819	100.000	99
	39	Cyclohexane	56	5.012	5.011	(0.898)	200901	100.000	99
	40	1,1-Dichloropropene	110	5.104	5.104	(0.915)	66061	100.000	92
	41	Carbon Tetrachloride	117	5.116	5.104	(0.917)	207694	100.000	99
	42	Isobutyl Alcohol	43	5.197	5.197	(0.931)	100672	2000.00	2000
$	43	1,2-Dichloroethane-d4	102	5.244	5.231	(0.940)	7521	50.0000	49
	44	Benzene	78	5.302	5.301	(0.950)	469608	100.000	96
	45	1,2-Dichloroethane	62	5.313	5.313	(0.952)	185772	100.000	97
	46	tert-Amyl methyl ether	73	5.418	5.417	(0.971)	398699	100.000	96
*	47	Fluorobenzene	96	5.580	5.580	(1.000)	109749	50.0000	
	48	Trichloroethene	130	5.952	5.951	(1.067)	153006	100.000	99
	49	Methylcyclohexane	83	6.173	6.172	(1.106)	159922	100.000	98
	50	1,2-Dichloropropane	63	6.184	6.183	(1.108)	125957	100.000	98
	51	Methyl Methacrylate	69	6.312	6.311	(1.131)	114139	100.000	97
	52	Dibromomethane	93	6.312	6.311	(1.131)	104558	100.000	100
	53	1,4-Dioxane	88	6.323	6.334	(1.133)	17452	2000.00	1600
	54	Bromodichloromethane	83	6.474	6.474	(1.160)	187100	100.000	96
M	55	1,2-Dichloroethene (Total)	96				285123	200.000	190
	56	2-Chloroethyl vinyl ether	63	6.811	6.810	(1.221)	13754	100.000	100
	57	cis-1,3-Dichloropropene	75	6.974	6.973	(1.250)	214182	100.000	99
	58	4-Methyl-2-pentanone	43	7.159	7.159	(1.283)	144310	100.000	100
$	59	Toluene-d8	98	7.287	7.286	(0.806)	123799	50.0000	51
	60	Toluene	91	7.368	7.368	(1.320)	484799	100.000	96
	61	trans-1,3-Dichloropropene	75	7.612	7.623	(1.364)	198102	100.000	100
	62	Ethyl Methacrylate	69	7.740	7.739	(1.387)	145931	100.000	100
	63	1,1,2-Trichloroethane	97	7.833	7.832	(1.404)	118006	100.000	96
	64	Tetrachloroethene	164	8.018	8.018	(0.887)	138867	100.000	97
	65	1,3-Dichloropropane	76	8.042	8.041	(0.890)	192177	100.000	96
	66	2-Hexanone	43	8.146	8.145	(0.901)	98996	100.000	100
	67	Dibromochloromethane	129	8.309	8.308	(0.919)	178712	100.000	100
	68	1,2-Dibromoethane	107	8.448	8.447	(0.935)	143746	100.000	100
*	69	Chlorobenzene-d5	117	9.040	9.039	(1.000)	132197	50.0000	
	70	1-Chlorohexane	91	9.063	9.063	(1.003)	168459	100.000	100
	71	Chlorobenzene	112	9.087	9.074	(1.005)	337249	100.000	98
	72	1,1,1,2-Tetrachloroethane	131	9.191	9.190	(1.017)	147323	100.000	100
	73	Ethylbenzene	106	9.237	9.237	(1.022)	165482	100.000	100
	74	m,p-Xylene	106	9.388	9.388	(1.039)	402465	200.000	200
	75	o-Xylene	106	9.911	9.910	(1.096)	199946	100.000	100
	76	Styrene	104	9.922	9.922	(1.098)	348075	100.000	100
	77	Bromoform	173	10.143	10.142	(1.122)	147417	100.000	110

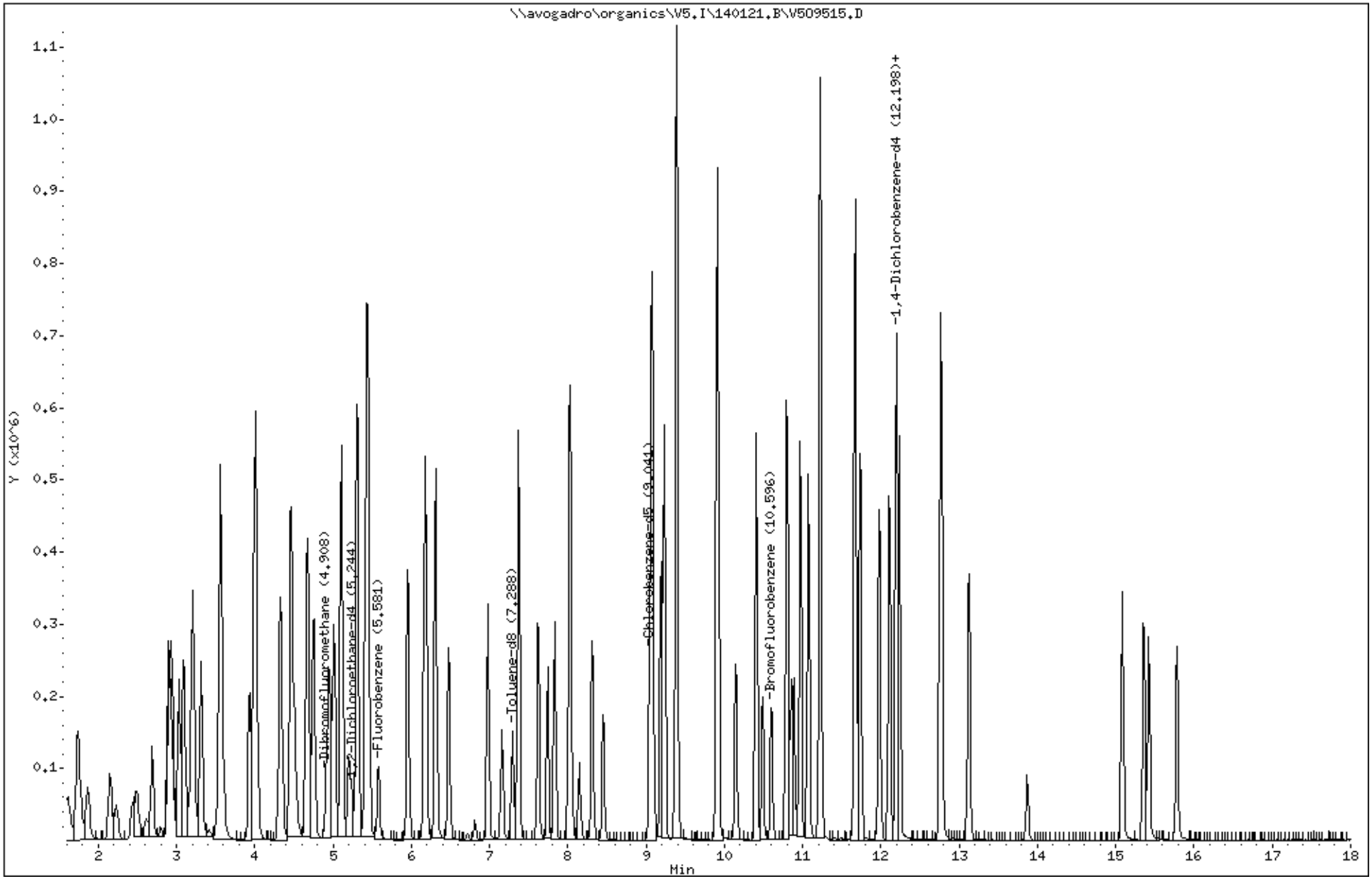
Data File: \\avogadro\organics\V5.I\140121.B\V5O9515.D
Report Date: 22-Jan-2014 15:01

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 Isopropylbenzene	105	10.410	10.409	(1.152)	496205	100.000	100
	79 trans-1,4-Dichloro-2-butene	75	10.491	10.491	(1.161)	58719	100.000	100
$	80 Bromofluorobenzene	95	10.596	10.595	(1.172)	72562	50.0000	50
	81 Bromobenzene	156	10.793	10.792	(0.884)	178988	100.000	100
	82 1,1,2,2-Tetrachloroethane	83	10.805	10.804	(0.885)	158256	100.000	98
	83 1,2,3-Trichloropropane	75	10.851	10.862	(0.889)	184936	100.000	100
	84 n-Propylbenzene	120	10.967	10.967	(0.898)	128737	100.000	100
	85 2-Chlorotoluene	126	11.072	11.071	(0.907)	128719	100.000	100
	86 4-Chlorotoluene	126	11.223	11.222	(0.919)	132108	100.000	100
	87 1,3,5-Trimethylbenzene	105	11.223	11.222	(0.919)	385930	100.000	100
	88 tert-Butylbenzene	119	11.675	11.675	(0.956)	392894	100.000	100
	89 1,2,4-Trimethylbenzene	105	11.734	11.744	(0.961)	398268	100.000	99
	90 sec-Butylbenzene	105	11.977	11.977	(0.981)	443032	100.000	100
	91 1,3-Dichlorobenzene	146	12.105	12.116	(0.991)	280488	100.000	99
	92 4-Isopropyltoluene	119	12.198	12.197	(0.999)	375605	100.000	100
*	93 1,4-Dichlorobenzene-d4	152	12.210	12.209	(1.000)	86353	50.0000	(Q)
	94 1,4-Dichlorobenzene	146	12.233	12.232	(1.002)	294981	100.000	97
M	95 Xylene (Total)	106				602411	300.000	300
	96 1,2-Dichlorobenzene	146	12.755	12.754	(1.045)	274556	100.000	100
	97 n-Butylbenzene	91	12.778	12.778	(1.047)	320290	100.000	99
	98 Hexachloroethane	117	13.127	13.126	(1.075)	100271	100.000	110
	99 1,2-Dibromo-3-chloropropane	75	13.870	13.869	(1.136)	23319	100.000	110
	100 1,3,5-Trichlorobenzene	182	15.089	15.088	(2.704)	163946	100.000	98
	101 1,2,4-Trichlorobenzene	180	15.089	15.088	(1.236)	169933	100.000	100
	102 Hexachlorobutadiene	225	15.367	15.367	(1.259)	99866	100.000	99
	103 Naphthalene	128	15.425	15.425	(1.263)	297642	100.000	100
	104 1,2,3-Trichlorobenzene	180	15.785	15.784	(1.293)	129586	100.000	99

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\140121.B\V509515.D
Date : 21-JAN-2014 12:41
Client ID: VSTD1005K
Instrument: V5.i
Sample Info: 5ML,VSTD1005K,VSTD1005K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7422.D
Report Date: 31-Jan-2014 11:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140116.B\V1M7422.D
Lab Smp Id: VSTD2001W Client Smp ID: VSTD2001W
Inj Date : 16-JAN-2014 14:46
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD2001W,VSTD2001W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140116.B\v18260GH.m
Meth Date : 22-Jan-2014 12:29 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 14:46 Cal File: V1M7422.D
Als bottle: 17 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.258	1.288	(0.282)	274876	200.000	230(AM)M7 AM 01/31
2	Chloromethane	50	1.415	1.406	(0.317)	1422687	200.000	200
3	Vinyl Chloride	62	1.504	1.495	(0.337)	917040	200.000	210(A)
4	Bromomethane	94	1.740	1.741	(0.390)	577929	200.000	190
5	Chloroethane	64	1.819	1.820	(0.407)	590010	200.000	190
6	Trichlorofluoromethane	101	1.937	1.948	(0.434)	665166	200.000	220(A)
127	Ethanol	46	2.046	2.056	(0.458)	407998	20000.0	23000
7	Ether	59	2.124	2.135	(0.475)	971979	200.000	220(A)
8	Acrolein	56	2.203	2.214	(0.493)	1100950	1000.00	1100(A)
9	1,1-Dichloroethene	96	2.321	2.332	(0.520)	654988	200.000	200
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.321	2.312	(0.520)	421204	200.000	200(A)
11	Acetone	58	2.312	2.322	(0.517)	206717	200.000	250(A)
12	Iodomethane	142	2.459	2.460	(0.550)	767155	200.000	200
13	Carbon Disulfide	76	2.538	2.539	(0.568)	2000392	200.000	210(A)
14	Acetonitrile	40	2.499	2.509	(0.559)	1065073	2000.00	2000
15	Methyl Acetate	43	2.538	2.549	(0.568)	1463631	200.000	210(A)
16	Methylene Chloride	84	2.676	2.696	(0.599)	623762	200.000	230(A)
17	tert-Butanol	59	2.686	2.696	(0.601)	141915	400.000	370
18	Acrylonitrile	53	2.775	2.785	(0.621)	426453	200.000	220
20	Methyl tert-butyl ether	73	2.824	2.824	(0.632)	2318585	200.000	210(A)
19	trans-1,2-Dichloroethene	96	2.814	2.824	(0.630)	742427	200.000	220(A)

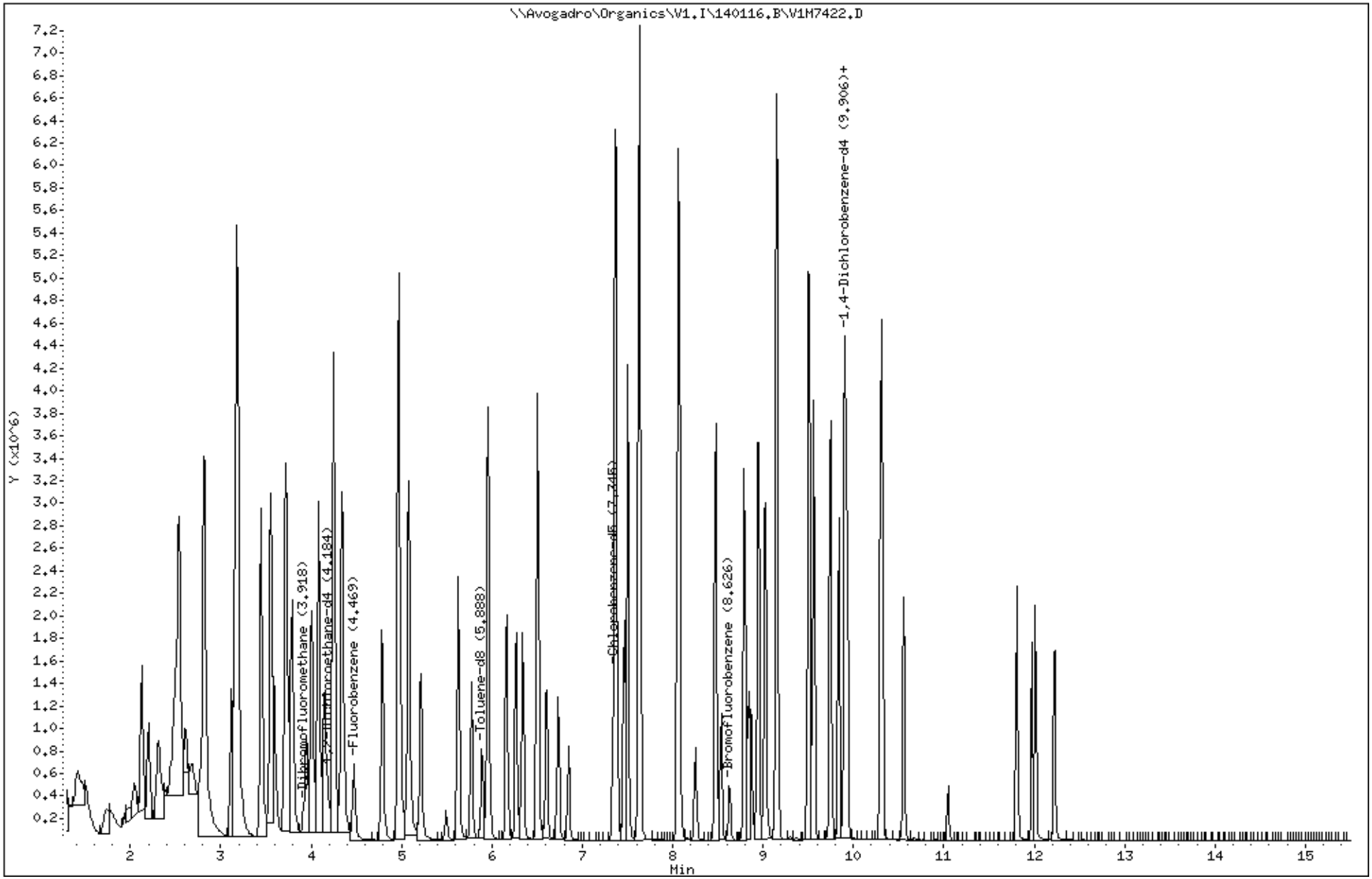
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.119	3.120	(0.698)	1573350	200.000	210(A)
	22 Vinyl acetate	43	3.169	3.169	(0.709)	3873771	200.000	200(A)
	23 Diisopropyl Ether	45	3.178	3.179	(0.711)	5072359	200.000	200
	24 Ethyl tert-butyl ether	59	3.444	3.445	(0.771)	3122465	200.000	210(A)
M	27 1,2-dichloroethene, (Total)	100				1592224	400.000	(a)
	25 cis-1,2-Dichloroethene	96	3.553	3.553	(0.795)	849797	200.000	210(A)
	26 2,2-Dichloropropane	77	3.553	3.563	(0.795)	470246	200.000	200
	28 2-Butanone	72	3.553	3.553	(0.795)	147803	200.000	240(A)
	29 Bromochloromethane	128	3.730	3.740	(0.835)	384308	200.000	220(A)
	30 Tetrahydrofuran	72	3.769	3.770	(0.844)	204685	400.000	430
	31 Chloroform	83	3.789	3.790	(0.848)	1284486	200.000	200(A)
$	32 Dibromofluoromethane	113	3.917	3.918	(0.877)	149695	50.0000	49
	33 1,1,1-Trichloroethane	97	3.947	3.947	(0.883)	744590	200.000	210(A)
	34 Cyclohexane	56	4.006	4.006	(0.896)	1575117	200.000	220(A)
	36 Carbon Tetrachloride	117	4.085	4.095	(0.914)	655585	200.000	210(A)
	35 1,1-Dichloropropene	110	4.085	4.085	(0.914)	325844	200.000	220(A)
$	37 1,2-Dichloroethane-d4	102	4.183	4.193	(0.936)	38008	50.0000	47
	38 Benzene	78	4.242	4.253	(0.949)	3048008	200.000	210(A)
	39 1,2-Dichloroethane	62	4.252	4.253	(0.952)	857124	200.000	200(A)
	40 tert-Amyl methyl ether	73	4.341	4.341	(0.971)	2456237	200.000	210(A)
*	41 Fluorobenzene	96	4.469	4.469	(1.000)	590066	50.0000	
	42 Trichloroethene	130	4.784	4.784	(1.071)	647038	200.000	210(A)
	43 Methylcyclohexane	83	4.971	4.962	(1.112)	1292556	200.000	210(A)
	44 1,2-Dichloropropane	63	4.971	4.972	(1.112)	943917	200.000	200(A)
	46 Dibromomethane	93	5.070	5.070	(1.134)	471235	200.000	210(A)
	47 1,4-Dioxane	88	5.089	5.090	(1.139)	81723	4000.00	4300(A)
	48 Bromodichloromethane	83	5.217	5.218	(1.167)	1020206	200.000	210(A)
	45 2-Chloroethyl vinyl ether	63	5.493	5.494	(1.229)	106988	200.000	200(A)
	49 cis-1,3-Dichloropropene	75	5.631	5.631	(1.260)	1357129	200.000	220(A)
	50 4-Methyl-2-pentanone	43	5.779	5.779	(1.293)	1323343	200.000	220(A)
$	51 Toluene-d8	98	5.887	5.897	(0.802)	544145	50.0000	50
	52 Toluene	91	5.956	5.957	(1.333)	2809958	200.000	200(A)
	53 trans-1,3-Dichloropropene	75	6.163	6.154	(1.379)	1098910	200.000	220(A)
	54 1,1,2-Trichloroethane	97	6.340	6.341	(1.419)	624146	200.000	210(A)
	55 Tetrachloroethene	164	6.508	6.498	(0.886)	494014	200.000	220(A)
	56 1,3-Dichloropropane	76	6.508	6.508	(0.886)	1175546	200.000	210(A)
	57 2-Hexanone	43	6.606	6.597	(0.899)	1183023	200.000	250(A)
	58 Dibromochloromethane	129	6.734	6.735	(0.917)	722101	200.000	220(A)
	59 1,2-Dibromoethane	107	6.852	6.843	(0.933)	664595	200.000	220(A)
*	60 Chlorobenzene-d5	117	7.345	7.345	(1.000)	385143	50.0000	
	63 1-Chlorohexane	91	7.364	7.365	(1.003)	1136562	200.000	210(A)
	61 Chlorobenzene	112	7.374	7.375	(1.004)	1704534	200.000	210(A)
	62 1,1,1,2-Tetrachloroethane	131	7.463	7.463	(1.016)	612597	200.000	210(A)
	64 Ethylbenzene	106	7.502	7.503	(1.021)	913038	200.000	210(A)
	65 m,p-Xylene	106	7.630	7.631	(1.039)	2221920	400.000	410(A)
	66 o-Xylene	106	8.054	8.064	(1.097)	1097161	200.000	210(A)
	67 Styrene	104	8.074	8.074	(1.099)	1906508	200.000	210(A)
	68 Bromoform	173	8.251	8.261	(1.123)	428469	200.000	230(TA)
	69 Isopropylbenzene	105	8.477	8.478	(1.154)	2740436	200.000	210(A)
	126 trans-1,4-Dichloro-2-butene	75	8.537	8.537	(1.162)	313808	200.000	250(A)
$	70 Bromofluorobenzene	95	8.625	8.636	(1.174)	213906	50.0000	51
	72 Bromobenzene	156	8.793	8.793	(0.888)	621662	200.000	210(A)
	71 1,1,2,2-Tetrachloroethane	83	8.802	8.803	(0.889)	819671	200.000	210(A)
	73 1,2,3-Trichloropropane	75	8.842	8.842	(0.893)	928790	200.000	220(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 n-Propylbenzene	120	8.950	8.951	(0.904)	681120	200.000	220(A)
	75 2-Chlorotoluene	126	9.029	9.030	(0.912)	601019	200.000	220(A)
	76 1,3,5-Trimethylbenzene	105	9.147	9.158	(0.923)	2132005	200.000	200(A)
	77 4-Chlorotoluene	126	9.147	9.148	(0.923)	607824	200.000	210(A)
	78 tert-Butylbenzene	119	9.512	9.512	(0.960)	2089637	200.000	200(A)
	79 1,2,4-Trimethylbenzene	105	9.561	9.561	(0.965)	2187547	200.000	210(A)
M	81 Xylene (Total)	106				3319081	600.000	(a)
	80 sec-Butylbenzene	105	9.748	9.749	(0.984)	2820059	200.000	210(A)
	82 1,3-Dichlorobenzene	146	9.837	9.837	(0.993)	1082184	200.000	210(A)
	83 4-Isopropyltoluene	119	9.906	9.906	(1.000)	2122834	200.000	200(A)
*	84 1,4-Dichlorobenzene-d4	152	9.906	9.906	(1.000)	155781	50.0000	
	85 1,4-Dichlorobenzene	146	9.935	9.936	(1.003)	1097043	200.000	210(A)
	86 n-Butylbenzene	91	10.319	10.320	(1.042)	2175343	200.000	200(A)
	87 1,2-Dichlorobenzene	146	10.300	10.300	(1.040)	996781	200.000	210(A)
	88 1,2-Dibromo-3-chloropropane	75	11.048	11.049	(1.115)	96833	200.000	220(A)
	89 1,2,4-Trichlorobenzene	180	11.807	11.807	(1.192)	619673	200.000	220(A)
	90 Hexachlorobutadiene	225	11.974	11.975	(1.209)	277768	200.000	200
	91 Naphthalene	128	12.013	12.014	(1.213)	1342155	200.000	220(A)
	92 1,2,3-Trichlorobenzene	180	12.230	12.231	(1.235)	500626	200.000	220(A)

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.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7422.D
Date : 16-JAN-2014 14:46
Client ID: VSTD2001W
Instrument: V1.i
Sample Info: 5ML,VSTD2001W,VSTD2001W
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7501.D
Report Date: 30-Jan-2014 10:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7501.D
Lab Smp Id: VSTD2001Z Client Smp ID: VSTD2001Z
Inj Date : 21-JAN-2014 15:31
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD2001Z,VSTD2001Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 30-Jan-2014 10:54 mscarpaci Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.263	1.273	(0.282)	268743	200.000	200(M)M7 AM 01/30
2	Chloromethane	50	1.411	1.401	(0.315)	1465100	200.000	200
3	Vinyl Chloride	62	1.480	1.480	(0.331)	959653	200.000	200
4	Bromomethane	94	1.716	1.716	(0.384)	618912	200.000	190
5	Chloroethane	64	1.815	1.825	(0.406)	612367	200.000	190
6	Trichlorofluoromethane	101	1.943	1.943	(0.434)	701481	200.000	200(A)
127	Ethanol	46	2.041	2.041	(0.456)	486759	20000.0	24000
7	Ether	59	2.130	2.130	(0.476)	919838	200.000	200(A)
8	Acrolein	56	2.209	2.209	(0.494)	1186373	1000.00	1100(A)
9	1,1-Dichloroethene	96	2.317	2.327	(0.518)	690499	200.000	200(A)
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.307	2.307	(0.516)	522725	200.000	210(A)
11	Acetone	58	2.307	2.307	(0.516)	156327	200.000	190
12	Iodomethane	142	2.445	2.455	(0.547)	864927	200.000	210(A)
13	Carbon Disulfide	76	2.534	2.534	(0.566)	1924466	200.000	190
14	Acetonitrile	40	2.494	2.494	(0.558)	1124245	2000.00	2000
15	Methyl Acetate	43	2.544	2.544	(0.569)	1548157	200.000	210(A)
16	Methylene Chloride	84	2.672	2.681	(0.597)	726926	200.000	210(A)
17	tert-Butanol	59	2.691	2.681	(0.602)	158383	400.000	420
18	Acrylonitrile	53	2.780	2.780	(0.621)	455755	200.000	220
20	Methyl tert-butyl ether	73	2.819	2.819	(0.630)	2395786	200.000	210(A)

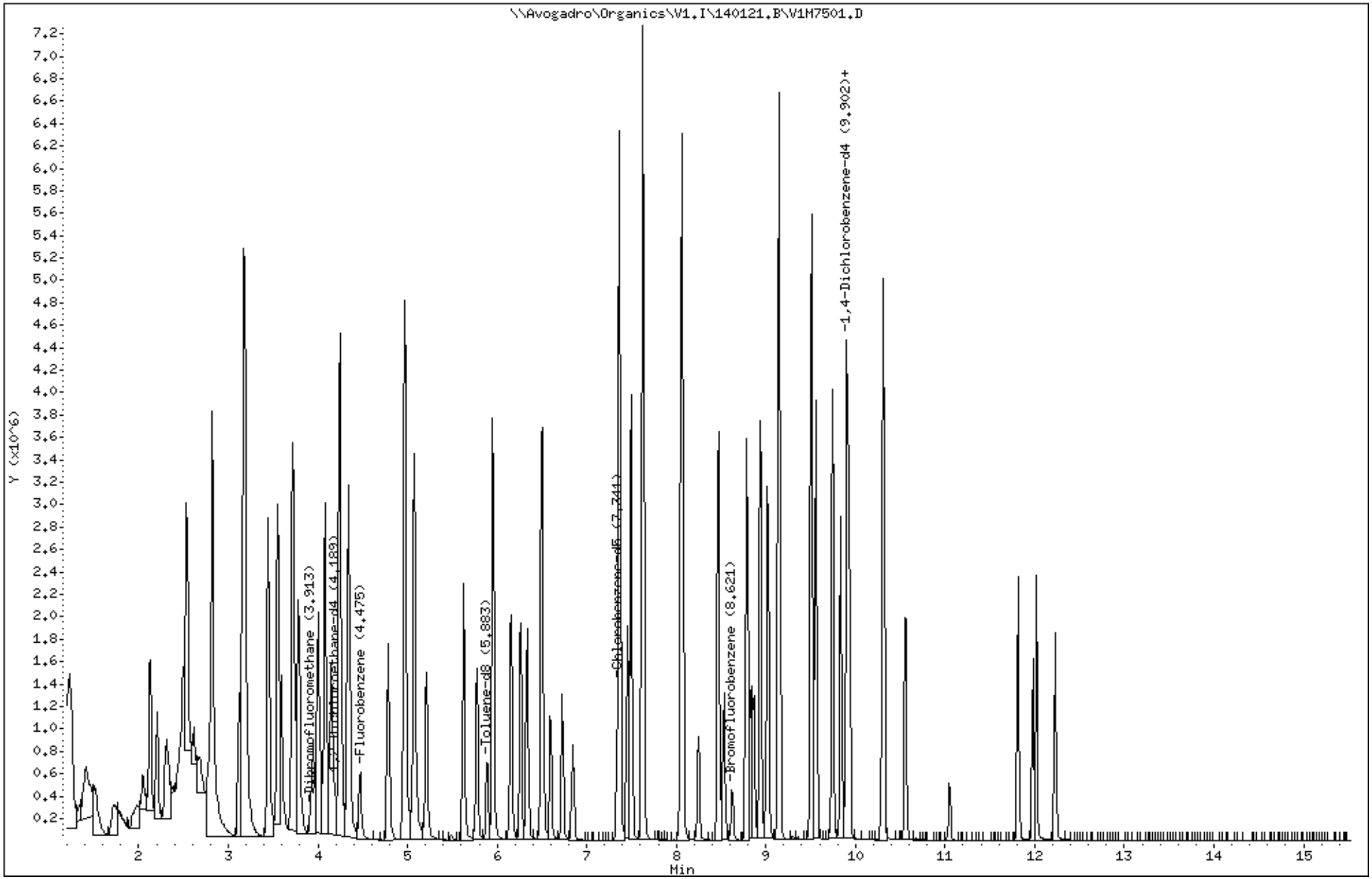
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	19	trans-1,2-Dichloroethene	96	2.819	2.819	(0.630)	727586	200.000	210(A)
	21	1,1-Dichloroethane	63	3.115	3.115	(0.696)	1512397	200.000	200(A)
	22	Vinyl acetate	43	3.174	3.164	(0.709)	3738356	200.000	200
	23	Diisopropyl Ether	45	3.174	3.174	(0.709)	4909237	200.000	200
	24	Ethyl tert-butyl ether	59	3.440	3.440	(0.769)	3147693	200.000	200(A)
M	27	1,2-dichloroethene, (Total)	100				1554460	400.000	410(A)
	25	cis-1,2-Dichloroethene	96	3.548	3.548	(0.793)	826874	200.000	200
	26	2,2-Dichloropropane	77	3.558	3.558	(0.795)	437828	200.000	180
	28	2-Butanone	72	3.548	3.548	(0.793)	124854	200.000	190
	29	Bromochloromethane	128	3.726	3.735	(0.833)	379620	200.000	200(A)
	30	Tetrahydrofuran	72	3.775	3.775	(0.844)	226891	400.000	440
	31	Chloroform	83	3.794	3.795	(0.848)	1246683	200.000	200
$	32	Dibromofluoromethane	113	3.913	3.913	(0.875)	136222	50.0000	50
	33	1,1,1-Trichloroethane	97	3.952	3.952	(0.883)	721191	200.000	200
	34	Cyclohexane	56	4.001	4.001	(0.894)	1545726	200.000	210(A)
	36	Carbon Tetrachloride	117	4.080	4.090	(0.912)	617868	200.000	200
	35	1,1-Dichloropropene	110	4.080	4.080	(0.912)	313853	200.000	200
$	37	1,2-Dichloroethane-d4	102	4.188	4.187	(0.936)	33879	50.0000	50
	38	Benzene	78	4.248	4.248	(0.949)	2931651	200.000	200
	39	1,2-Dichloroethane	62	4.248	4.248	(0.949)	848328	200.000	200(A)
	40	tert-Amyl methyl ether	73	4.336	4.336	(0.969)	2512697	200.000	210(A)
*	41	Fluorobenzene	96	4.474	4.474	(1.000)	521903	50.0000	
	42	Trichloroethene	130	4.779	4.779	(1.068)	624138	200.000	190
	43	Methylcyclohexane	83	4.967	4.967	(1.110)	1233704	200.000	200
	44	1,2-Dichloropropane	63	4.976	4.967	(1.112)	913261	200.000	200
	46	Dibromomethane	93	5.065	5.075	(1.132)	470956	200.000	200(A)
	47	1,4-Dioxane	88	5.095	5.085	(1.139)	106326	4000.00	4500(A)
	48	Bromodichloromethane	83	5.213	5.213	(1.165)	996537	200.000	200(A)
	45	2-Chloroethyl vinyl ether	63	5.489	5.489	(1.227)	20696	200.000	200
	49	cis-1,3-Dichloropropene	75	5.627	5.627	(1.258)	1336307	200.000	200(A)
	50	4-Methyl-2-pentanone	43	5.774	5.774	(1.291)	1361412	200.000	210(A)
$	51	Toluene-d8	98	5.892	5.892	(0.803)	482317	50.0000	50
	52	Toluene	91	5.952	5.952	(1.330)	2746062	200.000	190
	53	trans-1,3-Dichloropropene	75	6.158	6.149	(1.376)	1123457	200.000	210(A)
	54	1,1,2-Trichloroethane	97	6.336	6.336	(1.416)	641750	200.000	210(A)
	55	Tetrachloroethene	164	6.493	6.493	(0.885)	487069	200.000	200(A)
	56	1,3-Dichloropropane	76	6.503	6.493	(0.886)	1198827	200.000	200(A)
	57	2-Hexanone	43	6.592	6.592	(0.898)	980478	200.000	200
	58	Dibromochloromethane	129	6.730	6.730	(0.917)	745120	200.000	210(A)
	59	1,2-Dibromoethane	107	6.848	6.838	(0.933)	693394	200.000	210(A)
*	60	Chlorobenzene-d5	117	7.340	7.331	(1.000)	351303	50.0000	
	63	1-Chlorohexane	91	7.360	7.360	(1.003)	1087887	200.000	200
	61	Chlorobenzene	112	7.370	7.360	(1.004)	1703078	200.000	200
	62	1,1,1,2-Tetrachloroethane	131	7.459	7.449	(1.016)	623673	200.000	210(A)
	64	Ethylbenzene	106	7.498	7.488	(1.021)	901579	200.000	200(A)
	65	m,p-Xylene	106	7.626	7.616	(1.039)	2198451	400.000	390
	66	o-Xylene	106	8.059	8.050	(1.098)	1093473	200.000	200
	67	Styrene	104	8.069	8.058	(1.099)	1922057	200.000	200
	68	Bromoform	173	8.246	8.247	(1.123)	481065	200.000	230(TA)
	69	Isopropylbenzene	105	8.473	8.462	(1.154)	2720595	200.000	200
	126	trans-1,4-Dichloro-2-butene	75	8.532	8.532	(1.162)	355396	200.000	230(A)
$	70	Bromofluorobenzene	95	8.621	8.621	(1.174)	197505	50.0000	51
	72	Bromobenzene	156	8.788	8.778	(0.888)	662451	200.000	210(A)
	71	1,1,2,2-Tetrachloroethane	83	8.798	8.788	(0.889)	925431	200.000	220(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	73 1,2,3-Trichloropropane	75	8.837	8.828	(0.893)	698807	200.000	160
	74 n-Propylbenzene	120	8.936	8.936	(0.903)	666788	200.000	210(A)
	75 2-Chlorotoluene	126	9.015	9.015	(0.910)	615074	200.000	210(A)
	76 1,3,5-Trimethylbenzene	105	9.143	9.143	(0.923)	2182975	200.000	200(A)
	77 4-Chlorotoluene	126	9.143	9.143	(0.923)	630935	200.000	200(A)
	78 tert-Butylbenzene	119	9.507	9.497	(0.960)	2122070	200.000	200(A)
	79 1,2,4-Trimethylbenzene	105	9.556	9.547	(0.965)	2231019	200.000	200(A)
M	81 Xylene (Total)	106				3291924	600.000	590
	80 sec-Butylbenzene	105	9.744	9.734	(0.984)	2848897	200.000	200
	82 1,3-Dichlorobenzene	146	9.832	9.832	(0.993)	1144506	200.000	210(A)
	83 4-Isopropyltoluene	119	9.901	9.901	(1.000)	2140759	200.000	200(A)
*	84 1,4-Dichlorobenzene-d4	152	9.901	9.901	(1.000)	147938	50.0000	
	85 1,4-Dichlorobenzene	146	9.931	9.921	(1.003)	1154776	200.000	210(A)
	86 n-Butylbenzene	91	10.315	10.315	(1.042)	2140628	200.000	200
	87 1,2-Dichlorobenzene	146	10.305	10.295	(1.041)	1079910	200.000	210(A)
	88 1,2-Dibromo-3-chloropropane	75	11.044	11.044	(1.115)	113143	200.000	220(A)
	89 1,2,4-Trichlorobenzene	180	11.812	11.802	(1.193)	634063	200.000	210(A)
	90 Hexachlorobutadiene	225	11.979	11.970	(1.210)	261677	200.000	180
	91 Naphthalene	128	12.019	12.009	(1.214)	1526914	200.000	220(A)
	92 1,2,3-Trichlorobenzene	180	12.226	12.226	(1.235)	534938	200.000	210(A)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7501.D
Date : 21-JAN-2014 15:31
Client ID: VSTD2001Z
Instrument: V1.i
Sample Info: 5ML,VSTD2001Z,VSTD2001Z
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140121.B\V5O9516.D
Report Date: 22-Jan-2014 15:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140121.B\V5O9516.D
Lab Smp Id: VSTD2005K Client Smp ID: VSTD2005K
Inj Date : 21-JAN-2014 13:07
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD2005K,VSTD2005K
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140121.B\v5_8260W.m
Meth Date : 22-Jan-2014 14:03 wluo Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.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	1.615	1.609	(0.289)	236107	200.000	190
2	Freon114	85	1.754	1.737	(0.314)	224033	200.000	180
3	Chloromethane	50	1.754	1.725	(0.314)	329670	200.000	200
4	Vinyl Chloride	62	1.882	1.853	(0.337)	250083	200.000	190
5	Bromomethane	94	2.161	2.143	(0.387)	185503	200.000	160
6	Chloroethane	64	2.242	2.225	(0.401)	129791	200.000	190
7	Trichlorofluoromethane	101	2.509	2.492	(0.449)	342926	200.000	210(A)
8	Ethanol	46	2.614	2.608	(0.468)	98408	20000.0	24000(A)
9	Ether	59	2.695	2.689	(0.483)	216694	200.000	220(A)
10	Acrolein	56	2.799	2.793	(0.501)	48914	1000.00	1200(A)
11	1,1-Dichloroethene	96	2.904	2.886	(0.520)	249095	200.000	200
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.939	2.933	(0.526)	287429	200.000	190
13	Acetone	58	2.939	2.921	(0.526)	24023	200.000	220(A)
14	Iodomethane	142	3.031	3.026	(0.543)	694083	200.000	200(A)
15	Carbon Disulfide	76	3.090	3.084	(0.553)	979245	200.000	190
16	Acetonitrile	41	3.206	3.200	(0.574)	776145	2000.00	2000
17	Allyl Chloride	39	3.206	3.200	(0.574)	382175	200.000	200(A)
18	Methyl Acetate	43	3.217	3.211	(0.576)	298122	200.000	190
19	Methylene Chloride	84	3.310	3.304	(0.593)	279115	200.000	180
20	tert-Butanol	59	3.426	3.420	(0.613)	50215	400.000	400(A)
21	Acrylonitrile	53	3.519	3.513	(0.630)	105828	200.000	200(A)
22	trans-1,2-Dichloroethene	96	3.554	3.548	(0.636)	268757	200.000	190
23	Methyl tert-butyl ether	73	3.566	3.560	(0.638)	787172	200.000	190

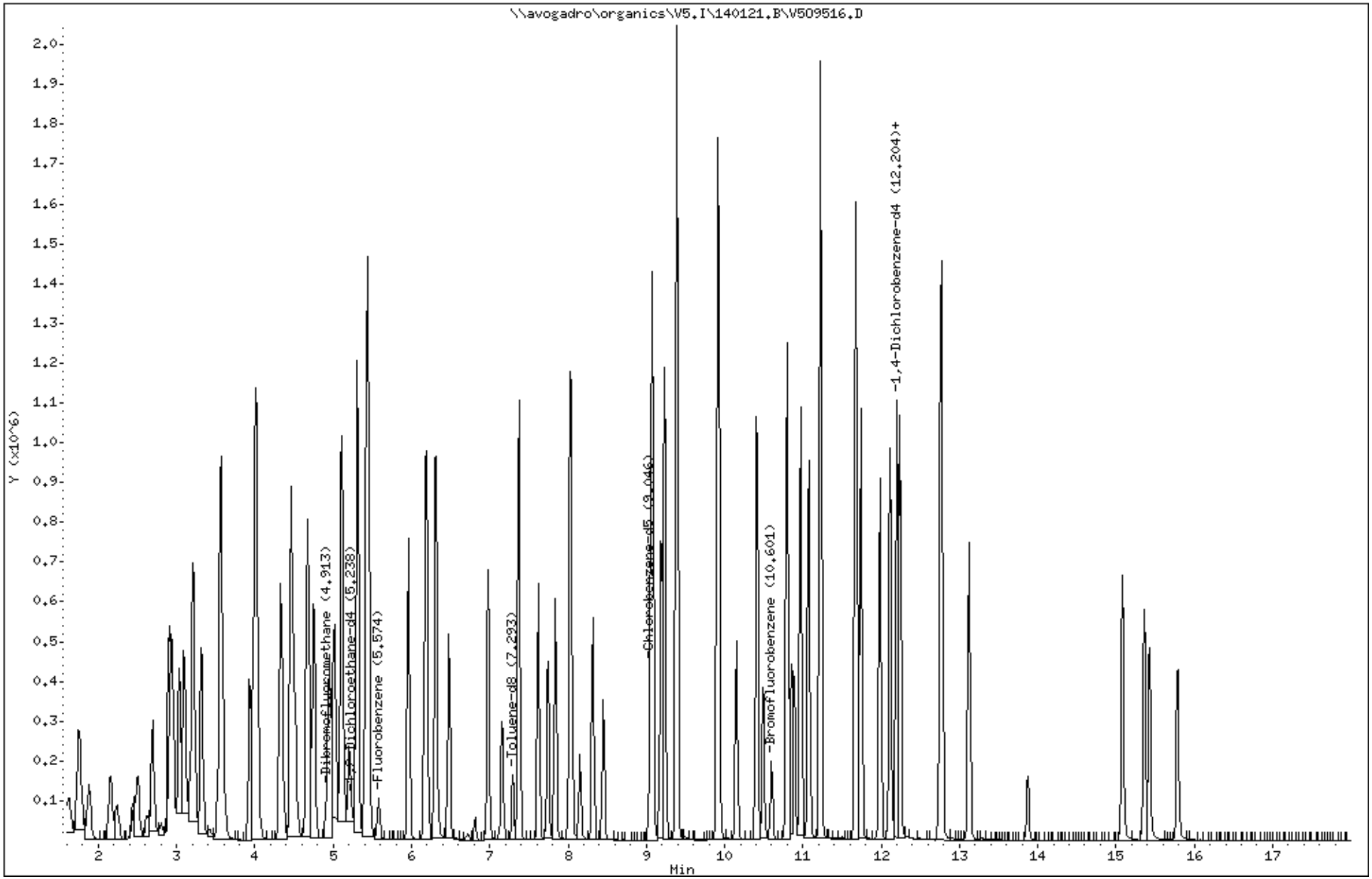
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	24	1,1-Dichloroethane	63	3.925	3.920	(0.703)	449982	200.000	190
	25	Vinyl acetate	43	3.983	3.978	(0.713)	822278	200.000	190
	26	Diisopropyl Ether	45	3.995	3.989	(0.715)	948227	200.000	180
	27	2-Chloro-1,3-Butadiene	53	4.018	4.012	(0.719)	366098	200.000	190
	28	Ethyl tert-butyl ether	59	4.332	4.326	(0.776)	901566	200.000	190
	29	cis-1,2-Dichloroethene	96	4.459	4.454	(0.798)	289926	200.000	190
	30	2-Butanone	72	4.471	4.465	(0.800)	29634	200.000	200(A)
	31	2,2-Dichloropropane	77	4.483	4.465	(0.803)	370998	200.000	180
	32	Propionitrile	54	4.517	4.512	(0.809)	348907	2000.00	2000
	33	Methacrylonitrile	41	4.668	4.663	(0.836)	339761	400.000	380
	34	Bromochloromethane	128	4.680	4.686	(0.838)	174134	200.000	200
	35	Tetrahydrofuran	72	4.738	4.732	(0.848)	66855	400.000	390
	36	Chloroform	83	4.761	4.755	(0.852)	470711	200.000	190
$	37	Dibromofluoromethane	113	4.912	4.906	(0.879)	44689	50.0000	52
	38	1,1,1-Trichloroethane	97	4.947	4.941	(0.886)	435513	200.000	200
	39	Cyclohexane	56	5.017	5.011	(0.898)	375500	200.000	190
	40	1,1-Dichloropropene	110	5.098	5.104	(0.913)	128647	200.000	180
	41	Carbon Tetrachloride	117	5.121	5.104	(0.917)	406641	200.000	200
	42	Isobutyl Alcohol	43	5.202	5.197	(0.931)	191748	4000.00	3900
$	43	1,2-Dichloroethane-d4	102	5.237	5.231	(0.938)	7782	50.0000	52
	44	Benzene	78	5.307	5.301	(0.950)	907142	200.000	190
	45	1,2-Dichloroethane	62	5.319	5.313	(0.952)	354084	200.000	190
	46	tert-Amyl methyl ether	73	5.423	5.417	(0.971)	769720	200.000	190
*	47	Fluorobenzene	96	5.586	5.580	(1.000)	107211	50.0000	
	48	Trichloroethene	130	5.957	5.951	(1.067)	302261	200.000	200(A)
	49	Methylcyclohexane	83	6.178	6.172	(1.106)	285351	200.000	180
	50	1,2-Dichloropropane	63	6.189	6.183	(1.108)	248378	200.000	200
	51	Methyl Methacrylate	69	6.305	6.311	(1.129)	222972	200.000	190
	52	Dibromomethane	93	6.317	6.311	(1.131)	205892	200.000	200(A)
	53	1,4-Dioxane	88	6.329	6.334	(1.133)	44962	4000.00	4300(A)
	54	Bromodichloromethane	83	6.480	6.474	(1.160)	369551	200.000	190
M	55	1,2-Dichloroethene (Total)	96				558683	400.000	380
	56	2-Chloroethyl vinyl ether	63	6.805	6.810	(1.218)	27091	200.000	210(A)
	57	cis-1,3-Dichloropropene	75	6.979	6.973	(1.249)	433371	200.000	200(A)
	58	4-Methyl-2-pentanone	43	7.153	7.159	(1.281)	281389	200.000	200
$	59	Toluene-d8	98	7.292	7.286	(0.806)	126145	50.0000	51
	60	Toluene	91	7.373	7.368	(1.320)	956060	200.000	190
	61	trans-1,3-Dichloropropene	75	7.617	7.623	(1.364)	389515	200.000	200(A)
	62	Ethyl Methacrylate	69	7.745	7.739	(1.387)	284933	200.000	200(A)
	63	1,1,2-Trichloroethane	97	7.838	7.832	(1.403)	233507	200.000	190
	64	Tetrachloroethene	164	8.024	8.018	(0.887)	268875	200.000	180
	65	1,3-Dichloropropane	76	8.035	8.041	(0.888)	367030	200.000	180
	66	2-Hexanone	43	8.151	8.145	(0.901)	191279	200.000	190
	67	Dibromochloromethane	129	8.314	8.308	(0.919)	355219	200.000	200
	68	1,2-Dibromoethane	107	8.453	8.447	(0.935)	283169	200.000	200
*	69	Chlorobenzene-d5	117	9.045	9.039	(1.000)	134261	50.0000	
	70	1-Chlorohexane	91	9.068	9.063	(1.003)	320769	200.000	190
	71	Chlorobenzene	112	9.080	9.074	(1.004)	655337	200.000	190
	72	1,1,1,2-Tetrachloroethane	131	9.185	9.190	(1.015)	288963	200.000	190
	73	Ethylbenzene	106	9.231	9.237	(1.021)	315116	200.000	190
	74	m,p-Xylene	106	9.394	9.388	(1.039)	756574	400.000	370
	75	o-Xylene	106	9.904	9.910	(1.095)	380278	200.000	190
	76	Styrene	104	9.928	9.922	(1.098)	671397	200.000	200
	77	Bromoform	173	10.148	10.142	(1.122)	300301	200.000	220(A)

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
Compounds								
78	Isopropylbenzene	105	10.404	10.409	(1.150)	970956	200.000	200
79	trans-1,4-Dichloro-2-butene	75	10.485	10.491	(1.159)	112552	200.000	200
$ 80	Bromofluorobenzene	95	10.601	10.595	(1.172)	75559	50.0000	51
81	Bromobenzene	156	10.798	10.792	(0.885)	353648	200.000	190
82	1,1,2,2-Tetrachloroethane	83	10.810	10.804	(0.886)	304784	200.000	180
83	1,2,3-Trichloropropane	75	10.856	10.862	(0.890)	341225	200.000	190
84	n-Propylbenzene	120	10.972	10.967	(0.899)	247739	200.000	200
85	2-Chlorotoluene	126	11.077	11.071	(0.908)	251563	200.000	190
86	4-Chlorotoluene	126	11.228	11.222	(0.920)	256190	200.000	190
87	1,3,5-Trimethylbenzene	105	11.228	11.222	(0.920)	735957	200.000	190
88	tert-Butylbenzene	119	11.669	11.675	(0.956)	764638	200.000	190
89	1,2,4-Trimethylbenzene	105	11.739	11.744	(0.962)	771290	200.000	190
90	sec-Butylbenzene	105	11.982	11.977	(0.982)	851576	200.000	190
91	1,3-Dichlorobenzene	146	12.110	12.116	(0.992)	552963	200.000	190
92	4-Isopropyltoluene	119	12.203	12.197	(1.000)	715322	200.000	190
* 93	1,4-Dichlorobenzene-d4	152	12.203	12.209	(1.000)	87879	50.0000	
94	1,4-Dichlorobenzene	146	12.238	12.232	(1.003)	575262	200.000	190
M 95	Xylene (Total)	106				1136852	600.000	560
96	1,2-Dichlorobenzene	146	12.760	12.754	(1.046)	544521	200.000	190
97	n-Butylbenzene	91	12.772	12.778	(1.047)	650028	200.000	200
98	Hexachloroethane	117	13.120	13.126	(1.075)	203767	200.000	210(A)
99	1,2-Dibromo-3-chloropropane	75	13.875	13.869	(1.137)	44570	200.000	200(A)
100	1,3,5-Trichlorobenzene	182	15.082	15.088	(2.700)	309548	200.000	190
101	1,2,4-Trichlorobenzene	180	15.082	15.088	(1.236)	324213	200.000	190
102	Hexachlorobutadiene	225	15.361	15.367	(1.259)	190502	200.000	180
103	Naphthalene	128	15.430	15.425	(1.264)	534737	200.000	180
104	1,2,3-Trichlorobenzene	180	15.790	15.784	(1.294)	227393	200.000	170

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V5.I\140121.B\V509516.D
Date : 21-JAN-2014 13:07
Client ID: VSTD2005K
Instrument: V5.i
Sample Info: 5ML,VSTD2005K,VSTD2005K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/20/2014 Time: 9:11

Lab File ID: V1M7473.D Init. Calib. Date(s): 01/16/2014 01/16/2014

EPA Sample No.(VSTD#####) VSTD0501Y Init. Calib. Time(s): 12:54 14:46

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.099	0.109	0.100	9.9	20.0
Chloromethane	0.616	0.746	0.100	21.1	20.0
Vinyl chloride	0.374	0.457	0.100	22.2	20.0
Bromomethane	0.260	0.286	0.100	10.0	20.0
Chloroethane	0.261	0.296	0.100	13.3	20.0
Trichlorofluoromethane	0.265	0.338	0.100	27.5	20.0
1,1-Dichloroethene	0.275	0.332	0.100	21.0	20.0
Acetone	0.071	0.085	0.100	19.1	20.0
Iodomethane	0.295	0.404	0.100	37.0	20.0
Carbon disulfide	0.820	0.981	0.100	19.6	20.0
Methylene chloride	0.273	0.295	0.100	8.3	20.0
trans-1,2-Dichloroethene	0.293	0.344	0.100	17.6	20.0
Methyl tert-butyl ether	0.946	0.960	0.100	1.5	20.0
1,1-Dichloroethane	0.632	0.717	0.200	13.3	20.0
Vinyl acetate	1.596	1.605	0.100	0.5	20.0
2-Butanone	0.053	0.061	0.100	14.3	20.0
cis-1,2-Dichloroethene	0.341	0.366	0.100	7.3	20.0
2,2-Dichloropropane	0.202	0.234	0.100	16.1	20.0
Bromochloromethane	0.151	0.154	0.100	1.5	20.0
Chloroform	0.529	0.560	0.200	6.0	20.0
1,1,1-Trichloroethane	0.304	0.358	0.100	17.7	20.0
1,1-Dichloropropene	0.128	0.157	0.100	22.6	20.0
Carbon tetrachloride	0.263	0.314	0.100	19.3	20.0
1,2-Dichloroethane	0.355	0.355	0.100	-0.2	20.0
Benzene	1.248	1.394	0.500	11.7	20.0
Trichloroethene	0.260	0.296	0.200	13.7	20.0
1,2-Dichloropropane	0.390	0.394	0.100	1.2	20.0
Dibromomethane	0.187	0.199	0.100	6.7	20.0
Bromodichloromethane	0.406	0.425	0.200	4.7	20.0
cis-1,3-Dichloropropene	0.527	0.565	0.200	7.2	20.0
4-Methyl-2-pentanone	0.503	0.531	0.100	5.6	20.0
Toluene	1.190	1.312	0.400	10.2	20.0
trans-1,3-Dichloropropene	0.426	0.449	0.100	5.4	20.0
1,1,2-Trichloroethane	0.247	0.250	0.100	1.2	20.0
1,3-Dichloropropane	0.731	0.741	0.100	1.4	20.0
Tetrachloroethene	0.297	0.348	0.200	17.1	20.0
2-Hexanone	0.618	0.698	0.100	12.9	20.0
Dibromochloromethane	0.416	0.451	0.100	8.5	20.0
1,2-Dibromoethane	0.400	0.408	0.100	2.0	20.0
Chlorobenzene	1.067	1.168	0.500	9.5	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/20/2014 Time: 9:11

Lab File ID: V1M7473.D Init. Calib. Date(s): 01/16/2014 01/16/2014

EPA Sample No.(VSTD#####) VSTD0501Y Init. Calib. Time(s): 12:54 14:46

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.372	0.402	0.100	8.1	20.0
Ethylbenzene	0.552	0.621	0.100	12.6	20.0
m,p-Xylene	0.703	0.790	0.100	12.5	20.0
o-Xylene	0.688	0.758	0.300	10.2	20.0
Xylene (Total)	0.698	0.780	0.100	11.7	20.0
Styrene	1.197	1.288	0.300	7.5	20.0
Bromoform	0.240	0.269	0.100	12.2	20.0
Isopropylbenzene	1.710	1.990	0.100	16.4	20.0
1,1,2,2-Tetrachloroethane	1.232	1.304	0.300	5.9	20.0
Bromobenzene	0.936	0.963	0.100	2.9	20.0
1,2,3-Trichloropropane	1.323	1.354	0.100	2.3	20.0
n-Propylbenzene	0.996	1.146	0.100	15.1	20.0
2-Chlorotoluene	0.896	0.992	0.100	10.7	20.0
1,3,5-Trimethylbenzene	3.391	3.815	0.100	12.5	20.0
4-Chlorotoluene	0.929	1.010	0.100	8.8	20.0
tert-Butylbenzene	3.272	3.778	0.100	15.5	20.0
1,2,4-Trimethylbenzene	3.406	3.758	0.100	10.3	20.0
sec-Butylbenzene	4.380	5.131	0.100	17.2	20.0
4-Isopropyltoluene	3.329	3.811	0.100	14.5	20.0
1,3-Dichlorobenzene	1.654	1.786	0.600	8.0	20.0
1,4-Dichlorobenzene	1.678	1.817	0.500	8.3	20.0
n-Butylbenzene	3.394	4.019	0.100	18.4	20.0
1,2-Dichlorobenzene	1.552	1.643	0.400	5.9	20.0
1,2-Dibromo-3-chloropropane	0.143	0.169	0.050	17.9	20.0
1,2,4-Trichlorobenzene	0.919	0.973	0.200	5.9	20.0
Hexachlorobutadiene	0.447	0.514	0.100	15.0	20.0
1,2,3-Trichlorobenzene	0.745	0.794	0.100	6.5	20.0
Naphthalene	1.999	2.312	0.100	15.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.178	0.235	0.100	31.8	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/20/2014 Time: 9:11

Lab File ID: V1M7473.D Init. Calib. Date(s): 01/16/2014 01/16/2014

EPA Sample No.(VSTD#####) VSTD0501Y Init. Calib. Time(s): 12:54 14:46

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.257	0.257	0.100	0.2	20.0
1,2-Dichloroethane-d4	0.068	0.061	0.100	-10.0	20.0
Toluene-d8	1.401	1.393	0.100	-0.6	20.0
Bromofluorobenzene	0.546	0.548	0.100	0.3	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/22/2014 Time: 11:27

Lab File ID: V1M7522.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0501A Init. Calib. Time(s): 13:38 15:31

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.131	0.136	0.100	3.6	20.0
Chloromethane	0.694	0.800	0.100	15.2	20.0
Vinyl chloride	0.455	0.528	0.100	16.1	20.0
Bromomethane	0.305	0.347	0.100	13.9	20.0
Chloroethane	0.302	0.341	0.100	13.1	20.0
Trichlorofluoromethane	0.326	0.385	0.100	18.1	20.0
1,1-Dichloroethene	0.327	0.383	0.100	17.3	20.0
Acetone	0.078	0.075	0.100	-3.3	20.0
Iodomethane	0.392	0.355	0.100	-9.5	20.0
Carbon disulfide	0.961	1.088	0.100	13.2	20.0
Methylene chloride	0.335	0.330	0.100	-1.5	20.0
trans-1,2-Dichloroethene	0.335	0.381	0.100	13.8	20.0
Methyl tert-butyl ether	1.103	1.069	0.100	-3.1	20.0
1,1-Dichloroethane	0.724	0.766	0.200	5.9	20.0
Vinyl acetate	1.798	1.744	0.100	-3.0	20.0
2-Butanone	0.062	0.056	0.100	-10.0	20.0
cis-1,2-Dichloroethene	0.392	0.422	0.100	7.6	20.0
2,2-Dichloropropane	0.234	0.257	0.100	9.8	20.0
Bromochloromethane	0.177	0.176	0.100	-0.6	20.0
Chloroform	0.603	0.634	0.200	5.2	20.0
1,1,1-Trichloroethane	0.351	0.415	0.100	18.3	20.0
1,1-Dichloropropene	0.154	0.164	0.100	6.3	20.0
Carbon tetrachloride	0.299	0.360	0.100	20.2	20.0
1,2-Dichloroethane	0.404	0.402	0.100	-0.4	20.0
Benzene	1.431	1.547	0.500	8.2	20.0
Trichloroethene	0.307	0.334	0.200	8.8	20.0
1,2-Dichloropropane	0.438	0.447	0.100	2.0	20.0
Dibromomethane	0.224	0.218	0.100	-3.1	20.0
Bromodichloromethane	0.464	0.478	0.200	3.1	20.0
cis-1,3-Dichloropropene	0.626	0.622	0.200	-0.7	20.0
4-Methyl-2-pentanone	0.612	0.547	0.100	-10.7	20.0
Toluene	1.352	1.467	0.400	8.5	20.0
trans-1,3-Dichloropropene	0.509	0.509	0.100	0.0	20.0
1,1,2-Trichloroethane	0.290	0.286	0.100	-1.6	20.0
1,3-Dichloropropane	0.829	0.800	0.100	-3.5	20.0
Tetrachloroethene	0.343	0.380	0.200	10.7	20.0
2-Hexanone	0.703	0.692	0.100	-1.6	20.0
Dibromochloromethane	0.501	0.471	0.100	-6.0	20.0
1,2-Dibromoethane	0.461	0.433	0.100	-6.1	20.0
Chlorobenzene	1.222	1.264	0.500	3.4	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/22/2014 Time: 11:27

Lab File ID: V1M7522.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0501A Init. Calib. Time(s): 13:38 15:31

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.429	0.434	0.100	1.2	20.0
Ethylbenzene	0.637	0.681	0.100	6.8	20.0
m,p-Xylene	0.796	0.870	0.100	9.3	20.0
o-Xylene	0.782	0.819	0.300	4.7	20.0
Xylene (Total)	0.792	0.853	0.100	7.7	20.0
Styrene	1.373	1.431	0.300	4.3	20.0
Bromoform	0.301	0.282	0.100	-6.3	20.0
Isopropylbenzene	1.969	2.180	0.100	10.7	20.0
1,1,2,2-Tetrachloroethane	1.427	1.263	0.300	-11.5	20.0
Bromobenzene	1.053	1.057	0.100	0.4	20.0
1,2,3-Trichloropropane	1.461	1.379	0.100	-5.6	20.0
n-Propylbenzene	1.082	1.169	0.100	8.1	20.0
2-Chlorotoluene	1.004	1.049	0.100	4.5	20.0
1,3,5-Trimethylbenzene	3.681	3.991	0.100	8.4	20.0
4-Chlorotoluene	1.046	1.059	0.100	1.2	20.0
tert-Butylbenzene	3.582	3.937	0.100	9.9	20.0
1,2,4-Trimethylbenzene	3.763	3.997	0.100	6.2	20.0
sec-Butylbenzene	4.826	5.401	0.100	11.9	20.0
4-Isopropyltoluene	3.600	4.013	0.100	11.5	20.0
1,3-Dichlorobenzene	1.843	1.916	0.600	3.9	20.0
1,4-Dichlorobenzene	1.889	1.926	0.500	1.9	20.0
n-Butylbenzene	3.666	4.183	0.100	14.1	20.0
1,2-Dichlorobenzene	1.760	1.727	0.400	-1.9	20.0
1,2-Dibromo-3-chloropropane	0.176	0.150	0.050	-14.8	20.0
1,2,4-Trichlorobenzene	1.019	1.065	0.200	4.5	20.0
Hexachlorobutadiene	0.482	0.556	0.100	15.5	20.0
1,2,3-Trichlorobenzene	0.850	0.893	0.100	5.0	20.0
Naphthalene	2.388	2.236	0.100	-6.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.235	0.173	0.100	-26.1	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/22/2014 Time: 11:27

Lab File ID: V1M7522.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0501A Init. Calib. Time(s): 13:38 15:31

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.258	0.271	0.100	5.0	20.0
1,2-Dichloroethane-d4	0.064	0.065	0.100	0.4	20.0
Toluene-d8	1.381	1.404	0.100	1.7	20.0
Bromofluorobenzene	0.554	0.546	0.100	-1.3	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/23/2014 Time: 9:37

Lab File ID: V1M7551.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0501B Init. Calib. Time(s): 13:38 15:31

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.131	0.098	0.100	-25.3	20.0
Chloromethane	0.694	0.643	0.100	-7.3	20.0
Vinyl chloride	0.455	0.435	0.100	-4.4	20.0
Bromomethane	0.305	0.277	0.100	-9.3	20.0
Chloroethane	0.302	0.265	0.100	-12.1	20.0
Trichlorofluoromethane	0.326	0.293	0.100	-10.0	20.0
1,1-Dichloroethene	0.327	0.306	0.100	-6.4	20.0
Acetone	0.078	0.067	0.100	-13.9	20.0
Iodomethane	0.392	0.379	0.100	-3.3	20.0
Carbon disulfide	0.961	0.927	0.100	-3.6	20.0
Methylene chloride	0.335	0.316	0.100	-5.7	20.0
trans-1,2-Dichloroethene	0.335	0.279	0.100	-16.7	20.0
Methyl tert-butyl ether	1.103	1.053	0.100	-4.5	20.0
1,1-Dichloroethane	0.724	0.686	0.200	-5.2	20.0
Vinyl acetate	1.798	1.652	0.100	-8.2	20.0
2-Butanone	0.062	0.054	0.100	-12.9	20.0
cis-1,2-Dichloroethene	0.392	0.366	0.100	-6.8	20.0
2,2-Dichloropropane	0.234	0.195	0.100	-16.8	20.0
Bromochloromethane	0.177	0.168	0.100	-5.4	20.0
Chloroform	0.603	0.549	0.200	-8.9	20.0
1,1,1-Trichloroethane	0.351	0.310	0.100	-11.7	20.0
1,1-Dichloropropene	0.154	0.135	0.100	-12.4	20.0
Carbon tetrachloride	0.299	0.267	0.100	-10.8	20.0
1,2-Dichloroethane	0.404	0.379	0.100	-6.0	20.0
Benzene	1.431	1.333	0.500	-6.8	20.0
Trichloroethene	0.307	0.279	0.200	-9.3	20.0
1,2-Dichloropropane	0.438	0.398	0.100	-9.2	20.0
Dibromomethane	0.224	0.206	0.100	-8.0	20.0
Bromodichloromethane	0.464	0.438	0.200	-5.6	20.0
cis-1,3-Dichloropropene	0.626	0.583	0.200	-6.9	20.0
4-Methyl-2-pentanone	0.612	0.550	0.100	-10.2	20.0
Toluene	1.352	1.243	0.400	-8.1	20.0
trans-1,3-Dichloropropene	0.509	0.464	0.100	-8.8	20.0
1,1,2-Trichloroethane	0.290	0.282	0.100	-3.0	20.0
1,3-Dichloropropane	0.829	0.746	0.100	-10.0	20.0
Tetrachloroethene	0.343	0.299	0.200	-12.8	20.0
2-Hexanone	0.703	0.579	0.100	-17.7	20.0
Dibromochloromethane	0.501	0.435	0.100	-13.1	20.0
1,2-Dibromoethane	0.461	0.420	0.100	-8.9	20.0
Chlorobenzene	1.222	1.064	0.500	-13.0	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/23/2014 Time: 9:37

Lab File ID: V1M7551.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0501B Init. Calib. Time(s): 13:38 15:31

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.429	0.378	0.100	-11.9	20.0
Ethylbenzene	0.637	0.548	0.100	-13.9	20.0
m,p-Xylene	0.796	0.690	0.100	-13.3	20.0
o-Xylene	0.782	0.682	0.300	-12.8	20.0
Xylene (Total)	0.792	0.687	0.100	-13.2	20.0
Styrene	1.373	1.204	0.300	-12.2	20.0
Bromoform	0.301	0.265	0.100	-11.8	20.0
Isopropylbenzene	1.969	1.716	0.100	-12.9	20.0
1,1,2,2-Tetrachloroethane	1.427	1.251	0.300	-12.3	20.0
Bromobenzene	1.053	0.903	0.100	-14.2	20.0
1,2,3-Trichloropropane	1.461	1.372	0.100	-6.1	20.0
n-Propylbenzene	1.082	0.937	0.100	-13.4	20.0
2-Chlorotoluene	1.004	0.851	0.100	-15.2	20.0
1,3,5-Trimethylbenzene	3.681	3.179	0.100	-13.6	20.0
4-Chlorotoluene	1.046	0.864	0.100	-17.4	20.0
tert-Butylbenzene	3.582	3.160	0.100	-11.8	20.0
1,2,4-Trimethylbenzene	3.763	3.275	0.100	-13.0	20.0
sec-Butylbenzene	4.826	4.166	0.100	-13.7	20.0
4-Isopropyltoluene	3.600	3.171	0.100	-11.9	20.0
1,3-Dichlorobenzene	1.843	1.593	0.600	-13.6	20.0
1,4-Dichlorobenzene	1.889	1.607	0.500	-15.0	20.0
n-Butylbenzene	3.666	3.293	0.100	-10.2	20.0
1,2-Dichlorobenzene	1.760	1.488	0.400	-15.4	20.0
1,2-Dibromo-3-chloropropane	0.176	0.143	0.050	-18.6	20.0
1,2,4-Trichlorobenzene	1.019	0.903	0.200	-11.3	20.0
Hexachlorobutadiene	0.482	0.410	0.100	-14.9	20.0
1,2,3-Trichlorobenzene	0.850	0.743	0.100	-12.6	20.0
Naphthalene	2.388	2.044	0.100	-14.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.235	0.152	0.100	-35.1	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V1 Calibration Date: 01/23/2014 Time: 9:37

Lab File ID: V1M7551.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0501B Init. Calib. Time(s): 13:38 15:31

Heated Purge: (Y/N) Y GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 10.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.258	0.271	0.100	5.0	20.0
1,2-Dichloroethane-d4	0.064	0.076	0.100	18.0	20.0
Toluene-d8	1.381	1.333	0.100	-3.5	20.0
Bromofluorobenzene	0.554	0.544	0.100	-1.8	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date: 01/22/2014 Time: 13:59

Lab File ID: V5O9551.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0505M Init. Calib. Time(s): 10:59 13:07

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	0.577	0.493	0.100	-14.6	20.0
Chloromethane	0.787	0.649	0.100	-17.5	20.0
Vinyl chloride	0.626	0.551	0.100	-12.0	20.0
Bromomethane	0.533	0.434	0.100	-18.6	20.0
Chloroethane	0.324	0.254	0.100	-21.6	20.0
Trichlorofluoromethane	0.745	0.731	0.100	-1.9	20.0
1,1-Dichloroethene	0.594	0.572	0.100	-3.7	20.0
Acetone	0.052	0.062	0.100	19.8	20.0
Iodomethane	1.632	1.575	0.100	-3.5	20.0
Carbon disulfide	2.384	2.148	0.100	-9.9	20.0
Methylene chloride	0.705	0.642	0.100	-9.0	20.0
trans-1,2-Dichloroethene	0.658	0.617	0.100	-6.2	20.0
Methyl tert-butyl ether	1.932	1.844	0.100	-4.6	20.0
1,1-Dichloroethane	1.124	1.014	0.200	-9.8	20.0
Vinyl acetate	2.019	1.777	0.100	-12.0	20.0
2-Butanone	0.069	0.077	0.100	11.9	20.0
cis-1,2-Dichloroethene	0.715	0.680	0.100	-4.8	20.0
2,2-Dichloropropane	0.960	0.871	0.100	-9.2	20.0
Bromochloromethane	0.415	0.400	0.100	-3.7	20.0
Chloroform	1.158	1.075	0.200	-7.2	20.0
1,1,1-Trichloroethane	1.036	0.973	0.100	-6.1	20.0
1,1-Dichloropropene	0.327	0.296	0.100	-9.4	20.0
Carbon tetrachloride	0.953	0.885	0.100	-7.1	20.0
1,2-Dichloroethane	0.872	0.826	0.100	-5.3	20.0
Benzene	2.222	2.108	0.500	-5.1	20.0
Trichloroethene	0.702	0.700	0.200	-0.3	20.0
1,2-Dichloropropane	0.587	0.560	0.100	-4.6	20.0
Dibromomethane	0.469	0.481	0.100	2.6	20.0
Bromodichloromethane	0.887	0.814	0.200	-8.3	20.0
cis-1,3-Dichloropropene	0.986	0.947	0.200	-3.9	20.0
4-Methyl-2-pentanone	0.658	0.632	0.100	-4.0	20.0
Toluene	2.300	2.208	0.400	-4.0	20.0
trans-1,3-Dichloropropene	0.901	0.863	0.100	-4.2	20.0
1,1,2-Trichloroethane	0.560	0.534	0.100	-4.6	20.0
1,3-Dichloropropane	0.755	0.676	0.100	-10.4	20.0
Tetrachloroethene	0.544	0.498	0.200	-8.3	20.0
2-Hexanone	0.366	0.338	0.100	-7.5	20.0
Dibromochloromethane	0.665	0.625	0.100	-6.0	20.0
1,2-Dibromoethane	0.528	0.520	0.100	-1.6	20.0
Chlorobenzene	1.297	1.216	0.500	-6.3	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date: 01/22/2014 Time: 13:59

Lab File ID: V5O9551.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0505M Init. Calib. Time(s): 10:59 13:07

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	0.554	0.519	0.100	-6.3	20.0
Ethylbenzene	0.629	0.578	0.100	-8.1	20.0
m,p-Xylene	0.761	0.705	0.100	-7.4	20.0
o-Xylene	0.736	0.707	0.300	-3.9	20.0
Xylene (Total)	0.753	0.706	0.100	-6.2	20.0
Styrene	1.276	1.224	0.300	-4.1	20.0
Bromoform	0.509	0.511	0.100	0.5	20.0
Isopropylbenzene	1.850	1.765	0.100	-4.6	20.0
1,1,2,2-Tetrachloroethane	0.939	0.936	0.300	-0.3	20.0
Bromobenzene	1.039	1.008	0.100	-3.0	20.0
1,2,3-Trichloropropane	1.035	1.016	0.100	-1.8	20.0
n-Propylbenzene	0.720	0.704	0.100	-2.3	20.0
2-Chlorotoluene	0.744	0.699	0.100	-6.0	20.0
1,3,5-Trimethylbenzene	2.208	2.141	0.100	-3.0	20.0
4-Chlorotoluene	0.753	0.728	0.100	-3.3	20.0
tert-Butylbenzene	2.275	2.235	0.100	-1.8	20.0
1,2,4-Trimethylbenzene	2.339	2.206	0.100	-5.7	20.0
sec-Butylbenzene	2.554	2.449	0.100	-4.1	20.0
4-Isopropyltoluene	2.155	2.040	0.100	-5.3	20.0
1,3-Dichlorobenzene	1.640	1.557	0.600	-5.1	20.0
1,4-Dichlorobenzene	1.756	1.643	0.500	-6.4	20.0
n-Butylbenzene	1.871	1.796	0.100	-4.0	20.0
1,2-Dichlorobenzene	1.596	1.601	0.400	0.3	20.0
1,2-Dibromo-3-chloropropane	0.124	0.148	0.050	19.5	20.0
1,2,4-Trichlorobenzene	0.989	1.009	0.200	2.1	20.0
Hexachlorobutadiene	0.586	0.556	0.100	-5.1	20.0
1,2,3-Trichlorobenzene	0.758	0.779	0.100	2.8	20.0
Naphthalene	1.696	1.877	0.100	10.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.707	0.630	0.100	-10.8	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Instrument ID: V5 Calibration Date: 01/22/2014 Time: 13:59

Lab File ID: V5O9551.D Init. Calib. Date(s): 01/21/2014 01/21/2014

EPA Sample No.(VSTD#####) VSTD0505M Init. Calib. Time(s): 10:59 13:07

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.405	0.401	0.100	-0.8	20.0
1,2-Dichloroethane-d4	0.070	0.070	0.100	-1.1	20.0
Toluene-d8	0.925	0.866	0.100	-6.4	20.0
Bromofluorobenzene	0.552	0.543	0.100	-1.7	20.0

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7522.D
Report Date: 30-Jan-2014 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7522.D
Lab Smp Id: VSTD0501A Client Smp ID: VSTD0501A
Inj Date : 22-JAN-2014 11:27
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501A,VSTD0501A
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 30-Jan-2014 10:31 V1.i Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.267	1.267	(0.282)	70042	50.0000	52(MH)M7 AM 01/30
2	Chloromethane	50	1.405	1.405	(0.313)	413136	50.0000	58
3	Vinyl Chloride	62	1.503	1.503	(0.335)	272637	50.0000	58
4	Bromomethane	94	1.739	1.739	(0.388)	179457	50.0000	57
5	Chloroethane	64	1.828	1.828	(0.407)	176211	50.0000	56
6	Trichlorofluoromethane	101	1.946	1.946	(0.434)	199034	50.0000	59
127	Ethanol	46	2.055	2.055	(0.458)	133445	5000.00	6700
7	Ether	59	2.143	2.143	(0.478)	208248	50.0000	47
8	Acrolein	56	2.222	2.222	(0.495)	237099	250.000	220
9	1,1-Dichloroethene	96	2.330	2.330	(0.519)	197854	50.0000	59
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.340	2.340	(0.522)	89584	50.0000	37
11	Acetone	58	2.321	2.321	(0.517)	38742	50.0000	48
12	Iodomethane	142	2.458	2.458	(0.548)	183303	50.0000	45
13	Carbon Disulfide	76	2.547	2.547	(0.568)	562264	50.0000	57
14	Acetonitrile	40	2.518	2.518	(0.561)	236100	500.000	420(Q)
15	Methyl Acetate	43	2.557	2.557	(0.570)	328611	50.0000	44
16	Methylene Chloride	84	2.715	2.715	(0.605)	170329	50.0000	49(H)
17	tert-Butanol	59	2.705	2.705	(0.603)	37825	100.000	100
18	Acrylonitrile	53	2.793	2.793	(0.623)	93383	50.0000	46
20	Methyl tert-butyl ether	73	2.833	2.833	(0.631)	552253	50.0000	48

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	19	trans-1,2-Dichloroethene	96	2.833	2.833	(0.631)	196871	50.0000	57
	21	1,1-Dichloroethane	63	3.138	3.138	(0.699)	395984	50.0000	53
	22	Vinyl acetate	43	3.187	3.187	(0.710)	900971	50.0000	48
	23	Diisopropyl Ether	45	3.187	3.187	(0.710)	1271407	50.0000	51
	24	Ethyl tert-butyl ether	59	3.463	3.463	(0.772)	766901	50.0000	50
M	27	1,2-dichloroethene, (Total)	100				414909	100.000	(a)
	25	cis-1,2-Dichloroethene	96	3.562	3.562	(0.794)	218038	50.0000	54
	26	2,2-Dichloropropane	77	3.571	3.571	(0.796)	132714	50.0000	55
	28	2-Butanone	72	3.562	3.562	(0.794)	28691	50.0000	45
	29	Bromochloromethane	128	3.749	3.749	(0.835)	91109	50.0000	50
	30	Tetrahydrofuran	72	3.788	3.788	(0.844)	45649	100.000	90
	31	Chloroform	83	3.808	3.808	(0.849)	327812	50.0000	53
$	32	Dibromofluoromethane	113	3.936	3.936	(0.877)	140255	50.0000	52
	33	1,1,1-Trichloroethane	97	3.965	3.965	(0.884)	214521	50.0000	59
	34	Cyclohexane	56	4.025	4.025	(0.897)	382750	50.0000	52
	36	Carbon Tetrachloride	117	4.103	4.103	(0.914)	185928	50.0000	60
	35	1,1-Dichloropropene	110	4.103	4.103	(0.914)	84495	50.0000	53
$	37	1,2-Dichloroethane-d4	102	4.202	4.202	(0.936)	33436	50.0000	50
	38	Benzene	78	4.261	4.261	(0.950)	799484	50.0000	54
	39	1,2-Dichloroethane	62	4.261	4.261	(0.950)	207636	50.0000	50
	40	tert-Amyl methyl ether	73	4.359	4.359	(0.971)	581423	50.0000	49
*	41	Fluorobenzene	96	4.487	4.487	(1.000)	516647	50.0000	
	42	Trichloroethene	130	4.803	4.803	(1.070)	172672	50.0000	54
	43	Methylcyclohexane	83	4.980	4.980	(1.110)	365600	50.0000	59
	44	1,2-Dichloropropane	63	4.990	4.990	(1.112)	230993	50.0000	51
	46	Dibromomethane	93	5.088	5.088	(1.134)	112384	50.0000	48
	47	1,4-Dioxane	88	5.108	5.108	(1.138)	31769	1000.00	1400
	48	Bromodichloromethane	83	5.226	5.226	(1.165)	247126	50.0000	52
	45	2-Chloroethyl vinyl ether	63	5.512	5.512	(1.228)	3301	50.0000	32
	49	cis-1,3-Dichloropropene	75	5.640	5.640	(1.257)	321119	50.0000	50
	50	4-Methyl-2-pentanone	43	5.788	5.788	(1.290)	282672	50.0000	45
$	51	Toluene-d8	98	5.906	5.906	(0.803)	499530	50.0000	51
	52	Toluene	91	5.965	5.965	(1.329)	757950	50.0000	54
	53	trans-1,3-Dichloropropene	75	6.172	6.172	(1.375)	262902	50.0000	50
	54	1,1,2-Trichloroethane	97	6.349	6.349	(1.415)	147583	50.0000	49
	55	Tetrachloroethene	164	6.517	6.517	(0.886)	135252	50.0000	55
	56	1,3-Dichloropropane	76	6.517	6.517	(0.886)	284745	50.0000	48
	57	2-Hexanone	43	6.605	6.605	(0.898)	246156	50.0000	49
	58	Dibromochloromethane	129	6.743	6.743	(0.917)	167451	50.0000	47
	59	1,2-Dibromoethane	107	6.861	6.861	(0.933)	153960	50.0000	47
*	60	Chlorobenzene-d5	117	7.354	7.354	(1.000)	355856	50.0000	
	63	1-Chlorohexane	91	7.373	7.373	(1.003)	321005	50.0000	57
	61	Chlorobenzene	112	7.383	7.383	(1.004)	449835	50.0000	52
	62	1,1,1,2-Tetrachloroethane	131	7.472	7.472	(1.016)	154426	50.0000	51
	64	Ethylbenzene	106	7.511	7.511	(1.021)	242204	50.0000	53
	65	m,p-Xylene	106	7.639	7.639	(1.039)	619233	100.000	110
	66	o-Xylene	106	8.073	8.073	(1.098)	291433	50.0000	52
	67	Styrene	104	8.083	8.083	(1.099)	509341	50.0000	52
	68	Bromoform	173	8.260	8.260	(1.123)	100224	50.0000	47(T)
	69	Isopropylbenzene	105	8.486	8.486	(1.154)	775912	50.0000	55
	126	trans-1,4-Dichloro-2-butene	75	8.546	8.546	(1.162)	74560	50.0000	48
$	70	Bromofluorobenzene	95	8.644	8.644	(1.175)	194397	50.0000	49
	72	Bromobenzene	156	8.802	8.802	(0.888)	165029	50.0000	50
	71	1,1,2,2-Tetrachloroethane	83	8.811	8.811	(0.889)	197322	50.0000	44

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7522.D
Report Date: 30-Jan-2014 10:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	73 1,2,3-Trichloropropane	75	8.851	8.851	(0.893)	215423	50.0000	47	
	74 n-Propylbenzene	120	8.949	8.949	(0.903)	182632	50.0000	54	
	75 2-Chlorotoluene	126	9.038	9.038	(0.912)	163777	50.0000	52	
	76 1,3,5-Trimethylbenzene	105	9.156	9.156	(0.924)	623334	50.0000	54	
	77 4-Chlorotoluene	126	9.156	9.156	(0.924)	165357	50.0000	50	
	78 tert-Butylbenzene	119	9.511	9.511	(0.959)	614893	50.0000	55	
	79 1,2,4-Trimethylbenzene	105	9.570	9.570	(0.965)	624287	50.0000	53	
M	81 Xylene (Total)	106				910666	150.000	(a)	
	80 sec-Butylbenzene	105	9.747	9.747	(0.983)	843554	50.0000	56	
	82 1,3-Dichlorobenzene	146	9.846	9.846	(0.993)	299161	50.0000	52	
	83 4-Isopropyltoluene	119	9.915	9.915	(1.000)	626699	50.0000	56	
*	84 1,4-Dichlorobenzene-d4	152	9.915	9.915	(1.000)	156172	50.0000		
	85 1,4-Dichlorobenzene	146	9.934	9.934	(1.002)	300754	50.0000	51	
	86 n-Butylbenzene	91	10.318	10.318	(1.041)	653327	50.0000	57	
	87 1,2-Dichlorobenzene	146	10.309	10.309	(1.040)	269743	50.0000	49	
	88 1,2-Dibromo-3-chloropropane	75	11.047	11.047	(1.114)	23455	50.0000	42	
	89 1,2,4-Trichlorobenzene	180	11.816	11.816	(1.192)	166364	50.0000	52	
	90 Hexachlorobutadiene	225	11.983	11.983	(1.209)	86870	50.0000	58	
	91 Naphthalene	128	12.022	12.022	(1.213)	349167	50.0000	47	
	92 1,2,3-Trichlorobenzene	180	12.229	12.229	(1.233)	139421	50.0000	52	

QC Flag Legend

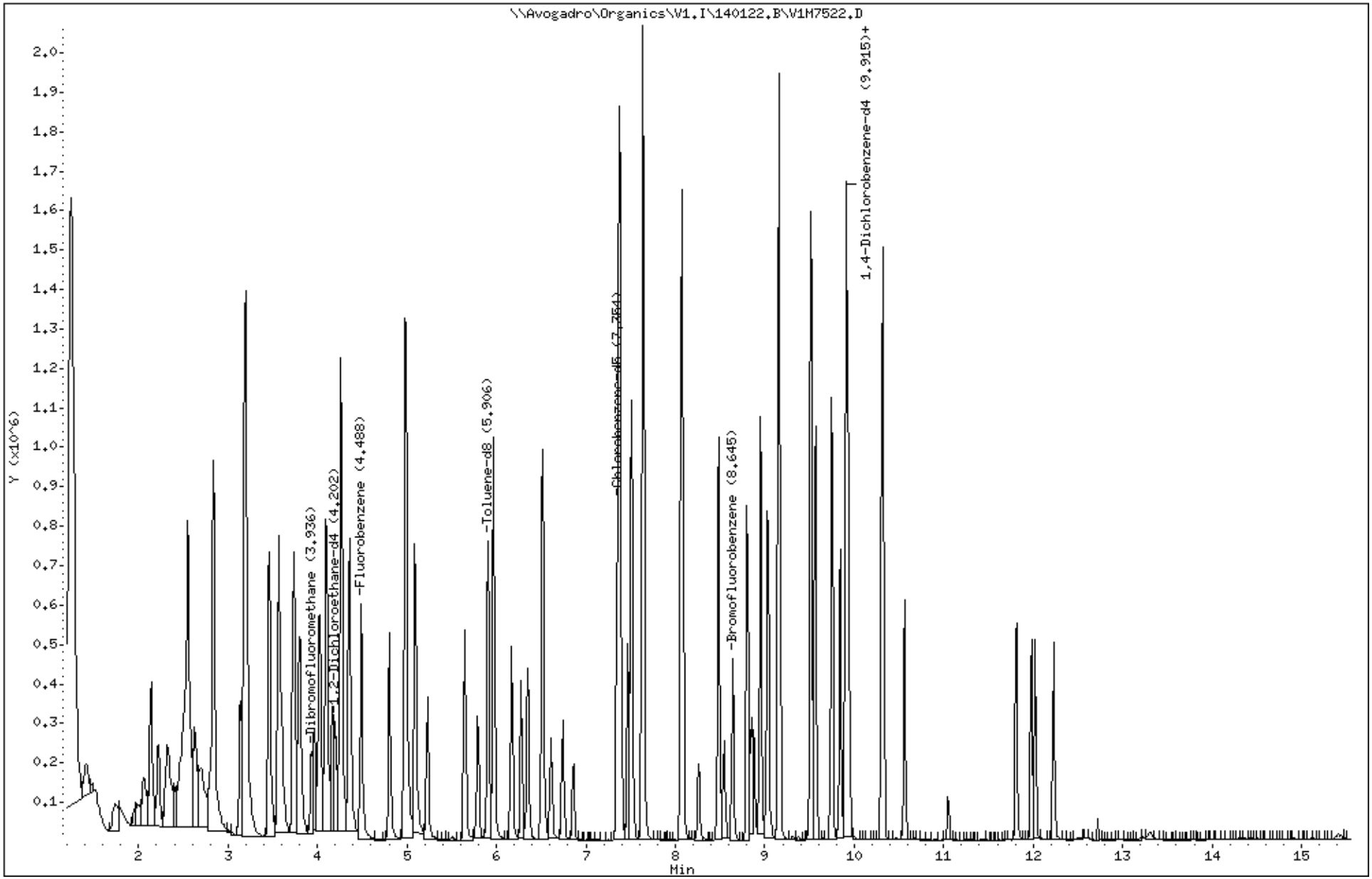
T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7522.D
Date : 22-JAN-2014 11:27
Client ID: VSTD0501A
Sample Info: 5ML,VSTD0501A,VSTD0501A

Instrument: V1.i

Operator: WL SRC: WL
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7551.D
Report Date: 30-Jan-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7551.D
Lab Smp Id: VSTD0501B Client Smp ID: VSTD0501B
Inj Date : 23-JAN-2014 09:37
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501B,VSTD0501B
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 30-Jan-2014 10:29 V1.i Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.286	1.286	(0.288)	54747	50.0000	37(M)M7 AM 01/30
2	Chloromethane	50	1.405	1.405	(0.314)	360393	50.0000	46
3	Vinyl Chloride	62	1.493	1.493	(0.334)	243449	50.0000	48
4	Bromomethane	94	1.720	1.720	(0.385)	154906	50.0000	45
5	Chloroethane	64	1.828	1.828	(0.409)	148516	50.0000	44
6	Trichlorofluoromethane	101	1.936	1.936	(0.433)	164375	50.0000	45
127	Ethanol	46	2.045	2.045	(0.458)	66486	5000.00	3100
7	Ether	59	2.124	2.124	(0.475)	226311	50.0000	47
8	Acrolein	56	2.202	2.202	(0.493)	279147	250.000	240
9	1,1-Dichloroethene	96	2.321	2.321	(0.519)	171147	50.0000	47
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.301	2.301	(0.515)	85266	50.0000	32
11	Acetone	58	2.311	2.311	(0.517)	37398	50.0000	43(Q)
12	Iodomethane	142	2.458	2.458	(0.550)	212340	50.0000	48
13	Carbon Disulfide	76	2.537	2.537	(0.568)	519178	50.0000	48
14	Acetonitrile	40	2.498	2.498	(0.559)	274166	500.000	460(Q)
15	Methyl Acetate	43	2.547	2.547	(0.570)	367919	50.0000	46
16	Methylene Chloride	84	2.685	2.685	(0.601)	176743	50.0000	47
17	tert-Butanol	59	2.685	2.685	(0.601)	34685	100.000	85
18	Acrylonitrile	53	2.774	2.774	(0.621)	104841	50.0000	48
20	Methyl tert-butyl ether	73	2.813	2.813	(0.630)	590021	50.0000	48

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	19	trans-1,2-Dichloroethene	96	2.813	2.813	(0.630)	156320	50.0000	42
	21	1,1-Dichloroethane	63	3.118	3.118	(0.698)	384304	50.0000	47
	22	Vinyl acetate	43	3.158	3.158	(0.707)	925071	50.0000	46
	23	Diisopropyl Ether	45	3.168	3.168	(0.709)	1253378	50.0000	47
	24	Ethyl tert-butyl ether	59	3.443	3.443	(0.771)	775706	50.0000	47
M	27	1,2-dichloroethene, (Total)	100				361067	100.000	(a)
	25	cis-1,2-Dichloroethene	96	3.542	3.542	(0.793)	204747	50.0000	47
	26	2,2-Dichloropropane	77	3.552	3.552	(0.795)	108954	50.0000	42
	28	2-Butanone	72	3.552	3.552	(0.795)	30116	50.0000	44(Q)
	29	Bromochloromethane	128	3.729	3.729	(0.835)	93996	50.0000	47
	30	Tetrahydrofuran	72	3.768	3.768	(0.843)	52103	100.000	95
	31	Chloroform	83	3.788	3.788	(0.848)	307583	50.0000	46
$	32	Dibromofluoromethane	113	3.916	3.916	(0.877)	152070	50.0000	52
	33	1,1,1-Trichloroethane	97	3.946	3.946	(0.883)	173608	50.0000	44
	34	Cyclohexane	56	3.995	3.995	(0.894)	370039	50.0000	46
	36	Carbon Tetrachloride	117	4.084	4.084	(0.914)	149632	50.0000	45
	35	1,1-Dichloropropene	110	4.074	4.074	(0.912)	75468	50.0000	44
$	37	1,2-Dichloroethane-d4	102	4.182	4.182	(0.936)	42604	50.0000	59
	38	Benzene	78	4.241	4.241	(0.949)	746745	50.0000	46
	39	1,2-Dichloroethane	62	4.241	4.241	(0.949)	212449	50.0000	47
	40	tert-Amyl methyl ether	73	4.330	4.330	(0.969)	606459	50.0000	47
*	41	Fluorobenzene	96	4.468	4.468	(1.000)	560135	50.0000	
	42	Trichloroethene	130	4.773	4.773	(1.068)	156006	50.0000	45
	43	Methylcyclohexane	83	4.960	4.960	(1.110)	303531	50.0000	45
	44	1,2-Dichloropropane	63	4.960	4.960	(1.110)	222885	50.0000	45
	46	Dibromomethane	93	5.059	5.059	(1.132)	115614	50.0000	46
	47	1,4-Dioxane	88	5.078	5.078	(1.137)	11614	1000.00	460
	48	Bromodichloromethane	83	5.207	5.207	(1.165)	245557	50.0000	47
	45	2-Chloroethyl vinyl ether	63	5.482	5.482	(1.227)	3211	50.0000	28
	49	cis-1,3-Dichloropropene	75	5.620	5.620	(1.258)	326445	50.0000	46
	50	4-Methyl-2-pentanone	43	5.768	5.768	(1.291)	308056	50.0000	45
$	51	Toluene-d8	98	5.886	5.886	(0.803)	529987	50.0000	48
	52	Toluene	91	5.945	5.945	(1.331)	696220	50.0000	46
	53	trans-1,3-Dichloropropene	75	6.152	6.152	(1.377)	260033	50.0000	46
	54	1,1,2-Trichloroethane	97	6.329	6.329	(1.417)	157696	50.0000	48
	55	Tetrachloroethene	164	6.487	6.487	(0.885)	119019	50.0000	44
	56	1,3-Dichloropropane	76	6.497	6.497	(0.886)	296671	50.0000	45
	57	2-Hexanone	43	6.585	6.585	(0.898)	230171	50.0000	41
	58	Dibromochloromethane	129	6.723	6.723	(0.917)	173048	50.0000	43(T)
	59	1,2-Dibromoethane	107	6.842	6.842	(0.933)	167017	50.0000	46
*	60	Chlorobenzene-d5	117	7.334	7.334	(1.000)	397658	50.0000	
	63	1-Chlorohexane	91	7.354	7.354	(1.003)	273952	50.0000	44
	61	Chlorobenzene	112	7.364	7.364	(1.004)	423001	50.0000	44
	62	1,1,1,2-Tetrachloroethane	131	7.452	7.452	(1.016)	150207	50.0000	44
	64	Ethylbenzene	106	7.492	7.492	(1.021)	218021	50.0000	43
	65	m,p-Xylene	106	7.620	7.620	(1.039)	548849	100.000	87
	66	o-Xylene	106	8.043	8.043	(1.097)	271204	50.0000	44
	67	Styrene	104	8.063	8.063	(1.099)	478963	50.0000	44
	68	Bromoform	173	8.240	8.240	(1.124)	105499	50.0000	44
	69	Isopropylbenzene	105	8.467	8.467	(1.154)	682502	50.0000	44
	126	trans-1,4-Dichloro-2-butene	75	8.526	8.526	(1.162)	74338	50.0000	42
$	70	Bromofluorobenzene	95	8.614	8.614	(1.175)	216160	50.0000	49
	72	Bromobenzene	156	8.782	8.782	(0.887)	156184	50.0000	43
	71	1,1,2,2-Tetrachloroethane	83	8.792	8.792	(0.888)	216255	50.0000	44

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7551.D
Report Date: 30-Jan-2014 10:29

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	73	1,2,3-Trichloropropane	75	8.831	8.831	(0.892)	237254	50.0000	47
	74	n-Propylbenzene	120	8.930	8.930	(0.902)	162018	50.0000	43
	75	2-Chlorotoluene	126	9.008	9.008	(0.910)	147090	50.0000	42
	76	1,3,5-Trimethylbenzene	105	9.137	9.137	(0.922)	549523	50.0000	43
	77	4-Chlorotoluene	126	9.137	9.137	(0.922)	149372	50.0000	41
	78	tert-Butylbenzene	119	9.501	9.501	(0.959)	546305	50.0000	44
	79	1,2,4-Trimethylbenzene	105	9.550	9.550	(0.964)	566114	50.0000	44
M	81	Xylene (Total)	106				820053	150.000	(a)
	80	sec-Butylbenzene	105	9.737	9.737	(0.983)	720241	50.0000	43
	82	1,3-Dichlorobenzene	146	9.826	9.826	(0.992)	275339	50.0000	43
	83	4-Isopropyltoluene	119	9.895	9.895	(0.999)	548153	50.0000	44
*	84	1,4-Dichlorobenzene-d4	152	9.905	9.905	(1.000)	172875	50.0000	
	85	1,4-Dichlorobenzene	146	9.924	9.924	(1.002)	277745	50.0000	42
	86	n-Butylbenzene	91	10.309	10.309	(1.041)	569302	50.0000	45
	87	1,2-Dichlorobenzene	146	10.299	10.299	(1.040)	257311	50.0000	42
	88	1,2-Dibromo-3-chloropropane	75	11.047	11.047	(1.115)	24804	50.0000	41
	89	1,2,4-Trichlorobenzene	180	11.806	11.806	(1.192)	156165	50.0000	44
	90	Hexachlorobutadiene	225	11.973	11.973	(1.209)	70831	50.0000	42
	91	Naphthalene	128	12.013	12.013	(1.213)	353402	50.0000	43
	92	1,2,3-Trichlorobenzene	180	12.219	12.219	(1.234)	128442	50.0000	44

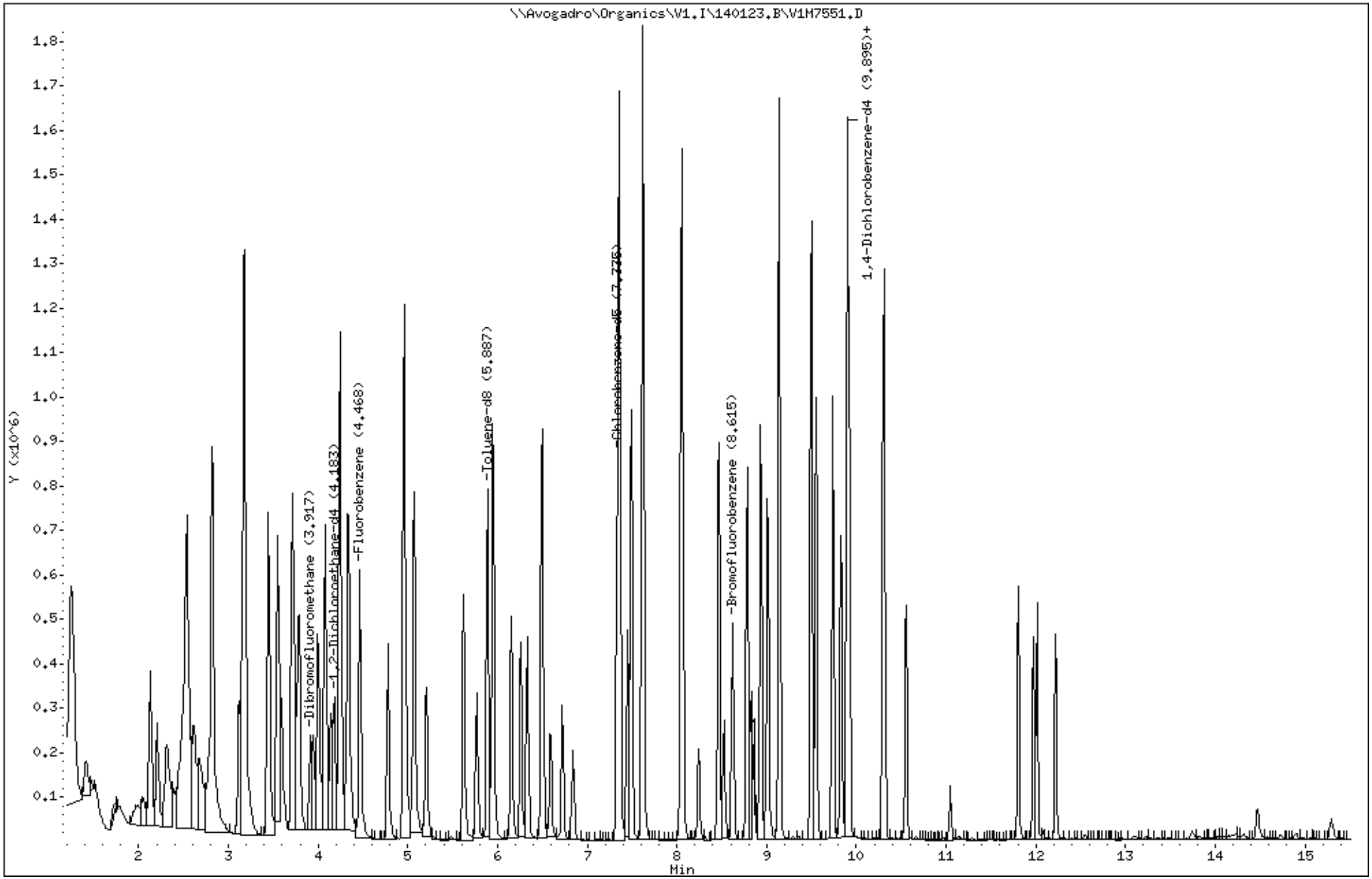
QC Flag Legend

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.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7551.D
Date : 23-JAN-2014 09:37
Client ID: VSTD0501B
Sample Info: 5ML,VSTD0501B,VSTD0501B

Instrument: V1.i

Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7473.D
Report Date: 30-Jan-2014 10:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7473.D
Lab Smp Id: VSTD0501Y Client Smp ID: VSTD0501Y
Inj Date : 20-JAN-2014 09:11
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501Y,VSTD0501Y
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 30-Jan-2014 10:57 V1.i Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.258	1.258	(0.281)	58829	50.0000	55(QM)M7 AM 01/30
2	Chloromethane	50	1.416	1.416	(0.316)	401332	50.0000	60
3	Vinyl Chloride	62	1.505	1.505	(0.336)	245955	50.0000	61(TM)M7 AM 01/30
4	Bromomethane	94	1.741	1.741	(0.389)	154070	50.0000	55
5	Chloroethane	64	1.859	1.859	(0.415)	159262	50.0000	57
6	Trichlorofluoromethane	101	1.958	1.958	(0.437)	181692	50.0000	64
127	Ethanol	46	2.056	2.056	(0.459)	132434	5000.00	8300
7	Ether	59	2.135	2.135	(0.477)	197852	50.0000	49
8	Acrolein	56	2.214	2.214	(0.494)	243100	250.000	270
9	1,1-Dichloroethene	96	2.302	2.302	(0.514)	178863	50.0000	60
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.322	2.322	(0.518)	126460	50.0000	66
11	Acetone	58	2.322	2.322	(0.518)	45562	50.0000	60
12	Iodomethane	142	2.401	2.401	(0.536)	217587	50.0000	68
13	Carbon Disulfide	76	2.549	2.549	(0.569)	528063	50.0000	60
14	Acetonitrile	40	2.509	2.509	(0.560)	247378	500.000	500(Q)
15	Methyl Acetate	43	2.559	2.559	(0.571)	322748	50.0000	51
16	Methylene Chloride	84	2.687	2.687	(0.600)	158943	50.0000	54
17	tert-Butanol	59	2.696	2.696	(0.602)	41563	100.000	120
18	Acrylonitrile	53	2.795	2.795	(0.624)	91014	50.0000	52
20	Methyl tert-butyl ether	73	2.834	2.834	(0.633)	516768	50.0000	51

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	19	trans-1,2-Dichloroethene	96	2.824	2.824	(0.631)	185113	50.0000	59
	21	1,1-Dichloroethane	63	3.130	3.130	(0.699)	385659	50.0000	57
	22	Vinyl acetate	43	3.179	3.179	(0.710)	863777	50.0000	50
	23	Diisopropyl Ether	45	3.179	3.179	(0.710)	1176791	50.0000	51
	24	Ethyl tert-butyl ether	59	3.455	3.455	(0.771)	687014	50.0000	50
M	27	1,2-dichloroethene, (Total)	100				382108	100.000	(a)
	25	cis-1,2-Dichloroethene	96	3.563	3.563	(0.796)	196995	50.0000	54
	26	2,2-Dichloropropane	77	3.563	3.563	(0.796)	126100	50.0000	58
	28	2-Butanone	72	3.563	3.563	(0.796)	32745	50.0000	57(Q)
	29	Bromochloromethane	128	3.740	3.740	(0.835)	82696	50.0000	51
	30	Tetrahydrofuran	72	3.780	3.780	(0.844)	45369	100.000	100
	31	Chloroform	83	3.800	3.800	(0.848)	301453	50.0000	53
$	32	Dibromofluoromethane	113	3.918	3.918	(0.875)	138348	50.0000	50
	33	1,1,1-Trichloroethane	97	3.957	3.957	(0.883)	192764	50.0000	59
	34	Cyclohexane	56	4.016	4.016	(0.897)	360756	50.0000	56
	36	Carbon Tetrachloride	117	4.095	4.095	(0.914)	169119	50.0000	60
	35	1,1-Dichloropropene	110	4.085	4.085	(0.912)	84372	50.0000	61
$	37	1,2-Dichloroethane-d4	102	4.194	4.194	(0.936)	33090	50.0000	45
	38	Benzene	78	4.253	4.253	(0.949)	750476	50.0000	56
	39	1,2-Dichloroethane	62	4.253	4.253	(0.949)	190818	50.0000	50
	40	tert-Amyl methyl ether	73	4.351	4.351	(0.971)	538349	50.0000	50
*	41	Fluorobenzene	96	4.479	4.479	(1.000)	538202	50.0000	
	42	Trichloroethene	130	4.794	4.794	(1.070)	159077	50.0000	57
	43	Methylcyclohexane	83	4.972	4.972	(1.110)	352262	50.0000	63
	44	1,2-Dichloropropane	63	4.972	4.972	(1.110)	212150	50.0000	50
	46	Dibromomethane	93	5.070	5.070	(1.132)	107187	50.0000	53
	47	1,4-Dioxane	88	5.090	5.090	(1.136)	36202	1000.00	2100
	48	Bromodichloromethane	83	5.218	5.218	(1.165)	228587	50.0000	52
	45	2-Chloroethyl vinyl ether	63	5.494	5.494	(1.226)	9626	50.0000	20
	49	cis-1,3-Dichloropropene	75	5.632	5.632	(1.257)	303823	50.0000	54
	50	4-Methyl-2-pentanone	43	5.779	5.779	(1.290)	285708	50.0000	53
$	51	Toluene-d8	98	5.888	5.888	(0.803)	497040	50.0000	50
	52	Toluene	91	5.957	5.957	(1.330)	706146	50.0000	55
	53	trans-1,3-Dichloropropene	75	6.154	6.154	(1.374)	241817	50.0000	53
	54	1,1,2-Trichloroethane	97	6.341	6.341	(1.416)	134689	50.0000	50
	55	Tetrachloroethene	164	6.498	6.498	(0.886)	124076	50.0000	58
	56	1,3-Dichloropropane	76	6.508	6.508	(0.887)	264483	50.0000	51
	57	2-Hexanone	43	6.597	6.597	(0.899)	249163	50.0000	56
	58	Dibromochloromethane	129	6.735	6.735	(0.918)	160972	50.0000	54(T)
	59	1,2-Dibromoethane	107	6.843	6.843	(0.933)	145563	50.0000	51
*	60	Chlorobenzene-d5	117	7.336	7.336	(1.000)	356845	50.0000	
	63	1-Chlorohexane	91	7.365	7.365	(1.004)	298653	50.0000	60
	61	Chlorobenzene	112	7.365	7.365	(1.004)	416712	50.0000	55
	62	1,1,1,2-Tetrachloroethane	131	7.454	7.454	(1.016)	143422	50.0000	54
	64	Ethylbenzene	106	7.503	7.503	(1.023)	221618	50.0000	56
	65	m,p-Xylene	106	7.631	7.631	(1.040)	563980	100.000	110
	66	o-Xylene	106	8.055	8.055	(1.098)	270649	50.0000	55
	67	Styrene	104	8.074	8.074	(1.101)	459451	50.0000	54
	68	Bromoform	173	8.252	8.252	(1.125)	96074	50.0000	56(T)
	69	Isopropylbenzene	105	8.468	8.468	(1.154)	710047	50.0000	58
	126	trans-1,4-Dichloro-2-butene	75	8.537	8.537	(1.164)	63011	50.0000	55
$	70	Bromofluorobenzene	95	8.626	8.626	(1.176)	195472	50.0000	50
	72	Bromobenzene	156	8.793	8.793	(0.888)	144673	50.0000	51
	71	1,1,2,2-Tetrachloroethane	83	8.793	8.793	(0.888)	195885	50.0000	53

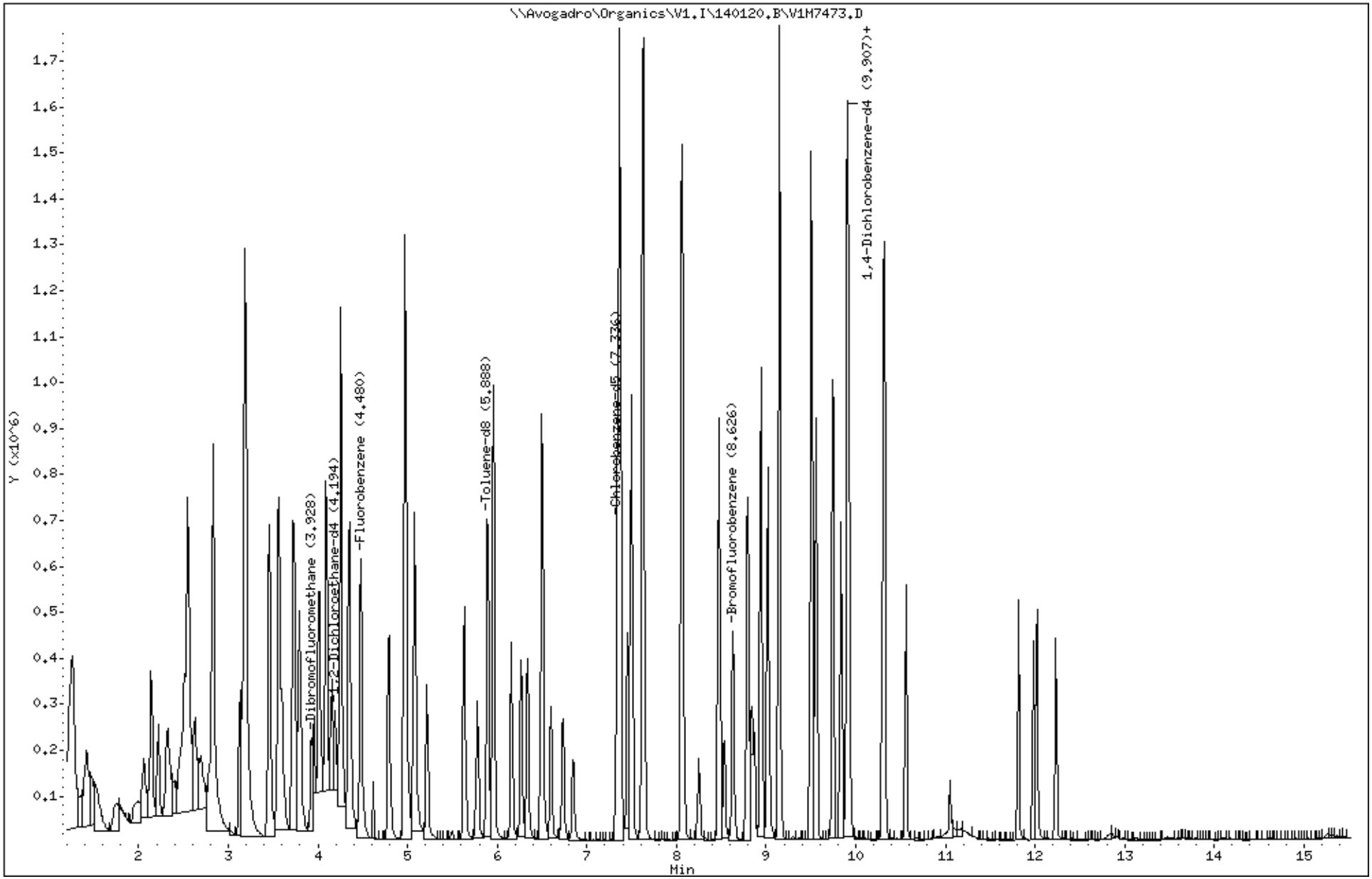
Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7473.D
Report Date: 30-Jan-2014 10:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	73 1,2,3-Trichloropropane	75	8.843	8.843	(0.893)	203319	50.0000	51	
	74 n-Propylbenzene	120	8.941	8.941	(0.903)	172141	50.0000	58	
	75 2-Chlorotoluene	126	9.020	9.020	(0.911)	149013	50.0000	55	
	76 1,3,5-Trimethylbenzene	105	9.148	9.148	(0.923)	572894	50.0000	56	
	77 4-Chlorotoluene	126	9.148	9.148	(0.923)	151680	50.0000	54	
	78 tert-Butylbenzene	119	9.502	9.502	(0.959)	567348	50.0000	58	
	79 1,2,4-Trimethylbenzene	105	9.562	9.562	(0.965)	564404	50.0000	55	
M	81 Xylene (Total)	106				834629	150.000	(a)	
	80 sec-Butylbenzene	105	9.739	9.739	(0.983)	770594	50.0000	58	
	82 1,3-Dichlorobenzene	146	9.837	9.837	(0.993)	268156	50.0000	54	
	83 4-Isopropyltoluene	119	9.906	9.906	(1.000)	572276	50.0000	57	
*	84 1,4-Dichlorobenzene-d4	152	9.906	9.906	(1.000)	150174	50.0000		
	85 1,4-Dichlorobenzene	146	9.926	9.926	(1.002)	272890	50.0000	54	
	86 n-Butylbenzene	91	10.320	10.320	(1.042)	603549	50.0000	59	
	87 1,2-Dichlorobenzene	146	10.300	10.300	(1.040)	246801	50.0000	53	
	88 1,2-Dibromo-3-chloropropane	75	11.049	11.049	(1.115)	25377	50.0000	59	
	89 1,2,4-Trichlorobenzene	180	11.817	11.817	(1.193)	146100	50.0000	53	
	90 Hexachlorobutadiene	225	11.985	11.985	(1.210)	77242	50.0000	58	
	91 Naphthalene	128	12.024	12.024	(1.214)	347216	50.0000	58	
	92 1,2,3-Trichlorobenzene	180	12.231	12.231	(1.235)	119225	50.0000	53	

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.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7473.D
Date : 20-JAN-2014 09:11
Client ID: VSTD0501Y
Instrument: V1.i
Sample Info: 5ML,VSTD0501Y,VSTD0501Y
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140122.B\V5O9551.D
Report Date: 24-Jan-2014 09:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140122.B\V5O9551.D
Lab Smp Id: VSTD0505M Client Smp ID: VSTD0505M
Inj Date : 22-JAN-2014 13:59
Operator : WL   SRC: WL Inst ID: V5.i
Smp Info : 5ML,VSTD0505M,VSTD0505M
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140122.B\v5_8260W.m
Meth Date : 23-Jan-2014 13:57 V5.i Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 1 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.615	1.615	(0.289)	50002	50.0000	43
2	Freon114	85	1.742	1.742	(0.312)	47275	50.0000	39
3	Chloromethane	50	1.731	1.731	(0.310)	65850	50.0000	41
4	Vinyl Chloride	62	1.858	1.858	(0.333)	55836	50.0000	44
5	Bromomethane	94	2.137	2.137	(0.383)	44000	50.0000	41
6	Chloroethane	64	2.230	2.230	(0.399)	25744	50.0000	39
7	Trichlorofluoromethane	101	2.497	2.497	(0.447)	74117	50.0000	49
8	Ethanol	46	2.625	2.625	(0.470)	16279	5000.00	4300(Q)
9	Ether	59	2.694	2.694	(0.482)	48344	50.0000	51
10	Acrolein	56	2.799	2.799	(0.501)	10962	250.000	290
11	1,1-Dichloroethene	96	2.903	2.903	(0.520)	58006	50.0000	48
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.938	2.938	(0.526)	63916	50.0000	45
13	Acetone	58	2.938	2.938	(0.526)	6318	50.0000	60
14	Iodomethane	142	3.031	3.031	(0.543)	159699	50.0000	49
15	Carbon Disulfide	76	3.101	3.101	(0.555)	217845	50.0000	45
16	Acetonitrile	41	3.205	3.205	(0.574)	162064	500.000	430
17	Allyl Chloride	39	3.205	3.205	(0.574)	81167	50.0000	45
18	Methyl Acetate	43	3.228	3.228	(0.578)	68472	50.0000	47
19	Methylene Chloride	84	3.321	3.321	(0.595)	65048	50.0000	45
20	tert-Butanol	59	3.414	3.414	(0.611)	13065	100.000	110
21	Acrylonitrile	53	3.530	3.530	(0.632)	23953	50.0000	49
22	trans-1,2-Dichloroethene	96	3.553	3.553	(0.636)	62608	50.0000	47
23	Methyl tert-butyl ether	73	3.565	3.565	(0.638)	186987	50.0000	48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 1,1-Dichloroethane	63	3.925	3.925	(0.703)	102861	50.0000	45
	25 Vinyl acetate	43	3.995	3.995	(0.715)	180157	50.0000	44
	26 Diisopropyl Ether	45	3.995	3.995	(0.715)	210030	50.0000	43
	27 2-Chloro-1,3-Butadiene	53	4.018	4.018	(0.719)	83516	50.0000	46
	28 Ethyl tert-butyl ether	59	4.331	4.331	(0.776)	203684	50.0000	46
	29 cis-1,2-Dichloroethene	96	4.459	4.459	(0.798)	68988	50.0000	48
	30 2-Butanone	72	4.459	4.459	(0.798)	7774	50.0000	56
	31 2,2-Dichloropropane	77	4.471	4.471	(0.800)	88335	50.0000	45
	32 Propionitrile	54	4.517	4.517	(0.809)	81266	500.000	490
	33 Methacrylonitrile	41	4.668	4.668	(0.836)	74074	100.000	89
	34 Bromochloromethane	128	4.680	4.680	(0.838)	40548	50.0000	48
	35 Tetrahydrofuran	72	4.738	4.738	(0.848)	16748	100.000	100
	36 Chloroform	83	4.761	4.761	(0.852)	108953	50.0000	46
$	37 Dibromofluoromethane	113	4.912	4.912	(0.879)	40683	50.0000	50
	38 1,1,1-Trichloroethane	97	4.947	4.947	(0.886)	98614	50.0000	47
	39 Cyclohexane	56	5.016	5.016	(0.898)	77866	50.0000	41
	40 1,1-Dichloropropene	110	5.109	5.109	(0.915)	30052	50.0000	45
	41 Carbon Tetrachloride	117	5.109	5.109	(0.915)	89770	50.0000	46
	42 Isobutyl Alcohol	43	5.202	5.202	(0.931)	47695	1000.00	1000
$	43 1,2-Dichloroethane-d4	102	5.237	5.237	(0.938)	7057	50.0000	49
	44 Benzene	78	5.306	5.306	(0.950)	213736	50.0000	47
	45 1,2-Dichloroethane	62	5.318	5.318	(0.952)	83767	50.0000	47
	46 tert-Amyl methyl ether	73	5.423	5.423	(0.971)	185025	50.0000	48
*	47 Fluorobenzene	96	5.585	5.585	(1.000)	101397	50.0000	
	48 Trichloroethene	130	5.957	5.957	(1.067)	70975	50.0000	50
	49 Methylcyclohexane	83	6.177	6.177	(1.106)	59520	50.0000	39
	50 1,2-Dichloropropane	63	6.189	6.189	(1.108)	56777	50.0000	48
	51 Methyl Methacrylate	69	6.305	6.305	(1.129)	53061	50.0000	49
	52 Dibromomethane	93	6.317	6.317	(1.131)	48748	50.0000	51
	53 1,4-Dioxane	88	6.328	6.328	(1.133)	9833	1000.00	980
	54 Bromodichloromethane	83	6.479	6.479	(1.160)	82492	50.0000	46
M	55 1,2-Dichloroethene (Total)	96				131596	100.000	(a)
	56 2-Chloroethyl vinyl ether	63	6.816	6.816	(1.220)	3892	50.0000	32
	57 cis-1,3-Dichloropropene	75	6.978	6.978	(1.249)	96044	50.0000	48
	58 4-Methyl-2-pentanone	43	7.152	7.152	(1.281)	64093	50.0000	48
$	59 Toluene-d8	98	7.292	7.292	(0.806)	112492	50.0000	47
	60 Toluene	91	7.373	7.373	(1.320)	223861	50.0000	48
	61 trans-1,3-Dichloropropene	75	7.617	7.617	(1.364)	87509	50.0000	48
	62 Ethyl Methacrylate	69	7.744	7.744	(1.387)	66975	50.0000	50
	63 1,1,2-Trichloroethane	97	7.837	7.837	(1.403)	54120	50.0000	48
	64 Tetrachloroethene	164	8.023	8.023	(0.887)	64733	50.0000	46
	65 1,3-Dichloropropane	76	8.035	8.035	(0.888)	87824	50.0000	45
	66 2-Hexanone	43	8.151	8.151	(0.901)	43954	50.0000	46
	67 Dibromochloromethane	129	8.313	8.313	(0.919)	81170	50.0000	47
	68 1,2-Dibromoethane	107	8.453	8.453	(0.935)	67537	50.0000	49
*	69 Chlorobenzene-d5	117	9.045	9.045	(1.000)	129906	50.0000	
	70 1-Chlorohexane	91	9.068	9.068	(1.003)	75898	50.0000	46(Q)
	71 Chlorobenzene	112	9.080	9.080	(1.004)	157928	50.0000	47
	72 1,1,1,2-Tetrachloroethane	131	9.184	9.184	(1.015)	67421	50.0000	47
	73 Ethylbenzene	106	9.231	9.231	(1.021)	75070	50.0000	46
	74 m,p-Xylene	106	9.393	9.393	(1.039)	183191	100.000	93
	75 o-Xylene	106	9.904	9.904	(1.095)	91866	50.0000	48
	76 Styrene	104	9.927	9.927	(1.098)	158984	50.0000	48
	77 Bromoform	173	10.148	10.148	(1.122)	66385	50.0000	50

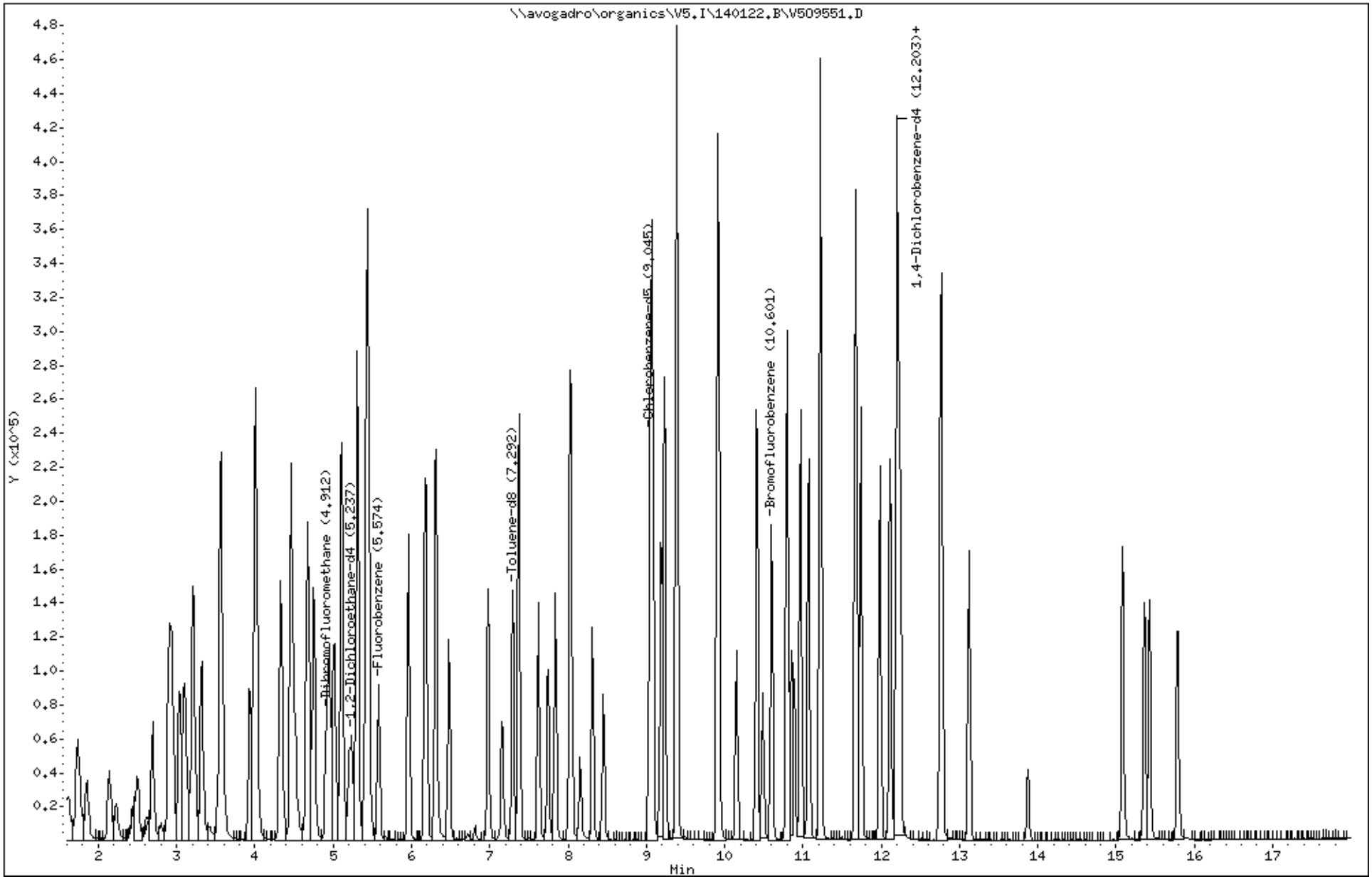
Data File: \\avogadro\organics\V5.I\140122.B\V5O9551.D
Report Date: 24-Jan-2014 09:18

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	78	Isopropylbenzene	105	10.403	10.403	(1.150)	229313	50.0000	48	
	79	trans-1,4-Dichloro-2-butene	75	10.484	10.484	(1.159)	25818	50.0000	47	
$	80	Bromofluorobenzene	95	10.600	10.600	(1.172)	70508	50.0000	49	
	81	Bromobenzene	156	10.798	10.798	(0.885)	83379	50.0000	48	
	82	1,1,2,2-Tetrachloroethane	83	10.809	10.809	(0.886)	77429	50.0000	50	
	83	1,2,3-Trichloropropane	75	10.856	10.856	(0.890)	83991	50.0000	49	
	84	n-Propylbenzene	120	10.972	10.972	(0.899)	58170	50.0000	49	
	85	2-Chlorotoluene	126	11.076	11.076	(0.908)	57812	50.0000	47	
	86	4-Chlorotoluene	126	11.227	11.227	(0.920)	60221	50.0000	48	
	87	1,3,5-Trimethylbenzene	105	11.227	11.227	(0.920)	177046	50.0000	48	
	88	tert-Butylbenzene	119	11.669	11.669	(0.956)	184796	50.0000	49	
	89	1,2,4-Trimethylbenzene	105	11.738	11.738	(0.962)	182375	50.0000	47	
	90	sec-Butylbenzene	105	11.982	11.982	(0.982)	202483	50.0000	48	
	91	1,3-Dichlorobenzene	146	12.110	12.110	(0.992)	128707	50.0000	47	
	92	4-Isopropyltoluene	119	12.191	12.191	(0.999)	168676	50.0000	47	
*	93	1,4-Dichlorobenzene-d4	152	12.203	12.203	(1.000)	82685	50.0000		
	94	1,4-Dichlorobenzene	146	12.237	12.237	(1.003)	135856	50.0000	47	
M	95	Xylene (Total)	106				275057	150.000	(a)	
	96	1,2-Dichlorobenzene	146	12.760	12.760	(1.046)	132393	50.0000	50	
	97	n-Butylbenzene	91	12.783	12.783	(1.048)	148468	50.0000	48	
	98	Hexachloroethane	117	13.120	13.120	(1.075)	44438	50.0000	49	
	99	1,2-Dibromo-3-chloropropane	75	13.874	13.874	(1.137)	12216	50.0000	60	
	100	1,3,5-Trichlorobenzene	182	15.082	15.082	(2.700)	81755	50.0000	53	
	101	1,2,4-Trichlorobenzene	180	15.082	15.082	(1.236)	83438	50.0000	51	
	102	Hexachlorobutadiene	225	15.360	15.360	(1.259)	45984	50.0000	47	
	103	Naphthalene	128	15.430	15.430	(1.264)	155178	50.0000	55	
	104	1,2,3-Trichlorobenzene	180	15.790	15.790	(1.294)	64414	50.0000	51	

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\V5.I\140122.B\V509551.D
Date : 22-JAN-2014 13:59
Client ID: VSTD0505M
Instrument: V5.i
Sample Info: 5ML,VSTD0505M,VSTD0505M
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7520.D
Lab Smp Id: BFB1A Client Smp ID: BFB1A
Inj Date : 22-JAN-2014 10:33
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 2UL,BFB1A,BFB1A
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140122.B\bfb8260.m
Meth Date : 30-Jan-2014 10:29 mscarpaci 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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.610	4.200	(0.000)	95	377984			0.00- 100.00	100.00
4.610	4.200	(0.000)	50	73144			15.00- 40.00	19.35
4.610	4.200	(0.000)	75	150016			30.00- 60.00	39.69
4.610	4.200	(0.000)	96	25448			5.00- 9.00	6.73
4.610	4.200	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
4.610	4.200	(0.000)	174	258688			50.00- 0.00	68.44
4.610	4.200	(0.000)	175	20840			5.00- 9.00	8.06
4.610	4.200	(0.000)	176	250944			95.00- 101.00	97.01
4.610	4.200	(0.000)	177	16168			5.00- 9.00	6.44

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7520.D

Date : 22-JAN-2014 10:33

Client ID: BFB1A

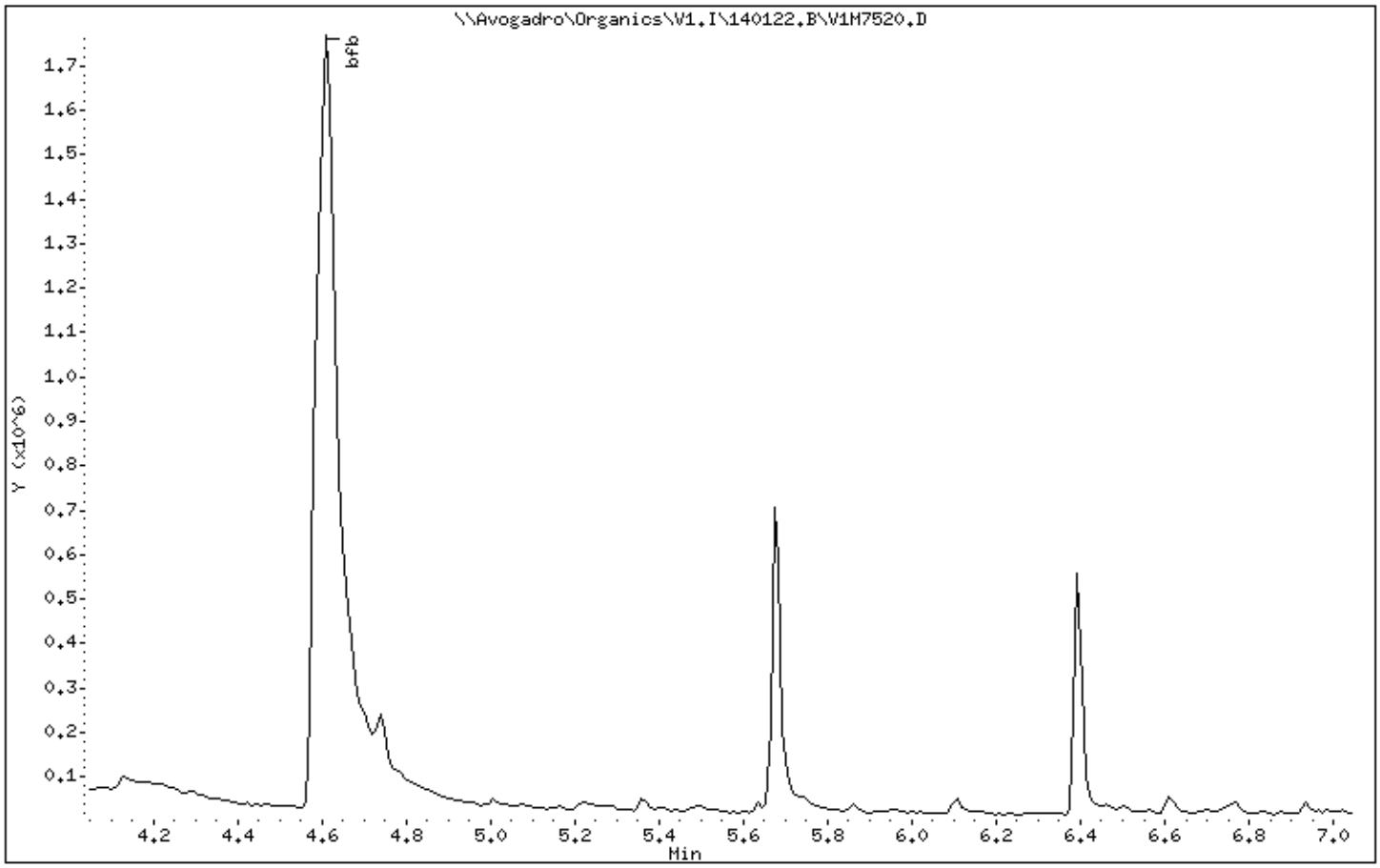
Instrument: V1.i

Sample Info: 2UL,BFB1A,BFB1A

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7520.D

Date : 22-JAN-2014 10:33

Client ID: BFB1A

Instrument: V1.i

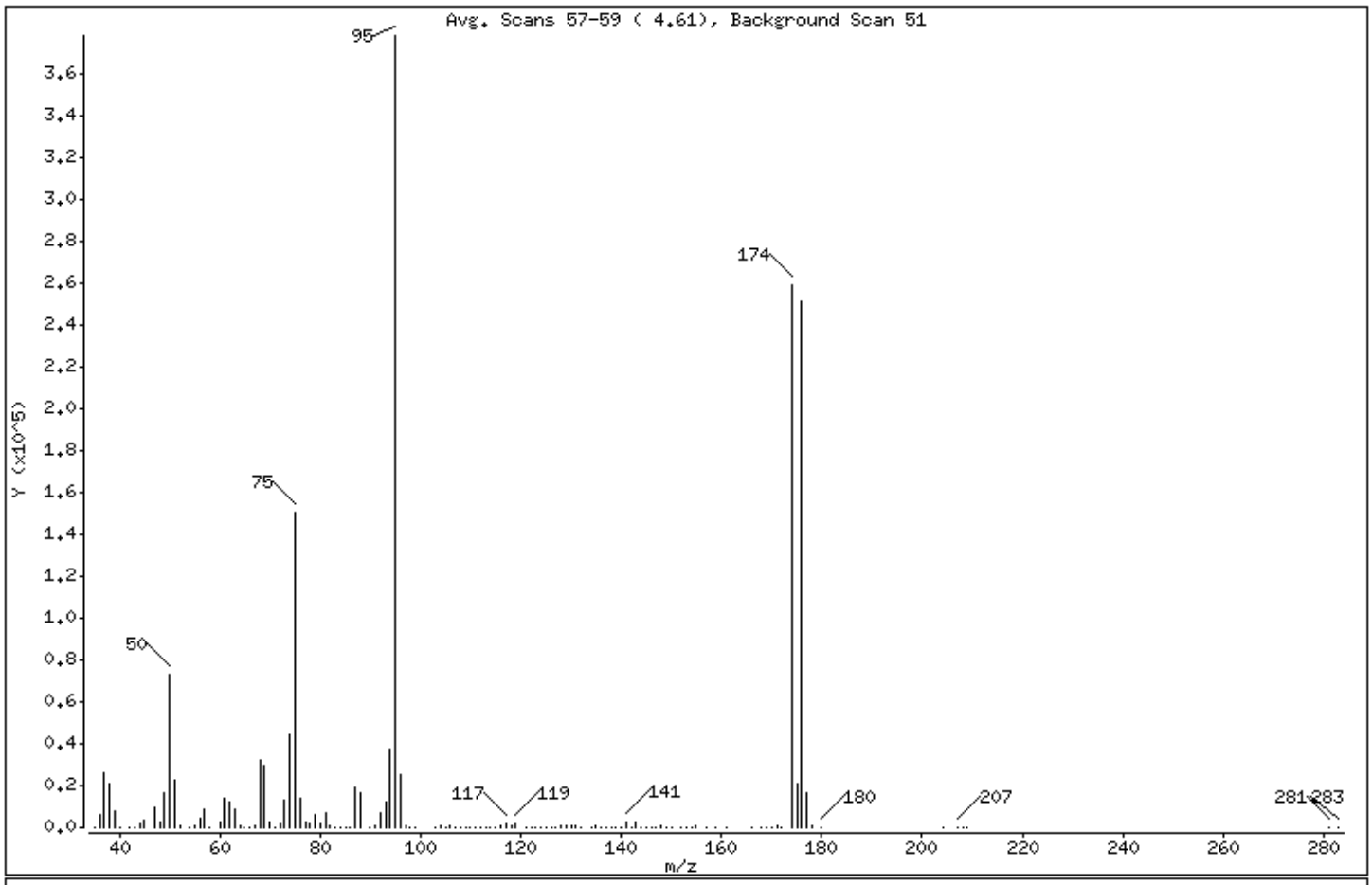
Sample Info: 2UL,BFB1A,BFB1A

Operator: WL SRC: WL

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	19.35
75	30.00 - 60.00% of mass 95	39.69
96	5.00 - 9.00% of mass 95	6.73
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	68.44
175	5.00 - 9.00% of mass 174	5.51 (8.06)
176	95.00 - 101.00% of mass 174	66.39 (97.01)
177	5.00 - 9.00% of mass 176	4.28 (6.44)

Date : 22-JAN-2014 10:33

Client ID: BFB1A Instrument: V1.i

Sample Info: 2UL,BFB1A,BFB1A

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M7520.D
Spectrum: Avg. Scans 57-59 (4.61), Background Scan 51
Location of Maximum: 95.00
Number of points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	106	72.00	1790	109.00	39	144.00	163
36.00	5755	73.00	12811	110.00	255	145.00	382
37.00	26056	74.00	43968	111.00	242	146.00	430
38.00	21016	75.00	150016	112.00	162	147.00	196
39.00	7395	76.00	13996	113.00	157	148.00	606
40.00	42	77.00	2273	114.00	40	149.00	219
42.00	178	78.00	1582	115.00	176	150.00	317
43.00	151	79.00	6080	116.00	802	152.00	254
44.00	1597	80.00	1694	117.00	1323	153.00	335
45.00	3211	81.00	6875	118.00	988	154.00	218
47.00	9427	82.00	1288	119.00	1346	155.00	815
48.00	2913	83.00	50	121.00	74	157.00	390
49.00	16223	84.00	241	122.00	134	159.00	356
50.00	73144	85.00	216	123.00	156	161.00	386
51.00	22400	86.00	202	124.00	197	166.00	42
52.00	847	87.00	18792	125.00	111	168.00	34
54.00	29	88.00	16768	126.00	89	169.00	34
55.00	496	90.00	41	127.00	97	170.00	71
56.00	4635	91.00	811	128.00	971	171.00	571
57.00	8943	92.00	7167	129.00	445	172.00	307
58.00	278	93.00	12073	130.00	1006	174.00	258688
60.00	2725	94.00	37320	131.00	479	175.00	20840
61.00	14024	95.00	377984	132.00	96	176.00	250944
62.00	12277	96.00	25448	134.00	60	177.00	16168
63.00	8556	97.00	737	135.00	561	178.00	546
64.00	965	98.00	146	136.00	202	180.00	48
65.00	304	99.00	39	137.00	395	204.00	36
66.00	255	103.00	189	138.00	59	207.00	115
67.00	1169	104.00	890	139.00	201	208.00	94
68.00	32208	105.00	16	140.00	53	209.00	48
69.00	29400	106.00	938	141.00	2574	281.00	87
70.00	2211	107.00	142	142.00	238	283.00	34
71.00	75	108.00	36	143.00	2195		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7550.D
Lab Smp Id: BFB1B Client Smp ID: BFB1B
Inj Date : 23-JAN-2014 08:43
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 2UL,BFB1B,BFB1B
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140123.B\bfb8260.m
Meth Date : 30-Jan-2014 10:26 mscarpaci 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: TARGET115

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 ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.594	4.600	(0.000)	95	336384			0.00- 100.00	100.00
4.594	4.600	(0.000)	50	65024			15.00- 40.00	19.33
4.594	4.600	(0.000)	75	133760			30.00- 60.00	39.76
4.594	4.600	(0.000)	96	22720			5.00- 9.00	6.75
4.594	4.600	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
4.594	4.600	(0.000)	174	227968			50.00- 0.00	67.77
4.594	4.600	(0.000)	175	17912			5.00- 9.00	7.86
4.594	4.600	(0.000)	176	222912			95.00- 101.00	97.78
4.594	4.600	(0.000)	177	15508			5.00- 9.00	6.96

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7550.D

Date : 23-JAN-2014 08:43

Client ID: BFB1B

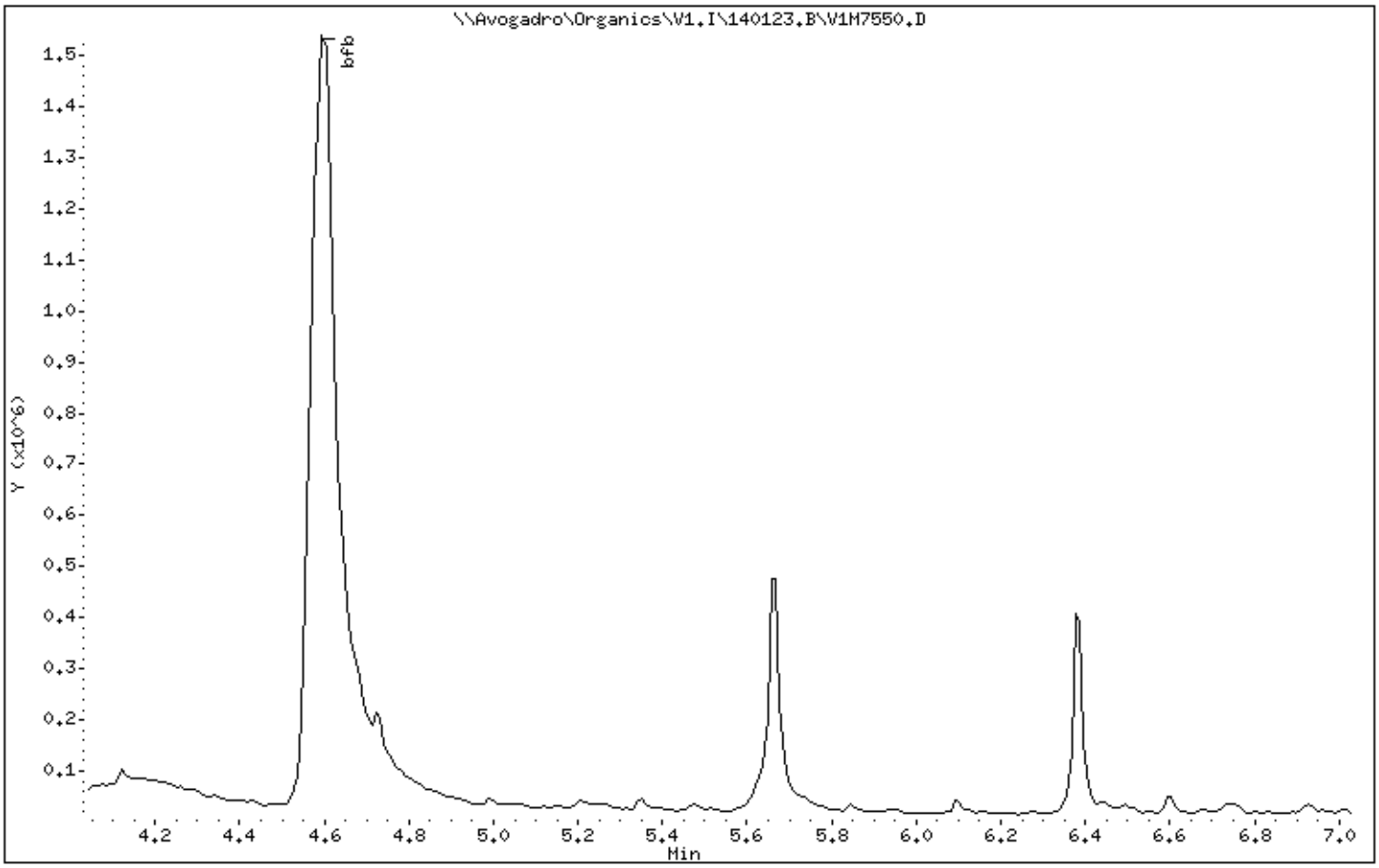
Instrument: V1.i

Sample Info: 2UL,BFB1B,BFB1B

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7550.D

Date : 23-JAN-2014 08:43

Client ID: BFB1B

Instrument: V1.i

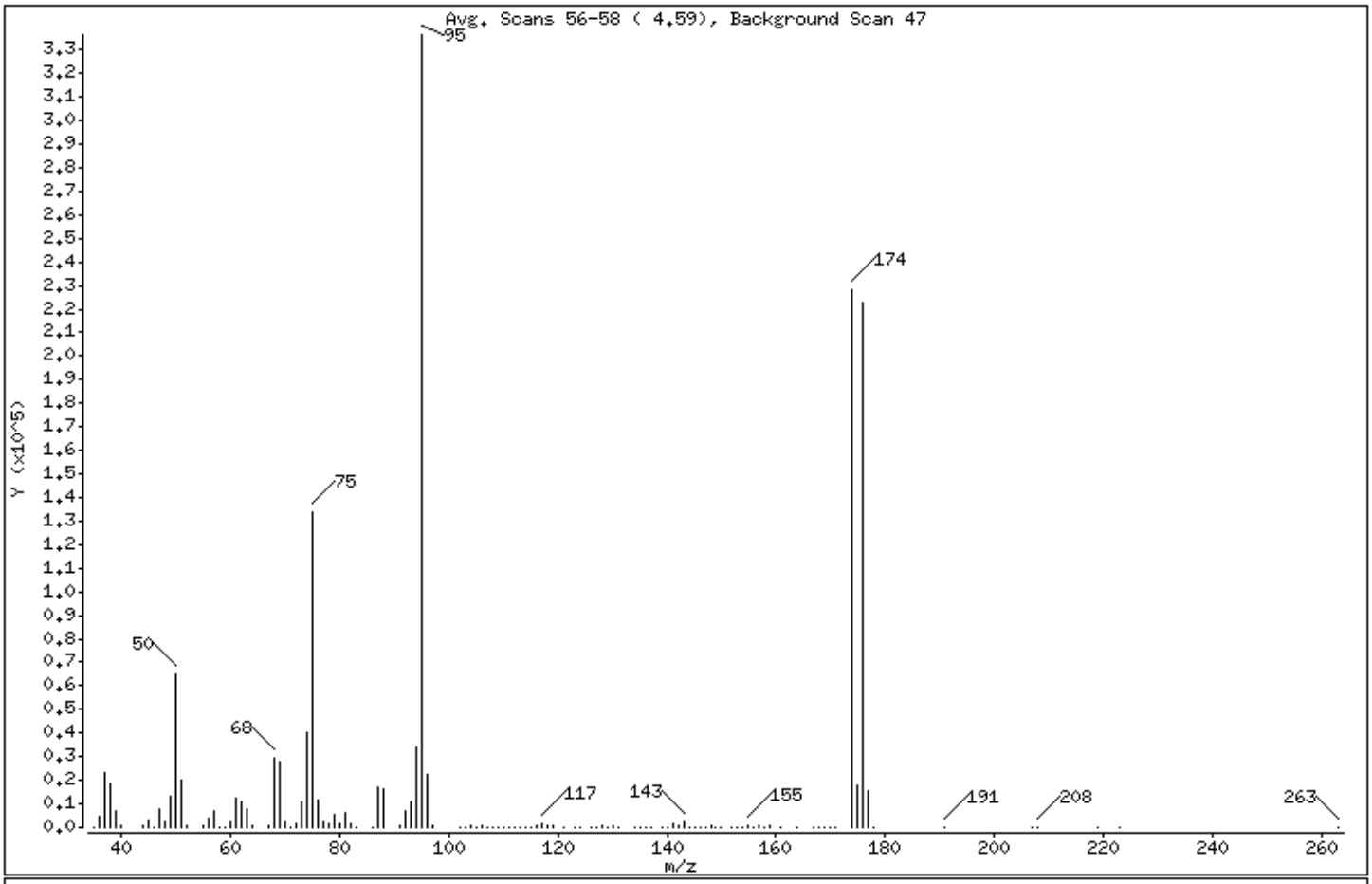
Sample Info: 2UL,BFB1B,BFB1B

Operator: WL SRC: WL

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	19.33
75	30.00 - 60.00% of mass 95	39.76
96	5.00 - 9.00% of mass 95	6.75
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	67.77
175	5.00 - 9.00% of mass 174	5.32 (7.86)
176	95.00 - 101.00% of mass 174	66.27 (97.78)
177	5.00 - 9.00% of mass 176	4.61 (6.96)

Date : 23-JAN-2014 08:43

Client ID: BFB1B Instrument: V1.i

Sample Info: 2UL,BFB1B,BFB1B

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M7550.D
Spectrum: Avg. Scans 56-58 (4.59), Background Scan 47
Location of Maximum: 95.00
Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	158	73.00	10656	112.00	79	149.00	242
36.00	4528	74.00	40120	113.00	166	150.00	317
37.00	22976	75.00	133760	114.00	5	152.00	255
38.00	18808	76.00	11611	115.00	137	153.00	173
39.00	6678	77.00	2124	116.00	742	154.00	257
40.00	450	78.00	1468	117.00	1392	155.00	764
44.00	495	79.00	5210	118.00	724	156.00	36
45.00	3194	80.00	1357	119.00	1072	157.00	544
46.00	112	81.00	6194	121.00	59	158.00	50
47.00	7914	82.00	1335	123.00	124	159.00	587
48.00	2569	83.00	207	124.00	87	161.00	201
49.00	12813	86.00	221	126.00	198	164.00	54
50.00	65024	87.00	16760	127.00	83	167.00	46
51.00	19784	88.00	15872	128.00	871	168.00	84
52.00	748	91.00	1146	129.00	384	169.00	44
55.00	871	92.00	6666	130.00	802	170.00	133
56.00	3703	93.00	11028	131.00	319	171.00	187
57.00	7317	94.00	34024	134.00	107	174.00	227968
58.00	183	95.00	336384	135.00	336	175.00	17912
59.00	212	96.00	22720	136.00	111	176.00	222912
60.00	2617	97.00	737	137.00	361	177.00	15508
61.00	12025	102.00	79	139.00	153	178.00	308
62.00	10925	103.00	63	140.00	208	191.00	69
63.00	7553	104.00	694	141.00	1874	207.00	80
64.00	533	105.00	63	142.00	502	208.00	141
67.00	557	106.00	629	143.00	2077	219.00	36
68.00	29584	107.00	204	144.00	133	223.00	43
69.00	28008	108.00	45	145.00	239	263.00	40
70.00	2223	109.00	37	146.00	334		
71.00	212	110.00	176	147.00	166		
72.00	1295	111.00	88	148.00	400		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140116.B\V1M7417.D
Lab Smp Id: BFB1W Client Smp ID: BFB1W
Inj Date : 16-JAN-2014 12:23
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 5ML,BFB1W,BFB1W
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140116.B\bfb8260.m
Meth Date : 16-Jan-2014 08:35 amarquis 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

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.620	8.199	(0.000)	95	54714			0.00- 100.00	100.00
8.620	8.199	(0.000)	50	10224			15.00- 40.00	18.69
8.620	8.199	(0.000)	75	21471			30.00- 60.00	39.24
8.620	8.199	(0.000)	96	3640			5.00- 9.00	6.65
8.620	8.199	(0.000)	173	49			0.00- 2.00	0.14
8.620	8.199	(0.000)	174	34736			50.00- 0.00	63.49
8.620	8.199	(0.000)	175	2722			5.00- 9.00	7.84
8.620	8.199	(0.000)	176	34326			95.00- 101.00	98.82
8.620	8.199	(0.000)	177	2116			5.00- 9.00	6.16

Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7417.D

Date : 16-JAN-2014 12:23

Client ID: BFB1W

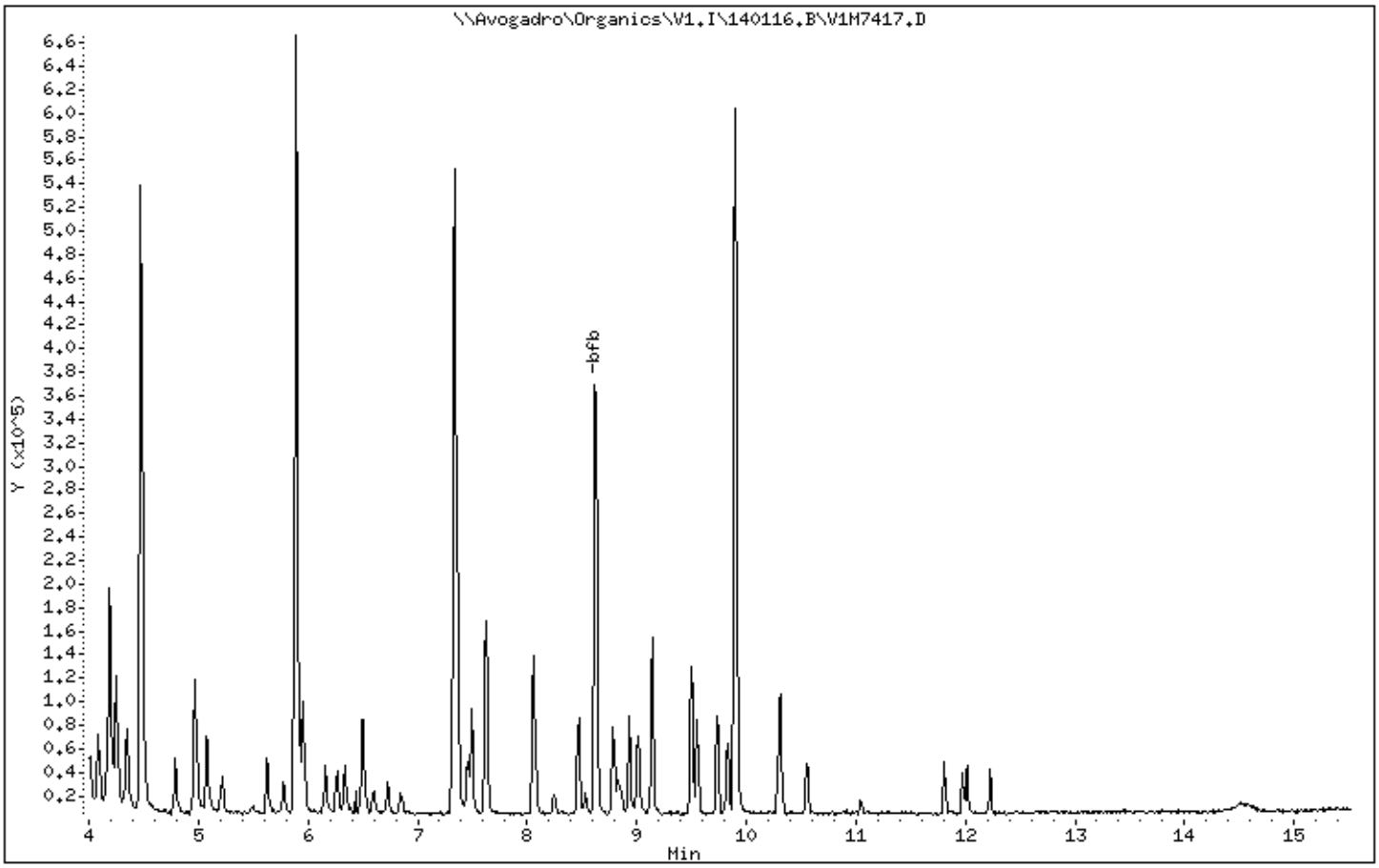
Instrument: V1.i

Sample Info: 5ML,BFB1W,BFB1W

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140116.B\V1M7417.D

Date : 16-JAN-2014 12:23

Client ID: BFB1W

Instrument: V1.i

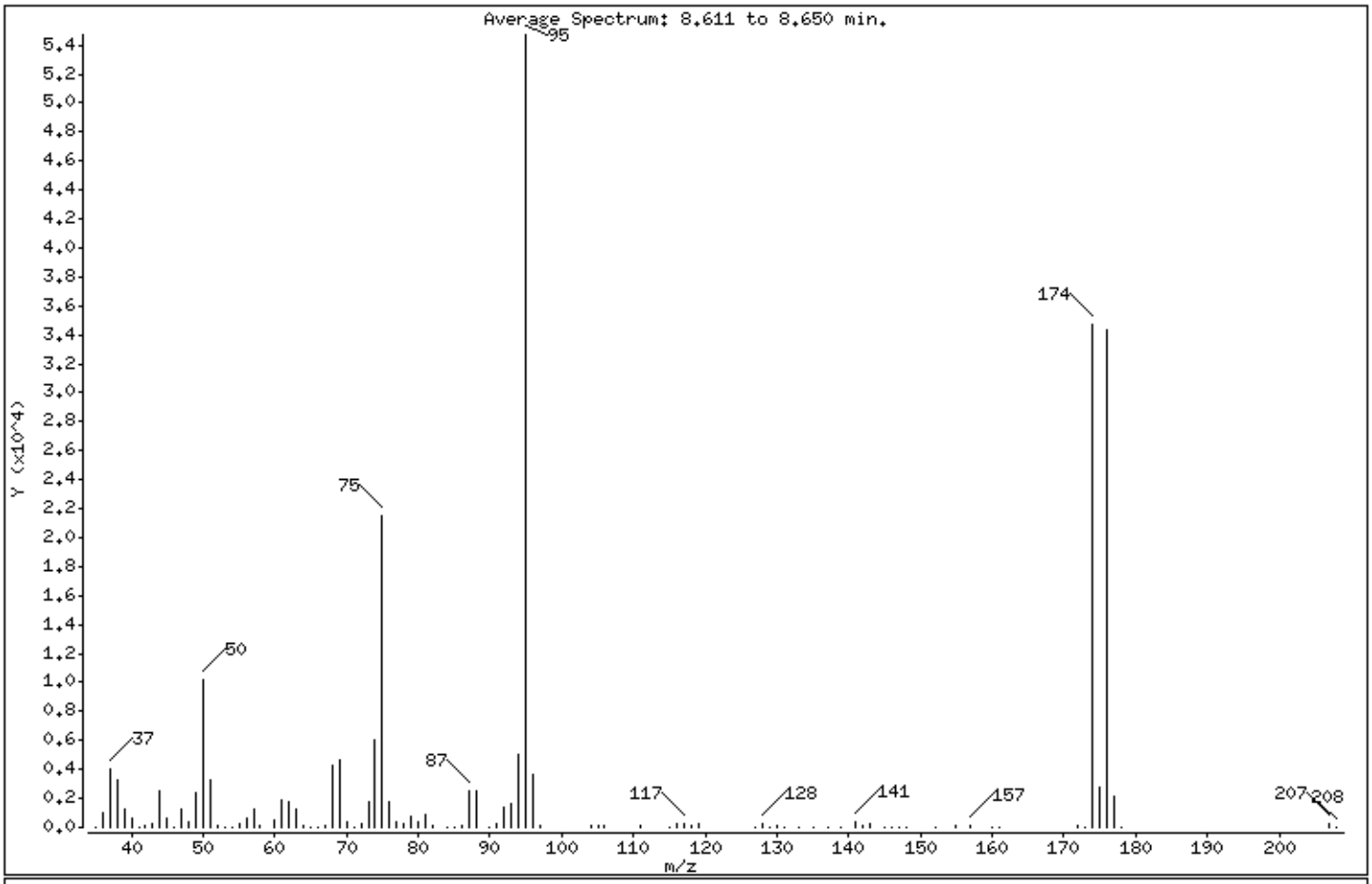
Sample Info: 5ML,BFB1W,BFB1W

Operator: WL SRC: WL

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	18.69
75	30.00 - 60.00% of mass 95	39.24
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.09 (0.14)
174	Greater than 50.00% of mass 95	63.49
175	5.00 - 9.00% of mass 174	4.97 (7.84)
176	95.00 - 101.00% of mass 174	62.74 (98.82)
177	5.00 - 9.00% of mass 176	3.87 (6.16)

Date : 16-JAN-2014 12:23

Client ID: BFB1W Instrument: V1.i

Sample Info: 5ML,BFB1W,BFB1W

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M7417.D
Spectrum: Average Spectrum: 8.611 to 8.650 min.
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	54	61.00	1944	87.00	2548	135.00	24
36.00	1024	62.00	1762	88.00	2520	137.00	48
37.00	3972	63.00	1257	90.00	23	139.00	29
38.00	3293	64.00	158	91.00	195	141.00	370
39.00	1271	65.00	55	92.00	1335	142.00	133
40.00	653	66.00	51	93.00	1653	143.00	189
41.00	32	67.00	114	94.00	5056	145.00	20
42.00	92	68.00	4236	95.00	54712	146.00	22
43.00	207	69.00	4600	96.00	3640	147.00	22
44.00	2489	70.00	321	97.00	130	148.00	62
45.00	689	71.00	21	104.00	183	152.00	27
46.00	32	72.00	230	105.00	107	155.00	105
47.00	1220	73.00	1750	106.00	82	157.00	121
48.00	352	74.00	6076	111.00	79	160.00	51
49.00	2371	75.00	21464	115.00	37	161.00	50
50.00	10224	76.00	1788	116.00	194	172.00	82
51.00	3307	77.00	438	117.00	223	173.00	49
52.00	155	78.00	257	118.00	155	174.00	34736
53.00	24	79.00	817	119.00	209	175.00	2722
54.00	30	80.00	319	127.00	24	176.00	34320
55.00	245	81.00	861	128.00	201	177.00	2116
56.00	675	82.00	151	129.00	52	178.00	30
57.00	1288	84.00	20	130.00	113	207.00	209
58.00	87	85.00	21	131.00	23	208.00	37
60.00	494	86.00	103	133.00	21		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7472.D
Lab Smp Id: BFB1Y Client Smp ID: BFB1Y
Inj Date : 20-JAN-2014 08:34
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 5ML,BFB1Y,BFB1Y
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140120.B\bfb8260.m
Meth Date : 30-Jan-2014 10:55 mscarpaci Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 7 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: TARGET115

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 ON-COL (ug/L)	FINAL (ug/Kg)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.634	8.199	(0.000)	95	89818			0.00- 100.00	100.00
8.634	8.199	(0.000)	50	17802			15.00- 40.00	19.82
8.634	8.199	(0.000)	75	35482			30.00- 60.00	39.50
8.634	8.199	(0.000)	96	6310			5.00- 9.00	7.03
8.634	8.199	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
8.634	8.199	(0.000)	174	59184			50.00- 0.00	65.89
8.634	8.199	(0.000)	175	3288			5.00- 9.00	5.56
8.634	8.199	(0.000)	176	56693			95.00- 101.00	95.79
8.634	8.199	(0.000)	177	3646			5.00- 9.00	6.43

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7472.D

Date : 20-JAN-2014 08:34

Client ID: BFB1Y

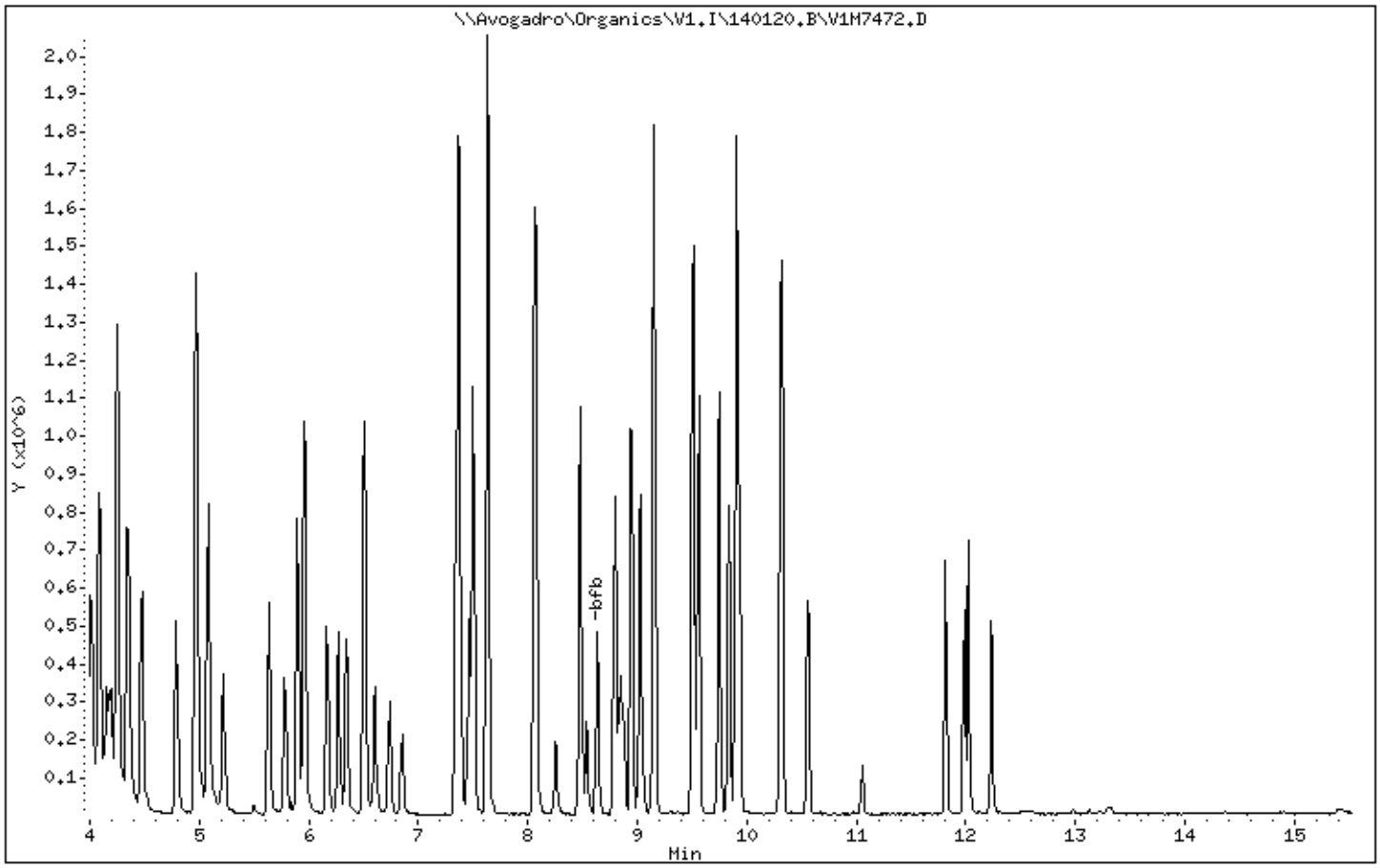
Instrument: V1.i

Sample Info: 5ML,BFB1Y,BFB1Y

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7472.D

Date : 20-JAN-2014 08:34

Client ID: BFB1Y

Instrument: V1.i

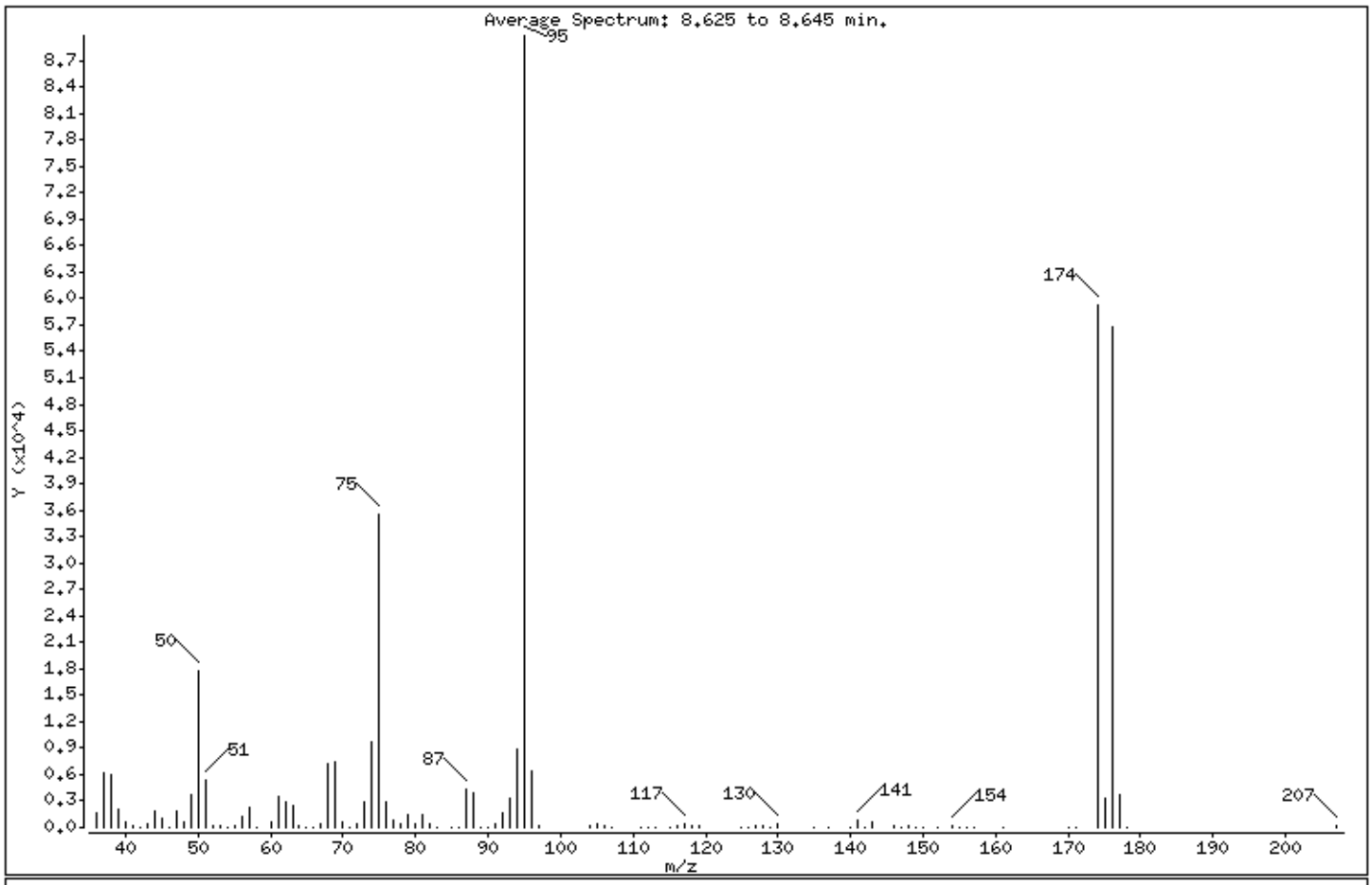
Sample Info: 5ML,BFB1Y,BFB1Y

Operator: WL SRC: WL

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	19.82
75	30.00 - 60.00% of mass 95	39.50
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	65.89
175	5.00 - 9.00% of mass 174	3.66 (5.56)
176	95.00 - 101.00% of mass 174	63.12 (95.79)
177	5.00 - 9.00% of mass 176	4.06 (6.43)

Date : 20-JAN-2014 08:34

Client ID: BFB1Y Instrument: V1.i

Sample Info: 5ML,BFB1Y,BFB1Y

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M7472.D
Spectrum: Average Spectrum: 8.625 to 8.645 min.
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1614	63.00	2447	90.00	39	135.00	93
37.00	6281	64.00	185	91.00	354	137.00	46
38.00	5886	65.00	33	92.00	1747	140.00	57
39.00	2161	66.00	42	93.00	3301	141.00	754
40.00	667	67.00	370	94.00	8954	142.00	54
41.00	261	68.00	7196	95.00	89816	143.00	574
42.00	36	69.00	7334	96.00	6310	146.00	193
43.00	335	70.00	619	97.00	188	147.00	82
44.00	1826	71.00	39	104.00	268	148.00	129
45.00	983	72.00	494	105.00	338	149.00	84
46.00	40	73.00	2811	106.00	269	150.00	72
47.00	1827	74.00	9694	107.00	42	152.00	61
48.00	714	75.00	35480	111.00	85	154.00	132
49.00	3669	76.00	2961	112.00	37	155.00	93
50.00	17800	77.00	858	113.00	36	156.00	76
51.00	5385	78.00	427	115.00	41	157.00	51
52.00	273	79.00	1411	116.00	130	161.00	52
53.00	189	80.00	409	117.00	385	170.00	41
54.00	45	81.00	1547	118.00	239	171.00	53
55.00	307	82.00	387	119.00	251	174.00	59184
56.00	1271	83.00	45	125.00	64	175.00	3288
57.00	2290	85.00	34	126.00	59	176.00	56688
58.00	95	86.00	38	127.00	159	177.00	3646
60.00	671	87.00	4259	128.00	164	178.00	35
61.00	3450	88.00	3960	129.00	80	207.00	218
62.00	2910	89.00	80	130.00	345		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7496.D
Lab Smp Id: BFB1Z Client Smp ID: BFB1Z
Inj Date : 21-JAN-2014 13:10
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 5ML,BFB1Z,BFB1Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140121.B\bfb8260.m
Meth Date : 30-Jan-2014 10:54 mscarpaci 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: TARGET115

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 ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.620	8.199	(0.000)	95	38312			0.00- 100.00	100.00
8.620	8.199	(0.000)	50	6433			15.00- 40.00	16.79
8.620	8.199	(0.000)	75	13904			30.00- 60.00	36.29
8.620	8.199	(0.000)	96	2335			5.00- 9.00	6.09
8.620	8.199	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
8.620	8.199	(0.000)	174	30552			50.00- 0.00	79.75
8.620	8.199	(0.000)	175	2222			5.00- 9.00	7.27
8.620	8.199	(0.000)	176	30249			95.00- 101.00	99.01
8.620	8.199	(0.000)	177	1919			5.00- 9.00	6.34

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7496.D

Date : 21-JAN-2014 13:10

Client ID: BFB1Z

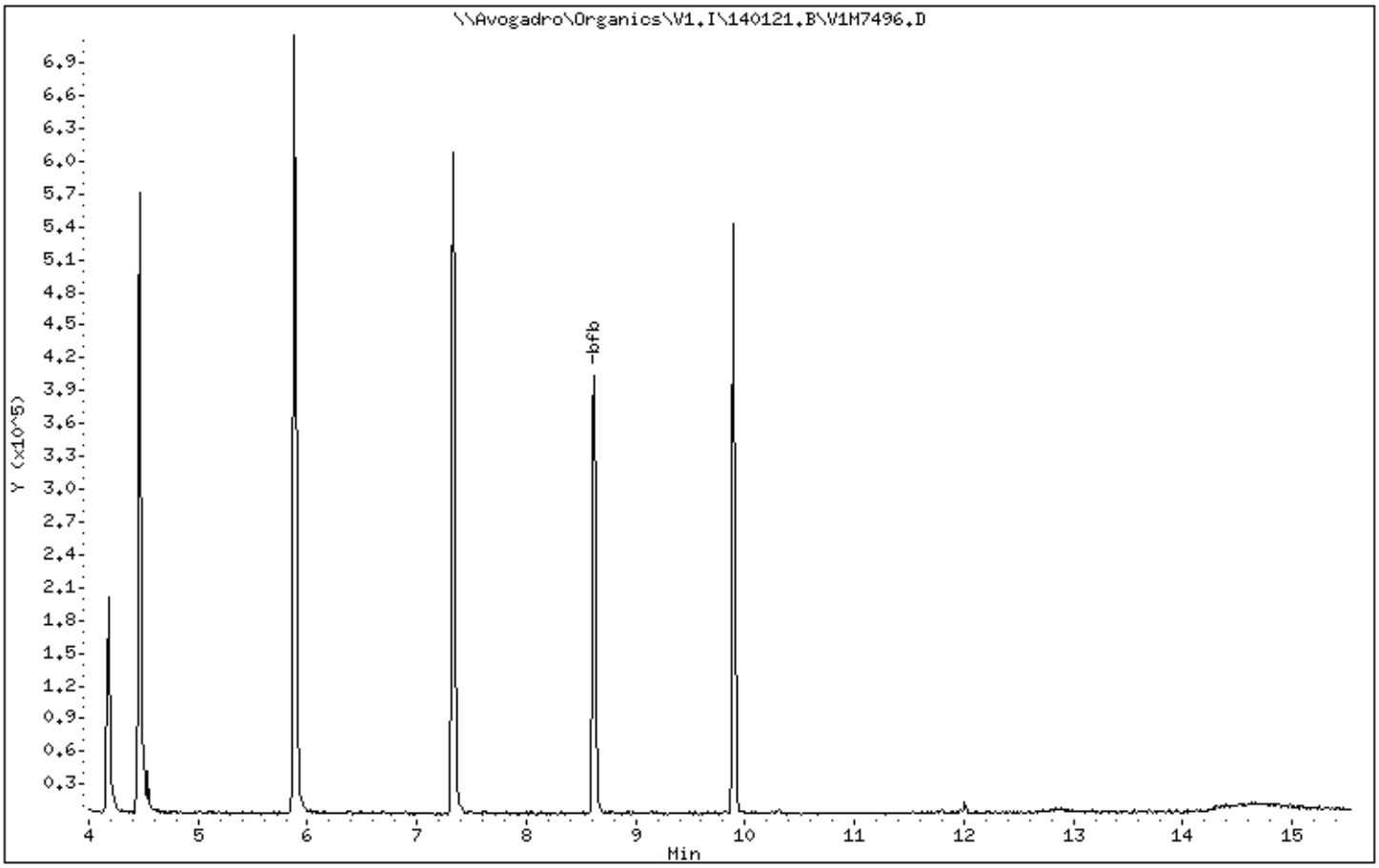
Instrument: V1.i

Sample Info: 5ML,BFB1Z,BFB1Z

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7496.D

Date : 21-JAN-2014 13:10

Client ID: BFB1Z

Instrument: V1.i

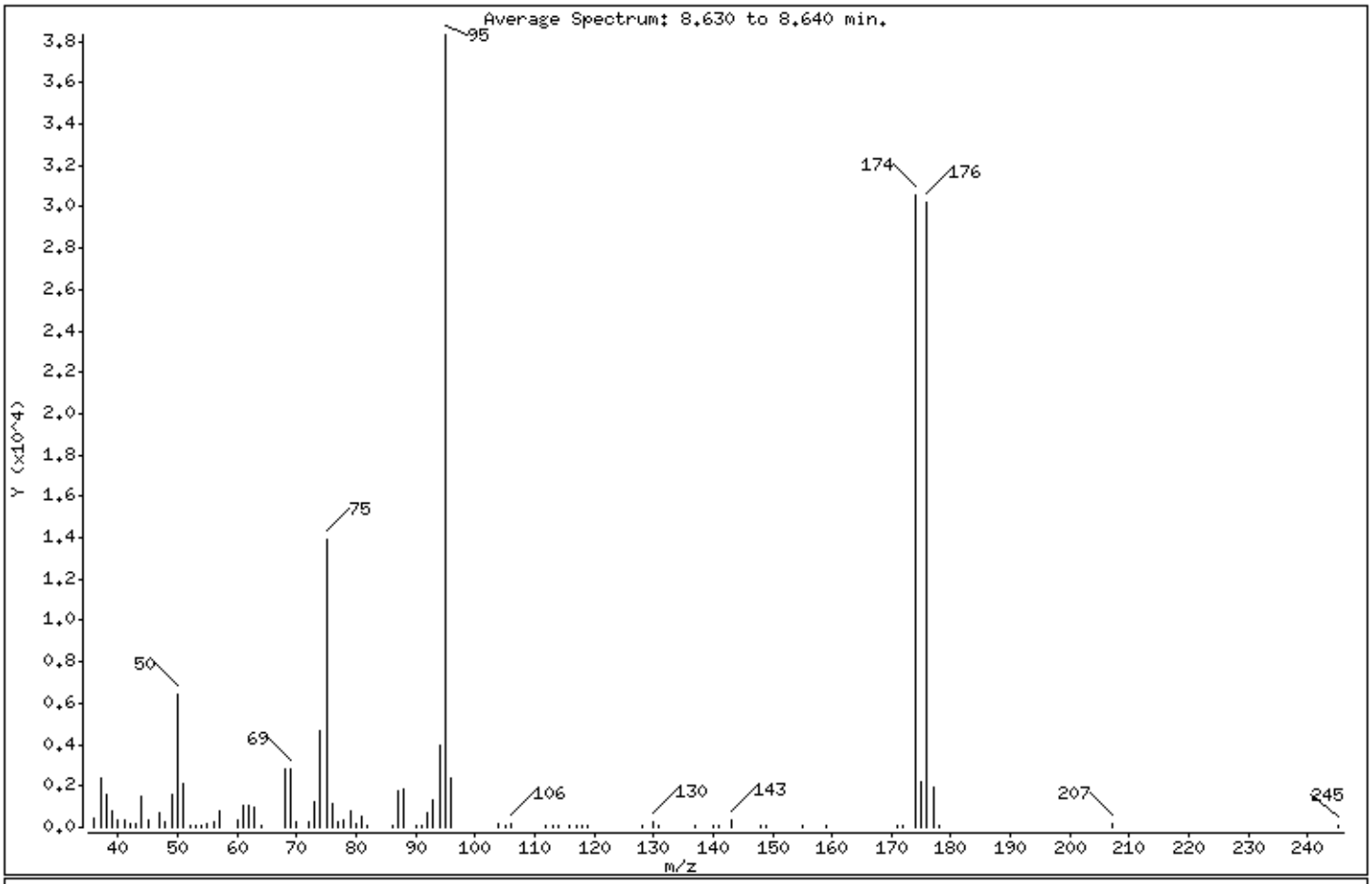
Sample Info: 5ML,BFB1Z,BFB1Z

Operator: WL SRC: WL

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	36.29
96	5.00 - 9.00% of mass 95	6.09
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	79.75
175	5.00 - 9.00% of mass 174	5.80 (7.27)
176	95.00 - 101.00% of mass 174	78.95 (99.01)
177	5.00 - 9.00% of mass 176	5.01 (6.34)

Date : 21-JAN-2014 13:10

Client ID: BFB1Z Instrument: V1.i

Sample Info: 5ML,BFB1Z,BFB1Z

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M7496.D
Spectrum: Average Spectrum: 8.630 to 8.640 min.
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	401	60.00	378	88.00	1807	137.00	53
37.00	2407	61.00	1028	90.00	54	140.00	99
38.00	1628	62.00	1094	91.00	87	141.00	84
39.00	752	63.00	942	92.00	673	143.00	366
40.00	385	64.00	121	93.00	1298	148.00	107
41.00	317	68.00	2803	94.00	3950	149.00	87
42.00	146	69.00	2832	95.00	38312	155.00	87
43.00	177	70.00	285	96.00	2335	159.00	75
44.00	1482	72.00	224	104.00	142	171.00	65
45.00	384	73.00	1253	105.00	106	172.00	73
47.00	746	74.00	4670	106.00	183	174.00	30552
48.00	269	75.00	13904	112.00	53	175.00	2222
49.00	1553	76.00	1135	113.00	58	176.00	30248
50.00	6433	77.00	266	114.00	51	177.00	1919
51.00	2113	78.00	356	116.00	72	178.00	54
52.00	102	79.00	753	117.00	81	207.00	134
53.00	59	80.00	136	118.00	104	245.00	57
54.00	73	81.00	547	119.00	94		
55.00	135	82.00	73	128.00	115		
56.00	292	86.00	75	130.00	244		
57.00	784	87.00	1740	131.00	116		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\140121.B\V5O9510.D
Lab Smp Id: BFB5K Client Smp ID: BFB5K
Inj Date : 21-JAN-2014 10:34
Operator : WL SRC: WL Inst ID: V5.i
Smp Info : 2UL,BFB5K,BFB5K
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\140121.B\bfb8260.m
Meth Date : 22-Jan-2014 14:02 wluo Quant Type: ISTD
Cal Date : 21-MAR-2011 17:17 Cal File: V5M6831.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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.595	10.800	(0.000)	95	12098			0.00- 100.00	100.00
10.595	10.800	(0.000)	50	2425			15.00- 40.00	20.04
10.595	10.800	(0.000)	75	5787			30.00- 60.00	47.83
10.595	10.800	(0.000)	96	865			5.00- 9.00	7.15
10.595	10.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.595	10.800	(0.000)	174	11127			50.00- 100.00	91.97
10.595	10.800	(0.000)	175	997			5.00- 9.00	8.96
10.595	10.800	(0.000)	176	10752			95.00- 101.00	96.63
10.595	10.800	(0.000)	177	713			5.00- 9.00	6.63

Data File: \\avogadro\organics\V5.I\140121.B\V509510.D

Date : 21-JAN-2014 10:34

Client ID: BFB5K

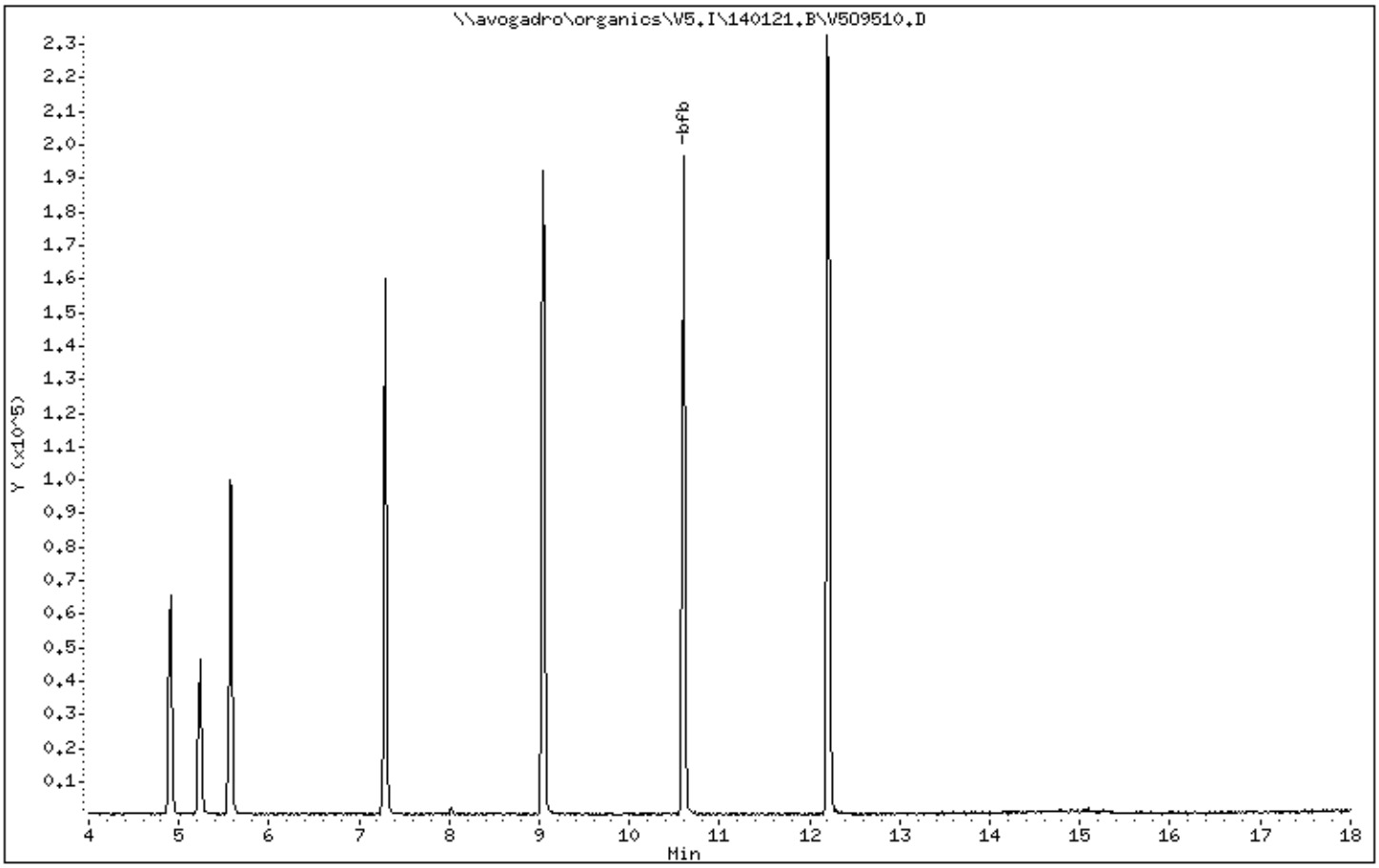
Instrument: V5.i

Sample Info: 2UL,BFB5K,BFB5K

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140121.B\V509510.D

Date : 21-JAN-2014 10:34

Client ID: BFB5K

Instrument: V5.i

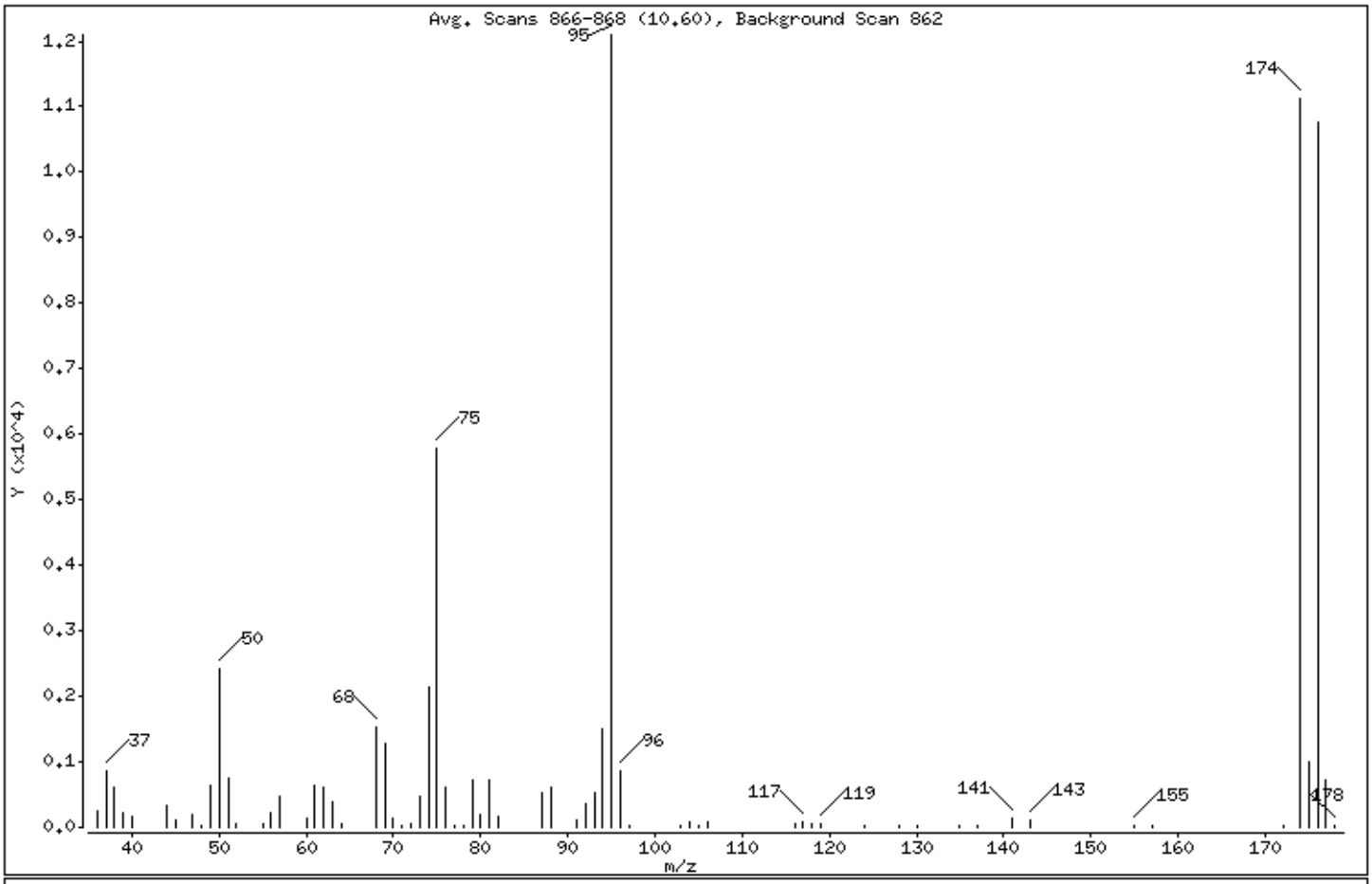
Sample Info: 2UL,BFB5K,BFB5K

Operator: WL SRC: WL

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	20.04
75	30.00 - 60.00% of mass 95	47.83
96	5.00 - 9.00% of mass 95	7.15
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	91.97
175	5.00 - 9.00% of mass 174	8.24 (8.96)
176	95.00 - 101.00% of mass 174	88.87 (96.63)
177	5.00 - 9.00% of mass 176	5.89 (6.63)

Date : 21-JAN-2014 10:34

Client ID: BFB5K Instrument: V5.i

Sample Info: 2UL,BFB5K,BFB5K

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V509510.D
Spectrum: Avg. Scans 866-868 (10.60), Background Scan 862
Location of Maximum: 95.00
Number of points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	247	62.00	614	87.00	529	128.00	37
37.00	865	63.00	401	88.00	607	130.00	25
38.00	618	64.00	54	91.00	111	135.00	26
39.00	217	68.00	1525	92.00	358	137.00	22
40.00	158	69.00	1288	93.00	529	141.00	146
44.00	327	70.00	137	94.00	1496	143.00	118
45.00	115	71.00	33	95.00	12098	155.00	20
47.00	191	72.00	61	96.00	865	157.00	20
48.00	31	73.00	483	97.00	31	172.00	38
49.00	627	74.00	2146	103.00	21	174.00	11127
50.00	2425	75.00	5787	104.00	77	175.00	997
51.00	750	76.00	618	105.00	22	176.00	10752
52.00	65	77.00	39	106.00	83	177.00	713
55.00	54	78.00	38	116.00	44	178.00	22
56.00	231	79.00	723	117.00	77		
57.00	463	80.00	193	118.00	65		
60.00	142	81.00	721	119.00	67		
61.00	648	82.00	160	124.00	20		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V5.I\140122.B\V5O9550.D
Lab Smp Id: BFB5M Client Smp ID: BFB5M
Inj Date : 22-JAN-2014 13:15
Operator : WL SRC: WL Inst ID: V5.i
Smp Info : 2UL,BFB5M,BFB5M
Misc Info :
Comment :
Method : \\avogadro\organics\V5.I\140122.B\bfb8260.m
Meth Date : 22-Jan-2014 14:02 wluo Quant Type: ISTD
Cal Date : 21-MAR-2011 17:17 Cal File: V5M6831.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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
10.607	10.800	(0.000)	95	16298			0.00- 100.00	100.00
10.607	10.800	(0.000)	50	3380			15.00- 40.00	20.74
10.607	10.800	(0.000)	75	7705			30.00- 60.00	47.28
10.607	10.800	(0.000)	96	1249			5.00- 9.00	7.66
10.607	10.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
10.607	10.800	(0.000)	174	15316			50.00- 100.00	93.97
10.607	10.800	(0.000)	175	957			5.00- 9.00	6.25
10.607	10.800	(0.000)	176	14911			95.00- 101.00	97.36
10.607	10.800	(0.000)	177	1095			5.00- 9.00	7.34

Data File: \\avogadro\organics\V5.I\140122.B\V509550.D

Date : 22-JAN-2014 13:15

Client ID: BFB5M

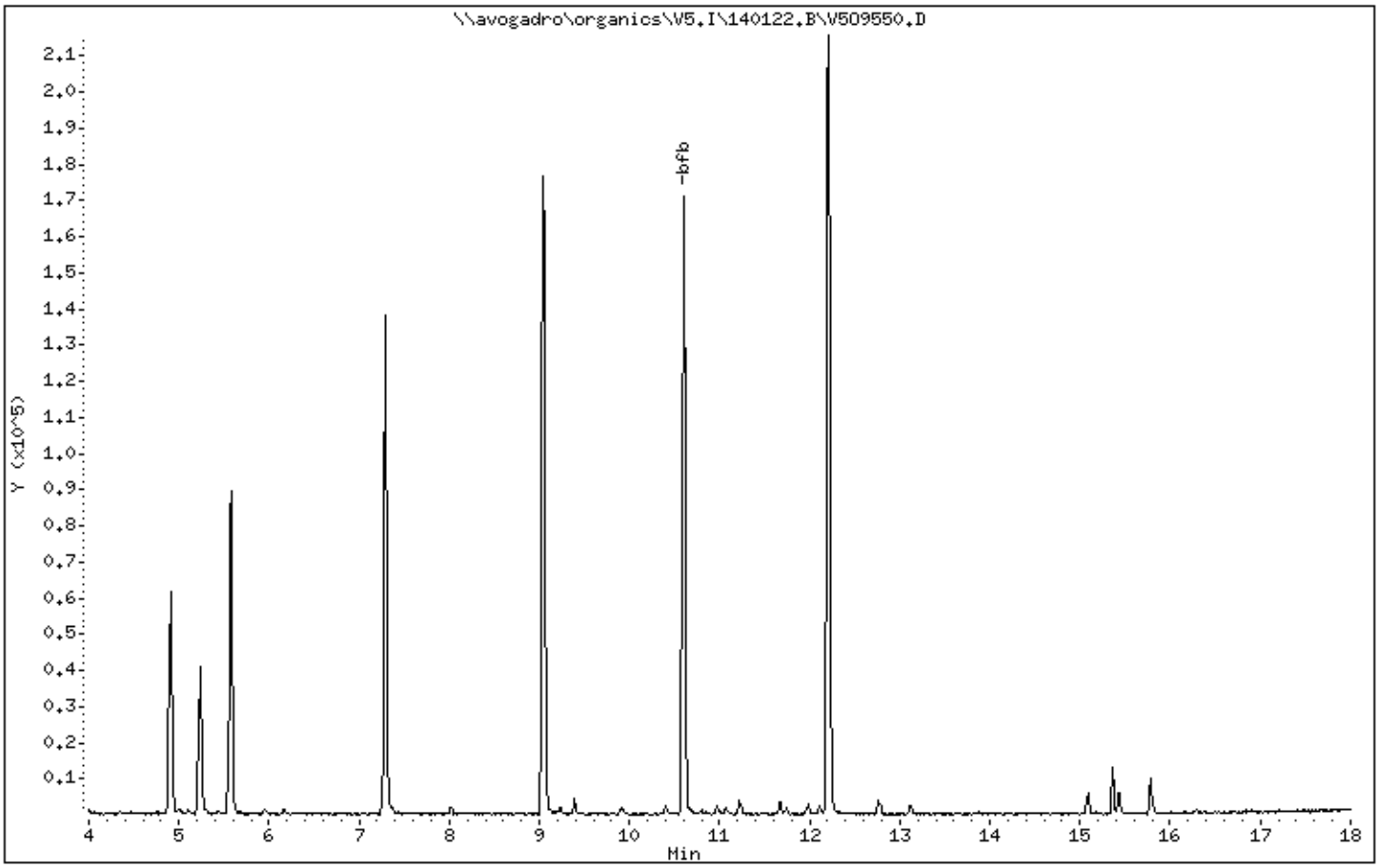
Instrument: V5.i

Sample Info: 2UL,BFB5M,BFB5M

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\avogadro\organics\V5.I\140122.B\V509550.D

Date : 22-JAN-2014 13:15

Client ID: BFB5M

Instrument: V5.i

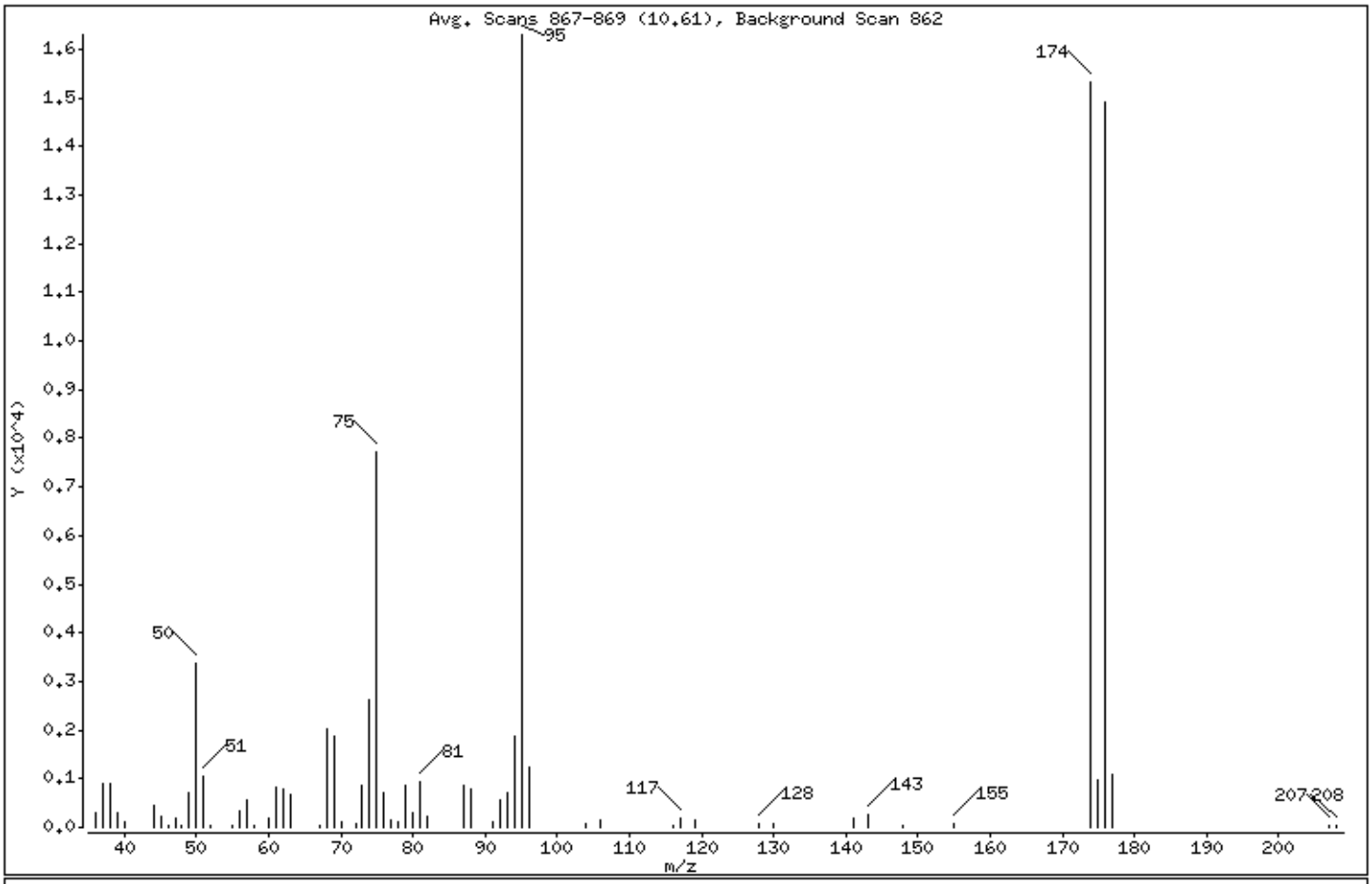
Sample Info: 2UL,BFB5M,BFB5M

Operator: WL SRC: WL

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	20.74
75	30.00 - 60.00% of mass 95	47.28
96	5.00 - 9.00% of mass 95	7.66
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	93.97
175	5.00 - 9.00% of mass 174	5.87 (6.25)
176	95.00 - 101.00% of mass 174	91.49 (97.36)
177	5.00 - 9.00% of mass 176	6.72 (7.34)

Date : 22-JAN-2014 13:15

Client ID: BFB5M Instrument: V5.i

Sample Info: 2UL,BFB5M,BFB5M

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V509550.D
Spectrum: Avg. Scans 867-869 (10.61), Background Scan 862
Location of Maximum: 95.00
Number of points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	315	57.00	555	78.00	123	117.00	181
37.00	895	58.00	37	79.00	858	119.00	153
38.00	897	60.00	189	80.00	295	128.00	69
39.00	292	61.00	807	81.00	939	130.00	63
40.00	125	62.00	779	82.00	208	141.00	193
44.00	455	63.00	670	87.00	863	143.00	244
45.00	214	67.00	42	88.00	773	148.00	44
46.00	43	68.00	2025	91.00	96	155.00	64
47.00	172	69.00	1888	92.00	552	174.00	15316
48.00	51	70.00	117	93.00	710	175.00	957
49.00	719	72.00	86	94.00	1858	176.00	14911
50.00	3380	73.00	844	95.00	16298	177.00	1095
51.00	1066	74.00	2631	96.00	1249	207.00	41
52.00	45	75.00	7705	104.00	73	208.00	34
55.00	55	76.00	696	106.00	140		
56.00	353	77.00	146	116.00	33		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75643

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7477.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/20/2014

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-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75643

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7477.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7477.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7477.D
Lab Smp Id: MB-75643 Client Smp ID: MB-75643
Inj Date : 20-JAN-2014 11:17
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75643,MB-75643,75643
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)	
$ 32 Dibromofluoromethane	113	3.926	3.918	(0.877)	115123	49.2931	49	
$ 37 1,2-Dichloroethane-d4	102	4.192	4.194	(0.936)	29354	47.1900	47	
* 41 Fluorobenzene	96	4.478	4.479	(1.000)	455082	50.0000		
$ 51 Toluene-d8	98	5.896	5.888	(0.803)	426164	49.8490	50	
* 60 Chlorobenzene-d5	117	7.344	7.336	(1.000)	305104	50.0000		
$ 70 Bromofluorobenzene	95	8.634	8.626	(1.176)	164550	49.3849	49	
* 84 1,4-Dichlorobenzene-d4	152	9.915	9.906	(1.000)	125685	50.0000		(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7477.D
Report Date: 31-Jan-2014 09:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

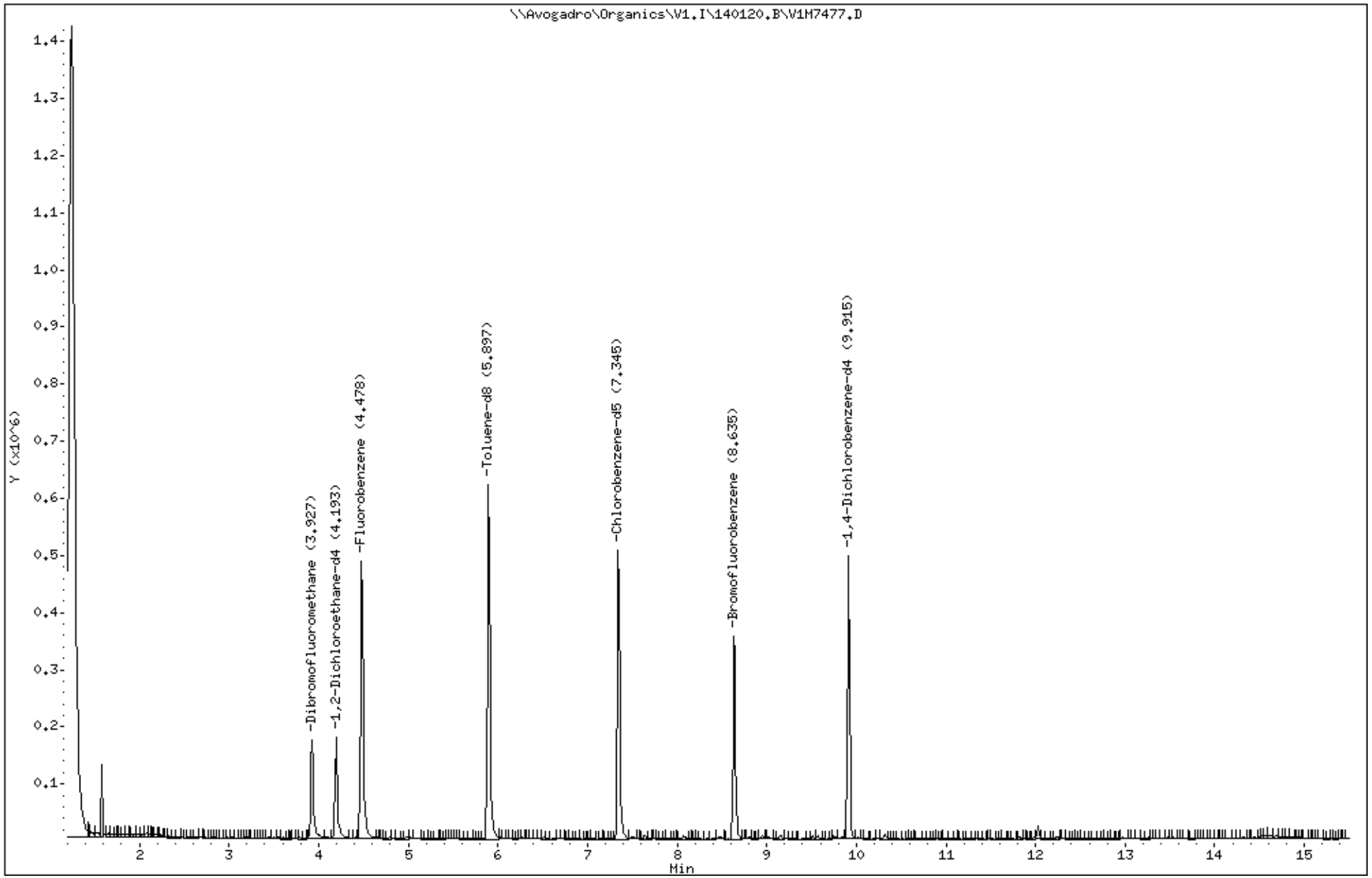
Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7477.D
Lab Smp Id: MB-75643 Client Smp ID: MB-75643
Inj Date : 20-JAN-2014 11:17
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75643,MB-75643,75643
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 31-Jan-2014 09:47 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 12 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\V1.I\140120.B\V1M7477.D
Date : 20-JAN-2014 11:17
Client ID: MB-75643
Sample Info: 5ML,MB-75643,MB-75643,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75665

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7505.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/21/2014

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-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75665

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7505.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/21/2014

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	2.1	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7505.D
Report Date: 31-Jan-2014 09:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7505.D
Lab Smp Id: MB-75665 Client Smp ID: MB-75665
Inj Date : 21-JAN-2014 17:24
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75665,MB-75665,75665
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 20 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)
$ 32 Dibromofluoromethane	113	3.917	3.913	(0.877)	126561	52.0626	52
$ 37 1,2-Dichloroethane-d4	102	4.182	4.187	(0.936)	30565	50.4401	50
* 41 Fluorobenzene	96	4.468	4.474	(1.000)	470221	50.0000	
$ 51 Toluene-d8	98	5.886	5.892	(0.803)	444051	49.9269	50
* 60 Chlorobenzene-d5	117	7.334	7.331	(1.000)	322092	50.0000	
$ 70 Bromofluorobenzene	95	8.625	8.621	(1.176)	168416	47.2183	47
* 84 1,4-Dichlorobenzene-d4	152	9.895	9.901	(1.000)	132635	50.0000	(Q)
91 Naphthalene	128	12.013	12.009	(1.214)	13072	2.06325	2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7505.D
Report Date: 31-Jan-2014 09:50

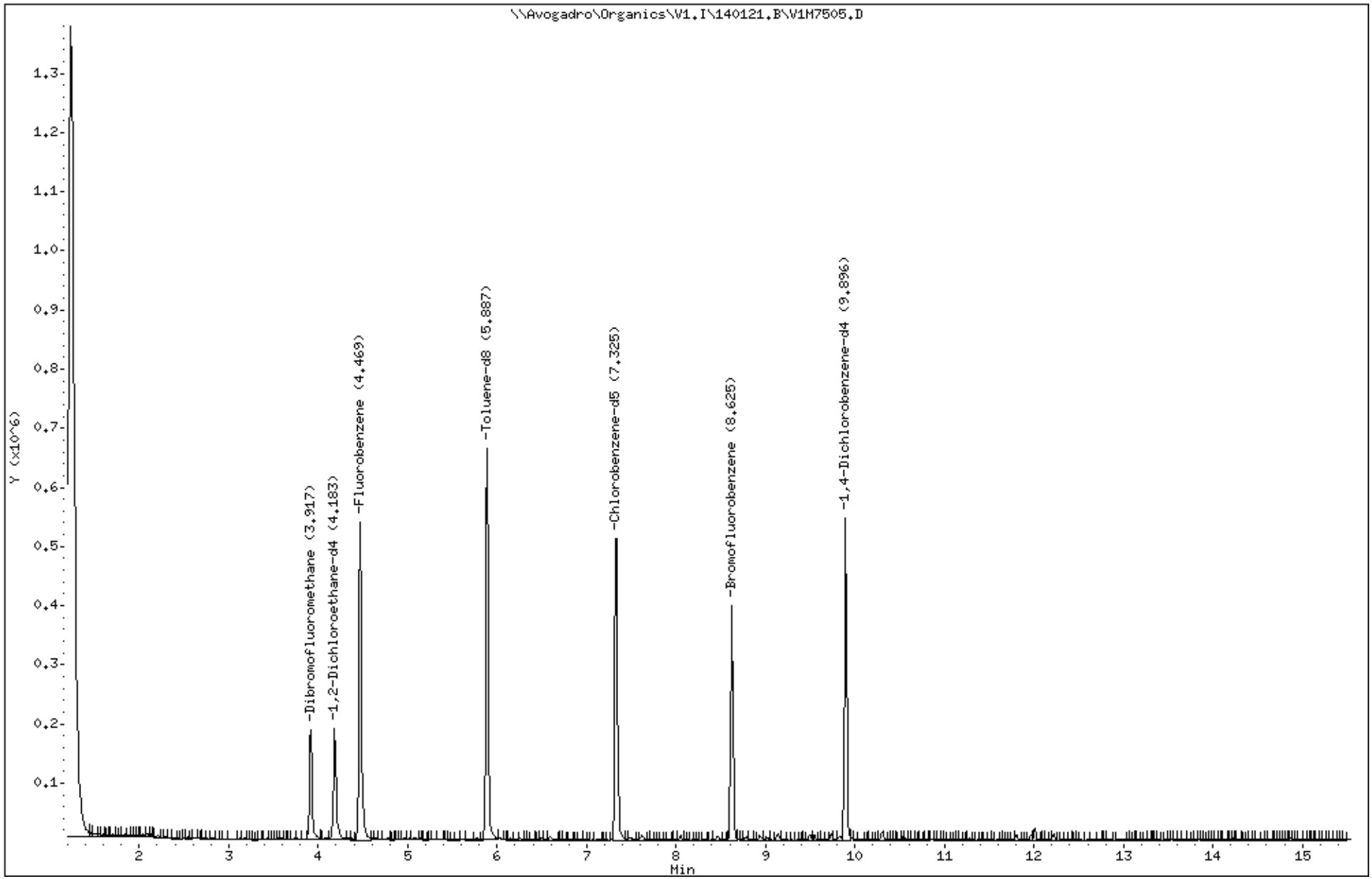
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7505.D
Lab Smp Id: MB-75665 Client Smp ID: MB-75665
Inj Date : 21-JAN-2014 17:24
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75665,MB-75665,75665
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 20 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\V1.I\140121.B\V1M7505.D
Date : 21-JAN-2014 17:24
Client ID: MB-75665
Instrument: V1.i
Sample Info: 5ML,MB-75665,MB-75665,75665
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7505.D

Date : 21-JAN-2014 17:24

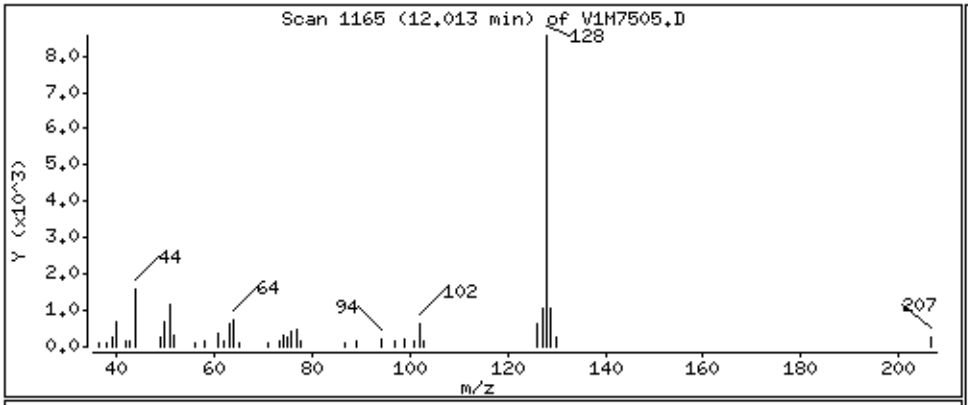
Client ID: MB-75665 Instrument: V1.i

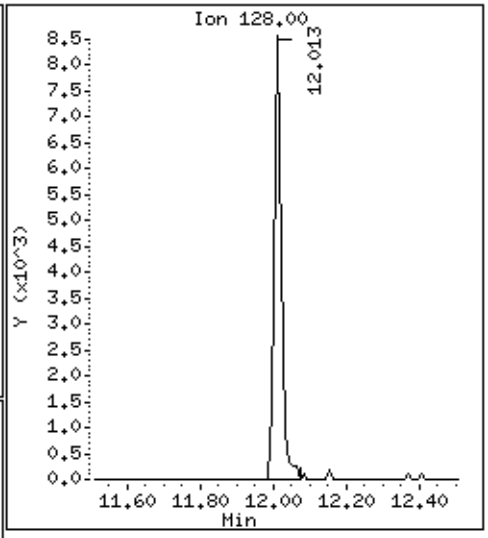
Sample Info: 5ML,MB-75665,MB-75665,75665

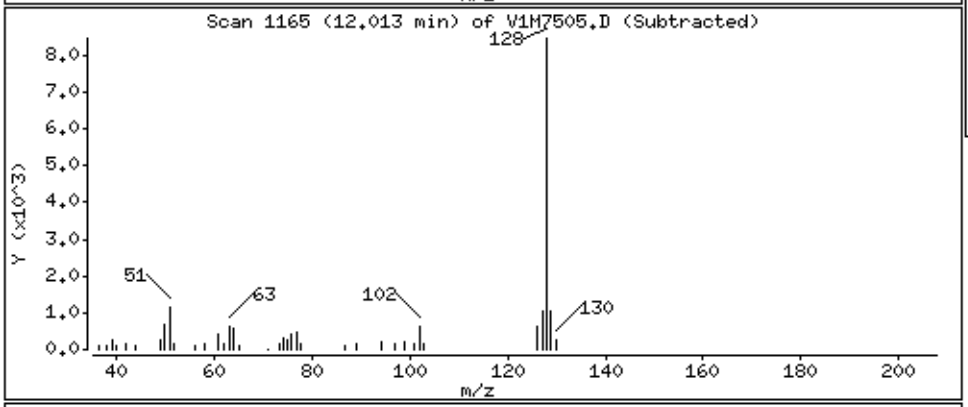
Operator: WL SRC: LIMS

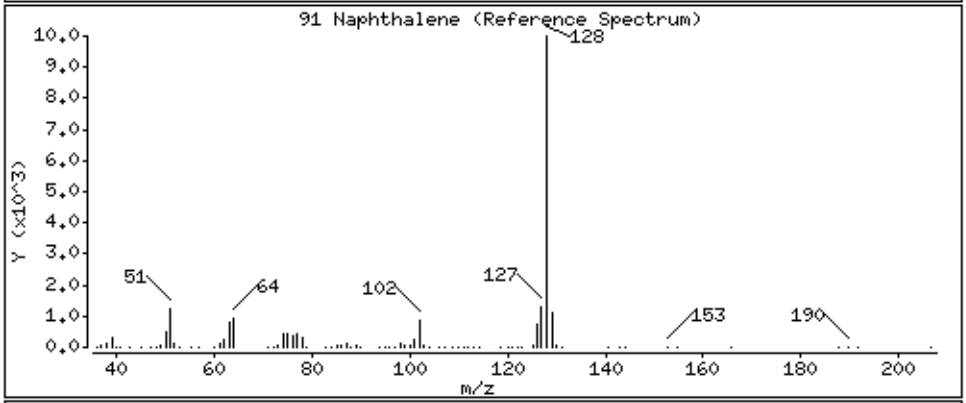
Column phase: DB-624 Column diameter: 0.25

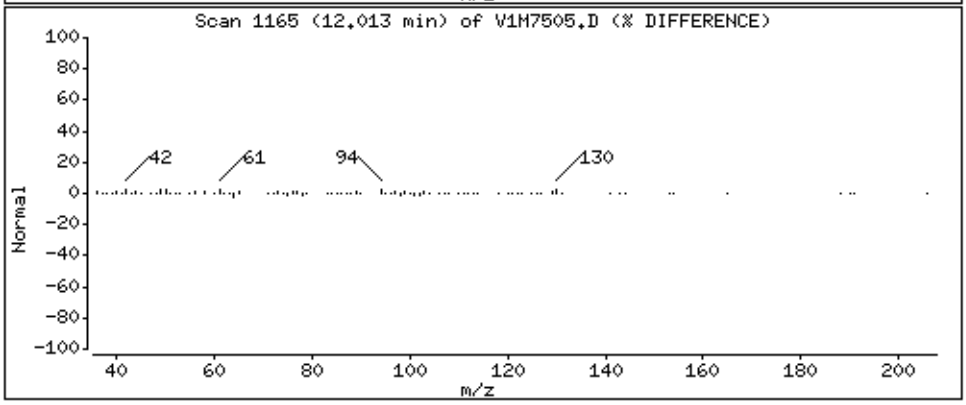
91 Naphthalene Concentration: 2 ug/Kg











1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75681

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7527.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75681

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7527.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7527.D
Report Date: 31-Jan-2014 09:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7527.D
Lab Smp Id: MB-75681 Client Smp ID: MB-75681
Inj Date : 22-JAN-2014 13:02
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75681,MB-75681,75681
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)	
$ 32 Dibromofluoromethane	113	3.927	3.936	(0.875)	123876	48.8341	49	
$ 37 1,2-Dichloroethane-d4	102	4.203	4.202	(0.936)	32468	51.3472	51	
* 41 Fluorobenzene	96	4.489	4.487	(1.000)	490673	50.0000		
$ 51 Toluene-d8	98	5.907	5.906	(0.803)	463506	50.8430	51	
* 60 Chlorobenzene-d5	117	7.355	7.354	(1.000)	330146	50.0000		
$ 70 Bromofluorobenzene	95	8.635	8.644	(1.174)	180361	49.3337	49	
* 84 1,4-Dichlorobenzene-d4	152	9.916	9.915	(1.000)	137857	50.0000		(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7527.D
Report Date: 31-Jan-2014 09:53

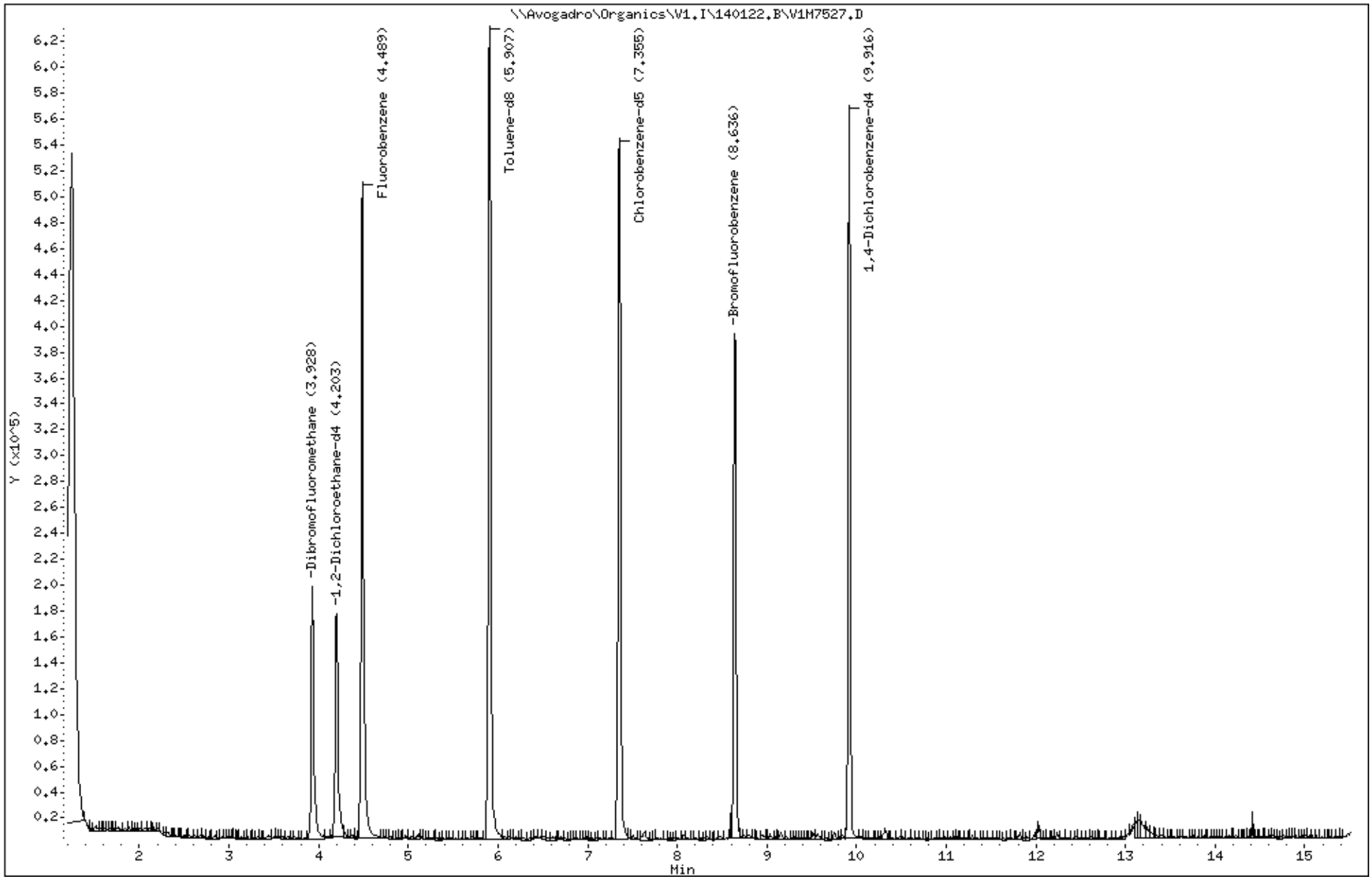
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7527.D
Lab Smp Id: MB-75681 Client Smp ID: MB-75681
Inj Date : 22-JAN-2014 13:02
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75681,MB-75681,75681
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 31-Jan-2014 09:53 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 11 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\V1.I\140122.B\V1M7527.D
Date : 22-JAN-2014 13:02
Client ID: MB-75681
Instrument: V1.i
Sample Info: 5ML,MB-75681,MB-75681,75681
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75683

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5O9554.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75683

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5O9554.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U

Data File: \\avogadro\organics\V5.I\140122.B\V5O9554.D
Report Date: 24-Jan-2014 09:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140122.B\V5O9554.D
Lab Smp Id: MB-75683 Client Smp ID: MB-75683
Inj Date : 22-JAN-2014 15:41
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,MB-75683,MB-75683,75683
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140122.B\v5_8260W.m
Meth Date : 23-Jan-2014 13:57 V5.i Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * CpndVariable

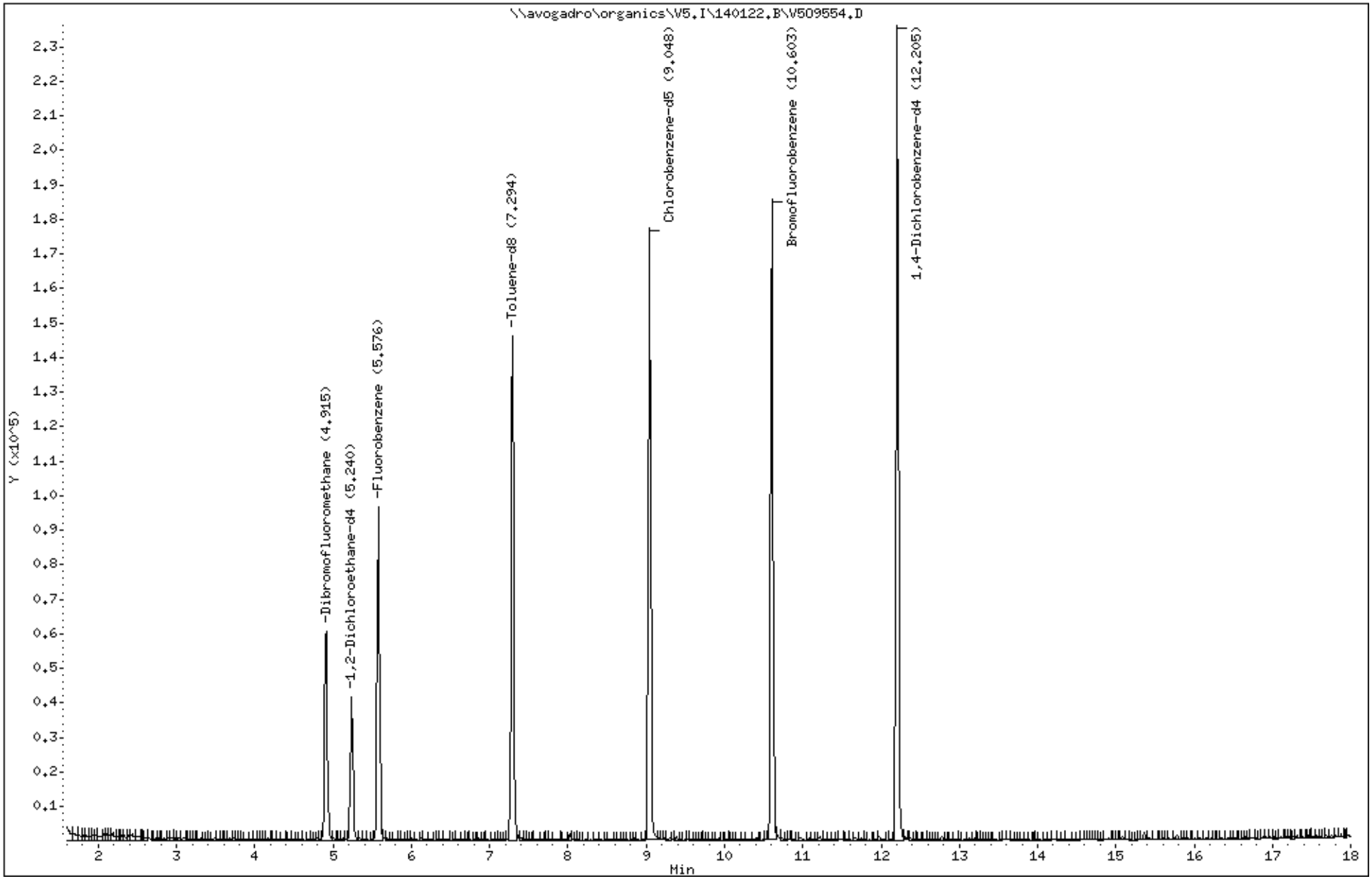
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Methanol extract volume (mL)
Va	100.000	Aliquot of methanol (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 37 Dibromofluoromethane	113	4.914	4.912	(0.881)	43139	51.2092	2600
$ 43 1,2-Dichloroethane-d4	102	5.239	5.237	(0.940)	6832	46.6316	2300
* 47 Fluorobenzene	96	5.576	5.585	(1.000)	104121	50.0000	
$ 59 Toluene-d8	98	7.294	7.292	(0.806)	118969	48.5390	2400
* 69 Chlorobenzene-d5	117	9.047	9.045	(1.000)	132447	50.0000	
$ 80 Bromofluorobenzene	95	10.603	10.600	(1.172)	71974	49.2060	2500
* 93 1,4-Dichlorobenzene-d4	152	12.205	12.203	(1.000)	86037	50.0000	

Data File: \\avogadro\organics\V5.I\140122.B\V509554.D
Date : 22-JAN-2014 15:41
Client ID: MB-75683
Sample Info: 5ML,MB-75683,MB-75683,75683

Instrument: V5.i

Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75688

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7555.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/23/2014

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-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-75688

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7555.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/23/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7555.D
Report Date: 31-Jan-2014 09:55

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7555.D
Lab Smp Id: MB-75688 Client Smp ID: MB-75688
Inj Date : 23-JAN-2014 11:53
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75688,MB-75688,75688
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 31-Jan-2014 09:55 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 10 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)
$ 32 Dibromofluoromethane	113	3.915	3.916	(0.877)	120660	49.2939	49
$ 37 1,2-Dichloroethane-d4	102	4.181	4.182	(0.936)	31517	51.6536	52
* 41 Fluorobenzene	96	4.467	4.468	(1.000)	473476	50.0000	
$ 51 Toluene-d8	98	5.885	5.886	(0.803)	451006	50.0270	50
* 60 Chlorobenzene-d5	117	7.333	7.334	(1.000)	326482	50.0000	
$ 70 Bromofluorobenzene	95	8.623	8.614	(1.176)	174139	48.1663	48
* 84 1,4-Dichlorobenzene-d4	152	9.894	9.905	(1.000)	135707	50.0000	

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7555.D
Report Date: 31-Jan-2014 09:55

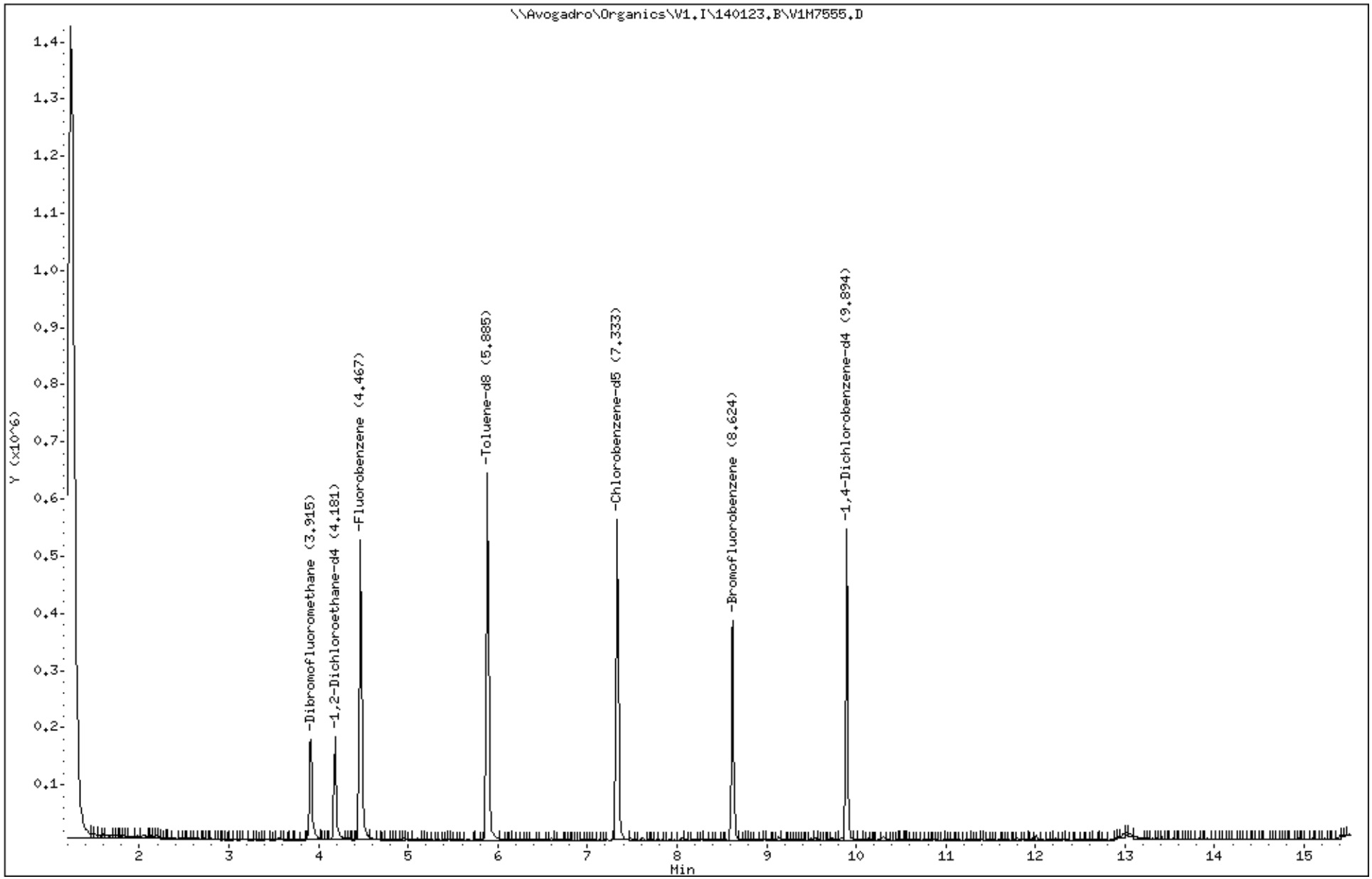
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7555.D
Lab Smp Id: MB-75688 Client Smp ID: MB-75688
Inj Date : 23-JAN-2014 11:53
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-75688,MB-75688,75688
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 31-Jan-2014 09:55 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 10 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\V1.I\140123.B\V1M7555.D
Date : 23-JAN-2014 11:53
Client ID: MB-75688
Instrument: V1.i
Sample Info: 5ML,MB-75688,MB-75688,75688
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12AMS

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7544.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/22/2014

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	110	JL
74-87-3	Chloromethane	160	JL
75-01-4	Vinyl chloride	170	JL
74-83-9	Bromomethane	150	JL
75-00-3	Chloroethane	78	JL
75-69-4	Trichlorofluoromethane	150	JL
75-35-4	1,1-Dichloroethene	260	
67-64-1	Acetone	110	JL
74-88-4	Iodomethane	99	JL
75-15-0	Carbon disulfide	210	
75-09-2	Methylene chloride	160	JL
156-60-5	trans-1,2-Dichloroethene	130	JL
1634-04-4	Methyl tert-butyl ether	160	JL
75-34-3	1,1-Dichloroethane	440	
108-05-4	Vinyl acetate	82	JL
78-93-3	2-Butanone	120	JL
156-59-2	cis-1,2-Dichloroethene	140	JL
594-20-7	2,2-Dichloropropane	140	JL
74-97-5	Bromochloromethane	140	JL
67-66-3	Chloroform	140	JL
71-55-6	1,1,1-Trichloroethane	1100	E
563-58-6	1,1-Dichloropropene	140	JL
56-23-5	Carbon tetrachloride	150	JL
107-06-2	1,2-Dichloroethane	140	JL
71-43-2	Benzene	150	JL
79-01-6	Trichloroethene	150	JL
78-87-5	1,2-Dichloropropane	150	JL
74-95-3	Dibromomethane	150	JL
75-27-4	Bromodichloromethane	120	JL
10061-01-5	cis-1,3-Dichloropropene	110	JL
108-10-1	4-Methyl-2-pentanone	150	JL
108-88-3	Toluene	140	JL
10061-02-6	trans-1,3-Dichloropropene	110	JL
79-00-5	1,1,2-Trichloroethane	140	JL
142-28-9	1,3-Dichloropropane	140	JL

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12AMS

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7544.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/22/2014

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	130	JL
591-78-6	2-Hexanone	100	JL
124-48-1	Dibromochloromethane	100	JL
106-93-4	1,2-Dibromoethane	130	JL
108-90-7	Chlorobenzene	120	JL
630-20-6	1,1,1,2-Tetrachloroethane	120	JL
100-41-4	Ethylbenzene	130	JL
179601-23-1	m,p-Xylene	250	
95-47-6	o-Xylene	120	JL
1330-20-7	Xylene (Total)	370	
100-42-5	Styrene	80	JL
75-25-2	Bromoform	73	JL
98-82-8	Isopropylbenzene	120	JL
79-34-5	1,1,2,2-Tetrachloroethane	110	JL
108-86-1	Bromobenzene	100	JL
96-18-4	1,2,3-Trichloropropane	110	JL
103-65-1	n-Propylbenzene	110	JL
95-49-8	2-Chlorotoluene	100	JL
108-67-8	1,3,5-Trimethylbenzene	110	JL
106-43-4	4-Chlorotoluene	98	JL
98-06-6	tert-Butylbenzene	110	JL
95-63-6	1,2,4-Trimethylbenzene	99	JL
135-98-8	sec-Butylbenzene	110	JL
99-87-6	4-Isopropyltoluene	110	JL
541-73-1	1,3-Dichlorobenzene	80	JL
106-46-7	1,4-Dichlorobenzene	82	JL
104-51-8	n-Butylbenzene	98	JL
95-50-1	1,2-Dichlorobenzene	76	JL
96-12-8	1,2-Dibromo-3-chloropropane	82	JL
120-82-1	1,2,4-Trichlorobenzene	44	JL
87-68-3	Hexachlorobutadiene	67	JL
87-61-6	1,2,3-Trichlorobenzene	35	JL
91-20-3	Naphthalene	43	JL
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	420	

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7544.D
Report Date: 30-Jan-2014 12:02

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7544.D
Lab Smp Id: N0058-12AMS Client Smp ID: HW-WET-SE-4-(1)_01/
Inj Date : 22-JAN-2014 21:01
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-12AMS,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 30-Jan-2014 11:59 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 28 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.274	1.267	(0.284)	39816	50.0000	32
2	Chloromethane	50	1.422	1.405	(0.317)	289404	50.0000	43
3	Vinyl Chloride	62	1.510	1.503	(0.337)	201338	50.0000	46
4	Bromomethane	94	1.757	1.739	(0.392)	122822	50.0000	42
5	Chloroethane	64	1.530	1.828	(0.341)	62469	50.0000	22
6	Trichlorofluoromethane	101	1.944	1.946	(0.433)	132466	50.0000	42
127	Ethanol	46	2.052	2.055	(0.458)	29898	5000.00	1600(Q)
7	Ether	59	2.141	2.143	(0.477)	180518	50.0000	44
8	Acrolein	56	2.219	2.222	(0.495)	205344	250.000	200
9	1,1-Dichloroethene	96	2.485	2.330	(0.554)	227624	50.0000	72
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.308	2.340	(0.515)	261476	50.0000	120(Q)
11	Acetone	58	2.318	2.321	(0.517)	22627	50.0000	30
12	Iodomethane	142	2.466	2.458	(0.550)	103218	50.0000	27
13	Carbon Disulfide	76	2.544	2.547	(0.567)	535682	50.0000	58
14	Acetonitrile	40	2.525	2.518	(0.563)	200016	500.000	390(Q)
15	Methyl Acetate	43	2.554	2.557	(0.570)	186498	50.0000	27
16	Methylene Chloride	84	2.702	2.715	(0.603)	145015	50.0000	45
17	tert-Butanol	59	2.702	2.705	(0.603)	28235	100.000	80
18	Acrylonitrile	53	2.791	2.793	(0.622)	72474	50.0000	38
20	Methyl tert-butyl ether	73	2.830	2.833	(0.631)	473319	50.0000	45
19	trans-1,2-Dichloroethene	96	2.830	2.833	(0.631)	115344	50.0000	36(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.126	3.138	(0.697)	841515	50.0000	120
	22 Vinyl acetate	43	3.185	3.187	(0.710)	390379	50.0000	22
	23 Diisopropyl Ether	45	3.185	3.187	(0.710)	974650	50.0000	42
	24 Ethyl tert-butyl ether	59	3.451	3.463	(0.769)	605896	50.0000	43
M	27 1,2-dichloroethene, (Total)	100				263671	100.000	75
	25 cis-1,2-Dichloroethene	96	3.559	3.562	(0.794)	148327	50.0000	39
	26 2,2-Dichloropropane	77	3.559	3.571	(0.794)	89098	50.0000	40
	28 2-Butanone	72	3.559	3.562	(0.794)	20361	50.0000	34(Q)
	29 Bromochloromethane	128	3.736	3.749	(0.833)	68230	50.0000	40
	30 Tetrahydrofuran	72	3.776	3.788	(0.842)	36789	100.000	78
	31 Chloroform	83	3.795	3.808	(0.846)	227842	50.0000	39
$	32 Dibromofluoromethane	113	3.923	3.936	(0.875)	130727	50.0000	53
	33 1,1,1-Trichloroethane	97	3.953	3.965	(0.881)	1051167	50.0000	310(A)
	34 Cyclohexane	56	4.012	4.025	(0.895)	277728	50.0000	40
	36 Carbon Tetrachloride	117	4.091	4.103	(0.912)	120568	50.0000	42
	35 1,1-Dichloropropene	110	4.091	4.103	(0.912)	58266	50.0000	39
$	37 1,2-Dichloroethane-d4	102	4.199	4.202	(0.936)	35837	50.0000	58
	38 Benzene	78	4.248	4.261	(0.947)	553005	50.0000	40
	39 1,2-Dichloroethane	62	4.258	4.261	(0.949)	151390	50.0000	39
	40 tert-Amyl methyl ether	73	4.347	4.359	(0.969)	477772	50.0000	43
*	41 Fluorobenzene	96	4.485	4.487	(1.000)	480638	50.0000	
	42 Trichloroethene	130	4.790	4.803	(1.068)	120403	50.0000	41
	43 Methylcyclohexane	83	4.977	4.980	(1.110)	214552	50.0000	37
	44 1,2-Dichloropropane	63	4.977	4.990	(1.110)	168998	50.0000	40
	46 Dibromomethane	93	5.076	5.088	(1.132)	90782	50.0000	42
	47 1,4-Dioxane	88	5.096	5.108	(1.136)	11298	1000.00	520
	48 Bromodichloromethane	83	5.214	5.226	(1.162)	149122	50.0000	33
	45 2-Chloroethyl vinyl ether	63	5.499	5.512	(1.226)	517	50.0000	5(Q)
	49 cis-1,3-Dichloropropene	75	5.637	5.640	(1.257)	187957	50.0000	31
	50 4-Methyl-2-pentanone	43	5.785	5.788	(1.290)	239966	50.0000	41
$	51 Toluene-d8	98	5.893	5.906	(0.803)	463459	50.0000	51
	52 Toluene	91	5.962	5.965	(1.329)	506128	50.0000	39
	53 trans-1,3-Dichloropropene	75	6.159	6.172	(1.373)	150161	50.0000	31
	54 1,1,2-Trichloroethane	97	6.337	6.349	(1.413)	104701	50.0000	38
	55 Tetrachloroethene	164	6.504	6.517	(0.886)	83801	50.0000	37
	56 1,3-Dichloropropane	76	6.504	6.517	(0.886)	206556	50.0000	38
	57 2-Hexanone	43	6.593	6.605	(0.898)	130126	50.0000	28
	58 Dibromochloromethane	129	6.731	6.743	(0.917)	91588	50.0000	28
	59 1,2-Dibromoethane	107	6.849	6.861	(0.933)	107897	50.0000	36
*	60 Chlorobenzene-d5	117	7.341	7.354	(1.000)	327967	50.0000	
	63 1-Chlorohexane	91	7.361	7.373	(1.003)	184735	50.0000	36
	61 Chlorobenzene	112	7.371	7.383	(1.004)	268559	50.0000	33
	62 1,1,1,2-Tetrachloroethane	131	7.459	7.472	(1.016)	90460	50.0000	32
	64 Ethylbenzene	106	7.499	7.511	(1.021)	147665	50.0000	35
	65 m,p-Xylene	106	7.627	7.639	(1.039)	363808	100.000	70
	66 o-Xylene	106	8.050	8.073	(1.097)	167250	50.0000	32
	67 Styrene	104	8.070	8.083	(1.099)	198407	50.0000	22
	68 Bromoform	173	8.247	8.260	(1.123)	39987	50.0000	20
	69 Isopropylbenzene	105	8.474	8.486	(1.154)	426045	50.0000	33
	126 trans-1,4-Dichloro-2-butene	75	8.533	8.546	(1.162)	22464	50.0000	16
$	70 Bromofluorobenzene	95	8.622	8.644	(1.174)	180085	50.0000	50
	72 Bromobenzene	156	8.789	8.802	(0.888)	80237	50.0000	28
	71 1,1,2,2-Tetrachloroethane	83	8.789	8.811	(0.888)	122524	50.0000	32
	73 1,2,3-Trichloropropane	75	8.838	8.851	(0.893)	123270	50.0000	31

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7544.D
Report Date: 30-Jan-2014 12:02

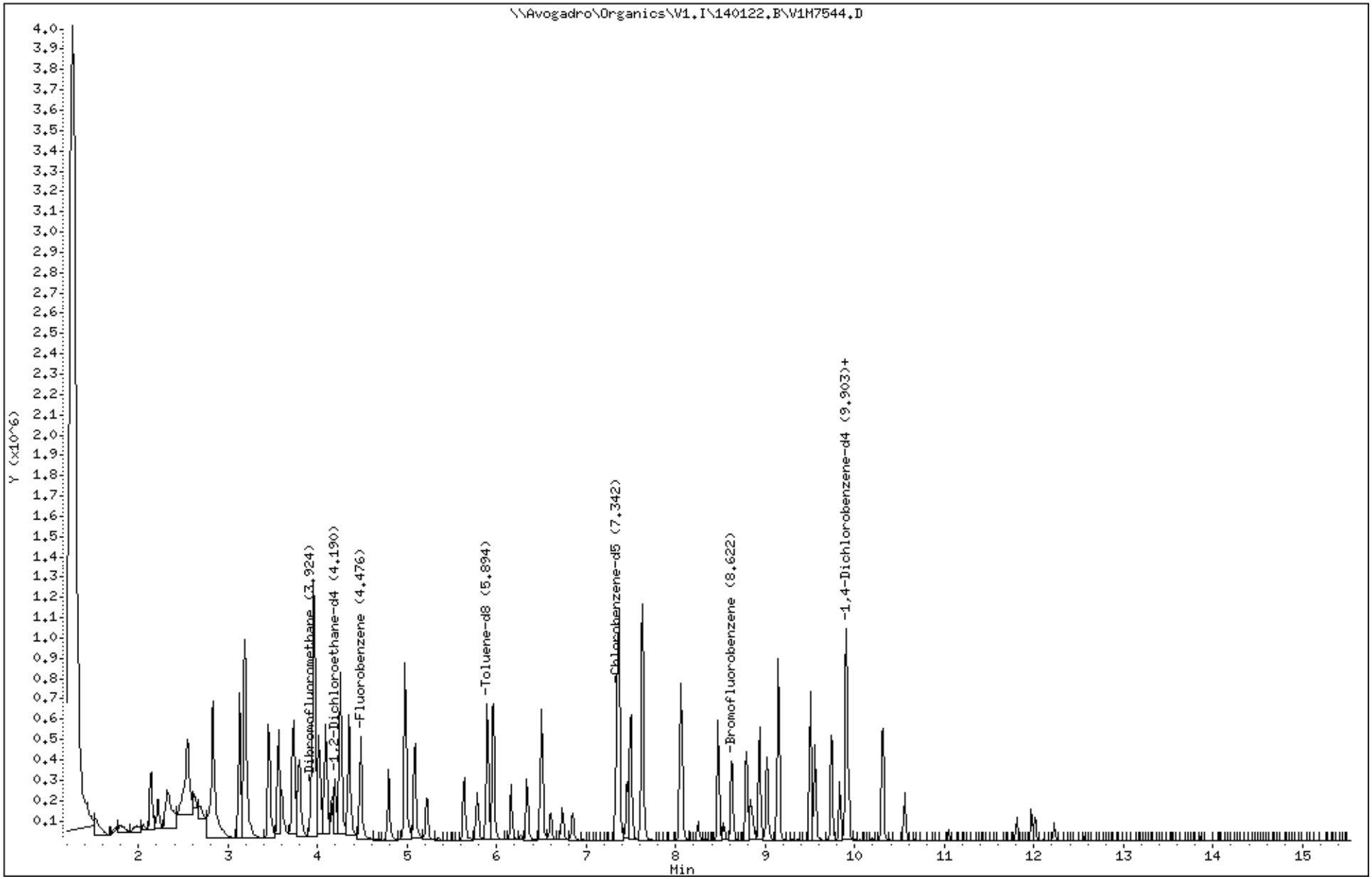
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	74	n-Propylbenzene	120	8.937	8.949	(0.903)	92259	50.0000	31
	75	2-Chlorotoluene	126	9.016	9.038	(0.910)	75693	50.0000	28
	76	1,3,5-Trimethylbenzene	105	9.144	9.156	(0.923)	298378	50.0000	30
	77	4-Chlorotoluene	126	9.144	9.156	(0.923)	76711	50.0000	27
	78	tert-Butylbenzene	119	9.498	9.511	(0.959)	296297	50.0000	30
	79	1,2,4-Trimethylbenzene	105	9.557	9.570	(0.965)	278975	50.0000	27
M	81	Xylene (Total)	106				531058	150.000	100
	80	sec-Butylbenzene	105	9.735	9.747	(0.983)	398166	50.0000	30
	82	1,3-Dichlorobenzene	146	9.833	9.846	(0.993)	110573	50.0000	22
	83	4-Isopropyltoluene	119	9.902	9.915	(1.000)	287355	50.0000	29
*	84	1,4-Dichlorobenzene-d4	152	9.902	9.915	(1.000)	135995	50.0000	
	85	1,4-Dichlorobenzene	146	9.932	9.934	(1.003)	116399	50.0000	23
	86	n-Butylbenzene	91	10.316	10.318	(1.042)	269630	50.0000	27
	87	1,2-Dichlorobenzene	146	10.296	10.309	(1.040)	99759	50.0000	21
	88	1,2-Dibromo-3-chloropropane	75	11.045	11.047	(1.115)	10787	50.0000	22
	89	1,2,4-Trichlorobenzene	180	11.803	11.816	(1.192)	33614	50.0000	12
	90	Hexachlorobutadiene	225	11.971	11.983	(1.209)	24151	50.0000	18
	91	Naphthalene	128	12.010	12.022	(1.213)	77356	50.0000	12
	92	1,2,3-Trichlorobenzene	180	12.227	12.229	(1.235)	22217	50.0000	10

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\140122.B\V1M7544.D
Date : 22-JAN-2014 21:01
Client ID: HW-WET-SE-4-(1)_01/
Sample Info: 5ML,N0058-12AMS,,75681

Instrument: V1.i
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12AMSD

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7545.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/22/2014

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	110	JL
74-87-3	Chloromethane	150	JL
75-01-4	Vinyl chloride	160	JL
74-83-9	Bromomethane	130	JL
75-00-3	Chloroethane	230	
75-69-4	Trichlorofluoromethane	160	JL
75-35-4	1,1-Dichloroethene	310	
67-64-1	Acetone	150	JL
74-88-4	Iodomethane	100	JL
75-15-0	Carbon disulfide	130	JL
75-09-2	Methylene chloride	150	JL
156-60-5	trans-1,2-Dichloroethene	150	JL
1634-04-4	Methyl tert-butyl ether	150	JL
75-34-3	1,1-Dichloroethane	470	
108-05-4	Vinyl acetate	78	JL
78-93-3	2-Butanone	120	JL
156-59-2	cis-1,2-Dichloroethene	140	JL
594-20-7	2,2-Dichloropropane	140	JL
74-97-5	Bromochloromethane	140	JL
67-66-3	Chloroform	130	JL
71-55-6	1,1,1-Trichloroethane	1500	E
563-58-6	1,1-Dichloropropene	140	JL
56-23-5	Carbon tetrachloride	150	JL
107-06-2	1,2-Dichloroethane	130	JL
71-43-2	Benzene	140	JL
79-01-6	Trichloroethene	140	JL
78-87-5	1,2-Dichloropropane	130	JL
74-95-3	Dibromomethane	130	JL
75-27-4	Bromodichloromethane	98	JL
10061-01-5	cis-1,3-Dichloropropene	92	JL
108-10-1	4-Methyl-2-pentanone	130	JL
108-88-3	Toluene	120	JL
10061-02-6	trans-1,3-Dichloropropene	88	JL
79-00-5	1,1,2-Trichloroethane	120	JL
142-28-9	1,3-Dichloropropane	120	JL

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW-WET-SE-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: N0058-12AMSD

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7545.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. 72 Date Analyzed: 01/22/2014

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	120	JL
591-78-6	2-Hexanone	88	JL
124-48-1	Dibromochloromethane	76	JL
106-93-4	1,2-Dibromoethane	110	JL
108-90-7	Chlorobenzene	100	JL
630-20-6	1,1,1,2-Tetrachloroethane	92	JL
100-41-4	Ethylbenzene	110	JL
179601-23-1	m,p-Xylene	210	
95-47-6	o-Xylene	93	JL
1330-20-7	Xylene (Total)	310	
100-42-5	Styrene	41	JL
75-25-2	Bromoform	61	JL
98-82-8	Isopropylbenzene	90	JL
79-34-5	1,1,2,2-Tetrachloroethane	86	JL
108-86-1	Bromobenzene	72	JL
96-18-4	1,2,3-Trichloropropane	82	JL
103-65-1	n-Propylbenzene	88	JL
95-49-8	2-Chlorotoluene	73	JL
108-67-8	1,3,5-Trimethylbenzene	76	JL
106-43-4	4-Chlorotoluene	67	JL
98-06-6	tert-Butylbenzene	77	JL
95-63-6	1,2,4-Trimethylbenzene	68	JL
135-98-8	sec-Butylbenzene	80	JL
99-87-6	4-Isopropyltoluene	72	JL
541-73-1	1,3-Dichlorobenzene	51	JL
106-46-7	1,4-Dichlorobenzene	49	JL
104-51-8	n-Butylbenzene	62	JL
95-50-1	1,2-Dichlorobenzene	47	JL
96-12-8	1,2-Dibromo-3-chloropropane	58	JL
120-82-1	1,2,4-Trichlorobenzene	22	JL
87-68-3	Hexachlorobutadiene	47	JL
87-61-6	1,2,3-Trichlorobenzene	19	JL
91-20-3	Naphthalene	26	JL
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	700	

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7545.D
Report Date: 30-Jan-2014 12:02

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7545.D
Lab Smp Id: N0058-12AMSD Client Smp ID: HW-WET-SE-4-(1)_01/
Inj Date : 22-JAN-2014 21:29
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N0058-12AMSD,,75681
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 30-Jan-2014 11:59 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 29 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.277	1.267	(0.286)	38721	50.0000	29
2	Chloromethane	50	1.414	1.405	(0.317)	288514	50.0000	41
3	Vinyl Chloride	62	1.503	1.503	(0.336)	206444	50.0000	45
4	Bromomethane	94	1.739	1.739	(0.389)	112271	50.0000	36
5	Chloroethane	64	1.818	1.828	(0.407)	196982	50.0000	64
6	Trichlorofluoromethane	101	1.946	1.946	(0.436)	142041	50.0000	43
127	Ethanol	46	2.055	2.055	(0.460)	113529	5000.00	5800
7	Ether	59	2.133	2.143	(0.478)	170294	50.0000	39(Q)
8	Acrolein	56	2.212	2.222	(0.495)	176194	250.000	160
9	1,1-Dichloroethene	96	2.498	2.330	(0.559)	279333	50.0000	84
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.311	2.340	(0.517)	462374	50.0000	190(Q)
11	Acetone	58	2.321	2.321	(0.519)	32200	50.0000	41
12	Iodomethane	142	2.459	2.458	(0.550)	109920	50.0000	28
13	Carbon Disulfide	76	2.537	2.547	(0.568)	342570	50.0000	35
14	Acetonitrile	40	2.508	2.518	(0.561)	211136	500.000	390(Q)
15	Methyl Acetate	43	2.547	2.557	(0.570)	141236	50.0000	19
16	Methylene Chloride	84	2.695	2.715	(0.603)	136767	50.0000	40
17	tert-Butanol	59	2.695	2.705	(0.603)	38110	100.000	100
18	Acrylonitrile	53	2.784	2.793	(0.623)	66083	50.0000	33
20	Methyl tert-butyl ether	73	2.823	2.833	(0.632)	448405	50.0000	40
19	trans-1,2-Dichloroethene	96	2.823	2.833	(0.632)	138749	50.0000	41

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7545.D
Report Date: 30-Jan-2014 12:02

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	21 1,1-Dichloroethane	63	3.118	3.138	(0.698)	952448	50.0000	130
	22 Vinyl acetate	43	3.178	3.187	(0.711)	394491	50.0000	22
	23 Diisopropyl Ether	45	3.178	3.187	(0.711)	988631	50.0000	40
	24 Ethyl tert-butyl ether	59	3.443	3.463	(0.771)	618135	50.0000	41
M	27 1,2-dichloroethene, (Total)	100				289363	100.000	78
	25 cis-1,2-Dichloroethene	96	3.552	3.562	(0.795)	150614	50.0000	38
	26 2,2-Dichloropropane	77	3.552	3.571	(0.795)	94060	50.0000	40
	28 2-Butanone	72	3.552	3.562	(0.795)	21377	50.0000	34
	29 Bromochloromethane	128	3.739	3.749	(0.837)	71575	50.0000	40
	30 Tetrahydrofuran	72	3.778	3.788	(0.846)	40261	100.000	81
	31 Chloroform	83	3.798	3.808	(0.850)	226779	50.0000	37
$	32 Dibromofluoromethane	113	3.916	3.936	(0.877)	132613	50.0000	50
	33 1,1,1-Trichloroethane	97	3.956	3.965	(0.885)	1460865	50.0000	410(A)
	34 Cyclohexane	56	4.005	4.025	(0.896)	300699	50.0000	41
	36 Carbon Tetrachloride	117	4.084	4.103	(0.914)	123666	50.0000	41
	35 1,1-Dichloropropene	110	4.084	4.103	(0.914)	59625	50.0000	38
$	37 1,2-Dichloroethane-d4	102	4.192	4.202	(0.938)	40288	50.0000	62
	38 Benzene	78	4.251	4.261	(0.952)	559921	50.0000	38
	39 1,2-Dichloroethane	62	4.251	4.261	(0.952)	150956	50.0000	37
	40 tert-Amyl methyl ether	73	4.340	4.359	(0.971)	483804	50.0000	41
*	41 Fluorobenzene	96	4.468	4.487	(1.000)	508261	50.0000	
	42 Trichloroethene	130	4.783	4.803	(1.071)	117099	50.0000	38
	43 Methylcyclohexane	83	4.960	4.980	(1.110)	239285	50.0000	39
	44 1,2-Dichloropropane	63	4.970	4.990	(1.112)	159424	50.0000	36
	46 Dibromomethane	93	5.069	5.088	(1.134)	80926	50.0000	35
	47 1,4-Dioxane	88	5.088	5.108	(1.139)	35855	1000.00	1600
	48 Bromodichloromethane	83	5.216	5.226	(1.168)	127317	50.0000	27
	45 2-Chloroethyl vinyl ether	63	5.630	5.512	(1.260)	866	50.0000	8(Q)
	49 cis-1,3-Dichloropropene	75	5.630	5.640	(1.260)	161764	50.0000	25
	50 4-Methyl-2-pentanone	43	5.778	5.788	(1.293)	217941	50.0000	35
$	51 Toluene-d8	98	5.886	5.906	(0.803)	471869	50.0000	50
	52 Toluene	91	5.955	5.965	(1.333)	472749	50.0000	34
	53 trans-1,3-Dichloropropene	75	6.162	6.172	(1.379)	125008	50.0000	24
	54 1,1,2-Trichloroethane	97	6.339	6.349	(1.419)	94474	50.0000	32
	55 Tetrachloroethene	164	6.497	6.517	(0.886)	74565	50.0000	32
	56 1,3-Dichloropropane	76	6.507	6.517	(0.887)	189178	50.0000	34
	57 2-Hexanone	43	6.595	6.605	(0.899)	115351	50.0000	24
	58 Dibromochloromethane	129	6.733	6.743	(0.918)	71256	50.0000	21
	59 1,2-Dibromoethane	107	6.842	6.861	(0.933)	92780	50.0000	30
*	60 Chlorobenzene-d5	117	7.334	7.354	(1.000)	339638	50.0000	
	63 1-Chlorohexane	91	7.364	7.373	(1.004)	168797	50.0000	31
	61 Chlorobenzene	112	7.364	7.383	(1.004)	233226	50.0000	28
	62 1,1,1,2-Tetrachloroethane	131	7.452	7.472	(1.016)	73999	50.0000	25
	64 Ethylbenzene	106	7.492	7.511	(1.021)	128721	50.0000	30
	65 m,p-Xylene	106	7.630	7.639	(1.040)	319976	100.000	59
	66 o-Xylene	106	8.053	8.073	(1.098)	136446	50.0000	26
	67 Styrene	104	8.063	8.083	(1.099)	104729	50.0000	11
	68 Bromoform	173	8.250	8.260	(1.125)	34101	50.0000	17
	69 Isopropylbenzene	105	8.467	8.486	(1.154)	331331	50.0000	25
	126 trans-1,4-Dichloro-2-butene	75	8.536	8.546	(1.164)	14747	50.0000	10
$	70 Bromofluorobenzene	95	8.624	8.644	(1.176)	176918	50.0000	47
	72 Bromobenzene	156	8.782	8.802	(0.887)	57920	50.0000	20
	71 1,1,2,2-Tetrachloroethane	83	8.792	8.811	(0.888)	93384	50.0000	24
	73 1,2,3-Trichloropropane	75	8.831	8.851	(0.892)	91740	50.0000	23

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7545.D
Report Date: 30-Jan-2014 12:02

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	74 n-Propylbenzene	120	8.940	8.949	(0.903)	72755	50.0000	24(Q)
	75 2-Chlorotoluene	126	9.018	9.038	(0.911)	56144	50.0000	20
	76 1,3,5-Trimethylbenzene	105	9.146	9.156	(0.923)	212611	50.0000	21
	77 4-Chlorotoluene	126	9.146	9.156	(0.923)	53317	50.0000	18
	78 tert-Butylbenzene	119	9.501	9.511	(0.959)	210846	50.0000	21
	79 1,2,4-Trimethylbenzene	105	9.550	9.570	(0.964)	193938	50.0000	19
M	81 Xylene (Total)	106				456422	150.000	85
	80 sec-Butylbenzene	105	9.737	9.747	(0.983)	293585	50.0000	22
	82 1,3-Dichlorobenzene	146	9.836	9.846	(0.993)	71518	50.0000	14
	83 4-Isopropyltoluene	119	9.895	9.915	(0.999)	197008	50.0000	20
*	84 1,4-Dichlorobenzene-d4	152	9.905	9.915	(1.000)	138283	50.0000	
	85 1,4-Dichlorobenzene	146	9.925	9.934	(1.002)	70493	50.0000	13
	86 n-Butylbenzene	91	10.318	10.318	(1.042)	174511	50.0000	17
	87 1,2-Dichlorobenzene	146	10.299	10.309	(1.040)	63685	50.0000	13
	88 1,2-Dibromo-3-chloropropane	75	11.047	11.047	(1.115)	7759	50.0000	16
	89 1,2,4-Trichlorobenzene	180	11.806	11.816	(1.192)	16902	50.0000	6
	90 Hexachlorobutadiene	225	11.973	11.983	(1.209)	17144	50.0000	13
	91 Naphthalene	128	12.013	12.022	(1.213)	46636	50.0000	7
	92 1,2,3-Trichlorobenzene	180	12.229	12.229	(1.235)	12053	50.0000	5

QC Flag Legend

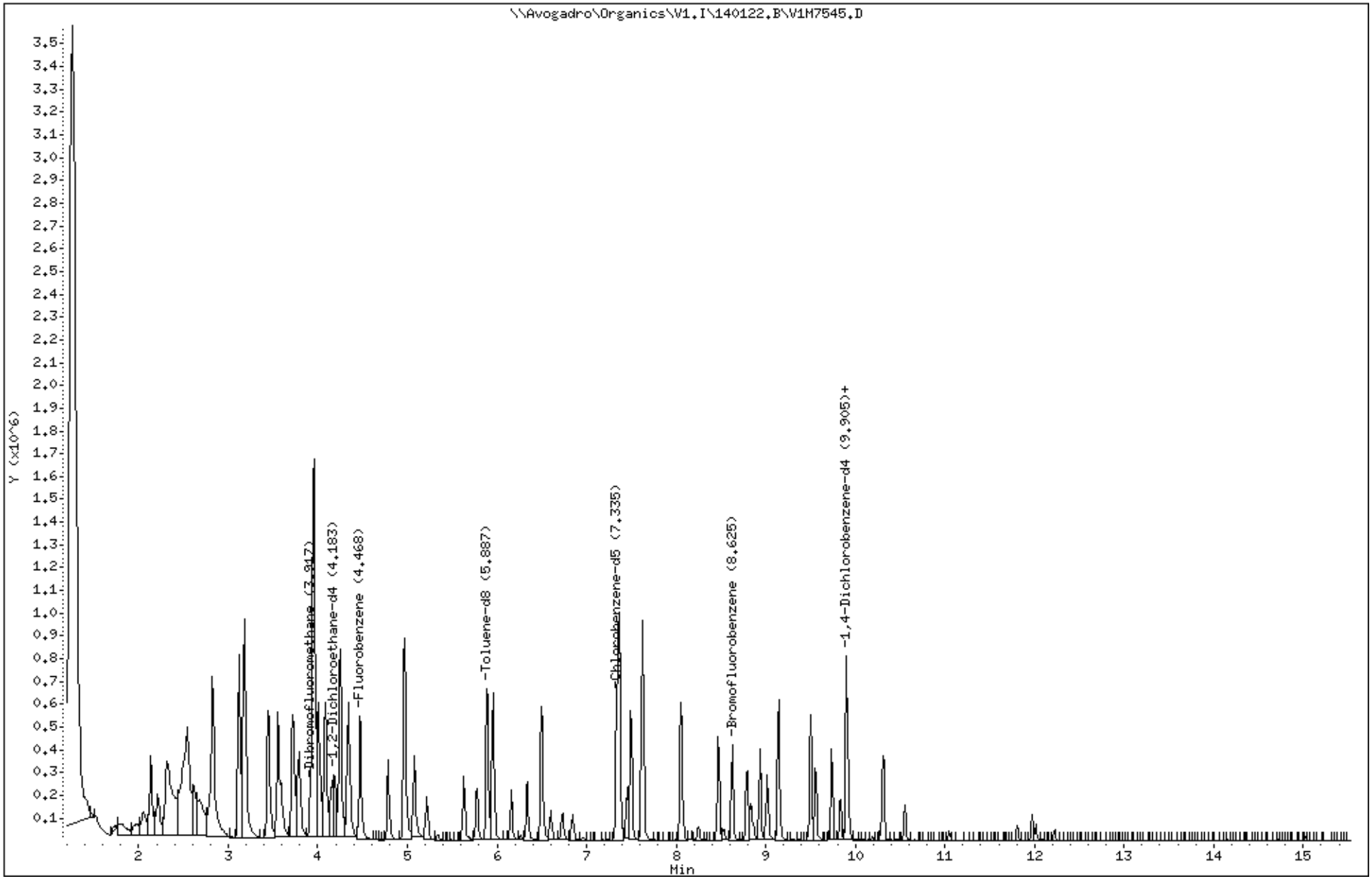
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7545.D
Date : 22-JAN-2014 21:29
Client ID: HW-WET-SE-4-(1)_01/
Sample Info: 5ML,N0058-12AMSD,,75681

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75643

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7474.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/20/2014

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	41	
74-87-3	Chloromethane	55	
75-01-4	Vinyl chloride	58	
74-83-9	Bromomethane	53	
75-00-3	Chloroethane	53	
75-69-4	Trichlorofluoromethane	59	
75-35-4	1,1-Dichloroethene	56	
67-64-1	Acetone	49	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	50	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	48	
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	53	
74-97-5	Bromochloromethane	49	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	55	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75643

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7474.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/20/2014

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	54	
591-78-6	2-Hexanone	54	
124-48-1	Dibromochloromethane	52	
106-93-4	1,2-Dibromoethane	49	
108-90-7	Chlorobenzene	51	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	52	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	52	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	51	
103-65-1	n-Propylbenzene	53	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	52	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	54	
95-63-6	1,2,4-Trimethylbenzene	52	
135-98-8	sec-Butylbenzene	55	
99-87-6	4-Isopropyltoluene	54	
541-73-1	1,3-Dichlorobenzene	52	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	55	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	54	
120-82-1	1,2,4-Trichlorobenzene	52	
87-68-3	Hexachlorobutadiene	54	
87-61-6	1,2,3-Trichlorobenzene	51	
91-20-3	Naphthalene	54	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	54	

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D
Report Date: 30-Jan-2014 10:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7474.D
Lab Smp Id: LCS-75643 Client Smp ID: LCS-75643
Inj Date : 20-JAN-2014 09:51
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCS-75643,LCS-75643,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 30-Jan-2014 10:57 V1.i Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)	
1	Dichlorodifluoromethane	85	1.282	1.258	(0.286)	43470	40.8642	41(M)M7 AM 01/30	
2	Chloromethane	50	1.420	1.416	(0.317)	359998	54.6266	55	
3	Vinyl Chloride	62	1.498	1.505	(0.334)	232786	58.1543	58(Q)	
4	Bromomethane	94	1.735	1.741	(0.387)	147999	53.1468	53	
5	Chloroethane	64	1.823	1.859	(0.407)	147562	52.8064	53	
6	Trichlorofluoromethane	101	1.951	1.958	(0.435)	168225	59.3847	59	
127	Ethanol	46	2.060	2.056	(0.460)	132783	8410.78	8400	
7	Ether	59	2.139	2.135	(0.477)	188572	47.3465	47	
8	Acrolein	56	2.217	2.214	(0.495)	225991	254.617	250	
9	1,1-Dichloroethene	96	2.306	2.302	(0.514)	164826	56.0820	56	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.326	2.322	(0.519)	102760	53.8518	54	
11	Acetone	58	2.316	2.322	(0.517)	37419	49.1938	49	
12	Iodomethane	142	2.464	2.401	(0.550)	174793	55.3620	55(Q)	
13	Carbon Disulfide	76	2.542	2.549	(0.567)	476642	54.3173	54	
14	Acetonitrile	40	2.513	2.509	(0.561)	241212	496.252	500(Q)	
15	Methyl Acetate	43	2.552	2.559	(0.569)	312504	49.3168	49	
16	Methylene Chloride	84	2.690	2.687	(0.600)	144599	49.5710	50(Q)	
17	tert-Butanol	59	2.700	2.696	(0.602)	34967	101.188	100	
18	Acrylonitrile	53	2.789	2.795	(0.622)	86518	49.5811	50	
20	Methyl tert-butyl ether	73	2.828	2.834	(0.631)	489715	48.4006	48	

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D
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							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/Kg)
	19 trans-1,2-Dichloroethene	96	2.828	2.824	(0.631)	164825	52.6524	53
	21 1,1-Dichloroethane	63	3.124	3.130	(0.697)	345380	51.0376	51
	22 Vinyl acetate	43	3.173	3.179	(0.708)	833607	48.7979	49
	23 Diisopropyl Ether	45	3.183	3.179	(0.710)	1114577	48.3056	48
	24 Ethyl tert-butyl ether	59	3.449	3.455	(0.769)	664899	48.6976	49
M	27 1,2-dichloroethene, (Total)	100				351178	103.604	100
	25 cis-1,2-Dichloroethene	96	3.557	3.563	(0.793)	186353	51.0726	51
	26 2,2-Dichloropropane	77	3.567	3.563	(0.796)	113619	52.6035	53
	28 2-Butanone	72	3.557	3.563	(0.793)	30213	53.0517	53(Q)
	29 Bromochloromethane	128	3.734	3.740	(0.833)	80055	49.4198	49
	30 Tetrahydrofuran	72	3.774	3.780	(0.842)	42455	99.2824	99
	31 Chloroform	83	3.803	3.800	(0.848)	284546	50.3143	50
$	32 Dibromofluoromethane	113	3.921	3.918	(0.875)	138474	50.4333	50
	33 1,1,1-Trichloroethane	97	3.961	3.957	(0.884)	173478	53.2579	53
	34 Cyclohexane	56	4.010	4.016	(0.895)	317249	49.6459	50(Q)
	36 Carbon Tetrachloride	117	4.099	4.095	(0.914)	155268	55.0873	55
	35 1,1-Dichloropropene	110	4.089	4.085	(0.912)	69976	51.1475	51
$	37 1,2-Dichloroethane-d4	102	4.197	4.194	(0.936)	33636	45.9951	46
	38 Benzene	78	4.256	4.253	(0.949)	695341	52.0581	52
	39 1,2-Dichloroethane	62	4.256	4.253	(0.949)	188493	49.5722	50
	40 tert-Amyl methyl ether	73	4.345	4.351	(0.969)	520835	48.3535	48
*	41 Fluorobenzene	96	4.483	4.479	(1.000)	535014	50.0000	
	42 Trichloroethene	130	4.798	4.794	(1.070)	144927	52.1223	52
	43 Methylcyclohexane	83	4.975	4.972	(1.110)	313847	56.3911	56
	44 1,2-Dichloropropane	63	4.975	4.972	(1.110)	201854	48.4150	48
	46 Dibromomethane	93	5.084	5.070	(1.134)	101953	51.0493	51
	47 1,4-Dioxane	88	5.093	5.090	(1.136)	34328	1992.72	2000(R)
	48 Bromodichloromethane	83	5.221	5.218	(1.165)	215658	49.6746	50
	45 2-Chloroethyl vinyl ether	63	5.497	5.494	(1.226)	8380	17.4238	17(R)
	49 cis-1,3-Dichloropropene	75	5.635	5.632	(1.257)	288057	51.1262	51
	50 4-Methyl-2-pentanone	43	5.773	5.779	(1.288)	271058	50.3935	50
$	51 Toluene-d8	98	5.891	5.888	(0.803)	493632	49.7757	50
	52 Toluene	91	5.960	5.957	(1.330)	654586	51.3963	51
	53 trans-1,3-Dichloropropene	75	6.167	6.154	(1.376)	232557	50.9969	51
	54 1,1,2-Trichloroethane	97	6.344	6.341	(1.415)	138209	52.2066	52
	55 Tetrachloroethene	164	6.502	6.498	(0.886)	112954	53.7250	54
	56 1,3-Dichloropropane	76	6.512	6.508	(0.887)	263224	50.8739	51
	57 2-Hexanone	43	6.600	6.597	(0.899)	238343	54.4556	54
	58 Dibromochloromethane	129	6.738	6.735	(0.918)	152553	51.8416	52
	59 1,2-Dibromoethane	107	6.857	6.843	(0.934)	139321	49.2088	49
*	60 Chlorobenzene-d5	117	7.339	7.336	(1.000)	353927	50.0000	
	63 1-Chlorohexane	91	7.369	7.365	(1.004)	268657	54.3246	54
	61 Chlorobenzene	112	7.379	7.365	(1.005)	386998	51.2619	51
	62 1,1,1,2-Tetrachloroethane	131	7.457	7.454	(1.016)	131599	49.9823	50
	64 Ethylbenzene	106	7.507	7.503	(1.023)	204648	52.4086	52
	65 m,p-Xylene	106	7.635	7.631	(1.040)	515743	103.701	100
	66 o-Xylene	106	8.058	8.055	(1.098)	251375	51.6194	52
	67 Styrene	104	8.078	8.074	(1.101)	443319	52.3087	52
	68 Bromoform	173	8.255	8.252	(1.125)	88476	52.0703	52
	69 Isopropylbenzene	105	8.482	8.468	(1.156)	656831	54.2779	54
	126 trans-1,4-Dichloro-2-butene	75	8.541	8.537	(1.164)	62813	55.5056	56
$	70 Bromofluorobenzene	95	8.629	8.626	(1.176)	192606	49.8311	50
	72 Bromobenzene	156	8.797	8.793	(0.888)	139013	49.4661	49
	71 1,1,2,2-Tetrachloroethane	83	8.797	8.793	(0.888)	183222	49.5579	50

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D
Report Date: 30-Jan-2014 10:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
73	1,2,3-Trichloropropane	75	8.846	8.843	(0.893)	203110	51.1434	51
74	n-Propylbenzene	120	8.945	8.941	(0.903)	157858	52.8204	53
75	2-Chlorotoluene	126	9.023	9.020	(0.911)	138488	51.4860	51
76	1,3,5-Trimethylbenzene	105	9.151	9.148	(0.923)	533732	52.4363	52
77	4-Chlorotoluene	126	9.151	9.148	(0.923)	139084	49.8875	50
78	tert-Butylbenzene	119	9.506	9.502	(0.959)	527490	53.7101	54
79	1,2,4-Trimethylbenzene	105	9.565	9.562	(0.965)	529121	51.7417	52
M 81	Xylene (Total)	106				767118	155.320	160
80	sec-Butylbenzene	105	9.742	9.739	(0.983)	716864	54.5219	54
82	1,3-Dichlorobenzene	146	9.841	9.837	(0.993)	256995	51.7562	52
83	4-Isopropyltoluene	119	9.910	9.906	(1.000)	542077	54.2500	54
* 84	1,4-Dichlorobenzene-d4	152	9.910	9.906	(1.000)	150099	50.0000	
85	1,4-Dichlorobenzene	146	9.930	9.926	(1.002)	258299	51.2634	51
86	n-Butylbenzene	91	10.324	10.320	(1.042)	555519	54.5156	54
87	1,2-Dichlorobenzene	146	10.304	10.300	(1.040)	236333	50.7286	51
88	1,2-Dibromo-3-chloropropane	75	11.052	11.049	(1.115)	23042	53.5435	54
89	1,2,4-Trichlorobenzene	180	11.811	11.817	(1.192)	143803	52.1260	52
90	Hexachlorobutadiene	225	11.978	11.985	(1.209)	72862	54.2871	54
91	Naphthalene	128	12.018	12.024	(1.213)	322322	53.7025	54
92	1,2,3-Trichlorobenzene	180	12.234	12.231	(1.235)	114821	51.3275	51

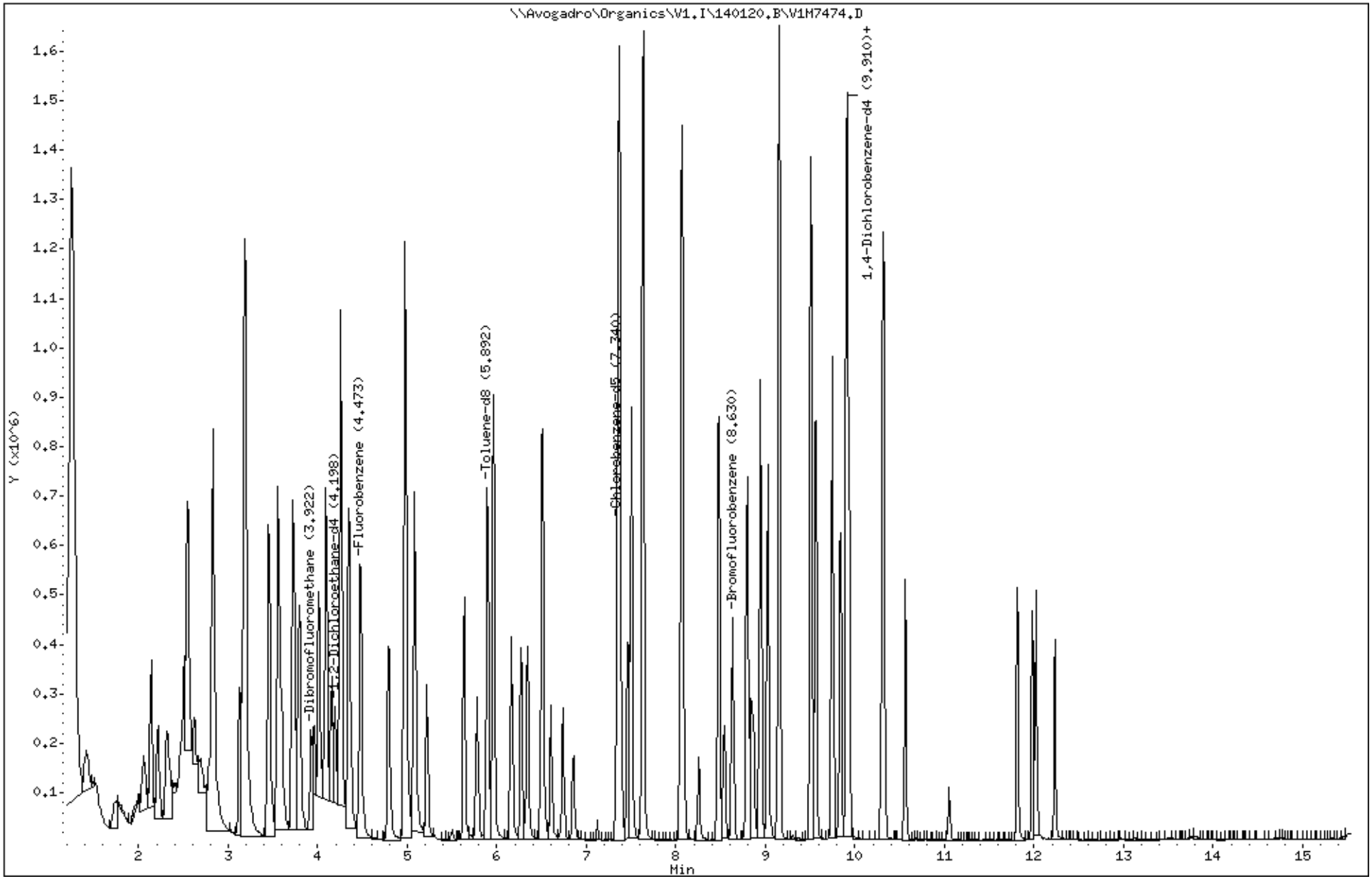
QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D
Date : 20-JAN-2014 09:51
Client ID: LCS-75643
Sample Info: 5ML,LCS-75643,LCS-75643,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D

Date : 20-JAN-2014 09:51

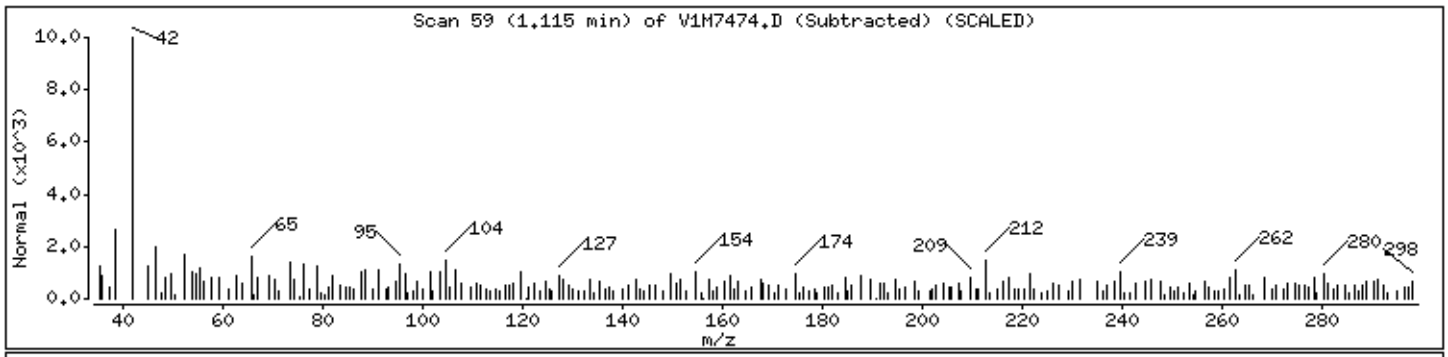
Client ID: LCS-75643 Instrument: V1.i

Sample Info: 5ML,LCS-75643,LCS-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D

Date : 20-JAN-2014 09:51

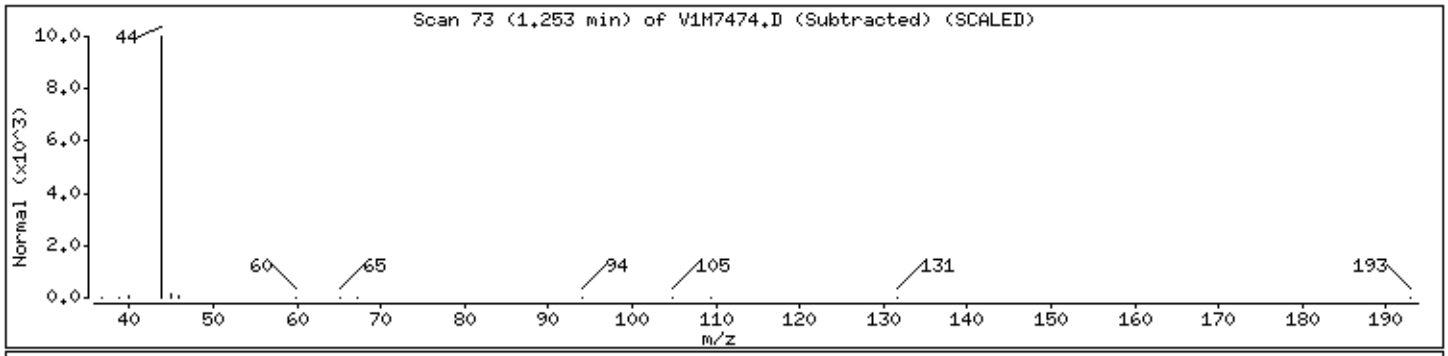
Client ID: LCS-75643 Instrument: V1.i

Sample Info: 5ML,LCS-75643,LCS-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D

Date : 20-JAN-2014 09:51

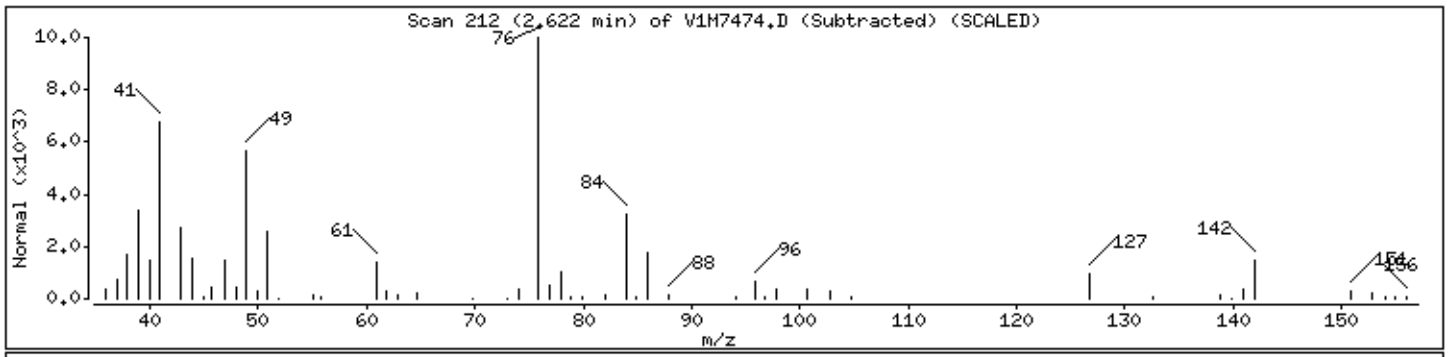
Client ID: LCS-75643 Instrument: V1.i

Sample Info: 5ML,LCS-75643,LCS-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D

Date : 20-JAN-2014 09:51

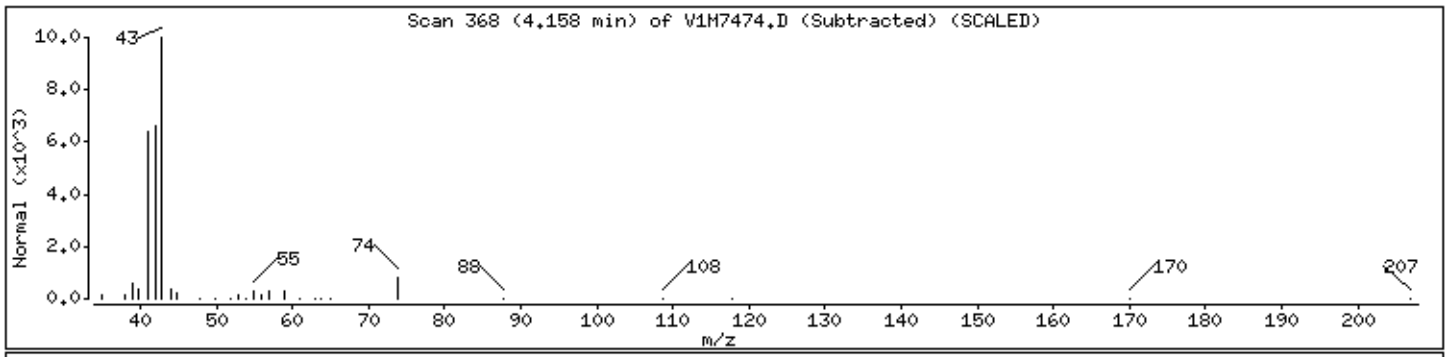
Client ID: LCS-75643 Instrument: V1.i

Sample Info: 5ML,LCS-75643,LCS-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D

Date : 20-JAN-2014 09:51

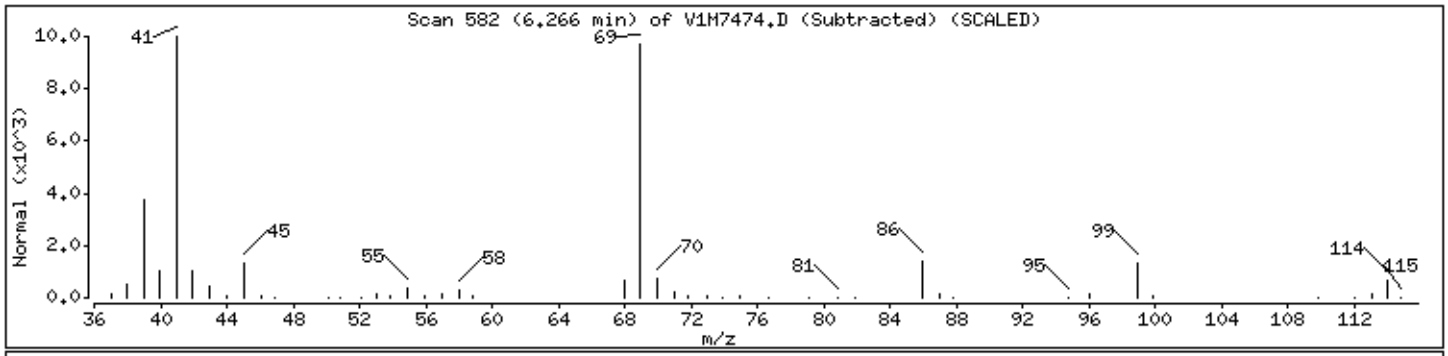
Client ID: LCS-75643 Instrument: V1.i

Sample Info: 5ML,LCS-75643,LCS-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7474.D

Date : 20-JAN-2014 09:51

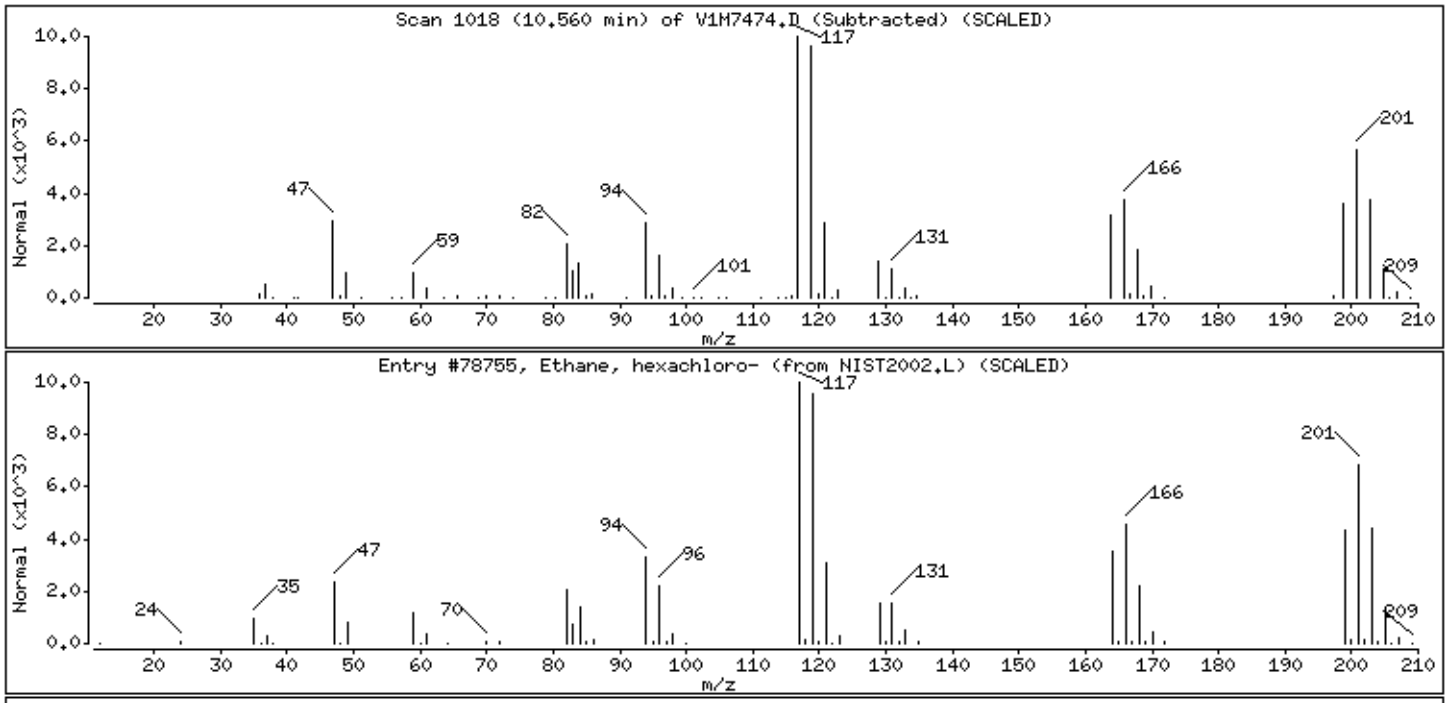
Client ID: LCS-75643 Instrument: V1.i

Sample Info: 5ML,LCS-75643,LCS-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, hexachloro-	67-72-1	NIST2002.L	78755	93	C2C16	234



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75665

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7503.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/21/2014

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	50	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	51	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	50	
67-64-1	Acetone	36	
74-88-4	Iodomethane	48	
75-15-0	Carbon disulfide	48	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	45	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	43	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	47	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	47	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	49	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75665

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75665

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7503.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/21/2014

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	48	
591-78-6	2-Hexanone	46	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	49	
108-90-7	Chlorobenzene	49	
630-20-6	1,1,1,2-Tetrachloroethane	47	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	97	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	48	
75-25-2	Bromoform	49	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	47	
108-86-1	Bromobenzene	46	
96-18-4	1,2,3-Trichloropropane	51	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	52	
91-20-3	Naphthalene	50	B
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	55	

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7503.D
Report Date: 31-Jan-2014 10:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140121.B\V1M7503.D
Lab Smp Id: LCS-75665 Client Smp ID: LCS-75665
Inj Date : 21-JAN-2014 16:28
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCS-75665,LCS-75665,75665
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140121.B\v18260GH.m
Meth Date : 31-Jan-2014 09:49 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 18 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.268	1.273	(0.284)	62313	50.0000	47(M)M7 AM 01/31	
2	Chloromethane	50	1.396	1.401	(0.312)	350490	50.0000	50	
3	Vinyl Chloride	62	1.485	1.480	(0.332)	230311	50.0000	50	
4	Bromomethane	94	1.721	1.716	(0.385)	156891	50.0000	51	
5	Chloroethane	64	1.830	1.825	(0.409)	154691	50.0000	51	
6	Trichlorofluoromethane	101	1.938	1.943	(0.434)	167027	50.0000	51	
127	Ethanol	46	2.046	2.041	(0.458)	154414	5000.00	7900	
7	Ether	59	2.125	2.130	(0.476)	208705	50.0000	48	
8	Acrolein	56	2.204	2.209	(0.493)	254253	250.000	240	
9	1,1-Dichloroethene	96	2.322	2.327	(0.520)	165426	50.0000	50	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.303	2.307	(0.515)	128807	50.0000	54	
11	Acetone	58	2.303	2.307	(0.515)	28324	50.0000	36(Q)	
12	Iodomethane	142	2.450	2.455	(0.548)	190769	50.0000	48	
13	Carbon Disulfide	76	2.529	2.534	(0.566)	466029	50.0000	48	
14	Acetonitrile	40	2.500	2.494	(0.559)	269134	500.000	500(Q)	
15	Methyl Acetate	43	2.539	2.544	(0.568)	350972	50.0000	49	
16	Methylene Chloride	84	2.677	2.681	(0.599)	154448	50.0000	46	
17	tert-Butanol	59	2.687	2.681	(0.601)	41005	100.000	110	
18	Acrylonitrile	53	2.775	2.780	(0.621)	99152	50.0000	50	
20	Methyl tert-butyl ether	73	2.815	2.819	(0.630)	549815	50.0000	50	
19	trans-1,2-Dichloroethene	96	2.815	2.819	(0.630)	153123	50.0000	45	

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7503.D
Report Date: 31-Jan-2014 10:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
21	1,1-Dichloroethane	63	3.110	3.115	(0.696)	360812	50.0000	50
22	Vinyl acetate	43	3.169	3.164	(0.709)	894749	50.0000	49
23	Diisopropyl Ether	45	3.169	3.174	(0.709)	1211748	50.0000	50
24	Ethyl tert-butyl ether	59	3.445	3.440	(0.771)	734277	50.0000	50
M 27	1,2-dichloroethene, (Total)	100				347962	100.000	95
25	cis-1,2-Dichloroethene	96	3.544	3.548	(0.793)	194839	50.0000	49
26	2,2-Dichloropropane	77	3.553	3.558	(0.795)	115594	50.0000	49
28	2-Butanone	72	3.544	3.548	(0.793)	26645	50.0000	43
29	Bromochloromethane	128	3.731	3.735	(0.835)	88954	50.0000	50
30	Tetrahydrofuran	72	3.770	3.775	(0.844)	48867	100.000	99
31	Chloroform	83	3.790	3.795	(0.848)	291860	50.0000	48
$ 32	Dibromofluoromethane	113	3.918	3.913	(0.877)	131883	50.0000	51
33	1,1,1-Trichloroethane	97	3.947	3.952	(0.883)	178460	50.0000	50
34	Cyclohexane	56	3.997	4.001	(0.894)	323013	50.0000	45
36	Carbon Tetrachloride	117	4.085	4.090	(0.914)	152577	50.0000	51
35	1,1-Dichloropropene	110	4.075	4.080	(0.912)	72539	50.0000	47
$ 37	1,2-Dichloroethane-d4	102	4.184	4.187	(0.936)	38313	50.0000	59
38	Benzene	78	4.243	4.248	(0.949)	722112	50.0000	50
39	1,2-Dichloroethane	62	4.243	4.248	(0.949)	201145	50.0000	49
40	tert-Amyl methyl ether	73	4.341	4.336	(0.971)	572494	50.0000	50
* 41	Fluorobenzene	96	4.469	4.474	(1.000)	503453	50.0000	
42	Trichloroethene	130	4.785	4.779	(1.071)	150369	50.0000	49
43	Methylcyclohexane	83	4.962	4.967	(1.110)	302282	50.0000	50
44	1,2-Dichloropropane	63	4.972	4.967	(1.112)	220368	50.0000	50
46	Dibromomethane	93	5.070	5.075	(1.134)	106877	50.0000	47
47	1,4-Dioxane	88	5.090	5.085	(1.139)	43027	1000.00	1900
48	Bromodichloromethane	83	5.208	5.213	(1.165)	234918	50.0000	50
45	2-Chloroethyl vinyl ether	63	5.484	5.489	(1.227)	3957	50.0000	39
49	cis-1,3-Dichloropropene	75	5.622	5.627	(1.258)	309267	50.0000	49
50	4-Methyl-2-pentanone	43	5.770	5.774	(1.291)	301549	50.0000	49
$ 51	Toluene-d8	98	5.888	5.892	(0.803)	484366	50.0000	50
52	Toluene	91	5.947	5.952	(1.331)	674135	50.0000	50
53	trans-1,3-Dichloropropene	75	6.154	6.149	(1.377)	253903	50.0000	50
54	1,1,2-Trichloroethane	97	6.331	6.336	(1.416)	144013	50.0000	49
55	Tetrachloroethene	164	6.498	6.493	(0.886)	115823	50.0000	48
56	1,3-Dichloropropane	76	6.498	6.493	(0.886)	278243	50.0000	48
57	2-Hexanone	43	6.597	6.592	(0.899)	227771	50.0000	46
58	Dibromochloromethane	129	6.725	6.730	(0.917)	165470	50.0000	47
59	1,2-Dibromoethane	107	6.843	6.838	(0.933)	156549	50.0000	48
* 60	Chlorobenzene-d5	117	7.336	7.331	(1.000)	349577	50.0000	
63	1-Chlorohexane	91	7.355	7.360	(1.003)	266905	50.0000	48(Q)
61	Chlorobenzene	112	7.365	7.360	(1.004)	420647	50.0000	49
62	1,1,1,2-Tetrachloroethane	131	7.454	7.449	(1.016)	140724	50.0000	47
64	Ethylbenzene	106	7.493	7.488	(1.021)	215208	50.0000	48
65	m,p-Xylene	106	7.621	7.616	(1.039)	537971	100.000	97
66	o-Xylene	106	8.045	8.050	(1.097)	268125	50.0000	49
67	Styrene	104	8.065	8.058	(1.099)	463637	50.0000	48
68	Bromoform	173	8.242	8.247	(1.124)	103487	50.0000	49
69	Isopropylbenzene	105	8.468	8.462	(1.154)	664369	50.0000	48
126	trans-1,4-Dichloro-2-butene	75	8.527	8.532	(1.162)	74756	50.0000	48
$ 70	Bromofluorobenzene	95	8.616	8.621	(1.175)	191886	50.0000	50
72	Bromobenzene	156	8.784	8.778	(0.888)	149763	50.0000	46
71	1,1,2,2-Tetrachloroethane	83	8.793	8.788	(0.889)	207222	50.0000	47
73	1,2,3-Trichloropropane	75	8.833	8.828	(0.893)	227856	50.0000	51

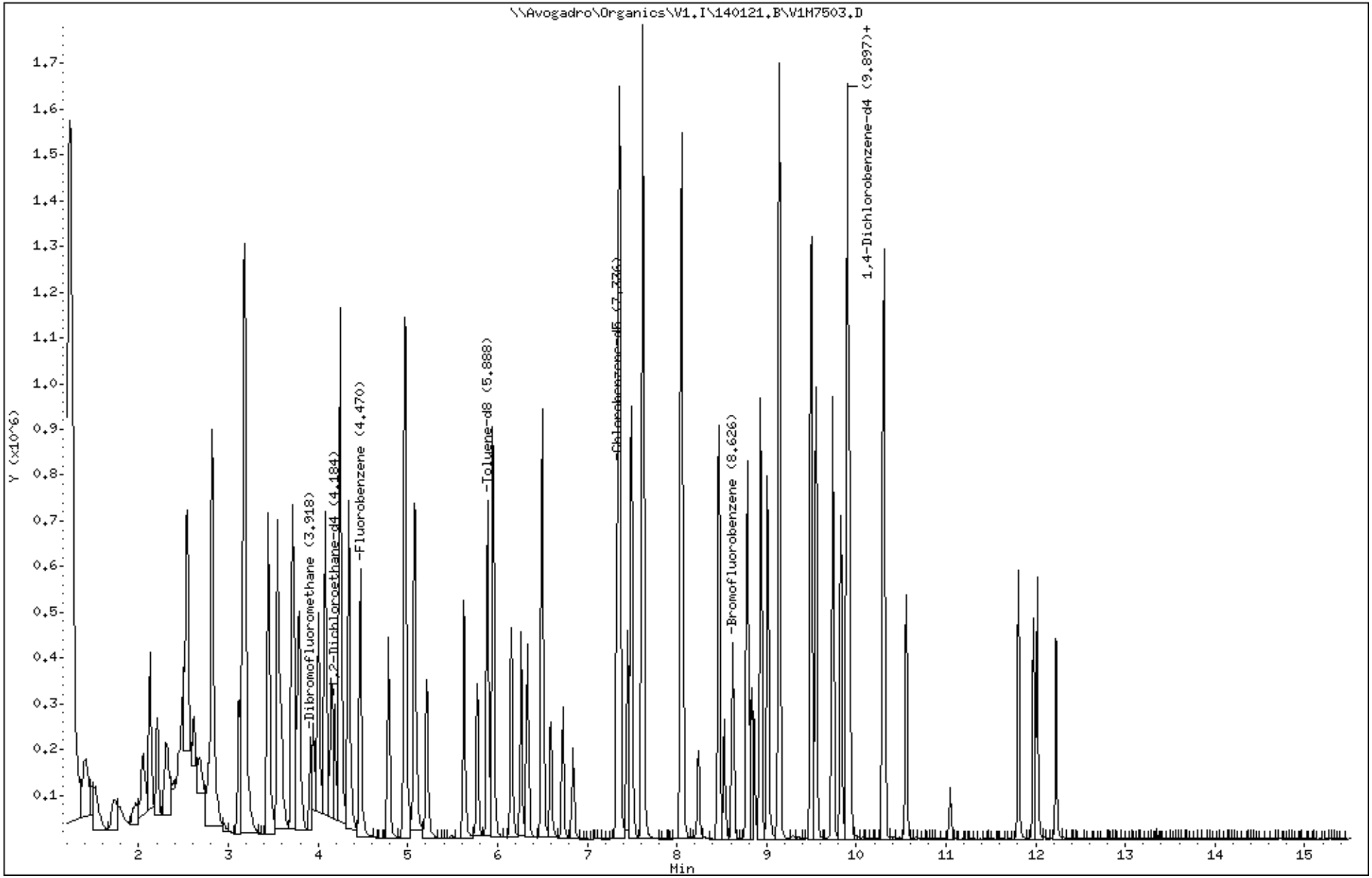
Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7503.D
Report Date: 31-Jan-2014 10:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	74 n-Propylbenzene	120	8.931	8.936	(0.902)	158485	50.0000	48	
	75 2-Chlorotoluene	126	9.010	9.015	(0.910)	143211	50.0000	46	
	76 1,3,5-Trimethylbenzene	105	9.138	9.143	(0.923)	547698	50.0000	48	
	77 4-Chlorotoluene	126	9.138	9.143	(0.923)	151174	50.0000	47	
	78 tert-Butylbenzene	119	9.503	9.497	(0.960)	537764	50.0000	49	
	79 1,2,4-Trimethylbenzene	105	9.552	9.547	(0.965)	555053	50.0000	48	
M	81 Xylene (Total)	106				806096	150.000	140	
	80 sec-Butylbenzene	105	9.739	9.734	(0.984)	722241	50.0000	48	
	82 1,3-Dichlorobenzene	146	9.828	9.832	(0.993)	272815	50.0000	48	
	83 4-Isopropyltoluene	119	9.897	9.901	(1.000)	549658	50.0000	50	
*	84 1,4-Dichlorobenzene-d4	152	9.897	9.901	(1.000)	153999	50.0000		(Q)
	85 1,4-Dichlorobenzene	146	9.926	9.921	(1.003)	275858	50.0000	47	
	86 n-Butylbenzene	91	10.310	10.315	(1.042)	567320	50.0000	50	
	87 1,2-Dichlorobenzene	146	10.300	10.295	(1.041)	259571	50.0000	48	
	88 1,2-Dibromo-3-chloropropane	75	11.049	11.044	(1.116)	23956	50.0000	44	
	89 1,2,4-Trichlorobenzene	180	11.807	11.802	(1.193)	153853	50.0000	49	
	90 Hexachlorobutadiene	225	11.975	11.970	(1.210)	77059	50.0000	52	
	91 Naphthalene	128	12.014	12.009	(1.214)	367577	50.0000	50	
	92 1,2,3-Trichlorobenzene	180	12.231	12.226	(1.236)	134980	50.0000	52	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140121.B\V1M7503.D
Date : 21-JAN-2014 16:28
Client ID: LCS-75665
Instrument: V1.i
Sample Info: 5ML,LCS-75665,LCS-75665,75665
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75681

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7523.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	50	
74-87-3	Chloromethane	56	
75-01-4	Vinyl chloride	55	
74-83-9	Bromomethane	54	
75-00-3	Chloroethane	53	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	54	
67-64-1	Acetone	51	
74-88-4	Iodomethane	44	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	49	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	54	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	55	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	57	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	49	
74-95-3	Dibromomethane	50	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	51	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	48	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75681

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75681

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7523.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	60	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	54	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	52	
75-25-2	Bromoform	51	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	52	
96-18-4	1,2,3-Trichloropropane	54	
103-65-1	n-Propylbenzene	54	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	52	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	53	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	54	
99-87-6	4-Isopropyltoluene	55	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	56	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	61	
120-82-1	1,2,4-Trichlorobenzene	53	
87-68-3	Hexachlorobutadiene	54	
87-61-6	1,2,3-Trichlorobenzene	52	
91-20-3	Naphthalene	50	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	41	

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7523.D
Report Date: 30-Jan-2014 12:02

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140122.B\V1M7523.D
Lab Smp Id: LCS-75681 Client Smp ID: LCS-75681
Inj Date : 22-JAN-2014 12:05
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCS-75681,LCS-75681,75681
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140122.B\v18260GH.m
Meth Date : 30-Jan-2014 11:59 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 8 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.274	1.267	(0.284)	67221	50.0000	50(M)M7 AM 01/30	
2	Chloromethane	50	1.402	1.405	(0.312)	397686	50.0000	56	
3	Vinyl Chloride	62	1.491	1.503	(0.332)	256951	50.0000	55	
4	Bromomethane	94	1.737	1.739	(0.386)	168143	50.0000	54	
5	Chloroethane	64	1.806	1.828	(0.402)	162884	50.0000	53	
6	Trichlorofluoromethane	101	1.944	1.946	(0.433)	182163	50.0000	55	
127	Ethanol	46	2.052	2.055	(0.457)	130275	5000.00	6600	
7	Ether	59	2.141	2.143	(0.476)	213685	50.0000	48	
8	Acrolein	56	2.220	2.222	(0.494)	264839	250.000	250	
9	1,1-Dichloroethene	96	2.328	2.330	(0.518)	178635	50.0000	54	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.338	2.340	(0.520)	98457	50.0000	41(Q)	
11	Acetone	58	2.318	2.321	(0.516)	40212	50.0000	51(Q)	
12	Iodomethane	142	2.466	2.458	(0.549)	176550	50.0000	44	
13	Carbon Disulfide	76	2.545	2.547	(0.566)	525811	50.0000	54	
14	Acetonitrile	40	2.515	2.518	(0.560)	266071	500.000	480(Q)	
15	Methyl Acetate	43	2.554	2.557	(0.568)	363450	50.0000	50	
16	Methylene Chloride	84	2.692	2.715	(0.599)	164869	50.0000	48	
17	tert-Butanol	59	2.702	2.705	(0.601)	39021	100.000	100	
18	Acrylonitrile	53	2.801	2.793	(0.623)	101303	50.0000	50	
20	Methyl tert-butyl ether	73	2.840	2.833	(0.632)	553175	50.0000	49	
19	trans-1,2-Dichloroethene	96	2.830	2.833	(0.630)	181100	50.0000	53	

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7523.D
Report Date: 30-Jan-2014 12:02

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	21 1,1-Dichloroethane	63	3.136	3.138	(0.698)	368256	50.0000	50
	22 Vinyl acetate	43	3.185	3.187	(0.709)	896151	50.0000	49
	23 Diisopropyl Ether	45	3.195	3.187	(0.711)	1206027	50.0000	49
	24 Ethyl tert-butyl ether	59	3.470	3.463	(0.772)	745050	50.0000	50
M	27 1,2-dichloroethene, (Total)	100				385953	100.000	100
	25 cis-1,2-Dichloroethene	96	3.569	3.562	(0.794)	204853	50.0000	51
	26 2,2-Dichloropropane	77	3.569	3.571	(0.794)	128217	50.0000	54
	28 2-Butanone	72	3.569	3.562	(0.794)	32106	50.0000	51
	29 Bromochloromethane	128	3.756	3.749	(0.836)	86034	50.0000	48
	30 Tetrahydrofuran	72	3.795	3.788	(0.844)	53341	100.000	110
	31 Chloroform	83	3.815	3.808	(0.849)	307536	50.0000	50
$	32 Dibromofluoromethane	113	3.933	3.936	(0.875)	131986	50.0000	50
	33 1,1,1-Trichloroethane	97	3.973	3.965	(0.884)	197744	50.0000	55
	34 Cyclohexane	56	4.022	4.025	(0.895)	410849	50.0000	56
	36 Carbon Tetrachloride	117	4.111	4.103	(0.915)	174232	50.0000	57
	35 1,1-Dichloropropene	110	4.101	4.103	(0.912)	82909	50.0000	53
$	37 1,2-Dichloroethane-d4	102	4.209	4.202	(0.936)	34492	50.0000	52
	38 Benzene	78	4.268	4.261	(0.950)	751821	50.0000	51
	39 1,2-Dichloroethane	62	4.268	4.261	(0.950)	198990	50.0000	48
	40 tert-Amyl methyl ether	73	4.367	4.359	(0.972)	571951	50.0000	49
*	41 Fluorobenzene	96	4.495	4.487	(1.000)	510174	50.0000	
	42 Trichloroethene	130	4.810	4.803	(1.070)	159980	50.0000	51
	43 Methylcyclohexane	83	4.987	4.980	(1.110)	342397	50.0000	56
	44 1,2-Dichloropropane	63	4.997	4.990	(1.112)	217424	50.0000	49
	46 Dibromomethane	93	5.096	5.088	(1.134)	113467	50.0000	50
	47 1,4-Dioxane	88	5.115	5.108	(1.138)	34809	1000.00	1500
	48 Bromodichloromethane	83	5.233	5.226	(1.164)	234788	50.0000	50
	45 2-Chloroethyl vinyl ether	63	5.509	5.512	(1.226)	4293	50.0000	42
	49 cis-1,3-Dichloropropene	75	5.647	5.640	(1.256)	309856	50.0000	48
	50 4-Methyl-2-pentanone	43	5.795	5.788	(1.289)	319177	50.0000	51
$	51 Toluene-d8	98	5.913	5.906	(0.804)	480987	50.0000	52
	52 Toluene	91	5.972	5.965	(1.329)	707399	50.0000	51
	53 trans-1,3-Dichloropropene	75	6.179	6.172	(1.375)	251840	50.0000	48
	54 1,1,2-Trichloroethane	97	6.356	6.349	(1.414)	145578	50.0000	49
	55 Tetrachloroethene	164	6.514	6.517	(0.886)	125558	50.0000	55
	56 1,3-Dichloropropane	76	6.524	6.517	(0.887)	286379	50.0000	52
	57 2-Hexanone	43	6.612	6.605	(0.900)	280410	50.0000	60
	58 Dibromochloromethane	129	6.750	6.743	(0.918)	166108	50.0000	50
	59 1,2-Dibromoethane	107	6.859	6.861	(0.933)	154212	50.0000	50
*	60 Chlorobenzene-d5	117	7.351	7.354	(1.000)	334265	50.0000	
	63 1-Chlorohexane	91	7.381	7.373	(1.004)	295144	50.0000	56
	61 Chlorobenzene	112	7.381	7.383	(1.004)	423003	50.0000	52
	62 1,1,1,2-Tetrachloroethane	131	7.469	7.472	(1.016)	147500	50.0000	51
	64 Ethylbenzene	106	7.509	7.511	(1.021)	228148	50.0000	54
	65 m,p-Xylene	106	7.647	7.639	(1.040)	577632	100.000	110
	66 o-Xylene	106	8.070	8.073	(1.098)	272503	50.0000	52
	67 Styrene	104	8.090	8.083	(1.100)	479424	50.0000	52
	68 Bromoform	173	8.267	8.260	(1.125)	103223	50.0000	51
	69 Isopropylbenzene	105	8.494	8.486	(1.155)	710273	50.0000	54
	126 trans-1,4-Dichloro-2-butene	75	8.553	8.546	(1.163)	75889	50.0000	52
$	70 Bromofluorobenzene	95	8.641	8.644	(1.176)	187526	50.0000	51
	72 Bromobenzene	156	8.799	8.802	(0.887)	162612	50.0000	52
	71 1,1,2,2-Tetrachloroethane	83	8.809	8.811	(0.888)	209787	50.0000	50
	73 1,2,3-Trichloropropane	75	8.848	8.851	(0.892)	234181	50.0000	54

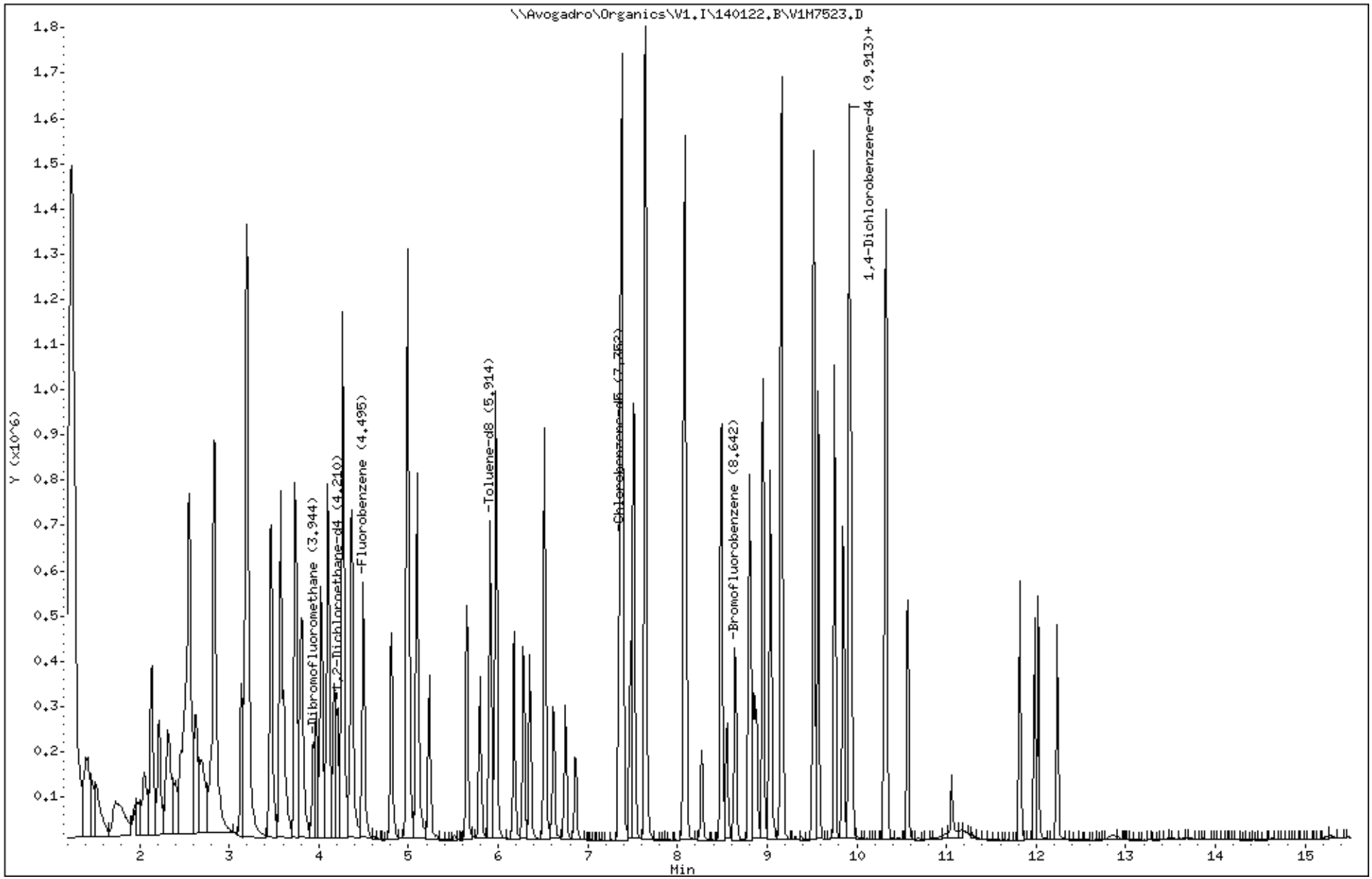
Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7523.D
Report Date: 30-Jan-2014 12:02

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74	n-Propylbenzene	120	8.957	8.949	(0.903)	172177	50.0000	54
	75	2-Chlorotoluene	126	9.035	9.038	(0.911)	147911	50.0000	50
	76	1,3,5-Trimethylbenzene	105	9.163	9.156	(0.924)	569100	50.0000	52
	77	4-Chlorotoluene	126	9.154	9.156	(0.923)	156766	50.0000	50
	78	tert-Butylbenzene	119	9.518	9.511	(0.959)	566119	50.0000	53
	79	1,2,4-Trimethylbenzene	105	9.567	9.570	(0.964)	566560	50.0000	51
M	81	Xylene (Total)	106				850135	150.000	160
	80	sec-Butylbenzene	105	9.754	9.747	(0.983)	770580	50.0000	54
	82	1,3-Dichlorobenzene	146	9.843	9.846	(0.992)	281144	50.0000	51
	83	4-Isopropyltoluene	119	9.912	9.915	(0.999)	584928	50.0000	55
*	84	1,4-Dichlorobenzene-d4	152	9.922	9.915	(1.000)	148238	50.0000	
	85	1,4-Dichlorobenzene	146	9.942	9.934	(1.002)	284403	50.0000	51
	86	n-Butylbenzene	91	10.326	10.318	(1.041)	606341	50.0000	56
	87	1,2-Dichlorobenzene	146	10.316	10.309	(1.040)	252676	50.0000	48
	88	1,2-Dibromo-3-chloropropane	75	11.055	11.047	(1.114)	31724	50.0000	61
	89	1,2,4-Trichlorobenzene	180	11.813	11.816	(1.191)	159163	50.0000	53
	90	Hexachlorobutadiene	225	11.980	11.983	(1.207)	77104	50.0000	54
	91	Naphthalene	128	12.020	12.022	(1.211)	356371	50.0000	50
	92	1,2,3-Trichlorobenzene	180	12.237	12.229	(1.233)	131615	50.0000	52

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140122.B\V1M7523.D
Date : 22-JAN-2014 12:05
Client ID: LCS-75681
Instrument: V1.i
Sample Info: 5ML,LCS-75681,LCS-75681,75681
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75683

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5O9552.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	2000	
74-87-3	Chloromethane	2000	
75-01-4	Vinyl chloride	2000	
74-83-9	Bromomethane	1700	
75-00-3	Chloroethane	1900	
75-69-4	Trichlorofluoromethane	2300	
75-35-4	1,1-Dichloroethene	2200	
67-64-1	Acetone	2900	
74-88-4	Iodomethane	2400	
75-15-0	Carbon disulfide	2100	
75-09-2	Methylene chloride	2300	
156-60-5	trans-1,2-Dichloroethene	2300	
1634-04-4	Methyl tert-butyl ether	2400	
75-34-3	1,1-Dichloroethane	2300	
108-05-4	Vinyl acetate	2300	
78-93-3	2-Butanone	2700	
156-59-2	cis-1,2-Dichloroethene	2200	
594-20-7	2,2-Dichloropropane	2100	
74-97-5	Bromochloromethane	2400	
67-66-3	Chloroform	2300	
71-55-6	1,1,1-Trichloroethane	2200	
563-58-6	1,1-Dichloropropene	2100	
56-23-5	Carbon tetrachloride	2300	
107-06-2	1,2-Dichloroethane	2400	
71-43-2	Benzene	2300	
79-01-6	Trichloroethene	2300	
78-87-5	1,2-Dichloropropane	2200	
74-95-3	Dibromomethane	2600	
75-27-4	Bromodichloromethane	2300	
10061-01-5	cis-1,3-Dichloropropene	2400	
108-10-1	4-Methyl-2-pentanone	2600	
108-88-3	Toluene	2300	
10061-02-6	trans-1,3-Dichloropropene	2400	
79-00-5	1,1,2-Trichloroethane	2400	
142-28-9	1,3-Dichloropropane	2300	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75683

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5O9552.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	2200	
591-78-6	2-Hexanone	2300	
124-48-1	Dibromochloromethane	2300	
106-93-4	1,2-Dibromoethane	2500	
108-90-7	Chlorobenzene	2300	
630-20-6	1,1,1,2-Tetrachloroethane	2200	
100-41-4	Ethylbenzene	2200	
179601-23-1	m,p-Xylene	4600	
95-47-6	o-Xylene	2300	
1330-20-7	Xylene (Total)	6900	
100-42-5	Styrene	2300	
75-25-2	Bromoform	2600	
98-82-8	Isopropylbenzene	2200	
79-34-5	1,1,2,2-Tetrachloroethane	2400	
108-86-1	Bromobenzene	2300	
96-18-4	1,2,3-Trichloropropane	2400	
103-65-1	n-Propylbenzene	2200	
95-49-8	2-Chlorotoluene	2300	
108-67-8	1,3,5-Trimethylbenzene	2100	
106-43-4	4-Chlorotoluene	2200	
98-06-6	tert-Butylbenzene	2200	
95-63-6	1,2,4-Trimethylbenzene	2200	
135-98-8	sec-Butylbenzene	2200	
99-87-6	4-Isopropyltoluene	2100	
541-73-1	1,3-Dichlorobenzene	2200	
106-46-7	1,4-Dichlorobenzene	2200	
104-51-8	n-Butylbenzene	2100	
95-50-1	1,2-Dichlorobenzene	2300	
96-12-8	1,2-Dibromo-3-chloropropane	2800	
120-82-1	1,2,4-Trichlorobenzene	2400	
87-68-3	Hexachlorobutadiene	2100	
87-61-6	1,2,3-Trichlorobenzene	2600	
91-20-3	Naphthalene	2800	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2000	

Data File: \\avogadro\organics\V5.I\140122.B\V5O9552.D
Report Date: 24-Jan-2014 09:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140122.B\V5O9552.D
Lab Smp Id: LCS-75683 Client Smp ID: LCS-75683
Inj Date : 22-JAN-2014 14:24
Operator : WL SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,LCS-75683,LCS-75683,75683
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140122.B\v5_8260W.m
Meth Date : 23-Jan-2014 13:57 V5.i Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.604	1.615	(0.288)	44917	50.0000	39
2	Freon114	85	1.732	1.742	(0.311)	42325	50.0000	36
3	Chloromethane	50	1.720	1.731	(0.309)	62039	50.0000	40
4	Vinyl Chloride	62	1.848	1.858	(0.332)	50244	50.0000	40
5	Bromomethane	94	2.126	2.137	(0.382)	37024	50.0000	35
6	Chloroethane	64	2.219	2.230	(0.398)	24524	50.0000	38
7	Trichlorofluoromethane	101	2.486	2.497	(0.446)	69363	50.0000	47
8	Ethanol	46	2.614	2.625	(0.469)	23409	5000.00	6200
9	Ether	59	2.684	2.694	(0.481)	49298	50.0000	53
10	Acrolein	56	2.788	2.799	(0.500)	10863	250.000	290
11	1,1-Dichloroethene	96	2.893	2.903	(0.519)	52293	50.0000	44
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.927	2.938	(0.525)	56856	50.0000	40
13	Acetone	58	2.927	2.938	(0.525)	5982	50.0000	58
14	Iodomethane	142	3.032	3.031	(0.544)	153000	50.0000	48
15	Carbon Disulfide	76	3.090	3.101	(0.554)	198257	50.0000	42
16	Acetonitrile	41	3.194	3.205	(0.573)	159220	500.000	440
17	Allyl Chloride	39	3.194	3.205	(0.573)	76039	50.0000	43
18	Methyl Acetate	43	3.218	3.228	(0.577)	69611	50.0000	48
19	Methylene Chloride	84	3.310	3.321	(0.594)	64267	50.0000	46

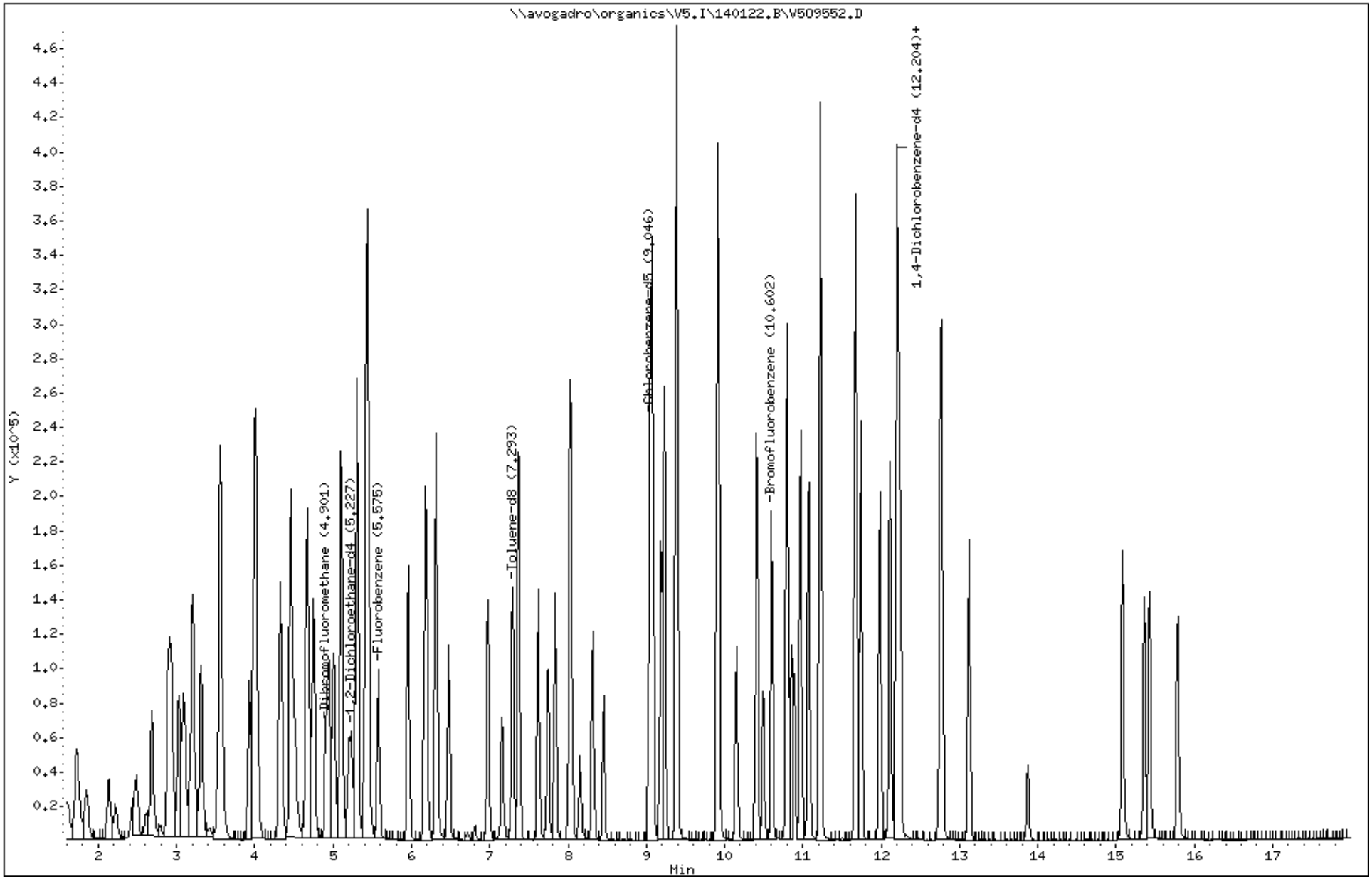
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 tert-Butanol	59	3.415	3.414	(0.613)	14095	100.000	120
	21 Acrylonitrile	53	3.519	3.530	(0.631)	24765	50.0000	52
	22 trans-1,2-Dichloroethene	96	3.554	3.553	(0.638)	59422	50.0000	45
	23 Methyl tert-butyl ether	73	3.566	3.565	(0.640)	181216	50.0000	47
	24 1,1-Dichloroethane	63	3.926	3.925	(0.704)	100690	50.0000	45
	25 Vinyl acetate	43	3.972	3.995	(0.713)	184375	50.0000	46
	26 Diisopropyl Ether	45	3.995	3.995	(0.717)	203442	50.0000	43
	27 2-Chloro-1,3-Butadiene	53	4.007	4.018	(0.719)	77606	50.0000	44
	28 Ethyl tert-butyl ether	59	4.332	4.331	(0.777)	198417	50.0000	46
	29 cis-1,2-Dichloroethene	96	4.460	4.459	(0.800)	63341	50.0000	45
	30 2-Butanone	72	4.460	4.459	(0.800)	7339	50.0000	54
	31 2,2-Dichloropropane	77	4.471	4.471	(0.802)	80902	50.0000	42
	32 Propionitrile	54	4.518	4.517	(0.810)	87261	500.000	530
	33 Methacrylonitrile	41	4.657	4.668	(0.835)	76784	100.000	94
	34 Bromochloromethane	128	4.680	4.680	(0.840)	38968	50.0000	47
	35 Tetrahydrofuran	72	4.727	4.738	(0.848)	17102	100.000	110
	36 Chloroform	83	4.750	4.761	(0.852)	103880	50.0000	45
$	37 Dibromofluoromethane	113	4.901	4.912	(0.879)	41058	50.0000	51
	38 1,1,1-Trichloroethane	97	4.947	4.947	(0.888)	91854	50.0000	45
	39 Cyclohexane	56	5.005	5.016	(0.898)	69841	50.0000	38
	40 1,1-Dichloropropene	110	5.098	5.109	(0.915)	27583	50.0000	42
	41 Carbon Tetrachloride	117	5.110	5.109	(0.917)	85199	50.0000	45
	42 Isobutyl Alcohol	43	5.203	5.202	(0.933)	52364	1000.00	1200
$	43 1,2-Dichloroethane-d4	102	5.238	5.237	(0.940)	7100	50.0000	51
	44 Benzene	78	5.296	5.306	(0.950)	200399	50.0000	45
	45 1,2-Dichloroethane	62	5.307	5.318	(0.952)	82967	50.0000	48
	46 tert-Amyl methyl ether	73	5.412	5.423	(0.971)	181694	50.0000	49
*	47 Fluorobenzene	96	5.574	5.585	(1.000)	99354	50.0000	
	48 Trichloroethene	130	5.957	5.957	(1.069)	64890	50.0000	46
	49 Methylcyclohexane	83	6.166	6.177	(1.106)	53780	50.0000	36
	50 1,2-Dichloropropane	63	6.190	6.189	(1.110)	52322	50.0000	45
	51 Methyl Methacrylate	69	6.306	6.305	(1.131)	54283	50.0000	51
	52 Dibromomethane	93	6.306	6.317	(1.131)	48159	50.0000	52
	53 1,4-Dioxane	88	6.329	6.328	(1.135)	10640	1000.00	1100
	54 Bromodichloromethane	83	6.480	6.479	(1.162)	81137	50.0000	46
M	55 1,2-Dichloroethene (Total)	96				122763	100.000	90
	56 2-Chloroethyl vinyl ether	63	6.817	6.816	(1.223)	4358	50.0000	36
	57 cis-1,3-Dichloropropene	75	6.979	6.978	(1.252)	92099	50.0000	47
	58 4-Methyl-2-pentanone	43	7.153	7.152	(1.283)	66873	50.0000	51
$	59 Toluene-d8	98	7.293	7.292	(0.806)	116571	50.0000	49
	60 Toluene	91	7.374	7.373	(1.323)	209541	50.0000	46
	61 trans-1,3-Dichloropropene	75	7.618	7.617	(1.367)	87594	50.0000	49
	62 Ethyl Methacrylate	69	7.745	7.744	(1.389)	66445	50.0000	50
	63 1,1,2-Trichloroethane	97	7.838	7.837	(1.406)	52825	50.0000	48
	64 Tetrachloroethene	164	8.024	8.023	(0.887)	59772	50.0000	43
	65 1,3-Dichloropropane	76	8.036	8.035	(0.888)	89935	50.0000	47
	66 2-Hexanone	43	8.152	8.151	(0.901)	42298	50.0000	45
	67 Dibromochloromethane	129	8.314	8.313	(0.919)	79068	50.0000	47
	68 1,2-Dibromoethane	107	8.454	8.453	(0.935)	66951	50.0000	50
*	69 Chlorobenzene-d5	117	9.046	9.045	(1.000)	127506	50.0000	
	70 1-Chlorohexane	91	9.069	9.068	(1.003)	70391	50.0000	44(Q)
	71 Chlorobenzene	112	9.080	9.080	(1.004)	153663	50.0000	46
	72 1,1,1,2-Tetrachloroethane	131	9.185	9.184	(1.015)	63321	50.0000	45
	73 Ethylbenzene	106	9.231	9.231	(1.021)	71718	50.0000	45

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	74	m,p-Xylene	106	9.382	9.393	(1.037)	177700	100.000	92
	75	o-Xylene	106	9.905	9.904	(1.095)	87845	50.0000	47
	76	Styrene	104	9.928	9.927	(1.098)	149666	50.0000	46
	77	Bromoform	173	10.149	10.148	(1.122)	68587	50.0000	53
	78	Isopropylbenzene	105	10.404	10.403	(1.150)	212207	50.0000	45
	79	trans-1,4-Dichloro-2-butene	75	10.485	10.484	(1.159)	25128	50.0000	47
$	80	Bromofluorobenzene	95	10.601	10.600	(1.172)	70432	50.0000	50
	81	Bromobenzene	156	10.799	10.798	(0.885)	80695	50.0000	45
	82	1,1,2,2-Tetrachloroethane	83	10.810	10.809	(0.886)	76880	50.0000	48
	83	1,2,3-Trichloropropane	75	10.857	10.856	(0.890)	85315	50.0000	48
	84	n-Propylbenzene	120	10.973	10.972	(0.899)	54896	50.0000	44
	85	2-Chlorotoluene	126	11.077	11.076	(0.908)	57682	50.0000	45
	86	4-Chlorotoluene	126	11.228	11.227	(0.920)	57420	50.0000	44
	87	1,3,5-Trimethylbenzene	105	11.228	11.227	(0.920)	163030	50.0000	43
	88	tert-Butylbenzene	119	11.669	11.669	(0.956)	169875	50.0000	43
	89	1,2,4-Trimethylbenzene	105	11.739	11.738	(0.962)	173159	50.0000	43
	90	sec-Butylbenzene	105	11.983	11.982	(0.982)	190733	50.0000	43
	91	1,3-Dichlorobenzene	146	12.111	12.110	(0.992)	124806	50.0000	44
	92	4-Isopropyltoluene	119	12.192	12.191	(0.999)	159206	50.0000	43
*	93	1,4-Dichlorobenzene-d4	152	12.203	12.203	(1.000)	86083	50.0000	
	94	1,4-Dichlorobenzene	146	12.238	12.237	(1.003)	131439	50.0000	43
M	95	Xylene (Total)	106				265545	150.000	140
	96	1,2-Dichlorobenzene	146	12.761	12.760	(1.046)	126395	50.0000	46
	97	n-Butylbenzene	91	12.784	12.783	(1.048)	138111	50.0000	43
	98	Hexachloroethane	117	13.121	13.120	(1.075)	43017	50.0000	46
	99	1,2-Dibromo-3-chloropropane	75	13.875	13.874	(1.137)	11786	50.0000	55
	100	1,3,5-Trichlorobenzene	182	15.083	15.082	(2.706)	77715	50.0000	51
	101	1,2,4-Trichlorobenzene	180	15.083	15.082	(1.236)	80962	50.0000	48
	102	Hexachlorobutadiene	225	15.361	15.360	(1.259)	43229	50.0000	43
	103	Naphthalene	128	15.431	15.430	(1.264)	163639	50.0000	56
	104	1,2,3-Trichlorobenzene	180	15.791	15.790	(1.294)	67975	50.0000	52

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\140122.B\V509552.D
Date : 22-JAN-2014 14:24
Client ID: LCS-75683
Instrument: V5.i
Sample Info: 5ML,LCS-75683,LCS-75683,75683
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75688

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7552.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/23/2014

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	53	
75-01-4	Vinyl chloride	53	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	54	
67-64-1	Acetone	56	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	50	
156-60-5	trans-1,2-Dichloroethene	54	
1634-04-4	Methyl tert-butyl ether	48	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	48	
78-93-3	2-Butanone	49	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	52	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	55	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	48	
75-27-4	Bromodichloromethane	49	
10061-01-5	cis-1,3-Dichloropropene	48	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	49	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-75688

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7552.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/23/2014

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	50	
591-78-6	2-Hexanone	51	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	49	
108-90-7	Chlorobenzene	49	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	49	
75-25-2	Bromoform	48	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-86-1	Bromobenzene	47	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	50	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	51	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	48	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	41	

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7552.D
Report Date: 31-Jan-2014 10:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7552.D
Lab Smp Id: LCS-75688 Client Smp ID: LCS-75688
Inj Date : 23-JAN-2014 10:19
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 5ML,LCS-75688,LCS-75688,75688
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 31-Jan-2014 09:55 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 7 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.277	1.286	(0.286)	61735	50.0000	47
2	Chloromethane	50	1.405	1.405	(0.315)	369329	50.0000	53
3	Vinyl Chloride	62	1.504	1.493	(0.337)	240638	50.0000	53
4	Bromomethane	94	1.720	1.720	(0.385)	154757	50.0000	51
5	Chloroethane	64	1.799	1.828	(0.403)	158091	50.0000	52
6	Trichlorofluoromethane	101	1.937	1.936	(0.434)	173057	50.0000	53
127	Ethanol	46	2.036	2.045	(0.456)	156603	5000.00	8100
7	Ether	59	2.124	2.124	(0.475)	209648	50.0000	48
8	Acrolein	56	2.203	2.202	(0.493)	244762	250.000	230
9	1,1-Dichloroethene	96	2.292	2.321	(0.513)	177605	50.0000	54
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.311	2.301	(0.517)	96881	50.0000	41(Q)
11	Acetone	58	2.311	2.311	(0.517)	43307	50.0000	56
12	Iodomethane	142	2.449	2.458	(0.548)	220514	50.0000	56
13	Carbon Disulfide	76	2.528	2.537	(0.566)	516085	50.0000	54
14	Acetonitrile	40	2.498	2.498	(0.559)	252365	500.000	470(Q)
15	Methyl Acetate	43	2.538	2.547	(0.568)	332229	50.0000	46
16	Methylene Chloride	84	2.676	2.685	(0.599)	166311	50.0000	50
17	tert-Butanol	59	2.686	2.685	(0.601)	42979	100.000	120
18	Acrylonitrile	53	2.774	2.774	(0.621)	100890	50.0000	51
20	Methyl tert-butyl ether	73	2.814	2.813	(0.630)	530560	50.0000	48
19	trans-1,2-Dichloroethene	96	2.814	2.813	(0.630)	179824	50.0000	54

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7552.D
Report Date: 31-Jan-2014 10:03

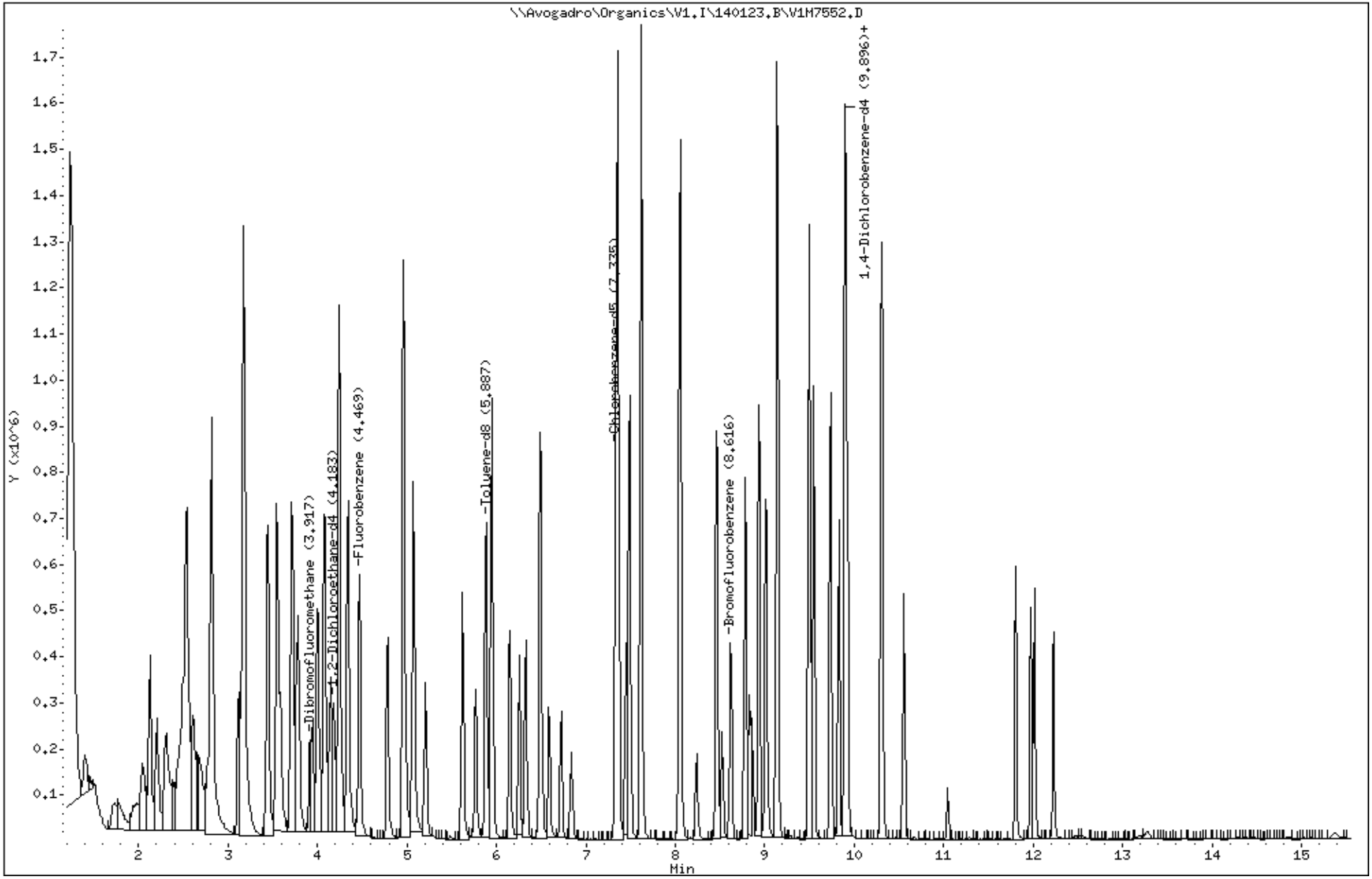
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	21 1,1-Dichloroethane	63	3.119	3.118	(0.698)	362738	50.0000	50
	22 Vinyl acetate	43	3.168	3.158	(0.709)	865027	50.0000	48
	23 Diisopropyl Ether	45	3.168	3.168	(0.709)	1177769	50.0000	49
	24 Ethyl tert-butyl ether	59	3.444	3.443	(0.771)	724372	50.0000	49
M	27 1,2-dichloroethene, (Total)	100				376311	100.000	100
	25 cis-1,2-Dichloroethene	96	3.543	3.542	(0.793)	196487	50.0000	50
	26 2,2-Dichloropropane	77	3.552	3.552	(0.795)	114230	50.0000	49
	28 2-Butanone	72	3.552	3.552	(0.795)	30406	50.0000	49
	29 Bromochloromethane	128	3.730	3.729	(0.835)	84954	50.0000	48
	30 Tetrahydrofuran	72	3.769	3.768	(0.844)	48740	100.000	99
	31 Chloroform	83	3.789	3.788	(0.848)	297231	50.0000	49
$	32 Dibromofluoromethane	113	3.917	3.916	(0.877)	135684	50.0000	52
	33 1,1,1-Trichloroethane	97	3.946	3.946	(0.883)	183755	50.0000	52
	34 Cyclohexane	56	3.996	3.995	(0.894)	329831	50.0000	46
	36 Carbon Tetrachloride	117	4.084	4.084	(0.914)	163324	50.0000	54
	35 1,1-Dichloropropene	110	4.074	4.074	(0.912)	77457	50.0000	50
$	37 1,2-Dichloroethane-d4	102	4.183	4.182	(0.936)	33919	50.0000	53
	38 Benzene	78	4.242	4.241	(0.949)	736969	50.0000	51
	39 1,2-Dichloroethane	62	4.242	4.241	(0.949)	198156	50.0000	49
	40 tert-Amyl methyl ether	73	4.340	4.330	(0.971)	578479	50.0000	50
*	41 Fluorobenzene	96	4.468	4.468	(1.000)	500192	50.0000	
	42 Trichloroethene	130	4.784	4.773	(1.071)	155548	50.0000	51
	43 Methylcyclohexane	83	4.961	4.960	(1.110)	324180	50.0000	54
	44 1,2-Dichloropropane	63	4.971	4.960	(1.112)	210969	50.0000	48
	46 Dibromomethane	93	5.069	5.059	(1.134)	108634	50.0000	48
	47 1,4-Dioxane	88	5.079	5.078	(1.137)	35481	1000.00	1600
	48 Bromodichloromethane	83	5.207	5.207	(1.165)	226892	50.0000	49
	45 2-Chloroethyl vinyl ether	63	5.483	5.482	(1.227)	2830	50.0000	28
	49 cis-1,3-Dichloropropene	75	5.621	5.620	(1.258)	301979	50.0000	48
	50 4-Methyl-2-pentanone	43	5.769	5.768	(1.291)	293505	50.0000	48
$	51 Toluene-d8	98	5.887	5.886	(0.803)	476102	50.0000	50
	52 Toluene	91	5.946	5.945	(1.331)	683374	50.0000	50
	53 trans-1,3-Dichloropropene	75	6.153	6.152	(1.377)	249073	50.0000	49
	54 1,1,2-Trichloroethane	97	6.330	6.329	(1.417)	143777	50.0000	49
	55 Tetrachloroethene	164	6.488	6.487	(0.885)	117530	50.0000	50
	56 1,3-Dichloropropane	76	6.497	6.497	(0.886)	274741	50.0000	48
	57 2-Hexanone	43	6.586	6.585	(0.898)	247289	50.0000	51
	58 Dibromochloromethane	129	6.724	6.723	(0.917)	161165	50.0000	47
	59 1,2-Dibromoethane	107	6.832	6.842	(0.932)	154907	50.0000	49
*	60 Chlorobenzene-d5	117	7.335	7.334	(1.000)	342213	50.0000	
	63 1-Chlorohexane	91	7.354	7.354	(1.003)	281589	50.0000	52
	61 Chlorobenzene	112	7.364	7.364	(1.004)	407758	50.0000	49
	62 1,1,1,2-Tetrachloroethane	131	7.453	7.452	(1.016)	143390	50.0000	49
	64 Ethylbenzene	106	7.492	7.492	(1.021)	214818	50.0000	49
	65 m,p-Xylene	106	7.620	7.620	(1.039)	550649	100.000	100
	66 o-Xylene	106	8.044	8.043	(1.097)	265728	50.0000	50
	67 Styrene	104	8.063	8.063	(1.099)	463840	50.0000	49
	68 Bromoform	173	8.241	8.240	(1.124)	98534	50.0000	48
	69 Isopropylbenzene	105	8.457	8.467	(1.153)	687478	50.0000	51
	126 trans-1,4-Dichloro-2-butene	75	8.526	8.526	(1.162)	67059	50.0000	44
$	70 Bromofluorobenzene	95	8.615	8.614	(1.175)	191147	50.0000	50
	72 Bromobenzene	156	8.783	8.782	(0.888)	151376	50.0000	47
	71 1,1,2,2-Tetrachloroethane	83	8.792	8.792	(0.889)	202140	50.0000	46
	73 1,2,3-Trichloropropane	75	8.832	8.831	(0.893)	216586	50.0000	48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	n-Propylbenzene	120	8.930	8.930	(0.902)	162491	50.0000	49
75	2-Chlorotoluene	126	9.019	9.008	(0.911)	141790	50.0000	46
76	1,3,5-Trimethylbenzene	105	9.147	9.137	(0.924)	547530	50.0000	49
77	4-Chlorotoluene	126	9.137	9.137	(0.923)	146245	50.0000	46
78	tert-Butylbenzene	119	9.502	9.501	(0.960)	547303	50.0000	50
79	1,2,4-Trimethylbenzene	105	9.551	9.550	(0.965)	559112	50.0000	49
M 81	Xylene (Total)	106				816377	150.000	150
80	sec-Butylbenzene	105	9.738	9.737	(0.984)	735761	50.0000	50
82	1,3-Dichlorobenzene	146	9.827	9.826	(0.993)	272410	50.0000	48
83	4-Isopropyltoluene	119	9.896	9.895	(1.000)	563725	50.0000	51
* 84	1,4-Dichlorobenzene-d4	152	9.896	9.905	(1.000)	152611	50.0000	
85	1,4-Dichlorobenzene	146	9.925	9.924	(1.003)	272492	50.0000	47
86	n-Butylbenzene	91	10.309	10.309	(1.042)	590163	50.0000	53
87	1,2-Dichlorobenzene	146	10.299	10.299	(1.041)	246838	50.0000	46
88	1,2-Dibromo-3-chloropropane	75	11.048	11.047	(1.116)	24329	50.0000	45
89	1,2,4-Trichlorobenzene	180	11.806	11.806	(1.193)	159629	50.0000	51
90	Hexachlorobutadiene	225	11.974	11.973	(1.210)	76319	50.0000	52
91	Naphthalene	128	12.013	12.013	(1.214)	350092	50.0000	48
92	1,2,3-Trichlorobenzene	180	12.230	12.219	(1.236)	127729	50.0000	49

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7552.D
Date : 23-JAN-2014 10:19
Client ID: LCS-75688
Instrument: V1.i
Sample Info: 5ML,LCS-75688,LCS-75688,75688
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-75643

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7475.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/20/2014

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	41	
74-87-3	Chloromethane	52	
75-01-4	Vinyl chloride	55	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	49	
75-69-4	Trichlorofluoromethane	56	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	50	
74-88-4	Iodomethane	14	
75-15-0	Carbon disulfide	53	
75-09-2	Methylene chloride	49	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	50	
156-59-2	cis-1,2-Dichloroethene	52	
594-20-7	2,2-Dichloropropane	56	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	55	
563-58-6	1,1-Dichloropropene	55	
56-23-5	Carbon tetrachloride	55	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	54	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-75643

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-75643

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7475.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/20/2014

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	46	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	54	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	54	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	54	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	53	
75-25-2	Bromoform	57	
98-82-8	Isopropylbenzene	57	
79-34-5	1,1,2,2-Tetrachloroethane	53	
108-86-1	Bromobenzene	54	
96-18-4	1,2,3-Trichloropropane	54	
103-65-1	n-Propylbenzene	57	
95-49-8	2-Chlorotoluene	55	
108-67-8	1,3,5-Trimethylbenzene	56	
106-43-4	4-Chlorotoluene	53	
98-06-6	tert-Butylbenzene	57	
95-63-6	1,2,4-Trimethylbenzene	55	
135-98-8	sec-Butylbenzene	57	
99-87-6	4-Isopropyltoluene	56	
541-73-1	1,3-Dichlorobenzene	54	
106-46-7	1,4-Dichlorobenzene	53	
104-51-8	n-Butylbenzene	57	
95-50-1	1,2-Dichlorobenzene	53	
96-12-8	1,2-Dibromo-3-chloropropane	51	
120-82-1	1,2,4-Trichlorobenzene	46	
87-68-3	Hexachlorobutadiene	49	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	50	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	64	

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D
Report Date: 30-Jan-2014 10:57

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140120.B\V1M7475.D
Lab Smp Id: LCSD-75643 Client Smp ID: LCSD-75643
Inj Date : 20-JAN-2014 10:20
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCSD-75643,LCSD-75643,75643
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140120.B\v18260GH.m
Meth Date : 30-Jan-2014 10:57 V1.i Quant Type: ISTD
Cal Date : 16-JAN-2014 13:22 Cal File: V1M7419.D
Als bottle: 10 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

Concentration Formula: Amt * DF * Uf * 5/(Ws * (100 - M)/100) * 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)	
1	Dichlorodifluoromethane	85	1.283	1.258	(0.286)	49371	40.8423	41(M)M7 AM 01/30	
2	Chloromethane	50	1.421	1.416	(0.317)	391473	52.2746	52	
3	Vinyl Chloride	62	1.519	1.505	(0.339)	248190	54.5626	54(Q)	
4	Bromomethane	94	1.756	1.741	(0.392)	154554	48.8409	49	
5	Chloroethane	64	1.844	1.859	(0.411)	154558	48.6731	49	
6	Trichlorofluoromethane	101	1.953	1.958	(0.436)	180807	56.1674	56	
127	Ethanol	46	2.051	2.056	(0.457)	144258	8041.16	8000	
7	Ether	59	2.140	2.135	(0.477)	226912	50.1364	50	
8	Acrolein	56	2.219	2.214	(0.495)	262385	260.148	260	
9	1,1-Dichloroethene	96	2.347	2.302	(0.523)	175240	52.4706	52	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.337	2.322	(0.521)	138982	64.0944	64	
11	Acetone	58	2.327	2.322	(0.519)	43312	50.1085	50	
12	Iodomethane	142	2.406	2.401	(0.537)	51346	14.3113	14(QR)	
13	Carbon Disulfide	76	2.553	2.549	(0.570)	531108	53.2615	53	
14	Acetonitrile	40	2.514	2.509	(0.561)	279667	506.326	510	
15	Methyl Acetate	43	2.563	2.559	(0.572)	353144	49.0429	49	
16	Methylene Chloride	84	2.711	2.687	(0.605)	161747	48.7960	49(Q)	
17	tert-Butanol	59	2.701	2.696	(0.602)	42474	108.163	110	
18	Acrylonitrile	53	2.790	2.795	(0.622)	103546	52.2189	52	
20	Methyl tert-butyl ether	73	2.829	2.834	(0.631)	590479	51.3567	51	

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/Kg)
	19 trans-1,2-Dichloroethene	96	2.829	2.824	(0.631)	181146	50.9224	51
	21 1,1-Dichloroethane	63	3.135	3.130	(0.699)	404499	52.6012	53
	22 Vinyl acetate	43	3.184	3.179	(0.710)	974649	50.2080	50
	23 Diisopropyl Ether	45	3.184	3.179	(0.710)	1340647	51.1313	51
	24 Ethyl tert-butyl ether	59	3.460	3.455	(0.772)	796931	51.3639	51
M	27 1,2-dichloroethene, (Total)	100				395070	102.567	100
	25 cis-1,2-Dichloroethene	96	3.558	3.563	(0.794)	213924	51.5936	52
	26 2,2-Dichloropropane	77	3.568	3.563	(0.796)	138250	56.3267	56
	28 2-Butanone	72	3.568	3.563	(0.796)	32643	50.4406	50
	29 Bromochloromethane	128	3.745	3.740	(0.835)	93238	50.6513	51
	30 Tetrahydrofuran	72	3.785	3.780	(0.844)	50151	103.207	100
	31 Chloroform	83	3.804	3.800	(0.848)	334575	52.0616	52
$	32 Dibromofluoromethane	113	3.932	3.918	(0.877)	153522	49.2045	49
	33 1,1,1-Trichloroethane	97	3.962	3.957	(0.884)	204448	55.2341	55
	34 Cyclohexane	56	4.021	4.016	(0.897)	375944	51.7715	52(Q)
	36 Carbon Tetrachloride	117	4.100	4.095	(0.914)	176682	55.1628	55
	35 1,1-Dichloropropene	110	4.100	4.085	(0.914)	85837	55.2121	55
$	37 1,2-Dichloroethane-d4	102	4.198	4.194	(0.936)	41375	49.7886	50
	38 Benzene	78	4.257	4.253	(0.949)	812140	53.5065	54
	39 1,2-Dichloroethane	62	4.267	4.253	(0.952)	218925	50.6668	51
	40 tert-Amyl methyl ether	73	4.356	4.351	(0.971)	634318	51.8227	52
*	41 Fluorobenzene	96	4.484	4.479	(1.000)	607967	50.0000	
	42 Trichloroethene	130	4.799	4.794	(1.070)	166831	52.8003	53
	43 Methylcyclohexane	83	4.986	4.972	(1.112)	363920	57.5419	58
	44 1,2-Dichloropropane	63	4.986	4.972	(1.112)	243077	51.3064	51
	46 Dibromomethane	93	5.095	5.070	(1.136)	118274	52.1152	52
	47 1,4-Dioxane	88	5.104	5.090	(1.138)	37676	1924.64	1900(R)
	48 Bromodichloromethane	83	5.233	5.218	(1.167)	248618	50.3949	50
	45 2-Chloroethyl vinyl ether	63	5.508	5.494	(1.228)	11704	21.4150	21(R)
	49 cis-1,3-Dichloropropene	75	5.646	5.632	(1.259)	338813	52.9189	53
	50 4-Methyl-2-pentanone	43	5.794	5.779	(1.292)	304914	49.8856	50
$	51 Toluene-d8	98	5.912	5.888	(0.804)	566696	49.8137	50
	52 Toluene	91	5.971	5.957	(1.332)	776623	53.6613	54
	53 trans-1,3-Dichloropropene	75	6.178	6.154	(1.378)	275118	53.0907	53
	54 1,1,2-Trichloroethane	97	6.355	6.341	(1.417)	157518	52.3606	52
	55 Tetrachloroethene	164	6.513	6.498	(0.886)	132567	54.9661	55
	56 1,3-Dichloropropane	76	6.523	6.508	(0.887)	302800	51.0164	51
	57 2-Hexanone	43	6.611	6.597	(0.900)	230179	45.8448	46
	58 Dibromochloromethane	129	6.749	6.735	(0.918)	181952	53.9013	54
	59 1,2-Dibromoethane	107	6.858	6.843	(0.933)	165860	51.0684	51
*	60 Chlorobenzene-d5	117	7.350	7.336	(1.000)	406003	50.0000	
	63 1-Chlorohexane	91	7.380	7.365	(1.004)	316843	55.8505	56
	61 Chlorobenzene	112	7.380	7.365	(1.004)	464566	53.6436	54
	62 1,1,1,2-Tetrachloroethane	131	7.468	7.454	(1.016)	158430	52.4549	52
	64 Ethylbenzene	106	7.508	7.503	(1.021)	242672	54.1750	54
	65 m,p-Xylene	106	7.636	7.631	(1.039)	617488	108.233	110
	66 o-Xylene	106	8.069	8.055	(1.098)	299348	53.5860	54
	67 Styrene	104	8.079	8.074	(1.099)	519282	53.4128	53
	68 Bromoform	173	8.256	8.252	(1.123)	110837	56.8635	57
	69 Isopropylbenzene	105	8.483	8.468	(1.154)	791924	57.0476	57
	126 trans-1,4-Dichloro-2-butene	75	8.542	8.537	(1.162)	76212	58.7077	59
$	70 Bromofluorobenzene	95	8.640	8.626	(1.176)	230127	51.9018	52
	72 Bromobenzene	156	8.798	8.793	(0.888)	167795	53.9736	54
	71 1,1,2,2-Tetrachloroethane	83	8.808	8.793	(0.889)	217008	53.0592	53

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D
Report Date: 30-Jan-2014 10:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
73	1,2,3-Trichloropropane	75	8.847	8.843	(0.893)	235131	53.5202	54
74	n-Propylbenzene	120	8.946	8.941	(0.903)	189062	57.1858	57
75	2-Chlorotoluene	126	9.034	9.020	(0.912)	164210	55.1856	55
76	1,3,5-Trimethylbenzene	105	9.162	9.148	(0.924)	633417	56.2533	56
77	4-Chlorotoluene	126	9.153	9.148	(0.923)	163272	52.9390	53
78	tert-Butylbenzene	119	9.517	9.502	(0.960)	614462	56.5569	56
79	1,2,4-Trimethylbenzene	105	9.566	9.562	(0.965)	624250	55.1815	55
M 81	Xylene (Total)	106				916836	161.819	160
80	sec-Butylbenzene	105	9.753	9.739	(0.984)	834463	57.3707	57
82	1,3-Dichlorobenzene	146	9.842	9.837	(0.993)	295040	53.7116	54
83	4-Isopropyltoluene	119	9.911	9.906	(1.000)	618593	55.9620	56
* 84	1,4-Dichlorobenzene-d4	152	9.911	9.906	(1.000)	166046	50.0000	
85	1,4-Dichlorobenzene	146	9.941	9.926	(1.003)	297622	53.3948	53
86	n-Butylbenzene	91	10.325	10.320	(1.042)	638852	56.6724	57
87	1,2-Dichlorobenzene	146	10.305	10.300	(1.040)	271423	52.6652	53
88	1,2-Dibromo-3-chloropropane	75	11.054	11.049	(1.115)	24445	51.3483	51
89	1,2,4-Trichlorobenzene	180	11.812	11.817	(1.192)	139012	45.5499	46
90	Hexachlorobutadiene	225	11.979	11.985	(1.209)	72464	48.8053	49
91	Naphthalene	128	12.019	12.024	(1.213)	334295	50.3482	50
92	1,2,3-Trichlorobenzene	180	12.236	12.231	(1.235)	114600	46.3087	46

QC Flag Legend

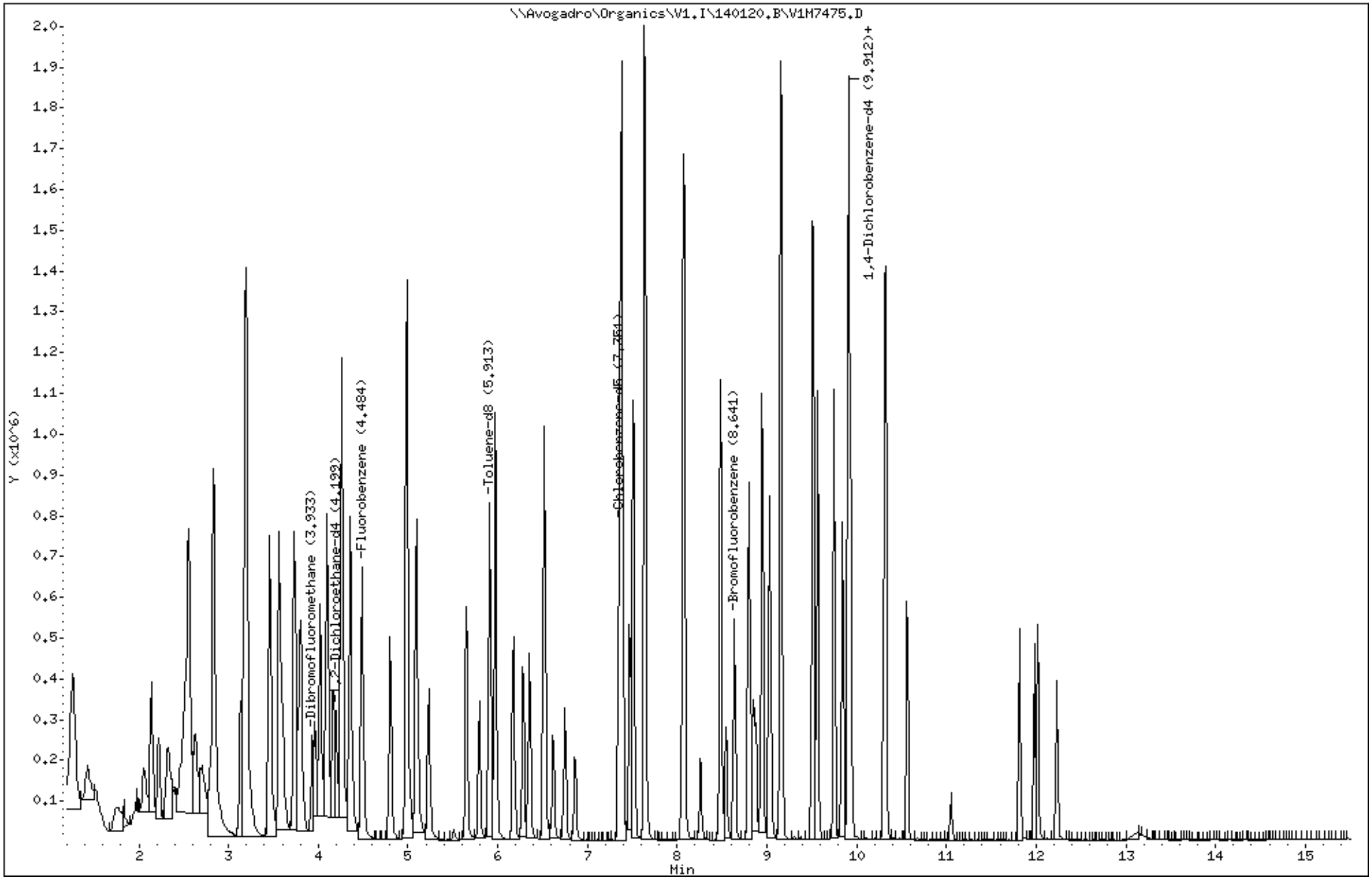
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D
Date : 20-JAN-2014 10:20
Client ID: LCSD-75643
Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D

Date : 20-JAN-2014 10:20

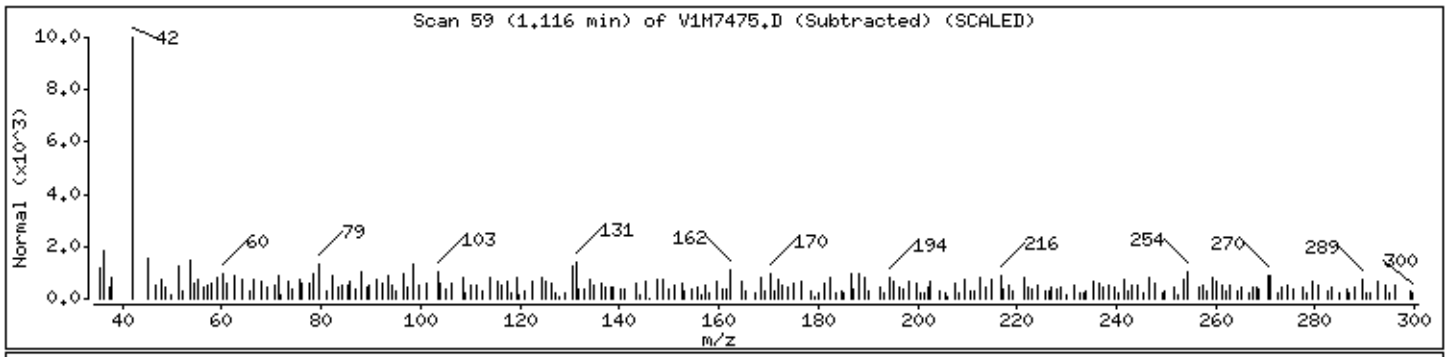
Client ID: LCSD-75643 Instrument: V1.i

Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D

Date : 20-JAN-2014 10:20

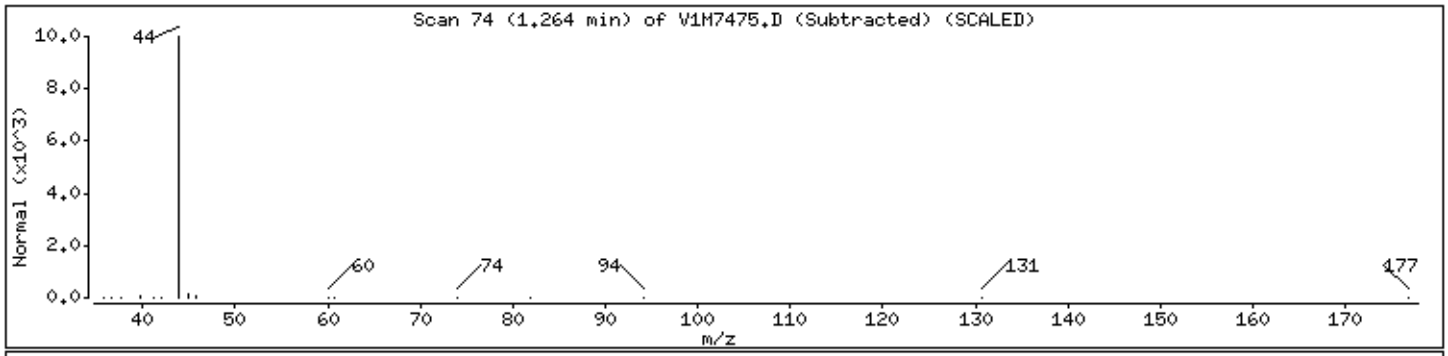
Client ID: LCSD-75643 Instrument: V1.i

Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D

Date : 20-JAN-2014 10:20

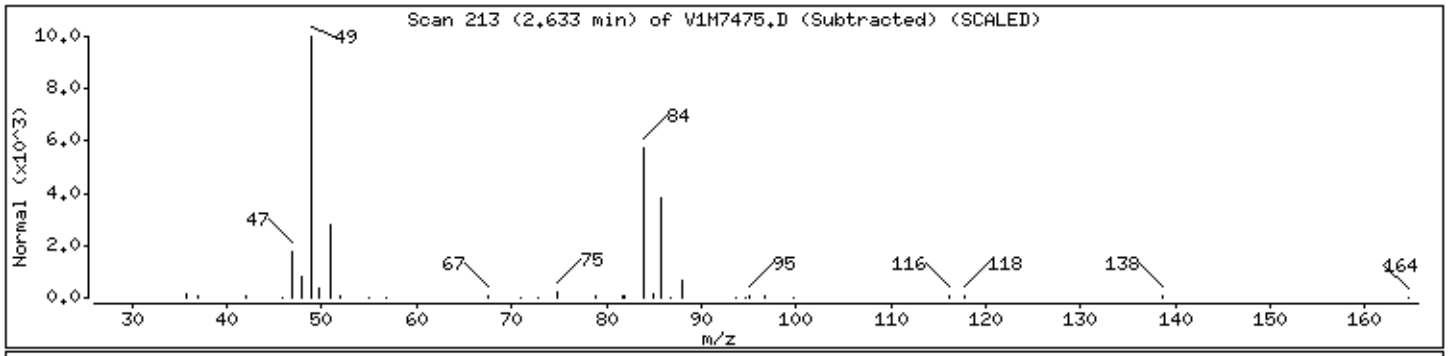
Client ID: LCSD-75643 Instrument: V1.i

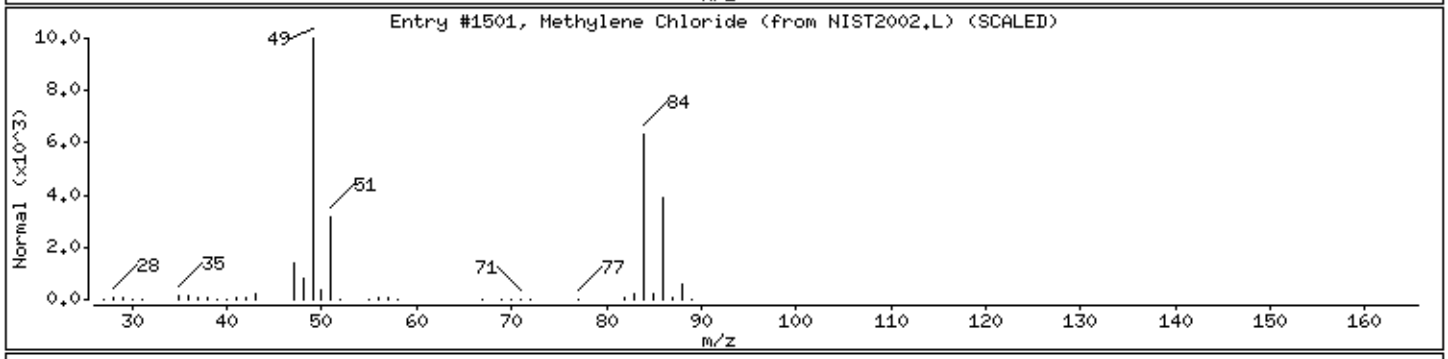
Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Methylene Chloride	75-09-2	NIST2002.L	1501	94	CH2Cl2	84





Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D

Date : 20-JAN-2014 10:20

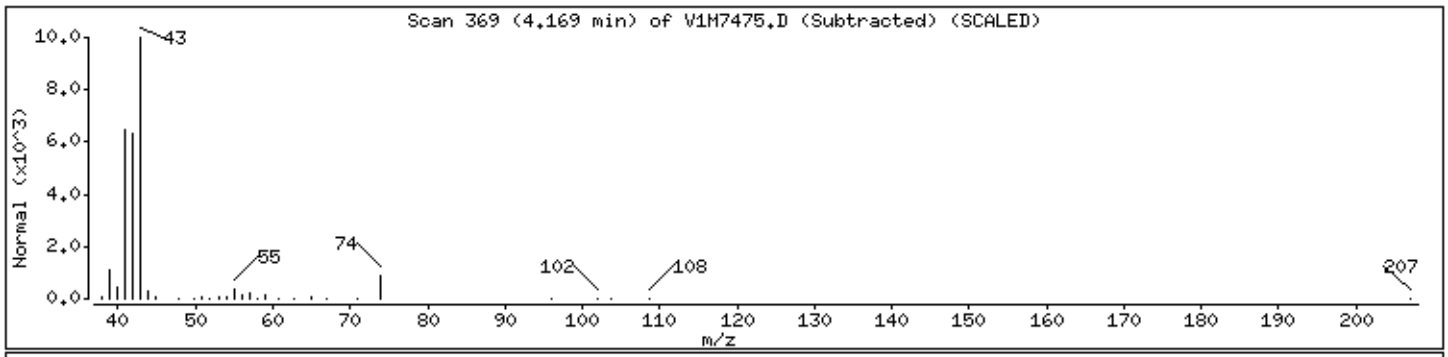
Client ID: LCSD-75643 Instrument: V1.i

Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D

Date : 20-JAN-2014 10:20

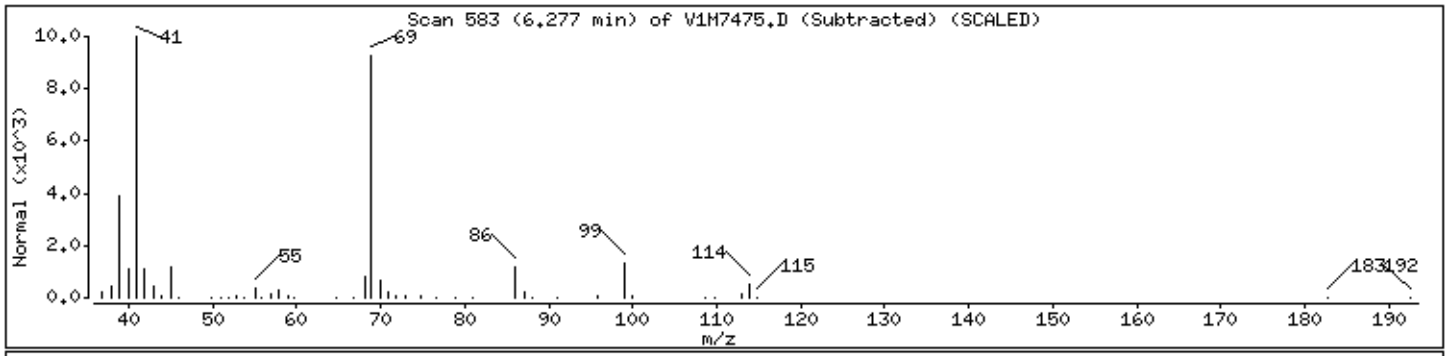
Client ID: LCSD-75643 Instrument: V1.i

Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V1.I\140120.B\V1M7475.D

Date : 20-JAN-2014 10:20

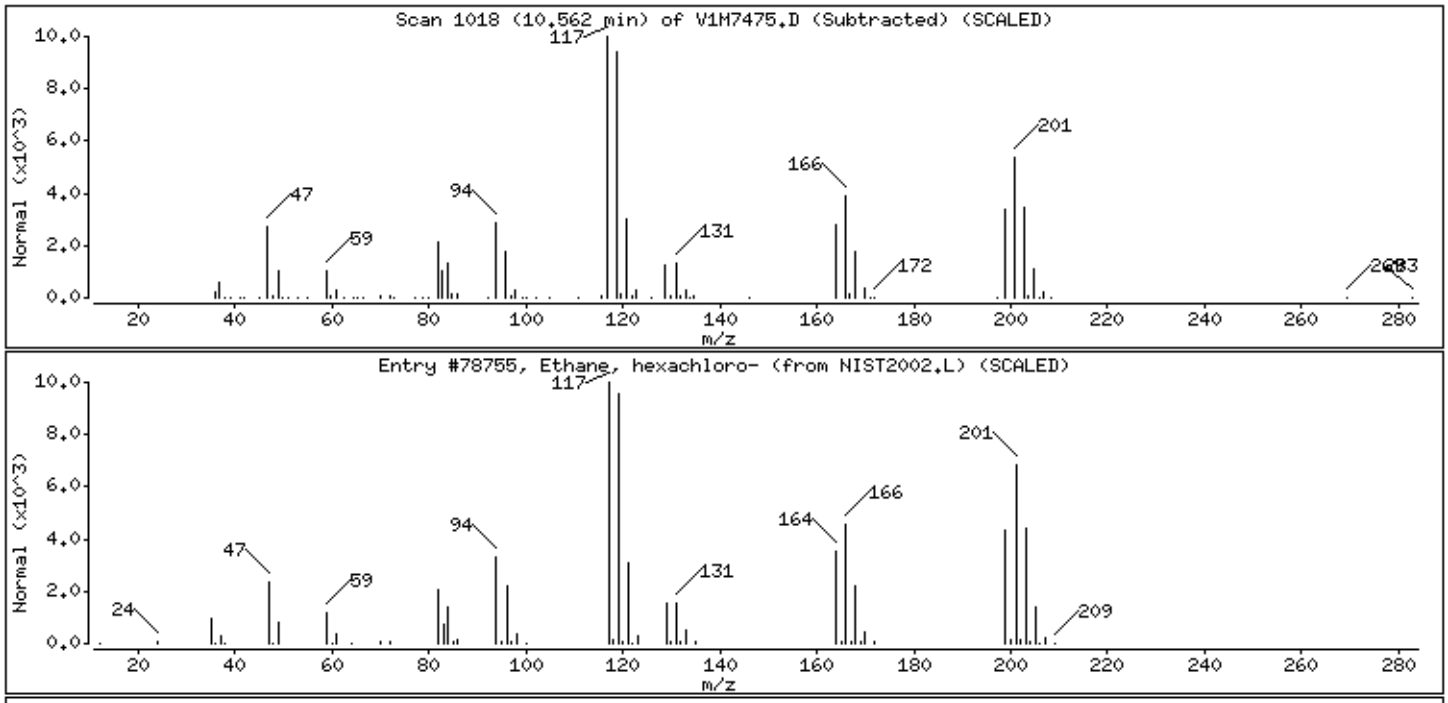
Client ID: LCSD-75643 Instrument: V1.i

Sample Info: 5ML,LCSD-75643,LCSD-75643,75643

Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, hexachloro-	67-72-1	NIST2002.L	78755	95	C2Cl6	234



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-75683

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5O9553.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	2100	
74-87-3	Chloromethane	2100	
75-01-4	Vinyl chloride	2200	
74-83-9	Bromomethane	2100	
75-00-3	Chloroethane	2200	
75-69-4	Trichlorofluoromethane	2500	
75-35-4	1,1-Dichloroethene	2400	
67-64-1	Acetone	3700	
74-88-4	Iodomethane	2500	
75-15-0	Carbon disulfide	2300	
75-09-2	Methylene chloride	2300	
156-60-5	trans-1,2-Dichloroethene	2300	
1634-04-4	Methyl tert-butyl ether	2300	
75-34-3	1,1-Dichloroethane	2300	
108-05-4	Vinyl acetate	2300	
78-93-3	2-Butanone	3200	
156-59-2	cis-1,2-Dichloroethene	2300	
594-20-7	2,2-Dichloropropane	2300	
74-97-5	Bromochloromethane	2500	
67-66-3	Chloroform	2300	
71-55-6	1,1,1-Trichloroethane	2300	
563-58-6	1,1-Dichloropropene	2300	
56-23-5	Carbon tetrachloride	2400	
107-06-2	1,2-Dichloroethane	2400	
71-43-2	Benzene	2400	
79-01-6	Trichloroethene	2500	
78-87-5	1,2-Dichloropropane	2400	
74-95-3	Dibromomethane	2600	
75-27-4	Bromodichloromethane	2400	
10061-01-5	cis-1,3-Dichloropropene	2400	
108-10-1	4-Methyl-2-pentanone	2500	
108-88-3	Toluene	2400	
10061-02-6	trans-1,3-Dichloropropene	2400	
79-00-5	1,1,2-Trichloroethane	2400	
142-28-9	1,3-Dichloropropane	2400	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-75683

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-75683

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V5O9553.D

Level: (TRACE/LOW/MED) MED Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/22/2014

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	2400	
591-78-6	2-Hexanone	2500	
124-48-1	Dibromochloromethane	2400	
106-93-4	1,2-Dibromoethane	2600	
108-90-7	Chlorobenzene	2400	
630-20-6	1,1,1,2-Tetrachloroethane	2400	
100-41-4	Ethylbenzene	2300	
179601-23-1	m,p-Xylene	4800	
95-47-6	o-Xylene	2500	
1330-20-7	Xylene (Total)	7300	
100-42-5	Styrene	2500	
75-25-2	Bromoform	2700	
98-82-8	Isopropylbenzene	2500	
79-34-5	1,1,2,2-Tetrachloroethane	2500	
108-86-1	Bromobenzene	2400	
96-18-4	1,2,3-Trichloropropane	2500	
103-65-1	n-Propylbenzene	2300	
95-49-8	2-Chlorotoluene	2500	
108-67-8	1,3,5-Trimethylbenzene	2400	
106-43-4	4-Chlorotoluene	2400	
98-06-6	tert-Butylbenzene	2400	
95-63-6	1,2,4-Trimethylbenzene	2400	
135-98-8	sec-Butylbenzene	2400	
99-87-6	4-Isopropyltoluene	2400	
541-73-1	1,3-Dichlorobenzene	2500	
106-46-7	1,4-Dichlorobenzene	2300	
104-51-8	n-Butylbenzene	2500	
95-50-1	1,2-Dichlorobenzene	2500	
96-12-8	1,2-Dibromo-3-chloropropane	2900	
120-82-1	1,2,4-Trichlorobenzene	2600	
87-68-3	Hexachlorobutadiene	2500	
87-61-6	1,2,3-Trichlorobenzene	2800	
91-20-3	Naphthalene	3000	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2300	

Data File: \\avogadro\organics\V5.I\140122.B\V5O9553.D
Report Date: 24-Jan-2014 09:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\avogadro\organics\V5.I\140122.B\V5O9553.D
Lab Smp Id: LCSD-75683 Client Smp ID: LCSD-75683
Inj Date : 22-JAN-2014 14:50
Operator : WL   SRC: LIMS Inst ID: V5.i
Smp Info : 5ML,LCSD-75683,LCSD-75683,75683
Misc Info :
Comment   :
Method   : \\avogadro\organics\V5.I\140122.B\v5_8260W.m
Meth Date : 23-Jan-2014 13:57 V5.i Quant Type: ISTD
Cal Date : 21-JAN-2014 13:07 Cal File: V5O9516.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula:
   Amt * DF * Uf*((Vt+(Ws*M/100))*5000)/(Va*Ws*((100-M)/100))) * 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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.620	1.615	(0.290)	51005	50.0000	43
2	Freon114	85	1.737	1.742	(0.311)	50606	50.0000	42
3	Chloromethane	50	1.725	1.731	(0.309)	68781	50.0000	42
4	Vinyl Chloride	62	1.853	1.858	(0.332)	56717	50.0000	44
5	Bromomethane	94	2.143	2.137	(0.384)	46376	50.0000	42
6	Chloroethane	64	2.236	2.230	(0.401)	29177	50.0000	44
7	Trichlorofluoromethane	101	2.503	2.497	(0.449)	76871	50.0000	50
8	Ethanol	46	2.642	2.625	(0.474)	27686	5000.00	7200(Q)
9	Ether	59	2.700	2.694	(0.484)	52767	50.0000	55(Q)
10	Acrolein	56	2.805	2.799	(0.503)	8810	250.000	230
11	1,1-Dichloroethene	96	2.897	2.903	(0.519)	58224	50.0000	48
12	1,1,2-Trichloro-1,2,2-Trifluo	101	2.944	2.938	(0.528)	66141	50.0000	46
13	Acetone	58	2.944	2.938	(0.528)	7880	50.0000	74
14	Iodomethane	142	3.037	3.031	(0.544)	165795	50.0000	50
15	Carbon Disulfide	76	3.106	3.101	(0.557)	227449	50.0000	46
16	Acetonitrile	41	3.211	3.205	(0.576)	180147	500.000	480
17	Allyl Chloride	39	3.211	3.205	(0.576)	86787	50.0000	48
18	Methyl Acetate	43	3.223	3.228	(0.578)	74083	50.0000	50
19	Methylene Chloride	84	3.315	3.321	(0.594)	67053	50.0000	46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 tert-Butanol	59	3.420	3.414	(0.613)	14630	100.000	120
	21 Acrylonitrile	53	3.524	3.530	(0.632)	25169	50.0000	51
	22 trans-1,2-Dichloroethene	96	3.559	3.553	(0.638)	63506	50.0000	47
	23 Methyl tert-butyl ether	73	3.571	3.565	(0.640)	186548	50.0000	47
	24 1,1-Dichloroethane	63	3.931	3.925	(0.705)	105996	50.0000	46
	25 Vinyl acetate	43	3.989	3.995	(0.715)	192280	50.0000	46
	26 Diisopropyl Ether	45	4.000	3.995	(0.717)	216182	50.0000	44
	27 2-Chloro-1,3-Butadiene	53	4.012	4.018	(0.719)	84563	50.0000	46
	28 Ethyl tert-butyl ether	59	4.325	4.331	(0.775)	206112	50.0000	46
	29 cis-1,2-Dichloroethene	96	4.465	4.459	(0.800)	68465	50.0000	47
	30 2-Butanone	72	4.476	4.459	(0.802)	9088	50.0000	64
	31 2,2-Dichloropropane	77	4.476	4.471	(0.802)	91547	50.0000	46
	32 Propionitrile	54	4.523	4.517	(0.811)	92876	500.000	550
	33 Methacrylonitrile	41	4.662	4.668	(0.836)	81914	100.000	97
	34 Bromochloromethane	128	4.685	4.680	(0.840)	41882	50.0000	49
	35 Tetrahydrofuran	72	4.732	4.738	(0.848)	17869	100.000	110
	36 Chloroform	83	4.755	4.761	(0.852)	111221	50.0000	47
$	37 Dibromofluoromethane	113	4.906	4.912	(0.879)	40732	50.0000	49
	38 1,1,1-Trichloroethane	97	4.952	4.947	(0.888)	99777	50.0000	47
	39 Cyclohexane	56	5.010	5.016	(0.898)	82239	50.0000	43
	40 1,1-Dichloropropene	110	5.103	5.109	(0.915)	31249	50.0000	46
	41 Carbon Tetrachloride	117	5.115	5.109	(0.917)	95348	50.0000	49
	42 Isobutyl Alcohol	43	5.208	5.202	(0.933)	54961	1000.00	1200
$	43 1,2-Dichloroethane-d4	102	5.243	5.237	(0.940)	7811	50.0000	54
	44 Benzene	78	5.301	5.306	(0.950)	214777	50.0000	47
	45 1,2-Dichloroethane	62	5.312	5.318	(0.952)	85164	50.0000	48
	46 tert-Amyl methyl ether	73	5.417	5.423	(0.971)	186327	50.0000	48
*	47 Fluorobenzene	96	5.579	5.585	(1.000)	102730	50.0000	
	48 Trichloroethene	130	5.962	5.957	(1.069)	73082	50.0000	51
	49 Methylcyclohexane	83	6.171	6.177	(1.106)	64702	50.0000	42
	50 1,2-Dichloropropane	63	6.195	6.189	(1.110)	58492	50.0000	48
	51 Methyl Methacrylate	69	6.311	6.305	(1.131)	56966	50.0000	52
	52 Dibromomethane	93	6.311	6.317	(1.131)	50086	50.0000	52
	53 1,4-Dioxane	88	6.322	6.328	(1.133)	14355	1000.00	1400
	54 Bromodichloromethane	83	6.485	6.479	(1.162)	87697	50.0000	48
M	55 1,2-Dichloroethene (Total)	96				131971	100.000	94
	56 2-Chloroethyl vinyl ether	63	6.821	6.816	(1.223)	3915	50.0000	31
	57 cis-1,3-Dichloropropene	75	6.984	6.978	(1.252)	98947	50.0000	49
	58 4-Methyl-2-pentanone	43	7.158	7.152	(1.283)	68298	50.0000	50
$	59 Toluene-d8	98	7.297	7.292	(0.806)	116555	50.0000	49
	60 Toluene	91	7.367	7.373	(1.320)	227869	50.0000	48
	61 trans-1,3-Dichloropropene	75	7.623	7.617	(1.366)	90245	50.0000	49
	62 Ethyl Methacrylate	69	7.739	7.744	(1.387)	68738	50.0000	50
	63 1,1,2-Trichloroethane	97	7.832	7.837	(1.404)	55781	50.0000	48
	64 Tetrachloroethene	164	8.017	8.023	(0.886)	66967	50.0000	48
	65 1,3-Dichloropropane	76	8.040	8.035	(0.888)	92297	50.0000	47
	66 2-Hexanone	43	8.145	8.151	(0.900)	48057	50.0000	51
	67 Dibromochloromethane	129	8.319	8.313	(0.919)	83817	50.0000	49
	68 1,2-Dibromoethane	107	8.458	8.453	(0.935)	70873	50.0000	52
*	69 Chlorobenzene-d5	117	9.051	9.045	(1.000)	129075	50.0000	
	70 1-Chlorohexane	91	9.062	9.068	(1.001)	77606	50.0000	48(Q)
	71 Chlorobenzene	112	9.085	9.080	(1.004)	162959	50.0000	49
	72 1,1,1,2-Tetrachloroethane	131	9.190	9.184	(1.015)	68777	50.0000	48
	73 Ethylbenzene	106	9.236	9.231	(1.021)	76196	50.0000	47

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	74	m,p-Xylene	106	9.387	9.393	(1.037)	189108	100.000	96
	75	o-Xylene	106	9.910	9.904	(1.095)	95513	50.0000	50
	76	Styrene	104	9.921	9.927	(1.096)	163618	50.0000	50
	77	Bromoform	173	10.153	10.148	(1.122)	70106	50.0000	53
	78	Isopropylbenzene	105	10.409	10.403	(1.150)	234398	50.0000	49
	79	trans-1,4-Dichloro-2-butene	75	10.490	10.484	(1.159)	28018	50.0000	51
$	80	Bromofluorobenzene	95	10.595	10.600	(1.171)	70776	50.0000	50
	81	Bromobenzene	156	10.792	10.798	(0.884)	85294	50.0000	48
	82	1,1,2,2-Tetrachloroethane	83	10.804	10.809	(0.885)	79633	50.0000	50
	83	1,2,3-Trichloropropane	75	10.862	10.856	(0.890)	89981	50.0000	51
	84	n-Propylbenzene	120	10.978	10.972	(0.899)	57102	50.0000	46
	85	2-Chlorotoluene	126	11.071	11.076	(0.907)	62894	50.0000	49
	86	4-Chlorotoluene	126	11.222	11.227	(0.919)	62834	50.0000	49
	87	1,3,5-Trimethylbenzene	105	11.222	11.227	(0.919)	178559	50.0000	47
	88	tert-Butylbenzene	119	11.674	11.669	(0.956)	189517	50.0000	49
	89	1,2,4-Trimethylbenzene	105	11.744	11.738	(0.962)	189032	50.0000	47
	90	sec-Butylbenzene	105	11.976	11.982	(0.981)	205477	50.0000	47
	91	1,3-Dichlorobenzene	146	12.115	12.110	(0.992)	137610	50.0000	49
	92	4-Isopropyltoluene	119	12.197	12.191	(0.999)	174757	50.0000	47
*	93	1,4-Dichlorobenzene-d4	152	12.208	12.203	(1.000)	85552	50.0000	
	94	1,4-Dichlorobenzene	146	12.243	12.237	(1.003)	139809	50.0000	46
M	95	Xylene (Total)	106				284621	150.000	150
	96	1,2-Dichlorobenzene	146	12.754	12.760	(1.045)	135202	50.0000	50
	97	n-Butylbenzene	91	12.777	12.783	(1.047)	159039	50.0000	50
	98	Hexachloroethane	117	13.125	13.120	(1.075)	45609	50.0000	49
	99	1,2-Dibromo-3-chloropropane	75	13.868	13.874	(1.136)	12289	50.0000	58
	100	1,3,5-Trichlorobenzene	182	15.087	15.082	(2.704)	85901	50.0000	55
	101	1,2,4-Trichlorobenzene	180	15.087	15.082	(1.236)	88415	50.0000	52
	102	Hexachlorobutadiene	225	15.366	15.360	(1.259)	50203	50.0000	50
	103	Naphthalene	128	15.424	15.430	(1.263)	172934	50.0000	60
	104	1,2,3-Trichlorobenzene	180	15.784	15.790	(1.293)	71390	50.0000	55

QC Flag Legend

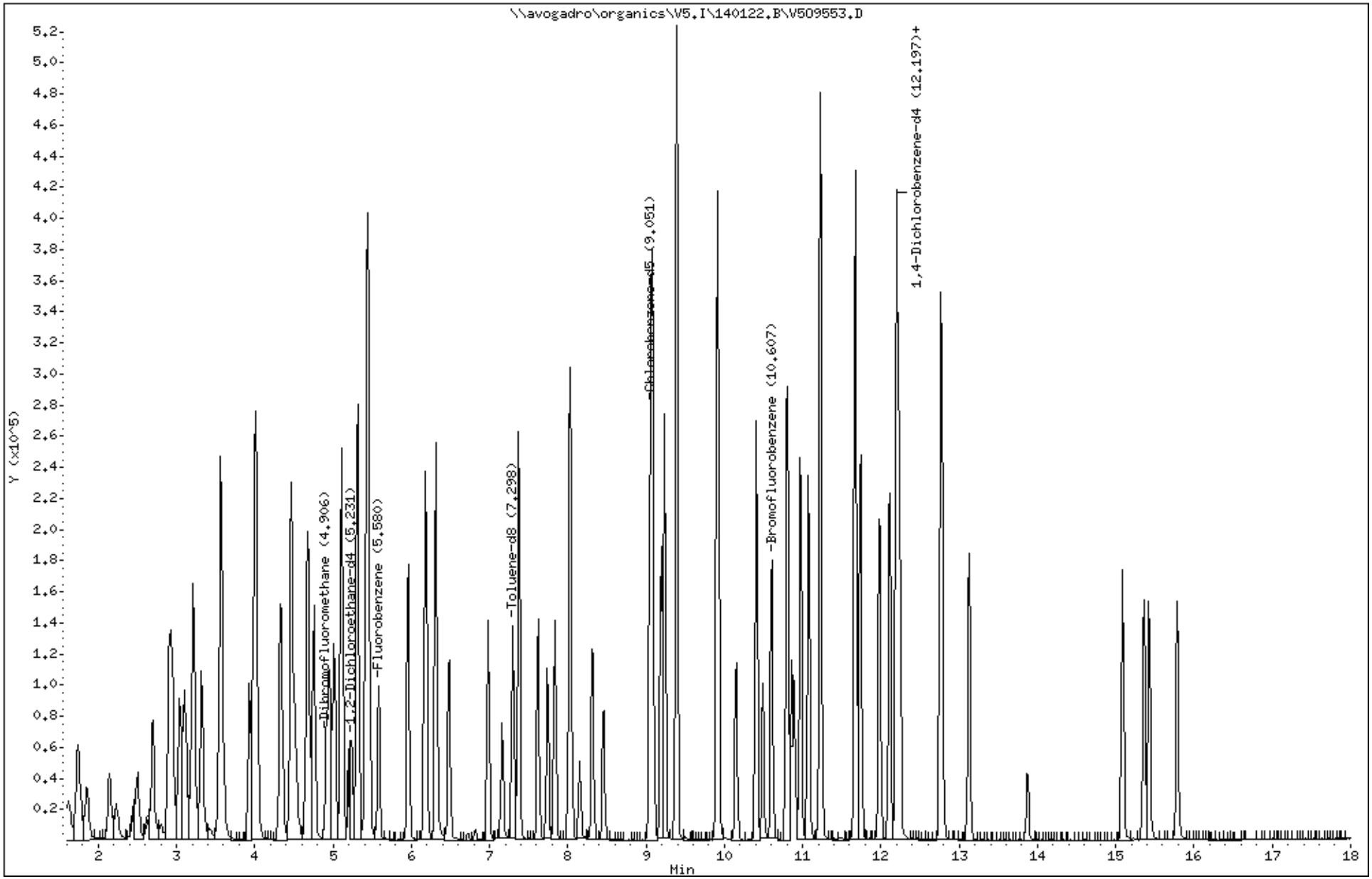
Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V5.I\140122.B\V509553.D
Date : 22-JAN-2014 14:50
Client ID: LCSD-75683
Sample Info: 5ML,LCSD-75683,LCSD-75683,75683

Column phase: DB-624

Instrument: V5.i

Operator: WL SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-75688

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7553.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/23/2014

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	59	
74-87-3	Chloromethane	59	
75-01-4	Vinyl chloride	58	
74-83-9	Bromomethane	55	
75-00-3	Chloroethane	59	
75-69-4	Trichlorofluoromethane	59	
75-35-4	1,1-Dichloroethene	55	
67-64-1	Acetone	58	
74-88-4	Iodomethane	62	
75-15-0	Carbon disulfide	57	
75-09-2	Methylene chloride	55	
156-60-5	trans-1,2-Dichloroethene	57	
1634-04-4	Methyl tert-butyl ether	56	
75-34-3	1,1-Dichloroethane	57	
108-05-4	Vinyl acetate	55	
78-93-3	2-Butanone	54	
156-59-2	cis-1,2-Dichloroethene	57	
594-20-7	2,2-Dichloropropane	59	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	55	
71-55-6	1,1,1-Trichloroethane	59	
563-58-6	1,1-Dichloropropene	57	
56-23-5	Carbon tetrachloride	61	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	58	
79-01-6	Trichloroethene	57	
78-87-5	1,2-Dichloropropane	56	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	56	
10061-01-5	cis-1,3-Dichloropropene	55	
108-10-1	4-Methyl-2-pentanone	58	
108-88-3	Toluene	58	
10061-02-6	trans-1,3-Dichloropropene	56	
79-00-5	1,1,2-Trichloroethane	56	
142-28-9	1,3-Dichloropropane	55	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD-75688

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0058 Mod. Ref No.: SDG No.: SN0058

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-75688

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M7553.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. 0.0 Date Analyzed: 01/23/2014

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	57	
591-78-6	2-Hexanone	60	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	55	
108-90-7	Chlorobenzene	55	
630-20-6	1,1,1,2-Tetrachloroethane	54	
100-41-4	Ethylbenzene	56	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	55	
1330-20-7	Xylene (Total)	170	
100-42-5	Styrene	55	
75-25-2	Bromoform	56	
98-82-8	Isopropylbenzene	57	
79-34-5	1,1,2,2-Tetrachloroethane	54	
108-86-1	Bromobenzene	53	
96-18-4	1,2,3-Trichloropropane	60	
103-65-1	n-Propylbenzene	56	
95-49-8	2-Chlorotoluene	55	
108-67-8	1,3,5-Trimethylbenzene	56	
106-43-4	4-Chlorotoluene	52	
98-06-6	tert-Butylbenzene	57	
95-63-6	1,2,4-Trimethylbenzene	56	
135-98-8	sec-Butylbenzene	57	
99-87-6	4-Isopropyltoluene	58	
541-73-1	1,3-Dichlorobenzene	55	
106-46-7	1,4-Dichlorobenzene	54	
104-51-8	n-Butylbenzene	59	
95-50-1	1,2-Dichlorobenzene	55	
96-12-8	1,2-Dibromo-3-chloropropane	64	
120-82-1	1,2,4-Trichlorobenzene	58	
87-68-3	Hexachlorobutadiene	60	
87-61-6	1,2,3-Trichlorobenzene	61	
91-20-3	Naphthalene	58	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	43	

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7553.D
Report Date: 31-Jan-2014 10:03

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140123.B\V1M7553.D
Lab Smp Id: LCSD-75688 Client Smp ID: LCSD-75688
Inj Date : 23-JAN-2014 10:47
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCSD-75688,LCSD-75688,75688
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140123.B\v18260GH.m
Meth Date : 31-Jan-2014 09:55 amarquis Quant Type: ISTD
Cal Date : 21-JAN-2014 15:31 Cal File: V1M7501.D
Als bottle: 8 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/(Ws * (100 - M)/100) * 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	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
1	Dichlorodifluoromethane	85	1.274	1.286	(0.285)	68832	50.0000	58(M)M7 AM 01/31	
2	Chloromethane	50	1.402	1.405	(0.314)	369731	50.0000	59	
3	Vinyl Chloride	62	1.481	1.493	(0.332)	234809	50.0000	58	
4	Bromomethane	94	1.727	1.720	(0.387)	151103	50.0000	55	
5	Chloroethane	64	1.835	1.828	(0.411)	159293	50.0000	59	
6	Trichlorofluoromethane	101	1.944	1.936	(0.435)	171901	50.0000	59	
127	Ethanol	46	2.042	2.045	(0.457)	157239	5000.00	9000	
7	Ether	59	2.121	2.124	(0.475)	210219	50.0000	54	
8	Acrolein	56	2.200	2.202	(0.493)	270412	250.000	290	
9	1,1-Dichloroethene	96	2.288	2.321	(0.513)	162375	50.0000	55	
10	1,1,2-Trichloro-1,2,2-trifluo	101	2.298	2.301	(0.515)	91084	50.0000	43	
11	Acetone	58	2.308	2.311	(0.517)	40314	50.0000	58	
12	Iodomethane	142	2.387	2.458	(0.535)	218956	50.0000	62(Q)	
13	Carbon Disulfide	76	2.525	2.537	(0.565)	491588	50.0000	57	
14	Acetonitrile	40	2.495	2.498	(0.559)	277025	500.000	570(Q)	
15	Methyl Acetate	43	2.535	2.547	(0.568)	365558	50.0000	57	
16	Methylene Chloride	84	2.673	2.685	(0.599)	165226	50.0000	55	
17	tert-Butanol	59	2.682	2.685	(0.601)	45787	100.000	140	
18	Acrylonitrile	53	2.781	2.774	(0.623)	101531	50.0000	57	
20	Methyl tert-butyl ether	73	2.820	2.813	(0.632)	554673	50.0000	56	
19	trans-1,2-Dichloroethene	96	2.810	2.813	(0.629)	171668	50.0000	57	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	21 1,1-Dichloroethane	63	3.116	3.118	(0.698)	373359	50.0000	57
	22 Vinyl acetate	43	3.165	3.158	(0.709)	886132	50.0000	55
	23 Diisopropyl Ether	45	3.165	3.168	(0.709)	1210573	50.0000	56
	24 Ethyl tert-butyl ether	59	3.441	3.443	(0.771)	743904	50.0000	56
M	27 1,2-dichloroethene, (Total)	100				372700	100.000	110
	25 cis-1,2-Dichloroethene	96	3.539	3.542	(0.793)	201032	50.0000	57
	26 2,2-Dichloropropane	77	3.549	3.552	(0.795)	122867	50.0000	58
	28 2-Butanone	72	3.549	3.552	(0.795)	30046	50.0000	54
	29 Bromochloromethane	128	3.726	3.729	(0.835)	87003	50.0000	55
	30 Tetrahydrofuran	72	3.766	3.768	(0.843)	52100	100.000	120
	31 Chloroform	83	3.786	3.788	(0.848)	296678	50.0000	55
$	32 Dibromofluoromethane	113	3.914	3.916	(0.876)	121076	50.0000	52
	33 1,1,1-Trichloroethane	97	3.943	3.946	(0.883)	186109	50.0000	59
	34 Cyclohexane	56	3.992	3.995	(0.894)	399237	50.0000	62
	36 Carbon Tetrachloride	117	4.081	4.084	(0.914)	163579	50.0000	61
	35 1,1-Dichloropropene	110	4.071	4.074	(0.912)	79118	50.0000	57
$	37 1,2-Dichloroethane-d4	102	4.180	4.182	(0.936)	31504	50.0000	54
	38 Benzene	78	4.239	4.241	(0.949)	744581	50.0000	58
	39 1,2-Dichloroethane	62	4.239	4.241	(0.949)	200204	50.0000	55
	40 tert-Amyl methyl ether	73	4.337	4.330	(0.971)	596598	50.0000	58
*	41 Fluorobenzene	96	4.465	4.468	(1.000)	448760	50.0000	
	42 Trichloroethene	130	4.780	4.773	(1.071)	156842	50.0000	57
	43 Methylcyclohexane	83	4.958	4.960	(1.110)	323853	50.0000	60
	44 1,2-Dichloropropane	63	4.968	4.960	(1.112)	221892	50.0000	56
	46 Dibromomethane	93	5.066	5.059	(1.135)	110004	50.0000	55
	47 1,4-Dioxane	88	5.086	5.078	(1.139)	38529	1000.00	1900
	48 Bromodichloromethane	83	5.204	5.207	(1.165)	235267	50.0000	56
	45 2-Chloroethyl vinyl ether	63	5.490	5.482	(1.229)	2612	50.0000	29
	49 cis-1,3-Dichloropropene	75	5.618	5.620	(1.258)	308319	50.0000	55
	50 4-Methyl-2-pentanone	43	5.765	5.768	(1.291)	316778	50.0000	58
$	51 Toluene-d8	98	5.884	5.886	(0.803)	436461	50.0000	51
	52 Toluene	91	5.943	5.945	(1.331)	704679	50.0000	58
	53 trans-1,3-Dichloropropene	75	6.149	6.152	(1.377)	255762	50.0000	56
	54 1,1,2-Trichloroethane	97	6.327	6.329	(1.417)	146512	50.0000	56
	55 Tetrachloroethene	164	6.494	6.487	(0.886)	121001	50.0000	57
	56 1,3-Dichloropropane	76	6.494	6.497	(0.886)	282227	50.0000	55
	57 2-Hexanone	43	6.593	6.585	(0.899)	260845	50.0000	60
	58 Dibromochloromethane	129	6.721	6.723	(0.917)	167693	50.0000	54
	59 1,2-Dibromoethane	107	6.839	6.842	(0.933)	156911	50.0000	55
*	60 Chlorobenzene-d5	117	7.331	7.334	(1.000)	310433	50.0000	
	63 1-Chlorohexane	91	7.361	7.354	(1.004)	285343	50.0000	58
	61 Chlorobenzene	112	7.361	7.364	(1.004)	419168	50.0000	55
	62 1,1,1,2-Tetrachloroethane	131	7.450	7.452	(1.016)	144202	50.0000	54
	64 Ethylbenzene	106	7.489	7.492	(1.021)	219602	50.0000	56
	65 m,p-Xylene	106	7.617	7.620	(1.039)	554832	100.000	110
	66 o-Xylene	106	8.050	8.043	(1.098)	268065	50.0000	55
	67 Styrene	104	8.060	8.063	(1.099)	471610	50.0000	55
	68 Bromoform	173	8.247	8.240	(1.125)	103825	50.0000	56
	69 Isopropylbenzene	105	8.474	8.467	(1.156)	696453	50.0000	57
	126 trans-1,4-Dichloro-2-butene	75	8.533	8.526	(1.164)	73767	50.0000	54
$	70 Bromofluorobenzene	95	8.632	8.614	(1.177)	172469	50.0000	50
	72 Bromobenzene	156	8.789	8.782	(0.888)	152663	50.0000	53
	71 1,1,2,2-Tetrachloroethane	83	8.799	8.792	(0.889)	211703	50.0000	54
	73 1,2,3-Trichloropropane	75	8.838	8.831	(0.893)	238200	50.0000	60(Q)

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7553.D
Report Date: 31-Jan-2014 10:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 n-Propylbenzene	120	8.937	8.930	(0.903)	165394	50.0000	56
	75 2-Chlorotoluene	126	9.026	9.008	(0.911)	151209	50.0000	55
	76 1,3,5-Trimethylbenzene	105	9.154	9.137	(0.924)	565468	50.0000	56
	77 4-Chlorotoluene	126	9.144	9.137	(0.923)	149259	50.0000	52
	78 tert-Butylbenzene	119	9.508	9.501	(0.960)	557614	50.0000	57
	79 1,2,4-Trimethylbenzene	105	9.557	9.550	(0.965)	573869	50.0000	56
M	81 Xylene (Total)	106				822897	150.000	170
	80 sec-Butylbenzene	105	9.745	9.737	(0.984)	752168	50.0000	57
	82 1,3-Dichlorobenzene	146	9.833	9.826	(0.993)	278002	50.0000	55
	83 4-Isopropyltoluene	119	9.902	9.895	(1.000)	572592	50.0000	58
*	84 1,4-Dichlorobenzene-d4	152	9.902	9.905	(1.000)	136801	50.0000	
	85 1,4-Dichlorobenzene	146	9.932	9.924	(1.003)	277332	50.0000	54
	86 n-Butylbenzene	91	10.316	10.309	(1.042)	589770	50.0000	59
	87 1,2-Dichlorobenzene	146	10.296	10.299	(1.040)	265062	50.0000	55
	88 1,2-Dibromo-3-chloropropane	75	11.045	11.047	(1.115)	30882	50.0000	64
	89 1,2,4-Trichlorobenzene	180	11.813	11.806	(1.193)	162984	50.0000	58
	90 Hexachlorobutadiene	225	11.971	11.973	(1.209)	79522	50.0000	60
	91 Naphthalene	128	12.010	12.013	(1.213)	380191	50.0000	58
	92 1,2,3-Trichlorobenzene	180	12.227	12.219	(1.235)	141782	50.0000	61

QC Flag Legend

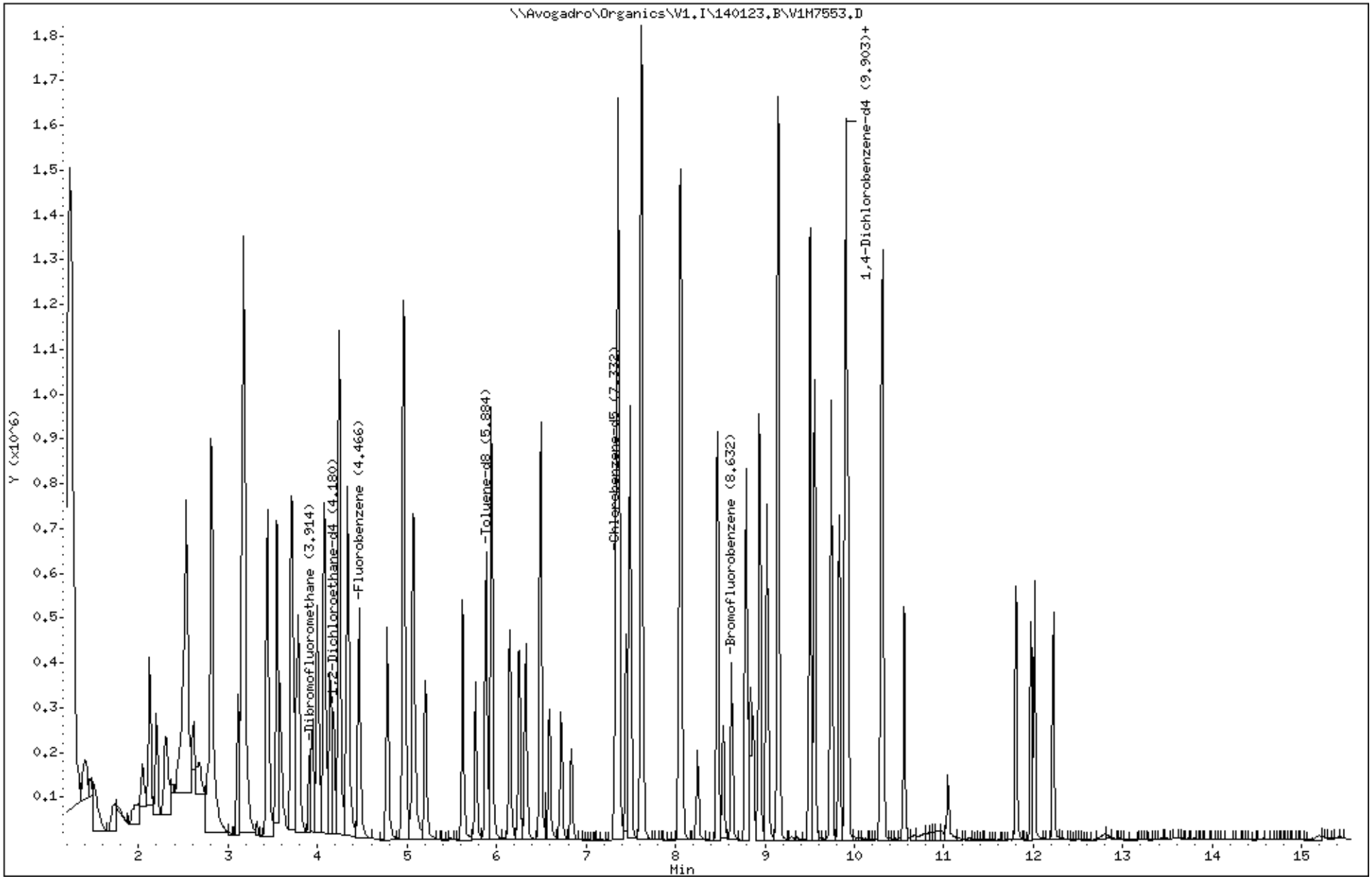
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Avogadro\Organics\V1.I\140123.B\V1M7553.D
Date : 23-JAN-2014 10:47
Client ID: LCSD-75688
Sample Info: 5ML,LCSD-75688,LCSD-75688,75688

Instrument: V1.i

Operator: WL SRC: LIMS
Column diameter: 0.25

Column phase: DB-624



Percent Moisture and Percent Solids Report

Lab Sample ID	Client Sample ID	Analyzed	Percent Moisture	Percent Solids	Validated
N0058-01A	HW-WET-SE-6-(1)_01/1	01/17/2014	32.650	67.350	Yes
N0058-02A	HW-WET-SE-5-(1)_01/1	01/17/2014	50.136	49.864	Yes
N0058-03A	HW-WET-SE-12-(1)_01/	01/17/2014	47.189	52.811	Yes
N0058-04A	HW-WET-SE-11-(1)_01/	01/17/2014	33.971	66.029	Yes
N0058-05A	HW-WET-SE-10-(1)_01/	01/17/2014	39.077	60.923	Yes
N0058-06A	HW-WET-SE-9-(1)_01/1	01/17/2014	40.060	59.940	Yes
N0058-07A	HW-WET-SE-8-(1)_01/1	01/17/2014	52.778	47.222	Yes
N0058-08A	HW-WET-SE-7-(1)_01/1	01/17/2014	53.405	46.595	Yes
N0058-09A	HW-WET-SE-(1)_01/15/	01/17/2014	45.856	54.144	Yes
N0058-10A	HW-WET-SE-2-(1)_01/1	01/17/2014	27.257	72.743	Yes
N0058-11A	HW-WET-SE-3-(1)_01/1	01/17/2014	57.252	42.748	Yes
N0058-12A	HW-WET-SE-4-(1)_01/1	01/17/2014	72.419	27.581	Yes
N0058-13A	HW-WET-SE-17-(1)_01/	01/17/2014	37.601	62.399	Yes
N0058-14A	HW-WET-SE-16-(1)_01/	01/17/2014	49.843	50.157	Yes
N0058-15A	HW-WET-SE-15-(1)_01/	01/17/2014	48.344	51.656	Yes
N0058-16A	HW-WET-SE-14-(1)_01/	01/17/2014	9.477	90.523	Yes
N0058-17A	HW-WET-SE-13-(1)_01/	01/17/2014	31.157	68.843	Yes

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260C
ICAL DATE: 1-16-14

ANALYST: JH

BATCH: 140116.B

Start: 16-JAN-14 12:43
End: 16-JAN-14 15:43

Comments:

Standards: BFB VW130927A 2 uL
IS/SS VW140109A 100 uL
SM VW140116A ___ uL
ICV VW140116B ___ uL

Reviewed By: WC 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V1M7417	12:23	BFB1W	BFB1W		SL									1		OK	
V1M7418	12:54	VSTD0051W	VSTD0051W		SL		94	93	91					1		OK MI_12	
V1M7419	13:22	VSTD0201W	VSTD0201W		SL		97	99	100					1		OK	
V1M7420	13:50	VSTD0501W	VSTD0501W		SL		100	100	100					1		OK MI_1	
V1M7421	14:18	VSTD1001W	VSTD1001W		SL		98	98	100					1		OK MI_9	
V1M7422	14:46	VSTD2001W	VSTD2001W		SL		109	107	104					1		OK MI_1	
V1M7423	15:14	VBLK	VBLK		SL		94	93	89	102	102	102	97	1	E	MI VBLK	
V1M7424	15:43	VICV0501W	VICV0501W		SL		96	95	98	102	103	102	101	1	R	OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence

R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

1-17-14

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260L
ICAL DATE: 1-16-14

ANALYST:

BATCH: 140120.B

Start: 20-JAN-14 08:34
End: 20-JAN-14 14:45

Comments:

Standards: BFB MJ309271A 2 uL
IS/SU VL140116A 100 uL
STD VL140116A 20 uL
_____ ___ uL

Reviewed By: 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V1M7472	08:34	BFB1Y	BFB1Y		SL									1			
V1M7473	09:11	VSTD0501Y	VSTD0501Y		SL		100	100	100					1		MI_1_3	
V1M7474	09:51	LCS-75643	LCS-75643	75643	SL		99	99	100	101	92	100	100	1	R		
V1M7475	10:20	LCSD-75643	LCSD-75643	75643	SL		113	114	111	98	100	100	104	1	ER		
V1M7476	10:49	MB-75643	MB-75643	75643	SL		97	96	92	102	96	100	98	1			
V1M7477	11:17	MB-75643	MB-75643	75643	SL		85	86	84	98	94	100	99	1			
V1M7478	11:45	N0058-01A	HW-WET-SE-6-(1)_	75643	SL	1	93	94	92	102	98	100	98	1			
V1M7479	12:14	N0058-02A	HW-WET-SE-5-(1)_	75643	SL	1	92	93	87	101	106	100	95	1			
V1M7480	12:42	N0058-03A	HW-WET-SE-12-(1	75643	SL	1	93	95	89	106	111*	99	99	1			
V1M7481	13:10	N0058-04A	HW-WET-SE-11-(1	75643	SL	1	89	93	91	104	97	99	98	1			
V1M7482	13:42	N0058-05A	HW-WET-SE-10-(1	75643	SL	1	83	82	73	101	99	101	97	1			
V1M7483	14:17	N0058-06A	HW-WET-SE-9-(1)_	75643	SL	1	131	134	134	108	104	97	94	1			
V1M7484	14:45	N0058-07A	HW-WET-SE-8-(1)_	75643	SL	1	82	87	87	107	111*	96	100	1			RT

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

1-27-14

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260B ANALYST: [illegible]
ICAL DATE: 1-21-14

BATCH: 140121.B

Start: 21-JAN-14 13:10
End: 21-JAN-14 23:04

Comments:

Standards: [illegible] 2 uL
[illegible] AMP uL
[illegible] uL
ICV [illegible] 25 uL

Reviewed By: MC 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V1M7496	13:10	BFB1Z	BFB1Z		SL									1		OK	
V1M7497	13:38	VSTD0051Z	VSTD0051Z		SL		103	105	101					1		OK MI_1_45	
V1M7498	14:06	VSTD0201Z	VSTD0201Z		SL		101	102	99					1		OK MI_1	
V1M7499	14:35	VSTD0501Z	VSTD0501Z		SL		100	100	100					1		OK MI_1	
V1M7500	15:03	VSTD1001Z	VSTD1001Z		SL		97	100	102					1		OK MI_1	
V1M7501	15:31	VSTD2001Z	VSTD2001Z		SL		99	100	97					1		OK MI_1	
V1M7502	16:00	VICV0501Z	VICV0501Z		SL		98	98	98	100	95	103	102	1	ER	OK	
V1M7503	16:28	LCS-75665	LCS-75665	75665	SL		96	99	101	101	109	100	99	1	ER	OK	
V1M7504	16:56	MB-75665	MB-75665	75665	SL		99	100	96	100	105	101	99	1		MW USED	
V1M7505	17:24	MB-75665	MB-75665	75665	SL		89	92	87	104	101	100	94	1		OK	
V1M7506	17:53	N0058-09A	HW-WET-SE-(1)_01	75665	SL	1	95	95	87	104	108	102	97	1		OK	
V1M7507	18:21	N0058-10A	HW-WET-SE-2-(1)_	75665	SL	1	97	102	97	103	105	98	97	1		OK	
V1M7508	18:49	N0058-11A	HW-WET-SE-3-(1)_	75665	SL	1	87	85	82	99	112*	105	123*	1	E	RR MED LVL	
V1M7509	19:17	N0058-12A	HW-WET-SE-4-(1)_	75665	SL	1	83	75	55	103	117*	111	88	1	E	RR MED LVL	
V1M7510	19:45	N0058-13A	HW-WET-SE-17-(1	75665	SL	1	95	96	92	104	106	101	97	1		OK LOW LVL	
V1M7511	20:13	N0058-14A	HW-WET-SE-16-(1	75665	SL	1	95	95	92	105	116*	101	100	1		OK LOW LVL	
V1M7512	20:42	N0058-15A	HW-WET-SE-15-(1	75665	SL	1	96	95	92	104	105	102	100	1		OK	
V1M7513	21:10	N0058-16A	HW-WET-SE-14-(1	75665	SL	1	100	101	93	102	102	101	97	1		OK	
V1M7514	21:38	N0058-17A	HW-WET-SE-13-(1	75665	SL	1	95	98	96	103	104	99	98	1		OK	
V1M7515	22:07	N0058-12AMS	HW-WET-SE-4-(1)_	75665	SL	2	91	90	82	104	120*	103	98	1	ER	3RR LVL	
V1M7516	22:35	N0058-12AMSD	HW-WET-SE-4-(1)_	75665	SL	3	85	81	64	100	127*	106	92	1	ER	3RR LVL	
V1M7517	23:04	VBLK	VBLK		SL		102	104	92	101	103	99	93	1		WT USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

1-22-14

INJECTION LOG — VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260C
ICAL DATE: 1-23-14
ANALYST: [signature]
BATCH: 140122.B
Start: 22-JAN-14 10:33
End: 22-JAN-14 22:55

Comments:

Standards: BFB WM1309219 2 uL
IS/SS VM1401098 AUTO uL
SMI VM1401160 2.5 uL
_____ ____ uL

Reviewed By: [signature] 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V1M7520	10:33	BFB1A	BFB1A		SL									1		OK	
V1M7521	10:51	VSTD0501A	VSTD0501A		SL		100	100	100					1		NOT USED	
V1M7522	11:27	VSTD0501A	VSTD0501A		SL		100	100	100					1		OK MI_1	
V1M7523	12:05	LCS-75681	LCS-75681	75681	SL		99	94	95	100	105	104	101	1	R	OK MI_1	
V1M7526	12:33	MB-75681	MB-75681	75681	SL		95	94	86	100	105	99	96	1		NOT USED	
V1M7527	13:02	MB-75681	MB-75681	75681	SL		95	93	88	98	103	102	99	1		OK	
V1M7528	13:30	N0052-01B	RS-BF-A101-0116	75681	SL		0*	0*	0*	0*	0*	0*	0*	1		RE-EX	RT
V1M7529	13:58	N0052-02B	RS-BF-A102-0116	75681	SL		95	96	94	102	112*	99	100	1		OK	
V1M7530	14:26	N0071-01C	WGGM-14-RBF-002	75681	SL		95	95	91	100	107	99	98	1		OK	
V1M7531	14:55	N0058-08A	HW-WET-SE-7-(1)_	75681	SL		95	92	86	101	101	100	99	1		OK	
V1M7532	15:23	N0044-11B	SB-27 (22-23.5)	75681	SL		89	86	88	103	106	103	101	1		OK	
V1M7533	15:52	N0044-15B	SB-28 (22-23)	75681	SL		100	98	99	102	103	102	98	1		OK	
V1M7534	16:20	N0044-16C	TP-9 (2.7-2.9)	75681	SL		96	95	92	101	102	101	98	1		OK	
V1M7535	16:48	N0044-17C	TP-9 (3.9-4.2)	75681	SL		98	95	91	103	108	101	98	1		OK	
V1M7536	17:16	N0058-06A	HW-WET-SE-9-(1)_	75681	SL		96	94	89	99	104	101	99	1		RE-EX	
V1M7537	17:44	N0058-13A	HW-WET-SE-17-(1	75681	SL		96	93	90	103	109	100	99	1		OK	
V1M7538	18:13	N0058-14A	HW-WET-SE-16-(1	75681	SL		89	92	85	105	121*	97	99	1		OK	
V1M7539	18:41	N0054-01C	MW-10 7-8	75681	SL		95	95	91	106	112*	99	99	1		OK	
V1M7540	19:09	N0054-02C	MW-11 8-9	75681	SL		96	96	91	103	110*	100	97	1		OK	
V1M7541	19:37	N0054-03C	MW-12 9-10	75681	SL		83	78	70	103	99	105	94	1		OK	
V1M7542	20:05	N0054-04C	MW-13 4-5	75681	SL		99	98	91	102	113*	100	95	1		OK	
V1M7543	20:33	N0072-01C	DRUM SAMPLE	75681	SL		105	103	96	102	106	98	98	1		OK	
V1M7544	21:01	N0058-12AMS	HW-WET-SE-4-(1)_	75681	SL		93	92	87	105	116*	102	99	1	ER	OK	
V1M7545	21:29	N0058-12AMSD	HW-WET-SE-4-(1)_	75681	SL		98	95	89	101	123*	101	94	1	ER	OK	
V1M7546	21:58	N0044-17CMS	TP-9 (3.9-4.2)M	75681	SL		100	101	98	101	116*	99	100	1	R	OK	
V1M7547	22:26	N0044-17CMSD	TP-9 (3.9-4.2)M	75681	SL		94	98	97	105	124*	96	99	1	R	OK	
V1M7548	22:55	VBLK	VBLK		SL		99	97	95	105	105	101	100	1	T	NOT USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

[signature] 1-23-14

N0058

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260C
ICAL DATE: 1-27-14

ANALYST: [illegible]

BATCH: 140123.B

Start: 23-JAN-14 08:43
End: 23-JAN-14 13:02

Comments:

Standards: [illegible] 2 uL
[illegible] 2 uL
[illegible] 2 uL
[illegible] uL

Reviewed By: [illegible] 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V1M7550	08:43	BFB1B	BFB1B		SL									1			
V1M7551	09:37	VSTD0501B	VSTD0501B		SL		100	100	100					1		MI_1	
V1M7552	10:19	LCS-75688	LCS-75688	75688	SL		89	86	88	105	105	101	101	1	R		
V1M7553	10:47	LCSD-75688	LCSD-75688	75688	SL		80	78	79	104	109	102	100	1	R		
V1M7554	11:25	MB-75688	MB-75688	75688	SL		87	83	81	102	98	100	99	1		INT USED	
V1M7555	11:53	MB-75688	MB-75688	75688	SL		85	82	79	98	103	100	96	1			
V1M7556	12:34	N0058-06A	HW-WET-SE-9-(1)_	75688	SL	1	86	83	75	103	106	100	95	1			
V1M7557	13:02	N0052-01B	RS-BF-A101-0116	75688	SL	2	86	84	84	104	115*	99	99	1			

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

[illegible] 1-24-14

N0058

METHOD:
INITIAL CAL:
COMMENTS:

CAL ID:
IS/SS ID:
ICV ID:

ANALYST:
ARCHIVE:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

Comments:

METHOD: 8260W
ICAL DATE: 1/21/14

ANALYST: WL

BATCH: 140121.B

Start: 21-JAN-14 10:34
End: 21-JAN-14 13:58

Standards: SSIS-VWI401116A ___ uL
SSD-VWI401116A ___ uL
_____ ___ uL
_____ ___ uL

Reviewed By: 1-22-14 Manual Integration: OK MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V5O9510	10:34	BFB5K	BFB5K		AQ												
V5O9511	10:59	VSTD0015K	VSTD0015K		AQ		105	103	102					1		OK	
V5O9512	11:24	VSTD0055K	VSTD0055K		AQ		103	104	100					1		OK MI_99	
V5O9513	11:50	VSTD0205K	VSTD0205K		AQ		101	100	102					1		OK	
V5O9514	12:16	VSTD0505K	VSTD0505K		AQ		100	100	100					1		OK	
V5O9515	12:41	VSTD1005K	VSTD1005K		AQ		103	101	99					1		OK	
V5O9516	13:07	VSTD2005K	VSTD2005K		AQ		101	102	101					1		OK	
V5O9517	13:58	VICV0505K	VICV0505K		AQ		100	101	100	99	106	100	100	1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

WL 1/22/14

METHOD: CAL ID: ANALYST:

INITIAL CAL: IS/SS ID: ARCHIVE:

COMMENTS: ICV ID:

Spectrum Analytical, Inc. RI Division V5 Injection Log
Volatiles Laboratory

METHOD: 8260_M.S ANALYST: WL
ICAL DATE: 1/21/14

BATCH: 140122.B

Start: 22-JAN-14 13:15
End: 22-JAN-14 19:28

Comments:

Standards: IS/SS-VW140110A ___ uL
STD-VW140118A ___ uL
_____ ___ uL
_____ ___ uL

Reviewed By: 1-23-14 Manual Integration: NA MI Review: WL

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V5O9550	13:15	BFB5M	BFB5M		AQ									1		OK	
V5O9551	13:59	VSTD0505M	VSTD0505M		AQ		100	100	100					1		OK	
V5O9552	14:24	LCS-75683	LCS-75683	75683	SL		98	98	104	102	102	99	100	1		OK	
V5O9553	14:50	LCSD-75683	LCSD-75683	75683	SL		101	99	103	98	108	98	99	1	R	OK	
V5O9554	15:41	MB-75683	MB-75683	75683	SL		103	102	104	102	93	97	98	1		OK	
V5O9555	16:06	N0058-12AME	HW-WET-SE-4-(1)	75683	SL	1	96	97	101	100	104	100	100	1		OK	
V5O9556	16:32	N0058-11AME	HW-WET-SE-3-(1)	75683	SL	1	100	99	103	99	104	98	99	1	E	1,1,1-TCE=1202, RRX10	
V5O9557	16:57	BLK			AQ		102	102	105	101	98	99	100	1		Retuned	
V5O9558	17:22	N0044-08C	SB-29 (20.8-21.	75683	SL	1	100	100	101	98	96	95	98	1		OK 1,1,1-TCE=0	
V5O9559	17:48	N0044-07C	SB-26 (12.5-14.	75683	SL	1	102	103	105	99	98	104	101	1		OK	
V5O9560	18:13	N0044-05C	SB-26 (8-10)	75683	SL	1	100	105	107	104	110	94	101	20		OK, 1,2,4-TMB=53	
V5O9561	18:39	BLK			AQ		109	109	108	100	99	97	97	1	E	Retuned	
V5O9562	19:04	BLK			AQ		109	109	111	102	104	98	100	1			
V5O9563	19:28	N0058-11AMEDL	HW-WET-SE-3-(1)	75683	SL	1	100	103	107	103	103	96	104	10		OK 1,1,1-TCE=103	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

WL 1/24/14

N0058

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
1-17-14	N0044	14C	8260C	Nm	Nm	4.8	5.0	E	DI H2O		
1-17-14	N0044	15D	8260C	Nm	Nm	5.1	5.0	E	DI H2O		
1-20-14	MB-75643		8260C			5.0	5.0	E			
	LCS-75634					5.0					
	N0058	01A				5.1					
		02A				6.8					
		03A				5.2					
		04A				5.3					
		05A				5.2					
		06A				5.5					
		07A				5.1					
		08A				5.4					
		09A				5.0					
		10A				5.7					
1-20-14	N0058	11A	8260C	Nm	Nm	5.8	5.0	E	DI H2O		

*=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

Logbook ID: 90.0189-09/13

Reviewed By: 1-28-14

N0058

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
1-2014	N0058	12A	8260L	Nbr	Nbr	6.1	5.0	E	DI H2O		✱
		12AMS				4.8					
		12AMSD				5.6					
		13A				6.9					
		14A				5.3					
		15A				5.3					
		17A				5.3					
1-2014	N0058	16A	8260L	Nbr	Nbr	6.1	5.0	E	DI H2O		✱
1/21/14	N0071-01C		8260	NA	NA	5.1	5.0	D			MC
	N0071-01D			NA	NA	5.9		D			
	N0049-01B			29.76	37.58	7.8		A	MeOH		
	N0049-02B			29.66	37.07	7.4		A			
	MB-75663			NA	NA	5.0		E			
	LCS-75663					5.0		E			
1/21/14	LCSD-75663		8260	NA	NA	5.0	5.0	E	MeOH		MC

*=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

Logbook ID: 90.0189-09/13

Reviewed By: ✱ 1-2014

N0058

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
1/21/14	N0050	-18A	8260	29.90	29.92	5.0	5.0	A	MeOH		WL
1/21/14	N0050	-19A	8260	29.79	39.81	10.0	5.0	A	MeOH		WL
1-22-14	MB-756	81	8260_L	NA	NA	5.0		E	DI H2O		AM
	LCS-756	81		NA	NA	5.0		E			
	N0072	01C		32.62	38.82	6.2		B			
	N0052	01D		32.23	38.98	6.8		B			
	N0052	02D		32.68	40.17	7.5		B			
	N0058	08A		MB	MB	5.3		E			
	N0044	11D				2.0					
		15D				2.0					
		16C				3.0					
		17C				5.6					
		MCMS				5.4					
	N0044	MCMSD				5.4					
1-22-14	N0054	01C	8260_L	MB	MB	5.7	5.0	E	DI H2O		AM

*=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

Logbook ID: 90.0189-09/13

Reviewed By: WL 1-22-14

N0058

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
1-22-14	N0054	02C	8260L	Nm	Nm	5.3	5.0	E	DI H2O		
↓	N0054	03C	8260L	↓	↓	5.3	↓	↓	DI H2O		↓
↓	N0054	04C	8260L			5.6			DI H2O		
1-22-14	MB		8260M			5.0			MeOH		
↓	LCS		↓			5.0			↓		
	LCSD					5.0					
	N0044-05					5.1					
	N0044-07					5.0					
	N0044-08					5.1					
	N0058-11					5.1					
↓	N0058-12		8260M			5.2			MeOH		
1-22-14	N0058	01A	8260L			5.5			DI H2O		
↓	↓	13A	↓			5.2			↓		
↓	↓	14A	↓	↓	↓	5.4	↓	↓	↓		↓
1-22-14	N0058	12AMS	8260L	Nm	Nm	5.0	5.0	E	DI H2O		

*=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

Page 456 of 459

Logbook ID: 90.0189-09/13

Reviewed By: 1-22-14

N005B

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
1-22-14	N0058	RAMDD	8260L	NA	NA	5.0	5.0	E	DI H2O		
1-23-14	MB-75689		GRO	NA	NA	5.0		E	MeOH		
	LCS-75689			NA	NA	5.0		E			
	N0022-05A			29.99	35.76	5.8		A			
	N0022-06A		GRO	30.12	36.03	5.9		A	MeOH		
	MD-75687		8260L	NA	NA	5.0	5.0	E	DI H2O		
	LCS-75687			NA	NA	5.0		E			
	N0052	01D		32.16	39.03	6.9		D			
	N0058	06A	8260L	NA	NA	5.5	5.0	E	DI H2O		
	N0084-02A		GRO	26.76	31.80	5.0		E	MeOH		
1-23-14	MB-75734		50M	NA	NA	5.0		E			
	N0085-01A		50M	26.84	31.79	5.0		E			
	MB-75715		GRO	NA	NA	5.0		E			
	N0072-01D			30.14	36.47	6.3		A			
1-23-14	LCS-75715		GRO	NA	NA	5.0	5.0	E	MeOH		

*=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

Logbook ID: 90.0189-09/13

Reviewed By: 1/27/14

N0058

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 R23
01/17/14	N0052	SEVENSON	01, 02	WJL	WL	F	F10	
	N0052	SEVENSO	01, 02	WJL		M	R10	
	N0048	AMEC	01-25	WJL		H	R10	
	N0053	LAND	01	WJL		H	R10	
	N0054	ARCADIS	01-04	WJL		US	R10	
	N0050	AMEC	01-07, 09-16, 18, 19	WJL		M	R10	
	N0055	SPECTRUM	01	WJL		H	R10	
	N0056	SPECTRUM	01	WJL		H	R10	
	N0058	~~DARK~~ DIVRKA WJL 01/17/14	01-17	WJL		US	R10	
	N0060	DIVIRKA	01-14	WJL		H	R10	
	N0049	AMEC	01-02	WJL		M	R10	
	N0022	EPA	05	WJL		M	R13	
	N0057	SPECTRUM	01	WJL		H	R10	
01/17/14	N0059	SPECTRUM	01	WJL	WL	H	R10	

Logbook ID 90.0191-10/13

Reviewed By: WL 1-22-14

"Preservative Used" Key				
UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

Last Page of Data Report

Report Date:
03-Feb-14 14:16

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Work Order: N0060
Project : Farrand Controls
Project #:

Attn: Robbin Petrella

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N0060-01	HW-WET-WS-7-(1)_01/15/14	Aqueous	15-Jan-14 08:15	17-Jan-14 11:30
N0060-02	HW-WET-WS-6-(1)_01/15/14	Aqueous	15-Jan-14 08:50	17-Jan-14 11:30
N0060-03	HW-WET-WS-2-(1)_01/15/14	Aqueous	15-Jan-14 12:30	17-Jan-14 11:30
N0060-04	HW-WET-WS-3-(1)_01/15/14	Aqueous	15-Jan-14 12:45	17-Jan-14 11:30
N0060-05	HW-WET-WS-4-(1)_01/15/14	Aqueous	15-Jan-14 13:10	17-Jan-14 11:30
N0060-06	HW-WET-WS-5-(1)_01/15/14	Aqueous	15-Jan-14 13:50	17-Jan-14 11:30
N0060-07	HW-WET-WS-1-(1)_01/15/14	Aqueous	15-Jan-14 14:45	17-Jan-14 11:30
N0060-08	HW-WET-WS-11-(1)_01/16/14	Aqueous	16-Jan-14 08:20	17-Jan-14 11:30
N0060-09	HW-WET-WS-10-(1)_01/16/14	Aqueous	16-Jan-14 09:10	17-Jan-14 11:30
N0060-10	HW-WET-WS-9-(1)_01/16/14	Aqueous	16-Jan-14 09:25	17-Jan-14 11:30
N0060-11	HW-WET-WS-8-(1)_01/16/14	Aqueous	16-Jan-14 09:40	17-Jan-14 11:30
N0060-12	SUMP 2_01/16/13	Aqueous	16-Jan-14 10:50	17-Jan-14 11:30
N0060-13	SUMP 3_01/16/13	Aqueous	16-Jan-14 11:00	17-Jan-14 11:30
N0060-14	TRIPBLANK_01/15/14	Aqueous	15-Jan-14 00:00	17-Jan-14 11:30

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 requirments have been meet.

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
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N0060

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
HW-WET-WS-7-(1)_01/15/14	N0060-01	SW8260_W				
HW-WET-WS-6-(1)_01/15/14	N0060-02	SW8260_W				
HW-WET-WS-2-(1)_01/15/14	N0060-03	SW8260_W				
HW-WET-WS-3-(1)_01/15/14	N0060-04	SW8260_W				
HW-WET-WS-4-(1)_01/15/14	N0060-05	SW8260_W				
HW-WET-WS-5-(1)_01/15/14	N0060-06	SW8260_W				
HW-WET-WS-1-(1)_01/15/14	N0060-07	SW8260_W				
HW-WET-WS-11-(1)_01/16/14	N0060-08	SW8260_W				
HW-WET-WS-10-(1)_01/16/14	N0060-09	SW8260_W				
HW-WET-WS-9-(1)_01/16/14	N0060-10	SW8260_W				
HW-WET-WS-8-(1)_01/16/14	N0060-11	SW8260_W				
SUMP 2_01/16/13	N0060-12	SW8260_W				
SUMP 3_01/16/13	N0060-13	SW8260_W				
TRIPBLANK_01/15/14	N0060-14	SW8260_W				

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N0060

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
N0060-01A	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-02A	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-03A	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-04A	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-05A	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-05ADL	AQ	1/15/2014	1/17/2014	NA	1/21/2014
N0060-06A	AQ	1/15/2014	1/17/2014	NA	1/21/2014
N0060-06AMS	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-06AMSD	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-07A	AQ	1/15/2014	1/17/2014	NA	1/20/2014
N0060-08A	AQ	1/16/2014	1/17/2014	NA	1/20/2014
N0060-09A	AQ	1/16/2014	1/17/2014	NA	1/20/2014
N0060-10A	AQ	1/16/2014	1/17/2014	NA	1/20/2014
N0060-11A	AQ	1/16/2014	1/17/2014	NA	1/20/2014
N0060-12A	AQ	1/16/2014	1/17/2014	NA	1/20/2014
N0060-12ADL	AQ	1/16/2014	1/17/2014	NA	1/21/2014
N0060-13A	AQ	1/16/2014	1/17/2014	NA	1/21/2014
N0060-14A	AQ	1/15/2014	1/17/2014	NA	1/20/2014

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N0060

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
N0060-01A	AQ	SW8260_W	NA	LOW	1
N0060-02A	AQ	SW8260_W	NA	LOW	1
N0060-03A	AQ	SW8260_W	NA	LOW	1
N0060-04A	AQ	SW8260_W	NA	LOW	1
N0060-05A	AQ	SW8260_W	NA	LOW	1
N0060-05ADL	AQ	SW8260_W	NA	LOW	5
N0060-06A	AQ	SW8260_W	NA	LOW	1
N0060-06AMS	AQ	SW8260_W	NA	LOW	1
N0060-06AMSD	AQ	SW8260_W	NA	LOW	1
N0060-07A	AQ	SW8260_W	NA	LOW	1
N0060-08A	AQ	SW8260_W	NA	LOW	1
N0060-09A	AQ	SW8260_W	NA	LOW	1
N0060-10A	AQ	SW8260_W	NA	LOW	1
N0060-11A	AQ	SW8260_W	NA	LOW	1
N0060-12A	AQ	SW8260_W	NA	LOW	1
N0060-12ADL	AQ	SW8260_W	NA	LOW	2
N0060-13A	AQ	SW8260_W	NA	LOW	1
N0060-14A	AQ	SW8260_W	NA	LOW	1

N0060

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N0060

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3050

HC Due: 01/31/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0060-01A	HW-WET-WS-7-(1)_01/15/14	01/15/2014 08:15	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-02A	HW-WET-WS-6-(1)_01/15/14	01/15/2014 08:50	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-03A	HW-WET-WS-2-(1)_01/15/14	01/15/2014 12:30	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-04A	HW-WET-WS-3-(1)_01/15/14	01/15/2014 12:45	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-05A	HW-WET-WS-4-(1)_01/15/14	01/15/2014 13:10	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-06A	HW-WET-WS-5-(1)_01/15/14	01/15/2014 13:50	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC			Y	Y	VOA
N0060-07A	HW-WET-WS-1-(1)_01/15/14	01/15/2014 14:45	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-08A	HW-WET-WS-11-(1)_01/16/14	01/16/2014 08:20	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-09A	HW-WET-WS-10-(1)_01/16/14	01/16/2014 09:10	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-10A	HW-WET-WS-9-(1)_01/16/14	01/16/2014 09:25	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-11A	HW-WET-WS-8-(1)_01/16/14	01/16/2014 09:40	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-12A	SUMP 2_01/16/13	01/16/2014 10:50	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N0060-13A	SUMP 3_01/16/13	01/16/2014 11:00	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA

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

HT = Test logged in but has been placed on hold

01/20/2014 10:07 Lab Client Rep: Agnes R Huntley

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N0060

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3050

HC Due: 01/31/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N0060-14A	TRIPBLANK_01/15/14	01/15/2014 00:00	01/17/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	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

N0060

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 4

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dvirka + Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Ferrand Control Site
Location: 99 Wall Street State: NY
Sampler(s): Keith Robins / Paul Bernard

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

List preservative code below: 1c

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs TCL +10 (8260B)
	HW-WET-SE-6-(1)_01/15/14	01/15/14	820 am	G	SO		1			✓
01	HW-WET-WS-7-(1)_01/15/14	01/15/14	815 am	G	SW	2				✓
	HW-WET-SE-5-(1)_01/15/14	01/15/14	855 am	G	SO		1			✓
02	HW-WET-WS-6-(1)-01/15/14	01/15/14	850 am	G	SW	2				✓
	HW-WET-SE-12-(1)_01/15/14	01/15/14	915 am	G	SO		1			✓
	HW-WET-SE-11-(1)_01/15/14	01/15/14	939 am	G	SO		1			✓
	HW-WET-SE-10-(1)_01/15/14	01/15/14	1015 am	G	SO		1			✓
	HW-WET-SE-9-(1)_01/15/14	01/15/14	1030 am	G	SO		1			✓
	HW-WET-SE-8-(1)_01/15/14	01/15/14	1100 am	G	SO		1			✓
	HW-WET-SE-7-(1)_01/15/14	01/15/14	1155 am	G	SO		1			✓

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category B Deliverables

State-specific reporting standards: EQuIS

2-9/-1/-1 IR-01
SUH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins		01/16/14	1240	
Subcontractor	Subcontractor	1/16/14	1530	
		1-17-14	800	
		1/17/14	11:30	

☐ EDD Format _____
☐ E-mail to MDeVinney@dvirka.com
NOTE: 8260B - Soil / Surface Water

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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N0060

SPECTRUM ANALYTICAL, INC.
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Page 5 of 14

CHAIN OF CUSTODY RECORD

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☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☑ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

TAT- Ind icate Date Needed: Standard
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dvirka + Bartilucci Engineers
330 crossways Park Drive
Woodbury NY 11797

P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Farrand Control Site
Location: 99 Wall Street State: NY
Sampler(s): Keith Rubins / Paul Baruish

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11=_____ 12=_____

List preservative code below: JLR

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs TCL 1,4 Dioxane (8260B)
03	HW-WET-WS-2-(1)_01	01/15/14	1230pm	G	SW	2				✓
	HW-WET-SE-(1)_01	01/15/14	1235pm	G	SO		1			✓
04	HW-WET-WS-3-(1)_01	01/15/14	1245pm	G	SW	2				✓
	HW-WET-SE-2-(1)_01	01/15/14	1250pm	G	SO		1			✓
05	HW-WET-WS-4-(1)_01	01/15/14	110pm	G	SW	2				✓
	HW-WET-SE-3-(1)_01	01/15/14	115pm	G	SO		1			✓
06	HW-WET-WS-5-(1)_01	01/15/14	150pm	G	SW	2				✓
	HW-WET-SE-4-(1)_01	01/15/14	155pm	G	SO		1			✓
07	HW-WET-WS-1-(1)_01	01/15/14	245pm	G	SW	2				✓
	HW-WET-SE-17-(1)_01	01/16/14	830am	G	SO		1			✓

29-1/1a IRQ1
SUH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Rubins	[signature]	01/16/14	1240pm	
[signature] Subcont	Subcont	1/16/14	1530	
[signature]	[signature]	1-17-14	800	
[signature]	[signature]	1/17/14	11:30	

☐ EDD Format _____
☐ E-mail to Matt DeVinney@db-eng.com
NOTE 8260B soil / surface water

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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N0060

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka & Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797
Telephone #: 516 364-9850
Project Mgr. Matt DeVinney

Invoice To: Dvirka & Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797
P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Farrand Controls site
Location: 99 Wall street State: NY
Sampler(s): Keith Robins / Paul Barasch

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCL VOCs + TICs (8260B)
08	HW-WET-WS-11-(1)	01/16/14	01/16/14 820am	G	SW	2	1			✓
	HW-WET-SE-16-(1)	01/16/14	01/16/14 915am	G	SO			1		✓
09	HW-WET-WS-10-(1)	01/16/14	01/16/14 910am	G	SW	2	2			✓
	HW-WET-SE-15-(1)	01/16/14	01/16/14 934am	G	SO			1		✓
10	HW-WET-WS-9-(1)	01/16/14	01/16/14 925am	G	SW	2				✓
	HW-WET-SE-14-(1)	01/16/14	01/16/14 945am	G	SO			1		✓
11	HW-WET-WS-8-(1)	01/16/14	01/16/14 940	G	SW	2				✓
	HW-WET-SE-13-(1)	01/16/14	01/16/14 1010am	G	SO			1		✓
12	Sump 2	01/16/14	01/16/14 1050	G	GW	2				✓
13	Sump 3	01/16/14	01/16/14 1100	G	GW	2				✓

List preservative code below: ICO

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☑ Other Category B

State-specific reporting standards: EQuIS

29-1 1.9 IR 01
JCH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins		01/16/14	1240	
	Sybrant	1/16/14	1530	
Sybrant	Paul Barasch	1-17-14	806	
Paul Barasch		1/17/14	11:30	

☐ EDD Format _____
☑ E-mail to MDeVinney@dvb-eng.com
NOTE (Soil/sediment) analysis = 8260B

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Revised Feb 2013

N0060

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 4 of 4

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. MATT DeVinney

Invoice To: Dvirka + Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

P.O. No.: _____ RQN: _____

Project No.: 3050
Site Name: Farrand Control Site
Location: 99 Wall street State: NY
Sampler(s): Keith Robins / Paul Barush

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: Tcl Voas + 10 (8260B)	List preservative code below: Ice
06	HW-WET-WS-5-(1)_01/15/14(MS)	01/15/14	1520	G	SW	2				✓	
06	HW-WET-WS-5-(1)_01/15/14(MSD)	01/15/14	1520	G	SW	2				✓	
	HW-WET-SE-4-(1)_01/15/14(MS)	01/15/14	1535	G	SO			1		✓	
	HW-WET-SE-4-(1)_01/15/14(MSD)	01/15/14	1535	G	SO			1		✓	
14	Trip Blank - 01/15/14	01/15/14	—		AQ	—	2			✓	

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category "B"

State-specific reporting standards:
EQuIS

date 01/15/14
date 01/15/14

29-1/16/14 01
JLH 1/16/14

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins		01/16/14	1240pm	
	Suncat	1/16/14	1535	
Suncat		1-17-14	800	
		1/17/14	11:30	

☐ EDD Format _____
☒ E-mail to MDeVinney@db-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

Received By: WSL	Page 01 of 00
Reviewed By: RP	Log-in Date 01/17/2014
Work Order: N0060	Client Name: Dvirka & Bartilucci
Project Name/Event: Farrand Controls	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

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 N/A
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	2.3 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	01/17/2014
12. Time Received	11:30

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-74

CoolantCondition: ICE

Preservative Name/Lot No:

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
N0060-01						UA	
N0060-02						UA	
N0060-03						UA	
N0060-04						UA	
N0060-05						UA	
N0060-06						UA	
N0060-07						UA	
N0060-08						UA	
N0060-09						UA	
N0060-10						UA	
N0060-11						UA	
N0060-12						UA	
N0060-13						UA	
N0060-14						UA	

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

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : Dvirka & Bartilucci

Project: Farrand Controls

Laboratory Workorder / SDG #: N0060

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: SW5030B

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.

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-75652 in batch 75652, recovery is above criteria for Iodomethane at 140% with criteria of (72-121).

LCSD-75646 in batch 75646, recovery is above criteria for Iodomethane at 134% with criteria of (72-121).

LCSD-75652 in batch 75652, recovery is above criteria for Iodomethane at 155% with criteria of (72-121).

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

Matrix spikes were performed on samples:
HW-WET-WS-5-(1)_01/15/14 (N0060-06AMS) and
HW-WET-WS-5-(1)_01/15/14 (N0060-06AMSD).

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

HW-WET-WS-5-(1)_01/15/14 (N0060-06AMSD), recovery is above criteria for Iodomethane at 145% with criteria of (72-121).

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:

HW-WET-WS-4-(1)_01/15/14 (N0060-05ADL) : Dilution Factor: 5
SUMP 2_01/16/13 (N0060-12ADL) : Dilution Factor: 2

G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integration was performed on the following:

VSTD00510V 2-Chloroethyl vinyl ether due to M6

VSTD00510V 2-Hexanone due to M7

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:_____2/3/2014_____

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 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 an aldol condensation by-product.

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

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-75646	101	100	100	100				0
02	LCSD-75646	99	99	100	101				0
03	MB-75646	97	98	99	94				0
04	TRIPBLANK_01/15/14	100	101	99	94				0
05	HW-WET-WS-7-(1)_01/	99	101	100	94				0
06	HW-WET-WS-6-(1)_01/	99	101	99	95				0
07	HW-WET-WS-2-(1)_01/	99	99	99	93				0
08	HW-WET-WS-3-(1)_01/	99	102	100	92				0
09	HW-WET-WS-4-(1)_01/	99	98	99	93				0
10	HW-WET-WS-1-(1)_01/	100	98	100	91				0
11	HW-WET-WS-11-(1)_01	100	99	97	92				0
12	HW-WET-WS-10-(1)_01	102	100	100	94				0
13	HW-WET-WS-9-(1)_01/	100	102	99	93				0
14	HW-WET-WS-8-(1)_01/	100	98	100	92				0
15	SUMP 2_01/16/13	99	100	99	94				0
16	HW-WET-WS-5-(1)_01/	102	99	100	101				0
17	HW-WET-WS-5-(1)_01/	101	99	99	101				0
18	LCS-75652	102	99	99	101				0
19	LCSD-75652	101	98	98	98				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.12.31.1153

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
20	MB-75652	100	100	97	92				0
21	HW-WET-WS-5-(1)_01/	101	100	98	95				0
22	SUMP 3_01/16/13	100	100	99	95				0
23	HW-WET-WS-4-(1)_01/	101	98	97	93				0
24	SUMP 2_01/16/13DL	99	98	98	92				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som13.12.31.1153

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix Spike - EPA Sample No.: HW-WET-WS-5-(1)_01/ 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	37.5030	75		30-155
Chloromethane	50.0000	0.0000	43.3846	87		40-125
Vinyl chloride	50.0000	0.0000	42.5625	85		50-145
Bromomethane	50.0000	0.0000	50.0161	100		30-145
Chloroethane	50.0000	0.0000	44.4833	89		60-135
Trichlorofluoromethane	50.0000	0.0000	43.2302	86		60-145
1,1-Dichloroethene	50.0000	0.0000	40.3395	81		70-130
Acetone	50.0000	0.0000	29.2006	58		40-140
Iodomethane	50.0000	0.0000	56.3987	113		72-121
Carbon disulfide	50.0000	0.0000	38.0777	76		35-160
Methylene chloride	50.0000	0.0000	43.4865	87		55-140
trans-1,2-Dichloroethen	50.0000	0.0000	42.8577	86		60-140
Methyl tert-butyl ether	50.0000	0.0000	44.6929	89		65-125
1,1-Dichloroethane	50.0000	3.8461	49.5215	91		70-135
Vinyl acetate	50.0000	0.0000	37.0906	74		38-163
2-Butanone	50.0000	0.0000	32.9352	66		30-150
cis-1,2-Dichloroethene	50.0000	1.7100	45.7223	88		70-125
2,2-Dichloropropane	50.0000	0.0000	36.7305	73		70-135
Bromochloromethane	50.0000	0.0000	48.2057	96		65-130
Chloroform	50.0000	0.0000	45.9201	92		65-135
1,1,1-Trichloroethane	50.0000	8.4061	52.1311	87		65-130
1,1-Dichloropropene	50.0000	0.0000	43.0402	86		75-130
Carbon tetrachloride	50.0000	0.0000	43.4531	87		65-140
1,2-Dichloroethane	50.0000	0.0000	48.3267	97		70-130
Benzene	50.0000	0.0000	44.4480	89		80-120
Trichloroethene	50.0000	2.1493	45.0451	86		70-125
1,2-Dichloropropane	50.0000	0.0000	45.5787	91		75-125
Dibromomethane	50.0000	0.0000	47.4853	95		75-125
Bromodichloromethane	50.0000	0.0000	46.4236	93		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	44.4685	89		70-130
4-Methyl-2-pentanone	50.0000	0.0000	42.3171	85		60-135
Toluene	50.0000	0.0000	43.2252	86		75-120
trans-1,3-Dichloroprope	50.0000	0.0000	44.4216	89		55-140
1,1,2-Trichloroethane	50.0000	0.0000	45.2473	90		75-125
1,3-Dichloropropane	50.0000	0.0000	46.1250	92		75-125
Tetrachloroethene	50.0000	0.0000	43.8986	88		45-150
2-Hexanone	50.0000	0.0000	34.9180	70		55-130
Dibromochloromethane	50.0000	0.0000	46.3673	93		60-135
1,2-Dibromoethane	50.0000	0.0000	46.6182	93		80-120
Chlorobenzene	50.0000	0.0000	43.3173	87		80-120
1,1,1,2-Tetrachloroetha	50.0000	0.0000	46.1161	92		80-130
Ethylbenzene	50.0000	0.0000	43.0559	86		75-125
m,p-Xylene	100.0000	0.0000	87.7406	88		75-130
o-Xylene	50.0000	0.0000	45.5465	91		80-120

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix Spike - EPA Sample No.: HW-WET-WS-5-(1)_01/ Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	133.2871	89		81-121
Styrene	50.0000	0.0000	43.1374	86		65-135
Bromoform	50.0000	0.0000	43.4100	87		70-130
Isopropylbenzene	50.0000	0.0000	43.9404	88		75-125
1,1,2,2-Tetrachloroetha	50.0000	0.0000	46.0190	92		65-130
Bromobenzene	50.0000	0.0000	42.5206	85		75-125
1,2,3-Trichloropropane	50.0000	0.0000	39.6621	79		75-125
n-Propylbenzene	50.0000	0.0000	41.8182	84		70-130
2-Chlorotoluene	50.0000	0.0000	41.8355	84		75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	43.2615	87		75-130
4-Chlorotoluene	50.0000	0.0000	41.7051	83		75-130
tert-Butylbenzene	50.0000	0.0000	41.4340	83		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	43.6654	87		75-130
sec-Butylbenzene	50.0000	0.0000	41.9517	84		70-125
4-Isopropyltoluene	50.0000	0.0000	42.7435	85		75-130
1,3-Dichlorobenzene	50.0000	0.0000	42.5322	85		75-125
1,4-Dichlorobenzene	50.0000	0.0000	40.8838	82		75-125
n-Butylbenzene	50.0000	0.0000	42.1727	84		70-135
1,2-Dichlorobenzene	50.0000	0.0000	43.2645	87		70-120
1,2-Dibromo-3-chloropro	50.0000	0.0000	40.0632	80		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	38.1363	76		65-135
Hexachlorobutadiene	50.0000	0.0000	37.5830	75		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	37.7570	76		55-140
Naphthalene	50.0000	0.0000	35.9597	72		55-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0000	1.0901	39.1316	76		70-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	43.5633	87		15		0-40	30-155
Chloromethane	50.0000	49.4735	99		13		0-40	40-125
Vinyl chloride	50.0000	48.5917	97		13		0-40	50-145
Bromomethane	50.0000	55.3556	111		10		0-40	30-145
Chloroethane	50.0000	50.3707	101		12		0-40	60-135
Trichlorofluoromethane	50.0000	49.2743	99		13		0-40	60-145
1,1-Dichloroethene	50.0000	46.5253	93		14		0-40	70-130
Acetone	50.0000	29.8245	60		2		0-40	40-140
Iodomethane	50.0000	72.3928	145	*	25		0-40	72-121
Carbon disulfide	50.0000	43.6706	87		14		0-40	35-160
Methylene chloride	50.0000	46.3703	93		6		0-40	55-140
trans-1,2-Dichloroethen	50.0000	47.5095	95		10		0-40	60-140
Methyl tert-butyl ether	50.0000	45.2768	91		1		0-40	65-125
1,1-Dichloroethane	50.0000	53.5966	100		9		0-40	70-135
Vinyl acetate	50.0000	38.5148	77		4		0-40	38-163
2-Butanone	50.0000	36.3129	73		10		0-40	30-150
cis-1,2-Dichloroethene	50.0000	49.5561	96		8		0-40	70-125
2,2-Dichloropropane	50.0000	41.1859	82		11		0-40	70-135

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix Spike - EPA Sample No.: HW-WET-WS-5-(1)_01/ Level: (TRACE or LOW) LOW

Bromochloromethane	50.0000	51.4143	103		6		0-40	65-130
Chloroform	50.0000	49.2058	98		7		0-40	65-135
1,1,1-Trichloroethane	50.0000	56.4475	96		9		0-40	65-130
1,1-Dichloropropene	50.0000	49.0434	98		13		0-40	75-130
Carbon tetrachloride	50.0000	48.8727	98		12		0-40	65-140
1,2-Dichloroethane	50.0000	49.1562	98		2		0-40	70-130
Benzene	50.0000	47.8826	96		7		0-40	80-120
Trichloroethene	50.0000	50.3518	96		12		0-40	70-125
1,2-Dichloropropane	50.0000	48.4127	97		6		0-40	75-125
Dibromomethane	50.0000	48.5224	97		2		0-40	75-125
Bromodichloromethane	50.0000	48.9650	98		5		0-40	75-120
cis-1,3-Dichloropropene	50.0000	47.7492	95		7		0-40	70-130
4-Methyl-2-pentanone	50.0000	43.7552	88		3		0-40	60-135
Toluene	50.0000	47.8681	96		10		0-40	75-120
trans-1,3-Dichloroprope	50.0000	46.7311	93		5		0-40	55-140
1,1,2-Trichloroethane	50.0000	45.4277	91		0		0-40	75-125
1,3-Dichloropropane	50.0000	46.6781	93		1		0-40	75-125
Tetrachloroethene	50.0000	49.4936	99		12		0-40	45-150
2-Hexanone	50.0000	34.9260	70		0		0-40	55-130
Dibromochloromethane	50.0000	47.5330	95		2		0-40	60-135
1,2-Dibromoethane	50.0000	47.7883	96		2		0-40	80-120
Chlorobenzene	50.0000	47.5283	95		9		0-40	80-120
1,1,1,2-Tetrachloroetha	50.0000	48.3279	97		5		0-40	80-130
Ethylbenzene	50.0000	48.7237	97		12		0-40	75-125
m,p-Xylene	100.0000	96.4988	96		10		0-40	75-130
o-Xylene	50.0000	48.8101	98		7		0-40	80-120
Xylene (Total)	150.0000	145.3090	97		9		0-40	81-121
Styrene	50.0000	47.7705	96		10		0-40	65-135
Bromoform	50.0000	43.5077	87		0		0-40	70-130
Isopropylbenzene	50.0000	48.4726	97		10		0-40	75-125
1,1,2,2-Tetrachloroetha	50.0000	46.4754	93		1		0-40	65-130
Bromobenzene	50.0000	45.3118	91		6		0-40	75-125
1,2,3-Trichloropropane	50.0000	40.7623	82		3		0-40	75-125
n-Propylbenzene	50.0000	46.6857	93		11		0-40	70-130
2-Chlorotoluene	50.0000	46.1753	92		10		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	46.7264	93		8		0-40	75-130
4-Chlorotoluene	50.0000	45.8047	92		9		0-40	75-130
tert-Butylbenzene	50.0000	42.9606	86		4		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	46.9775	94		7		0-40	75-130
sec-Butylbenzene	50.0000	45.9670	92		9		0-40	70-125
4-Isopropyltoluene	50.0000	46.7877	94		9		0-40	75-130
1,3-Dichlorobenzene	50.0000	46.2114	92		8		0-40	75-125
1,4-Dichlorobenzene	50.0000	44.3656	89		8		0-40	75-125
n-Butylbenzene	50.0000	45.4935	91		8		0-40	70-135
1,2-Dichlorobenzene	50.0000	45.2125	90		4		0-40	70-120
1,2-Dibromo-3-chloropro	50.0000	40.5053	81		1		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	41.5224	83		9		0-40	65-135

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix Spike - EPA Sample No.: HW-WET-WS-5-(1)_01/ Level: (TRACE or LOW) LOW

Hexachlorobutadiene	50.0000	40.8078	82		8		0-40	50-140
1,2,3-Trichlorobenzene	50.0000	42.4705	85		12		0-40	55-140
Naphthalene	50.0000	42.7300	85		17		0-40	55-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0000	45.3825	89		15		0-40	70-130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 1 out of 138 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCS-75646 LCS Lot No.:

Date Extracted: 01/20/2014 Date Analyzed (1): 01/20/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	46.0070	92		30 - 155
Chloromethane	50.0000	0.0000	49.8499	100		40 - 125
Vinyl chloride	50.0000	0.0000	47.2289	94		50 - 145
Bromomethane	50.0000	0.0000	46.6668	93		30 - 145
Chloroethane	50.0000	0.0000	46.6365	93		60 - 135
Trichlorofluoromethane	50.0000	0.0000	46.4387	93		60 - 145
1,1-Dichloroethene	50.0000	0.0000	45.8771	92		70 - 130
Acetone	50.0000	0.0000	44.8557	90		40 - 140
Iodomethane	50.0000	0.0000	54.6354	109		72 - 121
Carbon disulfide	50.0000	0.0000	45.1212	90		35 - 160
Methylene chloride	50.0000	0.0000	48.8012	98		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.8129	98		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	51.9143	104		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.9956	100		70 - 135
Vinyl acetate	50.0000	0.0000	52.8858	106		38 - 163
2-Butanone	50.0000	0.0000	53.9998	108		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	49.5452	99		70 - 125
2,2-Dichloropropane	50.0000	0.0000	49.3093	99		70 - 135
Bromochloromethane	50.0000	0.0000	49.5231	99		65 - 130
Chloroform	50.0000	0.0000	49.4655	99		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	48.9722	98		65 - 130
1,1-Dichloropropene	50.0000	0.0000	49.6122	99		75 - 130
Carbon tetrachloride	50.0000	0.0000	49.7725	100		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.6356	101		70 - 130
Benzene	50.0000	0.0000	49.7146	99		80 - 120
Trichloroethene	50.0000	0.0000	49.5426	99		70 - 125
1,2-Dichloropropane	50.0000	0.0000	49.8183	100		75 - 125
Dibromomethane	50.0000	0.0000	51.9879	104		75 - 125
Bromodichloromethane	50.0000	0.0000	51.3230	103		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	52.8730	106		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	58.5280	117		60 - 135
Toluene	50.0000	0.0000	49.0424	98		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	53.6891	107		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.1622	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	51.8156	104		75 - 125
Tetrachloroethene	50.0000	0.0000	47.5964	95		45 - 150
2-Hexanone	50.0000	0.0000	55.0361	110		55 - 130
Dibromochloromethane	50.0000	0.0000	53.1734	106		60 - 135
1,2-Dibromoethane	50.0000	0.0000	53.5177	107		80 - 120
Chlorobenzene	50.0000	0.0000	48.3083	97		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.0721	100		80 - 130
Ethylbenzene	50.0000	0.0000	49.2996	99		75 - 125
m,p-Xylene	100.0000	0.0000	99.1249	99		75 - 130
o-Xylene	50.0000	0.0000	50.5364	101		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCS-75646 LCS Lot No.:

Date Extracted: 01/20/2014 Date Analyzed (1): 01/20/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	149.6613	100		81 - 121
Styrene	50.0000	0.0000	50.4549	101		65 - 135
Bromoform	50.0000	0.0000	53.3911	107		70 - 130
Isopropylbenzene	50.0000	0.0000	50.0744	100		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	58.8328	118		65 - 130
Bromobenzene	50.0000	0.0000	49.7595	100		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	52.6976	105		75 - 125
n-Propylbenzene	50.0000	0.0000	50.7335	101		70 - 130
2-Chlorotoluene	50.0000	0.0000	50.2858	101		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	50.4638	101		75 - 130
4-Chlorotoluene	50.0000	0.0000	49.4413	99		75 - 130
tert-Butylbenzene	50.0000	0.0000	49.1827	98		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	50.9772	102		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.9860	100		70 - 125
4-Isopropyltoluene	50.0000	0.0000	50.9416	102		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	50.2052	100		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	48.0157	96		75 - 125
n-Butylbenzene	50.0000	0.0000	52.9348	106		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	49.7471	99		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	57.9425	116		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	52.2171	104		65 - 135
Hexachlorobutadiene	50.0000	0.0000	48.4964	97		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	55.3829	111		55 - 140
Naphthalene	50.0000	0.0000	60.1859	120		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	47.3161	95		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCS-75652 LCS Lot No.:

Date Extracted: 01/21/2014 Date Analyzed (1): 01/21/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	51.3002	103		30 - 155
Chloromethane	50.0000	0.0000	51.5789	103		40 - 125
Vinyl chloride	50.0000	0.0000	50.9626	102		50 - 145
Bromomethane	50.0000	0.0000	58.6929	117		30 - 145
Chloroethane	50.0000	0.0000	49.6503	99		60 - 135
Trichlorofluoromethane	50.0000	0.0000	51.4525	103		60 - 145
1,1-Dichloroethene	50.0000	0.0000	48.8226	98		70 - 130
Acetone	50.0000	0.0000	59.1894	118		40 - 140
Iodomethane	50.0000	0.0000	70.2346	140	*	72 - 121
Carbon disulfide	50.0000	0.0000	49.7509	100		35 - 160
Methylene chloride	50.0000	0.0000	50.0206	100		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	51.8273	104		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.1610	104		65 - 125
1,1-Dichloroethane	50.0000	0.0000	52.6890	105		70 - 135
Vinyl acetate	50.0000	0.0000	53.7814	108		38 - 163
2-Butanone	50.0000	0.0000	60.8932	122		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	51.2480	102		70 - 125
2,2-Dichloropropane	50.0000	0.0000	53.2864	107		70 - 135
Bromochloromethane	50.0000	0.0000	51.3432	103		65 - 130
Chloroform	50.0000	0.0000	52.0510	104		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	52.6341	105		65 - 130
1,1-Dichloropropene	50.0000	0.0000	52.7471	105		75 - 130
Carbon tetrachloride	50.0000	0.0000	52.9741	106		65 - 140
1,2-Dichloroethane	50.0000	0.0000	53.7415	107		70 - 130
Benzene	50.0000	0.0000	52.1198	104		80 - 120
Trichloroethene	50.0000	0.0000	52.2305	104		70 - 125
1,2-Dichloropropane	50.0000	0.0000	51.9095	104		75 - 125
Dibromomethane	50.0000	0.0000	52.8379	106		75 - 125
Bromodichloromethane	50.0000	0.0000	53.4024	107		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	54.5923	109		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	56.5905	113		60 - 135
Toluene	50.0000	0.0000	51.1879	102		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	54.4301	109		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.0165	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	51.6790	103		75 - 125
Tetrachloroethene	50.0000	0.0000	47.7284	95		45 - 150
2-Hexanone	50.0000	0.0000	61.8689	124		55 - 130
Dibromochloromethane	50.0000	0.0000	53.1751	106		60 - 135
1,2-Dibromoethane	50.0000	0.0000	53.5227	107		80 - 120
Chlorobenzene	50.0000	0.0000	50.0321	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.8500	104		80 - 130
Ethylbenzene	50.0000	0.0000	50.4772	101		75 - 125
m,p-Xylene	100.0000	0.0000	100.6489	101		75 - 130
o-Xylene	50.0000	0.0000	51.5952	103		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCS-75652 LCS Lot No.:

Date Extracted: 01/21/2014 Date Analyzed (1): 01/21/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	152.2440	101		81 - 121
Styrene	50.0000	0.0000	51.1900	102		65 - 135
Bromoform	50.0000	0.0000	52.3336	105		70 - 130
Isopropylbenzene	50.0000	0.0000	48.7033	97		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	55.2052	110		65 - 130
Bromobenzene	50.0000	0.0000	48.5410	97		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	49.7715	100		75 - 125
n-Propylbenzene	50.0000	0.0000	48.0786	96		70 - 130
2-Chlorotoluene	50.0000	0.0000	48.3299	97		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	47.7804	96		75 - 130
4-Chlorotoluene	50.0000	0.0000	48.0991	96		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.2260	92		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.5553	97		75 - 130
sec-Butylbenzene	50.0000	0.0000	47.2142	94		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.5054	95		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.4232	95		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.3645	93		75 - 125
n-Butylbenzene	50.0000	0.0000	50.0852	100		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.8339	96		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	50.8813	102		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	47.4534	95		65 - 135
Hexachlorobutadiene	50.0000	0.0000	47.6059	95		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	49.1726	98		55 - 140
Naphthalene	50.0000	0.0000	53.4093	107		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	50.3859	101		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCSD-75646 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	47.3231	95		3		40	30 - 155
Chloromethane	50.0000	50.6594	101		1		40	40 - 125
Vinyl chloride	50.0000	47.7832	96		2		40	50 - 145
Bromomethane	50.0000	51.2348	102		9		40	30 - 145
Chloroethane	50.0000	47.8611	96		3		40	60 - 135
Trichlorofluoromethane	50.0000	47.0781	94		1		40	60 - 145
1,1-Dichloroethene	50.0000	47.2805	95		3		40	70 - 130
Acetone	50.0000	35.6443	71		24		40	40 - 140
Iodomethane	50.0000	67.2070	134	*	21		40	72 - 121
Carbon disulfide	50.0000	46.5731	93		3		40	35 - 160
Methylene chloride	50.0000	49.0397	98		0		40	55 - 140
trans-1,2-Dichloroethene	50.0000	49.5414	99		1		40	60 - 140
Methyl tert-butyl ether	50.0000	52.0326	104		0		40	65 - 125
1,1-Dichloroethane	50.0000	50.3380	101		1		40	70 - 135
Vinyl acetate	50.0000	53.1998	106		0		40	38 - 163
2-Butanone	50.0000	45.7851	92		16		40	30 - 150
cis-1,2-Dichloroethene	50.0000	51.1958	102		3		40	70 - 125
2,2-Dichloropropane	50.0000	50.8562	102		3		40	70 - 135
Bromochloromethane	50.0000	50.8234	102		3		40	65 - 130
Chloroform	50.0000	50.8255	102		3		40	65 - 135
1,1,1-Trichloroethane	50.0000	50.2087	100		2		40	65 - 130
1,1-Dichloropropene	50.0000	50.1526	100		1		40	75 - 130
Carbon tetrachloride	50.0000	49.8617	100		0		40	65 - 140
1,2-Dichloroethane	50.0000	50.7727	102		1		40	70 - 130
Benzene	50.0000	50.3799	101		2		40	80 - 120
Trichloroethene	50.0000	49.4336	99		0		40	70 - 125
1,2-Dichloropropane	50.0000	50.9281	102		2		40	75 - 125
Dibromomethane	50.0000	52.1877	104		0		40	75 - 125
Bromodichloromethane	50.0000	51.4521	103		0		40	75 - 120
cis-1,3-Dichloropropene	50.0000	53.4058	107		1		40	70 - 130
4-Methyl-2-pentanone	50.0000	55.1333	110		6		40	60 - 135
Toluene	50.0000	50.1346	100		2		40	75 - 120
trans-1,3-Dichloropropene	50.0000	53.9867	108		1		40	55 - 140
1,1,2-Trichloroethane	50.0000	50.9924	102		0		40	75 - 125
1,3-Dichloropropane	50.0000	52.6142	105		1		40	75 - 125
Tetrachloroethene	50.0000	49.0386	98		3		40	45 - 150
2-Hexanone	50.0000	49.5489	99		11		40	55 - 130
Dibromochloromethane	50.0000	53.6722	107		1		40	60 - 135
1,2-Dibromoethane	50.0000	54.5211	109		2		40	80 - 120
Chlorobenzene	50.0000	50.3228	101		4		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	51.8842	104		4		40	80 - 130
Ethylbenzene	50.0000	51.7482	103		4		40	75 - 125
m,p-Xylene	100.0000	103.2978	103		4		40	75 - 130
o-Xylene	50.0000	51.9470	104		3		40	80 - 120
Xylene (Total)	150.0000	155.2447	103		3		40	81 - 121
Styrene	50.0000	52.6890	105		4		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCSD-75646 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	53.1881	106		1		40	70 - 130
Isopropylbenzene	50.0000	51.4085	103		3		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	57.3737	115		3		40	65 - 130
Bromobenzene	50.0000	50.3278	101		1		40	75 - 125
1,2,3-Trichloropropane	50.0000	51.6638	103		2		40	75 - 125
n-Propylbenzene	50.0000	51.2984	103		2		40	70 - 130
2-Chlorotoluene	50.0000	50.4293	101		0		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	51.0464	102		1		40	75 - 130
4-Chlorotoluene	50.0000	50.0454	100		1		40	75 - 130
tert-Butylbenzene	50.0000	49.2305	98		0		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	50.8702	102		0		40	75 - 130
sec-Butylbenzene	50.0000	50.1916	100		0		40	70 - 125
4-Isopropyltoluene	50.0000	51.4028	103		1		40	75 - 130
1,3-Dichlorobenzene	50.0000	50.8711	102		2		40	75 - 125
1,4-Dichlorobenzene	50.0000	49.3742	99		3		40	75 - 125
n-Butylbenzene	50.0000	53.2370	106		0		40	70 - 135
1,2-Dichlorobenzene	50.0000	49.6233	99		0		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	53.2563	107		8		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	50.6170	101		3		40	65 - 135
Hexachlorobutadiene	50.0000	49.4215	99		2		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	52.8213	106		5		40	55 - 140
Naphthalene	50.0000	57.1676	114		5		40	55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	47.9490	96		1		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCSD-75652 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	46.1874	92		11		40	30 - 155
Chloromethane	50.0000	47.9373	96		7		40	40 - 125
Vinyl chloride	50.0000	47.0170	94		8		40	50 - 145
Bromomethane	50.0000	59.5152	119		2		40	30 - 145
Chloroethane	50.0000	47.1180	94		5		40	60 - 135
Trichlorofluoromethane	50.0000	47.0199	94		9		40	60 - 145
1,1-Dichloroethene	50.0000	44.8398	90		9		40	70 - 130
Acetone	50.0000	40.3590	81		37		40	40 - 140
Iodomethane	50.0000	77.5058	155	*	10		40	72 - 121
Carbon disulfide	50.0000	44.2693	89		12		40	35 - 160
Methylene chloride	50.0000	46.9326	94		6		40	55 - 140
trans-1,2-Dichloroethene	50.0000	47.3144	95		9		40	60 - 140
Methyl tert-butyl ether	50.0000	49.8790	100		4		40	65 - 125
1,1-Dichloroethane	50.0000	48.0733	96		9		40	70 - 135
Vinyl acetate	50.0000	50.8720	102		6		40	38 - 163
2-Butanone	50.0000	50.9539	102		18		40	30 - 150
cis-1,2-Dichloroethene	50.0000	48.6338	97		5		40	70 - 125
2,2-Dichloropropane	50.0000	48.0445	96		11		40	70 - 135
Bromochloromethane	50.0000	50.0796	100		3		40	65 - 130
Chloroform	50.0000	48.7112	97		7		40	65 - 135
1,1,1-Trichloroethane	50.0000	48.2600	97		8		40	65 - 130
1,1-Dichloropropene	50.0000	47.6905	95		10		40	75 - 130
Carbon tetrachloride	50.0000	48.1109	96		10		40	65 - 140
1,2-Dichloroethane	50.0000	49.9485	100		7		40	70 - 130
Benzene	50.0000	47.8697	96		8		40	80 - 120
Trichloroethene	50.0000	47.4958	95		9		40	70 - 125
1,2-Dichloropropane	50.0000	47.6729	95		9		40	75 - 125
Dibromomethane	50.0000	50.0622	100		6		40	75 - 125
Bromodichloromethane	50.0000	49.8385	100		7		40	75 - 120
cis-1,3-Dichloropropene	50.0000	50.6700	101		8		40	70 - 130
4-Methyl-2-pentanone	50.0000	51.1645	102		10		40	60 - 135
Toluene	50.0000	47.7552	96		6		40	75 - 120
trans-1,3-Dichloropropene	50.0000	50.7871	102		7		40	55 - 140
1,1,2-Trichloroethane	50.0000	48.8846	98		4		40	75 - 125
1,3-Dichloropropane	50.0000	48.3241	97		6		40	75 - 125
Tetrachloroethene	50.0000	45.5065	91		4		40	45 - 150
2-Hexanone	50.0000	44.9939	90		32		40	55 - 130
Dibromochloromethane	50.0000	49.6767	99		7		40	60 - 135
1,2-Dibromoethane	50.0000	50.7337	101		6		40	80 - 120
Chlorobenzene	50.0000	46.3626	93		7		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	47.6263	95		9		40	80 - 130
Ethylbenzene	50.0000	47.3864	95		6		40	75 - 125
m,p-Xylene	100.0000	94.5521	95		6		40	75 - 130
o-Xylene	50.0000	48.0587	96		7		40	80 - 120
Xylene (Total)	150.0000	142.6108	95		6		40	81 - 121
Styrene	50.0000	47.3193	95		7		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab Sample ID: LCSD-75652 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	47.3272	95		10		40	70 - 130
Isopropylbenzene	50.0000	47.2972	95		2		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	51.6062	103		7		40	65 - 130
Bromobenzene	50.0000	45.7026	91		6		40	75 - 125
1,2,3-Trichloropropane	50.0000	45.1188	90		11		40	75 - 125
n-Propylbenzene	50.0000	47.4922	95		1		40	70 - 130
2-Chlorotoluene	50.0000	46.8225	94		3		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	47.1890	94		2		40	75 - 130
4-Chlorotoluene	50.0000	45.7810	92		4		40	75 - 130
tert-Butylbenzene	50.0000	44.7194	89		3		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	47.6098	95		2		40	75 - 130
sec-Butylbenzene	50.0000	46.9384	94		0		40	70 - 125
4-Isopropyltoluene	50.0000	47.6759	95		0		40	75 - 130
1,3-Dichlorobenzene	50.0000	46.9574	94		1		40	75 - 125
1,4-Dichlorobenzene	50.0000	45.4665	91		2		40	75 - 125
n-Butylbenzene	50.0000	48.5473	97		3		40	70 - 135
1,2-Dichlorobenzene	50.0000	45.5329	91		5		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	48.2652	97		5		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	47.0008	94		1		40	65 - 135
Hexachlorobutadiene	50.0000	45.3219	91		4		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	47.2045	94		4		40	55 - 140
Naphthalene	50.0000	51.8713	104		3		40	55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	46.6347	93		8		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab File ID: V8D2815.D Lab Sample ID: MB-75646

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/20/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 16:36

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-75646	LCS-75646	V8D2812.D	15:14
02	LCSD-75646	LCSD-75646	V8D2813.D	15:41
03	TRIPBLANK_01/15/14	N0060-14A	V8D2816.D	17:03
04	HW-WET-WS-7-(1)_01/	N0060-01A	V8D2817.D	17:30
05	HW-WET-WS-6-(1)_01/	N0060-02A	V8D2818.D	17:57
06	HW-WET-WS-2-(1)_01/	N0060-03A	V8D2819.D	18:25
07	HW-WET-WS-3-(1)_01/	N0060-04A	V8D2820.D	18:52
08	HW-WET-WS-4-(1)_01/	N0060-05A	V8D2821.D	19:19
09	HW-WET-WS-1-(1)_01/	N0060-07A	V8D2823.D	20:13
10	HW-WET-WS-11-(1)_01	N0060-08A	V8D2824.D	20:40
11	HW-WET-WS-10-(1)_01	N0060-09A	V8D2825.D	21:07
12	HW-WET-WS-9-(1)_01/	N0060-10A	V8D2826.D	21:34
13	HW-WET-WS-8-(1)_01/	N0060-11A	V8D2827.D	22:01
14	SUMP 2_01/16/13	N0060-12A	V8D2828.D	22:28
15	HW-WET-WS-5-(1)_01/	N0060-06AMS	V8D2830.D	23:21
16	HW-WET-WS-5-(1)_01/	N0060-06AMSD	V8D2831.D	23:48

COMMENTS:

som13.12.31.1153

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab File ID: V8D2846.D Lab Sample ID: MB-75652

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/21/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:00

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-75652	LCS-75652	V8D2843.D	9:39
02	LCSD-75652	LCSD-75652	V8D2844.D	10:06
03	HW-WET-WS-5-(1)_01/	N0060-06A	V8D2847.D	11:27
04	SUMP 3_01/16/13	N0060-13A	V8D2848.D	11:54
05	HW-WET-WS-4-(1)_01/	N0060-05ADL	V8D2850.D	12:49
06	SUMP 2_01/16/13DL	N0060-12ADL	V8D2851.D	13:16

COMMENTS:

som13.12.31.1153

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

EPA SAMPLE NO.
BFB10V

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab File ID: V8D2800.D BFB Injection Date: 01/20/2014

Instrument ID: V10 BFB Injection Time: 7:29

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	28.0
75	30.0 - 80.0% of mass 95	49.2
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	0.7 (0.7)1
174	50.0 -120% of mass 95	102.9
175	5.0 - 9.0% of mass 174	7.2 (7.0)1
176	95.0 - 101% of mass 174	99.6 (96.8)1
177	5.0 - 9.0% of mass 176	6.4 (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	VSTD05010V	VSTD05010V	V8D2802.D	01/20/2014	8:29
02	VSTD02010V	VSTD02010V	V8D2803.D	01/20/2014	9:12
03	VSTD00510V	VSTD00510V	V8D2804.D	01/20/2014	9:39
04	VSTD00110V	VSTD00110V	V8D2806.D	01/20/2014	10:33
05	VSTD20010V	VSTD20010V	V8D2807.D	01/20/2014	12:13
06	VSTD10010V	VSTD10010V	V8D2808.D	01/20/2014	12:40

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

EPA SAMPLE NO.
BFB10W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab File ID: V8D2810.D BFB Injection Date: 01/20/2014

Instrument ID: V10 BFB Injection Time: 14:18

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	48.2
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	0.4 (0.5)1
174	50.0 -120% of mass 95	99.0
175	5.0 - 9.0% of mass 174	7.2 (7.3)1
176	95.0 - 101% of mass 174	96.1 (97.1)1
177	5.0 - 9.0% of mass 176	6.3 (6.6)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	VSTD05010W	VSTD05010W	V8D2811.D	01/20/2014	14:46
02	LCS-75646	LCS-75646	V8D2812.D	01/20/2014	15:14
03	LCSD-75646	LCSD-75646	V8D2813.D	01/20/2014	15:41
04	MB-75646	MB-75646	V8D2815.D	01/20/2014	16:36
05	TRIPBLANK_01/15/14	N0060-14A	V8D2816.D	01/20/2014	17:03
06	HW-WET-WS-7-(1)_01/	N0060-01A	V8D2817.D	01/20/2014	17:30
07	HW-WET-WS-6-(1)_01/	N0060-02A	V8D2818.D	01/20/2014	17:57
08	HW-WET-WS-2-(1)_01/	N0060-03A	V8D2819.D	01/20/2014	18:25
09	HW-WET-WS-3-(1)_01/	N0060-04A	V8D2820.D	01/20/2014	18:52
10	HW-WET-WS-4-(1)_01/	N0060-05A	V8D2821.D	01/20/2014	19:19
11	HW-WET-WS-1-(1)_01/	N0060-07A	V8D2823.D	01/20/2014	20:13
12	HW-WET-WS-11-(1)_01	N0060-08A	V8D2824.D	01/20/2014	20:40
13	HW-WET-WS-10-(1)_01	N0060-09A	V8D2825.D	01/20/2014	21:07
14	HW-WET-WS-9-(1)_01/	N0060-10A	V8D2826.D	01/20/2014	21:34
15	HW-WET-WS-8-(1)_01/	N0060-11A	V8D2827.D	01/20/2014	22:01

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB10W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab File ID: V8D2810.D BFB Injection Date: 01/20/2014

Instrument ID: V10 BFB Injection Time: 14:18

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	48.2
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	0.4 (0.5)1
174	50.0 -120% of mass 95	99.0
175	5.0 - 9.0% of mass 174	7.2 (7.3)1
176	95.0 - 101% of mass 174	96.1 (97.1)1
177	5.0 - 9.0% of mass 176	6.3 (6.6)2

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

16	SUMP 2_01/16/13	N0060-12A	V8D2828.D	01/20/2014	22:28
17	HW-WET-WS-5-(1)_01/	N0060-06AMS	V8D2830.D	01/20/2014	23:21
18	HW-WET-WS-5-(1)_01/	N0060-06AMSD	V8D2831.D	01/20/2014	23:48

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

EPA SAMPLE NO.
BFB10X

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Lab File ID: V8D2840.D BFB Injection Date: 01/21/2014

Instrument ID: V10 BFB Injection Time: 8:02

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	28.0
75	30.0 - 80.0% of mass 95	49.5
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	0.6 (0.6)1
174	50.0 -120% of mass 95	101.3
175	5.0 - 9.0% of mass 174	7.0 (7.0)1
176	95.0 - 101% of mass 174	97.7 (96.5)1
177	5.0 - 9.0% of mass 176	6.2 (6.3)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	VSTD05010X	VSTD05010X	V8D2842.D	01/21/2014	9:00
02	LCS-75652	LCS-75652	V8D2843.D	01/21/2014	9:39
03	LCSD-75652	LCSD-75652	V8D2844.D	01/21/2014	10:06
04	MB-75652	MB-75652	V8D2846.D	01/21/2014	11:00
05	HW-WET-WS-5-(1)_01/	N0060-06A	V8D2847.D	01/21/2014	11:27
06	SUMP 3_01/16/13	N0060-13A	V8D2848.D	01/21/2014	11:54
07	HW-WET-WS-4-(1)_01/	N0060-05ADL	V8D2850.D	01/21/2014	12:49
08	SUMP 2_01/16/13DL	N0060-12ADL	V8D2851.D	01/21/2014	13:16

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####): VSTD05010W Date Analyzed: 01/20/2014

Lab File ID (Standard): V8D2811.D Time Analyzed: 14:46

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	889790		5.236		754172		8.223		419554		10.725	
	UPPER LIMIT	1779580		5.736		1508344		8.723		839108		11.225	
	LOWER LIMIT	444895		4.736		377086		7.723		209777		10.225	
	EPA SAMPLE NO.												
01	LCS-75646	878736		5.236		753516		8.223		405782		10.725	
02	LCSD-75646	887888		5.236		750608		8.220		410099		10.725	
03	MB-75646	873508		5.236		739001		8.223		345774		10.728	
04	TRIPBLANK_01/15/14	857547		5.236		736086		8.220		342061		10.728	
05	HW-WET-WS-7-(1)_01/	863853		5.236		724080		8.223		337230		10.728	
06	HW-WET-WS-6-(1)_01/	866177		5.236		727132		8.223		343109		10.728	
07	HW-WET-WS-2-(1)_01/	868603		5.236		733588		8.223		347453		10.728	
08	HW-WET-WS-3-(1)_01/	846764		5.236		703219		8.223		326137		10.728	
09	HW-WET-WS-4-(1)_01/	842913		5.236		710443		8.223		317743		10.728	
10	HW-WET-WS-1-(1)_01/	822649		5.236		695092		8.223		316814		10.728	

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.: N0060 Mod. Ref No.: SDG No.: SN0060

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####): VSTD05010W Date Analyzed: 01/20/2014

Lab File ID (Standard): V8D2811.D Time Analyzed: 14:46

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	889790		5.236		754172		8.223		419554		10.725	
	UPPER LIMIT	1779580		5.736		1508344		8.723		839108		11.225	
	LOWER LIMIT	444895		4.736		377086		7.723		209777		10.225	
	EPA SAMPLE NO.												
11	HW-WET-WS-11-(1)_01	827285		5.236		701159		8.223		315596		10.728	
12	HW-WET-WS-10-(1)_01	801365		5.236		687612		8.223		318565		10.728	
13	HW-WET-WS-9-(1)_01/	812866		5.236		691705		8.223		314727		10.728	
14	HW-WET-WS-8-(1)_01/	818358		5.236		684476		8.223		315189		10.728	
15	SUMP 2_01/16/13	816277		5.236		684916		8.223		313799		10.728	
16	HW-WET-WS-5-(1)_01/	814271		5.236		694668		8.223		387296		10.725	
17	HW-WET-WS-5-(1)_01/	823329		5.236		703316		8.223		392856		10.725	

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.: N0060 Mod. Ref No.: SDG No.: SN0060

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####): VSTD05010X Date Analyzed: 01/21/2014

Lab File ID (Standard): V8D2842.D Time Analyzed: 9:00

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	844276		5.236		733958		8.223		399061		10.725	
	UPPER LIMIT	1688552		5.736		1467916		8.723		798122		11.225	
	LOWER LIMIT	422138		4.736		366979		7.723		199531		10.225	
	EPA SAMPLE NO.												
01	LCS-75652	829031		5.236		719696		8.220		398937		10.725	
02	LCSD-75652	835098		5.236		732365		8.223		400093		10.725	
03	MB-75652	820176		5.236		702454		8.223		320263		10.728	
04	HW-WET-WS-5-(1)_01/	821052		5.236		697746		8.223		324688		10.728	
05	SUMP 3_01/16/13	807607		5.236		688730		8.223		328727		10.728	
06	HW-WET-WS-4-(1)_01/	786561		5.236		685354		8.223		319499		10.728	
07	SUMP 2_01/16/13DL	803306		5.236		680485		8.223		311322		10.728	

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.

som13.12.31.1153

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-7-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2817.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	0.90	J
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.85	J
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	1.1	
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

EPA SAMPLE NO.

HW-WET-WS-7-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2817.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d
Lab Smp Id: N0060-01A Client Smp ID: HW-WET-WS-7-(1)_01/
Inj Date : 20-JAN-2014 17:30
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-01A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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)
	23 1,1-Dichloroethane	63	3.789	3.786	(0.724)	10068	0.89944	0.90
	28 cis-1,2-Dichloroethene	96	4.265	4.255	(0.815)	4662	0.85279	0.85(Q)
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	267252	49.4087	49
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	10772	1.12836	1.1
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	54333	50.3339	50
M	50 1,2-Dichloroethene (Total)	96				4662	0.85279	0.85
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	863853	50.0000	
$	58 Toluene-d8	98	6.718	6.715	(0.817)	861914	49.9007	50
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	724080	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	325841	46.9347	47
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	337230	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d
Report Date: 29-Jan-2014 14:44

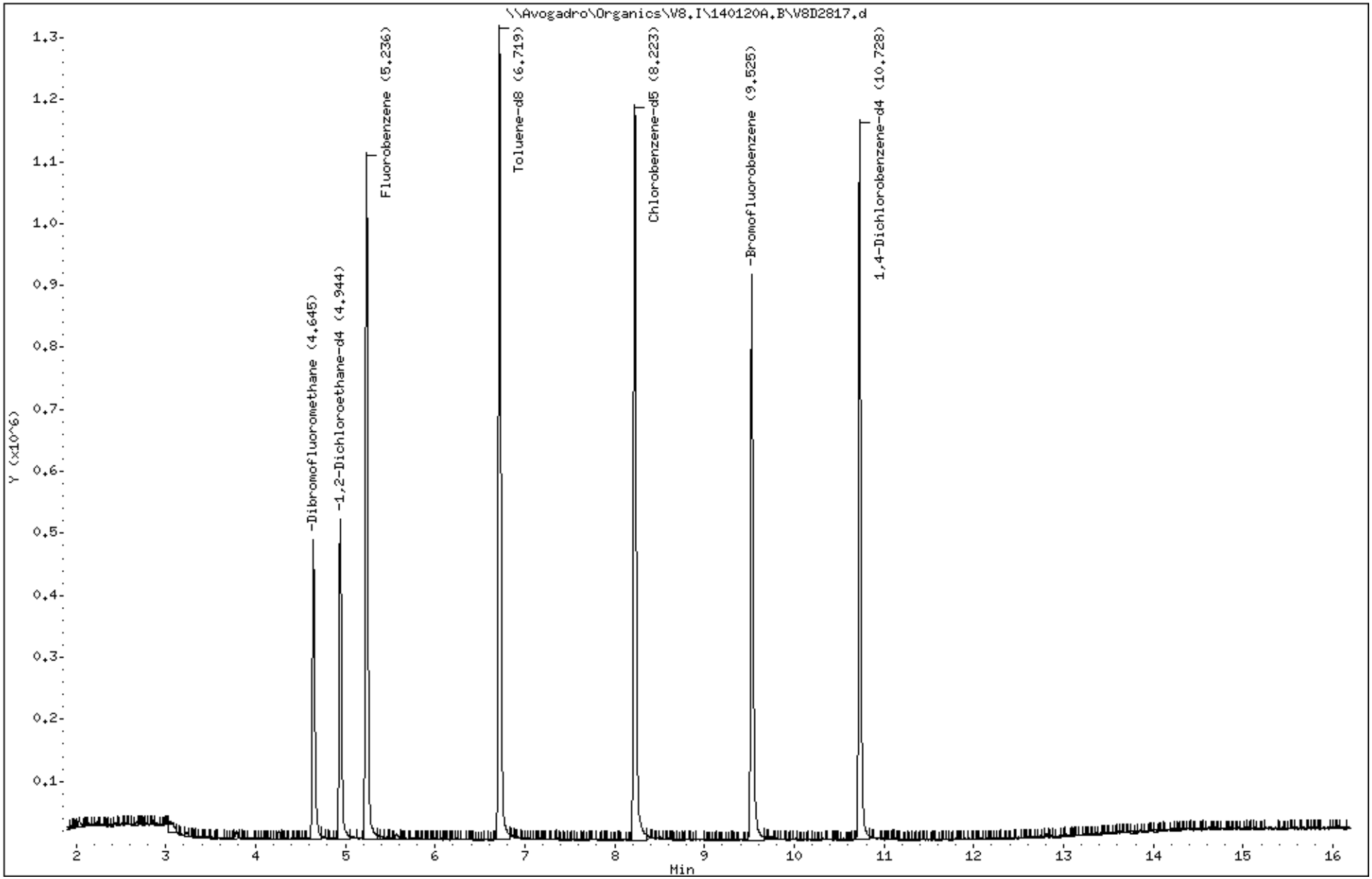
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d
Lab Smp Id: N0060-01A Client Smp ID: HW-WET-WS-7-(1)_01/
Inj Date : 20-JAN-2014 17:30
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-01A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d
Date : 20-JAN-2014 17:30
Client ID: HW-WET-WS-7-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-01A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d

Date : 20-JAN-2014 17:30

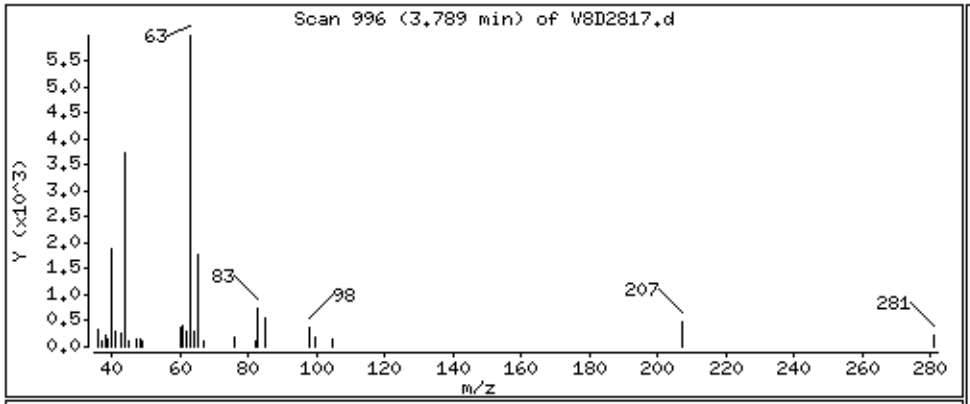
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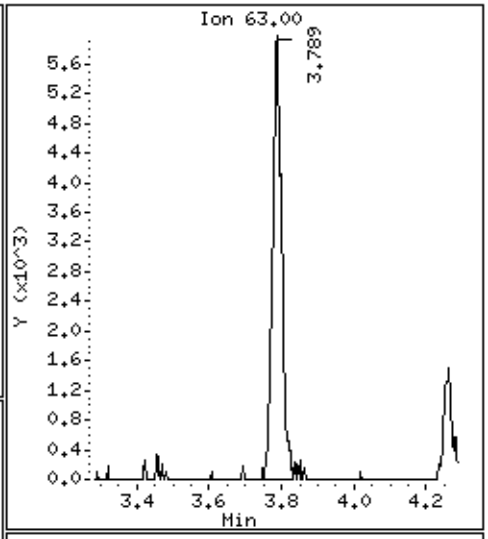
Sample Info: 5ML,N0060-01A,,75646

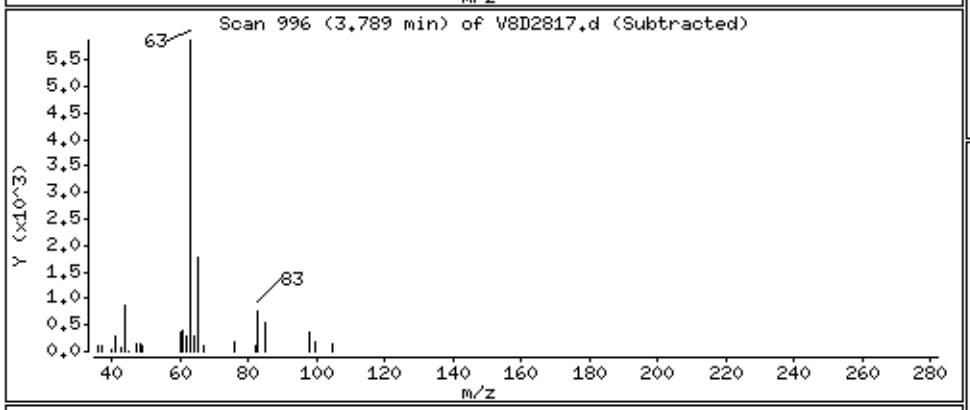
Purge Volume: 5.0 Operator: ALM SRC: LIMS

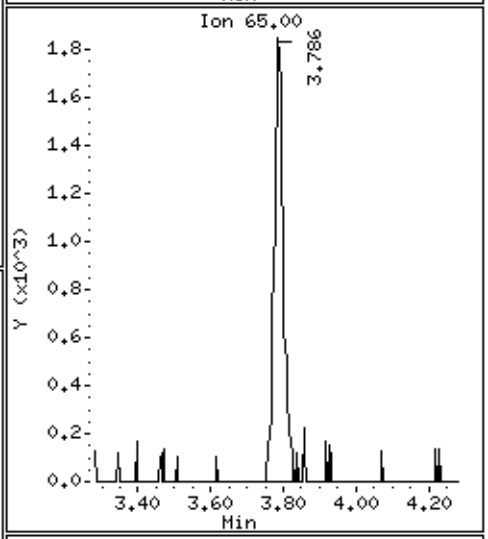
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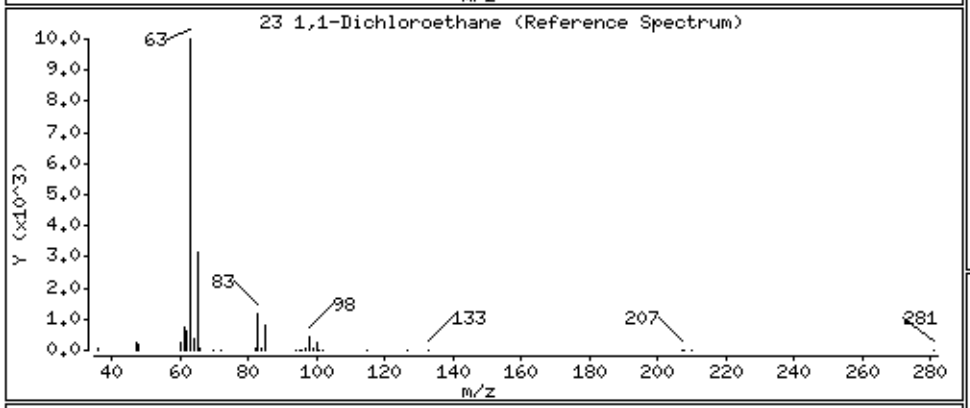
23 1,1-Dichloroethane Concentration: 0.90 ug/L

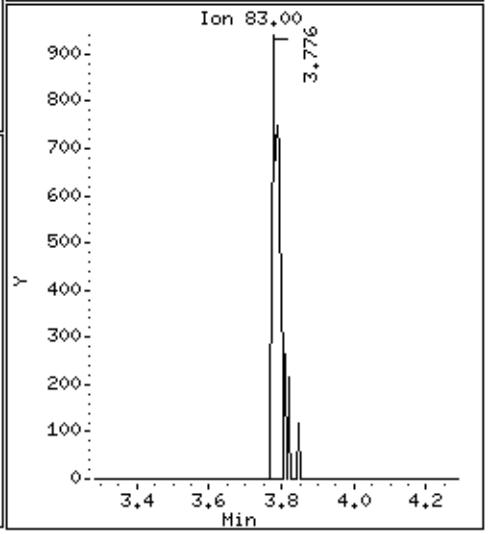


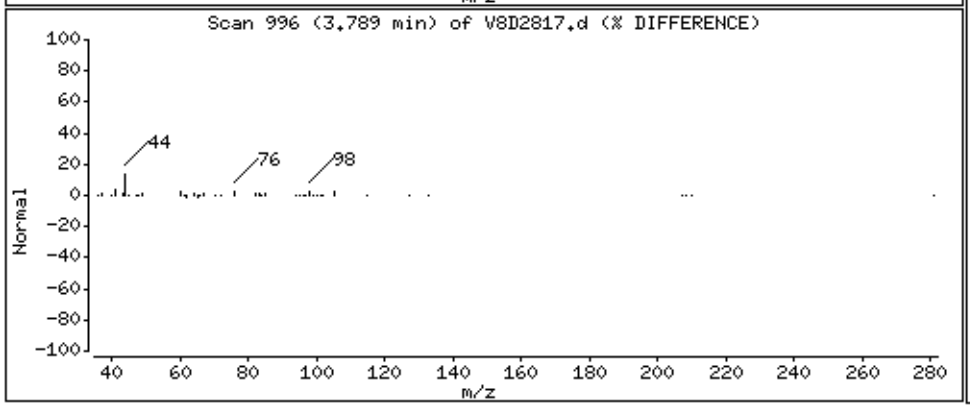












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d

Date : 20-JAN-2014 17:30

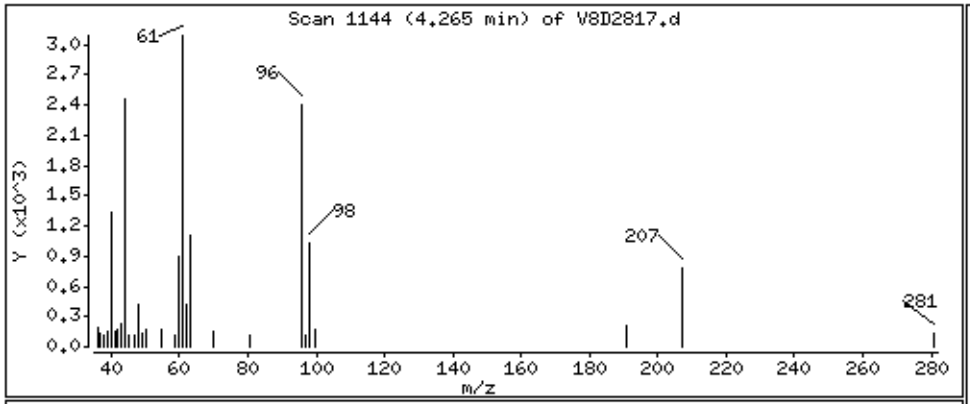
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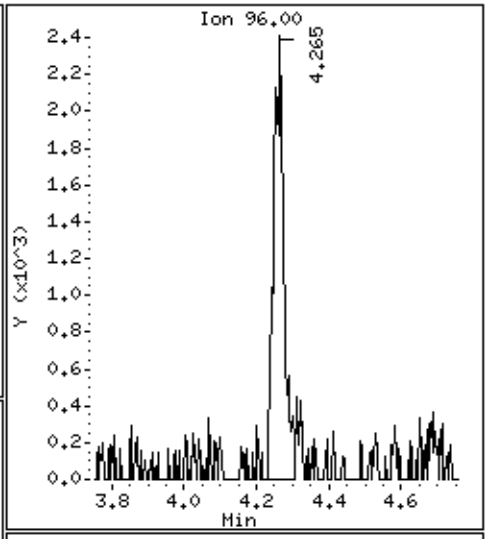
Sample Info: 5ML,N0060-01A,,75646

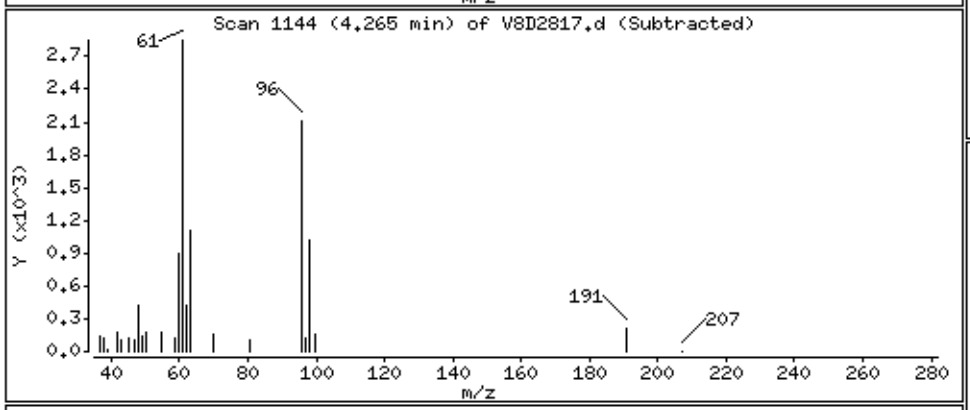
Purge Volume: 5.0 Operator: ALM SRC: LIMS

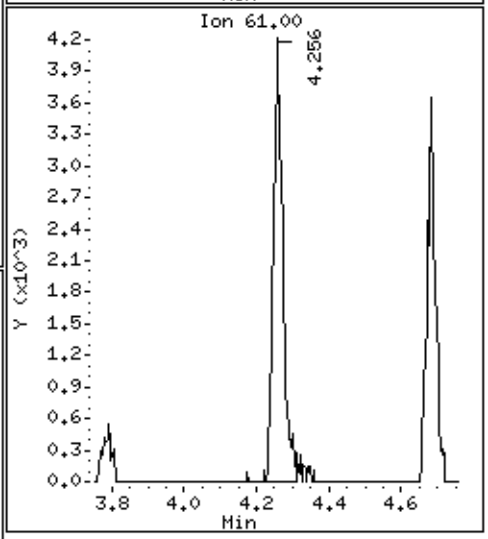
Column phase: DB-624 Column diameter: 0.25

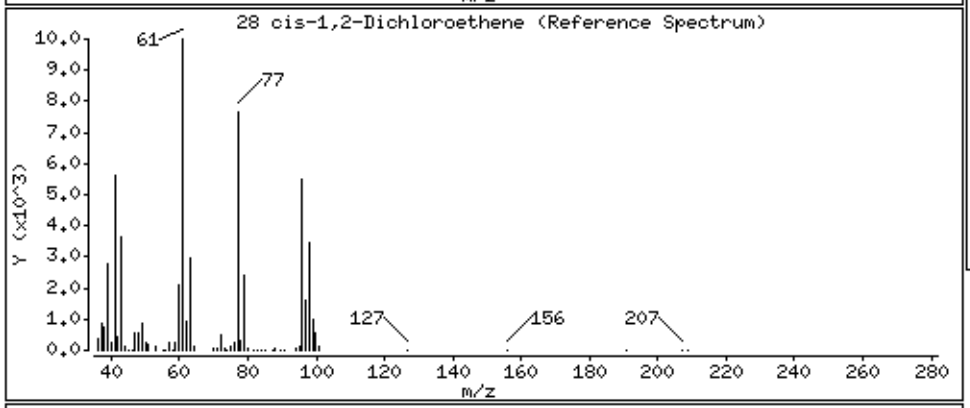
28 cis-1,2-Dichloroethene Concentration: 0.85 ug/L

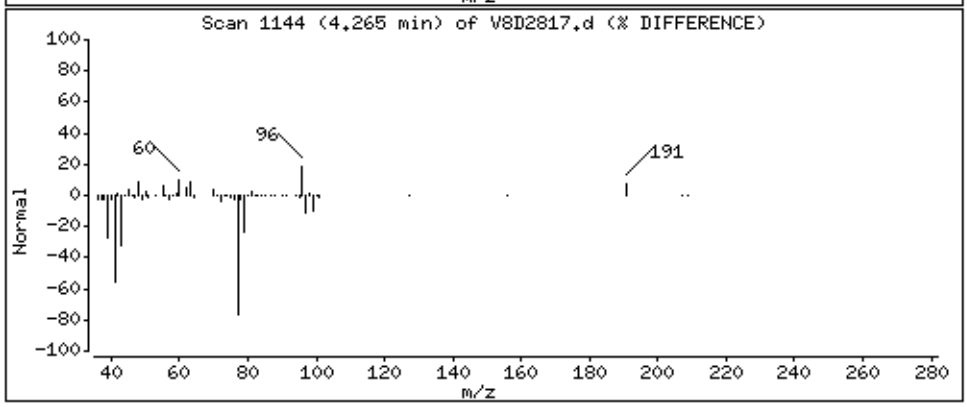












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2817.d

Date : 20-JAN-2014 17:30

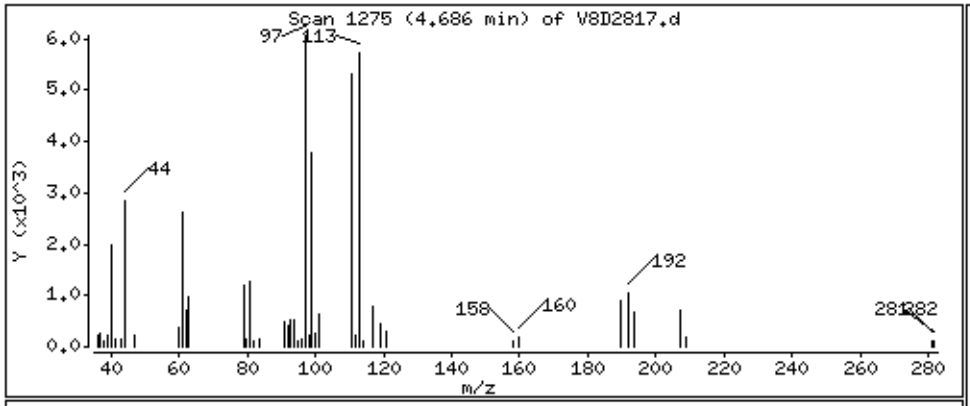
Client ID: HW-WET-WS-7-(1)_01/ Instrument: V8.i

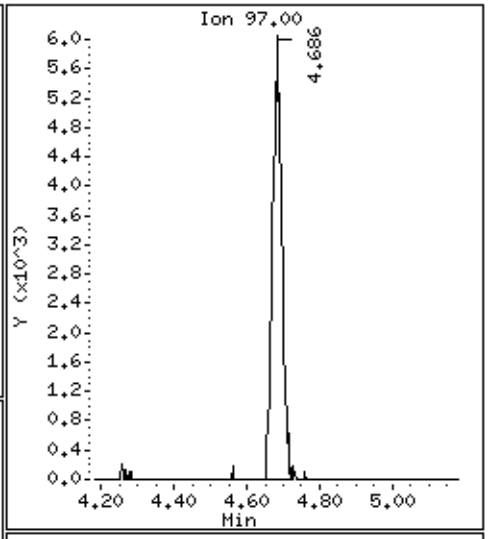
Sample Info: 5ML,N0060-01A,,75646

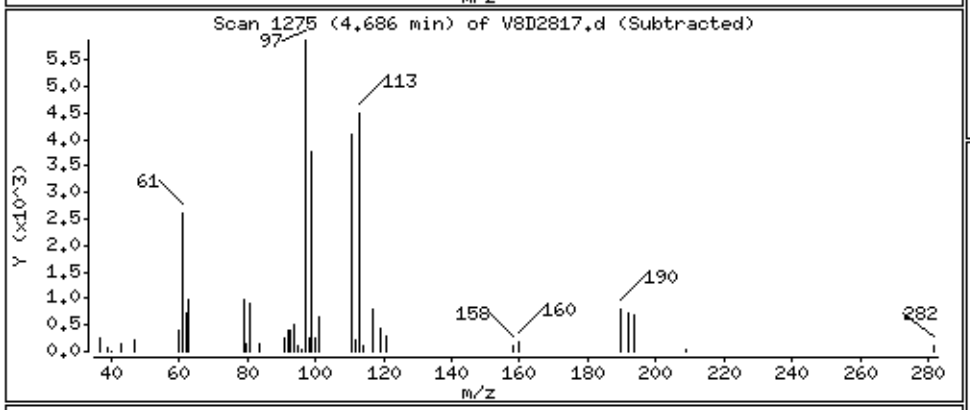
Purge Volume: 5.0 Operator: ALM SRC: LIMS

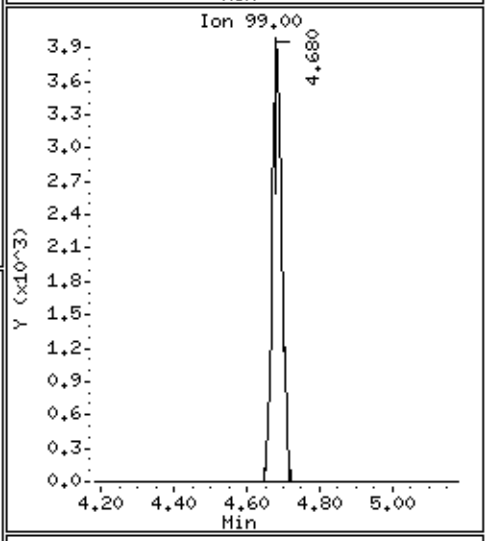
Column phase: DB-624 Column diameter: 0.25

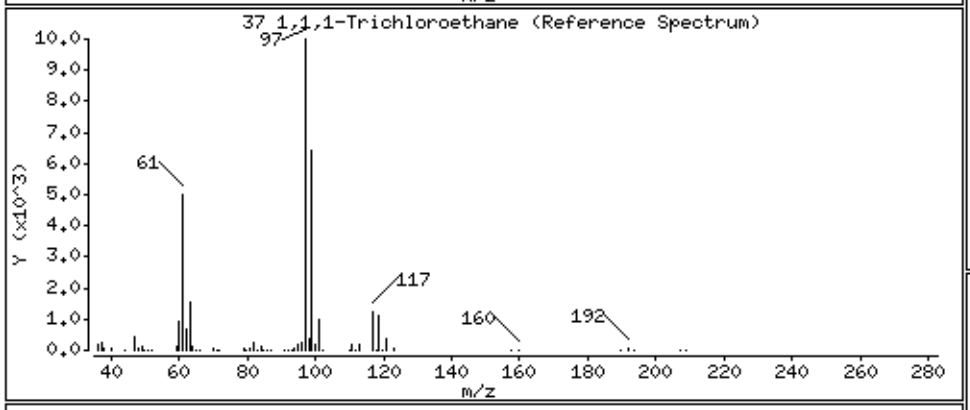
37 1,1,1-Trichloroethane Concentration: 1.1 ug/L

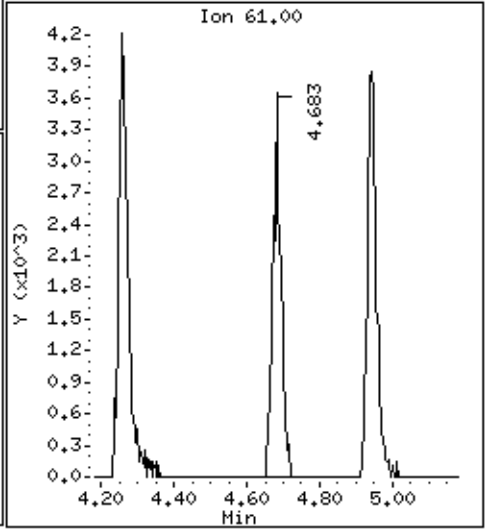


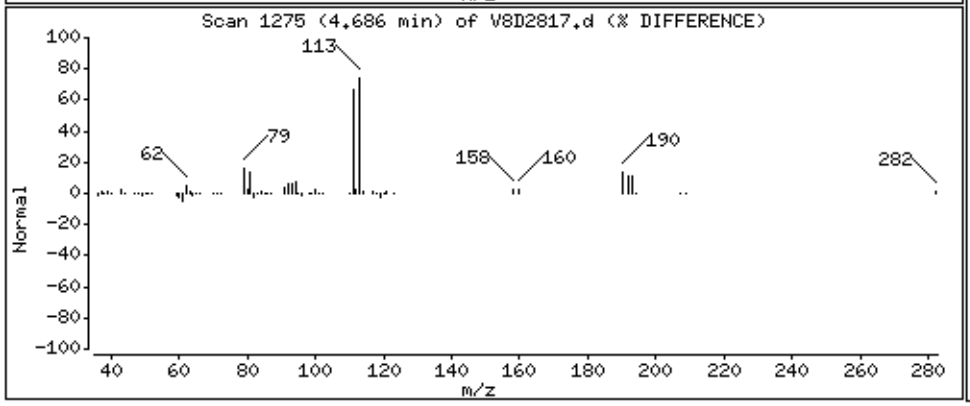












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-6-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2818.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	0.89	J
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.90	J
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	1.2	
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

EPA SAMPLE NO.

HW-WET-WS-6-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2818.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d
Lab Smp Id: N0060-02A Client Smp ID: HW-WET-WS-6-(1)_01/
Inj Date : 20-JAN-2014 17:57
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-02A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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)
	23 1,1-Dichloroethane	63	3.789	3.786	(0.724)	9945	0.88607	0.89
	28 cis-1,2-Dichloroethene	96	4.262	4.255	(0.814)	4955	0.90395	0.90(Q)
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	268256	49.4612	49
	37 1,1,1-Trichloroethane	97	4.679	4.683	(0.894)	11122	1.16190	1.2
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	54395	50.2561	50
M	50 1,2-Dichloroethene (Total)	96				4955	0.90395	0.90
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	866177	50.0000	
$	58 Toluene-d8	98	6.715	6.715	(0.817)	860575	49.6141	50
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	727132	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	329493	47.2615	47
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	343109	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d
Report Date: 29-Jan-2014 14:44

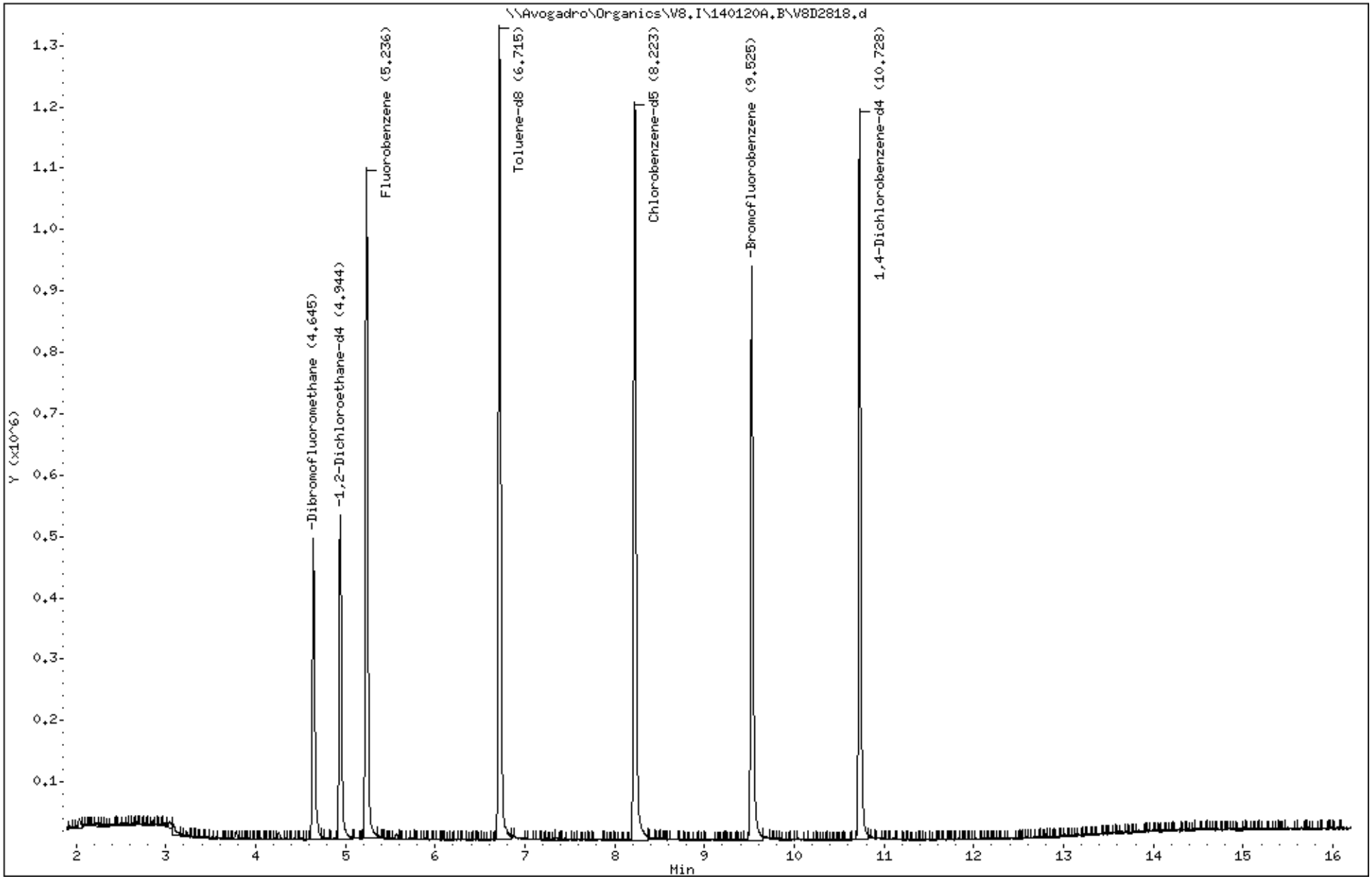
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d
Lab Smp Id: N0060-02A Client Smp ID: HW-WET-WS-6-(1)_01/
Inj Date : 20-JAN-2014 17:57
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-02A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d
Date : 20-JAN-2014 17:57
Client ID: HW-WET-WS-6-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-02A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d

Date : 20-JAN-2014 17:57

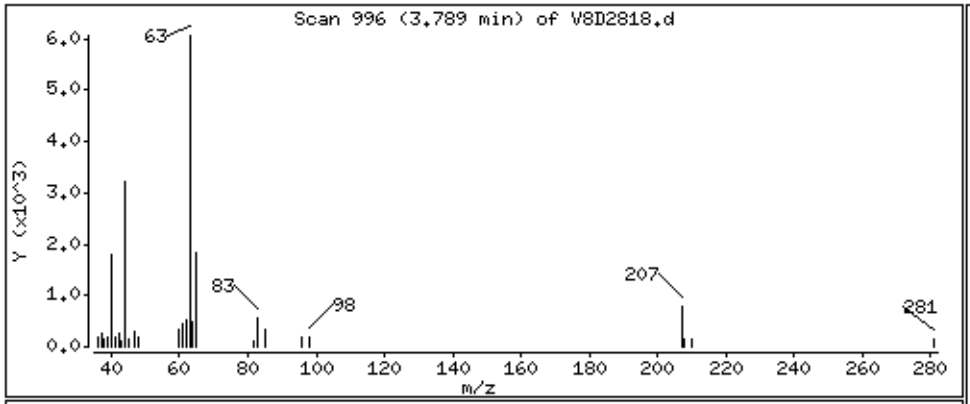
Client ID: HW-WET-WS-6-(1)_01/ Instrument: V8.i

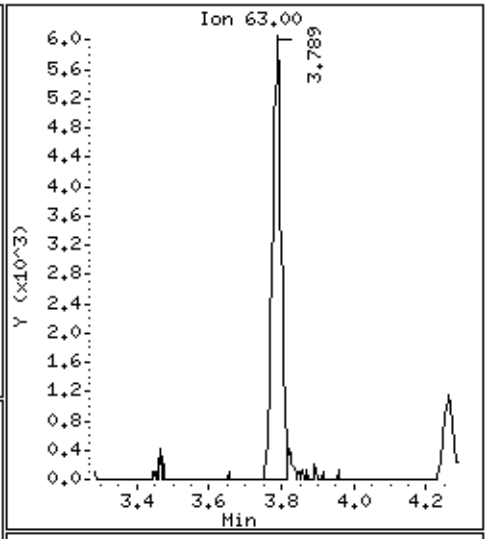
Sample Info: 5ML,N0060-02A,,75646

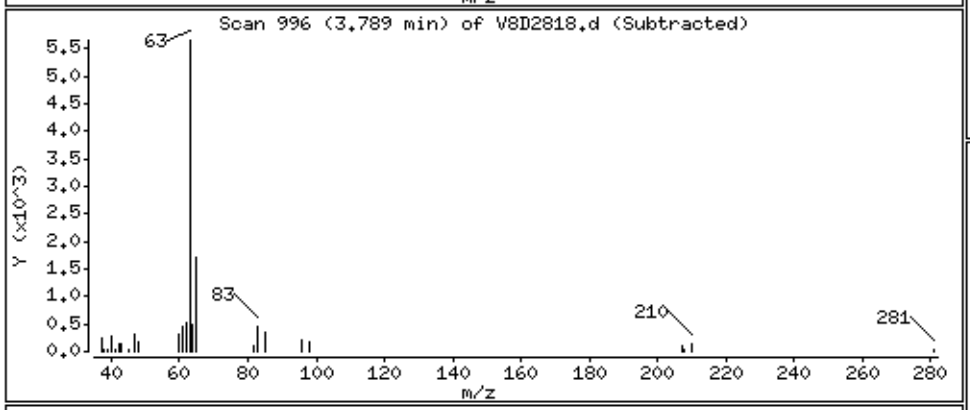
Purge Volume: 5.0 Operator: ALM SRC: LIMS

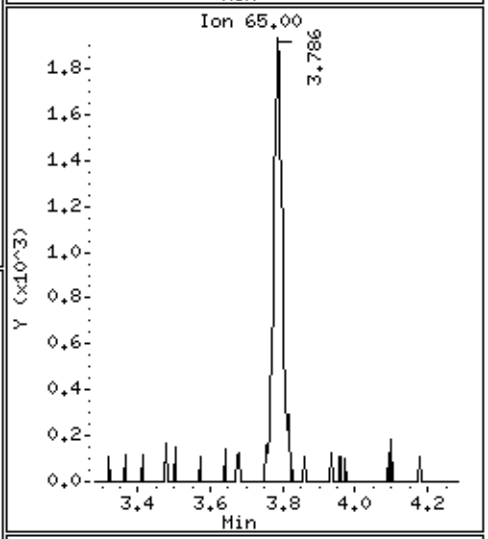
Column phase: DB-624 Column diameter: 0.25

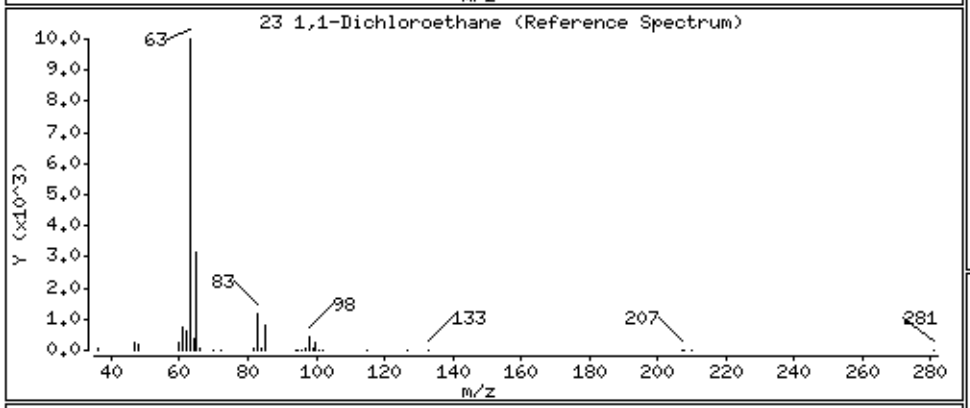
23 1,1-Dichloroethane Concentration: 0.89 ug/L

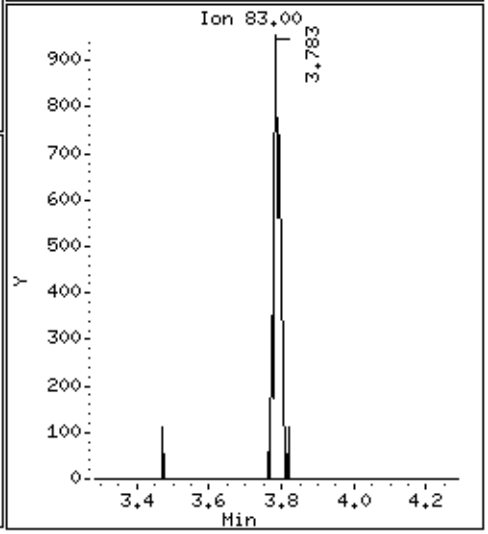


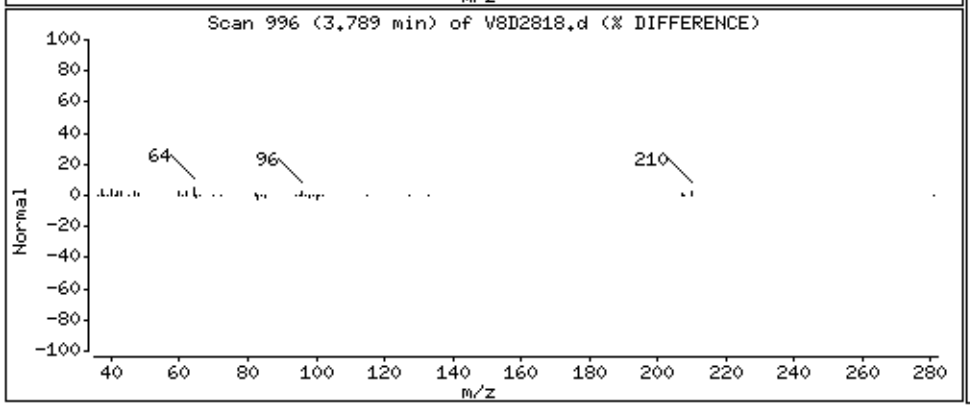












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d

Date : 20-JAN-2014 17:57

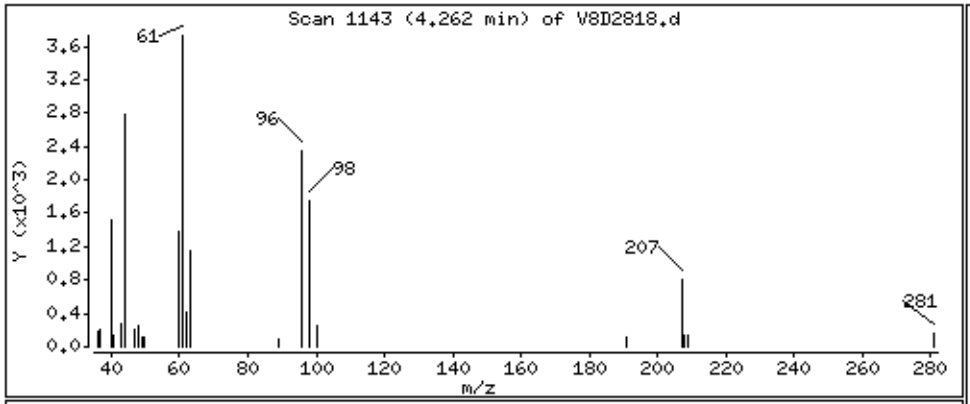
Client ID: HW-WET-WS-6-(1)_01/ Instrument: V8.i

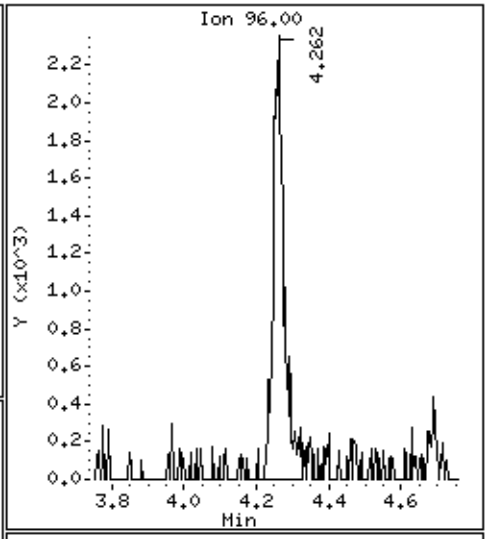
Sample Info: 5ML,N0060-02A,,75646

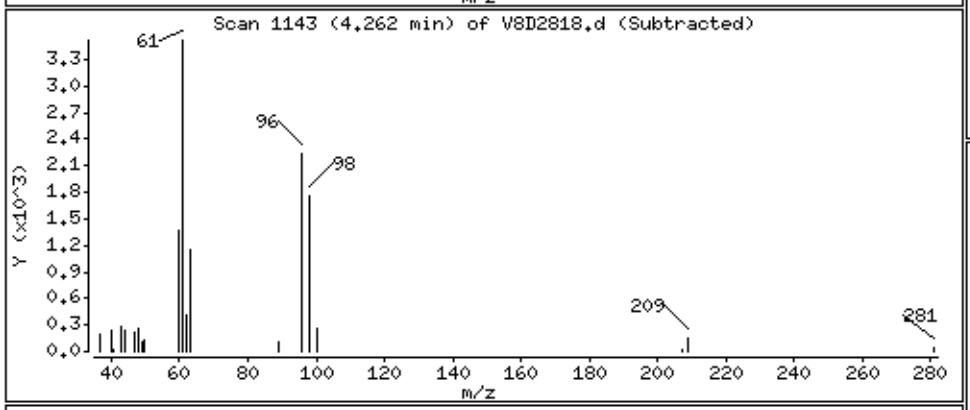
Purge Volume: 5.0 Operator: ALM SRC: LIMS

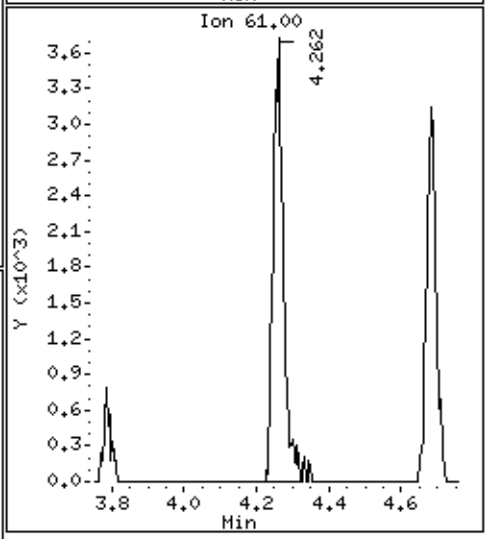
Column phase: DB-624 Column diameter: 0.25

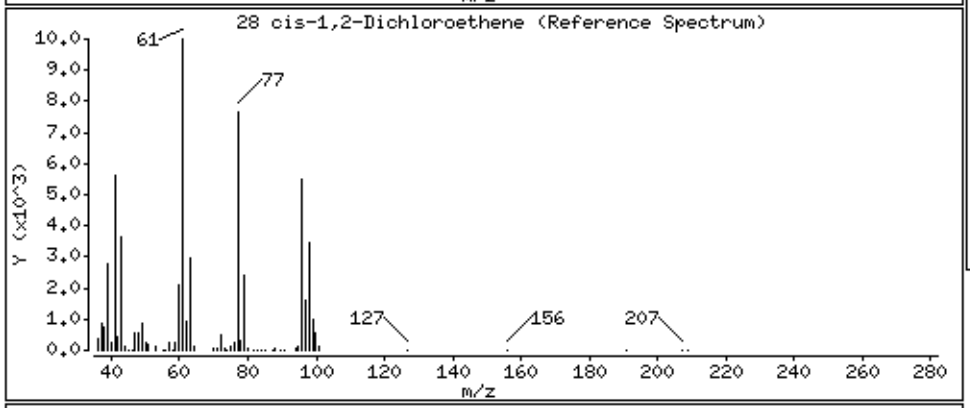
28 cis-1,2-Dichloroethene Concentration: 0.90 ug/L

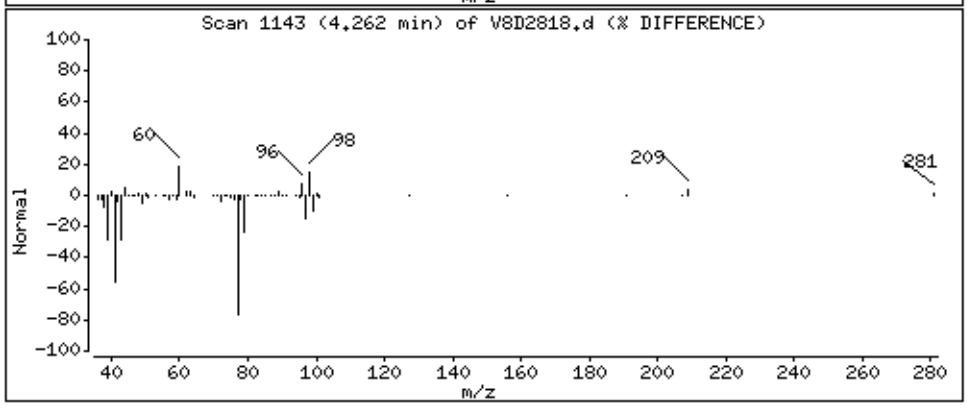












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2818.d

Date : 20-JAN-2014 17:57

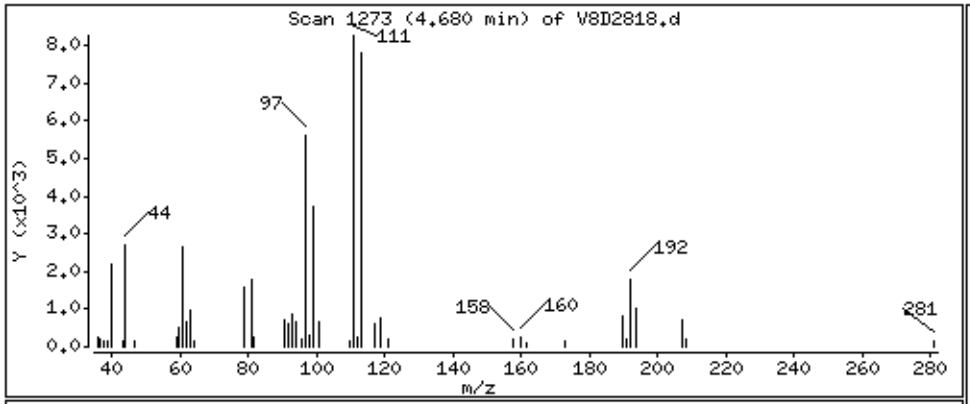
Client ID: HW-WET-WS-6-(1)_01/ Instrument: V8.i

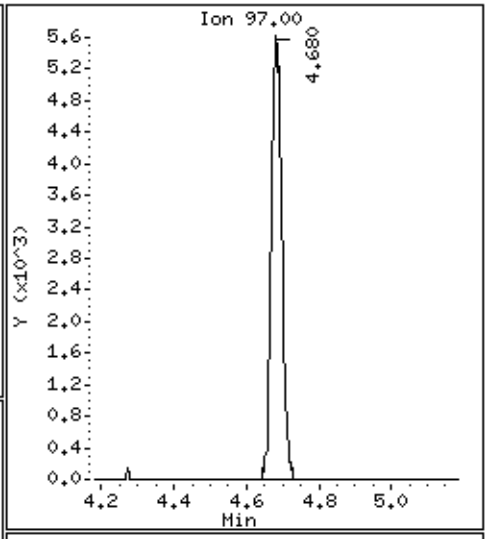
Sample Info: 5ML,N0060-02A,,75646

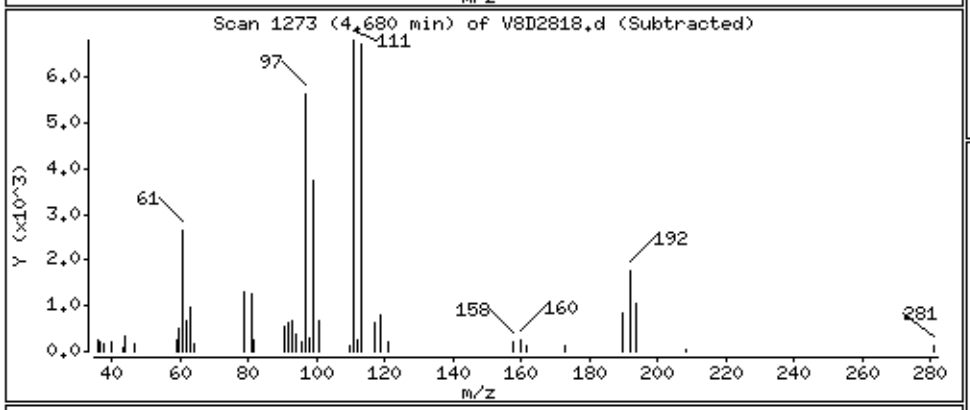
Purge Volume: 5.0 Operator: ALM SRC: LIMS

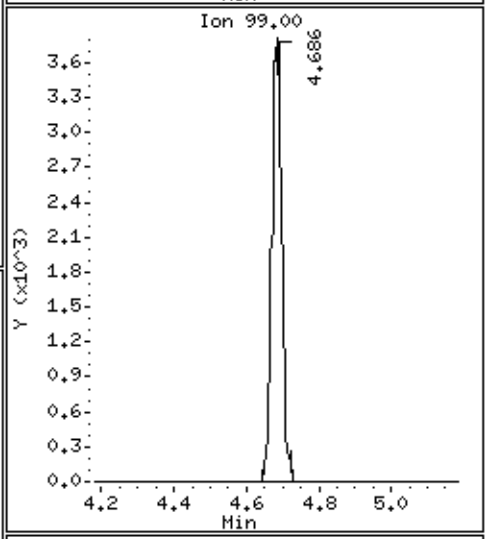
Column phase: DB-624 Column diameter: 0.25

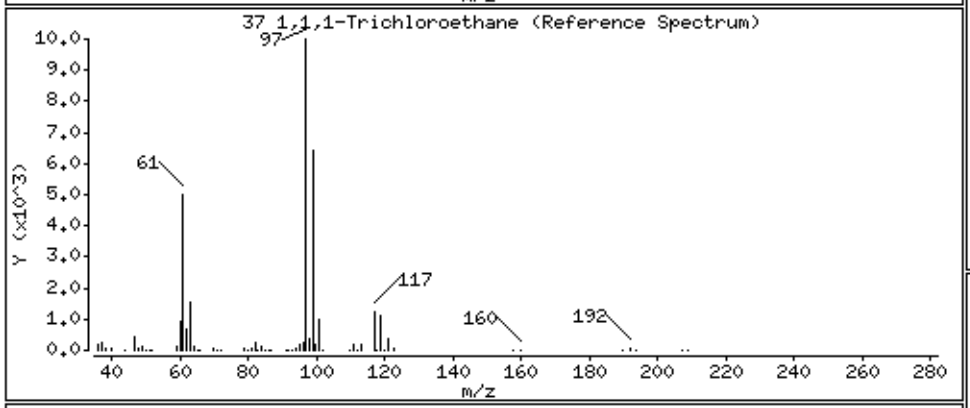
37 1,1,1-Trichloroethane Concentration: 1.2 ug/L

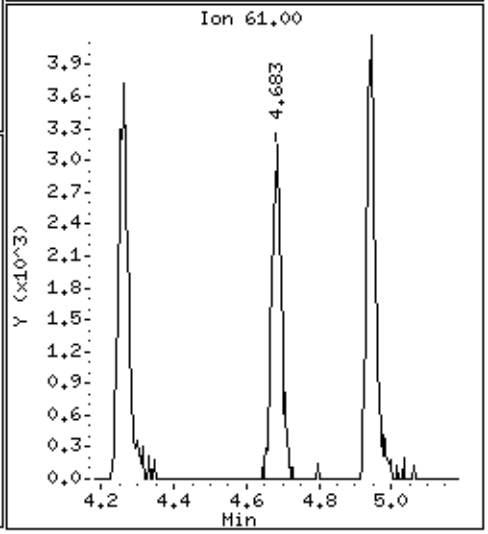


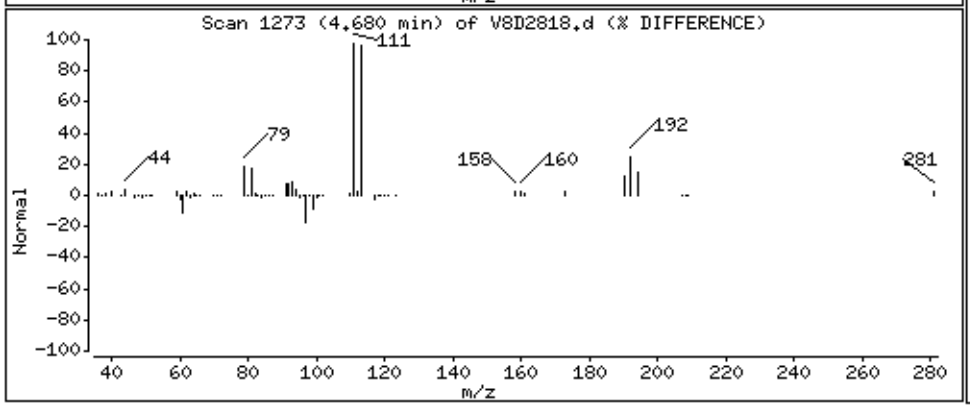












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-2-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2819.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	1.2	
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

EPA SAMPLE NO.

HW-WET-WS-2-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2819.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2819.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2819.d
Lab Smp Id: N0060-03A Client Smp ID: HW-WET-WS-2-(1)_01/
Inj Date : 20-JAN-2014 18:25
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-03A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.644	4.644	(0.887)	269536	49.5584	50
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	53459	49.2534	49
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	868603	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	7274	1.23421	1.2
$	58 Toluene-d8	98	6.718	6.715	(0.817)	862525	49.2889	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	733588	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	328016	46.6356	47
*	92 1,4-Dichlorobenzene-d4	152	10.728	10.724	(1.000)	347453	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2819.d
Report Date: 29-Jan-2014 14:44

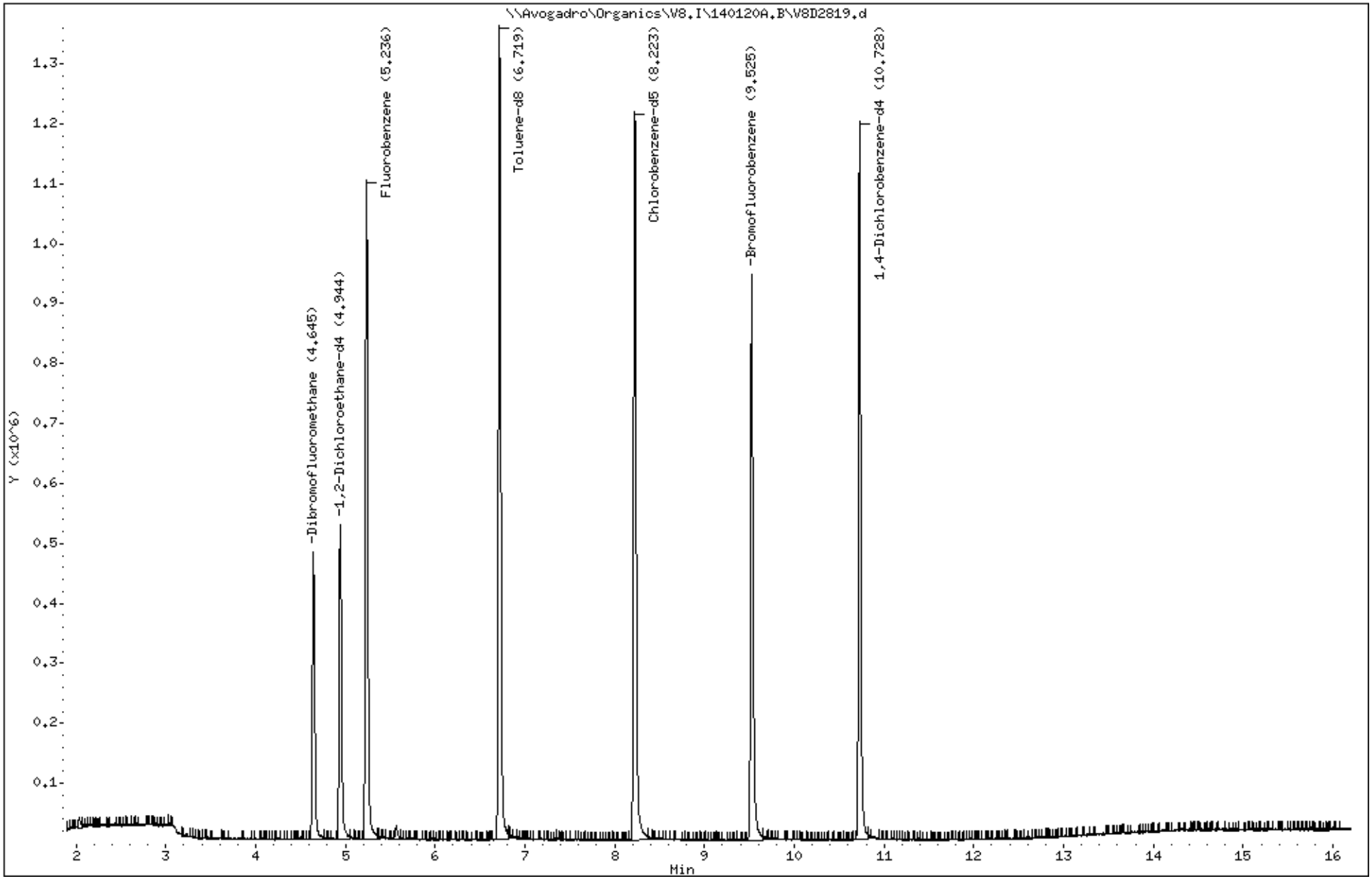
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2819.d
Lab Smp Id: N0060-03A Client Smp ID: HW-WET-WS-2-(1)_01/
Inj Date : 20-JAN-2014 18:25
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-03A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2819.d
Date : 20-JAN-2014 18:25
Client ID: HW-WET-WS-2-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-03A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2819.d

Date : 20-JAN-2014 18:25

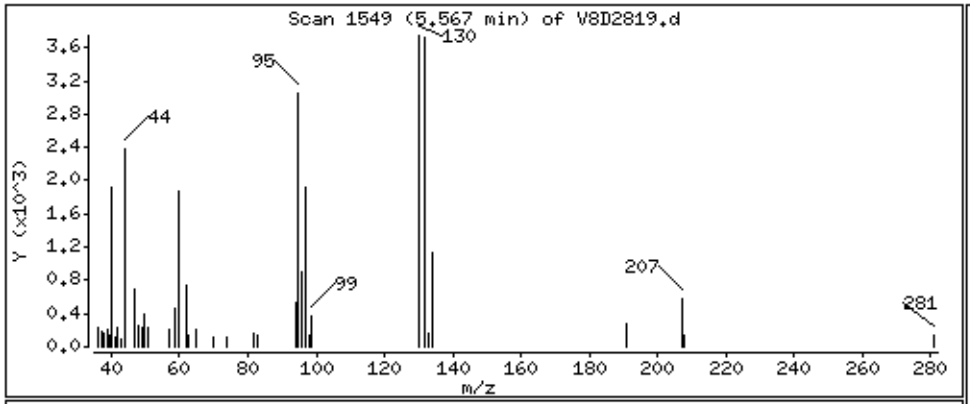
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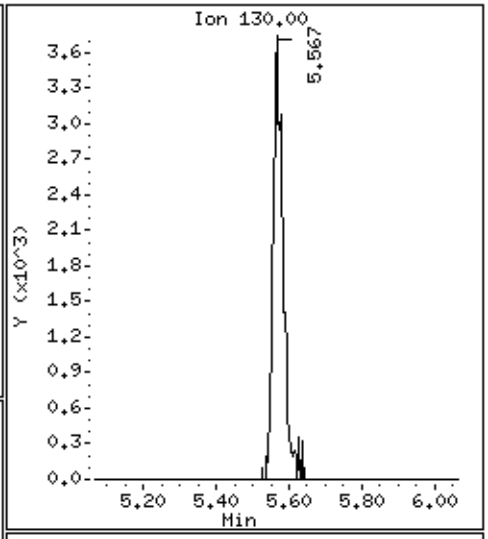
Sample Info: 5ML,N0060-03A,,75646

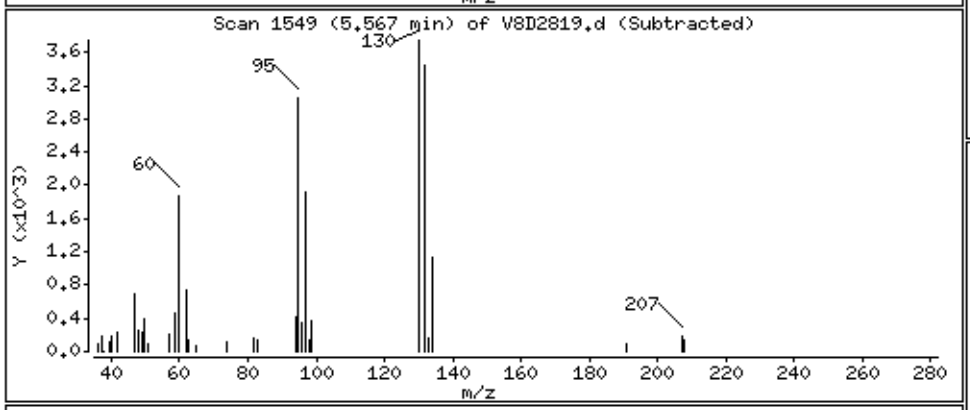
Purge Volume: 5.0 Operator: ALM SRC: LIMS

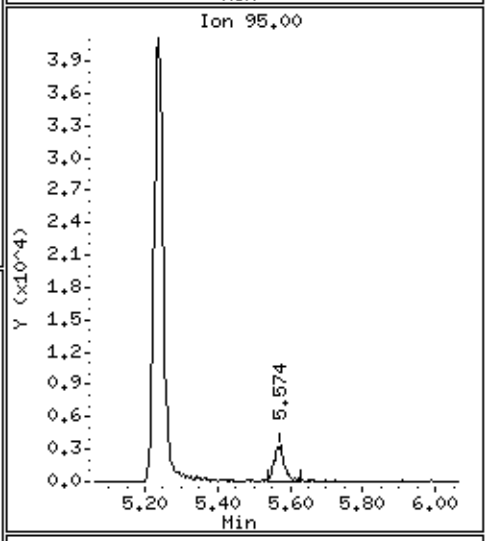
Column phase: DB-624 Column diameter: 0.25

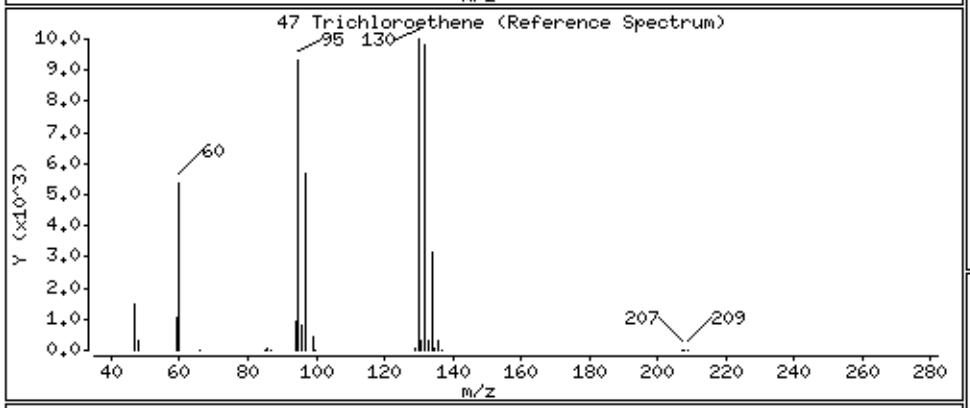
47 Trichloroethene Concentration: 1.2 ug/L

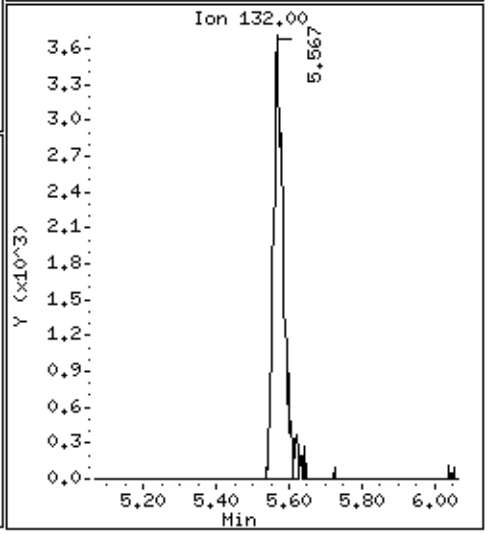


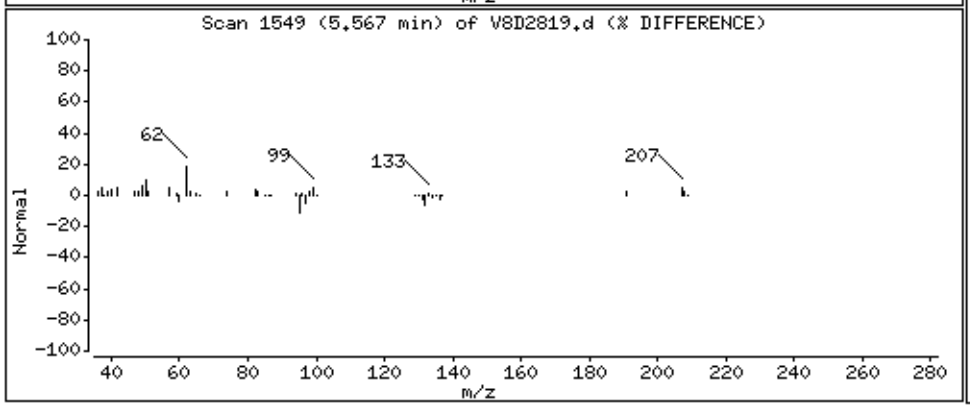












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-3-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2820.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	3.9	
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	5.7	
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	7.0	
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

EPA SAMPLE NO.

HW-WET-WS-3-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2820.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.3	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d
Lab Smp Id: N0060-04A Client Smp ID: HW-WET-WS-3-(1)_01/
Inj Date : 20-JAN-2014 18:52
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-04A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	23062	4.29071	4.3
	28 cis-1,2-Dichloroethene	96	4.262	4.255	(0.814)	20943	3.90826	3.9(Q)
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	263285	49.6576	50
	37 1,1,1-Trichloroethane	97	4.680	4.683	(0.894)	53321	5.69807	5.7
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	53808	50.8535	51
M	50 1,2-Dichloroethene (Total)	96				20943	3.90826	3.9
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	846764	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	40025	6.96636	7.0
$	58 Toluene-d8	98	6.715	6.715	(0.817)	840833	50.1243	50
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	703219	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	309407	45.8896	46
*	92 1,4-Dichlorobenzene-d4	152	10.728	10.724	(1.000)	326137	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d
Report Date: 29-Jan-2014 14:45

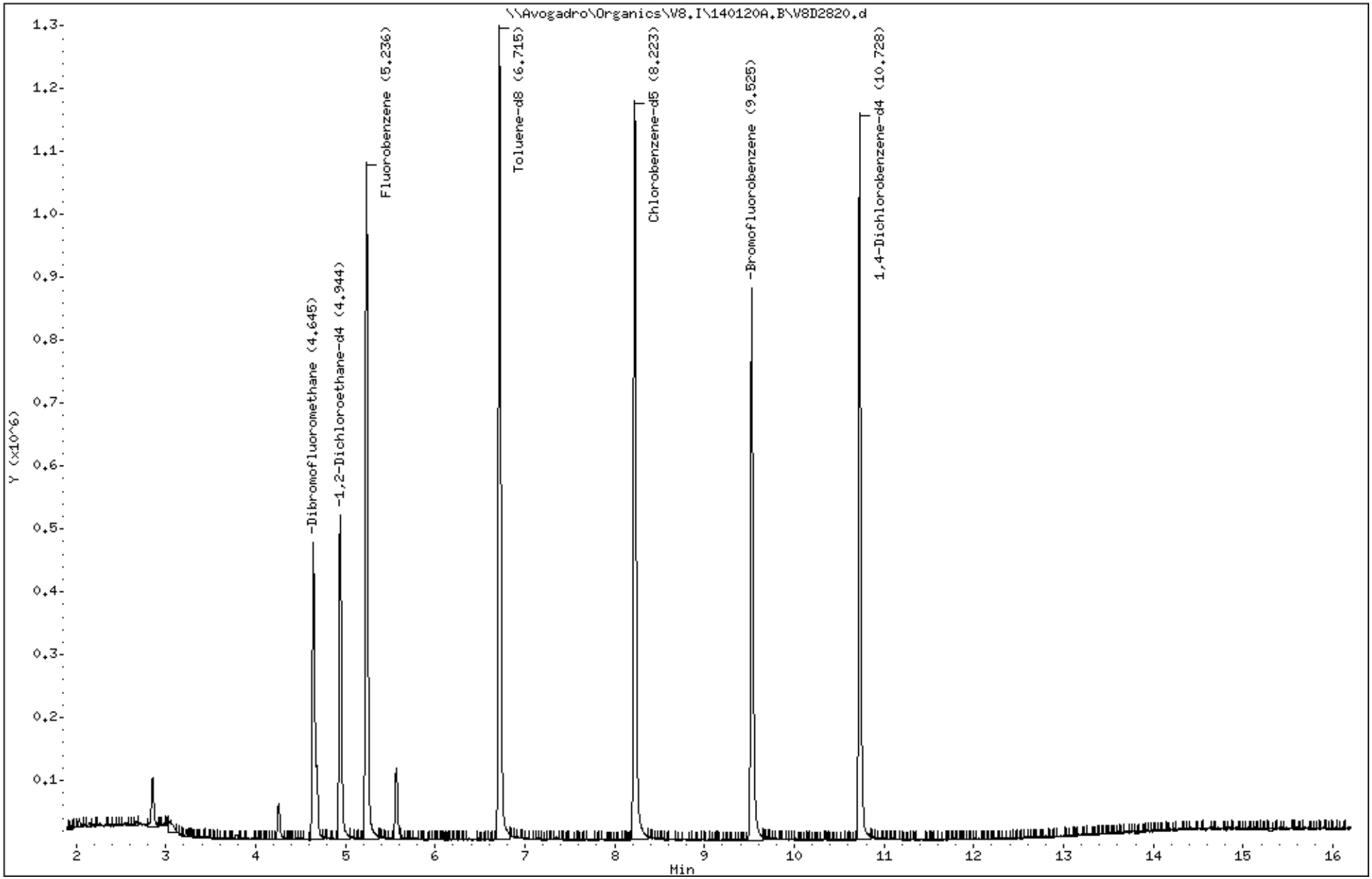
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d
Lab Smp Id: N0060-04A Client Smp ID: HW-WET-WS-3-(1)_01/
Inj Date : 20-JAN-2014 18:52
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-04A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d
Date : 20-JAN-2014 18:52
Client ID: HW-WET-WS-3-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-04A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d

Date : 20-JAN-2014 18:52

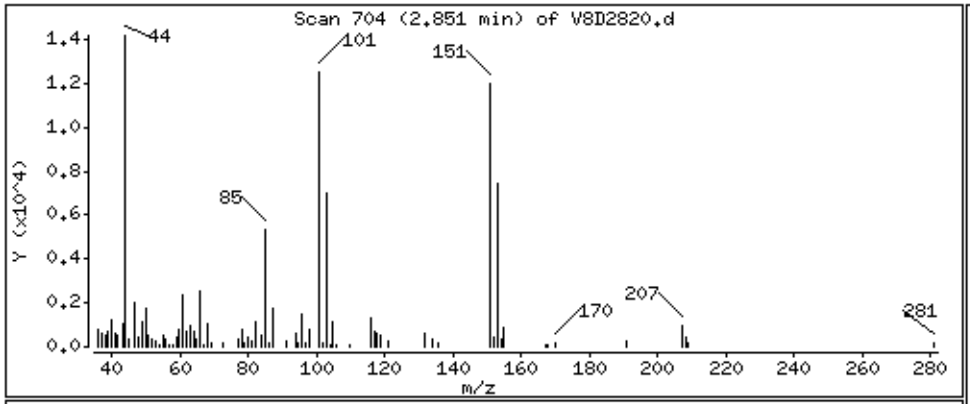
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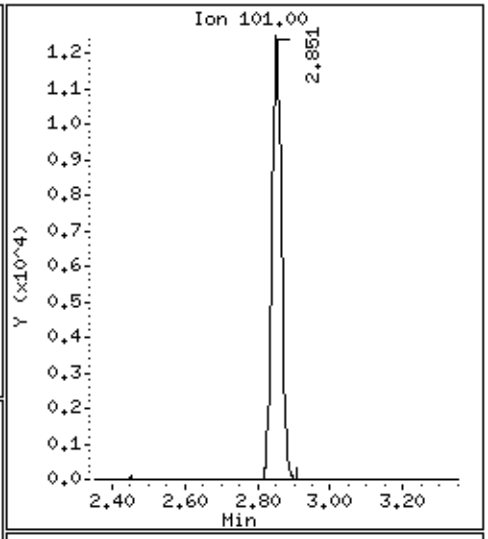
Sample Info: 5ML,N0060-04A,,75646

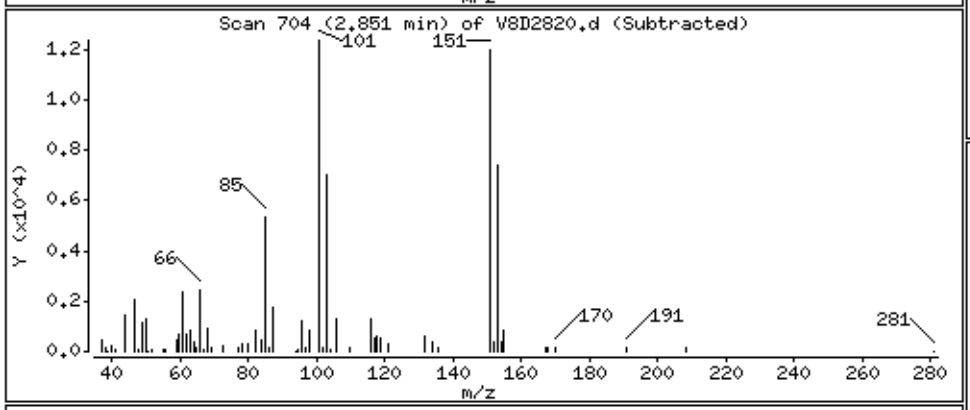
Purge Volume: 5.0 Operator: ALM SRC: LIMS

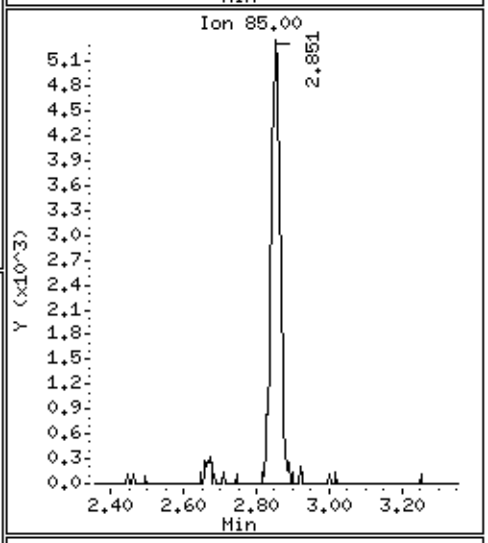
Column phase: DB-624 Column diameter: 0.25

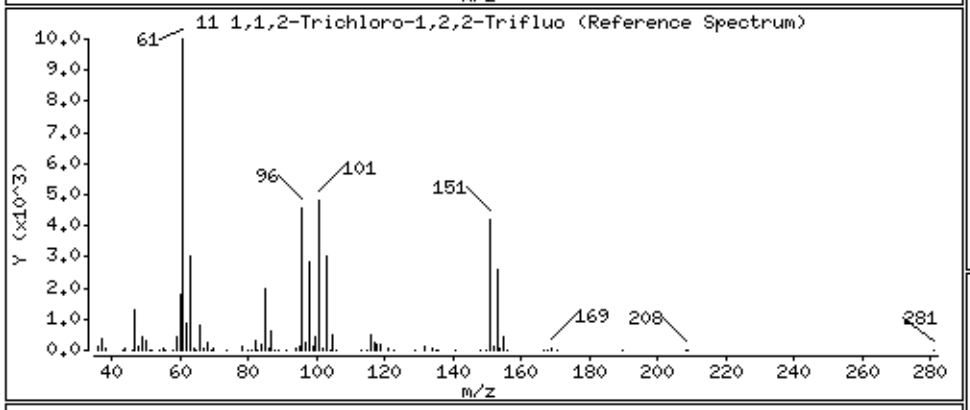
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 4.3 ug/L

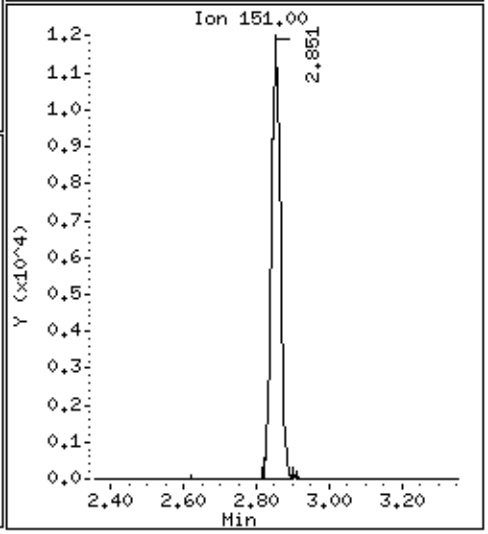


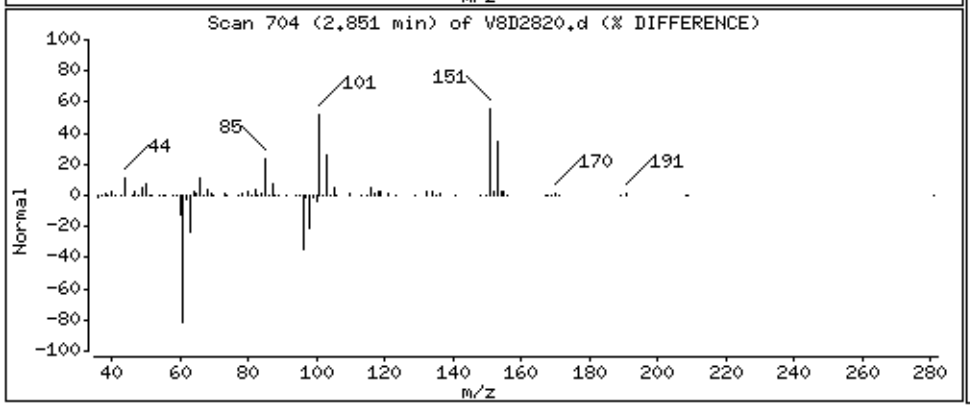












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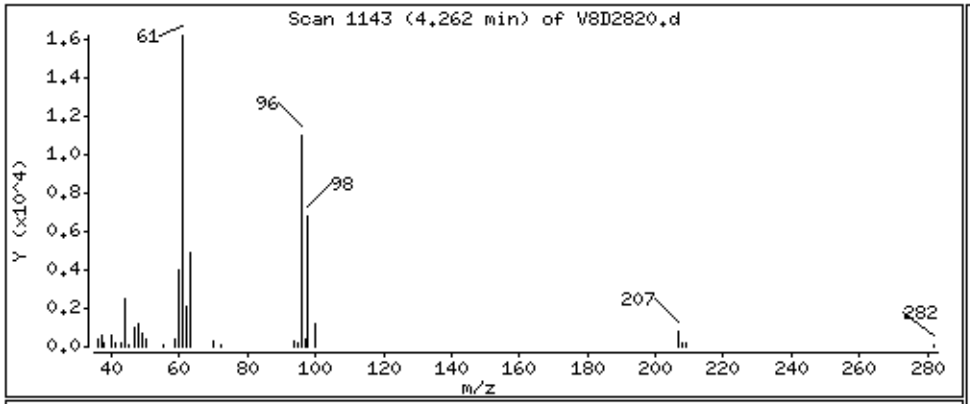
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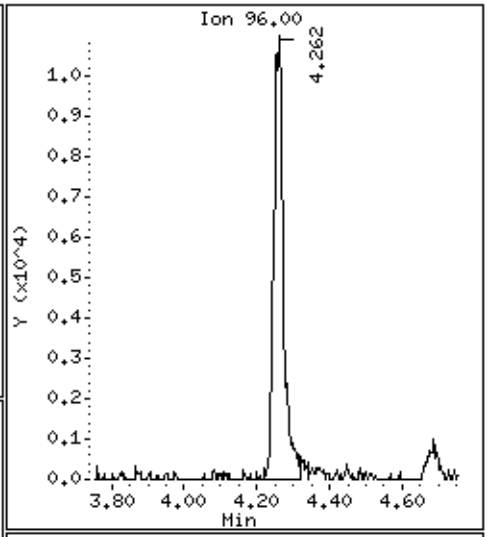
Sample Info: 5ML,N0060-04A,,75646

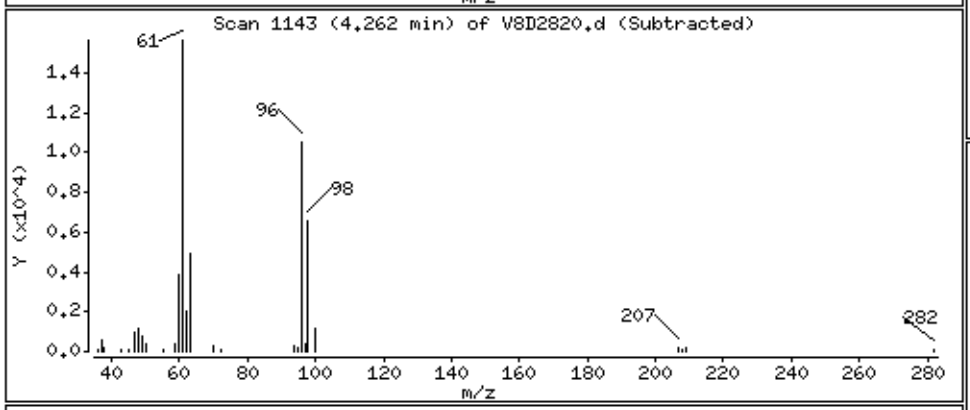
Purge Volume: 5.0 Operator: ALM SRC: LIMS

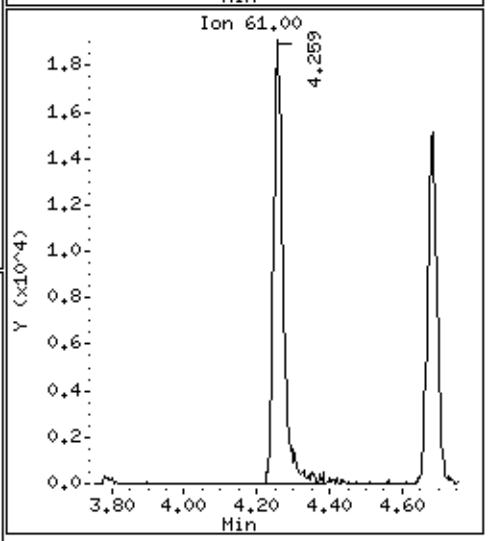
Column phase: DB-624 Column diameter: 0.25

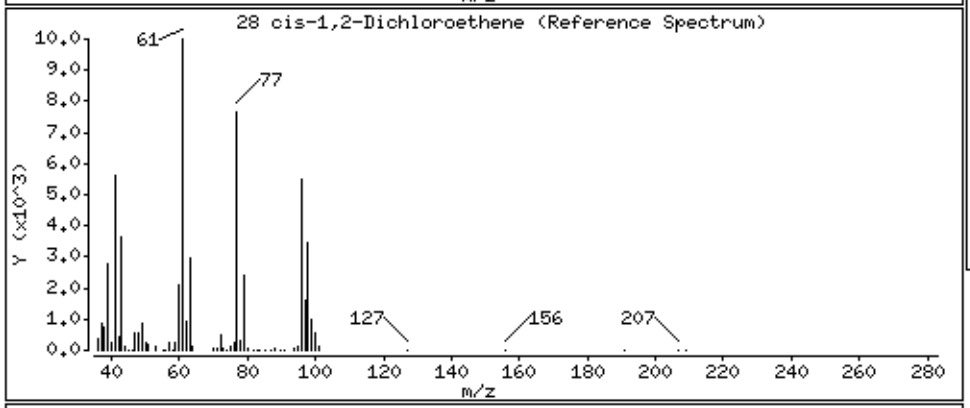
28 cis-1,2-Dichloroethene Concentration: 3.9 ug/L

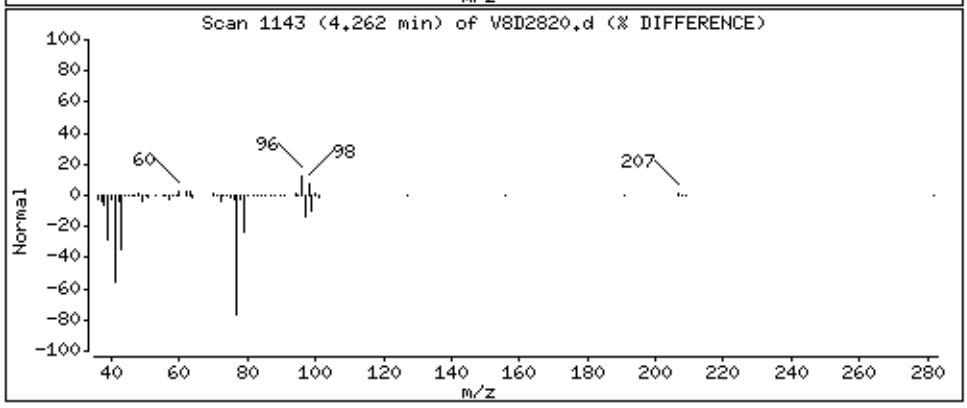












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d

Date : 20-JAN-2014 18:52

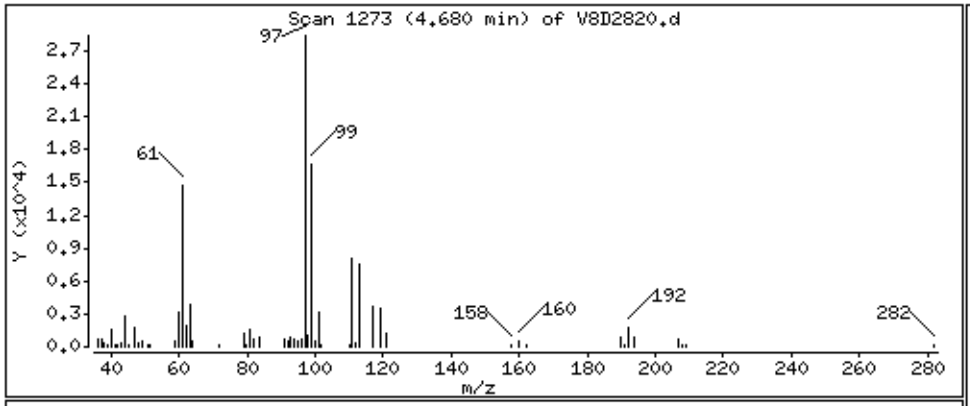
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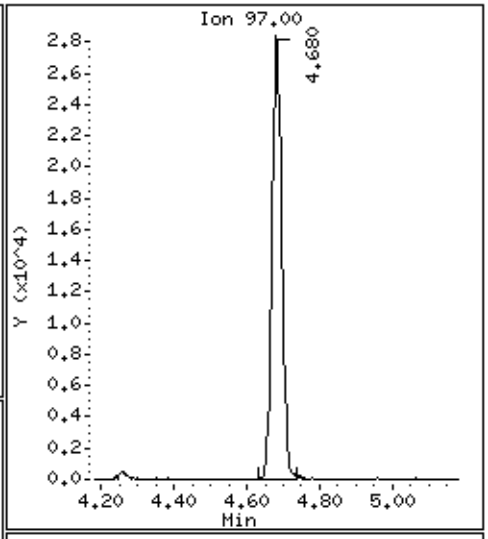
Sample Info: 5ML,N0060-04A,,75646

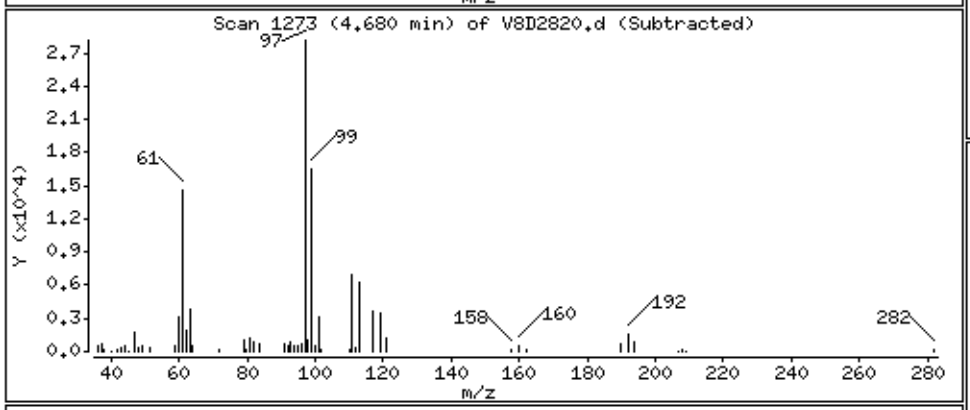
Purge Volume: 5.0 Operator: ALM SRC: LIMS

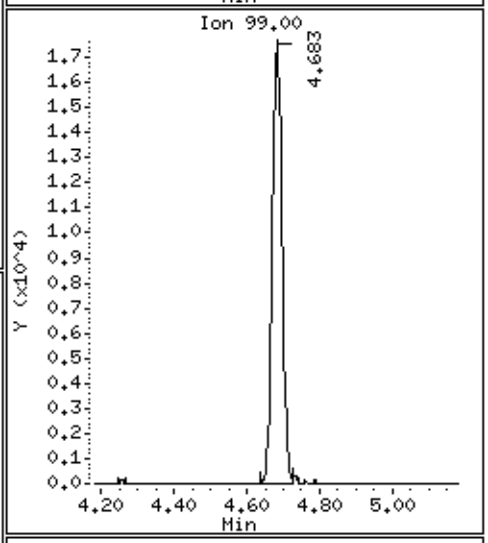
Column phase: DB-624 Column diameter: 0.25

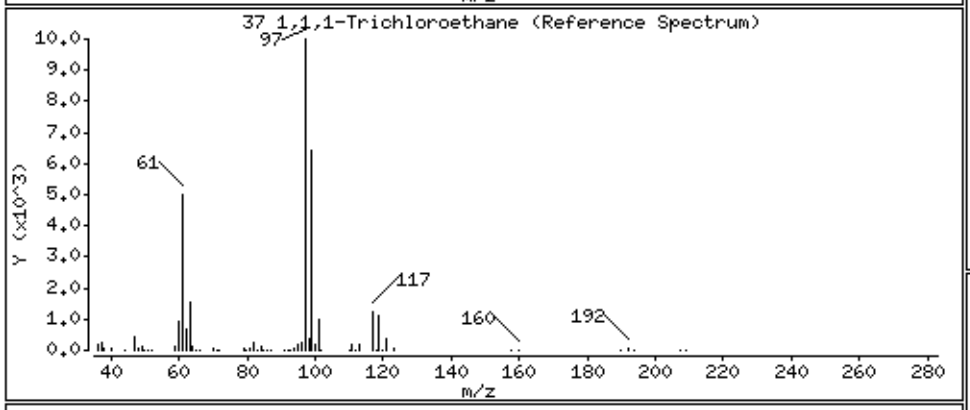
37 1,1,1-Trichloroethane Concentration: 5.7 ug/L

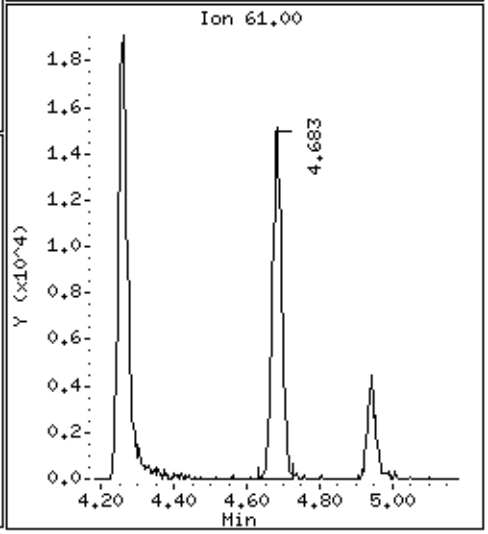


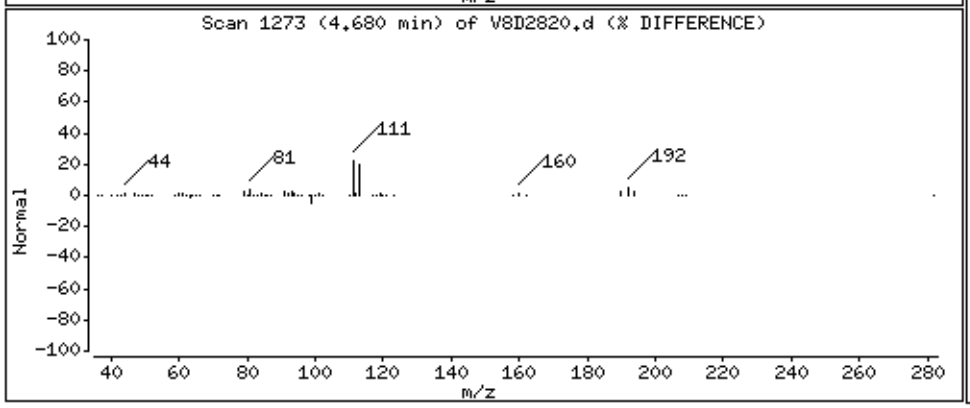












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2820.d

Date : 20-JAN-2014 18:52

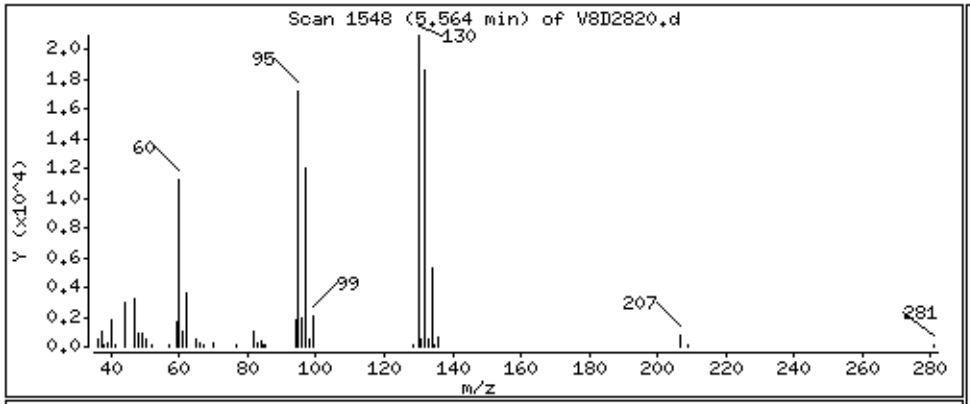
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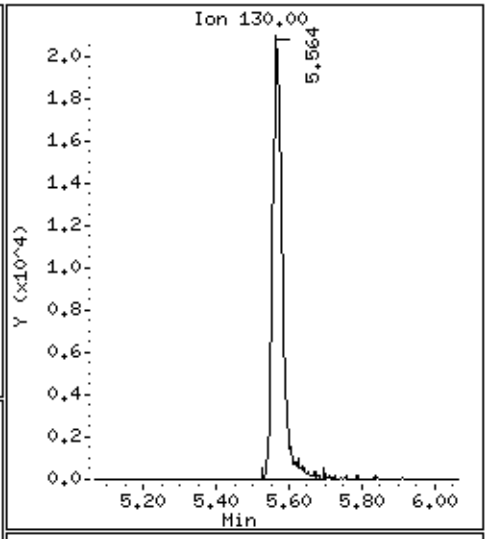
Sample Info: 5ML,N0060-04A,,75646

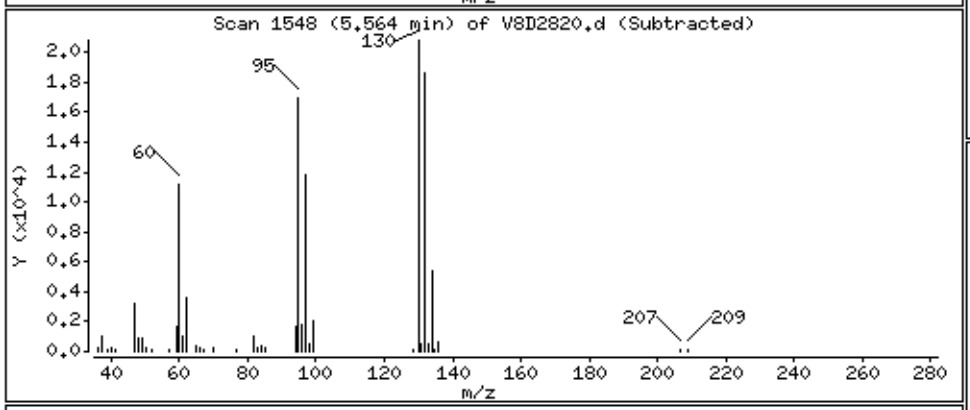
Purge Volume: 5.0 Operator: ALM SRC: LIMS

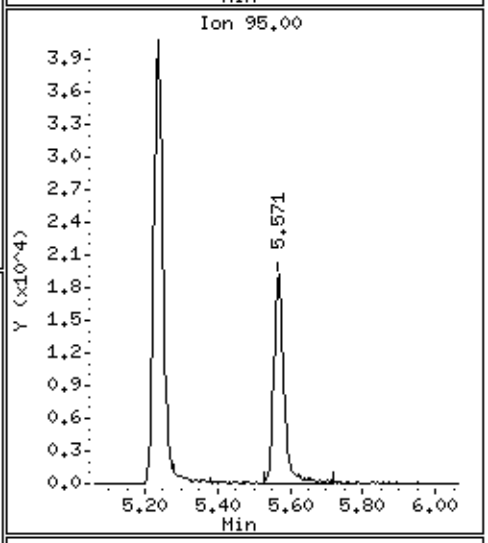
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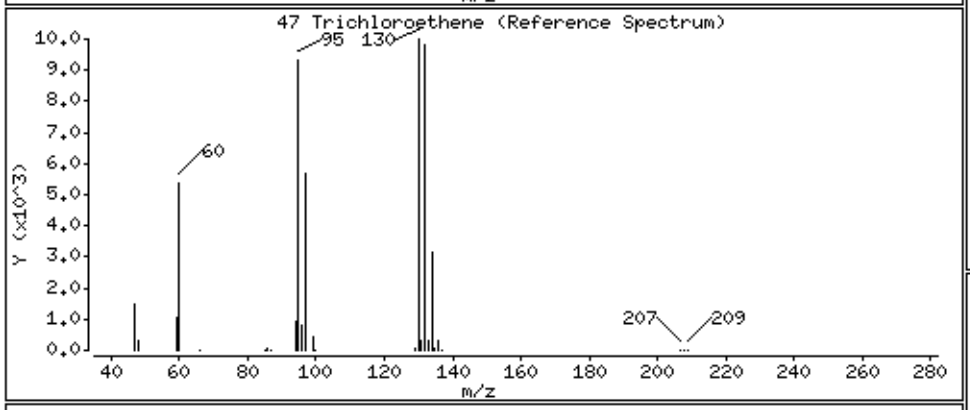
47 Trichloroethene Concentration: 7.0 ug/L

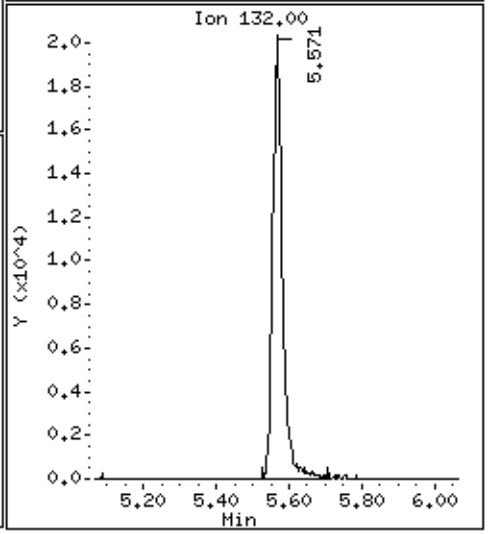


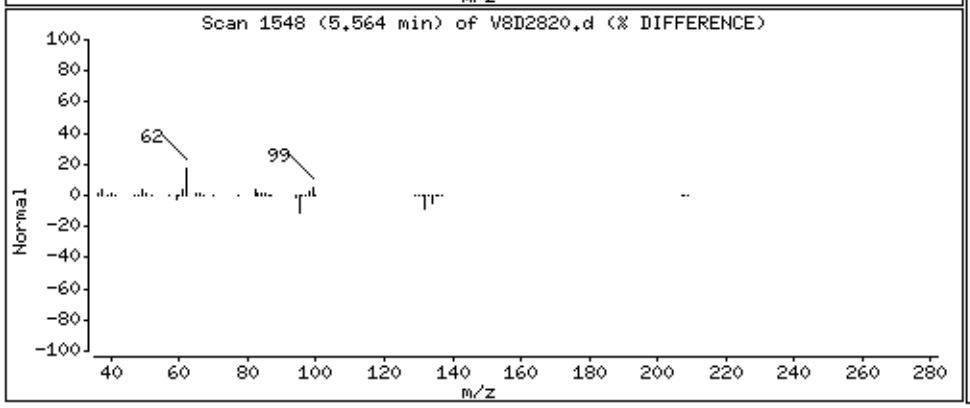












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2821.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	26	
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	160	
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	3.1	
156-60-5	trans-1,2-Dichloroethene	3.5	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	150	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	78	
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	600	E
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	66	
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

EPA SAMPLE NO.

HW-WET-WS-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2821.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	1.6	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	39	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d
Lab Smp Id: N0060-05A Client Smp ID: HW-WET-WS-4-(1)_01/
Inj Date : 20-JAN-2014 19:19
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-05A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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)
	4 Vinyl Chloride	62	1.856	1.856	(0.355)	166836	25.9791	26
	6 Chloroethane	64	2.229	2.229	(0.426)	525141	159.916	160
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	209849	39.2210	39
	18 Methylene Chloride	84	3.229	3.229	(0.617)	15998	3.12157	3.1
	21 trans-1,2-Dichloroethene	96	3.458	3.454	(0.660)	17503	3.50867	3.5
	23 1,1-Dichloroethane	63	3.785	3.786	(0.723)	1633820	149.586	150
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	415435	77.8803	78(Q)
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	262479	49.7317	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	5556626	596.514	600(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	51582	48.9725	49
M	50 1,2-Dichloroethene (Total)	96				432938	81.3890	81
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	842913	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	375824	65.7111	66
$	58 Toluene-d8	98	6.715	6.715	(0.817)	835923	49.3249	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	710443	50.0000	
	70 Chlorobenzene	112	8.258	8.255	(1.004)	21661	1.59040	1.6
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	316915	46.5252	46
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	317743	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d
Report Date: 29-Jan-2014 14:45

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d
Lab Smp Id: N0060-05A Client Smp ID: HW-WET-WS-4-(1)_01/
Inj Date : 20-JAN-2014 19:19
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-05A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

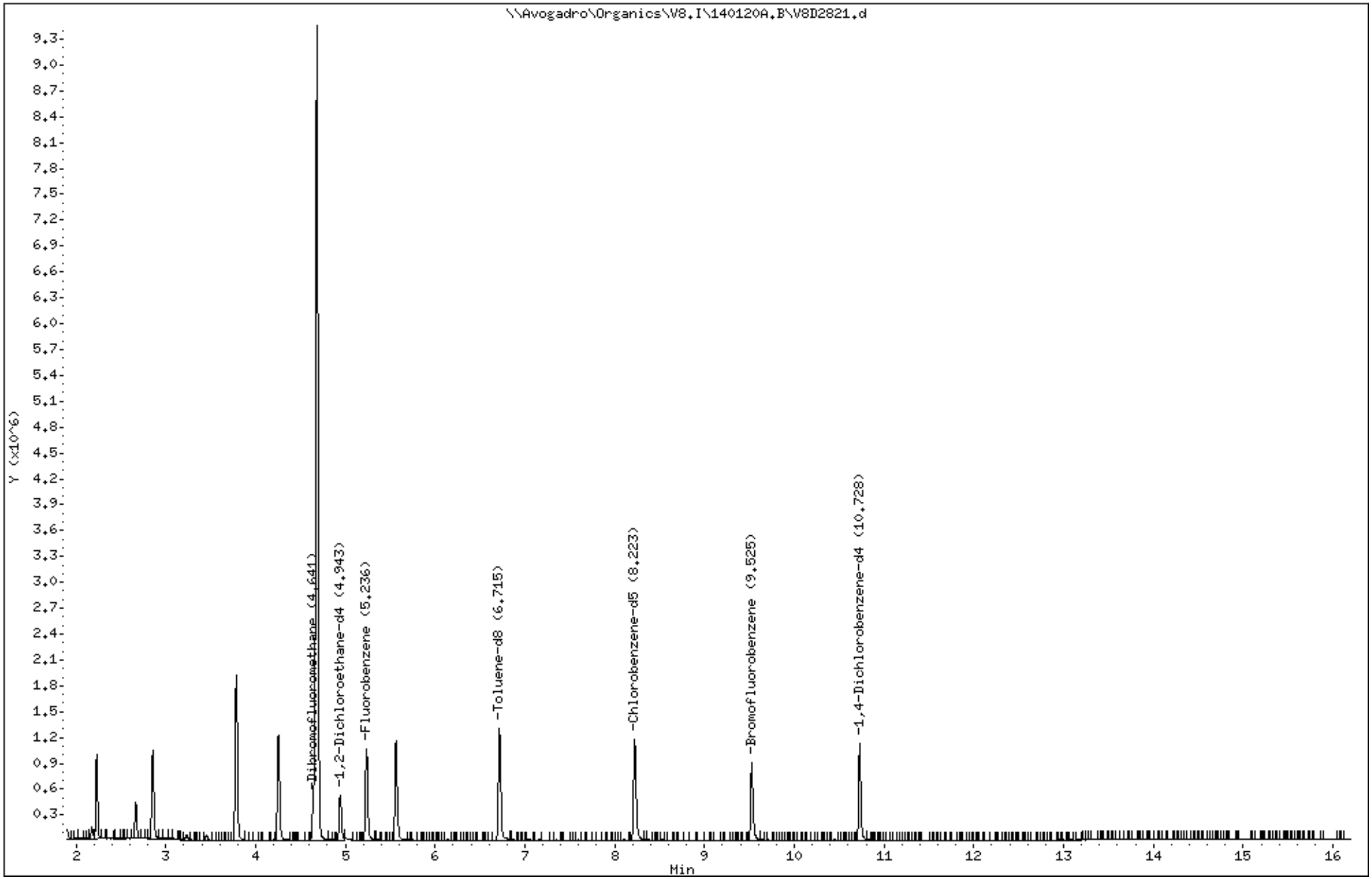
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	1943603	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	683580	17.5853647	18	97	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d
Date : 20-JAN-2014 19:19
Client ID: HW-WET-WS-4-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-05A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

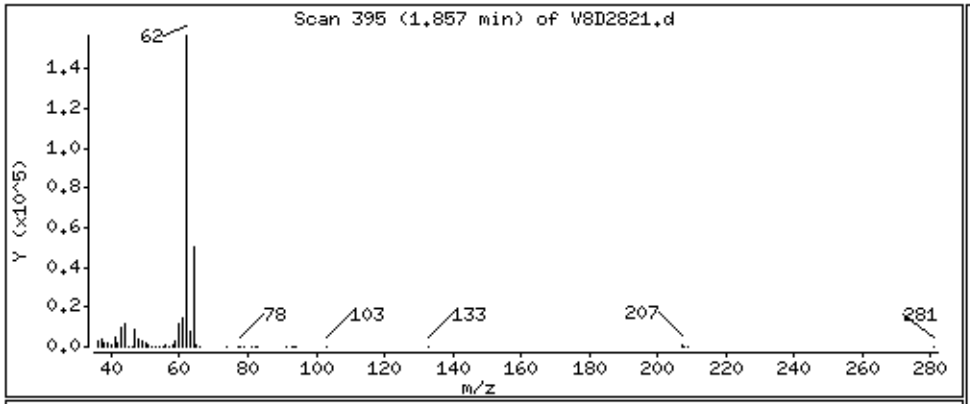
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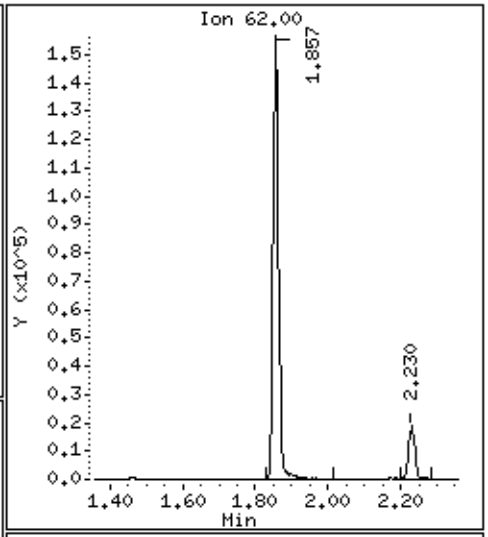
Sample Info: 5ML,N0060-05A,,75646

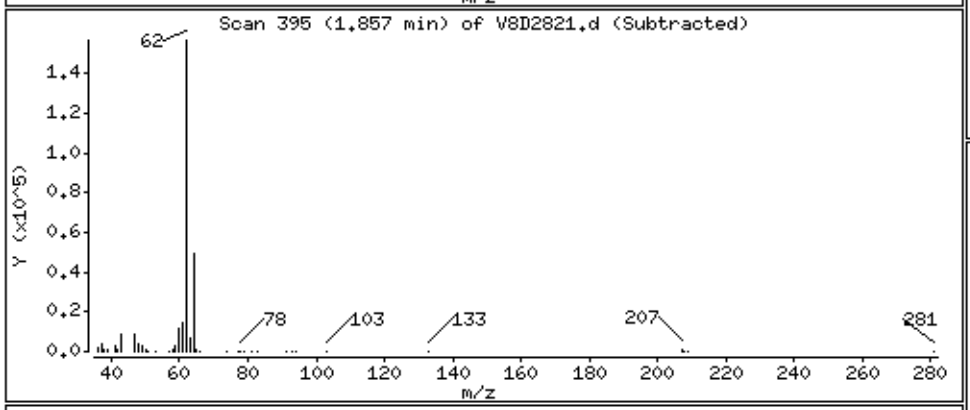
Purge Volume: 5.0 Operator: ALM SRC: LIMS

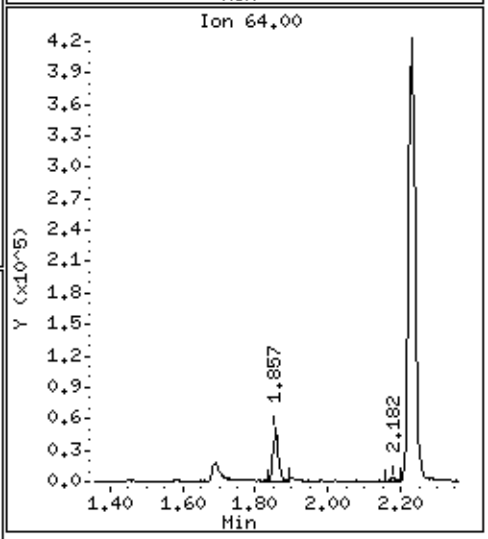
Column phase: DB-624 Column diameter: 0.25

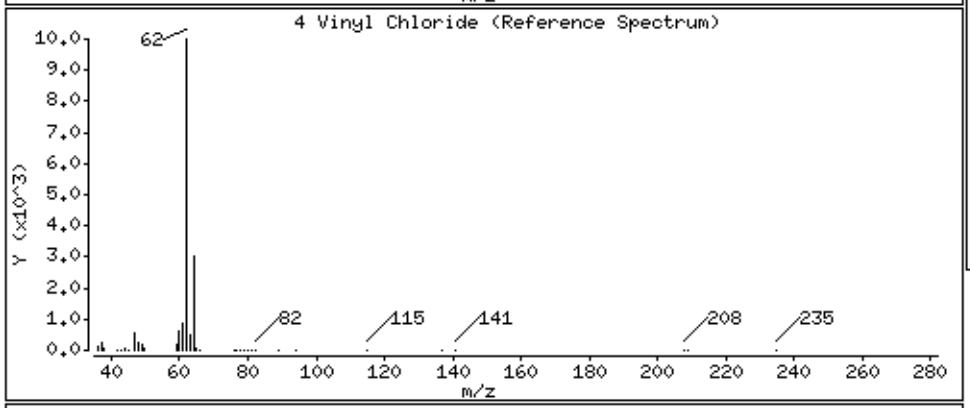
4 Vinyl Chloride Concentration: 26 ug/L

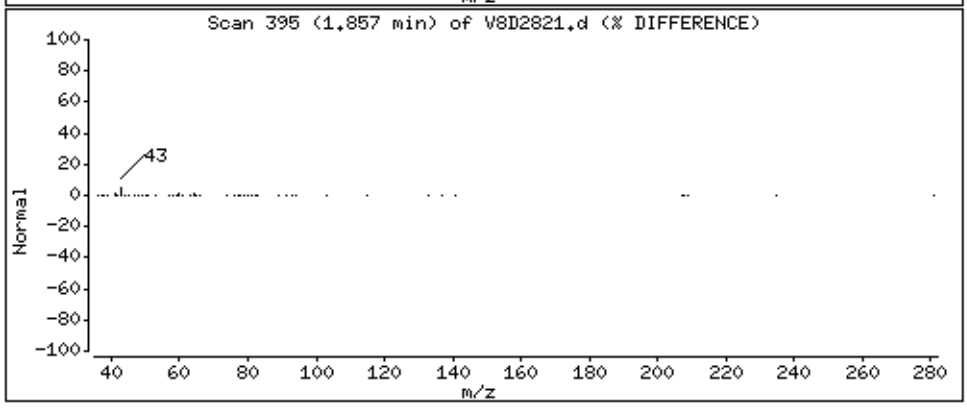












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

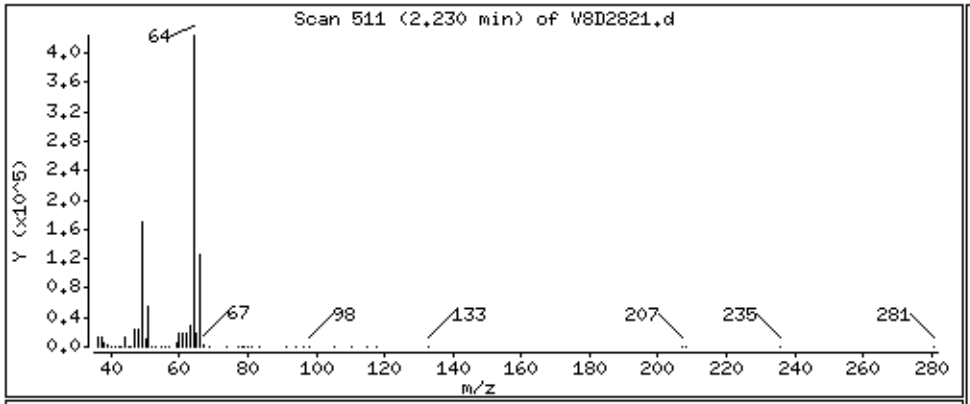
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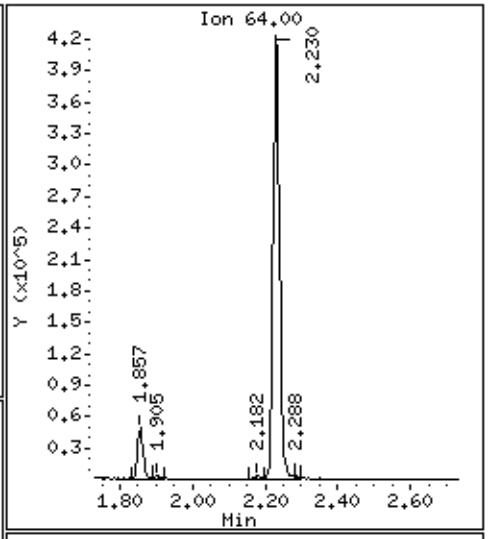
Sample Info: 5ML,N0060-05A,,75646

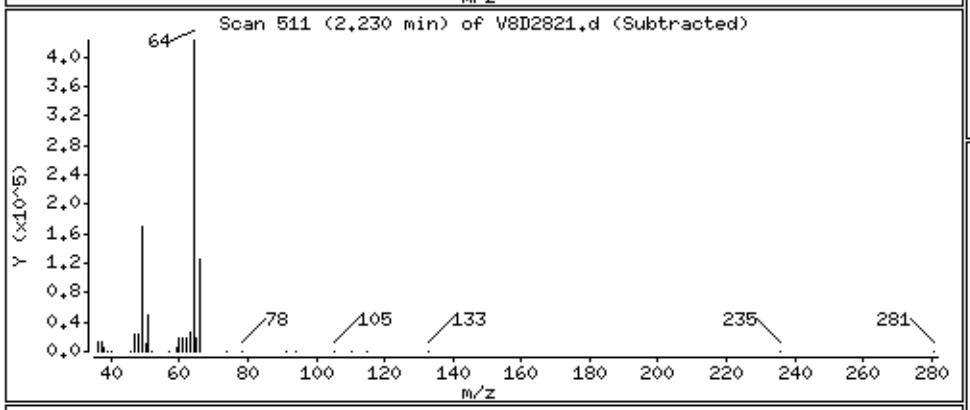
Purge Volume: 5.0 Operator: ALM SRC: LIMS

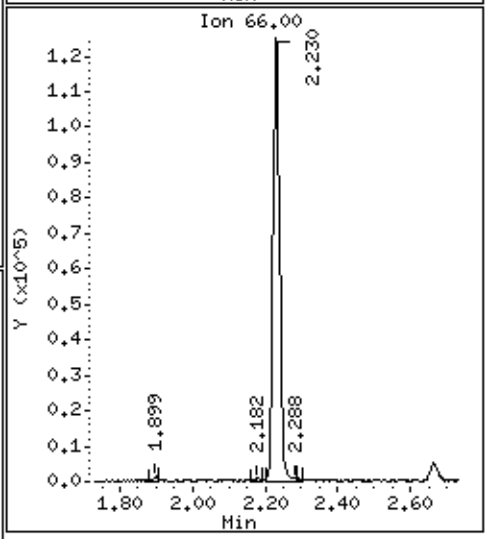
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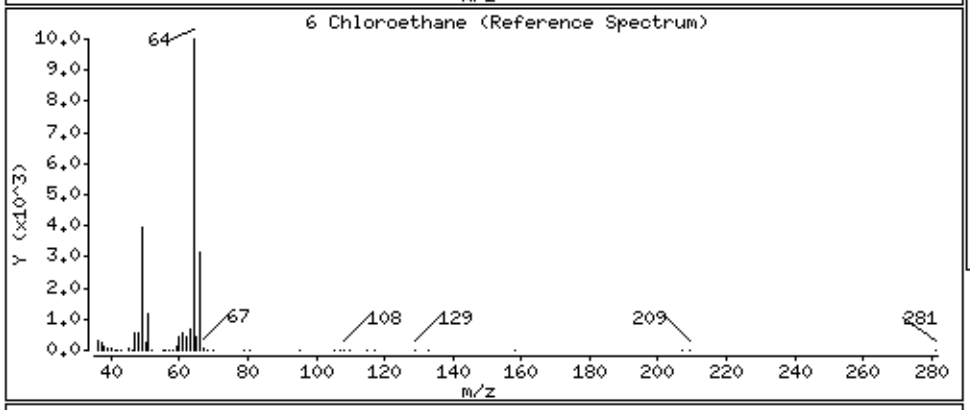
6 Chloroethane Concentration: 160 ug/L

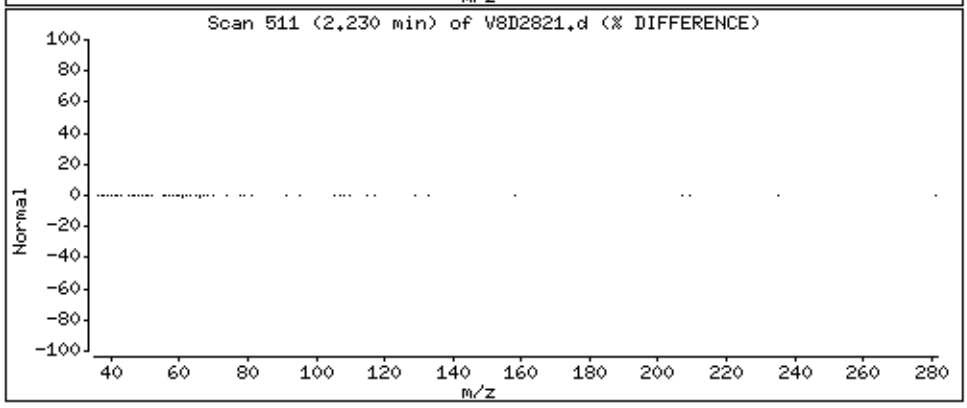












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

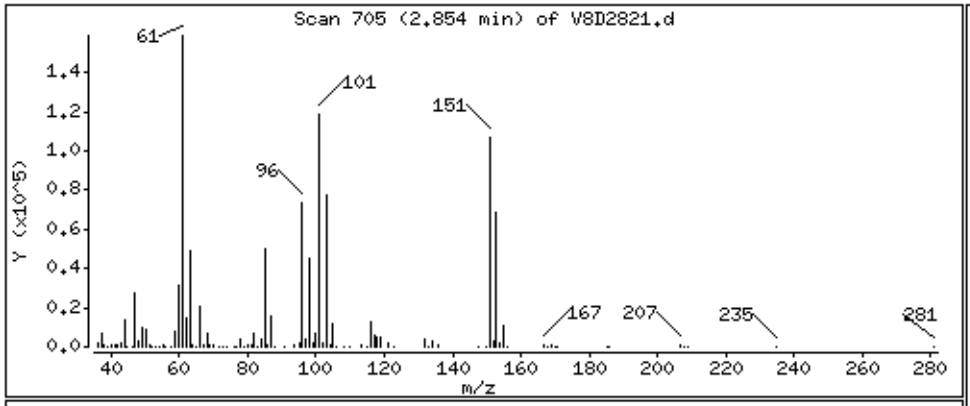
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

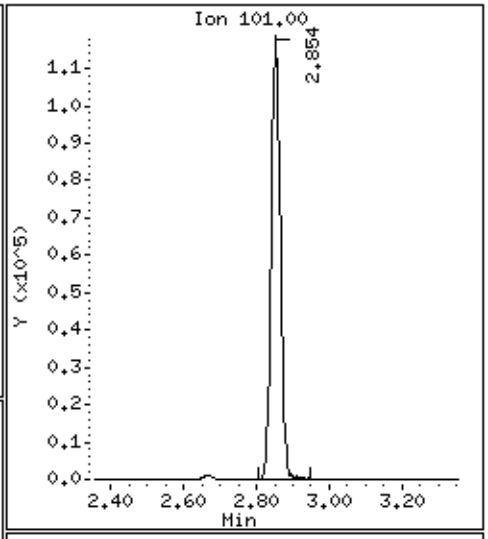
Sample Info: 5ML,N0060-05A,,75646

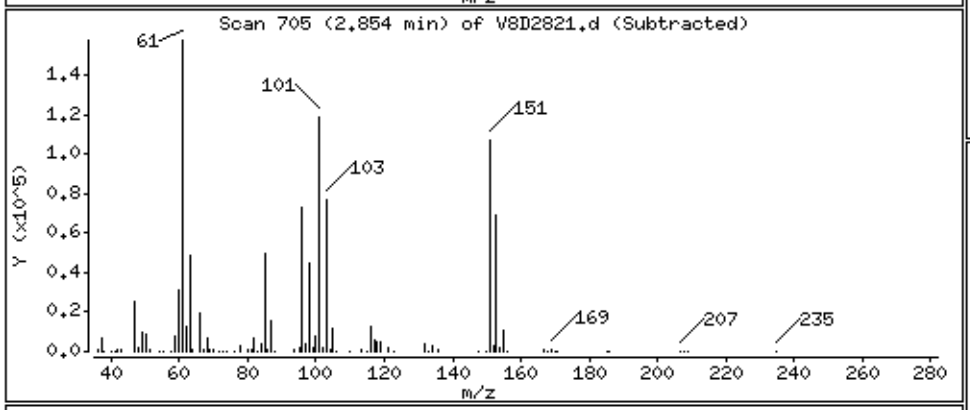
Purge Volume: 5.0 Operator: ALM SRC: LIMS

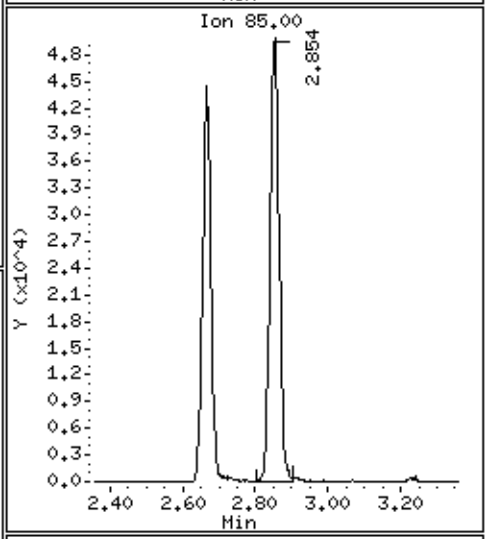
Column phase: DB-624 Column diameter: 0.25

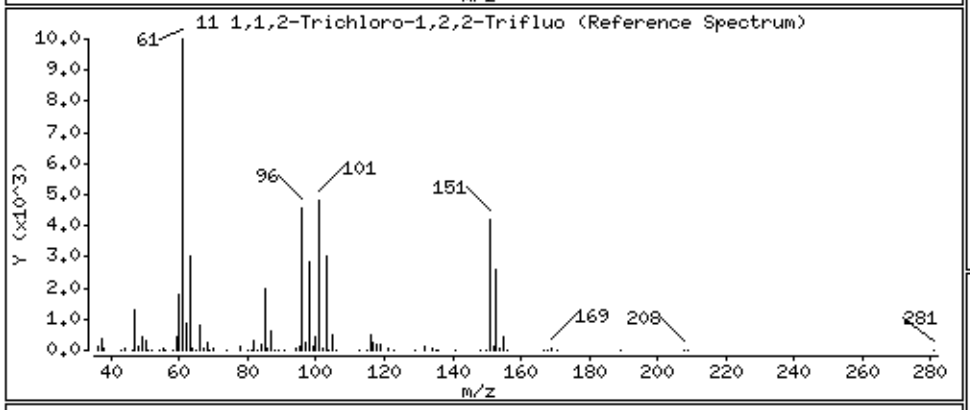
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 39 ug/L

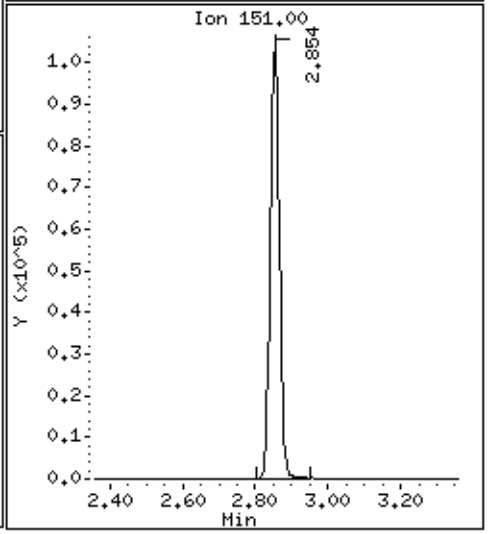


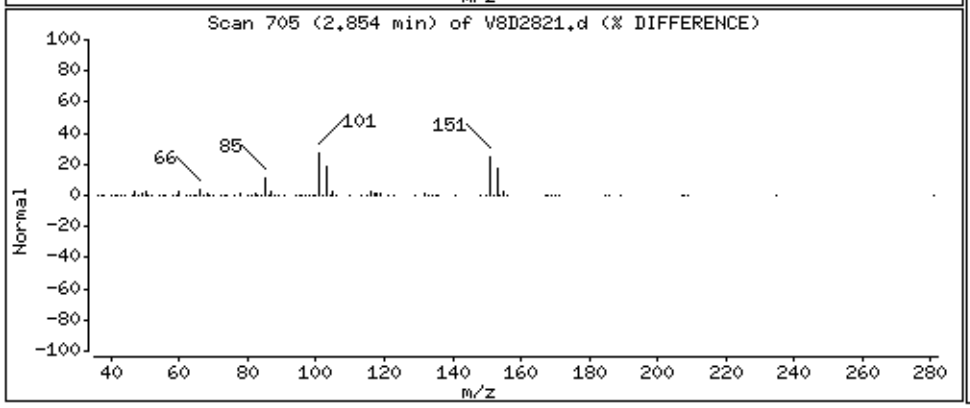












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

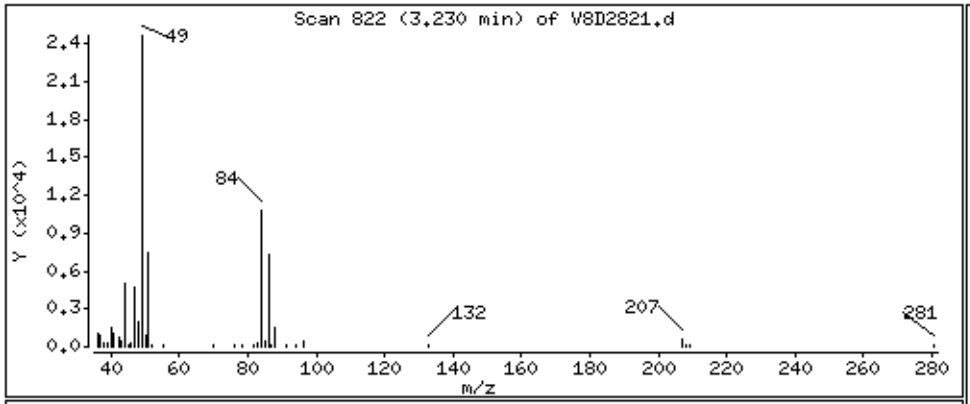
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

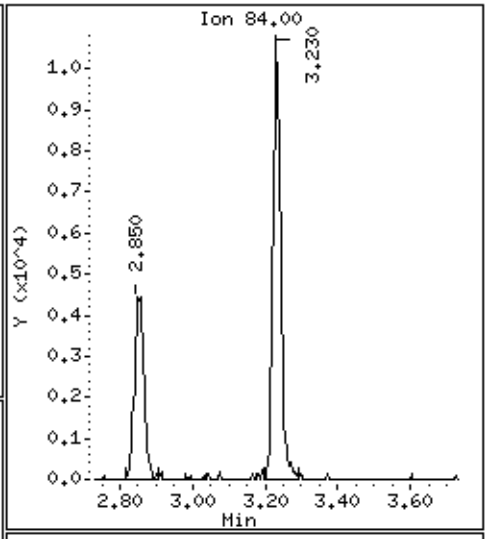
Sample Info: 5ML,N0060-05A,,75646

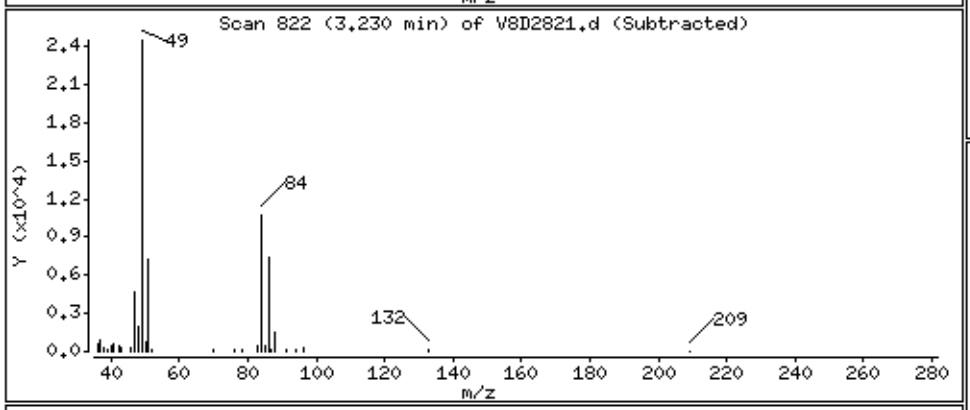
Purge Volume: 5.0 Operator: ALM SRC: LIMS

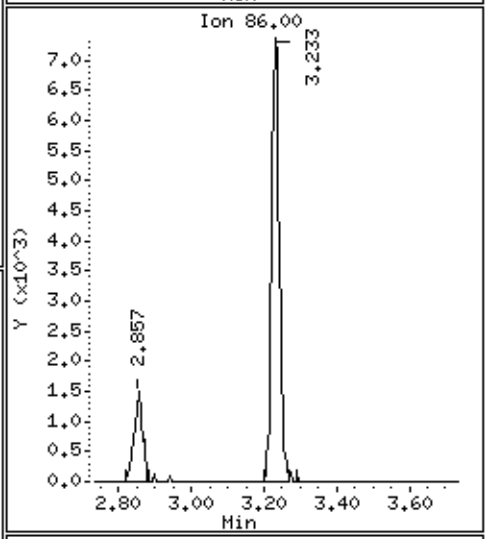
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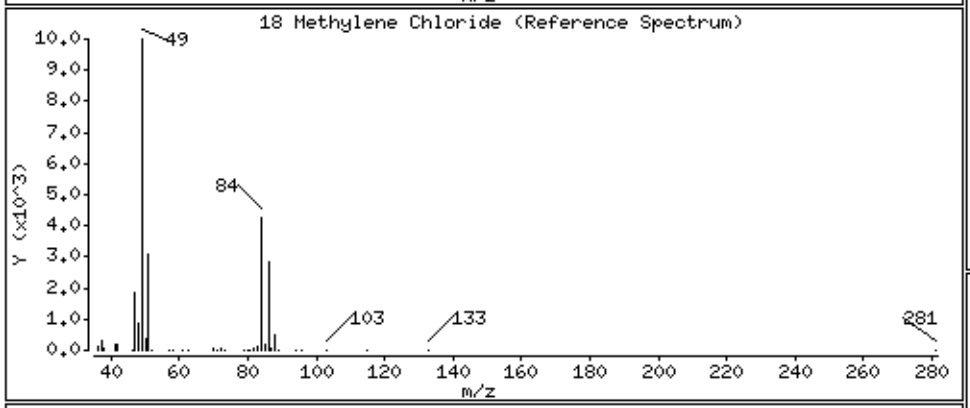
18 Methylene Chloride Concentration: 3.1 ug/L

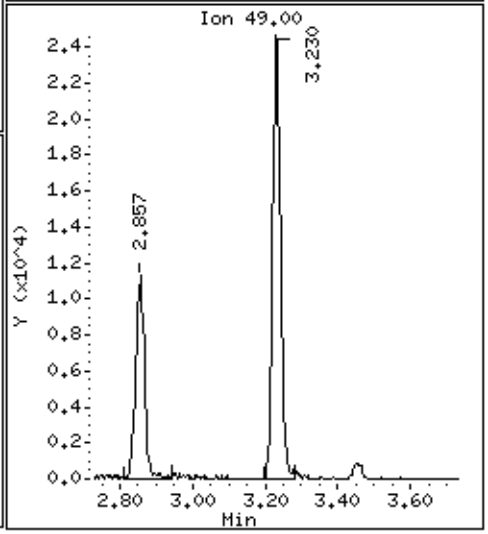


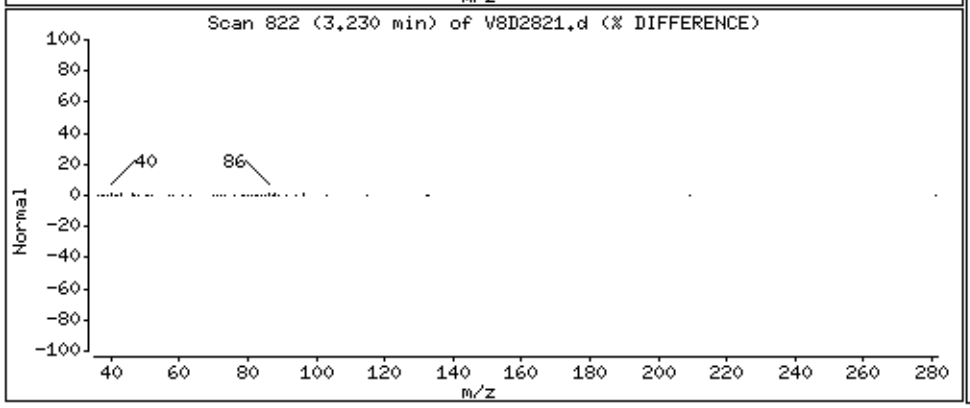












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

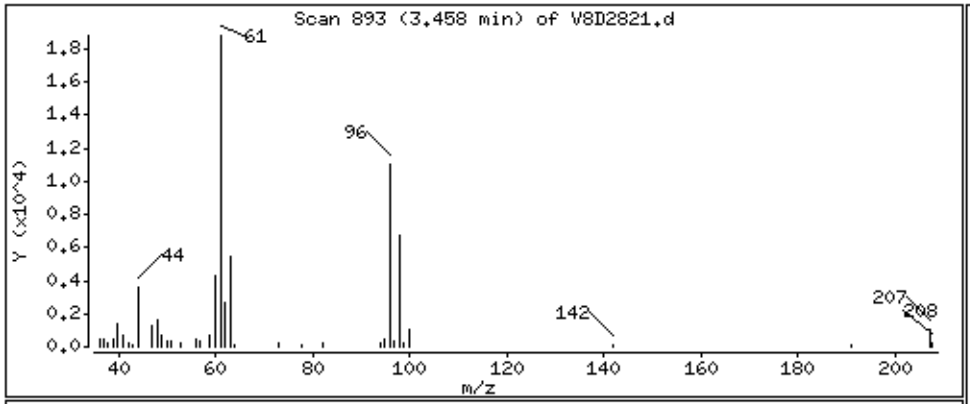
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

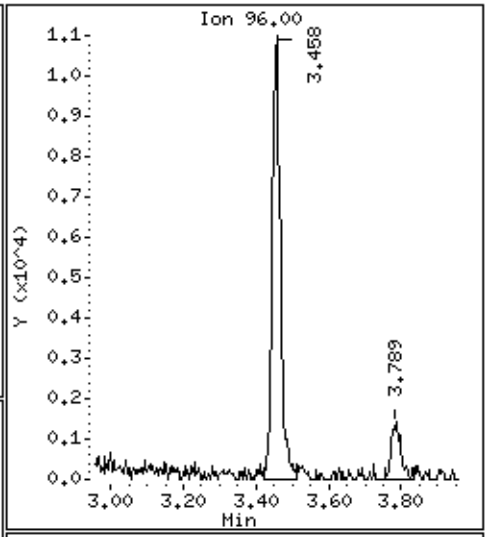
Sample Info: 5ML,N0060-05A,,75646

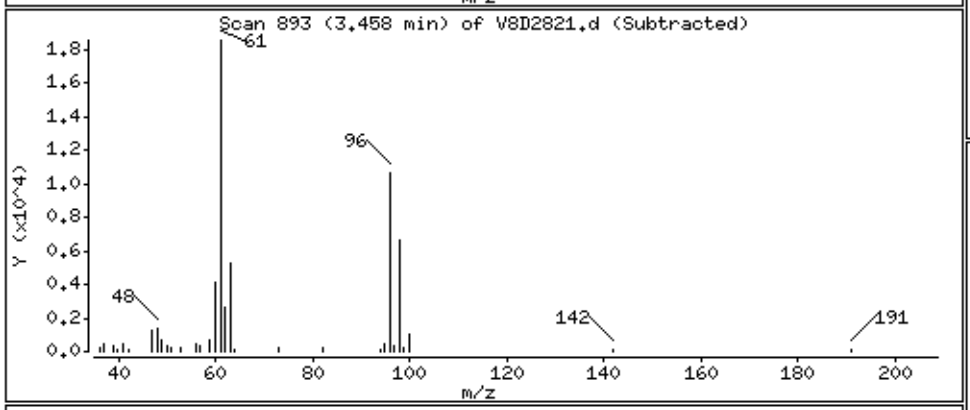
Purge Volume: 5.0 Operator: ALM SRC: LIMS

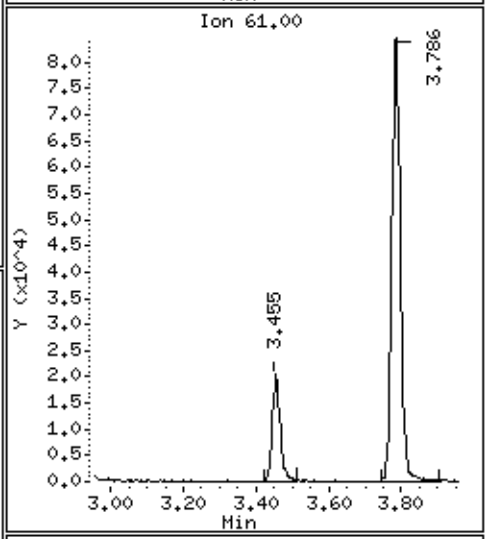
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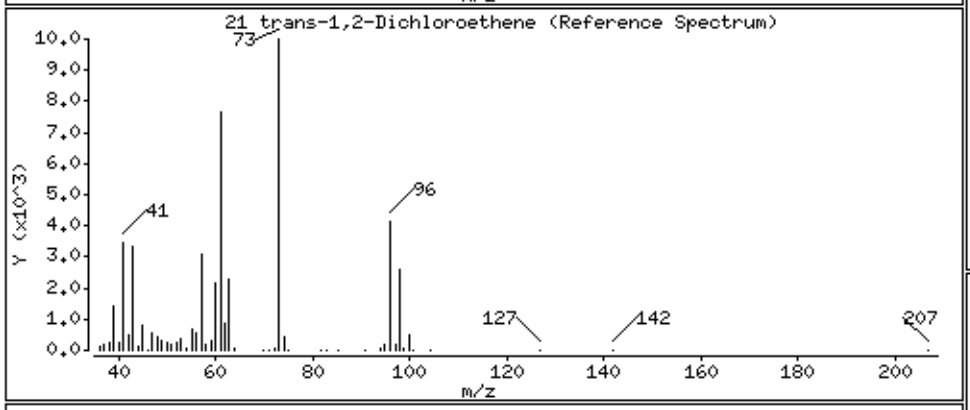
21 trans-1,2-Dichloroethene Concentration: 3.5 ug/L

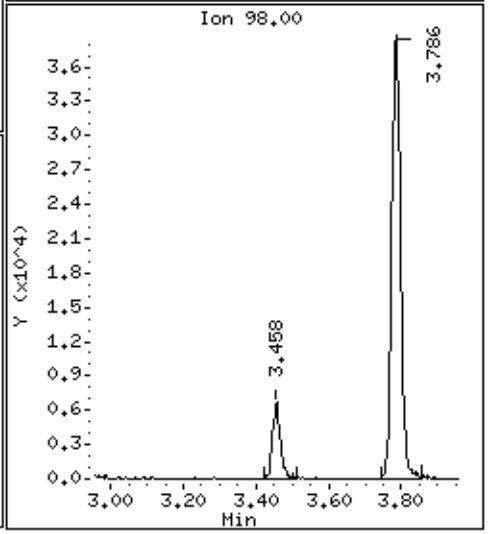


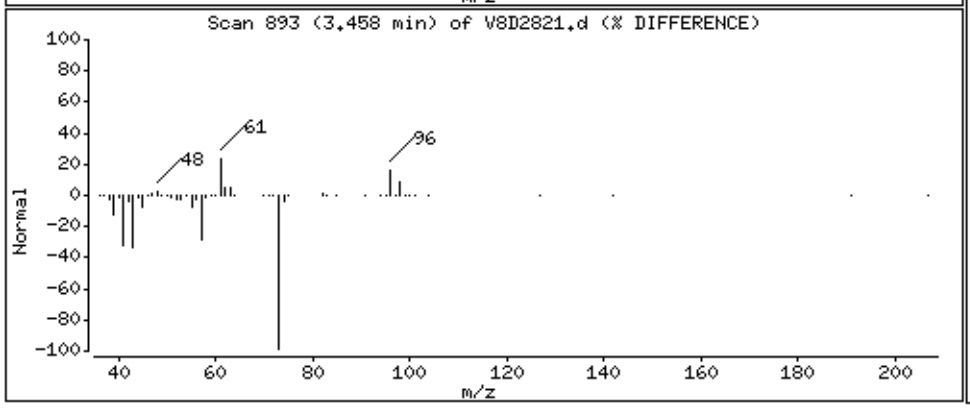












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

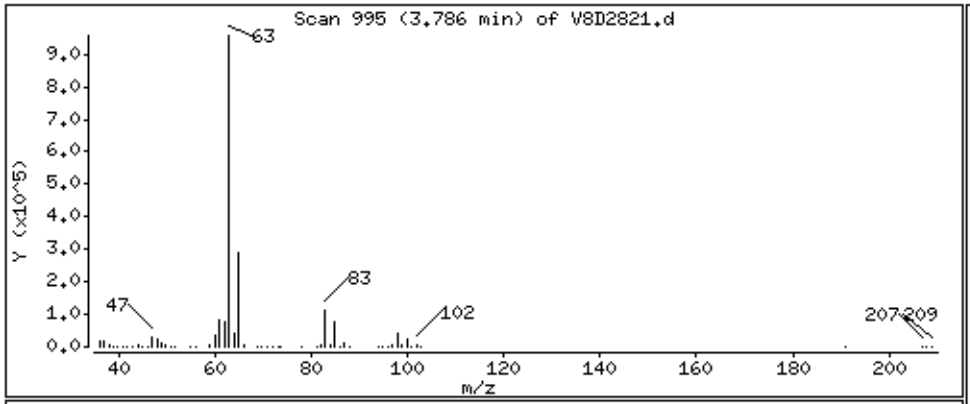
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

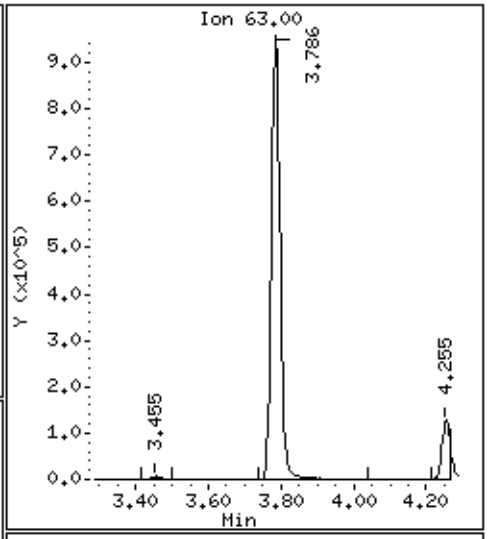
Sample Info: 5ML,N0060-05A,,75646

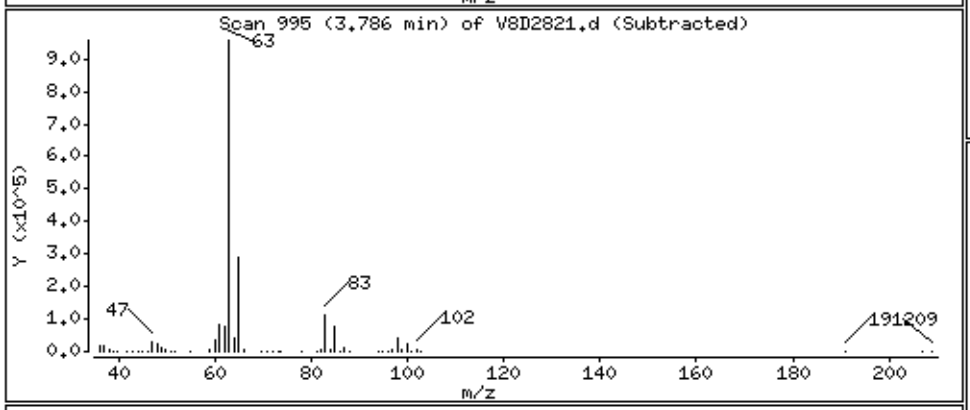
Purge Volume: 5.0 Operator: ALM SRC: LIMS

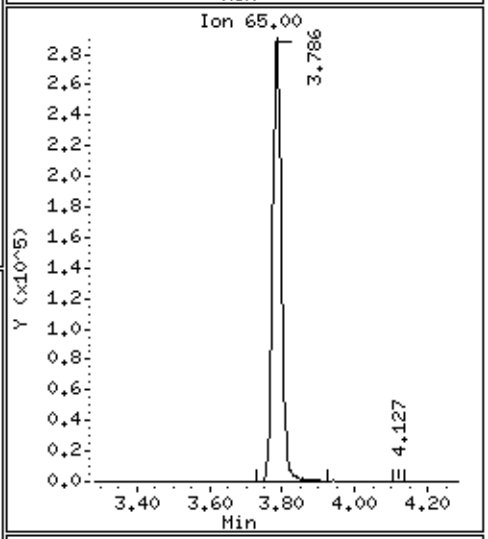
Column phase: DB-624 Column diameter: 0.25

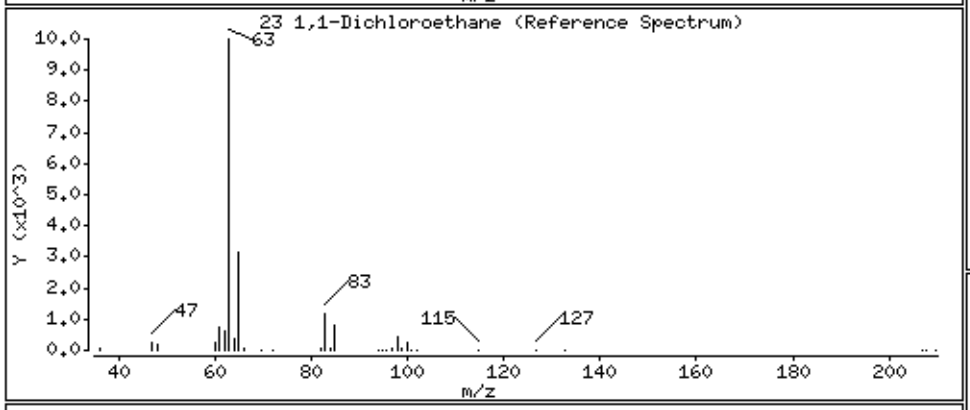
23 1,1-Dichloroethane Concentration: 150 ug/L

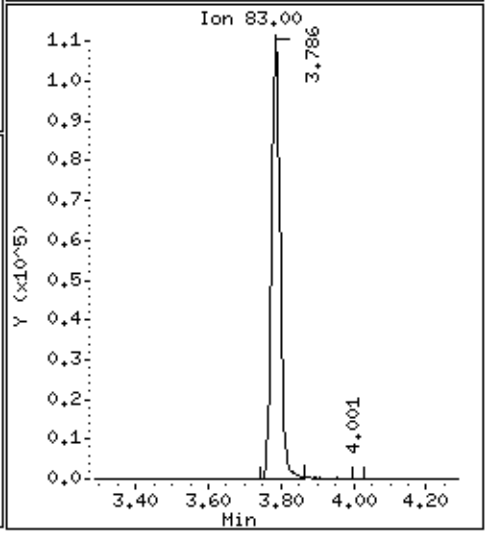


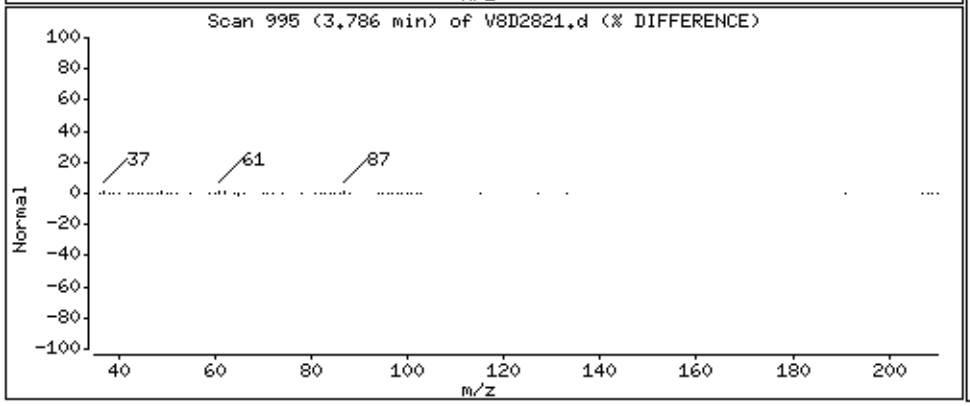












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

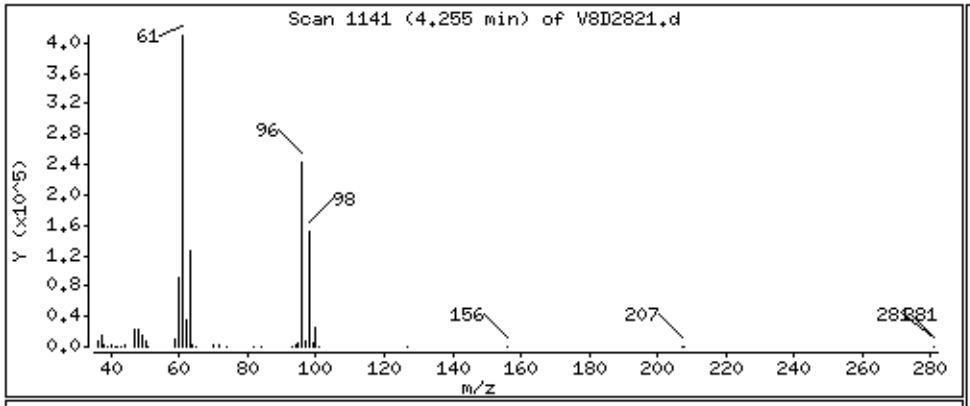
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

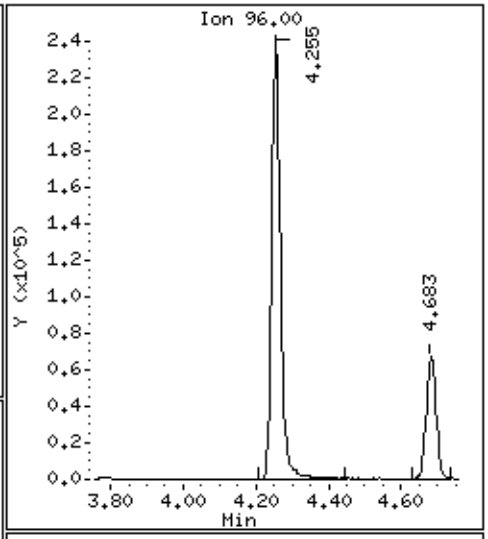
Sample Info: 5ML,N0060-05A,,75646

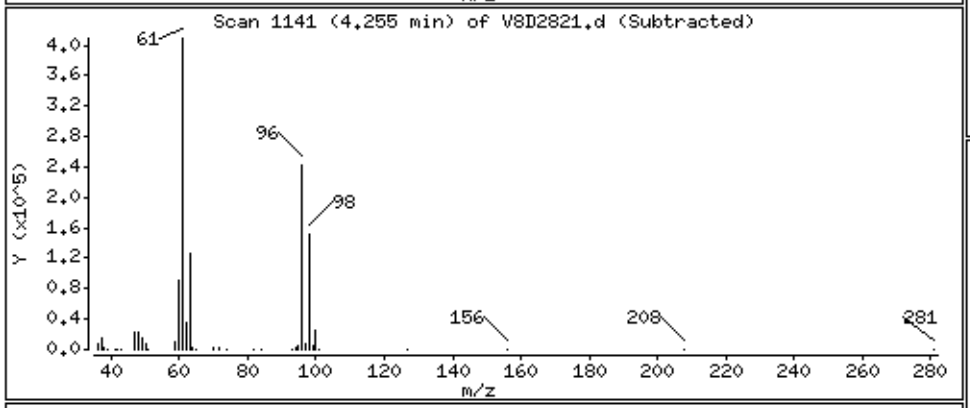
Purge Volume: 5.0 Operator: ALM SRC: LIMS

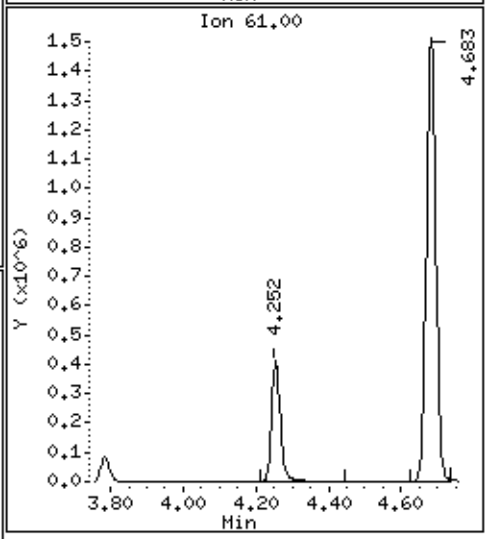
Column phase: DB-624 Column diameter: 0.25

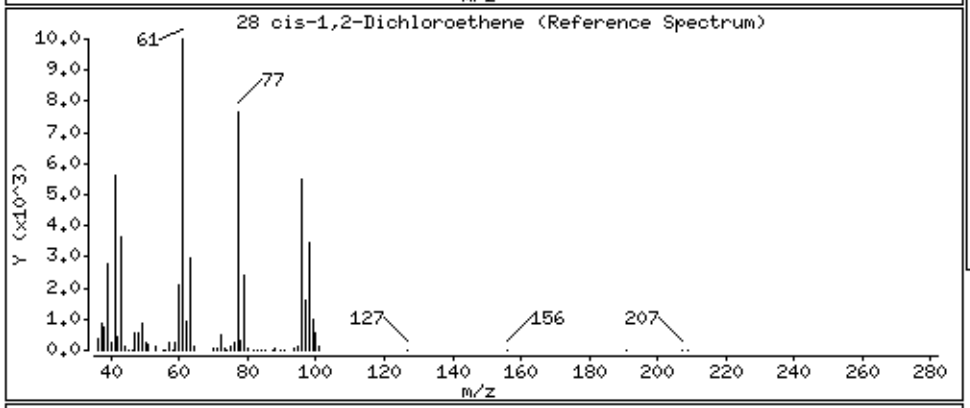
28 cis-1,2-Dichloroethene Concentration: 78 ug/L

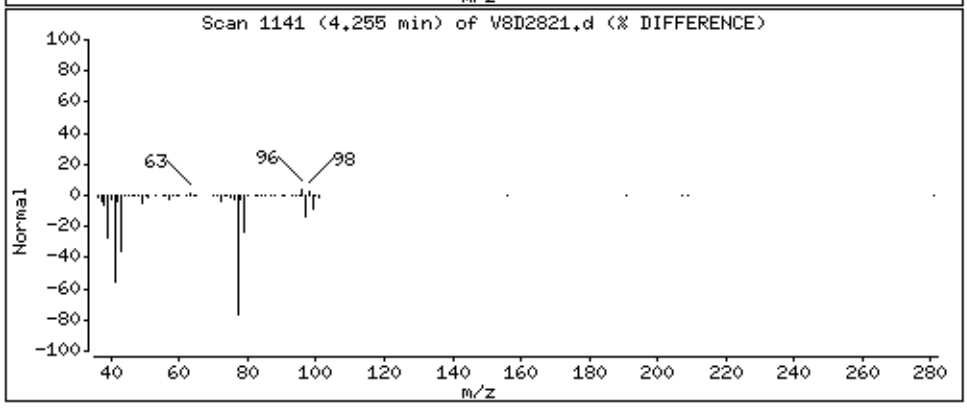












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

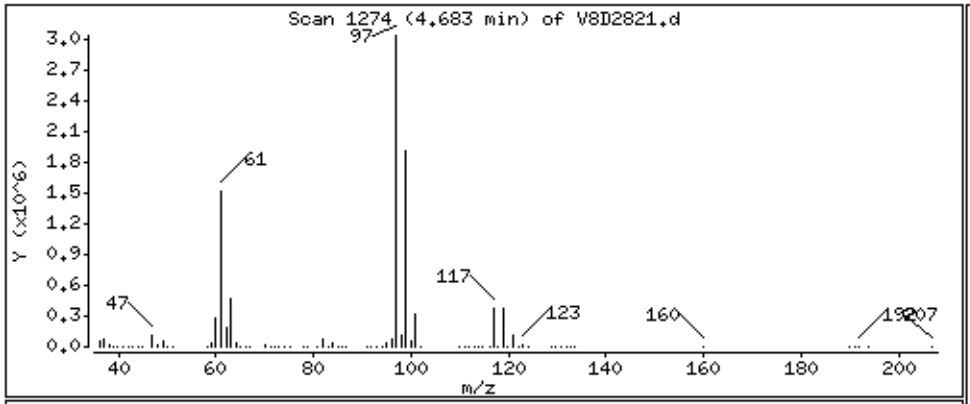
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

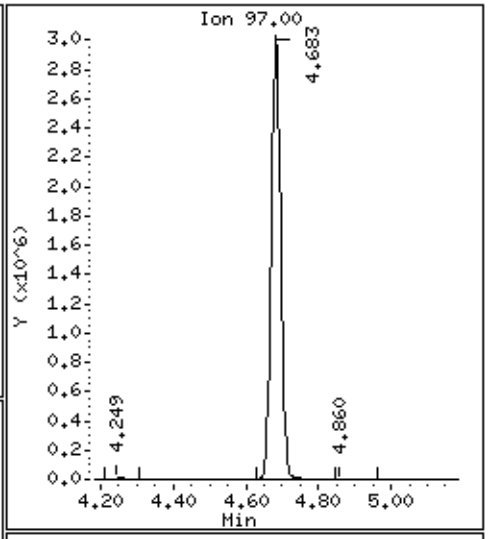
Sample Info: 5ML,N0060-05A,,75646

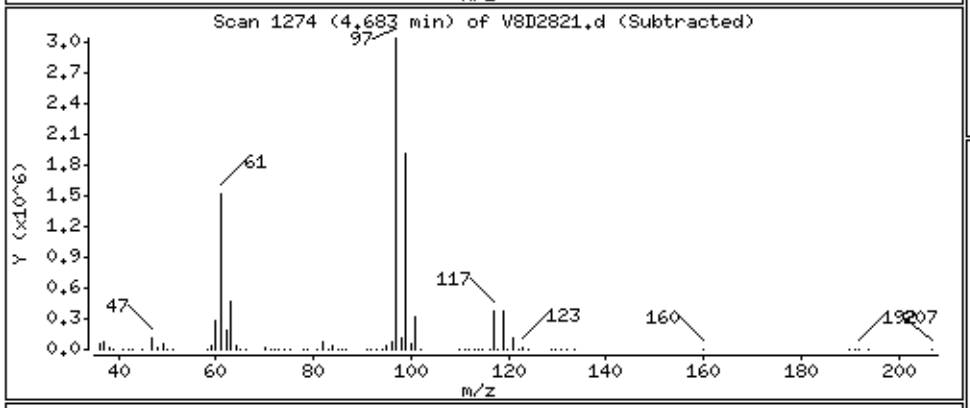
Purge Volume: 5.0 Operator: ALM SRC: LIMS

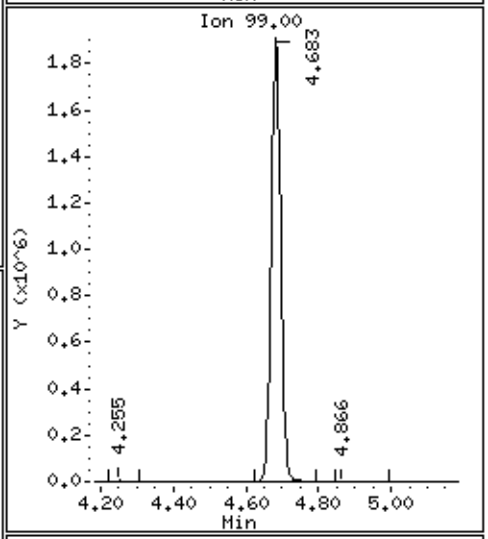
Column phase: DB-624 Column diameter: 0.25

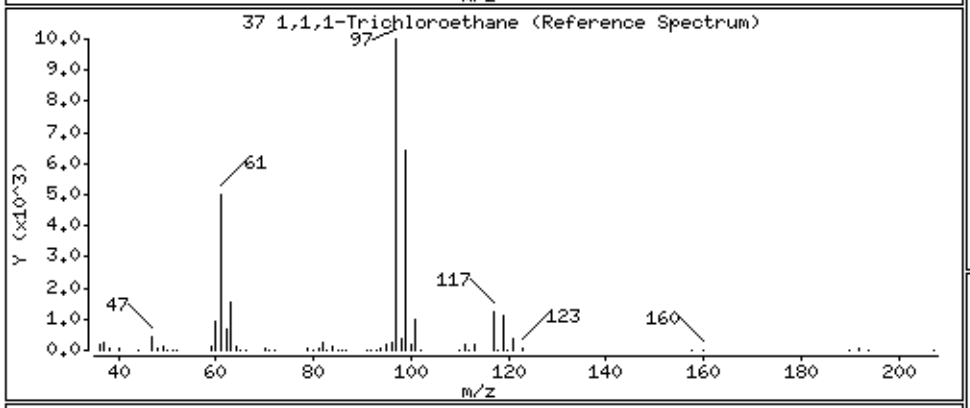
37 1,1,1-Trichloroethane Concentration: 600 ug/L

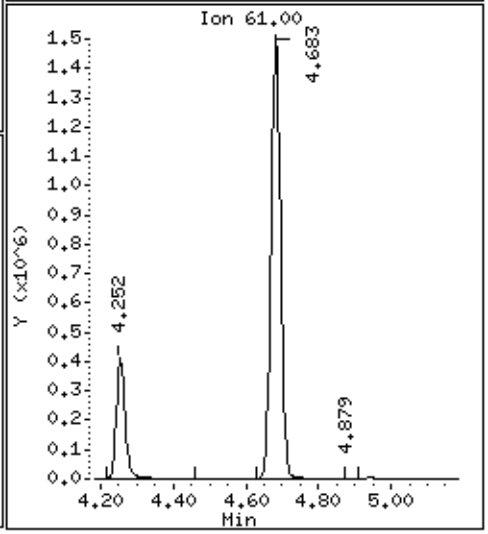


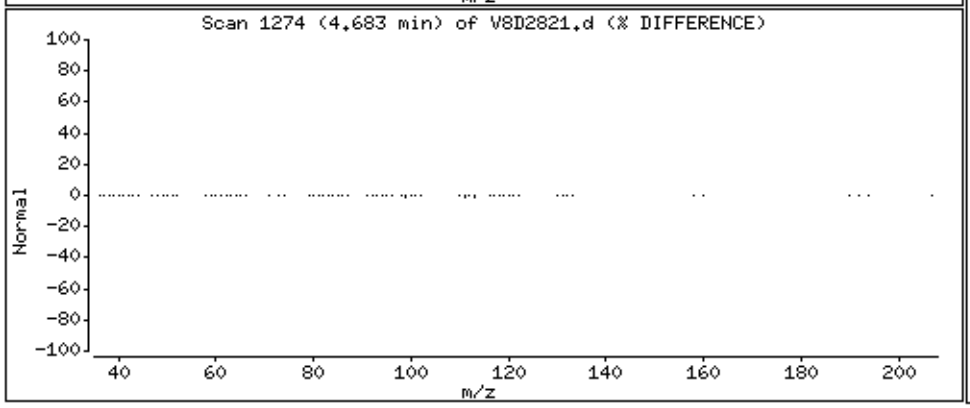












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

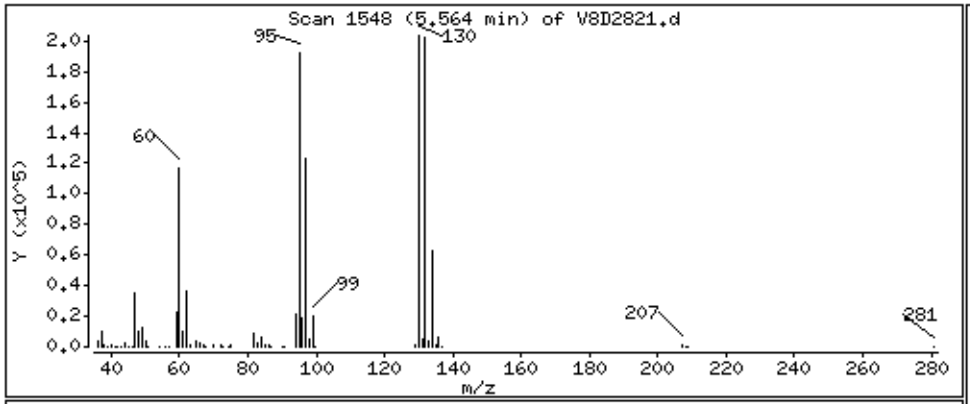
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

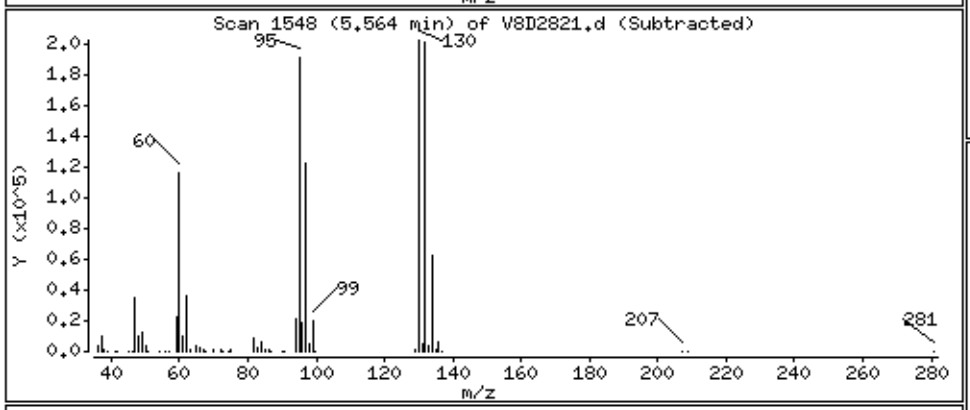
Sample Info: 5ML,N0060-05A,,75646

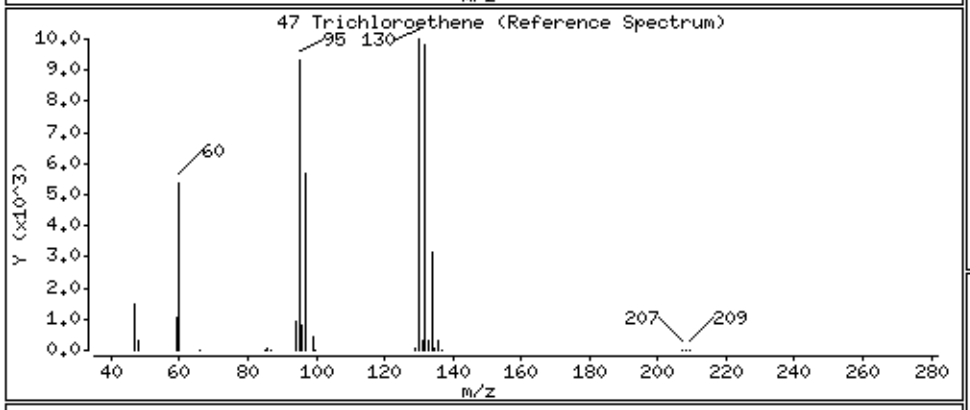
Purge Volume: 5.0 Operator: ALM SRC: LIMS

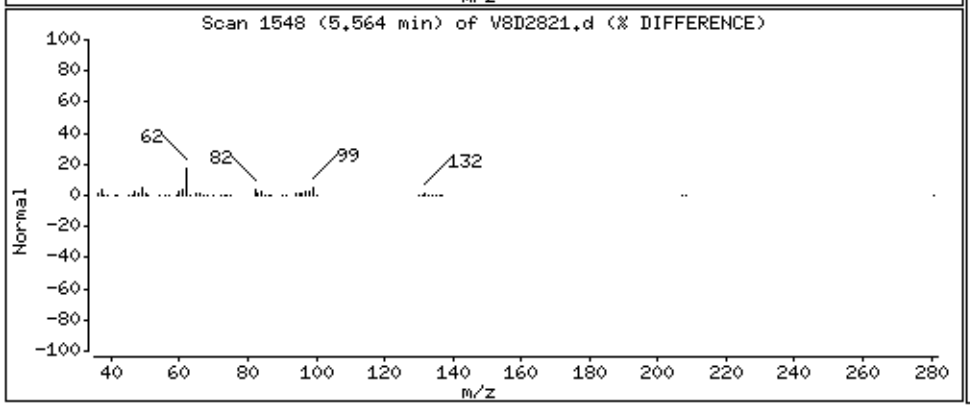
Column phase: DB-624 Column diameter: 0.25

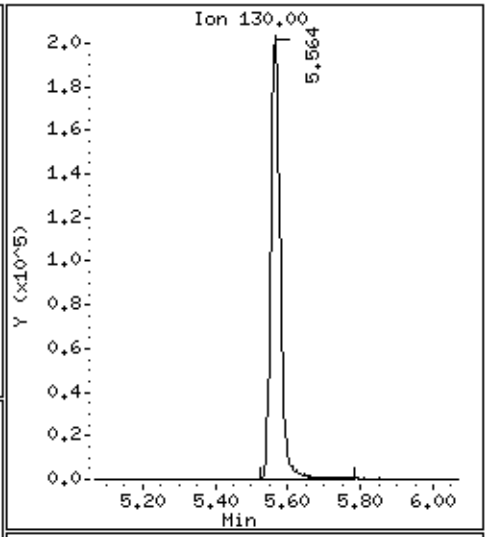
47 Trichloroethene Concentration: 66 ug/L

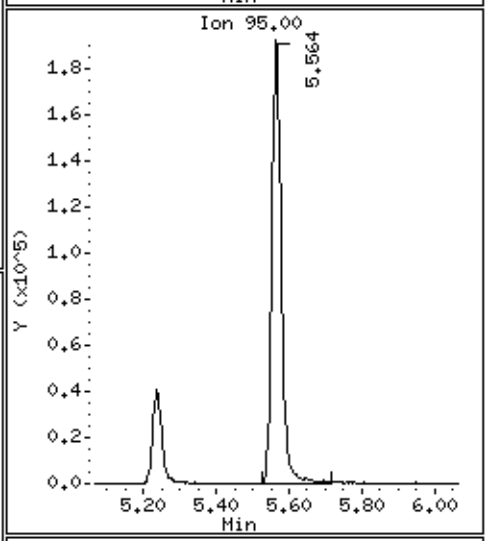


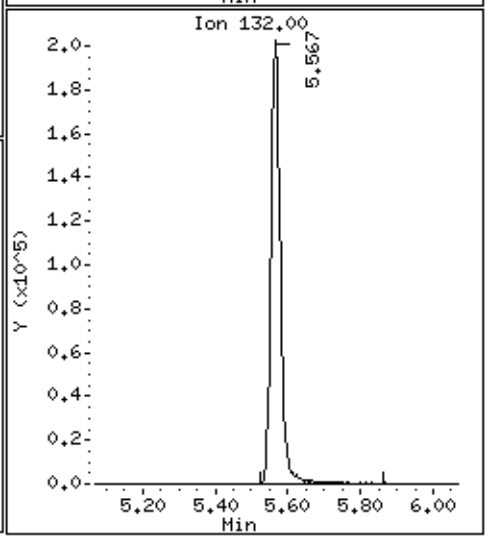












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

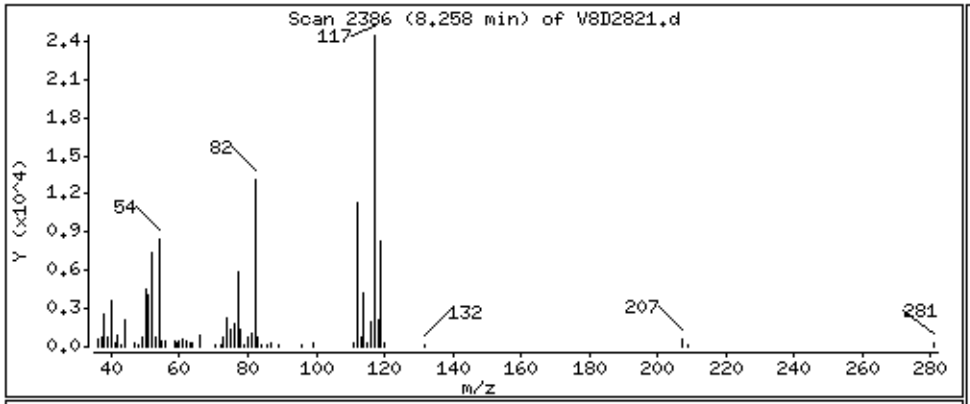
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

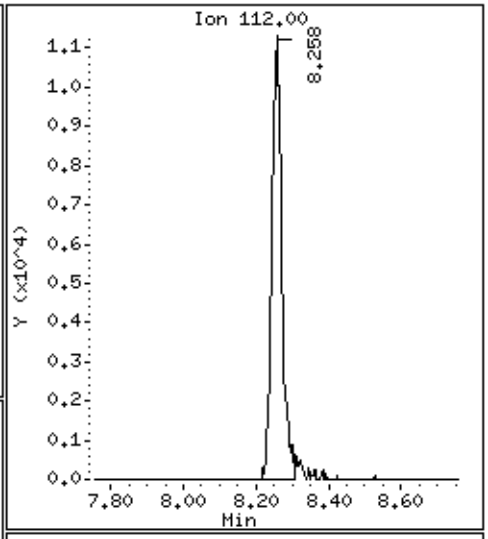
Sample Info: 5ML,N0060-05A,,75646

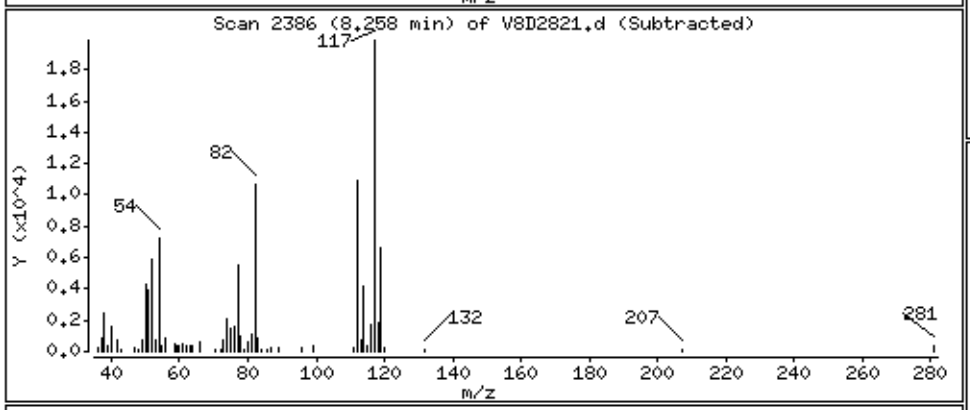
Purge Volume: 5.0 Operator: ALM SRC: LIMS

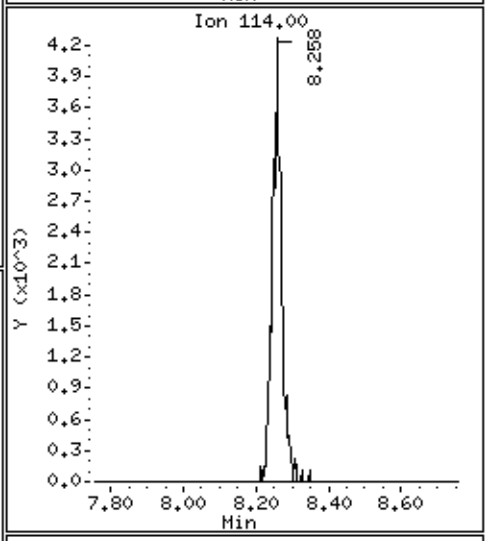
Column phase: DB-624 Column diameter: 0.25

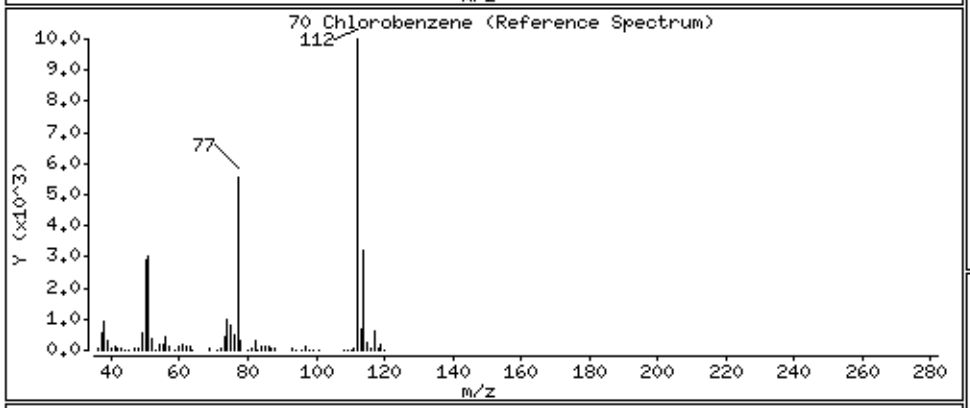
70 Chlorobenzene Concentration: 1.6 ug/L

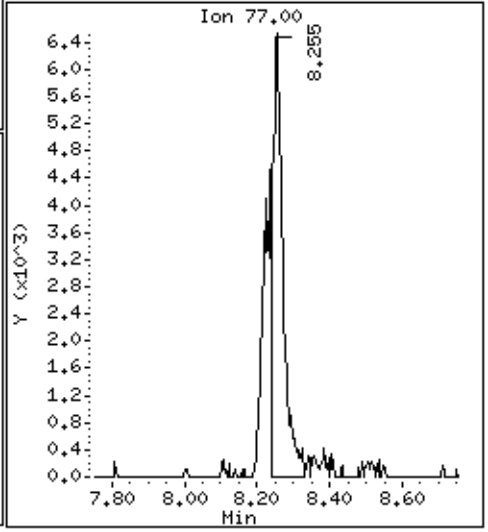


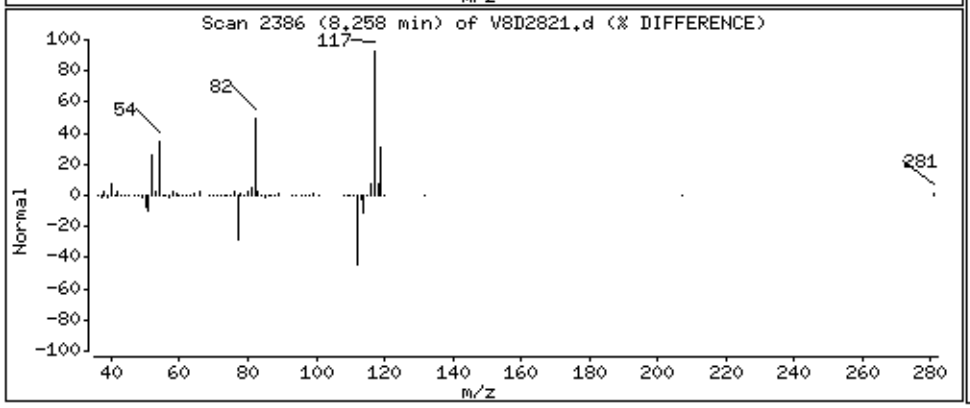












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2821.d

Date : 20-JAN-2014 19:19

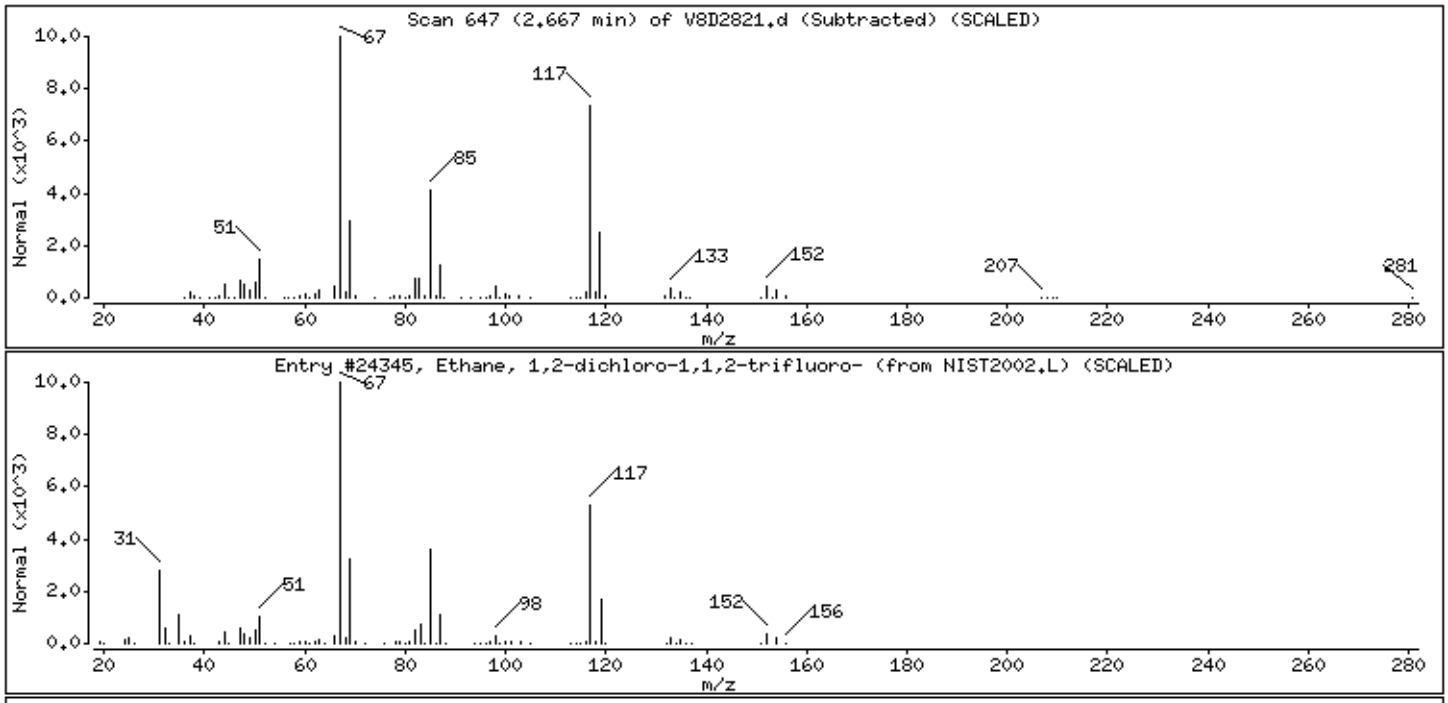
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

Sample Info: 5ML,N0060-05A,,75646

Purge Volume: 5.0 Operator: ALM SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	97	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-05ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2850.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

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	26	D
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	150	D
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	25	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	3.7	DJ
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	150	D
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	25	U
156-59-2	cis-1,2-Dichloroethene	74	D
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	570	D
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	63	D
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	25	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

EPA SAMPLE NO.

HW-WET-WS-4-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-05ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2850.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

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	25	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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	37	D

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d
Report Date: 29-Jan-2014 14:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2850.d
Lab Smp Id: N0060-05ADL Client Smp ID: HW-WET-WS-4-(1)_01/
Inj Date : 21-JAN-2014 12:49
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-05ADL,,75652,5
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

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

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	4	Vinyl Chloride	62	1.856	1.856	(0.355)	30654	5.11530	26
	6	Chloroethane	64	2.229	2.229	(0.426)	94389	30.8026	150
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	37285	7.46787	37
	21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.660)	3410	0.73255	3.7
	23	1,1-Dichloroethane	63	3.785	3.786	(0.723)	296341	29.0756	140
	28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	73370	14.7399	74(Q)
$	36	Dibromofluoromethane	113	4.641	4.644	(0.886)	249575	50.6746	51
	37	1,1,1-Trichloroethane	97	4.682	4.683	(0.894)	990417	113.940	570
$	42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	48297	49.1388	49
M	50	1,2-Dichloroethene (Total)	96				76780	15.4724	77
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	786561	50.0000	
	47	Trichloroethene	130	5.567	5.564	(1.063)	67120	12.5764	63
$	58	Toluene-d8	98	6.715	6.715	(0.817)	789375	48.2834	48
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	685354	50.0000	
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	305432	46.4809	46
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	319499	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d
Report Date: 29-Jan-2014 14:39

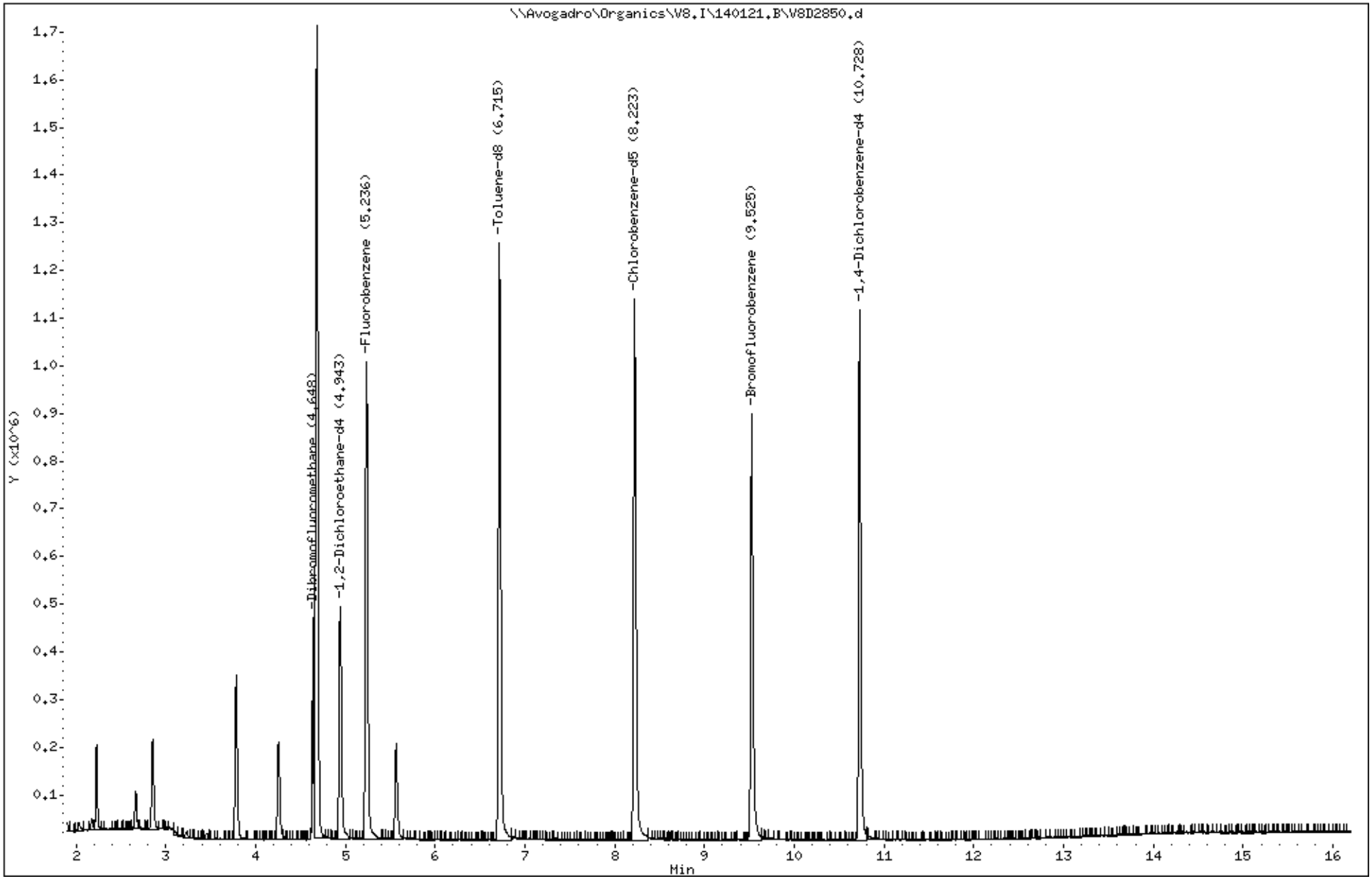
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2850.d
Lab Smp Id: N0060-05ADL Client Smp ID: HW-WET-WS-4-(1)_01/
Inj Date : 21-JAN-2014 12:49
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-05ADL,,75652,5
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d
Date : 21-JAN-2014 12:49
Client ID: HW-WET-WS-4-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-05ADL,,75652,5
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

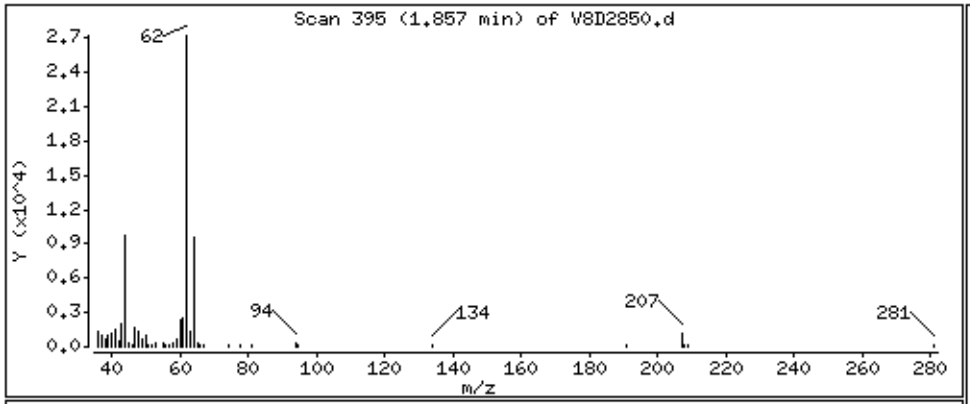
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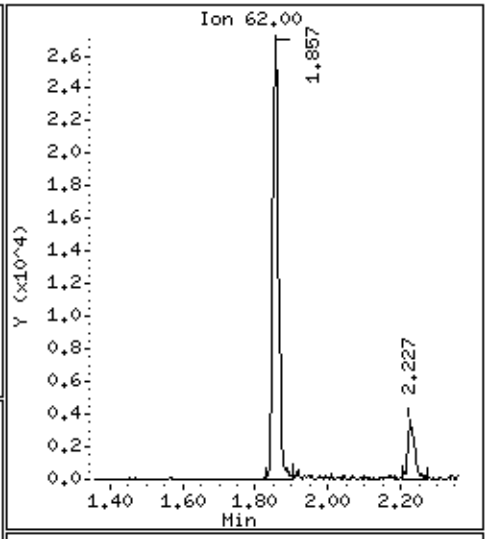
Sample Info: 5ML,N0060-05ADL,,75652,5

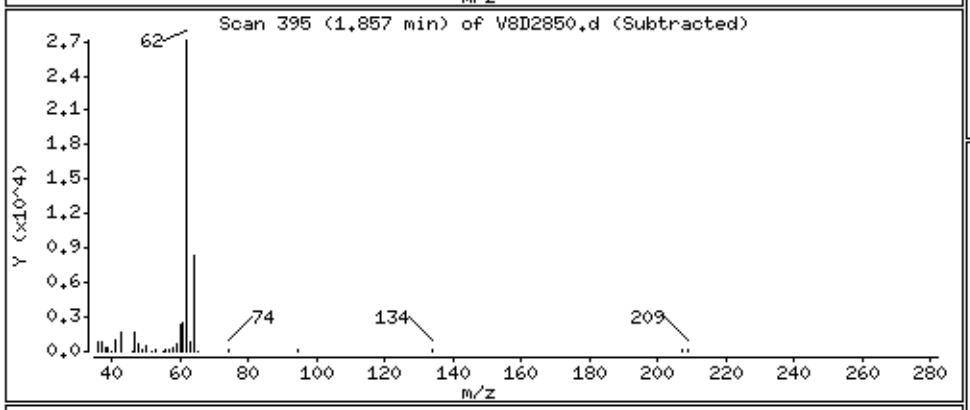
Purge Volume: 5.0 Operator: ALM SRC: LIMS

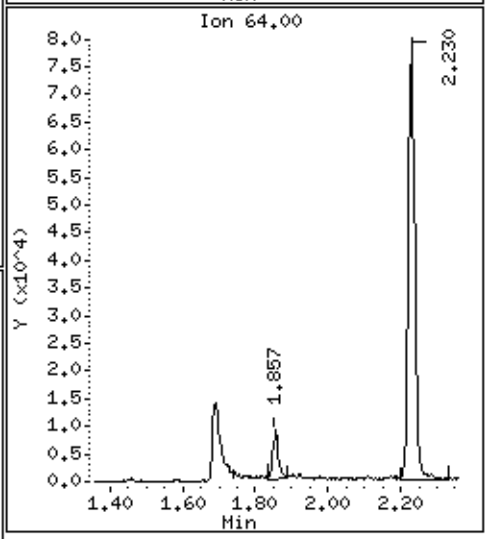
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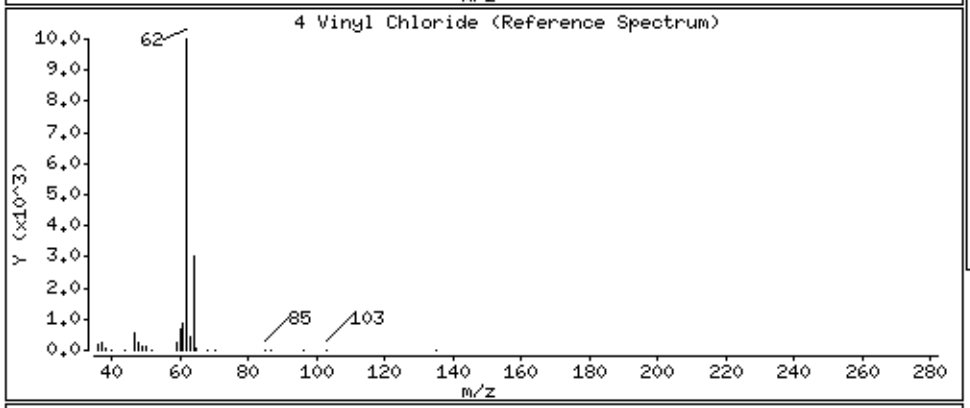
4 Vinyl Chloride Concentration: 26 ug/L

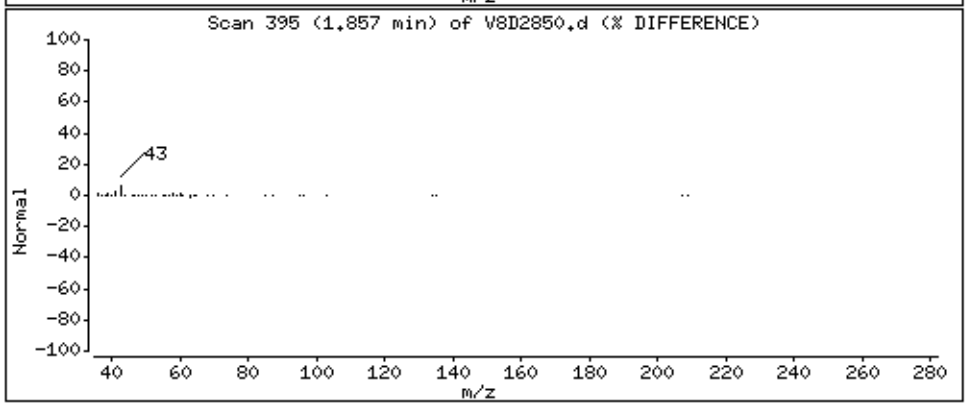












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

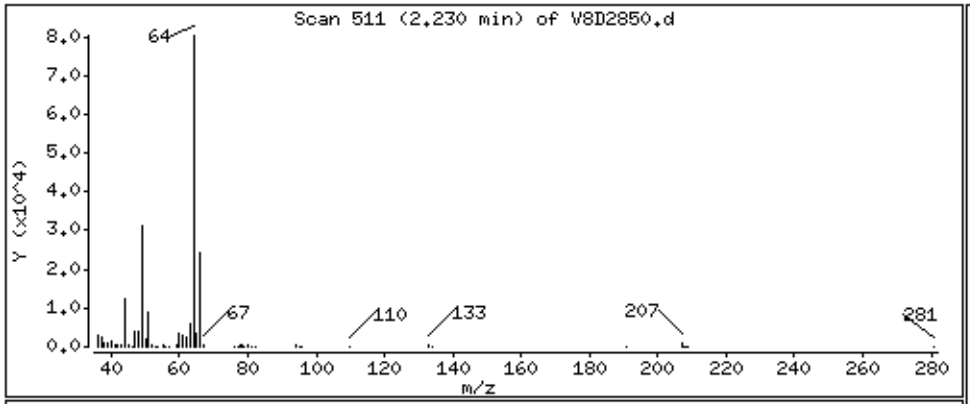
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

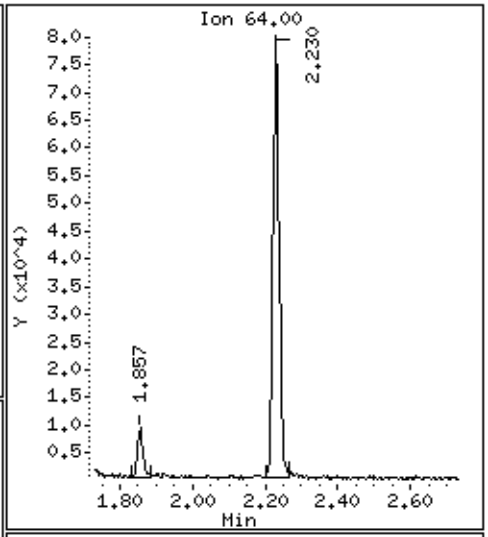
Sample Info: 5ML,N0060-05ADL,,75652,5

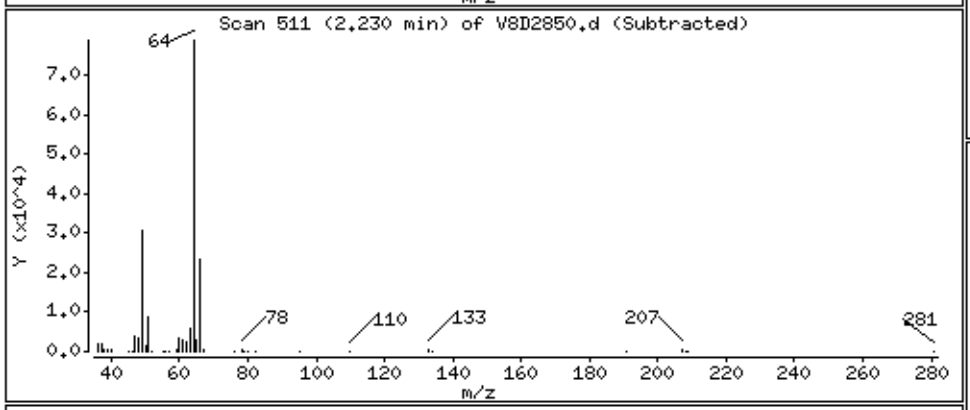
Purge Volume: 5.0 Operator: ALM SRC: LIMS

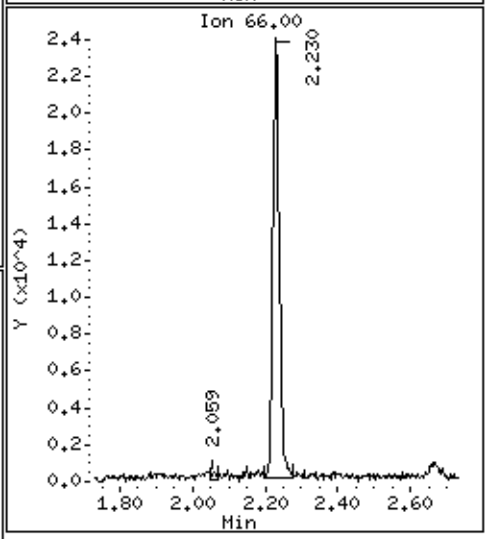
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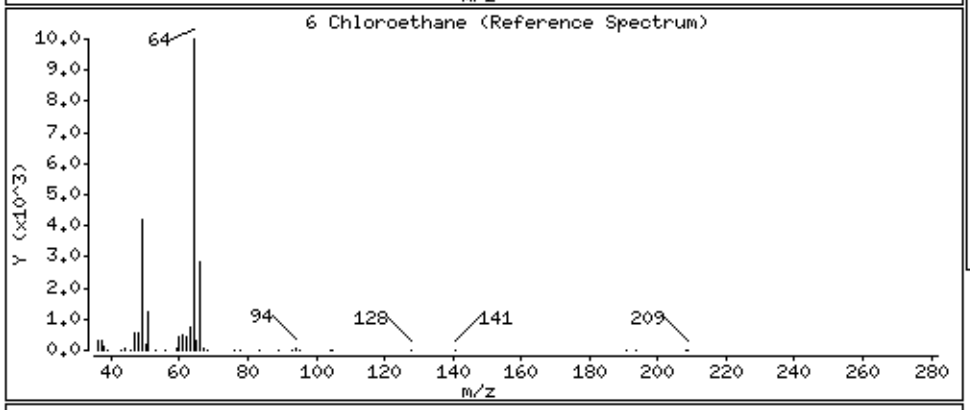
6 Chloroethane Concentration: 150 ug/L

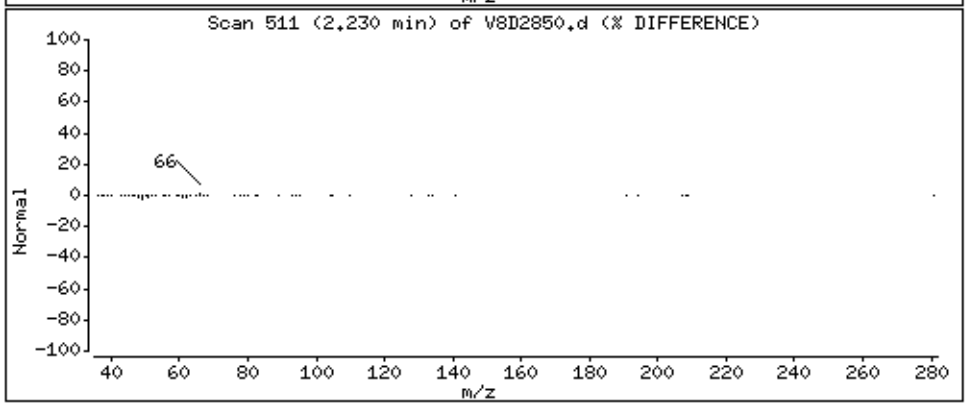












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

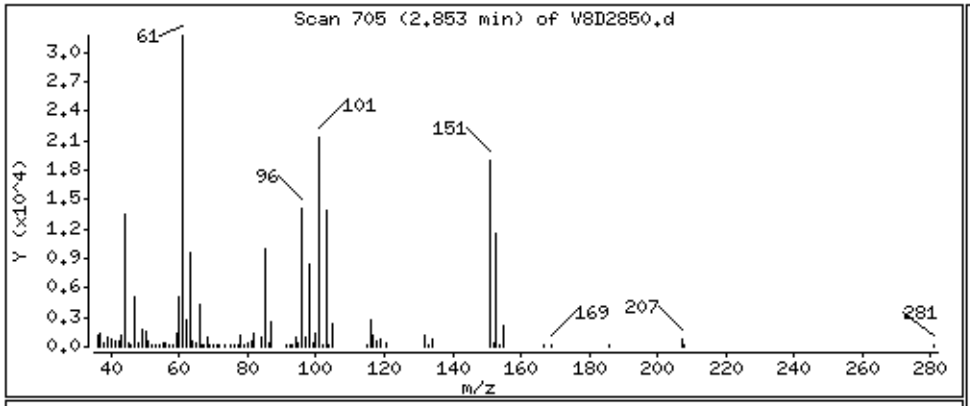
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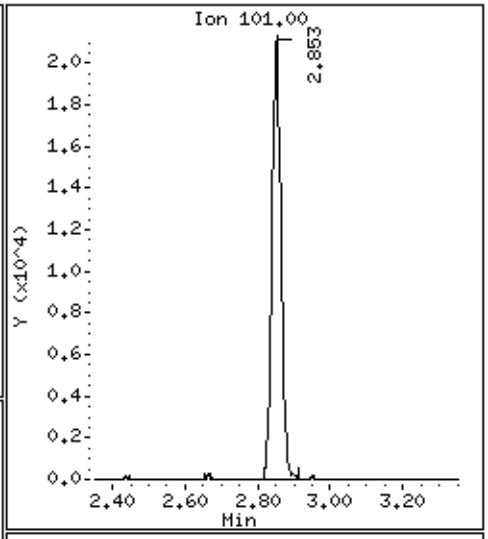
Sample Info: 5ML,N0060-05ADL,,75652,5

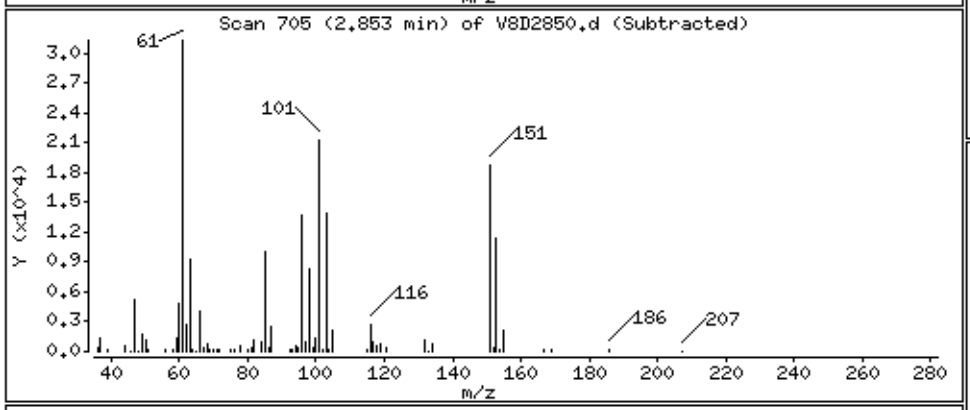
Purge Volume: 5.0 Operator: ALM SRC: LIMS

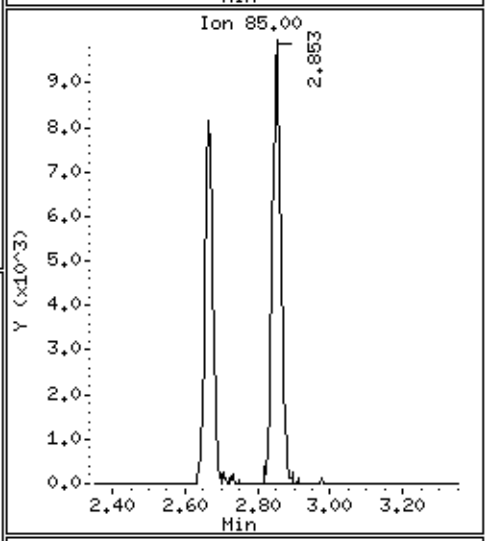
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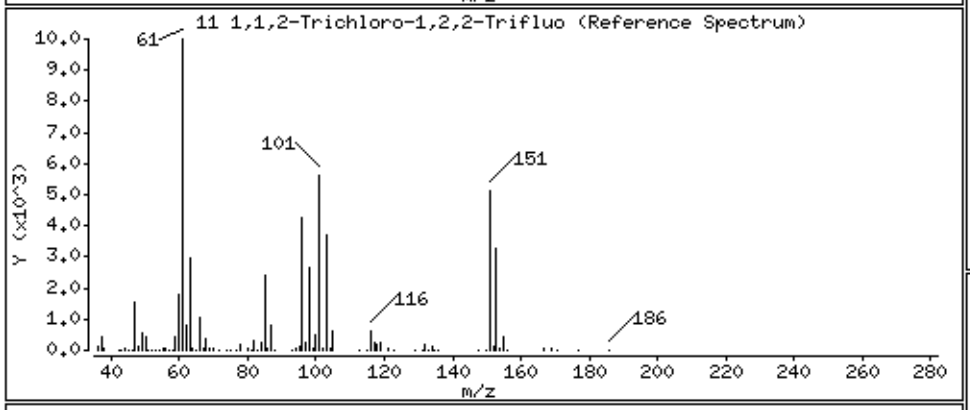
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 37 ug/L

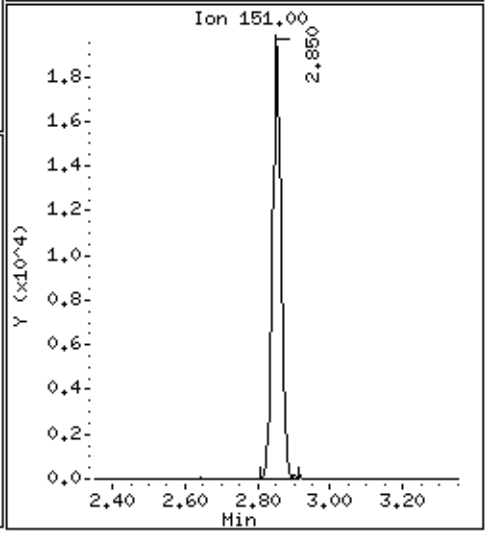


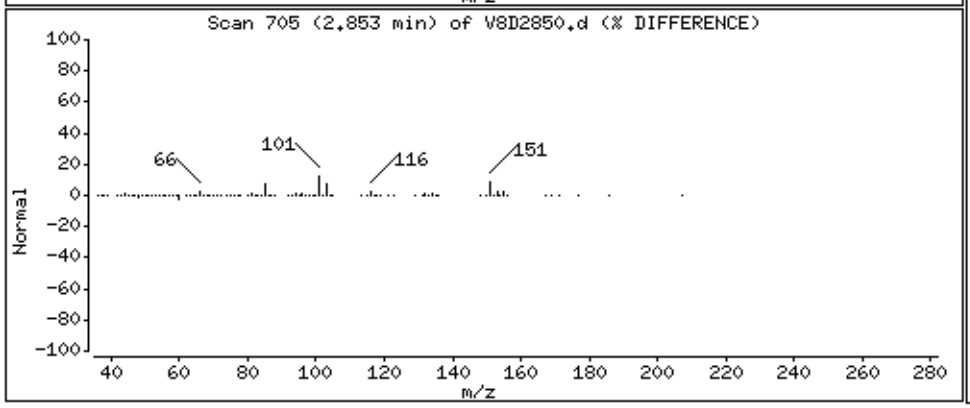












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

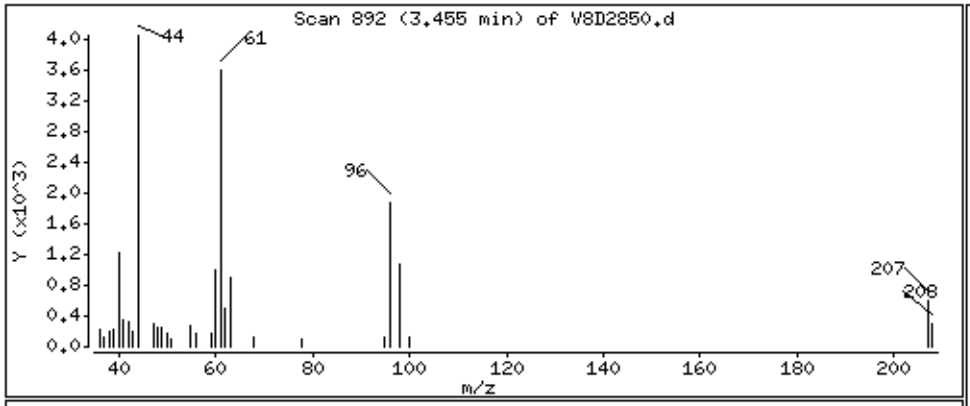
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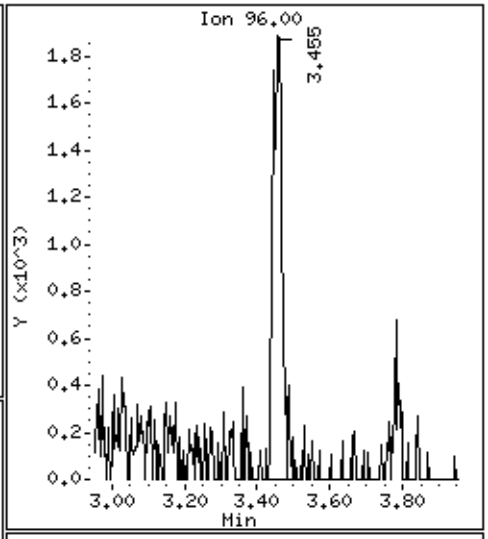
Sample Info: 5ML,N0060-05ADL,,75652,5

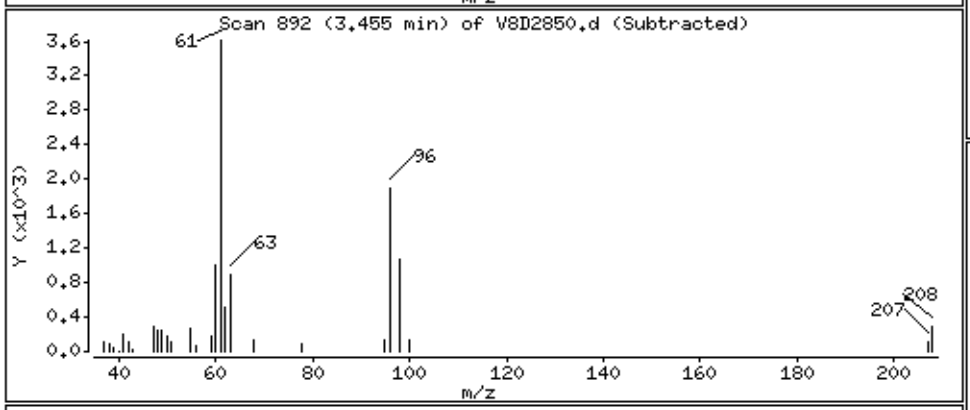
Purge Volume: 5.0 Operator: ALM SRC: LIMS

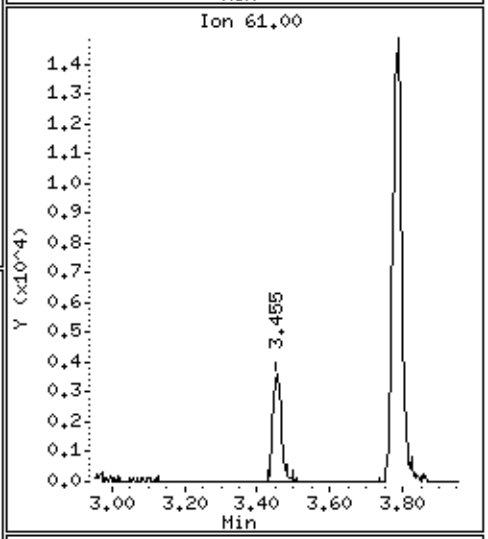
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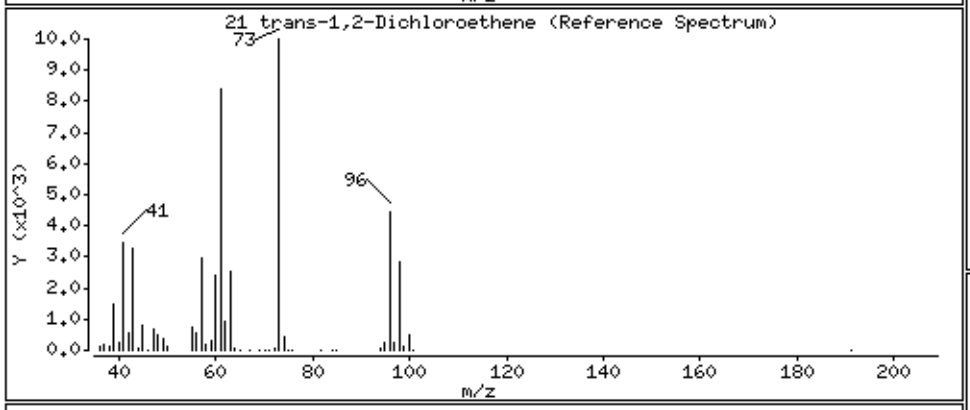
21 trans-1,2-Dichloroethene Concentration: 3.7 ug/L

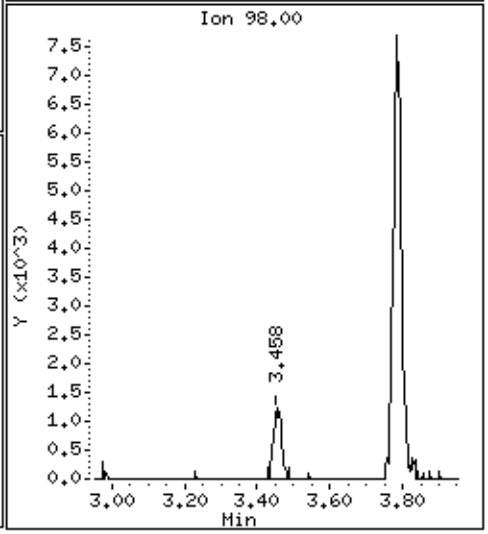


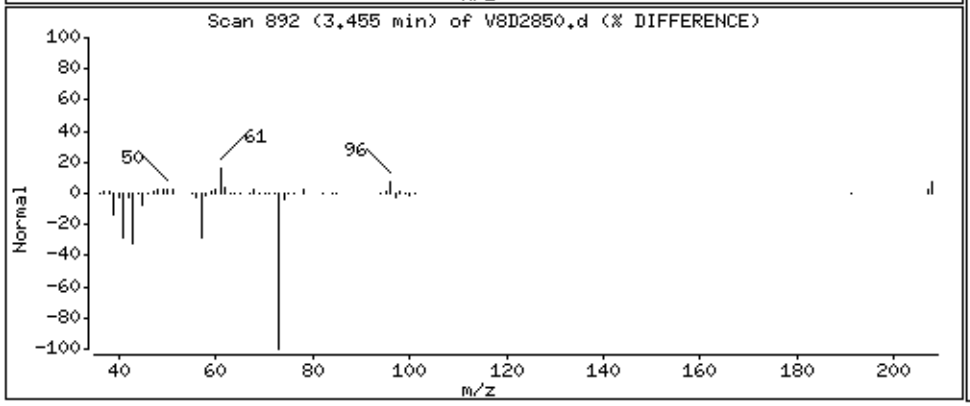












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

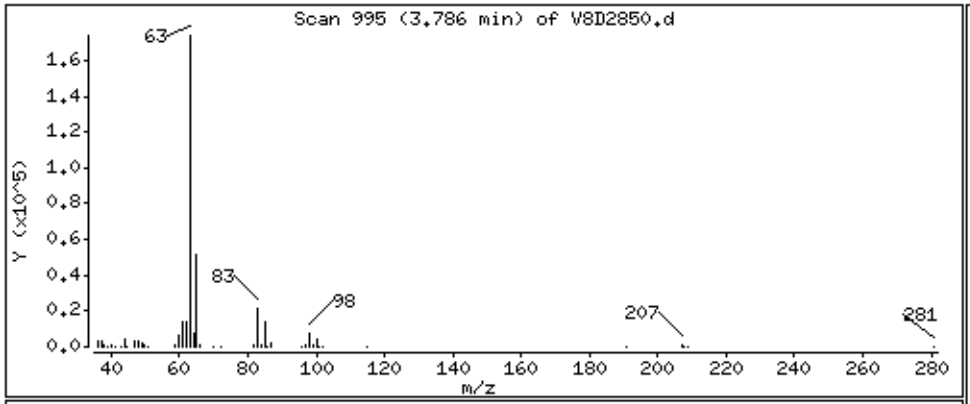
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

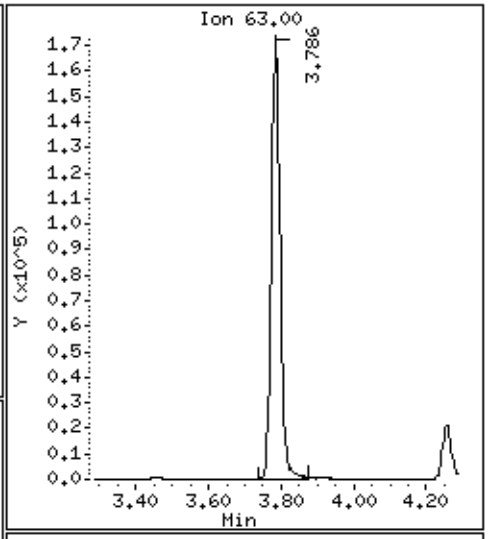
Sample Info: 5ML,N0060-05ADL,,75652,5

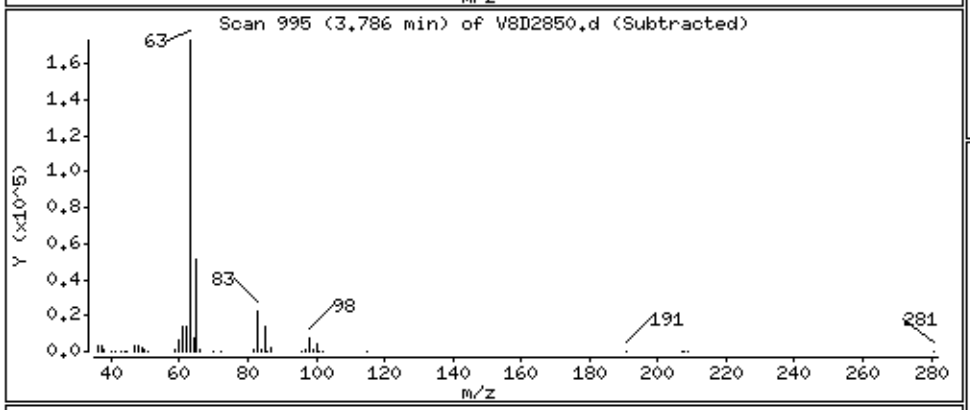
Purge Volume: 5.0 Operator: ALM SRC: LIMS

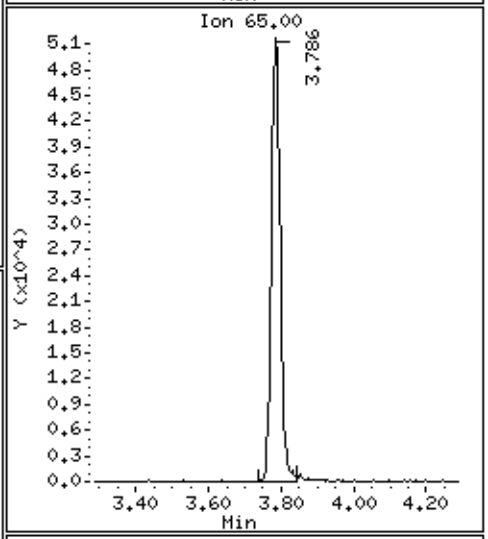
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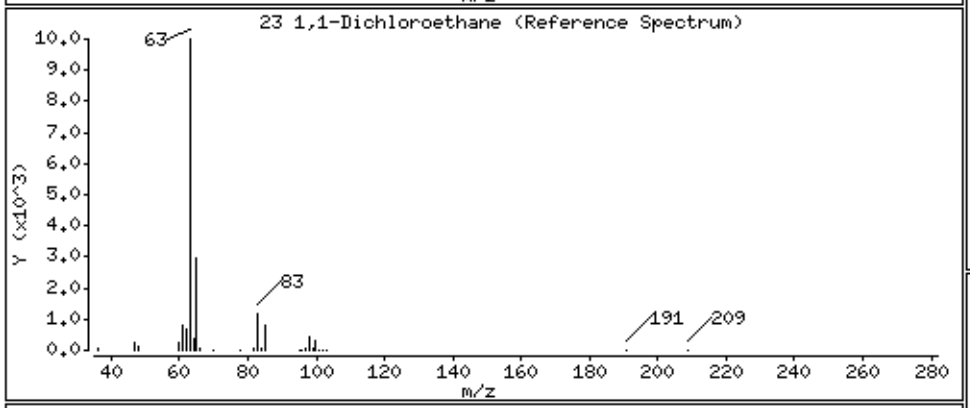
23 1,1-Dichloroethane Concentration: 140 ug/L

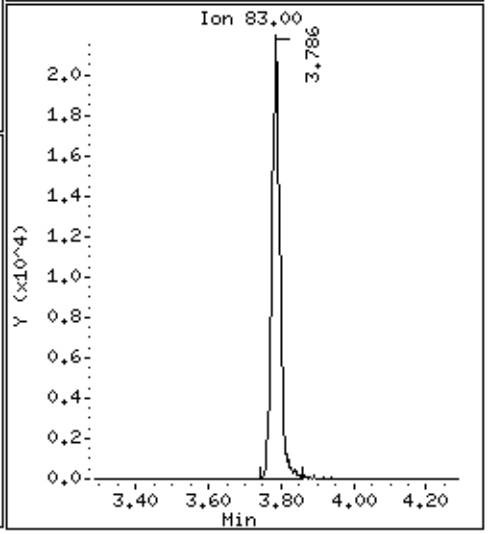


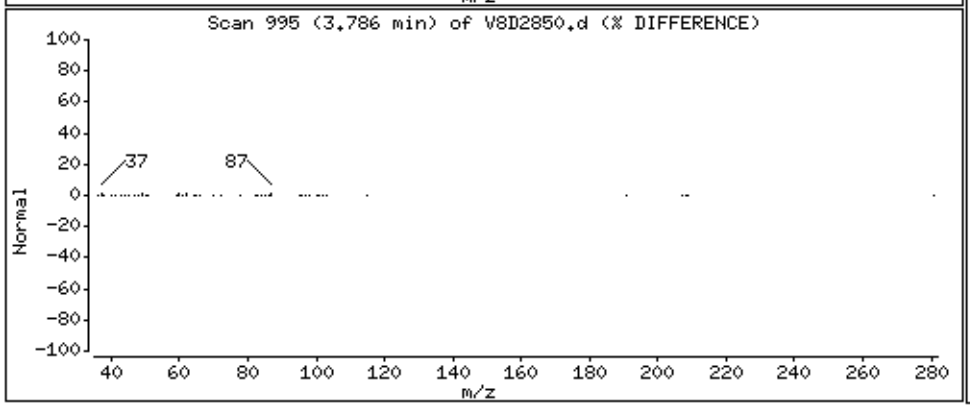












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

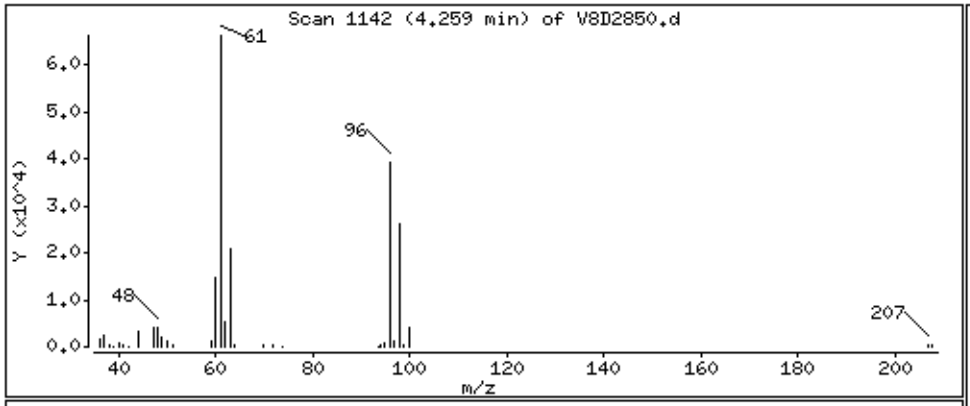
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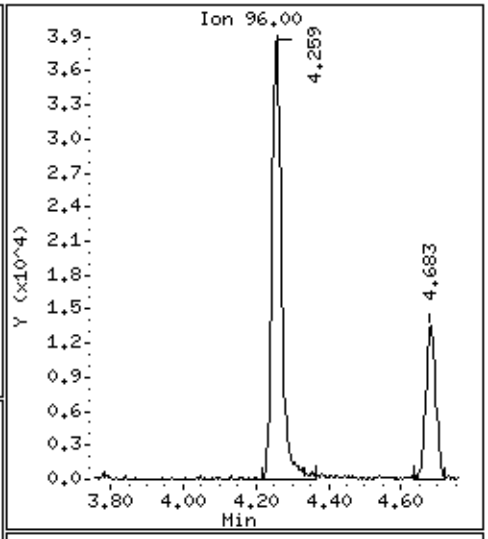
Sample Info: 5ML,N0060-05ADL,,75652,5

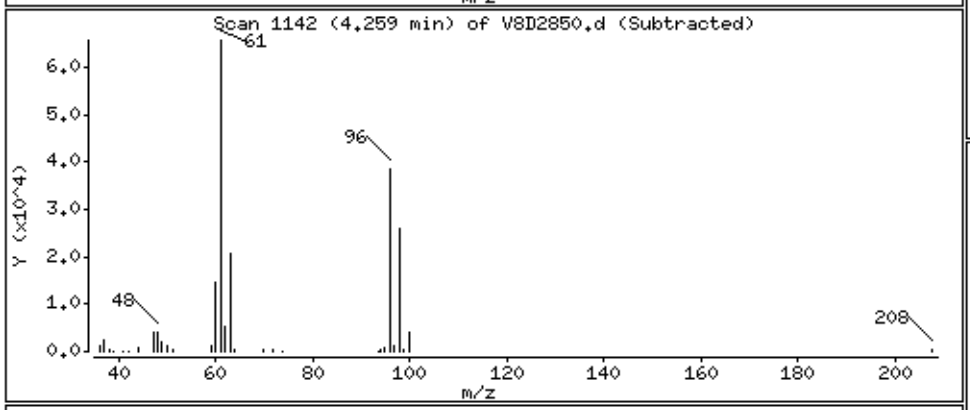
Purge Volume: 5.0 Operator: ALM SRC: LIMS

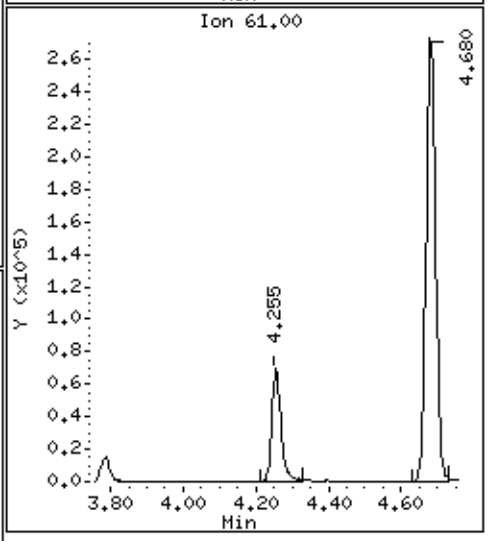
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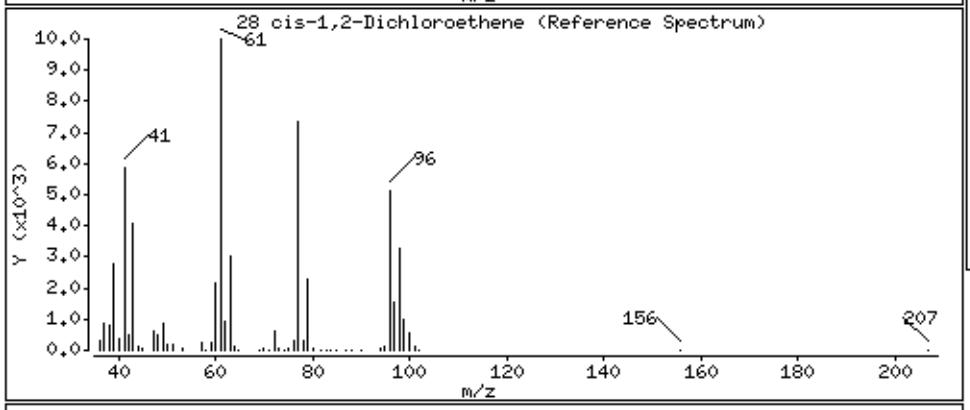
28 cis-1,2-Dichloroethene Concentration: 74 ug/L

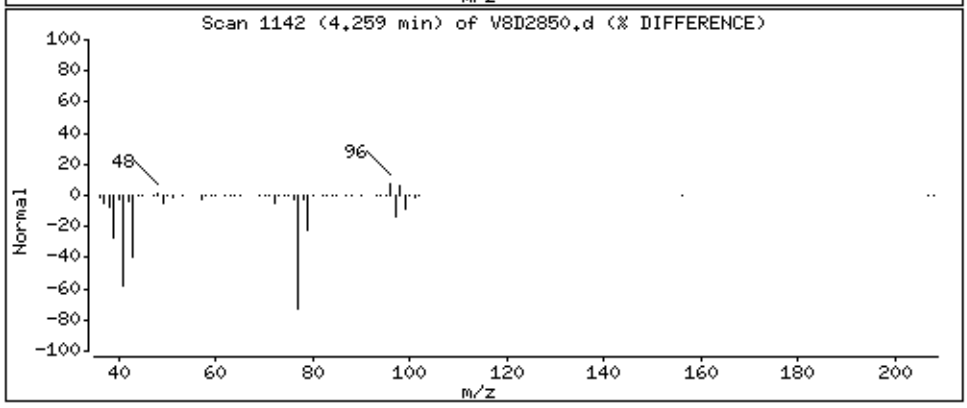












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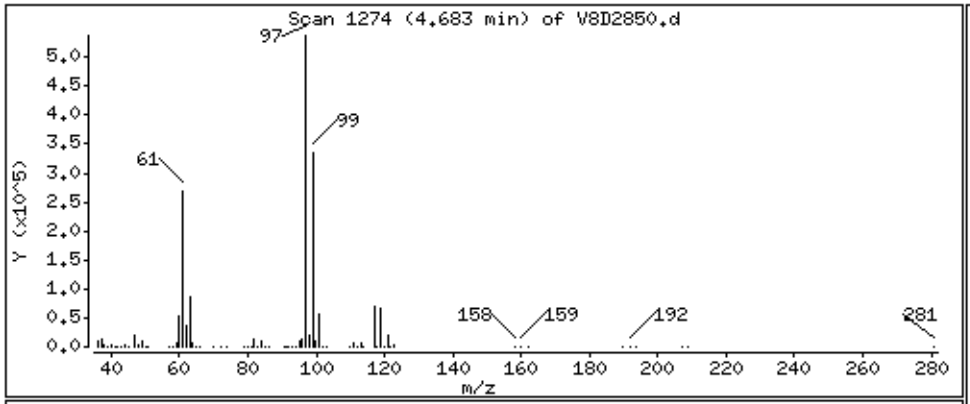
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

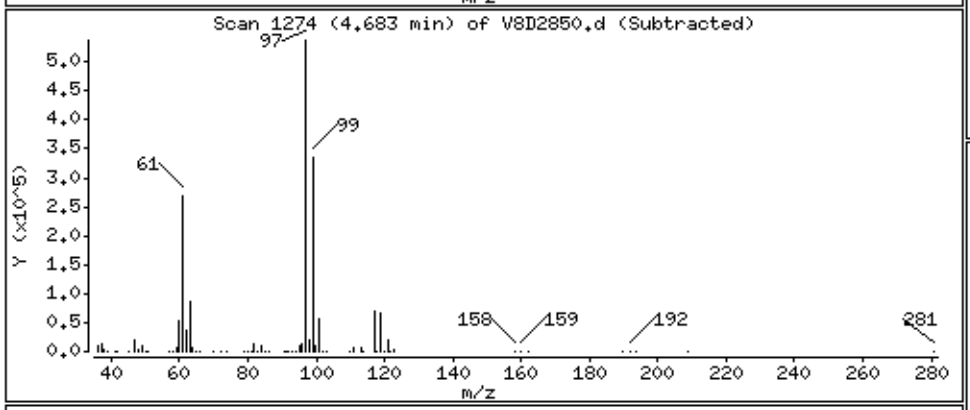
Sample Info: 5ML,N0060-05ADL,,75652,5

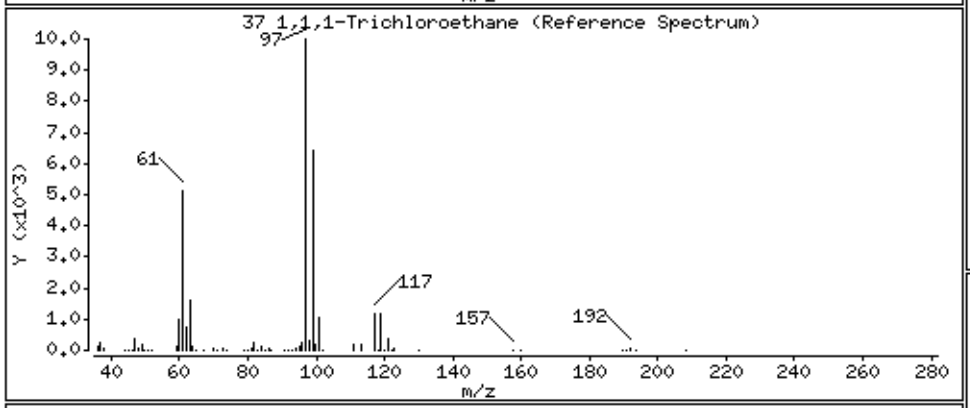
Purge Volume: 5.0 Operator: ALM SRC: LIMS

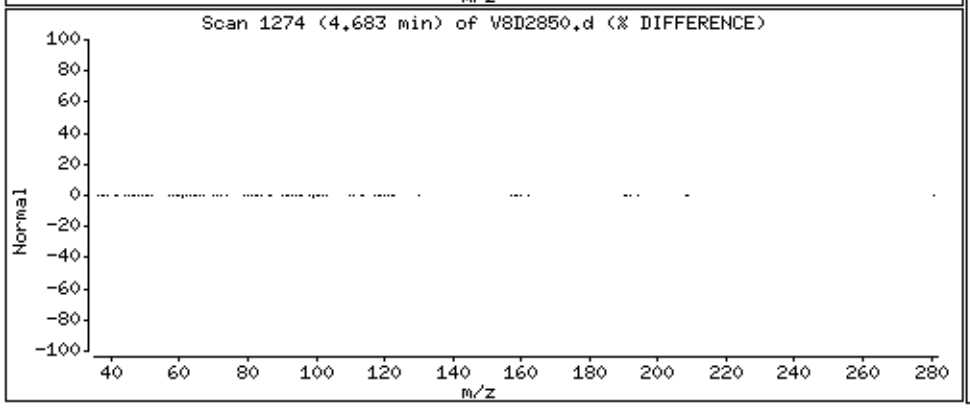
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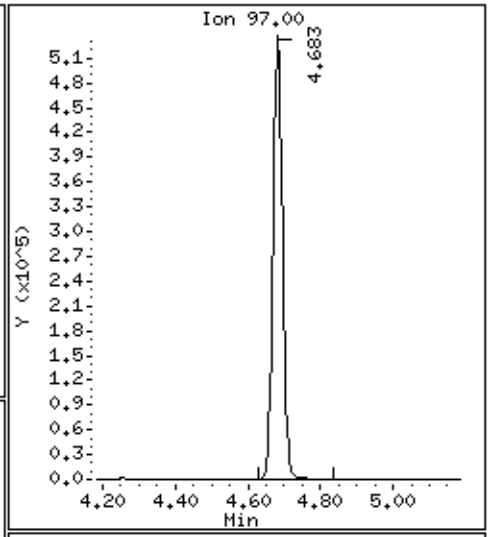
37 1,1,1-Trichloroethane Concentration: 570 ug/L

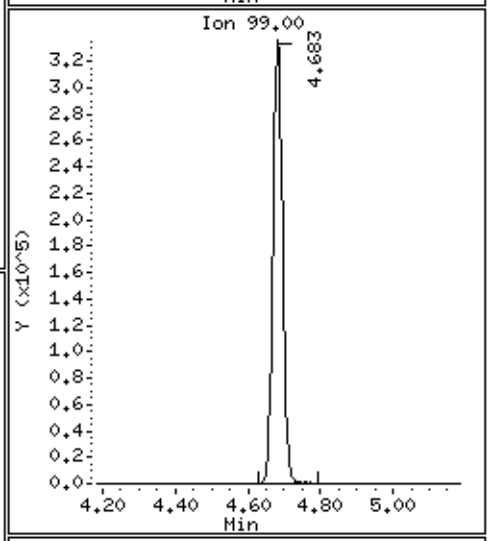


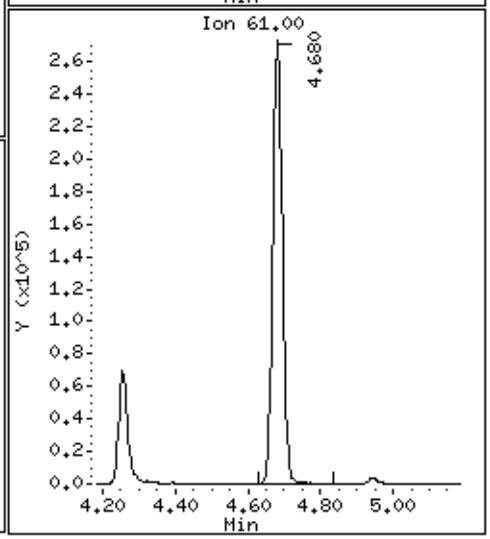












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2850.d

Date : 21-JAN-2014 12:49

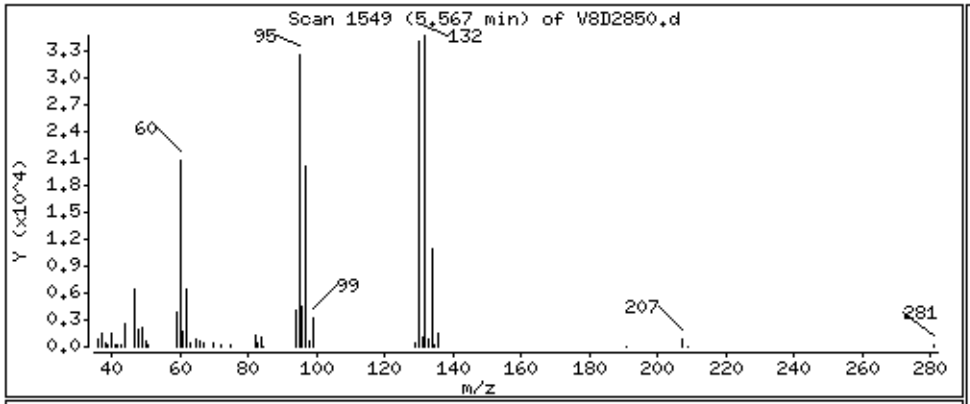
Client ID: HW-WET-WS-4-(1)_01/ Instrument: V8.i

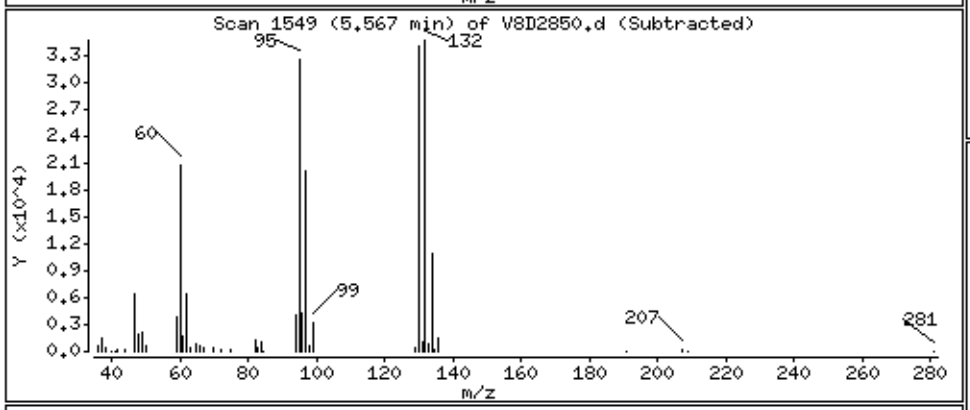
Sample Info: 5ML,N0060-05ADL,,75652,5

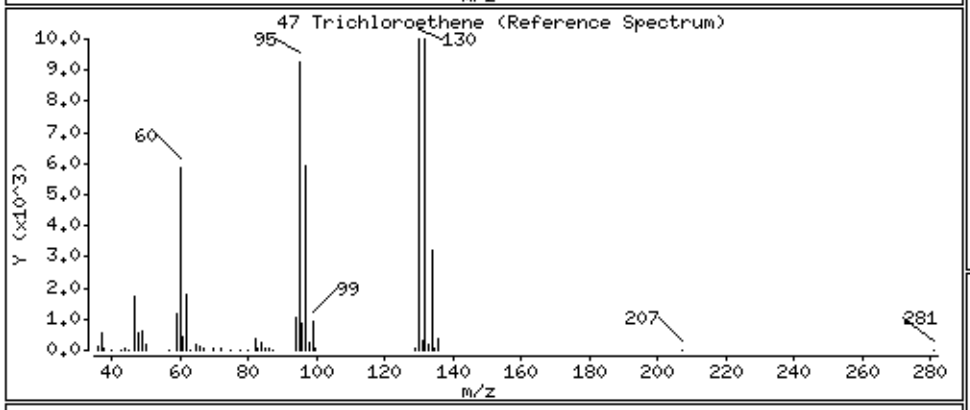
Purge Volume: 5.0 Operator: ALM SRC: LIMS

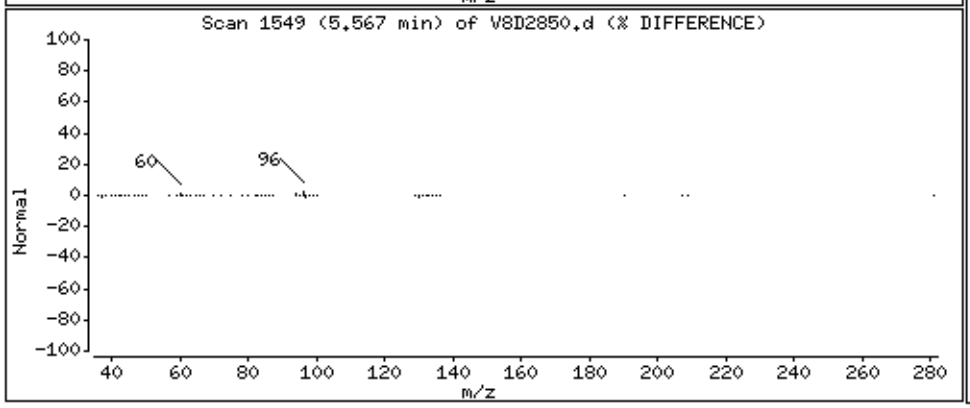
Column phase: DB-624 Column diameter: 0.25

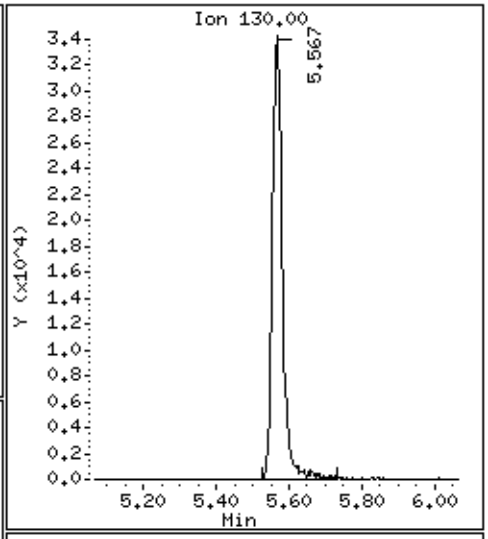
47 Trichloroethene Concentration: 63 ug/L

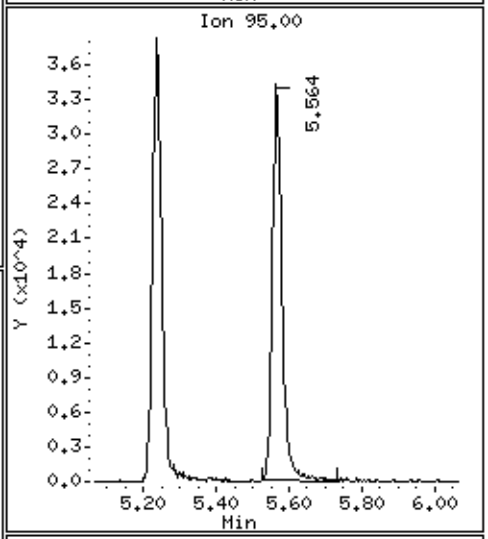


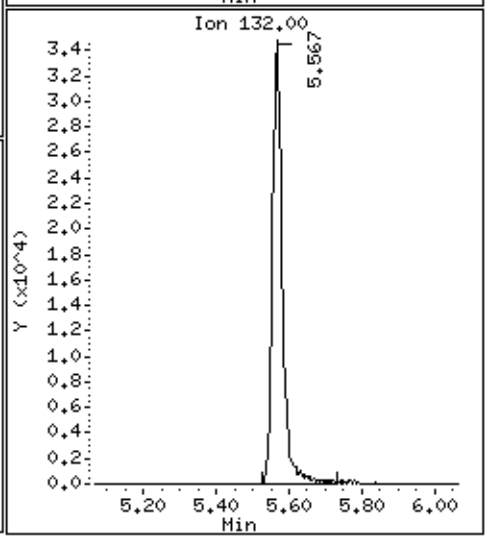












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2847.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

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	3.8	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.7	
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	8.4	
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	2.1	
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

EPA SAMPLE NO.

HW-WET-WS-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2847.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2847.d
Report Date: 29-Jan-2014 14:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2847.d
Lab Smp Id: N0060-06A Client Smp ID: HW-WET-WS-5-(1)_01/
Inj Date : 21-JAN-2014 11:27
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-06A,,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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)
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	5681	1.09006	1.1
	23	1,1-Dichloroethane	63	3.782	3.786	(0.722)	40919	3.84613	3.8
	28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	8885	1.70999	1.7
$	36	Dibromofluoromethane	113	4.644	4.644	(0.887)	259396	50.4562	50
	37	1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	76273	8.40606	8.4
$	42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	51247	49.9499	50
M	50	1,2-Dichloroethene (Total)	96				8885	1.70999	1.7
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	821052	50.0000	
	47	Trichloroethene	130	5.567	5.564	(1.063)	11974	2.14934	2.1
$	58	Toluene-d8	98	6.718	6.715	(0.817)	819606	49.2422	49
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	697746	50.0000	
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	317070	47.3950	47
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	324688	50.0000	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2847.d
Report Date: 29-Jan-2014 14:39

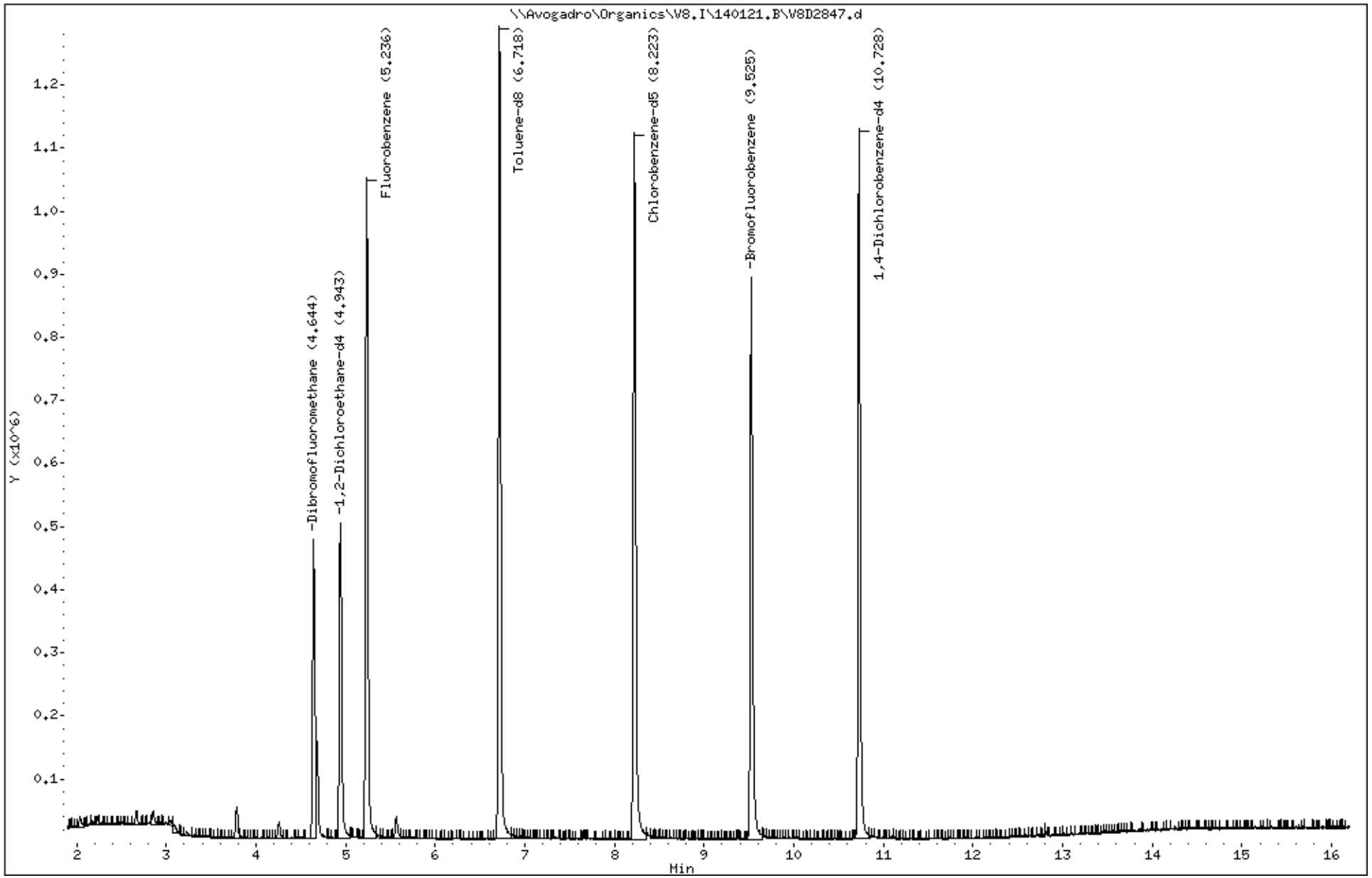
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2847.d
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Inj Date : 21-JAN-2014 11:27
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-06A,,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2847.d
Date : 21-JAN-2014 11:27
Client ID: HW-WET-WS-5-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-06A,,75652
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2847.d

Date : 21-JAN-2014 11:27

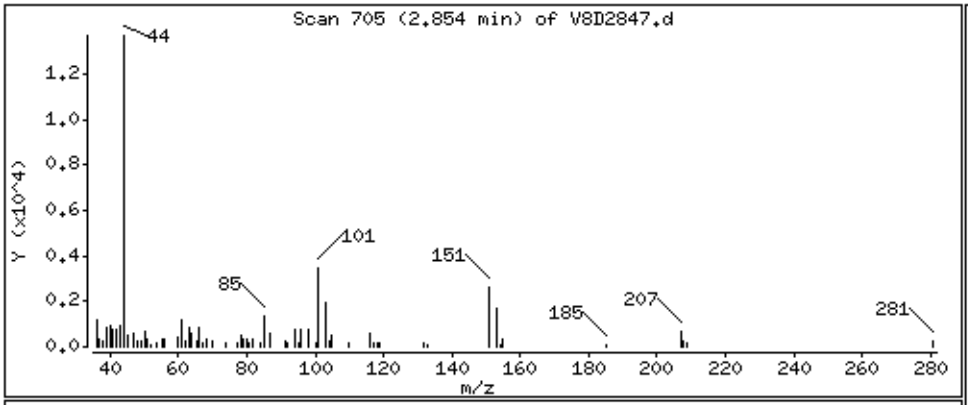
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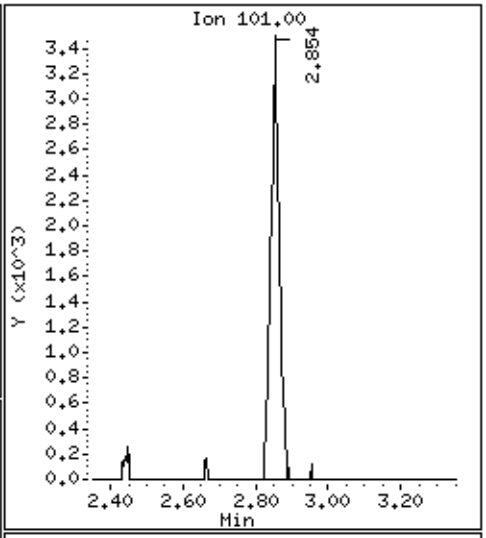
Sample Info: 5ML,N0060-06A,,75652

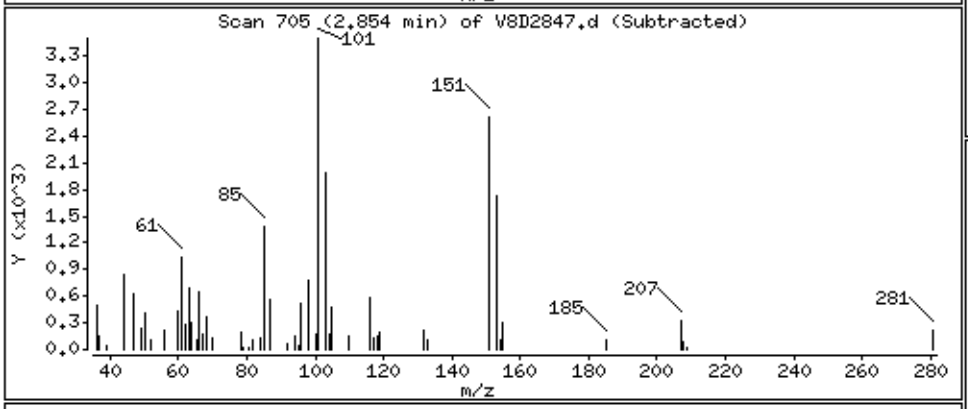
Purge Volume: 5.0 Operator: ALM SRC: LIMS

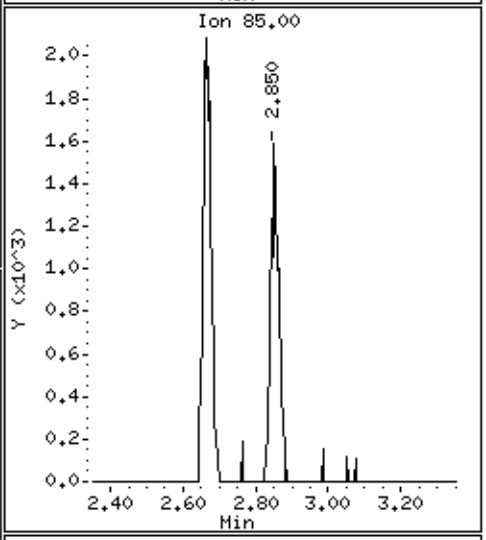
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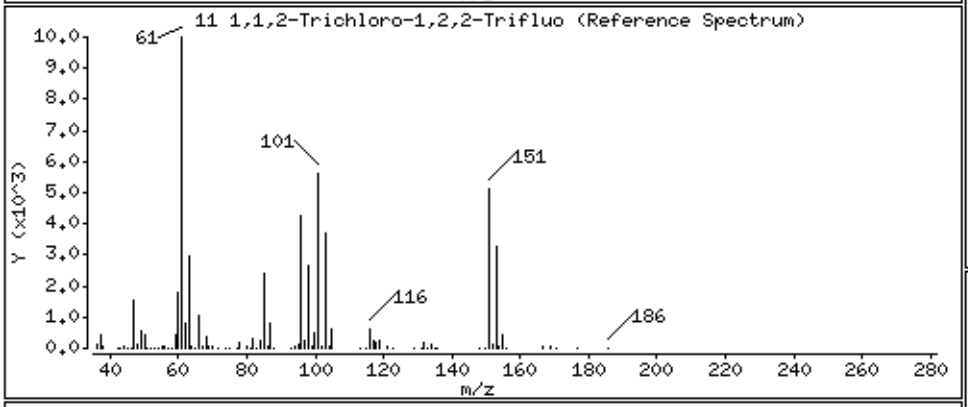
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 1.1 ug/L

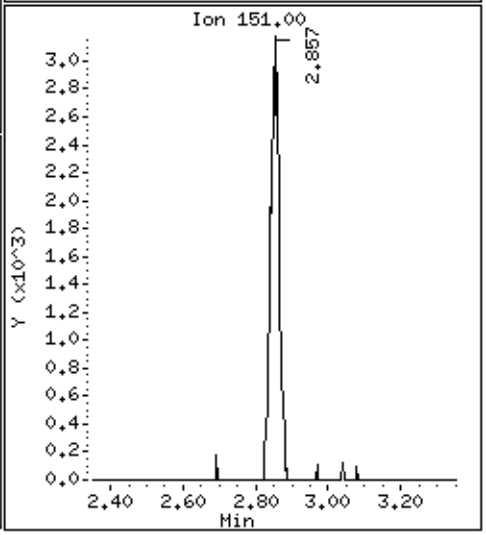


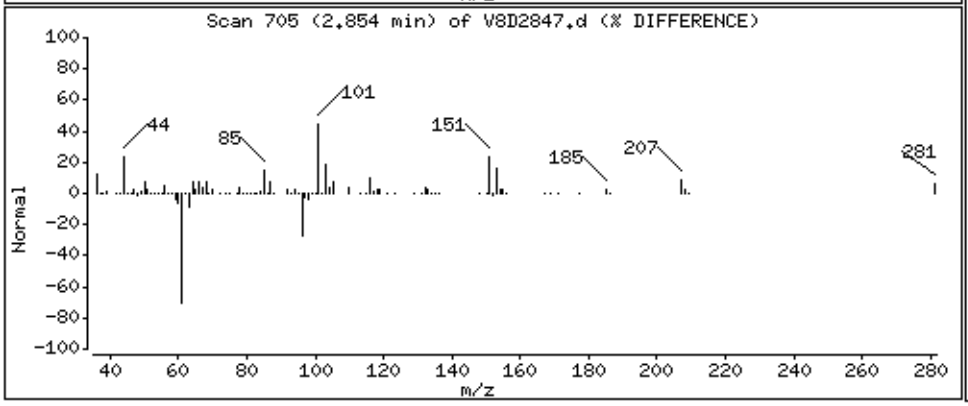












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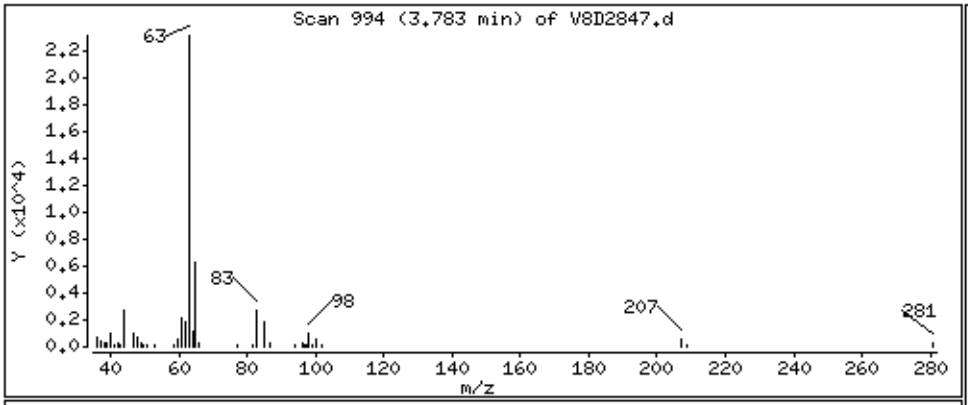
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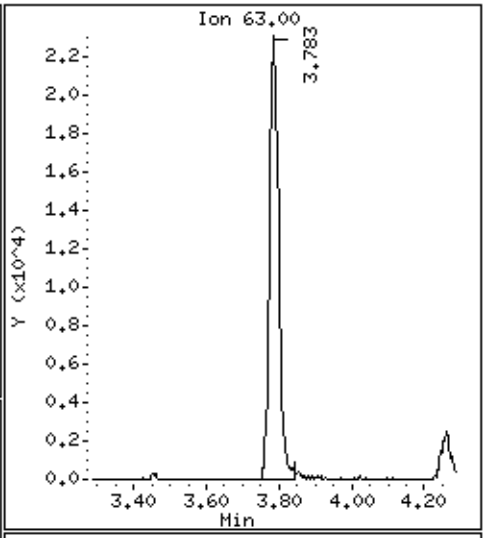
Sample Info: 5ML,N0060-06A,,75652

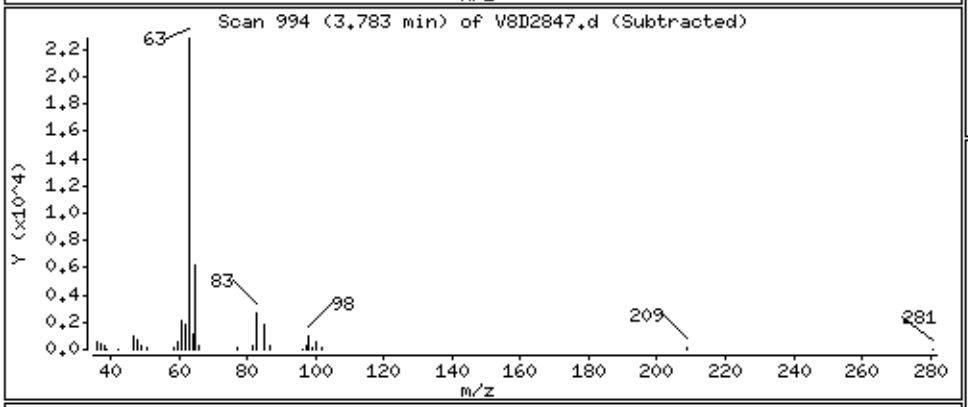
Purge Volume: 5.0 Operator: ALM SRC: LIMS

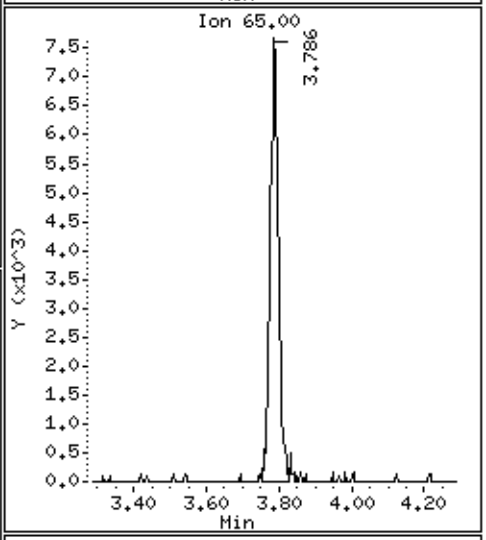
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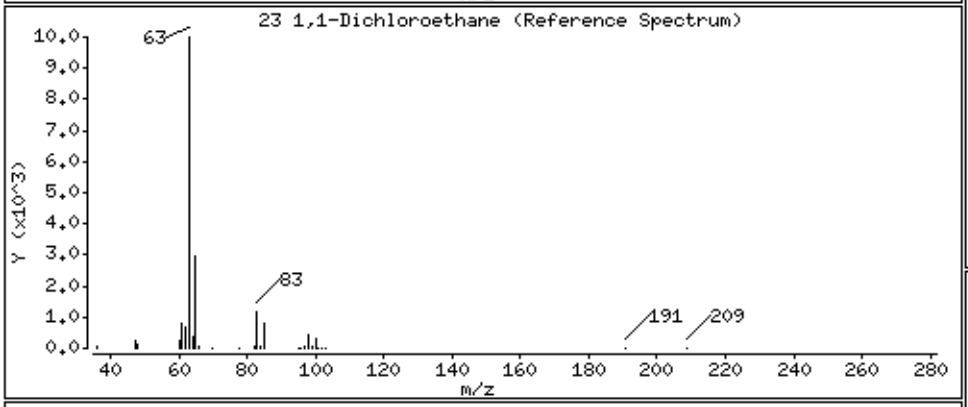
23 1,1-Dichloroethane Concentration: 3.8 ug/L

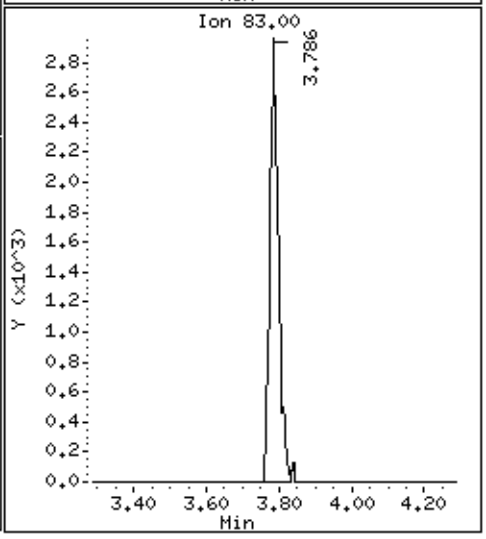


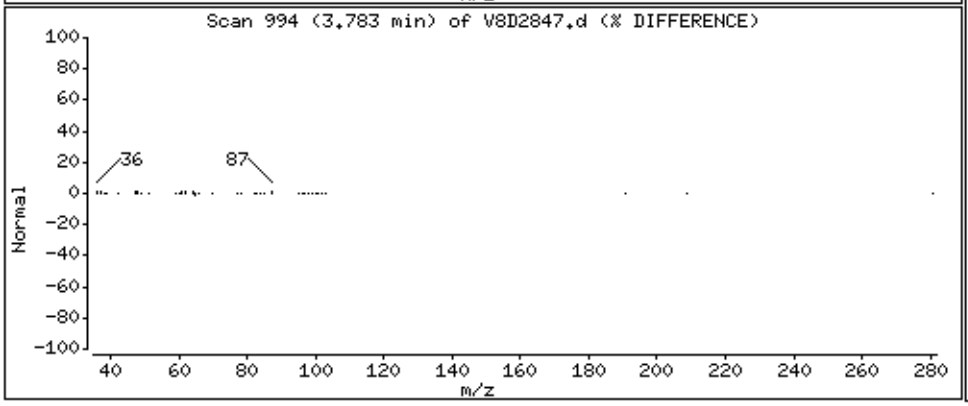












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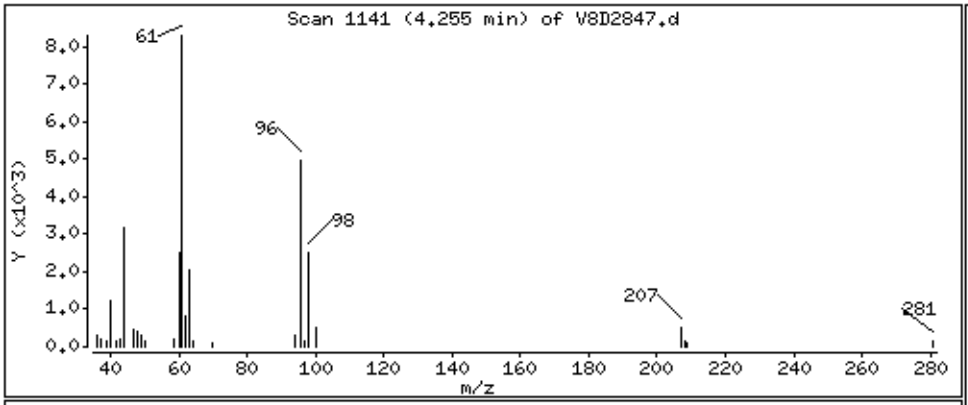
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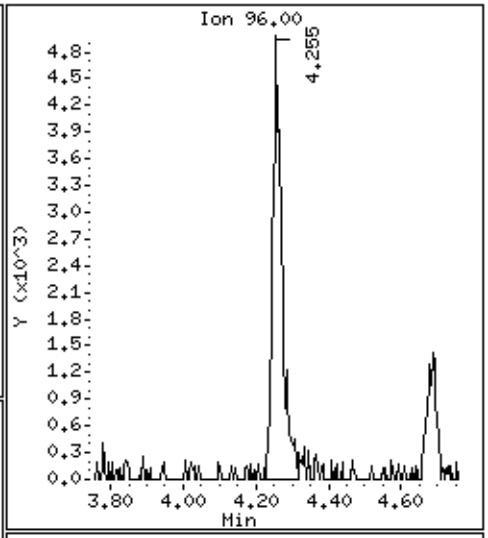
Sample Info: 5ML,N0060-06A,,75652

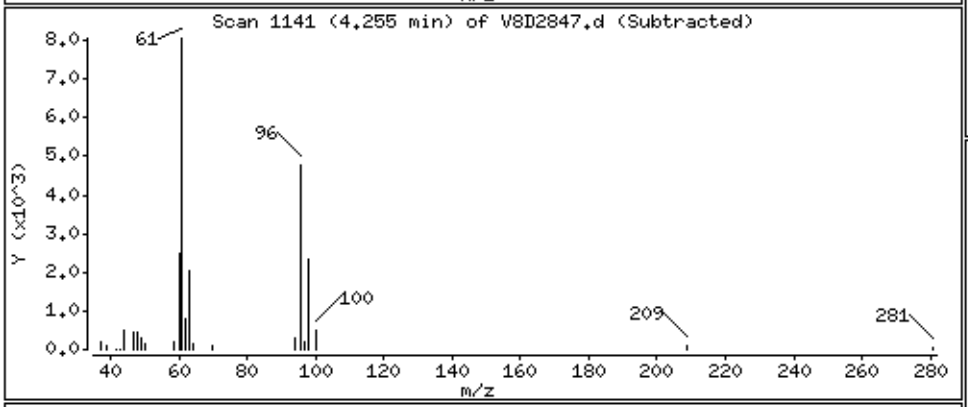
Purge Volume: 5.0 Operator: ALM SRC: LIMS

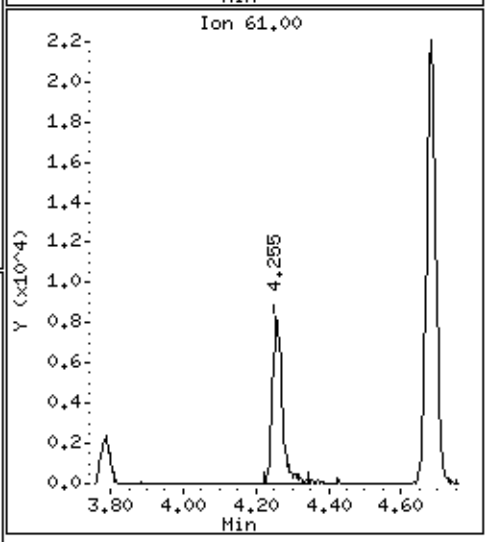
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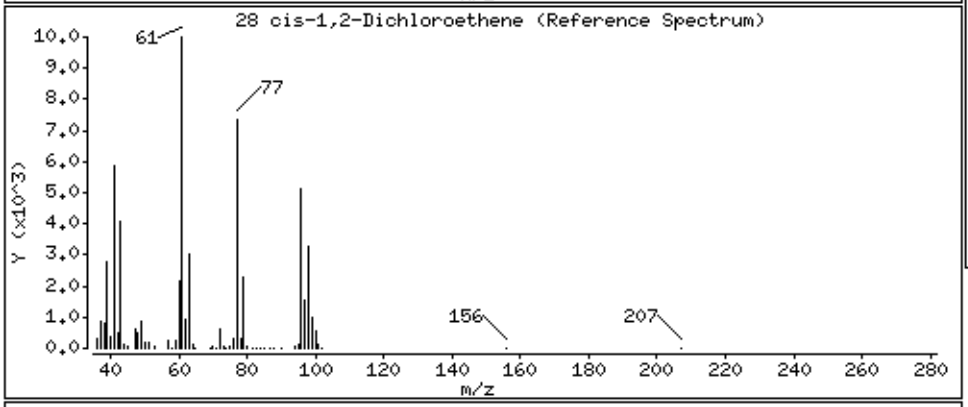
28 cis-1,2-Dichloroethene Concentration: 1.7 ug/L

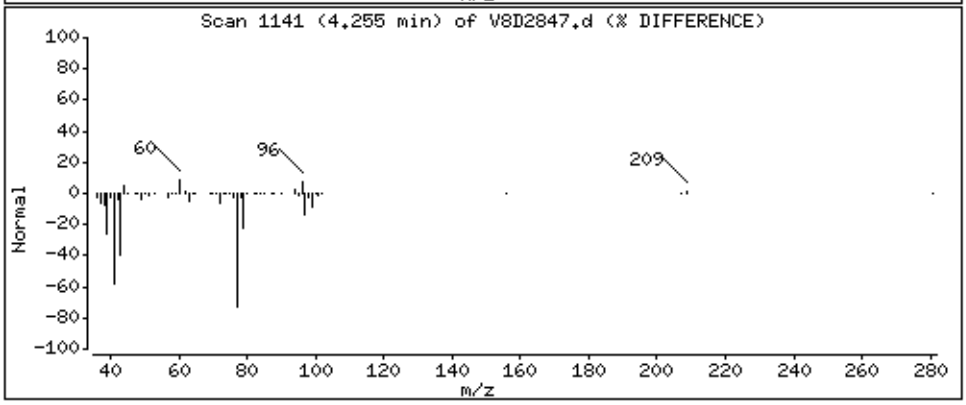












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2847.d

Date : 21-JAN-2014 11:27

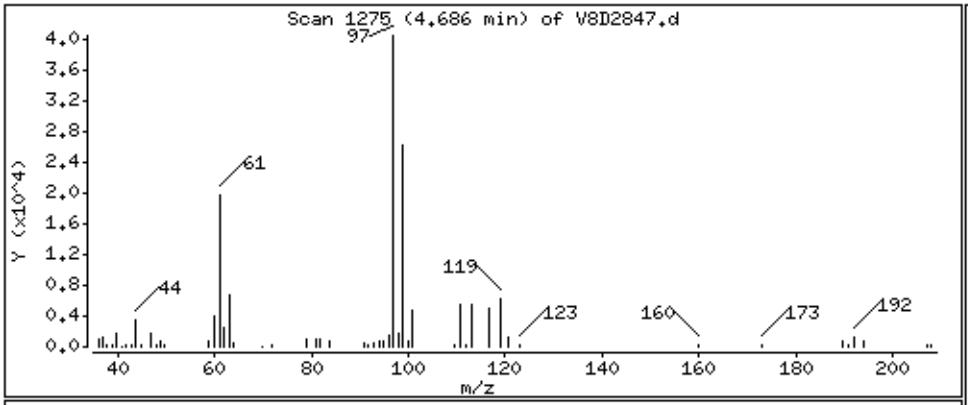
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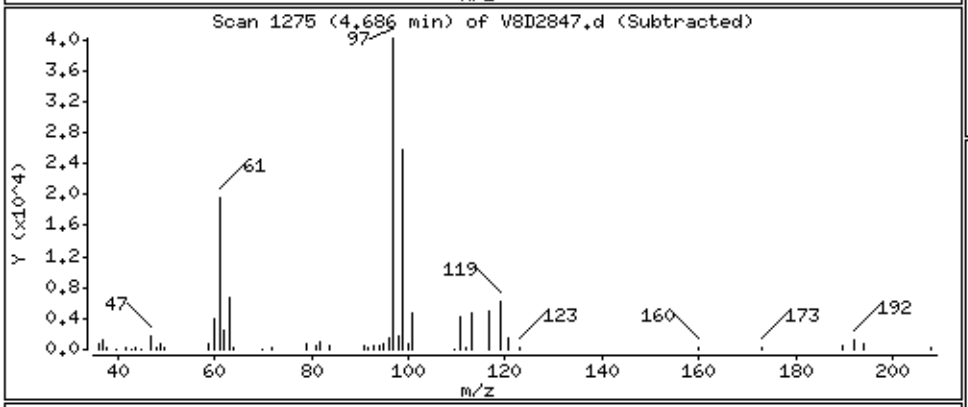
Sample Info: 5ML,N0060-06A,,75652

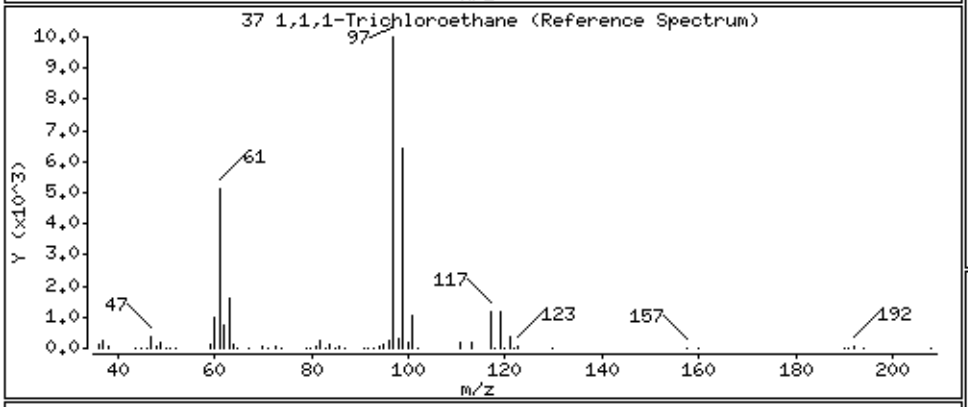
Purge Volume: 5.0 Operator: ALM SRC: LIMS

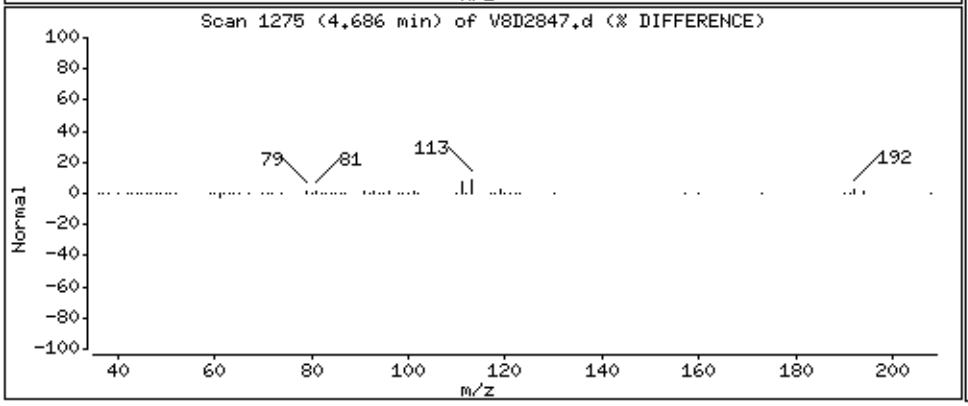
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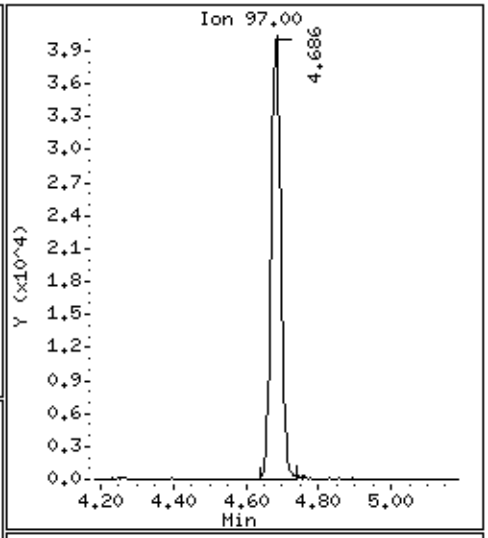
37 1,1,1-Trichloroethane Concentration: 8.4 ug/L

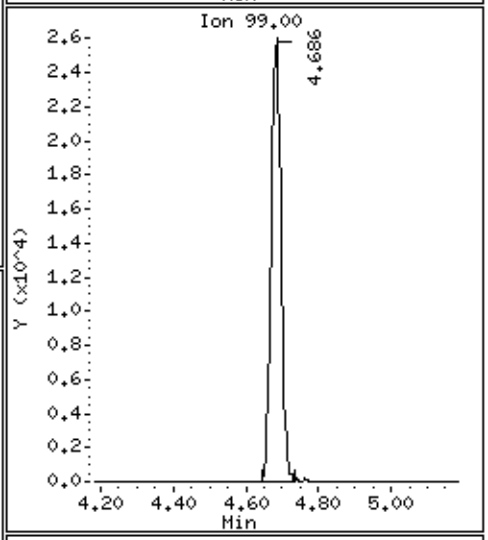


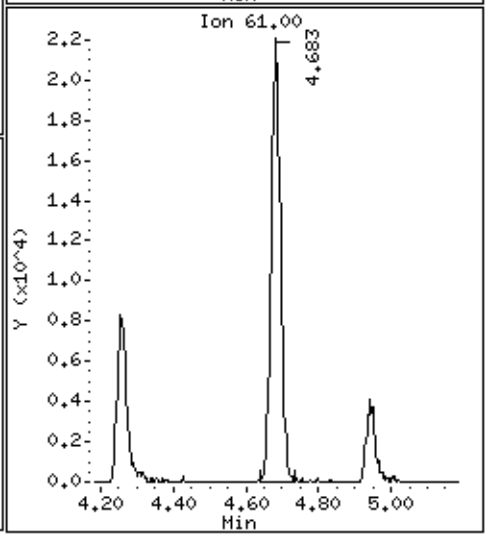












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2847.d

Date : 21-JAN-2014 11:27

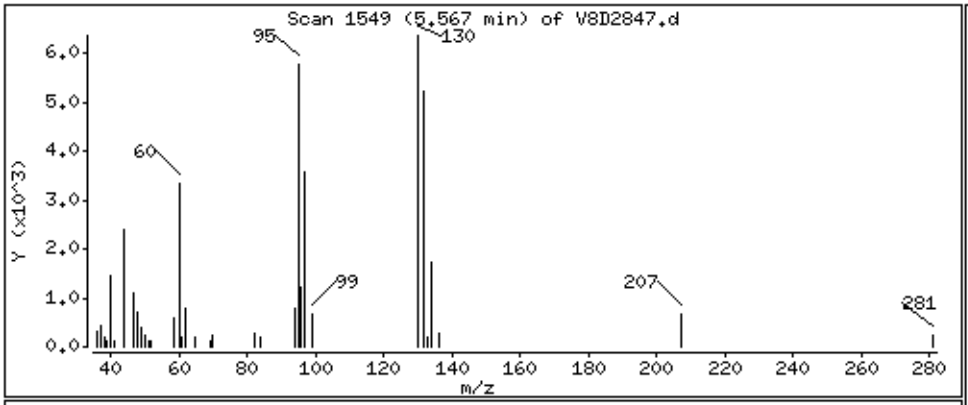
Client ID: HW-WET-WS-5-(1)_01/ Instrument: V8.i

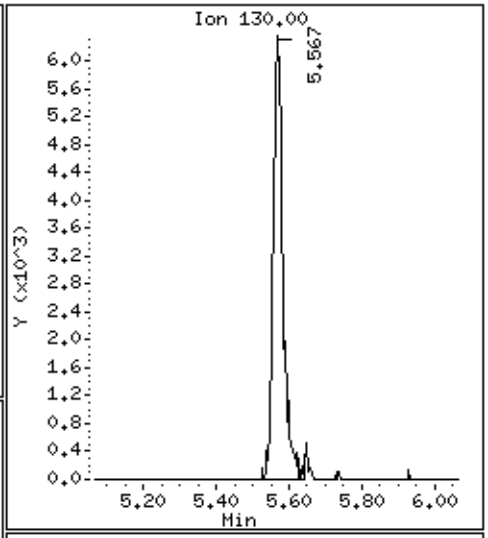
Sample Info: 5ML,N0060-06A,,75652

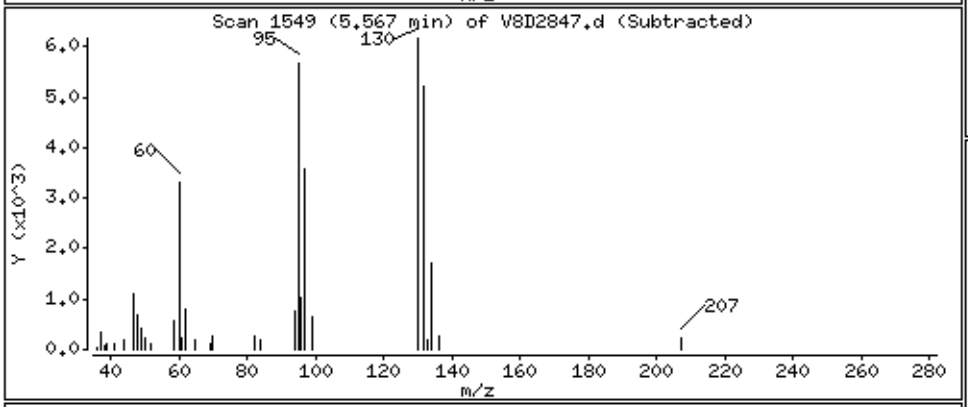
Purge Volume: 5.0 Operator: ALM SRC: LIMS

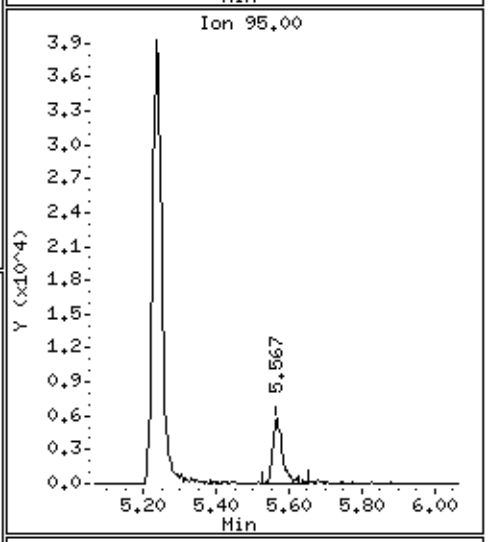
Column phase: DB-624 Column diameter: 0.25

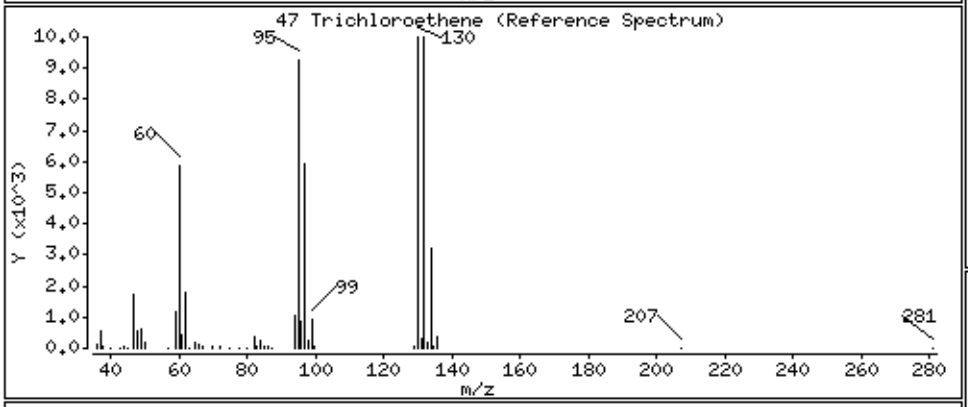
47 Trichloroethene Concentration: 2.1 ug/L

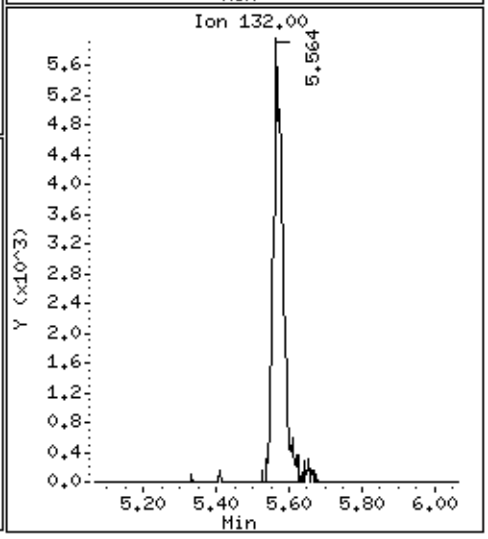


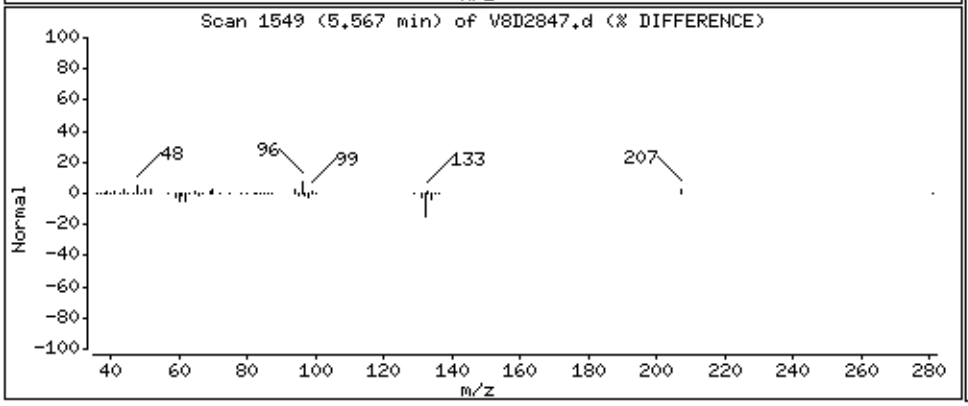












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-1-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2823.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

HW-WET-WS-1-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2823.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2823.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2823.d
Lab Smp Id: N0060-07A Client Smp ID: HW-WET-WS-1-(1)_01/
Inj Date : 20-JAN-2014 20:13
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-07A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.641	4.644	(0.886)	257916	50.0709	50
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	50486	49.1126	49
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	822649	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	830750	50.1023	50
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	695092	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.522	(1.159)	302824	45.4384	45
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	316814	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2823.d
Report Date: 29-Jan-2014 14:45

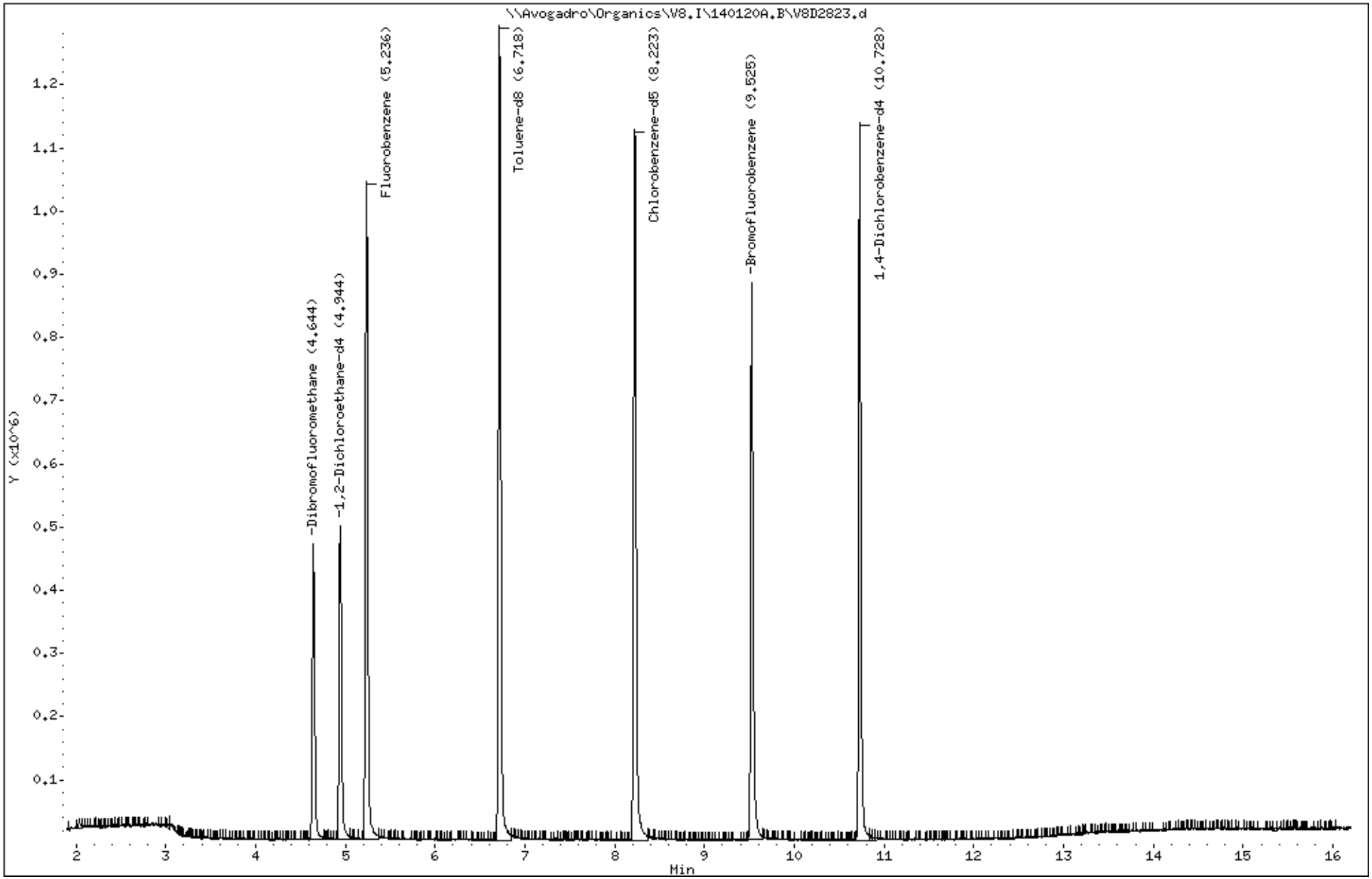
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2823.d
Lab Smp Id: N0060-07A Client Smp ID: HW-WET-WS-1-(1)_01/
Inj Date : 20-JAN-2014 20:13
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-07A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2823.d
Date : 20-JAN-2014 20:13
Client ID: HW-WET-WS-1-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-07A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-11-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2824.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

HW-WET-WS-11-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2824.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2824.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2824.d
Lab Smp Id: N0060-08A Client Smp ID: HW-WET-WS-11-(1)_01
Inj Date : 20-JAN-2014 20:40
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-08A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.644	4.644	(0.887)	260255	50.2419	50
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	51291	49.6161	50
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	827285	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	811268	48.5040	48
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	701159	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.522	(1.159)	310239	46.1482	46
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	315596	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2824.d
Report Date: 29-Jan-2014 14:45

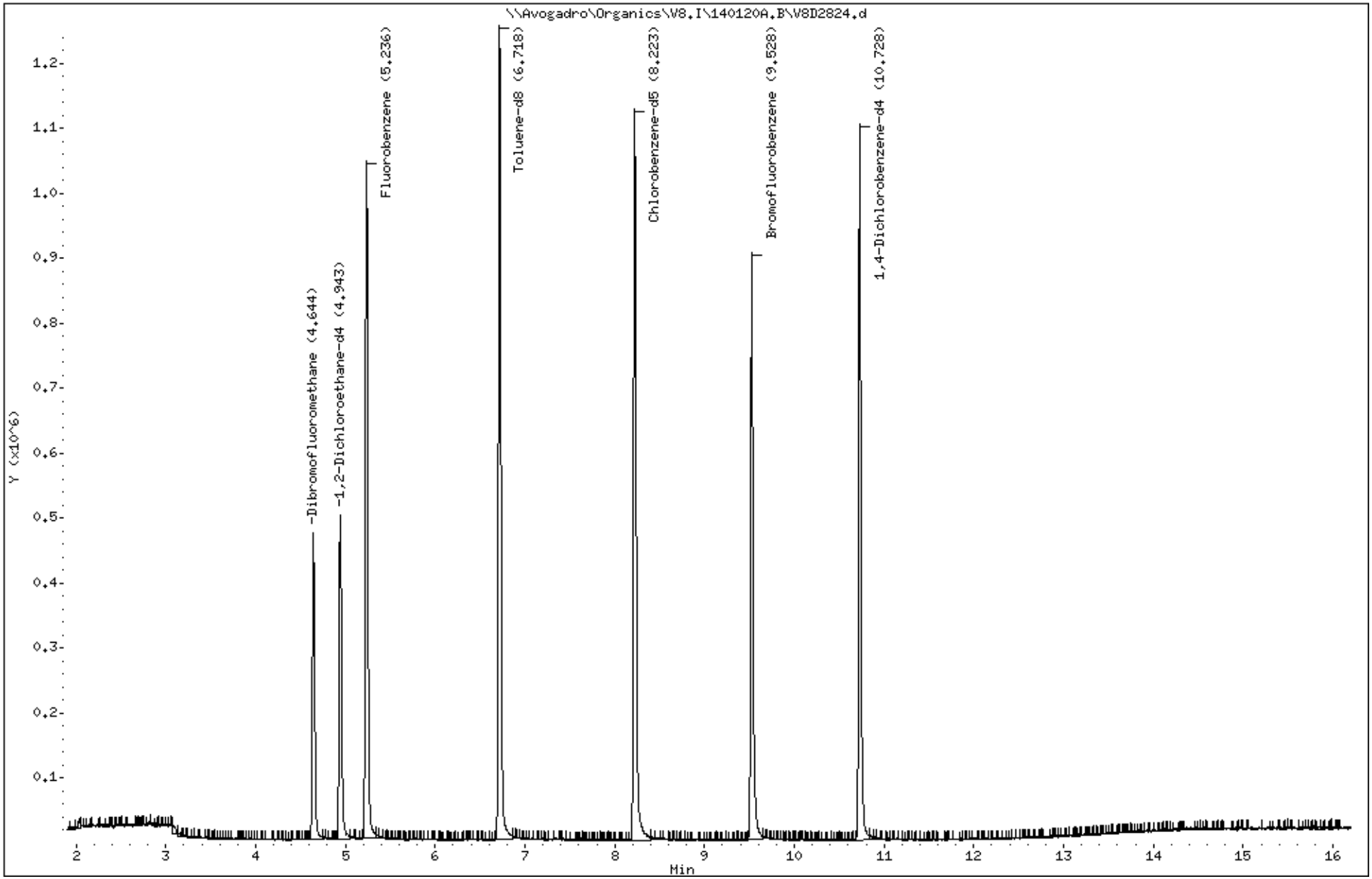
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2824.d
Lab Smp Id: N0060-08A Client Smp ID: HW-WET-WS-11-(1)_01
Inj Date : 20-JAN-2014 20:40
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-08A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2824.d
Date : 20-JAN-2014 20:40
Client ID: HW-WET-WS-11-(1)_01
Instrument: V8.i
Sample Info: 5ML,N0060-08A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-10-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2825.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

HW-WET-WS-10-(1)_01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2825.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2825.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2825.d
Lab Smp Id: N0060-09A Client Smp ID: HW-WET-WS-10-(1)_01
Inj Date : 20-JAN-2014 21:07
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-09A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.644	4.644	(0.887)	256829	51.1842	51
$ 42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	49948	49.8798	50
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	801365	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	821734	50.0977	50
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	687612	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.522	(1.159)	310460	47.0909	47
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	318565	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2825.d
Report Date: 29-Jan-2014 14:45

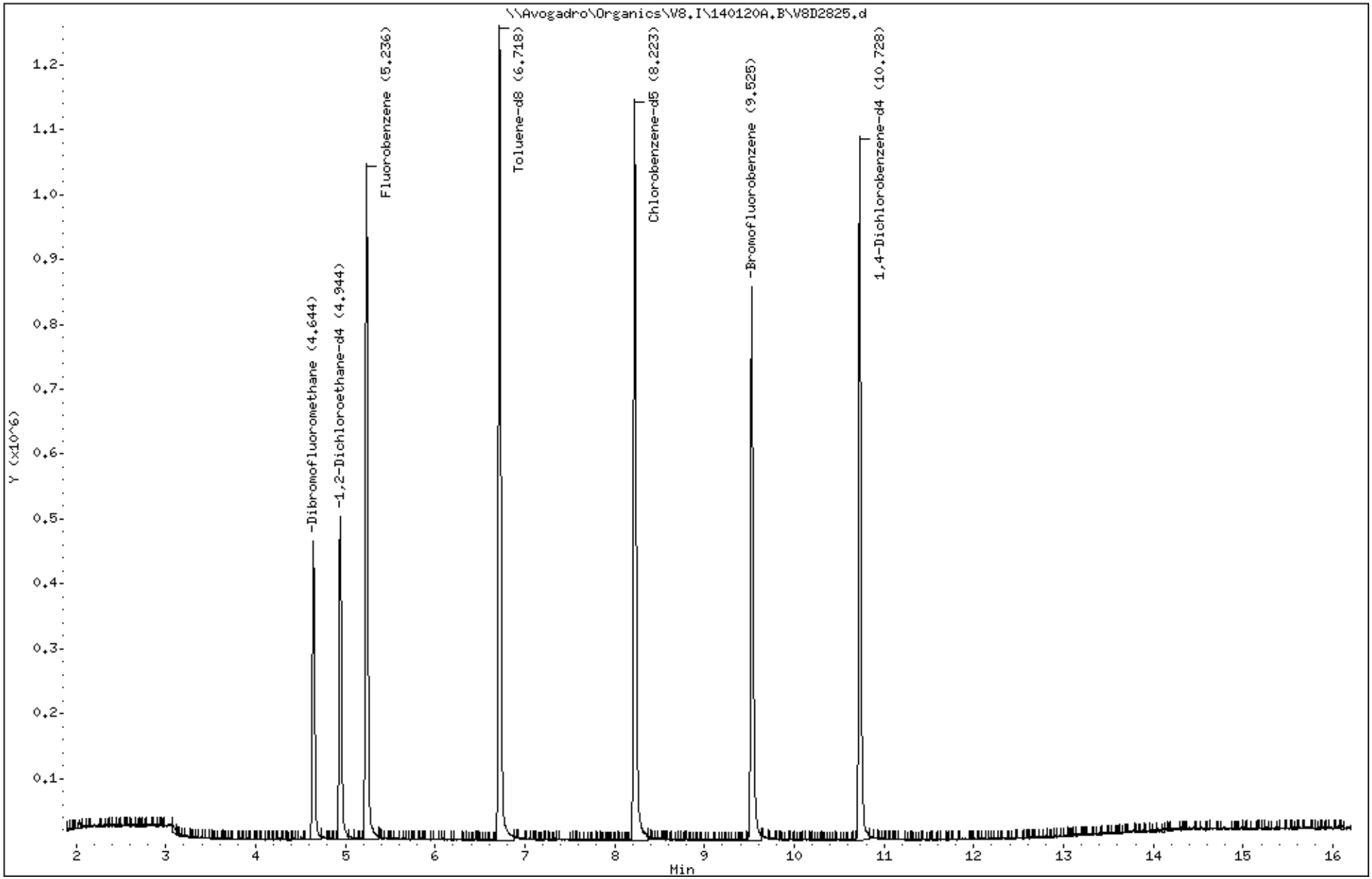
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2825.d
Lab Smp Id: N0060-09A Client Smp ID: HW-WET-WS-10-(1)_01
Inj Date : 20-JAN-2014 21:07
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-09A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2825.d
Date : 20-JAN-2014 21:07
Client ID: HW-WET-WS-10-(1)_01
Instrument: V8.i
Sample Info: 5ML,N0060-09A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-9-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2826.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

HW-WET-WS-9-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2826.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2826.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2826.d
Lab Smp Id: N0060-10A Client Smp ID: HW-WET-WS-9-(1)_01/
Inj Date : 20-JAN-2014 21:34
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-10A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.641	4.644	(0.886)	255736	50.2452	50
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	51575	50.7758	51
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	812866	50.0000	
$ 58 Toluene-d8	98	6.715	6.715	(0.817)	819438	49.6621	50
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	691705	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.522	(1.158)	307898	46.4260	46
* 92 1,4-Dichlorobenzene-d4	152	10.728	10.724	(1.000)	314727	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2826.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

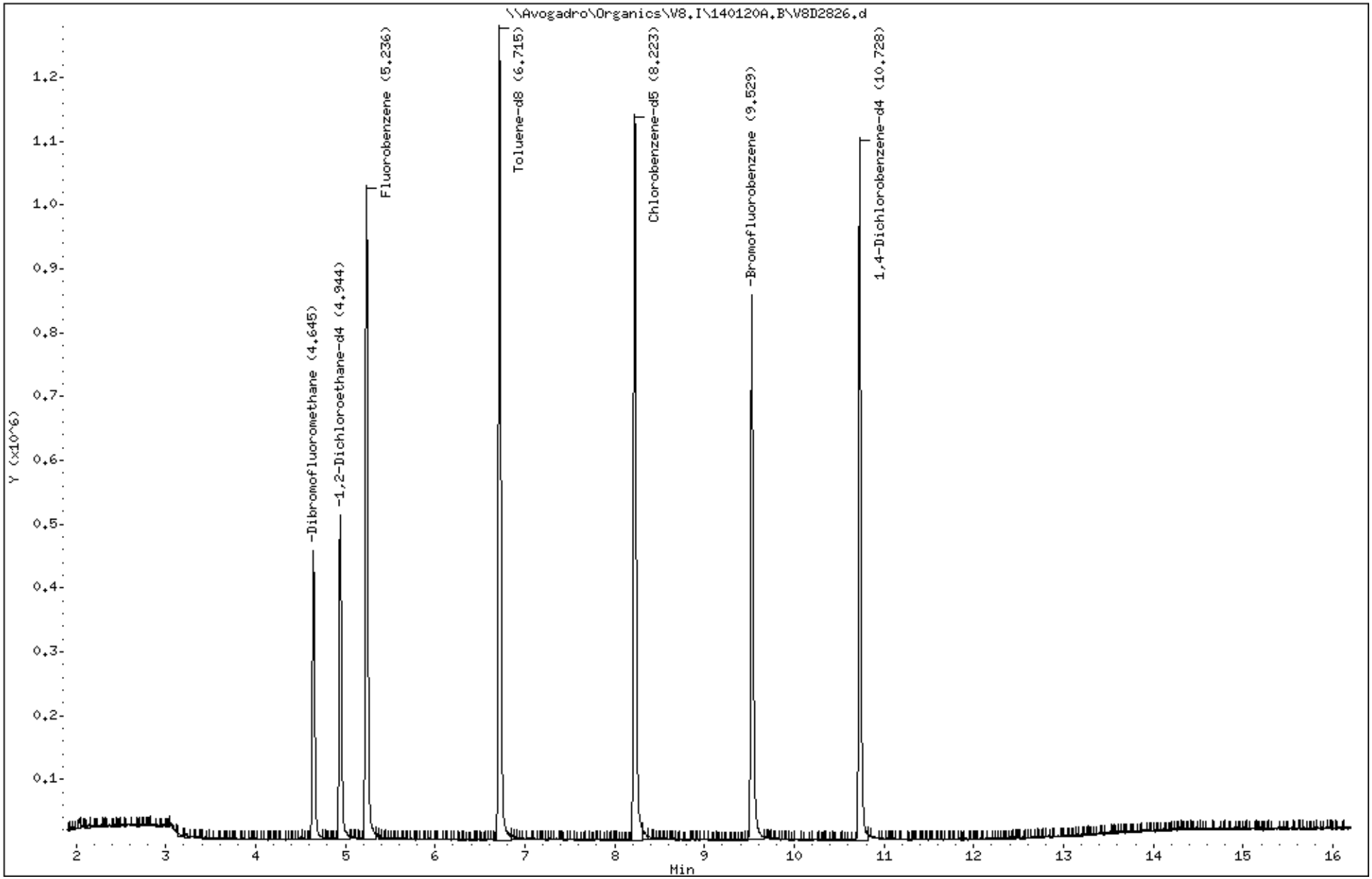
Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2826.d
Lab Smp Id: N0060-10A Client Smp ID: HW-WET-WS-9-(1)_01/
Inj Date : 20-JAN-2014 21:34
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-10A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2826.d
Date : 20-JAN-2014 21:34
Client ID: HW-WET-WS-9-(1)_01/
Sample Info: 5ML,N0060-10A,,75646
Purge Volume: 5.0
Column phase: DB-624

Instrument: V8.i
Operator: ALM SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-8-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2827.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

HW-WET-WS-8-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2827.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2827.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2827.d
Lab Smp Id: N0060-11A Client Smp ID: HW-WET-WS-8-(1)_01/
Inj Date : 20-JAN-2014 22:01
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-11A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.644	4.644	(0.887)	256033	49.9660	50
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	50054	48.9477	49
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	818358	50.0000	
$ 58 Toluene-d8	98	6.715	6.715	(0.817)	818871	50.1518	50
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	684476	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.522	(1.158)	301490	45.9399	46
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	315189	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2827.d
Report Date: 29-Jan-2014 14:45

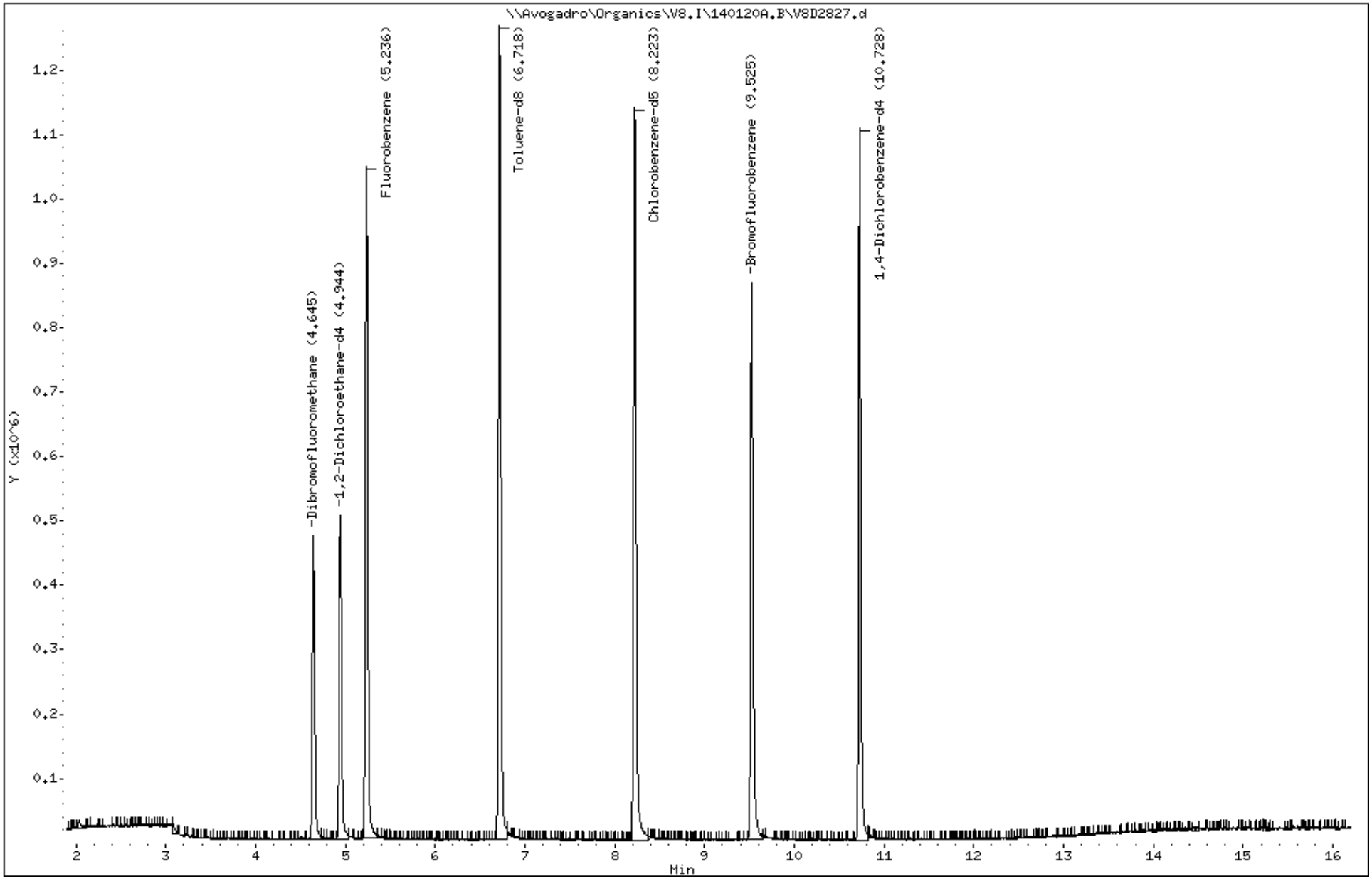
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2827.d
Lab Smp Id: N0060-11A Client Smp ID: HW-WET-WS-8-(1)_01/
Inj Date : 20-JAN-2014 22:01
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-11A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2827.d
Date : 20-JAN-2014 22:01
Client ID: HW-WET-WS-8-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-11A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SUMP 2_01/16/13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2828.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	0.85	J
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	6.5	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	20	
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	250	E
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	130	
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

EPA SAMPLE NO.

SUMP 2_01/16/13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2828.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	97	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d
Lab Smp Id: N0060-12A Client Smp ID: SUMP 2_01/16/13
Inj Date : 20-JAN-2014 22:28
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-12A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
4	Vinyl Chloride	62	1.853	1.856	(0.354)	5309	0.85367	0.85(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	504656	97.3986	97
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	68538	6.47983	6.5
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	104417	20.2135	20(Q)
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	253397	49.5776	50
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	2247775	249.177	250(A)
$ 42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	50992	49.9921	50
M 50	1,2-Dichloroethene (Total)	96				104417	20.2135	20
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	816277	50.0000	
47	Trichloroethene	130	5.564	5.567	(1.063)	717292	129.508	130
$ 58	Toluene-d8	98	6.718	6.715	(0.817)	805722	49.3148	49
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	684916	50.0000	
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.158)	310205	47.2374	47
* 92	1,4-Dichlorobenzene-d4	152	10.728	10.724	(1.000)	313799	50.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d
Report Date: 29-Jan-2014 14:45

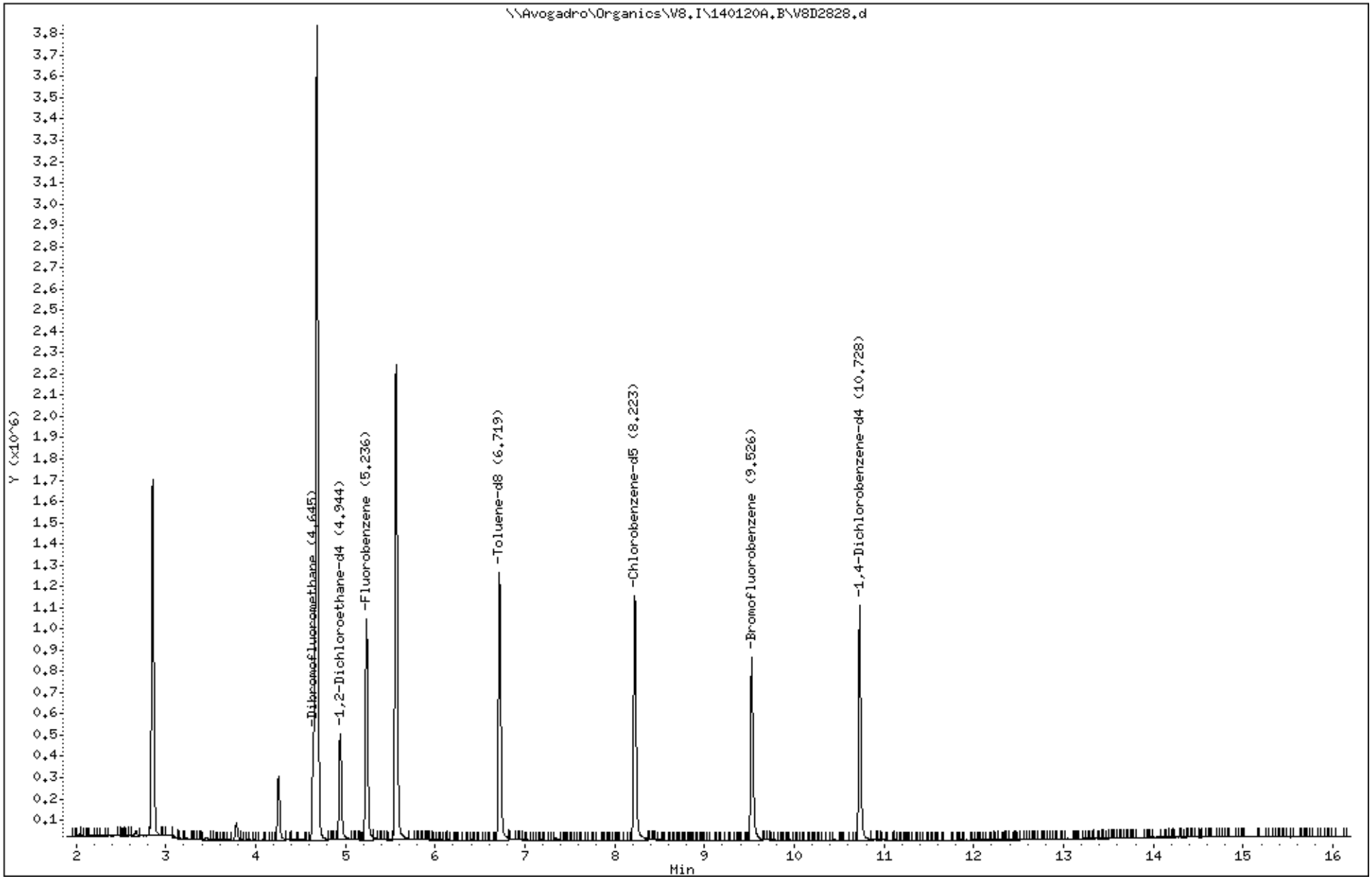
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

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Inj Date : 20-JAN-2014 22:28
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-12A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d
Date : 20-JAN-2014 22:28
Client ID: SUMP 2_01/16/13
Instrument: V8.i
Sample Info: 5ML,N0060-12A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d

Date : 20-JAN-2014 22:28

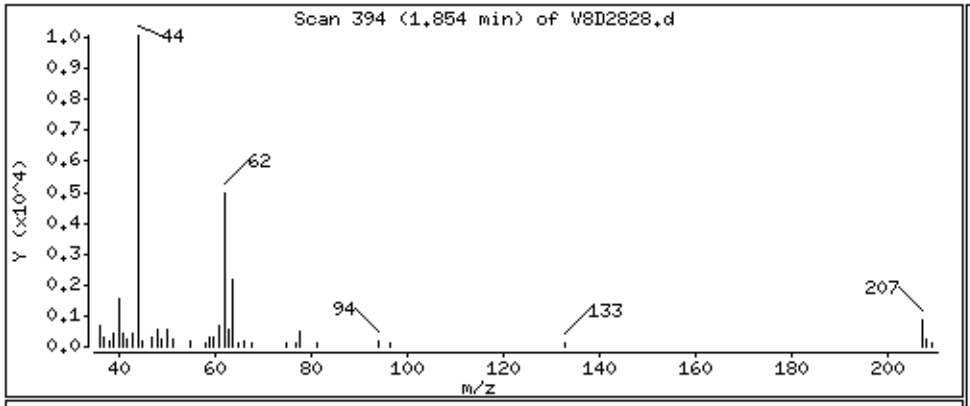
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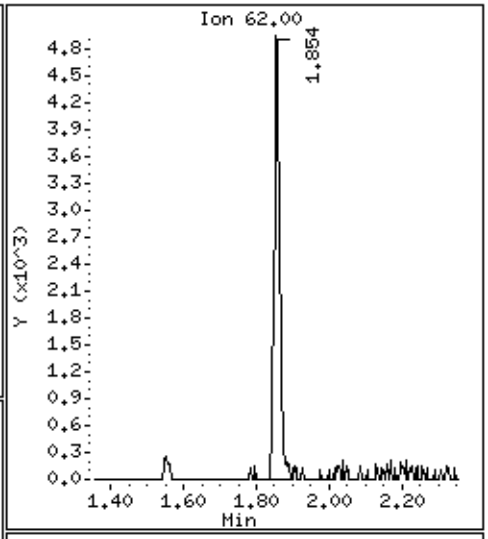
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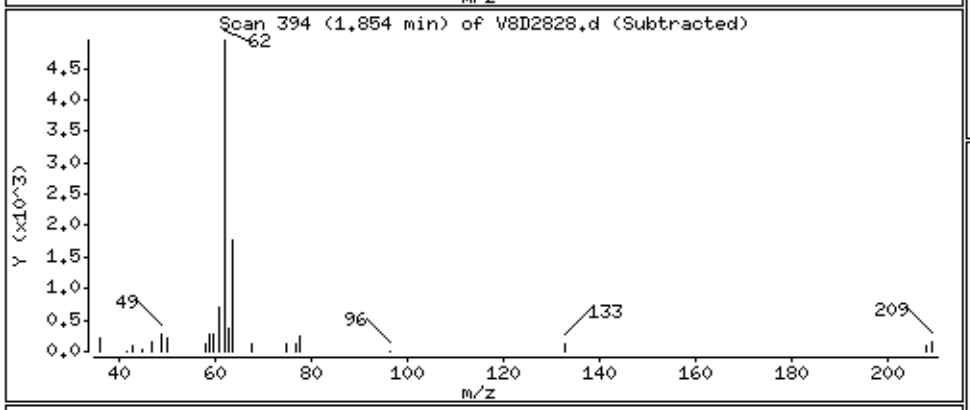
Purge Volume: 5.0 Operator: ALM SRC: LIMS

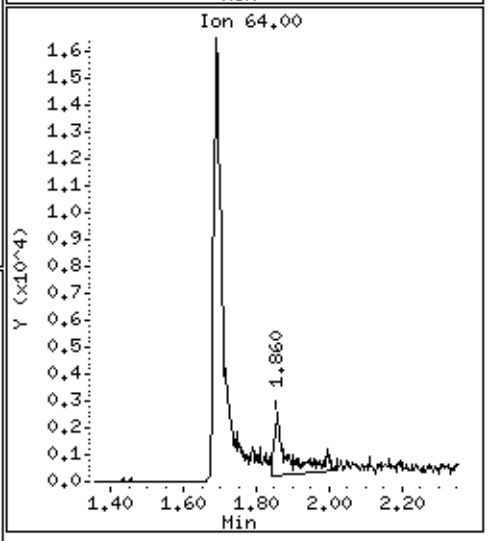
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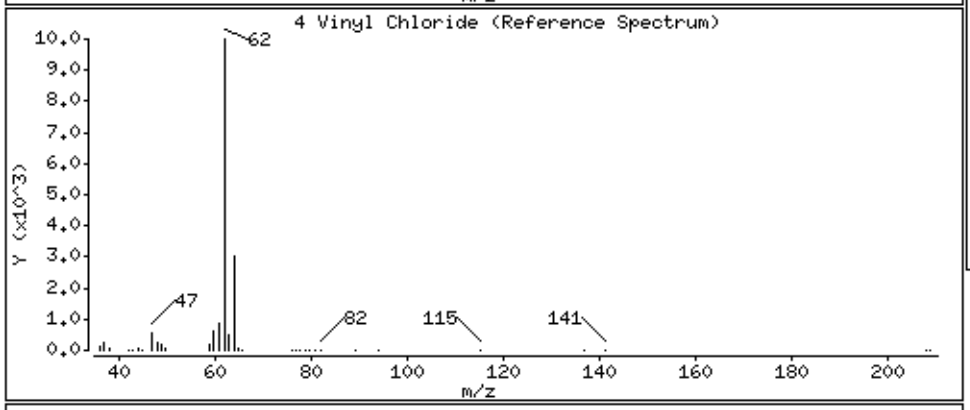
4 Vinyl Chloride Concentration: 0.85 ug/L

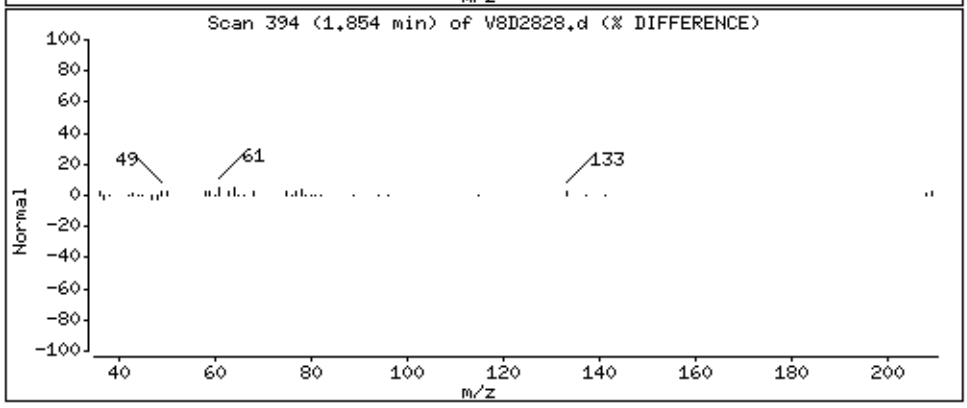












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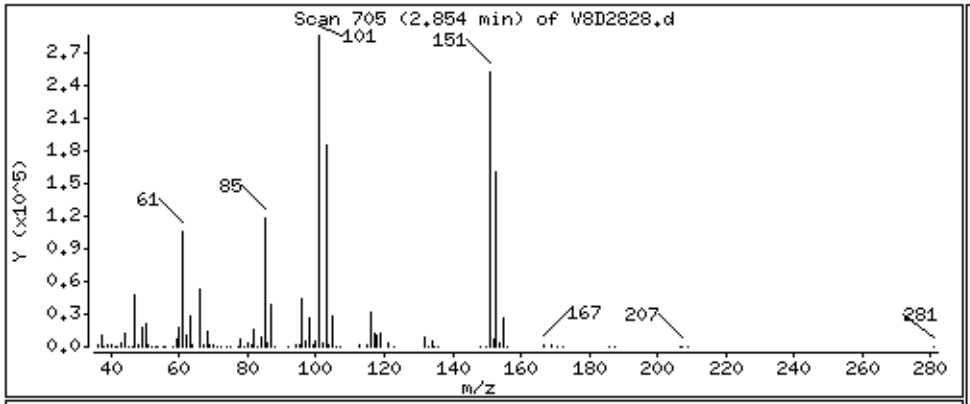
Client ID: SUMP 2_01/16/13 Instrument: V8.i

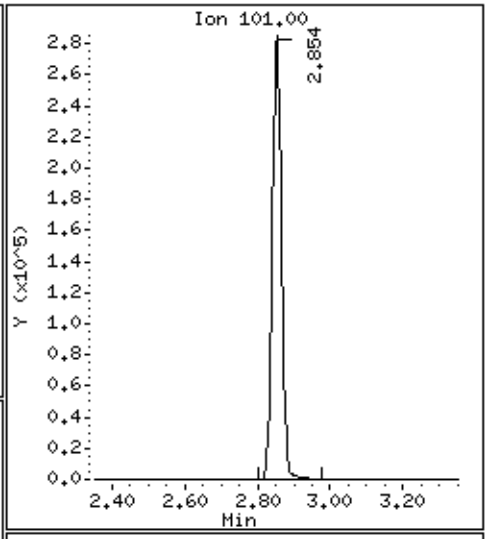
Sample Info: 5ML,N0060-12A,,75646

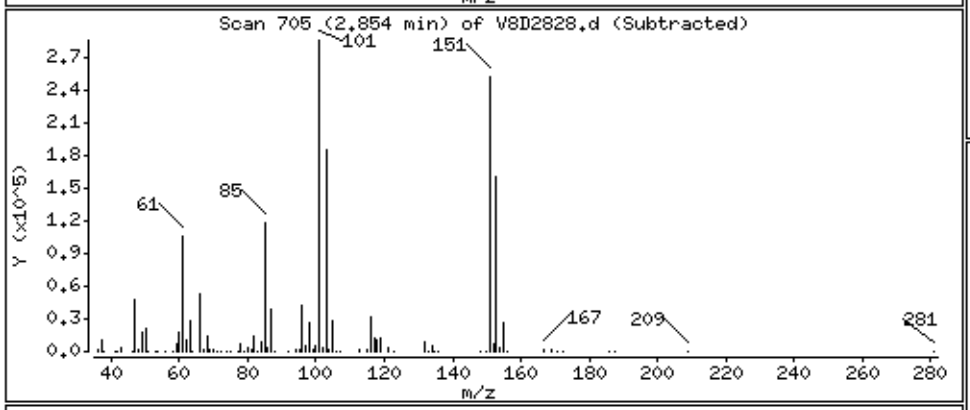
Purge Volume: 5.0 Operator: ALM SRC: LIMS

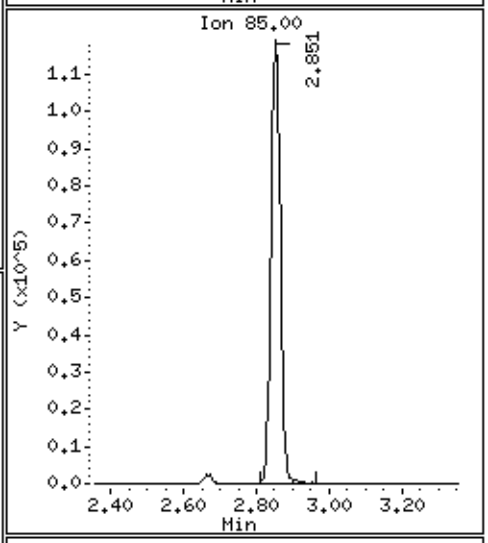
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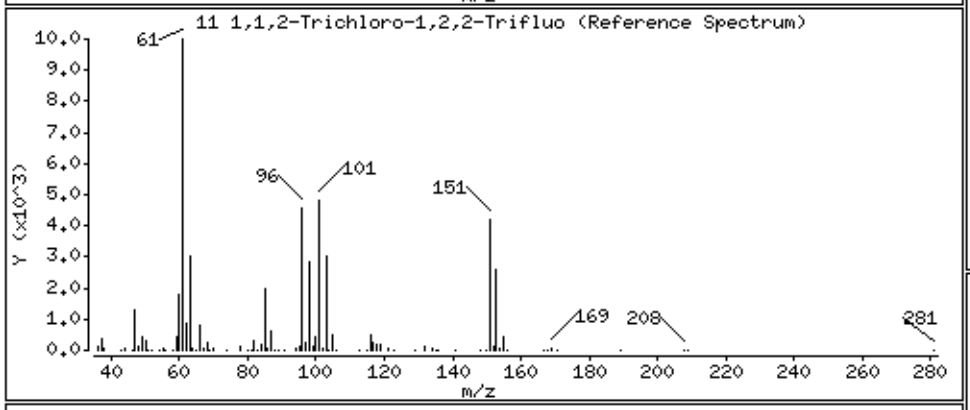
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 97 ug/L

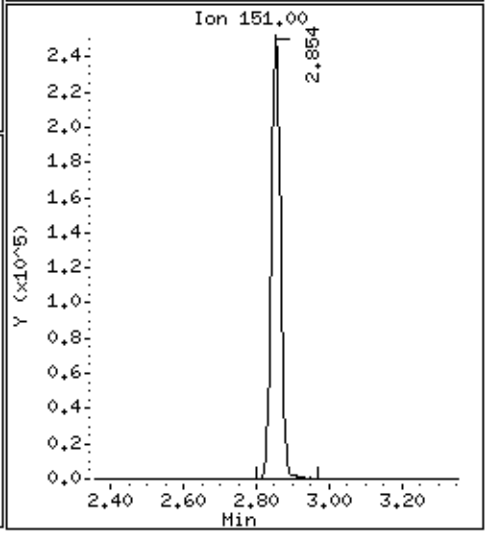


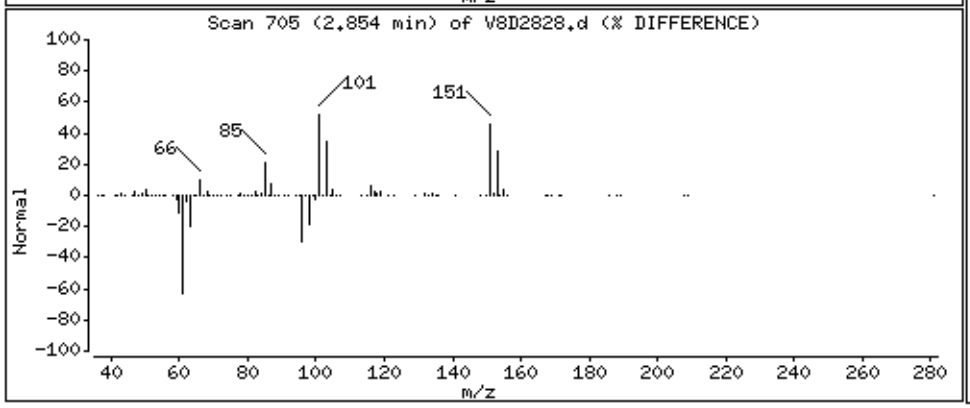












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d

Date : 20-JAN-2014 22:28

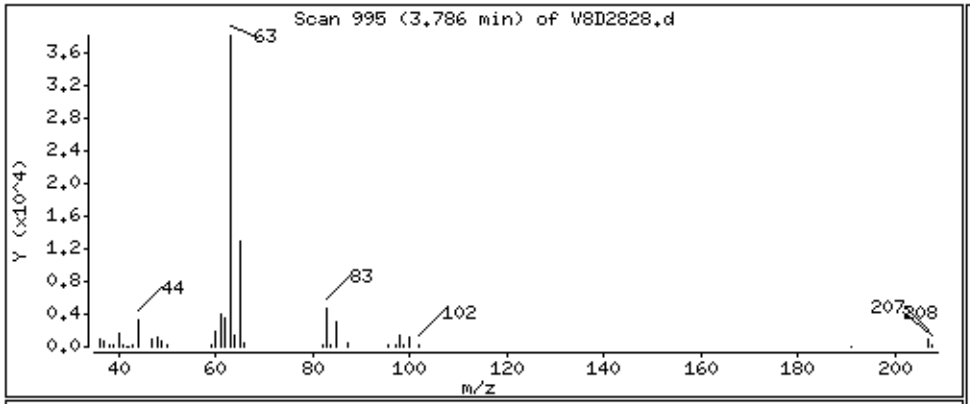
Client ID: SUMP 2_01/16/13 Instrument: V8.i

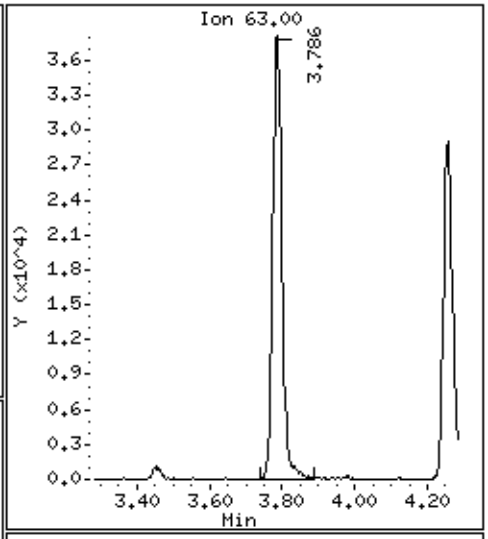
Sample Info: 5ML,N0060-12A,,75646

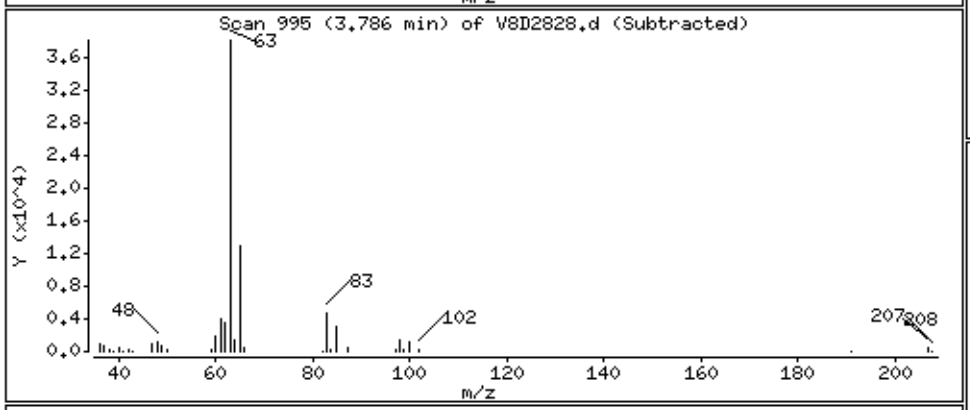
Purge Volume: 5.0 Operator: ALM SRC: LIMS

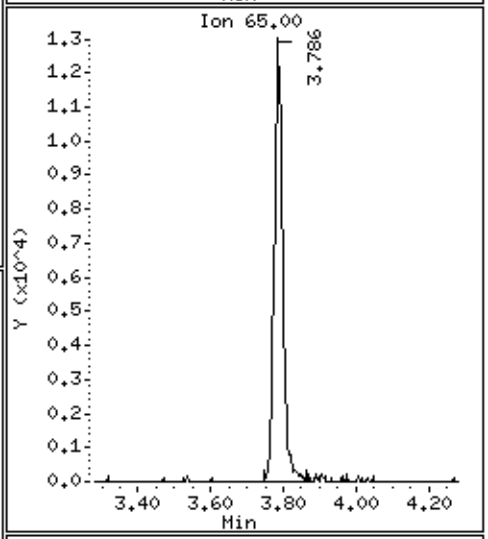
Column phase: DB-624 Column diameter: 0.25

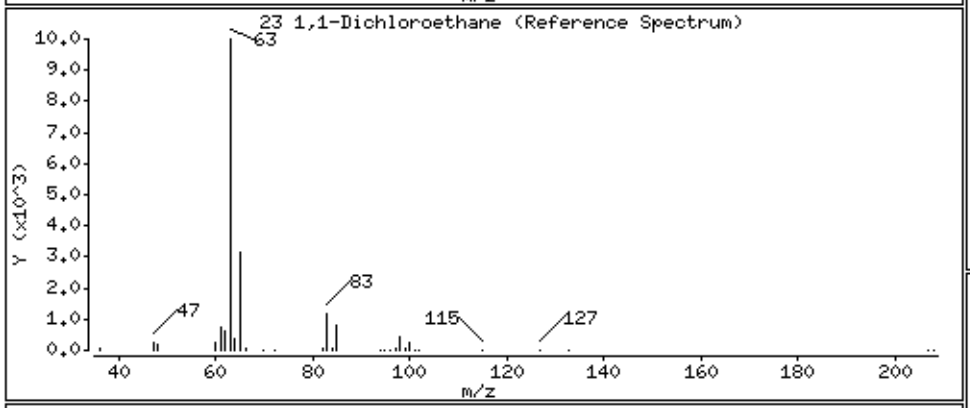
23 1,1-Dichloroethane Concentration: 6.5 ug/L

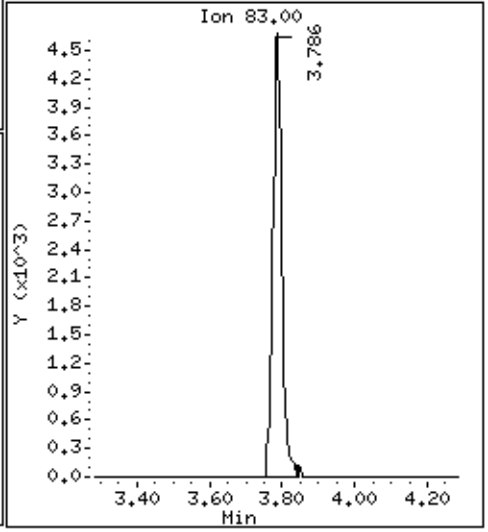


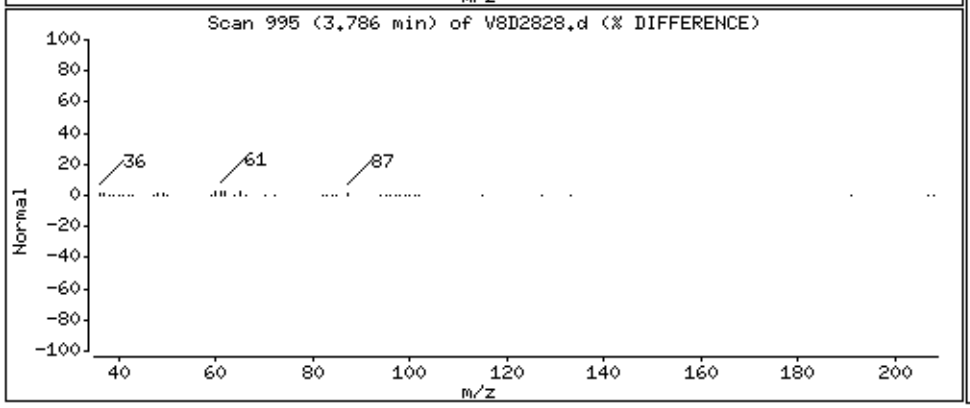












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d

Date : 20-JAN-2014 22:28

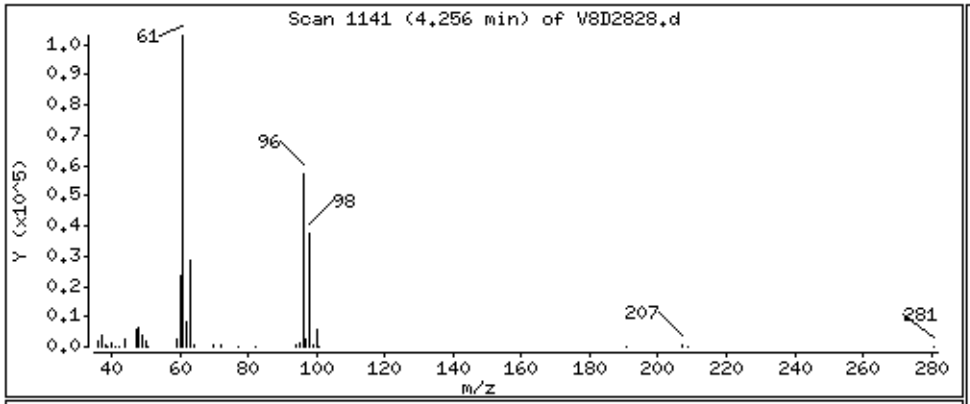
Client ID: SUMP 2_01/16/13 Instrument: V8.i

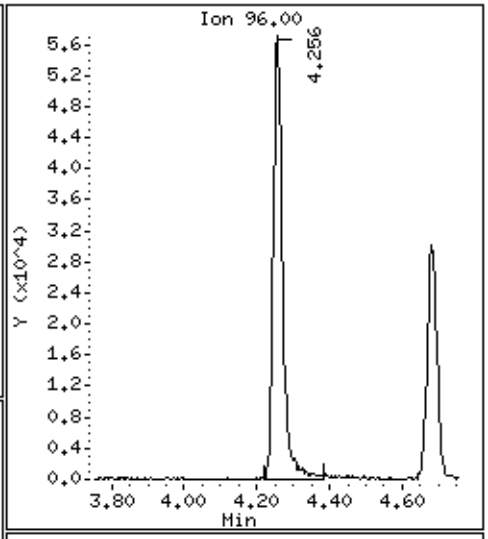
Sample Info: 5ML,N0060-12A,,75646

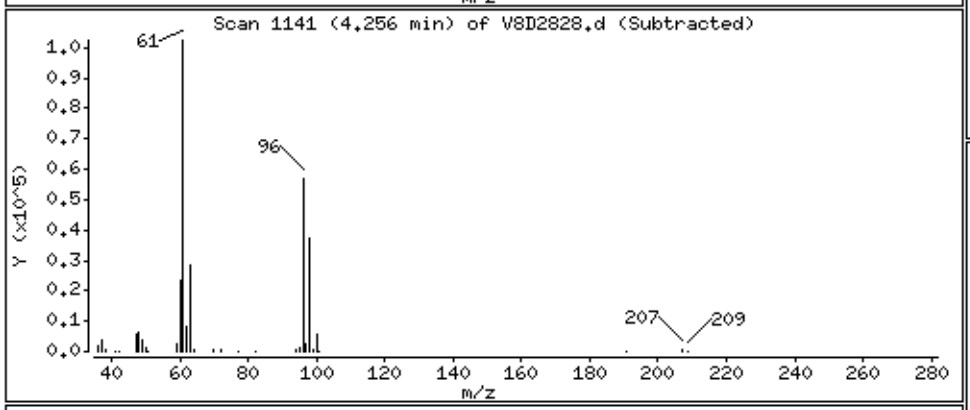
Purge Volume: 5.0 Operator: ALM SRC: LIMS

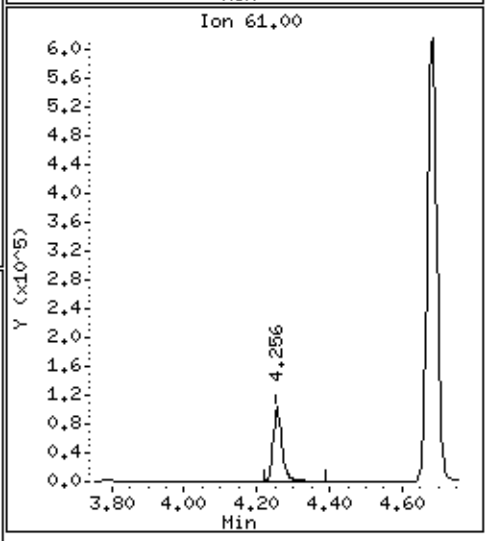
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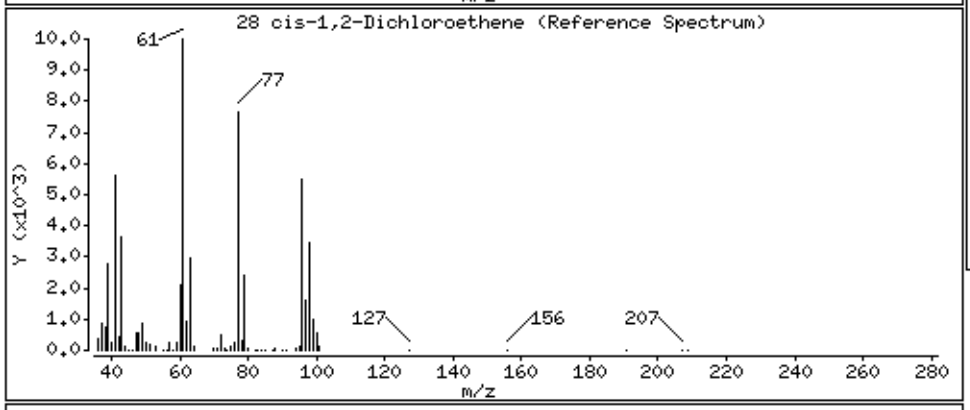
28 cis-1,2-Dichloroethene Concentration: 20 ug/L

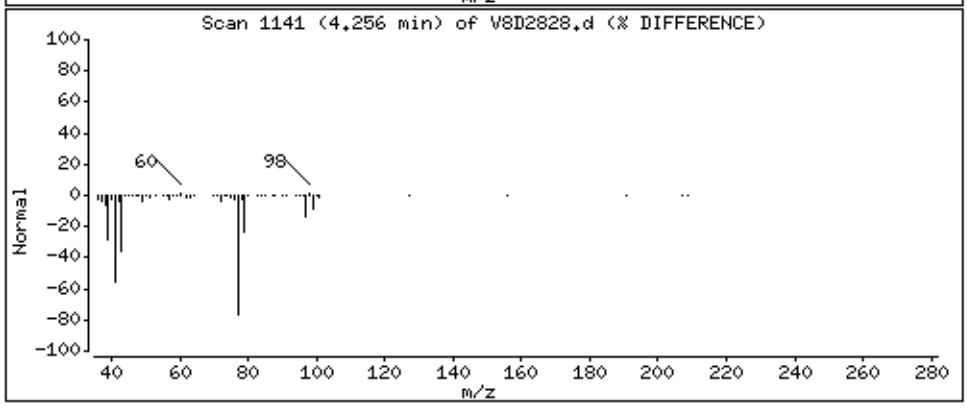












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d

Date : 20-JAN-2014 22:28

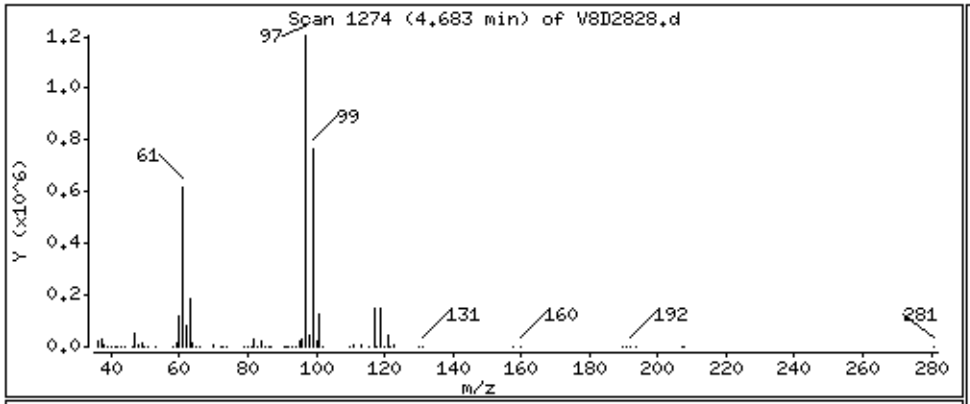
Client ID: SUMP 2_01/16/13 Instrument: V8.i

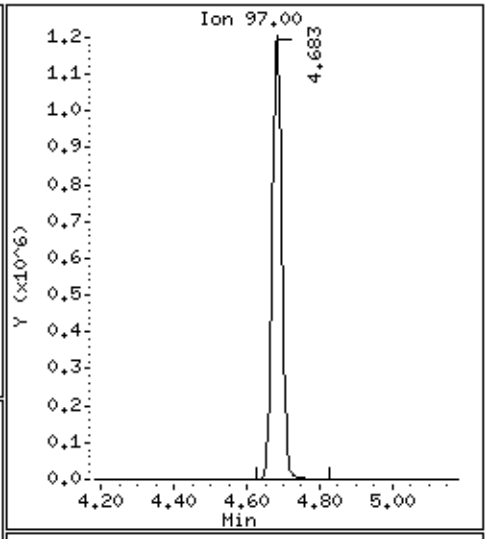
Sample Info: 5ML,N0060-12A,,75646

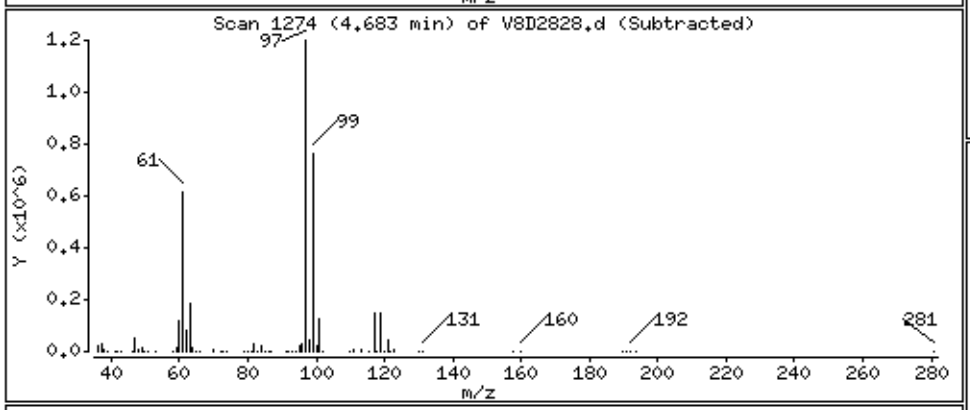
Purge Volume: 5.0 Operator: ALM SRC: LIMS

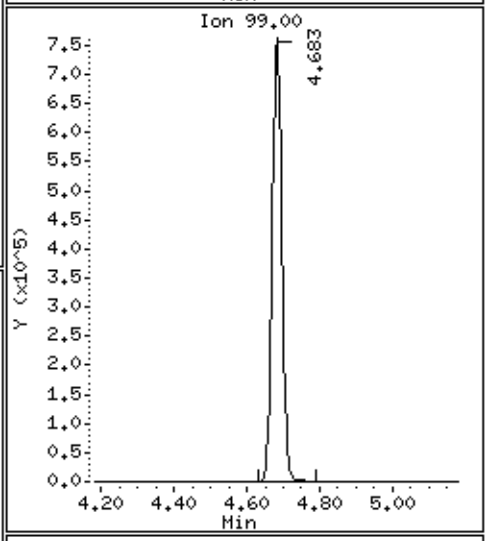
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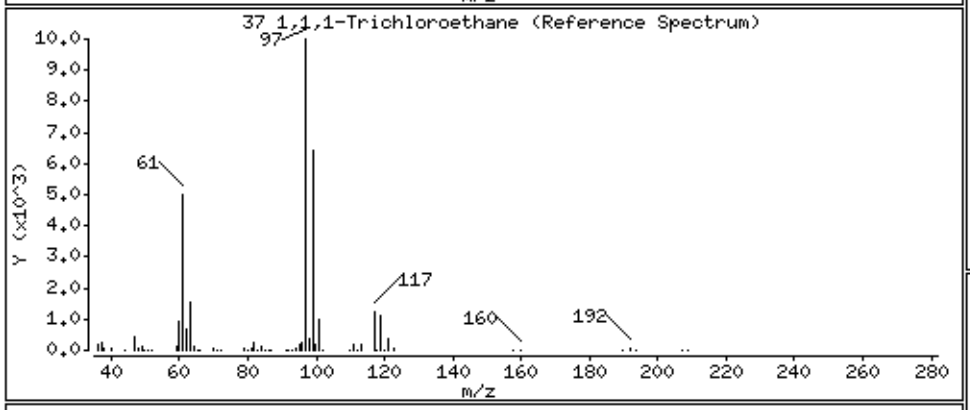
37 1,1,1-Trichloroethane Concentration: 250 ug/L

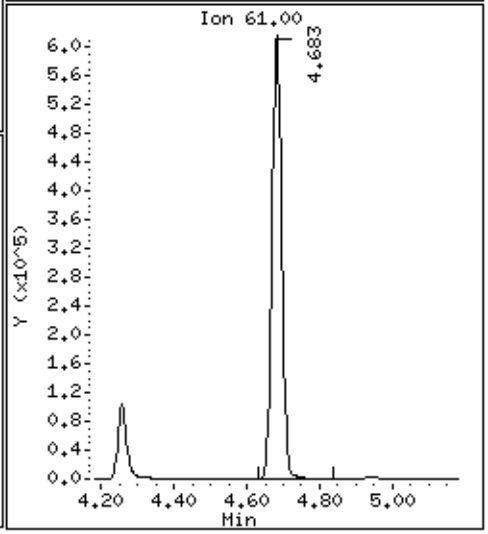


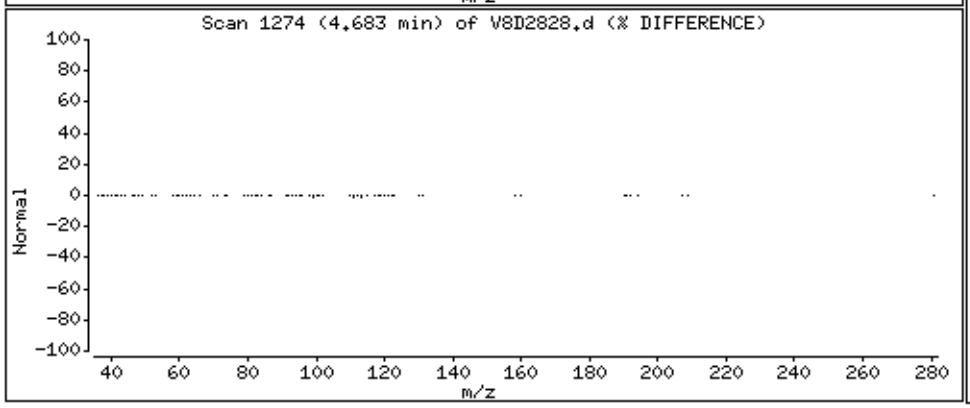












Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2828.d

Date : 20-JAN-2014 22:28

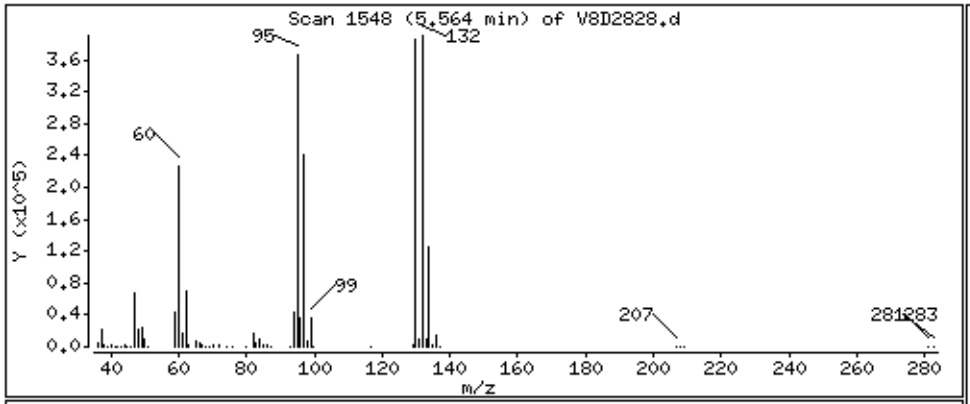
Client ID: SUMP 2_01/16/13 Instrument: V8.i

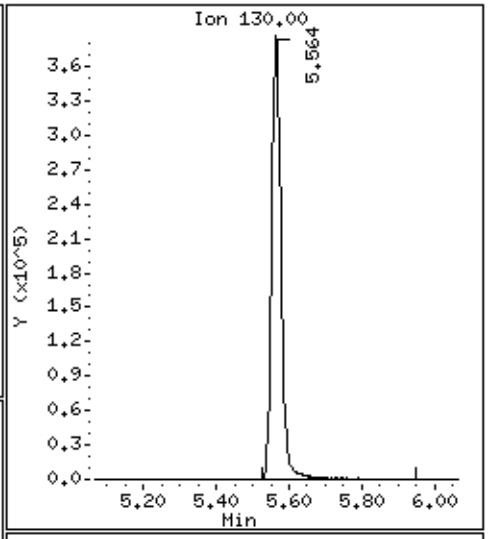
Sample Info: 5ML,N0060-12A,,75646

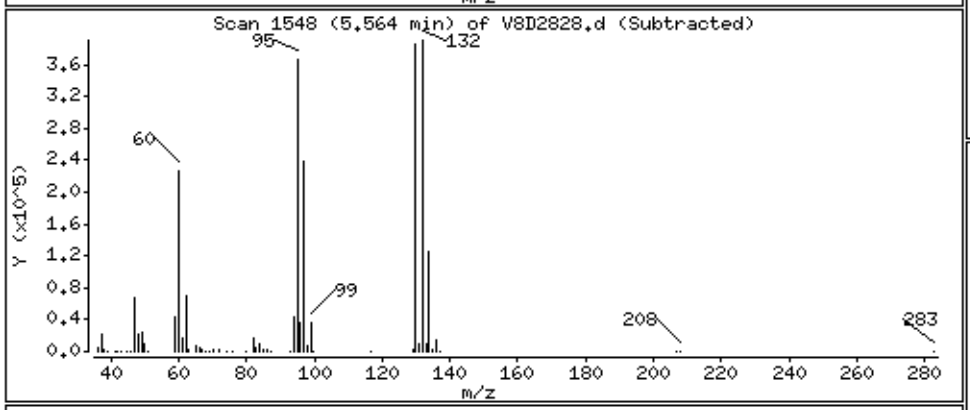
Purge Volume: 5.0 Operator: ALM SRC: LIMS

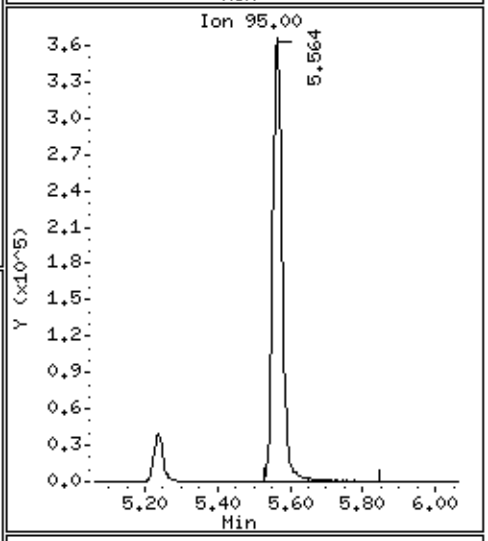
Column phase: DB-624 Column diameter: 0.25

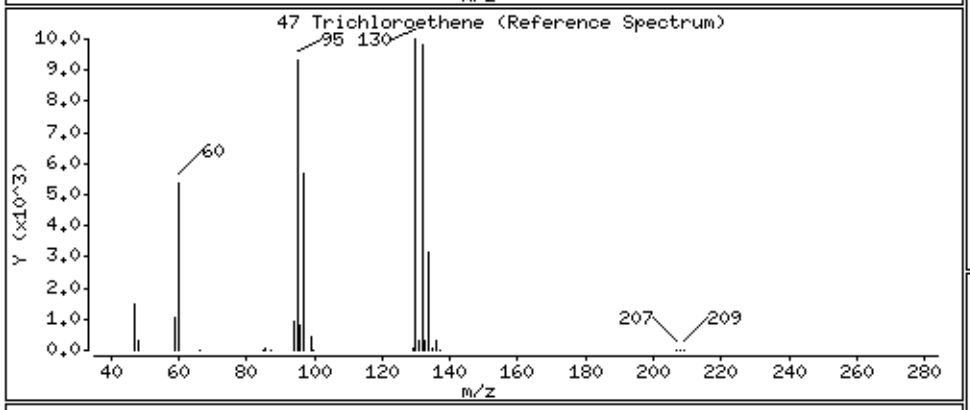
47 Trichloroethene Concentration: 130 ug/L

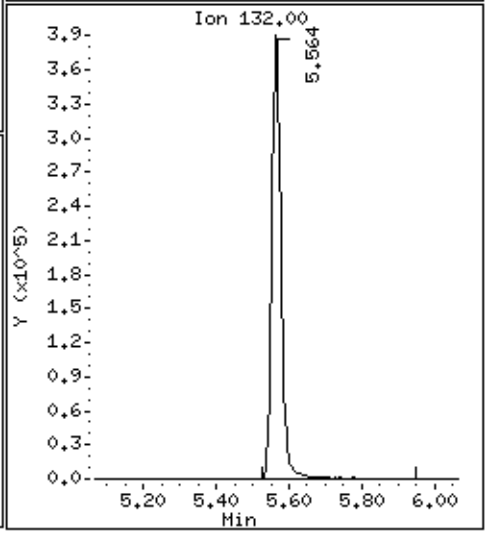


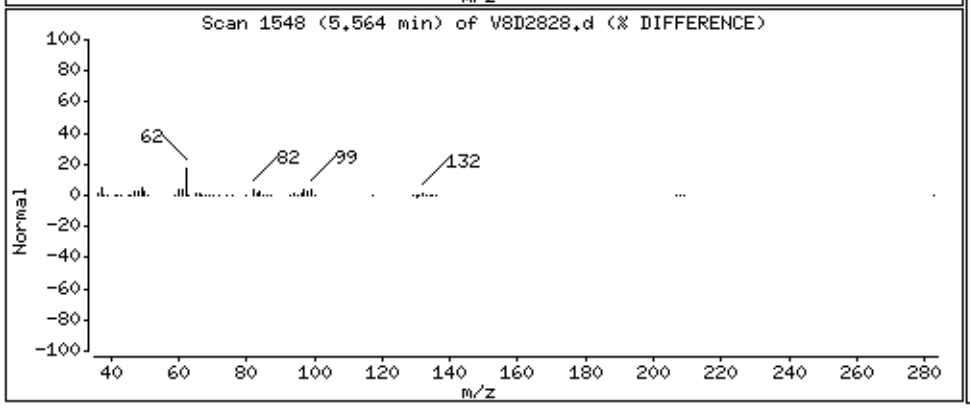












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SUMP 2_01/16/13DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2851.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
67-64-1	Acetone	10	U
74-88-4	Iodomethane	2.0	U
75-15-0	Carbon disulfide	2.0	U
75-09-2	Methylene chloride	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
1634-04-4	Methyl tert-butyl ether	2.0	U
75-34-3	1,1-Dichloroethane	6.0	D
108-05-4	Vinyl acetate	2.0	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	18	D
594-20-7	2,2-Dichloropropane	2.0	U
74-97-5	Bromochloromethane	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	230	D
563-58-6	1,1-Dichloropropene	2.0	U
56-23-5	Carbon tetrachloride	2.0	U
107-06-2	1,2-Dichloroethane	2.0	U
71-43-2	Benzene	2.0	U
79-01-6	Trichloroethene	120	D
78-87-5	1,2-Dichloropropane	2.0	U
74-95-3	Dibromomethane	2.0	U
75-27-4	Bromodichloromethane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	2.0	U
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
142-28-9	1,3-Dichloropropane	2.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SUMP 2_01/16/13DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2851.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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	2.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
108-90-7	Chlorobenzene	2.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U
100-41-4	Ethylbenzene	2.0	U
179601-23-1	m,p-Xylene	2.0	U
95-47-6	o-Xylene	2.0	U
1330-20-7	Xylene (Total)	2.0	U
100-42-5	Styrene	2.0	U
75-25-2	Bromoform	2.0	U
98-82-8	Isopropylbenzene	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
108-86-1	Bromobenzene	2.0	U
96-18-4	1,2,3-Trichloropropane	2.0	U
103-65-1	n-Propylbenzene	2.0	U
95-49-8	2-Chlorotoluene	2.0	U
108-67-8	1,3,5-Trimethylbenzene	2.0	U
106-43-4	4-Chlorotoluene	2.0	U
98-06-6	tert-Butylbenzene	2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.0	U
135-98-8	sec-Butylbenzene	2.0	U
99-87-6	4-Isopropyltoluene	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
104-51-8	n-Butylbenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U
87-68-3	Hexachlorobutadiene	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U
91-20-3	Naphthalene	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	88	D

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d
Report Date: 29-Jan-2014 14:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2851.d
Lab Smp Id: N0060-12ADL Client Smp ID: SUMP 2_01/16/13DL
Inj Date : 21-JAN-2014 13:16
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-12ADL,,75652,2
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

Name	Value	Description
DF	2.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	225275	44.1801	88
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	31193	2.99672	6.0
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	45901	9.02918	18
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	249424	49.5883	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	1030343	116.063	230
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	49392	49.2054	49
M	50 1,2-Dichloroethene (Total)	96				45901	9.02918	18
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	803306	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	325309	59.6832	120
$	58 Toluene-d8	98	6.718	6.715	(0.817)	793541	48.8855	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	680485	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	301161	46.1589	46
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	311322	50.0000	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d
Report Date: 29-Jan-2014 14:39

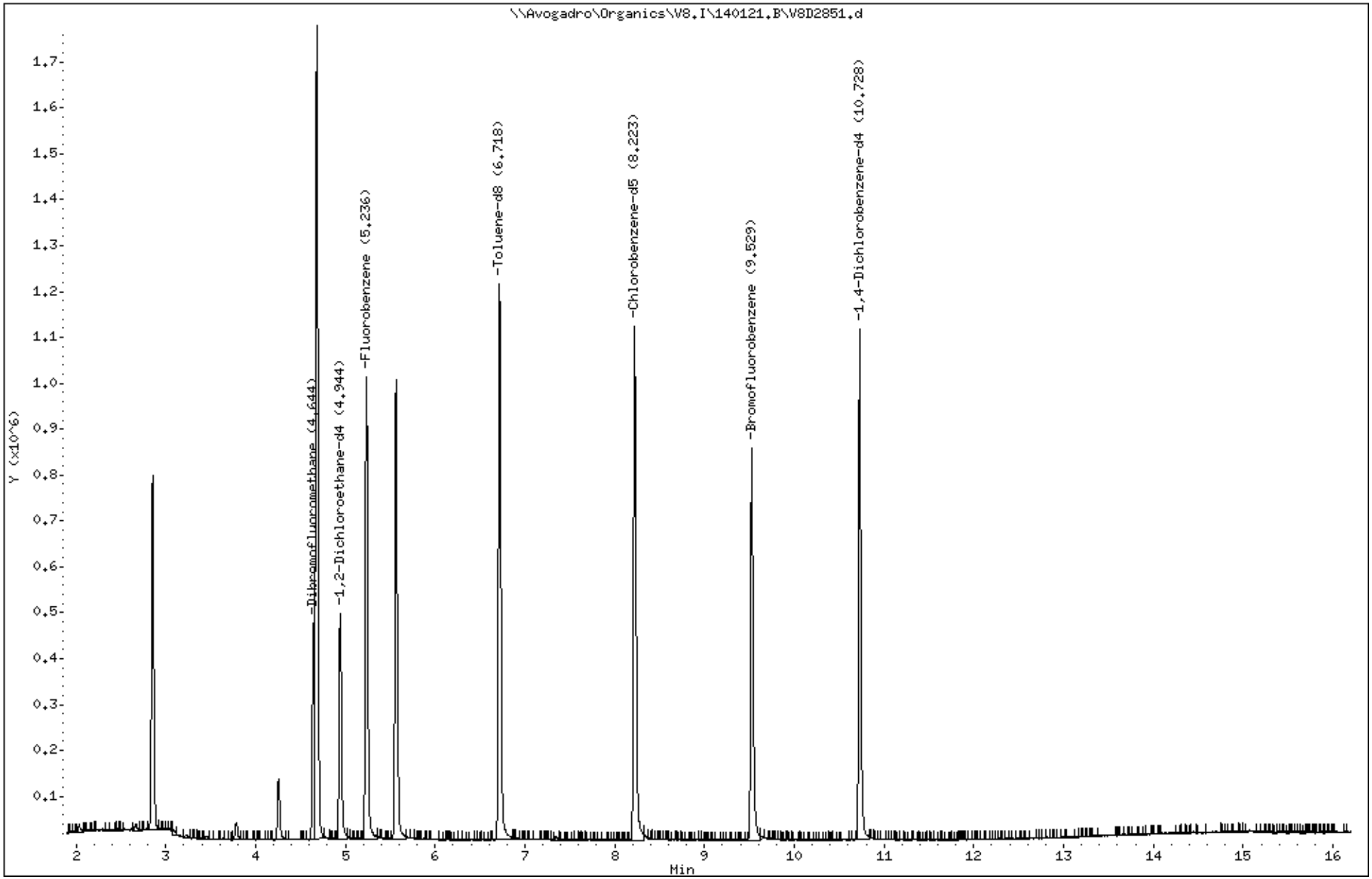
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2851.d
Lab Smp Id: N0060-12ADL Client Smp ID: SUMP 2_01/16/13DL
Inj Date : 21-JAN-2014 13:16
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-12ADL,,75652,2
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d
Date : 21-JAN-2014 13:16
Client ID: SUMP 2_01/16/13DL
Instrument: V8.i
Sample Info: 5ML,N0060-12ADL,,75652,2
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d

Date : 21-JAN-2014 13:16

Client ID: SUMP 2_01/16/13DL

Instrument: V8.i

Sample Info: 5ML,N0060-12ADL,,75652,2

Purge Volume: 5.0

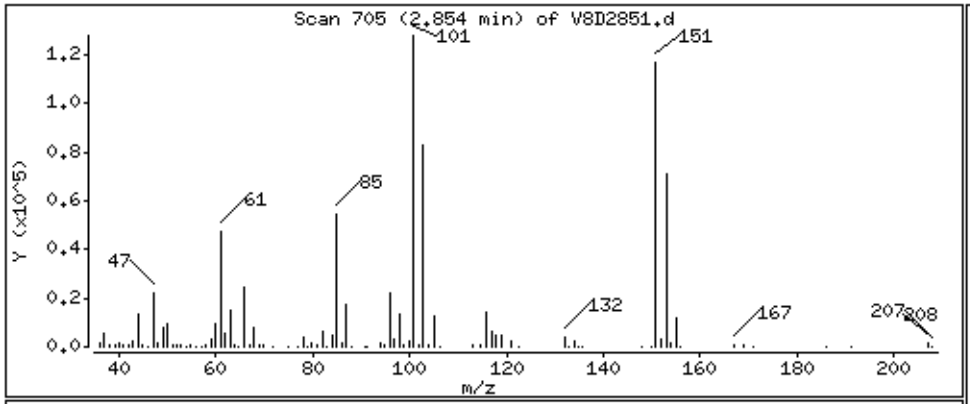
Operator: ALM SRC: LIMS

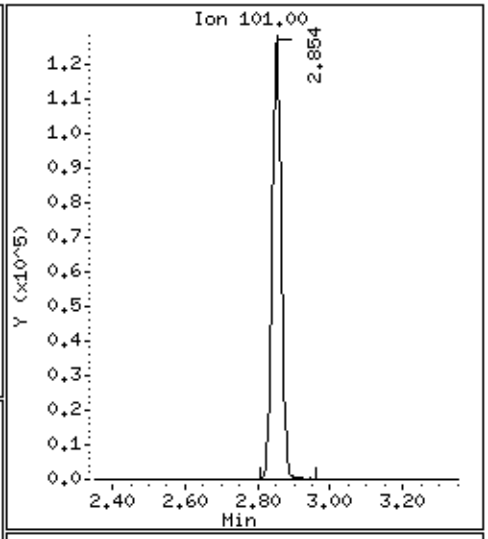
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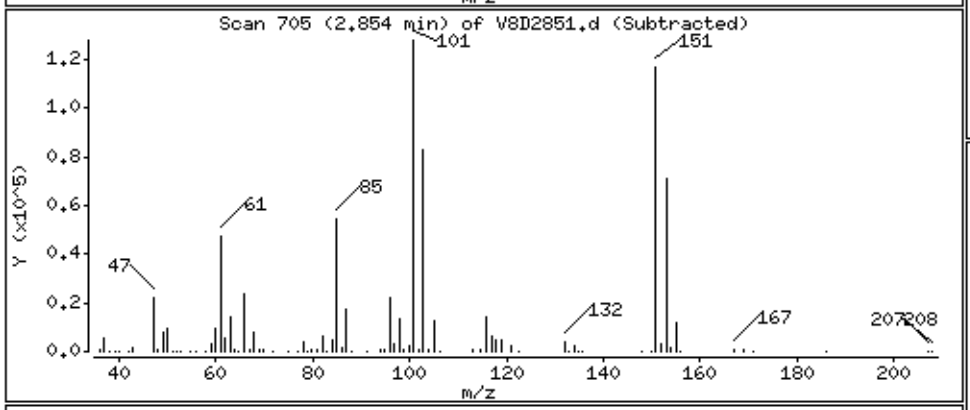
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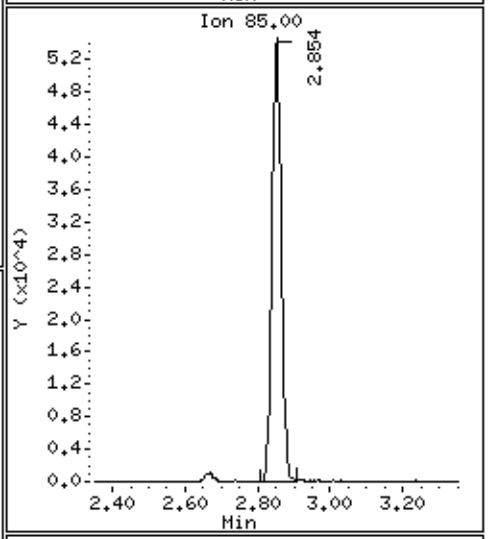
11 1,1,2-Trichloro-1,2,2-Trifluo

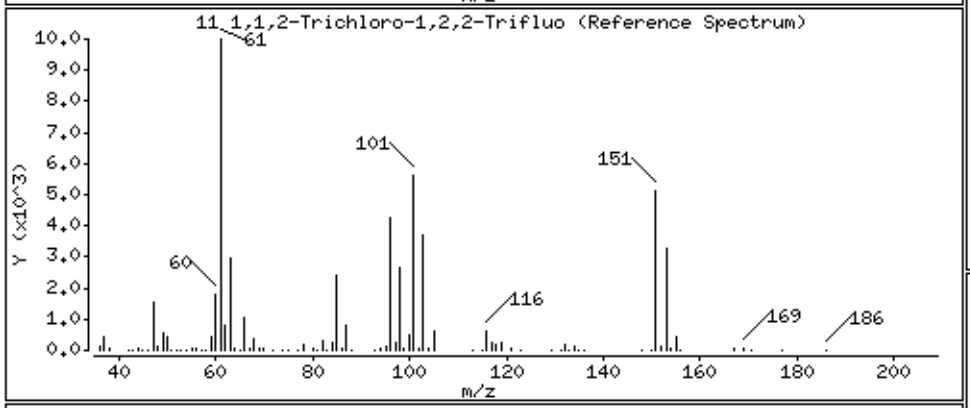
Concentration: 88 ug/L

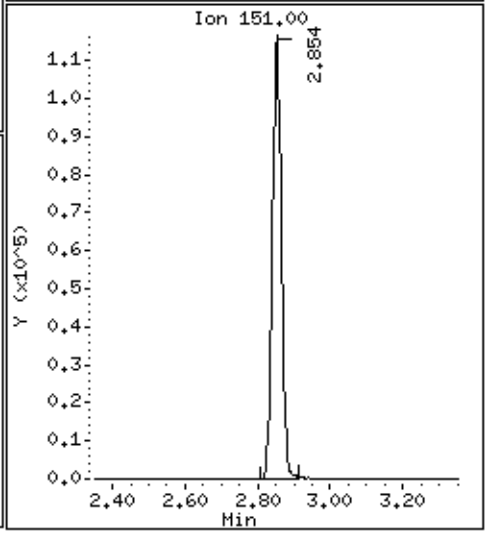


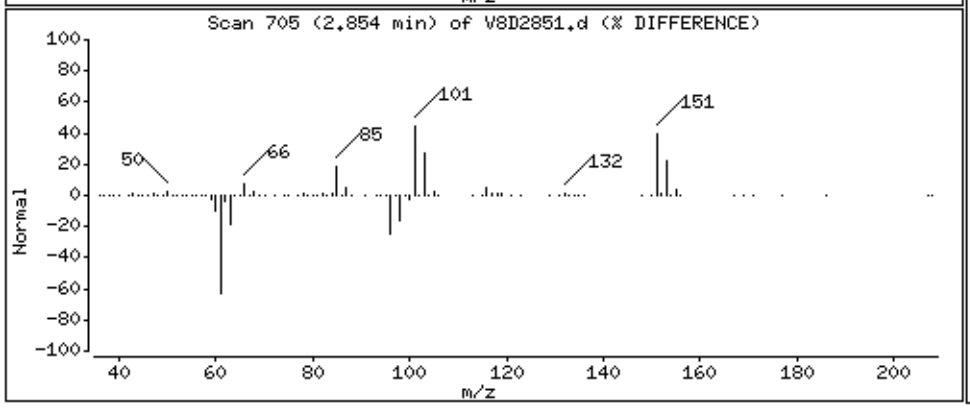












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d

Date : 21-JAN-2014 13:16

Client ID: SUMP 2_01/16/13DL

Instrument: V8.i

Sample Info: 5ML,N0060-12ADL,,75652,2

Purge Volume: 5.0

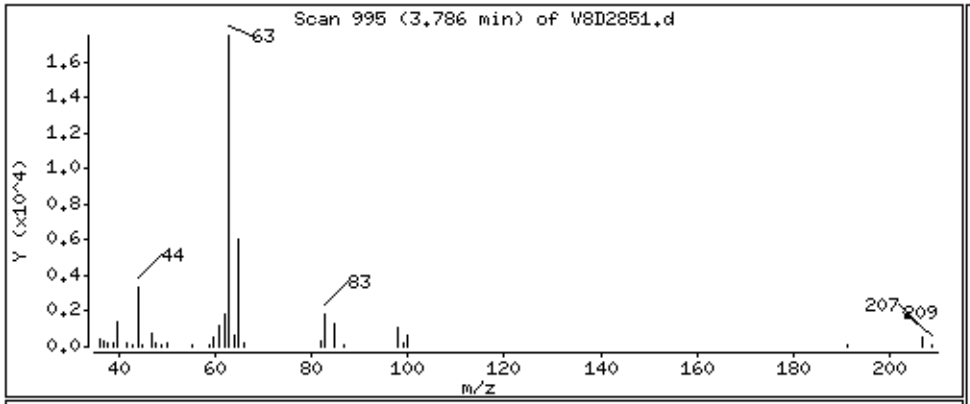
Operator: ALM SRC: LIMS

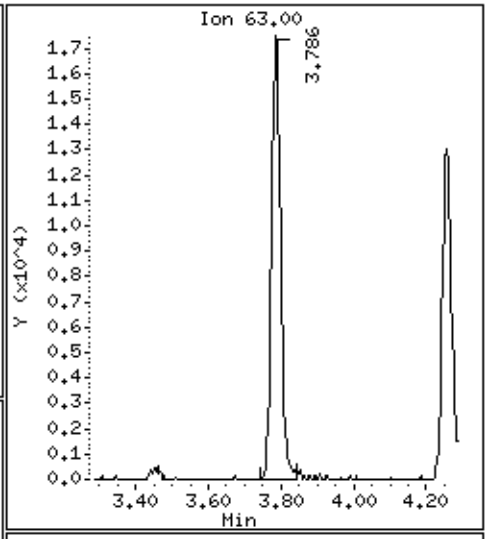
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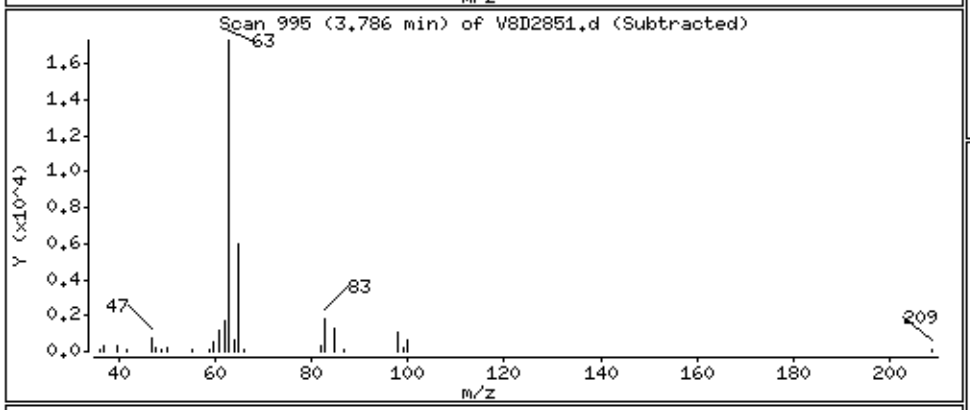
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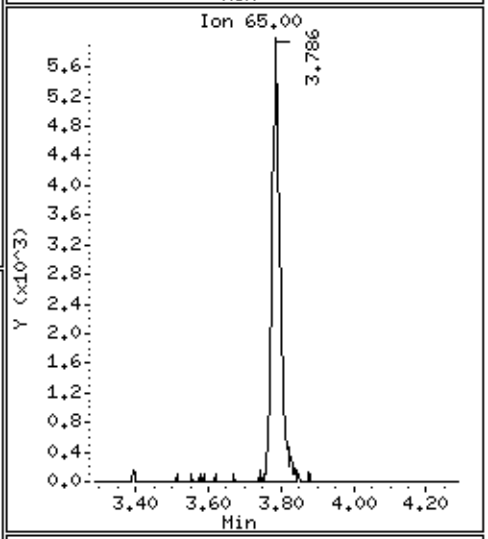
23 1,1-Dichloroethane

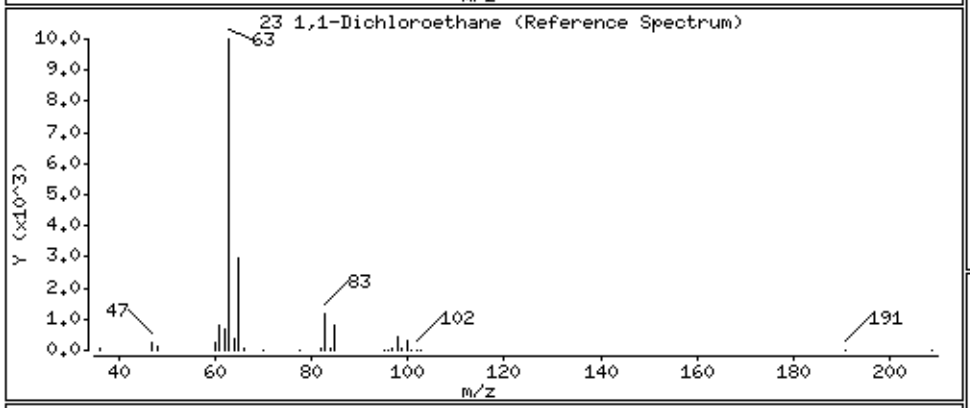
Concentration: 6.0 ug/L

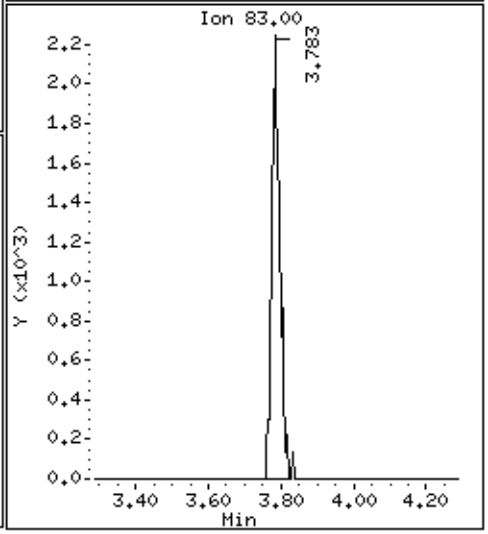


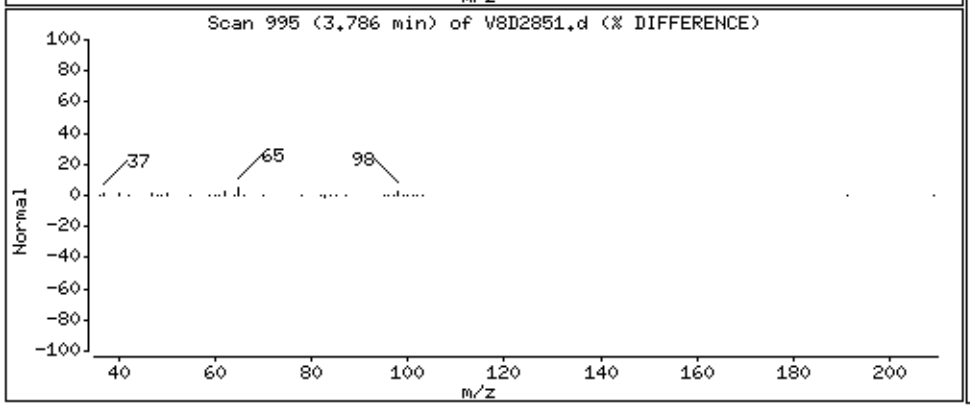












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d

Date : 21-JAN-2014 13:16

Client ID: SUMP 2_01/16/13DL

Instrument: V8.i

Sample Info: 5ML,N0060-12ADL,,75652,2

Purge Volume: 5.0

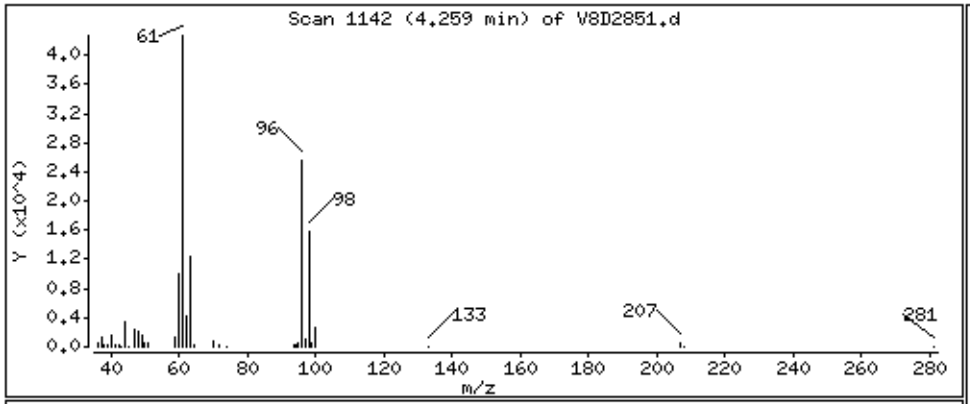
Operator: ALM SRC: LIMS

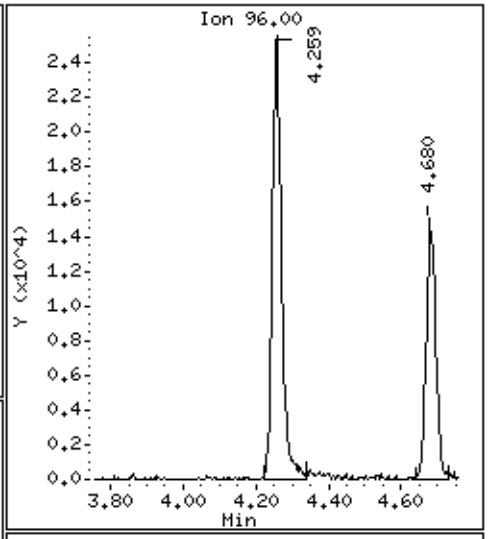
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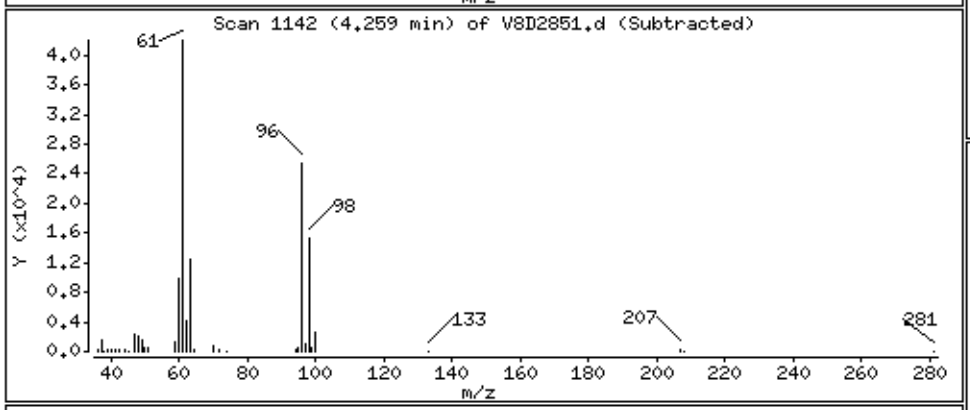
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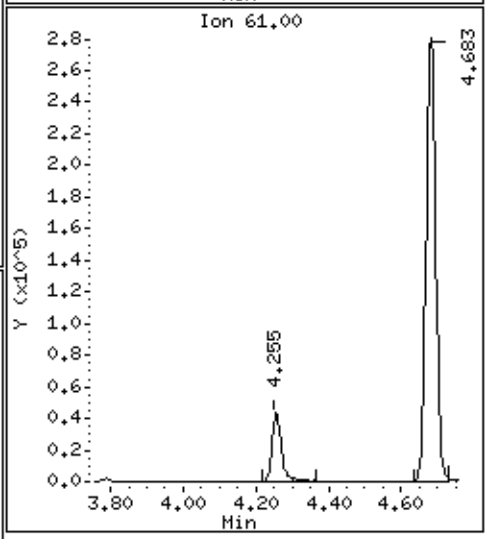
28 cis-1,2-Dichloroethene

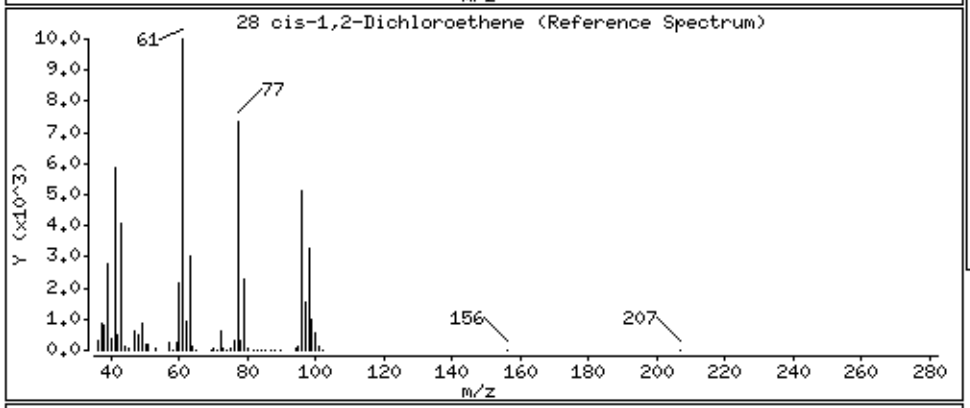
Concentration: 18 ug/L

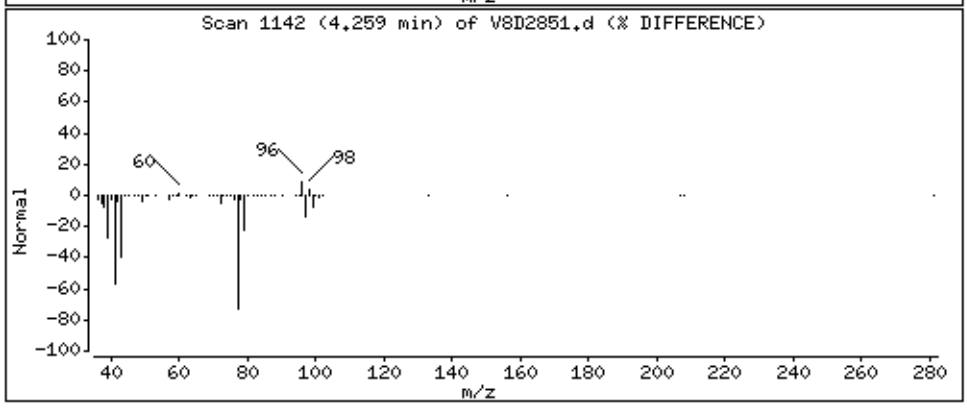












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d

Date : 21-JAN-2014 13:16

Client ID: SUMP 2_01/16/13DL

Instrument: V8.i

Sample Info: 5ML,N0060-12ADL,,75652,2

Purge Volume: 5.0

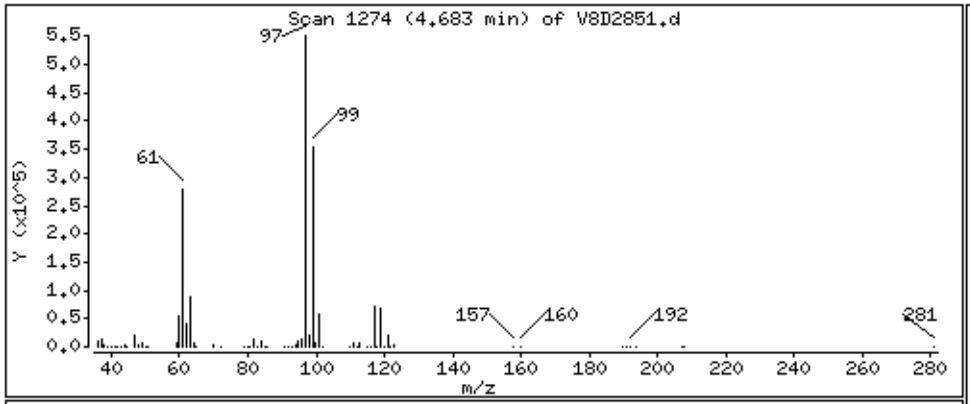
Operator: ALM SRC: LIMS

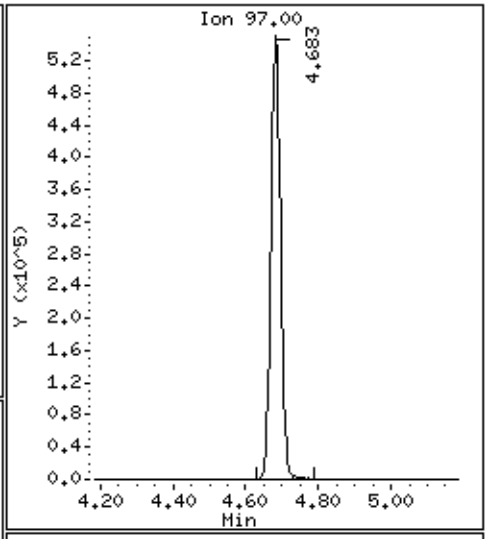
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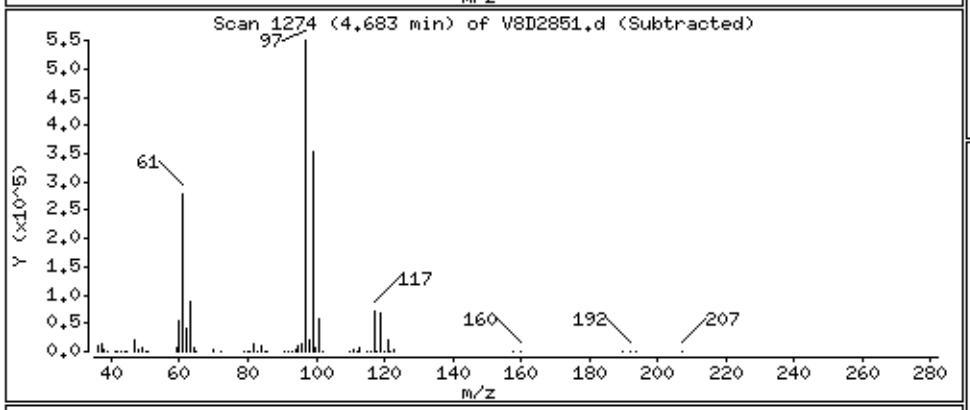
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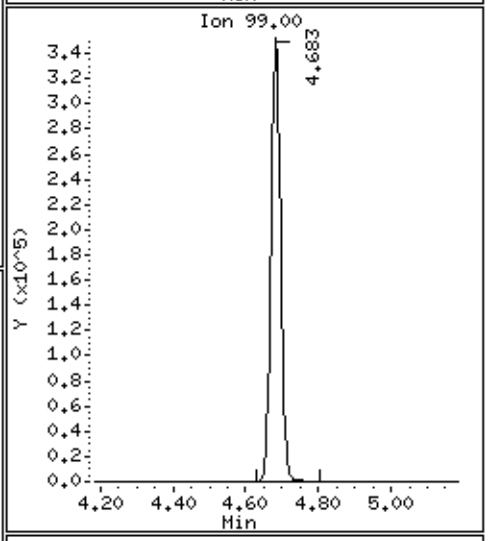
37 1,1,1-Trichloroethane

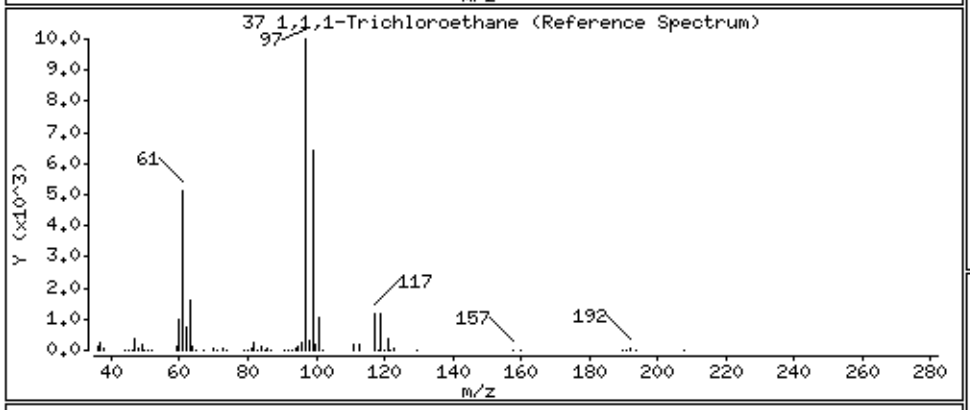
Concentration: 230 ug/L

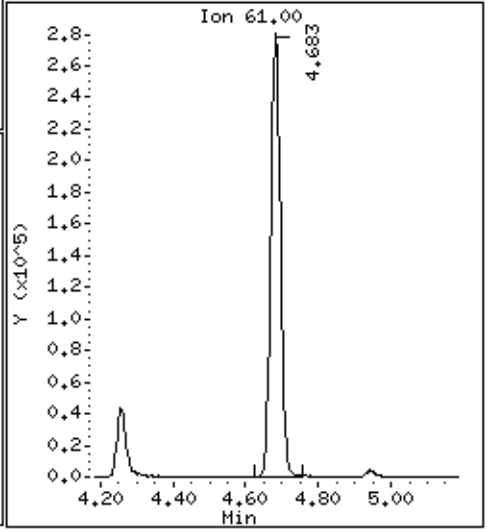


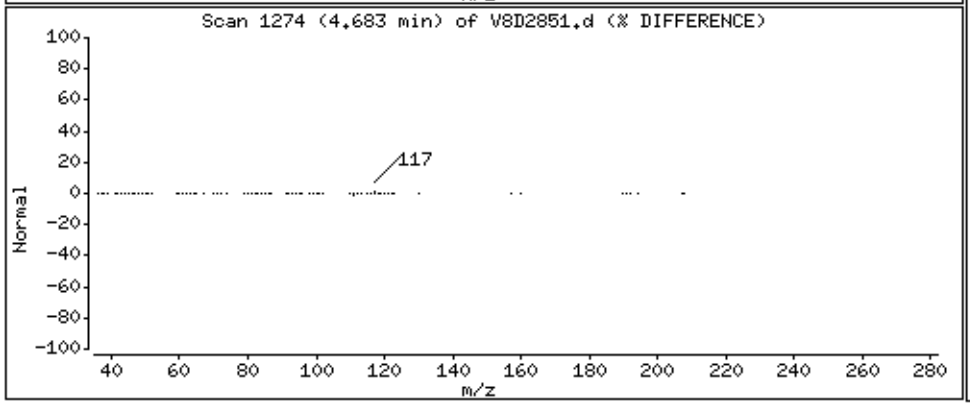












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2851.d

Date : 21-JAN-2014 13:16

Client ID: SUMP 2_01/16/13DL

Instrument: V8.i

Sample Info: 5ML,N0060-12ADL,,75652,2

Purge Volume: 5.0

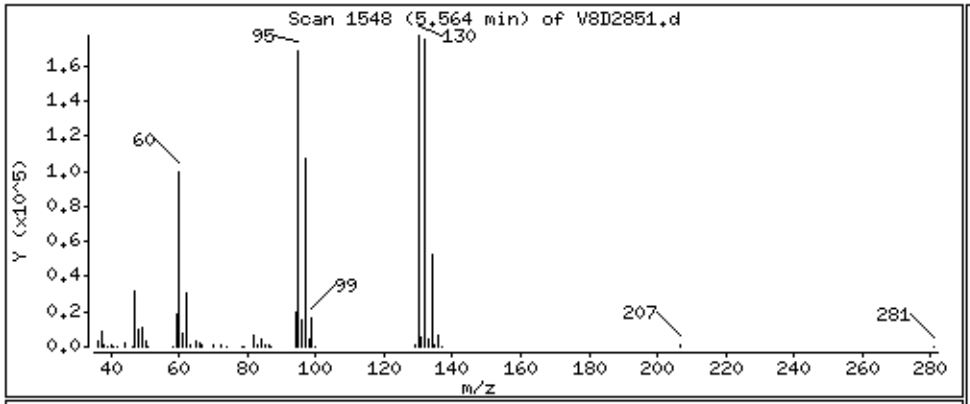
Operator: ALM SRC: LIMS

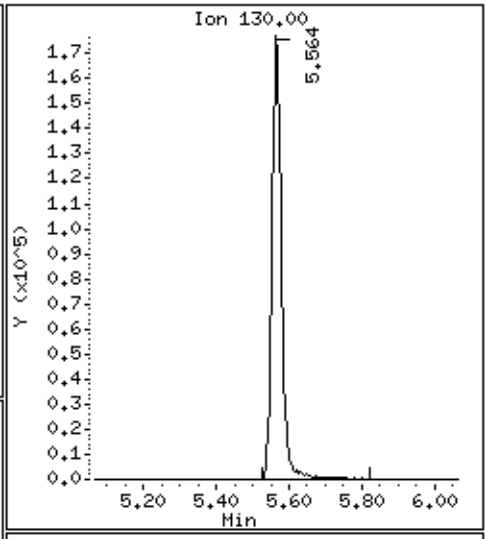
Column phase: DB-624

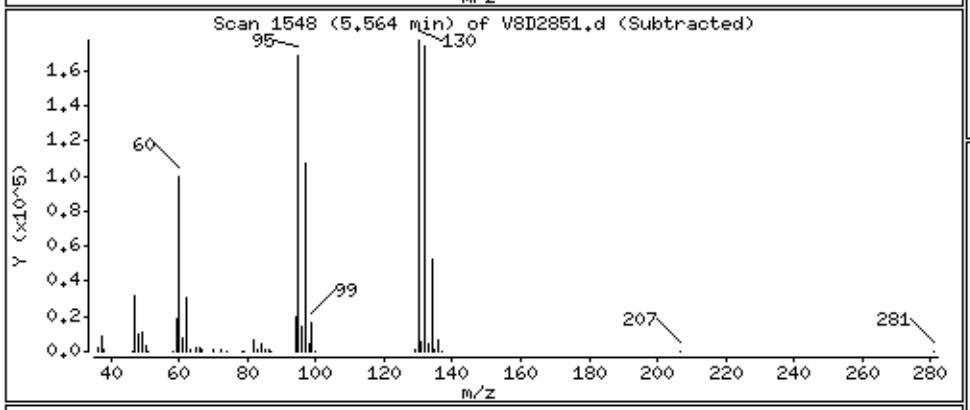
Column diameter: 0.25

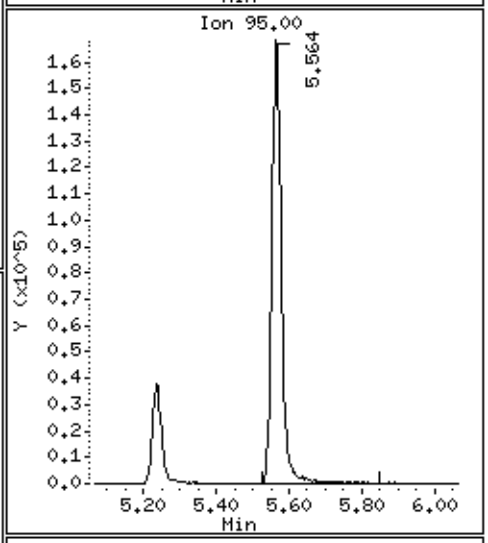
47 Trichloroethene

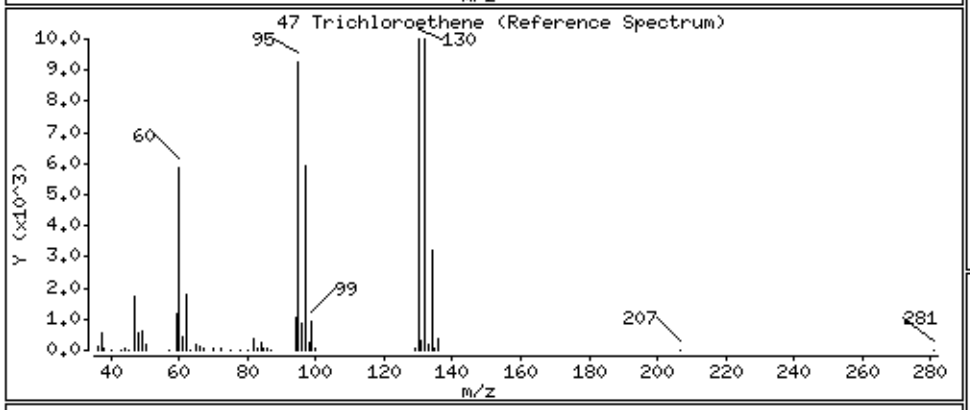
Concentration: 120 ug/L

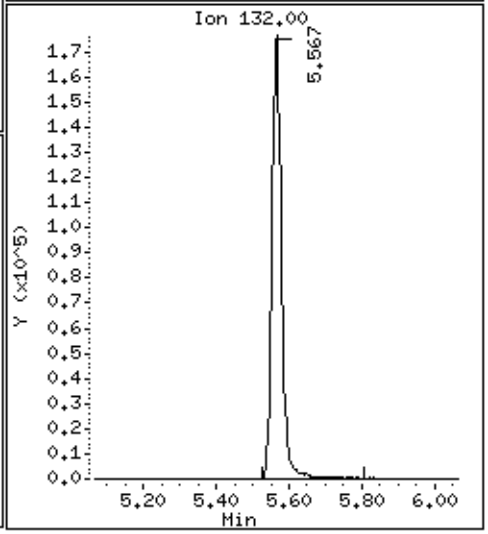


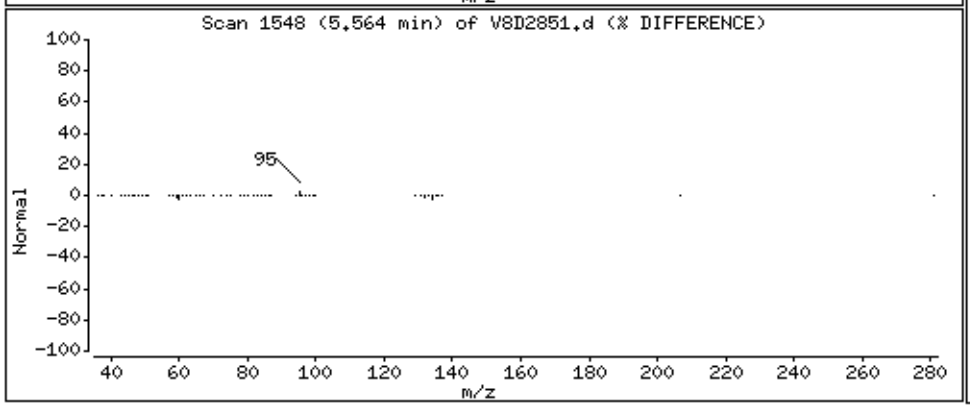












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SUMP 3_01/16/13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2848.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

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	0.53	J
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	3.4	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	31	
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	36	
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	54	
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

EPA SAMPLE NO.

SUMP 3_01/16/13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2848.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/21/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	44	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d
Report Date: 29-Jan-2014 14:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2848.d
Lab Smp Id: N0060-13A Client Smp ID: SUMP 3_01/16/13
Inj Date : 21-JAN-2014 11:54
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-13A,,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
4	Vinyl Chloride	62	1.856	1.856	(0.355)	3255	0.52901	0.53(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	223076	43.5159	44
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	35340	3.37704	3.4
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	157411	30.7994	31(Q)
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	253714	50.1726	50
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	317916	35.6209	36
$ 42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	50353	49.8956	50
M 50	1,2-Dichloroethene (Total)	96				157411	30.7994	31
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	807607	50.0000	
47	Trichloroethene	130	5.564	5.564	(1.063)	295053	53.8439	54
$ 58	Toluene-d8	98	6.718	6.715	(0.817)	810391	49.3259	49
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	688730	50.0000	
$ 79	Bromofluorobenzene	95	9.528	9.522	(1.159)	313911	47.5371	48
* 92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	328727	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d
Report Date: 29-Jan-2014 14:39

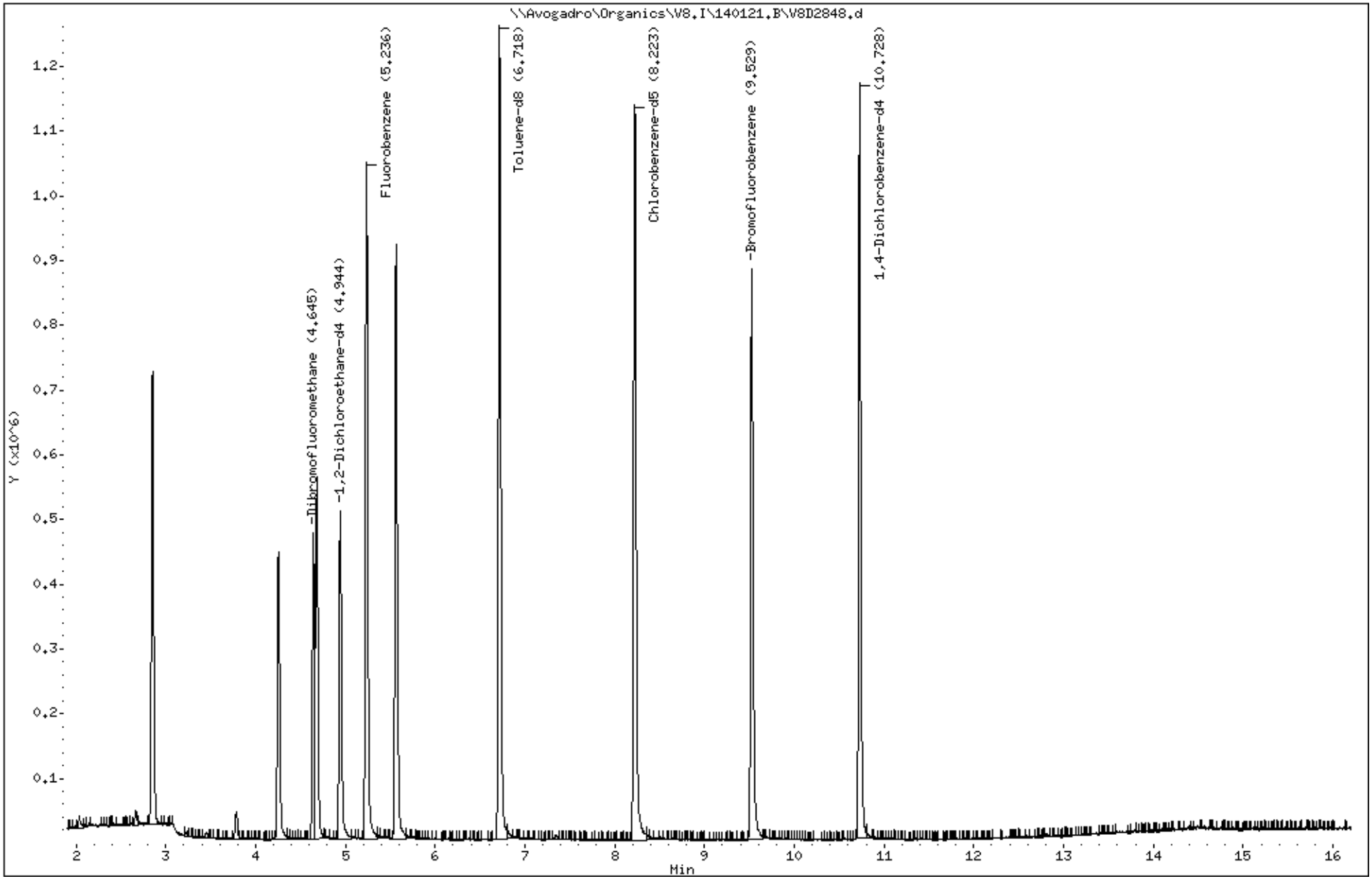
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2848.d
Lab Smp Id: N0060-13A Client Smp ID: SUMP 3_01/16/13
Inj Date : 21-JAN-2014 11:54
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-13A,,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:38 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d
Date : 21-JAN-2014 11:54
Client ID: SUMP 3_01/16/13
Instrument: V8.i
Sample Info: 5ML,N0060-13A,,75652
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d

Date : 21-JAN-2014 11:54

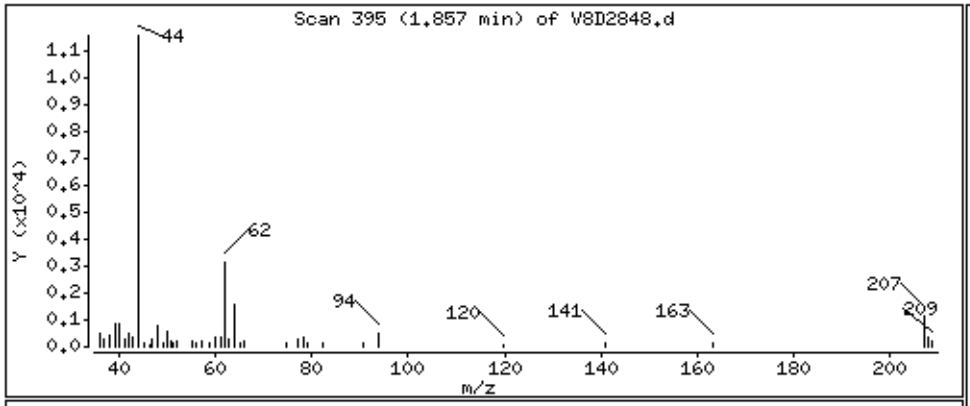
Client ID: SUMP 3_01/16/13 Instrument: V8.i

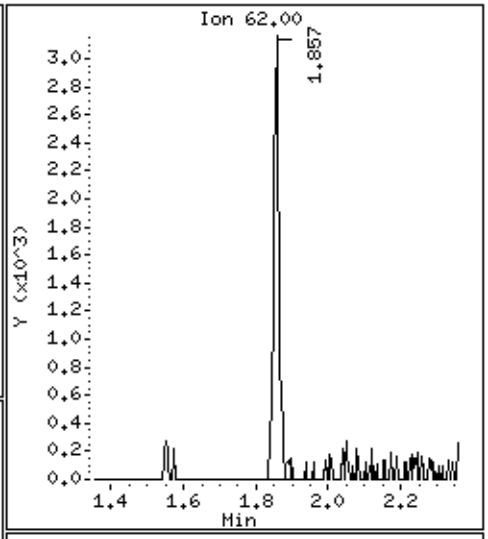
Sample Info: 5ML,N0060-13A,,75652

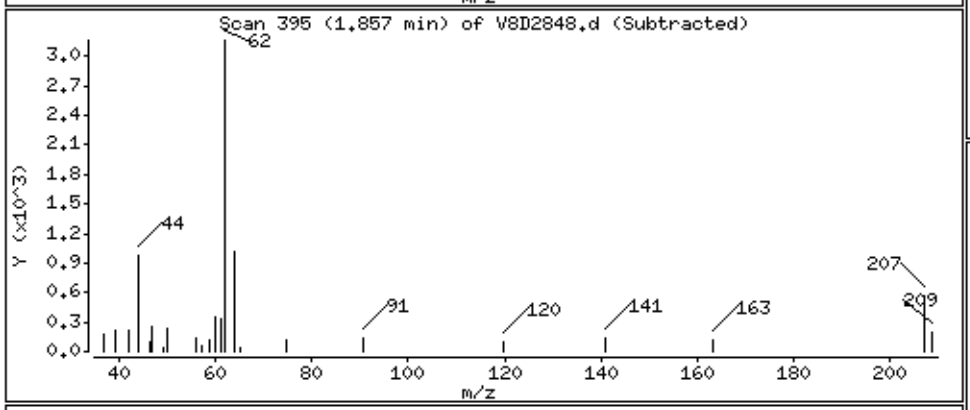
Purge Volume: 5.0 Operator: ALM SRC: LIMS

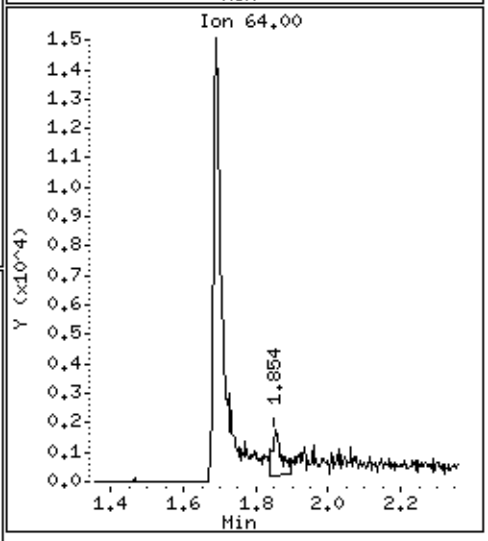
Column phase: DB-624 Column diameter: 0.25

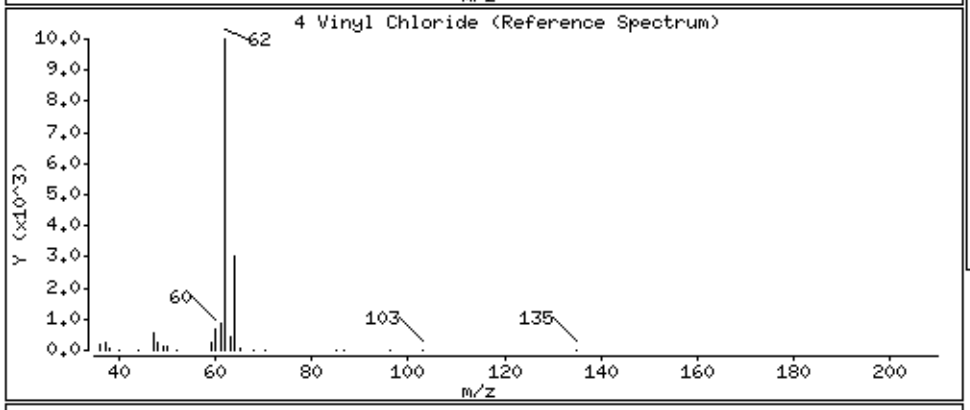
4 Vinyl Chloride Concentration: 0.53 ug/L

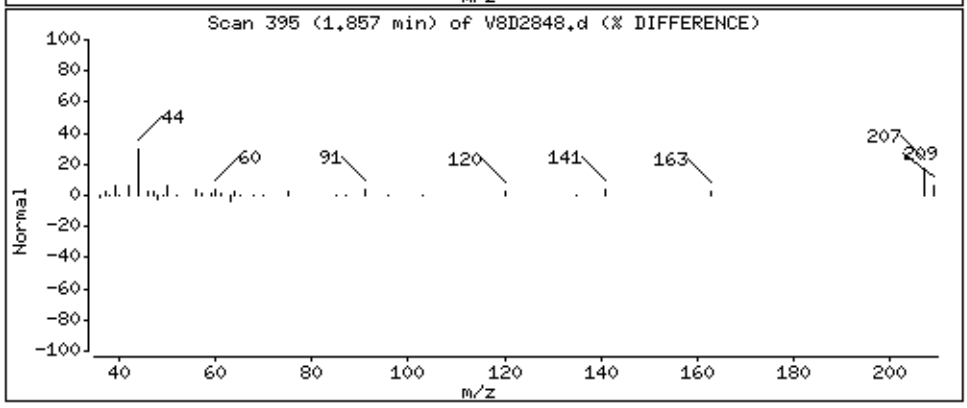












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d

Date : 21-JAN-2014 11:54

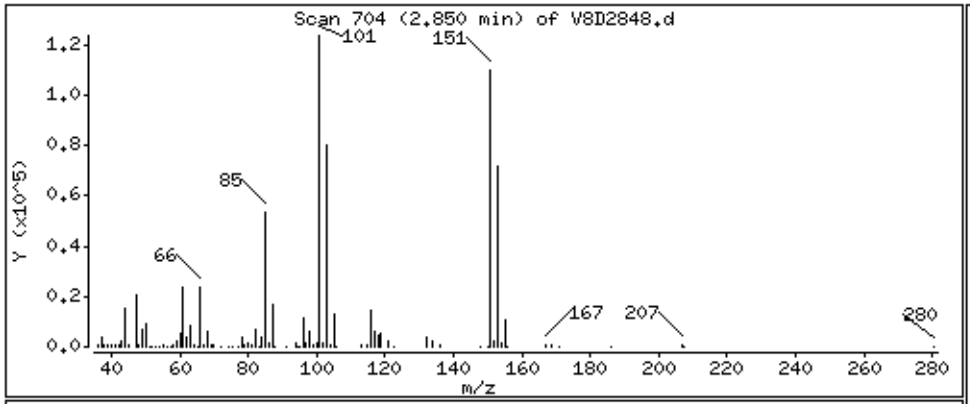
Client ID: SUMP 3_01/16/13 Instrument: V8.i

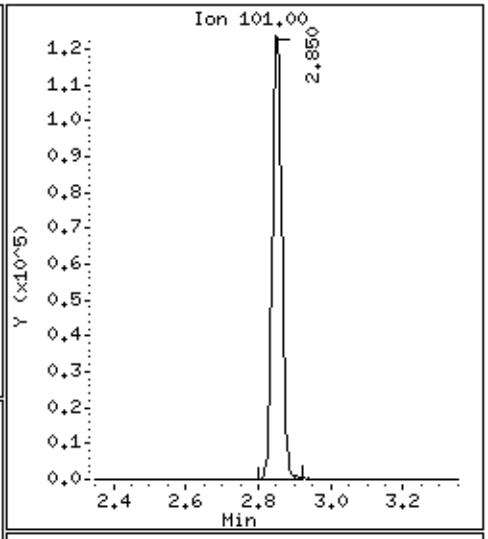
Sample Info: 5ML,N0060-13A,,75652

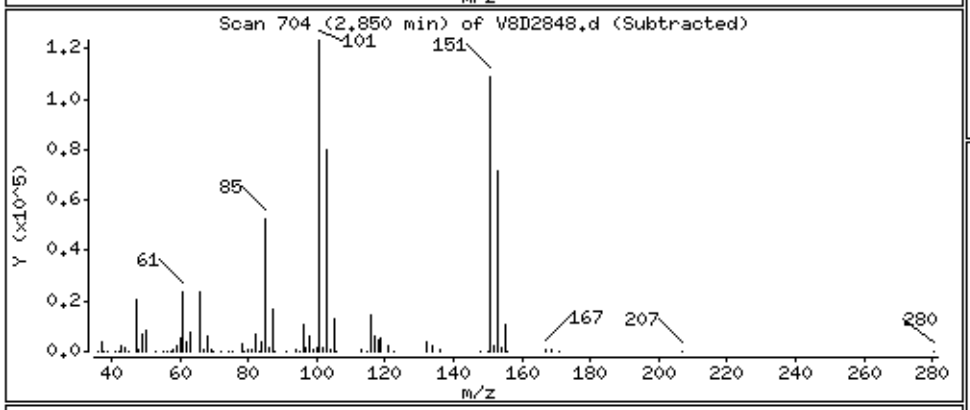
Purge Volume: 5.0 Operator: ALM SRC: LIMS

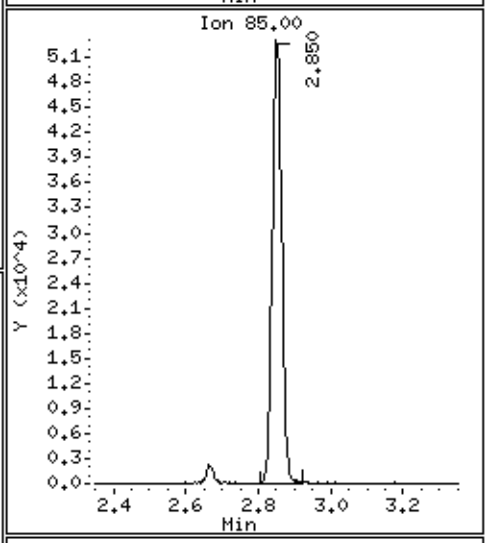
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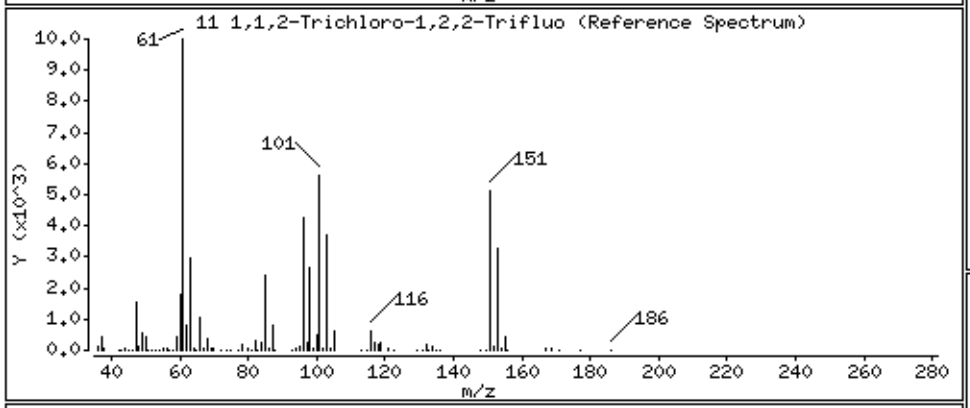
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 44 ug/L

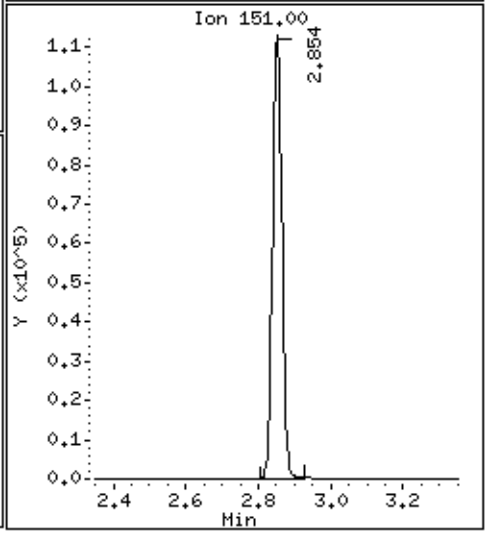


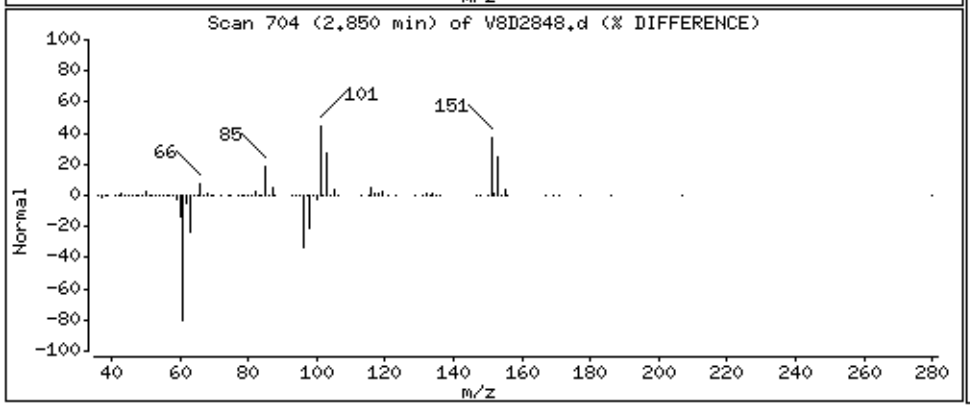












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d

Date : 21-JAN-2014 11:54

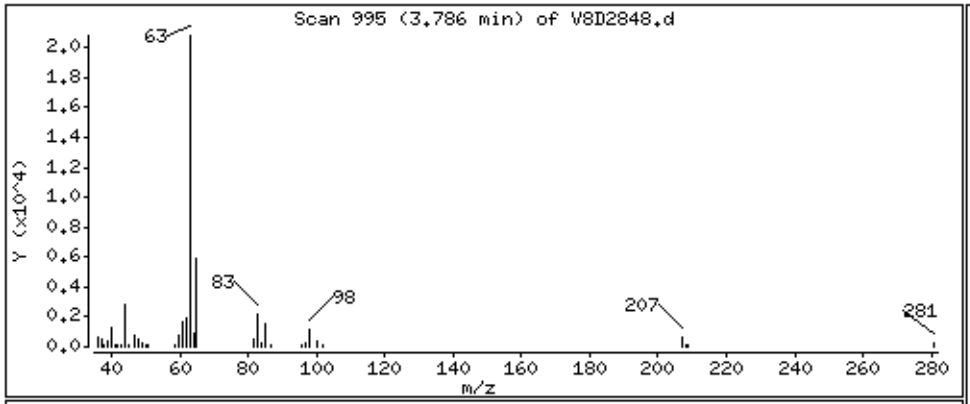
Client ID: SUMP 3_01/16/13 Instrument: V8.i

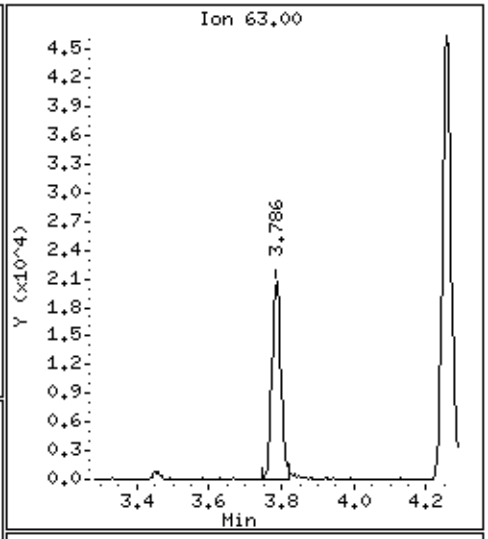
Sample Info: 5ML,N0060-13A,,75652

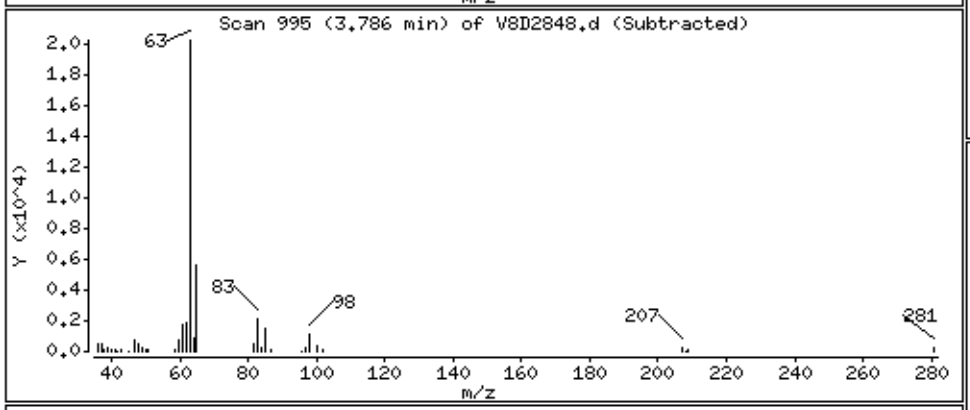
Purge Volume: 5.0 Operator: ALM SRC: LIMS

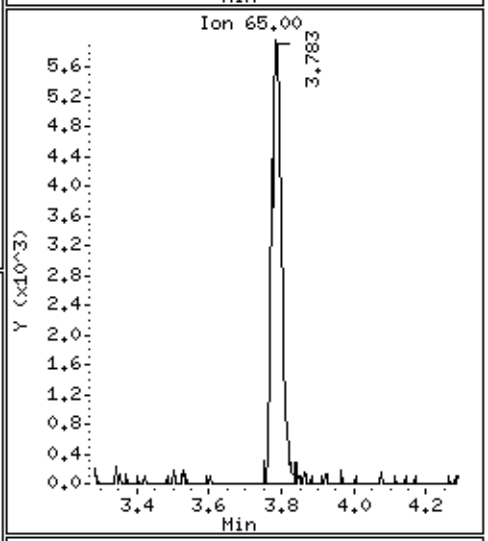
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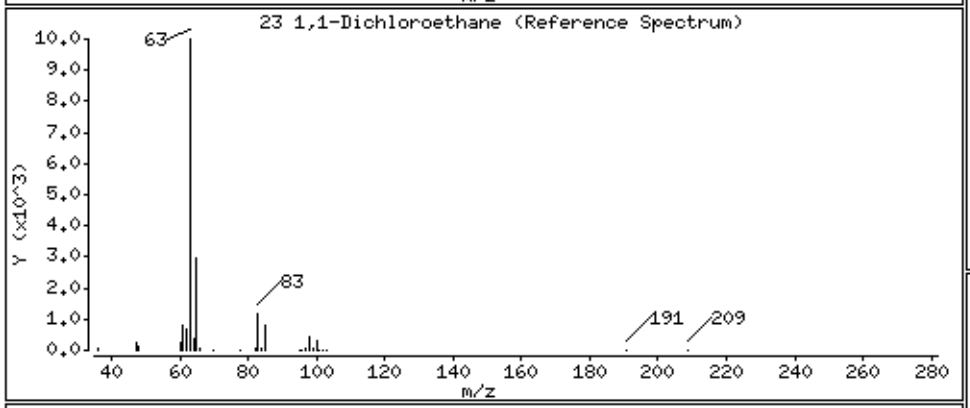
23 1,1-Dichloroethane Concentration: 3.4 ug/L

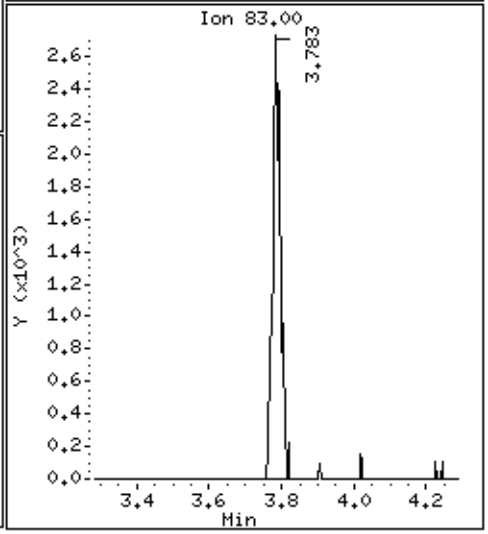


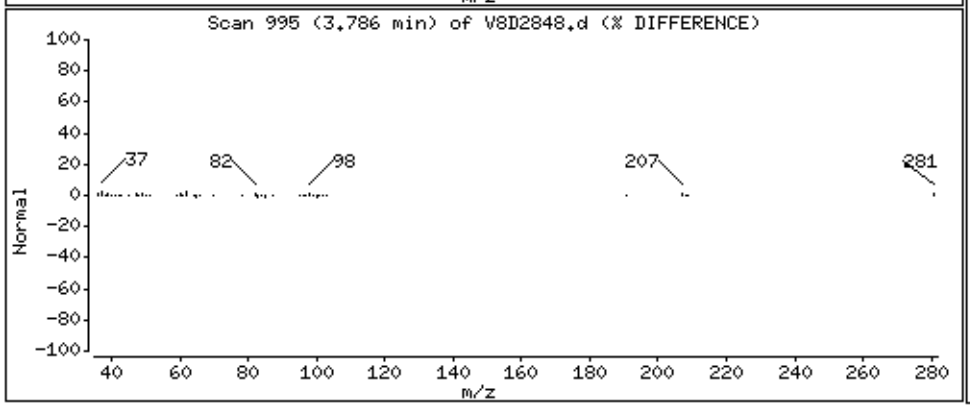












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d

Date : 21-JAN-2014 11:54

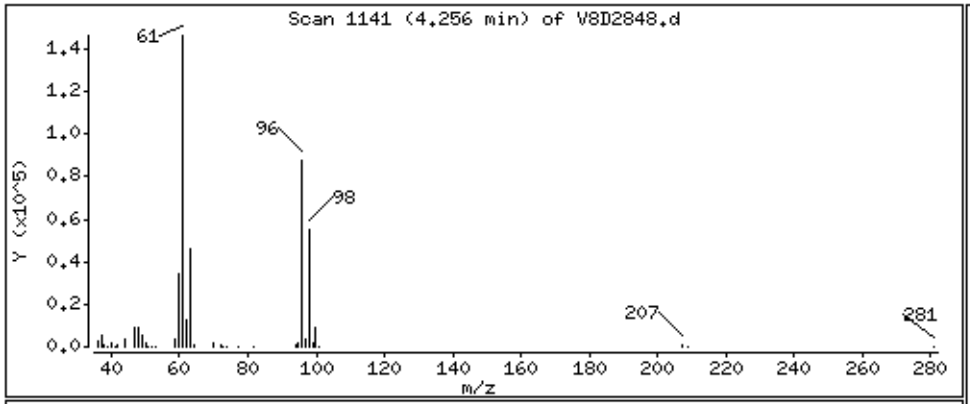
Client ID: SUMP 3_01/16/13 Instrument: V8.i

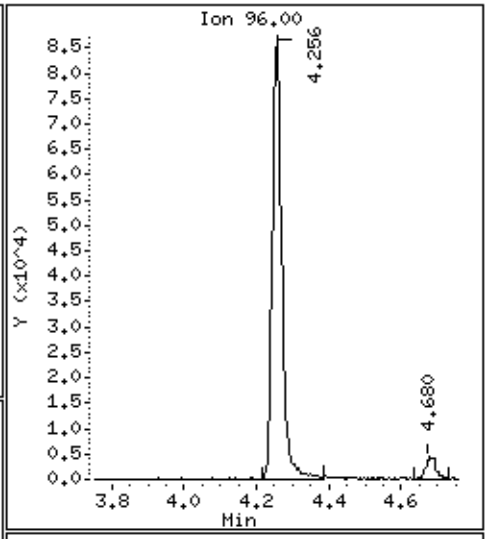
Sample Info: 5ML,N0060-13A,,75652

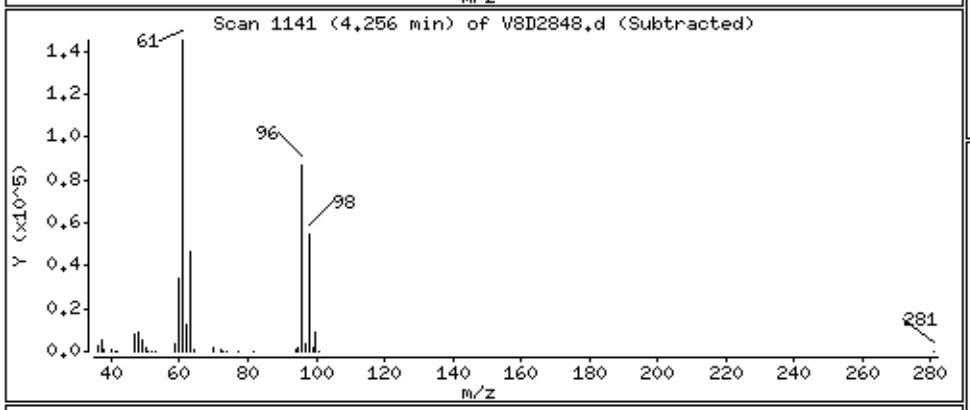
Purge Volume: 5.0 Operator: ALM SRC: LIMS

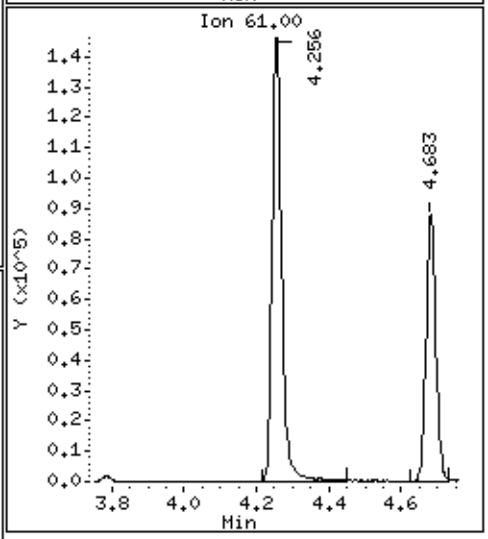
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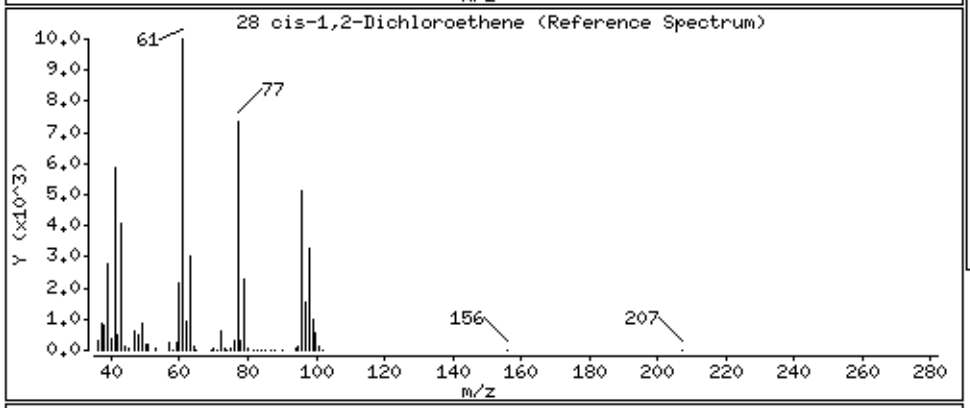
28 cis-1,2-Dichloroethene Concentration: 31 ug/L

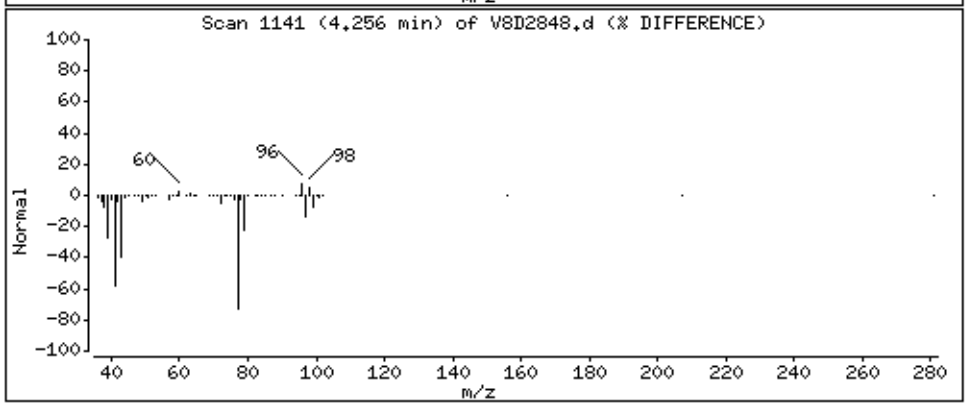












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d

Date : 21-JAN-2014 11:54

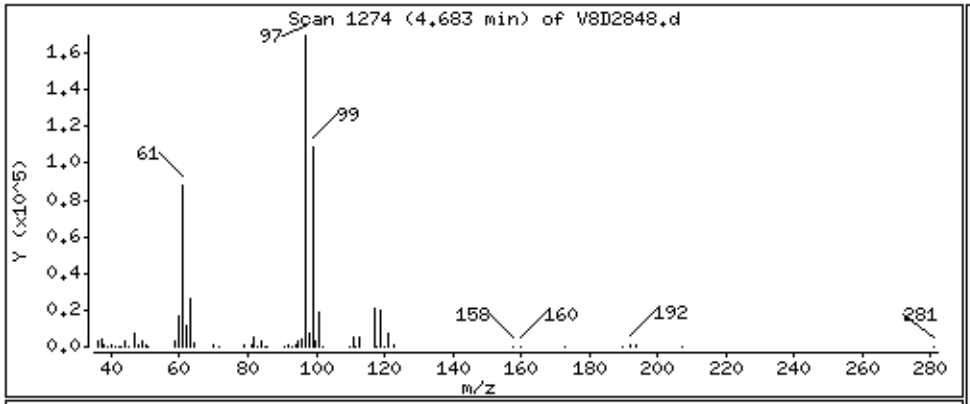
Client ID: SUMP 3_01/16/13 Instrument: V8.i

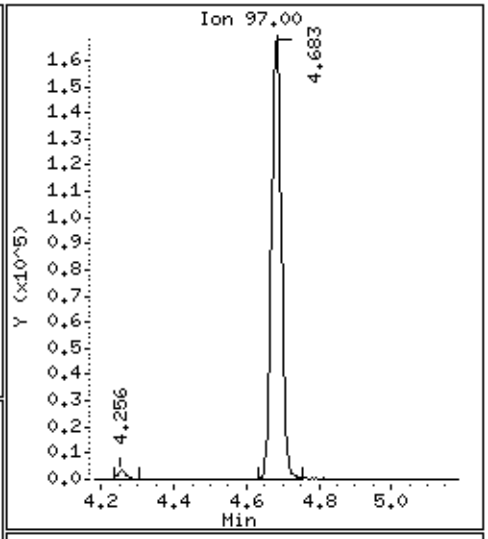
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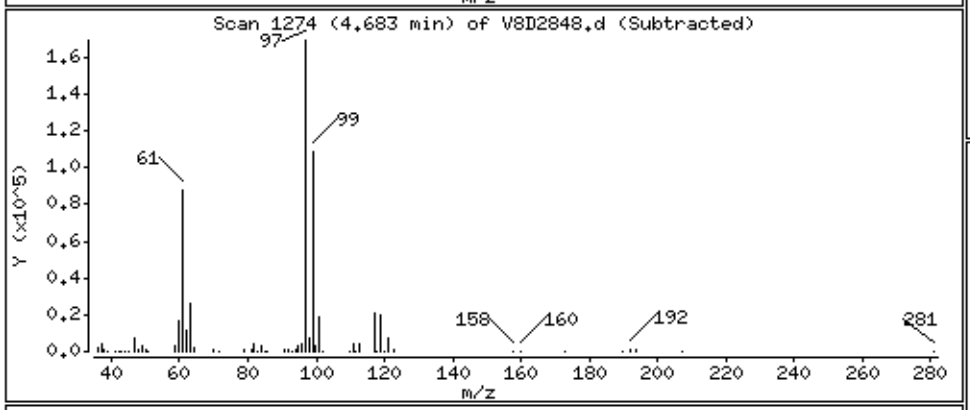
Purge Volume: 5.0 Operator: ALM SRC: LIMS

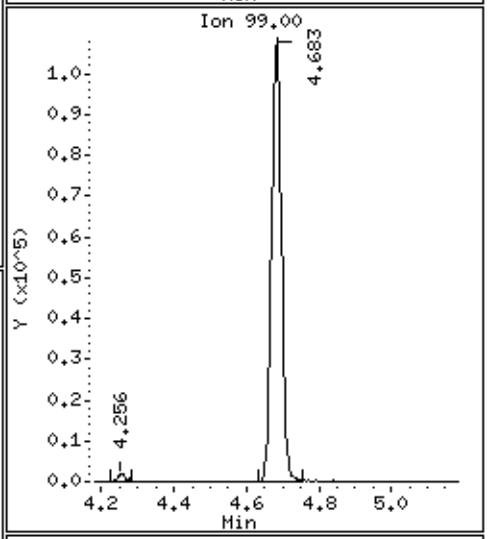
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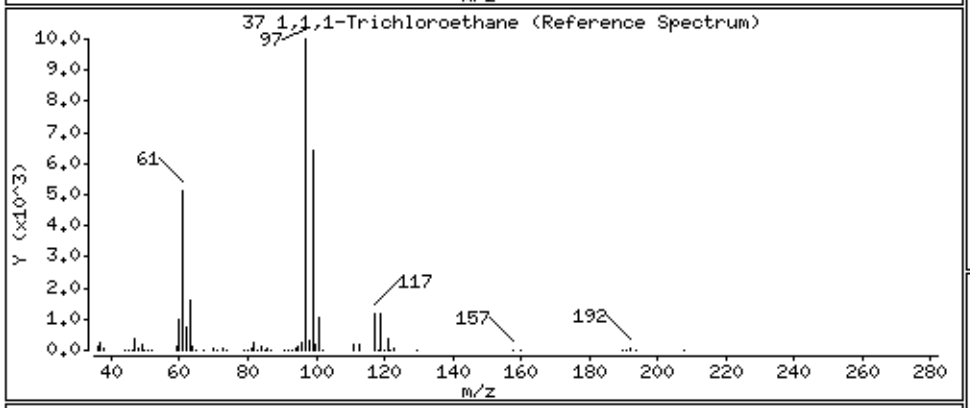
37 1,1,1-Trichloroethane Concentration: 36 ug/L

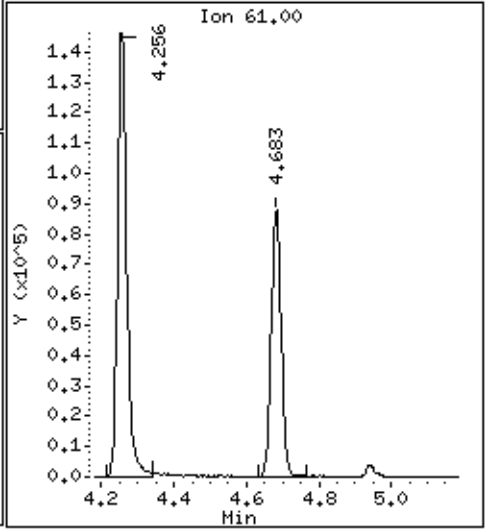


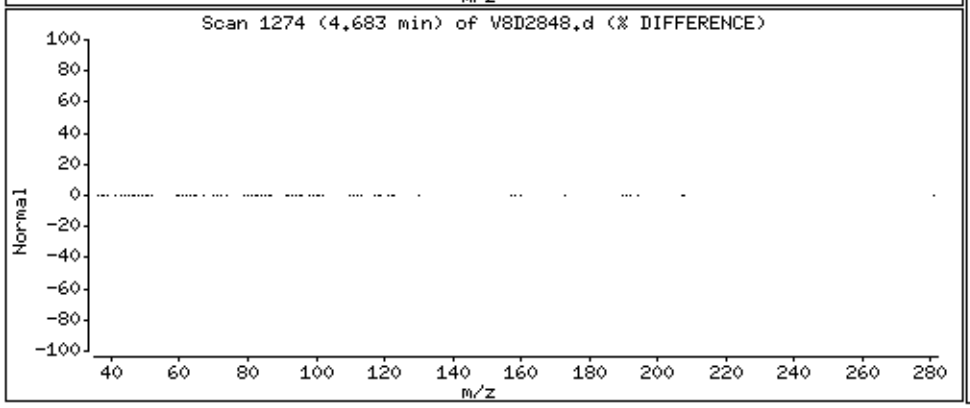












Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2848.d

Date : 21-JAN-2014 11:54

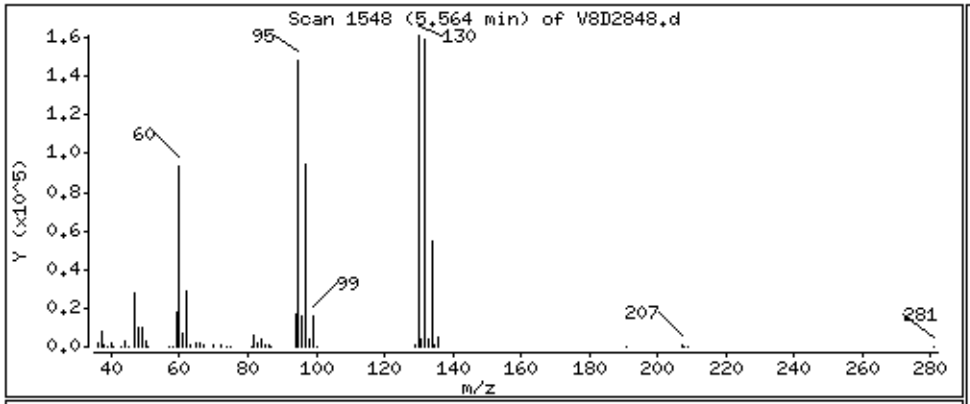
Client ID: SUMP 3_01/16/13 Instrument: V8.i

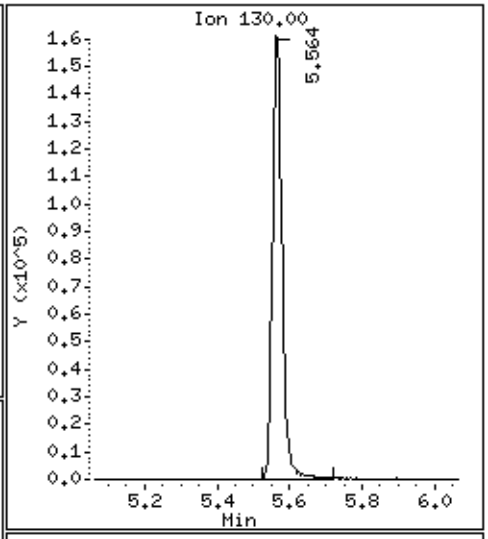
Sample Info: 5ML,N0060-13A,,75652

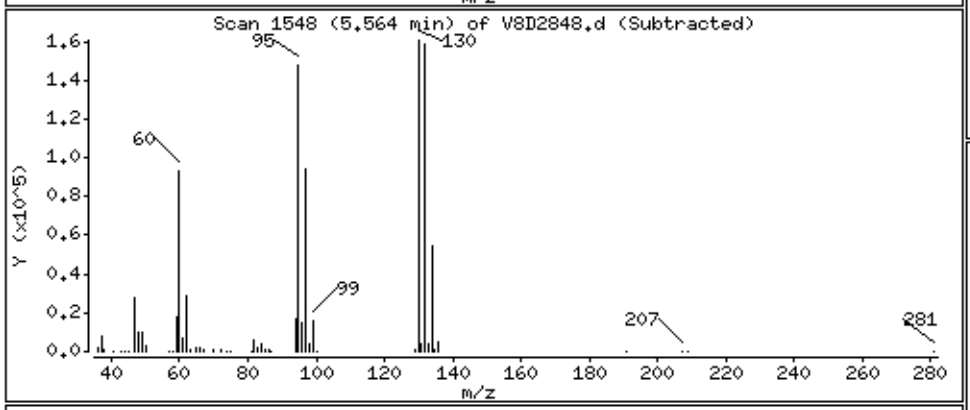
Purge Volume: 5.0 Operator: ALM SRC: LIMS

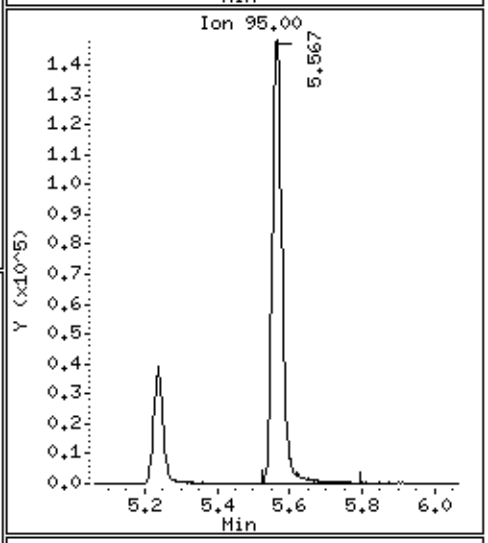
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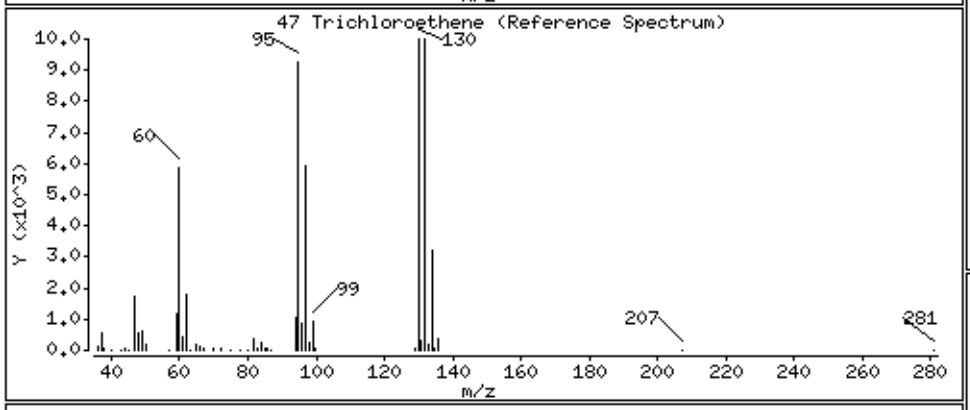
47 Trichloroethene Concentration: 54 ug/L

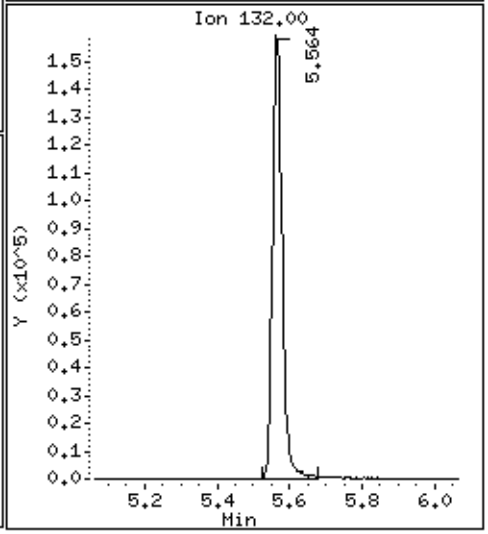


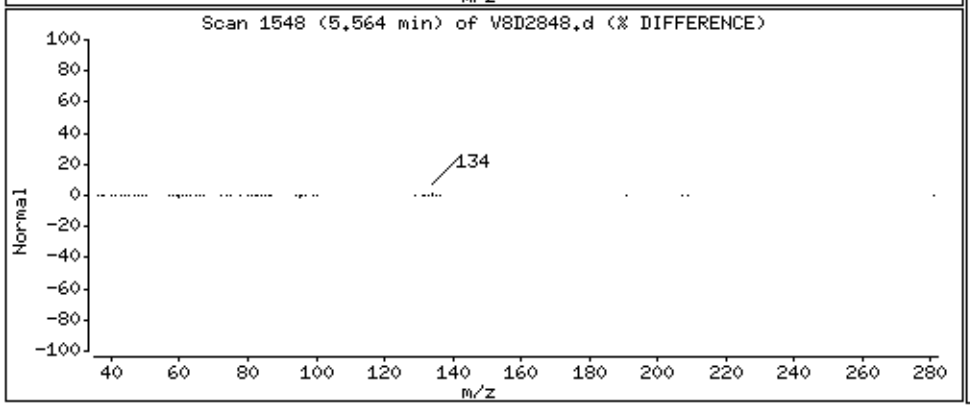












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK_01/15/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2816.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

TRIPBLANK_01/15/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2816.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2816.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2816.d
Lab Smp Id: N0060-14A Client Smp ID: TRIPBLANK_01/15/14
Inj Date : 20-JAN-2014 17:03
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-14A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
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	4.644	4.644	(0.887)	269726	50.2327	50
$ 42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	53871	50.2729	50
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	857547	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	871840	49.6521	50
* 68 Chlorobenzene-d5	117	8.220	8.223	(1.000)	736086	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.522	(1.159)	330064	46.7675	47
* 92 1,4-Dichlorobenzene-d4	152	10.728	10.724	(1.000)	342061	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2816.d
Report Date: 29-Jan-2014 14:44

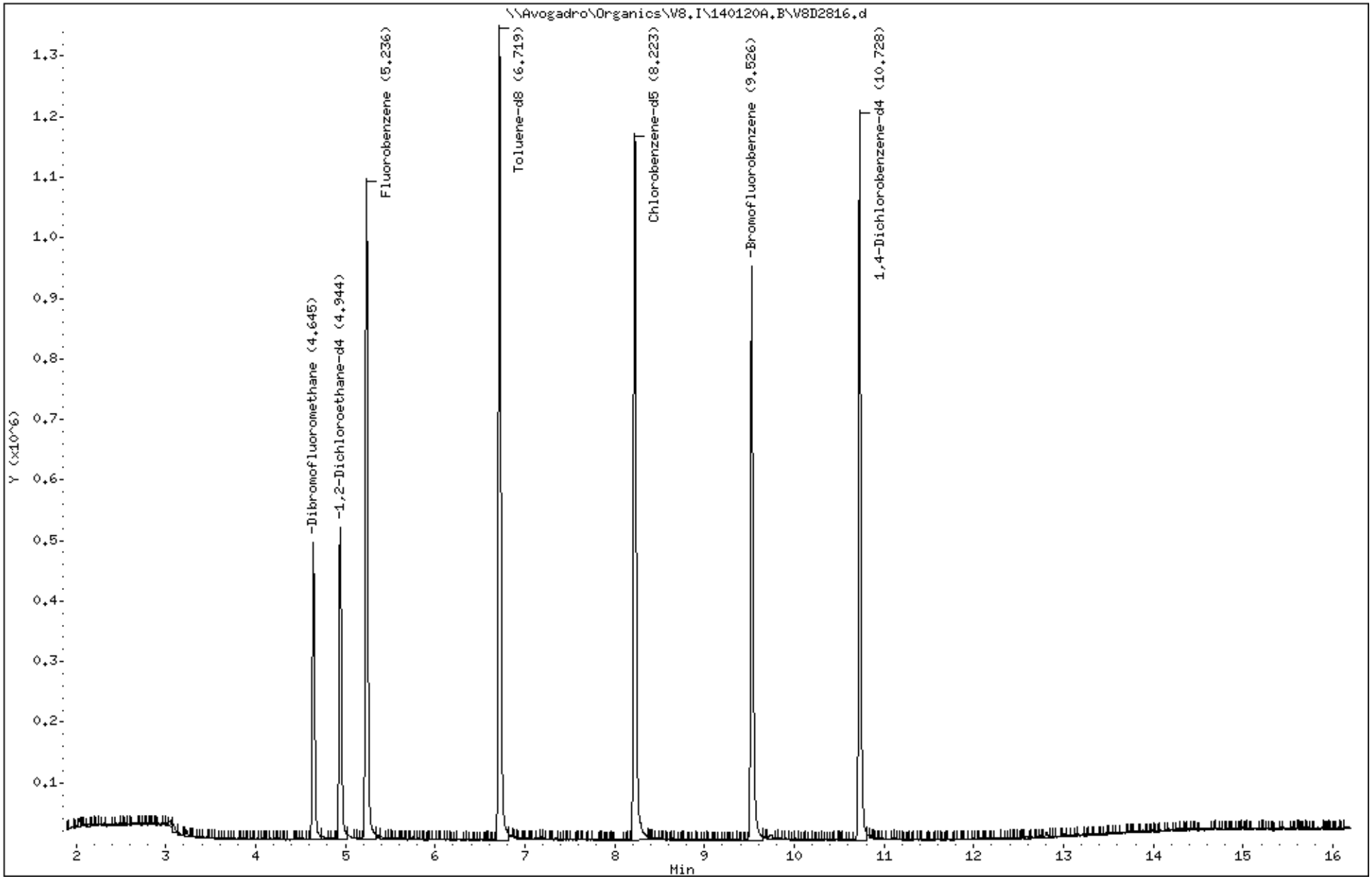
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2816.d
Lab Smp Id: N0060-14A Client Smp ID: TRIPBLANK_01/15/14
Inj Date : 20-JAN-2014 17:03
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-14A,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2816.d
Date : 20-JAN-2014 17:03
Client ID: TRIPBLANK_01/15/14
Instrument: V8.i
Sample Info: 5ML,N0060-14A,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0060 SAS No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date(s): 01/20/2014 01/20/2014

Heated Purge: (Y/N) N Calibration Times: 8:29 12:40

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D2804.D RRF020 = V8D2803.D RRF050 = V8D2802.D RRF100 = V8D2808.D RRF200 = V8D2807.D
RRF001 = V8D2806.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.306	0.377	0.298	0.278	0.298	0.305					0.310	11.1
Chloromethane	1.049	1.142	0.942	0.865	0.902	1.537					1.073	23.2
Vinyl chloride	0.359	0.453	0.369	0.360	0.366	0.379					0.381	9.5
Bromomethane	0.069	0.070	0.052	0.068	0.059	0.112					0.072	29.5
Chloroethane	0.190	0.232	0.186	0.179	0.180	0.202					0.195	10.3
Trichlorofluoromethane	0.498	0.625	0.502	0.479	0.499	0.515					0.520	10.2
1,1-Dichloroethene	0.250	0.302	0.245	0.242	0.239	0.298					0.263	11.2
Acetone	0.060	0.080	0.066	0.036	0.058						0.060	26.3
Iodomethane	0.038	0.041	0.028	0.057	0.060	0.020					0.041	39.3
Carbon disulfide	0.696	0.864	0.747	0.714	0.724	0.880					0.771	10.4
Methylene chloride	0.288	0.349	0.291	0.279	0.285	0.332					0.304	9.6
trans-1,2-Dichloroethene	0.280	0.352	0.283	0.278	0.272	0.310					0.296	10.3
Methyl tert-butyl ether	0.841	1.072	0.887	0.868	0.873	0.895					0.906	9.2
1,1-Dichloroethane	0.616	0.786	0.634	0.618	0.619	0.615					0.648	10.5
Vinyl acetate	1.207	1.567	1.332	1.275	1.317	1.093					1.299	12.2
2-Butanone	0.026	0.050	0.044	0.030	0.041						0.038	25.7
cis-1,2-Dichloroethene	0.318	0.368	0.304	0.296	0.296	0.315					0.316	8.5
2,2-Dichloropropane	0.468	0.605	0.514	0.475	0.503	0.447					0.502	11.1
Bromochloromethane	0.162	0.203	0.157	0.155	0.144	0.171					0.165	12.3
Chloroform	0.549	0.684	0.555	0.540	0.540	0.559					0.571	9.8
1,1,1-Trichloroethane	0.521	0.653	0.543	0.528	0.533	0.537					0.553	9.0
1,1-Dichloropropene	0.142	0.182	0.149	0.148	0.145	0.138					0.151	10.6
Carbon tetrachloride	0.457	0.597	0.493	0.491	0.495	0.463					0.499	10.1
1,2-Dichloroethane	0.503	0.657	0.556	0.549	0.551	0.570					0.564	9.0
Benzene	1.023	1.262	1.027	1.023	1.028	1.096					1.077	8.8
Trichloroethene	0.318	0.397	0.327	0.323	0.330	0.340					0.339	8.7
1,2-Dichloropropane	0.321	0.400	0.327	0.325	0.331	0.353					0.343	8.8

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0060 SAS No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date(s): 01/20/2014 01/20/2014

Heated Purge: (Y/N) N Calibration Times: 8:29 12:40

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D2804.D RRF020 = V8D2803.D RRF050 = V8D2802.D RRF100 = V8D2808.D RRF200 = V8D2807.D
RRF001 = V8D2806.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.190	0.244	0.200	0.199	0.196	0.197					0.204	9.7
Bromodichloromethane	0.377	0.488	0.414	0.411	0.422	0.390					0.417	9.2
cis-1,3-Dichloropropene	0.369	0.495	0.424	0.430	0.436	0.340					0.416	13.1
4-Methyl-2-pentanone	0.357	0.495	0.449	0.415	0.439						0.431	11.8
Toluene	1.079	1.335	1.084	1.098	1.102	1.154					1.142	8.6
trans-1,3-Dichloropropene	0.309	0.467	0.406	0.406	0.416	0.334					0.390	14.9
1,1,2-Trichloroethane	0.250	0.307	0.250	0.248	0.250	0.299					0.267	10.4
1,3-Dichloropropane	0.434	0.570	0.480	0.471	0.487	0.503					0.491	9.2
Tetrachloroethene	0.388	0.453	0.358	0.361	0.383	0.442					0.397	10.2
2-Hexanone	0.315	0.463	0.438	0.306	0.421						0.389	18.7
Dibromochloromethane	0.332	0.462	0.407	0.411	0.429	0.363					0.401	11.6
1,2-Dibromoethane	0.304	0.395	0.338	0.337	0.341	0.294					0.335	10.6
Chlorobenzene	0.918	1.112	0.902	0.909	0.913	0.997					0.959	8.6
1,1,1,2-Tetrachloroethane	0.345	0.456	0.383	0.384	0.393	0.391					0.392	9.2
Ethylbenzene	0.423	0.540	0.449	0.454	0.466	0.453					0.464	8.5
m,p-Xylene	0.540	0.675	0.550	0.561	0.569	0.543					0.573	8.9
o-Xylene	0.508	0.653	0.529	0.536	0.536	0.517					0.547	9.8
Xylene (Total)	0.529	0.668	0.543	0.553	0.558	0.535					0.564	9.2
Styrene	0.787	1.028	0.865	0.883	0.874	0.779					0.869	10.3
Bromoform	0.216	0.302	0.279	0.282	0.303	0.280					0.277	11.4
Isopropylbenzene	1.376	1.712	1.408	1.465	1.485	1.408					1.476	8.3
1,1,2,2-Tetrachloroethane	0.728	0.817	0.692	0.652	0.650	1.126					0.777	23.3
Bromobenzene	0.842	0.978	0.787	0.795	0.777	0.992					0.862	11.4
1,2,3-Trichloropropane	0.736	0.928	0.799	0.763	0.758	1.022					0.834	13.8
n-Propylbenzene	0.694	0.828	0.667	0.689	0.685	0.723					0.714	8.2
2-Chlorotoluene	0.700	0.816	0.636	0.654	0.642	0.729					0.696	9.9
1,3,5-Trimethylbenzene	2.174	2.604	2.077	2.071	2.126	2.202					2.209	9.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0060 SAS No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date(s): 01/20/2014 01/20/2014

Heated Purge: (Y/N) N Calibration Times: 8:29 12:40

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D2804.D RRF020 = V8D2803.D RRF050 = V8D2802.D RRF100 = V8D2808.D RRF200 = V8D2807.D
RRF001 = V8D2806.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.706	0.826	0.664	0.664	0.666	0.774					0.717	9.5
tert-Butylbenzene	2.321	2.794	2.257	2.493	2.490	2.463					2.470	7.6
1,2,4-Trimethylbenzene	2.135	2.592	2.090	2.133	2.161	2.257					2.228	8.4
sec-Butylbenzene	2.707	3.231	2.573	2.607	2.597	2.799					2.753	9.1
4-Isopropyltoluene	2.229	2.765	2.222	2.250	2.289	2.300					2.343	8.9
1,3-Dichlorobenzene	1.314	1.577	1.276	1.282	1.303	1.415					1.361	8.6
1,4-Dichlorobenzene	1.409	1.624	1.320	1.324	1.345	1.771					1.465	12.8
n-Butylbenzene	1.673	2.256	1.853	1.883	1.934	1.696					1.882	11.2
1,2-Dichlorobenzene	1.269	1.565	1.244	1.250	1.260	1.619					1.368	12.8
1,2-Dibromo-3-chloropropane	0.104	0.132	0.119	0.121	0.122	0.174					0.129	18.6
1,2,4-Trichlorobenzene	0.555	0.875	0.820	0.859	0.901	0.448					0.743	25.8
Hexachlorobutadiene	0.535	0.643	0.512	0.502	0.503	0.569					0.544	10.1
1,2,3-Trichlorobenzene	0.578	0.830	0.752	0.802	0.807	0.511					0.713	18.9
Naphthalene	1.166	1.460	1.415	1.589	1.464	1.382					1.413	9.9
1,1,2-Trichloro-1,2,2-trifluoroe	0.303	0.377	0.301	0.294	0.302	0.327					0.317	9.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N0060 SAS No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date(s): 01/20/2014 01/20/2014

Heated Purge: (Y/N) N Calibration Times: 8:29 12:40

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D2804.D RRF020 = V8D2803.D RRF050 = V8D2802.D RRF100 = V8D2808.D RRF200 = V8D2807.D
RRF001 = V8D2806.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.316	0.322	0.314	0.306	0.308						0.313	2.0
1,2-Dichloroethane-d4	0.063	0.067	0.062	0.060	0.061						0.062	4.0
Toluene-d8	1.201	1.193	1.185	1.180	1.206						1.193	0.9
Bromofluorobenzene	0.461	0.475	0.482	0.487	0.492						0.479	2.5

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2806.d
Report Date: 29-Jan-2014 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2806.d
Lab Smp Id: VSTD00110V Client Smp ID: VSTD00110V
Inj Date : 20-JAN-2014 10:33
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD00110V,VSTD00110V
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120.B\v108260Gadd-6lvl.m
Meth Date : 20-Jan-2014 13:22 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 10:33 Cal File: V8D2806.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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.593	1.586	(0.304)	5342	1.00000	0.94
2	Freon114	85	1.708	1.705	(0.326)	4791	1.00000	0.89
3	Chloromethane	50	1.753	1.754	(0.335)	26869	1.00000	1.3
4	Vinyl Chloride	62	1.856	1.856	(0.355)	6631	1.00000	0.96(Q)
5	Bromomethane	94	2.142	2.143	(0.409)	1964	1.00000	1.4
6	Chloroethane	64	2.232	2.229	(0.426)	3533	1.00000	0.97
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	9003	1.00000	0.97
126	Ethanol	46	2.567	2.567	(0.490)	5660	500.000	170(Q)
8	Ether	59	2.673	2.667	(0.511)	5247	1.00000	0.99(Q)
9	Acrolein	56	2.776	2.770	(0.530)	8498	5.00000	6.1
10	1,1-Dichloroethene	96	2.853	2.856	(0.545)	5214	1.00000	1.1
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.856	2.853	(0.546)	5715	1.00000	1.0
12	Acetone	58	2.888	2.885	(0.552)	637	1.00000	0.53(Q)
13	Iodomethane	142	2.975	2.982	(0.568)	344	1.00000	0.41(aQ)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	15383	1.00000	1.1
15	Acetonitrile	41	3.136	3.136	(0.599)	16063	1.00000	9.5
16	Allyl Chloride	39	3.139	3.136	(0.600)	11195	1.00000	1.0
17	Methyl Acetate	43	3.149	3.146	(0.601)	10211	1.00000	1.1
18	Methylene Chloride	84	3.232	3.229	(0.617)	5799	1.00000	1.1(Q)
19	tert-Butanol	59	3.300	3.297	(0.630)	2678	1.00000	3.7
20	Acrylonitrile	53	3.425	3.419	(0.654)	3909	1.00000	1.1(Q)
21	trans-1,2-Dichloroethene	96	3.448	3.451	(0.659)	5425	1.00000	1.0
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	15646	1.00000	0.97

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.785	3.786	(0.723)	10746	1.00000	0.93
24	Vinyl acetate	43	3.824	3.821	(0.730)	19111	1.00000	0.85(T)
25	Diisopropyl Ether	45	3.821	3.824	(0.730)	30490	1.00000	0.98
26	2-Chloro-1,3-Butadiene	53	3.869	3.860	(0.739)	10669	1.00000	0.85
27	Ethyl tert-butyl ether	59	4.120	4.117	(0.787)	21878	1.00000	0.95
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	7813	1.00000	0.88
28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	5512	1.00000	0.93(Q)
30	2-Butanone	72	4.265	4.255	(0.815)	165	1.00000	0.24(aQ)
32	Propionitrile	54	4.319	4.303	(0.825)	9725	1.00000	8.9
33	Methacrylonitrile	41	4.448	4.432	(0.850)	8988	1.00000	1.8
34	Bromochloromethane	128	4.461	4.454	(0.852)	2988	1.00000	0.99
31	Tetrahydrofuran	72	4.502	4.496	(0.860)	1150	1.00000	2.0
35	Chloroform	83	4.509	4.509	(0.861)	9778	1.00000	0.96
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	268725	1.00000	48
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	9388	1.00000	0.95
38	Cyclohexane	56	4.737	4.741	(0.905)	12112	1.00000	0.93
39	1,1-Dichloropropene	110	4.821	4.821	(0.921)	2407	1.00000	0.89
40	Carbon Tetrachloride	117	4.830	4.827	(0.923)	8093	1.00000	0.92
41	Isobutyl Alcohol	43	4.875	4.866	(0.931)	11306	1.00000	35
$ 42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	54469	1.00000	49
43	Benzene	78	5.004	5.001	(0.956)	19160	1.00000	0.99
44	1,2-Dichloroethane	62	5.014	5.007	(0.958)	9969	1.00000	1.00
45	tert-Amyl methyl ether	73	5.081	5.078	(0.971)	13818	1.00000	0.95
M 50	1,2-Dichloroethene (Total)	96				10937	2.00000	(a)
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	874317	50.0000	
47	Trichloroethene	130	5.570	5.567	(1.064)	5943	1.00000	1.00
48	Methylcyclohexane	83	5.753	5.750	(1.099)	7638	1.00000	0.94
49	1,2-Dichloropropane	63	5.773	5.769	(1.103)	6175	1.00000	1.0
51	Methyl Methacrylate	69	5.859	5.850	(1.119)	1447	1.00000	0.41(aQ)
52	Dibromomethane	93	5.891	5.879	(1.125)	3450	1.00000	0.97
53	1,4-Dioxane	88	5.879	5.882	(1.123)	103	1.00000	1.9(Q)
54	Bromodichloromethane	83	6.010	6.014	(1.148)	6825	1.00000	0.94
55	2-Chloroethyl vinyl ether	63	6.715	6.448	(1.282)	1095	1.00000	25(T)
56	cis-1,3-Dichloropropene	75	6.451	6.441	(1.232)	5940	1.00000	0.82
57	4-Methyl-2-pentanone	43	6.586	6.580	(1.258)	8618	1.00000	1.1(Q)
$ 58	Toluene-d8	98	6.718	6.715	(0.817)	859510	1.00000	49
59	Toluene	91	6.792	6.782	(1.297)	20180	1.00000	1.0
60	trans-1,3-Dichloropropene	75	6.994	6.985	(1.336)	5833	1.00000	0.91
61	Ethyl Methacrylate	69	7.075	7.068	(1.351)	3919	1.00000	0.86(Q)
62	1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	5224	1.00000	1.1
63	Tetrachloroethene	164	7.345	7.345	(0.893)	6452	1.00000	1.1
64	1,3-Dichloropropane	76	7.354	7.355	(0.894)	7354	1.00000	1.0
65	2-Hexanone	43	7.438	7.432	(0.904)	1467	1.00000	0.28(aQ)
66	Dibromochloromethane	129	7.592	7.596	(0.923)	5308	1.00000	0.96(T)
67	1,2-Dibromoethane	107	7.734	7.728	(0.940)	4289	1.00000	0.90(T)
69	1-Chlorohexane	91	8.223	8.213	(1.000)	7710	1.00000	1.1(Q)
* 68	Chlorobenzene-d5	117	8.226	8.223	(1.000)	730412	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	14570	1.00000	1.0
71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.013)	5706	1.00000	1.0
72	Ethylbenzene	106	8.374	8.367	(1.018)	6617	1.00000	0.99(Q)
73	m,p-Xylene	106	8.506	8.499	(1.034)	15877	2.00000	1.9
74	o-Xylene	106	8.943	8.943	(1.087)	7549	1.00000	0.94
75	Styrene	104	8.965	8.956	(1.090)	11385	1.00000	0.87
76	Bromoform	173	9.168	9.165	(1.115)	4090	1.00000	1.1

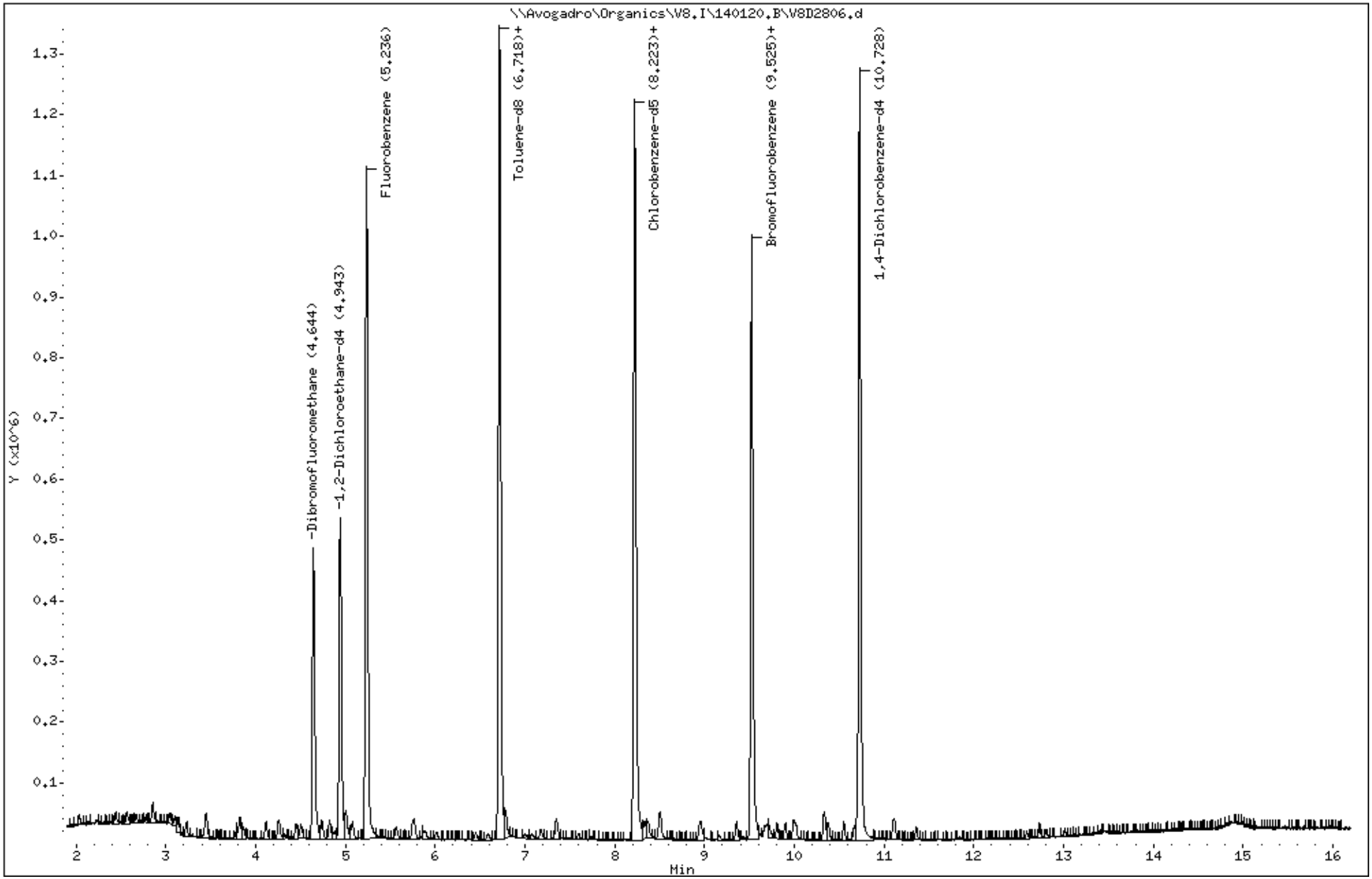
Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2806.d
Report Date: 29-Jan-2014 11:27

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.358	9.354	(1.138)	20572	1.00000	0.97
	78 trans-1,4-Dichloro-2-butene	75	9.525	9.425	(1.158)	165193	1.00000	140(TQ)
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	335122	1.00000	48
	80 1,1,2,2-Tetrachloroethane	83	9.663	9.666	(0.901)	7999	1.00000	1.5
	81 Bromobenzene	156	9.692	9.692	(0.903)	7047	1.00000	1.1
	82 1,2,3-Trichloropropane	75	9.724	9.721	(0.906)	7260	1.00000	1.4(Q)
	83 n-Propylbenzene	120	9.814	9.801	(0.915)	5135	1.00000	1.0
	84 2-Chlorotoluene	126	9.895	9.895	(0.922)	5179	1.00000	1.0(Q)
	85 1,3,5-Trimethylbenzene	105	9.991	9.988	(0.931)	15652	1.00000	0.96
	86 4-Chlorotoluene	126	10.017	10.010	(0.934)	5504	1.00000	1.1(Q)
M	94 Xylene (Total)	106				23426	3.00000	(a)
	87 tert-Butylbenzene	119	10.332	10.329	(0.963)	17502	1.00000	1.0
	88 1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	16041	1.00000	1.0
	89 sec-Butylbenzene	105	10.550	10.547	(0.984)	19895	1.00000	0.98
	90 1,3-Dichlorobenzene	146	10.669	10.663	(0.995)	10059	1.00000	1.0
	91 4-Isopropyltoluene	119	10.698	10.695	(0.997)	16343	1.00000	0.96
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	355337	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	12584	1.00000	1.2
	95 n-Butylbenzene	91	11.097	11.097	(1.034)	12051	1.00000	0.90
	96 1,2-Dichlorobenzene	146	11.123	11.113	(1.037)	11507	1.00000	1.2
	97 Hexachloroethane	117	11.354	11.358	(1.058)	2841	1.00000	0.94(Q)
	98 1,2-Dibromo-3-chloropropane	75	11.846	11.840	(1.104)	1235	1.00000	1.5
	141 1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	3136	1.00000	(a)
	99 1,2,4-Trichlorobenzene	180	12.592	12.586	(1.174)	3184	1.00000	0.63
	100 Hexachlorobutadiene	225	12.734	12.731	(1.187)	4046	1.00000	1.0
	101 Naphthalene	128	12.808	12.801	(1.194)	9822	1.00000	0.95
	102 1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	3633	1.00000	0.73

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\V8.I\140120.B\V8D2806.d
Date : 20-JAN-2014 10:33
Client ID: VSTD00110V
Instrument: V8.i
Sample Info: 5ML,VSTD00110V,VSTD00110V
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2804.d
Report Date: 29-Jan-2014 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2804.d
Lab Smp Id: VSTD00510V Client Smp ID: VSTD00510V
Inj Date : 20-JAN-2014 09:39
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD00510V,VSTD00510V
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120.B\v108260Gadd-6lvl.m
Meth Date : 20-Jan-2014 13:22 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 09:39 Cal File: V8D2804.d
Als bottle: 100 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	1.586	1.586	(0.303)	26650	5.00000	4.9
2	Freon114	85	1.705	1.705	(0.326)	25055	5.00000	4.9
3	Chloromethane	50	1.753	1.754	(0.335)	91272	5.00000	4.1
4	Vinyl Chloride	62	1.856	1.856	(0.355)	31218	5.00000	4.7
5	Bromomethane	94	2.146	2.143	(0.410)	6021	5.00000	5.7(Q)
6	Chloroethane	64	2.229	2.229	(0.426)	16568	5.00000	4.9
7	Trichlorofluoromethane	101	2.438	2.442	(0.466)	43379	5.00000	4.8
126	Ethanol	46	2.567	2.567	(0.490)	14947	500.000	470(A)
8	Ether	59	2.670	2.667	(0.510)	25056	5.00000	4.8
9	Acrolein	56	2.776	2.770	(0.530)	29882	25.0000	21
10	1,1-Dichloroethene	96	2.860	2.856	(0.546)	21721	5.00000	4.8
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	26351	5.00000	4.8
12	Acetone	58	2.885	2.885	(0.551)	5201	5.00000	5.0(Q)
13	Iodomethane	142	2.985	2.982	(0.570)	3281	5.00000	4.6
14	Carbon Disulfide	76	3.046	3.046	(0.582)	60555	5.00000	4.5
15	Acetonitrile	41	3.139	3.136	(0.600)	78275	50.0000	49
16	Allyl Chloride	39	3.136	3.136	(0.599)	49195	5.00000	4.8
17	Methyl Acetate	43	3.149	3.146	(0.601)	43493	5.00000	4.6
18	Methylene Chloride	84	3.233	3.229	(0.617)	25058	5.00000	4.7
19	tert-Butanol	59	3.297	3.297	(0.630)	6251	10.0000	9.1
20	Acrylonitrile	53	3.425	3.419	(0.654)	16063	5.00000	4.6
21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.660)	24384	5.00000	4.7
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	73165	5.00000	4.6

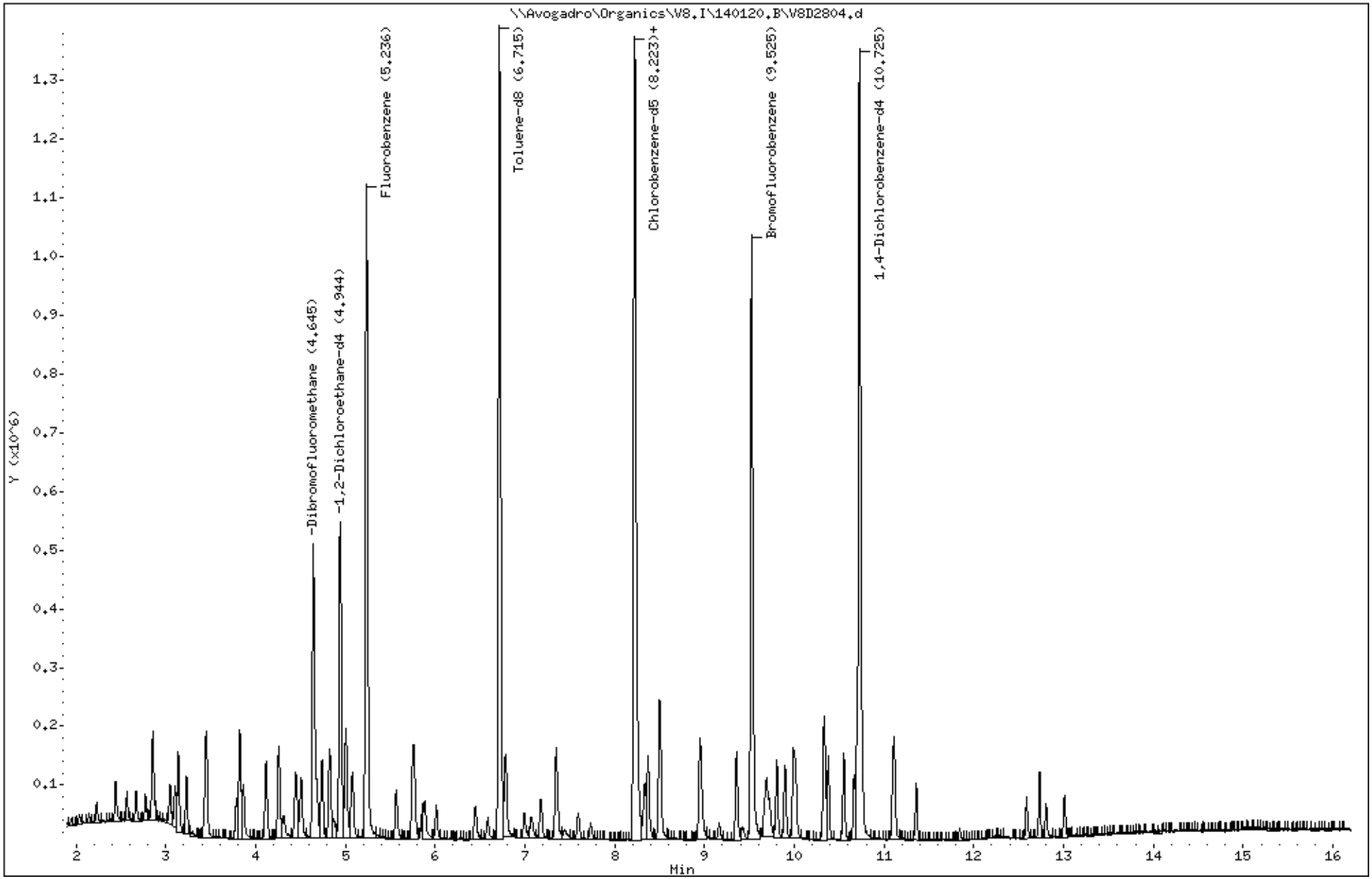
			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
	23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	53629	5.00000	4.8	
	24	Vinyl acetate	43	3.824	3.821	(0.730)	105072	5.00000	4.6	
	25	Diisopropyl Ether	45	3.824	3.824	(0.730)	144573	5.00000	4.8	
	26	2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	53797	5.00000	4.4	
	27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	107118	5.00000	4.8	
	29	2,2-Dichloropropane	77	4.261	4.258	(0.814)	40710	5.00000	4.7	
	28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	27706	5.00000	5.0	
	30	2-Butanone	72	4.268	4.255	(0.815)	2285	5.00000	3.4(Q)	
	32	Propionitrile	54	4.313	4.303	(0.824)	45923	50.0000	43	
	33	Methacrylonitrile	41	4.438	4.432	(0.848)	40772	10.0000	8.2	
	34	Bromochloromethane	128	4.451	4.454	(0.850)	14116	5.00000	4.9	
	31	Tetrahydrofuran	72	4.499	4.496	(0.859)	5059	10.0000	8.8	
	35	Chloroform	83	4.509	4.509	(0.861)	47829	5.00000	4.8	
$	36	Dibromofluoromethane	113	4.644	4.644	(0.887)	274683	50.0000	50	
	37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	45361	5.00000	4.7	
	38	Cyclohexane	56	4.740	4.741	(0.905)	60162	5.00000	4.8	
	39	1,1-Dichloropropene	110	4.818	4.821	(0.920)	12392	5.00000	4.7	
	40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	39741	5.00000	4.6	
	41	Isobutyl Alcohol	43	4.872	4.866	(0.931)	27166	100.000	85	
$	42	1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	54667	50.0000	50	
	43	Benzene	78	5.004	5.001	(0.956)	89088	5.00000	4.8	
	44	1,2-Dichloroethane	62	5.011	5.007	(0.957)	43743	5.00000	4.4	
	45	tert-Amyl methyl ether	73	5.081	5.078	(0.971)	65092	5.00000	4.6	
M	50	1,2-Dichloroethene (Total)	96				52090	10.0000	(a)	
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	870445	50.0000		
	47	Trichloroethene	130	5.567	5.567	(1.063)	27654	5.00000	4.7	
	48	Methylcyclohexane	83	5.750	5.750	(1.098)	37863	5.00000	4.8	
	49	1,2-Dichloropropane	63	5.769	5.769	(1.102)	27903	5.00000	4.7	
	51	Methyl Methacrylate	69	5.859	5.850	(1.119)	12764	5.00000	3.5	
	52	Dibromomethane	93	5.882	5.879	(1.123)	16515	5.00000	4.6	
	53	1,4-Dioxane	88	5.885	5.882	(1.124)	4560	100.000	85	
	54	Bromodichloromethane	83	6.014	6.014	(1.149)	32855	5.00000	4.5	
	55	2-Chloroethyl vinyl ether	63	6.454	6.448	(1.233)	255	5.00000	4.4(TQM)M6 AM 01/29	
	56	cis-1,3-Dichloropropene	75	6.445	6.441	(1.231)	32096	5.00000	4.4	
	57	4-Methyl-2-pentanone	43	6.586	6.580	(1.258)	31048	5.00000	4.1	
$	58	Toluene-d8	98	6.715	6.715	(0.817)	888438	50.0000	50	
	59	Toluene	91	6.785	6.782	(1.296)	93929	5.00000	4.7	
	60	trans-1,3-Dichloropropene	75	6.994	6.985	(1.336)	26886	5.00000	4.0	
	61	Ethyl Methacrylate	69	7.068	7.068	(1.350)	18780	5.00000	4.1	
	62	1,1,2-Trichloroethane	97	7.178	7.178	(1.371)	21801	5.00000	4.7	
	63	Tetrachloroethene	164	7.342	7.345	(0.893)	28723	5.00000	4.9	
	64	1,3-Dichloropropane	76	7.358	7.355	(0.895)	32092	5.00000	4.4	
	65	2-Hexanone	43	7.448	7.432	(0.906)	23317	5.00000	4.0(M)M7 AM 01/29	
	66	Dibromochloromethane	129	7.592	7.596	(0.923)	24599	5.00000	4.1	
	67	1,2-Dibromoethane	107	7.731	7.728	(0.940)	22489	5.00000	4.5	
	69	1-Chlorohexane	91	8.216	8.213	(0.999)	32341	5.00000	4.6(Q)	
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	739998	50.0000		
	70	Chlorobenzene	112	8.255	8.255	(1.004)	67922	5.00000	4.8	
	71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	25539	5.00000	4.4	
	72	Ethylbenzene	106	8.371	8.367	(1.018)	31337	5.00000	4.6	
	73	m,p-Xylene	106	8.499	8.499	(1.034)	79860	10.0000	9.4	
	74	o-Xylene	106	8.943	8.943	(1.088)	37596	5.00000	4.6	
	75	Styrene	104	8.962	8.956	(1.090)	58237	5.00000	4.4	
	76	Bromoform	173	9.165	9.165	(1.115)	16003	5.00000	3.9	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	Isopropylbenzene	105	9.358	9.354	(1.138)	101859	5.00000	4.7
78	trans-1,4-Dichloro-2-butene	75	9.428	9.425	(1.147)	4225	5.00000	3.4(Q)
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.158)	341315	50.0000	48
80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	27060	5.00000	3.3
81	Bromobenzene	156	9.698	9.692	(0.904)	31323	5.00000	4.9
82	1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	27359	5.00000	4.4
83	n-Propylbenzene	120	9.801	9.801	(0.914)	25816	5.00000	4.8
84	2-Chlorotoluene	126	9.901	9.895	(0.923)	26026	5.00000	5.0
85	1,3,5-Trimethylbenzene	105	9.991	9.988	(0.932)	80855	5.00000	4.9
86	4-Chlorotoluene	126	10.014	10.010	(0.934)	26237	5.00000	4.9
M 94	Xylene (Total)	106				117456	15.0000	(a)
87	tert-Butylbenzene	119	10.329	10.329	(0.963)	86295	5.00000	4.7
88	1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	79391	5.00000	4.8
89	sec-Butylbenzene	105	10.551	10.547	(0.984)	100677	5.00000	4.9
90	1,3-Dichlorobenzene	146	10.666	10.663	(0.995)	48863	5.00000	4.8
91	4-Isopropyltoluene	119	10.698	10.695	(0.998)	82908	5.00000	4.8
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	371874	50.0000	(Q)
93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	52380	5.00000	4.8
95	n-Butylbenzene	91	11.100	11.097	(1.035)	62206	5.00000	4.4
96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	47182	5.00000	4.6
97	Hexachloroethane	117	11.358	11.358	(1.059)	14050	5.00000	4.4(Q)
98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	3860	5.00000	4.3
141	1,3,5-Trichlorobenzene	182	12.589	12.586	(2.404)	20562	5.00000	(a)
99	1,2,4-Trichlorobenzene	180	12.589	12.586	(1.174)	20638	5.00000	5.2
100	Hexachlorobutadiene	225	12.734	12.731	(1.187)	19882	5.00000	4.9
101	Naphthalene	128	12.808	12.801	(1.194)	43368	5.00000	4.1
102	1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	21505	5.00000	4.7

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\V8.I\140120.B\V8D2804.d
Date : 20-JAN-2014 09:39
Client ID: VSTD00510V
Instrument: V8.i
Sample Info: 5ML,VSTD00510V,VSTD00510V
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2803.d
Report Date: 29-Jan-2014 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2803.d
Lab Smp Id: VSTD02010V Client Smp ID: VSTD02010V
Inj Date : 20-JAN-2014 09:12
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD02010V,VSTD02010V
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120.B\v108260Gadd-6lvl.m
Meth Date : 20-Jan-2014 13:22 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 09:12 Cal File: V8D2803.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: TARGET115

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	1.586	1.586	(0.303)	131048	20.0000	22
2	Freon114	85	1.705	1.705	(0.326)	124329	20.0000	22
3	Chloromethane	50	1.753	1.754	(0.335)	396752	20.0000	22
4	Vinyl Chloride	62	1.856	1.856	(0.355)	157421	20.0000	22
5	Bromomethane	94	2.143	2.143	(0.409)	24362	20.0000	23
6	Chloroethane	64	2.229	2.229	(0.426)	80524	20.0000	22
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	217074	20.0000	22
126	Ethanol	46	2.567	2.567	(0.490)	73927	2000.00	2100(A)
8	Ether	59	2.667	2.667	(0.509)	124734	20.0000	22
9	Acrolein	56	2.769	2.770	(0.529)	157560	100.000	110
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	105054	20.0000	22
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	131139	20.0000	22
12	Acetone	58	2.888	2.885	(0.552)	27628	20.0000	22
13	Iodomethane	142	2.978	2.982	(0.569)	14121	20.0000	24
14	Carbon Disulfide	76	3.046	3.046	(0.582)	300265	20.0000	21
15	Acetonitrile	41	3.136	3.136	(0.599)	380945	200.000	220(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	244508	20.0000	22
17	Methyl Acetate	43	3.146	3.146	(0.601)	218398	20.0000	22
18	Methylene Chloride	84	3.229	3.229	(0.617)	121339	20.0000	22
19	tert-Butanol	59	3.300	3.297	(0.630)	32751	40.0000	43
20	Acrylonitrile	53	3.419	3.419	(0.653)	78781	20.0000	22
21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.660)	122281	20.0000	22

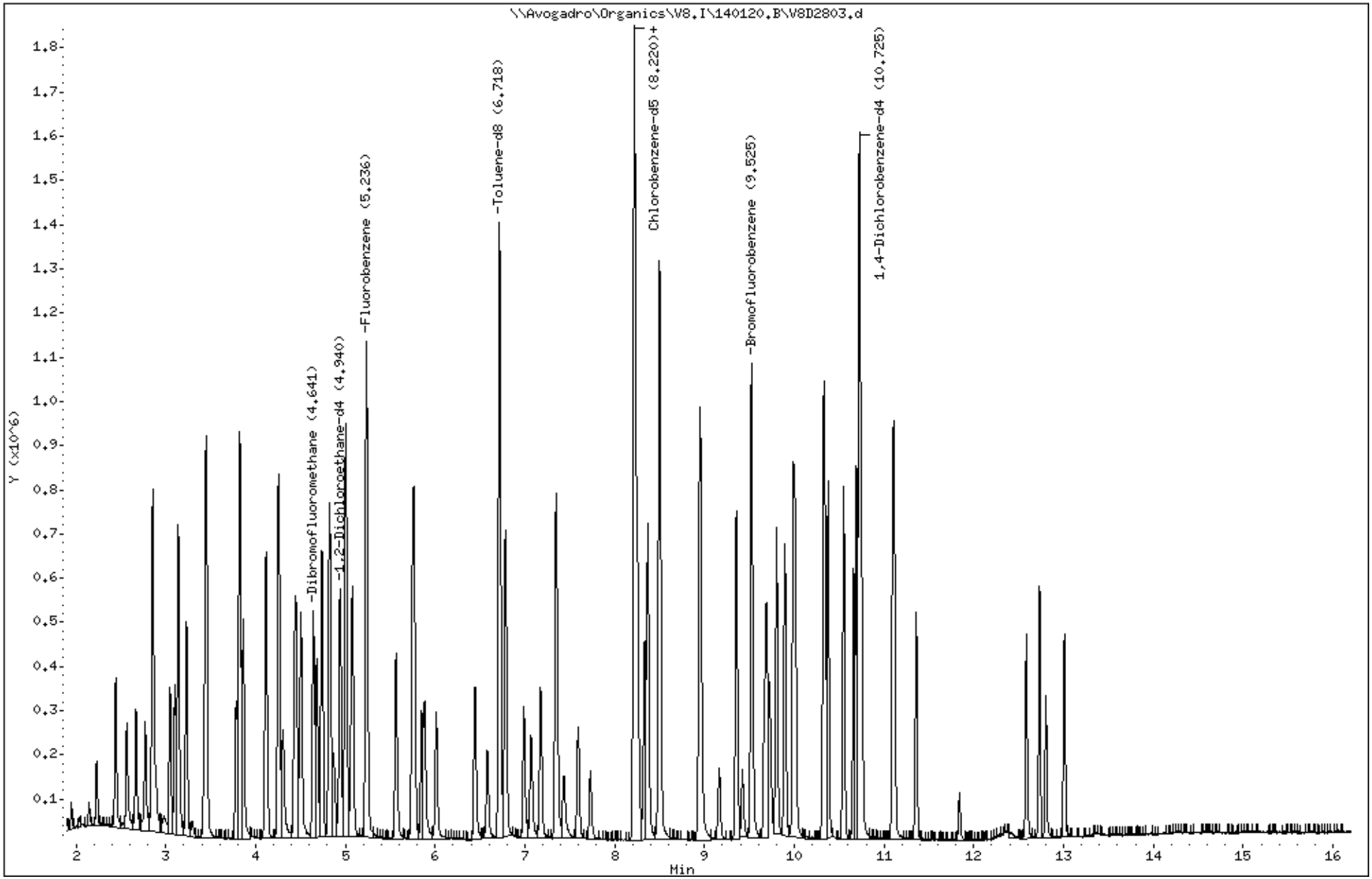
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	372501	20.0000	22
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	273070	20.0000	22
	24 Vinyl acetate	43	3.821	3.821	(0.730)	544322	20.0000	22
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	713797	20.0000	22
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	291414	20.0000	22
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	532591	20.0000	22
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	210123	20.0000	22
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	127912	20.0000	22
	30 2-Butanone	72	4.258	4.255	(0.813)	17324	20.0000	21
	32 Propionitrile	54	4.306	4.303	(0.823)	248679	200.000	210(A)
	33 Methacrylonitrile	41	4.435	4.432	(0.847)	229246	40.0000	42
	34 Bromochloromethane	128	4.454	4.454	(0.851)	70560	20.0000	22
	31 Tetrahydrofuran	72	4.503	4.496	(0.860)	26241	40.0000	42
	35 Chloroform	83	4.506	4.509	(0.861)	237620	20.0000	22
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	279582	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	226934	20.0000	22
	38 Cyclohexane	56	4.737	4.741	(0.905)	299478	20.0000	22
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	63369	20.0000	22
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	207248	20.0000	22
	41 Isobutyl Alcohol	43	4.869	4.866	(0.930)	142130	400.000	410(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	57847	50.0000	52
	43 Benzene	78	5.004	5.001	(0.956)	438288	20.0000	22
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	228147	20.0000	22
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	341930	20.0000	22
M	50 1,2-Dichloroethene (Total)	96				250193	40.0000	44
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	868491	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	138041	20.0000	22
	48 Methylcyclohexane	83	5.753	5.750	(1.099)	189954	20.0000	22
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	138875	20.0000	22
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	86571	20.0000	22
	52 Dibromomethane	93	5.882	5.879	(1.123)	84807	20.0000	22
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	24266	400.000	420(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	169530	20.0000	22
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.231)	1353	20.0000	21(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	171916	20.0000	22
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	172070	20.0000	21
$	58 Toluene-d8	98	6.718	6.715	(0.817)	889971	50.0000	50
	59 Toluene	91	6.782	6.782	(1.295)	463820	20.0000	22
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	162121	20.0000	21
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	104775	20.0000	21
	62 1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	106481	20.0000	22
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	135167	20.0000	22
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	170270	20.0000	22
	65 2-Hexanone	43	7.435	7.432	(0.904)	138109	20.0000	20
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	137843	20.0000	21
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	117825	20.0000	22
	69 1-Chlorohexane	91	8.213	8.213	(0.999)	161097	20.0000	22
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	746283	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	331815	20.0000	22
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	136087	20.0000	22
	72 Ethylbenzene	106	8.371	8.367	(1.018)	161137	20.0000	22
	73 m,p-Xylene	106	8.499	8.499	(1.034)	402748	40.0000	44
	74 o-Xylene	106	8.943	8.943	(1.088)	195051	20.0000	22
	75 Styrene	104	8.959	8.956	(1.090)	306834	20.0000	22

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.162	9.165	(1.114)	90059	20.0000	21
	77 Isopropylbenzene	105	9.358	9.354	(1.138)	511104	20.0000	22
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	26928	20.0000	20
$	79 Bromofluorobenzene	95	9.522	9.522	(1.158)	354306	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.670	9.666	(0.902)	131152	20.0000	22
	81 Bromobenzene	156	9.692	9.692	(0.904)	157109	20.0000	22
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	149102	20.0000	22
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	133024	20.0000	22
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	131108	20.0000	22
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	418169	20.0000	22
	86 4-Chlorotoluene	126	10.010	10.010	(0.933)	132577	20.0000	22
M	94 Xylene (Total)	106				597799	60.0000	66
	87 tert-Butylbenzene	119	10.329	10.329	(0.963)	448782	20.0000	22
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	416236	20.0000	22
	89 sec-Butylbenzene	105	10.551	10.547	(0.984)	518869	20.0000	22
	90 1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	253299	20.0000	22
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	444082	20.0000	22
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	401495	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	260797	20.0000	22
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	362278	20.0000	22
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	251399	20.0000	22
	97 Hexachloroethane	117	11.358	11.358	(1.059)	81588	20.0000	22
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	21210	20.0000	21
	141 1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	135009	20.0000	(a)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	140478	20.0000	20
	100 Hexachlorobutadiene	225	12.731	12.731	(1.187)	103309	20.0000	22
	101 Naphthalene	128	12.801	12.801	(1.194)	234469	20.0000	20
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	133329	20.0000	21

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\V8.I\140120.B\V8D2803.d
Date : 20-JAN-2014 09:12
Client ID: VSTD02010V
Instrument: V8.i
Sample Info: 5ML,VSTD02010V,VSTD02010V
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2802.d
Report Date: 29-Jan-2014 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2802.d
Lab Smp Id: VSTD05010V Client Smp ID: VSTD05010V
Inj Date : 20-JAN-2014 08:29
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD05010V,VSTD05010V
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120.B\v108260Gadd-6lvl.m
Meth Date : 20-Jan-2014 13:22 amarquis Quant Type: ISTD
Cal Date : 16-JAN-2014 11:16 Cal File: V8D2759.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	275219	50.0000	48(H)
2	Freon114	85	1.705	1.705	(0.326)	254941	50.0000	47
3	Chloromethane	50	1.754	1.754	(0.335)	870864	50.0000	51
4	Vinyl Chloride	62	1.856	1.856	(0.355)	341015	50.0000	48
5	Bromomethane	94	2.143	2.143	(0.409)	48159	50.0000	36
6	Chloroethane	64	2.229	2.229	(0.426)	171979	50.0000	48
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	463558	50.0000	48
126	Ethanol	46	2.567	2.567	(0.490)	172351	5000.00	5100(A)
8	Ether	59	2.667	2.667	(0.509)	271867	50.0000	48
9	Acrolein	56	2.770	2.770	(0.529)	363298	250.000	240
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	226232	50.0000	46
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	278118	50.0000	47
12	Acetone	58	2.889	2.885	(0.552)	61094	50.0000	55
13	Iodomethane	142	2.982	2.982	(0.570)	25630	50.0000	34
14	Carbon Disulfide	76	3.046	3.046	(0.582)	689911	50.0000	48
15	Acetonitrile	41	3.136	3.136	(0.599)	837059	500.000	500(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	548399	50.0000	51
17	Methyl Acetate	43	3.143	3.146	(0.600)	496711	50.0000	50
18	Methylene Chloride	84	3.229	3.229	(0.617)	268855	50.0000	48
19	tert-Butanol	59	3.297	3.297	(0.630)	73872	100.000	100
20	Acrylonitrile	53	3.419	3.419	(0.653)	173449	50.0000	47
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	261309	50.0000	48
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	820208	50.0000	49

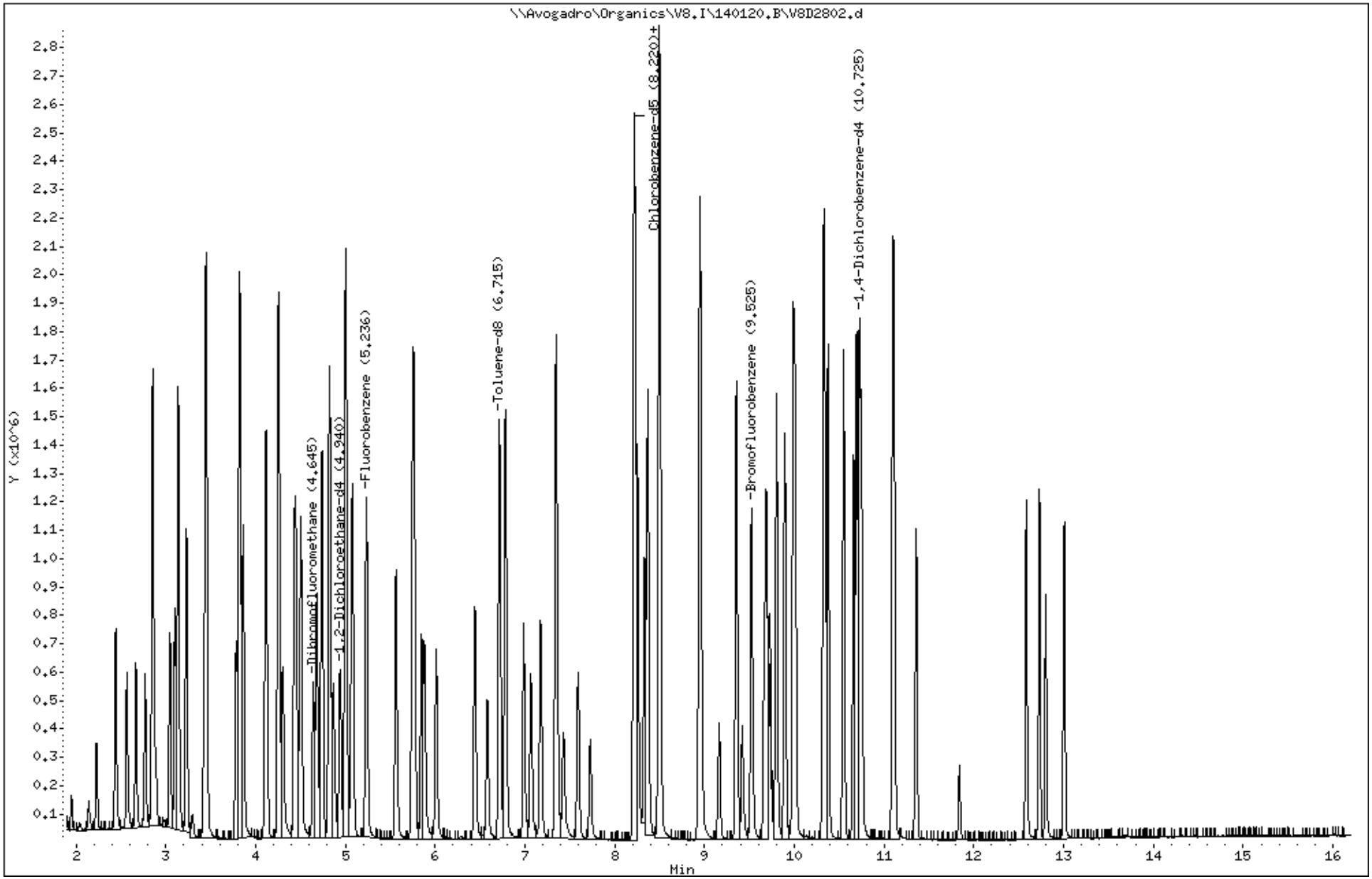
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	586043	50.0000	49
24	Vinyl acetate	43	3.818	3.821	(0.729)	1231009	50.0000	51
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	1559198	50.0000	48
26	2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	650713	50.0000	50
27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1179914	50.0000	49
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	474607	50.0000	51
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	281237	50.0000	48
30	2-Butanone	72	4.255	4.255	(0.813)	40547	50.0000	58
32	Propionitrile	54	4.303	4.303	(0.822)	582190	500.000	510(A)
33	Methacrylonitrile	41	4.432	4.432	(0.846)	543499	100.000	100
34	Bromochloromethane	128	4.451	4.454	(0.850)	145364	50.0000	48
31	Tetrahydrofuran	72	4.499	4.496	(0.859)	62644	100.000	100
35	Chloroform	83	4.506	4.509	(0.861)	512519	50.0000	48
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	289913	50.0000	50
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	501837	50.0000	49
38	Cyclohexane	56	4.741	4.741	(0.905)	632154	50.0000	48
39	1,1-Dichloropropene	110	4.818	4.821	(0.920)	138016	50.0000	50
40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	455562	50.0000	49
41	Isobutyl Alcohol	43	4.866	4.866	(0.929)	352938	1000.00	1000(A)
$ 42	1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	56978	50.0000	49
43	Benzene	78	5.001	5.001	(0.955)	949514	50.0000	48
44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	514201	50.0000	49
45	tert-Amyl methyl ether	73	5.078	5.078	(0.970)	749544	50.0000	49
M 50	1,2-Dichloroethene (Total)	96				542546	100.000	96
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	924183	50.0000	
47	Trichloroethene	130	5.567	5.567	(1.063)	302579	50.0000	48
48	Methylcyclohexane	83	5.750	5.750	(1.098)	399748	50.0000	47
49	1,2-Dichloropropane	63	5.769	5.769	(1.102)	302324	50.0000	48
51	Methyl Methacrylate	69	5.847	5.850	(1.117)	196678	50.0000	51
52	Dibromomethane	93	5.882	5.879	(1.123)	184878	50.0000	49
53	1,4-Dioxane	88	5.885	5.882	(1.124)	59481	1000.00	1000(A)
54	Bromodichloromethane	83	6.011	6.014	(1.148)	382883	50.0000	50
55	2-Chloroethyl vinyl ether	63	6.441	6.448	(1.230)	3102	50.0000	61(T)
56	cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	392250	50.0000	51
57	4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	414590	50.0000	52
$ 58	Toluene-d8	98	6.718	6.715	(0.817)	925843	50.0000	50
59	Toluene	91	6.782	6.782	(1.295)	1001993	50.0000	47
60	trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	374819	50.0000	52
61	Ethyl Methacrylate	69	7.065	7.068	(1.349)	241245	50.0000	49
62	1,1,2-Trichloroethane	97	7.175	7.178	(1.370)	230695	50.0000	47
63	Tetrachloroethene	164	7.345	7.345	(0.893)	280063	50.0000	45
64	1,3-Dichloropropane	76	7.351	7.355	(0.894)	374761	50.0000	49
65	2-Hexanone	43	7.429	7.432	(0.903)	342219	50.0000	57
66	Dibromochloromethane	129	7.593	7.596	(0.923)	318170	50.0000	51
67	1,2-Dibromoethane	107	7.728	7.728	(0.940)	264103	50.0000	50
69	1-Chlorohexane	91	8.216	8.213	(0.999)	341515	50.0000	46
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	781454	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	704980	50.0000	47
71	1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	298955	50.0000	49
72	Ethylbenzene	106	8.367	8.367	(1.018)	350548	50.0000	48
73	m,p-Xylene	106	8.499	8.499	(1.034)	859942	100.000	96
74	o-Xylene	106	8.943	8.943	(1.088)	413671	50.0000	48
75	Styrene	104	8.959	8.956	(1.090)	675989	50.0000	49
76	Bromoform	173	9.162	9.165	(1.114)	217653	50.0000	50

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.355	9.354	(1.138)	1100532	50.0000	48
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	71550	50.0000	54
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	376520	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	299549	50.0000	51
	81	Bromobenzene	156	9.689	9.692	(0.903)	340427	50.0000	46
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	345458	50.0000	48
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	288565	50.0000	47
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	275235	50.0000	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	898444	50.0000	47
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	287280	50.0000	46
M	94	Xylene (Total)	106				1273613	150.000	140
	87	tert-Butylbenzene	119	10.326	10.329	(0.963)	976498	50.0000	46
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	904196	50.0000	47
	89	sec-Butylbenzene	105	10.551	10.547	(0.984)	1113297	50.0000	47
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	551914	50.0000	47
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	961144	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	432626	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	571184	50.0000	45
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	801691	50.0000	49
	96	1,2-Dichlorobenzene	146	11.110	11.113	(1.036)	537993	50.0000	45
	97	Hexachloroethane	117	11.358	11.358	(1.059)	183854	50.0000	50
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	51668	50.0000	49
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	335508	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	354629	50.0000	48
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	221523	50.0000	47
	101	Naphthalene	128	12.801	12.801	(1.194)	612164	50.0000	50
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	325148	50.0000	48

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.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2802.d
Date : 20-JAN-2014 08:29
Client ID: VSTD05010V
Instrument: V8.i
Sample Info: 5ML,VSTD05010V,VSTD05010V
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2808.d
Report Date: 29-Jan-2014 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2808.d
Lab Smp Id: VSTD10010V Client Smp ID: VSTD10010V
Inj Date : 20-JAN-2014 12:40
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD10010V,VSTD10010V
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120.B\v108260Gadd-6lvl.m
Meth Date : 20-Jan-2014 13:22 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	497564	100.000	89
2	Freon114	85	1.705	1.705	(0.326)	470660	100.000	89
3	Chloromethane	50	1.753	1.754	(0.335)	1550134	100.000	96
4	Vinyl Chloride	62	1.856	1.856	(0.355)	645449	100.000	94
5	Bromomethane	94	2.142	2.143	(0.409)	121386	100.000	94(H)
6	Chloroethane	64	2.229	2.229	(0.426)	320686	100.000	92
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	857626	100.000	92
126	Ethanol	46	2.567	2.567	(0.490)	295663	10000.0	9100(A)
8	Ether	59	2.667	2.667	(0.509)	513877	100.000	95
9	Acrolein	56	2.769	2.770	(0.529)	672092	500.000	460
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	433121	100.000	92
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	526878	100.000	93
12	Acetone	58	2.888	2.885	(0.552)	64913	100.000	60
13	Iodomethane	142	2.982	2.982	(0.570)	102133	100.000	140
14	Carbon Disulfide	76	3.046	3.046	(0.582)	1280103	100.000	93
15	Acetonitrile	41	3.136	3.136	(0.599)	1485570	1000.00	910(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	983687	100.000	94
17	Methyl Acetate	43	3.142	3.146	(0.600)	898119	100.000	93
18	Methylene Chloride	84	3.232	3.229	(0.617)	500355	100.000	92
19	tert-Butanol	59	3.300	3.297	(0.630)	129247	200.000	180
20	Acrylonitrile	53	3.419	3.419	(0.653)	328295	100.000	92
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	498111	100.000	94
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	1556387	100.000	96

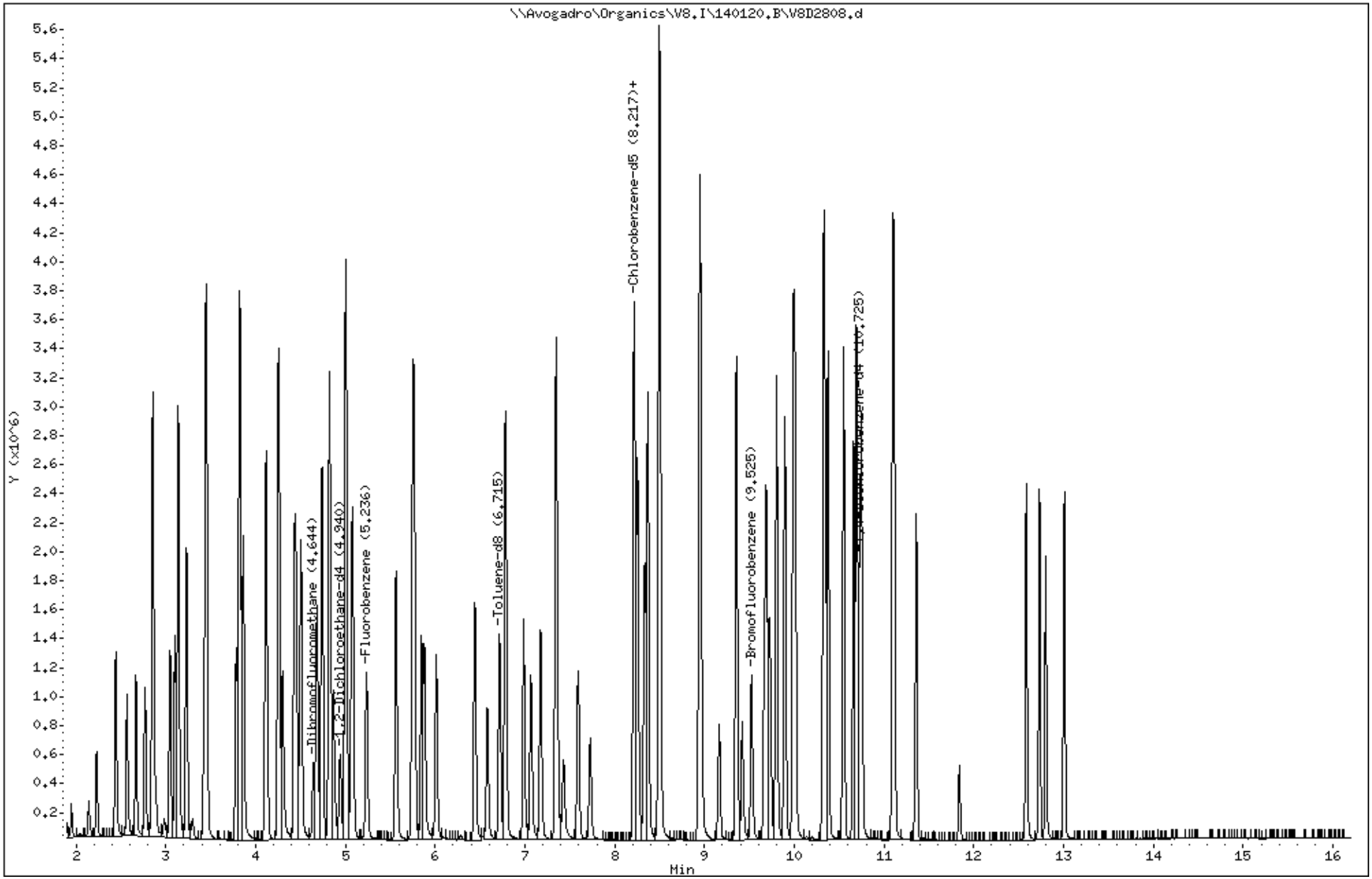
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.785	3.786	(0.723)	1106800	100.000	95
	24 Vinyl acetate	43	3.818	3.821	(0.729)	2285035	100.000	98
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	2963928	100.000	95
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	1232131	100.000	97
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	2176114	100.000	94
	29 2,2-Dichloropropane	77	4.261	4.258	(0.814)	851866	100.000	95
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	530534	100.000	94
	30 2-Butanone	72	4.258	4.255	(0.813)	53887	100.000	79
	32 Propionitrile	54	4.303	4.303	(0.822)	1063020	1000.00	960(A)
	33 Methacrylonitrile	41	4.432	4.432	(0.846)	997661	200.000	200
	34 Bromochloromethane	128	4.454	4.454	(0.851)	277866	100.000	94
	31 Tetrahydrofuran	72	4.499	4.496	(0.859)	114579	200.000	190
	35 Chloroform	83	4.509	4.509	(0.861)	967173	100.000	94
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	274507	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	946417	100.000	96
	38 Cyclohexane	56	4.740	4.741	(0.905)	1218510	100.000	95
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	265313	100.000	98
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	880146	100.000	98
	41 Isobutyl Alcohol	43	4.866	4.866	(0.929)	630833	2000.00	1900(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	54176	50.0000	48
	43 Benzene	78	5.004	5.001	(0.956)	1834003	100.000	95
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	983599	100.000	97
	45 tert-Amyl methyl ether	73	5.075	5.078	(0.969)	1416213	100.000	96
M	50 1,2-Dichloroethene (Total)	96				1028645	200.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	896128	50.0000	
	47 Trichloroethene	130	5.563	5.567	(1.063)	578450	100.000	95
	48 Methylcyclohexane	83	5.753	5.750	(1.099)	782622	100.000	96
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	582531	100.000	95
	51 Methyl Methacrylate	69	5.846	5.850	(1.117)	386138	100.000	100
	52 Dibromomethane	93	5.879	5.879	(1.123)	356046	100.000	97
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	107952	2000.00	2000(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	736215	100.000	98
	55 2-Chloroethyl vinyl ether	63	6.441	6.448	(1.230)	5669	100.000	96(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	770828	100.000	100
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	744261	100.000	96
$	58 Toluene-d8	98	6.718	6.715	(0.817)	898846	50.0000	49
	59 Toluene	91	6.782	6.782	(1.295)	1967609	100.000	96
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	728551	100.000	100
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	479618	100.000	100
	62 1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	443737	100.000	93
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	550378	100.000	91
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	717134	100.000	96
	65 2-Hexanone	43	7.428	7.432	(0.903)	466605	100.000	79
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	626479	100.000	100
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	514137	100.000	100
	69 1-Chlorohexane	91	8.213	8.213	(0.999)	687776	100.000	95
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	761813	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	1385325	100.000	95
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	584627	100.000	98
	72 Ethylbenzene	106	8.367	8.367	(1.018)	692363	100.000	98
	73 m,p-Xylene	106	8.496	8.499	(1.033)	1709746	200.000	200
	74 o-Xylene	106	8.943	8.943	(1.088)	816857	100.000	98
	75 Styrene	104	8.959	8.956	(1.090)	1344897	100.000	99
	76 Bromoform	173	9.161	9.165	(1.114)	430262	100.000	100

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.354	9.354	(1.138)	2232467	100.000	99
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	143606	100.000	110
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	370915	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.666	(0.902)	556083	100.000	99
	81	Bromobenzene	156	9.689	9.692	(0.903)	677827	100.000	92
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	650922	100.000	91
	83	n-Propylbenzene	120	9.804	9.801	(0.914)	587941	100.000	96
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	558006	100.000	94
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	1766748	100.000	94
	86	4-Chlorotoluene	126	10.007	10.010	(0.933)	566244	100.000	93
M	94	Xylene (Total)	106				2526603	300.000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	2126974	100.000	100
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	1819240	100.000	96
	89	sec-Butylbenzene	105	10.550	10.547	(0.984)	2224038	100.000	95
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	1093851	100.000	94
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	1919414	100.000	96
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	426544	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	1129636	100.000	90
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	1606323	100.000	100
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	1066628	100.000	91
	97	Hexachloroethane	117	11.357	11.358	(1.059)	375435	100.000	100
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	102940	100.000	99
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	710342	100.000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	732938	100.000	97
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	427926	100.000	92
	101	Naphthalene	128	12.801	12.801	(1.194)	1355229	100.000	110
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	683795	100.000	100

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.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2808.d
Date : 20-JAN-2014 12:40
Client ID: VSTD10010V
Instrument: V8.i
Sample Info: 5ML,VSTD10010V,VSTD10010V
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2807.d
Report Date: 29-Jan-2014 11:27

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2807.d
Lab Smp Id: VSTD20010V Client Smp ID: VSTD20010V
Inj Date : 20-JAN-2014 12:13
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD20010V,VSTD20010V
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120.B\v108260Gadd-6lvl.m
Meth Date : 20-Jan-2014 13:22 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:13 Cal File: V8D2807.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: TARGET115

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	1.590	1.586	(0.304)	1040619	200.000	190
2	Freon114	85	1.705	1.705	(0.326)	991033	200.000	190
3	Chloromethane	50	1.753	1.754	(0.335)	3151248	200.000	160
4	Vinyl Chloride	62	1.856	1.856	(0.355)	1276826	200.000	190
5	Bromomethane	94	2.139	2.143	(0.409)	204838	200.000	160
6	Chloroethane	64	2.229	2.229	(0.426)	627267	200.000	180
7	Trichlorofluoromethane	101	2.445	2.442	(0.467)	1743483	200.000	190
126	Ethanol	46	2.573	2.567	(0.492)	601269	20000.0	18000(A)
8	Ether	59	2.667	2.667	(0.509)	1008413	200.000	190
9	Acrolein	56	2.770	2.770	(0.529)	1327436	1000.00	920
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	836508	200.000	180
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	1056059	200.000	190
12	Acetone	58	2.885	2.885	(0.551)	201989	200.000	180
13	Iodomethane	142	2.982	2.982	(0.570)	210598	200.000	320(A)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	2527789	200.000	180
15	Acetonitrile	41	3.136	3.136	(0.599)	2844569	2000.00	1800(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	1776049	200.000	170
17	Methyl Acetate	43	3.146	3.146	(0.601)	1732397	200.000	180
18	Methylene Chloride	84	3.229	3.229	(0.617)	996143	200.000	180
19	tert-Butanol	59	3.300	3.297	(0.630)	259859	400.000	370(A)
20	Acrylonitrile	53	3.419	3.419	(0.653)	643856	200.000	180
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	951641	200.000	180

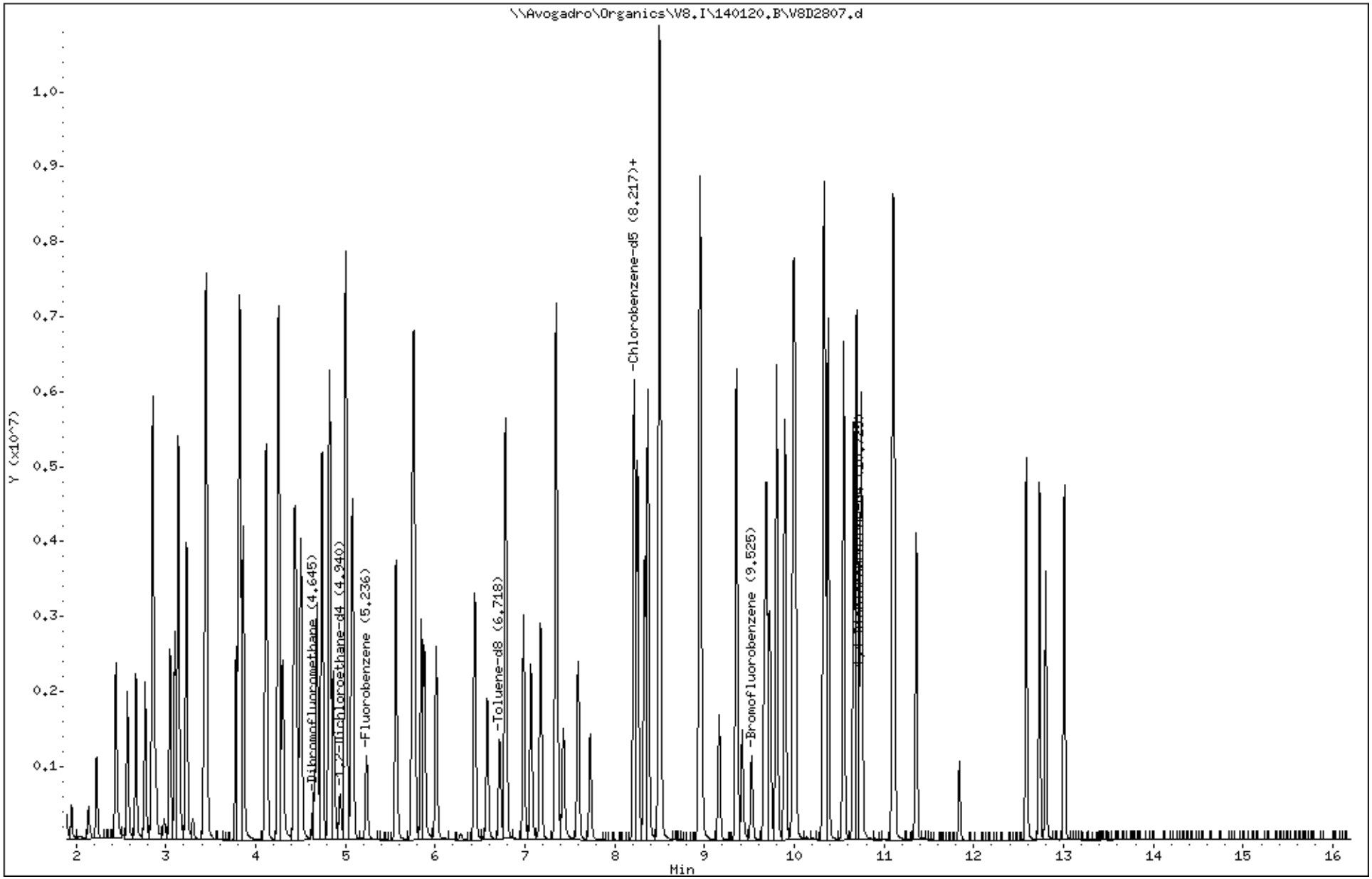
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	3050985	200.000	190
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	2162283	200.000	190
	24 Vinyl acetate	43	3.818	3.821	(0.729)	4602120	200.000	200
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	5841812	200.000	190
	26 2-Chloro-1,3-Butadiene	53	3.863	3.860	(0.738)	2419992	200.000	190
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	4362540	200.000	190
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	1755478	200.000	200
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	1035695	200.000	180
	30 2-Butanone	72	4.255	4.255	(0.813)	142009	200.000	200
	32 Propionitrile	54	4.303	4.303	(0.822)	2138911	2000.00	2000(A)
	33 Methacrylonitrile	41	4.432	4.432	(0.846)	2031494	400.000	400(A)
	34 Bromochloromethane	128	4.454	4.454	(0.851)	503678	200.000	170
	31 Tetrahydrofuran	72	4.496	4.496	(0.859)	226911	400.000	390(A)
	35 Chloroform	83	4.506	4.509	(0.861)	1885486	200.000	190
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	268874	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	1862098	200.000	190
	38 Cyclohexane	56	4.737	4.741	(0.905)	2437635	200.000	190
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	507180	200.000	190
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	1728369	200.000	200
	41 Isobutyl Alcohol	43	4.866	4.866	(0.929)	1327377	4000.00	4100(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	53166	50.0000	48
	43 Benzene	78	5.001	5.001	(0.955)	3592392	200.000	190
	44 1,2-Dichloroethane	62	5.004	5.007	(0.956)	1923286	200.000	190
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	2807158	200.000	190
M	50 1,2-Dichloroethene (Total)	96				1987336	400.000	370
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	873340	50.0000	(T)
	47 Trichloroethene	130	5.564	5.567	(1.063)	1154511	200.000	190
	48 Methylcyclohexane	83	5.753	5.750	(1.099)	1573222	200.000	200
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	1155632	200.000	190
	51 Methyl Methacrylate	69	5.847	5.850	(1.117)	764368	200.000	210(A)
	52 Dibromomethane	93	5.879	5.879	(1.123)	683248	200.000	190
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	209038	4000.00	3900(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	1474063	200.000	200
	55 2-Chloroethyl vinyl ether	63	6.438	6.448	(1.230)	10944	200.000	240(TA)
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	1521663	200.000	210(A)
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	1532327	200.000	200
$	58 Toluene-d8	98	6.718	6.715	(0.817)	887516	50.0000	50
	59 Toluene	91	6.782	6.782	(1.295)	3850974	200.000	190
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	1452807	200.000	220(A)
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	959644	200.000	210(A)
	62 1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	872093	200.000	180
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	1126830	200.000	190
	64 1,3-Dichloropropane	76	7.351	7.355	(0.894)	1435190	200.000	200
	65 2-Hexanone	43	7.428	7.432	(0.903)	1240617	200.000	220(A)
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	1262530	200.000	220(A)
	67 1,2-Dibromoethane	107	7.724	7.728	(0.939)	1003045	200.000	200
	69 1-Chlorohexane	91	8.216	8.213	(0.999)	1341002	200.000	190
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	736011	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	2688154	200.000	190
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	1157273	200.000	200
	72 Ethylbenzene	106	8.371	8.367	(1.018)	1371468	200.000	200
	73 m,p-Xylene	106	8.499	8.499	(1.034)	3349534	400.000	400(A)
	74 o-Xylene	106	8.946	8.943	(1.088)	1579473	200.000	200
	75 Styrene	104	8.959	8.956	(1.090)	2573862	200.000	200

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	891512	200.000	220(A)
	77	Isopropylbenzene	105	9.358	9.354	(1.138)	4371611	200.000	200
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	259258	200.000	220(A)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	362324	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	1103908	200.000	160
	81	Bromobenzene	156	9.689	9.692	(0.903)	1318634	200.000	180
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	1287198	200.000	180
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	1162502	200.000	190
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	1089159	200.000	180
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	3608331	200.000	190
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	1131372	200.000	180
M	94	Xylene (Total)	106				4929007	600.000	590
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	4227275	200.000	200
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	3668934	200.000	190
	89	sec-Butylbenzene	105	10.551	10.547	(0.984)	4408696	200.000	190
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	2211513	200.000	190
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	3886531	200.000	190
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	424393	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	2282450	200.000	180
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	3282573	200.000	200(A)
	96	1,2-Dichlorobenzene	146	11.110	11.113	(1.036)	2139317	200.000	180
	97	Hexachloroethane	117	11.358	11.358	(1.059)	719815	200.000	200
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	207447	200.000	190
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	1462886	200.000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	1529784	200.000	250(A)
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	854275	200.000	180
	101	Naphthalene	128	12.801	12.801	(1.194)	2485664	200.000	210(A)
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	1370187	200.000	230(A)

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\V8.I\140120.B\V8D2807.d
Date : 20-JAN-2014 12:13
Client ID: VSTD20010V
Instrument: V8.i
Sample Info: 5ML,VSTD20010V,VSTD20010V
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date: 01/20/2014 Time: 14:46

Lab File ID: V8D2811.D Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####) VSTD05010W Init. Calib. Time(s): 8:29 12:40

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	0.310	0.275	0.100	-11.4	20.0
Chloromethane	1.073	0.883	0.100	-17.7	20.0
Vinyl chloride	0.381	0.346	0.100	-9.3	20.0
Bromomethane	0.072	0.064	0.100	-11.2	20.0
Chloroethane	0.195	0.176	0.100	-9.9	20.0
Trichlorofluoromethane	0.520	0.461	0.100	-11.3	20.0
1,1-Dichloroethene	0.263	0.235	0.100	-10.6	20.0
Acetone	0.060	0.050	0.100	-16.0	20.0
Iodomethane	0.041	0.044	0.100	9.2	20.0
Carbon disulfide	0.771	0.666	0.100	-13.5	20.0
Methylene chloride	0.304	0.286	0.100	-5.9	20.0
trans-1,2-Dichloroethene	0.296	0.279	0.100	-5.8	20.0
Methyl tert-butyl ether	0.906	0.914	0.100	0.9	20.0
1,1-Dichloroethane	0.648	0.622	0.200	-4.0	20.0
Vinyl acetate	1.299	1.335	0.100	2.8	20.0
2-Butanone	0.038	0.039	0.100	2.2	20.0
cis-1,2-Dichloroethene	0.316	0.299	0.100	-5.4	20.0
2,2-Dichloropropane	0.502	0.485	0.100	-3.4	20.0
Bromochloromethane	0.165	0.157	0.100	-5.4	20.0
Chloroform	0.571	0.550	0.200	-3.6	20.0
1,1,1-Trichloroethane	0.553	0.519	0.100	-6.0	20.0
1,1-Dichloropropene	0.151	0.146	0.100	-3.1	20.0
Carbon tetrachloride	0.499	0.475	0.100	-4.7	20.0
1,2-Dichloroethane	0.564	0.548	0.100	-2.8	20.0
Benzene	1.077	1.024	0.500	-4.9	20.0
Trichloroethene	0.339	0.319	0.200	-6.1	20.0
1,2-Dichloropropane	0.343	0.323	0.100	-5.6	20.0
Dibromomethane	0.204	0.206	0.100	0.8	20.0
Bromodichloromethane	0.417	0.407	0.200	-2.4	20.0
cis-1,3-Dichloropropene	0.416	0.422	0.200	1.5	20.0
4-Methyl-2-pentanone	0.431	0.479	0.100	11.2	20.0
Toluene	1.142	1.069	0.400	-6.4	20.0
trans-1,3-Dichloropropene	0.390	0.402	0.100	3.2	20.0
1,1,2-Trichloroethane	0.267	0.258	0.100	-3.6	20.0
1,3-Dichloropropane	0.491	0.486	0.100	-1.0	20.0
Tetrachloroethene	0.397	0.359	0.200	-9.8	20.0
2-Hexanone	0.389	0.399	0.100	2.8	20.0
Dibromochloromethane	0.401	0.406	0.100	1.3	20.0
1,2-Dibromoethane	0.335	0.347	0.100	3.8	20.0
Chlorobenzene	0.959	0.893	0.500	-6.9	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date: 01/20/2014 Time: 14:46

Lab File ID: V8D2811.D Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####) VSTD05010W Init. Calib. Time(s): 8:29 12:40

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	0.392	0.377	0.100	-3.9	20.0
Ethylbenzene	0.464	0.439	0.100	-5.4	20.0
m,p-Xylene	0.573	0.544	0.100	-5.1	20.0
o-Xylene	0.547	0.526	0.300	-3.8	20.0
Xylene (Total)	0.564	0.538	0.100	-4.7	20.0
Styrene	0.869	0.836	0.300	-3.8	20.0
Bromoform	0.277	0.289	0.100	4.3	20.0
Isopropylbenzene	1.476	1.392	0.100	-5.7	20.0
1,1,2,2-Tetrachloroethane	0.777	0.735	0.300	-5.5	20.0
Bromobenzene	0.862	0.793	0.100	-8.0	20.0
1,2,3-Trichloropropane	0.834	0.837	0.100	0.4	20.0
n-Propylbenzene	0.714	0.666	0.100	-6.8	20.0
2-Chlorotoluene	0.696	0.647	0.100	-7.0	20.0
1,3,5-Trimethylbenzene	2.209	1.982	0.100	-10.3	20.0
4-Chlorotoluene	0.717	0.649	0.100	-9.4	20.0
tert-Butylbenzene	2.470	2.174	0.100	-12.0	20.0
1,2,4-Trimethylbenzene	2.228	2.044	0.100	-8.2	20.0
sec-Butylbenzene	2.753	2.509	0.100	-8.8	20.0
4-Isopropyltoluene	2.343	2.147	0.100	-8.3	20.0
1,3-Dichlorobenzene	1.361	1.260	0.600	-7.4	20.0
1,4-Dichlorobenzene	1.465	1.305	0.500	-10.9	20.0
n-Butylbenzene	1.882	1.795	0.100	-4.6	20.0
1,2-Dichlorobenzene	1.368	1.240	0.400	-9.3	20.0
1,2-Dibromo-3-chloropropane	0.129	0.134	0.050	3.8	20.0
1,2,4-Trichlorobenzene	0.743	0.794	0.200	6.9	20.0
Hexachlorobutadiene	0.544	0.488	0.100	-10.3	20.0
1,2,3-Trichlorobenzene	0.713	0.747	0.100	4.8	20.0
Naphthalene	1.413	1.456	0.100	3.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.317	0.283	0.100	-10.9	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date: 01/20/2014 Time: 14:46

Lab File ID: V8D2811.D Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####) VSTD05010W Init. Calib. Time(s): 8:29 12:40

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	0.313	0.314	0.100	0.3	20.0
1,2-Dichloroethane-d4	0.062	0.062	0.100	-1.3	20.0
Toluene-d8	1.193	1.174	0.100	-1.5	20.0
Bromofluorobenzene	0.479	0.484	0.100	0.9	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date: 01/21/2014 Time: 9:00

Lab File ID: V8D2842.D Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####) VSTD05010X Init. Calib. Time(s): 8:29 12:40

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	0.310	0.309	0.100	-0.6	20.0
Chloromethane	1.073	0.927	0.100	-13.6	20.0
Vinyl chloride	0.381	0.376	0.100	-1.2	20.0
Bromomethane	0.072	0.081	0.100	12.8	20.0
Chloroethane	0.195	0.191	0.100	-2.1	20.0
Trichlorofluoromethane	0.520	0.515	0.100	-0.9	20.0
1,1-Dichloroethene	0.263	0.251	0.100	-4.4	20.0
Acetone	0.060	0.066	0.100	9.8	20.0
Iodomethane	0.041	0.052	0.100	28.8	20.0
Carbon disulfide	0.771	0.750	0.100	-2.6	20.0
Methylene chloride	0.304	0.301	0.100	-0.9	20.0
trans-1,2-Dichloroethene	0.296	0.295	0.100	-0.3	20.0
Methyl tert-butyl ether	0.906	0.913	0.100	0.8	20.0
1,1-Dichloroethane	0.648	0.650	0.200	0.4	20.0
Vinyl acetate	1.299	1.361	0.100	4.8	20.0
2-Butanone	0.038	0.046	0.100	19.7	20.0
cis-1,2-Dichloroethene	0.316	0.315	0.100	-0.5	20.0
2,2-Dichloropropane	0.502	0.513	0.100	2.2	20.0
Bromochloromethane	0.165	0.167	0.100	0.8	20.0
Chloroform	0.571	0.577	0.200	1.0	20.0
1,1,1-Trichloroethane	0.553	0.553	0.100	0.1	20.0
1,1-Dichloropropene	0.151	0.150	0.100	-0.6	20.0
Carbon tetrachloride	0.499	0.499	0.100	0.1	20.0
1,2-Dichloroethane	0.564	0.584	0.100	3.6	20.0
Benzene	1.077	1.078	0.500	0.1	20.0
Trichloroethene	0.339	0.332	0.200	-2.2	20.0
1,2-Dichloropropane	0.343	0.337	0.100	-1.7	20.0
Dibromomethane	0.204	0.209	0.100	2.4	20.0
Bromodichloromethane	0.417	0.430	0.200	3.0	20.0
cis-1,3-Dichloropropene	0.416	0.434	0.200	4.4	20.0
4-Methyl-2-pentanone	0.431	0.451	0.100	4.6	20.0
Toluene	1.142	1.109	0.400	-2.9	20.0
trans-1,3-Dichloropropene	0.390	0.402	0.100	3.3	20.0
1,1,2-Trichloroethane	0.267	0.259	0.100	-2.9	20.0
1,3-Dichloropropane	0.491	0.481	0.100	-2.1	20.0
Tetrachloroethene	0.397	0.355	0.200	-10.7	20.0
2-Hexanone	0.389	0.438	0.100	12.6	20.0
Dibromochloromethane	0.401	0.406	0.100	1.3	20.0
1,2-Dibromoethane	0.335	0.337	0.100	0.6	20.0
Chlorobenzene	0.959	0.891	0.500	-7.1	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date: 01/21/2014 Time: 9:00

Lab File ID: V8D2842.D Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####) VSTD05010X Init. Calib. Time(s): 8:29 12:40

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	0.392	0.381	0.100	-2.7	20.0
Ethylbenzene	0.464	0.437	0.100	-5.8	20.0
m,p-Xylene	0.573	0.536	0.100	-6.4	20.0
o-Xylene	0.547	0.520	0.300	-4.8	20.0
Xylene (Total)	0.564	0.531	0.100	-5.9	20.0
Styrene	0.869	0.842	0.300	-3.1	20.0
Bromoform	0.277	0.270	0.100	-2.4	20.0
Isopropylbenzene	1.476	1.349	0.100	-8.6	20.0
1,1,2,2-Tetrachloroethane	0.777	0.711	0.300	-8.5	20.0
Bromobenzene	0.862	0.804	0.100	-6.7	20.0
1,2,3-Trichloropropane	0.834	0.796	0.100	-4.5	20.0
n-Propylbenzene	0.714	0.659	0.100	-7.7	20.0
2-Chlorotoluene	0.696	0.643	0.100	-7.6	20.0
1,3,5-Trimethylbenzene	2.209	2.015	0.100	-8.8	20.0
4-Chlorotoluene	0.717	0.662	0.100	-7.7	20.0
tert-Butylbenzene	2.470	2.135	0.100	-13.5	20.0
1,2,4-Trimethylbenzene	2.228	2.034	0.100	-8.7	20.0
sec-Butylbenzene	2.753	2.483	0.100	-9.8	20.0
4-Isopropyltoluene	2.343	2.142	0.100	-8.5	20.0
1,3-Dichlorobenzene	1.361	1.242	0.600	-8.8	20.0
1,4-Dichlorobenzene	1.465	1.317	0.500	-10.1	20.0
n-Butylbenzene	1.882	1.798	0.100	-4.5	20.0
1,2-Dichlorobenzene	1.368	1.257	0.400	-8.1	20.0
1,2-Dibromo-3-chloropropane	0.129	0.121	0.050	-6.0	20.0
1,2,4-Trichlorobenzene	0.743	0.756	0.200	1.7	20.0
Hexachlorobutadiene	0.544	0.501	0.100	-7.8	20.0
1,2,3-Trichlorobenzene	0.713	0.727	0.100	1.9	20.0
Naphthalene	1.413	1.363	0.100	-3.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.317	0.307	0.100	-3.4	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Instrument ID: V10 Calibration Date: 01/21/2014 Time: 9:00

Lab File ID: V8D2842.D Init. Calib. Date(s): 01/20/2014 01/20/2014

EPA Sample No.(VSTD#####) VSTD05010X Init. Calib. Time(s): 8:29 12:40

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	0.313	0.319	0.100	2.0	20.0
1,2-Dichloroethane-d4	0.062	0.062	0.100	-0.5	20.0
Toluene-d8	1.193	1.146	0.100	-3.9	20.0
Bromofluorobenzene	0.479	0.480	0.100	0.1	20.0

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2811.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2811.d
Lab Smp Id: VSTD05010W Client Smp ID: VSTD05010W
Inj Date : 20-JAN-2014 14:46
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD05010W,VSTD05010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	244793	50.0000	44
2	Freon114	85	1.705	1.705	(0.326)	232828	50.0000	44
3	Chloromethane	50	1.753	1.754	(0.335)	785616	50.0000	48
4	Vinyl Chloride	62	1.853	1.856	(0.354)	307483	50.0000	45
5	Bromomethane	94	2.139	2.143	(0.409)	56609	50.0000	44
6	Chloroethane	64	2.229	2.229	(0.426)	156231	50.0000	45
7	Trichlorofluoromethane	101	2.441	2.445	(0.466)	410020	50.0000	44
126	Ethanol	46	2.567	2.567	(0.490)	176821	5000.00	5500(A)
8	Ether	59	2.667	2.667	(0.509)	265390	50.0000	49
9	Acrolein	56	2.769	2.770	(0.529)	375888	250.000	260
10	1,1-Dichloroethene	96	2.856	2.860	(0.546)	208843	50.0000	45
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	251494	50.0000	44
12	Acetone	58	2.888	2.889	(0.552)	44749	50.0000	42
13	Iodomethane	142	2.982	2.982	(0.570)	39363	50.0000	55
14	Carbon Disulfide	76	3.046	3.046	(0.582)	592980	50.0000	43
15	Acetonitrile	41	3.136	3.139	(0.599)	751855	500.000	460(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	491221	50.0000	47
17	Methyl Acetate	43	3.146	3.146	(0.601)	519382	50.0000	54
18	Methylene Chloride	84	3.229	3.229	(0.617)	254627	50.0000	47
19	tert-Butanol	59	3.300	3.297	(0.630)	83065	100.000	120
20	Acrylonitrile	53	3.422	3.422	(0.654)	185780	50.0000	53
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	248005	50.0000	47

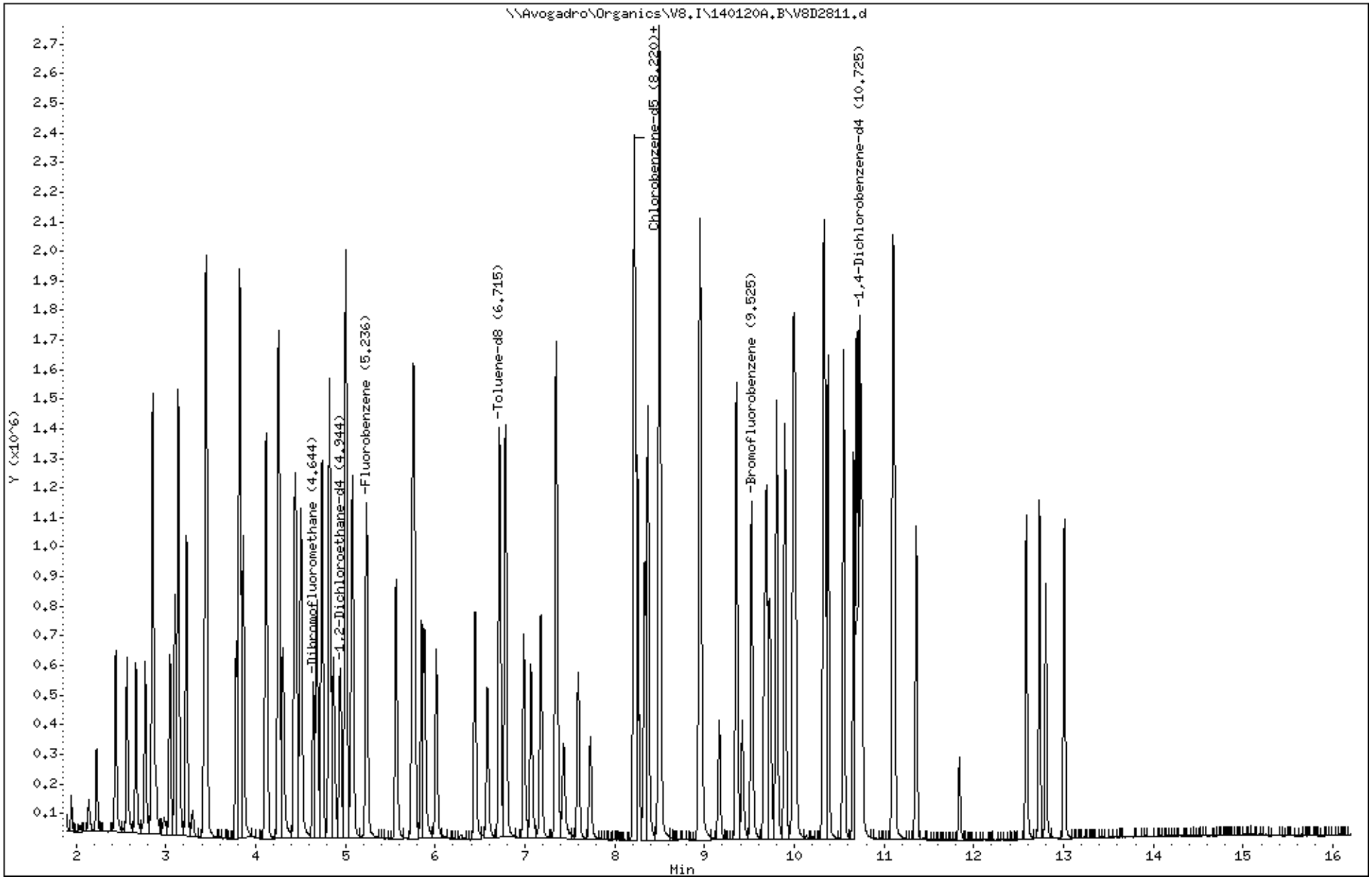
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	813170	50.0000	50
	23 1,1-Dichloroethane	63	3.785	3.786	(0.723)	553334	50.0000	48
	24 Vinyl acetate	43	3.818	3.821	(0.729)	1187509	50.0000	51
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1491348	50.0000	48
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	600633	50.0000	48
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1125314	50.0000	49
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	431511	50.0000	48
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	266255	50.0000	47
	30 2-Butanone	72	4.258	4.258	(0.813)	34678	50.0000	51
	32 Propionitrile	54	4.303	4.303	(0.822)	615786	500.000	560(A)
	33 Methacrylonitrile	41	4.435	4.432	(0.847)	558222	100.000	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	139294	50.0000	47
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	66788	100.000	110
	35 Chloroform	83	4.509	4.509	(0.861)	489813	50.0000	48
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	279475	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	462095	50.0000	47
	38 Cyclohexane	56	4.740	4.741	(0.905)	583909	50.0000	46
	39 1,1-Dichloropropene	110	4.821	4.824	(0.921)	129995	50.0000	48
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	423079	50.0000	48
	41 Isobutyl Alcohol	43	4.869	4.869	(0.930)	387470	1000.00	1200(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	54874	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	911284	50.0000	48
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	487876	50.0000	48
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	727554	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				514260	100.000	94
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	889790	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	283586	50.0000	47
	48 Methylcyclohexane	83	5.750	5.750	(1.098)	380438	50.0000	47
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	287748	50.0000	47
	51 Methyl Methacrylate	69	5.847	5.850	(1.117)	203428	50.0000	55
	52 Dibromomethane	93	5.882	5.882	(1.123)	183145	50.0000	50
	53 1,4-Dioxane	88	5.885	5.882	(1.124)	65612	1000.00	1200(A)
	54 Bromodichloromethane	83	6.014	6.011	(1.149)	362261	50.0000	49
	55 2-Chloroethyl vinyl ether	63	6.441	6.441	(1.230)	2987	50.0000	51(T)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	375325	50.0000	51
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	426395	50.0000	56
$	58 Toluene-d8	98	6.715	6.715	(0.817)	885604	50.0000	49
	59 Toluene	91	6.782	6.782	(1.295)	951187	50.0000	47
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	357518	50.0000	52
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	253285	50.0000	54
	62 1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	229205	50.0000	48
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	270520	50.0000	45
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	366375	50.0000	49
	65 2-Hexanone	43	7.428	7.432	(0.903)	301207	50.0000	51
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	306064	50.0000	51
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	262061	50.0000	52
	69 1-Chlorohexane	91	8.213	8.216	(0.999)	323091	50.0000	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	754172	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	673335	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	284081	50.0000	48
	72 Ethylbenzene	106	8.367	8.371	(1.018)	331259	50.0000	47
	73 m,p-Xylene	106	8.499	8.499	(1.034)	820294	100.000	95
	74 o-Xylene	106	8.943	8.943	(1.088)	396697	50.0000	48
	75 Styrene	104	8.956	8.959	(1.089)	630456	50.0000	47

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.165	9.165	(1.115)	217802	50.0000	52
	77 Isopropylbenzene	105	9.354	9.358	(1.138)	1050003	50.0000	47
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	71037	50.0000	56
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	364896	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	308351	50.0000	55
	81 Bromobenzene	156	9.692	9.692	(0.904)	332522	50.0000	46
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	351244	50.0000	50
	83 n-Propylbenzene	120	9.805	9.801	(0.914)	279384	50.0000	47
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	271606	50.0000	46
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	831760	50.0000	45
	86 4-Chlorotoluene	126	10.010	10.007	(0.933)	272443	50.0000	45
M	94 Xylene (Total)	106				1216991	150.000	140
	87 tert-Butylbenzene	119	10.329	10.326	(0.963)	912242	50.0000	44
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	857665	50.0000	46
	89 sec-Butylbenzene	105	10.550	10.551	(0.984)	1052725	50.0000	46
	90 1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	528820	50.0000	46
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	900901	50.0000	46
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	419554	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	547670	50.0000	44
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	753234	50.0000	48
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	520362	50.0000	45
	97 Hexachloroethane	117	11.358	11.358	(1.059)	175680	50.0000	49
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	56016	50.0000	55
	141 1,3,5-Trichlorobenzene	182	12.586	12.583	(2.404)	323174	50.0000	(a)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	333274	50.0000	46
	100 Hexachlorobutadiene	225	12.730	12.731	(1.187)	204744	50.0000	45
	101 Naphthalene	128	12.801	12.801	(1.194)	610858	50.0000	52
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	313583	50.0000	47

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\V8.I\140120A.B\V8D2811.d
Date : 20-JAN-2014 14:46
Client ID: VSTD05010W
Instrument: V8.i
Sample Info: 5ML,VSTD05010W,VSTD05010W
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2842.d
Report Date: 29-Jan-2014 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2842.d
Lab Smp Id: VSTD05010X Client Smp ID: VSTD05010X
Inj Date : 21-JAN-2014 09:00
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,VSTD05010X,VSTD05010X
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 21-Jan-2014 09:23 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.d
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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	1.586	1.586	(0.303)	260536	50.0000	50
2	Freon114	85	1.705	1.705	(0.326)	240367	50.0000	48
3	Chloromethane	50	1.754	1.754	(0.335)	782857	50.0000	50
4	Vinyl Chloride	62	1.856	1.856	(0.355)	317859	50.0000	49
5	Bromomethane	94	2.143	2.143	(0.409)	68239	50.0000	56
6	Chloroethane	64	2.229	2.229	(0.426)	160929	50.0000	49
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	434596	50.0000	50
126	Ethanol	46	2.567	2.567	(0.490)	161129	5000.00	5200(A)
8	Ether	59	2.667	2.667	(0.509)	256347	50.0000	50
9	Acrolein	56	2.770	2.770	(0.529)	338492	250.000	250
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	211959	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	258923	50.0000	48
12	Acetone	58	2.889	2.889	(0.552)	55493	50.0000	55
13	Iodomethane	142	2.982	2.982	(0.570)	44046	50.0000	64
14	Carbon Disulfide	76	3.046	3.046	(0.582)	633449	50.0000	49
15	Acetonitrile	41	3.136	3.136	(0.599)	754261	500.000	490(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	508995	50.0000	52
17	Methyl Acetate	43	3.143	3.146	(0.600)	476469	50.0000	52
18	Methylene Chloride	84	3.229	3.229	(0.617)	254254	50.0000	50
19	tert-Butanol	59	3.297	3.297	(0.630)	65727	100.000	99
20	Acrylonitrile	53	3.422	3.422	(0.654)	166556	50.0000	50
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	249080	50.0000	50

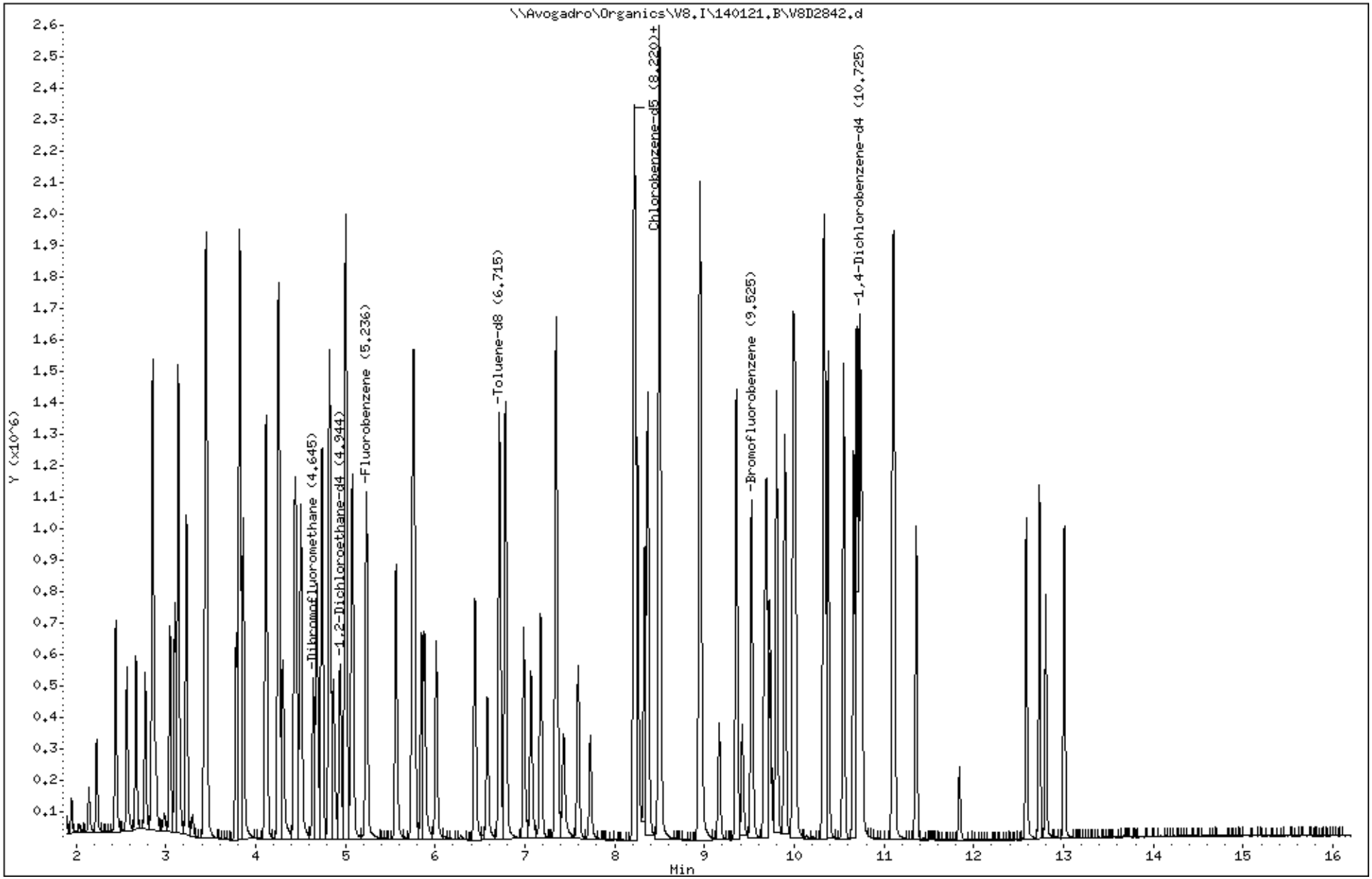
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	770824	50.0000	50
	23 1,1-Dichloroethane	63	3.782	3.786	(0.722)	548993	50.0000	50
	24 Vinyl acetate	43	3.818	3.818	(0.729)	1149127	50.0000	52
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1493798	50.0000	51
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	594583	50.0000	50
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1087999	50.0000	50
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	432899	50.0000	51
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	265681	50.0000	50
	30 2-Butanone	72	4.255	4.255	(0.813)	38544	50.0000	60
	32 Propionitrile	54	4.303	4.303	(0.822)	547865	500.000	530(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	501687	100.000	100
	34 Bromochloromethane	128	4.451	4.454	(0.850)	140834	50.0000	50
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	58492	100.000	100
	35 Chloroform	83	4.506	4.506	(0.861)	486969	50.0000	50
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	269535	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	466766	50.0000	50
	38 Cyclohexane	56	4.737	4.741	(0.905)	567882	50.0000	47
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	126639	50.0000	50
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	421672	50.0000	50
	41 Isobutyl Alcohol	43	4.866	4.869	(0.929)	325630	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	52470	50.0000	50
	43 Benzene	78	5.004	5.001	(0.956)	910038	50.0000	50
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	493330	50.0000	52
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	697446	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				514761	100.000	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	844276	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	280215	50.0000	49
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	352854	50.0000	46
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	284520	50.0000	49
	51 Methyl Methacrylate	69	5.850	5.847	(1.117)	181892	50.0000	52
	52 Dibromomethane	93	5.879	5.879	(1.123)	176539	50.0000	51
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	54671	1000.00	1000(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	362699	50.0000	51
	55 2-Chloroethyl vinyl ether	63	6.441	6.435	(1.230)	2759	50.0000	50(TQ)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	366206	50.0000	52
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	380457	50.0000	52
$	58 Toluene-d8	98	6.715	6.715	(0.817)	841438	50.0000	48
	59 Toluene	91	6.782	6.785	(1.295)	936449	50.0000	48
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	339713	50.0000	52
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	228702	50.0000	51
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	219012	50.0000	48
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	260620	50.0000	45
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	352842	50.0000	49
	65 2-Hexanone	43	7.432	7.432	(0.904)	321314	50.0000	56
	66 Dibromochloromethane	129	7.593	7.596	(0.923)	298034	50.0000	51
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	247187	50.0000	50
	69 1-Chlorohexane	91	8.213	8.216	(0.999)	307244	50.0000	44
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	733958	50.0000	
	70 Chlorobenzene	112	8.255	8.252	(1.004)	653605	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	279948	50.0000	49
	72 Ethylbenzene	106	8.371	8.367	(1.018)	320780	50.0000	47
	73 m,p-Xylene	106	8.499	8.499	(1.034)	787466	100.000	94
	74 o-Xylene	106	8.943	8.943	(1.088)	381822	50.0000	48
	75 Styrene	104	8.956	8.959	(1.089)	618132	50.0000	47

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.162	9.165	(1.114)	198329	50.0000	49
	77	Isopropylbenzene	105	9.355	9.354	(1.138)	990001	50.0000	46
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.422	(1.145)	63500	50.0000	51
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	352305	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	283799	50.0000	53
	81	Bromobenzene	156	9.689	9.689	(0.903)	320767	50.0000	47
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	317791	50.0000	48
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	263128	50.0000	46
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	256633	50.0000	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	804048	50.0000	46
	86	4-Chlorotoluene	126	10.010	10.007	(0.933)	264048	50.0000	46
M	94	Xylene (Total)	106				1169288	150.000	140
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	852133	50.0000	43
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	811524	50.0000	46
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	990993	50.0000	45
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	495663	50.0000	46
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	854974	50.0000	46
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	399061	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	525650	50.0000	45
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	717472	50.0000	48
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	501791	50.0000	46
	97	Hexachloroethane	117	11.358	11.358	(1.059)	162486	50.0000	47
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.837	(1.104)	48247	50.0000	50
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	287207	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	301495	50.0000	44
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	200106	50.0000	46
	101	Naphthalene	128	12.801	12.801	(1.194)	543804	50.0000	48
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	290138	50.0000	46

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\V8.I\140121.B\V8D2842.d
Date : 21-JAN-2014 09:00
Client ID: VSTD05010X
Instrument: V8.i
Sample Info: 5ML,VSTD05010X,VSTD05010X
Purge Volume: 5.0
Operator: ALM SRC: ALM
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\140120.B\V8D2800.d
Lab Smp Id: BFB10V Client Smp ID: BFB10V
Inj Date : 20-JAN-2014 07:29
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,BFB10V,BFB10V
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\140120.B\BFBSOM_V10.m
Meth Date : 07-Jan-2014 09:09 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.835	4.800	(0.000)	95	1727488			0.00- 100.00	97.21
4.835	4.800	(0.000)	50	483200			15.00- 40.00	27.97
4.835	4.800	(0.000)	75	849408			30.00- 80.00	49.17
4.835	4.800	(0.000)	96	112368			5.00- 9.00	6.50
4.835	4.800	(0.000)	173	11811			0.00- 2.00	0.66
4.835	4.800	(0.000)	174	1777152			50.00- 120.00	102.87
4.835	4.800	(0.000)	175	123800			5.00- 9.00	6.97
4.835	4.800	(0.000)	176	1720832			95.00- 101.00	96.83
4.835	4.800	(0.000)	177	109728			5.00- 9.00	6.38

Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2800.d

Date : 20-JAN-2014 07:29

Client ID: BFB10V

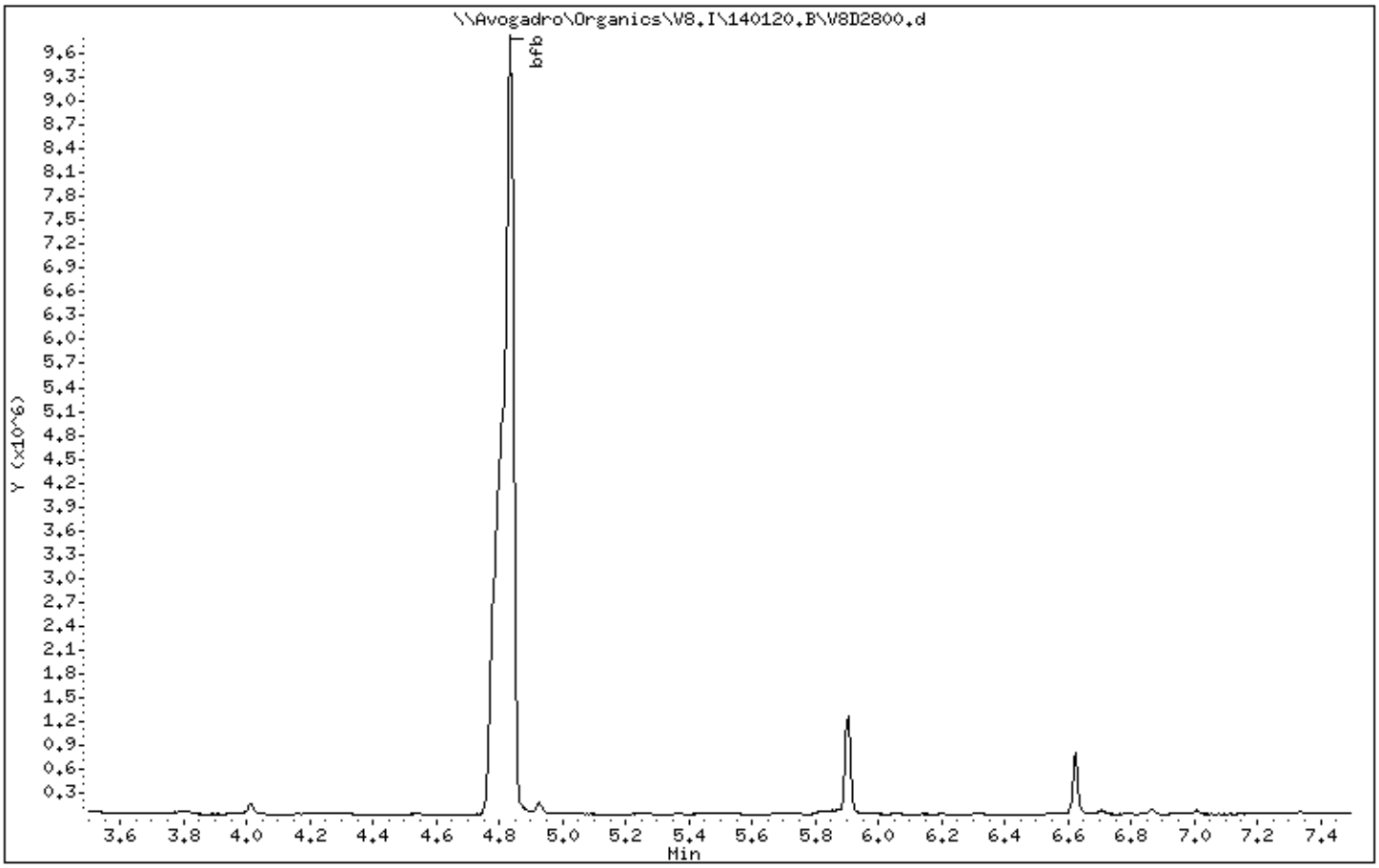
Instrument: V8.i

Sample Info: 5ML,BFB10V,BFB10V

Operator: ALM SRC: ALM

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120.B\V8D2800.d

Date : 20-JAN-2014 07:29

Client ID: BFB10V

Instrument: V8.i

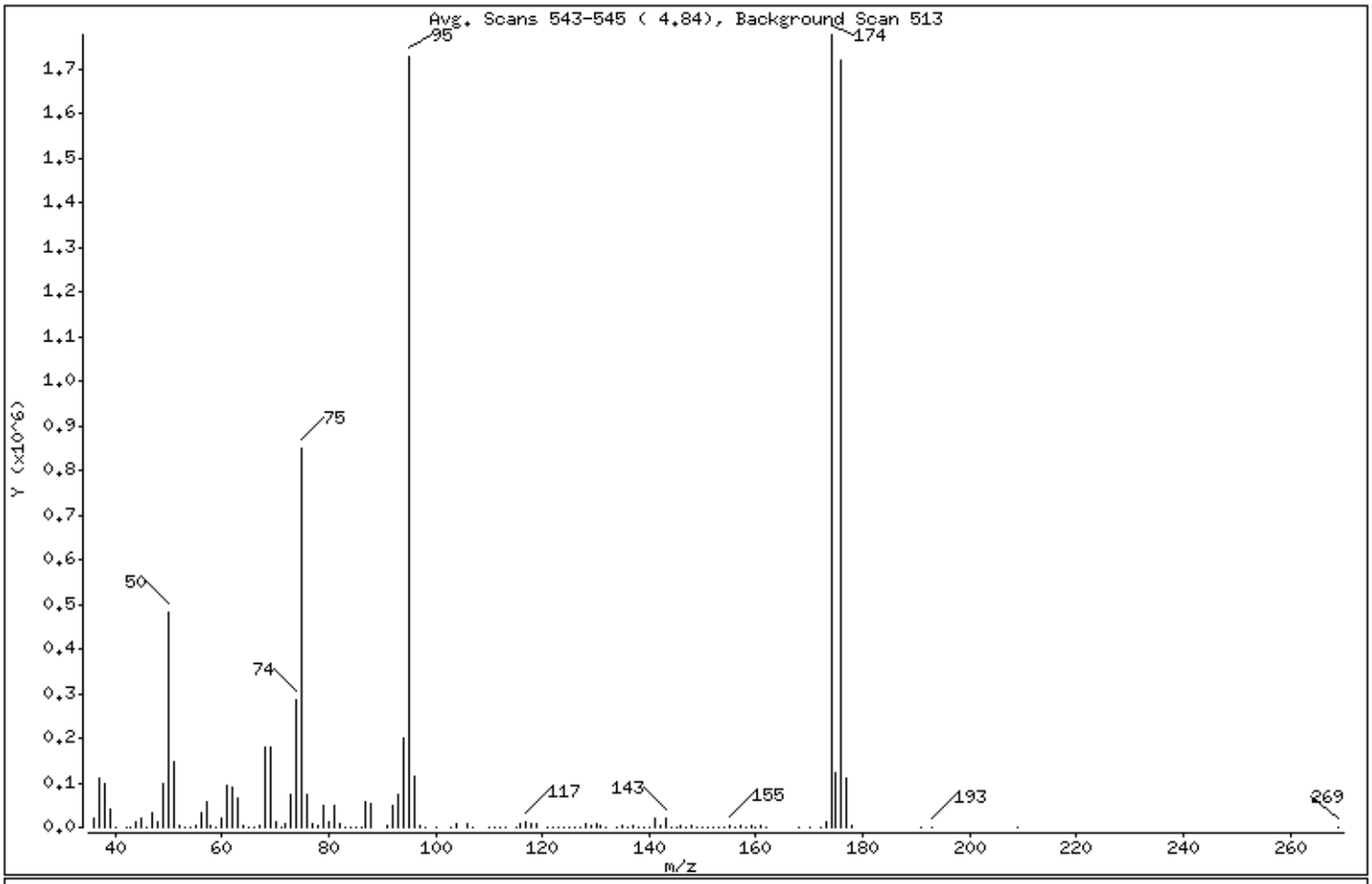
Sample Info: 5ML,BFB10V,BFB10V

Operator: ALM SRC: ALM

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	27.97
75	30.00 - 80.00% of mass 95	49.17
96	5.00 - 9.00% of mass 95	6.50
173	Less than 2.00% of mass 174	0.68 (0.66)
174	50.00 - 120.00% of mass 95	102.87
175	5.00 - 9.00% of mass 174	7.17 (6.97)
176	95.00 - 101.00% of mass 174	99.61 (96.83)
177	5.00 - 9.00% of mass 176	6.35 (6.38)

Date : 20-JAN-2014 07:29

Client ID: BFB10V Instrument: V8.i

Sample Info: 5ML,BFB10V,BFB10V

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V8D2800.d
Spectrum: Avg. Scans 543-545 (4.84), Background Scan 513
Location of Maximum: 174.00
Number of points: 128

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	21432	70.00	12634	111.00	1430	147.00	1499
37.00	112280	71.00	559	112.00	965	148.00	5172
38.00	98424	72.00	9176	113.00	1398	149.00	1290
39.00	39288	73.00	72152	115.00	1724	150.00	2037
40.00	901	74.00	285760	116.00	7998	151.00	221
42.00	414	75.00	849408	117.00	11209	152.00	850
43.00	363	76.00	72208	118.00	6711	153.00	1381
44.00	12449	77.00	7503	119.00	9196	154.00	1170
45.00	20168	78.00	4938	121.00	93	155.00	5041
46.00	1421	79.00	48072	122.00	315	156.00	652
47.00	31280	80.00	13019	123.00	639	157.00	3926
48.00	13724	81.00	48032	124.00	1080	158.00	395
49.00	98328	82.00	9158	125.00	572	159.00	2530
50.00	483200	83.00	1170	126.00	808	160.00	146
51.00	145600	84.00	467	127.00	551	161.00	2298
52.00	5443	85.00	395	128.00	7028	162.00	159
53.00	127	86.00	1607	129.00	3506	168.00	54
54.00	191	87.00	57040	130.00	6490	170.00	257
55.00	5698	88.00	54008	131.00	3162	172.00	929
56.00	31496	91.00	6022	132.00	469	173.00	11811
57.00	58472	92.00	48928	134.00	519	174.00	1777152
58.00	2616	93.00	73648	135.00	3113	175.00	123800
59.00	879	94.00	202048	136.00	526	176.00	1720832
60.00	18608	95.00	1727488	137.00	3014	177.00	109728
61.00	93432	96.00	112368	138.00	116	178.00	3126
62.00	89888	97.00	3154	139.00	636	191.00	67
63.00	66120	98.00	194	140.00	1206	193.00	56
64.00	6035	100.00	337	141.00	18960	209.00	50
65.00	345	103.00	630	142.00	2215	269.00	155
66.00	160	104.00	6891	143.00	19232		
67.00	3822	106.00	7042	144.00	1065		
68.00	180992	107.00	1759	145.00	1801		
69.00	180544	110.00	982	146.00	2828		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2810.d
Lab Smp Id: BFB10W Client Smp ID: BFB10W
Inj Date : 20-JAN-2014 14:18
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,BFB10W,BFB10W
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\140120A.B\BFBSOM_V10.m
Meth Date : 21-Jan-2014 07:48 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.525	9.600	(0.000)	95	182784			0.00- 100.00	100.00
9.525	9.600	(0.000)	50	50472			15.00- 40.00	27.61
9.525	9.600	(0.000)	75	88048			30.00- 80.00	48.17
9.525	9.600	(0.000)	96	12186			5.00- 9.00	6.67
9.525	9.600	(0.000)	173	821			0.00- 2.00	0.45
9.525	9.600	(0.000)	174	180864			50.00- 120.00	98.95
9.525	9.600	(0.000)	175	13156			5.00- 9.00	7.27
9.525	9.600	(0.000)	176	175680			95.00- 101.00	97.13
9.525	9.600	(0.000)	177	11584			5.00- 9.00	6.59

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2810.d

Date : 20-JAN-2014 14:18

Client ID: BFB10W

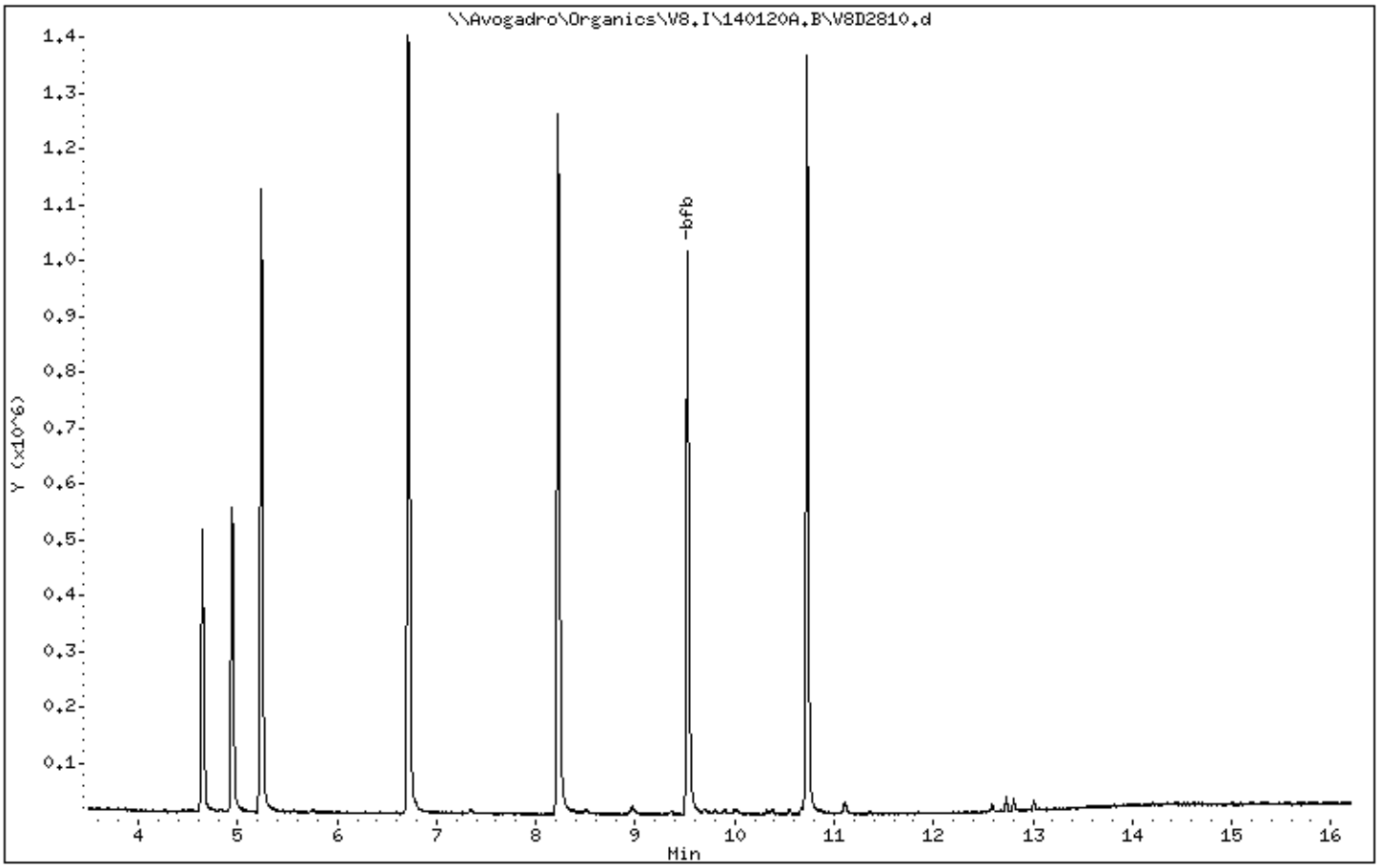
Instrument: V8.i

Sample Info: 5ML,BFB10W,BFB10W

Operator: ALM SRC: ALM

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2810.d

Date : 20-JAN-2014 14:18

Client ID: BFB10W

Instrument: V8.i

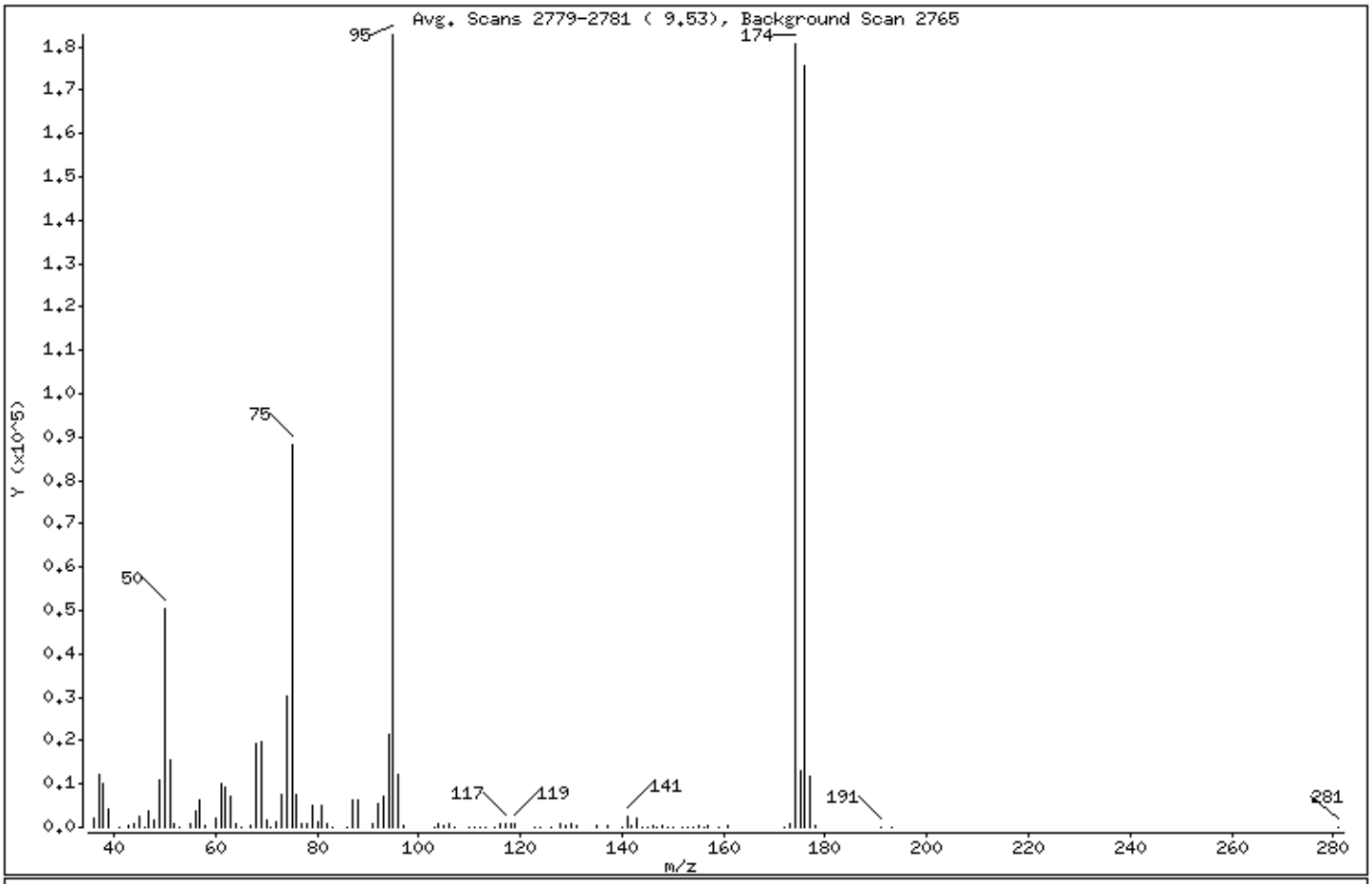
Sample Info: 5ML,BFB10W,BFB10W

Operator: ALM SRC: ALM

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	27.61
75	30.00 - 80.00% of mass 95	48.17
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.45 (0.45)
174	50.00 - 120.00% of mass 95	98.95
175	5.00 - 9.00% of mass 174	7.20 (7.27)
176	95.00 - 101.00% of mass 174	96.11 (97.13)
177	5.00 - 9.00% of mass 176	6.34 (6.59)

Date : 20-JAN-2014 14:18

Client ID: BFB10W Instrument: V8.i

Sample Info: 5ML,BFB10W,BFB10W

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V8D2810.d
Spectrum: Avg. Scans 2779-2781 (9.53), Background Scan 2765
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1974	68.00	19192	104.00	911	145.00	204
37.00	12394	69.00	19952	105.00	255	146.00	344
38.00	10249	70.00	1556	106.00	928	147.00	163
39.00	4093	71.00	63	107.00	161	148.00	543
41.00	44	72.00	1195	110.00	103	149.00	204
43.00	327	73.00	7456	111.00	158	150.00	183
44.00	748	74.00	30352	112.00	64	152.00	38
45.00	2322	75.00	88048	113.00	105	153.00	196
46.00	171	76.00	7574	115.00	202	154.00	56
47.00	3946	77.00	1009	116.00	637	155.00	552
48.00	1609	78.00	744	117.00	1014	156.00	41
49.00	10861	79.00	5243	118.00	694	157.00	503
50.00	50472	80.00	1404	119.00	997	159.00	200
51.00	15411	81.00	5183	123.00	72	161.00	303
52.00	663	82.00	986	124.00	165	172.00	153
53.00	44	83.00	104	126.00	61	173.00	821
55.00	704	86.00	194	128.00	720	174.00	180864
56.00	3596	87.00	6372	129.00	417	175.00	13156
57.00	6226	88.00	6098	130.00	817	176.00	175680
58.00	305	91.00	641	131.00	288	177.00	11584
60.00	1967	92.00	5422	135.00	429	178.00	270
61.00	10130	93.00	7350	137.00	430	191.00	49
62.00	9316	94.00	21368	140.00	135	193.00	40
63.00	7057	95.00	182784	141.00	2332	281.00	43
64.00	645	96.00	12186	142.00	311		
65.00	47	97.00	308	143.00	2152		
67.00	511	103.00	132	144.00	37		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2840.d
Lab Smp Id: BFB10X Client Smp ID: BFB10X
Inj Date : 21-JAN-2014 08:02
Operator : ALM SRC: ALM Inst ID: V8.i
Smp Info : 5ML,BFB10X,BFB10X
Misc Info :
Comment :
Method : \\Avogadro\Organics\V8.I\140121.B\BFBSOM_V10.m
Meth Date : 22-Jan-2014 11:05 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.835	4.800	(0.000)	95	1818624			0.00- 100.00	98.75
4.835	4.800	(0.000)	50	509632			15.00- 40.00	28.02
4.835	4.800	(0.000)	75	900480			30.00- 80.00	49.51
4.835	4.800	(0.000)	96	116984			5.00- 9.00	6.43
4.835	4.800	(0.000)	173	11743			0.00- 2.00	0.64
4.835	4.800	(0.000)	174	1841664			50.00- 120.00	101.27
4.835	4.800	(0.000)	175	128128			5.00- 9.00	6.96
4.835	4.800	(0.000)	176	1777664			95.00- 101.00	96.52
4.835	4.800	(0.000)	177	112728			5.00- 9.00	6.34

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2840.d

Date : 21-JAN-2014 08:02

Client ID: BFB10X

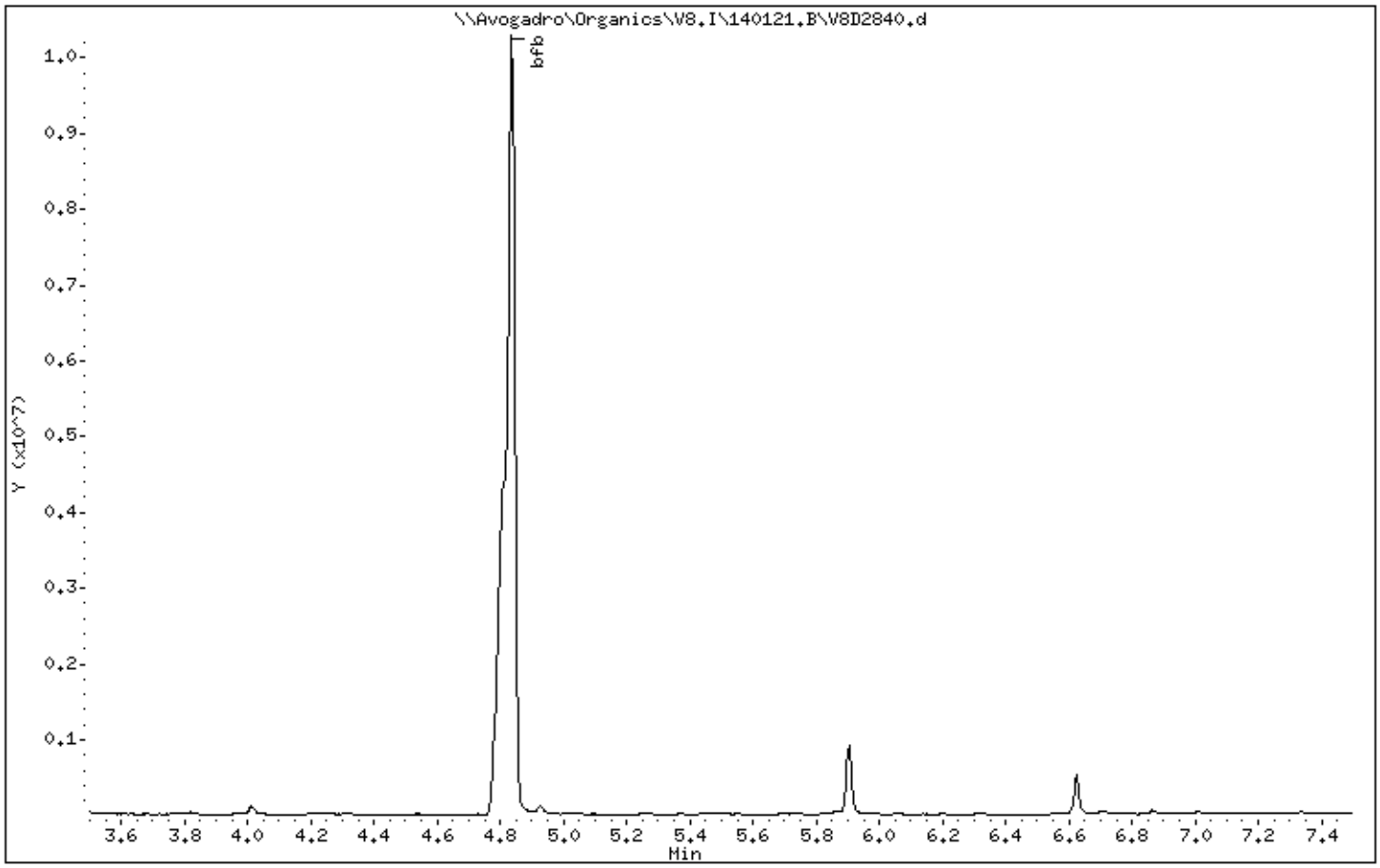
Instrument: V8.i

Sample Info: 5ML,BFB10X,BFB10X

Operator: ALM SRC: ALM

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2840.d

Date : 21-JAN-2014 08:02

Client ID: BFB10X

Instrument: V8.i

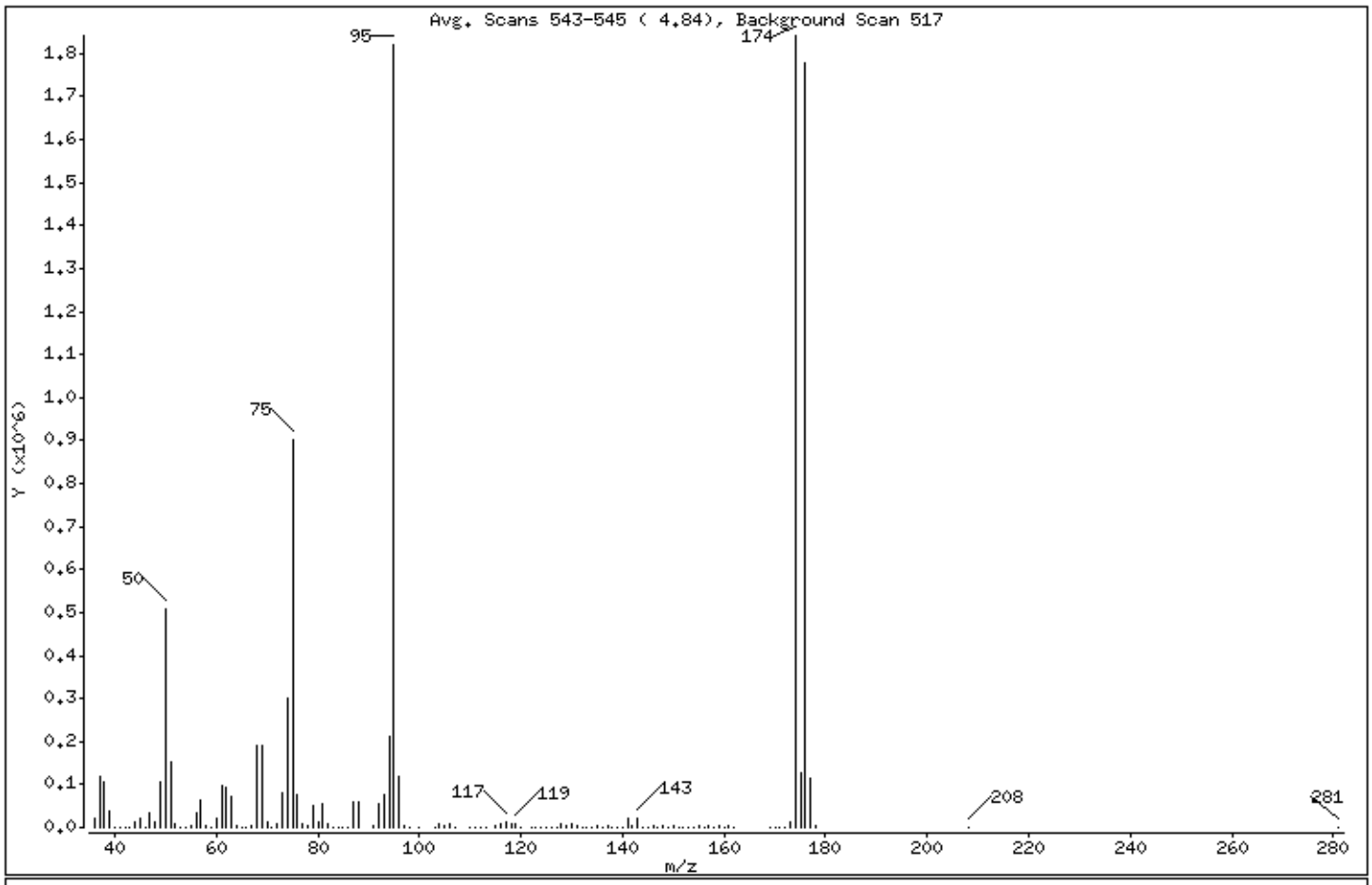
Sample Info: 5ML,BFB10X,BFB10X

Operator: ALM SRC: ALM

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	28.02
75	30.00 - 80.00% of mass 95	49.51
96	5.00 - 9.00% of mass 95	6.43
173	Less than 2.00% of mass 174	0.65 (0.64)
174	50.00 - 120.00% of mass 95	101.27
175	5.00 - 9.00% of mass 174	7.05 (6.96)
176	95.00 - 101.00% of mass 174	97.75 (96.52)
177	5.00 - 9.00% of mass 176	6.20 (6.34)

Date : 21-JAN-2014 08:02

Client ID: BFB10X Instrument: V8.i

Sample Info: 5ML,BFB10X,BFB10X

Operator: ALM SRC: ALM

Column phase: DB-624 Column diameter: 0.25

Data File: V8D2840.d
Spectrum: Avg. Scans 543-545 (4.84), Background Scan 517
Location of Maximum: 174.00
Number of points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	20960	69.00	190976	107.00	1575	144.00	1335
37.00	118392	70.00	14278	110.00	910	145.00	1506
38.00	104464	71.00	421	111.00	1388	146.00	2655
39.00	38800	72.00	9001	112.00	965	147.00	1450
40.00	1180	73.00	78392	113.00	1325	148.00	4948
41.00	261	74.00	302336	115.00	2152	149.00	1357
42.00	131	75.00	900480	116.00	6999	150.00	2310
43.00	487	76.00	75192	117.00	11789	151.00	148
44.00	11624	77.00	8478	118.00	7014	152.00	968
45.00	22800	78.00	5302	119.00	9599	153.00	1579
46.00	1480	79.00	49808	120.00	176	154.00	1013
47.00	32200	80.00	13771	122.00	371	155.00	5324
48.00	14679	81.00	52944	123.00	523	156.00	668
49.00	104112	82.00	10456	124.00	1130	157.00	4106
50.00	509632	83.00	1190	125.00	750	158.00	426
51.00	151040	84.00	446	126.00	673	159.00	2664
52.00	6416	85.00	244	127.00	562	160.00	255
53.00	355	86.00	1905	128.00	7044	161.00	2314
54.00	124	87.00	57816	129.00	3913	162.00	161
55.00	5397	88.00	57984	130.00	7635	169.00	69
56.00	33232	91.00	5919	131.00	3011	170.00	153
57.00	62104	92.00	53112	132.00	377	171.00	86
58.00	2451	93.00	77920	133.00	194	172.00	733
59.00	448	94.00	210432	134.00	340	173.00	11743
60.00	19704	95.00	1818624	135.00	3529	174.00	1841664
61.00	99168	96.00	116984	136.00	656	175.00	128128
62.00	94632	97.00	3559	137.00	3590	176.00	1777664
63.00	70576	98.00	278	138.00	81	177.00	112728
64.00	6074	100.00	74	139.00	603	178.00	2912
65.00	704	103.00	991	140.00	1187	208.00	220
66.00	114	104.00	8267	141.00	20864	281.00	236
67.00	4407	105.00	2306	142.00	2303		
68.00	188608	106.00	7958	143.00	21056		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-75646

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2815.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/20/2014

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

EPA SAMPLE NO.

MB-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-75646

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2815.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2815.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2815.d
Lab Smp Id: MB-75646 Client Smp ID: MB-75646
Inj Date : 20-JAN-2014 16:36
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-75646,MB-75646,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	4.644	4.644	(0.887)	265974	48.6289	49
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	53511	49.0245	49
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	873508	50.0000	
$	58 Toluene-d8	98	6.715	6.715	(0.817)	875452	49.6612	50
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	739001	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	332863	46.9781	47
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	345774	50.0000	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2815.d
Report Date: 29-Jan-2014 14:44

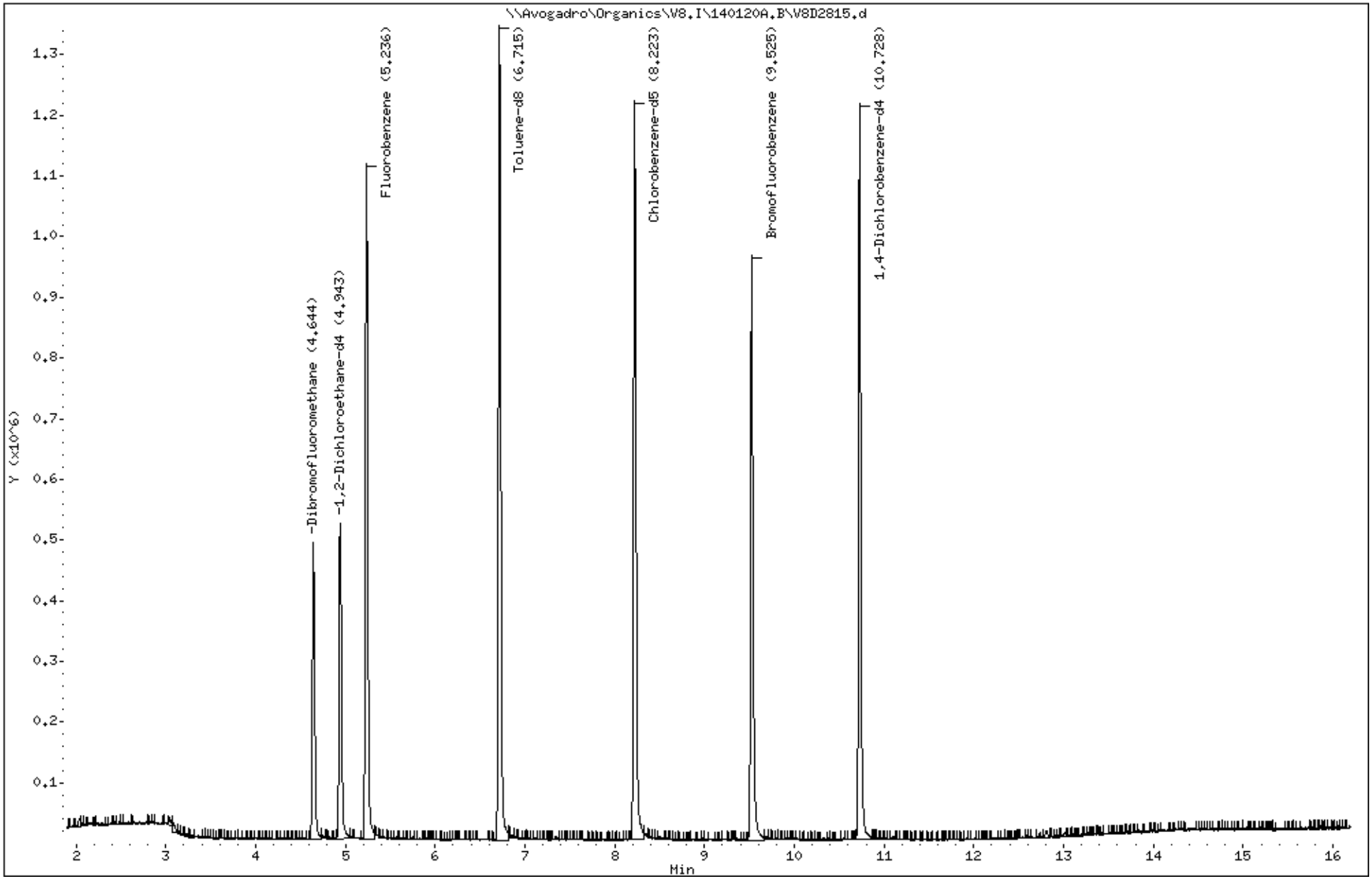
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2815.d
Lab Smp Id: MB-75646 Client Smp ID: MB-75646
Inj Date : 20-JAN-2014 16:36
Operator : ALM   SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-75646,MB-75646,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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\V8.I\140120A.B\V8D2815.d
Date : 20-JAN-2014 16:36
Client ID: MB-75646
Instrument: V8.i
Sample Info: 5ML,MB-75646,MB-75646,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-75652

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2846.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/21/2014

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

EPA SAMPLE NO.

MB-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-75652

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2846.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/21/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2846.d
Report Date: 29-Jan-2014 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

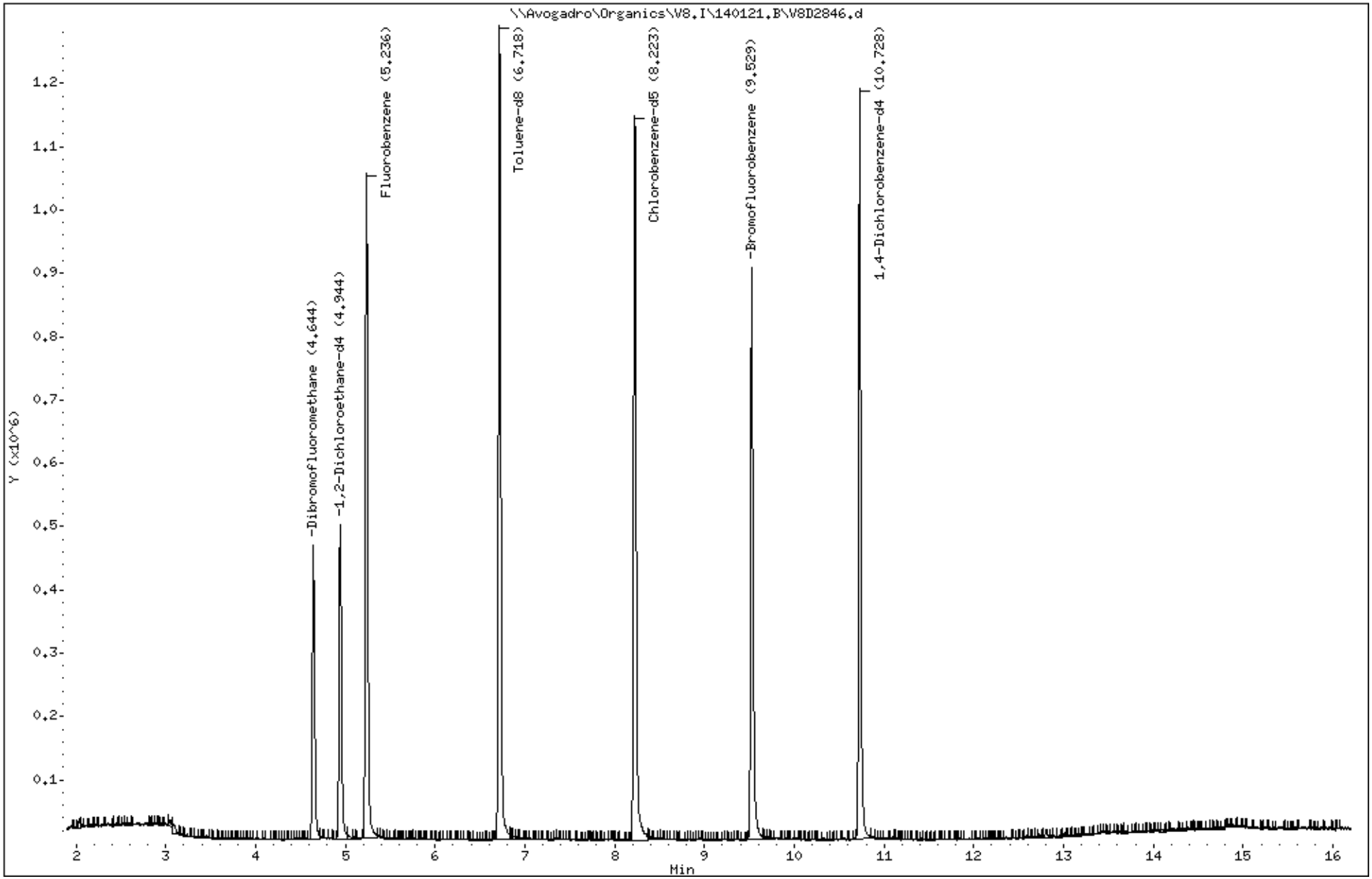
Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2846.d
Lab Smp Id: MB-75652 Client Smp ID: MB-75652
Inj Date : 21-JAN-2014 11:00
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,MB-75652,MB-75652,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 21-Jan-2014 09:23 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	4.644	4.644	(0.887)	256276	49.9026	50
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	51260	50.0159	50
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	820176	50.0000	
$	58 Toluene-d8	98	6.718	6.715	(0.817)	816717	48.7397	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	702454	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.522	(1.159)	311212	46.2076	46
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	320263	50.0000	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2846.d
Date : 21-JAN-2014 11:00
Client ID: MB-75652
Instrument: V8.i
Sample Info: 5ML,MB-75652,MB-75652,75652
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-06AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2830.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	38	
74-87-3	Chloromethane	43	
75-01-4	Vinyl chloride	43	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	44	
75-69-4	Trichlorofluoromethane	43	
75-35-4	1,1-Dichloroethene	40	
67-64-1	Acetone	29	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	38	
75-09-2	Methylene chloride	43	
156-60-5	trans-1,2-Dichloroethene	43	
1634-04-4	Methyl tert-butyl ether	45	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	37	
78-93-3	2-Butanone	33	
156-59-2	cis-1,2-Dichloroethene	46	
594-20-7	2,2-Dichloropropane	37	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	46	
71-55-6	1,1,1-Trichloroethane	52	
563-58-6	1,1-Dichloropropene	43	
56-23-5	Carbon tetrachloride	43	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	44	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	46	
74-95-3	Dibromomethane	47	
75-27-4	Bromodichloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	44	
108-10-1	4-Methyl-2-pentanone	42	
108-88-3	Toluene	43	
10061-02-6	trans-1,3-Dichloropropene	44	
79-00-5	1,1,2-Trichloroethane	45	
142-28-9	1,3-Dichloropropane	46	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-06AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2830.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	44	
591-78-6	2-Hexanone	35	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	47	
108-90-7	Chlorobenzene	43	
630-20-6	1,1,1,2-Tetrachloroethane	46	
100-41-4	Ethylbenzene	43	
179601-23-1	m,p-Xylene	88	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	43	
75-25-2	Bromoform	43	
98-82-8	Isopropylbenzene	44	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-86-1	Bromobenzene	43	
96-18-4	1,2,3-Trichloropropane	40	
103-65-1	n-Propylbenzene	42	
95-49-8	2-Chlorotoluene	42	
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	44	
135-98-8	sec-Butylbenzene	42	
99-87-6	4-Isopropyltoluene	43	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	41	
104-51-8	n-Butylbenzene	42	
95-50-1	1,2-Dichlorobenzene	43	
96-12-8	1,2-Dibromo-3-chloropropane	40	
120-82-1	1,2,4-Trichlorobenzene	38	
87-68-3	Hexachlorobutadiene	38	
87-61-6	1,2,3-Trichlorobenzene	38	
91-20-3	Naphthalene	36	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	39	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2830.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2830.d
Lab Smp Id: N0060-06AMS Client Smp ID: HW-WET-WS-5-(1)_01/
Inj Date : 20-JAN-2014 23:21
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-06AMS,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	189556	50.0000	38
2	Freon114	85	1.705	1.705	(0.326)	157511	50.0000	33
3	Chloromethane	50	1.753	1.754	(0.335)	653892	50.0000	43
4	Vinyl Chloride	62	1.856	1.856	(0.355)	264046	50.0000	42
5	Bromomethane	94	2.142	2.143	(0.409)	58387	50.0000	50
6	Chloroethane	64	2.229	2.229	(0.426)	141113	50.0000	44
7	Trichlorofluoromethane	101	2.441	2.445	(0.466)	365770	50.0000	43
126	Ethanol	46	2.567	2.567	(0.490)	123066	5000.00	4200(A)
8	Ether	59	2.667	2.667	(0.509)	227706	50.0000	46
9	Acrolein	56	2.769	2.770	(0.529)	275082	250.000	210
10	1,1-Dichloroethene	96	2.859	2.860	(0.546)	172561	50.0000	40
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	202256	50.0000	39
12	Acetone	58	2.888	2.889	(0.552)	28478	50.0000	29
13	Iodomethane	142	2.982	2.982	(0.570)	37201	50.0000	56
14	Carbon Disulfide	76	3.046	3.046	(0.582)	477906	50.0000	38
15	Acetonitrile	41	3.136	3.139	(0.599)	626446	500.000	420(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	416172	50.0000	44
17	Methyl Acetate	43	3.146	3.146	(0.601)	407979	50.0000	46
18	Methylene Chloride	84	3.229	3.229	(0.617)	215295	50.0000	43
19	tert-Butanol	59	3.297	3.297	(0.630)	50552	100.000	79
20	Acrylonitrile	53	3.422	3.422	(0.654)	141515	50.0000	44
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	206531	50.0000	43
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	659525	50.0000	45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.785	3.786	(0.723)	522508	50.0000	50
24	Vinyl acetate	43	3.824	3.821	(0.730)	784362	50.0000	37
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	1315477	50.0000	46
26	2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	489248	50.0000	42
27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	945282	50.0000	45
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	300154	50.0000	37
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	235608	50.0000	46
30	2-Butanone	72	4.258	4.258	(0.813)	20458	50.0000	33
32	Propionitrile	54	4.303	4.303	(0.822)	451109	500.000	450(A)
33	Methacrylonitrile	41	4.435	4.432	(0.847)	426594	100.000	92
34	Bromochloromethane	128	4.451	4.454	(0.850)	129882	50.0000	48
31	Tetrahydrofuran	72	4.499	4.499	(0.859)	46466	100.000	86
35	Chloroform	83	4.506	4.509	(0.861)	427084	50.0000	46
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	260477	50.0000	51
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	469109	50.0000	52
38	Cyclohexane	56	4.740	4.741	(0.905)	459732	50.0000	39
39	1,1-Dichloropropene	110	4.821	4.824	(0.921)	105721	50.0000	43
40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	353204	50.0000	43
41	Isobutyl Alcohol	43	4.869	4.869	(0.930)	239615	1000.00	800(A)
$ 42	1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	50157	50.0000	49
43	Benzene	78	5.004	5.004	(0.956)	779335	50.0000	44
44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	444026	50.0000	48
45	tert-Amyl methyl ether	73	5.078	5.078	(0.970)	605180	50.0000	45
M 50	1,2-Dichloroethene (Total)	96				442139	100.000	88
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	814271	50.0000	
47	Trichloroethene	130	5.567	5.567	(1.063)	248874	50.0000	45
48	Methylcyclohexane	83	5.750	5.750	(1.098)	290715	50.0000	39
49	1,2-Dichloropropane	63	5.769	5.769	(1.102)	252858	50.0000	46
51	Methyl Methacrylate	69	5.850	5.850	(1.117)	153855	50.0000	45
52	Dibromomethane	93	5.879	5.882	(1.123)	157942	50.0000	47
53	1,4-Dioxane	88	5.888	5.882	(1.125)	44152	1000.00	880(A)
54	Bromodichloromethane	83	6.014	6.011	(1.149)	315363	50.0000	46
55	2-Chloroethyl vinyl ether	63	6.438	6.441	(1.230)	2373	50.0000	44(T)
56	cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	300948	50.0000	44
57	4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	296957	50.0000	42
$ 58	Toluene-d8	98	6.718	6.715	(0.817)	828464	50.0000	50
59	Toluene	91	6.785	6.782	(1.296)	803978	50.0000	43
60	trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	281782	50.0000	44
61	Ethyl Methacrylate	69	7.065	7.068	(1.349)	178661	50.0000	42
62	1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	196814	50.0000	45
63	Tetrachloroethene	164	7.345	7.345	(0.893)	242433	50.0000	44
64	1,3-Dichloropropane	76	7.358	7.355	(0.895)	314565	50.0000	46
65	2-Hexanone	43	7.435	7.432	(0.904)	188552	50.0000	35
66	Dibromochloromethane	129	7.592	7.593	(0.923)	258185	50.0000	46
67	1,2-Dibromoethane	107	7.727	7.728	(0.940)	216793	50.0000	47
69	1-Chlorohexane	91	8.216	8.216	(0.999)	266013	50.0000	40
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	694668	50.0000	
70	Chlorobenzene	112	8.252	8.255	(1.004)	576873	50.0000	43
71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	251047	50.0000	46
72	Ethylbenzene	106	8.370	8.371	(1.018)	277669	50.0000	43
73	m,p-Xylene	106	8.496	8.499	(1.033)	698448	100.000	88
74	o-Xylene	106	8.943	8.943	(1.088)	345950	50.0000	46
75	Styrene	104	8.959	8.959	(1.090)	531823	50.0000	43
76	Bromoform	173	9.161	9.165	(1.114)	167028	50.0000	43

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2830.d
Report Date: 29-Jan-2014 14:45

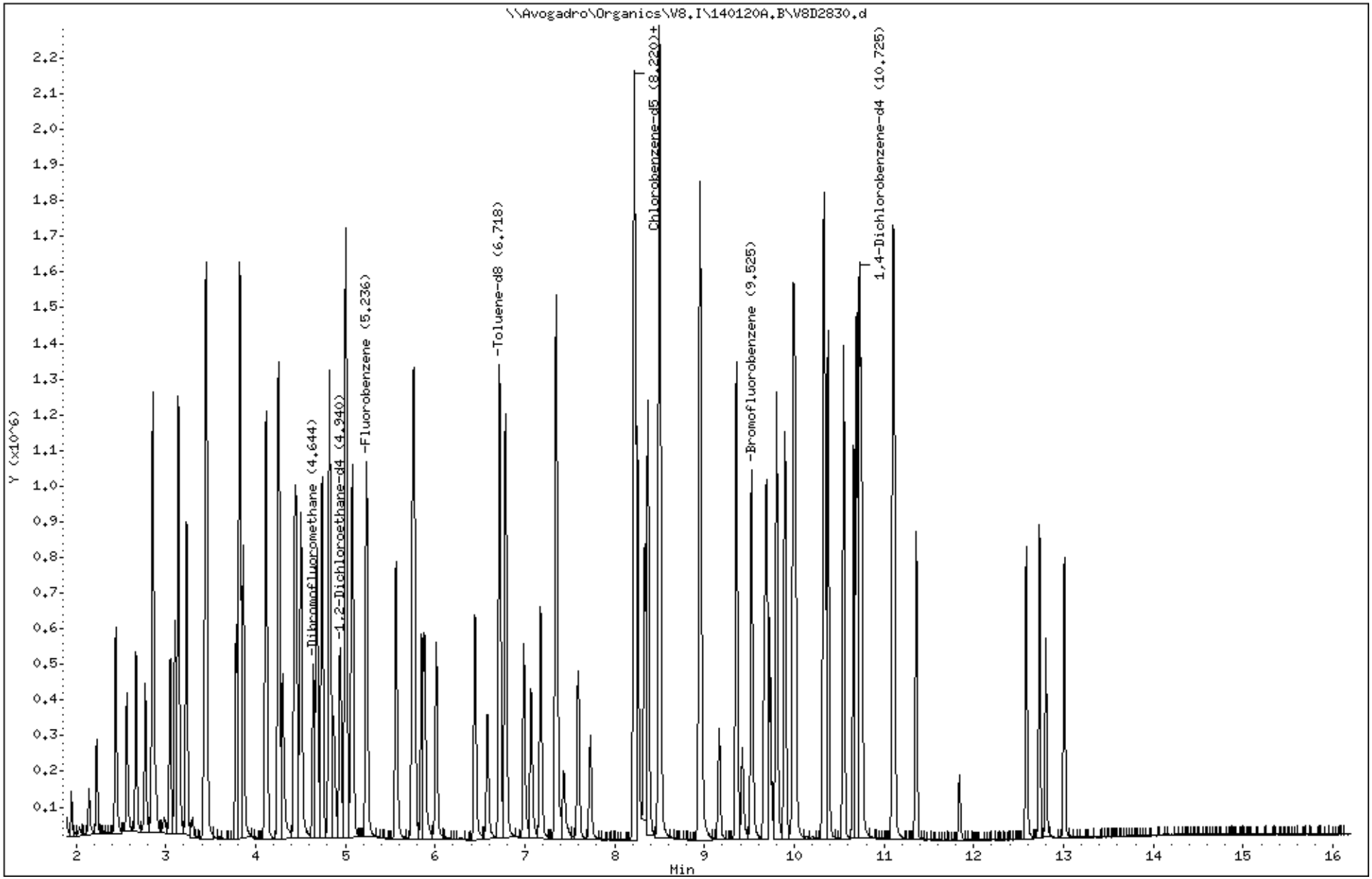
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.358	9.358	(1.138)	901000	50.0000	44
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	44309	50.0000	38
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	337379	50.0000	51
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	241020	50.0000	46
	81 Bromobenzene	156	9.692	9.692	(0.904)	283821	50.0000	42
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	256297	50.0000	40
	83 n-Propylbenzene	120	9.805	9.801	(0.914)	231391	50.0000	42
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	225589	50.0000	42
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	740664	50.0000	43
	86 4-Chlorotoluene	126	10.010	10.007	(0.933)	231504	50.0000	42
M	94 Xylene (Total)	106				1044398	150.000	130
	87 tert-Butylbenzene	119	10.325	10.326	(0.963)	792643	50.0000	41
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	753554	50.0000	44
	89 sec-Butylbenzene	105	10.550	10.551	(0.984)	894440	50.0000	42
	90 1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	448455	50.0000	42
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	775594	50.0000	43
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	387296	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	464054	50.0000	41
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	614895	50.0000	42
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	458416	50.0000	43
	97 Hexachloroethane	117	11.358	11.358	(1.059)	136584	50.0000	41
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	37805	50.0000	40
	141 1,3,5-Trichlorobenzene	182	12.586	12.583	(2.404)	238671	50.0000	(a)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	251604	50.0000	38
	100 Hexachlorobutadiene	225	12.730	12.731	(1.187)	158373	50.0000	38
	101 Naphthalene	128	12.801	12.801	(1.194)	393490	50.0000	36
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	229917	50.0000	38

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\V8.I\140120A.B\V8D2830.d
Date : 20-JAN-2014 23:21
Client ID: HW-WET-WS-5-(1)_01/
Sample Info: 5ML,N0060-06AMS,,75646
Purge Volume: 5.0
Column phase: DB-624

Instrument: V8.i
Operator: ALM SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-06AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2831.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	49	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	55	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	49	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	30	
74-88-4	Iodomethane	72	
75-15-0	Carbon disulfide	44	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	48	
1634-04-4	Methyl tert-butyl ether	45	
75-34-3	1,1-Dichloroethane	54	
108-05-4	Vinyl acetate	39	
78-93-3	2-Butanone	36	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	41	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	56	
563-58-6	1,1-Dichloropropene	49	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	49	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	49	
10061-01-5	cis-1,3-Dichloropropene	48	
108-10-1	4-Methyl-2-pentanone	44	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	47	
79-00-5	1,1,2-Trichloroethane	45	
142-28-9	1,3-Dichloropropane	47	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HW-WET-WS-5-(1)_01/

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0060-06AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2831.D

Level: (TRACE/LOW/MED) LOW Date Received: 01/17/2014

% Moisture: not dec. Date Analyzed: 01/20/2014

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	35	
124-48-1	Dibromochloromethane	48	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	96	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	48	
75-25-2	Bromoform	44	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	41	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	43	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	46	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	44	
104-51-8	n-Butylbenzene	45	
95-50-1	1,2-Dichlorobenzene	45	
96-12-8	1,2-Dibromo-3-chloropropane	41	
120-82-1	1,2,4-Trichlorobenzene	42	
87-68-3	Hexachlorobutadiene	41	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	43	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	45	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2831.d
Report Date: 29-Jan-2014 14:45

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2831.d
Lab Smp Id: N0060-06AMSD Client Smp ID: HW-WET-WS-5-(1)_01/
Inj Date : 20-JAN-2014 23:48
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,N0060-06AMSD,,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	222637	50.0000	44
2	Freon114	85	1.705	1.705	(0.326)	185798	50.0000	38
3	Chloromethane	50	1.754	1.754	(0.335)	750194	50.0000	49
4	Vinyl Chloride	62	1.856	1.856	(0.355)	304803	50.0000	48
5	Bromomethane	94	2.143	2.143	(0.409)	65339	50.0000	55
6	Chloroethane	64	2.229	2.229	(0.426)	161567	50.0000	50
7	Trichlorofluoromethane	101	2.445	2.445	(0.467)	421547	50.0000	49
126	Ethanol	46	2.567	2.567	(0.490)	124532	5000.00	4200(A)
8	Ether	59	2.667	2.667	(0.509)	238299	50.0000	48
9	Acrolein	56	2.770	2.770	(0.529)	281322	250.000	210
10	1,1-Dichloroethene	96	2.860	2.860	(0.546)	201236	50.0000	46
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	237174	50.0000	45
12	Acetone	58	2.889	2.889	(0.552)	29410	50.0000	30
13	Iodomethane	142	2.982	2.982	(0.570)	48282	50.0000	72
14	Carbon Disulfide	76	3.046	3.046	(0.582)	554199	50.0000	44
15	Acetonitrile	41	3.139	3.139	(0.600)	712694	500.000	480(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	447577	50.0000	46
17	Methyl Acetate	43	3.146	3.146	(0.601)	405785	50.0000	46
18	Methylene Chloride	84	3.229	3.229	(0.617)	232126	50.0000	46
19	tert-Butanol	59	3.297	3.297	(0.630)	51918	100.000	80
20	Acrylonitrile	53	3.422	3.422	(0.654)	141827	50.0000	43
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	231495	50.0000	48
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	675575	50.0000	45

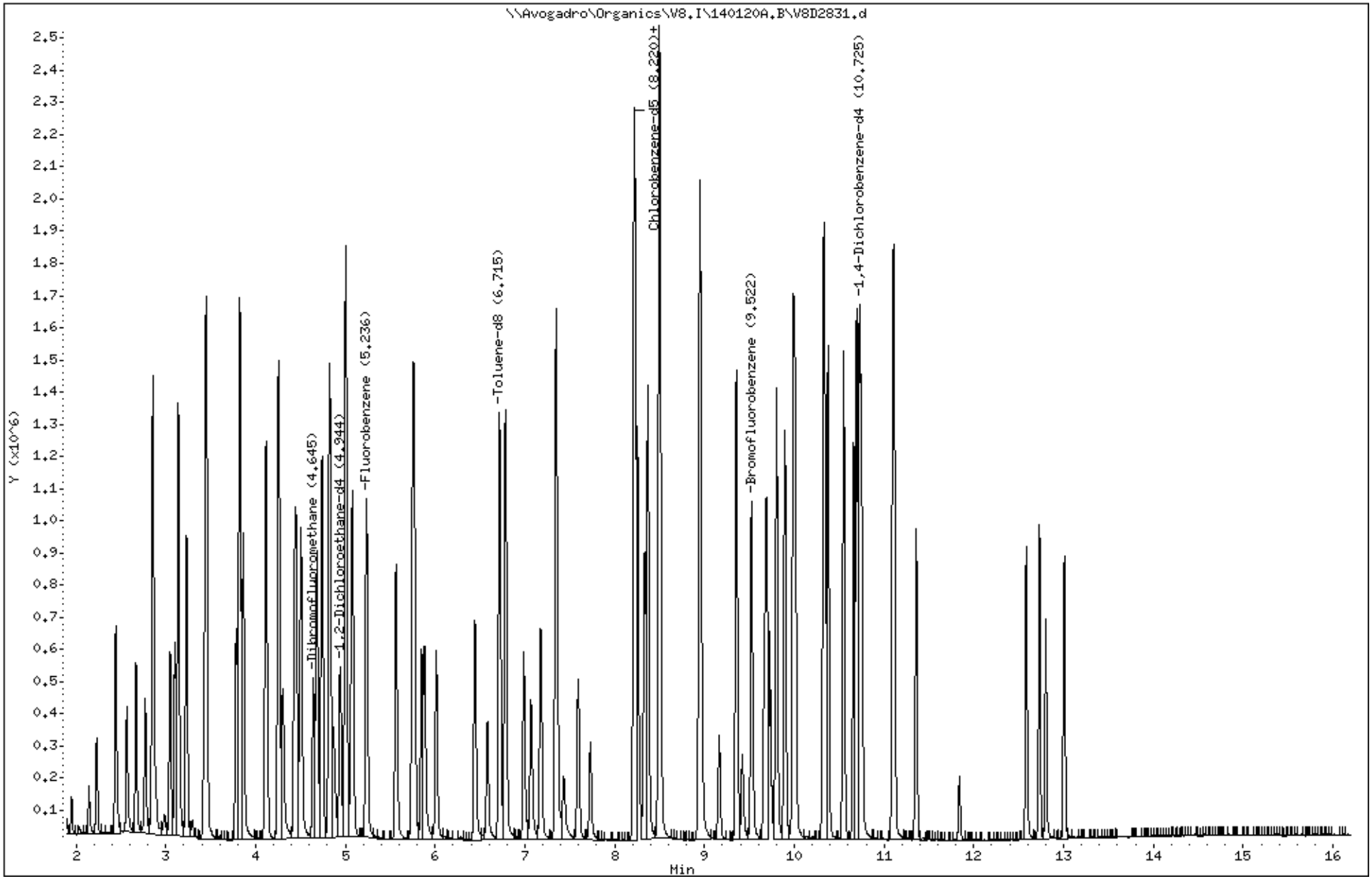
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	571795	50.0000	54
24	Vinyl acetate	43	3.821	3.821	(0.730)	823540	50.0000	38
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	1386743	50.0000	48
26	2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	558945	50.0000	48
27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	993098	50.0000	47
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	340306	50.0000	41
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	258204	50.0000	50
30	2-Butanone	72	4.258	4.258	(0.813)	22807	50.0000	36
32	Propionitrile	54	4.303	4.303	(0.822)	440944	500.000	430(A)
33	Methacrylonitrile	41	4.432	4.432	(0.846)	421559	100.000	90
34	Bromochloromethane	128	4.454	4.454	(0.851)	140068	50.0000	51
31	Tetrahydrofuran	72	4.499	4.499	(0.859)	47593	100.000	87
35	Chloroform	83	4.509	4.509	(0.861)	462734	50.0000	49
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	260020	50.0000	50
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	513601	50.0000	56
38	Cyclohexane	56	4.741	4.741	(0.905)	541761	50.0000	46
39	1,1-Dichloropropene	110	4.824	4.824	(0.921)	121807	50.0000	49
40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	401676	50.0000	49
41	Isobutyl Alcohol	43	4.869	4.869	(0.930)	240563	1000.00	800(A)
$ 42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	50884	50.0000	49
43	Benzene	78	5.004	5.004	(0.956)	848895	50.0000	48
44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	456672	50.0000	49
45	tert-Amyl methyl ether	73	5.078	5.078	(0.970)	631505	50.0000	47
M 50	1,2-Dichloroethene (Total)	96				489699	100.000	97
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	823329	50.0000	
47	Trichloroethene	130	5.567	5.567	(1.063)	281288	50.0000	50
48	Methylcyclohexane	83	5.750	5.750	(1.098)	334219	50.0000	44
49	1,2-Dichloropropane	63	5.769	5.769	(1.102)	271568	50.0000	48
51	Methyl Methacrylate	69	5.850	5.850	(1.117)	158270	50.0000	46
52	Dibromomethane	93	5.882	5.882	(1.123)	163187	50.0000	48
53	1,4-Dioxane	88	5.882	5.882	(1.123)	44329	1000.00	880(A)
54	Bromodichloromethane	83	6.011	6.011	(1.148)	336327	50.0000	49
55	2-Chloroethyl vinyl ether	63	6.441	6.441	(1.230)	2341	50.0000	43(TQ)
56	cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	326746	50.0000	48
57	4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	310464	50.0000	44
$ 58	Toluene-d8	98	6.715	6.715	(0.817)	827912	50.0000	49
59	Toluene	91	6.782	6.782	(1.295)	900240	50.0000	48
60	trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	299730	50.0000	47
61	Ethyl Methacrylate	69	7.068	7.068	(1.350)	186996	50.0000	43
62	1,1,2-Trichloroethane	97	7.178	7.178	(1.371)	199797	50.0000	45
63	Tetrachloroethene	164	7.345	7.345	(0.893)	276735	50.0000	49
64	1,3-Dichloropropane	76	7.355	7.355	(0.894)	322300	50.0000	47
65	2-Hexanone	43	7.432	7.432	(0.904)	190943	50.0000	35
66	Dibromochloromethane	129	7.593	7.593	(0.923)	267971	50.0000	48
67	1,2-Dibromoethane	107	7.728	7.728	(0.940)	225001	50.0000	48
69	1-Chlorohexane	91	8.216	8.216	(0.999)	298768	50.0000	45
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	703316	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	640832	50.0000	48
71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	266363	50.0000	48
72	Ethylbenzene	106	8.371	8.371	(1.018)	318132	50.0000	49
73	m,p-Xylene	106	8.499	8.499	(1.034)	777730	100.000	96
74	o-Xylene	106	8.943	8.943	(1.088)	375354	50.0000	49
75	Styrene	104	8.959	8.959	(1.090)	596274	50.0000	48
76	Bromoform	173	9.165	9.165	(1.115)	169488	50.0000	44

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	1006307	50.0000	48
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	45631	50.0000	38
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	341277	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	246787	50.0000	46
	81	Bromobenzene	156	9.692	9.692	(0.904)	306794	50.0000	45
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	267188	50.0000	41
	83	n-Propylbenzene	120	9.801	9.801	(0.914)	262033	50.0000	47
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	252565	50.0000	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	811470	50.0000	47
	86	4-Chlorotoluene	126	10.007	10.007	(0.933)	257911	50.0000	46
M	94	Xylene (Total)	106				1153084	150.000	140
	87	tert-Butylbenzene	119	10.326	10.326	(0.963)	833645	50.0000	43
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	822351	50.0000	47
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	994118	50.0000	46
	90	1,3-Dichlorobenzene	146	10.663	10.663	(0.994)	494243	50.0000	46
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	861164	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	392856	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	510803	50.0000	44
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	672836	50.0000	45
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	485933	50.0000	45
	97	Hexachloroethane	117	11.358	11.358	(1.059)	151794	50.0000	45
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	38771	50.0000	40
	141	1,3,5-Trichlorobenzene	182	12.583	12.583	(2.403)	267672	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	279250	50.0000	42
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	174431	50.0000	41
	101	Naphthalene	128	12.801	12.801	(1.194)	474287	50.0000	43
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	263219	50.0000	42

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\V8.I\140120A.B\V8D2831.d
Date : 20-JAN-2014 23:48
Client ID: HW-WET-WS-5-(1)_01/
Instrument: V8.i
Sample Info: 5ML,N0060-06AMSD,,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-75646

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2812.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/20/2014

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	46	
74-87-3	Chloromethane	50	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	47	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	46	
75-35-4	1,1-Dichloroethene	46	
67-64-1	Acetone	45	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	49	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	53	
78-93-3	2-Butanone	54	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	50	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	59	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	54	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-75646

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2812.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/20/2014

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	48	
591-78-6	2-Hexanone	55	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	54	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	99	
95-47-6	o-Xylene	51	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	59	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	53	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	50	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	50	
96-12-8	1,2-Dibromo-3-chloropropane	58	
120-82-1	1,2,4-Trichlorobenzene	52	
87-68-3	Hexachlorobutadiene	48	
87-61-6	1,2,3-Trichlorobenzene	55	
91-20-3	Naphthalene	60	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	47	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2812.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2812.d
Lab Smp Id: LCS-75646 Client Smp ID: LCS-75646
Inj Date : 20-JAN-2014 15:14
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCS-75646,LCS-75646,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	250949	50.0000	46
2	Freon114	85	1.705	1.705	(0.326)	239549	50.0000	46
3	Chloromethane	50	1.753	1.754	(0.335)	806554	50.0000	50
4	Vinyl Chloride	62	1.853	1.856	(0.354)	316191	50.0000	47
5	Bromomethane	94	2.139	2.143	(0.409)	58790	50.0000	47
6	Chloroethane	64	2.226	2.229	(0.425)	159656	50.0000	47
7	Trichlorofluoromethane	101	2.442	2.445	(0.466)	424024	50.0000	46
126	Ethanol	46	2.567	2.567	(0.490)	184089	5000.00	5800(A)
8	Ether	59	2.667	2.667	(0.509)	269556	50.0000	51
9	Acrolein	56	2.769	2.770	(0.529)	393194	250.000	280
10	1,1-Dichloroethene	96	2.856	2.860	(0.546)	211786	50.0000	46
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	263920	50.0000	47
12	Acetone	58	2.888	2.889	(0.552)	47209	50.0000	45
13	Iodomethane	142	2.985	2.982	(0.570)	38891	50.0000	55
14	Carbon Disulfide	76	3.046	3.046	(0.582)	611143	50.0000	45
15	Acetonitrile	41	3.136	3.139	(0.599)	807137	500.000	500(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	520844	50.0000	51
17	Methyl Acetate	43	3.146	3.146	(0.601)	525890	50.0000	55
18	Methylene Chloride	84	3.229	3.229	(0.617)	260735	50.0000	49
19	tert-Butanol	59	3.297	3.297	(0.630)	85058	100.000	120
20	Acrylonitrile	53	3.419	3.422	(0.653)	186008	50.0000	53
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	253852	50.0000	49
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	826741	50.0000	52

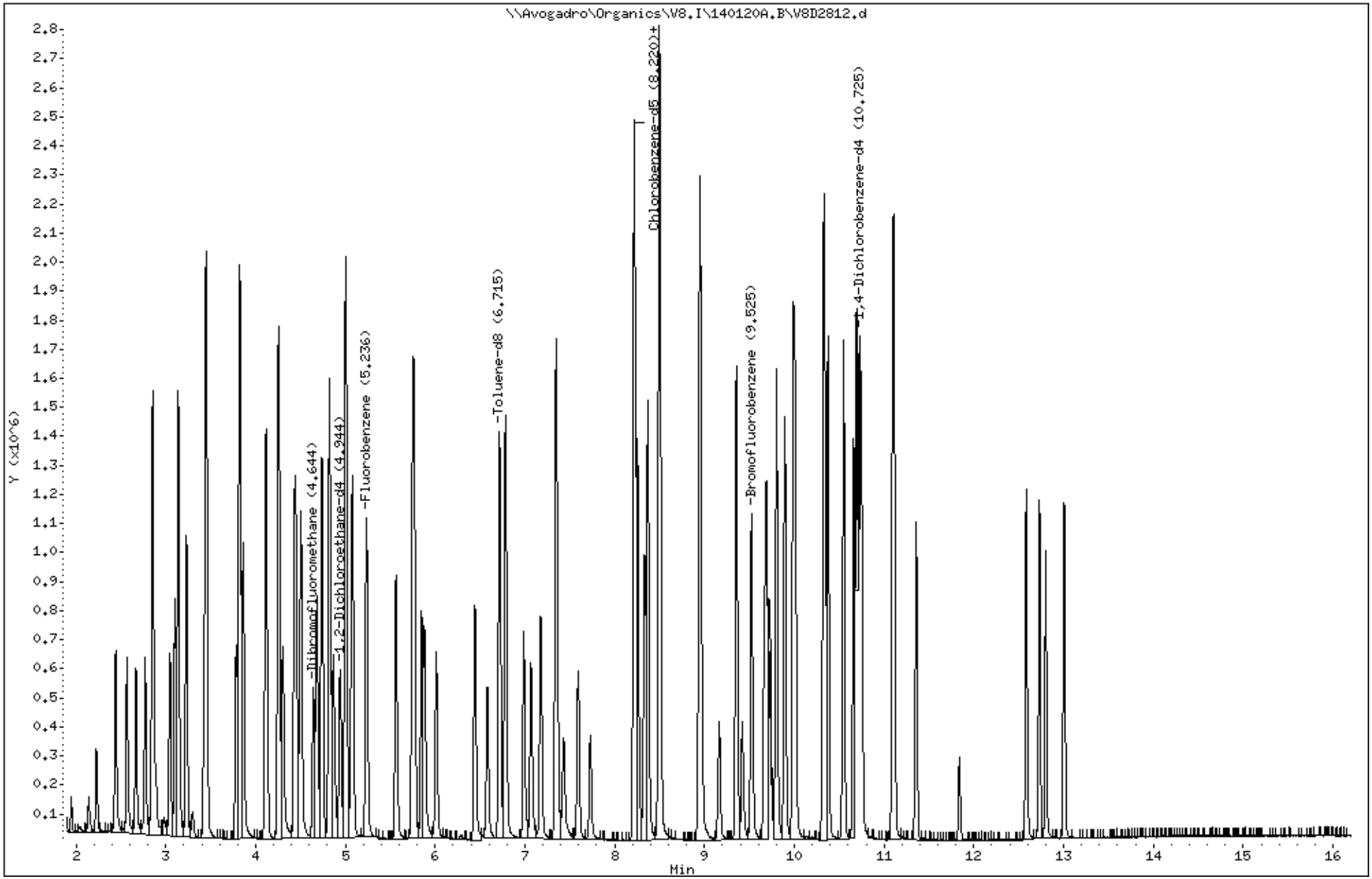
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.785	3.786	(0.723)	569273	50.0000	50
24	Vinyl acetate	43	3.821	3.821	(0.730)	1206929	50.0000	53
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	1535047	50.0000	50
26	2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	594329	50.0000	48
27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1160329	50.0000	51
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	434846	50.0000	49
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	275520	50.0000	50
30	2-Butanone	72	4.255	4.258	(0.813)	36198	50.0000	54
32	Propionitrile	54	4.303	4.303	(0.822)	621195	500.000	570(A)
33	Methacrylonitrile	41	4.435	4.432	(0.847)	563363	100.000	110
34	Bromochloromethane	128	4.454	4.454	(0.851)	143995	50.0000	50
31	Tetrahydrofuran	72	4.503	4.499	(0.860)	65940	100.000	110
35	Chloroform	83	4.509	4.509	(0.861)	496481	50.0000	49
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	276767	50.0000	50
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	475571	50.0000	49
38	Cyclohexane	56	4.737	4.741	(0.905)	619210	50.0000	49
39	1,1-Dichloropropene	110	4.821	4.824	(0.921)	131512	50.0000	50
40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	436600	50.0000	50
41	Isobutyl Alcohol	43	4.869	4.869	(0.930)	405510	1000.00	1200(A)
$ 42	1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	54886	50.0000	50
43	Benzene	78	5.004	5.004	(0.956)	940688	50.0000	50
44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	502073	50.0000	51
45	tert-Amyl methyl ether	73	5.078	5.078	(0.970)	746641	50.0000	52
M 50	1,2-Dichloroethene (Total)	96				529372	100.000	98
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	878736	50.0000	
47	Trichloroethene	130	5.564	5.567	(1.063)	295393	50.0000	50
48	Methylcyclohexane	83	5.753	5.750	(1.099)	399465	50.0000	50
49	1,2-Dichloropropane	63	5.769	5.769	(1.102)	298259	50.0000	50
51	Methyl Methacrylate	69	5.850	5.850	(1.117)	210995	50.0000	58
52	Dibromomethane	93	5.879	5.882	(1.123)	186608	50.0000	52
53	1,4-Dioxane	88	5.882	5.882	(1.123)	67022	1000.00	1200(A)
54	Bromodichloromethane	83	6.014	6.011	(1.149)	376247	50.0000	51
55	2-Chloroethyl vinyl ether	63	6.445	6.441	(1.231)	3071	50.0000	53(TQ)
56	cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	386156	50.0000	53
57	4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	443232	50.0000	58
$ 58	Toluene-d8	98	6.715	6.715	(0.817)	902047	50.0000	50
59	Toluene	91	6.782	6.782	(1.295)	984394	50.0000	49
60	trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	367532	50.0000	54
61	Ethyl Methacrylate	69	7.068	7.068	(1.350)	261060	50.0000	56
62	1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	240161	50.0000	51
63	Tetrachloroethene	164	7.345	7.345	(0.893)	285122	50.0000	48
64	1,3-Dichloropropane	76	7.354	7.355	(0.894)	383309	50.0000	52
65	2-Hexanone	43	7.432	7.432	(0.904)	322363	50.0000	55
66	Dibromochloromethane	129	7.592	7.593	(0.923)	321165	50.0000	53
67	1,2-Dibromoethane	107	7.731	7.728	(0.940)	269962	50.0000	54
69	1-Chlorohexane	91	8.216	8.216	(0.999)	345928	50.0000	48
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	753516	50.0000	
70	Chlorobenzene	112	8.252	8.255	(1.004)	697840	50.0000	48
71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	295674	50.0000	50
72	Ethylbenzene	106	8.371	8.371	(1.018)	344868	50.0000	49
73	m,p-Xylene	106	8.499	8.499	(1.034)	855917	100.000	99
74	o-Xylene	106	8.943	8.943	(1.088)	416368	50.0000	50
75	Styrene	104	8.959	8.959	(1.090)	674732	50.0000	50
76	Bromoform	173	9.161	9.165	(1.114)	222835	50.0000	53

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.354	9.358	(1.138)	1113761	50.0000	50
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.422	(1.145)	72588	50.0000	57
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	360973	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	319430	50.0000	59
	81	Bromobenzene	156	9.692	9.692	(0.904)	347993	50.0000	50
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	356786	50.0000	53
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	294121	50.0000	51
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	284098	50.0000	50
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	905211	50.0000	50
	86	4-Chlorotoluene	126	10.007	10.007	(0.933)	287547	50.0000	49
M	94	Xylene (Total)	106				1272285	150.000	150
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	985787	50.0000	49
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	921729	50.0000	51
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	1116606	50.0000	50
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	554625	50.0000	50
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	968470	50.0000	51
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	405782	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	571018	50.0000	48
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	808650	50.0000	53
	96	1,2-Dichlorobenzene	146	11.110	11.113	(1.036)	552262	50.0000	50
	97	Hexachloroethane	117	11.358	11.358	(1.059)	182832	50.0000	52
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	57294	50.0000	58
	141	1,3,5-Trichlorobenzene	182	12.586	12.583	(2.404)	353845	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	366844	50.0000	52
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	214116	50.0000	48
	101	Naphthalene	128	12.801	12.801	(1.194)	690021	50.0000	60
	102	1,2,3-Trichlorobenzene	180	13.004	13.007	(1.213)	356772	50.0000	55

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\V8.I\140120A.B\V8D2812.d
Date : 20-JAN-2014 15:14
Client ID: LCS-75646
Instrument: V8.i
Sample Info: 5ML,LCS-75646,LCS-75646,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-75652

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2843.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/21/2014

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	51	
74-87-3	Chloromethane	52	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	59	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	49	
67-64-1	Acetone	59	
74-88-4	Iodomethane	70	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	50	
156-60-5	trans-1,2-Dichloroethene	52	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	61	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	53	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	53	
107-06-2	1,2-Dichloroethane	54	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	52	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	55	
108-10-1	4-Methyl-2-pentanone	57	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	54	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-75652

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2843.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/21/2014

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	48	
591-78-6	2-Hexanone	62	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	54	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	50	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	51	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	55	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	46	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	51	
120-82-1	1,2,4-Trichlorobenzene	47	
87-68-3	Hexachlorobutadiene	48	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	53	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2843.d
Report Date: 29-Jan-2014 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2843.d
Lab Smp Id: LCS-75652 Client Smp ID: LCS-75652
Inj Date : 21-JAN-2014 09:39
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCS-75652,LCS-75652,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 21-Jan-2014 09:23 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	263993	50.0000	51
2	Freon114	85	1.705	1.705	(0.326)	249790	50.0000	51
3	Chloromethane	50	1.754	1.754	(0.335)	786387	50.0000	52
4	Vinyl Chloride	62	1.853	1.856	(0.354)	321889	50.0000	51
5	Bromomethane	94	2.143	2.143	(0.409)	69758	50.0000	59
6	Chloroethane	64	2.226	2.229	(0.425)	160359	50.0000	50
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	443230	50.0000	51
126	Ethanol	46	2.567	2.567	(0.490)	165418	5000.00	5500(A)
8	Ether	59	2.667	2.667	(0.509)	256683	50.0000	51
9	Acrolein	56	2.770	2.770	(0.529)	356706	250.000	260
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	212635	50.0000	49
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	265146	50.0000	50
12	Acetone	58	2.885	2.889	(0.551)	58771	50.0000	59
13	Iodomethane	142	2.982	2.982	(0.570)	47167	50.0000	70
14	Carbon Disulfide	76	3.046	3.046	(0.582)	635734	50.0000	50
15	Acetonitrile	41	3.136	3.136	(0.599)	797658	500.000	530(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	518017	50.0000	54
17	Methyl Acetate	43	3.143	3.146	(0.600)	486703	50.0000	54
18	Methylene Chloride	84	3.229	3.229	(0.617)	252133	50.0000	50
19	tert-Butanol	59	3.297	3.297	(0.630)	70863	100.000	110
20	Acrylonitrile	53	3.419	3.422	(0.653)	170908	50.0000	52
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	254283	50.0000	52
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	783684	50.0000	52

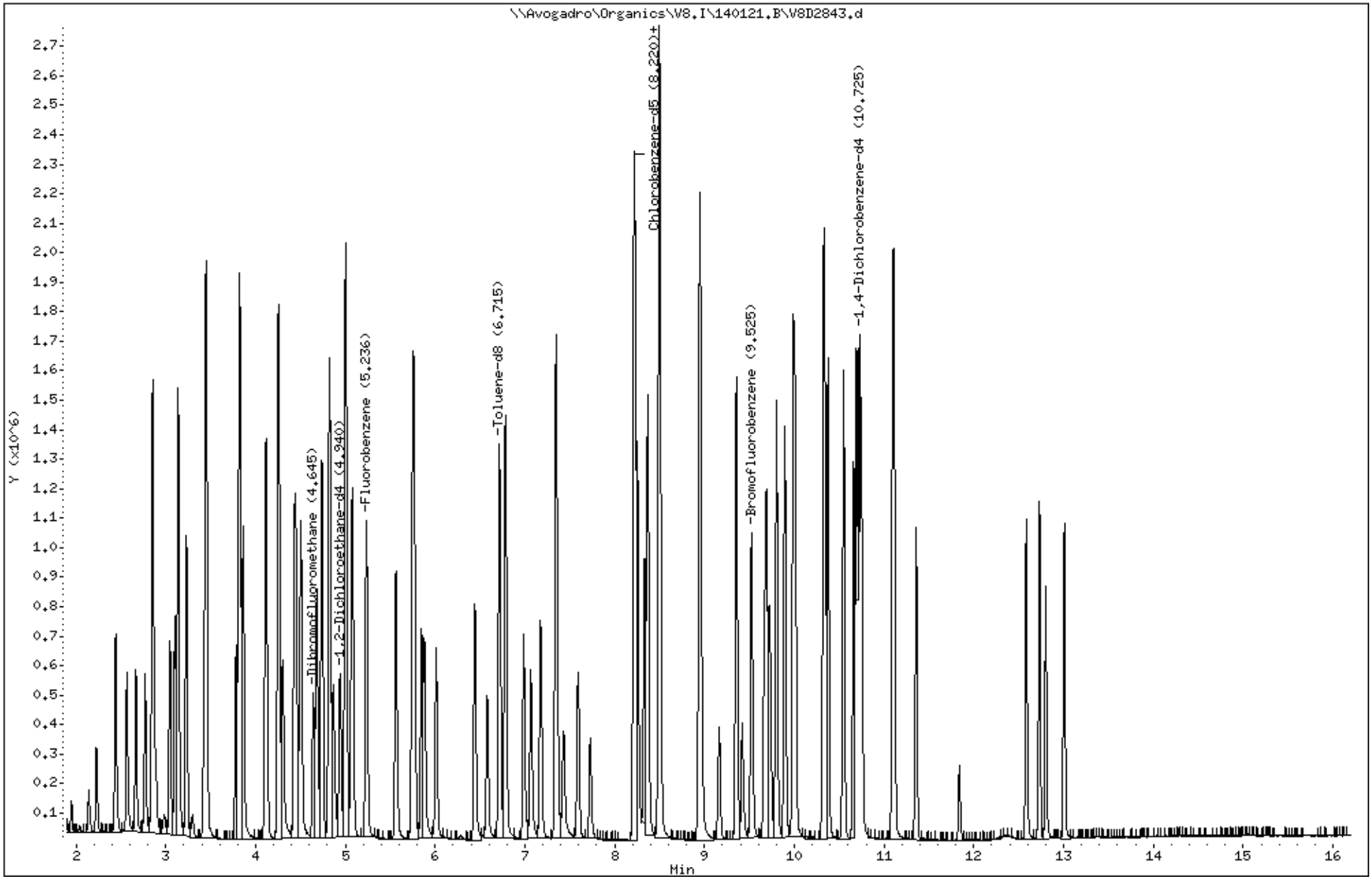
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	566006	50.0000	53
	24 Vinyl acetate	43	3.818	3.818	(0.729)	1157943	50.0000	54
	25 Diisopropyl Ether	45	3.821	3.824	(0.730)	1491299	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	3.860	3.863	(0.737)	611998	50.0000	52
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1117502	50.0000	52
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	443338	50.0000	53
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	268869	50.0000	51
	30 2-Butanone	72	4.255	4.255	(0.813)	38510	50.0000	61
	32 Propionitrile	54	4.303	4.303	(0.822)	566581	500.000	550(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	515621	100.000	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	140843	50.0000	51
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	60886	100.000	110
	35 Chloroform	83	4.506	4.506	(0.861)	492881	50.0000	52
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	264711	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	482221	50.0000	53
	38 Cyclohexane	56	4.737	4.741	(0.905)	594587	50.0000	50
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	131913	50.0000	53
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	438400	50.0000	53
	41 Isobutyl Alcohol	43	4.869	4.869	(0.930)	339857	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	51320	50.0000	50
	43 Benzene	78	5.001	5.001	(0.955)	930415	50.0000	52
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	502728	50.0000	54
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	710228	50.0000	52
M	50 1,2-Dichloroethene (Total)	96				523152	100.000	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	829031	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	293804	50.0000	52
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	376638	50.0000	50
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	293200	50.0000	52
	51 Methyl Methacrylate	69	5.847	5.847	(1.117)	196545	50.0000	57
	52 Dibromomethane	93	5.879	5.879	(1.123)	178931	50.0000	53
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	57238	1000.00	1100(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	369347	50.0000	53
	55 2-Chloroethyl vinyl ether	63	6.441	6.435	(1.230)	2960	50.0000	54(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	376160	50.0000	54
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	404318	50.0000	56
$	58 Toluene-d8	98	6.715	6.715	(0.817)	851088	50.0000	50
	59 Toluene	91	6.782	6.785	(1.295)	969342	50.0000	51
	60 trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	351528	50.0000	54
	61 Ethyl Methacrylate	69	7.065	7.068	(1.349)	239275	50.0000	55
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	225931	50.0000	51
	63 Tetrachloroethene	164	7.345	7.345	(0.894)	273080	50.0000	48
	64 1,3-Dichloropropane	76	7.355	7.355	(0.895)	365140	50.0000	52
	65 2-Hexanone	43	7.432	7.432	(0.904)	346120	50.0000	62
	66 Dibromochloromethane	129	7.593	7.596	(0.924)	306760	50.0000	53
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	257869	50.0000	54
	69 1-Chlorohexane	91	8.213	8.216	(0.999)	318346	50.0000	46
*	68 Chlorobenzene-d5	117	8.220	8.223	(1.000)	719696	50.0000	
	70 Chlorobenzene	112	8.252	8.252	(1.004)	690302	50.0000	50
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.014)	292431	50.0000	52
	72 Ethylbenzene	106	8.367	8.367	(1.018)	337257	50.0000	50
	73 m,p-Xylene	106	8.499	8.499	(1.034)	830069	100.000	100
	74 o-Xylene	106	8.943	8.943	(1.088)	406012	50.0000	52
	75 Styrene	104	8.956	8.959	(1.090)	653837	50.0000	51
	76 Bromoform	173	9.162	9.165	(1.115)	208618	50.0000	52

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.355	9.354	(1.138)	1034644	50.0000	49
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	66885	50.0000	55
$	79	Bromofluorobenzene	95	9.525	9.522	(1.159)	347160	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	295420	50.0000	55
	81	Bromobenzene	156	9.689	9.689	(0.903)	333745	50.0000	48
	82	1,2,3-Trichloropropane	75	9.718	9.721	(0.906)	331291	50.0000	50
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	274028	50.0000	48
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	268442	50.0000	48
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	842618	50.0000	48
	86	4-Chlorotoluene	126	10.010	10.007	(0.933)	275022	50.0000	48
M	94	Xylene (Total)	106				1236081	150.000	150
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	910895	50.0000	46
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	863128	50.0000	48
	89	sec-Butylbenzene	105	10.547	10.551	(0.984)	1036898	50.0000	47
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	515054	50.0000	47
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	887909	50.0000	48
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	398937	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	542081	50.0000	46
	95	n-Butylbenzene	91	11.094	11.097	(1.034)	752213	50.0000	50
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	522066	50.0000	48
	97	Hexachloroethane	117	11.358	11.358	(1.059)	169313	50.0000	49
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.837	(1.104)	49461	50.0000	51
	141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	312610	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	326321	50.0000	47
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	206639	50.0000	48
	101	Naphthalene	128	12.801	12.801	(1.194)	601999	50.0000	53
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	310613	50.0000	49

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\V8.I\140121.B\V8D2843.d
Date : 21-JAN-2014 09:39
Client ID: LCS-75652
Instrument: V8.i
Sample Info: 5ML,LCS-75652,LCS-75652,75652
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-75646

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2813.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/20/2014

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	47	
74-87-3	Chloromethane	51	
75-01-4	Vinyl chloride	48	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	47	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	36	
74-88-4	Iodomethane	67	
75-15-0	Carbon disulfide	47	
75-09-2	Methylene chloride	49	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	53	
78-93-3	2-Butanone	46	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	51	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	50	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	55	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	54	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-75646

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-75646

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2813.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/20/2014

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	50	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	55	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	52	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	53	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	57	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	52	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	50	
96-12-8	1,2-Dibromo-3-chloropropane	53	
120-82-1	1,2,4-Trichlorobenzene	51	
87-68-3	Hexachlorobutadiene	49	
87-61-6	1,2,3-Trichlorobenzene	53	
91-20-3	Naphthalene	57	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	48	

Data File: \\Avogadro\Organics\V8.I\140120A.B\V8D2813.d
Report Date: 29-Jan-2014 14:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140120A.B\V8D2813.d
Lab Smp Id: LCSD-75646 Client Smp ID: LCSD-75646
Inj Date : 20-JAN-2014 15:41
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCSD-75646,LCSD-75646,75646
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140120A.B\v108260Gadd-6lvl.m
Meth Date : 29-Jan-2014 14:43 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	260816	50.0000	47
2	Freon114	85	1.705	1.705	(0.326)	250543	50.0000	48
3	Chloromethane	50	1.753	1.754	(0.335)	827719	50.0000	51
4	Vinyl Chloride	62	1.856	1.856	(0.355)	323234	50.0000	48
5	Bromomethane	94	2.142	2.143	(0.409)	65217	50.0000	51
6	Chloroethane	64	2.229	2.229	(0.426)	165555	50.0000	48
7	Trichlorofluoromethane	101	2.441	2.445	(0.466)	434339	50.0000	47
126	Ethanol	46	2.567	2.567	(0.490)	170537	5000.00	5300(A)
8	Ether	59	2.666	2.667	(0.509)	273323	50.0000	51
9	Acrolein	56	2.769	2.770	(0.529)	377487	250.000	260
10	1,1-Dichloroethene	96	2.856	2.860	(0.546)	220538	50.0000	47
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	270236	50.0000	48
12	Acetone	58	2.885	2.889	(0.551)	37905	50.0000	36
13	Iodomethane	142	2.985	2.982	(0.570)	48338	50.0000	67
14	Carbon Disulfide	76	3.046	3.046	(0.582)	637377	50.0000	46
15	Acetonitrile	41	3.136	3.139	(0.599)	784665	500.000	490(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	516899	50.0000	50
17	Methyl Acetate	43	3.146	3.146	(0.601)	509193	50.0000	53
18	Methylene Chloride	84	3.229	3.229	(0.617)	264738	50.0000	49
19	tert-Butanol	59	3.293	3.297	(0.629)	77997	100.000	110
20	Acrylonitrile	53	3.422	3.422	(0.654)	180237	50.0000	51
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	260324	50.0000	50
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	837255	50.0000	52

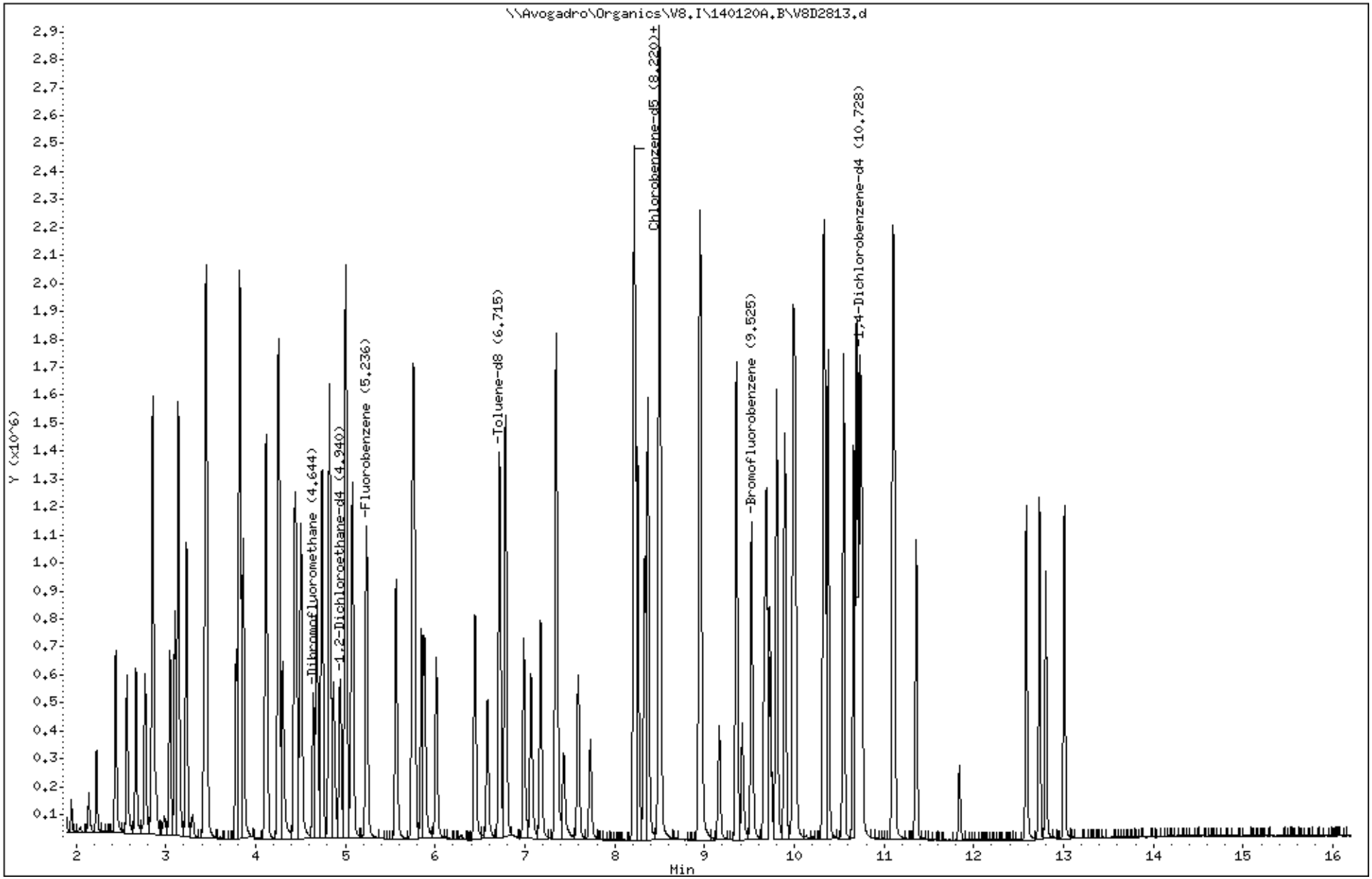
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.785	3.786	(0.723)	579141	50.0000	50
24	Vinyl acetate	43	3.821	3.821	(0.730)	1226738	50.0000	53
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	1581283	50.0000	51
26	2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	629529	50.0000	50
27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1177920	50.0000	51
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	453159	50.0000	51
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	287664	50.0000	51
30	2-Butanone	72	4.258	4.258	(0.813)	31011	50.0000	46
32	Propionitrile	54	4.303	4.303	(0.822)	606811	500.000	550(A)
33	Methacrylonitrile	41	4.435	4.432	(0.847)	555249	100.000	110
34	Bromochloromethane	128	4.451	4.454	(0.850)	149315	50.0000	51
31	Tetrahydrofuran	72	4.499	4.499	(0.859)	64671	100.000	110
35	Chloroform	83	4.509	4.509	(0.861)	515444	50.0000	51
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	276317	50.0000	50
37	1,1,1-Trichloroethane	97	4.682	4.683	(0.894)	492657	50.0000	50
38	Cyclohexane	56	4.740	4.741	(0.905)	623950	50.0000	49
39	1,1-Dichloropropene	110	4.821	4.824	(0.921)	134329	50.0000	50
40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	441938	50.0000	50
41	Isobutyl Alcohol	43	4.869	4.869	(0.930)	367380	1000.00	1100(A)
$ 42	1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	54981	50.0000	50
43	Benzene	78	5.001	5.004	(0.955)	963205	50.0000	50
44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	508675	50.0000	51
45	tert-Amyl methyl ether	73	5.078	5.078	(0.970)	766538	50.0000	52
M 50	1,2-Dichloroethene (Total)	96				547988	100.000	100
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	887888	50.0000	
47	Trichloroethene	130	5.563	5.567	(1.063)	297813	50.0000	49
48	Methylcyclohexane	83	5.750	5.750	(1.098)	408634	50.0000	50
49	1,2-Dichloropropane	63	5.769	5.769	(1.102)	308079	50.0000	51
51	Methyl Methacrylate	69	5.846	5.850	(1.117)	206003	50.0000	56
52	Dibromomethane	93	5.879	5.882	(1.123)	189276	50.0000	52
53	1,4-Dioxane	88	5.882	5.882	(1.123)	61794	1000.00	1100(A)
54	Bromodichloromethane	83	6.014	6.011	(1.149)	381122	50.0000	51
55	2-Chloroethyl vinyl ether	63	6.444	6.441	(1.231)	3041	50.0000	52(TQ)
56	cis-1,3-Dichloropropene	75	6.444	6.445	(1.231)	394110	50.0000	53
57	4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	421872	50.0000	55
$ 58	Toluene-d8	98	6.715	6.715	(0.817)	891570	50.0000	50
59	Toluene	91	6.782	6.782	(1.295)	1016798	50.0000	50
60	trans-1,3-Dichloropropene	75	6.988	6.985	(1.335)	373418	50.0000	54
61	Ethyl Methacrylate	69	7.068	7.068	(1.350)	253506	50.0000	54
62	1,1,2-Trichloroethane	97	7.178	7.178	(1.371)	241857	50.0000	51
63	Tetrachloroethene	164	7.345	7.345	(0.894)	292628	50.0000	49
64	1,3-Dichloropropane	76	7.354	7.355	(0.895)	387715	50.0000	53
65	2-Hexanone	43	7.432	7.432	(0.904)	289103	50.0000	50
66	Dibromochloromethane	129	7.592	7.593	(0.924)	322927	50.0000	54
67	1,2-Dibromoethane	107	7.727	7.728	(0.940)	273962	50.0000	54
69	1-Chlorohexane	91	8.216	8.216	(1.000)	351703	50.0000	49
* 68	Chlorobenzene-d5	117	8.219	8.223	(1.000)	750608	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	724135	50.0000	50
71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	305192	50.0000	52
72	Ethylbenzene	106	8.370	8.371	(1.018)	360600	50.0000	52
73	m,p-Xylene	106	8.499	8.499	(1.034)	888506	100.000	100
74	o-Xylene	106	8.943	8.943	(1.088)	426338	50.0000	52
75	Styrene	104	8.959	8.959	(1.090)	701890	50.0000	53
76	Bromoform	173	9.165	9.165	(1.115)	221131	50.0000	53

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77	Isopropylbenzene	105	9.354	9.358	(1.138)	1139022	50.0000	51
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.422	(1.146)	71486	50.0000	56
$	79	Bromofluorobenzene	95	9.525	9.522	(1.159)	363447	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	315129	50.0000	57
	81	Bromobenzene	156	9.692	9.692	(0.904)	355712	50.0000	50
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	353508	50.0000	52
	83	n-Propylbenzene	120	9.804	9.801	(0.914)	300560	50.0000	51
	84	2-Chlorotoluene	126	9.894	9.895	(0.923)	287940	50.0000	50
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	925402	50.0000	51
	86	4-Chlorotoluene	126	10.010	10.007	(0.933)	294157	50.0000	50
M	94	Xylene (Total)	106				1314844	150.000	160
	87	tert-Butylbenzene	119	10.325	10.326	(0.963)	997241	50.0000	49
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	929579	50.0000	51
	89	sec-Butylbenzene	105	10.550	10.551	(0.984)	1133127	50.0000	50
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	567960	50.0000	51
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	987635	50.0000	51
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	410099	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	593420	50.0000	49
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	821919	50.0000	53
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	556749	50.0000	50
	97	Hexachloroethane	117	11.357	11.358	(1.059)	180024	50.0000	51
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	53219	50.0000	53
	141	1,3,5-Trichlorobenzene	182	12.586	12.583	(2.404)	349704	50.0000	(a)
	99	1,2,4-Trichlorobenzene	180	12.582	12.586	(1.173)	358891	50.0000	51
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	220522	50.0000	49
	101	Naphthalene	128	12.801	12.801	(1.194)	662390	50.0000	57
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	343547	50.0000	53

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\V8.I\140120A.B\V8D2813.d
Date : 20-JAN-2014 15:41
Client ID: LCSD-75646
Instrument: V8.i
Sample Info: 5ML,LCSD-75646,LCSD-75646,75646
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-75652

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2844.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/21/2014

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	46	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	60	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	47	
75-35-4	1,1-Dichloroethene	45	
67-64-1	Acetone	40	
74-88-4	Iodomethane	78	
75-15-0	Carbon disulfide	44	
75-09-2	Methylene chloride	47	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	48	
108-05-4	Vinyl acetate	51	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	48	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	48	
563-58-6	1,1-Dichloropropene	48	
56-23-5	Carbon tetrachloride	48	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	47	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	50	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	51	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-75652

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N0060 Mod. Ref No.: SDG No.: SN0060

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-75652

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2844.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/21/2014

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	46	
591-78-6	2-Hexanone	45	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	95	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	47	
75-25-2	Bromoform	47	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	52	
108-86-1	Bromobenzene	46	
96-18-4	1,2,3-Trichloropropane	45	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	45	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	48	
120-82-1	1,2,4-Trichlorobenzene	47	
87-68-3	Hexachlorobutadiene	45	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	52	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	47	

Data File: \\Avogadro\Organics\V8.I\140121.B\V8D2844.d
Report Date: 29-Jan-2014 11:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V8.I\140121.B\V8D2844.d
Lab Smp Id: LCSD-75652 Client Smp ID: LCSD-75652
Inj Date : 21-JAN-2014 10:06
Operator : ALM SRC: LIMS Inst ID: V8.i
Smp Info : 5ML,LCSD-75652,LCSD-75652,75652
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V8.I\140121.B\v108260Gadd-6lvl.m
Meth Date : 21-Jan-2014 09:23 amarquis Quant Type: ISTD
Cal Date : 20-JAN-2014 12:40 Cal File: V8D2808.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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	239422	50.0000	46
2	Freon114	85	1.705	1.705	(0.326)	226860	50.0000	46
3	Chloromethane	50	1.754	1.754	(0.335)	738136	50.0000	48
4	Vinyl Chloride	62	1.856	1.856	(0.355)	299141	50.0000	47
5	Bromomethane	94	2.143	2.143	(0.409)	71253	50.0000	60
6	Chloroethane	64	2.229	2.229	(0.426)	153294	50.0000	47
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	408010	50.0000	47
126	Ethanol	46	2.567	2.567	(0.490)	157850	5000.00	5200(A)
8	Ether	59	2.667	2.667	(0.509)	251150	50.0000	50
9	Acrolein	56	2.770	2.770	(0.529)	340103	250.000	250
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	196718	50.0000	45
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	247202	50.0000	47
12	Acetone	58	2.889	2.889	(0.552)	40367	50.0000	40
13	Iodomethane	142	2.982	2.982	(0.570)	52431	50.0000	78
14	Carbon Disulfide	76	3.046	3.046	(0.582)	569827	50.0000	44
15	Acetonitrile	41	3.136	3.136	(0.599)	734602	500.000	480(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	455931	50.0000	47
17	Methyl Acetate	43	3.146	3.146	(0.601)	455024	50.0000	50
18	Methylene Chloride	84	3.229	3.229	(0.617)	238299	50.0000	47
19	tert-Butanol	59	3.297	3.297	(0.630)	64550	100.000	98
20	Acrylonitrile	53	3.422	3.422	(0.654)	163442	50.0000	49
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	233840	50.0000	47
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	754883	50.0000	50

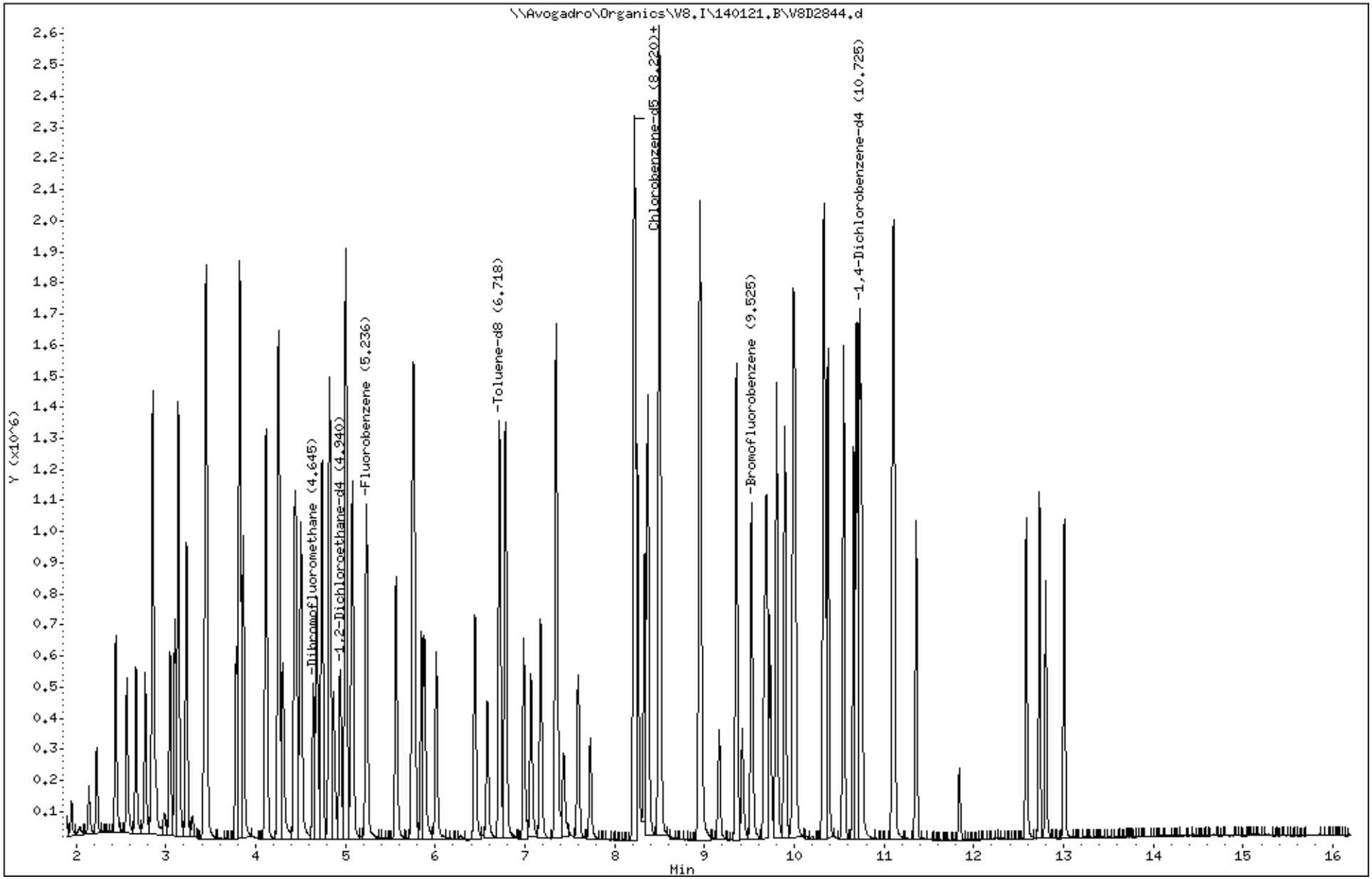
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	520201	50.0000	48
	24 Vinyl acetate	43	3.818	3.818	(0.729)	1103317	50.0000	51
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1434233	50.0000	49
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	573325	50.0000	48
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1055677	50.0000	49
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	402651	50.0000	48
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	257021	50.0000	49
	30 2-Butanone	72	4.255	4.255	(0.813)	32460	50.0000	51
	32 Propionitrile	54	4.303	4.303	(0.822)	537245	500.000	520(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	494762	100.000	100
	34 Bromochloromethane	128	4.454	4.454	(0.851)	138382	50.0000	50
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	57423	100.000	100
	35 Chloroform	83	4.506	4.506	(0.861)	464631	50.0000	49
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	264631	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	445382	50.0000	48
	38 Cyclohexane	56	4.741	4.741	(0.905)	568850	50.0000	47
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	120140	50.0000	48
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	401067	50.0000	48
	41 Isobutyl Alcohol	43	4.869	4.869	(0.930)	316818	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	51234	50.0000	49
	43 Benzene	78	5.001	5.001	(0.955)	860798	50.0000	48
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	470665	50.0000	50
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	683054	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				490861	100.000	96
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	835098	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	269126	50.0000	47
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	364856	50.0000	48
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	271241	50.0000	48
	51 Methyl Methacrylate	69	5.847	5.847	(1.117)	177391	50.0000	51
	52 Dibromomethane	93	5.879	5.879	(1.123)	170772	50.0000	50
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	54957	1000.00	1100(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	347220	50.0000	50
	55 2-Chloroethyl vinyl ether	63	6.435	6.435	(1.229)	2585	50.0000	47(TQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	351689	50.0000	51
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	368226	50.0000	51
$	58 Toluene-d8	98	6.715	6.715	(0.817)	857277	50.0000	49
	59 Toluene	91	6.785	6.785	(1.296)	910954	50.0000	48
	60 trans-1,3-Dichloropropene	75	6.985	6.985	(1.334)	330401	50.0000	51
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	221054	50.0000	50
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	218074	50.0000	49
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	264951	50.0000	46
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	347446	50.0000	48
	65 2-Hexanone	43	7.432	7.432	(0.904)	256145	50.0000	45
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	291623	50.0000	50
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	248735	50.0000	51
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	316181	50.0000	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	732365	50.0000	
	70 Chlorobenzene	112	8.252	8.252	(1.004)	650934	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	273338	50.0000	48
	72 Ethylbenzene	106	8.367	8.367	(1.018)	322180	50.0000	47
	73 m,p-Xylene	106	8.499	8.499	(1.034)	793515	100.000	94
	74 o-Xylene	106	8.943	8.943	(1.088)	384840	50.0000	48
	75 Styrene	104	8.959	8.959	(1.090)	615037	50.0000	47
	76 Bromoform	173	9.165	9.165	(1.115)	191982	50.0000	47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	Isopropylbenzene	105	9.354	9.354	(1.138)	1022461	50.0000	47
78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	60220	50.0000	49
$ 79	Bromofluorobenzene	95	9.522	9.522	(1.158)	344773	50.0000	49
80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	277748	50.0000	52
81	Bromobenzene	156	9.689	9.689	(0.903)	315140	50.0000	46
82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	301192	50.0000	45
83	n-Propylbenzene	120	9.801	9.801	(0.914)	271470	50.0000	47
84	2-Chlorotoluene	126	9.895	9.895	(0.923)	260823	50.0000	47
85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	834601	50.0000	47
86	4-Chlorotoluene	126	10.007	10.007	(0.933)	262526	50.0000	46
M 94	Xylene (Total)	106				1178355	150.000	140
87	tert-Butylbenzene	119	10.326	10.326	(0.963)	883761	50.0000	45
88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	848774	50.0000	48
89	sec-Butylbenzene	105	10.551	10.551	(0.984)	1033827	50.0000	47
90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	511473	50.0000	47
91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	893678	50.0000	48
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	400093	50.0000	
93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	533122	50.0000	45
95	n-Butylbenzene	91	11.097	11.097	(1.035)	731228	50.0000	48
96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	498392	50.0000	46
97	Hexachloroethane	117	11.358	11.358	(1.059)	162973	50.0000	47
98	1,2-Dibromo-3-chloropropane	75	11.837	11.837	(1.104)	47053	50.0000	48
141	1,3,5-Trichlorobenzene	182	12.586	12.586	(2.404)	302626	50.0000	(a)
99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	323995	50.0000	47
100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	197295	50.0000	45
101	Naphthalene	128	12.801	12.801	(1.194)	586358	50.0000	52
102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	298755	50.0000	47

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\V8.I\140121.B\V8D2844.d
Date : 21-JAN-2014 10:06
Client ID: LCSD-75652
Instrument: V8.i
Sample Info: 5ML,LCSD-75652,LCSD-75652,75652
Purge Volume: 5.0
Operator: ALM SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 1-2014

ANALYST: JH

BATCH: 140120.B

Start: 20-JAN-14 07:29
End: 20-JAN-14 13:32

Comments:

Standards: ISTD WN309177A 2 uL
IJSS WN401104 ATTO uL
STM WN146116A ___ uL
_____ ___ uL

Reviewed By: WL 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V8D2800	07:29	BFB10V	BFB10V		AQ									1		JH	
V8D2801	07:47	VSTD05010V	VSTD05010V		AQ		97	98	99					1		NT USED	
V8D2802	08:29	VSTD05010V	VSTD05010V		AQ		100	100	100					1		JH	
V8D2803	09:12	VSTD02010V	VSTD02010V		AQ		94	95	93					1		JH	
V8D2804	09:39	VSTD00510V	VSTD00510V		AQ		94	95	86					1		JH MI_55_65	
V8D2805	10:06	VSTD00110V	VSTD00110V		AQ		95	94	81					1		NT USED	
V8D2806	10:33	VSTD00110V	VSTD00110V		AQ		95	93	82					1		JH	
V8D2807	12:13	VSTD20010V	VSTD20010V		AQ		94	94	98					1		JH	
V8D2808	12:40	VSTD10010V	VSTD10010V		AQ		97	97	99					1		JH	
V8D2809	13:32	VICV05010V	VICV05010V		AQ		97	97	96	100	99	97	101	1	E	JH	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

1-2114

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 1-2014

ANALYST: [signature]

BATCH: 140120A.B

Start: 20-JAN-14 14:18
End: 21-JAN-14 00:15

Comments:

Standards: BFB IW130917A 2 uL
IS/S IW140116A 10 uL
STD IW140116A 20 uL
_____ ___ uL

Reviewed By: [signature] 1/29/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D2810	14:18	BFB10W	BFB10W		AQ									1		OK	
V8D2811	14:46	VSTD05010W	VSTD05010W		AQ		100	100	100					1		OK	
V8D2812	15:14	LCS-75646	LCS-75646	75646	AQ		99	100	97	101	100	100	100	1	E	OK	
V8D2813	15:41	LCSD-75646	LCSD-75646	75646	AQ		100	100	98	99	99	100	101	1	ER	OK	
V8D2814	16:09	MB-75646	MB-75646	75646	AQ		99	98	86	98	102	100	94	1		NOT USED	
V8D2815	16:36	MB-75646	MB-75646	75646	AQ		98	98	82	97	98	99	94	1		OK	
V8D2816	17:03	N0060-14A	TRIPBLANK_01/15	75646	AQ	1	96	98	82	100	100	99	94	1		OK	7
V8D2817	17:30	N0060-01A	HW-WET-WS-7-(1)_	75646	AQ	1	97	96	80	99	101	100	94	1		OK	
V8D2818	17:57	N0060-02A	HW-WET-WS-6-(1)_	75646	AQ	1	97	96	82	99	100	99	94	1		OK	
V8D2819	18:25	N0060-03A	HW-WET-WS-2-(1)_	75646	AQ	1	98	97	83	99	98	98	93	1		OK	
V8D2820	18:52	N0060-04A	HW-WET-WS-3-(1)_	75646	AQ	1	95	93	78	99	102	100	92	1		OK	
V8D2821	19:19	N0060-05A	HW-WET-WS-4-(1)_	75646	AQ	1	95	94	76	99	98	99	93	1	E	1,1,1-TCA = 600 RR@5X	
V8D2822	19:46	N0060-06A	HW-WET-WS-5-(1)_	75646	AQ	1	95	93	76	100	99	99	95	1		RR@1X	
V8D2823	20:13	N0060-07A	HW-WET-WS-1-(1)_	75646	AQ	1	92	92	76	100	98	100	91	1		OK	
V8D2824	20:40	N0060-08A	HW-WET-WS-11-(1	75646	AQ	1	93	93	75	100	99	97	92	1		OK	
V8D2825	21:07	N0060-09A	HW-WET-WS-10-(1	75646	AQ	1	90	91	76	102	100	100	94	1		OK	
V8D2826	21:34	N0060-10A	HW-WET-WS-9-(1)_	75646	AQ	1	91	92	75	100	102	99	93	1		OK	
V8D2827	22:01	N0060-11A	HW-WET-WS-8-(1)_	75646	AQ	1	92	91	75	100	98	100	92	1		OK	
V8D2828	22:28	N0060-12A	SUMP 2_01/16/13	75646	AQ	1	92	91	75	99	100	99	94	1	E	1,1,1-TCA = 250 RR@2X	
V8D2829	22:55	N0060-13A	SUMP 3_01/16/13	75646	AQ	1	90	89	74	100	95	99	92	1		RR@1X	
V8D2830	23:21	N0060-06AMS	HW-WET-WS-5-(1)_	75646	AQ	2	92	92	92	102	98	100	101	1	ER	OK	
V8D2831	23:48	N0060-06AMSD	HW-WET-WS-5-(1)_	75646	AQ	3	93	93	94	101	99	99	101	1	ER	OK	7
V8D2832	00:15	VBLK	VBLK		AQ		93	91	77	97	98	100	95	1		NOT USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
H - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

[signature] 21 1-14-14

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 1-20-14

ANALYST: JH

BATCH: 140121.B

Start: 21-JAN-14 08:02
End: 21-JAN-14 20:31

Comments:

Standards: ISB MW309177 2 uL
VSTD MW401108 ~~1~~ 2 uL
SSTD MW401168 20 uL
_____ ____ uL

Reviewed By: MC 1/22/14 Manual Integration: _____ MI Review: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D2840	08:02	BFB10X	BFB10X		AQ									1		OK	
V8D2841	08:20	VSTD05010X	VSTD05010X		AQ		100	100	100					1		MT USED	
V8D2842	09:00	VSTD05010X	VSTD05010X		AQ		100	100	100					1		OK	
V8D2843	09:39	LCS-75652	LCS-75652	75652	AQ		98	98	100	102	99	99	101	1	ER	OK	
V8D2844	10:06	LCSD-75652	LCSD-75652	75652	AQ		99	100	100	101	98	98	98	1	ER	OK	
V8D2845	10:33	MB-75652	MB-75652	75652	AQ		100	97	85	98	98	98	94	1		MT USED	
V8D2846	11:00	MB-75652	MB-75652	75652	AQ		97	96	80	100	100	97	92	1		OK	
V8D2847	11:27	N0060-06A	HW-WET-WS-5-(1)	75652	AQ	2	97	95	81	101	100	98	95	1		OK	7
V8D2848	11:54	N0060-13A	SUMP 3_01/16/13	75652	AQ	2	96	94	82	100	100	99	95	1		OK	7
V8D2849	12:22	N0053-01A	EFFLUENT 32	75657	AQ	1	94	94	81	102	102	97	94	1		OK	2
V8D2850	12:49	N0060-05ADL	HW-WET-WS-4-(1)	75652	AQ	2	93	93	80	101	98	96	93	5		1,1,1-TCA = 114 OK	7
V8D2851	13:16	N0060-12ADL	SUMP 2_01/16/13	75652	AQ	2	95	93	78	99	98	98	92	2		1,1,1-TCA = 116 OK	7
V8D2852	13:43	N0055-01A	SB83333-01	75652	AQ	1	93	91	80	101	103	98	94	1		OK	2
V8D2853	14:10	N0056-01A	SB83335-01	75652	AQ	1	93	92	85	101	100	98	96	1	*	OK	↓
V8D2854	14:37	N0057-01A	SB83351-01	75657	AQ	1-3	92	91	87	101	102	98	96	1	*	OK } COMPS 13 ML PER VIAL	2
V8D2855	15:05	N0059-01A	SB83349-01	75657	AQ	1-3	91	92	87	103	105	98	96	1		OK	
V8D2856	15:32	N0048-24A		75652	AQ		92	92	85	101	97	98	97	500		} RUN @ 1X	
V8D2857	15:59	N0048-12A		75652	AQ		91	91	82	102	99	98	94	500			
V8D2858	16:27	N0048-13A		75652	AQ		89	91	80	103	101	96	94	500			
V8D2859	16:54	N0048-14A		75652	AQ		90	90	82	104	102	98	96	500			
V8D2860	17:21	N0048-15A		75652	AQ		90	90	80	102	101	97	95	500		RR @ 20X } SCREEN	
V8D2861	17:48	N0048-19A		75652	AQ		89	89	79	102	102	97	96	500		RR @ 50X	
V8D2862	18:16	N0048-20A		75652	AQ		89	90	79	103	99	96	95	500		RR @ 50X ONLY	
V8D2863	18:43	N0048-21A		75652	AQ		88	88	77	102	101	98	94	500		} RR @ 1X	
V8D2864	19:10	N0048-23A		75652	AQ		88	88	75	105	104	96	93	500			
V8D2865	19:37	N0048-25A		75652	AQ		88	87	75	103	101	96	93	500		RR @ 100	
V8D2866	20:04	VBLK	VBLK		AQ		88	87	75	102	99	97	92	1	T	MT USED	
V8D2867	20:31	VBLK	VBLK		AQ		86	87	74	104	102	95	93	1	T	↓	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

1-22-14

N0060

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 R23
01/17/14	N0052	SEVENSON	01, 02	WJL	WL	F	F10	
	N0052	SEVENSO	01, 02	WJL		M	R10	
	N0048	AMEC	01-25	WJL		H	R10	
	N0053	LAND	01	WJL		H	R10	
	N0054	ARCADIS	01-04	WJL		US	R10	
	N0050	AMEC	01-07, 09-16, 18, 19	WJL		M	R10	
	N0055	SPECTRUM	01	WJL		H	R10	
	N0056	SPECTRUM	01	WJL		H	R10	
	N0058	~~DVRK~~ DIVRKA (WJL 01/17/14)	01-17	WJL		US	R10	
	N0060	DIVIRKA	01-14	WJL		H	R10	
	N0049	AMEC	01-02	WJL		M	R10	
	N0022	EPA	05	WJL		M	R13	
	N0057	SPECTRUM	01	WJL		H	R10	
01/17/14	N0059	SPECTRUM	01	WJL	WL	H	R10	

Logbook ID 90.0191-10/13

Reviewed By: WL 1-22-14

"Preservative Used" Key

UA = Unpreserved Aqueous | **H** = HCL | **A** = Air | **M** = MeOH | **E** = Encore

US = Unpreserved Soil | **N** = $NaHSO_4$ | **F** = Freeze | **T** = Trace, HCL

Last Page of Data Report

Report Date:
03-Jul-14 17:25

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Work Order: N1055
Project : Farrand Controls
Project #:

Attn: Robbin Petrella

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N1055-01	TRIPBLANK_6/16/14	Aqueous	16-Jun-14 00:00	18-Jun-14 12:50
N1055-02	MW-10R_6/16/14	Aqueous	16-Jun-14 11:35	18-Jun-14 12:50
N1055-03	MW-22R(1)_6/16/14	Aqueous	16-Jun-14 12:35	18-Jun-14 12:50
N1055-04	MW-22R(2)_6/16/14	Aqueous	16-Jun-14 13:45	18-Jun-14 12:50
N1055-05	MW-22R(3)_6/16/14	Aqueous	16-Jun-14 14:32	18-Jun-14 12:50
N1055-06	MW-22S(1)_6/16/14	Aqueous	16-Jun-14 15:40	18-Jun-14 12:50
N1055-07	MW-22S(2)_6/16/14	Aqueous	16-Jun-14 16:36	18-Jun-14 12:50
N1055-08	MW-22S(3)_6/16/14	Aqueous	16-Jun-14 17:35	18-Jun-14 12:50
N1055-09	MW-27_6/17/14	Aqueous	17-Jun-14 08:50	18-Jun-14 12:50
N1055-10	MW-21R(1)_6/17/14	Aqueous	17-Jun-14 09:42	18-Jun-14 12:50
N1055-11	MW-21R(2)_6/17/14	Aqueous	17-Jun-14 11:04	18-Jun-14 12:50
N1055-12	MW-21R(3)_6/17/14	Aqueous	17-Jun-14 12:43	18-Jun-14 12:50
N1055-13	MW-10S_6/16/14	Aqueous	16-Jun-14 09:25	18-Jun-14 12:50
N1055-14	MW-10D_6/16/14	Aqueous	16-Jun-14 09:35	18-Jun-14 12:50
N1055-15	OC-17S_6/16/14	Aqueous	16-Jun-14 12:35	18-Jun-14 12:50
N1055-16	OC-17D_6/16/14	Aqueous	16-Jun-14 11:35	18-Jun-14 12:50
N1055-17	OC-19S_6/16/14	Aqueous	16-Jun-14 16:30	18-Jun-14 12:50
N1055-18	OC-19D_6/16/14	Aqueous	16-Jun-14 15:15	18-Jun-14 12:50
N1055-19	MW-20D_6/17/14	Aqueous	17-Jun-14 13:50	18-Jun-14 12:50

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 requirments have been meet.

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
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1055

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
TRIPBLANK_6/16/14	N1055-01	SW8260_W				
MW-10R_6/16/14	N1055-02	SW8260_W				
MW-22R(1)_6/16/14	N1055-03	SW8260_W				
MW-22R(2)_6/16/14	N1055-04	SW8260_W				
MW-22R(3)_6/16/14	N1055-05	SW8260_W				
MW-22S(1)_6/16/14	N1055-06	SW8260_W				
MW-22S(2)_6/16/14	N1055-07	SW8260_W				
MW-22S(3)_6/16/14	N1055-08	SW8260_W				
MW-27_6/17/14	N1055-09	SW8260_W				
MW-21R(1)_6/17/14	N1055-10	SW8260_W				
MW-21R(2)_6/17/14	N1055-11	SW8260_W				
MW-21R(3)_6/17/14	N1055-12	SW8260_W				
MW-10S_6/16/14	N1055-13	SW8260_W				
MW-10D_6/16/14	N1055-14	SW8260_W				
OC-17S_6/16/14	N1055-15	SW8260_W				
OC-17D_6/16/14	N1055-16	SW8260_W				
OC-19S_6/16/14	N1055-17	SW8260_W				
OC-19D_6/16/14	N1055-18	SW8260_W				
MW-20D_6/17/14	N1055-19	SW8260_W				

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1055

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
N1055-01A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-02A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-02ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-03A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-03ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-04A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-04ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-05A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-05ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-06A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-06ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-07A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-07ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-08A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-08ADL	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-09A	AQ	6/17/2014	6/18/2014	NA	6/19/2014
N1055-09ADL	AQ	6/17/2014	6/18/2014	NA	6/20/2014
N1055-09AMS	AQ	6/17/2014	6/18/2014	NA	6/19/2014
N1055-09AMSD	AQ	6/17/2014	6/18/2014	NA	6/23/2014
N1055-10A	AQ	6/17/2014	6/18/2014	NA	6/19/2014
N1055-10ADL	AQ	6/17/2014	6/18/2014	NA	6/23/2014
N1055-11A	AQ	6/17/2014	6/18/2014	NA	6/19/2014
N1055-11ADL	AQ	6/17/2014	6/18/2014	NA	6/23/2014
N1055-12A	AQ	6/17/2014	6/18/2014	NA	6/19/2014
N1055-12ADL	AQ	6/17/2014	6/18/2014	NA	6/23/2014
N1055-13A	AQ	6/16/2014	6/18/2014	NA	6/23/2014
N1055-14A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-14ADL	AQ	6/16/2014	6/18/2014	NA	6/21/2014
N1055-15A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-15ADL	AQ	6/16/2014	6/18/2014	NA	6/21/2014
N1055-16A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-16ADL	AQ	6/16/2014	6/18/2014	NA	6/21/2014
N1055-17A	AQ	6/16/2014	6/18/2014	NA	6/20/2014
N1055-18A	AQ	6/16/2014	6/18/2014	NA	6/19/2014
N1055-18ADL	AQ	6/16/2014	6/18/2014	NA	6/21/2014
N1055-19A	AQ	6/17/2014	6/18/2014	NA	6/20/2014

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1055

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
N1055-01A	AQ	SW8260_W	NA	LOW	1
N1055-02A	AQ	SW8260_W	NA	LOW	1
N1055-02ADL	AQ	SW8260_W	NA	LOW	25
N1055-03A	AQ	SW8260_W	NA	LOW	1
N1055-03ADL	AQ	SW8260_W	NA	LOW	200
N1055-04A	AQ	SW8260_W	NA	LOW	1
N1055-04ADL	AQ	SW8260_W	NA	LOW	200
N1055-05A	AQ	SW8260_W	NA	LOW	1
N1055-05ADL	AQ	SW8260_W	NA	LOW	200
N1055-06A	AQ	SW8260_W	NA	LOW	1
N1055-06ADL	AQ	SW8260_W	NA	LOW	20
N1055-07A	AQ	SW8260_W	NA	LOW	1
N1055-07ADL	AQ	SW8260_W	NA	LOW	20
N1055-08A	AQ	SW8260_W	NA	LOW	1
N1055-08ADL	AQ	SW8260_W	NA	LOW	20
N1055-09A	AQ	SW8260_W	NA	LOW	1
N1055-09ADL	AQ	SW8260_W	NA	LOW	20
N1055-09AMS	AQ	SW8260_W	NA	LOW	1
N1055-09AMSD	AQ	SW8260_W	NA	LOW	1
N1055-10A	AQ	SW8260_W	NA	LOW	1
N1055-10ADL	AQ	SW8260_W	NA	LOW	1000
N1055-11A	AQ	SW8260_W	NA	LOW	1
N1055-11ADL	AQ	SW8260_W	NA	LOW	1000
N1055-12A	AQ	SW8260_W	NA	LOW	1
N1055-12ADL	AQ	SW8260_W	NA	LOW	1000
N1055-13A	AQ	SW8260_W	NA	LOW	1
N1055-14A	AQ	SW8260_W	NA	LOW	1
N1055-14ADL	AQ	SW8260_W	NA	LOW	25
N1055-15A	AQ	SW8260_W	NA	LOW	1
N1055-15ADL	AQ	SW8260_W	NA	LOW	4
N1055-16A	AQ	SW8260_W	NA	LOW	1
N1055-16ADL	AQ	SW8260_W	NA	LOW	10
N1055-17A	AQ	SW8260_W	NA	LOW	1
N1055-18A	AQ	SW8260_W	NA	LOW	1
N1055-18ADL	AQ	SW8260_W	NA	LOW	20
N1055-19A	AQ	SW8260_W	NA	LOW	1

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N1055

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3150-16

HC Due: 07/02/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N1055-01A	TRIPBLANK_6/16/14	06/16/2014 00:00	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-02A	MW-10R_6/16/14	06/16/2014 11:35	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-03A	MW-22R(1)_6/16/14	06/16/2014 12:35	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-04A	MW-22R(2)_6/16/14	06/16/2014 13:45	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-05A	MW-22R(3)_6/16/14	06/16/2014 14:32	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-06A	MW-22S(1)_6/16/14	06/16/2014 15:40	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-07A	MW-22S(2)_6/16/14	06/16/2014 16:36	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-08A	MW-22S(3)_6/16/14	06/16/2014 17:35	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-09A	MW-27_6/17/14	06/17/2014 08:50	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC			Y	Y	VOA
N1055-10A	MW-21R(1)_6/17/14	06/17/2014 09:42	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-11A	MW-21R(2)_6/17/14	06/17/2014 11:04	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-12A	MW-21R(3)_6/17/14	06/17/2014 12:43	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-13A	MW-10S_6/16/14	06/16/2014 09:25	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA

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

HT = Test logged in but has been placed on hold

06/19/2014 14:14

Lab Client Rep: Agnes R Huntley

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N1055

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3150-16

HC Due: 07/02/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N1055-14A	MW-10D_6/16/14	06/16/2014 09:35	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-15A	OC-17S_6/16/14	06/16/2014 12:35	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-16A	OC-17D_6/16/14	06/16/2014 11:35	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-17A	OC-19S_6/16/14	06/16/2014 16:30	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-18A	OC-19D_6/16/14	06/16/2014 15:15	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1055-19A	MW-20D_6/17/14	06/17/2014 13:50	06/18/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Huntley

Sample Transmittal Documentation

N1055

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Page 1 of 3

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☑ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
· All TATs subject to laboratory approval.
· Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Dunkel Bertolucci Engineers, 330 Crossways Park Drive, Woodbury NY 11797
Telephone #: 516 364-9850
Project Mgr. Matt DeVincenzi

Invoice To: Dunkel Bertolucci Engineers, 330 Crossways Park Drive, Woodbury NY 11797
P.O. No.: 3150-16 RQN:

Project No.: 3150-16
Site Name: Farrand Controls Site
Location: 99 Wallmeer Rd Valhalla State: NY
Sampler(s): K. Robins / Emily

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs-8260B							
N1055-01	TripBlank-6/16/14	6/16/14	—	—	AQ	2	—	—	—	✓							
-02	MW-10R-6/16/14	6/16/14	1135am	G	GW	2	—	—	—	✓							
-03	MW-22R(1)-6/16/14	6/16/14	1235	G	GW	2	—	—	—	✓							
-04	MW-22R(2)-6/16/14	6/16/14	145pm	G	GW	2	—	—	—	✓							
-05	MW-22R(3)-6/16/14	6/16/14	232pm	G	GW	2	—	—	—	✓							
-06	MW-22S(1)-6/16/14	6/16/14	340pm	G	GW	2	—	—	—	✓							
-07	MW-22S(2)-6/16/14	6/16/14	436pm	G	GW	2	—	—	—	✓							
-08	MW-22S(3)-6/16/14	6/16/14	535pm	G	GW	2	—	—	—	✓							
-09	MW-27-6/17/14 MS	6/17/14	850am	G	GW	2	—	—	—	✓							
N1055-09	MW-27-6/17/14 MSD	6/17/14	850am	G	GW	2	—	—	—	✓							

10/-1/10 IR02 MW
6/17/2014
Run MS
Run MSD

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category B and EQuIS
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins		6/17/14	14m	
	SUBOUT	6/17/2014	1715	0
		6/18/14	800	
		06/18/14	12:50	2.7c,

☑ EDD Format EQuIS
☒ E-mail to MDeVincenzi@dbe-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Client Cont

N1055

SPECTRUM ANALYTICAL, INC.
Featuring
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Page 2 of 3

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Ind icate Date Needed: 5 Thursday
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 60 days unless otherwise instructed.

Report To: Dunkel Bartholucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dunkel Bartholucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

P.O. No. 3150-16 RQN:

Project No.: 3150-16
Site Name: Ferrand Controls site
Location: 99 Church Street, Valhalla State: NY
Sampler(s): K Robins / Emily

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11=_____ 12=_____

List preservative code below: 1G

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	8260 B VOCs	Analyses:
N1055-10	MW-21R(1)-6/17/14	6/17/14	9:42 am	G	GW	2	—	—	1	✓	
-11	MW-21R(2)-6/17/14	6/17/14	11:04 am	G	GW	2	—	—	1	✓	
-12	MW-21R(3)-6/17/14	6/17/14	12:43 pm	G	GW	2	—	—	—	✓	
-13	MW-10S-6/16/14	6/16/14	9:25 am	G	GW	2	—	—	—	✓	
-14	MW-10D-6/16/14	6/16/14	9:35 am	G	GW	2	—	—	—	✓	
-15	OC-17S-6/16/14	6/16/14	12:35 pm	G	GW	2	—	—	—	✓	
-16	OC-17D-6/16/14	6/16/14	11:35 am	G	GW	2	—	—	—	✓	
-17	OC-19S-6/16/14	6/16/14	4:30 pm	G	GW	2	—	—	—	✓	
-18	OC-19D-6/16/14	6/16/14	3:15 pm	G	GW	2	—	—	—	✓	
N1055-09	MW-27-6/17/14	6/17/14	8:50 am	G	GW	2	—	—	—	✓	

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other EQuIS and CatScan "B"
State-specific reporting standards:

10/1/16 IR02 MW
06172014

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Illmer	[signature]	6/17/14	16:00	
[signature]	SUBCOUT	06172014	1715	0
Subcont	[signature]	6/18/14	800	
[signature]	[signature]	06/18/14	12:50	2.7°C

☒ EDD Format EQuIS
☒ E-mail to MDeVinney@dbe-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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Revised Feb 2013

N1055

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 3 of 3

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: STANDARD
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci Engineers, 330 Crossways Park Drive, Woodbury NY 11797
Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dvirka Bartilucci Engineers, 330 Crossways Park Drive, Woodbury NY 11797
P.O. No.: 3150 RQN:

Project No.: 3150-16
Site Name: Ferrand Controls
Location: 99 Wall Street Valhalla State: NY
Sampler(s): K. Robins / Emily

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	8260 TCL-VOCs
N1055-19	MW-20D_6/17/14	6/17/14	1:50pm	G	GW	2	-	-	-	✓

Containers: # of VOA Vials, # of Amber Glass, # of Clear Glass, # of Plastic
Analyses: 8260 TCL-VOCs

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category B and EQuIS
State-specific reporting standards:

10/1/10 IR02MW
6/17/2014

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Klum		6/17/14	19	
	SUBCOUT	6/17/2014	1715	0
		6/18/14	800	
		06/18/14	12:50	2.7°C

☒ EDD Format EQuIS
☒ E-mail to MDeVinney@dbe-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

Received By: RJB	Page 01 of 01
Reviewed By: WJL	Log-in Date 06/18/2014
Work Order: N1055	Client Name: Dvirka & Bartilucci
Project Name/Event: Farrand Controls	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

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.	Courier N/A
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	2.7 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	06/18/2014
12. Time Received	12:50

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

	Preservation (pH)						
Lab Sample ID	HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
N1055-01						UA	
N1055-02						UA	
N1055-03						UA	
N1055-04						UA	
N1055-05						UA	
N1055-06						UA	
N1055-07						UA	
N1055-08						UA	
N1055-09						UA	
N1055-10						UA	
N1055-11						UA	
N1055-12						UA	
N1055-13						UA	
N1055-14						UA	
N1055-15						UA	
N1055-16						UA	
N1055-17						UA	
N1055-18						UA	
N1055-19						UA	

IR Temp Gun ID:MT-74

CoolantCondition: 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

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : Dvirka & Bartilucci

Project: Farrand Controls

Laboratory Workorder / SDG #: N1055

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: SW5030B

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.

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.

TRIPBLANK_6/16/14 (N1055-01A), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

MW-22R(3)_6/16/14 (N1055-05A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

OC-17D_6/16/14 (N1055-16ADL), recovery is above criteria for Dibromofluoromethane at 115% with criteria of (85-115).

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-77659 in batch 77659, recovery is above criteria for Iodomethane at 153% with criteria of (72-121).

LCS-77692 in batch 77692, recovery is below criteria for 1,4-Dichlorobenzene at 75% with criteria of (75-125).

LCS-77721 in batch 77721, recovery is above criteria for Iodomethane at 128% with criteria of (72-121).

LCSD-77692 in batch 77692, recovery is above criteria for Chloroethane at 137% with criteria of (60-135)Iodomethane at 123% with criteria of (72-121).

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

Matrix spikes were performed on samples: MW-27_6/17/14 (N1055-09AMS) and MW-27_6/17/14 (N1055-09AMSD).

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

MW-27_6/17/14 (N1055-09AMS), recovery is above criteria for 1,1-Dichloroethene at 359% with criteria of (70-130), recovery is below criteria for 1,1,1-Trichloroethane at 0% with criteria of (65-130), 1,1,2-Trichloro-1,2,2-trifluoroethane at 0% with criteria of (70-130), Iodomethane at 69% with criteria of (72-121) and Trichloroethene at 66% with criteria of (70-125).

MW-27_6/17/14 (N1055-09AMSD), recovery is above criteria for 1,1-Dichloroethene at 348% with criteria of (70-130), recovery is below criteria for 1,1,1-Trichloroethane at 0% with criteria of (65-130), 1,1,2-Trichloro-1,2,2-trifluoroethane at 0% with criteria of (70-130), Iodomethane at 66% with criteria of (72-121) and Trichloroethene at 0% with criteria of (70-125).

Replicate RPDs were within the advisory QC limits with the exception of the following:

MW-27_6/17/14 (N1055-09AMSD), Relative Percent Difference is greater than RPD limit for Bromomethane, Chloromethane.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

MW-10R_6/16/14 (N1055-02ADL) : Dilution Factor: 25
MW-22R(1)_6/16/14 (N1055-03ADL) : Dilution Factor: 200
MW-22R(2)_6/16/14 (N1055-04ADL) : Dilution Factor: 200
MW-22R(3)_6/16/14 (N1055-05ADL) : Dilution Factor: 200

MW-22S(1)_6/16/14 (N1055-06ADL) : Dilution Factor: 20
MW-22S(2)_6/16/14 (N1055-07ADL) : Dilution Factor: 20
MW-22S(3)_6/16/14 (N1055-08ADL) : Dilution Factor: 20
MW-27_6/17/14 (N1055-09ADL) : Dilution Factor: 20
MW-21R(1)_6/17/14 (N1055-10ADL) : Dilution Factor: 1000
MW-21R(2)_6/17/14 (N1055-11ADL) : Dilution Factor: 1000
MW-21R(3)_6/17/14 (N1055-12ADL) : Dilution Factor: 1000
MW-10D_6/16/14 (N1055-14ADL) : Dilution Factor: 25
OC-17S_6/16/14 (N1055-15ADL) : Dilution Factor: 4
OC-17D_6/16/14 (N1055-16ADL) : Dilution Factor: 10
OC-19D_6/16/14 (N1055-18ADL) : Dilution Factor: 20

G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integration was performed on the following:

MW-22R(1)_6/16/14 (N1055-03A) 1,1,1-Trichloroethane , 1,1,2-Trichloro-1,2,2-trifluoroethane due to M6

MW-22R(2)_6/16/14 (N1055-04A) 1,1,2-Trichloro-1,2,2-trifluoroethane due to M6

MW-21R(1)_6/17/14 (N1055-10A) 1,1,1-Trichloroethane , Methylene chloride due to M6

MW-21R(2)_6/17/14 (N1055-11A) Methylene chloride due to M6

MW-21R(3)_6/17/14 (N1055-12A) 1,1,1-Trichloroethane , 1,1,2-Trichloro-1,2,2-trifluoroethane, Methylene chloride due to M6

VSTD00110W Bromomethane , Chloroethane, Chloromethane due to M3

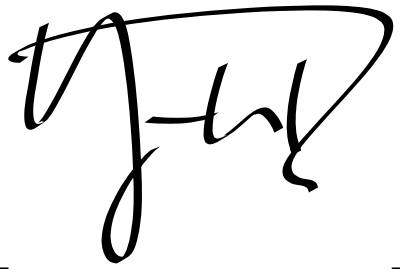
VSTD00510N 2-Chloroethyl vinyl ether due to M6

VSTD00510W Chloroethane due to M3

VSTD00510W 2-Chloroethyl vinyl ether due to M6

VSTD00510W Acetone due to M7

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:_____7/2/2014_____

Data Flag/Qualifiers (Page 1 of 2):

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 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 an aldol condensation by-product.

Data Flag/Qualifiers (Page 2 of 2):

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.

L NYSDEC qualifier: Result is biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

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.: N1055 Mod. Ref No.: SDG No.: SN1055

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-77659	107	97	95	104				0
02	MB-77659	112	102	97	95				0
03	TRIPBLANK_6/16/14	115 *	112	95	98				1
04	MW-10R_6/16/14	113	103	93	100				0
05	MW-22R(1)_6/16/14	112	100	92	103				0
06	MW-22R(2)_6/16/14	113	105	91	101				0
07	MW-22R(3)_6/16/14	116 *	105	92	101				1
08	MW-22S(1)_6/16/14	114	107	92	96				0
09	MW-22S(2)_6/16/14	110	101	96	99				0
10	MW-22S(3)_6/16/14	112	102	98	98				0
11	MW-27_6/17/14	115	102	97	96				0
12	MW-21R(1)_6/17/14	108	104	92	104				0
13	MW-21R(2)_6/17/14	106	102	89	104				0
14	MW-21R(3)_6/17/14	110	104	91	110				0
15	MW-10D_6/16/14	109	101	95	96				0
16	OC-17S_6/16/14	114	108	93	99				0
17	OC-17D_6/16/14	110	101	92	96				0
18	OC-19D_6/16/14	114	111	95	102				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som14.07.01.1137

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
19	MW-27_6/17/14MS	112	100	93	108				0
20	LCS-77692	111	99	91	108				0
21	LCSD-77692	109	102	90	107				0
22	MB-77692	108	102	91	100				0
23	OC-19S_6/16/14	106	105	109	89				0
24	MW-20D_6/17/14	113	105	91	105				0
25	MW-10R_6/16/14DL	114	110	93	101				0
26	MW-22R(1)_6/16/14DL	113	104	91	100				0
27	MW-22R(2)_6/16/14DL	114	105	93	100				0
28	MW-22R(3)_6/16/14DL	114	106	92	102				0
29	MW-22S(1)_6/16/14DL	111	106	92	99				0
30	MW-22S(2)_6/16/14DL	112	111	89	100				0
31	MW-22S(3)_6/16/14DL	113	111	89	101				0
32	MW-27_6/17/14DL	112	101	91	98				0
33	MW-10D_6/16/14DL	113	105	87	100				0
34	OC-17S_6/16/14DL	113	101	90	99				0
35	OC-17D_6/16/14DL	115 *	112	87	101				1
36	OC-19D_6/16/14DL	114	111	90	101				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som14.07.01.1137

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
37	LCS-77721	102	103	99	104				0
38	MB-77721	101	105	98	97				0
39	MW-10S_6/16/14	106	105	96	96				0
40	MW-21R(1)_6/17/14DL	104	111	95	94				0
41	MW-21R(2)_6/17/14DL	107	102	97	97				0
42	MW-21R(3)_6/17/14DL	108	112	95	94				0
43	MW-27_6/17/14MSD	104	95	99	102				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som14.07.01.1137

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix Spike - EPA Sample No.: MW-27_6/17/14 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	51.2719	103		30-155
Chloromethane	50.0000	0.0000	61.1751	122		40-125
Vinyl chloride	50.0000	0.0000	51.2692	103		50-145
Bromomethane	50.0000	0.0000	22.4141	45		30-145
Chloroethane	50.0000	0.0000	56.9727	114		60-135
Trichlorofluoromethane	50.0000	0.0000	58.3080	117		60-145
1,1-Dichloroethene	50.0000	0.0000	179.6083	359	*	70-130
Acetone	50.0000	0.0000	36.3037	73		40-140
Iodomethane	50.0000	0.0000	34.5556	69	*	72-121
Carbon disulfide	50.0000	0.0000	56.5367	113		35-160
Methylene chloride	50.0000	0.0000	52.6432	105		55-140
trans-1,2-Dichloroethen	50.0000	0.0000	51.8668	104		60-140
Methyl tert-butyl ether	50.0000	0.0000	54.7972	110		65-125
1,1-Dichloroethane	50.0000	86.9157	140.4301	107		70-135
Vinyl acetate	50.0000	0.0000	57.2522	115		38-163
2-Butanone	50.0000	0.0000	58.0059	116		30-150
cis-1,2-Dichloroethene	50.0000	7.0274	57.6934	101		70-125
2,2-Dichloropropane	50.0000	0.0000	49.2054	98		70-135
Bromochloromethane	50.0000	0.0000	47.8918	96		65-130
Chloroform	50.0000	0.0000	55.6241	111		65-135
1,1,1-Trichloroethane	50.0000	1048.4385	1045.3528	-6	*	65-130
1,1-Dichloropropene	50.0000	0.0000	50.8359	102		75-130
Carbon tetrachloride	50.0000	0.0000	58.1333	116		65-140
1,2-Dichloroethane	50.0000	0.0000	57.3307	115		70-130
Benzene	50.0000	0.0000	51.0456	102		80-120
Trichloroethene	50.0000	774.6438	807.5787	66	*	70-125
1,2-Dichloropropane	50.0000	0.0000	50.9485	102		75-125
Dibromomethane	50.0000	0.0000	55.9031	112		75-125
Bromodichloromethane	50.0000	0.0000	57.1543	114		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	47.6907	95		70-130
4-Methyl-2-pentanone	50.0000	0.0000	61.9540	124		60-135
Toluene	50.0000	0.0000	50.3206	101		75-120
trans-1,3-Dichloroprope	50.0000	0.0000	49.0163	98		55-140
1,1,2-Trichloroethane	50.0000	0.0000	51.7626	104		75-125
1,3-Dichloropropane	50.0000	0.0000	46.5358	93		75-125
Tetrachloroethene	50.0000	0.0000	44.1156	88		45-150
2-Hexanone	50.0000	0.0000	49.5414	99		55-130
Dibromochloromethane	50.0000	0.0000	44.9842	90		60-135
1,2-Dibromoethane	50.0000	0.0000	47.4301	95		80-120
Chlorobenzene	50.0000	0.0000	44.2270	88		80-120
1,1,1,2-Tetrachloroetha	50.0000	0.0000	47.9527	96		80-130
Ethylbenzene	50.0000	0.0000	45.2424	90		75-125
m,p-Xylene	100.0000	0.0000	88.9351	89		75-130
o-Xylene	50.0000	0.0000	45.8324	92		80-120

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix Spike - EPA Sample No.: MW-27_6/17/14 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	134.7675	90		81-121
Styrene	50.0000	0.0000	44.6433	89		65-135
Bromoform	50.0000	0.0000	47.6467	95		70-130
Isopropylbenzene	50.0000	0.0000	46.7127	93		75-125
1,1,2,2-Tetrachloroetha	50.0000	0.0000	44.1027	88		65-130
Bromobenzene	50.0000	0.0000	43.2218	86		75-125
1,2,3-Trichloropropane	50.0000	0.0000	48.4665	97		75-125
n-Propylbenzene	50.0000	0.0000	42.1115	84		70-130
2-Chlorotoluene	50.0000	0.0000	40.4841	81		75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	42.4385	85		75-130
4-Chlorotoluene	50.0000	0.0000	41.6811	83		75-130
tert-Butylbenzene	50.0000	0.0000	41.0203	82		70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	44.6097	89		75-130
sec-Butylbenzene	50.0000	0.0000	43.0217	86		70-125
4-Isopropyltoluene	50.0000	0.0000	43.5530	87		75-130
1,3-Dichlorobenzene	50.0000	0.0000	42.1651	84		75-125
1,4-Dichlorobenzene	50.0000	0.0000	40.2660	81		75-125
n-Butylbenzene	50.0000	0.0000	42.9601	86		70-135
1,2-Dichlorobenzene	50.0000	0.0000	42.3789	85		70-120
1,2-Dibromo-3-chloropro	50.0000	0.0000	53.5659	107		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	41.8000	84		65-135
Hexachlorobutadiene	50.0000	0.0000	44.5868	89		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	42.2112	84		55-140
Naphthalene	50.0000	0.0000	38.9176	78		55-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0000	2801.9888	2509.1255	-586	*	70-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	44.9566	90		13		0-40	30-155
Chloromethane	50.0000	35.9655	72		52	*	0-40	40-125
Vinyl chloride	50.0000	45.0649	90		13		0-40	50-145
Bromomethane	50.0000	44.8214	90		67	*	0-40	30-145
Chloroethane	50.0000	49.4766	99		14		0-40	60-135
Trichlorofluoromethane	50.0000	48.4142	97		19		0-40	60-145
1,1-Dichloroethene	50.0000	174.1673	348	*	3		0-40	70-130
Acetone	50.0000	36.4820	73		0		0-40	40-140
Iodomethane	50.0000	33.1575	66	*	4		0-40	72-121
Carbon disulfide	50.0000	45.7150	91		21		0-40	35-160
Methylene chloride	50.0000	48.6491	97		8		0-40	55-140
trans-1,2-Dichloroethen	50.0000	49.2628	99		5		0-40	60-140
Methyl tert-butyl ether	50.0000	49.7182	99		10		0-40	65-125
1,1-Dichloroethane	50.0000	131.8174	90		18		0-40	70-135
Vinyl acetate	50.0000	51.7024	103		10		0-40	38-163
2-Butanone	50.0000	46.2114	92		23		0-40	30-150
cis-1,2-Dichloroethene	50.0000	56.5359	99		2		0-40	70-125
2,2-Dichloropropane	50.0000	43.7069	87		12		0-40	70-135

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix Spike - EPA Sample No.: MW-27_6/17/14 Level: (TRACE or LOW) LOW

Bromochloromethane	50.0000	47.5417	95		1		0-40	65-130
Chloroform	50.0000	49.7866	100		11		0-40	65-135
1,1,1-Trichloroethane	50.0000	989.5709	-118	*	180	*	0-40	65-130
1,1-Dichloropropene	50.0000	49.8579	100		2		0-40	75-130
Carbon tetrachloride	50.0000	53.4462	107		8		0-40	65-140
1,2-Dichloroethane	50.0000	51.2143	102		11		0-40	70-130
Benzene	50.0000	47.7077	95		7		0-40	80-120
Trichloroethene	50.0000	760.7919	-28	*	490	*	0-40	70-125
1,2-Dichloropropane	50.0000	48.4939	97		5		0-40	75-125
Dibromomethane	50.0000	48.7836	98		14		0-40	75-125
Bromodichloromethane	50.0000	51.8355	104		10		0-40	75-120
cis-1,3-Dichloropropene	50.0000	49.4921	99		4		0-40	70-130
4-Methyl-2-pentanone	50.0000	53.4170	107		15		0-40	60-135
Toluene	50.0000	47.9583	96		5		0-40	75-120
trans-1,3-Dichloroprope	50.0000	45.0629	90		8		0-40	55-140
1,1,2-Trichloroethane	50.0000	49.7924	100		4		0-40	75-125
1,3-Dichloropropane	50.0000	49.7353	99		7		0-40	75-125
Tetrachloroethene	50.0000	50.3306	101		13		0-40	45-150
2-Hexanone	50.0000	45.0249	90		10		0-40	55-130
Dibromochloromethane	50.0000	48.9679	98		8		0-40	60-135
1,2-Dibromoethane	50.0000	49.6076	99		4		0-40	80-120
Chlorobenzene	50.0000	46.8529	94		6		0-40	80-120
1,1,1,2-Tetrachloroetha	50.0000	48.6804	97		2		0-40	80-130
Ethylbenzene	50.0000	46.7763	94		3		0-40	75-125
m,p-Xylene	100.0000	95.7801	96		7		0-40	75-130
o-Xylene	50.0000	49.1176	98		7		0-40	80-120
Xylene (Total)	150.0000	144.8977	97		7		0-40	81-121
Styrene	50.0000	48.2627	97		8		0-40	65-135
Bromoform	50.0000	52.2669	105		9		0-40	70-130
Isopropylbenzene	50.0000	46.9314	94		0		0-40	75-125
1,1,2,2-Tetrachloroetha	50.0000	48.7049	97		10		0-40	65-130
Bromobenzene	50.0000	46.7715	94		8		0-40	75-125
1,2,3-Trichloropropane	50.0000	51.8201	104		7		0-40	75-125
n-Propylbenzene	50.0000	47.9771	96		13		0-40	70-130
2-Chlorotoluene	50.0000	46.6102	93		14		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	49.6771	99		16		0-40	75-130
4-Chlorotoluene	50.0000	47.3474	95		13		0-40	75-130
tert-Butylbenzene	50.0000	50.8093	102		21		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	50.5470	101		12		0-40	75-130
sec-Butylbenzene	50.0000	49.8031	100		15		0-40	70-125
4-Isopropyltoluene	50.0000	49.5500	99		13		0-40	75-130
1,3-Dichlorobenzene	50.0000	47.3091	95		11		0-40	75-125
1,4-Dichlorobenzene	50.0000	44.9086	90		11		0-40	75-125
n-Butylbenzene	50.0000	47.5809	95		10		0-40	70-135
1,2-Dichlorobenzene	50.0000	48.6018	97		14		0-40	70-120
1,2-Dibromo-3-chloropro	50.0000	52.0408	104		3		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	42.2045	84		1		0-40	65-135

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix Spike - EPA Sample No.: MW-27_6/17/14 Level: (TRACE or LOW) LOW

Hexachlorobutadiene	50.0000	45.8200	92		3		0-40	50-140
1,2,3-Trichlorobenzene	50.0000	46.7876	94		10		0-40	55-140
Naphthalene	50.0000	42.3979	85		9		0-40	55-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0000	2182.0636	-1240	*	-72	*	0-40	70-130

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

* Values outside of QC limits

RPD: 5 out of 69 outside limits

Spike Recovery: 10 out of 138 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCS-77659 LCS Lot No.:

Date Extracted: 06/19/2014 Date Analyzed (1): 06/19/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	55.6532	111		30 - 155
Chloromethane	50.0000	0.0000	46.7056	93		40 - 125
Vinyl chloride	50.0000	0.0000	58.3240	117		50 - 145
Bromomethane	50.0000	0.0000	38.9506	78		30 - 145
Chloroethane	50.0000	0.0000	59.2578	119		60 - 135
Trichlorofluoromethane	50.0000	0.0000	61.6360	123		60 - 145
1,1-Dichloroethene	50.0000	0.0000	57.7204	115		70 - 130
Acetone	50.0000	0.0000	53.7901	108		40 - 140
Iodomethane	50.0000	0.0000	76.4749	153	*	72 - 121
Carbon disulfide	50.0000	0.0000	63.8681	128		35 - 160
Methylene chloride	50.0000	0.0000	50.8739	102		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	53.7339	107		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	53.8686	108		65 - 125
1,1-Dichloroethane	50.0000	0.0000	54.7138	109		70 - 135
Vinyl acetate	50.0000	0.0000	55.7091	111		38 - 163
2-Butanone	50.0000	0.0000	58.8560	118		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	52.0683	104		70 - 125
2,2-Dichloropropane	50.0000	0.0000	61.2218	122		70 - 135
Bromochloromethane	50.0000	0.0000	47.7197	95		65 - 130
Chloroform	50.0000	0.0000	55.2639	111		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	57.6529	115		65 - 130
1,1-Dichloropropene	50.0000	0.0000	52.2357	104		75 - 130
Carbon tetrachloride	50.0000	0.0000	57.5004	115		65 - 140
1,2-Dichloroethane	50.0000	0.0000	57.2498	114		70 - 130
Benzene	50.0000	0.0000	51.8225	104		80 - 120
Trichloroethene	50.0000	0.0000	52.9235	106		70 - 125
1,2-Dichloropropane	50.0000	0.0000	50.8820	102		75 - 125
Dibromomethane	50.0000	0.0000	53.9658	108		75 - 125
Bromodichloromethane	50.0000	0.0000	55.0538	110		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	49.4503	99		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	54.1914	108		60 - 135
Toluene	50.0000	0.0000	49.7058	99		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	51.2400	102		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	50.4143	101		75 - 125
1,3-Dichloropropane	50.0000	0.0000	46.1343	92		75 - 125
Tetrachloroethene	50.0000	0.0000	46.0516	92		45 - 150
2-Hexanone	50.0000	0.0000	48.2168	96		55 - 130
Dibromochloromethane	50.0000	0.0000	46.3227	93		60 - 135
1,2-Dibromoethane	50.0000	0.0000	48.1156	96		80 - 120
Chlorobenzene	50.0000	0.0000	44.9763	90		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	48.4202	97		80 - 130
Ethylbenzene	50.0000	0.0000	46.6669	93		75 - 125
m,p-Xylene	100.0000	0.0000	93.0865	93		75 - 130
o-Xylene	50.0000	0.0000	47.5085	95		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCS-77659 LCS Lot No.:

Date Extracted: 06/19/2014 Date Analyzed (1): 06/19/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	140.5950	94		81 - 121
Styrene	50.0000	0.0000	45.4977	91		65 - 135
Bromoform	50.0000	0.0000	46.4914	93		70 - 130
Isopropylbenzene	50.0000	0.0000	48.6014	97		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	42.7368	85		65 - 130
Bromobenzene	50.0000	0.0000	45.9113	92		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	48.6892	97		75 - 125
n-Propylbenzene	50.0000	0.0000	44.2537	89		70 - 130
2-Chlorotoluene	50.0000	0.0000	43.5670	87		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	45.0916	90		75 - 130
4-Chlorotoluene	50.0000	0.0000	44.6625	89		75 - 130
tert-Butylbenzene	50.0000	0.0000	44.8947	90		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.2094	94		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.6956	93		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.9015	96		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	43.9420	88		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	42.5163	85		75 - 125
n-Butylbenzene	50.0000	0.0000	47.4393	95		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	43.2418	86		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	50.5190	101		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	45.0695	90		65 - 135
Hexachlorobutadiene	50.0000	0.0000	55.6279	111		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	45.8167	92		55 - 140
Naphthalene	50.0000	0.0000	39.6993	79		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	57.9424	116		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCS-77692 LCS Lot No.:

Date Extracted: 06/20/2014 Date Analyzed (1): 06/20/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	47.0397	94		30 - 155
Chloromethane	50.0000	0.0000	39.0356	78		40 - 125
Vinyl chloride	50.0000	0.0000	46.6281	93		50 - 145
Bromomethane	50.0000	0.0000	36.4047	73		30 - 145
Chloroethane	50.0000	0.0000	59.0647	118		60 - 135
Trichlorofluoromethane	50.0000	0.0000	52.5072	105		60 - 145
1,1-Dichloroethene	50.0000	0.0000	52.1370	104		70 - 130
Acetone	50.0000	0.0000	60.0015	120		40 - 140
Iodomethane	50.0000	0.0000	53.5607	107		72 - 121
Carbon disulfide	50.0000	0.0000	58.9799	118		35 - 160
Methylene chloride	50.0000	0.0000	48.1396	96		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.9223	98		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	53.6759	107		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.8684	100		70 - 135
Vinyl acetate	50.0000	0.0000	59.5985	119		38 - 163
2-Butanone	50.0000	0.0000	56.9413	114		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	49.3359	99		70 - 125
2,2-Dichloropropane	50.0000	0.0000	51.7044	103		70 - 135
Bromochloromethane	50.0000	0.0000	44.0340	88		65 - 130
Chloroform	50.0000	0.0000	52.6846	105		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	53.2928	107		65 - 130
1,1-Dichloropropene	50.0000	0.0000	48.3823	97		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.9531	104		65 - 140
1,2-Dichloroethane	50.0000	0.0000	53.6487	107		70 - 130
Benzene	50.0000	0.0000	49.3117	99		80 - 120
Trichloroethene	50.0000	0.0000	49.7942	100		70 - 125
1,2-Dichloropropane	50.0000	0.0000	48.6288	97		75 - 125
Dibromomethane	50.0000	0.0000	52.8310	106		75 - 125
Bromodichloromethane	50.0000	0.0000	53.0446	106		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	48.1899	96		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	54.5602	109		60 - 135
Toluene	50.0000	0.0000	48.0300	96		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.4171	101		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	48.7853	98		75 - 125
1,3-Dichloropropane	50.0000	0.0000	41.6604	83		75 - 125
Tetrachloroethene	50.0000	0.0000	40.9075	82		45 - 150
2-Hexanone	50.0000	0.0000	45.0273	90		55 - 130
Dibromochloromethane	50.0000	0.0000	42.4394	85		60 - 135
1,2-Dibromoethane	50.0000	0.0000	44.2682	89		80 - 120
Chlorobenzene	50.0000	0.0000	40.5556	81		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	43.4935	87		80 - 130
Ethylbenzene	50.0000	0.0000	41.8500	84		75 - 125
m,p-Xylene	100.0000	0.0000	83.7741	84		75 - 130
o-Xylene	50.0000	0.0000	43.3048	87		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCS-77692 LCS Lot No.:

Date Extracted: 06/20/2014 Date Analyzed (1): 06/20/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	127.0790	85		81 - 121
Styrene	50.0000	0.0000	42.0835	84		65 - 135
Bromoform	50.0000	0.0000	42.5404	85		70 - 130
Isopropylbenzene	50.0000	0.0000	43.8062	88		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	36.8194	74		65 - 130
Bromobenzene	50.0000	0.0000	39.3076	79		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	39.4461	79		75 - 125
n-Propylbenzene	50.0000	0.0000	38.8633	78		70 - 130
2-Chlorotoluene	50.0000	0.0000	37.5731	75		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	38.6932	77		75 - 130
4-Chlorotoluene	50.0000	0.0000	38.4593	77		75 - 130
tert-Butylbenzene	50.0000	0.0000	41.1882	82		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	40.7839	82		75 - 130
sec-Butylbenzene	50.0000	0.0000	38.9617	78		70 - 125
4-Isopropyltoluene	50.0000	0.0000	39.5680	79		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	37.5727	75		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	37.3523	75	*	75 - 125
n-Butylbenzene	50.0000	0.0000	38.4421	77		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	38.7507	78		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	44.4466	89		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	38.5229	77		65 - 135
Hexachlorobutadiene	50.0000	0.0000	40.1067	80		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	38.4858	77		55 - 140
Naphthalene	50.0000	0.0000	36.0171	72		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	56.4094	113		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCS-77721 LCS Lot No.:

Date Extracted: 06/23/2014 Date Analyzed (1): 06/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	43.2389	86		30 - 155
Chloromethane	50.0000	0.0000	45.7486	91		40 - 125
Vinyl chloride	50.0000	0.0000	47.3755	95		50 - 145
Bromomethane	50.0000	0.0000	57.4850	115		30 - 145
Chloroethane	50.0000	0.0000	53.0951	106		60 - 135
Trichlorofluoromethane	50.0000	0.0000	44.0992	88		60 - 145
1,1-Dichloroethene	50.0000	0.0000	48.2568	97		70 - 130
Acetone	50.0000	0.0000	38.7306	77		40 - 140
Iodomethane	50.0000	0.0000	63.8908	128	*	72 - 121
Carbon disulfide	50.0000	0.0000	47.4310	95		35 - 160
Methylene chloride	50.0000	0.0000	50.8122	102		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	49.3098	99		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.7038	105		65 - 125
1,1-Dichloroethane	50.0000	0.0000	51.4552	103		70 - 135
Vinyl acetate	50.0000	0.0000	53.8227	108		38 - 163
2-Butanone	50.0000	0.0000	46.9108	94		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	52.0846	104		70 - 125
2,2-Dichloropropane	50.0000	0.0000	49.1239	98		70 - 135
Bromochloromethane	50.0000	0.0000	52.6680	105		65 - 130
Chloroform	50.0000	0.0000	50.6678	101		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	48.4521	97		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.8592	104		75 - 130
Carbon tetrachloride	50.0000	0.0000	48.9449	98		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.6275	101		70 - 130
Benzene	50.0000	0.0000	50.2037	100		80 - 120
Trichloroethene	50.0000	0.0000	46.6872	93		70 - 125
1,2-Dichloropropane	50.0000	0.0000	52.5759	105		75 - 125
Dibromomethane	50.0000	0.0000	50.9231	102		75 - 125
Bromodichloromethane	50.0000	0.0000	52.1542	104		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	56.6074	113		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.0535	96		60 - 135
Toluene	50.0000	0.0000	50.7877	102		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	51.5829	103		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.0438	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	53.6994	107		75 - 125
Tetrachloroethene	50.0000	0.0000	48.6553	97		45 - 150
2-Hexanone	50.0000	0.0000	44.4194	89		55 - 130
Dibromochloromethane	50.0000	0.0000	53.1106	106		60 - 135
1,2-Dibromoethane	50.0000	0.0000	51.3457	103		80 - 120
Chlorobenzene	50.0000	0.0000	49.7784	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.6960	101		80 - 130
Ethylbenzene	50.0000	0.0000	49.2941	99		75 - 125
m,p-Xylene	100.0000	0.0000	100.8105	101		75 - 130
o-Xylene	50.0000	0.0000	52.3246	105		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCS-77721 LCS Lot No.:

Date Extracted: 06/23/2014 Date Analyzed (1): 06/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	153.1351	102		81 - 121
Styrene	50.0000	0.0000	51.7454	103		65 - 135
Bromoform	50.0000	0.0000	51.4043	103		70 - 130
Isopropylbenzene	50.0000	0.0000	48.2664	97		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.8920	96		65 - 130
Bromobenzene	50.0000	0.0000	51.1481	102		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	50.0576	100		75 - 125
n-Propylbenzene	50.0000	0.0000	49.2806	99		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.3454	99		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	49.9938	100		75 - 130
4-Chlorotoluene	50.0000	0.0000	50.0877	100		75 - 130
tert-Butylbenzene	50.0000	0.0000	51.9123	104		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	52.5528	105		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.5353	99		70 - 125
4-Isopropyltoluene	50.0000	0.0000	49.9649	100		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	50.0226	100		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.4701	95		75 - 125
n-Butylbenzene	50.0000	0.0000	47.1078	94		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	50.8457	102		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	46.7226	93		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	49.3429	99		65 - 135
Hexachlorobutadiene	50.0000	0.0000	46.4903	93		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	52.9373	106		55 - 140
Naphthalene	50.0000	0.0000	49.0747	98		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	43.4249	87		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

EPA SAMPLE NO.

LCSD-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCSD-77692 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	50.1382	100		6		40	30 - 155
Chloromethane	50.0000	43.4322	87		11		40	40 - 125
Vinyl chloride	50.0000	52.3267	105		12		40	50 - 145
Bromomethane	50.0000	45.4439	91		22		40	30 - 145
Chloroethane	50.0000	68.5840	137	*	15		40	60 - 135
Trichlorofluoromethane	50.0000	55.9644	112		6		40	60 - 145
1,1-Dichloroethene	50.0000	56.9785	114		9		40	70 - 130
Acetone	50.0000	52.9860	106		12		40	40 - 140
Iodomethane	50.0000	61.3865	123	*	14		40	72 - 121
Carbon disulfide	50.0000	65.6853	131		10		40	35 - 160
Methylene chloride	50.0000	52.7475	105		9		40	55 - 140
trans-1,2-Dichloroethene	50.0000	55.6122	111		12		40	60 - 140
Methyl tert-butyl ether	50.0000	59.4408	119		11		40	65 - 125
1,1-Dichloroethane	50.0000	56.5667	113		12		40	70 - 135
Vinyl acetate	50.0000	64.7534	130		9		40	38 - 163
2-Butanone	50.0000	55.7184	111		3		40	30 - 150
cis-1,2-Dichloroethene	50.0000	55.5993	111		11		40	70 - 125
2,2-Dichloropropane	50.0000	55.6417	111		7		40	70 - 135
Bromochloromethane	50.0000	49.7043	99		12		40	65 - 130
Chloroform	50.0000	58.5237	117		11		40	65 - 135
1,1,1-Trichloroethane	50.0000	59.1919	118		10		40	65 - 130
1,1-Dichloropropene	50.0000	54.2436	108		11		40	75 - 130
Carbon tetrachloride	50.0000	57.3487	115		10		40	65 - 140
1,2-Dichloroethane	50.0000	59.6183	119		11		40	70 - 130
Benzene	50.0000	55.3119	111		11		40	80 - 120
Trichloroethene	50.0000	56.2484	112		11		40	70 - 125
1,2-Dichloropropane	50.0000	54.2350	108		11		40	75 - 125
Dibromomethane	50.0000	56.9025	114		7		40	75 - 125
Bromodichloromethane	50.0000	58.8683	118		11		40	75 - 120
cis-1,3-Dichloropropene	50.0000	53.0372	106		10		40	70 - 130
4-Methyl-2-pentanone	50.0000	56.8117	114		4		40	60 - 135
Toluene	50.0000	54.6027	109		13		40	75 - 120
trans-1,3-Dichloropropene	50.0000	55.0474	110		9		40	55 - 140
1,1,2-Trichloroethane	50.0000	54.7212	109		11		40	75 - 125
1,3-Dichloropropane	50.0000	46.3563	93		11		40	75 - 125
Tetrachloroethene	50.0000	45.3180	91		10		40	45 - 150
2-Hexanone	50.0000	45.8750	92		2		40	55 - 130
Dibromochloromethane	50.0000	45.3708	91		7		40	60 - 135
1,2-Dibromoethane	50.0000	47.8813	96		8		40	80 - 120
Chlorobenzene	50.0000	45.2546	91		12		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	48.1927	96		10		40	80 - 130
Ethylbenzene	50.0000	47.4276	95		12		40	75 - 125
m,p-Xylene	100.0000	93.4312	93		10		40	75 - 130
o-Xylene	50.0000	47.6855	95		9		40	80 - 120
Xylene (Total)	150.0000	141.1167	94		10		40	81 - 121
Styrene	50.0000	47.0790	94		11		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab Sample ID: LCSD-77692 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	46.2853	93		9		40	70 - 130
Isopropylbenzene	50.0000	48.3236	97		10		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	40.9352	82		10		40	65 - 130
Bromobenzene	50.0000	44.6690	89		12		40	75 - 125
1,2,3-Trichloropropane	50.0000	46.9496	94		17		40	75 - 125
n-Propylbenzene	50.0000	43.8644	88		12		40	70 - 130
2-Chlorotoluene	50.0000	41.9752	84		11		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	44.2989	89		14		40	75 - 130
4-Chlorotoluene	50.0000	43.3023	87		12		40	75 - 130
tert-Butylbenzene	50.0000	42.3611	85		4		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	46.1840	92		11		40	75 - 130
sec-Butylbenzene	50.0000	44.2273	88		12		40	70 - 125
4-Isopropyltoluene	50.0000	45.0004	90		13		40	75 - 130
1,3-Dichlorobenzene	50.0000	42.6862	85		13		40	75 - 125
1,4-Dichlorobenzene	50.0000	41.7890	84		11		40	75 - 125
n-Butylbenzene	50.0000	43.9528	88		13		40	70 - 135
1,2-Dichlorobenzene	50.0000	43.0368	86		10		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	48.7625	98		10		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	44.2077	88		13		40	65 - 135
Hexachlorobutadiene	50.0000	47.1117	94		16		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	44.1122	88		13		40	55 - 140
Naphthalene	50.0000	40.9171	82		13		40	55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	59.1304	118		4		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 2 out of 69 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5515.D Lab Sample ID: MB-77659

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/19/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 9:45

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-77659	LCS-77659	V8D5513.D	8:40
02	TRIPBLANK_6/16/14	N1055-01A	V8D5516.D	10:13
03	MW-10R_6/16/14	N1055-02A	V8D5517.D	10:41
04	MW-22R(1)_6/16/14	N1055-03A	V8D5518.D	11:09
05	MW-22R(2)_6/16/14	N1055-04A	V8D5519.D	11:37
06	MW-22R(3)_6/16/14	N1055-05A	V8D5520.D	12:04
07	MW-22S(1)_6/16/14	N1055-06A	V8D5521.D	12:33
08	MW-22S(2)_6/16/14	N1055-07A	V8D5522.D	13:01
09	MW-22S(3)_6/16/14	N1055-08A	V8D5523.D	13:29
10	MW-27_6/17/14	N1055-09A	V8D5524.D	13:56
11	MW-21R(1)_6/17/14	N1055-10A	V8D5525.D	14:24
12	MW-21R(2)_6/17/14	N1055-11A	V8D5526.D	14:52
13	MW-21R(3)_6/17/14	N1055-12A	V8D5527.D	15:20
14	MW-10D_6/16/14	N1055-14A	V8D5529.D	16:16
15	OC-17S_6/16/14	N1055-15A	V8D5530.D	16:44
16	OC-17D_6/16/14	N1055-16A	V8D5531.D	17:12
17	OC-19D_6/16/14	N1055-18A	V8D5533.D	18:09
18	MW-27_6/17/14MS	N1055-09AMS	V8D5534.D	18:37

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5584.D Lab Sample ID: MB-77692

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/20/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 18:37

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-77692	LCS-77692	V8D5579.D	16:19
02	LCSD-77692	LCSD-77692	V8D5582.D	17:42
03	OC-19S_6/16/14	N1055-17A	V8D5585.D	19:05
04	MW-20D_6/17/14	N1055-19A	V8D5586.D	19:33
05	MW-10R_6/16/14DL	N1055-02ADL	V8D5587.D	20:01
06	MW-22R(1)_6/16/14DL	N1055-03ADL	V8D5588.D	20:28
07	MW-22R(2)_6/16/14DL	N1055-04ADL	V8D5589.D	20:56
08	MW-22R(3)_6/16/14DL	N1055-05ADL	V8D5590.D	21:24
09	MW-22S(1)_6/16/14DL	N1055-06ADL	V8D5591.D	21:51
10	MW-22S(2)_6/16/14DL	N1055-07ADL	V8D5592.D	22:18
11	MW-22S(3)_6/16/14DL	N1055-08ADL	V8D5593.D	22:46
12	MW-27_6/17/14DL	N1055-09ADL	V8D5594.D	23:13
13	MW-10D_6/16/14DL	N1055-14ADL	V8D5599.D	1:29
14	OC-17S_6/16/14DL	N1055-15ADL	V8D5600.D	1:56
15	OC-17D_6/16/14DL	N1055-16ADL	V8D5601.D	2:24
16	OC-19D_6/16/14DL	N1055-18ADL	V8D5602.D	2:51

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5654.D Lab Sample ID: MB-77721

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/23/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 14:39

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-77721	LCS-77721	V8D5651.D	13:16
02	MW-10S_6/16/14	N1055-13A	V8D5655.D	15:07
03	MW-21R(1)_6/17/14DL	N1055-10ADL	V8D5660.D	17:25
04	MW-21R(2)_6/17/14DL	N1055-11ADL	V8D5661.D	17:53
05	MW-21R(3)_6/17/14DL	N1055-12ADL	V8D5662.D	18:21
06	MW-27_6/17/14MSD	N1055-09AMSD	V8D5664.D	19:17

COMMENTS:

som14.07.01.1137

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

EPA SAMPLE NO.
BFB10N

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5404.D BFB Injection Date: 06/16/2014

Instrument ID: V10 BFB Injection Time: 9:36

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.2
75	30.0 - 80.0% of mass 95	63.2
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	0.3 (0.5)1
174	50.0 -120% of mass 95	77.5
175	5.0 - 9.0% of mass 174	5.9 (7.6)1
176	95.0 - 101% of mass 174	76.5 (98.7)1
177	5.0 - 9.0% of mass 176	4.7 (6.2)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	V8D5405.D	06/16/2014	10:17
02	VSTD02010N	VSTD02010N	V8D5406.D	06/16/2014	10:45
03	VSTD00510N	VSTD00510N	V8D5407.D	06/16/2014	11:13
04	VSTD00110N	VSTD00110N	V8D5408.D	06/16/2014	11:41
05	VSTD20010N	VSTD20010N	V8D5410.D	06/16/2014	12:36
06	VSTD10010N	VSTD10010N	V8D5411.D	06/16/2014	13:04

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

EPA SAMPLE NO.
BFB10R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5510.D BFB Injection Date: 06/19/2014

Instrument ID: V10 BFB Injection Time: 6:59

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	36.8
75	30.0 - 80.0% of mass 95	61.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	82.9
175	5.0 - 9.0% of mass 174	6.4 (7.8)1
176	95.0 - 101% of mass 174	81.0 (97.7)1
177	5.0 - 9.0% of mass 176	5.4 (6.6)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	VSTD05010R	VSTD05010R	V8D5511.D	06/19/2014	7:17
02	LCS-77659	LCS-77659	V8D5513.D	06/19/2014	8:40
03	MB-77659	MB-77659	V8D5515.D	06/19/2014	9:45
04	TRIPBLANK_6/16/14	N1055-01A	V8D5516.D	06/19/2014	10:13
05	MW-10R_6/16/14	N1055-02A	V8D5517.D	06/19/2014	10:41
06	MW-22R(1)_6/16/14	N1055-03A	V8D5518.D	06/19/2014	11:09
07	MW-22R(2)_6/16/14	N1055-04A	V8D5519.D	06/19/2014	11:37
08	MW-22R(3)_6/16/14	N1055-05A	V8D5520.D	06/19/2014	12:04
09	MW-22S(1)_6/16/14	N1055-06A	V8D5521.D	06/19/2014	12:33
10	MW-22S(2)_6/16/14	N1055-07A	V8D5522.D	06/19/2014	13:01
11	MW-22S(3)_6/16/14	N1055-08A	V8D5523.D	06/19/2014	13:29
12	MW-27_6/17/14	N1055-09A	V8D5524.D	06/19/2014	13:56
13	MW-21R(1)_6/17/14	N1055-10A	V8D5525.D	06/19/2014	14:24
14	MW-21R(2)_6/17/14	N1055-11A	V8D5526.D	06/19/2014	14:52

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

EPA SAMPLE NO.
BFB10R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5510.D BFB Injection Date: 06/19/2014

Instrument ID: V10 BFB Injection Time: 6:59

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	36.8
75	30.0 - 80.0% of mass 95	61.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	82.9
175	5.0 - 9.0% of mass 174	6.4 (7.8)1
176	95.0 - 101% of mass 174	81.0 (97.7)1
177	5.0 - 9.0% of mass 176	5.4 (6.6)2

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

15	MW-21R(3)_6/17/14	N1055-12A	V8D5527.D	06/19/2014	15:20
16	MW-10D_6/16/14	N1055-14A	V8D5529.D	06/19/2014	16:16
17	OC-17S_6/16/14	N1055-15A	V8D5530.D	06/19/2014	16:44
18	OC-17D_6/16/14	N1055-16A	V8D5531.D	06/19/2014	17:12
19	OC-19D_6/16/14	N1055-18A	V8D5533.D	06/19/2014	18:09
20	MW-27_6/17/14MS	N1055-09AMS	V8D5534.D	06/19/2014	18:37

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

EPA SAMPLE NO.
BFB10T

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5576.D BFB Injection Date: 06/20/2014

Instrument ID: V10 BFB Injection Time: 14:56

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.1
75	30.0 - 80.0% of mass 95	62.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.6 (0.8)1
174	50.0 -120% of mass 95	75.1
175	5.0 - 9.0% of mass 174	5.9 (7.9)1
176	95.0 - 101% of mass 174	75.7 (100.7)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	VSTD05010T	VSTD05010T	V8D5577.D	06/20/2014	15:24
02	LCS-77692	LCS-77692	V8D5579.D	06/20/2014	16:19
03	LCSD-77692	LCSD-77692	V8D5582.D	06/20/2014	17:42
04	MB-77692	MB-77692	V8D5584.D	06/20/2014	18:37
05	OC-19S_6/16/14	N1055-17A	V8D5585.D	06/20/2014	19:05
06	MW-20D_6/17/14	N1055-19A	V8D5586.D	06/20/2014	19:33
07	MW-10R_6/16/14DL	N1055-02ADL	V8D5587.D	06/20/2014	20:01
08	MW-22R(1)_6/16/14DL	N1055-03ADL	V8D5588.D	06/20/2014	20:28
09	MW-22R(2)_6/16/14DL	N1055-04ADL	V8D5589.D	06/20/2014	20:56
10	MW-22R(3)_6/16/14DL	N1055-05ADL	V8D5590.D	06/20/2014	21:24
11	MW-22S(1)_6/16/14DL	N1055-06ADL	V8D5591.D	06/20/2014	21:51
12	MW-22S(2)_6/16/14DL	N1055-07ADL	V8D5592.D	06/20/2014	22:18
13	MW-22S(3)_6/16/14DL	N1055-08ADL	V8D5593.D	06/20/2014	22:46
14	MW-27_6/17/14DL	N1055-09ADL	V8D5594.D	06/20/2014	23:13
15	MW-10D_6/16/14DL	N1055-14ADL	V8D5599.D	06/21/2014	1:29

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

EPA SAMPLE NO.
BFB10T

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5576.D BFB Injection Date: 06/20/2014

Instrument ID: V10 BFB Injection Time: 14:56

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.1
75	30.0 - 80.0% of mass 95	62.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.6 (0.8)1
174	50.0 -120% of mass 95	75.1
175	5.0 - 9.0% of mass 174	5.9 (7.9)1
176	95.0 - 101% of mass 174	75.7 (100.7)1
177	5.0 - 9.0% of mass 176	4.9 (6.5)2

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

16	OC-17S_6/16/14DL	N1055-15ADL	V8D5600.D	06/21/2014	1:56
17	OC-17D_6/16/14DL	N1055-16ADL	V8D5601.D	06/21/2014	2:24
18	OC-19D_6/16/14DL	N1055-18ADL	V8D5602.D	06/21/2014	2:51

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

EPA SAMPLE NO.
BFB10W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Lab File ID: V8D5642.D BFB Injection Date: 06/23/2014

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	40.0
75	30.0 - 80.0% of mass 95	66.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 -120% of mass 95	87.1
175	5.0 - 9.0% of mass 174	6.6 (7.5)1
176	95.0 - 101% of mass 174	87.5 (100.4)1
177	5.0 - 9.0% of mass 176	5.9 (6.7)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	VSTD05010W	VSTD05010W	V8D5644.D	06/23/2014	9:51
02	VSTD02010W	VSTD02010W	V8D5645.D	06/23/2014	10:29
03	VSTD00510W	VSTD00510W	V8D5646.D	06/23/2014	10:58
04	VSTD00110W	VSTD00110W	V8D5648.D	06/23/2014	11:53
05	VSTD20010W	VSTD20010W	V8D5649.D	06/23/2014	12:21
06	VSTD10010W	VSTD10010W	V8D5650.D	06/23/2014	12:48
07	LCS-77721	LCS-77721	V8D5651.D	06/23/2014	13:16
08	MB-77721	MB-77721	V8D5654.D	06/23/2014	14:39
09	MW-10S_6/16/14	N1055-13A	V8D5655.D	06/23/2014	15:07
10	MW-21R(1)_6/17/14DL	N1055-10ADL	V8D5660.D	06/23/2014	17:25
11	MW-21R(2)_6/17/14DL	N1055-11ADL	V8D5661.D	06/23/2014	17:53
12	MW-21R(3)_6/17/14DL	N1055-12ADL	V8D5662.D	06/23/2014	18:21
13	MW-27_6/17/14MSD	N1055-09AMSD	V8D5664.D	06/23/2014	19:17

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####): VSTD05010R Date Analyzed: 06/19/2014

Lab File ID (Standard): V8D5511.D Time Analyzed: 7:17

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	223561		5.236		257112		8.223		149975		10.728	
	UPPER LIMIT	447122		5.736		514224		8.723		299950		11.228	
	LOWER LIMIT	111781		4.736		128556		7.723		74988		10.228	
	EPA SAMPLE NO.												
01	LCS-77659	238021		5.236		275617		8.223		153994		10.725	
02	MB-77659	251162		5.236		284360		8.223		139935		10.728	
03	TRIPBLANK_6/16/14	238870		5.236		282878		8.223		139557		10.728	
04	MW-10R_6/16/14	245117		5.239		282030		8.223		139371		10.728	
05	MW-22R(1)_6/16/14	244085		5.239		286112		8.223		142620		10.728	
06	MW-22R(2)_6/16/14	239438		5.239		281370		8.223		139508		10.725	
07	MW-22R(3)_6/16/14	239923		5.239		282554		8.223		142556		10.728	
08	MW-22S(1)_6/16/14	239358		5.236		278835		8.223		133755		10.728	
09	MW-22S(2)_6/16/14	217980		5.236		244024		8.223		115901		10.728	
10	MW-22S(3)_6/16/14	218269		5.236		244799		8.223		117791		10.728	

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.: N1055 Mod. Ref No.: SDG No.: SN1055

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####): VSTD05010R Date Analyzed: 06/19/2014

Lab File ID (Standard): V8D5511.D Time Analyzed: 7:17

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	223561		5.236		257112		8.223		149975		10.728	
	UPPER LIMIT	447122		5.736		514224		8.723		299950		11.228	
	LOWER LIMIT	111781		4.736		128556		7.723		74988		10.228	
	EPA SAMPLE NO.												
11	MW-27_6/17/14	202935		5.243		226960		8.223		107968		10.728	
12	MW-21R(1)_6/17/14	214425		5.236		252819		8.223		126648		10.725	
13	MW-21R(2)_6/17/14	241634		5.239		295099		8.223		153062		10.725	
14	MW-21R(3)_6/17/14	247669		5.239		309767		8.226		167511		10.725	
15	MW-10D_6/16/14	231810		5.236		267224		8.223		133281		10.725	
16	OC-17S_6/16/14	231983		5.236		271079		8.223		136669		10.728	
17	OC-17D_6/16/14	226633		5.236		260043		8.226		127494		10.725	
18	OC-19D_6/16/14	224015		5.236		260880		8.223		135276		10.728	
19	MW-27_6/17/14MS	227784		5.236		276053		8.223		159596		10.725	

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.: N1055 Mod. Ref No.: SDG No.: SN1055

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####): VSTD05010T Date Analyzed: 06/20/2014

Lab File ID (Standard): V8D5577.D Time Analyzed: 15:24

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	233020		5.239		296943		8.223		171635		10.725	
	UPPER LIMIT	466040		5.739		593886		8.723		343270		11.225	
	LOWER LIMIT	116510		4.739		148472		7.723		85818		10.225	
	EPA SAMPLE NO.												
01	LCS-77692	224647		5.236		281615		8.223		164813		10.728	
02	LCSD-77692	223895		5.236		284975		8.223		162766		10.725	
03	MB-77692	208031		5.239		262820		8.226		138559		10.728	
04	OC-19S_6/16/14	207942		5.239		211970		8.226		94535		10.728	
05	MW-20D_6/17/14	212586		5.233		267669		8.223		147390		10.728	
06	MW-10R_6/16/14DL	210448		5.236		262835		8.223		138640		10.728	
07	MW-22R(1)_6/16/14DL	183620		5.236		233764		8.223		121754		10.728	
08	MW-22R(2)_6/16/14DL	191790		5.239		237136		8.223		123793		10.728	
09	MW-22R(3)_6/16/14DL	198931		5.239		254947		8.223		136736		10.728	
10	MW-22S(1)_6/16/14DL	193724		5.239		244705		8.223		126740		10.728	

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.: N1055 Mod. Ref No.: SDG No.: SN1055

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####): VSTD05010T Date Analyzed: 06/20/2014

Lab File ID (Standard): V8D5577.D Time Analyzed: 15:24

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	233020		5.239		296943		8.223		171635		10.725	
	UPPER LIMIT	466040		5.739		593886		8.723		343270		11.225	
	LOWER LIMIT	116510		4.739		148472		7.723		85818		10.225	
	EPA SAMPLE NO.												
11	MW-22S(2)_6/16/14DL	192141		5.236		250687		8.223		134091		10.725	
12	MW-22S(3)_6/16/14DL	191705		5.236		248175		8.220		130564		10.728	
13	MW-27_6/17/14DL	175701		5.236		220581		8.223		113557		10.728	
14	MW-10D_6/16/14DL	177344		5.239		235715		8.223		120518		10.728	
15	OC-17S_6/16/14DL	165978		5.239		211236		8.226		104859		10.728	
16	OC-17D_6/16/14DL	172127		5.236		224359		8.220		118873		10.725	
17	OC-19D_6/16/14DL	168872		5.236		221081		8.223		114021		10.725	

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.: N1055 Mod. Ref No.: SDG No.: SN1055

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####): VSTD05010W Date Analyzed: 06/23/2014

Lab File ID (Standard): V8D5644.D Time Analyzed: 9:51

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	161852		5.236		223113		8.223		132933		10.725	
	UPPER LIMIT	323704		5.736		446226		8.723		265866		11.225	
	LOWER LIMIT	80926		4.736		111557		7.723		66467		10.225	
	EPA SAMPLE NO.												
01	MB-77721	164667		5.239		236331		8.223		128979		10.728	
02	MW-10S_6/16/14	160010		5.236		232289		8.223		121776		10.728	
03	MW-21R(1)_6/17/14DL	150298		5.239		218984		8.223		117969		10.728	
04	MW-21R(2)_6/17/14DL	147492		5.236		218885		8.223		118343		10.728	
05	MW-21R(3)_6/17/14DL	145201		5.239		217619		8.223		114894		10.725	
06	MW-27_6/17/14MSD	129725		5.236		191071		8.223		114895		10.725	

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

EPA SAMPLE NO.

TRIPBLANK_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5516.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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

EPA SAMPLE NO.

TRIPBLANK_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5516.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5516.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5516.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5516.d
Lab Smp Id: N1055-01A Client Smp ID: TRIPBLANK_6/16/14
Inj Date : 19-JUN-2014 10:13
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-01A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.644	4.644	(0.887)	102298	57.5486	58
$ 42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	16861	56.1040	56
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	238870	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	307610	47.5194	48
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	282878	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.522	(1.158)	170074	48.9412	49
* 92 1,4-Dichlorobenzene-d4	152	10.728	10.728	(1.000)	139557	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5516.d
Report Date: 27-Jun-2014 13:48

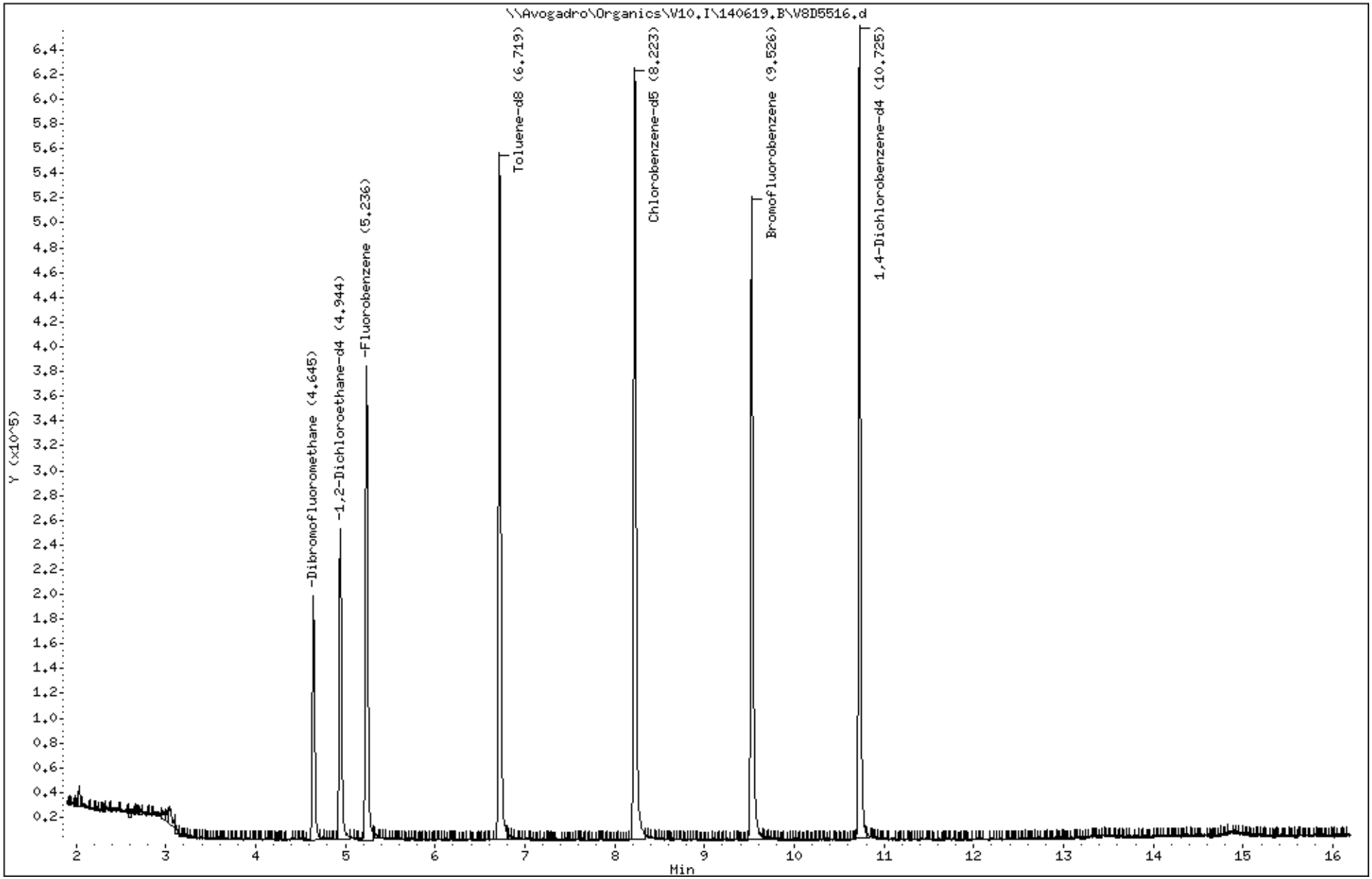
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5516.d
Lab Smp Id: N1055-01A Client Smp ID: TRIPBLANK_6/16/14
Inj Date : 19-JUN-2014 10:13
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-01A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5516.d
Date : 19-JUN-2014 10:13
Client ID: TRIPBLANK_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-01A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10R_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5517.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	4.8	
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	0.79	J
156-60-5	trans-1,2-Dichloroethene	2.0	
1634-04-4	Methyl tert-butyl ether	1.6	
75-34-3	1,1-Dichloroethane	680	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	42	
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	340	E
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	2400	E
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

EPA SAMPLE NO.

MW-10R_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5517.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	0.82	J
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	17	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3400	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-10R_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5517.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	540	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5517.d
Lab Smp Id: N1055-02A Client Smp ID: MW-10R_6/16/14
Inj Date : 19-JUN-2014 10:41
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-02A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	4 Vinyl Chloride	62	1.856	1.856	(0.354)	16987	4.80671	4.8(Q)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	8309593	3415.41	3400(A)
	18 Methylene Chloride	84	3.226	3.233	(0.616)	1678	0.78584	0.78
	21 trans-1,2-Dichloroethene	96	3.454	3.454	(0.659)	4154	2.03721	2.0
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	11292	1.60603	1.6
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	3716687	682.078	680(A)
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	90901	42.2691	42
$	36 Dibromofluoromethane	113	4.644	4.644	(0.886)	102919	56.4224	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	1705726	344.726	340(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	15860	51.4283	51
M	50 1,2-Dichloroethene (Total)	96				95055	44.3063	44
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	245117	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.062)	4808634	2377.07	2400(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	300829	46.6116	47
	63 Tetrachloroethene	164	7.355	7.345	(0.894)	1790	0.82415	0.82
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	282030	50.0000	
	70 Chlorobenzene	112	8.258	8.255	(1.004)	96541	17.0101	17
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	172618	49.8226	50
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	139371	50.0000	

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d
Report Date: 27-Jun-2014 13:48

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5517.d
Lab Smp Id: N1055-02A Client Smp ID: MW-10R_6/16/14
Inj Date : 19-JUN-2014 10:41
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-02A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

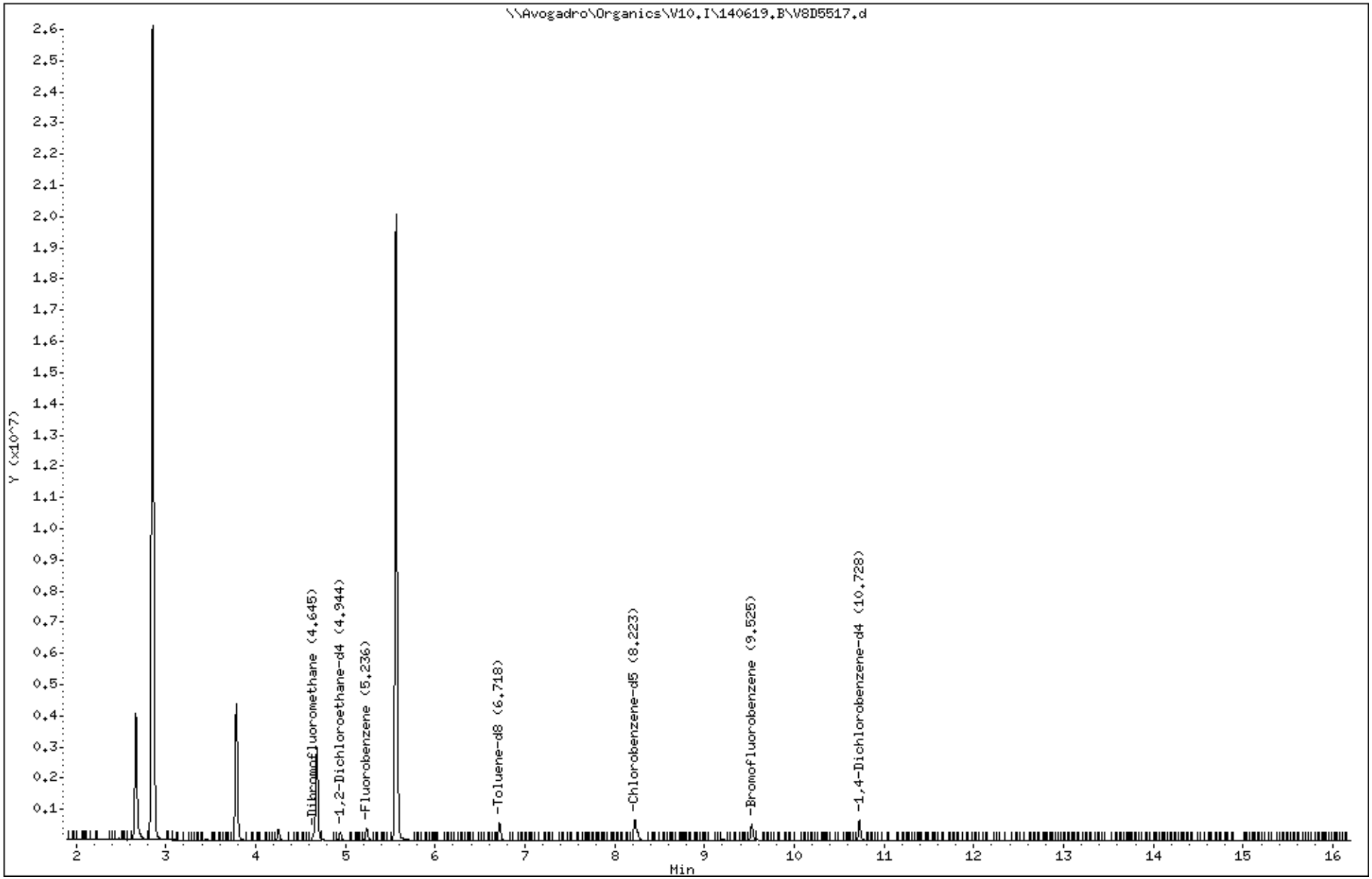
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.239	695013	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.667	7465210	537.055403	540	95	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d
Date : 19-JUN-2014 10:41
Client ID: MW-10R_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-02A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d

Date : 19-JUN-2014 10:41

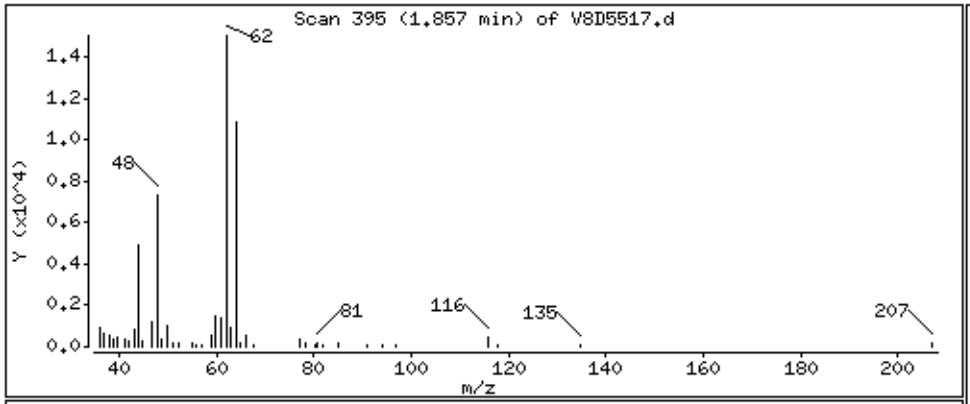
Client ID: MW-10R_6/16/14 Instrument: V10.i

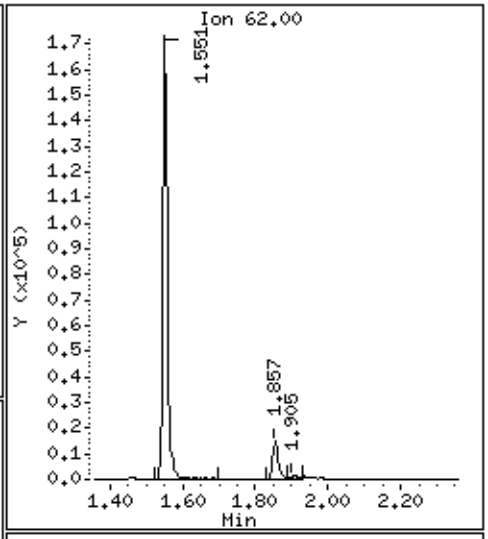
Sample Info: 5ML,N1055-02A,,77659

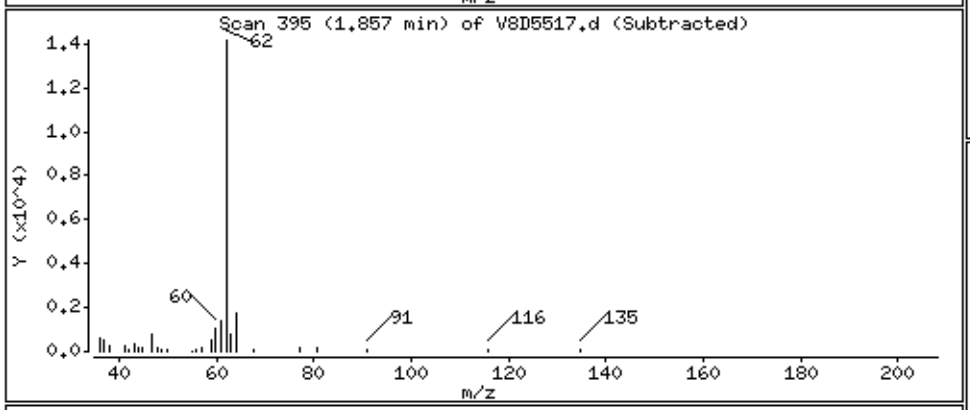
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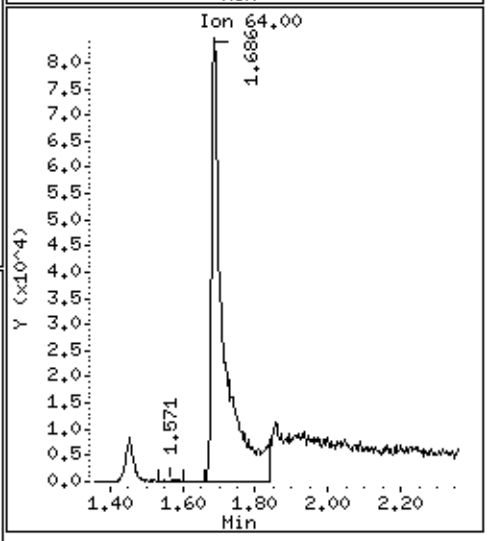
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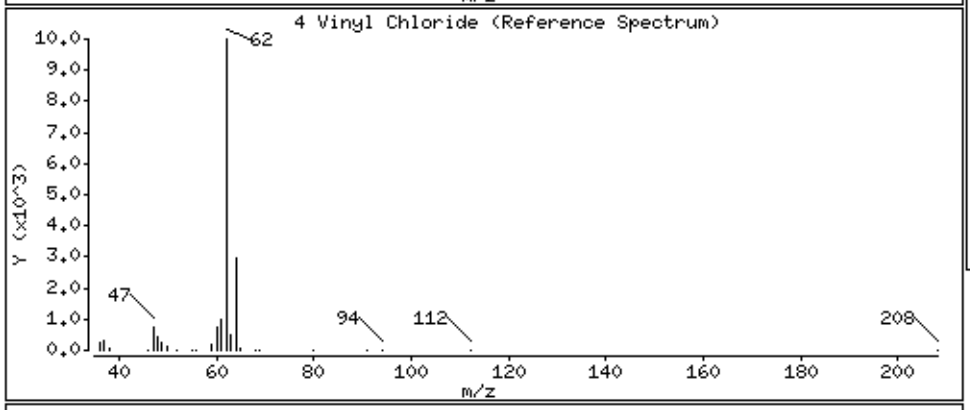
4 Vinyl Chloride Concentration: 4.8 ug/L

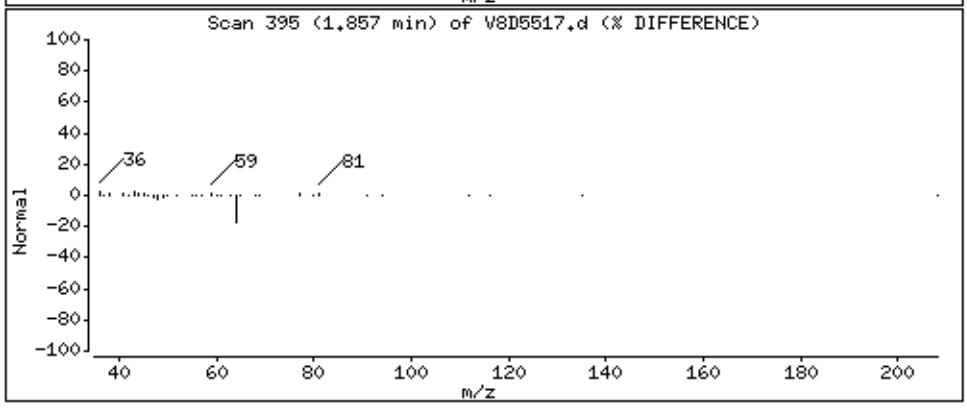












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Date : 19-JUN-2014 10:41

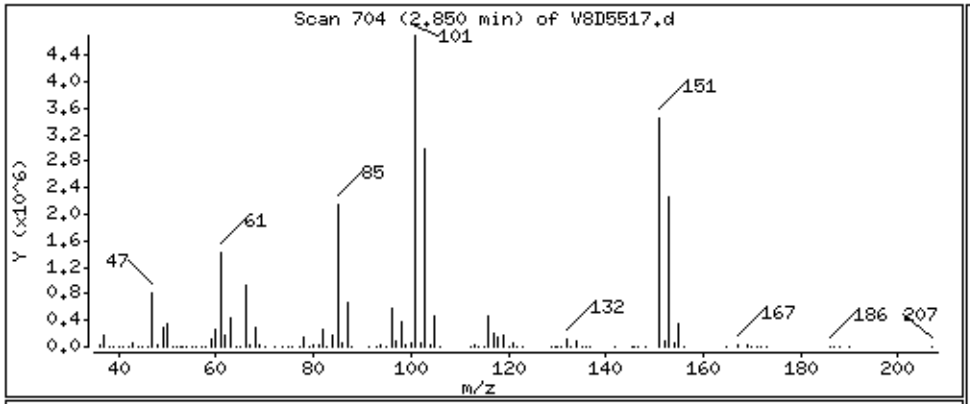
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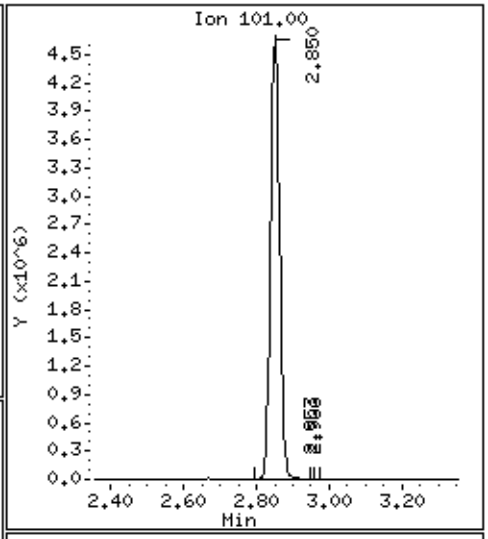
Sample Info: 5ML,N1055-02A,,77659

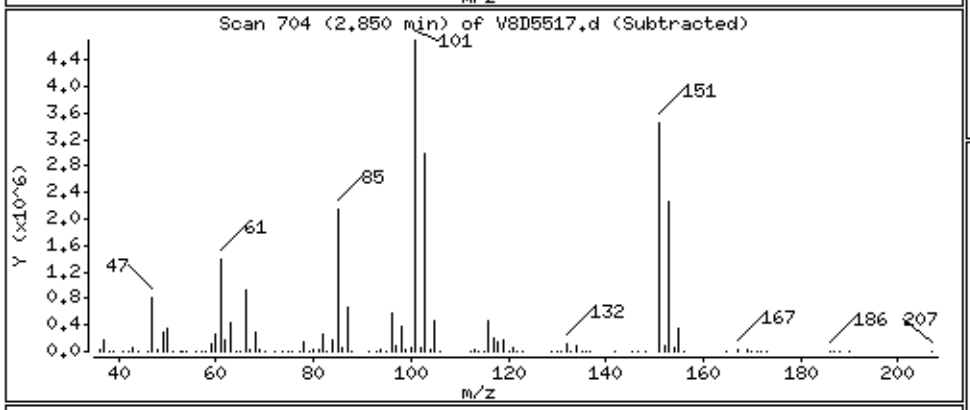
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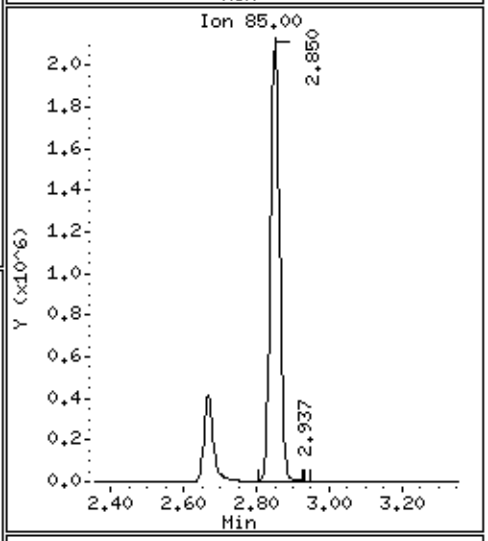
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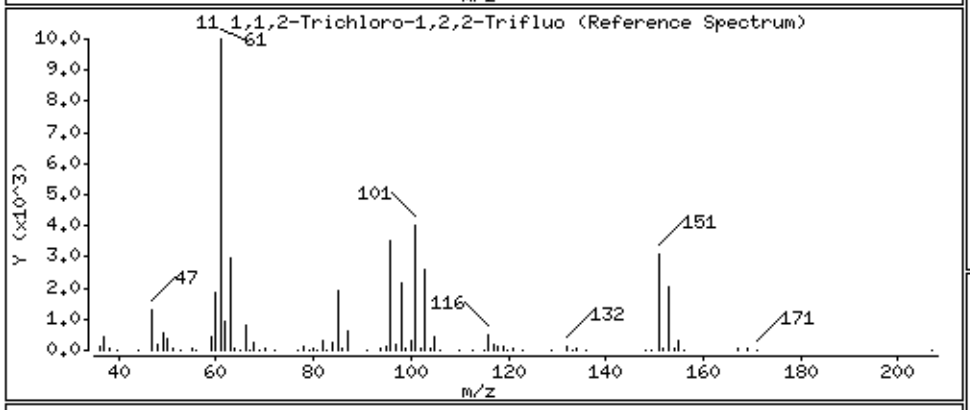
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 3400 ug/L

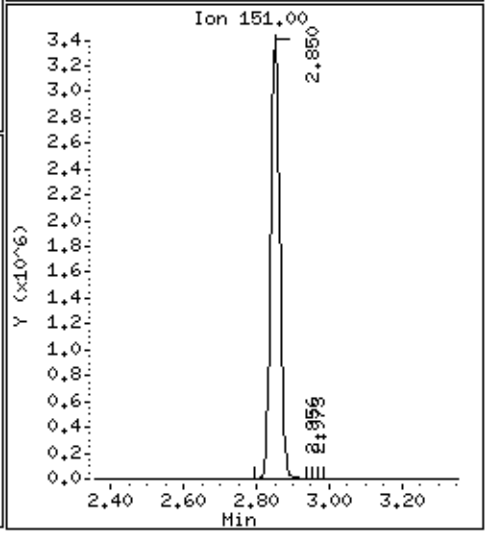


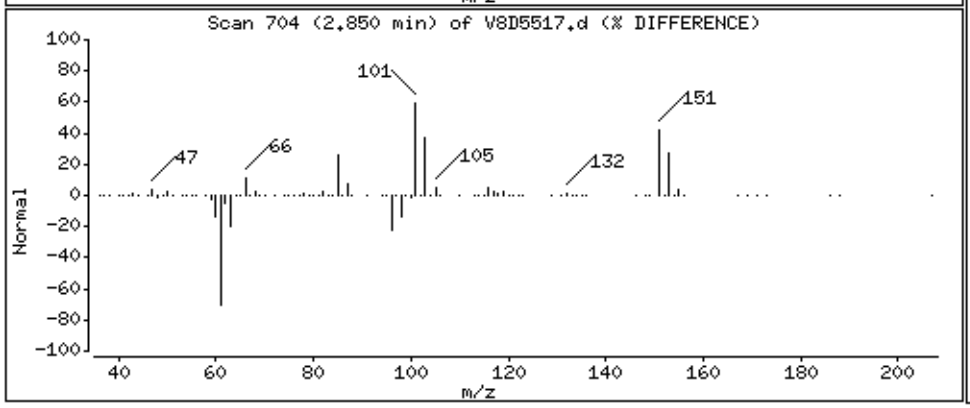












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d

Date : 19-JUN-2014 10:41

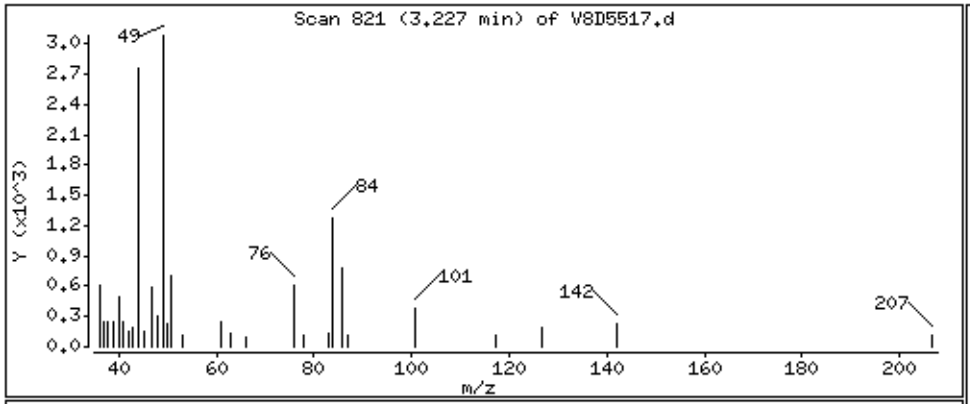
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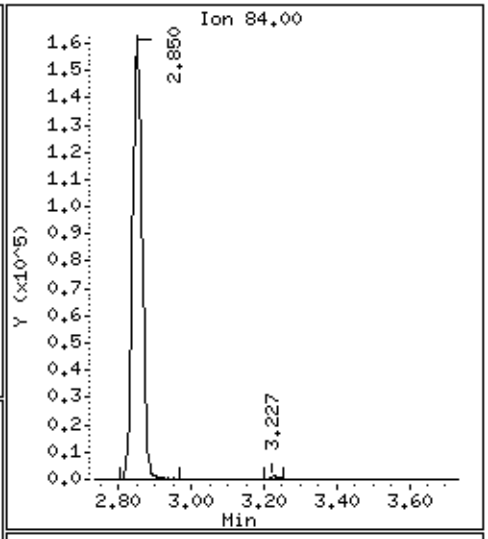
Sample Info: 5ML,N1055-02A,,77659

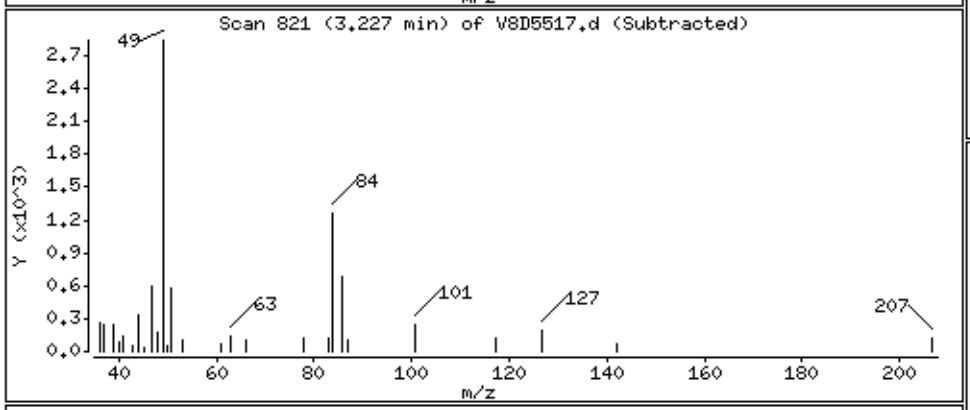
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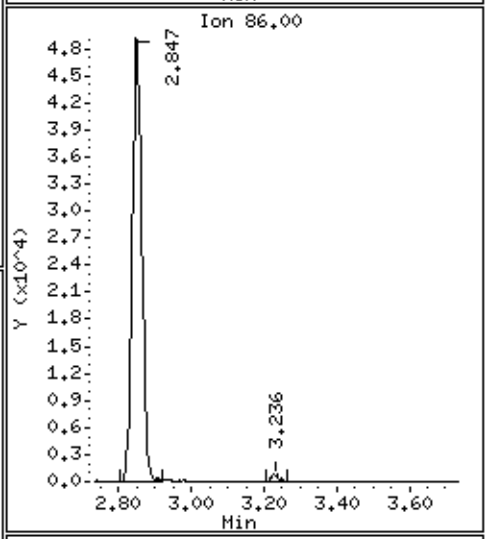
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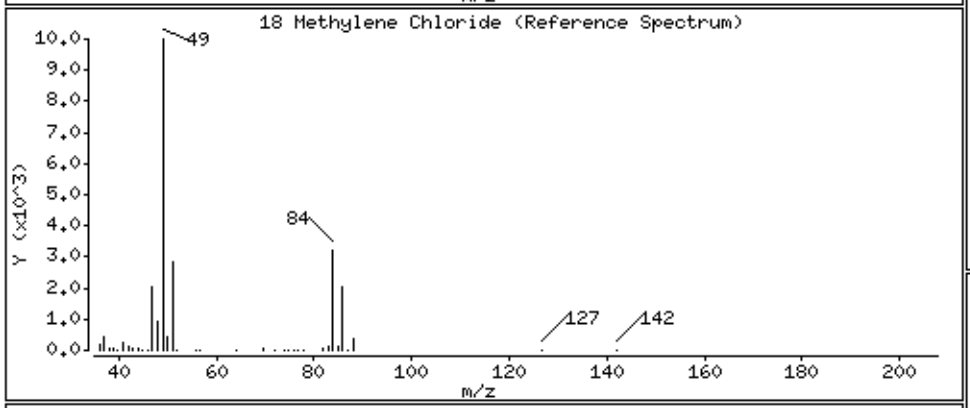
18 Methylene Chloride Concentration: 0.78 ug/L

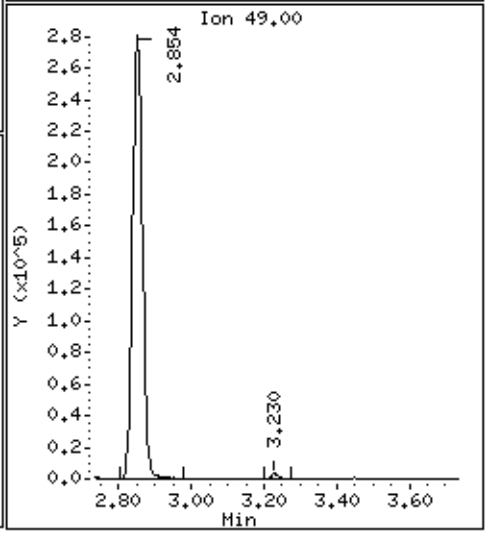


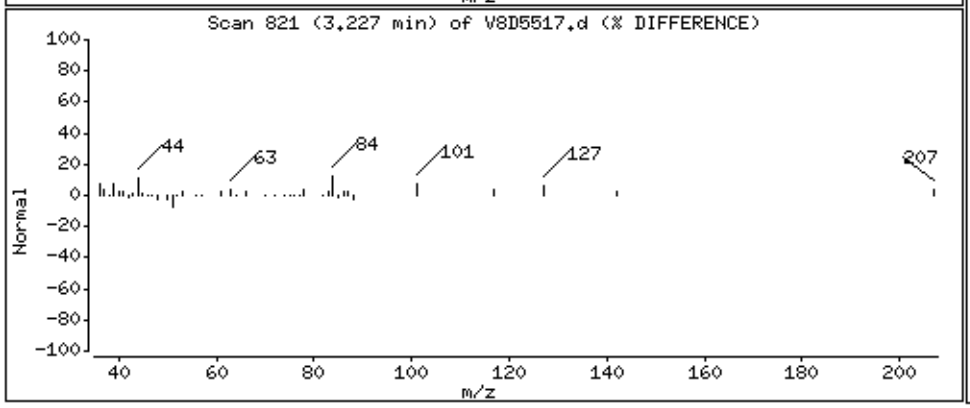












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d

Date : 19-JUN-2014 10:41

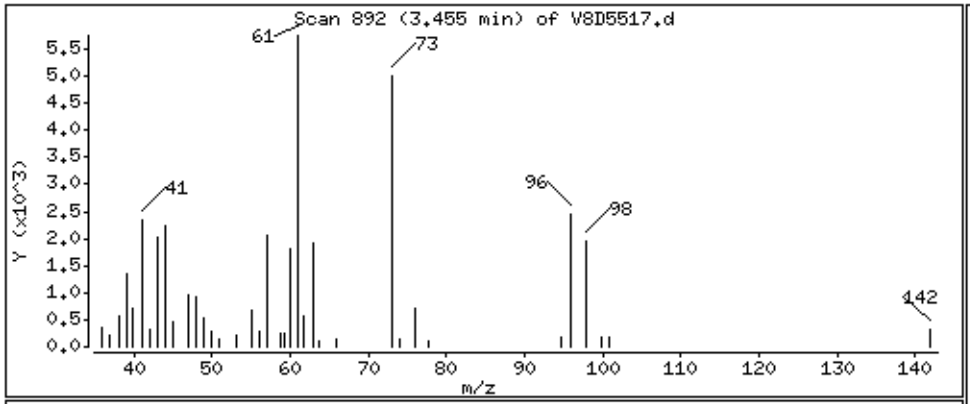
Client ID: MW-10R_6/16/14 Instrument: V10.i

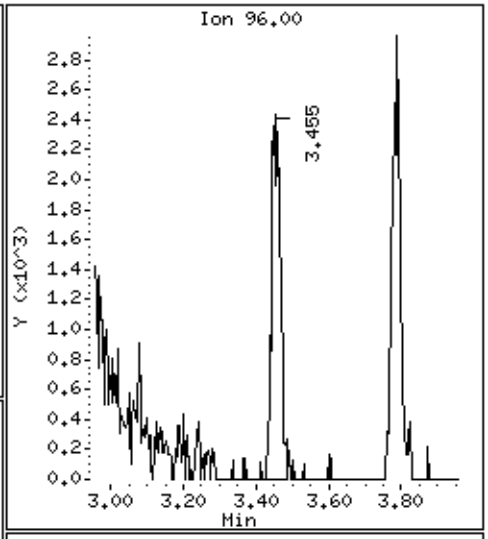
Sample Info: 5ML,N1055-02A,,77659

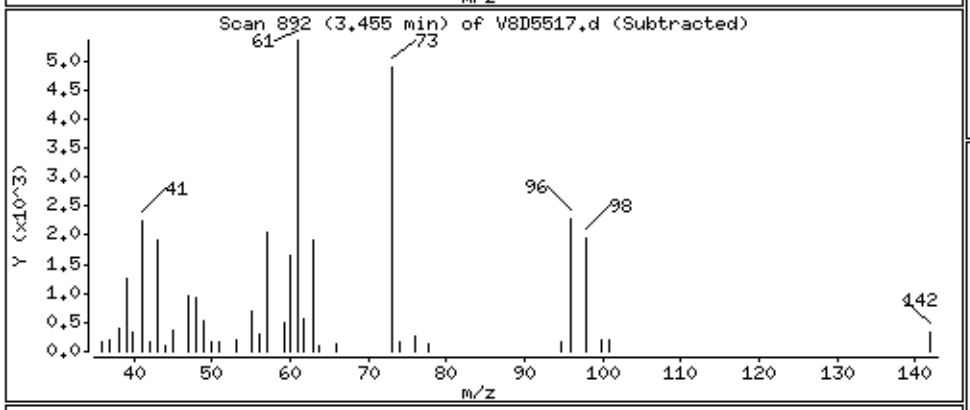
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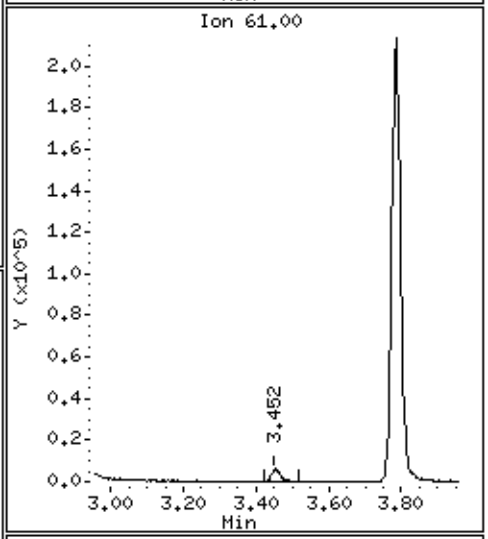
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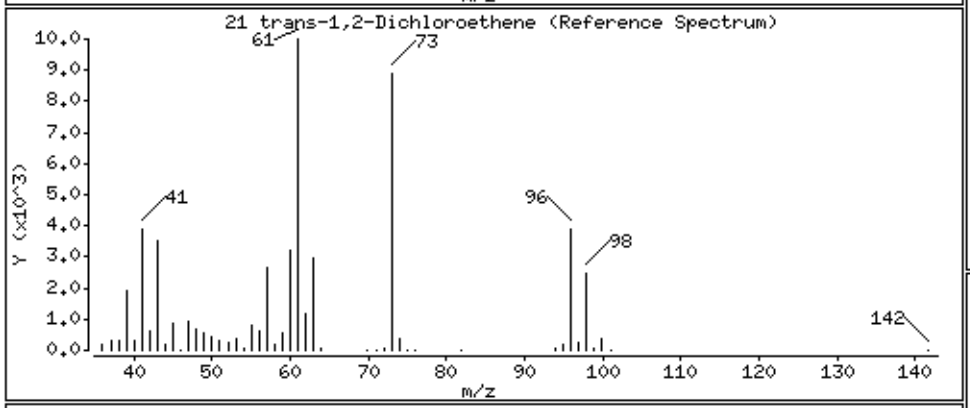
21 trans-1,2-Dichloroethene Concentration: 2.0 ug/L

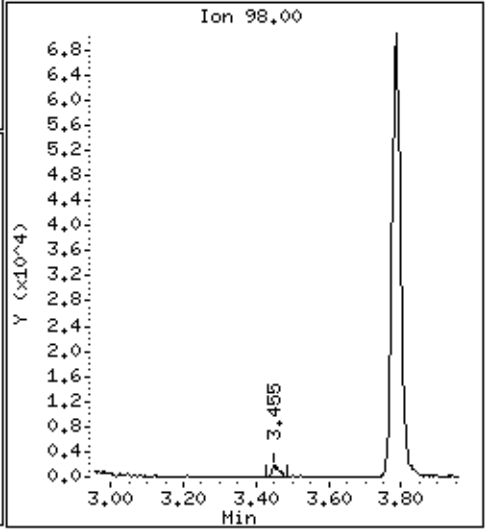


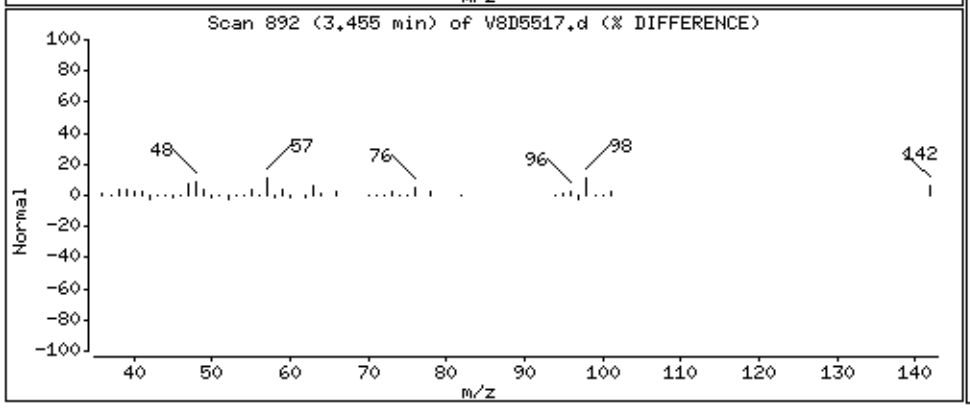












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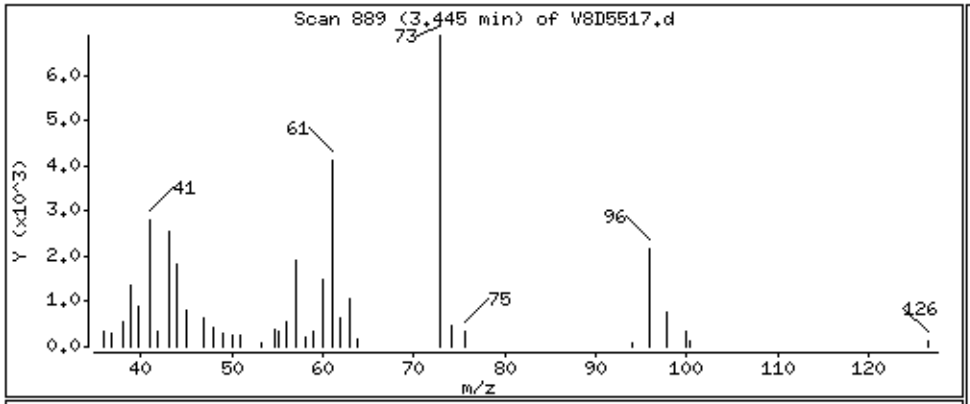
Client ID: MW-10R_6/16/14 Instrument: V10.i

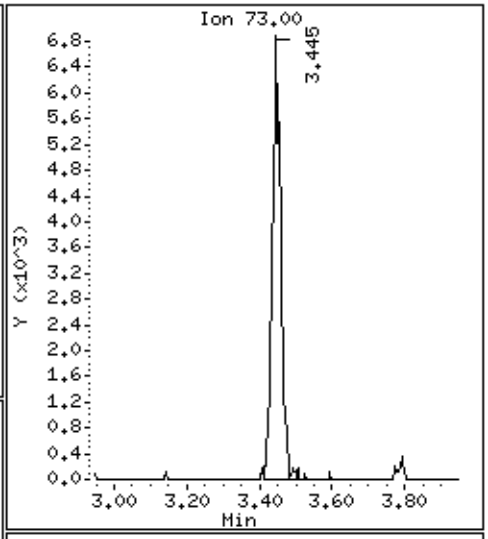
Sample Info: 5ML,N1055-02A,,77659

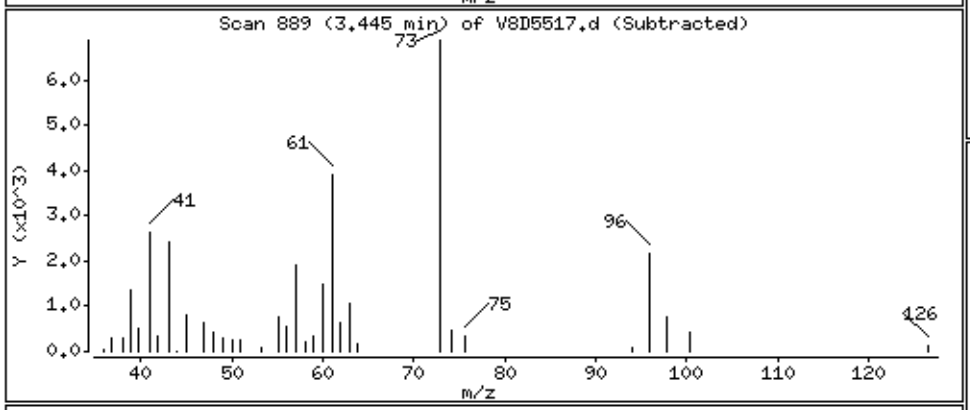
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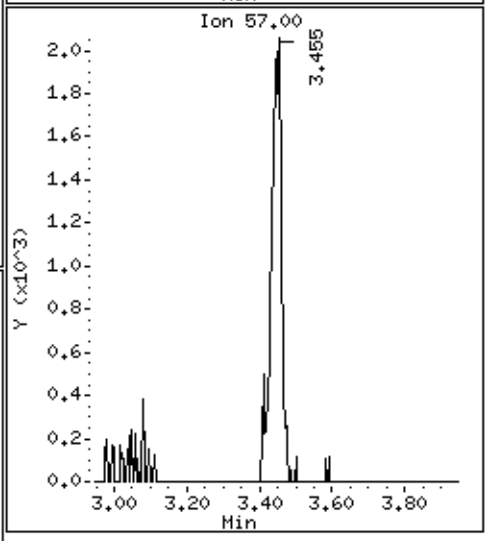
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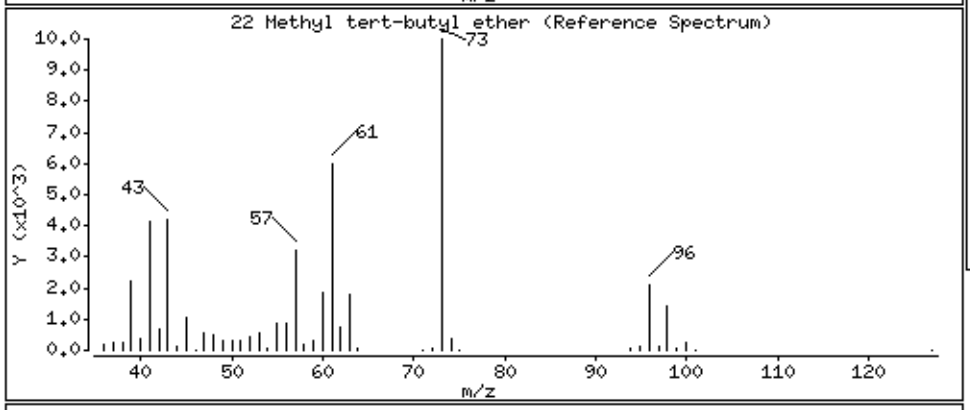
22 Methyl tert-butyl ether Concentration: 1.6 ug/L

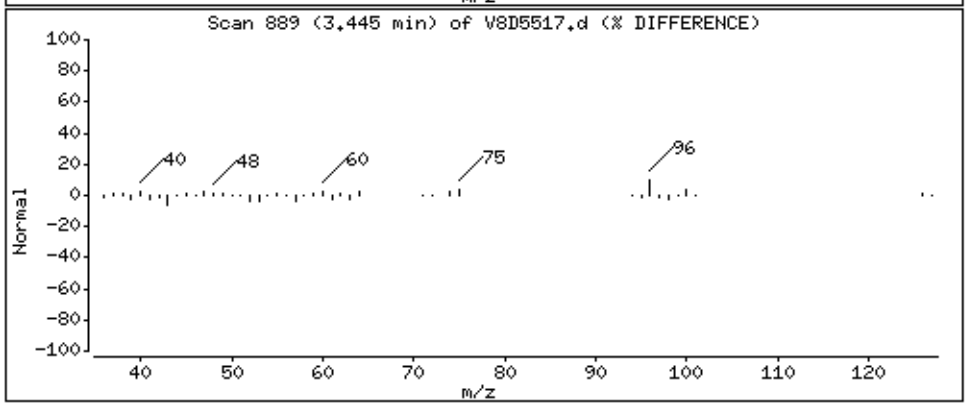












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Date : 19-JUN-2014 10:41

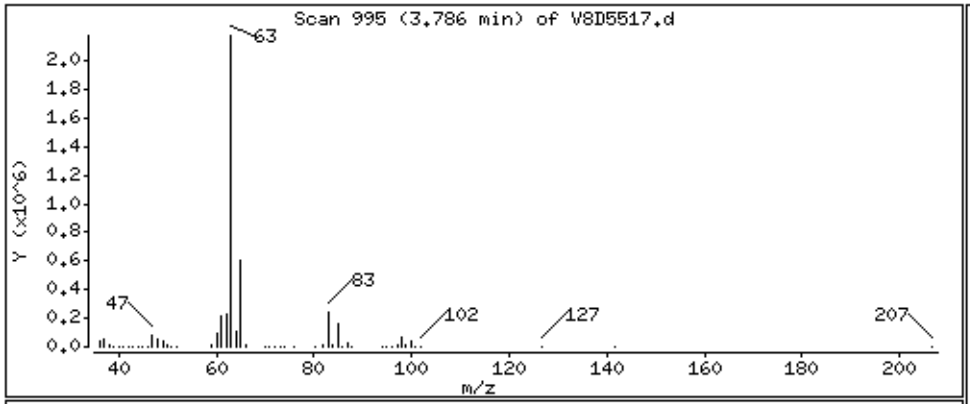
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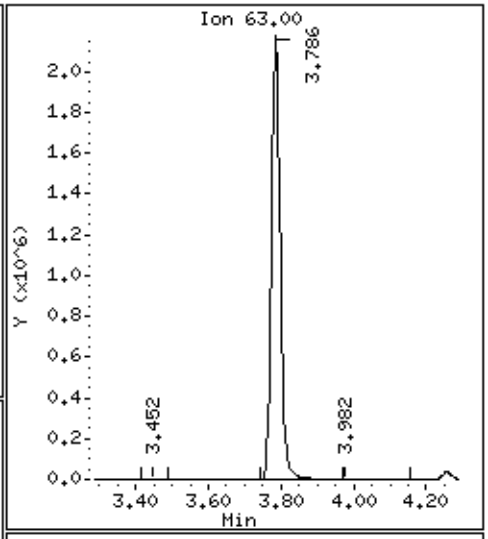
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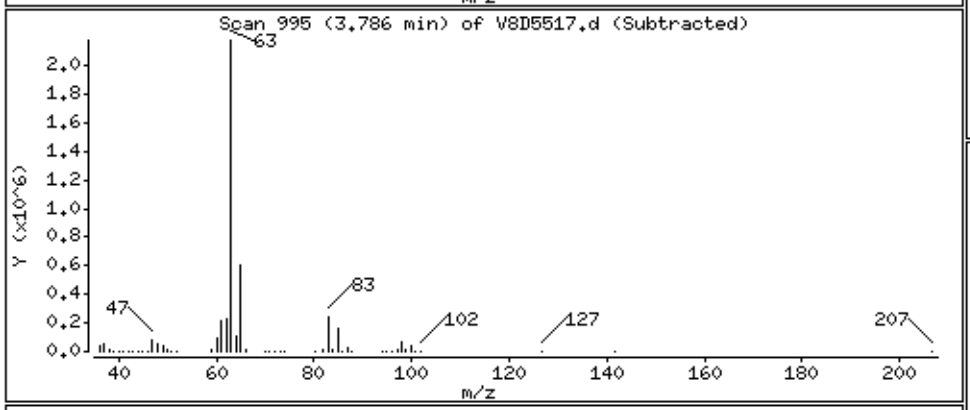
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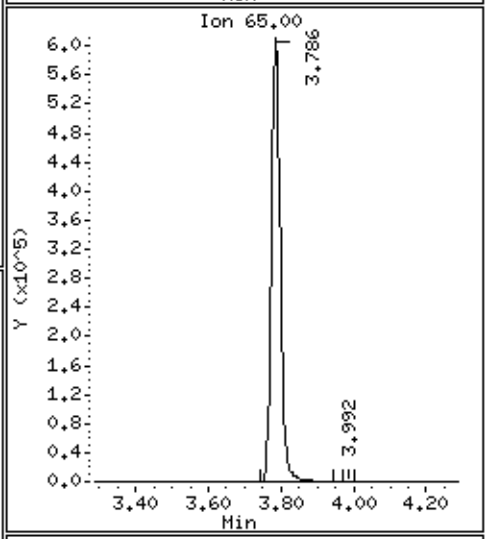
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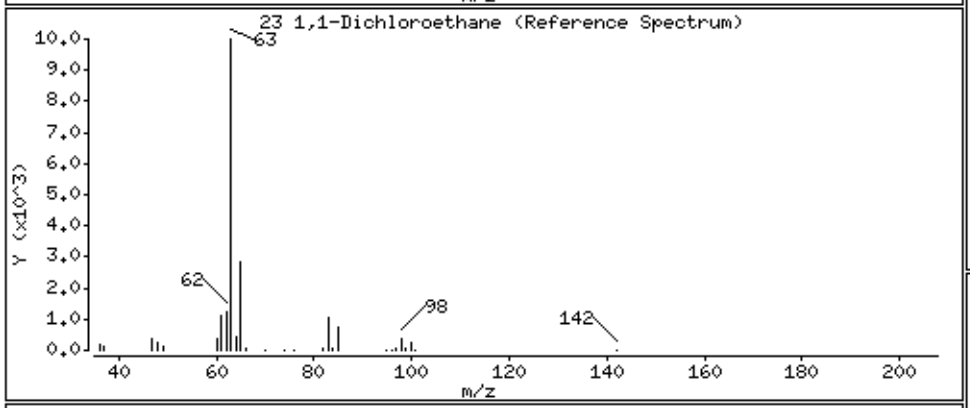
23 1,1-Dichloroethane Concentration: 680 ug/L

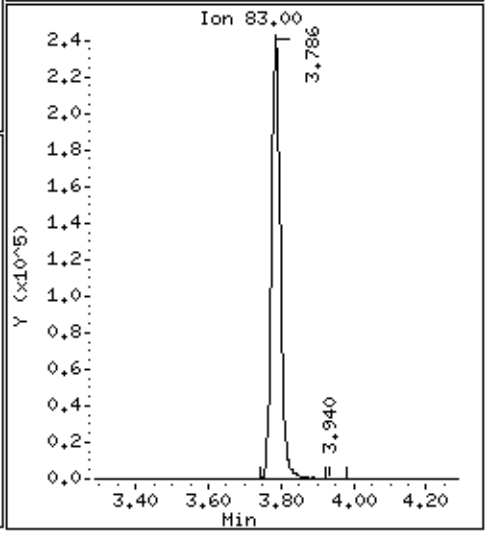


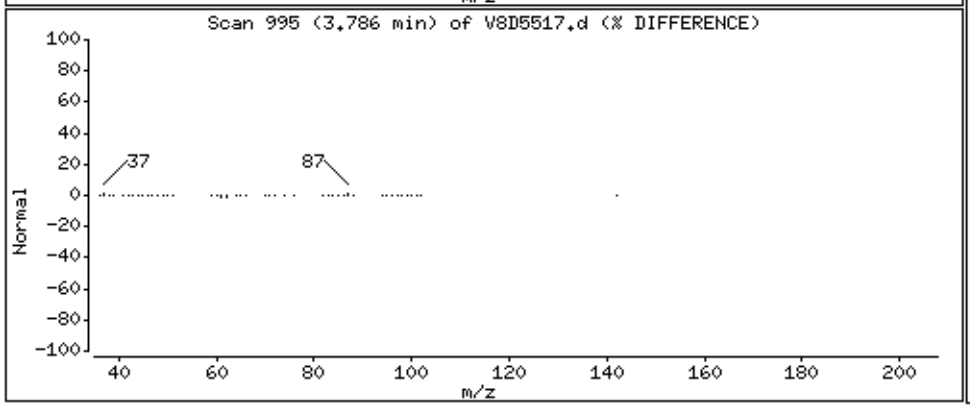












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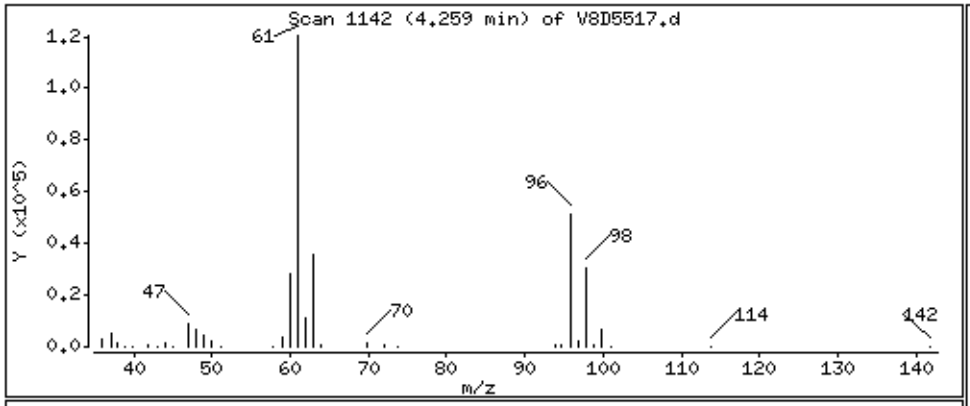
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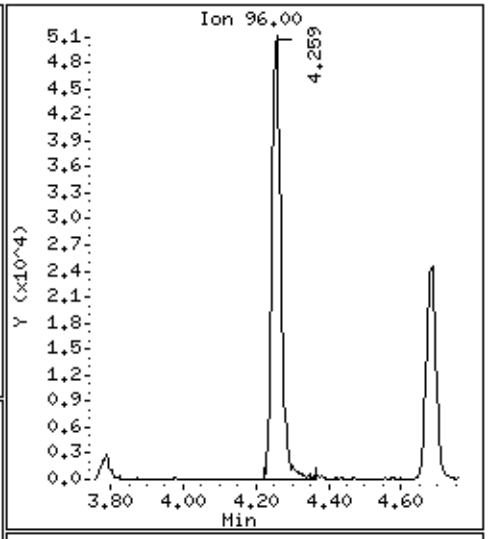
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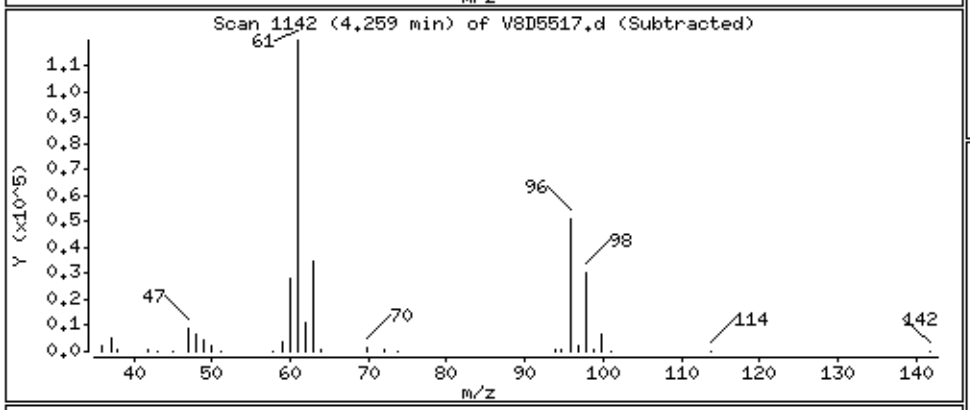
Purge Volume: 5.0 Operator: WL SRC: LIMS

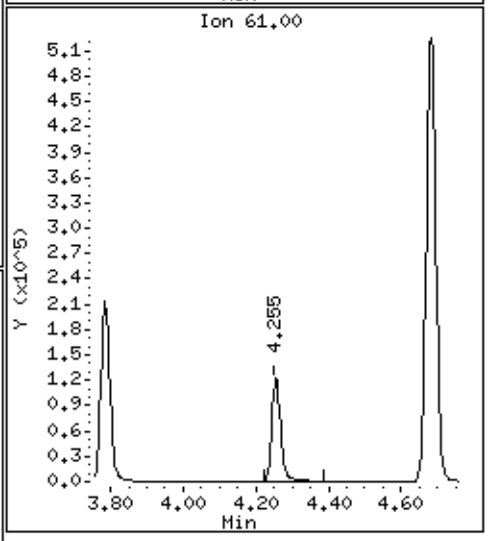
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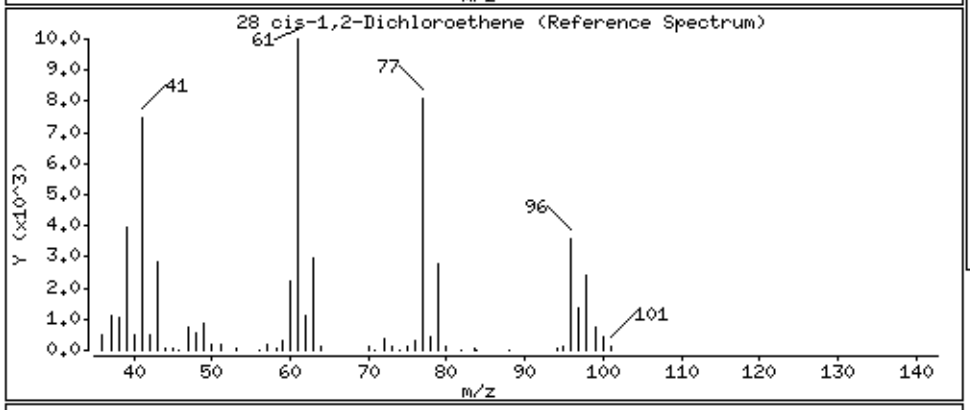
28 cis-1,2-Dichloroethene Concentration: 42 ug/L

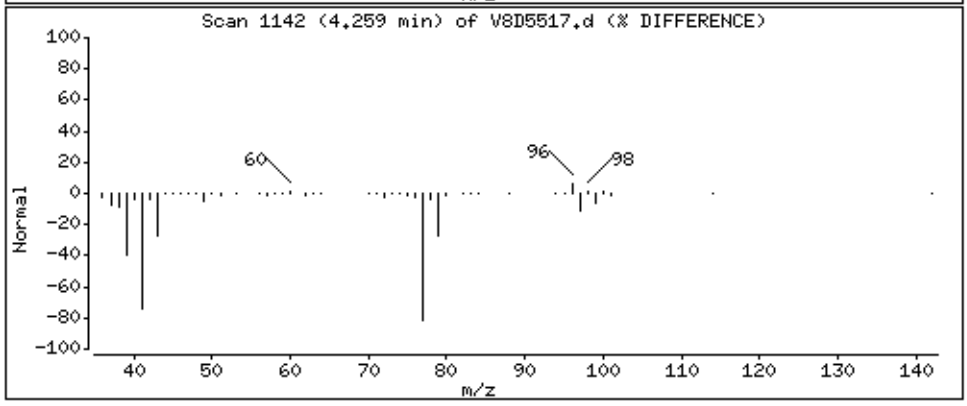












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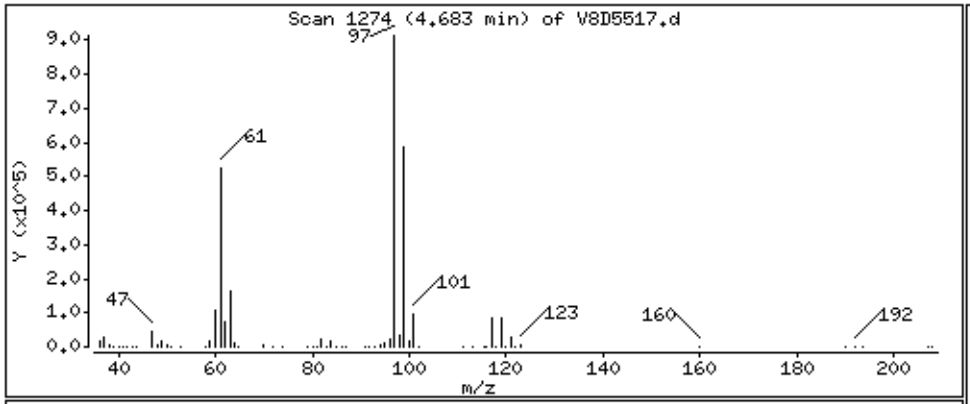
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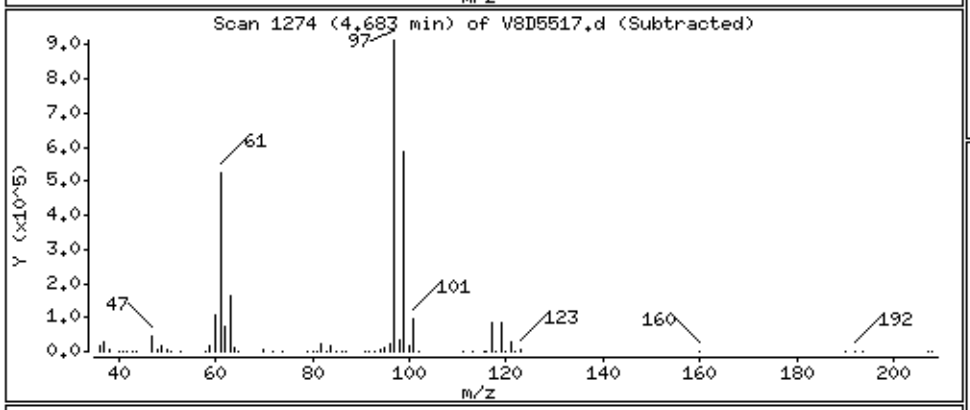
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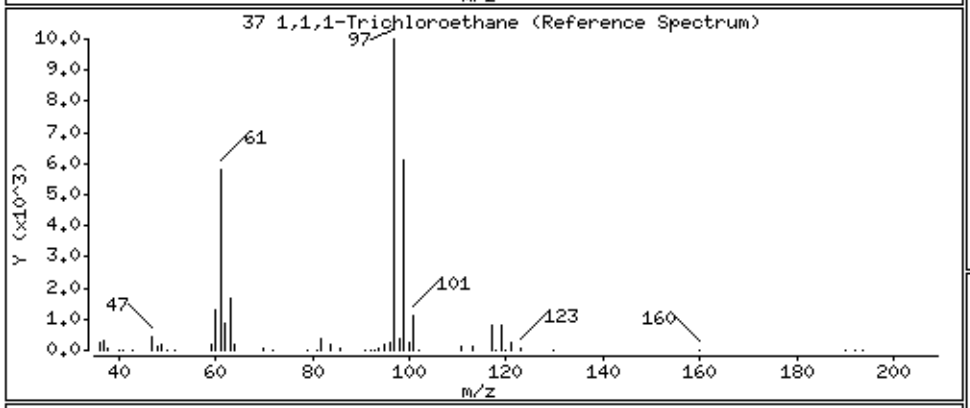
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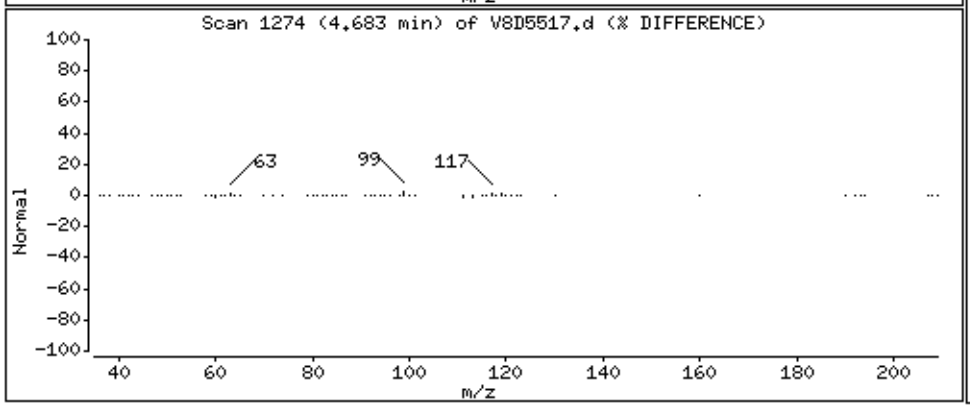
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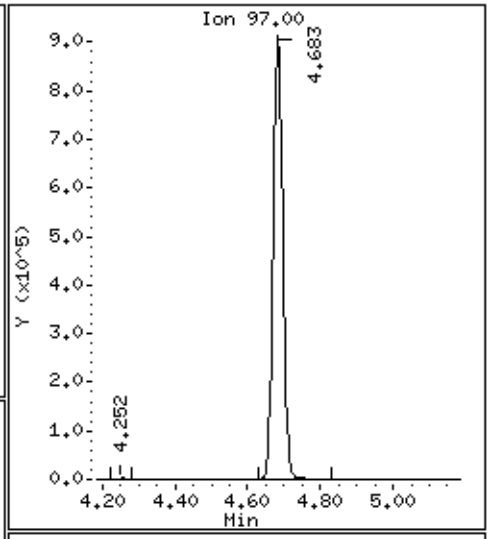
37 1,1,1-Trichloroethane Concentration: 340 ug/L

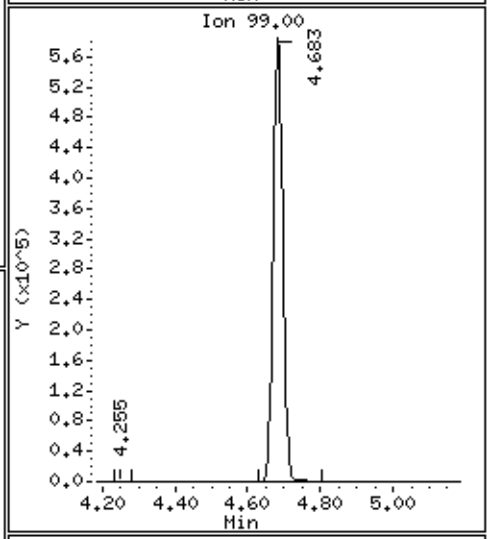


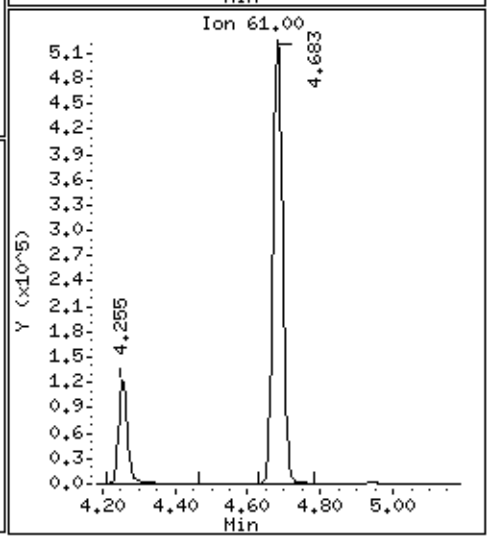












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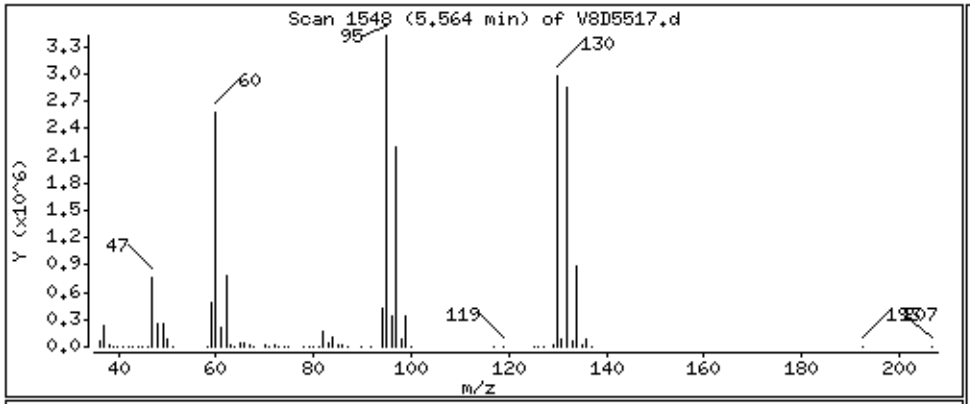
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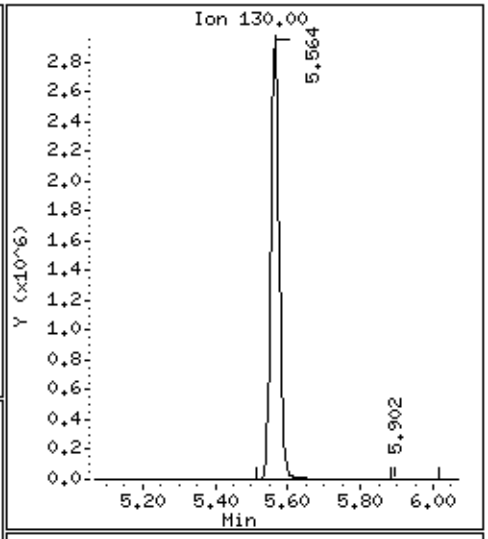
Sample Info: 5ML,N1055-02A,,77659

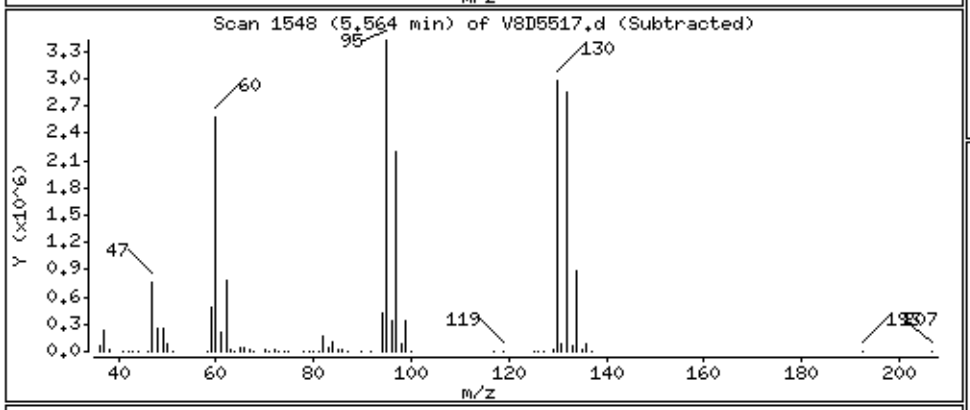
Purge Volume: 5.0 Operator: WL SRC: LIMS

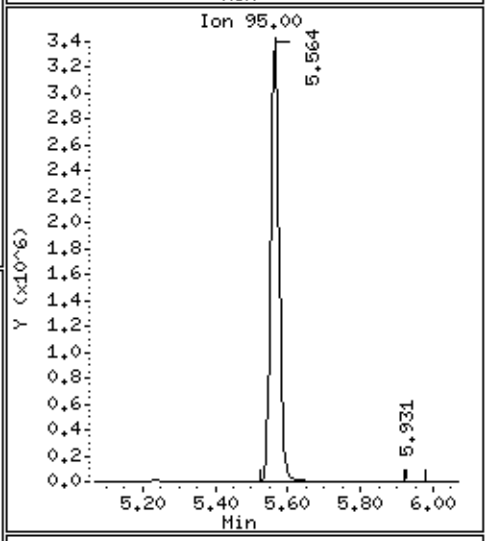
Column phase: DB-624 Column diameter: 0.25

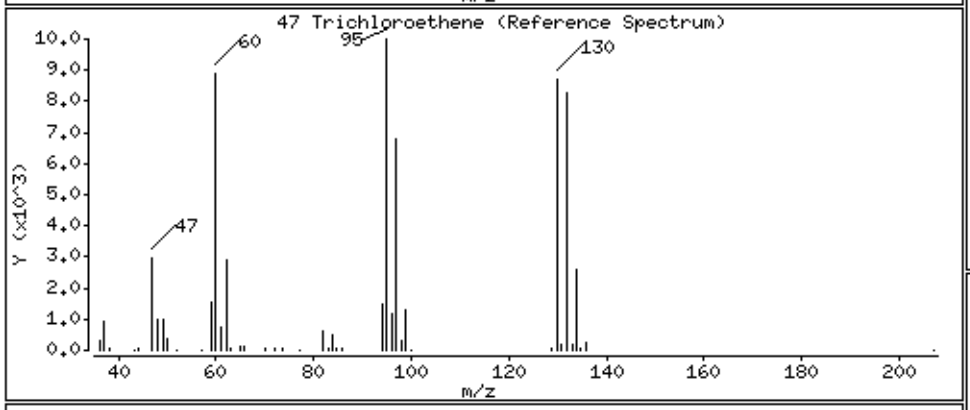
47 Trichloroethene Concentration: 2400 ug/L

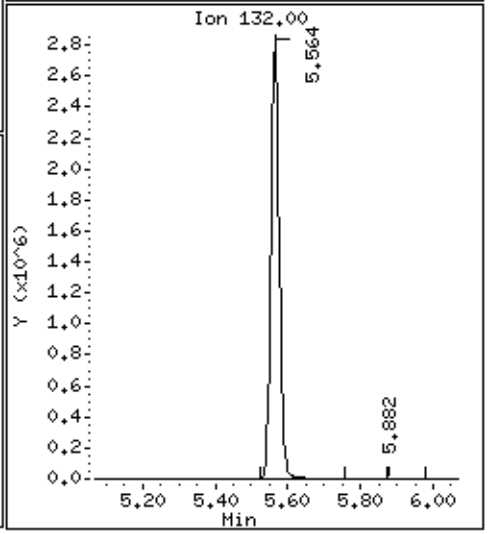


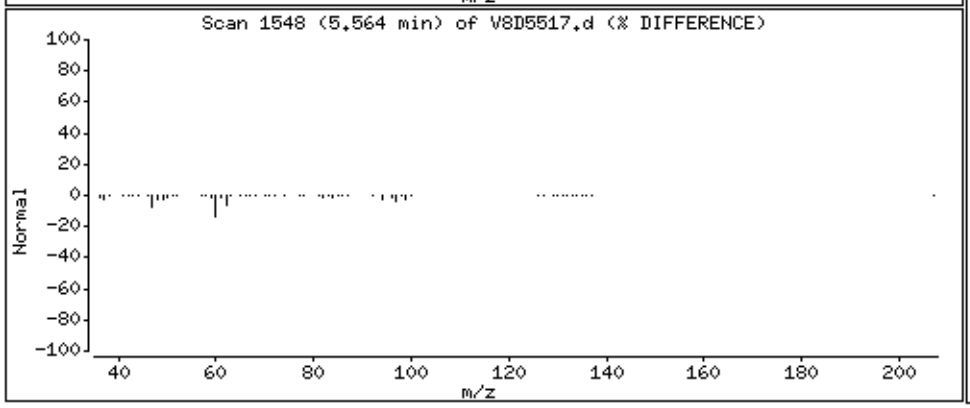












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d

Date : 19-JUN-2014 10:41

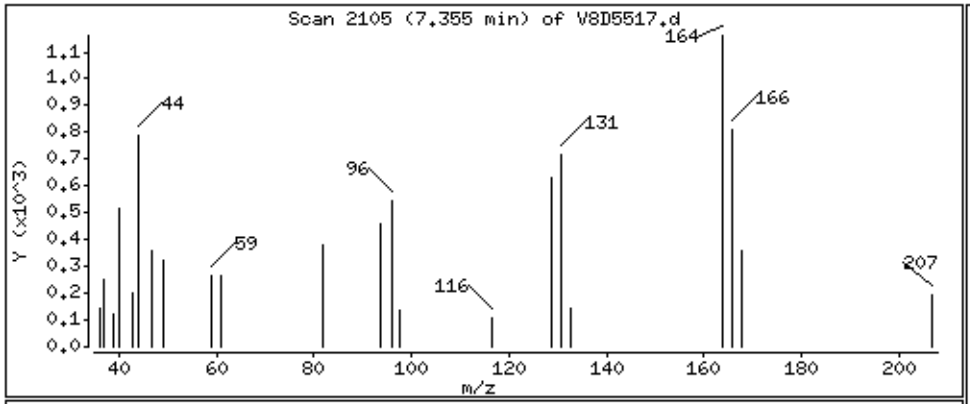
Client ID: MW-10R_6/16/14 Instrument: V10.i

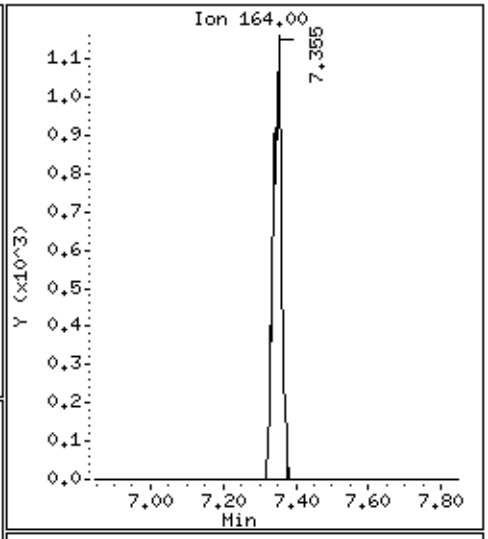
Sample Info: 5ML,N1055-02A,,77659

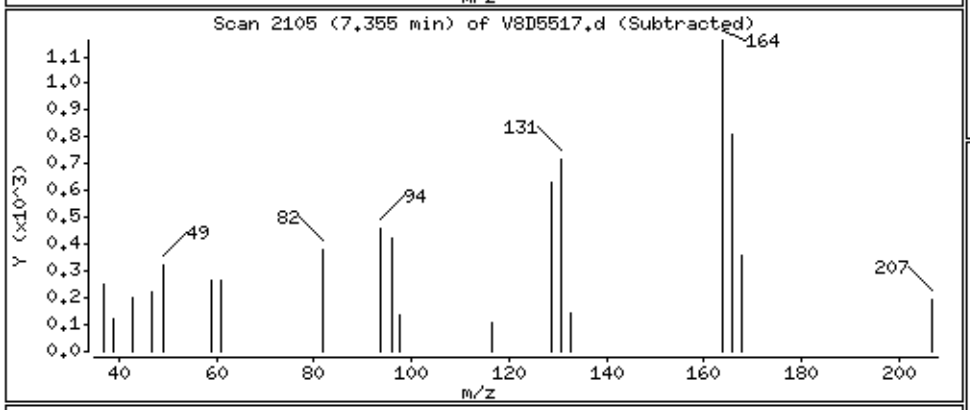
Purge Volume: 5.0 Operator: WL SRC: LIMS

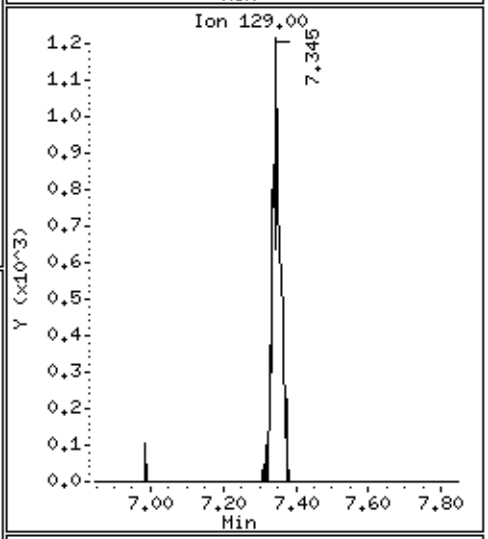
Column phase: DB-624 Column diameter: 0.25

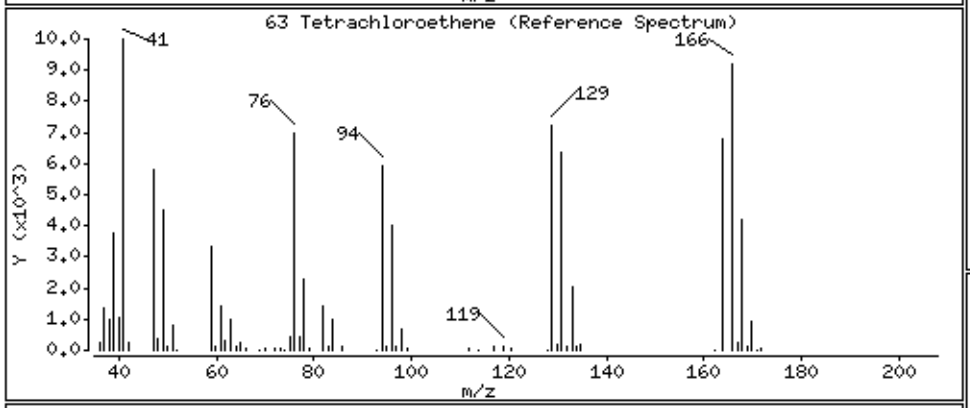
63 Tetrachloroethene Concentration: 0.82 ug/L

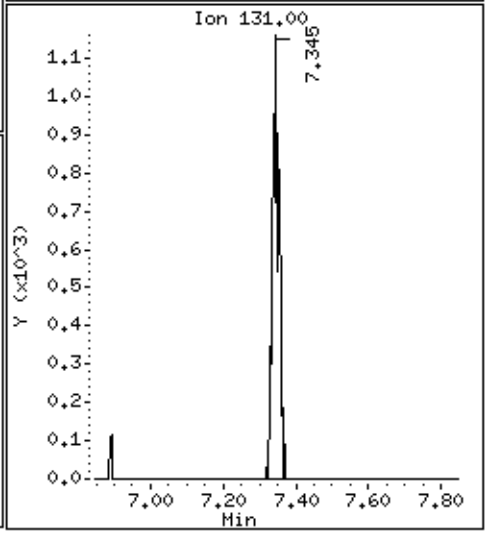


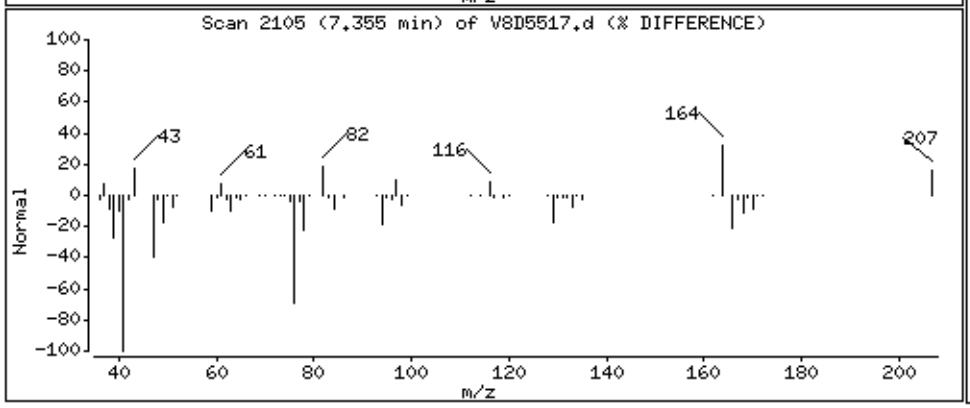












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d

Date : 19-JUN-2014 10:41

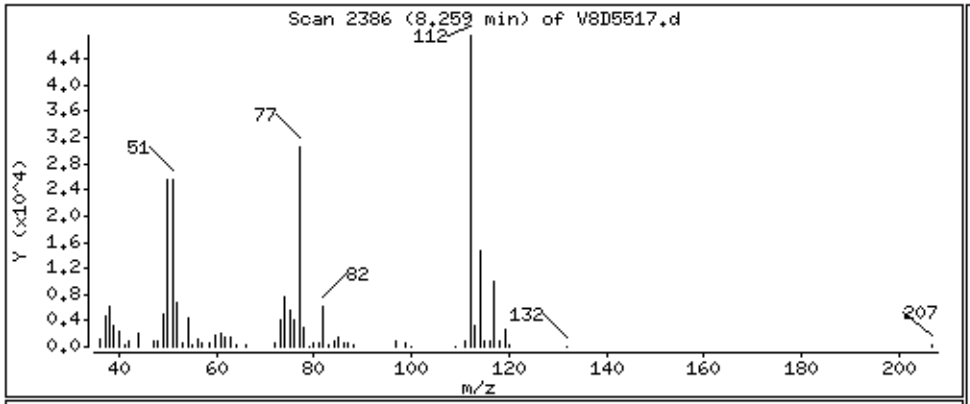
Client ID: MW-10R_6/16/14 Instrument: V10.i

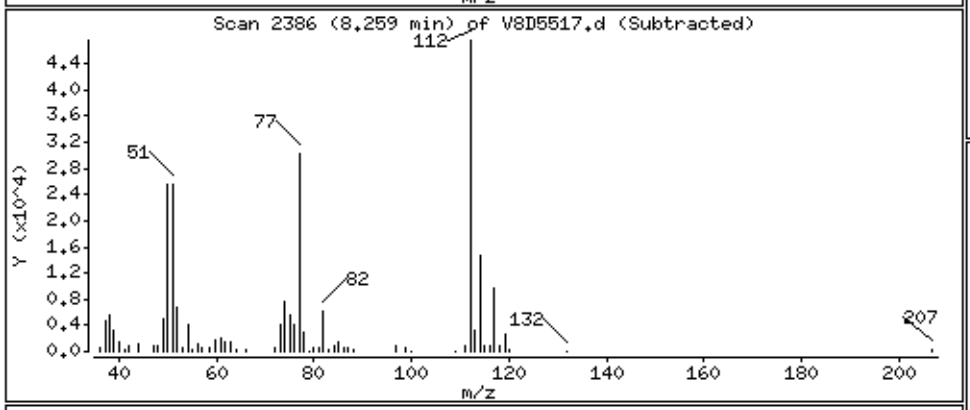
Sample Info: 5ML,N1055-02A,,77659

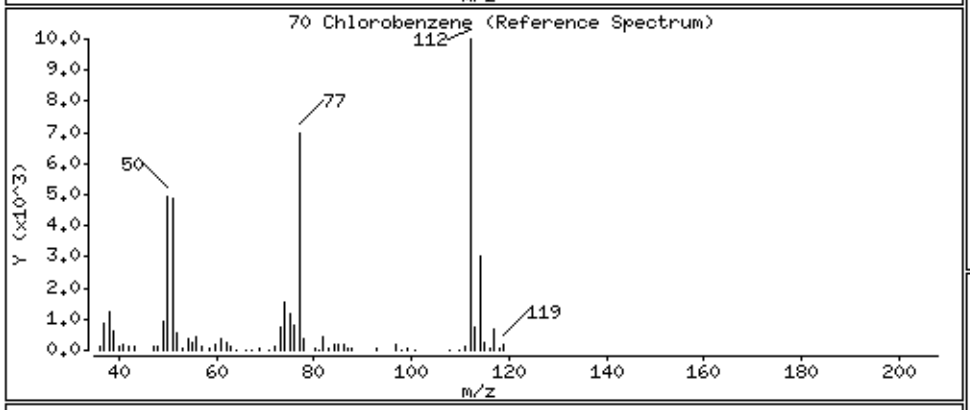
Purge Volume: 5.0 Operator: WL SRC: LIMS

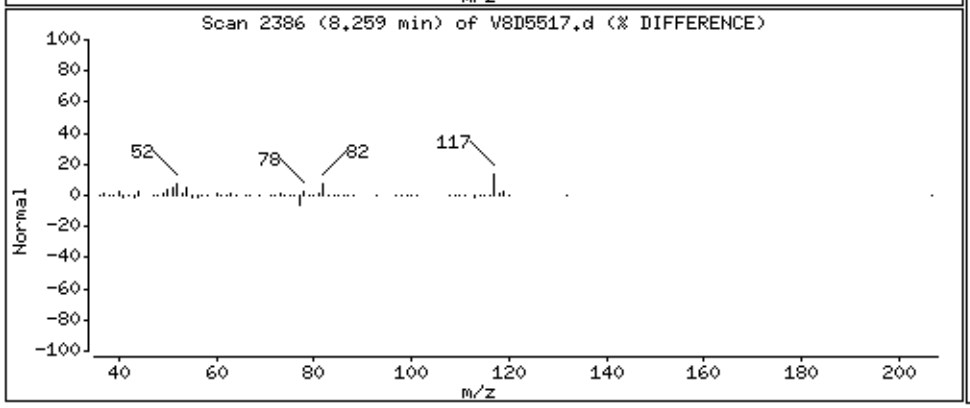
Column phase: DB-624 Column diameter: 0.25

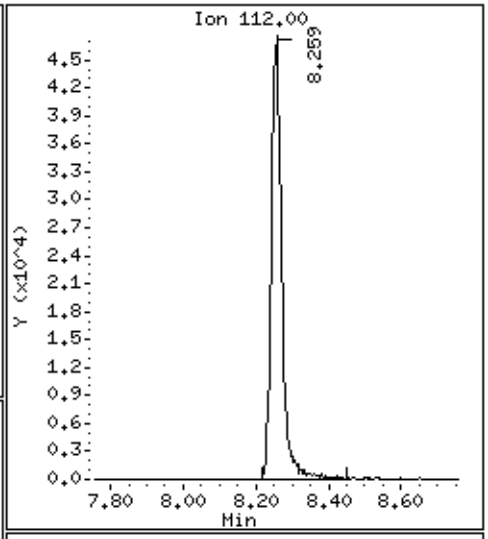
70 Chlorobenzene Concentration: 17 ug/L

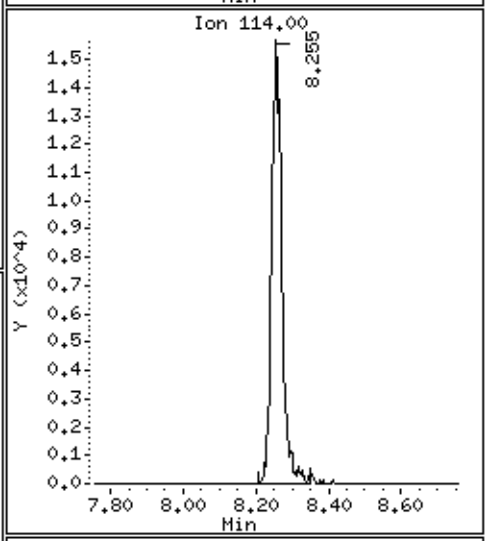


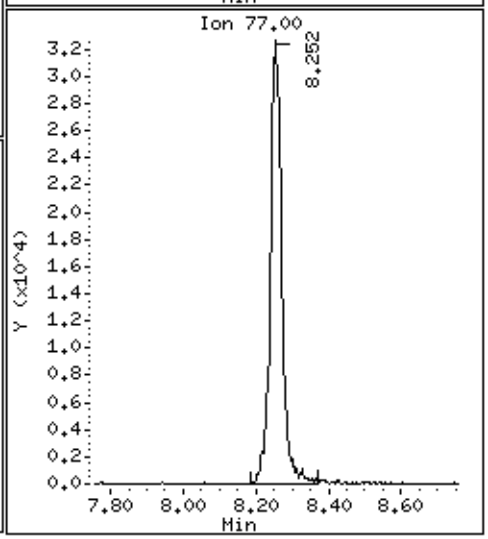












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5517.d

Date : 19-JUN-2014 10:41

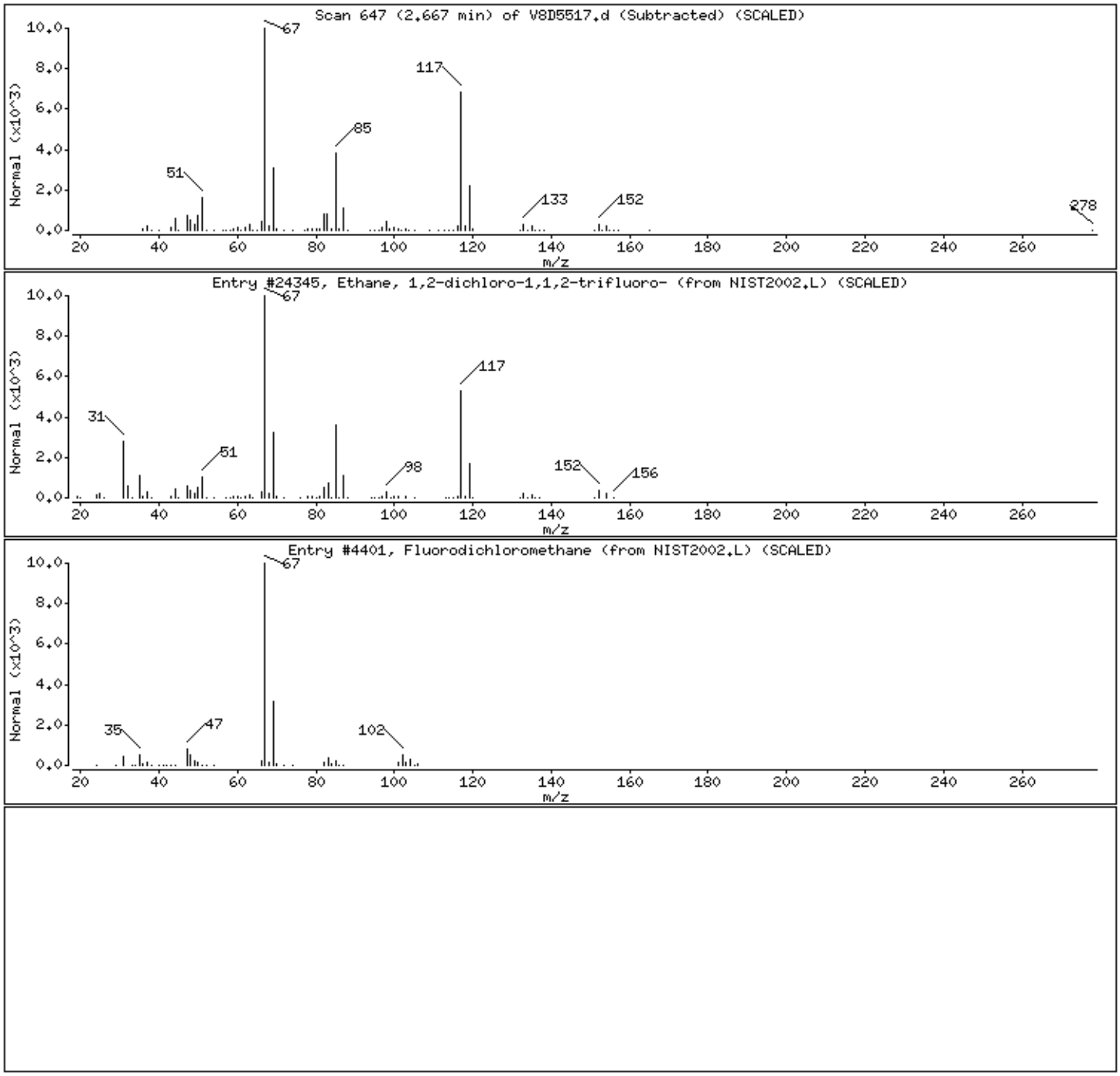
Client ID: MW-10R_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-02A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	25	CHCl2F	102



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10R_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5587.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

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	25	U
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
67-64-1	Acetone	130	U
74-88-4	Iodomethane	25	U
75-15-0	Carbon disulfide	25	U
75-09-2	Methylene chloride	25	U
156-60-5	trans-1,2-Dichloroethene	25	U
1634-04-4	Methyl tert-butyl ether	25	U
75-34-3	1,1-Dichloroethane	420	D
108-05-4	Vinyl acetate	25	U
78-93-3	2-Butanone	130	U
156-59-2	cis-1,2-Dichloroethene	31	D
594-20-7	2,2-Dichloropropane	25	U
74-97-5	Bromochloromethane	25	U
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	200	D
563-58-6	1,1-Dichloropropene	25	U
56-23-5	Carbon tetrachloride	25	U
107-06-2	1,2-Dichloroethane	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	1200	D
78-87-5	1,2-Dichloropropane	25	U
74-95-3	Dibromomethane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-pentanone	130	U
108-88-3	Toluene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
142-28-9	1,3-Dichloropropane	25	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10R_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5587.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

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	25	U
591-78-6	2-Hexanone	130	U
124-48-1	Dibromochloromethane	25	U
106-93-4	1,2-Dibromoethane	25	U
108-90-7	Chlorobenzene	25	U
630-20-6	1,1,1,2-Tetrachloroethane	25	U
100-41-4	Ethylbenzene	25	U
179601-23-1	m,p-Xylene	25	U
95-47-6	o-Xylene	25	U
1330-20-7	Xylene (Total)	25	U
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
98-82-8	Isopropylbenzene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-86-1	Bromobenzene	25	U
96-18-4	1,2,3-Trichloropropane	25	U
103-65-1	n-Propylbenzene	25	U
95-49-8	2-Chlorotoluene	25	U
108-67-8	1,3,5-Trimethylbenzene	25	U
106-43-4	4-Chlorotoluene	25	U
98-06-6	tert-Butylbenzene	25	U
95-63-6	1,2,4-Trimethylbenzene	25	U
135-98-8	sec-Butylbenzene	25	U
99-87-6	4-Isopropyltoluene	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
104-51-8	n-Butylbenzene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
96-12-8	1,2-Dibromo-3-chloropropane	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-68-3	Hexachlorobutadiene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U
91-20-3	Naphthalene	25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1700	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-10R_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5587.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	330	DNJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5587.d
Lab Smp Id: N1055-02ADL Client Smp ID: MW-10R_6/16/14DL
Inj Date : 20-JUN-2014 20:01
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-02ADL,,77692,25
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 78
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	25.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	8	Ether	59	2.856	2.667	(0.546)	3803	1.71647	43(Q)
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	138982	66.5350	1700
	23	1,1-Dichloroethane	63	3.786	3.782	(0.723)	78031	16.6792	420
	28	cis-1,2-Dichloroethene	96	4.265	4.255	(0.815)	2286	1.23811	31(Q)
$	36	Dibromofluoromethane	113	4.644	4.641	(0.887)	89408	57.0901	57
	37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	33695	7.93156	200
$	42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	14534	54.8924	55
M	50	1,2-Dichloroethene (Total)	96				2286	1.23811	31
*	46	Fluorobenzene	96	5.236	5.239	(1.000)	210448	50.0000	
	47	Trichloroethene	130	5.567	5.567	(1.063)	86317	49.6987	1200
$	58	Toluene-d8	98	6.718	6.715	(0.817)	278770	46.3482	46
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	262835	50.0000	
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	162472	50.3189	50
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	138640	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5587.d
Lab Smp Id: N1055-02ADL Client Smp ID: MW-10R_6/16/14DL
Inj Date : 20-JUN-2014 20:01
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-02ADL,,77692,25
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 78
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

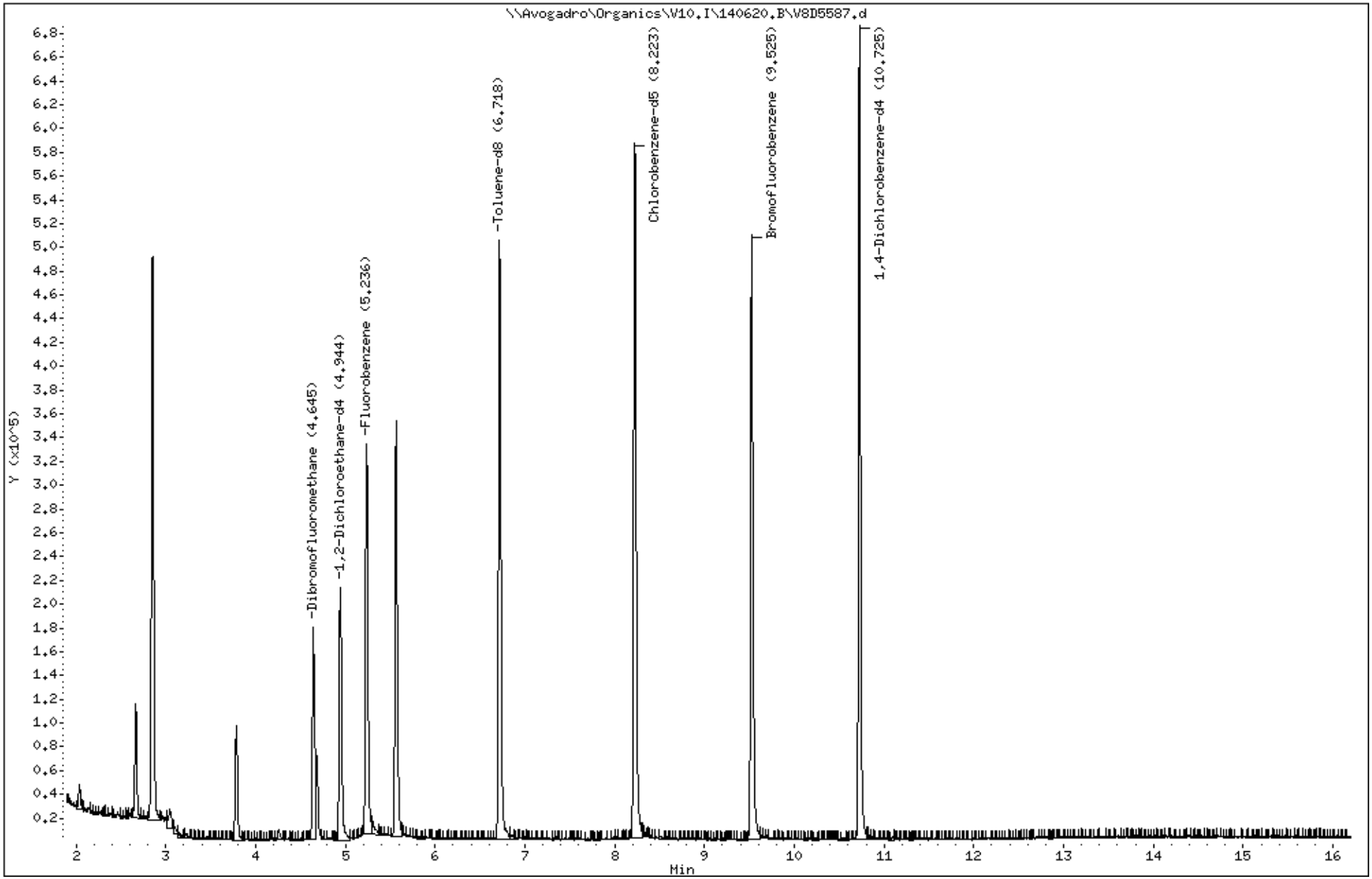
Name	Value	Description
DF	25.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	603245	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.664	156858	13.0011986	320	95	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d
Date : 20-JUN-2014 20:01
Client ID: MW-10R_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-02ADL,,77692,25
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d

Date : 20-JUN-2014 20:01

Client ID: MW-10R_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-02ADL,,77692,25

Purge Volume: 5.0

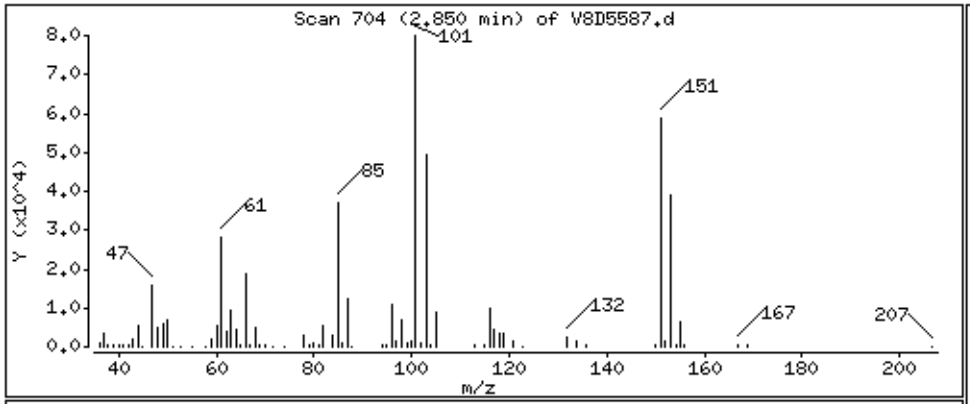
Operator: WL SRC: LIMS

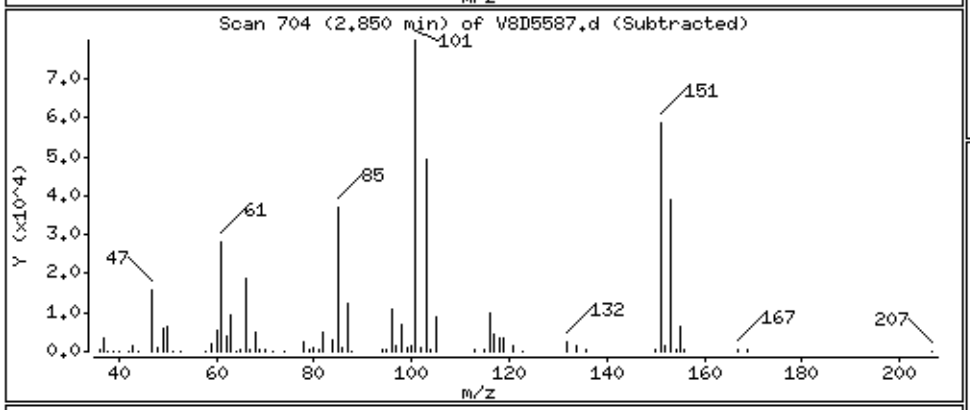
Column phase: DB-624

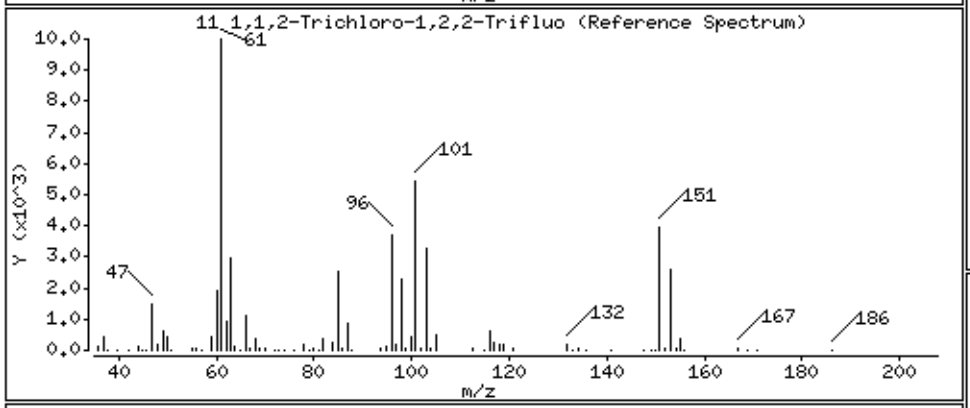
Column diameter: 0.25

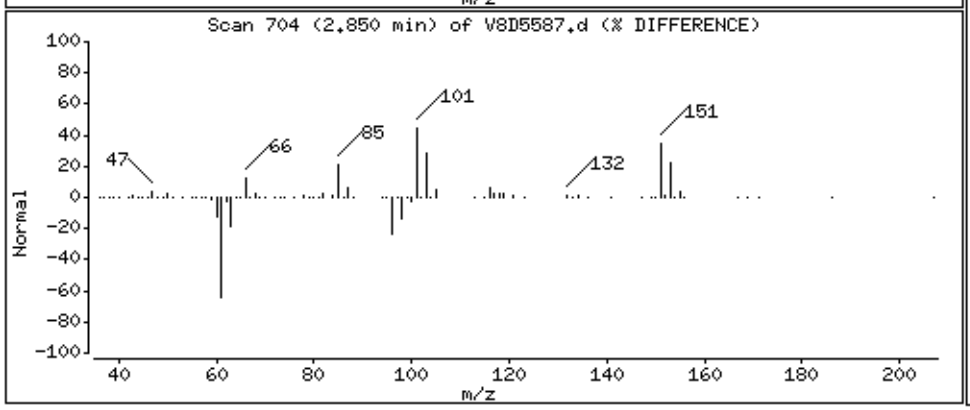
11 1,1,2-Trichloro-1,2,2-Trifluo

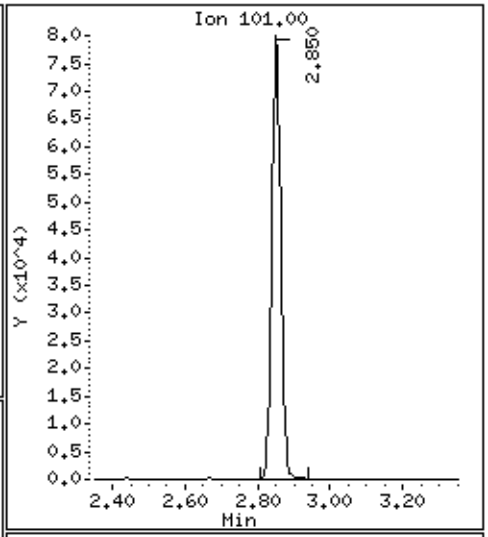
Concentration: 1700 ug/L

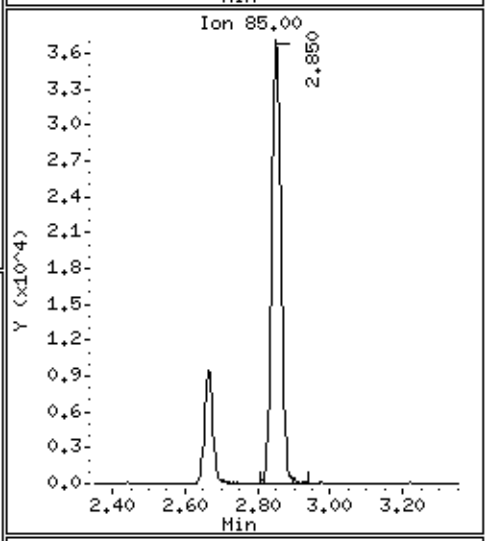


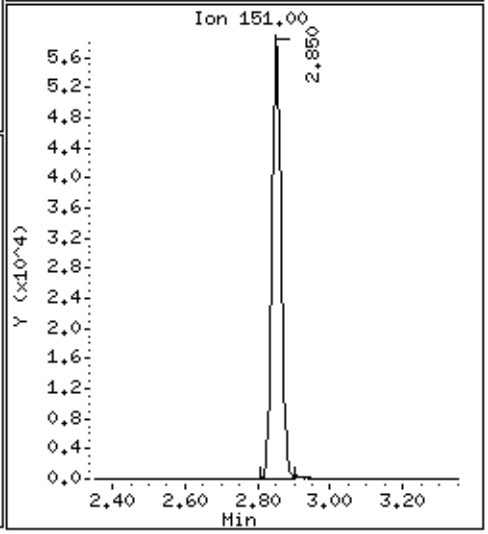












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d

Date : 20-JUN-2014 20:01

Client ID: MW-10R_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-02ADL,,77692,25

Purge Volume: 5.0

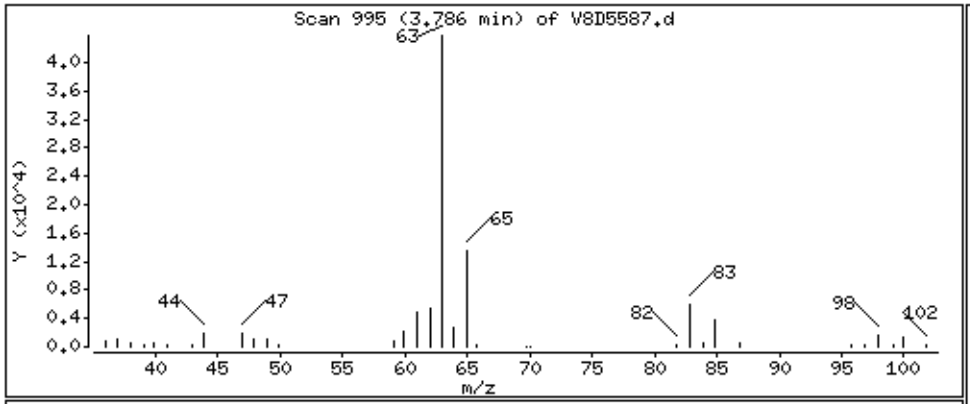
Operator: WL SRC: LIMS

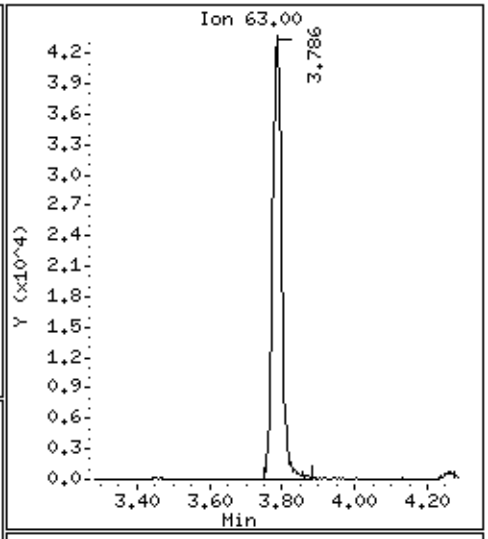
Column phase: DB-624

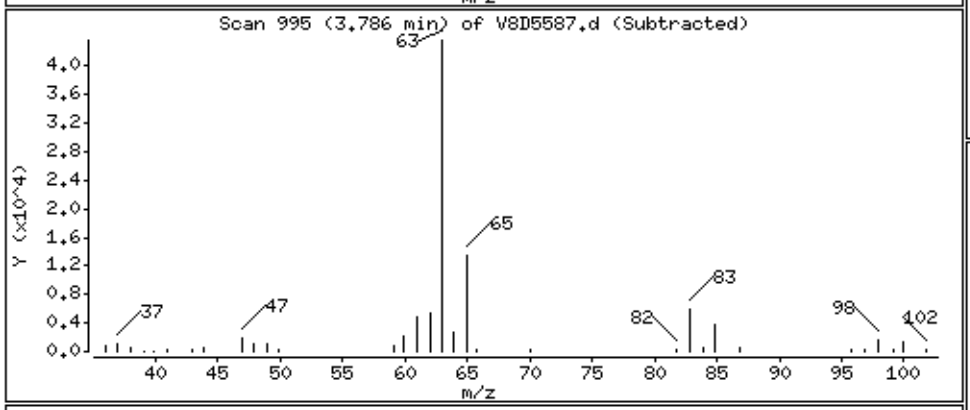
Column diameter: 0.25

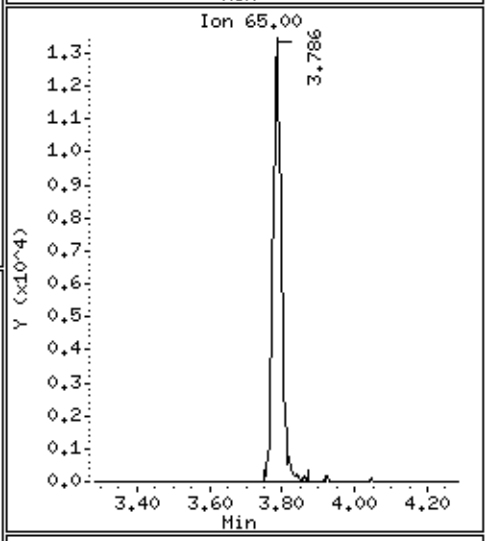
23 1,1-Dichloroethane

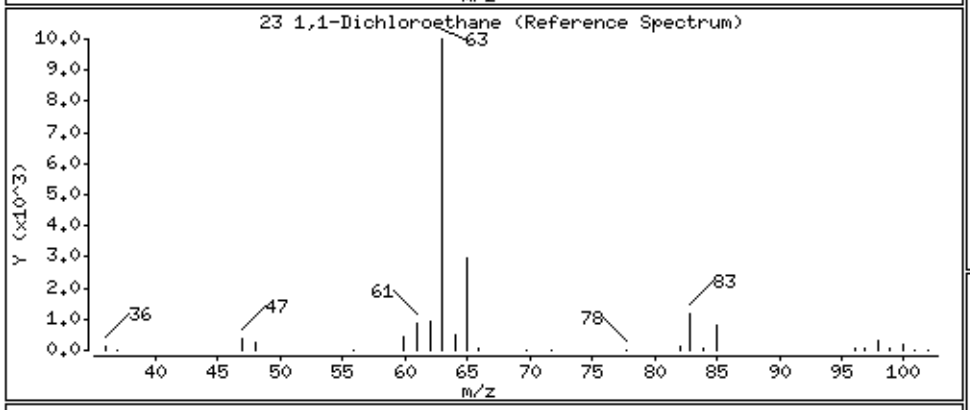
Concentration: 420 ug/L

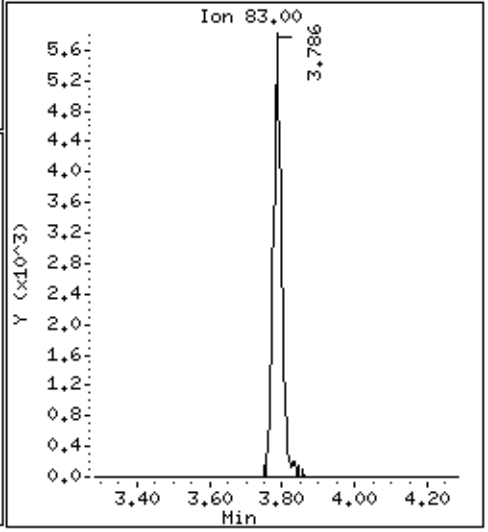


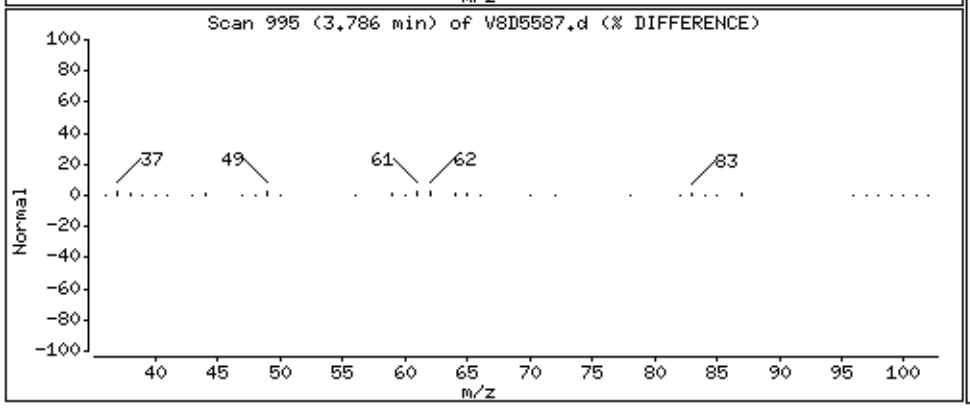












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d

Date : 20-JUN-2014 20:01

Client ID: MW-10R_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-02ADL,,77692,25

Purge Volume: 5.0

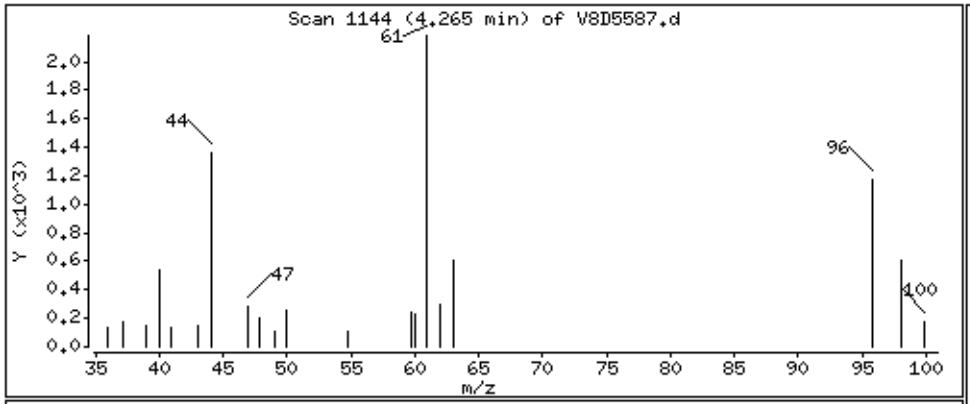
Operator: WL SRC: LIMS

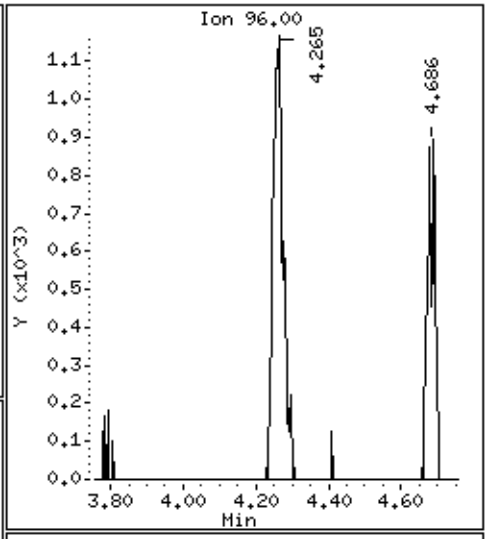
Column phase: DB-624

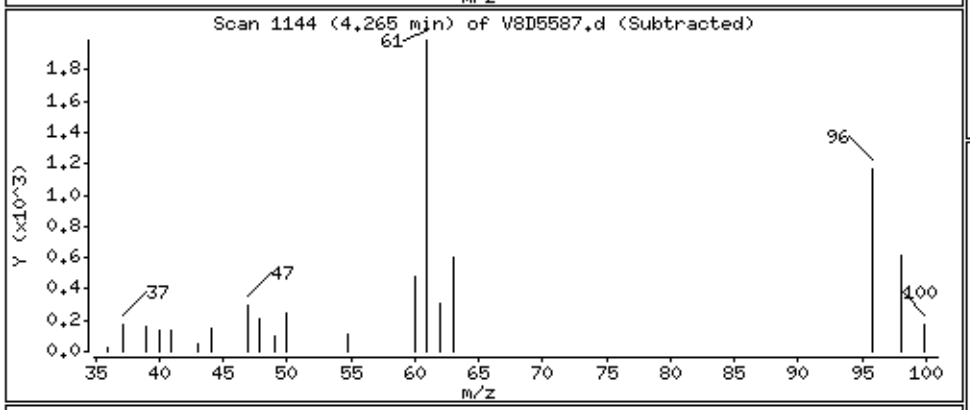
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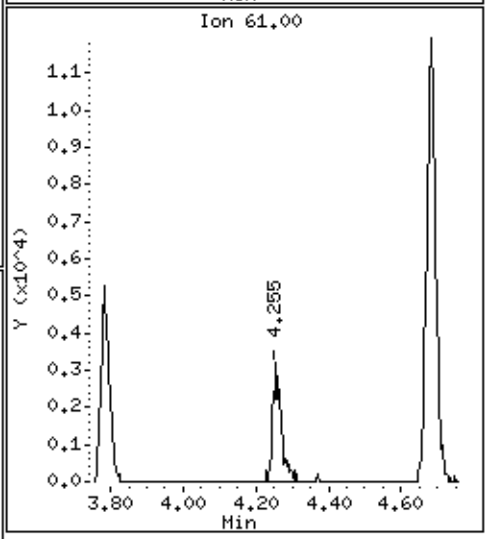
28 cis-1,2-Dichloroethene

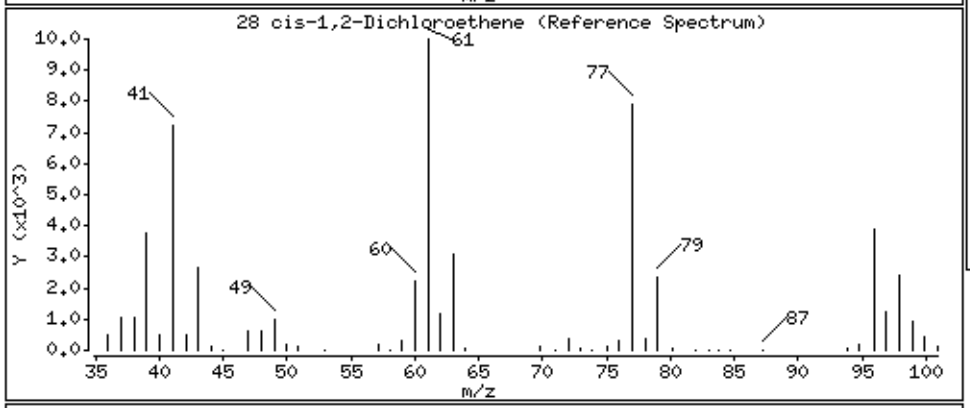
Concentration: 31 ug/L

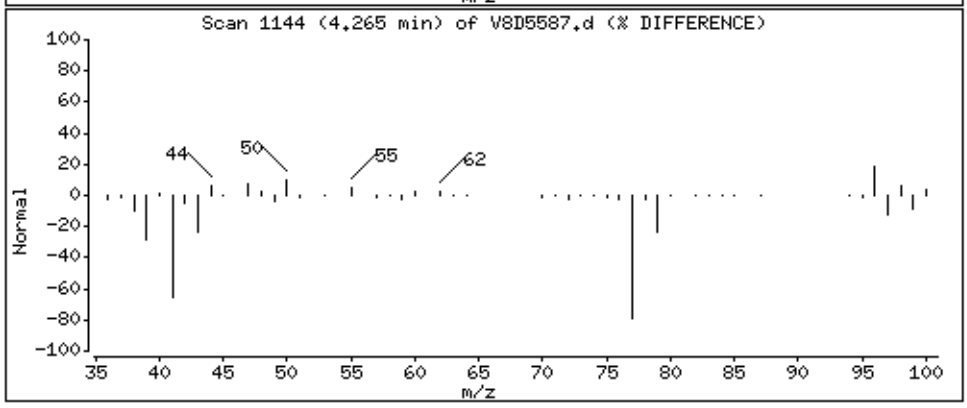












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d

Date : 20-JUN-2014 20:01

Client ID: MW-10R_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-02ADL,,77692,25

Purge Volume: 5.0

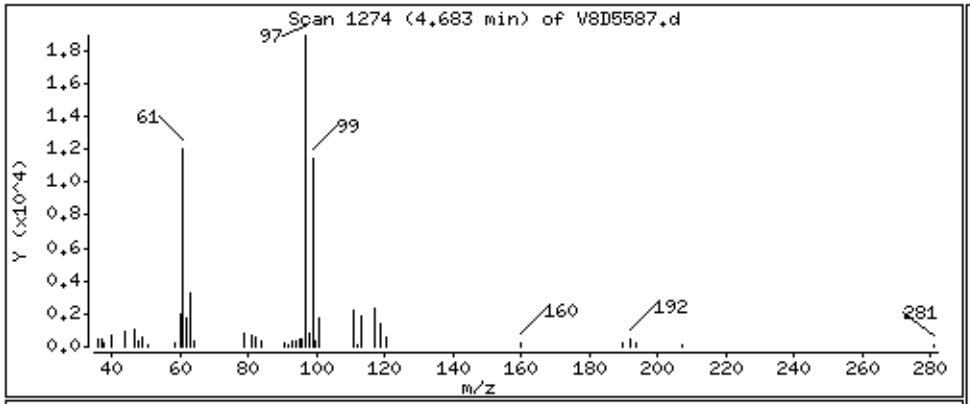
Operator: WL SRC: LIMS

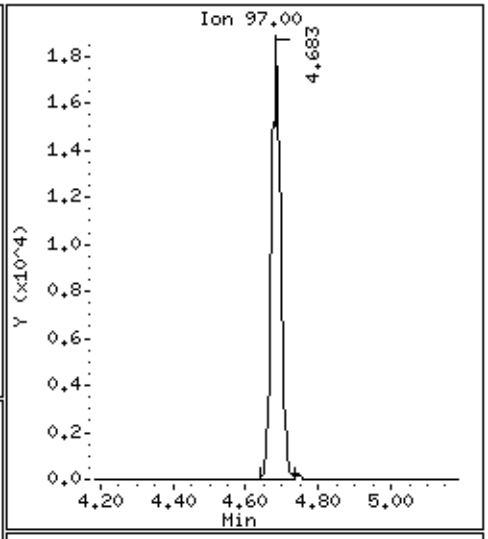
Column phase: DB-624

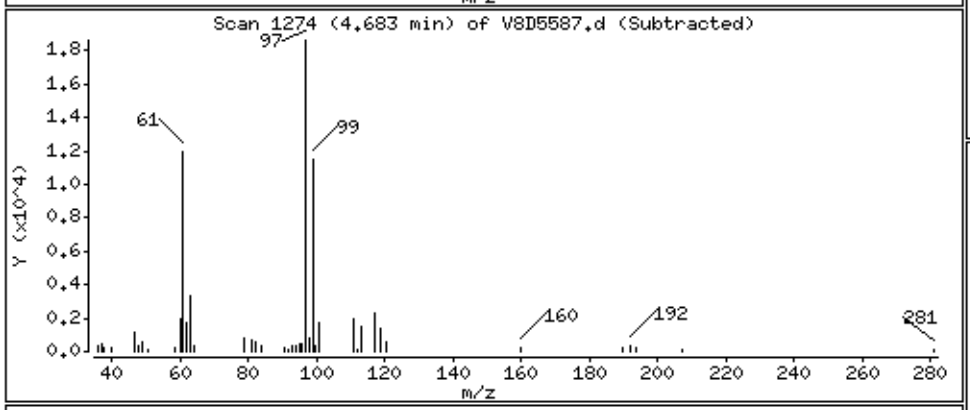
Column diameter: 0.25

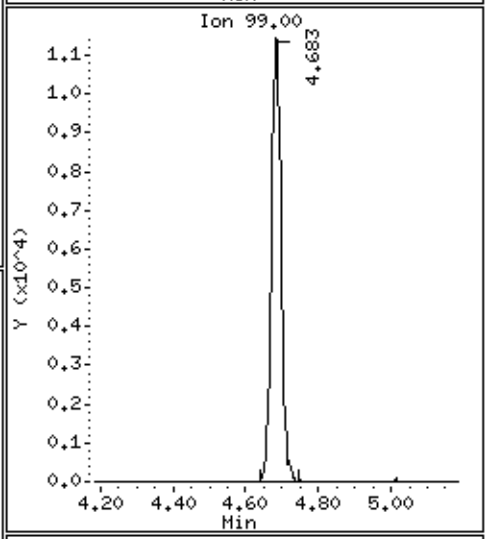
37 1,1,1-Trichloroethane

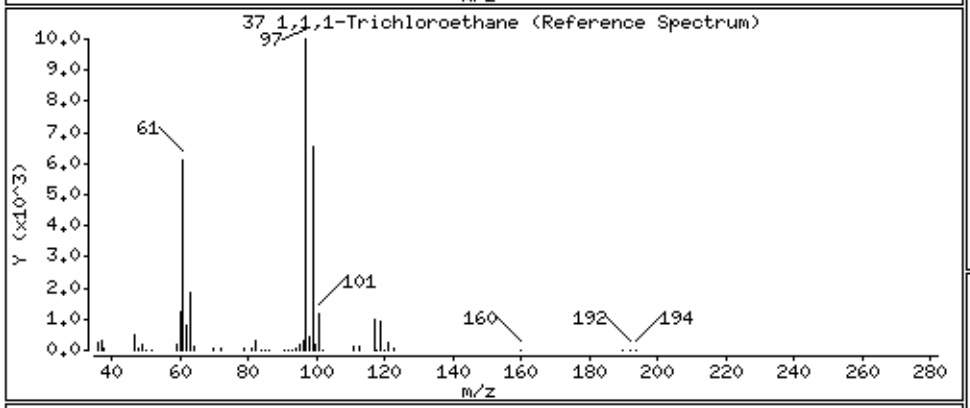
Concentration: 200 ug/L

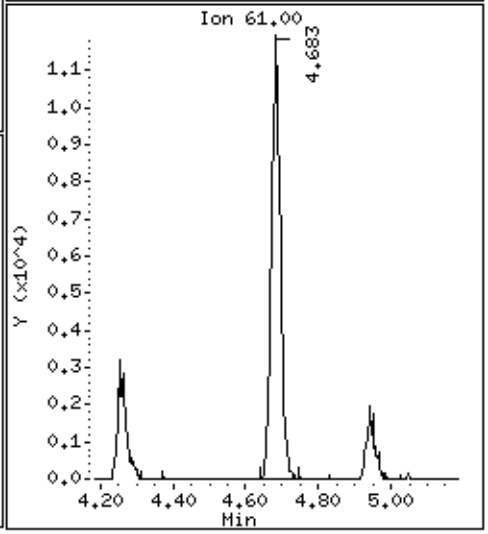


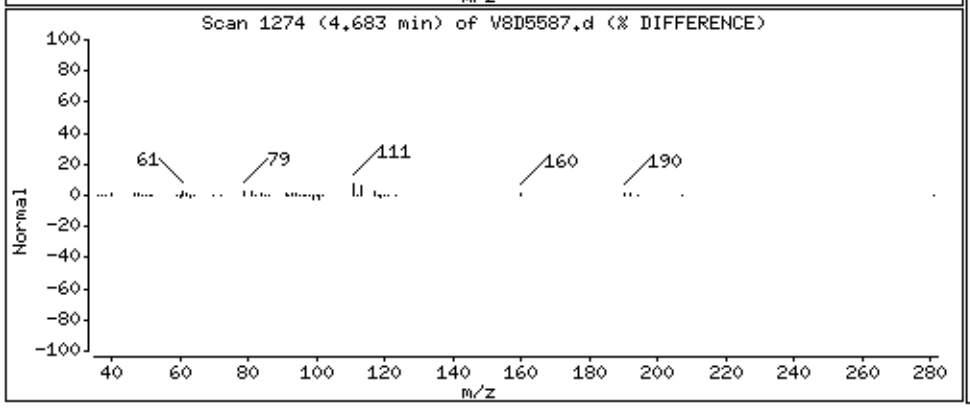












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d

Date : 20-JUN-2014 20:01

Client ID: MW-10R_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-02ADL,,77692,25

Purge Volume: 5.0

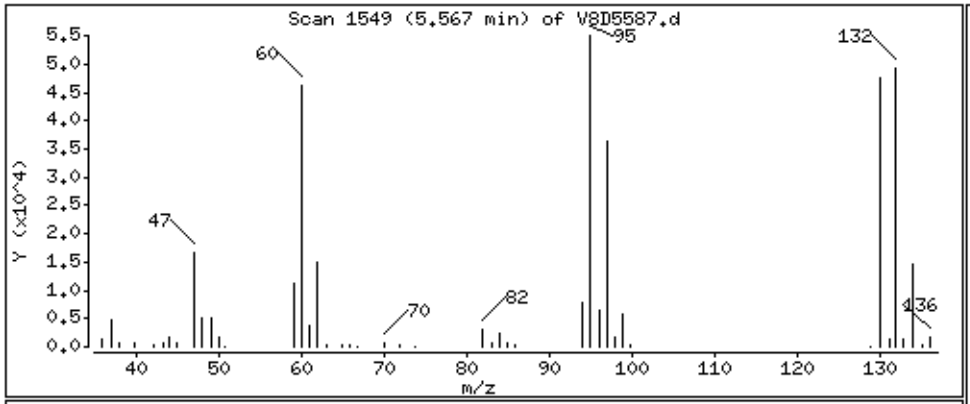
Operator: WL SRC: LIMS

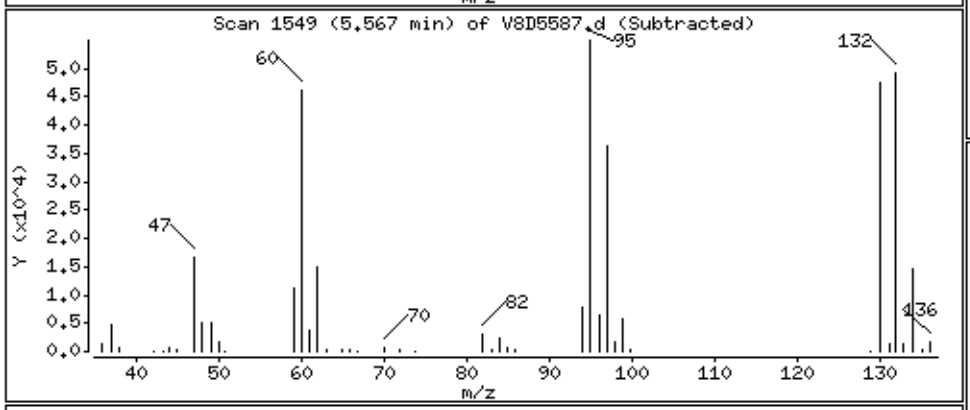
Column phase: DB-624

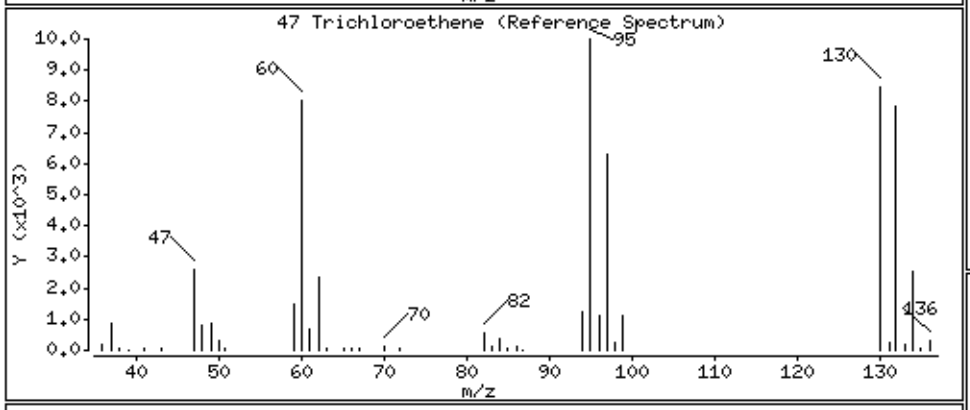
Column diameter: 0.25

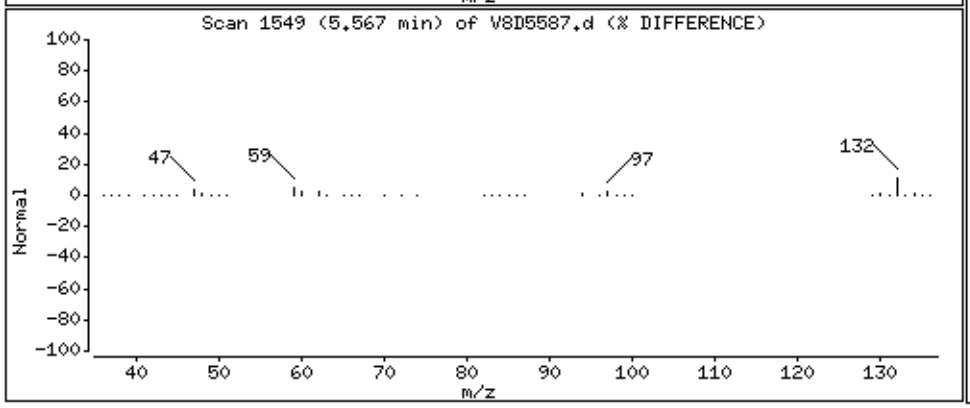
47 Trichloroethene

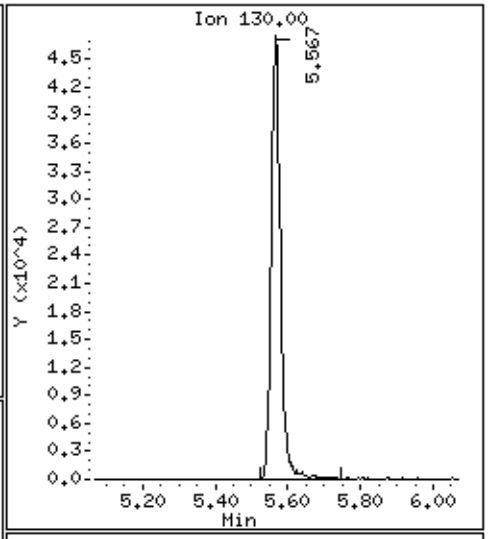
Concentration: 1200 ug/L

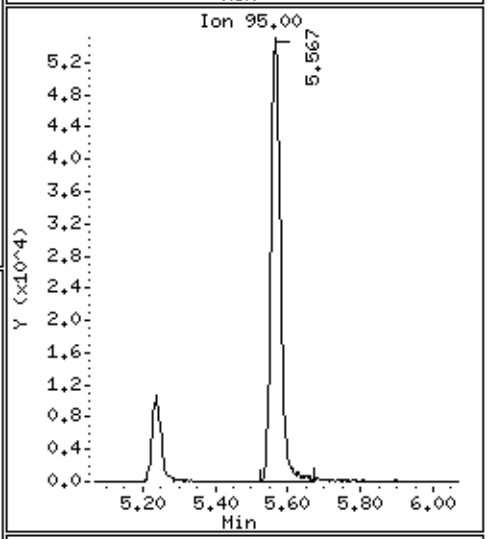


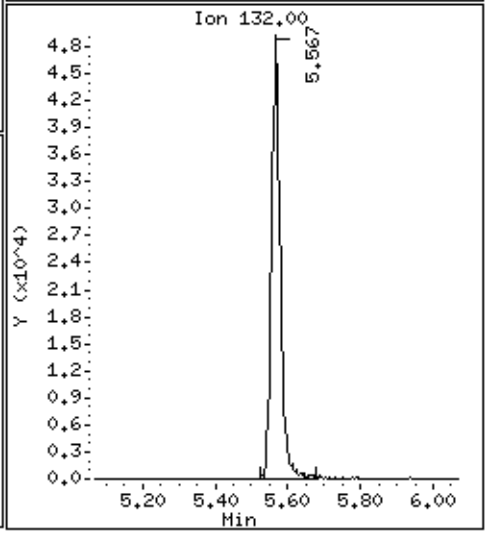












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5587.d

Date : 20-JUN-2014 20:01

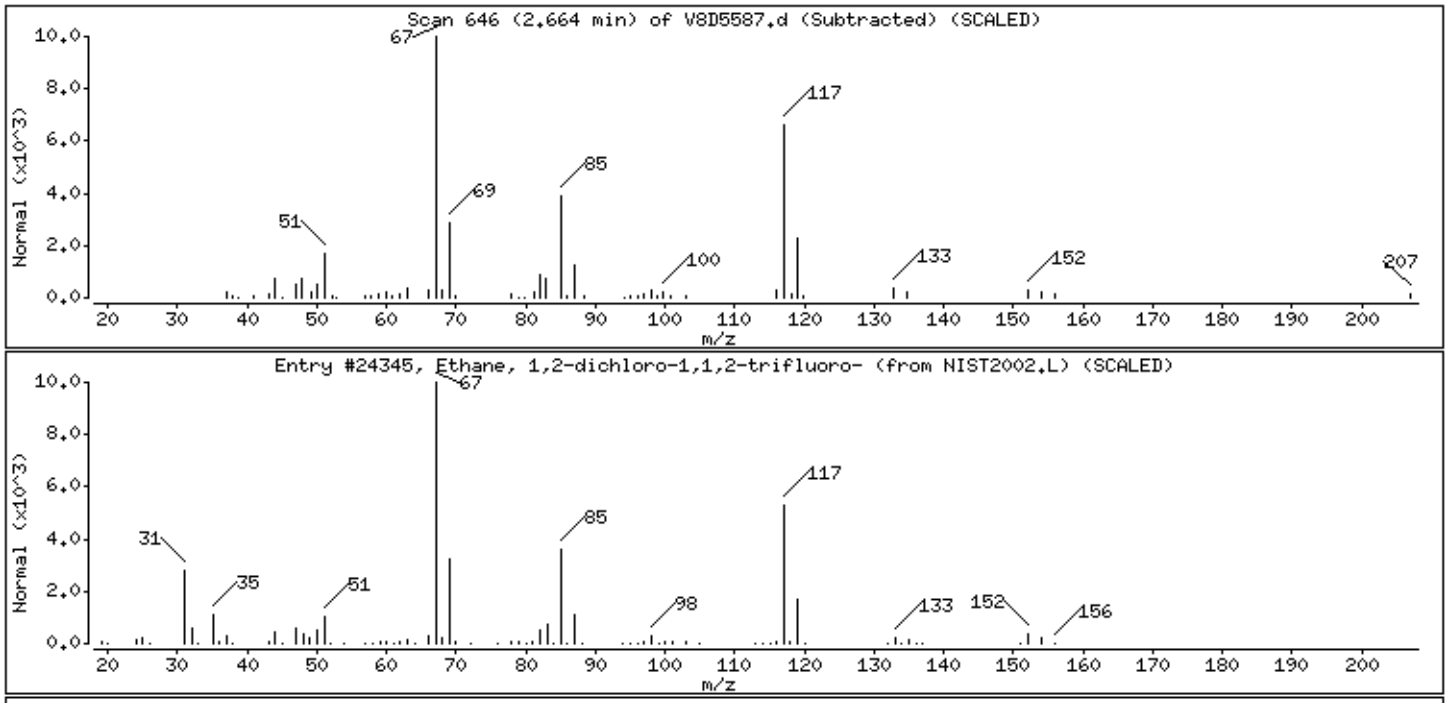
Client ID: MW-10R_6/16/14DL Instrument: V10.i

Sample Info: 5ML,N1055-02ADL,,77692,25

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(1)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5518.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	4.5	
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	11	
156-60-5	trans-1,2-Dichloroethene	4.2	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	730	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	26	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	0.80	J
71-55-6	1,1,1-Trichloroethane	5400	E
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	7900	E
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

EPA SAMPLE NO.
MW-22R(1)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5518.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	3.9	
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	120	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	17000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R(1)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5518.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	240	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5518.d
Lab Smp Id: N1055-03A Client Smp ID: MW-22R(1)_6/16/14
Inj Date : 19-JUN-2014 11:09
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-03A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
4	Vinyl Chloride	62	1.853	1.856	(0.354)	15745	4.47411	4.5(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.844	2.853	(0.543)	42096394	17375.6	17000(AQM)
18	Methylene Chloride	84	3.229	3.233	(0.616)	22938	10.7877	11(Q)
21	trans-1,2-Dichloroethene	96	3.455	3.454	(0.659)	8601	4.23595	4.2
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	3940774	726.260	730(A)
28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	54979	25.6734	26
35	Chloroform	83	4.519	4.509	(0.863)	3912	0.79673	0.80
$ 36	Dibromofluoromethane	113	4.647	4.644	(0.887)	101776	56.0317	56
37	1,1,1-Trichloroethane	97	4.667	4.683	(0.891)	26717876	5422.49	5400(AQM)M6 AM 06/27
$ 42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.944)	15284	49.7700	50
M 50	1,2-Dichloroethene (Total)	96				63580	29.9093	30
* 46	Fluorobenzene	96	5.239	5.236	(1.000)	244085	50.0000	
47	Trichloroethene	130	5.561	5.567	(1.061)	15842698	7864.68	7900(A)
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	300067	45.8302	46
63	Tetrachloroethene	164	7.345	7.345	(0.893)	8672	3.93577	3.9(Q)
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	286112	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	664562	115.422	120
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.158)	180482	51.3492	51
* 92	1,4-Dichlorobenzene-d4	152	10.728	10.728	(1.000)	142620	50.0000	

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d
Report Date: 27-Jun-2014 13:48

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.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5518.d
Lab Smp Id: N1055-03A Client Smp ID: MW-22R(1)_6/16/14
Inj Date : 19-JUN-2014 11:09
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-03A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

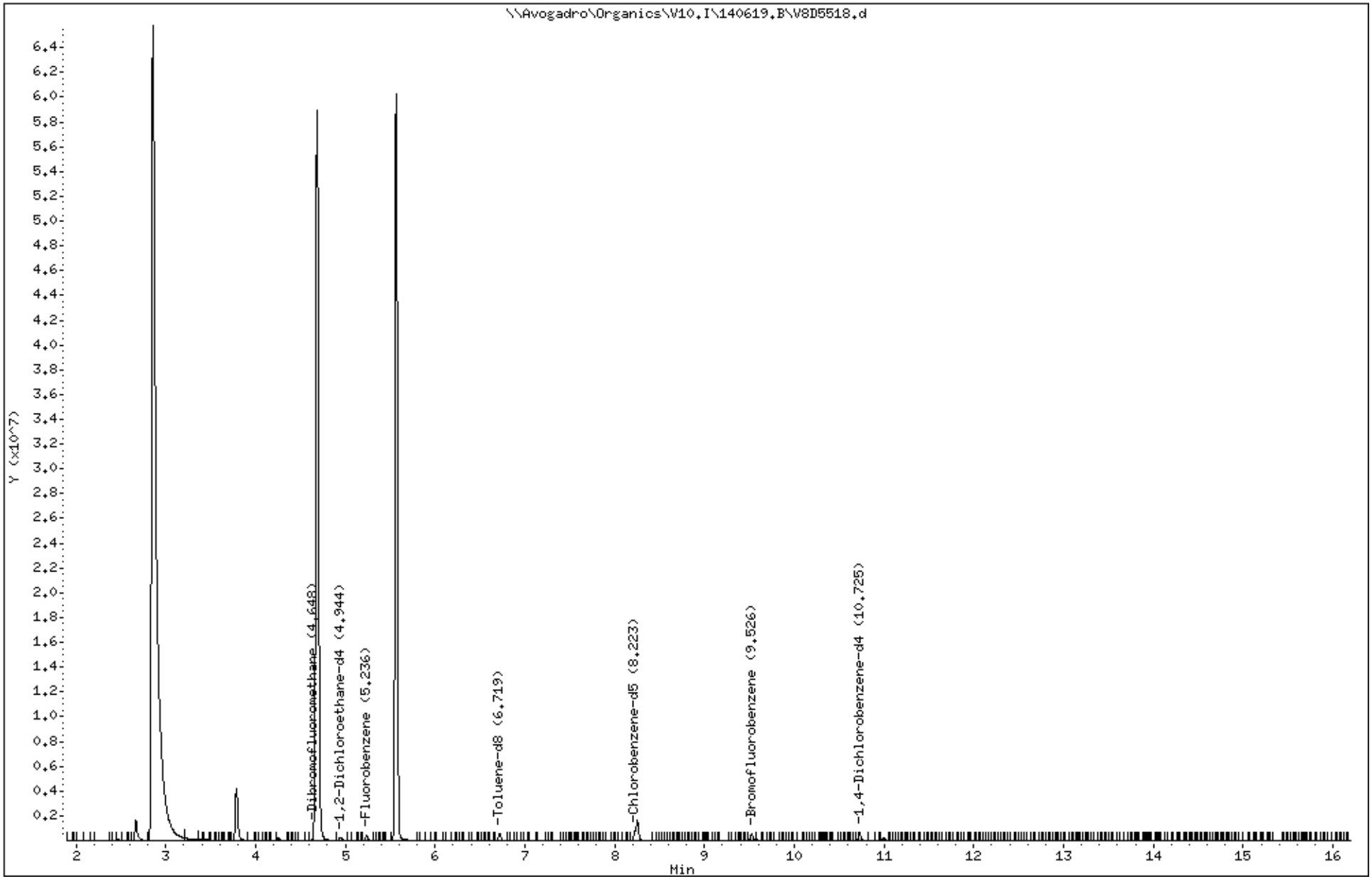
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.240	683423	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	3219089	235.511987	240	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d
Date : 19-JUN-2014 11:09
Client ID: MW-22R(1)_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-03A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

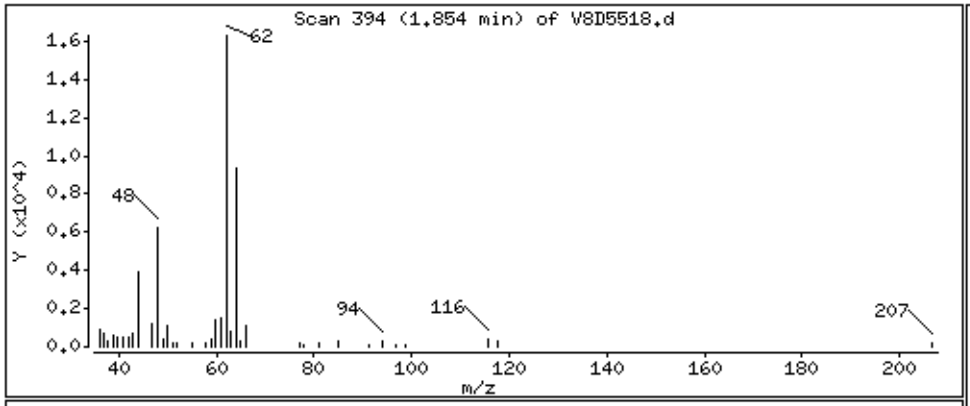
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

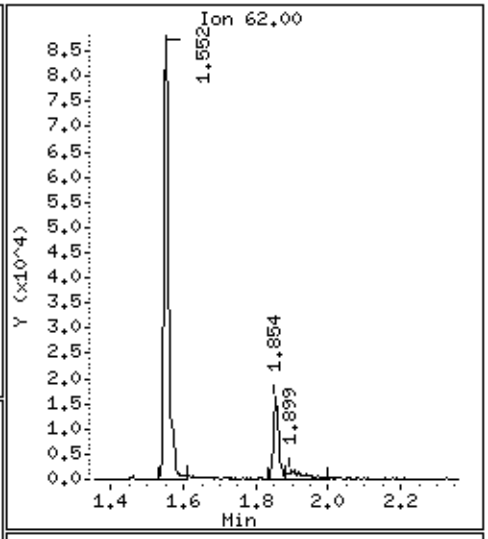
Sample Info: 5ML,N1055-03A,,77659

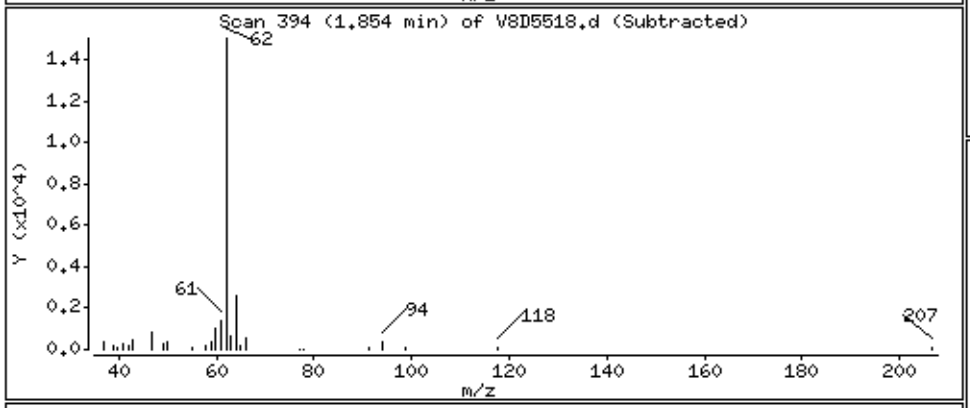
Purge Volume: 5.0 Operator: WL SRC: LIMS

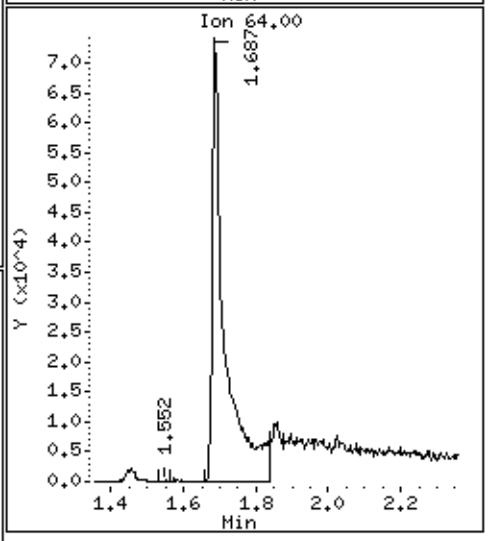
Column phase: DB-624 Column diameter: 0.25

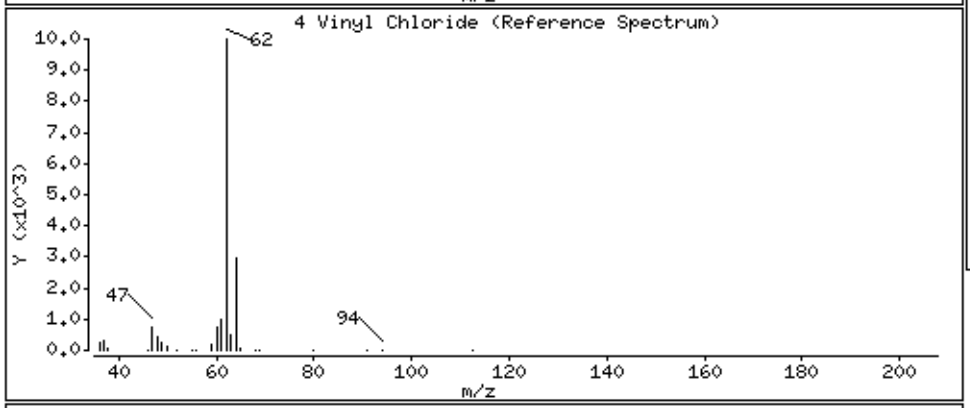
4 Vinyl Chloride Concentration: 4.5 ug/L

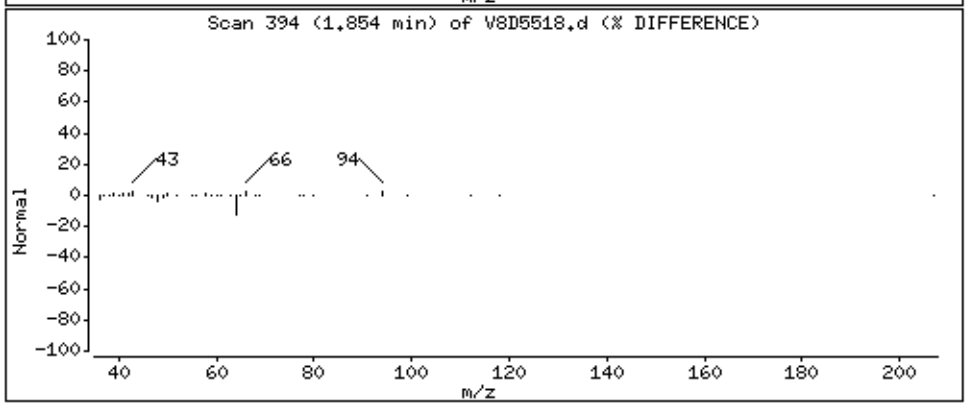












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

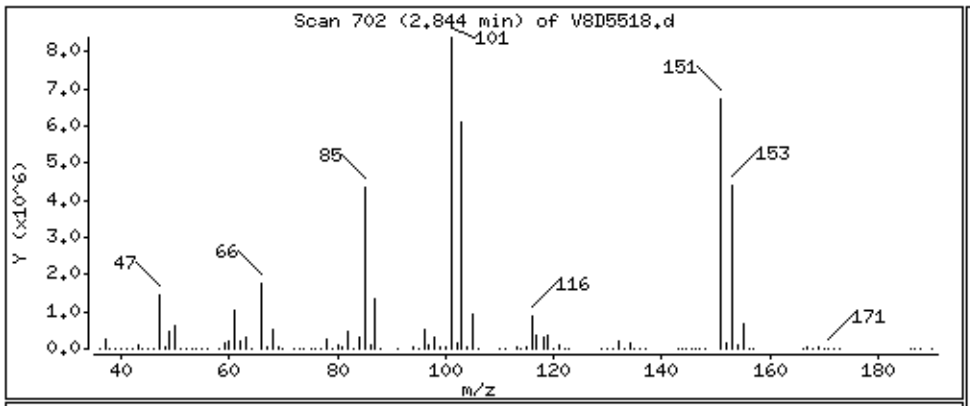
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

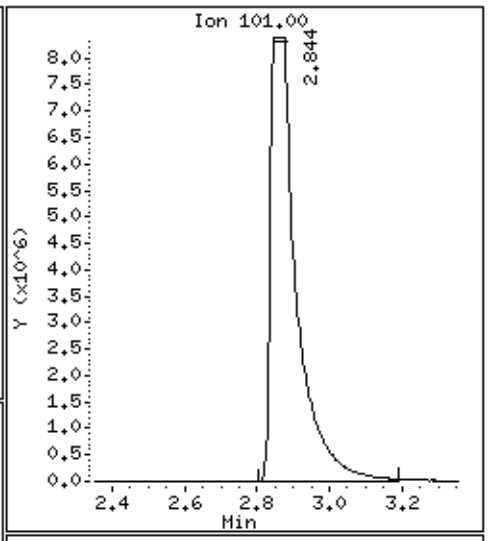
Sample Info: 5ML,N1055-03A,,77659

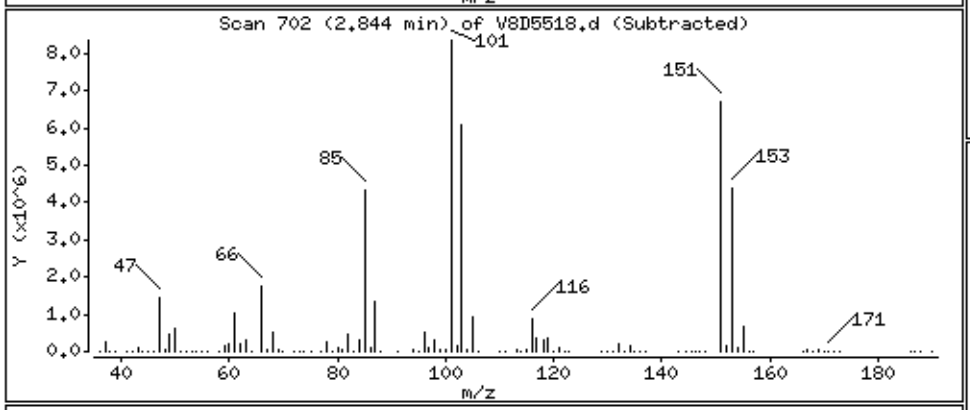
Purge Volume: 5.0 Operator: WL SRC: LIMS

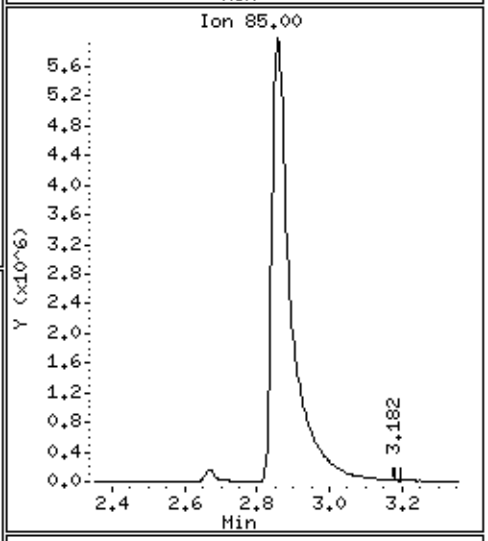
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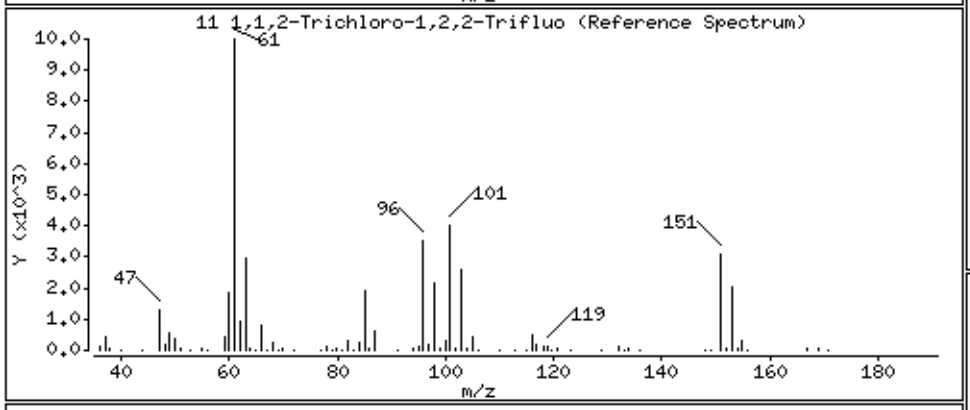
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 17000 ug/L

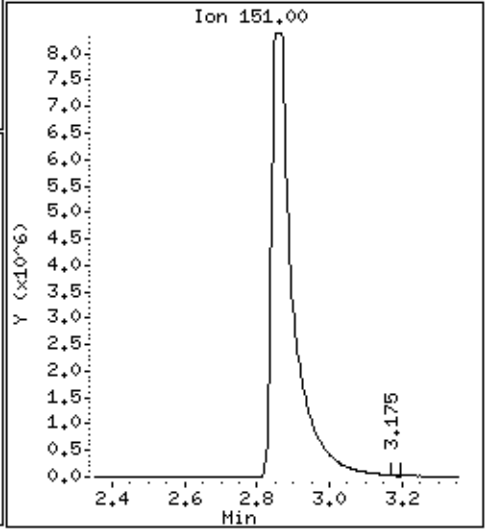


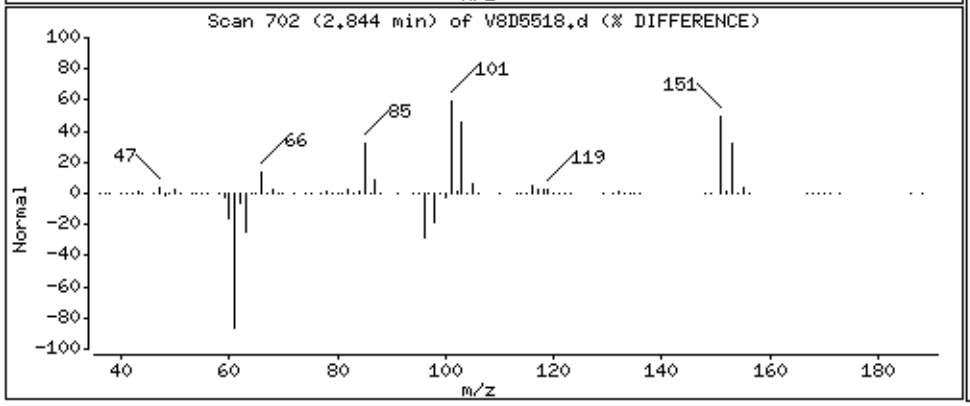












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

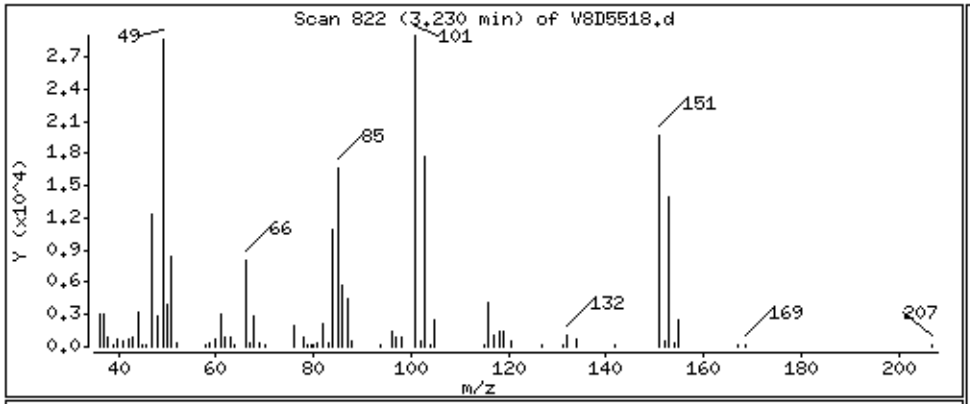
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

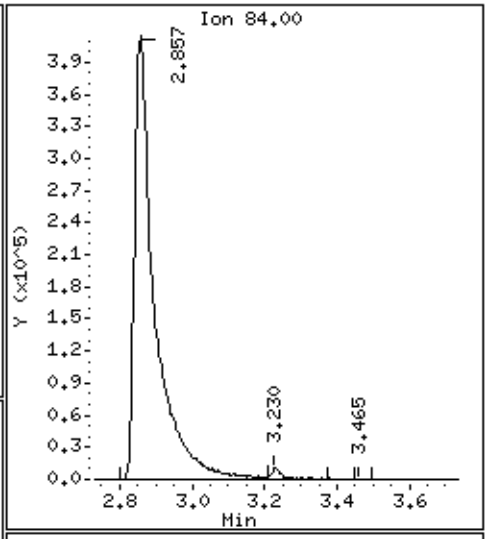
Sample Info: 5ML,N1055-03A,,77659

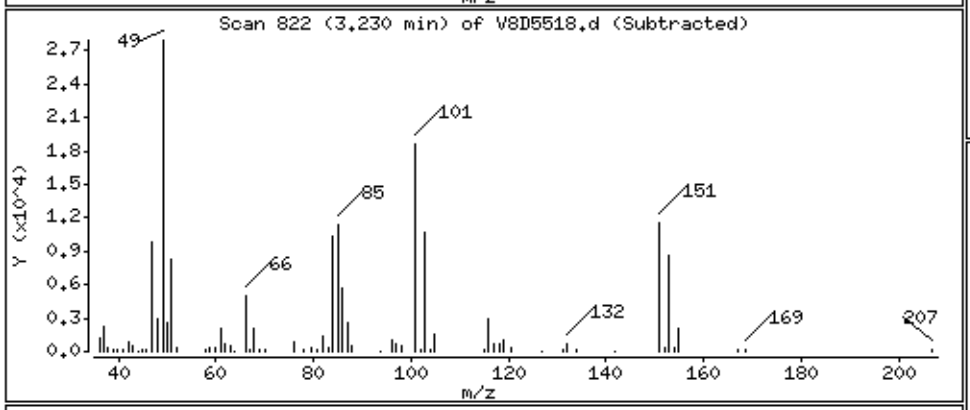
Purge Volume: 5.0 Operator: WL SRC: LIMS

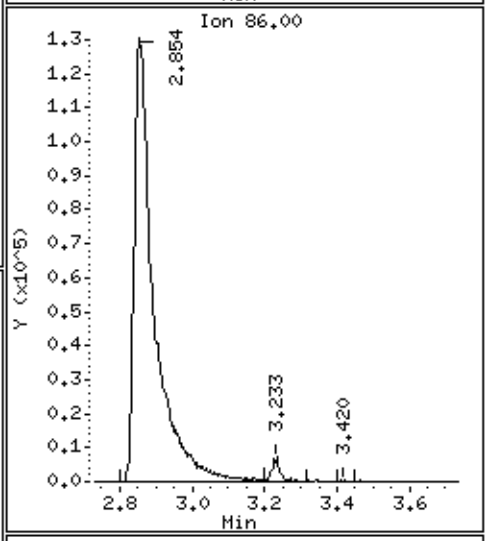
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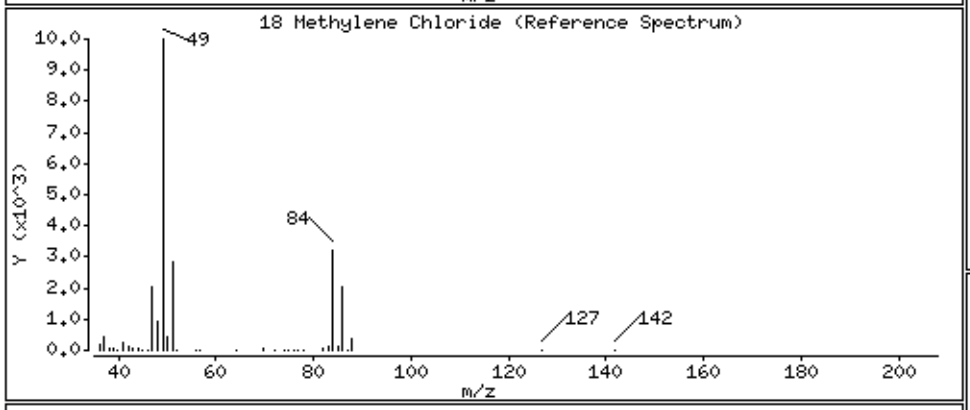
18 Methylene Chloride Concentration: 11 ug/L

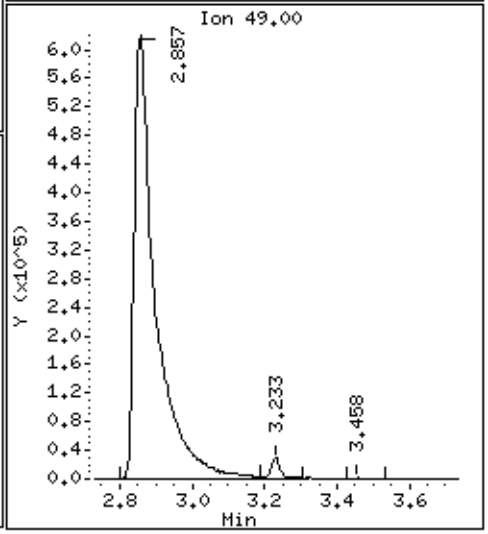


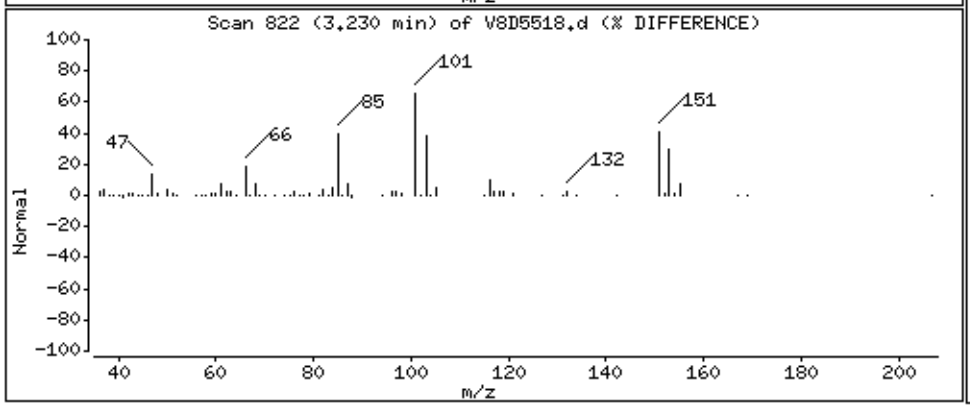












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

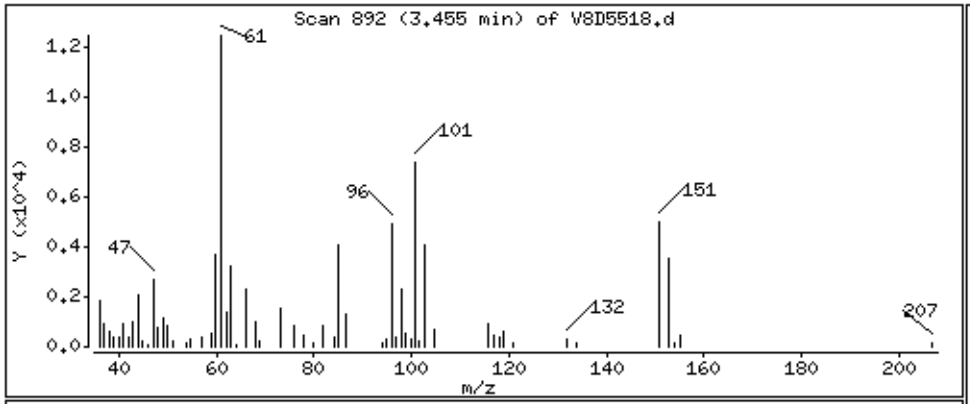
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

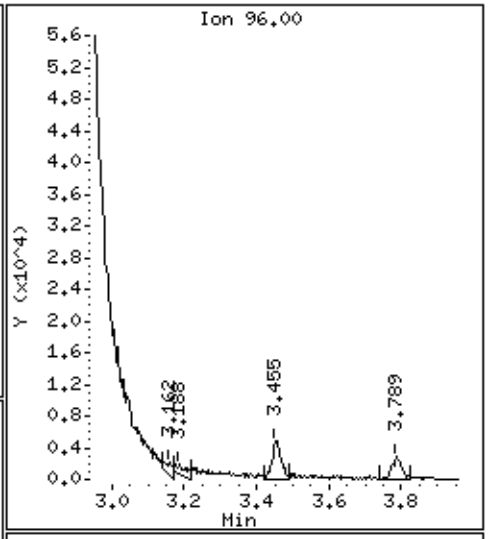
Sample Info: 5ML,N1055-03A,,77659

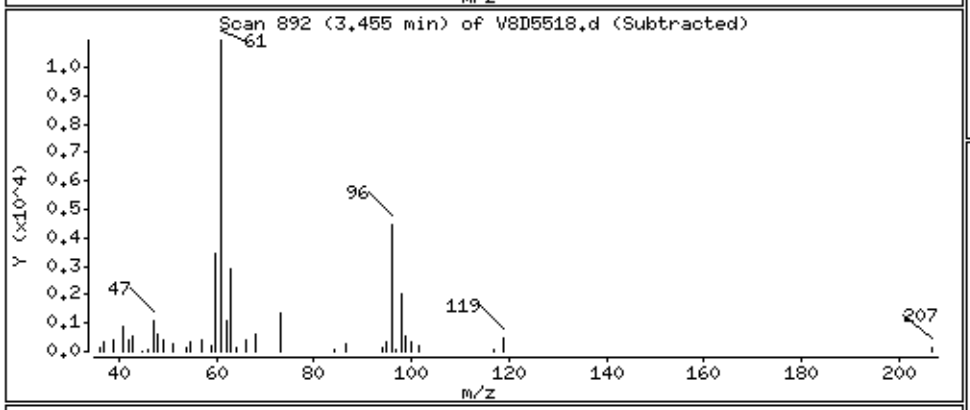
Purge Volume: 5.0 Operator: WL SRC: LIMS

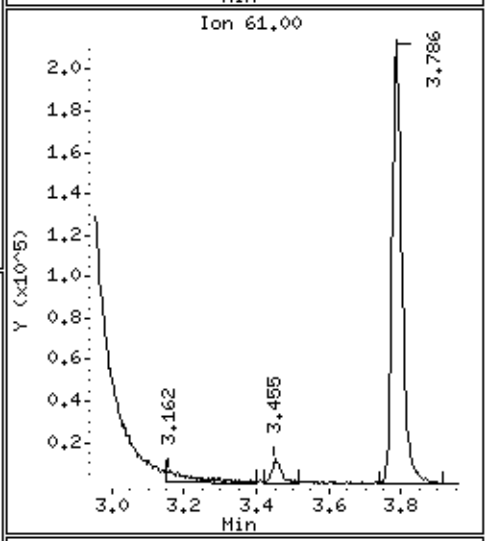
Column phase: DB-624 Column diameter: 0.25

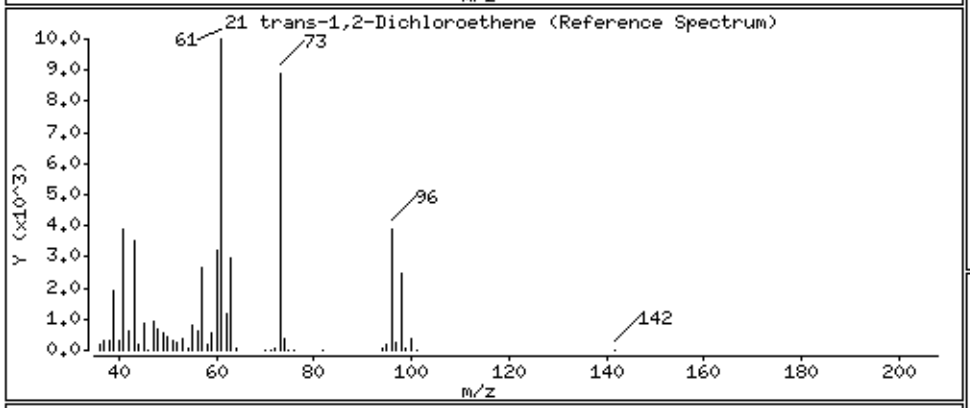
21 trans-1,2-Dichloroethene Concentration: 4.2 ug/L

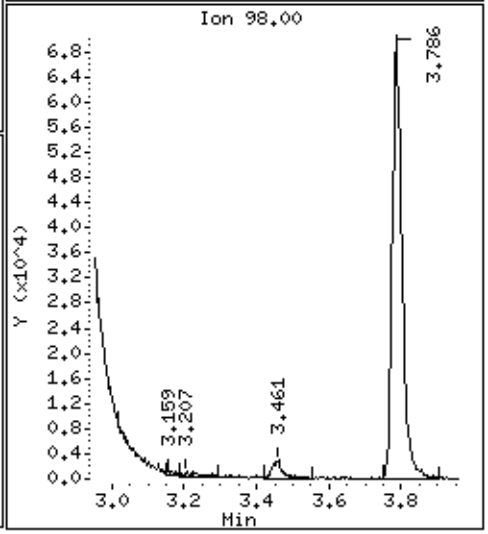


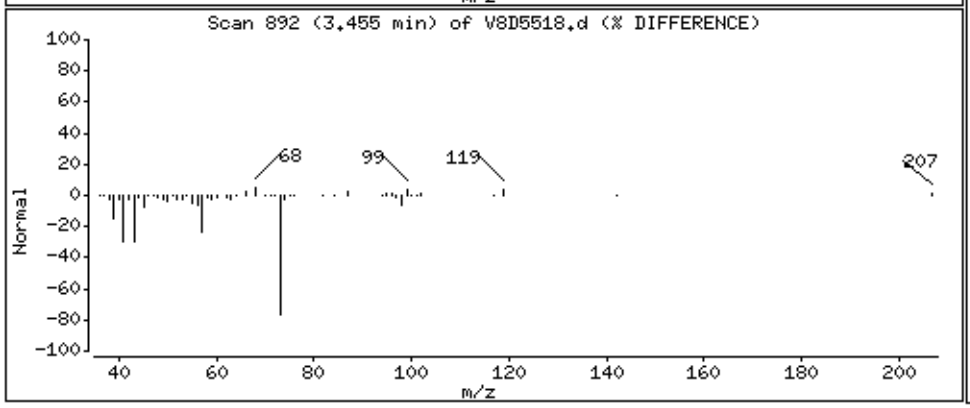












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

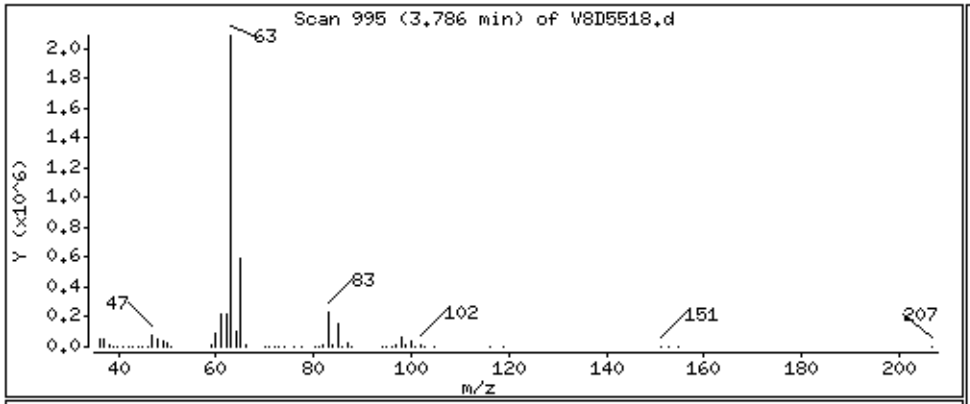
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

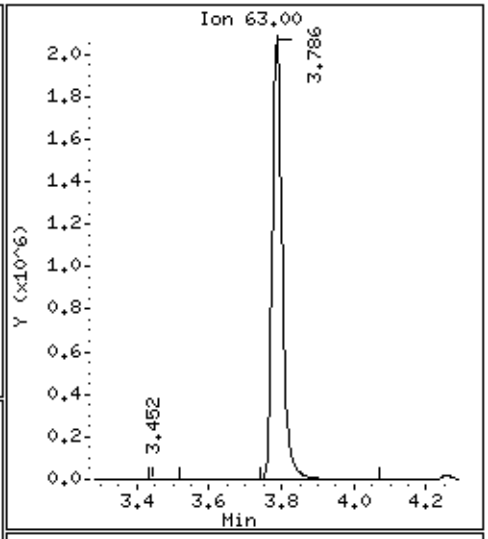
Sample Info: 5ML,N1055-03A,,77659

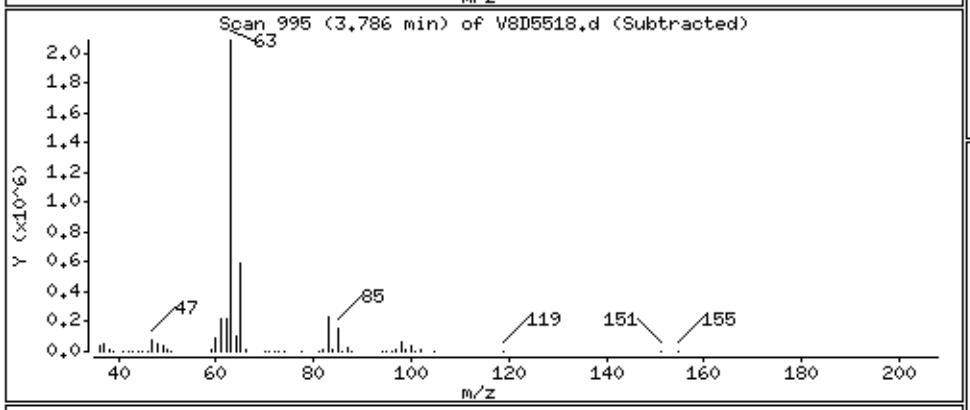
Purge Volume: 5.0 Operator: WL SRC: LIMS

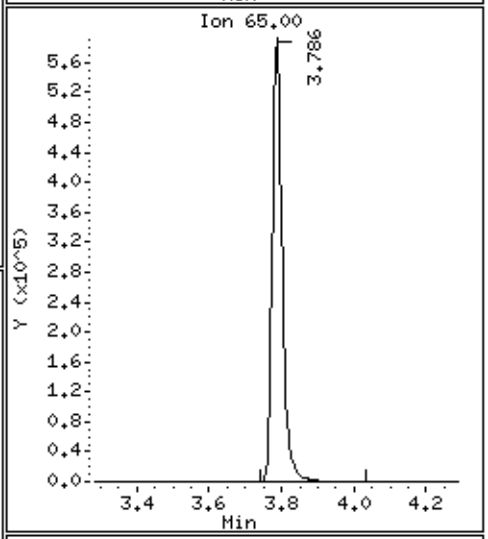
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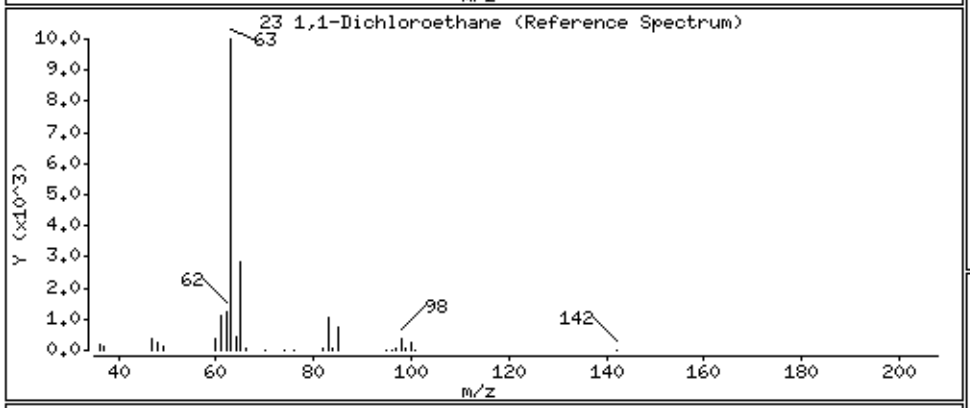
23 1,1-Dichloroethane Concentration: 730 ug/L

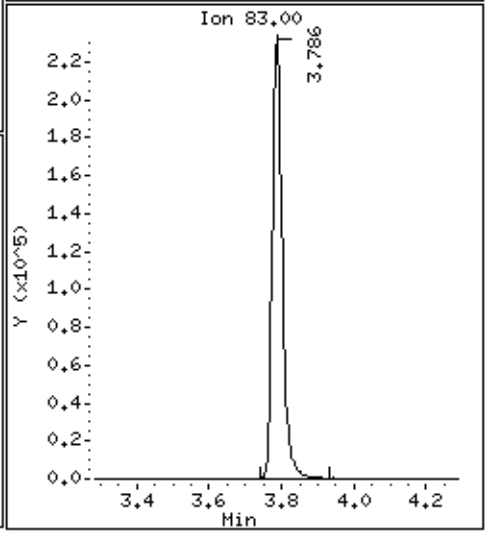


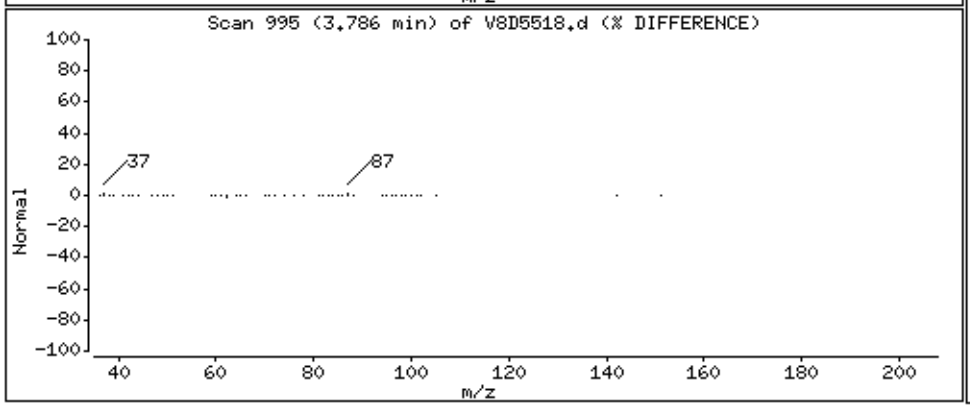












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

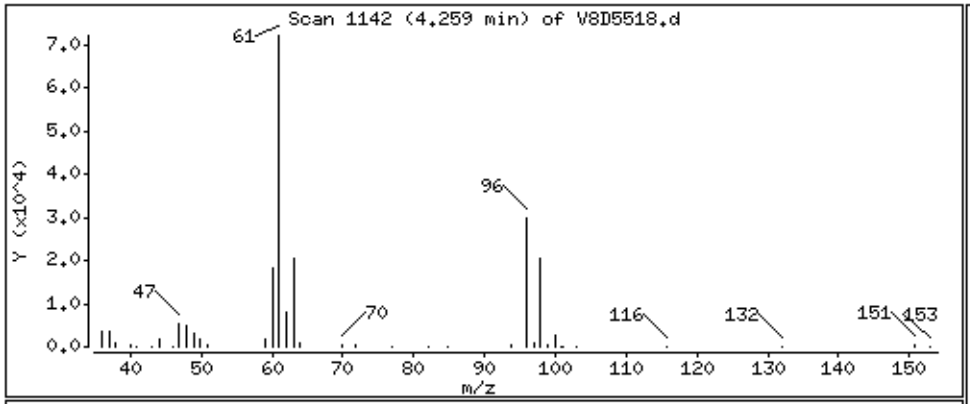
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

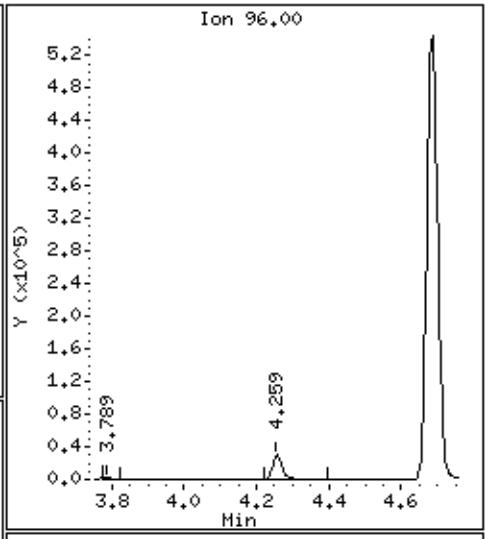
Sample Info: 5ML,N1055-03A,,77659

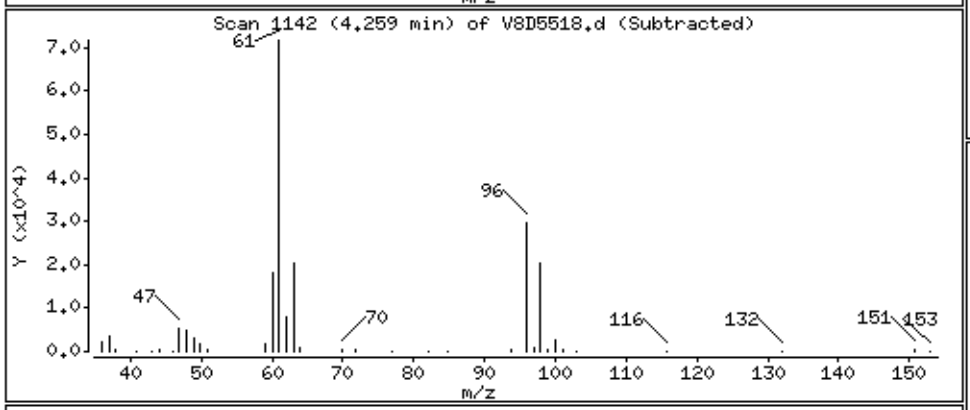
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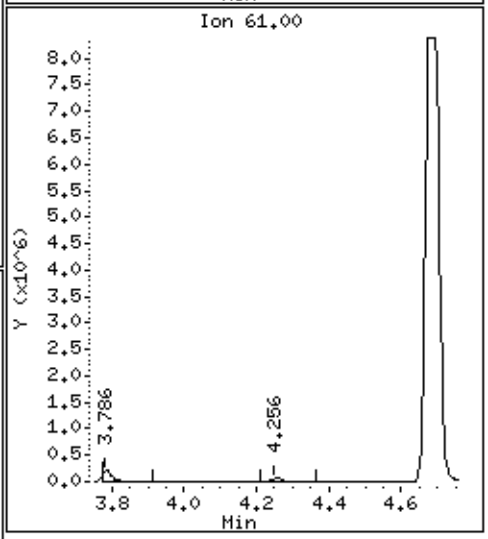
Column phase: DB-624 Column diameter: 0.25

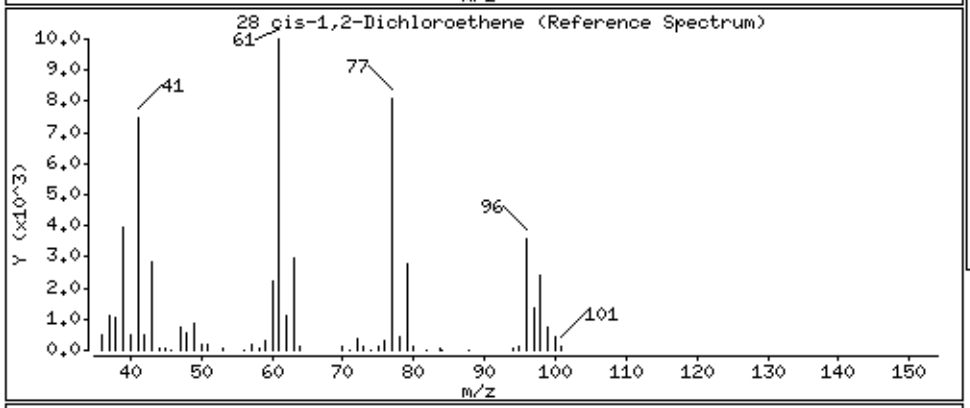
28 cis-1,2-Dichloroethene Concentration: 26 ug/L

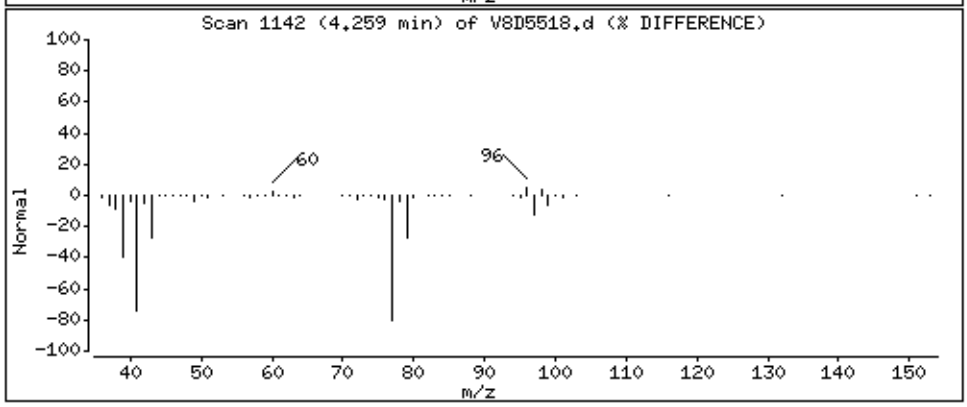












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

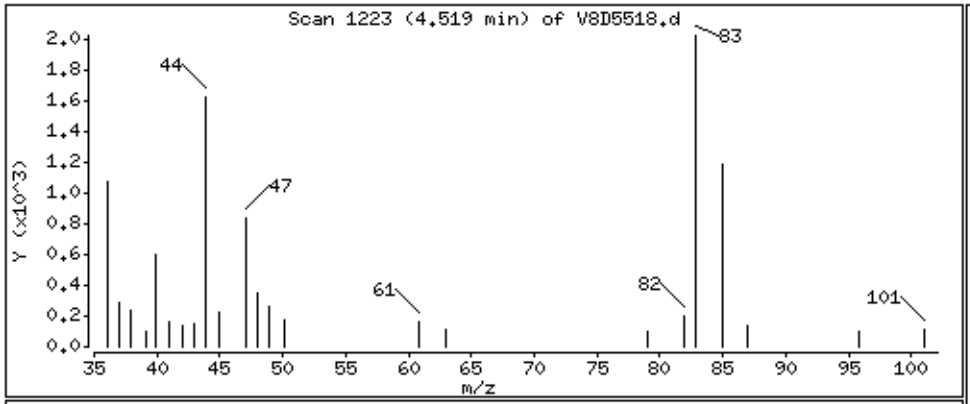
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

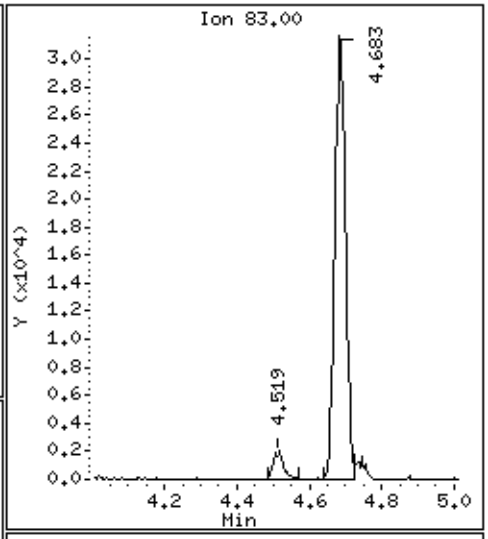
Sample Info: 5ML,N1055-03A,,77659

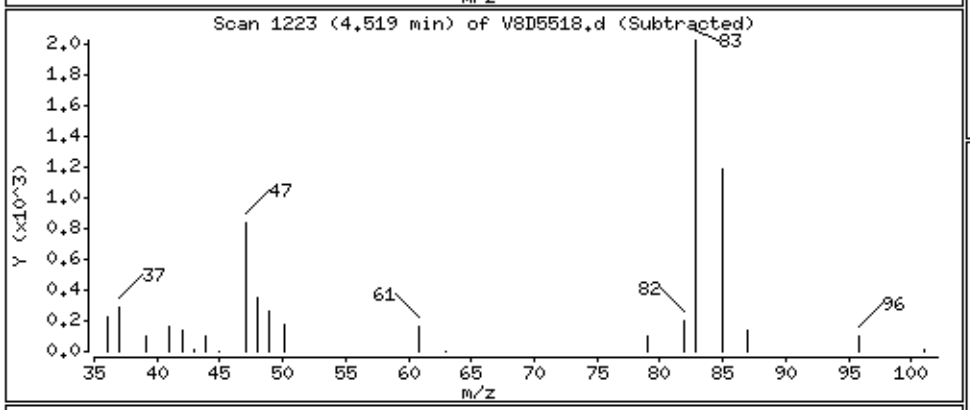
Purge Volume: 5.0 Operator: WL SRC: LIMS

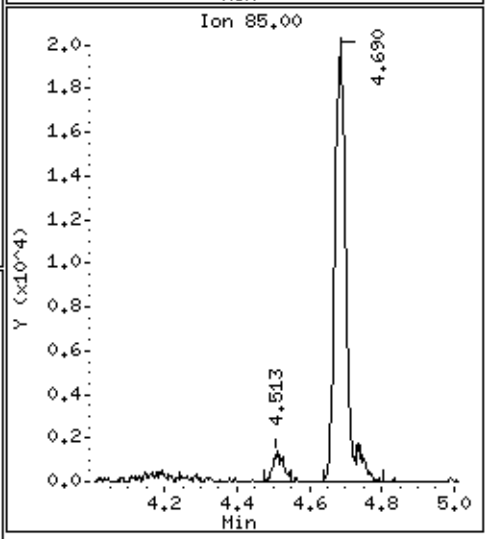
Column phase: DB-624 Column diameter: 0.25

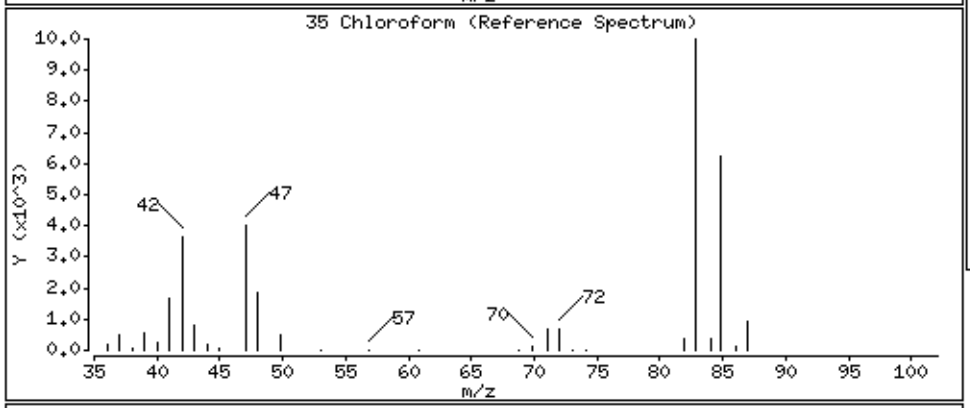
35 Chloroform Concentration: 0.80 ug/L

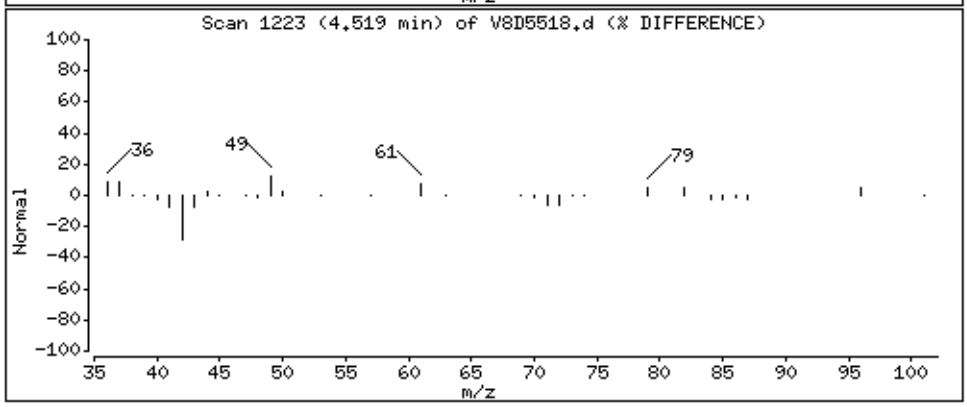












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

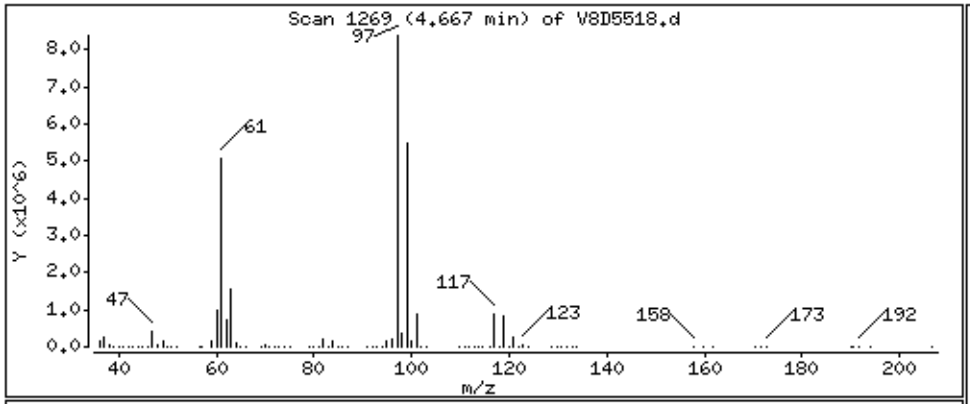
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

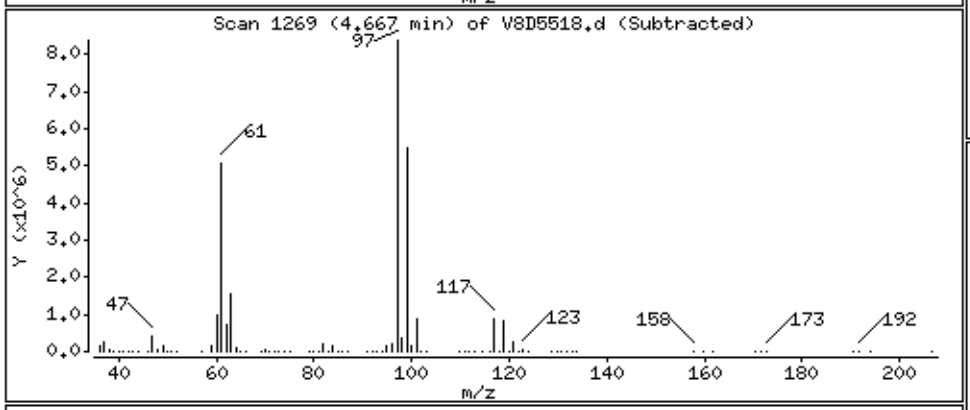
Sample Info: 5ML,N1055-03A,,77659

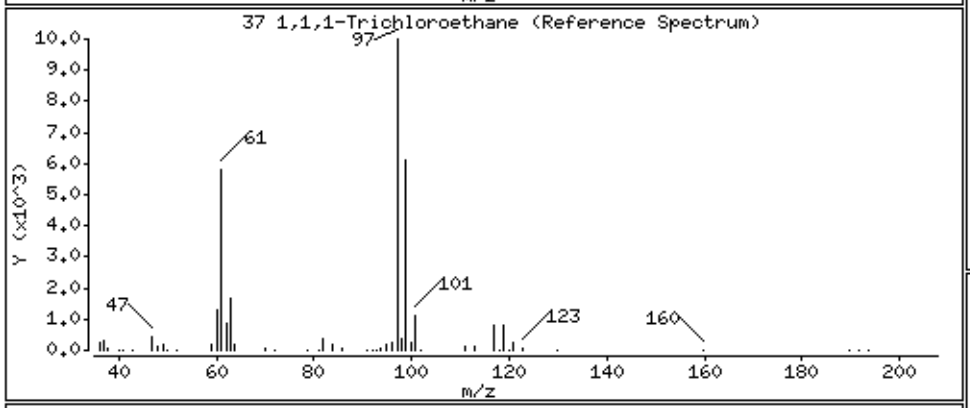
Purge Volume: 5.0 Operator: WL SRC: LIMS

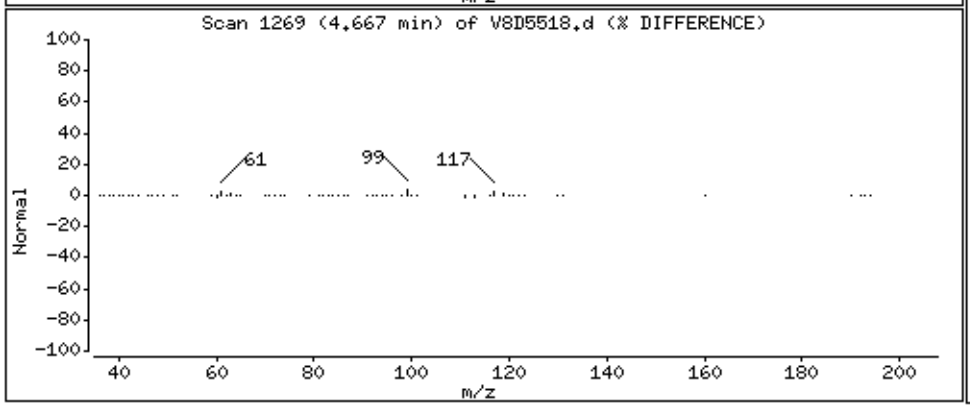
Column phase: DB-624 Column diameter: 0.25

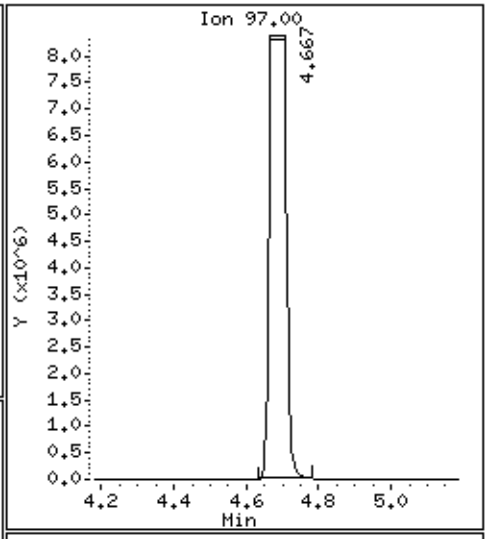
37 1,1,1-Trichloroethane Concentration: 5400 ug/L

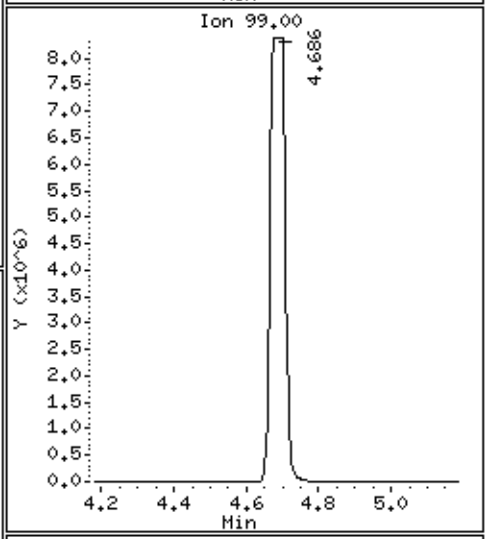


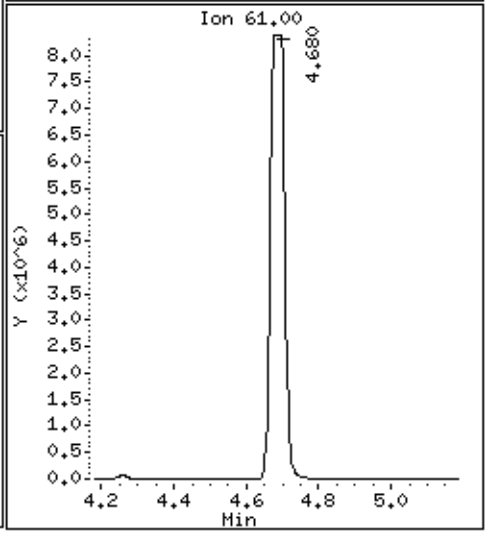












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

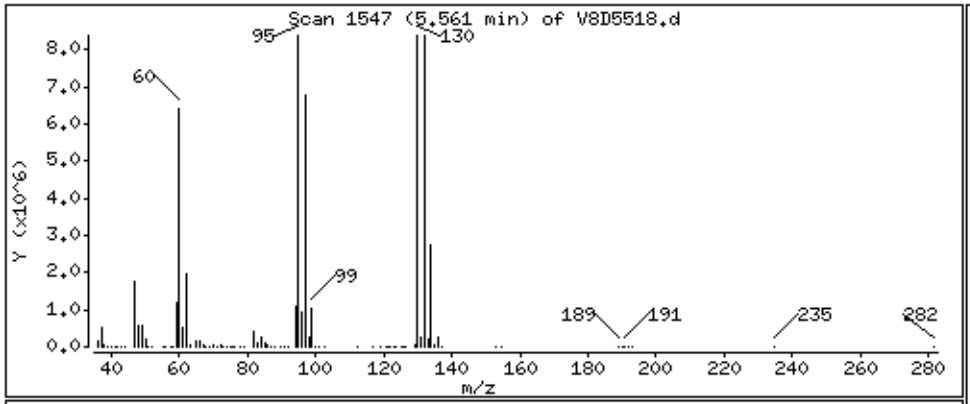
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

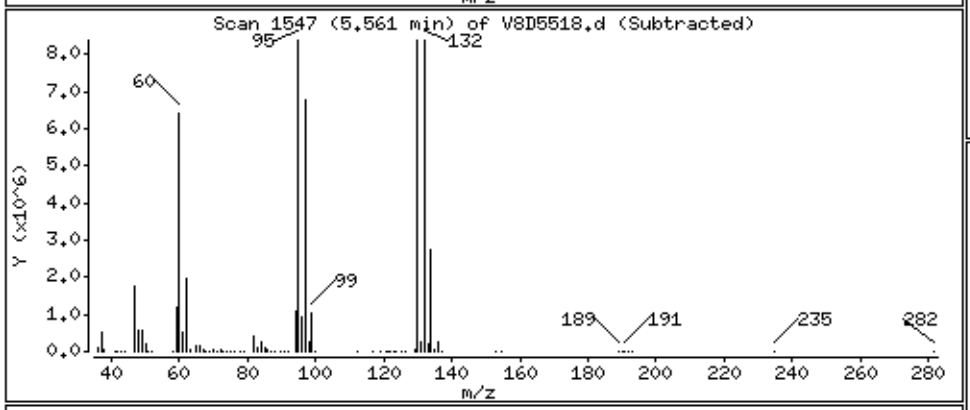
Sample Info: 5ML,N1055-03A,,77659

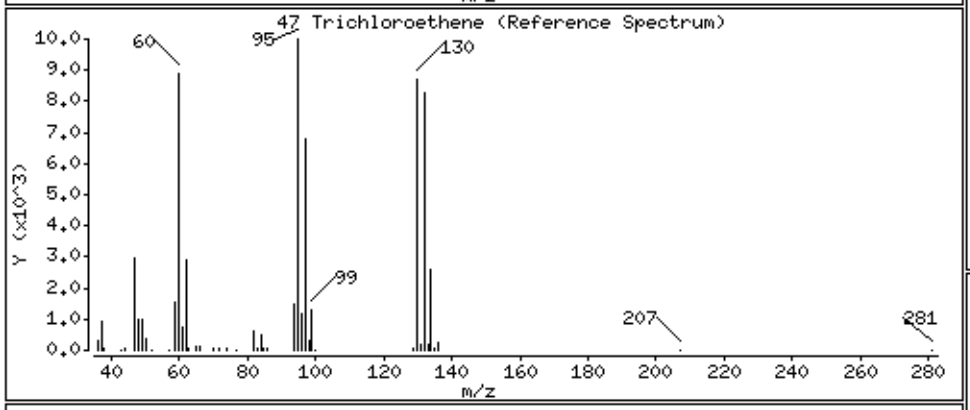
Purge Volume: 5.0 Operator: WL SRC: LIMS

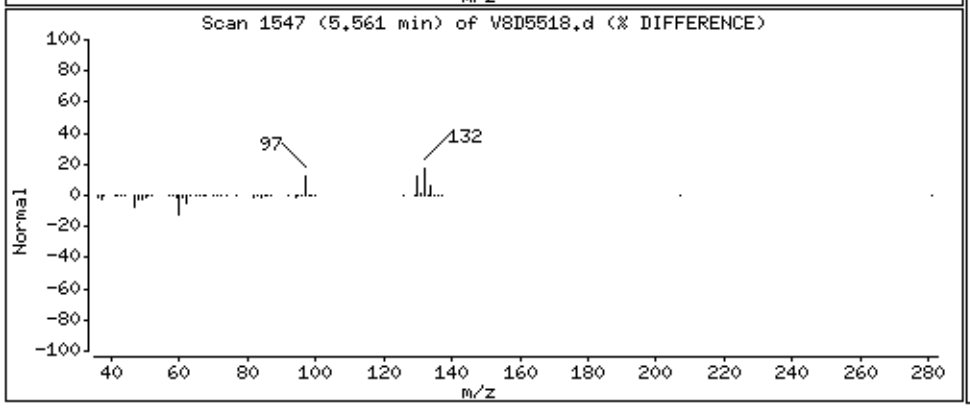
Column phase: DB-624 Column diameter: 0.25

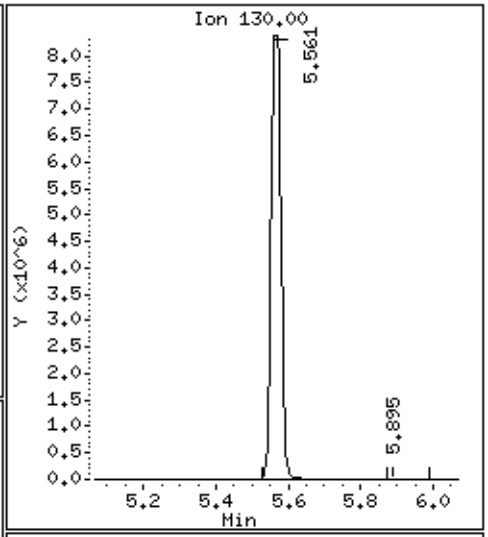
47 Trichloroethene Concentration: 7900 ug/L

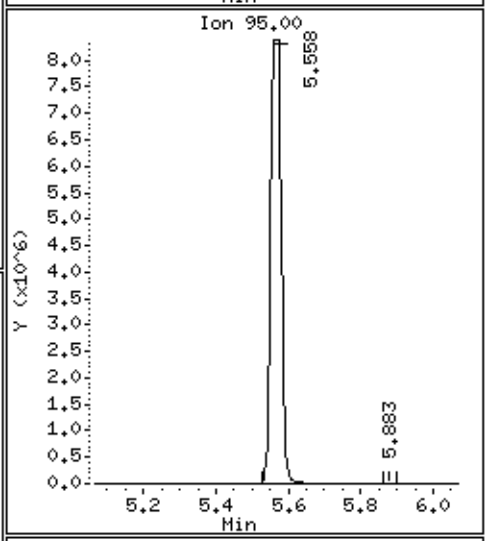


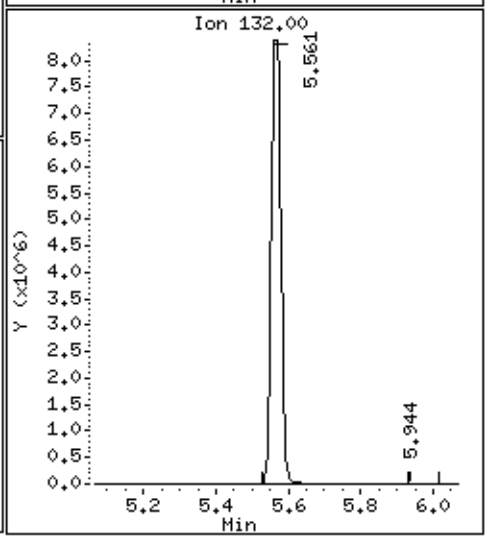












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

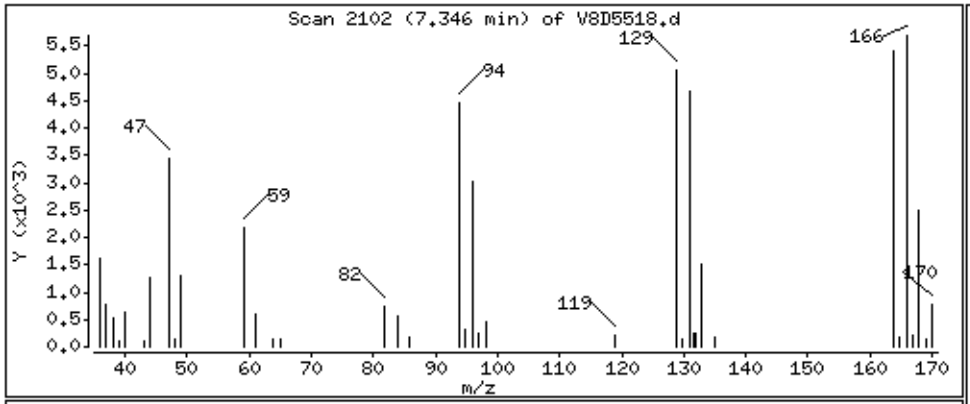
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

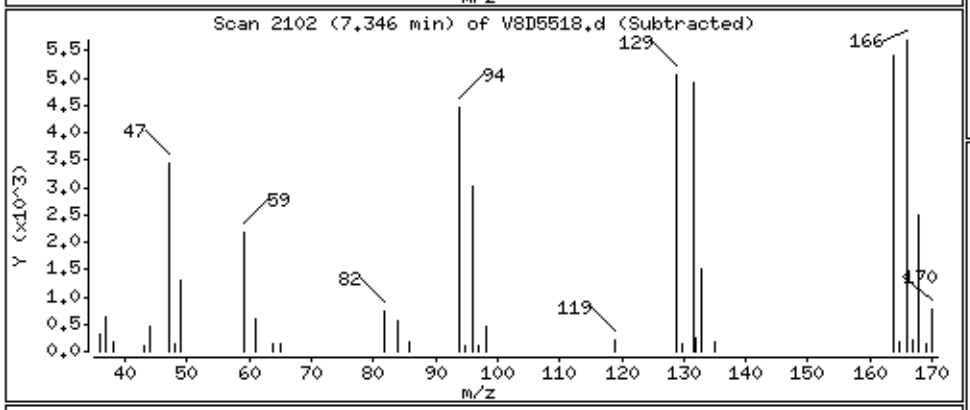
Sample Info: 5ML,N1055-03A,,77659

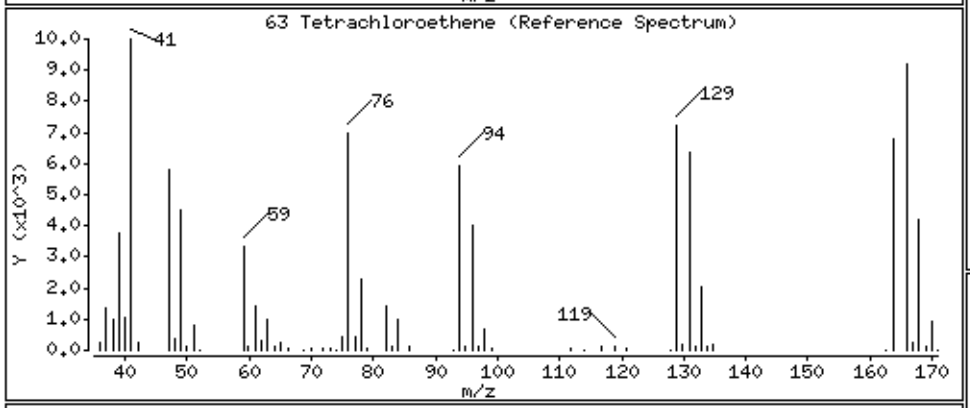
Purge Volume: 5.0 Operator: WL SRC: LIMS

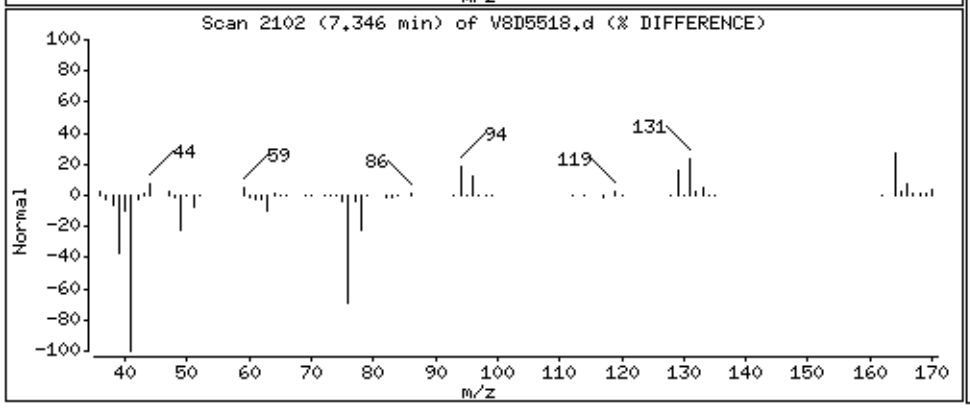
Column phase: DB-624 Column diameter: 0.25

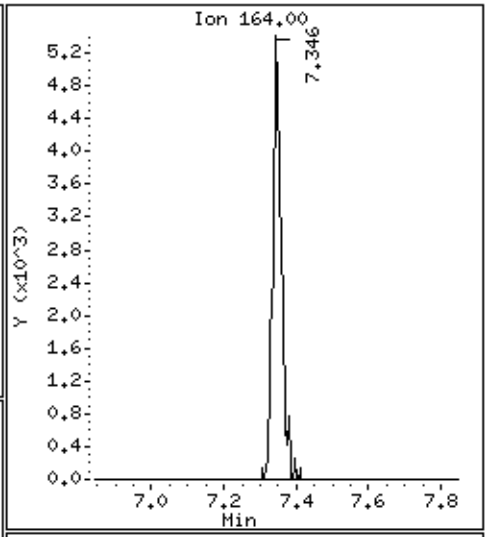
63 Tetrachloroethene Concentration: 3.9 ug/L

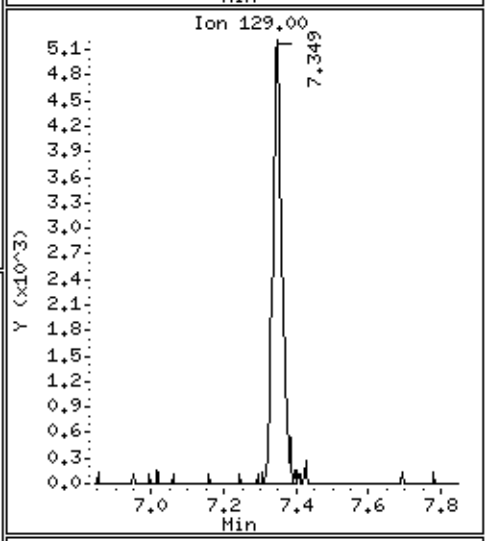


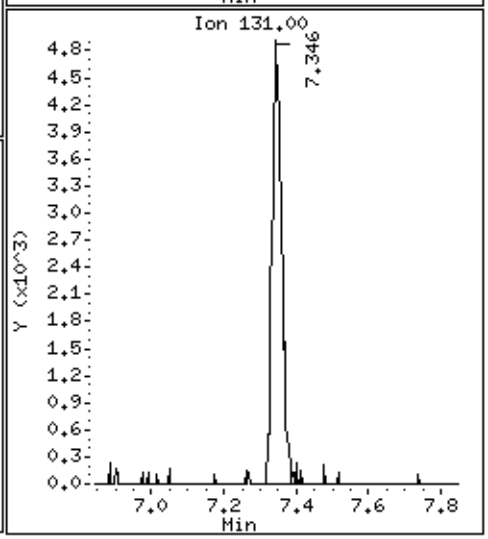












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

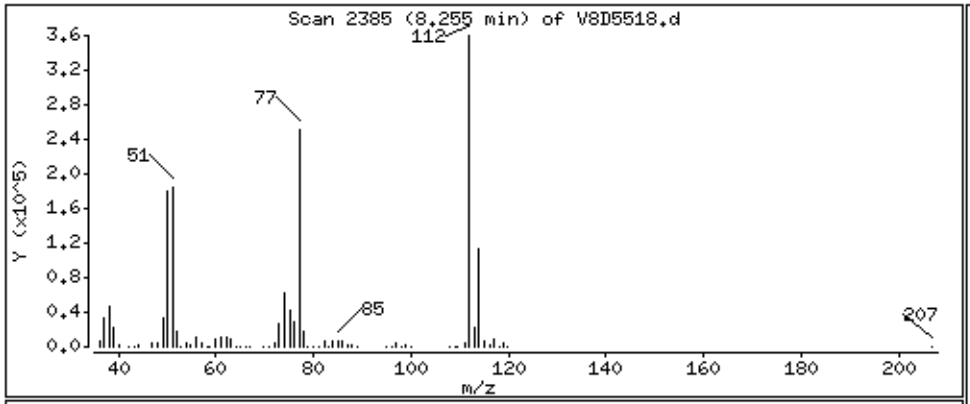
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

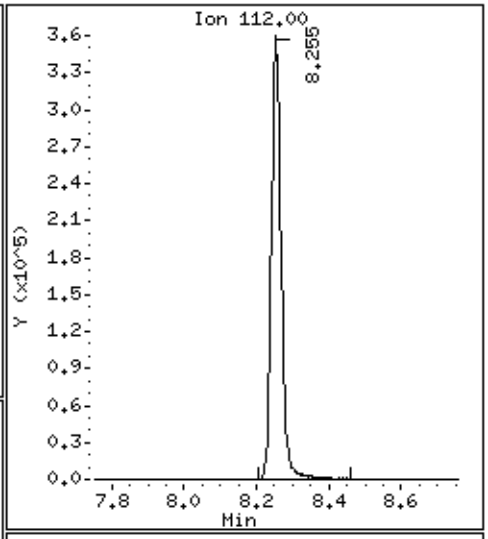
Sample Info: 5ML,N1055-03A,,77659

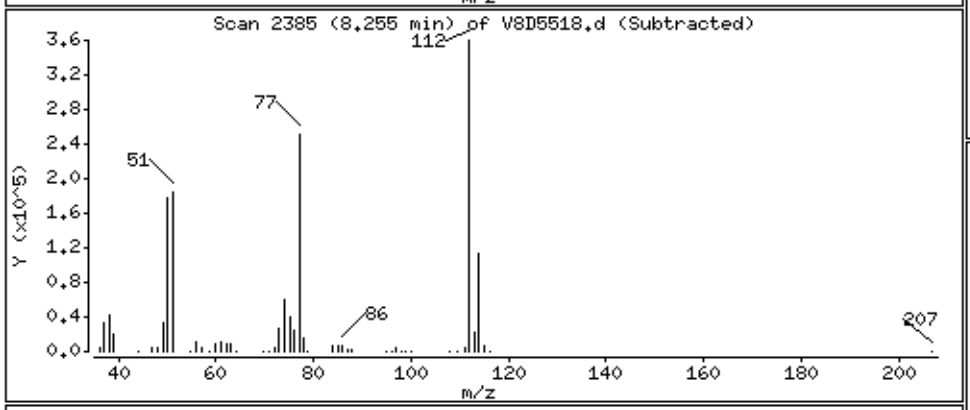
Purge Volume: 5.0 Operator: WL SRC: LIMS

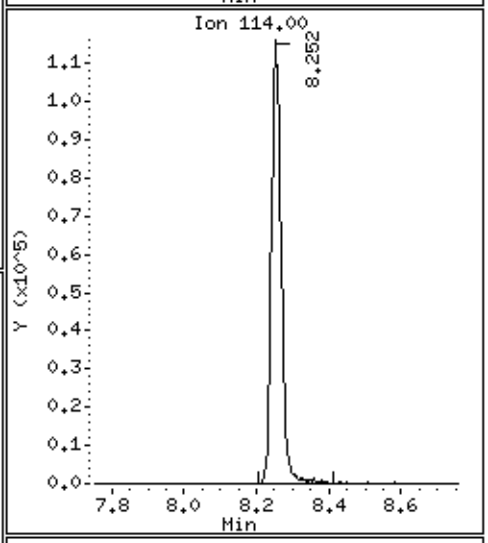
Column phase: DB-624 Column diameter: 0.25

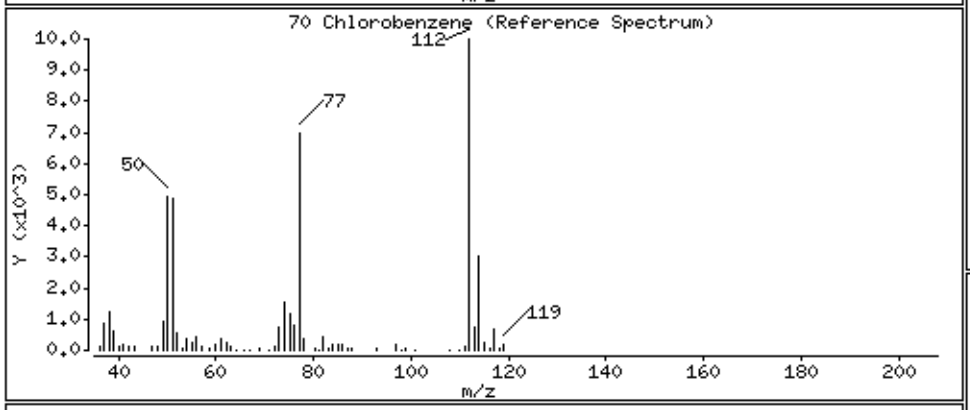
70 Chlorobenzene Concentration: 120 ug/L

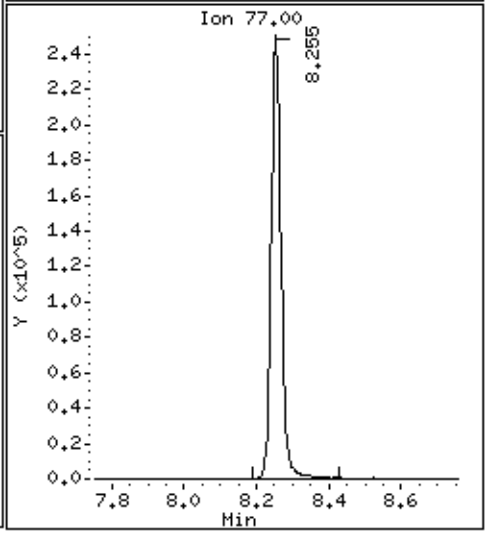


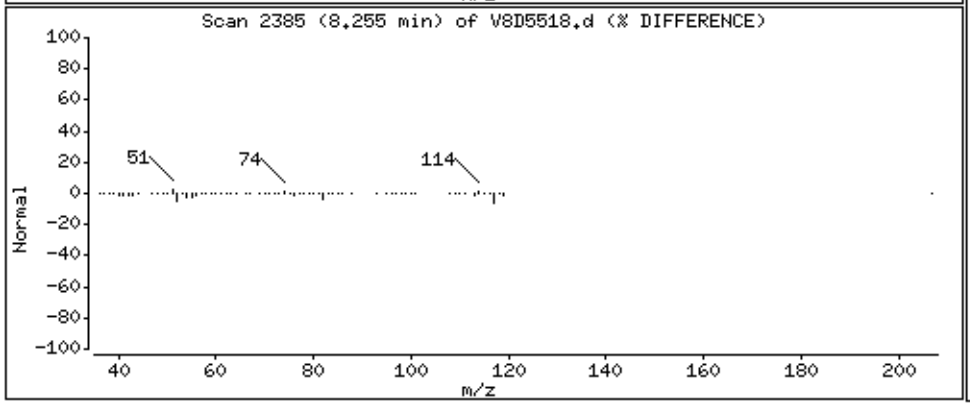












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Date : 19-JUN-2014 11:09

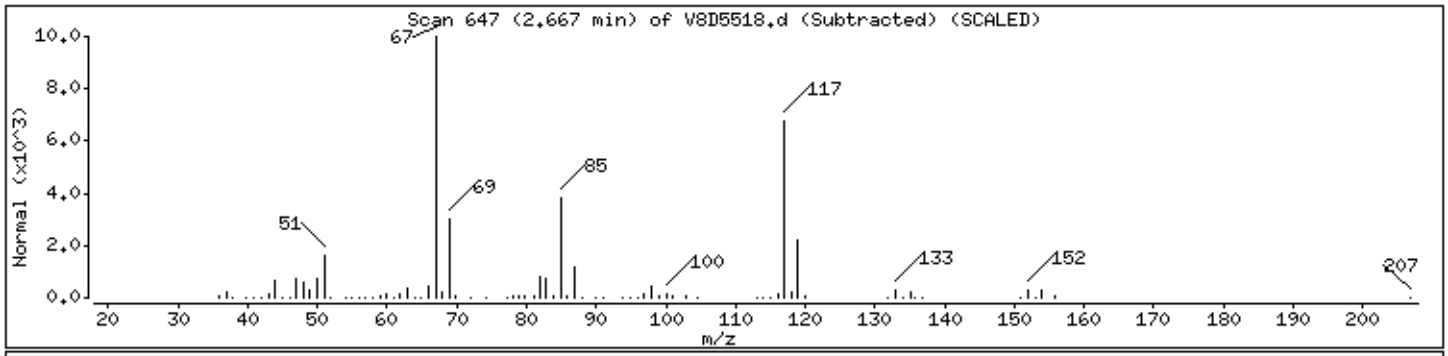
Client ID: MW-22R(1)_6/16/14 Instrument: V10.i

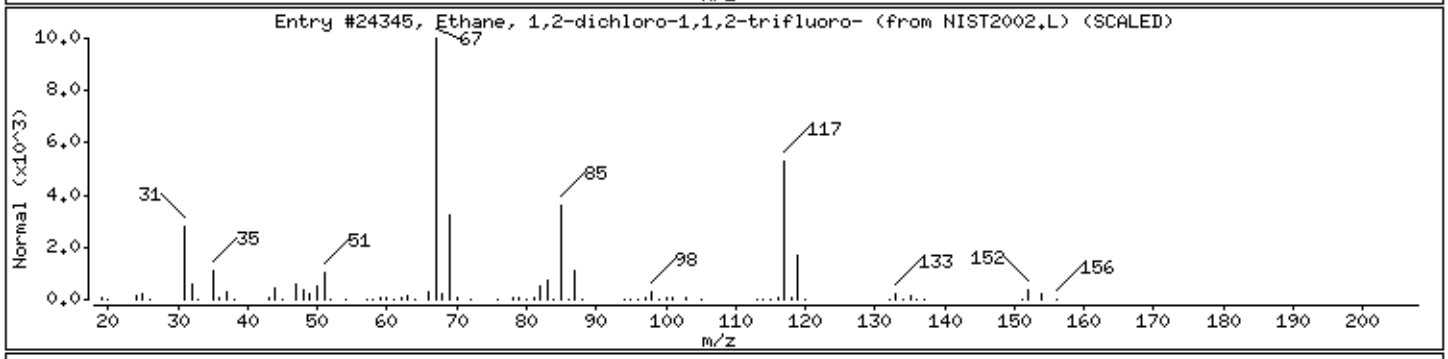
Sample Info: 5ML,N1055-03A,,77659

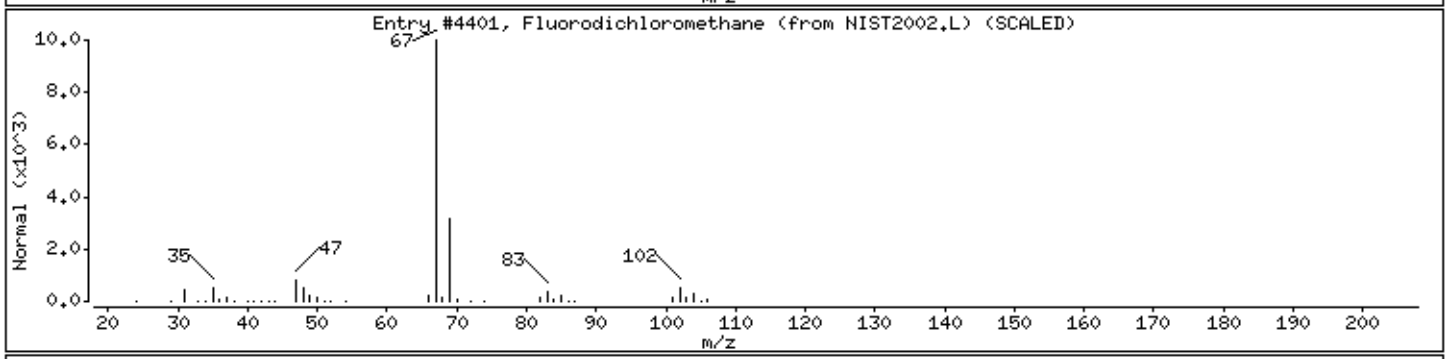
Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	25	CHCl2F	102



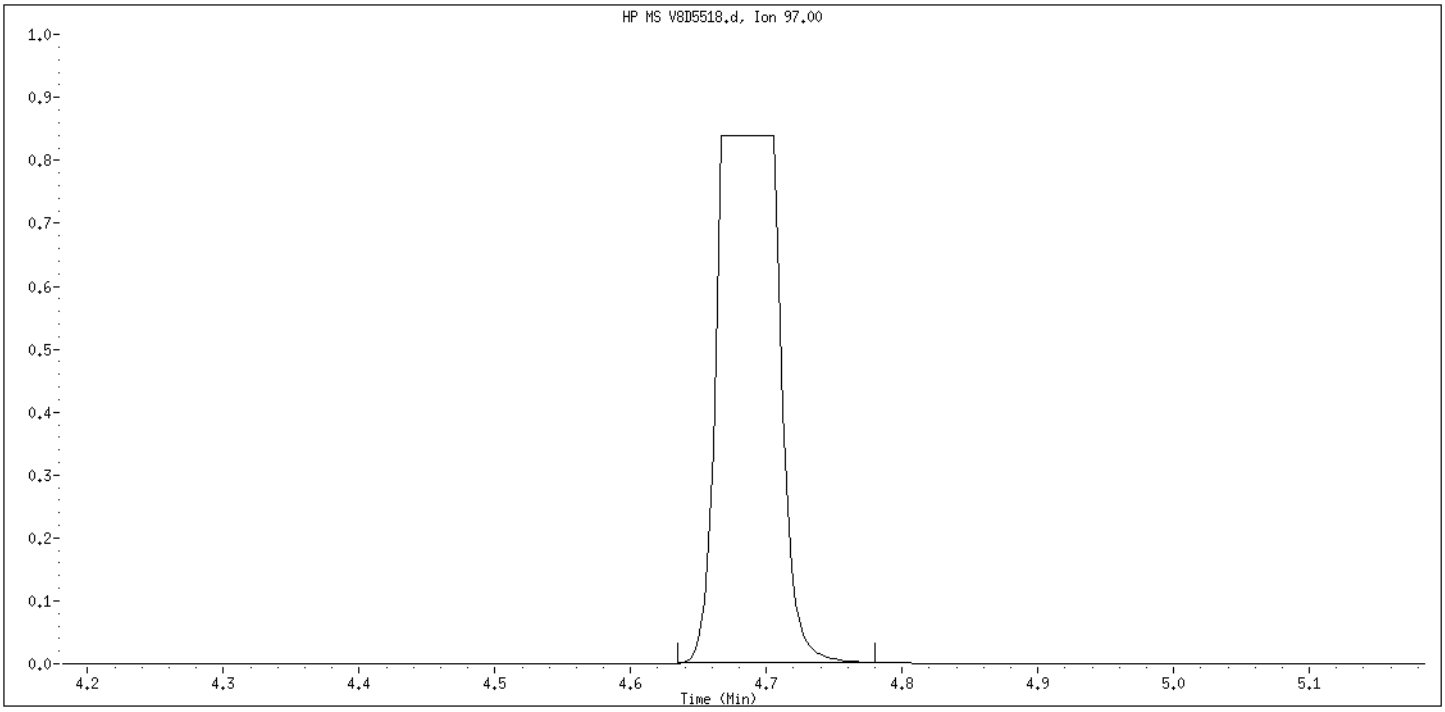




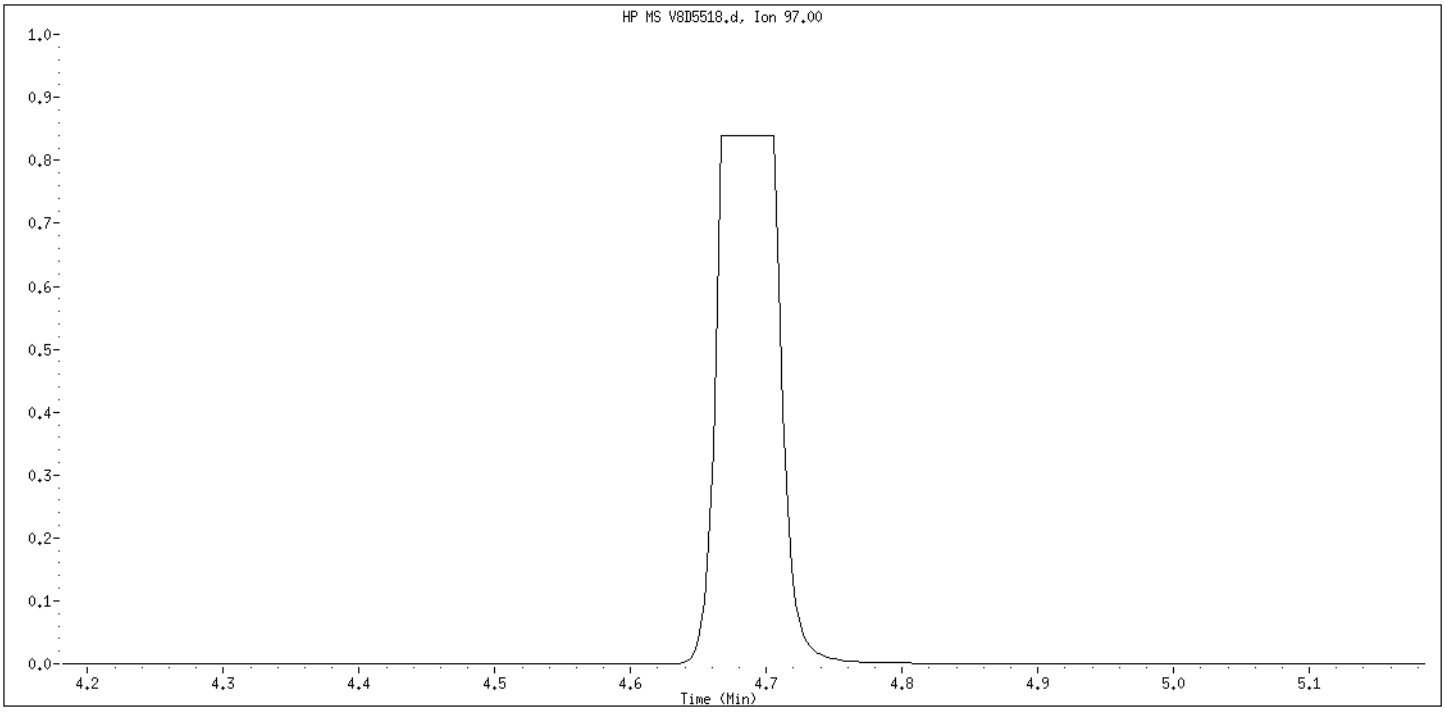
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Lab ID: N1055-03A Client ID: MW-22R(1)_6/16/14
Inj Date: 19-JUN-2014 11:09 Operator: WL SRC: LIMS

Manual Integration 1,1,1-Trichloroethane Ret Time: 4.667 min, Range: 4.635 to 4.780 min Response: 26717876



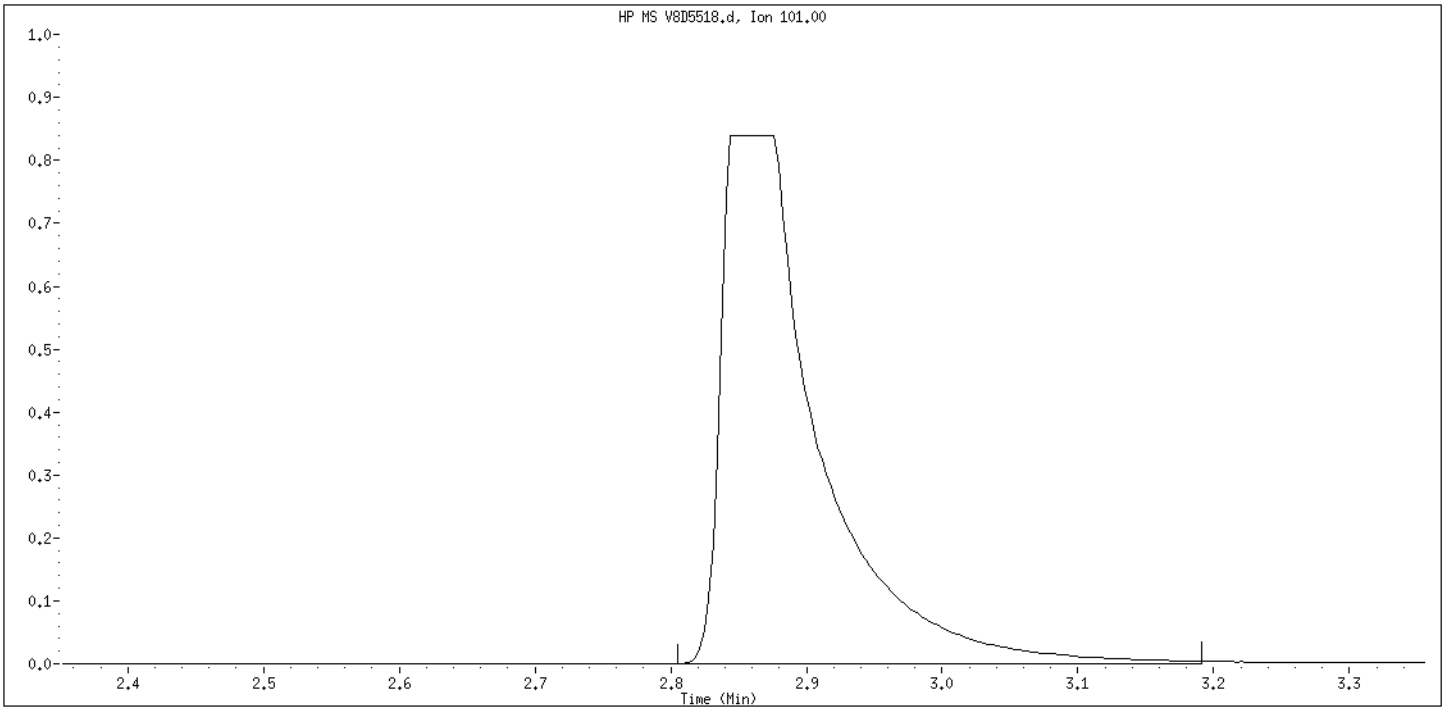
Original Integration 1,1,1-Trichloroethane Ret Time: 0.000 min, Range: 0.000 to 0.000 min Response: 0



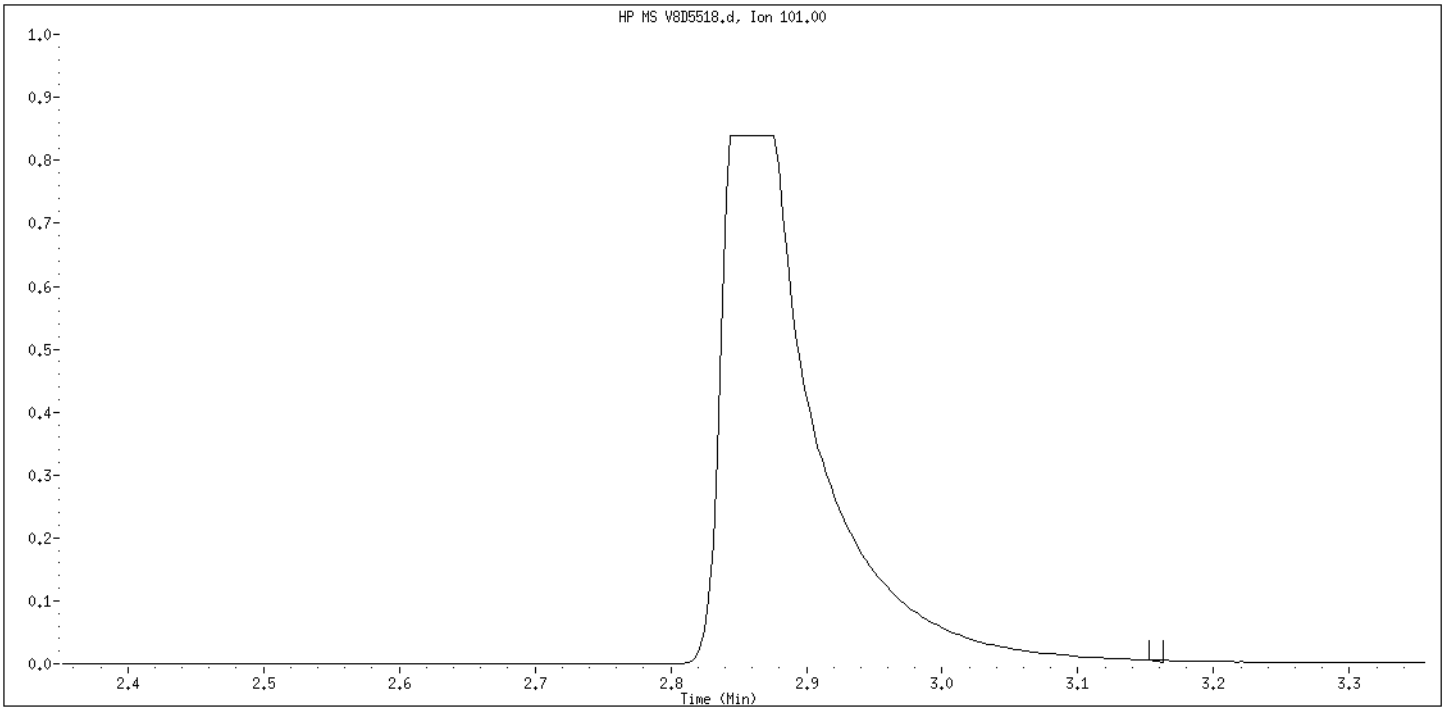
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5518.d

Lab ID: N1055-03A Client ID: MW-22R(1)_6/16/14
Inj Date: 19-JUN-2014 11:09 Operator: WL SRC: LIMS

Manual Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 2.844 min, Range: 2.806 to 3.191 min Response: 42096394



Original Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 3.156 min, Range: 3.153 to 3.162 min Response: 18690



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(1)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-03ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5588.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	200	U
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
75-35-4	1,1-Dichloroethene	200	U
67-64-1	Acetone	1000	U
74-88-4	Iodomethane	200	U
75-15-0	Carbon disulfide	200	U
75-09-2	Methylene chloride	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
1634-04-4	Methyl tert-butyl ether	200	U
75-34-3	1,1-Dichloroethane	620	D
108-05-4	Vinyl acetate	200	U
78-93-3	2-Butanone	1000	U
156-59-2	cis-1,2-Dichloroethene	200	U
594-20-7	2,2-Dichloropropane	200	U
74-97-5	Bromochloromethane	200	U
67-66-3	Chloroform	200	U
71-55-6	1,1,1-Trichloroethane	9900	D
563-58-6	1,1-Dichloropropene	200	U
56-23-5	Carbon tetrachloride	200	U
107-06-2	1,2-Dichloroethane	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	5400	D
78-87-5	1,2-Dichloropropane	200	U
74-95-3	Dibromomethane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
108-10-1	4-Methyl-2-pentanone	1000	U
108-88-3	Toluene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
142-28-9	1,3-Dichloropropane	200	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(1)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-03ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5588.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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	200	U
591-78-6	2-Hexanone	1000	U
124-48-1	Dibromochloromethane	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
630-20-6	1,1,1,2-Tetrachloroethane	200	U
100-41-4	Ethylbenzene	200	U
179601-23-1	m,p-Xylene	200	U
95-47-6	o-Xylene	200	U
1330-20-7	Xylene (Total)	200	U
100-42-5	Styrene	200	U
75-25-2	Bromoform	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
108-86-1	Bromobenzene	200	U
96-18-4	1,2,3-Trichloropropane	200	U
103-65-1	n-Propylbenzene	200	U
95-49-8	2-Chlorotoluene	200	U
108-67-8	1,3,5-Trimethylbenzene	200	U
106-43-4	4-Chlorotoluene	200	U
98-06-6	tert-Butylbenzene	200	U
95-63-6	1,2,4-Trimethylbenzene	200	U
135-98-8	sec-Butylbenzene	200	U
99-87-6	4-Isopropyltoluene	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
104-51-8	n-Butylbenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
87-68-3	Hexachlorobutadiene	200	U
87-61-6	1,2,3-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R(1)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-03ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5588.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5588.d
Lab Smp Id: N1055-03ADL Client Smp ID: MW-22R(1)_6/16/14DL
Inj Date : 20-JUN-2014 20:28
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-03ADL,,77692,200
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 79
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	200.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	161627	88.6810	18000
	23 1,1-Dichloroethane	63	3.782	3.782	(0.722)	12727	3.11787	620
$	36 Dibromofluoromethane	113	4.647	4.641	(0.888)	77191	56.4906	56
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	183082	49.3928	9900
$	42 1,2-Dichloroethane-d4	102	4.950	4.943	(0.945)	12029	52.0693	52
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	183620	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	41035	27.0787	5400
$	58 Toluene-d8	98	6.718	6.715	(0.817)	243256	45.4732	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	233764	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	143658	50.0251	50
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	121754	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d
Report Date: 25-Jun-2014 16:17

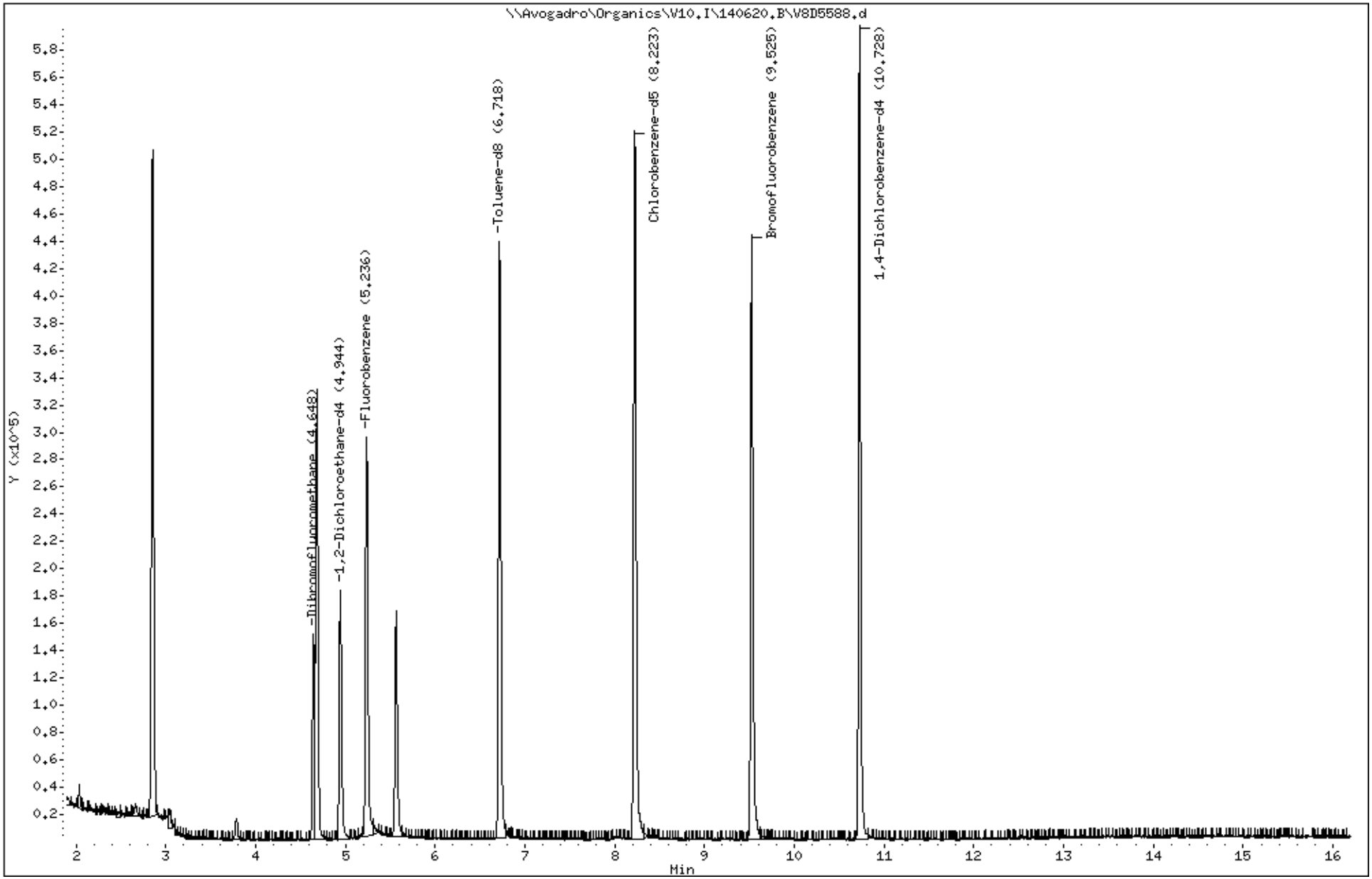
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5588.d
Lab Smp Id: N1055-03ADL Client Smp ID: MW-22R(1)_6/16/14DL
Inj Date : 20-JUN-2014 20:28
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-03ADL,,77692,200
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 79
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d
Date : 20-JUN-2014 20:28
Client ID: MW-22R(1)_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-03ADL,,77692,200
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d

Date : 20-JUN-2014 20:28

Client ID: MW-22R(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-03ADL,,77692,200

Purge Volume: 5.0

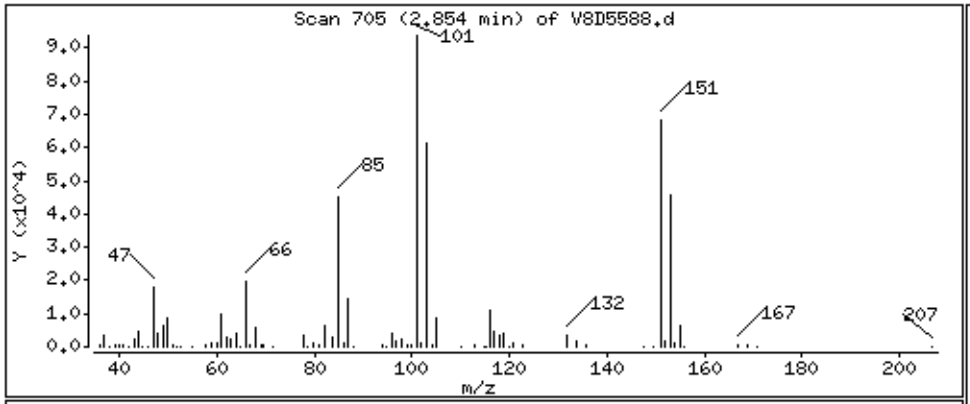
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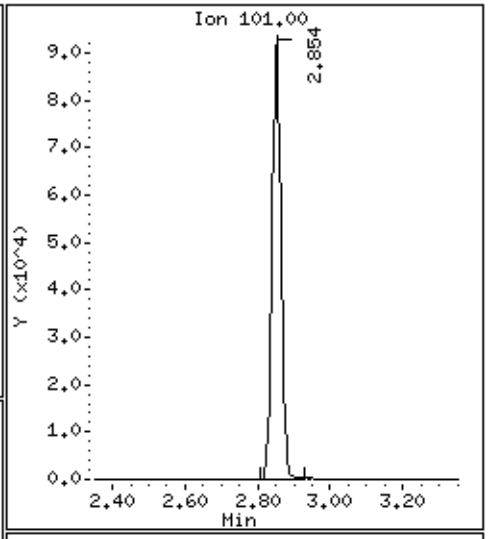
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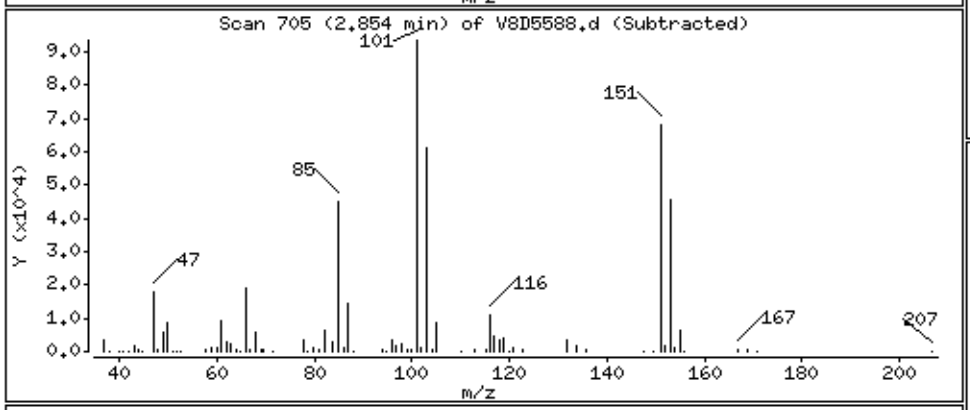
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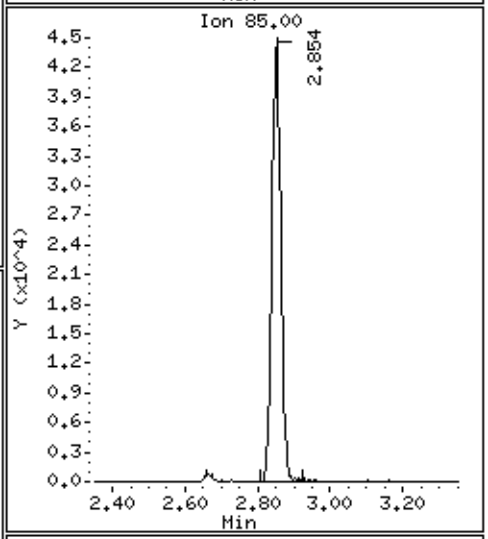
11 1,1,2-Trichloro-1,2,2-Trifluo

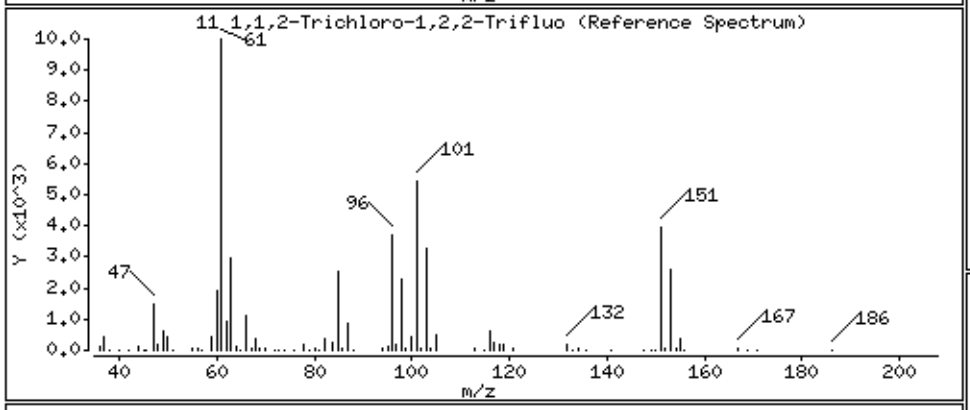
Concentration: 18000 ug/L

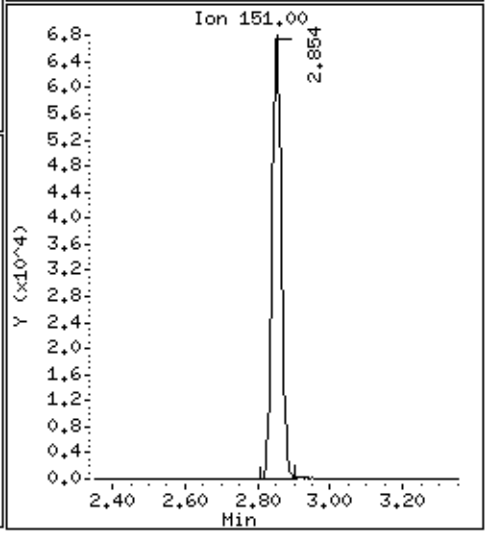


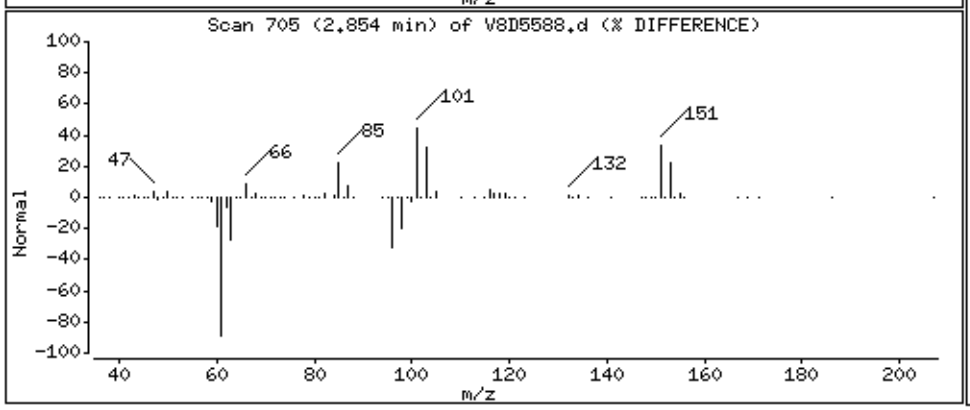












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d

Date : 20-JUN-2014 20:28

Client ID: MW-22R(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-03ADL,,77692,200

Purge Volume: 5.0

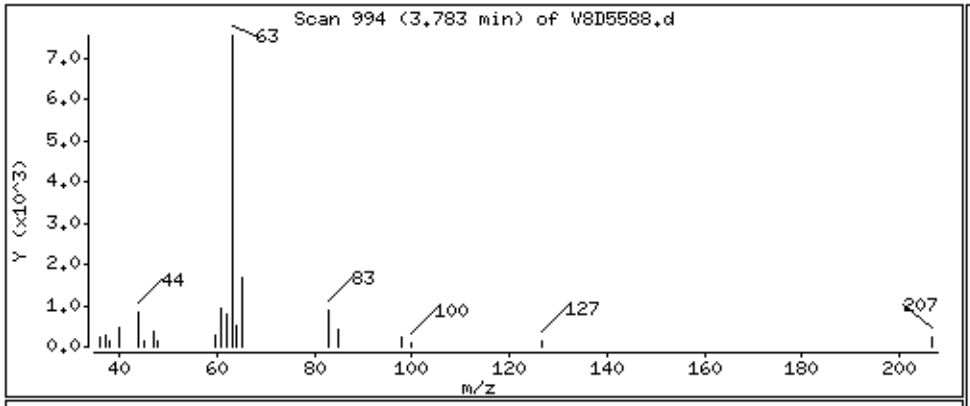
Operator: WL SRC: LIMS

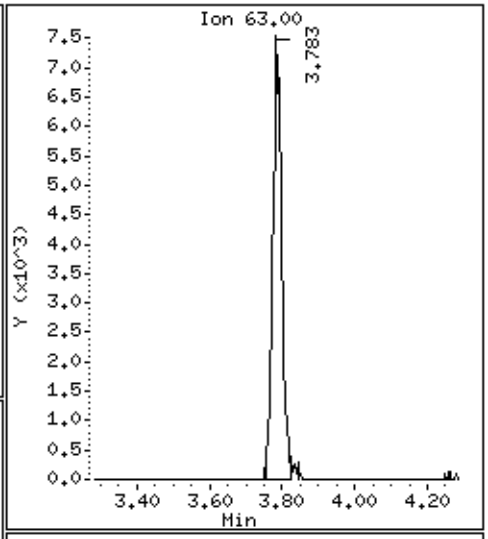
Column phase: DB-624

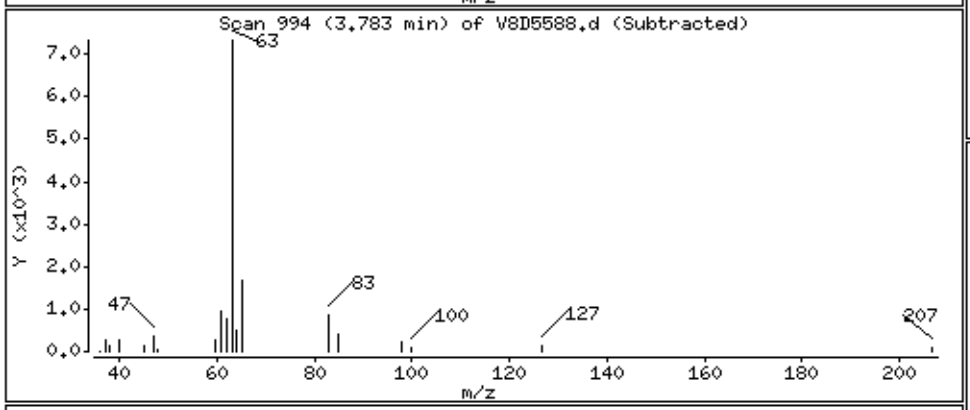
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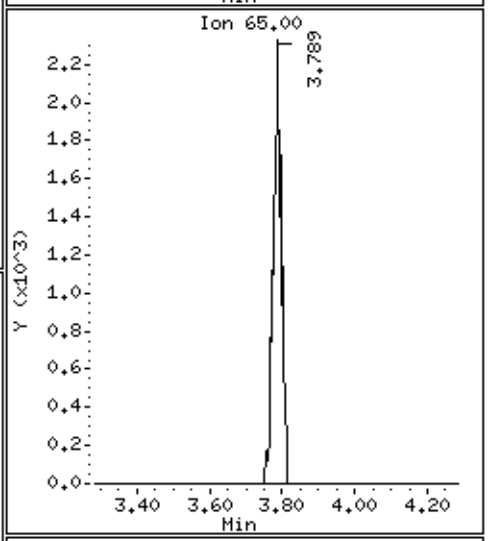
23 1,1-Dichloroethane

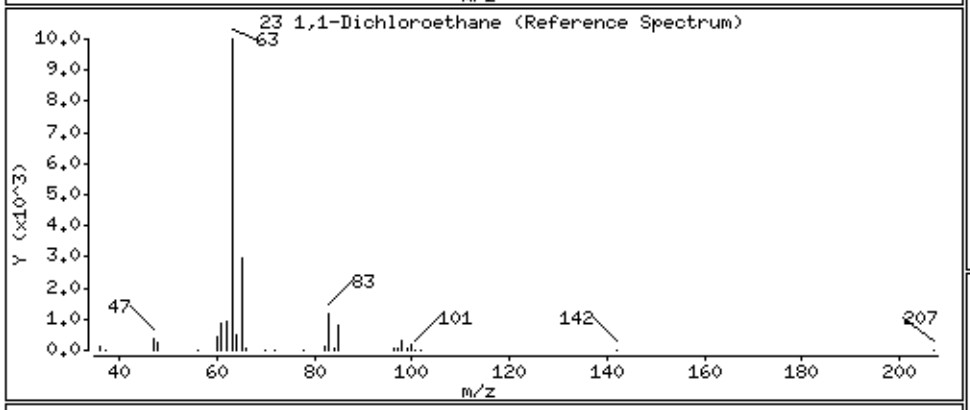
Concentration: 620 ug/L

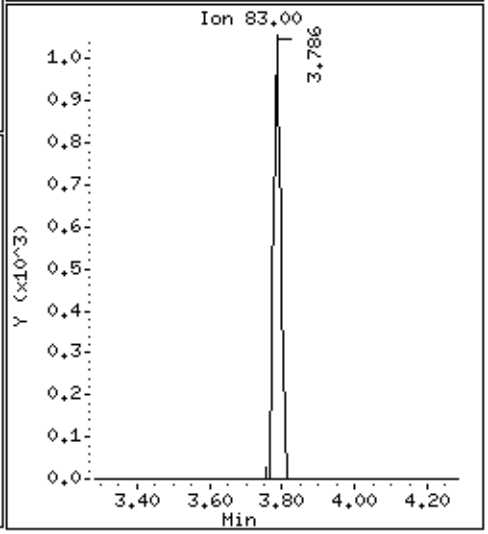


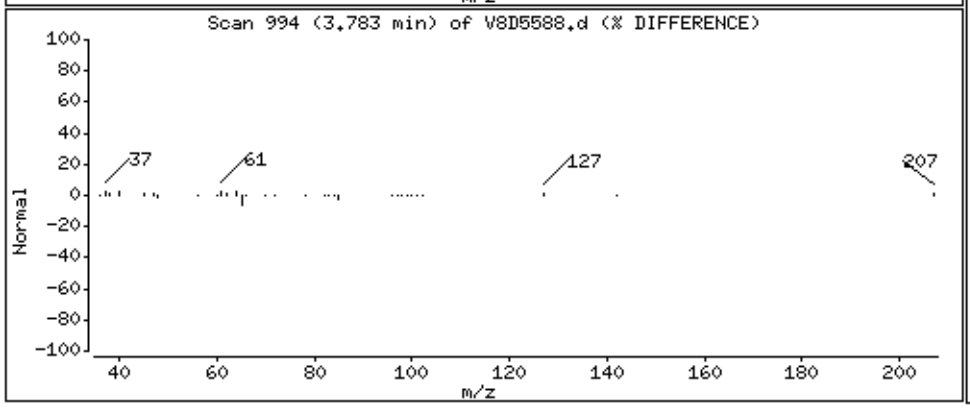












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d

Date : 20-JUN-2014 20:28

Client ID: MW-22R(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-03ADL,,77692,200

Purge Volume: 5.0

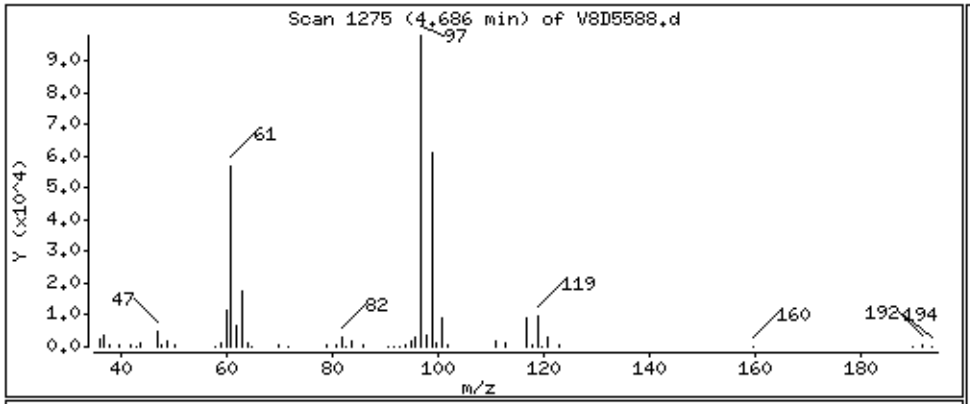
Operator: WL SRC: LIMS

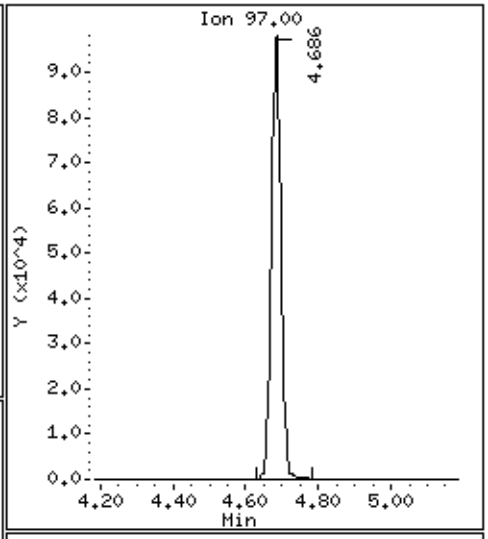
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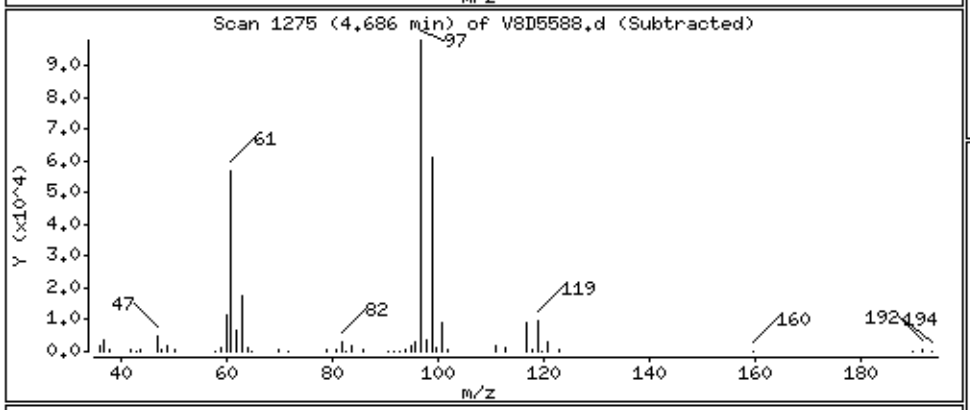
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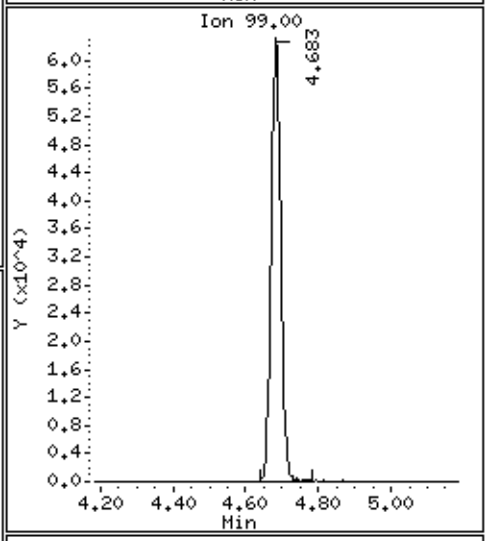
37 1,1,1-Trichloroethane

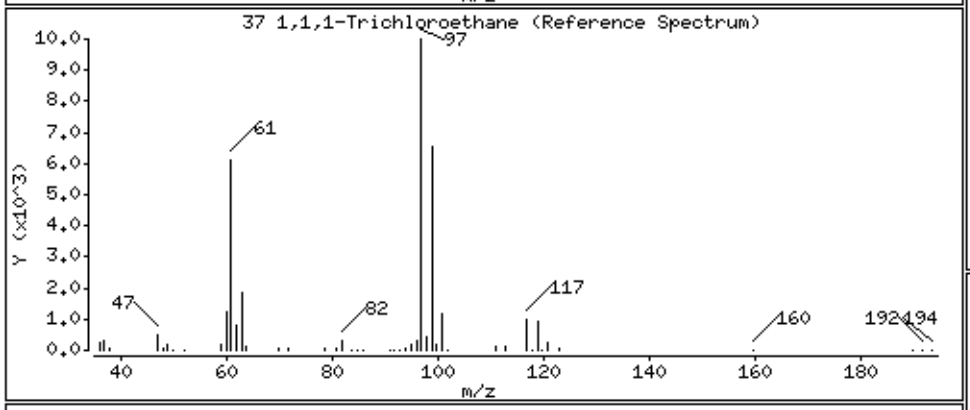
Concentration: 9900 ug/L

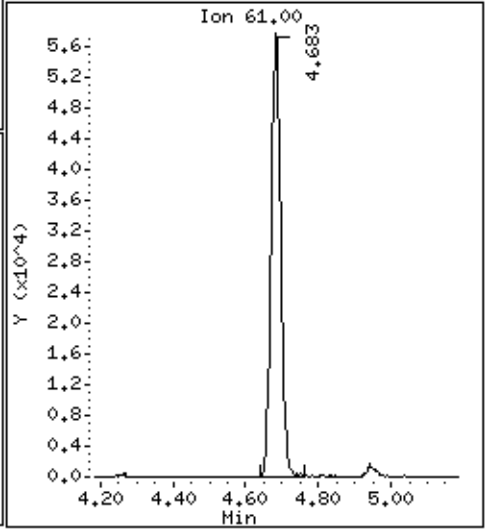


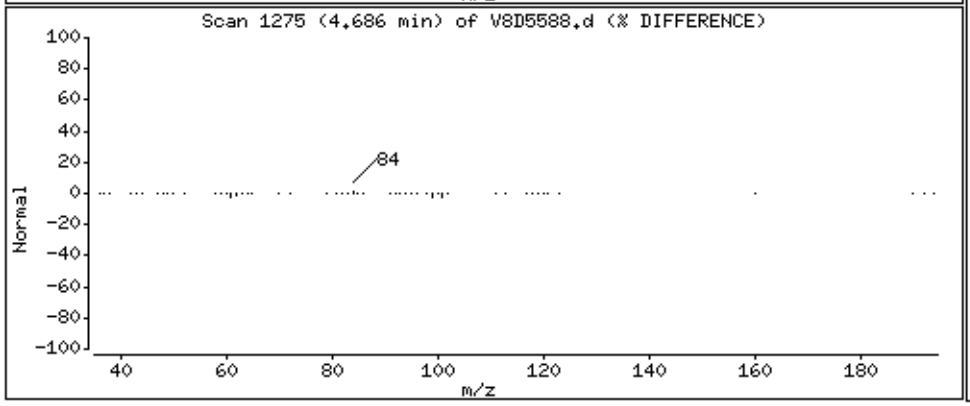












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5588.d

Date : 20-JUN-2014 20:28

Client ID: MW-22R(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-03ADL,,77692,200

Purge Volume: 5.0

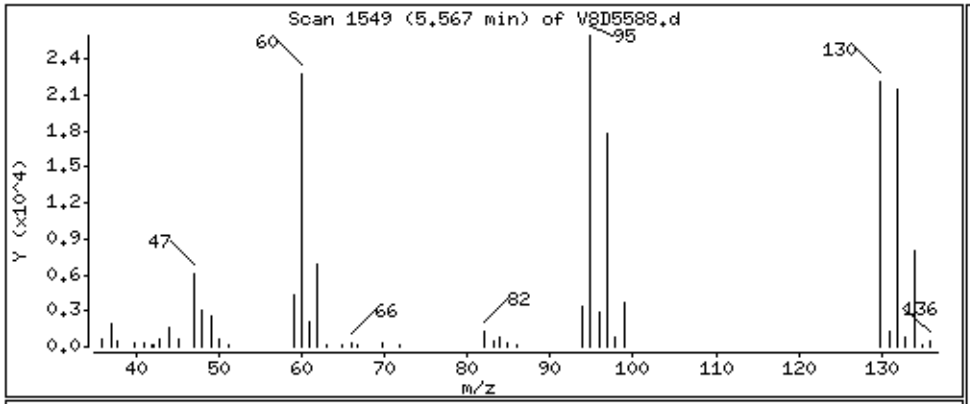
Operator: WL SRC: LIMS

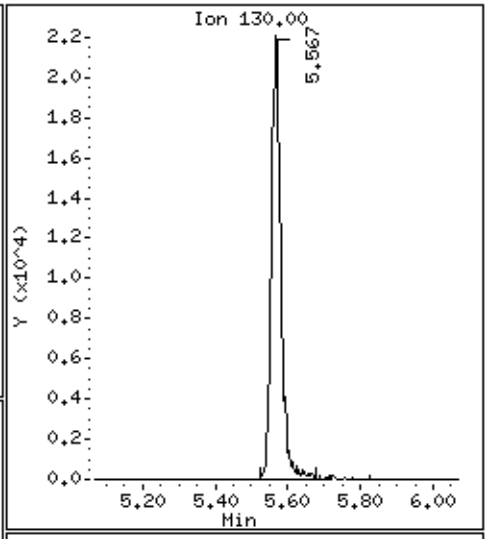
Column phase: DB-624

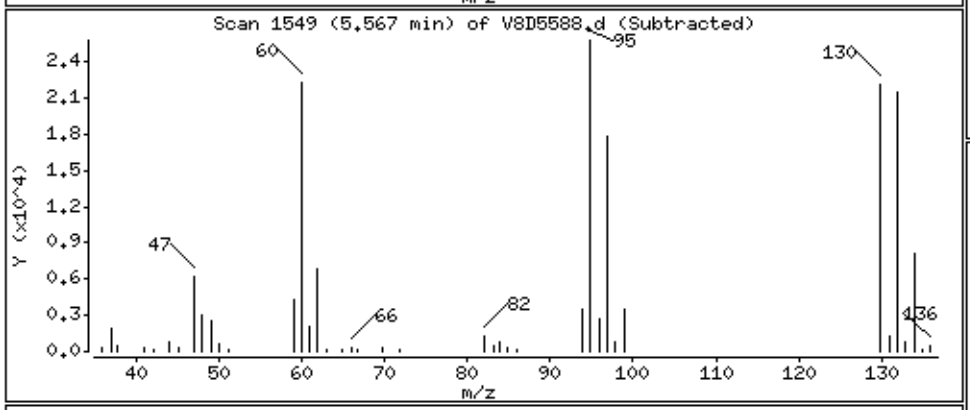
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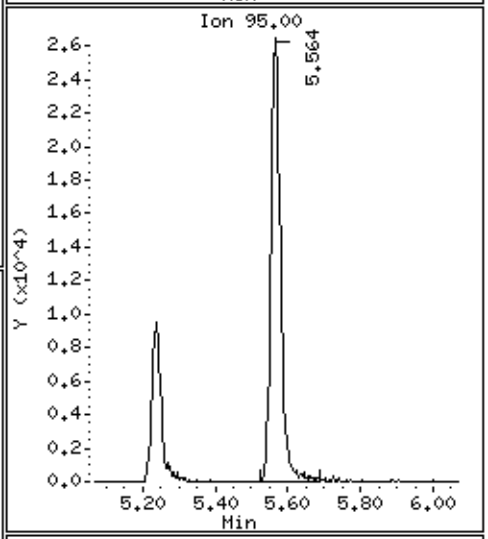
47 Trichloroethene

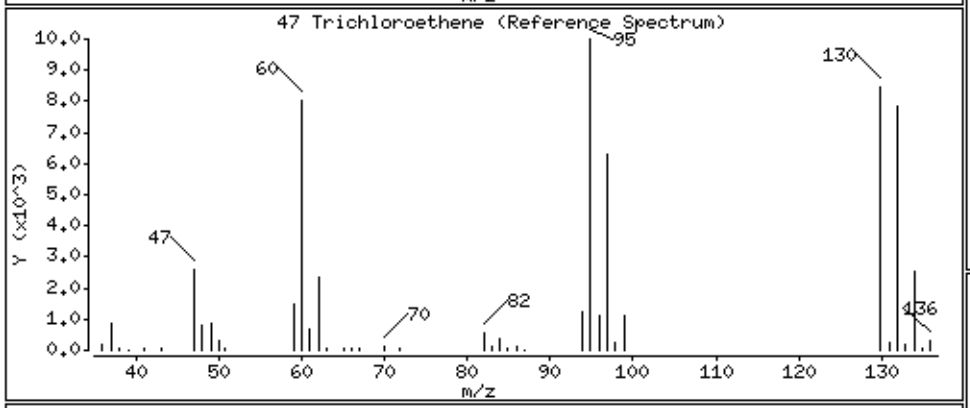
Concentration: 5400 ug/L

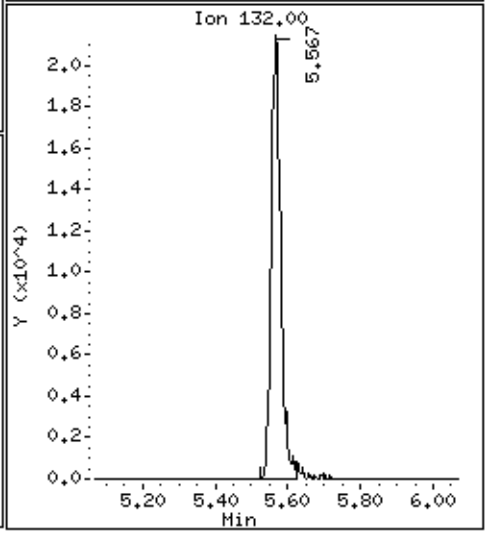


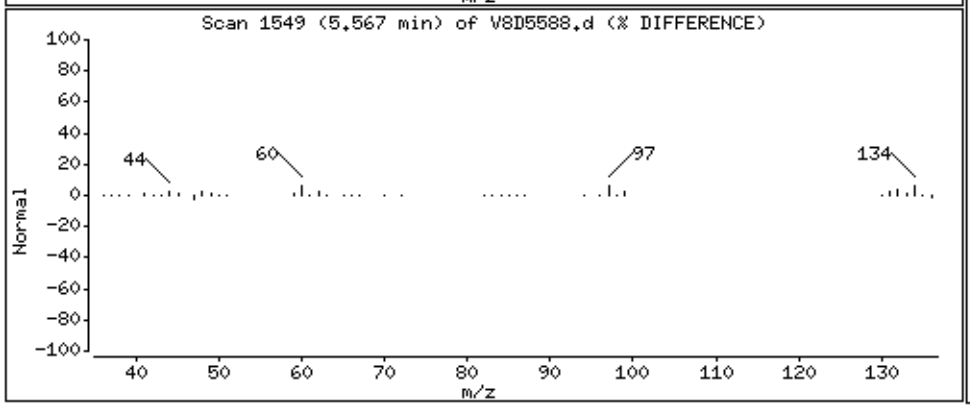












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(2)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5519.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	3.8	
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	8.9	
156-60-5	trans-1,2-Dichloroethene	3.5	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	650	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	25	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	0.75	J
71-55-6	1,1,1-Trichloroethane	5400	E
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	7600	E
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

EPA SAMPLE NO.

MW-22R(2)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5519.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	3.8	
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	82	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	15000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R(2)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5519.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	190	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d
Report Date: 03-Jul-2014 05:25

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5519.d
Lab Smp Id: N1055-04A Client Smp ID: MW-22R(2)_6/16/14
Inj Date : 19-JUN-2014 11:37
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-04A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 03-Jul-2014 05:25 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 10
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

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	4 Vinyl Chloride	62	1.853	1.856	(0.354)	13166	3.81387	3.8(Q)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.847	2.853	(0.543)	35283738	14846.3	15000(AQM)
	18 Methylene Chloride	84	3.229	3.233	(0.616)	18466	8.85310	8.8(Q)
	21 trans-1,2-Dichloroethene	96	3.458	3.454	(0.660)	7020	3.52441	3.5
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	3469203	651.761	650(A)
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	52210	24.8535	25
	35 Chloroform	83	4.515	4.509	(0.862)	3616	0.75074	0.75
$	36 Dibromofluoromethane	113	4.644	4.644	(0.886)	100580	56.4479	56
	37 1,1,1-Trichloroethane	97	4.670	4.683	(0.891)	26242612	5429.40	5400(A)
$	42 1,2-Dichloroethane-d4	102	4.949	4.943	(0.945)	15758	52.3094	52
M	50 1,2-Dichloroethene (Total)	96				59230	28.3779	28
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	239438	50.0000	
	47 Trichloroethene	130	5.560	5.567	(1.061)	14926908	7553.88	7600(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	293437	45.5729	46
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	8246	3.80551	3.8
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	281370	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	463340	81.8300	82
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	175224	50.6934	51
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	139508	50.0000	

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d
Report Date: 03-Jul-2014 05:25

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.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d
Report Date: 03-Jul-2014 05:25

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5519.d
Lab Smp Id: N1055-04A Client Smp ID: MW-22R(2)_6/16/14
Inj Date : 19-JUN-2014 11:37
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-04A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 03-Jul-2014 05:25 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

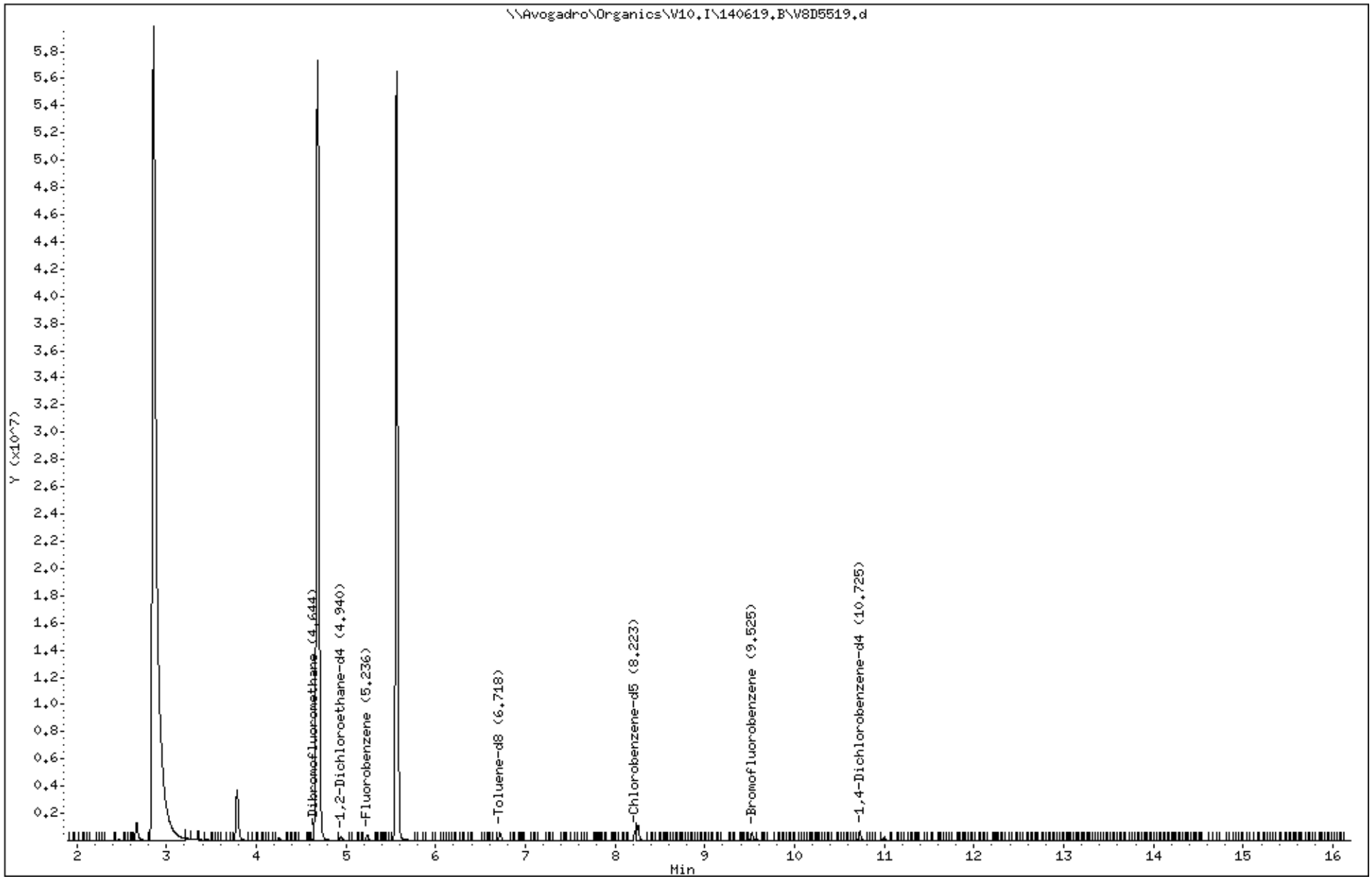
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.239	697650	50.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.667	2618802	187.687271	190	94	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d
Date : 19-JUN-2014 11:37
Client ID: MW-22R(2)_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-04A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

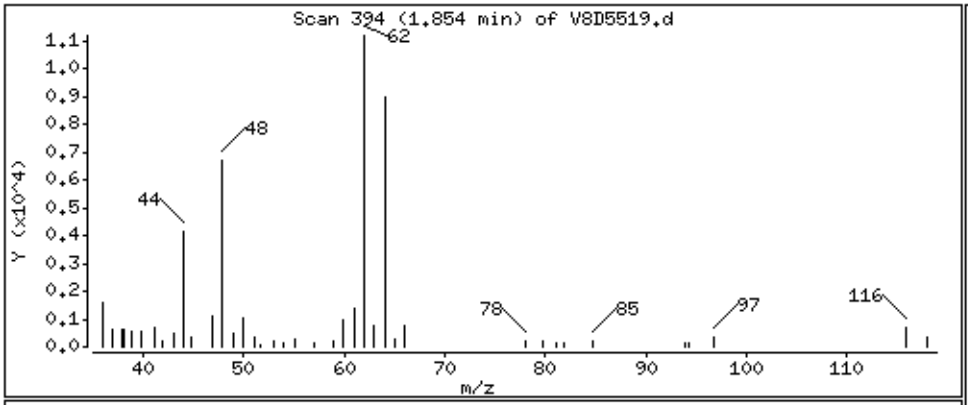
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

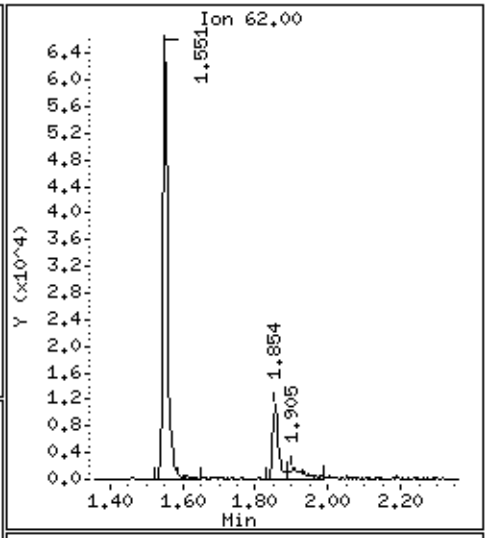
Sample Info: 5ML,N1055-04A,,77659

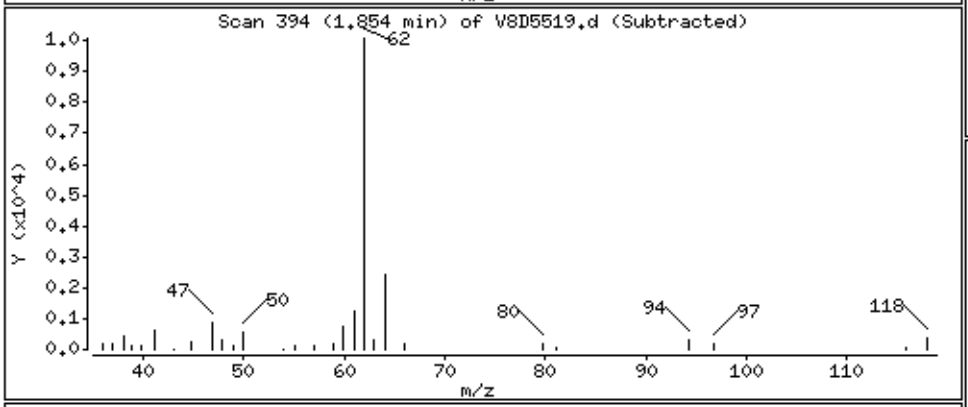
Purge Volume: 5.0 Operator: WL SRC: LIMS

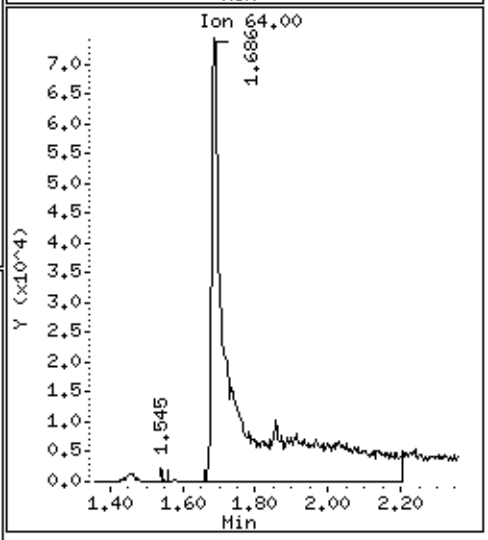
Column phase: DB-624 Column diameter: 0.25

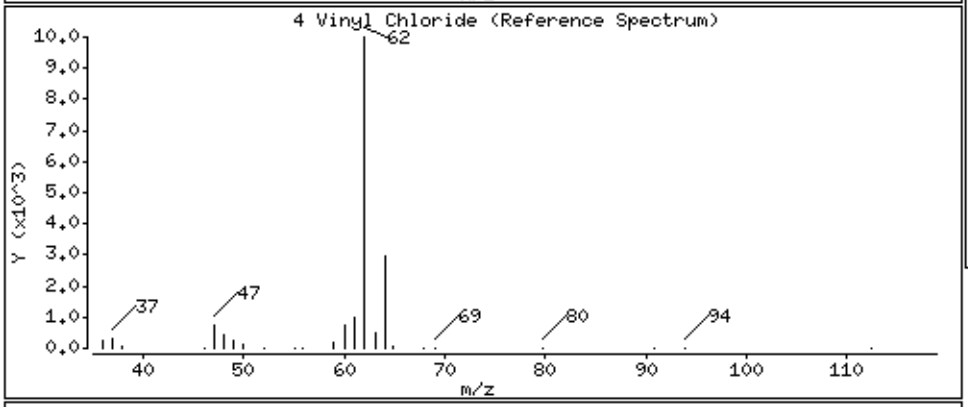
4 Vinyl Chloride Concentration: 3.8 ug/L

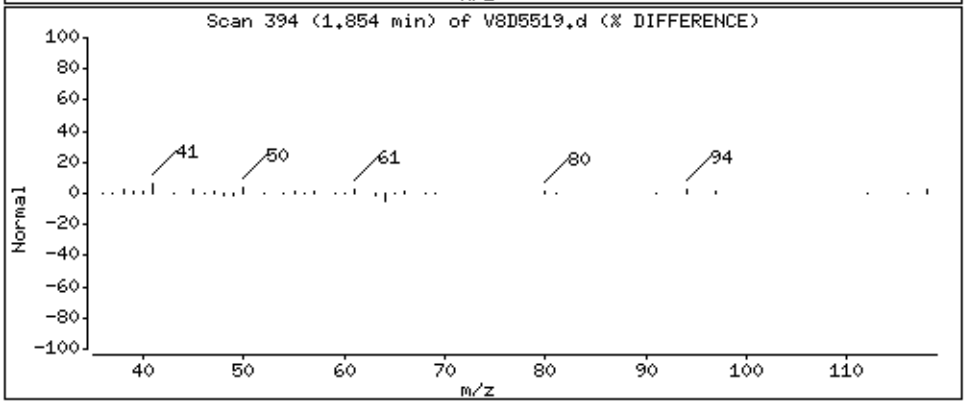












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

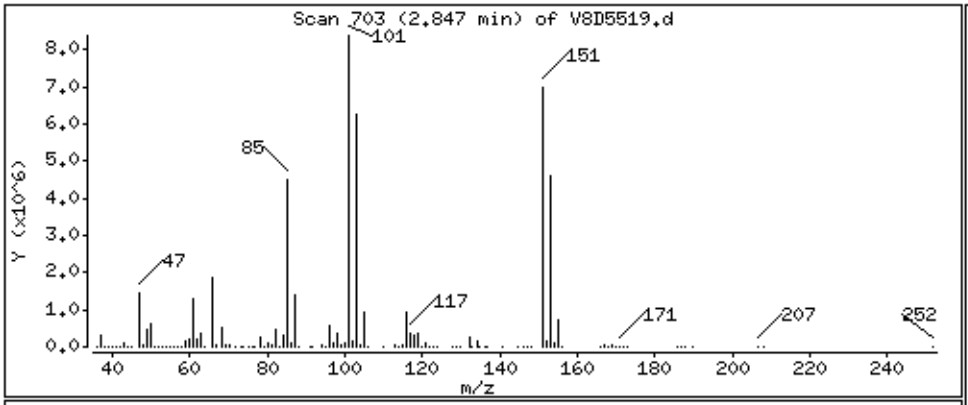
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

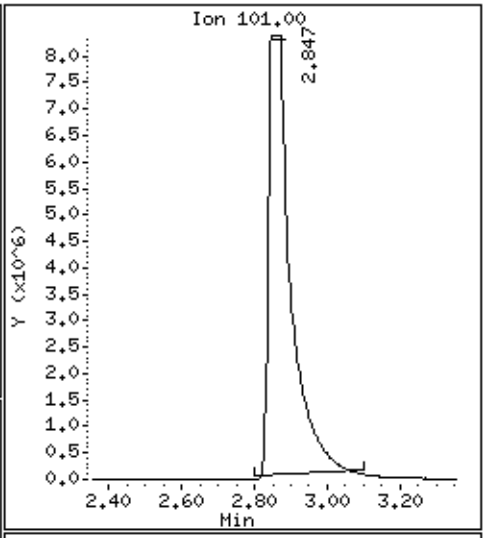
Sample Info: 5ML,N1055-04A,,77659

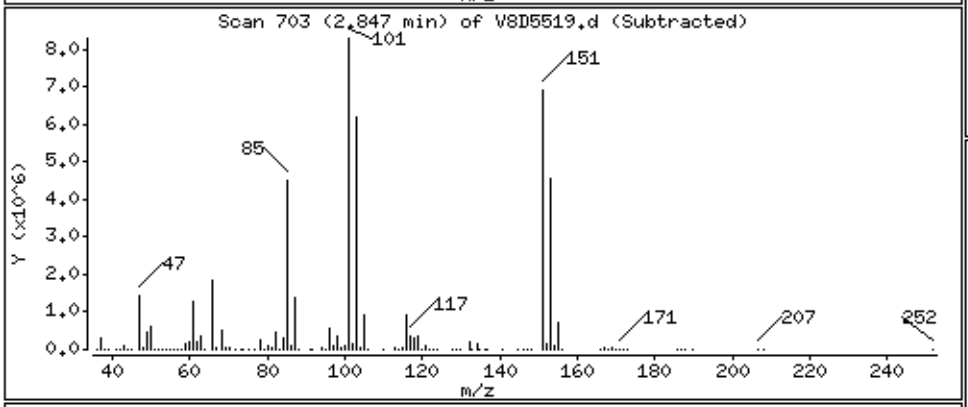
Purge Volume: 5.0 Operator: WL SRC: LIMS

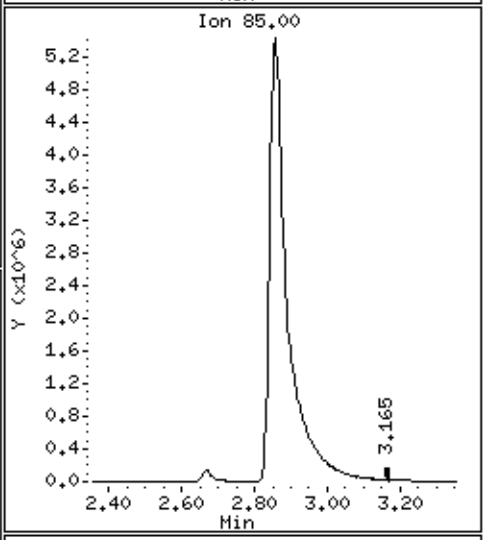
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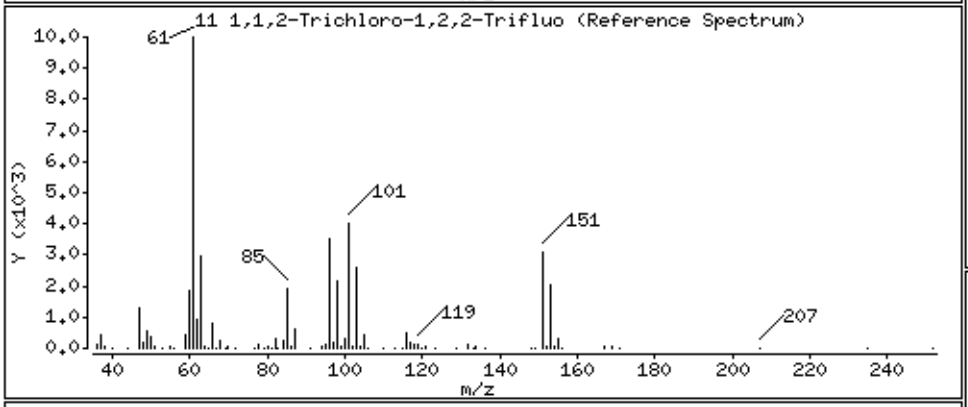
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 15000 ug/L

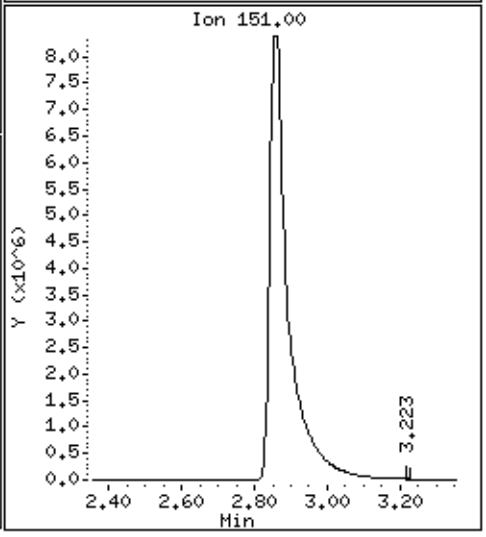


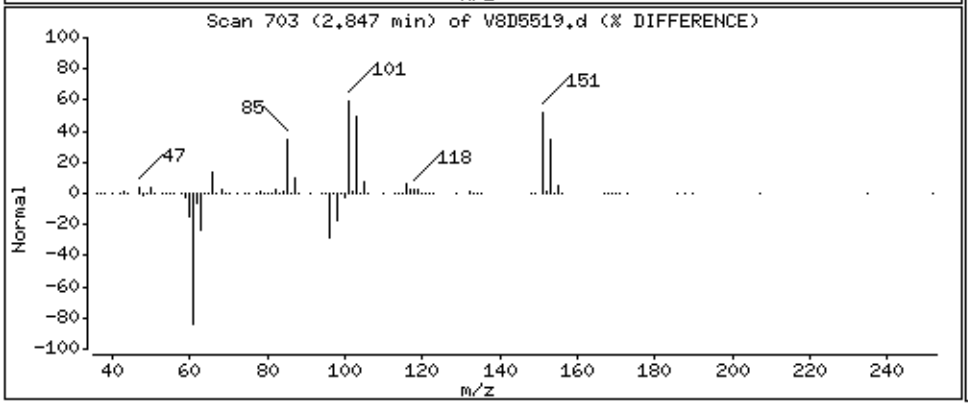












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

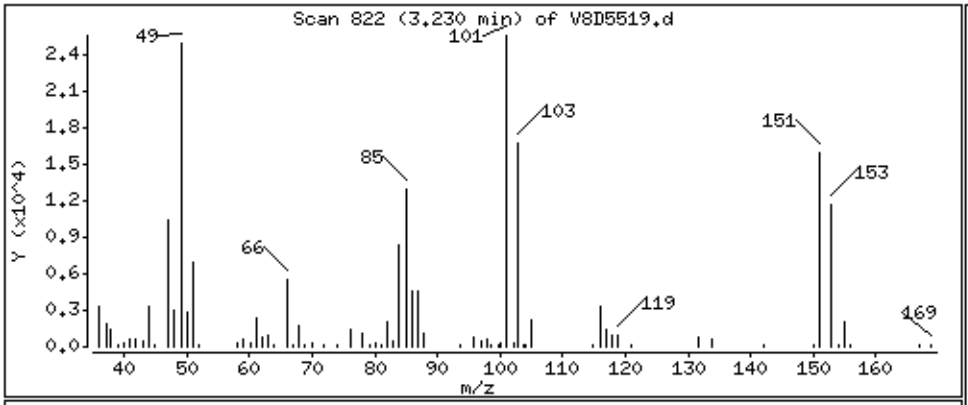
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

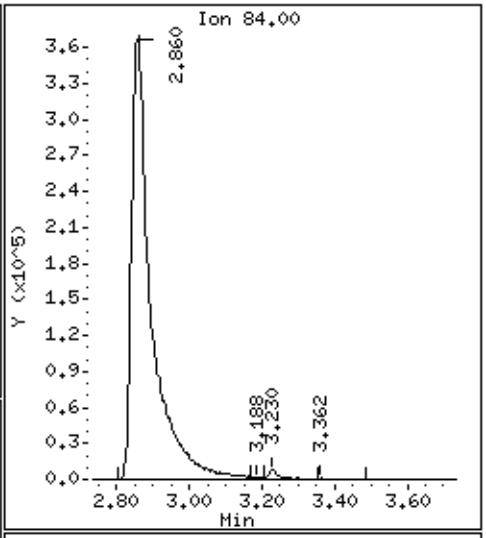
Sample Info: 5ML,N1055-04A,,77659

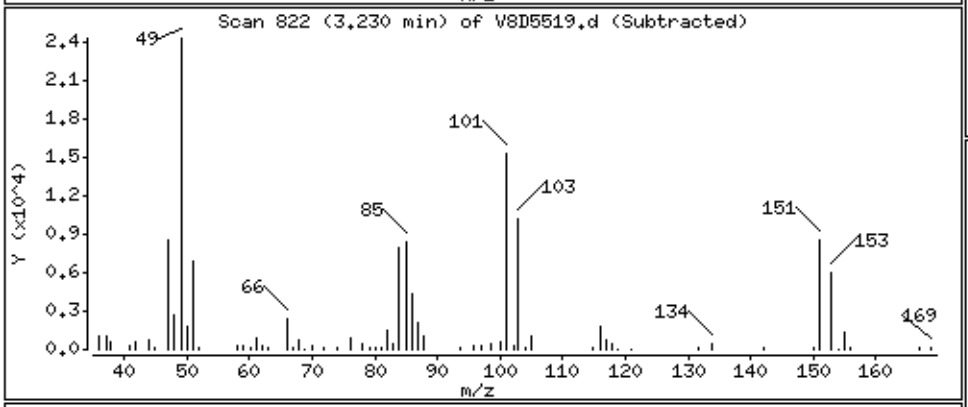
Purge Volume: 5.0 Operator: WL SRC: LIMS

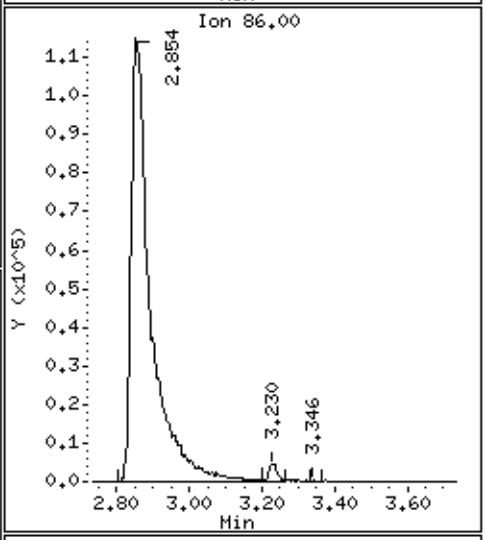
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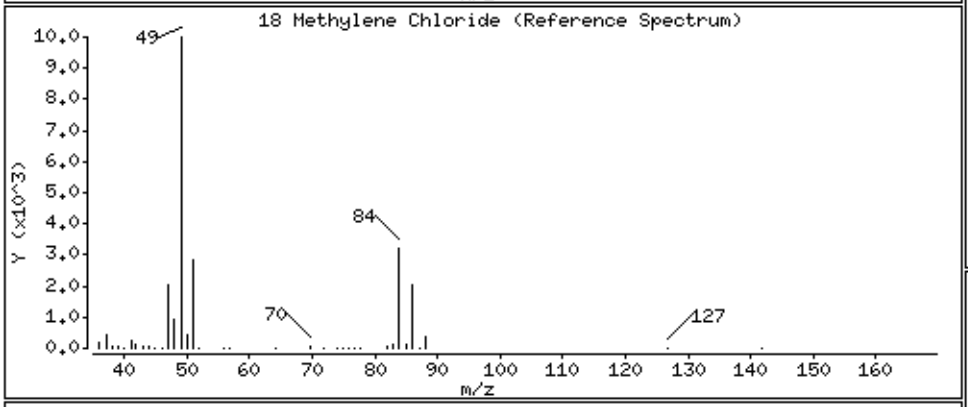
18 Methylene Chloride Concentration: 8.8 ug/L

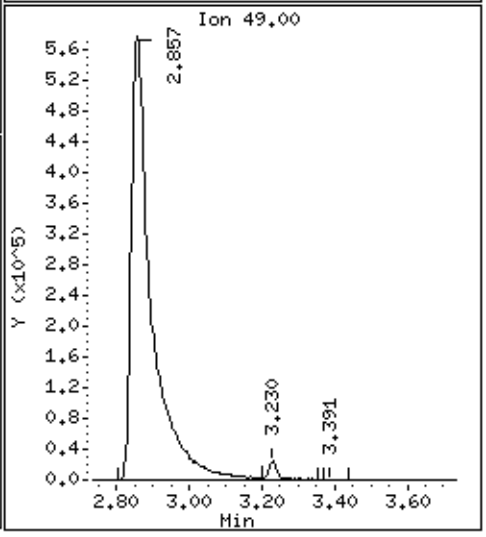


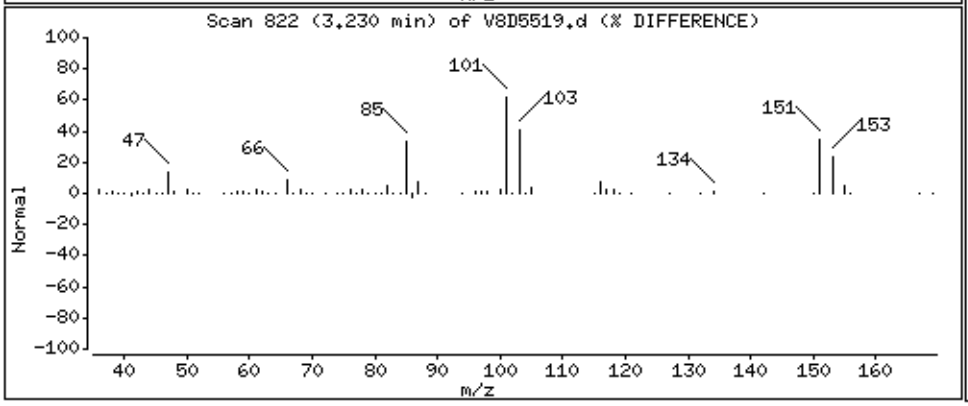












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

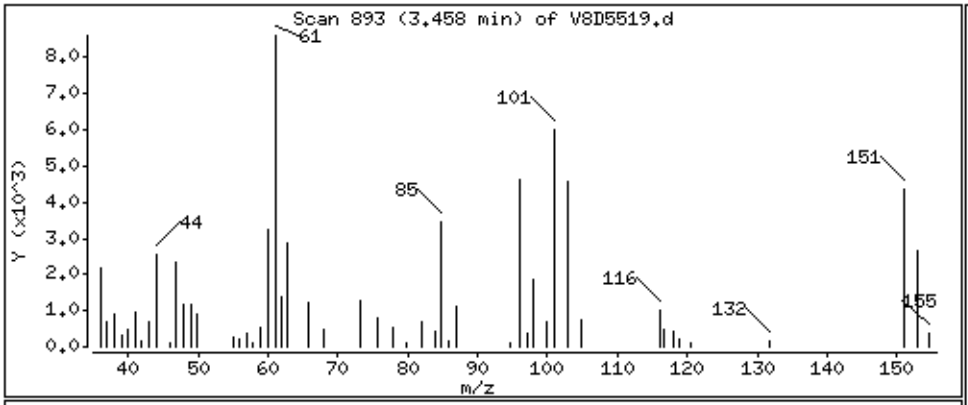
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

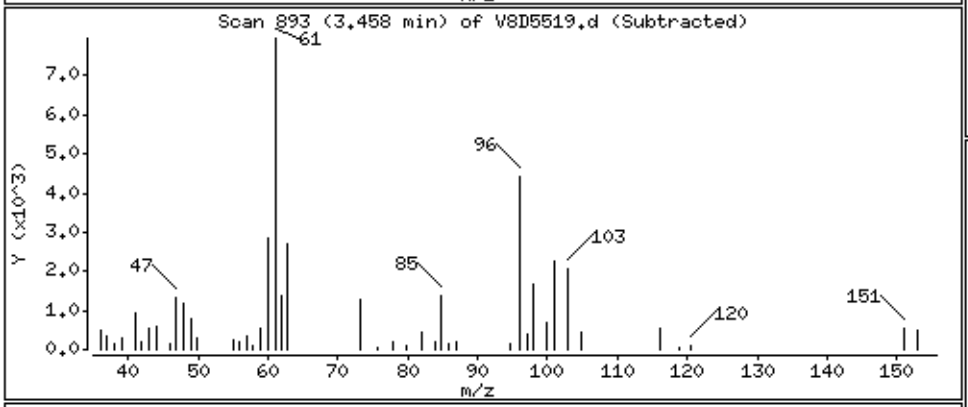
Sample Info: 5ML,N1055-04A,,77659

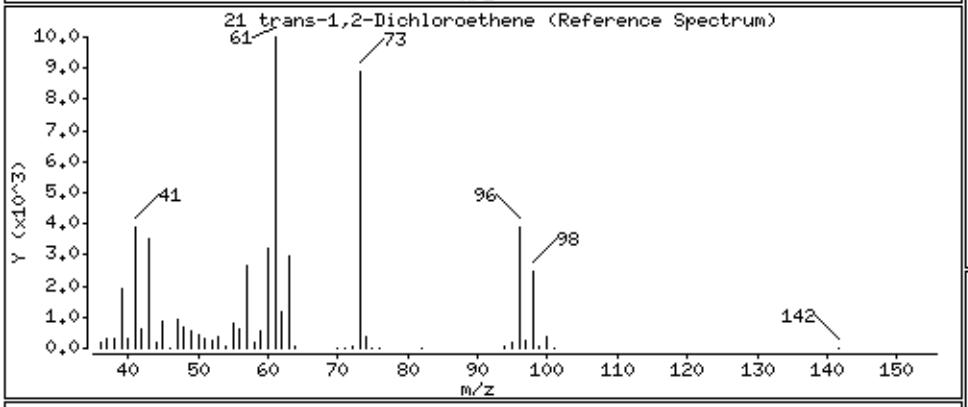
Purge Volume: 5.0 Operator: WL SRC: LIMS

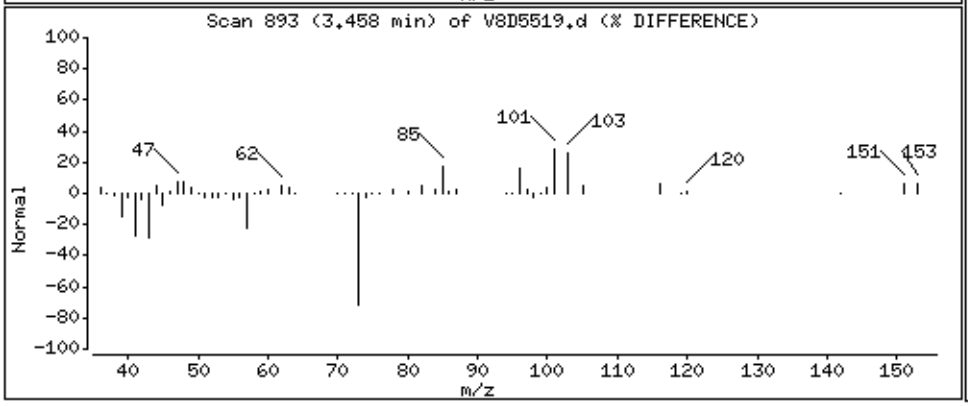
Column phase: DB-624 Column diameter: 0.25

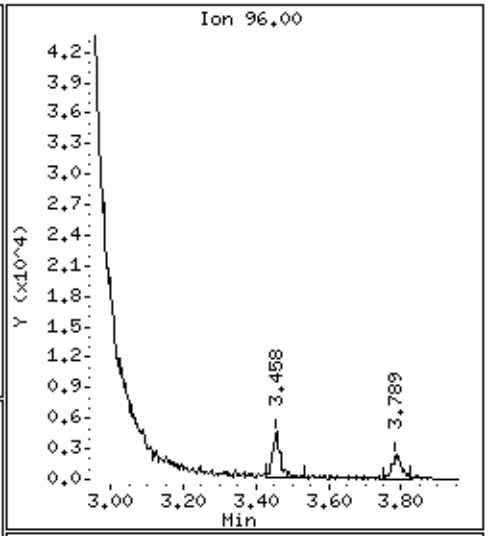
21 trans-1,2-Dichloroethene Concentration: 3.5 ug/L

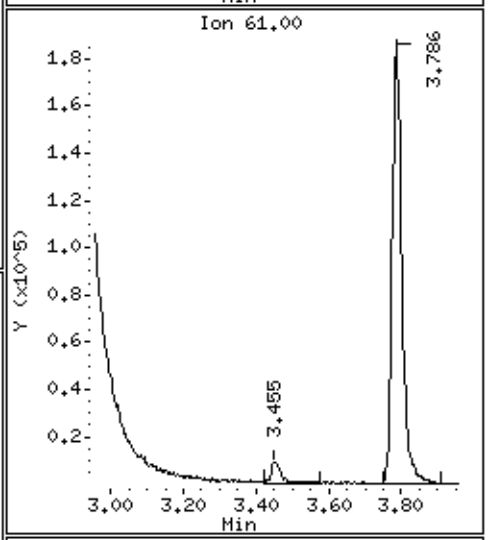


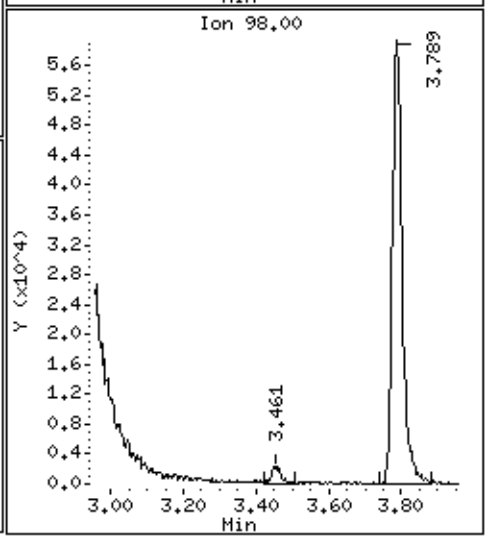












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

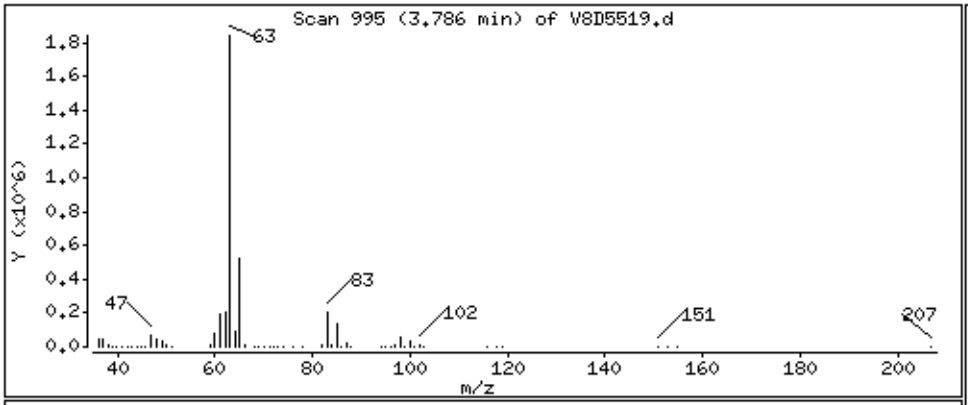
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

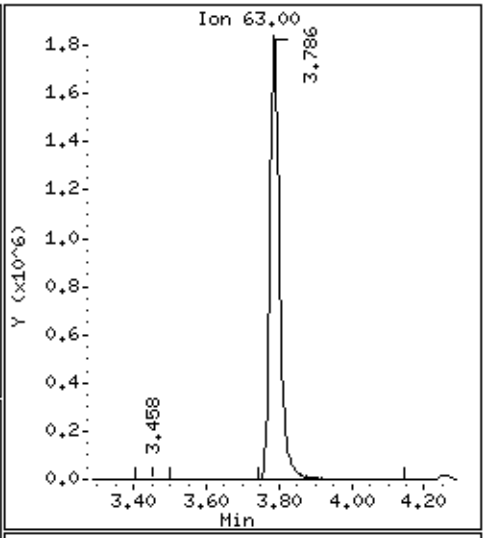
Sample Info: 5ML,N1055-04A,,77659

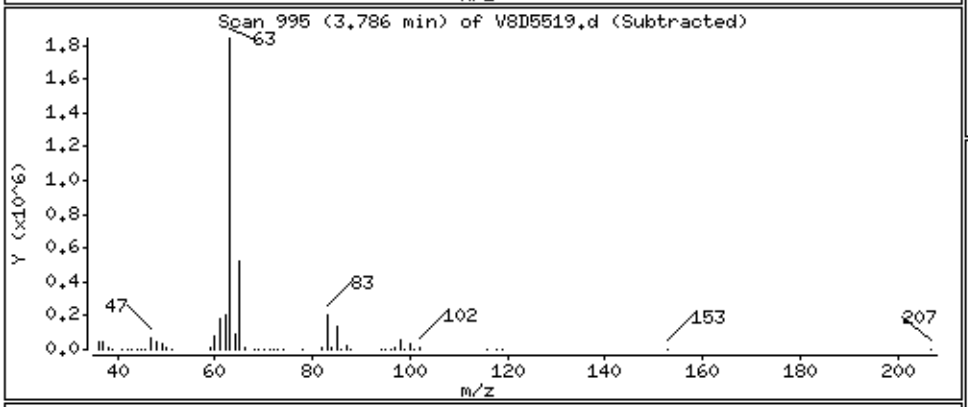
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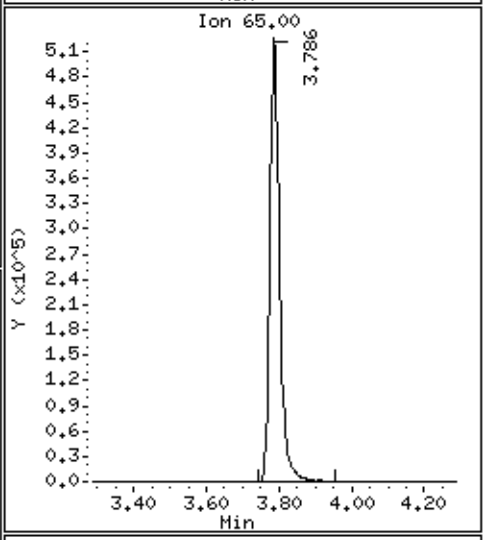
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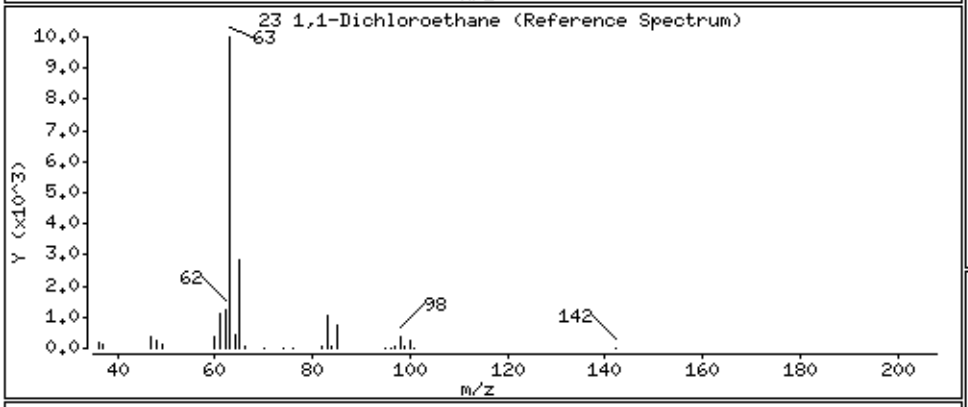
23 1,1-Dichloroethane Concentration: 650 ug/L

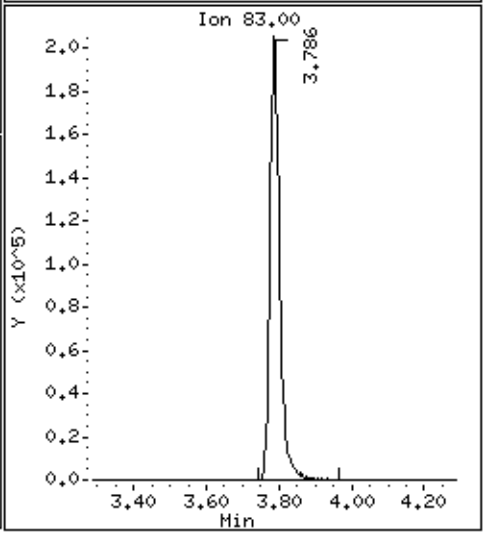


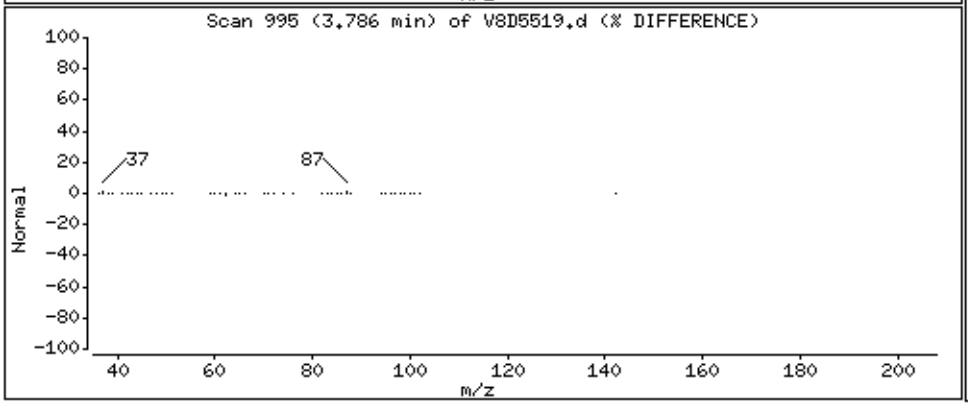












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

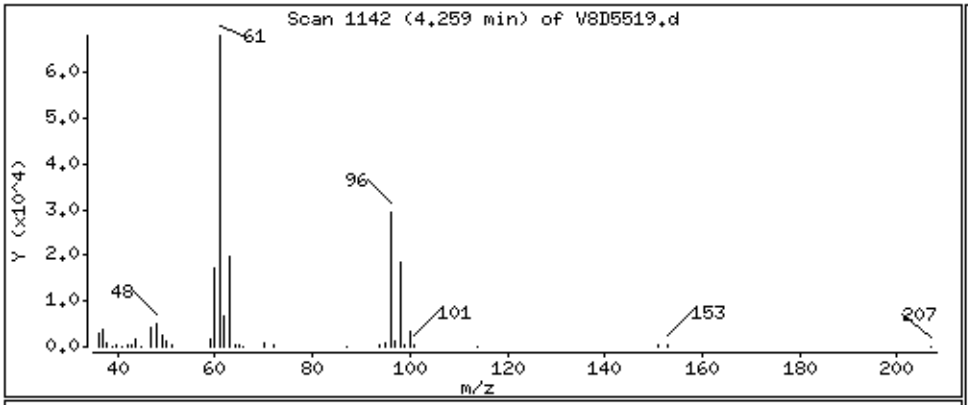
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

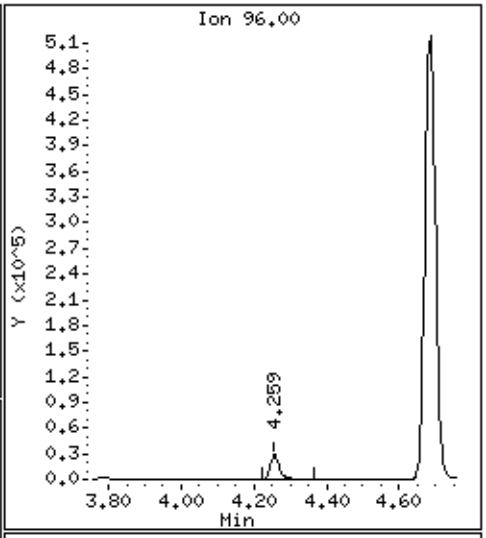
Sample Info: 5ML,N1055-04A,,77659

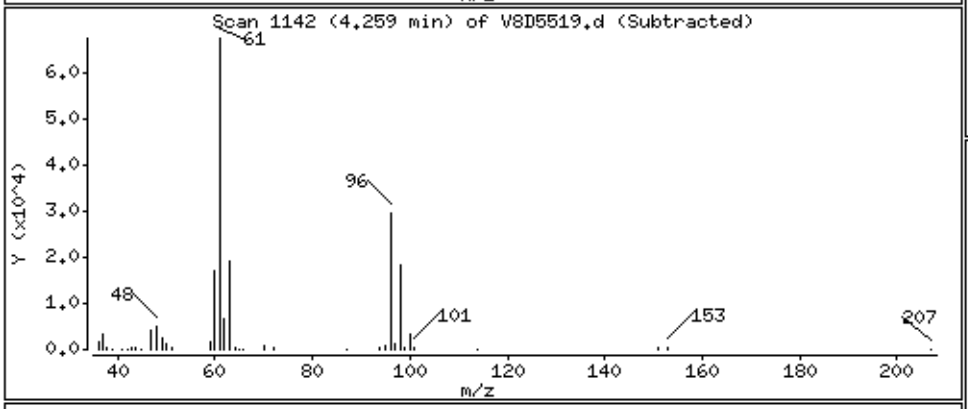
Purge Volume: 5.0 Operator: WL SRC: LIMS

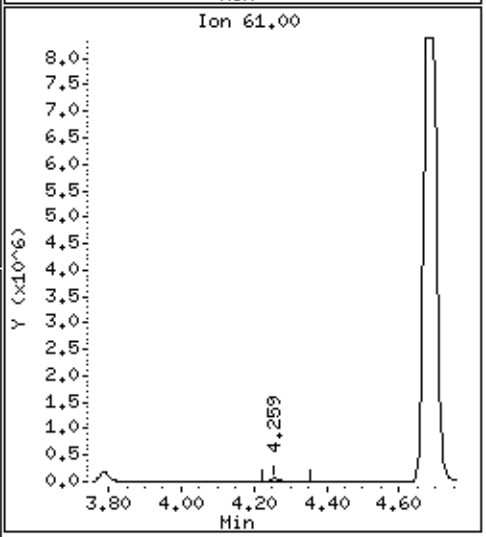
Column phase: DB-624 Column diameter: 0.25

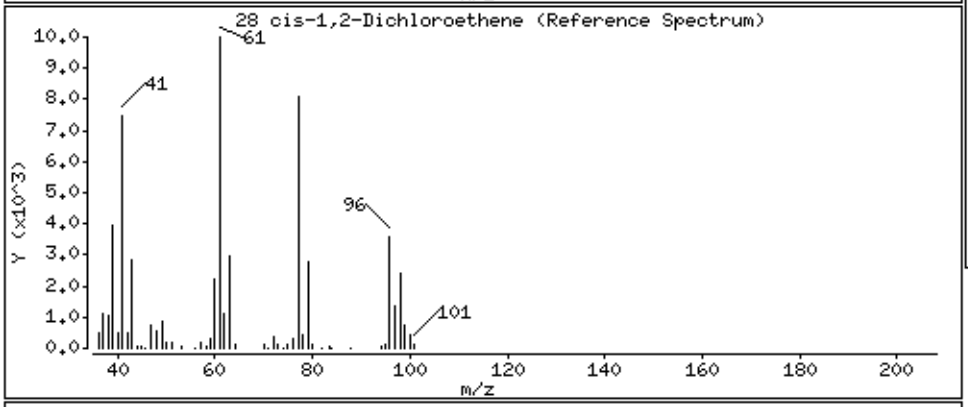
28 cis-1,2-Dichloroethene Concentration: 25 ug/L

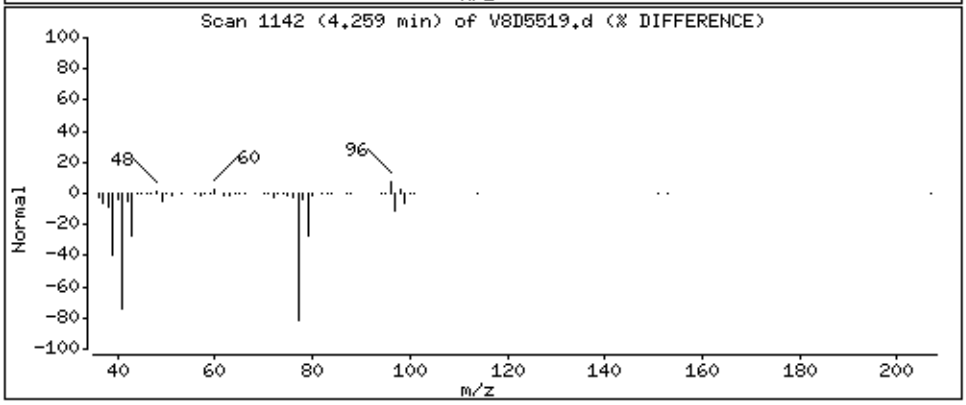












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

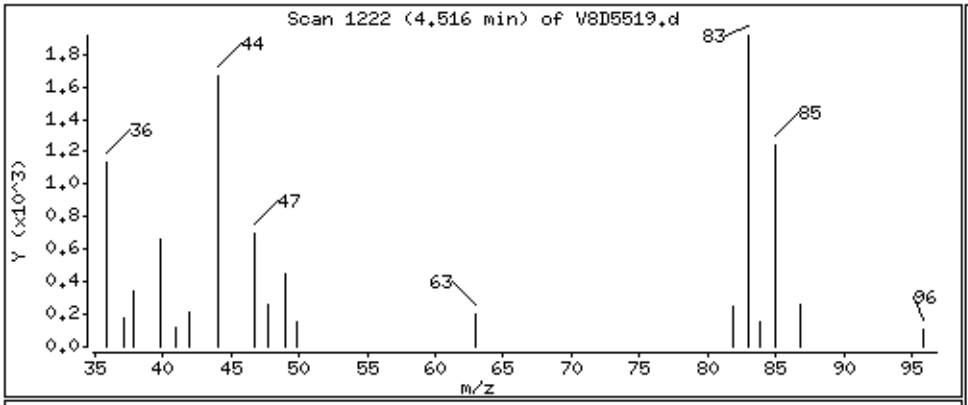
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

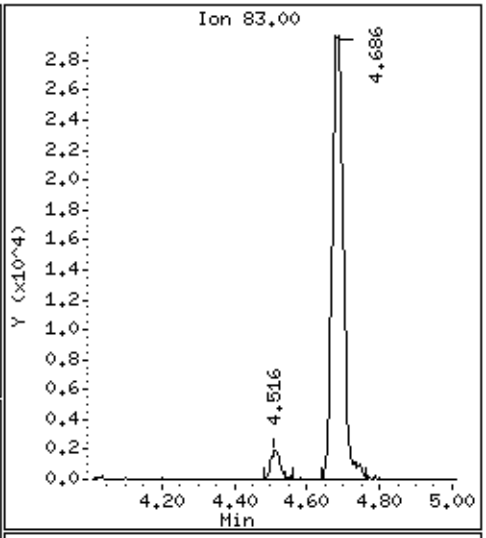
Sample Info: 5ML,N1055-04A,,77659

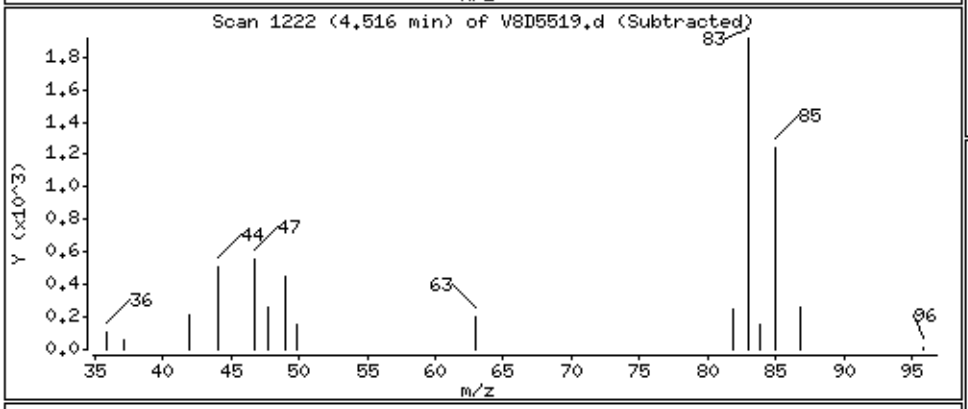
Purge Volume: 5.0 Operator: WL SRC: LIMS

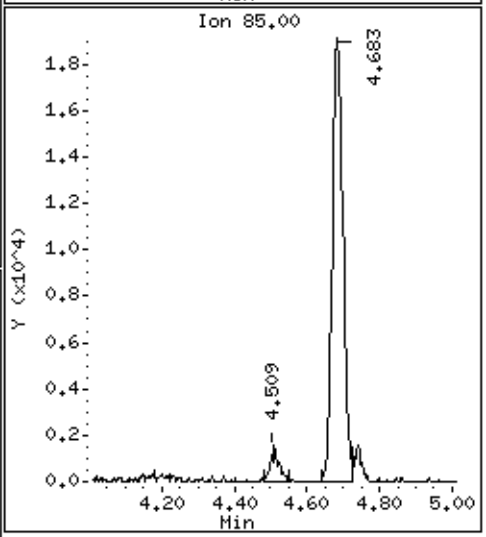
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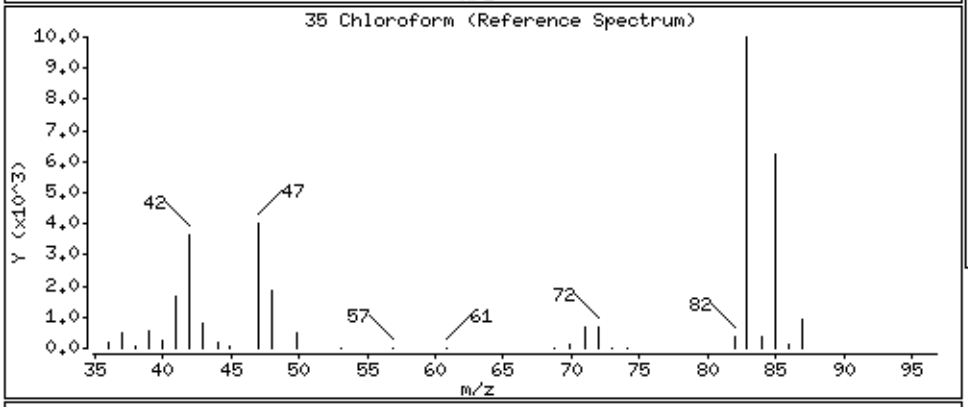
35 Chloroform Concentration: 0.75 ug/L

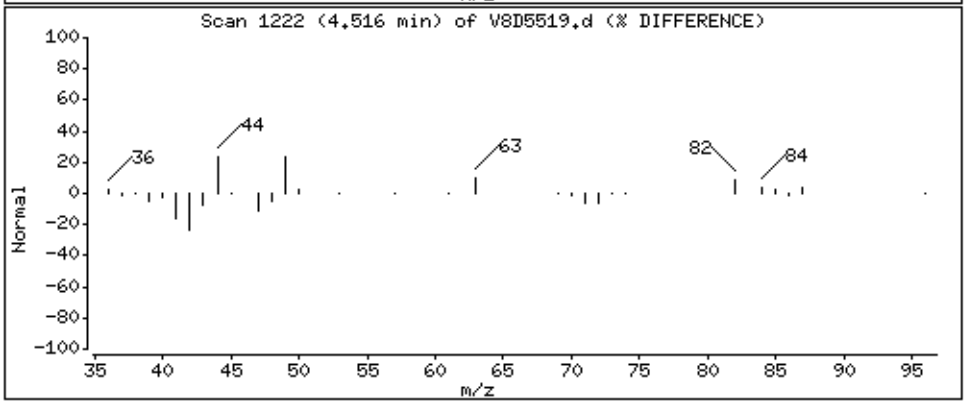












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

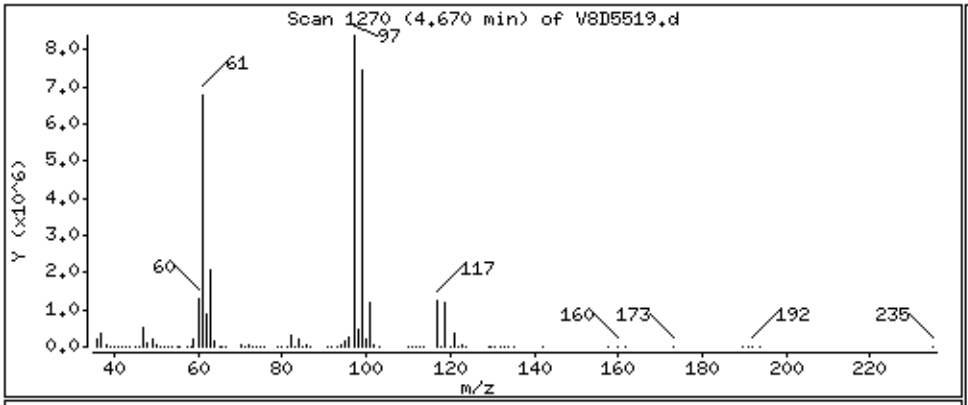
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

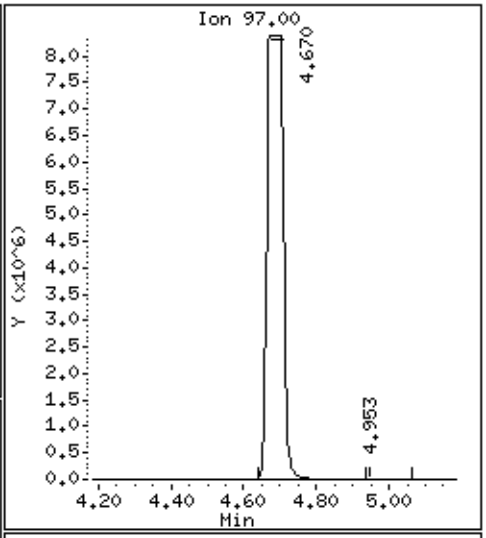
Sample Info: 5ML,N1055-04A,,77659

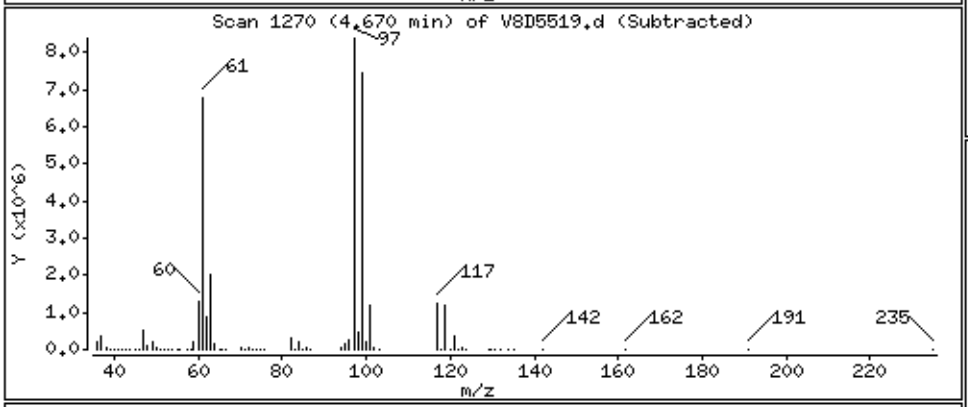
Purge Volume: 5.0 Operator: WL SRC: LIMS

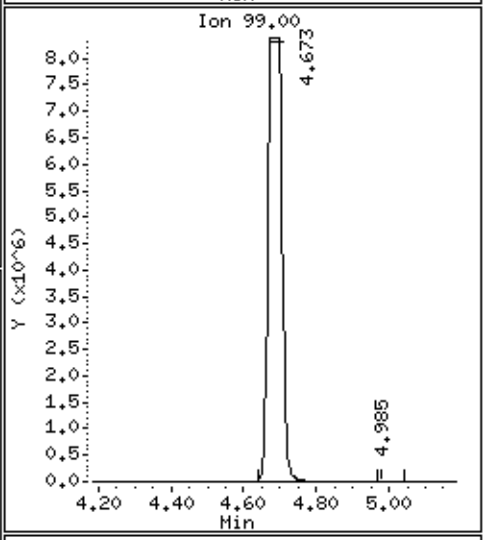
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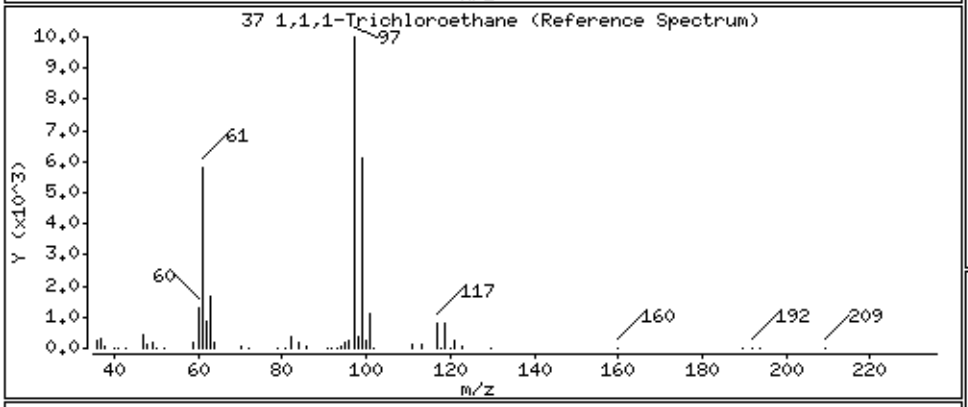
37 1,1,1-Trichloroethane Concentration: 5400 ug/L

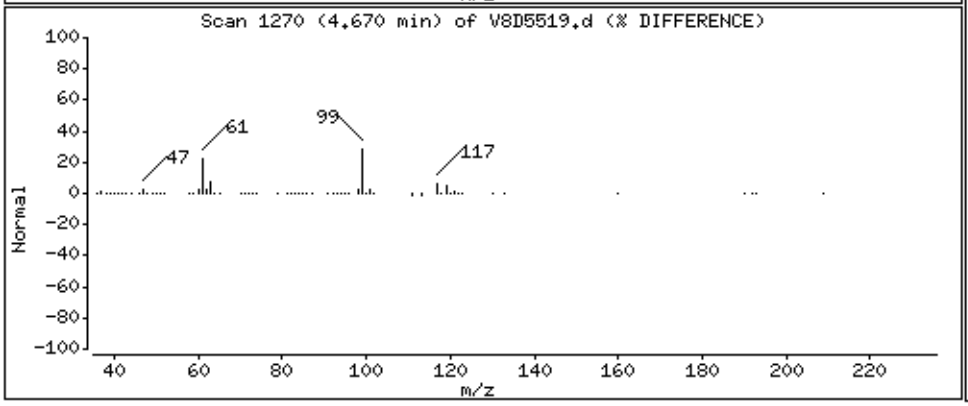


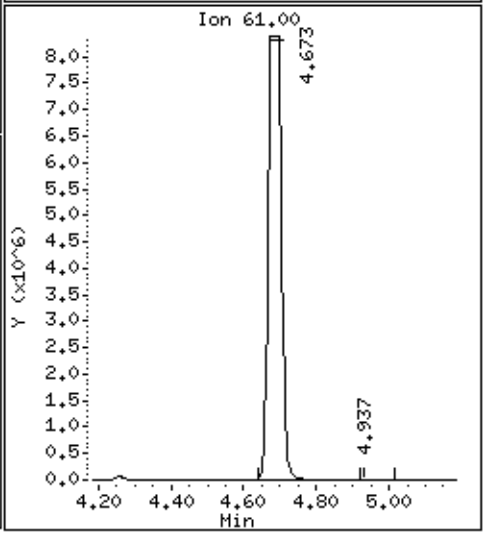












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

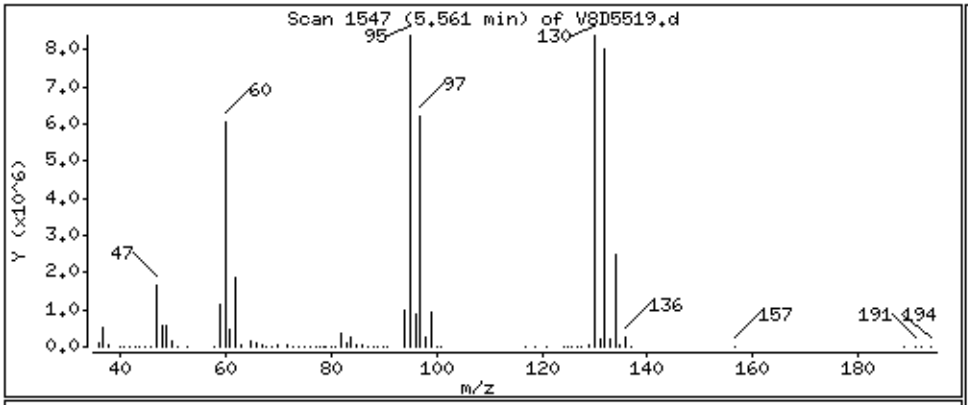
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

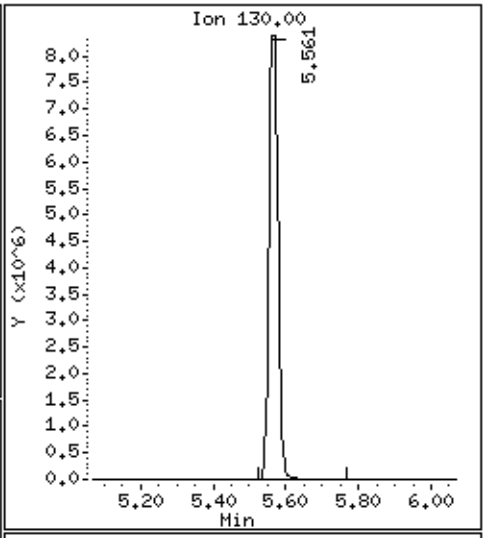
Sample Info: 5ML,N1055-04A,,77659

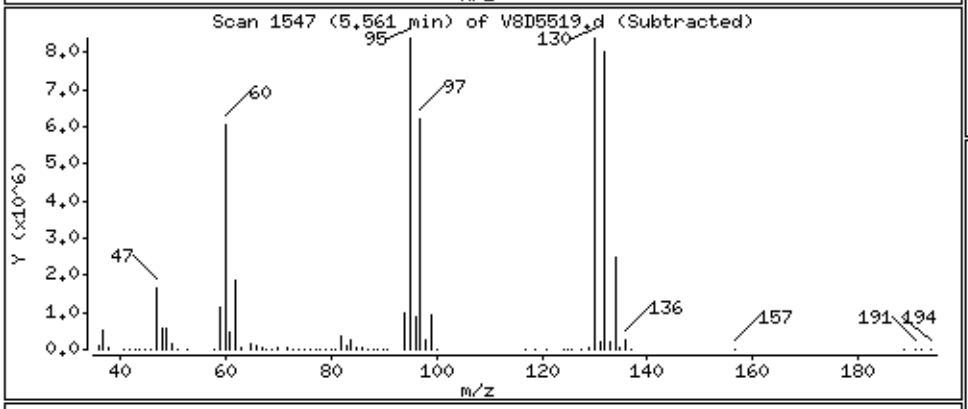
Purge Volume: 5.0 Operator: WL SRC: LIMS

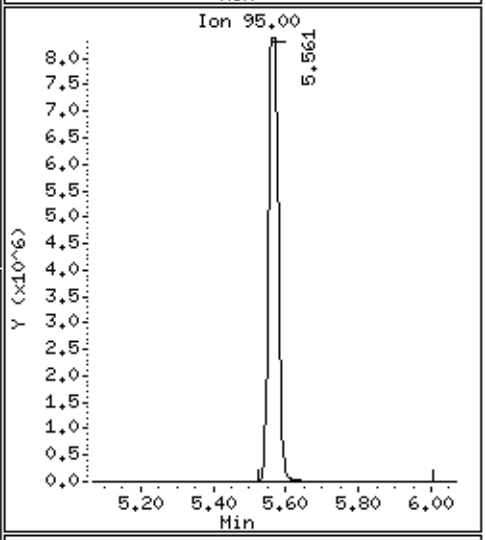
Column phase: DB-624 Column diameter: 0.25

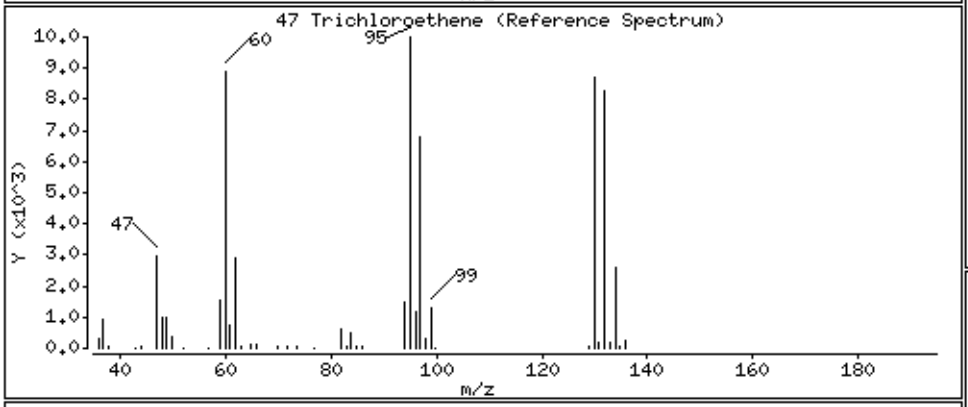
47 Trichloroethene Concentration: 7600 ug/L

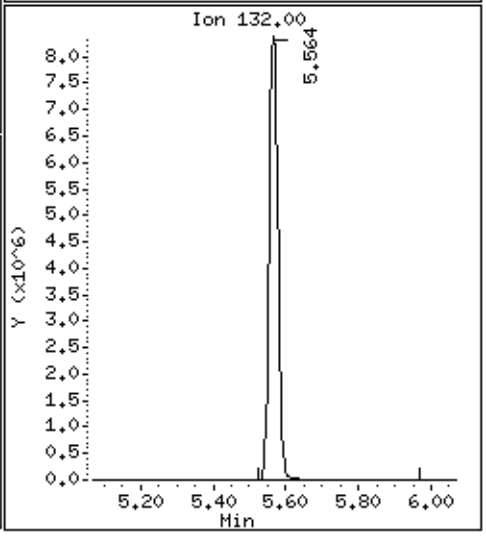


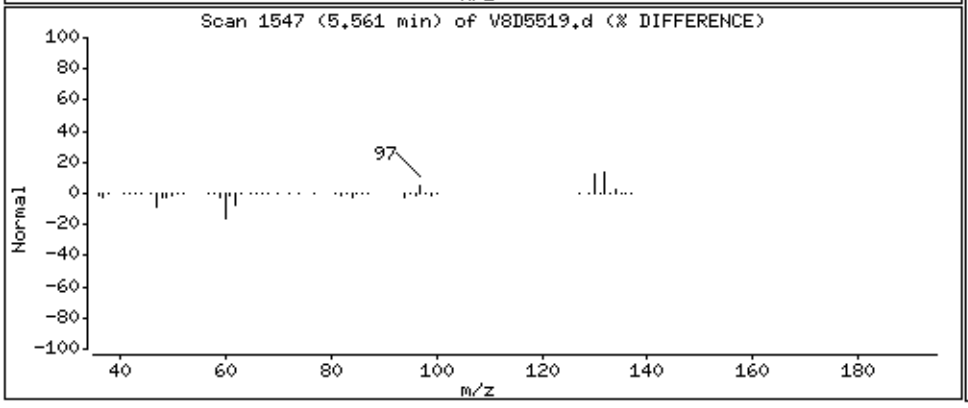












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

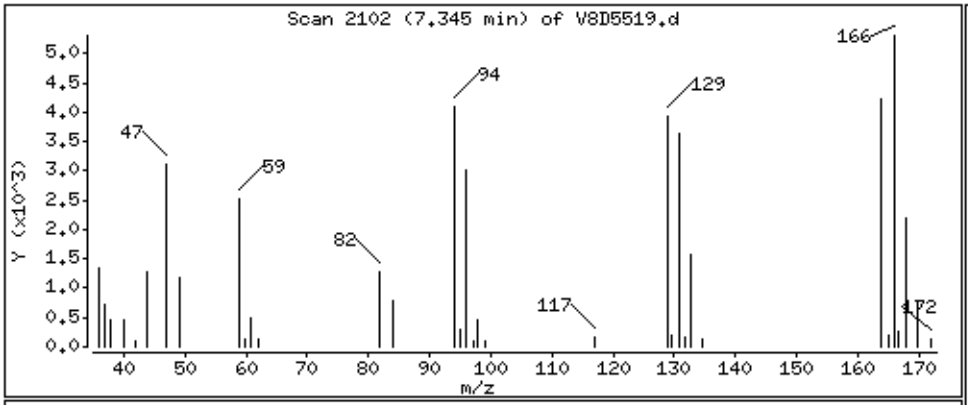
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

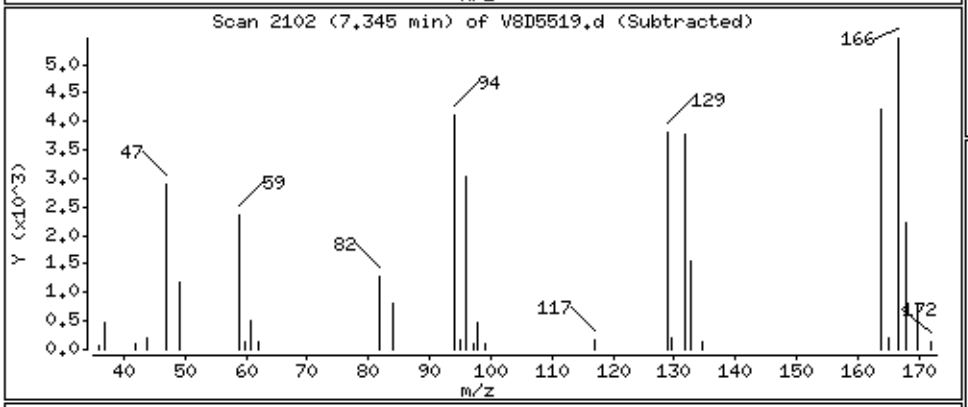
Sample Info: 5ML,N1055-04A,,77659

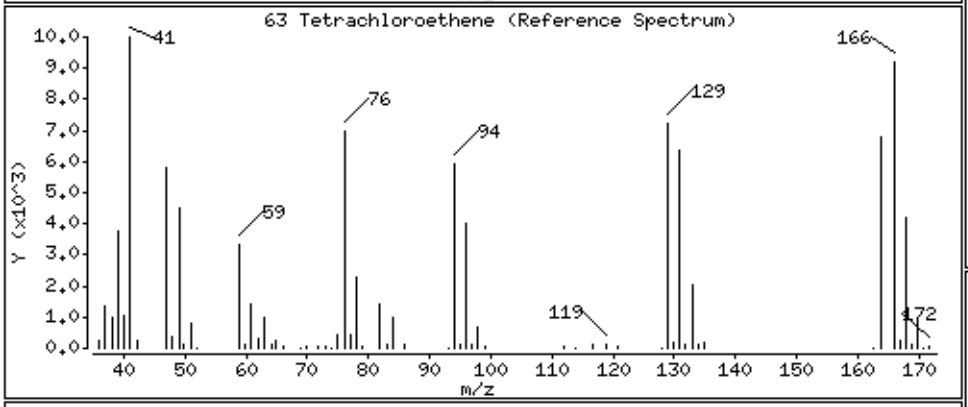
Purge Volume: 5.0 Operator: WL SRC: LIMS

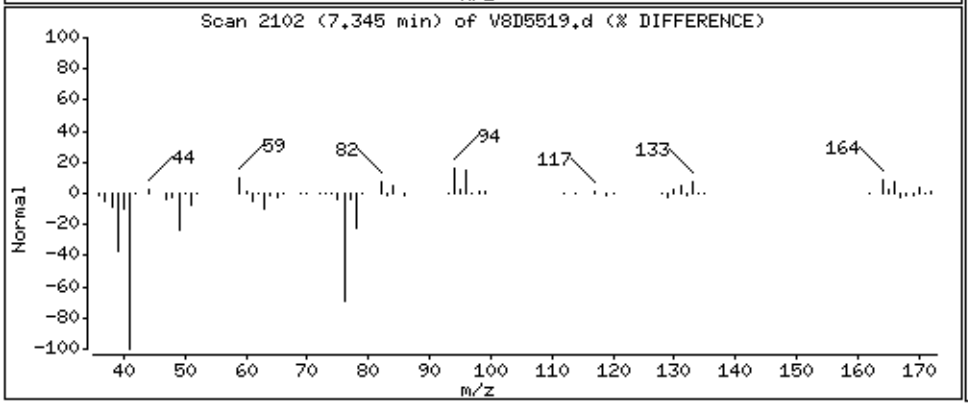
Column phase: DB-624 Column diameter: 0.25

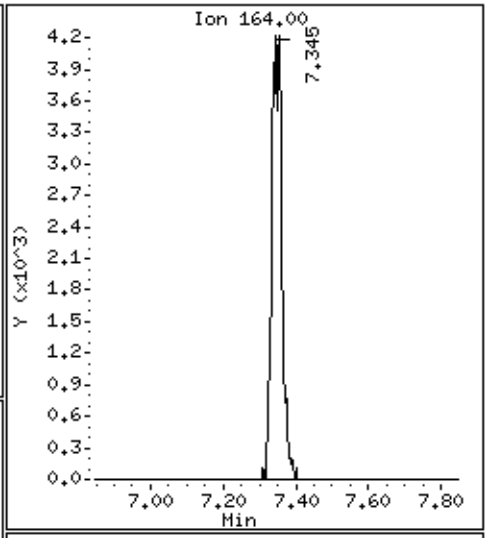
63 Tetrachloroethene Concentration: 3.8 ug/L

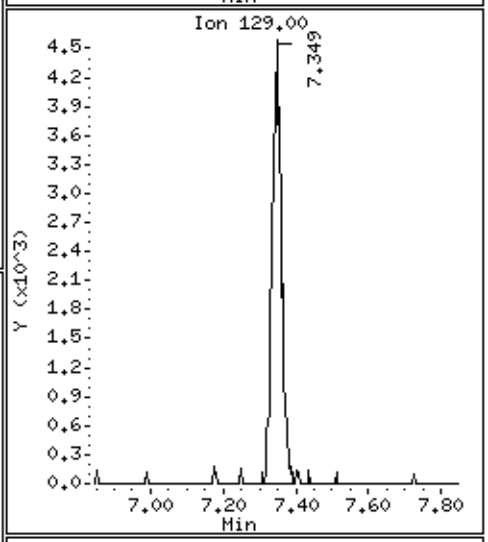


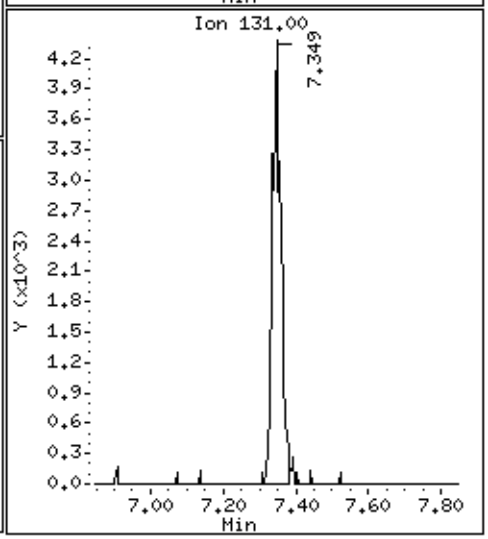












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

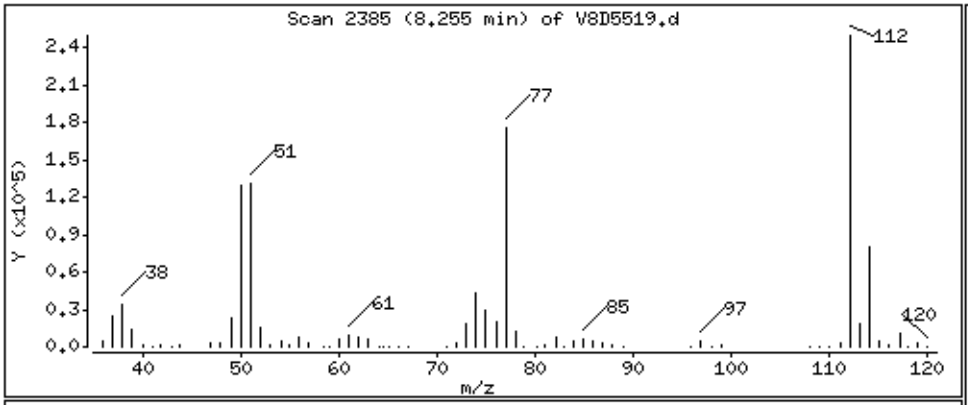
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

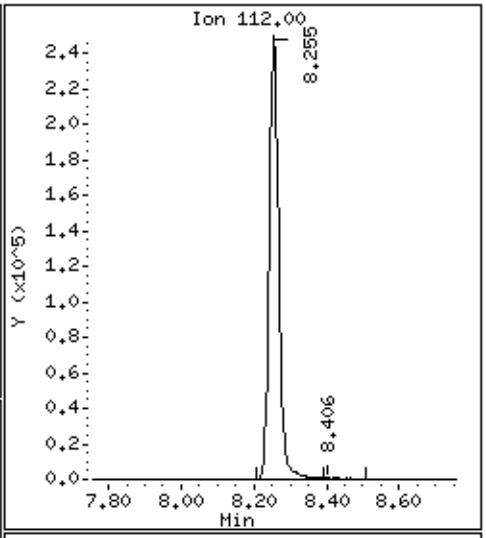
Sample Info: 5ML,N1055-04A,,77659

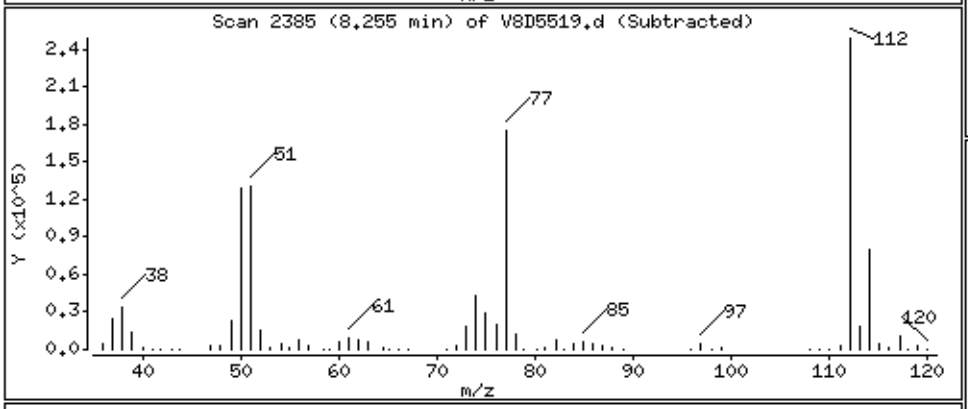
Purge Volume: 5.0 Operator: WL SRC: LIMS

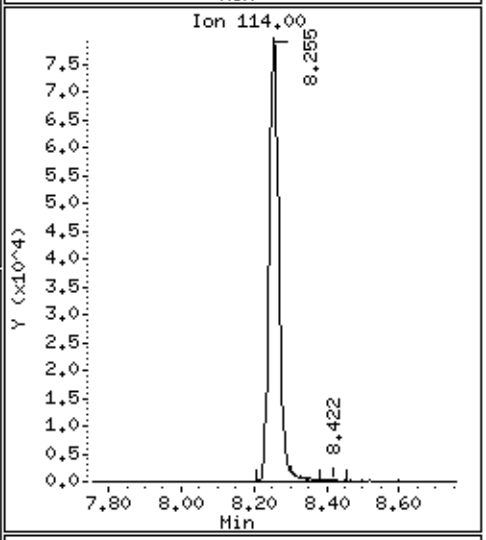
Column phase: DB-624 Column diameter: 0.25

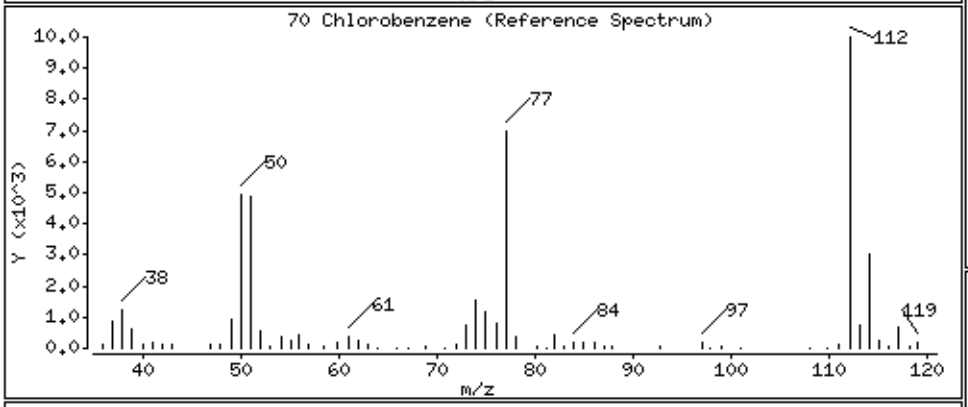
70 Chlorobenzene Concentration: 82 ug/L

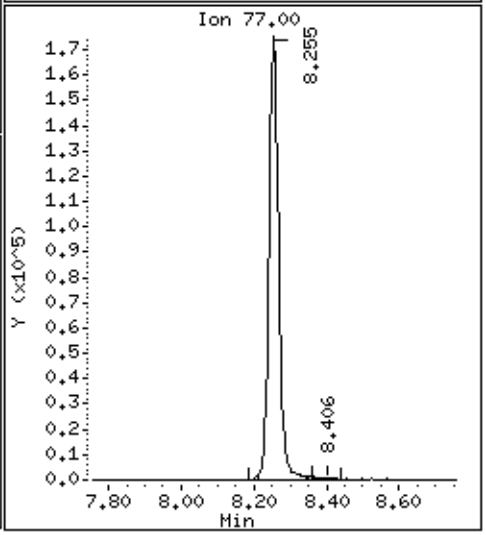


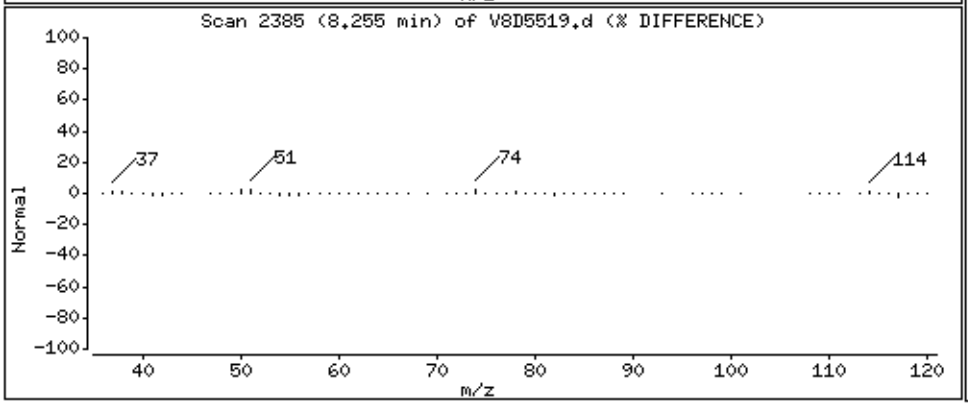












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Date : 19-JUN-2014 11:37

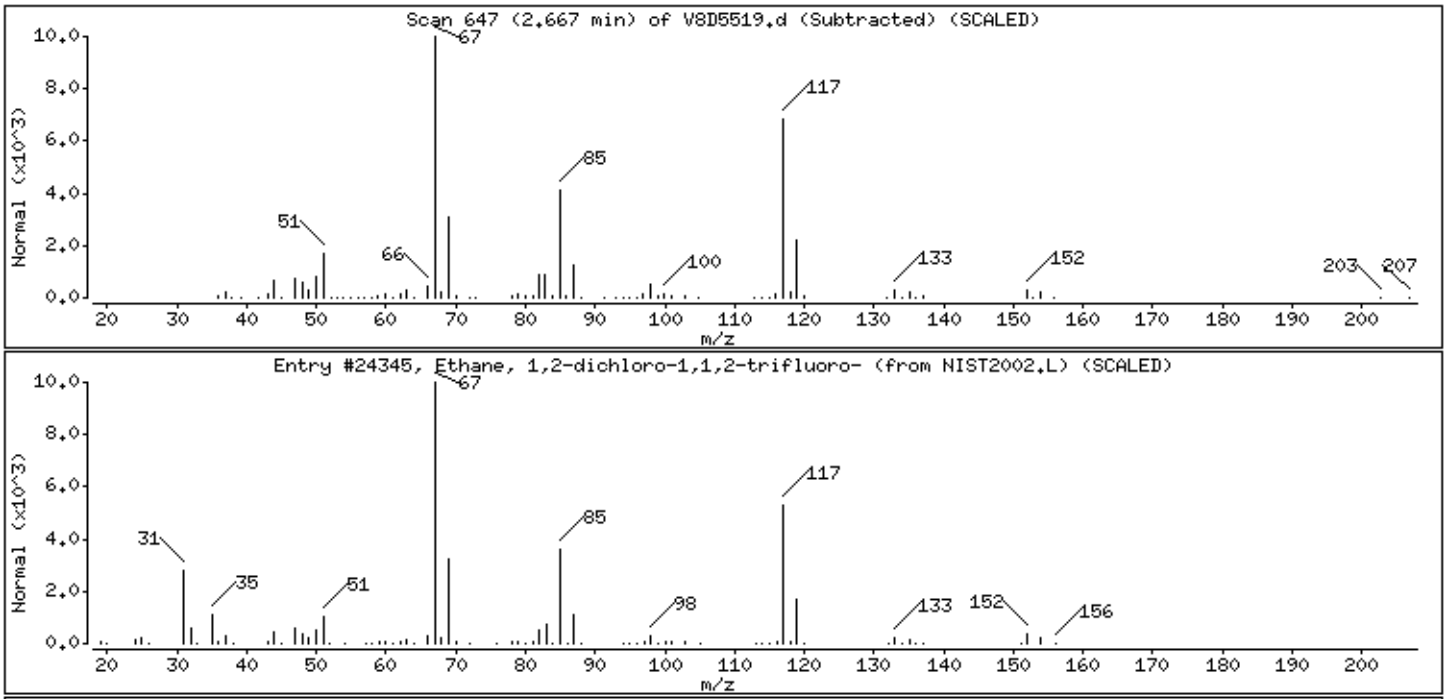
Client ID: MW-22R(2)_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-04A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

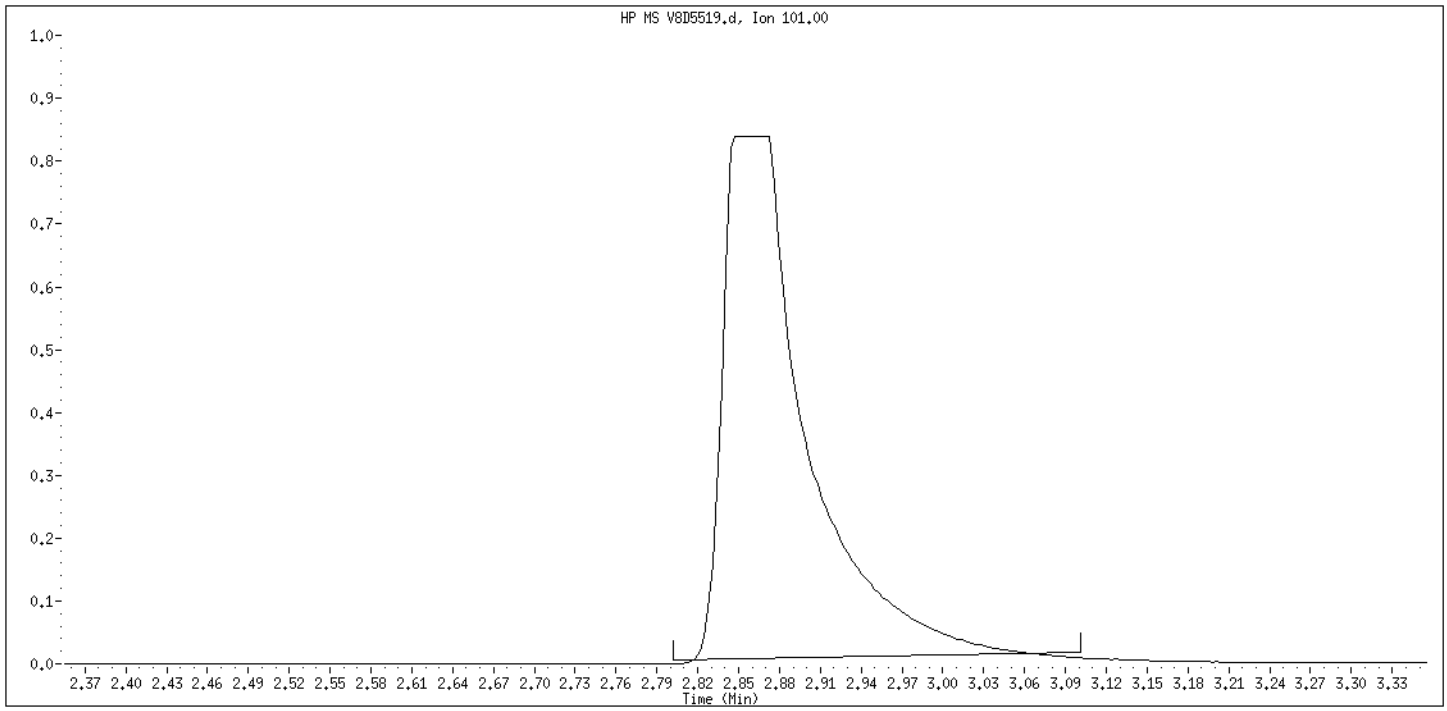
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	94	C2HCl2F3	152



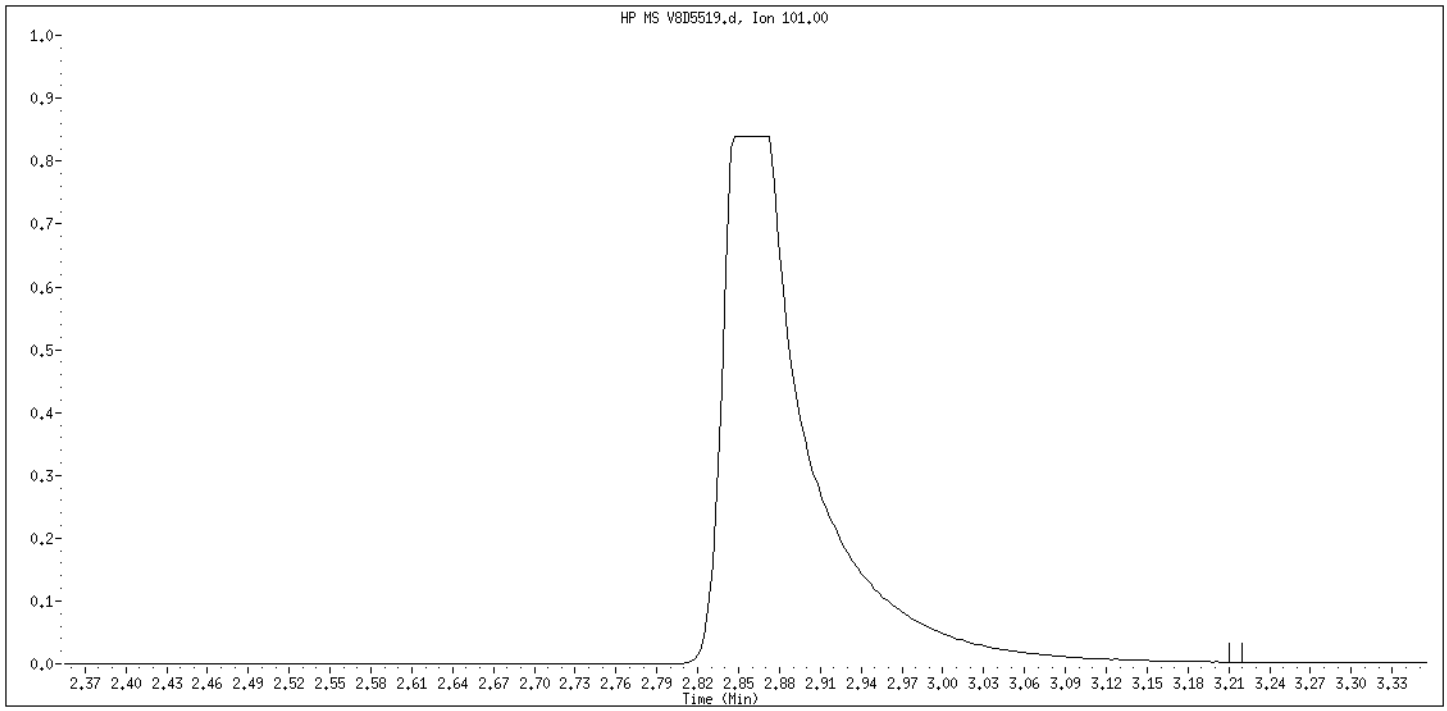
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5519.d

Lab ID: N1055-04A Client ID: MW-22R(2)_6/16/14
Inj Date: 19-JUN-2014 11:37 Operator: WL SRC: LIMS

Manual Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 2.847 min, Range: 2.802 to 3.101 min Response: 3528373



Original Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 3.214 min, Range: 3.210 to 3.220 min Response: 6696



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(2)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-04ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5589.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	200	U
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
75-35-4	1,1-Dichloroethene	200	U
67-64-1	Acetone	1000	U
74-88-4	Iodomethane	200	U
75-15-0	Carbon disulfide	200	U
75-09-2	Methylene chloride	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
1634-04-4	Methyl tert-butyl ether	200	U
75-34-3	1,1-Dichloroethane	600	D
108-05-4	Vinyl acetate	200	U
78-93-3	2-Butanone	1000	U
156-59-2	cis-1,2-Dichloroethene	200	U
594-20-7	2,2-Dichloropropane	200	U
74-97-5	Bromochloromethane	200	U
67-66-3	Chloroform	200	U
71-55-6	1,1,1-Trichloroethane	11000	D
563-58-6	1,1-Dichloropropene	200	U
56-23-5	Carbon tetrachloride	200	U
107-06-2	1,2-Dichloroethane	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	5600	D
78-87-5	1,2-Dichloropropane	200	U
74-95-3	Dibromomethane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
108-10-1	4-Methyl-2-pentanone	1000	U
108-88-3	Toluene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
142-28-9	1,3-Dichloropropane	200	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(2)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-04ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5589.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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	200	U
591-78-6	2-Hexanone	1000	U
124-48-1	Dibromochloromethane	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
630-20-6	1,1,1,2-Tetrachloroethane	200	U
100-41-4	Ethylbenzene	200	U
179601-23-1	m,p-Xylene	200	U
95-47-6	o-Xylene	200	U
1330-20-7	Xylene (Total)	200	U
100-42-5	Styrene	200	U
75-25-2	Bromoform	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
108-86-1	Bromobenzene	200	U
96-18-4	1,2,3-Trichloropropane	200	U
103-65-1	n-Propylbenzene	200	U
95-49-8	2-Chlorotoluene	200	U
108-67-8	1,3,5-Trimethylbenzene	200	U
106-43-4	4-Chlorotoluene	200	U
98-06-6	tert-Butylbenzene	200	U
95-63-6	1,2,4-Trimethylbenzene	200	U
135-98-8	sec-Butylbenzene	200	U
99-87-6	4-Isopropyltoluene	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
104-51-8	n-Butylbenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
87-68-3	Hexachlorobutadiene	200	U
87-61-6	1,2,3-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	19000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R(2)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-04ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5589.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5589.d
Lab Smp Id: N1055-04ADL Client Smp ID: MW-22R(2)_6/16/14DL
Inj Date : 20-JUN-2014 20:56
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-04ADL,,77692,200
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 80
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	200.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	176153	92.5339	18000
	23 1,1-Dichloroethane	63	3.785	3.782	(0.723)	12799	3.00194	600
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	81367	57.0101	57
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.894)	207231	53.5262	11000
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.944)	12625	52.3212	52
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	191790	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	44064	27.8388	5600
$	58 Toluene-d8	98	6.718	6.715	(0.817)	251671	46.3773	46
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	237136	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.522	(1.159)	146090	50.1486	50
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	123793	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d
Report Date: 25-Jun-2014 16:17

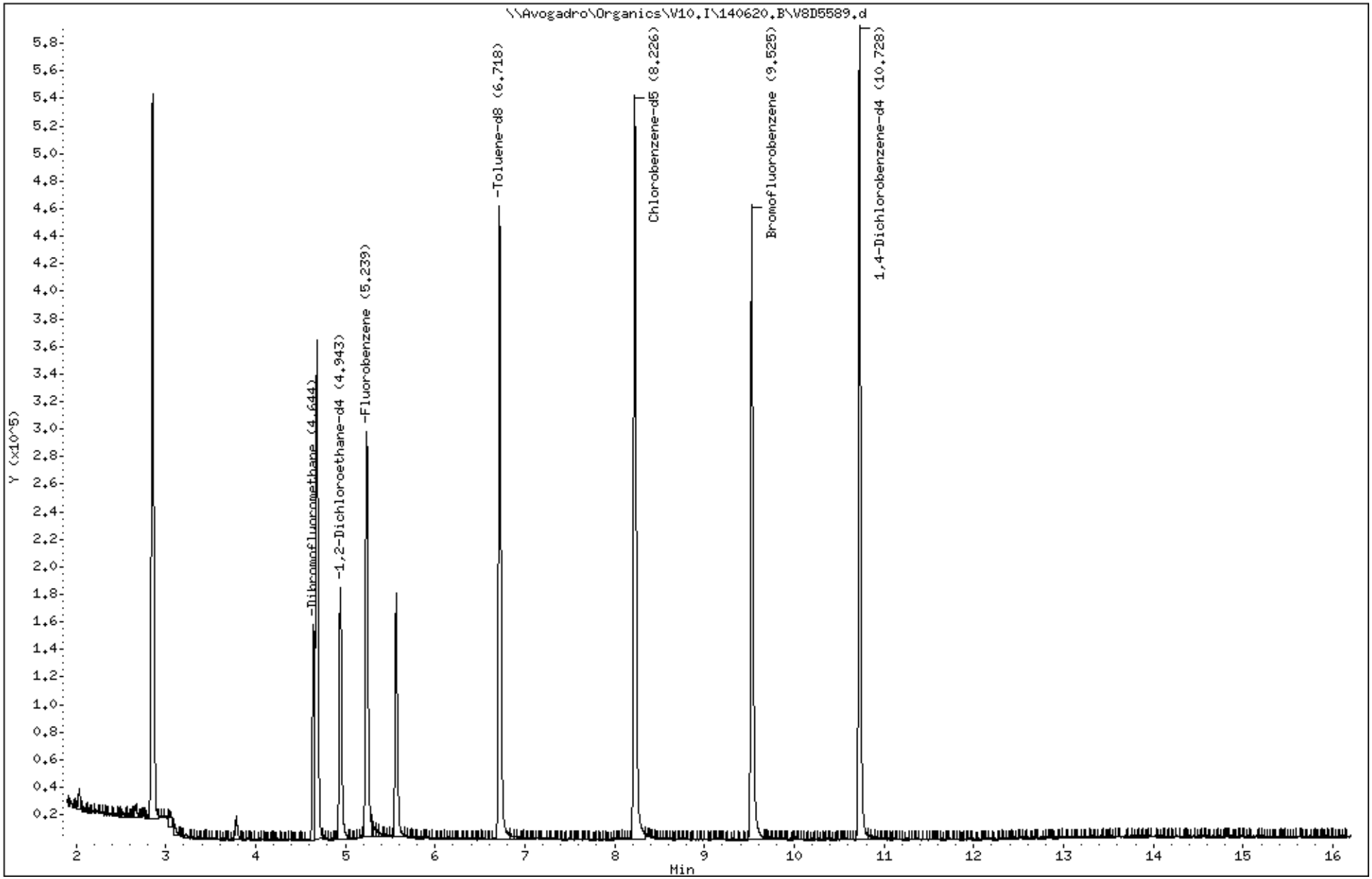
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5589.d
Lab Smp Id: N1055-04ADL Client Smp ID: MW-22R(2)_6/16/14DL
Inj Date : 20-JUN-2014 20:56
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-04ADL,,77692,200
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 80
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d
Date : 20-JUN-2014 20:56
Client ID: MW-22R(2)_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-04ADL,,77692,200
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d

Date : 20-JUN-2014 20:56

Client ID: MW-22R(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-04ADL,,77692,200

Purge Volume: 5.0

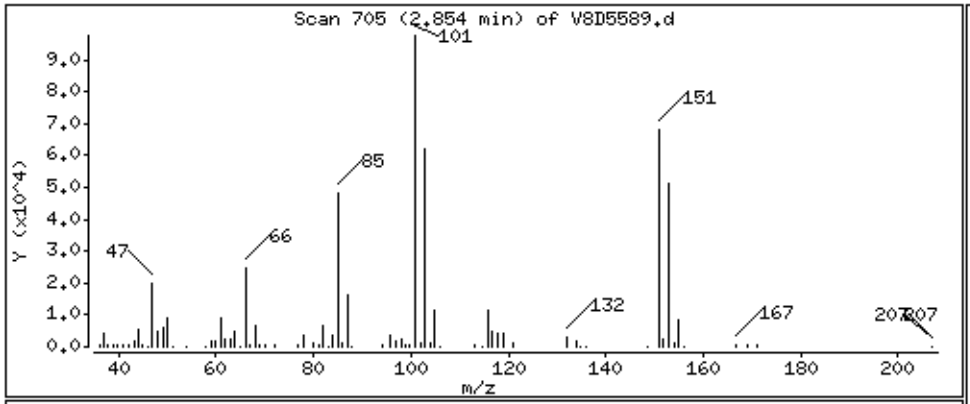
Operator: WL SRC: LIMS

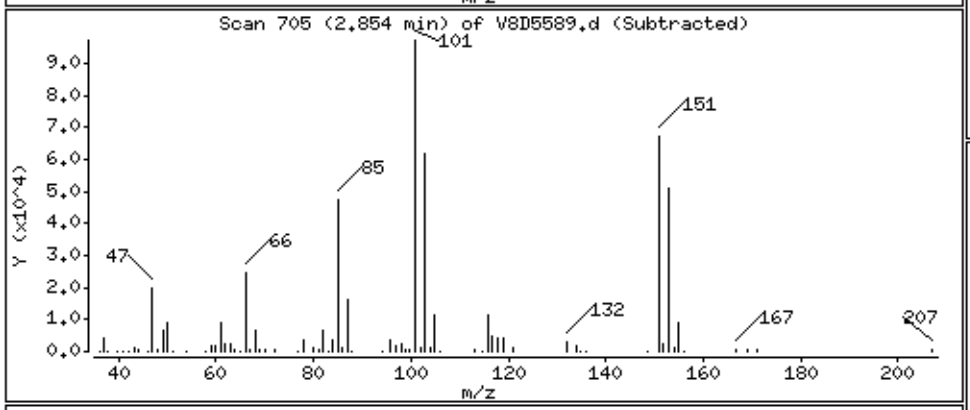
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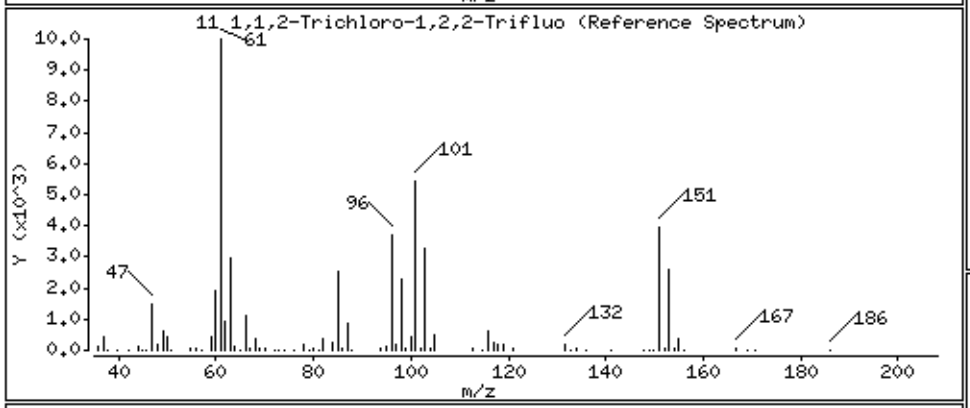
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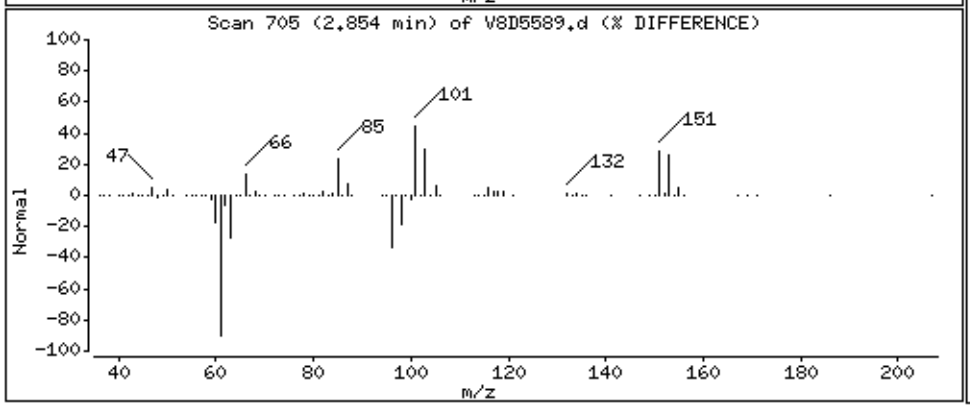
11 1,1,2-Trichloro-1,2,2-Trifluo

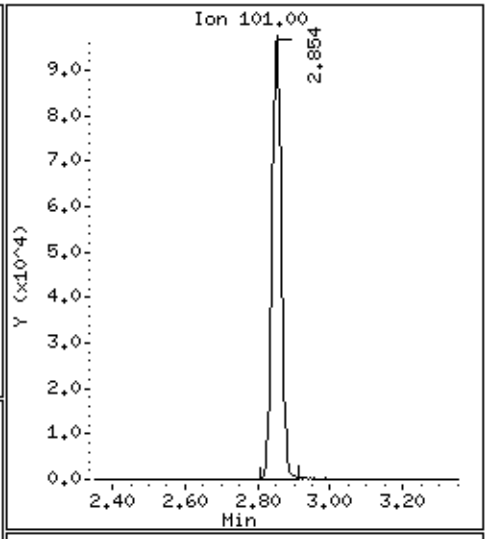
Concentration: 18000 ug/L

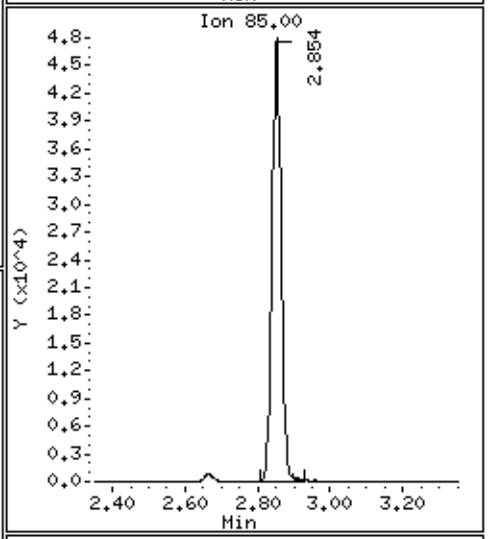


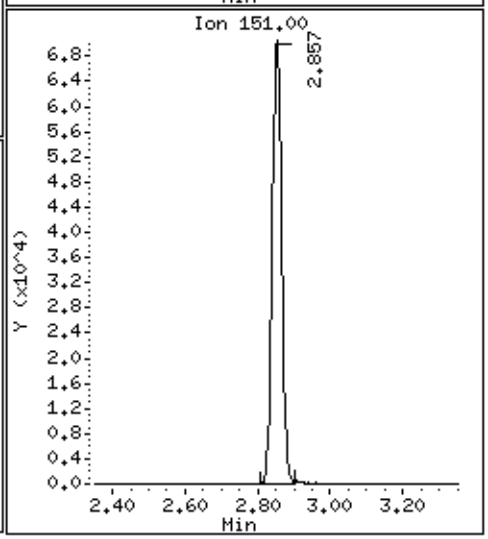












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d

Date : 20-JUN-2014 20:56

Client ID: MW-22R(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-04ADL,,77692,200

Purge Volume: 5.0

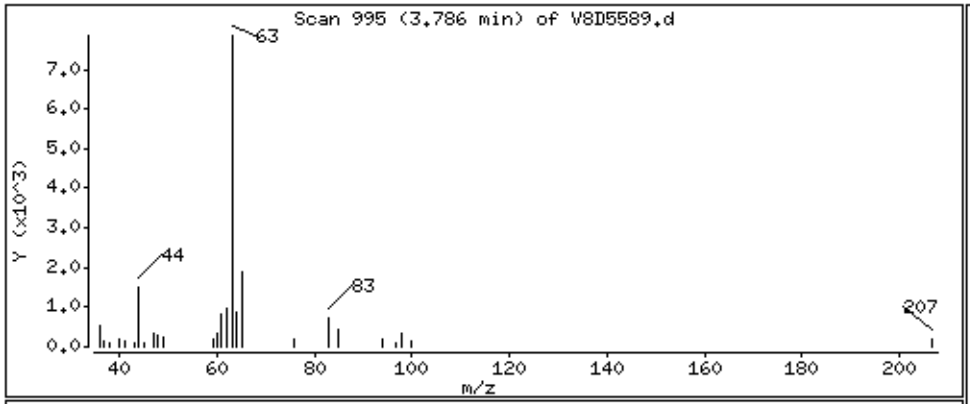
Operator: WL SRC: LIMS

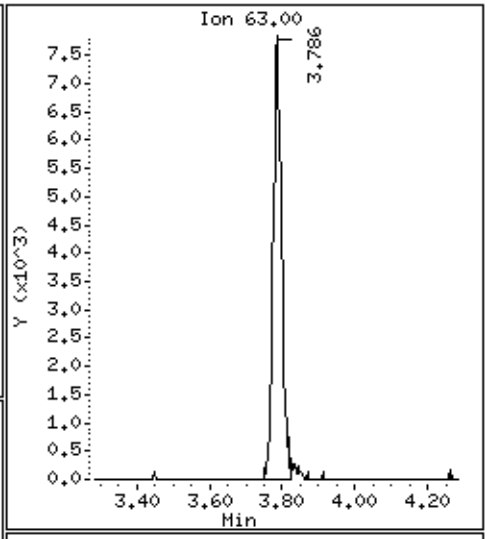
Column phase: DB-624

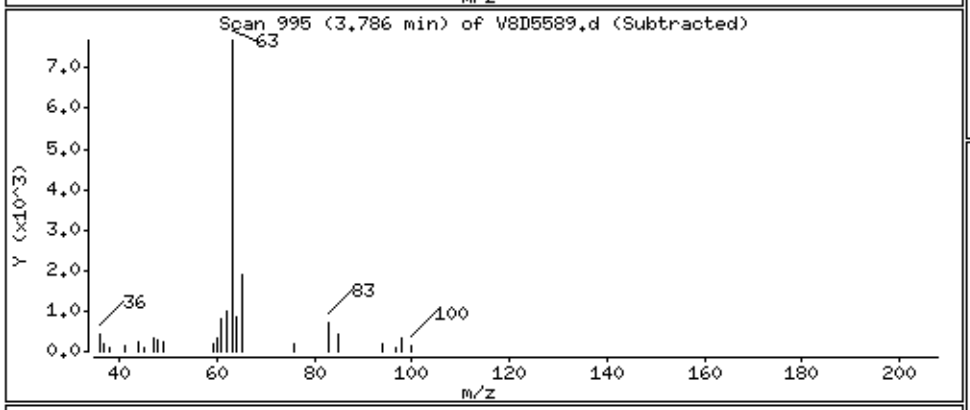
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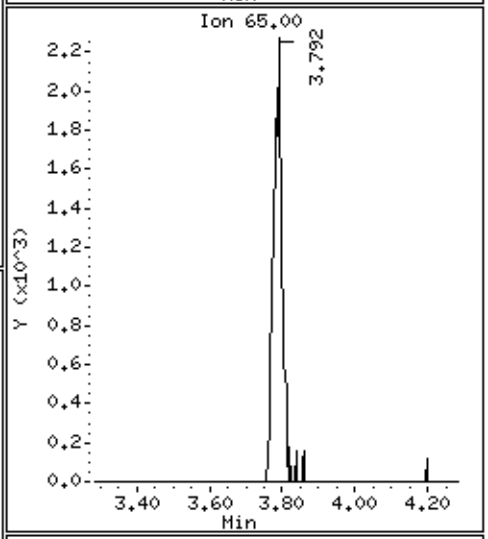
23 1,1-Dichloroethane

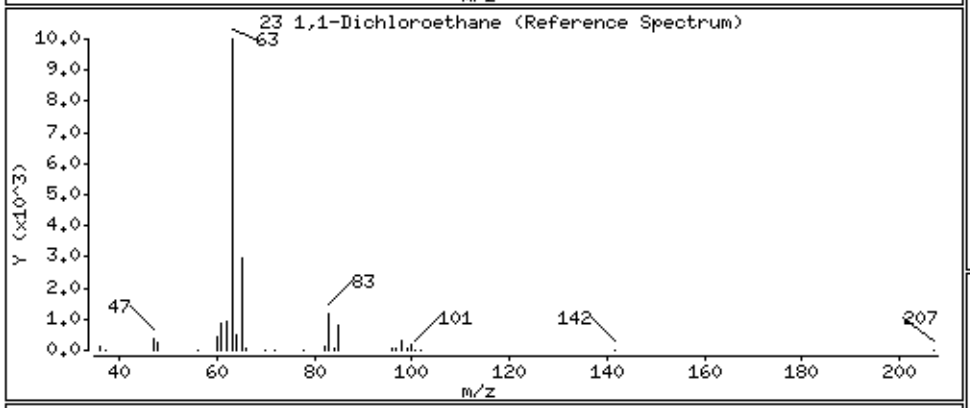
Concentration: 600 ug/L

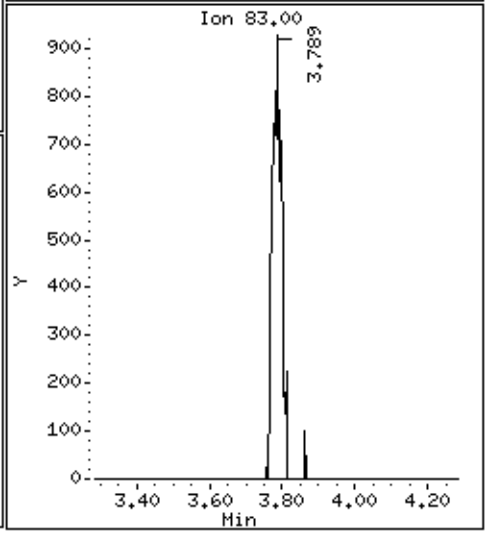


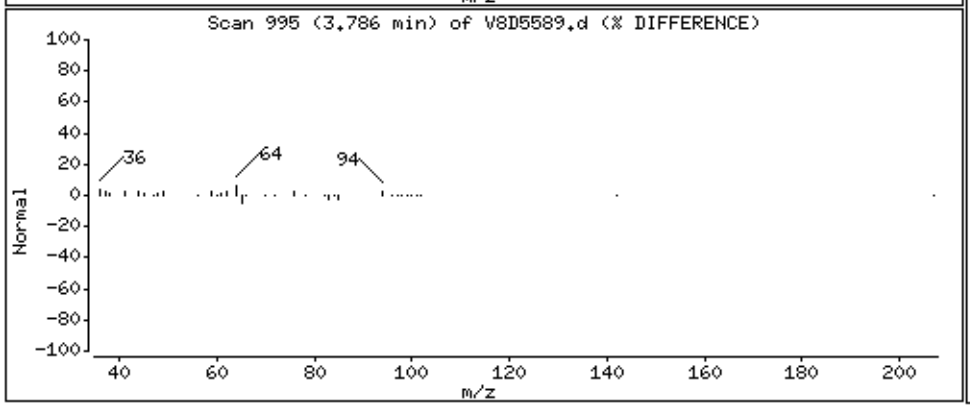












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d

Date : 20-JUN-2014 20:56

Client ID: MW-22R(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-04ADL,,77692,200

Purge Volume: 5.0

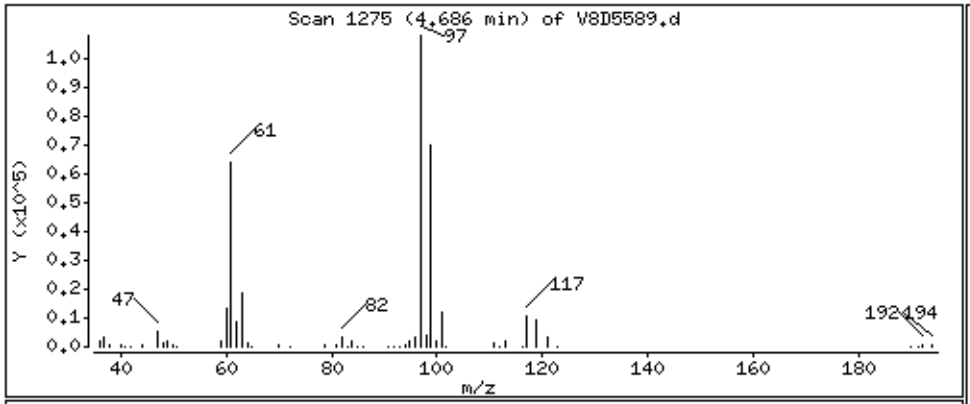
Operator: WL SRC: LIMS

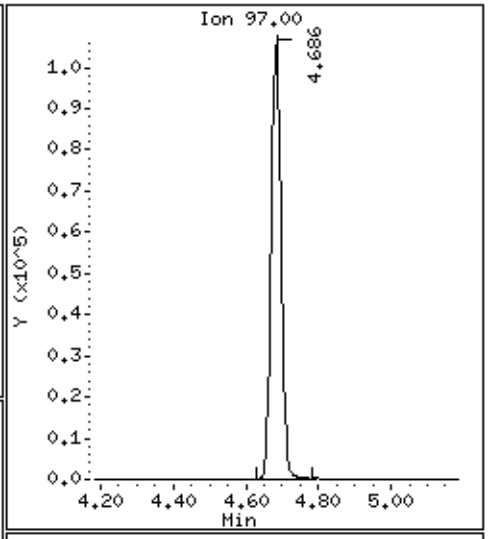
Column phase: DB-624

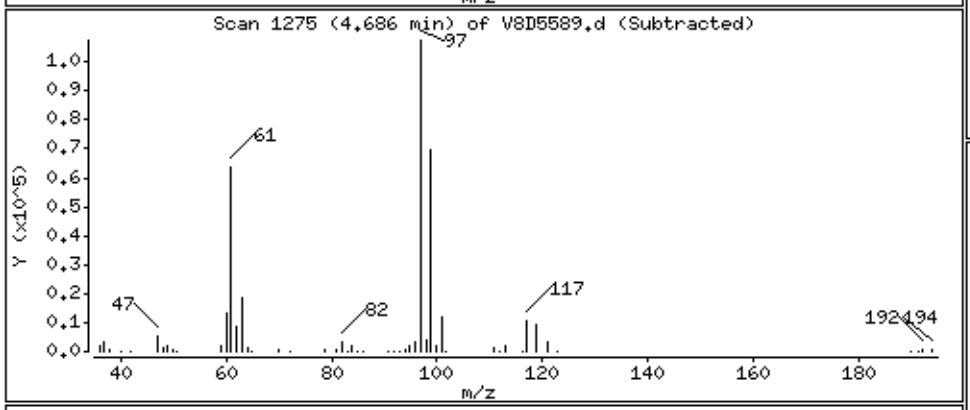
Column diameter: 0.25

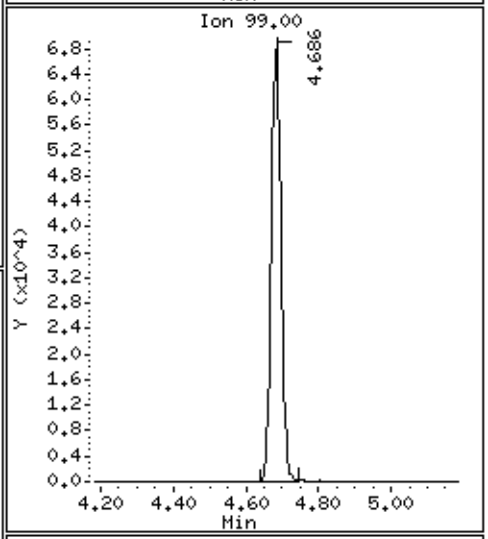
37 1,1,1-Trichloroethane

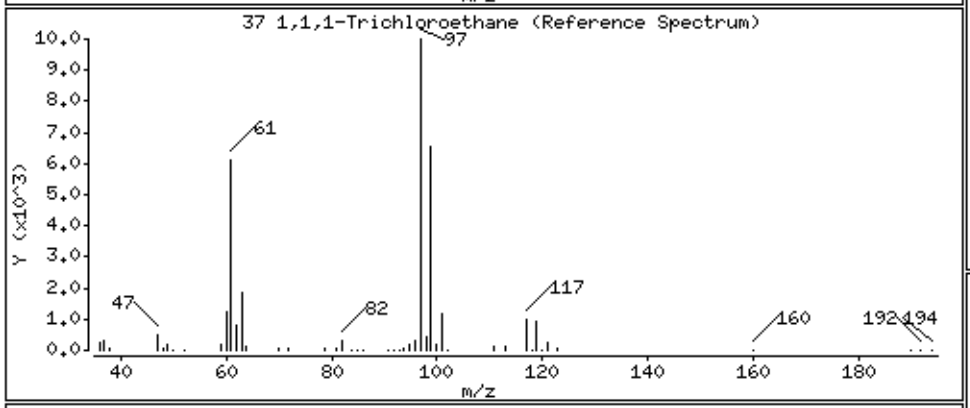
Concentration: 11000 ug/L

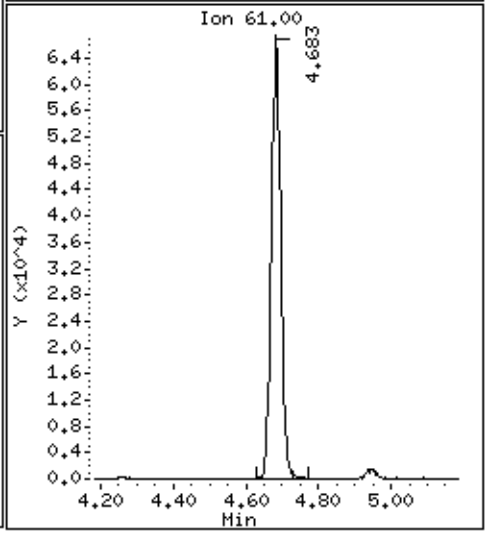


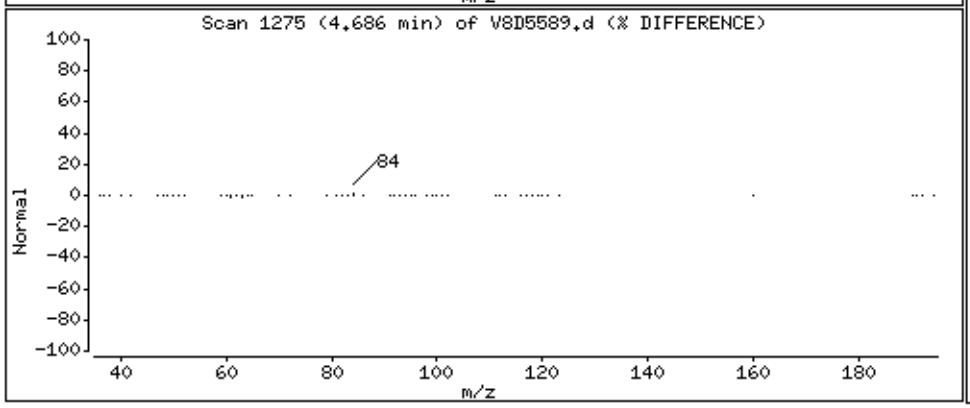












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5589.d

Date : 20-JUN-2014 20:56

Client ID: MW-22R(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-04ADL,,77692,200

Purge Volume: 5.0

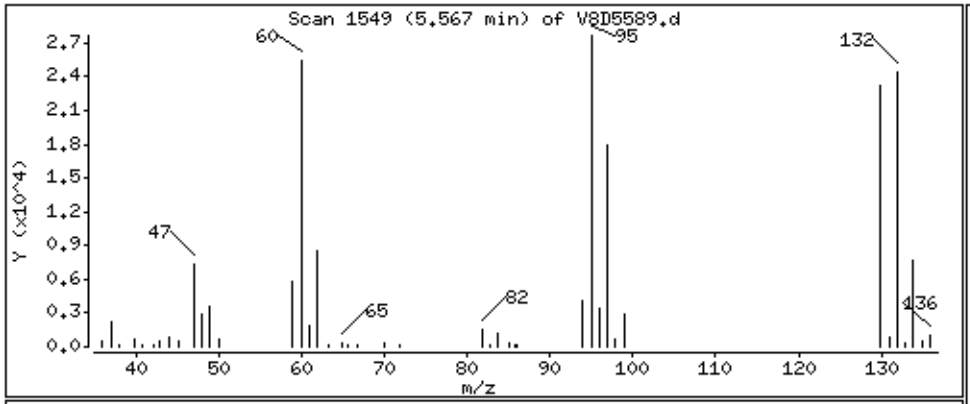
Operator: WL SRC: LIMS

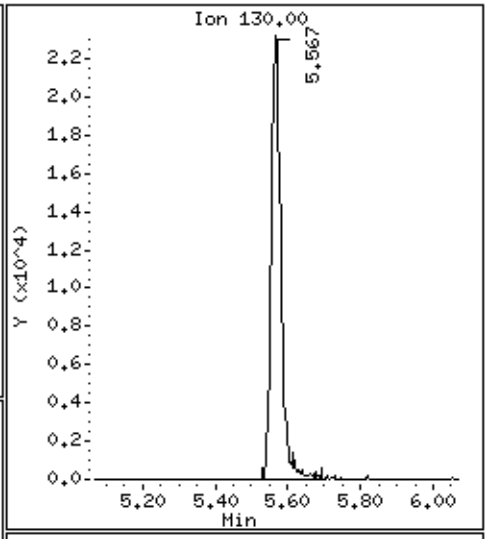
Column phase: DB-624

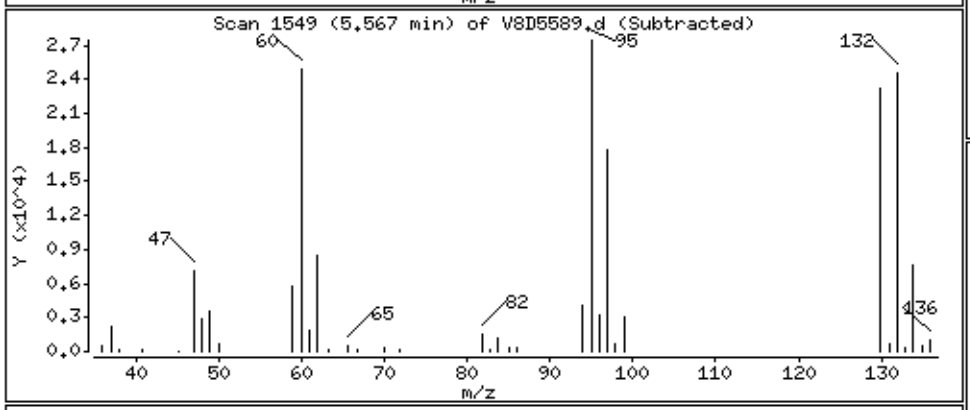
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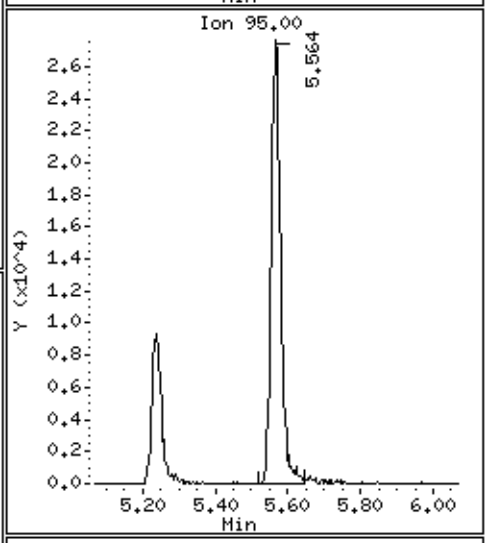
47 Trichloroethene

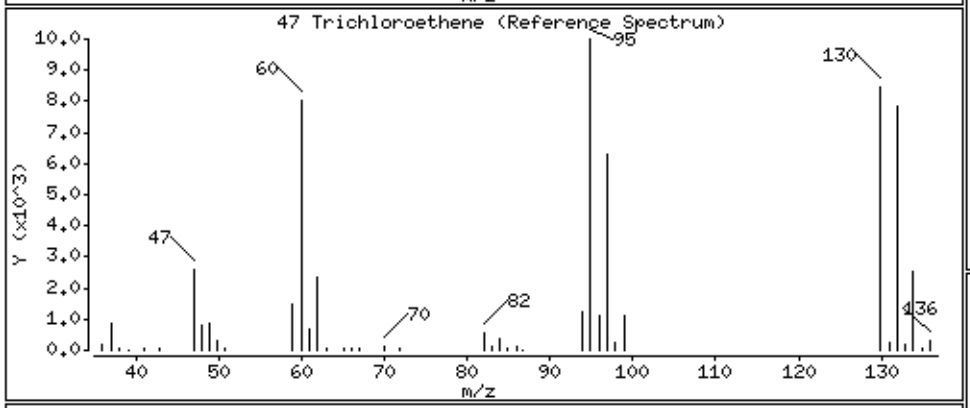
Concentration: 5600 ug/L

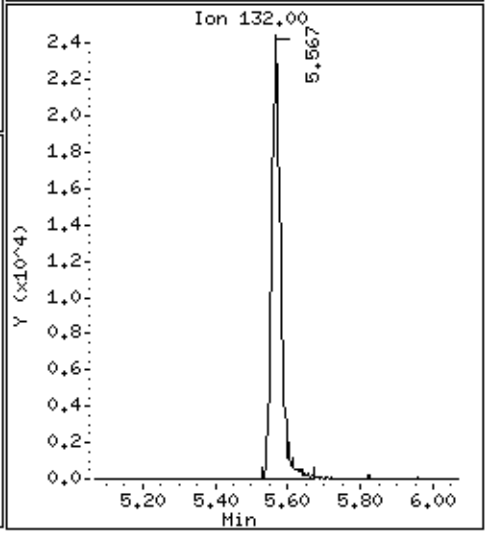


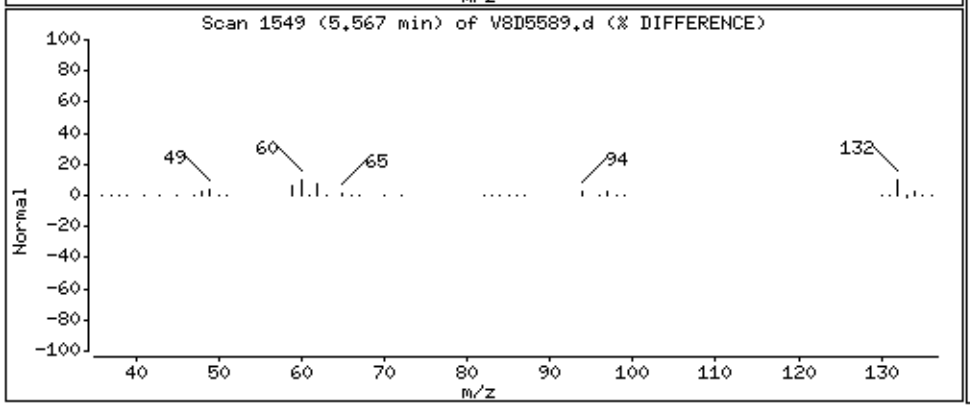












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(3)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5520.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	4.0	
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	9.9	
156-60-5	trans-1,2-Dichloroethene	4.6	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	590	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	22	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	0.67	J
71-55-6	1,1,1-Trichloroethane	5500	E
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	7400	E
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

EPA SAMPLE NO.

MW-22R(3)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5520.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	3.4	
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	69	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	17000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R(3)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5520.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	190	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5520.d
Lab Smp Id: N1055-05A Client Smp ID: MW-22R(3)_6/16/14
Inj Date : 19-JUN-2014 12:04
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-05A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)	CONCENTRATIONS FINAL (ug/L)
	4	Vinyl Chloride	62	1.853	1.856	(0.354)	13751	3.97528	4.0(Q)
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.843	2.853	(0.543)	40898735	17174.1	17000(A)
	18	Methylene Chloride	84	3.229	3.233	(0.616)	20667	9.88829	9.9(Q)
	21	trans-1,2-Dichloroethene	96	3.461	3.454	(0.661)	9137	4.57799	4.6(Q)
	23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	3157304	591.965	590(A)
	28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	47132	22.3909	22(Q)
	35	Chloroform	83	4.506	4.509	(0.860)	3216	0.66634	0.67
$	36	Dibromofluoromethane	113	4.647	4.644	(0.887)	103315	57.8657	58(R)
	37	1,1,1-Trichloroethane	97	4.670	4.683	(0.891)	26654438	5503.45	5500(A)
$	42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	15920	52.7404	53
M	50	1,2-Dichloroethene (Total)	96				56269	26.9689	27
*	46	Fluorobenzene	96	5.239	5.236	(1.000)	239923	50.0000	
	47	Trichloroethene	130	5.564	5.567	(1.062)	14701617	7424.83	7400(A)
$	58	Toluene-d8	98	6.718	6.718	(0.817)	298983	46.2397	46
	63	Tetrachloroethene	164	7.345	7.345	(0.893)	7488	3.44121	3.4(Q)
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	282554	50.0000	
	70	Chlorobenzene	112	8.255	8.255	(1.004)	394248	69.3360	69
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	176042	50.7167	51
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	142556	50.0000	(Q)

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d
Report Date: 27-Jun-2014 13:48

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5520.d
Lab Smp Id: N1055-05A Client Smp ID: MW-22R(3)_6/16/14
Inj Date : 19-JUN-2014 12:04
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-05A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

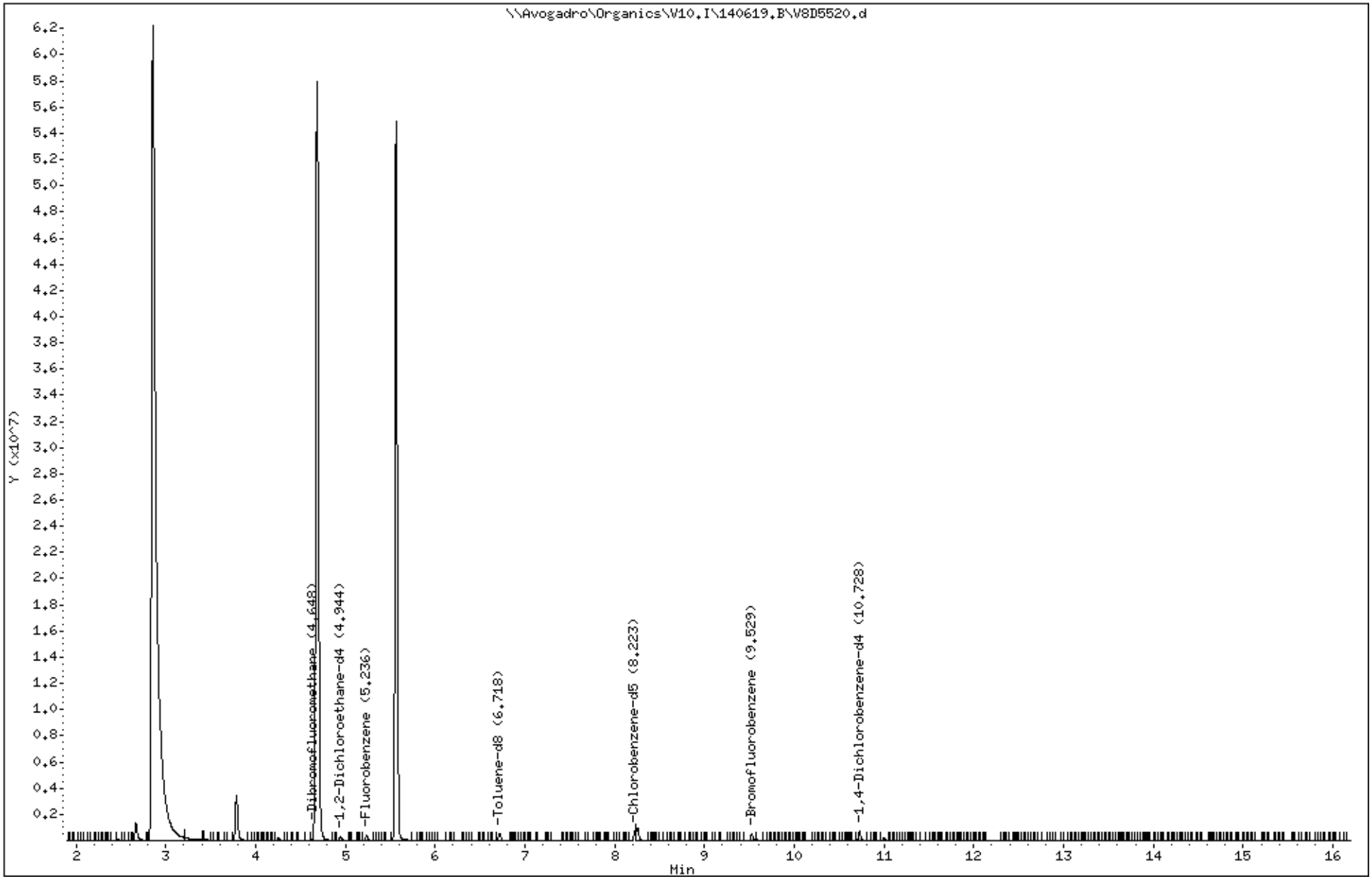
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.239	684961	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	2622481	191.432768	190	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d
Date : 19-JUN-2014 12:04
Client ID: MW-22R(3)_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-05A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

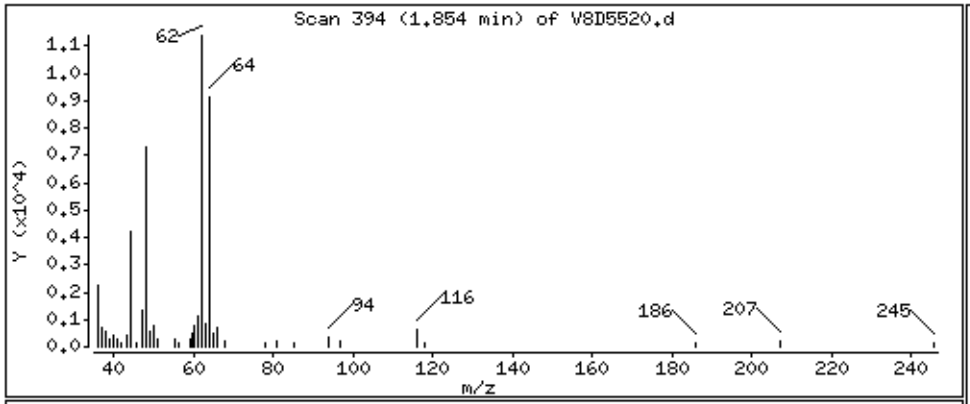
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

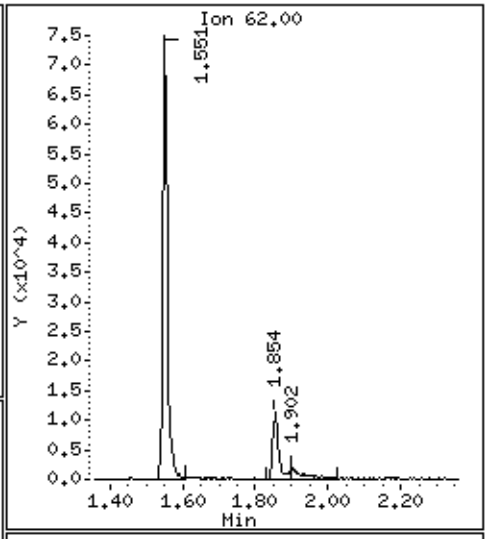
Sample Info: 5ML,N1055-05A,,77659

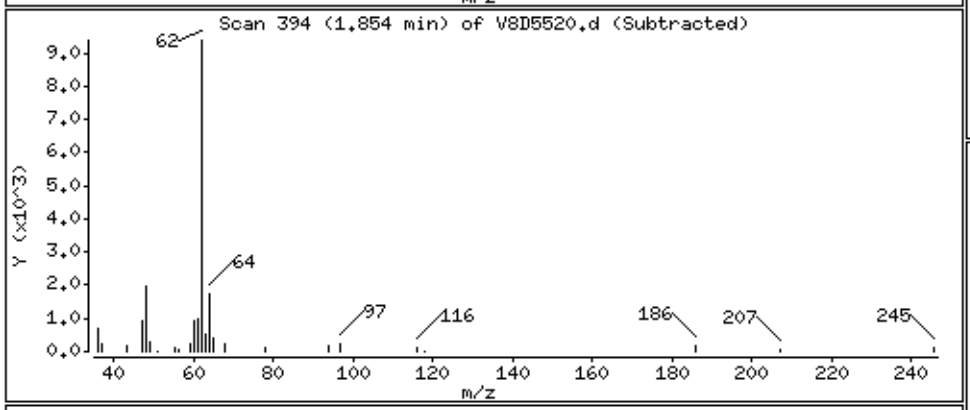
Purge Volume: 5.0 Operator: WL SRC: LIMS

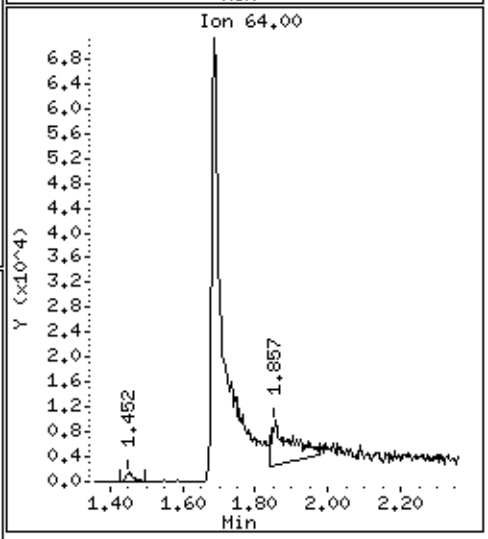
Column phase: DB-624 Column diameter: 0.25

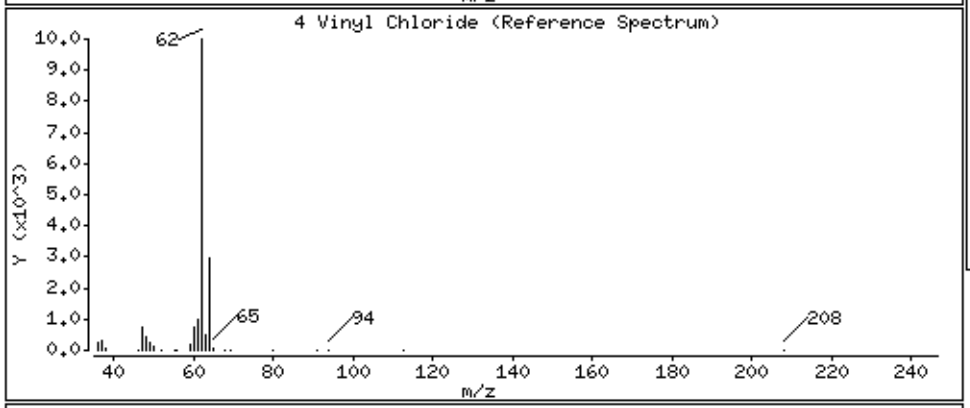
4 Vinyl Chloride Concentration: 4.0 ug/L

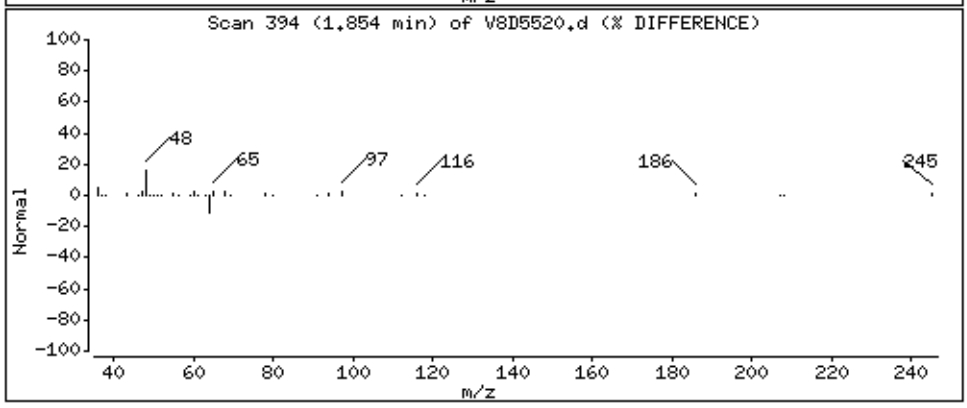












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

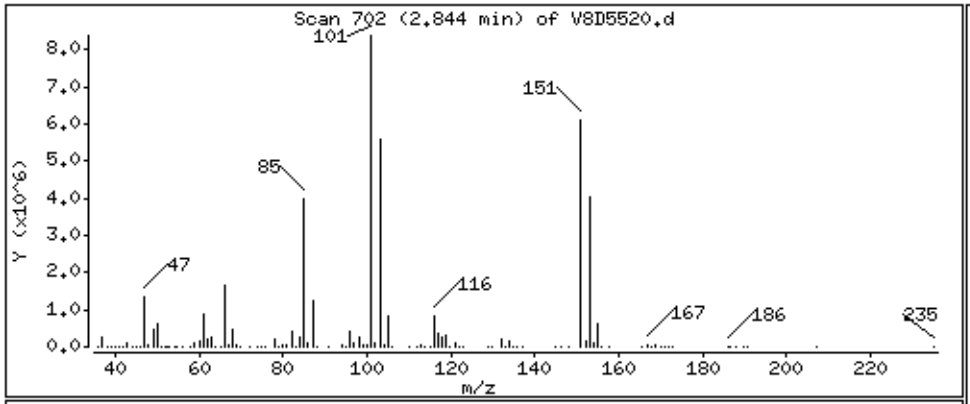
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

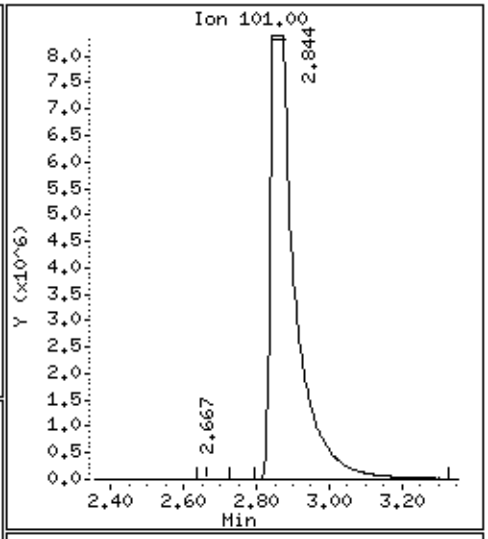
Sample Info: 5ML,N1055-05A,,77659

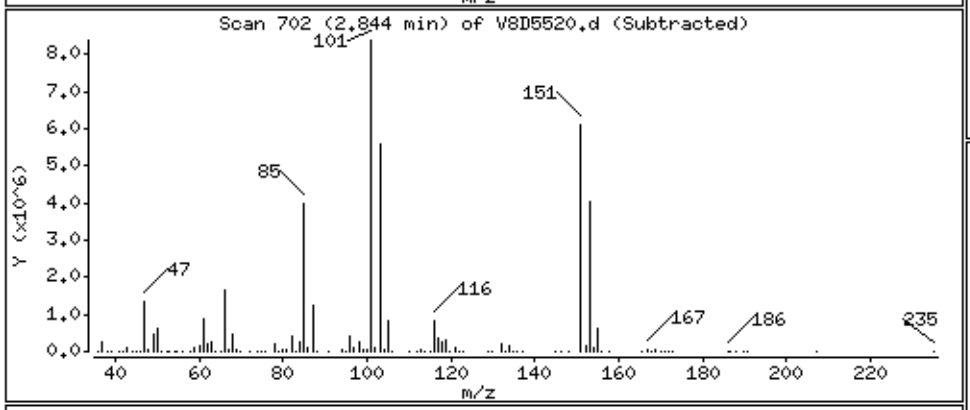
Purge Volume: 5.0 Operator: WL SRC: LIMS

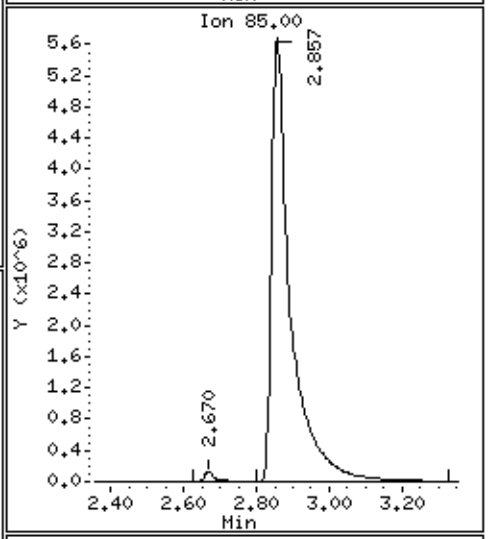
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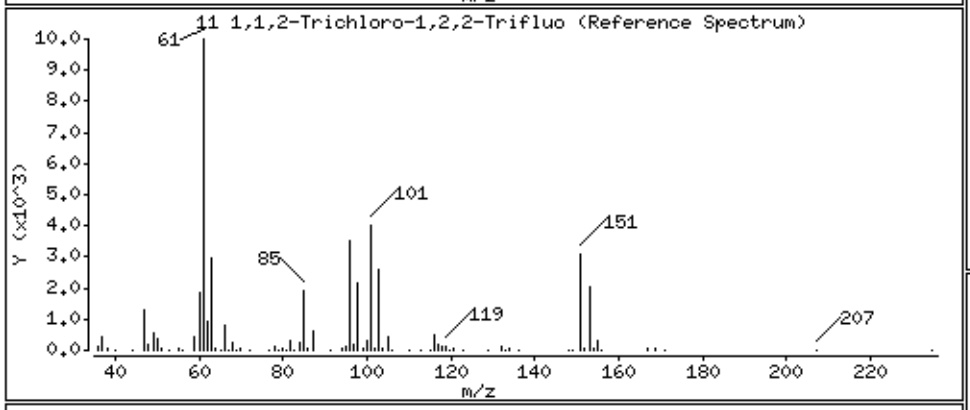
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 17000 ug/L

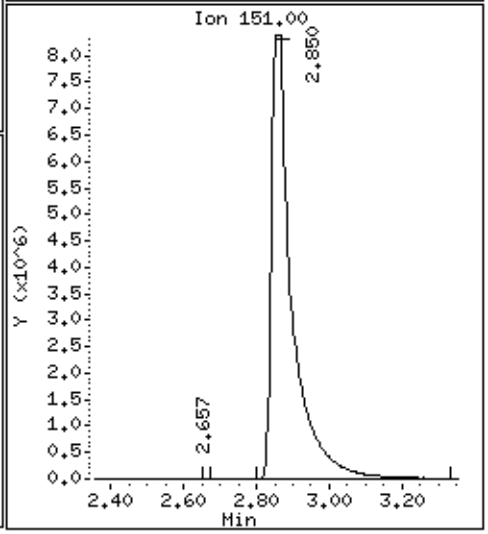


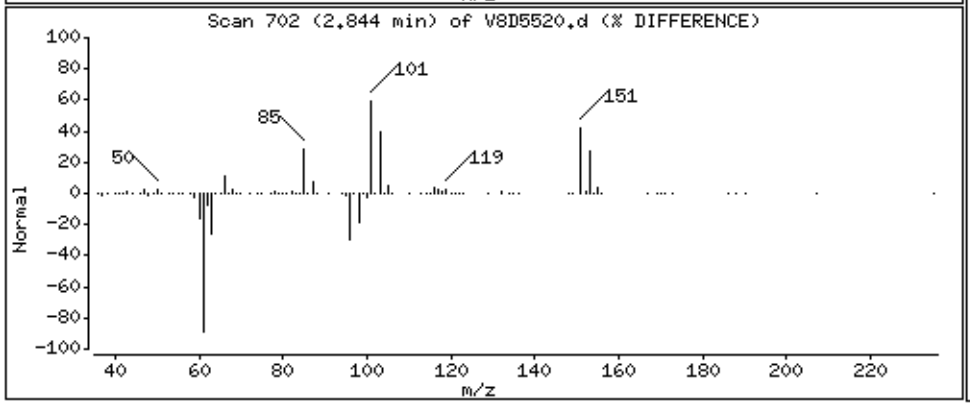












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

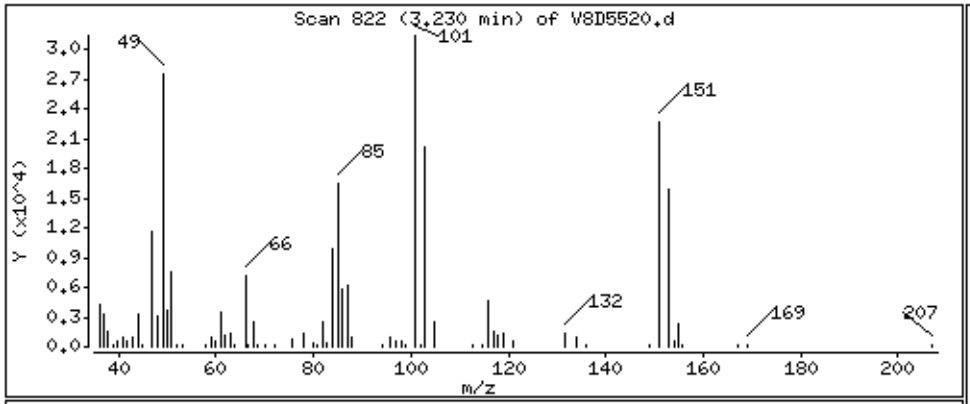
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

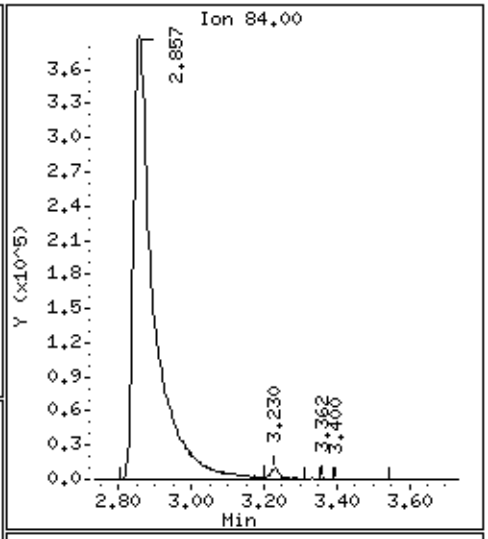
Sample Info: 5ML,N1055-05A,,77659

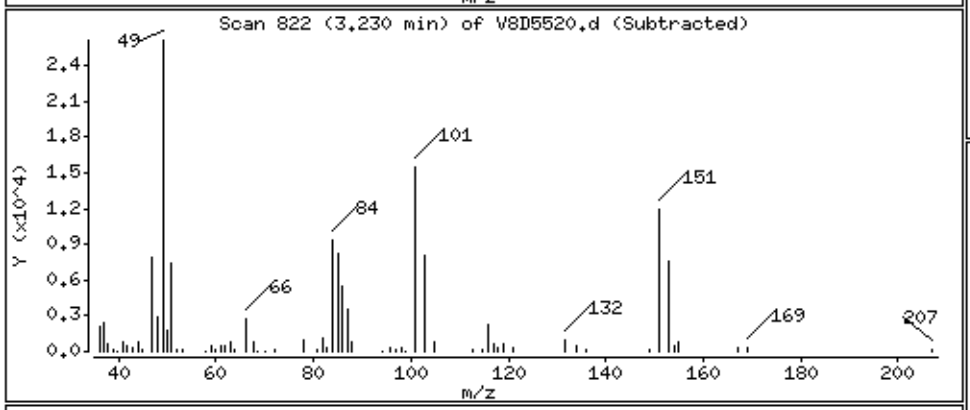
Purge Volume: 5.0 Operator: WL SRC: LIMS

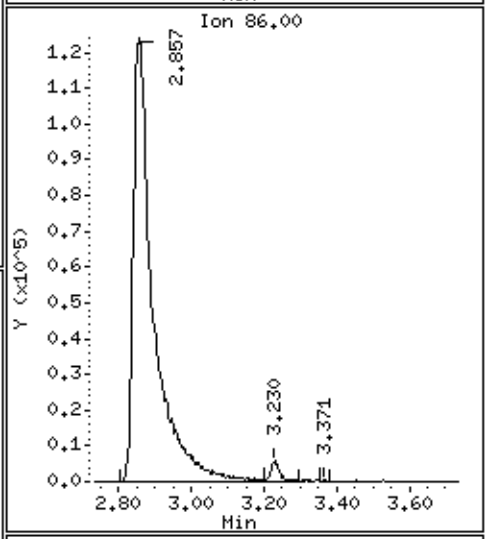
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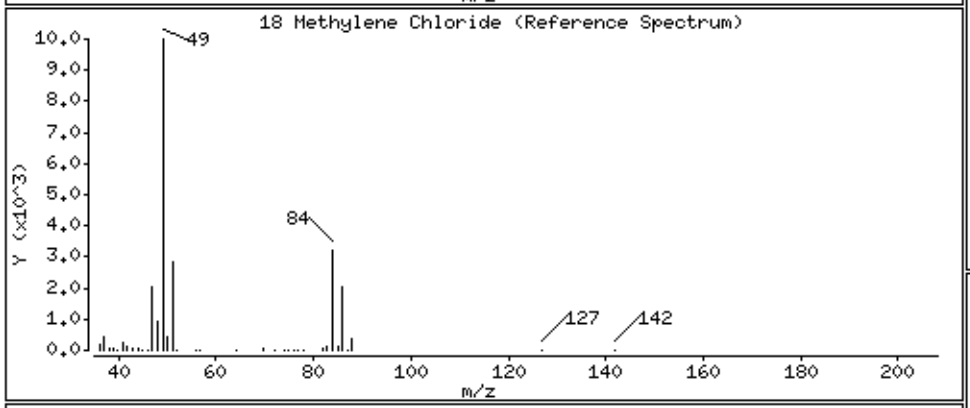
18 Methylene Chloride Concentration: 9.9 ug/L

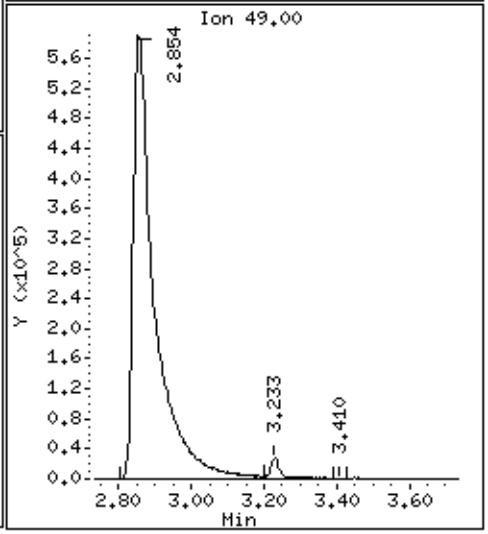


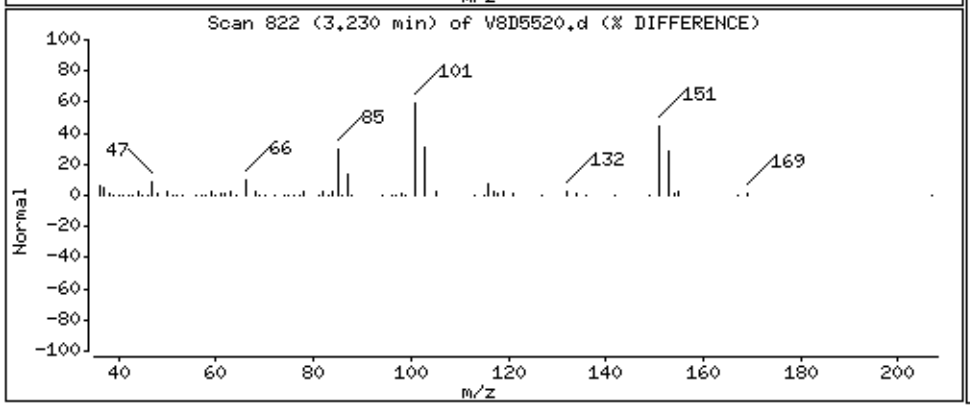












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

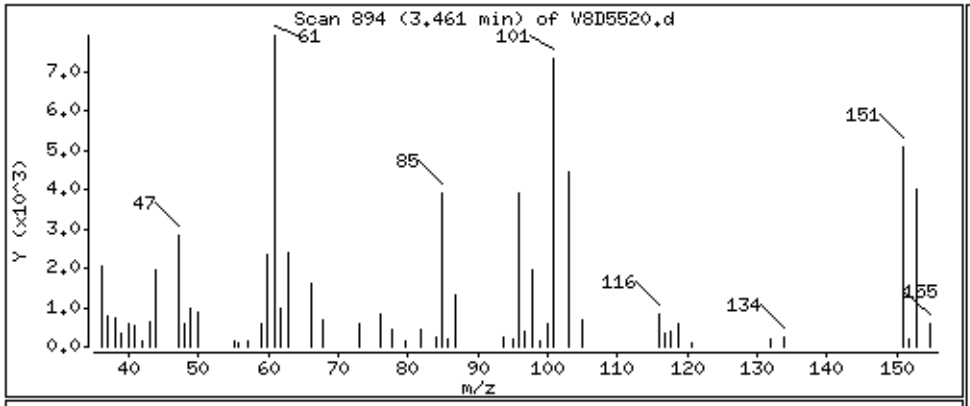
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

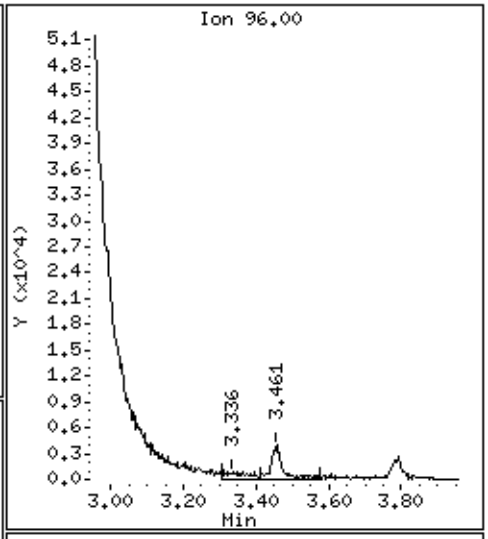
Sample Info: 5ML,N1055-05A,,77659

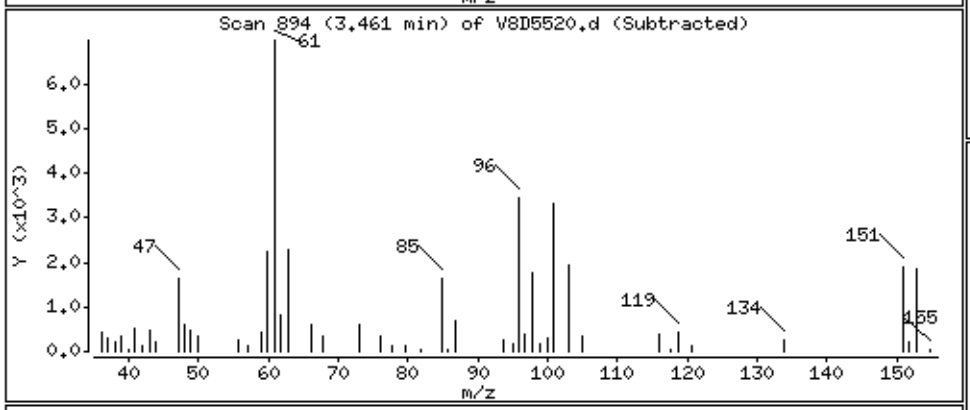
Purge Volume: 5.0 Operator: WL SRC: LIMS

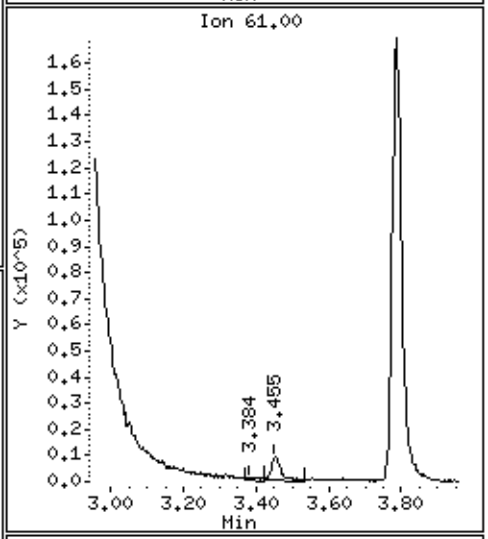
Column phase: DB-624 Column diameter: 0.25

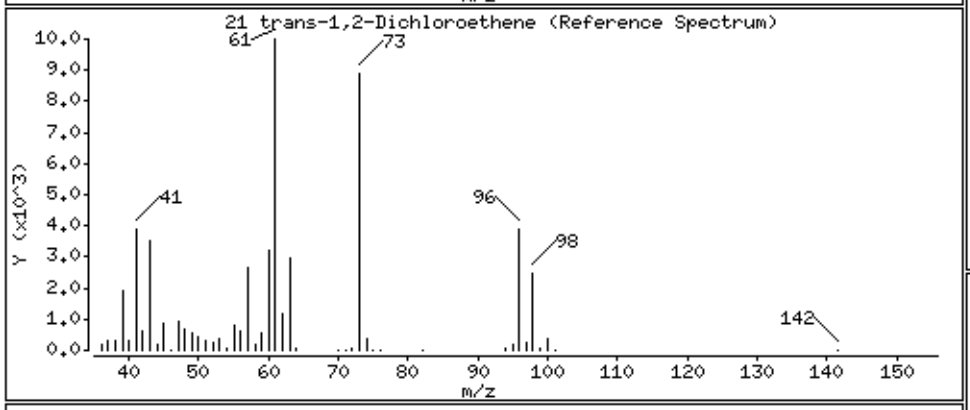
21 trans-1,2-Dichloroethene Concentration: 4.6 ug/L

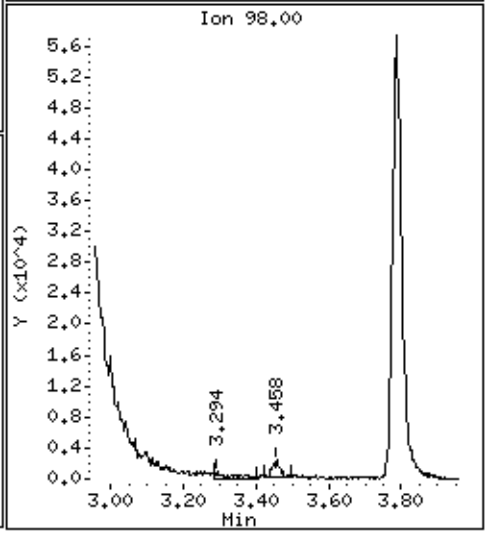


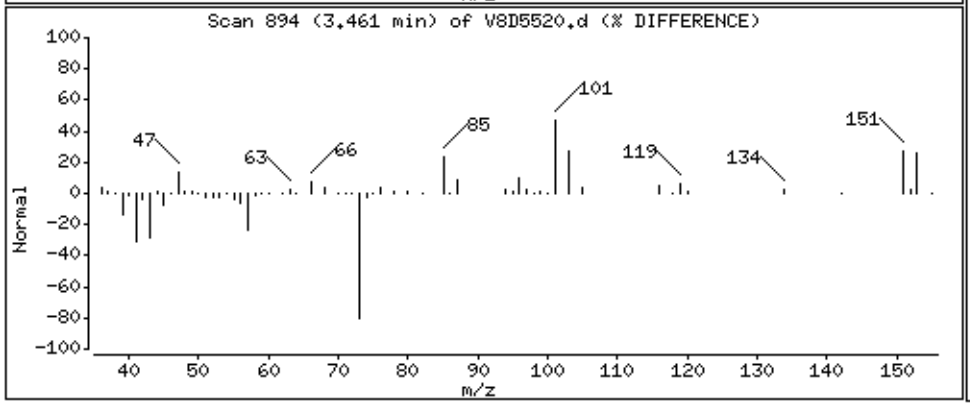












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

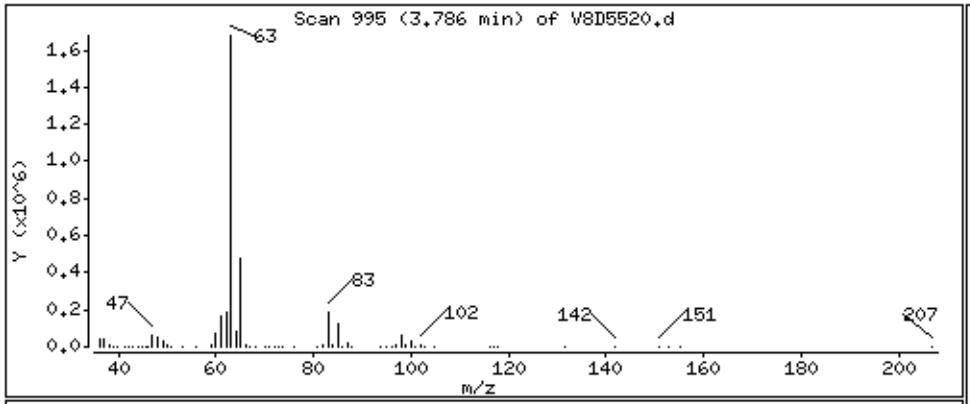
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

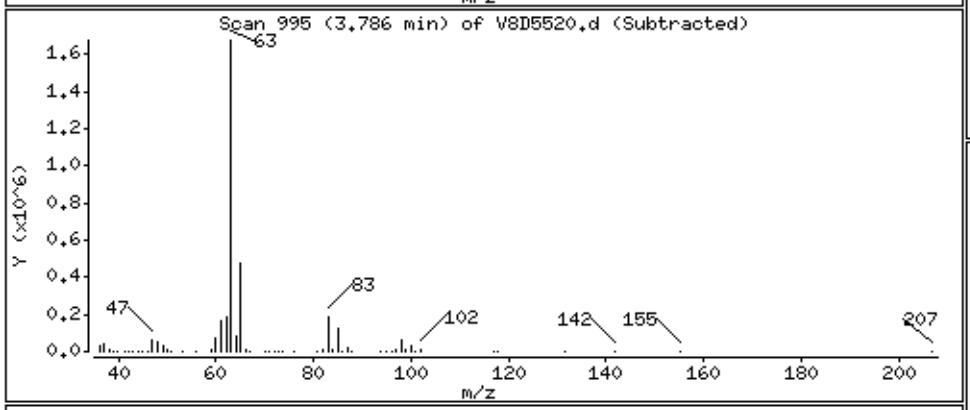
Sample Info: 5ML,N1055-05A,,77659

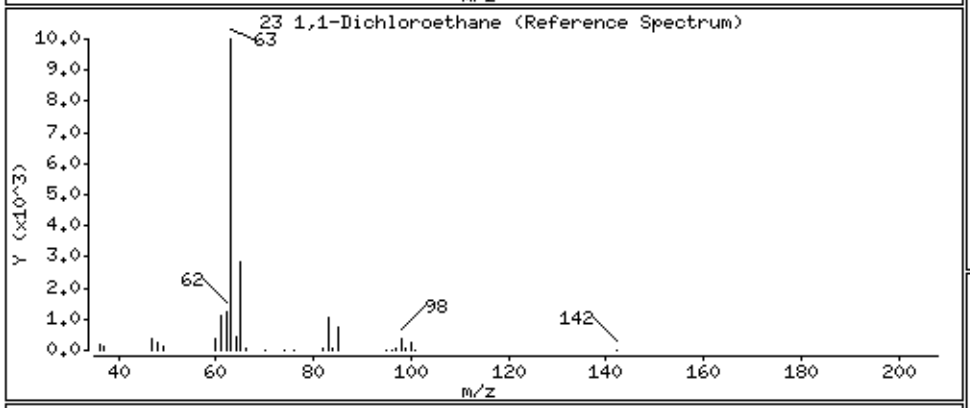
Purge Volume: 5.0 Operator: WL SRC: LIMS

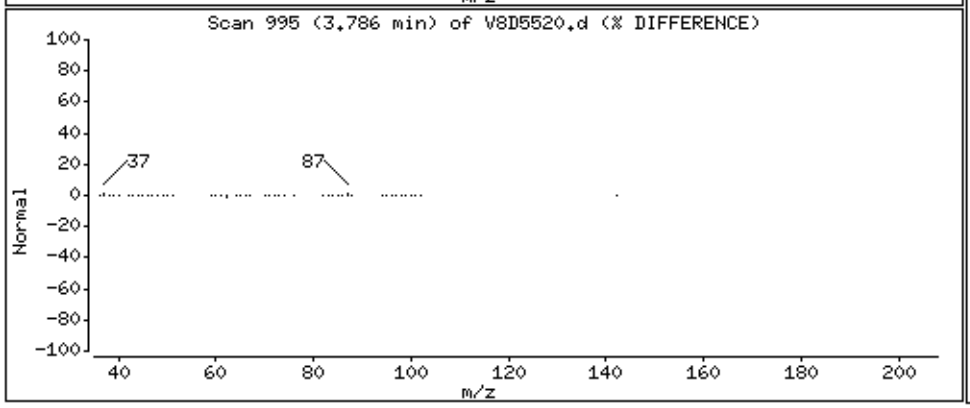
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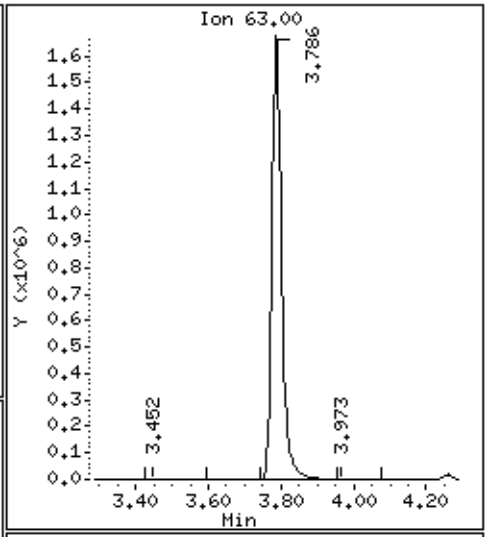
23 1,1-Dichloroethane Concentration: 590 ug/L

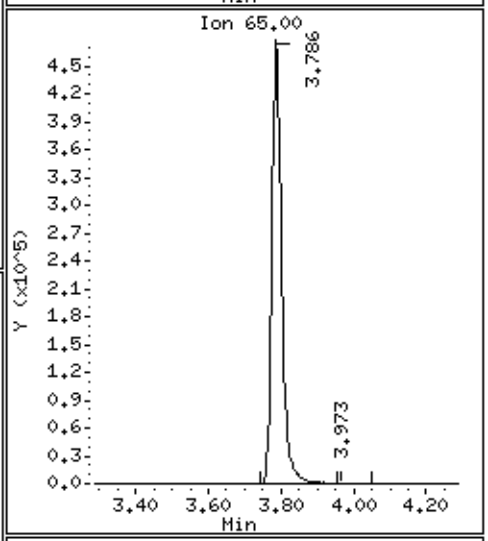


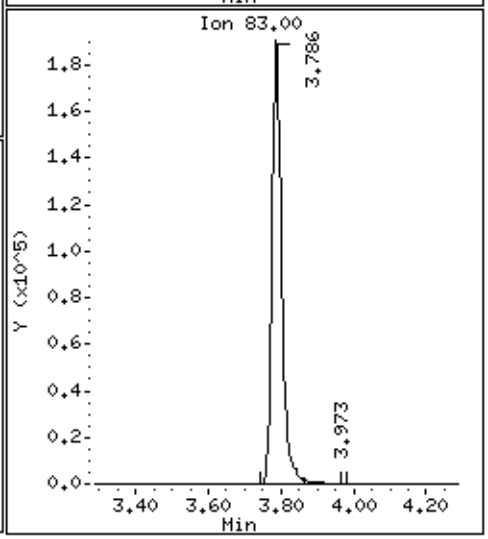












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

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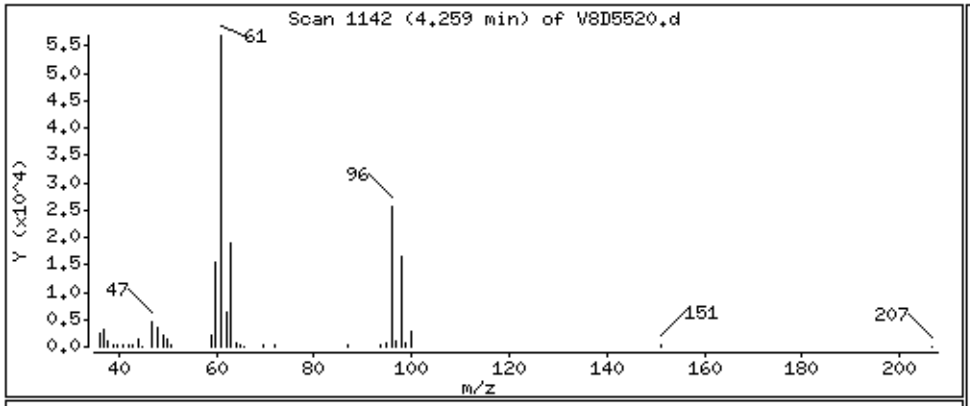
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

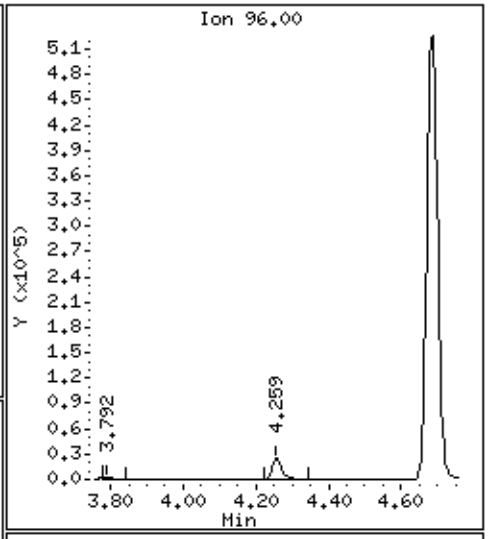
Sample Info: 5ML,N1055-05A,,77659

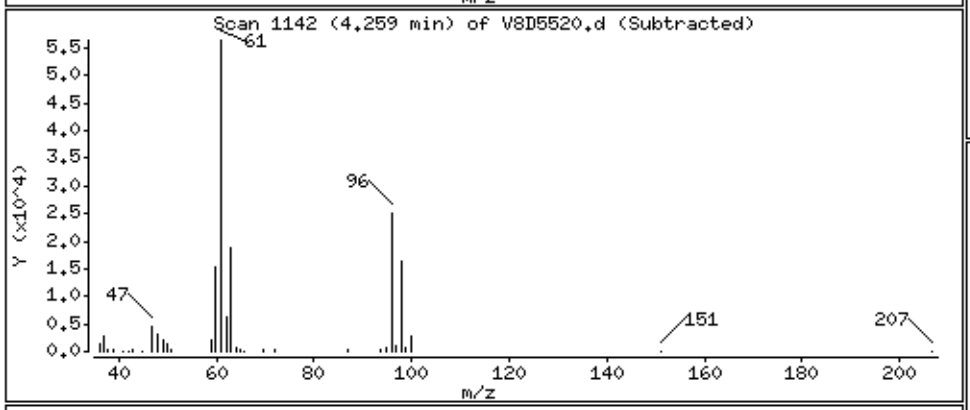
Purge Volume: 5.0 Operator: WL SRC: LIMS

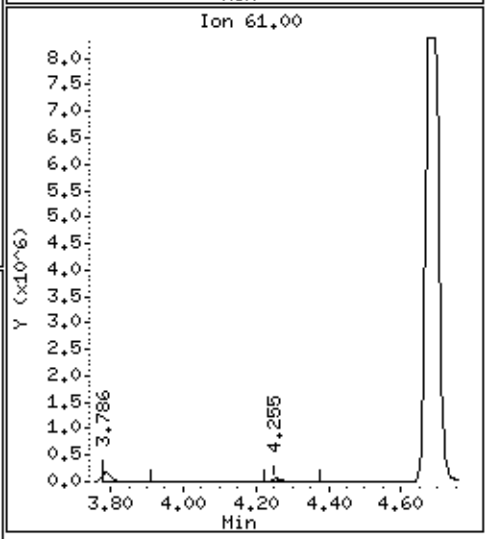
Column phase: DB-624 Column diameter: 0.25

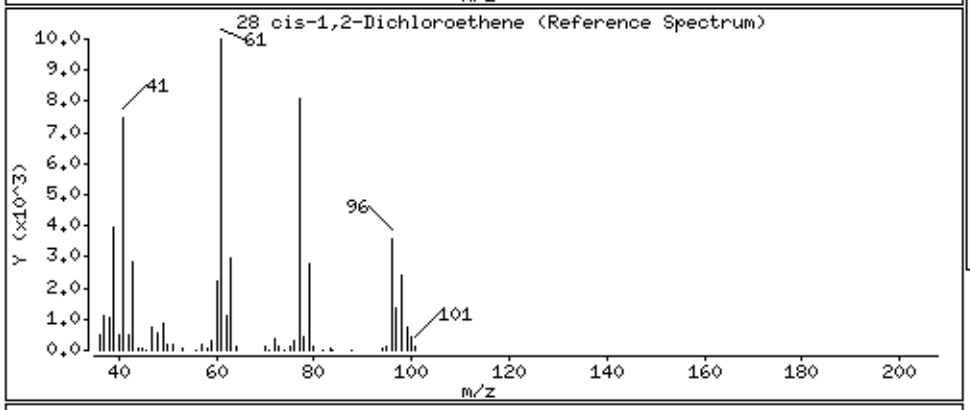
28 cis-1,2-Dichloroethene Concentration: 22 ug/L

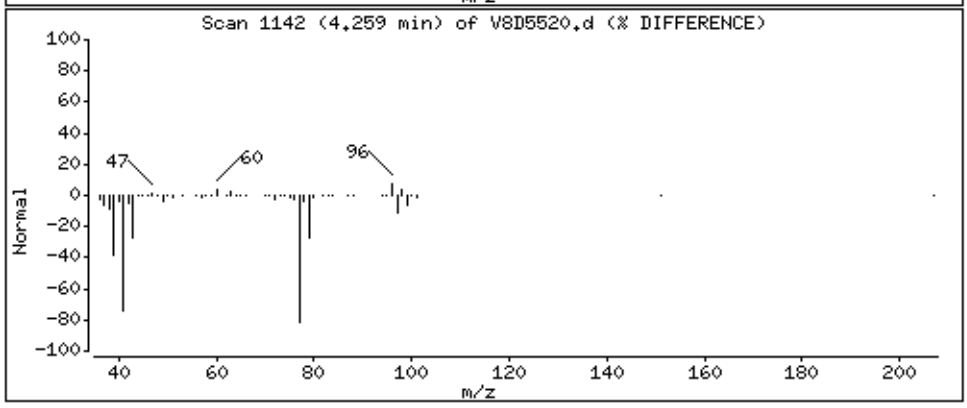












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

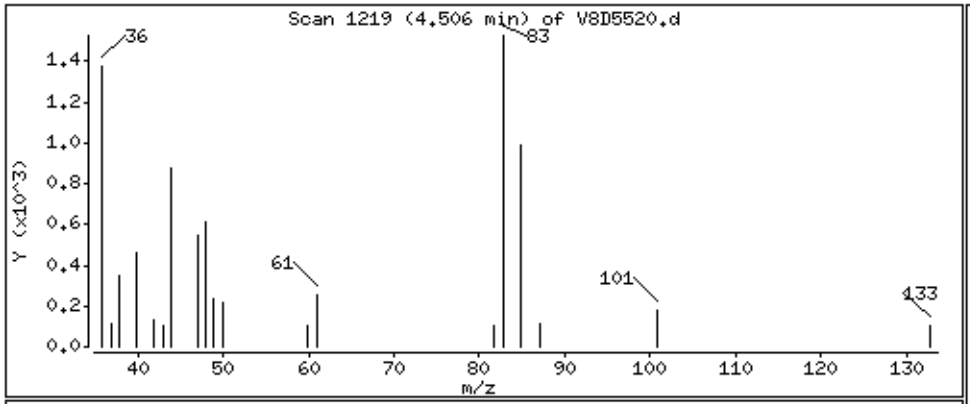
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

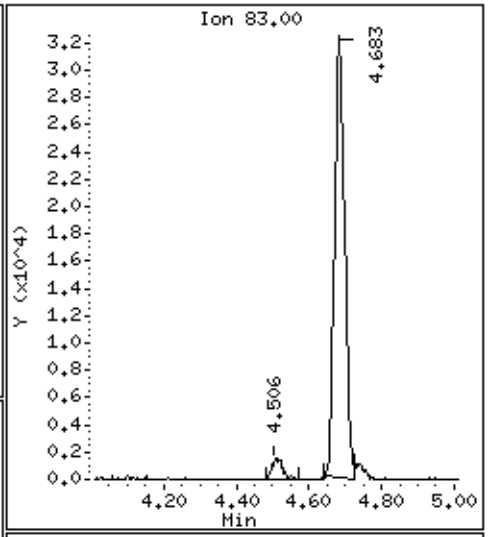
Sample Info: 5ML,N1055-05A,,77659

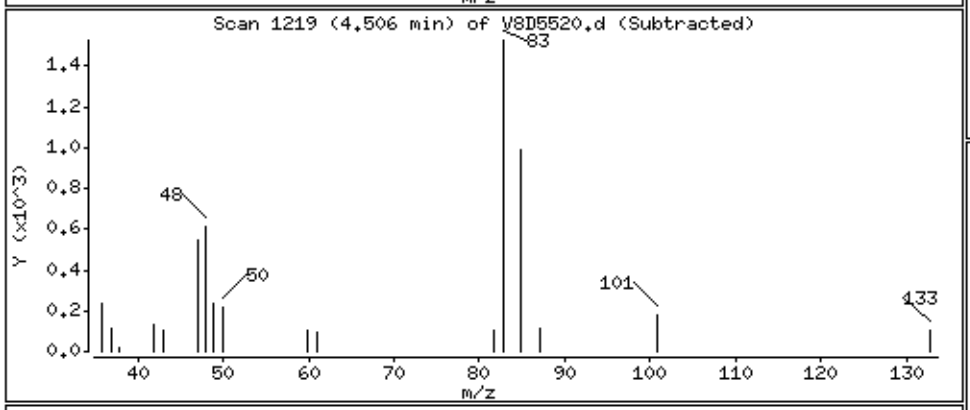
Purge Volume: 5.0 Operator: WL SRC: LIMS

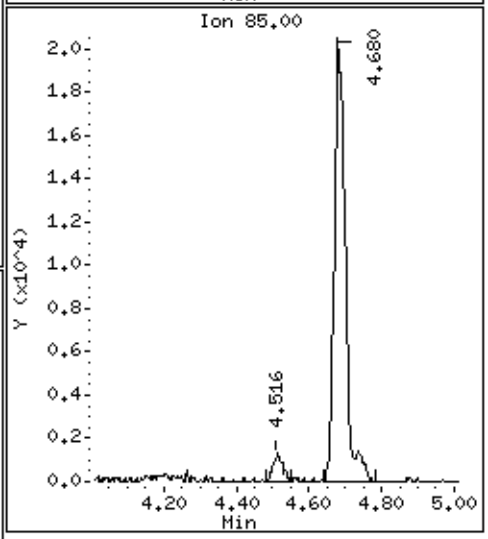
Column phase: DB-624 Column diameter: 0.25

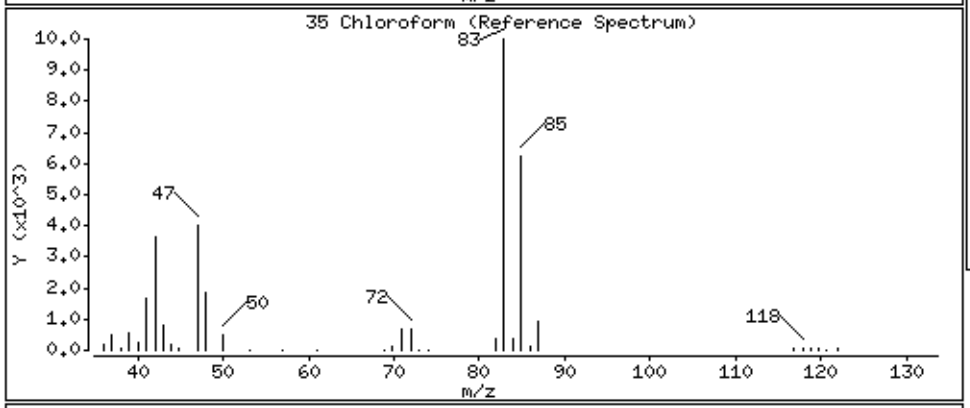
35 Chloroform Concentration: 0.67 ug/L

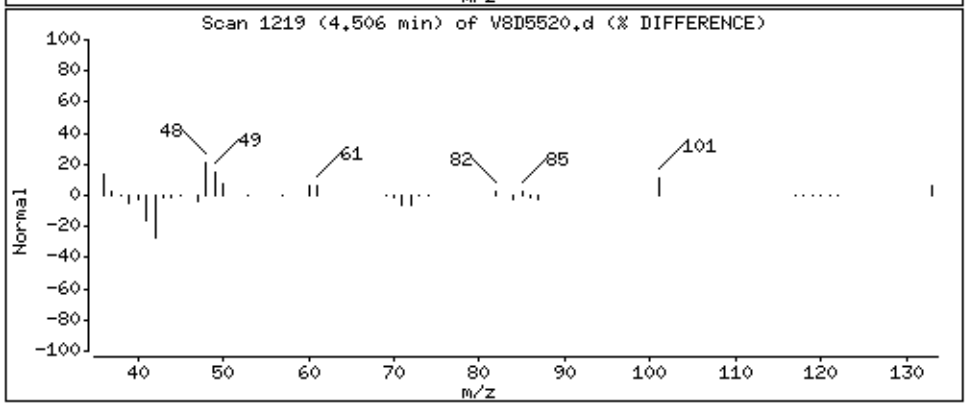












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

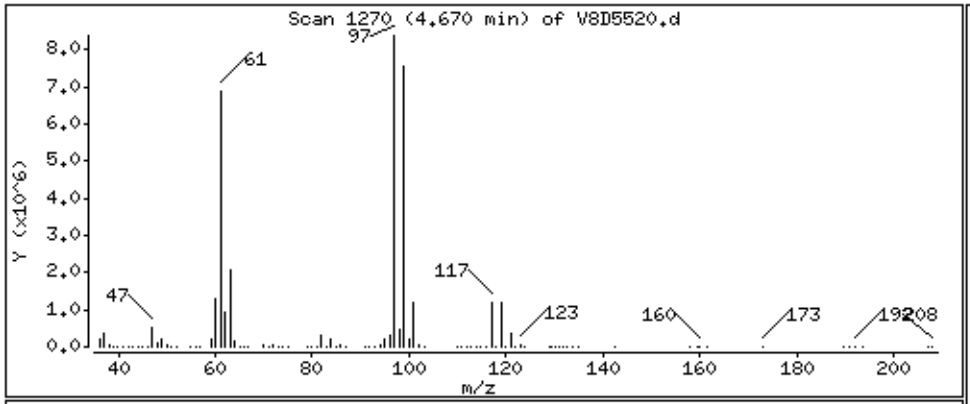
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

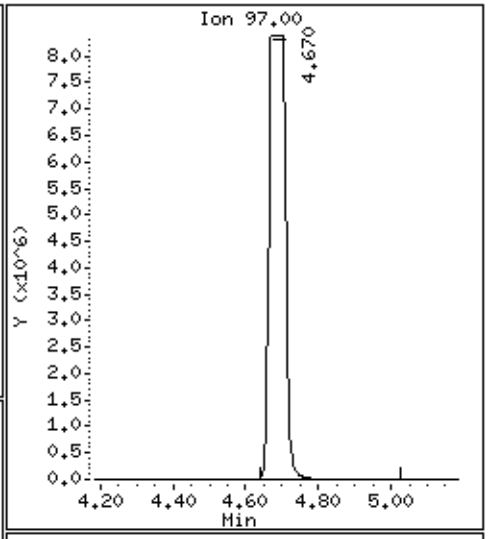
Sample Info: 5ML,N1055-05A,,77659

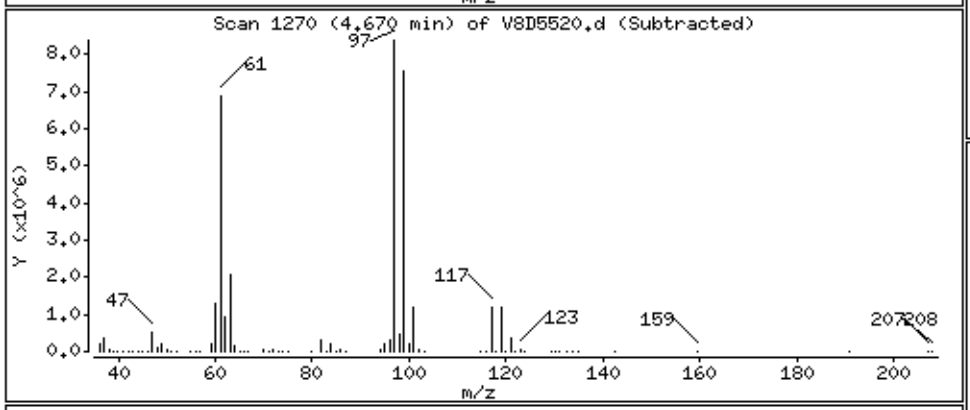
Purge Volume: 5.0 Operator: WL SRC: LIMS

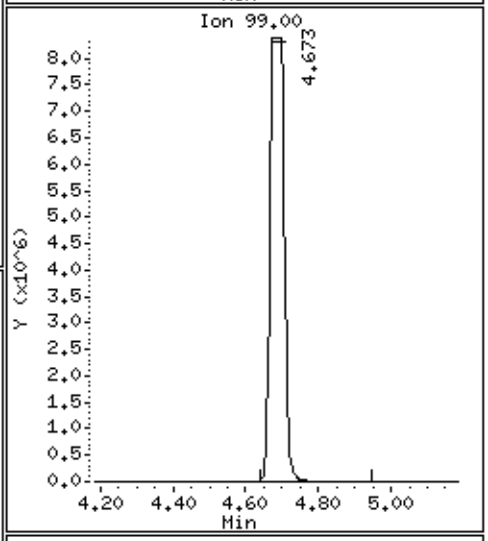
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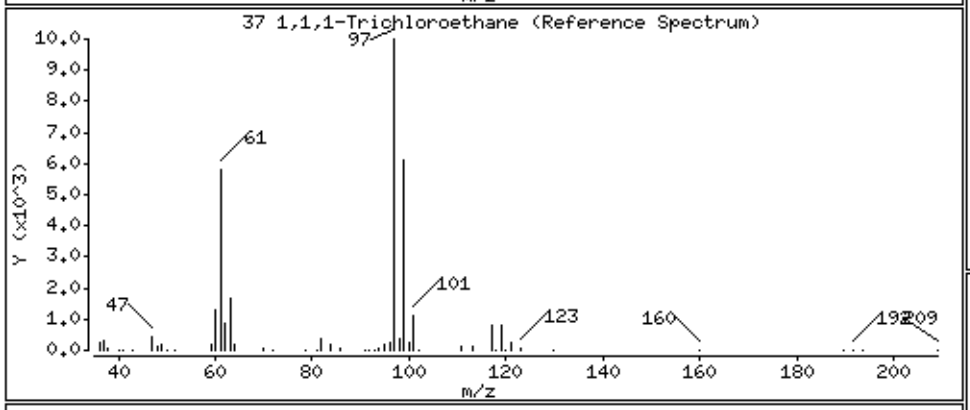
37 1,1,1-Trichloroethane Concentration: 5500 ug/L

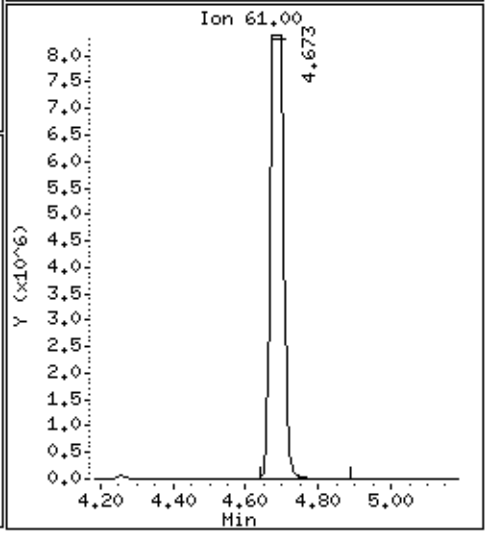


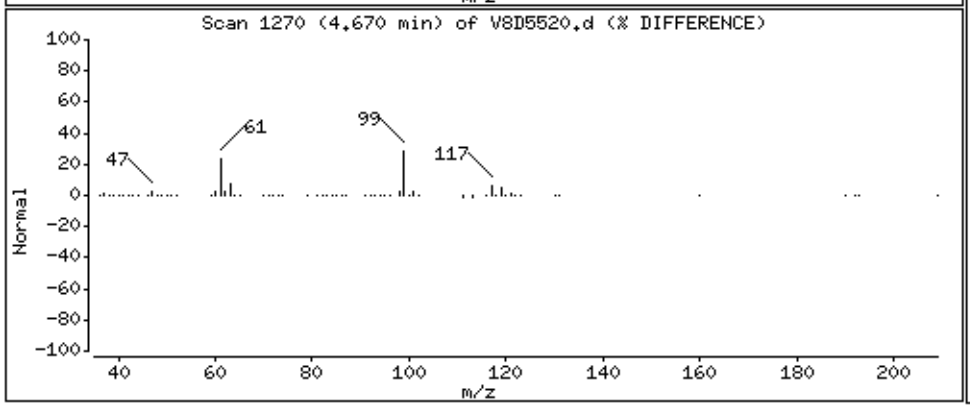












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

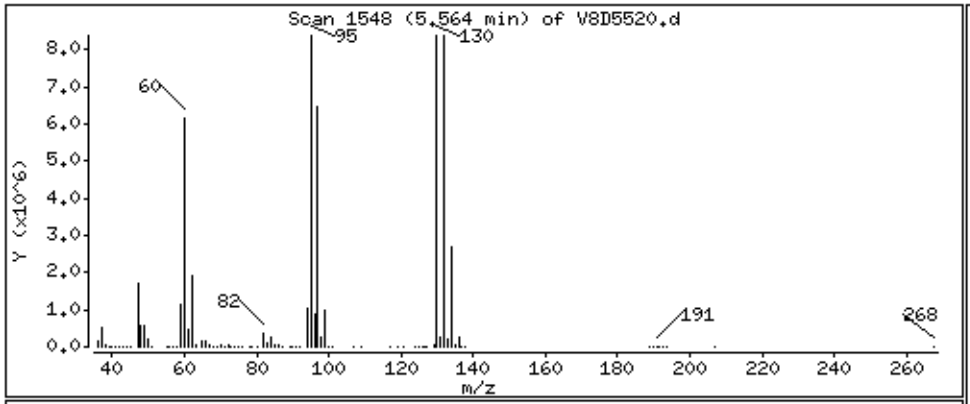
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

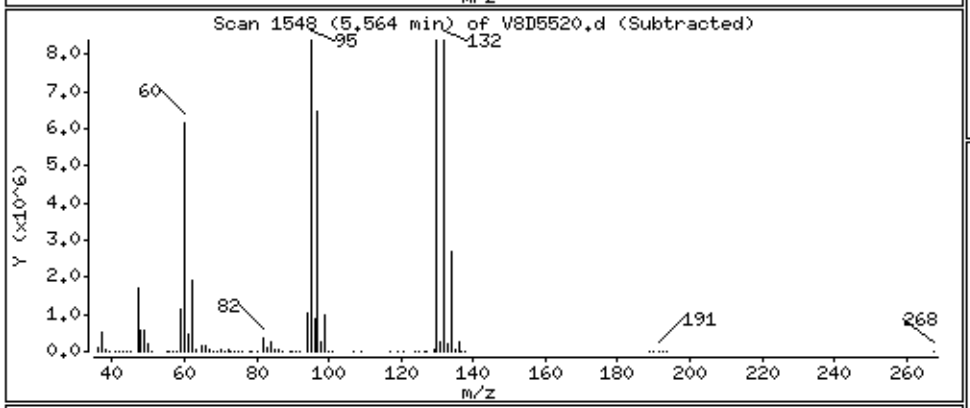
Sample Info: 5ML,N1055-05A,,77659

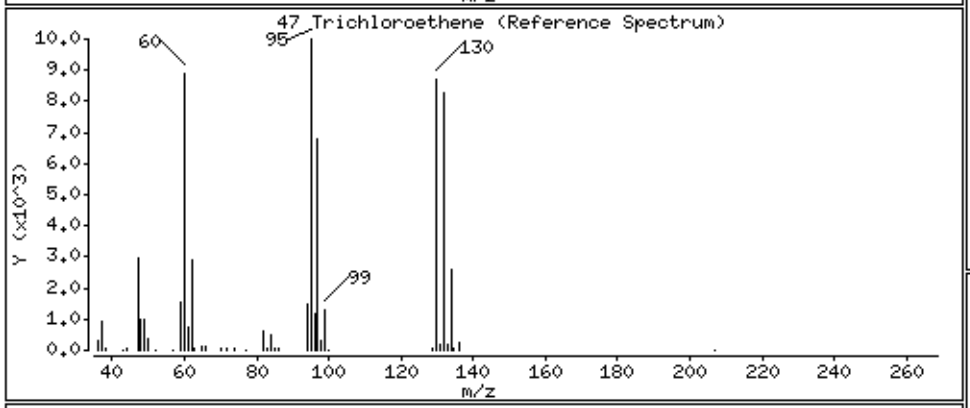
Purge Volume: 5.0 Operator: WL SRC: LIMS

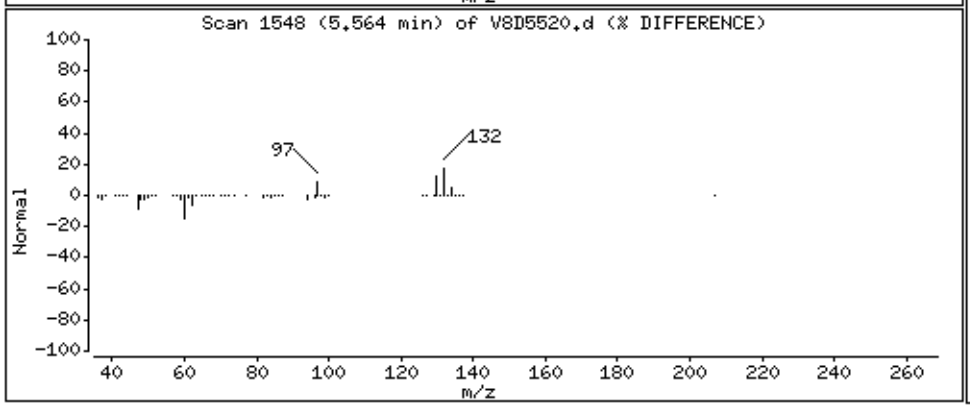
Column phase: DB-624 Column diameter: 0.25

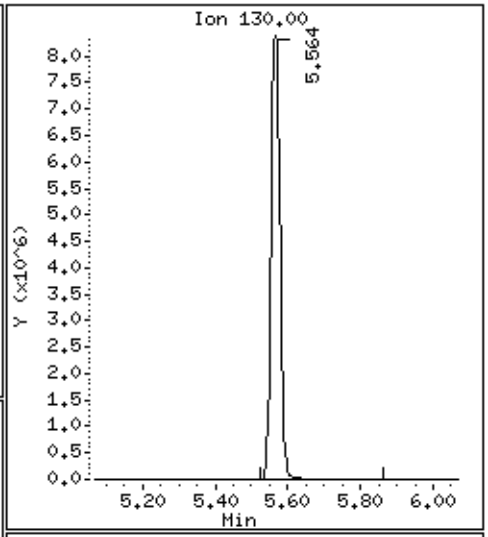
47 Trichloroethene Concentration: 7400 ug/L

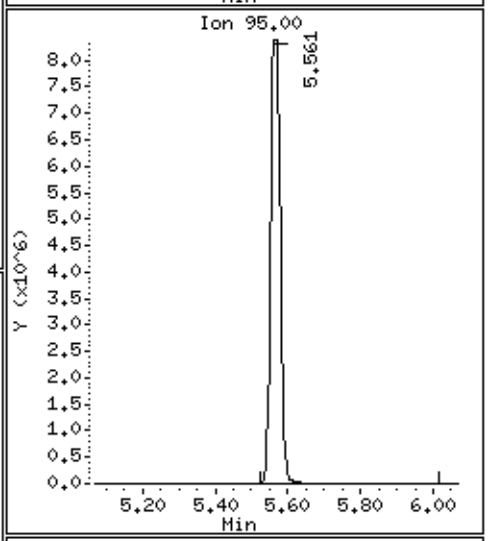


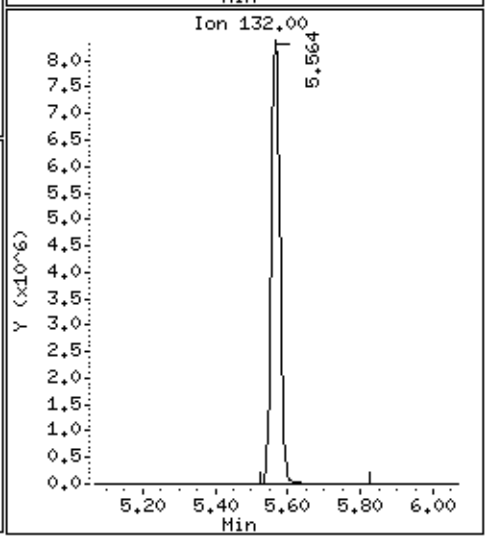












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

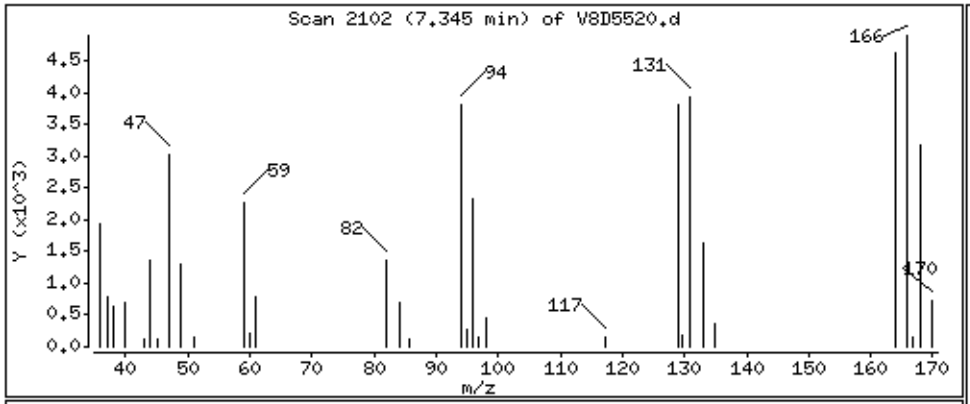
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

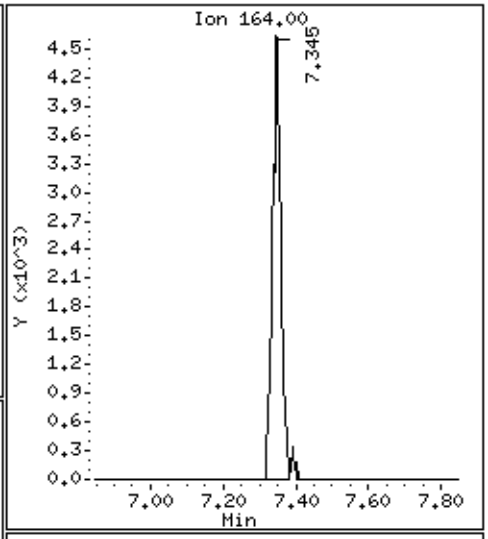
Sample Info: 5ML,N1055-05A,,77659

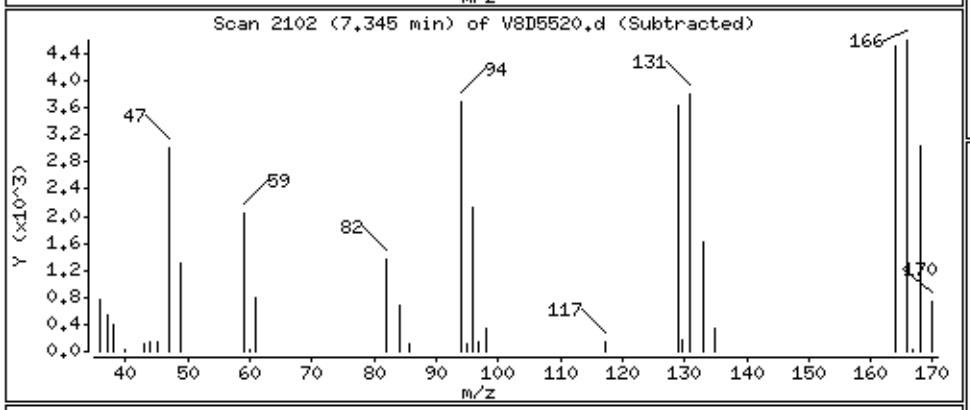
Purge Volume: 5.0 Operator: WL SRC: LIMS

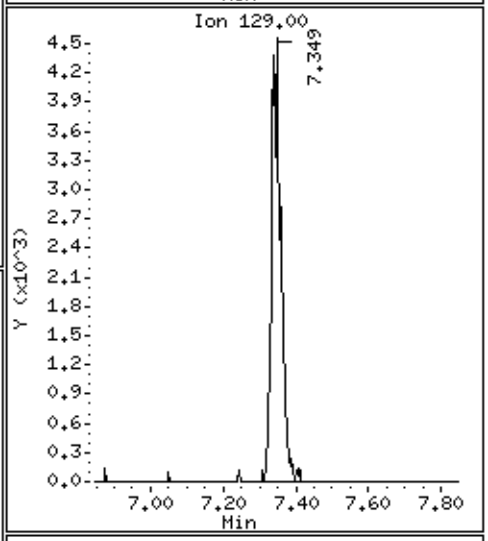
Column phase: DB-624 Column diameter: 0.25

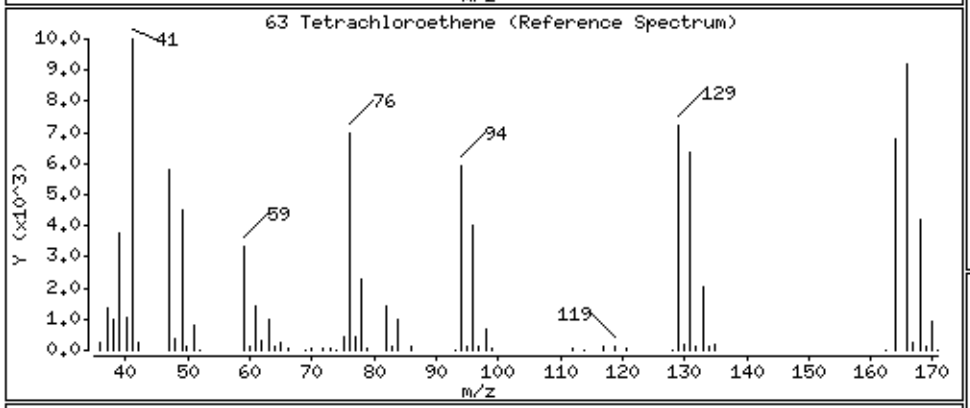
63 Tetrachloroethene Concentration: 3.4 ug/L

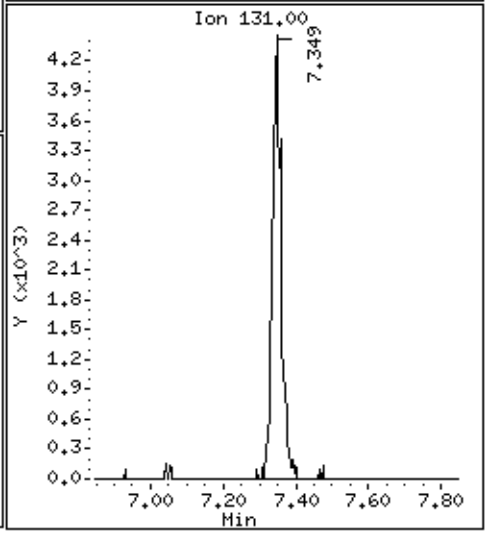


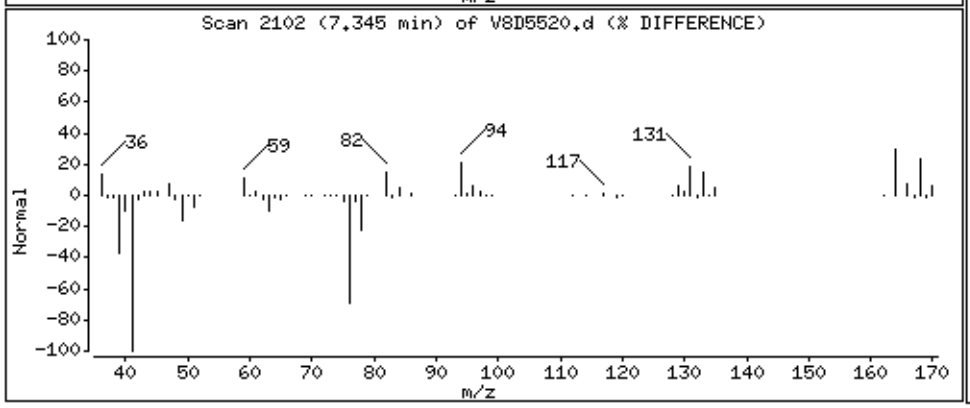












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

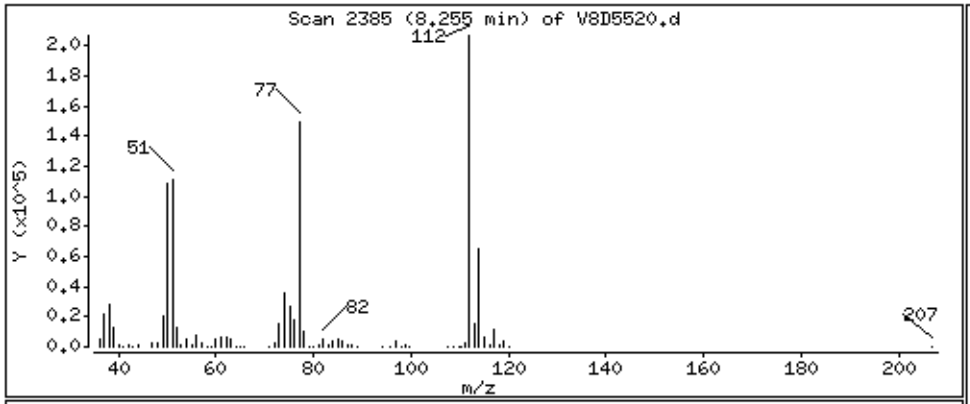
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

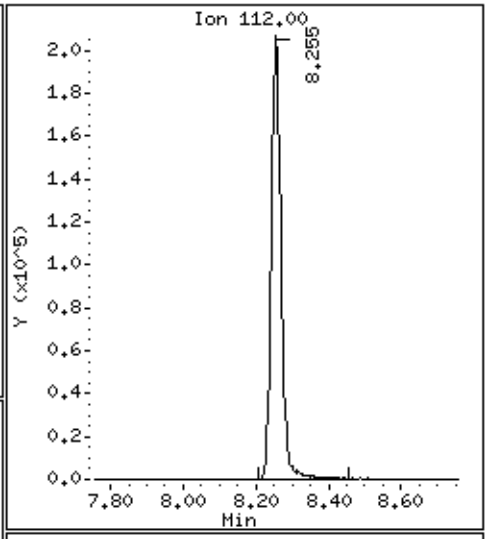
Sample Info: 5ML,N1055-05A,,77659

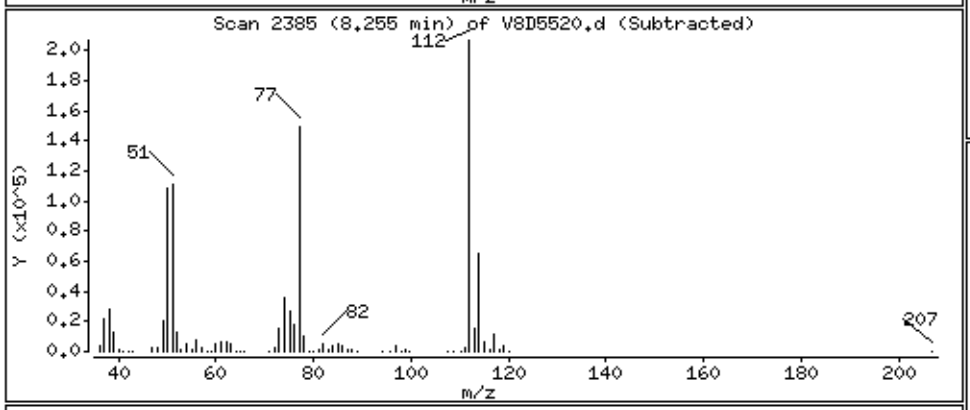
Purge Volume: 5.0 Operator: WL SRC: LIMS

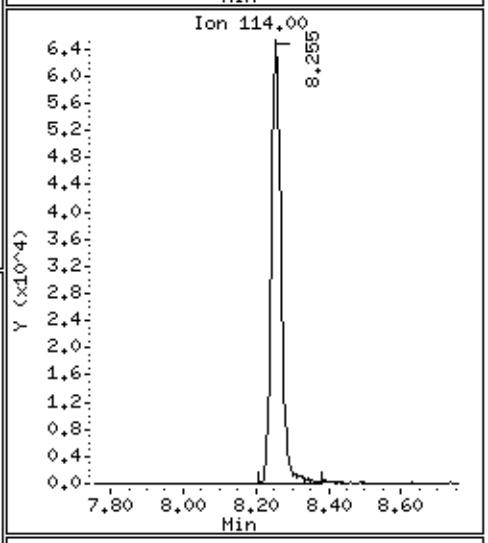
Column phase: DB-624 Column diameter: 0.25

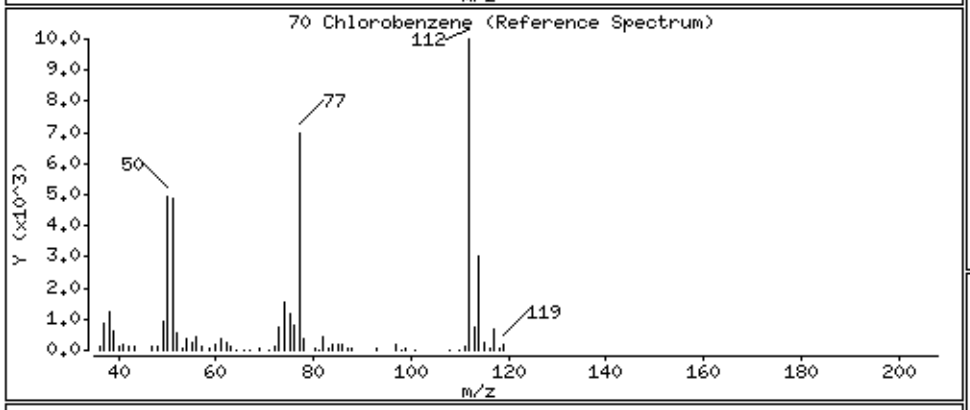
70 Chlorobenzene Concentration: 69 ug/L

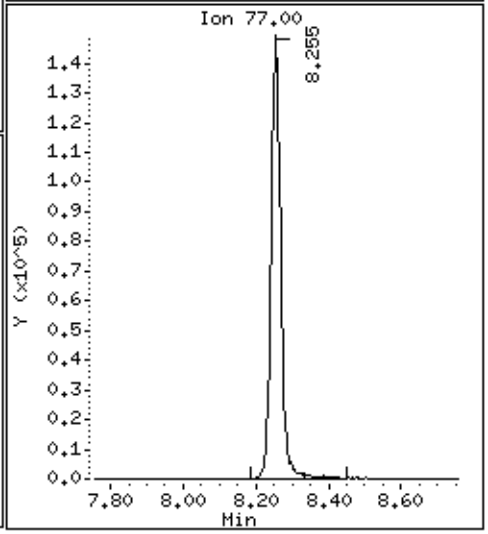


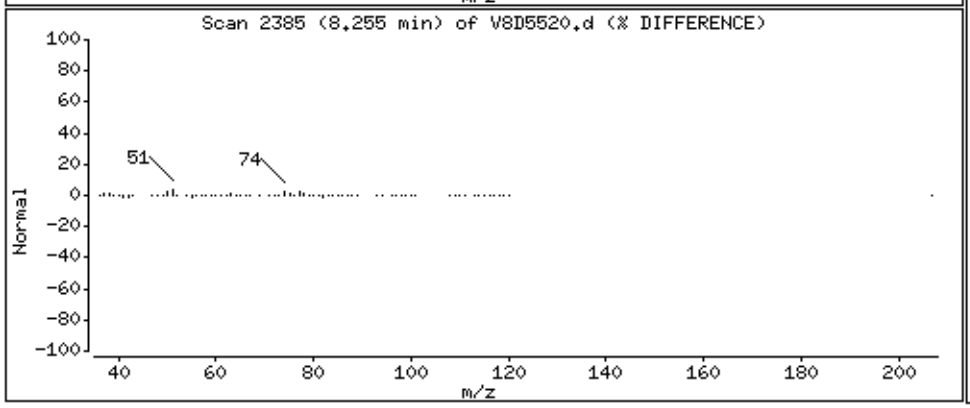












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5520.d

Date : 19-JUN-2014 12:04

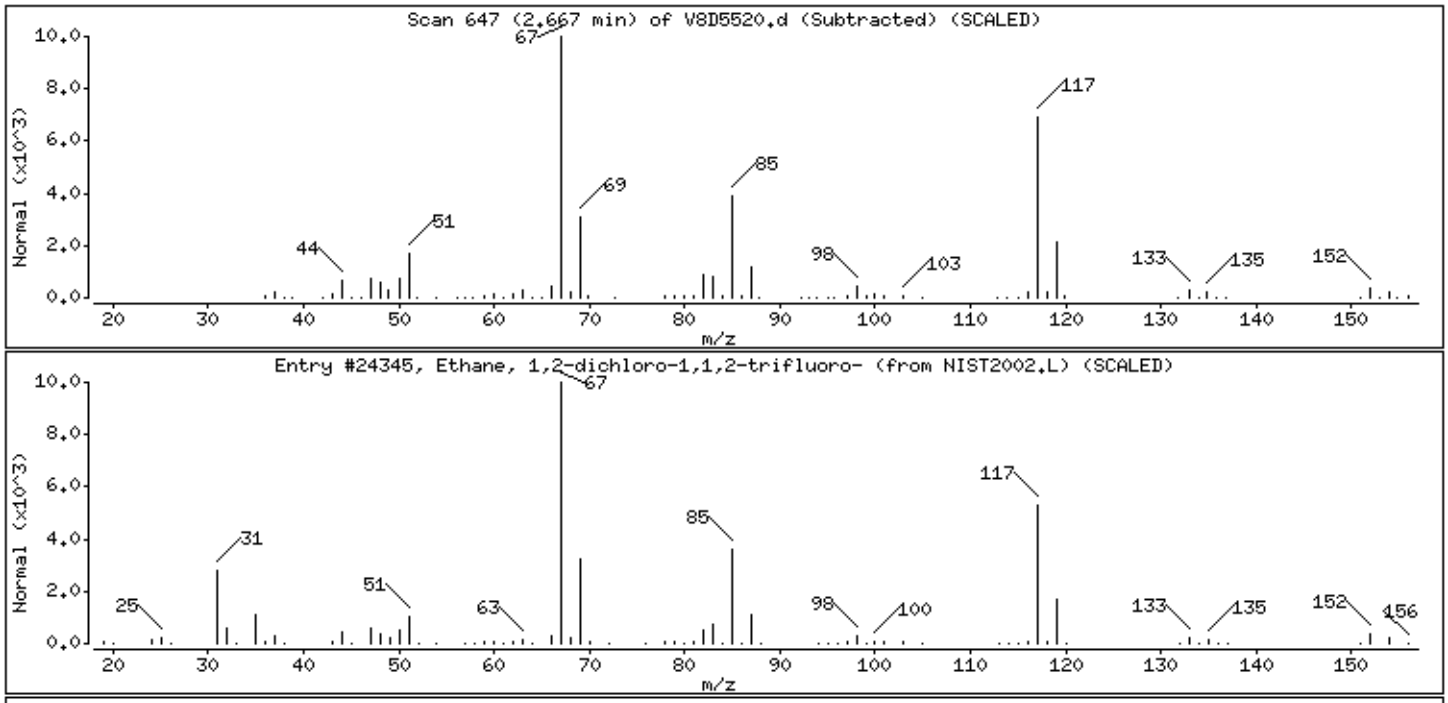
Client ID: MW-22R(3)_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-05A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(3)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-05ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5590.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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	200	U
74-87-3	Chloromethane	200	U
75-01-4	Vinyl chloride	200	U
74-83-9	Bromomethane	200	U
75-00-3	Chloroethane	200	U
75-69-4	Trichlorofluoromethane	200	U
75-35-4	1,1-Dichloroethene	200	U
67-64-1	Acetone	1000	U
74-88-4	Iodomethane	200	U
75-15-0	Carbon disulfide	200	U
75-09-2	Methylene chloride	200	U
156-60-5	trans-1,2-Dichloroethene	200	U
1634-04-4	Methyl tert-butyl ether	200	U
75-34-3	1,1-Dichloroethane	580	D
108-05-4	Vinyl acetate	200	U
78-93-3	2-Butanone	1000	U
156-59-2	cis-1,2-Dichloroethene	200	U
594-20-7	2,2-Dichloropropane	200	U
74-97-5	Bromochloromethane	200	U
67-66-3	Chloroform	200	U
71-55-6	1,1,1-Trichloroethane	11000	D
563-58-6	1,1-Dichloropropene	200	U
56-23-5	Carbon tetrachloride	200	U
107-06-2	1,2-Dichloroethane	200	U
71-43-2	Benzene	200	U
79-01-6	Trichloroethene	5500	D
78-87-5	1,2-Dichloropropane	200	U
74-95-3	Dibromomethane	200	U
75-27-4	Bromodichloromethane	200	U
10061-01-5	cis-1,3-Dichloropropene	200	U
108-10-1	4-Methyl-2-pentanone	1000	U
108-88-3	Toluene	200	U
10061-02-6	trans-1,3-Dichloropropene	200	U
79-00-5	1,1,2-Trichloroethane	200	U
142-28-9	1,3-Dichloropropane	200	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R(3)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-05ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5590.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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	200	U
591-78-6	2-Hexanone	1000	U
124-48-1	Dibromochloromethane	200	U
106-93-4	1,2-Dibromoethane	200	U
108-90-7	Chlorobenzene	200	U
630-20-6	1,1,1,2-Tetrachloroethane	200	U
100-41-4	Ethylbenzene	200	U
179601-23-1	m,p-Xylene	200	U
95-47-6	o-Xylene	200	U
1330-20-7	Xylene (Total)	200	U
100-42-5	Styrene	200	U
75-25-2	Bromoform	200	U
98-82-8	Isopropylbenzene	200	U
79-34-5	1,1,2,2-Tetrachloroethane	200	U
108-86-1	Bromobenzene	200	U
96-18-4	1,2,3-Trichloropropane	200	U
103-65-1	n-Propylbenzene	200	U
95-49-8	2-Chlorotoluene	200	U
108-67-8	1,3,5-Trimethylbenzene	200	U
106-43-4	4-Chlorotoluene	200	U
98-06-6	tert-Butylbenzene	200	U
95-63-6	1,2,4-Trimethylbenzene	200	U
135-98-8	sec-Butylbenzene	200	U
99-87-6	4-Isopropyltoluene	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
104-51-8	n-Butylbenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
96-12-8	1,2-Dibromo-3-chloropropane	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
87-68-3	Hexachlorobutadiene	200	U
87-61-6	1,2,3-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R(3)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-05ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5590.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5590.d
Lab Smp Id: N1055-05ADL Client Smp ID: MW-22R(3)_6/16/14DL
Inj Date : 20-JUN-2014 21:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-05ADL,,77692,200
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 81
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	200.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	199834	101.205	20000
	23 1,1-Dichloroethane	63	3.786	3.782	(0.723)	12729	2.87835	580
$	36 Dibromofluoromethane	113	4.647	4.641	(0.887)	84077	56.7942	57
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	216792	53.9857	11000
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.944)	13229	52.8563	53
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	198931	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	45085	27.4614	5500
$	58 Toluene-d8	98	6.718	6.715	(0.817)	268387	46.0025	46
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	254947	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	159723	50.9980	51
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	136736	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d
Report Date: 25-Jun-2014 16:17

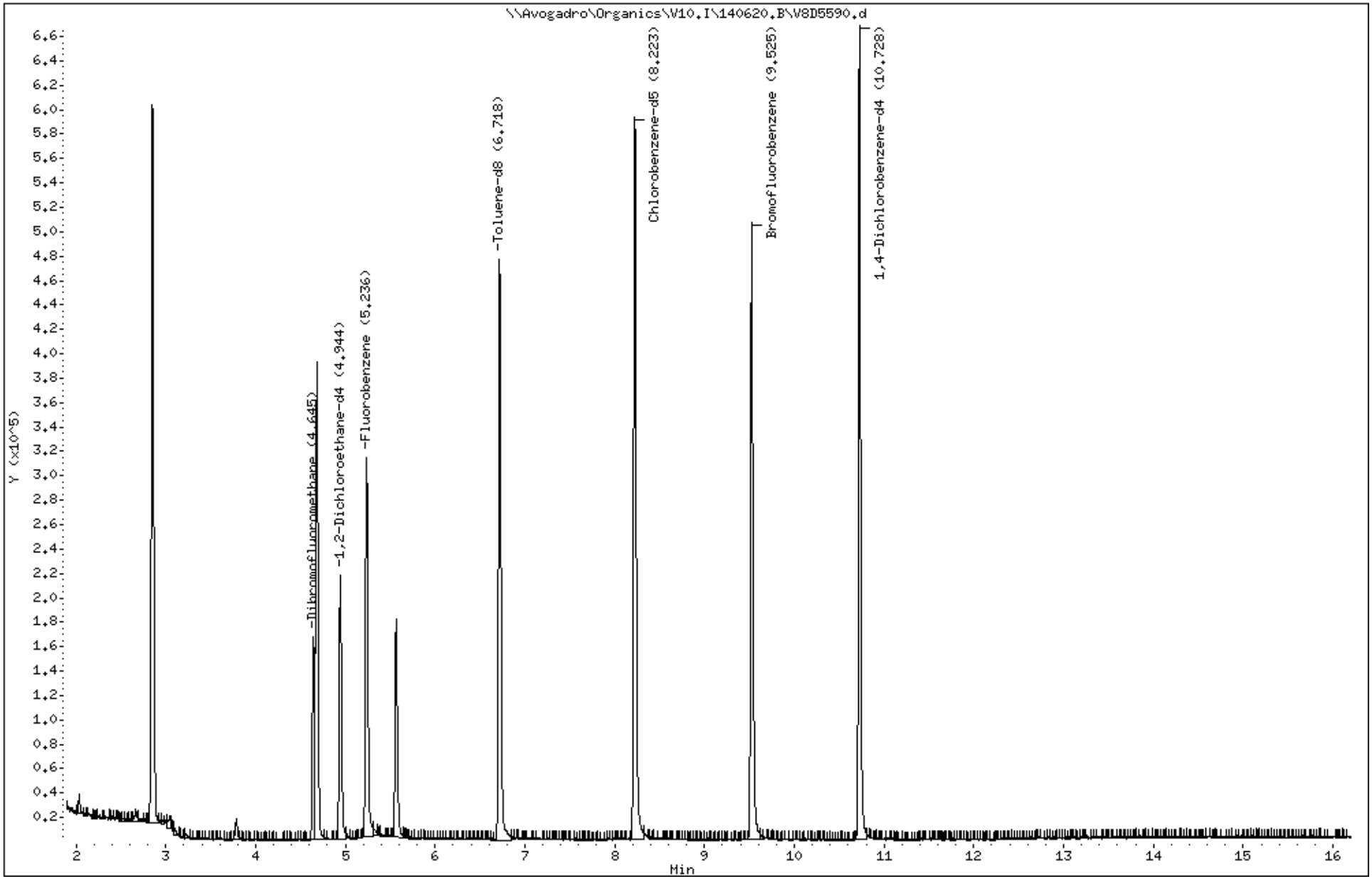
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5590.d
Lab Smp Id: N1055-05ADL Client Smp ID: MW-22R(3)_6/16/14DL
Inj Date : 20-JUN-2014 21:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-05ADL,,77692,200
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 81
Dil Factor: 200.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d
Date : 20-JUN-2014 21:24
Client ID: MW-22R(3)_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-05ADL,,77692,200
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d

Date : 20-JUN-2014 21:24

Client ID: MW-22R(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-05ADL,,77692,200

Purge Volume: 5.0

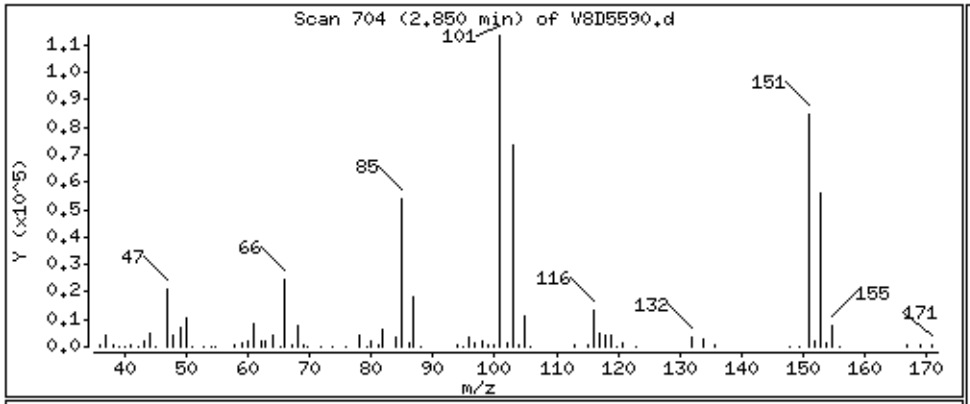
Operator: WL SRC: LIMS

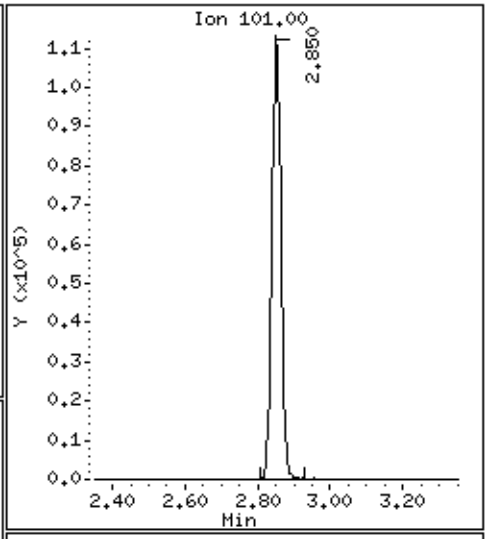
Column phase: DB-624

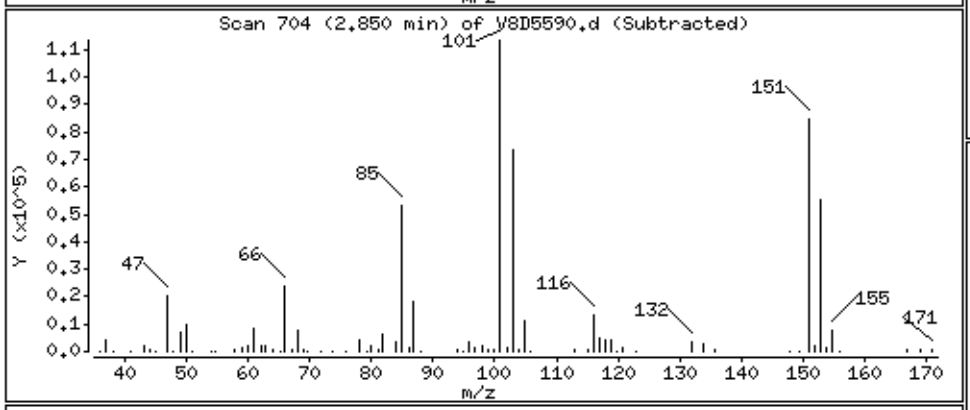
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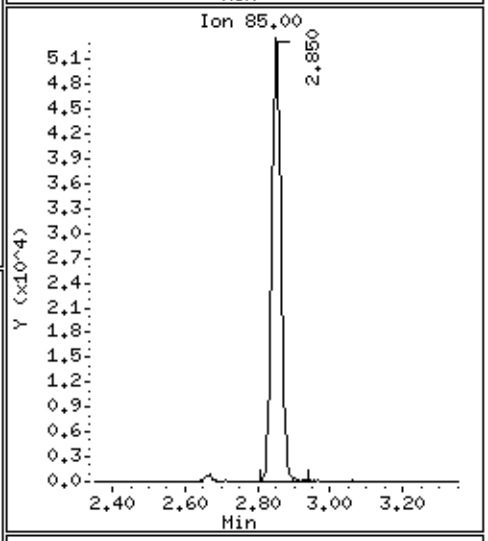
11 1,1,2-Trichloro-1,2,2-Trifluo

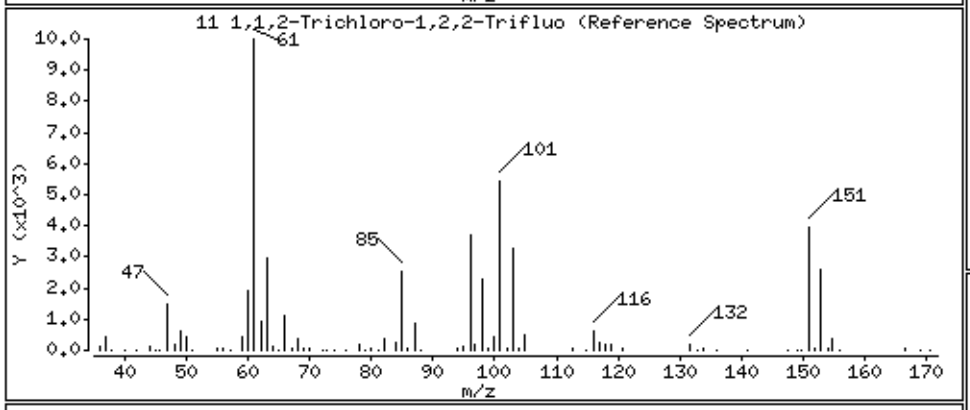
Concentration: 20000 ug/L

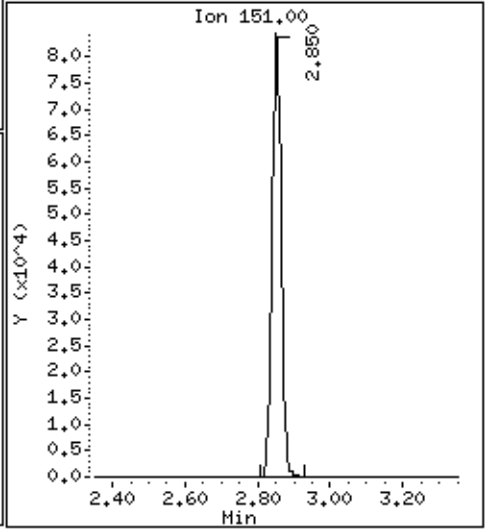


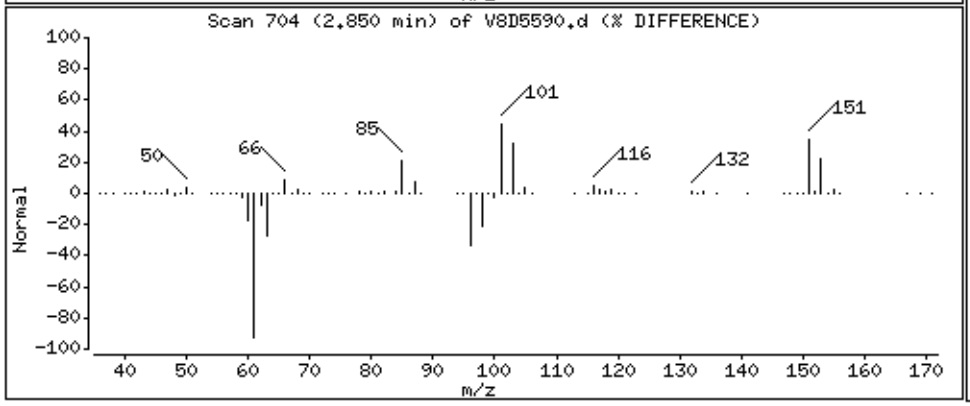












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d

Date : 20-JUN-2014 21:24

Client ID: MW-22R(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-05ADL,,77692,200

Purge Volume: 5.0

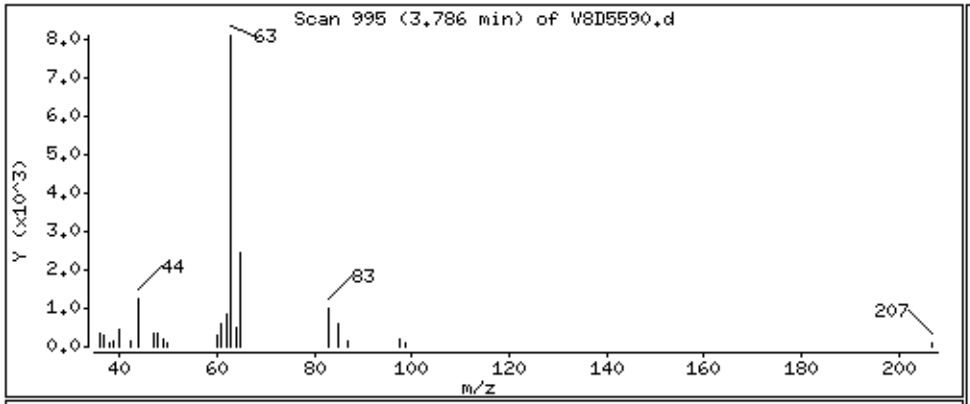
Operator: WL SRC: LIMS

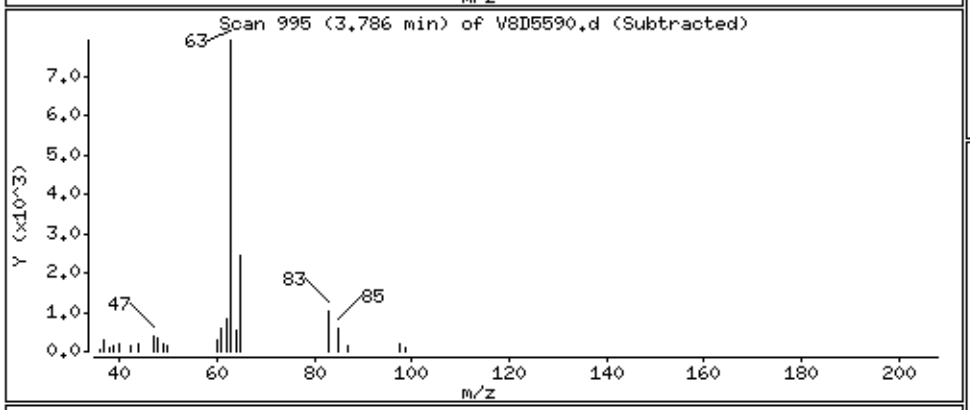
Column phase: DB-624

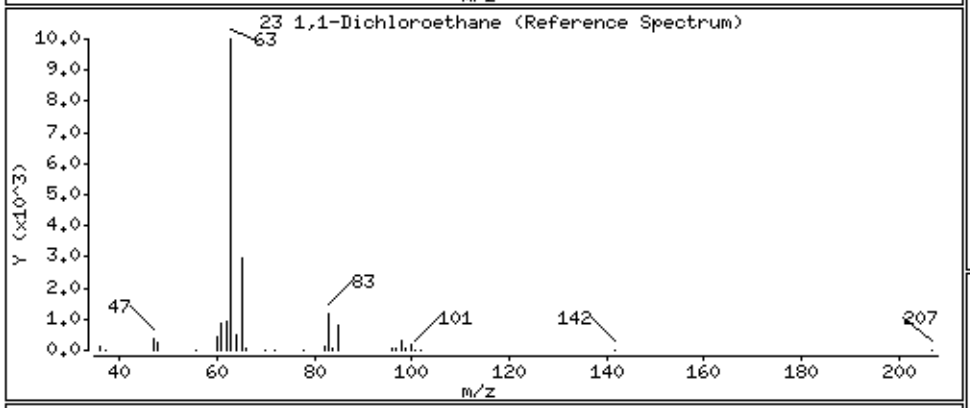
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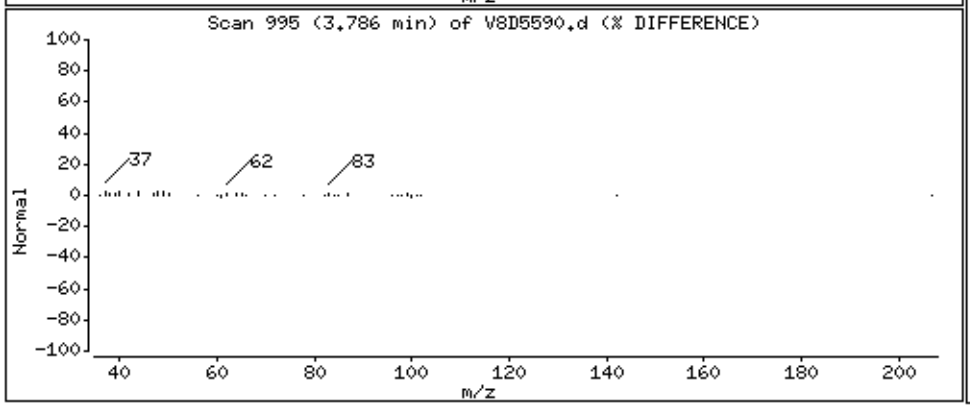
23 1,1-Dichloroethane

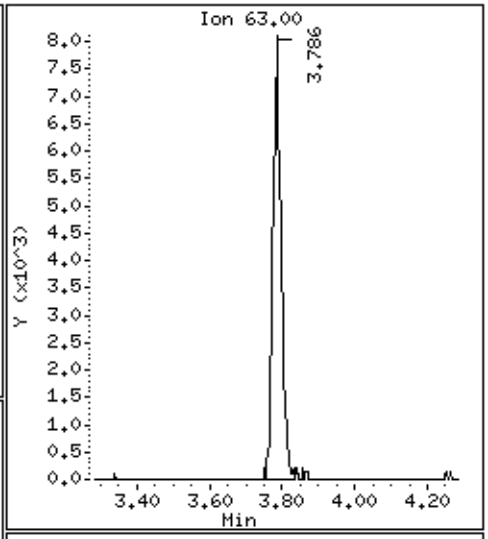
Concentration: 580 ug/L

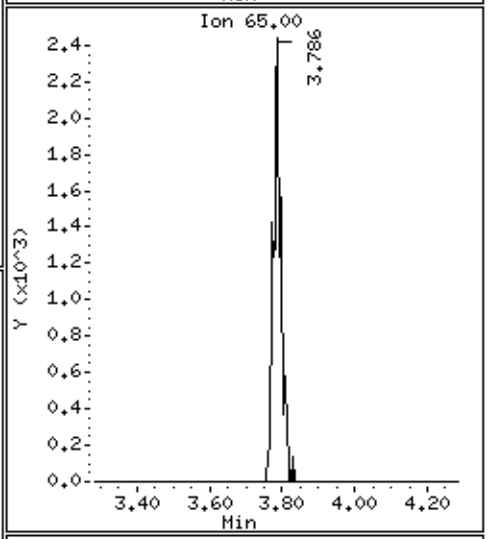


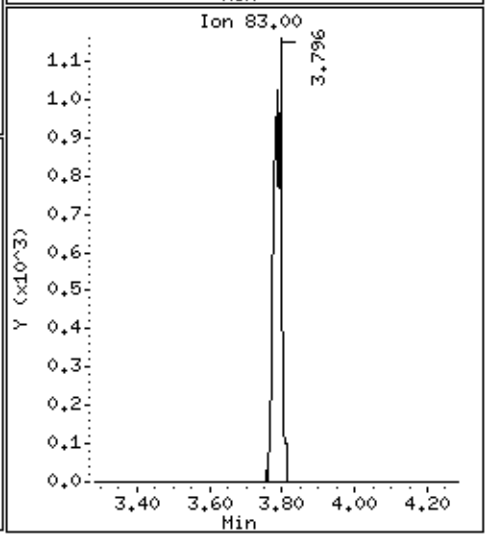












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d

Date : 20-JUN-2014 21:24

Client ID: MW-22R(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-05ADL,,77692,200

Purge Volume: 5.0

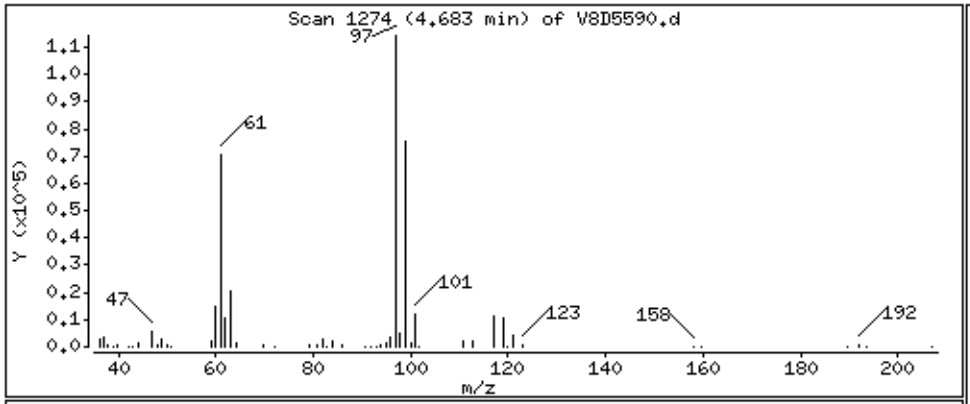
Operator: WL SRC: LIMS

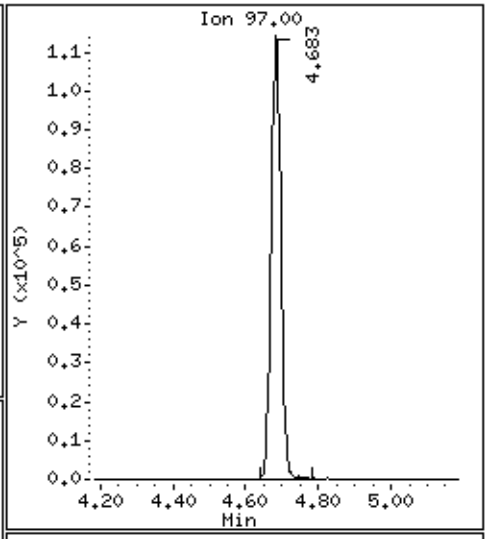
Column phase: DB-624

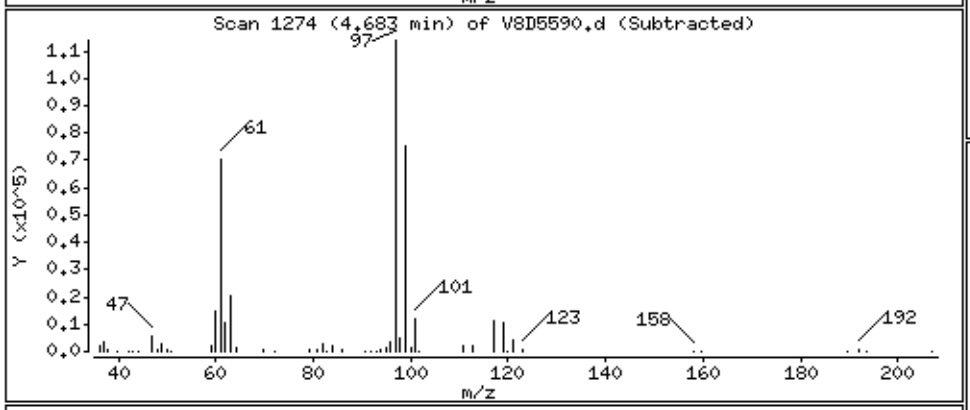
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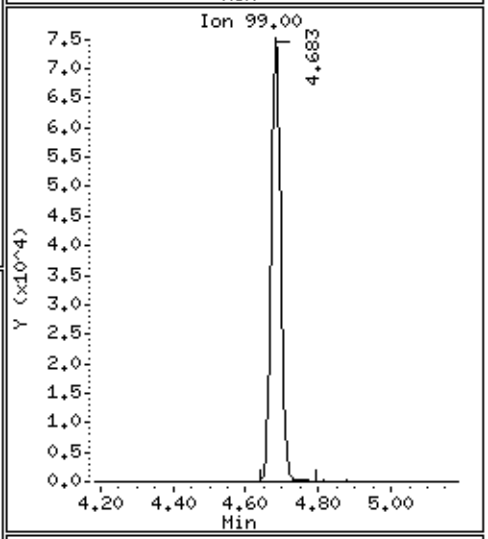
37 1,1,1-Trichloroethane

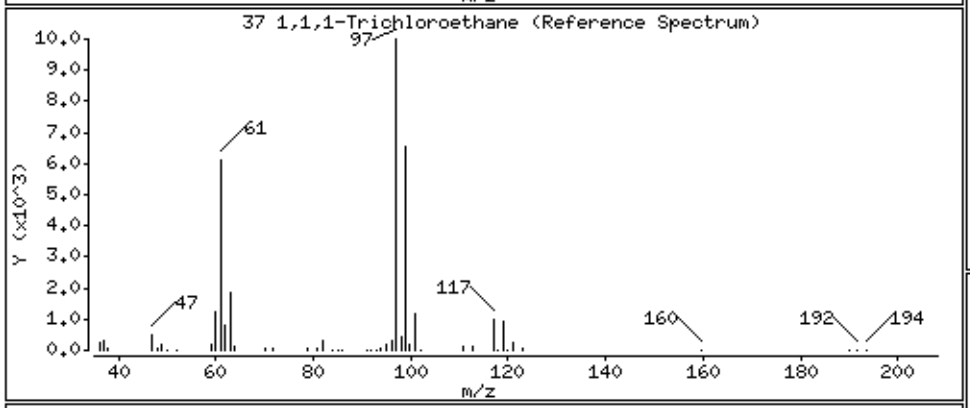
Concentration: 11000 ug/L

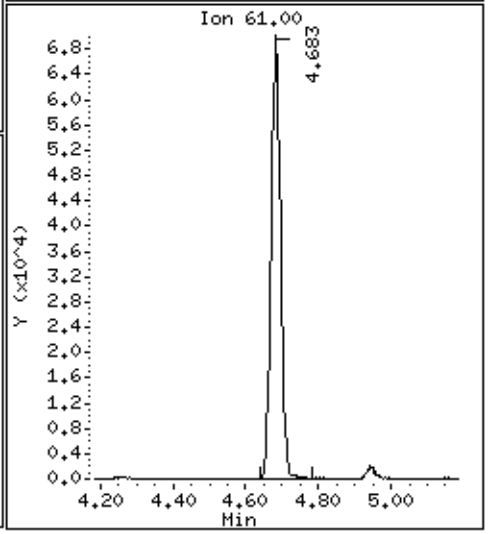


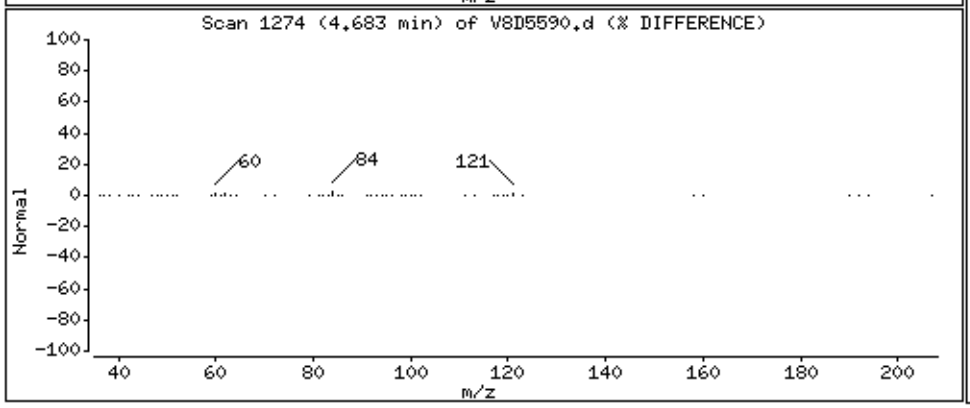












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5590.d

Date : 20-JUN-2014 21:24

Client ID: MW-22R(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-05ADL,,77692,200

Purge Volume: 5.0

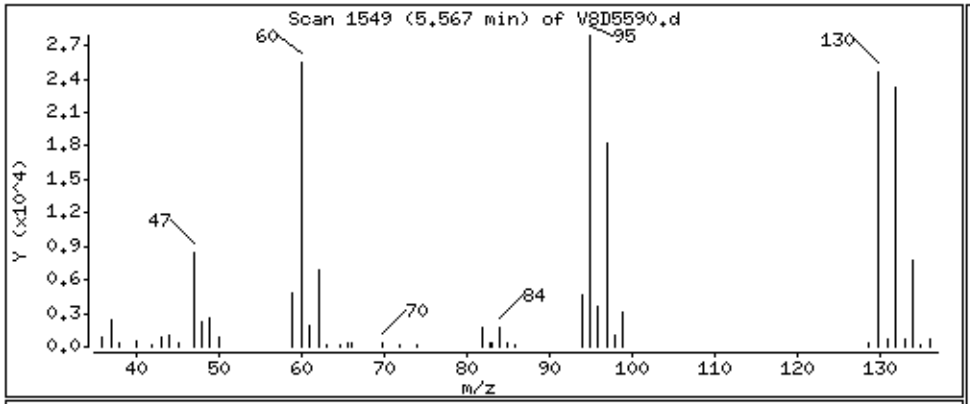
Operator: WL SRC: LIMS

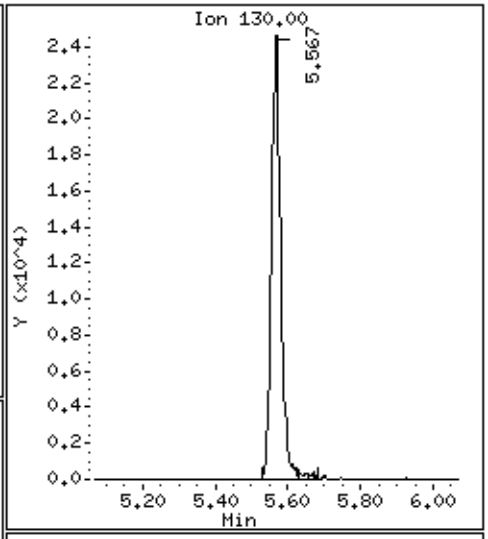
Column phase: DB-624

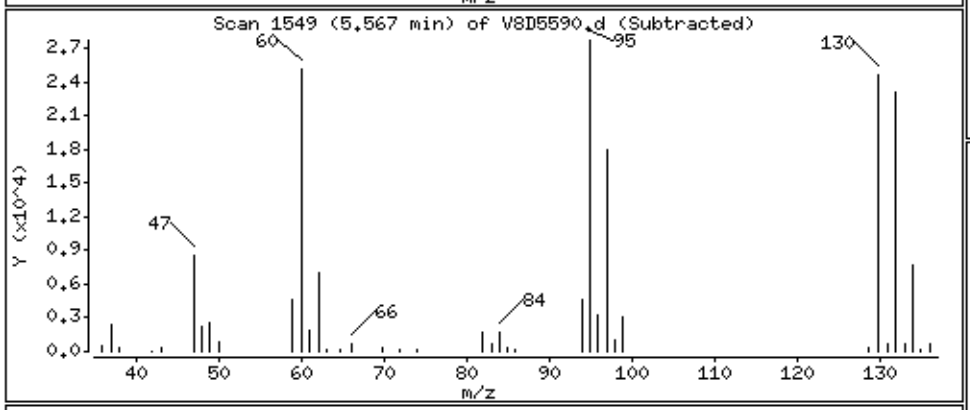
Column diameter: 0.25

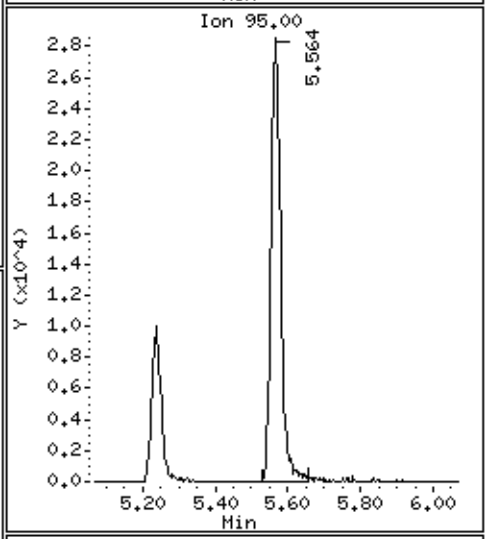
47 Trichloroethene

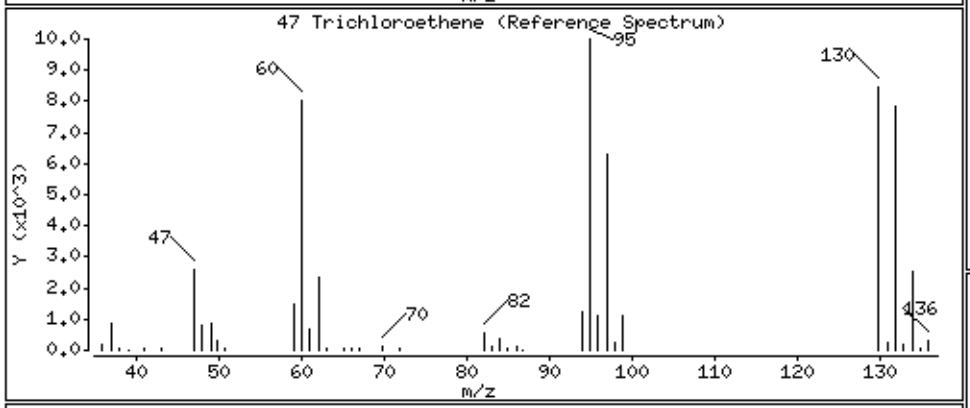
Concentration: 5500 ug/L

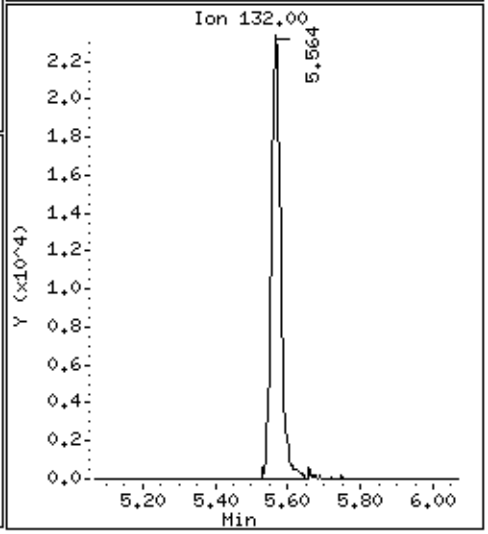


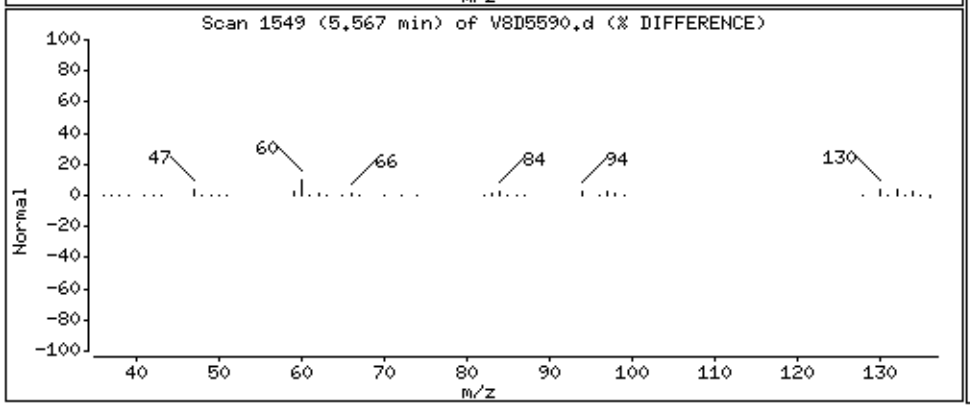












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(1)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5521.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	0.88	J
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	150	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	7.2	
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	950	E
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	770	E
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

EPA SAMPLE NO.

MW-22S(1)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5521.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	2.5	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2500	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S(1)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5521.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	110	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5521.d
Lab Smp Id: N1055-06A Client Smp ID: MW-22S(1)_6/16/14
Inj Date : 19-JUN-2014 12:33
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-06A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.853	1.856	(0.354)	3036	0.87975	0.88(Q)
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	5876162	2473.33	2500(A)
	23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	781032	146.782	150
	28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	15215	7.24522	7.2
$	36	Dibromofluoromethane	113	4.644	4.644	(0.887)	101337	56.8918	57
	37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	4579983	947.881	950(A)
$	42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	16103	53.4726	53
M	50	1,2-Dichloroethene (Total)	96				15215	7.24522	7.2
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	239358	50.0000	
	47	Trichloroethene	130	5.564	5.567	(1.063)	1513440	766.144	770(A)
$	58	Toluene-d8	98	6.718	6.718	(0.817)	295037	46.2380	46
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	278835	50.0000	
	70	Chlorobenzene	112	8.258	8.255	(1.004)	14114	2.51532	2.5
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	164484	48.0189	48
*	92	1,4-Dichlorobenzene-d4	152	10.728	10.728	(1.000)	133755	50.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5521.d
Lab Smp Id: N1055-06A Client Smp ID: MW-22S(1)_6/16/14
Inj Date : 19-JUN-2014 12:33
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-06A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

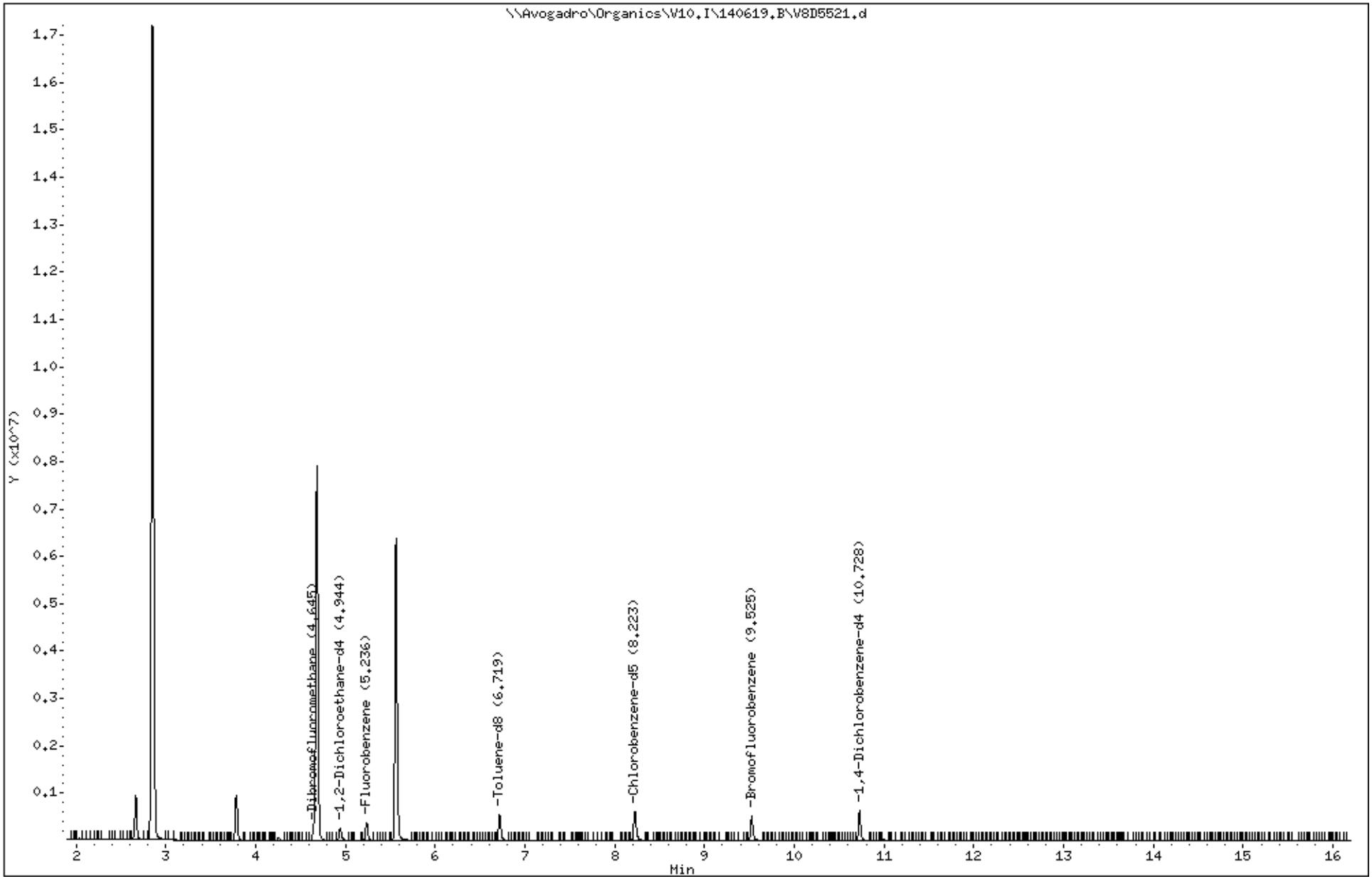
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.236	691369	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.664	1557534	112.641138	110	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d
Date : 19-JUN-2014 12:33
Client ID: MW-22S(1)_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-06A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

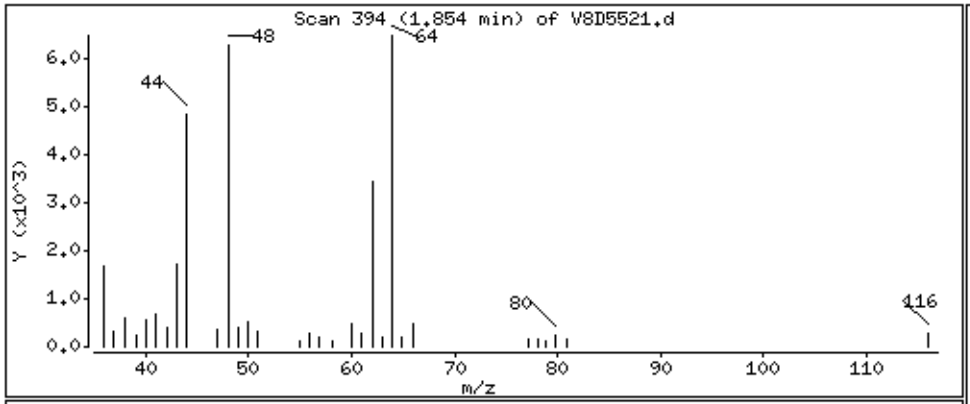
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

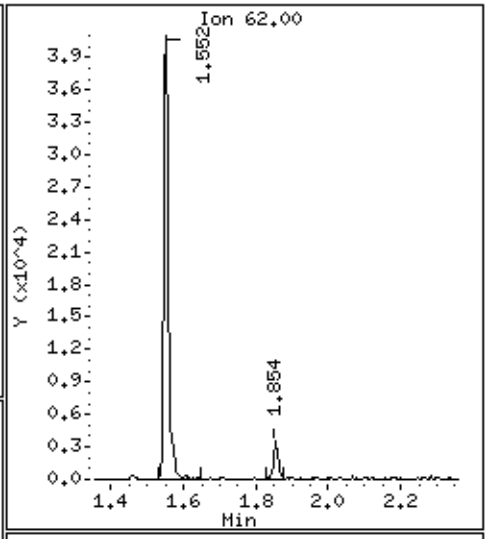
Sample Info: 5ML,N1055-06A,,77659

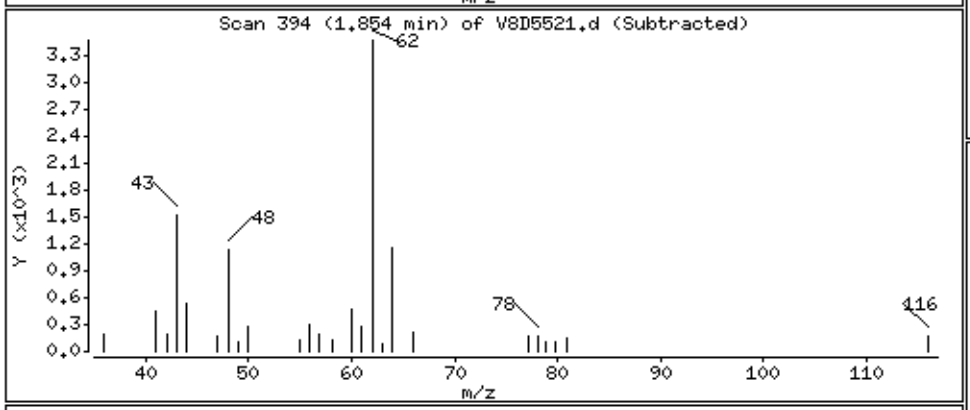
Purge Volume: 5.0 Operator: WL SRC: LIMS

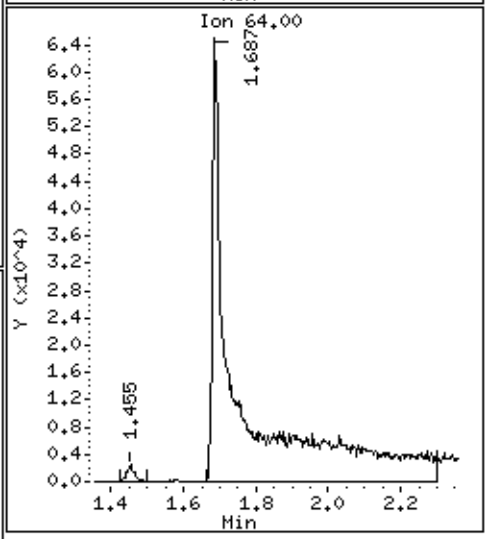
Column phase: DB-624 Column diameter: 0.25

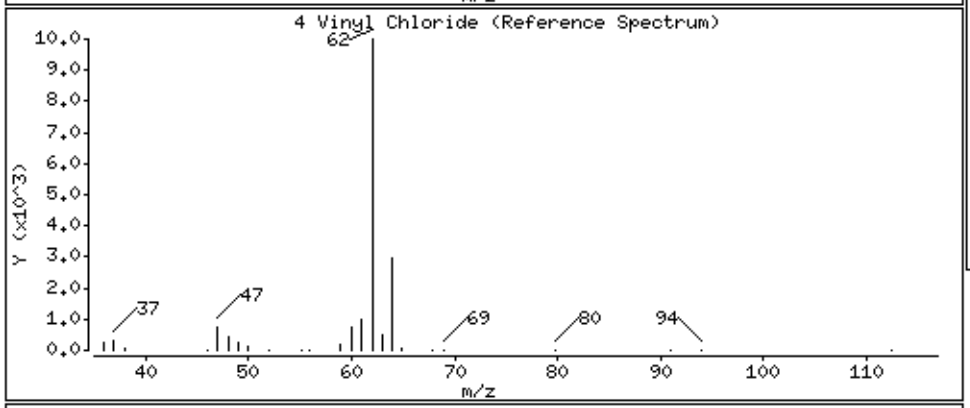
4 Vinyl Chloride Concentration: 0.88 ug/L

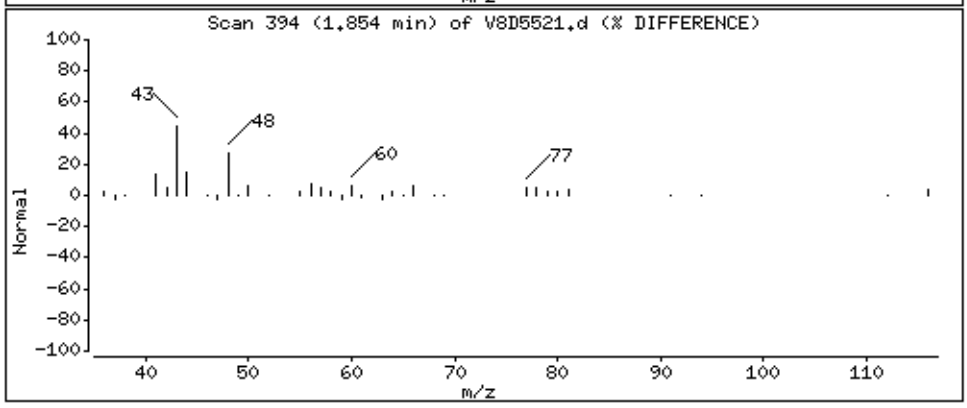












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

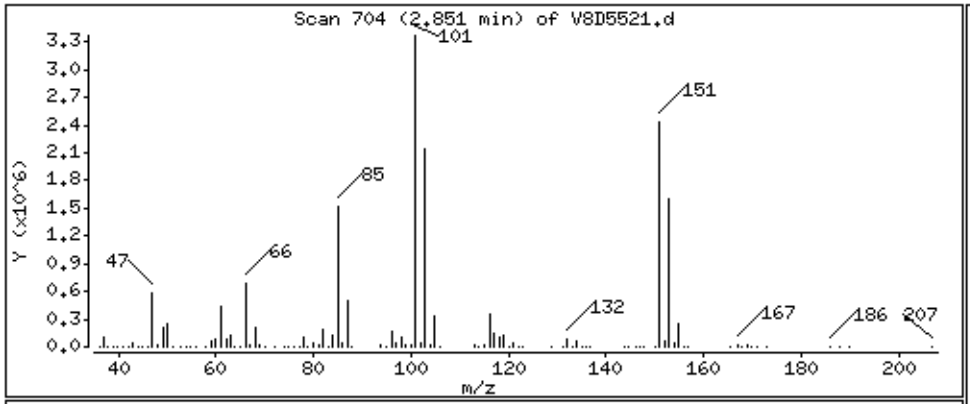
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

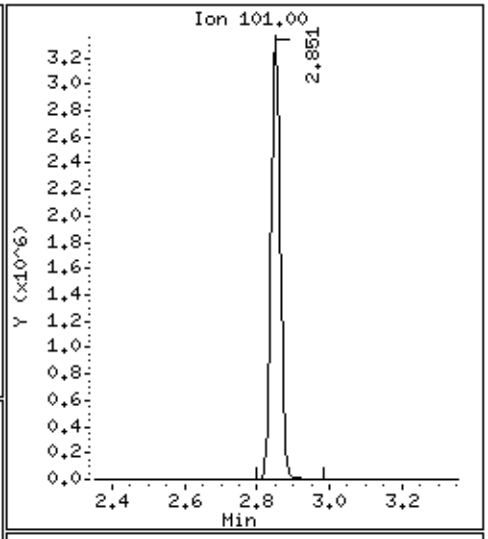
Sample Info: 5ML,N1055-06A,,77659

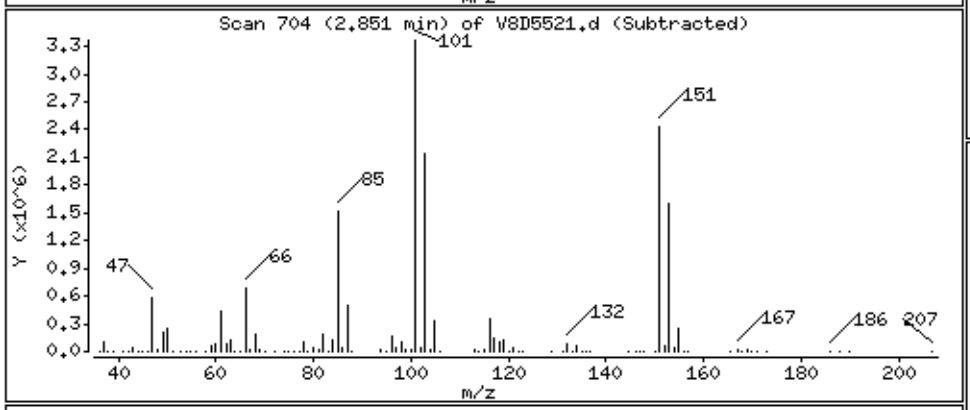
Purge Volume: 5.0 Operator: WL SRC: LIMS

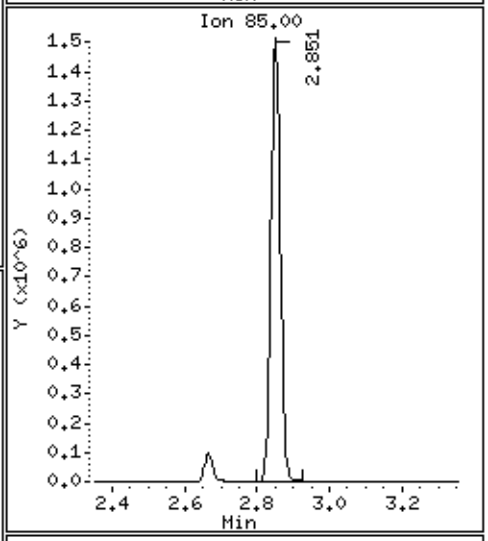
Column phase: DB-624 Column diameter: 0.25

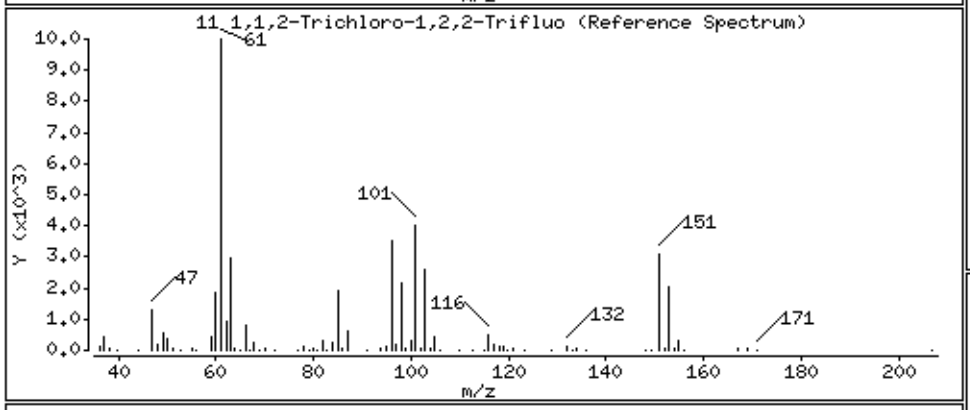
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2500 ug/L

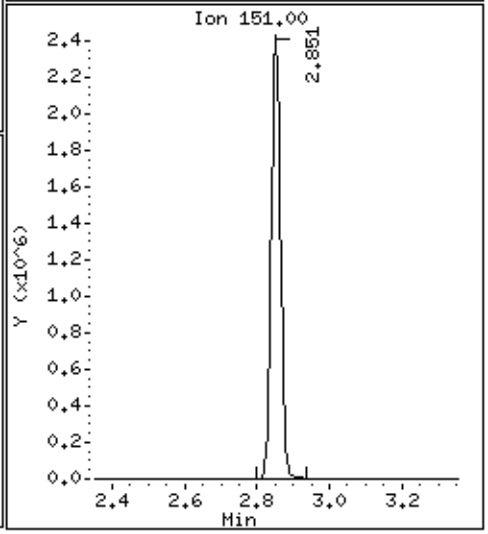


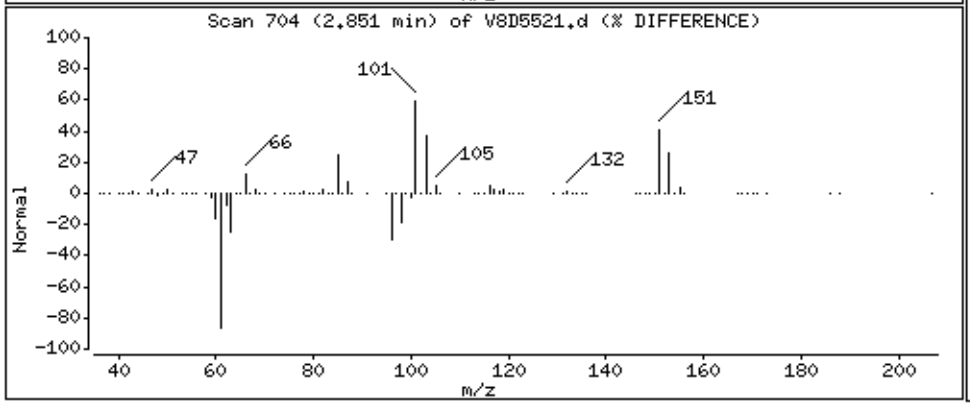












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

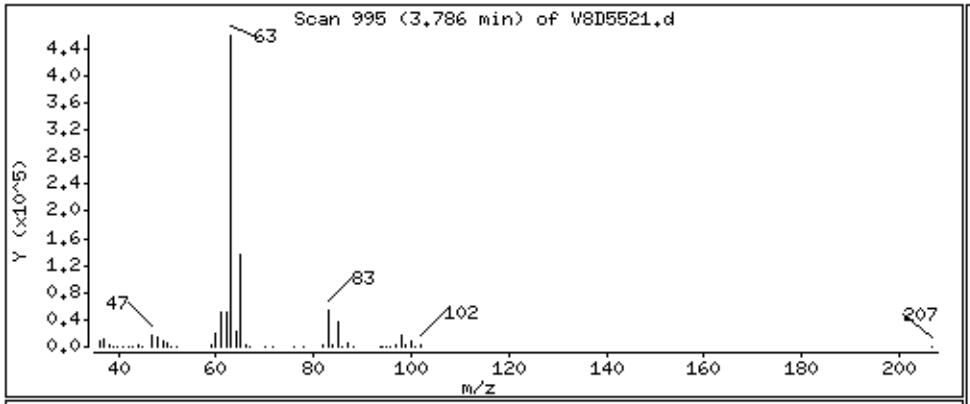
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

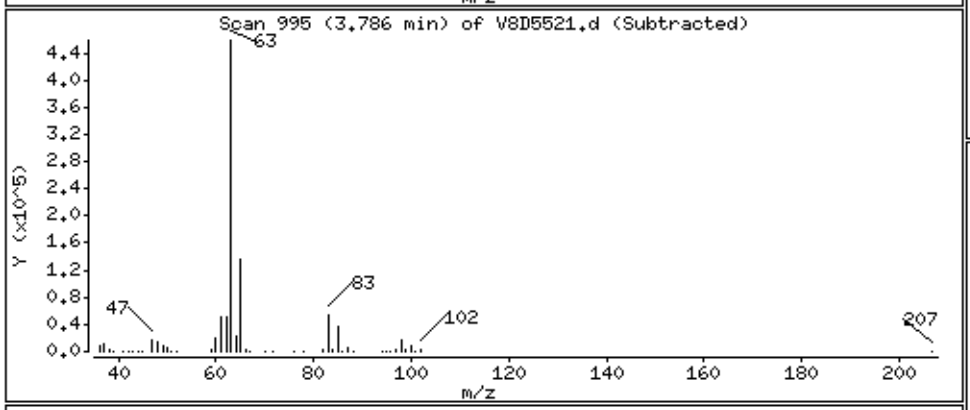
Sample Info: 5ML,N1055-06A,,77659

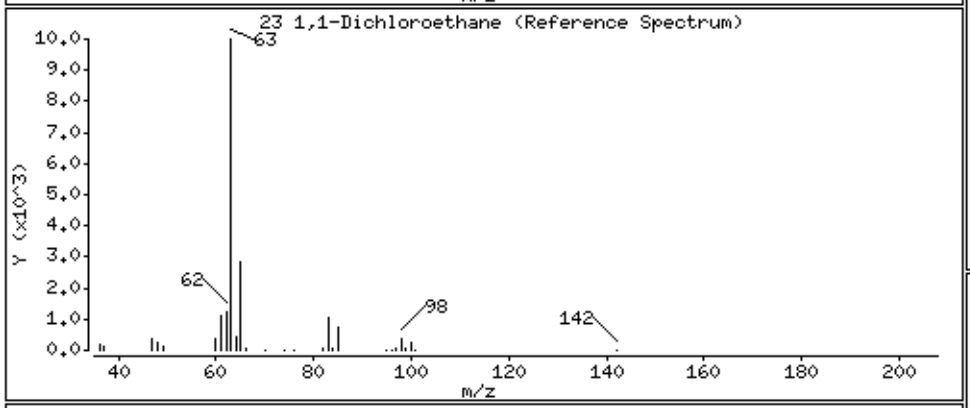
Purge Volume: 5.0 Operator: WL SRC: LIMS

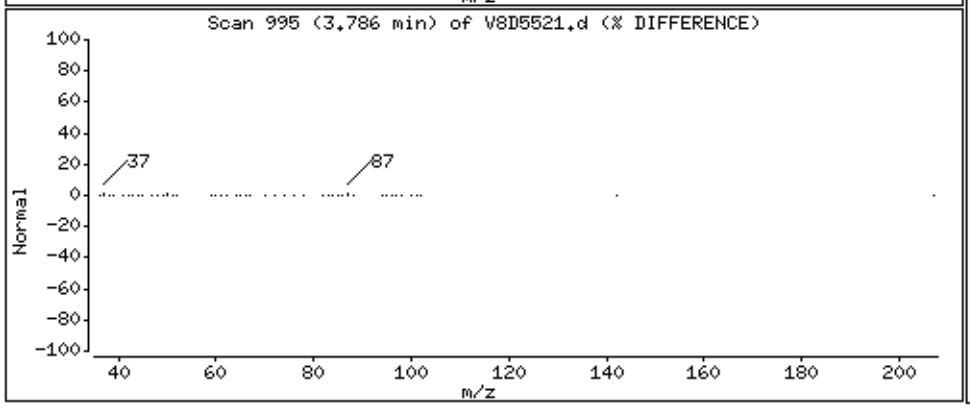
Column phase: DB-624 Column diameter: 0.25

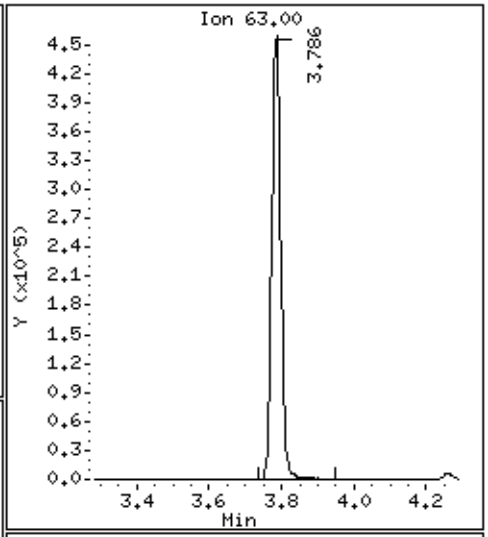
23 1,1-Dichloroethane Concentration: 150 ug/L

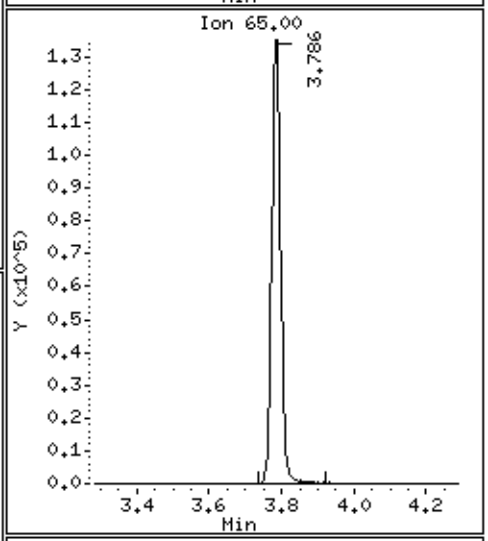


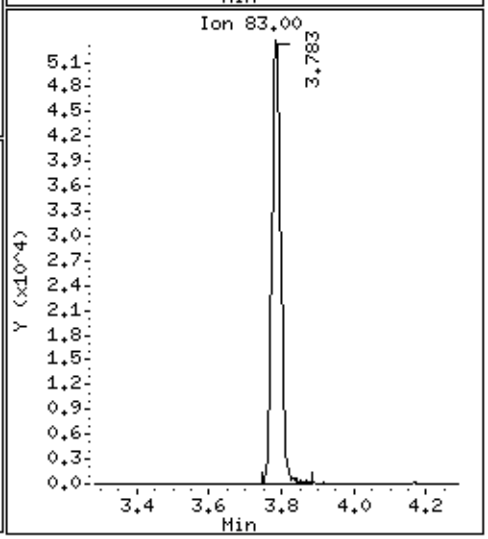












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

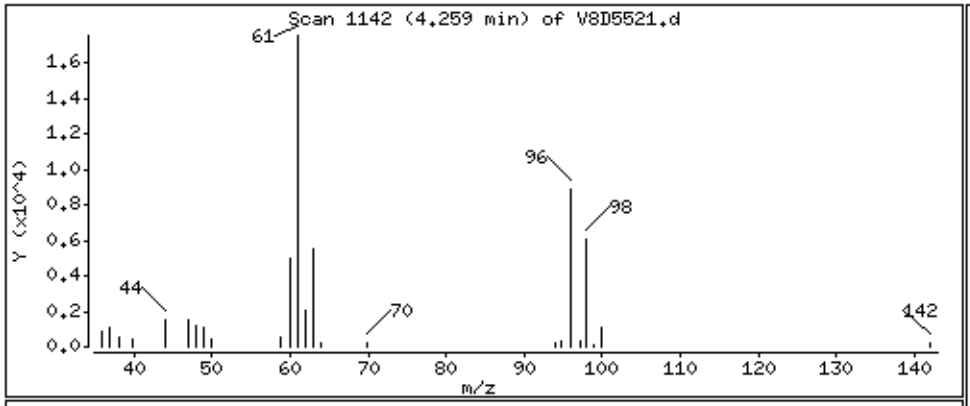
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

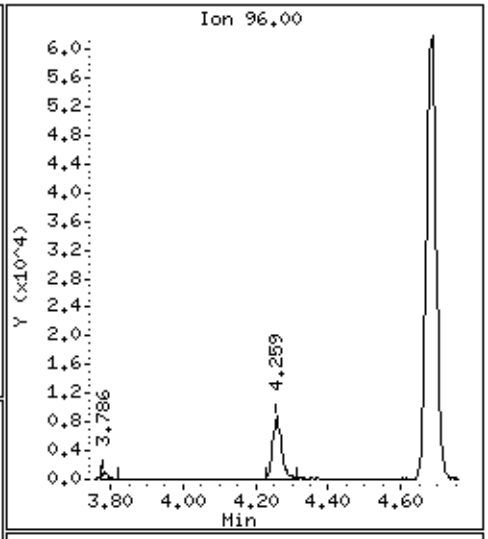
Sample Info: 5ML,N1055-06A,,77659

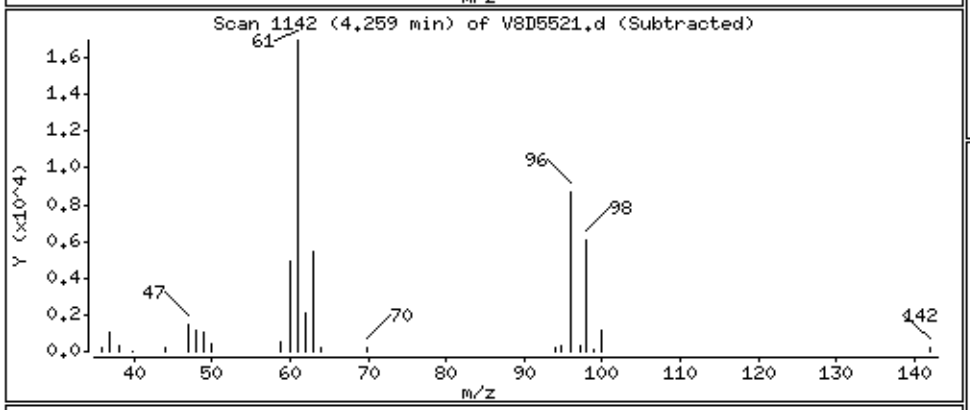
Purge Volume: 5.0 Operator: WL SRC: LIMS

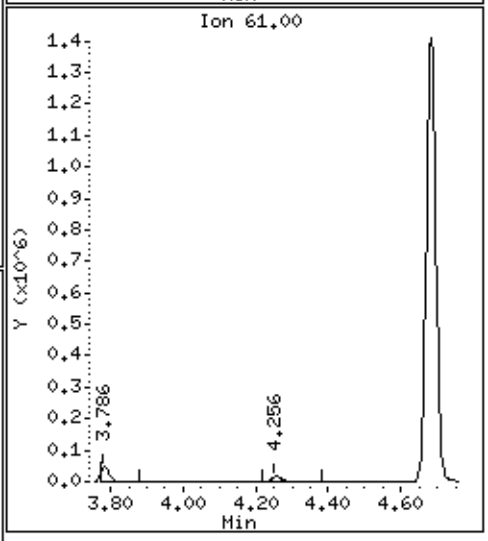
Column phase: DB-624 Column diameter: 0.25

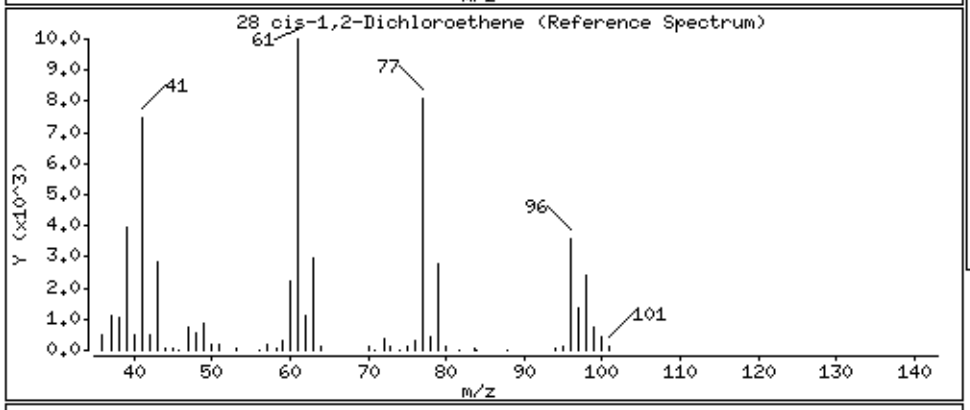
28 cis-1,2-Dichloroethene Concentration: 7.2 ug/L

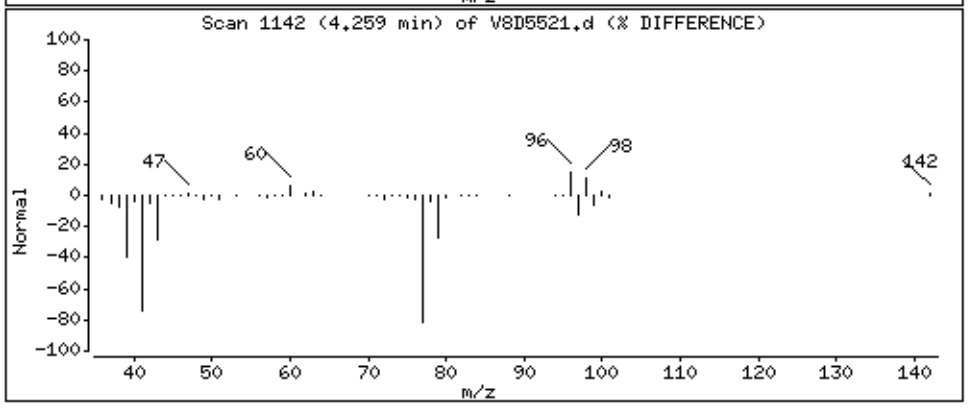












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

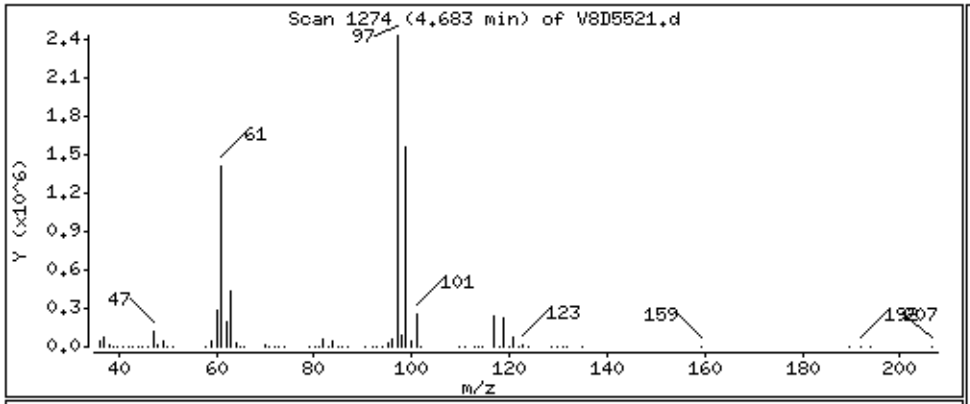
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

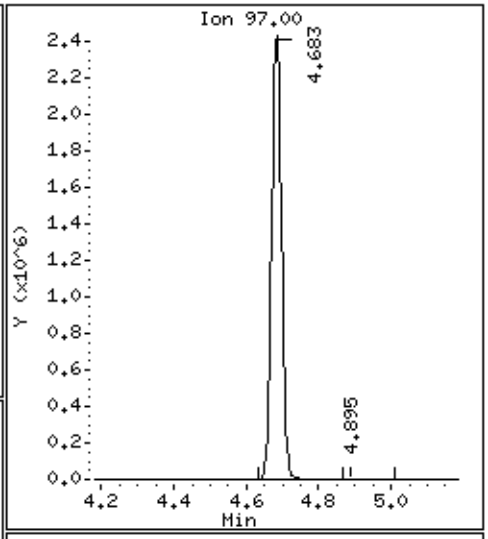
Sample Info: 5ML,N1055-06A,,77659

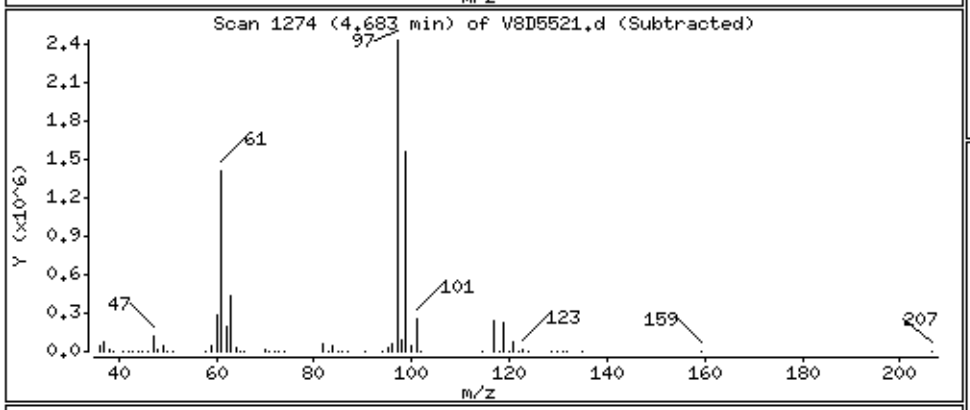
Purge Volume: 5.0 Operator: WL SRC: LIMS

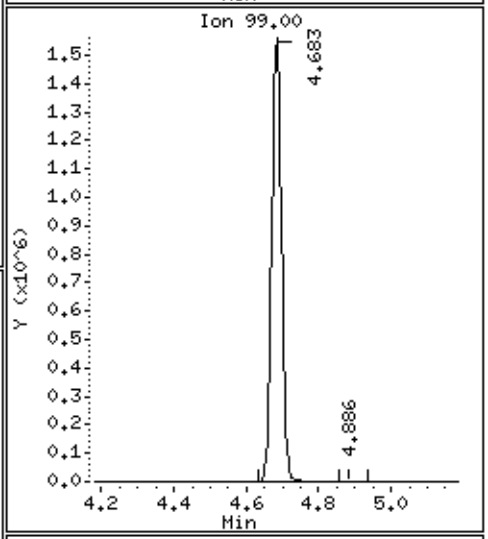
Column phase: DB-624 Column diameter: 0.25

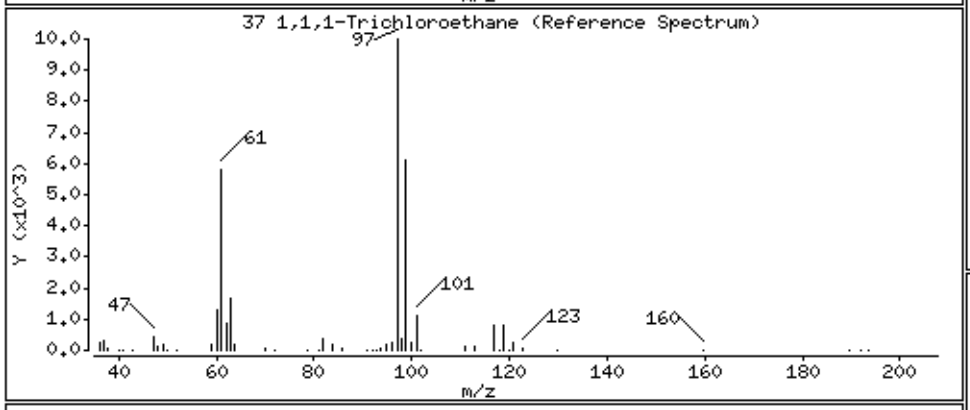
37 1,1,1-Trichloroethane Concentration: 950 ug/L

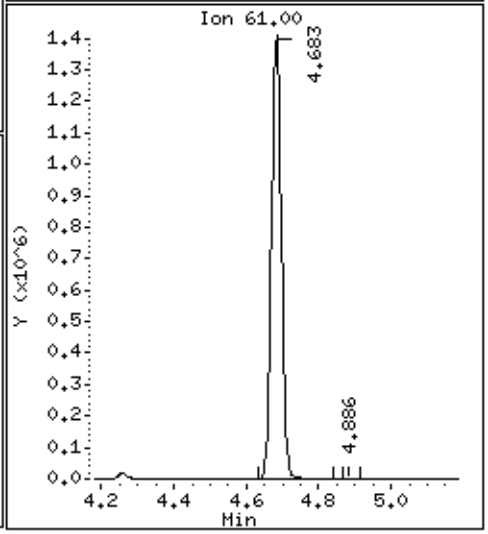


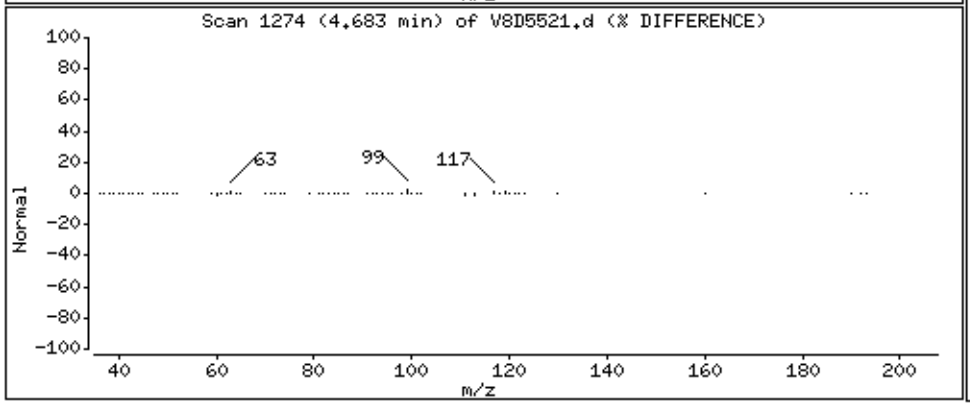












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

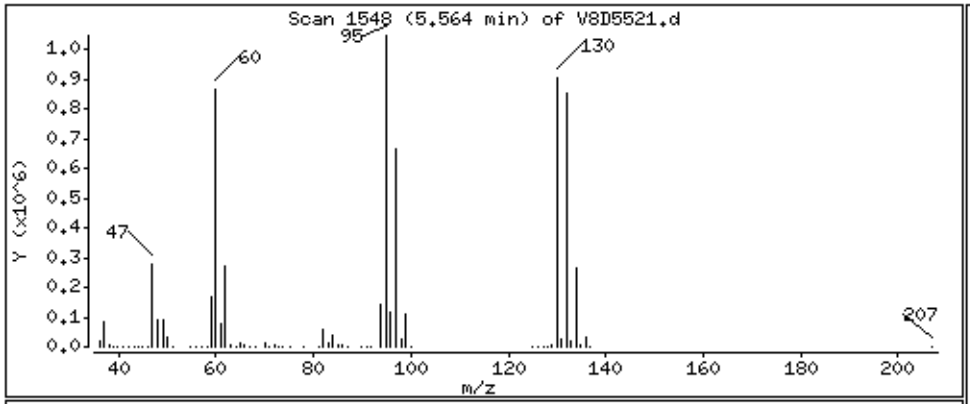
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

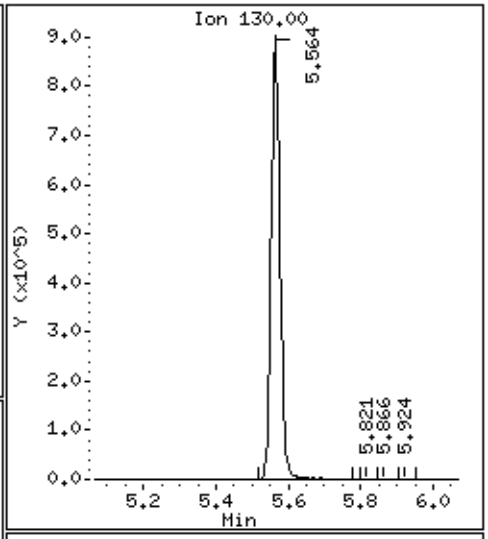
Sample Info: 5ML,N1055-06A,,77659

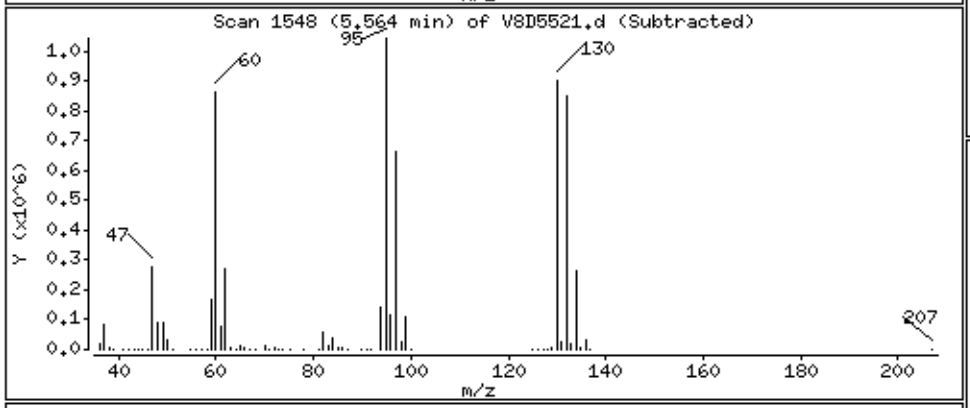
Purge Volume: 5.0 Operator: WL SRC: LIMS

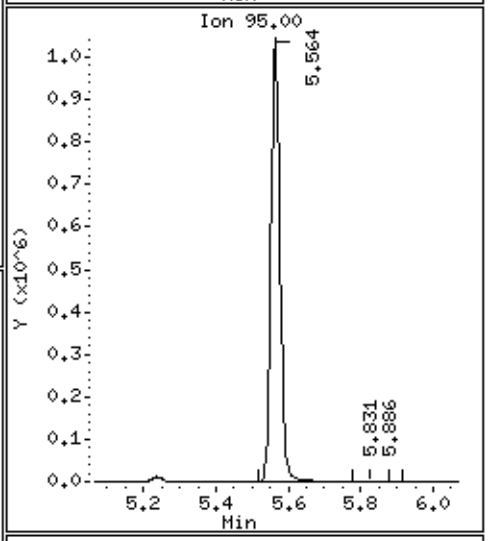
Column phase: DB-624 Column diameter: 0.25

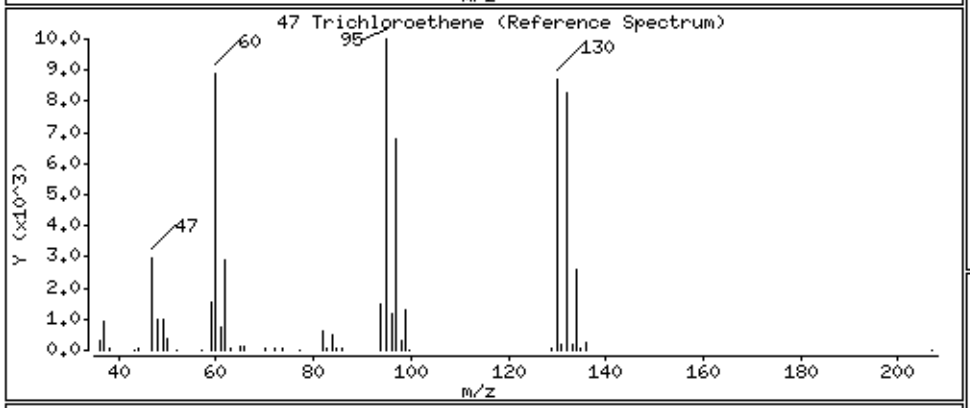
47 Trichloroethene Concentration: 770 ug/L

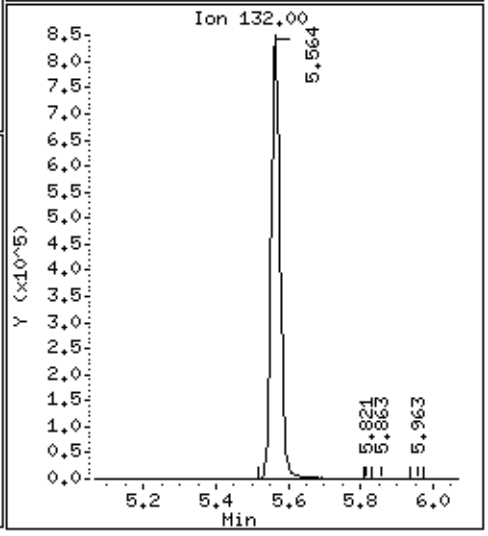


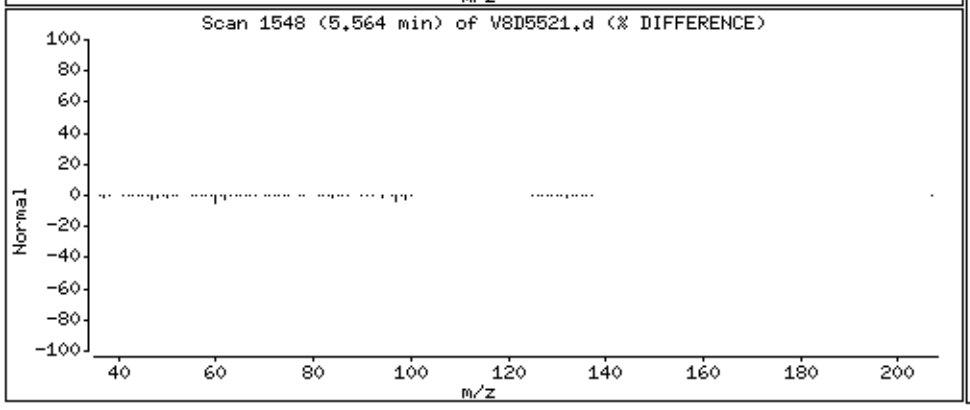












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

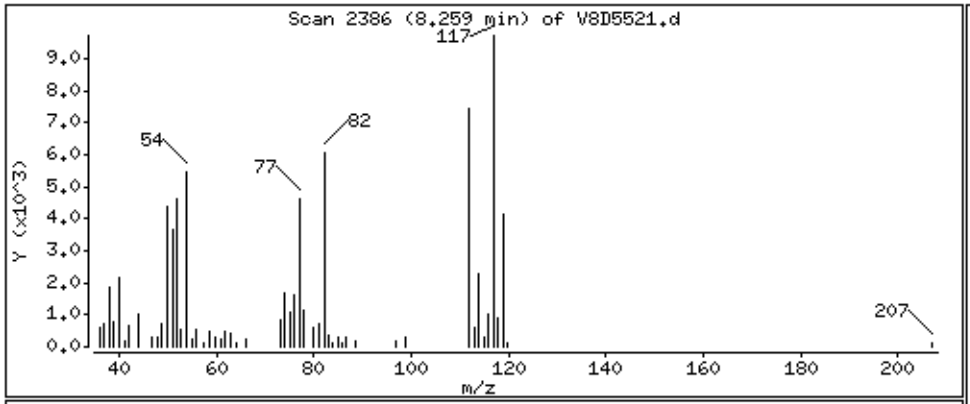
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

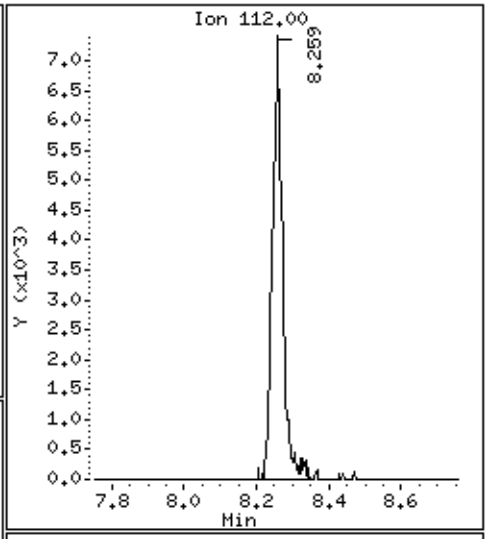
Sample Info: 5ML,N1055-06A,,77659

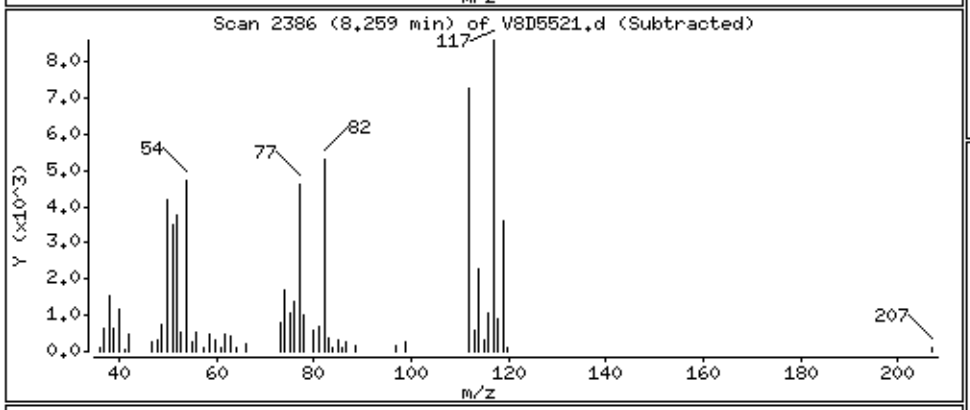
Purge Volume: 5.0 Operator: WL SRC: LIMS

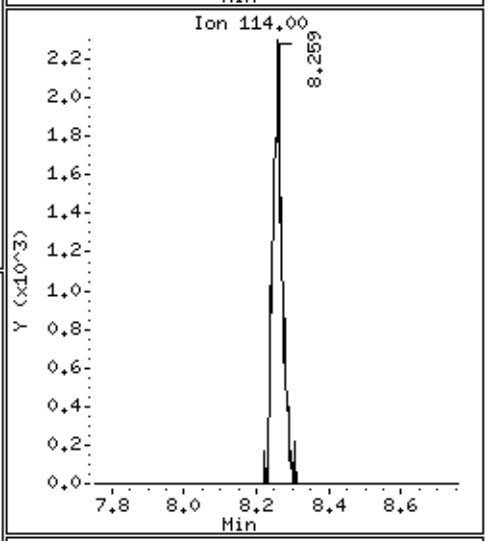
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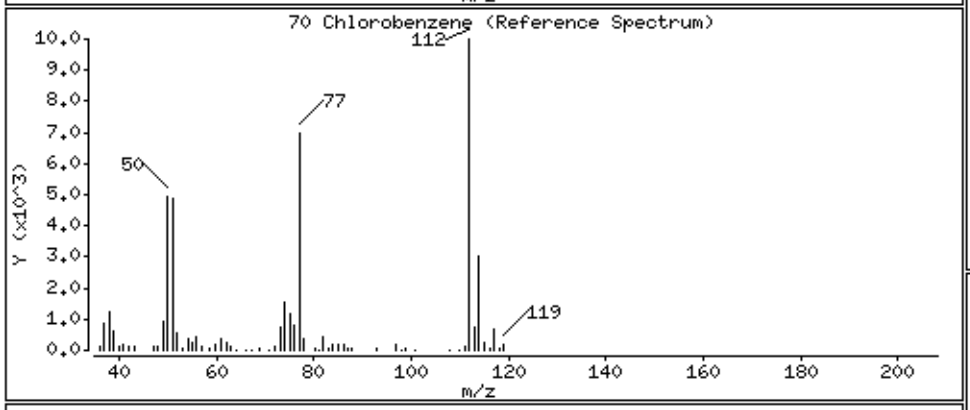
70 Chlorobenzene Concentration: 2.5 ug/L

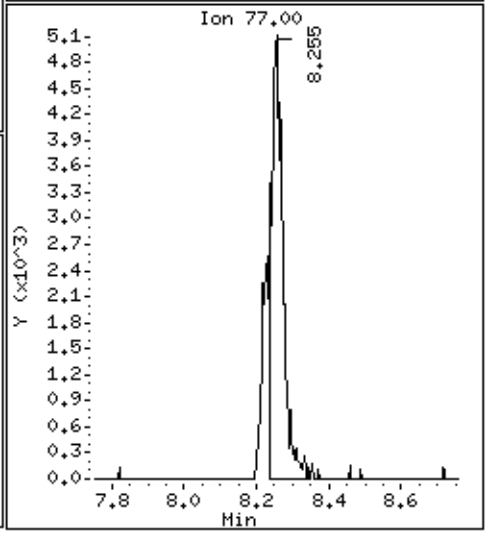


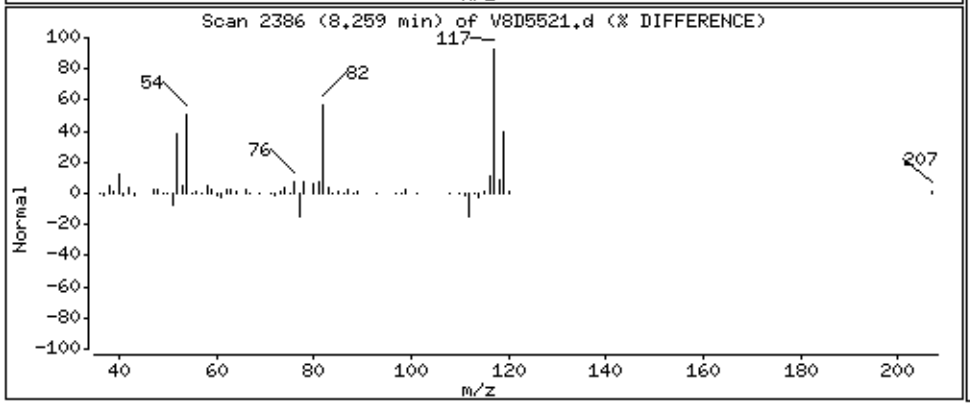












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5521.d

Date : 19-JUN-2014 12:33

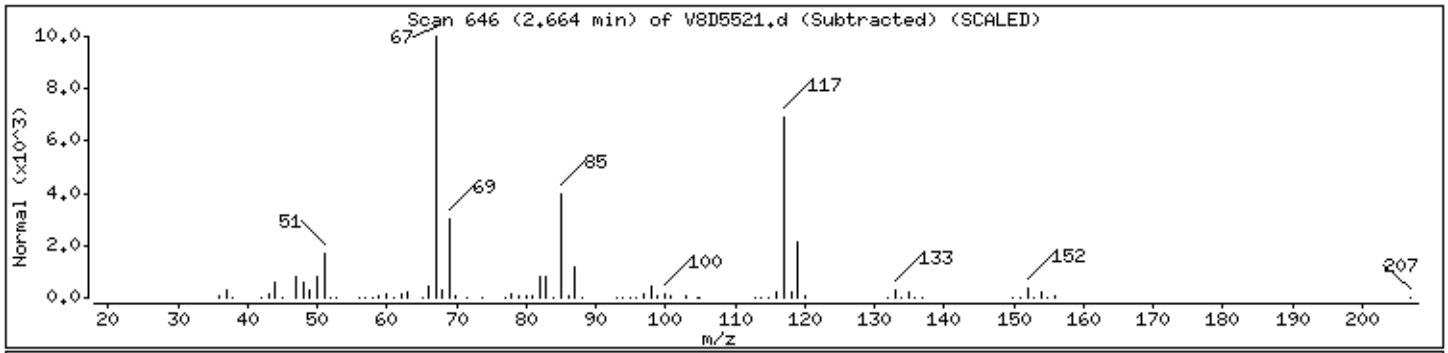
Client ID: MW-22S(1)_6/16/14 Instrument: V10.i

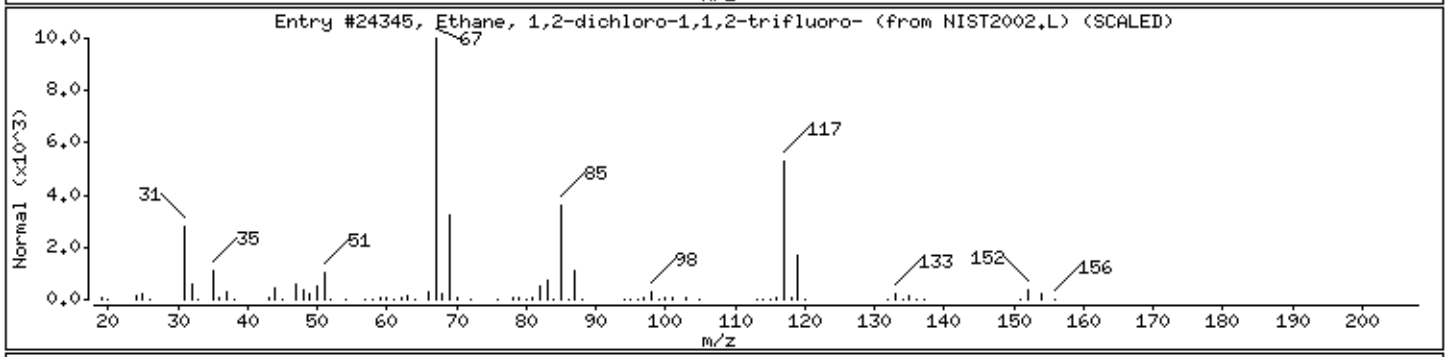
Sample Info: 5ML,N1055-06A,,77659

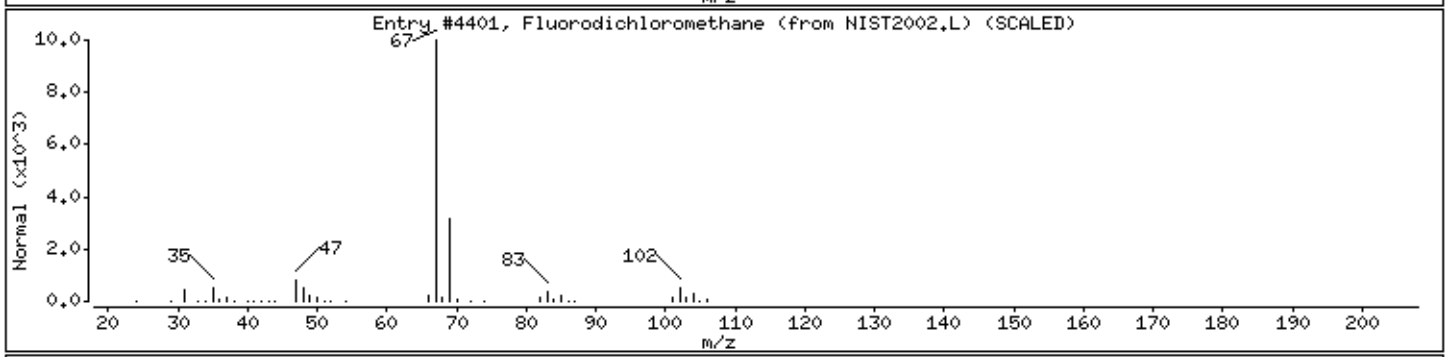
Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	25	CHCl2F	102







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(1)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-06ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5591.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	140	D
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	850	D
563-58-6	1,1-Dichloropropene	20	U
56-23-5	Carbon tetrachloride	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	660	D
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(1)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-06ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5591.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
103-65-1	n-Propylbenzene	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
104-51-8	n-Butylbenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S(1)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-06ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5591.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	110	DNJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5591.d
Lab Smp Id: N1055-06ADL Client Smp ID: MW-22S(1)_6/16/14DL
Inj Date : 20-JUN-2014 21:51
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-06ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 82
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	20.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	191532	99.6081	2000
	23 1,1-Dichloroethane	63	3.786	3.782	(0.723)	30133	6.99698	140
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	80065	55.5378	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	165689	42.3690	850
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	12885	52.8656	53
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	193724	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	52688	32.9550	660
$	58 Toluene-d8	98	6.718	6.715	(0.817)	258119	46.0943	46
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	244705	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	149174	49.6234	50
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	126740	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5591.d
Lab Smp Id: N1055-06ADL Client Smp ID: MW-22S(1)_6/16/14DL
Inj Date : 20-JUN-2014 21:51
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-06ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 82
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

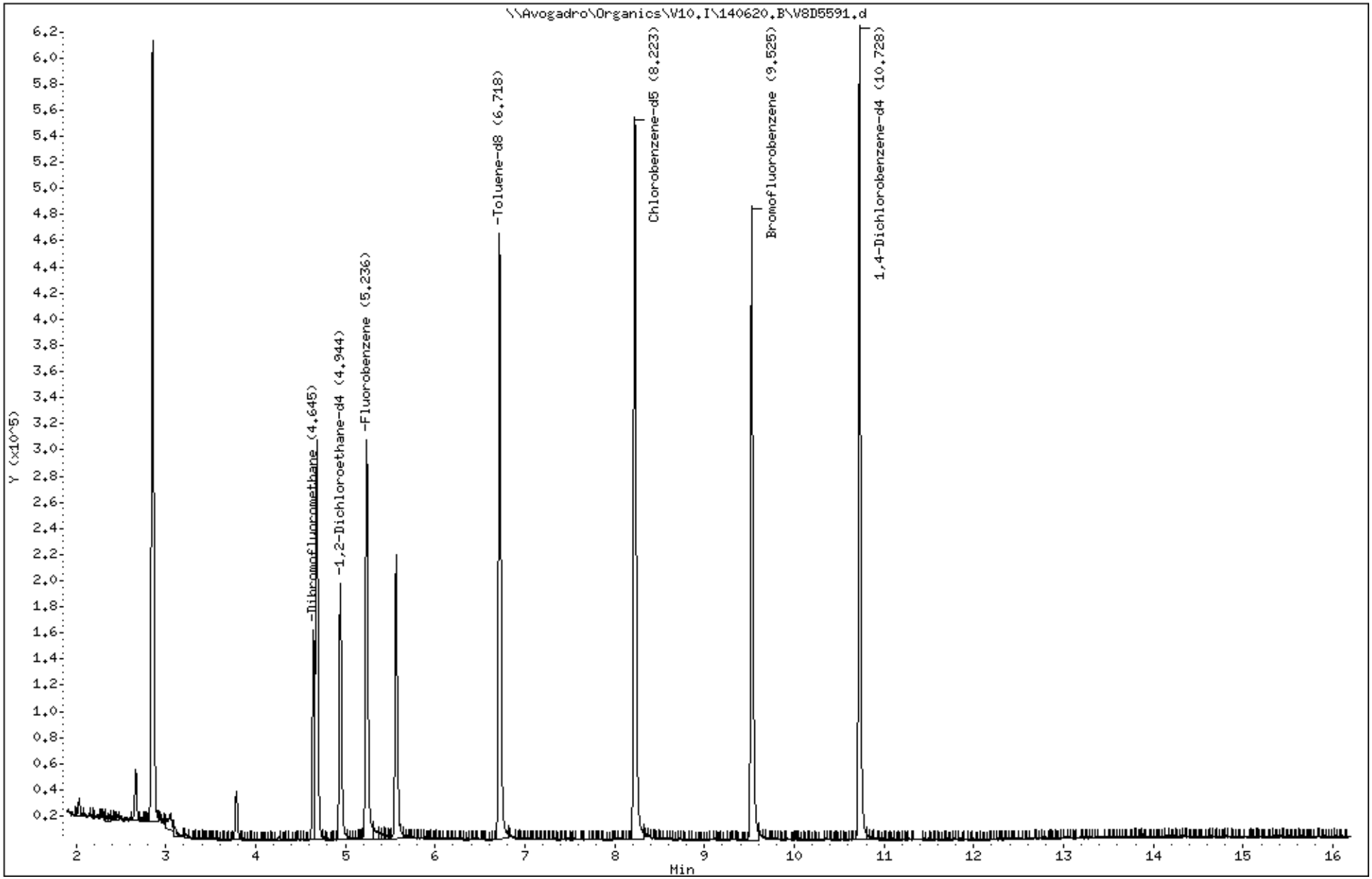
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	20.000	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	5.239	577555	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.664	64581	5.59092427	110	64	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d
Date : 20-JUN-2014 21:51
Client ID: MW-22S(1)_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-06ADL,,77692,20
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d

Date : 20-JUN-2014 21:51

Client ID: MW-22S(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-06ADL,,77692,20

Purge Volume: 5.0

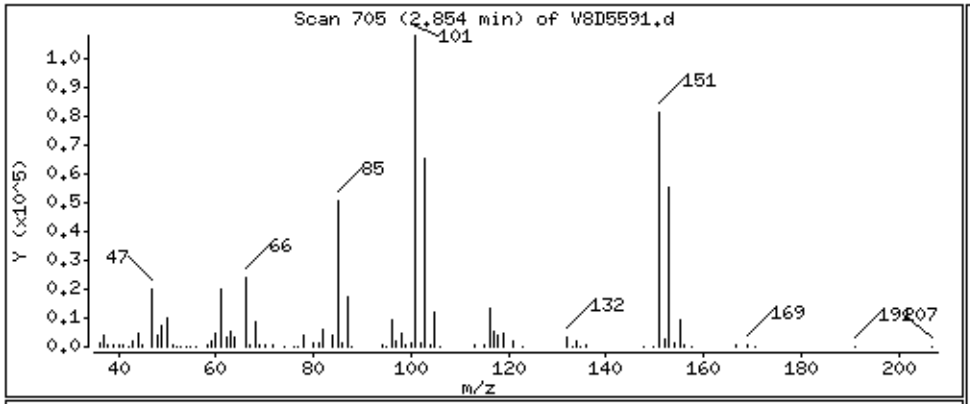
Operator: WL SRC: LIMS

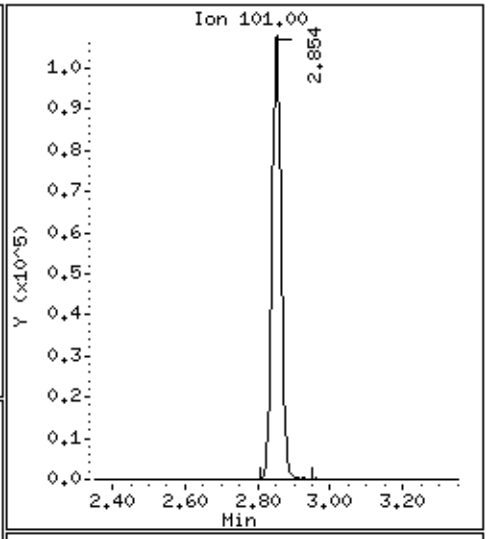
Column phase: DB-624

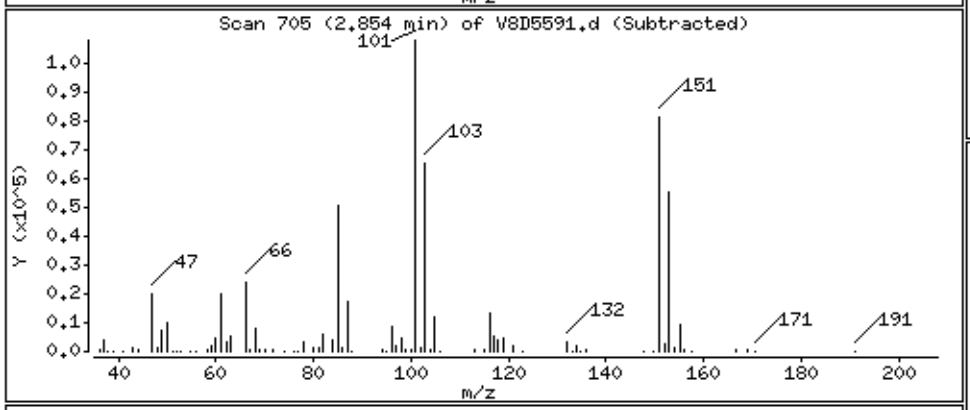
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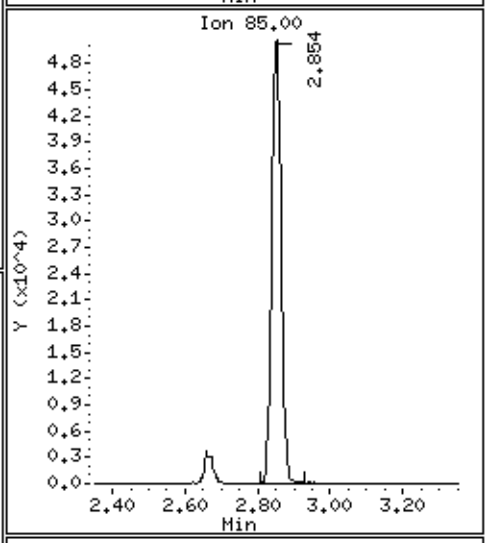
11 1,1,2-Trichloro-1,2,2-Trifluo

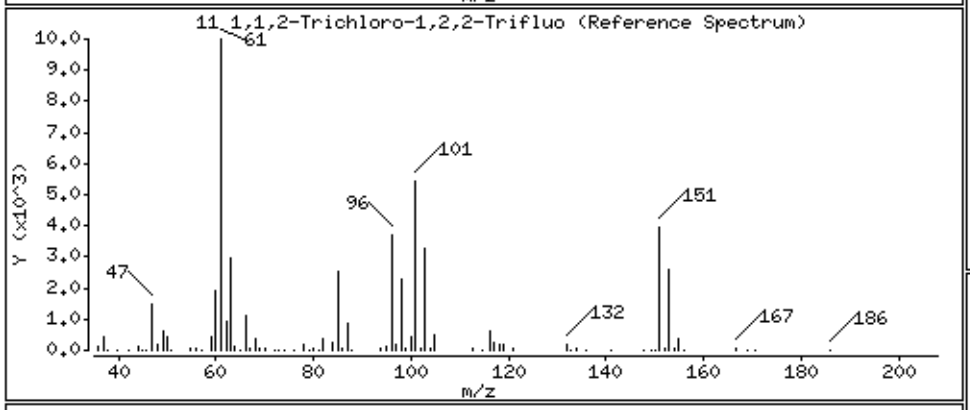
Concentration: 2000 ug/L

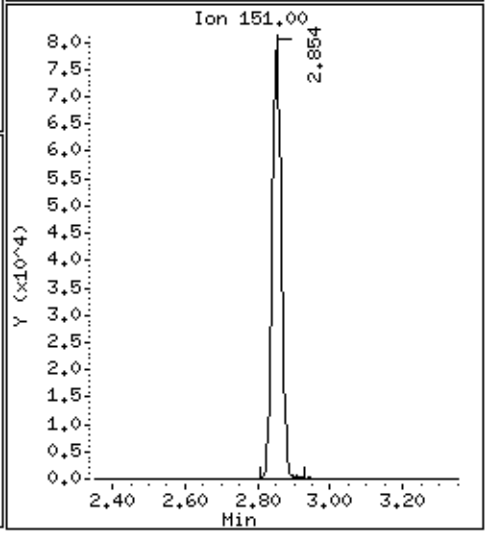


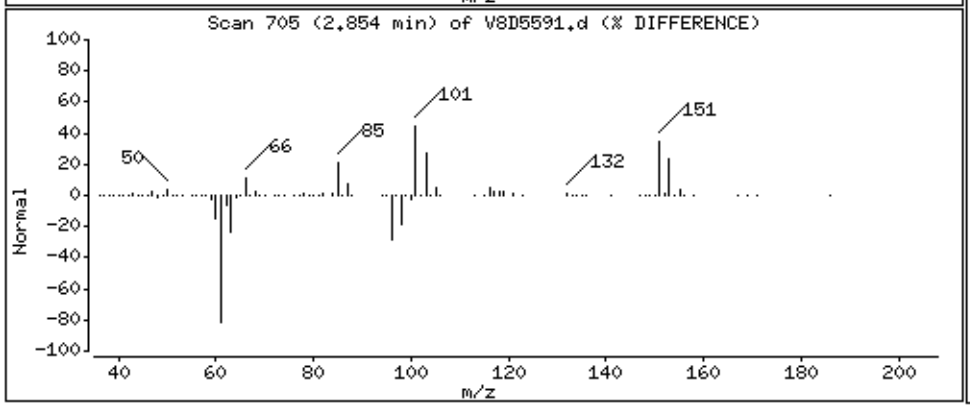












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d

Date : 20-JUN-2014 21:51

Client ID: MW-22S(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-06ADL,,77692,20

Purge Volume: 5.0

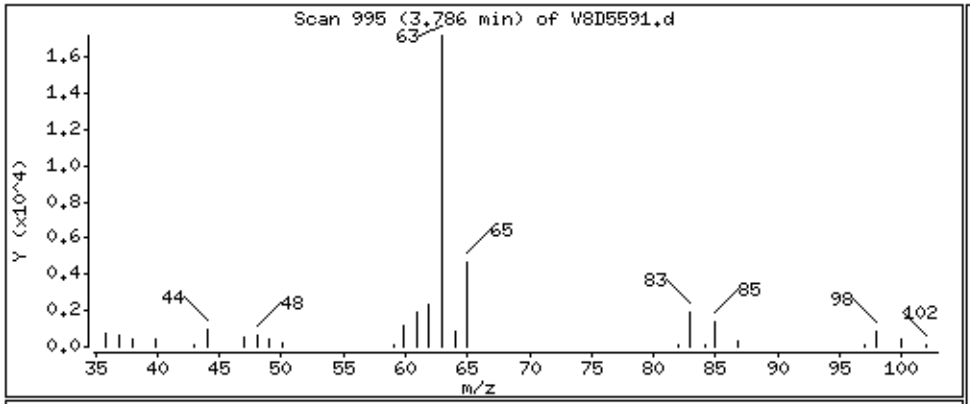
Operator: WL SRC: LIMS

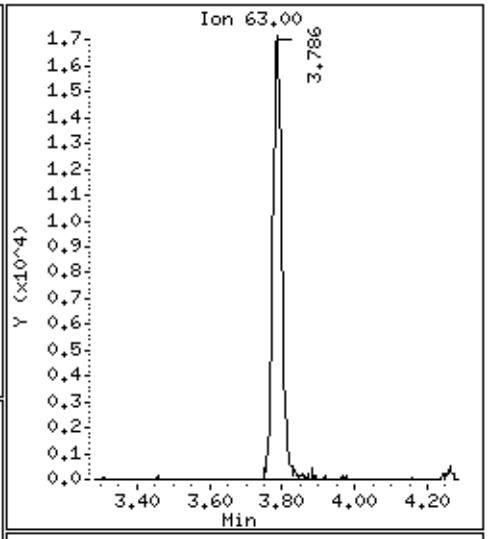
Column phase: DB-624

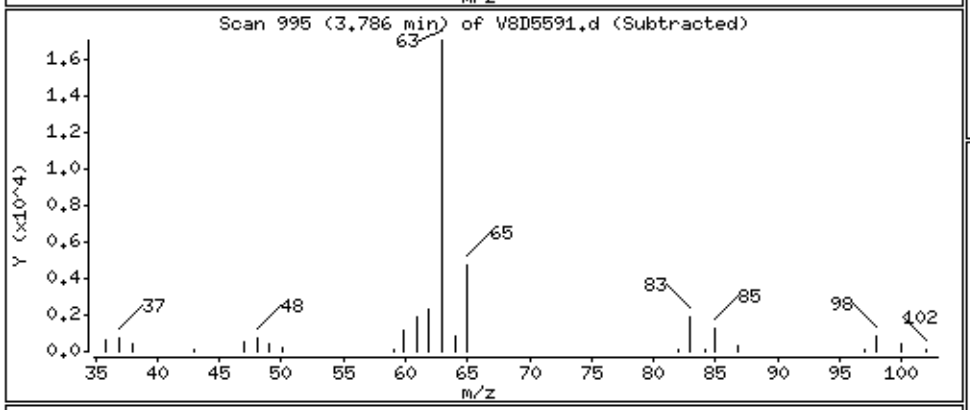
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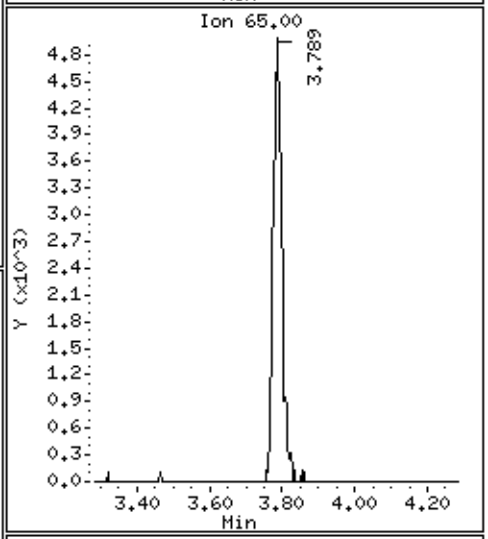
23 1,1-Dichloroethane

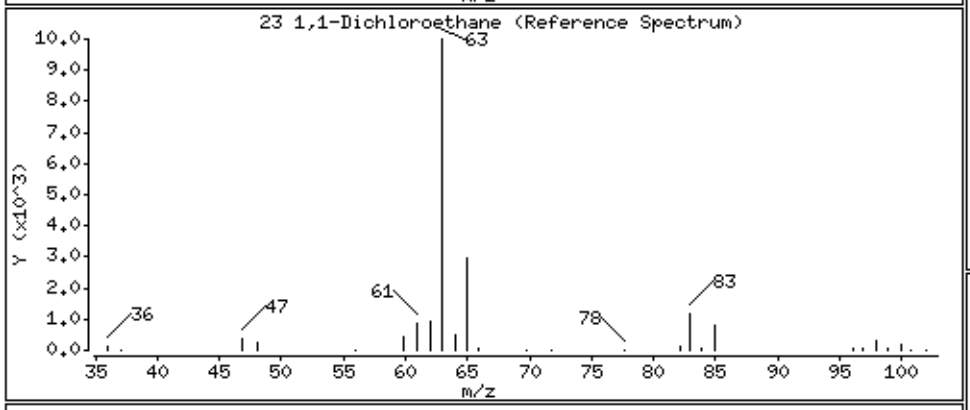
Concentration: 140 ug/L

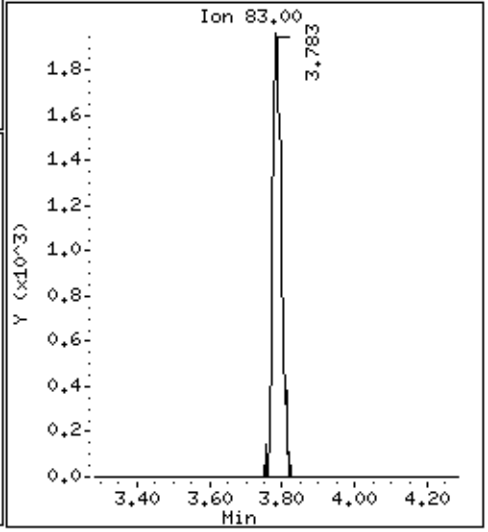


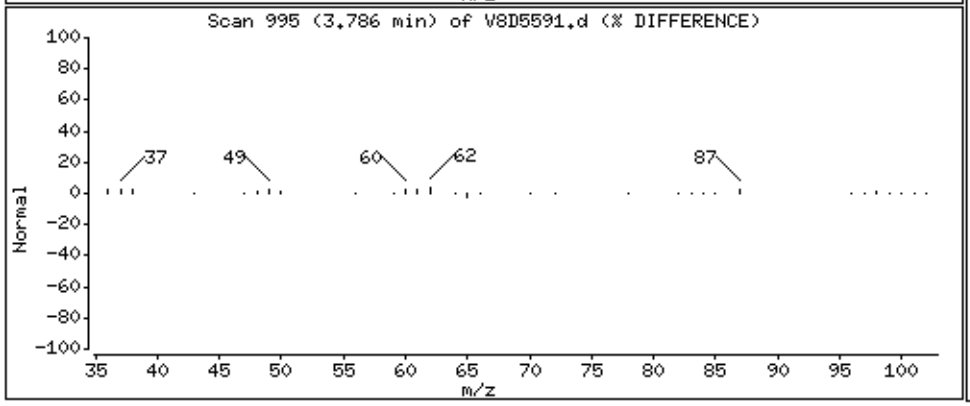












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d

Date : 20-JUN-2014 21:51

Client ID: MW-22S(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-06ADL,,77692,20

Purge Volume: 5.0

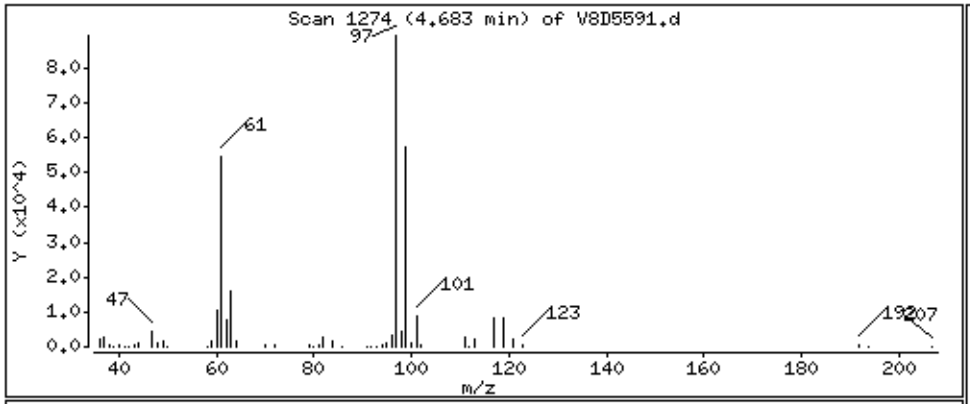
Operator: WL SRC: LIMS

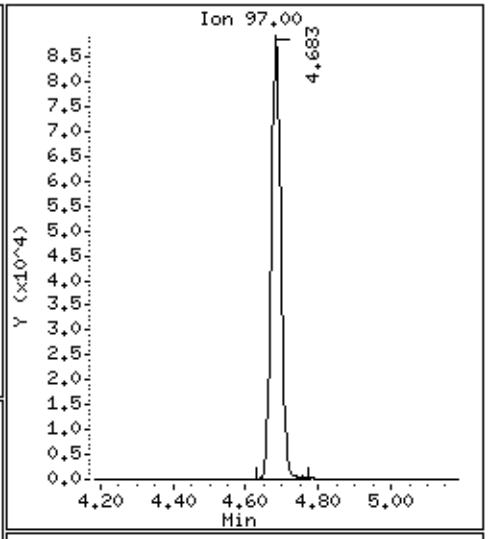
Column phase: DB-624

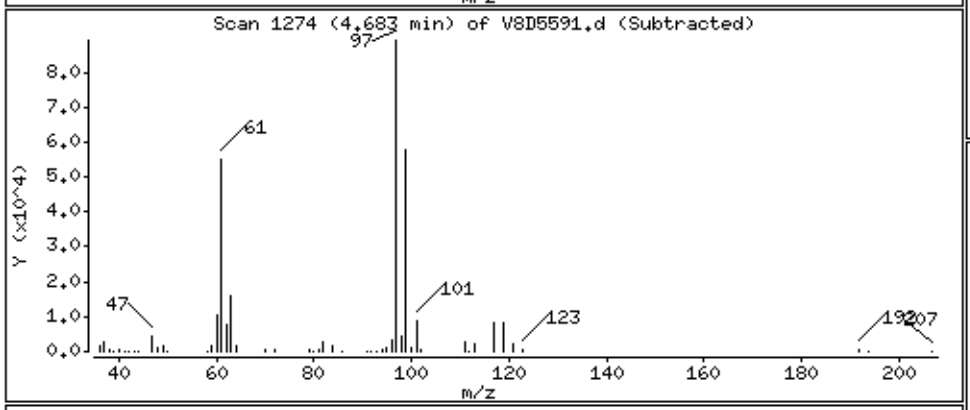
Column diameter: 0.25

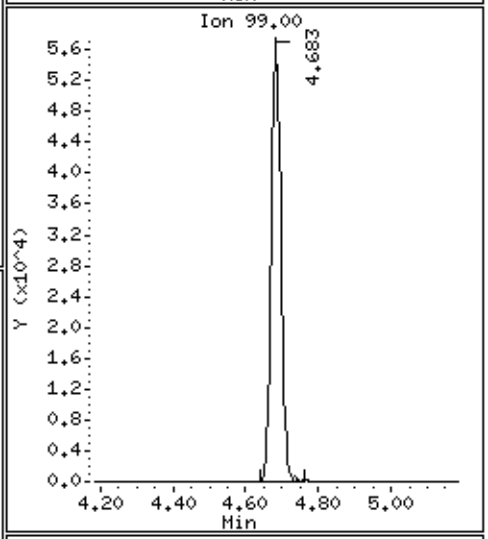
37 1,1,1-Trichloroethane

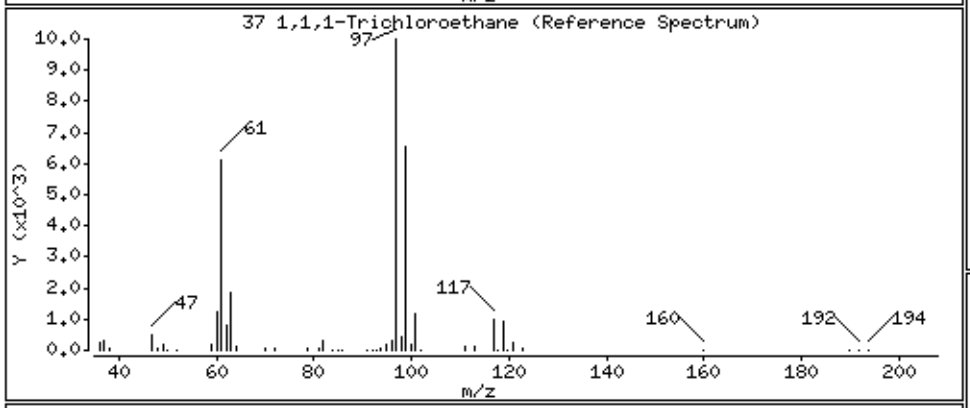
Concentration: 850 ug/L

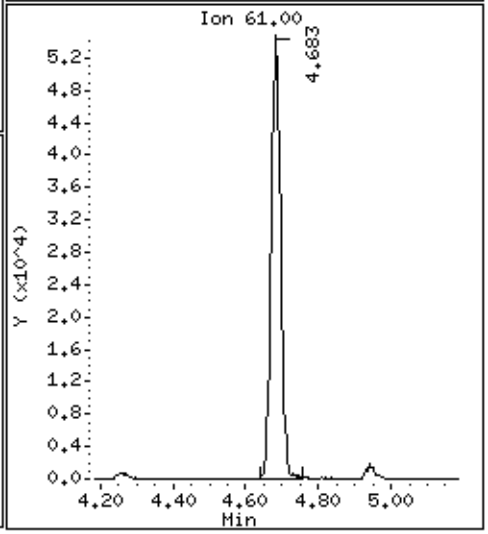


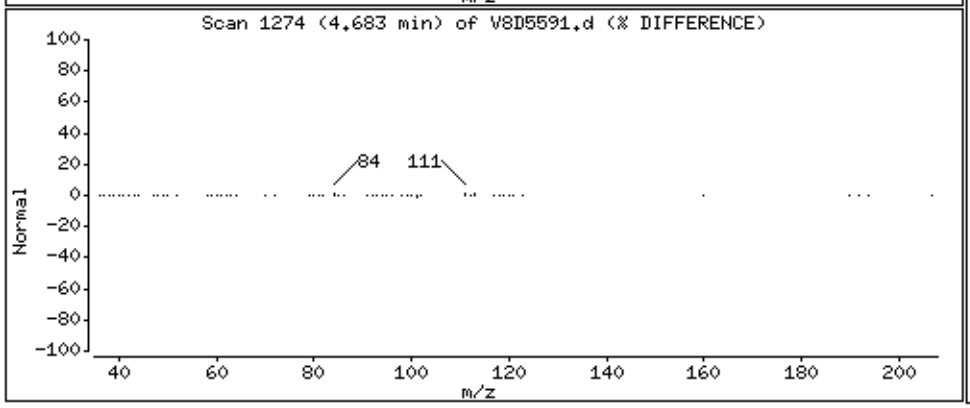












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d

Date : 20-JUN-2014 21:51

Client ID: MW-22S(1)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-06ADL,,77692,20

Purge Volume: 5.0

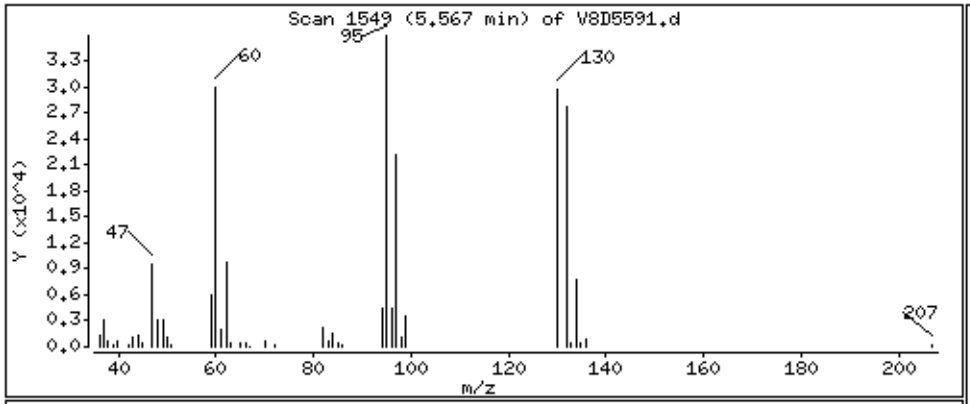
Operator: WL SRC: LIMS

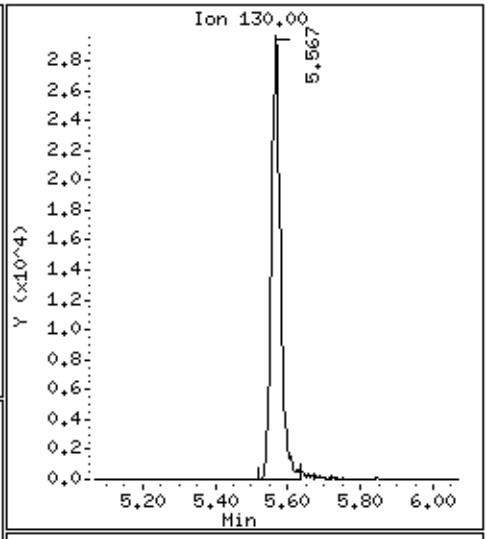
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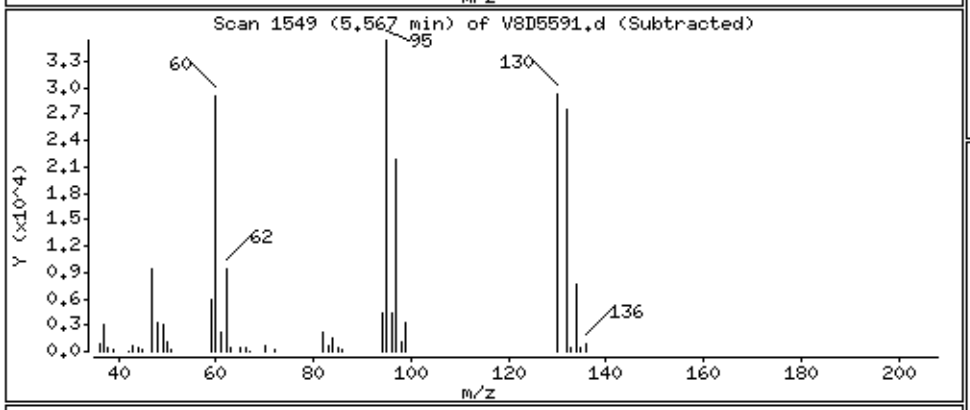
Column diameter: 0.25

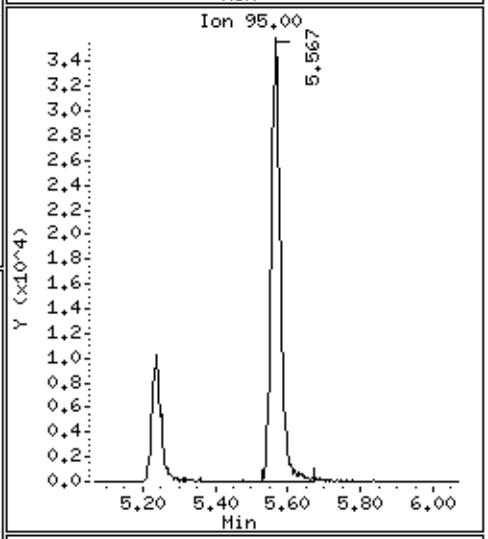
47 Trichloroethene

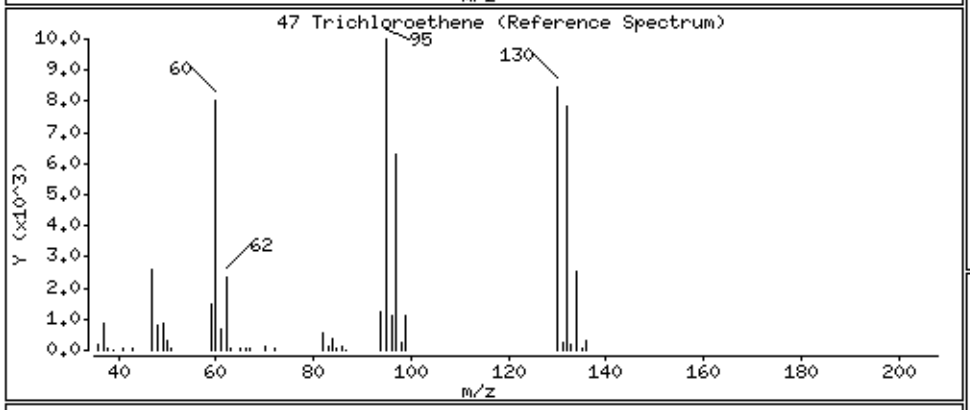
Concentration: 660 ug/L

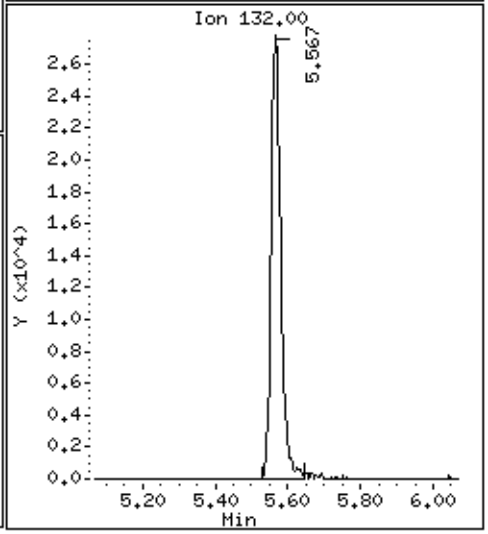


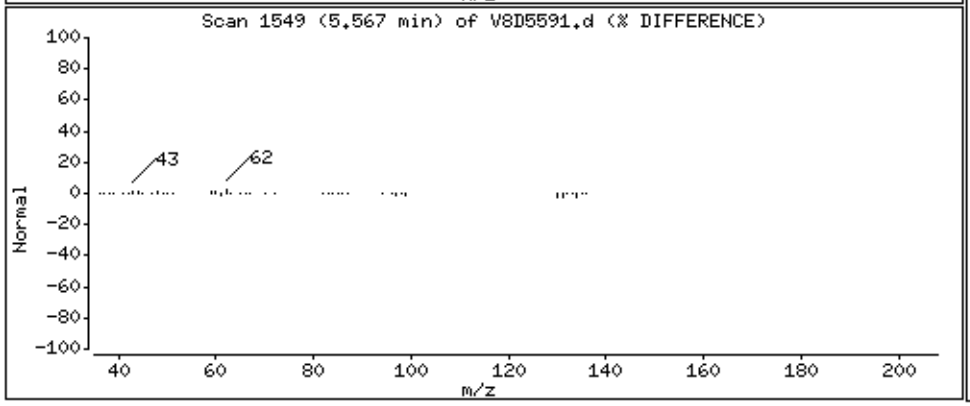












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5591.d

Date : 20-JUN-2014 21:51

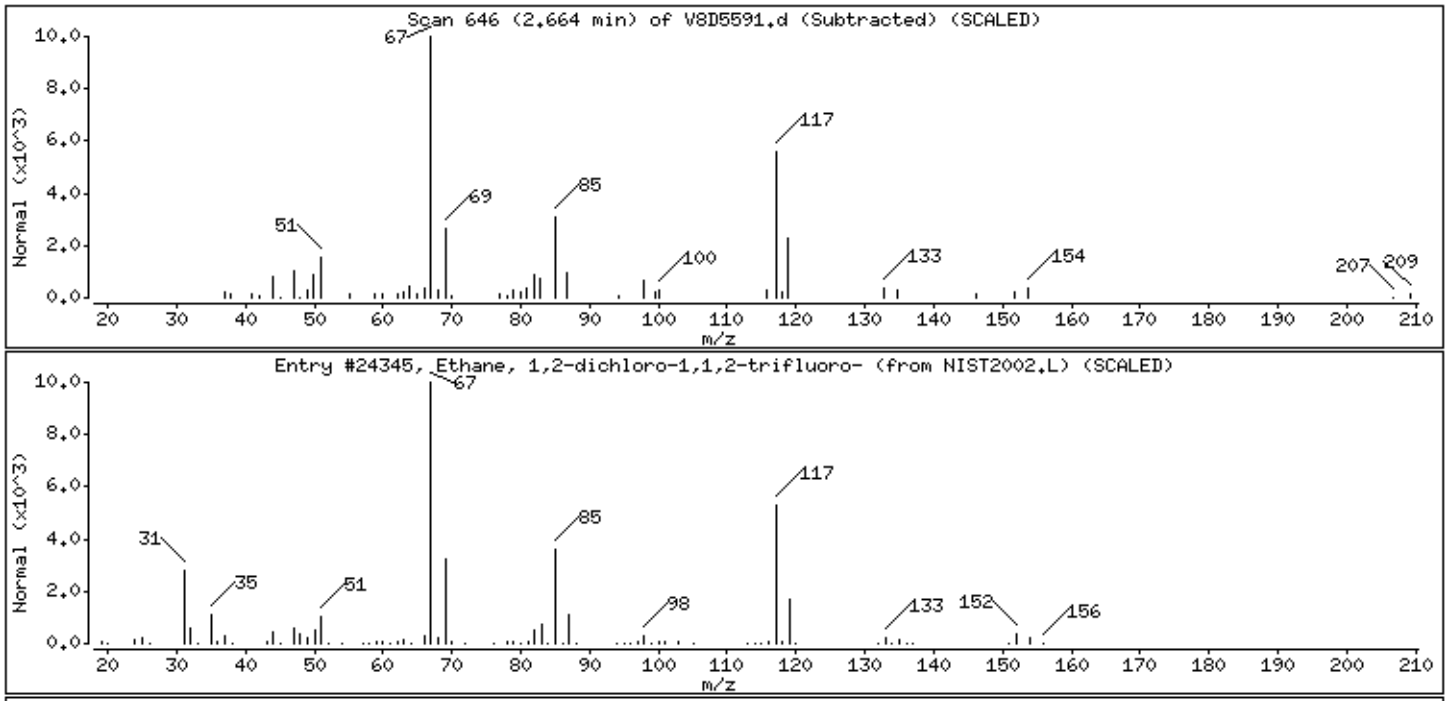
Client ID: MW-22S(1)_6/16/14DL Instrument: V10.i

Sample Info: 5ML,N1055-06ADL,,77692,20

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	64	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(2)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5522.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	0.81	J
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	130	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	6.8	
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	930	E
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	720	E
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

EPA SAMPLE NO.

MW-22S(2)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5522.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	2.7	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2300	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S(2)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5522.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	100	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5522.d
Lab Smp Id: N1055-07A Client Smp ID: MW-22S(2)_6/16/14
Inj Date : 19-JUN-2014 13:01
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-07A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

			QUANT SIG						CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
	4	Vinyl Chloride	62	1.856	1.856	(0.355)	2540		0.80821	0.81(QH)
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	5029258		2324.47	2300(A)
	23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	648611		133.850	130
	28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	12910		6.75052	6.8(Q)
$	36	Dibromofluoromethane	113	4.641	4.644	(0.886)	88989		54.8591	55
	37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	4084983		928.349	930(A)
$	42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13828		50.4214	50
M	50	1,2-Dichloroethene (Total)	96				12910		6.75052	6.8
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	217980		50.0000	
	47	Trichloroethene	130	5.564	5.567	(1.063)	1299240		722.214	720(A)
$	58	Toluene-d8	98	6.715	6.718	(0.817)	268469		48.0763	48
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	244024		50.0000	
	70	Chlorobenzene	112	8.255	8.255	(1.004)	13229		2.69392	2.7
$	79	Bromofluorobenzene	95	9.528	9.522	(1.159)	148858		49.6564	50
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	115901		50.0000	

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\V10.I\140619.B\V8D5522.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5522.d
Lab Smp Id: N1055-07A Client Smp ID: MW-22S(2)_6/16/14
Inj Date : 19-JUN-2014 13:01
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-07A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

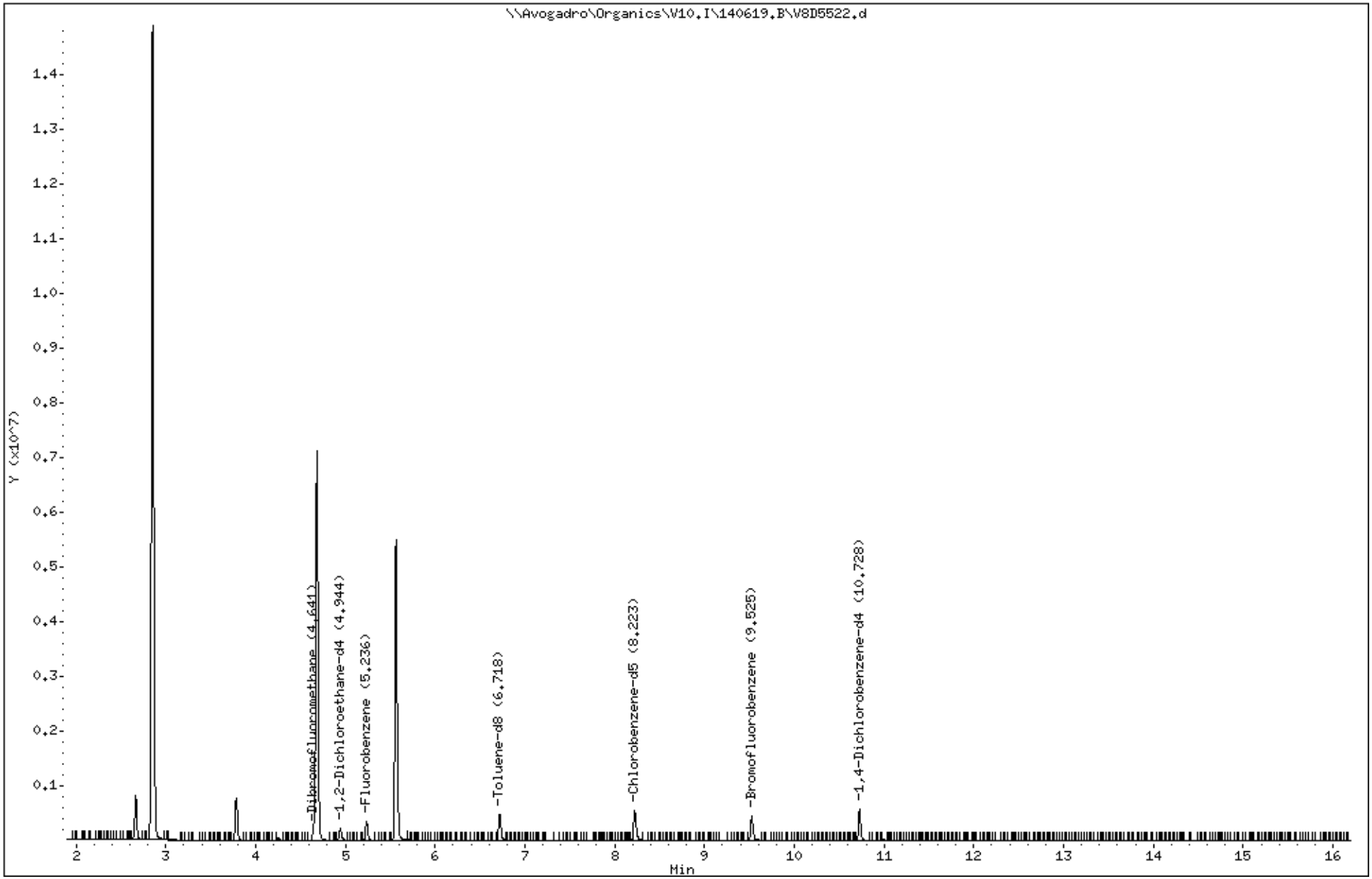
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	636353	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.664	1316260	103.422116	100	90	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d
Date : 19-JUN-2014 13:01
Client ID: MW-22S(2)_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-07A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

Date : 19-JUN-2014 13:01

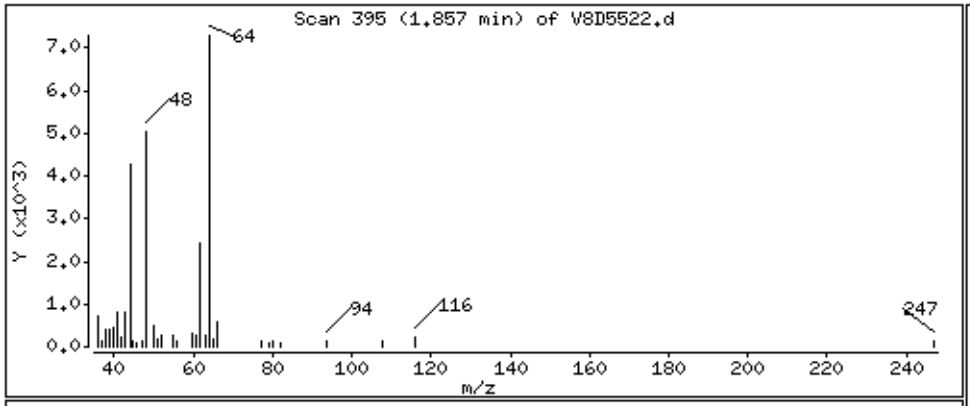
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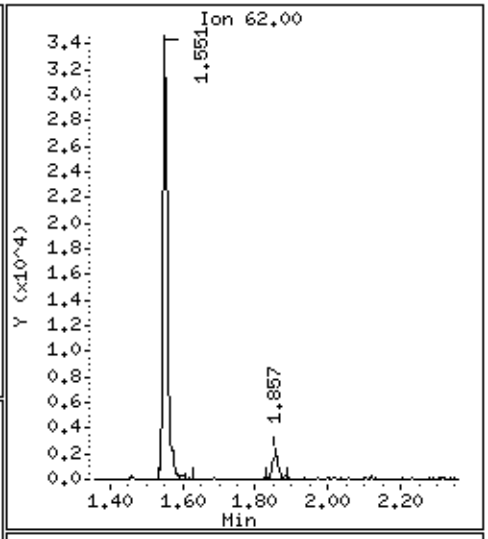
Sample Info: 5ML,N1055-07A,,77659

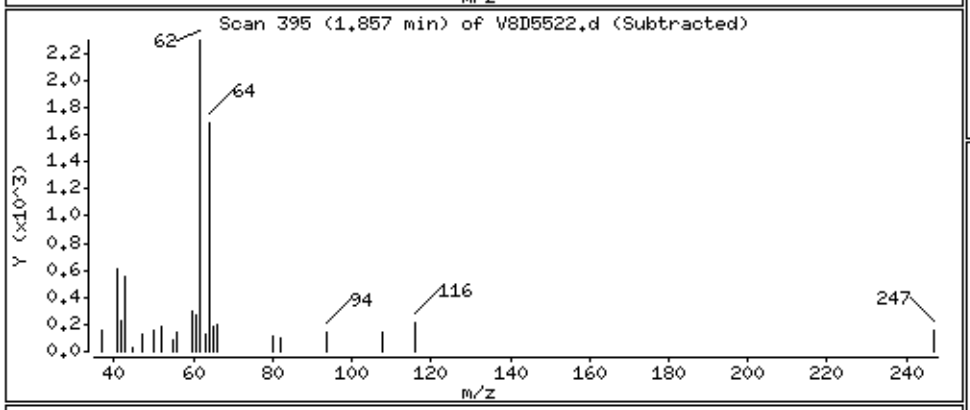
Purge Volume: 5.0 Operator: WL SRC: LIMS

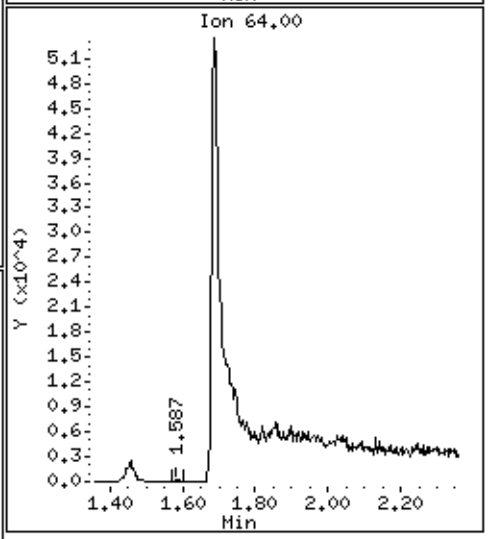
Column phase: DB-624 Column diameter: 0.25

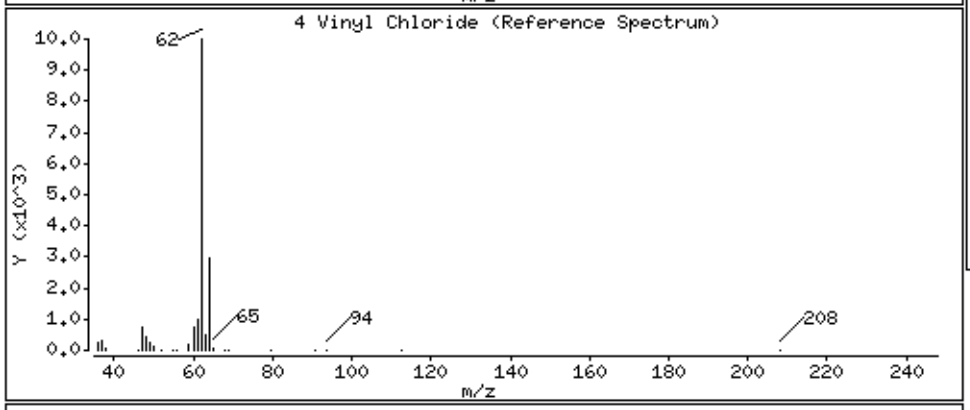
4 Vinyl Chloride Concentration: 0.81 ug/L

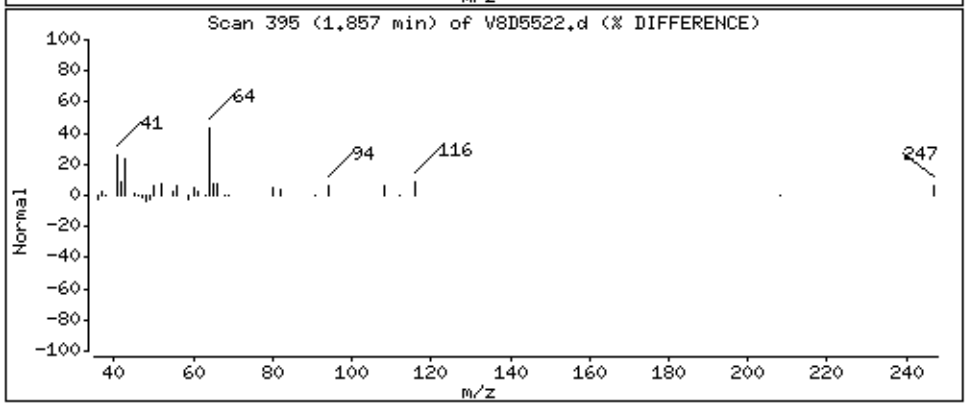












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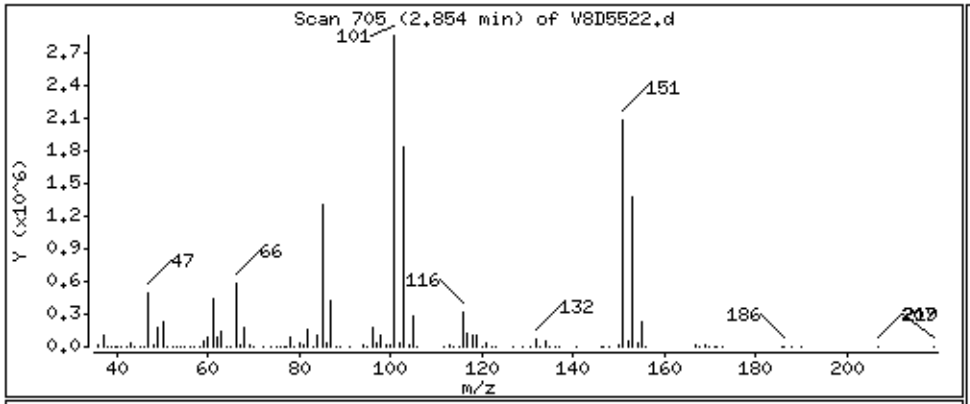
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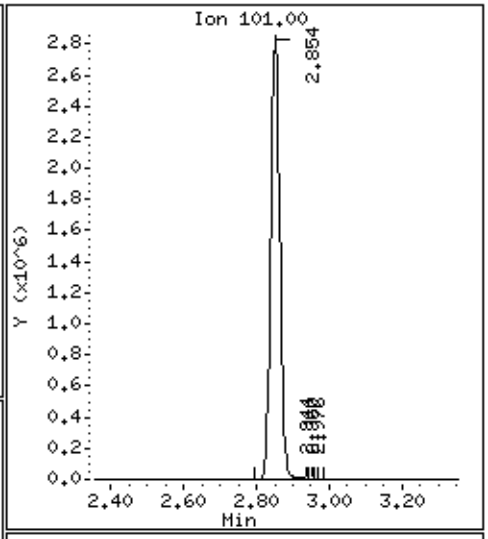
Sample Info: 5ML,N1055-07A,,77659

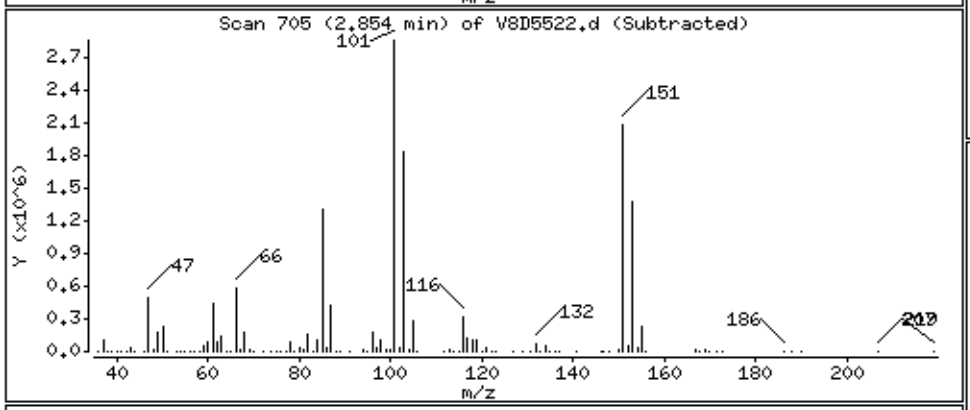
Purge Volume: 5.0 Operator: WL SRC: LIMS

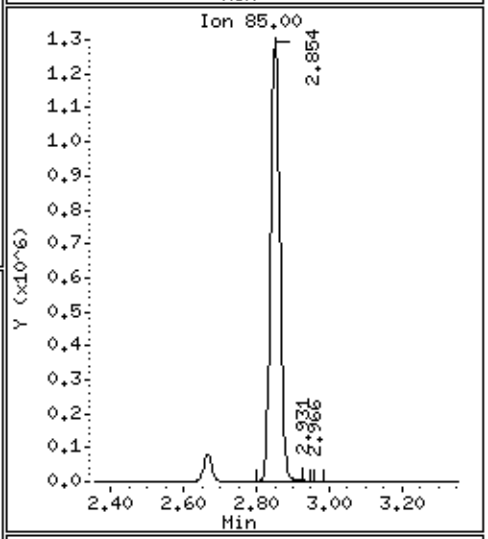
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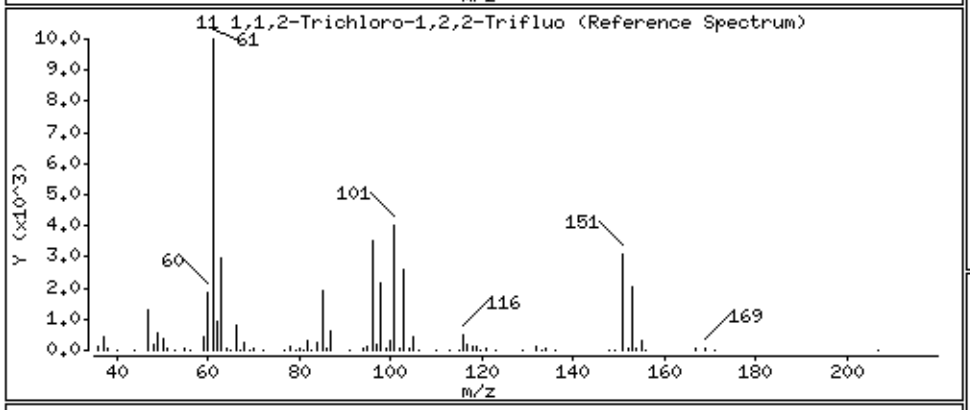
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2300 ug/L

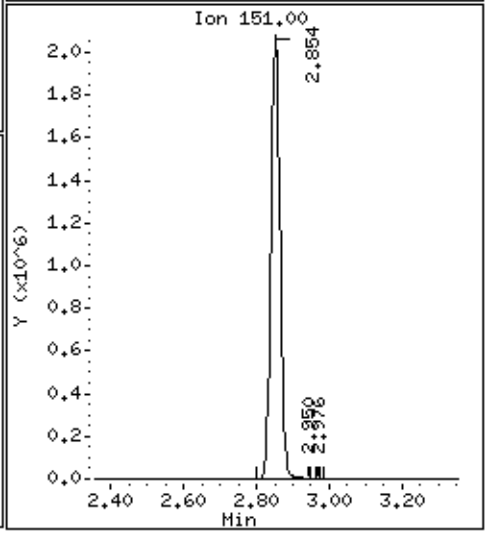


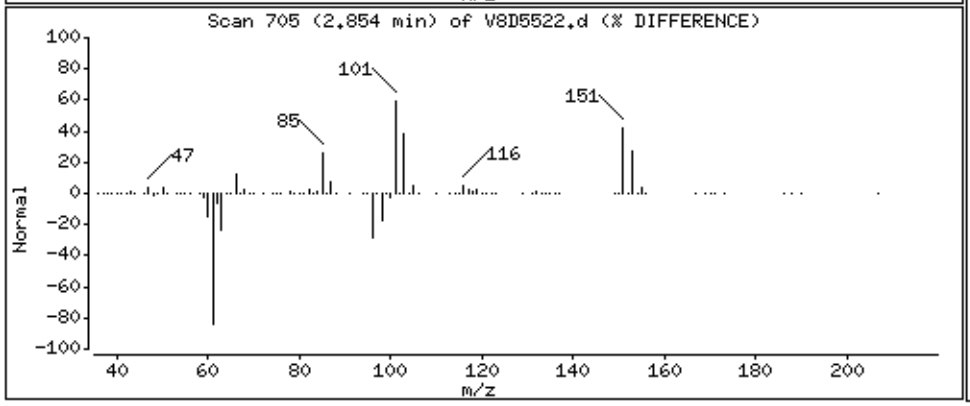












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

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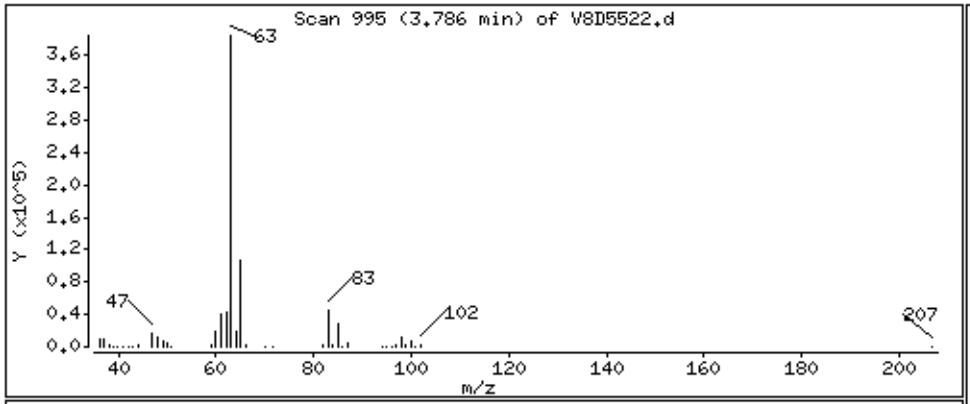
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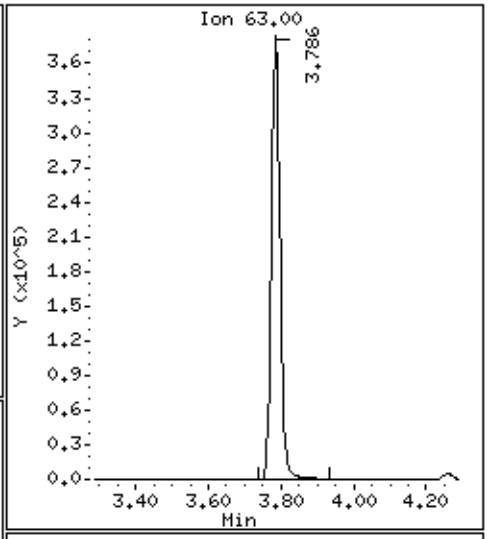
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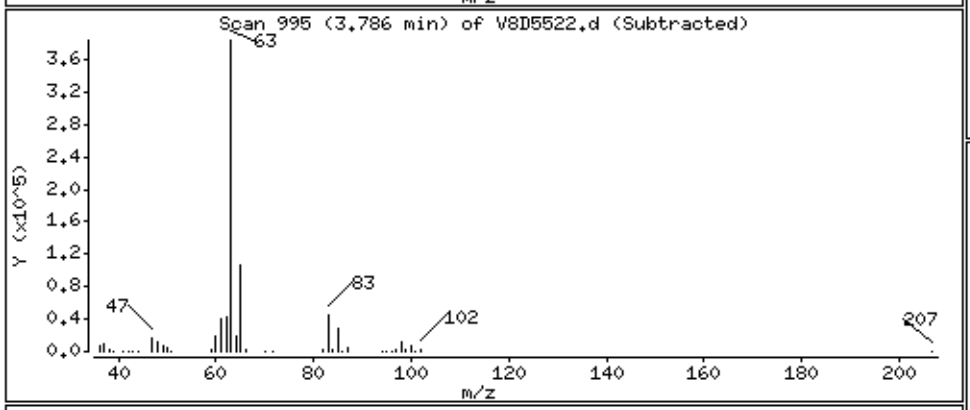
Purge Volume: 5.0 Operator: WL SRC: LIMS

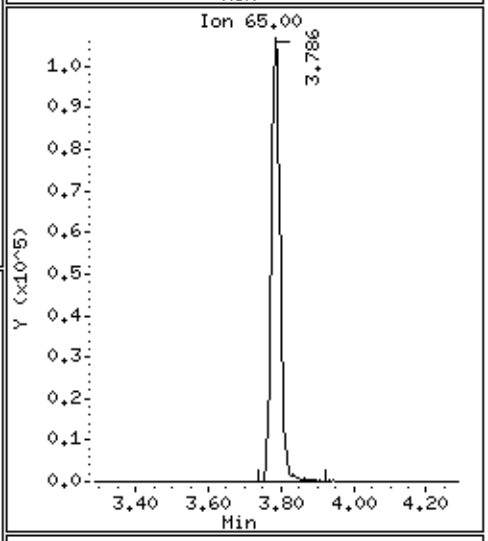
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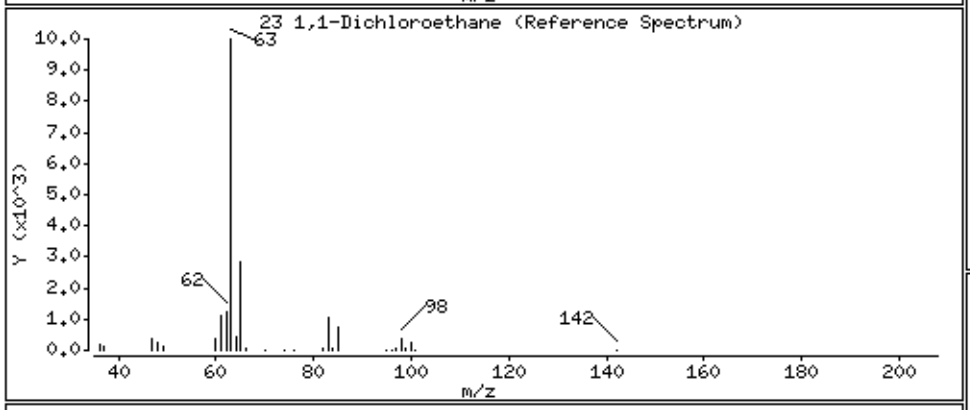
23 1,1-Dichloroethane Concentration: 130 ug/L

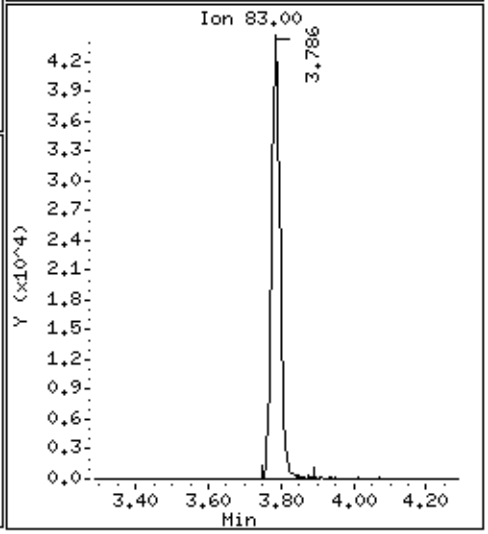


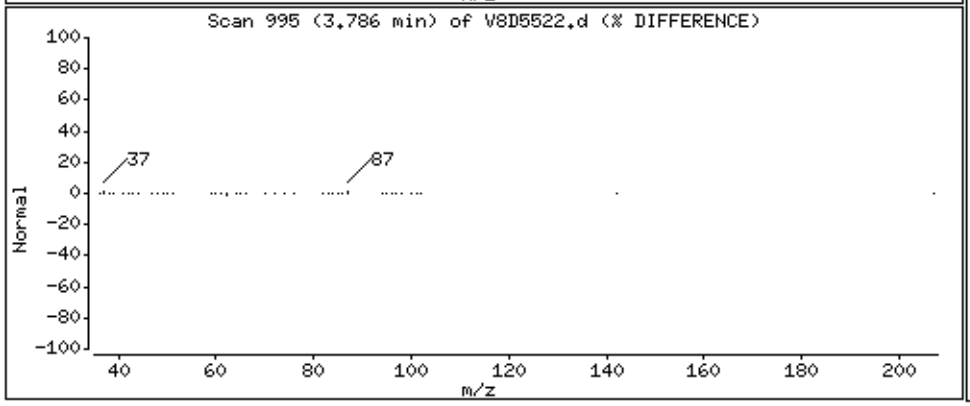












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

Date : 19-JUN-2014 13:01

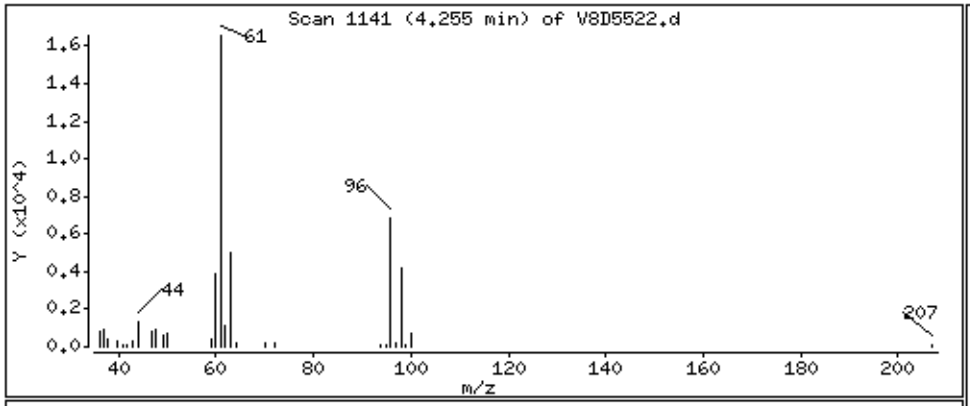
Client ID: MW-22S(2)_6/16/14 Instrument: V10.i

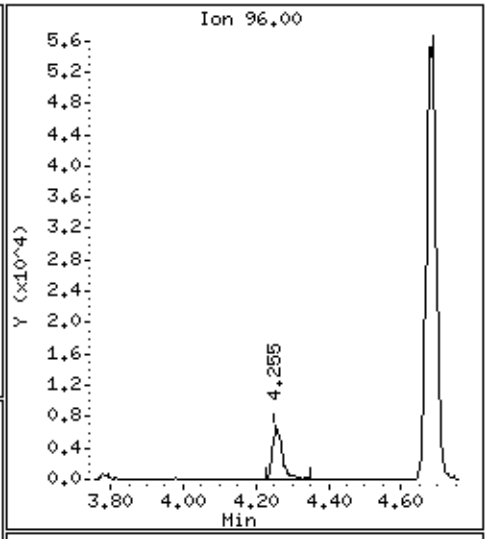
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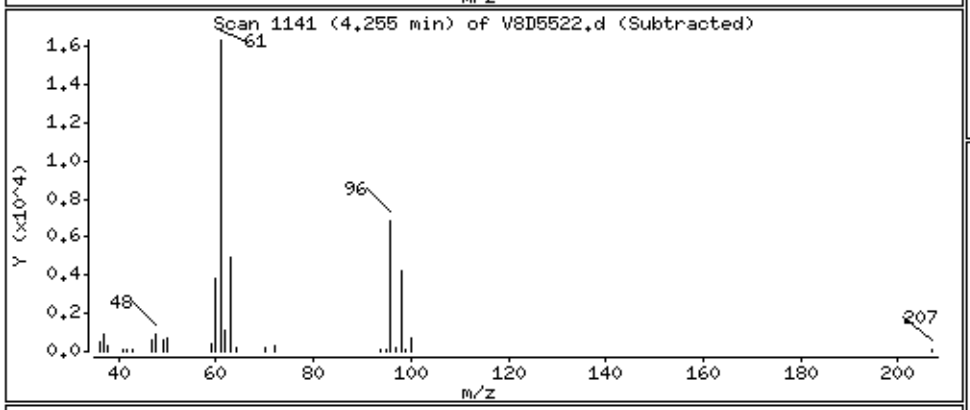
Purge Volume: 5.0 Operator: WL SRC: LIMS

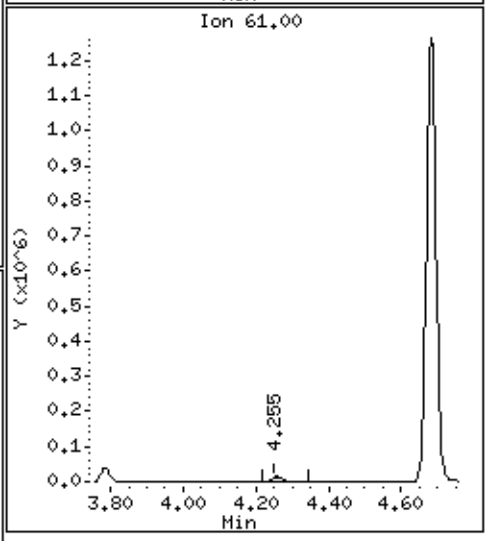
Column phase: DB-624 Column diameter: 0.25

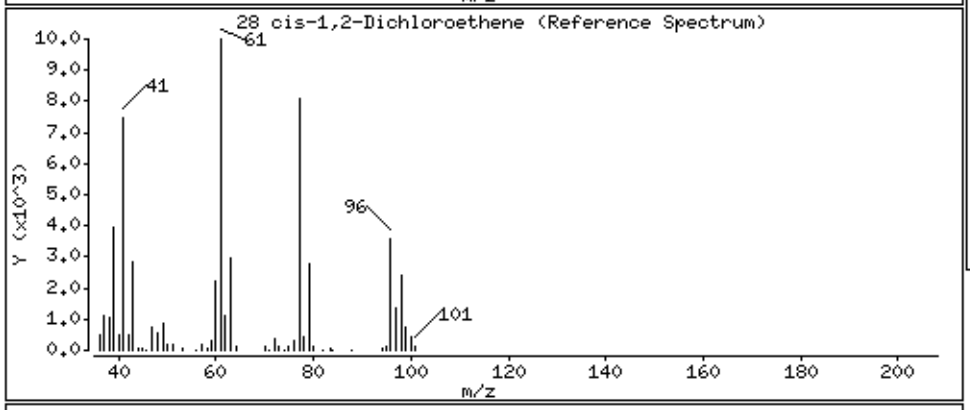
28 cis-1,2-Dichloroethene Concentration: 6.8 ug/L

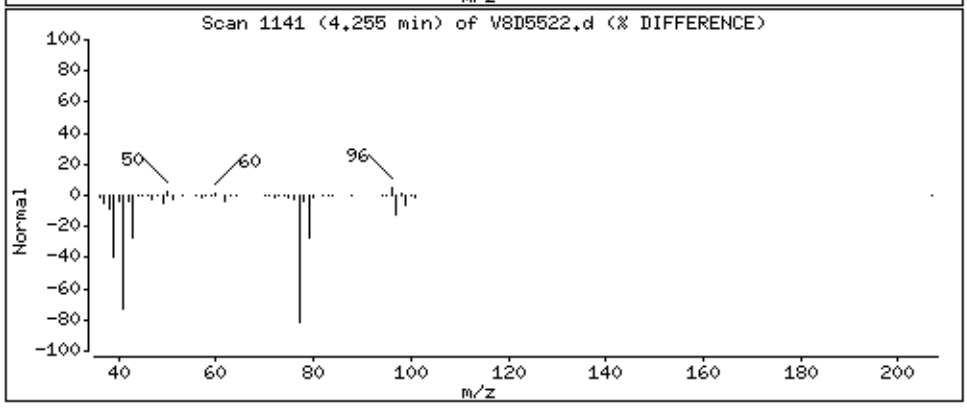












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

Date : 19-JUN-2014 13:01

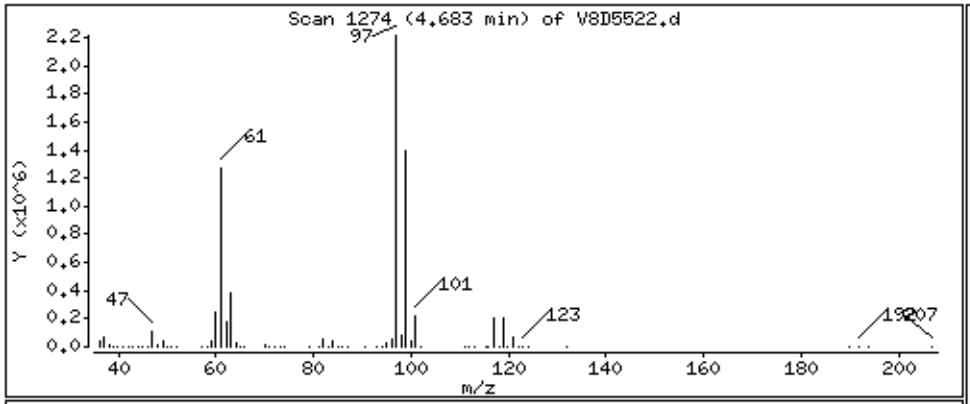
Client ID: MW-22S(2)_6/16/14 Instrument: V10.i

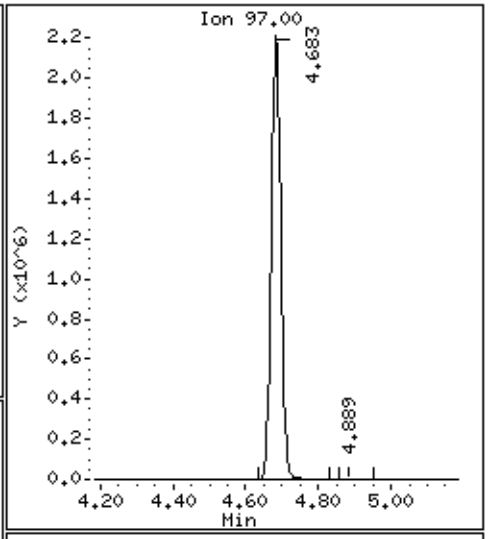
Sample Info: 5ML,N1055-07A,,77659

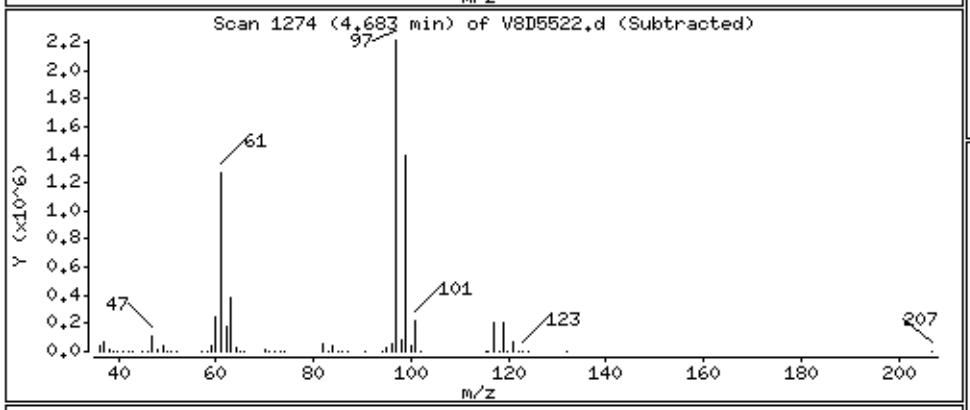
Purge Volume: 5.0 Operator: WL SRC: LIMS

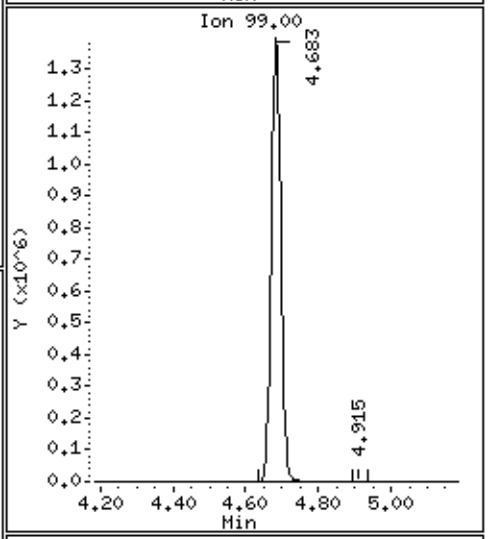
Column phase: DB-624 Column diameter: 0.25

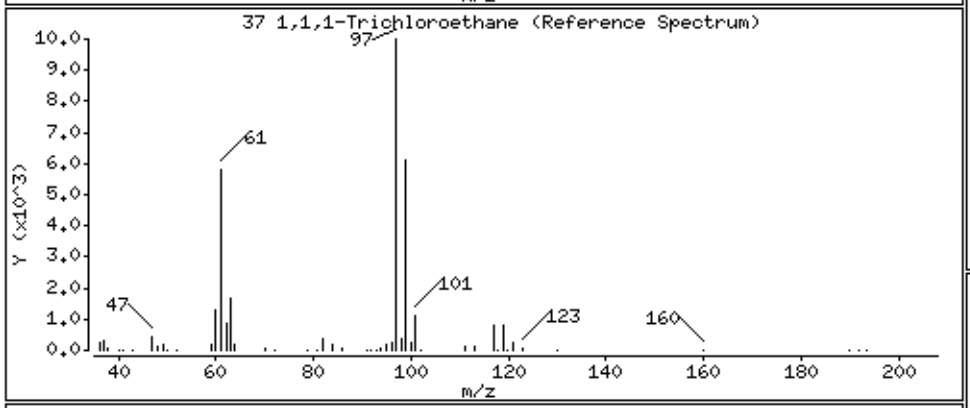
37 1,1,1-Trichloroethane Concentration: 930 ug/L

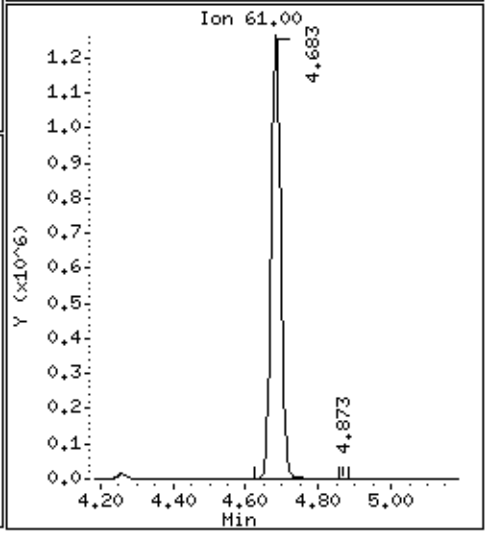


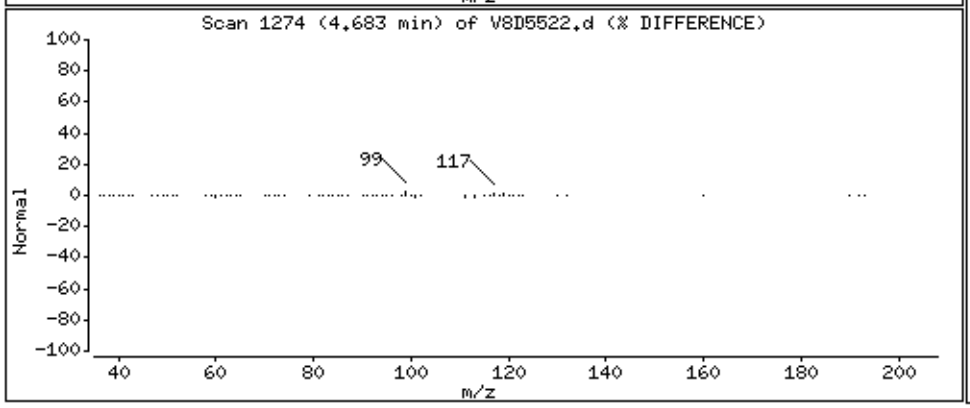












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

Date : 19-JUN-2014 13:01

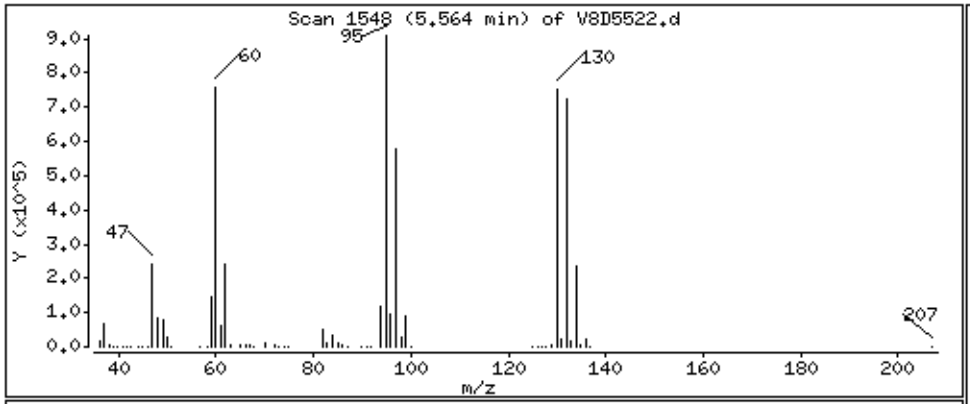
Client ID: MW-22S(2)_6/16/14 Instrument: V10.i

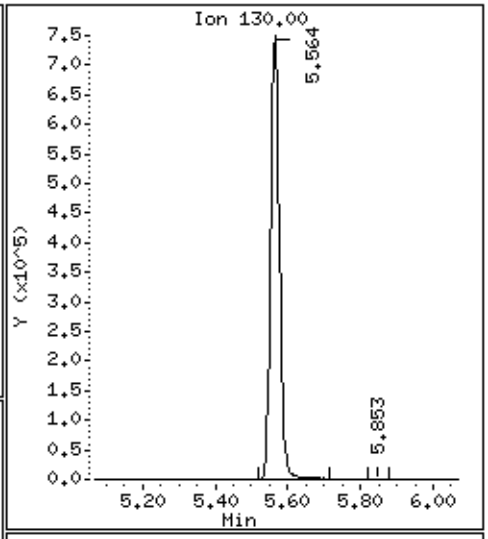
Sample Info: 5ML,N1055-07A,,77659

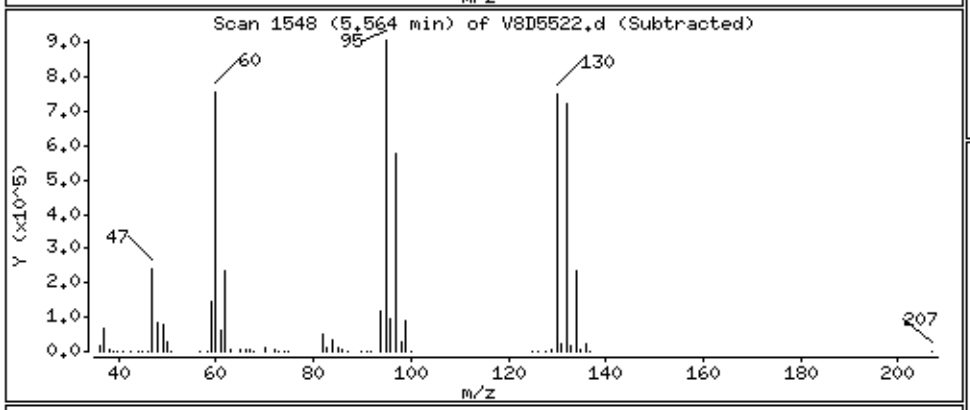
Purge Volume: 5.0 Operator: WL SRC: LIMS

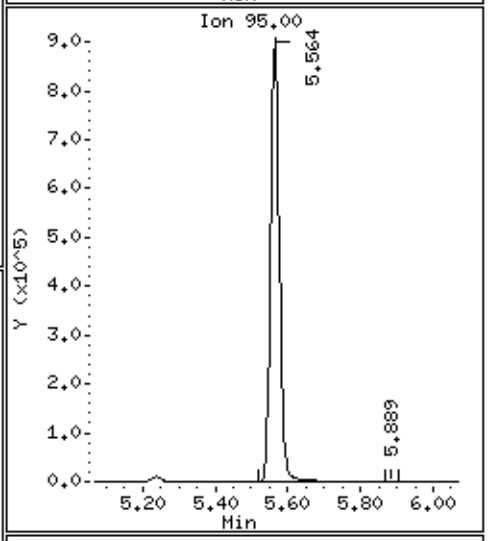
Column phase: DB-624 Column diameter: 0.25

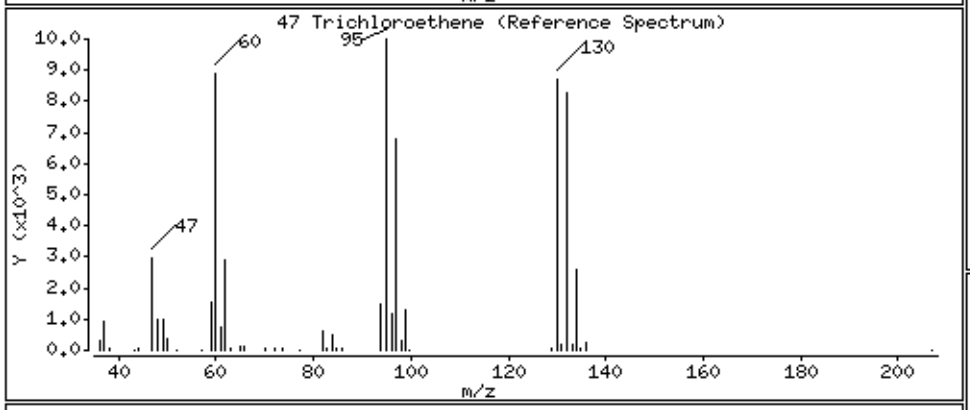
47 Trichloroethene Concentration: 720 ug/L

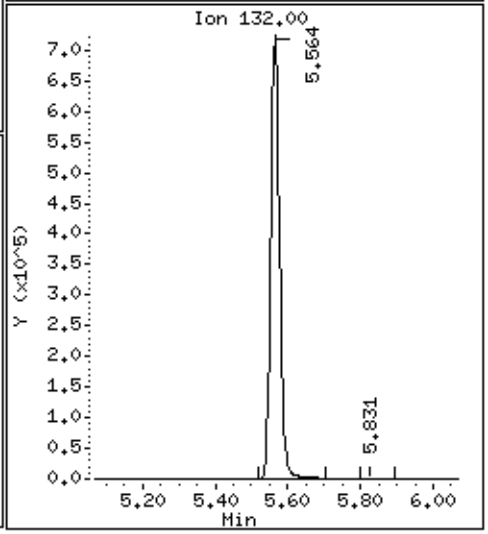


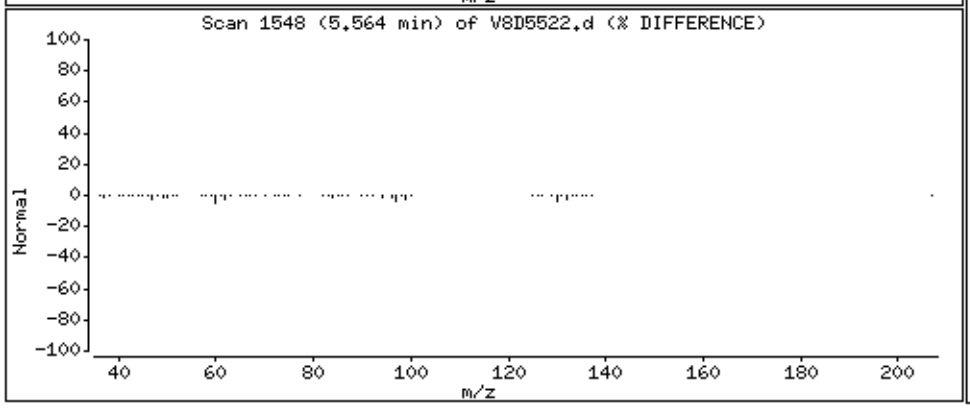












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

Date : 19-JUN-2014 13:01

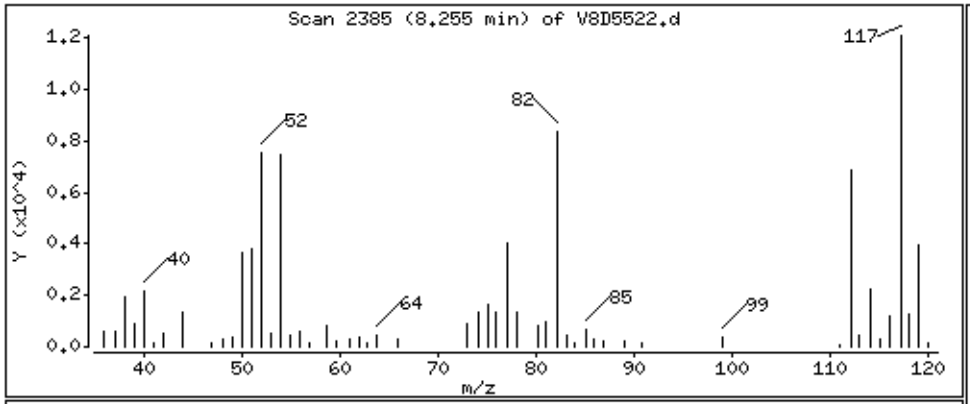
Client ID: MW-22S(2)_6/16/14 Instrument: V10.i

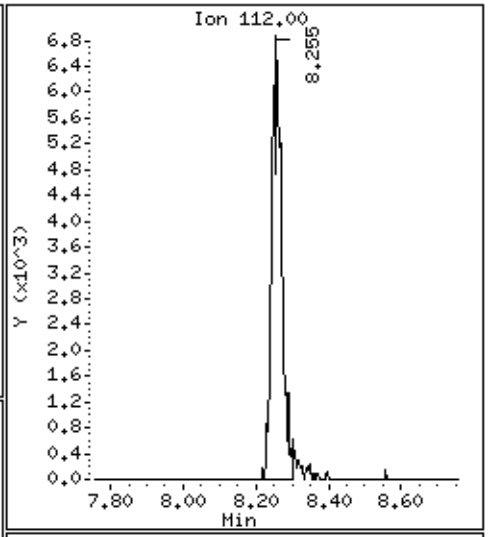
Sample Info: 5ML,N1055-07A,,77659

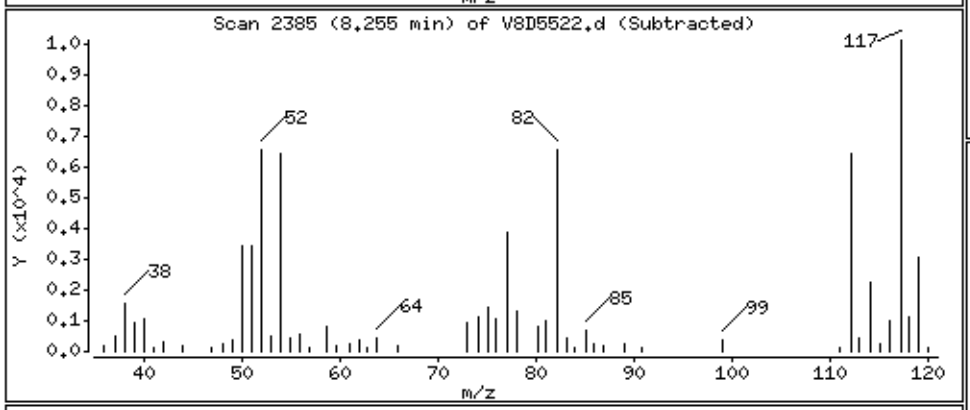
Purge Volume: 5.0 Operator: WL SRC: LIMS

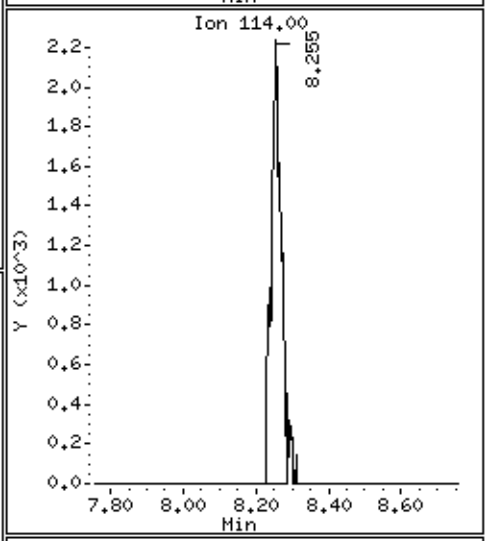
Column phase: DB-624 Column diameter: 0.25

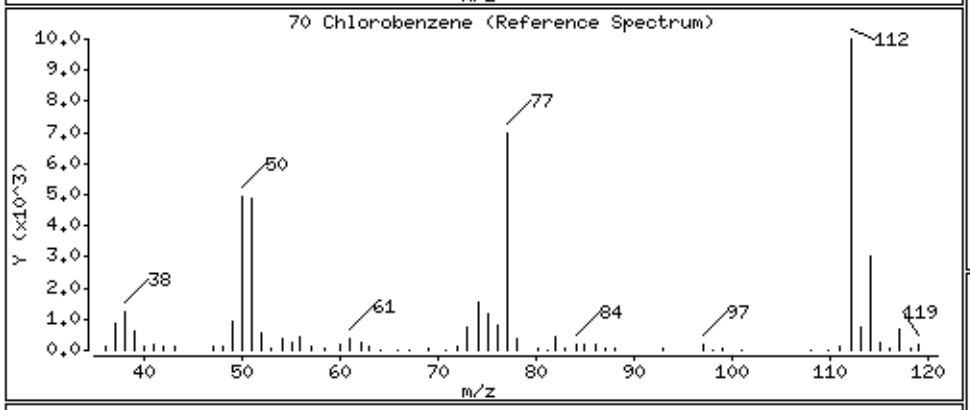
70 Chlorobenzene Concentration: 2.7 ug/L

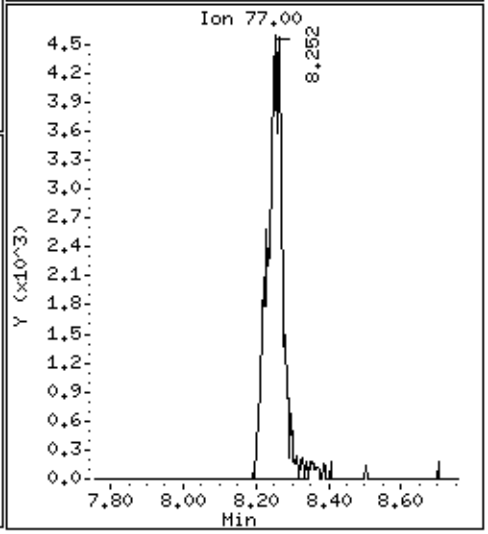


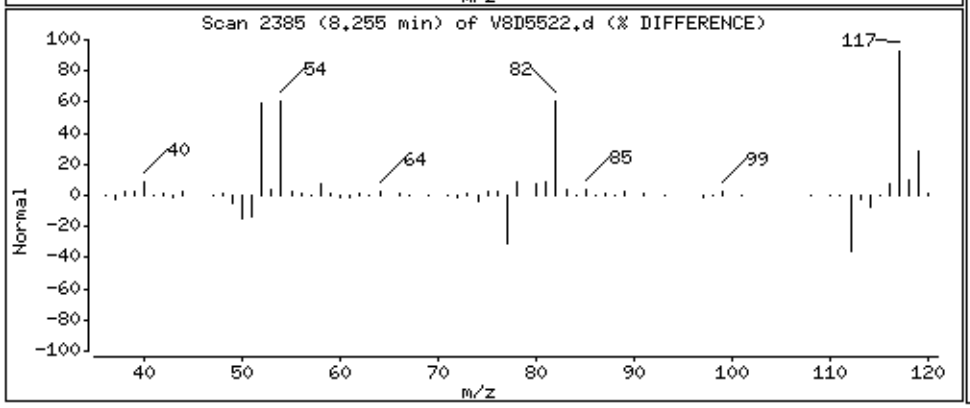












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5522.d

Date : 19-JUN-2014 13:01

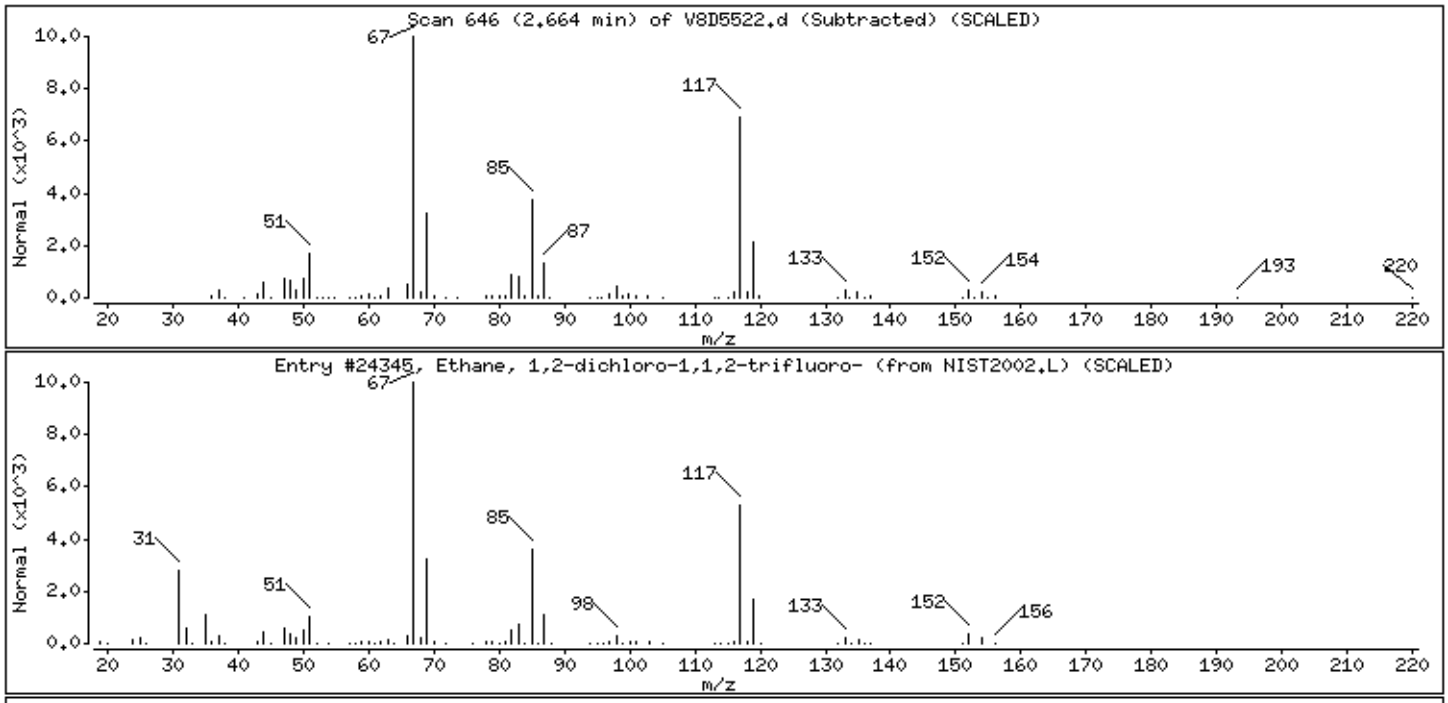
Client ID: MW-22S(2)_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-07A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	90	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(2)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-07ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5592.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	130	D
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	870	D
563-58-6	1,1-Dichloropropene	20	U
56-23-5	Carbon tetrachloride	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	670	D
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(2)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-07ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5592.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
103-65-1	n-Propylbenzene	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
104-51-8	n-Butylbenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2100	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S(2)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-07ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5592.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	100	DNJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5592.d
Lab Smp Id: N1055-07ADL Client Smp ID: MW-22S(2)_6/16/14DL
Inj Date : 20-JUN-2014 22:18
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-07ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 83
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	20.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	200524	105.144	2100
	23 1,1-Dichloroethane	63	3.786	3.782	(0.723)	26899	6.29749	120
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	80141	56.0485	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	168583	43.4642	870
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	13381	55.3529	55
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	192141	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	52807	33.3016	670
$	58 Toluene-d8	98	6.715	6.715	(0.817)	255973	44.6203	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	250687	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	153517	49.8495	50
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	134091	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5592.d
Lab Smp Id: N1055-07ADL Client Smp ID: MW-22S(2)_6/16/14DL
Inj Date : 20-JUN-2014 22:18
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-07ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 83
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

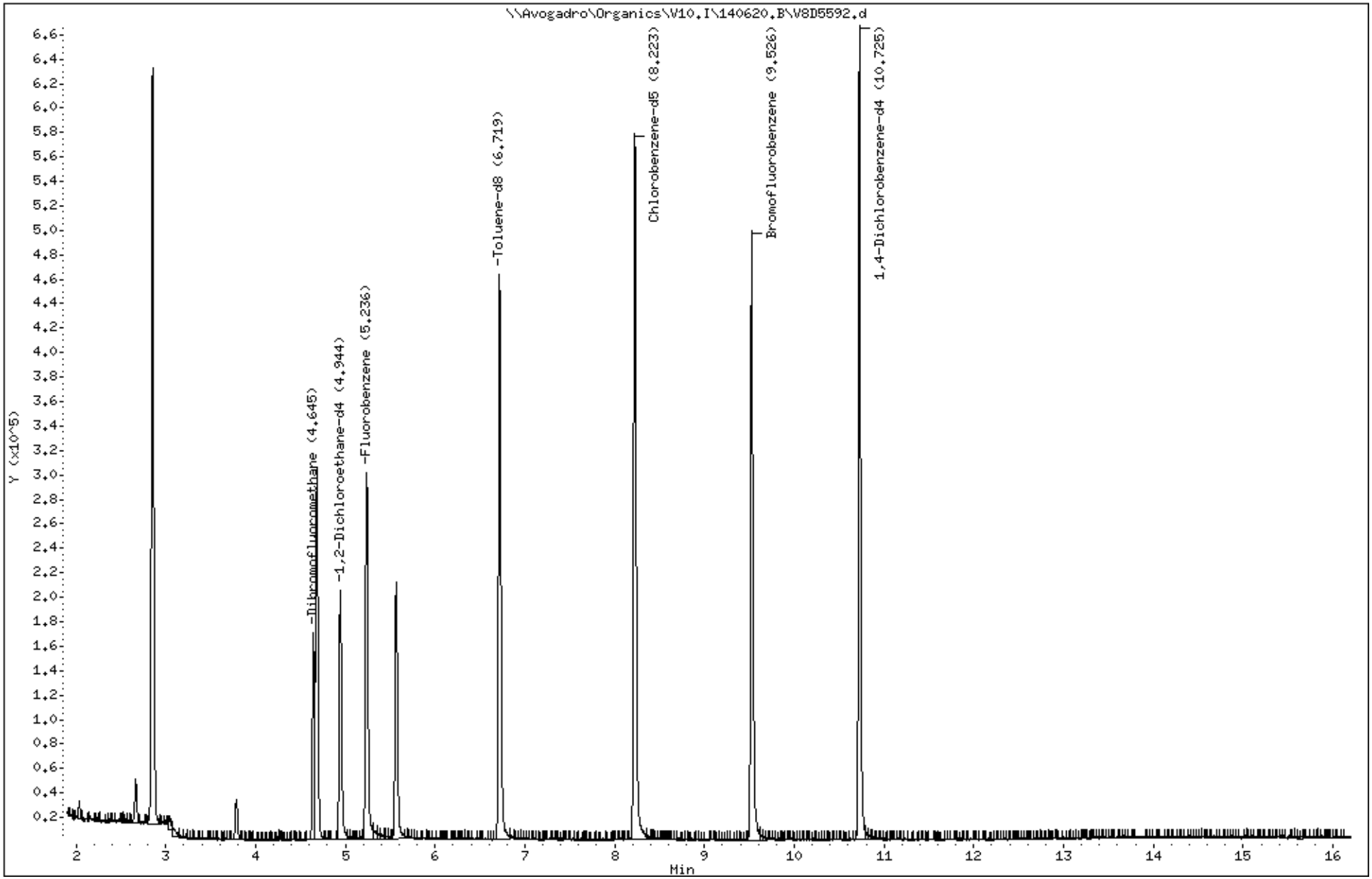
Name	Value	Description
DF	20.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	578165	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.664	59080	5.10927989	100	64	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d
Date : 20-JUN-2014 22:18
Client ID: MW-22S(2)_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-07ADL,,77692,20
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d

Date : 20-JUN-2014 22:18

Client ID: MW-22S(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-07ADL,,77692,20

Purge Volume: 5.0

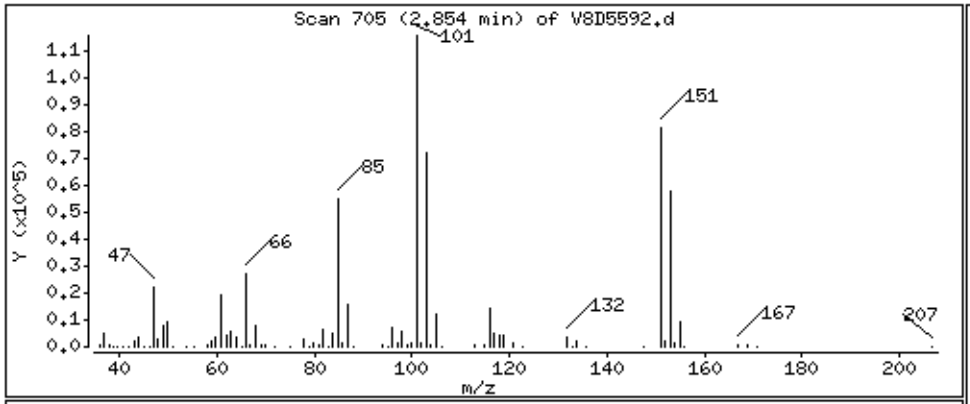
Operator: WL SRC: LIMS

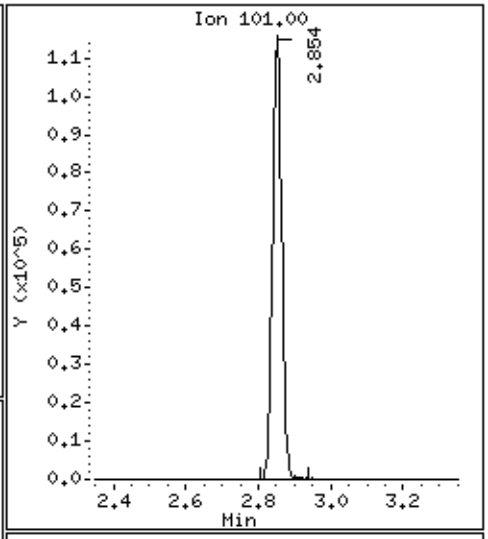
Column phase: DB-624

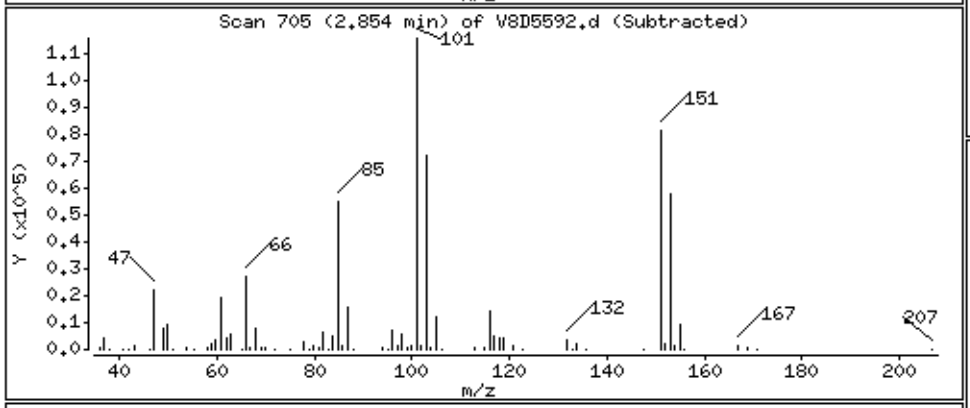
Column diameter: 0.25

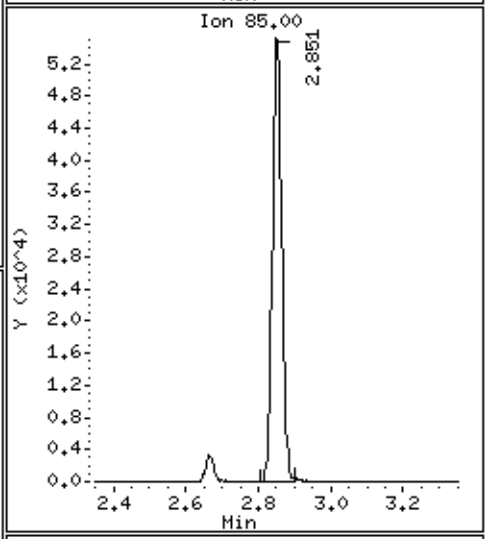
11 1,1,2-Trichloro-1,2,2-Trifluo

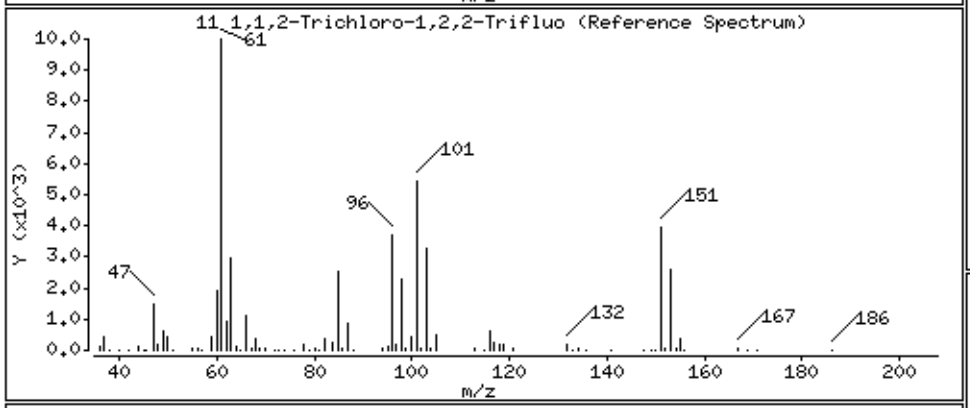
Concentration: 2100 ug/L

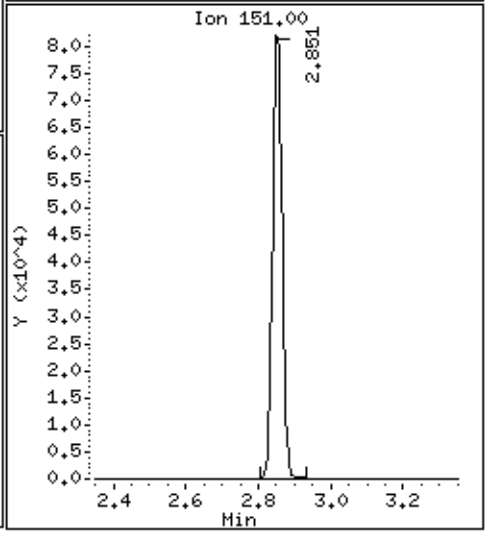


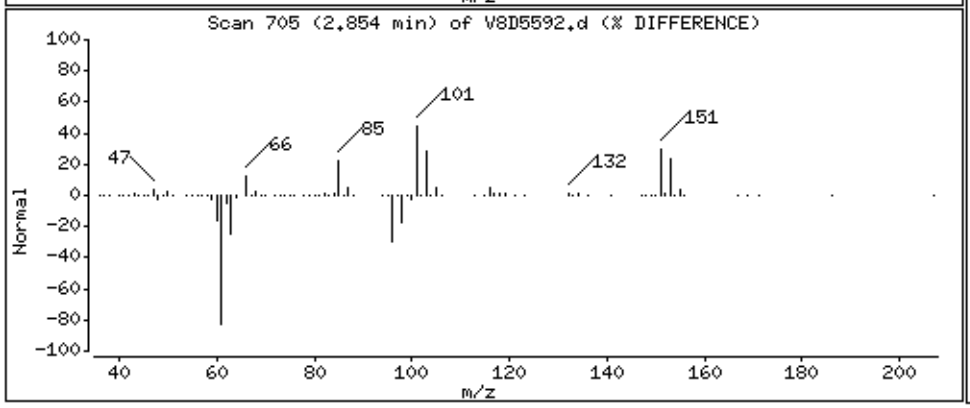












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d

Date : 20-JUN-2014 22:18

Client ID: MW-22S(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-07ADL,,77692,20

Purge Volume: 5.0

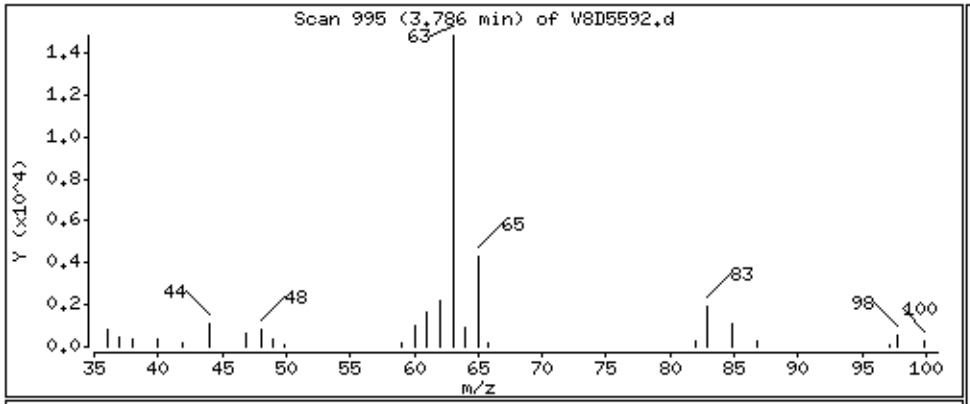
Operator: WL SRC: LIMS

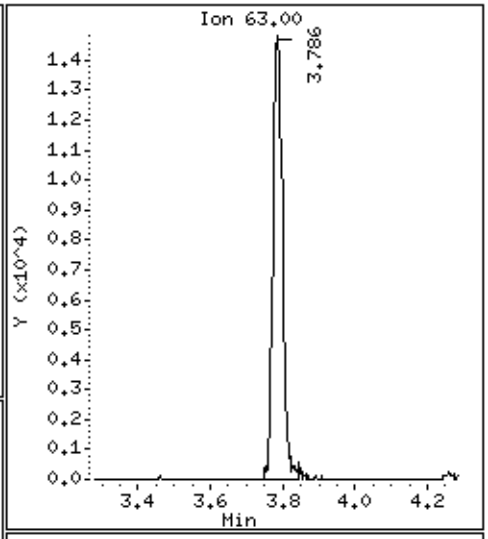
Column phase: DB-624

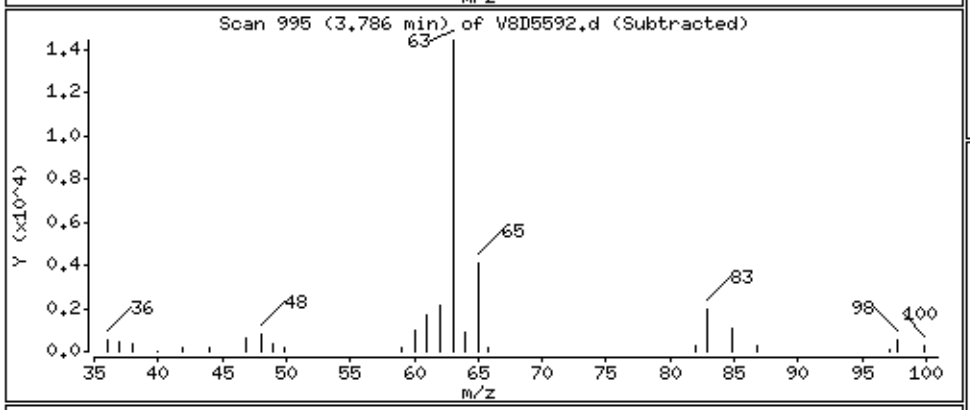
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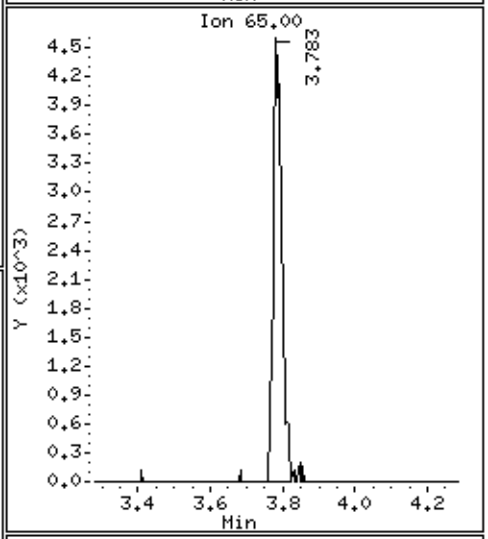
23 1,1-Dichloroethane

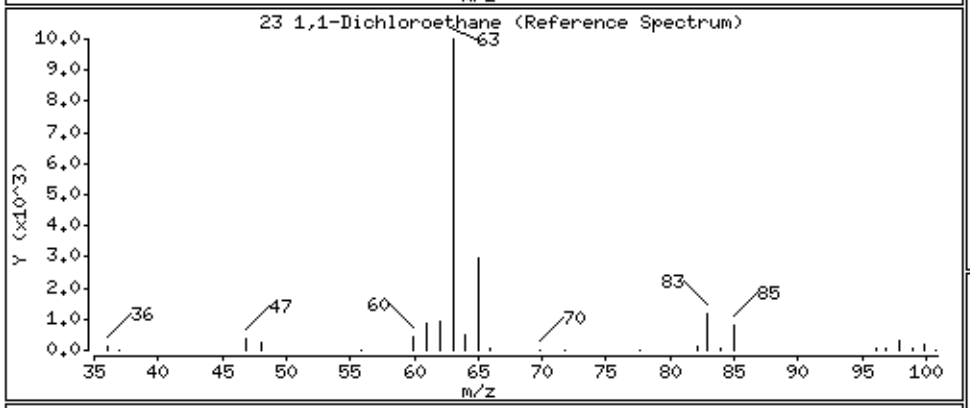
Concentration: 120 ug/L

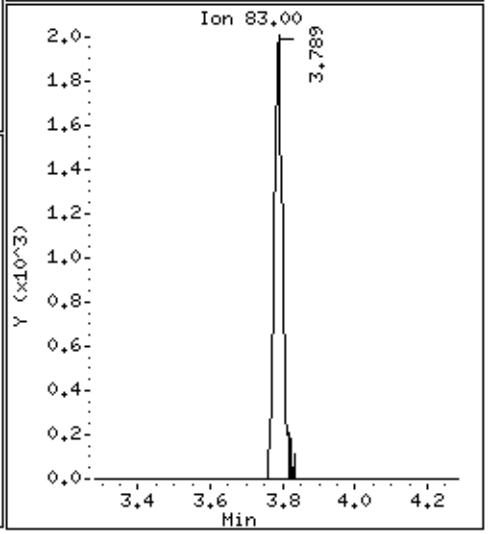


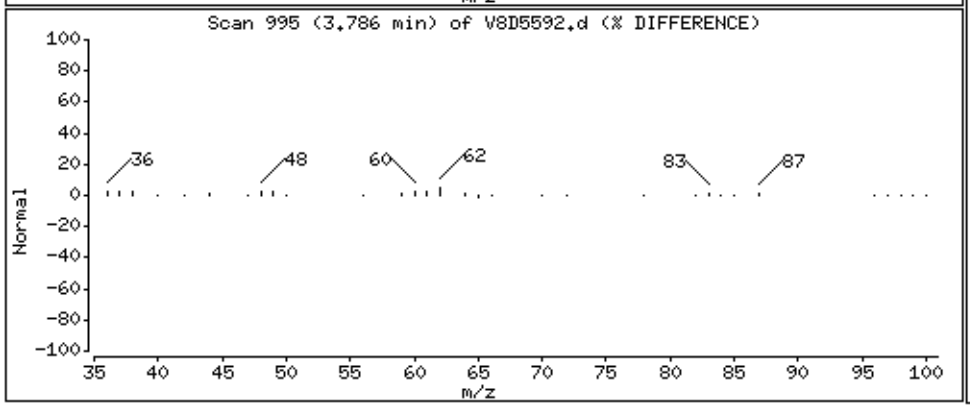












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d

Date : 20-JUN-2014 22:18

Client ID: MW-22S(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-07ADL,,77692,20

Purge Volume: 5.0

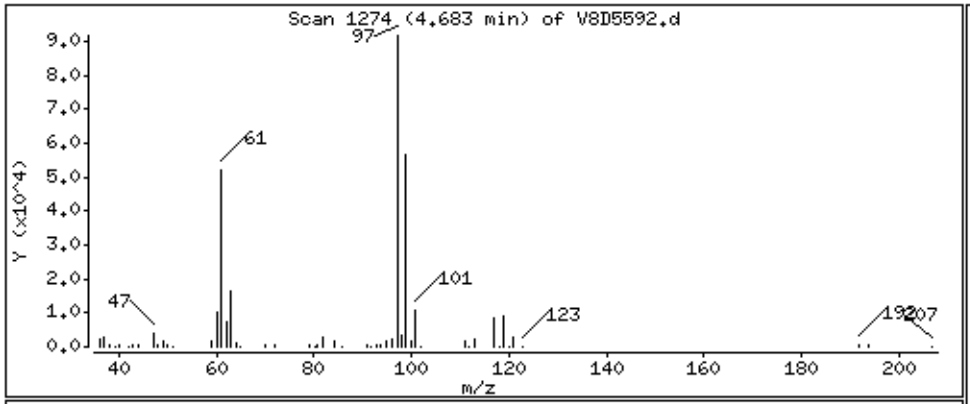
Operator: WL SRC: LIMS

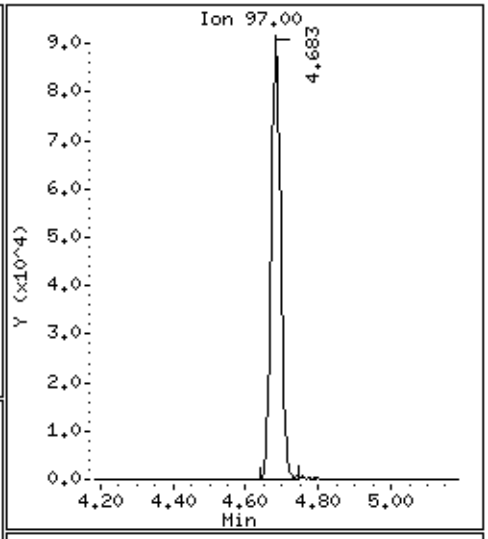
Column phase: DB-624

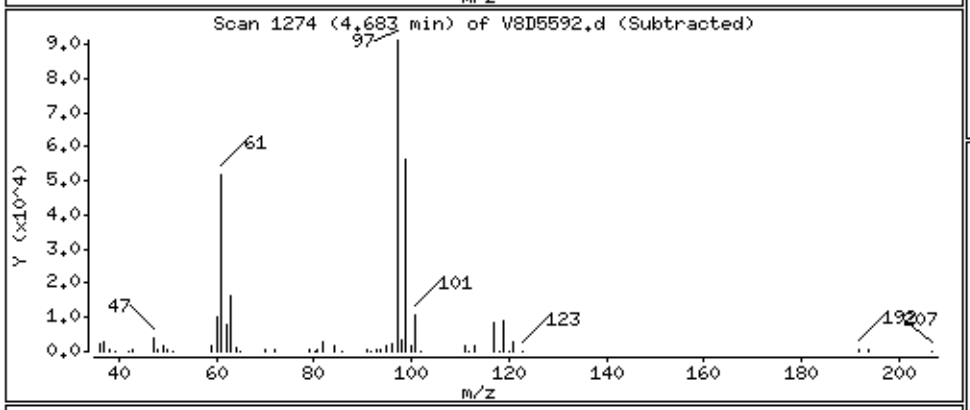
Column diameter: 0.25

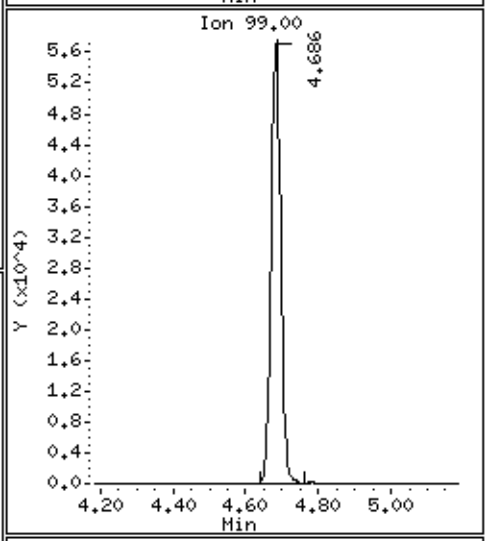
37 1,1,1-Trichloroethane

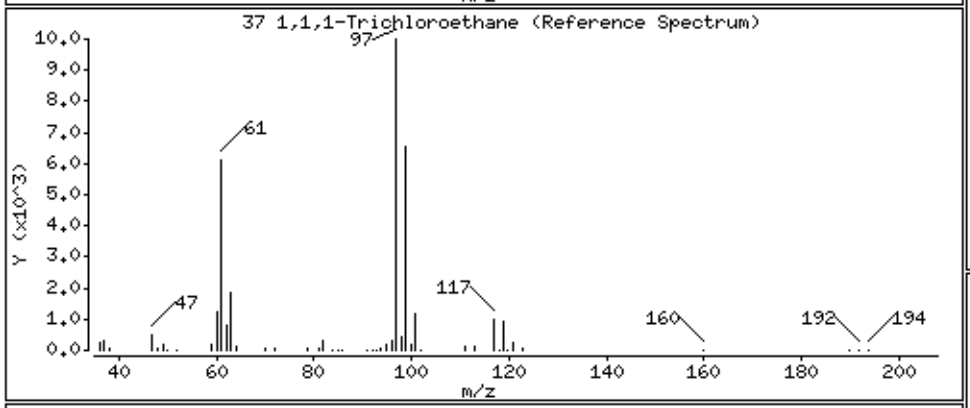
Concentration: 870 ug/L

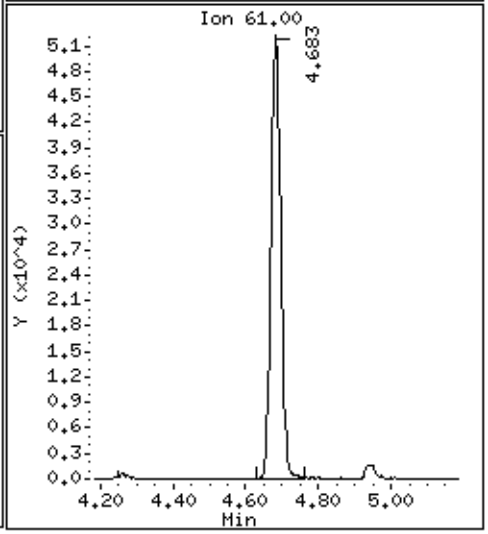


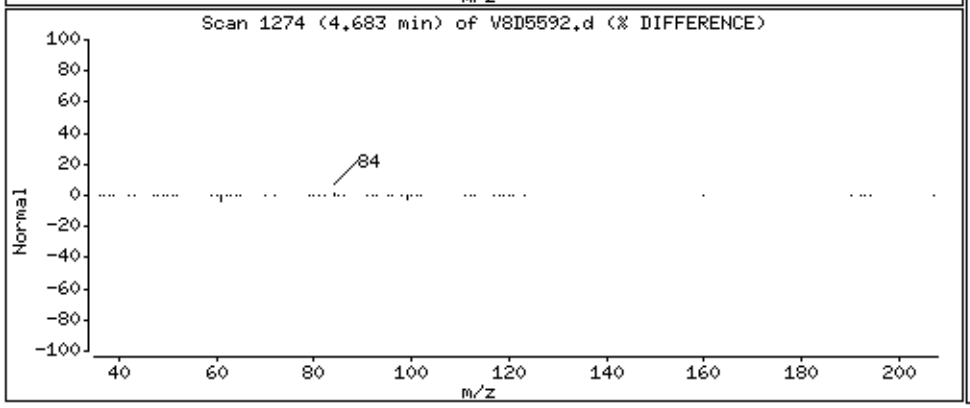












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d

Date : 20-JUN-2014 22:18

Client ID: MW-22S(2)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-07ADL,,77692,20

Purge Volume: 5.0

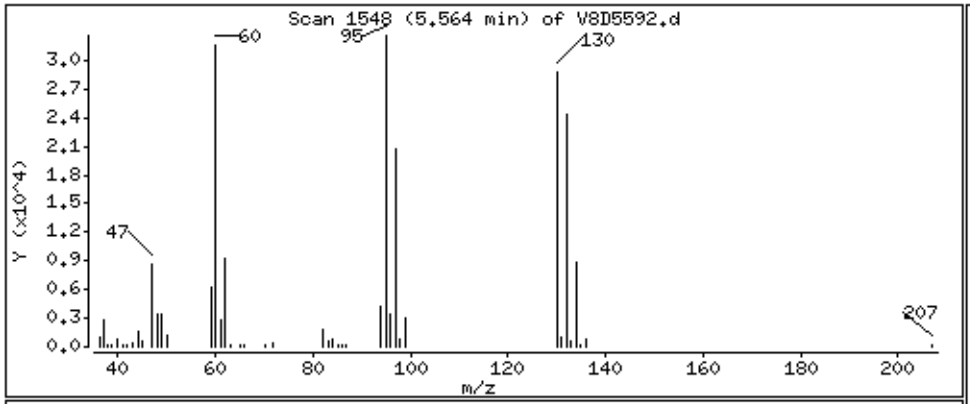
Operator: WL SRC: LIMS

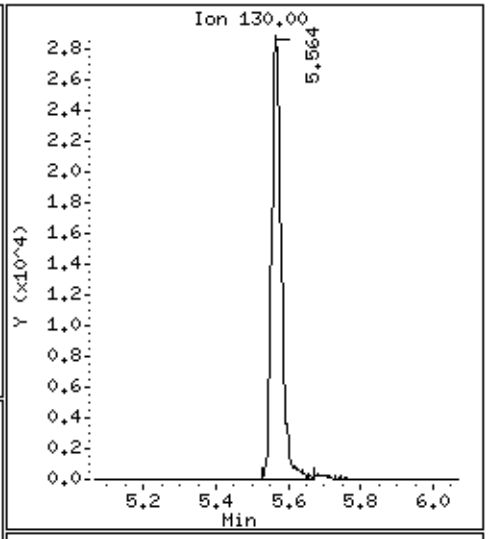
Column phase: DB-624

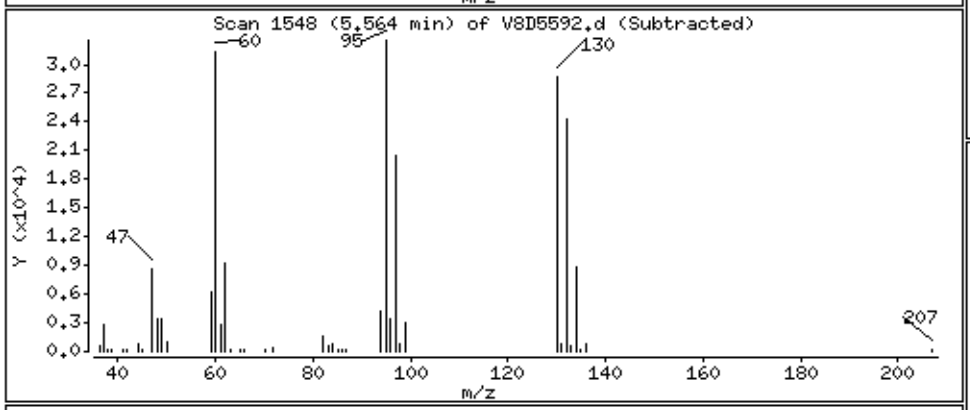
Column diameter: 0.25

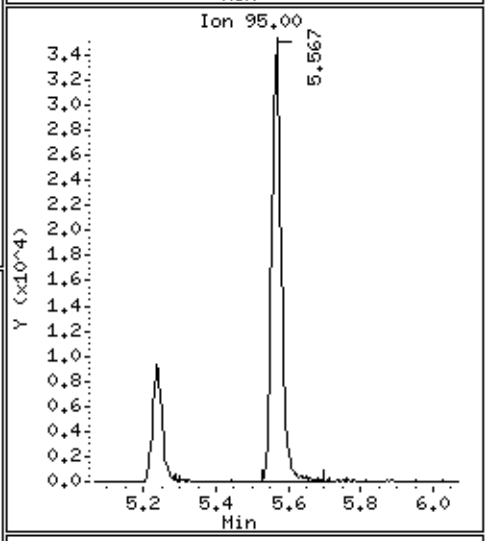
47 Trichloroethene

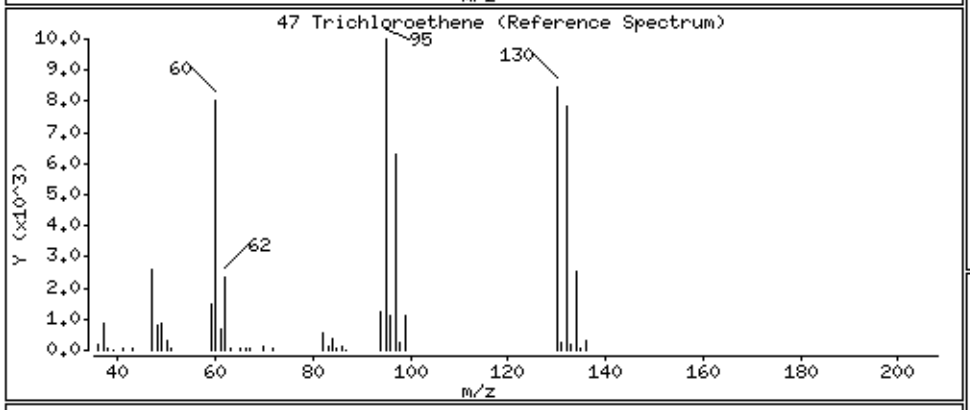
Concentration: 670 ug/L

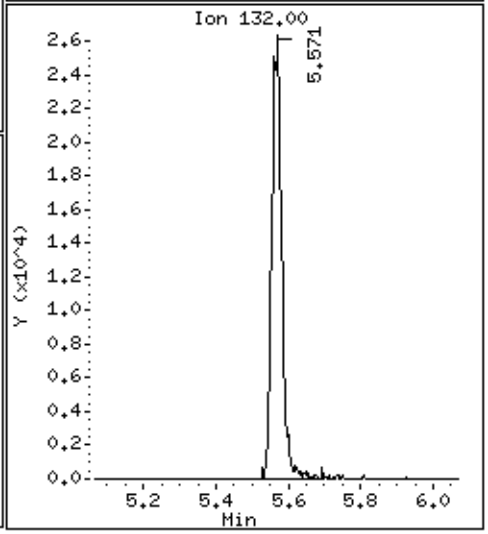


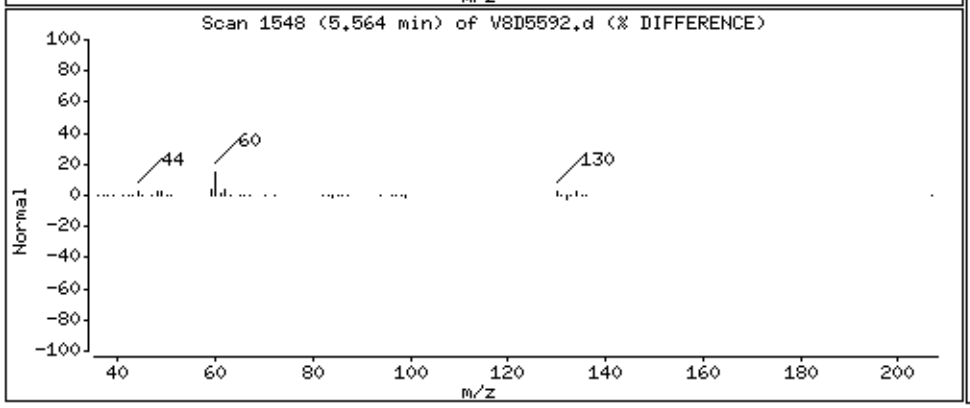












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5592.d

Date : 20-JUN-2014 22:18

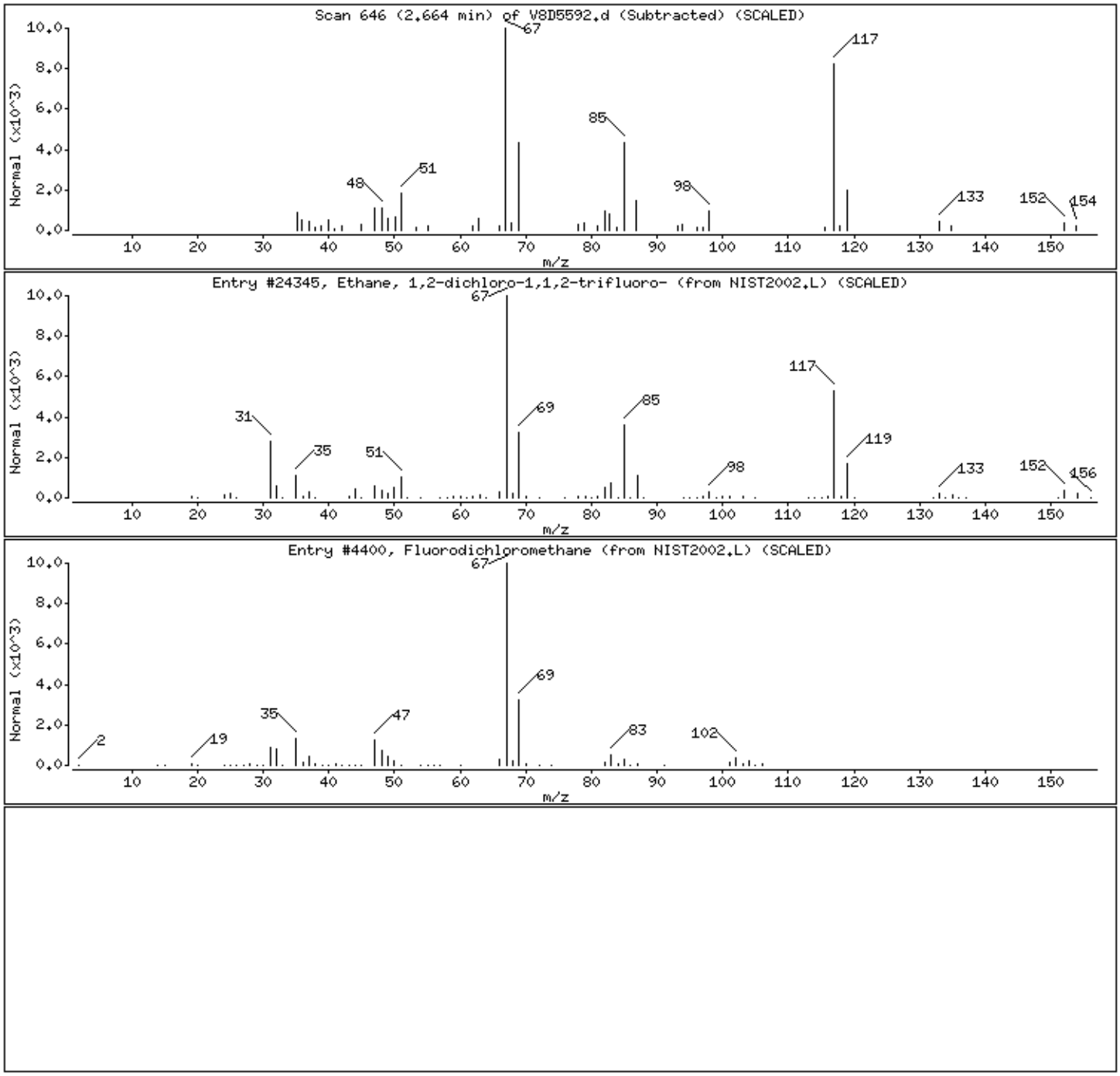
Client ID: MW-22S(2)_6/16/14DL Instrument: V10.i

Sample Info: 5ML,N1055-07ADL,,77692,20

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	64	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4400	27	CHCl2F	102



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(3)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5523.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	98	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	4.1	
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	1000	E
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	660	E
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

EPA SAMPLE NO.

MW-22S(3)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5523.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	2.5	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2300	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S(3)_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5523.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	64	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5523.d
Lab Smp Id: N1055-08A Client Smp ID: MW-22S(3)_6/16/14
Inj Date : 19-JUN-2014 13:29
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-08A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	4962731	2290.69	2300(A)
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	474168	97.7219	98
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	7866	4.10761	4.1
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	90690	55.8337	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	4393579	997.158	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13967	50.8608	51
M	50 1,2-Dichloroethene (Total)	96				7866	4.10761	4.1
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	218269	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	1191396	661.389	660(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	273349	48.7952	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	244799	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	12414	2.51995	2.5
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	147066	48.9034	49
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	117791	50.0000	(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5523.d
Lab Smp Id: N1055-08A Client Smp ID: MW-22S(3)_6/16/14
Inj Date : 19-JUN-2014 13:29
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-08A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

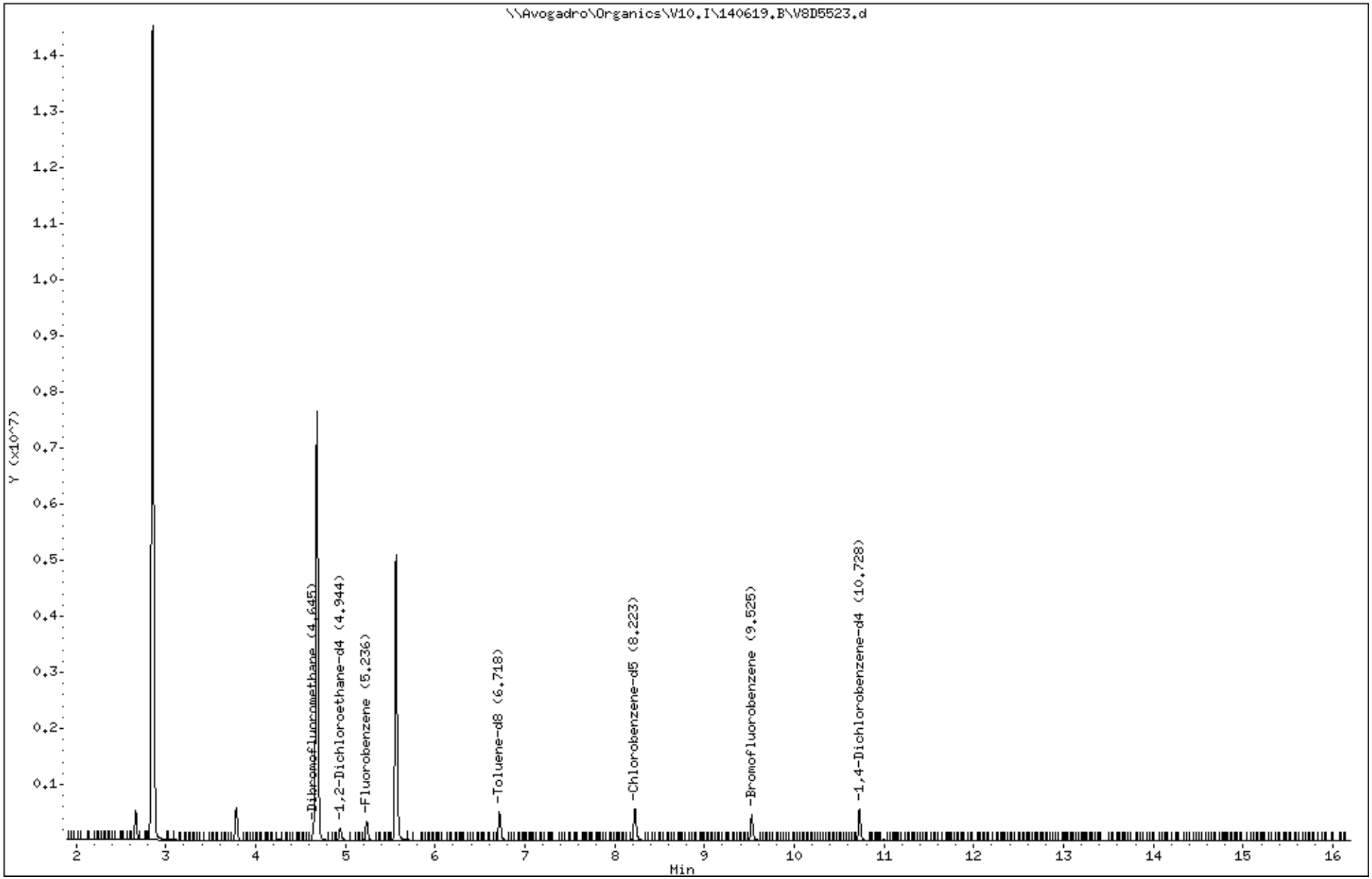
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.236	644646	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	829222	64.3160583	64	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d
Date : 19-JUN-2014 13:29
Client ID: MW-22S(3)_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-08A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

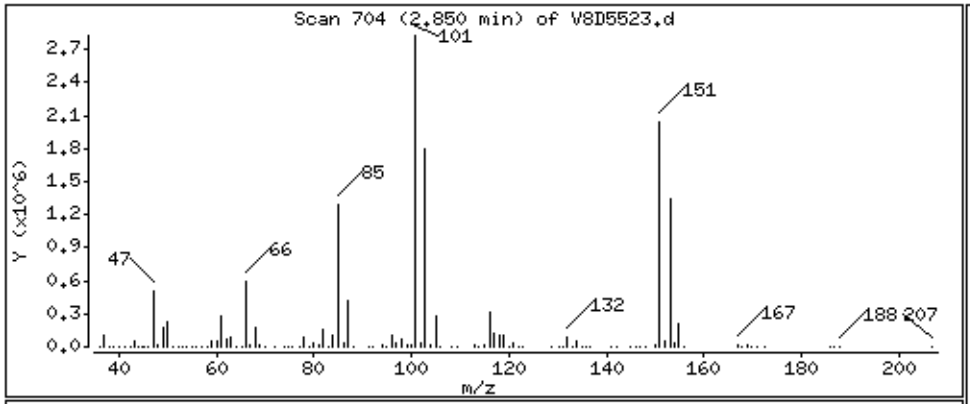
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

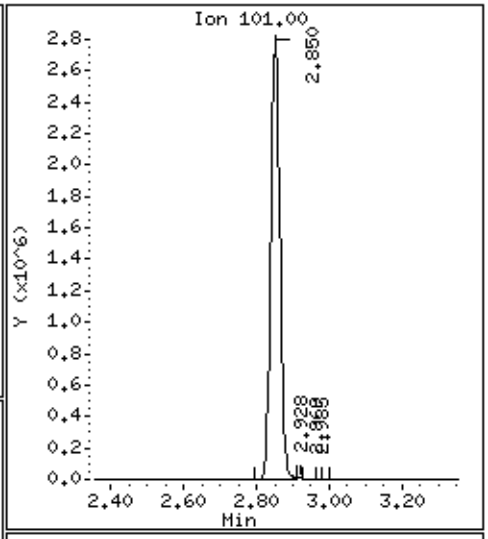
Sample Info: 5ML,N1055-08A,,77659

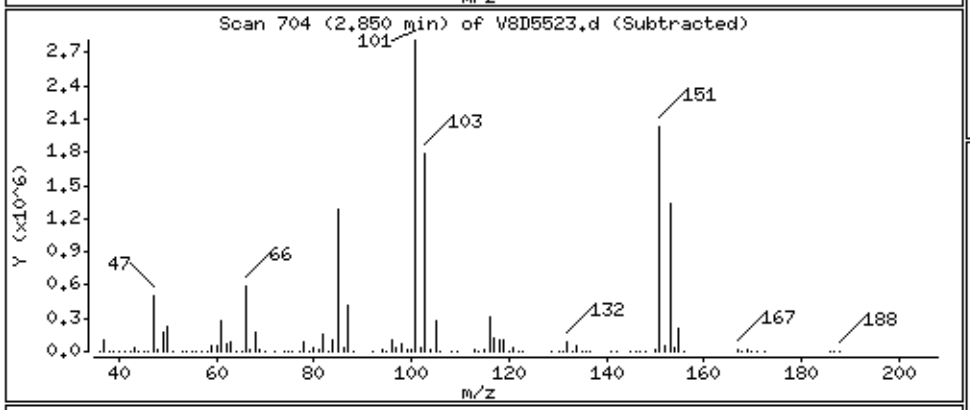
Purge Volume: 5.0 Operator: WL SRC: LIMS

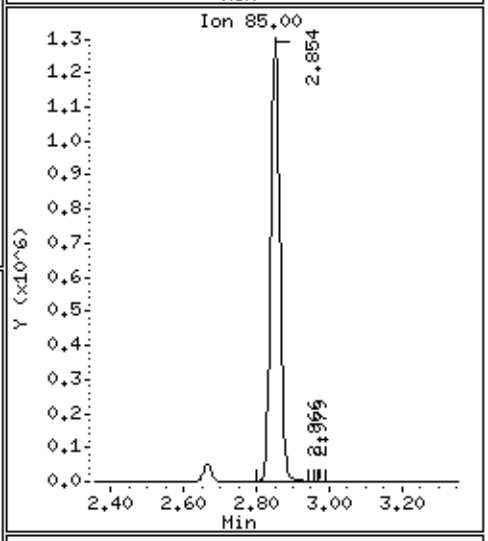
Column phase: DB-624 Column diameter: 0.25

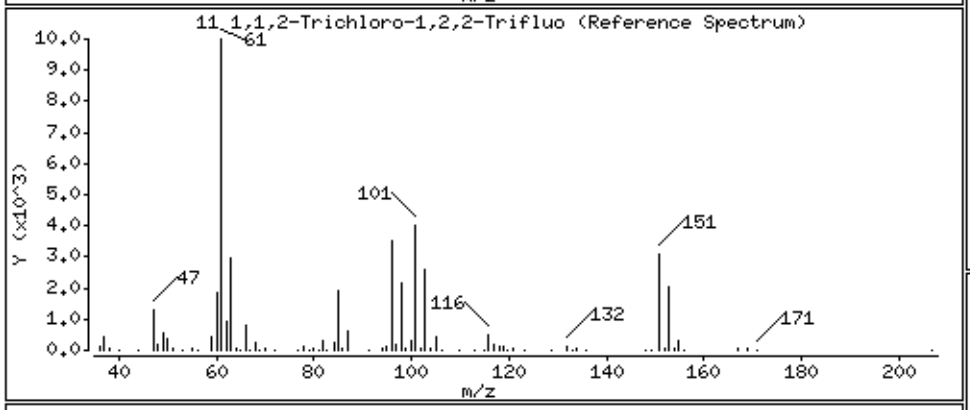
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2300 ug/L

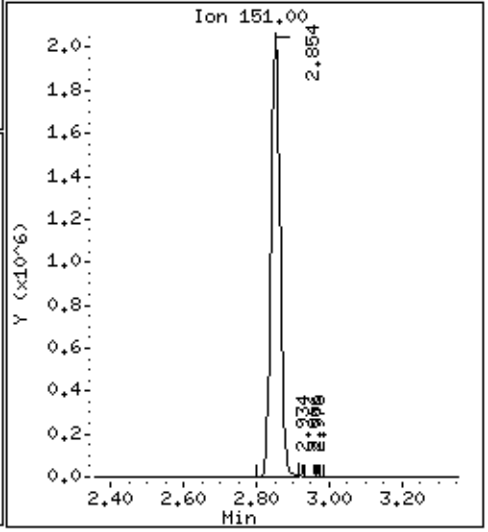


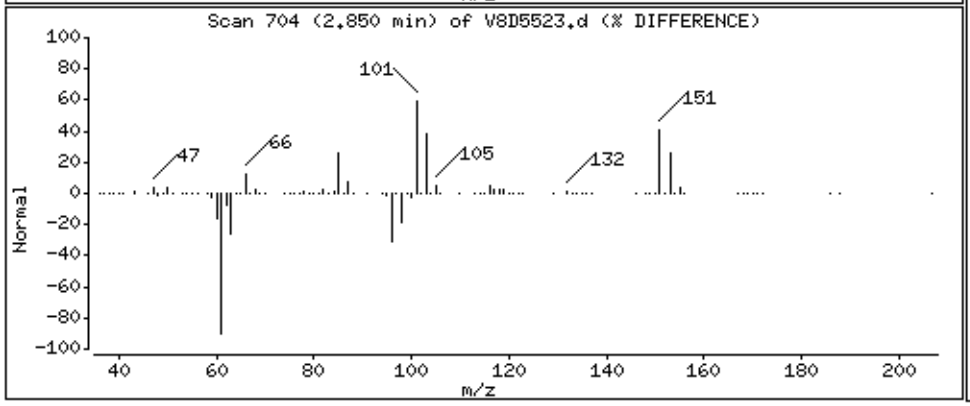












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

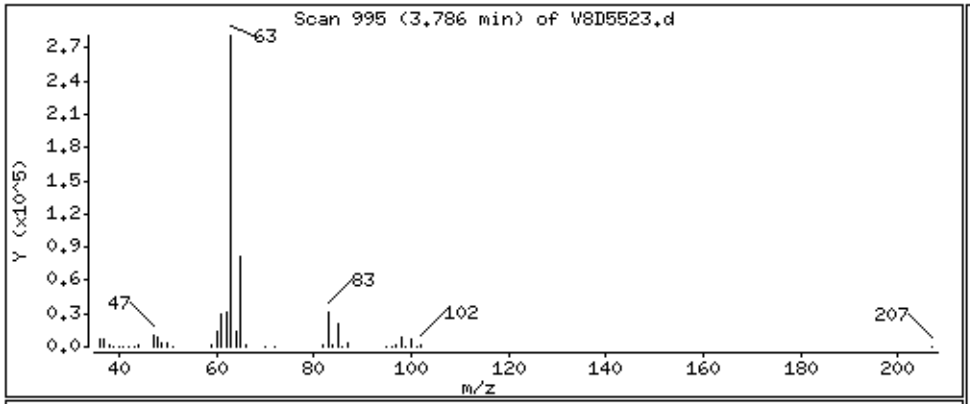
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

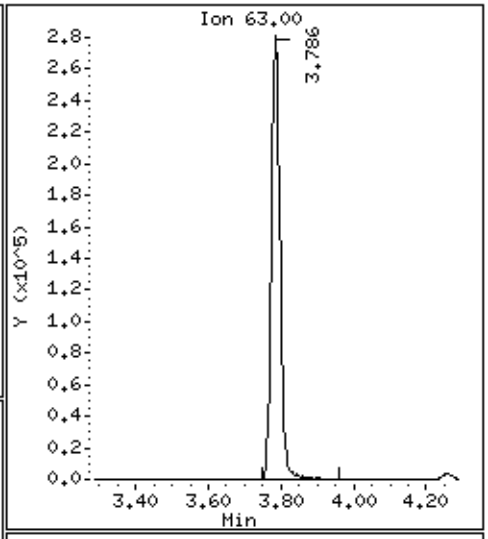
Sample Info: 5ML,N1055-08A,,77659

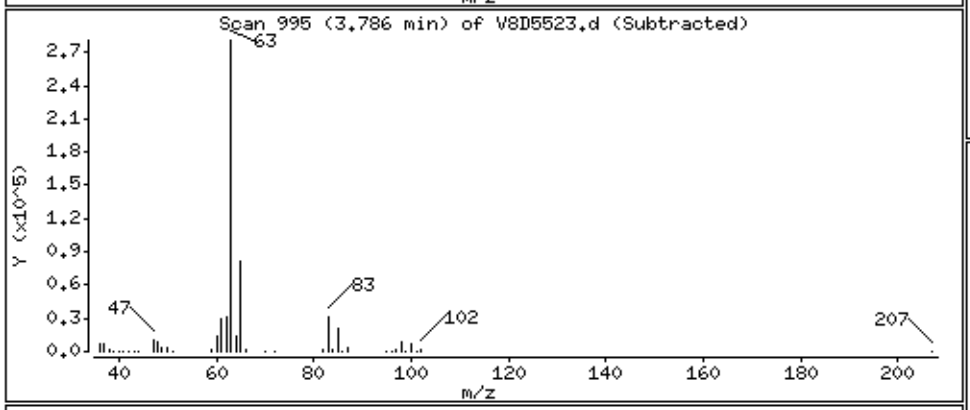
Purge Volume: 5.0 Operator: WL SRC: LIMS

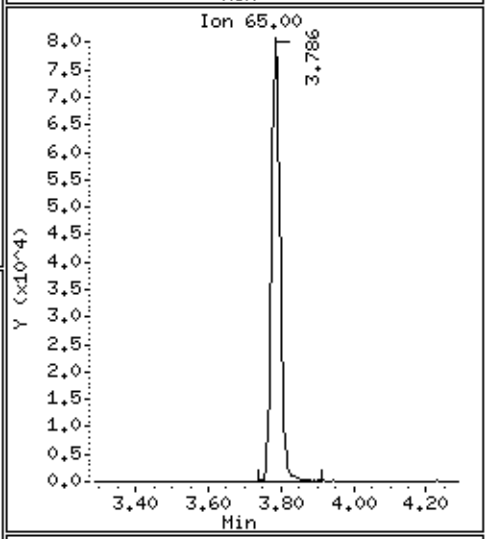
Column phase: DB-624 Column diameter: 0.25

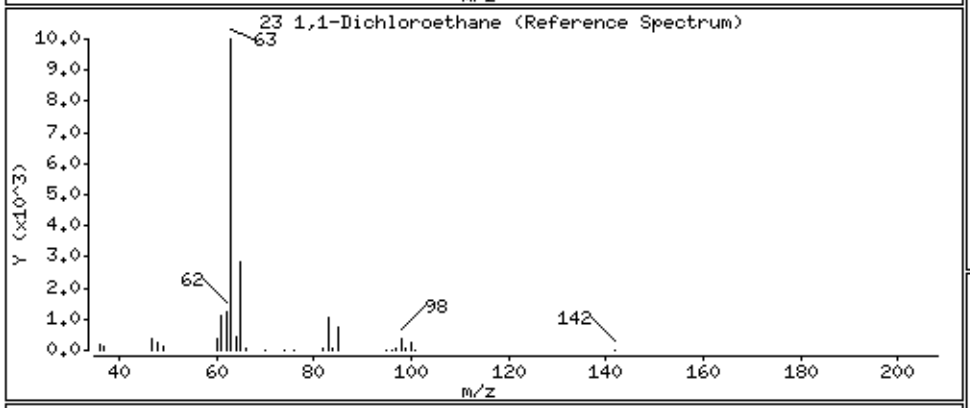
23 1,1-Dichloroethane Concentration: 98 ug/L

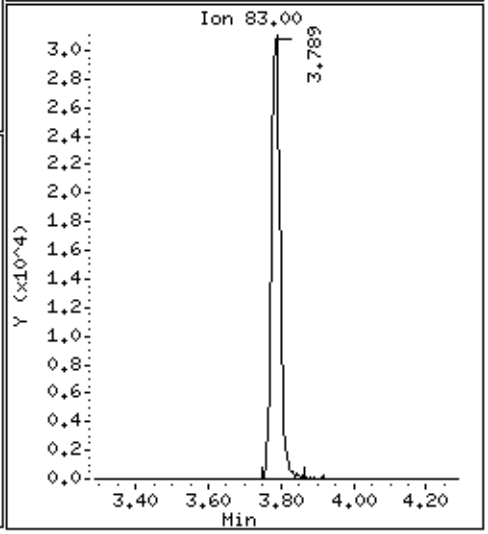


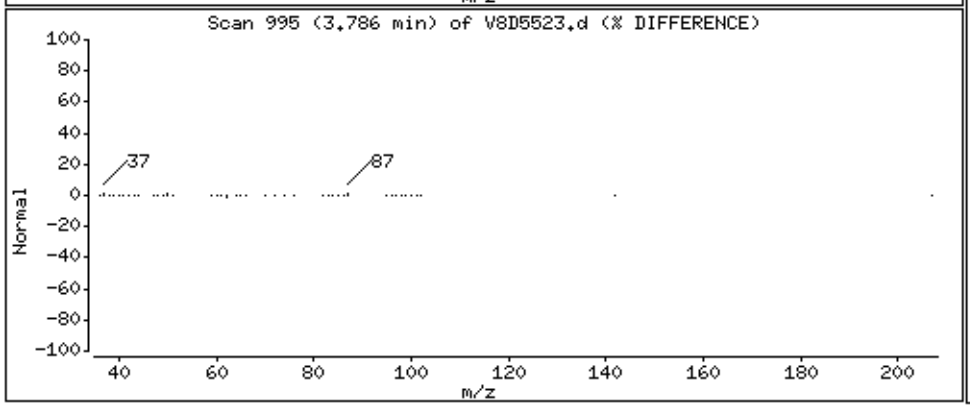












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

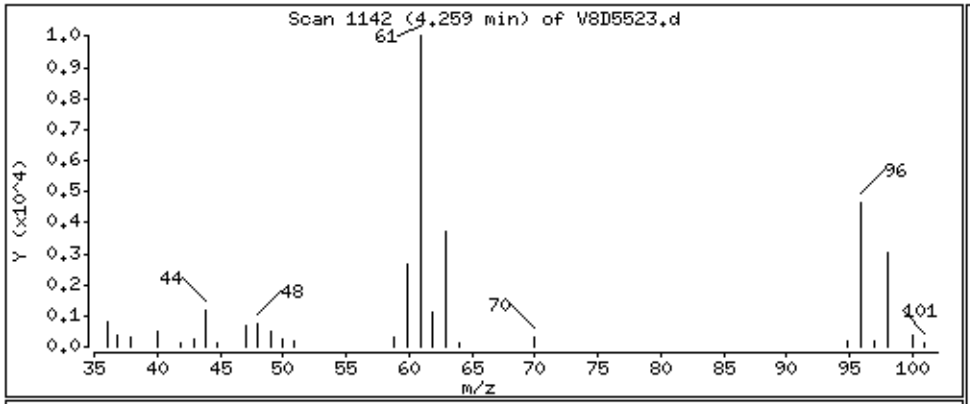
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

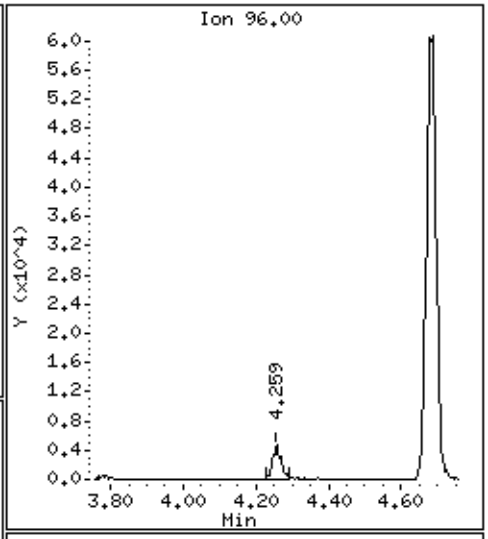
Sample Info: 5ML,N1055-08A,,77659

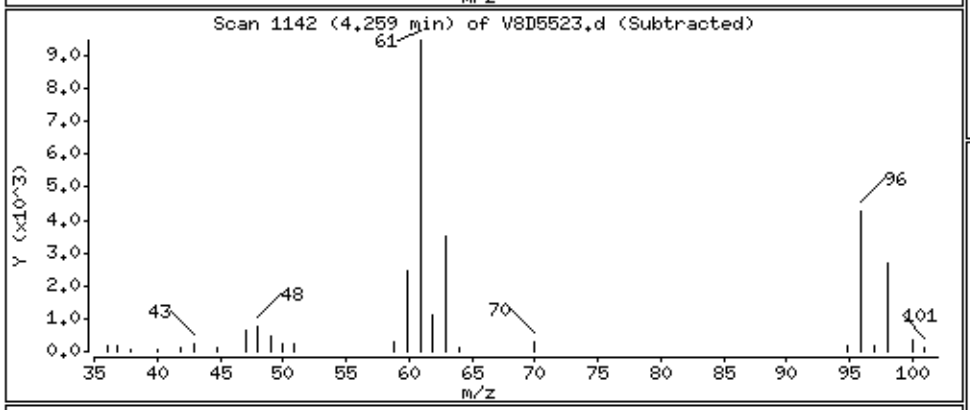
Purge Volume: 5.0 Operator: WL SRC: LIMS

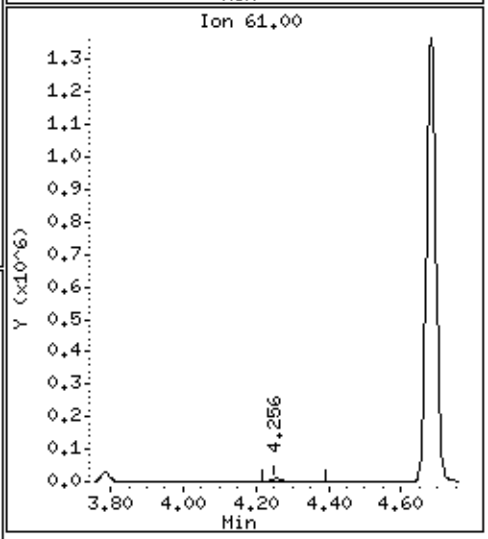
Column phase: DB-624 Column diameter: 0.25

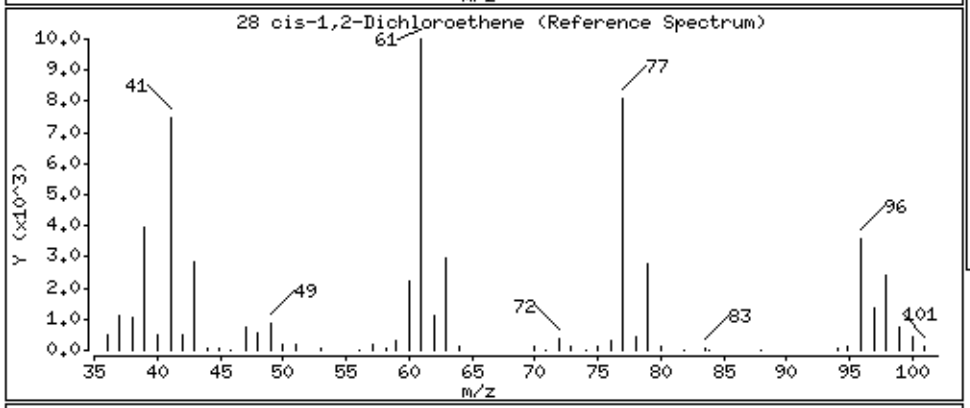
28 cis-1,2-Dichloroethene Concentration: 4.1 ug/L

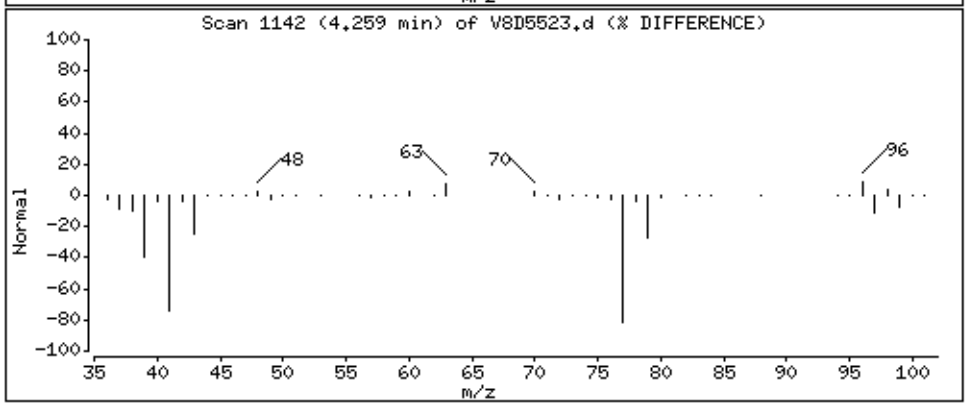












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

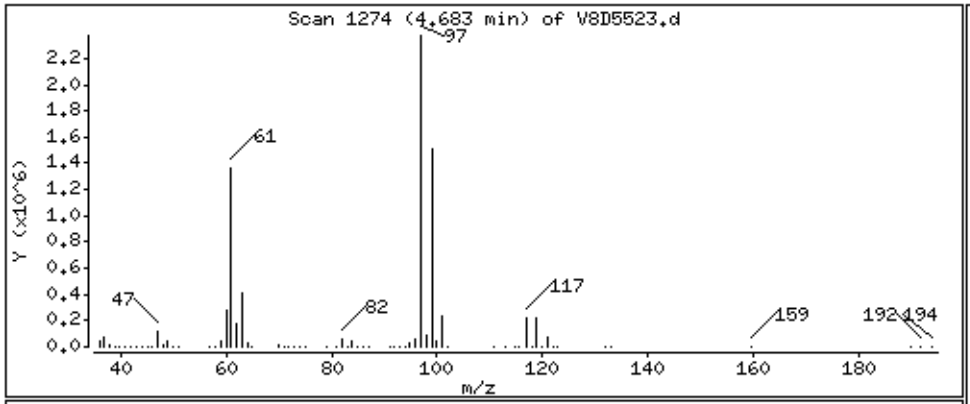
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

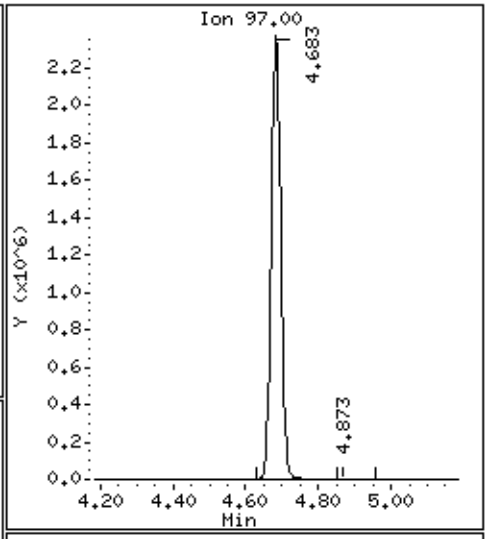
Sample Info: 5ML,N1055-08A,,77659

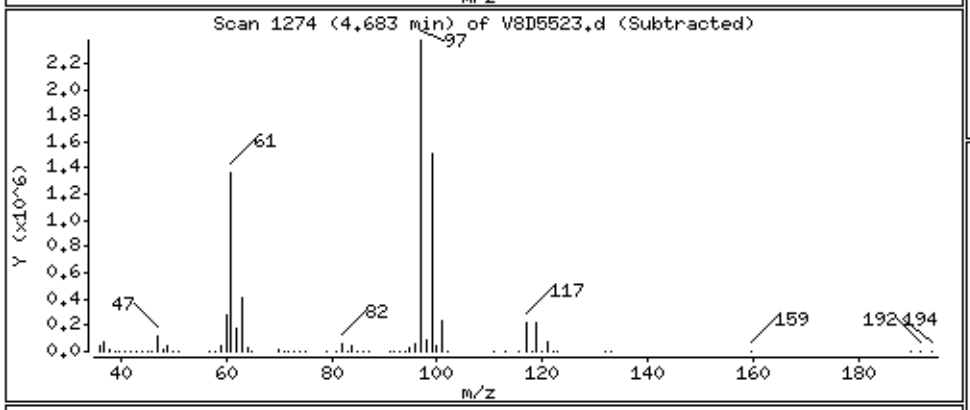
Purge Volume: 5.0 Operator: WL SRC: LIMS

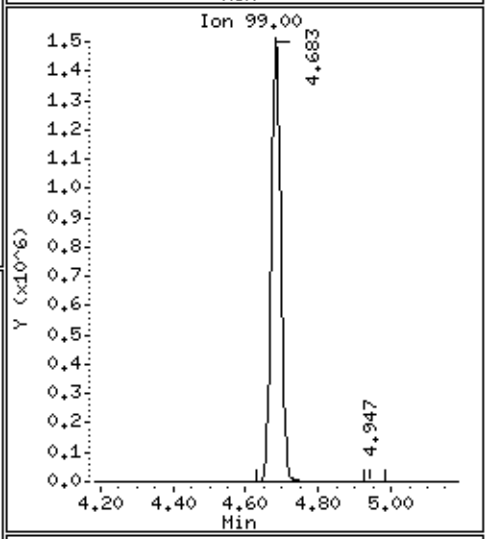
Column phase: DB-624 Column diameter: 0.25

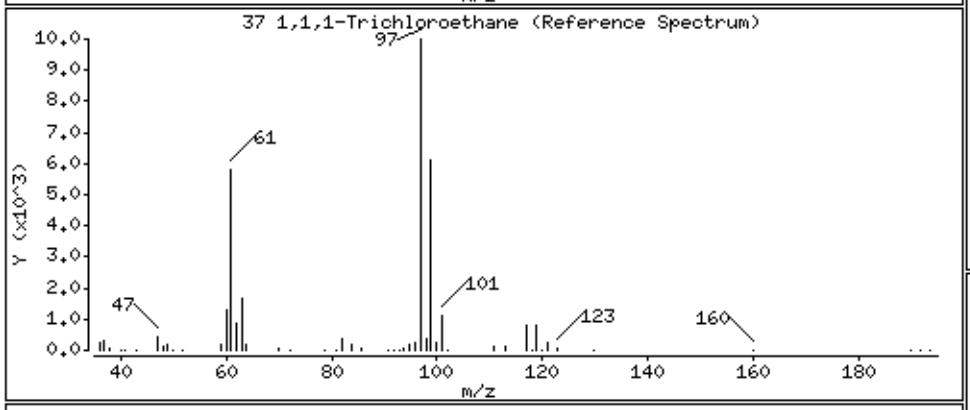
37 1,1,1-Trichloroethane Concentration: 1000 ug/L

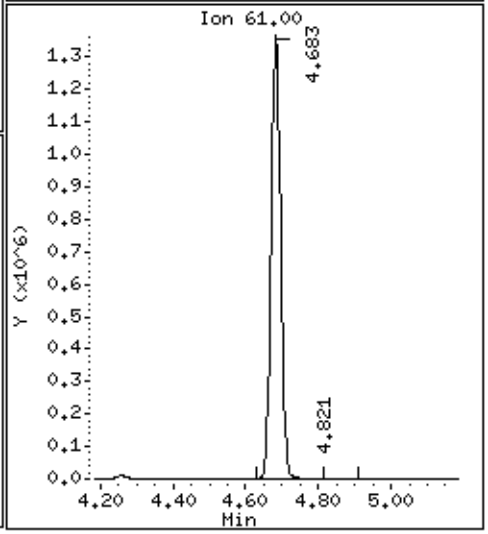


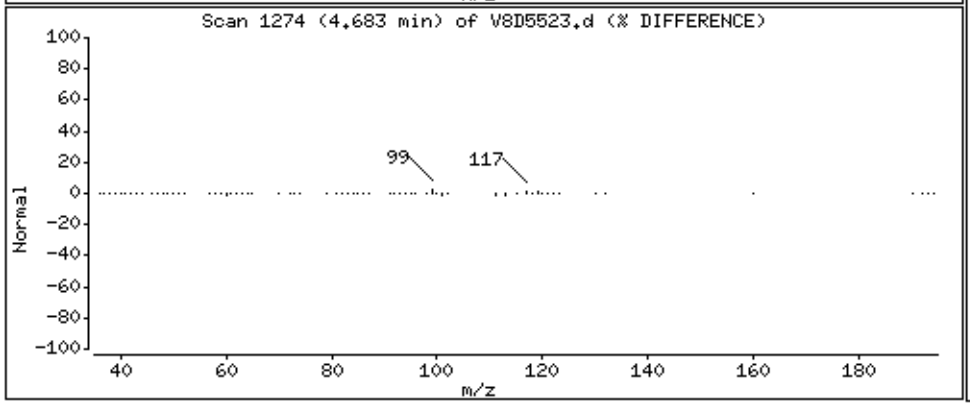












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

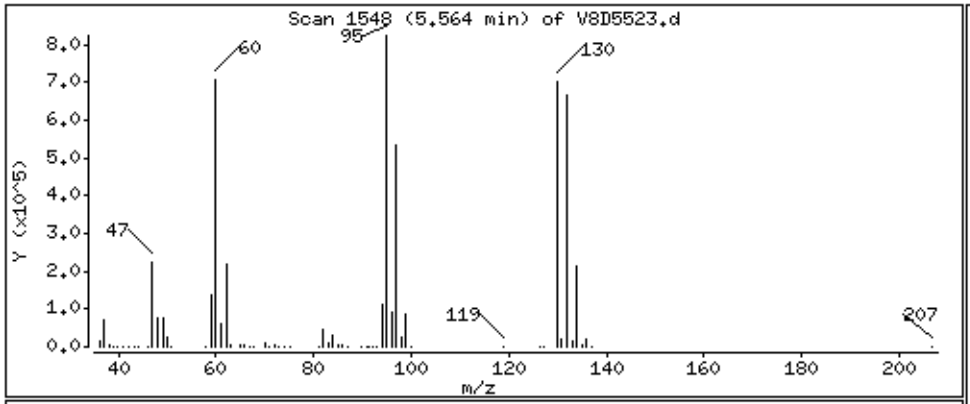
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

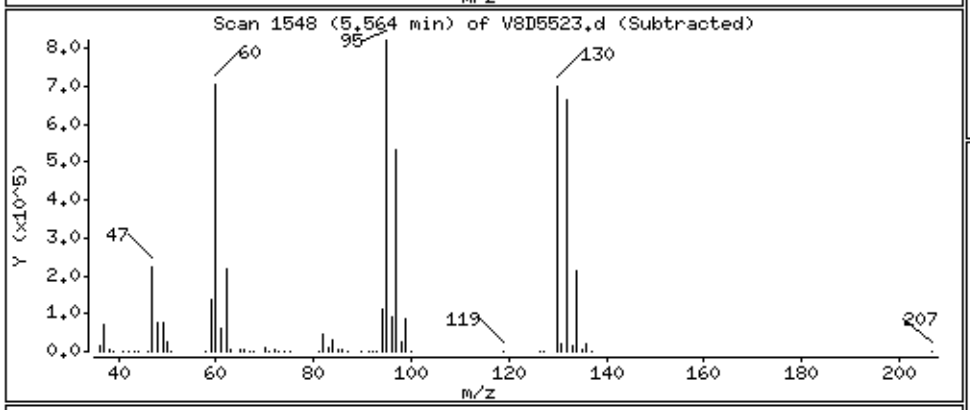
Sample Info: 5ML,N1055-08A,,77659

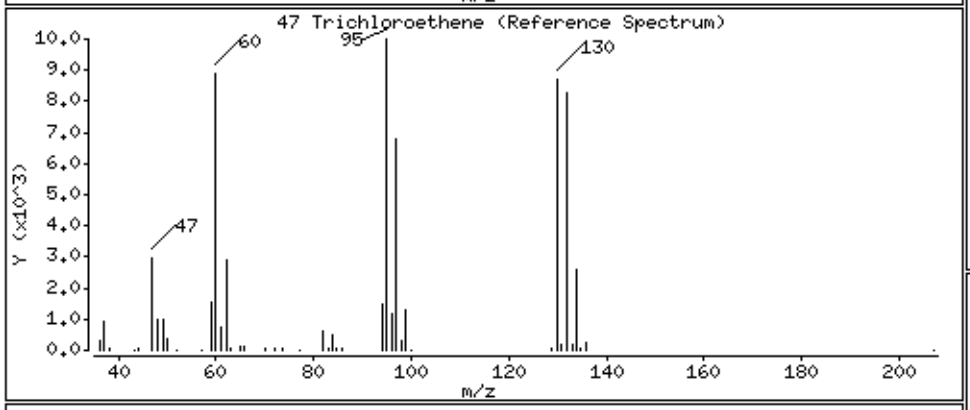
Purge Volume: 5.0 Operator: WL SRC: LIMS

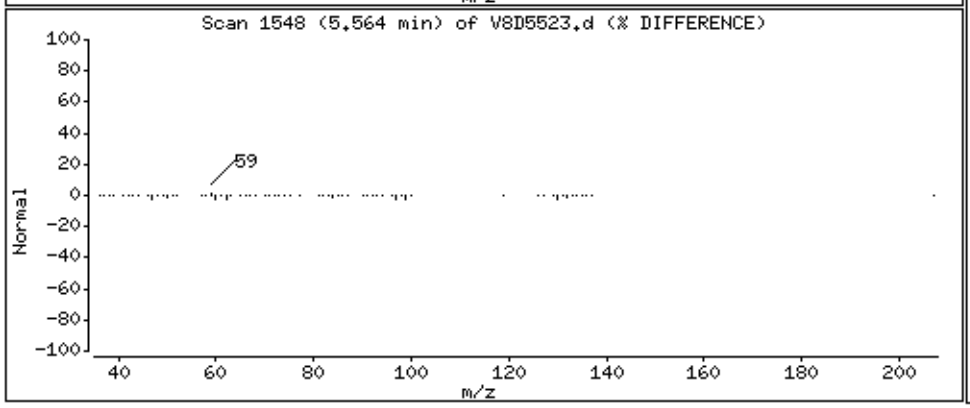
Column phase: DB-624 Column diameter: 0.25

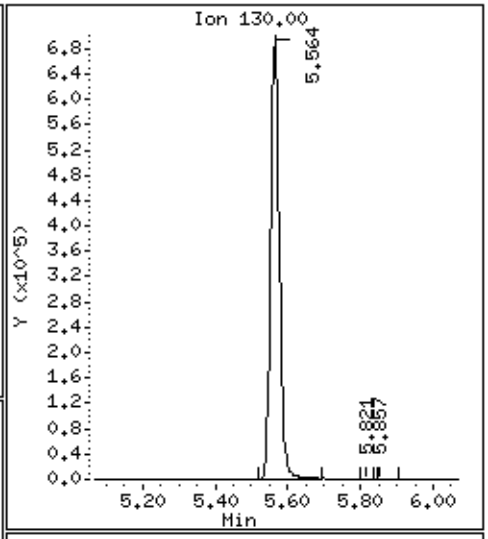
47 Trichloroethene Concentration: 660 ug/L

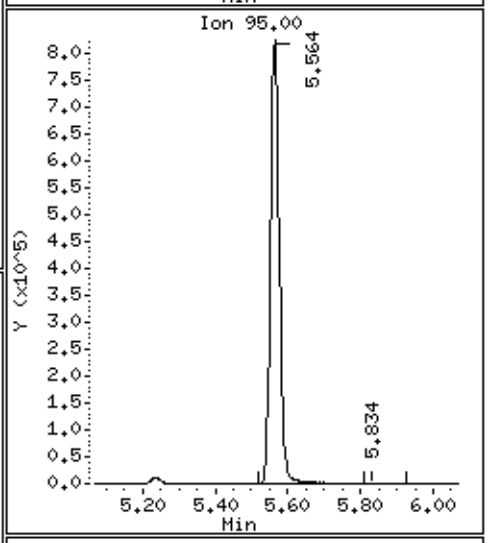


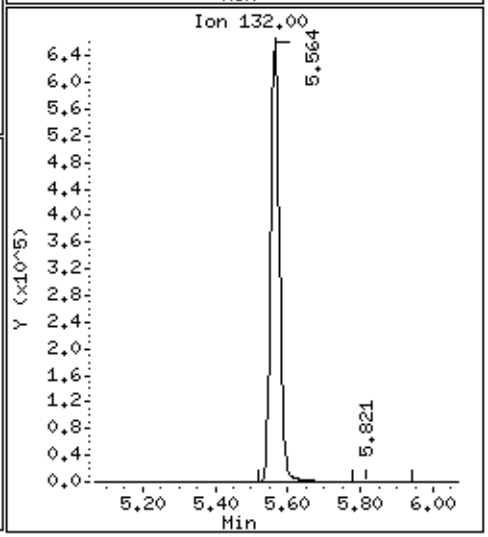












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

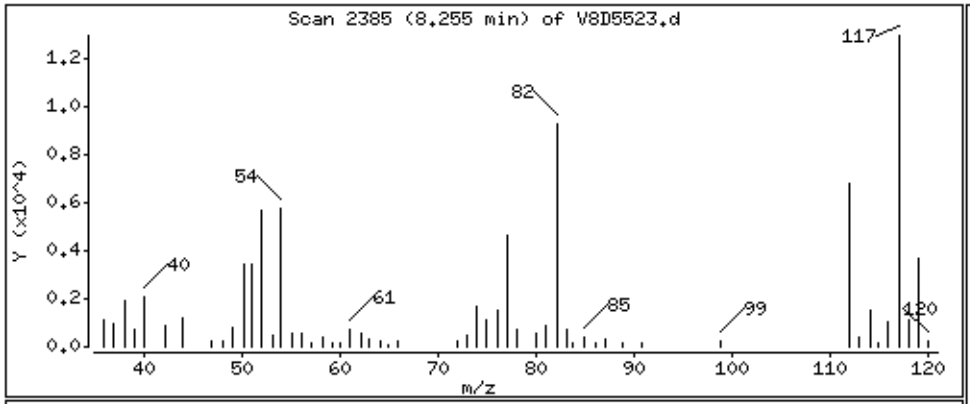
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

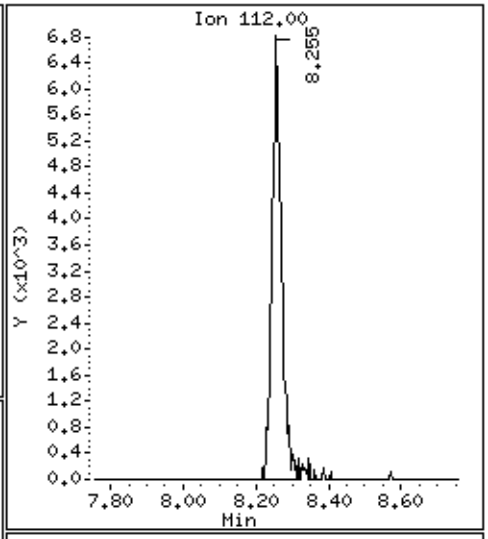
Sample Info: 5ML,N1055-08A,,77659

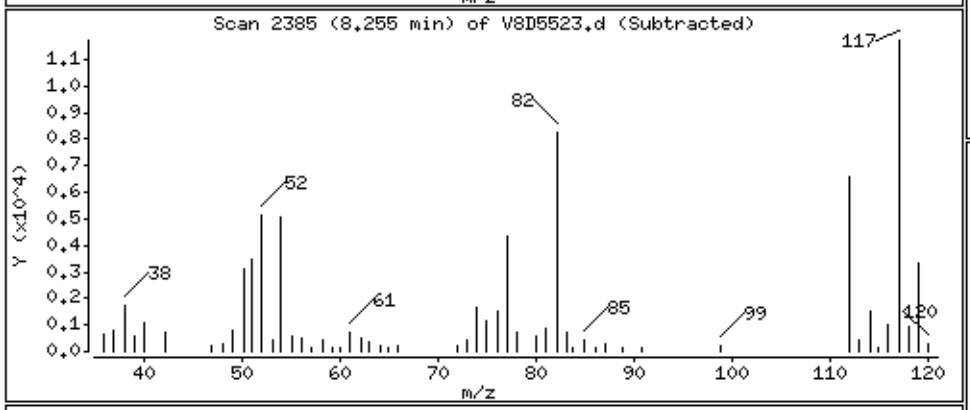
Purge Volume: 5.0 Operator: WL SRC: LIMS

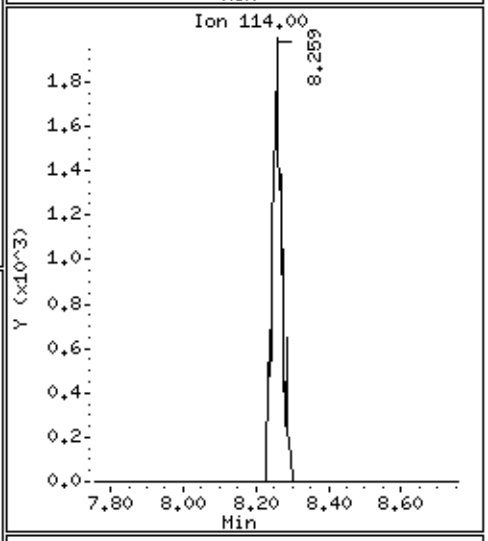
Column phase: DB-624 Column diameter: 0.25

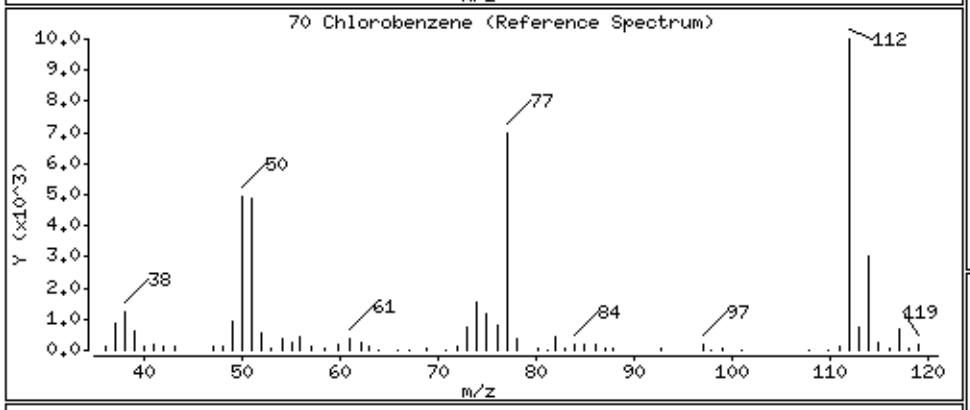
70 Chlorobenzene Concentration: 2.5 ug/L

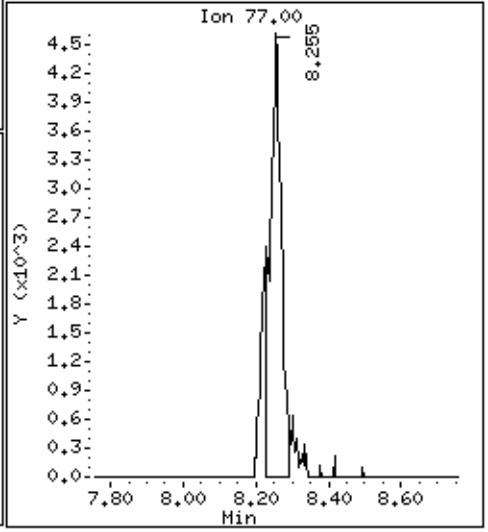


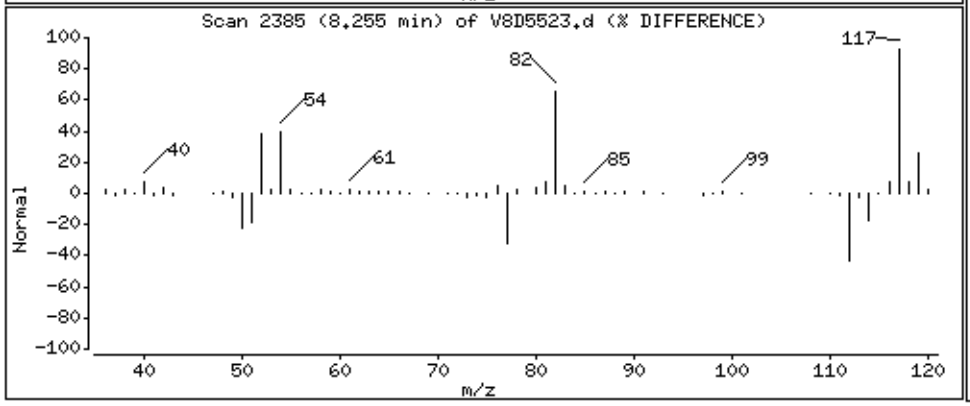












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5523.d

Date : 19-JUN-2014 13:29

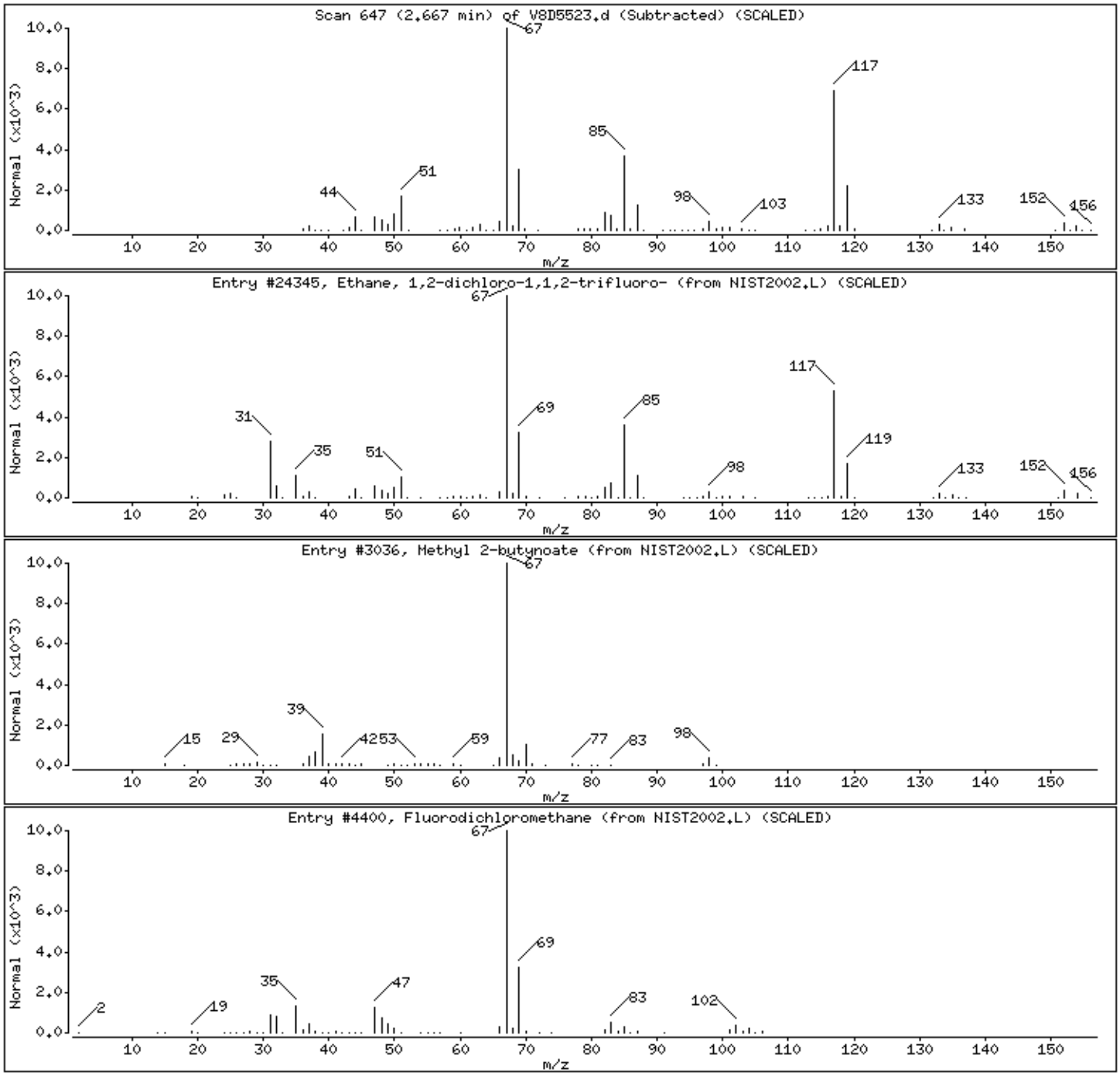
Client ID: MW-22S(3)_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-08A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Methyl 2-butynoate	23326-27-4	NIST2002.L	3036	25	C5H6O2	98
Fluorodichloromethane	75-43-4	NIST2002.L	4400	23	CHCl2F	102



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S(3)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-08ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5593.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	90	D
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	870	D
563-58-6	1,1-Dichloropropene	20	U
56-23-5	Carbon tetrachloride	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	580	D
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

EPA SAMPLE NO.
MW-22S(3)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-08ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5593.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
103-65-1	n-Propylbenzene	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
104-51-8	n-Butylbenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1800	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S(3)_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-08ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5593.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5593.d
Lab Smp Id: N1055-08ADL Client Smp ID: MW-22S(3)_6/16/14DL
Inj Date : 20-JUN-2014 22:46
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-08ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 84
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	20.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	174452	91.6810	1800
	23 1,1-Dichloroethane	63	3.789	3.782	(0.724)	19239	4.51441	90
$	36 Dibromofluoromethane	113	4.641	4.641	(0.886)	80685	56.5573	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	167704	43.3359	870
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13400	55.5576	56
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	191705	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	45593	28.8176	580
$	58 Toluene-d8	98	6.715	6.715	(0.817)	251400	44.2667	44
*	68 Chlorobenzene-d5	117	8.220	8.223	(1.000)	248175	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.159)	154400	50.6437	51
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	130564	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d
Report Date: 25-Jun-2014 16:17

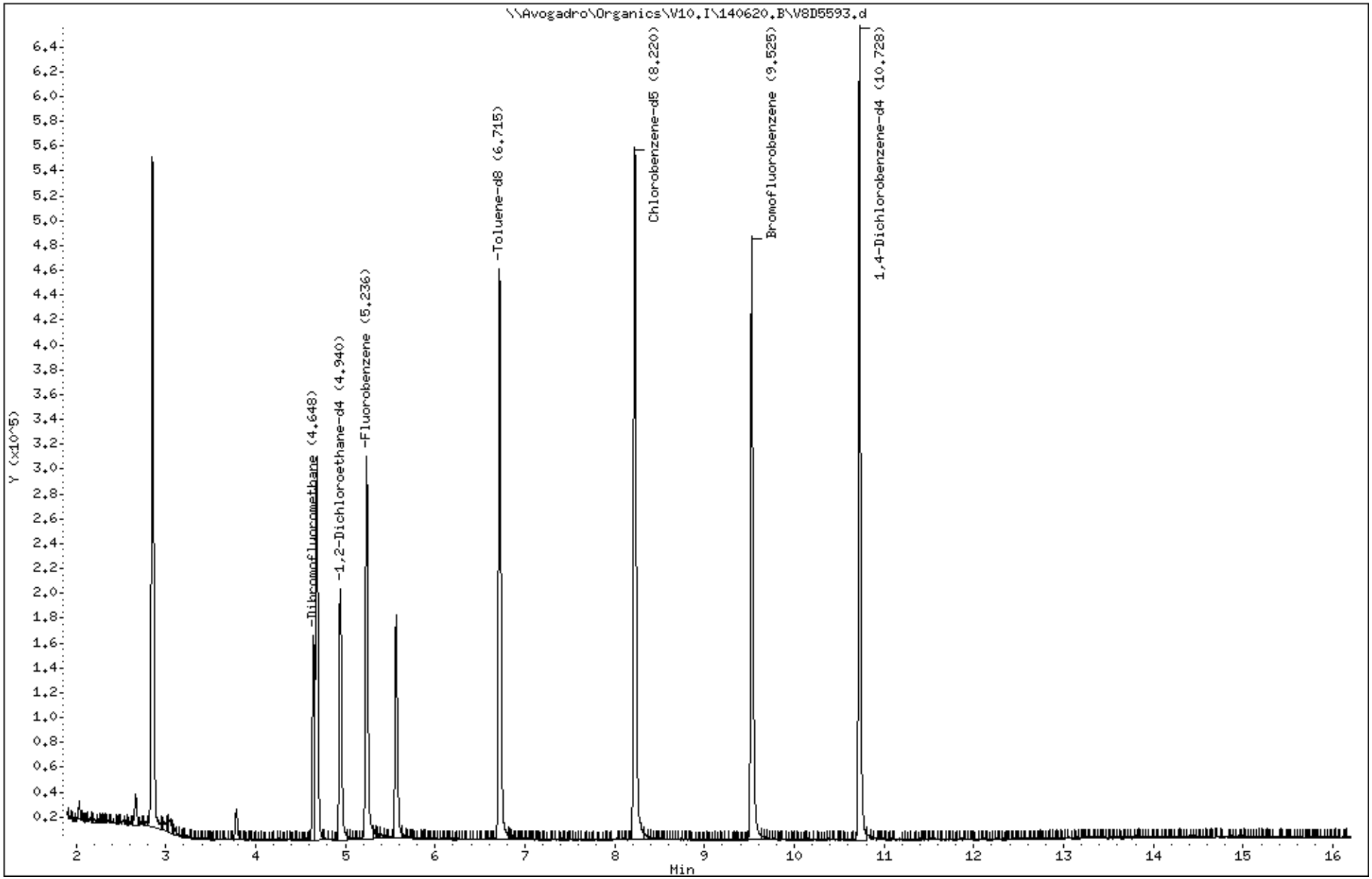
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5593.d
Lab Smp Id: N1055-08ADL Client Smp ID: MW-22S(3)_6/16/14DL
Inj Date : 20-JUN-2014 22:46
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-08ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 84
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d
Date : 20-JUN-2014 22:46
Client ID: MW-22S(3)_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-08ADL,,77692,20
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d

Date : 20-JUN-2014 22:46

Client ID: MW-22S(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-08ADL,,77692,20

Purge Volume: 5.0

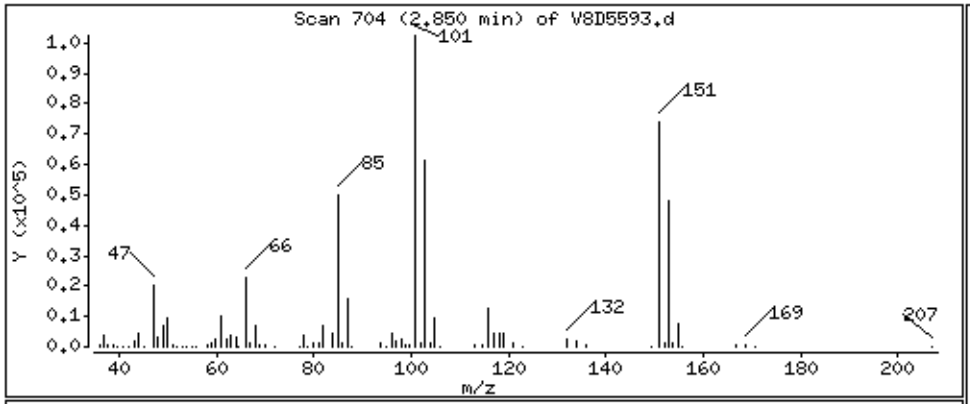
Operator: WL SRC: LIMS

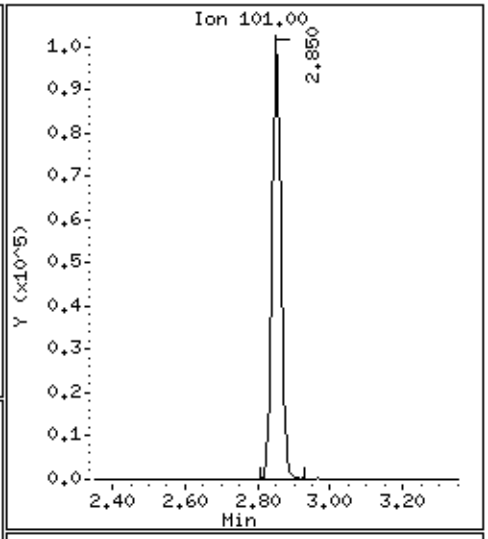
Column phase: DB-624

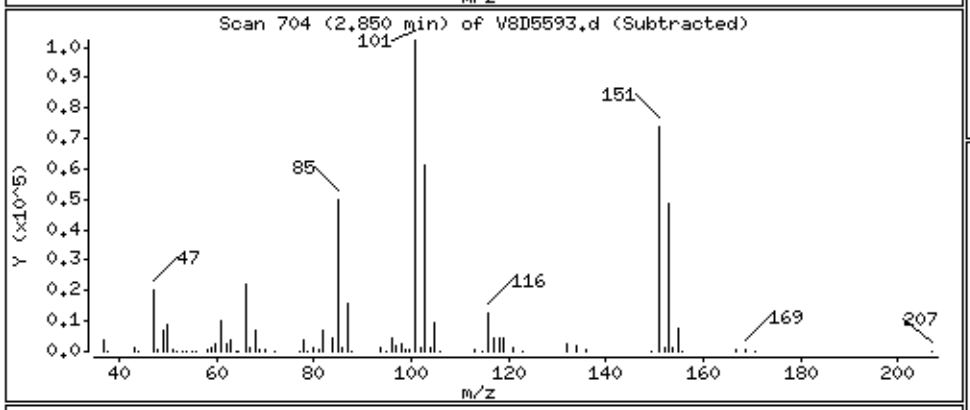
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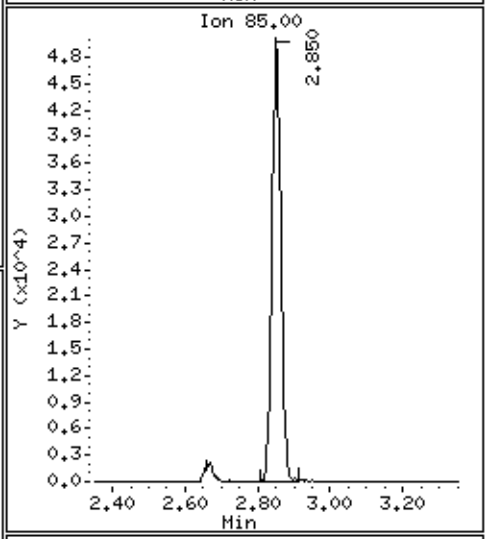
11 1,1,2-Trichloro-1,2,2-Trifluo

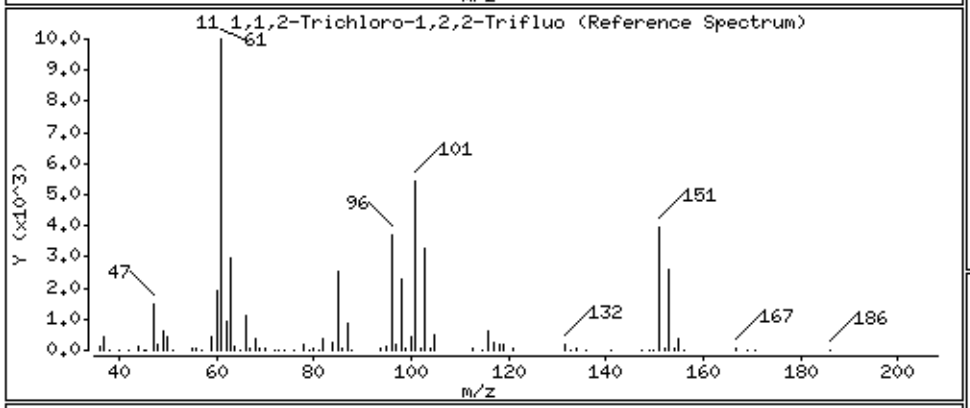
Concentration: 1800 ug/L

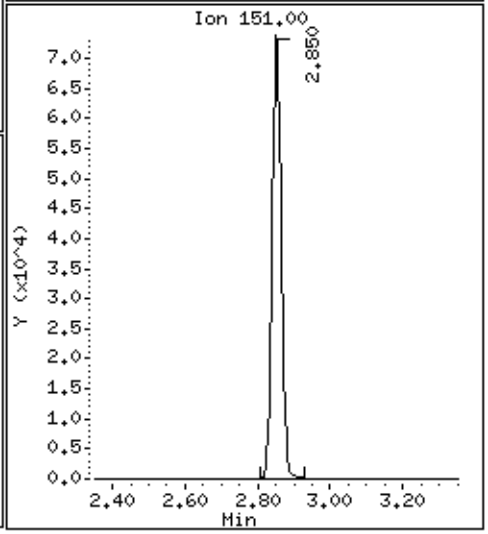


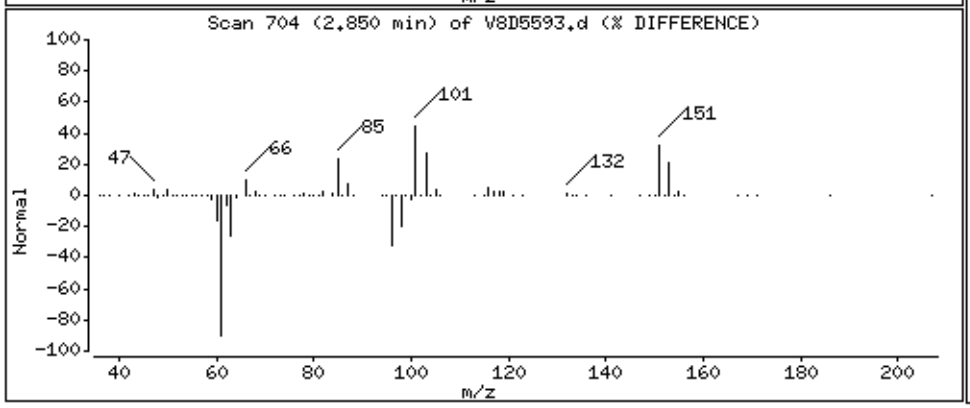












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d

Date : 20-JUN-2014 22:46

Client ID: MW-22S(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-08ADL,,77692,20

Purge Volume: 5.0

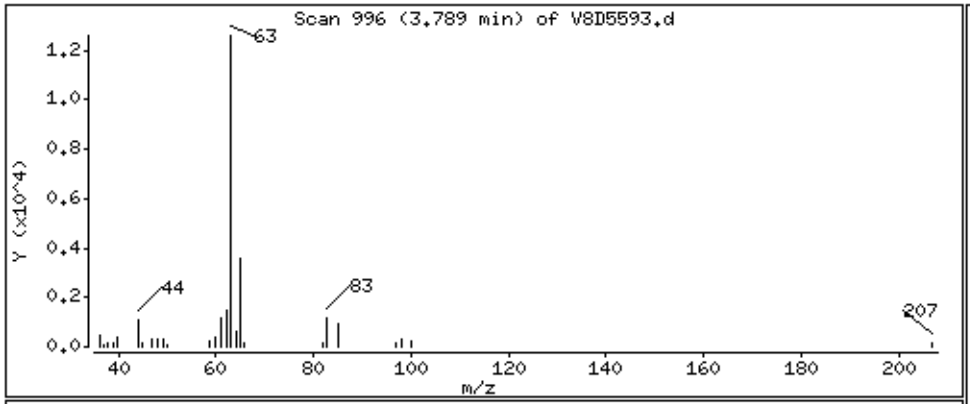
Operator: WL SRC: LIMS

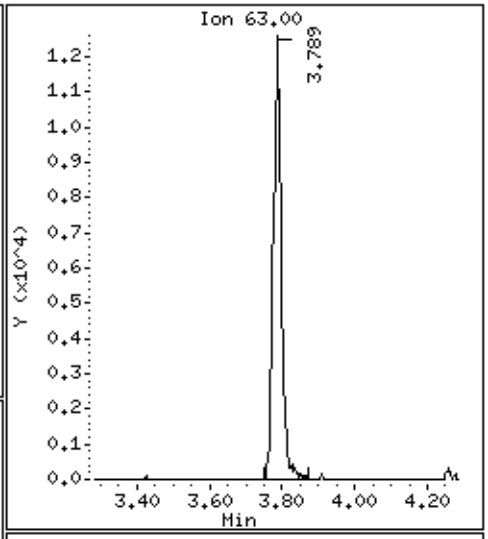
Column phase: DB-624

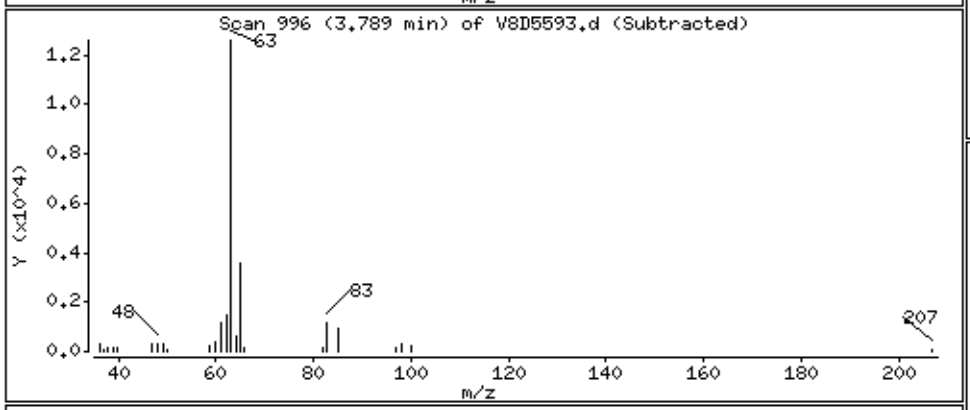
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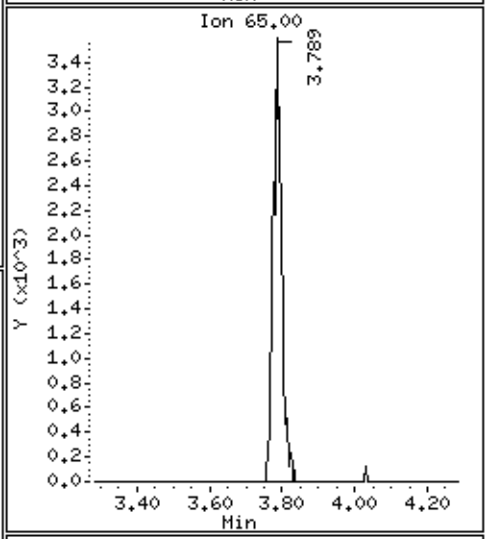
23 1,1-Dichloroethane

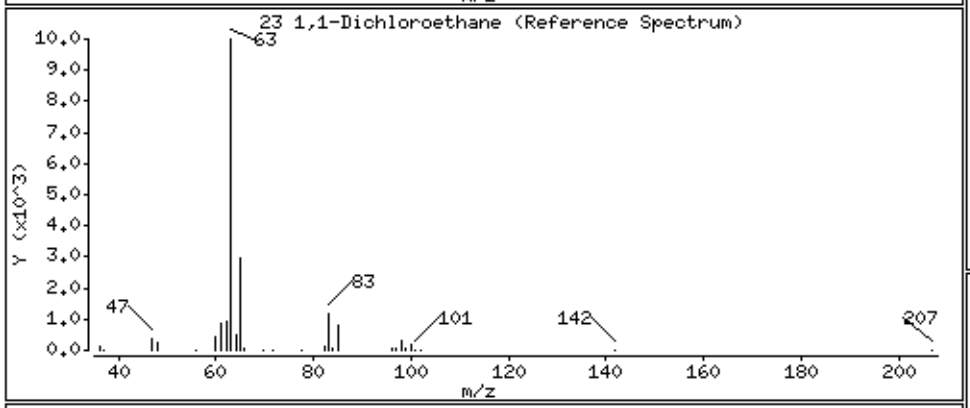
Concentration: 90 ug/L

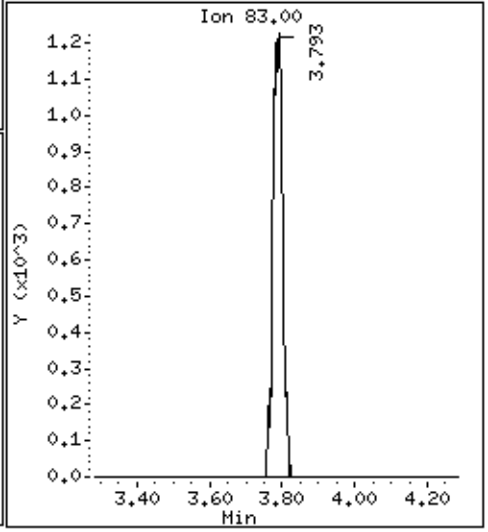


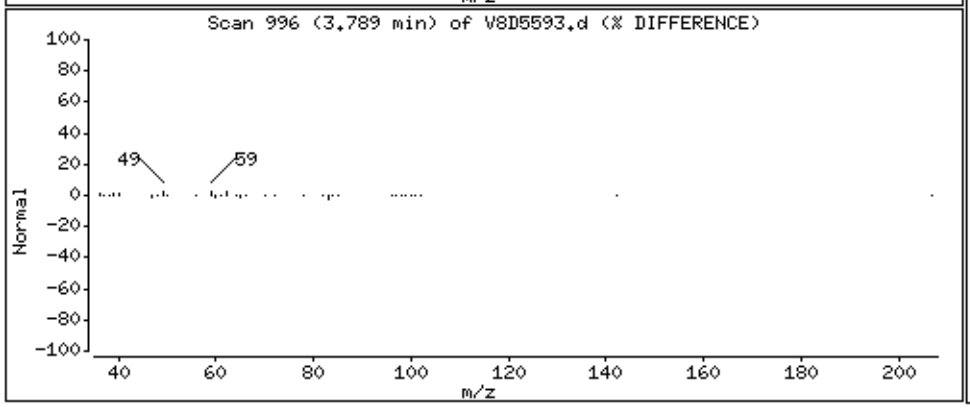












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d

Date : 20-JUN-2014 22:46

Client ID: MW-22S(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-08ADL,,77692,20

Purge Volume: 5.0

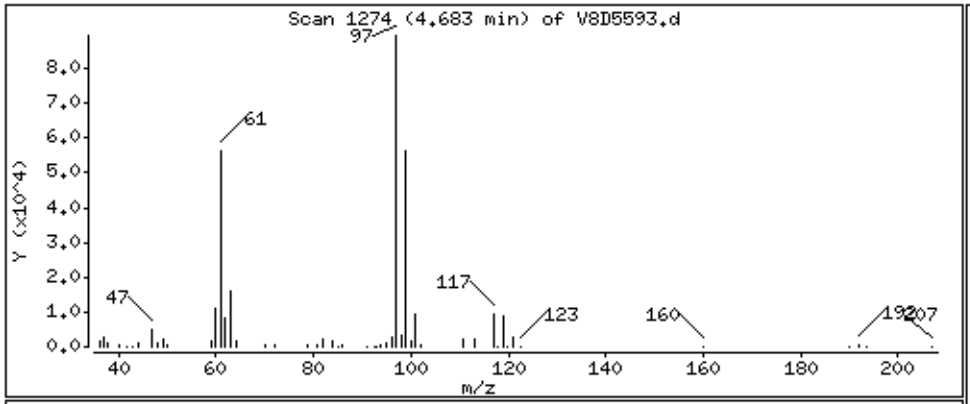
Operator: WL SRC: LIMS

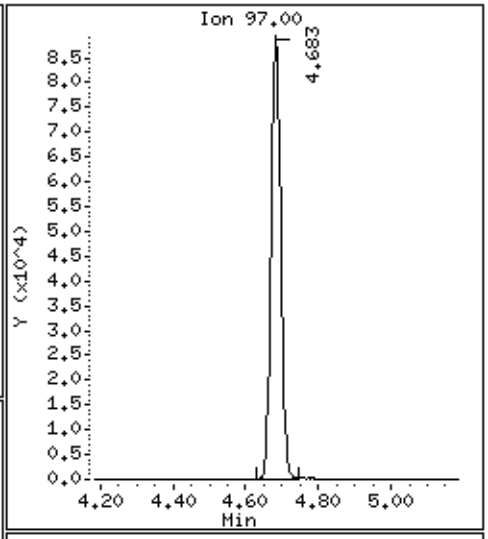
Column phase: DB-624

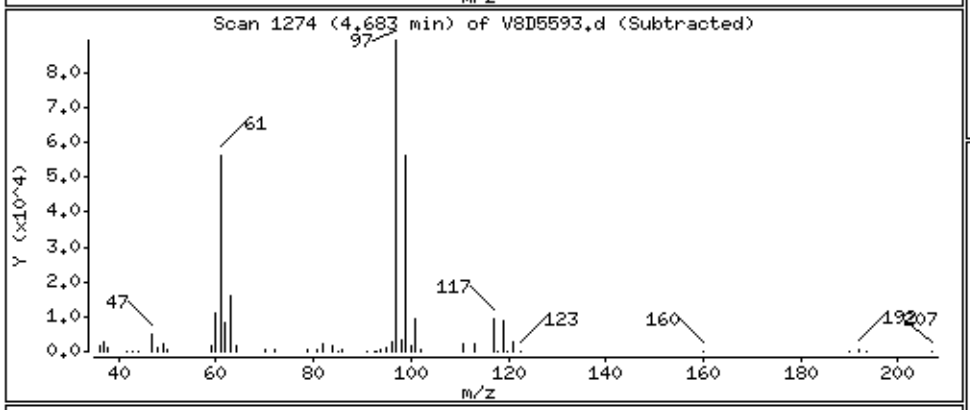
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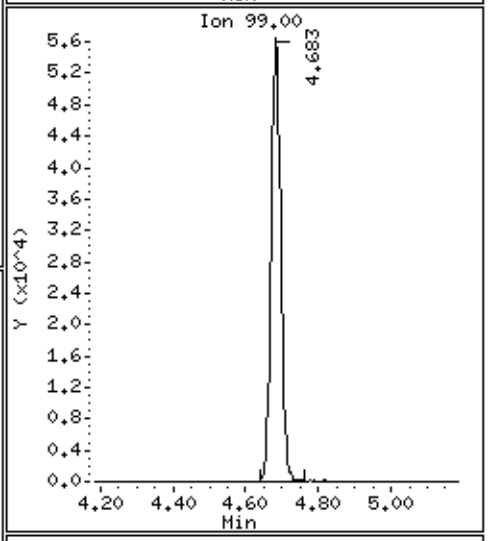
37 1,1,1-Trichloroethane

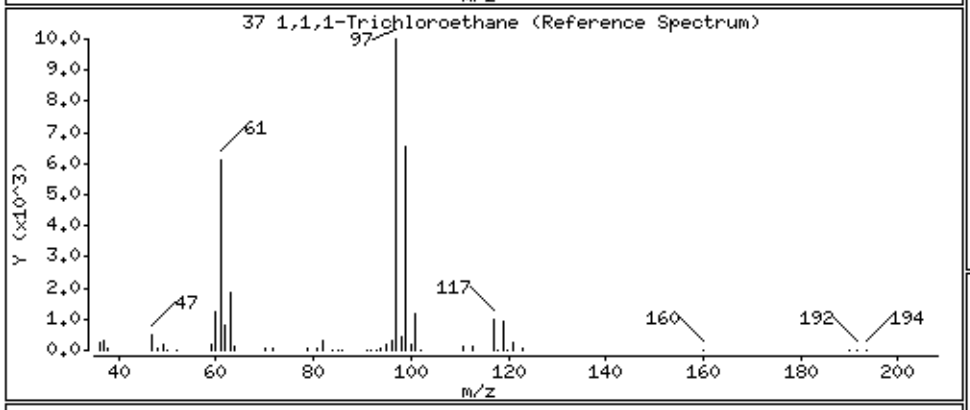
Concentration: 870 ug/L

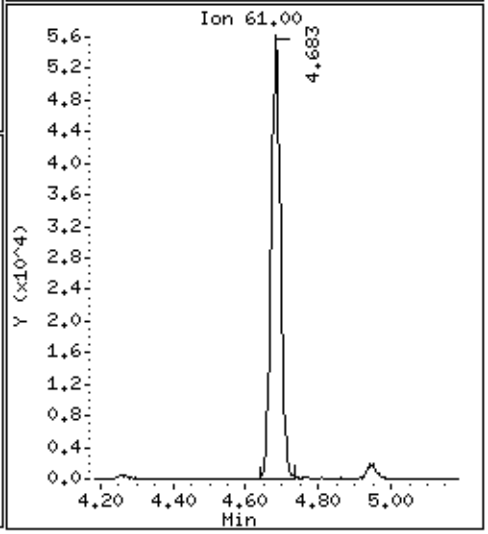


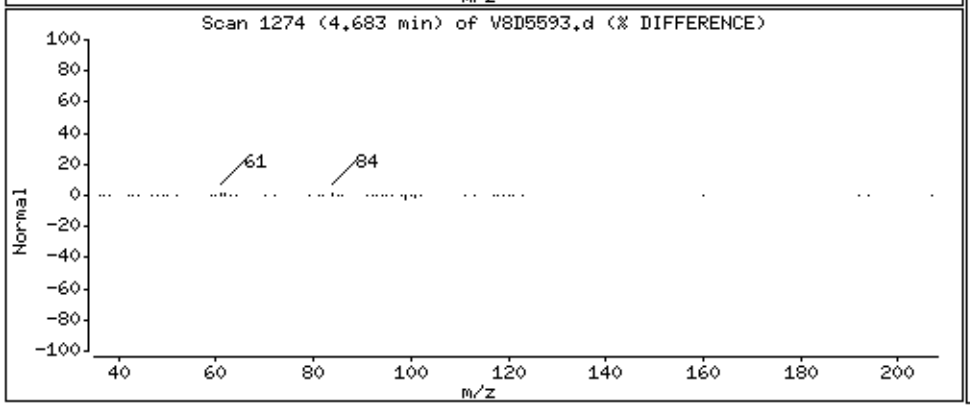












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5593.d

Date : 20-JUN-2014 22:46

Client ID: MW-22S(3)_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-08ADL,,77692,20

Purge Volume: 5.0

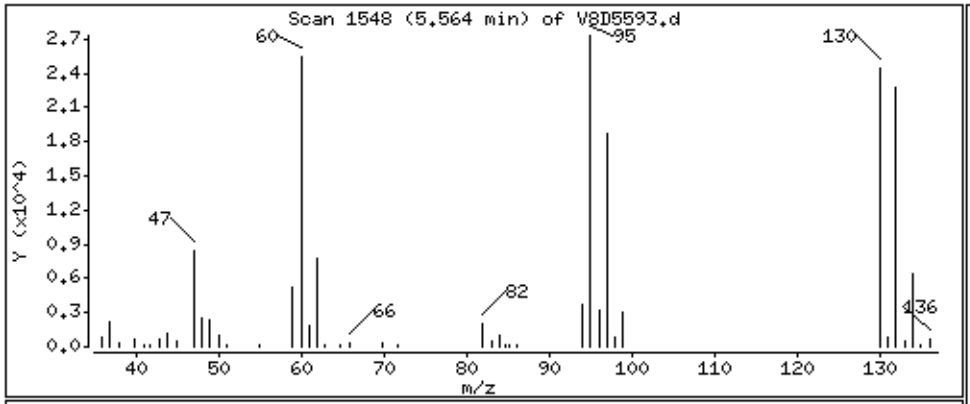
Operator: WL SRC: LIMS

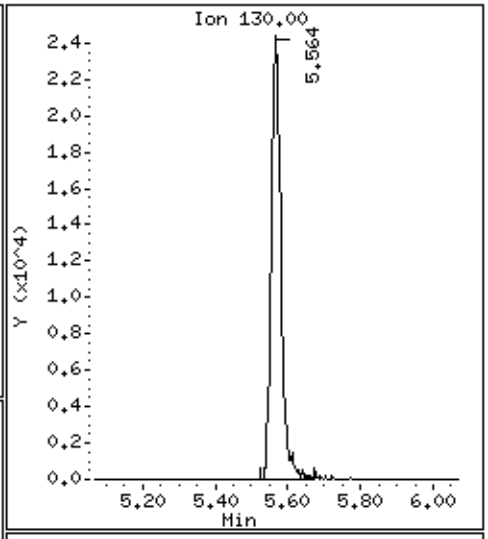
Column phase: DB-624

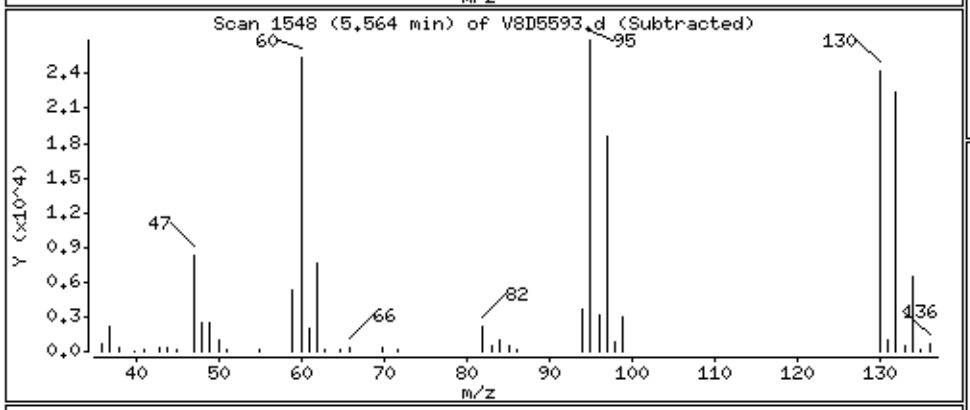
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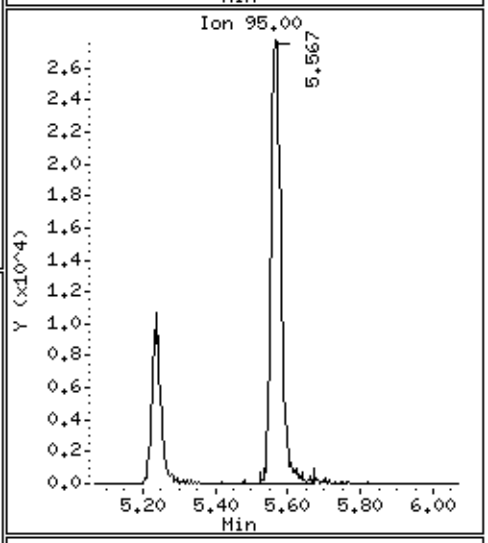
47 Trichloroethene

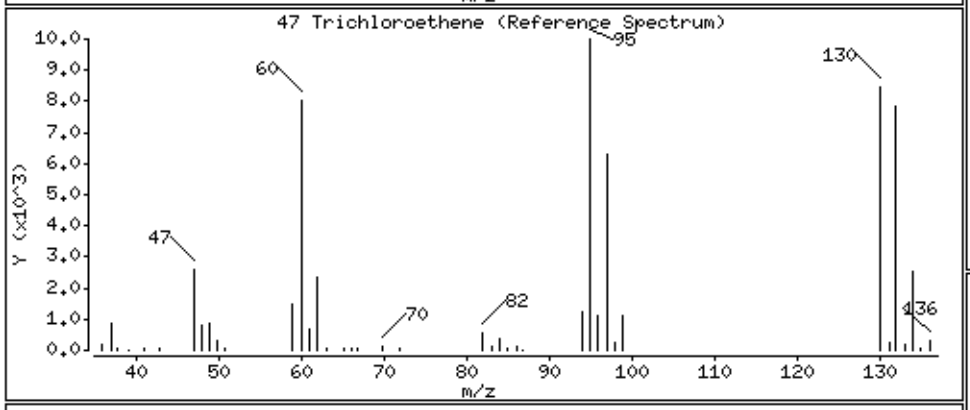
Concentration: 580 ug/L

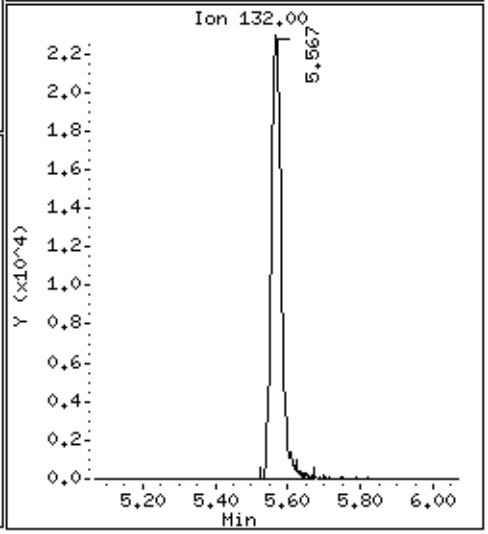


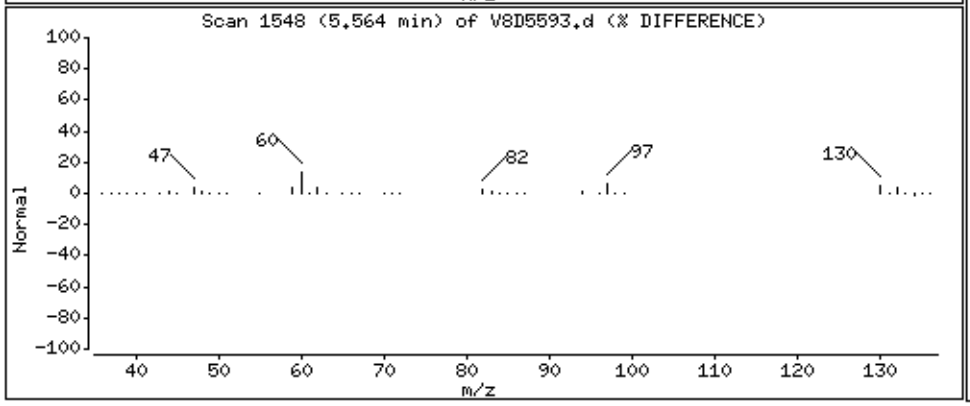












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5524.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	87	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	7.0	
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	1000	E
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	770	E
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

EPA SAMPLE NO.

MW-27_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5524.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2800	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-27_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5524.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	37	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5524.d
Lab Smp Id: N1055-09A Client Smp ID: MW-27_6/17/14
Inj Date : 19-JUN-2014 13:56
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-09A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.544)	5643995	2801.99	2800(A)
	23 1,1-Dichloroethane	63	3.782	3.786	(0.722)	392106	86.9157	87
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	12512	7.02744	7.0
$	36 Dibromofluoromethane	113	4.644	4.644	(0.886)	86526	57.2953	57
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.893)	4294990	1048.44	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.944)	12970	50.7990	51
M	50 1,2-Dichloroethene (Total)	96				12512	7.02744	7.0
*	46 Fluorobenzene	96	5.242	5.236	(1.000)	202935	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.061)	1297376	774.644	770(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	251255	48.3766	48
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	226960	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.522	(1.159)	133680	47.9461	48
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	107968	50.0000	(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5524.d
Lab Smp Id: N1055-09A Client Smp ID: MW-27_6/17/14
Inj Date : 19-JUN-2014 13:56
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-09A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

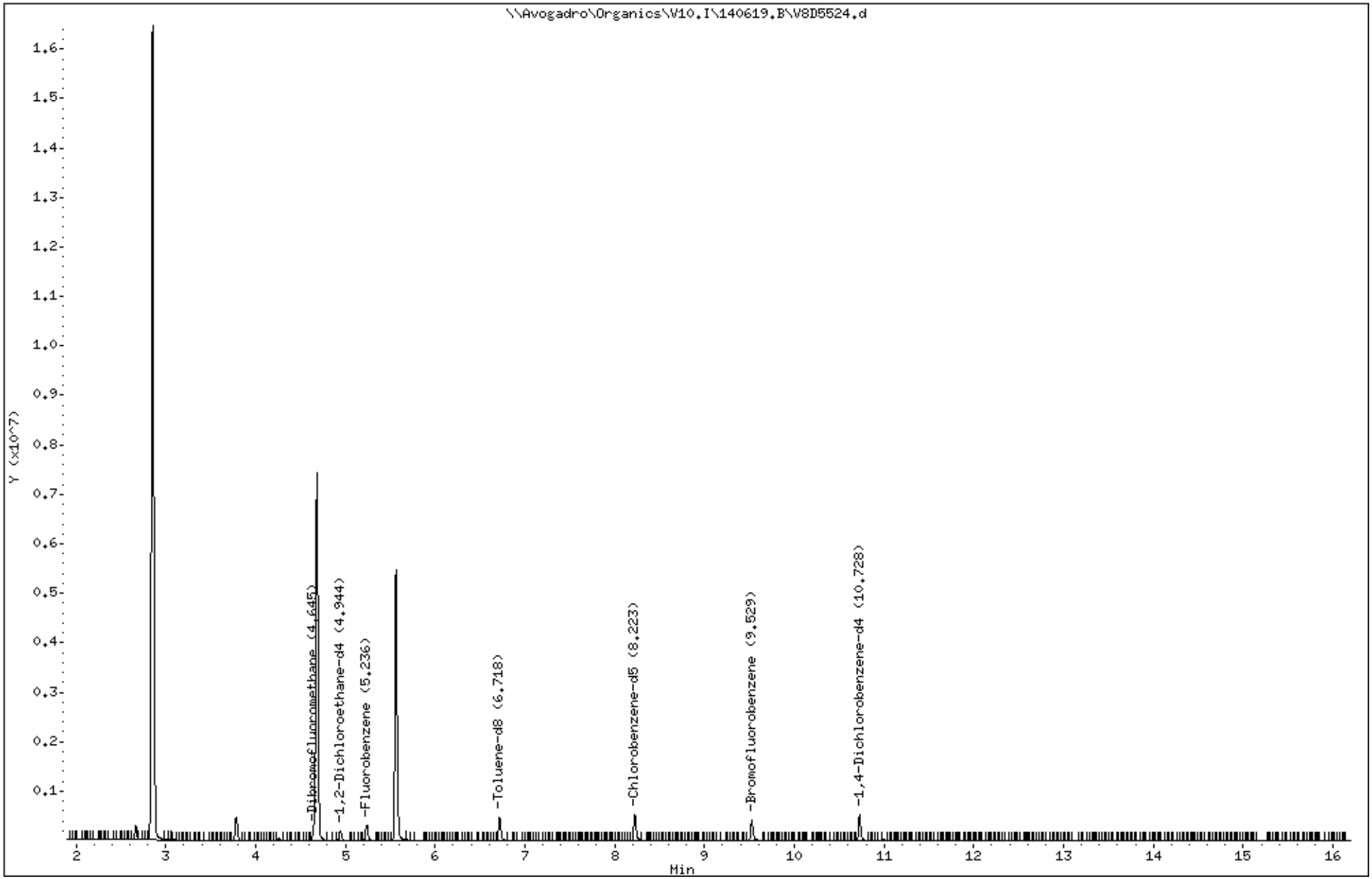
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.243	598650	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.664	447130	37.3448162	37	87	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d
Date : 19-JUN-2014 13:56
Client ID: MW-27_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1055-09A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d

Date : 19-JUN-2014 13:56

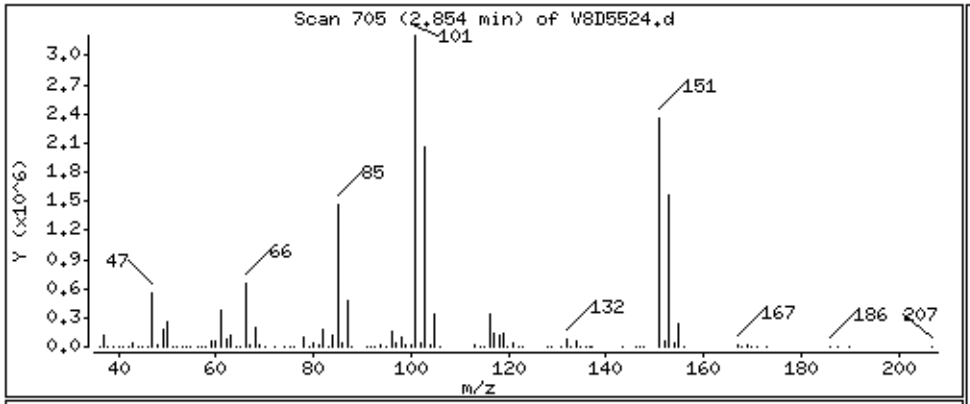
Client ID: MW-27_6/17/14 Instrument: V10.i

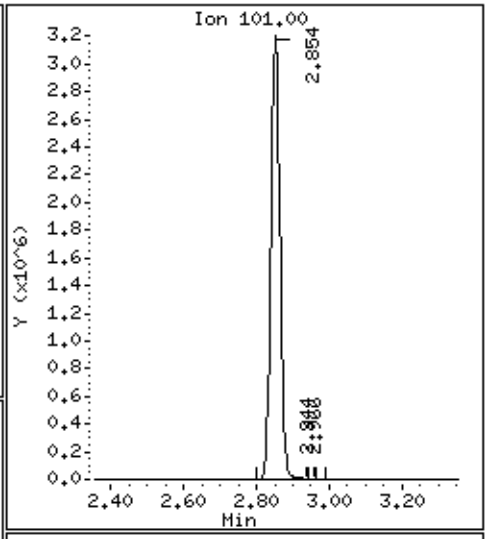
Sample Info: 5ML,N1055-09A,,77659

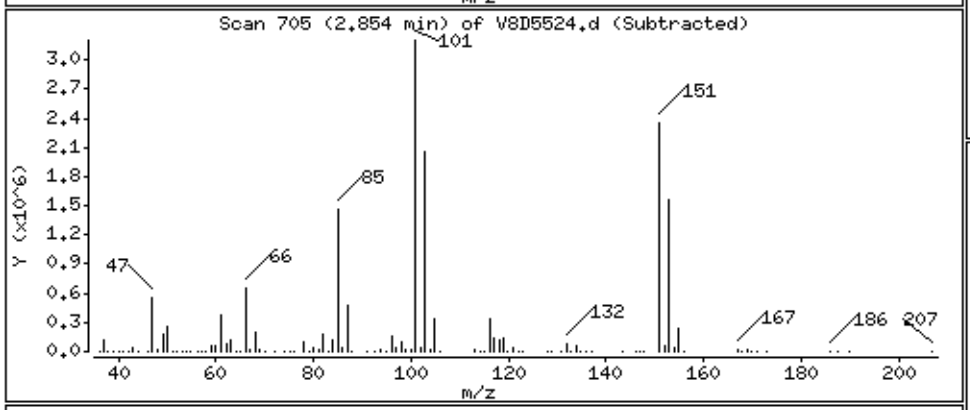
Purge Volume: 5.0 Operator: WL SRC: LIMS

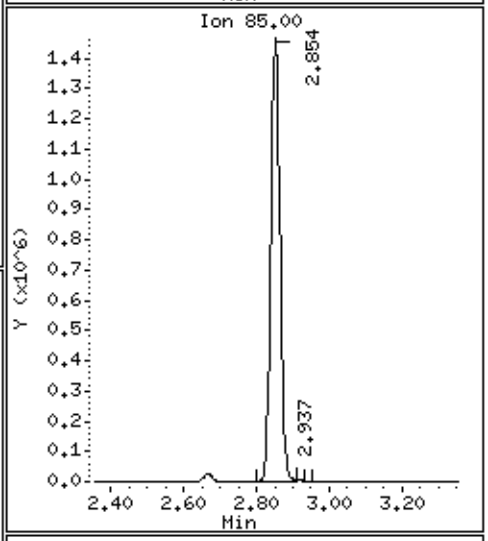
Column phase: DB-624 Column diameter: 0.25

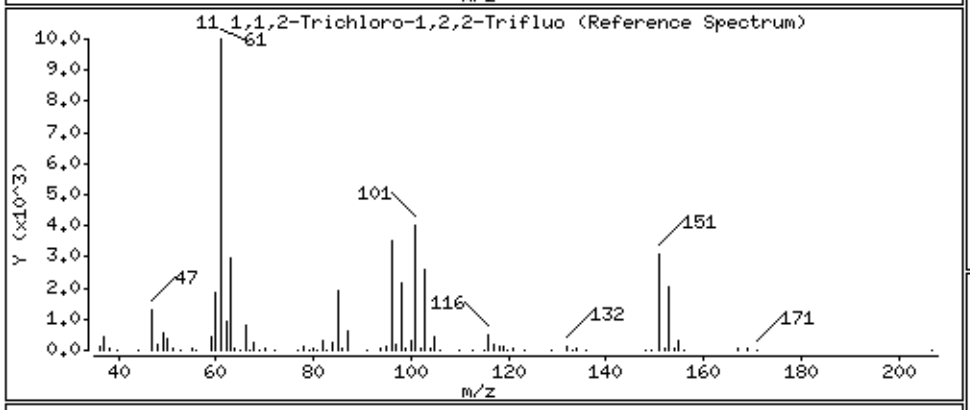
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2800 ug/L

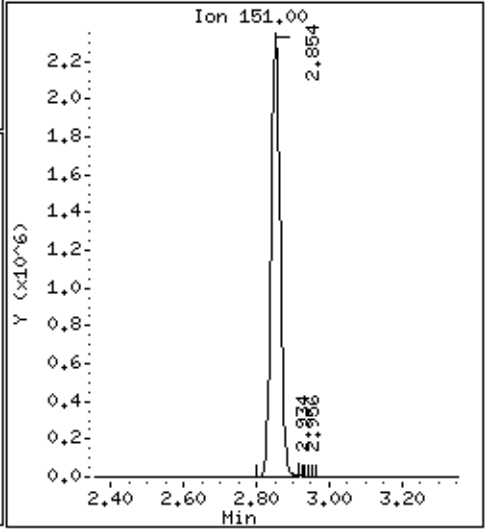


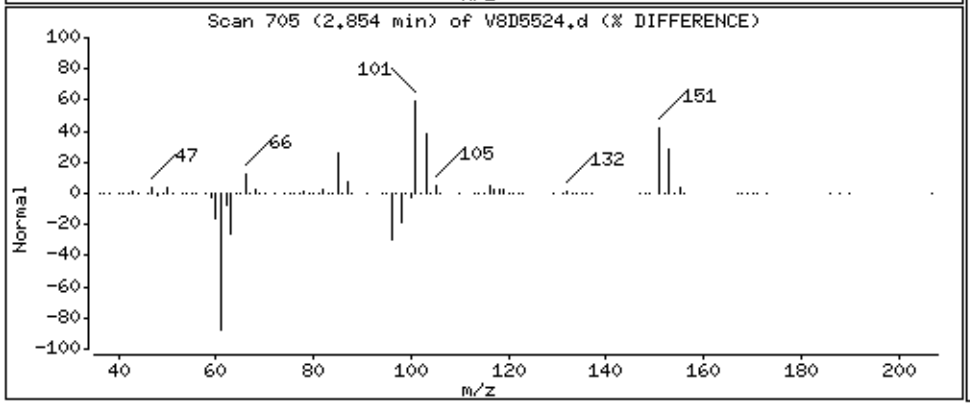












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d

Date : 19-JUN-2014 13:56

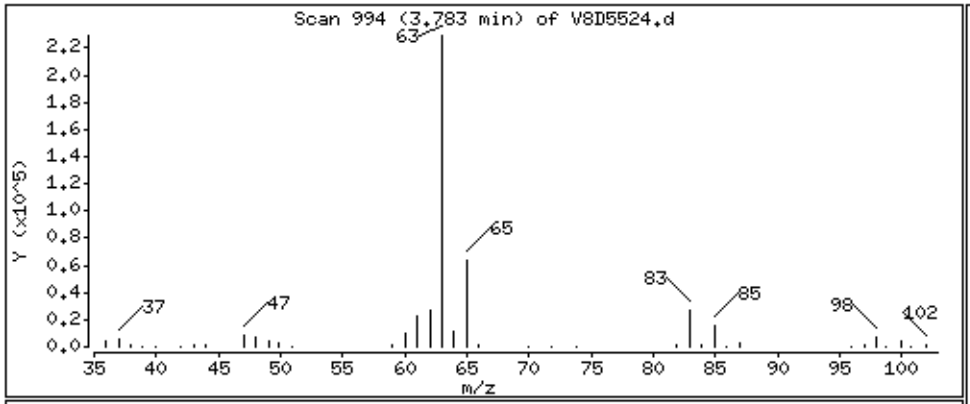
Client ID: MW-27_6/17/14 Instrument: V10.i

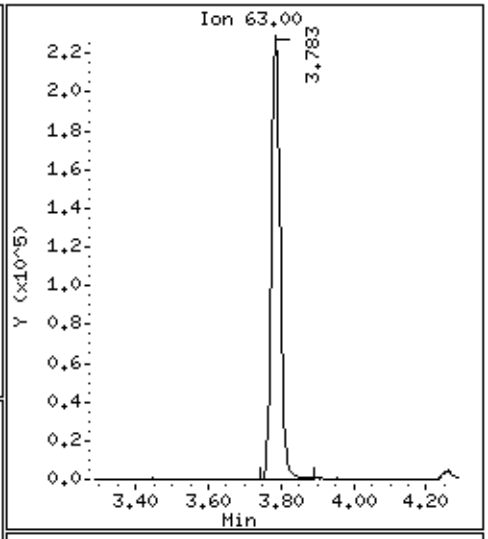
Sample Info: 5ML,N1055-09A,,77659

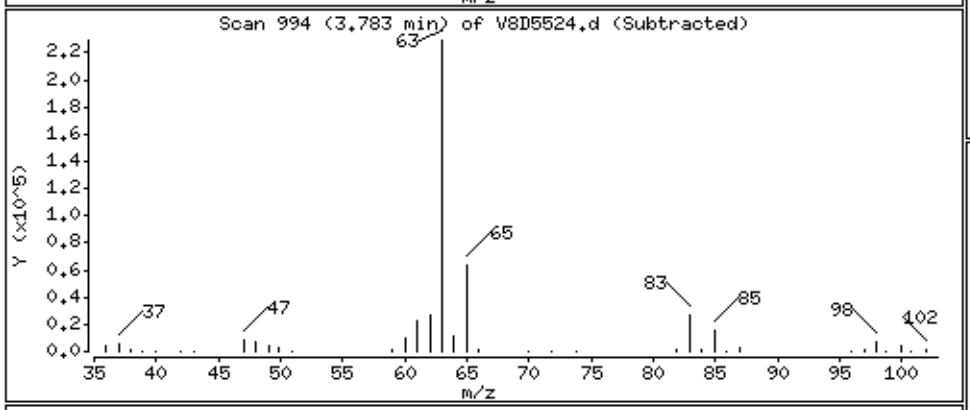
Purge Volume: 5.0 Operator: WL SRC: LIMS

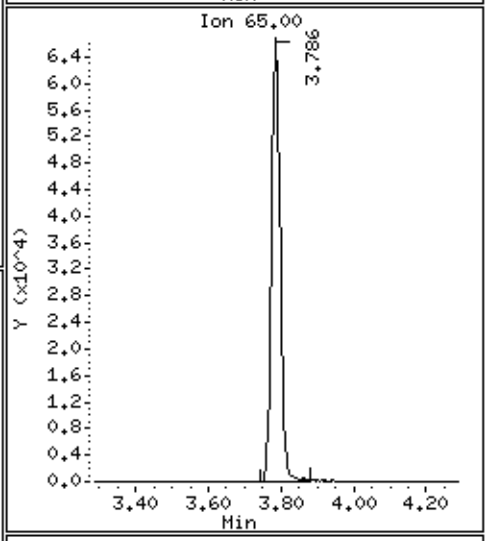
Column phase: DB-624 Column diameter: 0.25

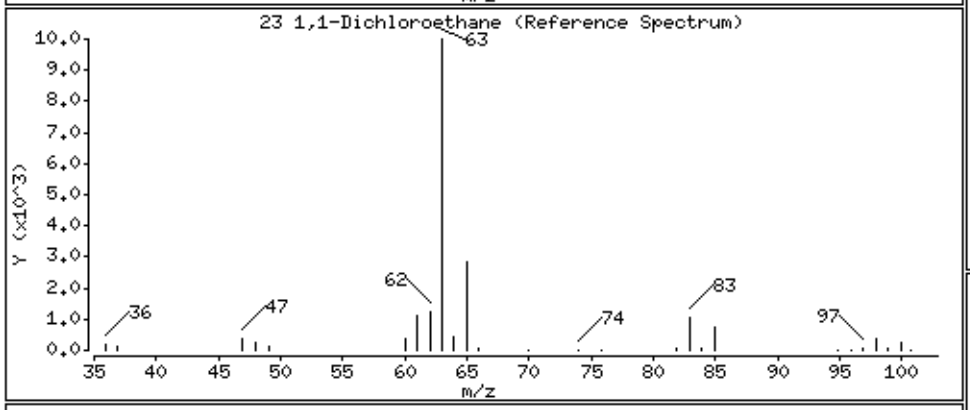
23 1,1-Dichloroethane Concentration: 87 ug/L

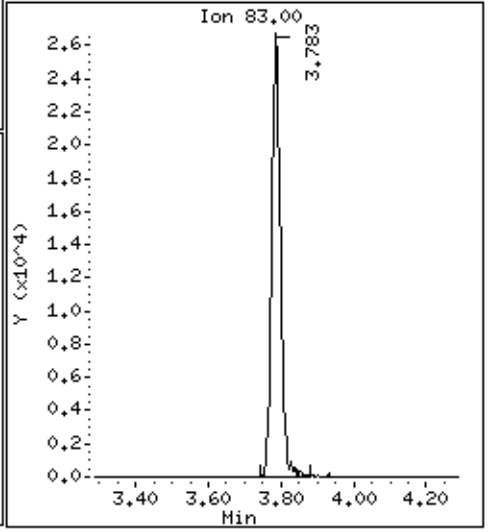


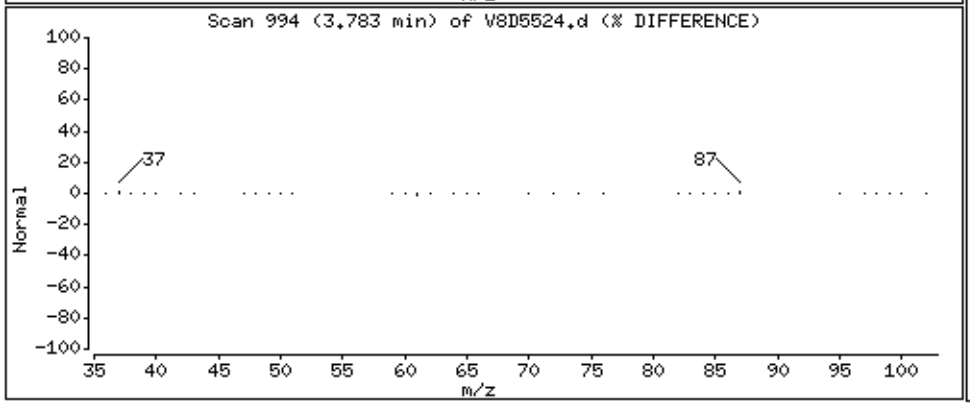












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d

Date : 19-JUN-2014 13:56

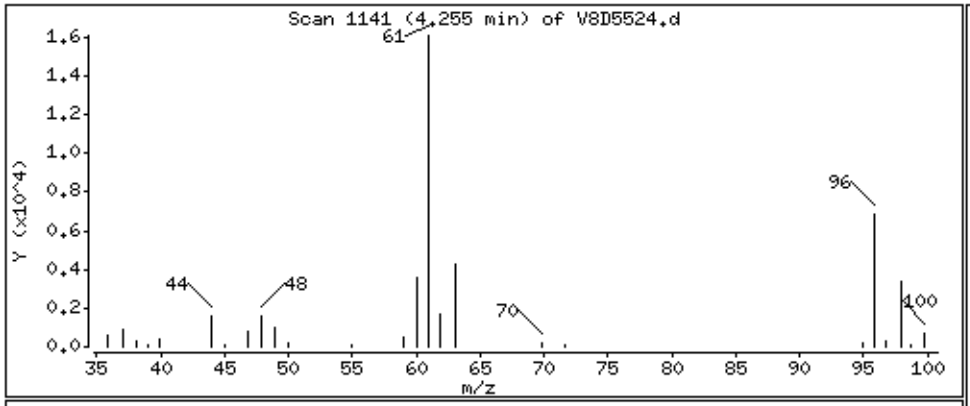
Client ID: MW-27_6/17/14 Instrument: V10.i

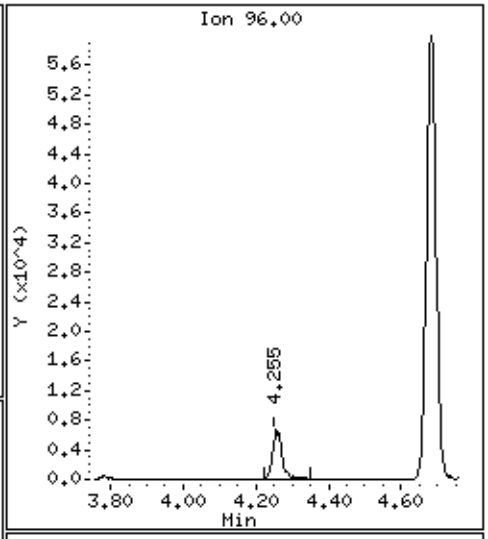
Sample Info: 5ML,N1055-09A,,77659

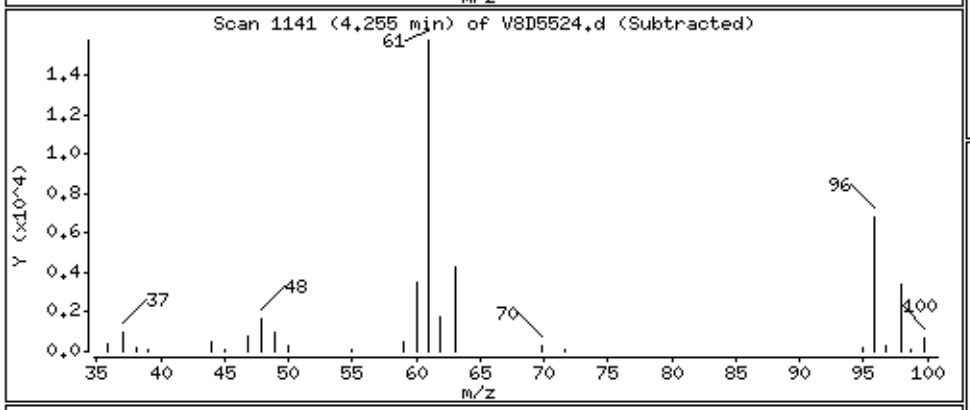
Purge Volume: 5.0 Operator: WL SRC: LIMS

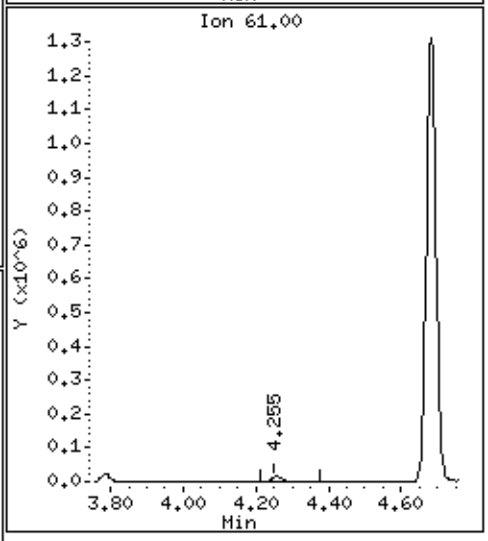
Column phase: DB-624 Column diameter: 0.25

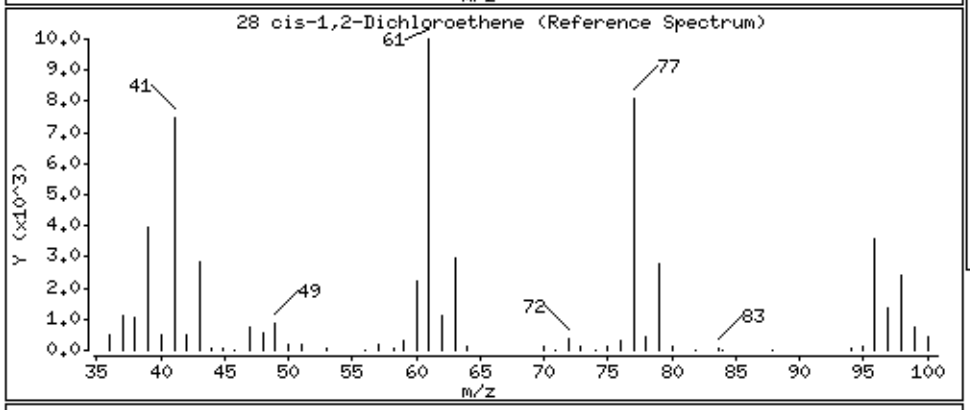
28 cis-1,2-Dichloroethene Concentration: 7.0 ug/L

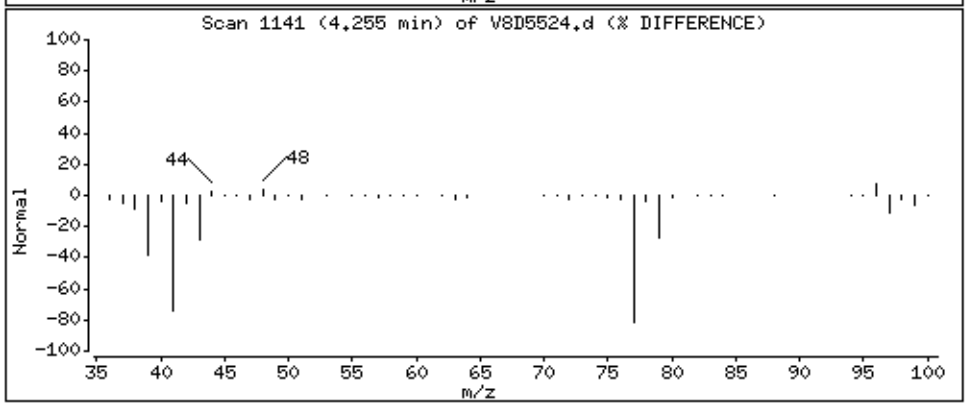












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d

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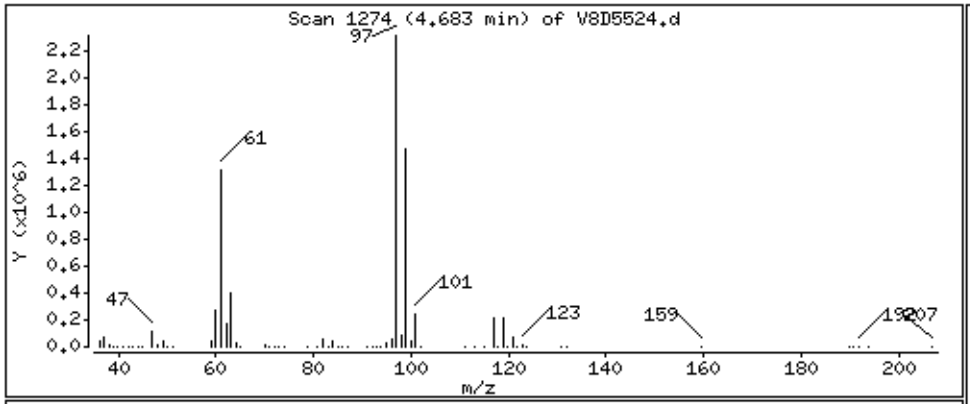
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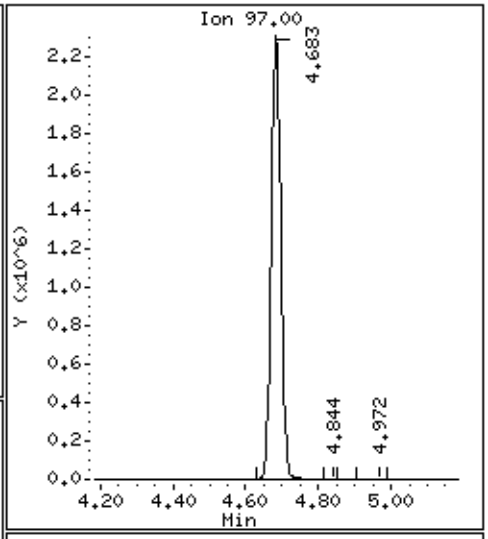
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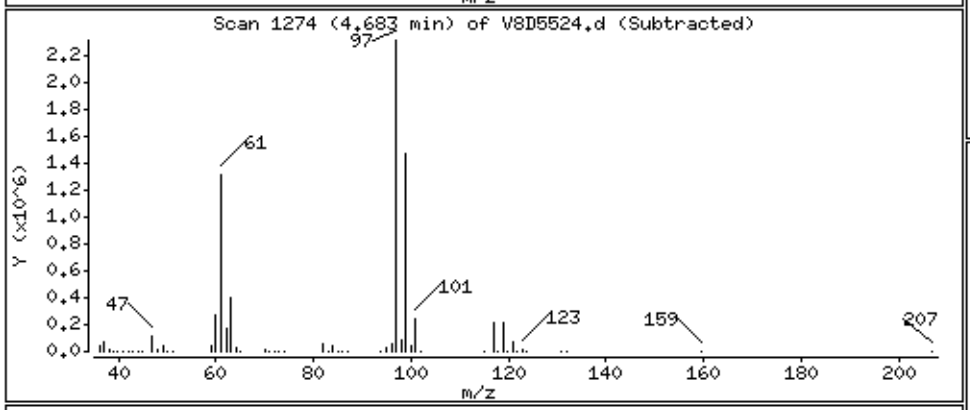
Purge Volume: 5.0 Operator: WL SRC: LIMS

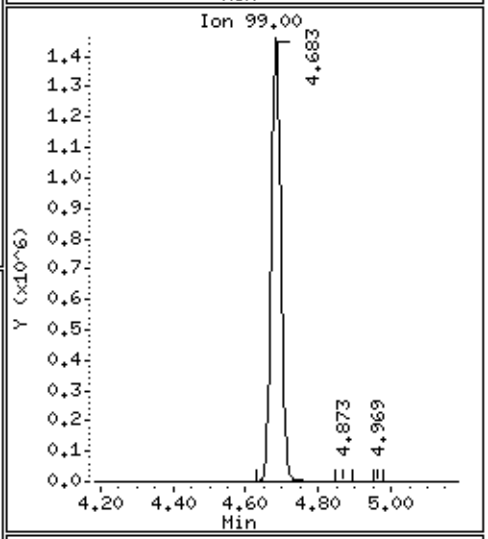
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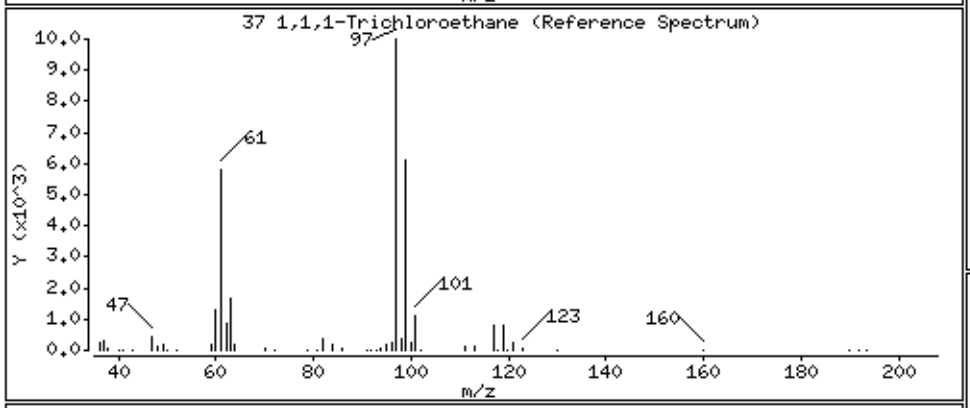
37 1,1,1-Trichloroethane Concentration: 1000 ug/L

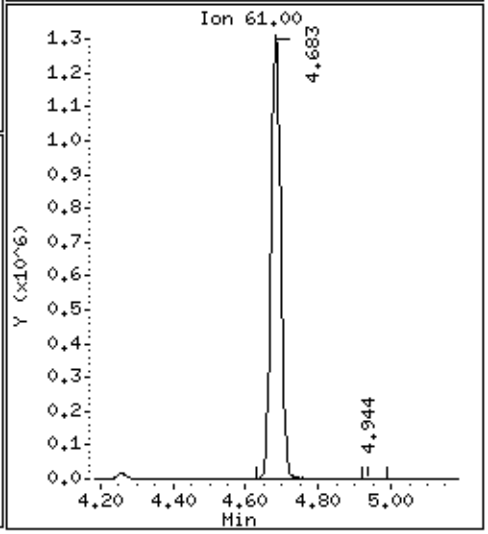


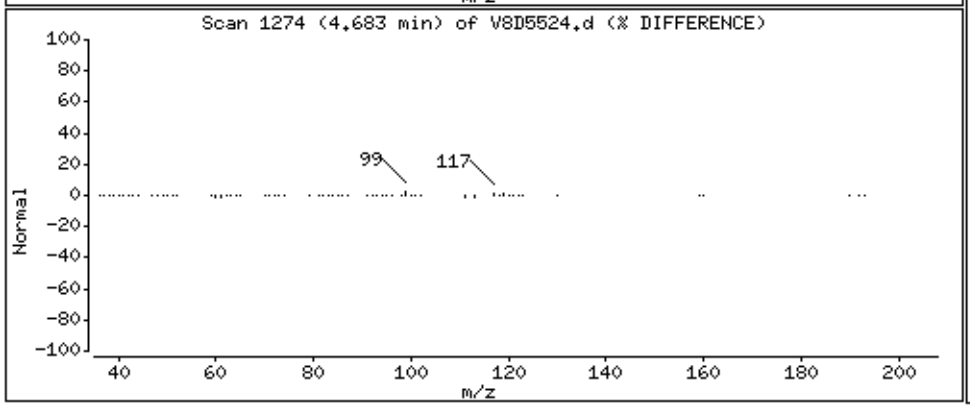












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d

Date : 19-JUN-2014 13:56

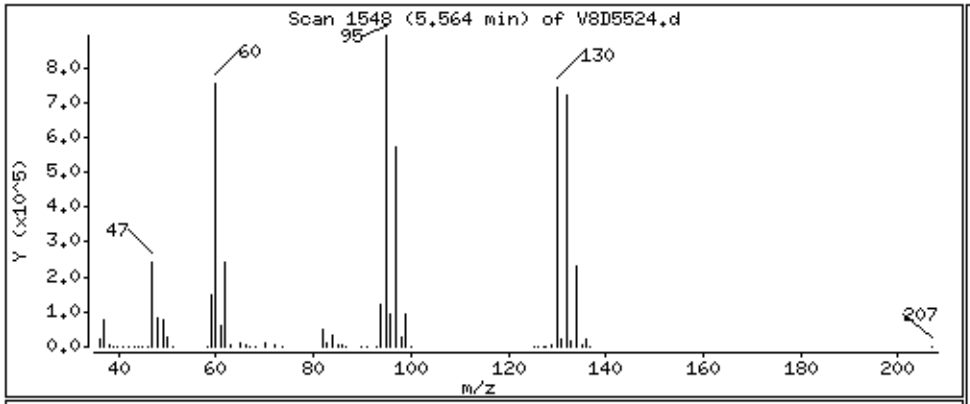
Client ID: MW-27_6/17/14 Instrument: V10.i

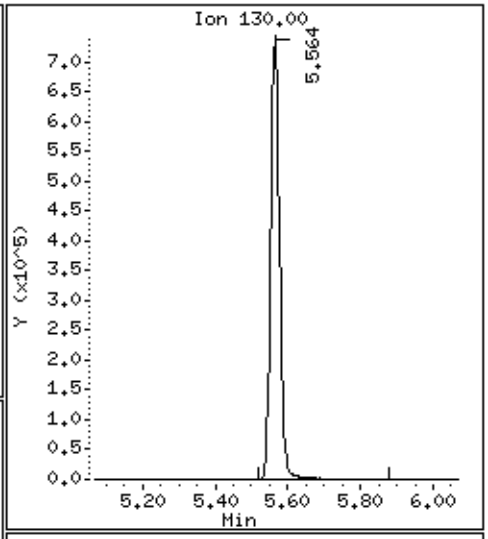
Sample Info: 5ML,N1055-09A,,77659

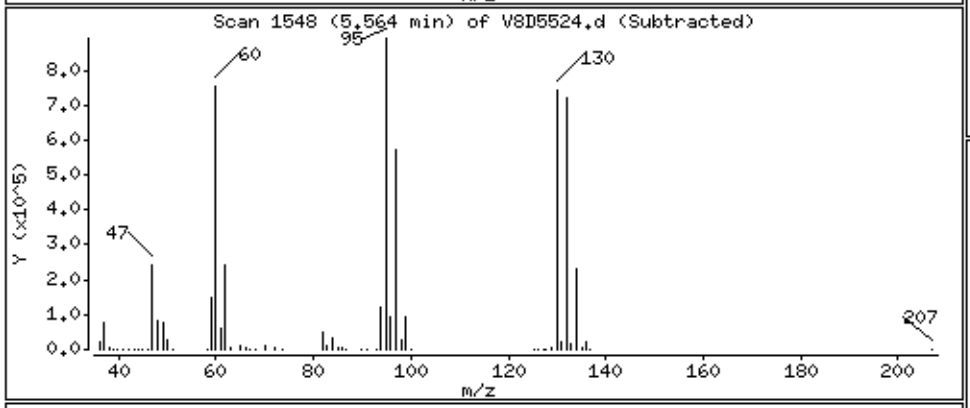
Purge Volume: 5.0 Operator: WL SRC: LIMS

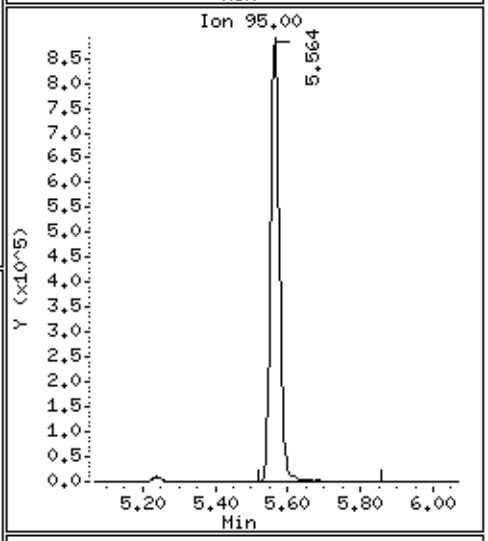
Column phase: DB-624 Column diameter: 0.25

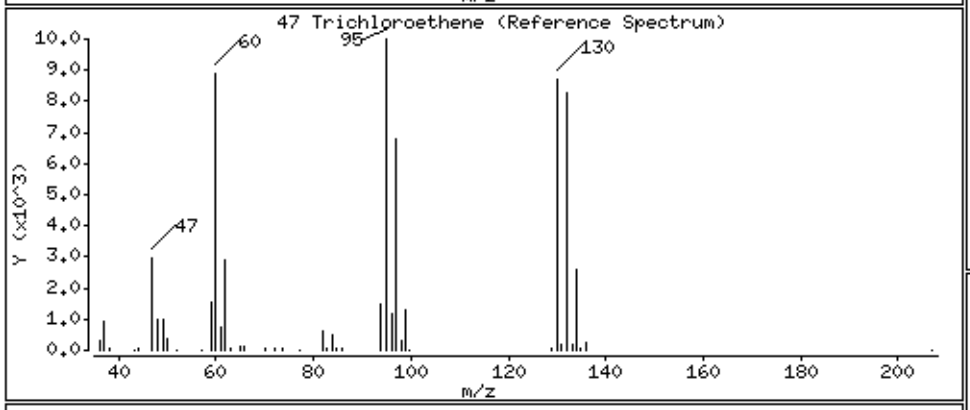
47 Trichloroethene Concentration: 770 ug/L

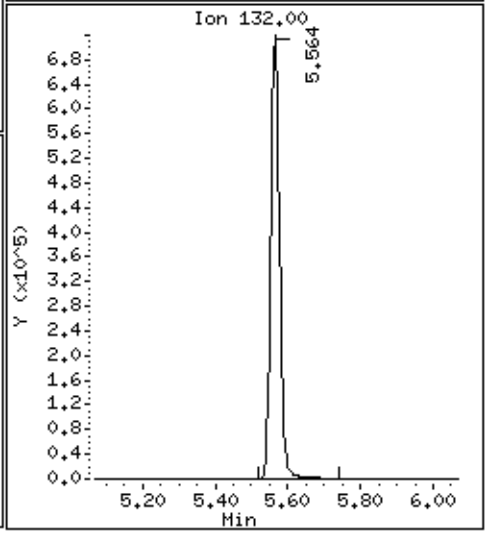


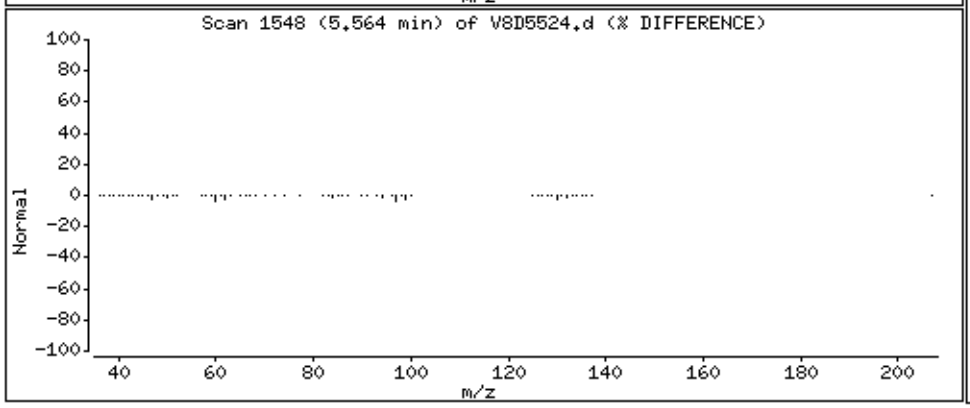












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5524.d

Date : 19-JUN-2014 13:56

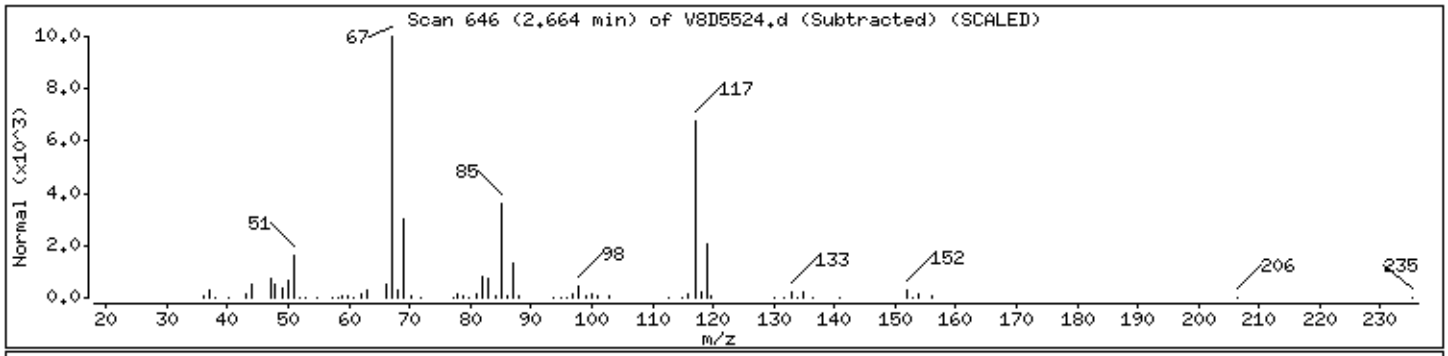
Client ID: MW-27_6/17/14 Instrument: V10.i

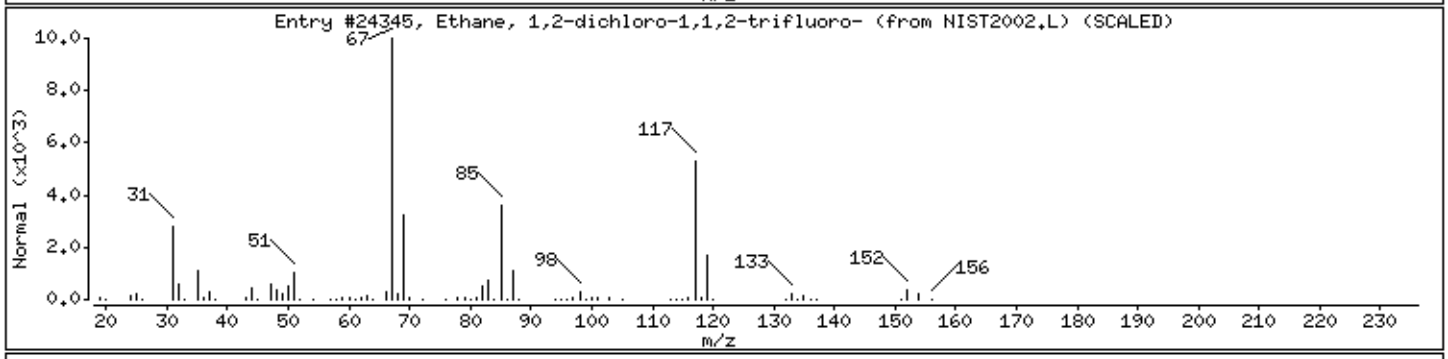
Sample Info: 5ML,N1055-09A,,77659

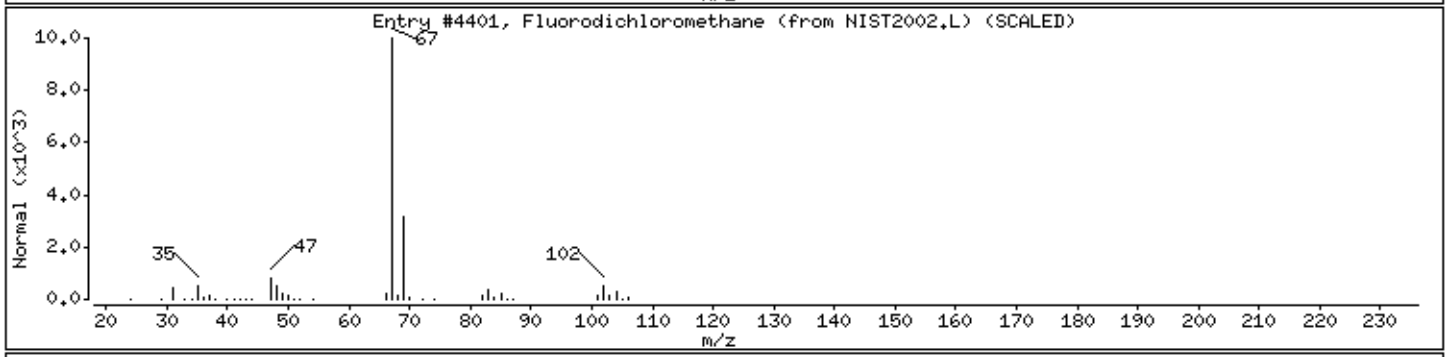
Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	87	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	32	CHCl2F	102







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5594.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	84	D
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	980	D
563-58-6	1,1-Dichloropropene	20	U
56-23-5	Carbon tetrachloride	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	710	D
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5594.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
103-65-1	n-Propylbenzene	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
104-51-8	n-Butylbenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2200	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-27_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5594.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5594.d
Lab Smp Id: N1055-09ADL Client Smp ID: MW-27_6/17/14DL
Inj Date : 20-JUN-2014 23:13
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-09ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 85
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	20.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	195656	112.190	2200
	23 1,1-Dichloroethane	63	3.786	3.782	(0.723)	16396	4.19774	84
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	73242	56.0164	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	173787	48.9983	980
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	11151	50.4442	50
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	175701	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	51734	35.6775	710
$	58 Toluene-d8	98	6.718	6.715	(0.817)	229609	45.4873	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	220581	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.522	(1.159)	132784	49.0020	49
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	113557	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d
Report Date: 25-Jun-2014 16:17

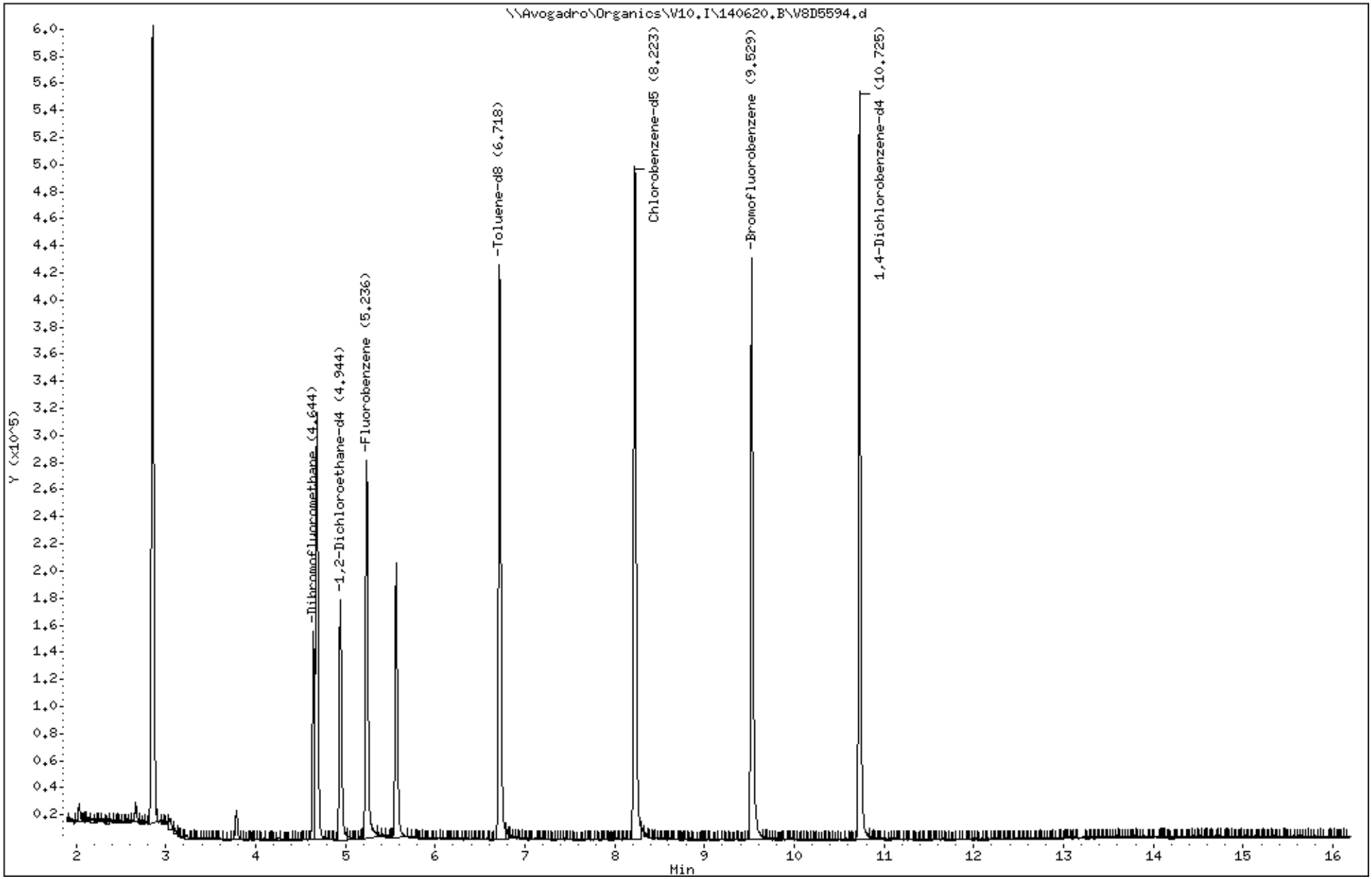
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5594.d
Lab Smp Id: N1055-09ADL Client Smp ID: MW-27_6/17/14DL
Inj Date : 20-JUN-2014 23:13
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-09ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 85
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d
Date : 20-JUN-2014 23:13
Client ID: MW-27_6/17/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-09ADL,,77692,20
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d

Date : 20-JUN-2014 23:13

Client ID: MW-27_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-09ADL,,77692,20

Purge Volume: 5.0

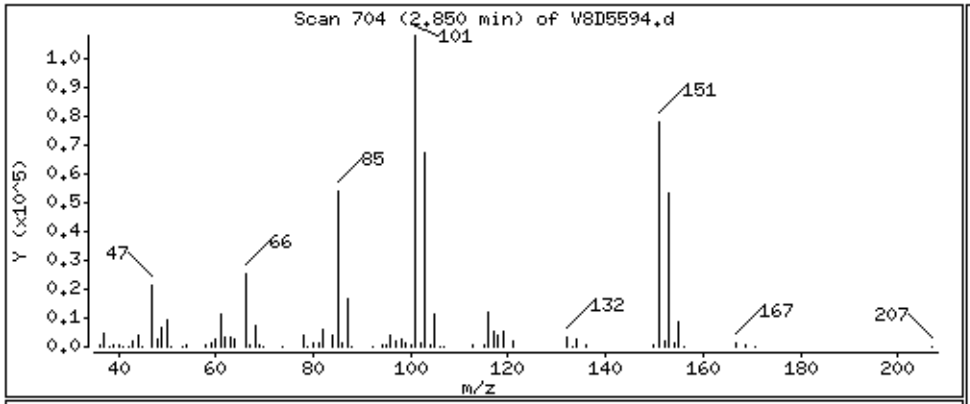
Operator: WL SRC: LIMS

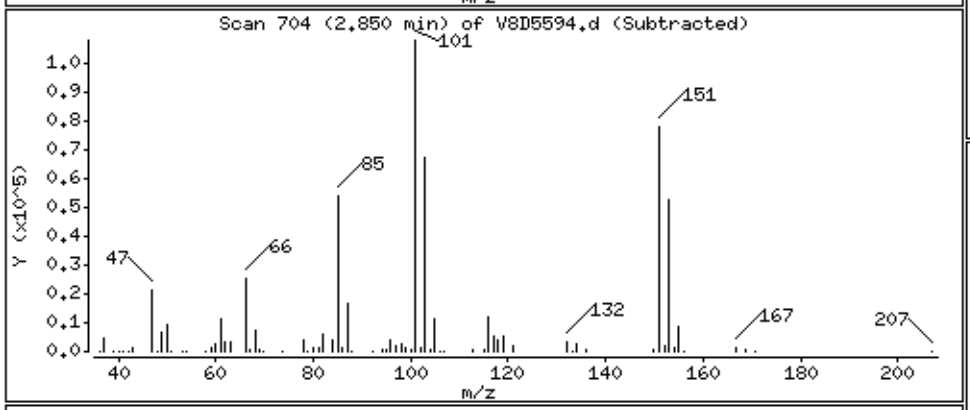
Column phase: DB-624

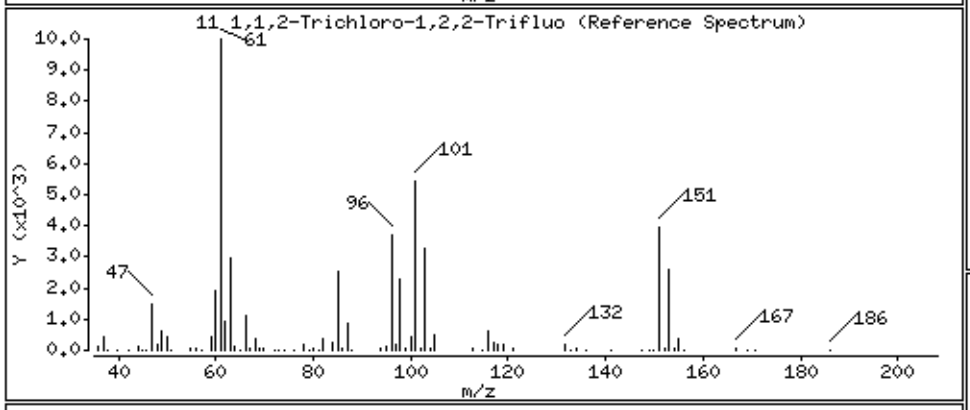
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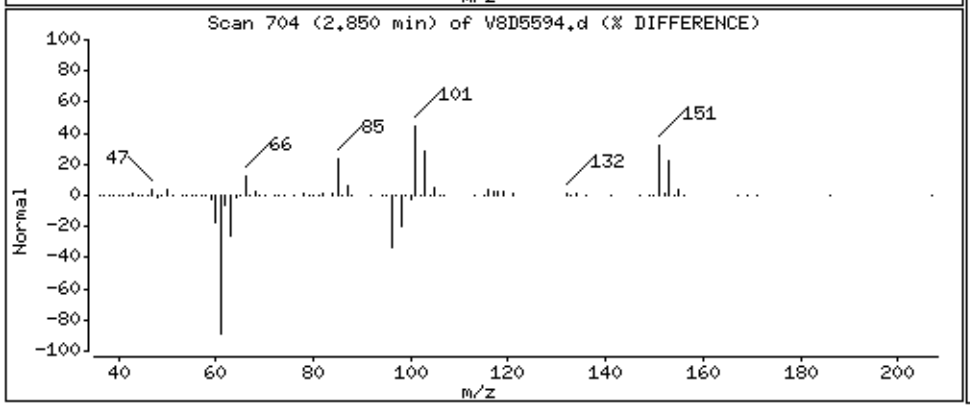
11 1,1,2-Trichloro-1,2,2-Trifluo

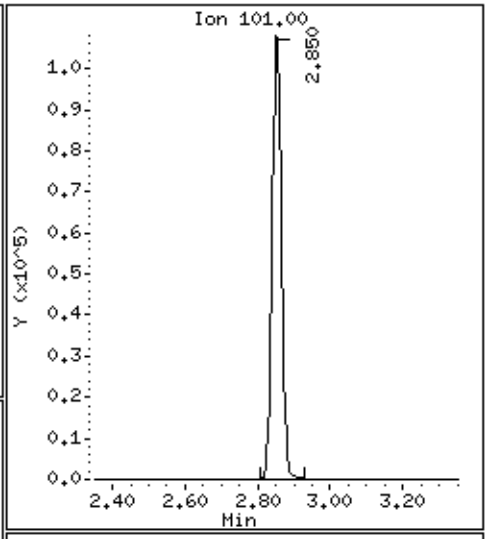
Concentration: 2200 ug/L

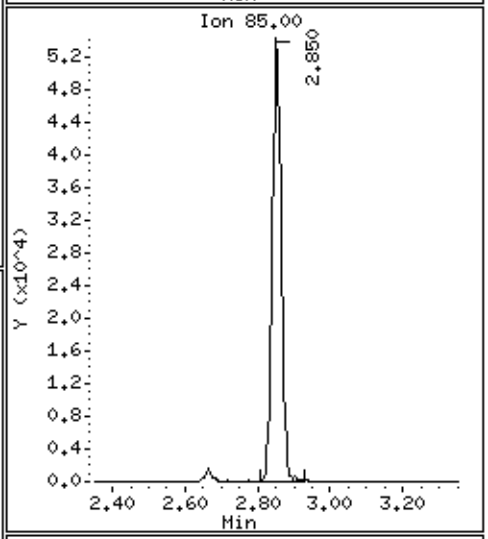


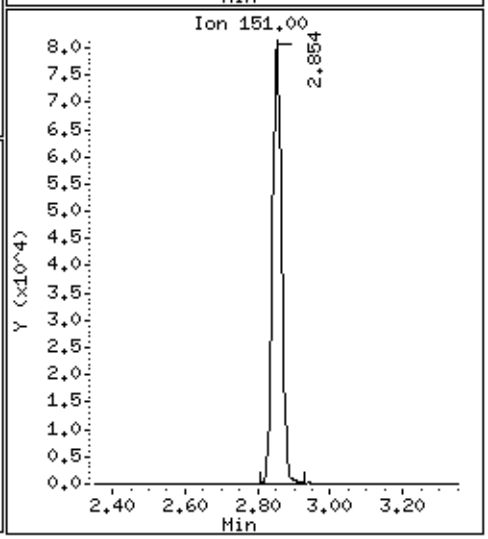












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d

Date : 20-JUN-2014 23:13

Client ID: MW-27_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-09ADL,,77692,20

Purge Volume: 5.0

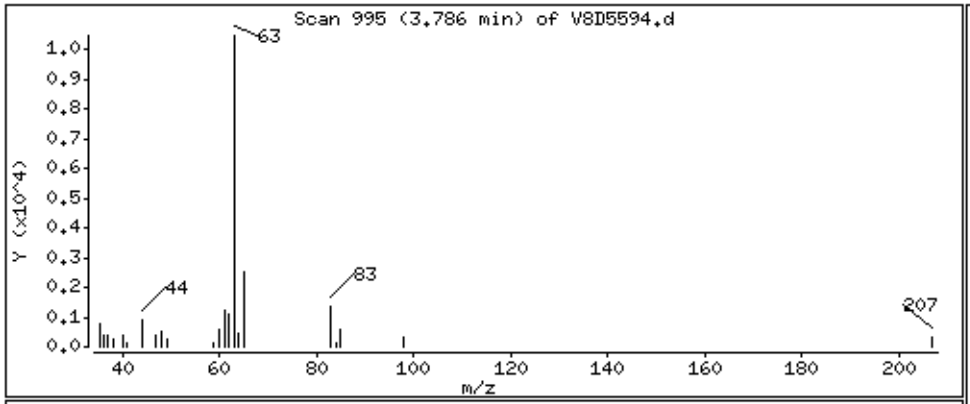
Operator: WL SRC: LIMS

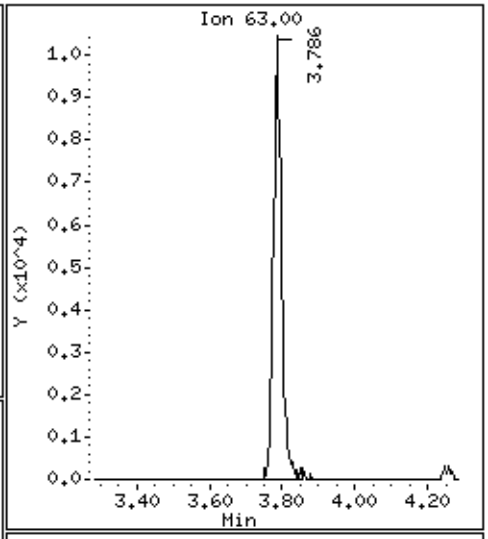
Column phase: DB-624

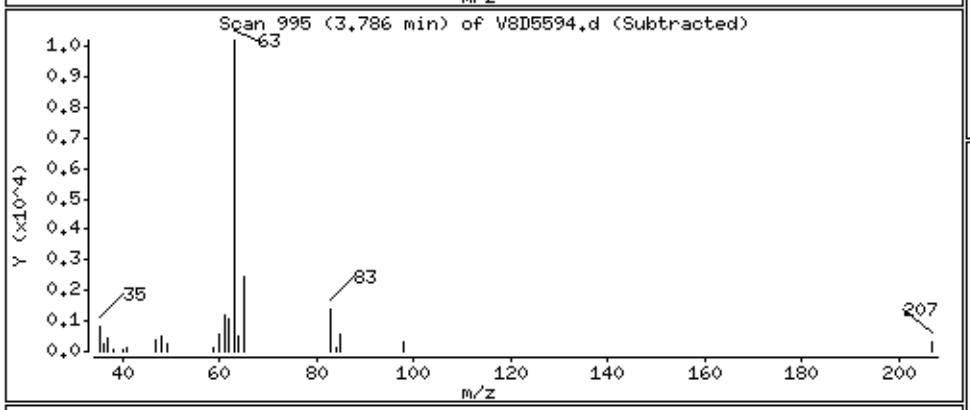
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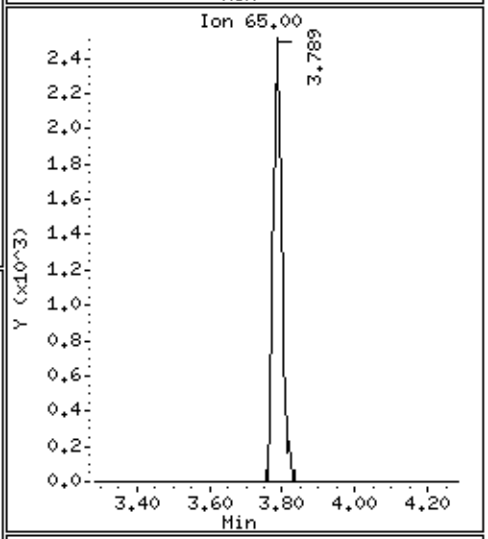
23 1,1-Dichloroethane

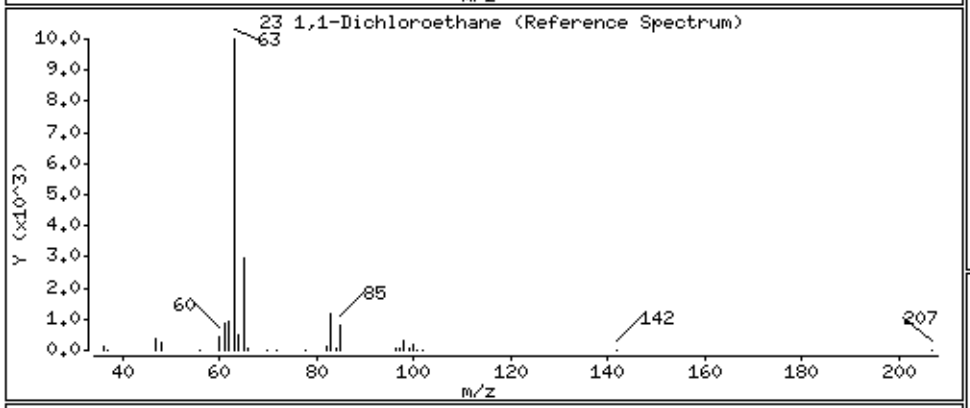
Concentration: 84 ug/L

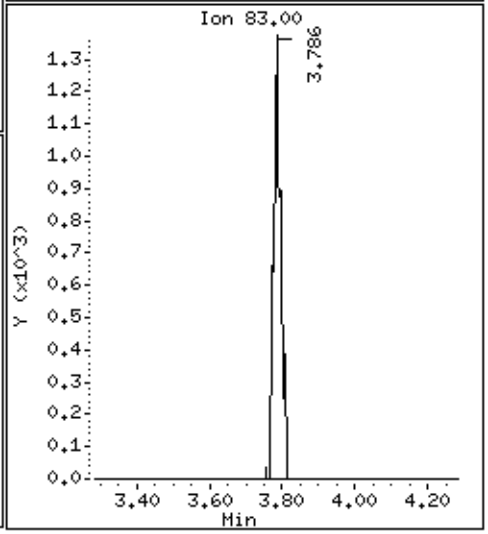


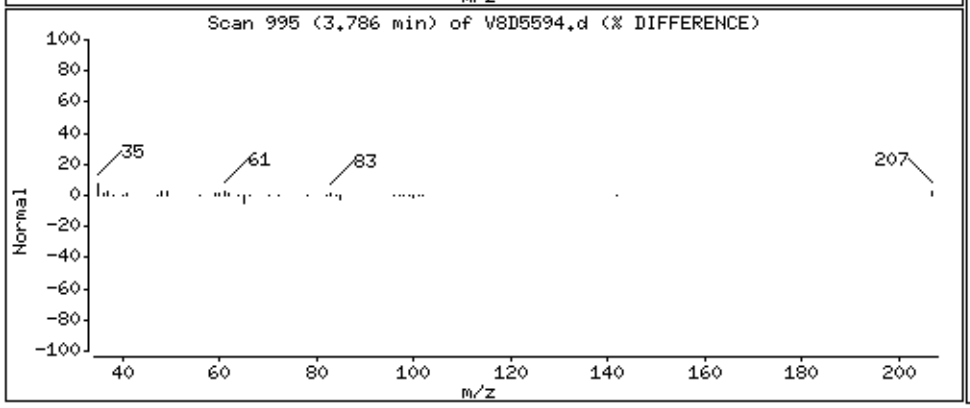












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d

Date : 20-JUN-2014 23:13

Client ID: MW-27_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-09ADL,,77692,20

Purge Volume: 5.0

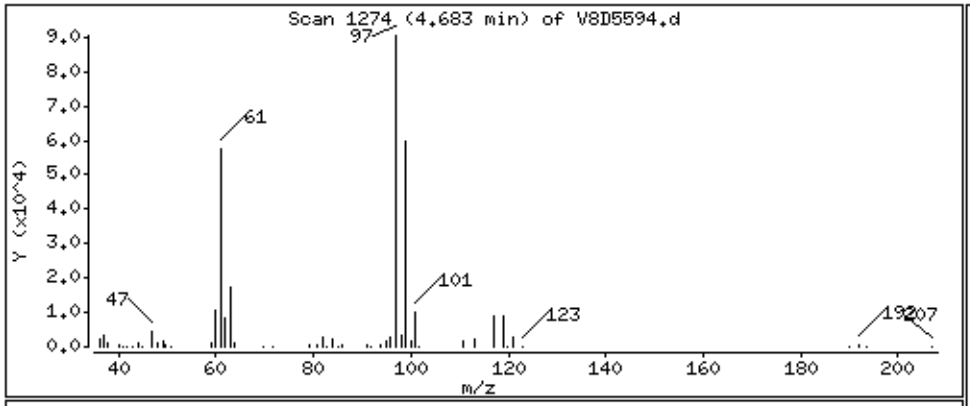
Operator: WL SRC: LIMS

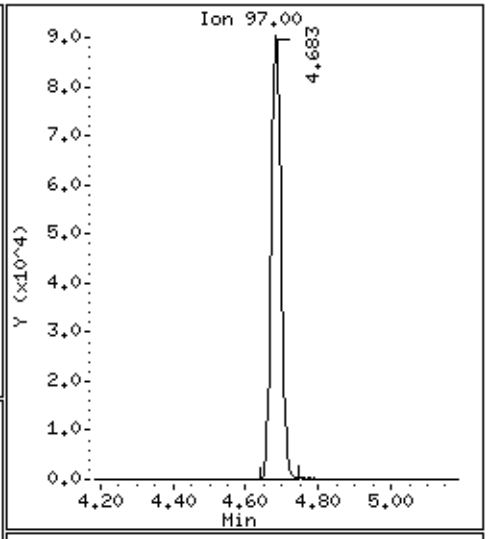
Column phase: DB-624

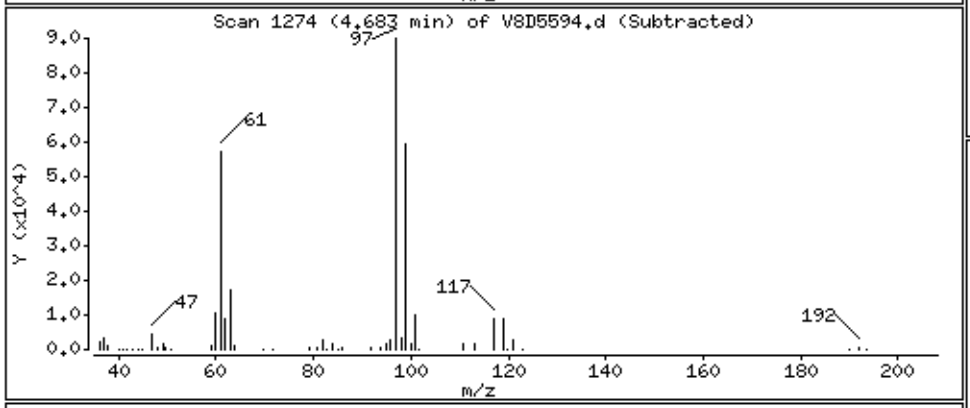
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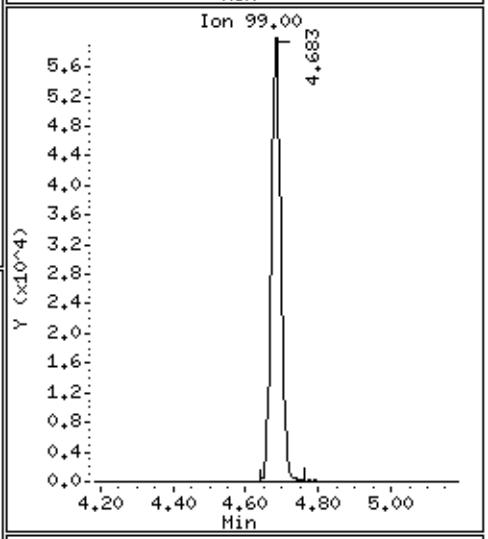
37 1,1,1-Trichloroethane

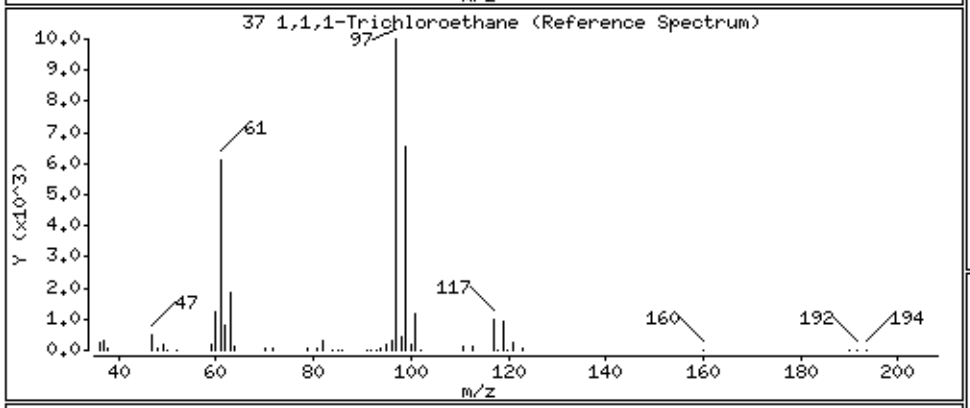
Concentration: 980 ug/L

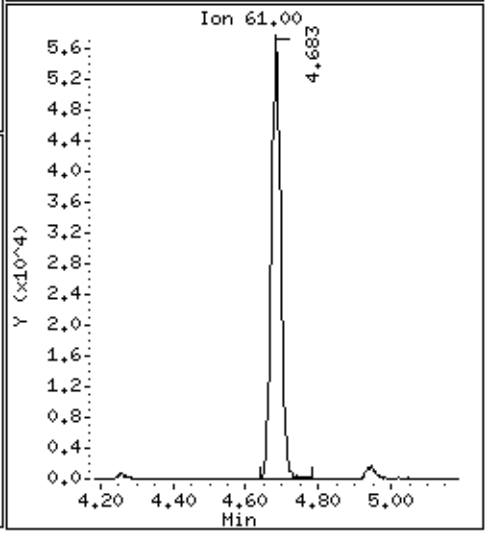


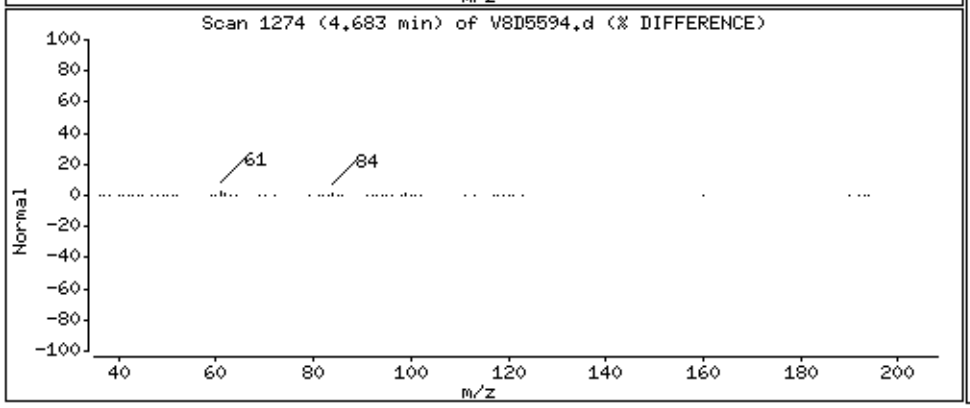












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5594.d

Date : 20-JUN-2014 23:13

Client ID: MW-27_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-09ADL,,77692,20

Purge Volume: 5.0

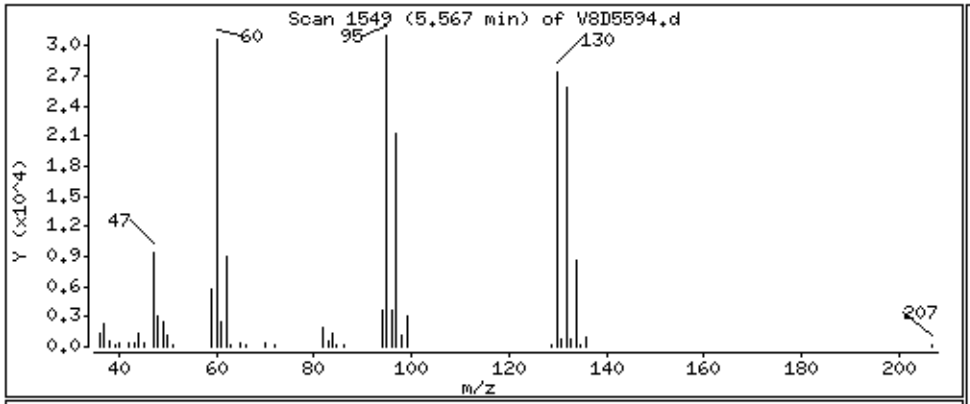
Operator: WL SRC: LIMS

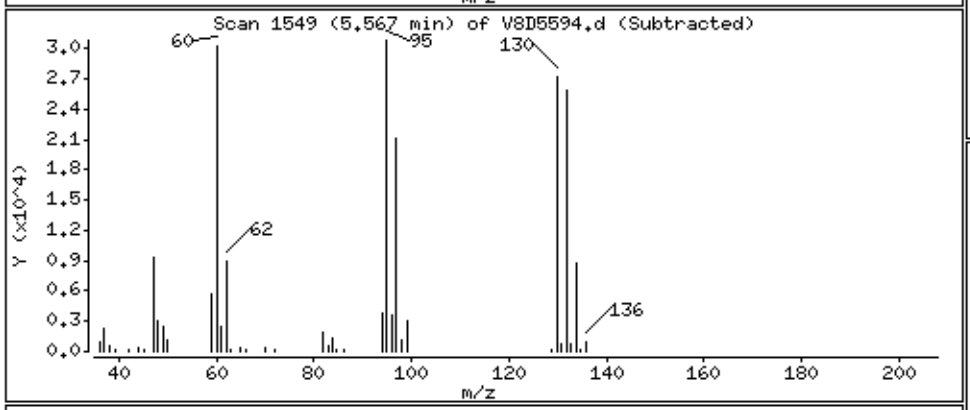
Column phase: DB-624

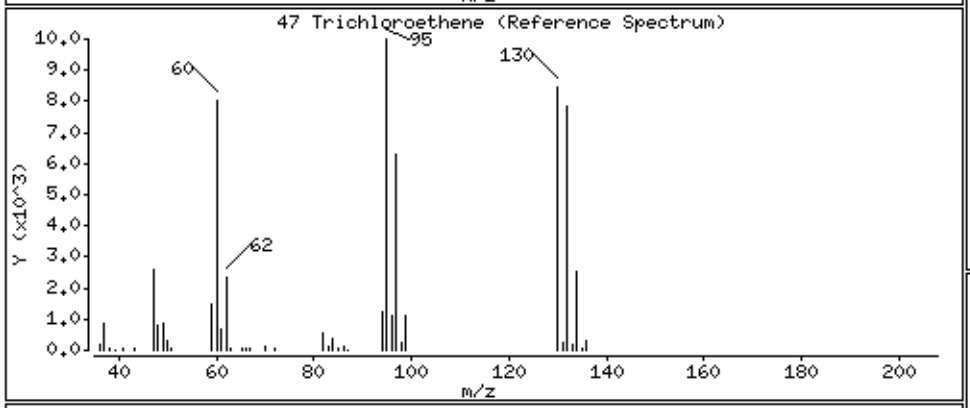
Column diameter: 0.25

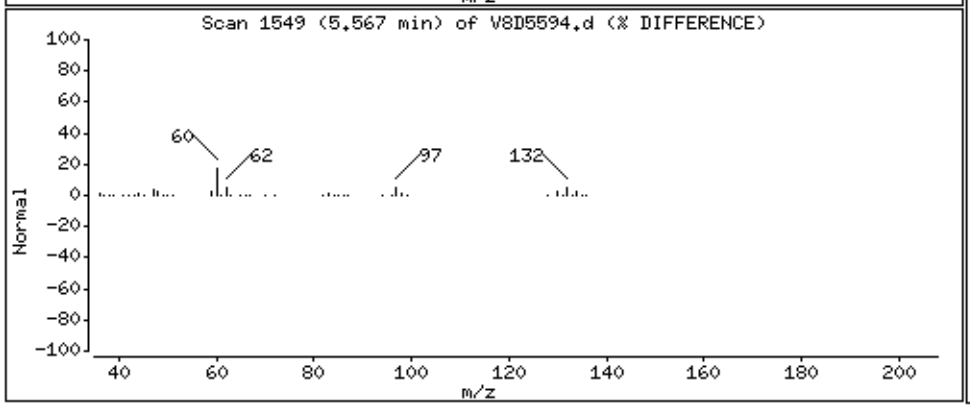
47 Trichloroethene

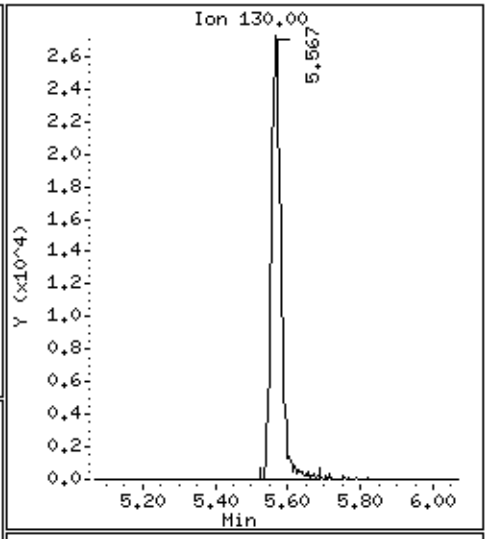
Concentration: 710 ug/L

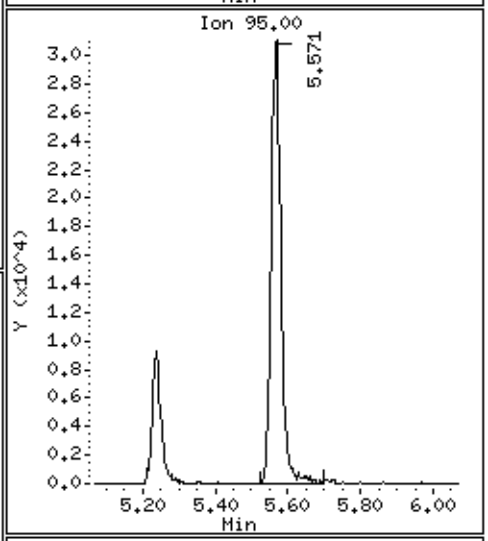


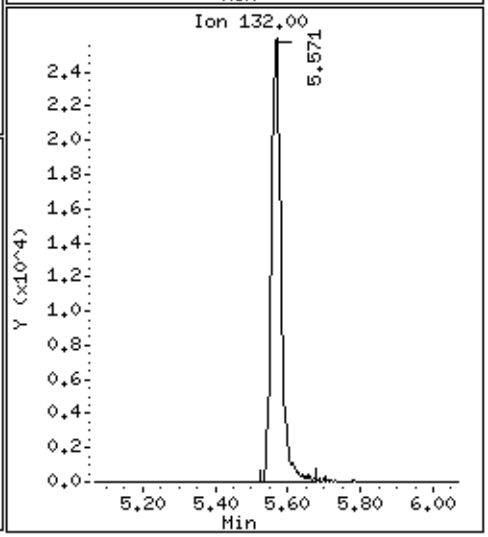












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(1)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5525.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	8.5	
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	8500	E
156-60-5	trans-1,2-Dichloroethene	18	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1500	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	47	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	23	
67-66-3	Chloroform	2.8	
71-55-6	1,1,1-Trichloroethane	8200	E
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	12000	E
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	11	
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

EPA SAMPLE NO.
MW-21R(1)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5525.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	7.9	
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	610	E
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	9.9	
179601-23-1	m,p-Xylene	55	
95-47-6	o-Xylene	24	
1330-20-7	Xylene (Total)	79	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	30000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R(1)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5525.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	500	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5525.d
Lab Smp Id: N1055-10A Client Smp ID: MW-21R(1)_6/17/14
Inj Date : 19-JUN-2014 14:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-10A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
	4 Vinyl Chloride	62	1.853	1.856	(0.354)	26252	8.49165	8.5
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.834	2.853	(0.541)	63787747	29970.8	30000(A)
	18 Methylene Chloride	84	3.220	3.233	(0.615)	15901287	8512.80	8500(AQM)M6 AM 06/27
	21 trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	31338	17.5687	18
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	7131922	1496.18	1500(A)
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	87570	46.5487	46
	34 Bromochloromethane	128	4.461	4.454	(0.852)	20513	23.2337	23(H)
	35 Chloroform	83	4.506	4.509	(0.861)	11863	2.75024	2.8
$	36 Dibromofluoromethane	113	4.654	4.644	(0.889)	86375	54.1305	54
	37 1,1,1-Trichloroethane	97	4.667	4.683	(0.891)	35325649	8161.17	8200(AQM)M6 AM 06/27
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	14017	51.9579	52
M	50 1,2-Dichloroethene (Total)	96				118908	64.1173	64
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	214425	50.0000	
	47 Trichloroethene	130	5.557	5.567	(1.061)	20956784	11842.5	12000(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	265379	45.8698	46
	59 Toluene	91	6.782	6.782	(1.295)	76491	10.8685	11
	63 Tetrachloroethene	164	7.348	7.345	(0.894)	15308	7.86241	7.9
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	252819	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	3109154	611.115	610(A)
	72 Ethylbenzene	106	8.371	8.367	(1.018)	25296	9.85191	9.8
	73 m,p-Xylene	106	8.499	8.499	(1.034)	174187	55.1892	55
	74 o-Xylene	106	8.946	8.946	(1.088)	72124	24.2897	24

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d
Report Date: 27-Jun-2014 13:49

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	161562	52.0194	52
M	94 Xylene (Total)	106				246311	79.4789	79
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	126648	50.0000	

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.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d
Report Date: 27-Jun-2014 13:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5525.d
Lab Smp Id: N1055-10A Client Smp ID: MW-21R(1)_6/17/14
Inj Date : 19-JUN-2014 14:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-10A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

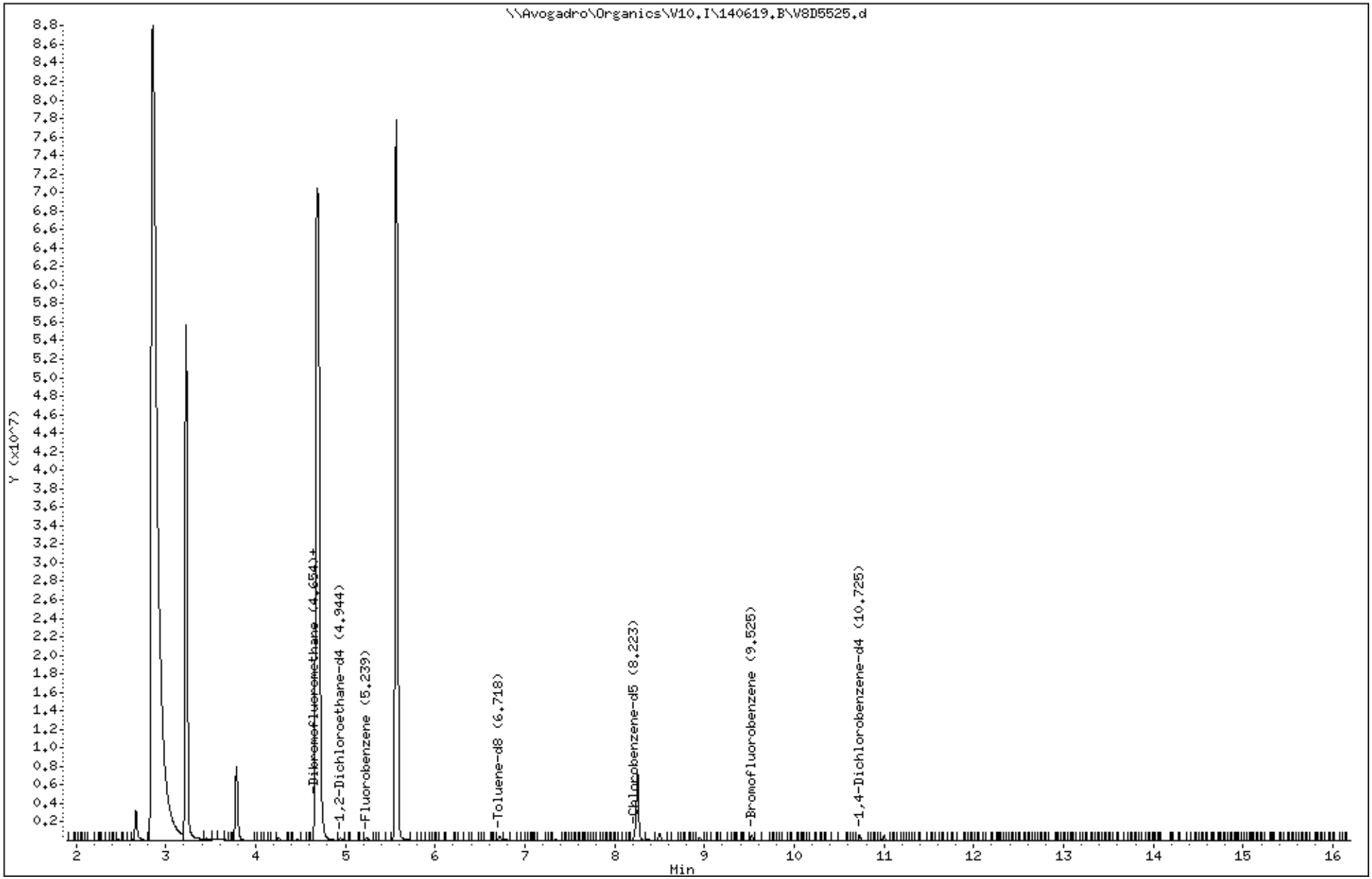
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.236	629329	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	6311930	501.480428	500	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d
Date : 19-JUN-2014 14:24
Client ID: MW-21R(1)_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1055-10A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

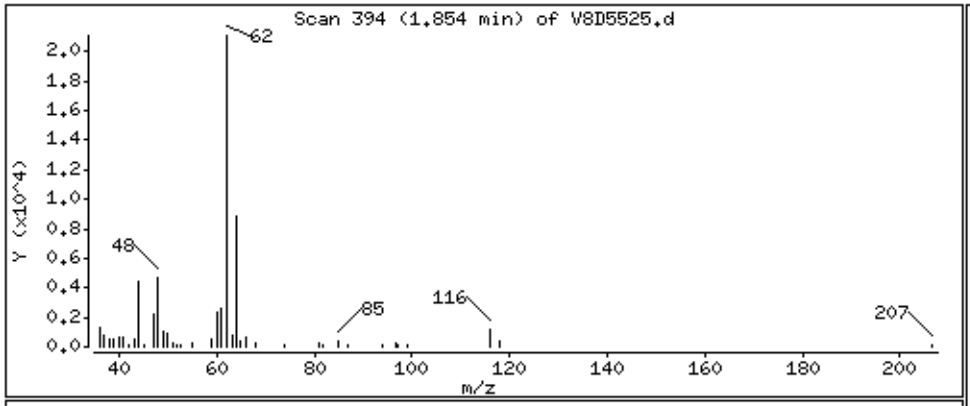
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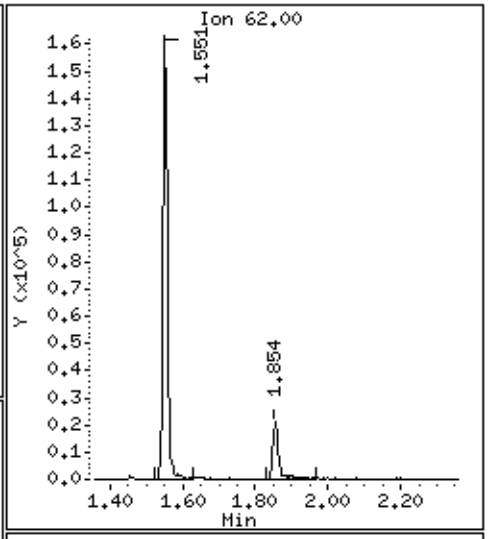
Sample Info: 5ML,N1055-10A,,77659

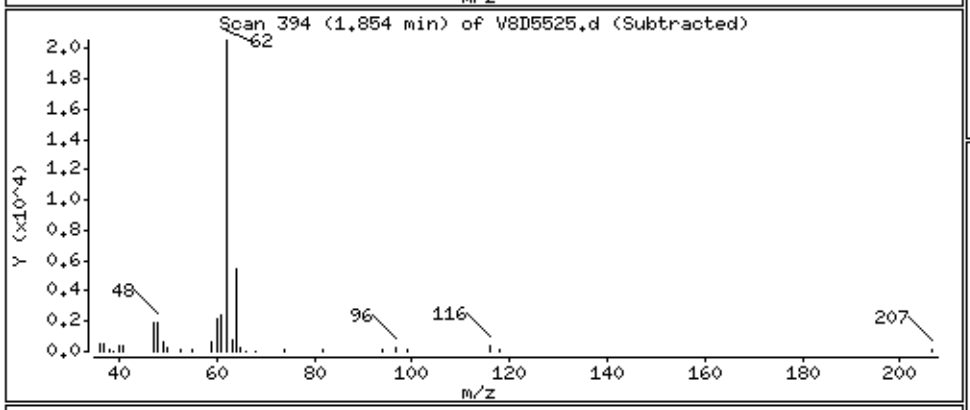
Purge Volume: 5.0 Operator: WL SRC: LIMS

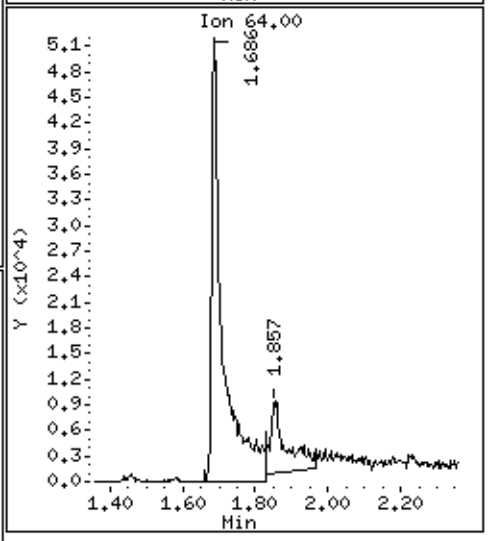
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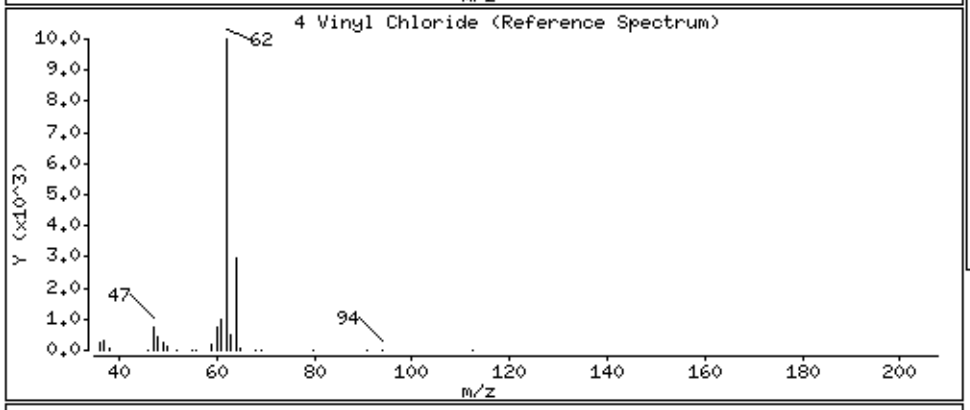
4 Vinyl Chloride Concentration: 8.5 ug/L

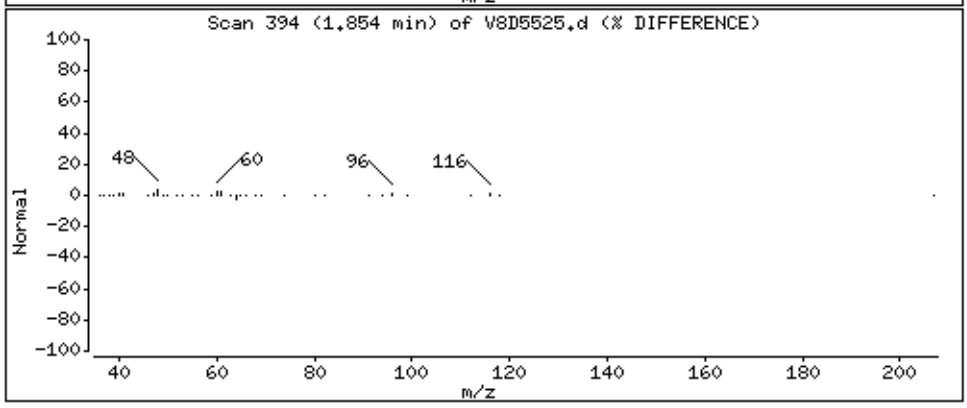












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

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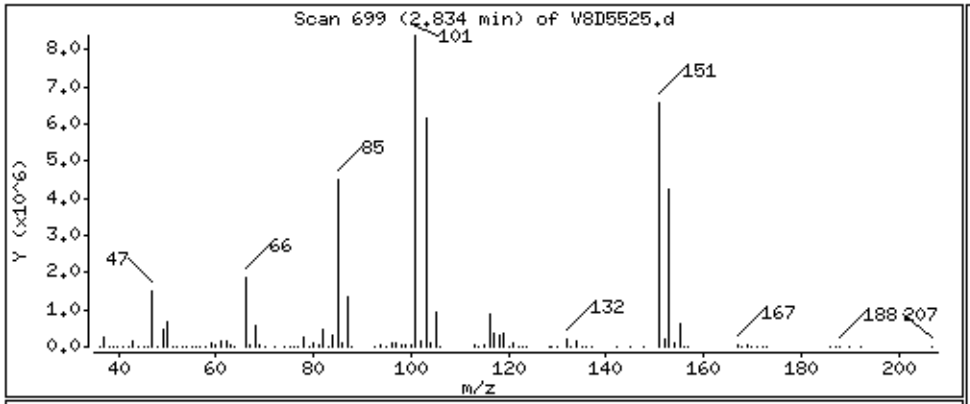
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

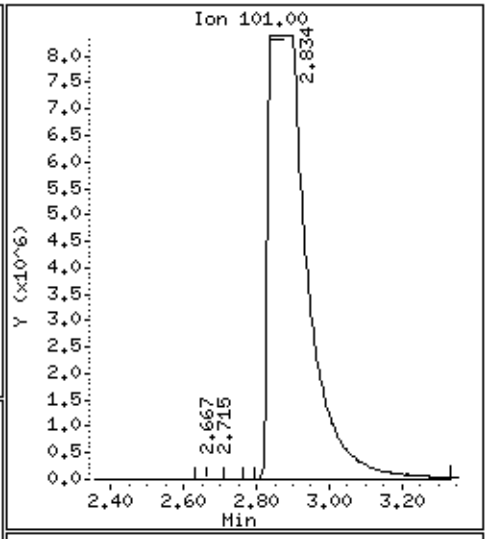
Sample Info: 5ML,N1055-10A,,77659

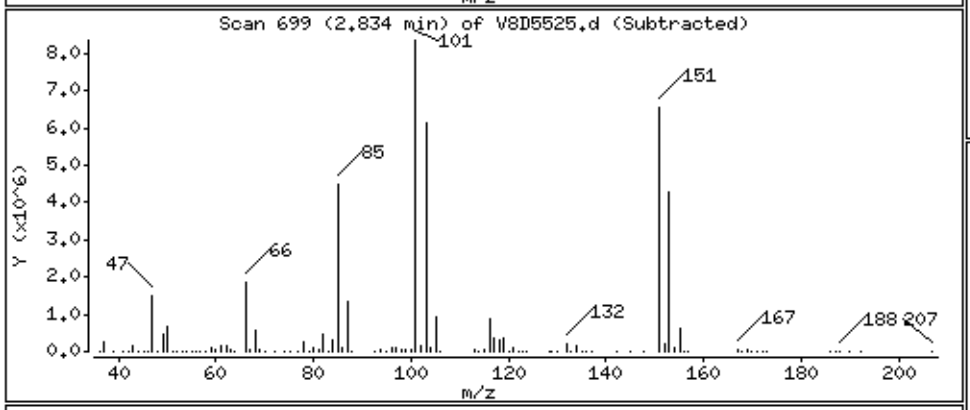
Purge Volume: 5.0 Operator: WL SRC: LIMS

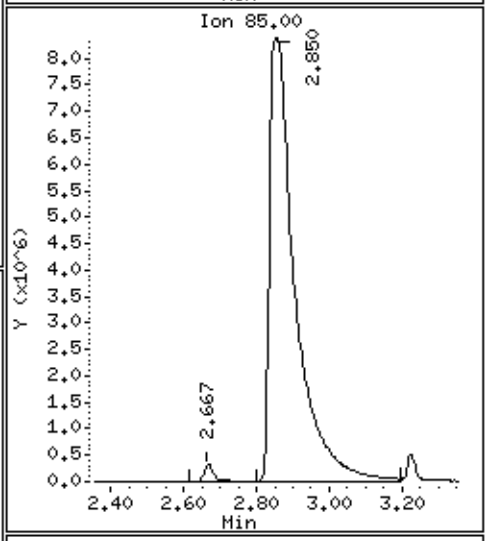
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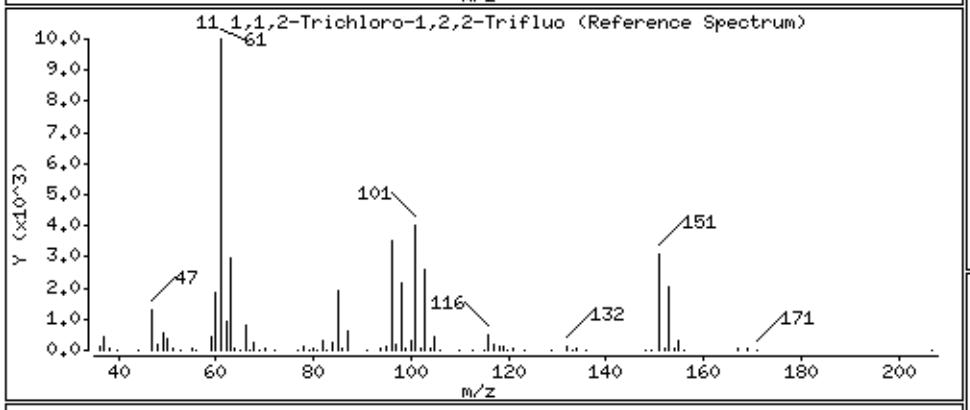
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 30000 ug/L

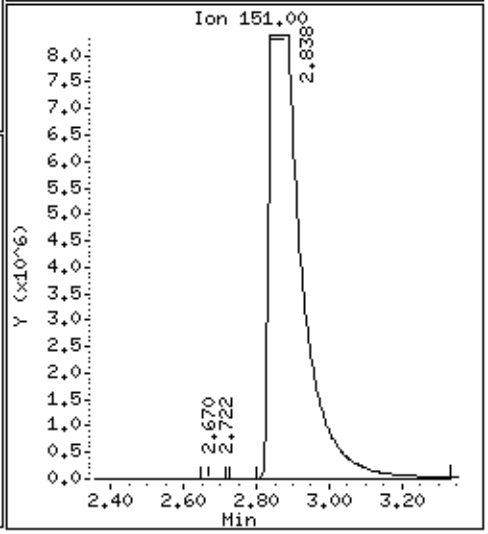


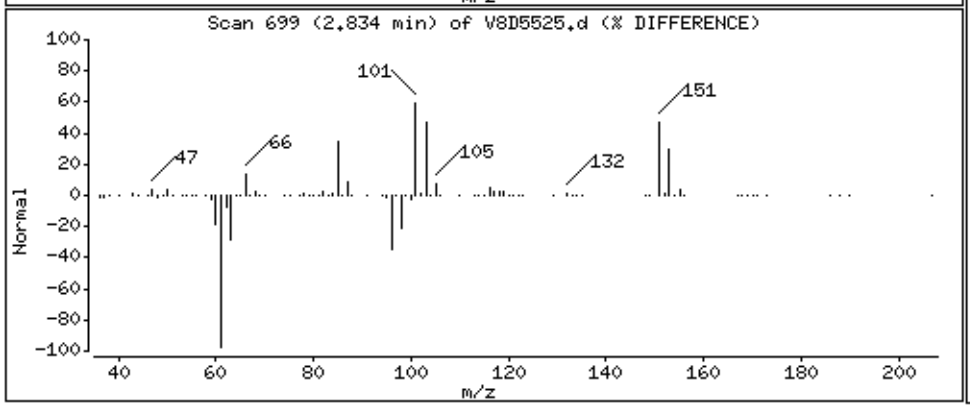












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

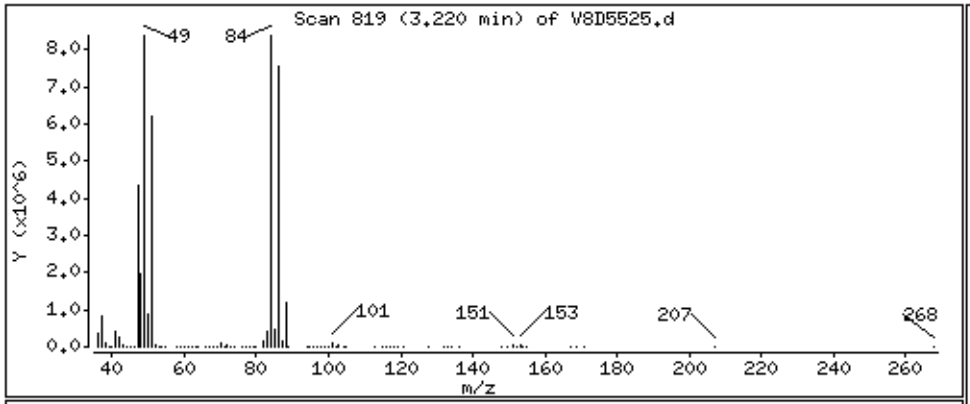
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

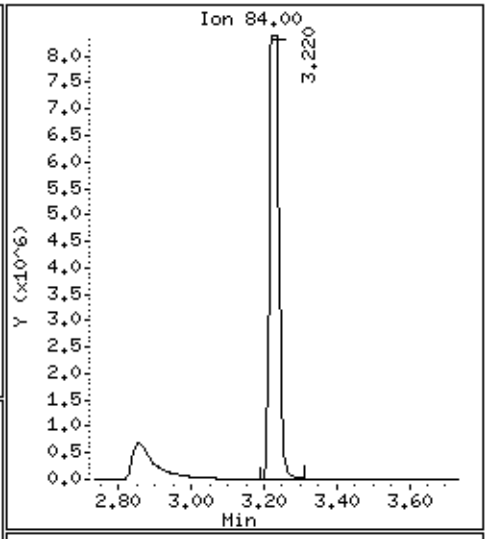
Sample Info: 5ML,N1055-10A,,77659

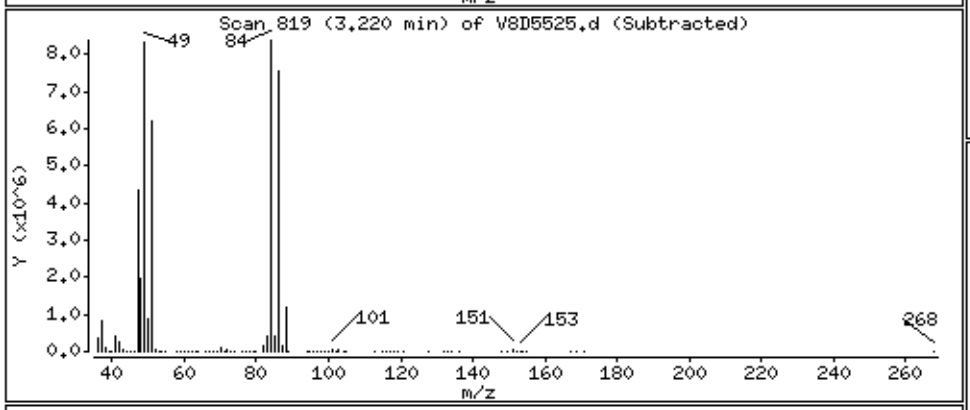
Purge Volume: 5.0 Operator: WL SRC: LIMS

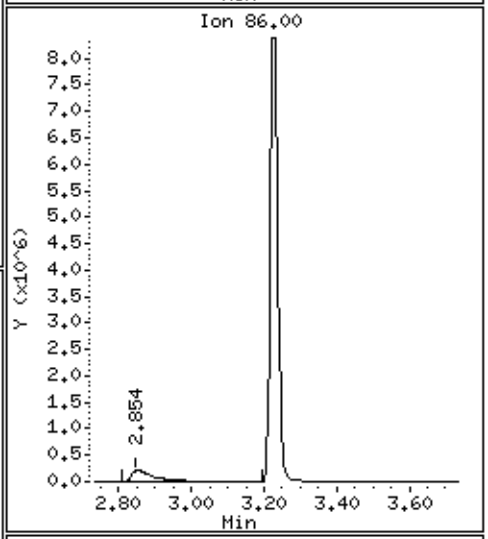
Column phase: DB-624 Column diameter: 0.25

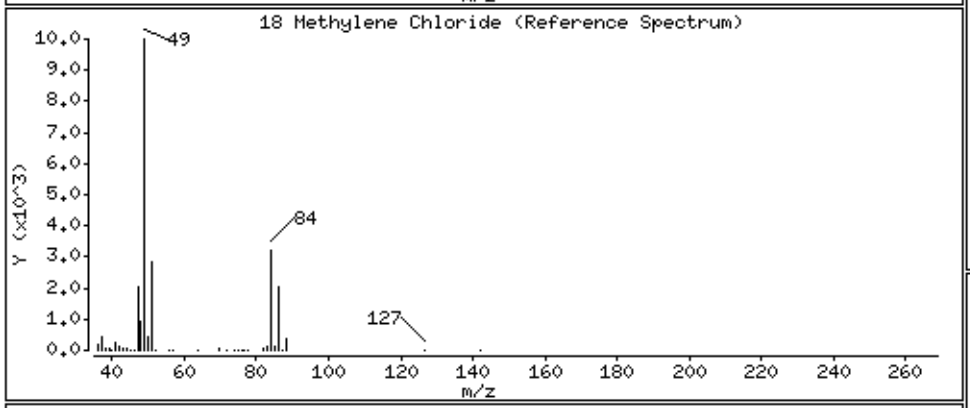
18 Methylene Chloride Concentration: 8500 ug/L

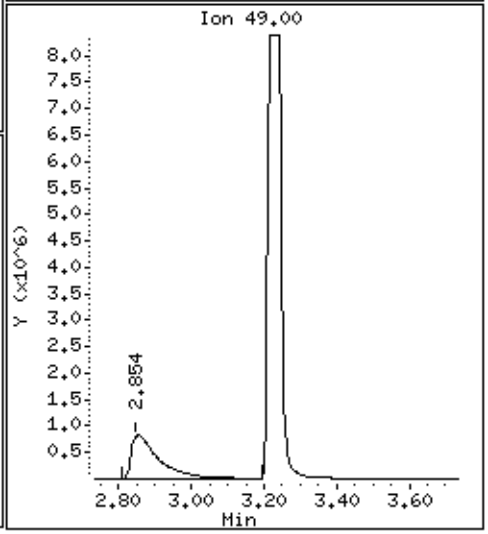


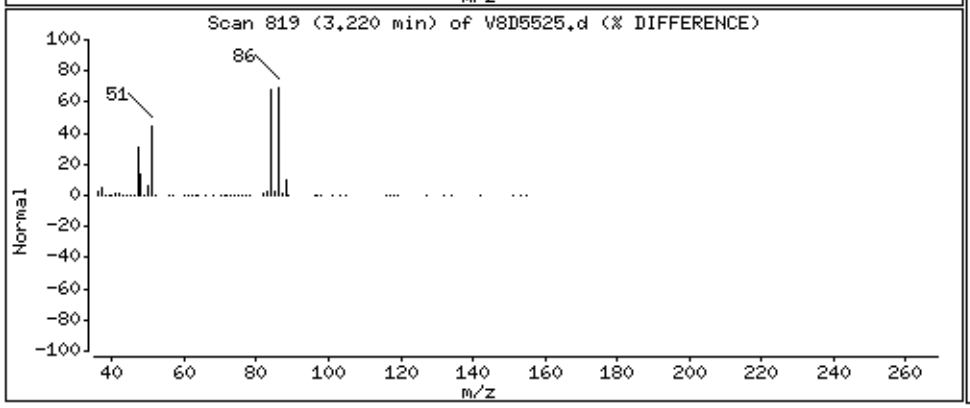












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

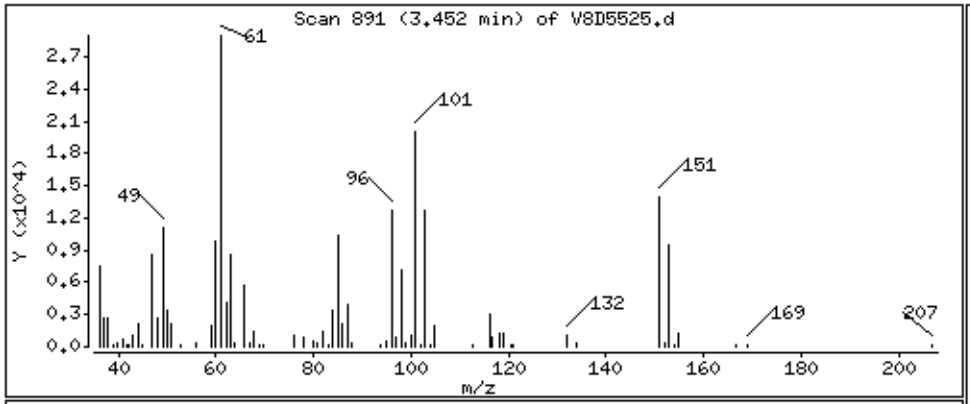
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

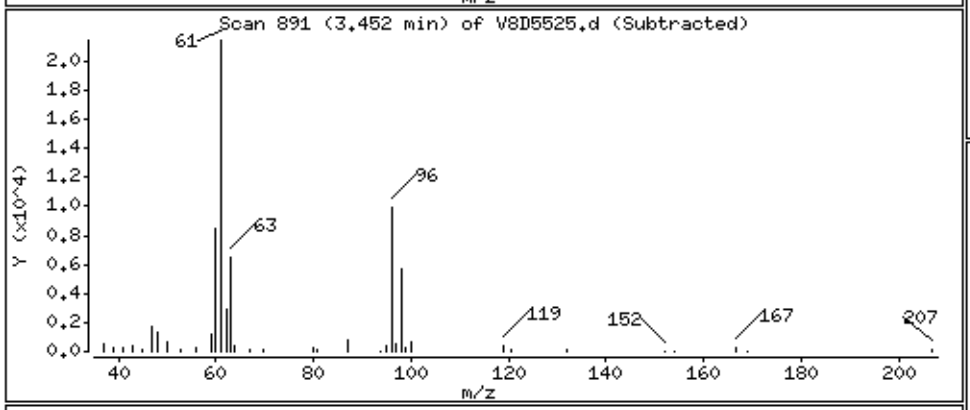
Sample Info: 5ML,N1055-10A,,77659

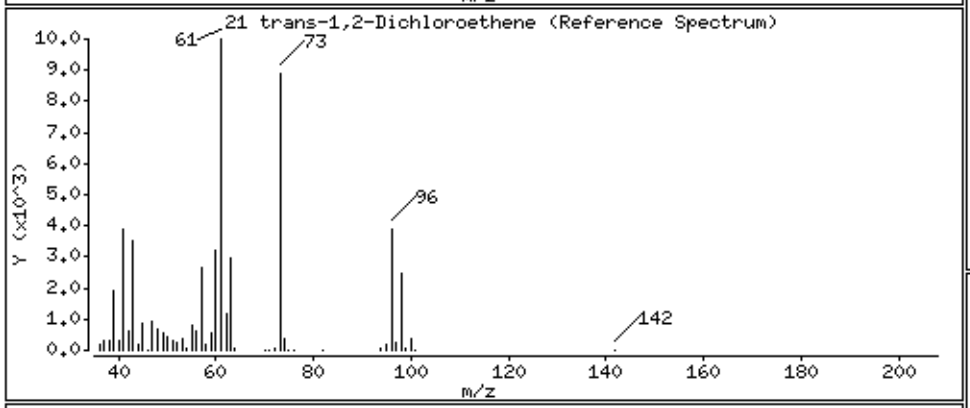
Purge Volume: 5.0 Operator: WL SRC: LIMS

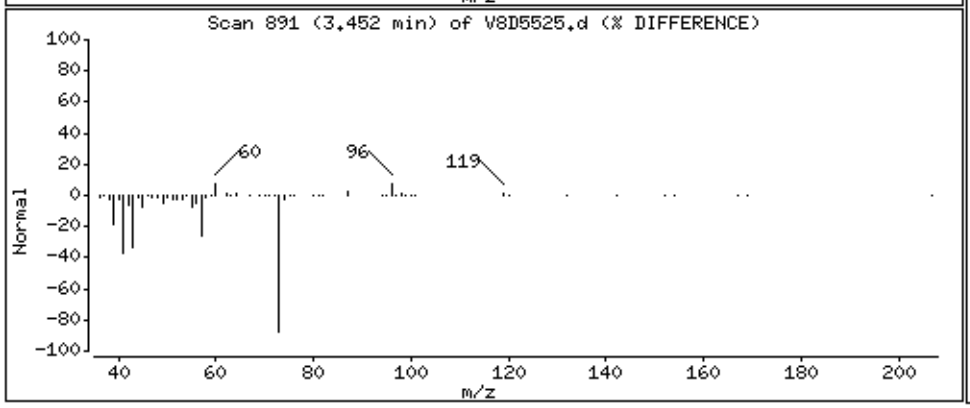
Column phase: DB-624 Column diameter: 0.25

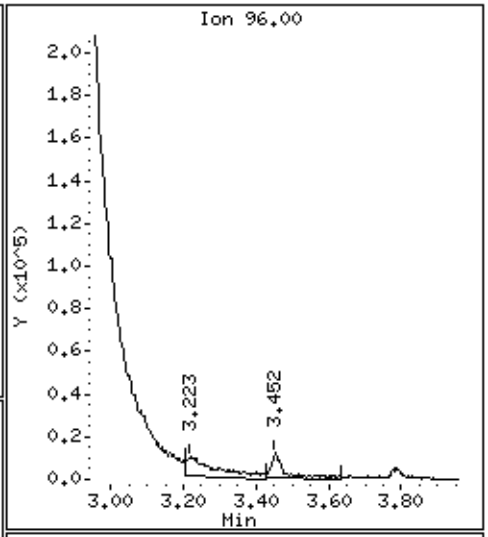
21 trans-1,2-Dichloroethene Concentration: 18 ug/L

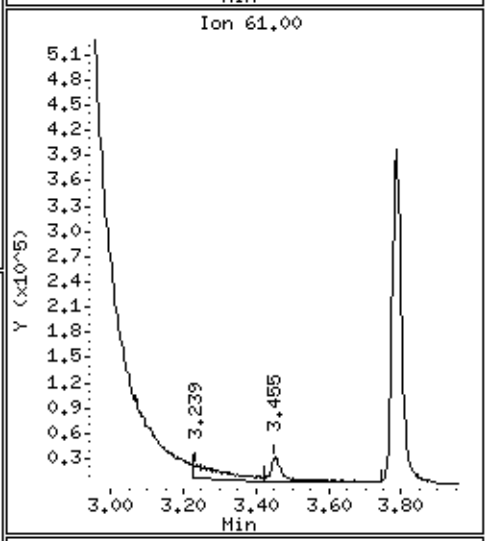


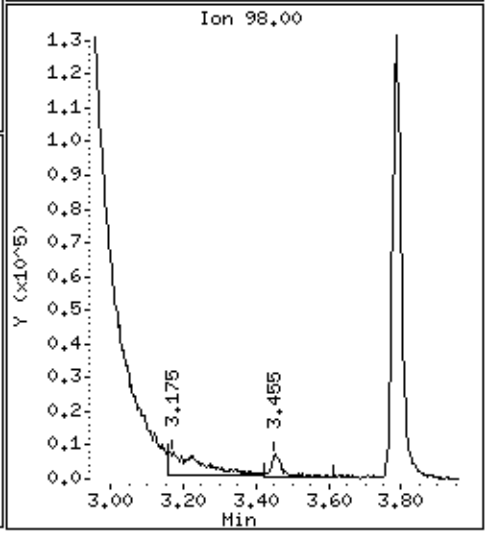












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

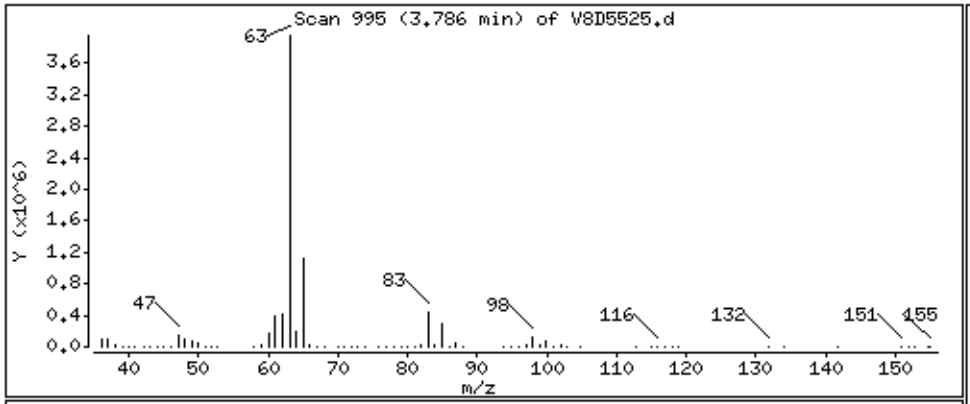
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

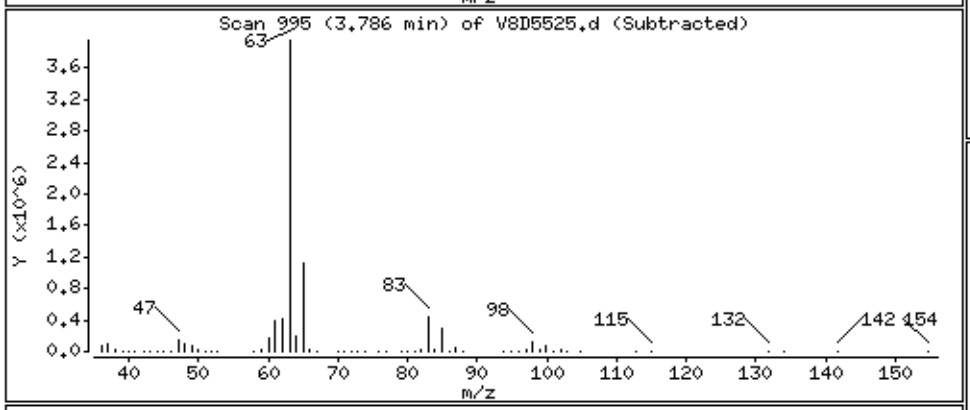
Sample Info: 5ML,N1055-10A,,77659

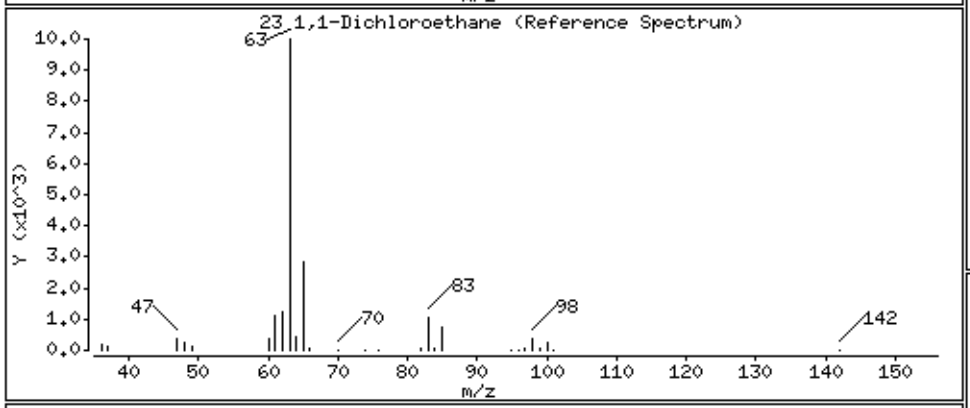
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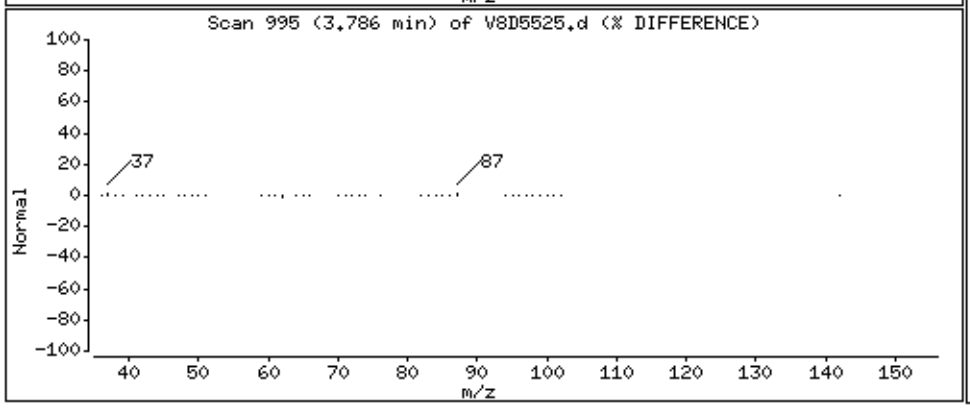
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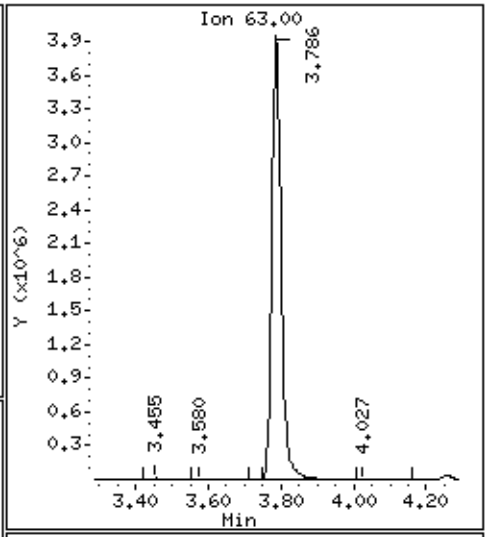
23 1,1-Dichloroethane Concentration: 1500 ug/L

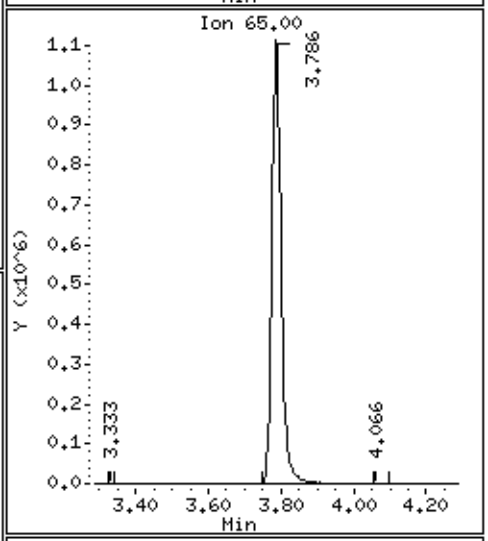


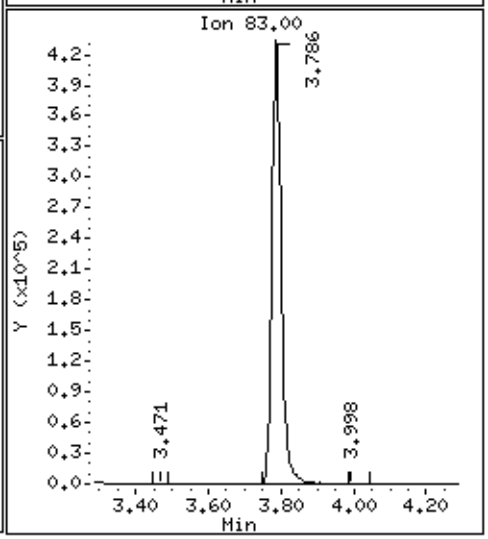












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

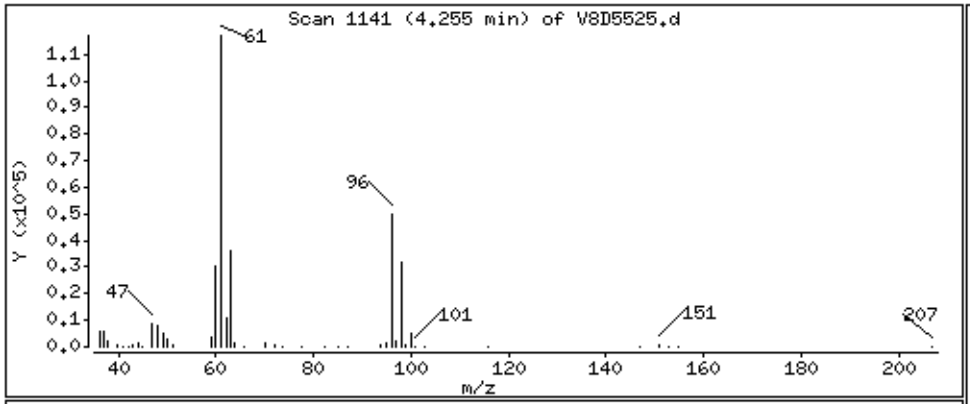
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

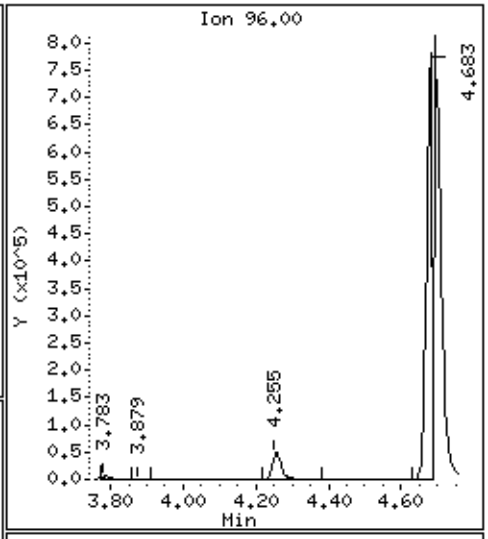
Sample Info: 5ML,N1055-10A,,77659

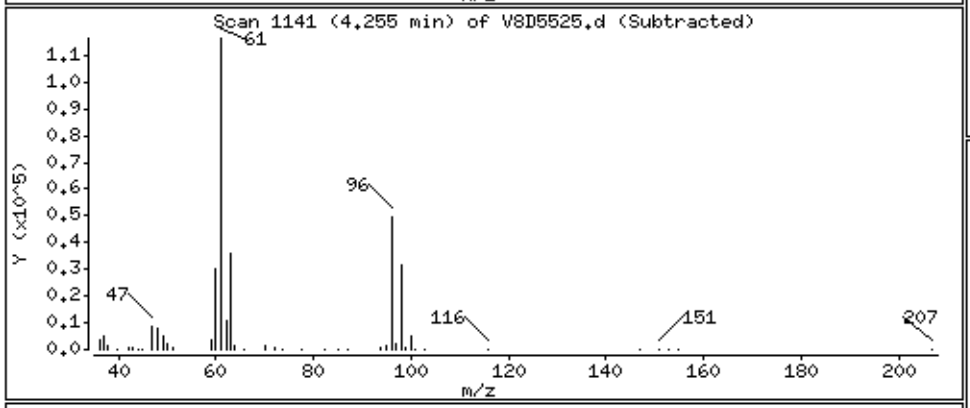
Purge Volume: 5.0 Operator: WL SRC: LIMS

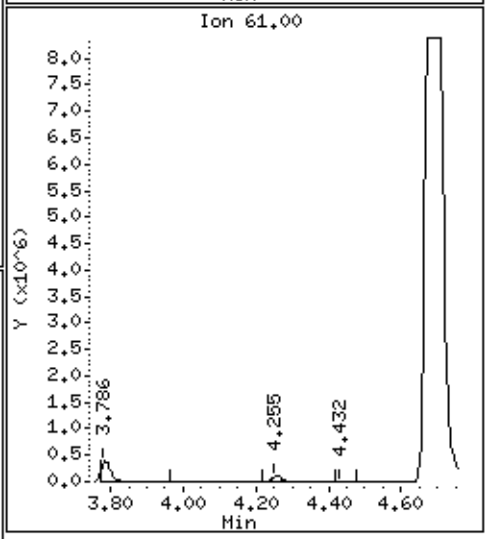
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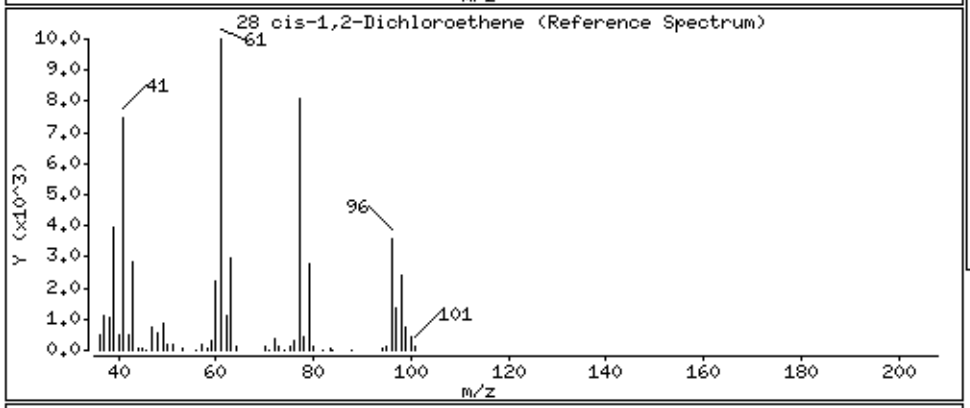
28 cis-1,2-Dichloroethene Concentration: 46 ug/L

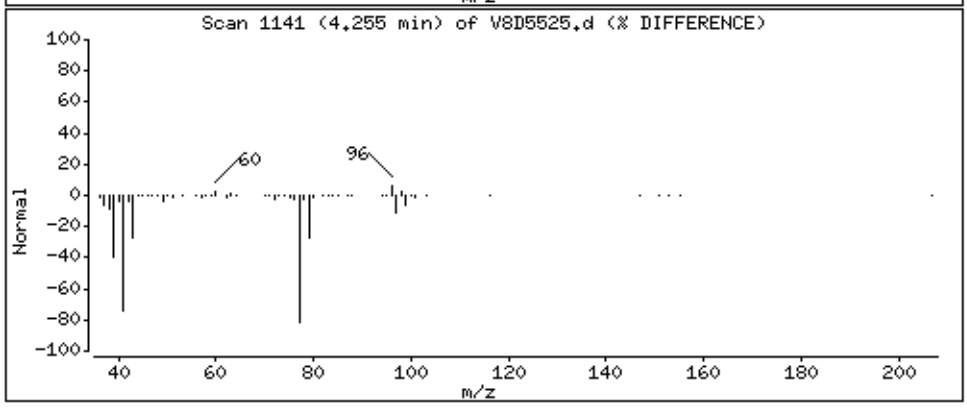












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

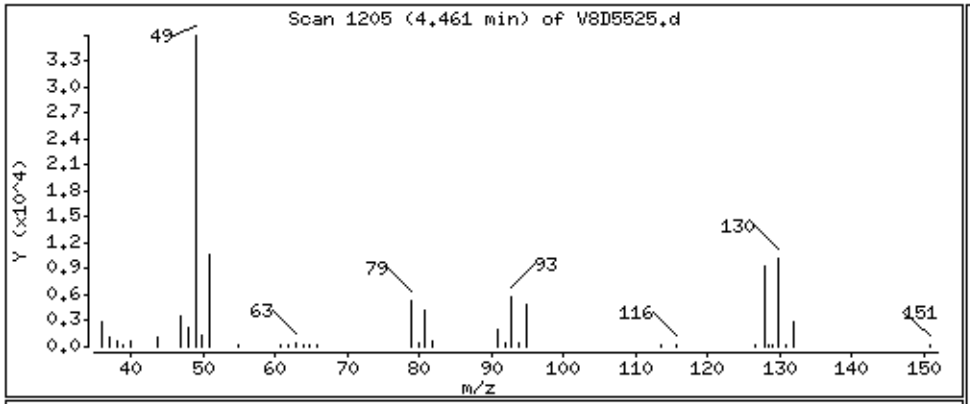
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

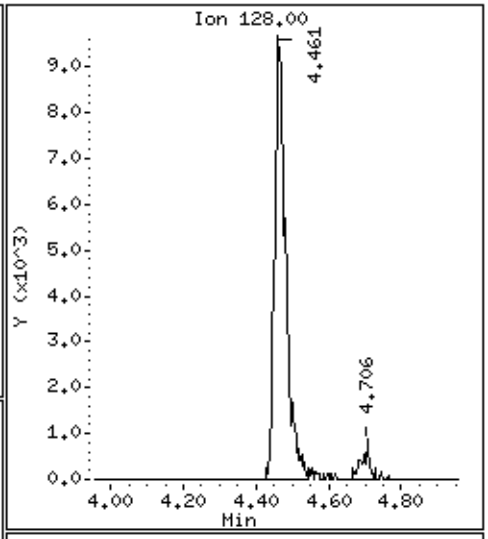
Sample Info: 5ML,N1055-10A,,77659

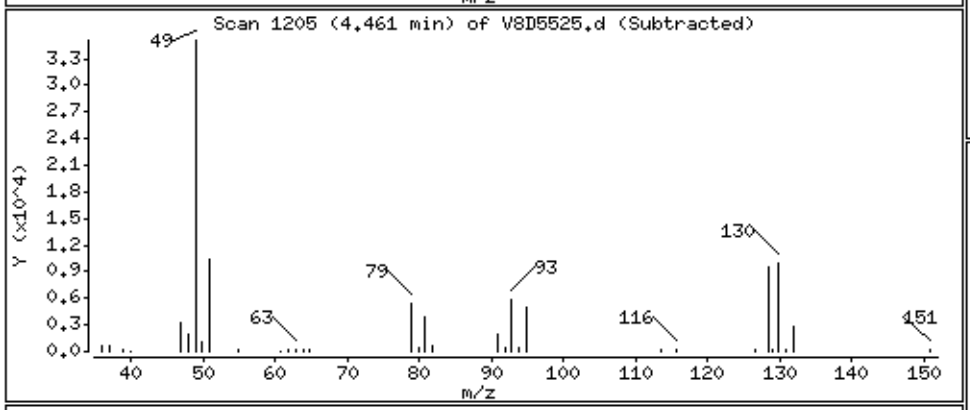
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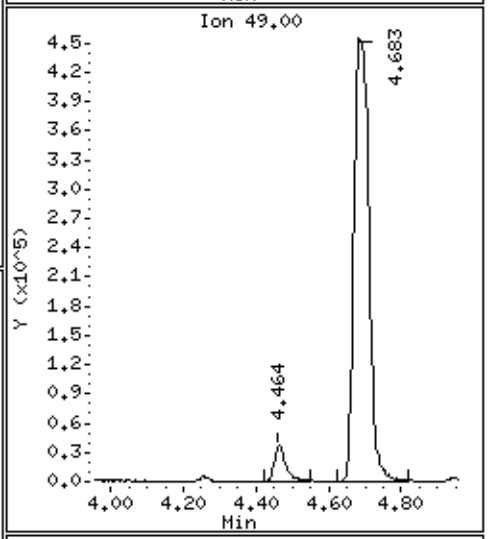
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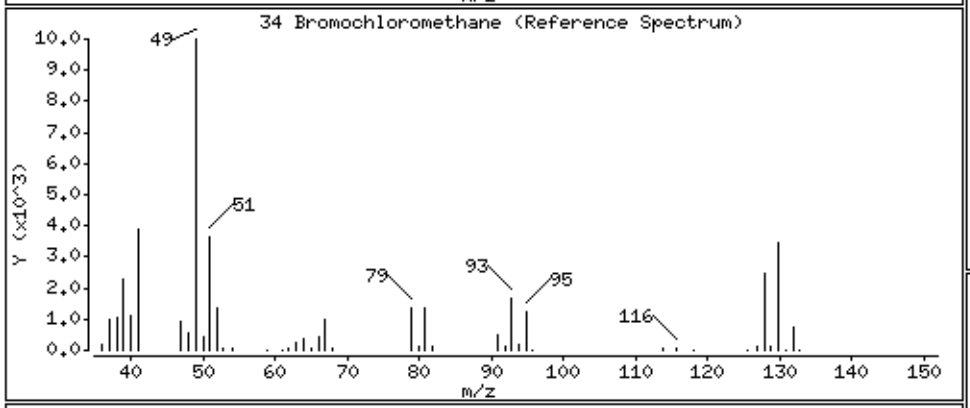
34 Bromochloromethane Concentration: 23 ug/L

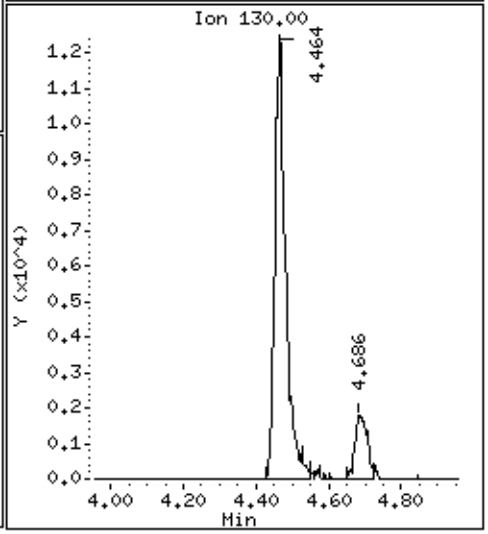


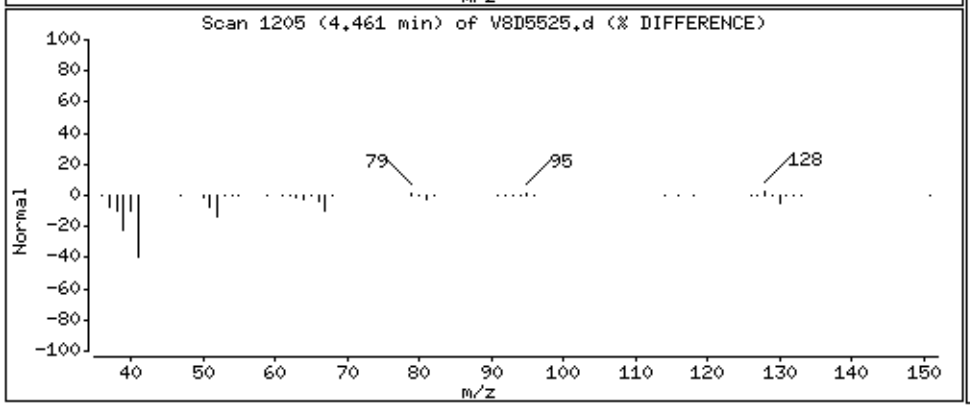












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

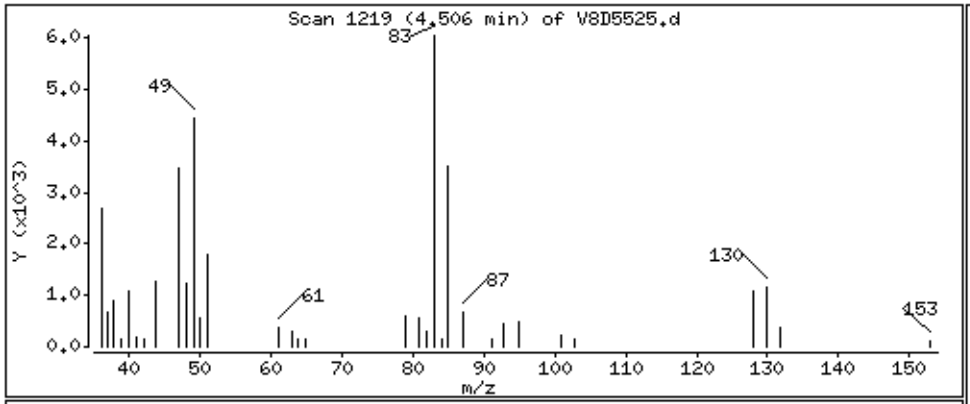
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

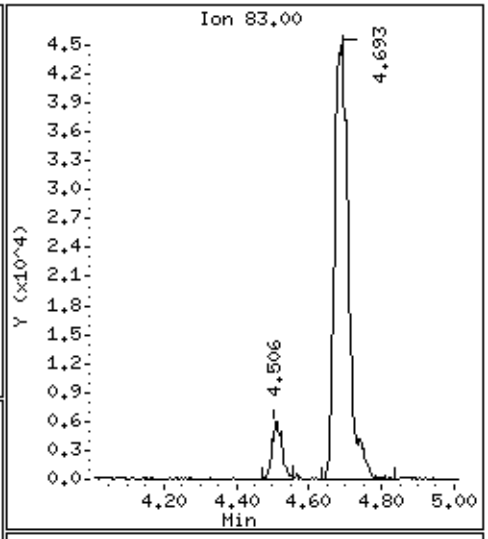
Sample Info: 5ML,N1055-10A,,77659

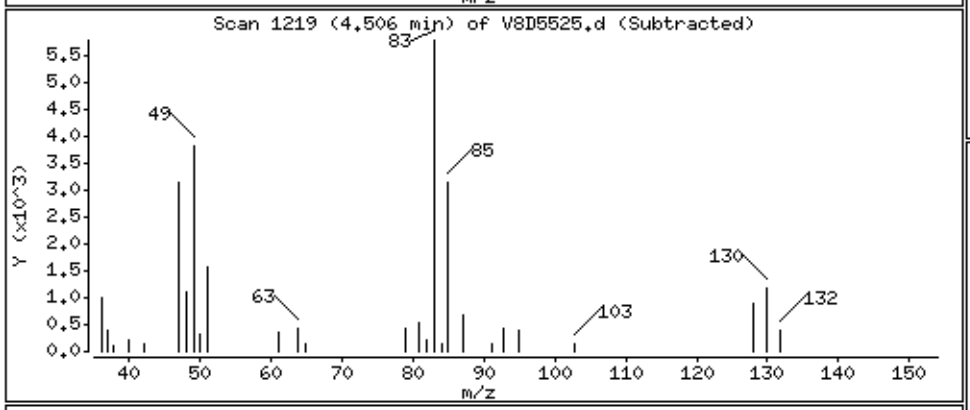
Purge Volume: 5.0 Operator: WL SRC: LIMS

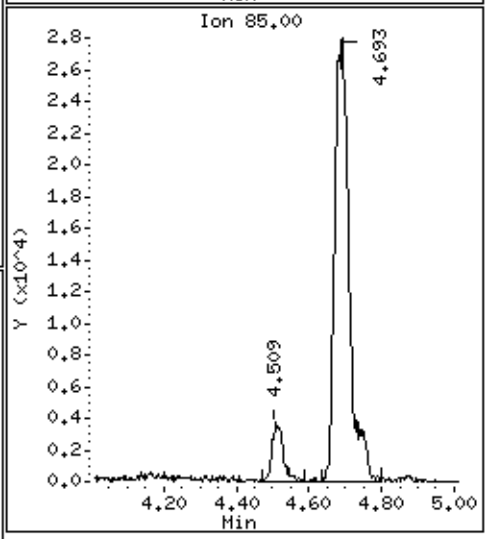
Column phase: DB-624 Column diameter: 0.25

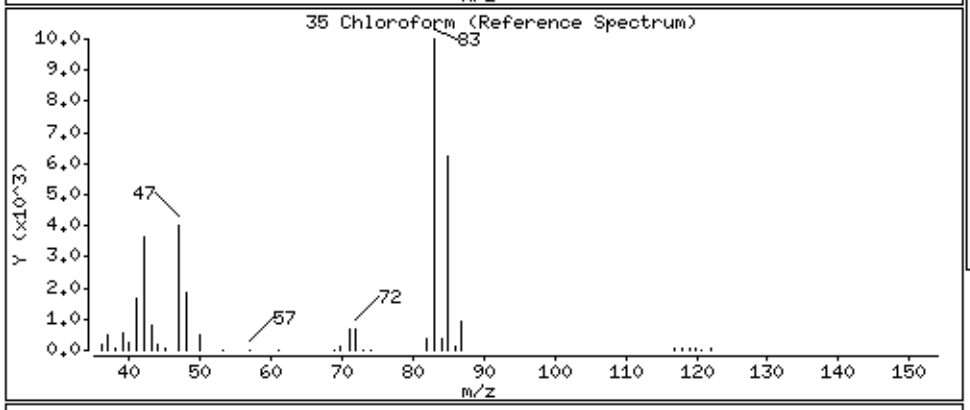
35 Chloroform Concentration: 2.8 ug/L

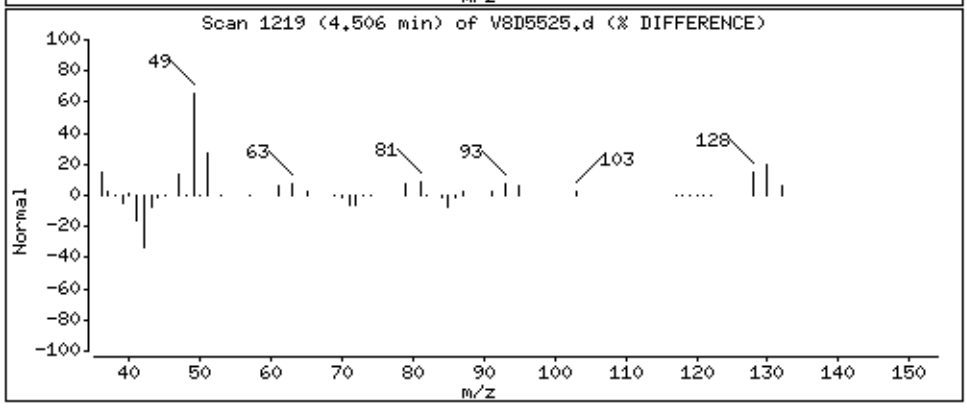












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

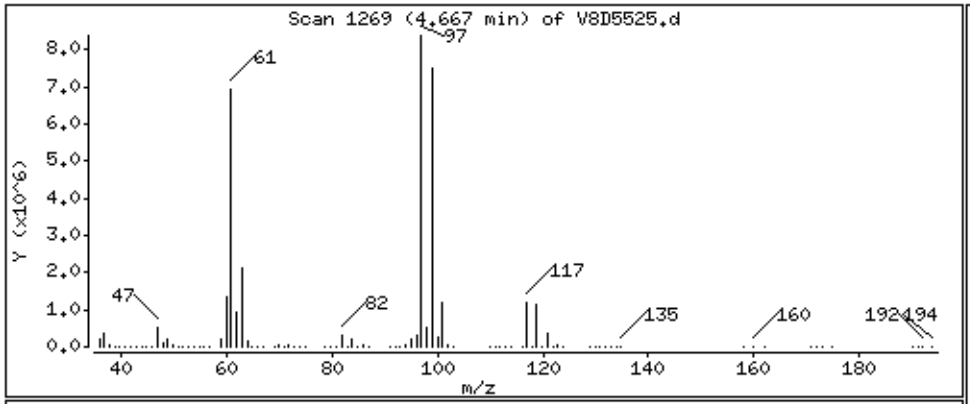
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

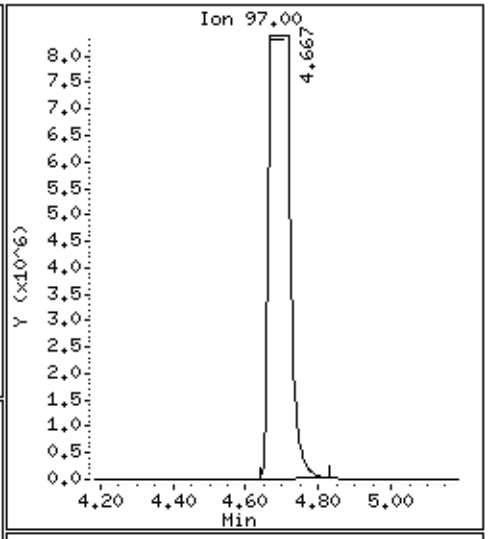
Sample Info: 5ML,N1055-10A,,77659

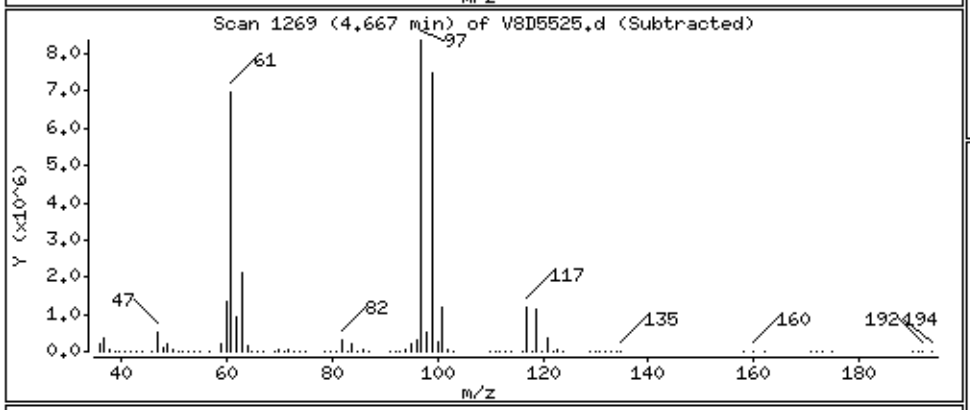
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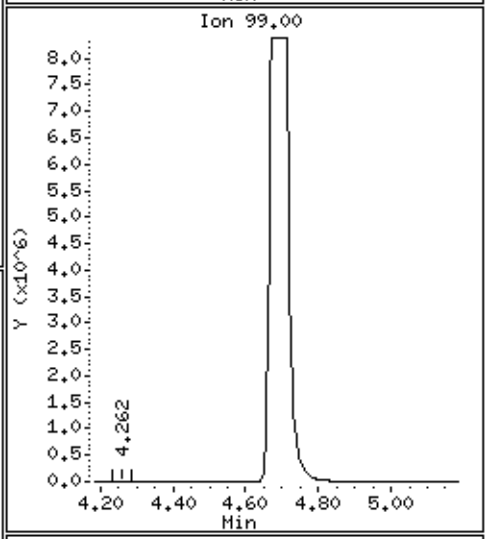
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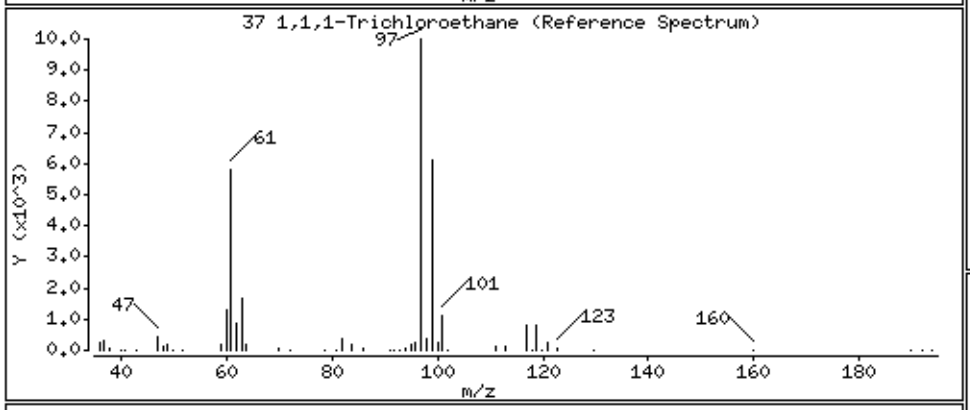
37 1,1,1-Trichloroethane Concentration: 8200 ug/L

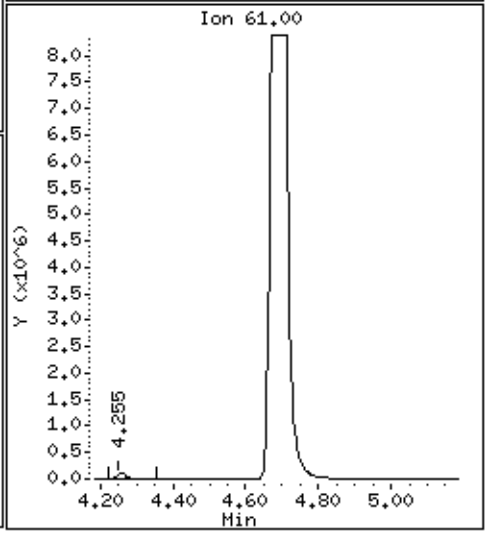


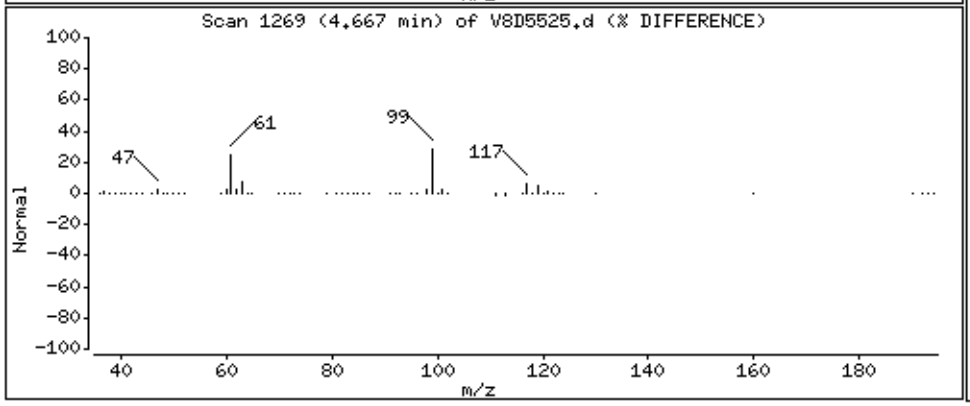












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

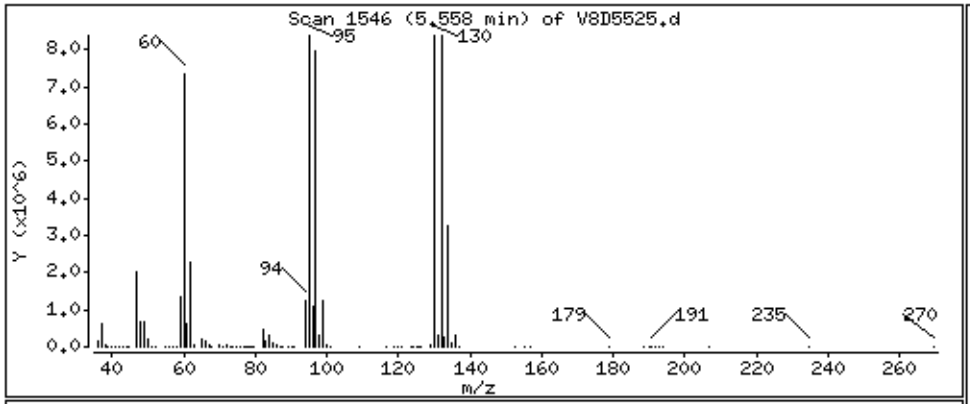
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

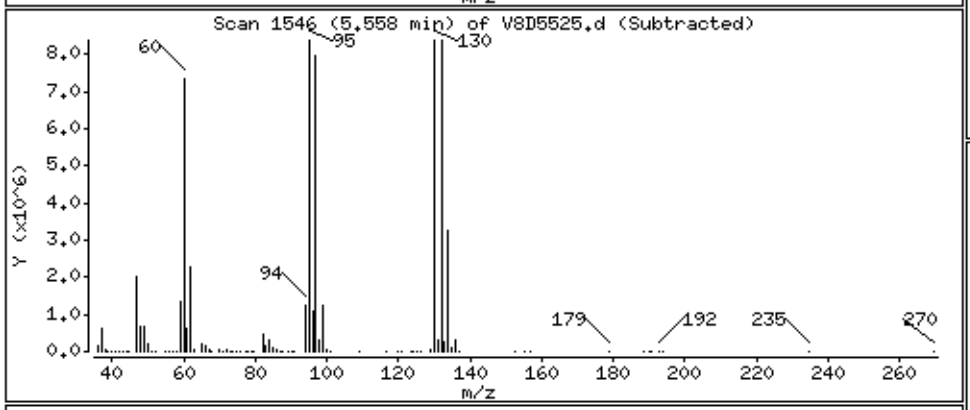
Sample Info: 5ML,N1055-10A,,77659

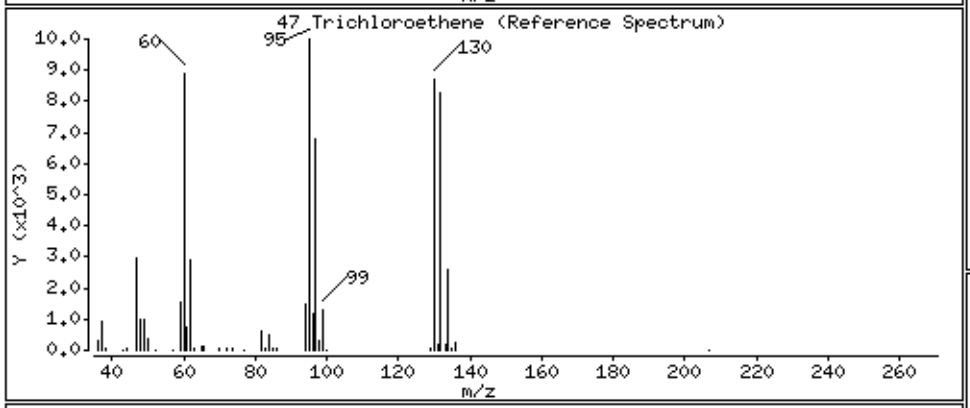
Purge Volume: 5.0 Operator: WL SRC: LIMS

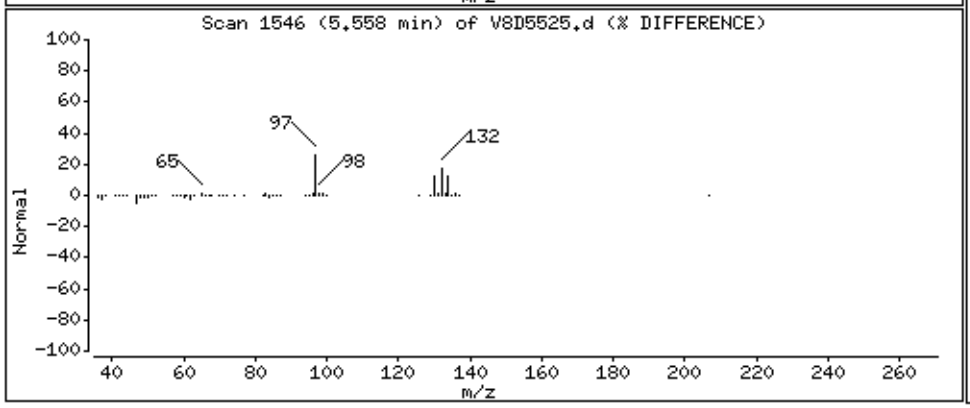
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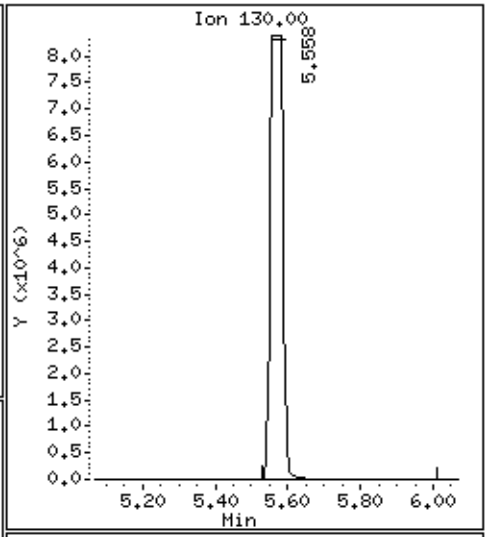
47 Trichloroethene Concentration: 12000 ug/L

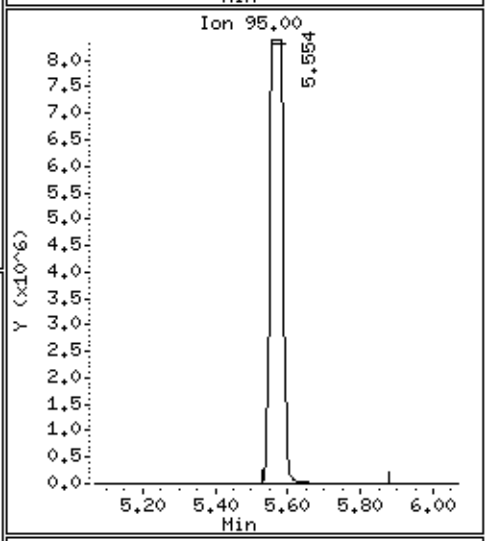


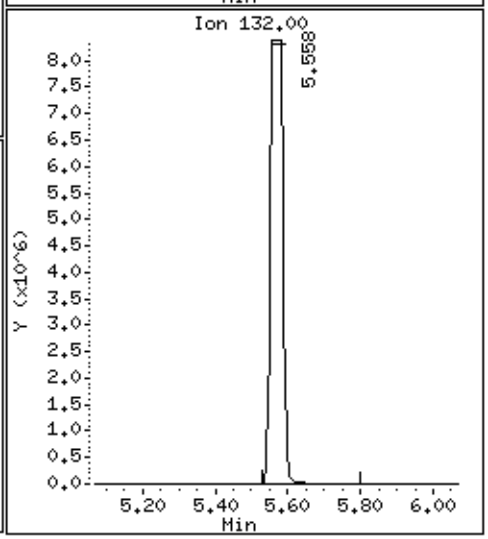












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

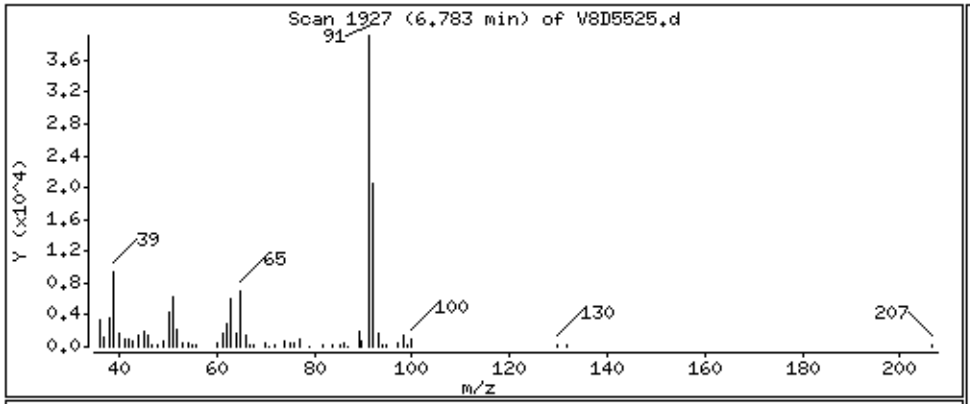
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

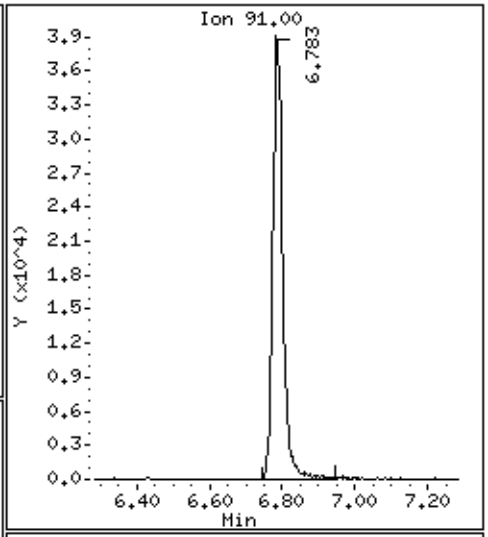
Sample Info: 5ML,N1055-10A,,77659

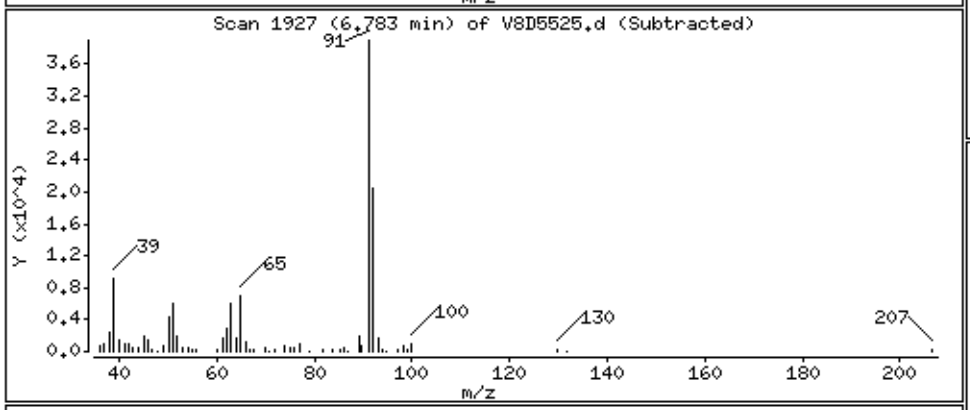
Purge Volume: 5.0 Operator: WL SRC: LIMS

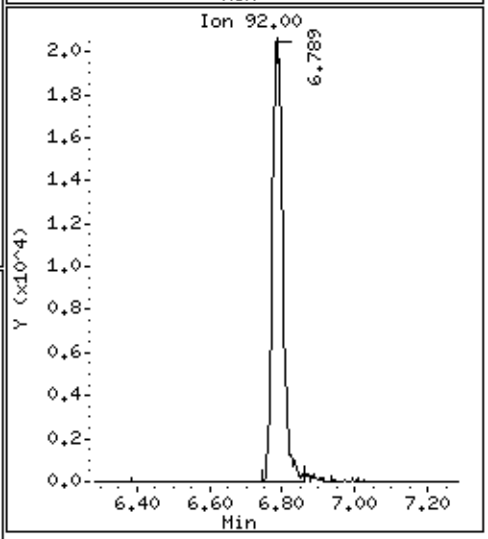
Column phase: DB-624 Column diameter: 0.25

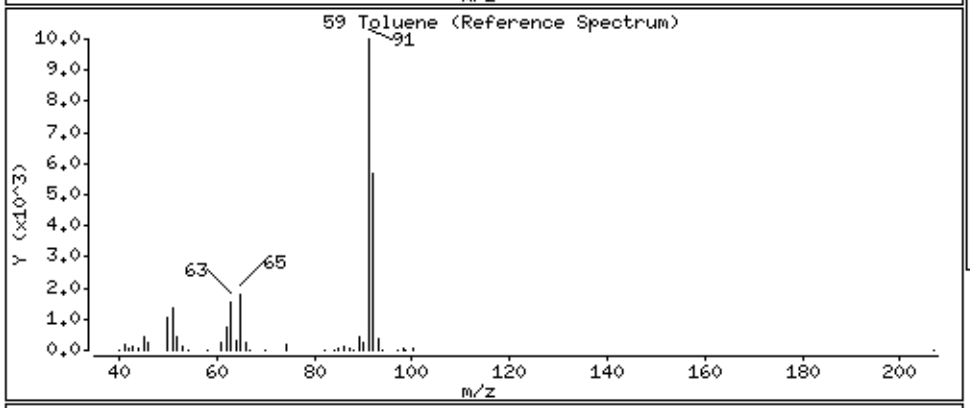
59 Toluene Concentration: 11 ug/L

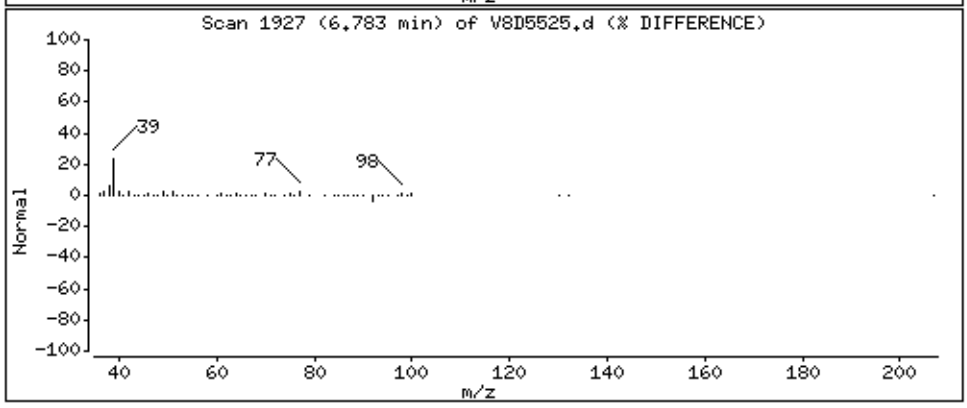












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

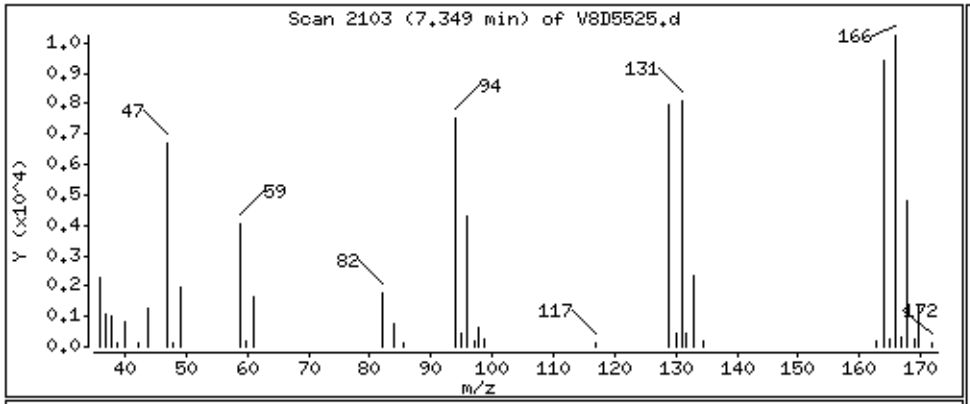
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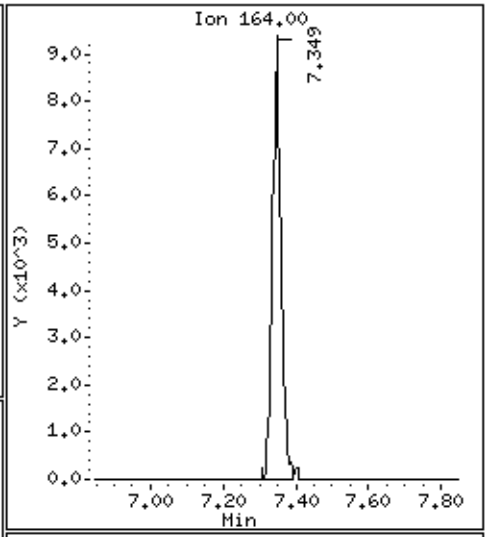
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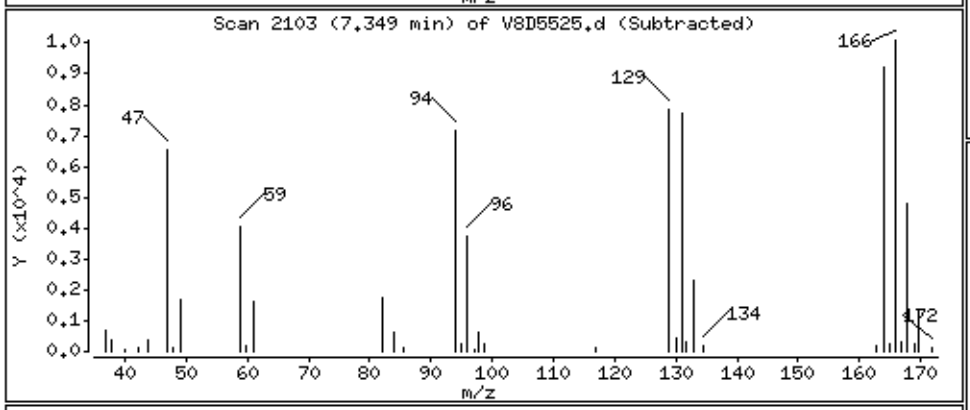
Purge Volume: 5.0 Operator: WL SRC: LIMS

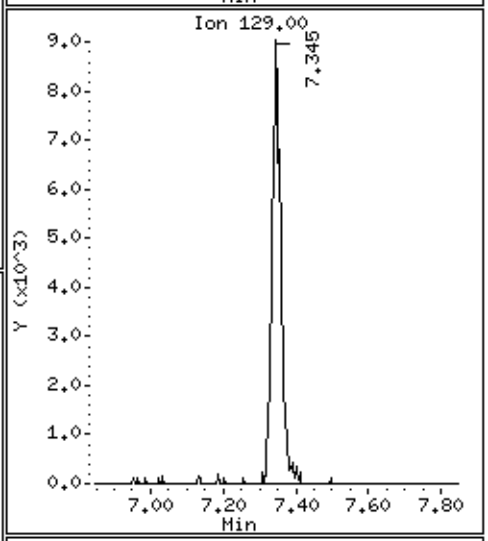
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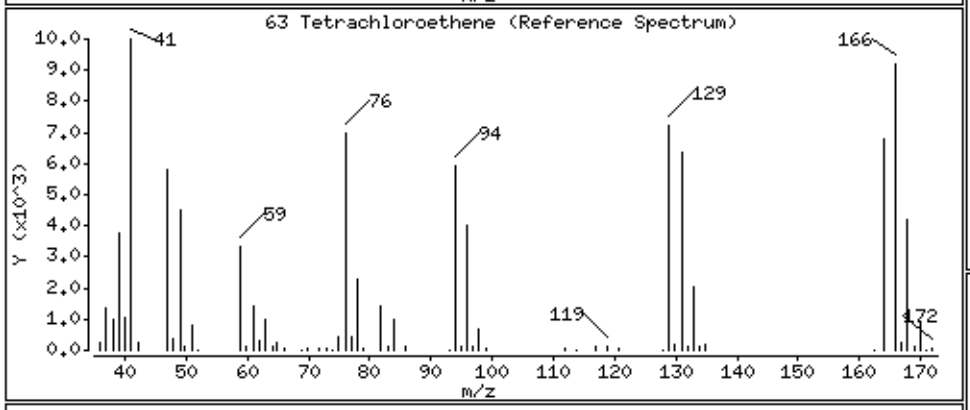
63 Tetrachloroethene Concentration: 7.9 ug/L

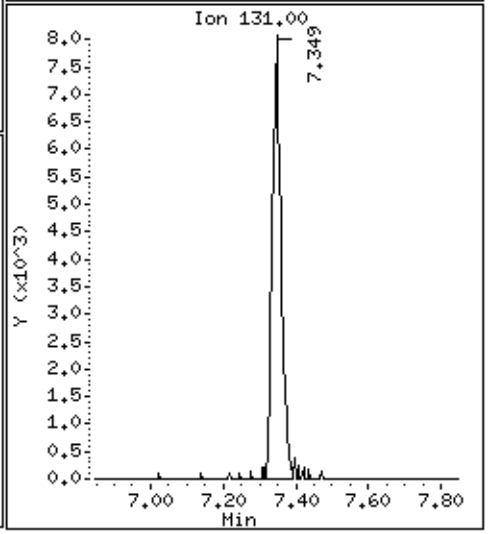


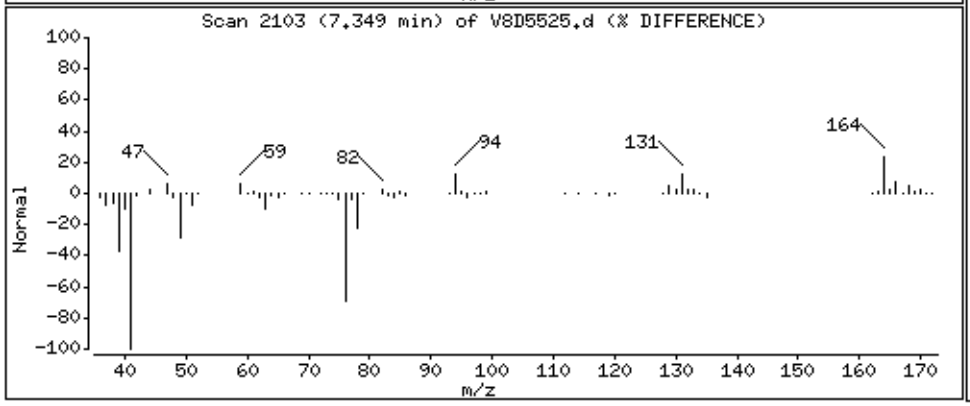












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

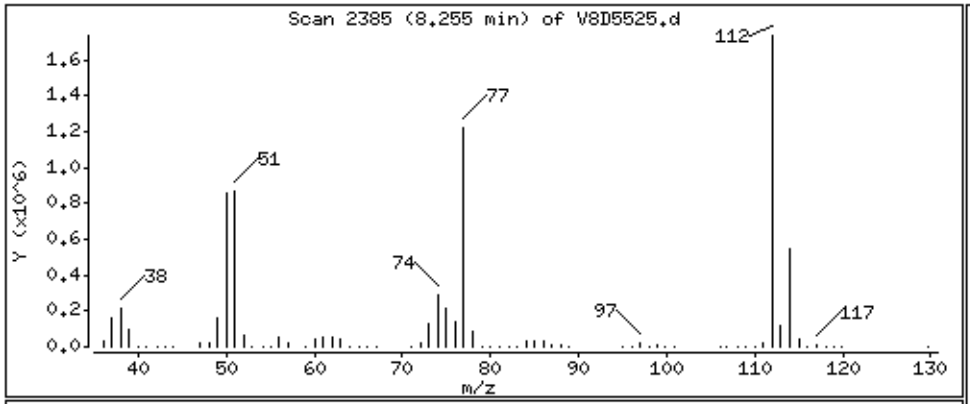
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

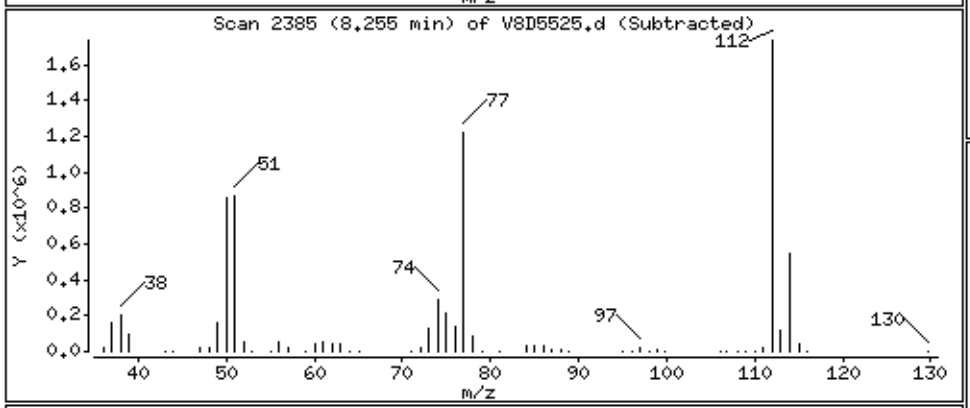
Sample Info: 5ML,N1055-10A,,77659

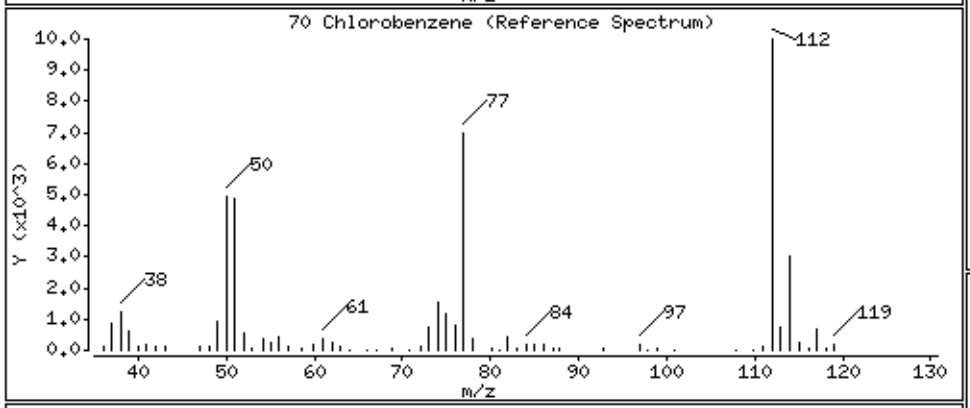
Purge Volume: 5.0 Operator: WL SRC: LIMS

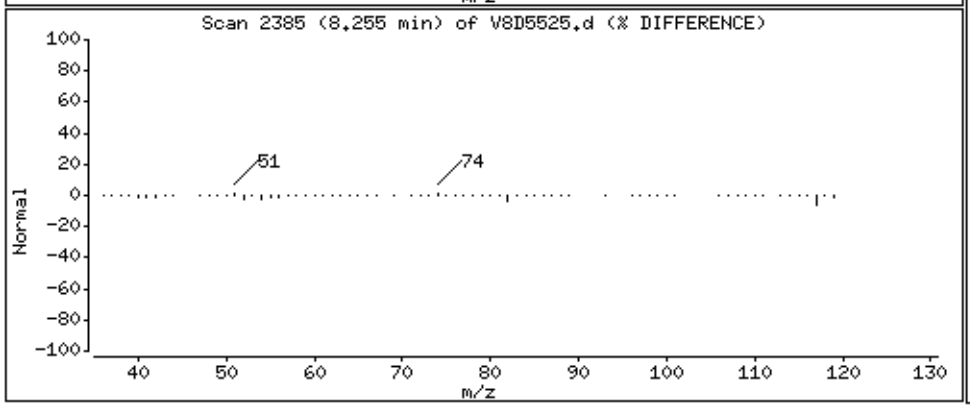
Column phase: DB-624 Column diameter: 0.25

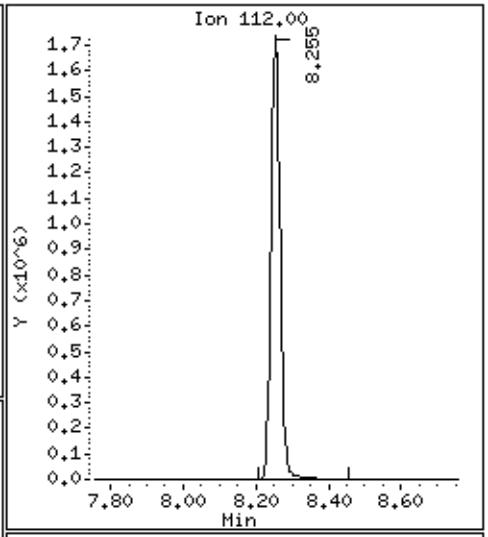
70 Chlorobenzene Concentration: 610 ug/L

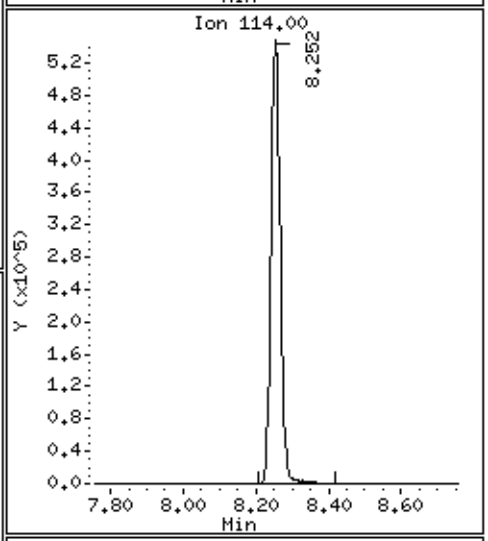


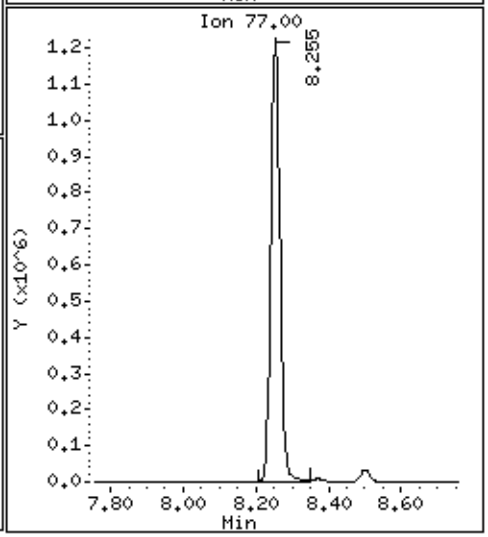












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

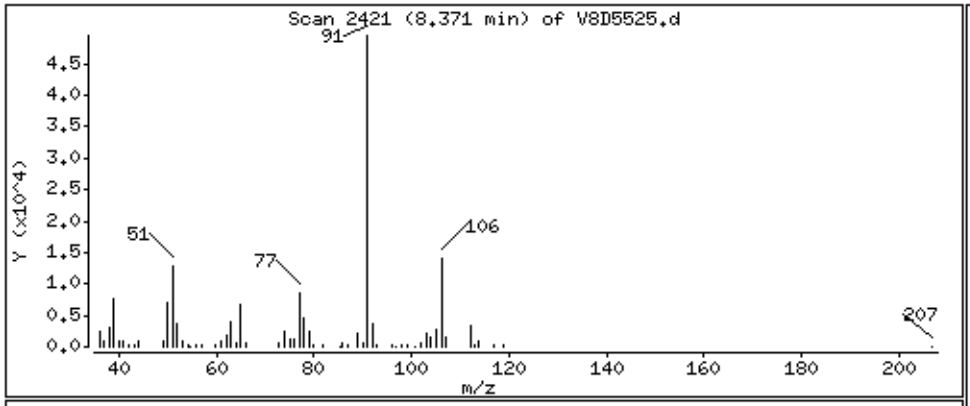
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

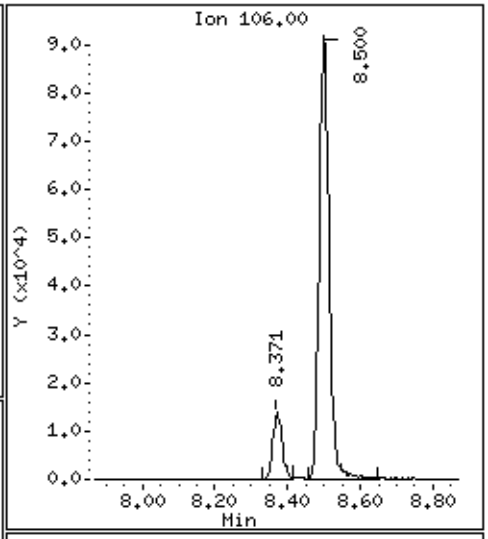
Sample Info: 5ML,N1055-10A,,77659

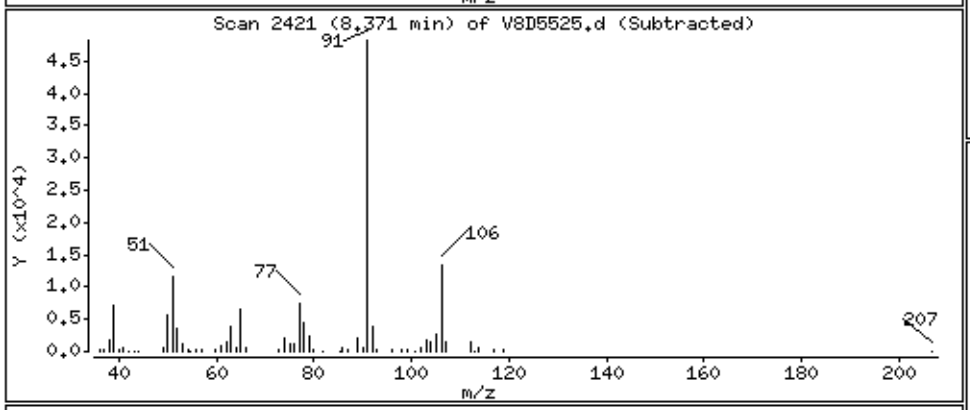
Purge Volume: 5.0 Operator: WL SRC: LIMS

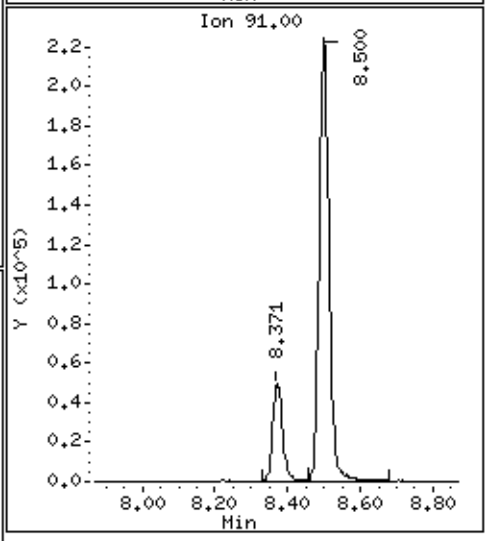
Column phase: DB-624 Column diameter: 0.25

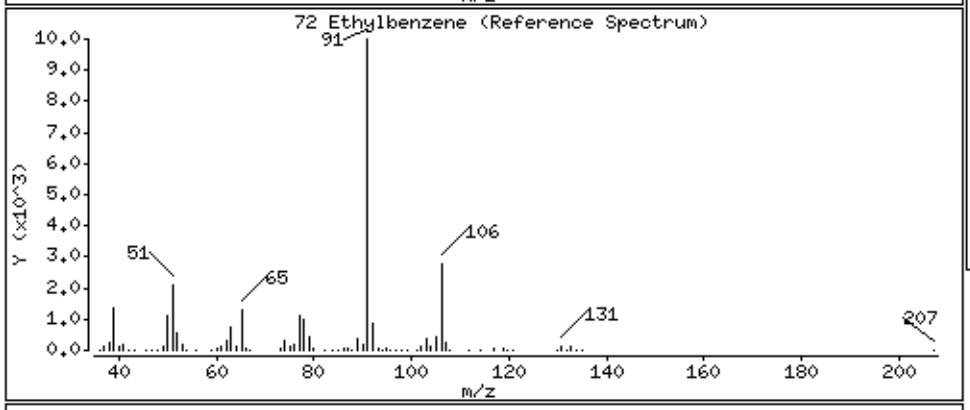
72 Ethylbenzene Concentration: 9.8 ug/L

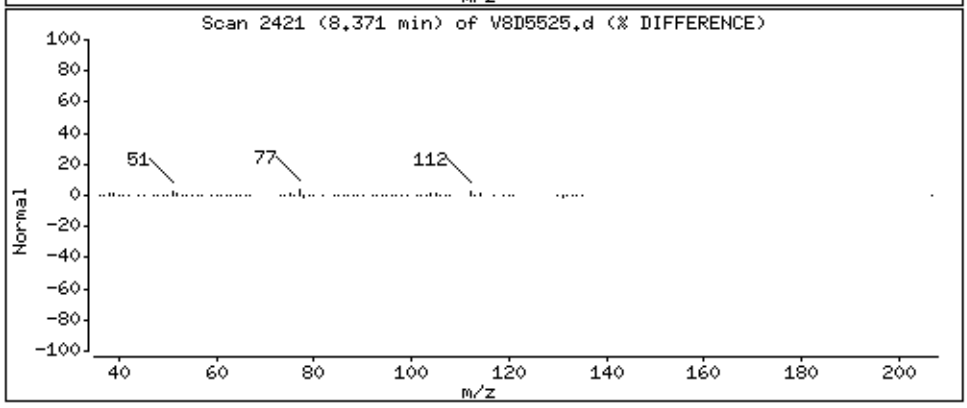












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

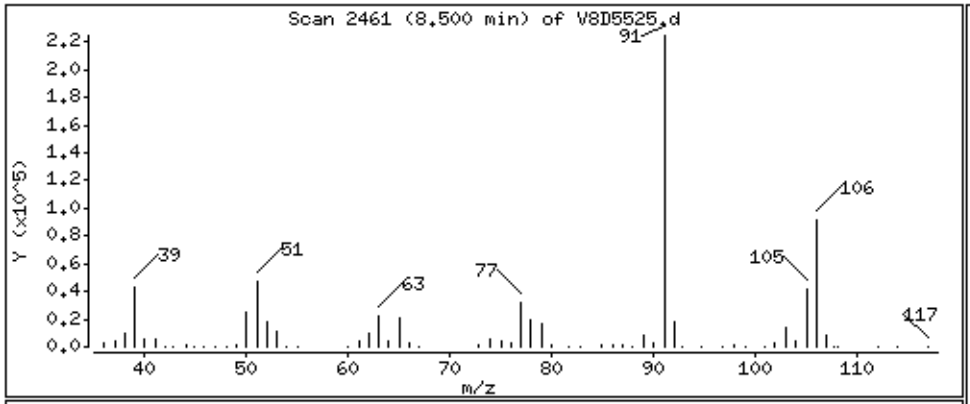
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

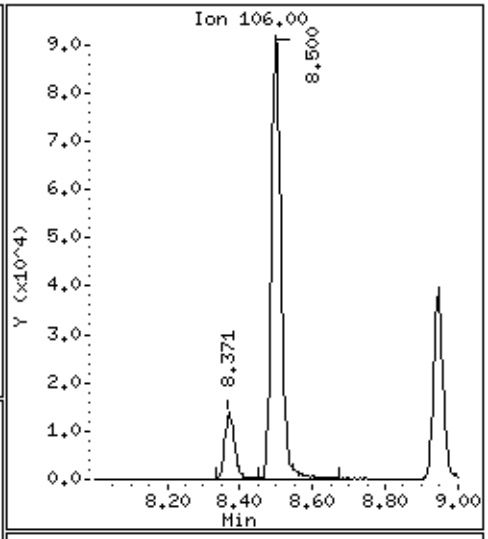
Sample Info: 5ML,N1055-10A,,77659

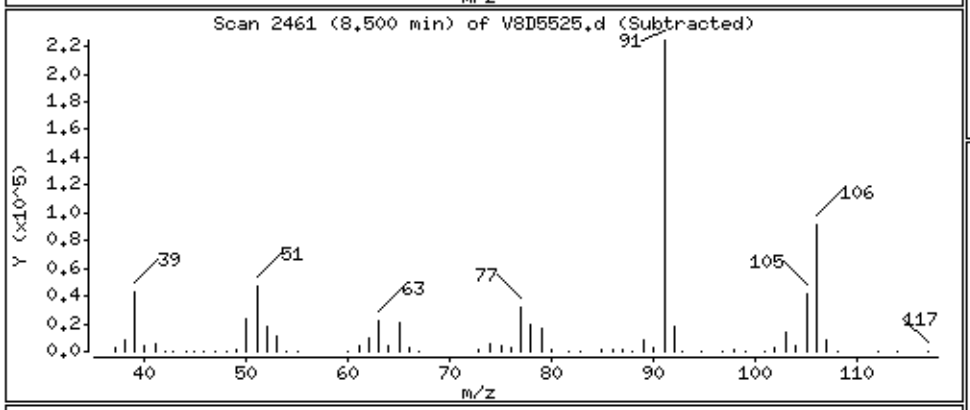
Purge Volume: 5.0 Operator: WL SRC: LIMS

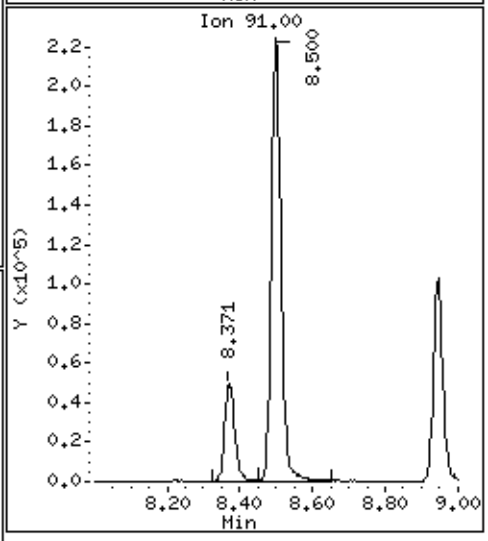
Column phase: DB-624 Column diameter: 0.25

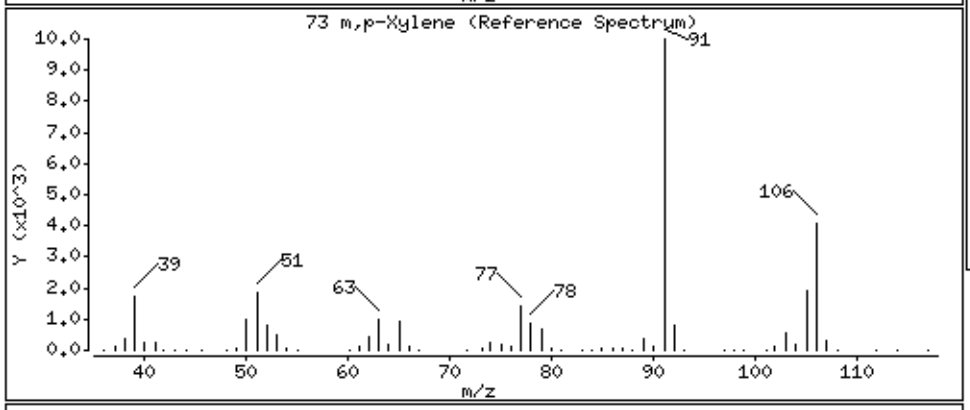
73 m,p-Xylene Concentration: 55 ug/L

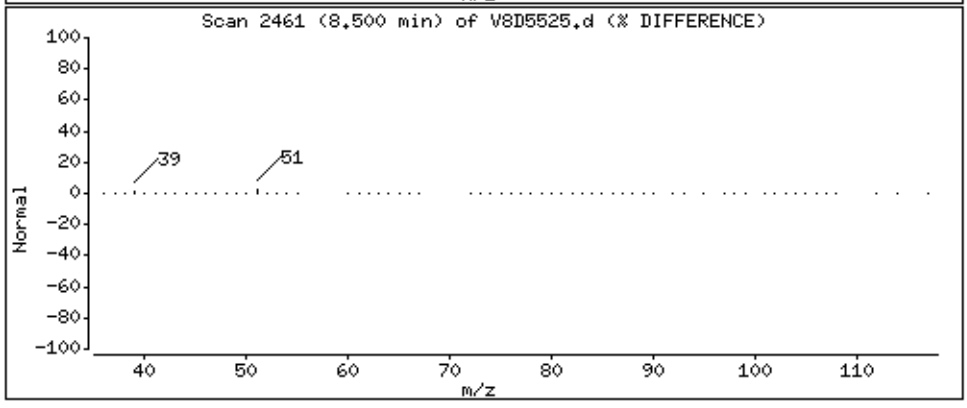












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

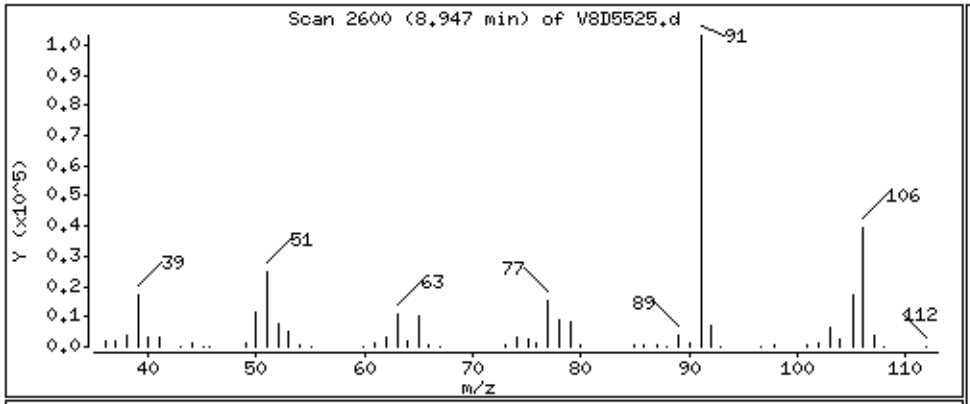
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

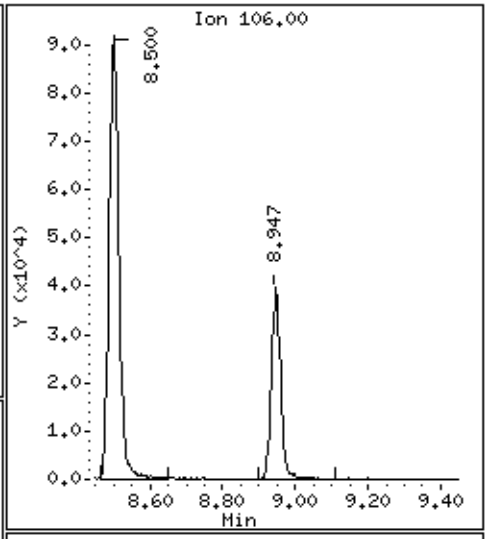
Sample Info: 5ML,N1055-10A,,77659

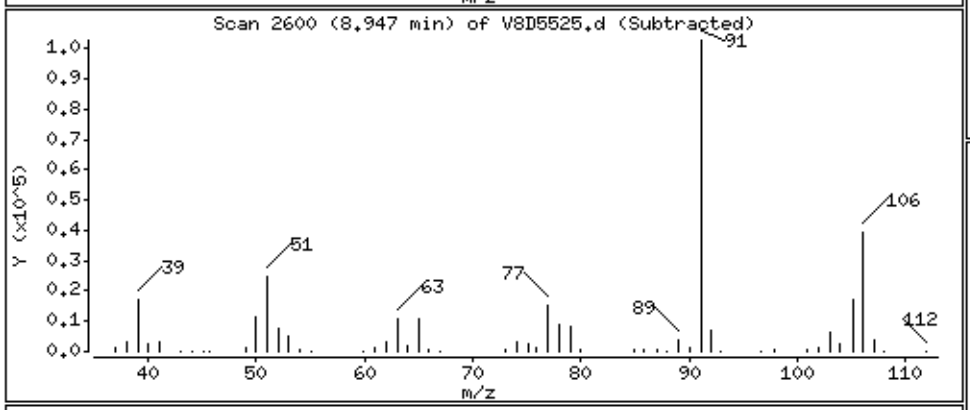
Purge Volume: 5.0 Operator: WL SRC: LIMS

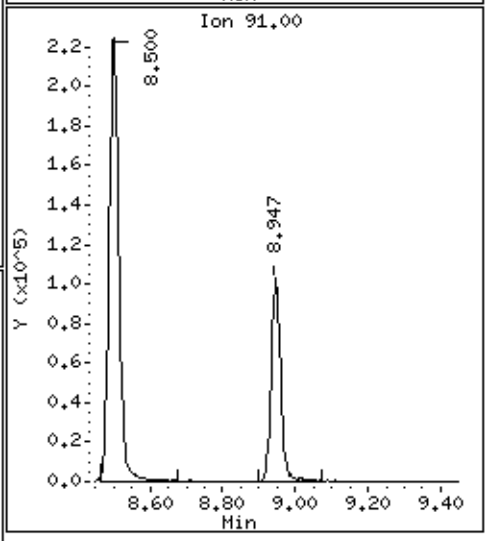
Column phase: DB-624 Column diameter: 0.25

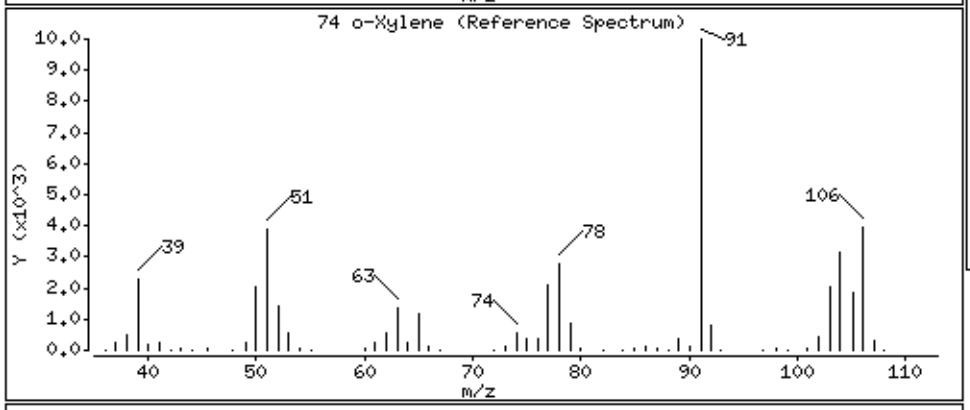
74 o-Xylene Concentration: 24 ug/L

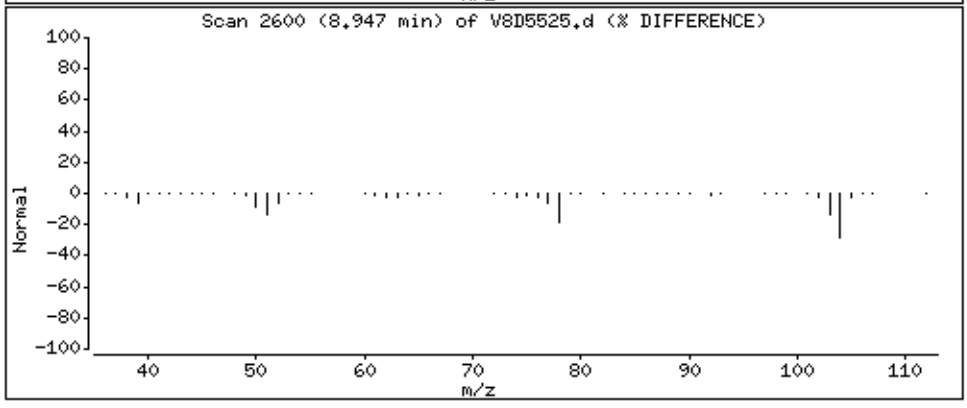












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Date : 19-JUN-2014 14:24

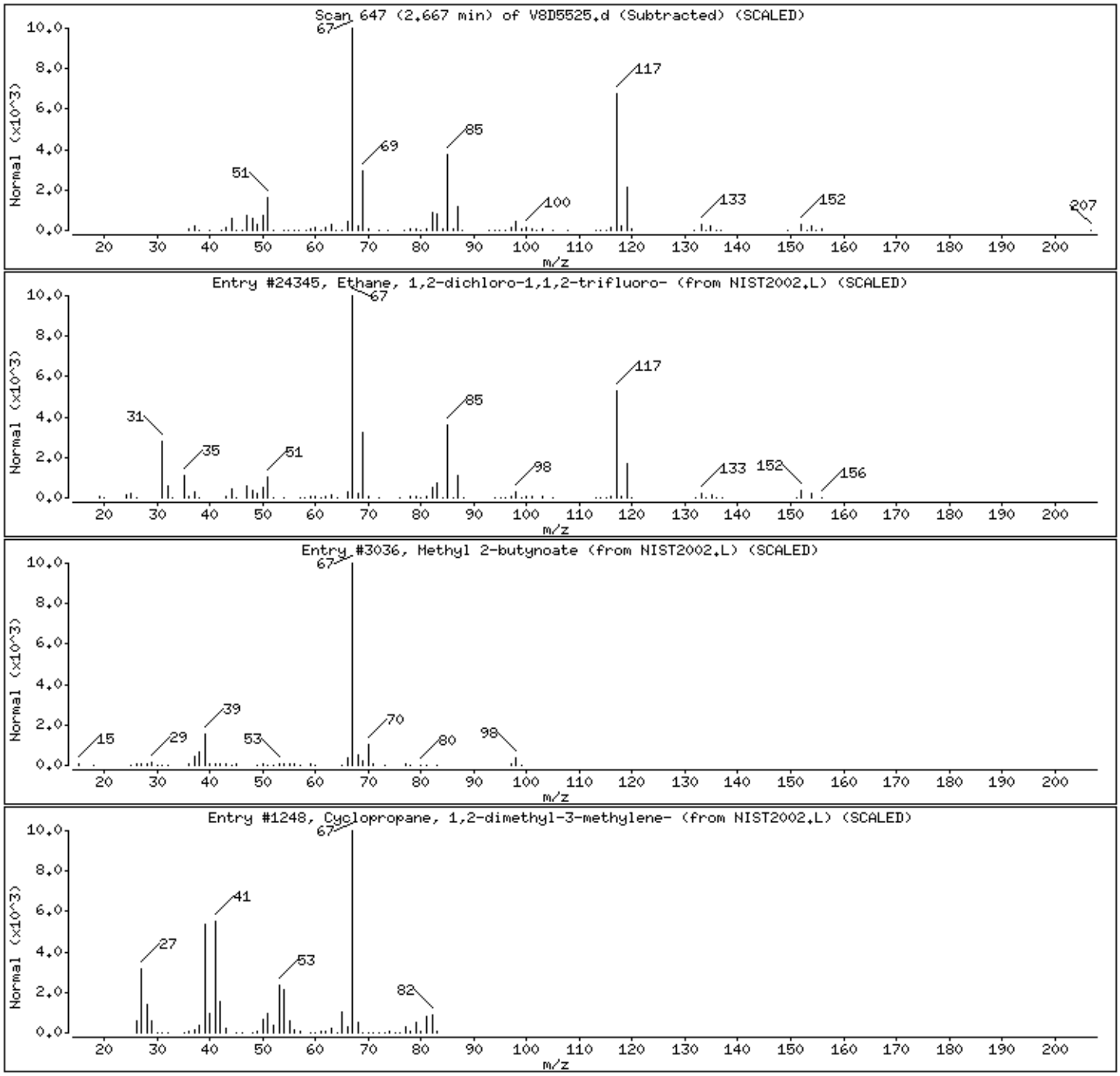
Client ID: MW-21R(1)_6/17/14 Instrument: V10.i

Sample Info: 5ML,N1055-10A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

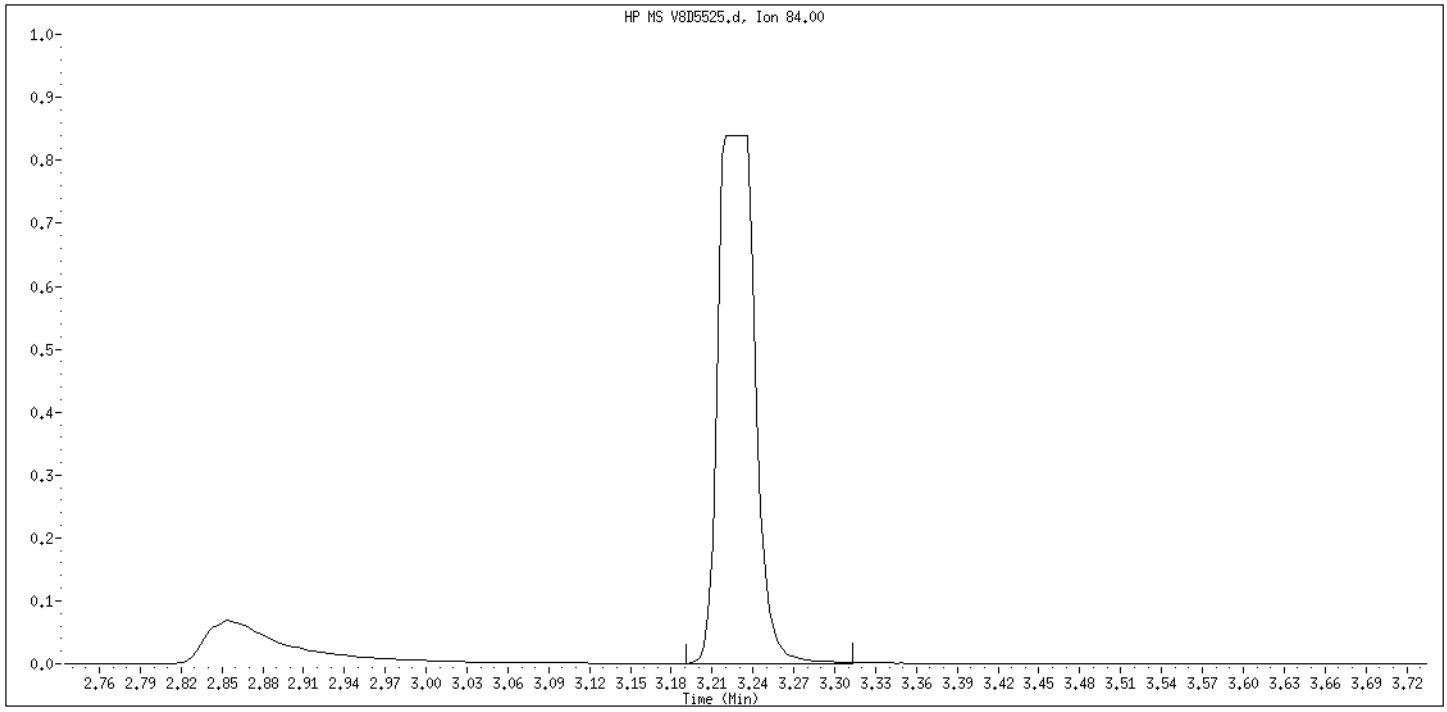
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Methyl 2-butynoate	23326-27-4	NIST2002.L	3036	25	C5H6O2	98
Cyclopropane, 1,2-dimethyl-3-methylene-	62338-02-7	NIST2002.L	1248	25	C6H10	82



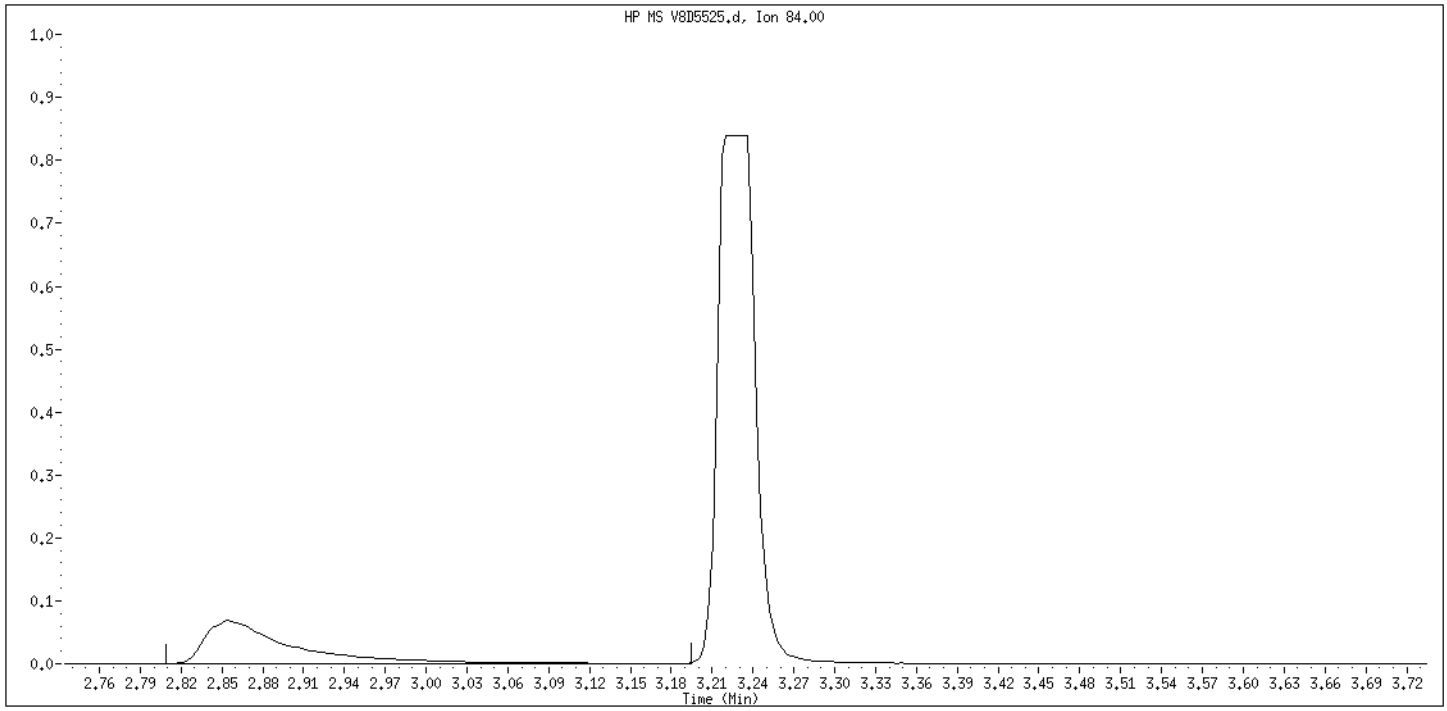
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Lab ID: N1055-10A Client ID: MW-21R(1)_6/17/14
Inj Date: 19-JUN-2014 14:24 Operator: WL SRC: LIMS

Manual Integration Methylene Chloride Ret Time: 3.220 min, Range: 3.191 to 3.313 min Response: 15901287



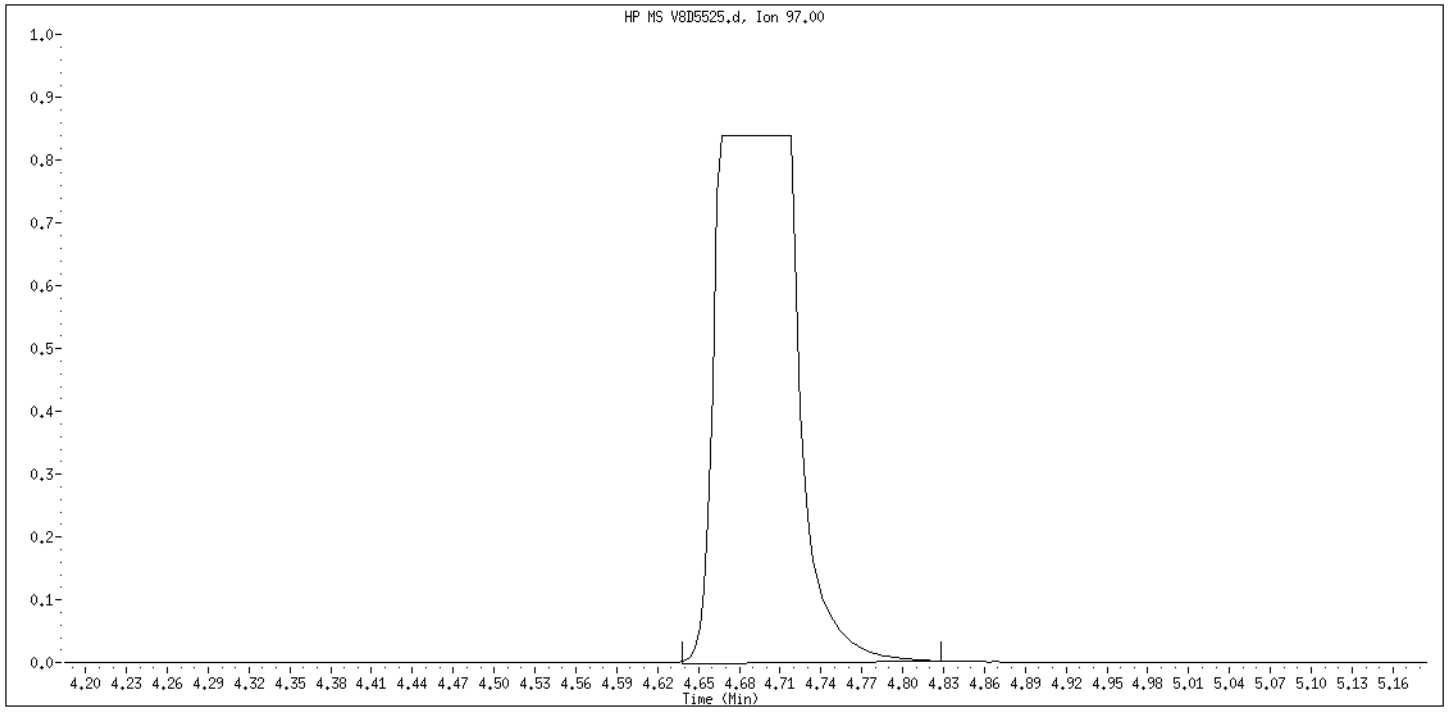
Original Integration Methylene Chloride Ret Time: 2.854 min, Range: 2.809 to 3.194 min Response: 3061339



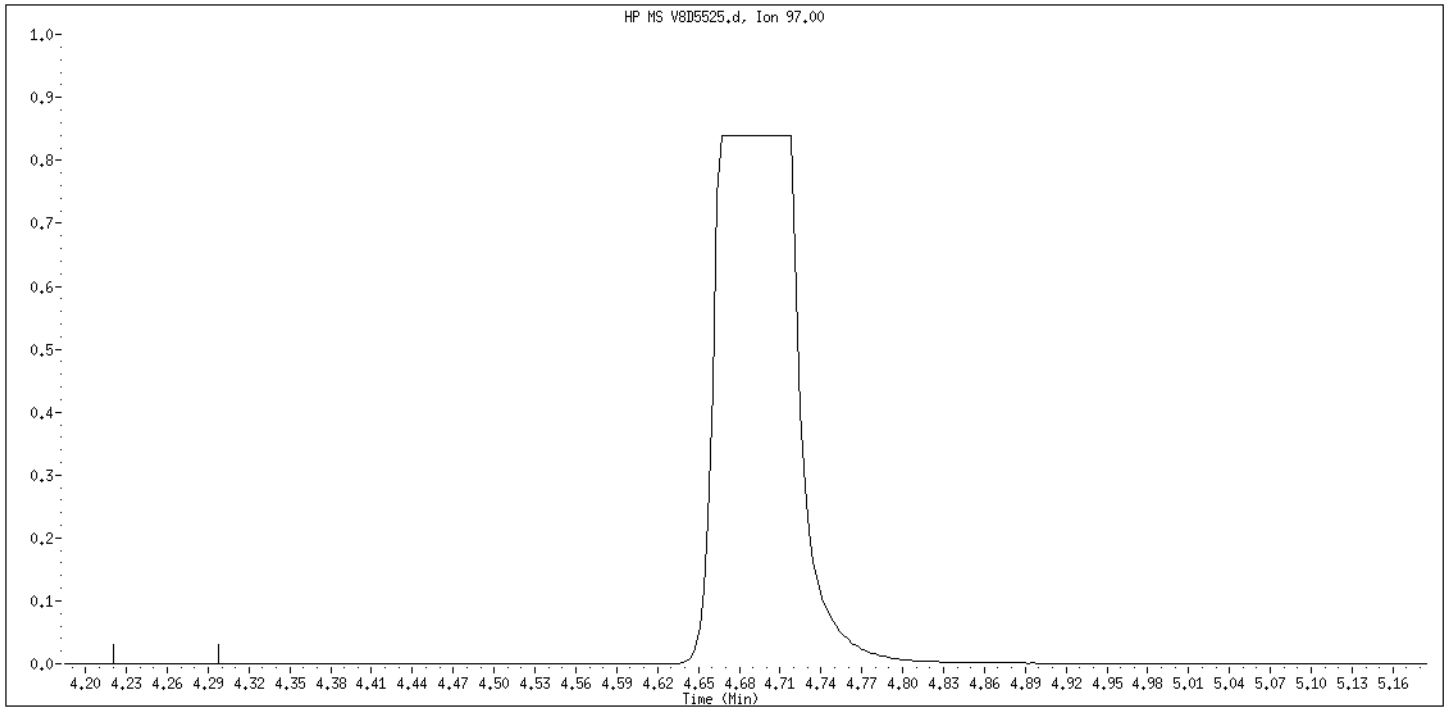
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5525.d

Lab ID: N1055-10A Client ID: MW-21R(1)_6/17/14
Inj Date: 19-JUN-2014 14:24 Operator: WL SRC: LIMS

Manual Integration 1,1,1-Trichloroethane Ret Time: 4.667 min, Range: 4.638 to 4.828 min Response: 35325649



Original Integration 1,1,1-Trichloroethane Ret Time: 4.255 min, Range: 4.220 to 4.297 min Response: 3596



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(1)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-10ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5660.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
74-87-3	Chloromethane	1000	U
75-01-4	Vinyl chloride	1000	U
74-83-9	Bromomethane	1000	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	1000	U
75-35-4	1,1-Dichloroethene	1000	U
67-64-1	Acetone	5000	U
74-88-4	Iodomethane	1000	U
75-15-0	Carbon disulfide	1000	U
75-09-2	Methylene chloride	17000	D
156-60-5	trans-1,2-Dichloroethene	1000	U
1634-04-4	Methyl tert-butyl ether	1000	U
75-34-3	1,1-Dichloroethane	2800	D
108-05-4	Vinyl acetate	1000	U
78-93-3	2-Butanone	5000	U
156-59-2	cis-1,2-Dichloroethene	1000	U
594-20-7	2,2-Dichloropropane	1000	U
74-97-5	Bromochloromethane	1000	U
67-66-3	Chloroform	1000	U
71-55-6	1,1,1-Trichloroethane	55000	D
563-58-6	1,1-Dichloropropene	1000	U
56-23-5	Carbon tetrachloride	1000	U
107-06-2	1,2-Dichloroethane	1000	U
71-43-2	Benzene	1000	U
79-01-6	Trichloroethene	21000	D
78-87-5	1,2-Dichloropropane	1000	U
74-95-3	Dibromomethane	1000	U
75-27-4	Bromodichloromethane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
108-10-1	4-Methyl-2-pentanone	5000	U
108-88-3	Toluene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
142-28-9	1,3-Dichloropropane	1000	U

EPA SAMPLE NO.
MW-21R(1)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-10ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5660.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
591-78-6	2-Hexanone	5000	U
124-48-1	Dibromochloromethane	1000	U
106-93-4	1,2-Dibromoethane	1000	U
108-90-7	Chlorobenzene	1200	D
630-20-6	1,1,1,2-Tetrachloroethane	1000	U
100-41-4	Ethylbenzene	1000	U
179601-23-1	m,p-Xylene	1000	U
95-47-6	o-Xylene	1000	U
1330-20-7	Xylene (Total)	1000	U
100-42-5	Styrene	1000	U
75-25-2	Bromoform	1000	U
98-82-8	Isopropylbenzene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-86-1	Bromobenzene	1000	U
96-18-4	1,2,3-Trichloropropane	1000	U
103-65-1	n-Propylbenzene	1000	U
95-49-8	2-Chlorotoluene	1000	U
108-67-8	1,3,5-Trimethylbenzene	1000	U
106-43-4	4-Chlorotoluene	1000	U
98-06-6	tert-Butylbenzene	1000	U
95-63-6	1,2,4-Trimethylbenzene	1000	U
135-98-8	sec-Butylbenzene	1000	U
99-87-6	4-Isopropyltoluene	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
104-51-8	n-Butylbenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
96-12-8	1,2-Dibromo-3-chloropropane	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
87-68-3	Hexachlorobutadiene	1000	U
87-61-6	1,2,3-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R(1)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-10ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5660.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5660.d
Lab Smp Id: N1055-10ADL Client Smp ID: MW-21R(1)_6/17/14DL
Inj Date : 23-JUN-2014 17:25
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-10ADL,,77721,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 74
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	1000.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	215155	100.228	100000
	18 Methylene Chloride	84	3.232	3.232	(0.617)	26692	17.0744	17000
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	11634	2.76369	2800
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	68310	51.9028	52
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	233170	54.7783	55000
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	10871	55.5288	56
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	150298	50.0000	
	47 Trichloroethene	130	5.570	5.564	(1.063)	34189	20.9985	21000
$	58 Toluene-d8	98	6.718	6.718	(0.817)	206608	47.6270	48
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	218984	50.0000	
	70 Chlorobenzene	112	8.258	8.255	(1.004)	4842	1.21200	1200(QH)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	139105	47.0427	47
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	117969	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d
Report Date: 27-Jun-2014 13:32

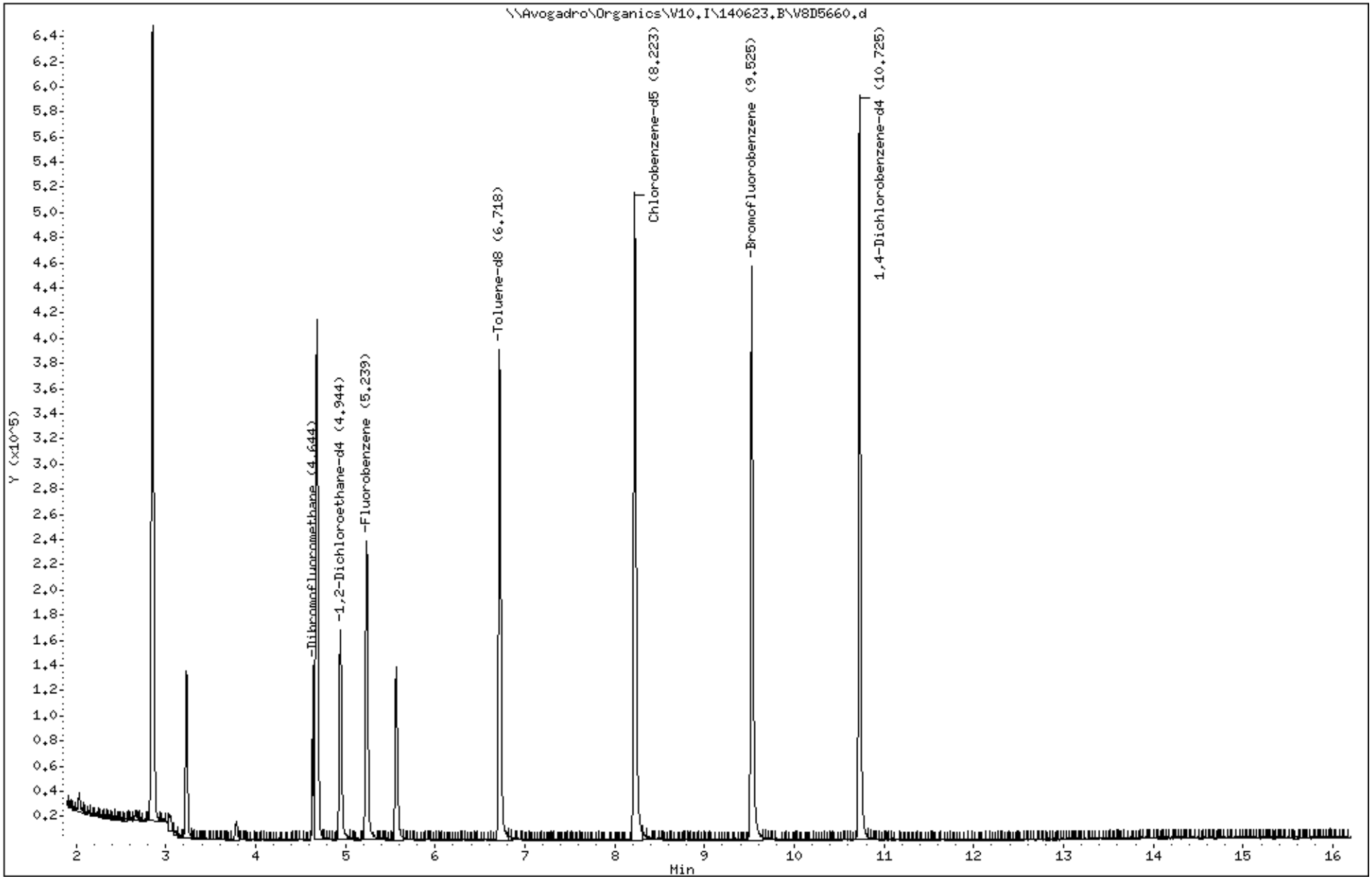
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5660.d
Lab Smp Id: N1055-10ADL Client Smp ID: MW-21R(1)_6/17/14DL
Inj Date : 23-JUN-2014 17:25
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-10ADL,,77721,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 74
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d
Date : 23-JUN-2014 17:25
Client ID: MW-21R(1)_6/17/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-10ADL,,77721,1000
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d

Date : 23-JUN-2014 17:25

Client ID: MW-21R(1)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-10ADL,,77721,1000

Purge Volume: 5.0

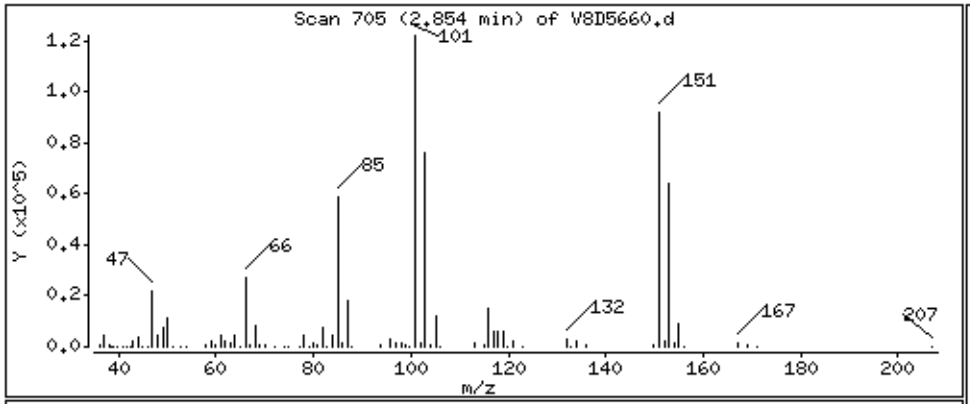
Operator: WL SRC: LIMS

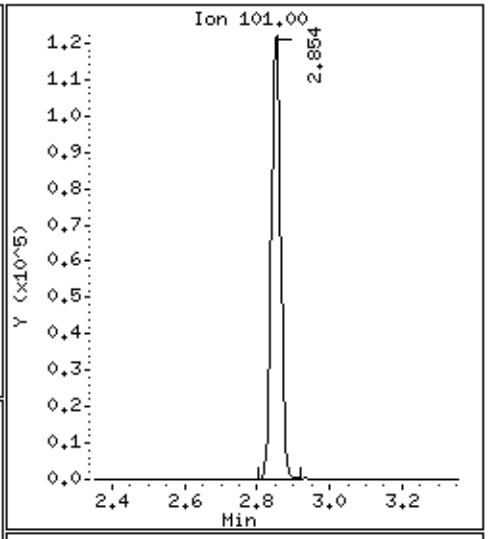
Column phase: DB-624

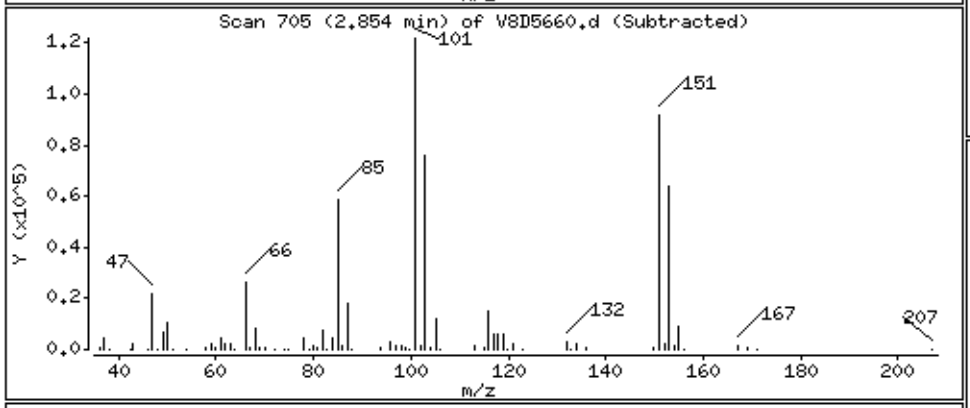
Column diameter: 0.25

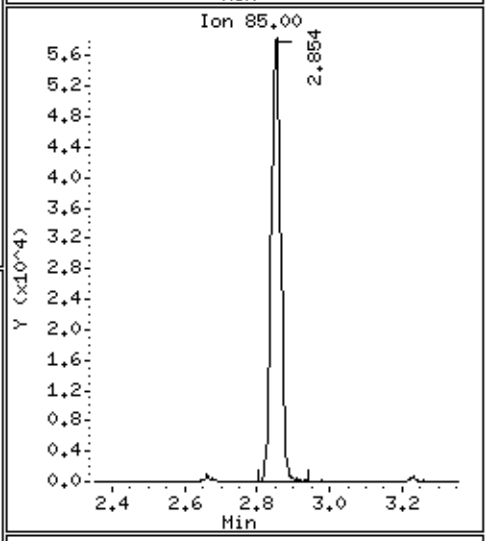
11 1,1,2-Trichloro-1,2,2-Trifluo

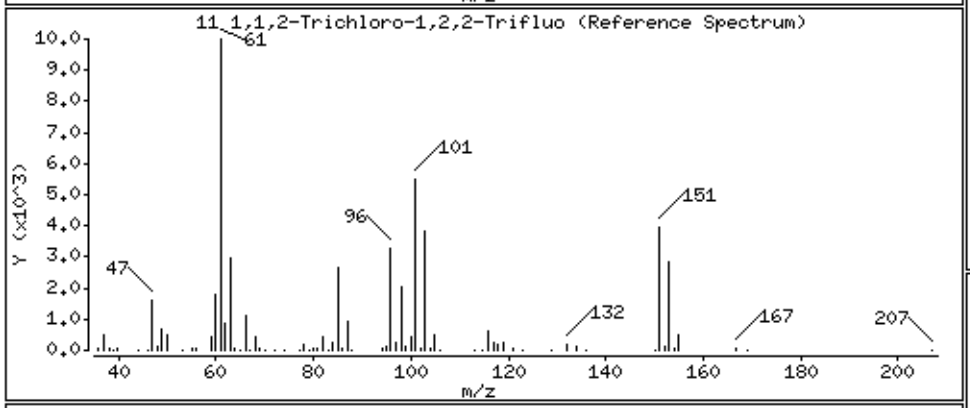
Concentration: 100000 ug/L

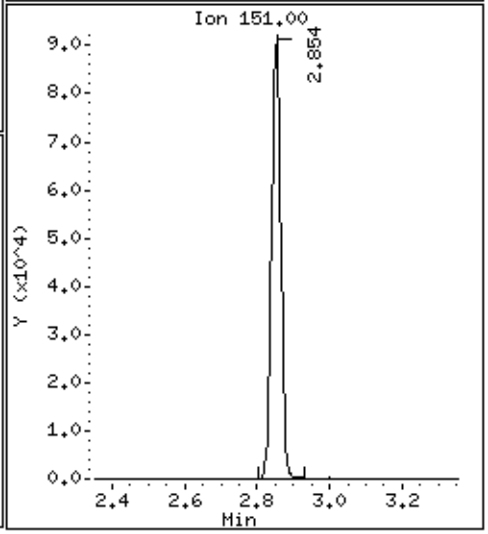


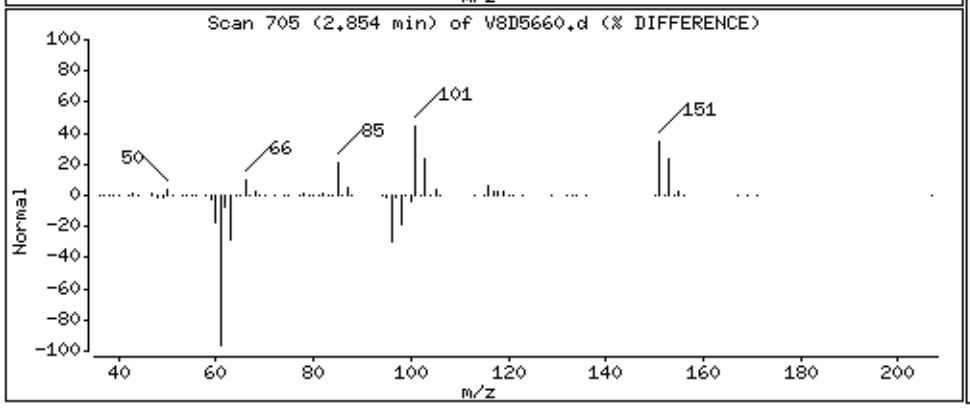












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d

Date : 23-JUN-2014 17:25

Client ID: MW-21R(1)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-10ADL,,77721,1000

Purge Volume: 5.0

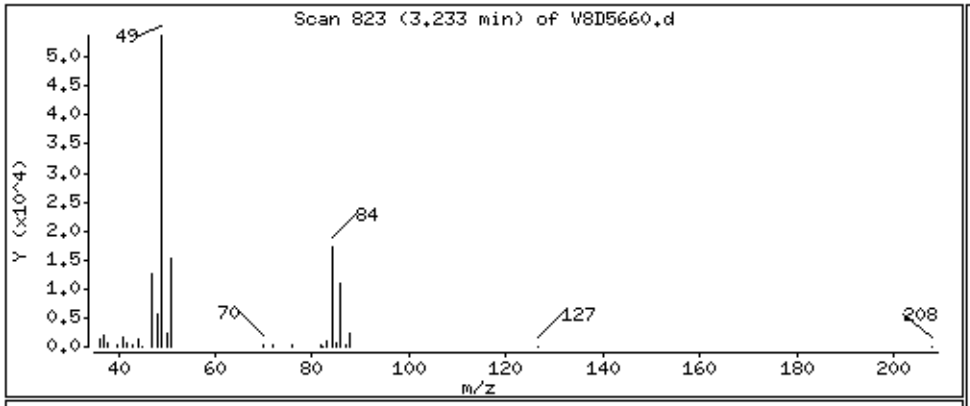
Operator: WL SRC: LIMS

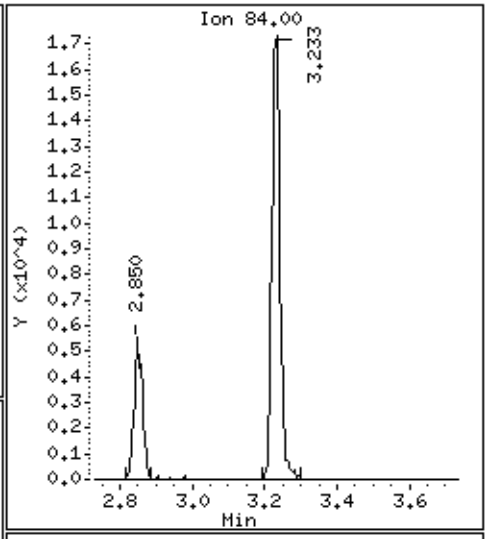
Column phase: DB-624

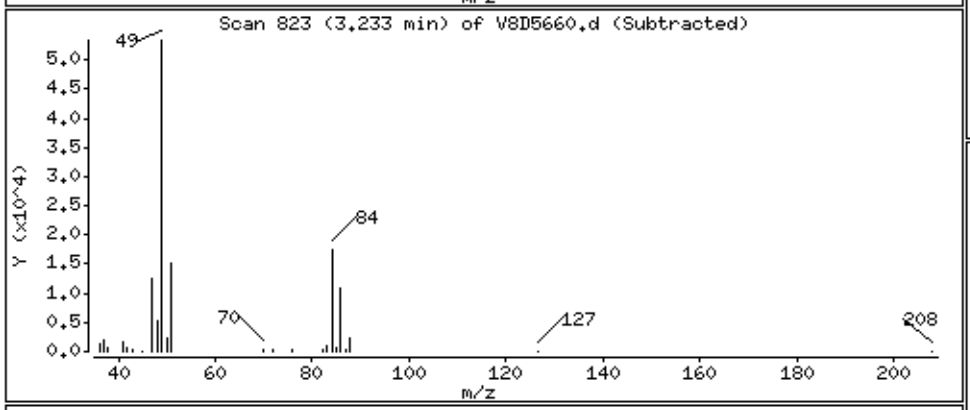
Column diameter: 0.25

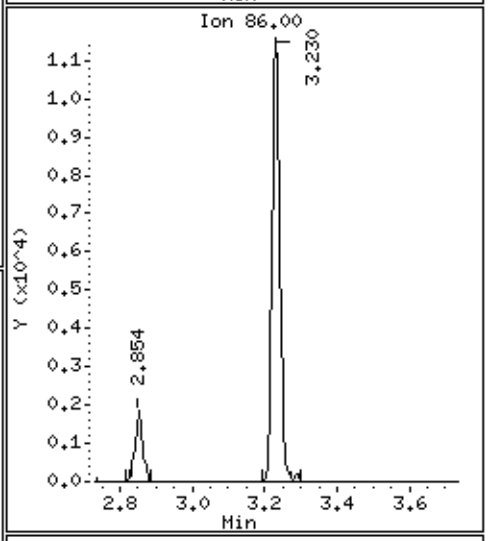
18 Methylene Chloride

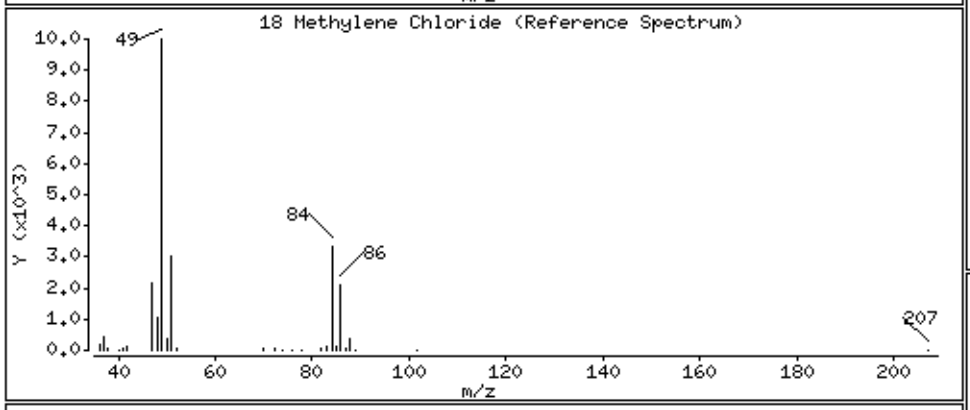
Concentration: 17000 ug/L

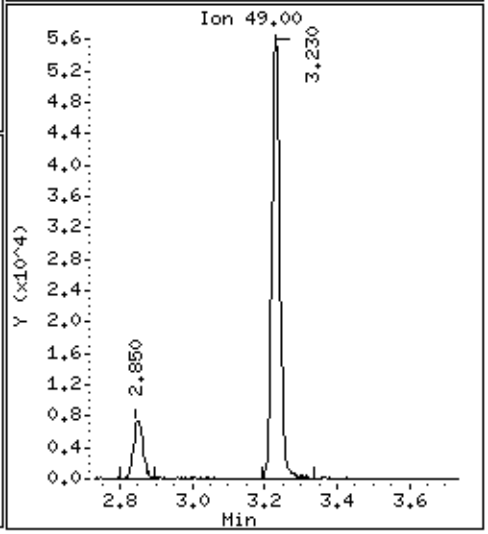


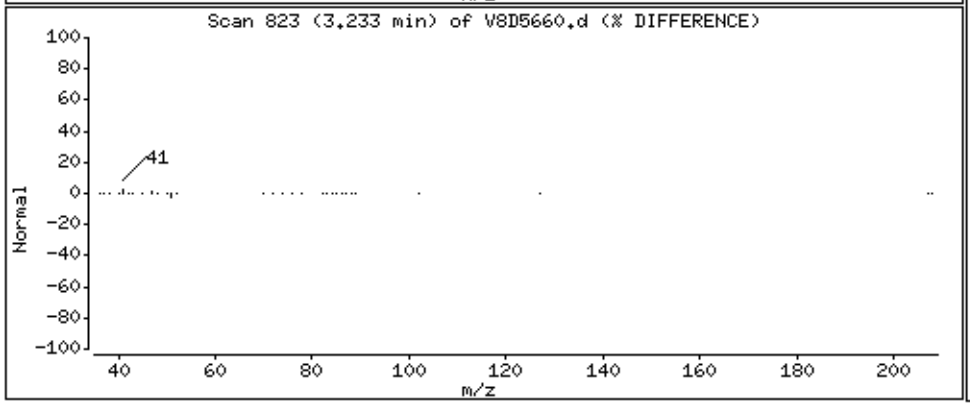












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d

Date : 23-JUN-2014 17:25

Client ID: MW-21R(1)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-10ADL,,77721,1000

Purge Volume: 5.0

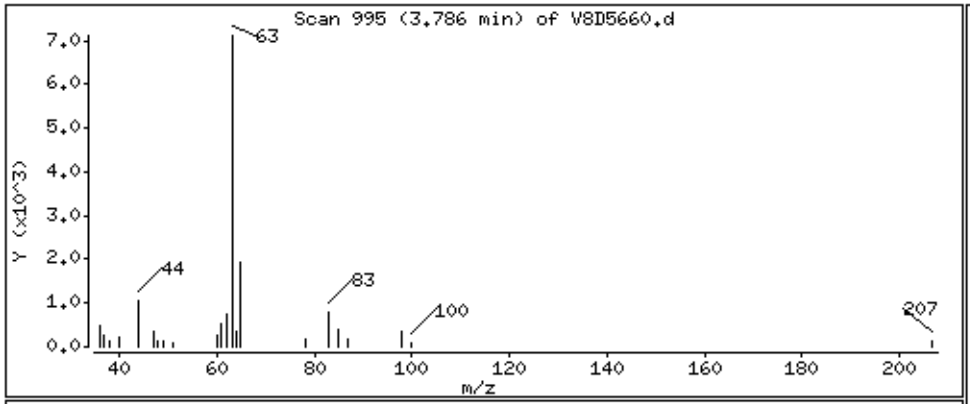
Operator: WL SRC: LIMS

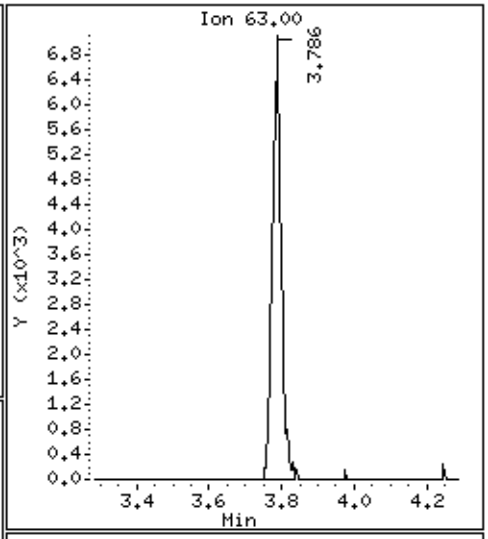
Column phase: DB-624

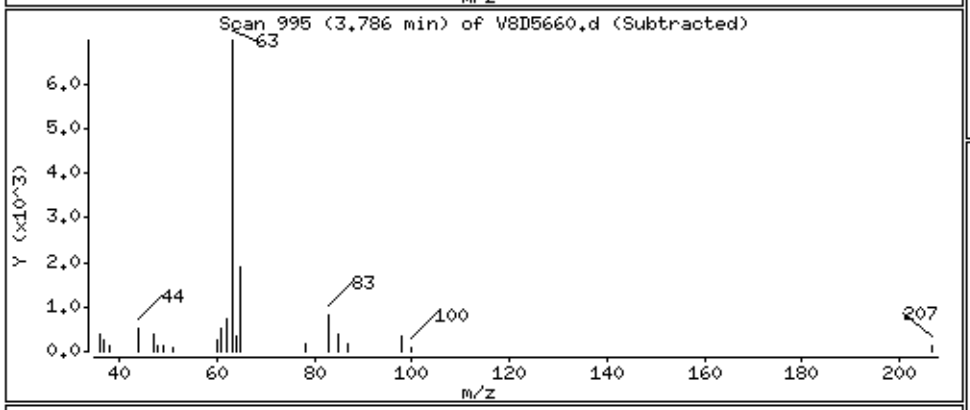
Column diameter: 0.25

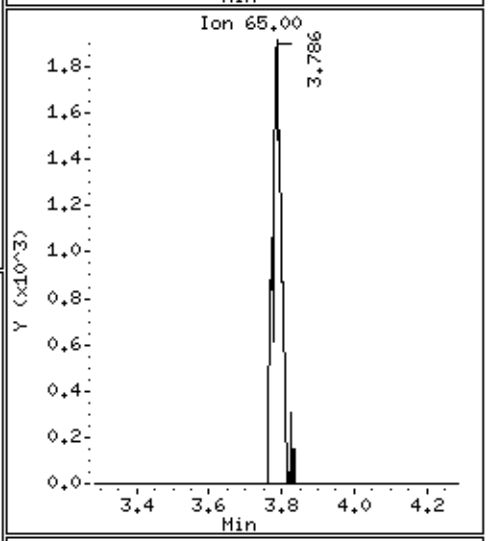
23 1,1-Dichloroethane

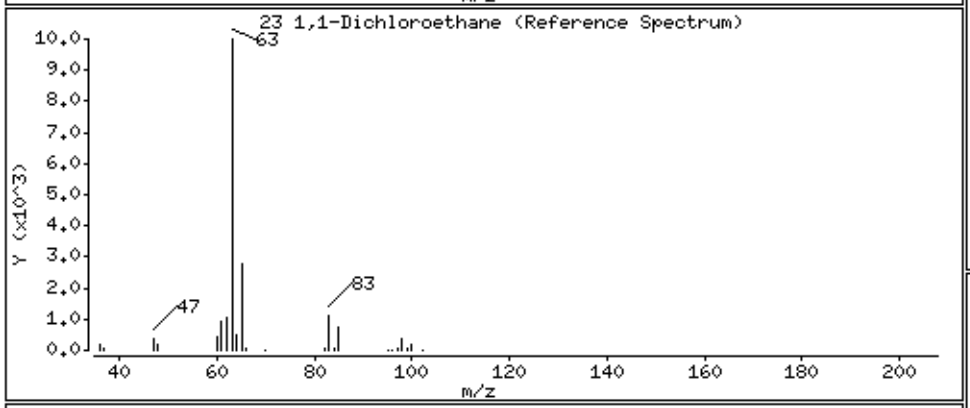
Concentration: 2800 ug/L

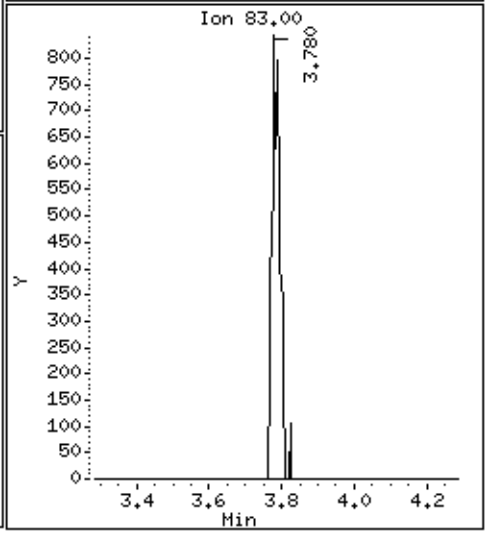


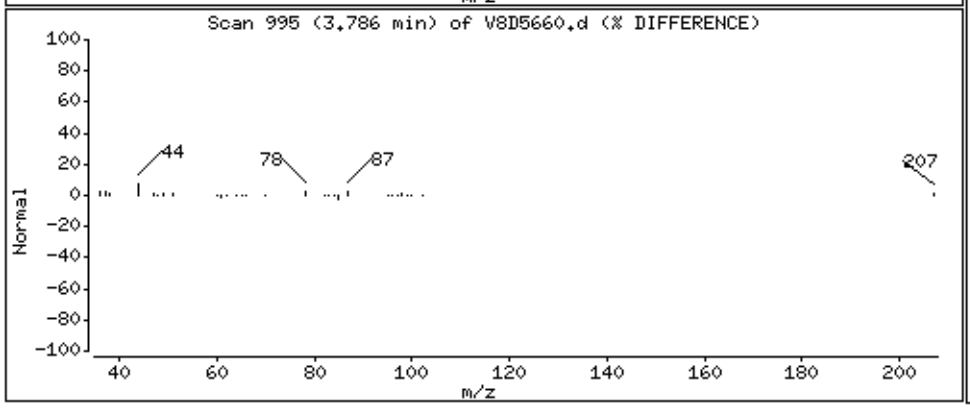












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d

Date : 23-JUN-2014 17:25

Client ID: MW-21R(1)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-10ADL,,77721,1000

Purge Volume: 5.0

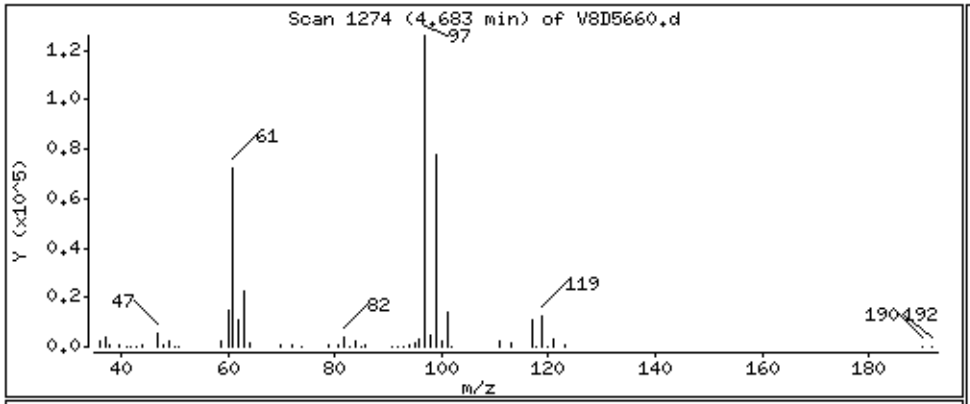
Operator: WL SRC: LIMS

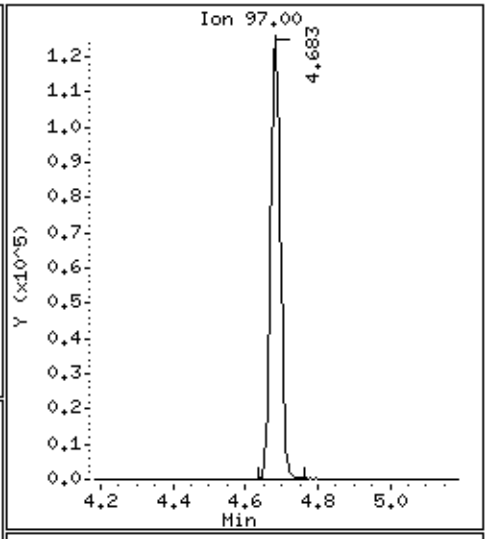
Column phase: DB-624

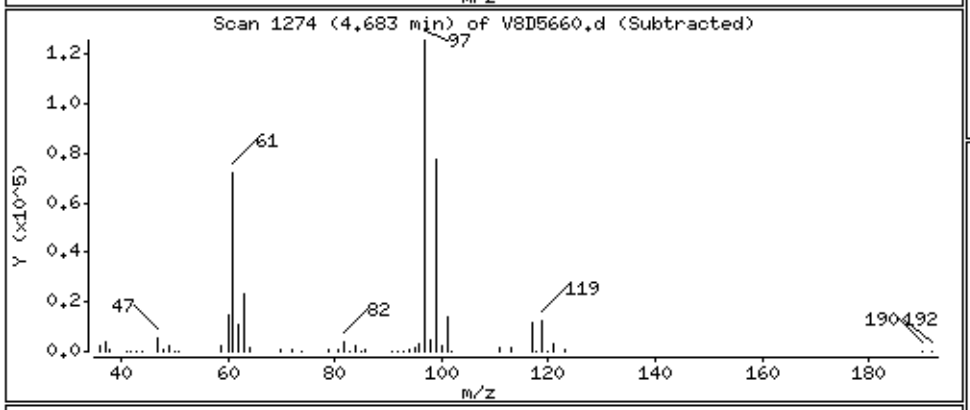
Column diameter: 0.25

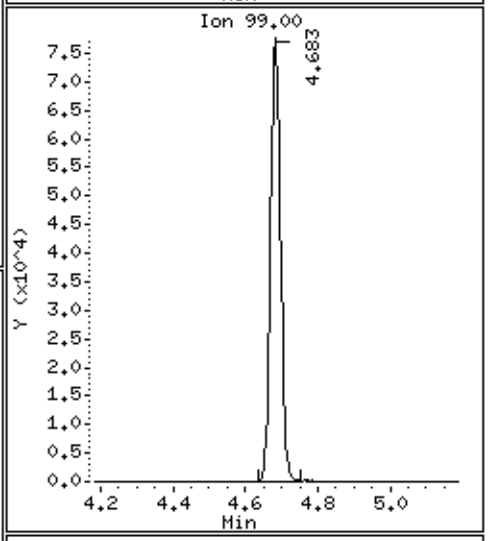
37 1,1,1-Trichloroethane

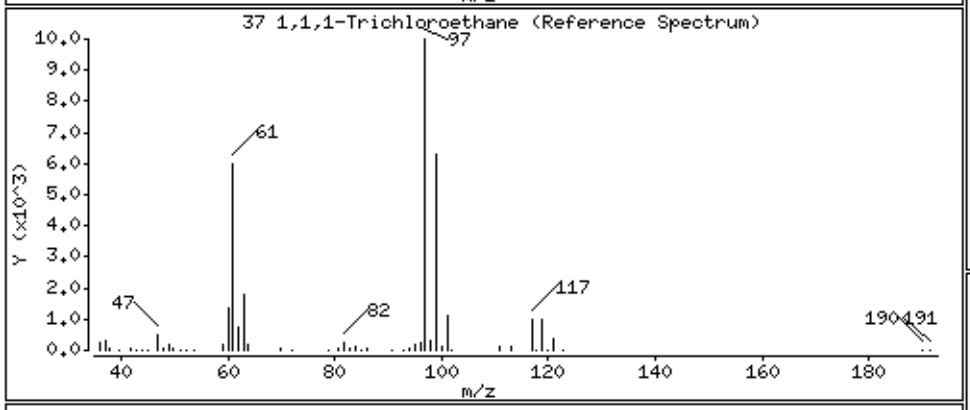
Concentration: 55000 ug/L

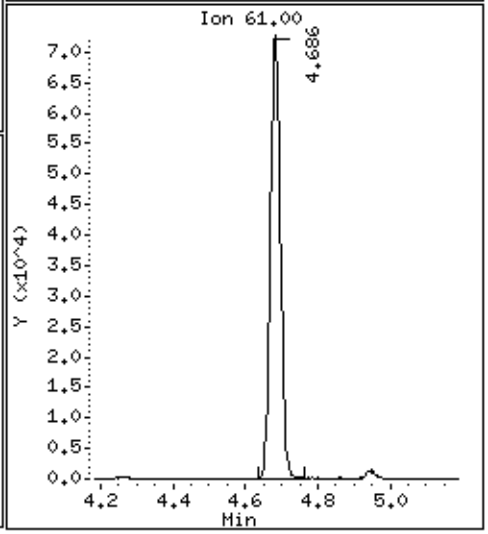


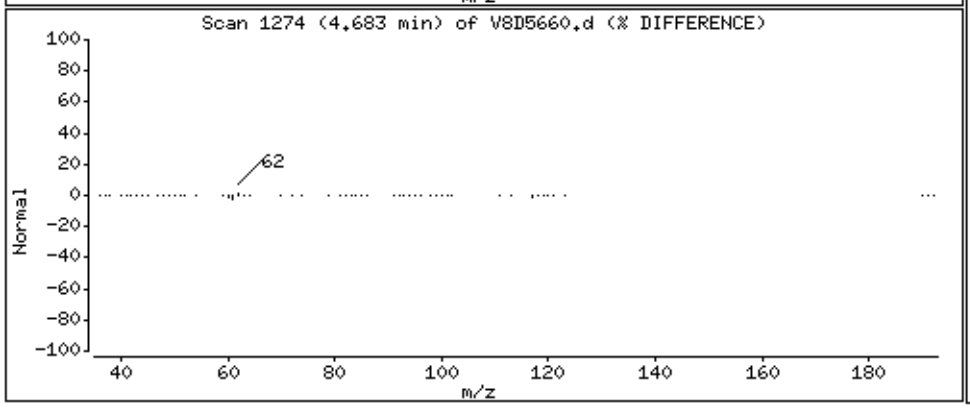












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d

Date : 23-JUN-2014 17:25

Client ID: MW-21R(1)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-10ADL,,77721,1000

Purge Volume: 5.0

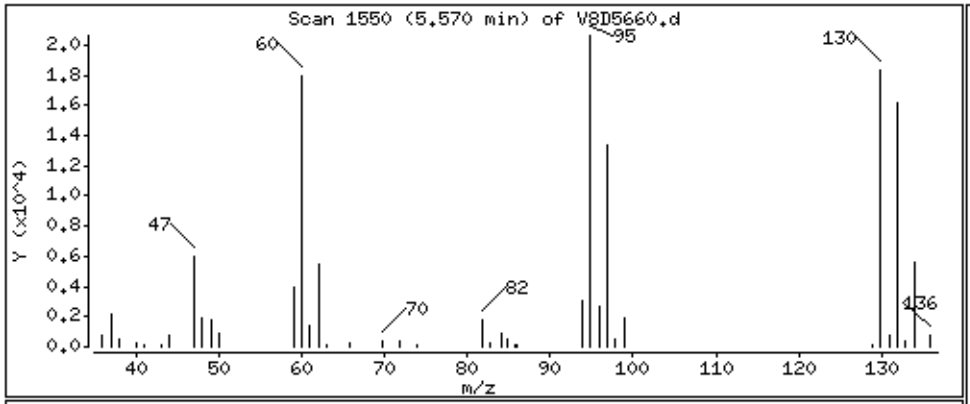
Operator: WL SRC: LIMS

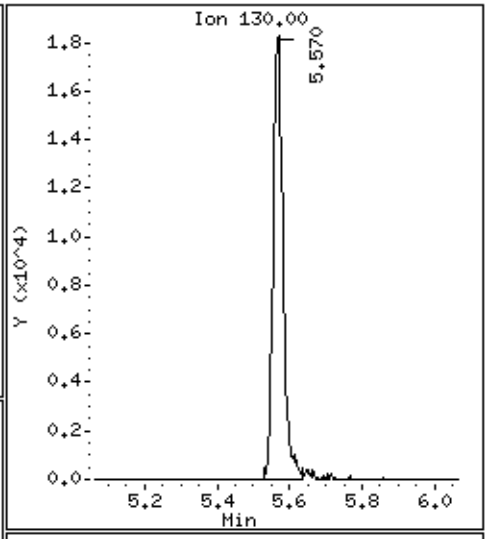
Column phase: DB-624

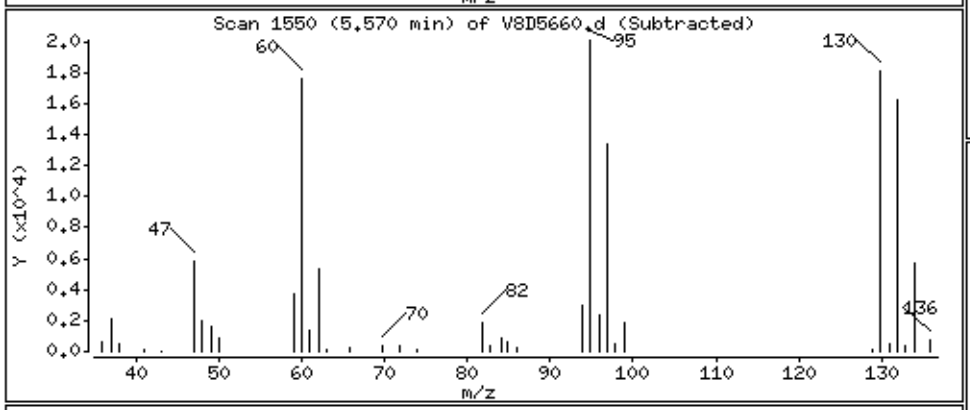
Column diameter: 0.25

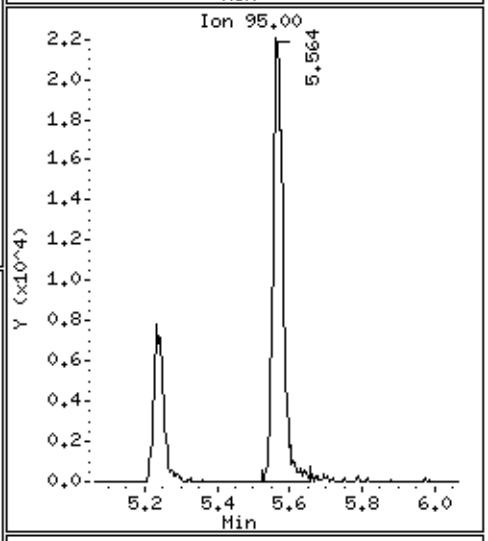
47 Trichloroethene

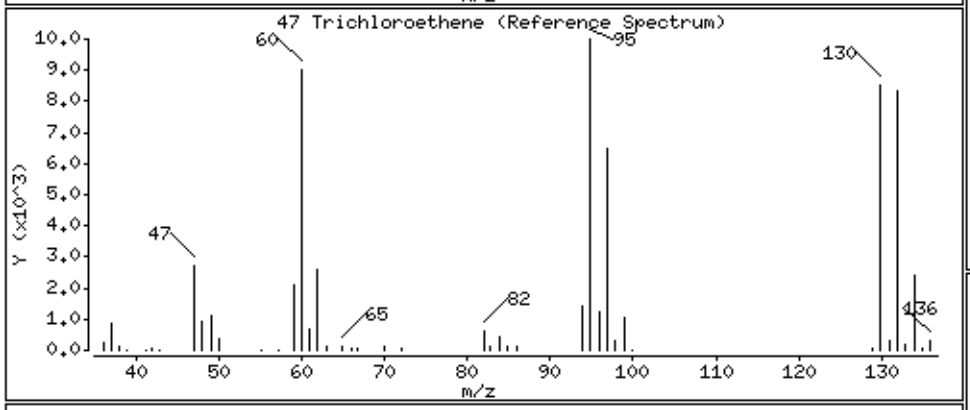
Concentration: 21000 ug/L

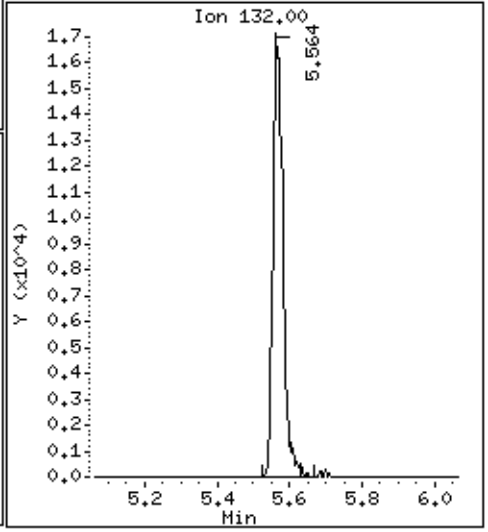


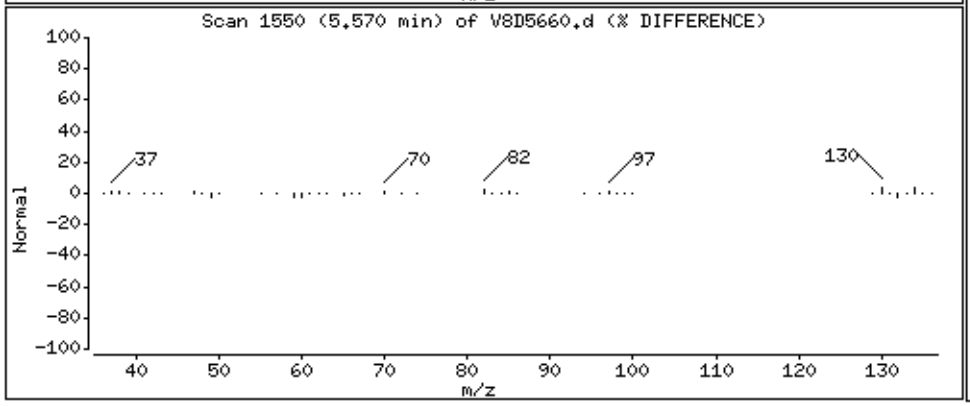












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5660.d

Date : 23-JUN-2014 17:25

Client ID: MW-21R(1)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-10ADL,,77721,1000

Purge Volume: 5.0

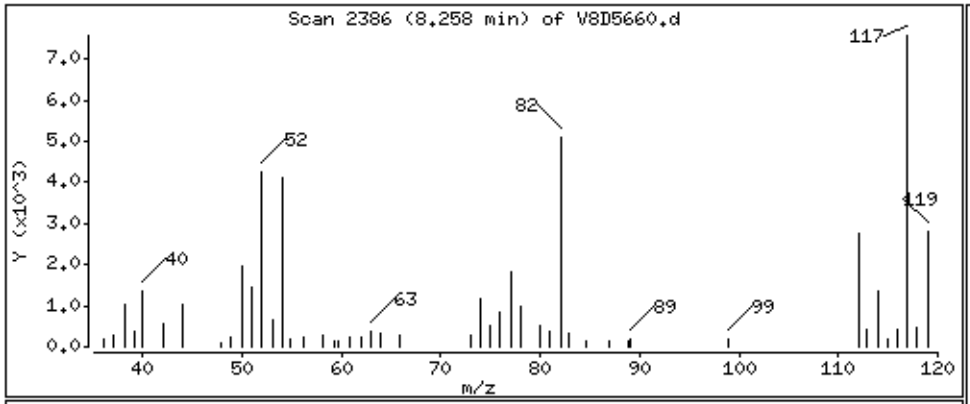
Operator: WL SRC: LIMS

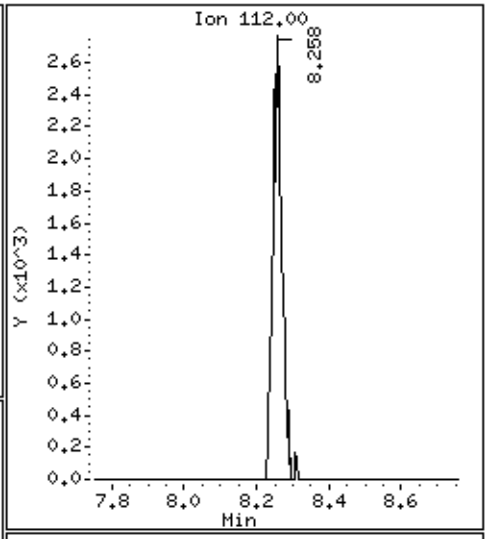
Column phase: DB-624

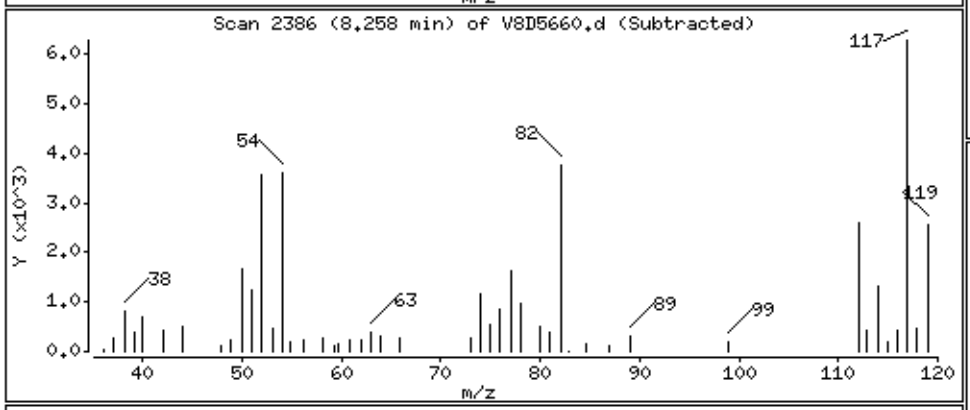
Column diameter: 0.25

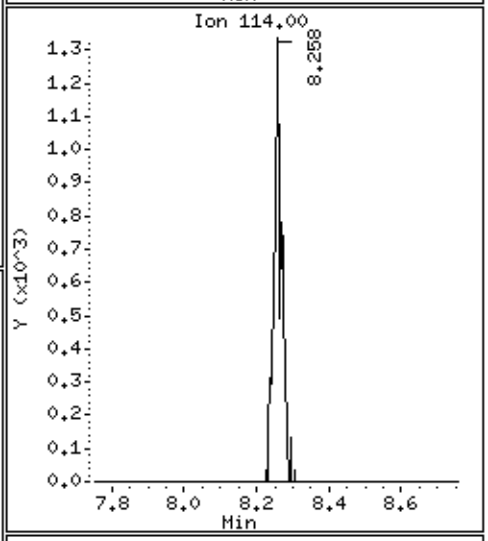
70 Chlorobenzene

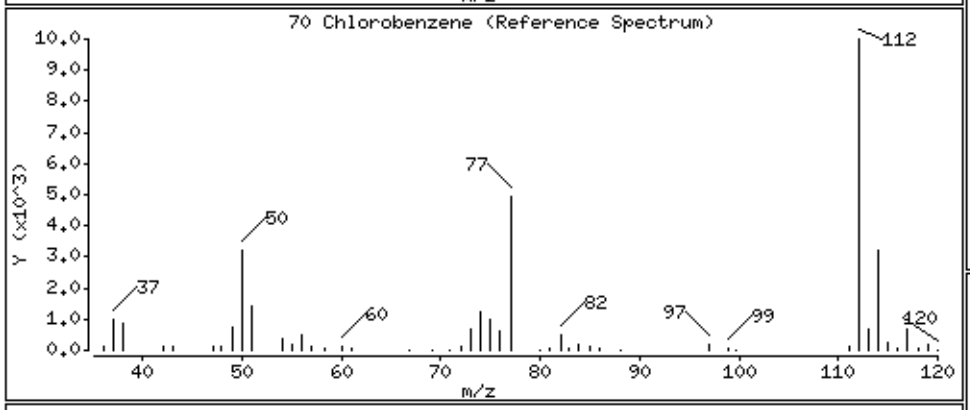
Concentration: 1200 ug/L

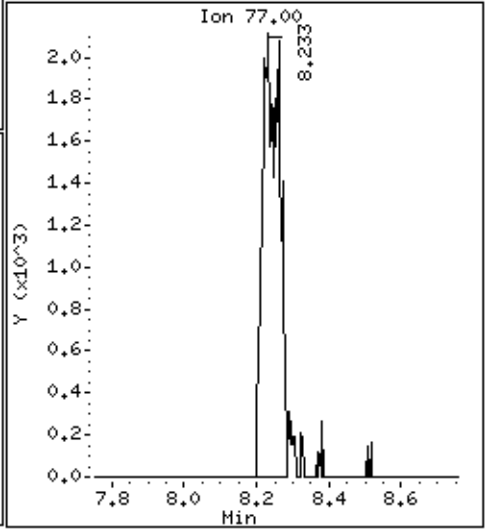


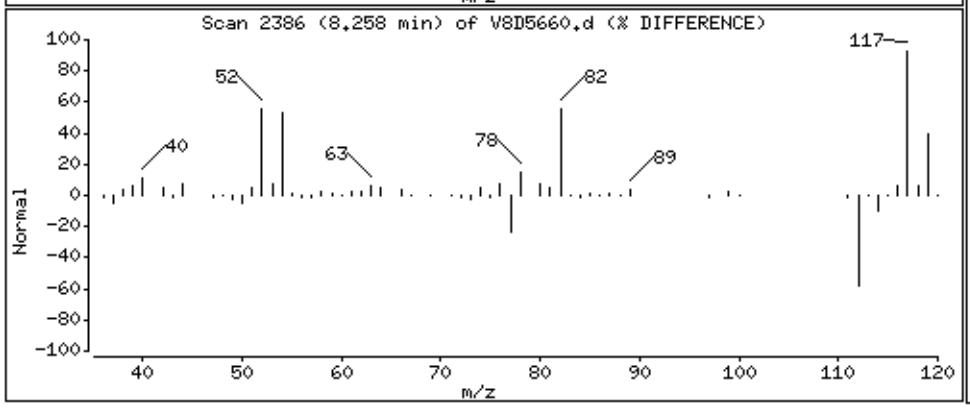












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(2)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5526.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	20	
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	10000	E
156-60-5	trans-1,2-Dichloroethene	41	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	3400	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	130	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	37	
67-66-3	Chloroform	7.0	
71-55-6	1,1,1-Trichloroethane	9600	E
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	7.6	
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	15000	E
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	15	
108-88-3	Toluene	28	
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	11	
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(2)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5526.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	21	
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	1900	E
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	29	
179601-23-1	m,p-Xylene	150	
95-47-6	o-Xylene	71	
1330-20-7	Xylene (Total)	220	
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	3.8	
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	1.2	
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	1.2	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	39000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R(2)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5526.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	1200	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d
Report Date: 27-Jun-2014 13:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5526.d
Lab Smp Id: N1055-11A Client Smp ID: MW-21R(2)_6/17/14
Inj Date : 19-JUN-2014 14:52
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-11A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
4	Vinyl Chloride	62	1.856	1.856	(0.354)	69271	19.8838	20(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.828	2.853	(0.540)	92936481	38749.4	39000(A)
18	Methylene Chloride	84	3.210	3.233	(0.613)	22006537	10454.6	10000(AQM)M6 AM 06/27
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	82543	41.0643	41
23	1,1-Dichloroethane	63	3.779	3.786	(0.721)	18428031	3430.62	3400(A)
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	272719	128.643	130
34	Bromochloromethane	128	4.461	4.454	(0.851)	36809	36.9964	37(QH)
35	Chloroform	83	4.512	4.509	(0.861)	34090	7.01328	7.0
$ 36	Dibromofluoromethane	113	4.654	4.644	(0.888)	95472	53.0942	53
37	1,1,1-Trichloroethane	97	4.663	4.683	(0.890)	46709210	9575.96	9600(AQ)
$ 42	1,2-Dichloroethane-d4	102	4.950	4.943	(0.945)	15571	51.2189	51
44	1,2-Dichloroethane	62	5.014	5.007	(0.957)	43500	7.62431	7.6
M 50	1,2-Dichloroethene (Total)	96				355262	169.707	170
* 46	Fluorobenzene	96	5.239	5.236	(1.000)	241634	50.0000	
47	Trichloroethene	130	5.554	5.567	(1.060)	29321492	14703.5	15000(A)
57	4-Methyl-2-pentanone	43	6.589	6.580	(1.258)	55965	14.5628	14(Q)
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	301271	44.6128	45
59	Toluene	91	6.786	6.782	(1.295)	222766	28.0883	28
62	1,1,2-Trichloroethane	97	7.181	7.175	(1.371)	19082	10.7860	11
63	Tetrachloroethene	164	7.345	7.345	(0.893)	47728	21.0016	21
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	295099	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	11020572	1855.78	1800(A)

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d
Report Date: 27-Jun-2014 13:50

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
	72	Ethylbenzene	106	8.371	8.367	(1.018)	86798	28.9615	29	
	73	m,p-Xylene	106	8.496	8.499	(1.033)	561585	152.439	150	
	74	o-Xylene	106	8.943	8.946	(1.088)	247316	71.3570	71	
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	189393	52.2435	52	
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	10883	3.78960	3.8	
M	94	Xylene (Total)	106				808901	223.796	220	
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	9821	1.23284	1.2	
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	153062	50.0000		(Q)
	96	1,2-Dichlorobenzene	146	11.117	11.113	(1.037)	5160	1.24464	1.2	

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.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d
Report Date: 27-Jun-2014 13:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5526.d
Lab Smp Id: N1055-11A Client Smp ID: MW-21R(2)_6/17/14
Inj Date : 19-JUN-2014 14:52
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-11A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

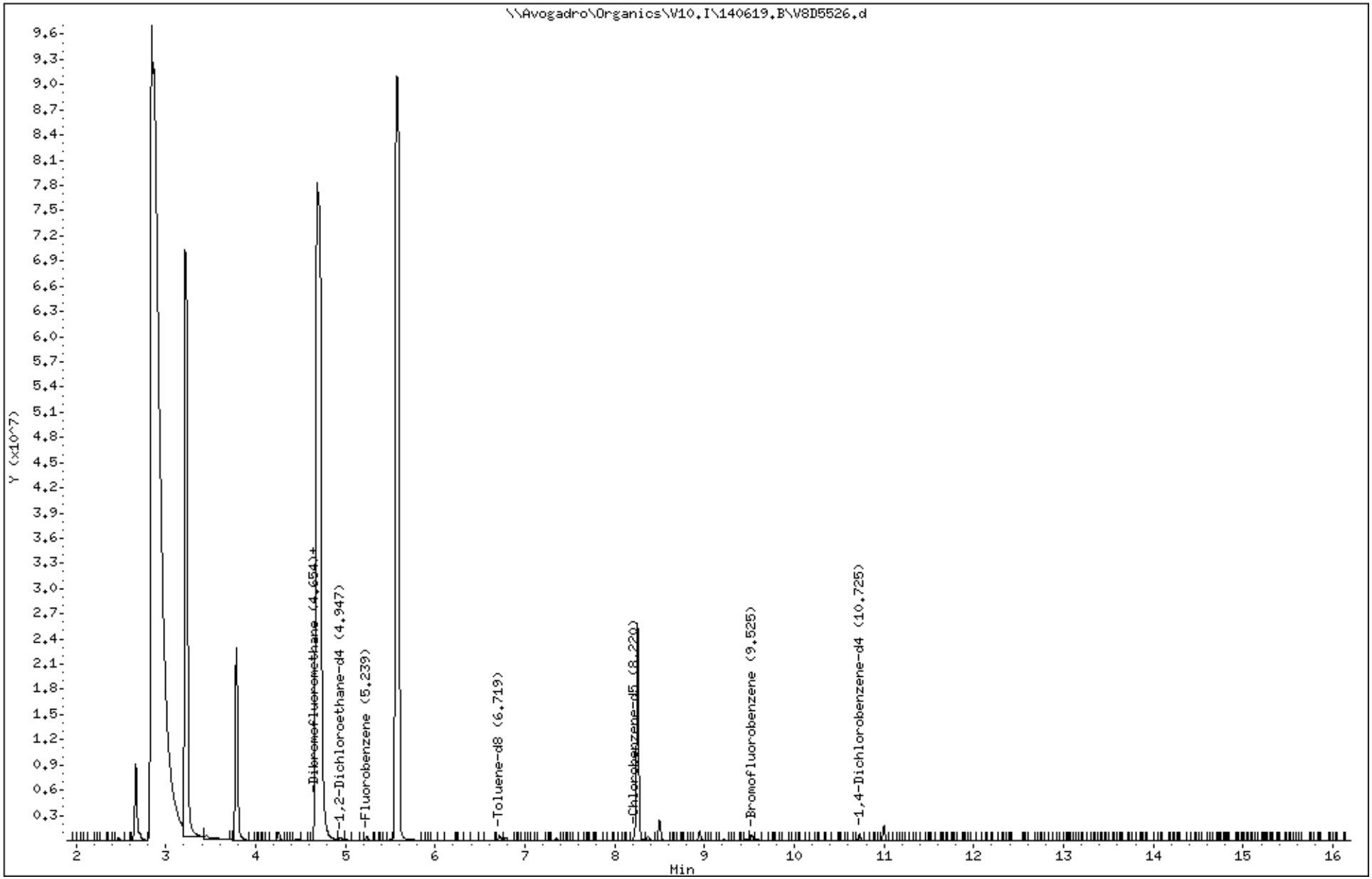
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.239	698492	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	17151284	1227.73576	1200	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d
Date : 19-JUN-2014 14:52
Client ID: MW-21R(2)_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1055-11A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

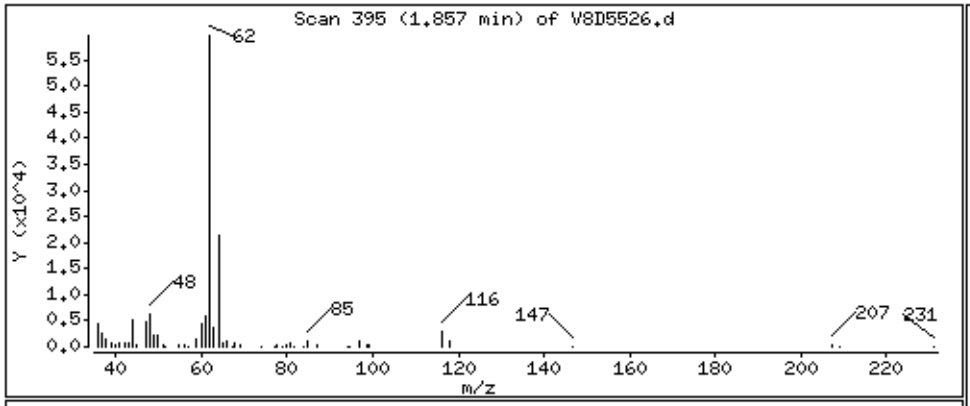
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

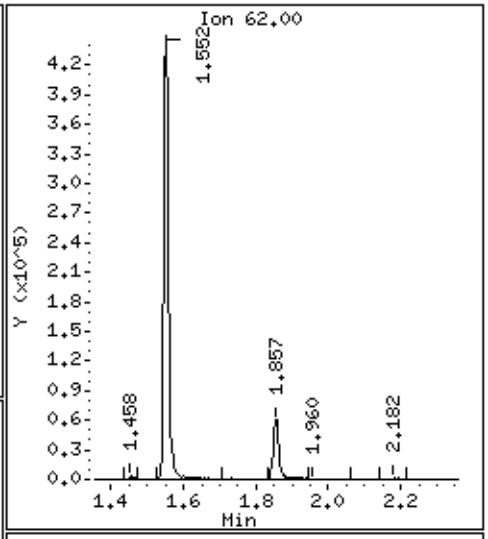
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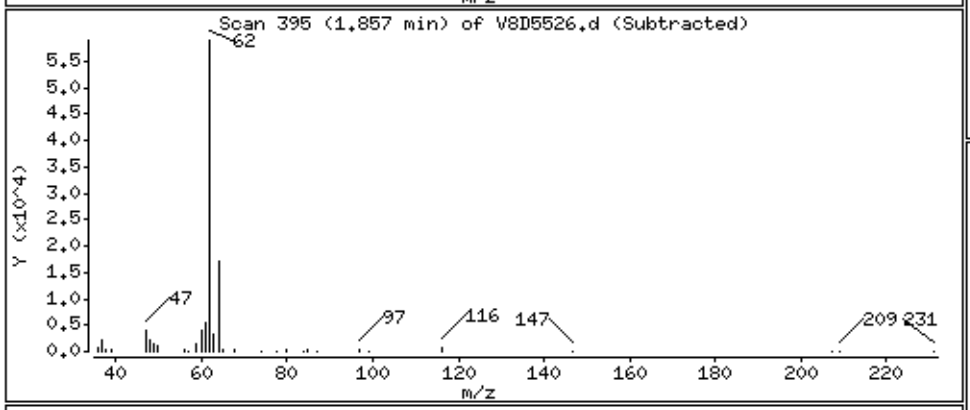
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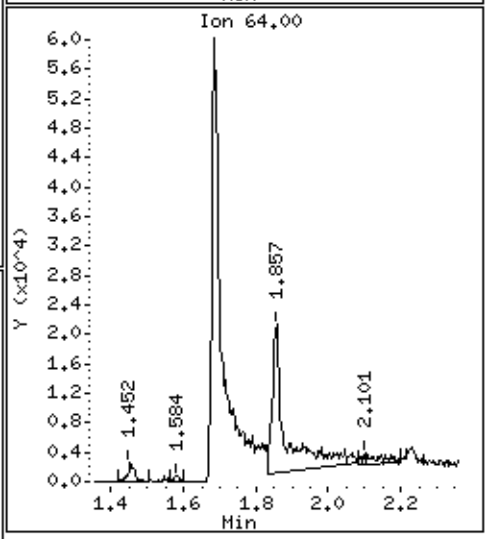
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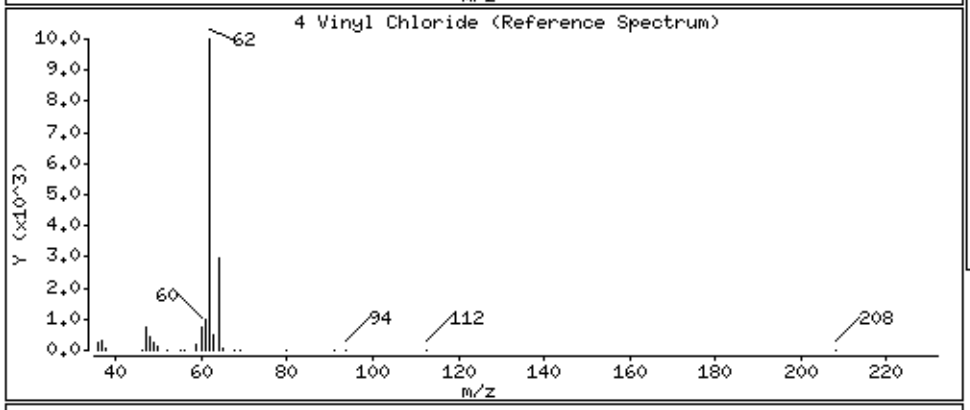
4 Vinyl Chloride Concentration: 20 ug/L

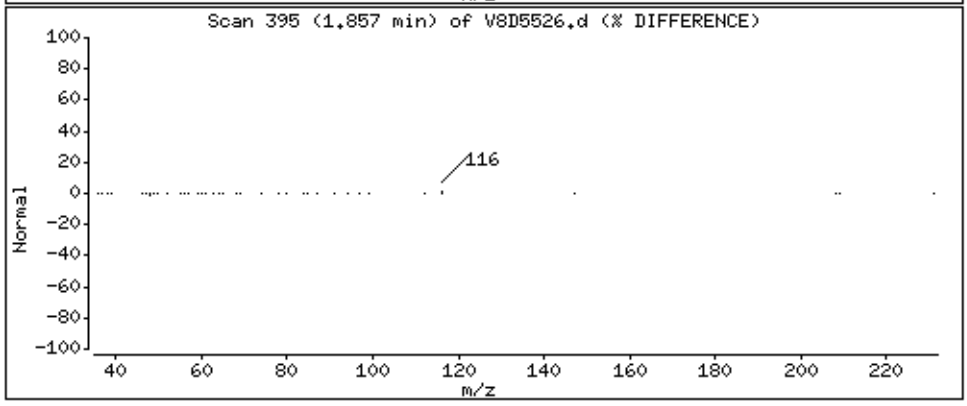












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

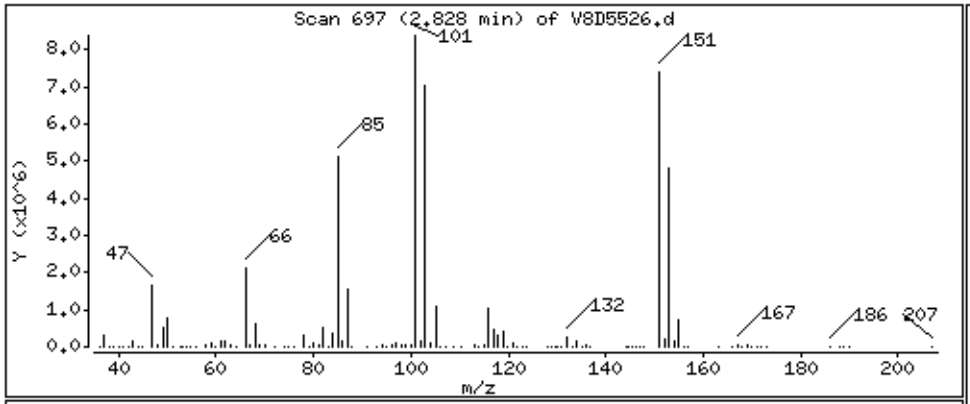
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

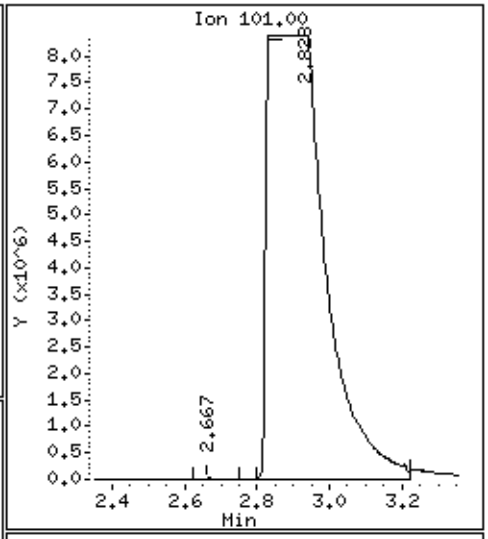
Sample Info: 5ML,N1055-11A,,77659

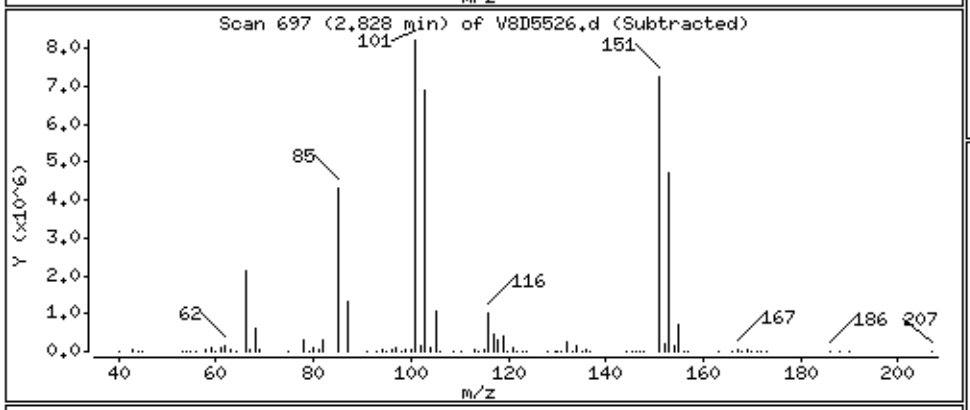
Purge Volume: 5.0 Operator: WL SRC: LIMS

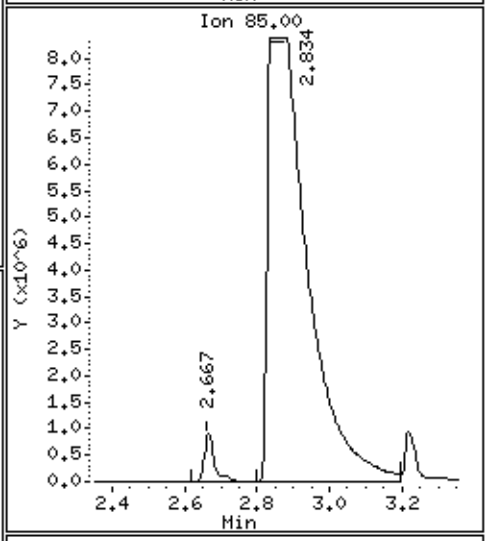
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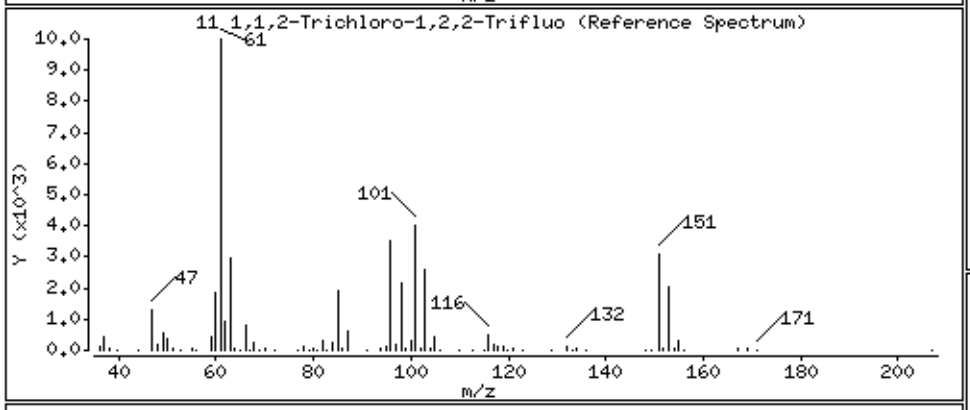
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 39000 ug/L

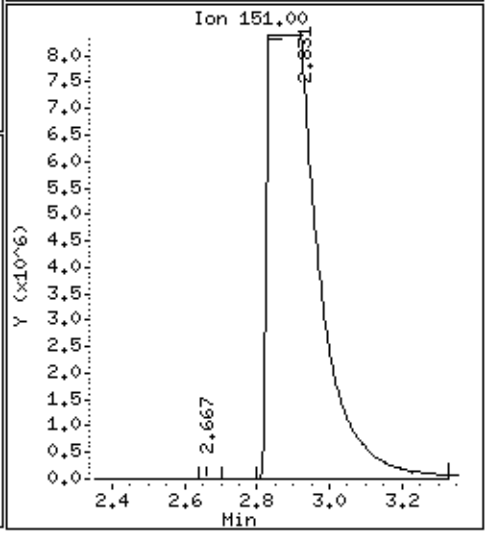


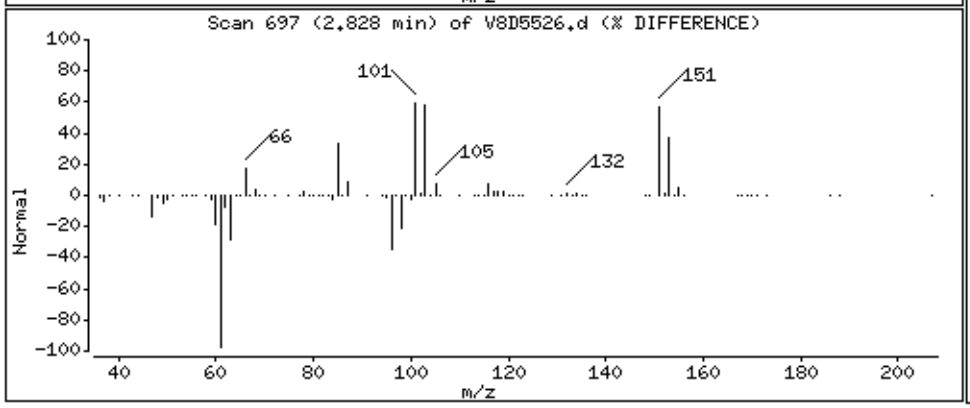












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

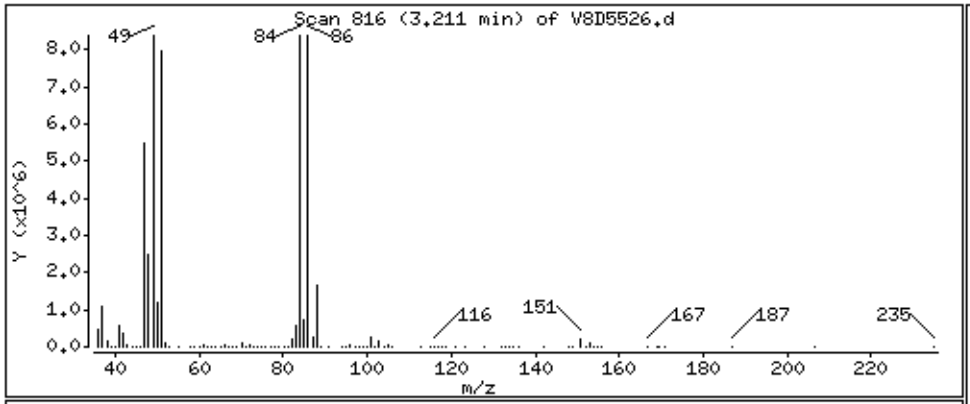
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

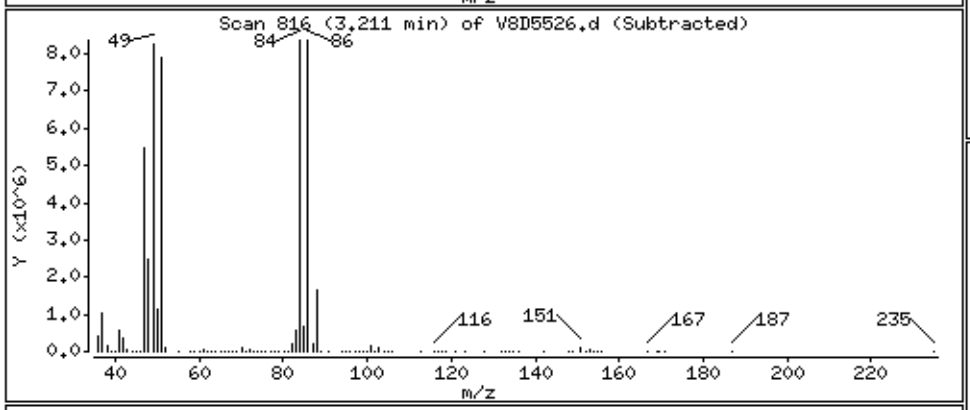
Sample Info: 5ML,N1055-11A,,77659

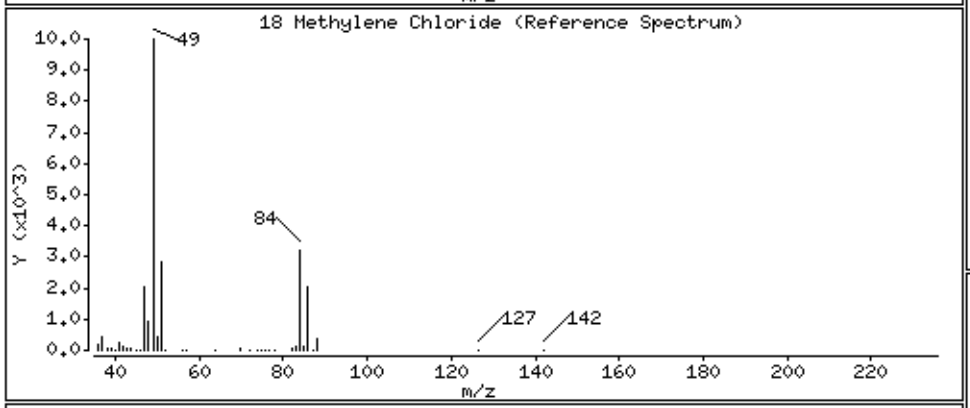
Purge Volume: 5.0 Operator: WL SRC: LIMS

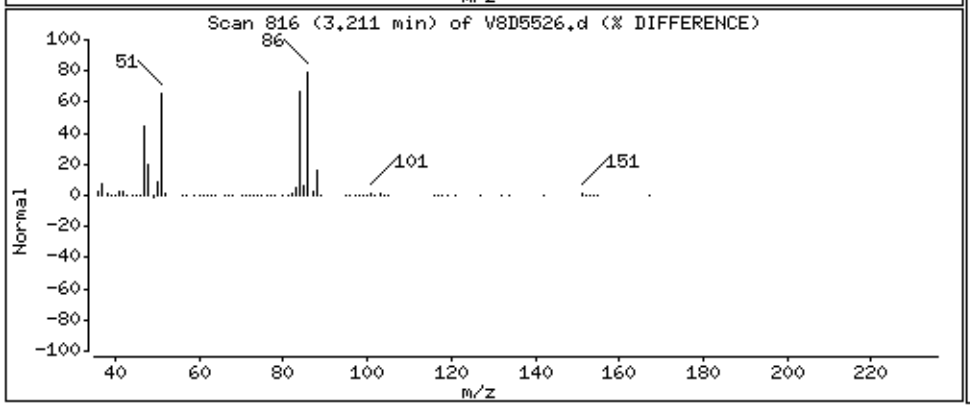
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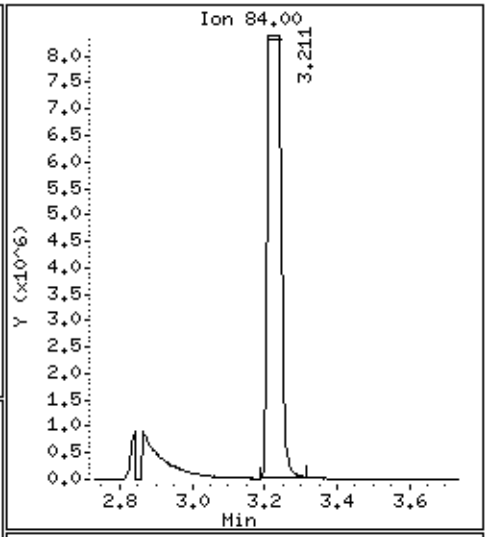
18 Methylene Chloride Concentration: 10000 ug/L

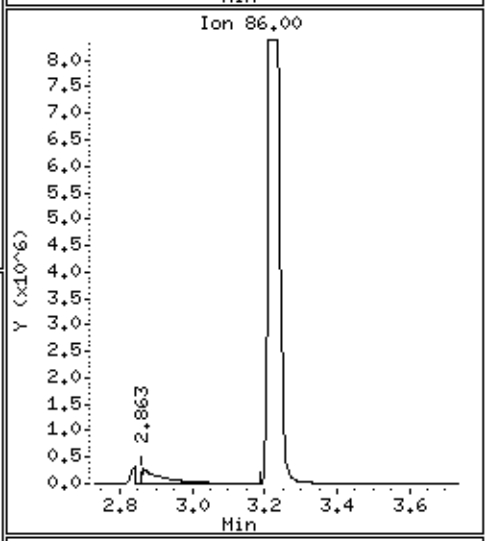


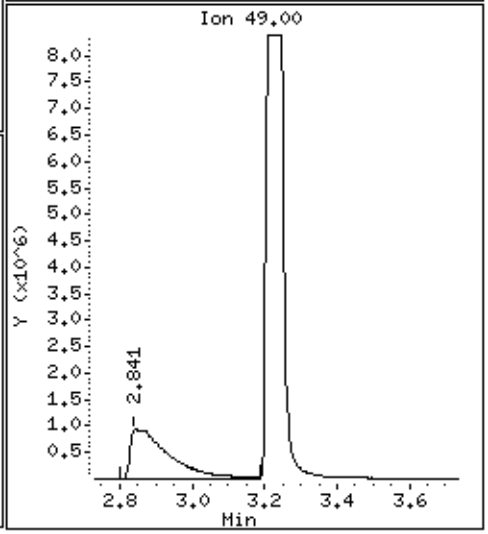












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

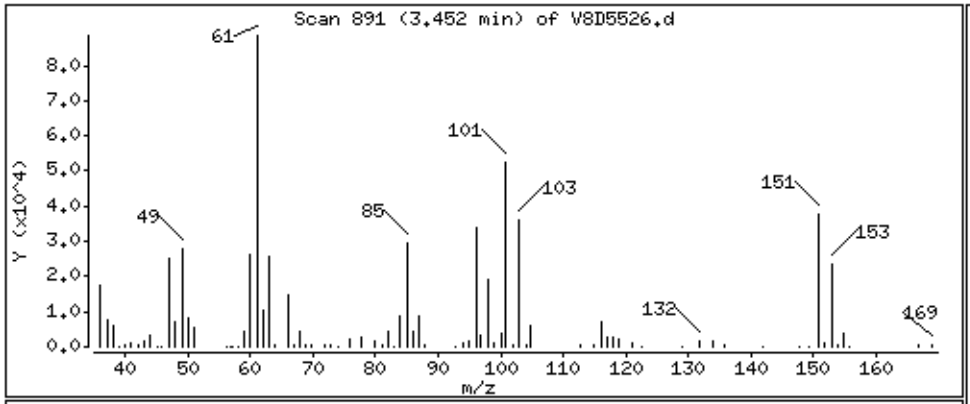
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

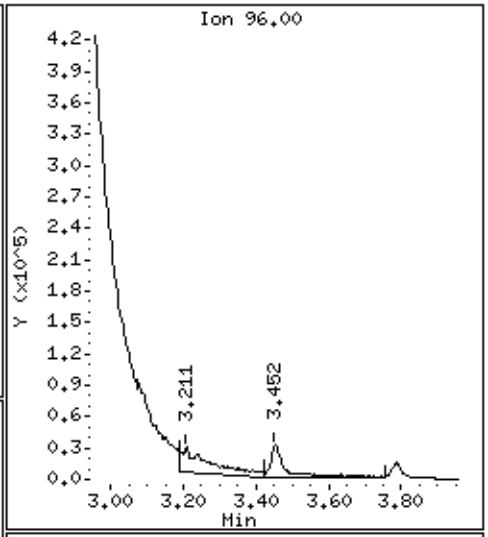
Sample Info: 5ML,N1055-11A,,77659

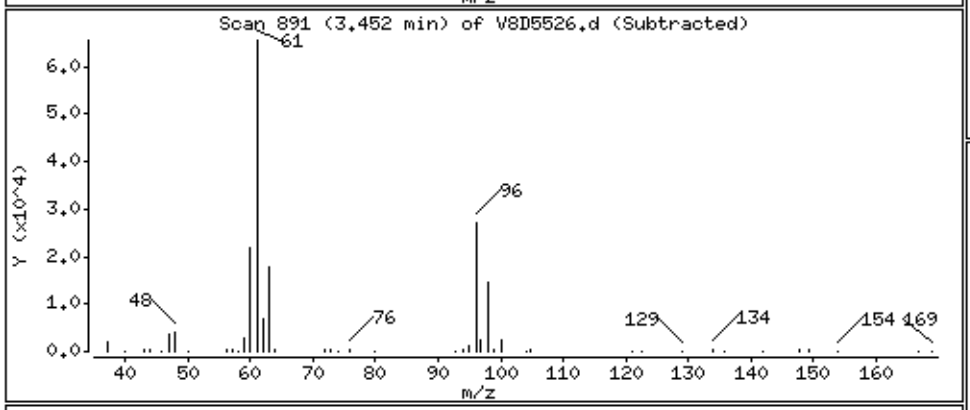
Purge Volume: 5.0 Operator: WL SRC: LIMS

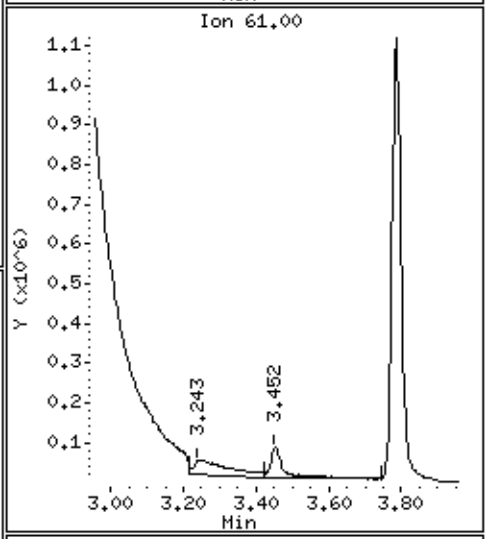
Column phase: DB-624 Column diameter: 0.25

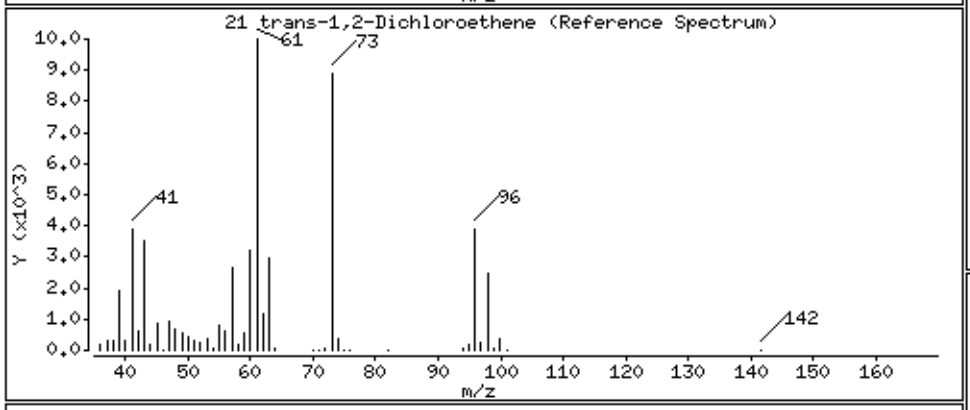
21 trans-1,2-Dichloroethene Concentration: 41 ug/L

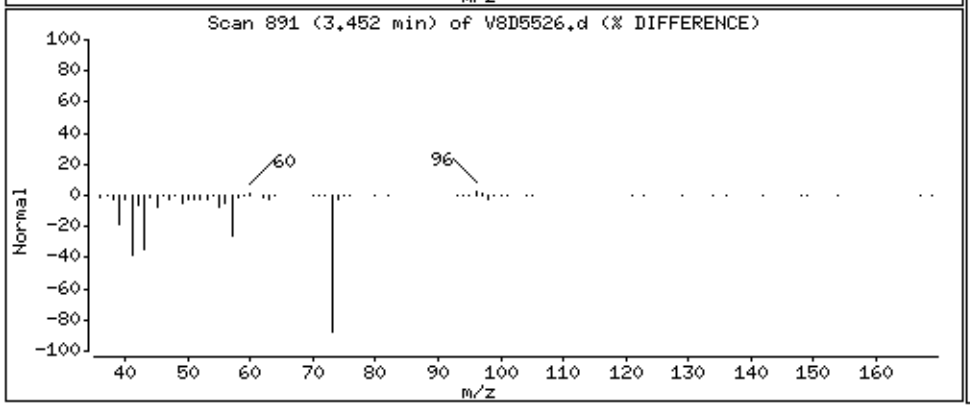


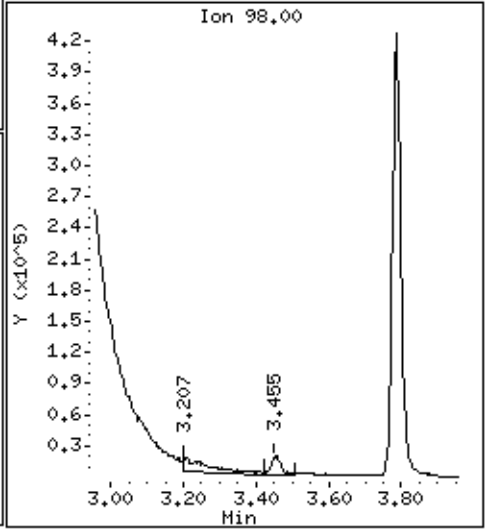












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

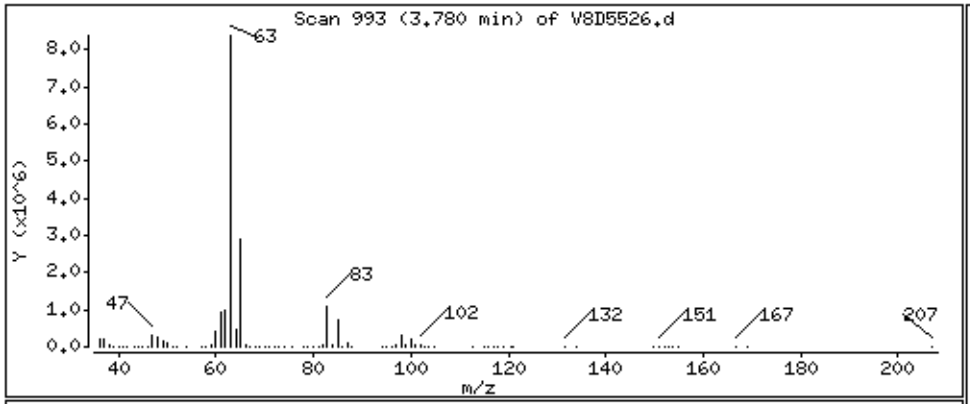
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

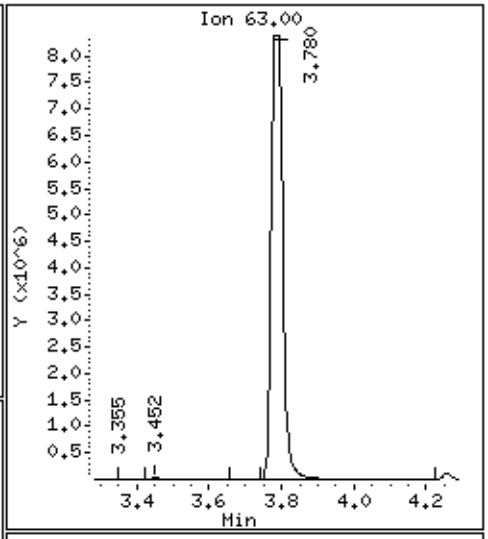
Sample Info: 5ML,N1055-11A,,77659

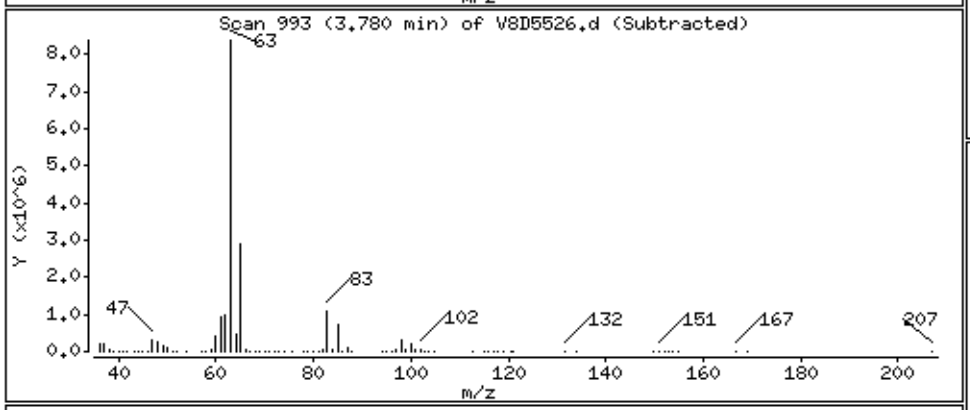
Purge Volume: 5.0 Operator: WL SRC: LIMS

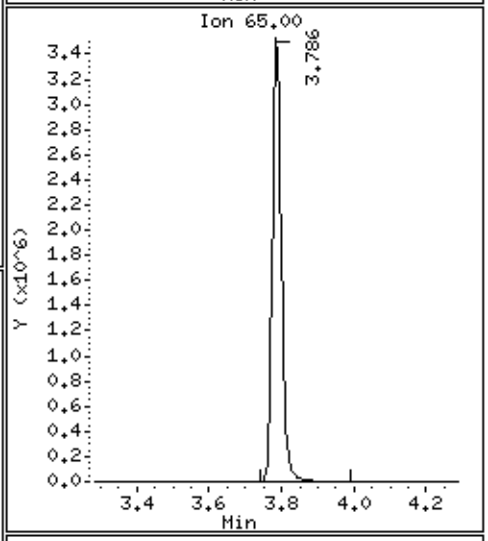
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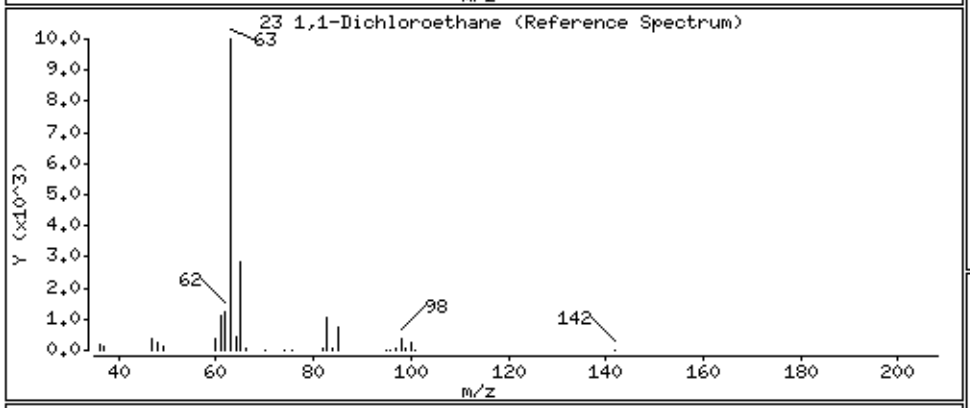
23 1,1-Dichloroethane Concentration: 3400 ug/L

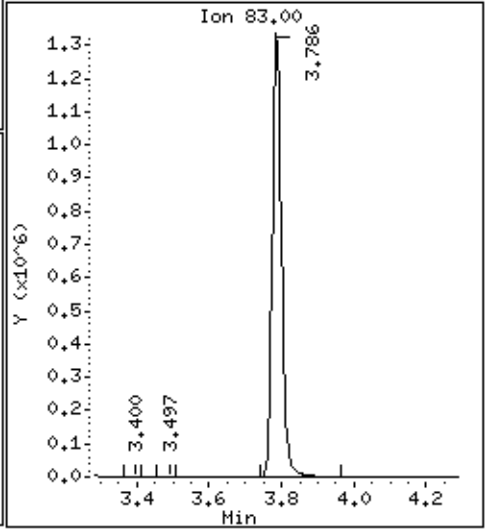


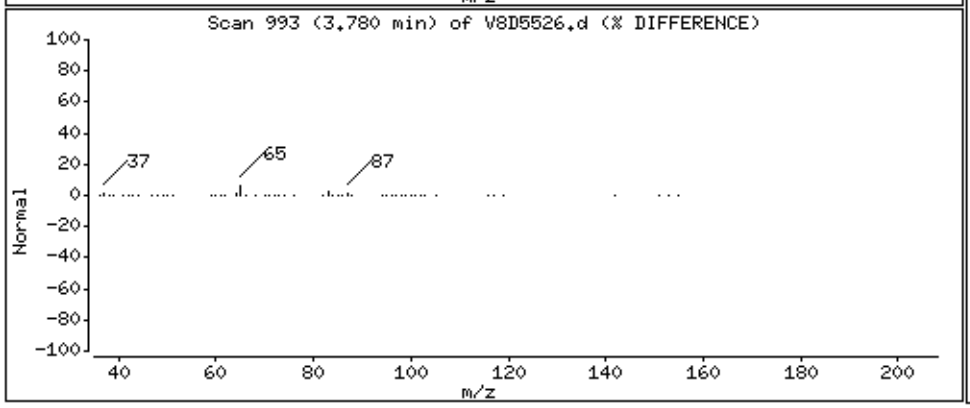












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

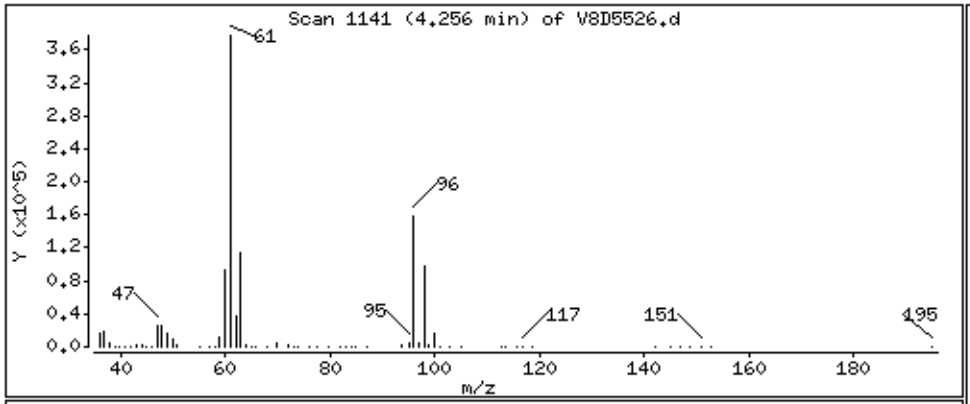
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

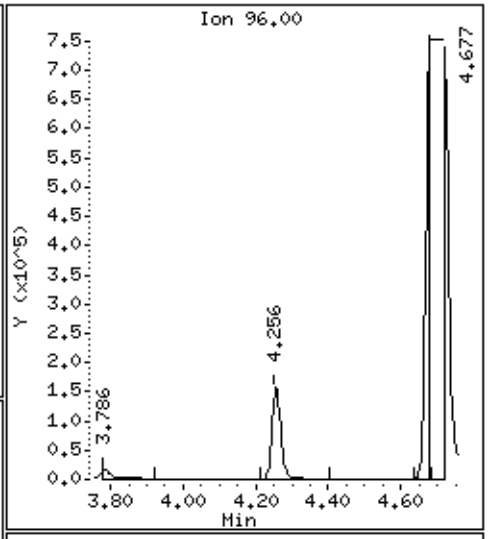
Sample Info: 5ML,N1055-11A,,77659

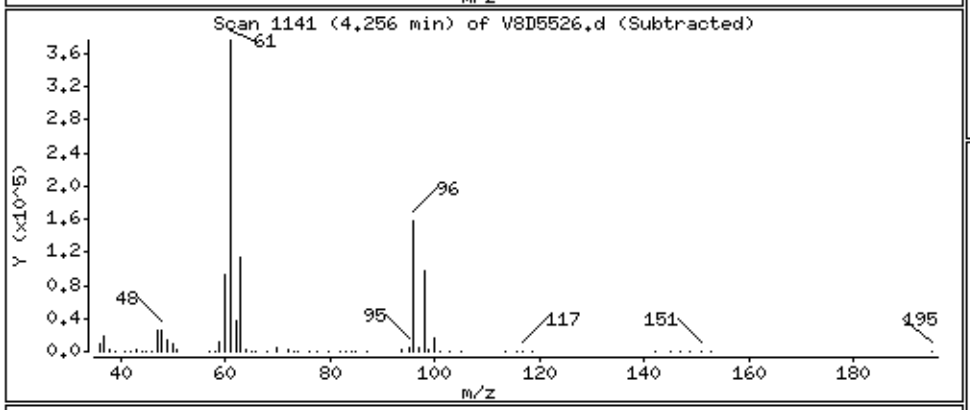
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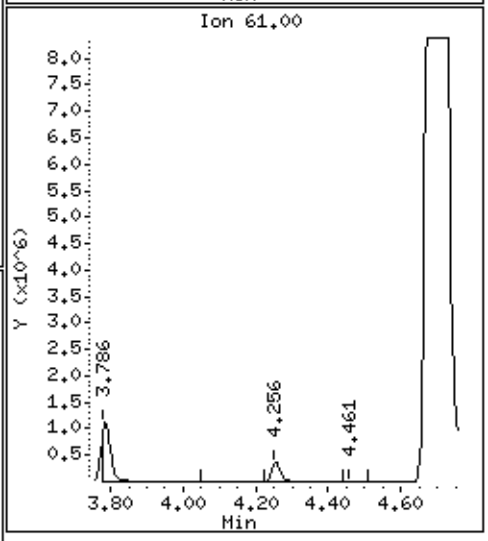
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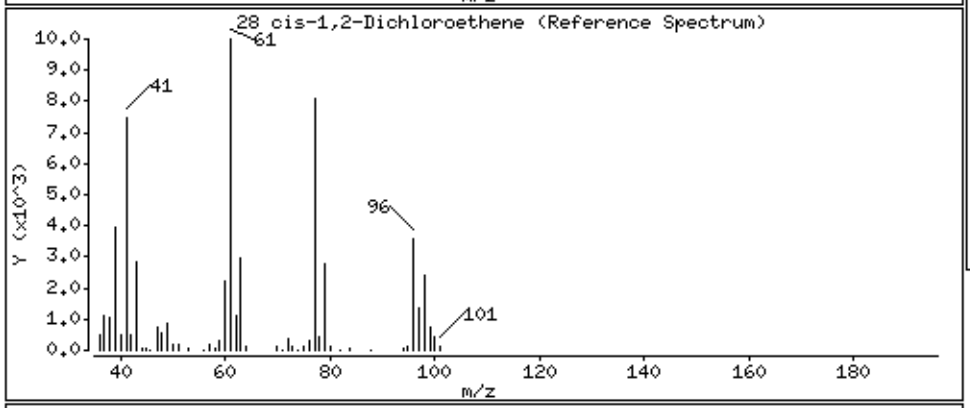
28 cis-1,2-Dichloroethene Concentration: 130 ug/L

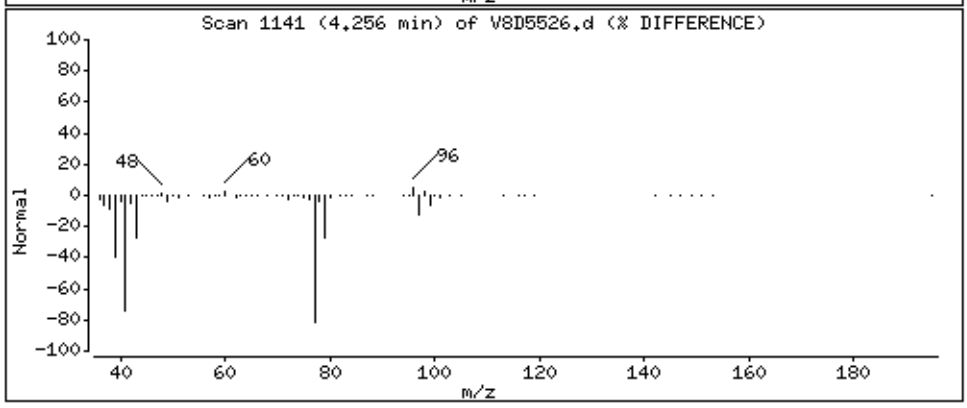












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

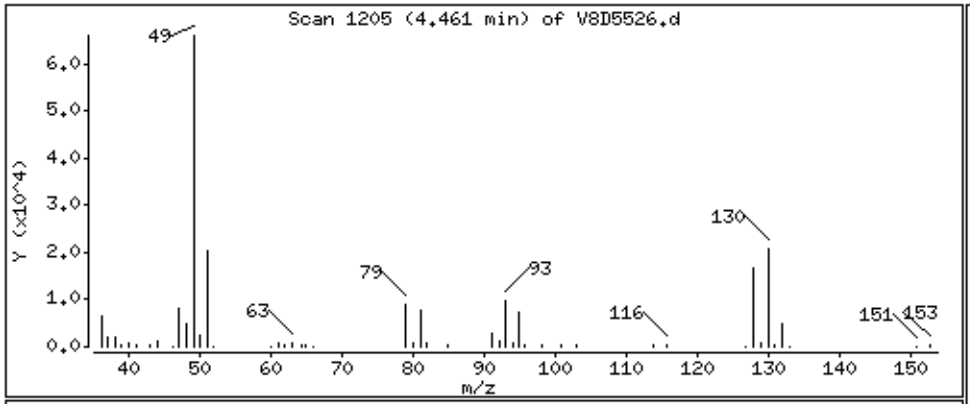
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

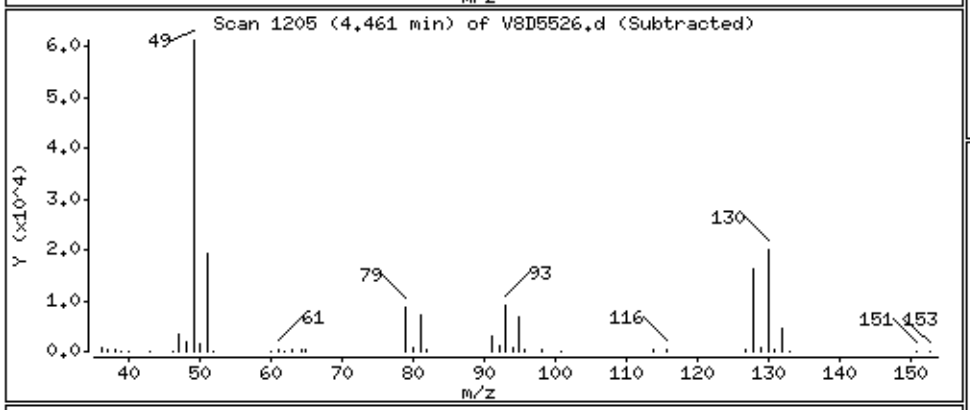
Sample Info: 5ML,N1055-11A,,77659

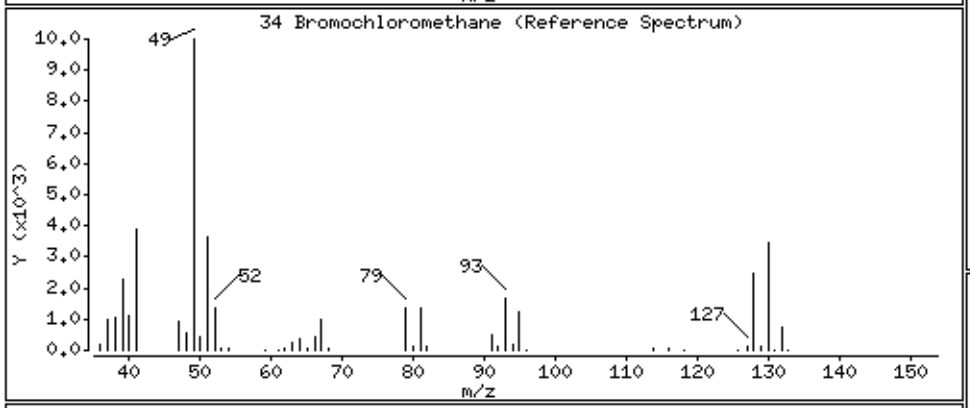
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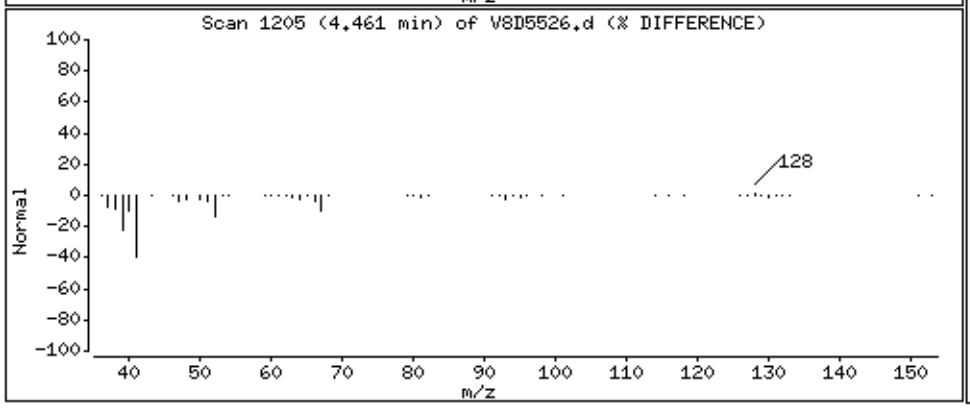
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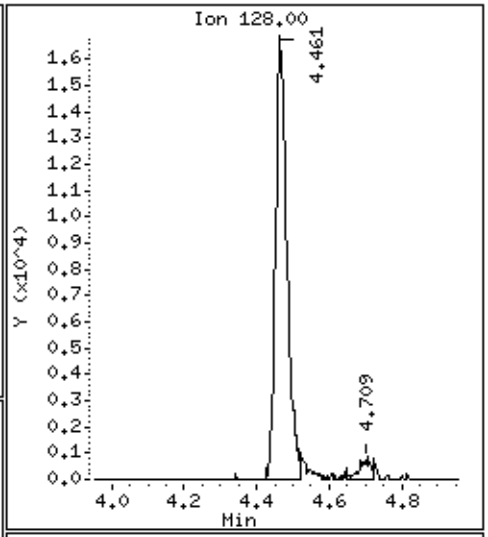
34 Bromochloromethane Concentration: 37 ug/L

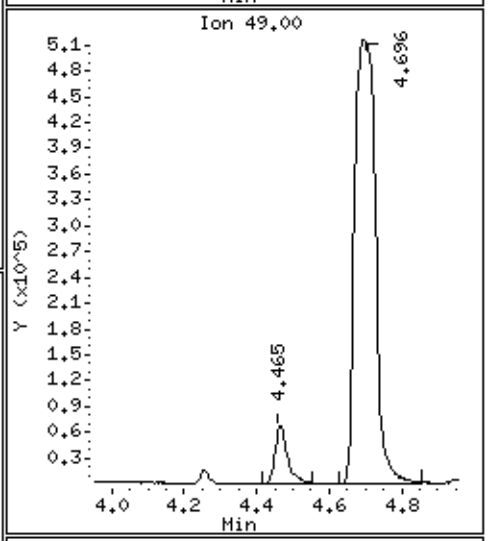


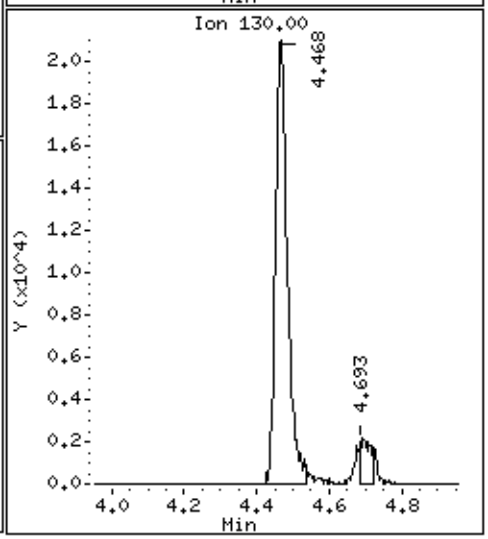












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

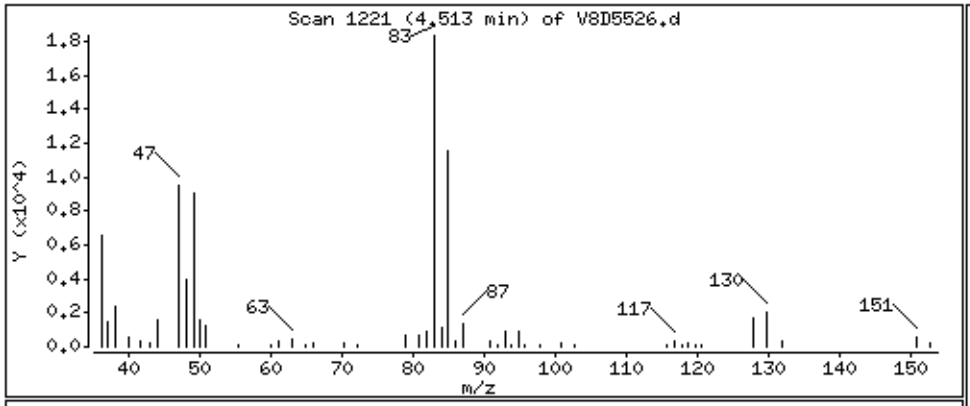
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

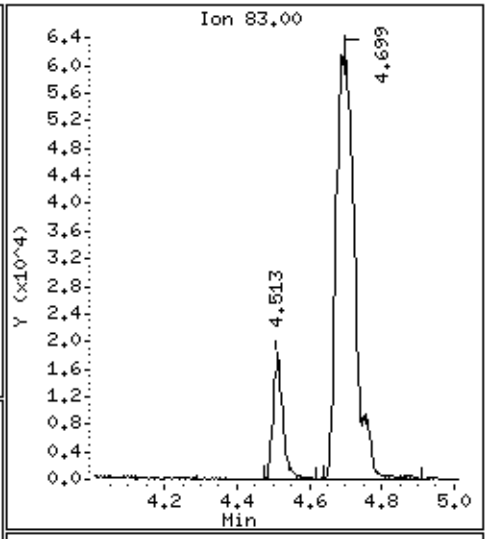
Sample Info: 5ML,N1055-11A,,77659

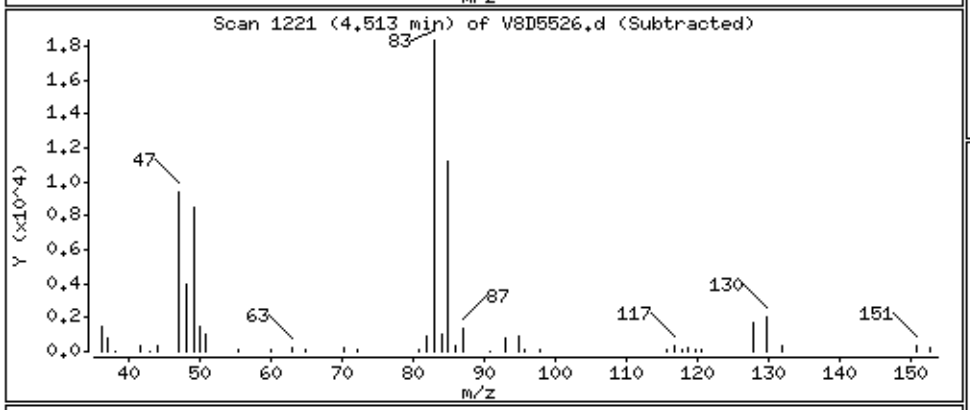
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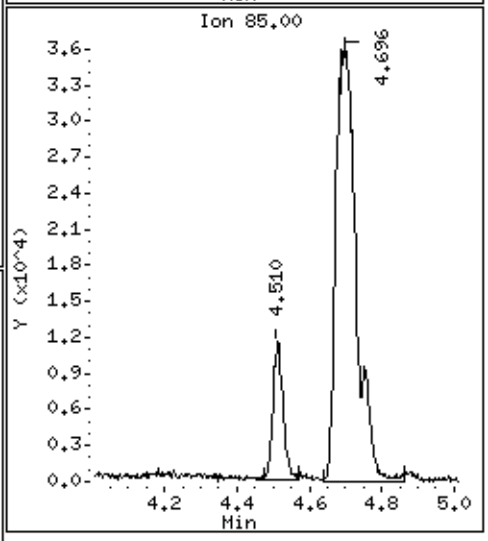
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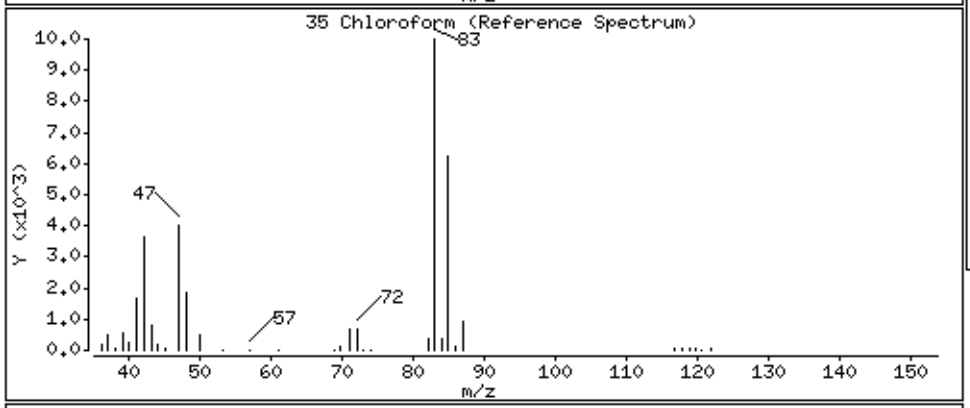
35 Chloroform Concentration: 7.0 ug/L

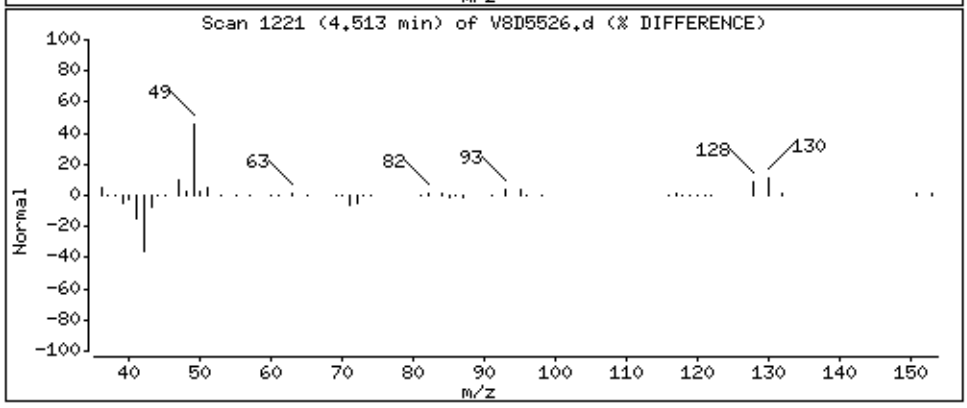












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

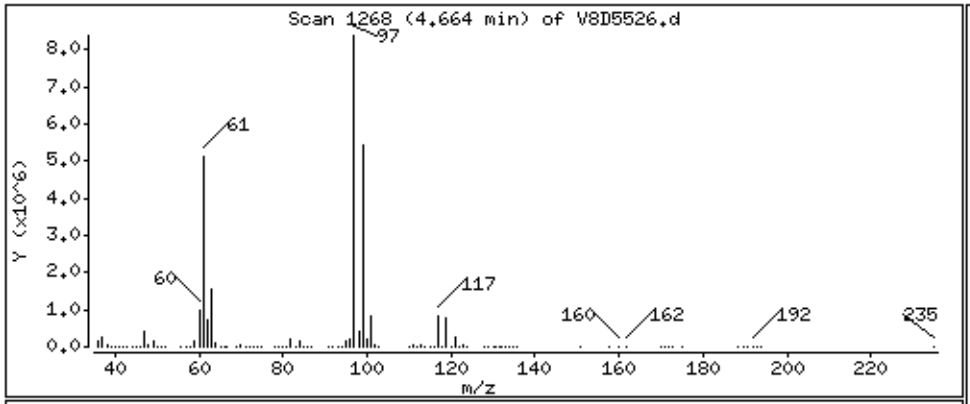
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

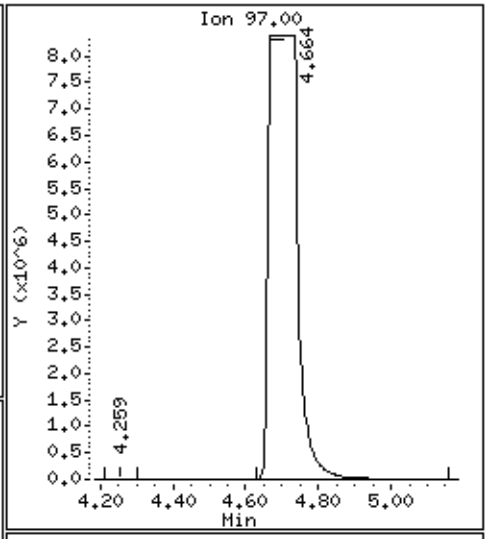
Sample Info: 5ML,N1055-11A,,77659

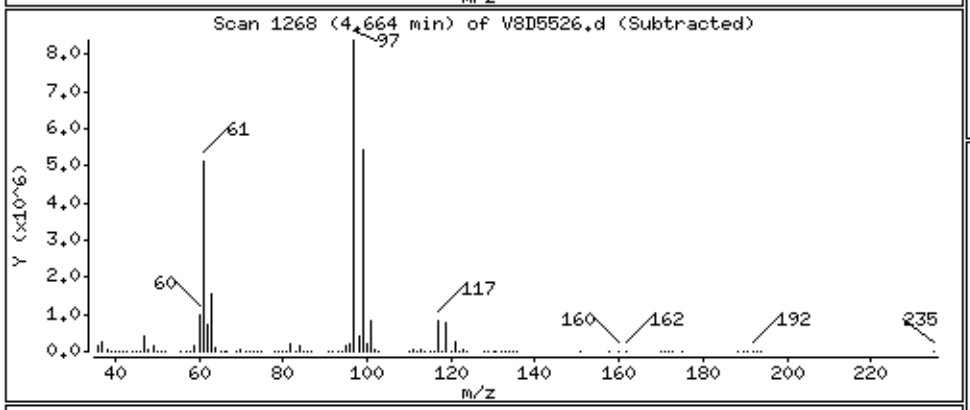
Purge Volume: 5.0 Operator: WL SRC: LIMS

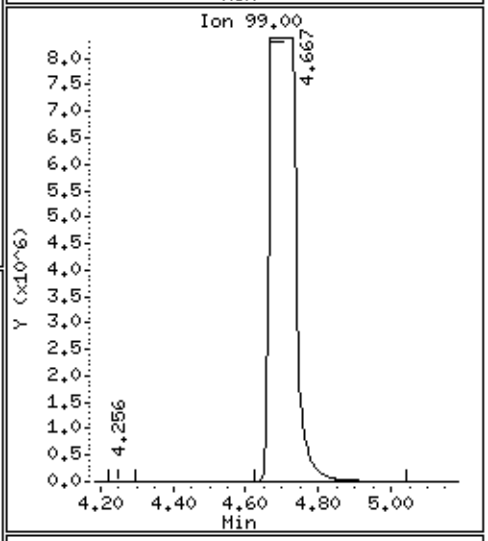
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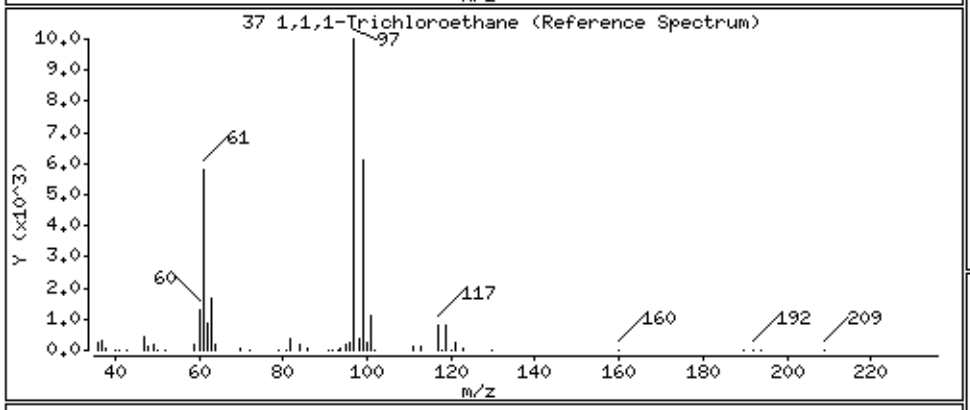
37 1,1,1-Trichloroethane Concentration: 9600 ug/L

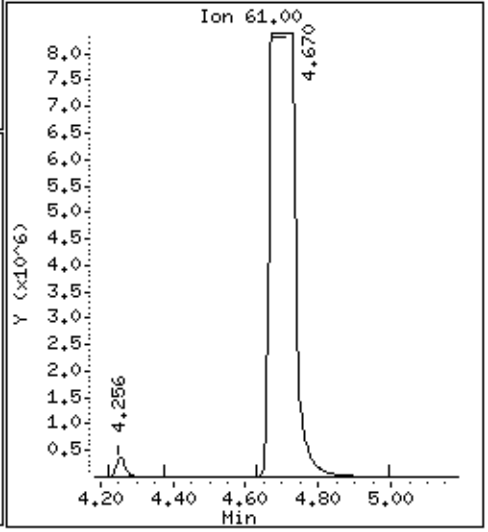


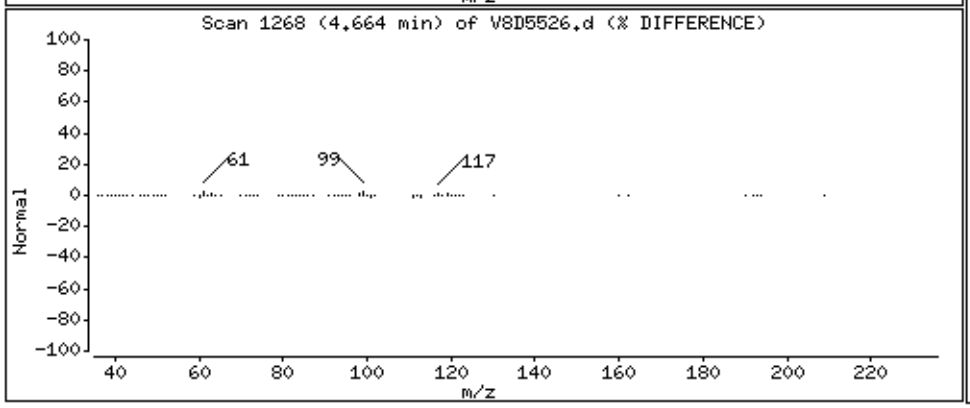












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

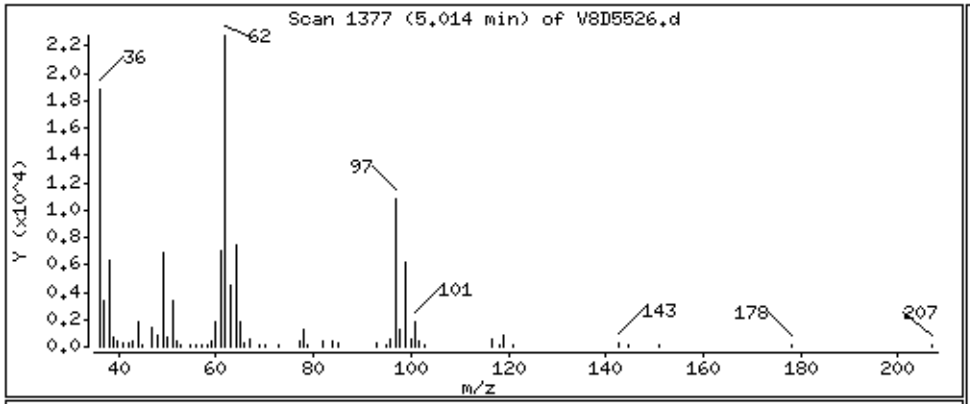
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

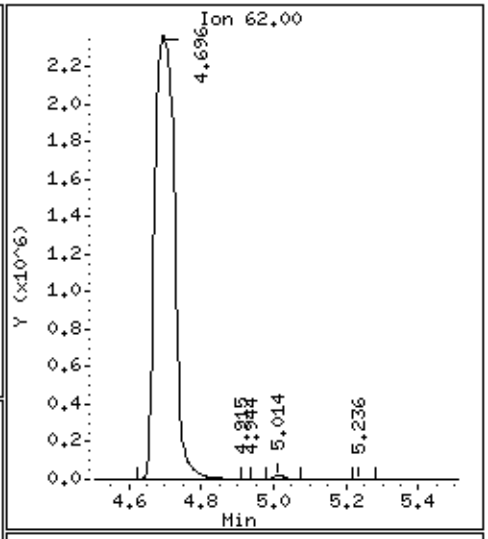
Sample Info: 5ML,N1055-11A,,77659

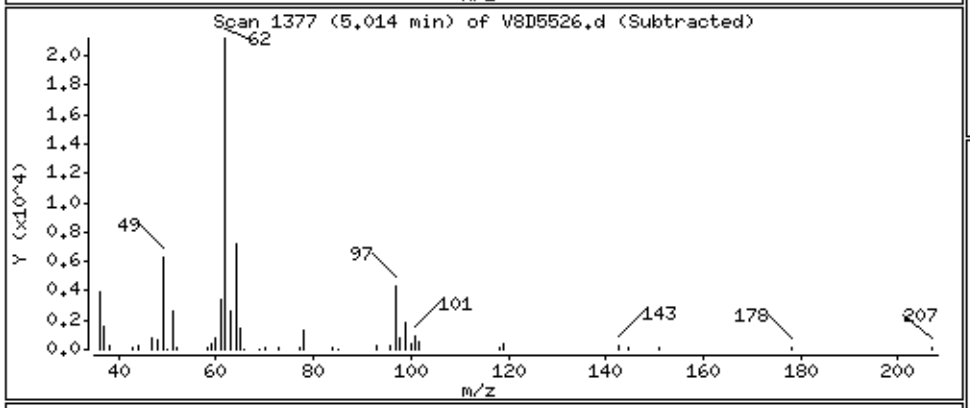
Purge Volume: 5.0 Operator: WL SRC: LIMS

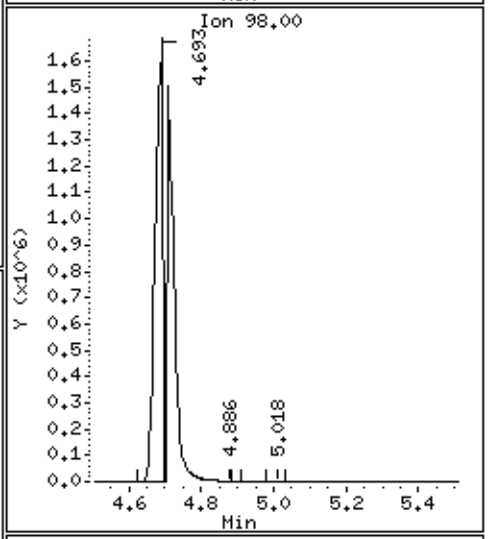
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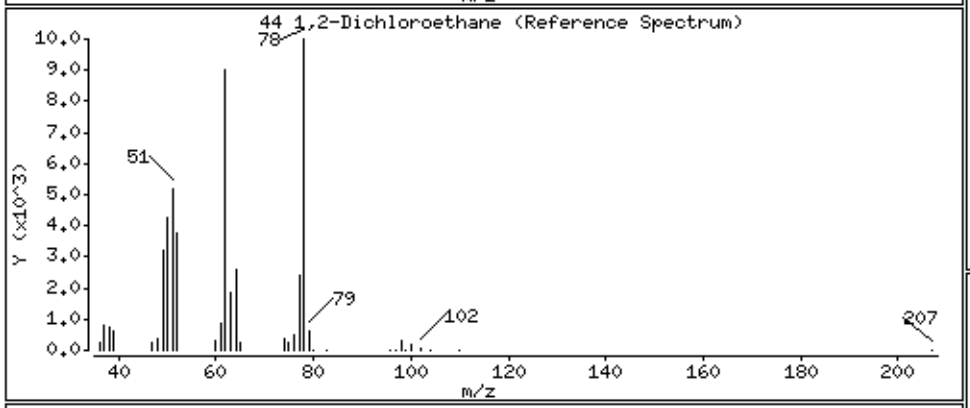
44 1,2-Dichloroethane Concentration: 7.6 ug/L

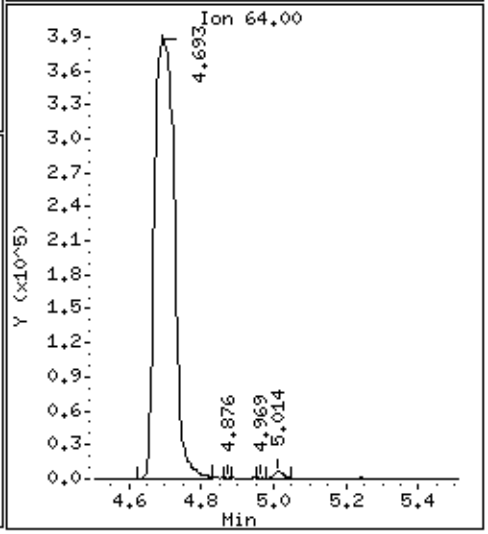


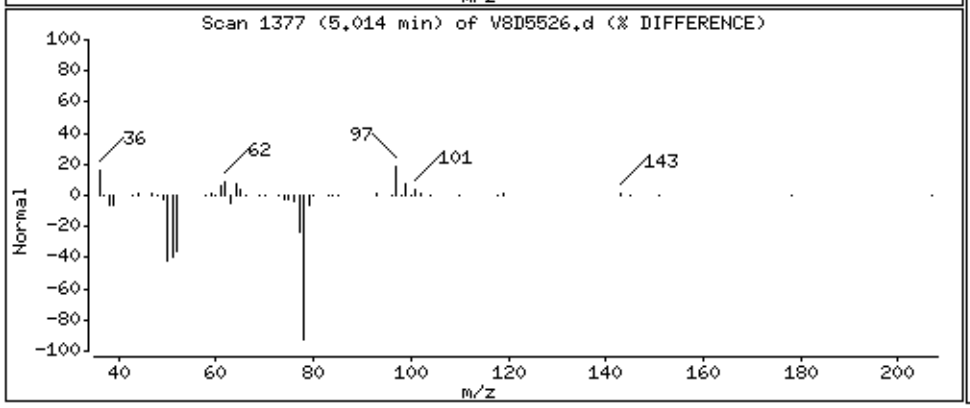












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

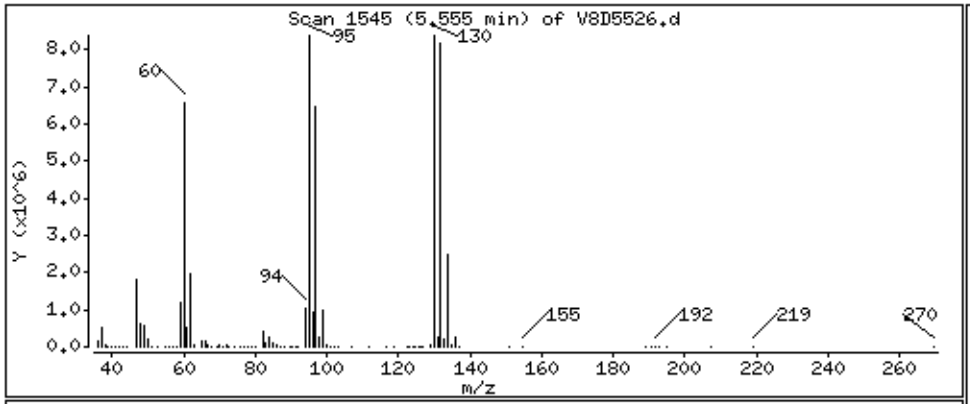
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

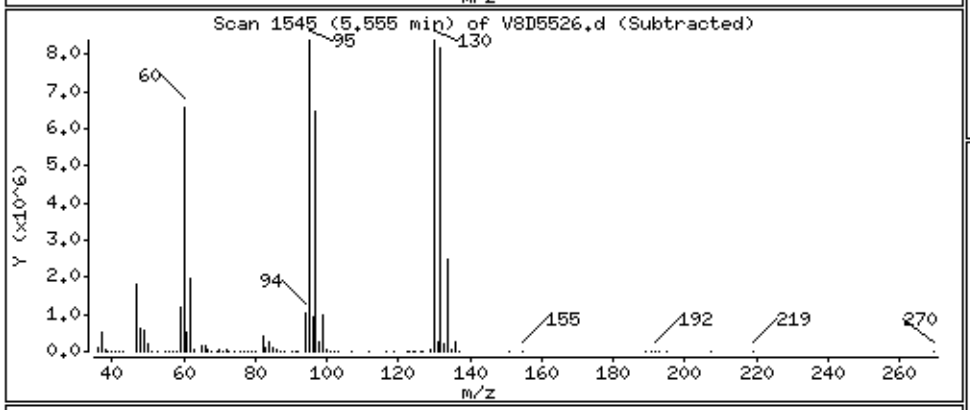
Sample Info: 5ML,N1055-11A,,77659

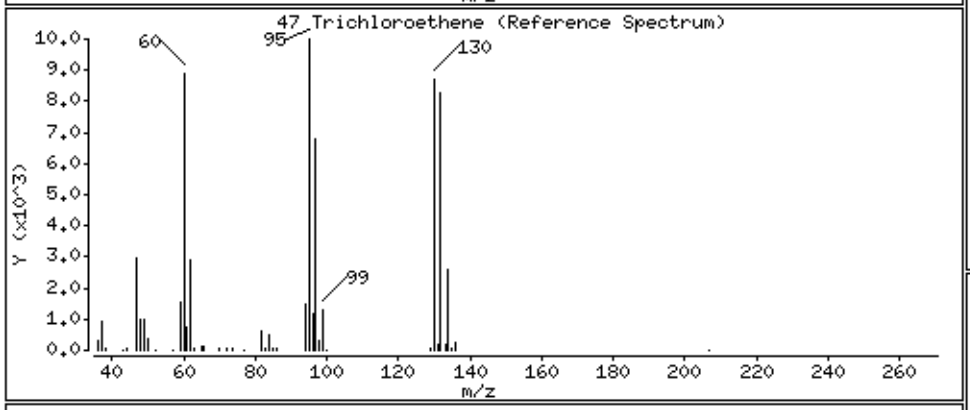
Purge Volume: 5.0 Operator: WL SRC: LIMS

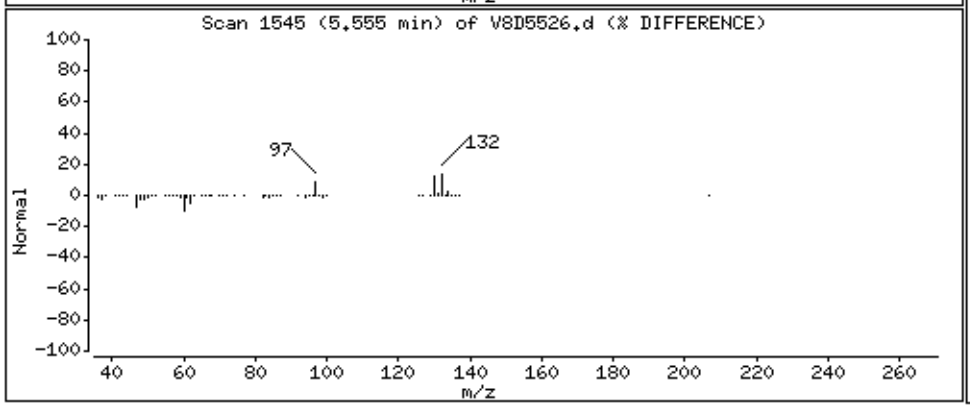
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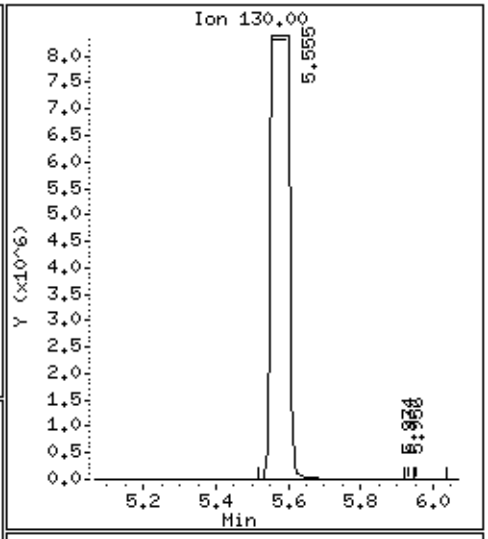
47 Trichloroethene Concentration: 15000 ug/L

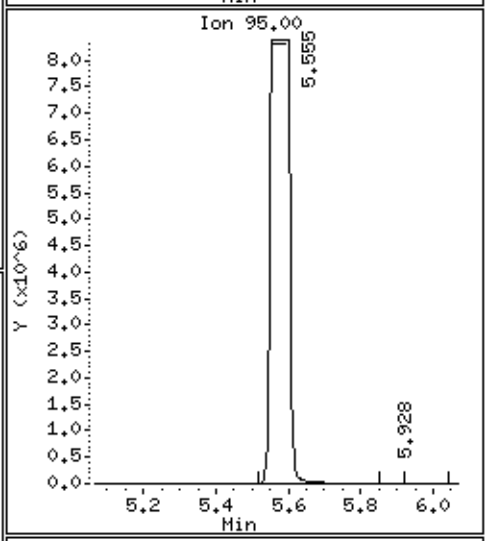


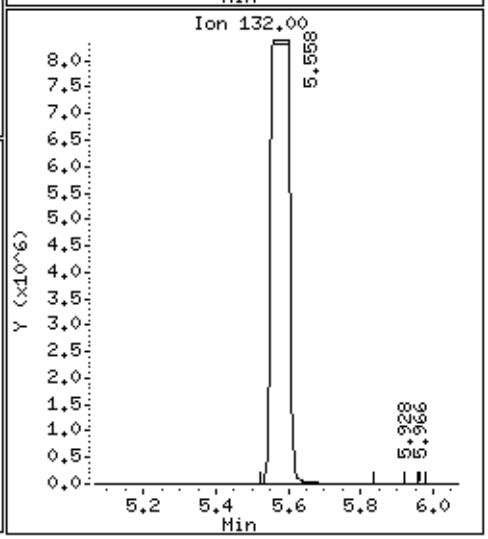












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

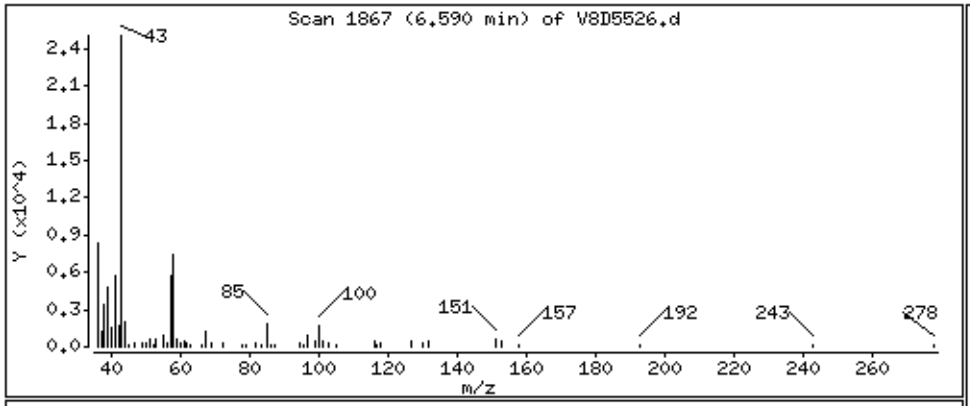
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

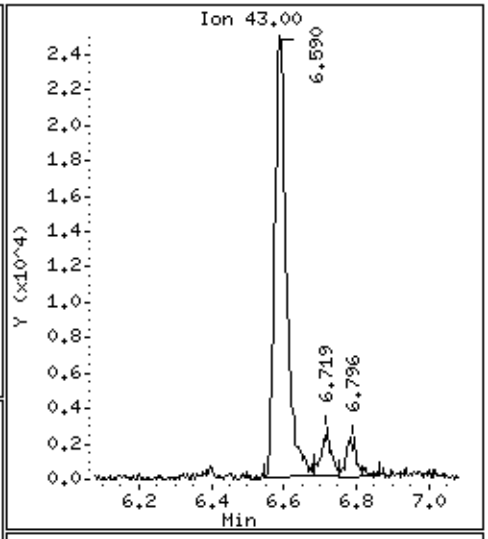
Sample Info: 5ML,N1055-11A,,77659

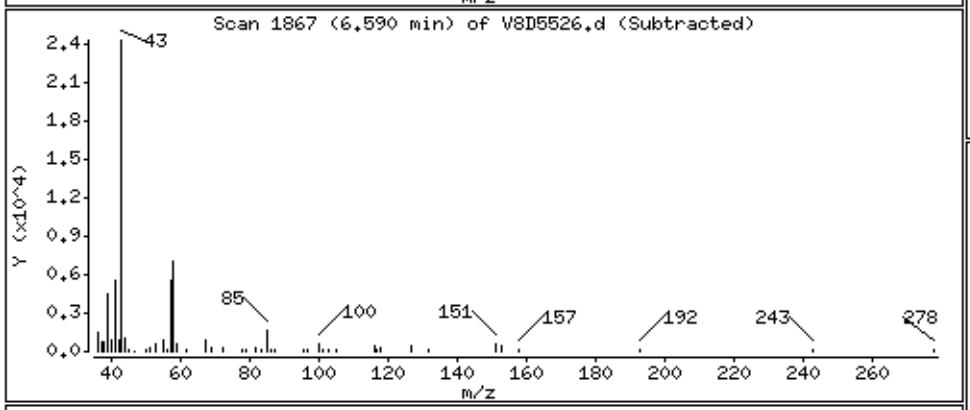
Purge Volume: 5.0 Operator: WL SRC: LIMS

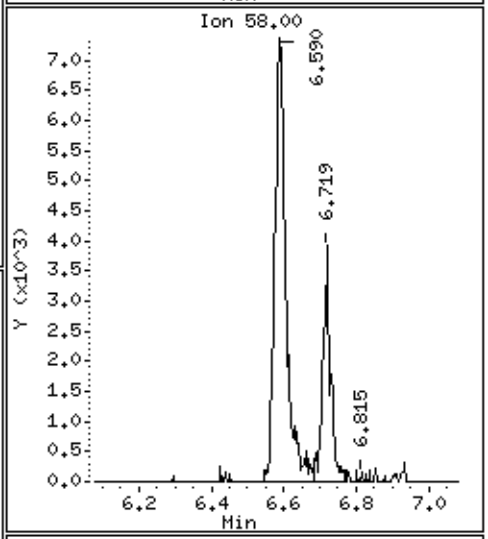
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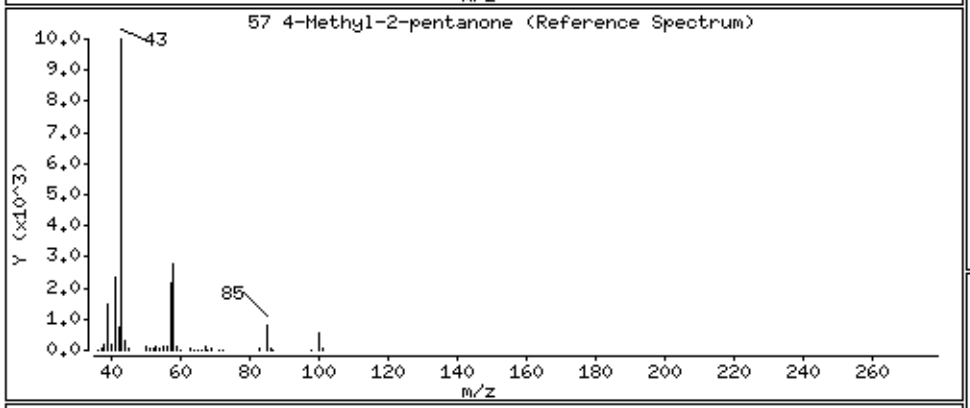
57 4-Methyl-2-pentanone Concentration: 14 ug/L

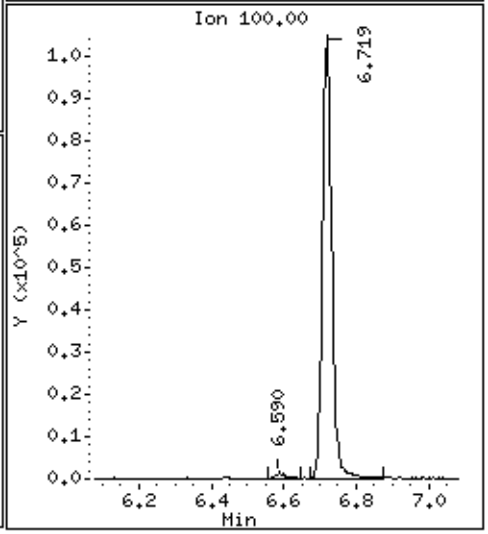


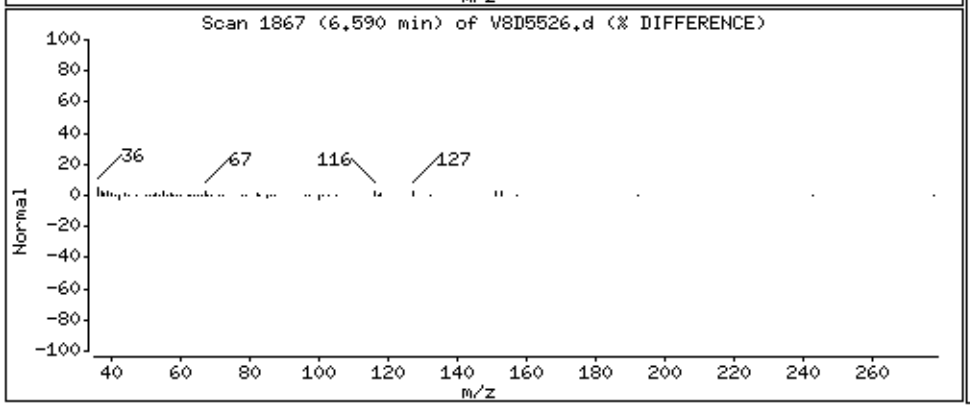












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

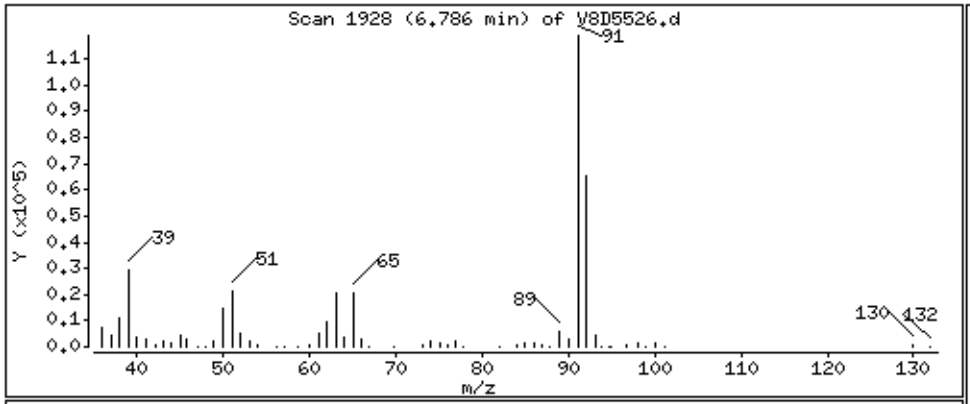
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

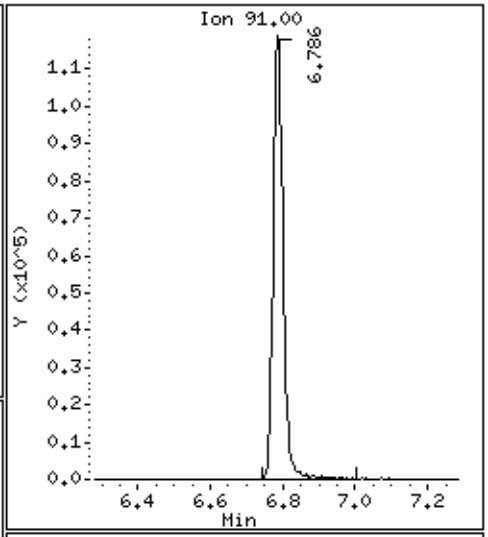
Sample Info: 5ML,N1055-11A,,77659

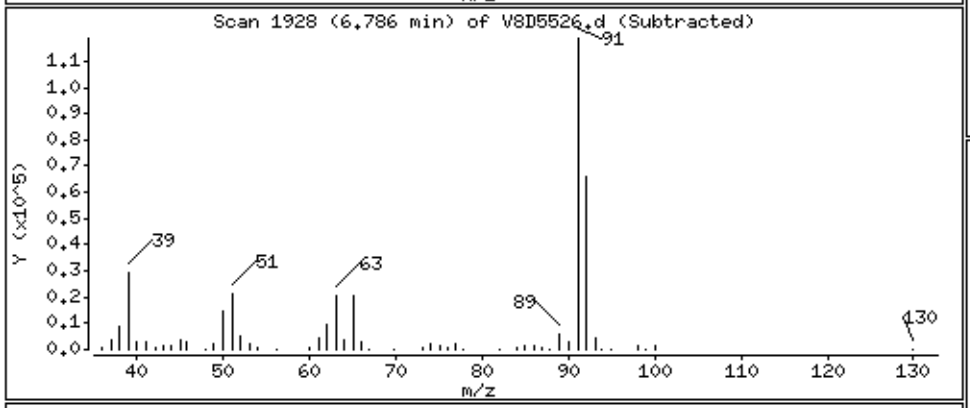
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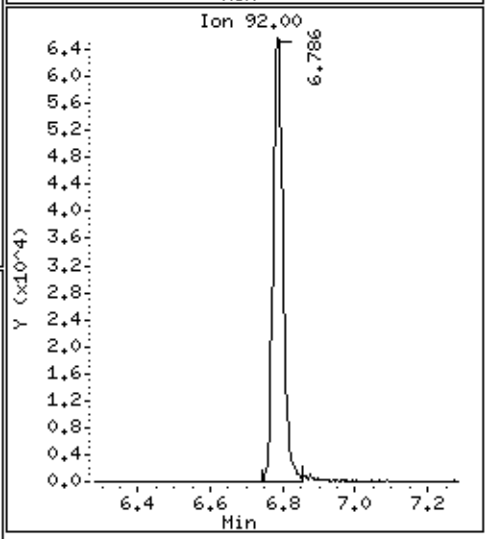
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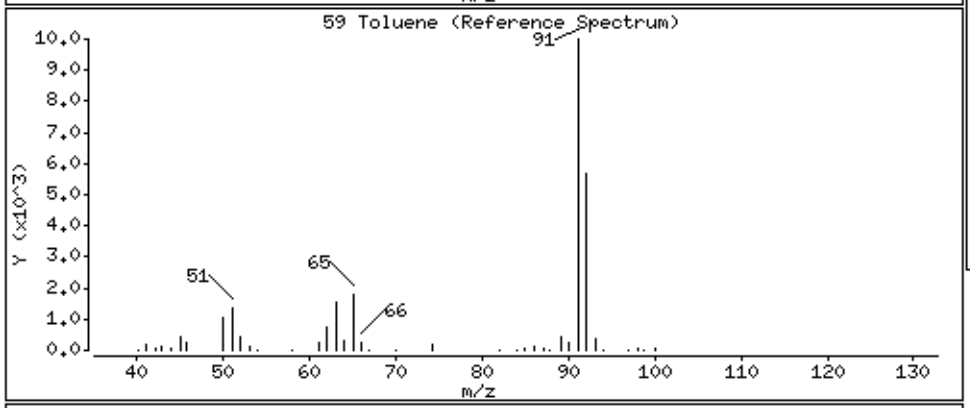
59 Toluene Concentration: 28 ug/L

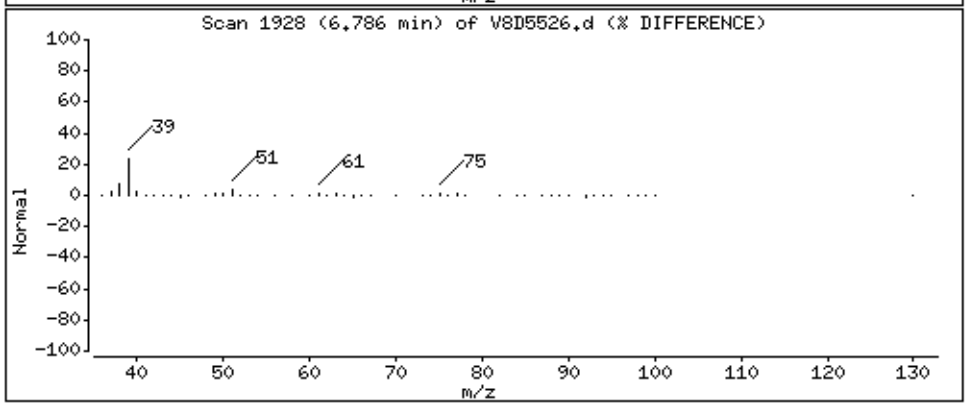












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

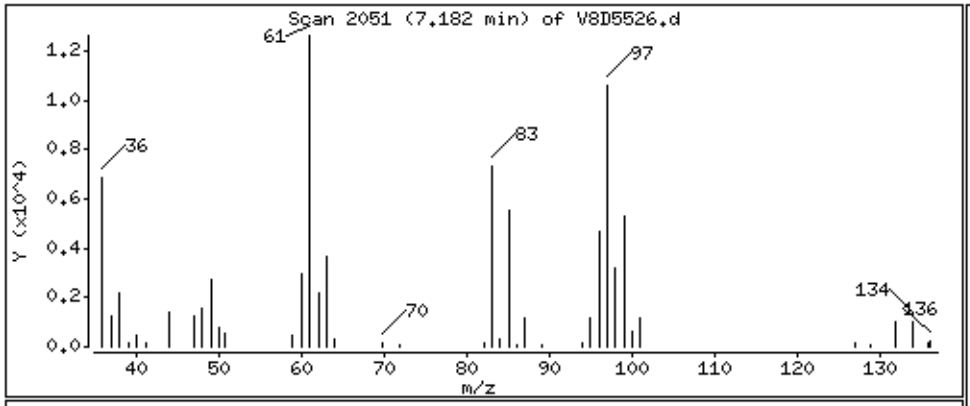
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

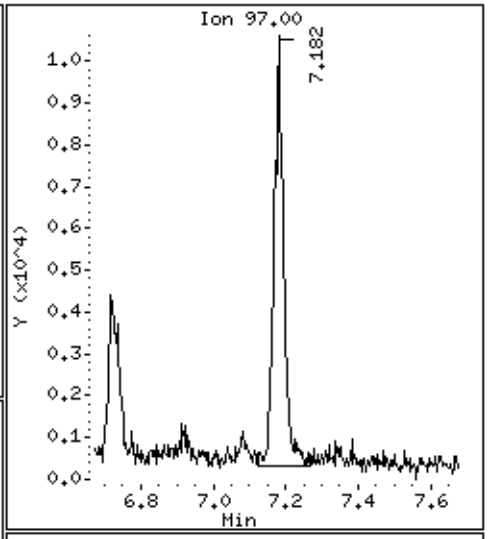
Sample Info: 5ML,N1055-11A,,77659

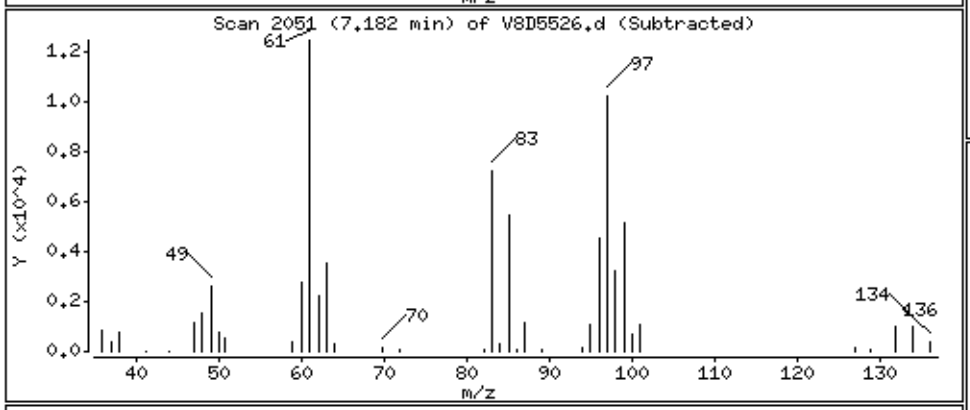
Purge Volume: 5.0 Operator: WL SRC: LIMS

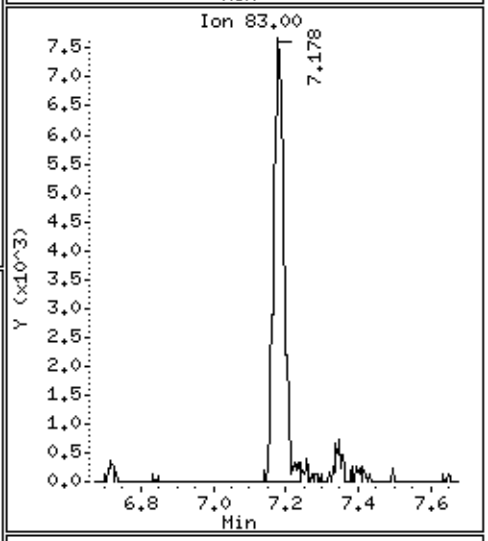
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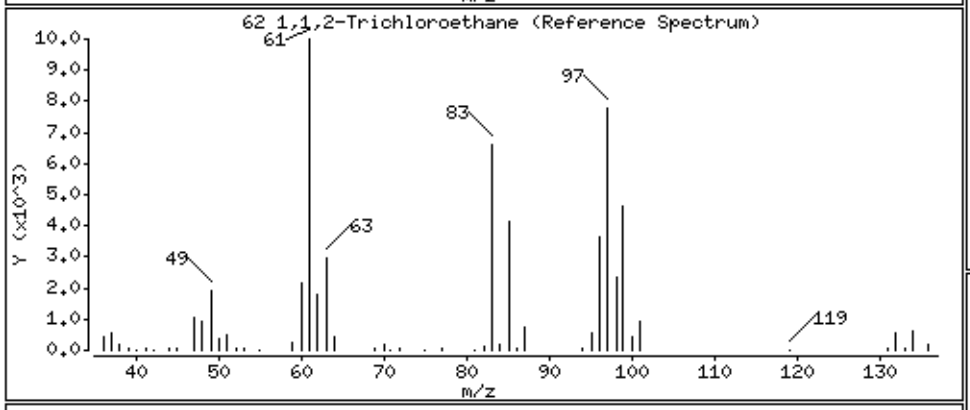
62 1,1,2-Trichloroethane Concentration: 11 ug/L

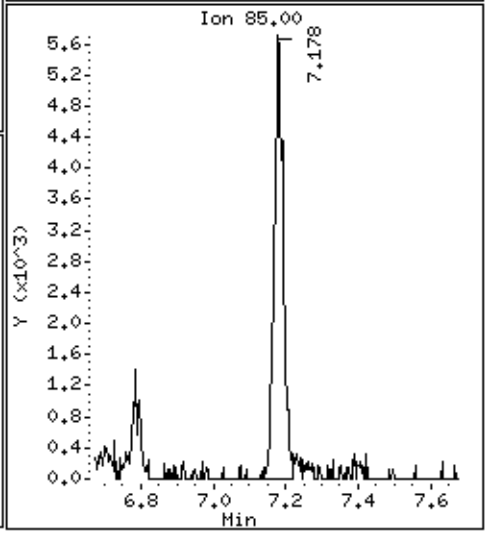


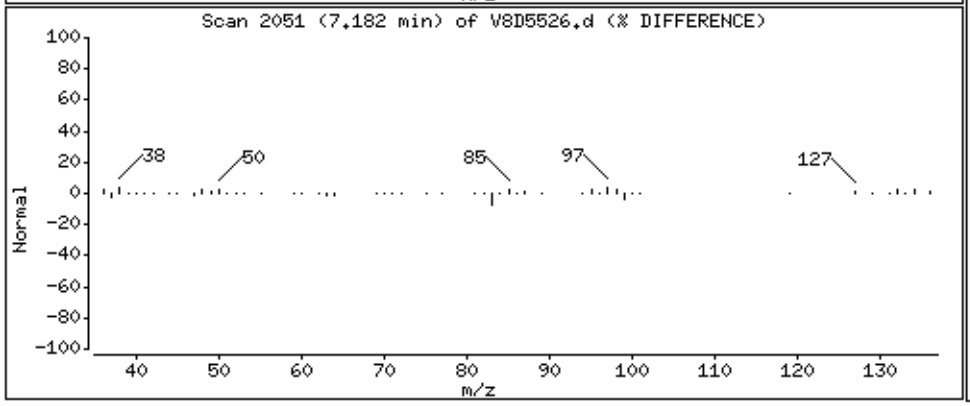












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

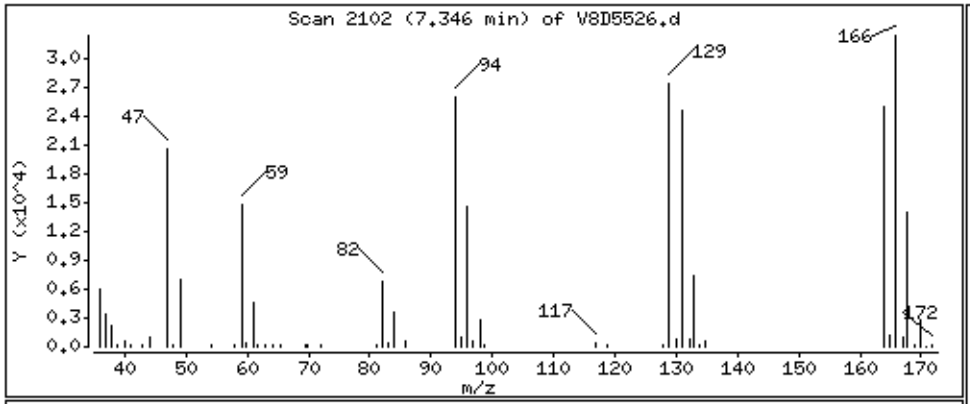
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

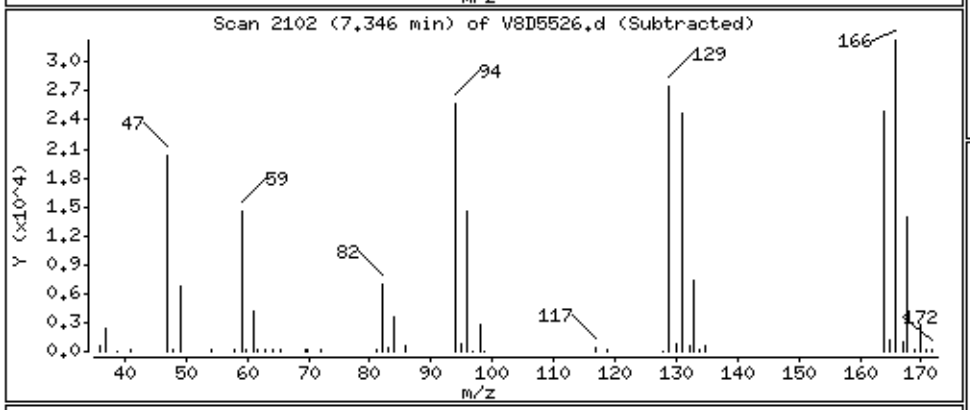
Sample Info: 5ML,N1055-11A,,77659

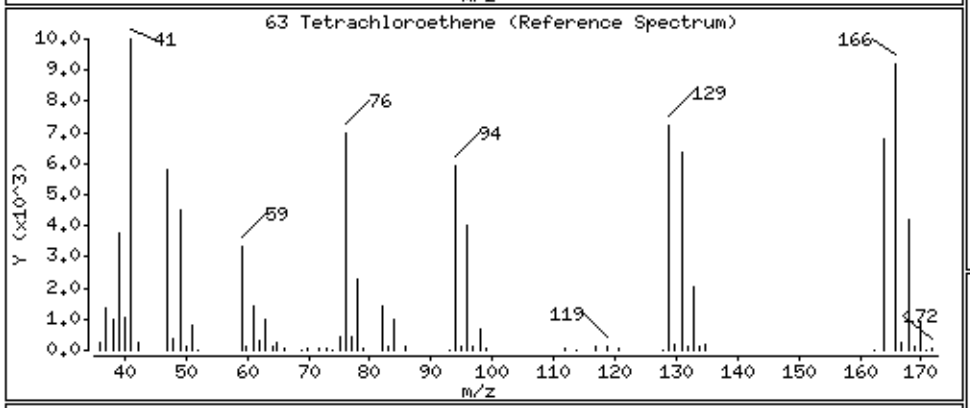
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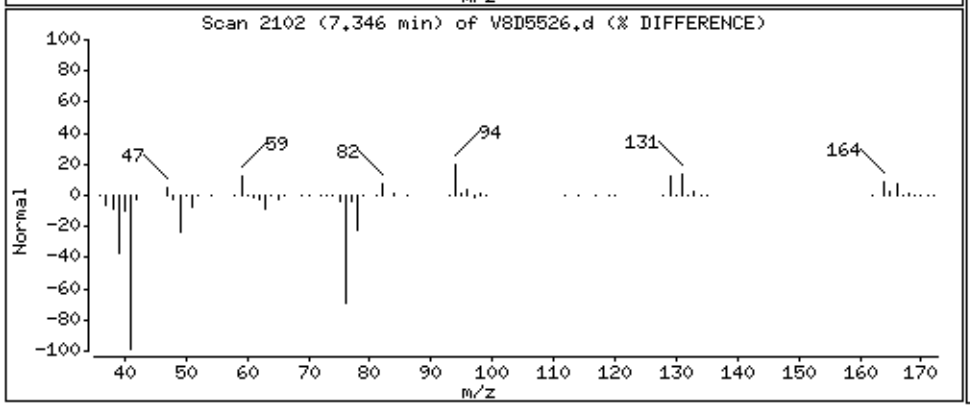
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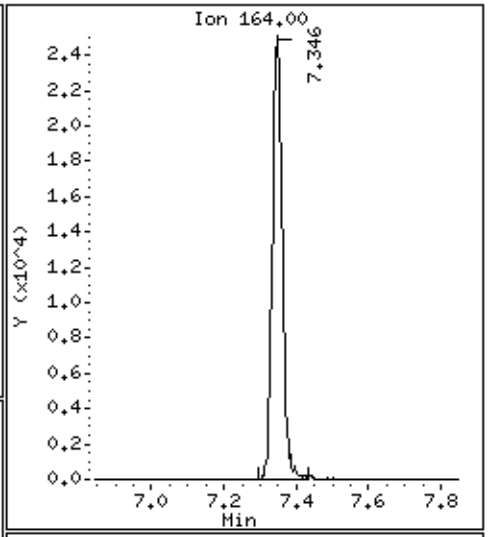
63 Tetrachloroethene Concentration: 21 ug/L

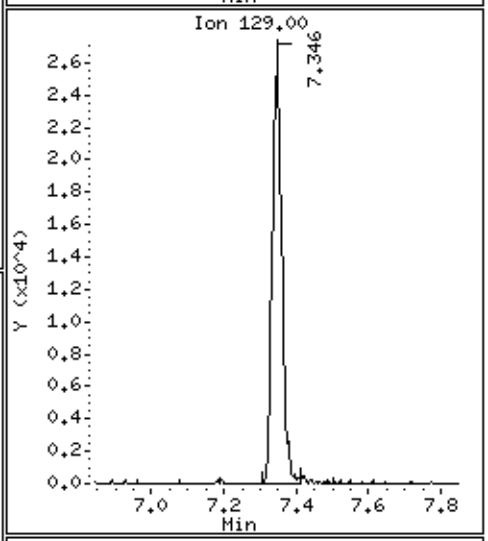


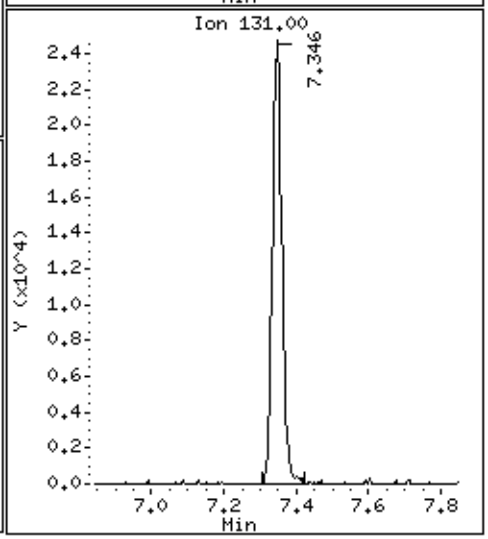












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

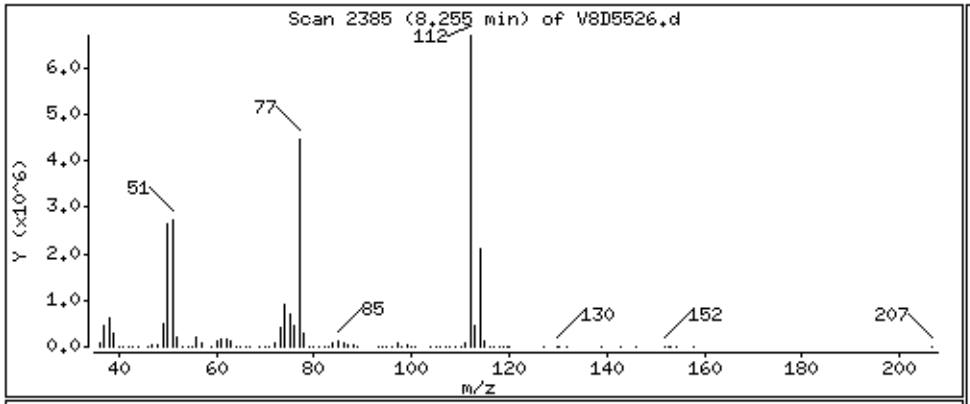
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

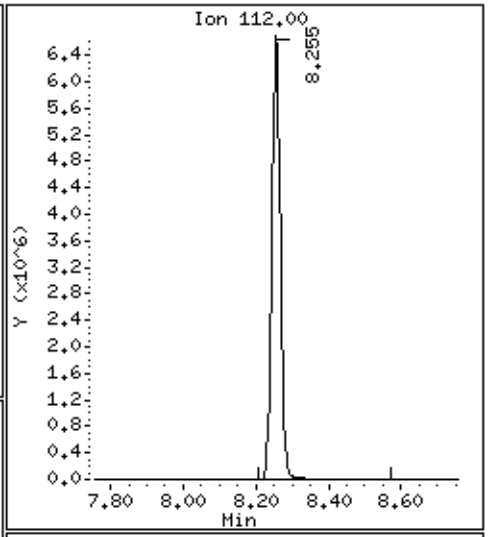
Sample Info: 5ML,N1055-11A,,77659

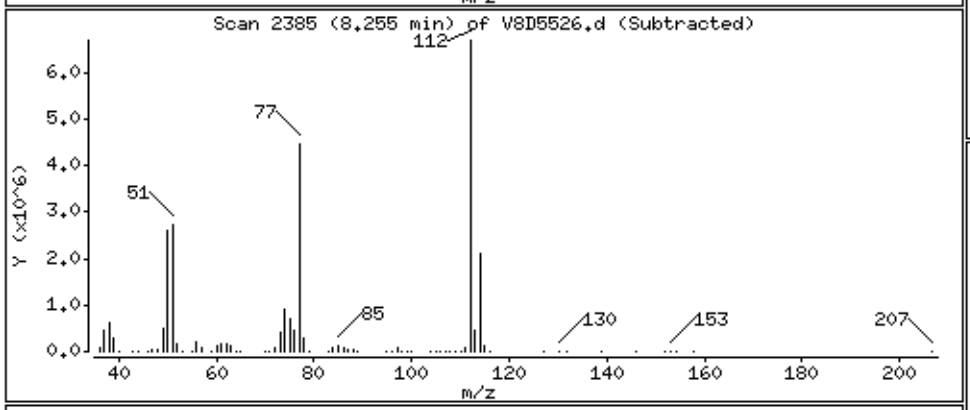
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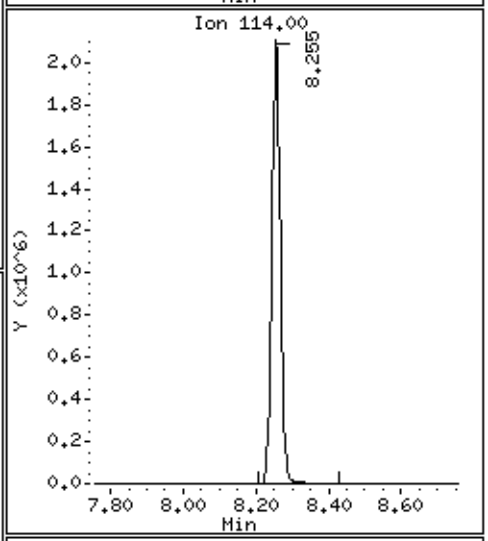
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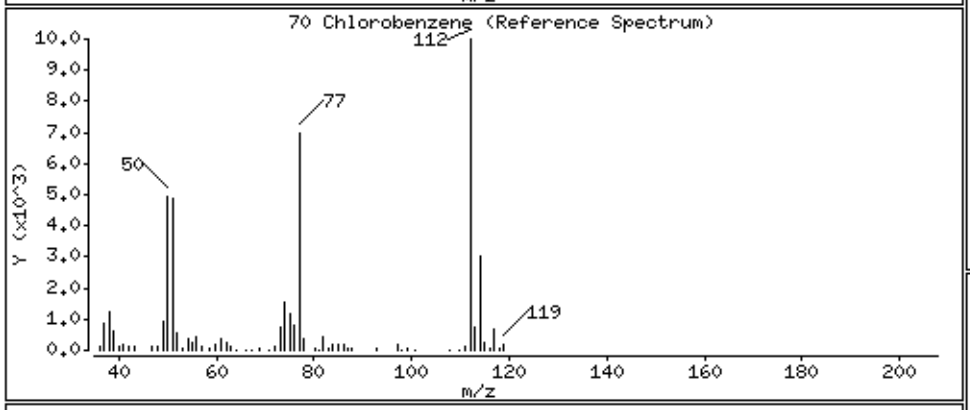
70 Chlorobenzene Concentration: 1800 ug/L

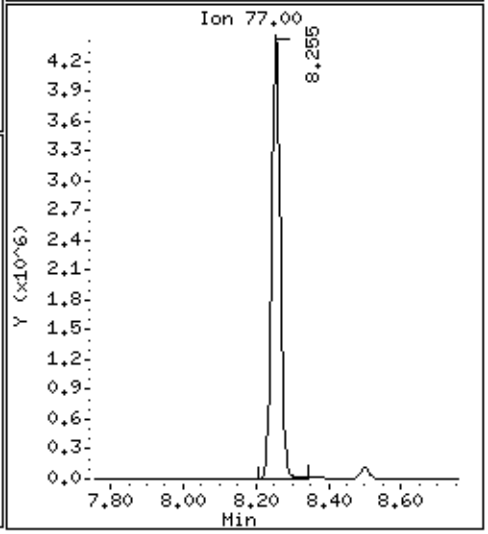


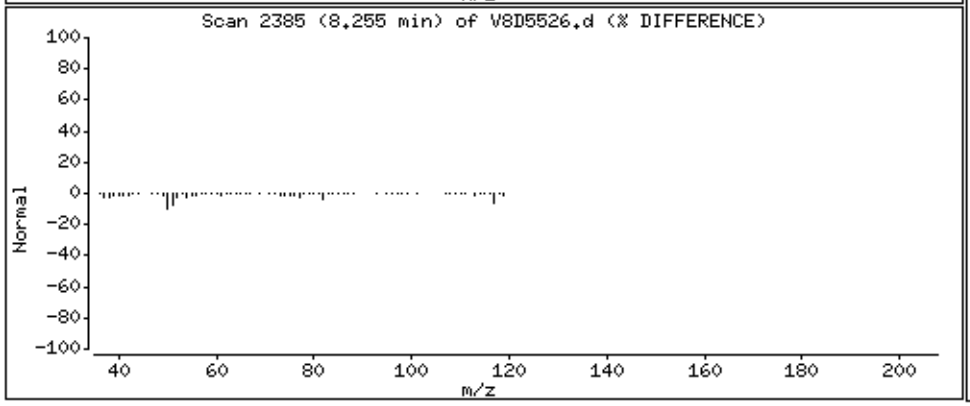












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

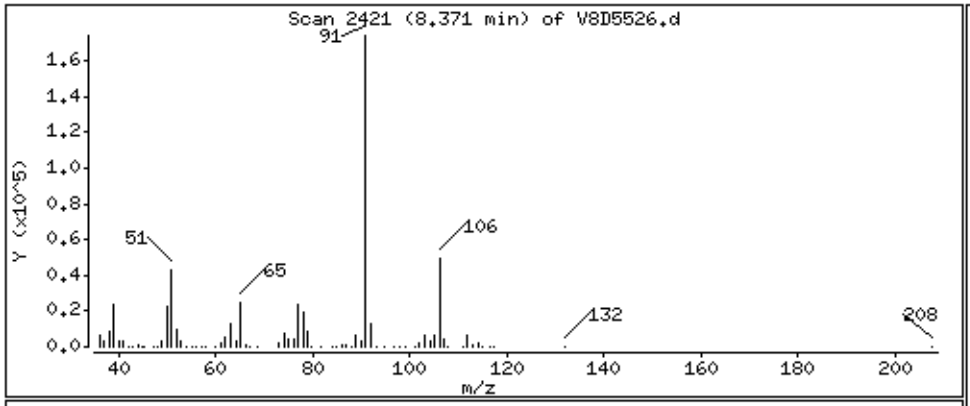
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

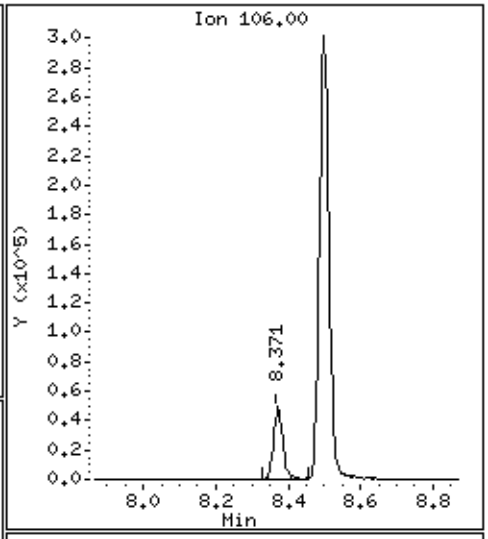
Sample Info: 5ML,N1055-11A,,77659

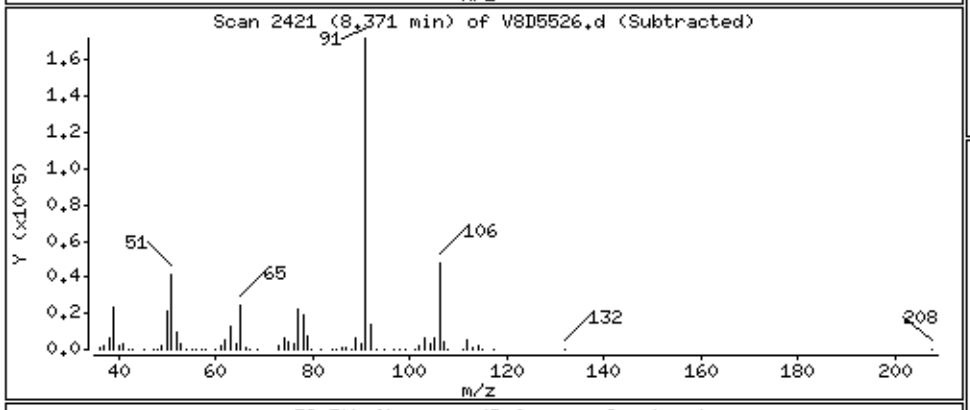
Purge Volume: 5.0 Operator: WL SRC: LIMS

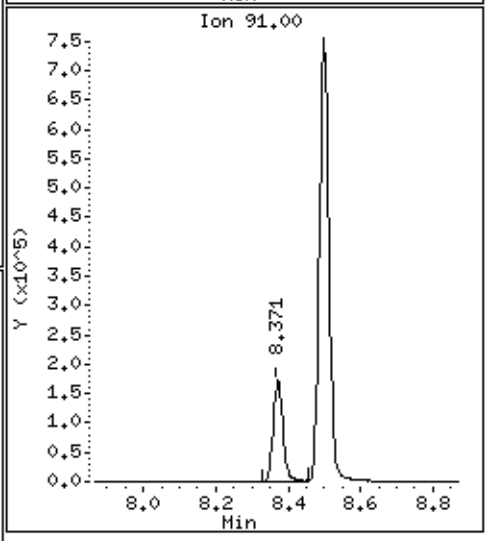
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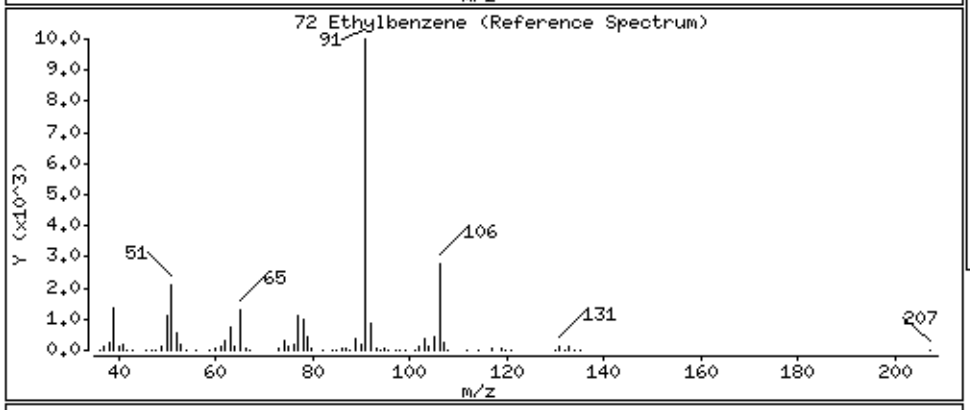
72 Ethylbenzene Concentration: 29 ug/L

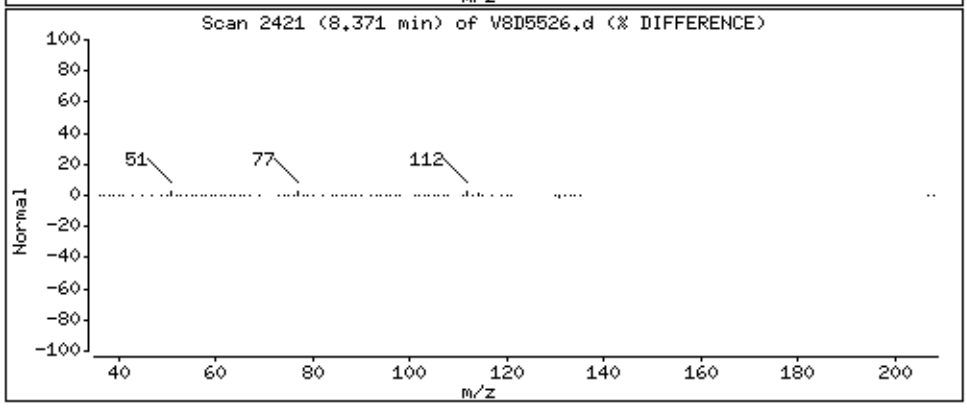












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

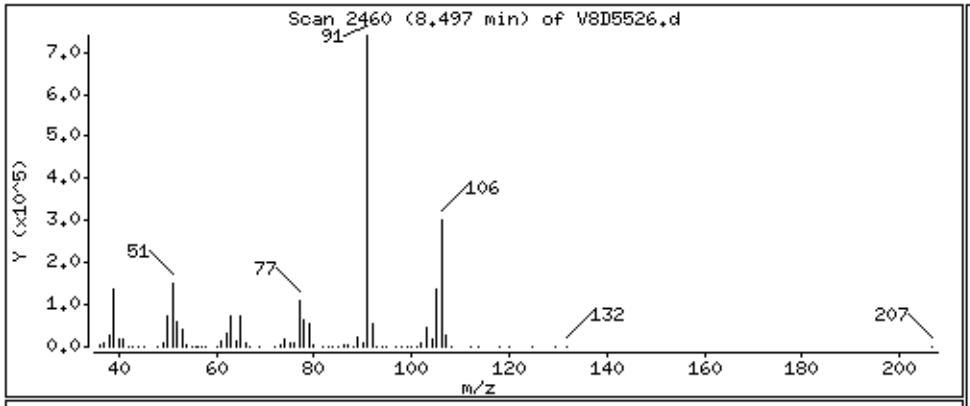
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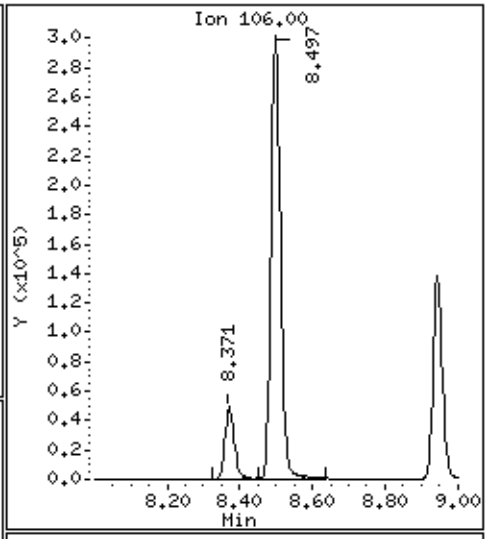
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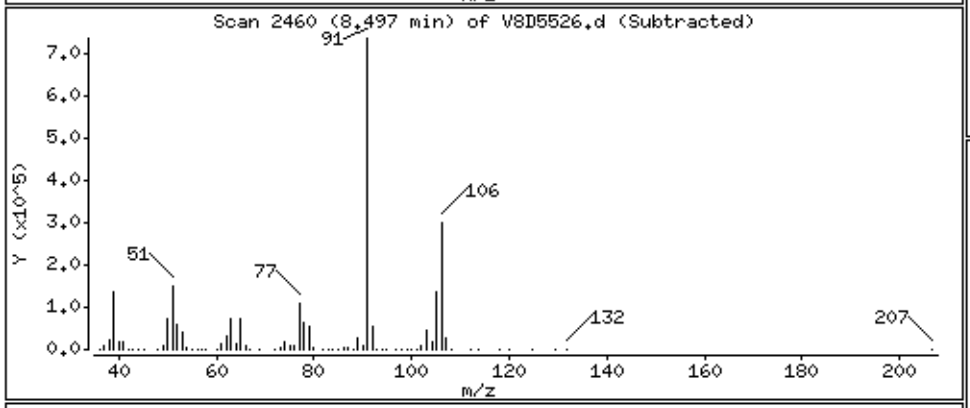
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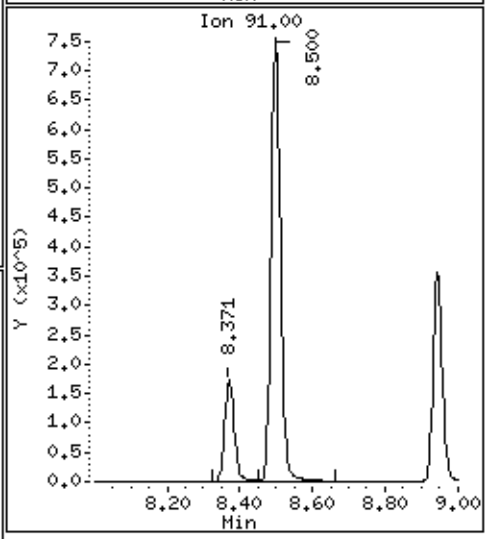
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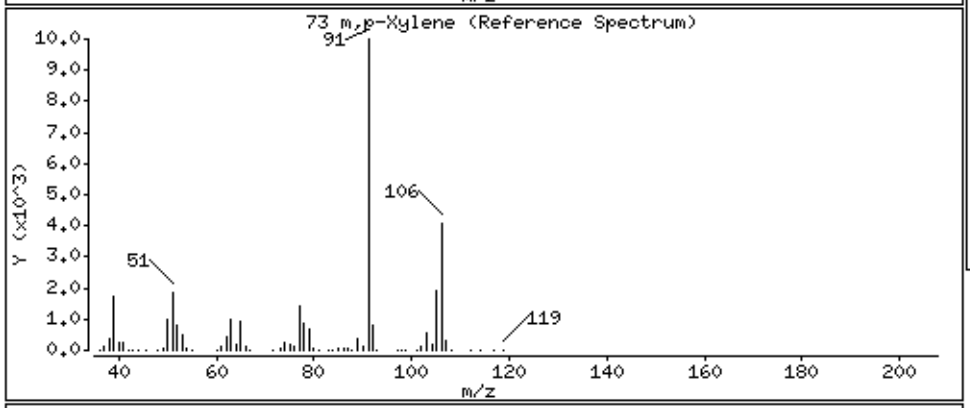
73 m,p-Xylene Concentration: 150 ug/L

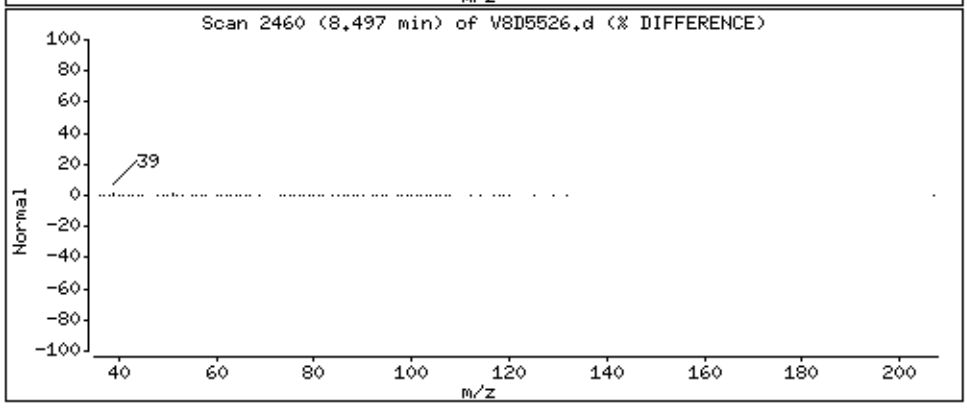












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

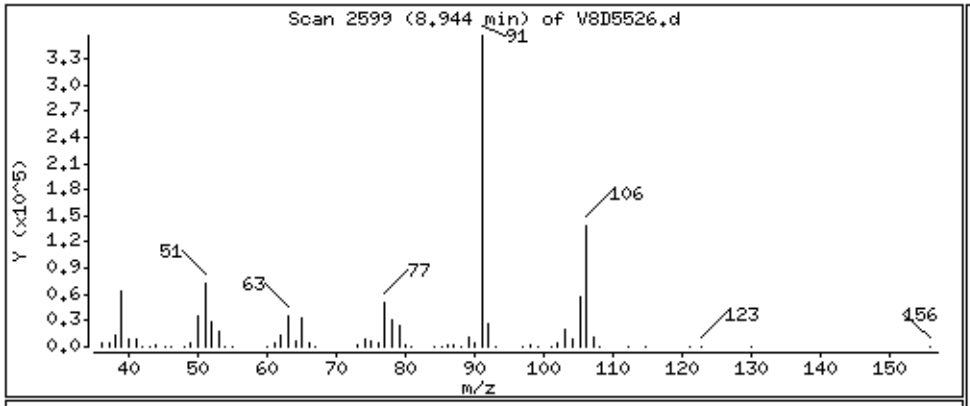
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

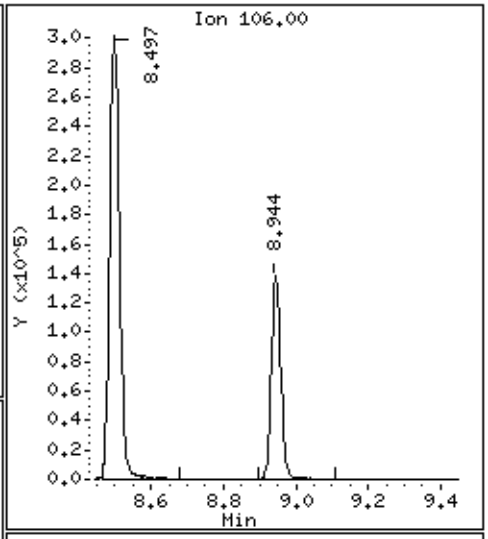
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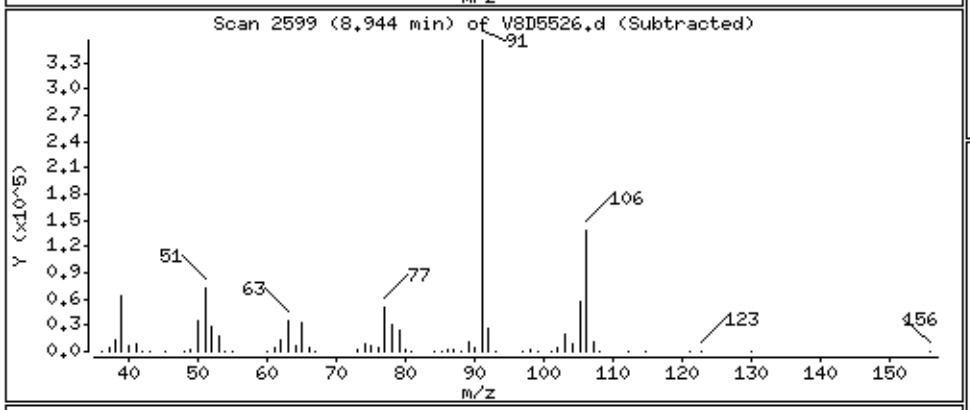
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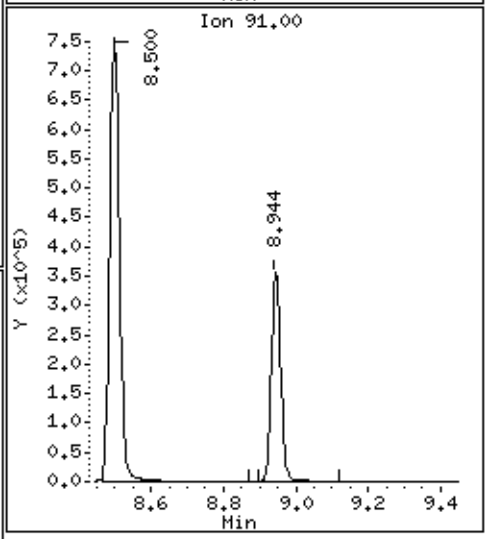
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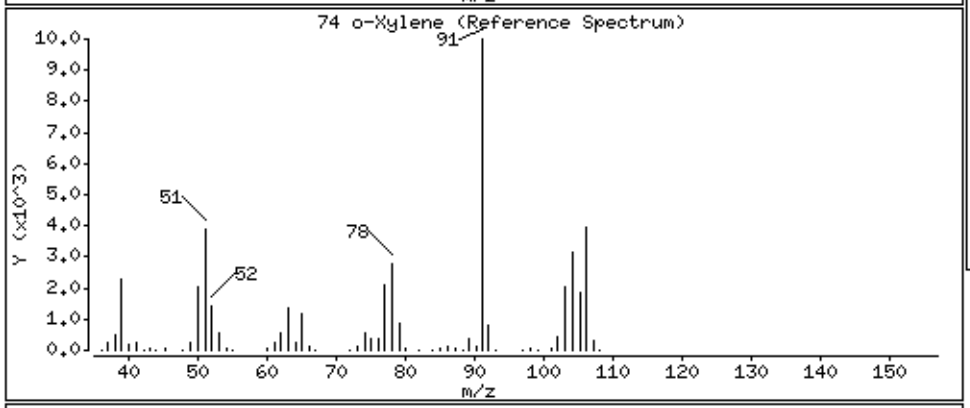
74 o-Xylene Concentration: 71 ug/L

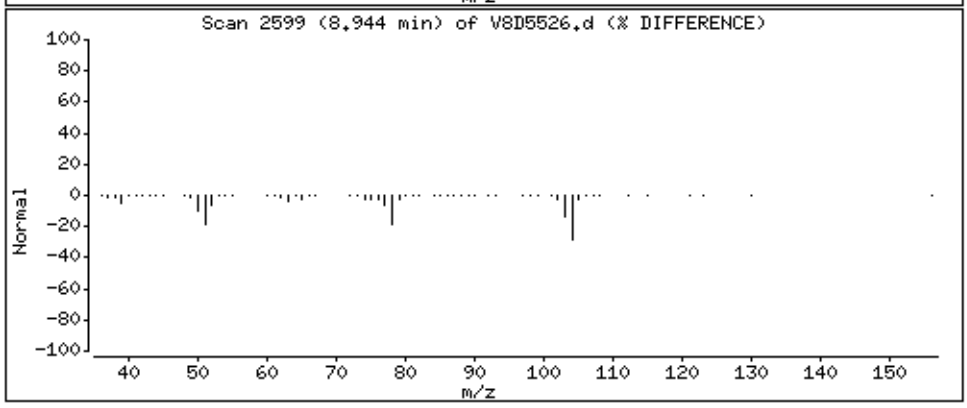












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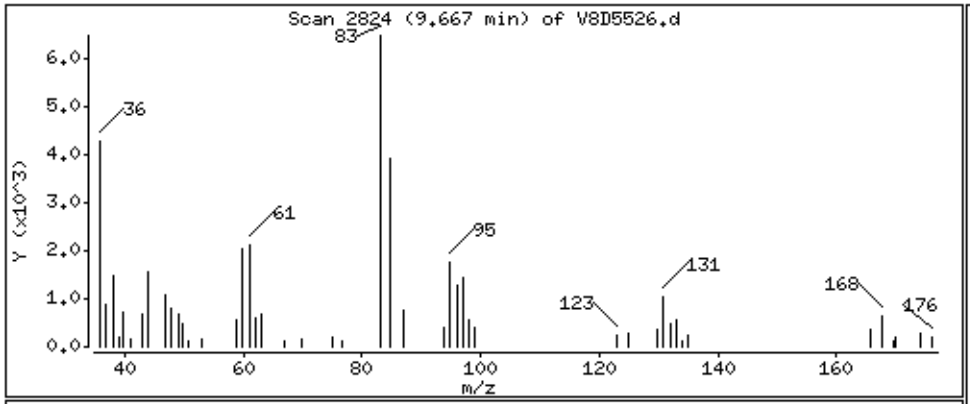
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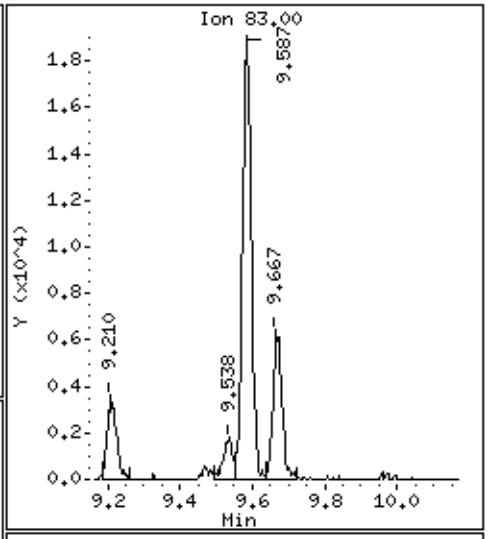
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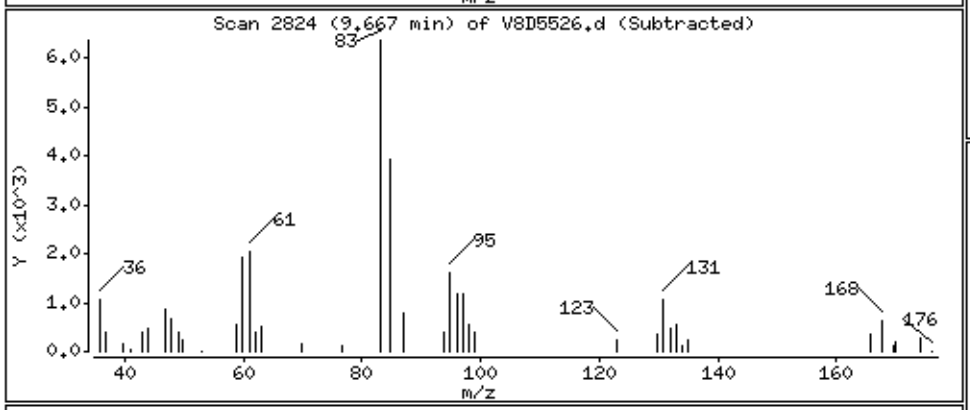
Purge Volume: 5.0 Operator: WL SRC: LIMS

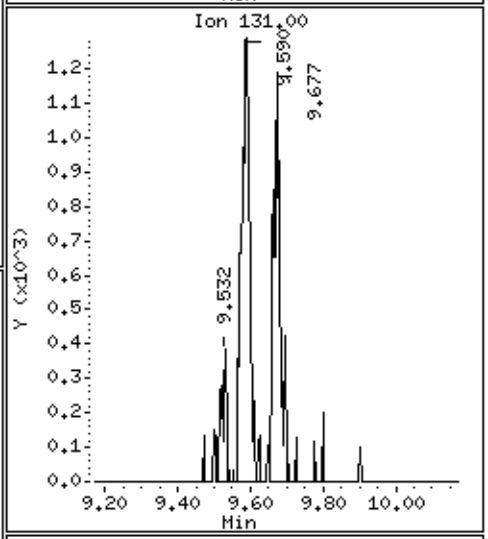
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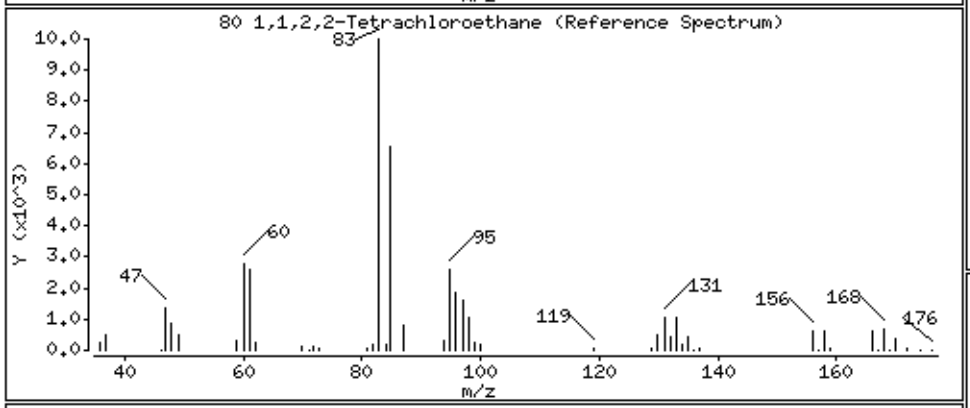
80 1,1,2,2-Tetrachloroethane Concentration: 3.8 ug/L

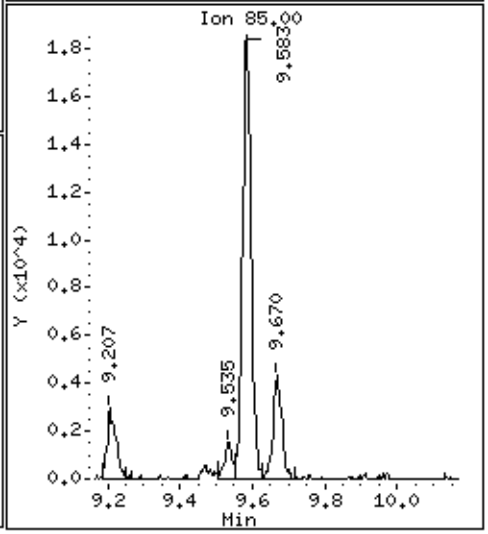


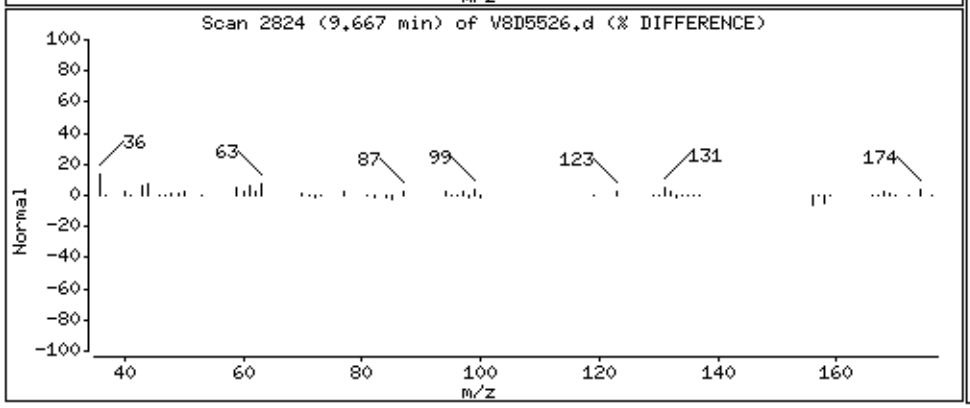












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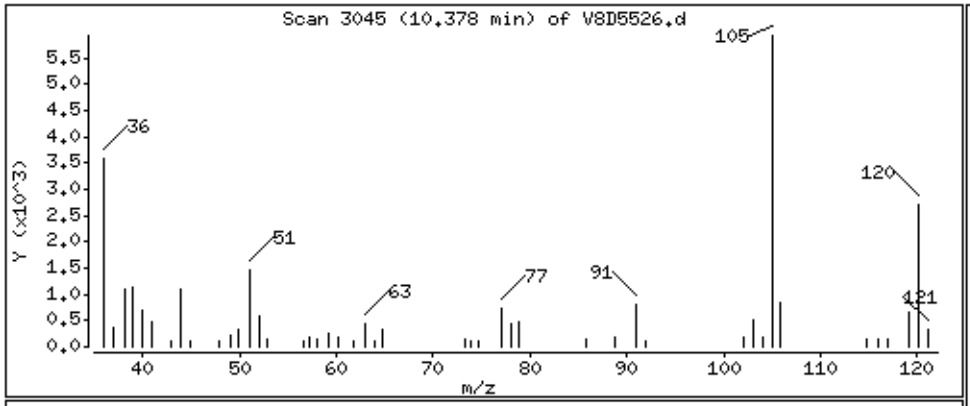
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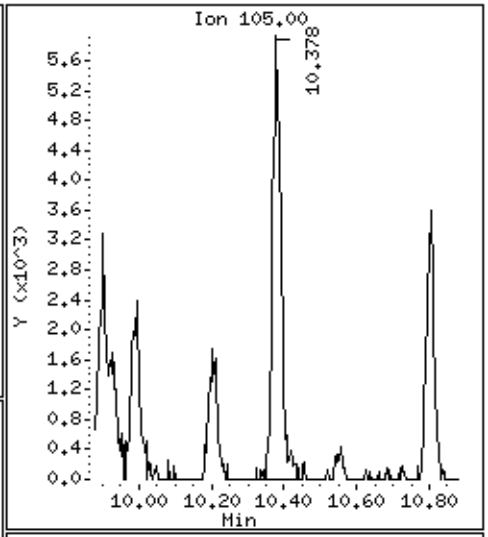
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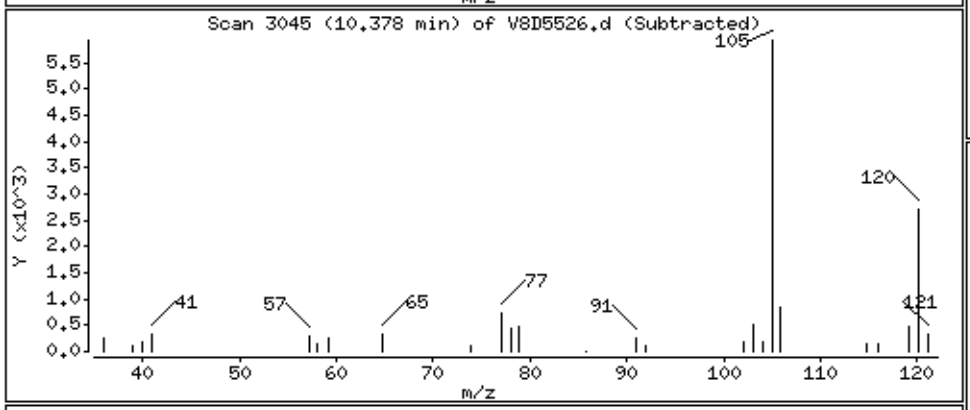
Purge Volume: 5.0 Operator: WL SRC: LIMS

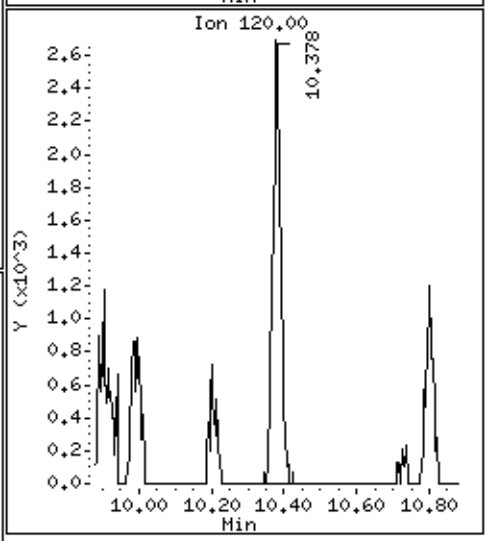
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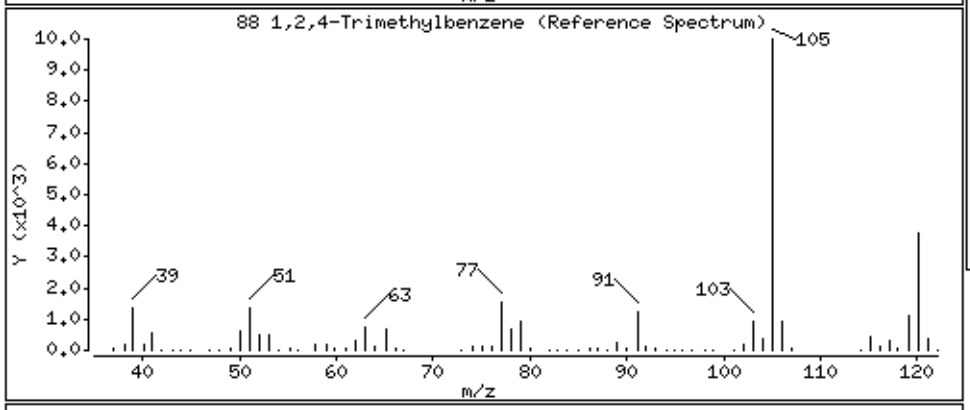
88 1,2,4-Trimethylbenzene Concentration: 1.2 ug/L

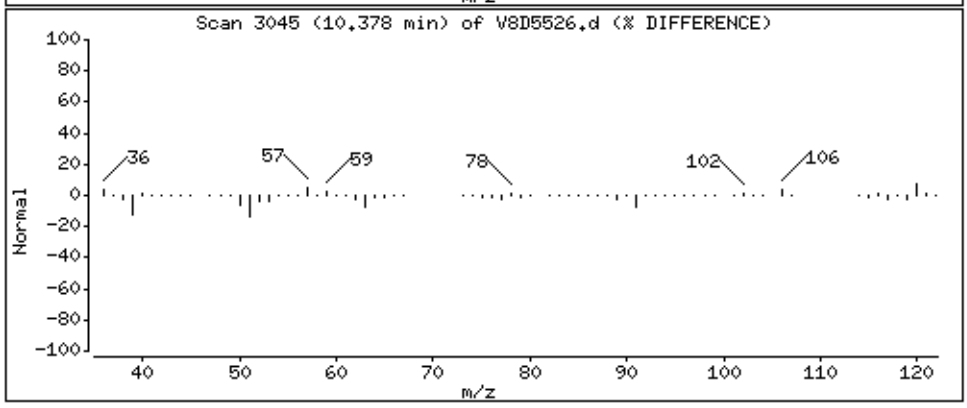












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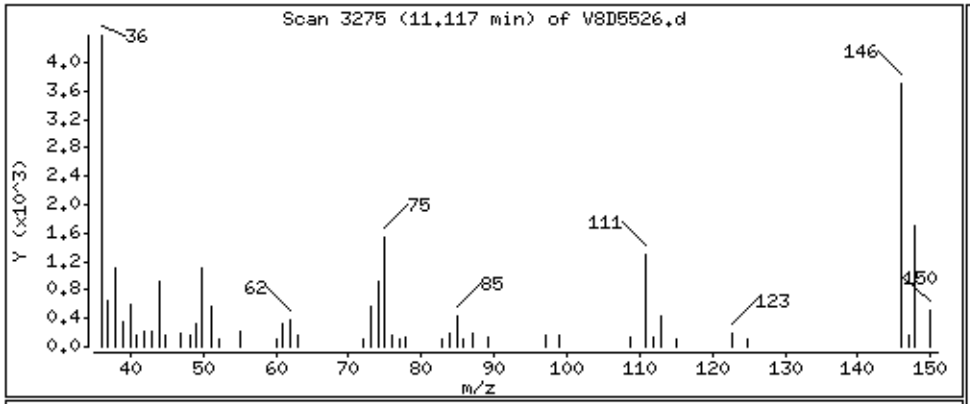
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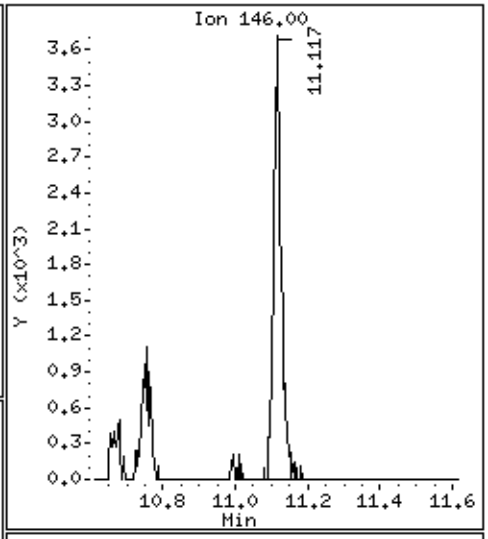
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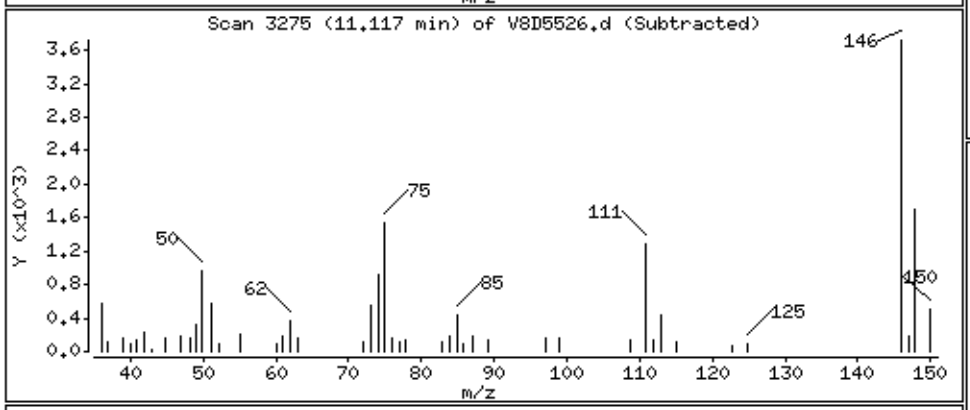
Purge Volume: 5.0 Operator: WL SRC: LIMS

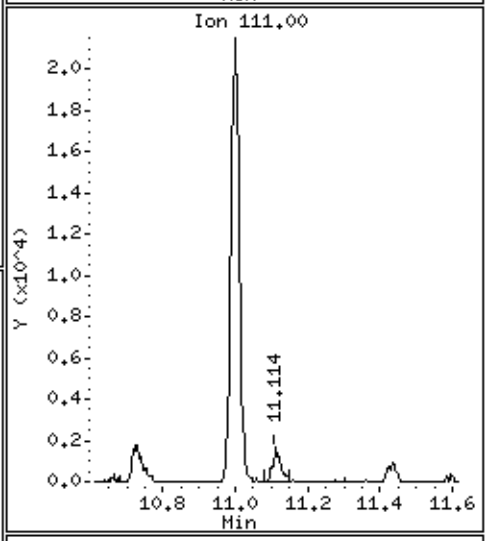
Column phase: DB-624 Column diameter: 0.25

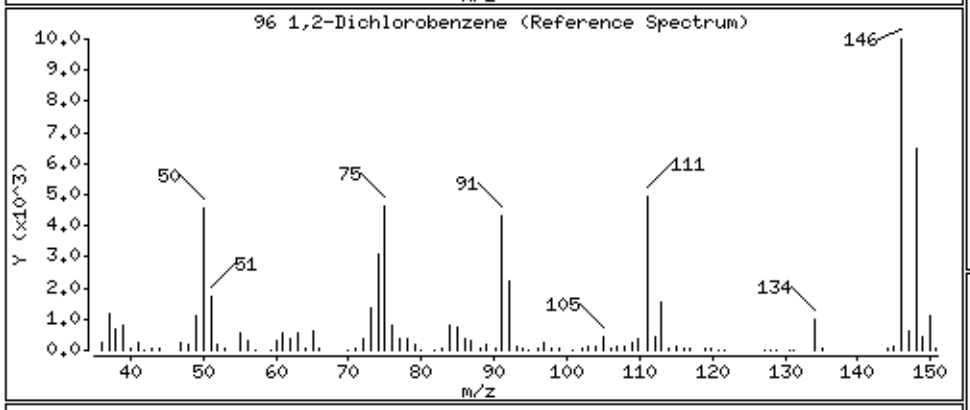
96 1,2-Dichlorobenzene Concentration: 1.2 ug/L

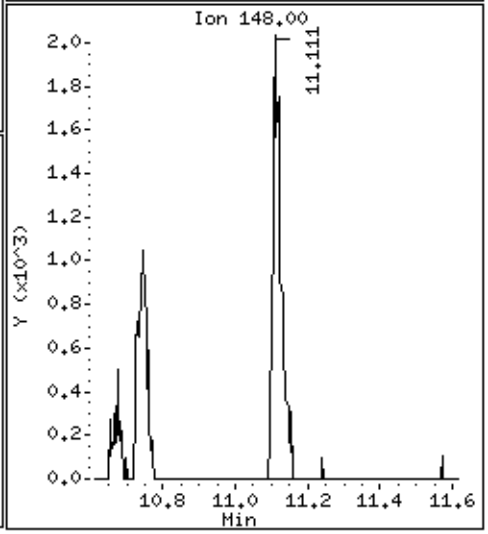


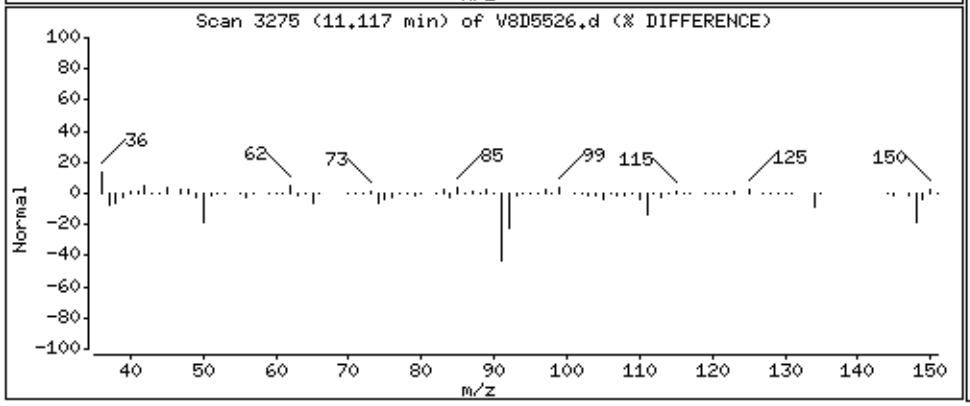












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Date : 19-JUN-2014 14:52

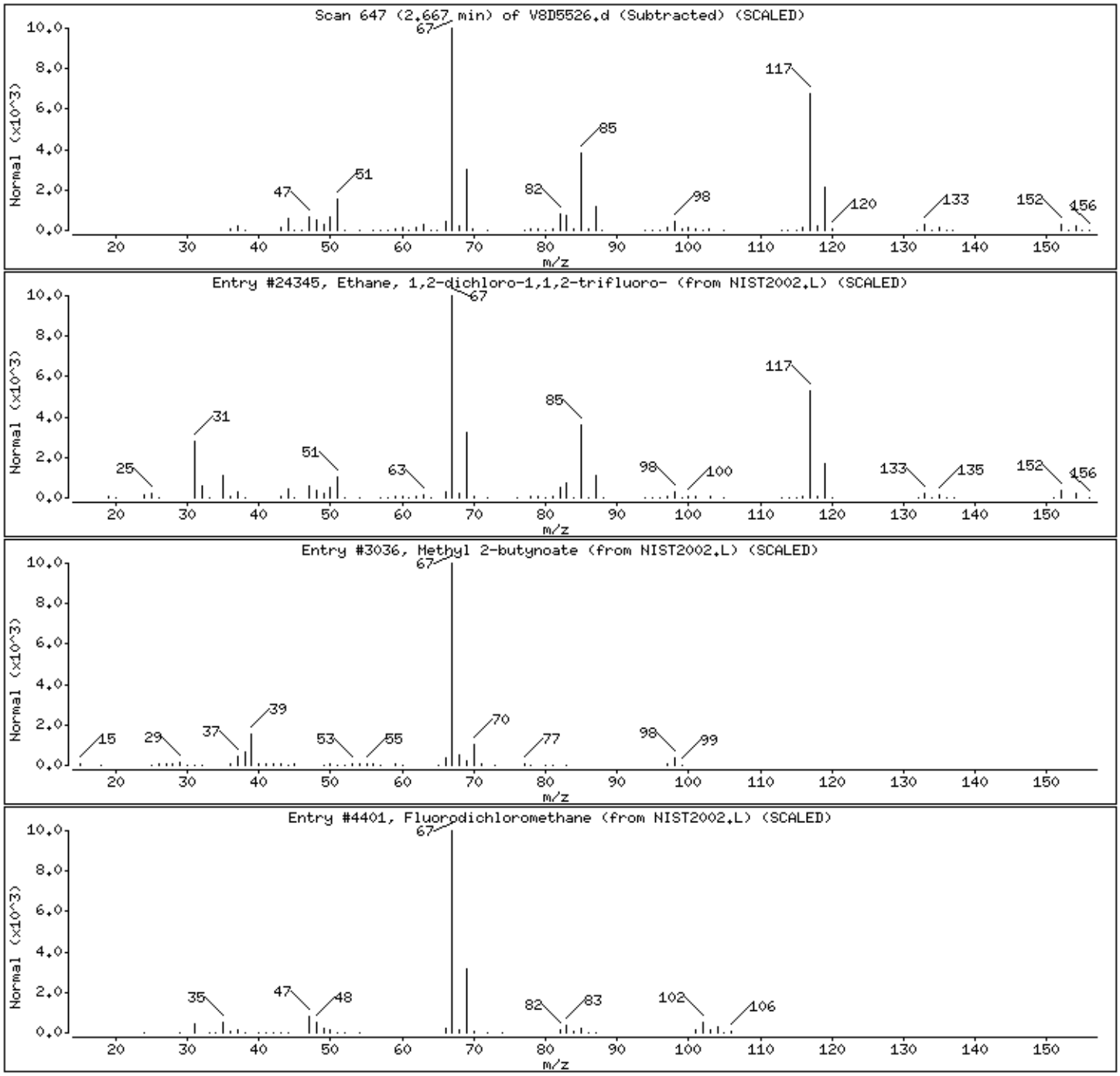
Client ID: MW-21R(2)_6/17/14 Instrument: V10.i

Sample Info: 5ML,N1055-11A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

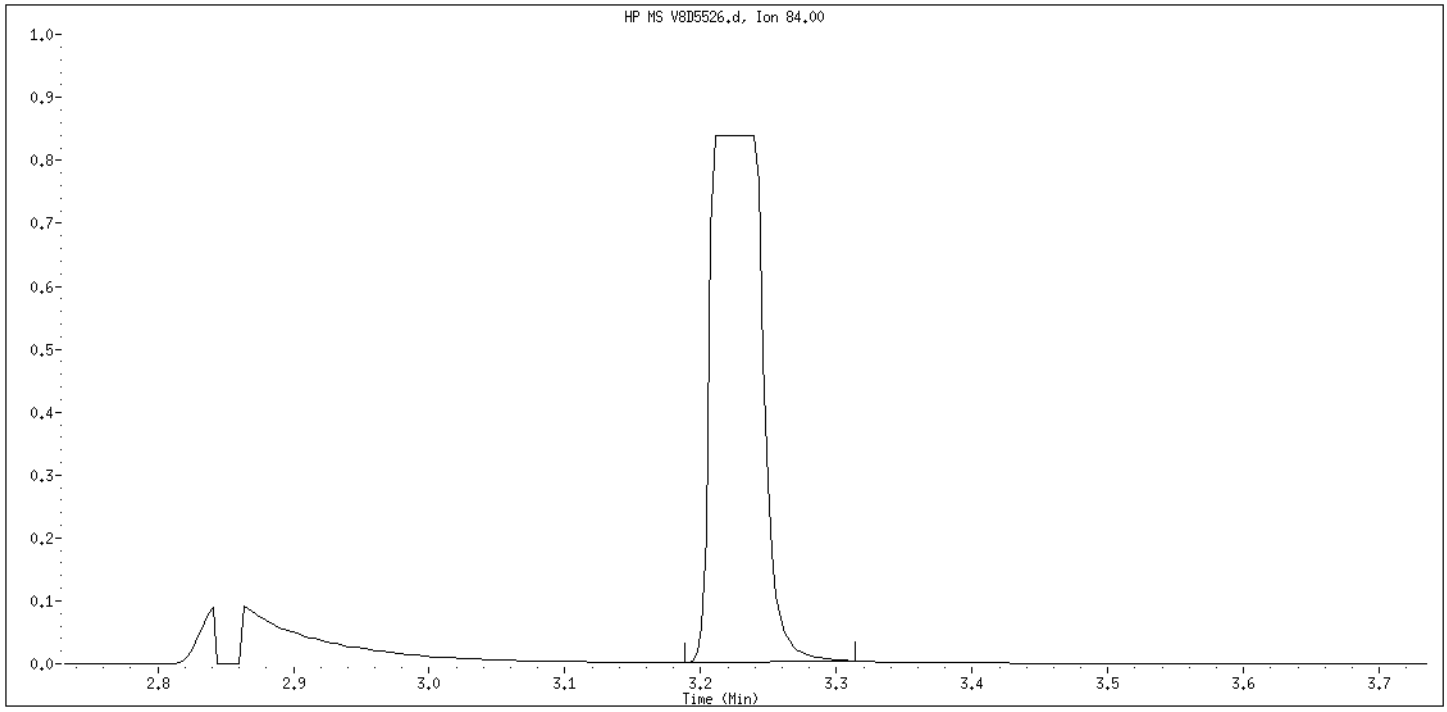
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Methyl 2-butynoate	23326-27-4	NIST2002.L	3036	25	C5H6O2	98
Fluorodichloromethane	75-43-4	NIST2002.L	4401	25	CHCl2F	102



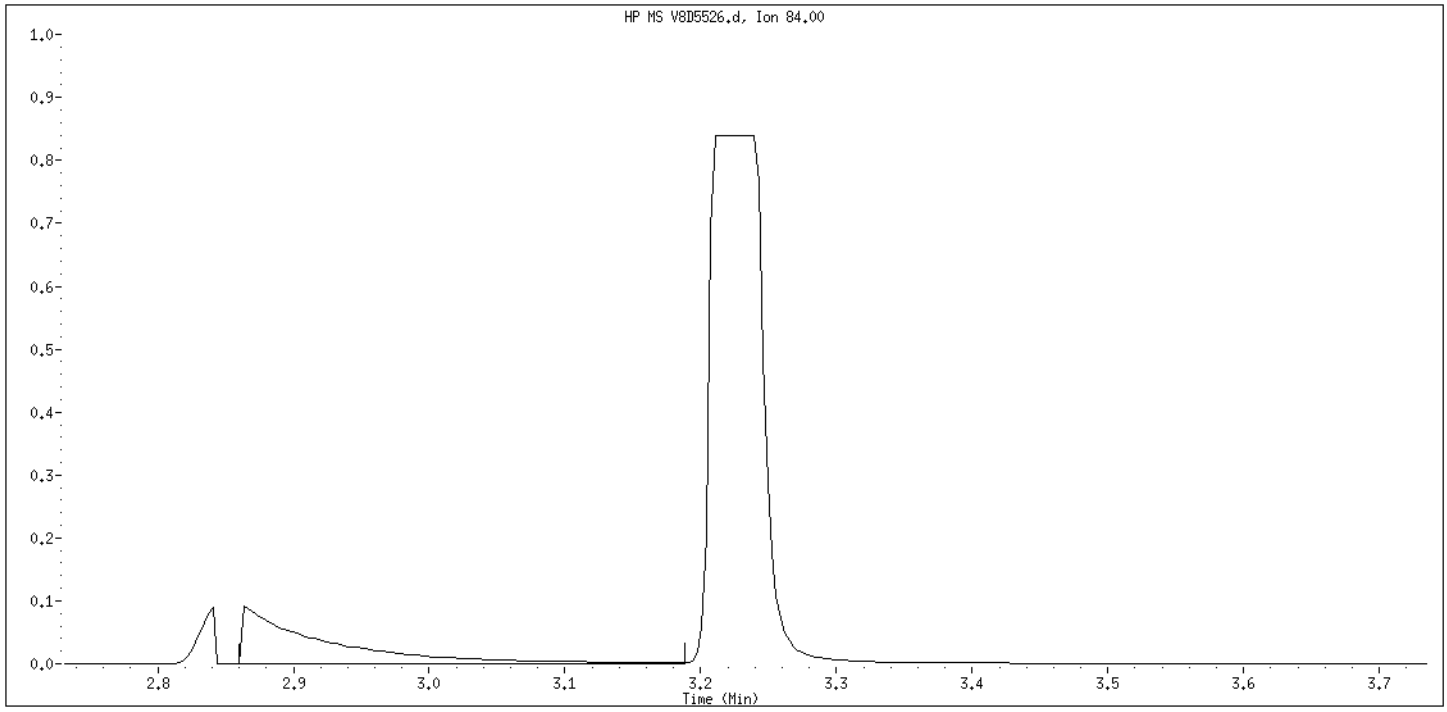
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5526.d

Lab ID: N1055-11A Client ID: MW-21R(2)_6/17/14
Inj Date: 19-JUN-2014 14:52 Operator: WL SRC: LIMS

Manual Integration Methylene Chloride Ret Time: 3.211 min, Range: 3.188 to 3.314 min Response: 22006537



Original Integration Methylene Chloride Ret Time: 2.863 min, Range: 2.860 to 3.188 min Response: 3673904



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(2)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-11ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5661.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
74-87-3	Chloromethane	1000	U
75-01-4	Vinyl chloride	1000	U
74-83-9	Bromomethane	1000	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	1000	U
75-35-4	1,1-Dichloroethene	1000	U
67-64-1	Acetone	5000	U
74-88-4	Iodomethane	1000	U
75-15-0	Carbon disulfide	1000	U
75-09-2	Methylene chloride	18000	D
156-60-5	trans-1,2-Dichloroethene	1000	U
1634-04-4	Methyl tert-butyl ether	1000	U
75-34-3	1,1-Dichloroethane	3000	D
108-05-4	Vinyl acetate	1000	U
78-93-3	2-Butanone	5000	U
156-59-2	cis-1,2-Dichloroethene	1000	U
594-20-7	2,2-Dichloropropane	1000	U
74-97-5	Bromochloromethane	1000	U
67-66-3	Chloroform	1000	U
71-55-6	1,1,1-Trichloroethane	67000	D
563-58-6	1,1-Dichloropropene	1000	U
56-23-5	Carbon tetrachloride	1000	U
107-06-2	1,2-Dichloroethane	1000	U
71-43-2	Benzene	1000	U
79-01-6	Trichloroethene	26000	D
78-87-5	1,2-Dichloropropane	1000	U
74-95-3	Dibromomethane	1000	U
75-27-4	Bromodichloromethane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
108-10-1	4-Methyl-2-pentanone	5000	U
108-88-3	Toluene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
142-28-9	1,3-Dichloropropane	1000	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(2)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-11ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5661.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
591-78-6	2-Hexanone	5000	U
124-48-1	Dibromochloromethane	1000	U
106-93-4	1,2-Dibromoethane	1000	U
108-90-7	Chlorobenzene	1600	D
630-20-6	1,1,1,2-Tetrachloroethane	1000	U
100-41-4	Ethylbenzene	1000	U
179601-23-1	m,p-Xylene	1000	U
95-47-6	o-Xylene	1000	U
1330-20-7	Xylene (Total)	1000	U
100-42-5	Styrene	1000	U
75-25-2	Bromoform	1000	U
98-82-8	Isopropylbenzene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-86-1	Bromobenzene	1000	U
96-18-4	1,2,3-Trichloropropane	1000	U
103-65-1	n-Propylbenzene	1000	U
95-49-8	2-Chlorotoluene	1000	U
108-67-8	1,3,5-Trimethylbenzene	1000	U
106-43-4	4-Chlorotoluene	1000	U
98-06-6	tert-Butylbenzene	1000	U
95-63-6	1,2,4-Trimethylbenzene	1000	U
135-98-8	sec-Butylbenzene	1000	U
99-87-6	4-Isopropyltoluene	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
104-51-8	n-Butylbenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
96-12-8	1,2-Dibromo-3-chloropropane	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
87-68-3	Hexachlorobutadiene	1000	U
87-61-6	1,2,3-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	120000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R(2)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-11ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5661.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5661.d
Lab Smp Id: N1055-11ADL Client Smp ID: MW-21R(2)_6/17/14DL
Inj Date : 23-JUN-2014 17:53
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-11ADL,,77721,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 75
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	1000.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	256096	121.854	120000
18	Methylene Chloride	84	3.233	3.232	(0.617)	27574	17.9741	18000
23	1,1-Dichloroethane	63	3.789	3.785	(0.724)	12410	3.00412	3000
$ 36	Dibromofluoromethane	113	4.644	4.641	(0.887)	69097	53.4996	53
37	1,1,1-Trichloroethane	97	4.686	4.686	(0.895)	278071	66.5697	66000
$ 42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	9786	50.9377	51
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	147492	50.0000	
47	Trichloroethene	130	5.570	5.564	(1.064)	42278	26.4607	26000
$ 58	Toluene-d8	98	6.715	6.718	(0.817)	210139	48.4628	48
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	218885	50.0000	
70	Chlorobenzene	112	8.258	8.255	(1.004)	6226	1.55914	1600(H)
$ 79	Bromofluorobenzene	95	9.525	9.525	(1.158)	143031	48.3923	48
* 92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	118343	50.0000	

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d
Report Date: 27-Jun-2014 13:32

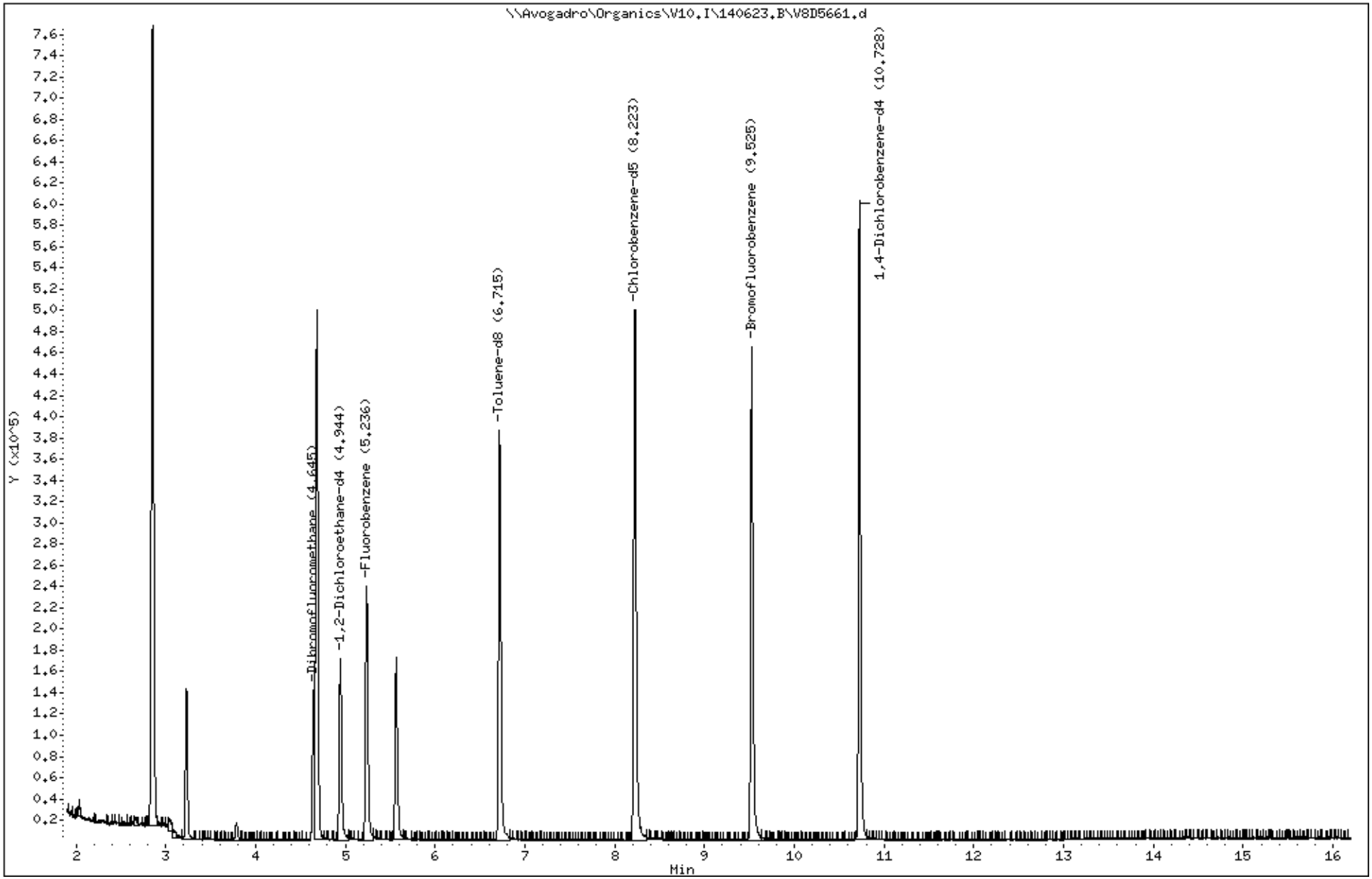
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5661.d
Lab Smp Id: N1055-11ADL Client Smp ID: MW-21R(2)_6/17/14DL
Inj Date : 23-JUN-2014 17:53
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-11ADL,,77721,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 75
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d
Date : 23-JUN-2014 17:53
Client ID: MW-21R(2)_6/17/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-11ADL,,77721,1000
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d

Date : 23-JUN-2014 17:53

Client ID: MW-21R(2)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-11ADL,,77721,1000

Purge Volume: 5.0

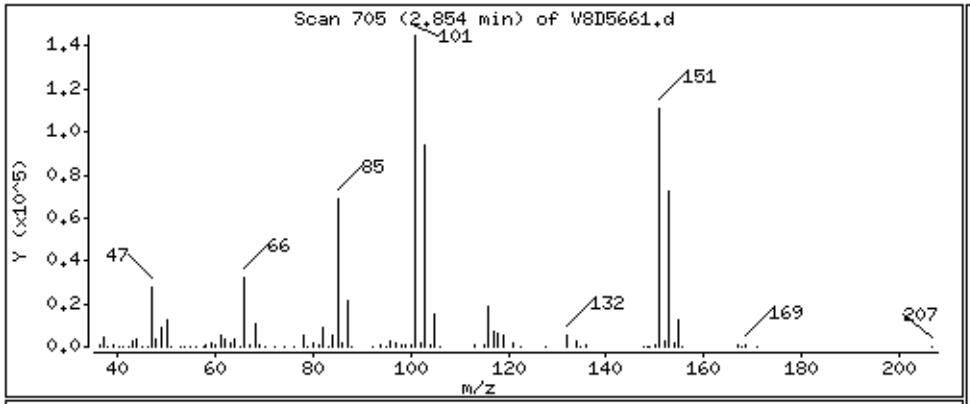
Operator: WL SRC: LIMS

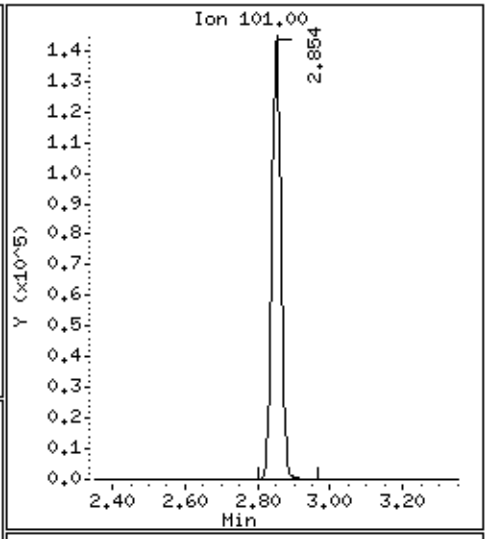
Column phase: DB-624

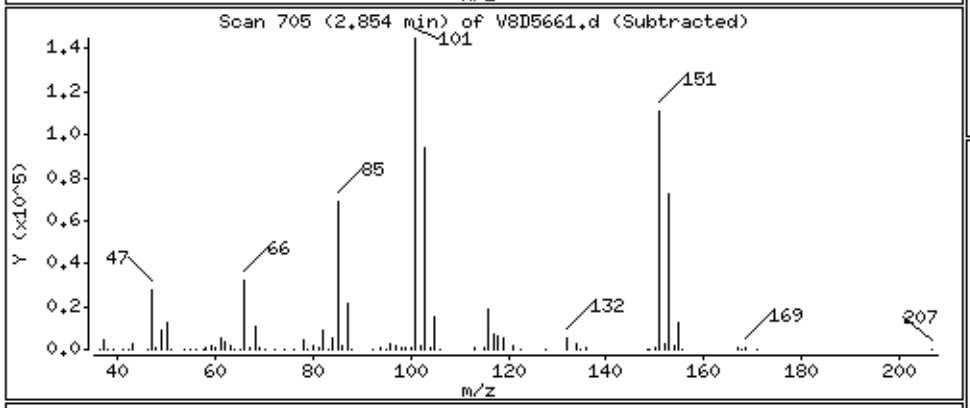
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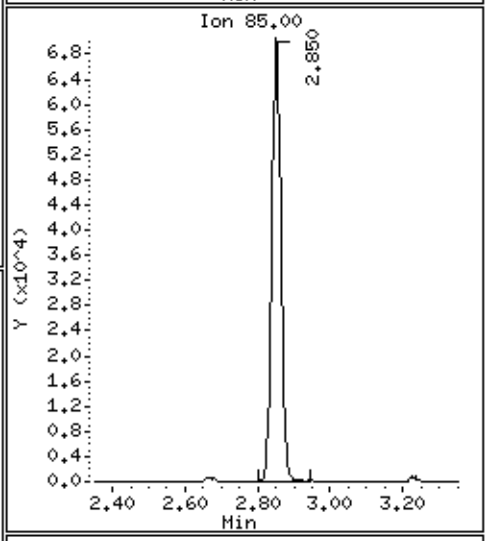
11 1,1,2-Trichloro-1,2,2-Trifluo

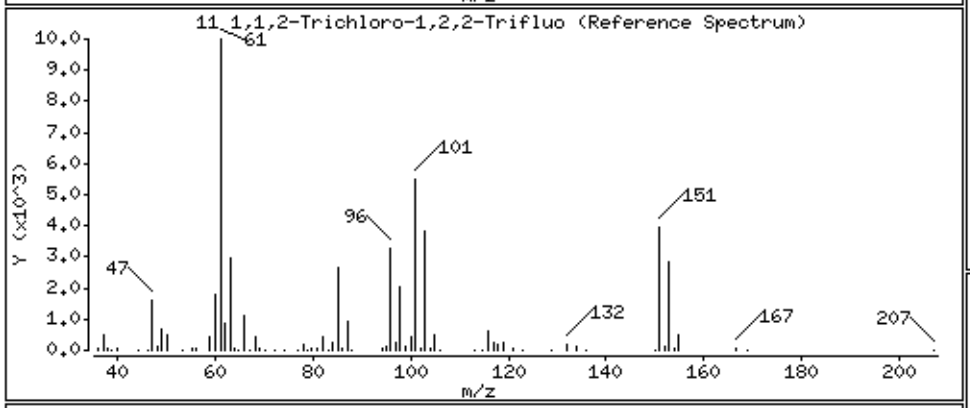
Concentration: 120000 ug/L

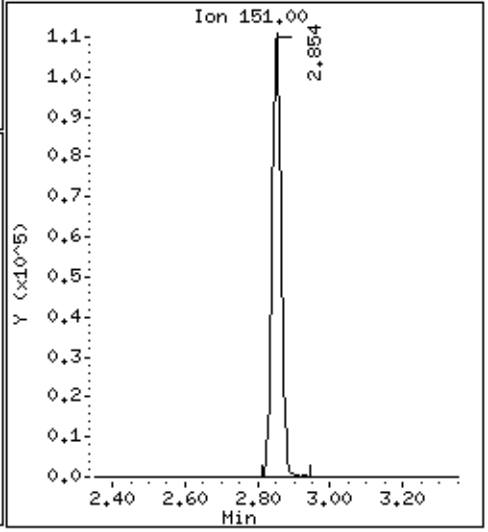


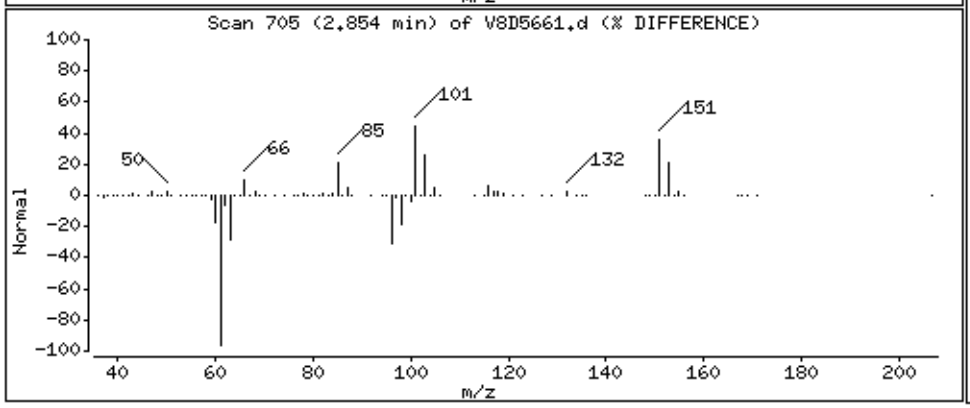












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d

Date : 23-JUN-2014 17:53

Client ID: MW-21R(2)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-11ADL,,77721,1000

Purge Volume: 5.0

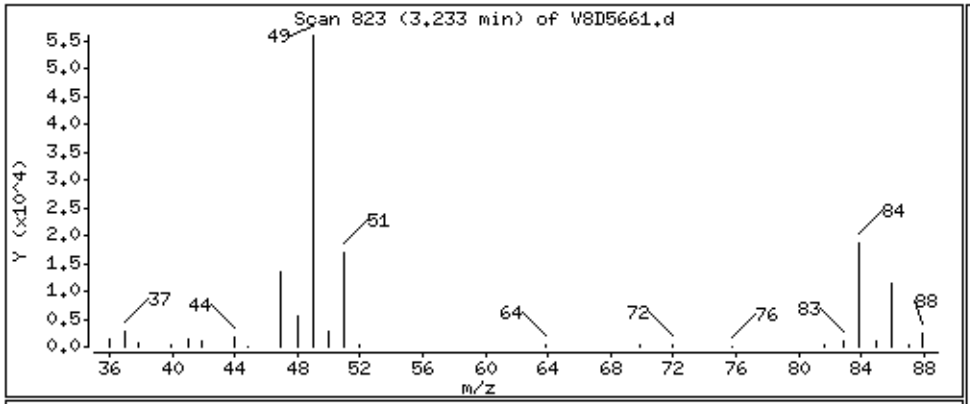
Operator: WL SRC: LIMS

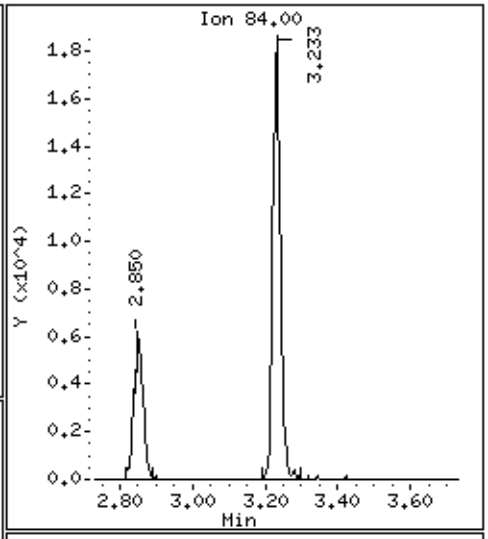
Column phase: DB-624

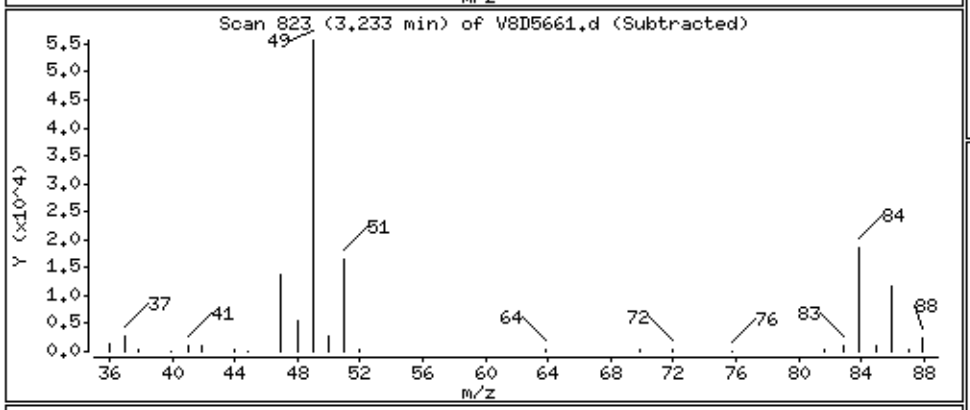
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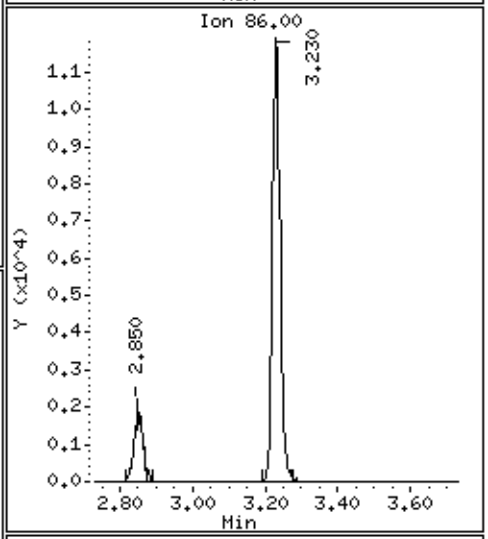
18 Methylene Chloride

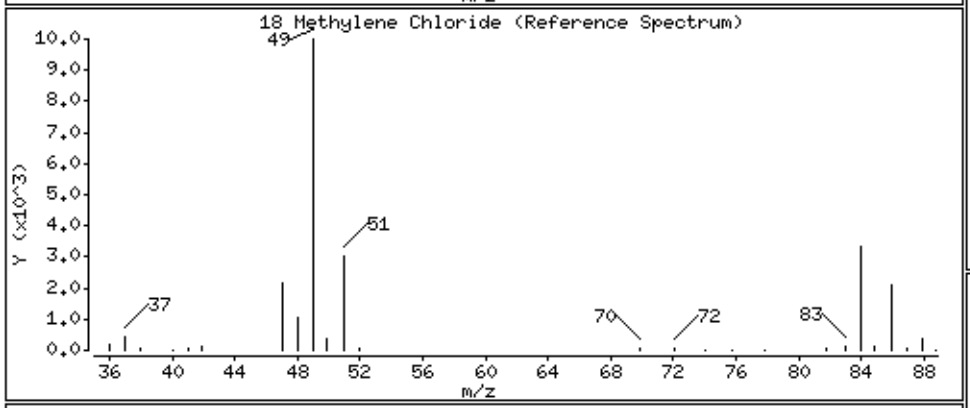
Concentration: 18000 ug/L

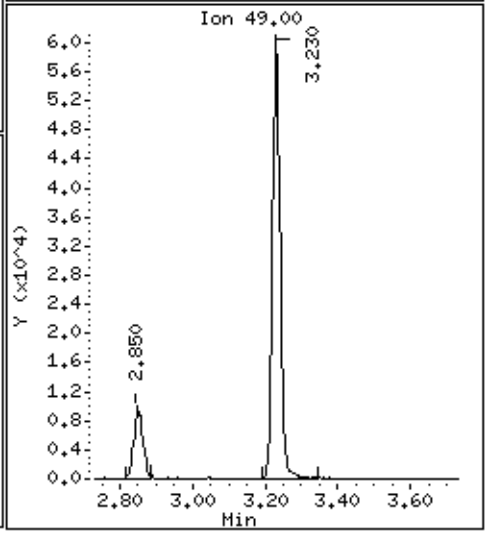


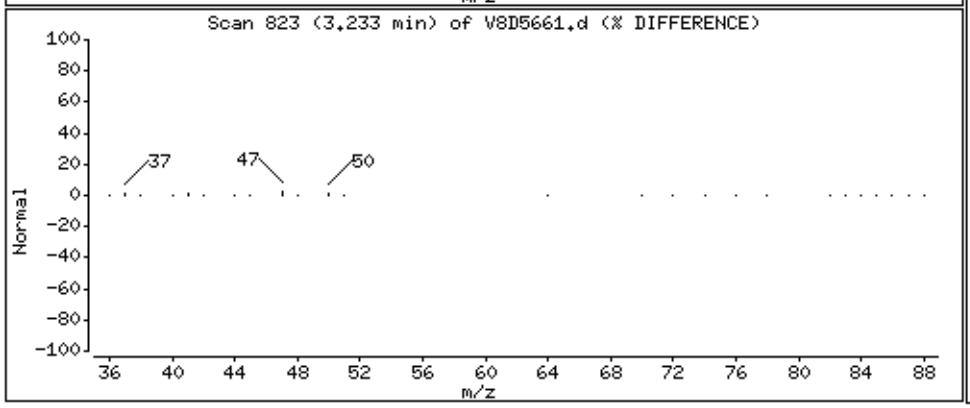












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d

Date : 23-JUN-2014 17:53

Client ID: MW-21R(2)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-11ADL,,77721,1000

Purge Volume: 5.0

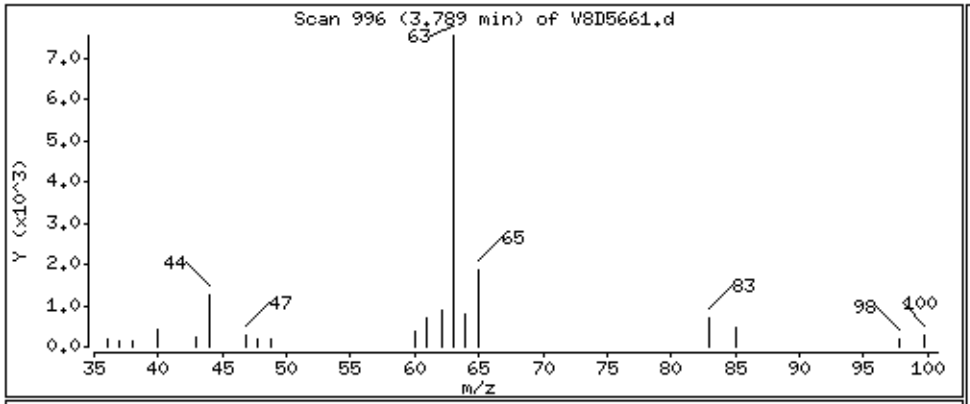
Operator: WL SRC: LIMS

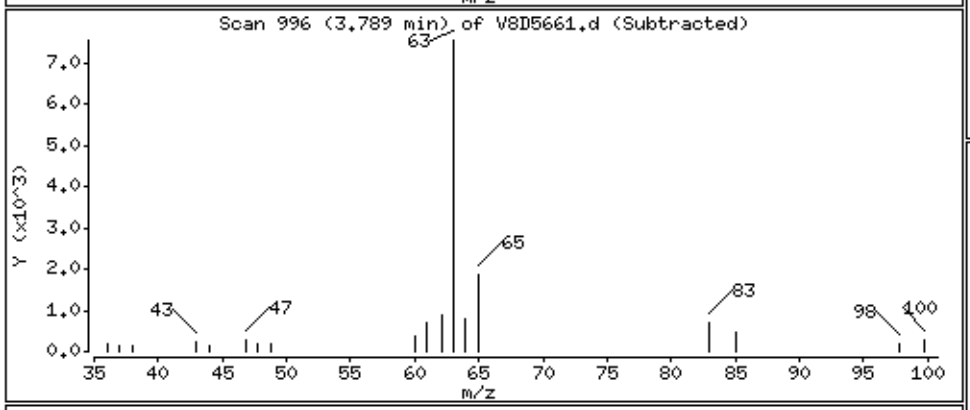
Column phase: DB-624

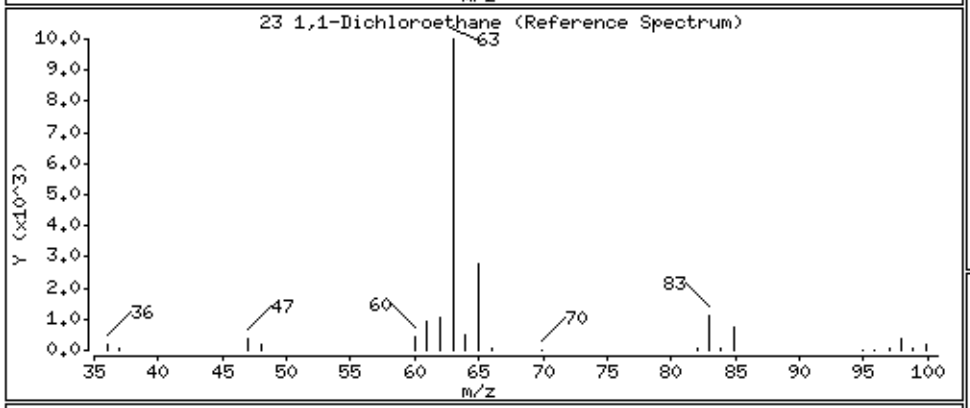
Column diameter: 0.25

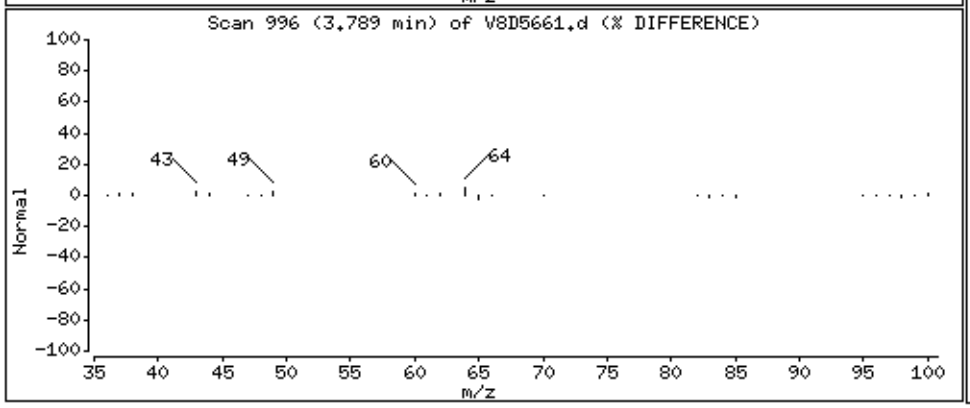
23 1,1-Dichloroethane

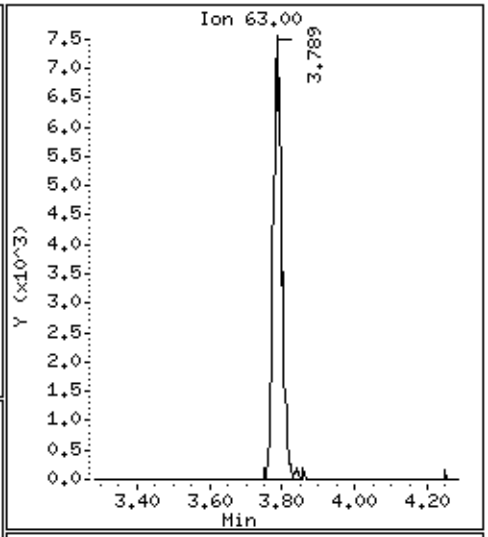
Concentration: 3000 ug/L

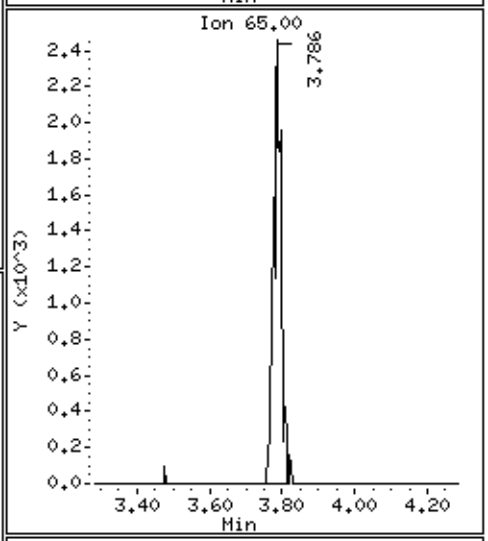


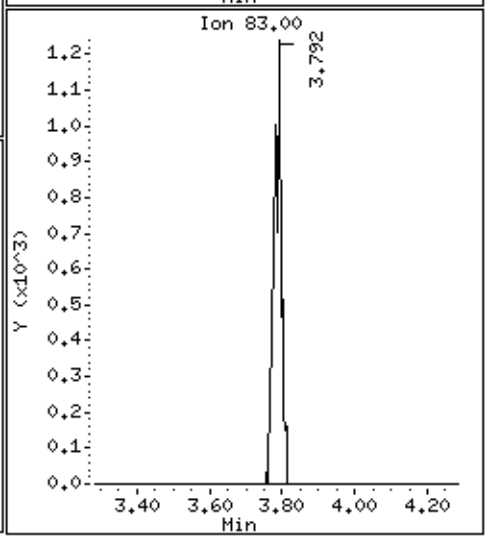












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d

Date : 23-JUN-2014 17:53

Client ID: MW-21R(2)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-11ADL,,77721,1000

Purge Volume: 5.0

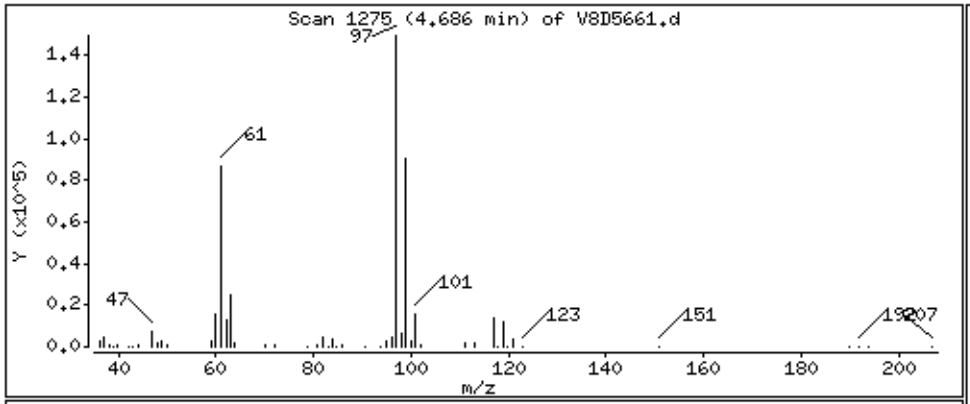
Operator: WL SRC: LIMS

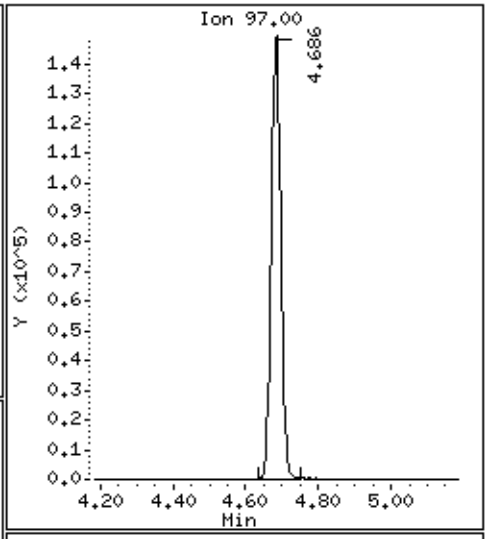
Column phase: DB-624

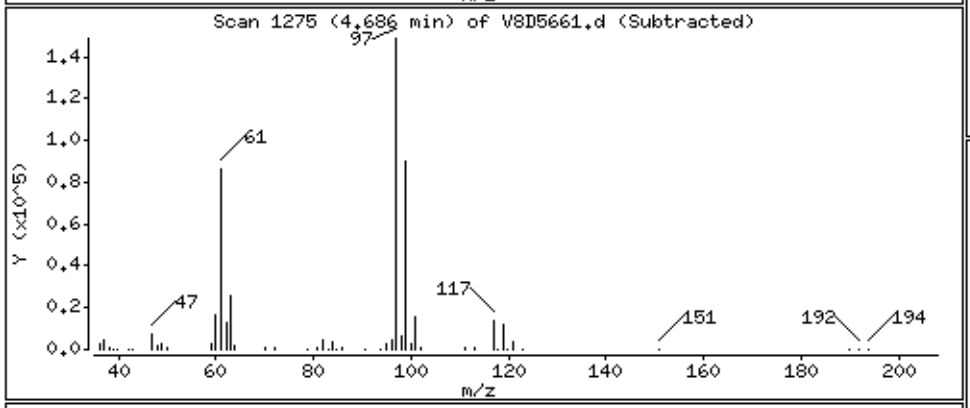
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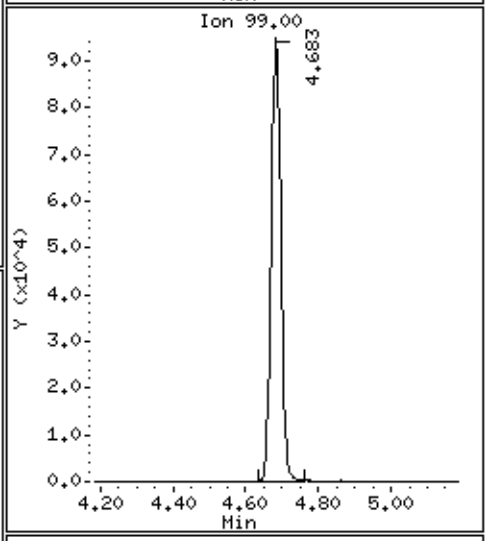
37 1,1,1-Trichloroethane

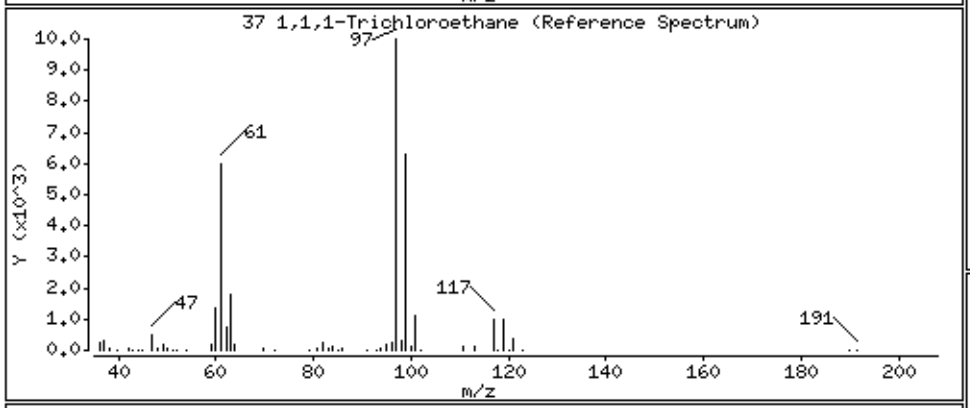
Concentration: 66000 ug/L

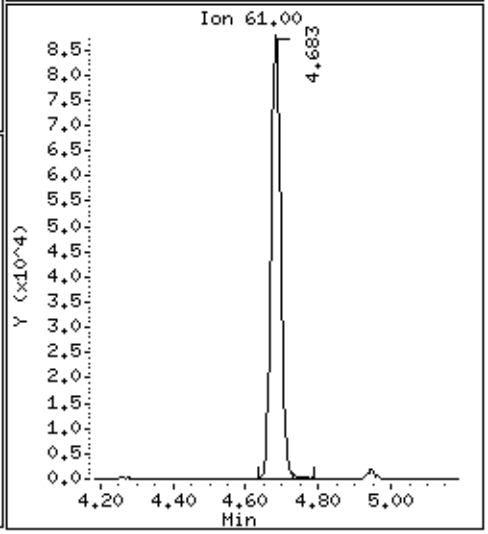


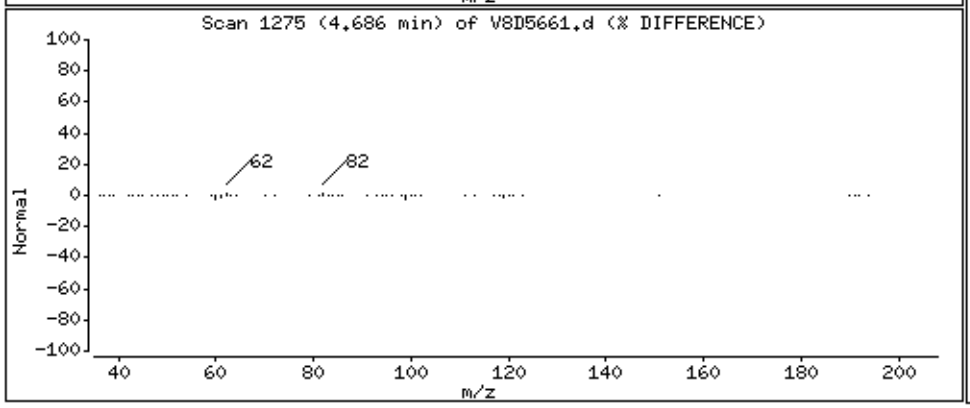












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d

Date : 23-JUN-2014 17:53

Client ID: MW-21R(2)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-11ADL,,77721,1000

Purge Volume: 5.0

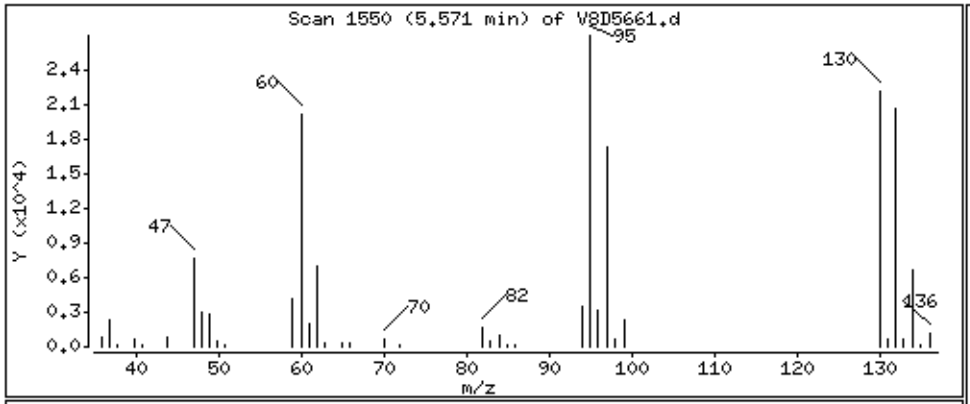
Operator: WL SRC: LIMS

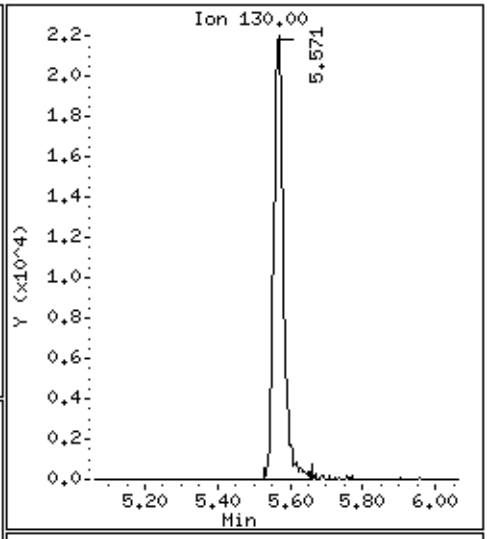
Column phase: DB-624

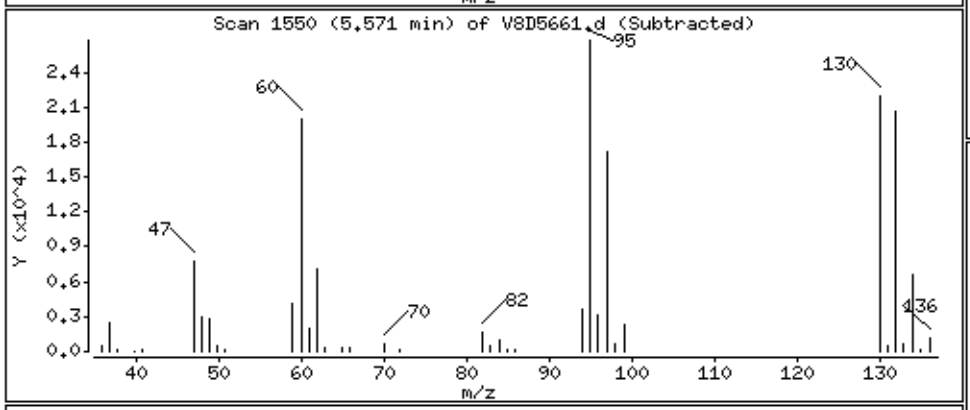
Column diameter: 0.25

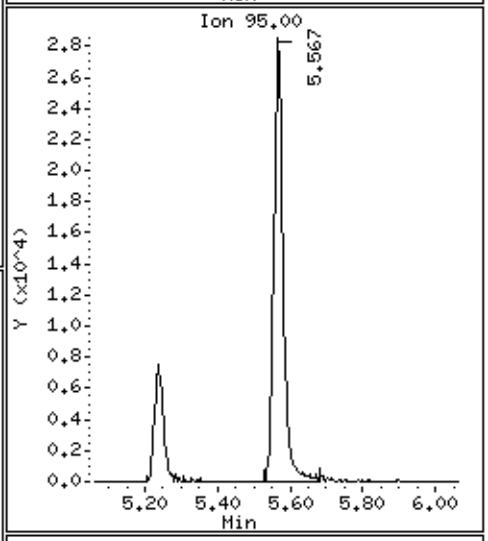
47 Trichloroethene

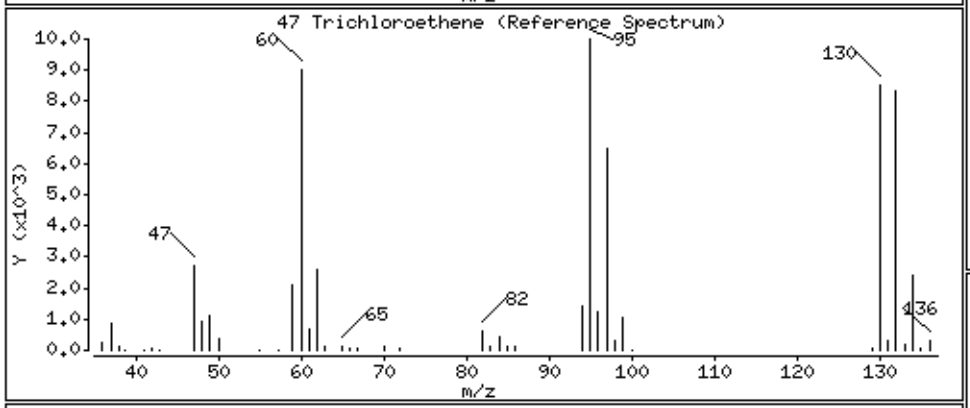
Concentration: 26000 ug/L

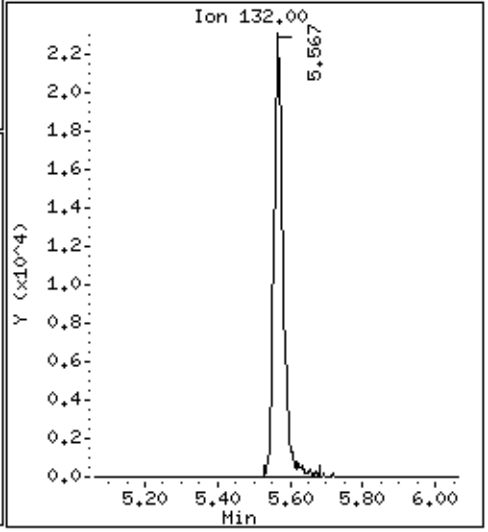


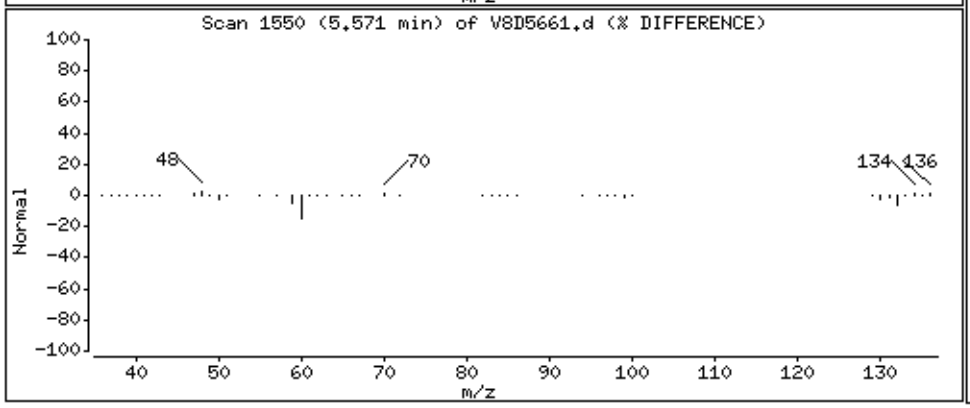












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5661.d

Date : 23-JUN-2014 17:53

Client ID: MW-21R(2)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-11ADL,,77721,1000

Purge Volume: 5.0

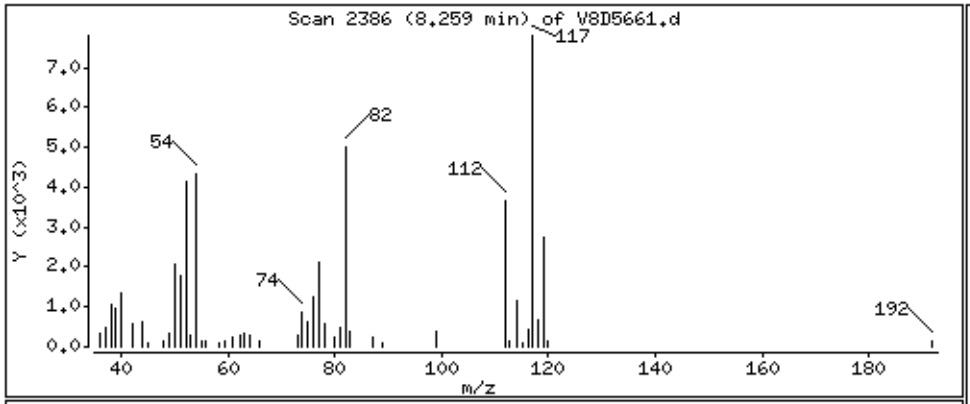
Operator: WL SRC: LIMS

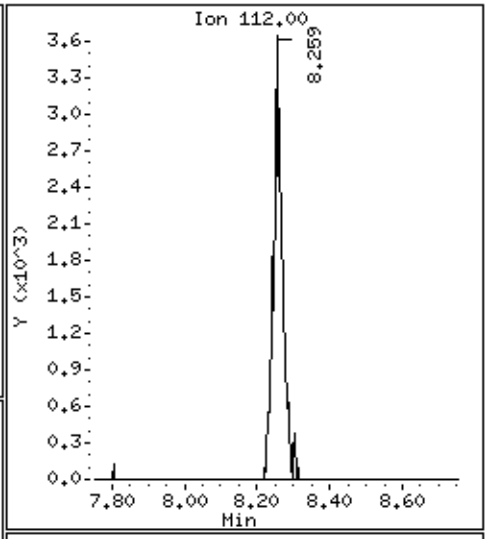
Column phase: DB-624

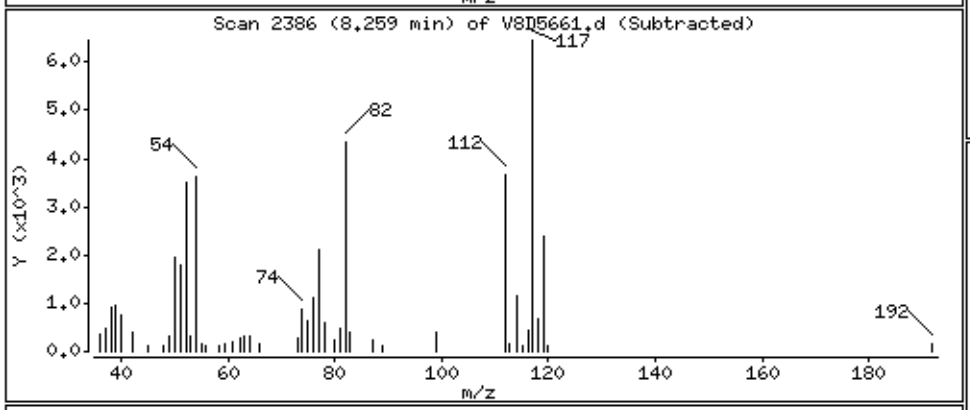
Column diameter: 0.25

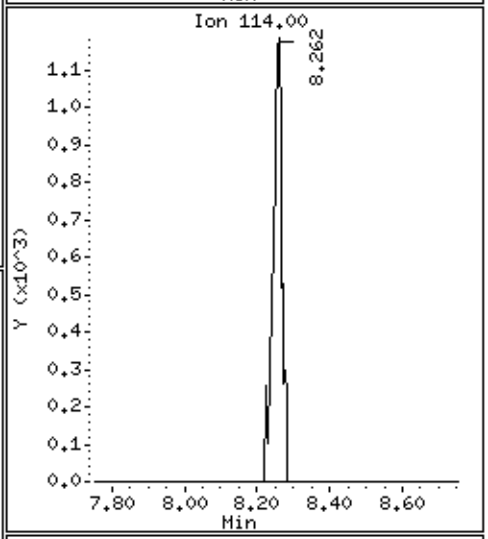
70 Chlorobenzene

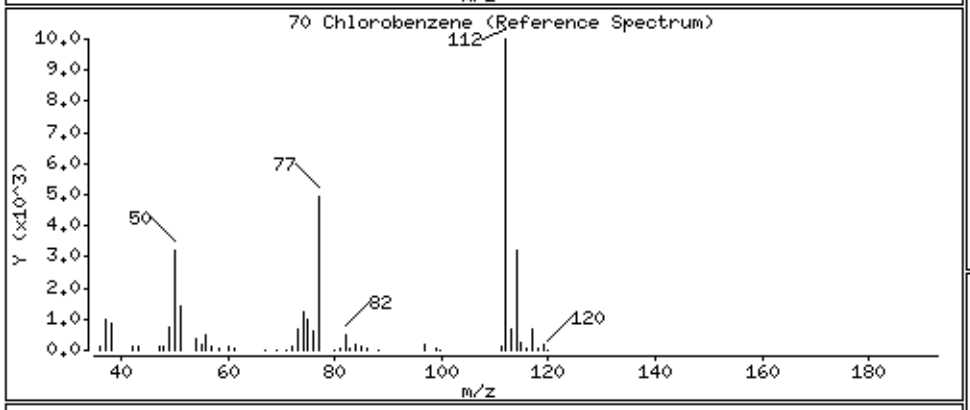
Concentration: 1600 ug/L

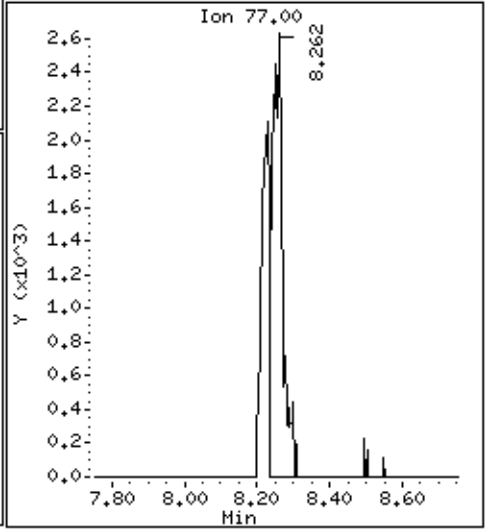


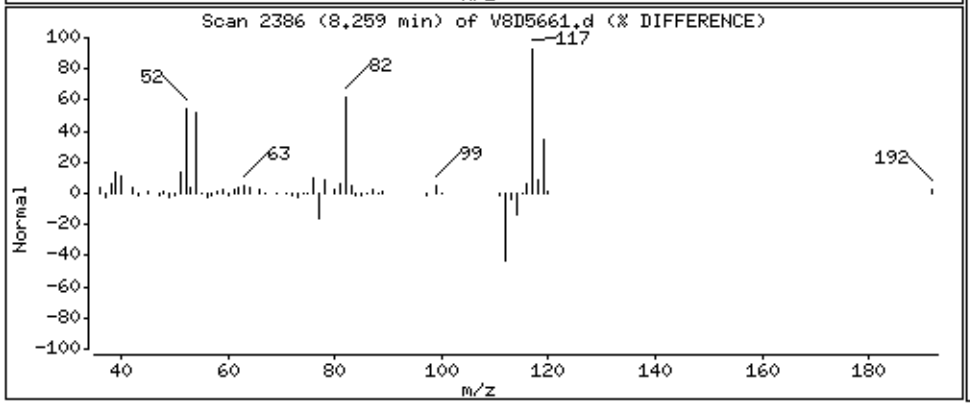












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(3)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5527.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	18	
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	10000	E
156-60-5	trans-1,2-Dichloroethene	36	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	3300	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	130	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	24	
67-66-3	Chloroform	6.4	
71-55-6	1,1,1-Trichloroethane	9100	E
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	14000	E
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	25	
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	11	
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(3)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5527.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	20	
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	1700	E
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	27	
179601-23-1	m,p-Xylene	140	
95-47-6	o-Xylene	68	
1330-20-7	Xylene (Total)	210	
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	3.5	
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	1.2	
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	1.2	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	37000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R(3)_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5527.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	1100	NJ
02	42525-60-0	Butane, 1,2,2,4-tetrachloro-	10.998	110	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d
Report Date: 27-Jun-2014 13:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5527.d
Lab Smp Id: N1055-12A Client Smp ID: MW-21R(3)_6/17/14
Inj Date : 19-JUN-2014 15:20
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-12A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.853	1.856	(0.354)	65363	18.3048	18
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.827	2.853	(0.540)	90185887	36686.3	37000(AQM)M6 AM 06/27
	18 Methylene Chloride	84	3.210	3.233	(0.613)	21847983	10126.4	10000(AQM)M6 AM 06/27
	21 trans-1,2-Dichloroethene	96	3.454	3.454	(0.659)	75058	36.4307	36(Q)
	23 1,1-Dichloroethane	63	3.779	3.786	(0.721)	17952661	3260.68	3300(A)
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	273361	125.803	120
	34 Bromochloromethane	128	4.470	4.454	(0.853)	24758	24.2777	24(Q)
	35 Chloroform	83	4.512	4.509	(0.861)	31795	6.38174	6.4
$	36 Dibromofluoromethane	113	4.657	4.644	(0.889)	101562	55.1047	55
	37 1,1,1-Trichloroethane	97	4.666	4.683	(0.891)	45538891	9108.54	9100(AQM)M6 AM 06/27
$	42 1,2-Dichloroethane-d4	102	4.949	4.943	(0.945)	16131	51.7680	52
M	50 1,2-Dichloroethene (Total)	96				348419	162.234	160
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	247669	50.0000	
	47 Trichloroethene	130	5.554	5.567	(1.060)	28757835	14069.5	14000(A)
$	58 Toluene-d8	98	6.721	6.718	(0.817)	324265	45.7440	46
	59 Toluene	91	6.785	6.782	(1.295)	206219	25.3683	25
	62 1,1,2-Trichloroethane	97	7.181	7.175	(1.371)	19271	10.6274	11
	63 Tetrachloroethene	164	7.348	7.345	(0.893)	48020	20.1295	20
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	309767	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	10620245	1703.69	1700(A)
	72 Ethylbenzene	106	8.371	8.367	(1.018)	85296	27.1126	27
	73 m,p-Xylene	106	8.499	8.499	(1.033)	551606	142.640	140

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d
Report Date: 27-Jun-2014 13:50

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	74	o-Xylene	106	8.946	8.946	(1.088)	245937	67.5991	68
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	209916	55.1628	55
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	10926	3.47640	3.5
M	94	Xylene (Total)	106				797543	210.239	210
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	10682	1.22526	1.2
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	167511	50.0000	(Q)
	96	1,2-Dichlorobenzene	146	11.120	11.113	(1.037)	5299	1.16792	1.2

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.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d
Report Date: 27-Jun-2014 13:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5527.d
Lab Smp Id: N1055-12A Client Smp ID: MW-21R(3)_6/17/14
Inj Date : 19-JUN-2014 15:20
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-12A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

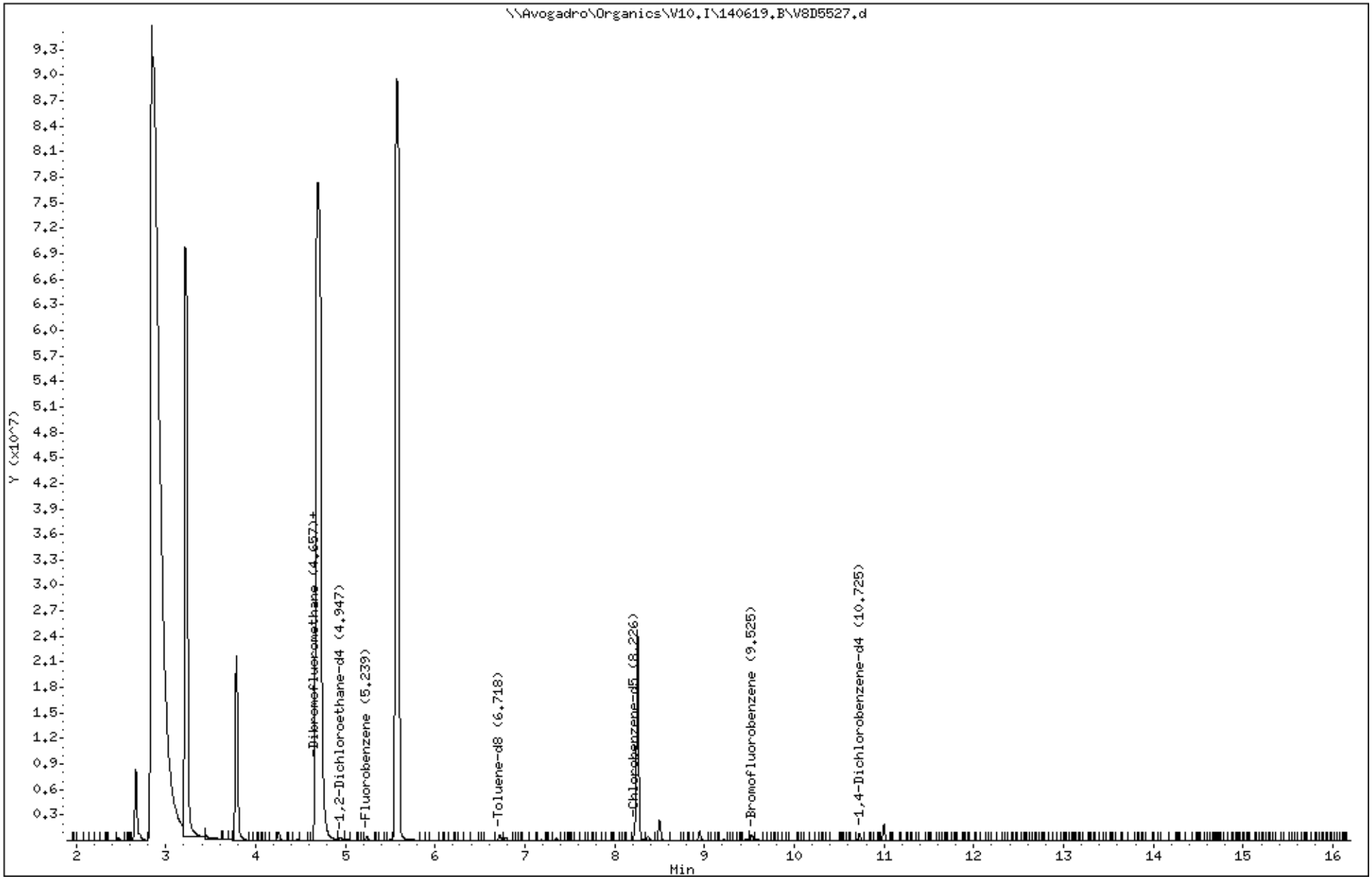
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.239	741607	50.000
* 92 1,4-Dichlorobenzene-d4	10.725	1339015	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-					CAS #: 354-23-4		
2.667	15874112	1070.24960	1100	95	NIST2002.L	24345	46
Butane, 1,2,2,4-tetrachloro-					CAS #: 42525-60-0		
10.998	2875135	107.360060	110	37	NIST2002.L	52153	92

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d
Date : 19-JUN-2014 15:20
Client ID: MW-21R(3)_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1055-12A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

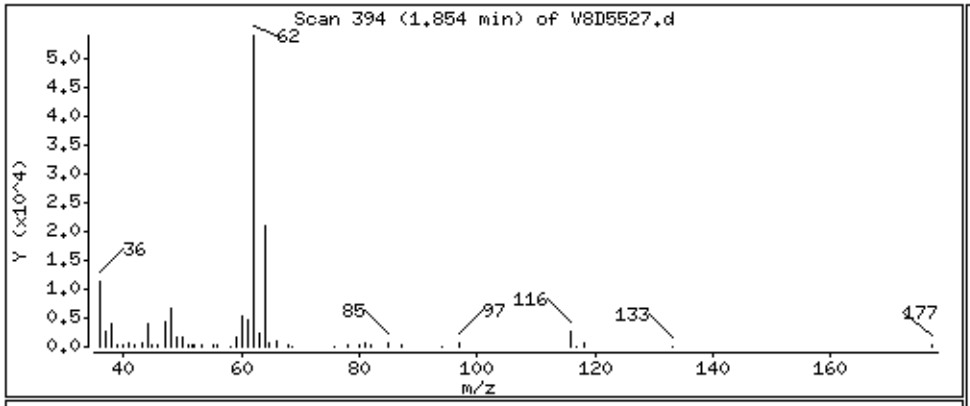
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

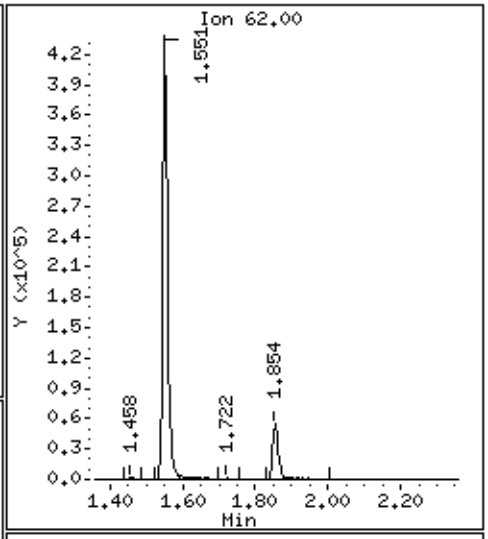
Sample Info: 5ML,N1055-12A,,77659

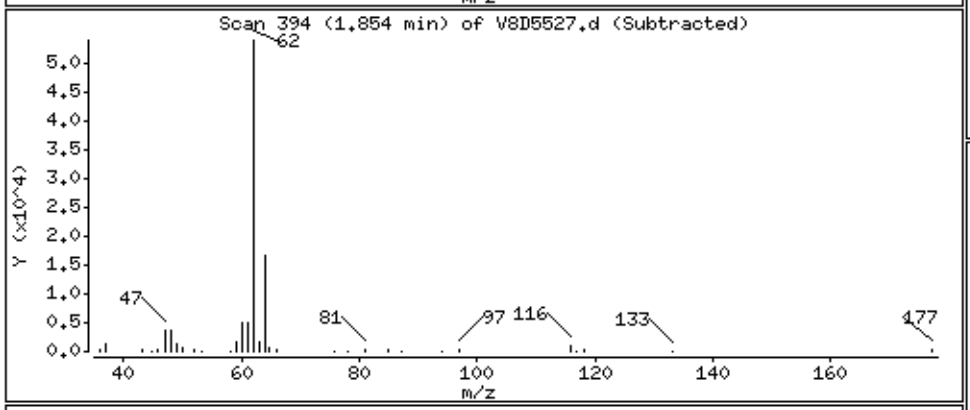
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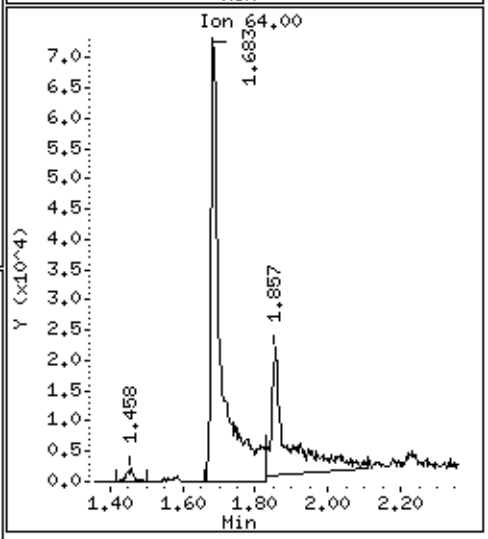
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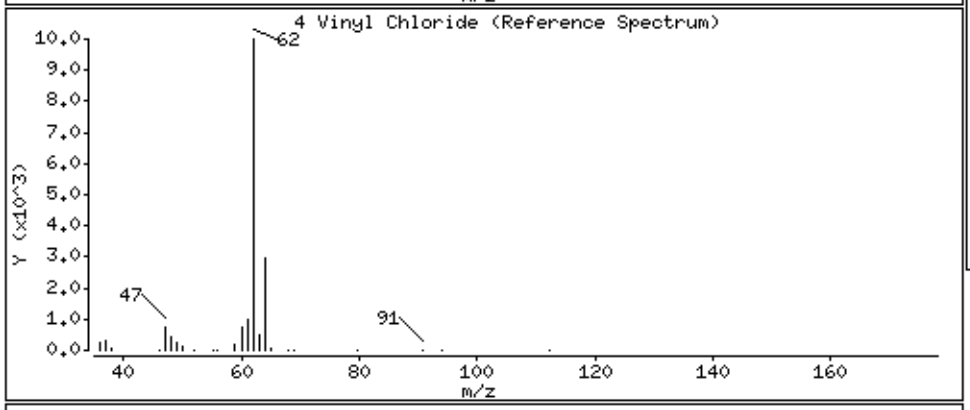
4 Vinyl Chloride Concentration: 18 ug/L

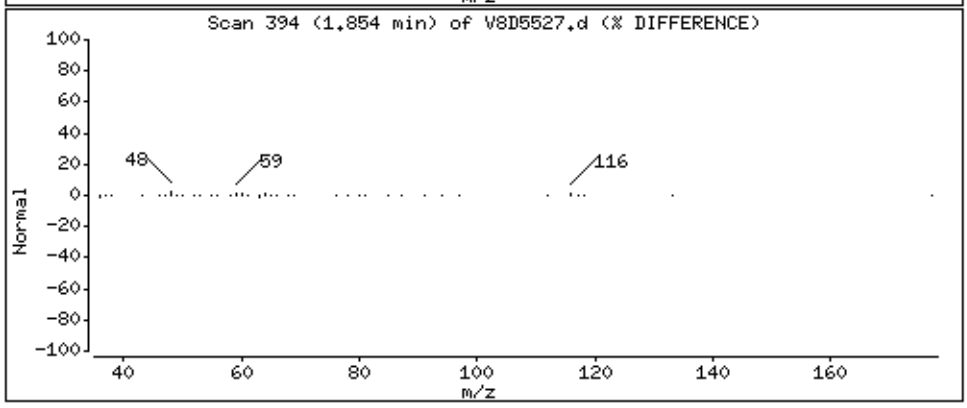












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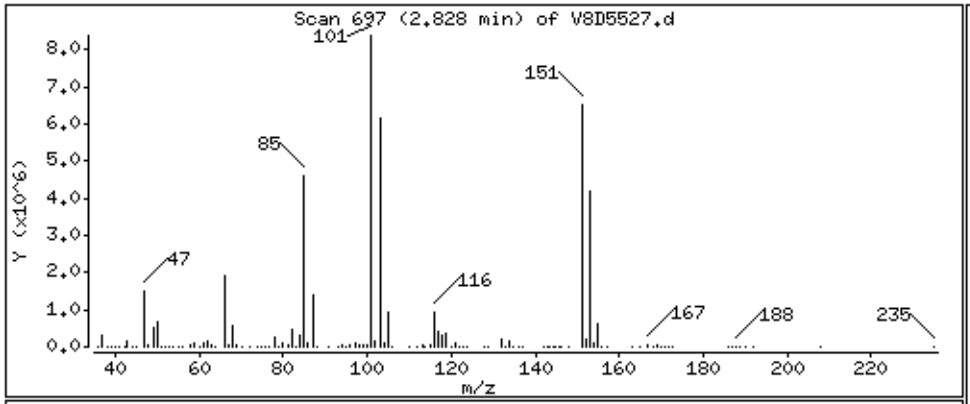
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

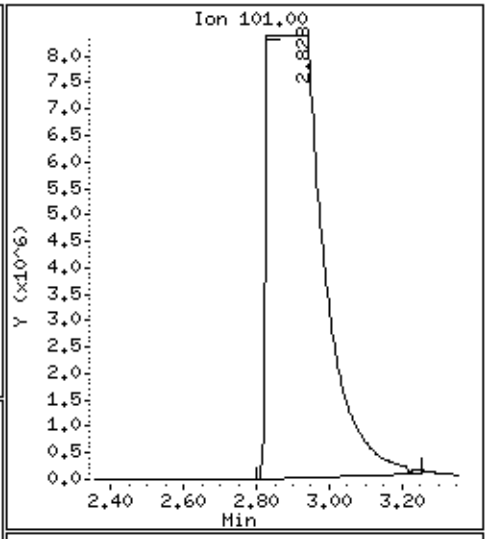
Sample Info: 5ML,N1055-12A,,77659

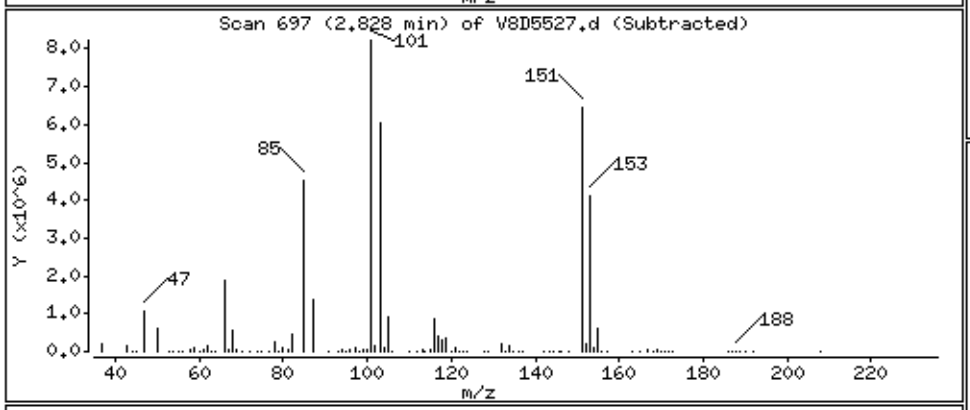
Purge Volume: 5.0 Operator: WL SRC: LIMS

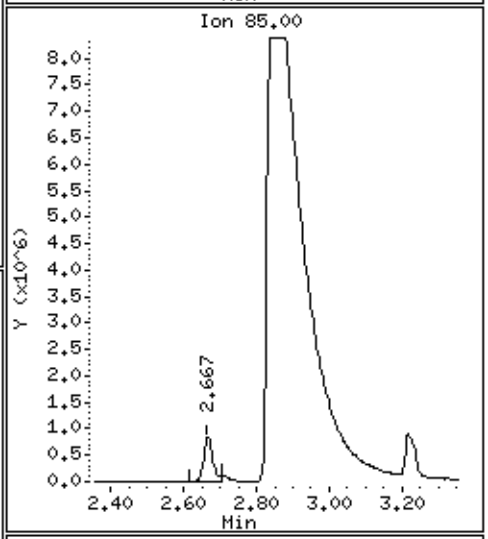
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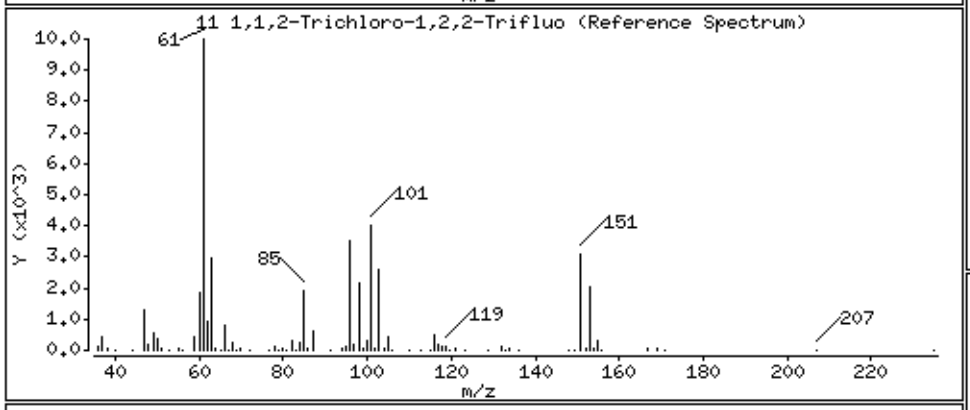
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 37000 ug/L

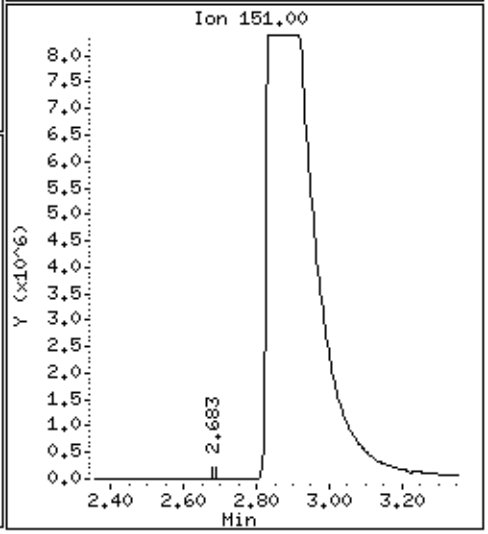


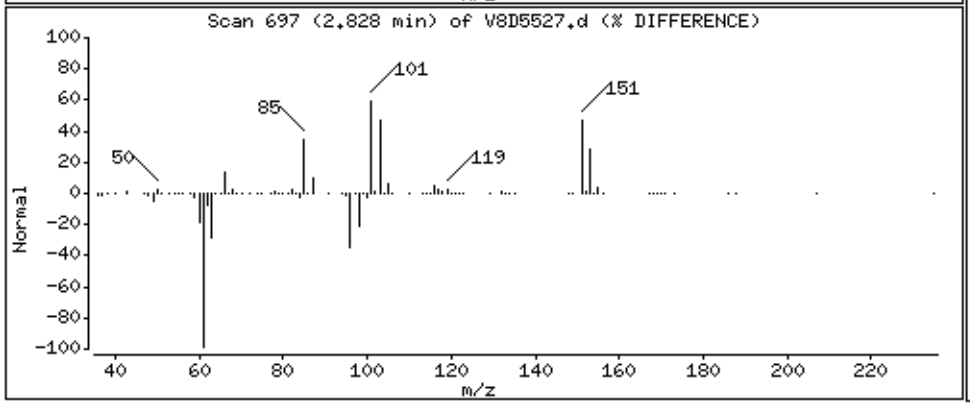












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

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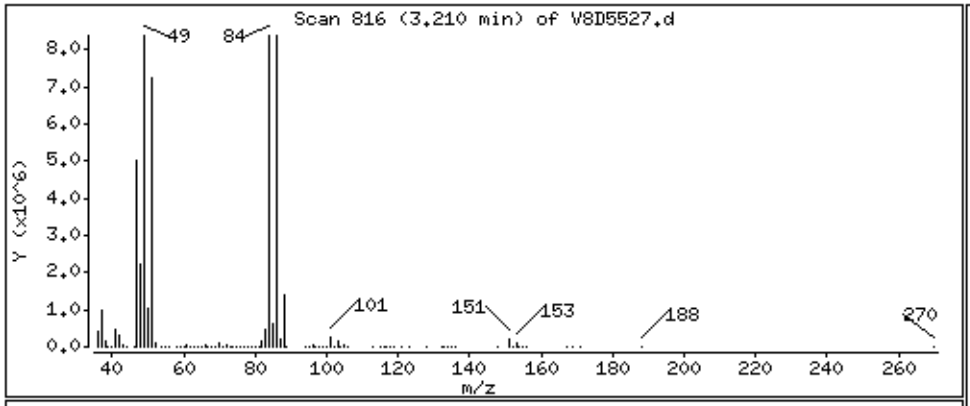
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

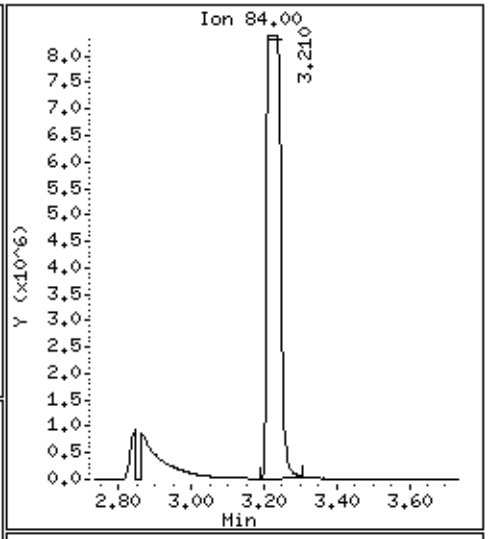
Sample Info: 5ML,N1055-12A,,77659

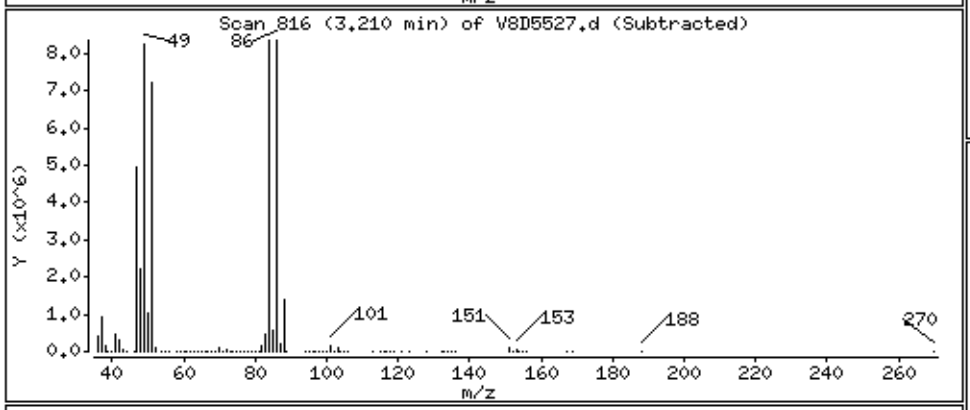
Purge Volume: 5.0 Operator: WL SRC: LIMS

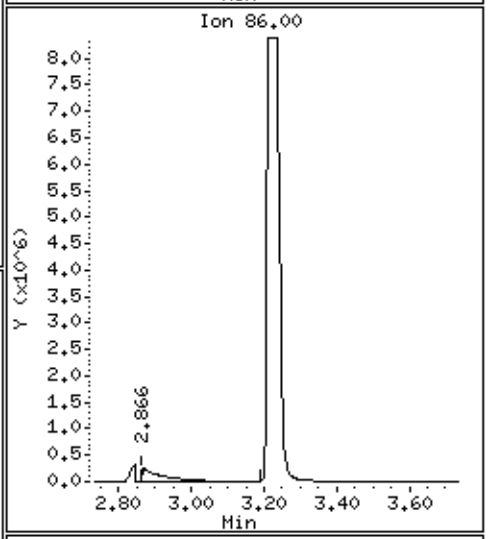
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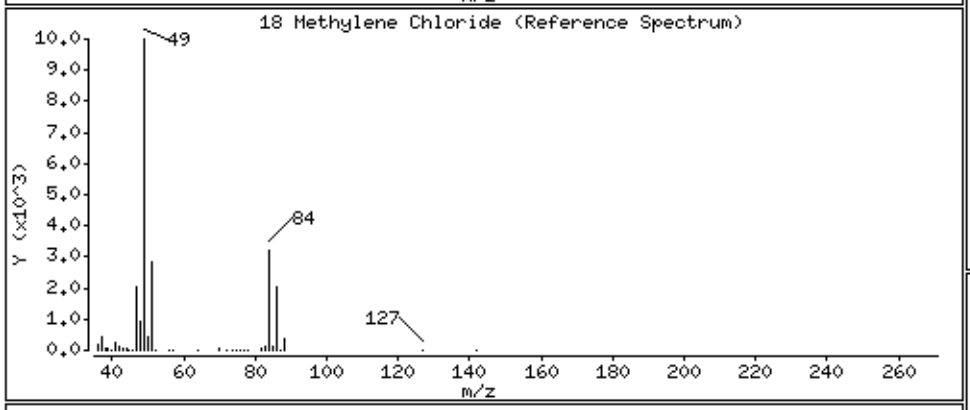
18 Methylene Chloride Concentration: 10000 ug/L

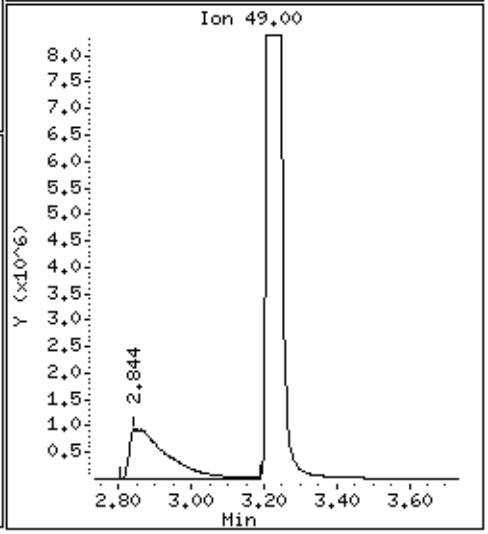


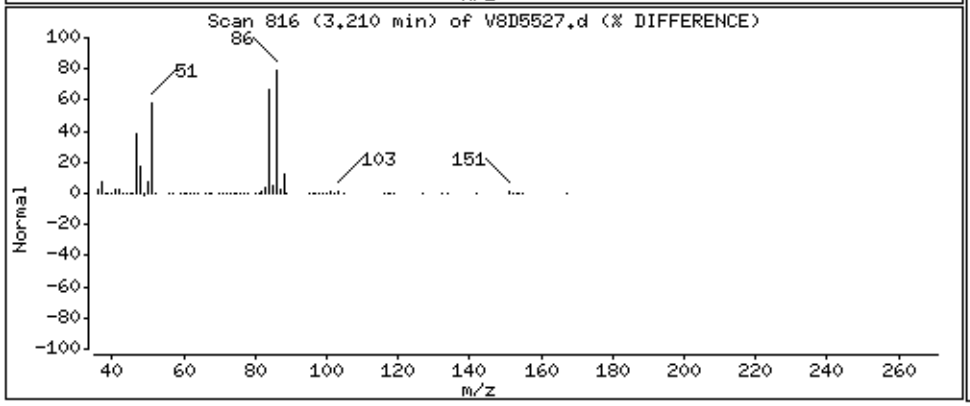












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

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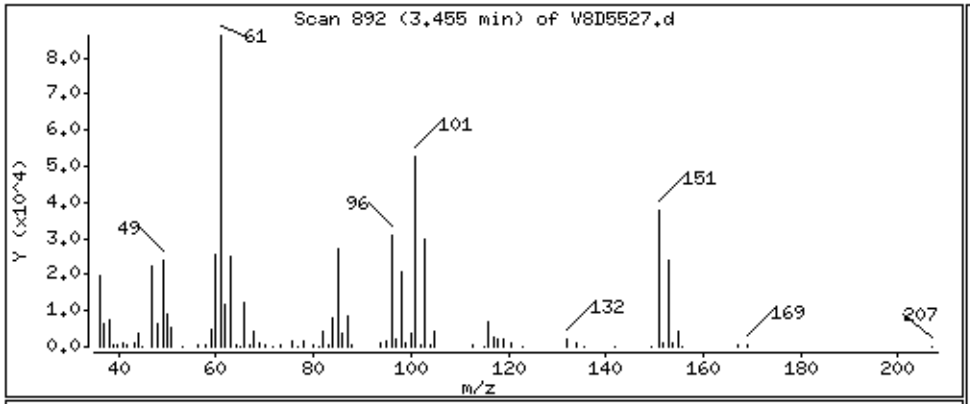
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

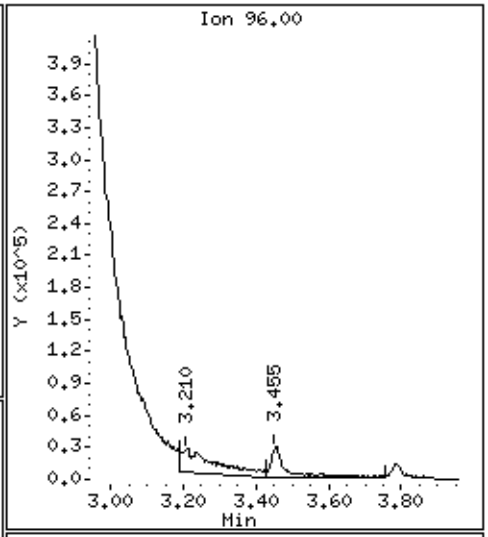
Sample Info: 5ML,N1055-12A,,77659

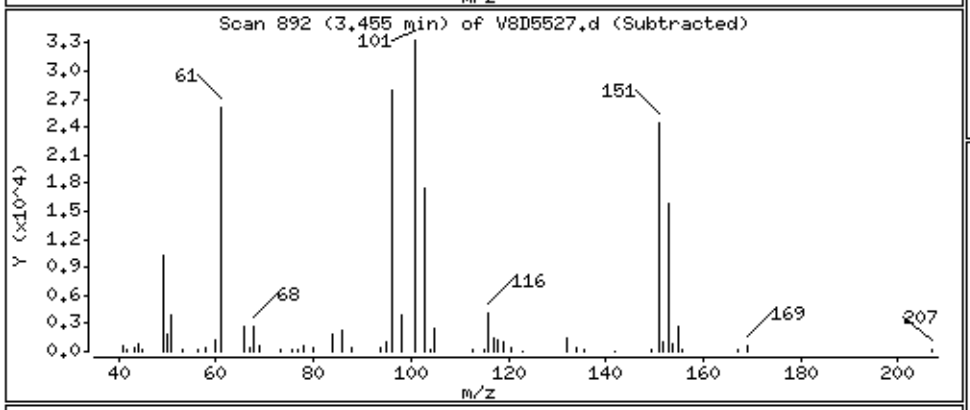
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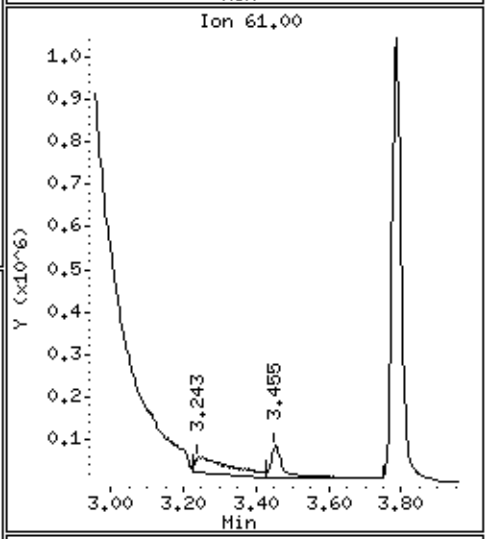
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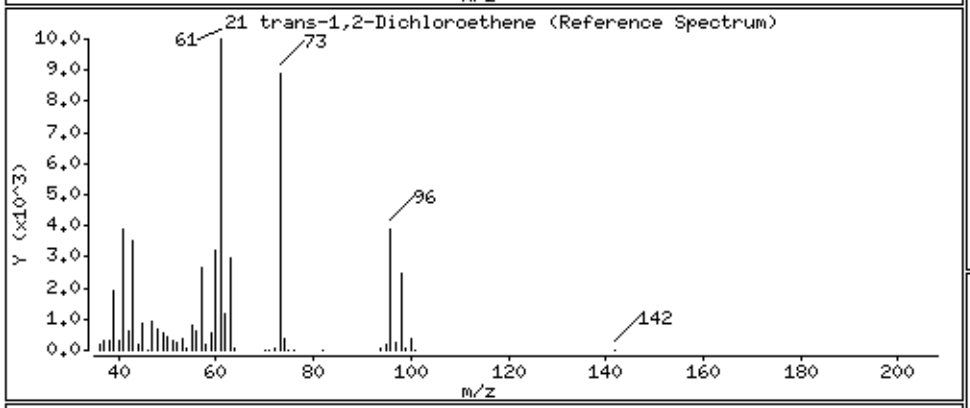
21 trans-1,2-Dichloroethene Concentration: 36 ug/L

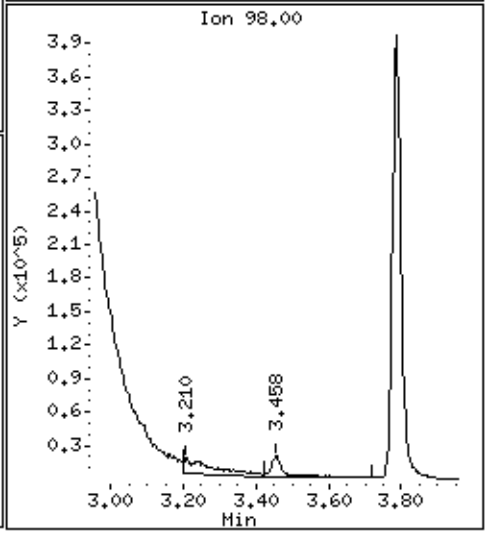


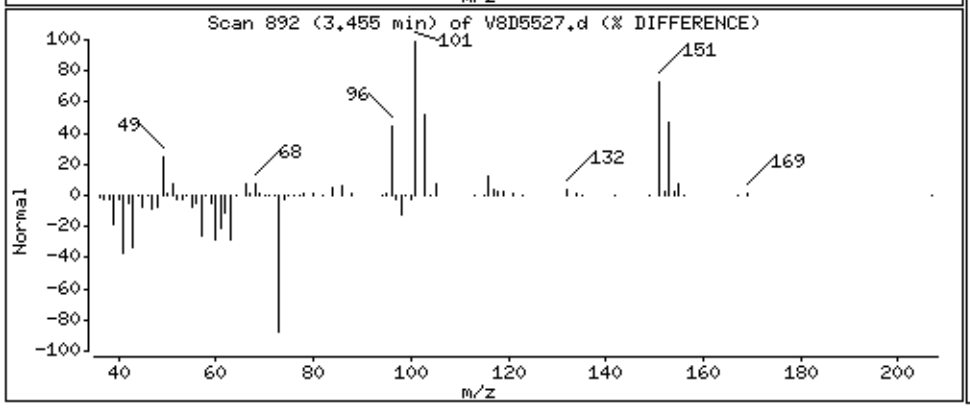












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

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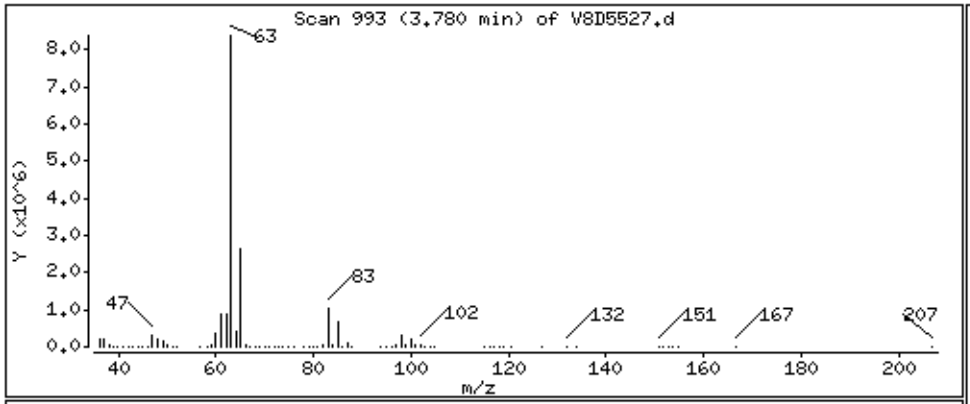
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

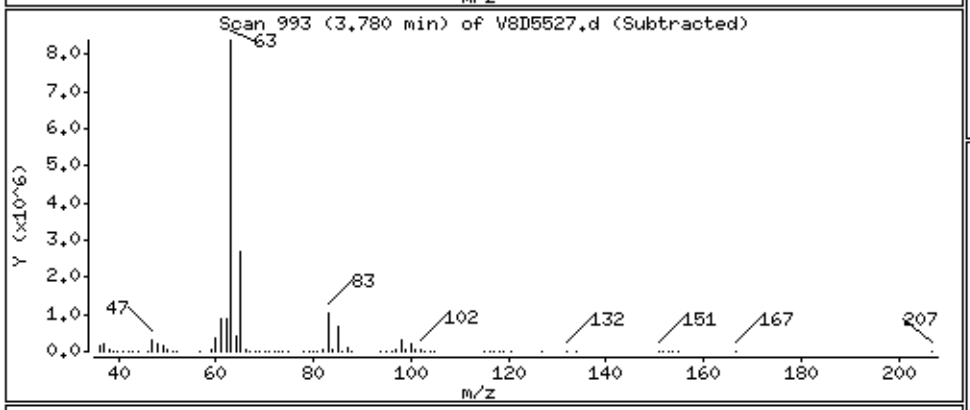
Sample Info: 5ML,N1055-12A,,77659

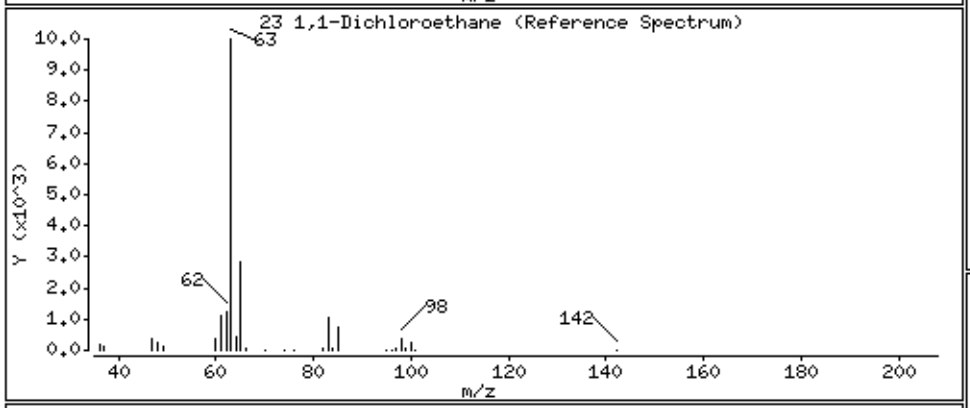
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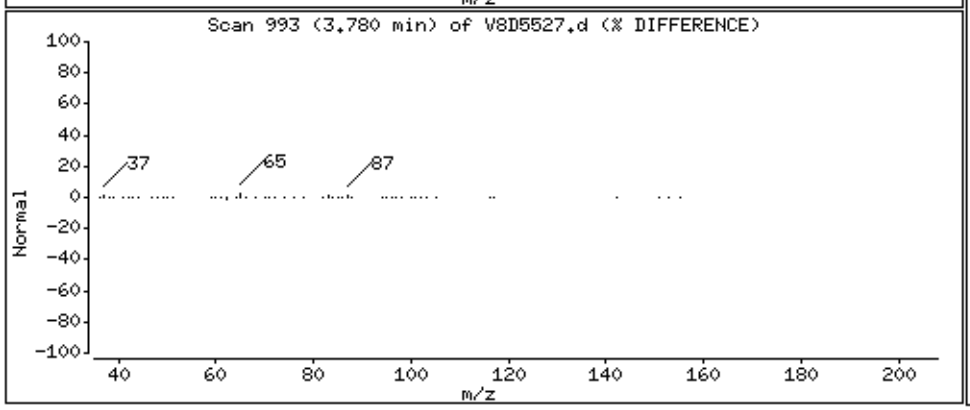
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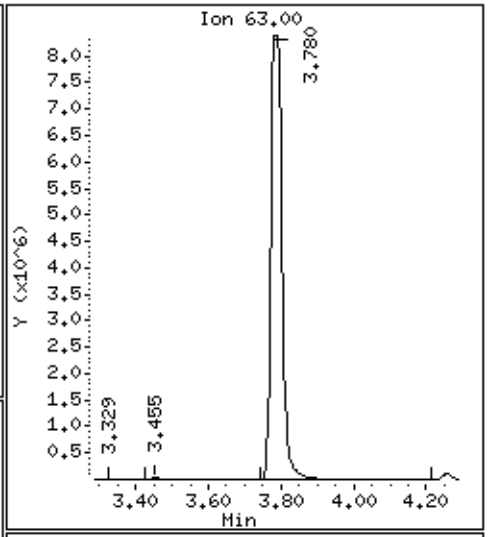
23 1,1-Dichloroethane Concentration: 3300 ug/L

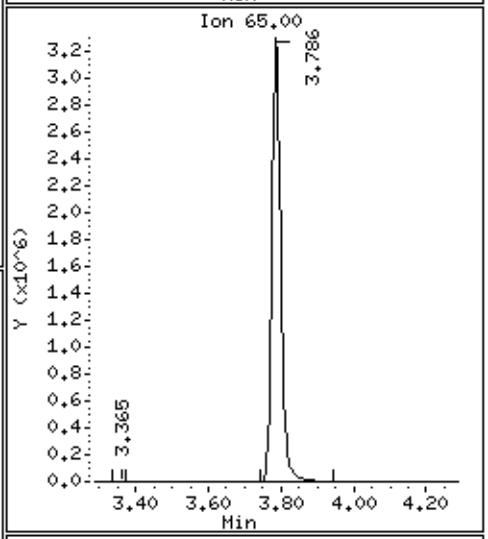


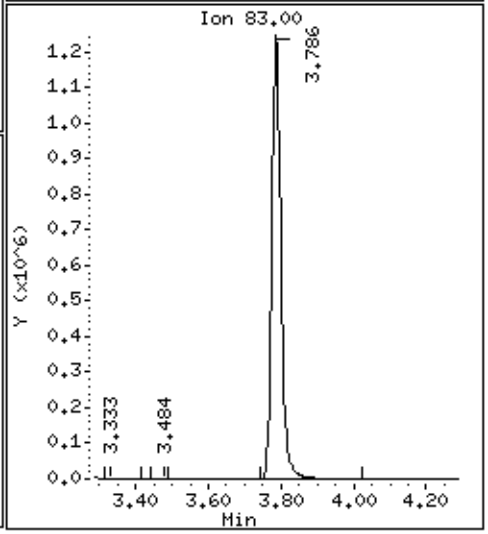












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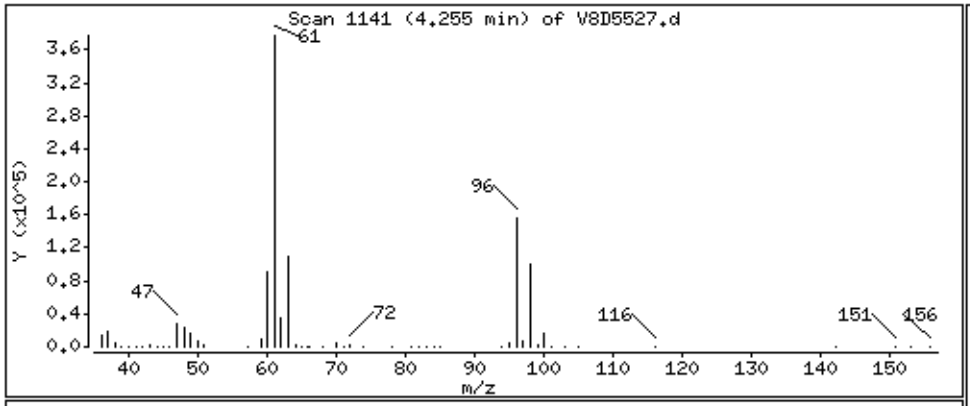
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

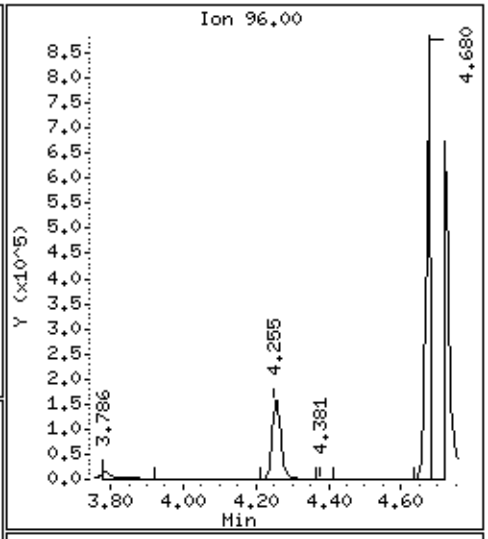
Sample Info: 5ML,N1055-12A,,77659

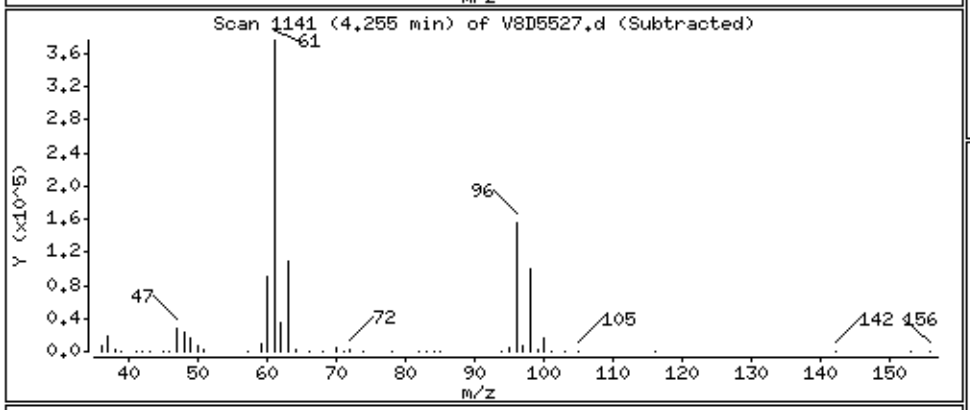
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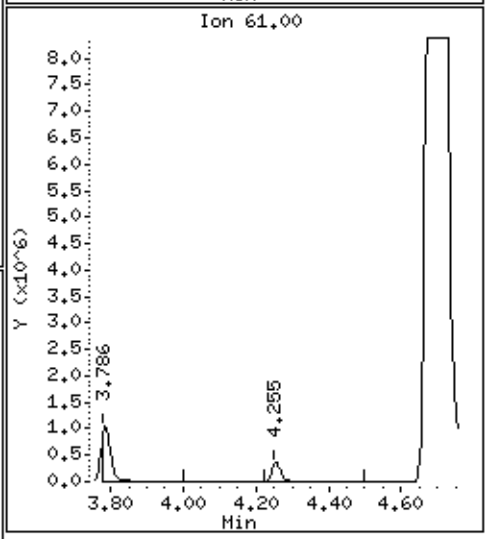
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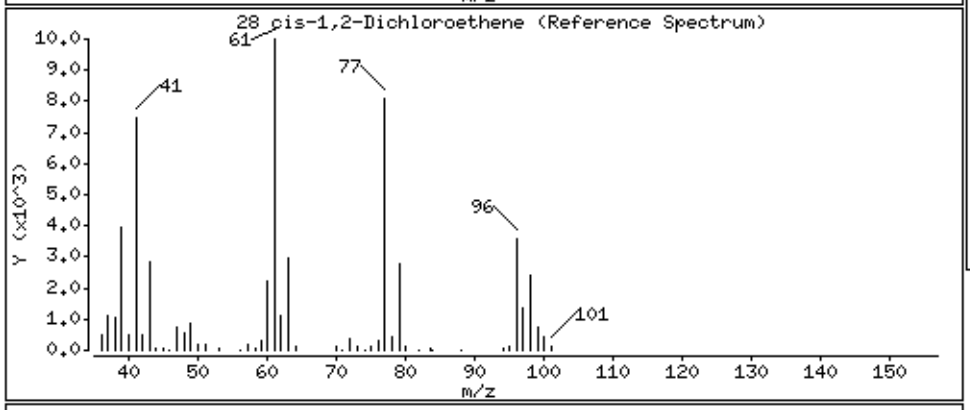
28 cis-1,2-Dichloroethene Concentration: 120 ug/L

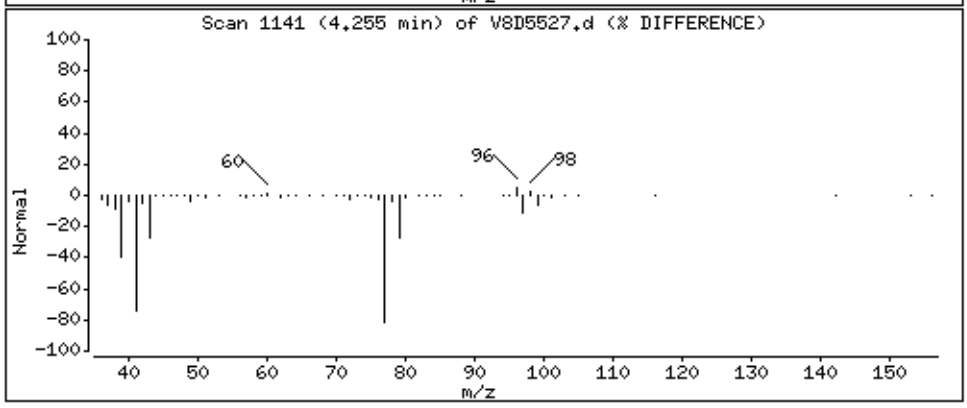












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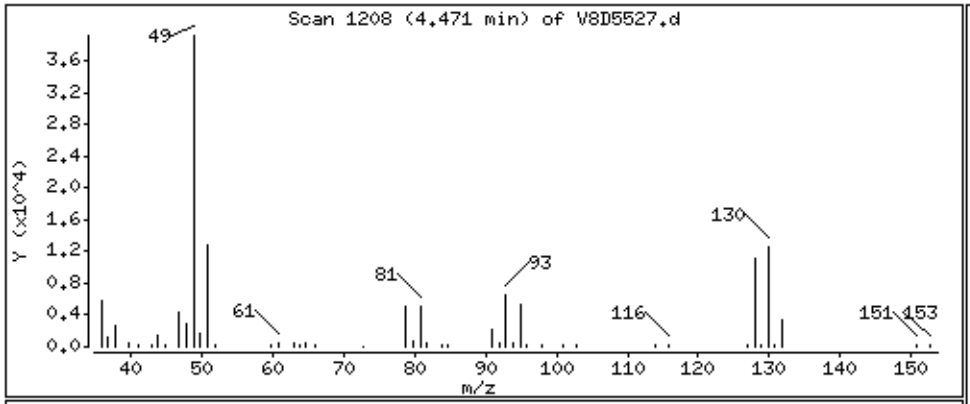
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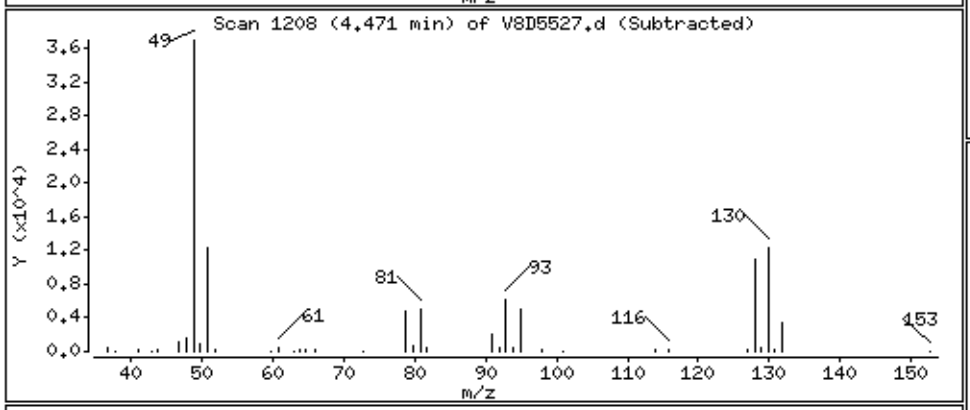
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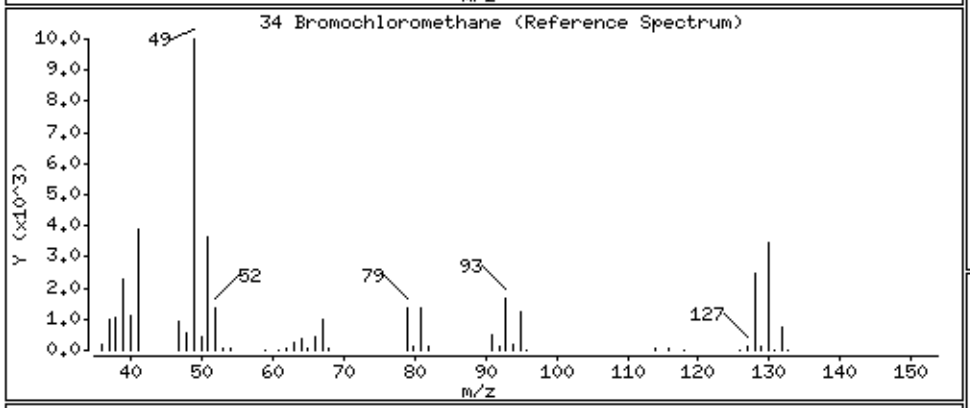
Purge Volume: 5.0 Operator: WL SRC: LIMS

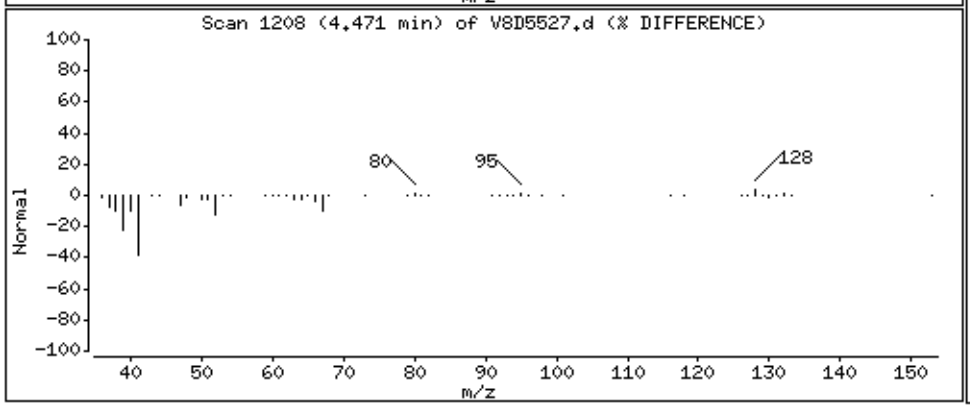
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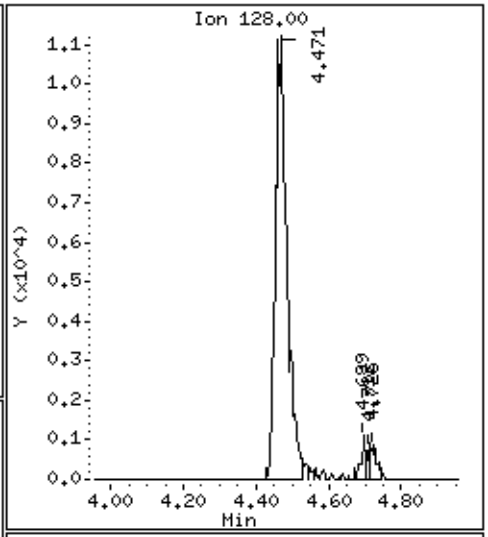
34 Bromochloromethane Concentration: 24 ug/L

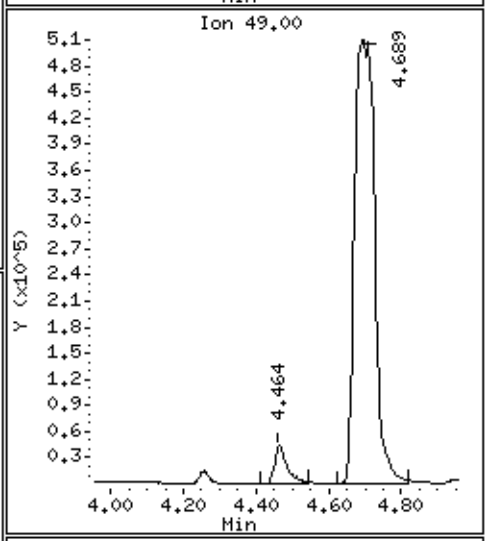


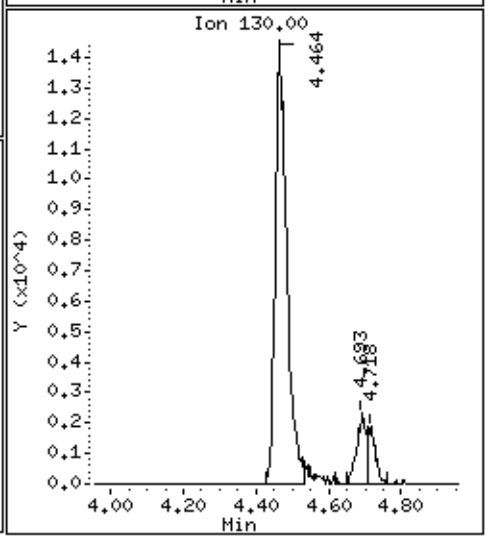












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

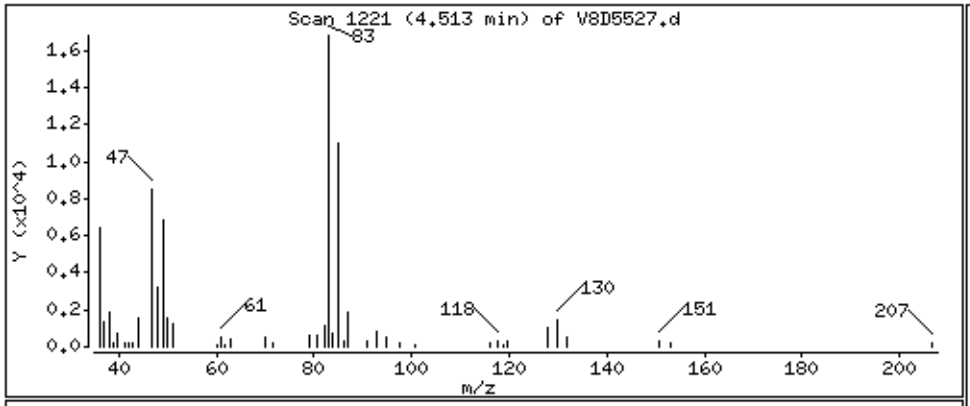
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

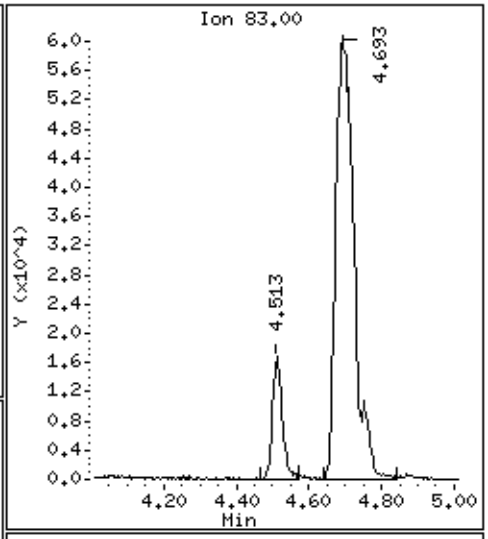
Sample Info: 5ML,N1055-12A,,77659

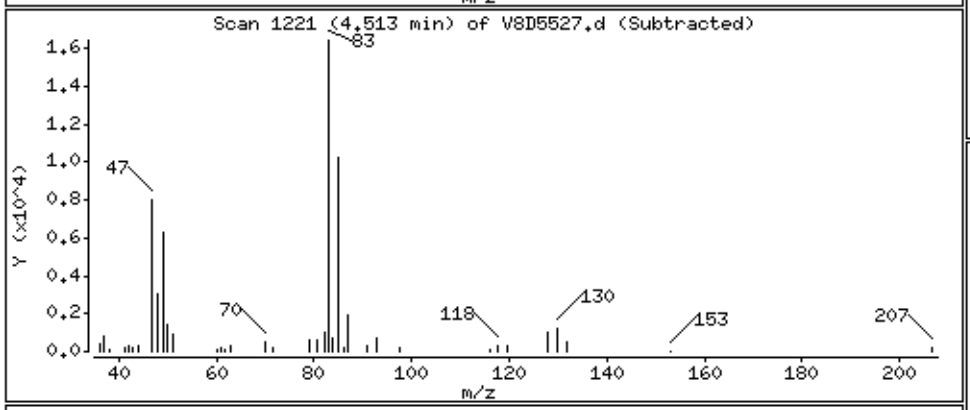
Purge Volume: 5.0 Operator: WL SRC: LIMS

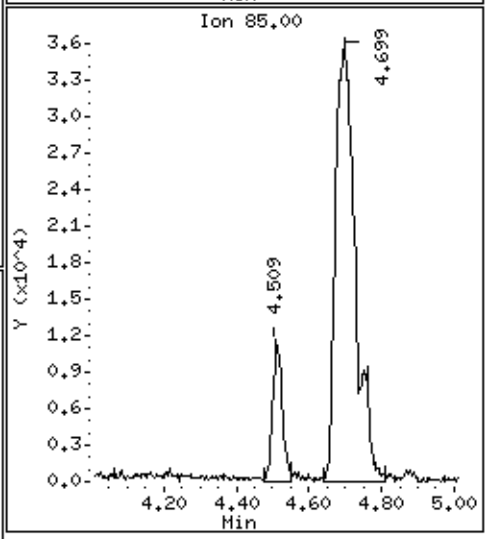
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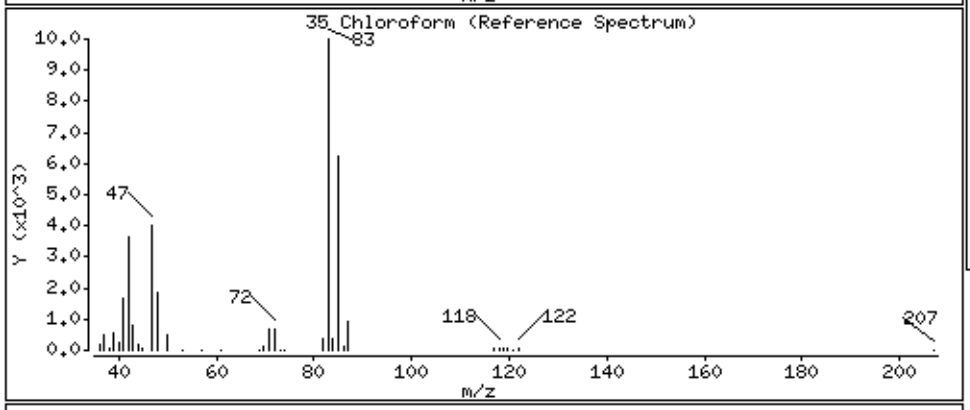
35 Chloroform Concentration: 6.4 ug/L

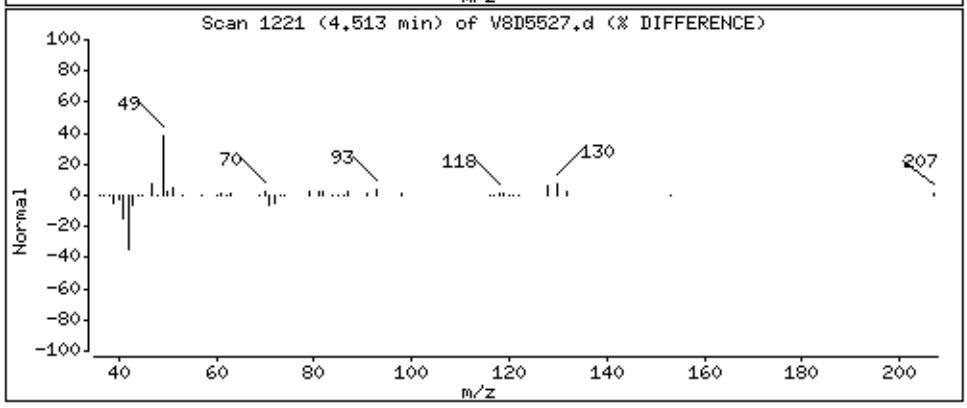












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

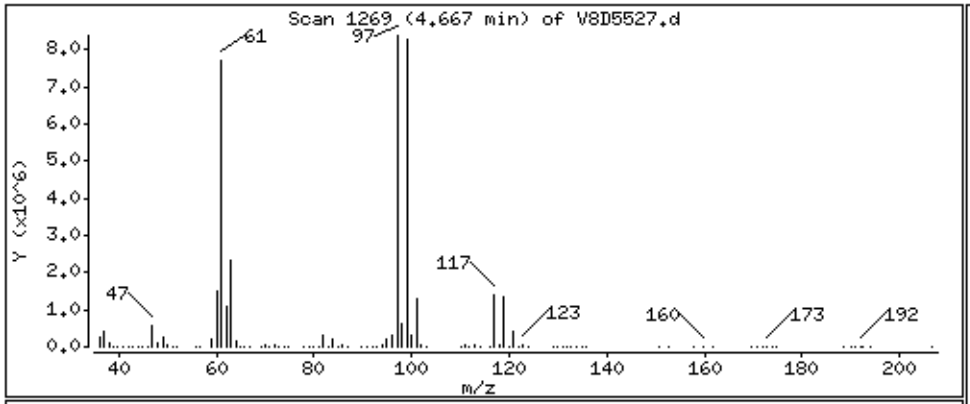
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

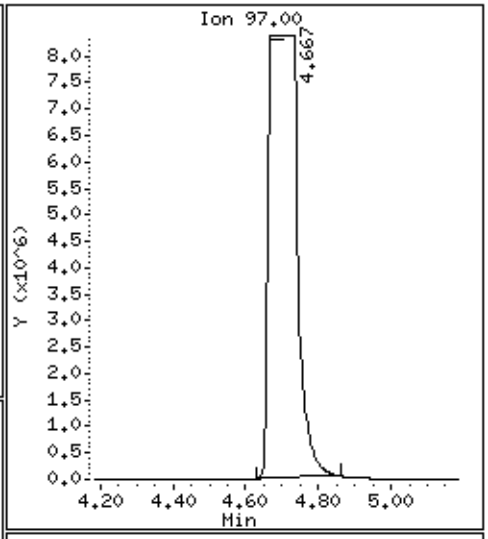
Sample Info: 5ML,N1055-12A,,77659

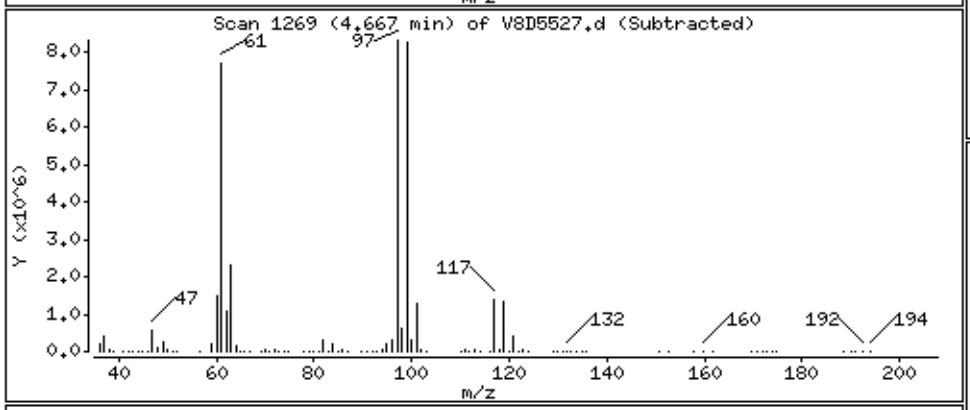
Purge Volume: 5.0 Operator: WL SRC: LIMS

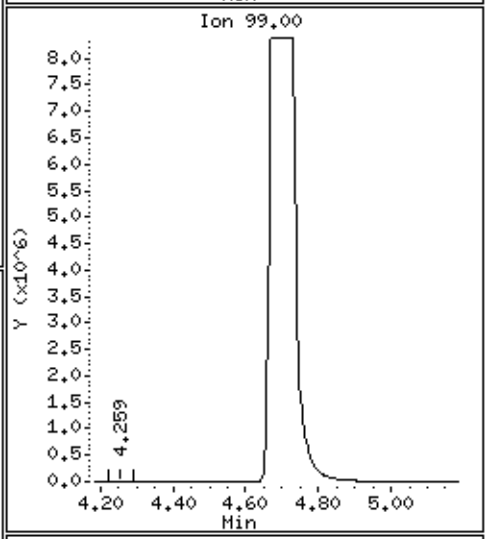
Column phase: DB-624 Column diameter: 0.25

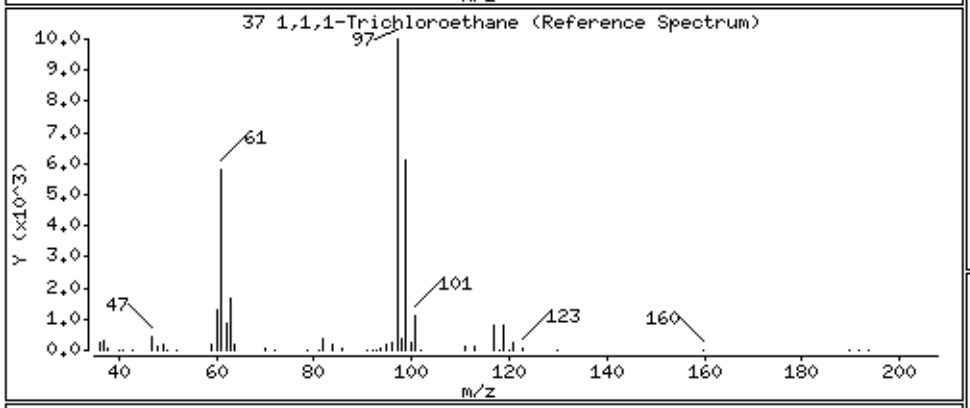
37 1,1,1-Trichloroethane Concentration: 9100 ug/L

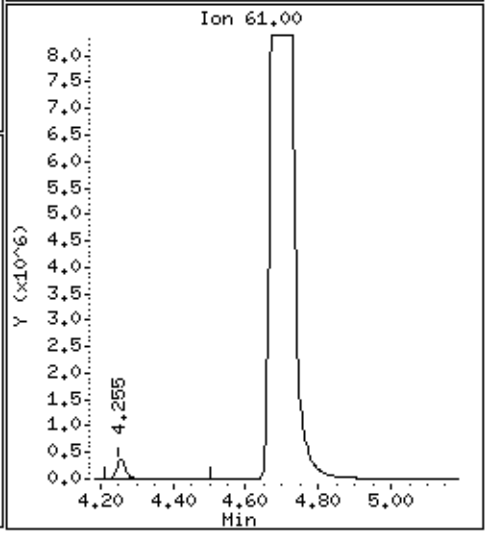


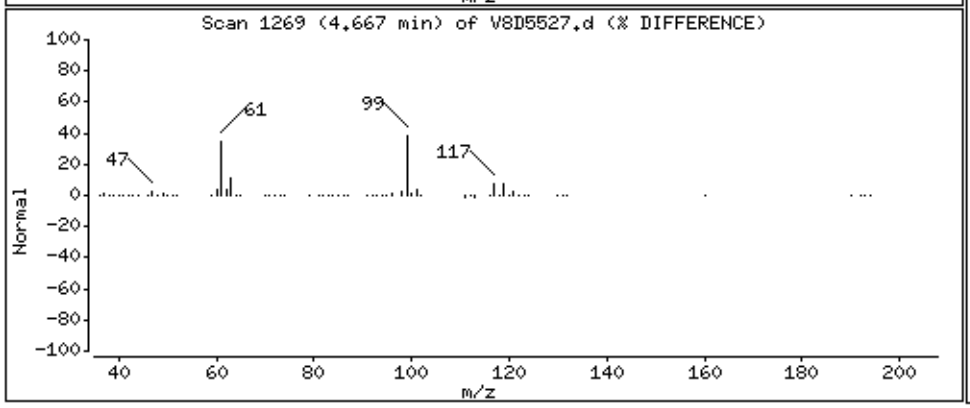












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

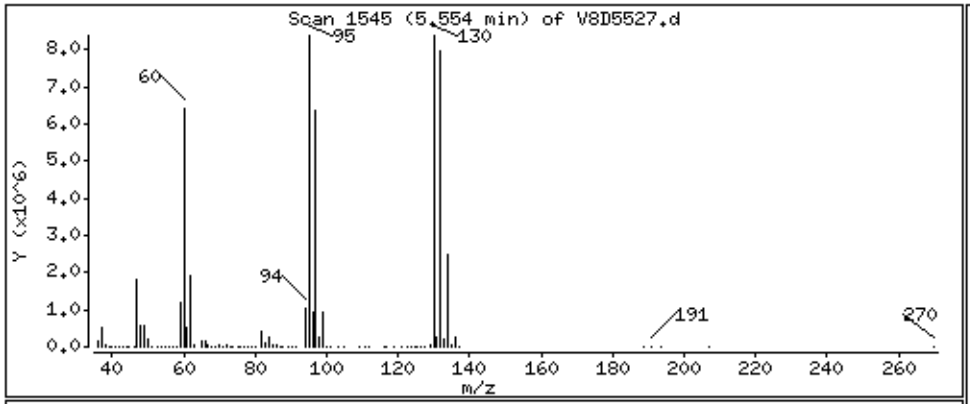
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

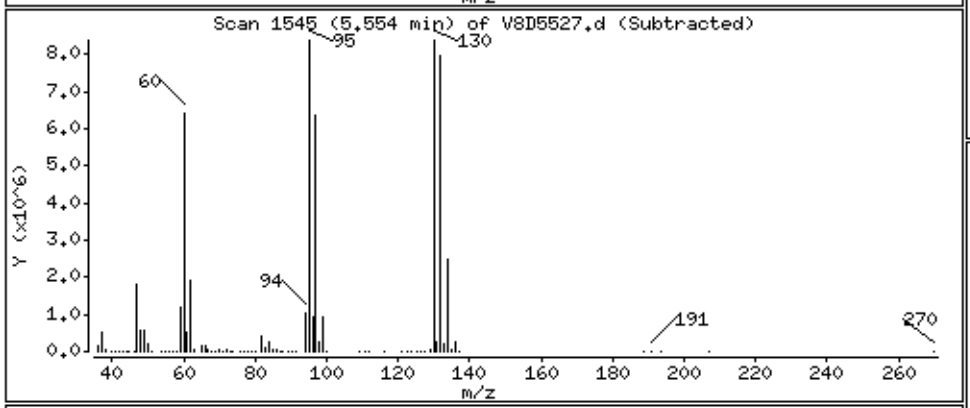
Sample Info: 5ML,N1055-12A,,77659

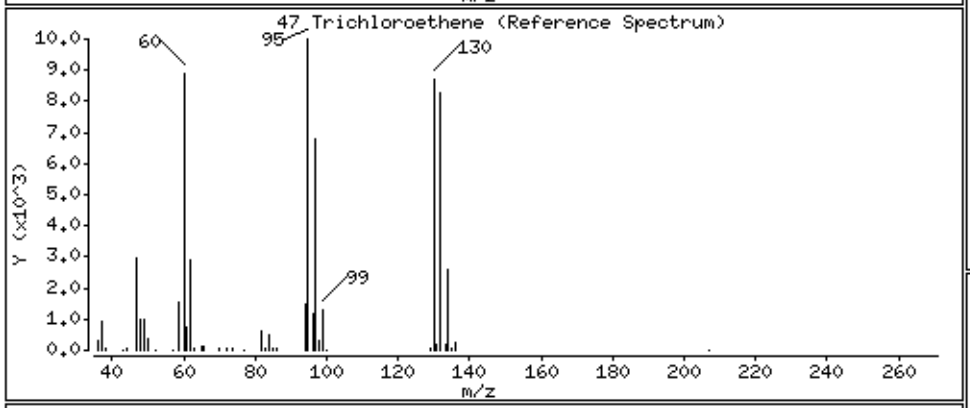
Purge Volume: 5.0 Operator: WL SRC: LIMS

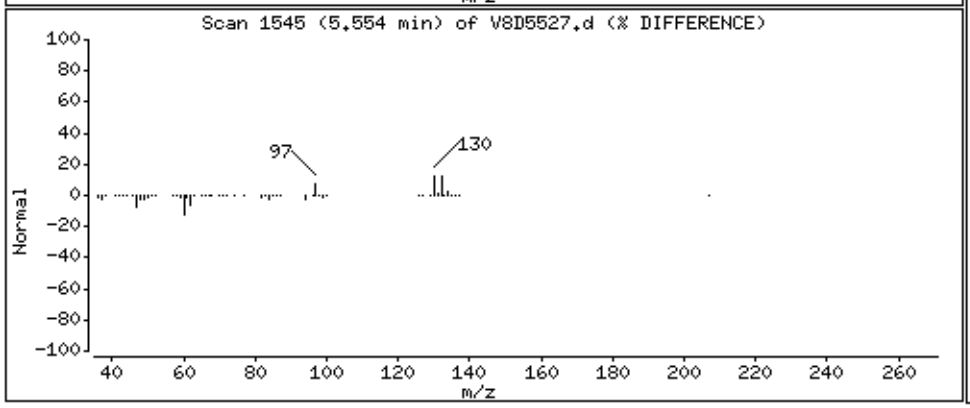
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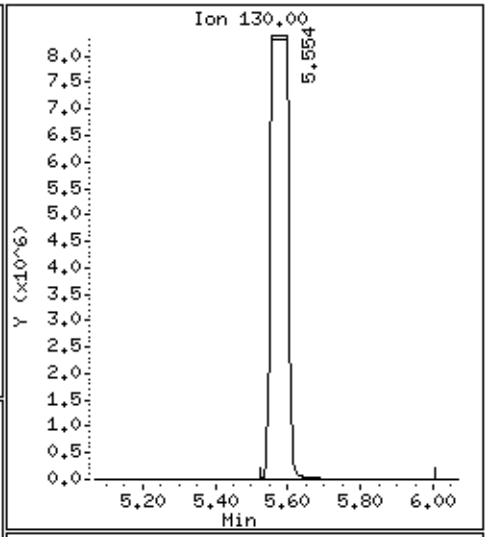
47 Trichloroethene Concentration: 14000 ug/L

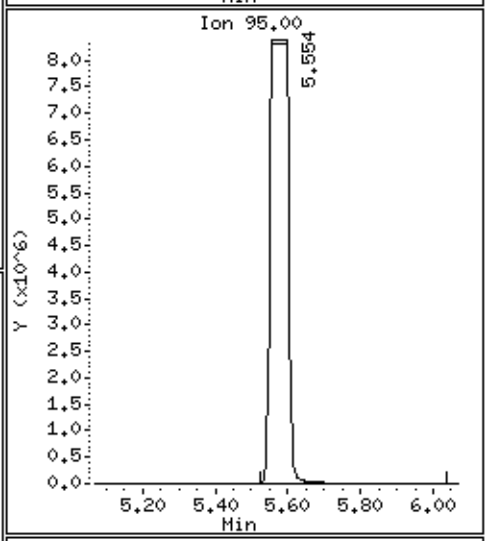


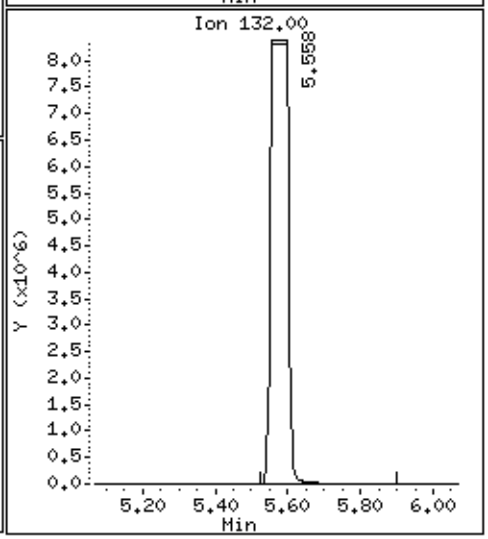












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

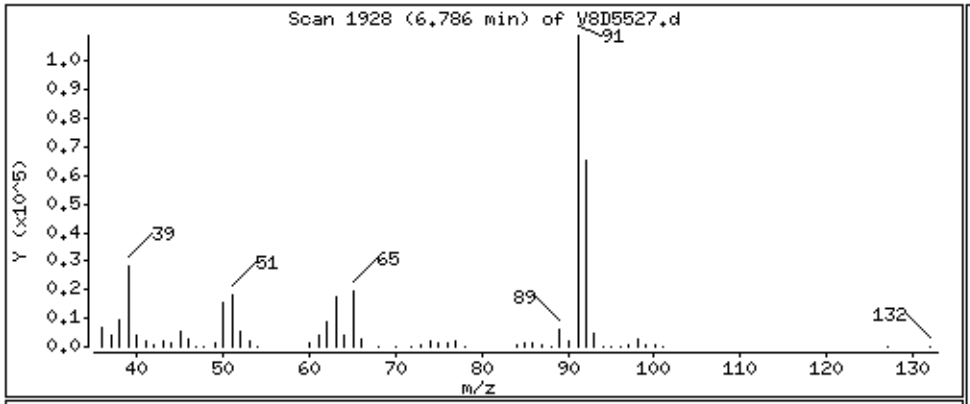
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

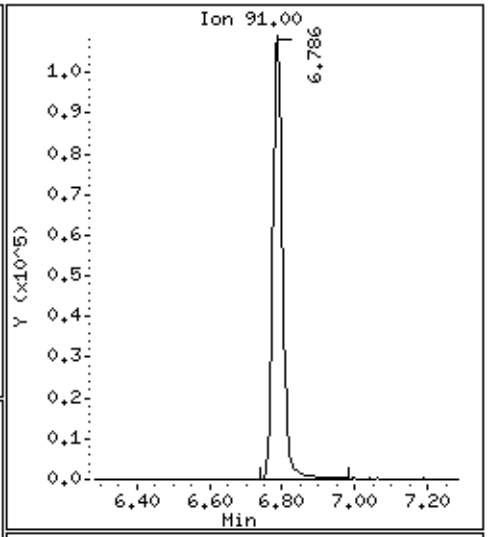
Sample Info: 5ML,N1055-12A,,77659

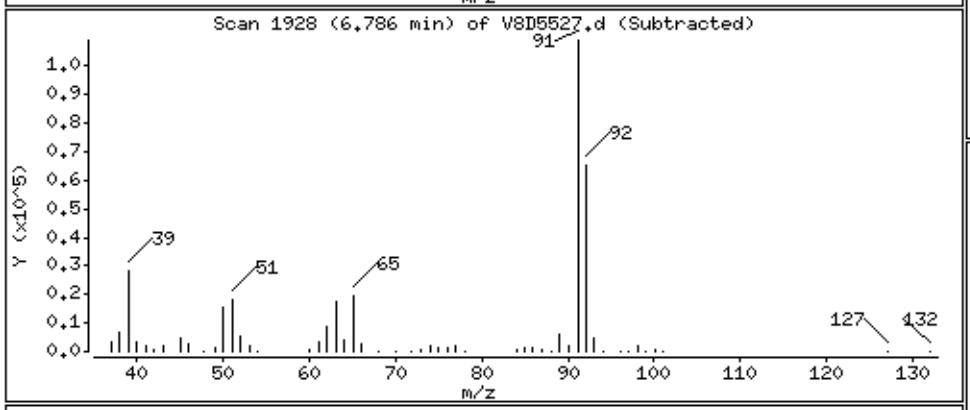
Purge Volume: 5.0 Operator: WL SRC: LIMS

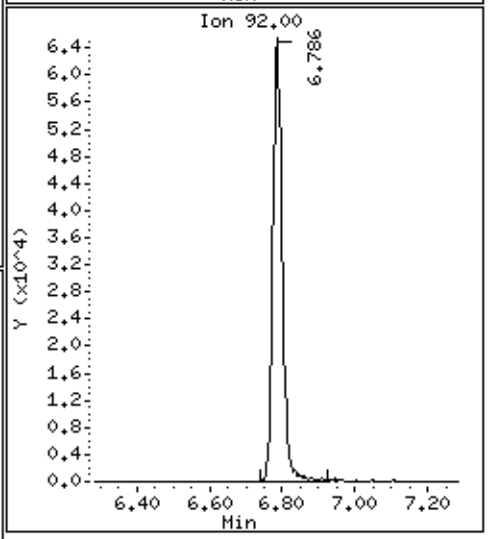
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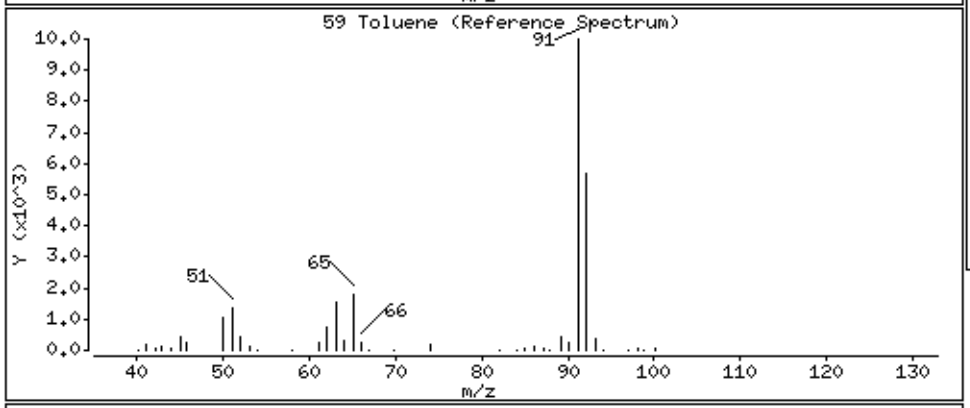
59 Toluene Concentration: 25 ug/L

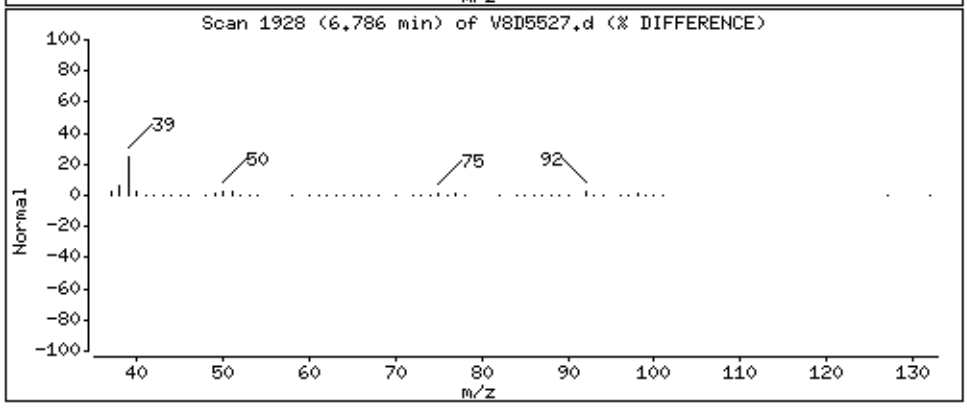












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

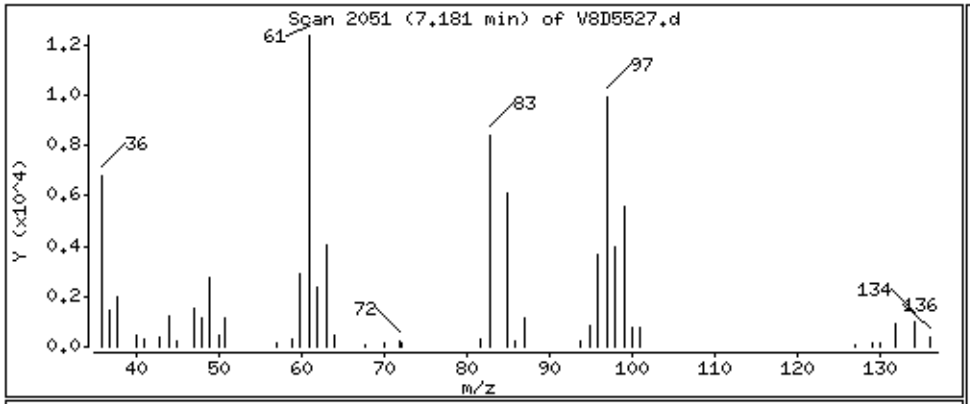
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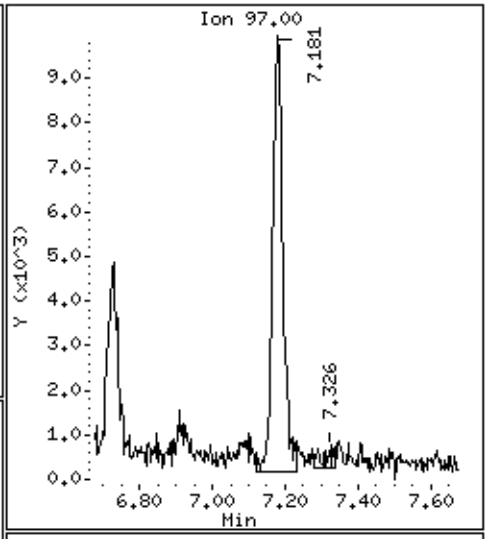
Sample Info: 5ML,N1055-12A,,77659

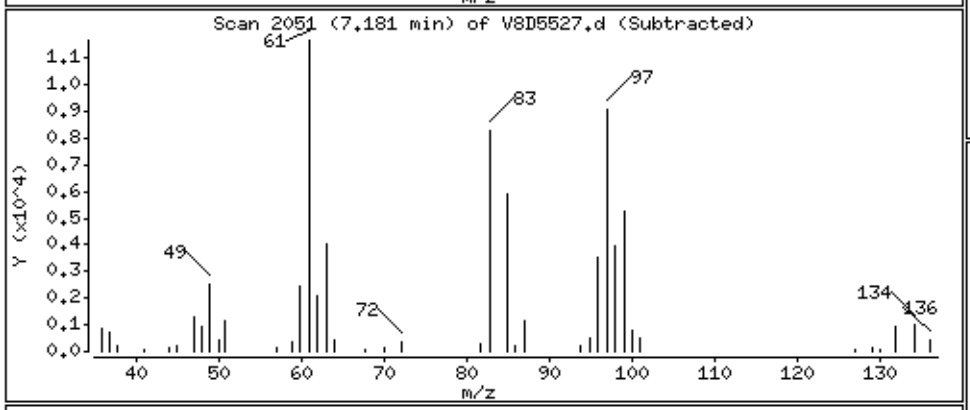
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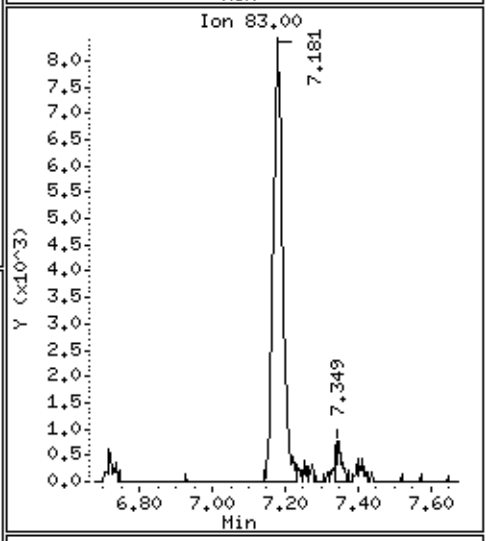
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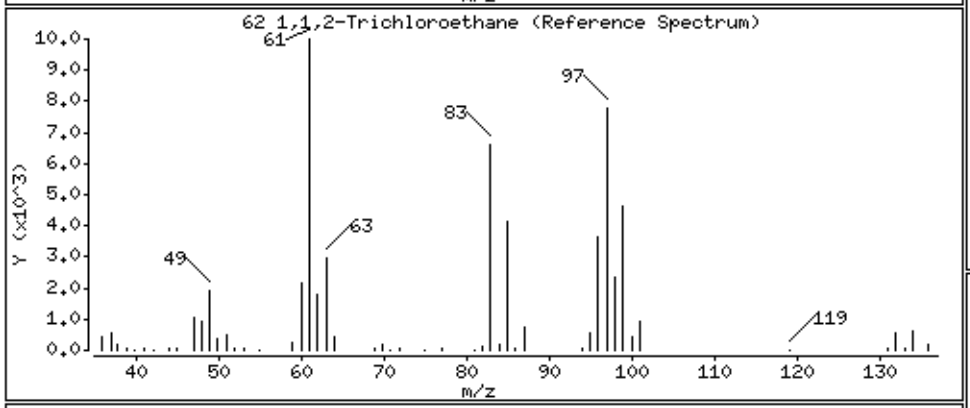
62 1,1,2-Trichloroethane Concentration: 11 ug/L

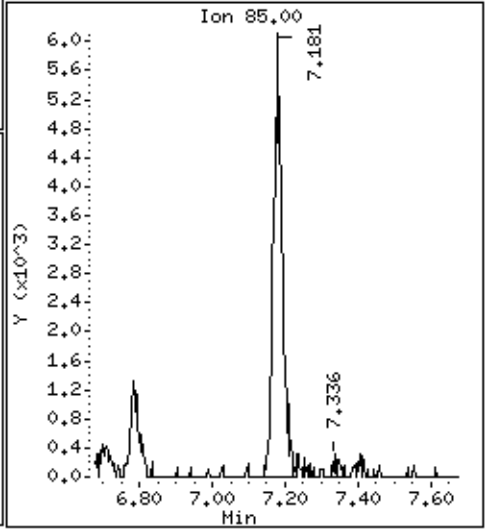


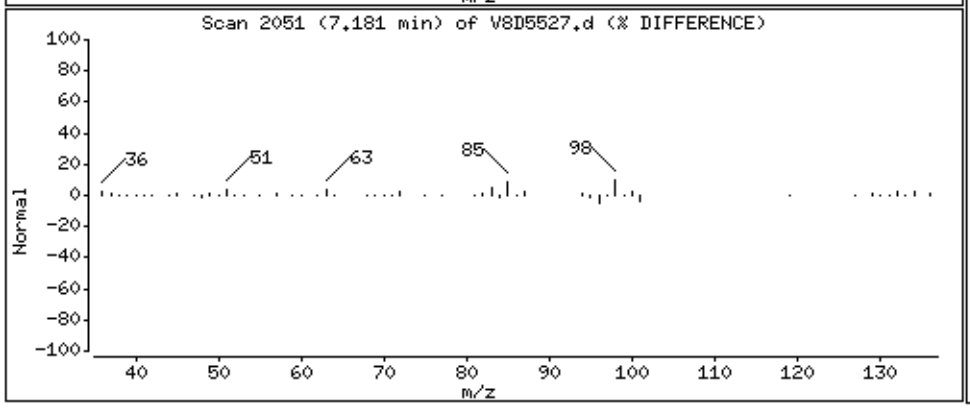












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

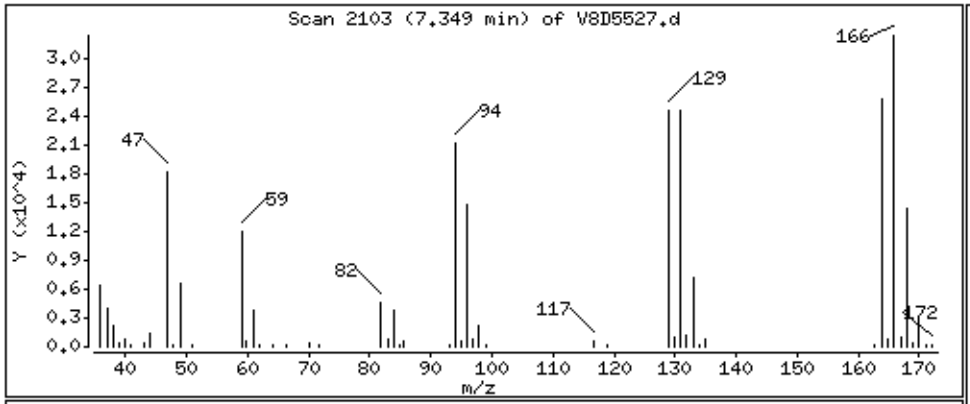
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

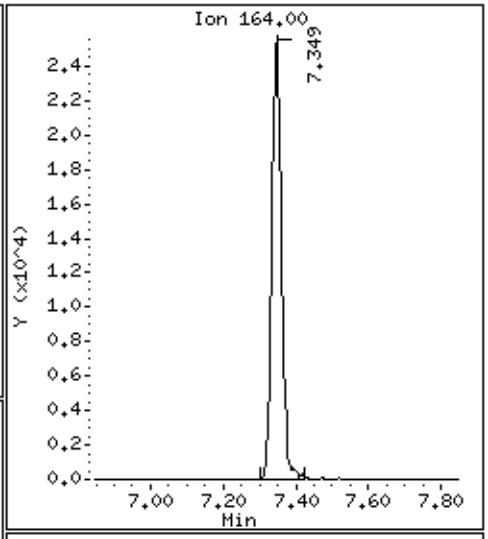
Sample Info: 5ML,N1055-12A,,77659

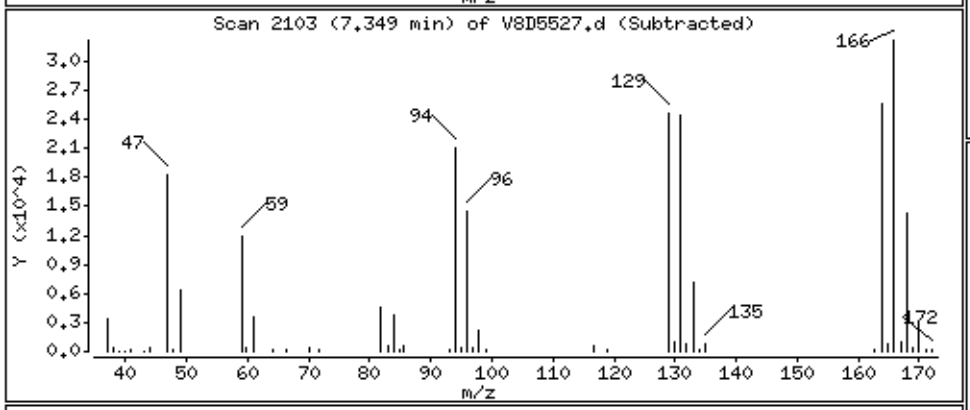
Purge Volume: 5.0 Operator: WL SRC: LIMS

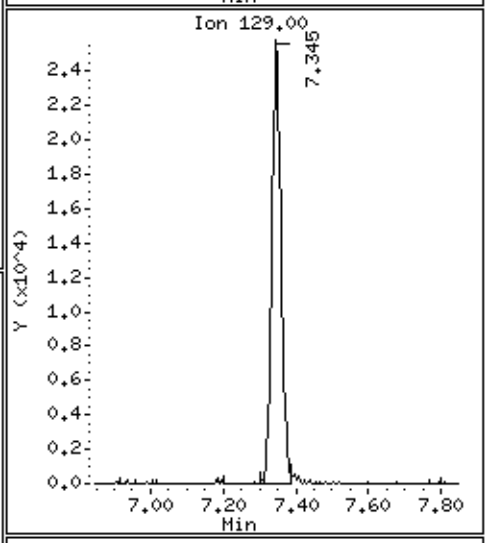
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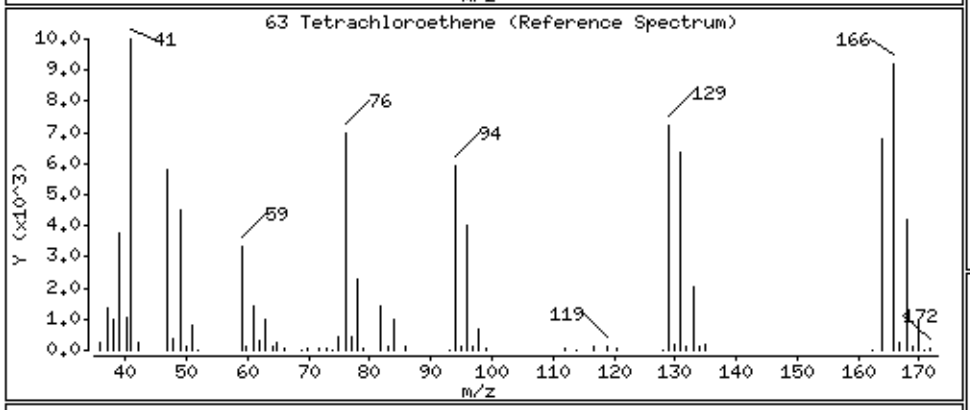
63 Tetrachloroethene Concentration: 20 ug/L

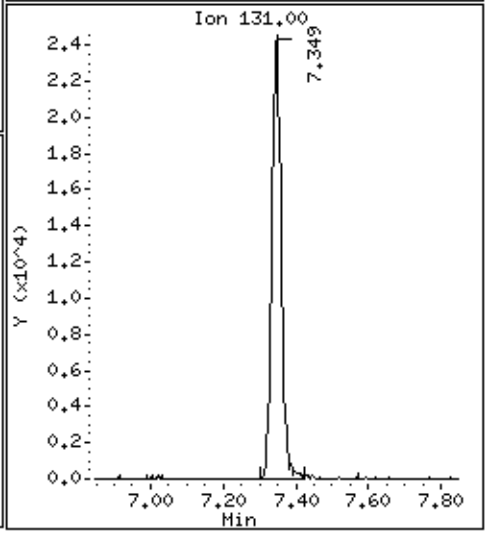


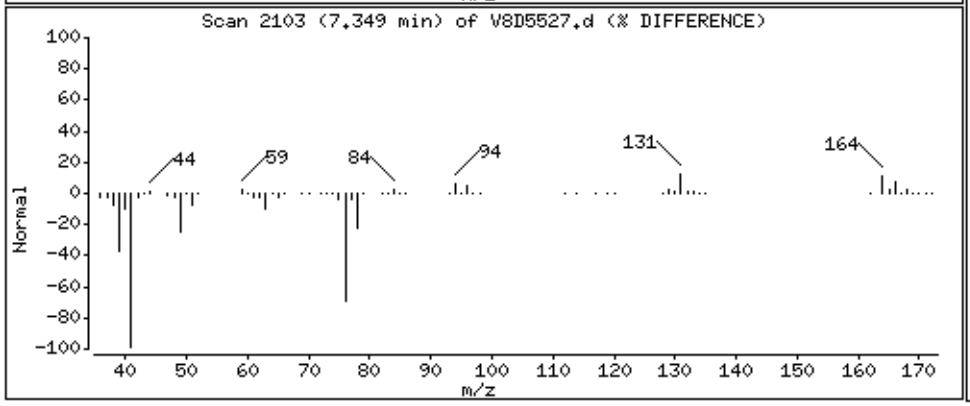












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

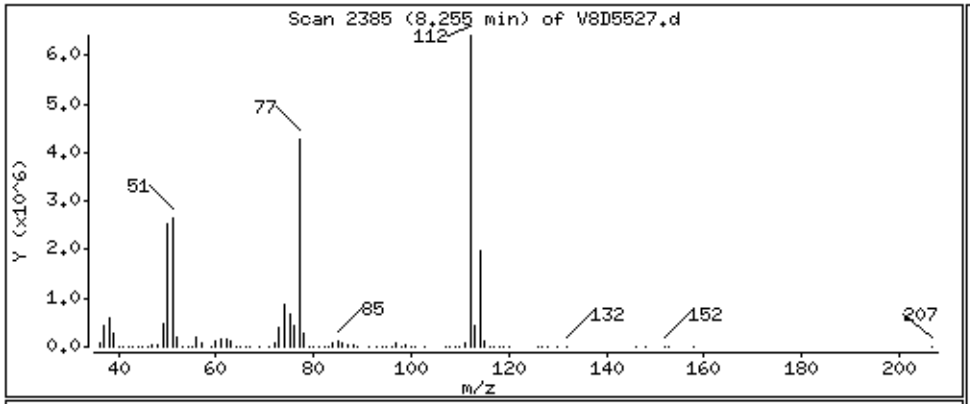
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

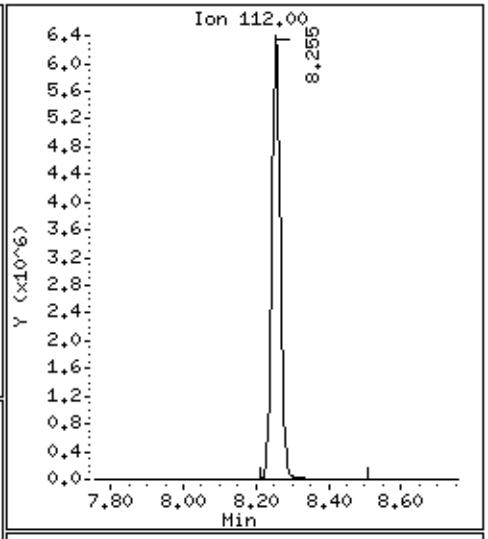
Sample Info: 5ML,N1055-12A,,77659

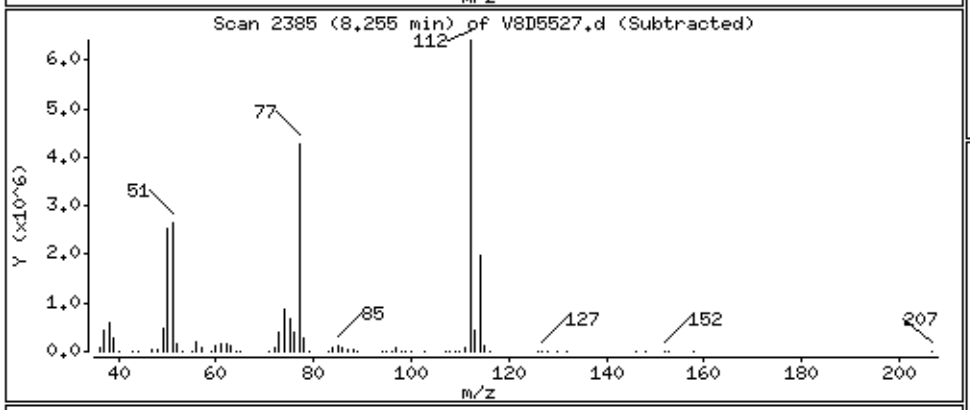
Purge Volume: 5.0 Operator: WL SRC: LIMS

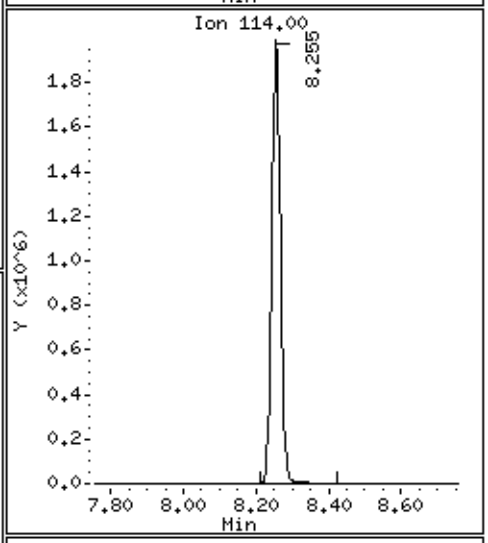
Column phase: DB-624 Column diameter: 0.25

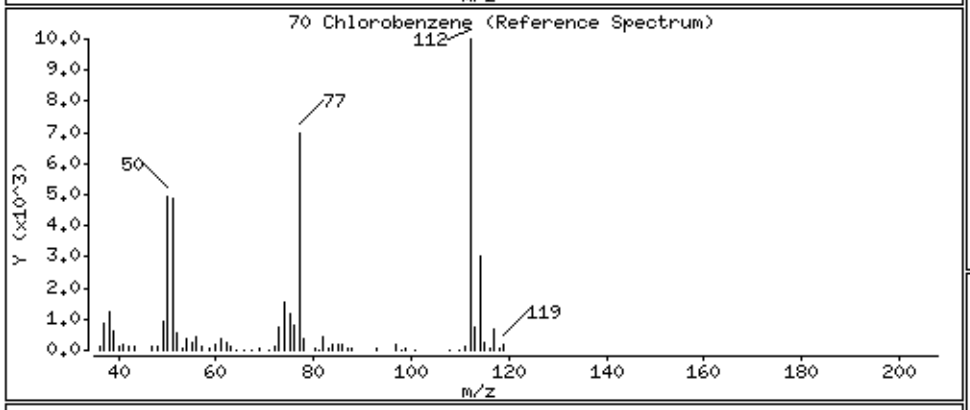
70 Chlorobenzene Concentration: 1700 ug/L

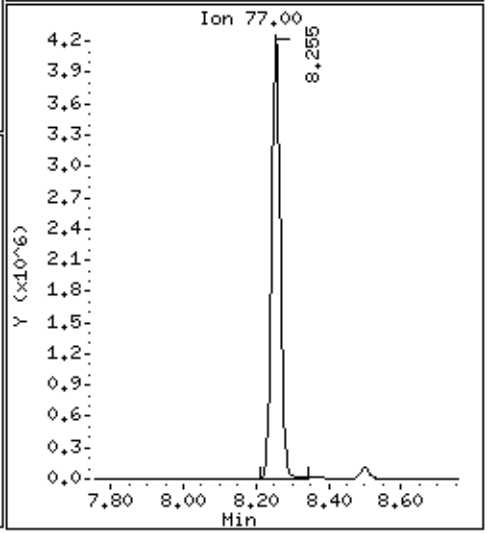


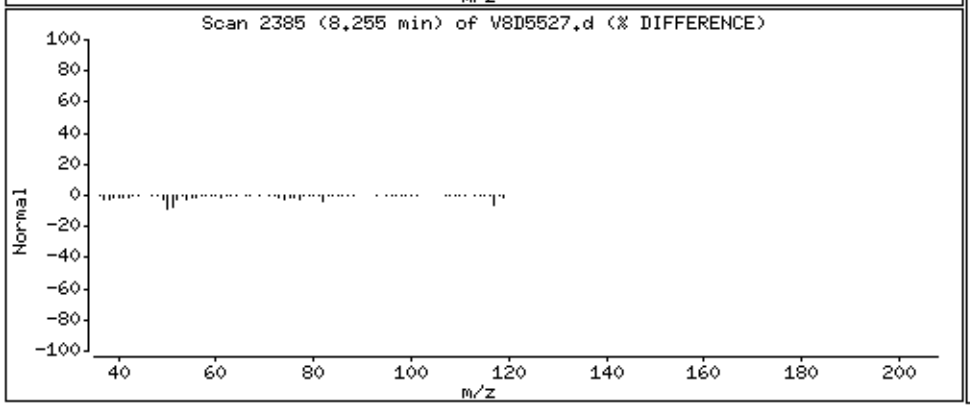












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

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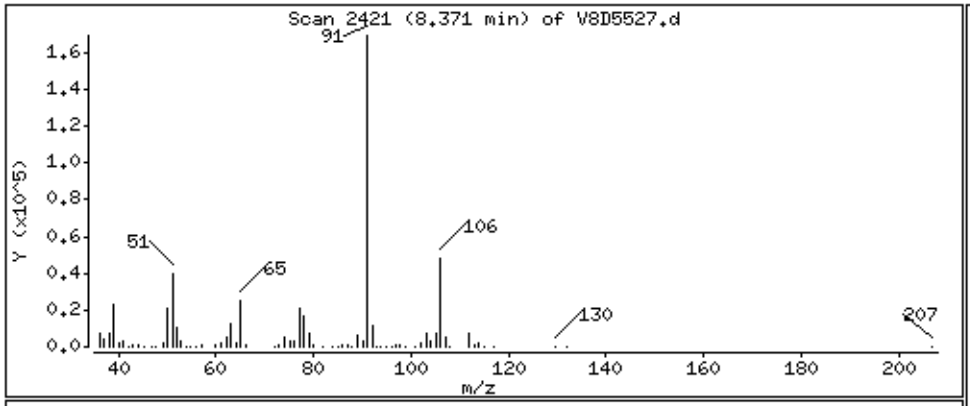
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

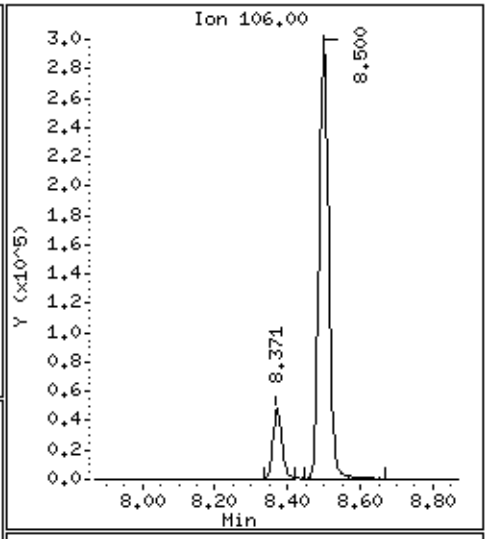
Sample Info: 5ML,N1055-12A,,77659

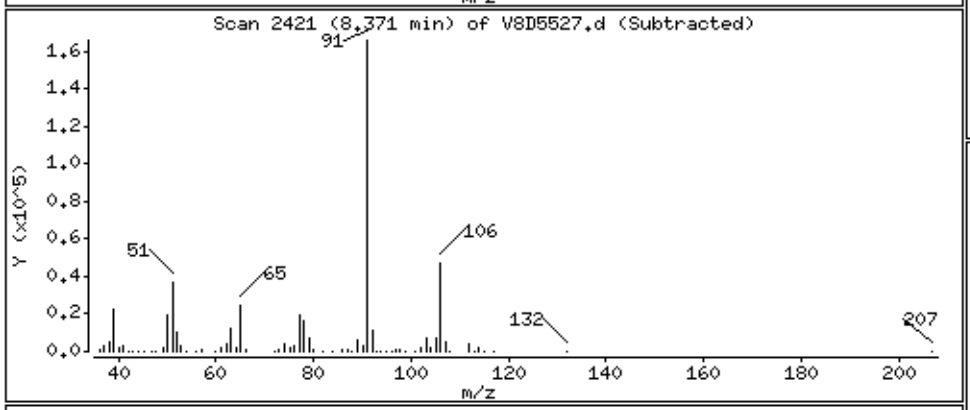
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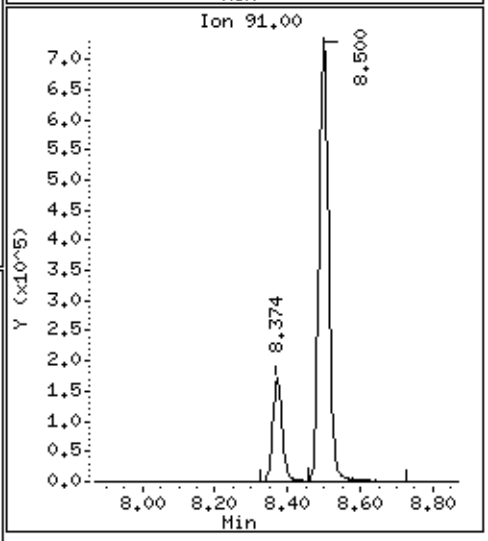
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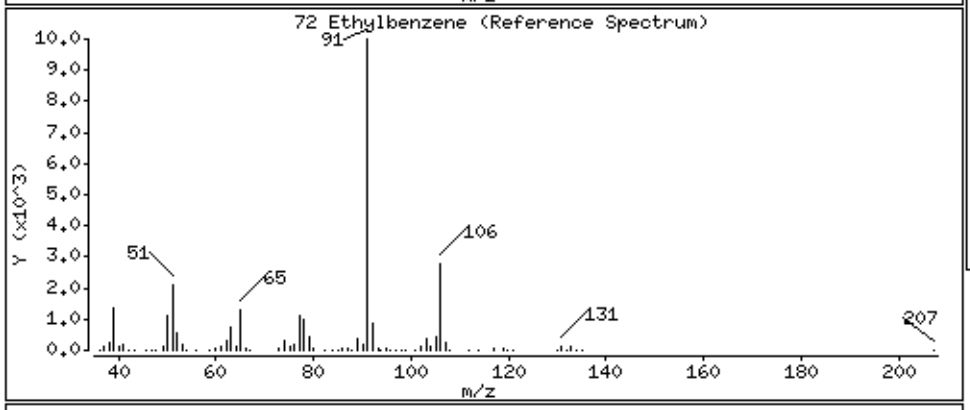
72 Ethylbenzene Concentration: 27 ug/L

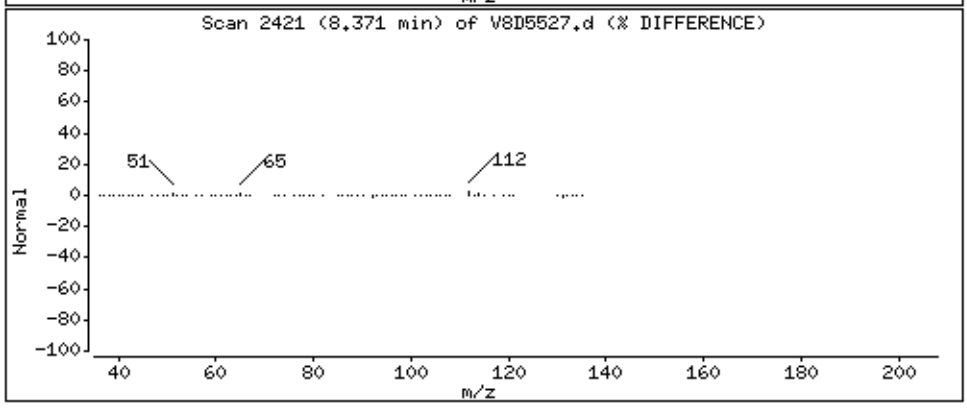












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

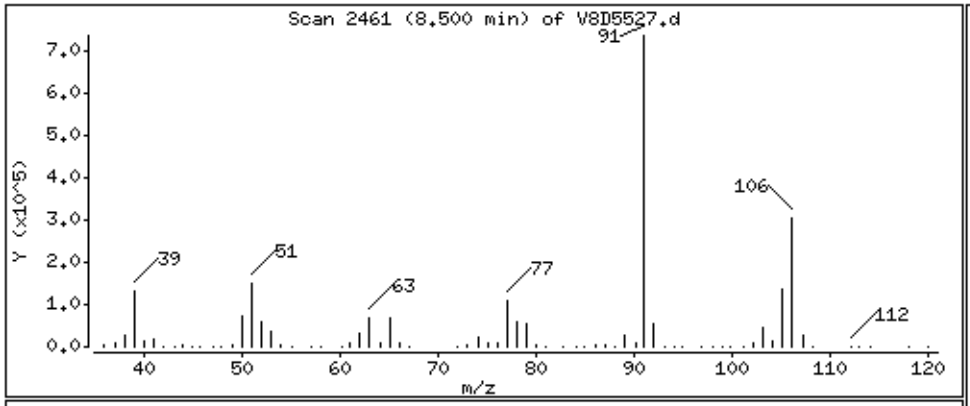
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

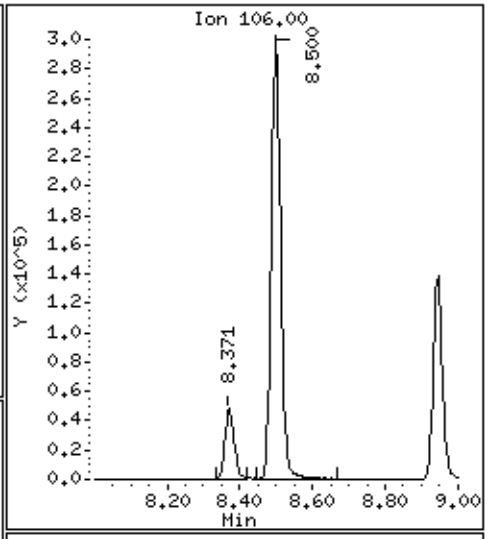
Sample Info: 5ML,N1055-12A,,77659

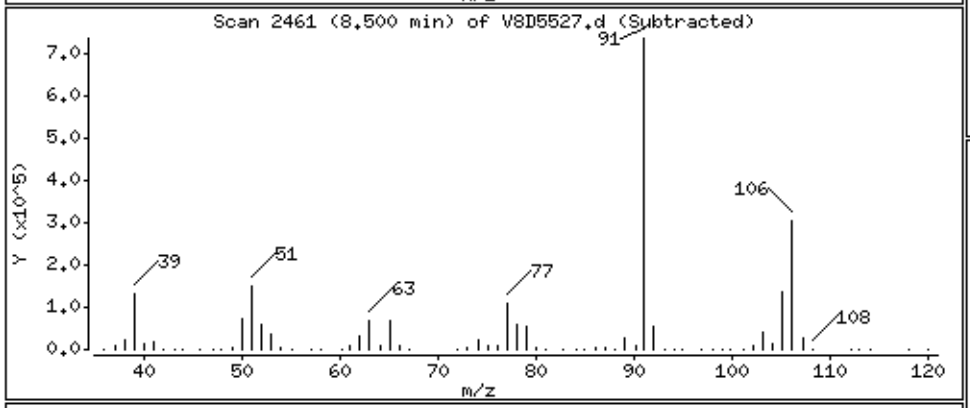
Purge Volume: 5.0 Operator: WL SRC: LIMS

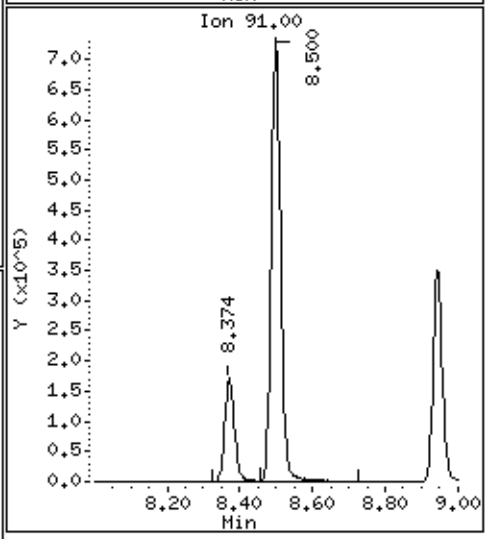
Column phase: DB-624 Column diameter: 0.25

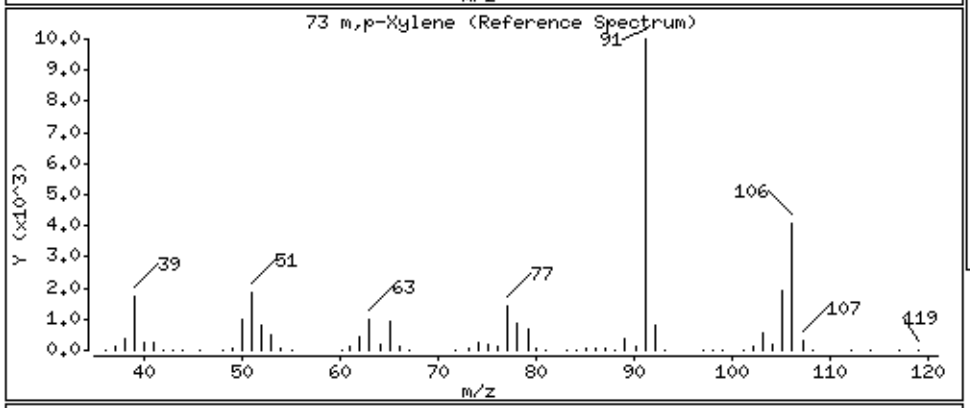
73 m,p-Xylene Concentration: 140 ug/L

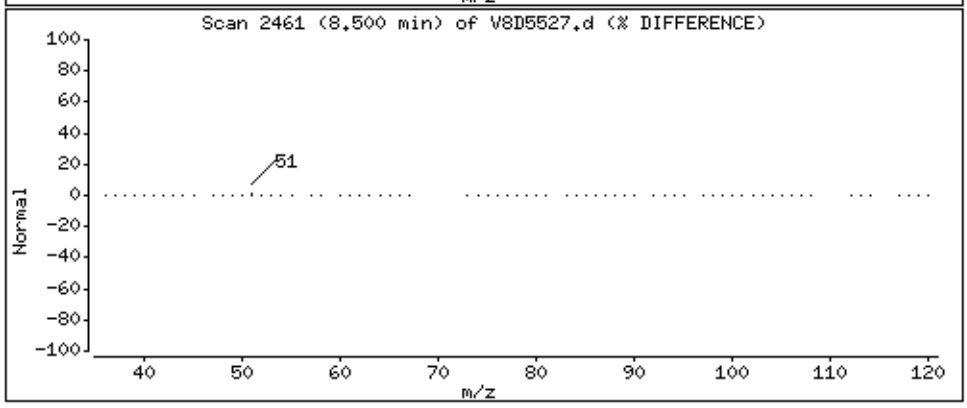












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

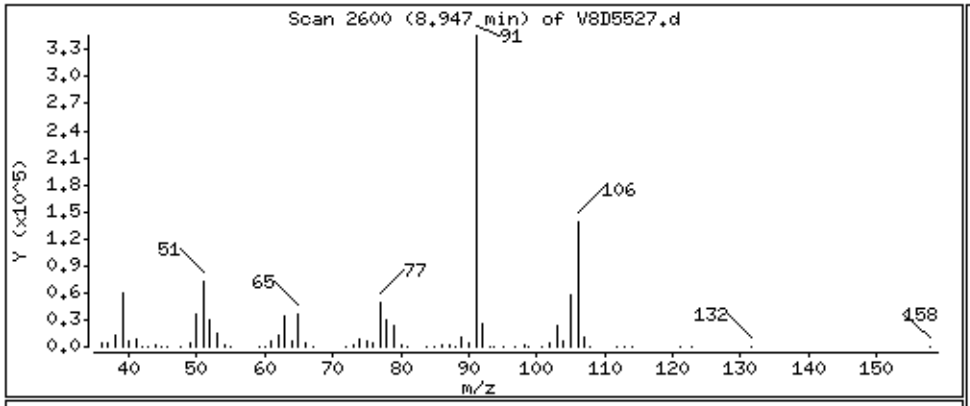
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

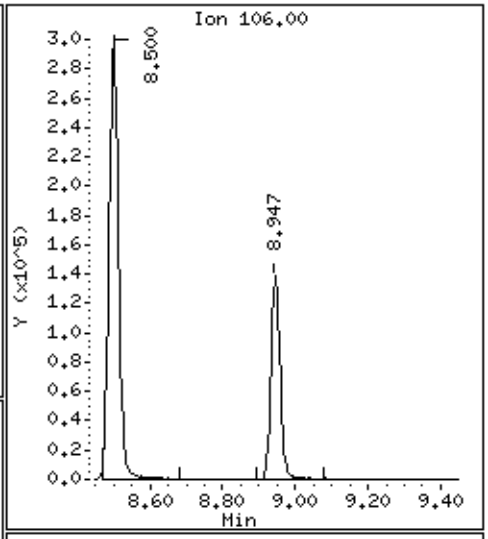
Sample Info: 5ML,N1055-12A,,77659

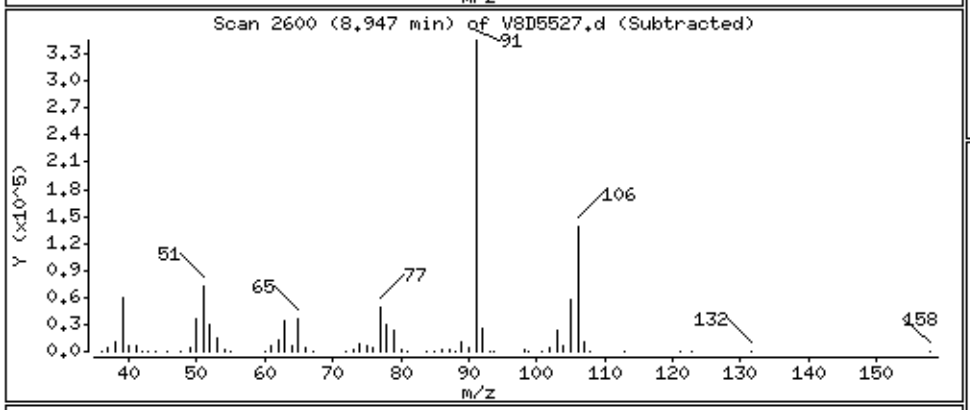
Purge Volume: 5.0 Operator: WL SRC: LIMS

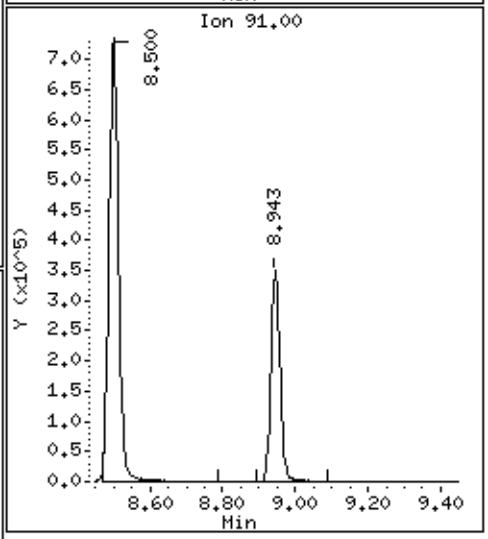
Column phase: DB-624 Column diameter: 0.25

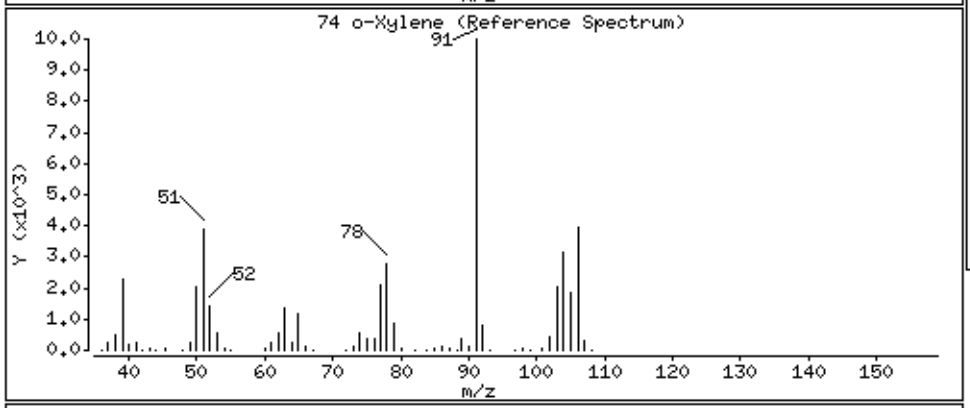
74 o-Xylene Concentration: 68 ug/L

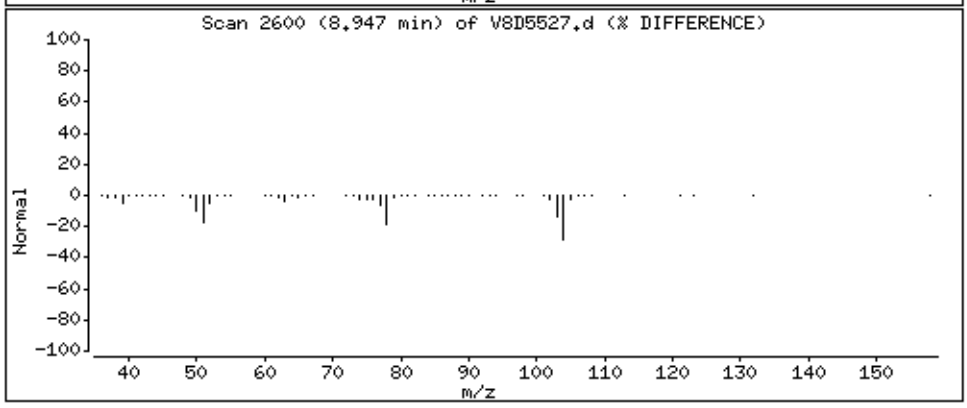












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

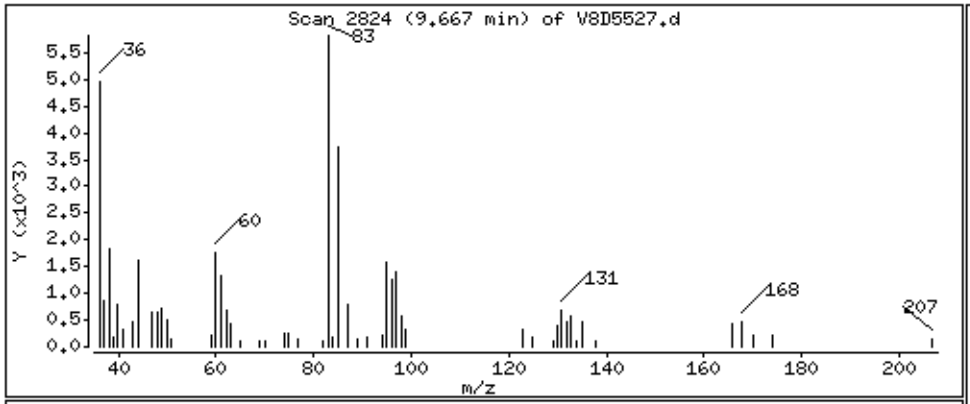
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

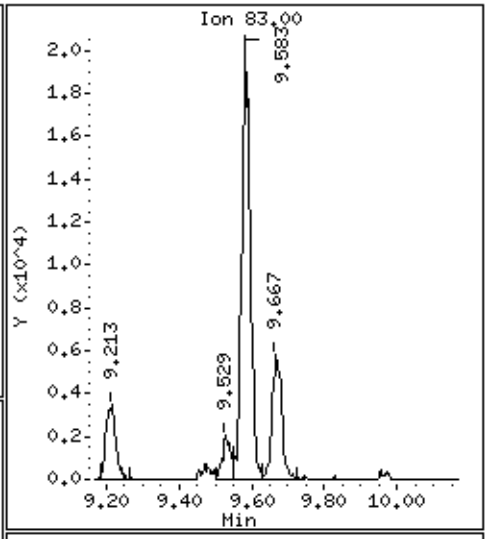
Sample Info: 5ML,N1055-12A,,77659

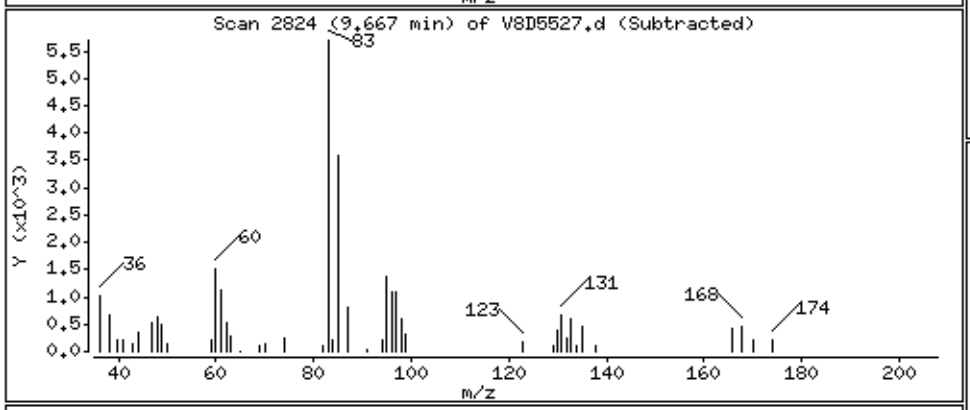
Purge Volume: 5.0 Operator: WL SRC: LIMS

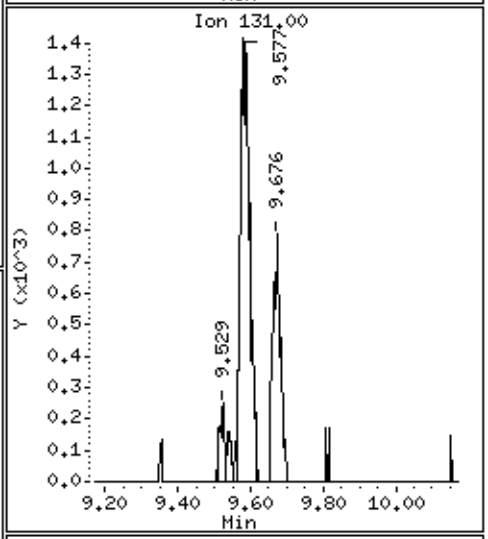
Column phase: DB-624 Column diameter: 0.25

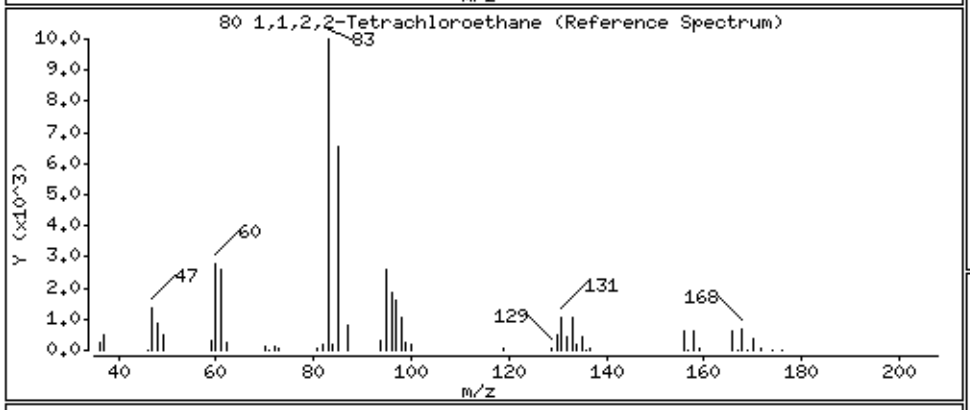
80 1,1,2,2-Tetrachloroethane Concentration: 3.5 ug/L

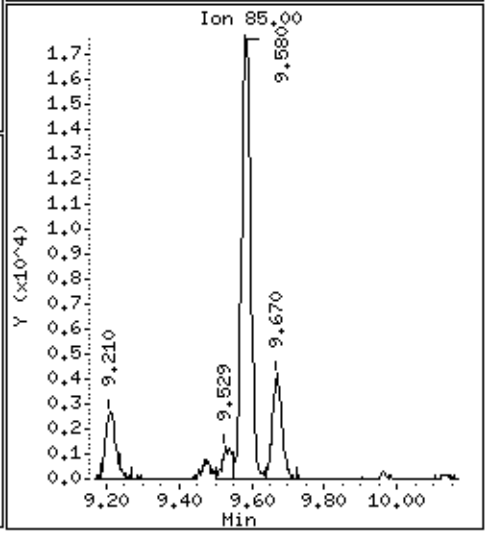


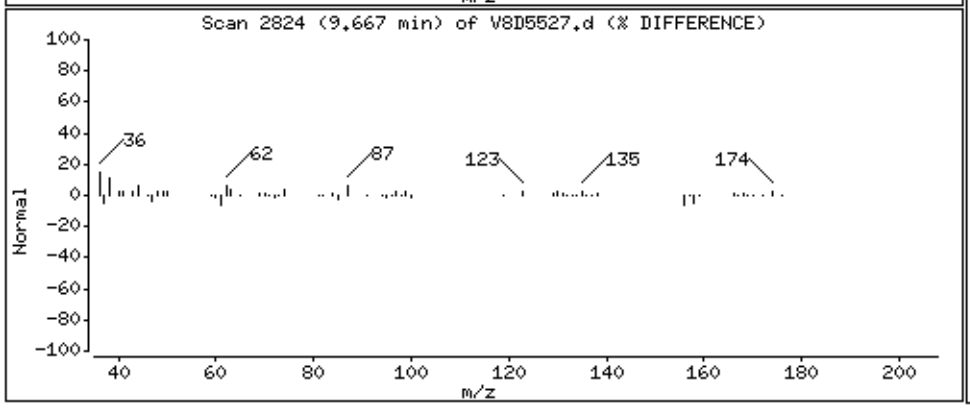












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

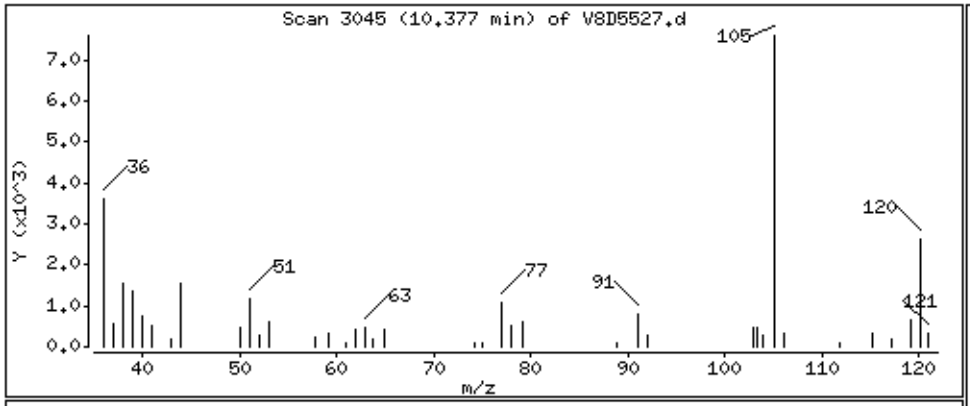
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

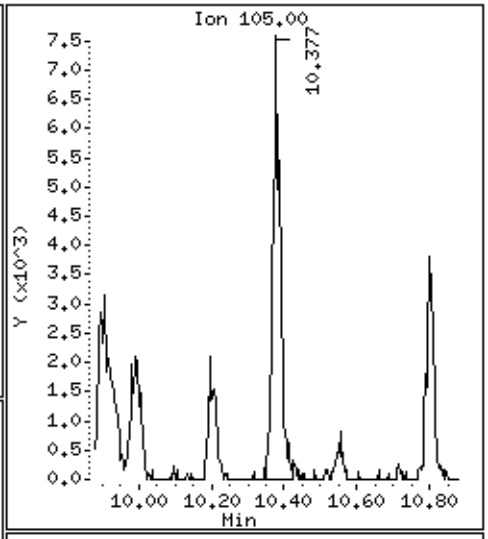
Sample Info: 5ML,N1055-12A,,77659

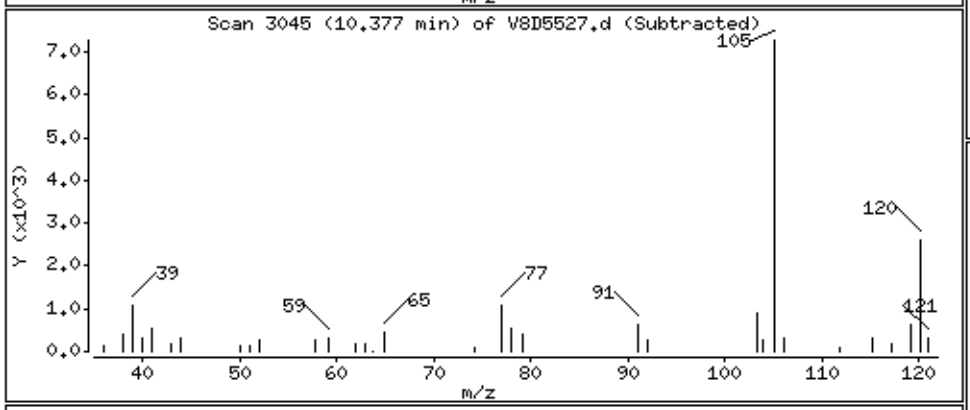
Purge Volume: 5.0 Operator: WL SRC: LIMS

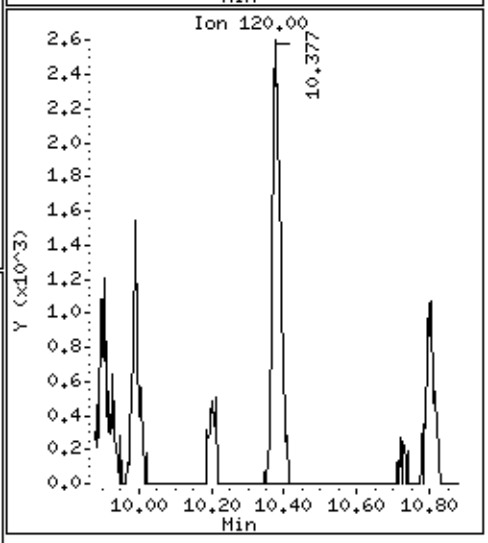
Column phase: DB-624 Column diameter: 0.25

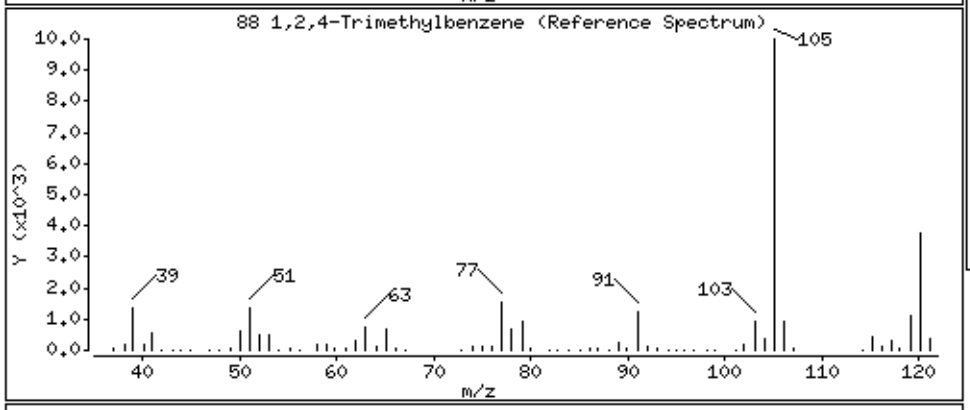
88 1,2,4-Trimethylbenzene Concentration: 1.2 ug/L

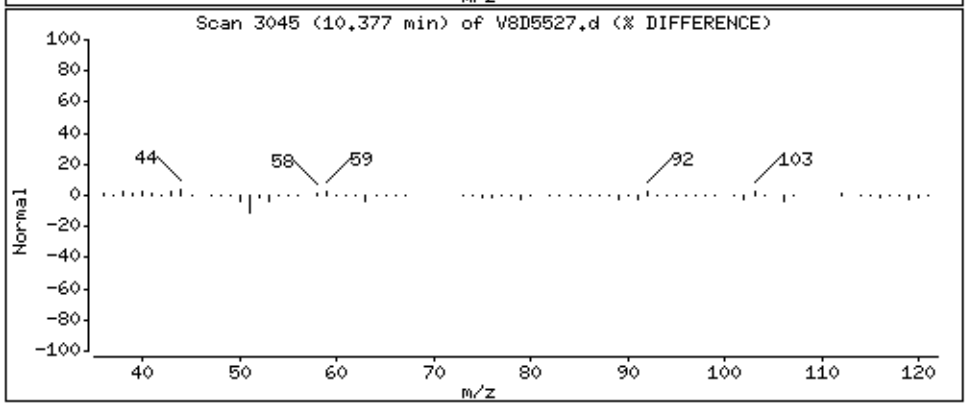












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

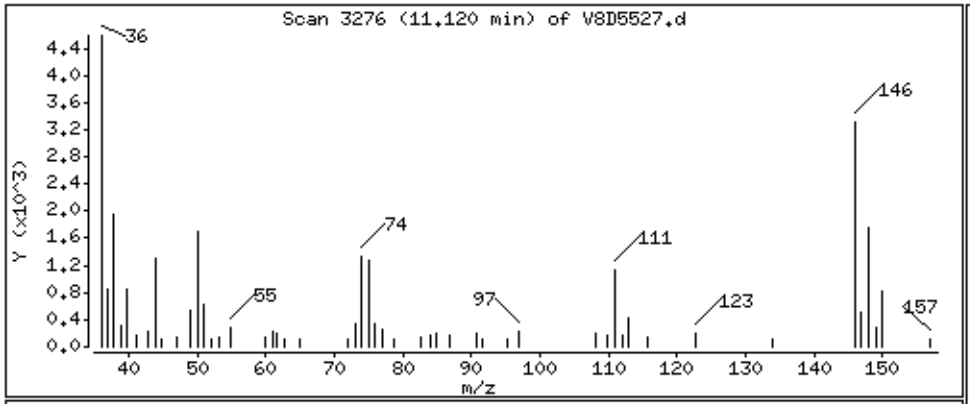
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

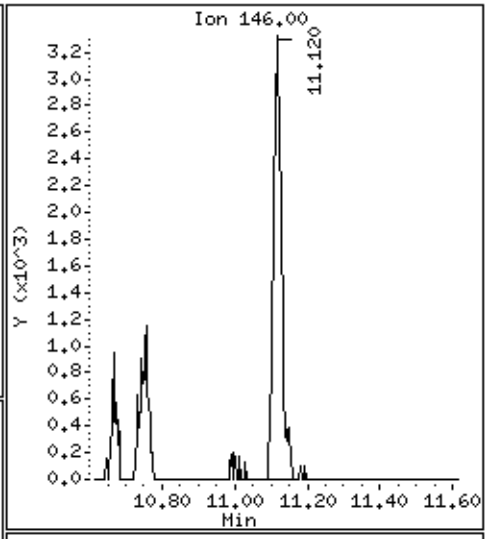
Sample Info: 5ML,N1055-12A,,77659

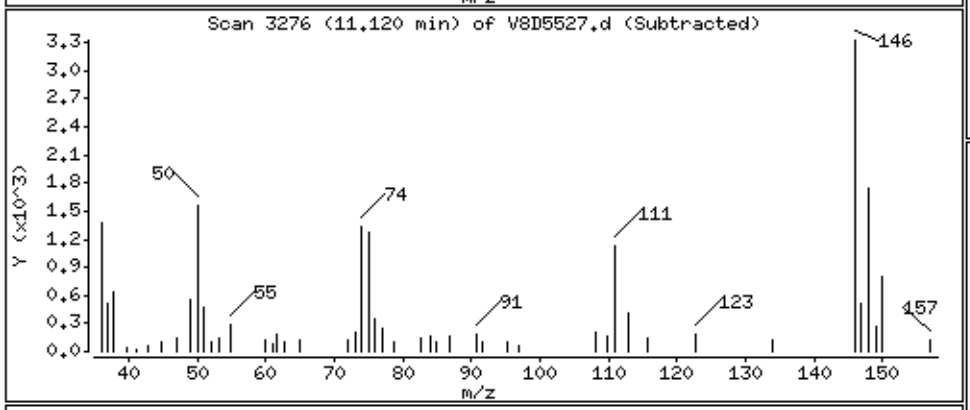
Purge Volume: 5.0 Operator: WL SRC: LIMS

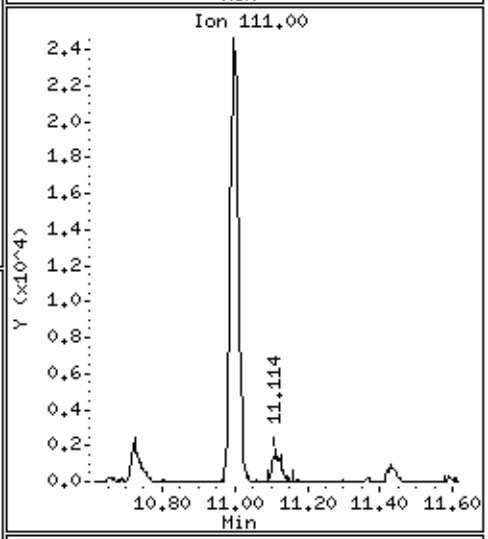
Column phase: DB-624 Column diameter: 0.25

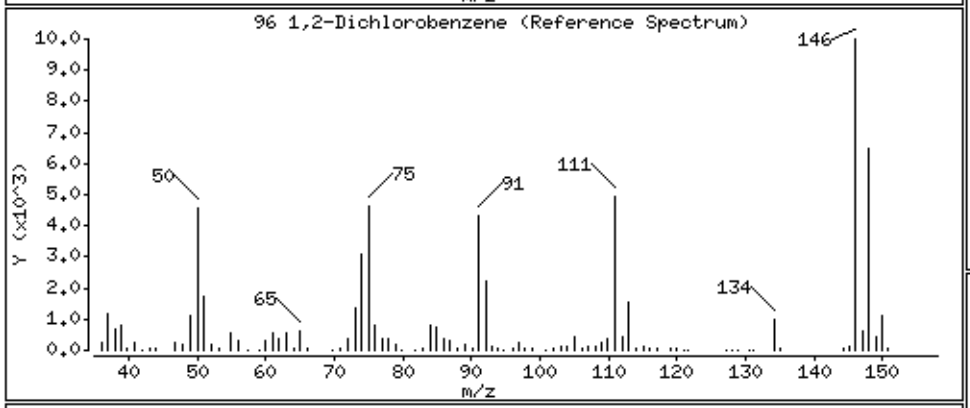
96 1,2-Dichlorobenzene Concentration: 1.2 ug/L

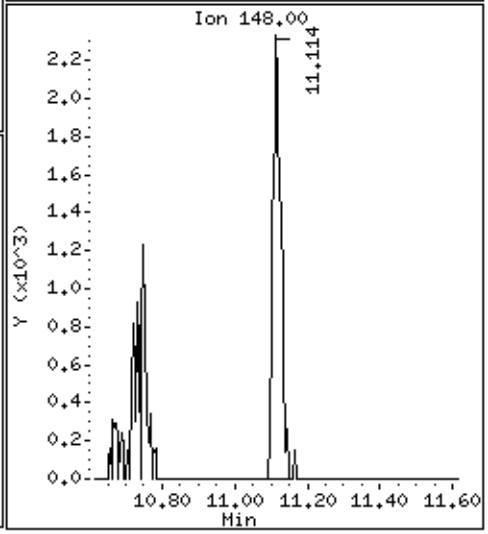


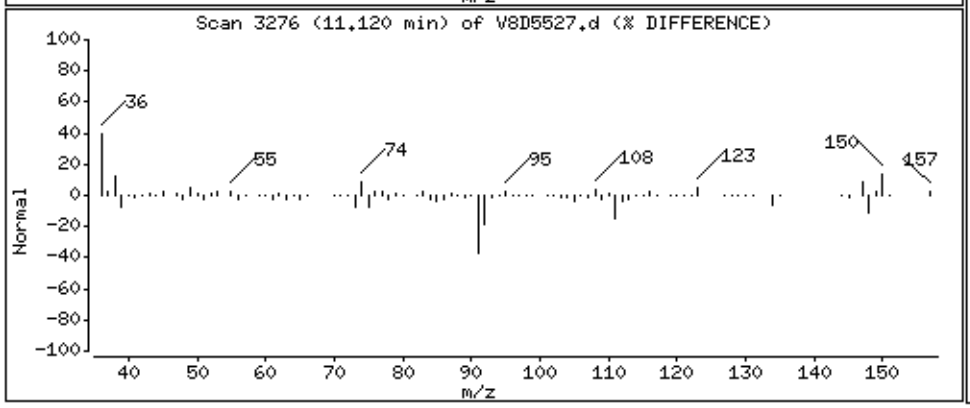












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

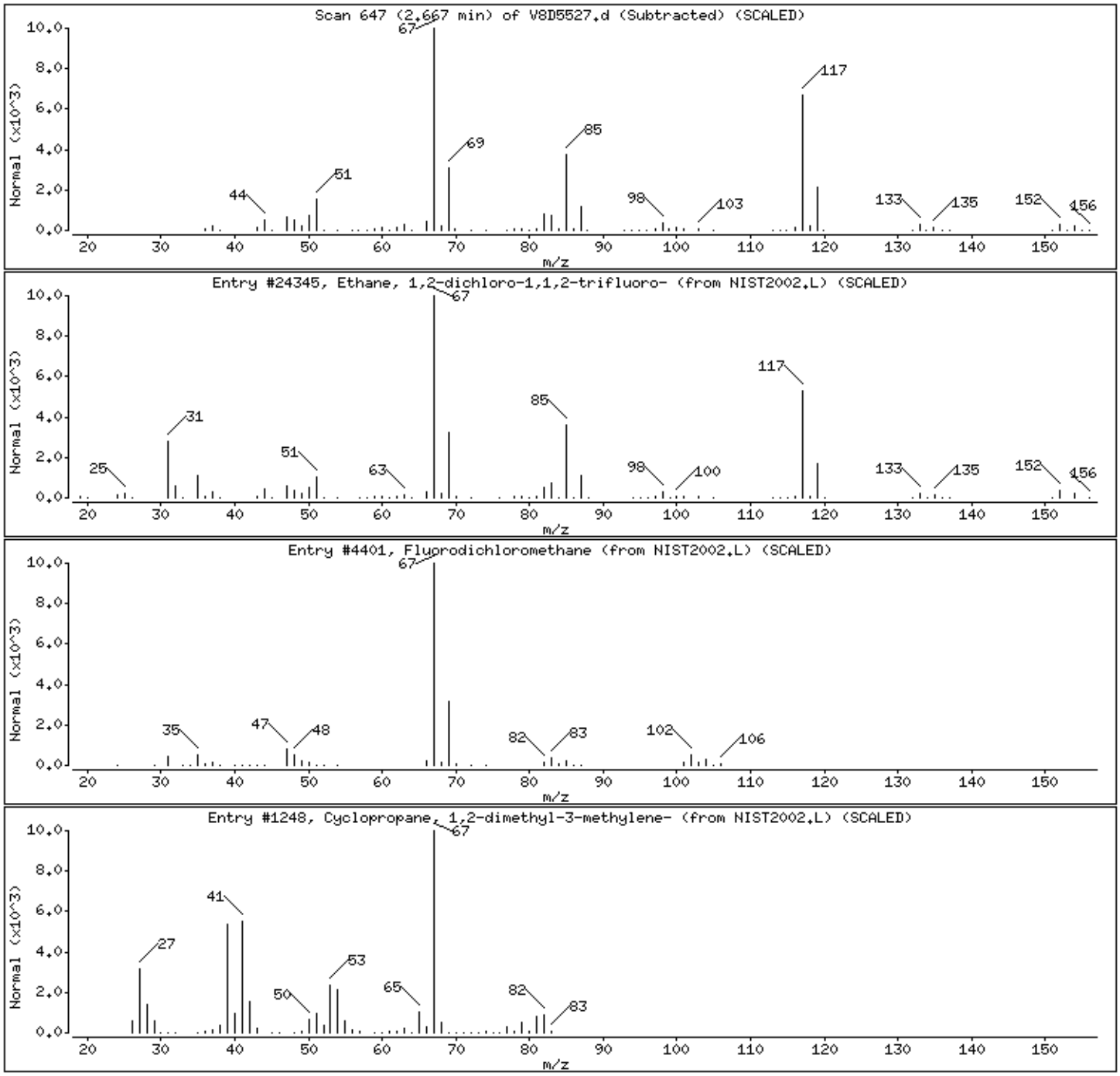
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

Sample Info: 5ML,N1055-12A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	25	CHCl2F	102
Cyclopropane, 1,2-dimethyl-3-methylene-	62338-02-7	NIST2002.L	1248	25	C6H10	82



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Date : 19-JUN-2014 15:20

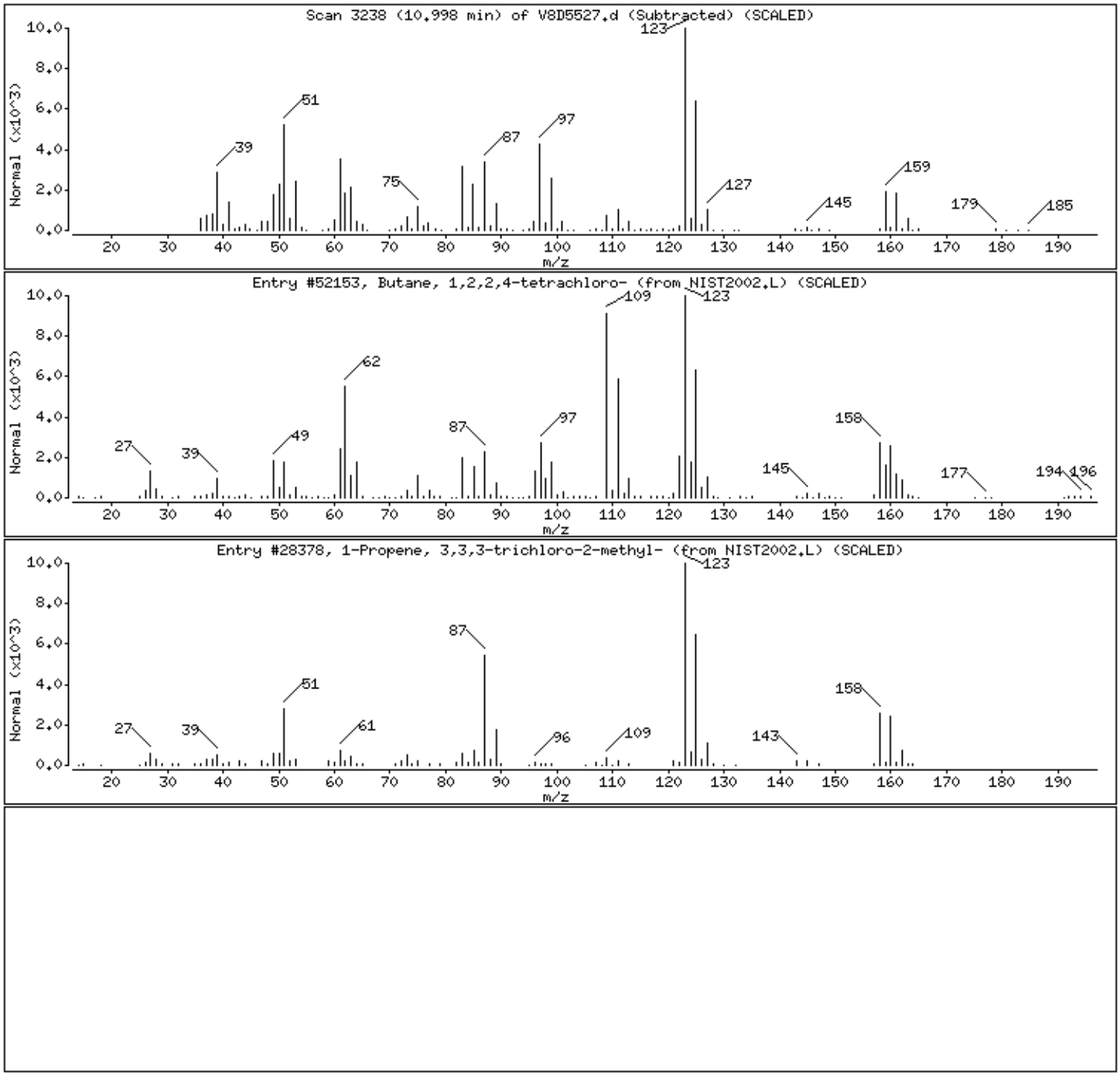
Client ID: MW-21R(3)_6/17/14 Instrument: V10.i

Sample Info: 5ML,N1055-12A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

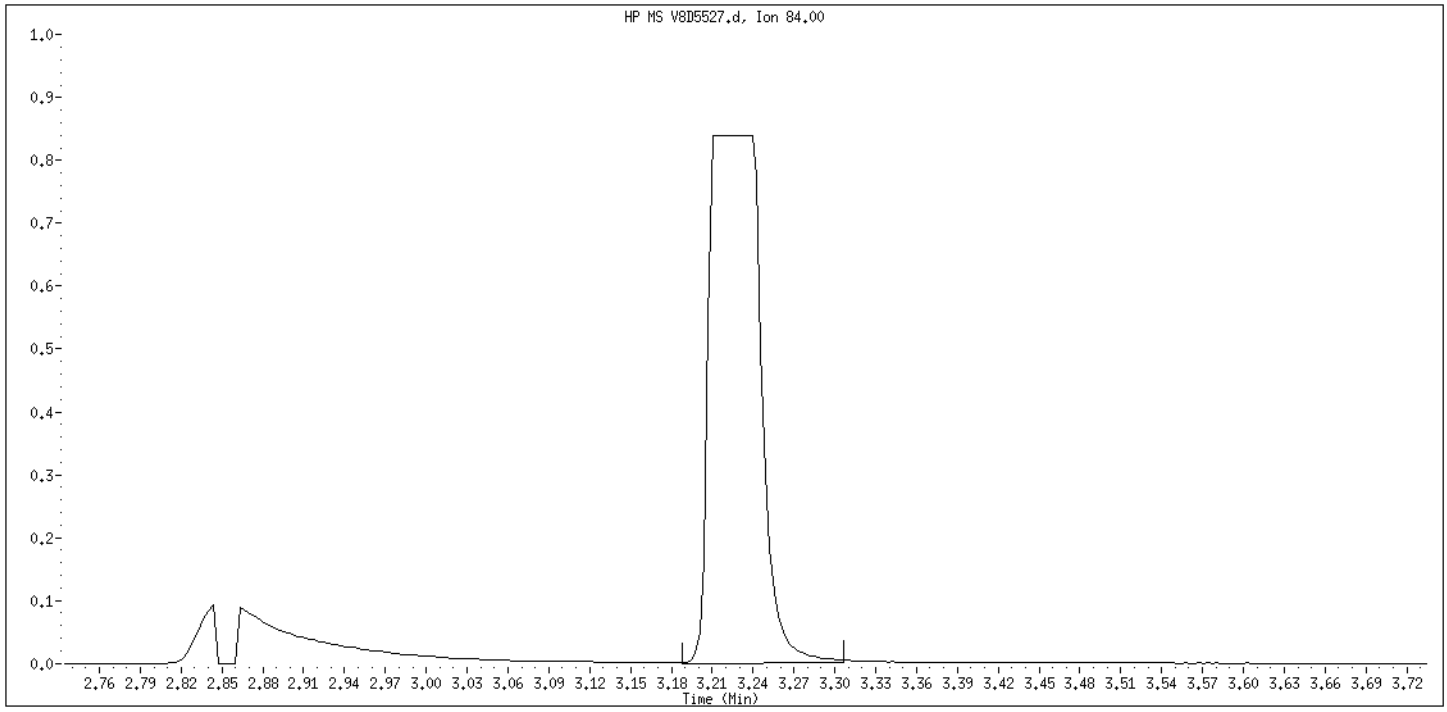
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butane, 1,2,2,4-tetrachloro-	42525-60-0	NIST2002.L	52153	37	C4H6Cl4	194
1-Propene, 3,3,3-trichloro-2-methyl-	4749-27-3	NIST2002.L	28378	23	C4H5Cl3	158



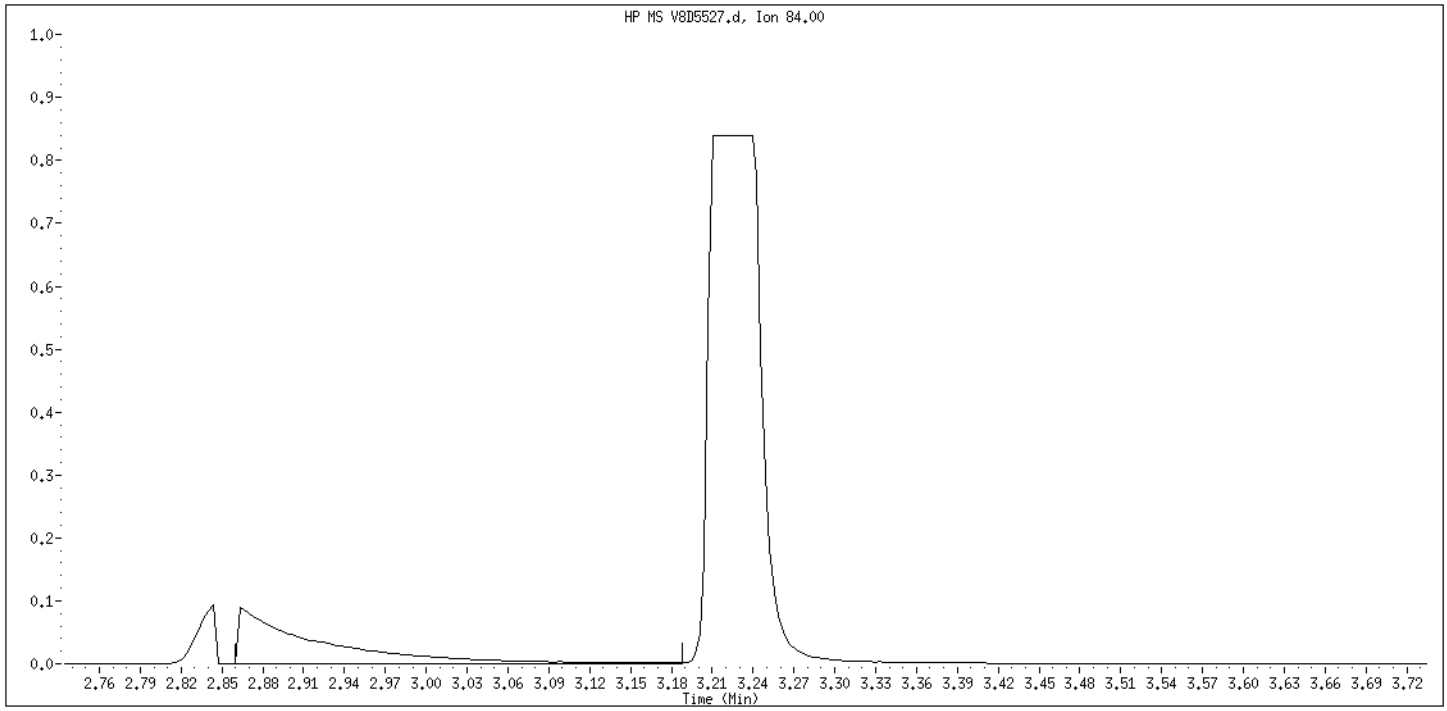
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Lab ID: N1055-12A Client ID: MW-21R(3)_6/17/14
Inj Date: 19-JUN-2014 15:20 Operator: WL SRC: LIMS

Manual Integration Methylene Chloride Ret Time: 3.210 min, Range: 3.188 to 3.307 min Response: 21847983



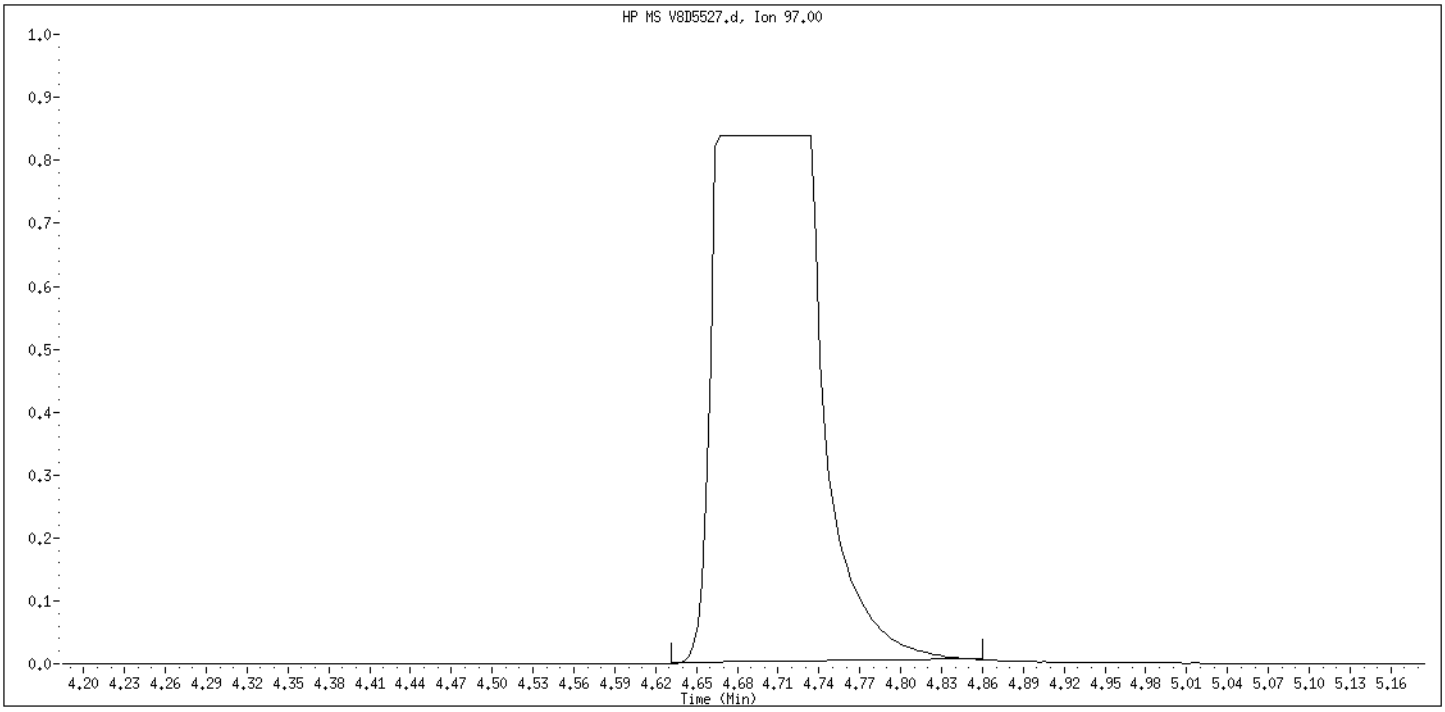
Original Integration Methylene Chloride Ret Time: 2.863 min, Range: 2.860 to 3.188 min Response: 3516763



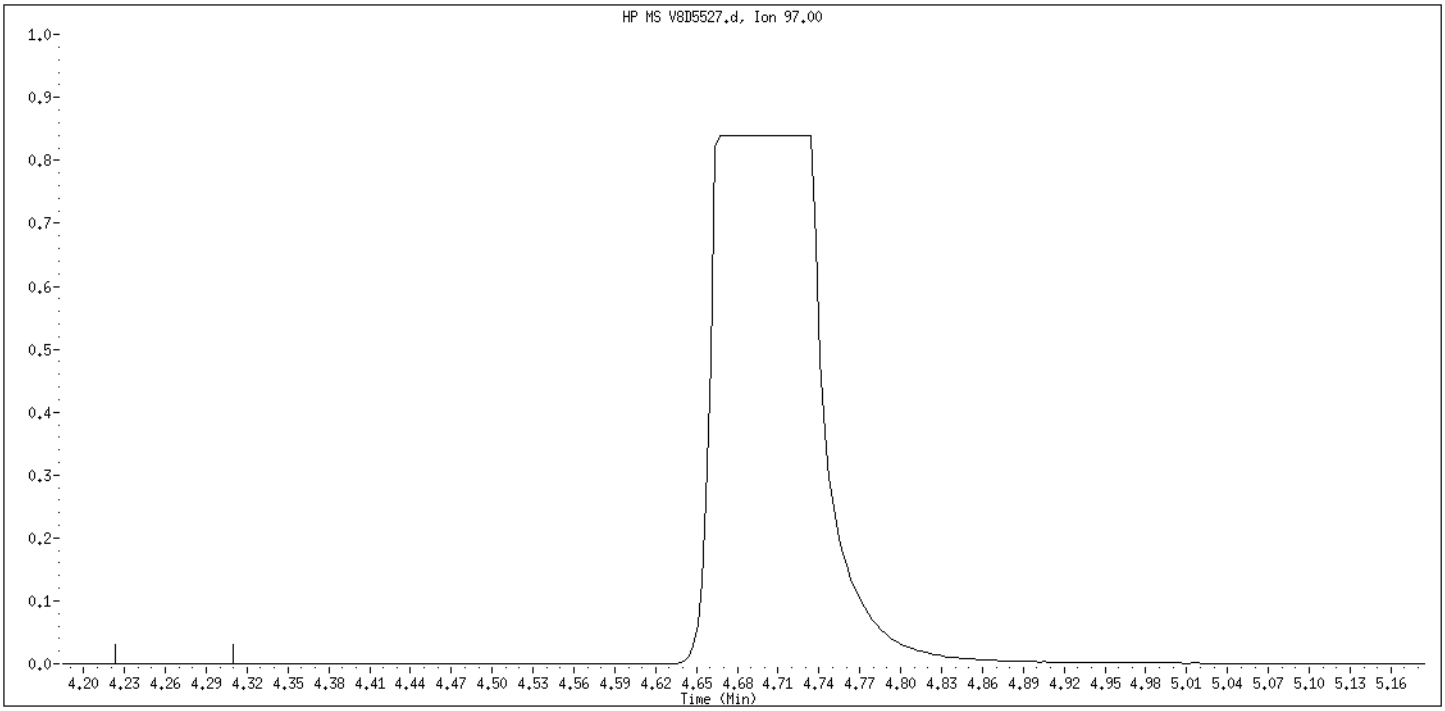
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Lab ID: N1055-12A Client ID: MW-21R(3)_6/17/14
Inj Date: 19-JUN-2014 15:20 Operator: WL SRC: LIMS

Manual Integration 1,1,1-Trichloroethane Ret Time: 4.667 min, Range: 4.632 to 4.860 min Response: 45538891



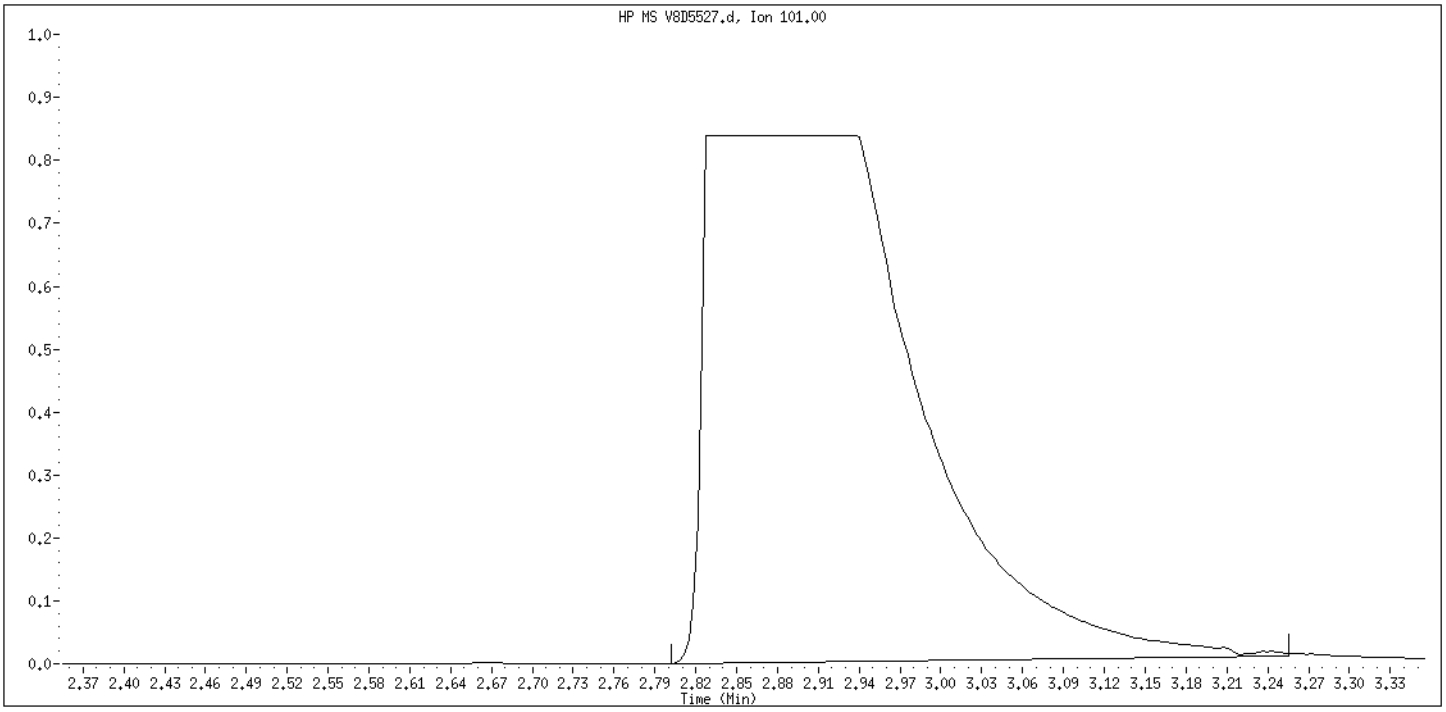
Original Integration 1,1,1-Trichloroethane Ret Time: 4.255 min, Range: 4.223 to 4.310 min Response: 10798



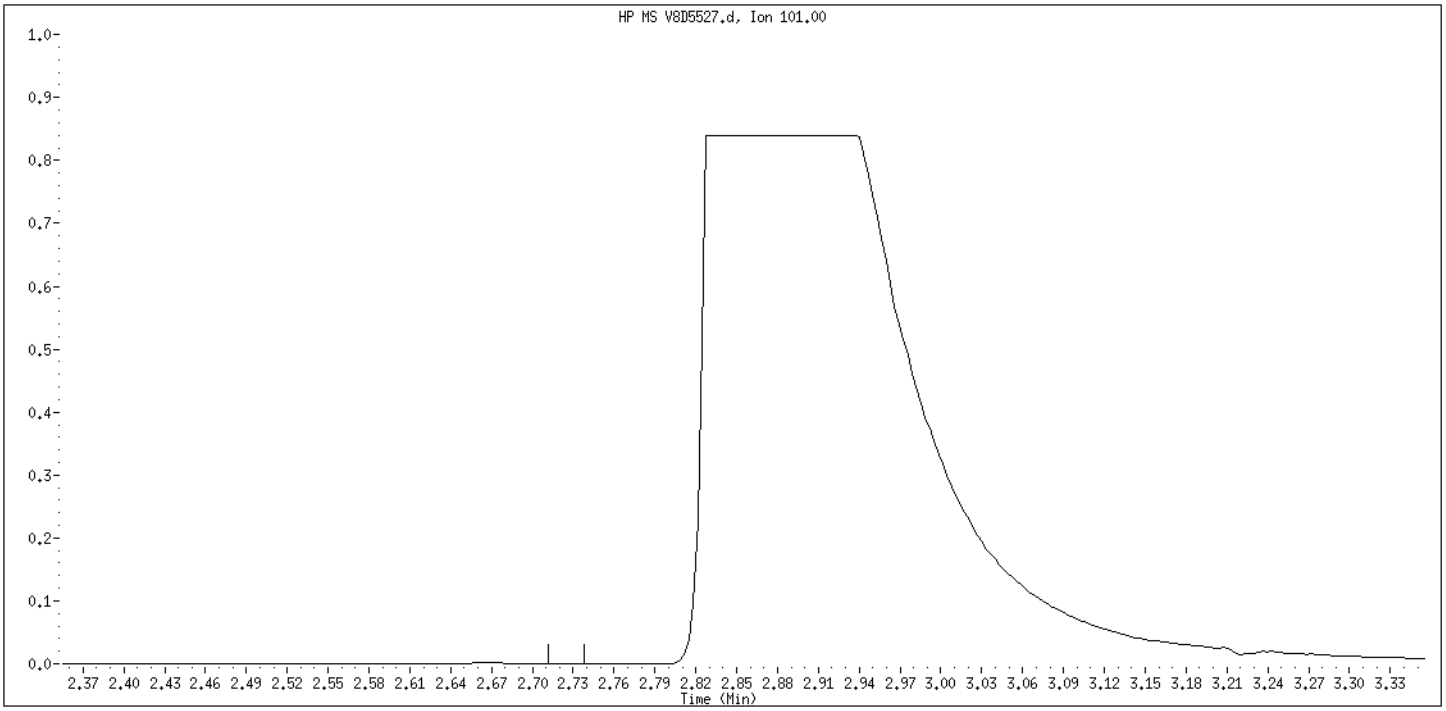
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5527.d

Lab ID: N1055-12A Client ID: MW-21R(3)_6/17/14
Inj Date: 19-JUN-2014 15:20 Operator: WL SRC: LIMS

Manual Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 2.828 min, Range: 2.802 to 3.255 min Response: 90185887



Original Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 2.715 min, Range: 2.712 to 2.738 min Response: 2012



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R(3)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5662.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
74-87-3	Chloromethane	1000	U
75-01-4	Vinyl chloride	1000	U
74-83-9	Bromomethane	1000	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	1000	U
75-35-4	1,1-Dichloroethene	1000	U
67-64-1	Acetone	5000	U
74-88-4	Iodomethane	1000	U
75-15-0	Carbon disulfide	1000	U
75-09-2	Methylene chloride	18000	D
156-60-5	trans-1,2-Dichloroethene	1000	U
1634-04-4	Methyl tert-butyl ether	1000	U
75-34-3	1,1-Dichloroethane	3100	D
108-05-4	Vinyl acetate	1000	U
78-93-3	2-Butanone	5000	U
156-59-2	cis-1,2-Dichloroethene	1000	U
594-20-7	2,2-Dichloropropane	1000	U
74-97-5	Bromochloromethane	1000	U
67-66-3	Chloroform	1000	U
71-55-6	1,1,1-Trichloroethane	69000	D
563-58-6	1,1-Dichloropropene	1000	U
56-23-5	Carbon tetrachloride	1000	U
107-06-2	1,2-Dichloroethane	1000	U
71-43-2	Benzene	1000	U
79-01-6	Trichloroethene	28000	D
78-87-5	1,2-Dichloropropane	1000	U
74-95-3	Dibromomethane	1000	U
75-27-4	Bromodichloromethane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
108-10-1	4-Methyl-2-pentanone	5000	U
108-88-3	Toluene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
142-28-9	1,3-Dichloropropane	1000	U

EPA SAMPLE NO.
MW-21R(3)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5662.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
591-78-6	2-Hexanone	5000	U
124-48-1	Dibromochloromethane	1000	U
106-93-4	1,2-Dibromoethane	1000	U
108-90-7	Chlorobenzene	1400	D
630-20-6	1,1,1,2-Tetrachloroethane	1000	U
100-41-4	Ethylbenzene	1000	U
179601-23-1	m,p-Xylene	1000	U
95-47-6	o-Xylene	1000	U
1330-20-7	Xylene (Total)	1000	U
100-42-5	Styrene	1000	U
75-25-2	Bromoform	1000	U
98-82-8	Isopropylbenzene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-86-1	Bromobenzene	1000	U
96-18-4	1,2,3-Trichloropropane	1000	U
103-65-1	n-Propylbenzene	1000	U
95-49-8	2-Chlorotoluene	1000	U
108-67-8	1,3,5-Trimethylbenzene	1000	U
106-43-4	4-Chlorotoluene	1000	U
98-06-6	tert-Butylbenzene	1000	U
95-63-6	1,2,4-Trimethylbenzene	1000	U
135-98-8	sec-Butylbenzene	1000	U
99-87-6	4-Isopropyltoluene	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
104-51-8	n-Butylbenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
96-12-8	1,2-Dibromo-3-chloropropane	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
87-68-3	Hexachlorobutadiene	1000	U
87-61-6	1,2,3-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	130000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R(3)_6/17/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5662.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5662.d
Lab Smp Id: N1055-12ADL Client Smp ID: MW-21R(3)_6/17/14DL
Inj Date : 23-JUN-2014 18:21
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-12ADL,,77721,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 76
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	1000.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	263285	127.310	130000
	18 Methylene Chloride	84	3.229	3.232	(0.616)	27447	18.1737	18000(H)
	23 1,1-Dichloroethane	63	3.789	3.785	(0.723)	12784	3.14348	3100
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	68581	53.9379	54
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	285058	69.3191	69000
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	10615	56.1245	56
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	145201	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.062)	43442	27.6182	28000
$	58 Toluene-d8	98	6.715	6.718	(0.817)	205358	47.6357	48
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	217619	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	5397	1.35940	1400(Q)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	137886	46.9230	47
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	114894	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d
Report Date: 27-Jun-2014 13:32

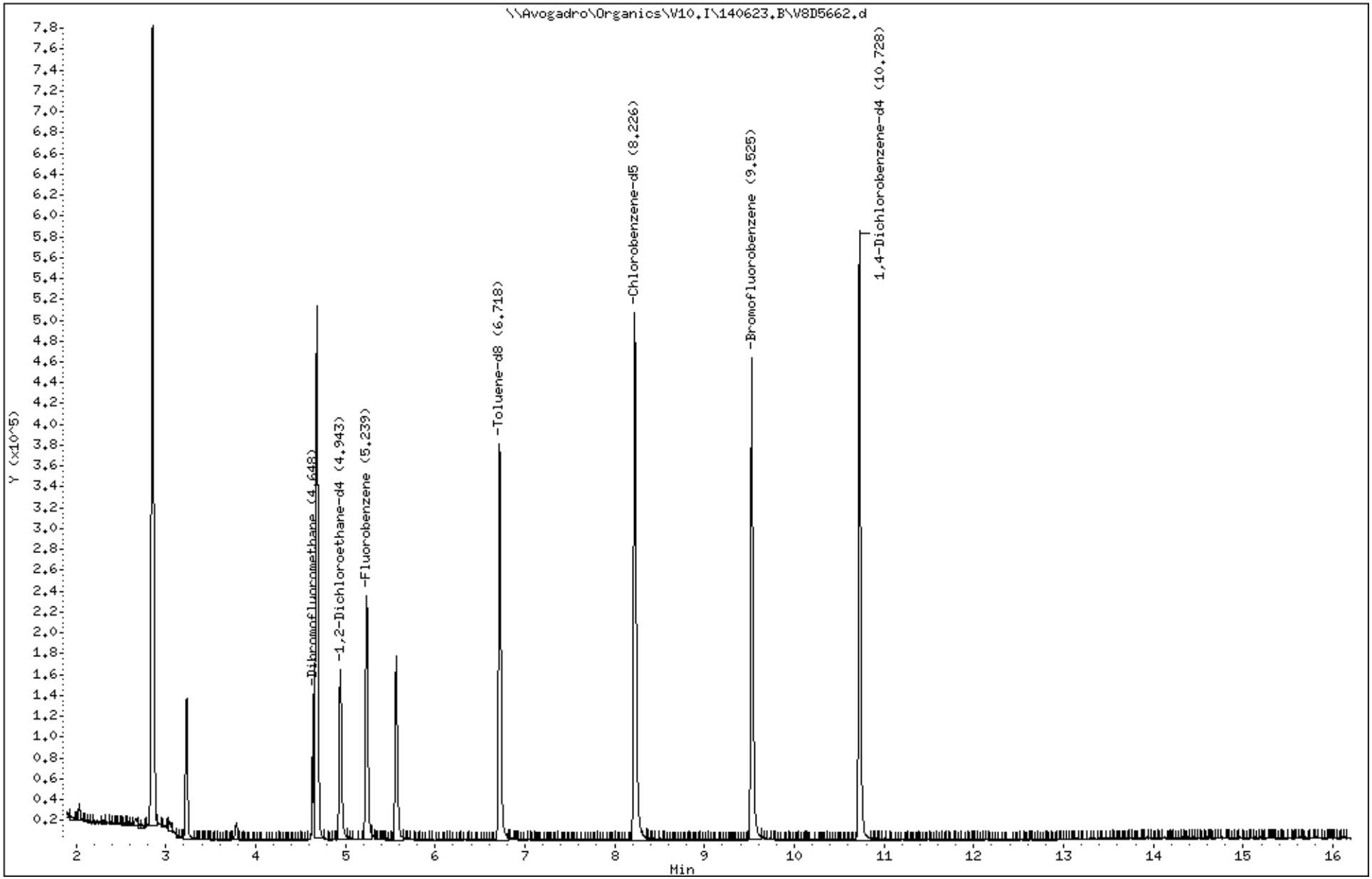
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5662.d
Lab Smp Id: N1055-12ADL Client Smp ID: MW-21R(3)_6/17/14DL
Inj Date : 23-JUN-2014 18:21
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-12ADL,,77721,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 76
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d
Date : 23-JUN-2014 18:21
Client ID: MW-21R(3)_6/17/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-12ADL,,77721,1000
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d

Date : 23-JUN-2014 18:21

Client ID: MW-21R(3)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-12ADL,,77721,1000

Purge Volume: 5.0

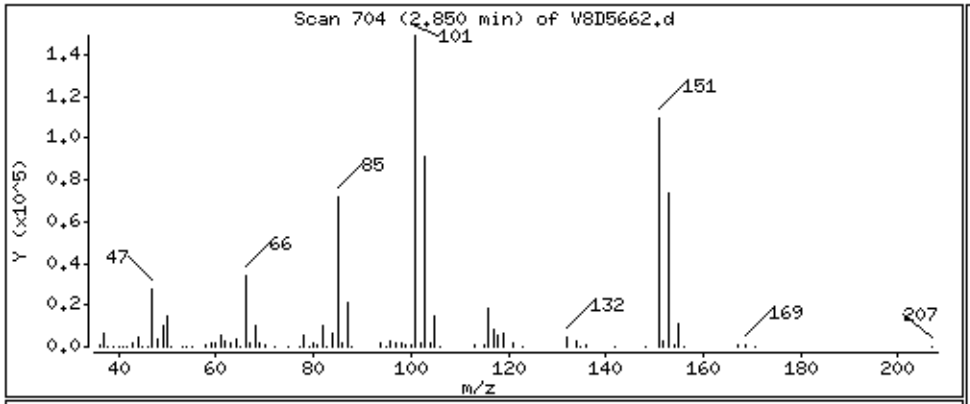
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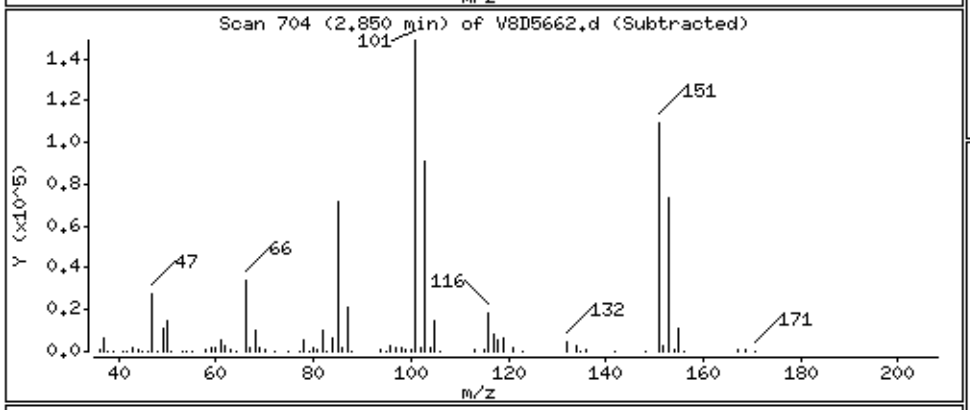
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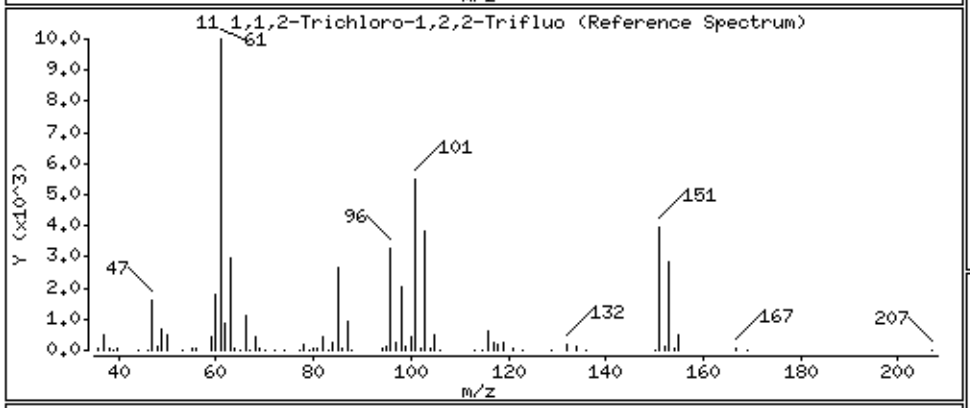
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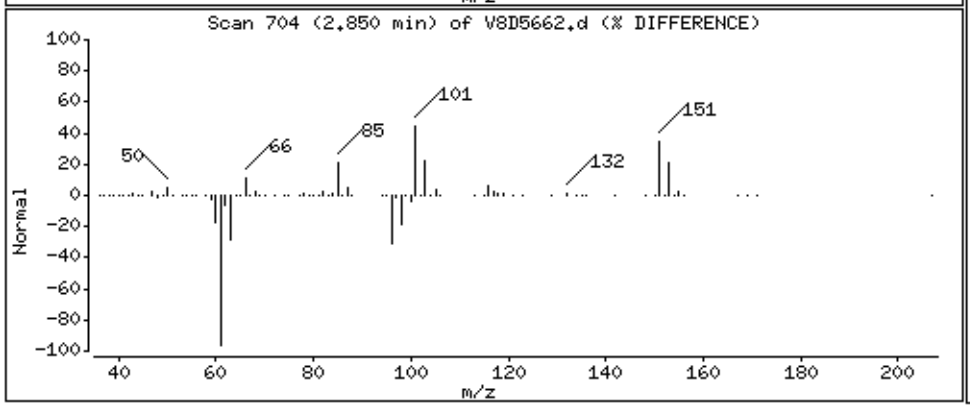
11 1,1,2-Trichloro-1,2,2-Trifluo

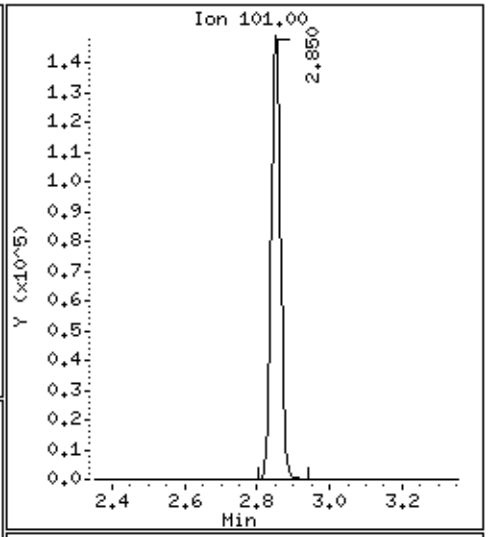
Concentration: 130000 ug/L

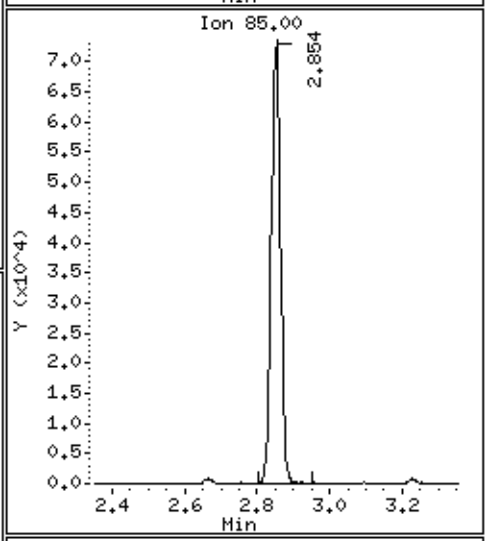


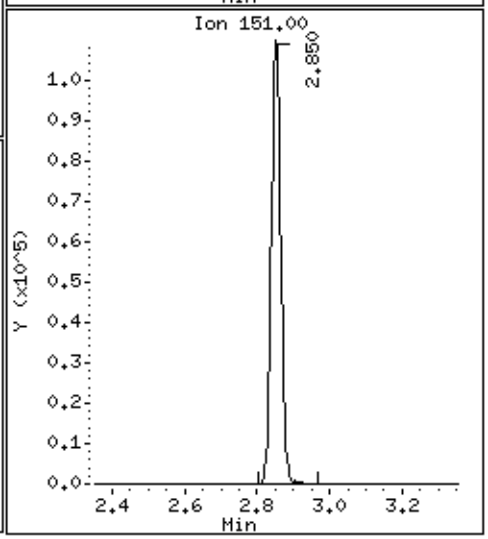












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d

Date : 23-JUN-2014 18:21

Client ID: MW-21R(3)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-12ADL,,77721,1000

Purge Volume: 5.0

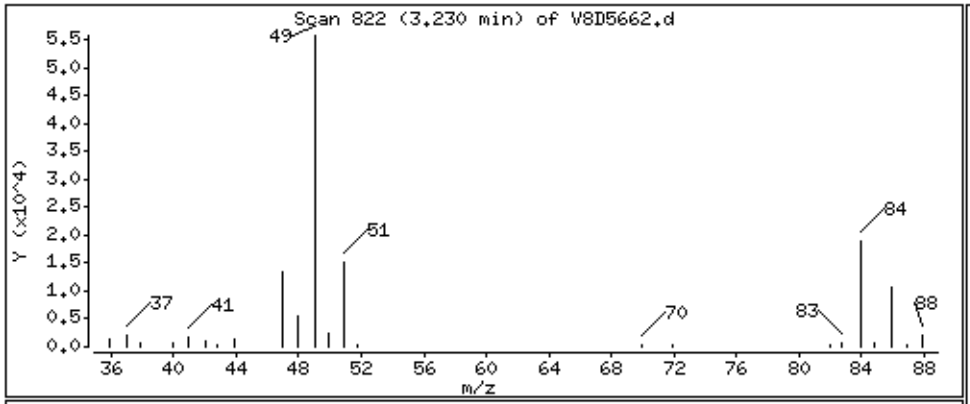
Operator: WL SRC: LIMS

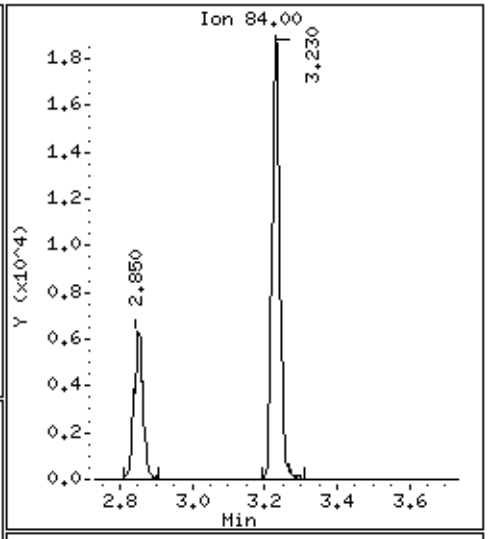
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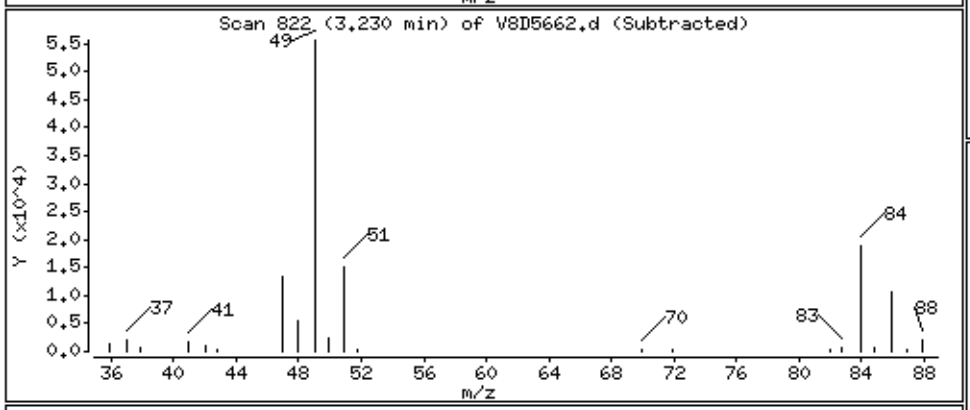
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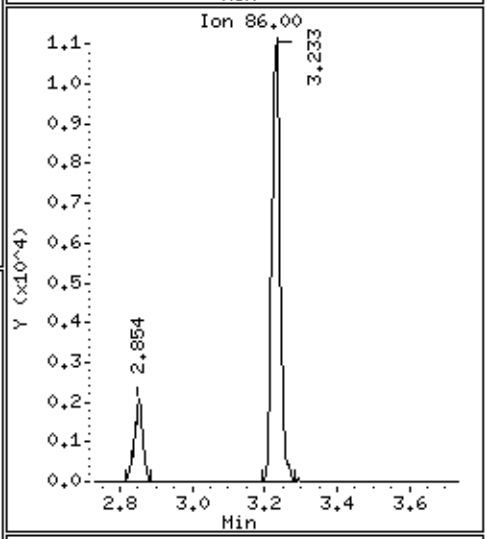
18 Methylene Chloride

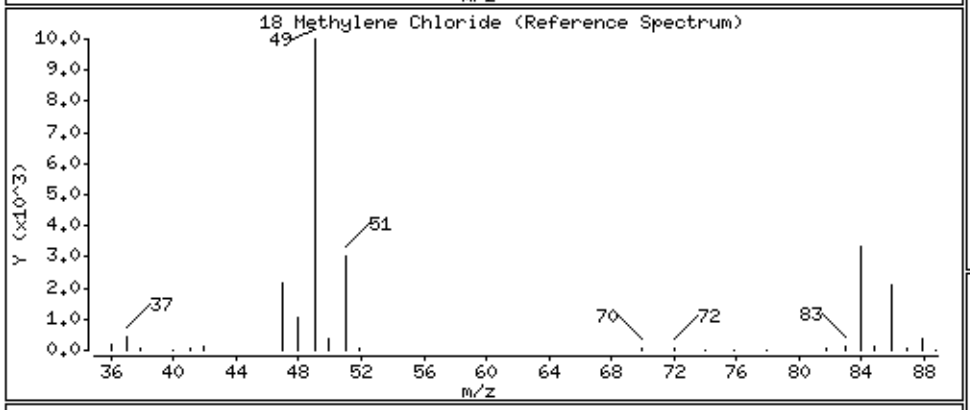
Concentration: 18000 ug/L

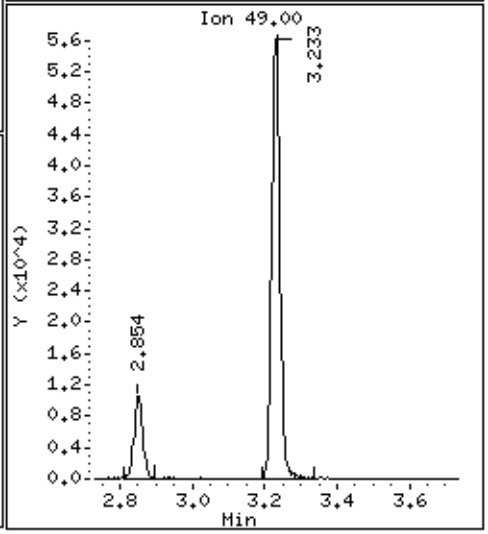


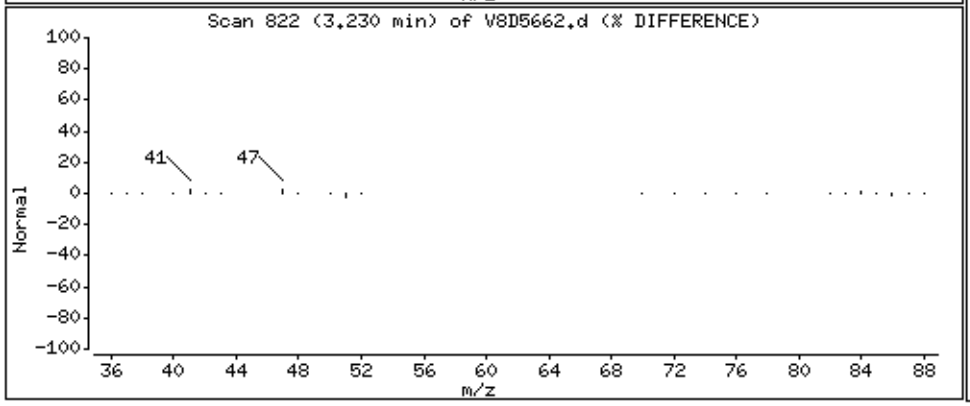












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d

Date : 23-JUN-2014 18:21

Client ID: MW-21R(3)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-12ADL,,77721,1000

Purge Volume: 5.0

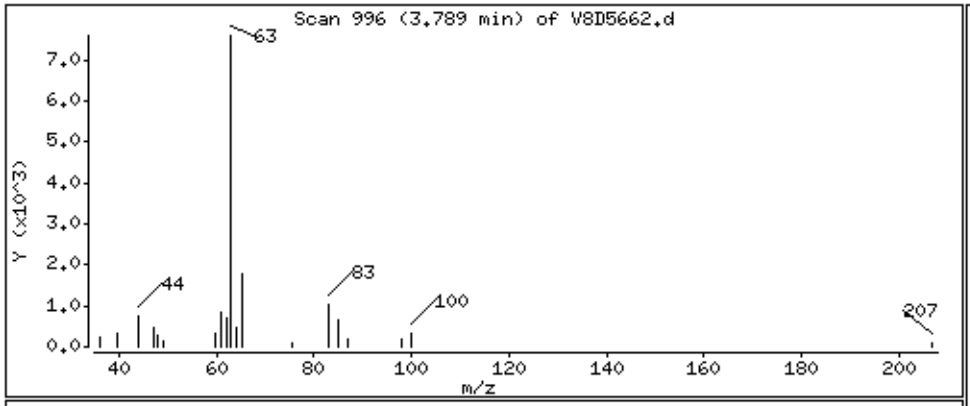
Operator: WL SRC: LIMS

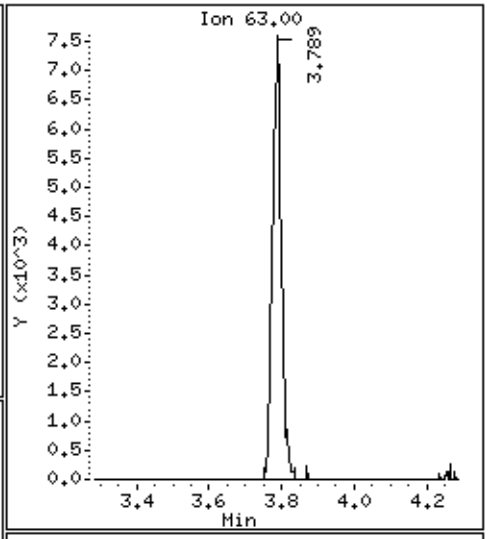
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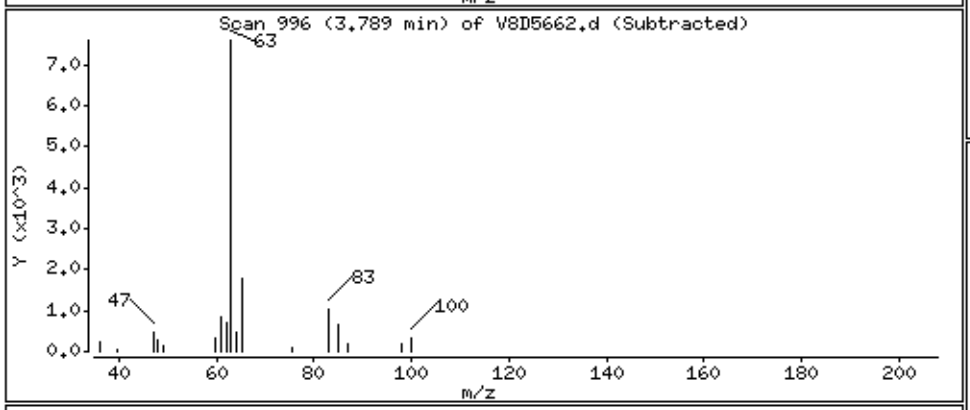
Column diameter: 0.25

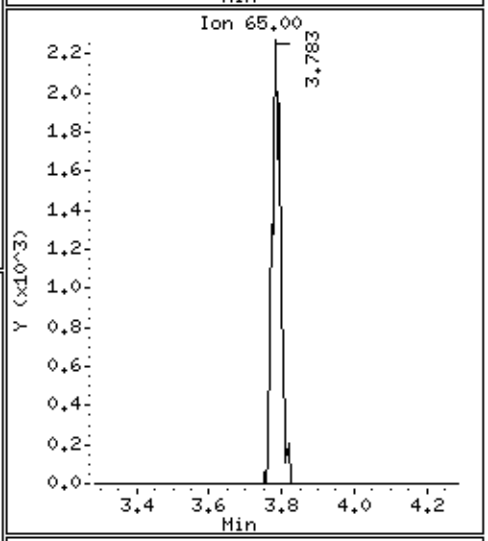
23 1,1-Dichloroethane

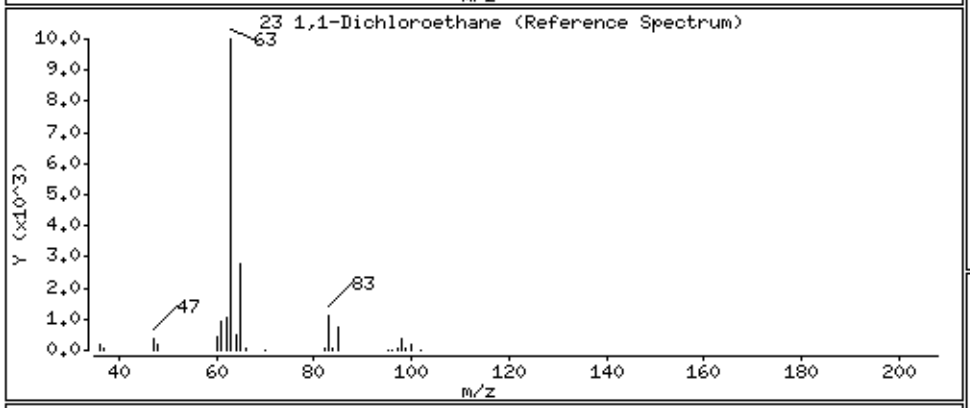
Concentration: 3100 ug/L

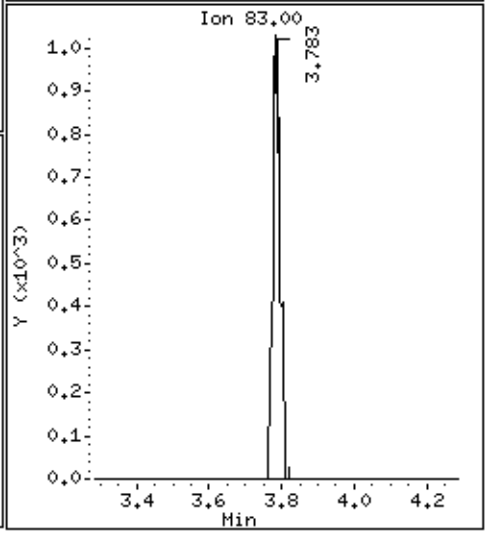


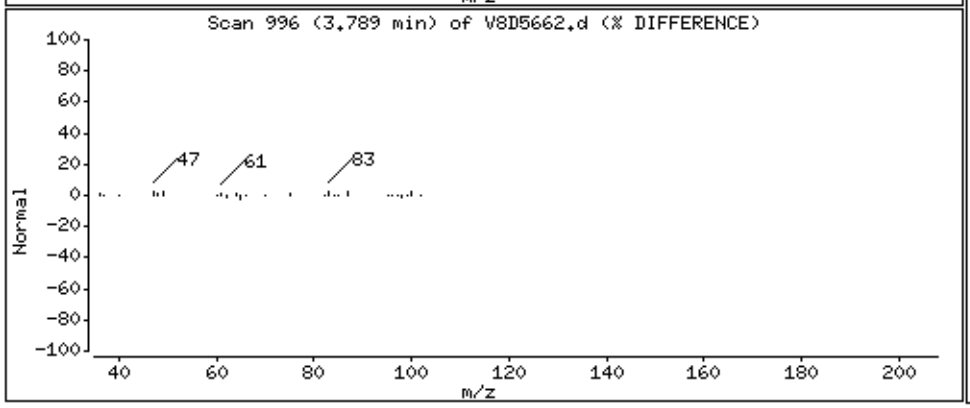












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d

Date : 23-JUN-2014 18:21

Client ID: MW-21R(3)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-12ADL,,77721,1000

Purge Volume: 5.0

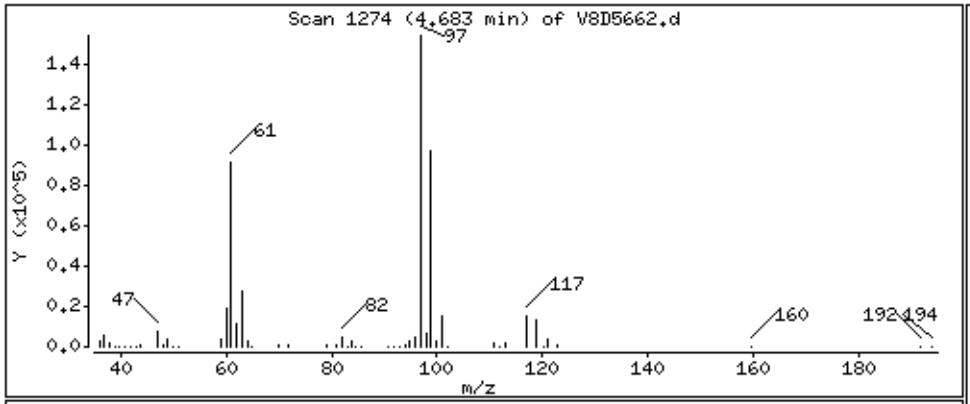
Operator: WL SRC: LIMS

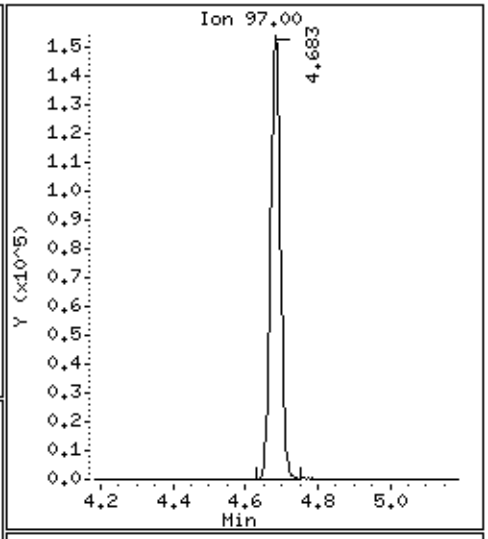
Column phase: DB-624

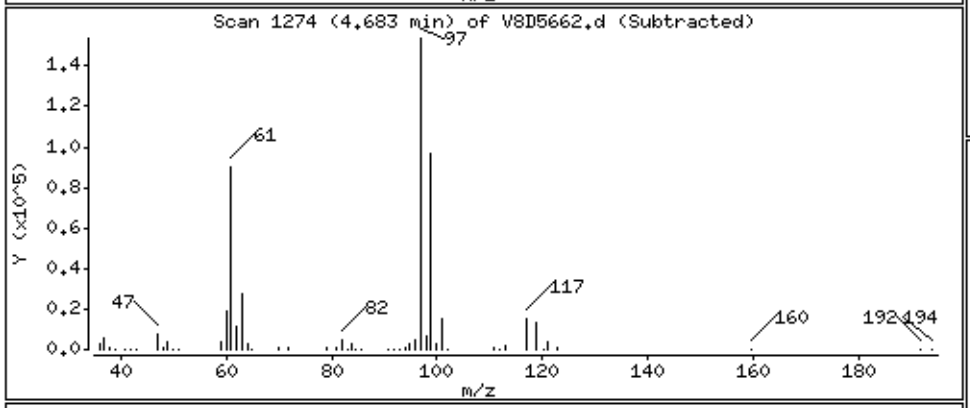
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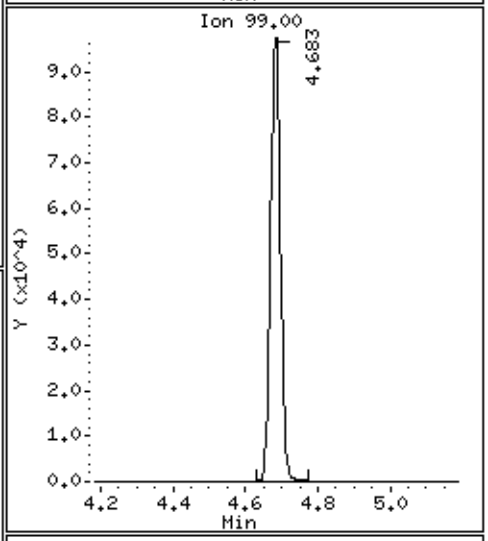
37 1,1,1-Trichloroethane

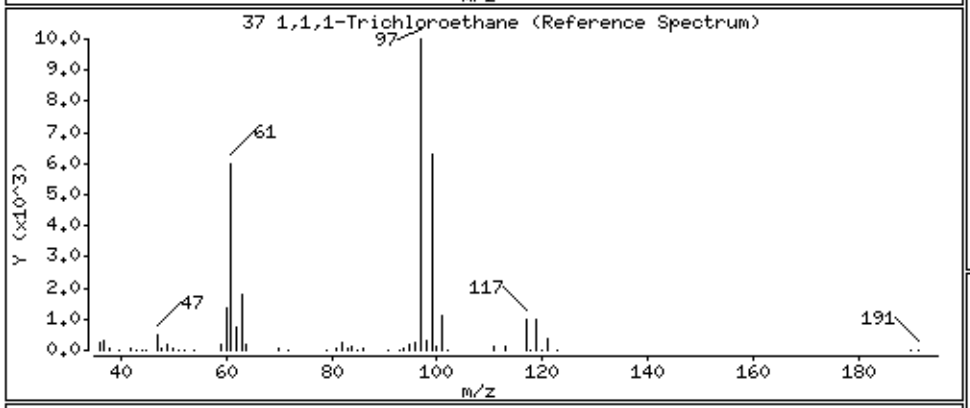
Concentration: 69000 ug/L

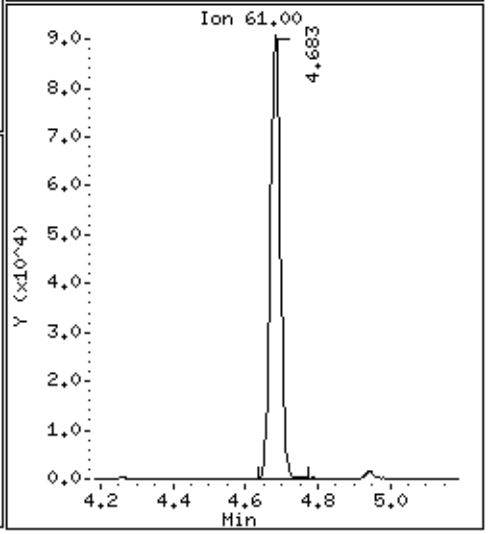


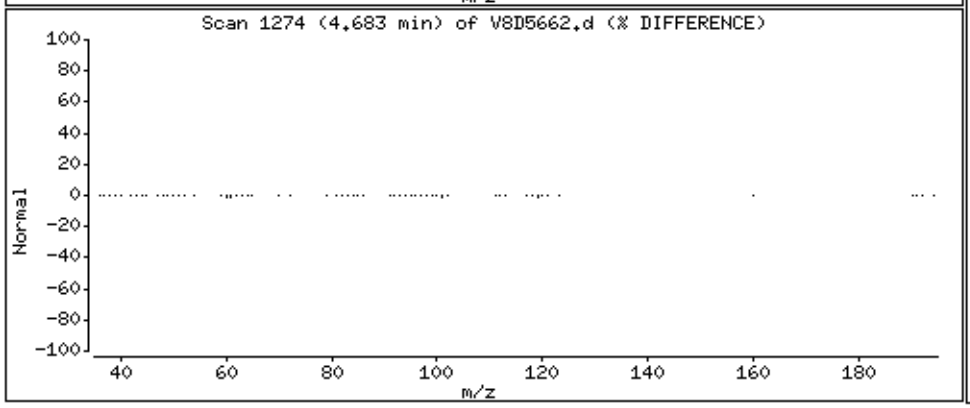












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d

Date : 23-JUN-2014 18:21

Client ID: MW-21R(3)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-12ADL,,77721,1000

Purge Volume: 5.0

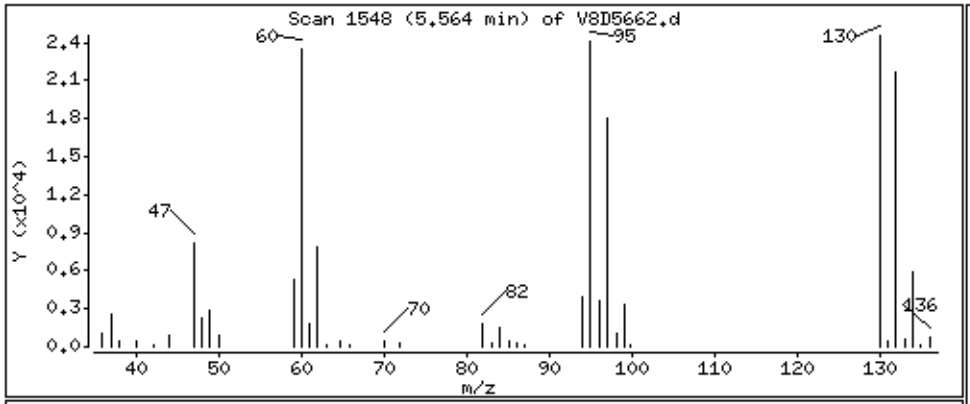
Operator: WL SRC: LIMS

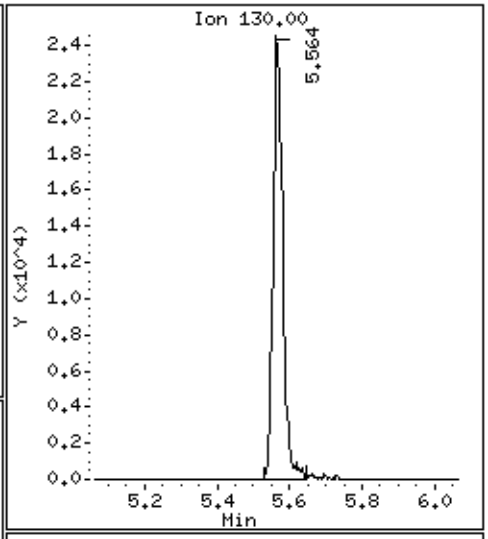
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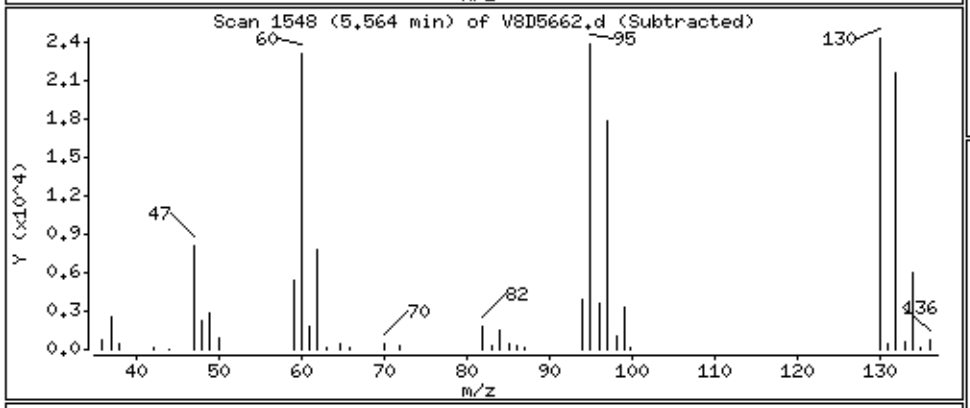
Column diameter: 0.25

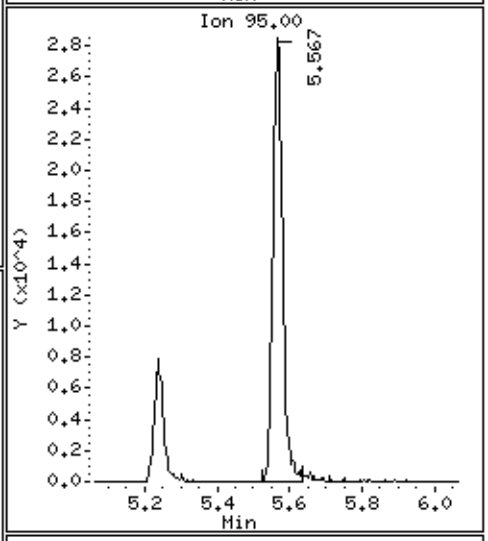
47 Trichloroethene

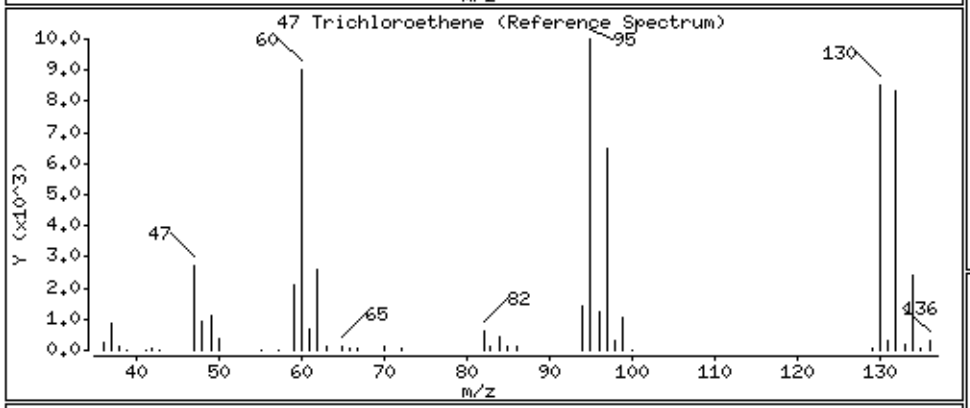
Concentration: 28000 ug/L

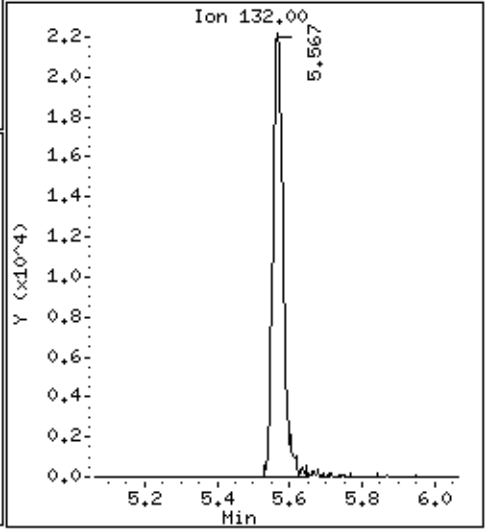


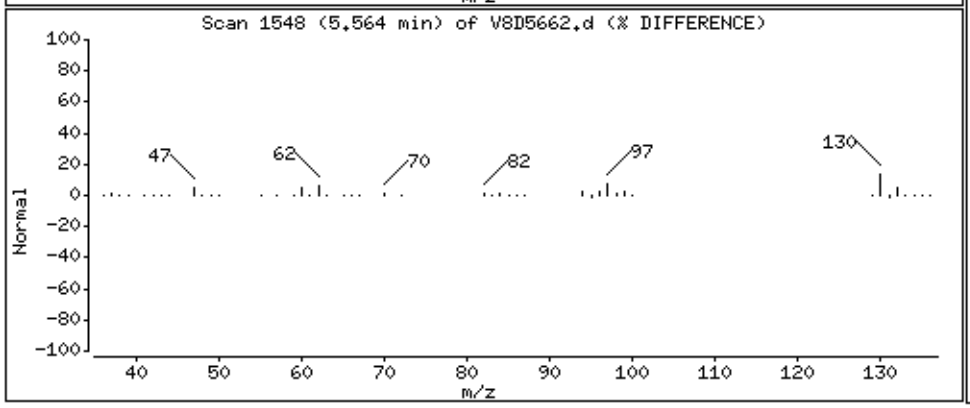












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5662.d

Date : 23-JUN-2014 18:21

Client ID: MW-21R(3)_6/17/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-12ADL,,77721,1000

Purge Volume: 5.0

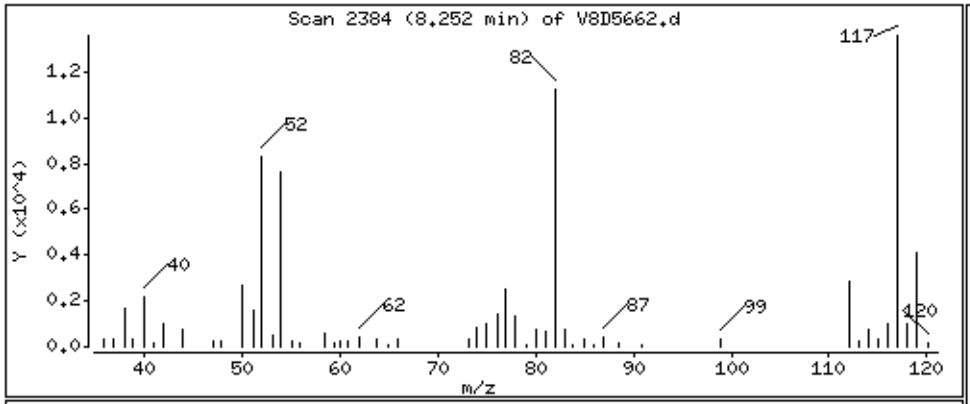
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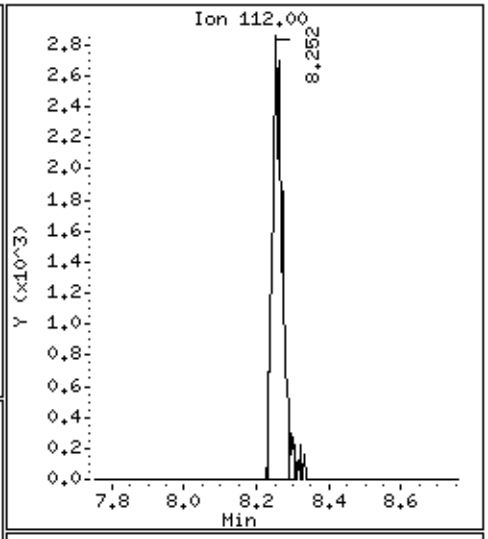
Column phase: DB-624

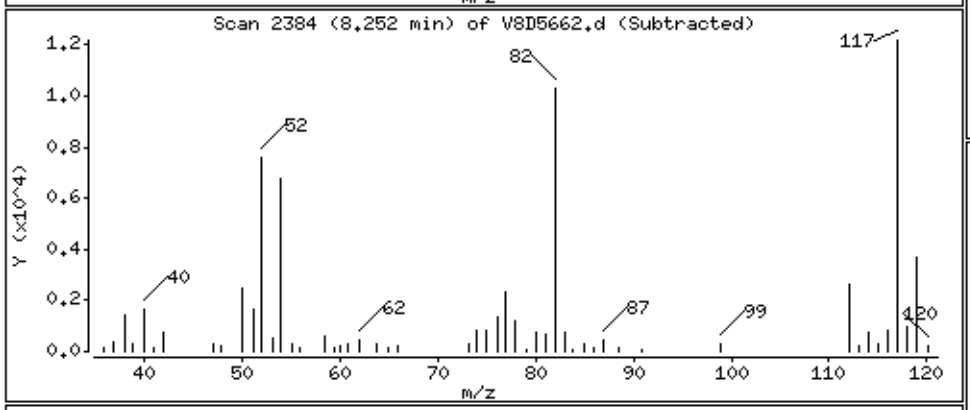
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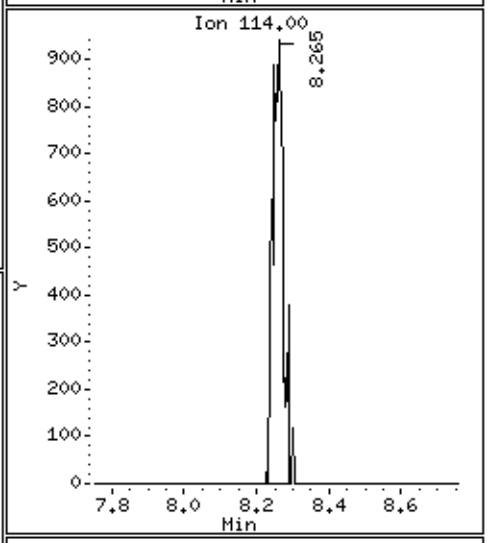
70 Chlorobenzene

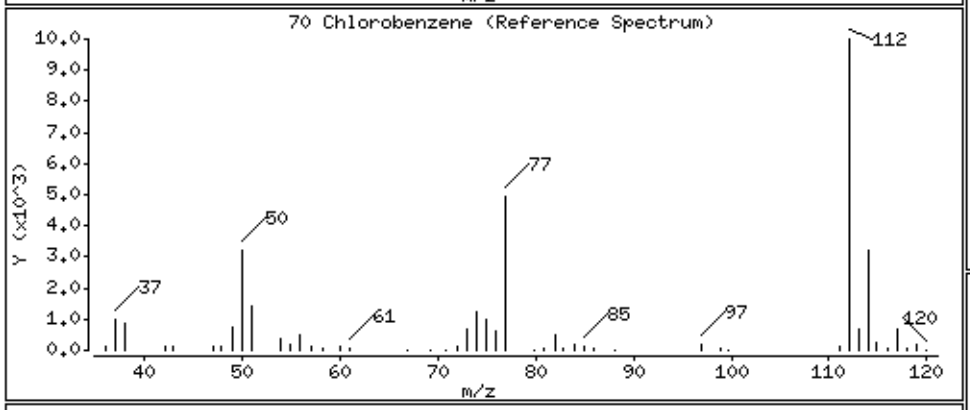
Concentration: 1400 ug/L

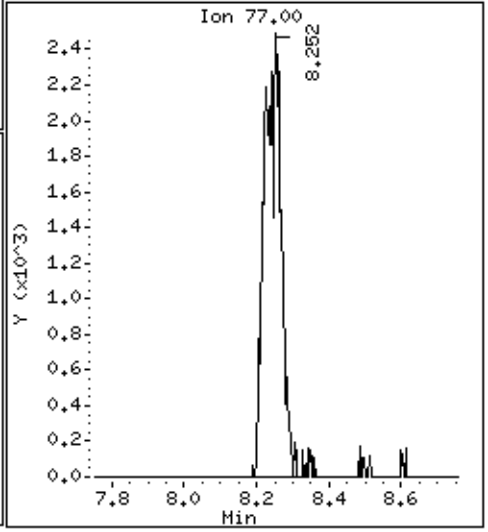


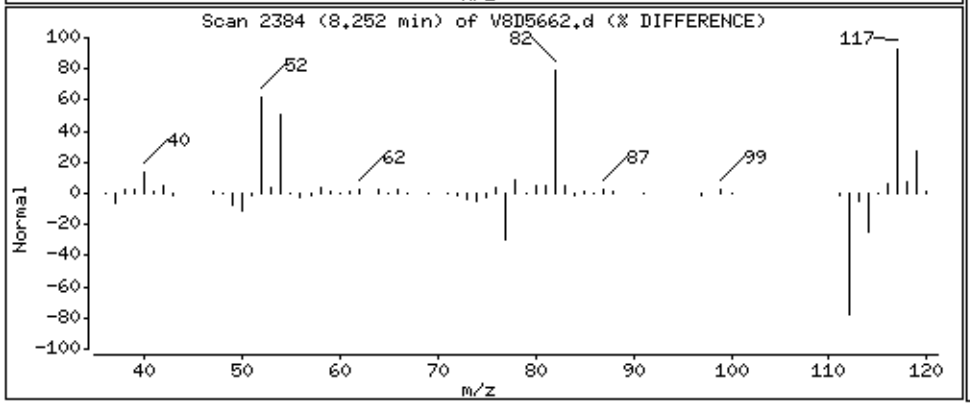












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5655.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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	1.5	
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	12	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	7.2	
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	2.7	
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	9.2	
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	0.51	J
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

EPA SAMPLE NO.

MW-10S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5655.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.2	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-10S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5655.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	21	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5655.d
Lab Smp Id: N1055-13A Client Smp ID: MW-10S_6/16/14
Inj Date : 23-JUN-2014 15:07
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-13A,,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

			QUANT SIG						CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/L)	FINAL (ug/L)
	4	Vinyl Chloride	62	1.853	1.853	(0.354)	4117		1.53591	1.5(Q)
	11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.847	2.853	(0.544)	5676		1.18276	1.2
	23	1,1-Dichloroethane	63	3.785	3.785	(0.723)	55697		12.4279	12
	28	cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	11971		7.23338	7.2(Q)
$	36	Dibromofluoromethane	113	4.647	4.641	(0.888)	74231		52.9783	53
	37	1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	12398		2.73586	2.7
$	42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	10976		52.6622	53
M	50	1,2-Dichloroethene (Total)	96				11971		7.23338	7.2
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	160010		50.0000	
	47	Trichloroethene	130	5.570	5.564	(1.064)	15961		9.20805	9.2
$	58	Toluene-d8	98	6.718	6.718	(0.817)	221746		48.1887	48
	59	Toluene	91	6.785	6.782	(1.296)	3219		0.51018	0.51
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	232289		50.0000	
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	150054		47.8389	48
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	121776		50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5655.d
Lab Smp Id: N1055-13A Client Smp ID: MW-10S_6/16/14
Inj Date : 23-JUN-2014 15:07
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-13A,,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 69
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

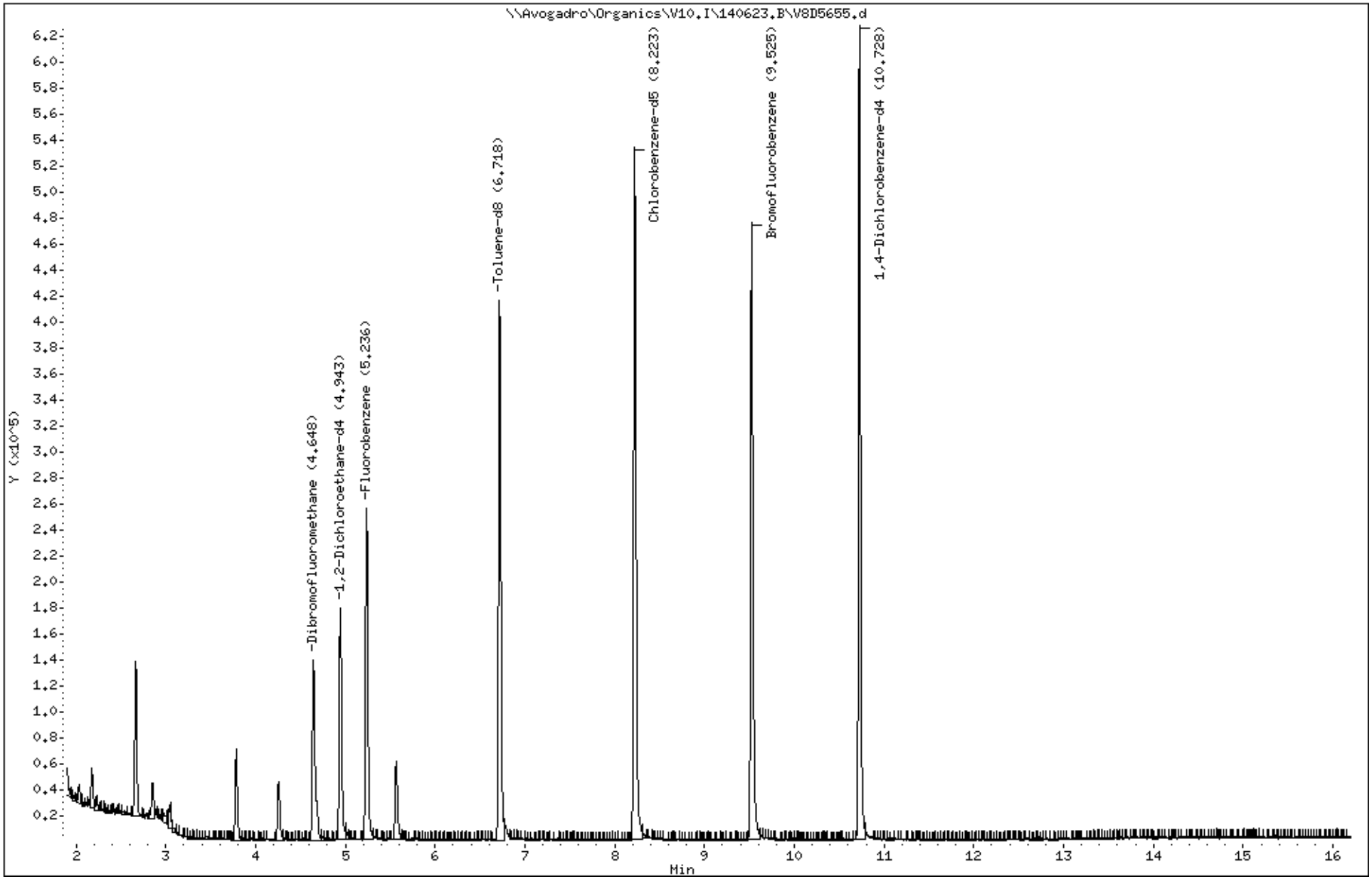
ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	466912	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.664	196215	21.0119210	21	87	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d
Date : 23-JUN-2014 15:07
Client ID: MW-10S_6/16/14
Sample Info: 5ML,N1055-13A,,77721
Purge Volume: 5.0
Column phase: DB-624

Instrument: V10.i
Operator: WL SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

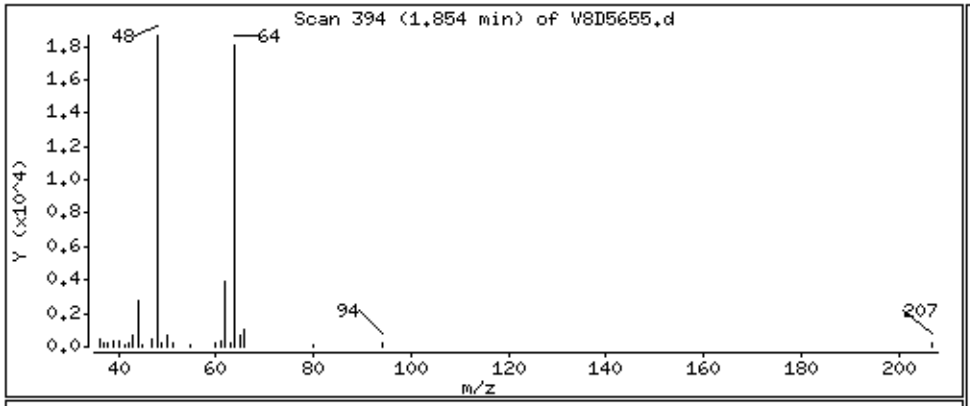
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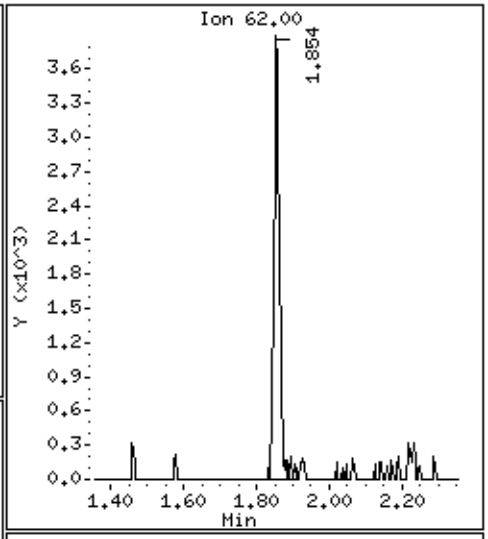
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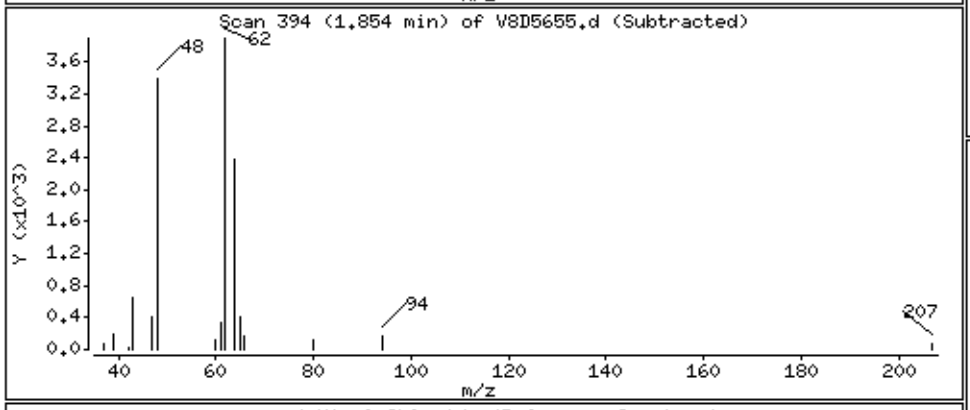
Purge Volume: 5.0 Operator: WL SRC: LIMS

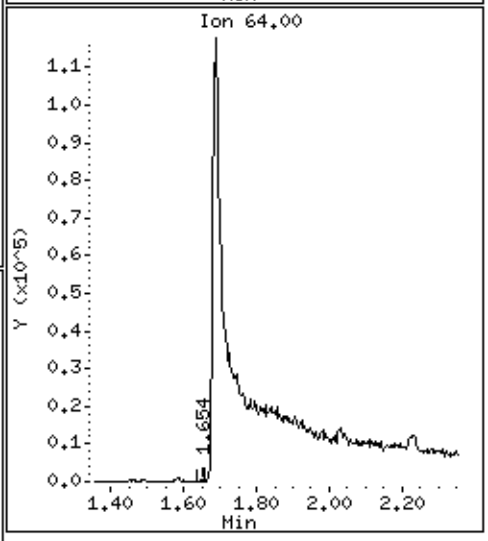
Column phase: DB-624 Column diameter: 0.25

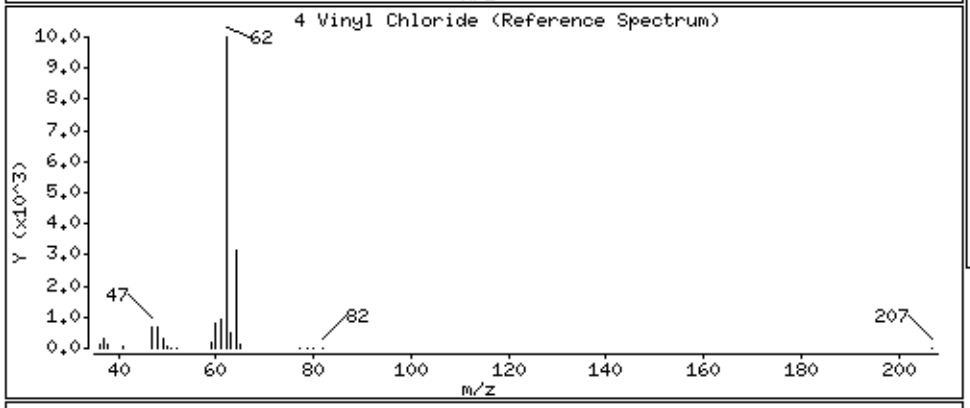
4 Vinyl Chloride Concentration: 1.5 ug/L

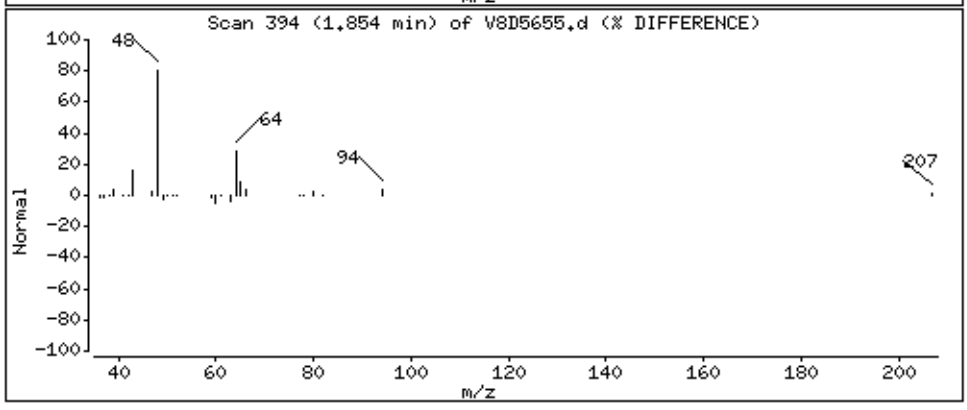












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

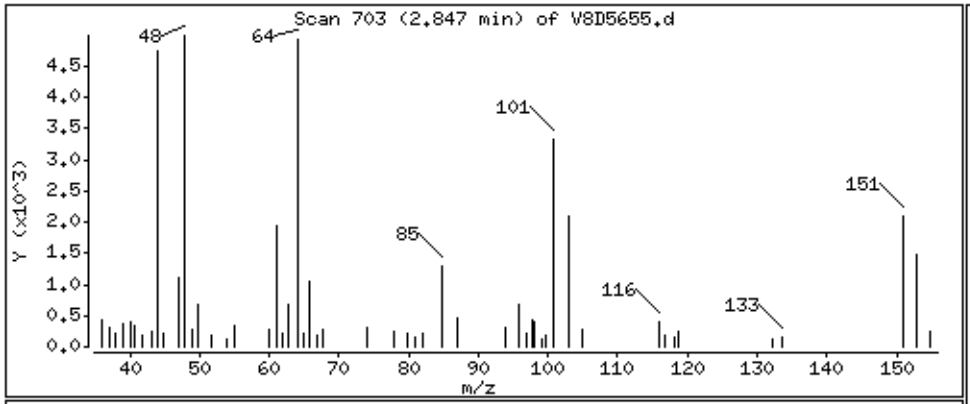
Client ID: MW-10S_6/16/14 Instrument: V10.i

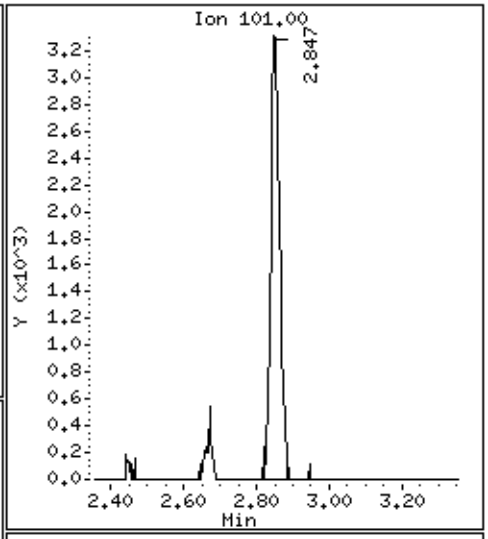
Sample Info: 5ML,N1055-13A,,77721

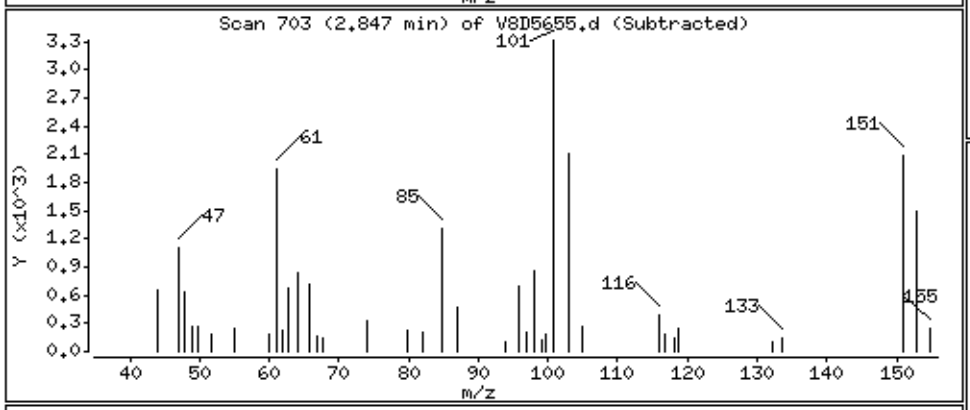
Purge Volume: 5.0 Operator: WL SRC: LIMS

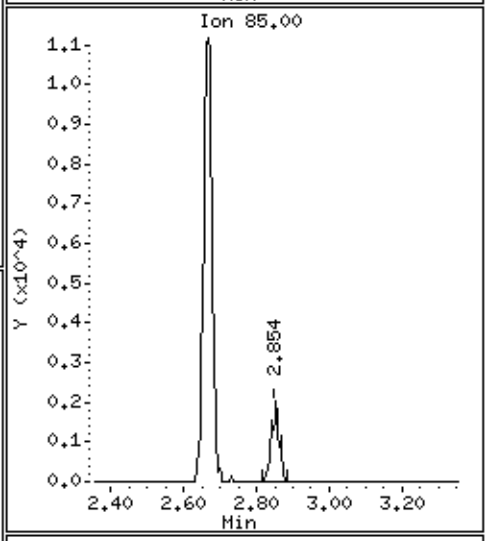
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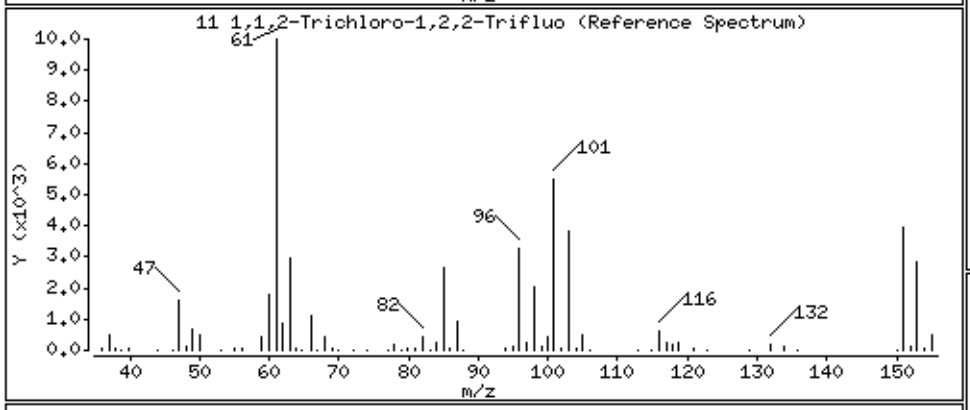
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 1.2 ug/L

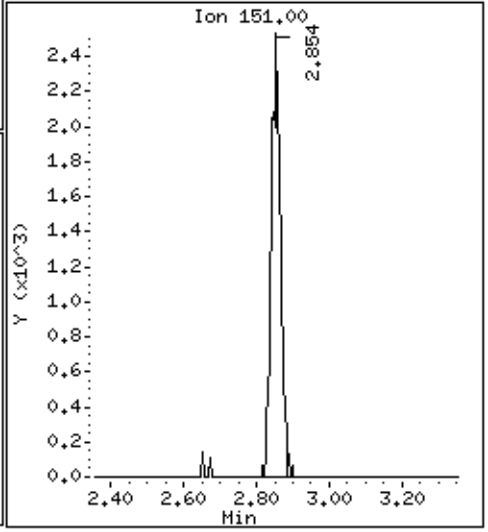


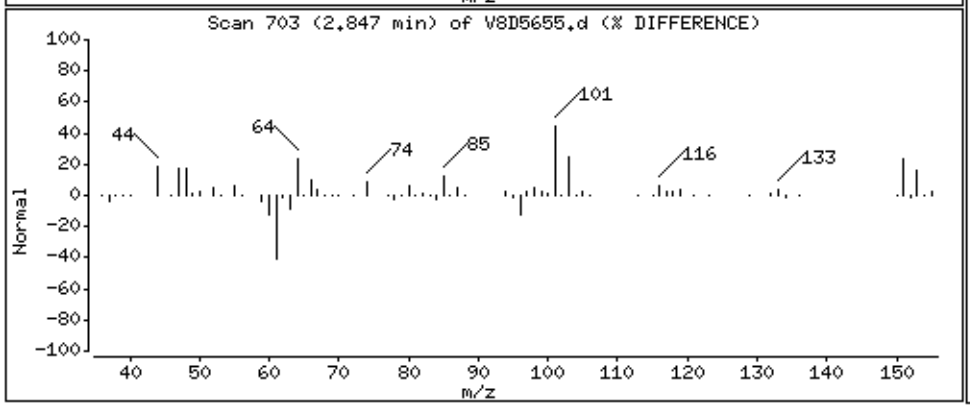












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

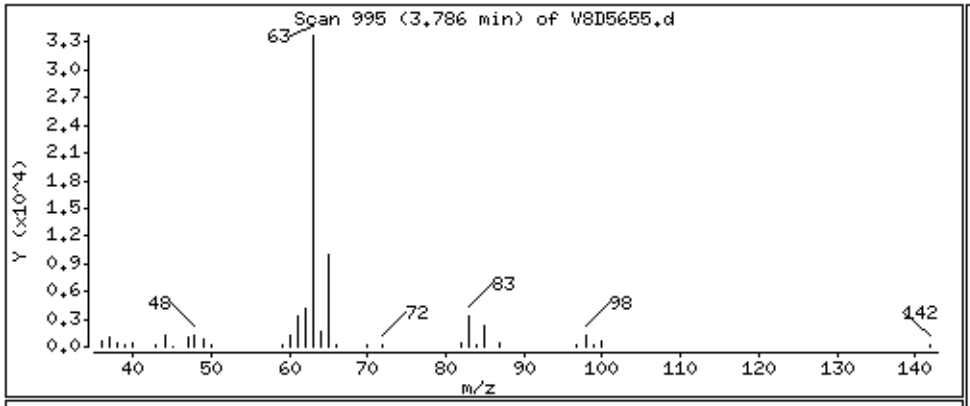
Client ID: MW-10S_6/16/14 Instrument: V10.i

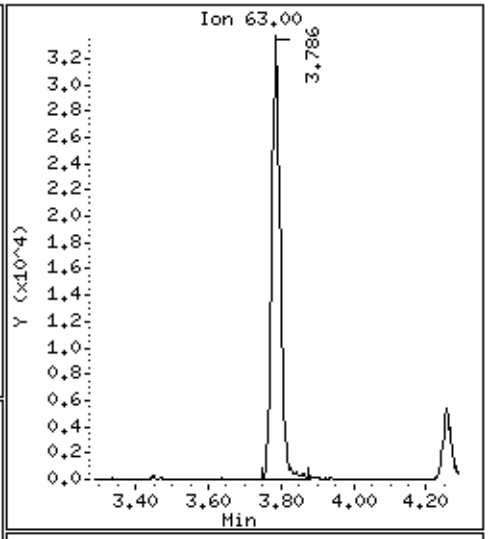
Sample Info: 5ML,N1055-13A,,77721

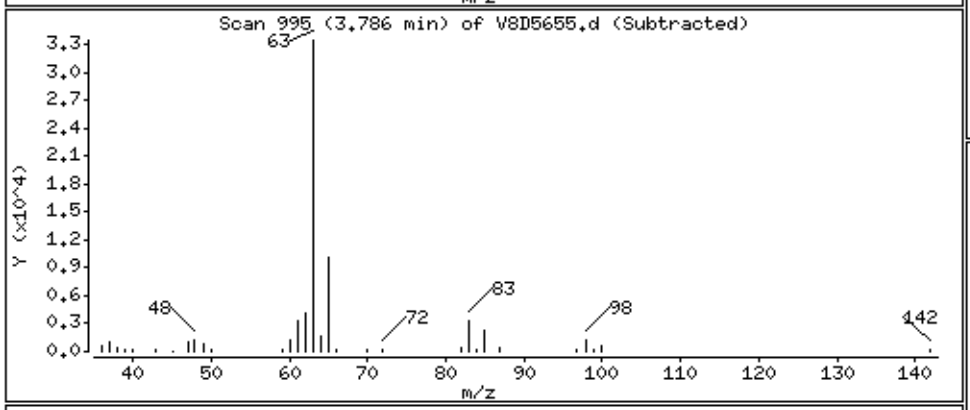
Purge Volume: 5.0 Operator: WL SRC: LIMS

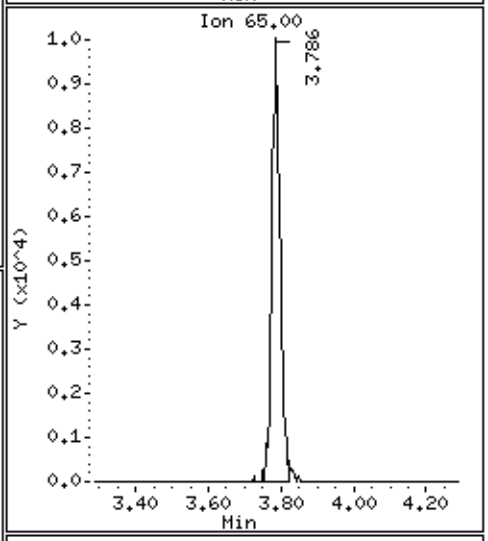
Column phase: DB-624 Column diameter: 0.25

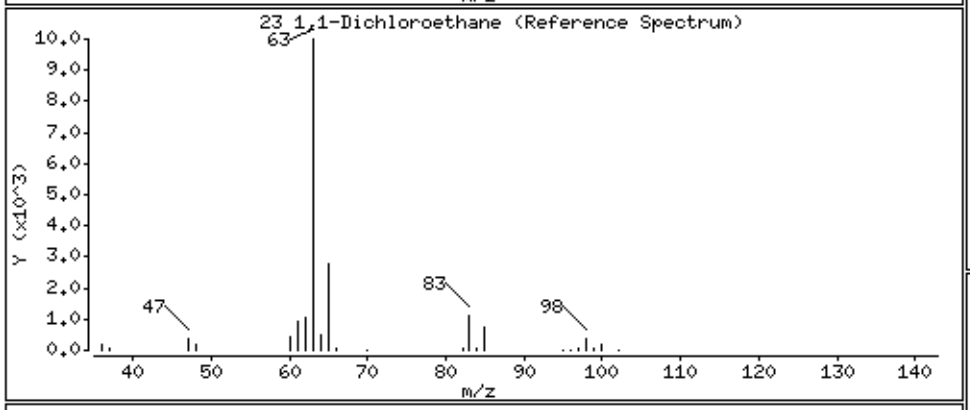
23 1,1-Dichloroethane Concentration: 12 ug/L

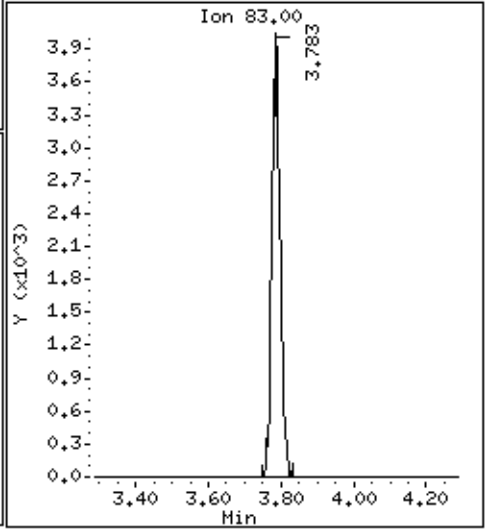


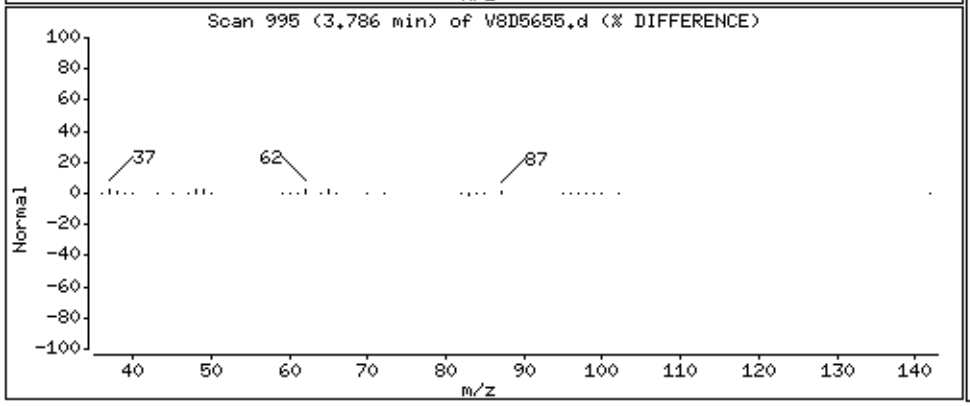












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

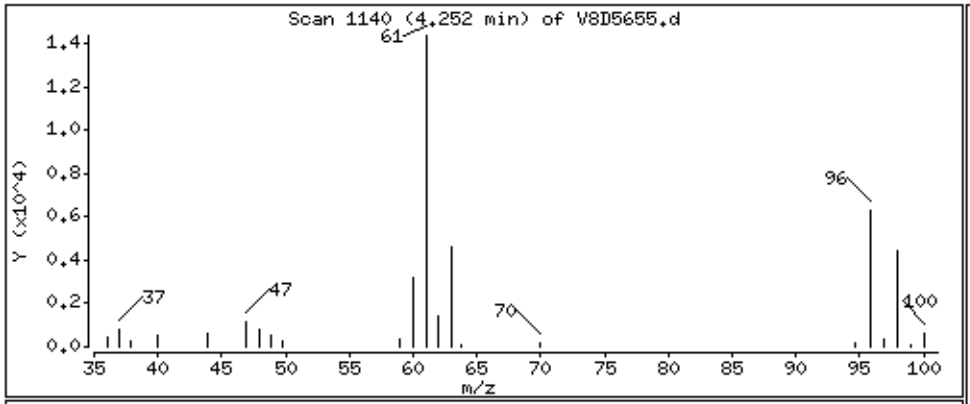
Client ID: MW-10S_6/16/14 Instrument: V10.i

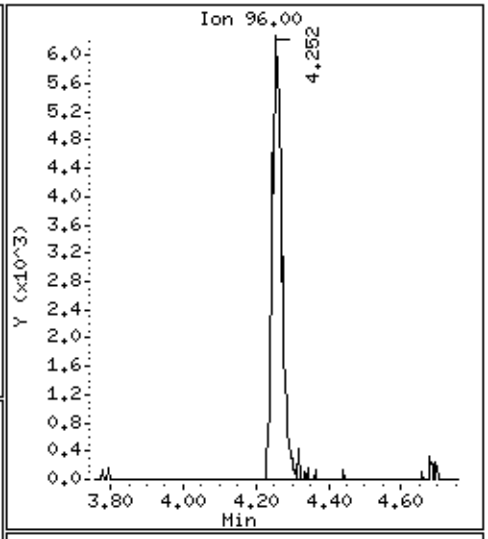
Sample Info: 5ML,N1055-13A,,77721

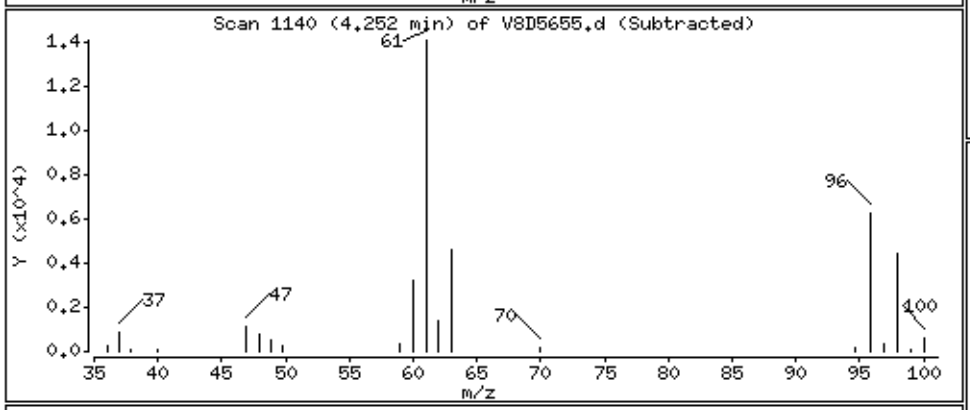
Purge Volume: 5.0 Operator: WL SRC: LIMS

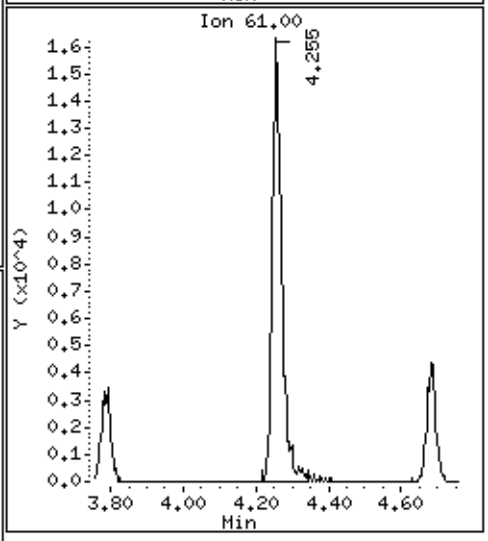
Column phase: DB-624 Column diameter: 0.25

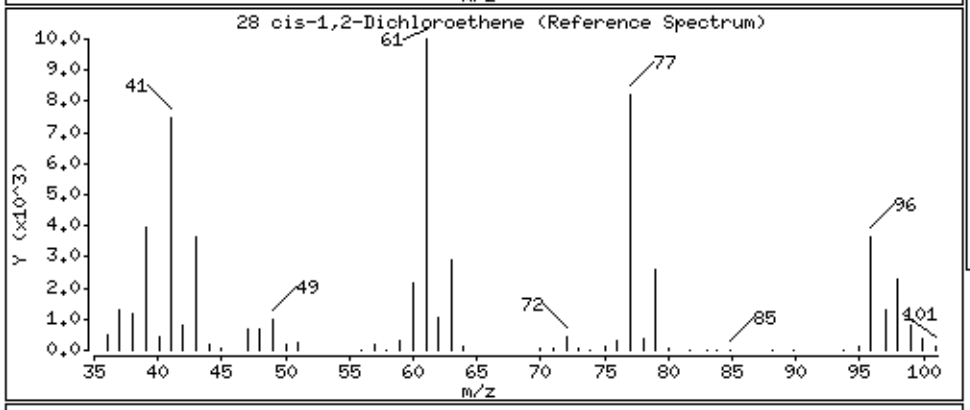
28 cis-1,2-Dichloroethene Concentration: 7.2 ug/L

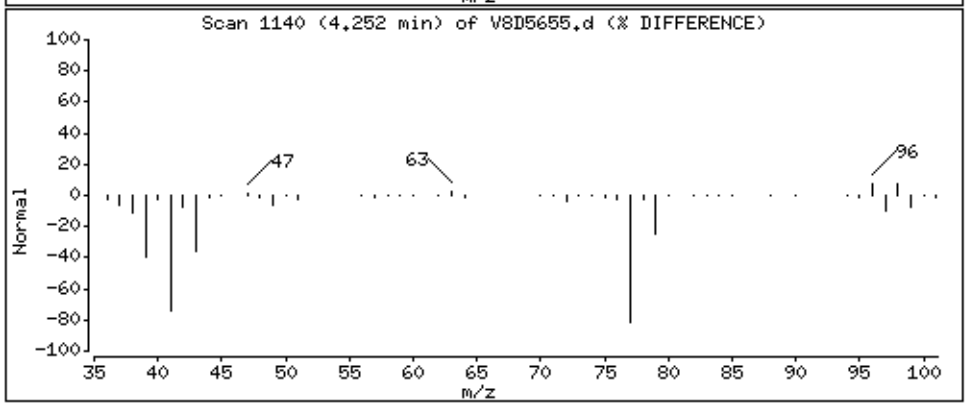












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

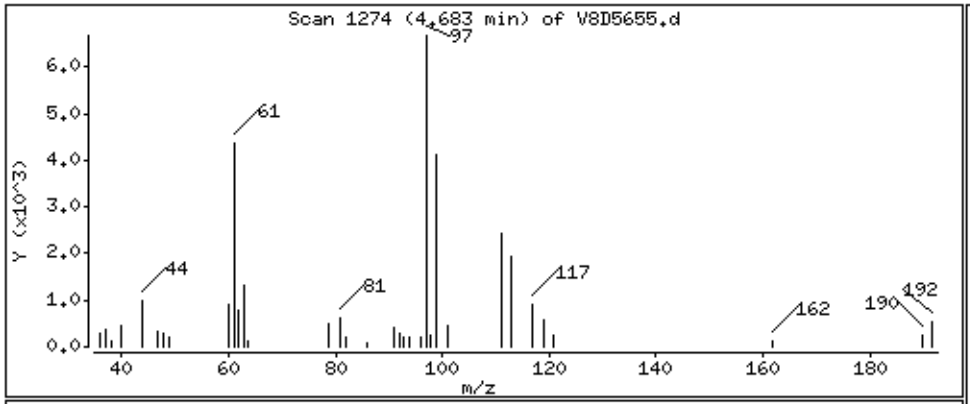
Client ID: MW-10S_6/16/14 Instrument: V10.i

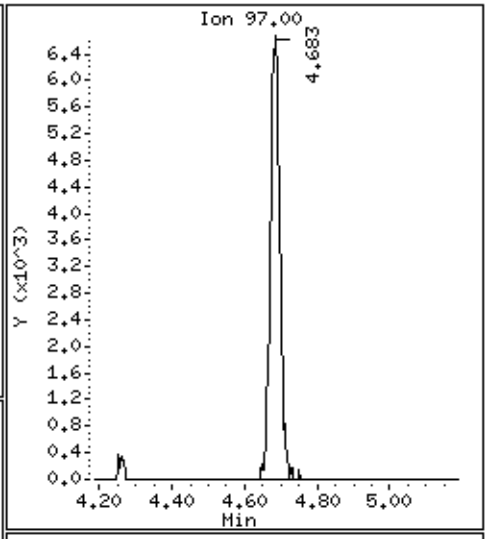
Sample Info: 5ML,N1055-13A,,77721

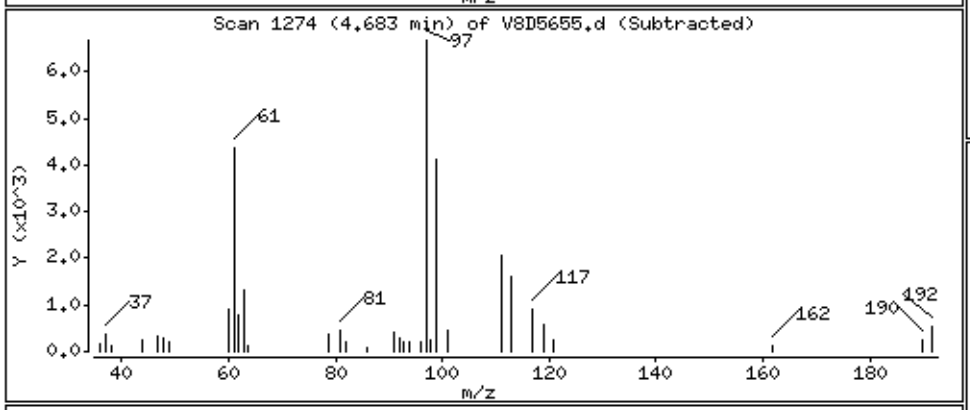
Purge Volume: 5.0 Operator: WL SRC: LIMS

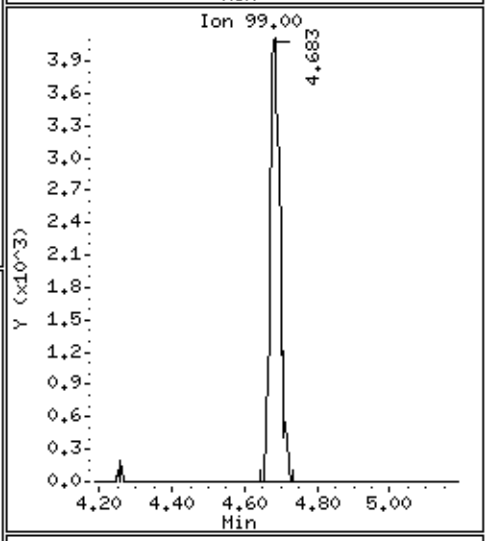
Column phase: DB-624 Column diameter: 0.25

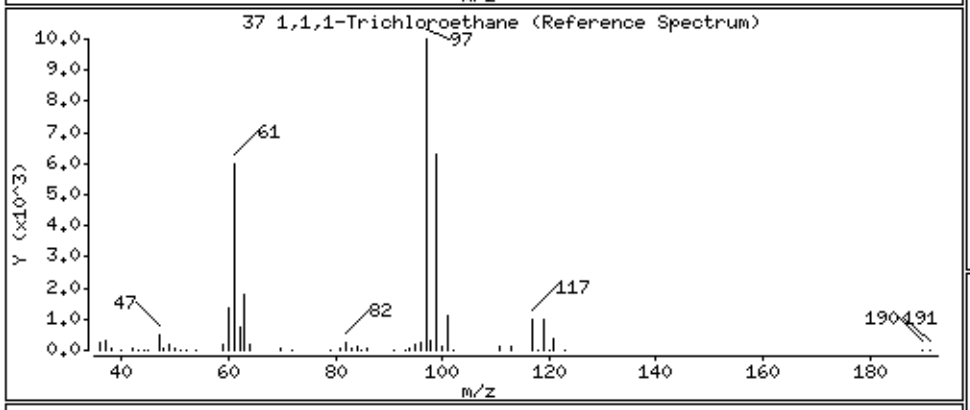
37 1,1,1-Trichloroethane Concentration: 2.7 ug/L

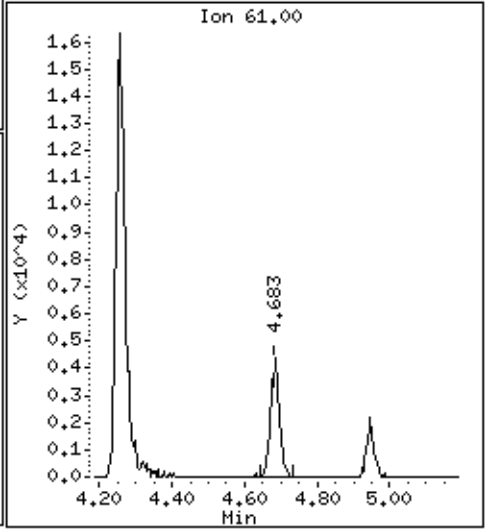


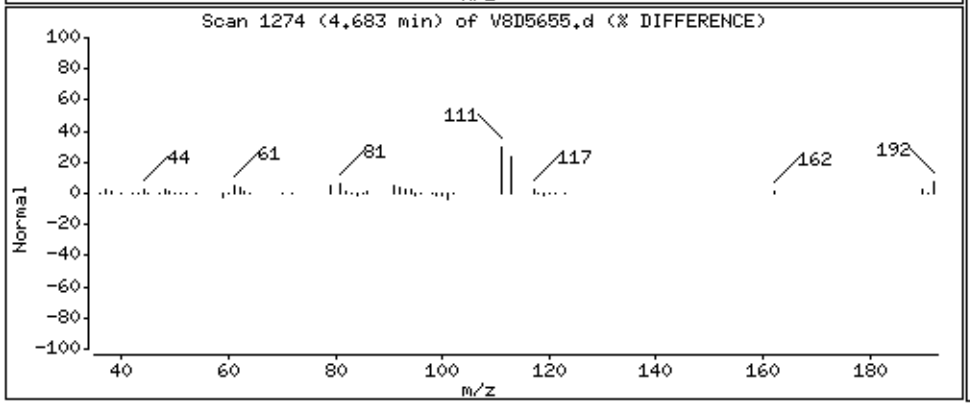












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

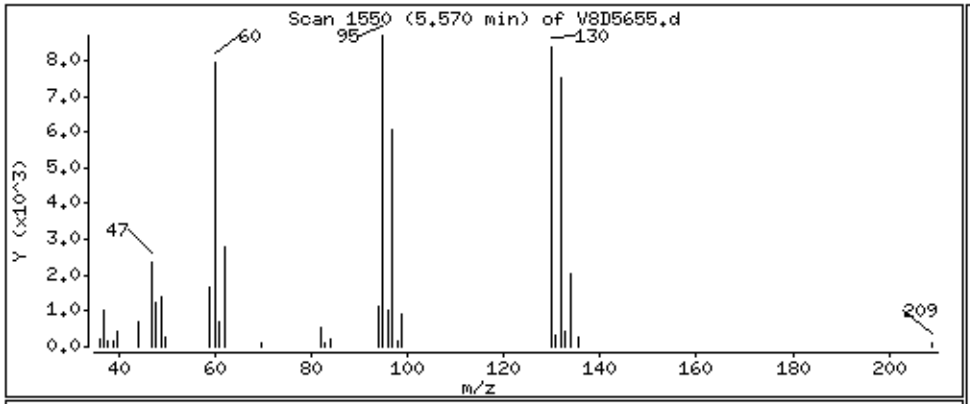
Client ID: MW-10S_6/16/14 Instrument: V10.i

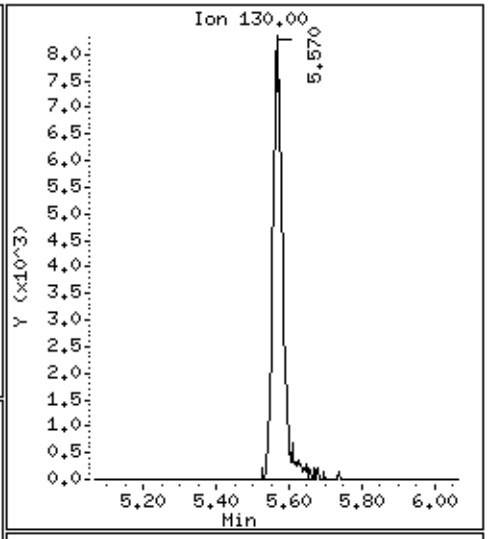
Sample Info: 5ML,N1055-13A,,77721

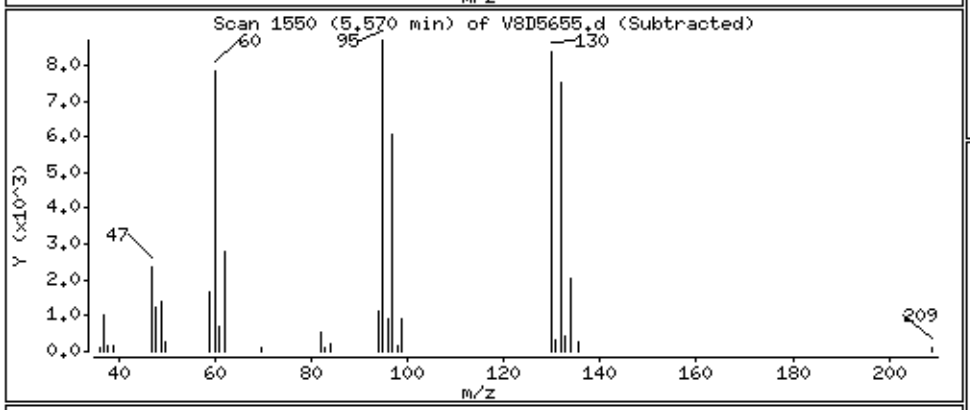
Purge Volume: 5.0 Operator: WL SRC: LIMS

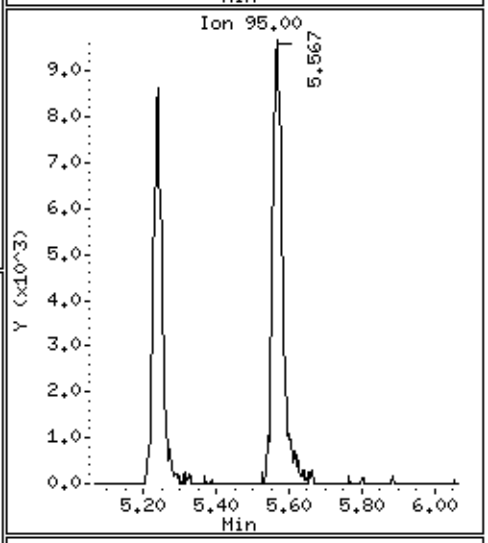
Column phase: DB-624 Column diameter: 0.25

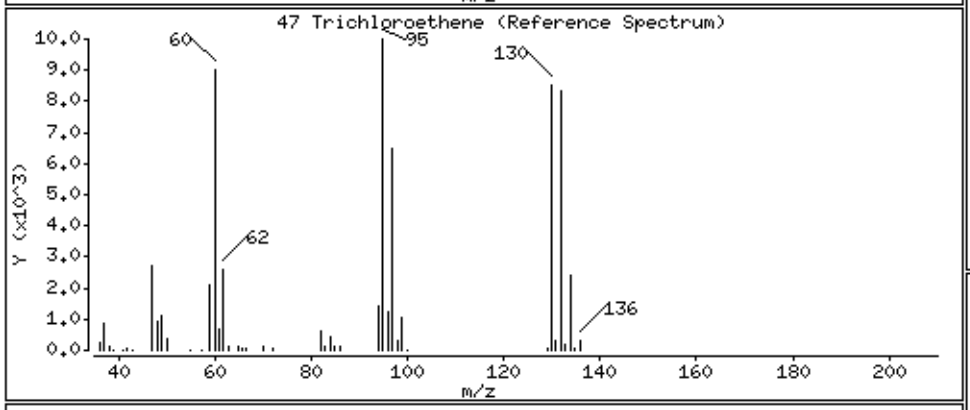
47 Trichloroethene Concentration: 9.2 ug/L

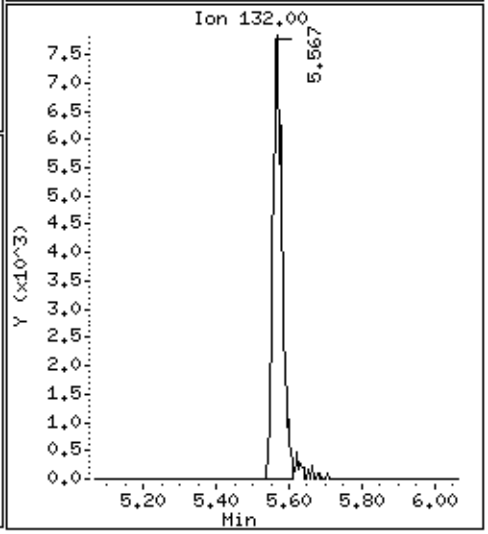


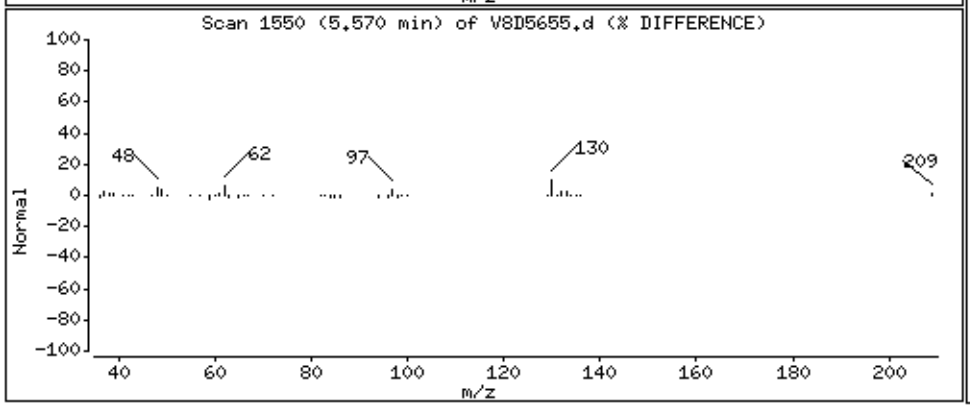












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

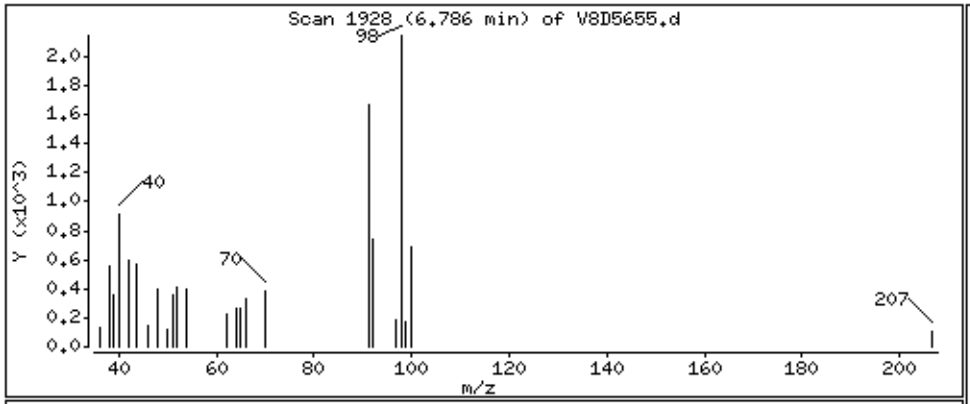
Client ID: MW-10S_6/16/14 Instrument: V10.i

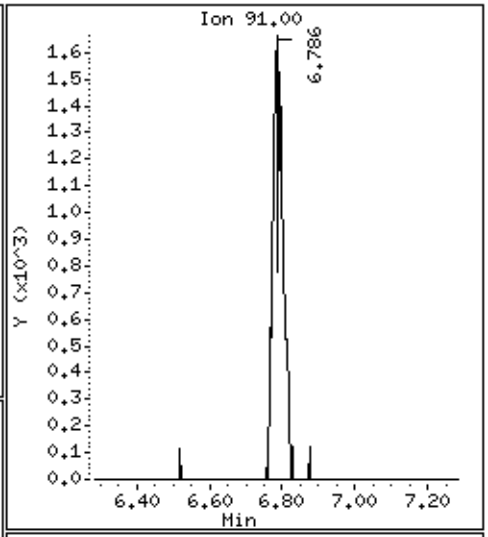
Sample Info: 5ML,N1055-13A,,77721

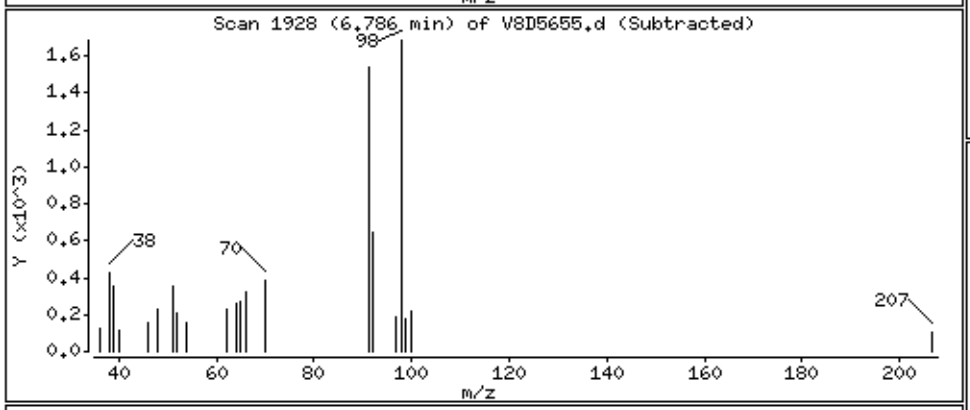
Purge Volume: 5.0 Operator: WL SRC: LIMS

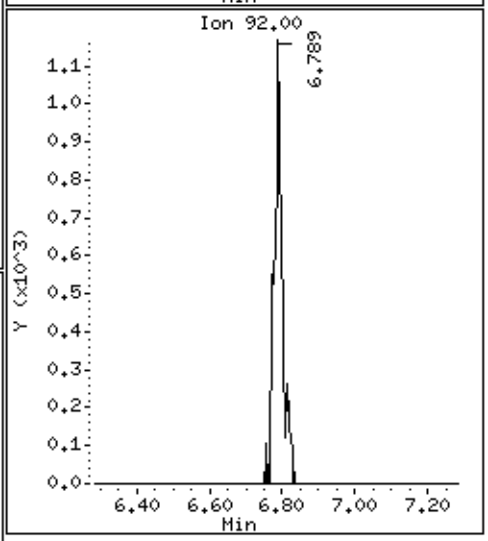
Column phase: DB-624 Column diameter: 0.25

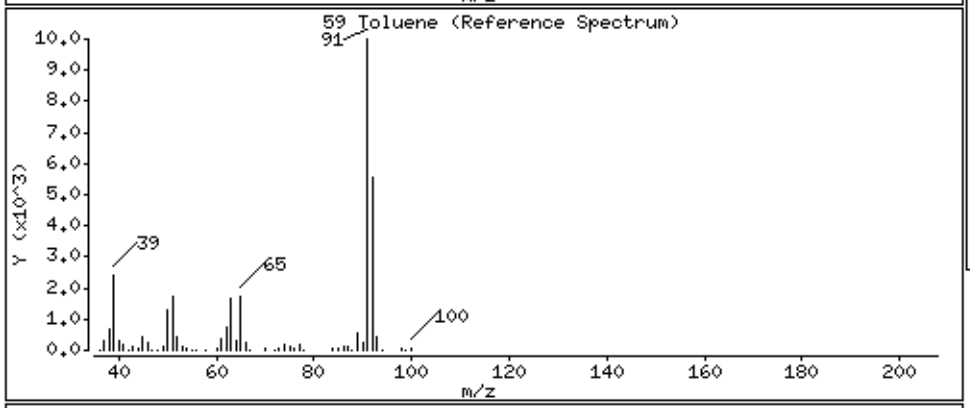
59 Toluene Concentration: 0.51 ug/L

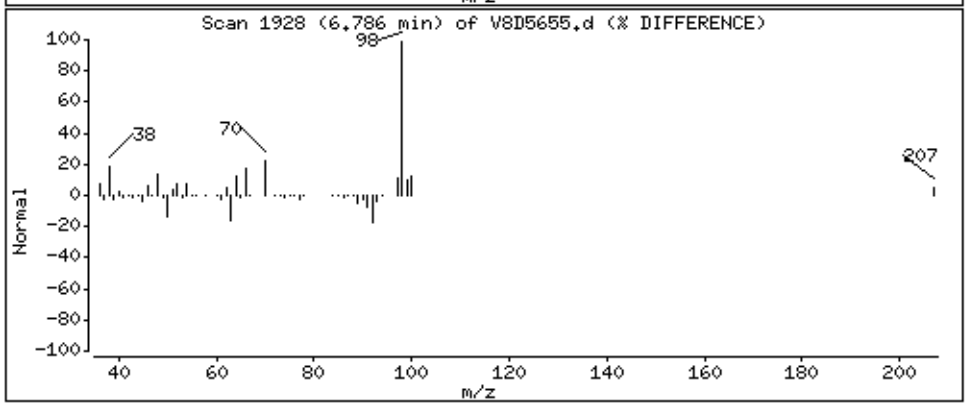












Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5655.d

Date : 23-JUN-2014 15:07

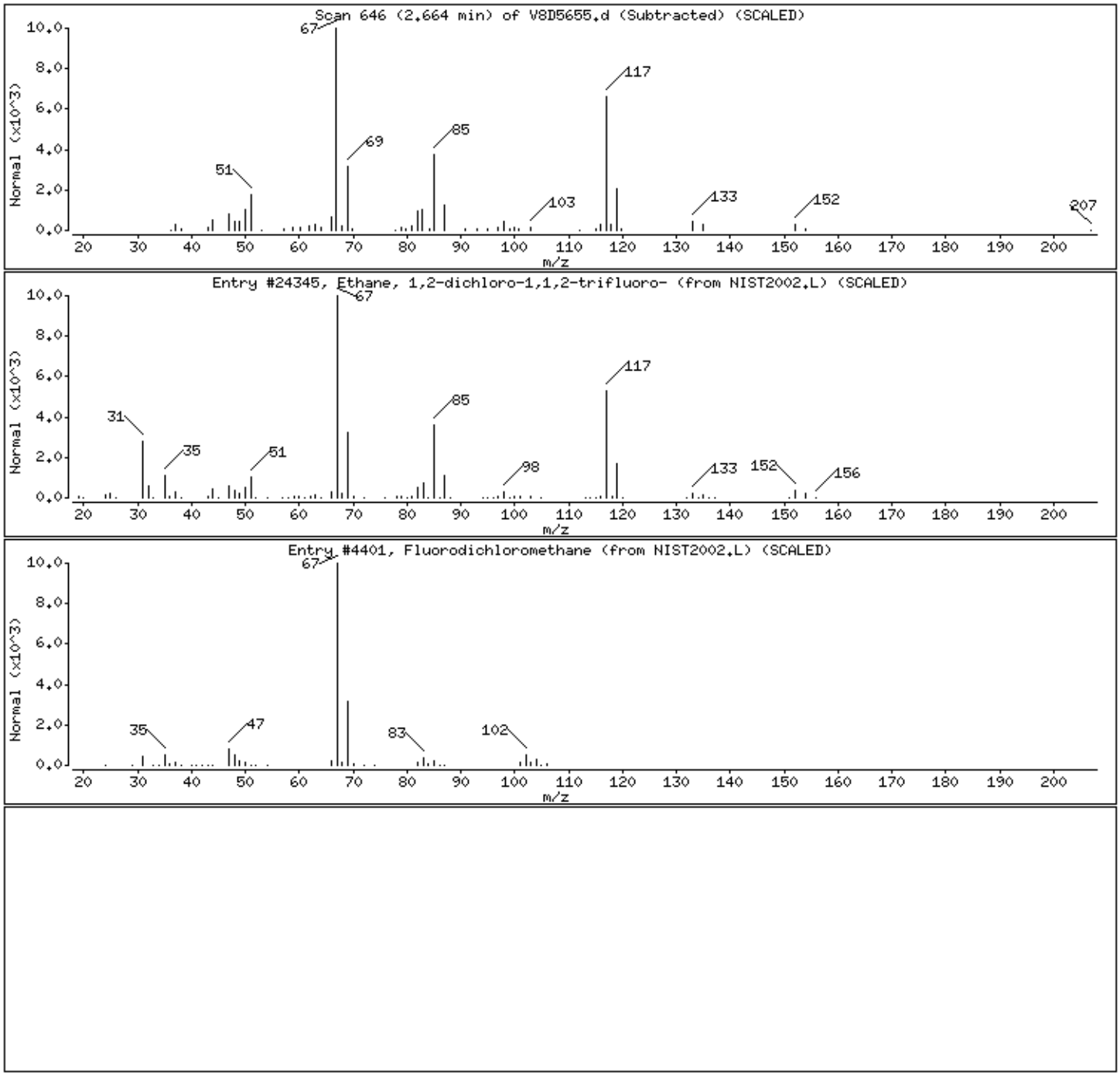
Client ID: MW-10S_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-13A,,77721

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	87	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	38	CHCl2F	102



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5529.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	0.72	J
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	6.9	
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	110	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	9.5	
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	1100	E
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	800	E
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

EPA SAMPLE NO.

MW-10D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5529.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	1.1	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3400	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-10D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5529.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	60	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d
Report Date: 27-Jun-2014 13:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5529.d
Lab Smp Id: N1055-14A Client Smp ID: MW-10D_6/16/14
Inj Date : 19-JUN-2014 16:16
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-14A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
4	Vinyl Chloride	62	1.853	1.856	(0.354)	2418	0.72348	0.72(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	7846566	3410.23	3400(A)
18	Methylene Chloride	84	3.236	3.233	(0.618)	13889	6.87788	6.9
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	562479	109.150	110
28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	19329	9.50396	9.5(Q)
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	94045	54.5171	54
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	4950493	1057.92	1000(A)
$ 42	1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	14791	50.7151	51
M 50	1,2-Dichloroethene (Total)	96				19329	9.50396	9.5
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	231810	50.0000	
47	Trichloroethene	130	5.564	5.567	(1.063)	1530090	799.794	800(A)
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	289419	47.3283	47
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	267224	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	5955	1.10738	1.1(Q)
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.158)	157232	47.8962	48
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	133281	50.0000	(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d
Report Date: 27-Jun-2014 13:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5529.d
Lab Smp Id: N1055-14A Client Smp ID: MW-10D_6/16/14
Inj Date : 19-JUN-2014 16:16
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-14A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

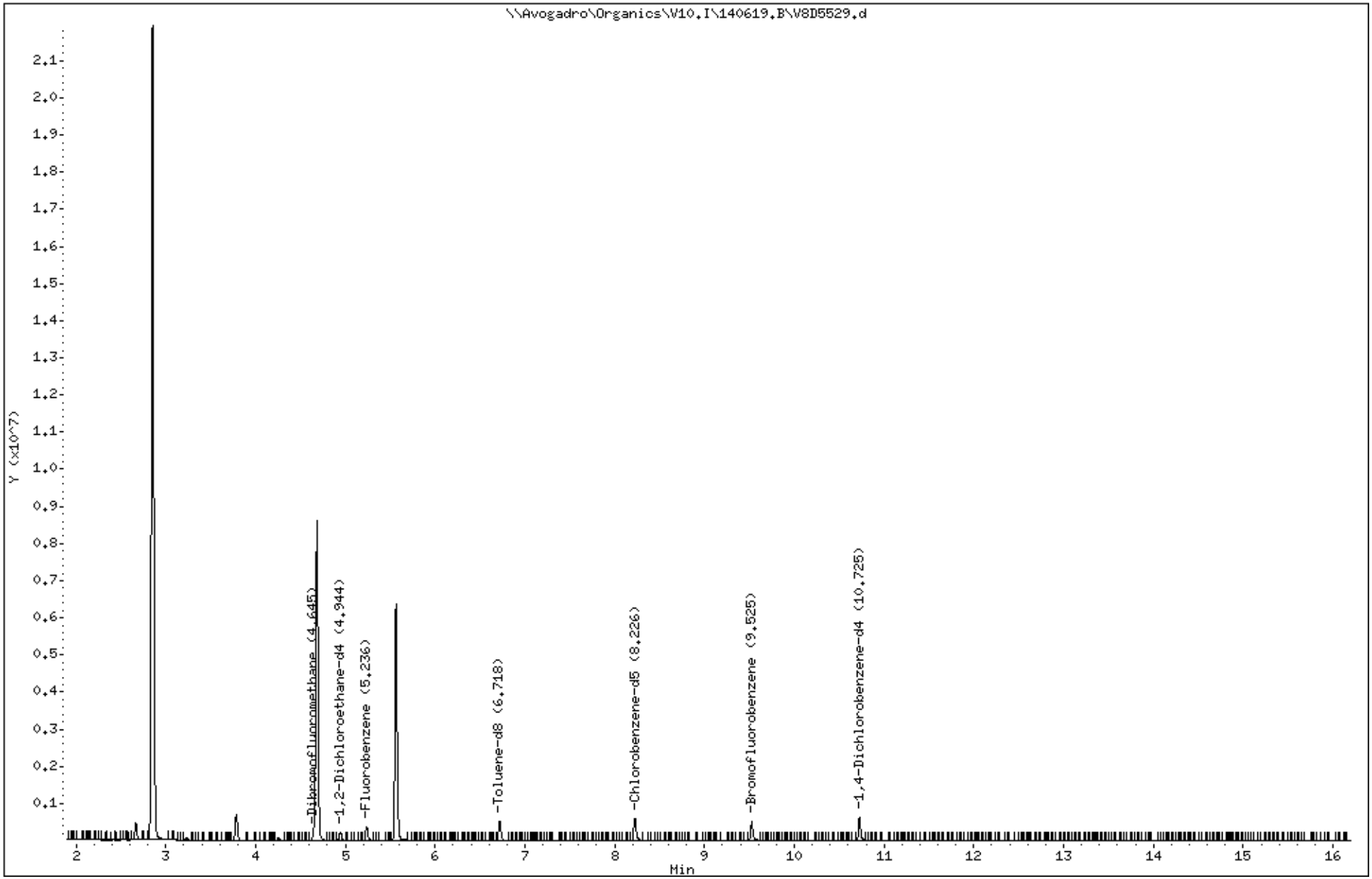
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.236	659628	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	785964	59.5762267	60	90	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d
Date : 19-JUN-2014 16:16
Client ID: MW-10D_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-14A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

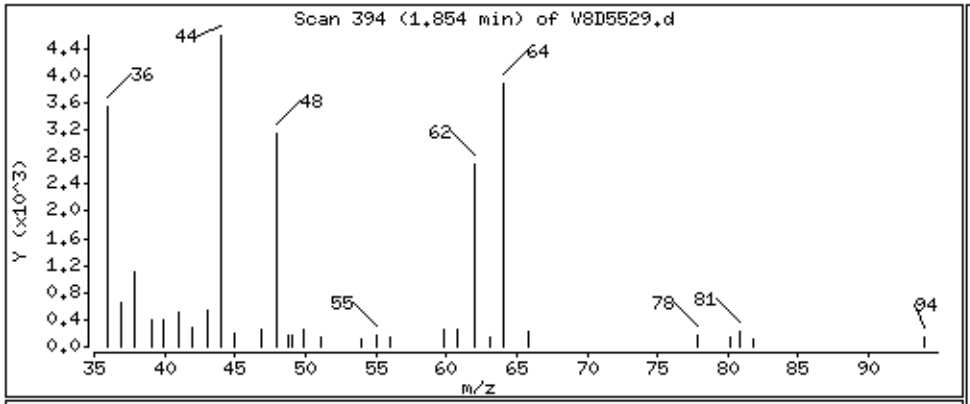
Client ID: MW-10D_6/16/14 Instrument: V10.i

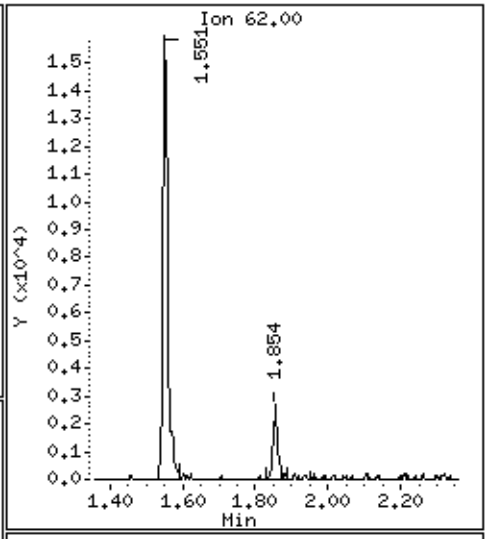
Sample Info: 5ML,N1055-14A,,77659

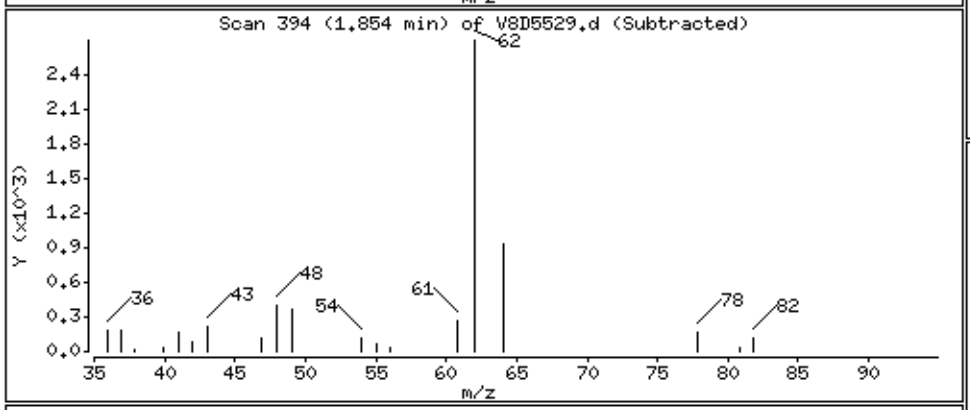
Purge Volume: 5.0 Operator: WL SRC: LIMS

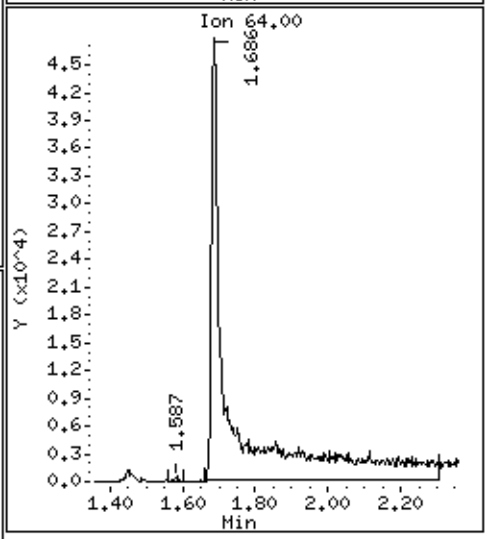
Column phase: DB-624 Column diameter: 0.25

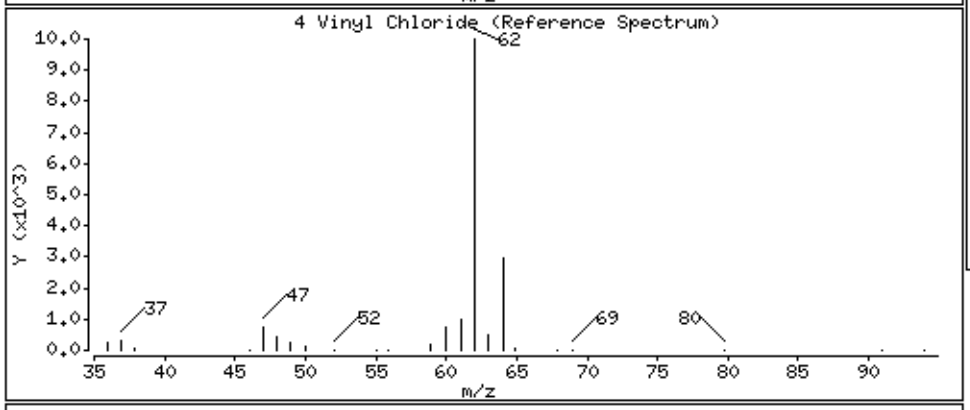
4 Vinyl Chloride Concentration: 0.72 ug/L

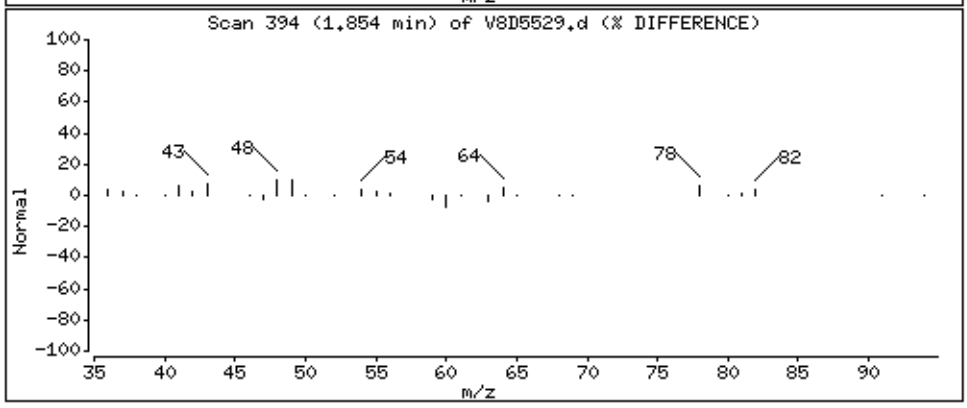












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

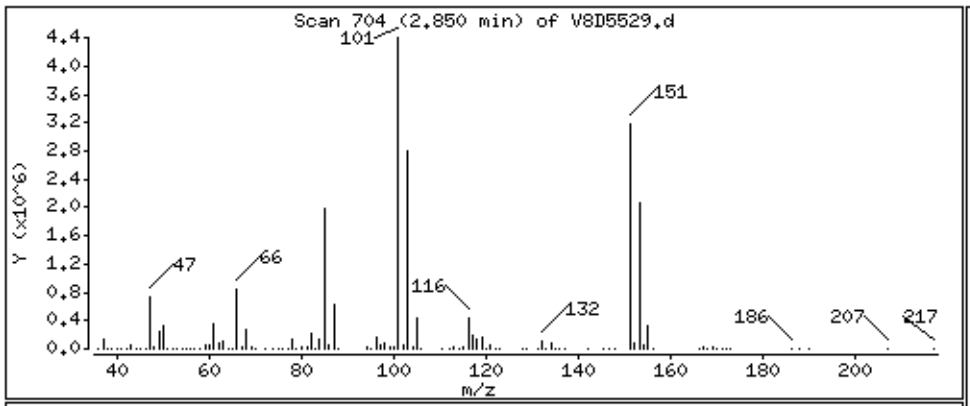
Client ID: MW-10D_6/16/14 Instrument: V10.i

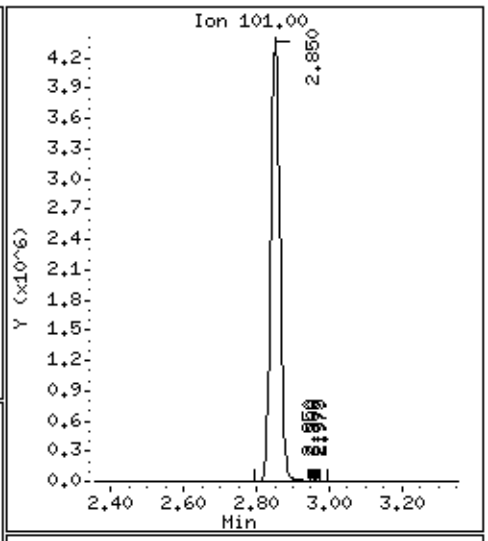
Sample Info: 5ML,N1055-14A,,77659

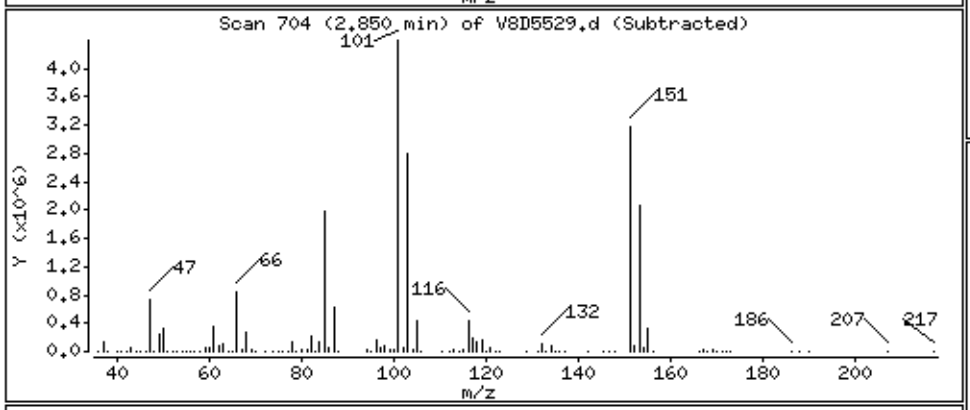
Purge Volume: 5.0 Operator: WL SRC: LIMS

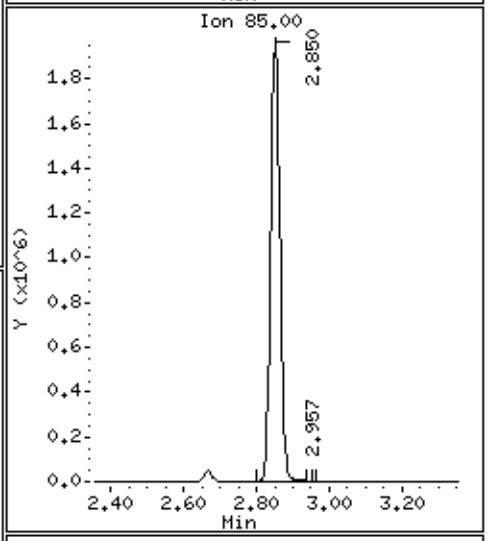
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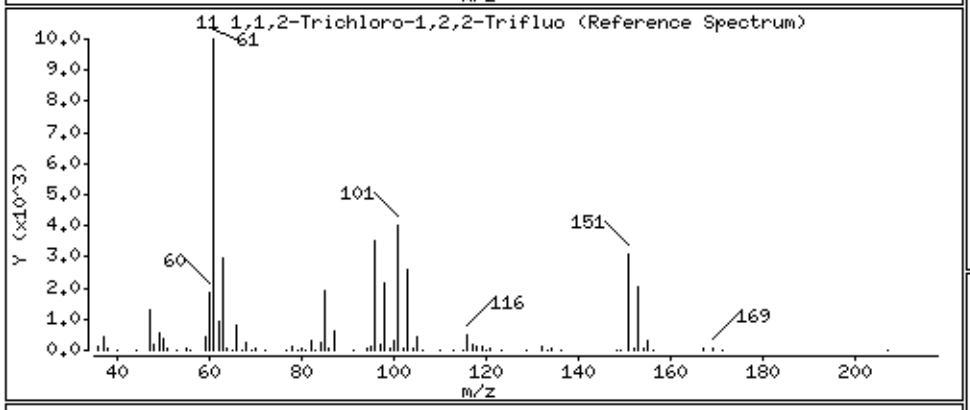
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 3400 ug/L

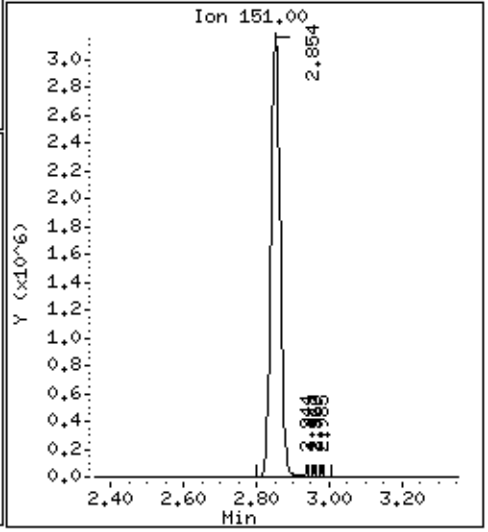


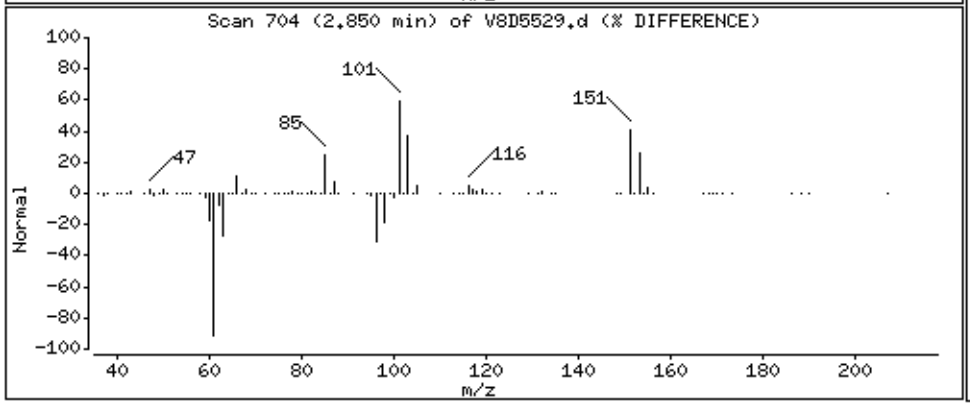












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

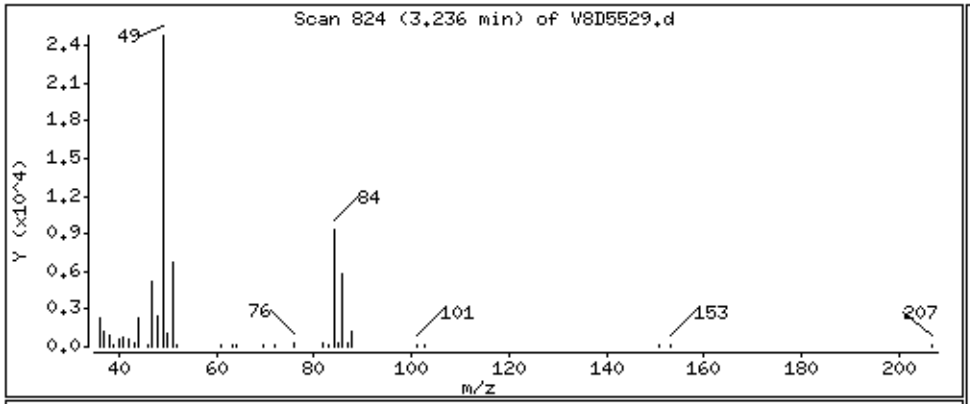
Client ID: MW-10D_6/16/14 Instrument: V10.i

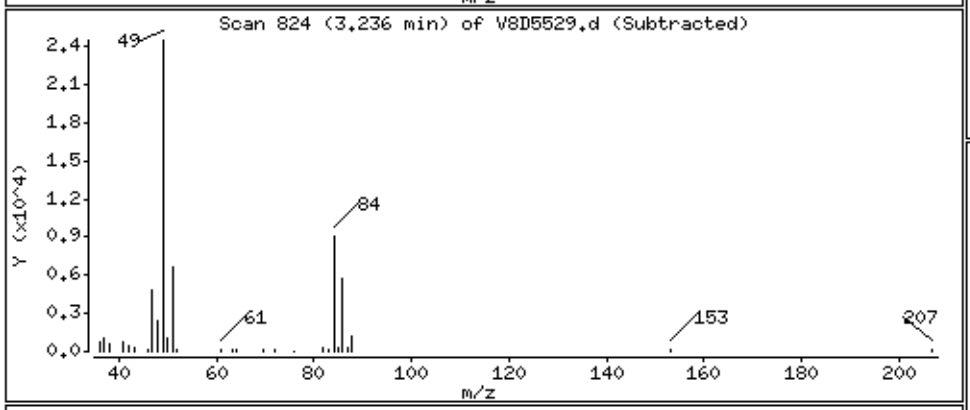
Sample Info: 5ML,N1055-14A,,77659

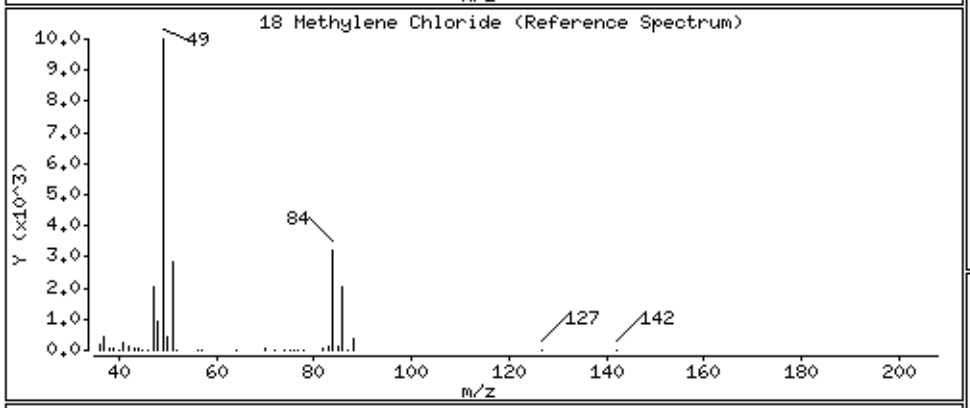
Purge Volume: 5.0 Operator: WL SRC: LIMS

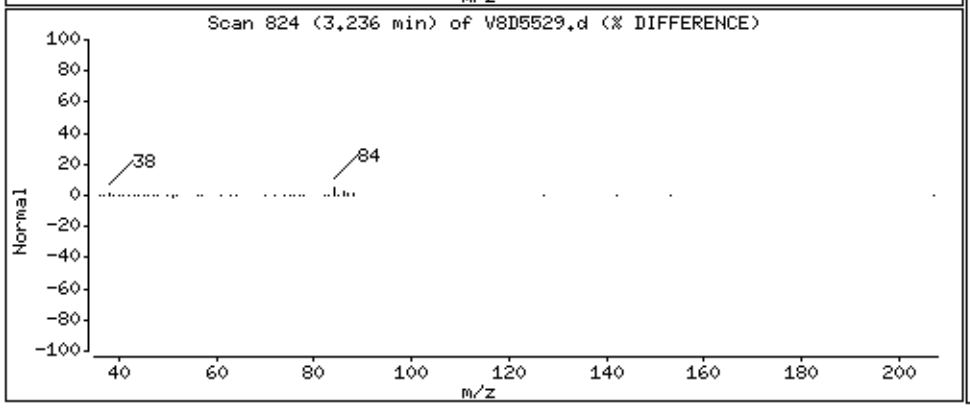
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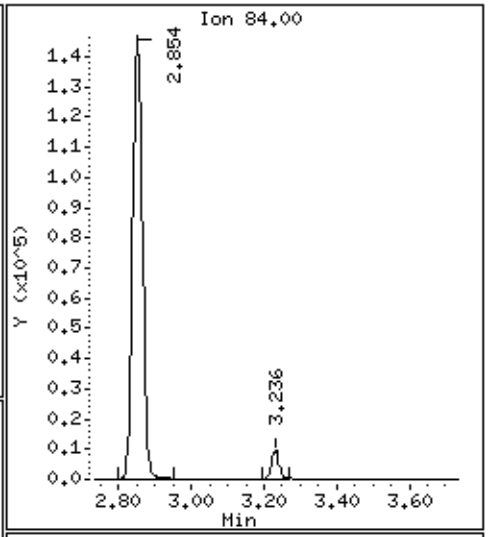
18 Methylene Chloride Concentration: 6.9 ug/L

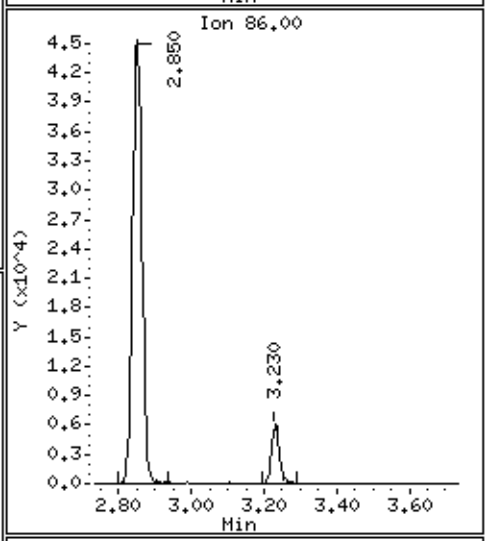


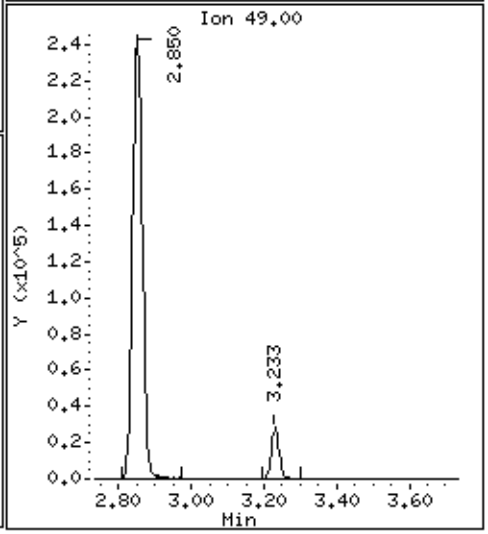












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

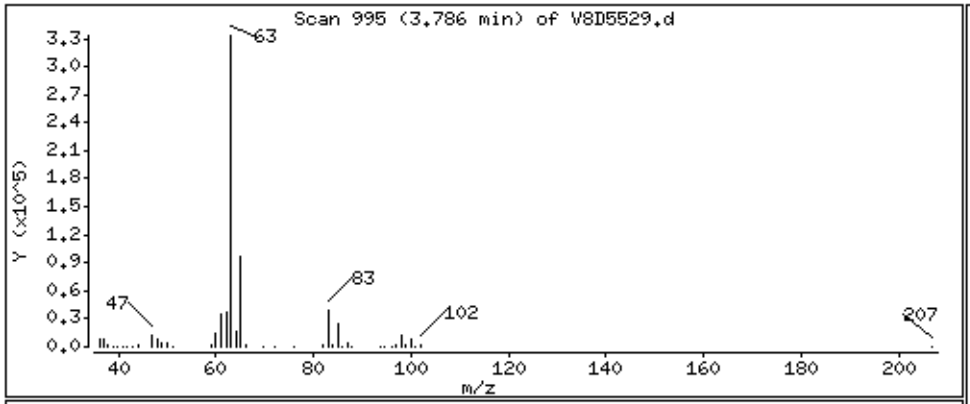
Client ID: MW-10D_6/16/14 Instrument: V10.i

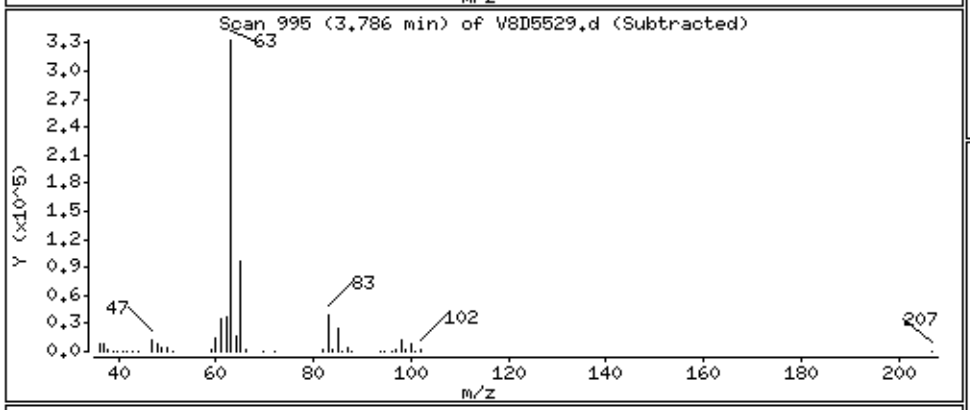
Sample Info: 5ML,N1055-14A,,77659

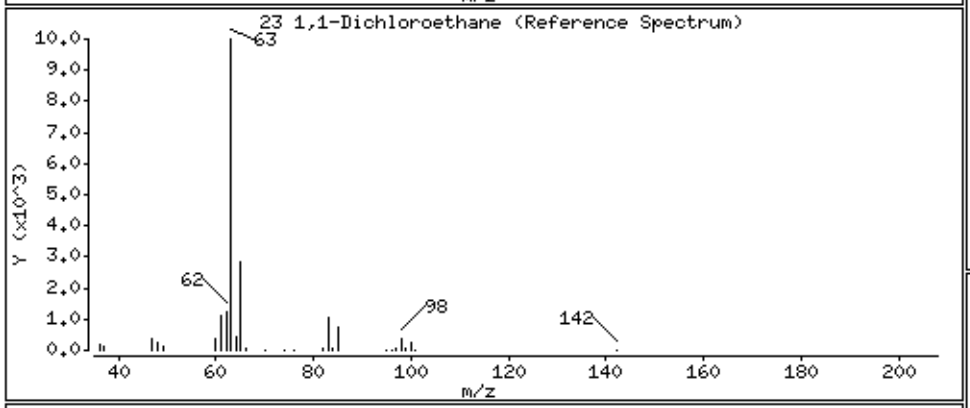
Purge Volume: 5.0 Operator: WL SRC: LIMS

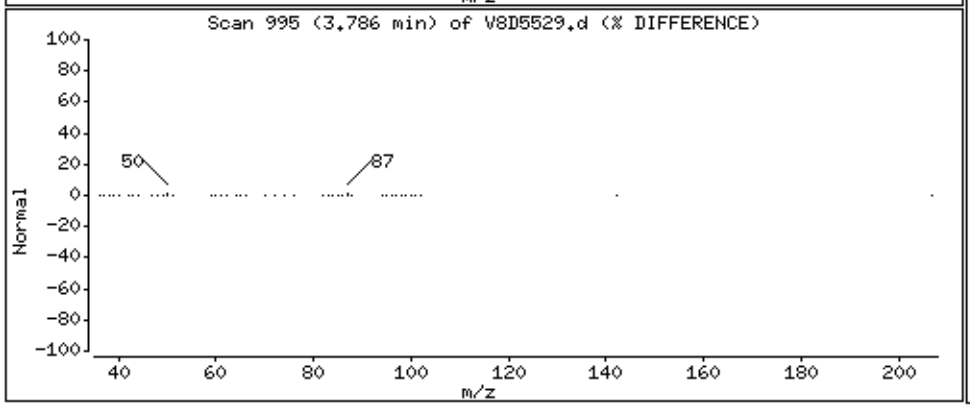
Column phase: DB-624 Column diameter: 0.25

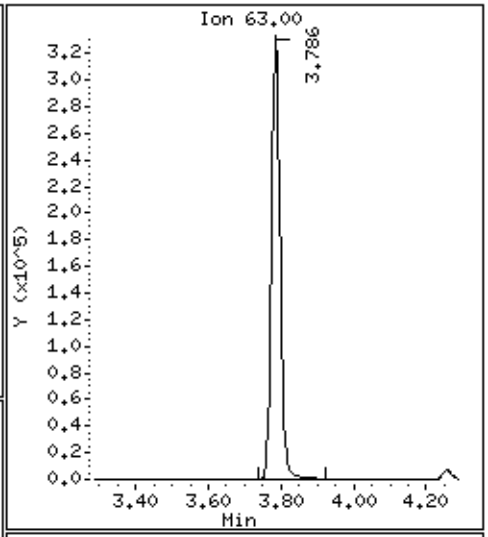
23 1,1-Dichloroethane Concentration: 110 ug/L

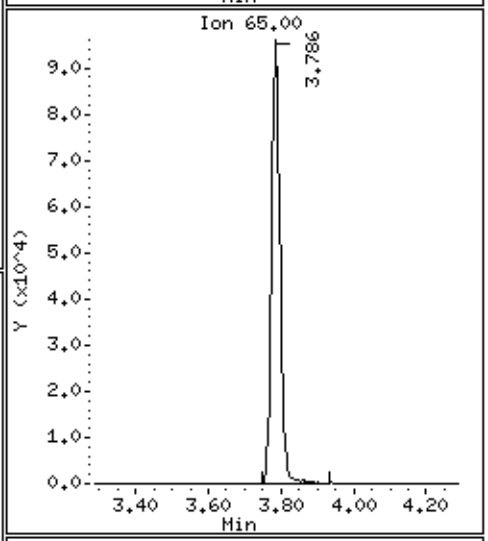


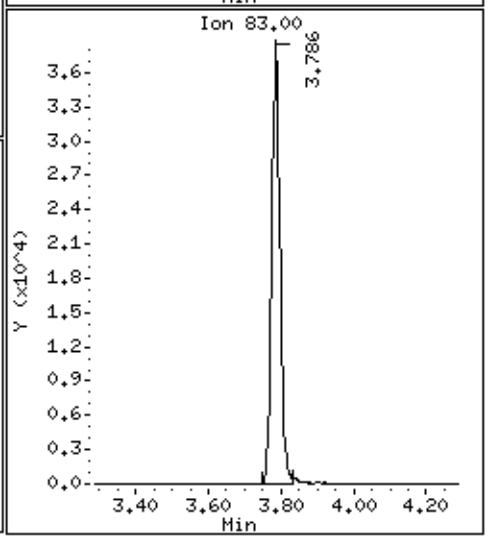












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

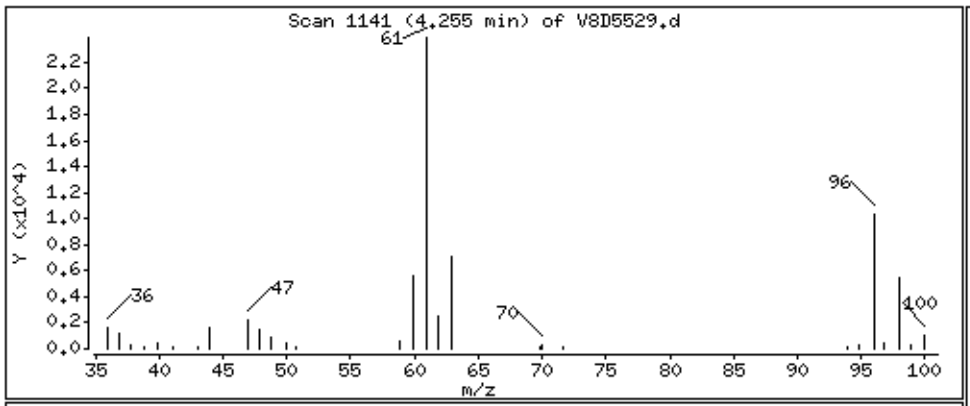
Client ID: MW-10D_6/16/14 Instrument: V10.i

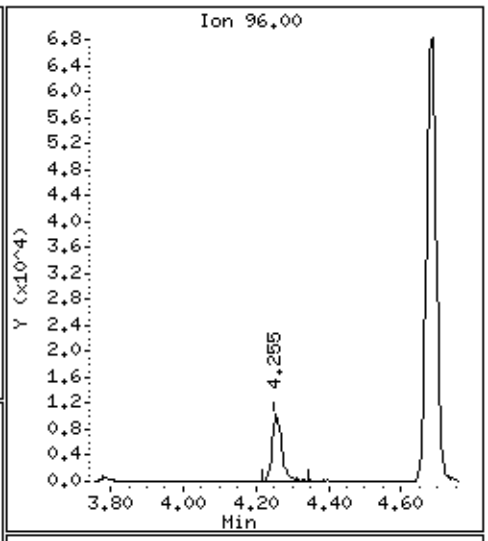
Sample Info: 5ML,N1055-14A,,77659

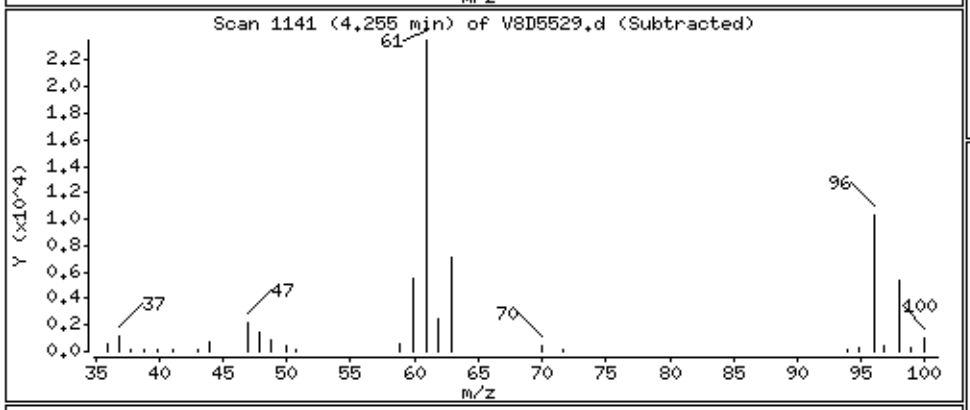
Purge Volume: 5.0 Operator: WL SRC: LIMS

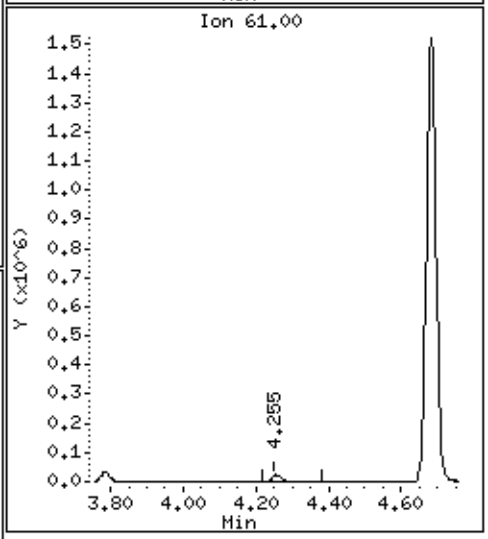
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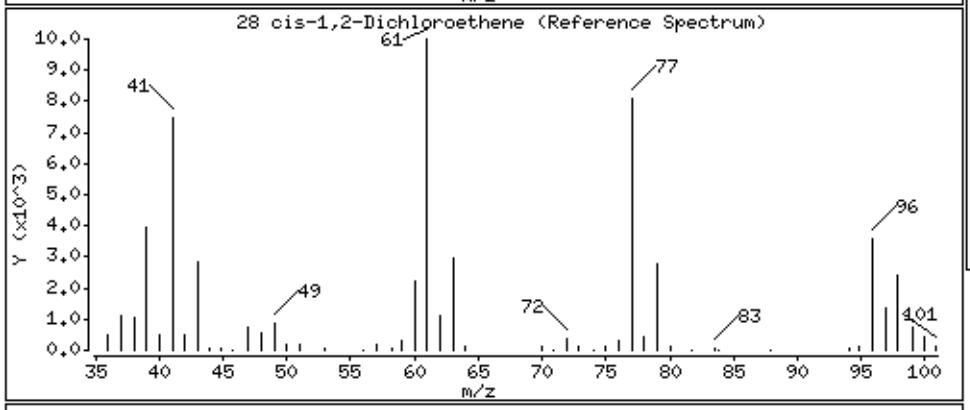
28 cis-1,2-Dichloroethene Concentration: 9.5 ug/L

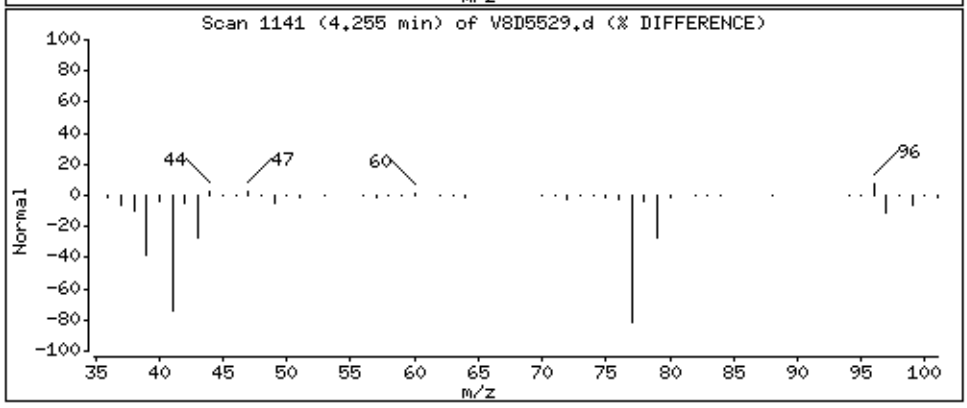












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

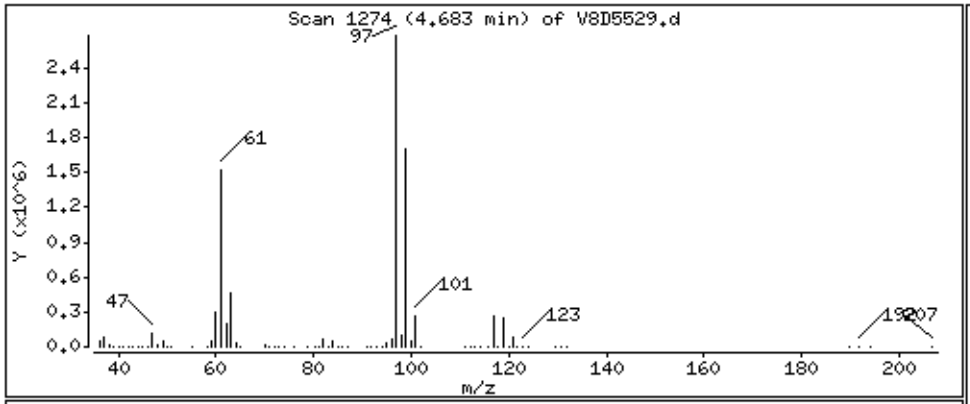
Client ID: MW-10D_6/16/14 Instrument: V10.i

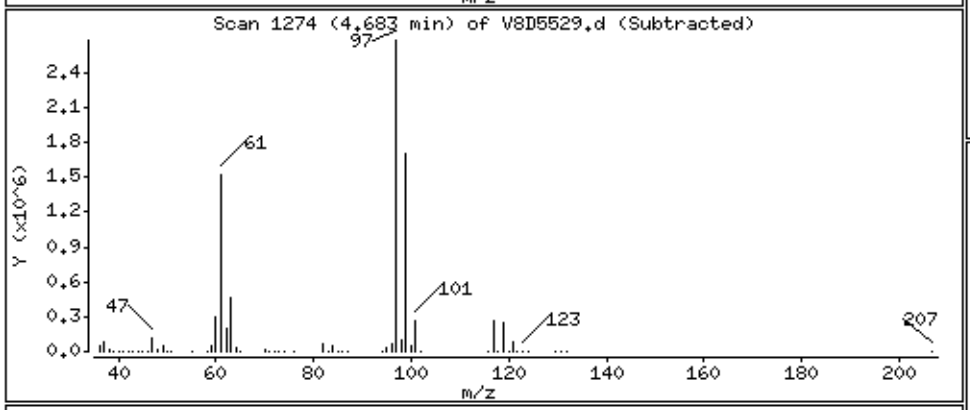
Sample Info: 5ML,N1055-14A,,77659

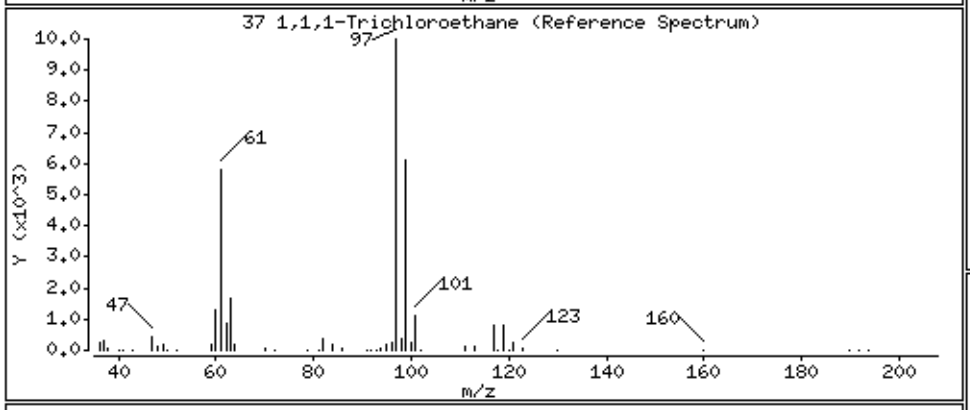
Purge Volume: 5.0 Operator: WL SRC: LIMS

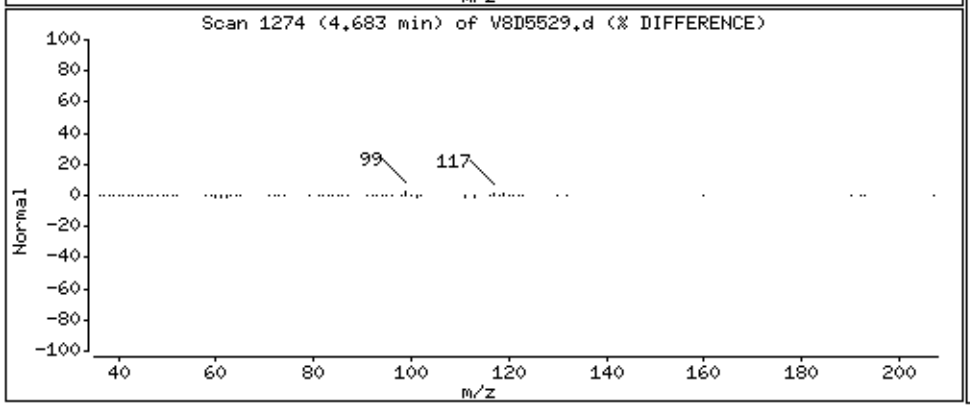
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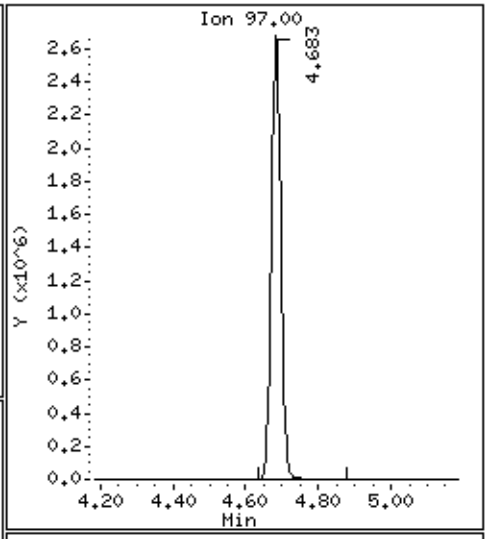
37 1,1,1-Trichloroethane Concentration: 1000 ug/L

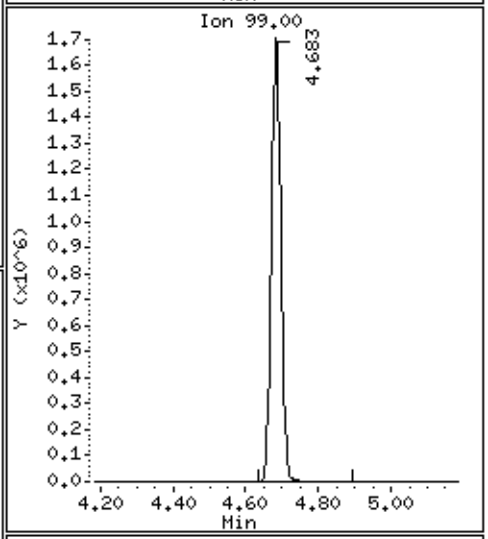


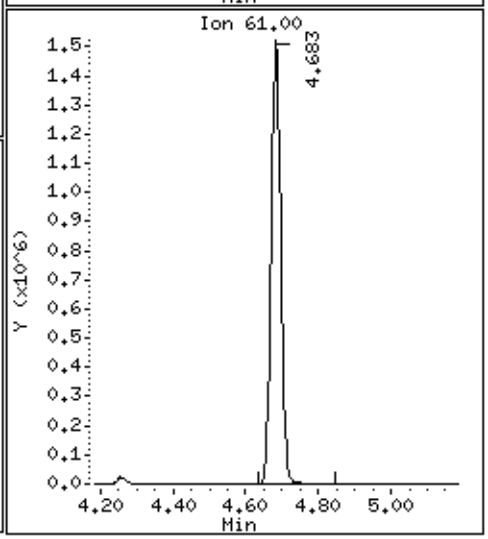












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

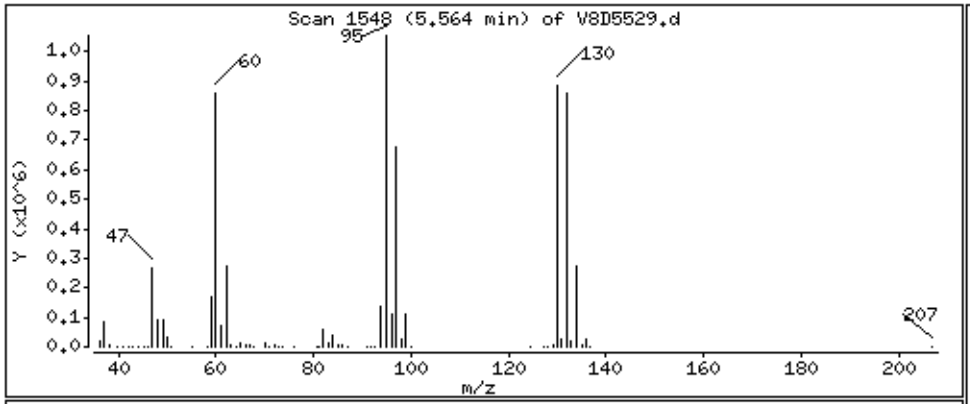
Client ID: MW-10D_6/16/14 Instrument: V10.i

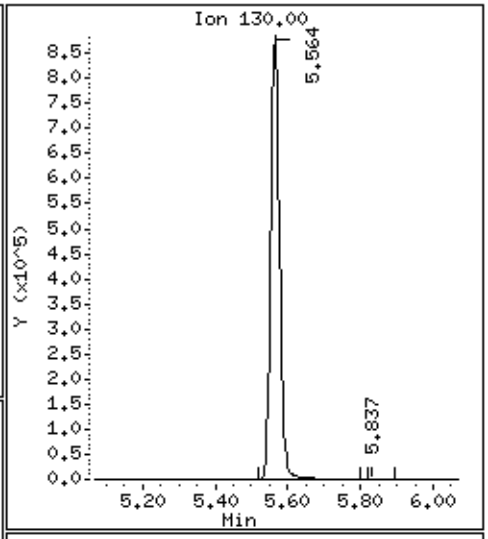
Sample Info: 5ML,N1055-14A,,77659

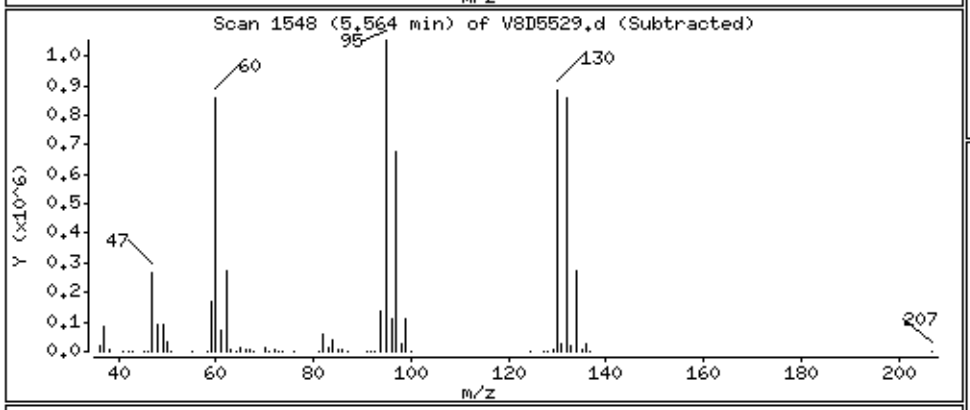
Purge Volume: 5.0 Operator: WL SRC: LIMS

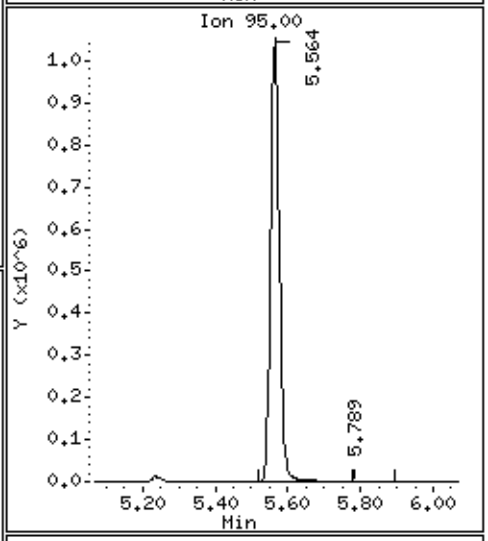
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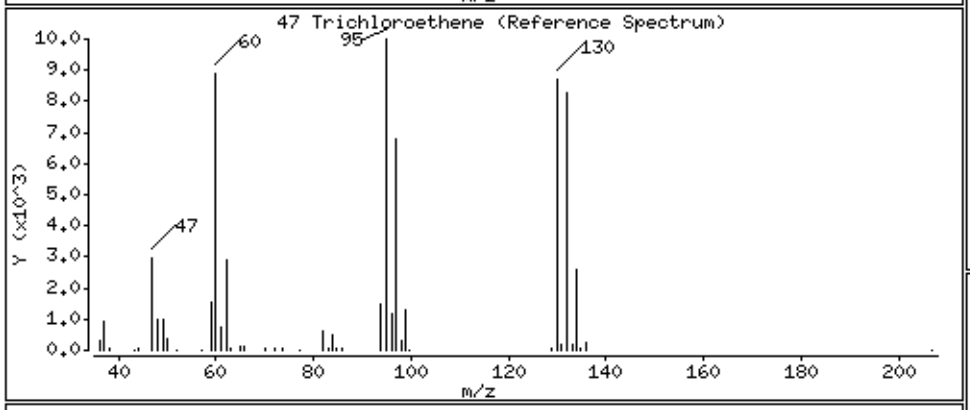
47 Trichloroethene Concentration: 800 ug/L

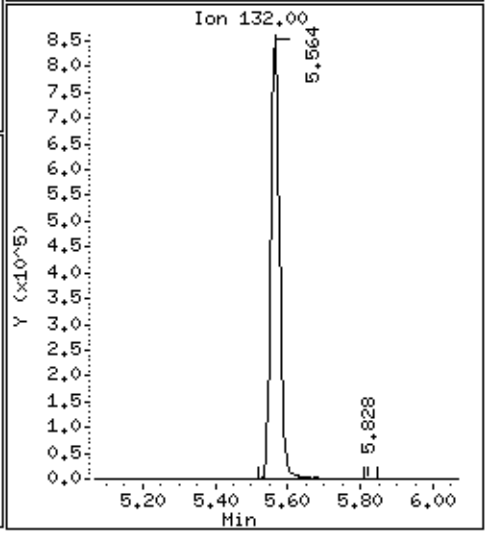


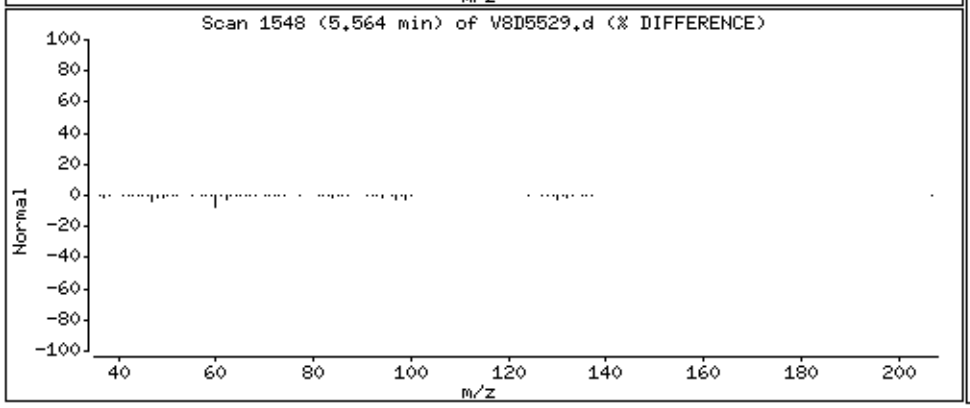












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

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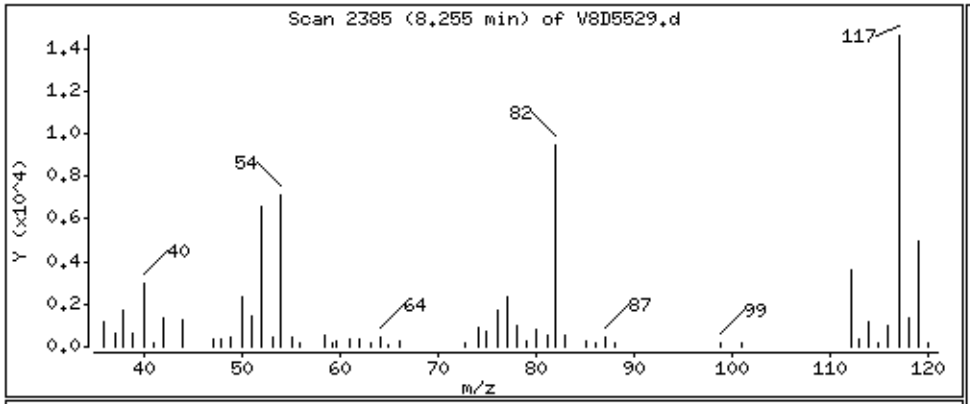
Client ID: MW-10D_6/16/14 Instrument: V10.i

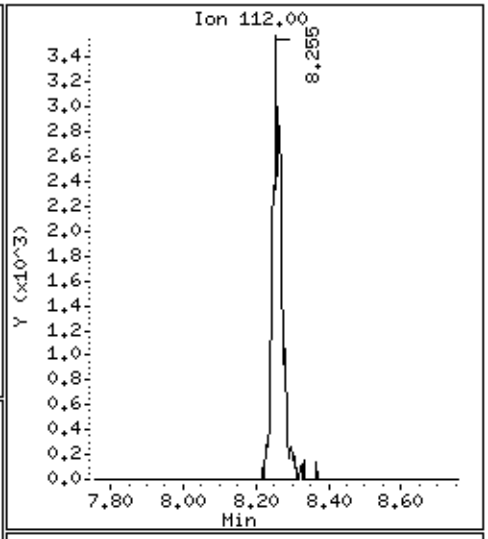
Sample Info: 5ML,N1055-14A,,77659

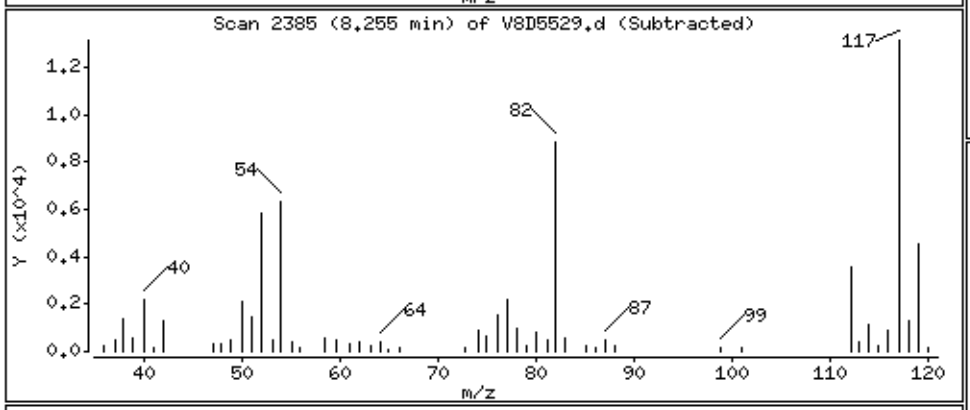
Purge Volume: 5.0 Operator: WL SRC: LIMS

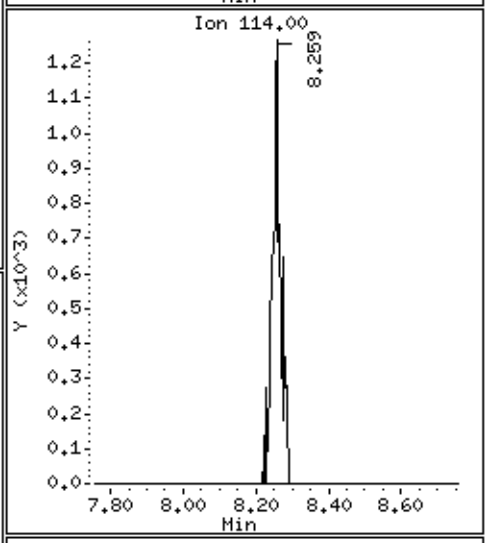
Column phase: DB-624 Column diameter: 0.25

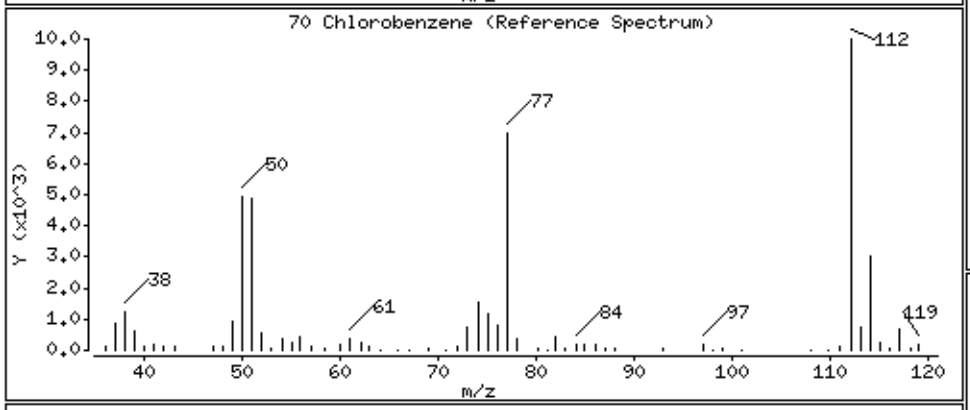
70 Chlorobenzene Concentration: 1.1 ug/L

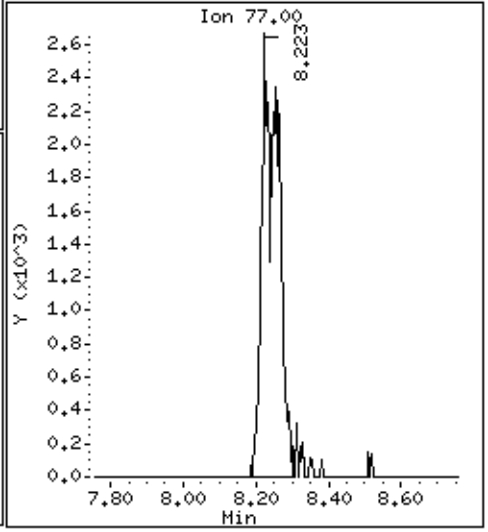


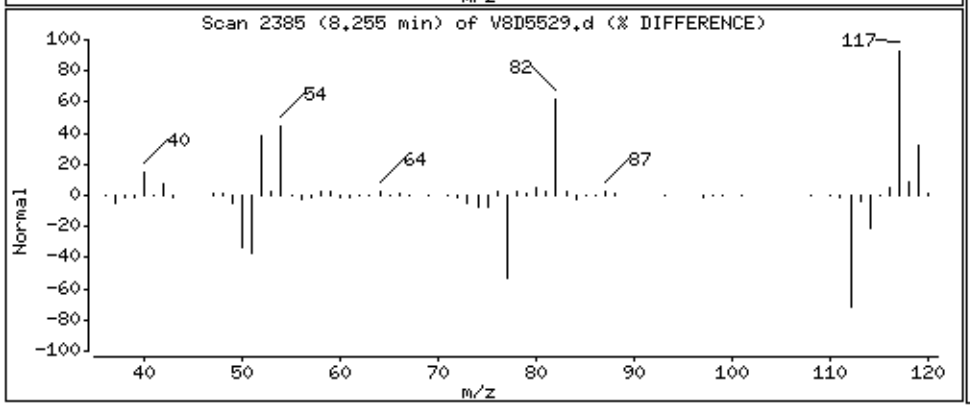












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5529.d

Date : 19-JUN-2014 16:16

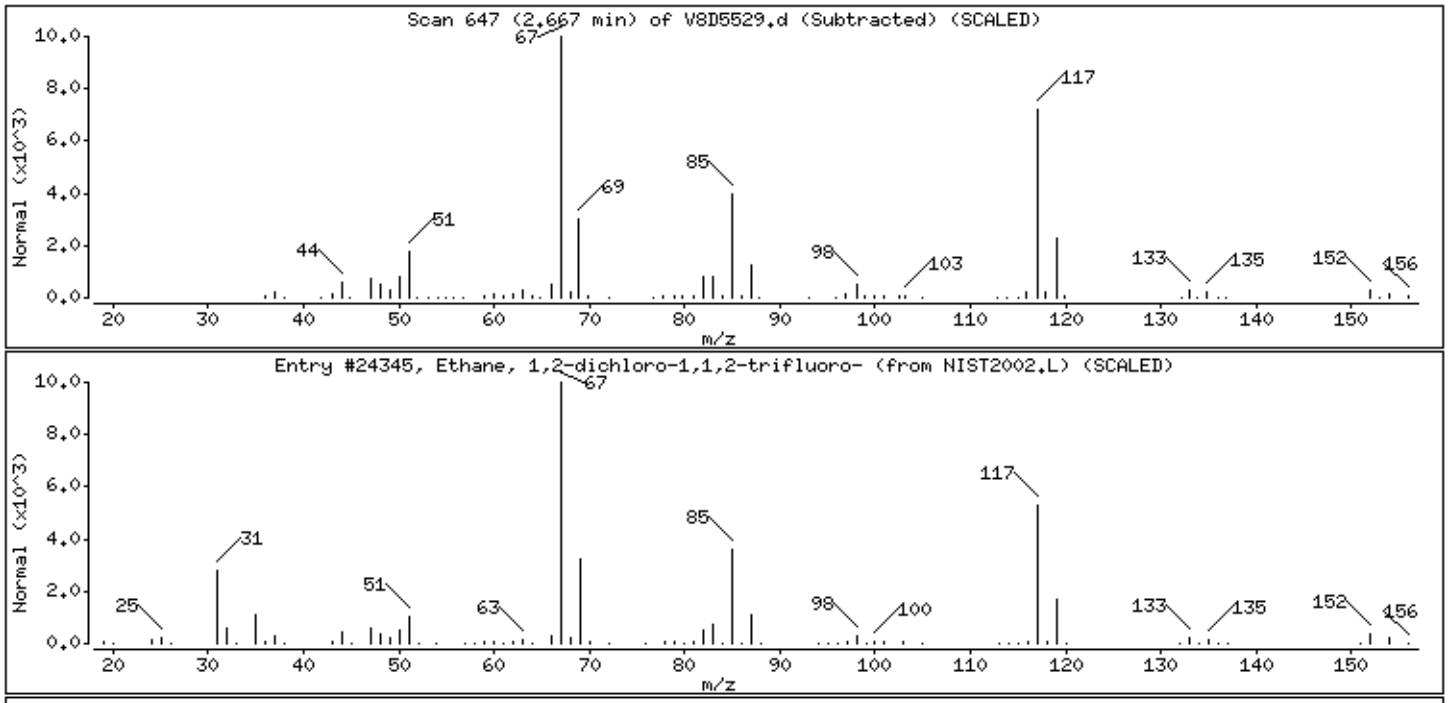
Client ID: MW-10D_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-14A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	90	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-14ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5599.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

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	25	U
74-87-3	Chloromethane	25	U
75-01-4	Vinyl chloride	25	U
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
67-64-1	Acetone	130	U
74-88-4	Iodomethane	25	U
75-15-0	Carbon disulfide	25	U
75-09-2	Methylene chloride	25	U
156-60-5	trans-1,2-Dichloroethene	25	U
1634-04-4	Methyl tert-butyl ether	25	U
75-34-3	1,1-Dichloroethane	120	D
108-05-4	Vinyl acetate	25	U
78-93-3	2-Butanone	130	U
156-59-2	cis-1,2-Dichloroethene	25	U
594-20-7	2,2-Dichloropropane	25	U
74-97-5	Bromochloromethane	25	U
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	1100	D
563-58-6	1,1-Dichloropropene	25	U
56-23-5	Carbon tetrachloride	25	U
107-06-2	1,2-Dichloroethane	25	U
71-43-2	Benzene	25	U
79-01-6	Trichloroethene	760	D
78-87-5	1,2-Dichloropropane	25	U
74-95-3	Dibromomethane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-pentanone	130	U
108-88-3	Toluene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
142-28-9	1,3-Dichloropropane	25	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-10D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-14ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5599.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

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	25	U
591-78-6	2-Hexanone	130	U
124-48-1	Dibromochloromethane	25	U
106-93-4	1,2-Dibromoethane	25	U
108-90-7	Chlorobenzene	25	U
630-20-6	1,1,1,2-Tetrachloroethane	25	U
100-41-4	Ethylbenzene	25	U
179601-23-1	m,p-Xylene	25	U
95-47-6	o-Xylene	25	U
1330-20-7	Xylene (Total)	25	U
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
98-82-8	Isopropylbenzene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-86-1	Bromobenzene	25	U
96-18-4	1,2,3-Trichloropropane	25	U
103-65-1	n-Propylbenzene	25	U
95-49-8	2-Chlorotoluene	25	U
108-67-8	1,3,5-Trimethylbenzene	25	U
106-43-4	4-Chlorotoluene	25	U
98-06-6	tert-Butylbenzene	25	U
95-63-6	1,2,4-Trimethylbenzene	25	U
135-98-8	sec-Butylbenzene	25	U
99-87-6	4-Isopropyltoluene	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
104-51-8	n-Butylbenzene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
96-12-8	1,2-Dibromo-3-chloropropane	25	U
120-82-1	1,2,4-Trichlorobenzene	25	U
87-68-3	Hexachlorobutadiene	25	U
87-61-6	1,2,3-Trichlorobenzene	25	U
91-20-3	Naphthalene	25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-10D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-14ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5599.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5599.d
Lab Smp Id: N1055-14ADL Client Smp ID: MW-10D_6/16/14DL
Inj Date : 21-JUN-2014 01:29
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-14ADL,,77692,25
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 90
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	25.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	212024	120.450	3000
	23 1,1-Dichloroethane	63	3.786	3.782	(0.723)	18375	4.66082	120
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	74594	56.5219	56
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.894)	157035	43.8650	1100
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	11748	52.6526	53
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	177344	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	44500	30.4044	760
$	58 Toluene-d8	98	6.715	6.715	(0.817)	233493	43.2869	43
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	235715	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	144405	49.8690	50
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	120518	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d
Report Date: 25-Jun-2014 16:17

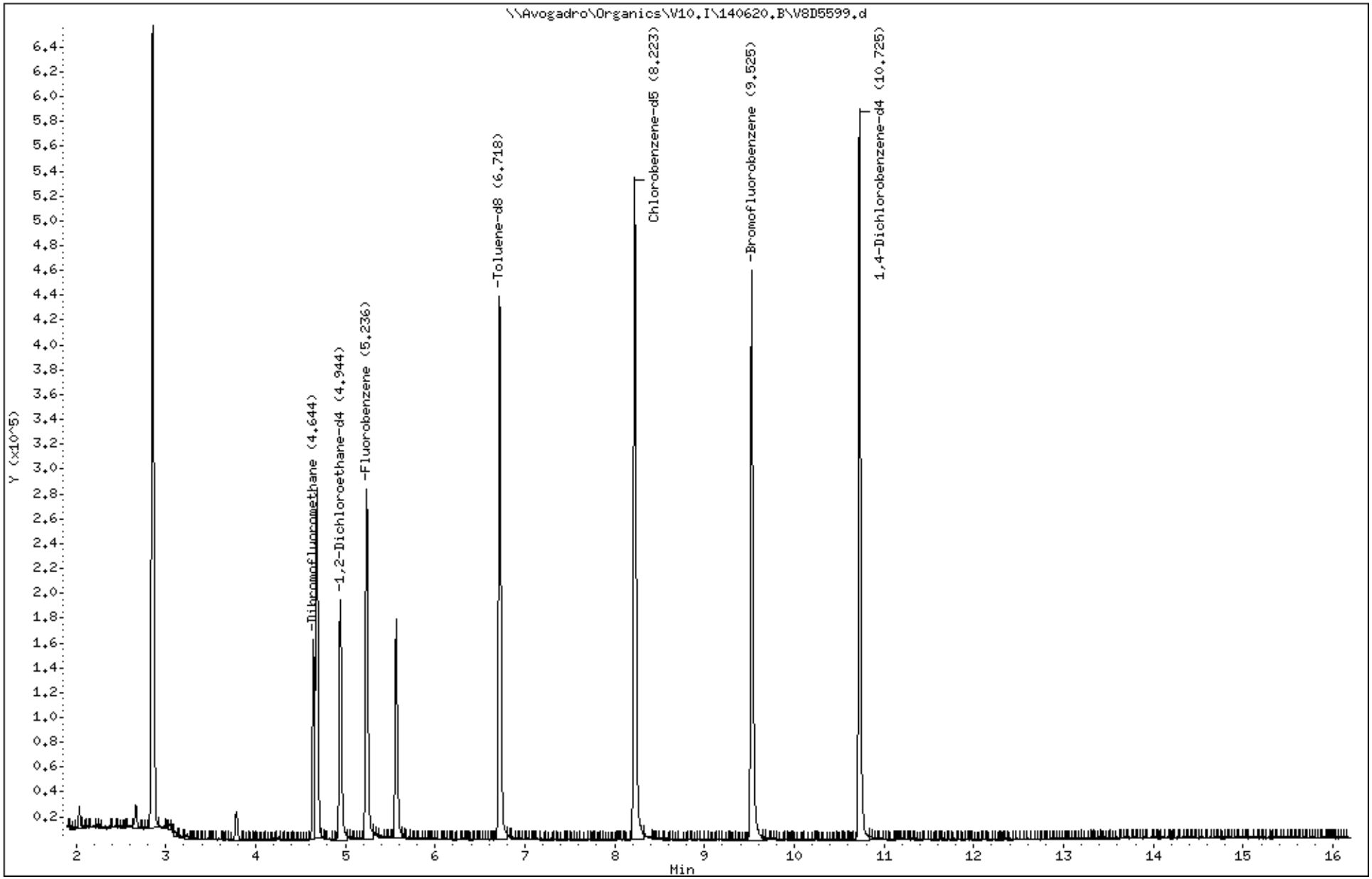
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5599.d
Lab Smp Id: N1055-14ADL Client Smp ID: MW-10D_6/16/14DL
Inj Date : 21-JUN-2014 01:29
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-14ADL,,77692,25
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 90
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d
Date : 21-JUN-2014 01:29
Client ID: MW-10D_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-14ADL,,77692,25
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d

Date : 21-JUN-2014 01:29

Client ID: MW-10D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-14ADL,,77692,25

Purge Volume: 5.0

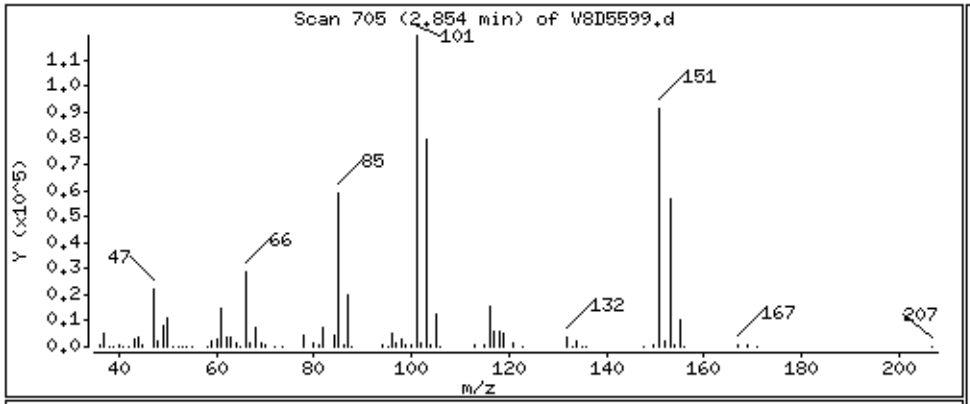
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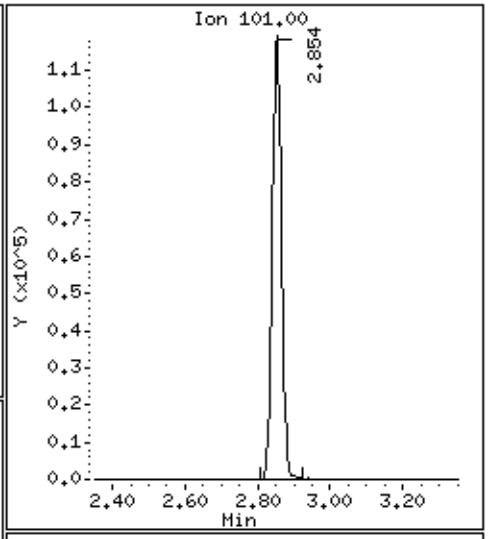
Column phase: DB-624

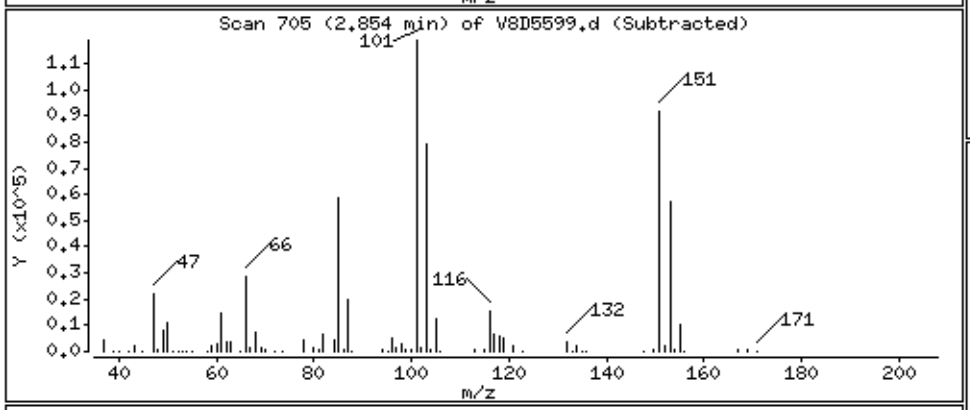
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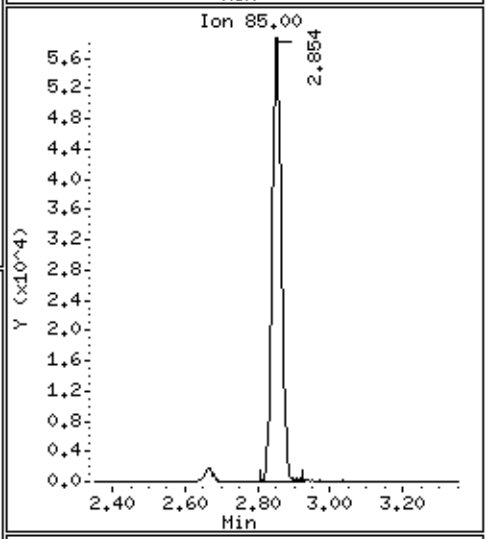
11 1,1,2-Trichloro-1,2,2-Trifluo

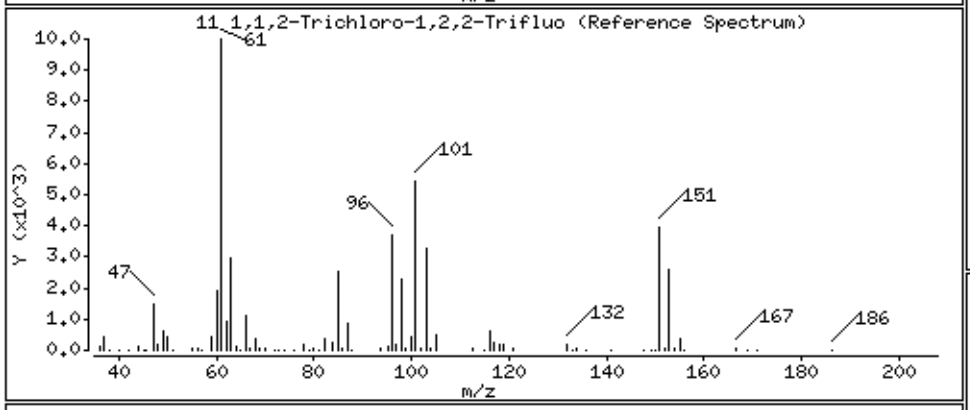
Concentration: 3000 ug/L

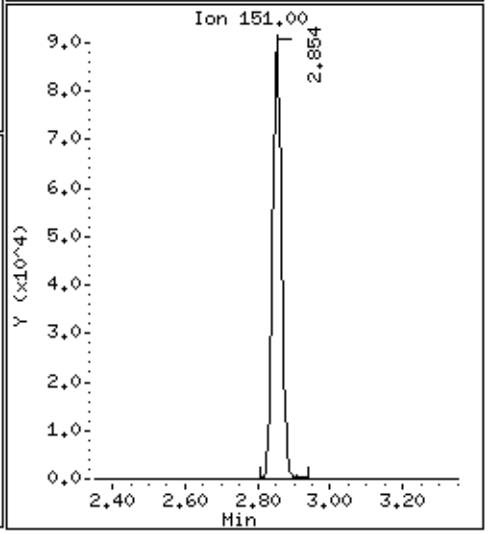


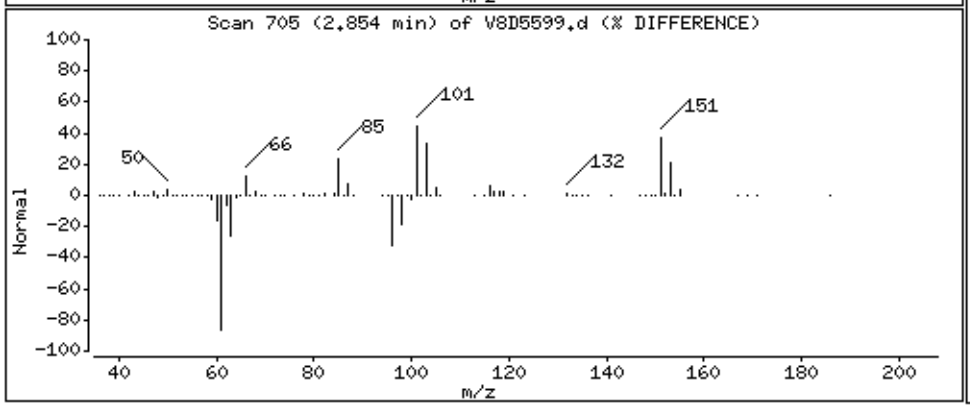












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d

Date : 21-JUN-2014 01:29

Client ID: MW-10D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-14ADL,,77692,25

Purge Volume: 5.0

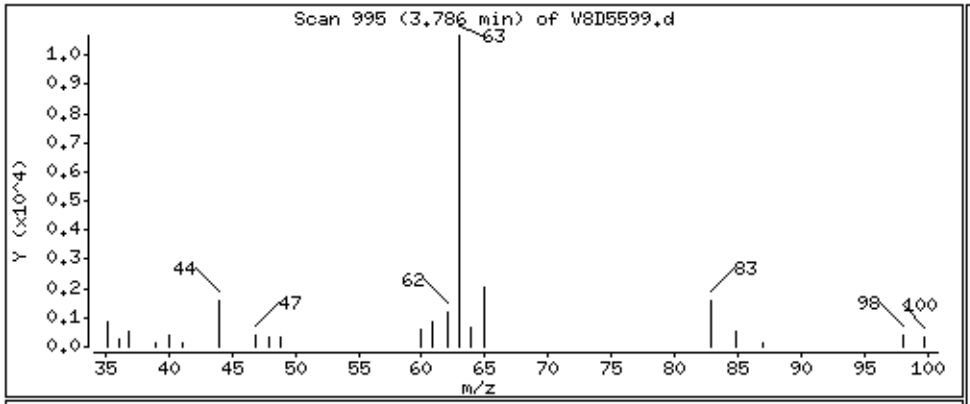
Operator: WL SRC: LIMS

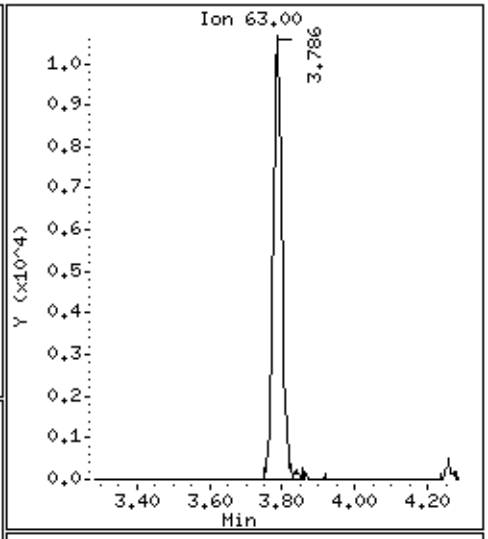
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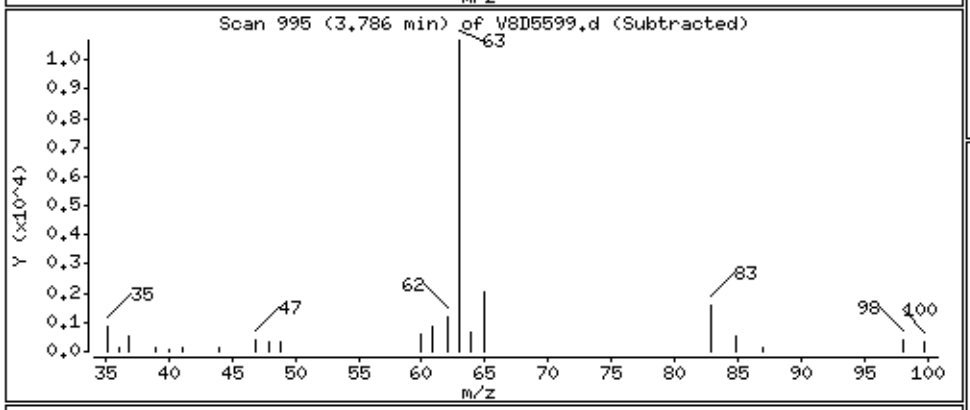
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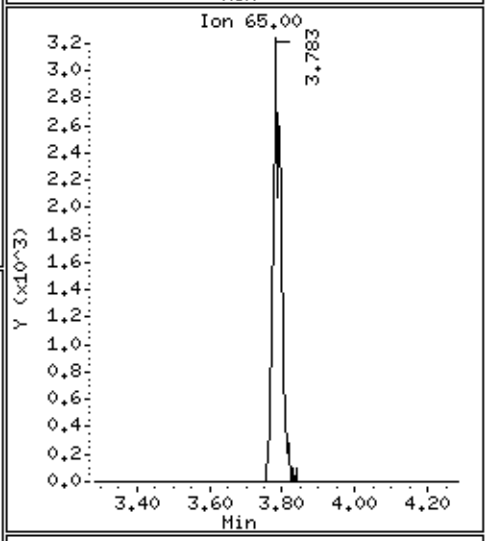
23 1,1-Dichloroethane

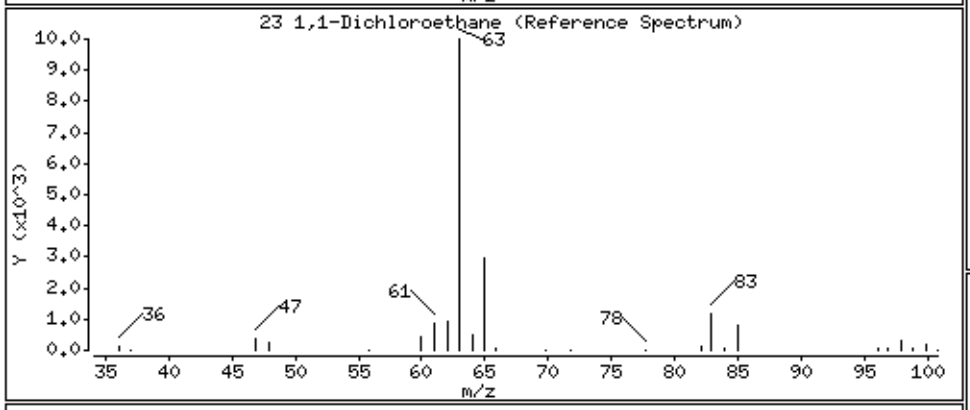
Concentration: 120 ug/L

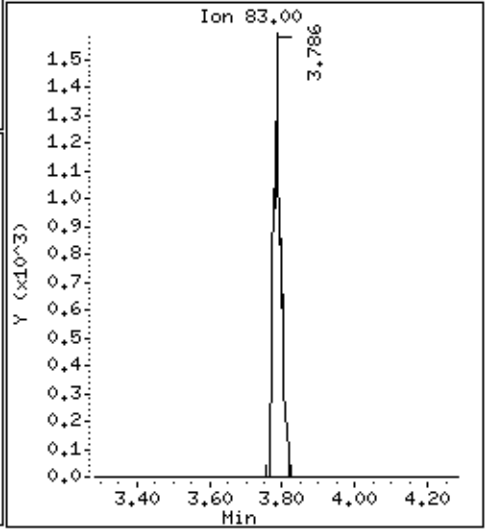


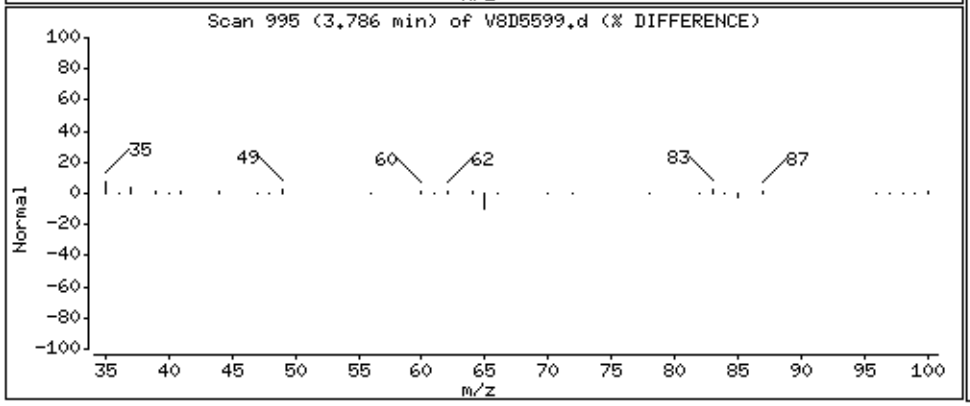












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d

Date : 21-JUN-2014 01:29

Client ID: MW-10D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-14ADL,,77692,25

Purge Volume: 5.0

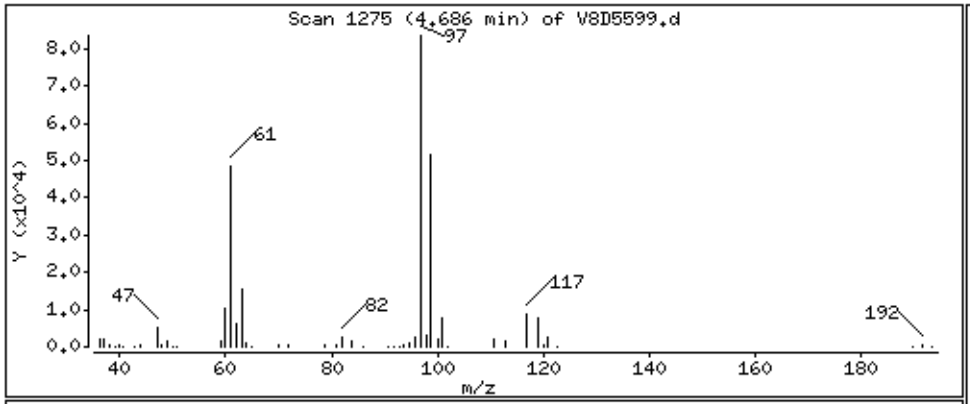
Operator: WL SRC: LIMS

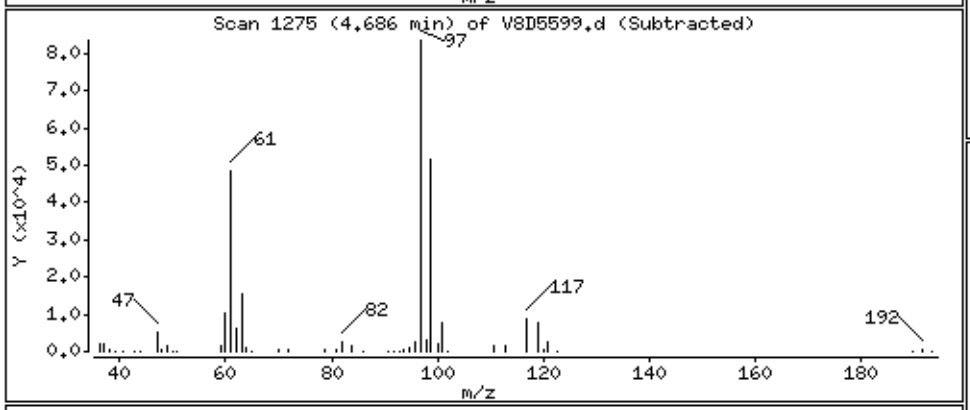
Column phase: DB-624

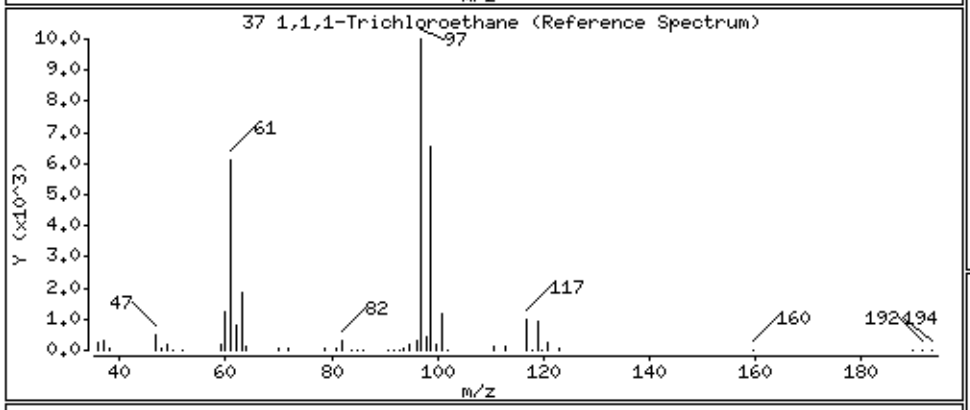
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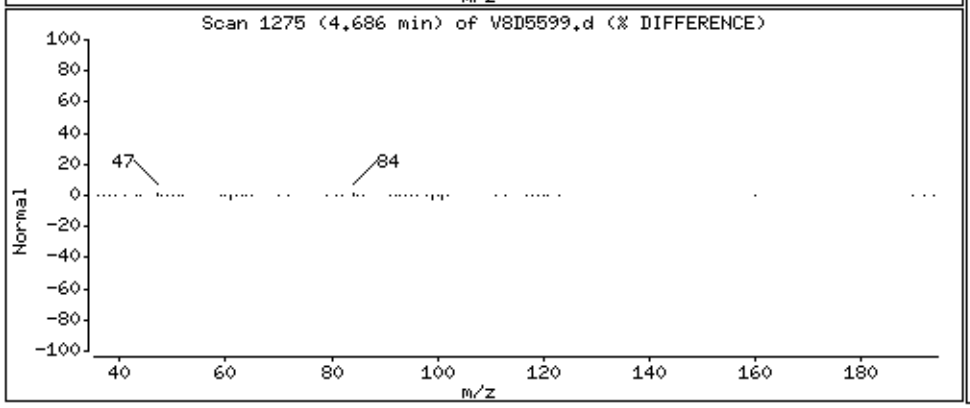
37 1,1,1-Trichloroethane

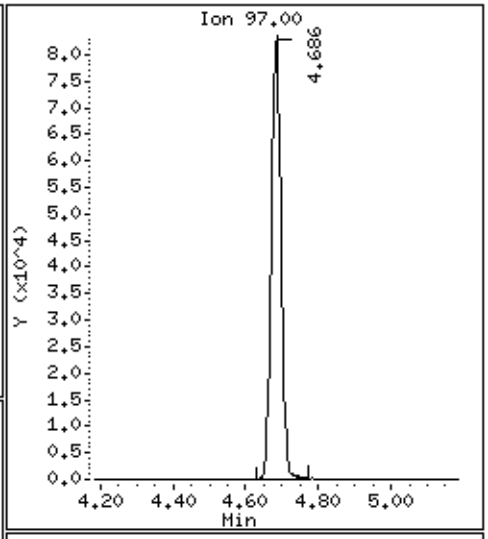
Concentration: 1100 ug/L

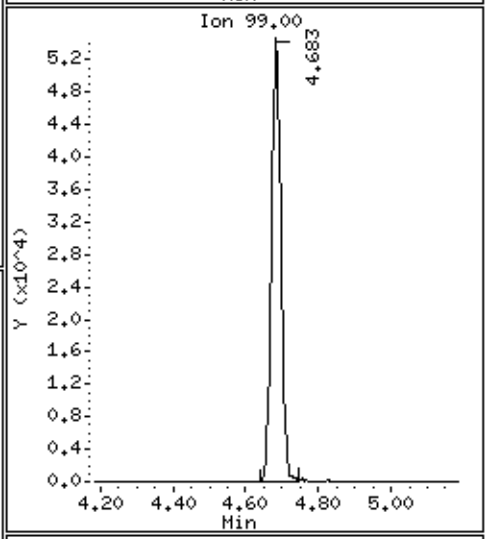


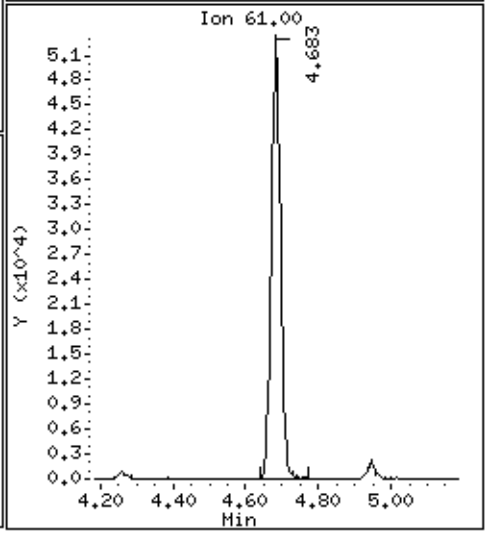












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5599.d

Date : 21-JUN-2014 01:29

Client ID: MW-10D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-14ADL,,77692,25

Purge Volume: 5.0

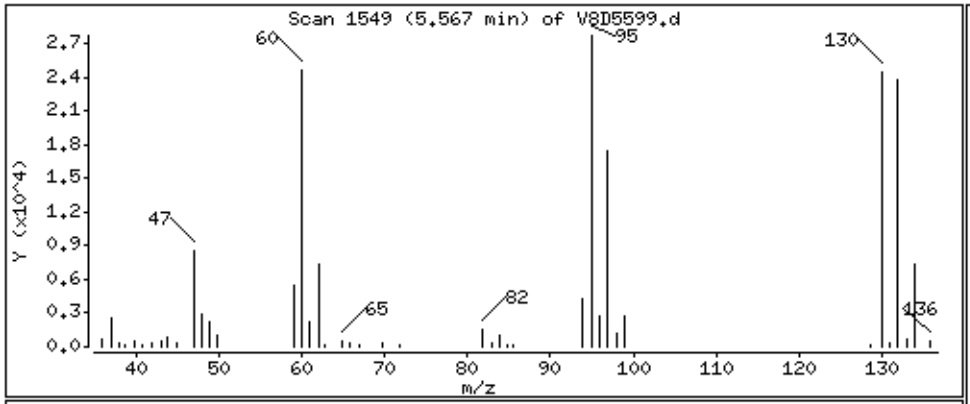
Operator: WL SRC: LIMS

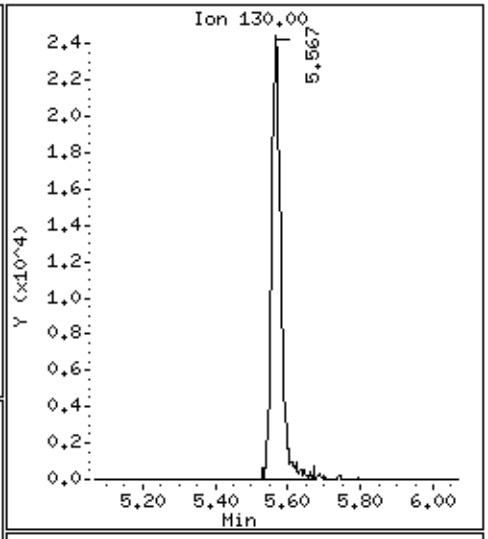
Column phase: DB-624

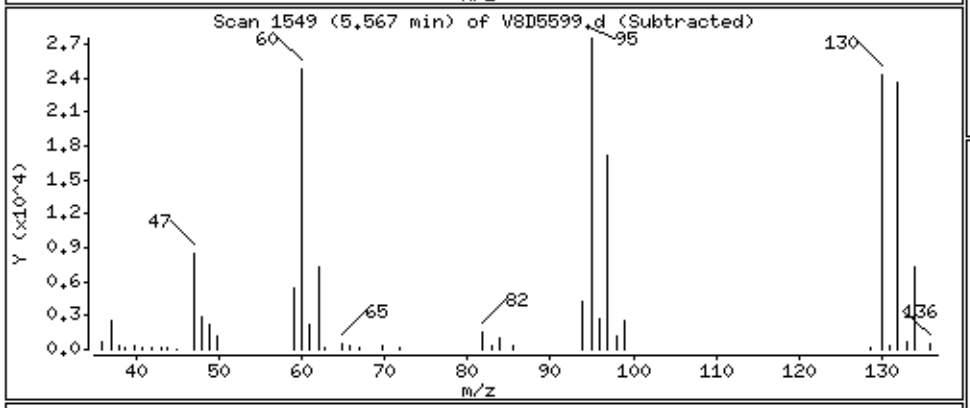
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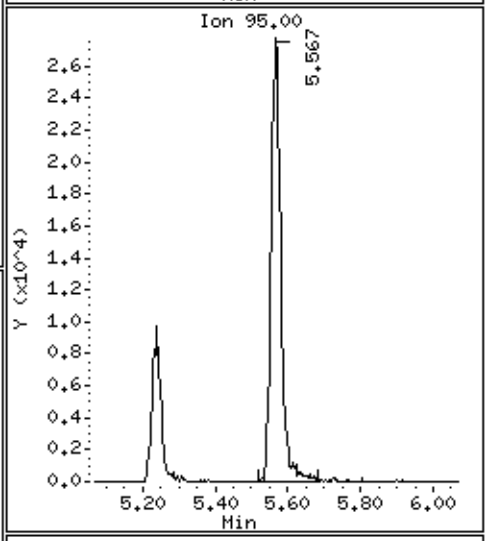
47 Trichloroethene

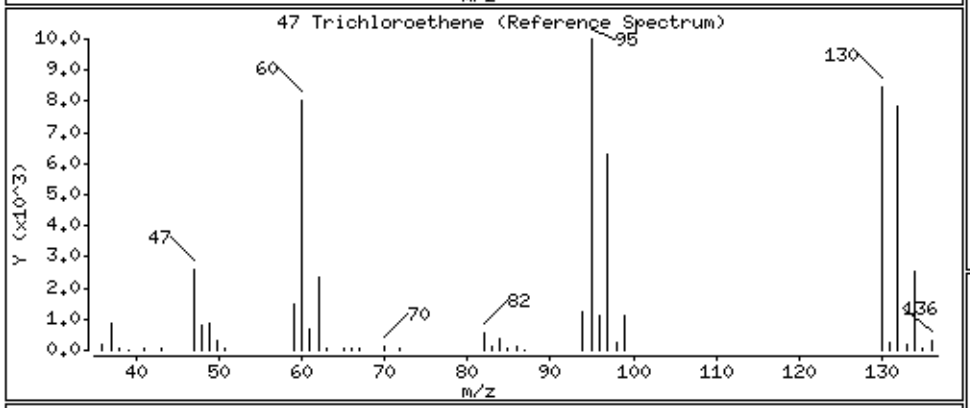
Concentration: 760 ug/L

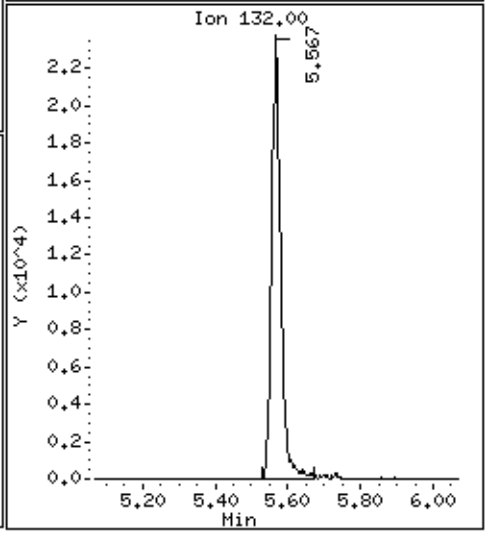


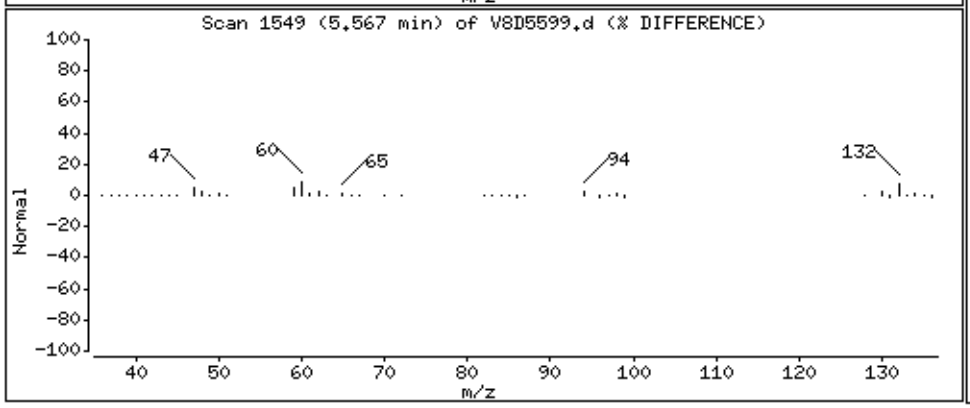












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-17S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-15A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5530.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	1.7	
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	4.4	
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	83	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	9.5	
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	80	
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	75	
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

EPA SAMPLE NO.

OC-17S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-15A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5530.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	360	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-17S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-15A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5530.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d
Report Date: 27-Jun-2014 13:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5530.d
Lab Smp Id: N1055-15A Client Smp ID: OC-17S_6/16/14
Inj Date : 19-JUN-2014 16:44
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-15A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.856	1.856	(0.355)	5697	1.70332	1.7(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	831025	360.906	360(A)
18	Methylene Chloride	84	3.229	3.233	(0.617)	8918	4.41293	4.4
23	1,1-Dichloroethane	63	3.786	3.786	(0.723)	430438	83.4653	83
28	cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	19323	9.49393	9.5
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.887)	98246	56.9099	57
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	376868	80.4768	80
$ 42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	15695	53.7746	54
M 50	1,2-Dichloroethene (Total)	96				19323	9.49393	9.5
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	231983	50.0000	
47	Trichloroethene	130	5.567	5.567	(1.063)	143222	74.8078	75
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	289928	46.7373	47
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	271079	50.0000	
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.158)	165503	49.6988	50
* 92	1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	136669	50.0000	

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d
Report Date: 27-Jun-2014 13:51

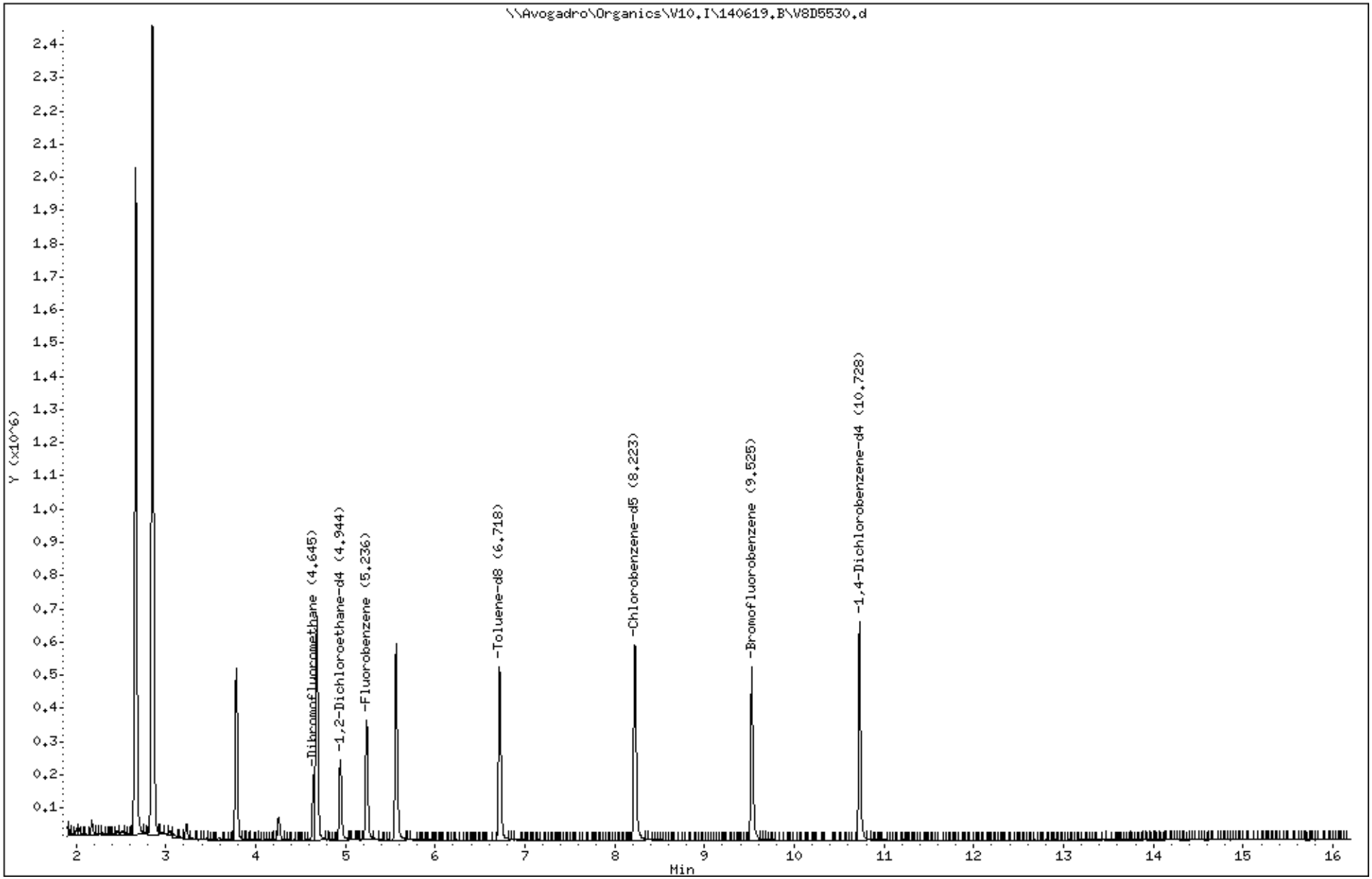
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5530.d
Lab Smp Id: N1055-15A Client Smp ID: OC-17S_6/16/14
Inj Date : 19-JUN-2014 16:44
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-15A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d
Date : 19-JUN-2014 16:44
Client ID: OC-17S_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-15A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

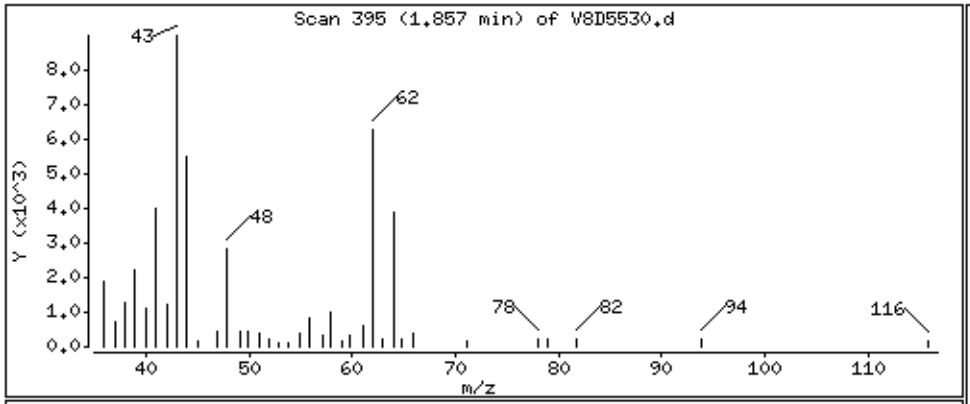
Client ID: OC-17S_6/16/14 Instrument: V10.i

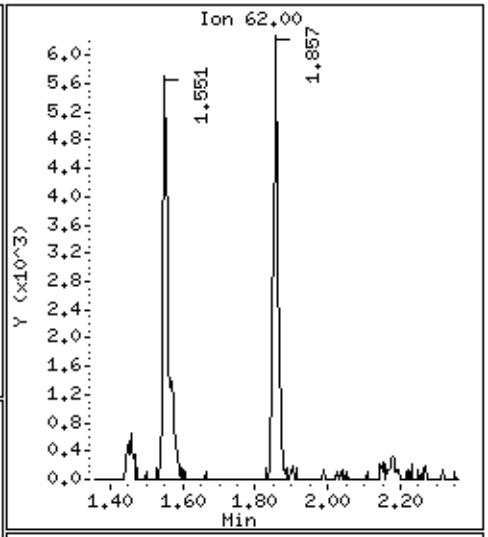
Sample Info: 5ML,N1055-15A,,77659

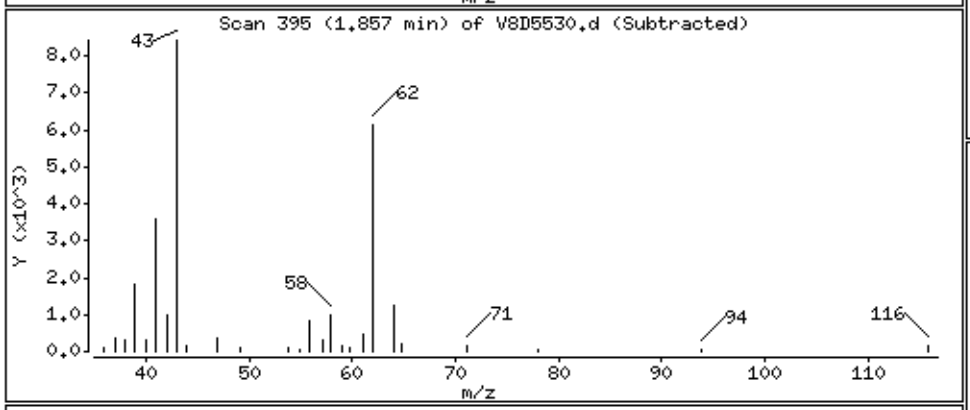
Purge Volume: 5.0 Operator: WL SRC: LIMS

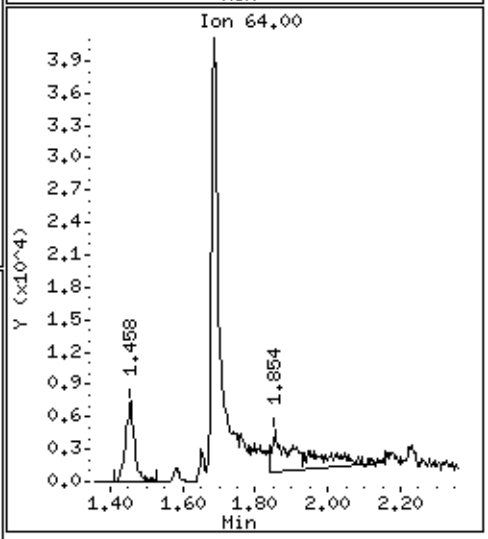
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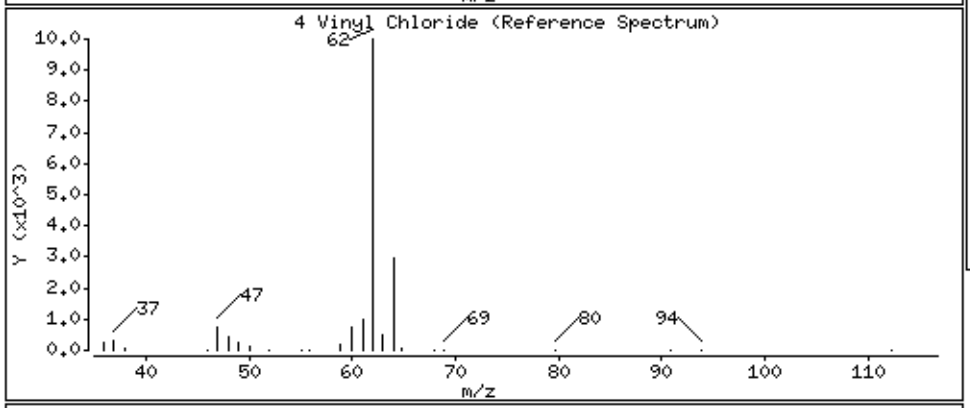
4 Vinyl Chloride Concentration: 1.7 ug/L

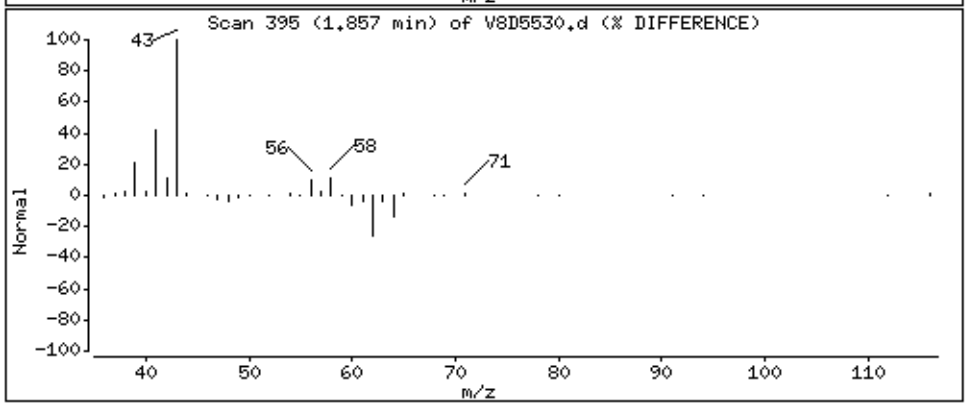












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

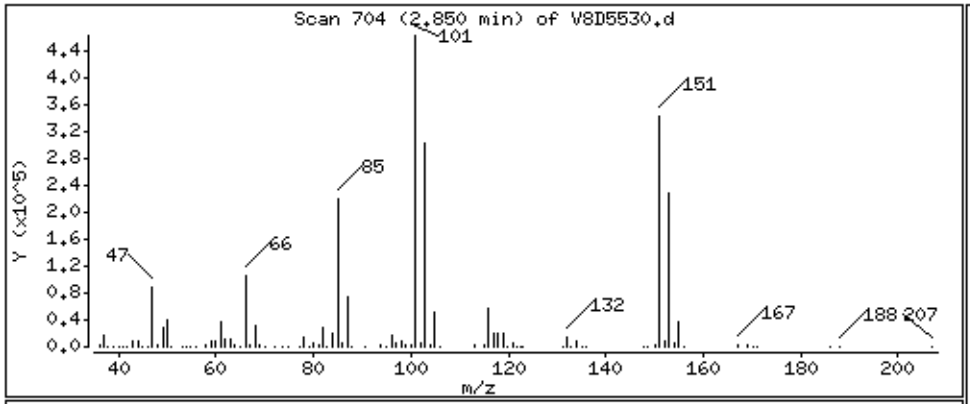
Client ID: OC-17S_6/16/14 Instrument: V10.i

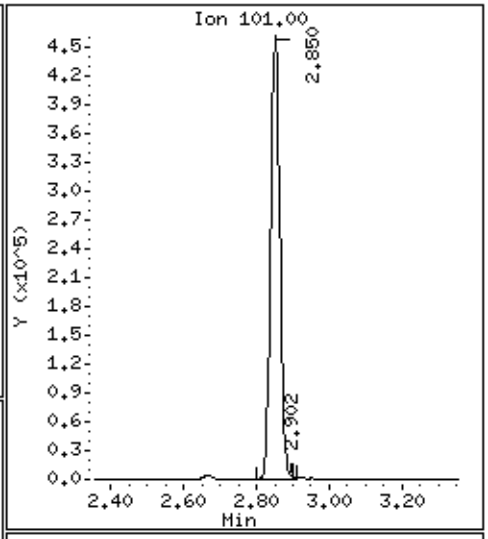
Sample Info: 5ML,N1055-15A,,77659

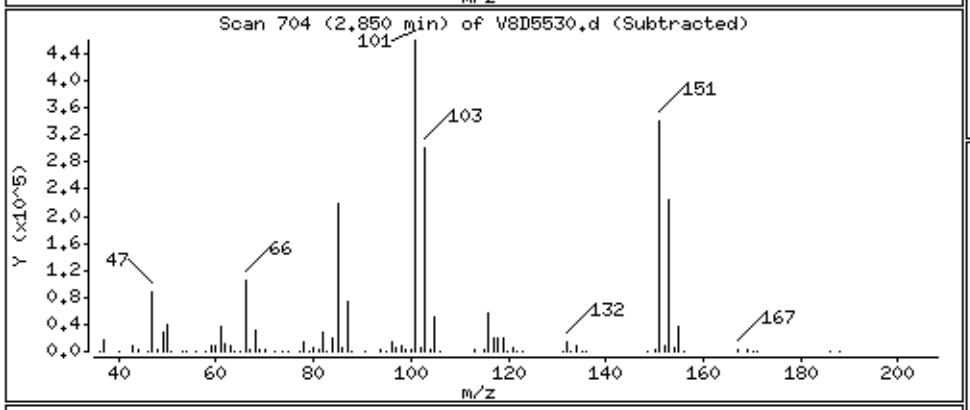
Purge Volume: 5.0 Operator: WL SRC: LIMS

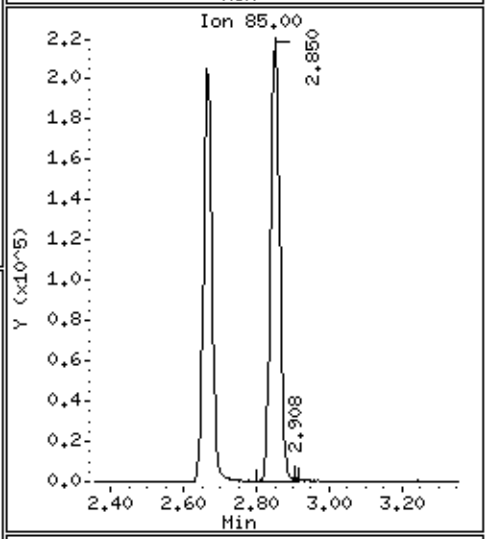
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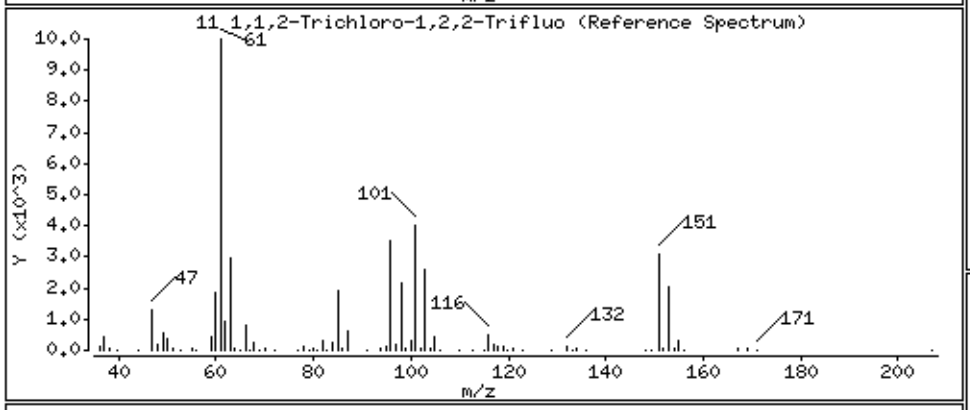
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 360 ug/L

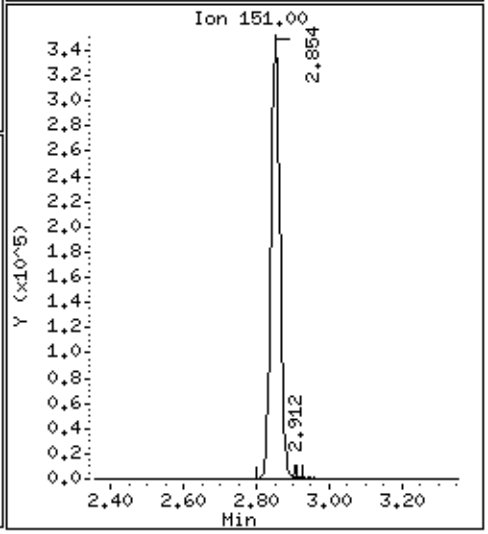


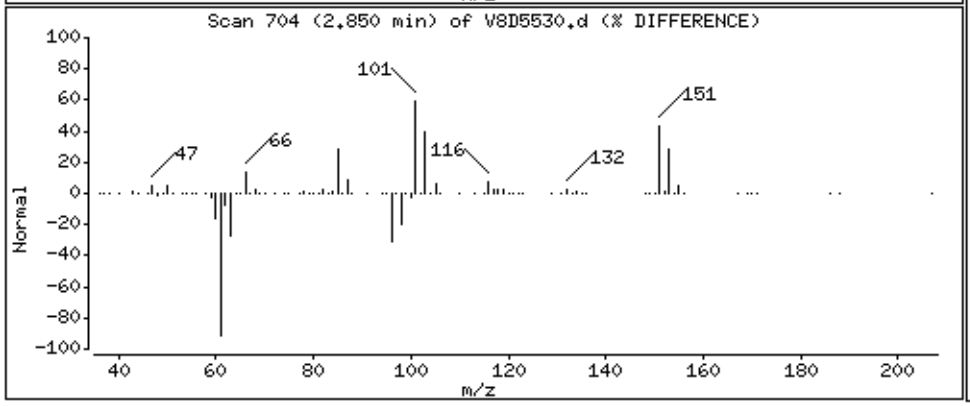












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

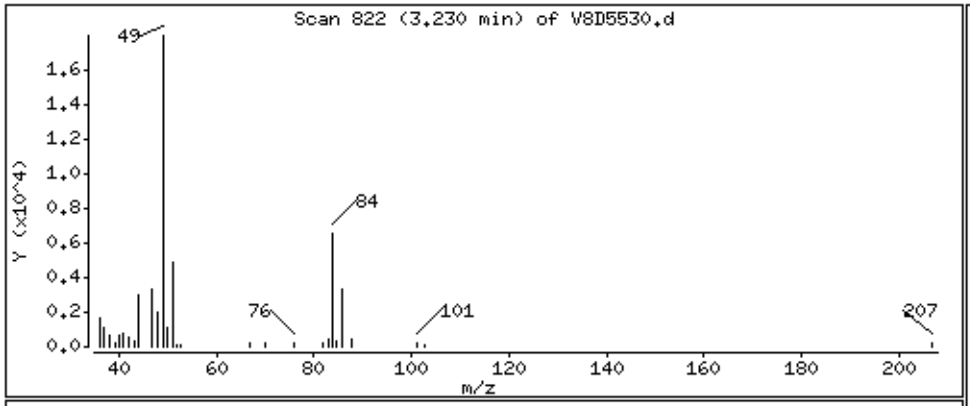
Client ID: OC-17S_6/16/14 Instrument: V10.i

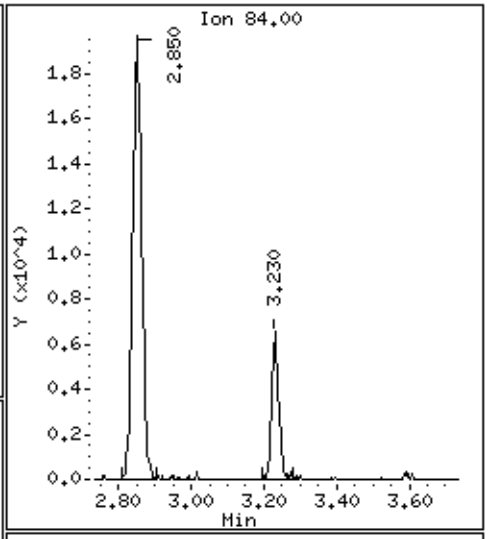
Sample Info: 5ML,N1055-15A,,77659

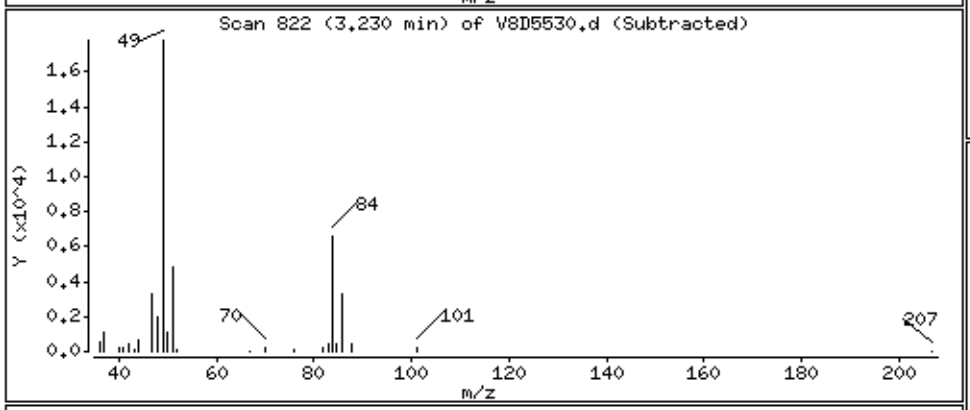
Purge Volume: 5.0 Operator: WL SRC: LIMS

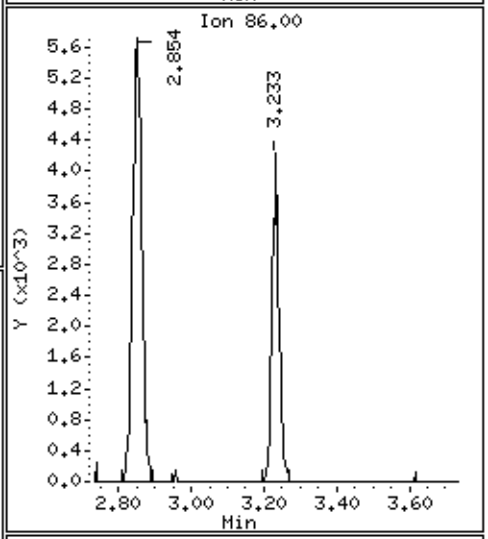
Column phase: DB-624 Column diameter: 0.25

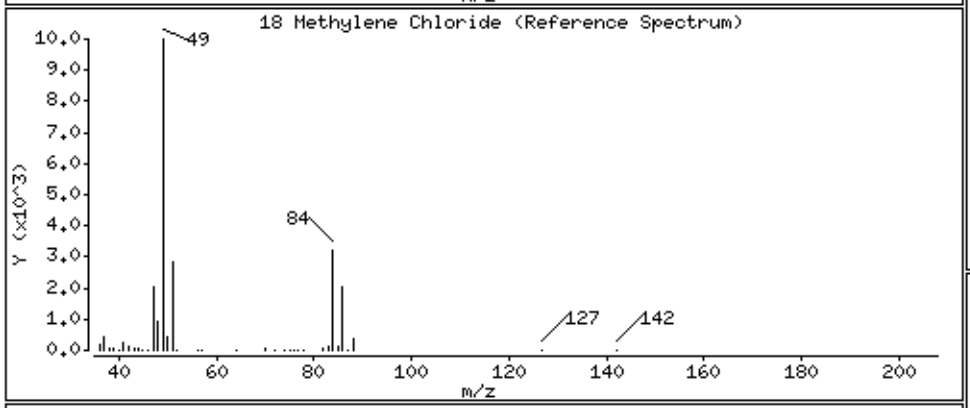
18 Methylene Chloride Concentration: 4.4 ug/L

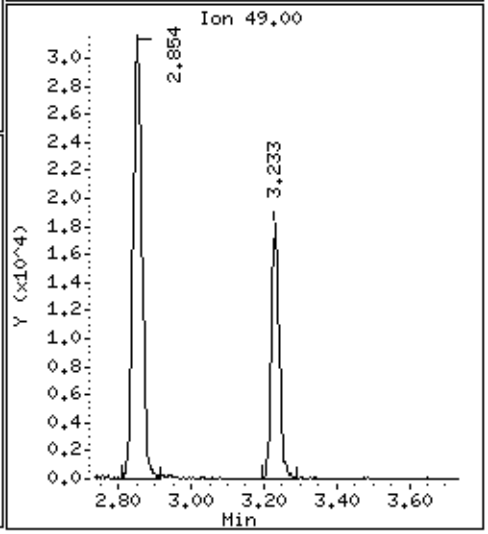


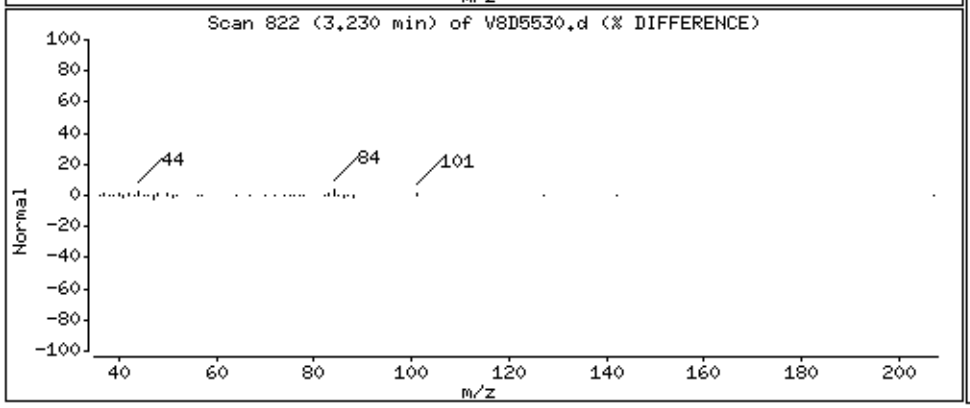












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

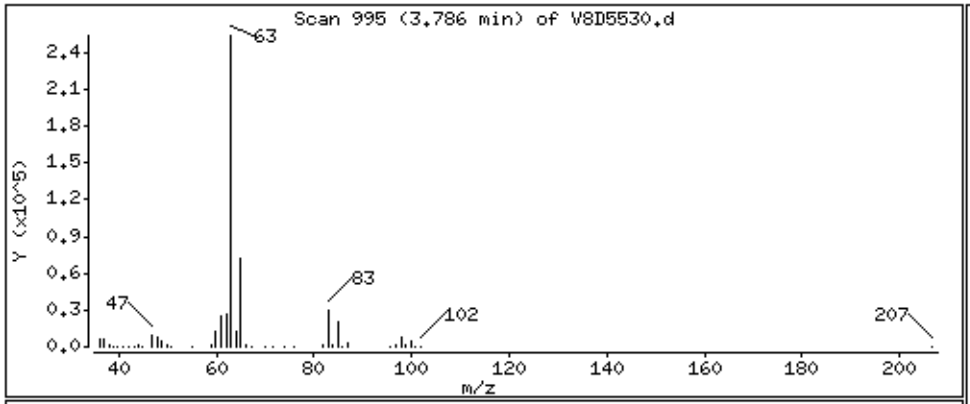
Client ID: OC-17S_6/16/14 Instrument: V10.i

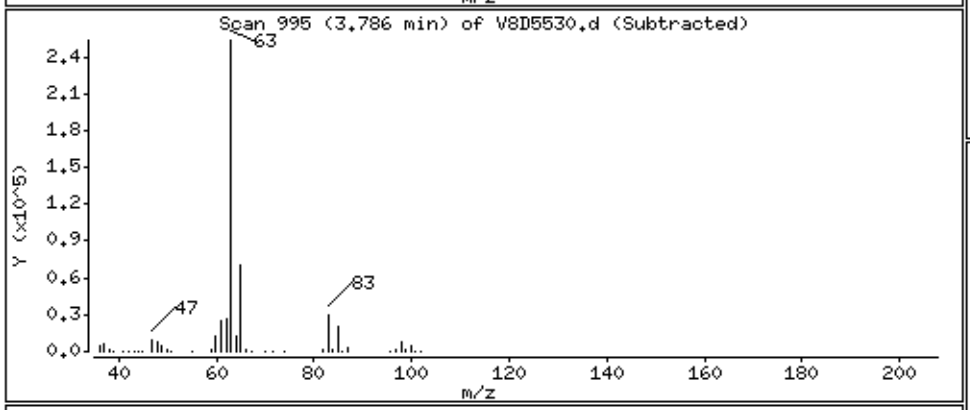
Sample Info: 5ML,N1055-15A,,77659

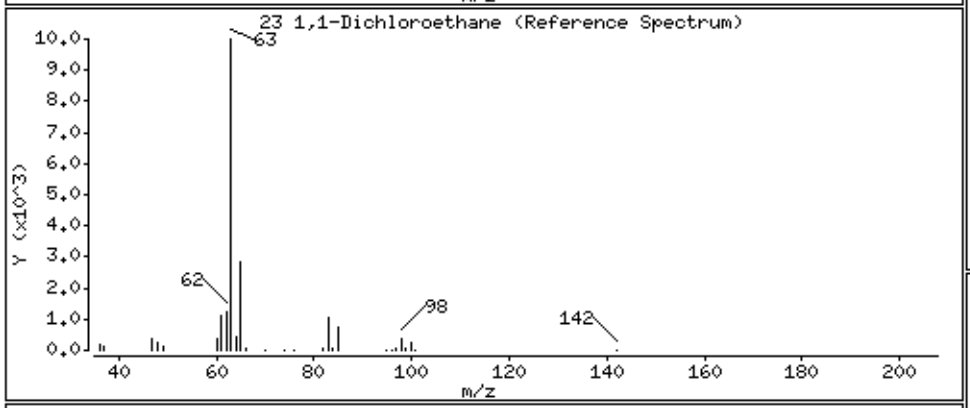
Purge Volume: 5.0 Operator: WL SRC: LIMS

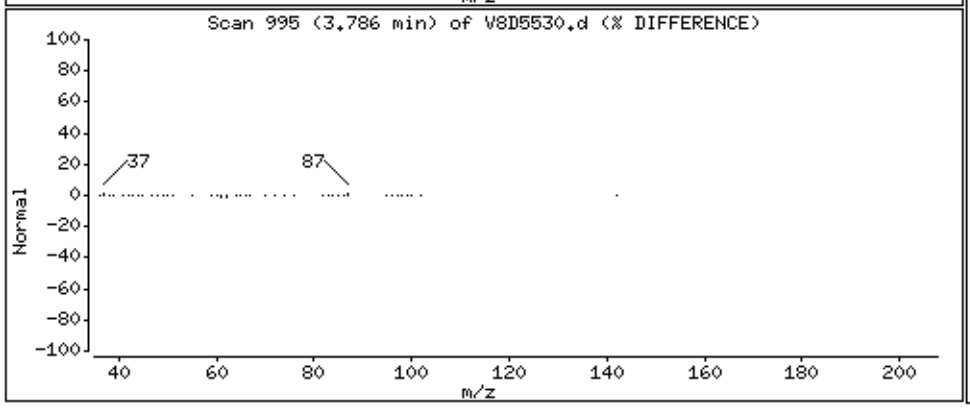
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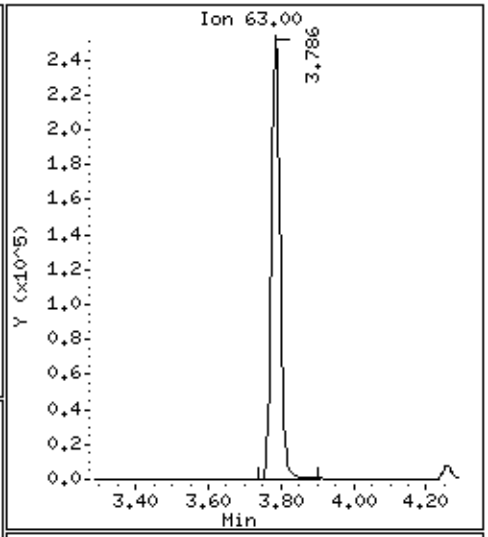
23 1,1-Dichloroethane Concentration: 83 ug/L

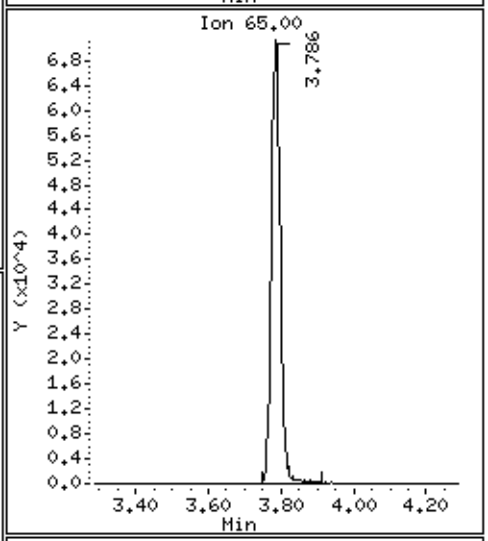


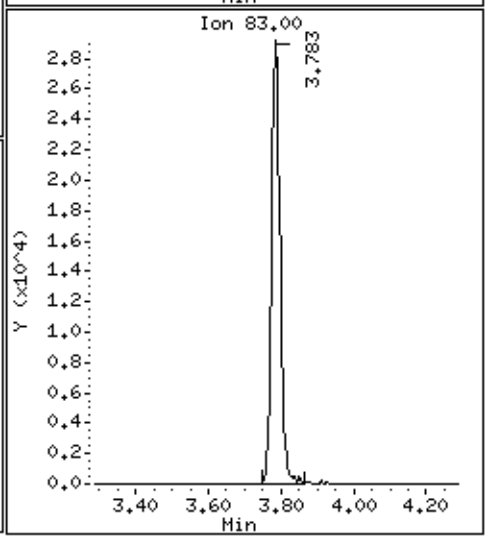












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

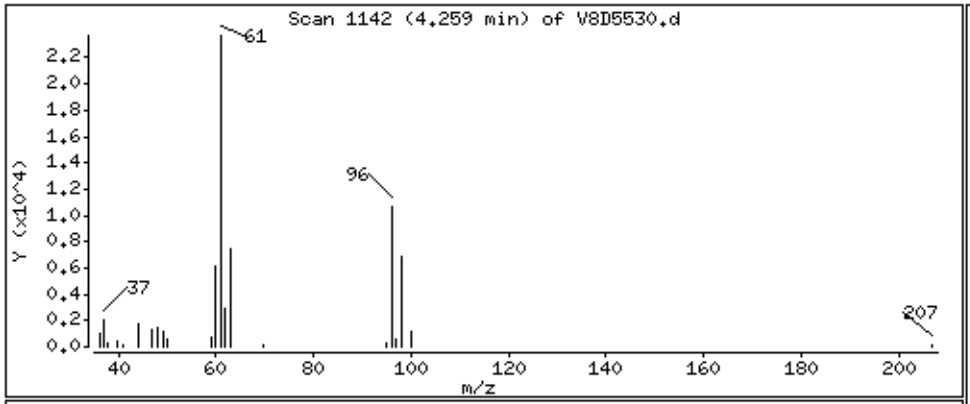
Client ID: OC-17S_6/16/14 Instrument: V10.i

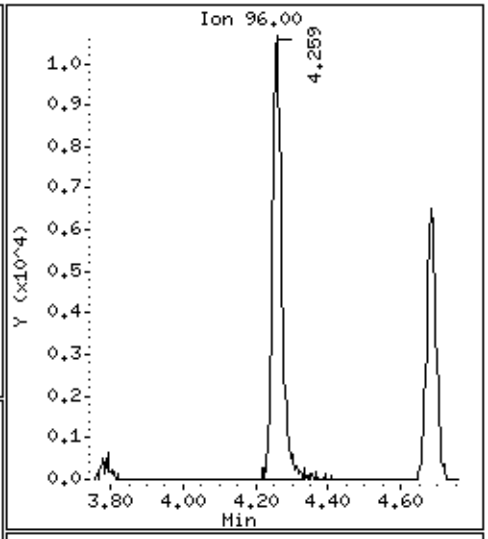
Sample Info: 5ML,N1055-15A,,77659

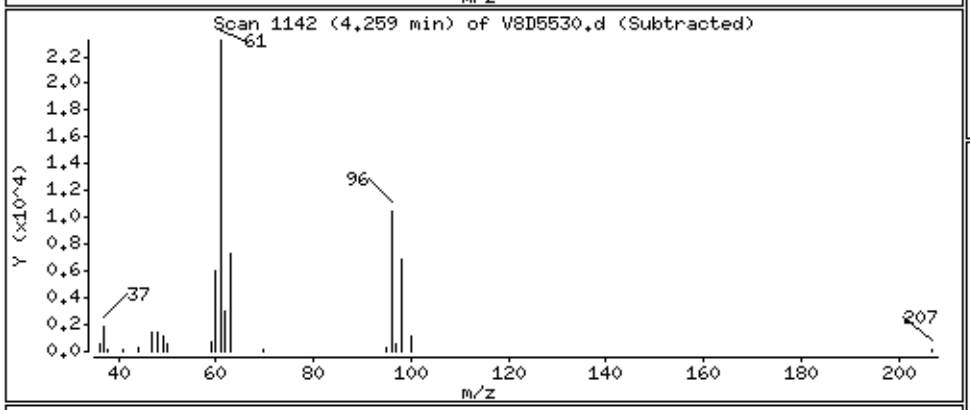
Purge Volume: 5.0 Operator: WL SRC: LIMS

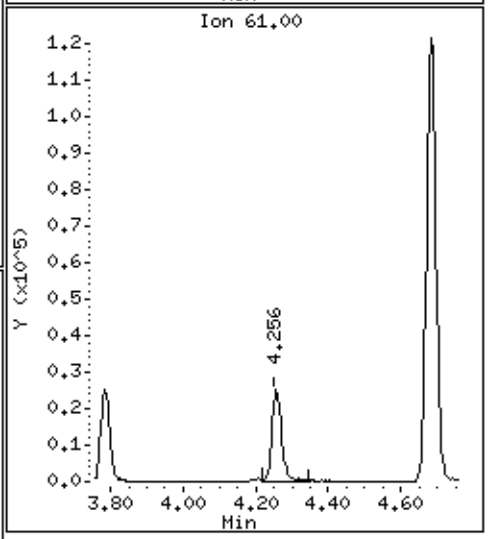
Column phase: DB-624 Column diameter: 0.25

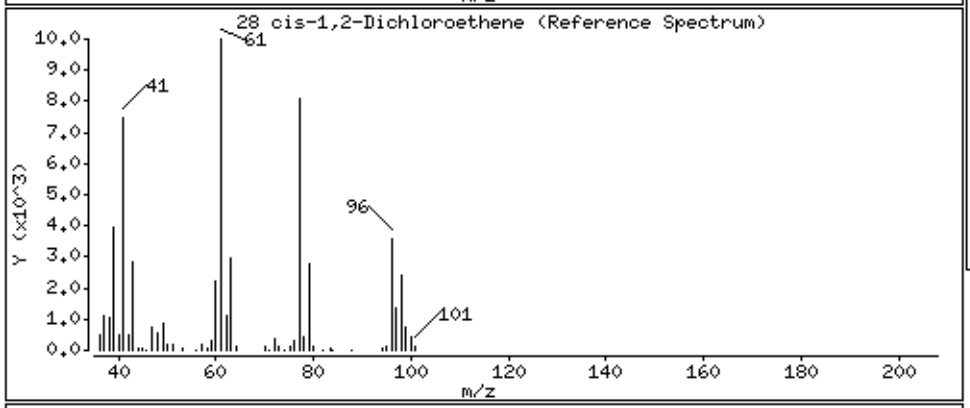
28 cis-1,2-Dichloroethene Concentration: 9.5 ug/L

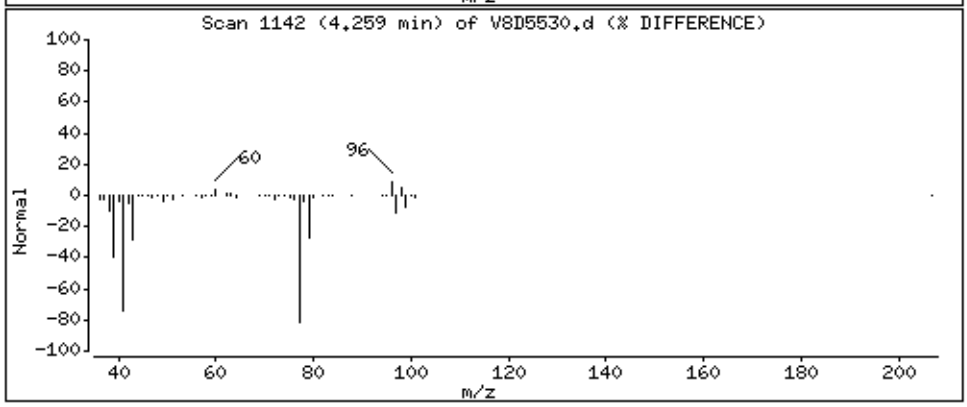












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

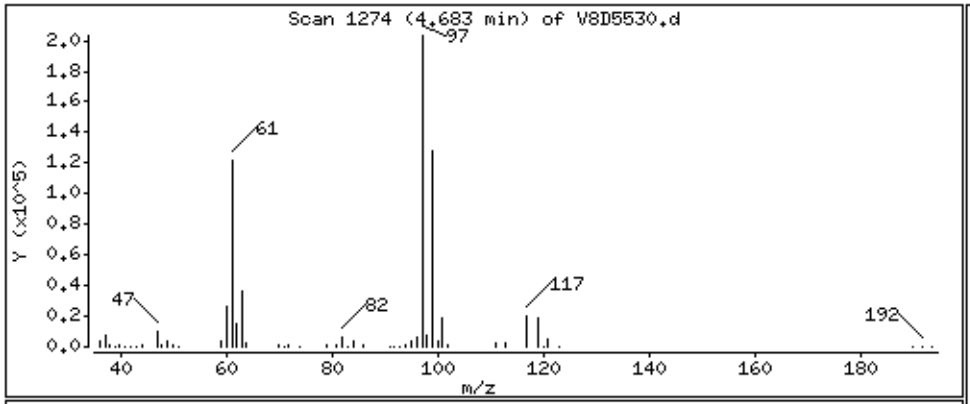
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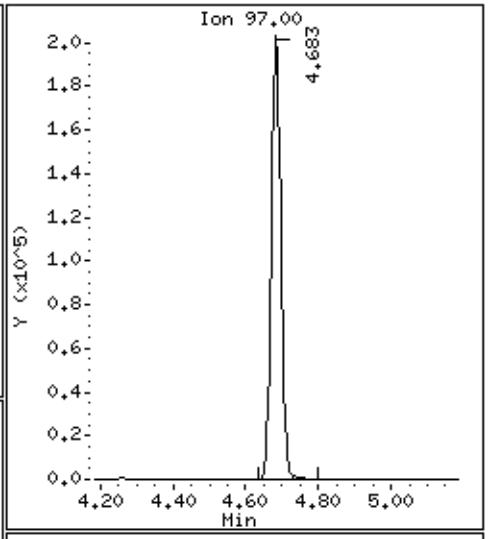
Sample Info: 5ML,N1055-15A,,77659

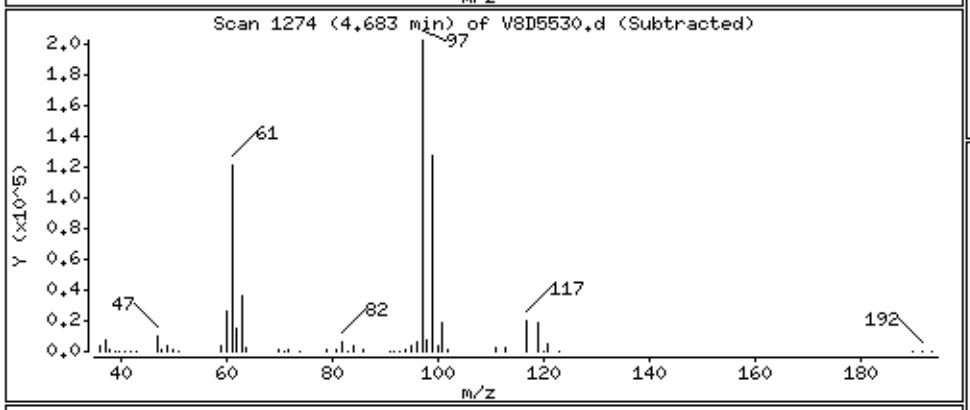
Purge Volume: 5.0 Operator: WL SRC: LIMS

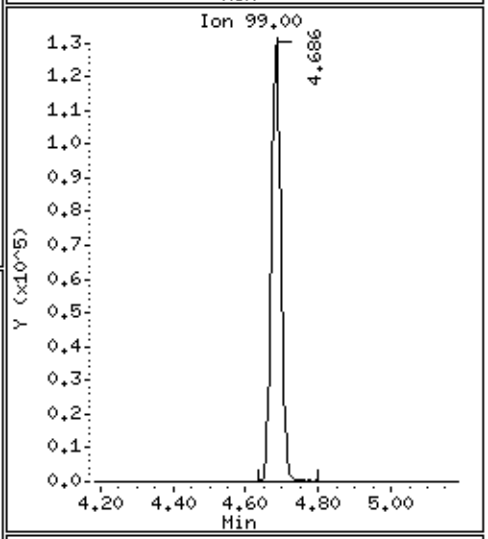
Column phase: DB-624 Column diameter: 0.25

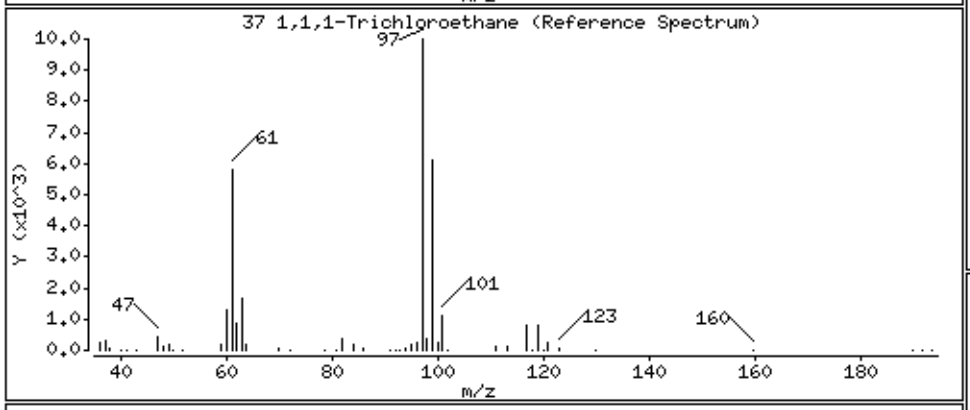
37 1,1,1-Trichloroethane Concentration: 80 ug/L

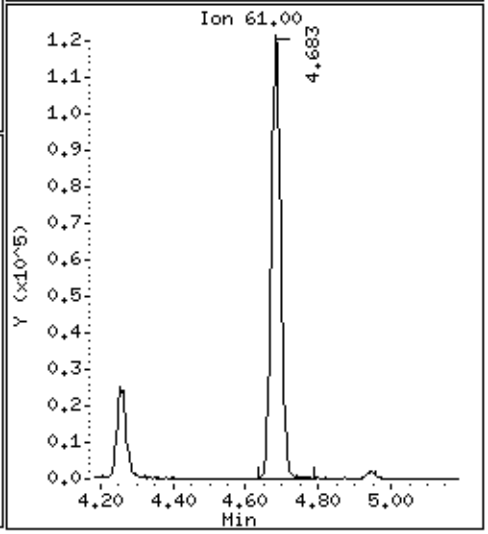


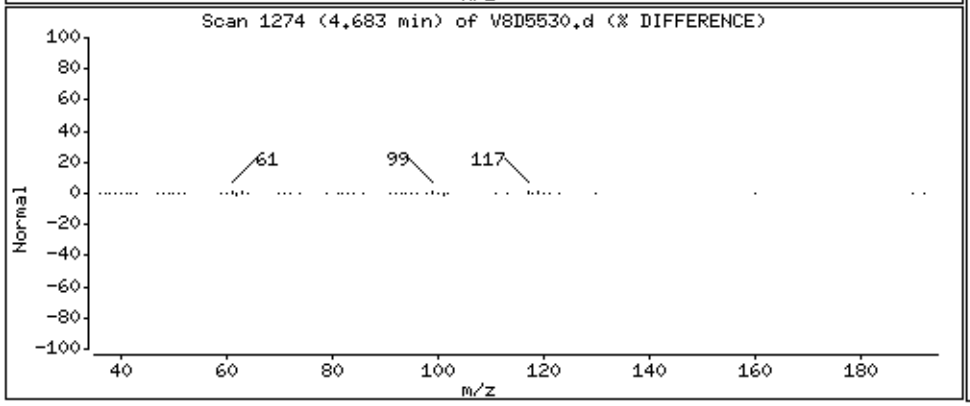












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5530.d

Date : 19-JUN-2014 16:44

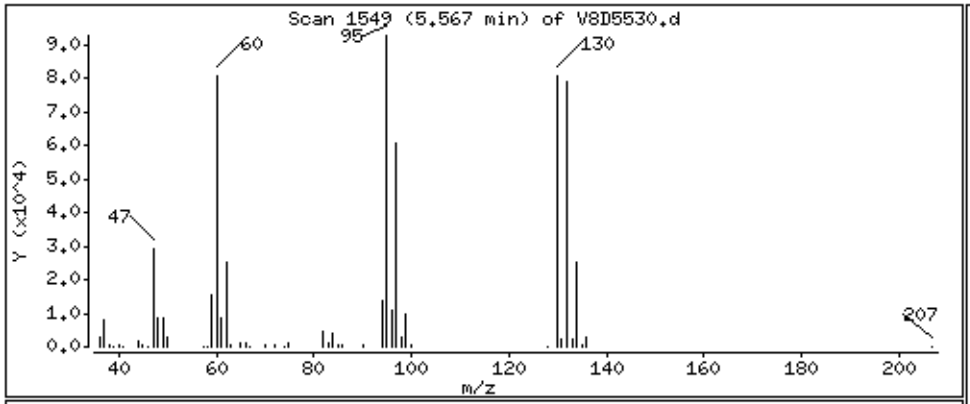
Client ID: OC-17S_6/16/14 Instrument: V10.i

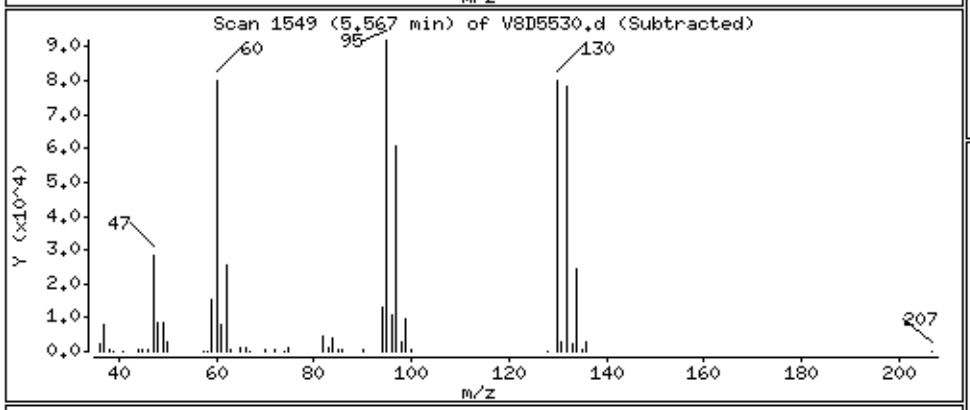
Sample Info: 5ML,N1055-15A,,77659

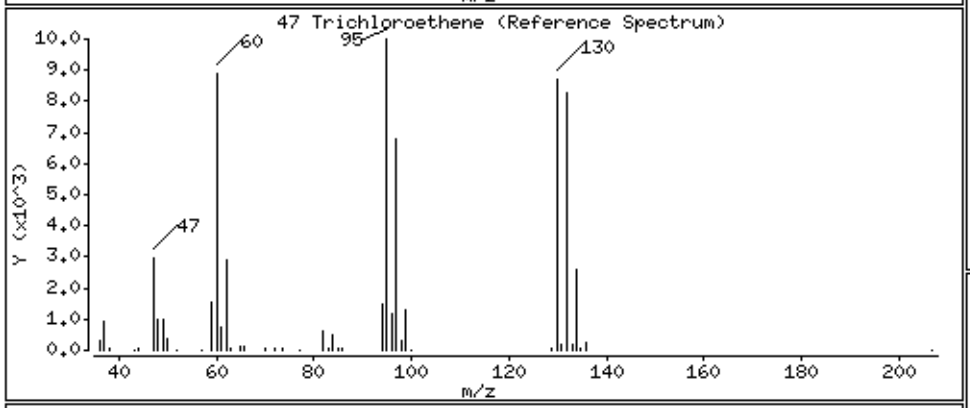
Purge Volume: 5.0 Operator: WL SRC: LIMS

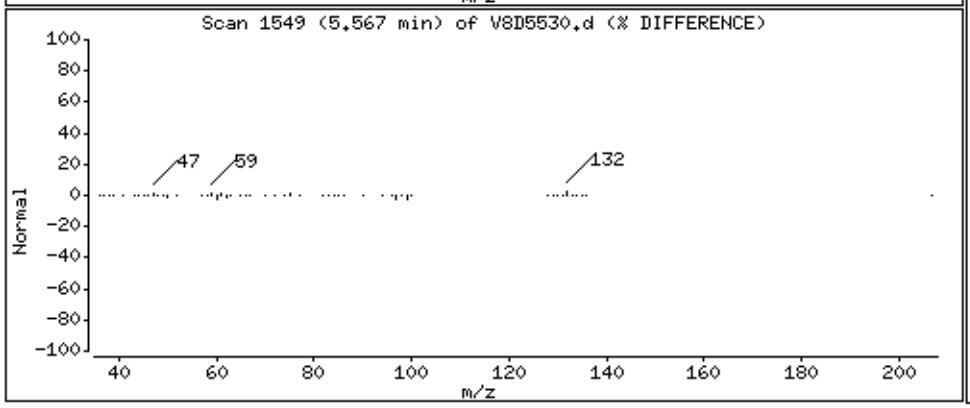
Column phase: DB-624 Column diameter: 0.25

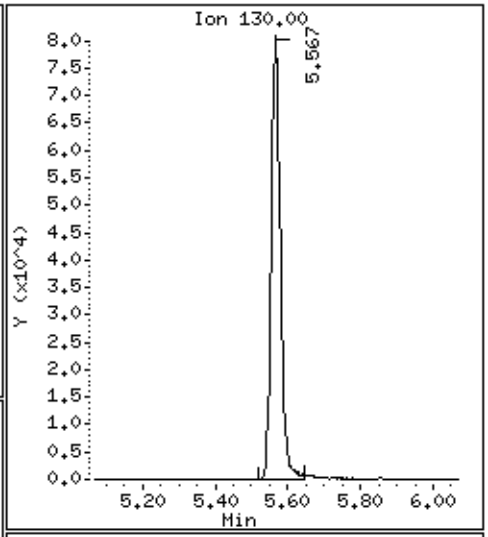
47 Trichloroethene Concentration: 75 ug/L

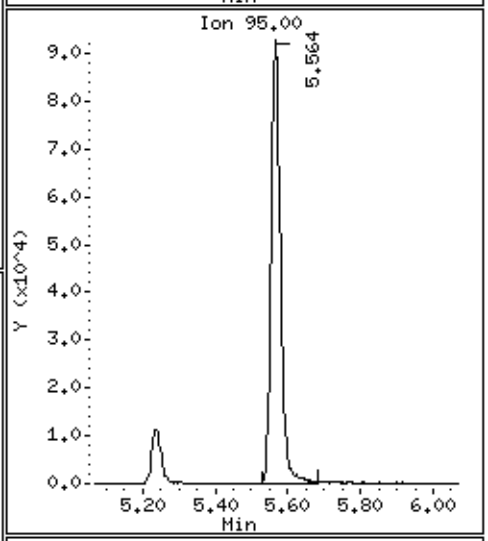


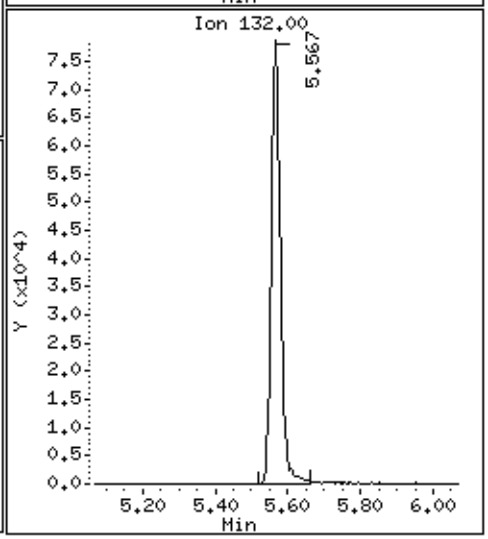












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-17S_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-15ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5600.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	4.0	U
74-87-3	Chloromethane	4.0	U
75-01-4	Vinyl chloride	4.0	U
74-83-9	Bromomethane	4.0	U
75-00-3	Chloroethane	4.0	U
75-69-4	Trichlorofluoromethane	4.0	U
75-35-4	1,1-Dichloroethene	4.0	U
67-64-1	Acetone	20	U
74-88-4	Iodomethane	4.0	U
75-15-0	Carbon disulfide	4.0	U
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.0	U
75-34-3	1,1-Dichloroethane	86	D
108-05-4	Vinyl acetate	4.0	U
78-93-3	2-Butanone	20	U
156-59-2	cis-1,2-Dichloroethene	8.2	D
594-20-7	2,2-Dichloropropane	4.0	U
74-97-5	Bromochloromethane	4.0	U
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	80	D
563-58-6	1,1-Dichloropropene	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
71-43-2	Benzene	4.0	U
79-01-6	Trichloroethene	60	D
78-87-5	1,2-Dichloropropane	4.0	U
74-95-3	Dibromomethane	4.0	U
75-27-4	Bromodichloromethane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
142-28-9	1,3-Dichloropropane	4.0	U

EPA SAMPLE NO.
OC-17S_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-15ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5600.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	4.0	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	4.0	U
106-93-4	1,2-Dibromoethane	4.0	U
108-90-7	Chlorobenzene	4.0	U
630-20-6	1,1,1,2-Tetrachloroethane	4.0	U
100-41-4	Ethylbenzene	4.0	U
179601-23-1	m,p-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
1330-20-7	Xylene (Total)	4.0	U
100-42-5	Styrene	4.0	U
75-25-2	Bromoform	4.0	U
98-82-8	Isopropylbenzene	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
108-86-1	Bromobenzene	4.0	U
96-18-4	1,2,3-Trichloropropane	4.0	U
103-65-1	n-Propylbenzene	4.0	U
95-49-8	2-Chlorotoluene	4.0	U
108-67-8	1,3,5-Trimethylbenzene	4.0	U
106-43-4	4-Chlorotoluene	4.0	U
98-06-6	tert-Butylbenzene	4.0	U
95-63-6	1,2,4-Trimethylbenzene	4.0	U
135-98-8	sec-Butylbenzene	4.0	U
99-87-6	4-Isopropyltoluene	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
104-51-8	n-Butylbenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	4.0	U
120-82-1	1,2,4-Trichlorobenzene	4.0	U
87-68-3	Hexachlorobutadiene	4.0	U
87-61-6	1,2,3-Trichlorobenzene	4.0	U
91-20-3	Naphthalene	4.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-17S_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-15ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5600.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d
Report Date: 25-Jun-2014 16:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5600.d
Lab Smp Id: N1055-15ADL Client Smp ID: OC-17S_6/16/14DL
Inj Date : 21-JUN-2014 01:56
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-15ADL,,77692,4
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 91
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	4.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	104392	63.3656	250
	23 1,1-Dichloroethane	63	3.785	3.782	(0.723)	79182	21.4599	86
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	2974	2.04229	8.2
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	69876	56.5727	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	66665	19.8969	80
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	10526	50.4063	50
M	50 1,2-Dichloroethene (Total)	96				2974	2.04229	8.2
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	165978	50.0000	
	47 Trichloroethene	130	5.563	5.567	(1.062)	20462	14.9379	60
$	58 Toluene-d8	98	6.718	6.715	(0.817)	218226	45.1449	45
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	211236	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	128121	49.3729	49
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	104859	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d
Report Date: 25-Jun-2014 16:17

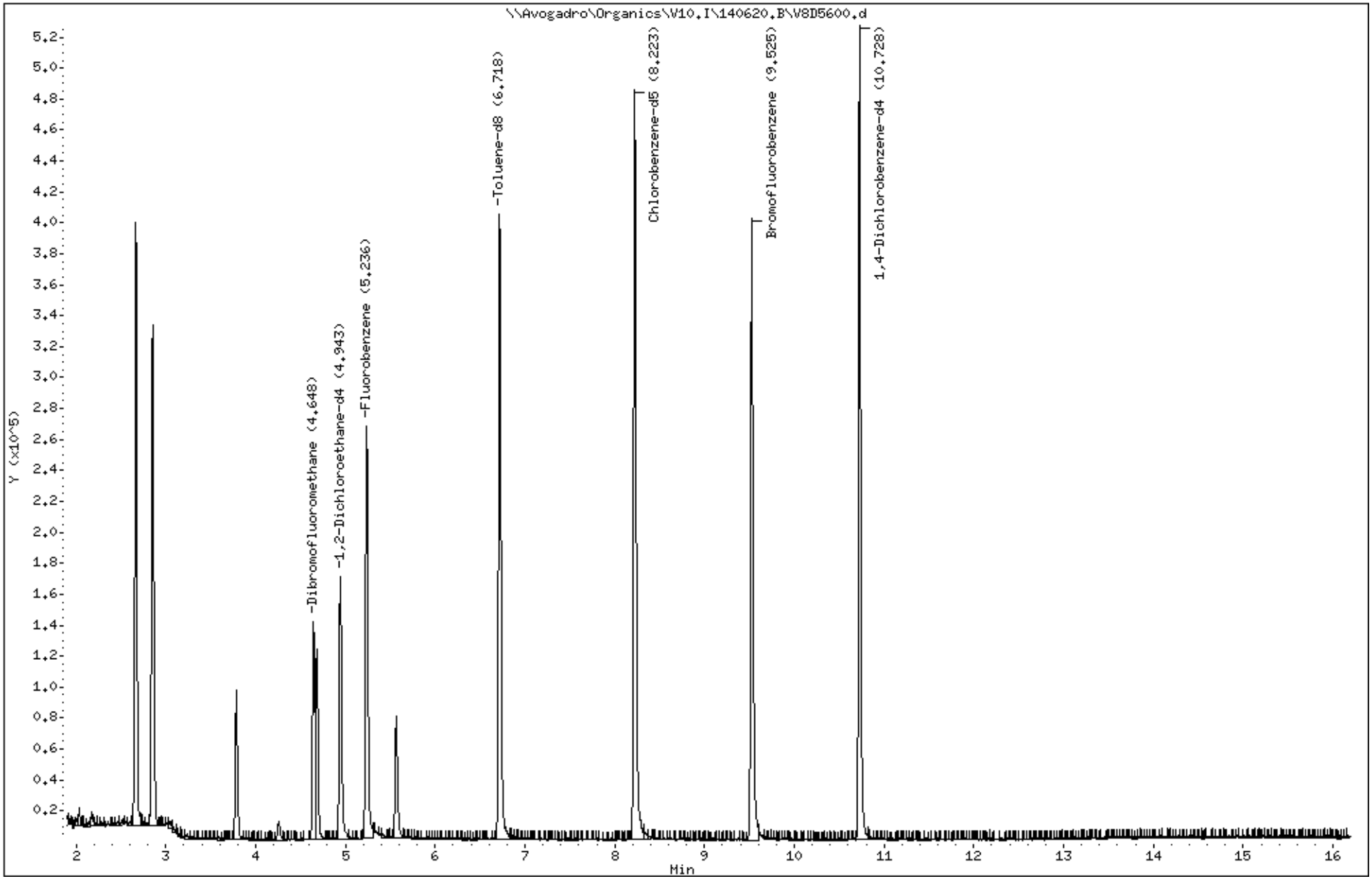
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5600.d
Lab Smp Id: N1055-15ADL Client Smp ID: OC-17S_6/16/14DL
Inj Date : 21-JUN-2014 01:56
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-15ADL,,77692,4
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 91
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d
Date : 21-JUN-2014 01:56
Client ID: OC-17S_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-15ADL,,77692,4
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d

Date : 21-JUN-2014 01:56

Client ID: OC-17S_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-15ADL,,77692,4

Purge Volume: 5.0

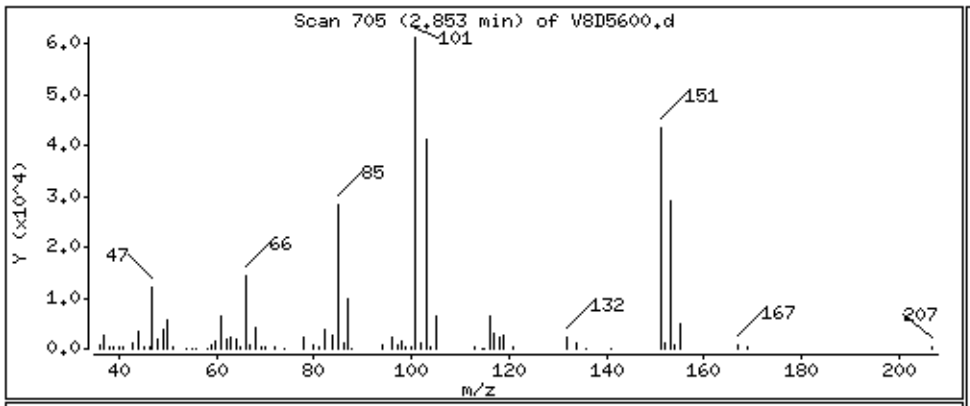
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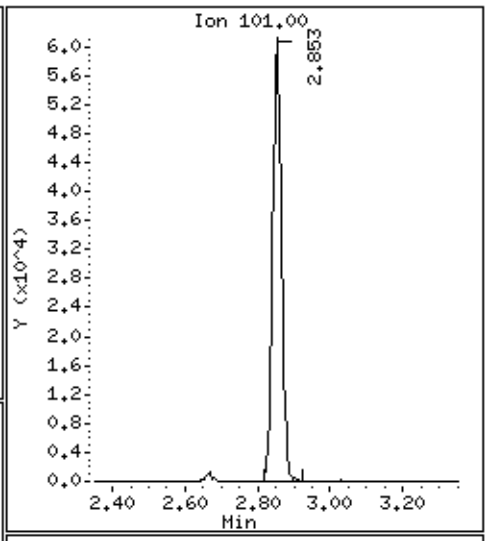
Column phase: DB-624

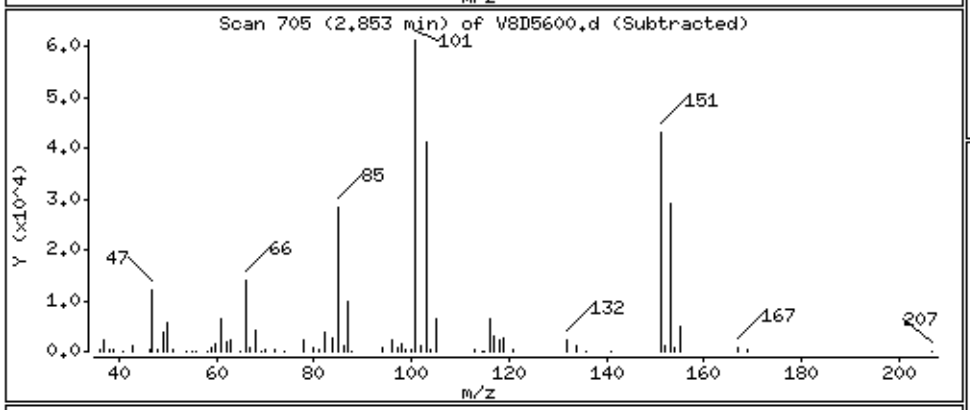
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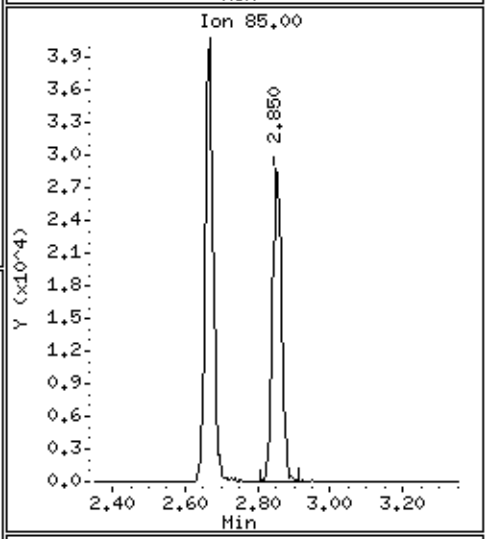
11 1,1,2-Trichloro-1,2,2-Trifluo

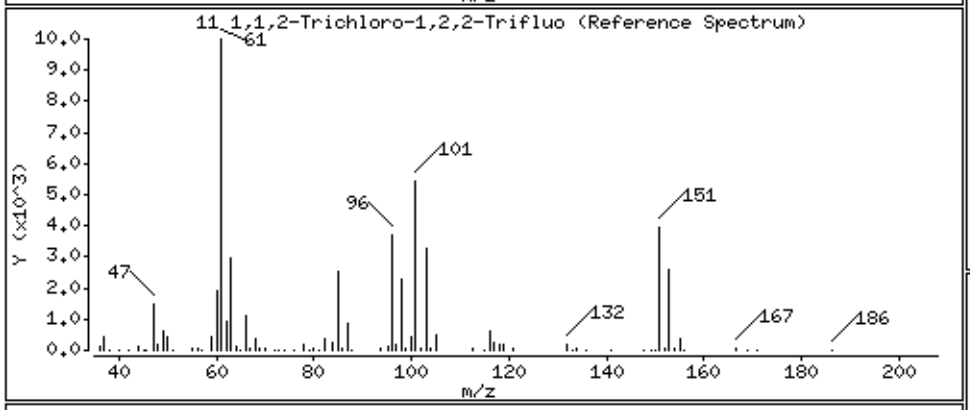
Concentration: 250 ug/L

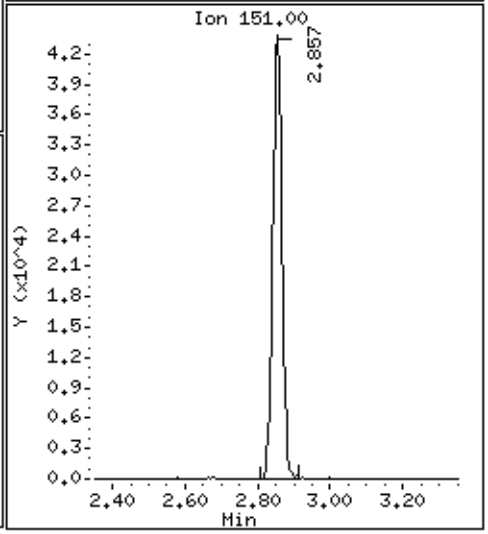


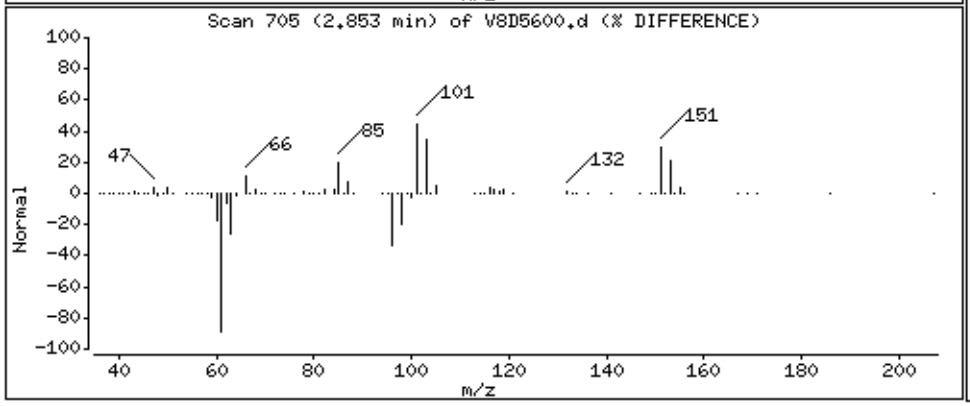












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d

Date : 21-JUN-2014 01:56

Client ID: OC-17S_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-15ADL,,77692,4

Purge Volume: 5.0

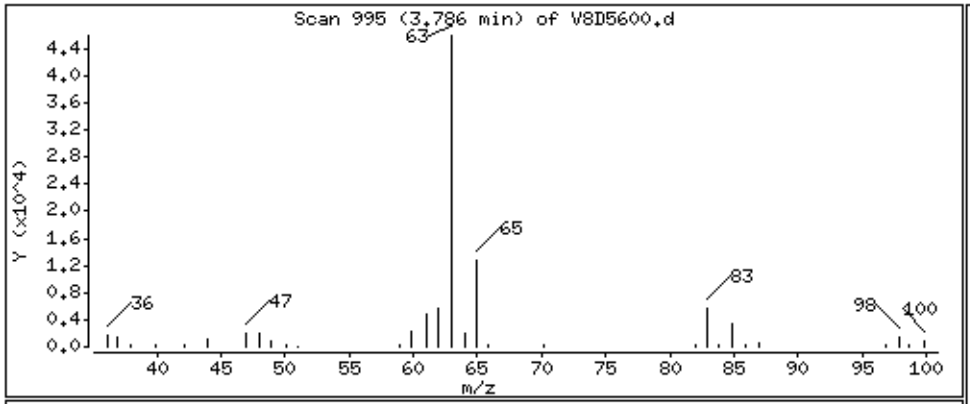
Operator: WL SRC: LIMS

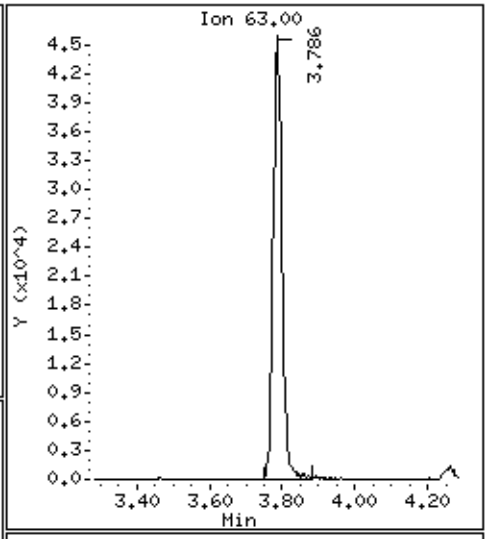
Column phase: DB-624

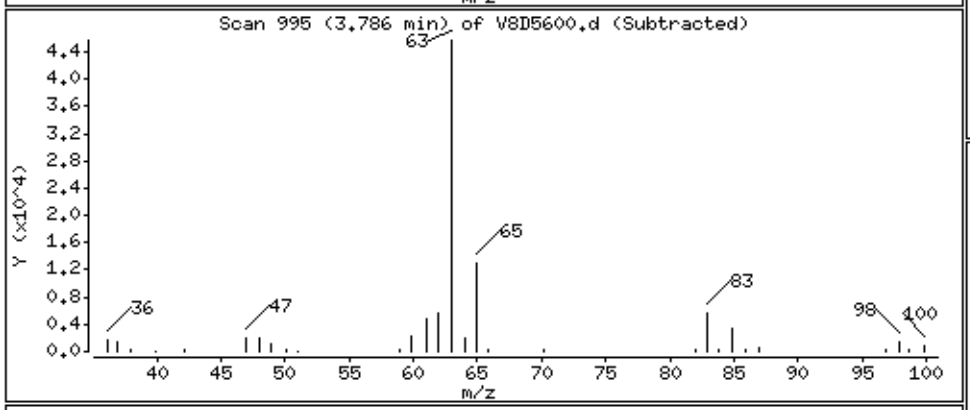
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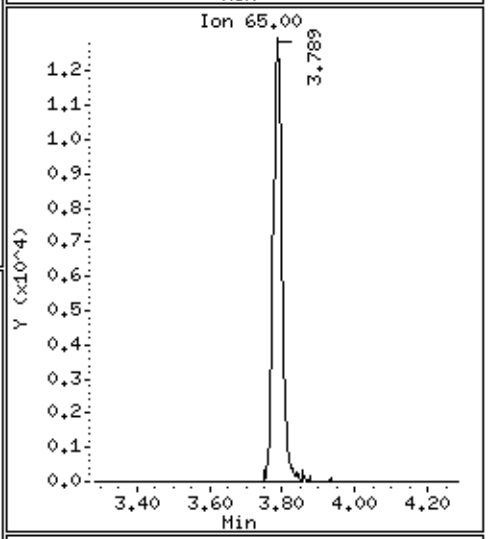
23 1,1-Dichloroethane

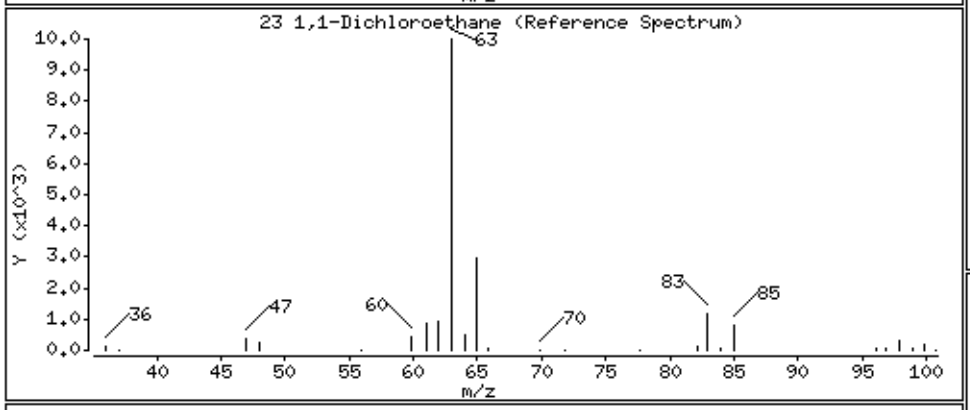
Concentration: 86 ug/L

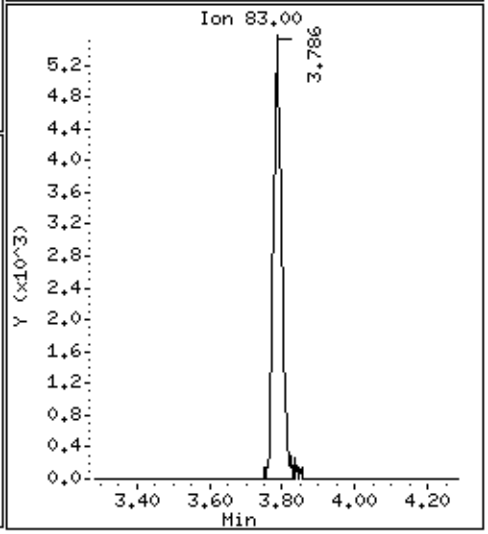


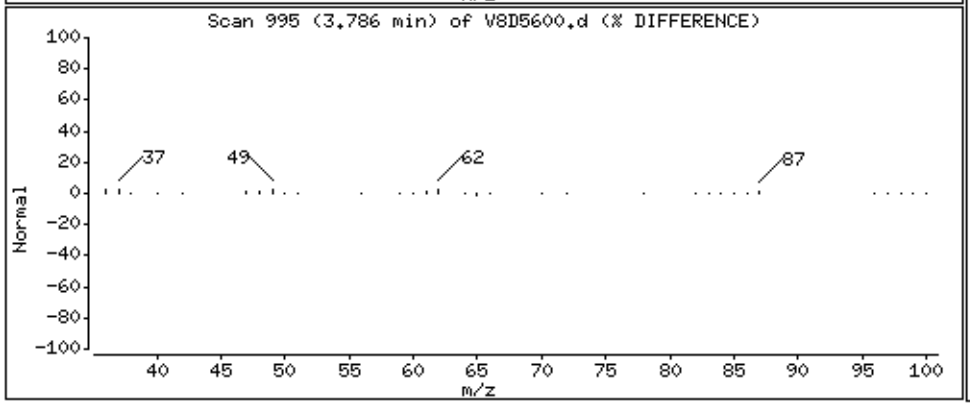












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d

Date : 21-JUN-2014 01:56

Client ID: OC-17S_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-15ADL,,77692,4

Purge Volume: 5.0

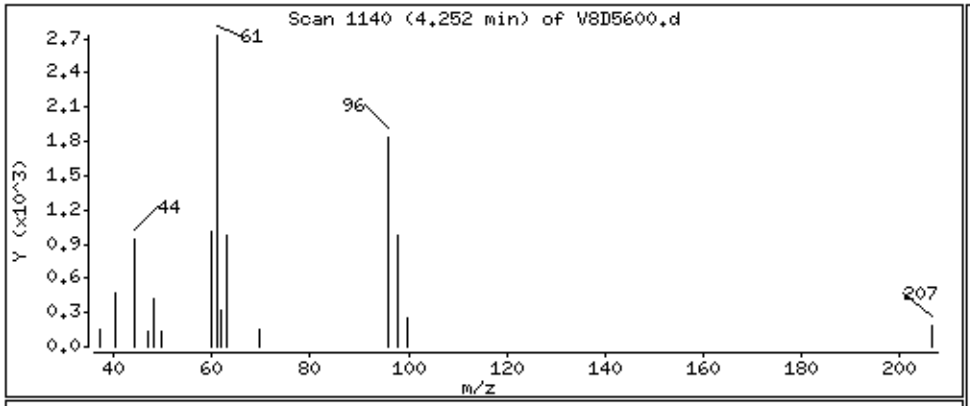
Operator: WL SRC: LIMS

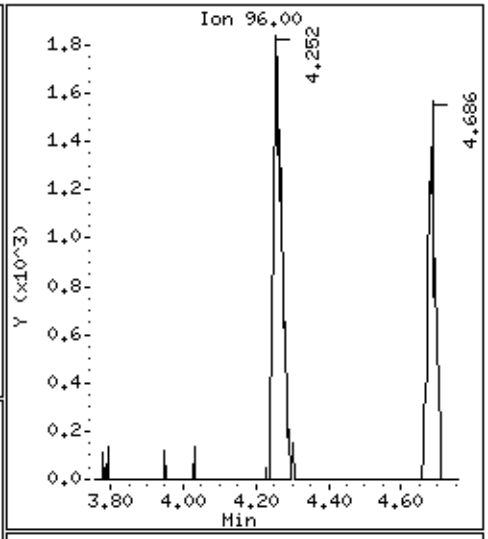
Column phase: DB-624

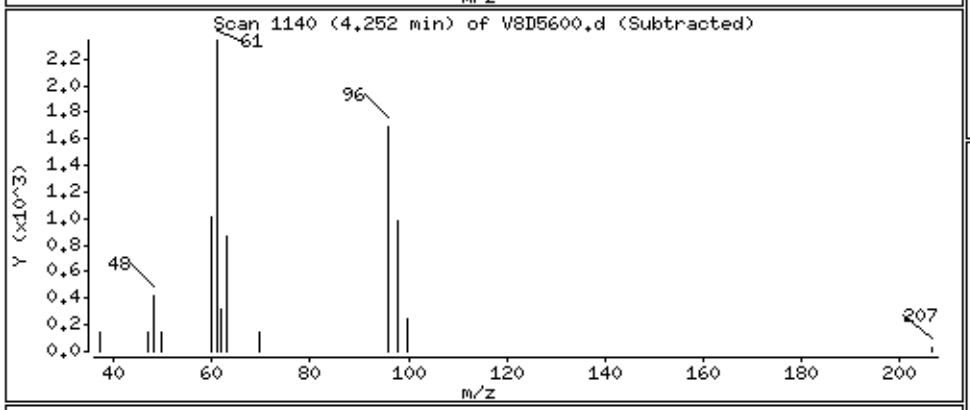
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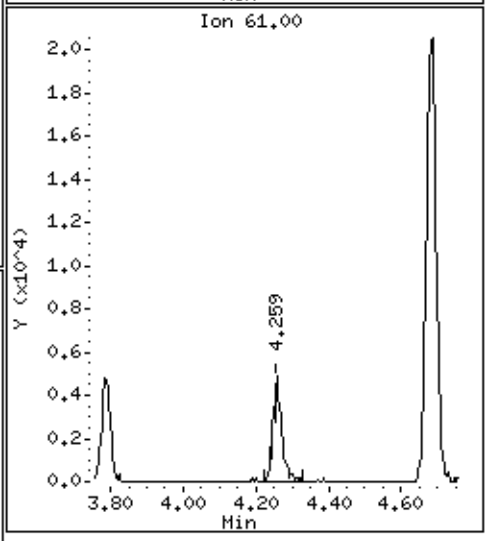
28 cis-1,2-Dichloroethene

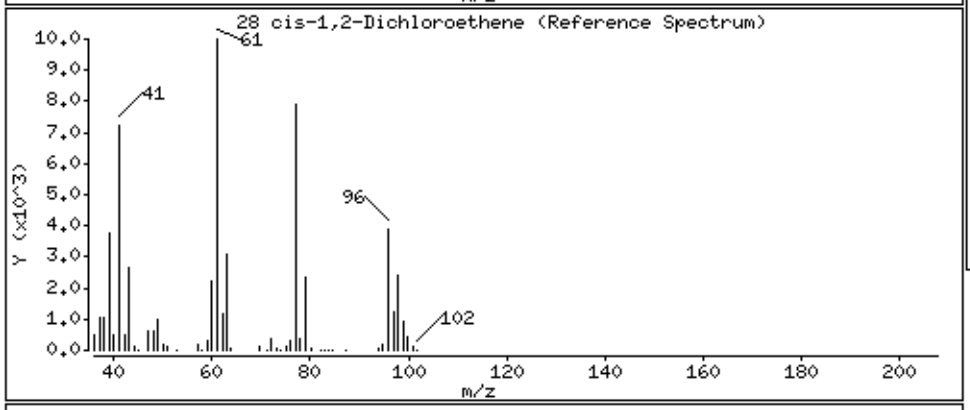
Concentration: 8.2 ug/L

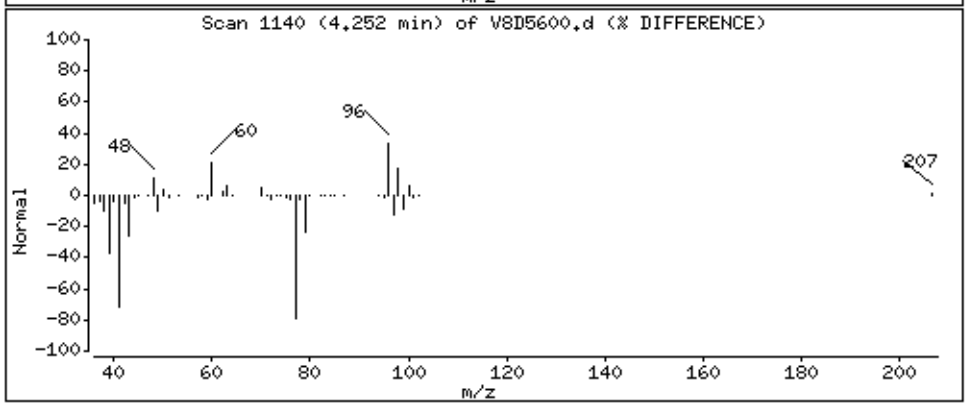












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d

Date : 21-JUN-2014 01:56

Client ID: OC-17S_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-15ADL,,77692,4

Purge Volume: 5.0

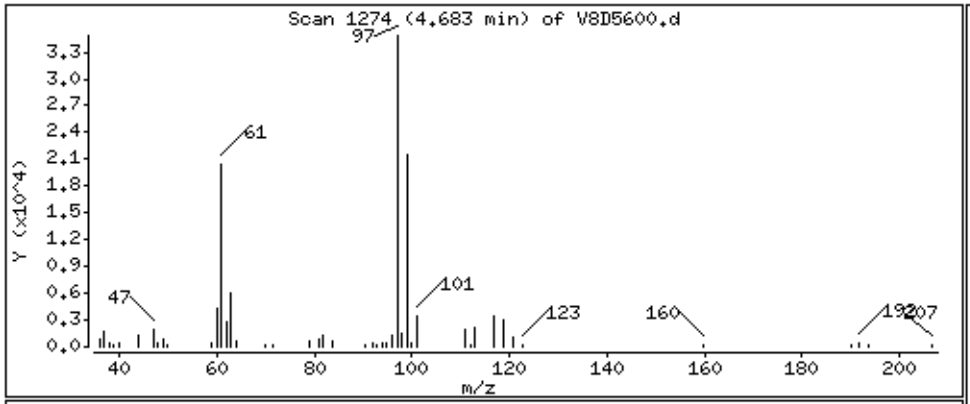
Operator: WL SRC: LIMS

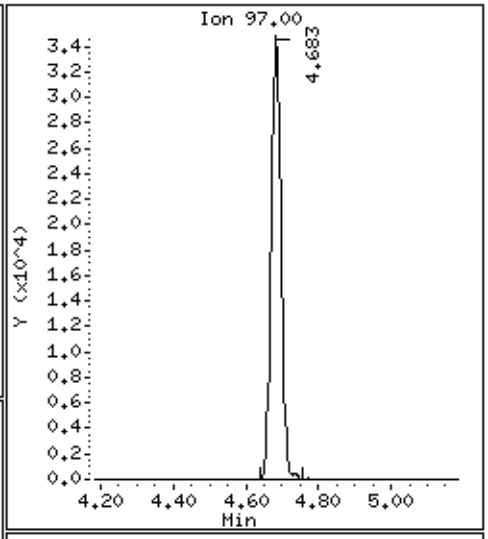
Column phase: DB-624

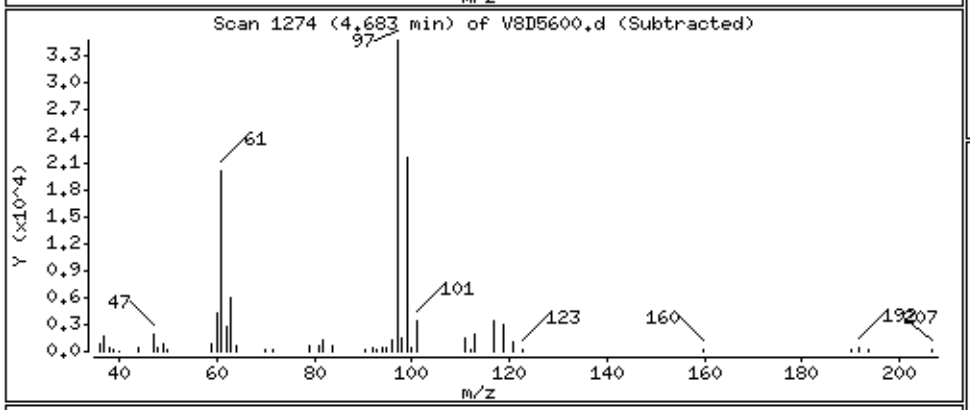
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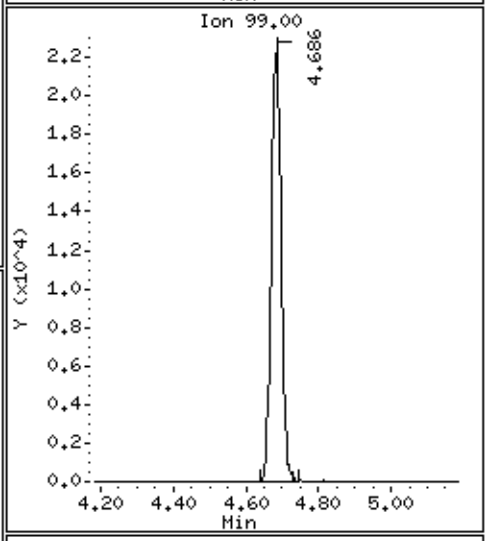
37 1,1,1-Trichloroethane

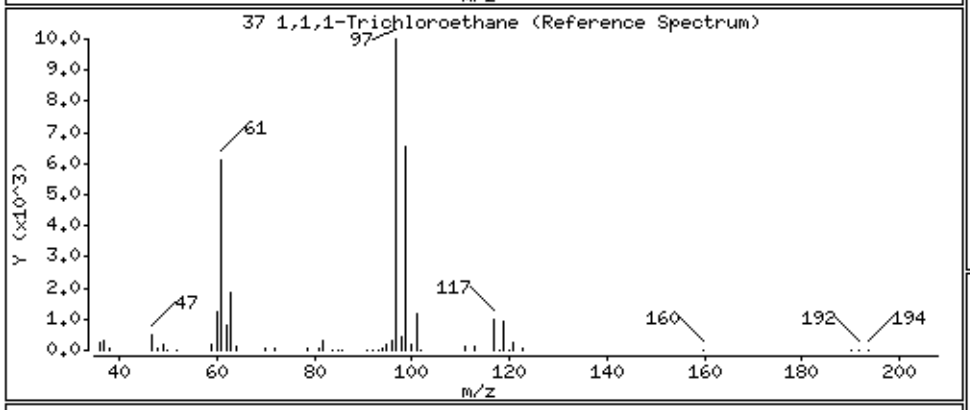
Concentration: 80 ug/L

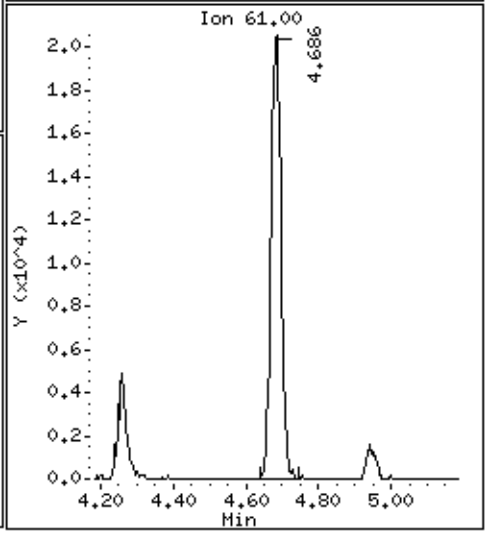


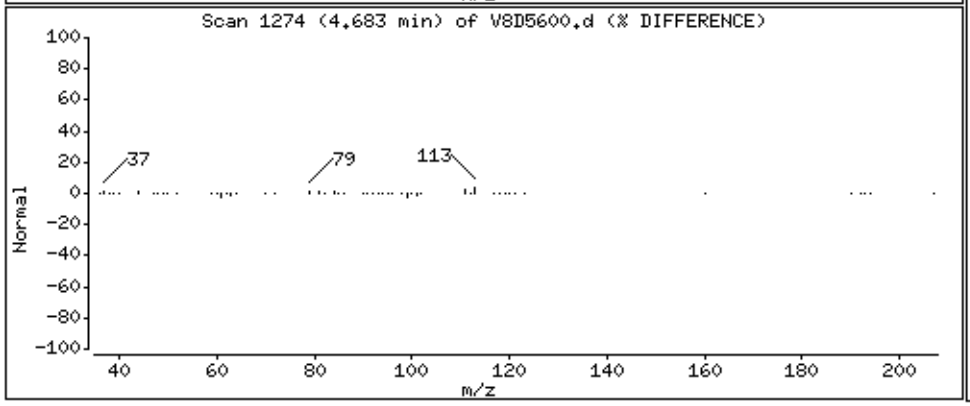












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5600.d

Date : 21-JUN-2014 01:56

Client ID: OC-17S_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-15ADL,,77692,4

Purge Volume: 5.0

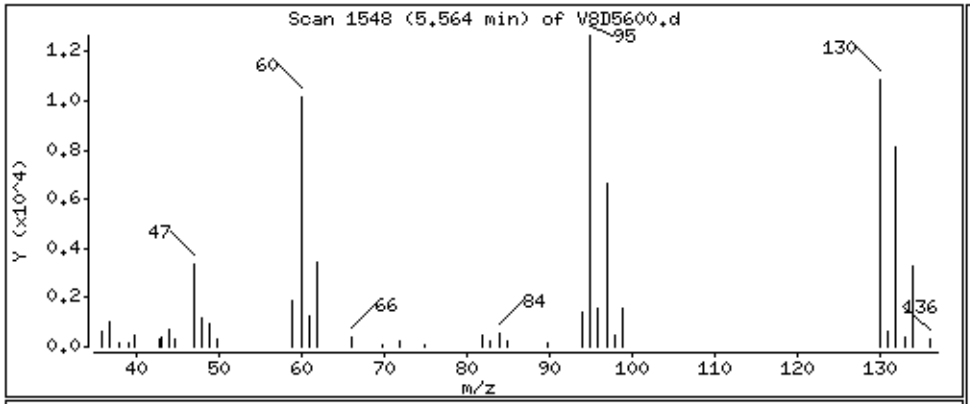
Operator: WL SRC: LIMS

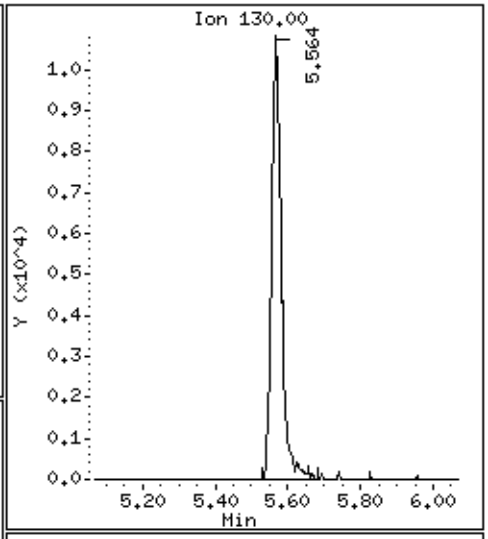
Column phase: DB-624

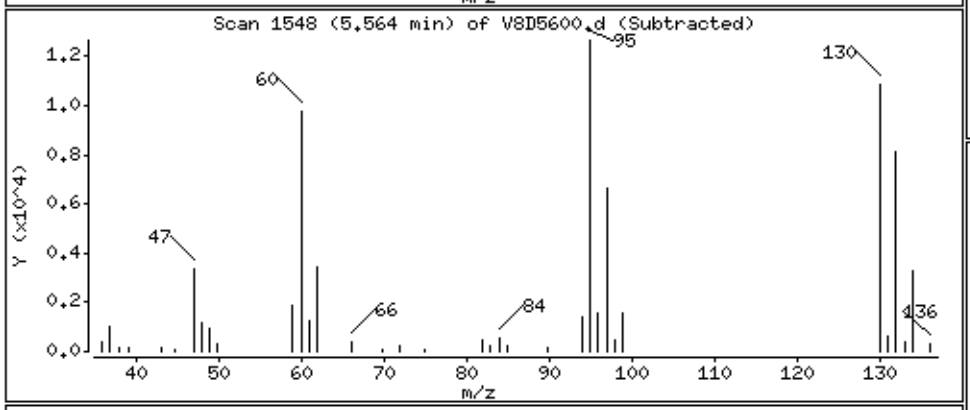
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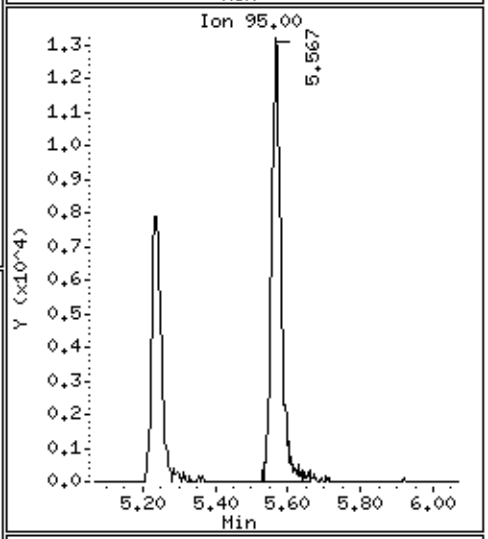
47 Trichloroethene

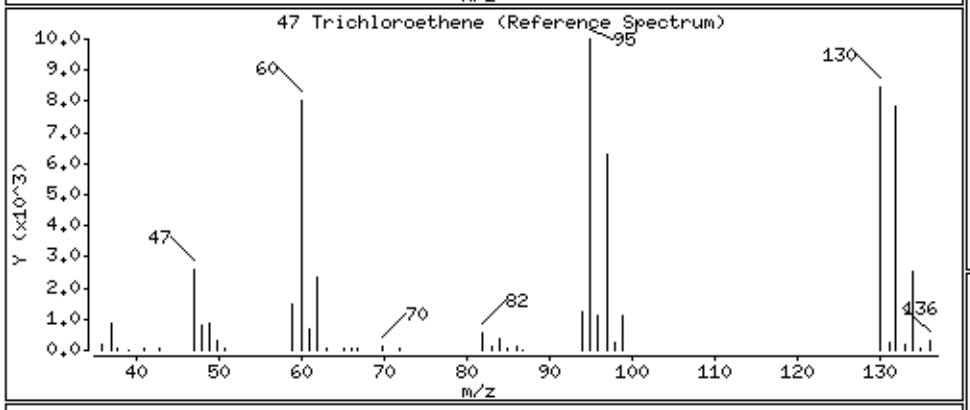
Concentration: 60 ug/L

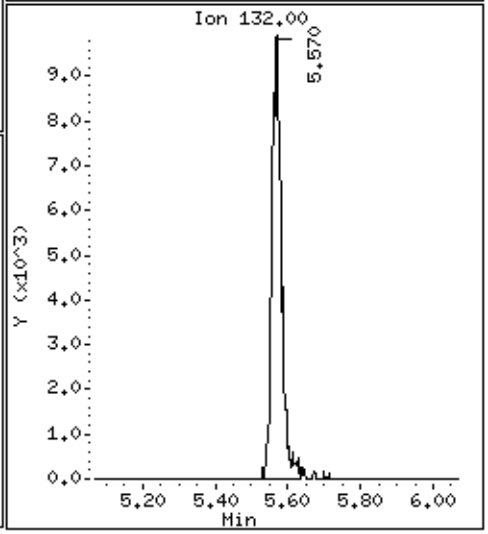


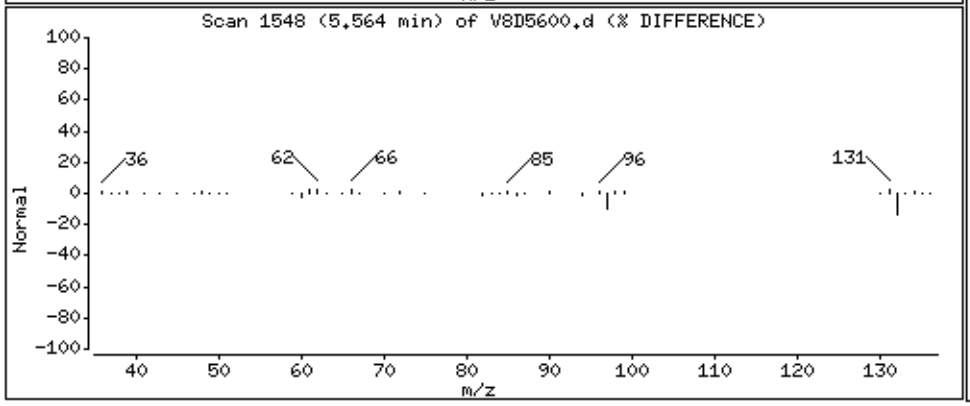












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-17D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-16A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5531.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	2.8	
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	110	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	3.3	
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	530	E
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	330	E
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

EPA SAMPLE NO.

OC-17D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-16A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5531.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1200	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-17D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-16A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5531.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	210	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d
Report Date: 27-Jun-2014 13:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5531.d
Lab Smp Id: N1055-16A Client Smp ID: OC-17D_6/16/14
Inj Date : 19-JUN-2014 17:12
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-16A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	2688850	1195.31	1200(A)
	18 Methylene Chloride	84	3.232	3.233	(0.617)	5446	2.75848	2.8
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	569593	113.056	110
	28 cis-1,2-Dichloroethene	96	4.261	4.255	(0.814)	6618	3.32837	3.3
$	36 Dibromofluoromethane	113	4.647	4.644	(0.888)	92741	54.9893	55
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	2438224	532.952	530(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	14367	50.3866	50
M	50 1,2-Dichloroethene (Total)	96				6618	3.32837	3.3
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	226633	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	609556	325.899	320(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	273094	45.8920	46
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	260043	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	153933	48.1862	48
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	127494	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d
Report Date: 27-Jun-2014 13:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5531.d
Lab Smp Id: N1055-16A Client Smp ID: OC-17D_6/16/14
Inj Date : 19-JUN-2014 17:12
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-16A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

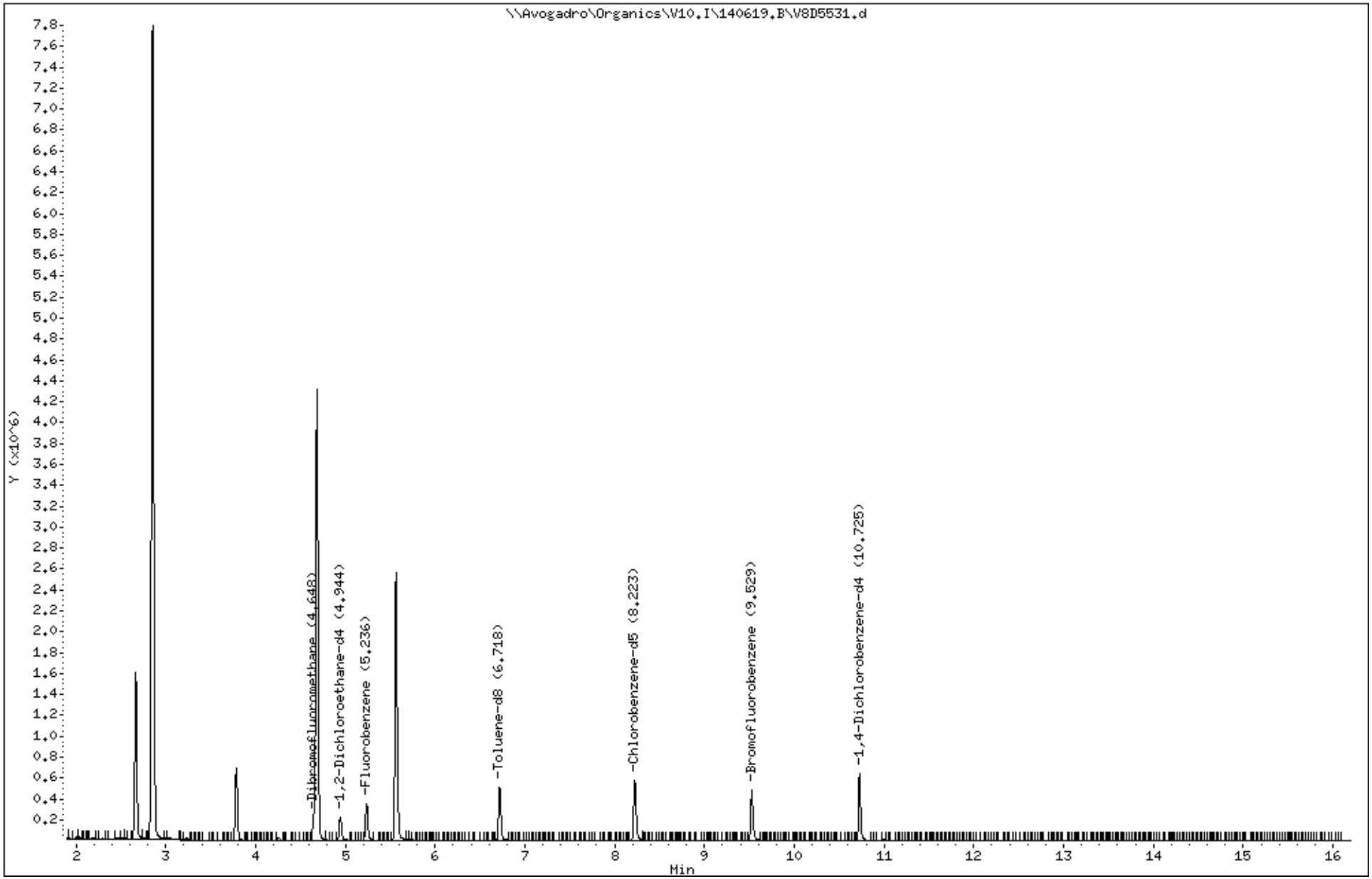
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	636459	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.664	2619700	205.802712	200	94	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d
Date : 19-JUN-2014 17:12
Client ID: OC-17D_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-16A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

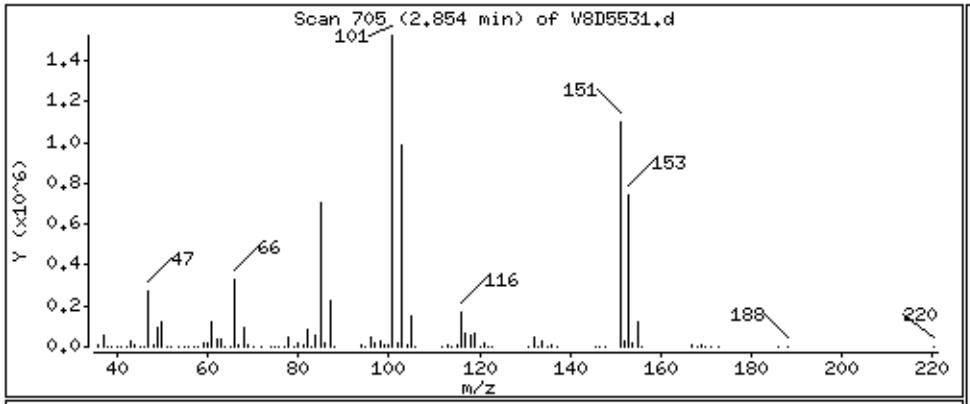
Client ID: OC-17D_6/16/14 Instrument: V10.i

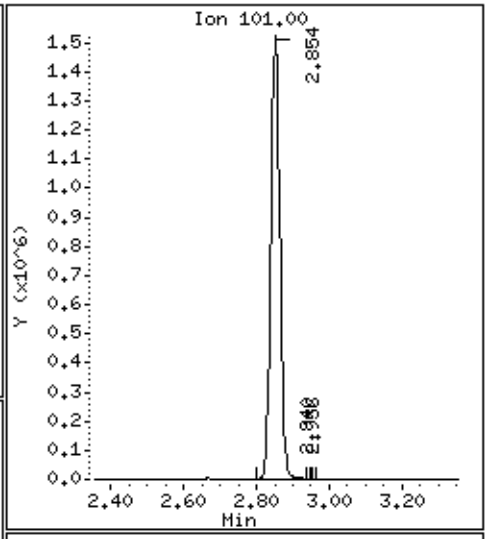
Sample Info: 5ML,N1055-16A,,77659

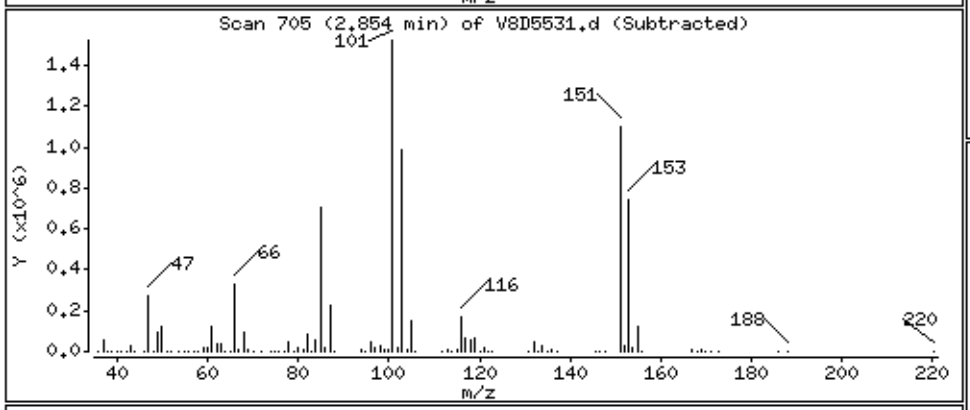
Purge Volume: 5.0 Operator: WL SRC: LIMS

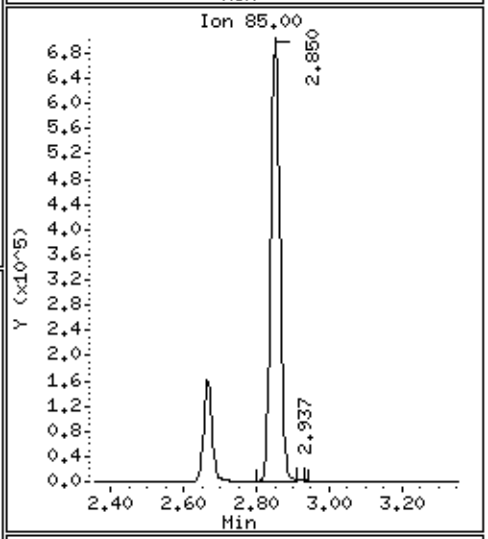
Column phase: DB-624 Column diameter: 0.25

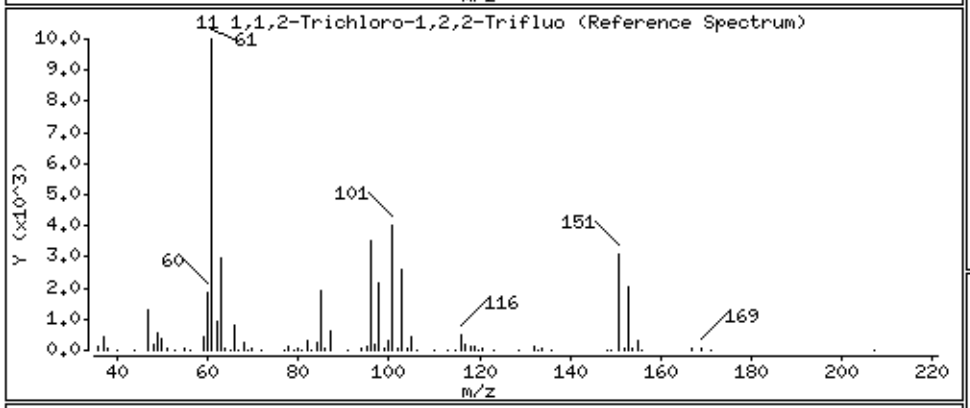
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 1200 ug/L

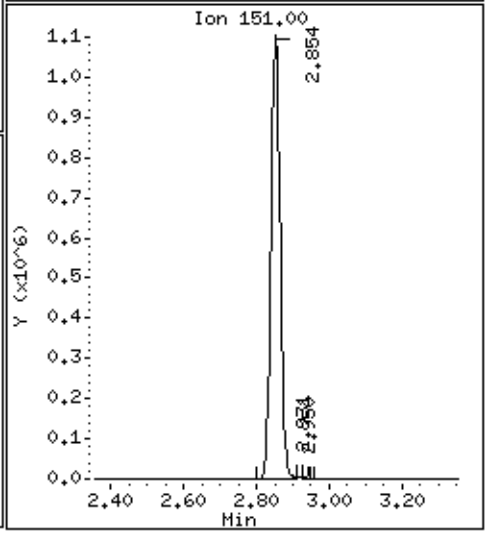


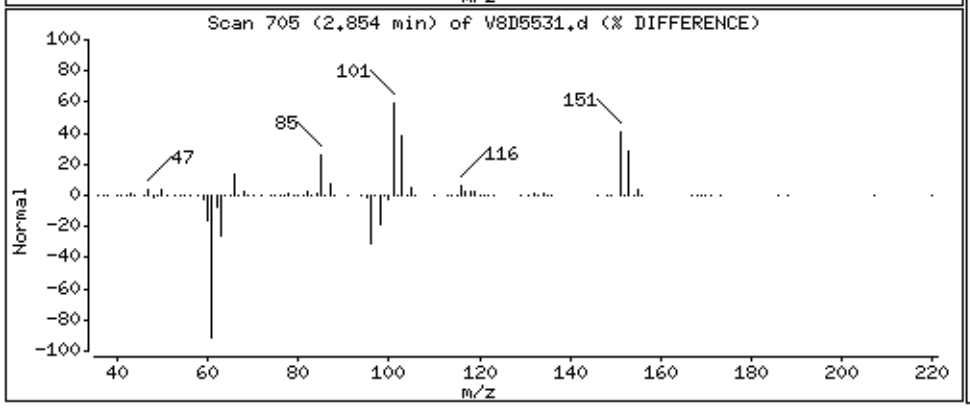












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

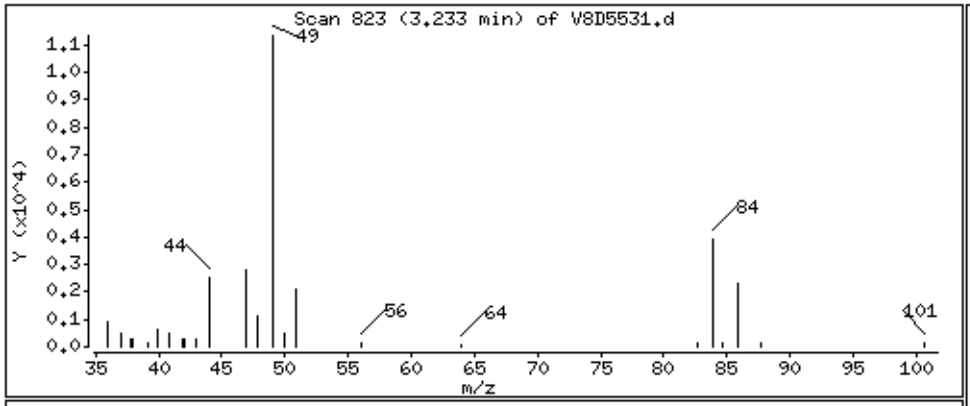
Client ID: OC-17D_6/16/14 Instrument: V10.i

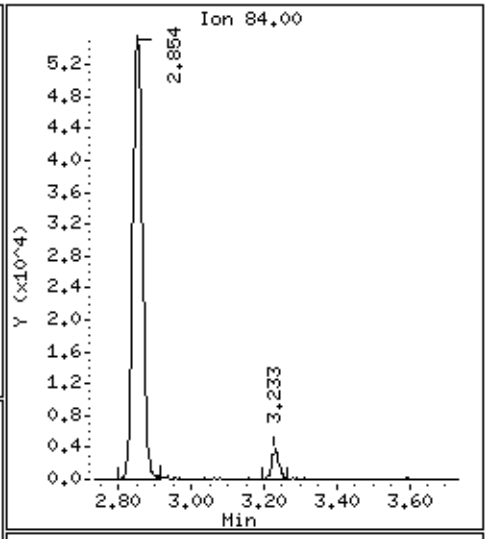
Sample Info: 5ML,N1055-16A,,77659

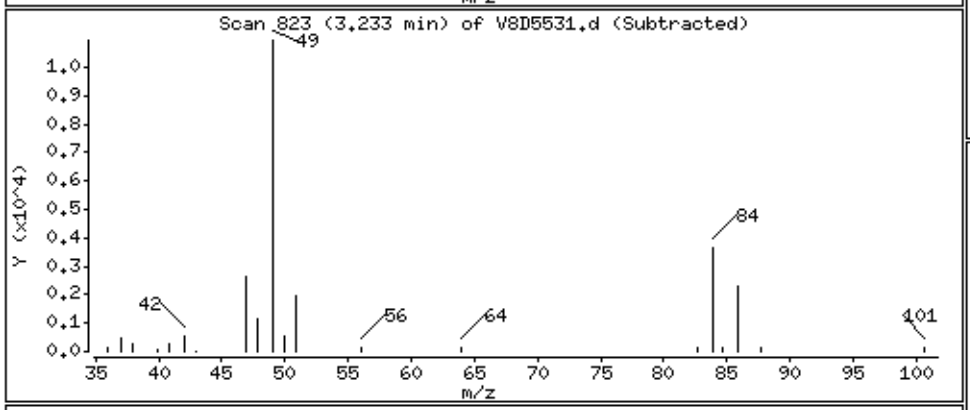
Purge Volume: 5.0 Operator: WL SRC: LIMS

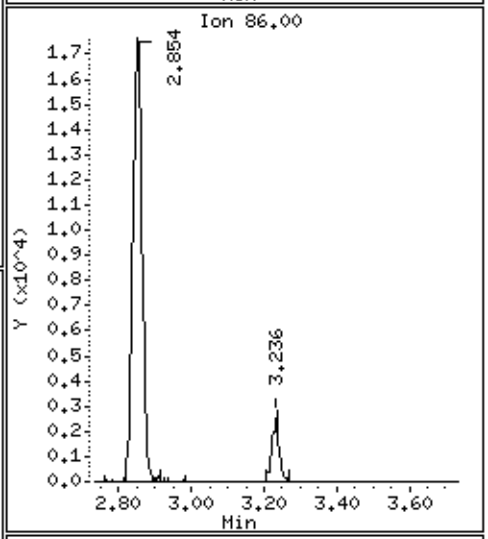
Column phase: DB-624 Column diameter: 0.25

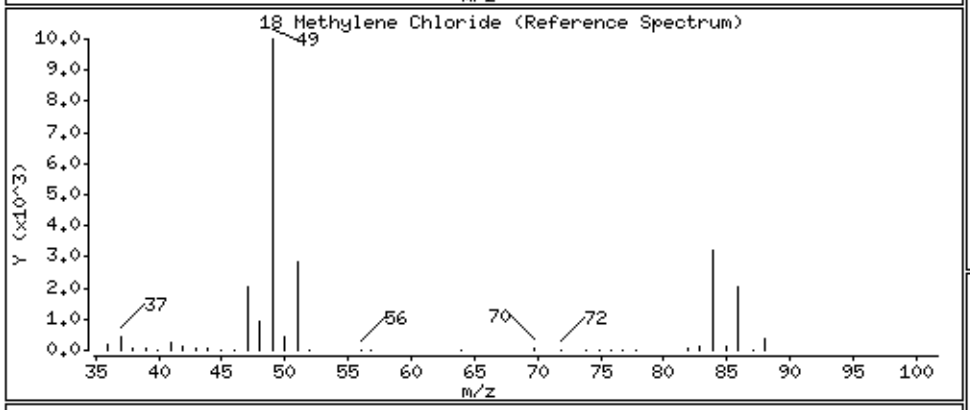
18 Methylene Chloride Concentration: 2.8 ug/L

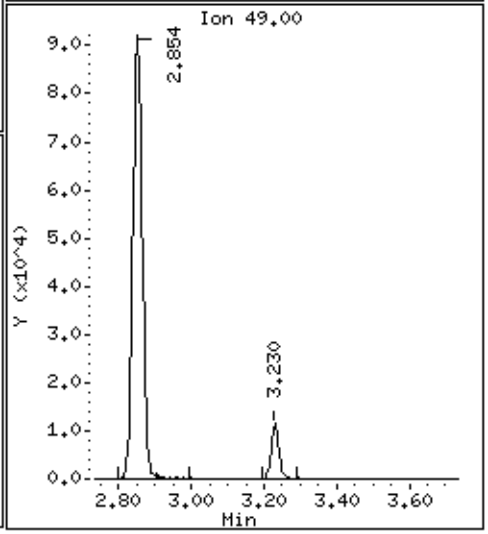


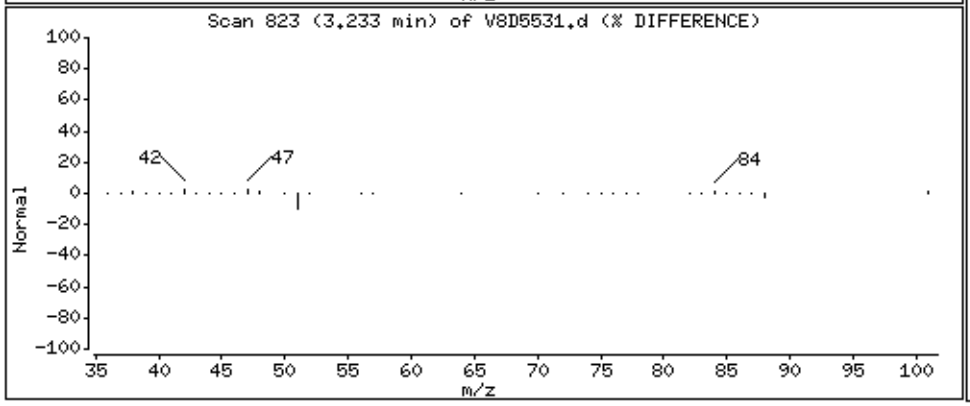












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

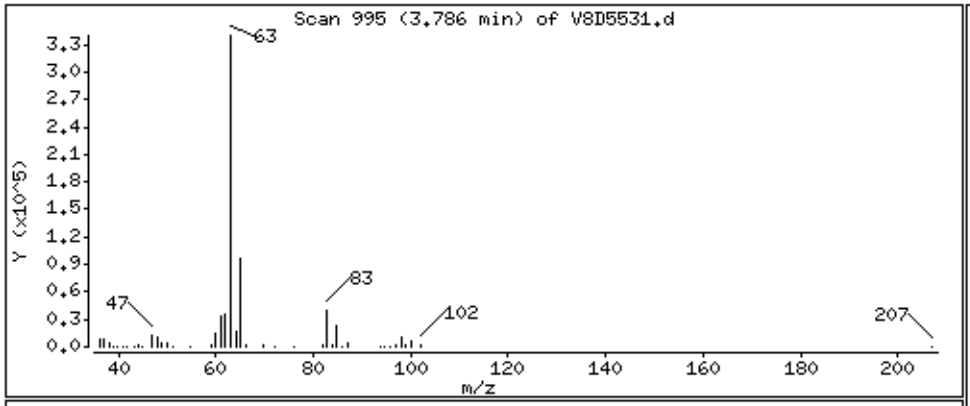
Client ID: OC-17D_6/16/14 Instrument: V10.i

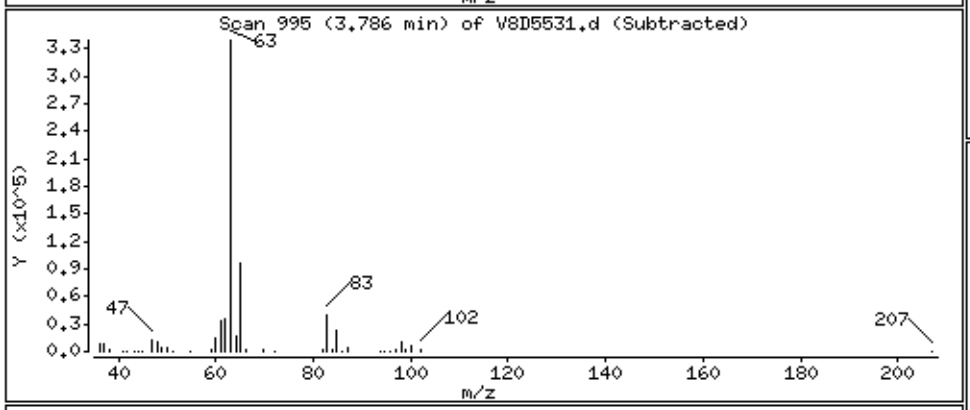
Sample Info: 5ML,N1055-16A,,77659

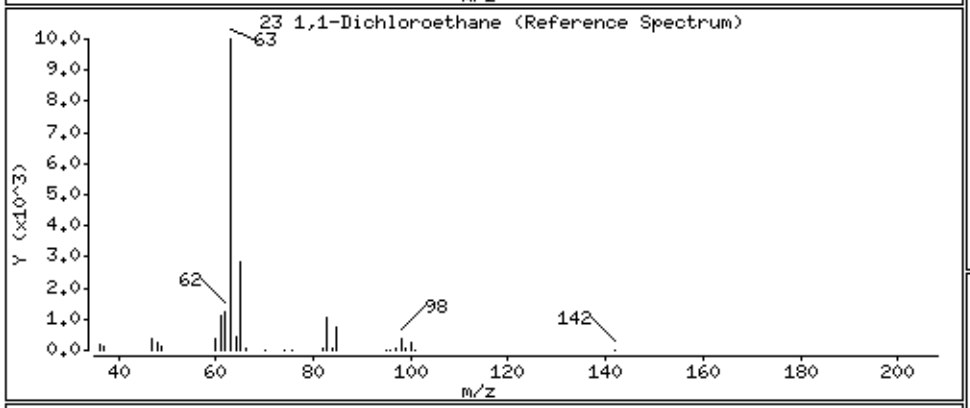
Purge Volume: 5.0 Operator: WL SRC: LIMS

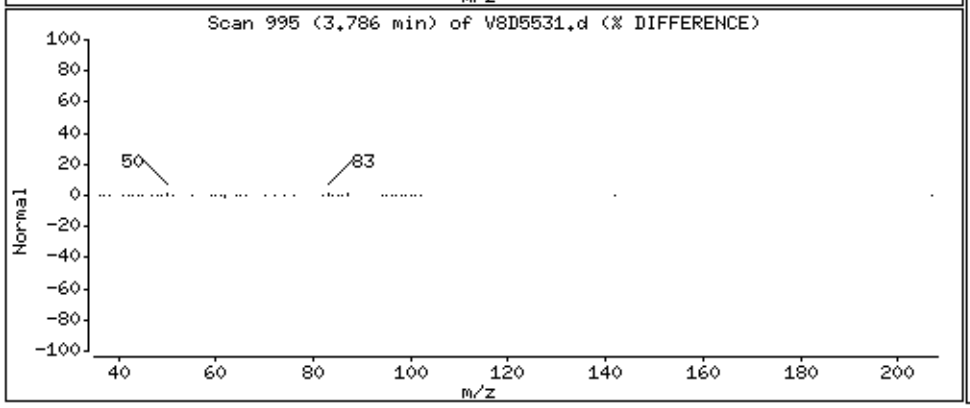
Column phase: DB-624 Column diameter: 0.25

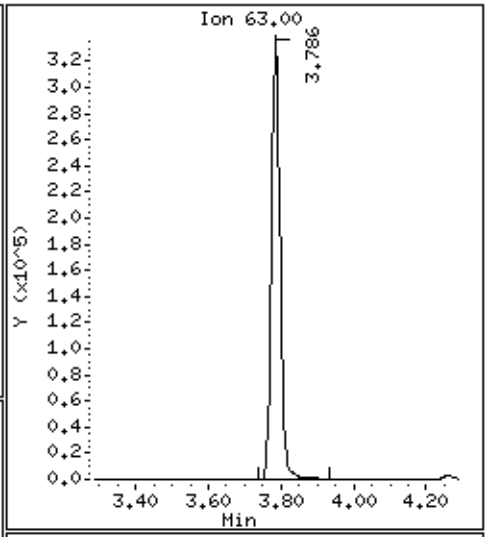
23 1,1-Dichloroethane Concentration: 110 ug/L

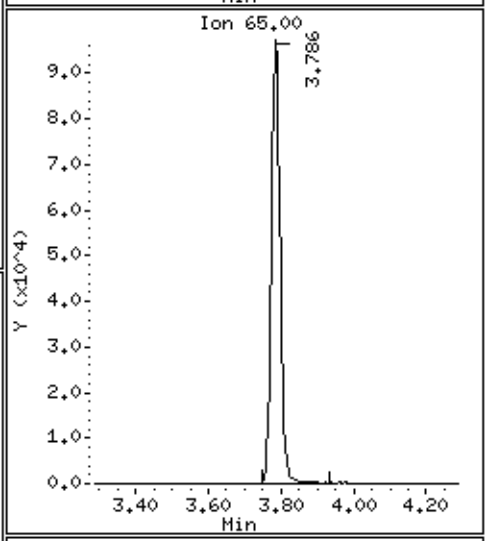


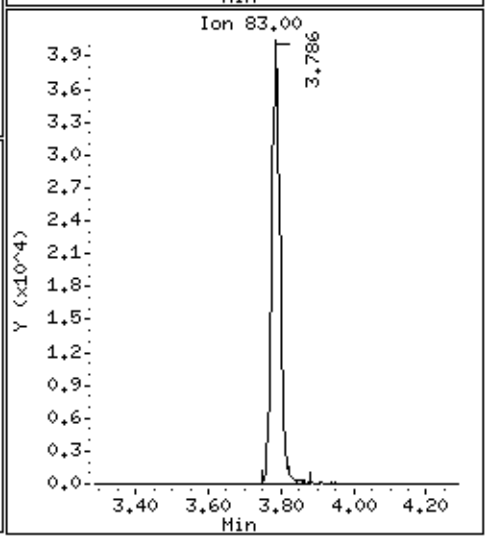












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

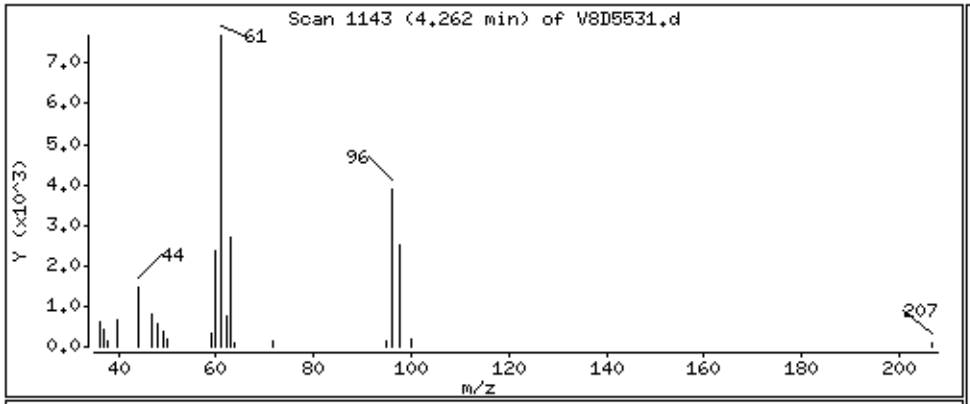
Client ID: OC-17D_6/16/14 Instrument: V10.i

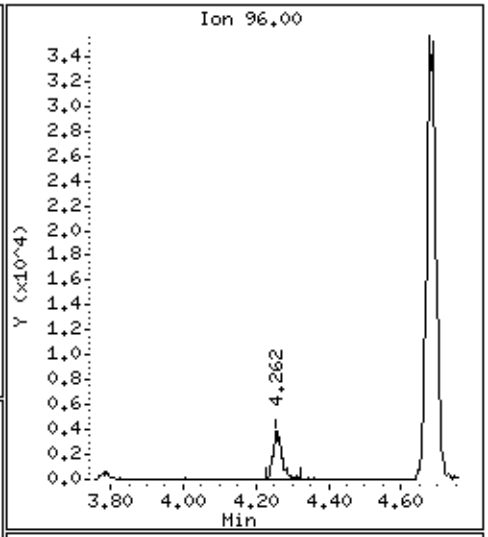
Sample Info: 5ML,N1055-16A,,77659

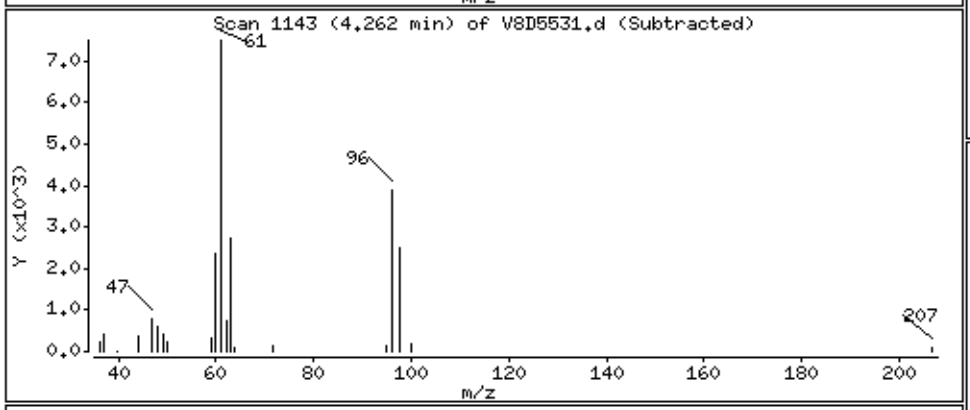
Purge Volume: 5.0 Operator: WL SRC: LIMS

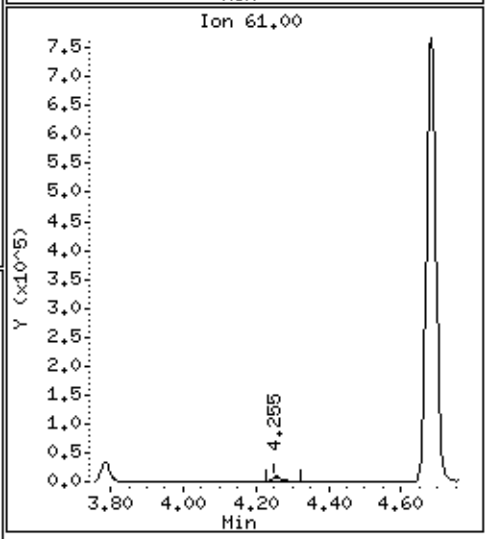
Column phase: DB-624 Column diameter: 0.25

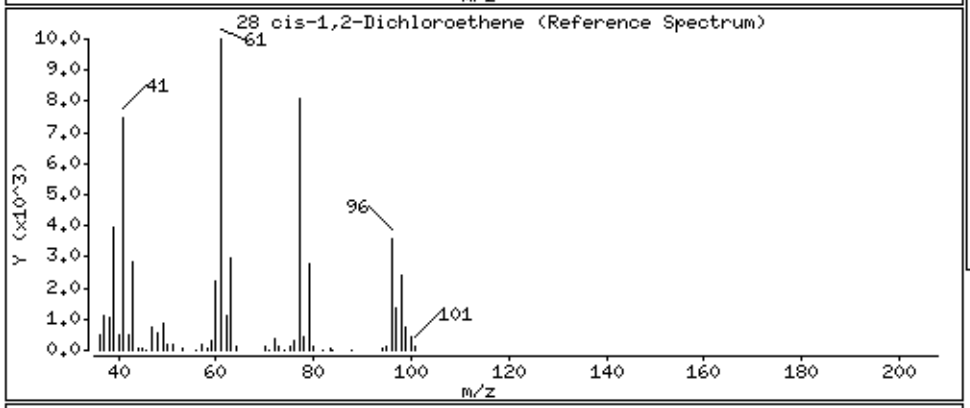
28 cis-1,2-Dichloroethene Concentration: 3.3 ug/L

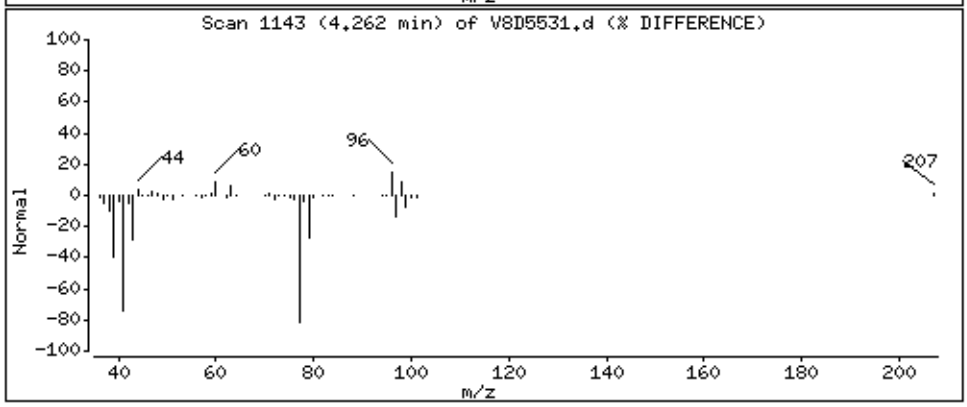












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

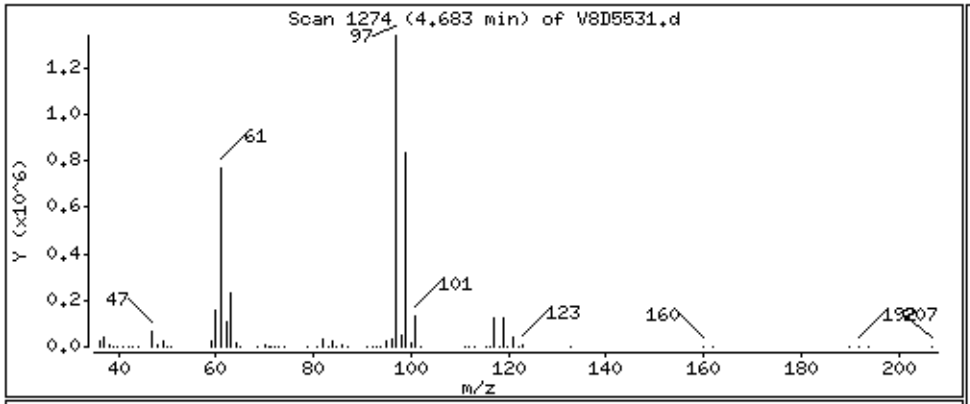
Client ID: OC-17D_6/16/14 Instrument: V10.i

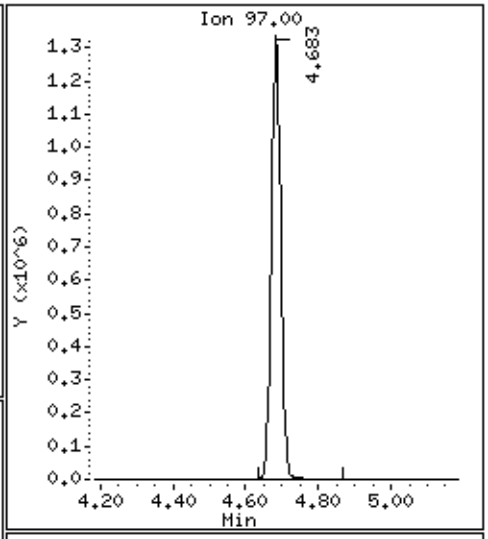
Sample Info: 5ML,N1055-16A,,77659

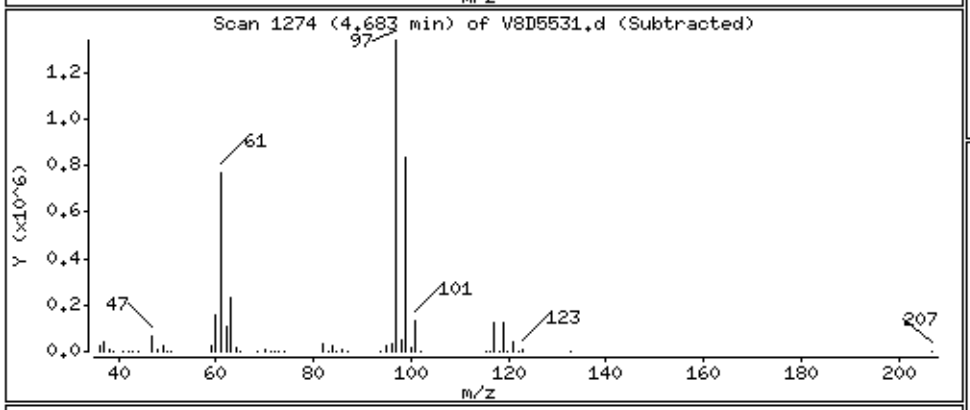
Purge Volume: 5.0 Operator: WL SRC: LIMS

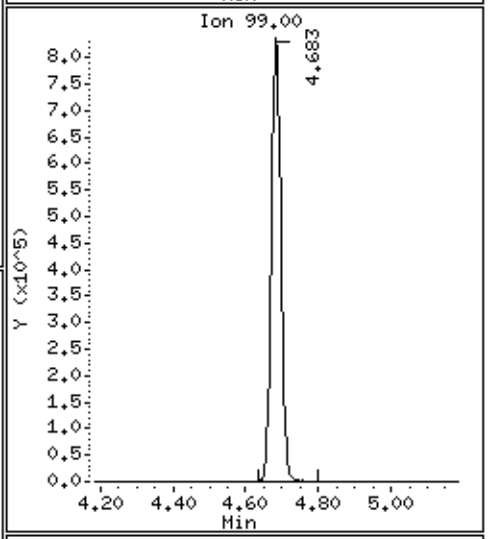
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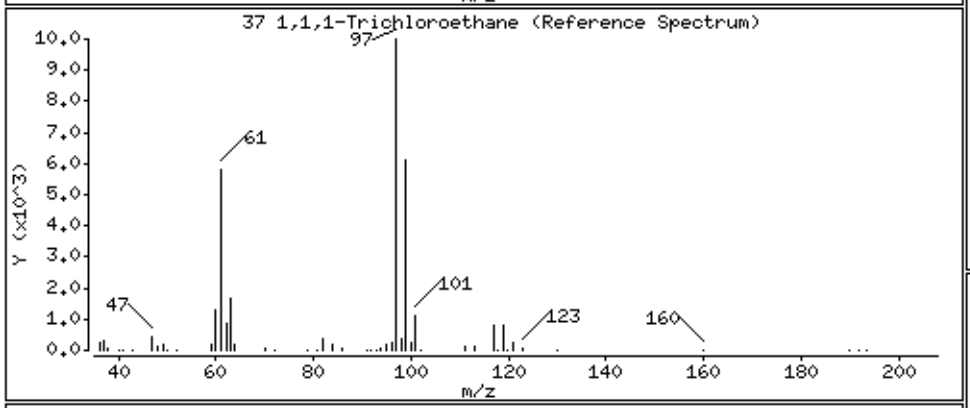
37 1,1,1-Trichloroethane Concentration: 530 ug/L

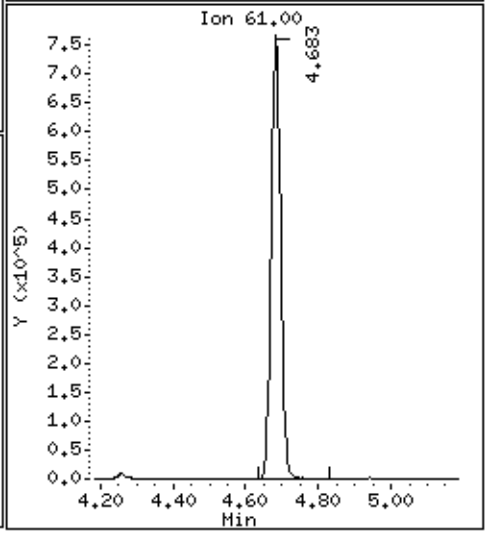


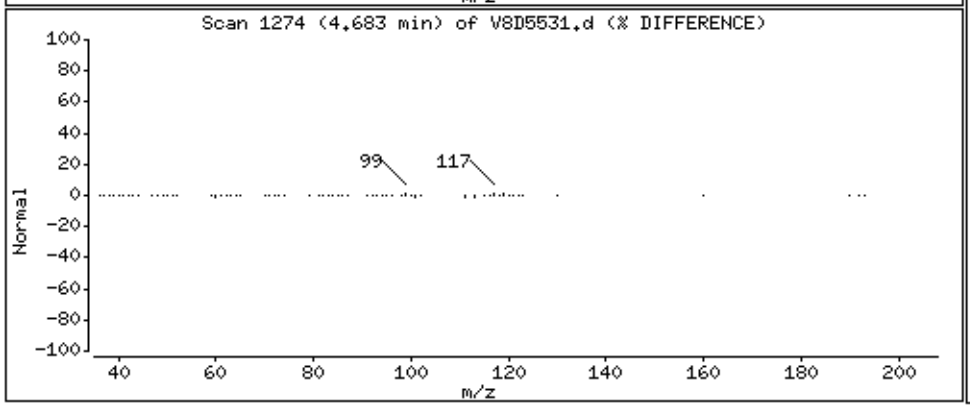












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

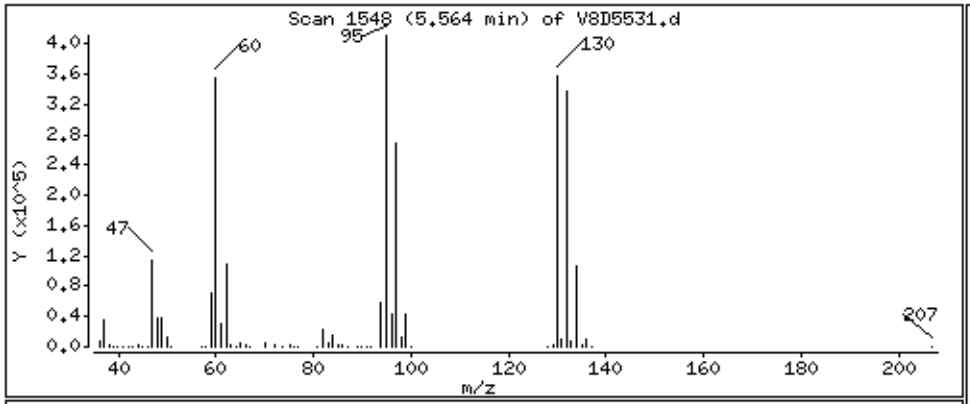
Client ID: OC-17D_6/16/14 Instrument: V10.i

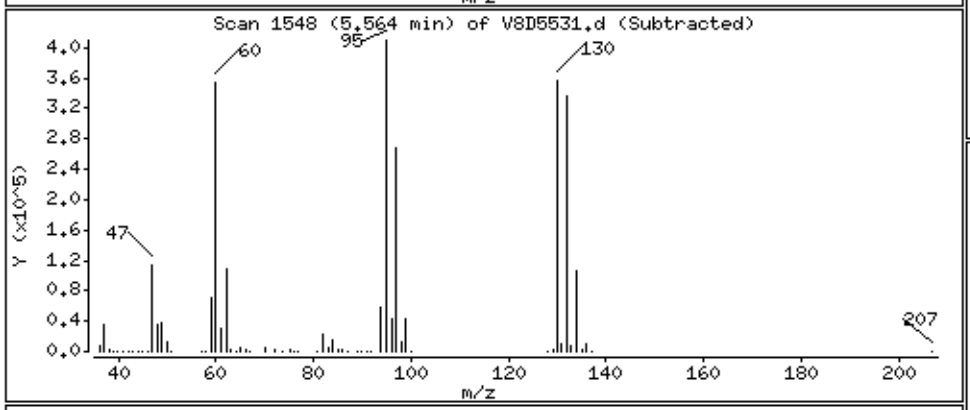
Sample Info: 5ML,N1055-16A,,77659

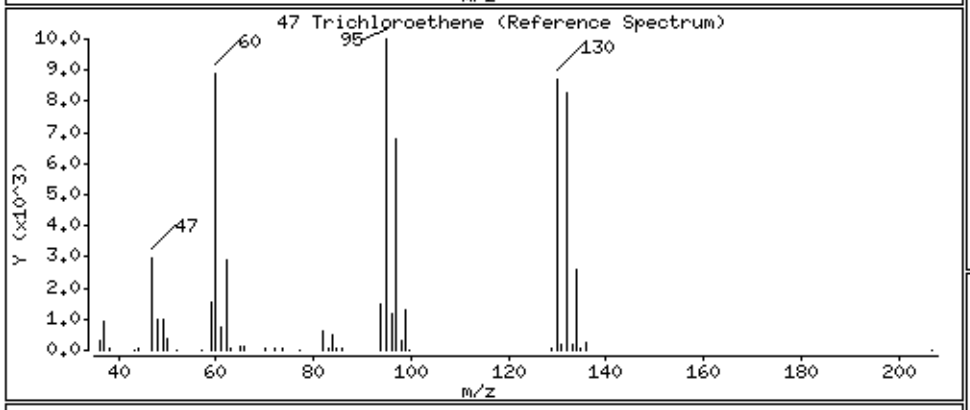
Purge Volume: 5.0 Operator: WL SRC: LIMS

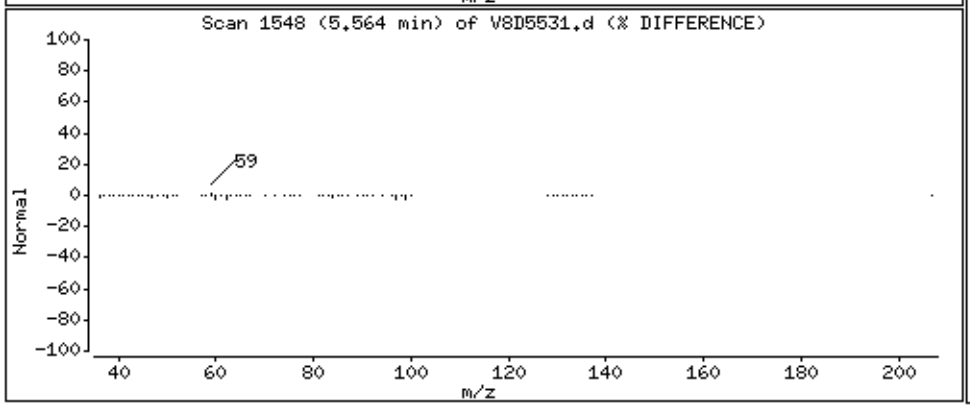
Column phase: DB-624 Column diameter: 0.25

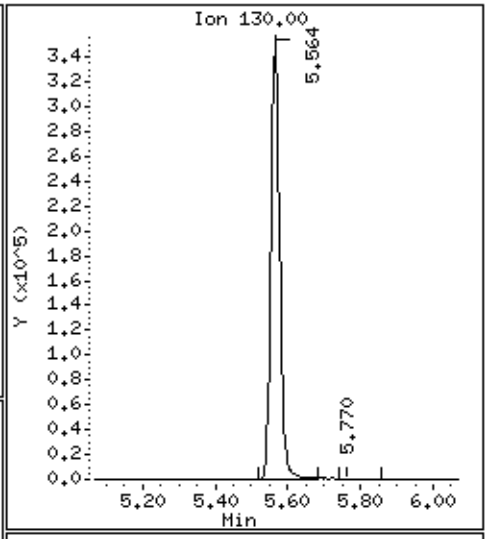
47 Trichloroethene Concentration: 320 ug/L

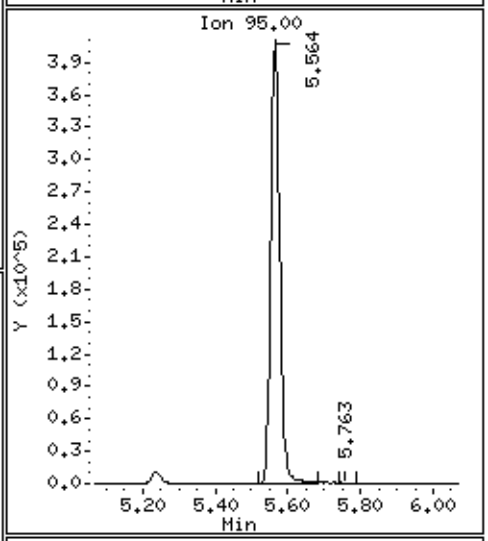


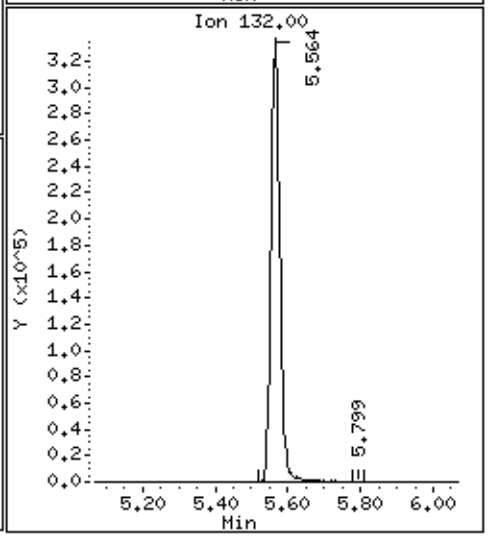












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5531.d

Date : 19-JUN-2014 17:12

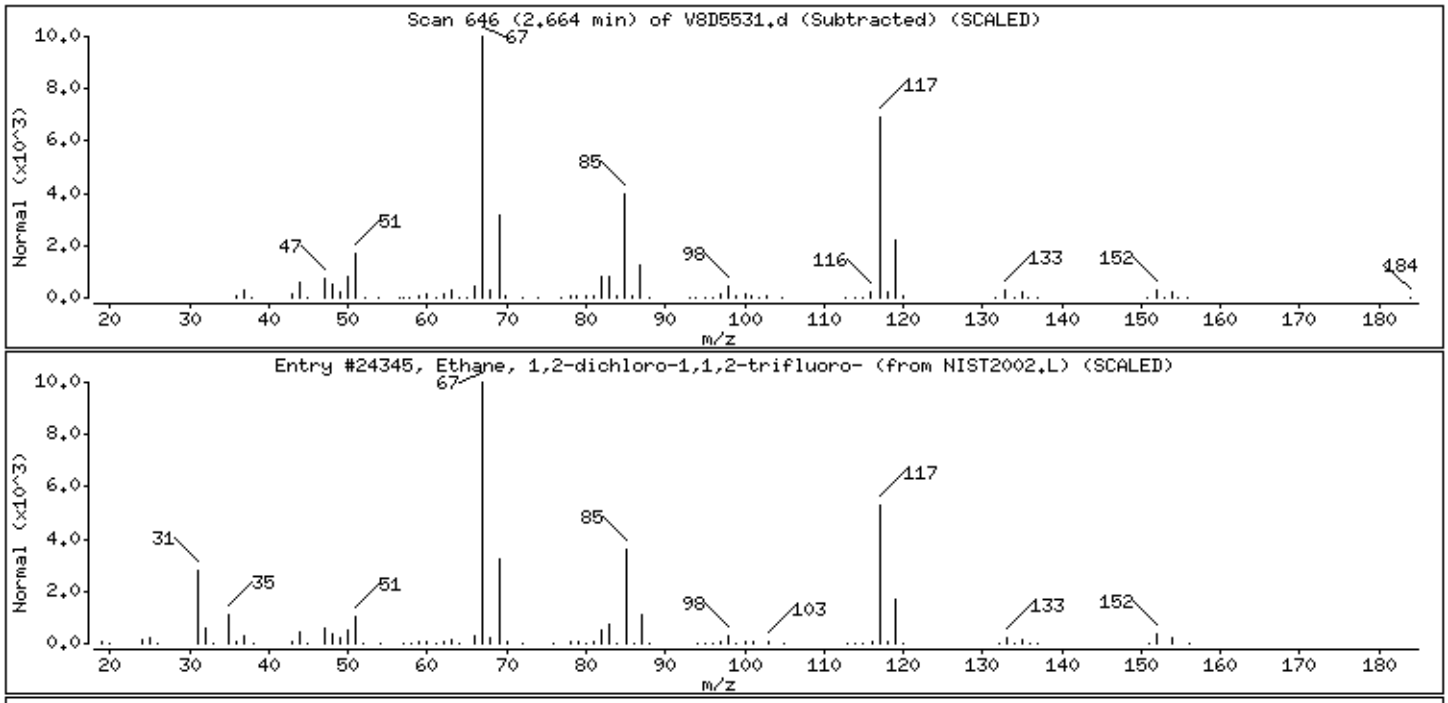
Client ID: OC-17D_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-16A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	94	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-17D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-16ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5601.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

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	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
67-64-1	Acetone	50	U
74-88-4	Iodomethane	10	U
75-15-0	Carbon disulfide	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	110	D
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	50	U
156-59-2	cis-1,2-Dichloroethene	10	U
594-20-7	2,2-Dichloropropane	10	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	540	D
563-58-6	1,1-Dichloropropene	10	U
56-23-5	Carbon tetrachloride	10	U
107-06-2	1,2-Dichloroethane	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	300	D
78-87-5	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
142-28-9	1,3-Dichloropropane	10	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-17D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-16ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5601.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

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	10	U
591-78-6	2-Hexanone	50	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-86-1	Bromobenzene	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
95-49-8	2-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
106-43-4	4-Chlorotoluene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
104-51-8	n-Butylbenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1100	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-17D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-16ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5601.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	200	DNJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d
Report Date: 25-Jun-2014 16:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5601.d
Lab Smp Id: N1055-16ADL Client Smp ID: OC-17D_6/16/14DL
Inj Date : 21-JUN-2014 02:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-16ADL,,77692,10
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 92
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	10.000	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)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	189681	111.023	1100
23	1,1-Dichloroethane	63	3.785	3.782	(0.723)	43309	11.3183	110
$ 36	Dibromofluoromethane	113	4.641	4.641	(0.886)	73925	57.7127	58
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	188721	54.3136	540
$ 42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	12092	55.8369	56
* 46	Fluorobenzene	96	5.236	5.239	(1.000)	172127	50.0000	
47	Trichloroethene	130	5.567	5.567	(1.063)	42165	29.6822	300
$ 58	Toluene-d8	98	6.718	6.715	(0.817)	224538	43.7337	44
* 68	Chlorobenzene-d5	117	8.219	8.223	(1.000)	224359	50.0000	
$ 79	Bromofluorobenzene	95	9.525	9.522	(1.159)	139360	50.5627	50
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	118873	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d
Report Date: 25-Jun-2014 16:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5601.d
Lab Smp Id: N1055-16ADL Client Smp ID: OC-17D_6/16/14DL
Inj Date : 21-JUN-2014 02:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-16ADL,,77692,10
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 92
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

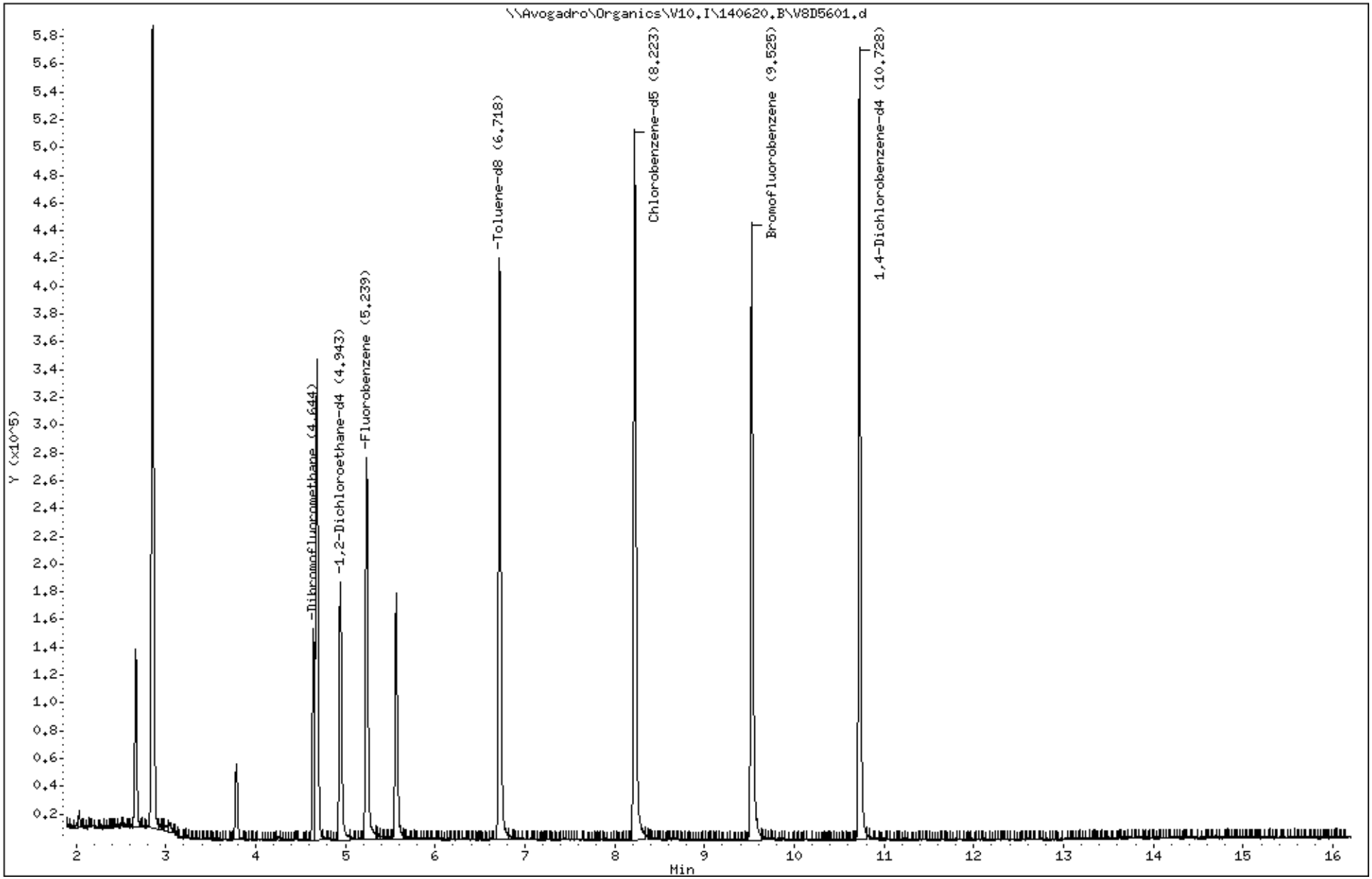
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	10.000	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	5.236	515815	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	204861	19.8579709	200	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d
Date : 21-JUN-2014 02:24
Client ID: OC-17D_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-16ADL,,77692,10
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d

Date : 21-JUN-2014 02:24

Client ID: OC-17D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-16ADL,,77692,10

Purge Volume: 5.0

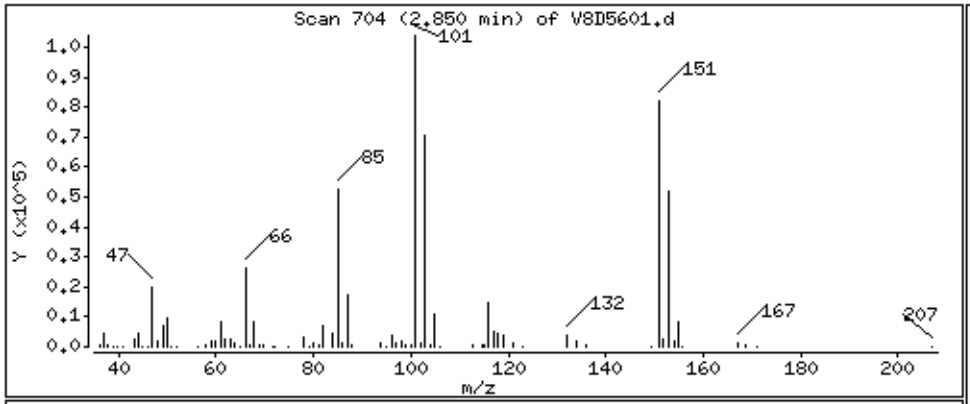
Operator: WL SRC: LIMS

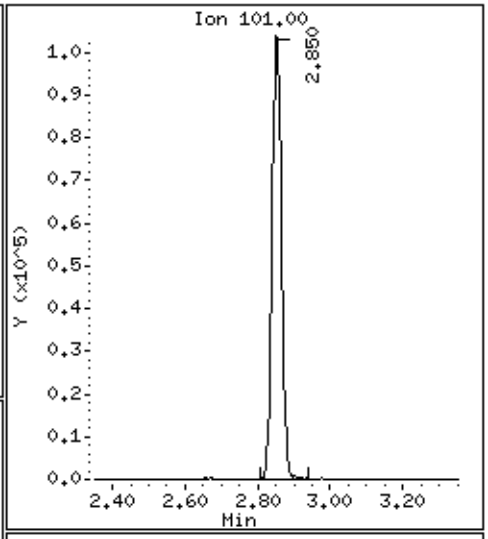
Column phase: DB-624

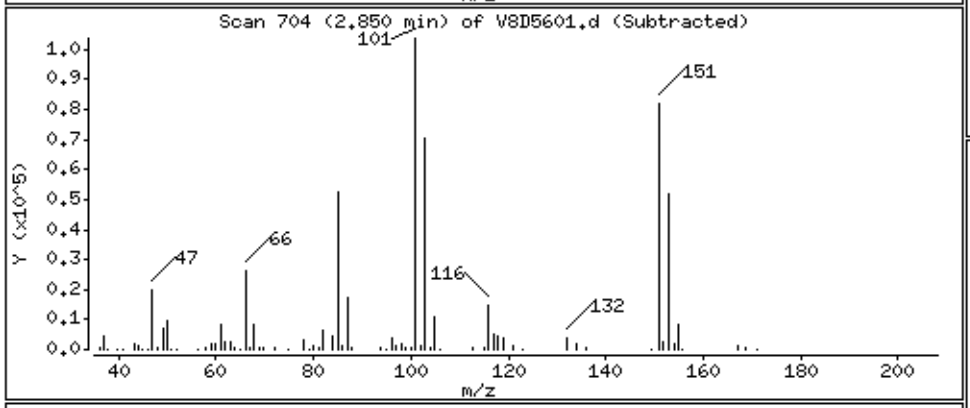
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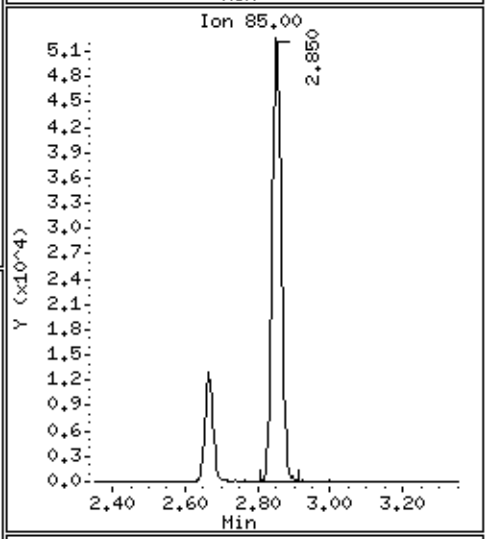
11 1,1,2-Trichloro-1,2,2-Trifluo

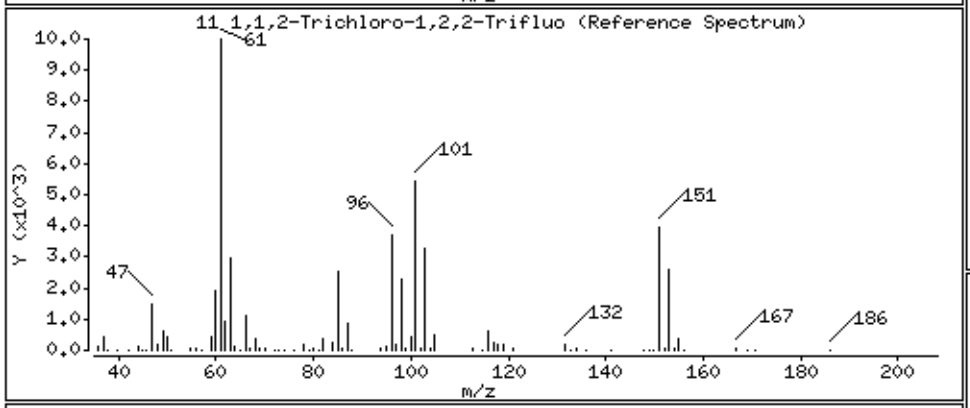
Concentration: 1100 ug/L

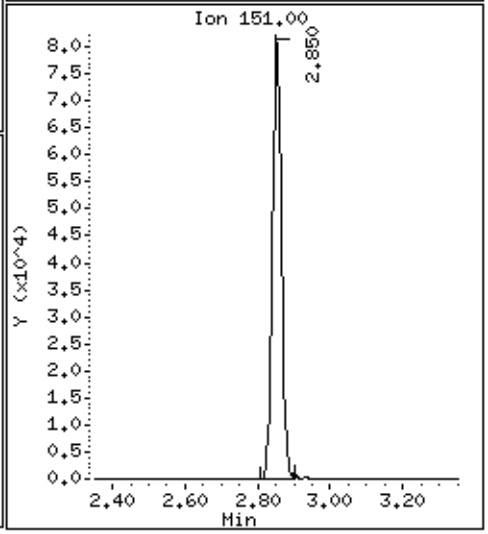


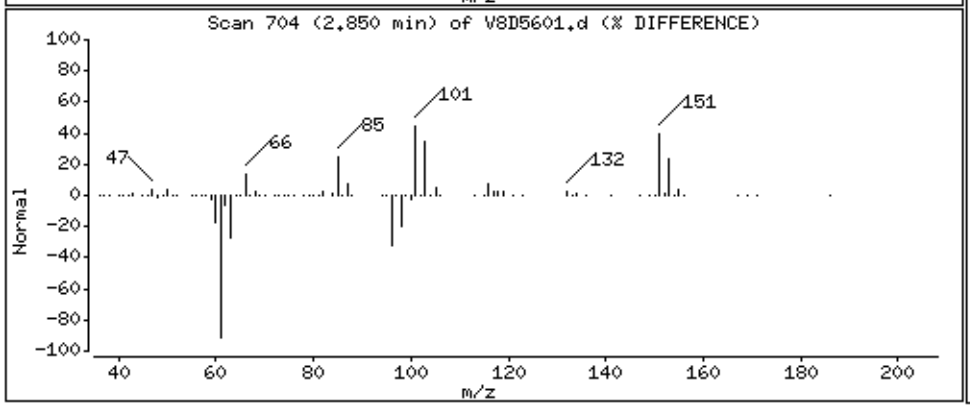












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d

Date : 21-JUN-2014 02:24

Client ID: OC-17D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-16ADL,,77692,10

Purge Volume: 5.0

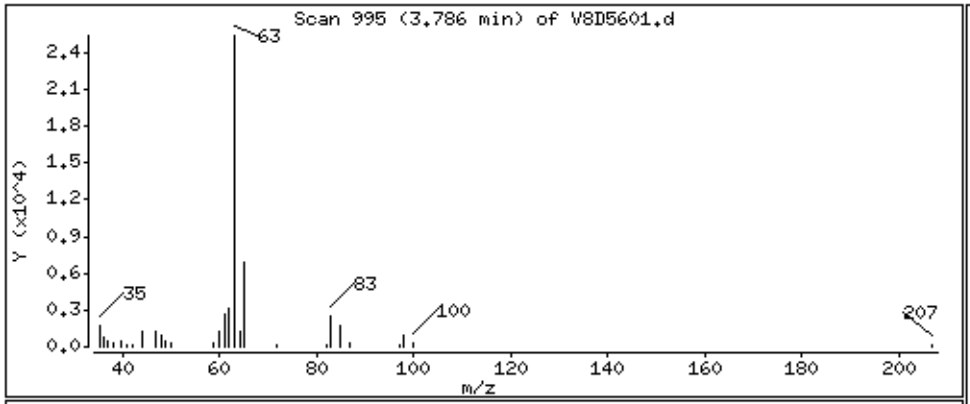
Operator: WL SRC: LIMS

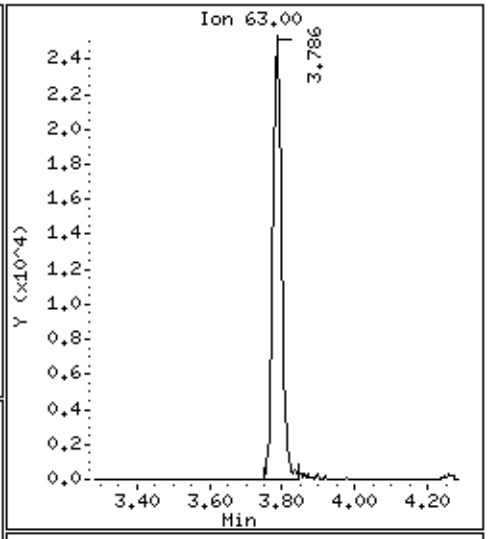
Column phase: DB-624

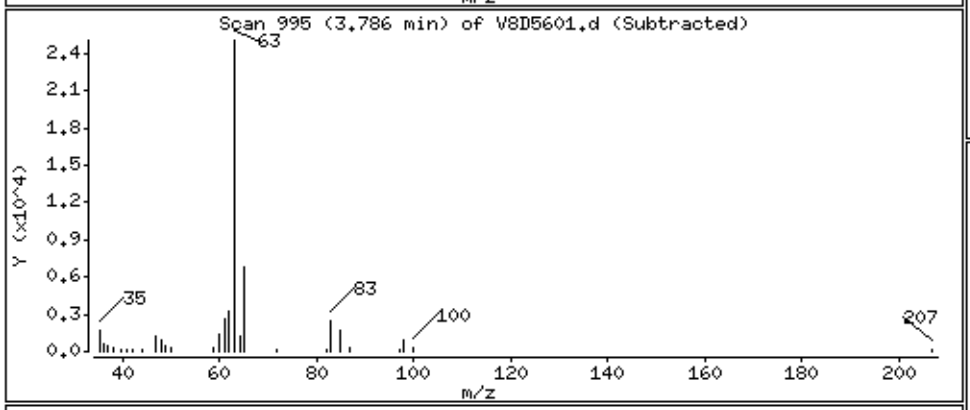
Column diameter: 0.25

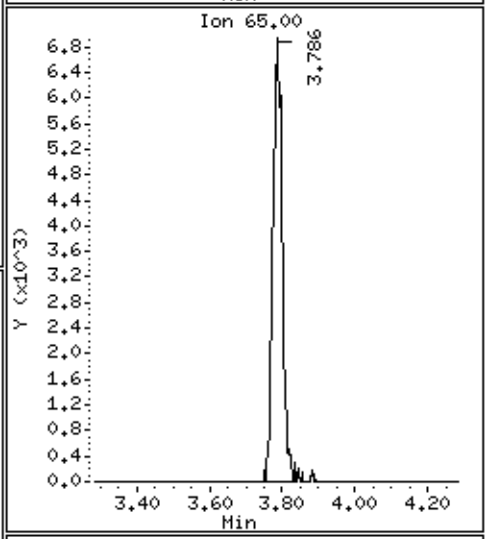
23 1,1-Dichloroethane

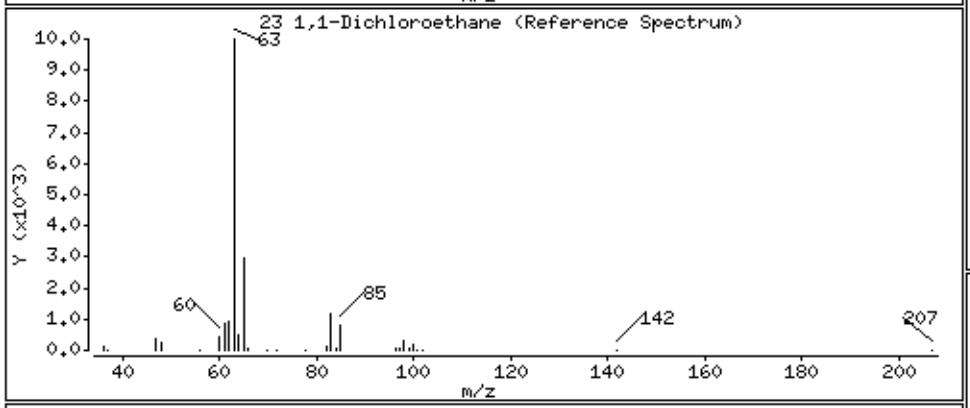
Concentration: 110 ug/L

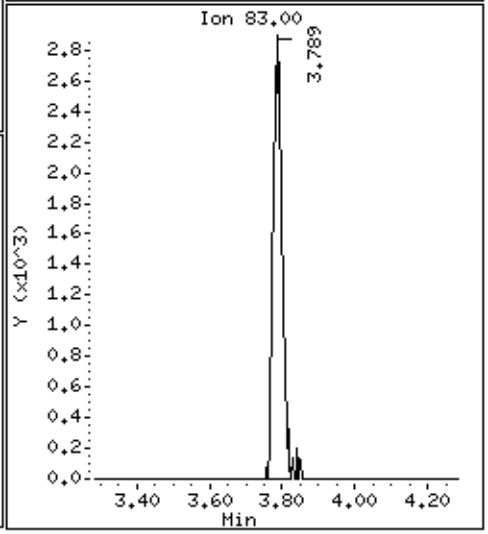


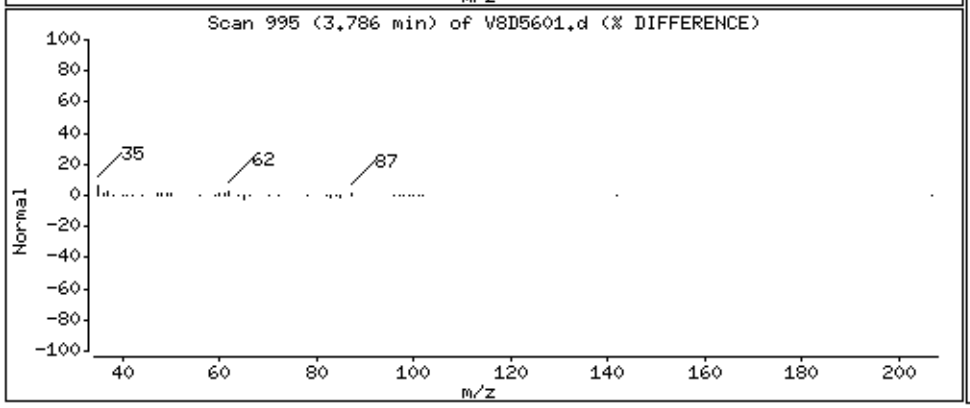












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d

Date : 21-JUN-2014 02:24

Client ID: OC-17D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-16ADL,,77692,10

Purge Volume: 5.0

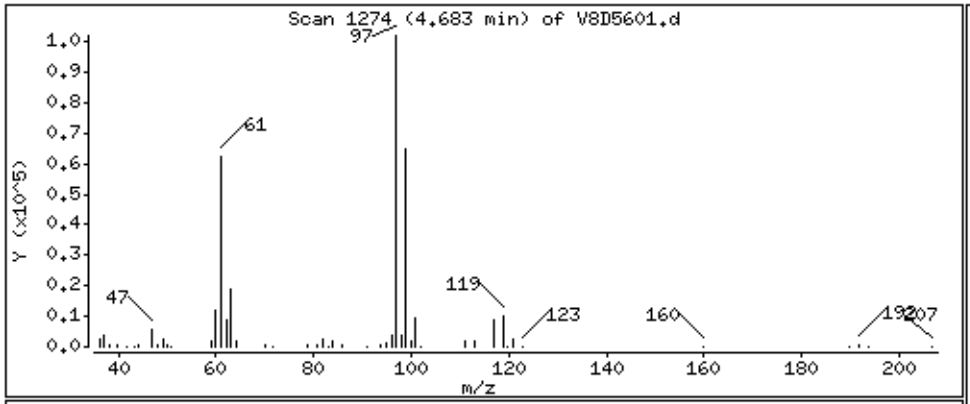
Operator: WL SRC: LIMS

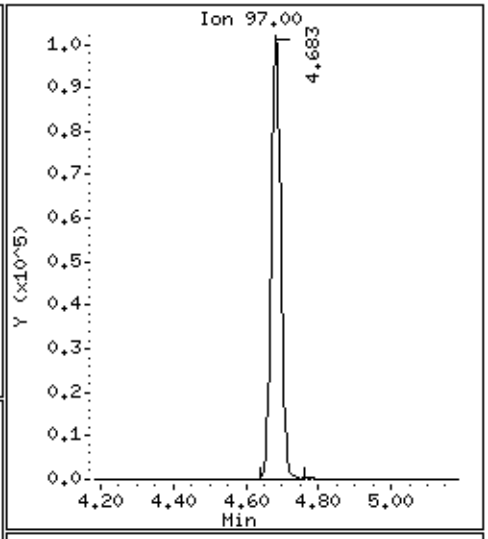
Column phase: DB-624

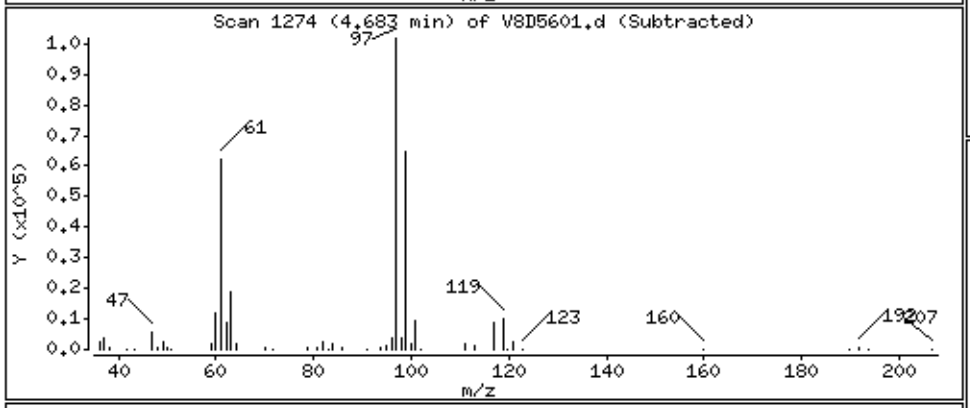
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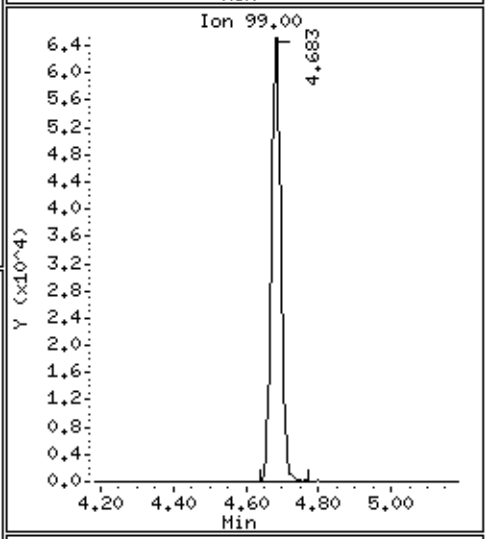
37 1,1,1-Trichloroethane

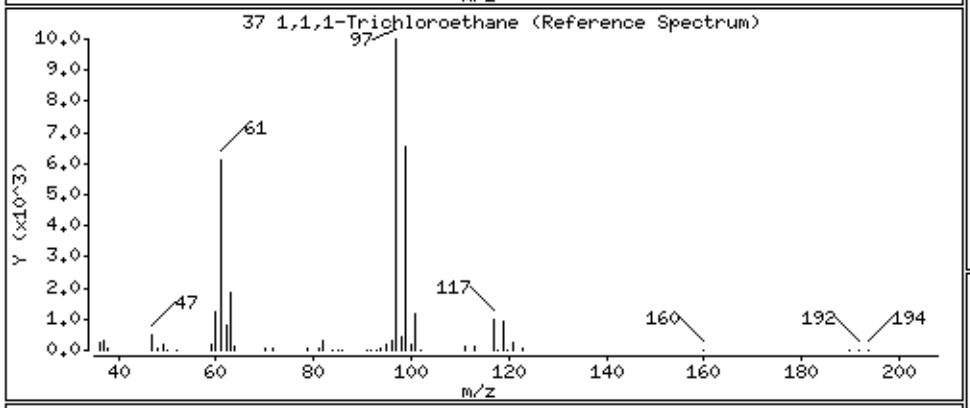
Concentration: 540 ug/L

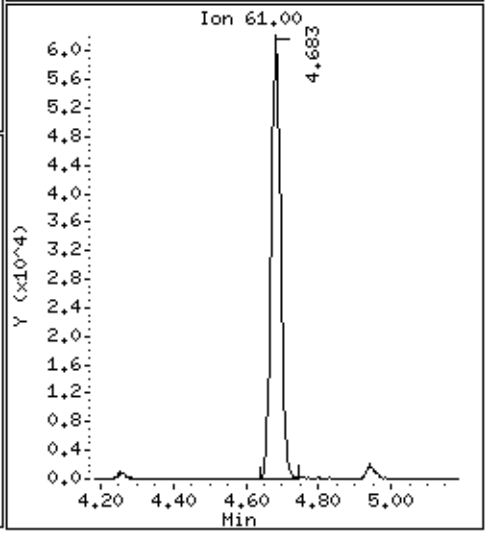


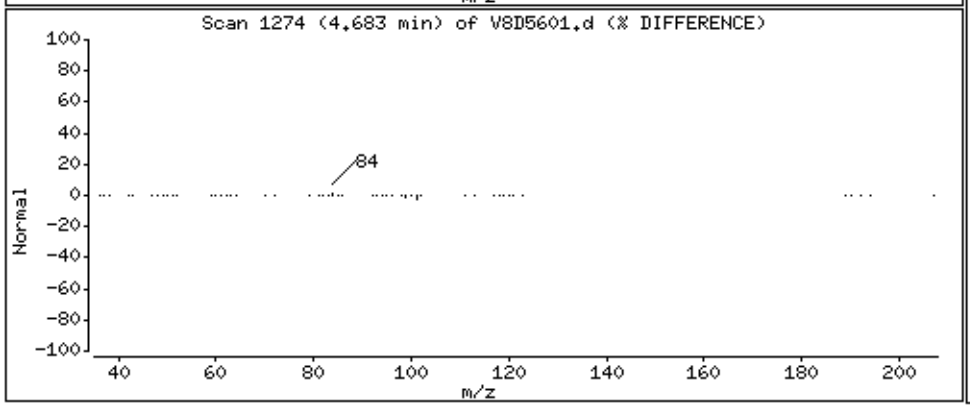












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d

Date : 21-JUN-2014 02:24

Client ID: OC-17D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-16ADL,,77692,10

Purge Volume: 5.0

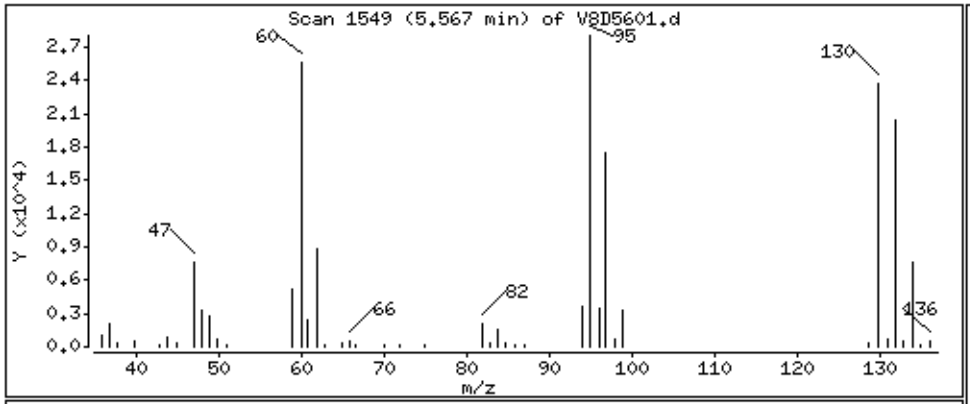
Operator: WL SRC: LIMS

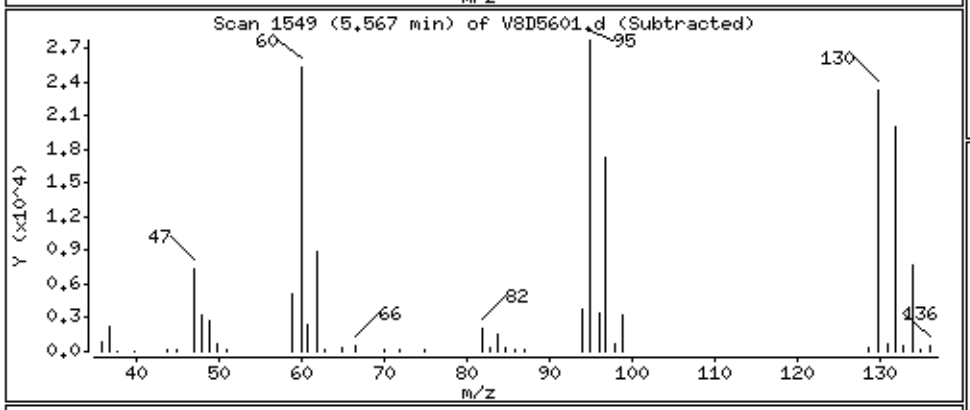
Column phase: DB-624

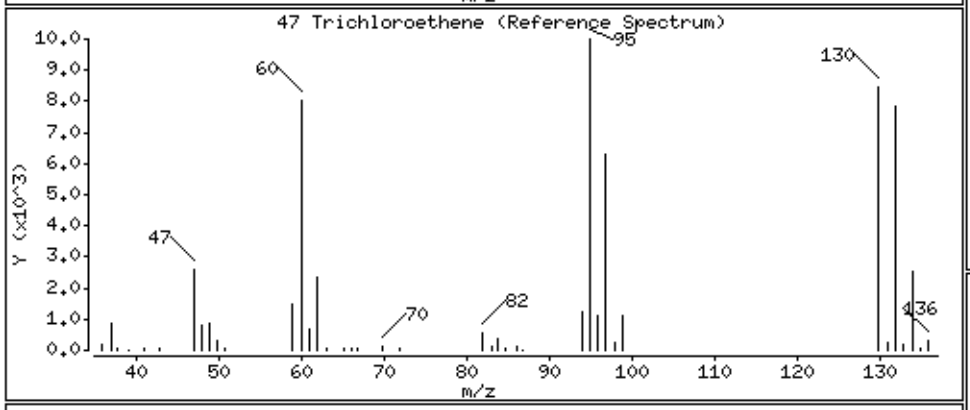
Column diameter: 0.25

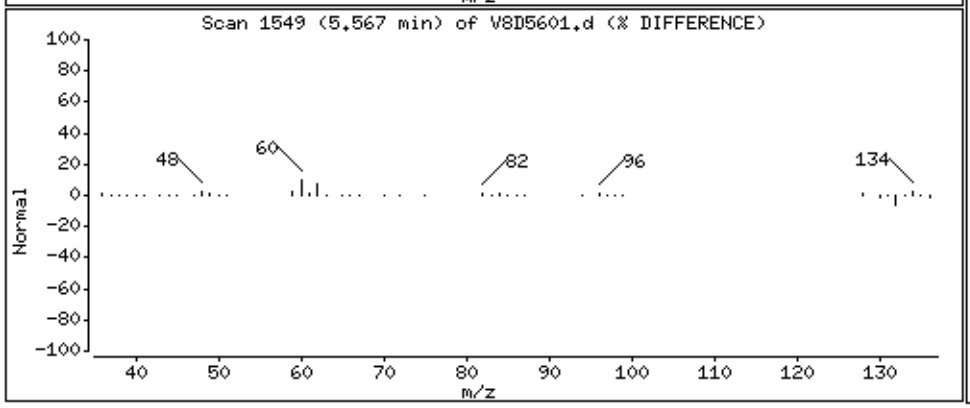
47 Trichloroethene

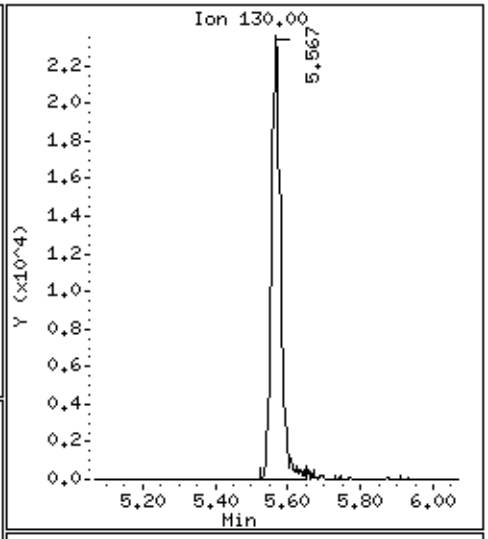
Concentration: 300 ug/L

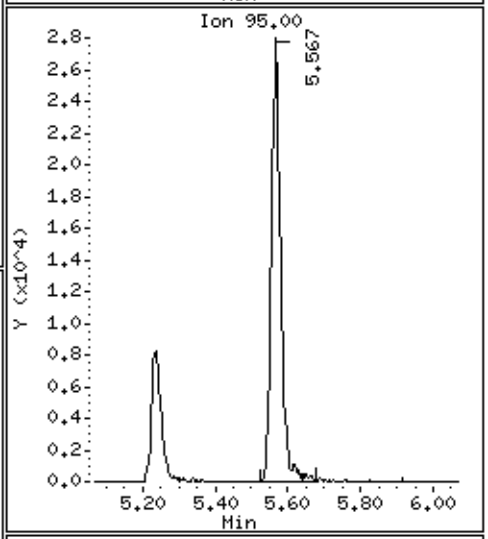


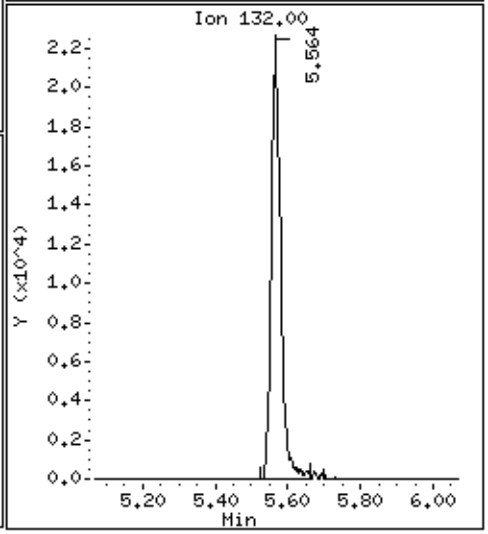












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5601.d

Date : 21-JUN-2014 02:24

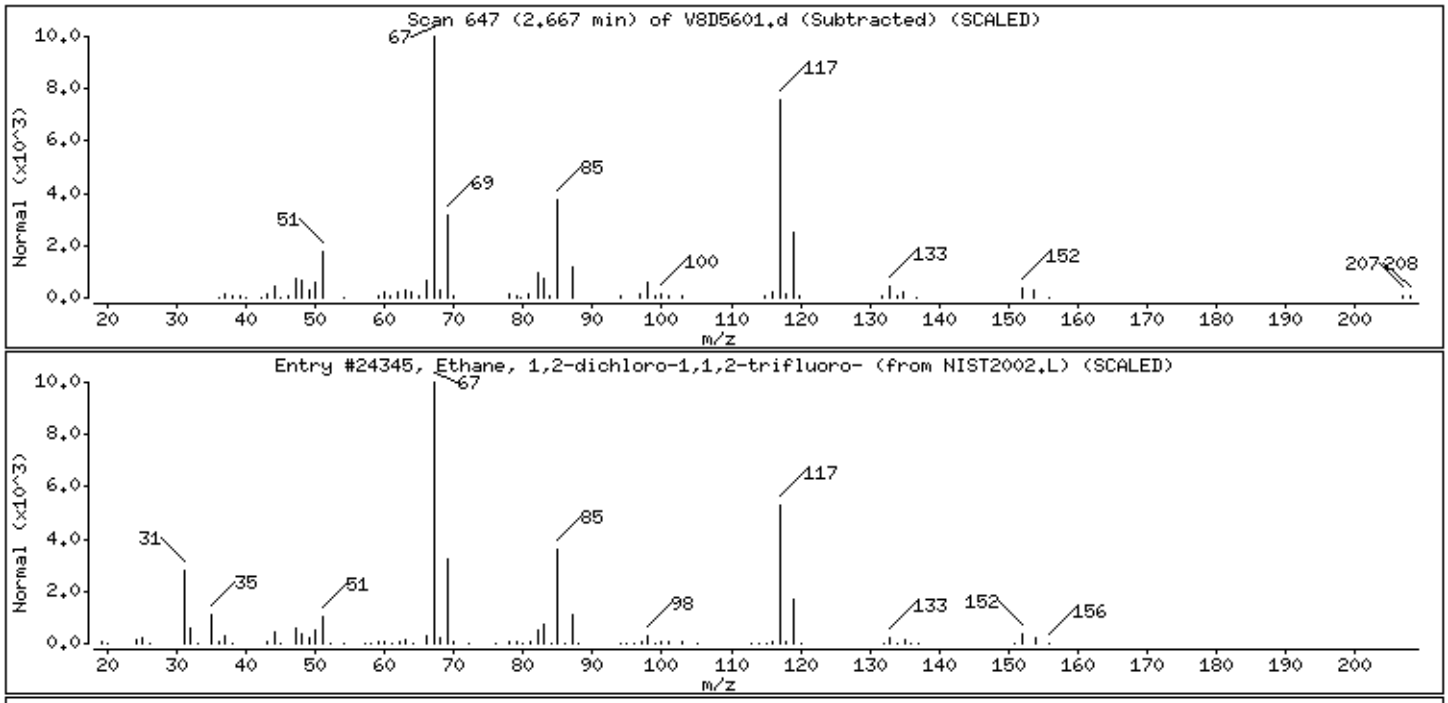
Client ID: OC-17D_6/16/14DL Instrument: V10.i

Sample Info: 5ML,N1055-16ADL,,77692,10

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-19S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-17A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5585.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

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	
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	1.6	
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

EPA SAMPLE NO.

OC-19S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-17A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5585.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.7	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-19S_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-17A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5585.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5585.d
Report Date: 25-Jun-2014 16:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5585.d
Lab Smp Id: N1055-17A Client Smp ID: OC-19S_6/16/14
Inj Date : 20-JUN-2014 19:05
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-17A,,77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	20006	9.69292	9.7
$	36 Dibromofluoromethane	113	4.644	4.641	(0.886)	82269	53.1647	53
	37 1,1,1-Trichloroethane	97	4.682	4.683	(0.894)	4296	1.02343	1.0
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13698	52.3585	52
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	207942	50.0000	
	47 Trichloroethene	130	5.563	5.567	(1.062)	2732	1.59196	1.6
$	58 Toluene-d8	98	6.718	6.715	(0.817)	264219	54.4702	54
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	211970	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.522	(1.158)	115730	44.4434	44
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	94535	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5585.d
Report Date: 25-Jun-2014 16:16

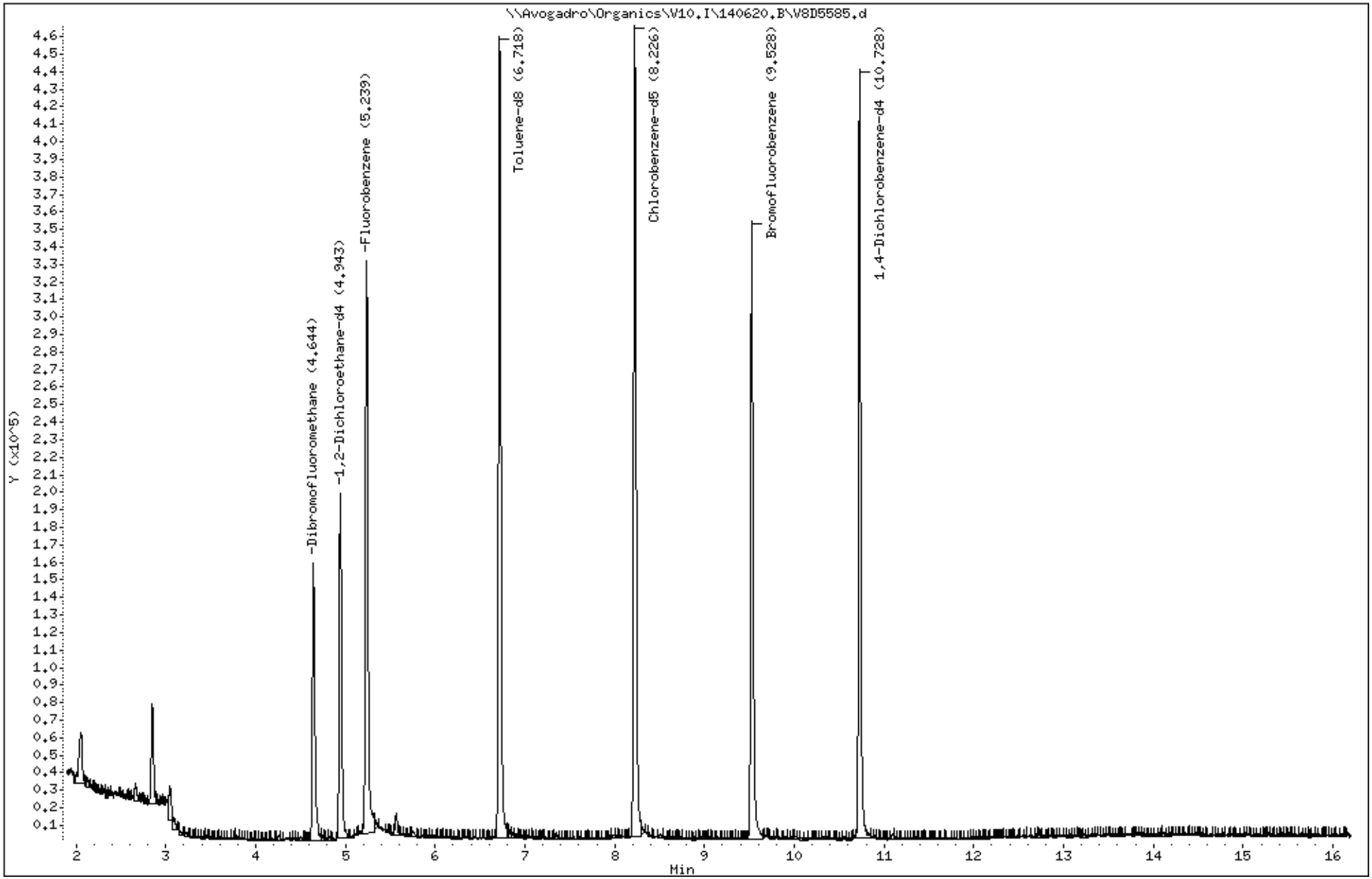
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

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Inj Date : 20-JUN-2014 19:05
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-17A,,77692
Misc Info :
Comment   :
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Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5585.d
Date : 20-JUN-2014 19:05
Client ID: OC-19S_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-17A,,77692
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5585.d

Date : 20-JUN-2014 19:05

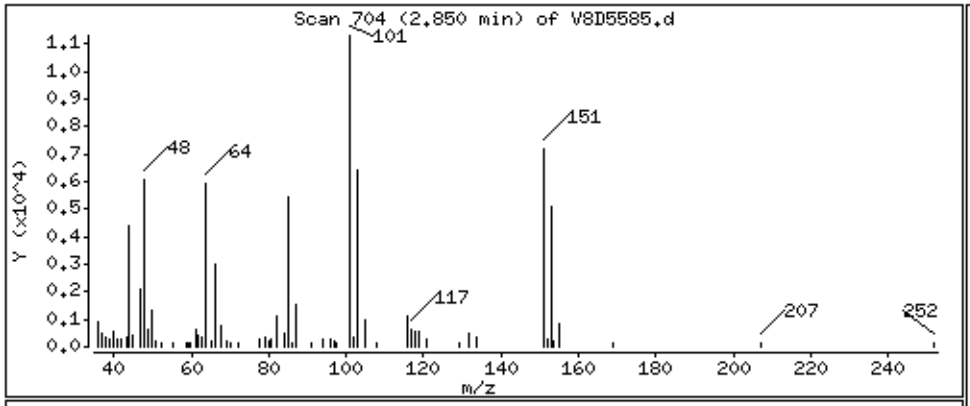
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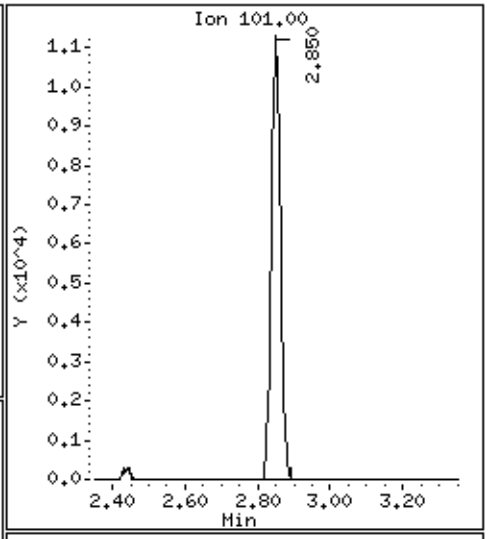
Sample Info: 5ML,N1055-17A,,77692

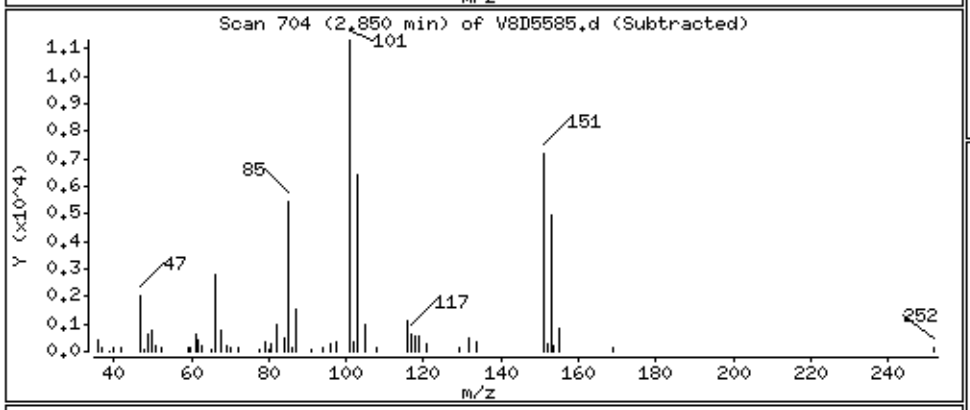
Purge Volume: 5.0 Operator: WL SRC: LIMS

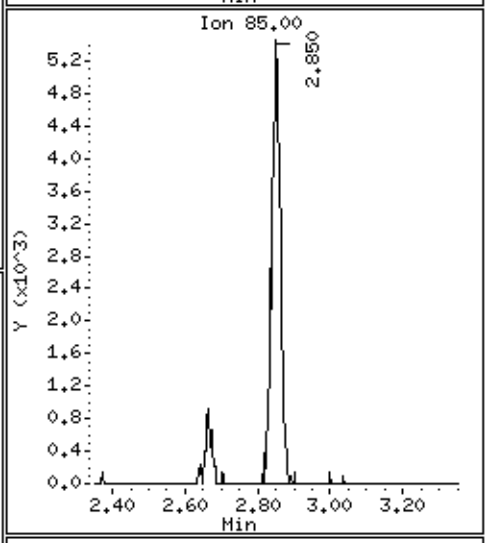
Column phase: DB-624 Column diameter: 0.25

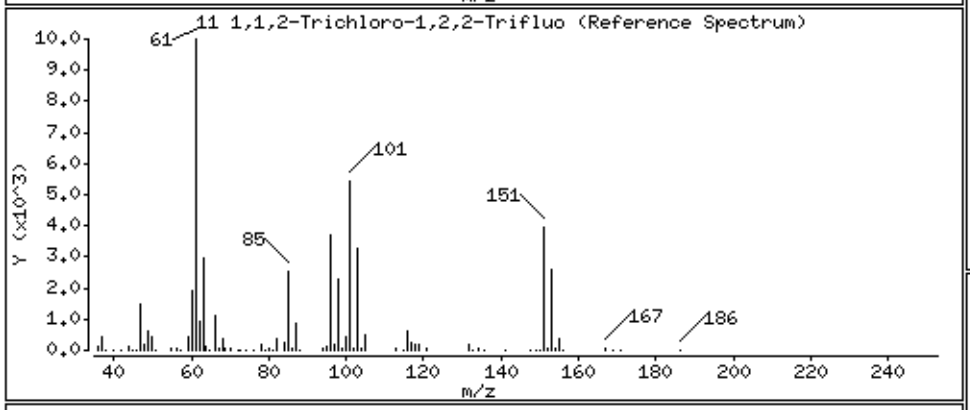
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 9.7 ug/L

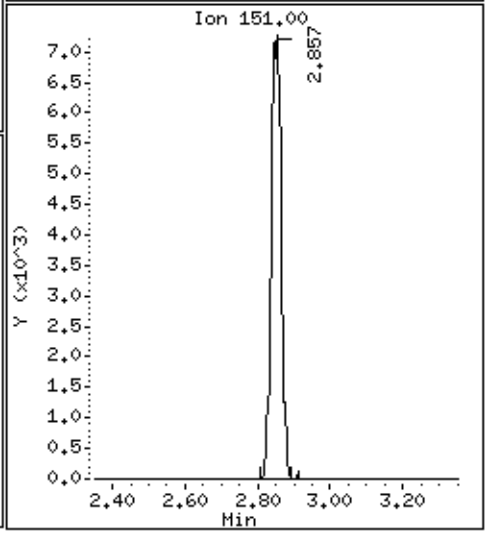


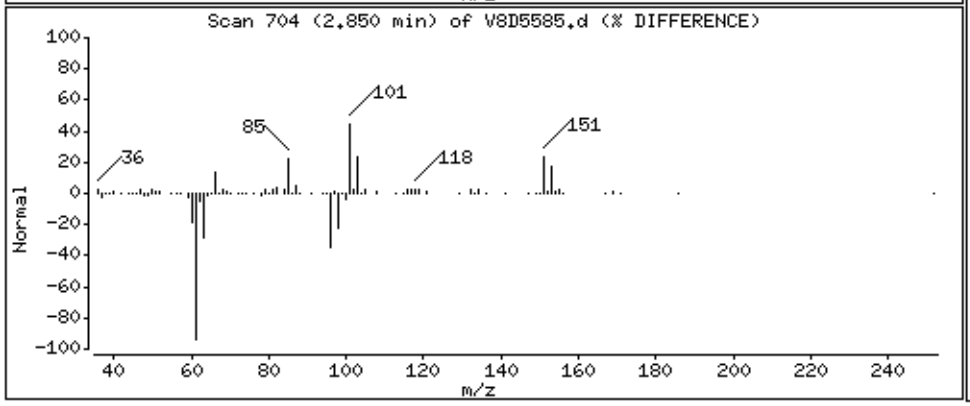












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5585.d

Date : 20-JUN-2014 19:05

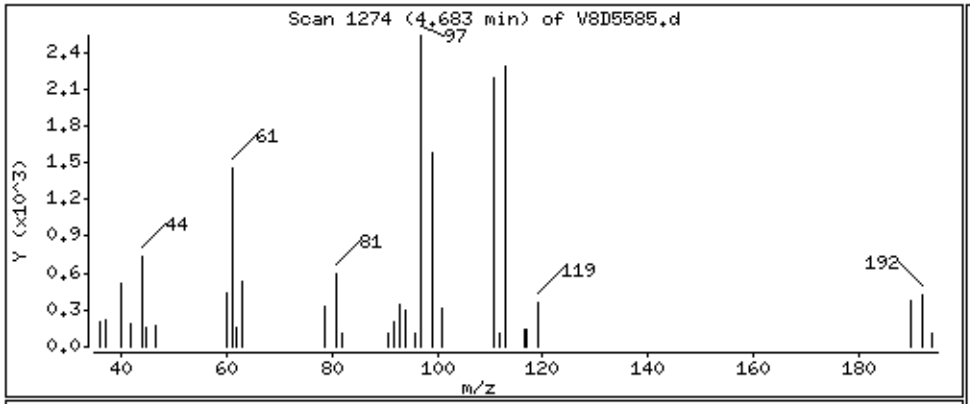
Client ID: OC-19S_6/16/14 Instrument: V10.i

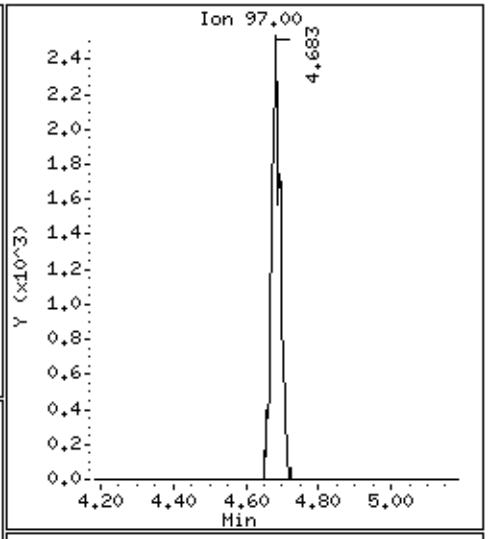
Sample Info: 5ML,N1055-17A,,77692

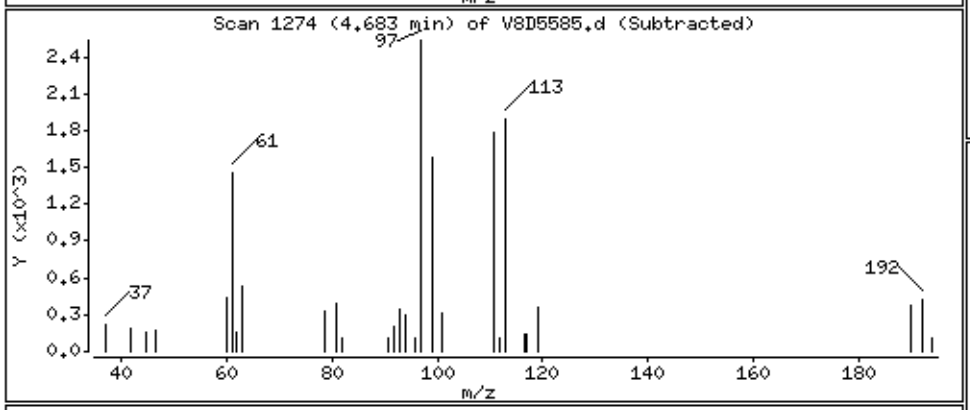
Purge Volume: 5.0 Operator: WL SRC: LIMS

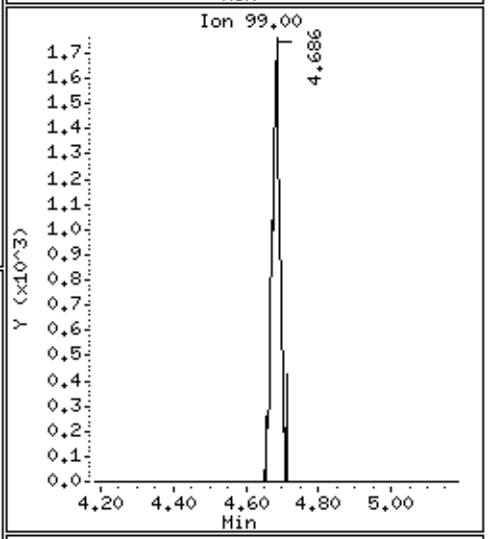
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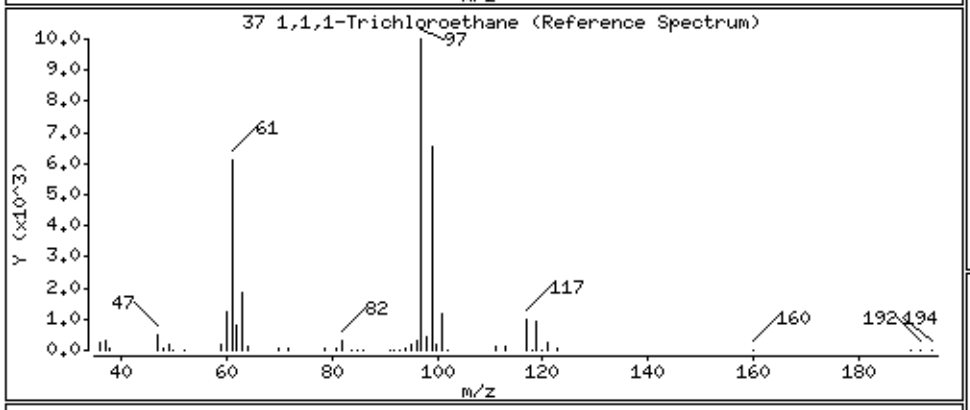
37 1,1,1-Trichloroethane Concentration: 1.0 ug/L

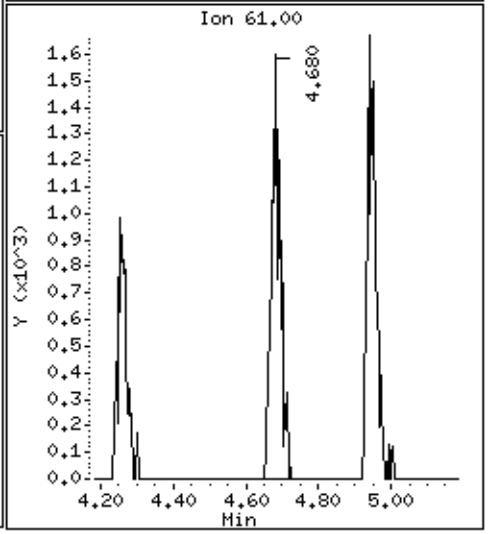


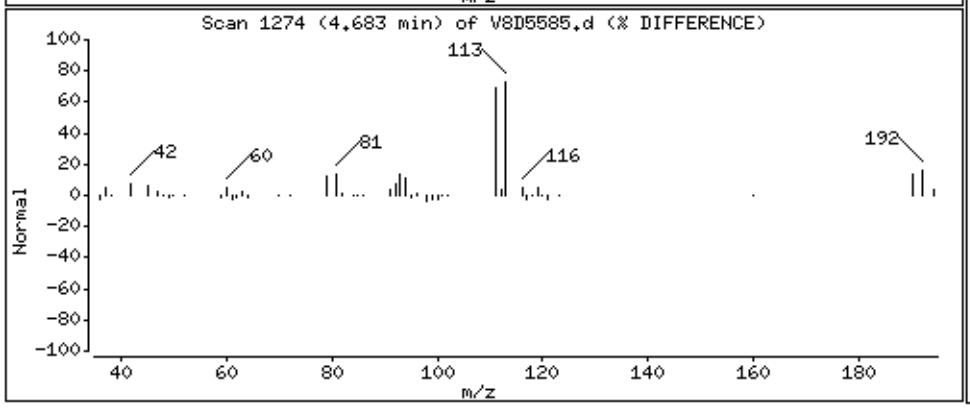












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5585.d

Date : 20-JUN-2014 19:05

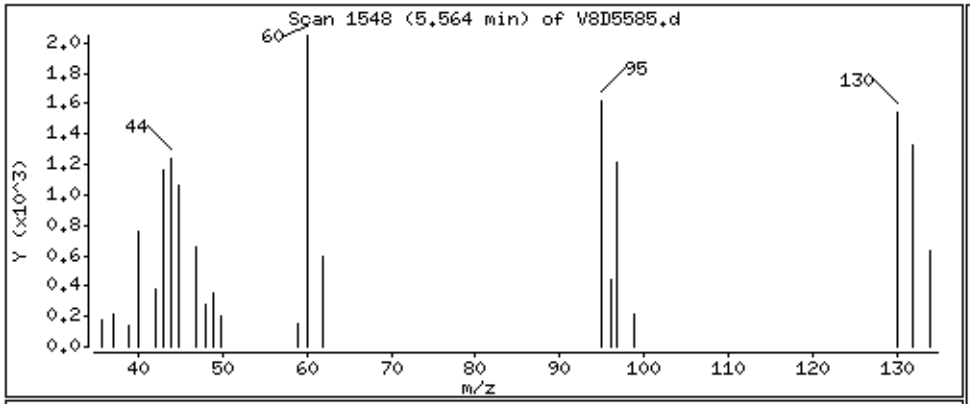
Client ID: OC-19S_6/16/14 Instrument: V10.i

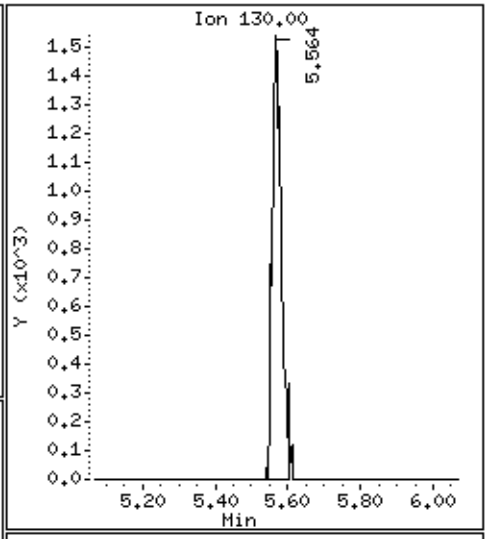
Sample Info: 5ML,N1055-17A,,77692

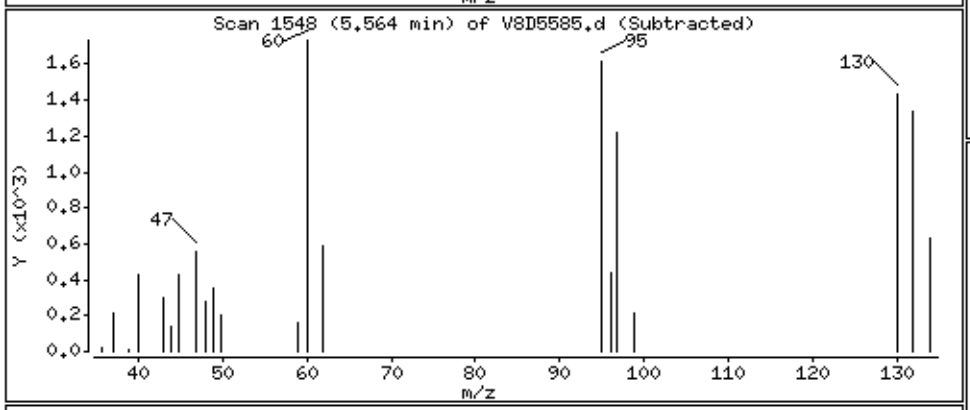
Purge Volume: 5.0 Operator: WL SRC: LIMS

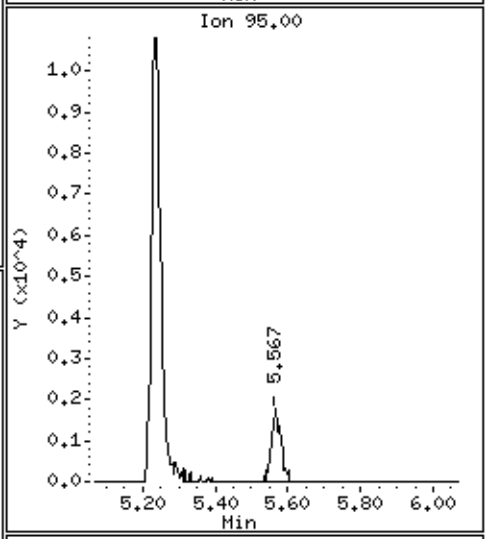
Column phase: DB-624 Column diameter: 0.25

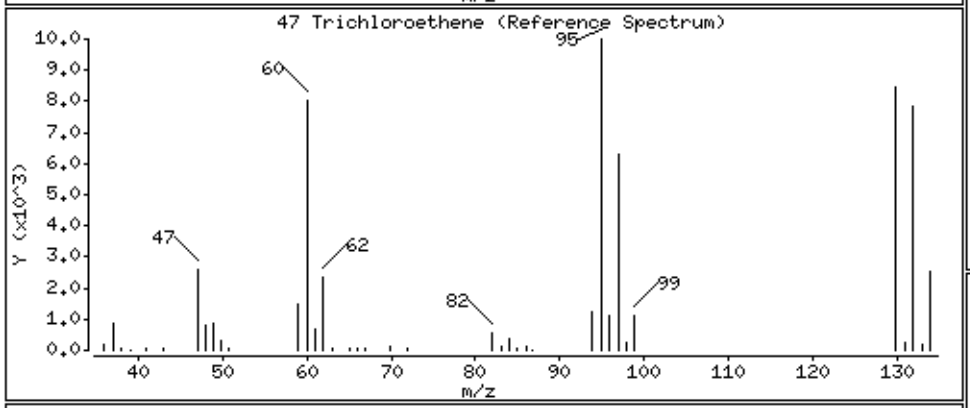
47 Trichloroethene Concentration: 1.6 ug/L

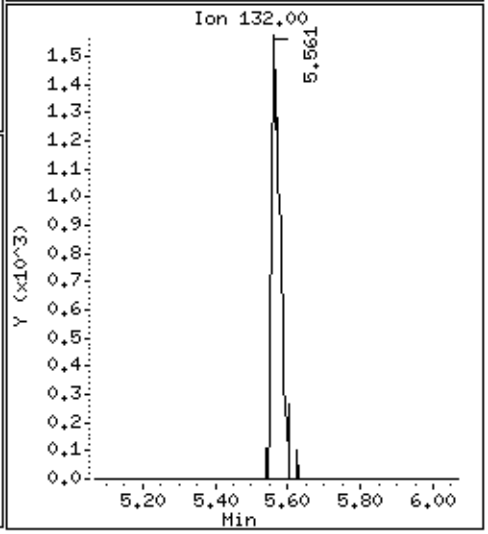


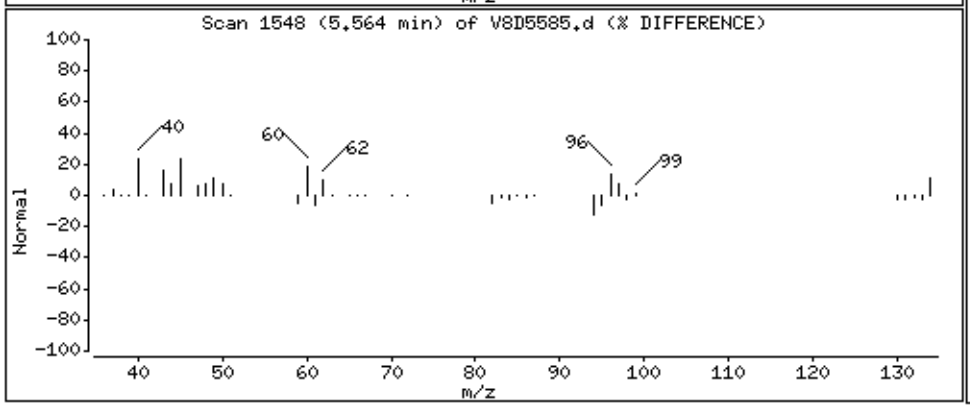












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-19D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-18A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5533.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	2.1	
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	67	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	2.3	
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	1100	E
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	480	E
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

EPA SAMPLE NO.

OC-19D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-18A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5533.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2500	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-19D_6/16/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-18A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5533.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.664	30	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d
Report Date: 27-Jun-2014 13:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5533.d
Lab Smp Id: N1055-18A Client Smp ID: OC-19D_6/16/14
Inj Date : 19-JUN-2014 18:09
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-18A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	5458361	2454.83	2400(A)
	18 Methylene Chloride	84	3.229	3.233	(0.617)	4018	2.05896	2.0(Q)
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	333700	67.0086	67
	28 cis-1,2-Dichloroethene	96	4.261	4.255	(0.814)	4452	2.26519	2.3(Q)
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	95170	57.0890	57
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	4816891	1065.19	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	15573	55.2544	55
M	50 1,2-Dichloroethene (Total)	96				4452	2.26519	2.3
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	224015	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	893887	483.502	480(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	283367	47.4655	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	260880	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.522	(1.159)	163823	51.1176	51
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	135276	50.0000	(Q)

QC Flag Legend

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

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d
Report Date: 27-Jun-2014 13:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5533.d
Lab Smp Id: N1055-18A Client Smp ID: OC-19D_6/16/14
Inj Date : 19-JUN-2014 18:09
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-18A,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

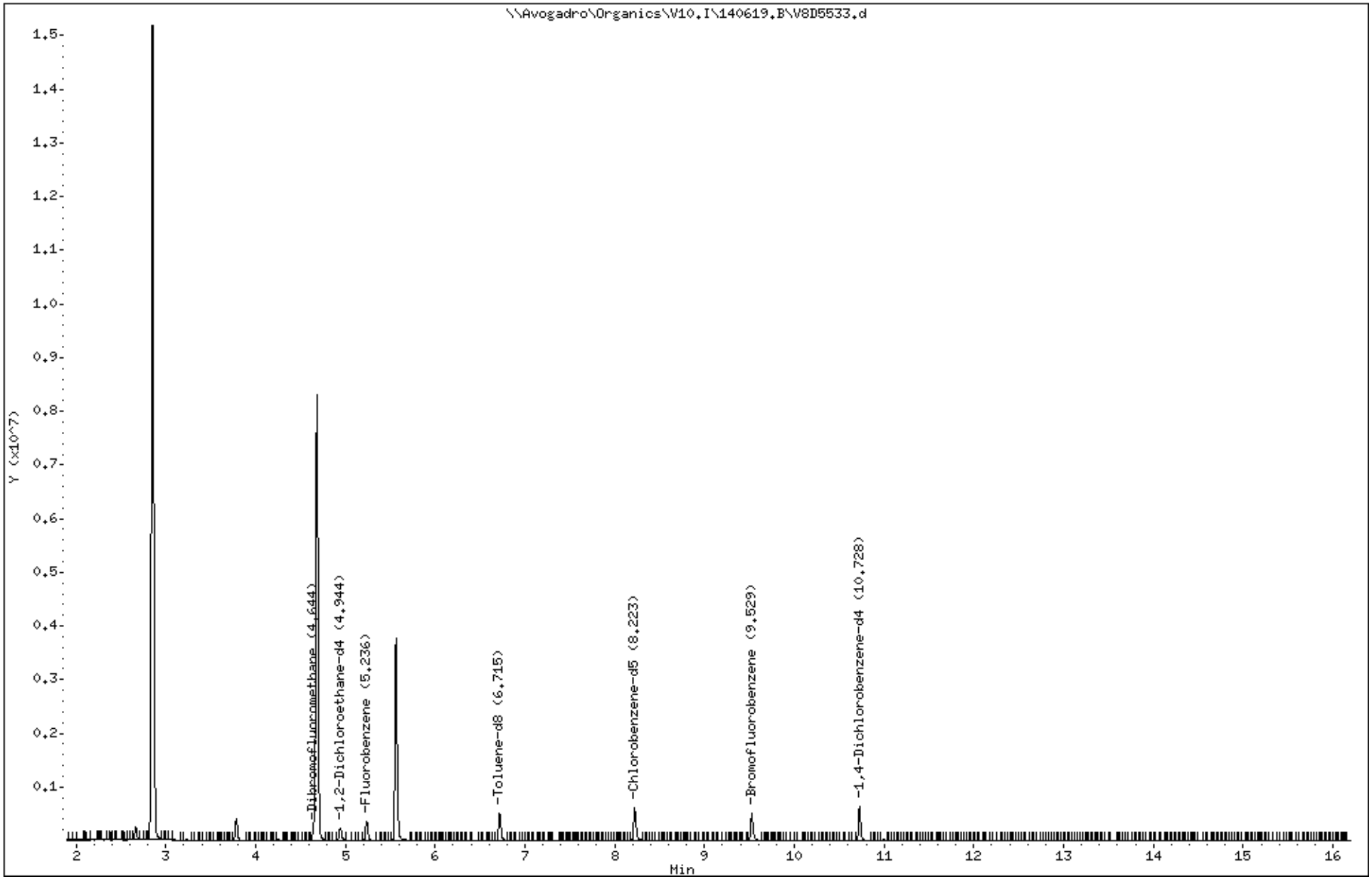
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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	5.236	662374	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.664	397248	29.9866426	30	87	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d
Date : 19-JUN-2014 18:09
Client ID: OC-19D_6/16/14
Instrument: V10.i
Sample Info: 5ML,N1055-18A,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

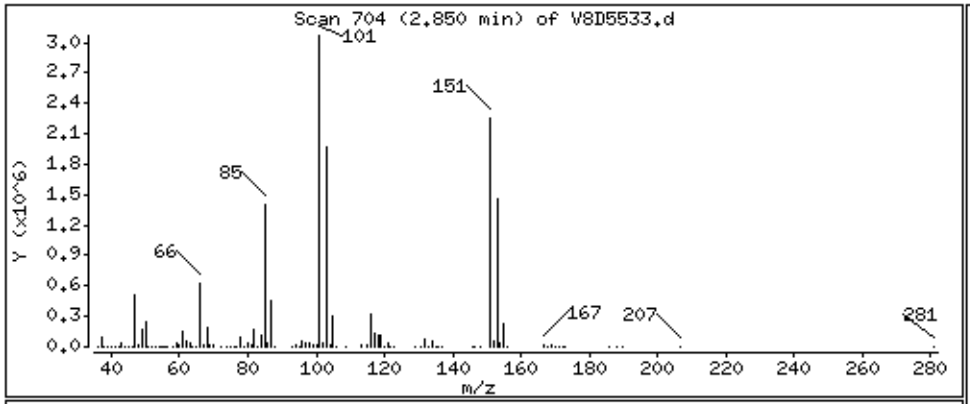
Client ID: OC-19D_6/16/14 Instrument: V10.i

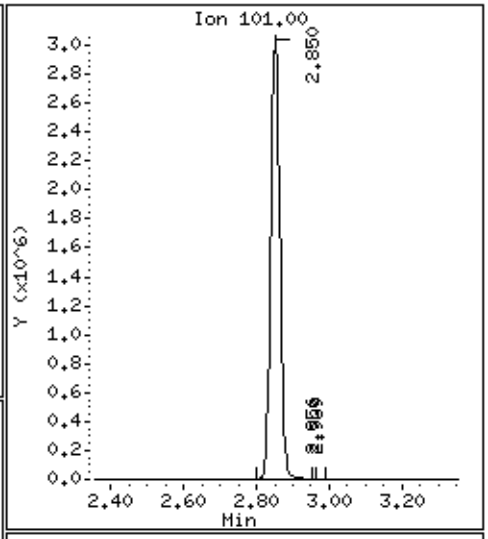
Sample Info: 5ML,N1055-18A,,77659

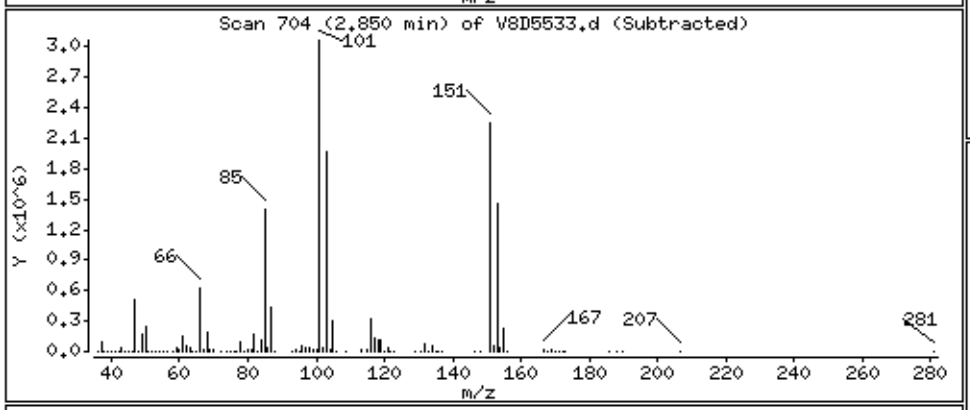
Purge Volume: 5.0 Operator: WL SRC: LIMS

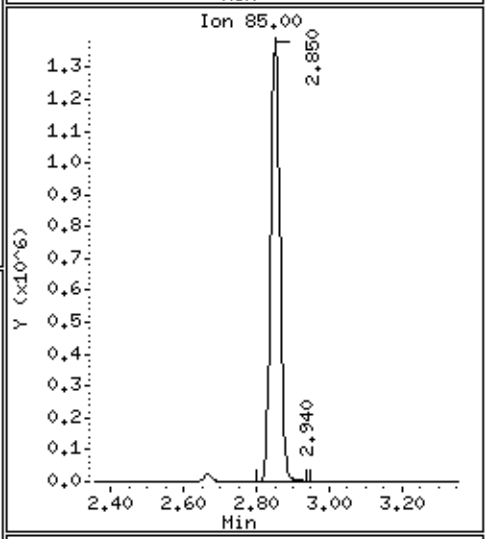
Column phase: DB-624 Column diameter: 0.25

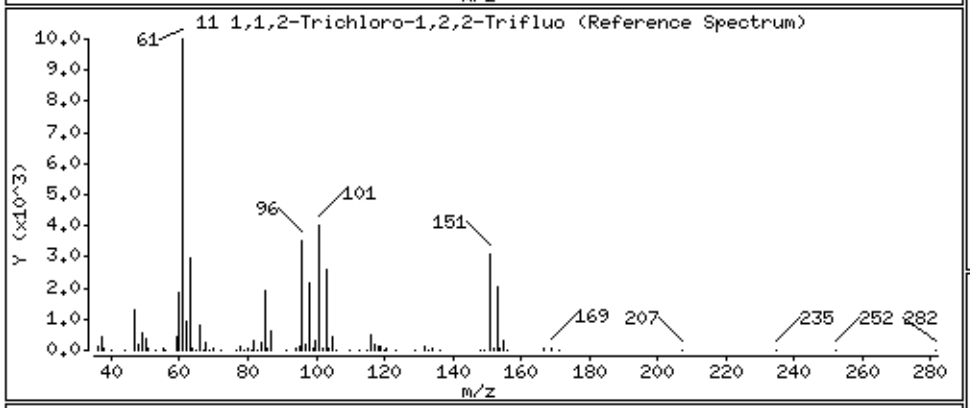
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2400 ug/L

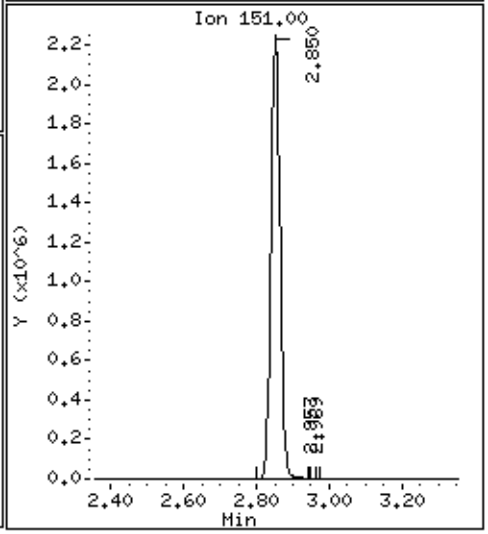


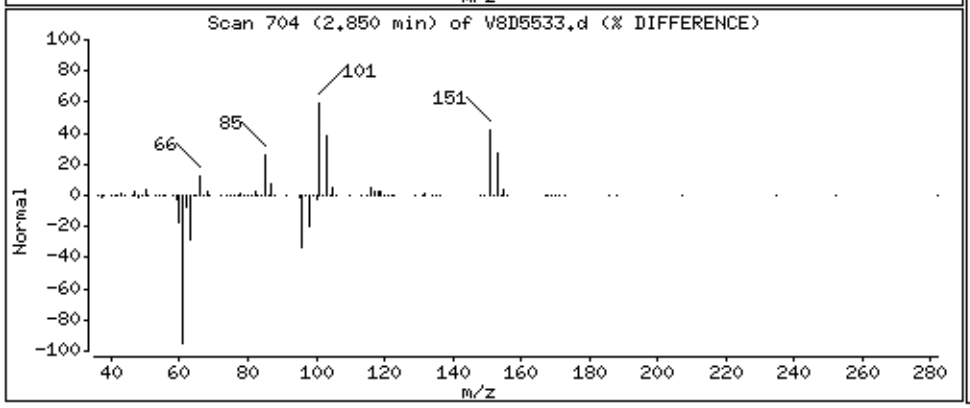












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

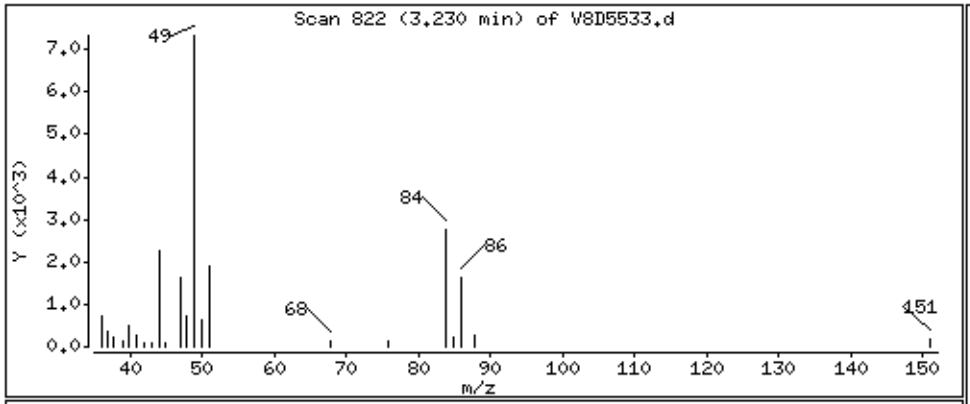
Client ID: OC-19D_6/16/14 Instrument: V10.i

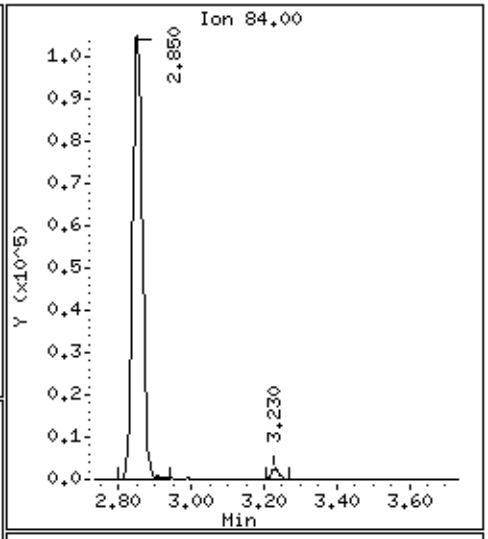
Sample Info: 5ML,N1055-18A,,77659

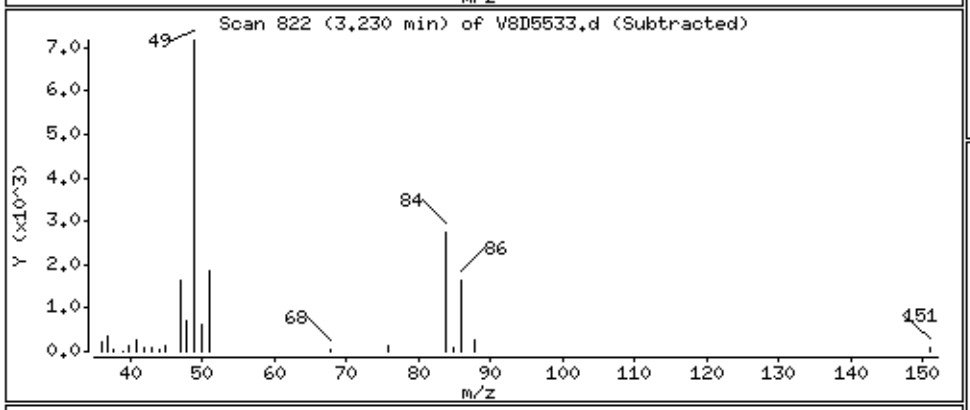
Purge Volume: 5.0 Operator: WL SRC: LIMS

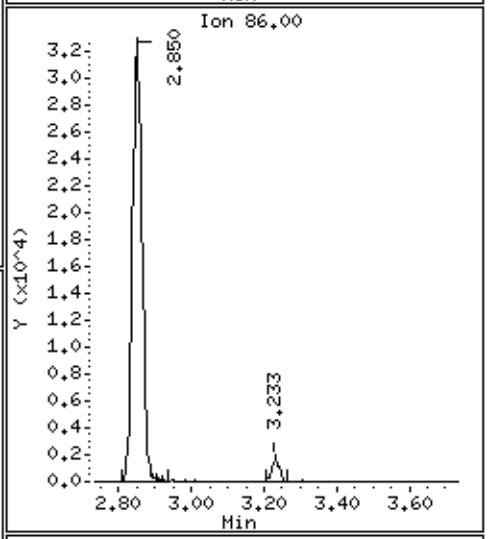
Column phase: DB-624 Column diameter: 0.25

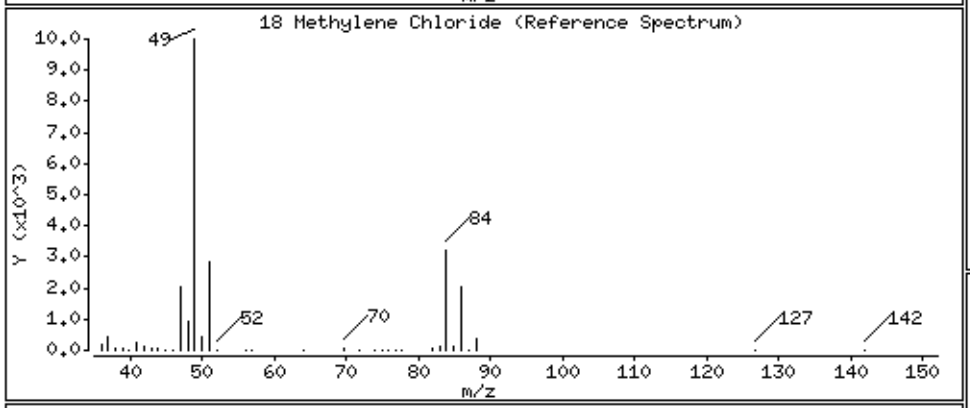
18 Methylene Chloride Concentration: 2.0 ug/L

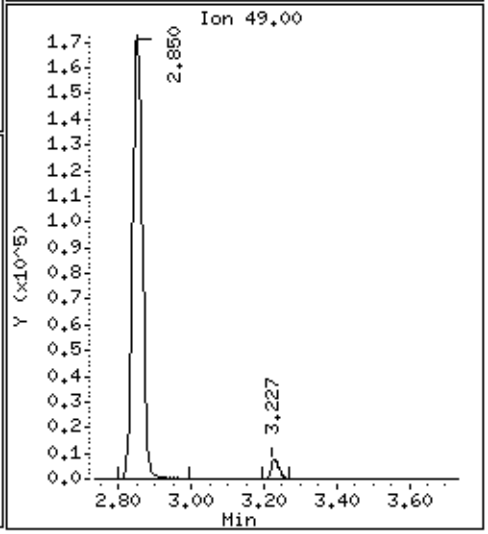


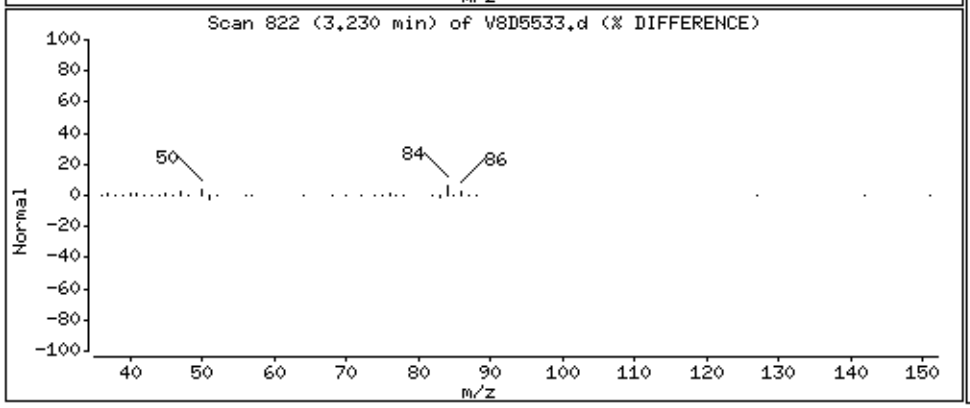












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

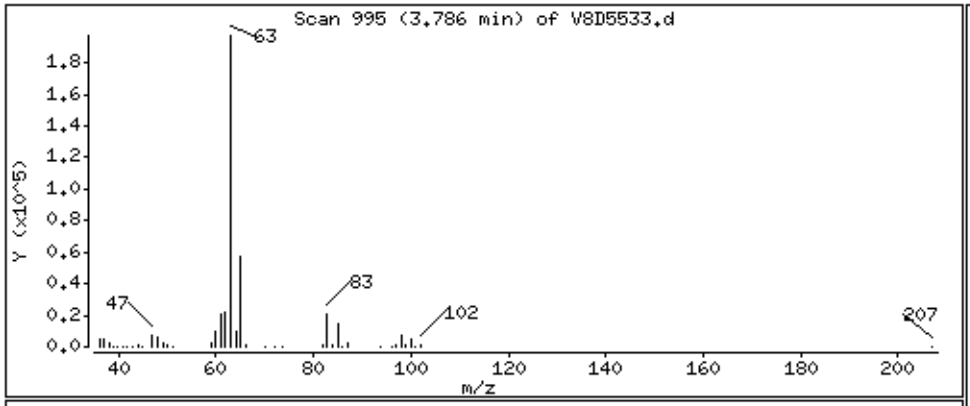
Client ID: OC-19D_6/16/14 Instrument: V10.i

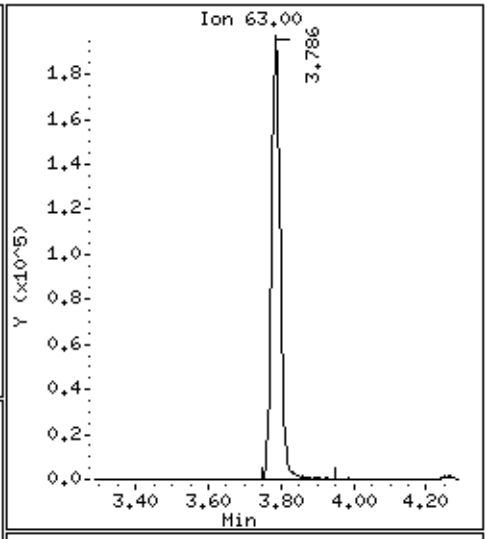
Sample Info: 5ML,N1055-18A,,77659

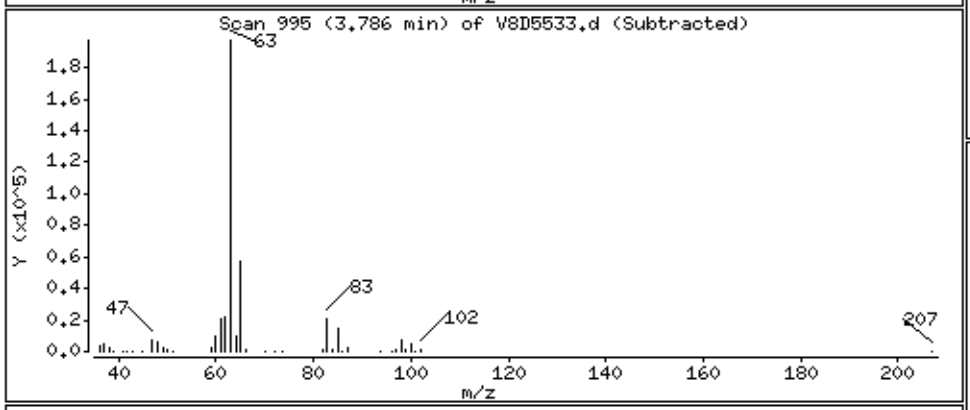
Purge Volume: 5.0 Operator: WL SRC: LIMS

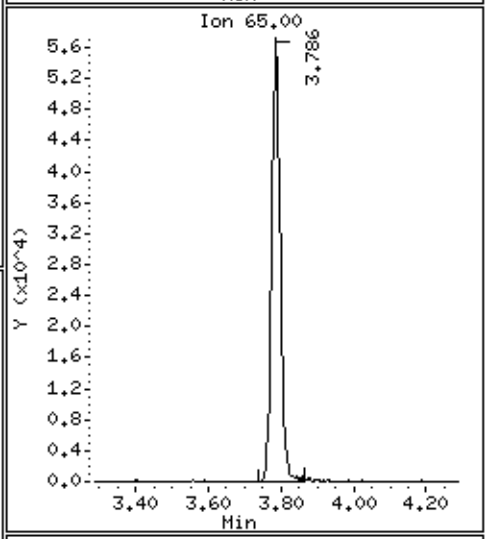
Column phase: DB-624 Column diameter: 0.25

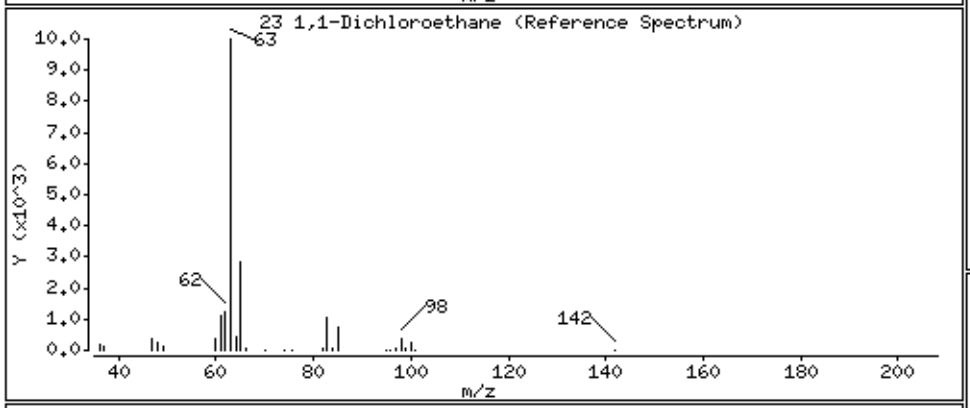
23 1,1-Dichloroethane Concentration: 67 ug/L

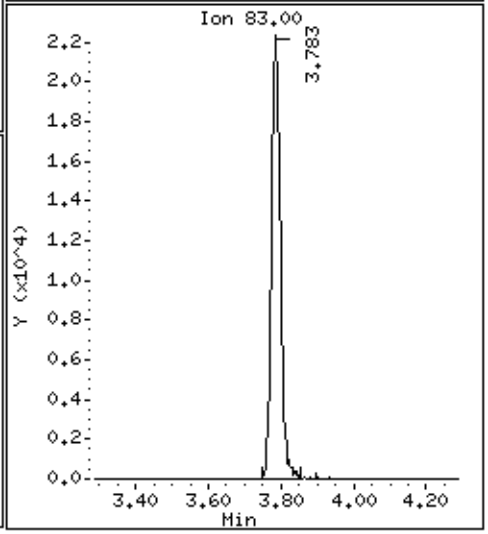


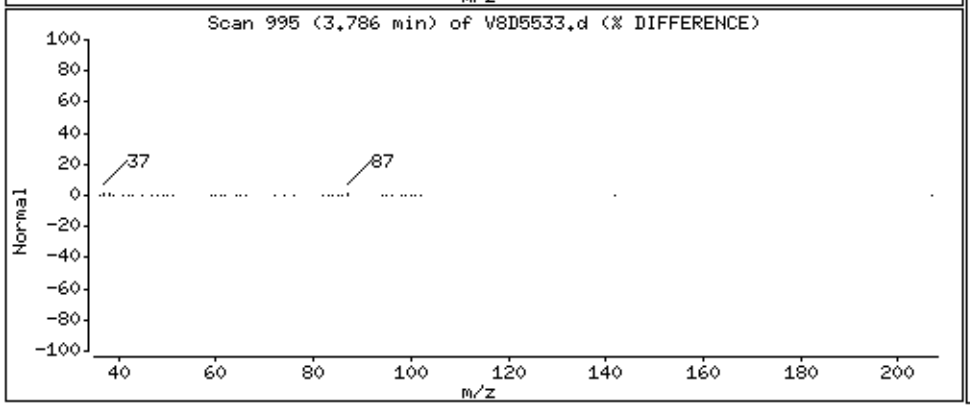












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

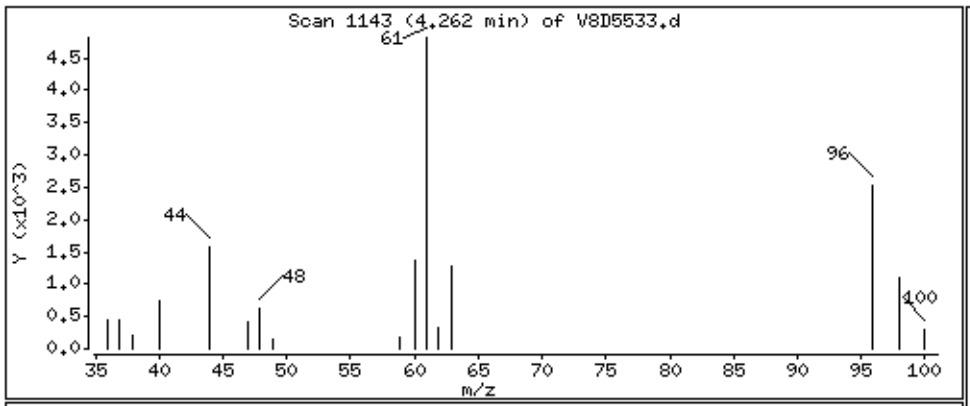
Client ID: OC-19D_6/16/14 Instrument: V10.i

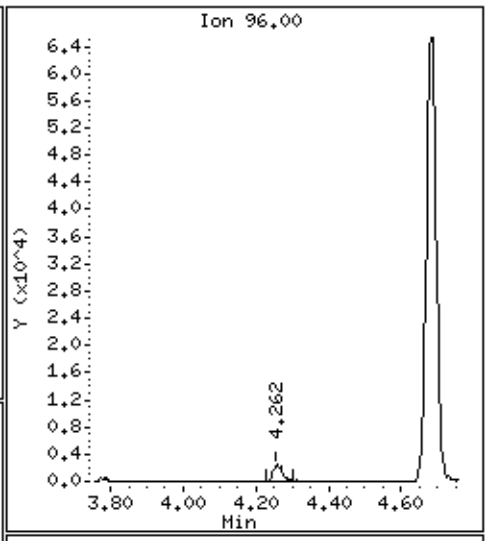
Sample Info: 5ML,N1055-18A,,77659

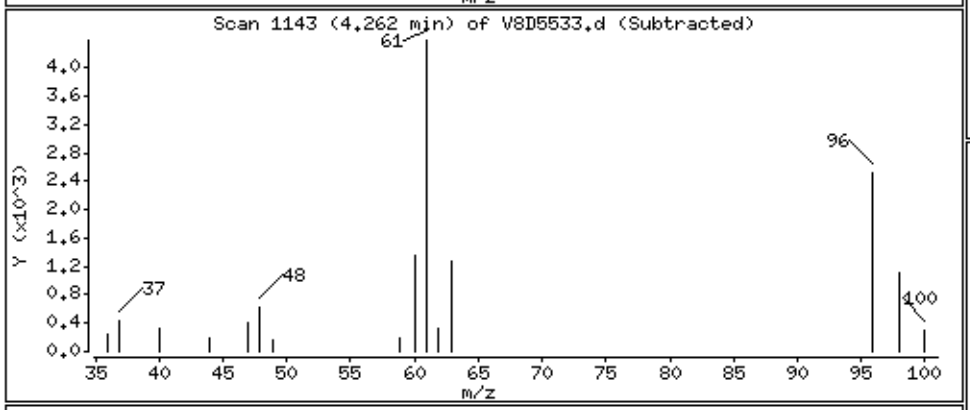
Purge Volume: 5.0 Operator: WL SRC: LIMS

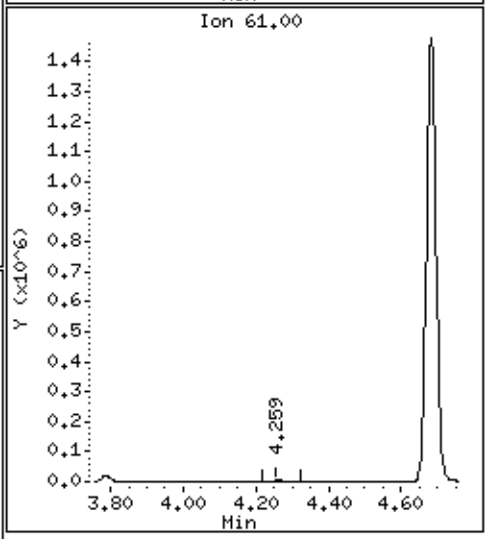
Column phase: DB-624 Column diameter: 0.25

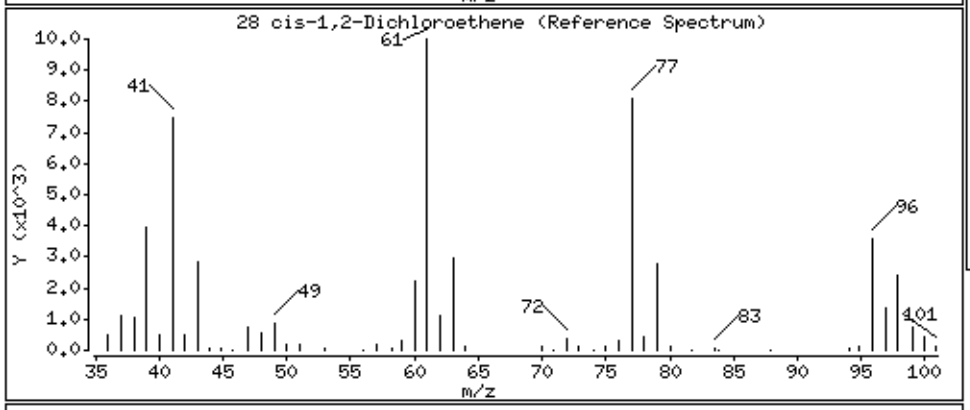
28 cis-1,2-Dichloroethene Concentration: 2.3 ug/L

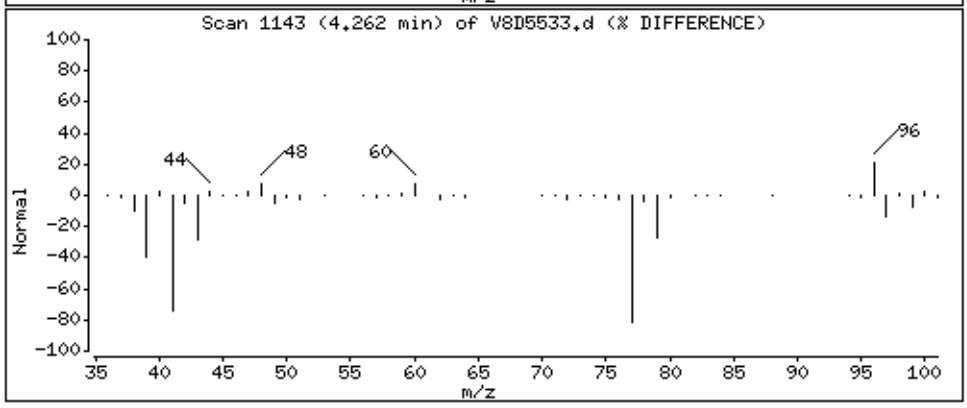












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

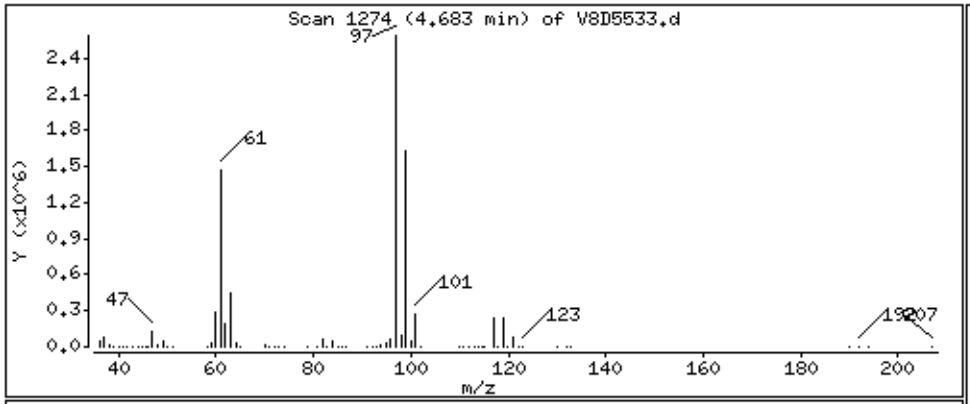
Client ID: OC-19D_6/16/14 Instrument: V10.i

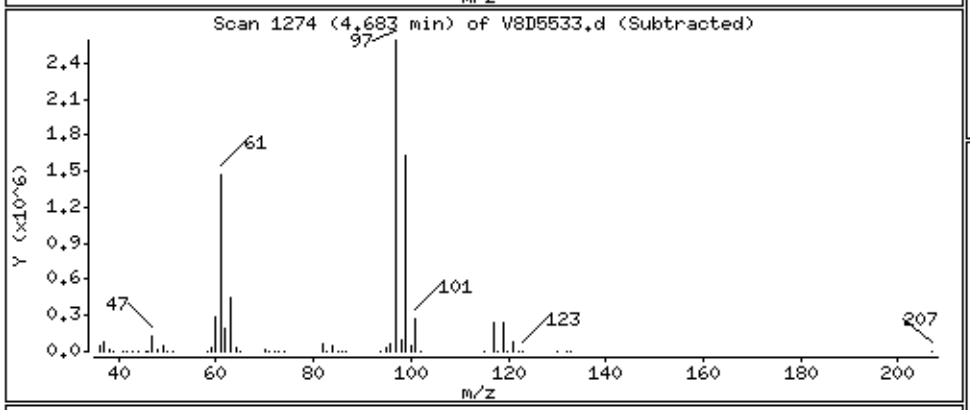
Sample Info: 5ML,N1055-18A,,77659

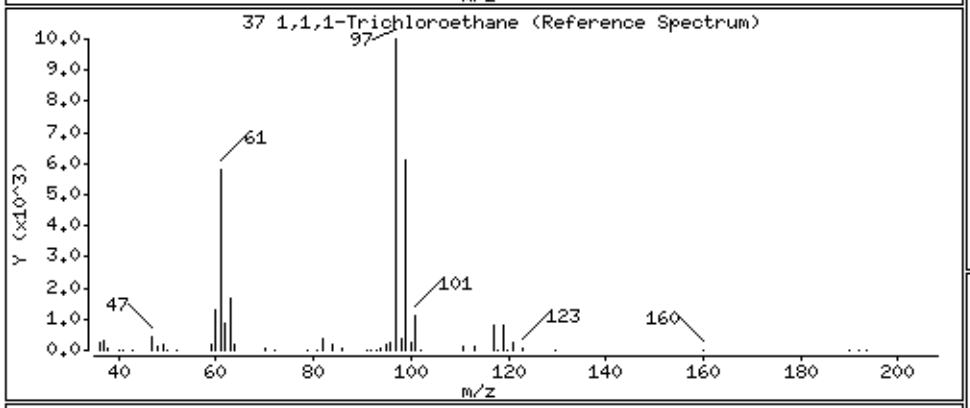
Purge Volume: 5.0 Operator: WL SRC: LIMS

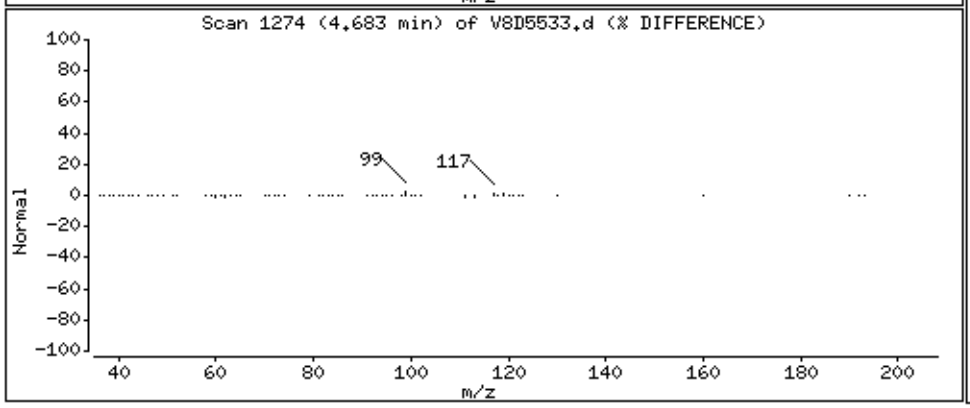
Column phase: DB-624 Column diameter: 0.25

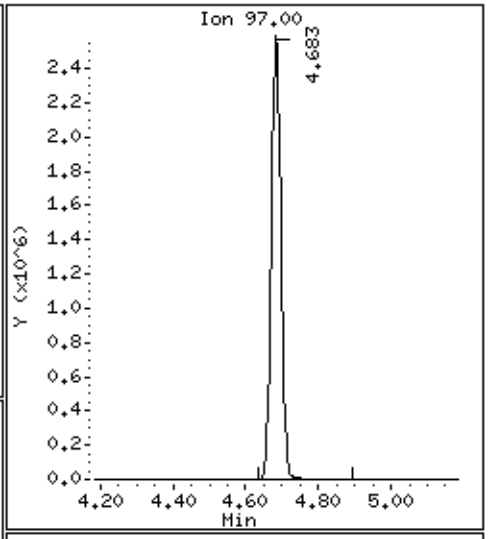
37 1,1,1-Trichloroethane Concentration: 1100 ug/L

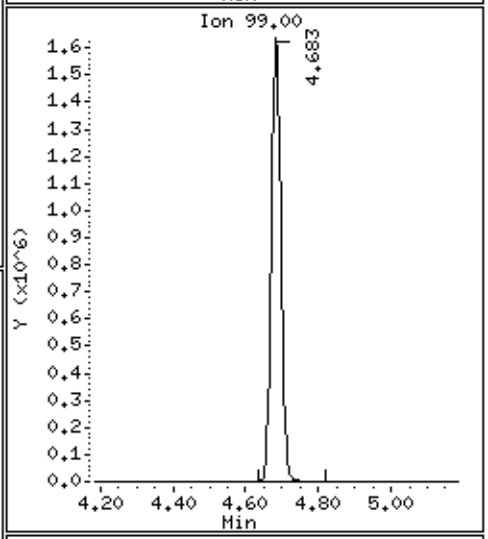


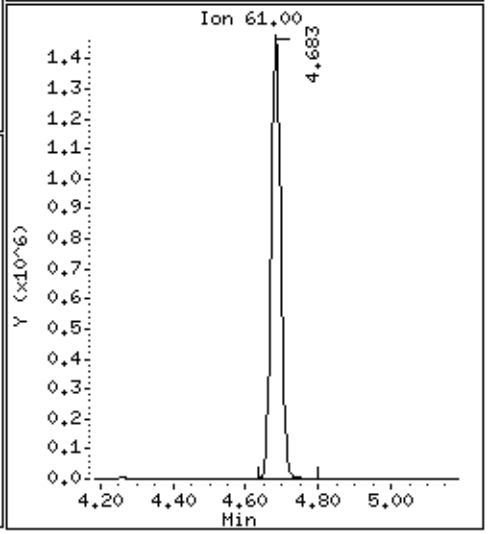












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

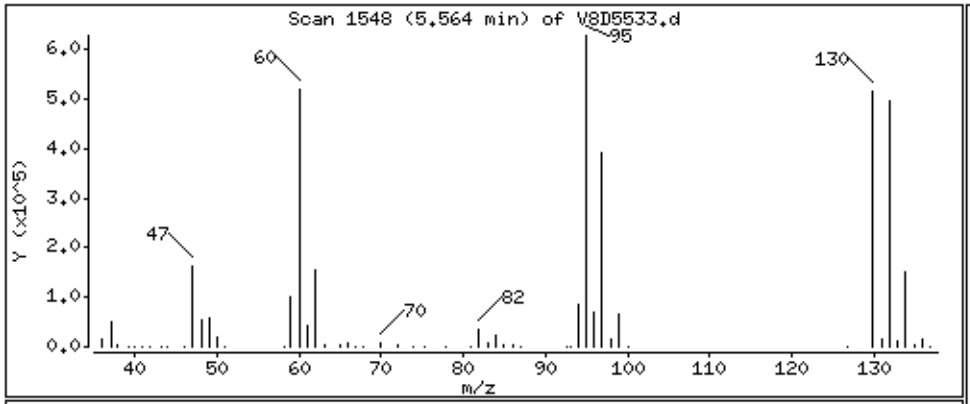
Client ID: OC-19D_6/16/14 Instrument: V10.i

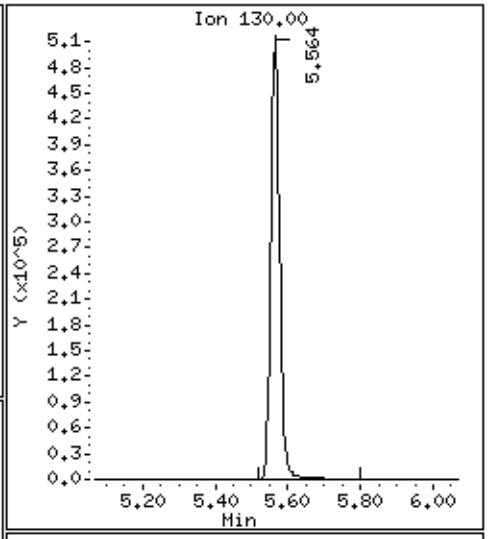
Sample Info: 5ML,N1055-18A,,77659

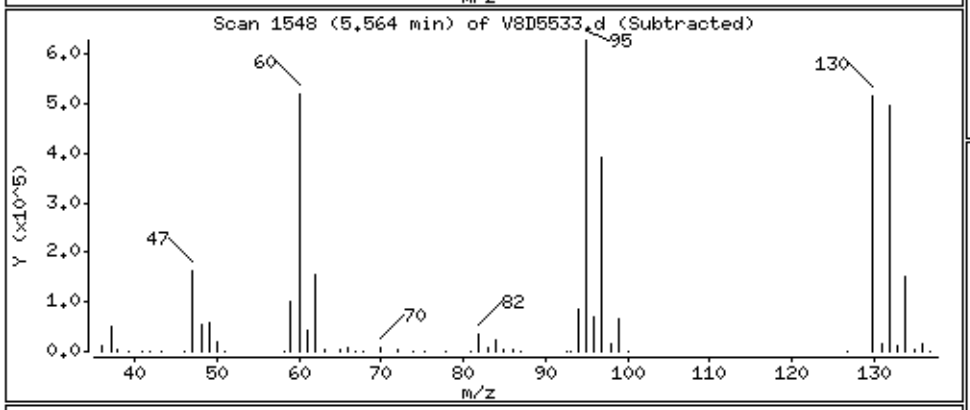
Purge Volume: 5.0 Operator: WL SRC: LIMS

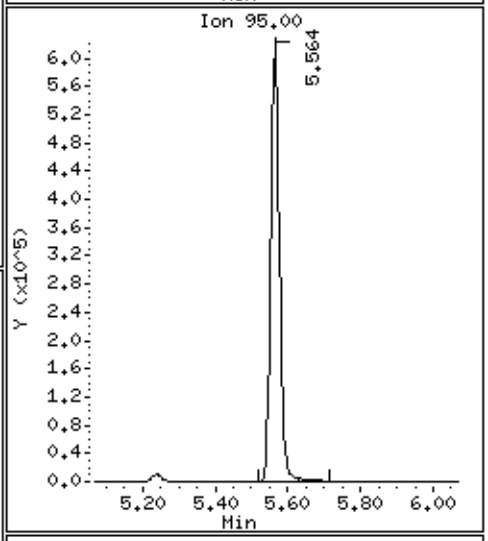
Column phase: DB-624 Column diameter: 0.25

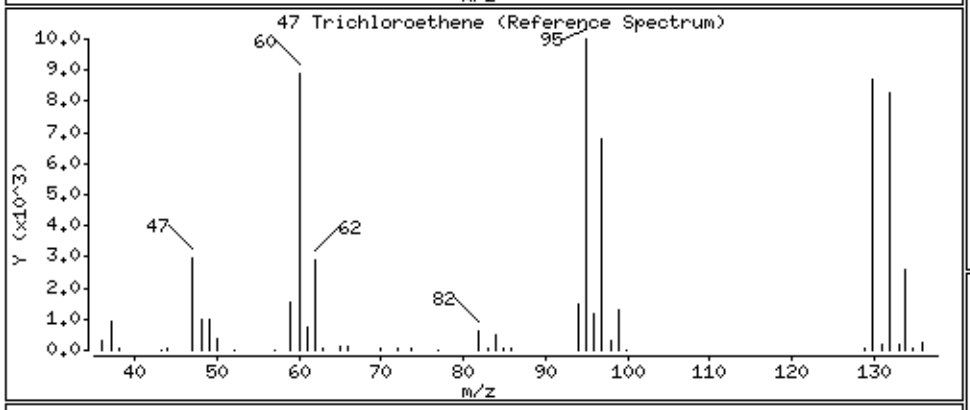
47 Trichloroethene Concentration: 480 ug/L

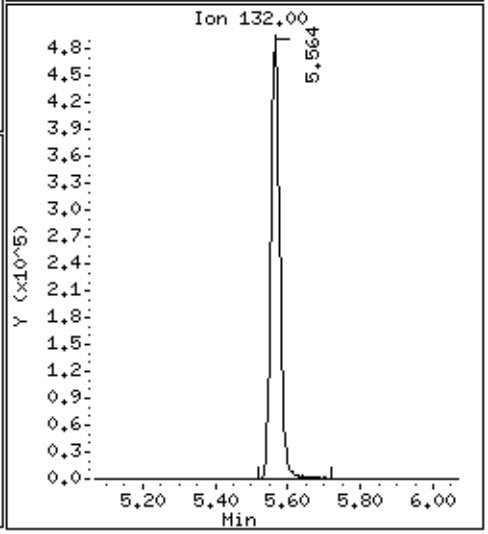


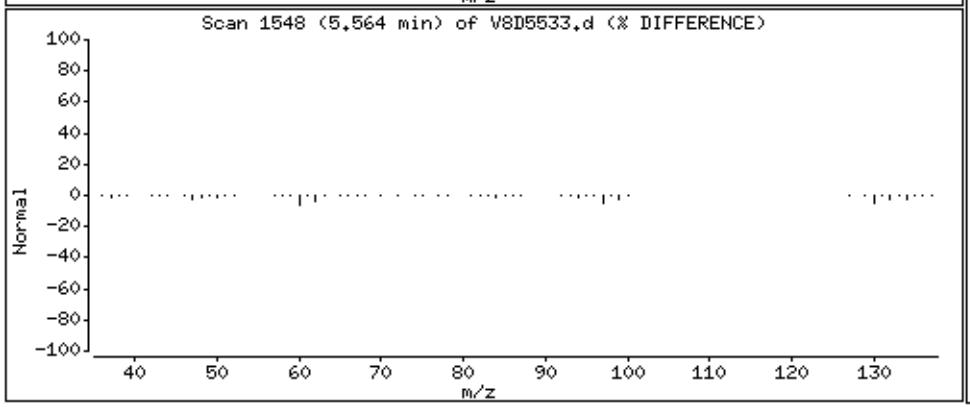












Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5533.d

Date : 19-JUN-2014 18:09

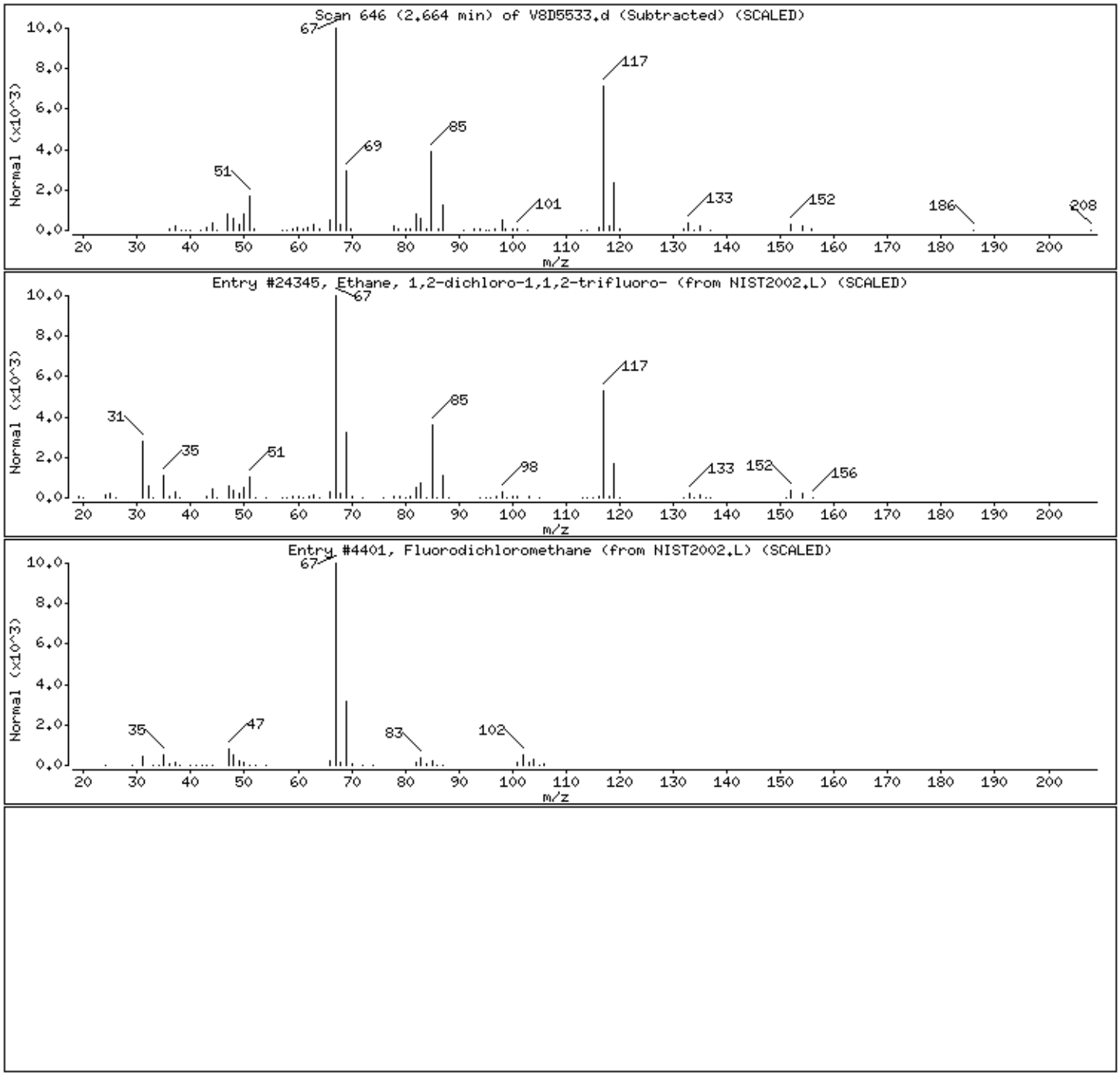
Client ID: OC-19D_6/16/14 Instrument: V10.i

Sample Info: 5ML,N1055-18A,,77659

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	87	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	35	CHCl2F	102



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-19D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-18ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5602.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	65	D
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	1000	D
563-58-6	1,1-Dichloropropene	20	U
56-23-5	Carbon tetrachloride	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	420	D
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OC-19D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-18ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5602.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
103-65-1	n-Propylbenzene	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
104-51-8	n-Butylbenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2100	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

OC-19D_6/16/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-18ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5602.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/21/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d
Report Date: 25-Jun-2014 16:18

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5602.d
Lab Smp Id: N1055-18ADL Client Smp ID: OC-19D_6/16/14DL
Inj Date : 21-JUN-2014 02:51
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-18ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 93
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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

Name	Value	Description
DF	20.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	173945	103.775	2100
	23 1,1-Dichloroethane	63	3.782	3.782	(0.722)	12201	3.25004	65
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	71816	57.1469	57
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	175496	51.4810	1000
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	11757	55.3364	55
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	168872	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	29266	20.9990	420
$	58 Toluene-d8	98	6.718	6.715	(0.817)	227035	44.8757	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	221081	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	137729	50.7119	51
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	114021	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d
Report Date: 25-Jun-2014 16:18

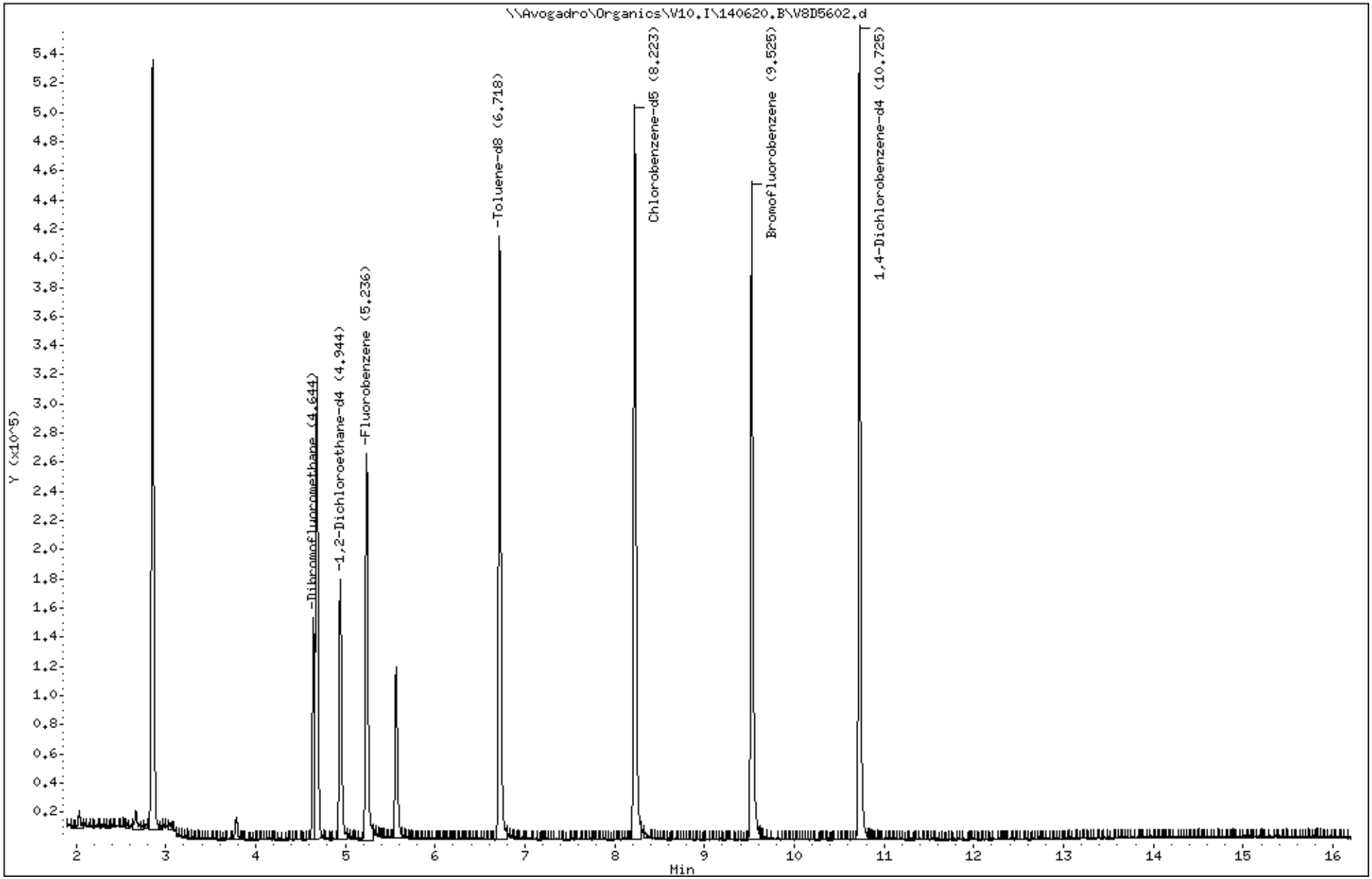
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5602.d
Lab Smp Id: N1055-18ADL Client Smp ID: OC-19D_6/16/14DL
Inj Date : 21-JUN-2014 02:51
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-18ADL,,77692,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 93
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d
Date : 21-JUN-2014 02:51
Client ID: OC-19D_6/16/14DL
Instrument: V10.i
Sample Info: 5ML,N1055-18ADL,,77692,20
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d

Date : 21-JUN-2014 02:51

Client ID: OC-19D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-18ADL,,77692,20

Purge Volume: 5.0

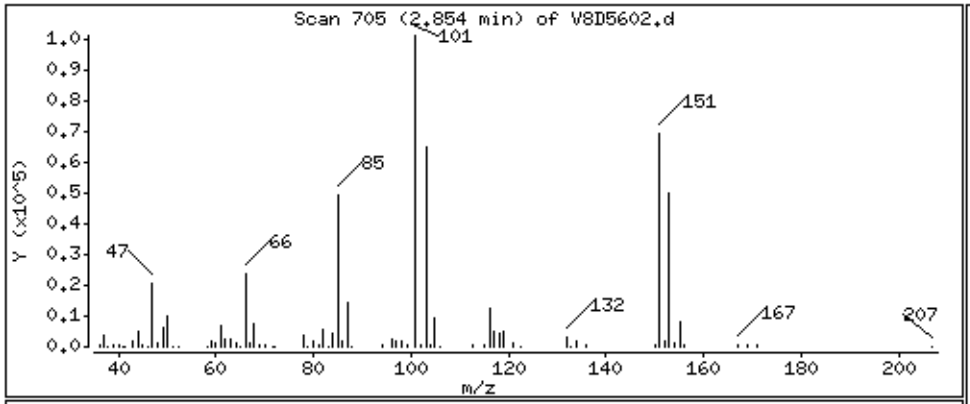
Operator: WL SRC: LIMS

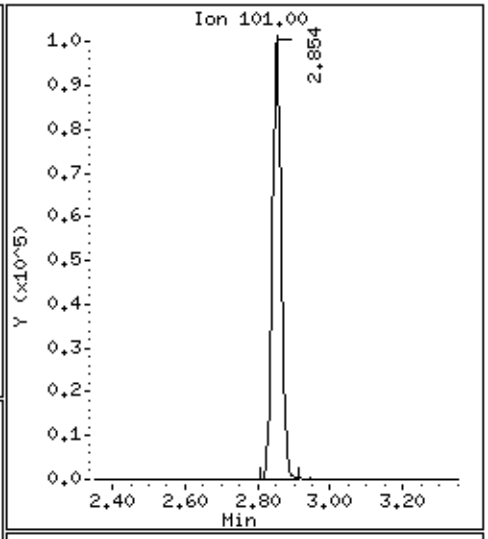
Column phase: DB-624

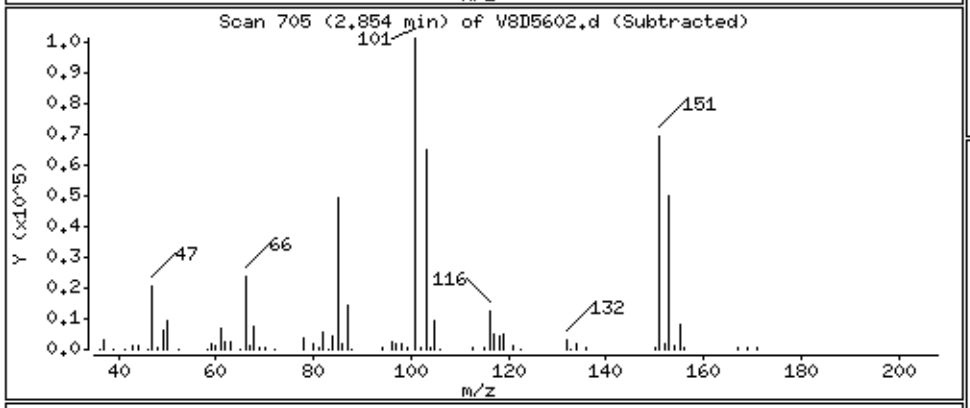
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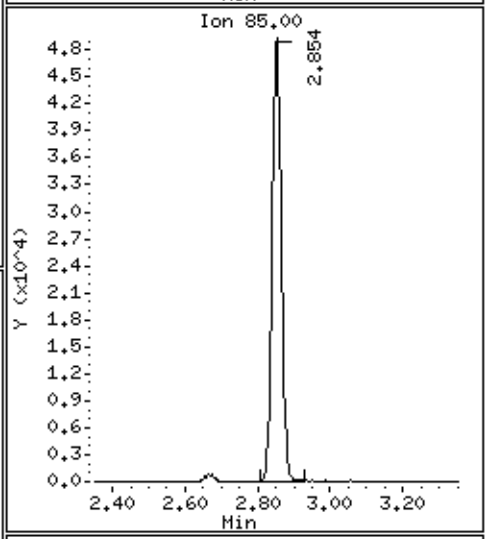
11 1,1,2-Trichloro-1,2,2-Trifluo

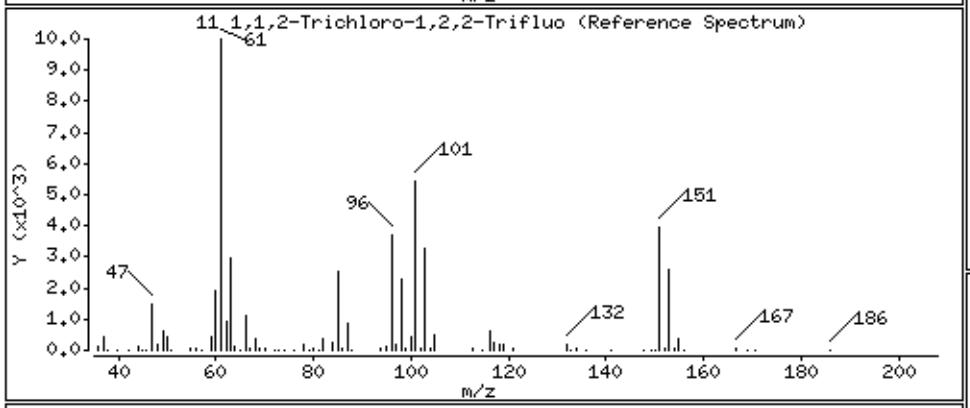
Concentration: 2100 ug/L

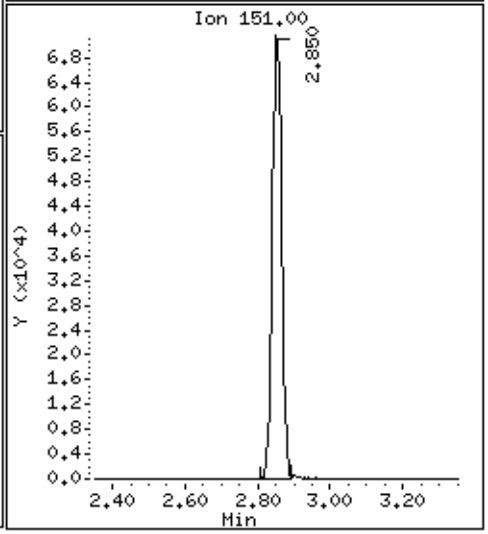


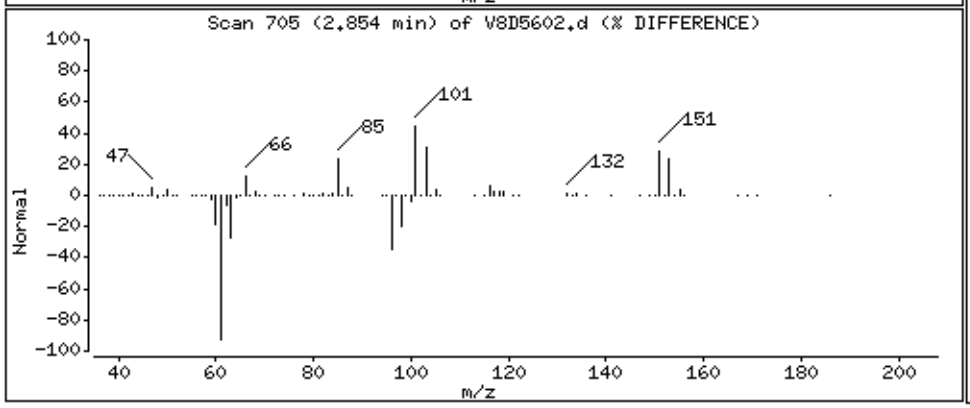












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d

Date : 21-JUN-2014 02:51

Client ID: OC-19D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-18ADL,,77692,20

Purge Volume: 5.0

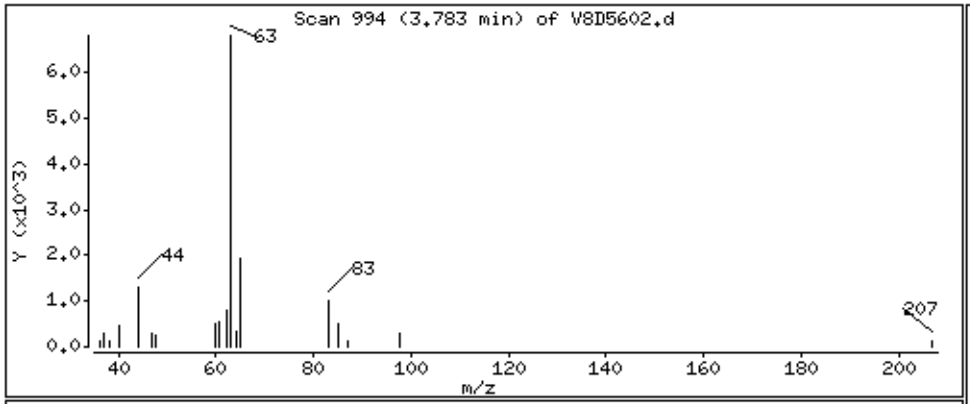
Operator: WL SRC: LIMS

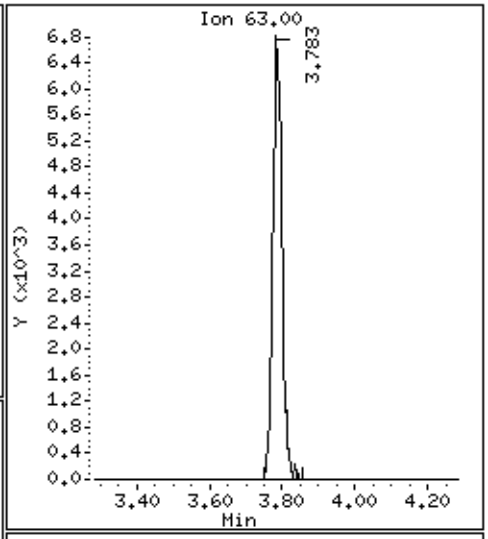
Column phase: DB-624

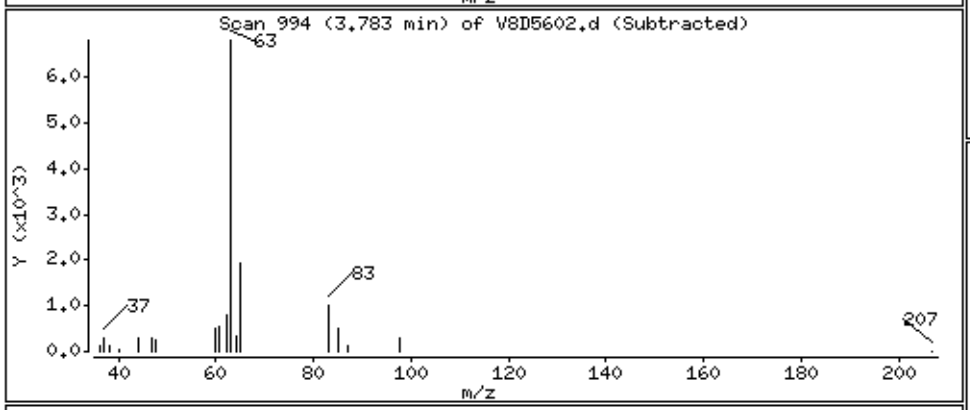
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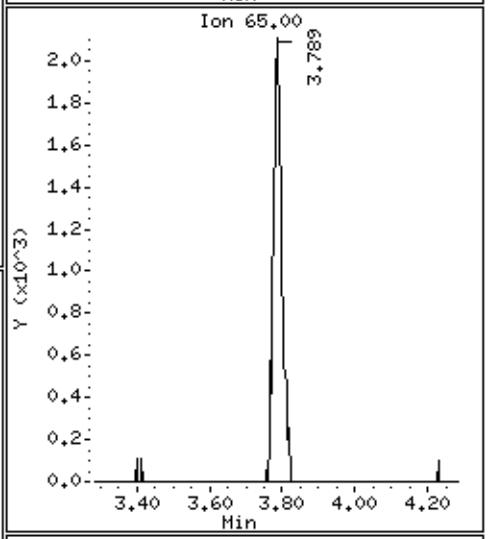
23 1,1-Dichloroethane

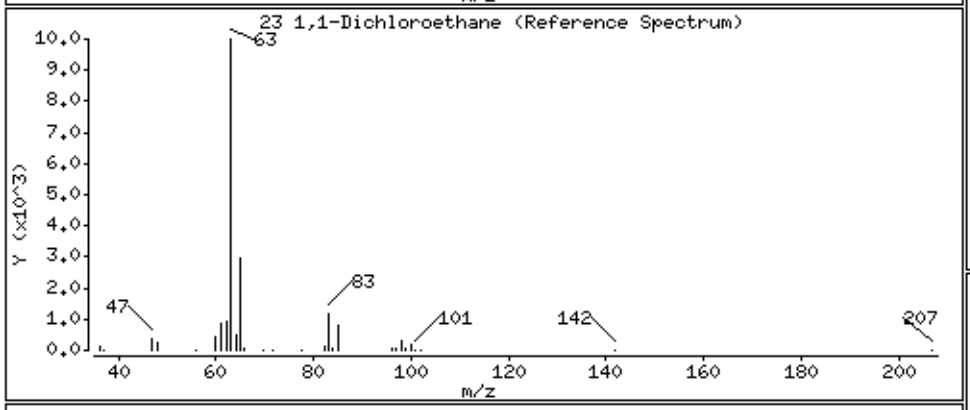
Concentration: 65 ug/L

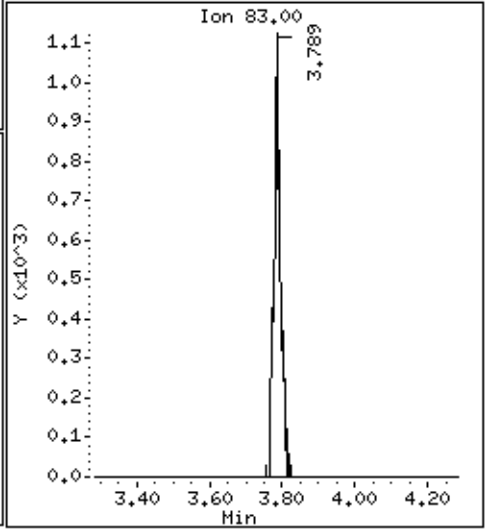


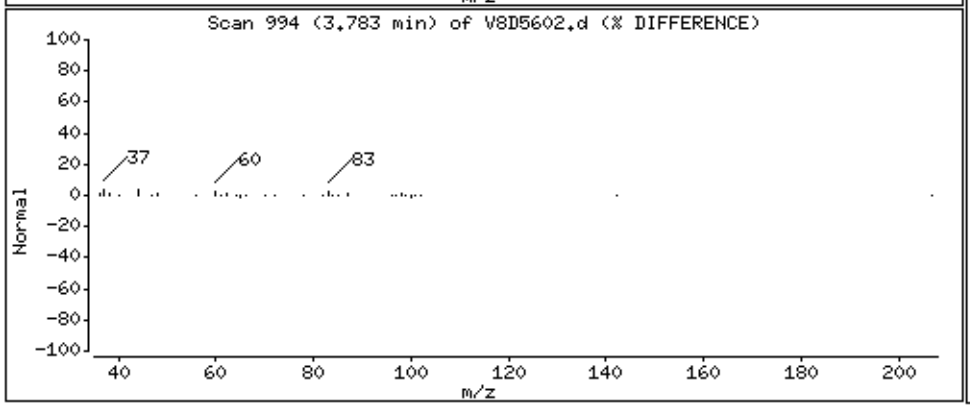












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d

Date : 21-JUN-2014 02:51

Client ID: OC-19D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-18ADL,,77692,20

Purge Volume: 5.0

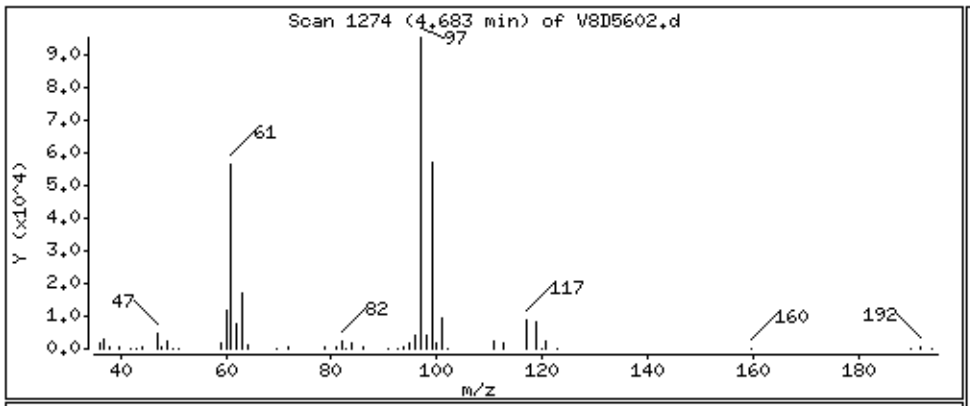
Operator: WL SRC: LIMS

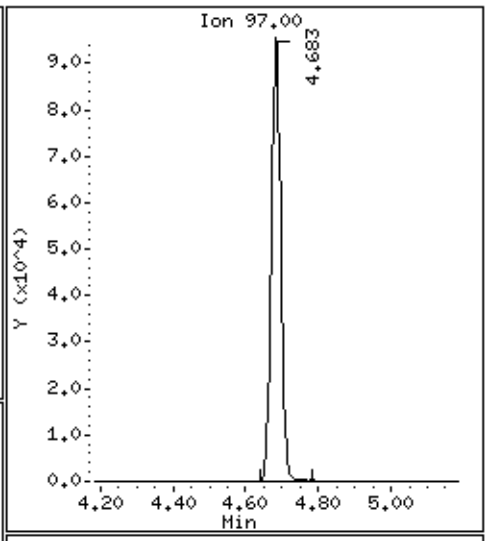
Column phase: DB-624

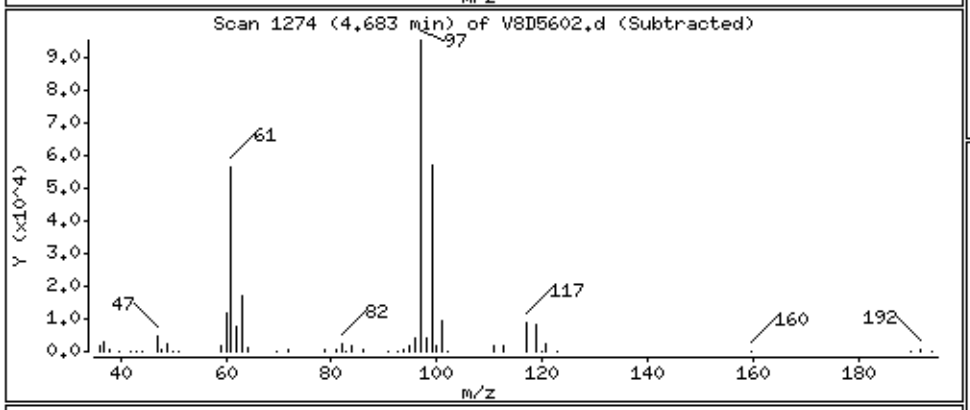
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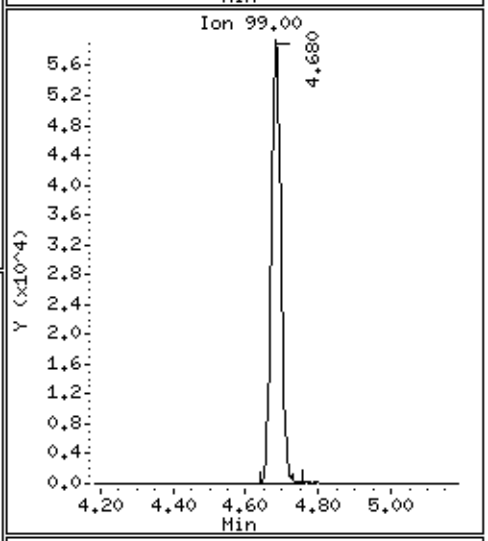
37 1,1,1-Trichloroethane

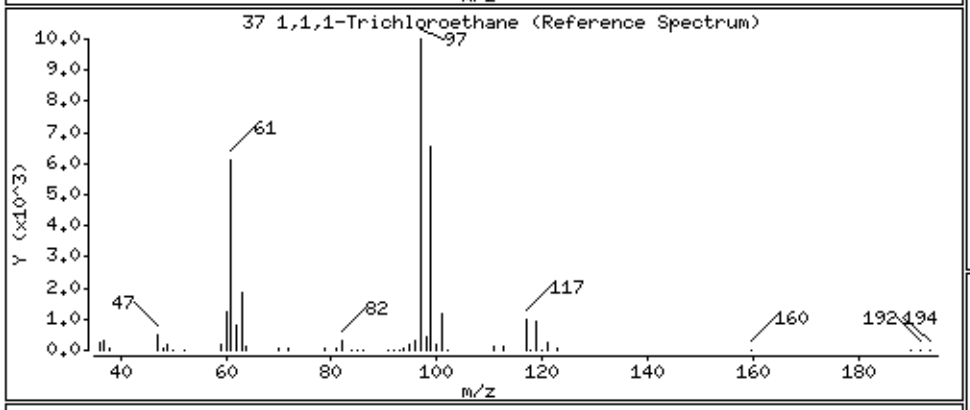
Concentration: 1000 ug/L

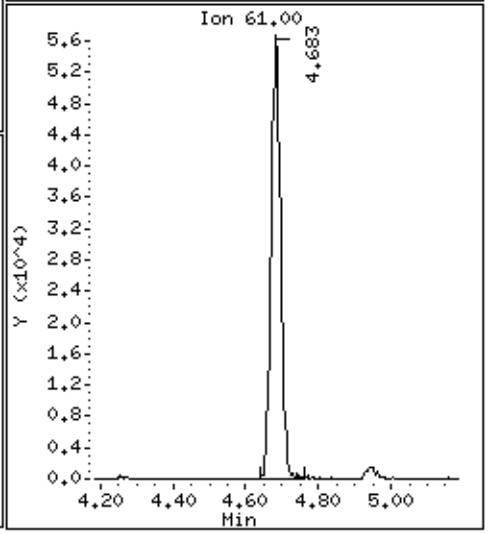


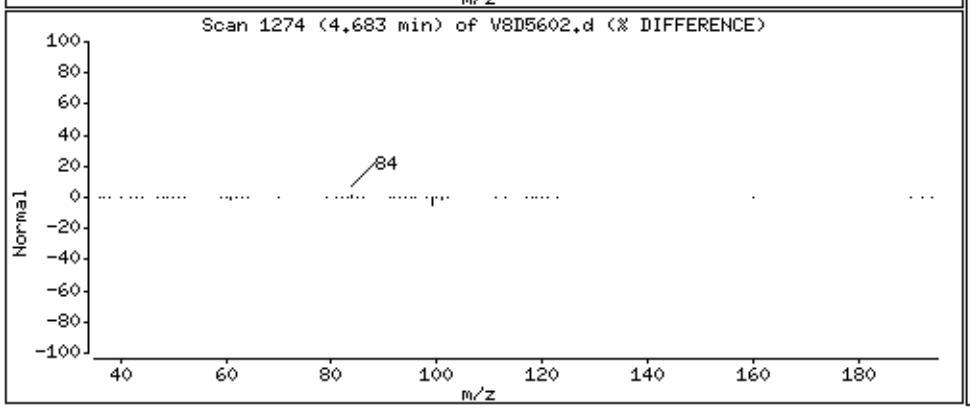












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5602.d

Date : 21-JUN-2014 02:51

Client ID: OC-19D_6/16/14DL

Instrument: V10.i

Sample Info: 5ML,N1055-18ADL,,77692,20

Purge Volume: 5.0

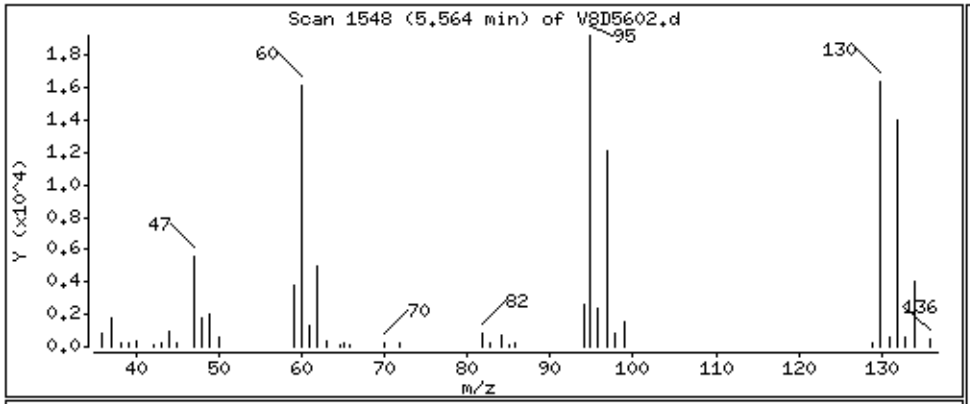
Operator: WL SRC: LIMS

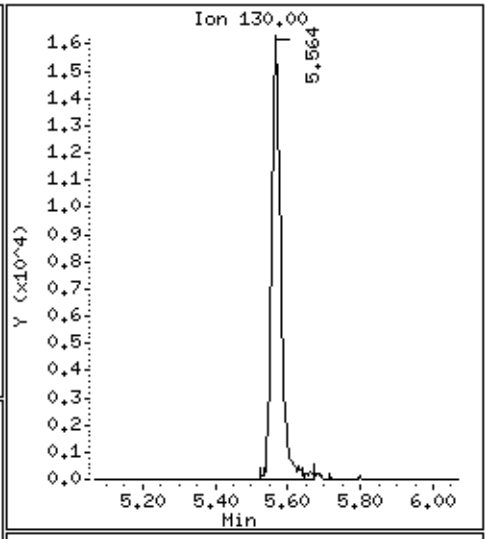
Column phase: DB-624

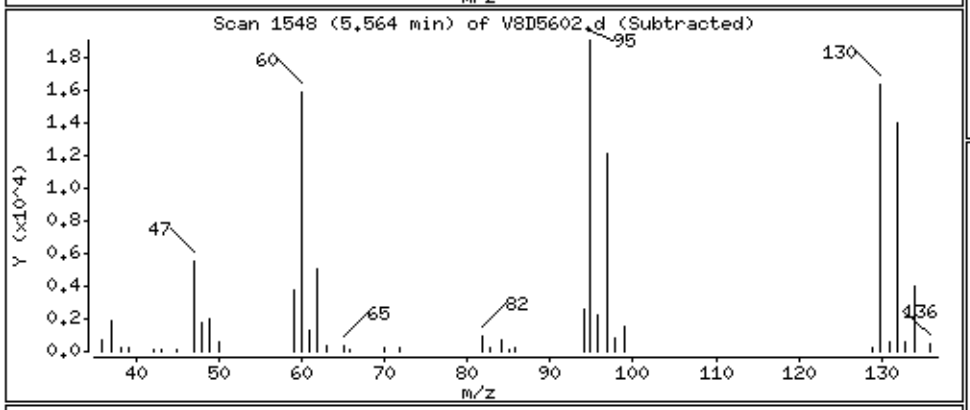
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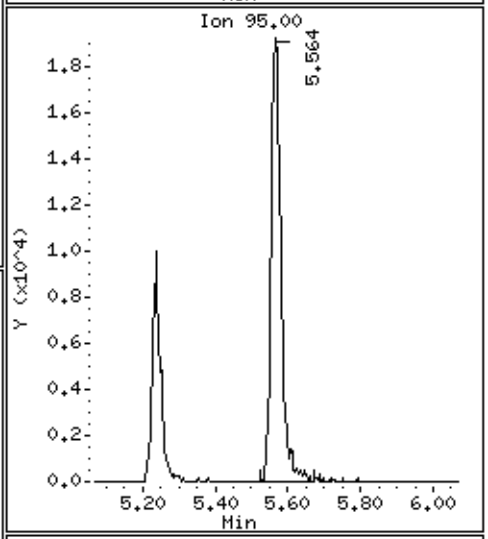
47 Trichloroethene

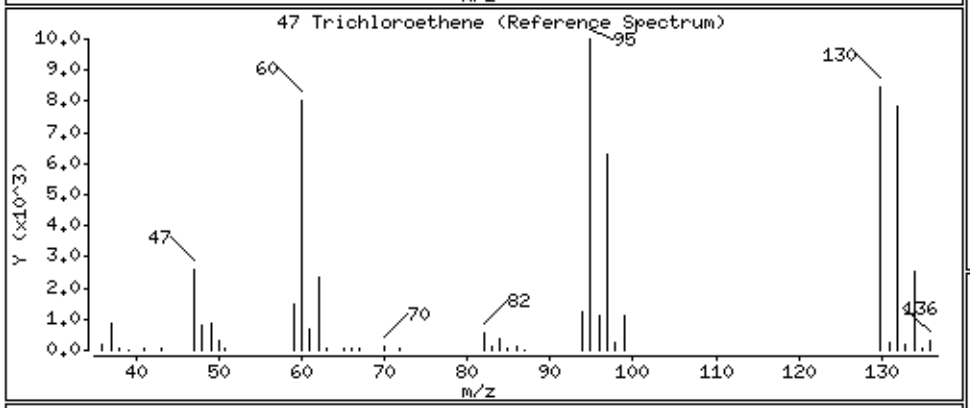
Concentration: 420 ug/L

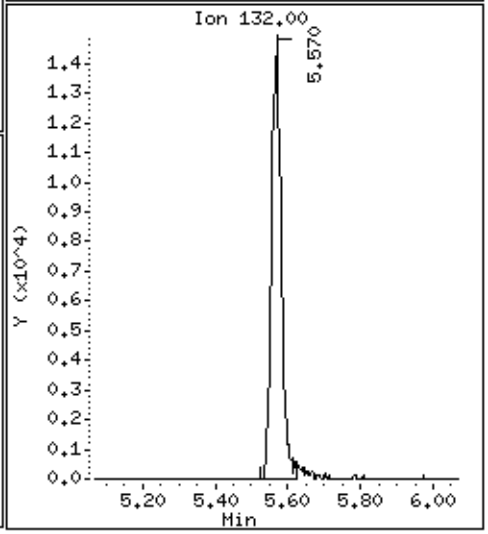


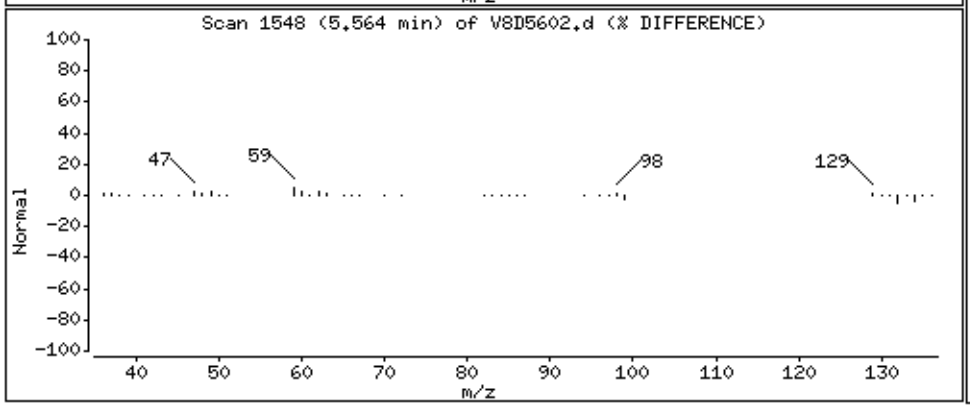












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-20D_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-19A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5586.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

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	7.0	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	10	
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	110	
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

EPA SAMPLE NO.

MW-20D_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-19A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5586.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.6	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-20D_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-19A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5586.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/20/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d
Report Date: 25-Jun-2014 16:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5586.d
Lab Smp Id: N1055-19A Client Smp ID: MW-20D_6/17/14
Inj Date : 20-JUN-2014 19:33
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-19A,,77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.847	2.850	(0.544)	5544	2.62739	2.6
	23 1,1-Dichloroethane	63	3.789	3.782	(0.724)	32898	6.96124	7.0
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.814)	18798	10.0787	10(Q)
$	36 Dibromofluoromethane	113	4.647	4.641	(0.888)	89651	56.6696	57
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	14103	52.7289	53
M	50 1,2-Dichloroethene (Total)	96				18798	10.0787	10
*	46 Fluorobenzene	96	5.232	5.239	(1.000)	212586	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.064)	184446	105.130	100
$	58 Toluene-d8	98	6.718	6.715	(0.817)	278656	45.4925	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	267669	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	172835	52.5617	52
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	147390	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d
Report Date: 25-Jun-2014 16:16

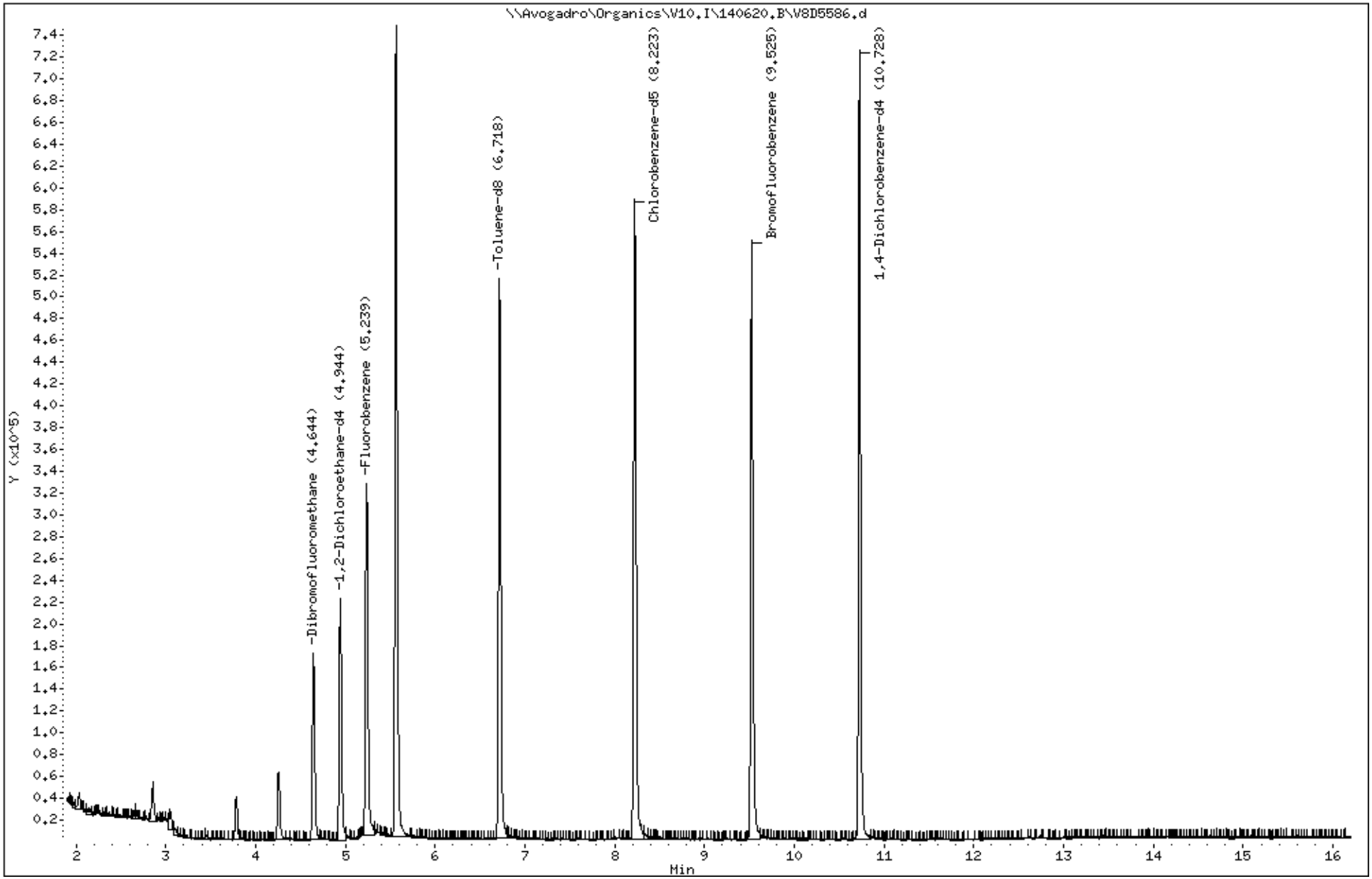
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5586.d
Lab Smp Id: N1055-19A Client Smp ID: MW-20D_6/17/14
Inj Date : 20-JUN-2014 19:33
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-19A,,77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d
Date : 20-JUN-2014 19:33
Client ID: MW-20D_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1055-19A,,77692
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d

Date : 20-JUN-2014 19:33

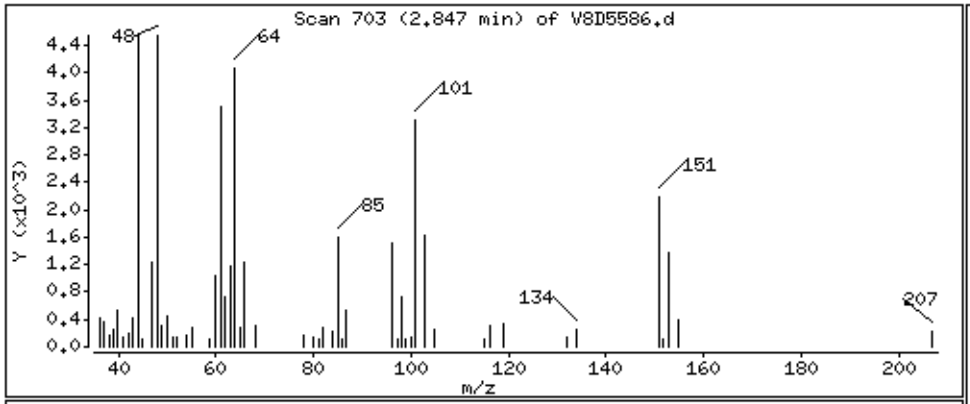
Client ID: MW-20D_6/17/14 Instrument: V10.i

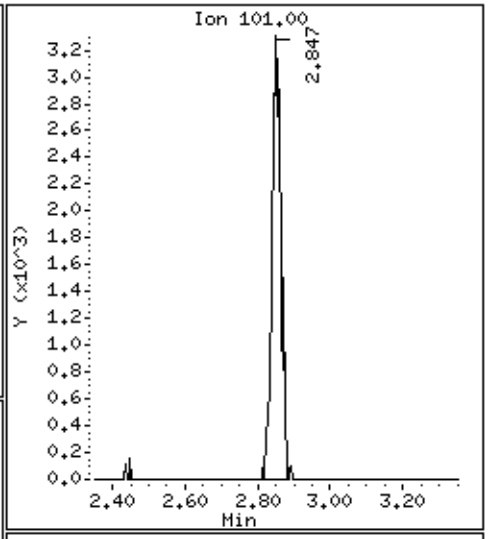
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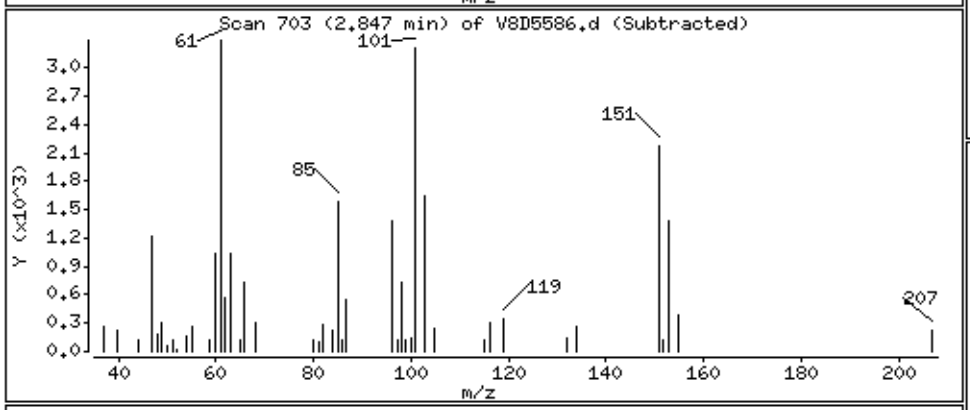
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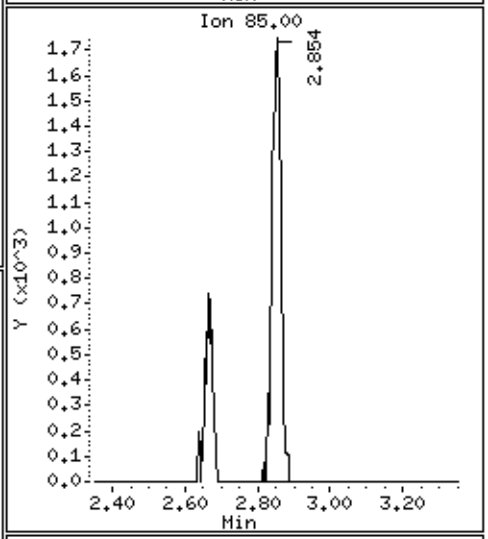
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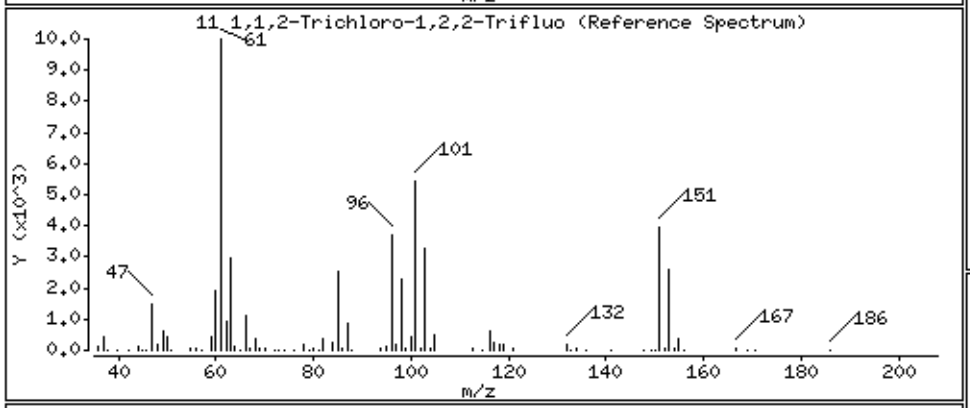
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2.6 ug/L

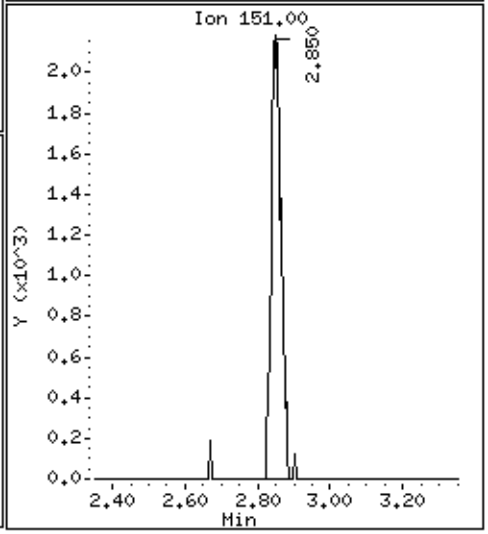


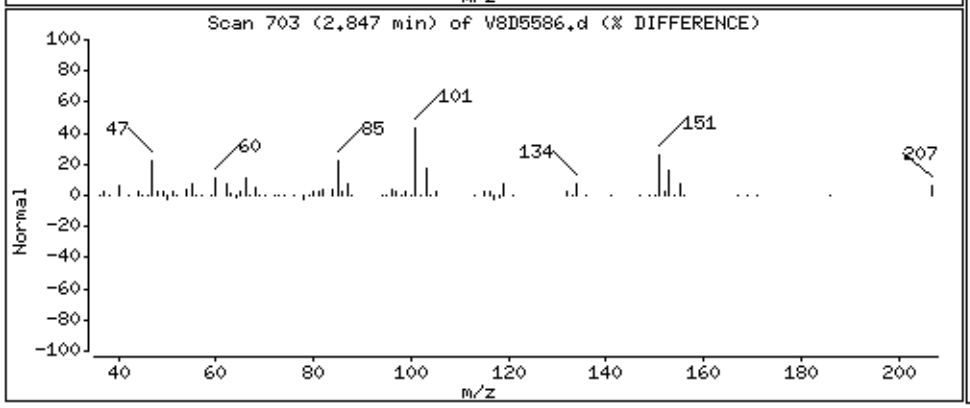












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d

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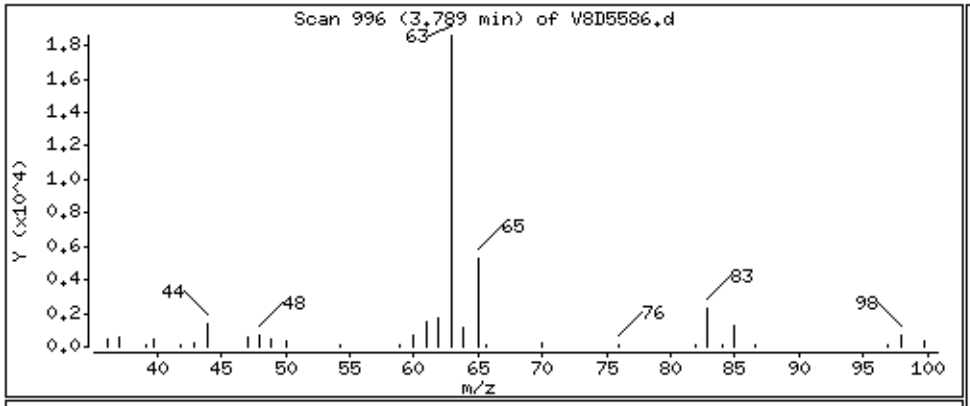
Client ID: MW-20D_6/17/14 Instrument: V10.i

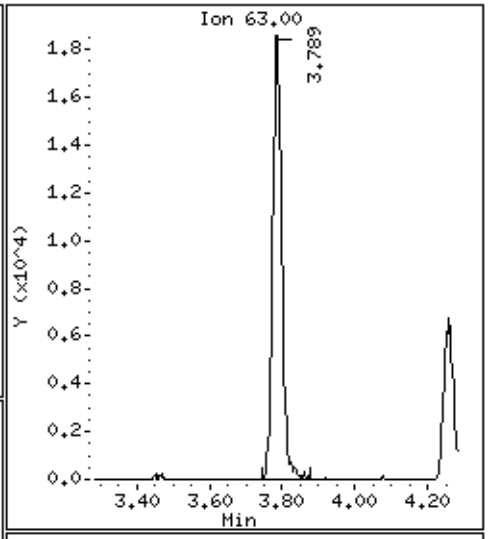
Sample Info: 5ML,N1055-19A,,77692

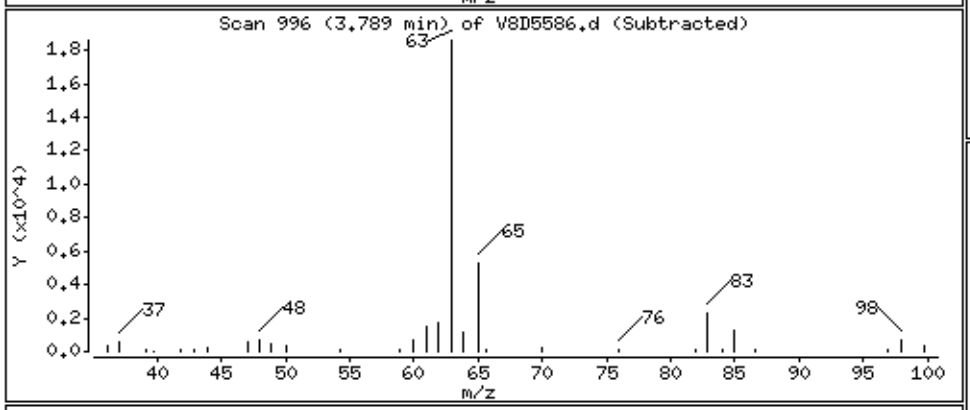
Purge Volume: 5.0 Operator: WL SRC: LIMS

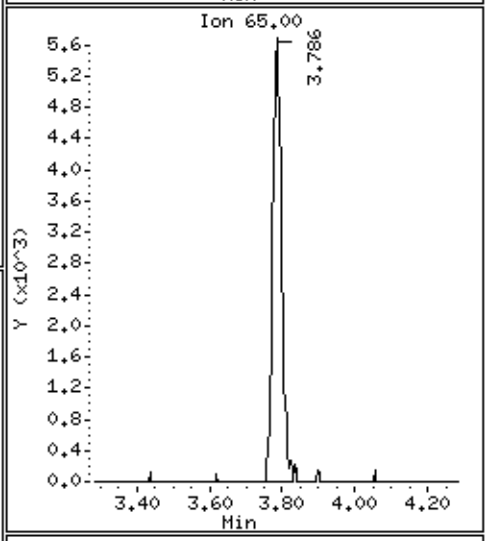
Column phase: DB-624 Column diameter: 0.25

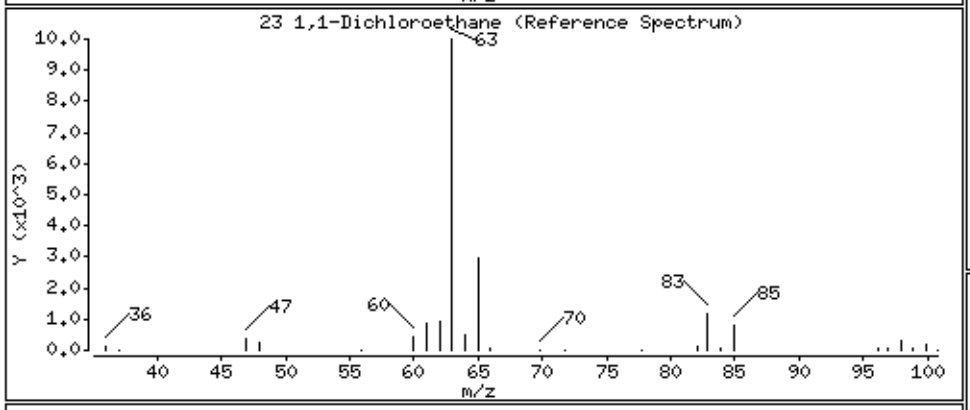
23 1,1-Dichloroethane Concentration: 7.0 ug/L

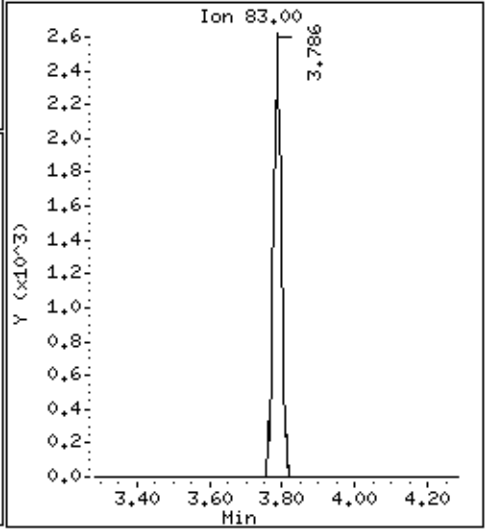


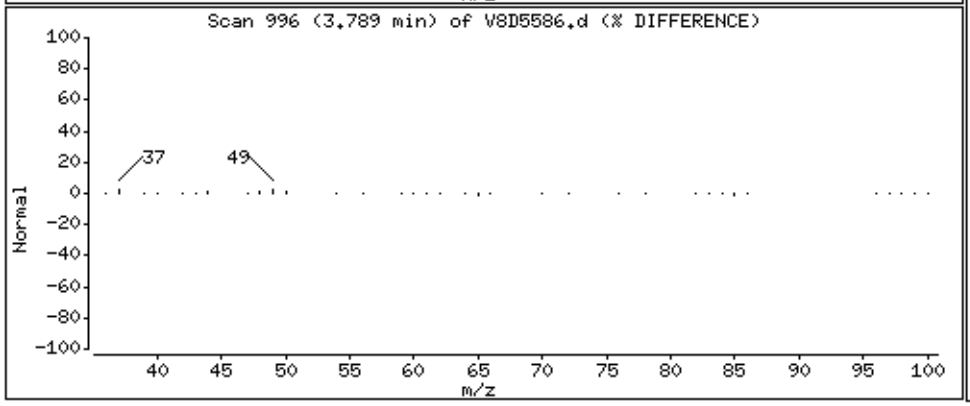












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d

Date : 20-JUN-2014 19:33

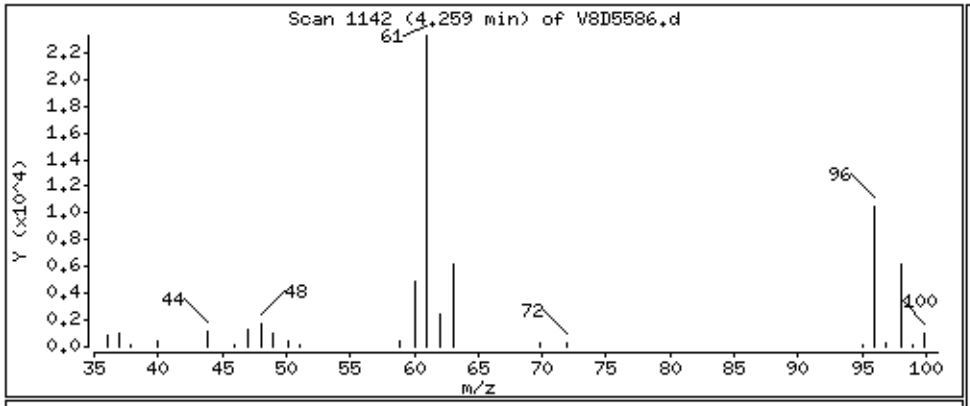
Client ID: MW-20D_6/17/14 Instrument: V10.i

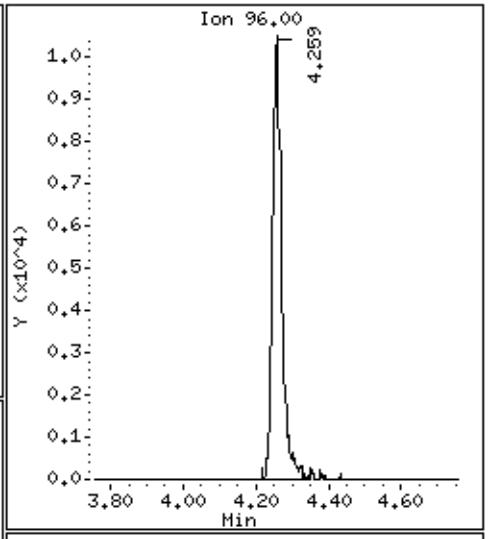
Sample Info: 5ML,N1055-19A,,77692

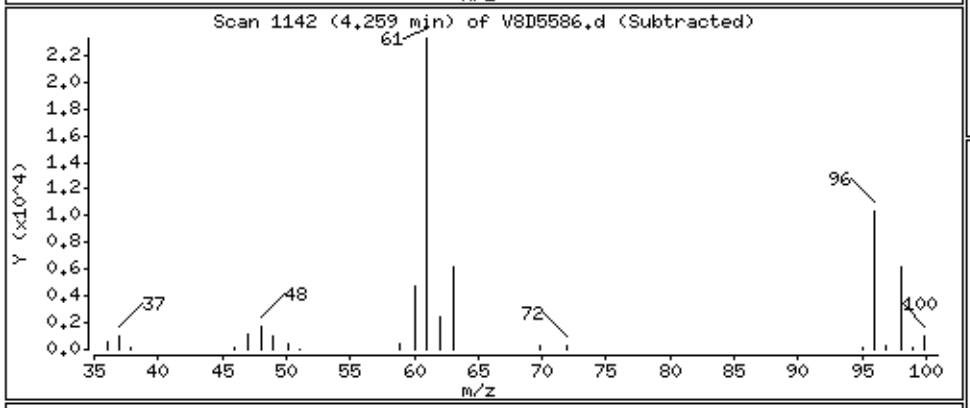
Purge Volume: 5.0 Operator: WL SRC: LIMS

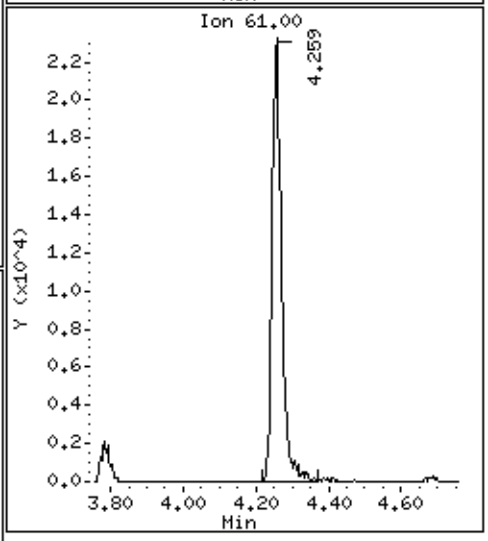
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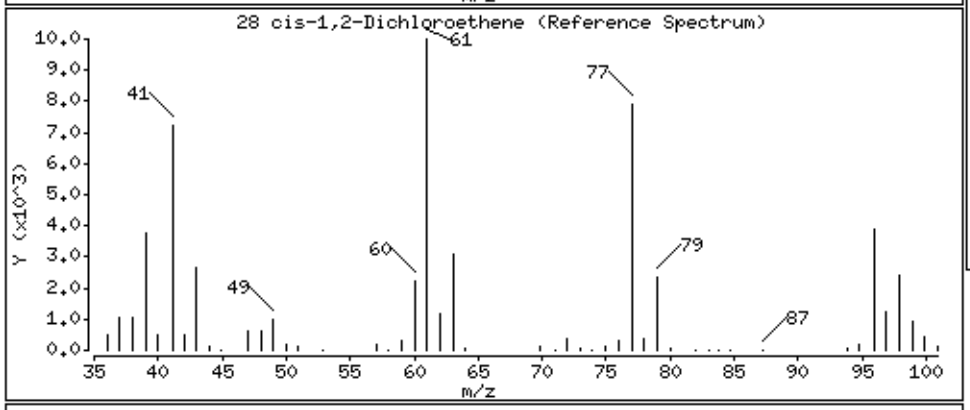
28 cis-1,2-Dichloroethene Concentration: 10 ug/L

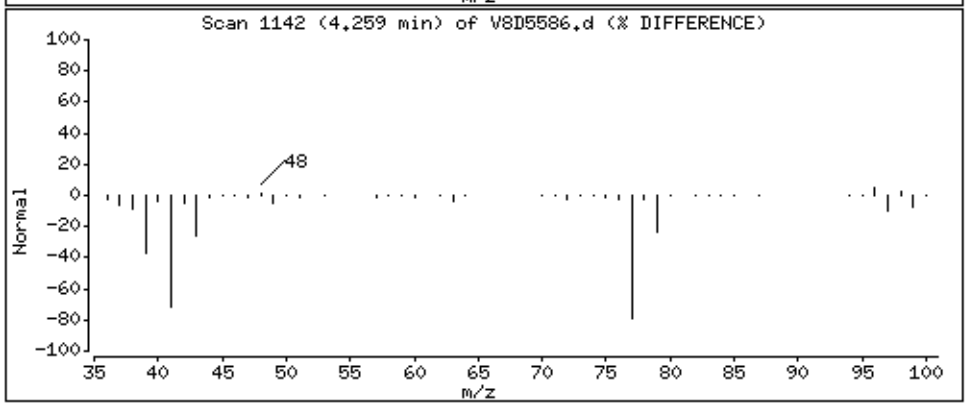












Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5586.d

Date : 20-JUN-2014 19:33

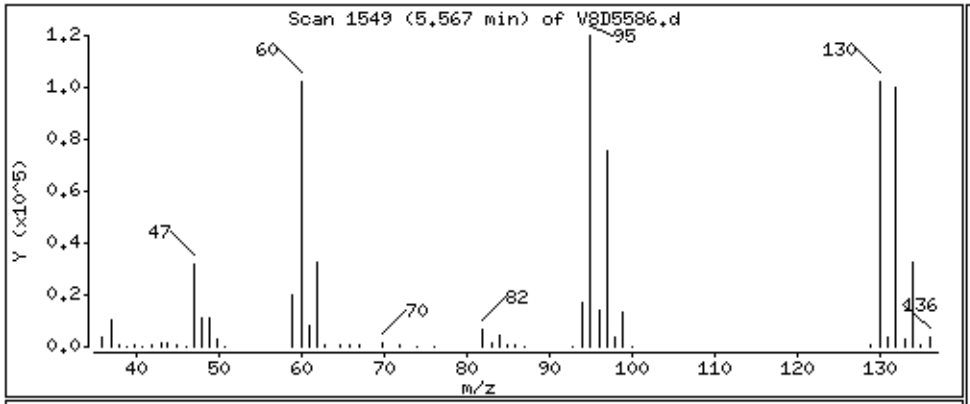
Client ID: MW-20D_6/17/14 Instrument: V10.i

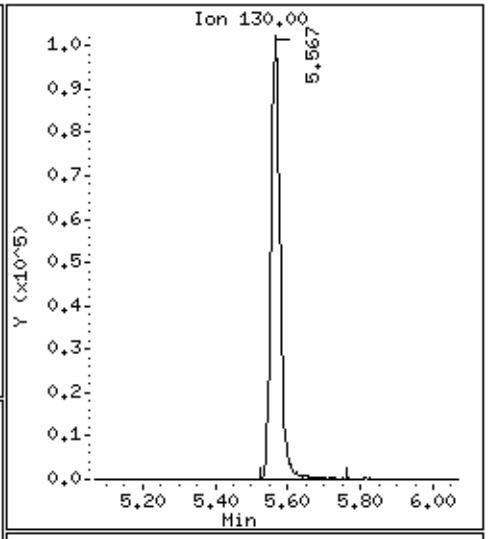
Sample Info: 5ML,N1055-19A,,77692

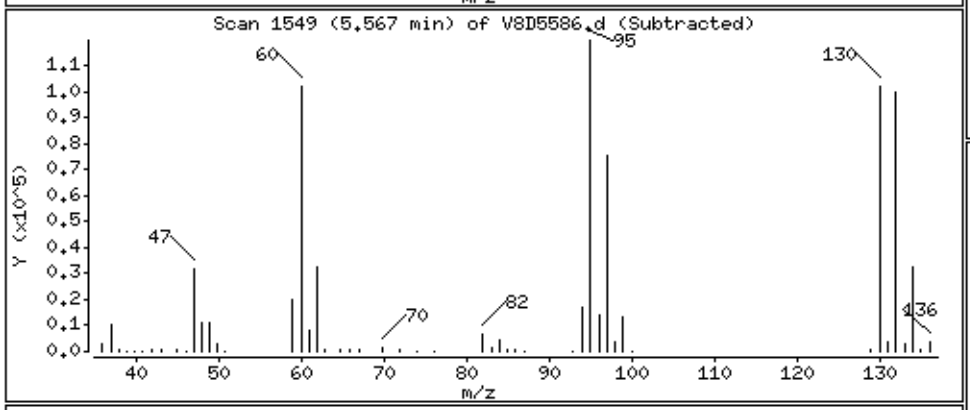
Purge Volume: 5.0 Operator: WL SRC: LIMS

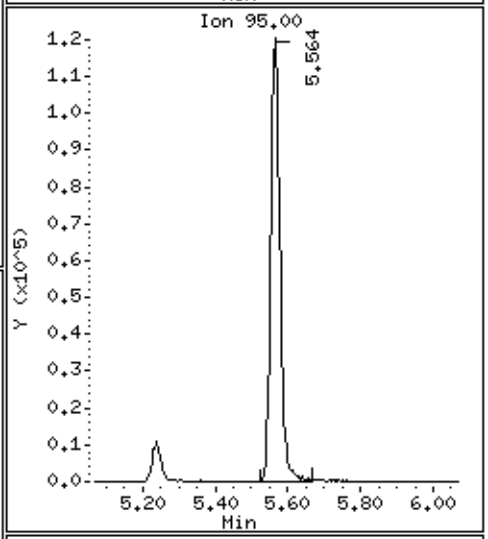
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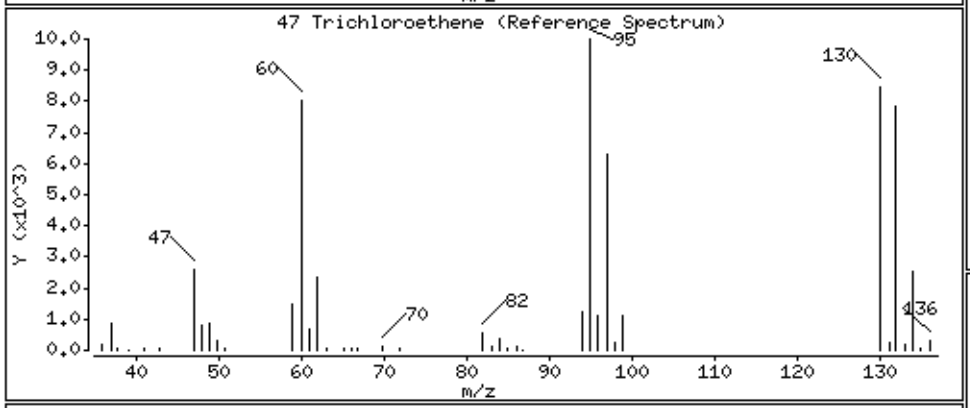
47 Trichloroethene Concentration: 100 ug/L

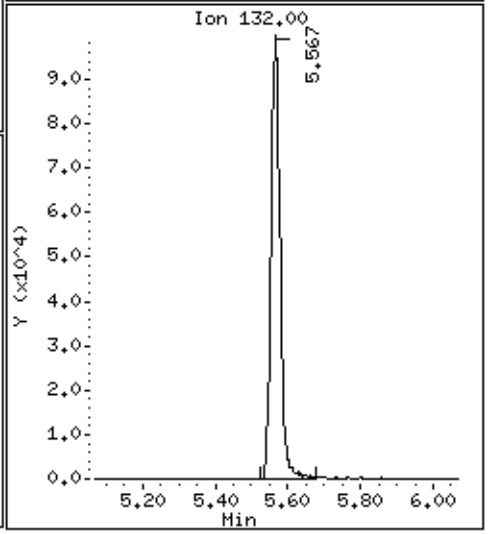


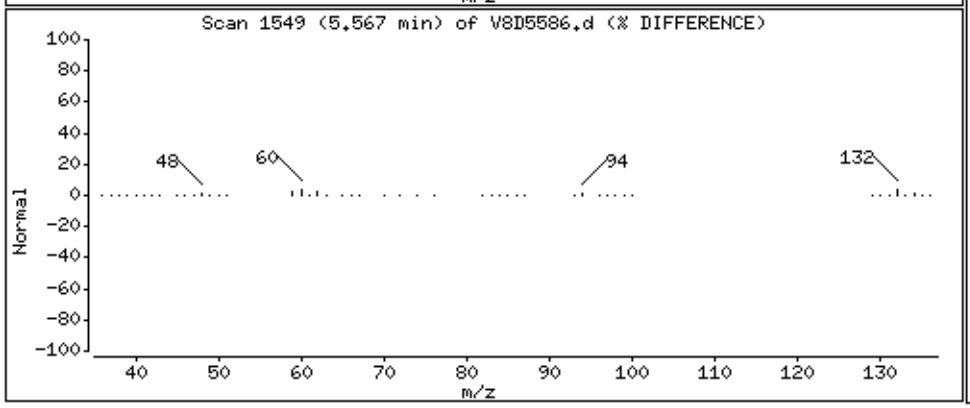












6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/16/2014 06/16/2014

Heated Purge: (Y/N) N Calibration Times: 10:17 13:04

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5407.D RRF020 = V8D5406.D RRF050 = V8D5405.D RRF100 = V8D5411.D RRF200 = V8D5410.D
RRF001 = V8D5408.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.656	0.759	0.665	0.613	0.620	0.678					0.665	7.9
Chloromethane	0.985	1.095	1.043	1.061	1.037	1.367					1.098	12.4
Vinyl chloride	0.661	0.792	0.709	0.720	0.684	0.760					0.721	6.7
Bromomethane	0.218	0.286	0.277	0.272	0.249	0.335					0.273	14.3
Chloroethane	0.350	0.405	0.355	0.361	0.346	0.302					0.353	9.3
Trichlorofluoromethane	0.981	1.122	0.999	0.969	0.986	1.016					1.012	5.6
1,1-Dichloroethene	0.412	0.465	0.415	0.410	0.402	0.492					0.433	8.5
Acetone	0.075	0.082	0.075	0.057	0.056						0.069	16.9
Iodomethane	0.170	0.226	0.247	0.342	0.322	0.268					0.263	24.1
Carbon disulfide	1.162	1.365	1.314	1.231	1.259	1.739					1.345	15.2
Methylene chloride	0.405	0.459	0.437	0.427	0.424	0.462					0.436	5.0
trans-1,2-Dichloroethene	0.380	0.456	0.408	0.401	0.409	0.441					0.416	6.7
Methyl tert-butyl ether	1.237	1.544	1.490	1.431	1.485	1.418					1.434	7.5
1,1-Dichloroethane	1.047	1.212	1.139	1.088	1.112	1.070					1.112	5.3
Vinyl acetate	2.267	2.860	2.863	2.749	2.884	2.150					2.629	12.6
2-Butanone	0.040	0.057	0.052	0.047	0.048						0.049	12.7
cis-1,2-Dichloroethene	0.403	0.467	0.441	0.432	0.437	0.452					0.439	4.9
2,2-Dichloropropane	0.707	1.011	0.983	0.890	0.940	0.667					0.866	16.8
Bromochloromethane	0.191	0.212	0.200	0.195	0.196	0.241					0.206	9.2
Chloroform	0.966	1.095	1.011	0.992	1.025	0.946					1.006	5.2
1,1,1-Trichloroethane	0.947	1.115	1.019	0.981	1.026	0.967					1.009	6.0
1,1-Dichloropropene	0.196	0.218	0.205	0.196	0.203	0.191					0.202	4.8
Carbon tetrachloride	0.847	0.953	0.903	0.878	0.912	0.857					0.892	4.4
1,2-Dichloroethane	1.010	1.256	1.208	1.175	1.244	1.190					1.181	7.6
Benzene	1.368	1.675	1.523	1.516	1.568	1.407					1.510	7.3
Trichloroethene	0.396	0.450	0.426	0.416	0.430	0.358					0.413	7.7
1,2-Dichloropropane	0.462	0.562	0.543	0.530	0.555	0.533					0.531	6.8

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/16/2014 06/16/2014

Heated Purge: (Y/N) N Calibration Times: 10:17 13:04

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5407.D RRF020 = V8D5406.D RRF050 = V8D5405.D RRF100 = V8D5411.D RRF200 = V8D5410.D
RRF001 = V8D5408.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.268	0.338	0.329	0.317	0.333	0.310					0.316	8.2
Bromodichloromethane	0.647	0.799	0.802	0.782	0.832	0.687					0.758	9.7
cis-1,3-Dichloropropene	0.518	0.680	0.716	0.710	0.759	0.517					0.650	16.2
4-Methyl-2-pentanone	0.644	0.908	0.816	0.780	0.828						0.795	12.2
Toluene	1.534	1.747	1.618	1.614	1.686	1.647					1.641	4.4
trans-1,3-Dichloropropene	0.487	0.630	0.711	0.703	0.779	0.455					0.627	20.8
1,1,2-Trichloroethane	0.329	0.388	0.379	0.369	0.375	0.355					0.366	5.8
1,3-Dichloropropane	0.577	0.700	0.649	0.643	0.673	0.560					0.633	8.6
Tetrachloroethene	0.377	0.419	0.359	0.360	0.361	0.434					0.385	8.6
2-Hexanone	0.454	0.608	0.533	0.487	0.505						0.517	11.2
Dibromochloromethane	0.395	0.501	0.500	0.508	0.534	0.360					0.466	15.2
1,2-Dibromoethane	0.334	0.414	0.389	0.392	0.403	0.327					0.377	9.8
Chlorobenzene	0.950	1.110	0.995	0.985	1.016	0.980					1.006	5.5
1,1,1,2-Tetrachloroethane	0.403	0.475	0.442	0.446	0.459	0.387					0.435	7.7
Ethylbenzene	0.467	0.574	0.515	0.523	0.536	0.431					0.508	10.0
m,p-Xylene	0.576	0.696	0.635	0.633	0.654	0.550					0.624	8.5
o-Xylene	0.520	0.651	0.620	0.613	0.631	0.488					0.587	11.4
Xylene (Total)	0.557	0.681	0.630	0.627	0.647	0.529					0.612	9.4
Styrene	0.761	1.004	0.989	1.001	1.052	0.585					0.899	20.5
Bromoform	0.230	0.305	0.304	0.309	0.328	0.134					0.268	27.5
Isopropylbenzene	1.481	1.901	1.734	1.755	1.780	1.320					1.662	13.0
1,1,2,2-Tetrachloroethane	0.966	1.095	0.889	0.852	0.854	0.973					0.938	10.0
Bromobenzene	0.770	0.860	0.783	0.782	0.804	0.753					0.792	4.7
1,2,3-Trichloropropane	1.011	1.293	1.085	1.045	1.094	1.012					1.090	9.7
n-Propylbenzene	0.700	0.811	0.712	0.693	0.707	0.726					0.725	6.0
2-Chlorotoluene	0.689	0.800	0.695	0.666	0.679	0.752					0.713	7.3
1,3,5-Trimethylbenzene	2.622	3.061	2.727	2.650	2.695	2.391					2.691	8.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/16/2014 06/16/2014

Heated Purge: (Y/N) N Calibration Times: 10:17 13:04

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5407.D RRF020 = V8D5406.D RRF050 = V8D5405.D RRF100 = V8D5411.D RRF200 = V8D5410.D
RRF001 = V8D5408.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.702	0.786	0.702	0.684	0.705	0.655					0.706	6.2
tert-Butylbenzene	2.453	3.216	2.840	2.775	2.591	2.479					2.726	10.5
1,2,4-Trimethylbenzene	2.430	3.028	2.641	2.608	2.651	2.255					2.602	9.9
sec-Butylbenzene	2.974	3.631	3.140	3.058	3.076	2.771					3.108	9.2
4-Isopropyltoluene	2.497	3.040	2.706	2.591	2.611	2.266					2.618	9.7
1,3-Dichlorobenzene	1.328	1.518	1.344	1.345	1.355	1.495					1.398	6.1
1,4-Dichlorobenzene	1.451	1.529	1.360	1.357	1.376	1.707					1.463	9.3
n-Butylbenzene	2.179	2.761	2.470	2.341	2.356	2.412					2.420	8.0
1,2-Dichlorobenzene	1.284	1.460	1.312	1.292	1.304	1.472					1.354	6.4
1,2-Dibromo-3-chloropropane	0.177	0.219	0.191	0.187	0.200	0.171					0.191	9.1
1,2,4-Trichlorobenzene	0.669	0.810	0.781	0.807	0.837	0.854					0.793	8.3
Hexachlorobutadiene	0.573	0.586	0.539	0.483	0.476	0.711					0.561	15.3
1,2,3-Trichlorobenzene	0.682	0.849	0.769	0.749	0.746	0.772					0.761	7.1
Naphthalene	1.609	1.883	1.605	1.712	1.689	1.884					1.730	7.3
1,1,2-Trichloro-1,2,2-trifluoroe	0.519	0.541	0.491	0.453	0.458	0.516					0.496	7.2

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/16/2014 06/16/2014

Heated Purge: (Y/N) N Calibration Times: 10:17 13:04

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5407.D RRF020 = V8D5406.D RRF050 = V8D5405.D RRF100 = V8D5411.D RRF200 = V8D5410.D
RRF001 = V8D5408.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.364	0.366	0.386	0.373	0.372						0.372	2.3
1,2-Dichloroethane-d4	0.058	0.063	0.065	0.062	0.066						0.063	4.6
Toluene-d8	1.194	1.146	1.119	1.141	1.121						1.144	2.6
Bromofluorobenzene	0.584	0.604	0.625	0.618	0.640						0.614	3.5

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.690	0.820	0.758	0.721	0.709	0.706					0.734	6.5
Chloromethane	1.063	1.201	1.008	0.923	0.801	0.858					0.976	14.9
Vinyl chloride	0.782	0.905	0.837	0.846	0.784	0.871					0.838	5.7
Bromomethane	0.215	0.227	0.220	0.265	0.223	0.224					0.229	7.9
Chloroethane	0.494	0.510	0.524	0.505	0.461	0.386					0.480	10.6
Trichlorofluoromethane	1.378	1.602	1.482	1.392	1.423	1.426					1.450	5.7
1,1-Dichloroethene	0.492	0.616	0.546	0.559	0.549	0.615					0.563	8.3
Acetone	0.151	0.185	0.159	0.108	0.132						0.147	19.7
Iodomethane	0.208	0.283	0.238	0.421	0.381	0.256					0.298	28.4
Carbon disulfide	1.984	2.163	2.005	1.843	1.872	3.561					2.238	29.4
Methylene chloride	0.538	0.547	0.493	0.512	0.473	0.558					0.520	6.4
trans-1,2-Dichloroethene	0.527	0.548	0.507	0.495	0.498	0.530					0.517	4.0
Methyl tert-butyl ether	1.914	2.037	1.944	2.023	1.906	1.898					1.954	3.1
1,1-Dichloroethane	1.388	1.513	1.392	1.396	1.357	1.357					1.400	4.1
Vinyl acetate	3.481	4.079	3.802	3.915	3.818	2.962					3.676	10.9
2-Butanone	0.065	0.086	0.079	0.067	0.078						0.075	11.7
cis-1,2-Dichloroethene	0.506	0.564	0.522	0.526	0.509	0.477					0.517	5.6
2,2-Dichloropropane	1.201	1.460	1.375	1.295	1.359	1.138					1.305	9.1
Bromochloromethane	0.264	0.230	0.224	0.229	0.213	0.280					0.240	10.8
Chloroform	1.301	1.412	1.327	1.321	1.292	1.394					1.341	3.7
1,1,1-Trichloroethane	1.340	1.542	1.432	1.388	1.419	1.375					1.416	4.9
1,1-Dichloropropene	0.230	0.270	0.241	0.246	0.251	0.189					0.238	11.4
Carbon tetrachloride	1.176	1.294	1.225	1.248	1.244	1.165					1.225	3.9
1,2-Dichloroethane	1.706	1.715	1.652	1.676	1.609	1.747					1.684	2.9
Benzene	1.863	1.951	1.813	1.823	1.827	1.766					1.840	3.4
Trichloroethene	0.512	0.553	0.526	0.521	0.535	0.603					0.542	6.1
1,2-Dichloropropane	0.589	0.657	0.614	0.649	0.624	0.587					0.620	4.7

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.428	0.432	0.415	0.419	0.400	0.459					0.425	4.7
Bromodichloromethane	0.972	1.061	1.016	1.049	1.040	0.998					1.023	3.3
cis-1,3-Dichloropropene	0.735	0.838	0.831	0.899	0.876	0.609					0.798	13.6
4-Methyl-2-pentanone	0.972	1.185	1.098	1.027	1.063						1.069	7.5
Toluene	1.912	2.099	1.964	1.967	1.980	1.909					1.972	3.5
trans-1,3-Dichloropropene	0.781	0.903	0.893	0.966	0.938	0.593					0.846	16.4
1,1,2-Trichloroethane	0.457	0.482	0.438	0.458	0.439	0.465					0.457	3.6
1,3-Dichloropropane	0.564	0.637	0.587	0.591	0.560	0.468					0.568	9.9
Tetrachloroethene	0.330	0.400	0.378	0.342	0.348	0.321					0.353	8.6
2-Hexanone	0.521	0.669	0.629	0.513	0.550						0.576	12.0
Dibromochloromethane	0.427	0.493	0.478	0.491	0.464	0.412					0.461	7.4
1,2-Dibromoethane	0.350	0.404	0.366	0.361	0.347	0.320					0.358	7.7
Chlorobenzene	0.912	0.999	0.935	0.890	0.865	0.872					0.912	5.5
1,1,1,2-Tetrachloroethane	0.412	0.460	0.428	0.413	0.407	0.397					0.419	5.3
Ethylbenzene	0.421	0.502	0.491	0.469	0.470	0.314					0.444	15.7
m,p-Xylene	0.524	0.624	0.602	0.574	0.588	0.481					0.565	9.5
o-Xylene	0.493	0.575	0.572	0.558	0.554	0.419					0.528	11.6
Xylene (Total)	0.514	0.608	0.592	0.569	0.576	0.460					0.553	10.1
Styrene	0.693	0.926	0.908	0.909	0.888	0.625					0.825	15.9
Bromoform	0.263	0.319	0.310	0.304	0.304	0.245					0.291	10.2
Isopropylbenzene	1.342	1.670	1.734	1.607	1.639	1.093					1.514	16.3
1,1,2,2-Tetrachloroethane	0.816	0.848	0.790	0.674	0.680	0.832					0.773	10.0
Bromobenzene	0.678	0.754	0.718	0.645	0.634	0.658					0.681	6.8
1,2,3-Trichloropropane	1.011	1.181	1.099	0.942	0.955	0.881					1.011	11.0
n-Propylbenzene	0.566	0.637	0.662	0.572	0.598	0.550					0.598	7.3
2-Chlorotoluene	0.596	0.623	0.594	0.537	0.546	0.538					0.573	6.4
1,3,5-Trimethylbenzene	2.056	2.508	2.530	2.216	2.312	1.901					2.254	11.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

SW846

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.583	0.639	0.620	0.555	0.561	0.583					0.590	5.6
tert-Butylbenzene	2.021	2.583	2.728	2.351	2.429	1.994					2.351	12.6
1,2,4-Trimethylbenzene	2.069	2.466	2.454	2.207	2.254	1.607					2.176	14.6
sec-Butylbenzene	2.468	2.862	2.969	2.533	2.670	2.032					2.589	12.8
4-Isopropyltoluene	2.067	2.493	2.585	2.216	2.311	1.699					2.229	14.3
1,3-Dichlorobenzene	1.142	1.276	1.214	1.092	1.109	1.155					1.165	5.9
1,4-Dichlorobenzene	1.303	1.305	1.245	1.132	1.120	1.413					1.253	9.0
n-Butylbenzene	1.844	2.220	2.355	1.986	2.081	1.392					1.980	17.1
1,2-Dichlorobenzene	1.121	1.203	1.199	1.067	1.055	1.024					1.111	6.8
1,2-Dibromo-3-chloropropane	0.173	0.210	0.210	0.176	0.194	0.117					0.180	19.1
1,2,4-Trichlorobenzene	0.616	0.678	0.763	0.701	0.701	0.452					0.652	16.7
Hexachlorobutadiene	0.517	0.577	0.590	0.458	0.458	0.482					0.514	11.3
1,2,3-Trichlorobenzene	0.652	0.682	0.729	0.651	0.642	0.511					0.645	11.3
Naphthalene	0.979	1.336	1.490	1.441	1.484	0.566					1.216	30.6
1,1,2-Trichloro-1,2,2-trifluoroe	0.747	0.804	0.752	0.700	0.711	1.110					0.804	19.2

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1055 SAS No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.458	0.432	0.428	0.434	0.438						0.438	2.7
1,2-Dichloroethane-d4	0.068	0.062	0.064	0.068	0.064						0.065	4.2
Toluene-d8	0.982	1.012	0.997	0.973	0.989						0.990	1.5
Bromofluorobenzene	0.679	0.675	0.674	0.684	0.664						0.675	1.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5405.d
Report Date: 17-Jun-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5405.d
Lab Smp Id: VSTD05010N Client Smp ID: VSTD05010N
Inj Date : 16-JUN-2014 10:17
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010N,VSTD05010N
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140616.B\v108260Gadd-6lvl.m
Meth Date : 17-Jun-2014 07:03 amarquis Quant Type: ISTD
Cal Date : 10-JUN-2014 13:30 Cal File: V8D5240.d
Als bottle: 6 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	1.586	1.586	(0.303)	235916	50.0000		(aQ)
2	Freon114	85	1.705	1.705	(0.326)	138720	50.0000		(aQ)
3	Chloromethane	50	1.754	1.753	(0.335)	370158	50.0000		(aQ)
4	Vinyl Chloride	62	1.853	1.856	(0.354)	251553	50.0000		(aQ)
5	Bromomethane	94	2.143	2.142	(0.409)	98452	50.0000		(aQ)
6	Chloroethane	64	2.229	2.229	(0.426)	125836	50.0000		(aQ)
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	354308	50.0000		(aQ)
126	Ethanol	46	2.567	2.567	(0.490)	126801	5000.00		(aQ)
8	Ether	59	2.667	2.670	(0.509)	187848	50.0000		(aQ)
9	Acrolein	56	2.770	2.773	(0.529)	260350	250.000		(aQ)
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	147388	50.0000		(aQ)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	174233	50.0000		(aQ)
12	Acetone	58	2.889	2.888	(0.552)	26722	50.0000		(aQ)
13	Iodomethane	142	2.982	2.982	(0.570)	87542	50.0000		(aQ)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	466378	50.0000		(aQ)
15	Acetonitrile	41	3.136	3.136	(0.599)	566205	500.000		(aQ)
16	Allyl Chloride	39	3.136	3.136	(0.599)	376744	50.0000		(aQ)
17	Methyl Acetate	43	3.146	3.146	(0.601)	317489	50.0000		(aQ)
18	Methylene Chloride	84	3.229	3.232	(0.617)	154920	50.0000		(aQ)
19	tert-Butanol	59	3.300	3.300	(0.630)	55883	100.000		(a)
20	Acrylonitrile	53	3.419	3.422	(0.653)	117690	50.0000		(aQ)
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	144645	50.0000		(aQ)
22	Methyl tert-butyl ether	73	3.445	3.448	(0.658)	528659	50.0000		(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	23 1,1-Dichloroethane	63	3.782	3.785	(0.722)	403981	50.0000		(aQ)
	24 Vinyl acetate	43	3.818	3.821	(0.729)	1015787	50.0000		(aQ)
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1077743	50.0000		(aQ)
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	474948	50.0000		(aQ)
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	748494	50.0000		(aQ)
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	348879	50.0000		(aQ)
	28 cis-1,2-Dichloroethene	96	4.255	4.258	(0.813)	156454	50.0000		(aQ)
	30 2-Butanone	72	4.258	4.261	(0.813)	18484	50.0000		(aQ)
	32 Propionitrile	54	4.303	4.303	(0.822)	397518	500.000		(aQ)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	389680	100.000		(aQ)
	34 Bromochloromethane	128	4.454	4.454	(0.851)	71004	50.0000		(aQ)
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	36833	100.000		(aQ)
	35 Chloroform	83	4.506	4.509	(0.861)	358538	50.0000		(aQ)
$	36 Dibromofluoromethane	113	4.641	4.644	(0.886)	136921	50.0000		(a)
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	361661	50.0000		(aQ)
	38 Cyclohexane	56	4.741	4.740	(0.905)	402255	50.0000		(aQ)
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	72636	50.0000		(aQ)
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	320518	50.0000		(aQ)
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	299656	1000.00		(aQ)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	23106	50.0000		(a)
	43 Benzene	78	5.004	5.004	(0.956)	540500	50.0000		(a)
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	428755	50.0000		(aQ)
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	447530	50.0000		(aQ)
M	50 1,2-Dichloroethene (Total)	96				301099	100.000		(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	354809	50.0000		(Q)
	47 Trichloroethene	130	5.564	5.564	(1.063)	151009	50.0000		(aQ)
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	227048	50.0000		(aQ)
	49 1,2-Dichloropropane	63	5.769	5.773	(1.102)	192635	50.0000		(aQ)
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	116264	50.0000		(aQ)
	52 Dibromomethane	93	5.879	5.882	(1.123)	116848	50.0000		(aQ)
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	34412	1000.00		(aQ)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	284710	50.0000		(aQ)
	55 2-Chloroethyl vinyl ether	63	6.441	6.448	(1.230)	2382	50.0000		(TaQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	254098	50.0000		(aQ)
	57 4-Methyl-2-pentanone	43	6.580	6.583	(1.257)	289477	50.0000		(aQ)
$	58 Toluene-d8	98	6.715	6.718	(0.817)	422136	50.0000		(a)
	59 Toluene	91	6.785	6.785	(1.296)	574209	50.0000		(aQ)
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	252148	50.0000		(aQ)
	61 Ethyl Methacrylate	69	7.068	7.071	(1.350)	137640	50.0000		(aQ)
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	134357	50.0000		(aQ)
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	135616	50.0000		(aQ)
	64 1,3-Dichloropropane	76	7.358	7.358	(0.895)	244727	50.0000		(aQ)
	65 2-Hexanone	43	7.432	7.435	(0.904)	201003	50.0000		(aQ)
	66 Dibromochloromethane	129	7.592	7.592	(0.923)	188505	50.0000		(aQ)
	67 1,2-Dibromoethane	107	7.728	7.731	(0.940)	146708	50.0000		(aQ)
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	187006	50.0000		(aQ)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	377350	50.0000		(Q)
	70 Chlorobenzene	112	8.255	8.255	(1.004)	375414	50.0000		(aQ)
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	166825	50.0000		(aQ)
	72 Ethylbenzene	106	8.371	8.370	(1.018)	194268	50.0000		(aQ)
	73 m,p-Xylene	106	8.499	8.499	(1.034)	479264	100.000		(aQ)
	74 o-Xylene	106	8.943	8.946	(1.088)	234083	50.0000		(aQ)
	75 Styrene	104	8.959	8.962	(1.090)	373045	50.0000		(aQ)
	76 Bromoform	173	9.162	9.161	(1.114)	114878	50.0000		(aQ)

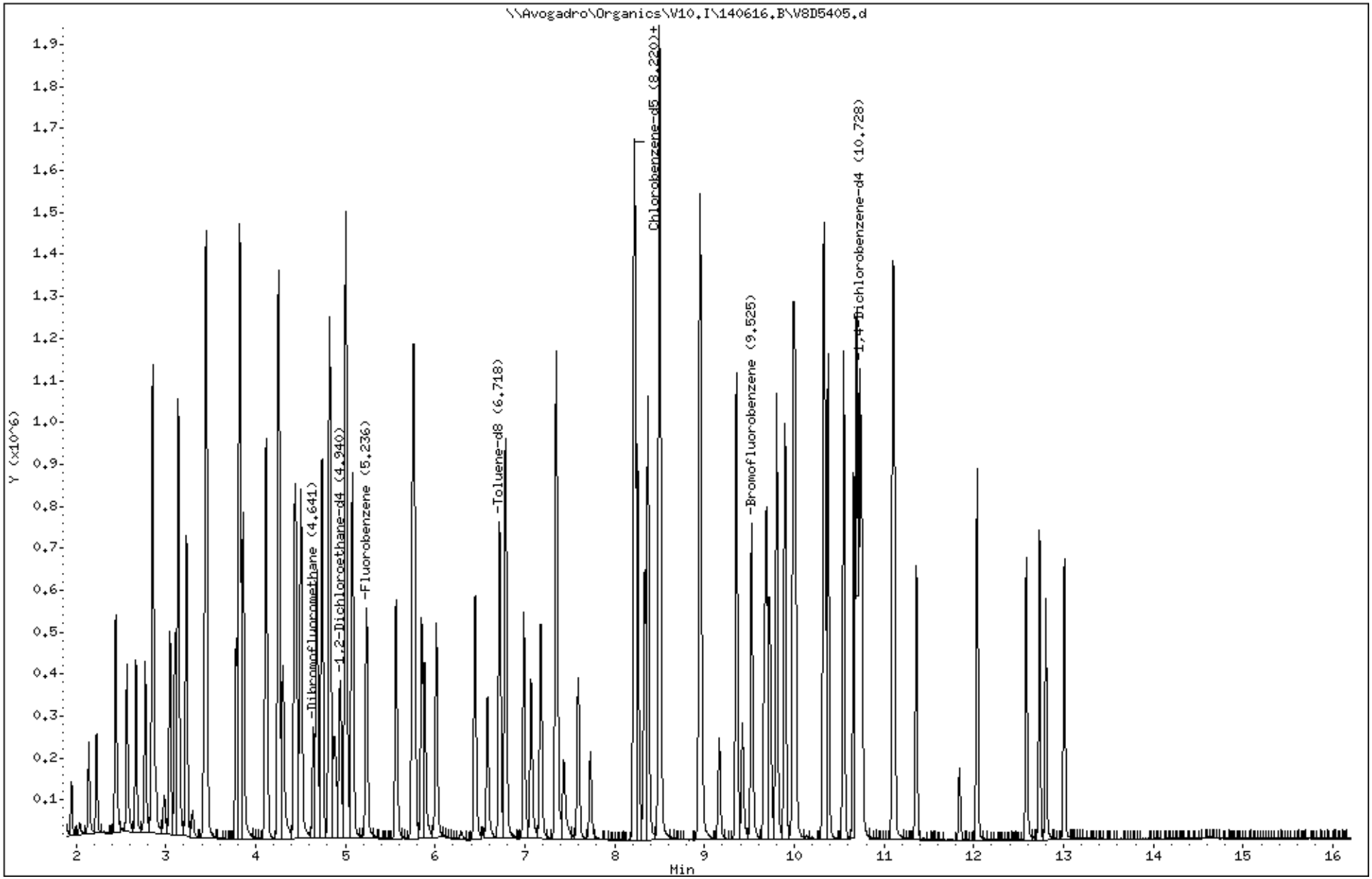
Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5405.d
Report Date: 17-Jun-2014 10:29

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	654462	50.0000	(aQ)
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	39640	50.0000	(aQ)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	235677	50.0000	(aQ)
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.666	(0.901)	187827	50.0000	(aQ)
	81	Bromobenzene	156	9.692	9.692	(0.903)	165417	50.0000	(aQ)
	82	1,2,3-Trichloropropane	75	9.718	9.721	(0.906)	229232	50.0000	(aQ)
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	150492	50.0000	(aQ)
	84	2-Chlorotoluene	126	9.895	9.895	(0.922)	146788	50.0000	(aQ)
	85	1,3,5-Trimethylbenzene	105	9.991	9.988	(0.931)	576129	50.0000	(aQ)
	86	4-Chlorotoluene	126	10.010	10.007	(0.933)	148374	50.0000	(aQ)
M	94	Xylene (Total)	106				713347	150.000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	600007	50.0000	(aQ)
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.967)	557955	50.0000	(aQ)
	89	sec-Butylbenzene	105	10.551	10.550	(0.984)	663255	50.0000	(aQ)
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	284024	50.0000	(aQ)
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	571577	50.0000	(aQ)
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	211255	50.0000	(Q)
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	287335	50.0000	(aQ)
	95	n-Butylbenzene	91	11.097	11.097	(1.034)	521901	50.0000	(aQ)
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	277260	50.0000	(aQ)
	97	Hexachloroethane	117	11.361	11.357	(1.059)	107012	50.0000	(aQ)
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.843	(1.104)	40283	50.0000	(aQ)
	141	1,3,5-Trichlorobenzene	182	12.039	12.036	(2.299)	208115	50.0000	(aQ)
	99	1,2,4-Trichlorobenzene	180	12.589	12.586	(1.174)	164912	50.0000	(aQ)
	100	Hexachlorobutadiene	225	12.731	12.730	(1.187)	113844	50.0000	(aQ)
	101	Naphthalene	128	12.801	12.801	(1.193)	339097	50.0000	(a)
	102	1,2,3-Trichlorobenzene	180	13.007	13.010	(1.212)	162460	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\V10.I\140616.B\V8D5405.d
Date : 16-JUN-2014 10:17
Client ID: VSTD05010N
Instrument: V10.i
Sample Info: 5ML,VSTD05010N,VSTD05010N
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5406.d
Report Date: 17-Jun-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5406.d
Lab Smp Id: VSTD02010N Client Smp ID: VSTD02010N
Inj Date : 16-JUN-2014 10:45
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD02010N,VSTD02010N
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140616.B\v108260Gadd-6lvl.m
Meth Date : 17-Jun-2014 07:03 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 10:45 Cal File: V8D5406.d
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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	1.586	1.586	(0.303)	103095	20.0000	21
2	Freon114	85	1.705	1.705	(0.326)	59826	20.0000	21
3	Chloromethane	50	1.753	1.753	(0.335)	148744	20.0000	20
4	Vinyl Chloride	62	1.856	1.856	(0.355)	107563	20.0000	21
5	Bromomethane	94	2.142	2.142	(0.409)	38896	20.0000	20
6	Chloroethane	64	2.229	2.229	(0.426)	54979	20.0000	20
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	152461	20.0000	21
126	Ethanol	46	2.567	2.567	(0.490)	58723	2000.00	2200(A)
8	Ether	59	2.670	2.670	(0.510)	73006	20.0000	20
9	Acrolein	56	2.769	2.773	(0.529)	111989	100.000	100
10	1,1-Dichloroethene	96	2.853	2.859	(0.545)	63242	20.0000	21
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	73478	20.0000	21
12	Acetone	58	2.888	2.888	(0.552)	11104	20.0000	21
13	Iodomethane	142	2.982	2.982	(0.570)	30754	20.0000	19
14	Carbon Disulfide	76	3.046	3.046	(0.582)	185462	20.0000	20
15	Acetonitrile	41	3.136	3.136	(0.599)	238272	200.000	210(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	172016	20.0000	22
17	Methyl Acetate	43	3.146	3.146	(0.601)	139064	20.0000	20
18	Methylene Chloride	84	3.229	3.232	(0.617)	62321	20.0000	20
19	tert-Butanol	59	3.300	3.300	(0.630)	26033	40.0000	44
20	Acrylonitrile	53	3.425	3.422	(0.654)	52119	20.0000	21
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	61994	20.0000	21

Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5406.d
Report Date: 17-Jun-2014 10:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.448	(0.659)	209810	20.0000	20
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	164660	20.0000	21
	24 Vinyl acetate	43	3.821	3.821	(0.730)	388589	20.0000	20
	25 Diisopropyl Ether	45	3.827	3.824	(0.731)	425012	20.0000	20
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	186074	20.0000	20
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	287734	20.0000	20
	29 2,2-Dichloropropane	77	4.261	4.258	(0.814)	137308	20.0000	20
	28 cis-1,2-Dichloroethene	96	4.258	4.258	(0.813)	63401	20.0000	20
	30 2-Butanone	72	4.265	4.261	(0.815)	7676	20.0000	21
	32 Propionitrile	54	4.306	4.303	(0.823)	181750	200.000	220(A)
	33 Methacrylonitrile	41	4.438	4.435	(0.848)	157508	40.0000	41
	34 Bromochloromethane	128	4.451	4.454	(0.850)	28827	20.0000	20
	31 Tetrahydrofuran	72	4.502	4.499	(0.860)	16007	40.0000	42
	35 Chloroform	83	4.506	4.509	(0.861)	148729	20.0000	21
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	124238	50.0000	49
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	151513	20.0000	21
	38 Cyclohexane	56	4.737	4.740	(0.905)	164974	20.0000	21
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	29645	20.0000	21
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	129458	20.0000	20
	41 Isobutyl Alcohol	43	5.081	5.078	(0.971)	121616	400.000	410(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	21337	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	227534	20.0000	21
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	170676	20.0000	20
	45 tert-Amyl methyl ether	73	5.081	5.078	(0.971)	172602	20.0000	20
M	50 1,2-Dichloroethene (Total)	96				125395	40.0000	42
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	339646	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	61137	20.0000	20
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	87977	20.0000	20
	49 1,2-Dichloropropane	63	5.772	5.773	(1.103)	76294	20.0000	20
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	48515	20.0000	21
	52 Dibromomethane	93	5.882	5.882	(1.123)	45957	20.0000	20
	53 1,4-Dioxane	88	5.888	5.885	(1.125)	15298	400.000	430(A)
	54 Bromodichloromethane	83	6.017	6.014	(1.149)	108572	20.0000	20
	55 2-Chloroethyl vinyl ether	63	6.438	6.448	(1.230)	676	20.0000	17(T)
	56 cis-1,3-Dichloropropene	75	6.448	6.445	(1.232)	92356	20.0000	19
	57 4-Methyl-2-pentanone	43	6.586	6.583	(1.258)	123378	20.0000	21
$	58 Toluene-d8	98	6.718	6.718	(0.817)	393545	50.0000	51
	59 Toluene	91	6.785	6.785	(1.296)	237394	20.0000	21
	60 trans-1,3-Dichloropropene	75	6.991	6.988	(1.335)	85562	20.0000	19
	61 Ethyl Methacrylate	69	7.071	7.071	(1.351)	49623	20.0000	19
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	52778	20.0000	20
	63 Tetrachloroethene	164	7.342	7.342	(0.893)	57554	20.0000	22
	64 1,3-Dichloropropane	76	7.358	7.358	(0.895)	96104	20.0000	21
	65 2-Hexanone	43	7.441	7.435	(0.905)	83462	20.0000	21
	66 Dibromochloromethane	129	7.596	7.592	(0.924)	68863	20.0000	20
	67 1,2-Dibromoethane	107	7.734	7.731	(0.941)	56816	20.0000	21
	69 1-Chlorohexane	91	8.213	8.216	(0.999)	73375	20.0000	21
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	343292	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	152485	20.0000	21
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	65184	20.0000	21
	72 Ethylbenzene	106	8.370	8.370	(1.018)	78825	20.0000	21
	73 m,p-Xylene	106	8.499	8.499	(1.034)	191245	40.0000	42
	74 o-Xylene	106	8.943	8.946	(1.088)	89423	20.0000	20
	75 Styrene	104	8.962	8.962	(1.090)	137814	20.0000	20

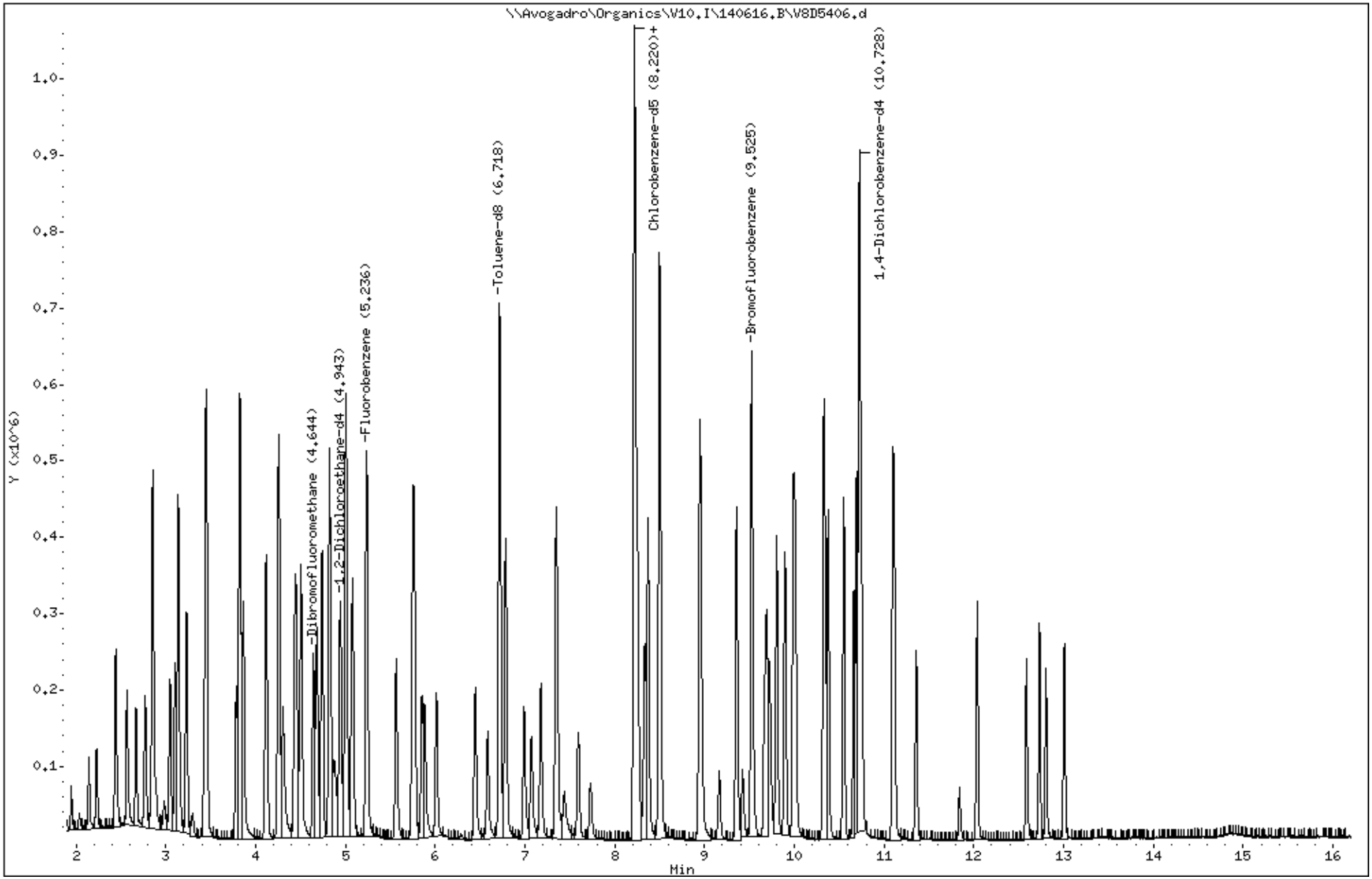
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Report Date: 17-Jun-2014 10:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76 Bromoform	173	9.165	9.161	(1.115)	41845	20.0000	20
	77 Isopropylbenzene	105	9.358	9.358	(1.138)	261068	20.0000	21
	78 trans-1,4-Dichloro-2-butene	75	9.425	9.422	(1.146)	12730	20.0000	19
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	207381	50.0000	49
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	78870	20.0000	20
	81 Bromobenzene	156	9.692	9.692	(0.904)	61963	20.0000	21
	82 1,2,3-Trichloropropane	75	9.718	9.721	(0.906)	93135	20.0000	22
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	58374	20.0000	21
	84 2-Chlorotoluene	126	9.898	9.895	(0.923)	57605	20.0000	21
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	220421	20.0000	21
	86 4-Chlorotoluene	126	10.010	10.007	(0.933)	56607	20.0000	21
M	94 Xylene (Total)	106				280668	60.0000	62
	87 tert-Butylbenzene	119	10.325	10.329	(0.963)	231626	20.0000	21
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	218044	20.0000	21
	89 sec-Butylbenzene	105	10.550	10.550	(0.984)	261467	20.0000	21
	90 1,3-Dichlorobenzene	146	10.663	10.663	(0.994)	109320	20.0000	21
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	218932	20.0000	21
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	180047	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	110115	20.0000	21
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	198815	20.0000	21
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	105143	20.0000	21
	97 Hexachloroethane	117	11.354	11.357	(1.059)	37813	20.0000	20
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.843	(1.104)	15773	20.0000	20
	141 1,3,5-Trichlorobenzene	182	12.039	12.036	(2.299)	75779	20.0000	19(A)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	58332	20.0000	20
	100 Hexachlorobutadiene	225	12.734	12.730	(1.187)	42204	20.0000	21
	101 Naphthalene	128	12.801	12.801	(1.194)	135641	20.0000	22
	102 1,2,3-Trichlorobenzene	180	13.007	13.010	(1.213)	61147	20.0000	21

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5406.d
Date : 16-JUN-2014 10:45
Client ID: VSTD02010N
Instrument: V10.i
Sample Info: 5ML,VSTD02010N,VSTD02010N
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5407.d
Report Date: 17-Jun-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5407.d
Lab Smp Id: VSTD00510N Client Smp ID: VSTD00510N
Inj Date : 16-JUN-2014 11:13
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00510N,VSTD00510N
Misc Info :
Comment   :
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Meth Date : 17-Jun-2014 07:03 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 11:13 Cal File: V8D5407.d
Als bottle: 8 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	1.586	1.586	(0.303)	22166	5.00000	4.9
2	Freon114	85	1.705	1.705	(0.326)	12940	5.00000	4.9
3	Chloromethane	50	1.753	1.753	(0.335)	33300	5.00000	4.5
4	Vinyl Chloride	62	1.856	1.856	(0.355)	22362	5.00000	4.6
5	Bromomethane	94	2.146	2.142	(0.410)	7370	5.00000	4.0
6	Chloroethane	64	2.229	2.229	(0.426)	11843	5.00000	5.0
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	33174	5.00000	4.8
126	Ethanol	46	2.570	2.567	(0.491)	13002	500.000	520(A)
8	Ether	59	2.667	2.670	(0.509)	16106	5.00000	4.5
9	Acrolein	56	2.773	2.773	(0.530)	23331	25.0000	24
10	1,1-Dichloroethene	96	2.859	2.859	(0.546)	13924	5.00000	4.8
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.856	2.850	(0.546)	17544	5.00000	5.2
12	Acetone	58	2.892	2.888	(0.552)	2547	5.00000	5.4
13	Iodomethane	142	2.985	2.982	(0.570)	5760	5.00000	3.2
14	Carbon Disulfide	76	3.046	3.046	(0.582)	39298	5.00000	4.3
15	Acetonitrile	41	3.136	3.136	(0.599)	52603	50.0000	51
16	Allyl Chloride	39	3.136	3.136	(0.599)	37007	5.00000	5.0
17	Methyl Acetate	43	3.149	3.146	(0.601)	30257	5.00000	4.9
18	Methylene Chloride	84	3.232	3.232	(0.617)	13706	5.00000	4.6
19	tert-Butanol	59	3.300	3.300	(0.630)	5438	10.0000	10
20	Acrylonitrile	53	3.425	3.422	(0.654)	10844	5.00000	4.8
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	12841	5.00000	4.6
22	Methyl tert-butyl ether	73	3.448	3.448	(0.659)	41813	5.00000	4.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
23	1,1-Dichloroethane	63	3.785	3.785	(0.723)	35415	5.00000	4.7	
24	Vinyl acetate	43	3.821	3.821	(0.730)	76663	5.00000	4.3	
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	85503	5.00000	4.4	
26	2-Chloro-1,3-Butadiene	53	3.859	3.863	(0.737)	37350	5.00000	4.3	
27	Ethyl tert-butyl ether	59	4.120	4.117	(0.787)	57228	5.00000	4.3	
29	2,2-Dichloropropane	77	4.261	4.258	(0.814)	23910	5.00000	4.1	
28	cis-1,2-Dichloroethene	96	4.255	4.258	(0.813)	13633	5.00000	4.6	
30	2-Butanone	72	4.261	4.261	(0.814)	1346	5.00000	4.1	
32	Propionitrile	54	4.316	4.303	(0.824)	34838	50.0000	46	
33	Methacrylonitrile	41	4.441	4.435	(0.848)	28670	10.0000	8.0	
34	Bromochloromethane	128	4.461	4.454	(0.852)	6445	5.00000	4.6	
31	Tetrahydrofuran	72	4.496	4.499	(0.859)	2753	10.0000	8.1	
35	Chloroform	83	4.512	4.509	(0.862)	32652	5.00000	4.8	
$ 36	Dibromofluoromethane	113	4.647	4.644	(0.888)	123248	50.0000	49	
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	32014	5.00000	4.7	
38	Cyclohexane	56	4.737	4.740	(0.905)	36461	5.00000	4.9	
39	1,1-Dichloropropene	110	4.824	4.821	(0.921)	6623	5.00000	4.9	
40	Carbon Tetrachloride	117	4.827	4.827	(0.922)	28634	5.00000	4.7	
41	Isobutyl Alcohol	43	5.078	5.078	(0.970)	24627	100.000	88	
$ 42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	19752	50.0000	46	
43	Benzene	78	5.004	5.004	(0.956)	46271	5.00000	4.5	
44	1,2-Dichloroethane	62	5.014	5.007	(0.958)	34151	5.00000	4.3	
45	tert-Amyl methyl ether	73	5.078	5.078	(0.970)	34911	5.00000	4.4	
M 50	1,2-Dichloroethene (Total)	96				26474	10.0000	(a)	
* 46	Fluorobenzene	96	5.236	5.236	(1.000)	338147	50.0000		
47	Trichloroethene	130	5.567	5.564	(1.063)	13384	5.00000	4.8	
48	Methylcyclohexane	83	5.750	5.753	(1.098)	18267	5.00000	4.5	
49	1,2-Dichloropropane	63	5.773	5.773	(1.103)	15607	5.00000	4.4	
51	Methyl Methacrylate	69	5.866	5.850	(1.120)	7985	5.00000	3.7	
52	Dibromomethane	93	5.888	5.882	(1.125)	9051	5.00000	4.2	
53	1,4-Dioxane	88	5.885	5.885	(1.124)	2450	100.000	79	
54	Bromodichloromethane	83	6.014	6.014	(1.149)	21866	5.00000	4.3	
55	2-Chloroethyl vinyl ether	63	6.448	6.448	(1.232)	69	5.00000	2.0(TM)M6 AM 06/17	
56	cis-1,3-Dichloropropene	75	6.448	6.445	(1.232)	17528	5.00000	4.0	
57	4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	21763	5.00000	4.0	
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	396254	50.0000	52	
59	Toluene	91	6.785	6.785	(1.296)	51876	5.00000	4.7	
60	trans-1,3-Dichloropropene	75	6.991	6.988	(1.335)	16480	5.00000	3.9	
61	Ethyl Methacrylate	69	7.072	7.071	(1.351)	9496	5.00000	3.8	
62	1,1,2-Trichloroethane	97	7.181	7.174	(1.372)	11131	5.00000	4.5	
63	Tetrachloroethene	164	7.348	7.342	(0.893)	12506	5.00000	4.9	
64	1,3-Dichloropropane	76	7.358	7.358	(0.894)	19138	5.00000	4.6	
65	2-Hexanone	43	7.451	7.435	(0.906)	15083	5.00000	4.4	
66	Dibromochloromethane	129	7.596	7.592	(0.923)	13117	5.00000	4.2	
67	1,2-Dibromoethane	107	7.734	7.731	(0.940)	11083	5.00000	4.4	
69	1-Chlorohexane	91	8.219	8.216	(0.999)	15949	5.00000	4.7	
* 68	Chlorobenzene-d5	117	8.226	8.223	(1.000)	331932	50.0000		
70	Chlorobenzene	112	8.255	8.255	(1.004)	31549	5.00000	4.7	
71	1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	13379	5.00000	4.6	
72	Ethylbenzene	106	8.374	8.370	(1.018)	15505	5.00000	4.6	
73	m,p-Xylene	106	8.506	8.499	(1.034)	38244	10.0000	9.2	
74	o-Xylene	106	8.943	8.946	(1.087)	17249	5.00000	4.4	
75	Styrene	104	8.962	8.962	(1.090)	25257	5.00000	4.0	
76	Bromoform	173	9.161	9.161	(1.114)	7645	5.00000	4.3	

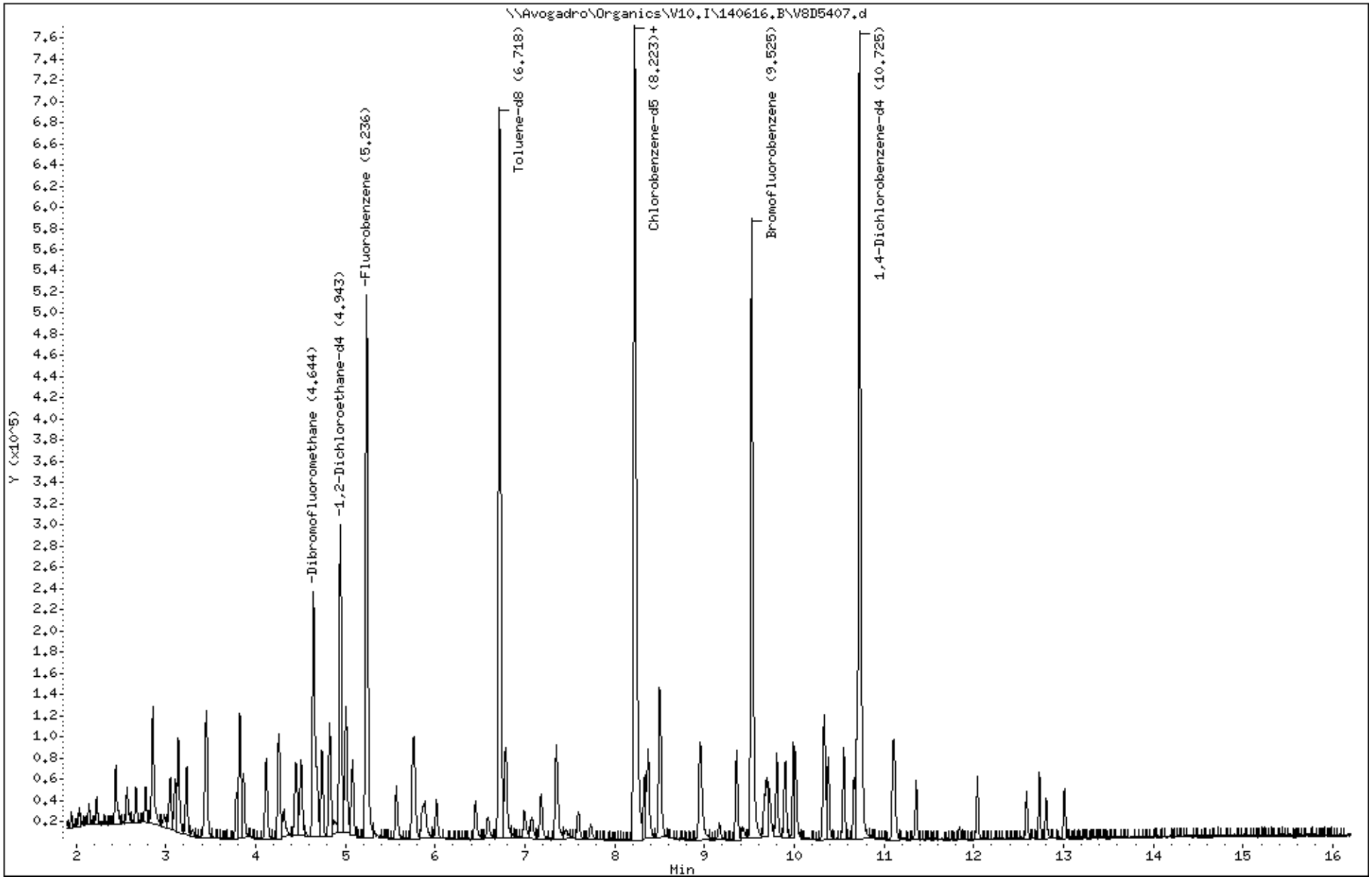
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Report Date: 17-Jun-2014 10:29

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	49173	5.00000	4.4
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.145)	1910	5.00000	3.0
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	193833	50.0000	48
	80	1,1,2,2-Tetrachloroethane	83	9.673	9.666	(0.902)	15705	5.00000	5.1
	81	Bromobenzene	156	9.695	9.692	(0.904)	12514	5.00000	4.8
	82	1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	16433	5.00000	5.2
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	11382	5.00000	4.8
	84	2-Chlorotoluene	126	9.901	9.895	(0.923)	11208	5.00000	4.8
	85	1,3,5-Trimethylbenzene	105	9.991	9.988	(0.932)	42642	5.00000	4.8
	86	4-Chlorotoluene	126	10.014	10.007	(0.934)	11416	5.00000	5.0
M	94	Xylene (Total)	106				55493	15.0000	(a)
	87	tert-Butylbenzene	119	10.332	10.329	(0.963)	39883	5.00000	4.5
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	39507	5.00000	4.7
	89	sec-Butylbenzene	105	10.547	10.550	(0.984)	48354	5.00000	4.8
	90	1,3-Dichlorobenzene	146	10.666	10.663	(0.995)	21602	5.00000	4.8
	91	4-Isopropyltoluene	119	10.692	10.695	(0.997)	40596	5.00000	4.8
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	162611	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	23595	5.00000	5.0
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	35426	5.00000	4.5
	96	1,2-Dichlorobenzene	146	11.116	11.113	(1.037)	20884	5.00000	4.7
	97	Hexachloroethane	117	11.358	11.357	(1.059)	7807	5.00000	4.9
	98	1,2-Dibromo-3-chloropropane	75	11.846	11.843	(1.105)	2872	5.00000	4.6
	141	1,3,5-Trichlorobenzene	182	12.036	12.036	(2.299)	13445	5.00000	3.9(A)
	99	1,2,4-Trichlorobenzene	180	12.589	12.586	(1.174)	10874	5.00000	4.2
	100	Hexachlorobutadiene	225	12.727	12.730	(1.187)	9311	5.00000	5.1
	101	Naphthalene	128	12.804	12.801	(1.194)	26156	5.00000	4.6
	102	1,2,3-Trichlorobenzene	180	13.007	13.010	(1.213)	11088	5.00000	4.5

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.
M - Compound response manually integrated.

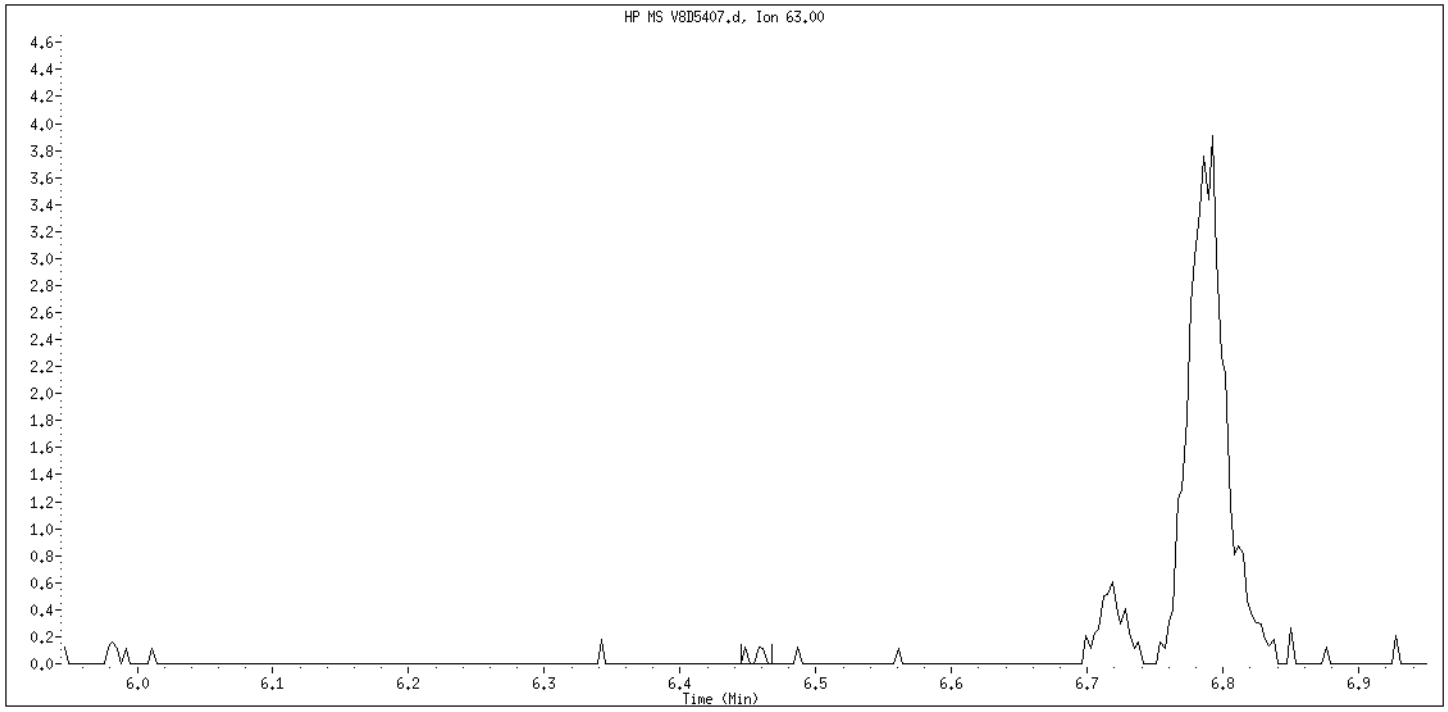
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Date : 16-JUN-2014 11:13
Client ID: VSTD00510N
Instrument: V10.i
Sample Info: 5ML,VSTD00510N,VSTD00510N
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



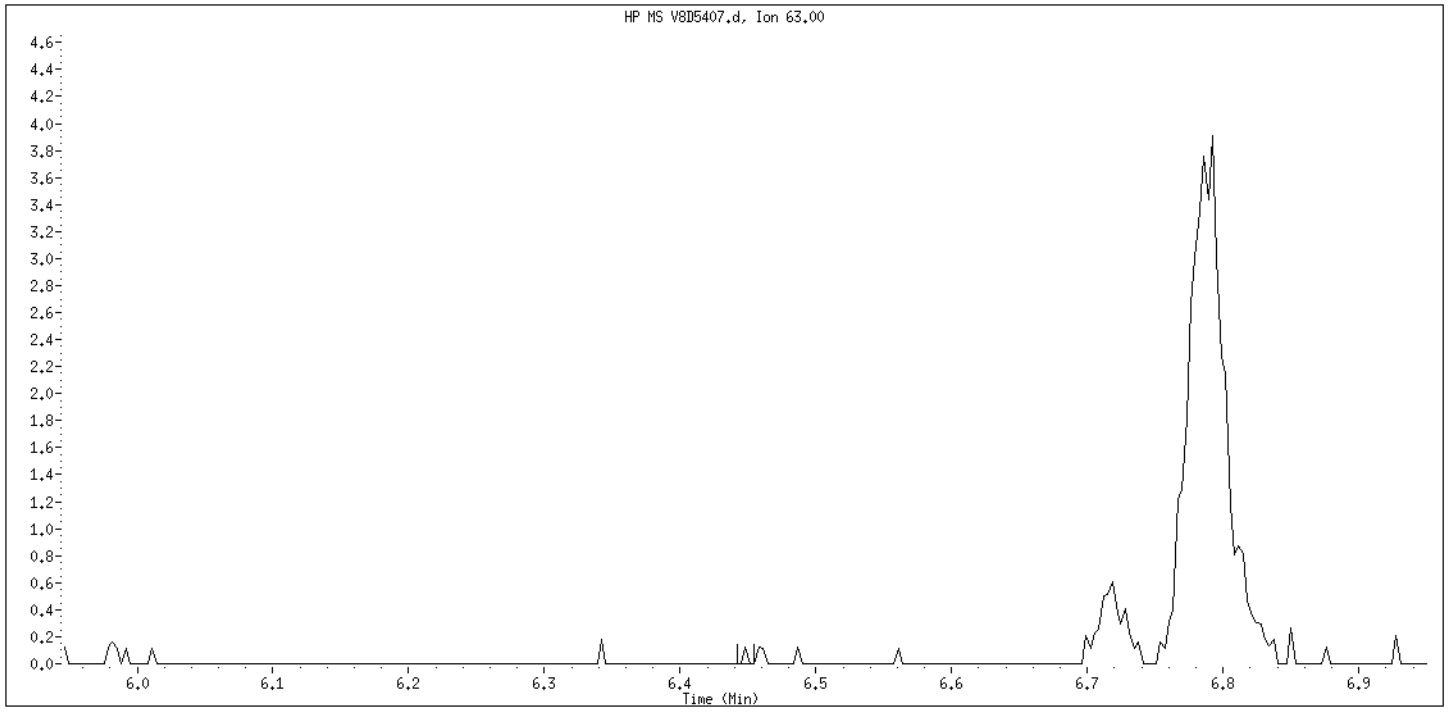
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5407.d

Lab ID: VSTD00510N Client ID: VSTD00510N
Inj Date: 16-JUN-2014 11:13 Operator: WL SRC: WL

Manual Integration 2-Chloroethyl vinyl ether Ret Time: 6.448 min, Range: 6.445 to 6.468 min Response: 69



Original Integration 2-Chloroethyl vinyl ether Ret Time: 6.448 min, Range: 6.442 to 6.455 min Response: 23



Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5408.d
Report Date: 17-Jun-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5408.d
Lab Smp Id: VSTD00110N Client Smp ID: VSTD00110N
Inj Date : 16-JUN-2014 11:41
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00110N,VSTD00110N
Misc Info :
Comment   :
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Meth Date : 17-Jun-2014 07:03 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 9 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	1.583	1.586	(0.302)	4753	1.00000	1.0
2	Freon114	85	1.705	1.705	(0.326)	2869	1.00000	1.0
3	Chloromethane	50	1.750	1.753	(0.334)	9590	1.00000	1.2
4	Vinyl Chloride	62	1.853	1.856	(0.354)	5328	1.00000	1.0(Q)
5	Bromomethane	94	2.142	2.142	(0.409)	2348	1.00000	1.2
6	Chloroethane	64	2.233	2.229	(0.426)	2116	1.00000	0.85
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	7126	1.00000	1.0
126	Ethanol	46	2.573	2.567	(0.492)	3062	500.000	120(Q)
8	Ether	59	2.667	2.670	(0.509)	3856	1.00000	1.0
9	Acrolein	56	2.773	2.773	(0.530)	5095	5.00000	5.0(Q)
10	1,1-Dichloroethene	96	2.863	2.859	(0.547)	3454	1.00000	1.1(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.847	2.850	(0.544)	3622	1.00000	1.0
12	Acetone	58	2.898	2.888	(0.554)	673	1.00000	1.4(Q)
13	Iodomethane	142	2.991	2.982	(0.571)	1882	1.00000	1.0
14	Carbon Disulfide	76	3.046	3.046	(0.582)	12197	1.00000	1.3
15	Acetonitrile	41	3.136	3.136	(0.599)	12877	1.00000	12
16	Allyl Chloride	39	3.136	3.136	(0.599)	11970	1.00000	1.6(Q)
17	Methyl Acetate	43	3.146	3.146	(0.601)	7070	1.00000	1.1
18	Methylene Chloride	84	3.229	3.232	(0.617)	3241	1.00000	1.1
19	tert-Butanol	59	3.297	3.300	(0.630)	1127	1.00000	2.0
20	Acrylonitrile	53	3.425	3.422	(0.654)	2510	1.00000	1.1
21	trans-1,2-Dichloroethene	96	3.458	3.454	(0.660)	3095	1.00000	1.1(Q)
22	Methyl tert-butyl ether	73	3.445	3.448	(0.658)	9947	1.00000	0.99

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	7508	1.00000	0.96
	24 Vinyl acetate	43	3.821	3.821	(0.730)	15082	1.00000	0.82(T)
	25 Diisopropyl Ether	45	3.827	3.824	(0.731)	18568	1.00000	0.92
	26 2-Chloro-1,3-Butadiene	53	3.866	3.863	(0.738)	7253	1.00000	0.80
	27 Ethyl tert-butyl ether	59	4.120	4.117	(0.787)	12200	1.00000	0.88
	29 2,2-Dichloropropane	77	4.255	4.258	(0.813)	4681	1.00000	0.77
	28 cis-1,2-Dichloroethene	96	4.258	4.258	(0.813)	3172	1.00000	1.0
	30 2-Butanone	72	4.506	4.261	(0.861)	611	1.00000	1.8(TQ)
	32 Propionitrile	54	4.322	4.303	(0.826)	5147	1.00000	6.5
	33 Methacrylonitrile	41	4.445	4.435	(0.849)	10378	1.00000	2.8
	34 Bromochloromethane	128	4.461	4.454	(0.852)	1693	1.00000	1.2(Q)
	31 Tetrahydrofuran	72	4.506	4.499	(0.861)	611	1.00000	1.7
	35 Chloroform	83	4.506	4.509	(0.861)	6638	1.00000	0.94
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	131122	1.00000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	6784	1.00000	0.96
	38 Cyclohexane	56	4.740	4.740	(0.905)	7017	1.00000	0.91
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	1341	1.00000	0.95
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	6012	1.00000	0.96
	41 Isobutyl Alcohol	43	5.072	5.078	(0.969)	6021	1.00000	21
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	22983	1.00000	52
	43 Benzene	78	5.007	5.004	(0.956)	9865	1.00000	0.93
	44 1,2-Dichloroethane	62	5.017	5.007	(0.958)	8347	1.00000	1.0
	45 tert-Amyl methyl ether	73	5.084	5.078	(0.971)	7303	1.00000	0.88
M	50 1,2-Dichloroethene (Total)	96				6267	2.00000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	350682	50.0000	
	47 Trichloroethene	130	5.570	5.564	(1.064)	2514	1.00000	0.87
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	3985	1.00000	0.96
	49 1,2-Dichloropropane	63	5.779	5.773	(1.104)	3735	1.00000	1.0
	51 Methyl Methacrylate	69	5.866	5.850	(1.120)	1351	1.00000	0.60
	52 Dibromomethane	93	5.885	5.882	(1.124)	2174	1.00000	0.98(Q)
	53 1,4-Dioxane	88	5.892	5.885	(1.125)	482	1.00000	15(Q)
	54 Bromodichloromethane	83	6.010	6.014	(1.148)	4821	1.00000	0.91
	55 2-Chloroethyl vinyl ether	63	6.718	6.448	(1.283)	608	1.00000	17(TQ)
	56 cis-1,3-Dichloropropene	75	6.448	6.445	(1.232)	3627	1.00000	0.80
	57 4-Methyl-2-pentanone	43	6.589	6.583	(1.259)	5051	1.00000	0.90(TQ)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	404413	1.00000	50
	59 Toluene	91	6.785	6.785	(1.296)	11554	1.00000	1.0
	60 trans-1,3-Dichloropropene	75	6.998	6.988	(1.337)	3188	1.00000	0.72
	61 Ethyl Methacrylate	69	7.078	7.071	(1.352)	1533	1.00000	0.59(Q)
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	2493	1.00000	0.97
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	3069	1.00000	1.1
	64 1,3-Dichloropropane	76	7.361	7.358	(0.895)	3961	1.00000	0.88
	65 2-Hexanone	43	7.441	7.435	(0.905)	354	1.00000	0.097(Ta)
	66 Dibromochloromethane	129	7.596	7.592	(0.924)	2543	1.00000	0.77(T)
	67 1,2-Dibromoethane	107	7.737	7.731	(0.941)	2314	1.00000	0.87(T)
	69 1-Chlorohexane	91	8.219	8.216	(1.000)	3957	1.00000	1.1(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	353556	50.0000	
	70 Chlorobenzene	112	8.261	8.255	(1.005)	6932	1.00000	0.97(Q)
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	2738	1.00000	0.89(Q)
	72 Ethylbenzene	106	8.374	8.370	(1.018)	3050	1.00000	0.85(Q)
	73 m,p-Xylene	106	8.502	8.499	(1.034)	7781	2.00000	1.8
	74 o-Xylene	106	8.949	8.946	(1.088)	3448	1.00000	0.83
	75 Styrene	104	8.969	8.962	(1.091)	4140	1.00000	0.61
	76 Bromoform	173	9.171	9.161	(1.115)	948	1.00000	0.50(T)

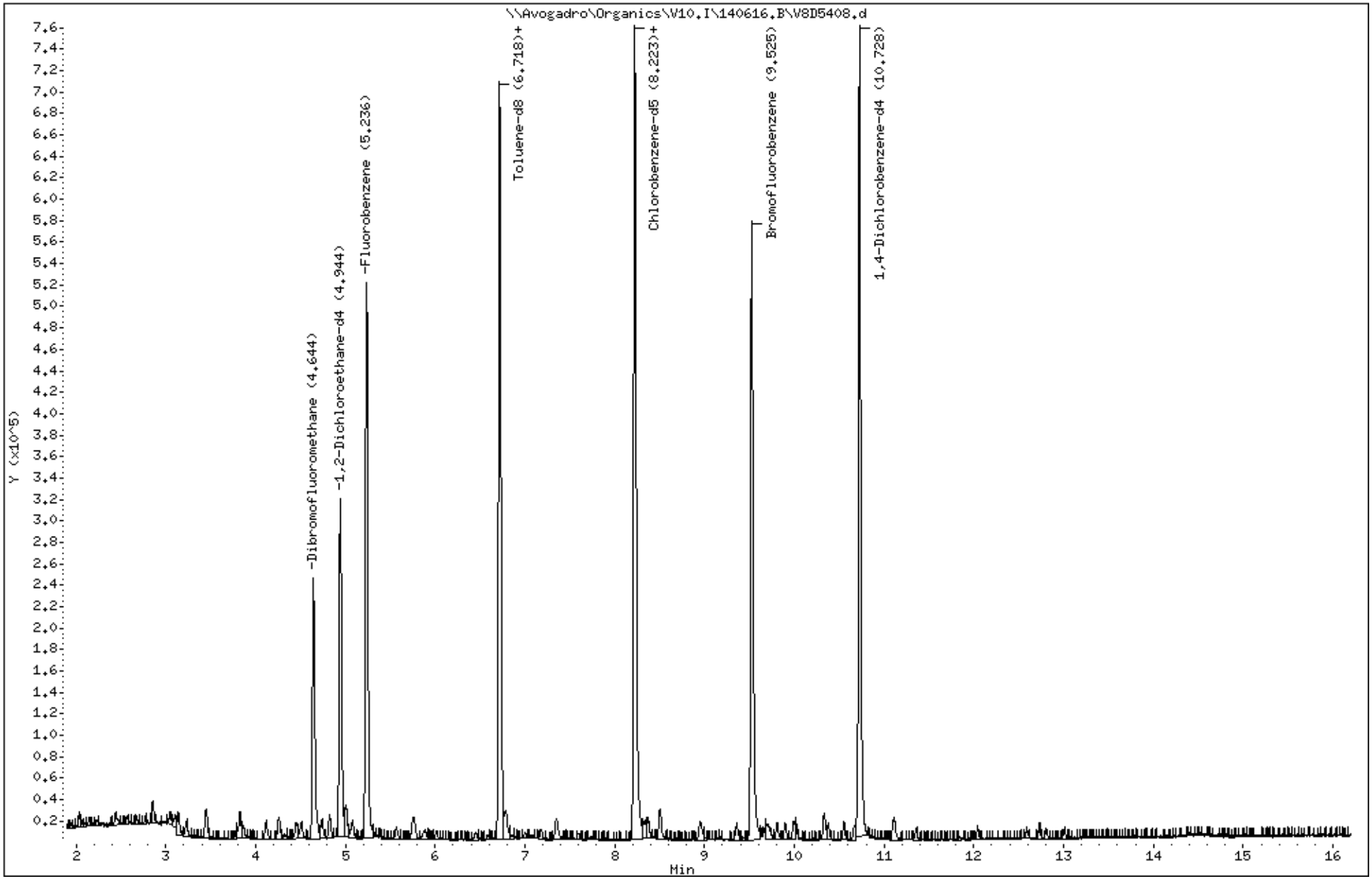
Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5408.d
Report Date: 17-Jun-2014 10:29

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.364	9.358	(1.139)	9332	1.00000	0.79
	78	trans-1,4-Dichloro-2-butene	75	9.428	9.422	(1.147)	286	1.00000	0.42(aQ)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	202836	1.00000	47
	80	1,1,2,2-Tetrachloroethane	83	9.679	9.666	(0.902)	3207	1.00000	1.0
	81	Bromobenzene	156	9.695	9.692	(0.904)	2481	1.00000	0.95(Q)
	82	1,2,3-Trichloropropane	75	9.724	9.721	(0.906)	3334	1.00000	1.0
	83	n-Propylbenzene	120	9.808	9.801	(0.914)	2392	1.00000	1.0
	84	2-Chlorotoluene	126	9.895	9.895	(0.922)	2479	1.00000	1.0
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	7882	1.00000	0.87
	86	4-Chlorotoluene	126	10.020	10.007	(0.934)	2160	1.00000	0.93
M	94	Xylene (Total)	106				11229	3.00000	(a)
	87	tert-Butylbenzene	119	10.325	10.329	(0.963)	8170	1.00000	0.91
	88	1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	7434	1.00000	0.87
	89	sec-Butylbenzene	105	10.557	10.550	(0.984)	9134	1.00000	0.89
	90	1,3-Dichlorobenzene	146	10.663	10.663	(0.994)	4928	1.00000	1.1
	91	4-Isopropyltoluene	119	10.698	10.695	(0.997)	7467	1.00000	0.86
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	164798	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	5626	1.00000	1.2(Q)
	95	n-Butylbenzene	91	11.097	11.097	(1.034)	7951	1.00000	1.00
	96	1,2-Dichlorobenzene	146	11.120	11.113	(1.037)	4853	1.00000	1.1
	97	Hexachloroethane	117	11.354	11.357	(1.058)	1497	1.00000	0.92
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.843	(1.104)	564	1.00000	0.90
	141	1,3,5-Trichlorobenzene	182	12.042	12.036	(2.300)	3041	1.00000	0.86(A)
	99	1,2,4-Trichlorobenzene	180	12.592	12.586	(1.174)	2816	1.00000	1.1
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	2343	1.00000	1.3
	101	Naphthalene	128	12.804	12.801	(1.194)	6210	1.00000	1.1
	102	1,2,3-Trichlorobenzene	180	13.007	13.010	(1.212)	2545	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\V10.I\140616.B\V8D5408.d
Date : 16-JUN-2014 11:41
Client ID: VSTD00110N
Instrument: V10.i
Sample Info: 5ML,VSTD00110N,VSTD00110N
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5410.d
Report Date: 17-Jun-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5410.d
Lab Smp Id: VSTD20010N Client Smp ID: VSTD20010N
Inj Date : 16-JUN-2014 12:36
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD20010N,VSTD20010N
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140616.B\v108260Gadd-6lvl.m
Meth Date : 17-Jun-2014 07:03 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 12:36 Cal File: V8D5410.d
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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	1.586	1.586	(0.303)	887865	200.000	180
2	Freon114	85	1.705	1.705	(0.326)	516596	200.000	180
3	Chloromethane	50	1.754	1.753	(0.335)	1485616	200.000	190
4	Vinyl Chloride	62	1.853	1.856	(0.354)	979356	200.000	190
5	Bromomethane	94	2.136	2.142	(0.408)	356110	200.000	180
6	Chloroethane	64	2.226	2.229	(0.425)	496095	200.000	200
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	1411867	200.000	190
126	Ethanol	46	2.567	2.567	(0.490)	466303	20000.0	17000(A)
8	Ether	59	2.667	2.670	(0.509)	765788	200.000	200
9	Acrolein	56	2.770	2.773	(0.529)	1021935	1000.00	970
10	1,1-Dichloroethene	96	2.856	2.859	(0.545)	575480	200.000	180
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	655251	200.000	180
12	Acetone	58	2.885	2.888	(0.551)	80148	200.000	160
13	Iodomethane	142	2.985	2.982	(0.570)	461784	200.000	260(A)
14	Carbon Disulfide	76	3.046	3.046	(0.581)	1803294	200.000	200
15	Acetonitrile	41	3.136	3.136	(0.599)	1913486	2000.00	1700(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	1436361	200.000	180
17	Methyl Acetate	43	3.143	3.146	(0.600)	1167416	200.000	200
18	Methylene Chloride	84	3.229	3.232	(0.616)	607035	200.000	190
19	tert-Butanol	59	3.300	3.300	(0.630)	210897	400.000	360(A)
20	Acrylonitrile	53	3.419	3.422	(0.653)	451381	200.000	180
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	586077	200.000	200

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
22	Methyl tert-butyl ether	73	3.445	3.448	(0.658)	2126704	200.000	210(A)
23	1,1-Dichloroethane	63	3.786	3.785	(0.723)	1593214	200.000	200
24	Vinyl acetate	43	3.815	3.821	(0.728)	4130065	200.000	220(A)
25	Diisopropyl Ether	45	3.824	3.824	(0.730)	4346196	200.000	210(A)
26	2-Chloro-1,3-Butadiene	53	3.860	3.863	(0.737)	1934158	200.000	210(A)
27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	3025113	200.000	220(A)
29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	1345862	200.000	220(A)
28	cis-1,2-Dichloroethene	96	4.252	4.258	(0.812)	626403	200.000	200
30	2-Butanone	72	4.255	4.261	(0.812)	69053	200.000	210(A)
32	Propionitrile	54	4.303	4.303	(0.821)	1545440	2000.00	1900(A)
33	Methacrylonitrile	41	4.432	4.435	(0.846)	1586047	400.000	420(A)
34	Bromochloromethane	128	4.451	4.454	(0.850)	280717	200.000	190
31	Tetrahydrofuran	72	4.499	4.499	(0.859)	143577	400.000	400(A)
35	Chloroform	83	4.506	4.509	(0.860)	1468416	200.000	200
$ 36	Dibromofluoromethane	113	4.644	4.644	(0.886)	133029	50.0000	50
37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	1469352	200.000	200
38	Cyclohexane	56	4.741	4.740	(0.905)	1569651	200.000	200
39	1,1-Dichloropropene	110	4.821	4.821	(0.920)	291264	200.000	200
40	Carbon Tetrachloride	117	4.827	4.827	(0.921)	1306217	200.000	200
41	Isobutyl Alcohol	43	5.078	5.078	(0.969)	1221282	4000.00	4100(A)
$ 42	1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	23538	50.0000	52
43	Benzene	78	5.001	5.004	(0.955)	2245914	200.000	210(A)
44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	1781598	200.000	210(A)
45	tert-Amyl methyl ether	73	5.078	5.078	(0.969)	1825097	200.000	220(A)
M 50	1,2-Dichloroethene (Total)	96				1212480	400.000	390
* 46	Fluorobenzene	96	5.239	5.236	(1.000)	358039	50.0000	
47	Trichloroethene	130	5.564	5.564	(1.062)	616014	200.000	210(A)
48	Methylcyclohexane	83	5.753	5.753	(1.098)	849526	200.000	200
49	1,2-Dichloropropane	63	5.770	5.773	(1.101)	794489	200.000	210(A)
51	Methyl Methacrylate	69	5.850	5.850	(1.117)	509894	200.000	220(A)
52	Dibromomethane	93	5.879	5.882	(1.122)	476412	200.000	210(A)
53	1,4-Dioxane	88	5.882	5.885	(1.123)	125945	4000.00	3800(A)
54	Bromodichloromethane	83	6.014	6.014	(1.148)	1190953	200.000	220(A)
55	2-Chloroethyl vinyl ether	63	6.438	6.448	(1.229)	8395	200.000	260(TA)
56	cis-1,3-Dichloropropene	75	6.442	6.445	(1.230)	1087371	200.000	240(A)
57	4-Methyl-2-pentanone	43	6.580	6.583	(1.256)	1186283	200.000	210(A)
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	430592	50.0000	49
59	Toluene	91	6.782	6.785	(1.295)	2414390	200.000	200(A)
60	trans-1,3-Dichloropropene	75	6.985	6.988	(1.333)	1115285	200.000	270(A)
61	Ethyl Methacrylate	69	7.065	7.071	(1.349)	593115	200.000	230(A)
62	1,1,2-Trichloroethane	97	7.175	7.174	(1.369)	537510	200.000	200(A)
63	Tetrachloroethene	164	7.342	7.342	(0.893)	554837	200.000	180
64	1,3-Dichloropropane	76	7.355	7.358	(0.894)	1033197	200.000	210(A)
65	2-Hexanone	43	7.432	7.435	(0.904)	775033	200.000	190
66	Dibromochloromethane	129	7.593	7.592	(0.923)	820698	200.000	230(A)
67	1,2-Dibromoethane	107	7.728	7.731	(0.940)	619017	200.000	220(A)
69	1-Chlorohexane	91	8.213	8.216	(0.999)	763080	200.000	190
* 68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	383972	50.0000	
70	Chlorobenzene	112	8.252	8.255	(1.004)	1560051	200.000	200
71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	704759	200.000	210(A)
72	Ethylbenzene	106	8.371	8.370	(1.018)	823703	200.000	210(A)
73	m,p-Xylene	106	8.499	8.499	(1.034)	2010441	400.000	420(A)
74	o-Xylene	106	8.943	8.946	(1.088)	969394	200.000	220(A)
75	Styrene	104	8.956	8.962	(1.089)	1616316	200.000	220(A)

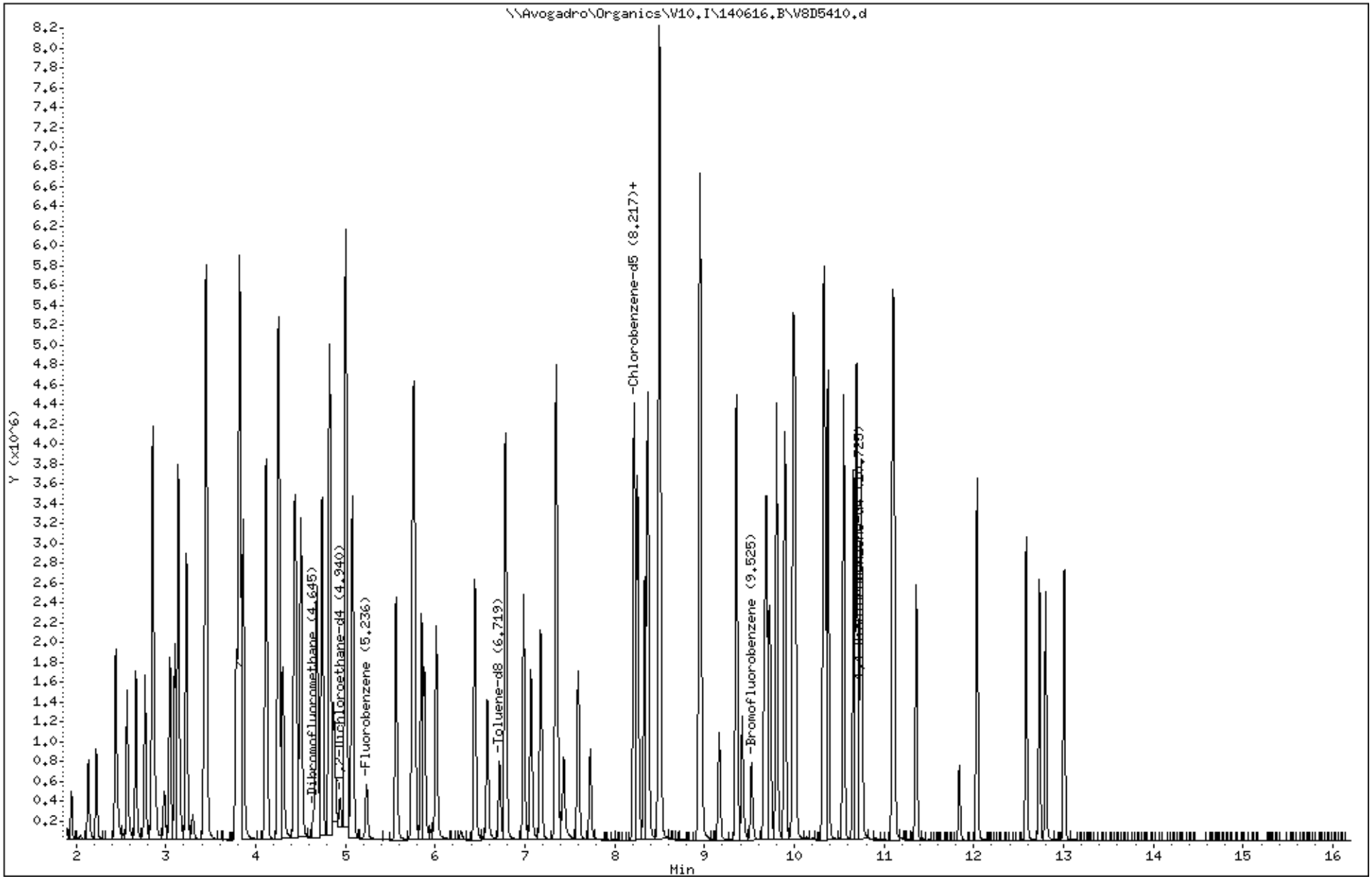
Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5410.d
Report Date: 17-Jun-2014 10:29

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.165	9.161	(1.115)	503482	200.000	250(A)
	77 Isopropylbenzene	105	9.358	9.358	(1.138)	2733728	200.000	220(A)
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	179528	200.000	250(A)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	245925	50.0000	52
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	744561	200.000	200
	81 Bromobenzene	156	9.689	9.692	(0.903)	700991	200.000	200
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	954535	200.000	210(A)
	83 n-Propylbenzene	120	9.802	9.801	(0.914)	616361	200.000	190
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	592111	200.000	190
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	2350938	200.000	190
	86 4-Chlorotoluene	126	10.007	10.007	(0.933)	614712	200.000	200
M	94 Xylene (Total)	106				2979835	600.000	640
	87 tert-Butylbenzene	119	10.326	10.329	(0.963)	2260035	200.000	190
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	2312821	200.000	200
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	2683061	200.000	200
	90 1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	1181759	200.000	190
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	2277848	200.000	200
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	218076	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	1200120	200.000	180
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	2055512	200.000	190
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	1137871	200.000	190
	97 Hexachloroethane	117	11.358	11.357	(1.059)	440178	200.000	200
	98 1,2-Dibromo-3-chloropropane	75	11.837	11.843	(1.104)	174876	200.000	200
	141 1,3,5-Trichlorobenzene	182	12.036	12.036	(2.297)	830790	200.000	230(A)
	99 1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	730217	200.000	200
	100 Hexachlorobutadiene	225	12.731	12.730	(1.187)	414928	200.000	160
	101 Naphthalene	128	12.801	12.801	(1.194)	1472981	200.000	190
	102 1,2,3-Trichlorobenzene	180	13.007	13.010	(1.213)	650970	200.000	200

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5410.d
Date : 16-JUN-2014 12:36
Client ID: VSTD20010N
Instrument: V10.i
Sample Info: 5ML,VSTD20010N,VSTD20010N
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5411.d
Report Date: 17-Jun-2014 10:29

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5411.d
Lab Smp Id: VSTD10010N Client Smp ID: VSTD10010N
Inj Date : 16-JUN-2014 13:04
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD10010N,VSTD10010N
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140616.B\v108260Gadd-6lvl.m
Meth Date : 17-Jun-2014 07:03 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 13:04 Cal File: V8D5411.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	445115	100.000	92
2	Freon114	85	1.705	1.705	(0.326)	263399	100.000	94
3	Chloromethane	50	1.754	1.753	(0.335)	770736	100.000	96
4	Vinyl Chloride	62	1.856	1.856	(0.354)	523013	100.000	100
5	Bromomethane	94	2.139	2.142	(0.408)	197852	100.000	100
6	Chloroethane	64	2.229	2.229	(0.426)	262501	100.000	100
7	Trichlorofluoromethane	101	2.445	2.441	(0.467)	703799	100.000	96
126	Ethanol	46	2.567	2.567	(0.490)	242950	10000.0	9100(A)
8	Ether	59	2.667	2.670	(0.509)	385691	100.000	100
9	Acrolein	56	2.770	2.773	(0.529)	509442	500.000	480
10	1,1-Dichloroethene	96	2.860	2.859	(0.546)	298078	100.000	95
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	329192	100.000	91
12	Acetone	58	2.892	2.888	(0.552)	41753	100.000	83
13	Iodomethane	142	2.982	2.982	(0.569)	248597	100.000	130
14	Carbon Disulfide	76	3.046	3.046	(0.581)	894481	100.000	98
15	Acetonitrile	41	3.136	3.136	(0.599)	1026069	1000.00	920(A)
16	Allyl Chloride	39	3.139	3.136	(0.599)	741842	100.000	94
17	Methyl Acetate	43	3.146	3.146	(0.600)	595728	100.000	99
18	Methylene Chloride	84	3.229	3.232	(0.616)	310095	100.000	98
19	tert-Butanol	59	3.297	3.300	(0.629)	99247	200.000	170
20	Acrylonitrile	53	3.419	3.422	(0.653)	223825	100.000	92
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	291653	100.000	96

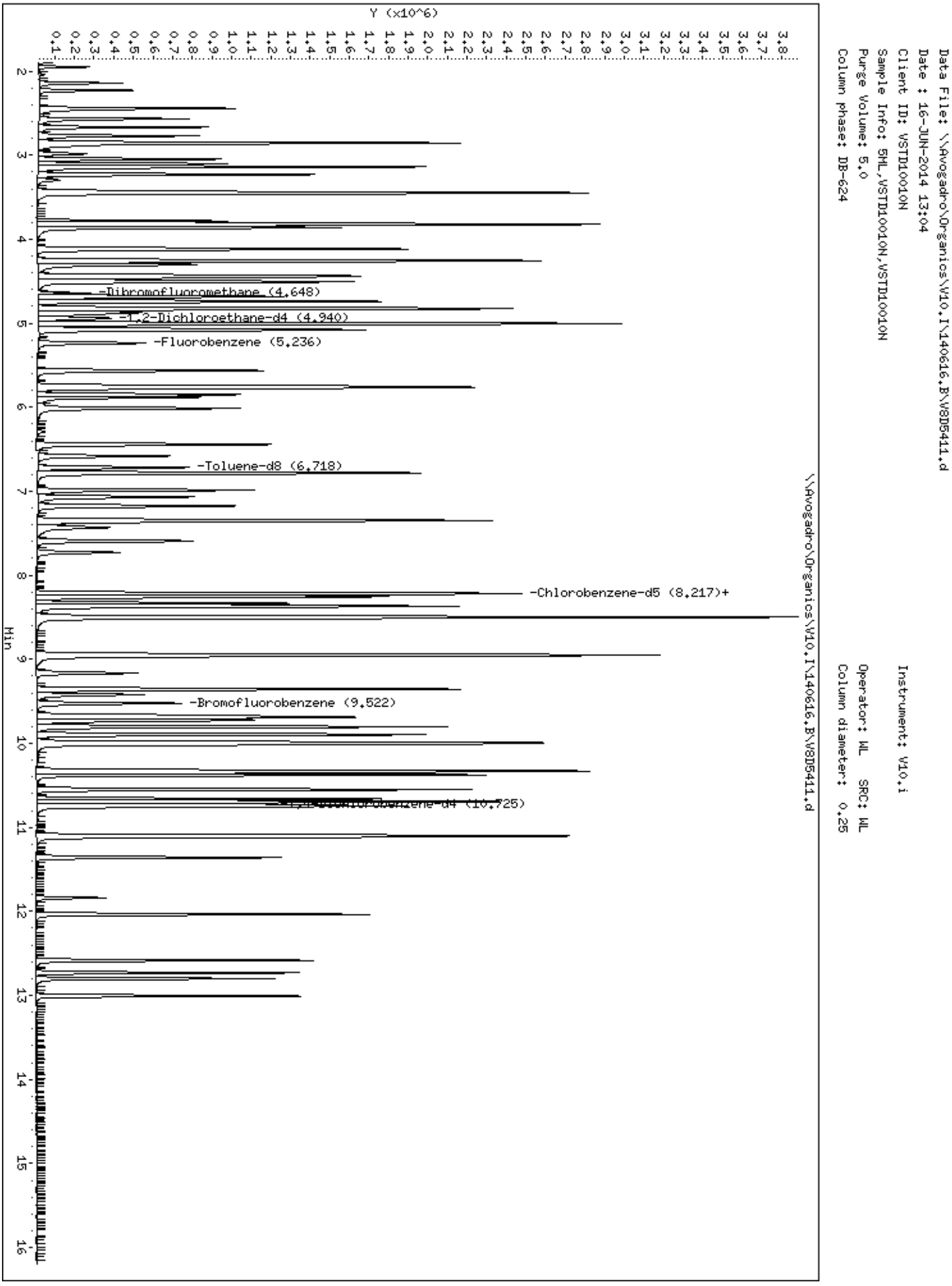
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.448	(0.658)	1039955	100.000	100
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	790773	100.000	98
	24 Vinyl acetate	43	3.818	3.821	(0.729)	1997534	100.000	100
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	2145074	100.000	100
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.737)	936007	100.000	100
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1490114	100.000	100
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	646544	100.000	100
	28 cis-1,2-Dichloroethene	96	4.255	4.258	(0.812)	313619	100.000	98
	30 2-Butanone	72	4.255	4.261	(0.812)	34420	100.000	100
	32 Propionitrile	54	4.303	4.303	(0.821)	767171	1000.00	940(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	773191	200.000	200
	34 Bromochloromethane	128	4.454	4.454	(0.850)	141662	100.000	95
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	71937	200.000	200
	35 Chloroform	83	4.506	4.509	(0.860)	721005	100.000	99
$	36 Dibromofluoromethane	113	4.644	4.644	(0.886)	135407	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	713145	100.000	97
	38 Cyclohexane	56	4.741	4.740	(0.905)	786044	100.000	98
	39 1,1-Dichloropropene	110	4.818	4.821	(0.920)	142161	100.000	97
	40 Carbon Tetrachloride	117	4.827	4.827	(0.921)	638113	100.000	98
	41 Isobutyl Alcohol	43	5.075	5.078	(0.969)	586840	2000.00	2000(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	22684	50.0000	50
	43 Benzene	78	5.004	5.004	(0.955)	1101499	100.000	100
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	853657	100.000	100
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.969)	891084	100.000	100
M	50 1,2-Dichloroethene (Total)	96				605272	200.000	190
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	363312	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.062)	302189	100.000	100
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	419205	100.000	97
	49 1,2-Dichloropropane	63	5.769	5.773	(1.101)	385056	100.000	100
	51 Methyl Methacrylate	69	5.847	5.850	(1.116)	238869	100.000	100
	52 Dibromomethane	93	5.879	5.882	(1.122)	230143	100.000	100
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	63769	2000.00	1900(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.148)	568541	100.000	100
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.230)	3940	100.000	110(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	515716	100.000	110
	57 4-Methyl-2-pentanone	43	6.580	6.583	(1.256)	566873	100.000	98
$	58 Toluene-d8	98	6.715	6.718	(0.817)	435882	50.0000	50
	59 Toluene	91	6.782	6.785	(1.295)	1172441	100.000	98
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	511022	100.000	120
	61 Ethyl Methacrylate	69	7.068	7.071	(1.349)	283463	100.000	110
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.369)	268409	100.000	100
	63 Tetrachloroethene	164	7.345	7.342	(0.893)	274952	100.000	93
	64 1,3-Dichloropropane	76	7.355	7.358	(0.894)	491301	100.000	100
	65 2-Hexanone	43	7.432	7.435	(0.904)	371927	100.000	94
	66 Dibromochloromethane	129	7.593	7.592	(0.923)	388322	100.000	110
	67 1,2-Dibromoethane	107	7.728	7.731	(0.940)	299949	100.000	100
	69 1-Chlorohexane	91	8.213	8.216	(0.999)	369711	100.000	95
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	382114	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	752978	100.000	98
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	341051	100.000	100
	72 Ethylbenzene	106	8.371	8.370	(1.018)	399831	100.000	100
	73 m,p-Xylene	106	8.499	8.499	(1.034)	967536	200.000	200
	74 o-Xylene	106	8.943	8.946	(1.088)	468835	100.000	100
	75 Styrene	104	8.959	8.962	(1.090)	764665	100.000	100

Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5411.d
Report Date: 17-Jun-2014 10:29

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.162	9.161	(1.114)	235876	100.000	120
	77 Isopropylbenzene	105	9.355	9.358	(1.138)	1341441	100.000	100
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.422	(1.146)	80910	100.000	110
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	236180	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	365735	100.000	99
	81 Bromobenzene	156	9.692	9.692	(0.904)	335740	100.000	99
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	448505	100.000	100
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	297415	100.000	96
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	285711	100.000	93
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	1137554	100.000	96
	86 4-Chlorotoluene	126	10.007	10.007	(0.933)	293725	100.000	97
M	94 Xylene (Total)	106				1436371	300.000	310
	87 tert-Butylbenzene	119	10.326	10.329	(0.963)	1191109	100.000	100
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	1119578	100.000	100
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	1312480	100.000	98
	90 1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	577298	100.000	96
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	1111951	100.000	99
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	214605	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	582315	100.000	93
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	1004880	100.000	97
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	554596	100.000	95
	97 Hexachloroethane	117	11.361	11.357	(1.059)	209394	100.000	99
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.843	(1.104)	80116	100.000	95
	141 1,3,5-Trichlorobenzene	182	12.036	12.036	(2.297)	399871	100.000	110(A)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	346234	100.000	98
	100 Hexachlorobutadiene	225	12.731	12.730	(1.187)	207288	100.000	86
	101 Naphthalene	128	12.801	12.801	(1.194)	734829	100.000	99
	102 1,2,3-Trichlorobenzene	180	13.007	13.010	(1.213)	321466	100.000	98

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
exceeded maximum amount.


Data File: \\Avogadro\Organics\W10.I\140616.B\W8D5411.d
Date : 16-JUN-2014 13:04
Client ID: VSTD10010N
Sample Info: 5ML,VSTD10010N,VSTD10010N
Purge Volume: 5.0
Column phase: DB-624
Instrument: W10.i
Operator: WL SRC: WL
Column diameter: 0.25
Y (x10^6)
Min
-Dibromofluoromethane (4.648)
-1,2-Dichloroethane-d4 (4.940)
-Fluorobenzene (5.236)
-Toluene-d8 (6.718)
-Chlorobenzene-d5 (8.217)+
-Bromofluorobenzene (9.522)
\\Avogadro\Organics\W10.I\140616.B\W8D5411.d

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5644.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5644.d
Lab Smp Id: VSTD05010W Client Smp ID: VSTD05010W
Inj Date : 23-JUN-2014 09:51
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010W,VSTD05010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 58 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	1.586	1.586	(0.303)	122758	50.0000	50
2	Freon114	85	1.705	1.705	(0.326)	96920	50.0000	50
3	Chloromethane	50	1.753	1.753	(0.335)	163183	50.0000	38
4	Vinyl Chloride	62	1.856	1.853	(0.355)	135429	50.0000	50(Q)
5	Bromomethane	94	2.143	2.142	(0.409)	35666	50.0000	70(Q)
6	Chloroethane	64	2.226	2.229	(0.425)	84769	50.0000	39
7	Trichlorofluoromethane	101	2.445	2.441	(0.467)	239840	50.0000	50
126	Ethanol	46	2.567	2.570	(0.490)	87043	5000.00	4700(A)
8	Ether	59	2.667	2.667	(0.509)	111187	50.0000	47
9	Acrolein	56	2.770	2.769	(0.529)	173350	250.000	250
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	88450	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	121663	50.0000	49
12	Acetone	58	2.889	2.885	(0.552)	25667	50.0000	49(Q)
13	Iodomethane	142	2.985	2.985	(0.570)	38525	50.0000	49(Q)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	324568	50.0000	50
15	Acetonitrile	41	3.136	3.136	(0.599)	314329	500.000	480(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	234346	50.0000	47
17	Methyl Acetate	43	3.146	3.146	(0.601)	176268	50.0000	48
18	Methylene Chloride	84	3.229	3.232	(0.617)	79750	50.0000	47
19	tert-Butanol	59	3.297	3.297	(0.630)	40552	100.000	98
20	Acrylonitrile	53	3.422	3.422	(0.654)	69369	50.0000	46
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	81995	50.0000	48
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	314644	50.0000	49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	225342	50.0000	49
	24 Vinyl acetate	43	3.818	3.818	(0.729)	615348	50.0000	50
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	585681	50.0000	49
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	294828	50.0000	52
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	429945	50.0000	50
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	222525	50.0000	50
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	84423	50.0000	49
	30 2-Butanone	72	4.261	4.265	(0.814)	12747	50.0000	51(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	248969	500.000	490(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	236364	100.000	100
	34 Bromochloromethane	128	4.451	4.454	(0.850)	36271	50.0000	47
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	22856	100.000	100
	35 Chloroform	83	4.506	4.509	(0.861)	214739	50.0000	49
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	69210	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	231814	50.0000	50
	38 Cyclohexane	56	4.737	4.740	(0.905)	239655	50.0000	52
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	39011	50.0000	49
	40 Carbon Tetrachloride	117	4.831	4.827	(0.923)	198226	50.0000	50
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	175682	1000.00	980(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	10305	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	293456	50.0000	48
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	267361	50.0000	49
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	248652	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				166418	100.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	161852	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	85146	50.0000	50
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	131235	50.0000	53
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	99303	50.0000	50
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	68397	50.0000	51
	52 Dibromomethane	93	5.882	5.882	(1.123)	67169	50.0000	49
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	21322	1000.00	990(A)
	54 Bromodichloromethane	83	6.017	6.014	(1.149)	164409	50.0000	50
	55 2-Chloroethyl vinyl ether	63	6.445	6.454	(1.231)	1310	50.0000	48(TQ)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	134550	50.0000	50
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	177707	50.0000	51
$	58 Toluene-d8	98	6.718	6.718	(0.817)	222402	50.0000	50
	59 Toluene	91	6.785	6.782	(1.296)	317851	50.0000	49
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	144577	50.0000	50
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	77362	50.0000	52
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.370)	70931	50.0000	48
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	84369	50.0000	51
	64 1,3-Dichloropropane	76	7.355	7.354	(0.894)	131022	50.0000	49
	65 2-Hexanone	43	7.435	7.432	(0.904)	140256	50.0000	52
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	106616	50.0000	50
	67 1,2-Dibromoethane	107	7.728	7.731	(0.940)	81592	50.0000	49
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	115120	50.0000	55(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	223113	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	208564	50.0000	49
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	95483	50.0000	49
	72 Ethylbenzene	106	8.371	8.367	(1.018)	109474	50.0000	52
	73 m,p-Xylene	106	8.499	8.499	(1.034)	268439	100.000	100
	74 o-Xylene	106	8.943	8.943	(1.088)	127581	50.0000	52
	75 Styrene	104	8.959	8.959	(1.090)	202668	50.0000	54
	76 Bromoform	173	9.165	9.161	(1.115)	69078	50.0000	50

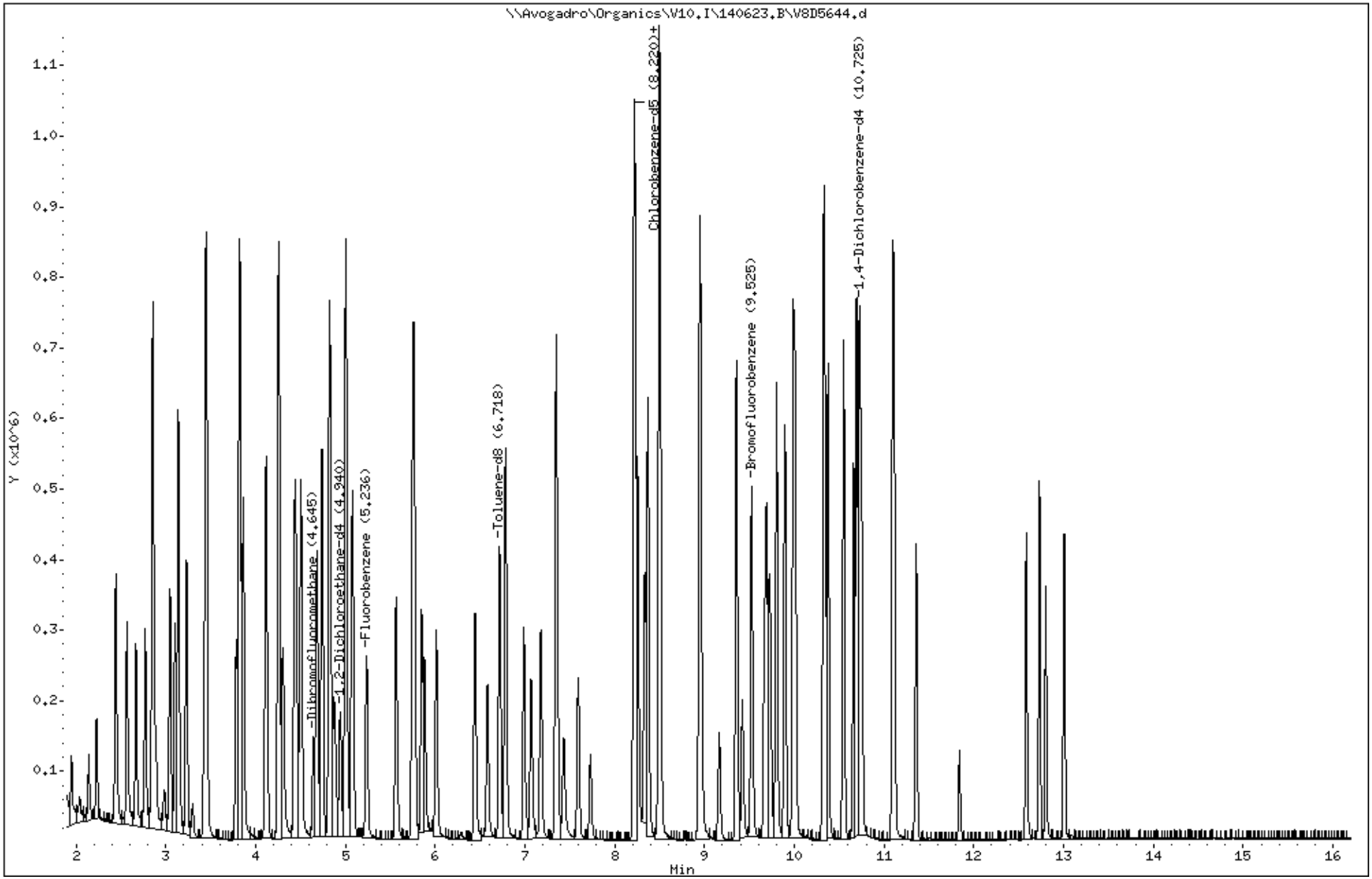
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5644.d
Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	386809	50.0000	55
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	25567	50.0000	53
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	150356	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.902)	104997	50.0000	48
	81 Bromobenzene	156	9.692	9.692	(0.904)	95481	50.0000	50
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	146062	50.0000	50(Q)
	83 n-Propylbenzene	120	9.805	9.801	(0.914)	88003	50.0000	53
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	78961	50.0000	49
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	336359	50.0000	54
	86 4-Chlorotoluene	126	10.007	10.014	(0.933)	82376	50.0000	50
M	94 Xylene (Total)	106				396020	150.000	(a)
	87 tert-Butylbenzene	119	10.326	10.329	(0.963)	362701	50.0000	56
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	326239	50.0000	53
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	394682	50.0000	54
	90 1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	161364	50.0000	50
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	343597	50.0000	54
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	132933	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	165505	50.0000	48
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	313123	50.0000	55
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	159335	50.0000	51
	97 Hexachloroethane	117	11.358	11.361	(1.059)	64827	50.0000	53
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	27878	50.0000	53
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	101436	50.0000	56
	100 Hexachlorobutadiene	225	12.731	12.730	(1.187)	78393	50.0000	50
	101 Naphthalene	128	12.801	12.801	(1.194)	198099	50.0000	59
	102 1,2,3-Trichlorobenzene	180	13.004	13.007	(1.213)	96916	50.0000	53

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\V10.I\140623.B\V8D5644.d
Date : 23-JUN-2014 09:51
Client ID: VSTD05010W
Instrument: V10.i
Sample Info: 5ML,VSTD05010W,VSTD05010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5645.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5645.d
Lab Smp Id: VSTD02010W Client Smp ID: VSTD02010W
Inj Date : 23-JUN-2014 10:29
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD02010W,VSTD02010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 10:29 Cal File: V8D5645.d
Als bottle: 59 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	1.586	1.586	(0.303)	53823	20.0000	22
2	Freon114	85	1.705	1.705	(0.326)	42733	20.0000	22
3	Chloromethane	50	1.754	1.753	(0.335)	78765	20.0000	25
4	Vinyl Chloride	62	1.856	1.853	(0.355)	59343	20.0000	22(Q)
5	Bromomethane	94	2.143	2.142	(0.409)	14912	20.0000	20
6	Chloroethane	64	2.229	2.229	(0.426)	33471	20.0000	21
7	Trichlorofluoromethane	101	2.445	2.441	(0.467)	105070	20.0000	22
126	Ethanol	46	2.567	2.570	(0.490)	39444	2000.00	2300(A)
8	Ether	59	2.670	2.667	(0.510)	51883	20.0000	22
9	Acrolein	56	2.770	2.769	(0.529)	78701	100.000	120
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	40430	20.0000	22
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	52751	20.0000	21
12	Acetone	58	2.892	2.885	(0.552)	12161	20.0000	25
13	Iodomethane	142	2.982	2.985	(0.570)	18565	20.0000	19
14	Carbon Disulfide	76	3.049	3.046	(0.582)	141879	20.0000	22
15	Acetonitrile	41	3.136	3.136	(0.599)	145233	200.000	230(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	106361	20.0000	22
17	Methyl Acetate	43	3.146	3.146	(0.601)	78380	20.0000	21
18	Methylene Chloride	84	3.233	3.232	(0.617)	35875	20.0000	21
19	tert-Butanol	59	3.297	3.297	(0.630)	17719	40.0000	45
20	Acrylonitrile	53	3.422	3.422	(0.654)	32454	20.0000	23
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	35942	20.0000	21
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	133644	20.0000	21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	99235	20.0000	22
	24 Vinyl acetate	43	3.821	3.818	(0.730)	267602	20.0000	22
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	252983	20.0000	21
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	122556	20.0000	21
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	182180	20.0000	21
	29 2,2-Dichloropropane	77	4.261	4.258	(0.814)	95758	20.0000	22
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	37022	20.0000	22
	30 2-Butanone	72	4.261	4.265	(0.814)	5630	20.0000	23(Q)
	32 Propionitrile	54	4.307	4.303	(0.823)	114021	200.000	230(A)
	33 Methacrylonitrile	41	4.438	4.435	(0.848)	98895	40.0000	43
	34 Bromochloromethane	128	4.451	4.454	(0.850)	15122	20.0000	19(Q)
	31 Tetrahydrofuran	72	4.503	4.499	(0.860)	10052	40.0000	45
	35 Chloroform	83	4.506	4.509	(0.861)	92633	20.0000	21
$	36 Dibromofluoromethane	113	4.647	4.641	(0.888)	70842	50.0000	49
	37 1,1,1-Trichloroethane	97	4.686	4.686	(0.895)	101167	20.0000	22
	38 Cyclohexane	56	4.741	4.740	(0.905)	101276	20.0000	22
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	17693	20.0000	23
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	84907	20.0000	21
	41 Isobutyl Alcohol	43	5.075	5.078	(0.969)	75344	400.000	420(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	10131	50.0000	47
	43 Benzene	78	5.004	5.004	(0.956)	128009	20.0000	21
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	112524	20.0000	20
	45 tert-Amyl methyl ether	73	5.081	5.081	(0.971)	104364	20.0000	21
M	50 1,2-Dichloroethene (Total)	96				72964	40.0000	43
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	164014	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	36307	20.0000	20
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	52474	20.0000	21
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	43086	20.0000	21
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	29333	20.0000	21
	52 Dibromomethane	93	5.882	5.882	(1.123)	28339	20.0000	20
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	9513	400.000	460(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	69605	20.0000	21
	55 2-Chloroethyl vinyl ether	63	6.441	6.454	(1.230)	272	20.0000	14(TQ)
	56 cis-1,3-Dichloropropene	75	6.448	6.445	(1.231)	55004	20.0000	21
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	77740	20.0000	22
$	58 Toluene-d8	98	6.718	6.718	(0.817)	225897	50.0000	51
	59 Toluene	91	6.786	6.782	(1.296)	137719	20.0000	21
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	59223	20.0000	20
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	30861	20.0000	20
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.370)	31595	20.0000	21
	63 Tetrachloroethene	164	7.348	7.348	(0.894)	35728	20.0000	23
	64 1,3-Dichloropropane	76	7.358	7.354	(0.895)	56854	20.0000	22
	65 2-Hexanone	43	7.435	7.432	(0.904)	59755	20.0000	23
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	44026	20.0000	21
	67 1,2-Dibromoethane	107	7.731	7.731	(0.940)	36074	20.0000	22
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	42869	20.0000	20(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	223212	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	89226	20.0000	22
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	41035	20.0000	22
	72 Ethylbenzene	106	8.374	8.367	(1.018)	44839	20.0000	21
	73 m,p-Xylene	106	8.499	8.499	(1.034)	111451	40.0000	44
	74 o-Xylene	106	8.943	8.943	(1.088)	51308	20.0000	22
	75 Styrene	104	8.962	8.959	(1.090)	82680	20.0000	21
	76 Bromoform	173	9.165	9.161	(1.115)	28458	20.0000	22

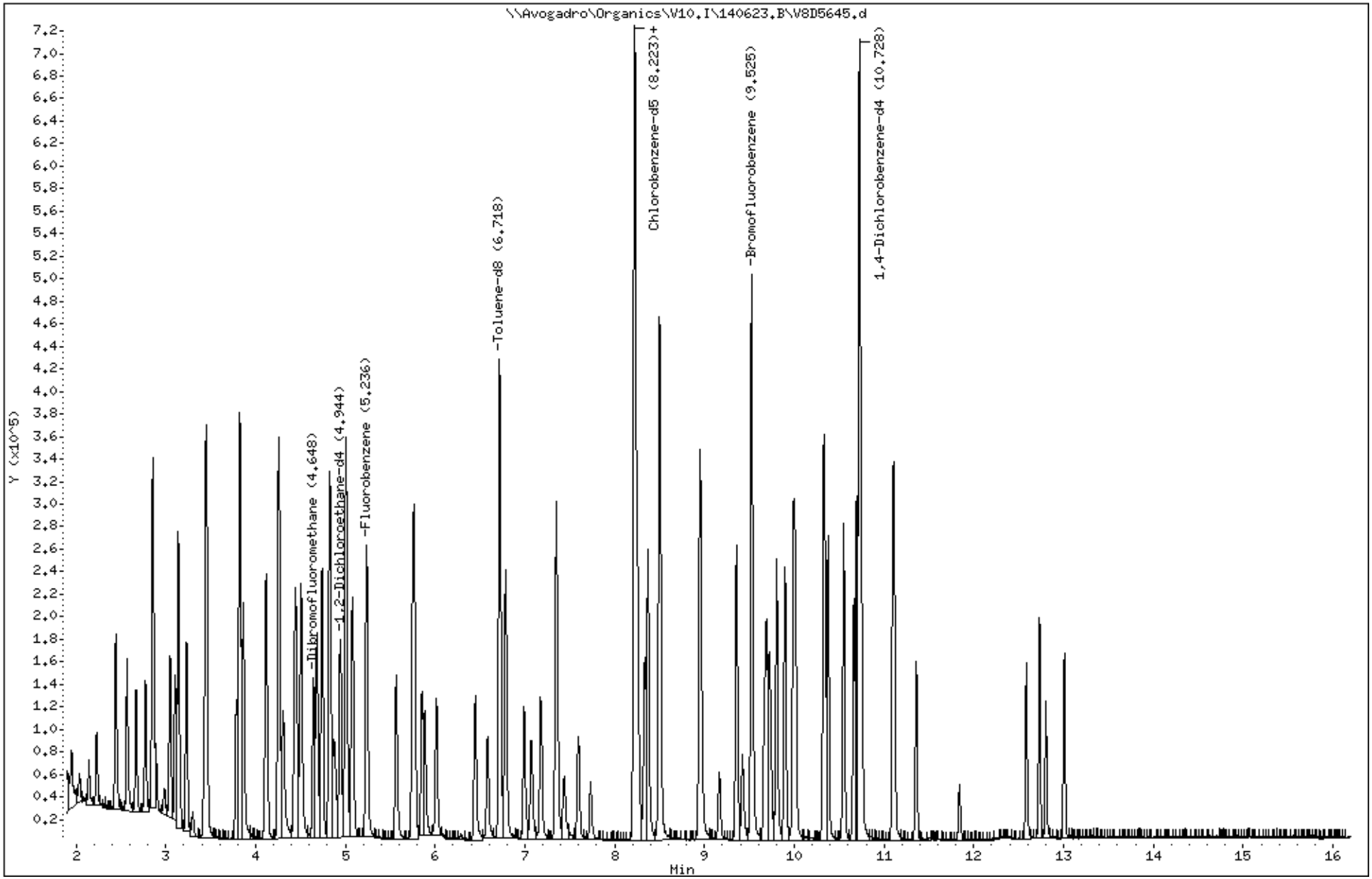
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5645.d
Report Date: 26-Jun-2014 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Isopropylbenzene	105	9.358	9.354	(1.138)	149075	20.0000	20
	78 trans-1,4-Dichloro-2-butene	75	9.428	9.425	(1.147)	10712	20.0000	22
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	150569	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.901)	44729	20.0000	22
	81 Bromobenzene	156	9.689	9.692	(0.903)	39762	20.0000	22
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	62320	20.0000	23
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	33628	20.0000	21
	84 2-Chlorotoluene	126	9.898	9.895	(0.923)	32878	20.0000	22
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	132287	20.0000	22
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	33685	20.0000	22
M	94 Xylene (Total)	106				162759	60.0000	66
	87 tert-Butylbenzene	119	10.326	10.329	(0.963)	136282	20.0000	22
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.967)	130067	20.0000	23
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	150999	20.0000	22
	90 1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	67301	20.0000	22
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	131508	20.0000	22
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	131887	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	68852	20.0000	21
	95 n-Butylbenzene	91	11.097	11.097	(1.034)	117137	20.0000	21
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	63451	20.0000	22
	97 Hexachloroethane	117	11.358	11.361	(1.059)	23593	20.0000	20
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	11059	20.0000	22
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.173)	35769	20.0000	19
	100 Hexachlorobutadiene	225	12.727	12.730	(1.186)	30420	20.0000	22
	101 Naphthalene	128	12.805	12.801	(1.194)	70498	20.0000	19
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.212)	35983	20.0000	21

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\V10.I\140623.B\V8D5645.d
Date : 23-JUN-2014 10:29
Client ID: VSTD02010W
Instrument: V10.i
Sample Info: 5ML,VSTD02010W,VSTD02010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5646.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5646.d
Lab Smp Id: VSTD00510W Client Smp ID: VSTD00510W
Inj Date : 23-JUN-2014 10:58
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00510W,VSTD00510W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 10:58 Cal File: V8D5646.d
Als bottle: 60 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	1.586	1.586	(0.303)	11838	5.00000	4.7
2	Freon114	85	1.705	1.705	(0.326)	9504	5.00000	4.7
3	Chloromethane	50	1.757	1.753	(0.336)	18226	5.00000	5.4
4	Vinyl Chloride	62	1.856	1.853	(0.355)	13414	5.00000	4.7(TQ)
5	Bromomethane	94	2.139	2.142	(0.409)	3687	5.00000	4.7
6	Chloroethane	64	2.226	2.229	(0.425)	8462	5.00000	5.1(M)M3 AM 06/26
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	23626	5.00000	4.8
126	Ethanol	46	2.567	2.570	(0.490)	9723	500.000	540(A)
8	Ether	59	2.667	2.667	(0.509)	12368	5.00000	4.9
9	Acrolein	56	2.773	2.769	(0.530)	16676	25.0000	24
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	8444	5.00000	4.4
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	12815	5.00000	4.0
12	Acetone	58	2.882	2.885	(0.550)	2588	5.00000	5.1(M)M7 AM 06/26
13	Iodomethane	142	2.982	2.985	(0.570)	3573	5.00000	3.5(Q)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	34021	5.00000	3.7
15	Acetonitrile	41	3.136	3.136	(0.599)	33059	50.0000	51
16	Allyl Chloride	39	3.136	3.139	(0.599)	26847	5.00000	5.4
17	Methyl Acetate	43	3.149	3.146	(0.601)	19300	5.00000	5.0
18	Methylene Chloride	84	3.226	3.232	(0.616)	9222	5.00000	5.2
19	tert-Butanol	59	3.297	3.297	(0.630)	4257	10.0000	10
20	Acrylonitrile	53	3.422	3.422	(0.654)	7902	5.00000	5.3
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	9032	5.00000	5.1
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	32808	5.00000	4.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	23 1,1-Dichloroethane	63	3.782	3.785	(0.722)	23796	5.00000	5.0	
	24 Vinyl acetate	43	3.821	3.818	(0.730)	59689	5.00000	4.7	
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	60489	5.00000	4.9	
	26 2-Chloro-1,3-Butadiene	53	3.859	3.863	(0.737)	25963	5.00000	4.3	
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	42844	5.00000	4.8	
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	20600	5.00000	4.6	
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	8668	5.00000	4.9	
	30 2-Butanone	72	4.274	4.265	(0.816)	1117	5.00000	4.4(Q)	
	32 Propionitrile	54	4.310	4.303	(0.823)	25068	50.0000	48	
	33 Methacrylonitrile	41	4.438	4.435	(0.848)	21248	10.0000	8.8	
	34 Bromochloromethane	128	4.458	4.454	(0.851)	4526	5.00000	5.5	
	31 Tetrahydrofuran	72	4.506	4.499	(0.861)	2150	10.0000	9.2	
	35 Chloroform	83	4.509	4.509	(0.861)	22314	5.00000	4.8	
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	78538	50.0000	52	
	37 1,1,1-Trichloroethane	97	4.689	4.686	(0.896)	22977	5.00000	4.7	
	38 Cyclohexane	56	4.744	4.740	(0.906)	21857	5.00000	4.5	
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	3942	5.00000	4.8	
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	20167	5.00000	4.8	
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	18961	100.000	100	
$	42 1,2-Dichloroethane-d4	102	4.949	4.943	(0.945)	11636	50.0000	52	
	43 Benzene	78	5.007	5.004	(0.956)	31939	5.00000	5.1	
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	29253	5.00000	5.1	
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	25676	5.00000	4.9	
M	50 1,2-Dichloroethene (Total)	96				17700	10.0000	10	
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	171455	50.0000		
	47 Trichloroethene	130	5.567	5.564	(1.063)	8786	5.00000	4.7	
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	11705	5.00000	4.5	
	49 1,2-Dichloropropane	63	5.773	5.766	(1.103)	10095	5.00000	4.7	
	51 Methyl Methacrylate	69	5.856	5.850	(1.119)	6391	5.00000	4.4	
	52 Dibromomethane	93	5.882	5.882	(1.123)	7335	5.00000	5.0	
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	1911	100.000	89	
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	16665	5.00000	4.8	
	55 2-Chloroethyl vinyl ether	63	6.538	6.454	(1.249)	48	5.00000	5.4(TQM)M6 AM 06/26	
	56 cis-1,3-Dichloropropene	75	6.448	6.445	(1.232)	12594	5.00000	4.6	
	57 4-Methyl-2-pentanone	43	6.589	6.583	(1.259)	16658	5.00000	4.5	
$	58 Toluene-d8	98	6.718	6.718	(0.817)	234953	50.0000	50	
	59 Toluene	91	6.785	6.782	(1.296)	32776	5.00000	4.8	
	60 trans-1,3-Dichloropropene	75	6.998	6.988	(1.337)	13393	5.00000	4.9	
	61 Ethyl Methacrylate	69	7.072	7.068	(1.351)	7353	5.00000	4.5	
	62 1,1,2-Trichloroethane	97	7.181	7.174	(1.372)	7843	5.00000	5.0	
	63 Tetrachloroethene	164	7.351	7.348	(0.894)	7893	5.00000	4.7	
	64 1,3-Dichloropropane	76	7.361	7.354	(0.895)	13486	5.00000	5.0	
	65 2-Hexanone	43	7.445	7.432	(0.905)	12469	5.00000	4.5	
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	10205	5.00000	4.6(T)	
	67 1,2-Dibromoethane	107	7.731	7.731	(0.940)	8374	5.00000	4.9	
	69 1-Chlorohexane	91	8.223	8.216	(1.000)	9994	5.00000	4.4(Q)	
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	239213	50.0000		
	70 Chlorobenzene	112	8.258	8.255	(1.004)	21824	5.00000	5.0	
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	9866	5.00000	4.9	
	72 Ethylbenzene	106	8.371	8.367	(1.018)	10059	5.00000	4.0	
	73 m,p-Xylene	106	8.502	8.499	(1.034)	25057	10.0000	9.3	
	74 o-Xylene	106	8.949	8.943	(1.088)	11799	5.00000	4.7	
	75 Styrene	104	8.962	8.959	(1.090)	16572	5.00000	4.0	
	76 Bromoform	173	9.161	9.161	(1.114)	6287	5.00000	4.5	

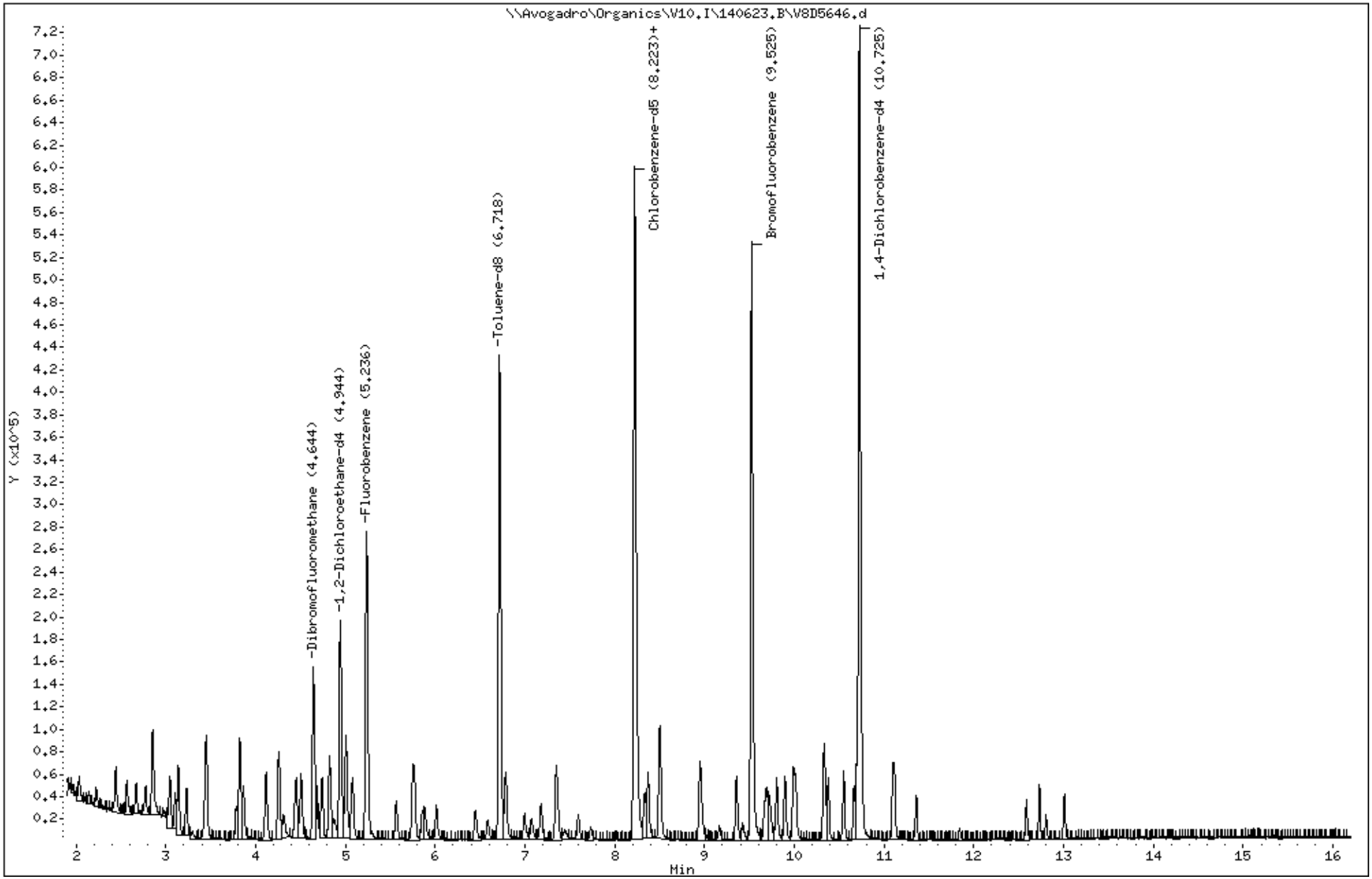
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Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.361	9.354	(1.138)	32113	5.00000	4.0
	78 trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	2089	5.00000	3.9
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	162446	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.902)	11007	5.00000	5.3
	81 Bromobenzene	156	9.695	9.692	(0.904)	9145	5.00000	5.0
	82 1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	13648	5.00000	5.0(Q)
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	7643	5.00000	4.7
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	8048	5.00000	5.2
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	27740	5.00000	4.4
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	7868	5.00000	4.9
M	94 Xylene (Total)	106				36856	15.0000	14
	87 tert-Butylbenzene	119	10.325	10.329	(0.963)	27266	5.00000	4.3
	88 1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	27918	5.00000	4.8
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	33306	5.00000	4.8
	90 1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	15407	5.00000	4.9
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	27894	5.00000	4.6
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	134943	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	17587	5.00000	5.2
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	24885	5.00000	3.6
	96 1,2-Dichlorobenzene	146	11.116	11.113	(1.037)	15123	5.00000	5.0
	97 Hexachloroethane	117	11.361	11.361	(1.059)	5855	5.00000	3.9
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	2341	5.00000	4.6
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	8316	5.00000	4.0
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	6982	5.00000	5.0
	101 Naphthalene	128	12.804	12.801	(1.194)	13217	5.00000	4.7
	102 1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	8805	5.00000	5.1

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.
M - Compound response manually integrated.

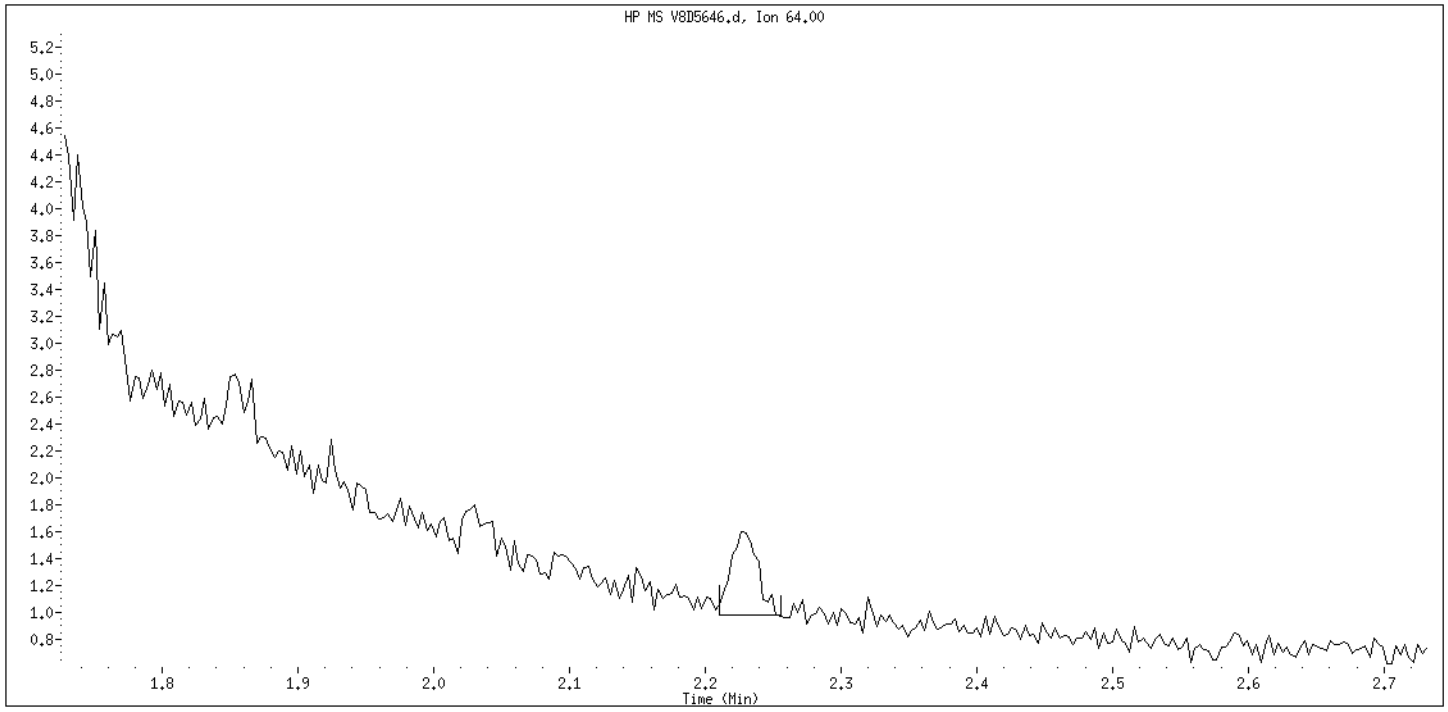
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Date : 23-JUN-2014 10:58
Client ID: VSTD00510W
Instrument: V10.i
Sample Info: 5ML,VSTD00510W,VSTD00510W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



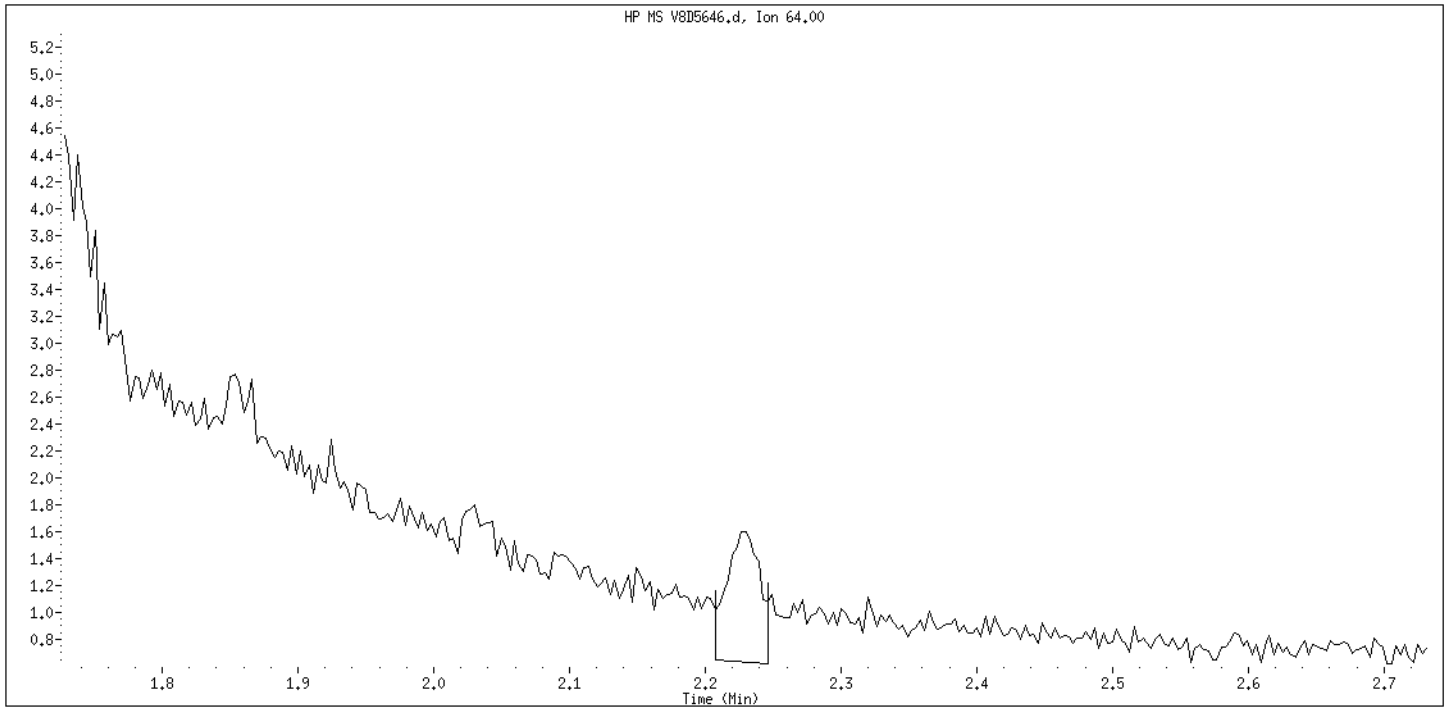
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Lab ID: VSTD00510W Client ID: VSTD00510W
Inj Date: 23-JUN-2014 10:58 Operator: WL SRC: WL

Manual Integration Chloroethane Ret Time: 2.227 min, Range: 2.211 to 2.256 min Response: 8462



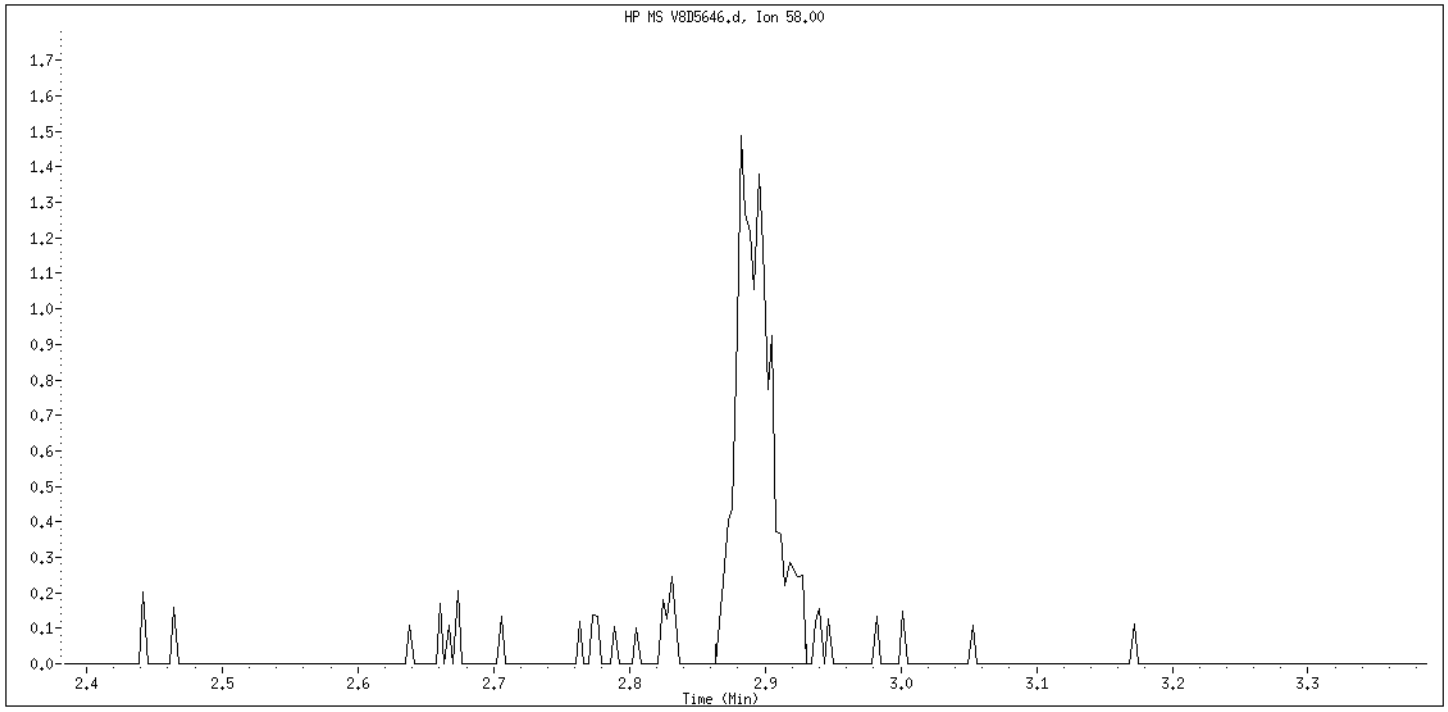
Original Integration Chloroethane Ret Time: 2.227 min, Range: 2.207 to 2.246 min Response: 17090



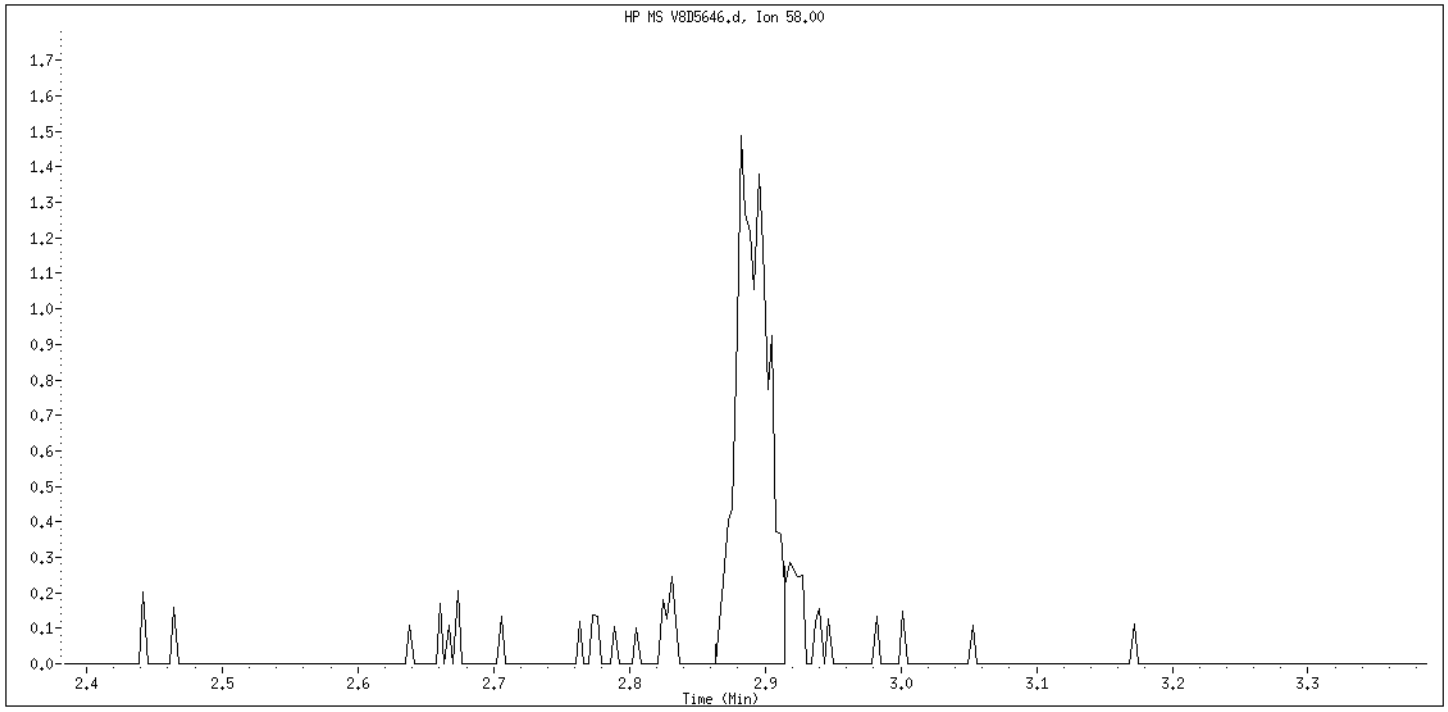
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Lab ID: VSTD00510W Client ID: VSTD00510W
Inj Date: 23-JUN-2014 10:58 Operator: WL SRC: WL

Manual Integration Acetone Ret Time: 2.883 min, Range: 2.863 to 2.931 min Response: 2588



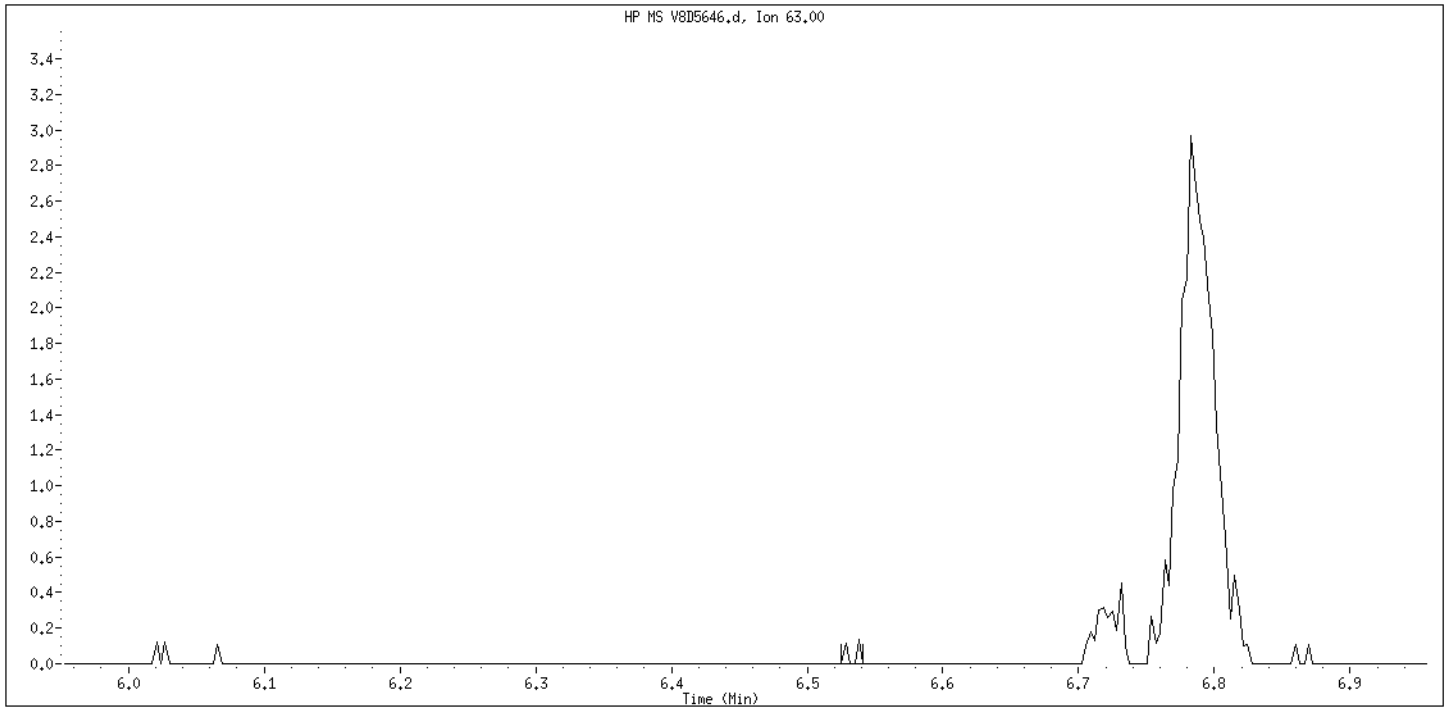
Original Integration Acetone Ret Time: 2.883 min, Range: 2.863 to 2.915 min Response: 2386



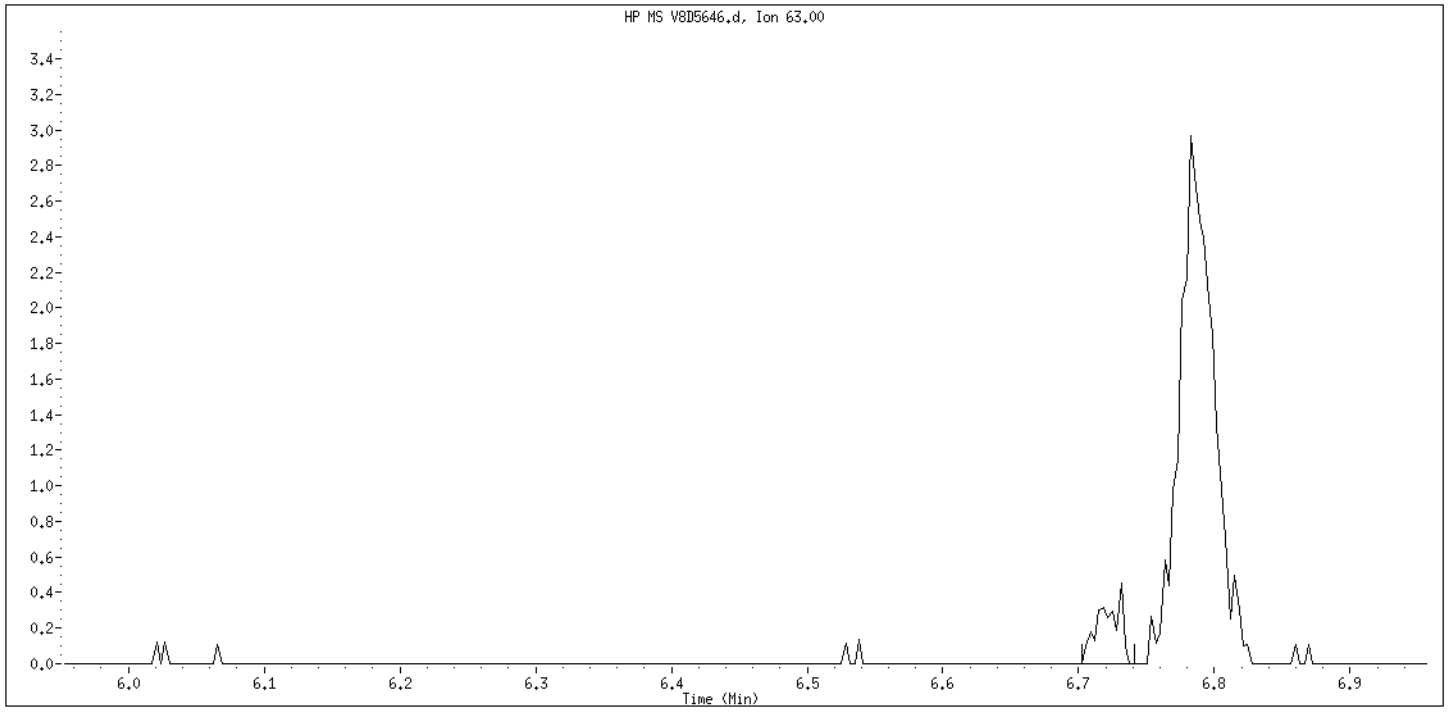
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Lab ID: VSTD00510W Client ID: VSTD00510W
Inj Date: 23-JUN-2014 10:58 Operator: WL SRC: WL

Manual Integration 2-Chloroethyl vinyl ether Ret Time: 6.538 min, Range: 6.525 to 6.542 min Response: 48



Original Integration 2-Chloroethyl vinyl ether Ret Time: 6.731 min, Range: 6.702 to 6.741 min Response: 450



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5648.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5648.d
Lab Smp Id: VSTD00110W Client Smp ID: VSTD00110W
Inj Date : 23-JUN-2014 11:53
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00110W,VSTD00110W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 11:53 Cal File: V8D5648.d
Als bottle: 62 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	1.583	1.586	(0.302)	2241	1.00000	0.96
2	Freon114	85	1.712	1.705	(0.327)	1982	1.00000	1.0
3	Chloromethane	50	1.750	1.753	(0.334)	2725	1.00000	0.88(M)M3 AM 06/26
4	Vinyl Chloride	62	1.856	1.853	(0.355)	2767	1.00000	1.0(TQ)
5	Bromomethane	94	2.142	2.142	(0.409)	710	1.00000	0.98(QM)M3 AM 06/26
6	Chloroethane	64	2.229	2.229	(0.426)	1225	1.00000	0.80(TQM)M3 AM 06/26
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	4529	1.00000	0.98
126	Ethanol	46	2.567	2.570	(0.490)	1631	500.000	97(Q)
8	Ether	59	2.676	2.667	(0.511)	2485	1.00000	1.1(Q)
9	Acrolein	56	2.776	2.769	(0.530)	2904	5.00000	4.4(Q)
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	1953	1.00000	1.1
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	3526	1.00000	0.24(a)
12	Acetone	58	2.908	2.885	(0.555)	452	1.00000	0.97(Q)
13	Iodomethane	142	2.991	2.985	(0.571)	814	1.00000	0.86
14	Carbon Disulfide	76	3.046	3.046	(0.582)	11310	1.00000	0.23(a)
15	Acetonitrile	41	3.136	3.136	(0.599)	6795	1.00000	11
16	Allyl Chloride	39	3.133	3.139	(0.598)	6589	1.00000	1.4(Q)
17	Methyl Acetate	43	3.146	3.146	(0.601)	4059	1.00000	1.1
18	Methylene Chloride	84	3.229	3.232	(0.617)	1772	1.00000	1.1
19	tert-Butanol	59	3.300	3.297	(0.630)	761	1.00000	2.0
20	Acrylonitrile	53	3.425	3.422	(0.654)	1290	1.00000	0.93
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	1682	1.00000	1.0
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	6030	1.00000	0.97

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.792	3.785	(0.724)	4311	1.00000	0.97
	24 Vinyl acetate	43	3.827	3.818	(0.731)	9408	1.00000	0.80(T)
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	10607	1.00000	0.93
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	4407	1.00000	0.78
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	7759	1.00000	0.94
	29 2,2-Dichloropropane	77	4.261	4.258	(0.814)	3615	1.00000	0.87
	28 cis-1,2-Dichloroethene	96	4.261	4.255	(0.814)	1515	1.00000	0.92(Q)
	30 2-Butanone	72	4.502	4.265	(0.860)	118	1.00000	0.50(TQ)
	32 Propionitrile	54	4.319	4.303	(0.825)	3471	1.00000	7.2
	33 Methacrylonitrile	41	4.441	4.435	(0.848)	3166	1.00000	1.4
	34 Bromochloromethane	128	4.457	4.454	(0.851)	890	1.00000	1.2
	31 Tetrahydrofuran	72	4.502	4.499	(0.860)	140	1.00000	0.65
	35 Chloroform	83	4.512	4.509	(0.862)	4428	1.00000	1.0
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	73405	1.00000	53
	37 1,1,1-Trichloroethane	97	4.679	4.686	(0.894)	4369	1.00000	0.97
	38 Cyclohexane	56	4.740	4.740	(0.905)	3994	1.00000	0.90
	39 1,1-Dichloropropene	110	4.830	4.821	(0.923)	601	1.00000	0.80(Q)
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	3700	1.00000	0.95
	41 Isobutyl Alcohol	43	5.072	5.078	(0.969)	3352	1.00000	19
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	11312	1.00000	55
	43 Benzene	78	5.001	5.004	(0.955)	5609	1.00000	0.96
	44 1,2-Dichloroethane	62	5.014	5.007	(0.958)	5549	1.00000	1.0
	45 tert-Amyl methyl ether	73	5.084	5.081	(0.971)	4805	1.00000	0.98
M	50 1,2-Dichloroethene (Total)	96				3197	2.00000	1.9
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	158815	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	1914	1.00000	1.1
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	2014	1.00000	0.84(Q)
	49 1,2-Dichloropropane	63	5.773	5.766	(1.103)	1866	1.00000	0.94
	51 Methyl Methacrylate	69	5.863	5.850	(1.120)	958	1.00000	0.71(Q)
	52 Dibromomethane	93	5.888	5.882	(1.125)	1458	1.00000	1.1
	54 Bromodichloromethane	83	6.017	6.014	(1.149)	3170	1.00000	0.98
	55 2-Chloroethyl vinyl ether	63	6.702	6.454	(1.280)	43	1.00000	5.3(TQ)
	56 cis-1,3-Dichloropropene	75	6.457	6.445	(1.233)	1934	1.00000	0.76
	57 4-Methyl-2-pentanone	43	6.586	6.583	(1.258)	2551	1.00000	0.75(TQ)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	224508	1.00000	49
	59 Toluene	91	6.782	6.782	(1.295)	6063	1.00000	0.97
	60 trans-1,3-Dichloropropene	75	7.001	6.988	(1.337)	1885	1.00000	1.4
	61 Ethyl Methacrylate	69	6.721	7.068	(1.284)	769	1.00000	0.51(TQ)
	62 1,1,2-Trichloroethane	97	7.181	7.174	(1.372)	1477	1.00000	1.0
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	1481	1.00000	0.91
	64 1,3-Dichloropropane	76	7.364	7.354	(0.896)	2160	1.00000	0.82
	65 2-Hexanone	43	7.441	7.432	(0.905)	1703	1.00000	0.64(TQ)
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	1899	1.00000	0.89(T)
	67 1,2-Dibromoethane	107	7.734	7.731	(0.941)	1477	1.00000	0.89(T)
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	2355	1.00000	1.1(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	230685	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	4024	1.00000	0.96(Q)
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	1830	1.00000	0.94(Q)
	72 Ethylbenzene	106	8.370	8.367	(1.018)	1448	1.00000	0.17(aQ)
	73 m,p-Xylene	106	8.502	8.499	(1.034)	4434	2.00000	1.7
	74 o-Xylene	106	8.949	8.943	(1.088)	1934	1.00000	0.79
	75 Styrene	104	8.962	8.959	(1.090)	2885	1.00000	0.72(Q)
	76 Bromoform	173	9.161	9.161	(1.114)	1130	1.00000	0.84(T)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	5043	1.00000	0.57

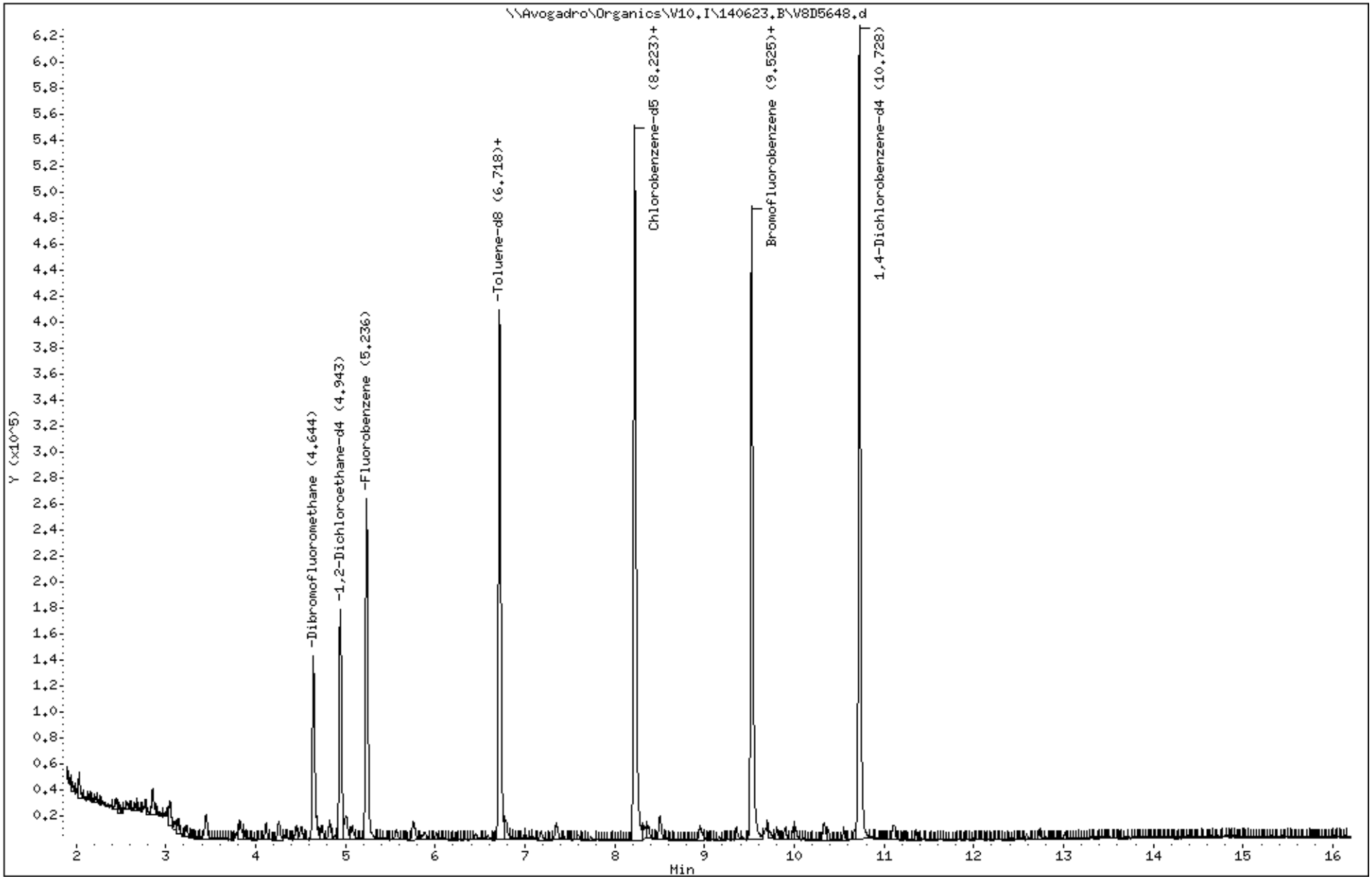
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Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 trans-1,4-Dichloro-2-butene	75	9.522	9.425	(1.158)	100666	1.00000	200(TQ)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	149571	1.00000	48
	80 1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	2076	1.00000	1.1(T)
	81 Bromobenzene	156	9.702	9.692	(0.905)	1641	1.00000	0.97
	82 1,2,3-Trichloropropane	75	9.727	9.721	(0.907)	2196	1.00000	0.87
	83 n-Propylbenzene	120	9.805	9.801	(0.914)	1372	1.00000	0.92(Q)
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	1342	1.00000	0.94(Q)
	85 1,3,5-Trimethylbenzene	105	9.985	9.988	(0.931)	4742	1.00000	0.82
	86 4-Chlorotoluene	126	10.014	10.014	(0.934)	1453	1.00000	0.99(Q)
M	94 Xylene (Total)	106				6368	3.00000	2.5
	87 tert-Butylbenzene	119	10.322	10.329	(0.963)	4972	1.00000	0.85
	88 1,2,4-Trimethylbenzene	105	10.383	10.377	(0.968)	4007	1.00000	0.74
	89 sec-Butylbenzene	105	10.550	10.550	(0.984)	5068	1.00000	0.78
	90 1,3-Dichlorobenzene	146	10.676	10.660	(0.996)	2880	1.00000	0.99
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	4238	1.00000	0.76
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	124697	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	3525	1.00000	1.1(Q)
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	3472	1.00000	(a)
	96 1,2-Dichlorobenzene	146	11.116	11.113	(1.037)	2553	1.00000	0.92
	97 Hexachloroethane	117	11.361	11.361	(1.059)	743	1.00000	(aQ)
	98 1,2-Dibromo-3-chloropropane	75	11.846	11.840	(1.105)	293	1.00000	0.72(TQ)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	1127	1.00000	0.26(a)
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	1203	1.00000	0.94(Q)
	101 Naphthalene	128	12.814	12.801	(1.195)	1412	1.00000	1.8
	102 1,2,3-Trichlorobenzene	180	13.013	13.007	(1.213)	1274	1.00000	0.79

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.
M - Compound response manually integrated.

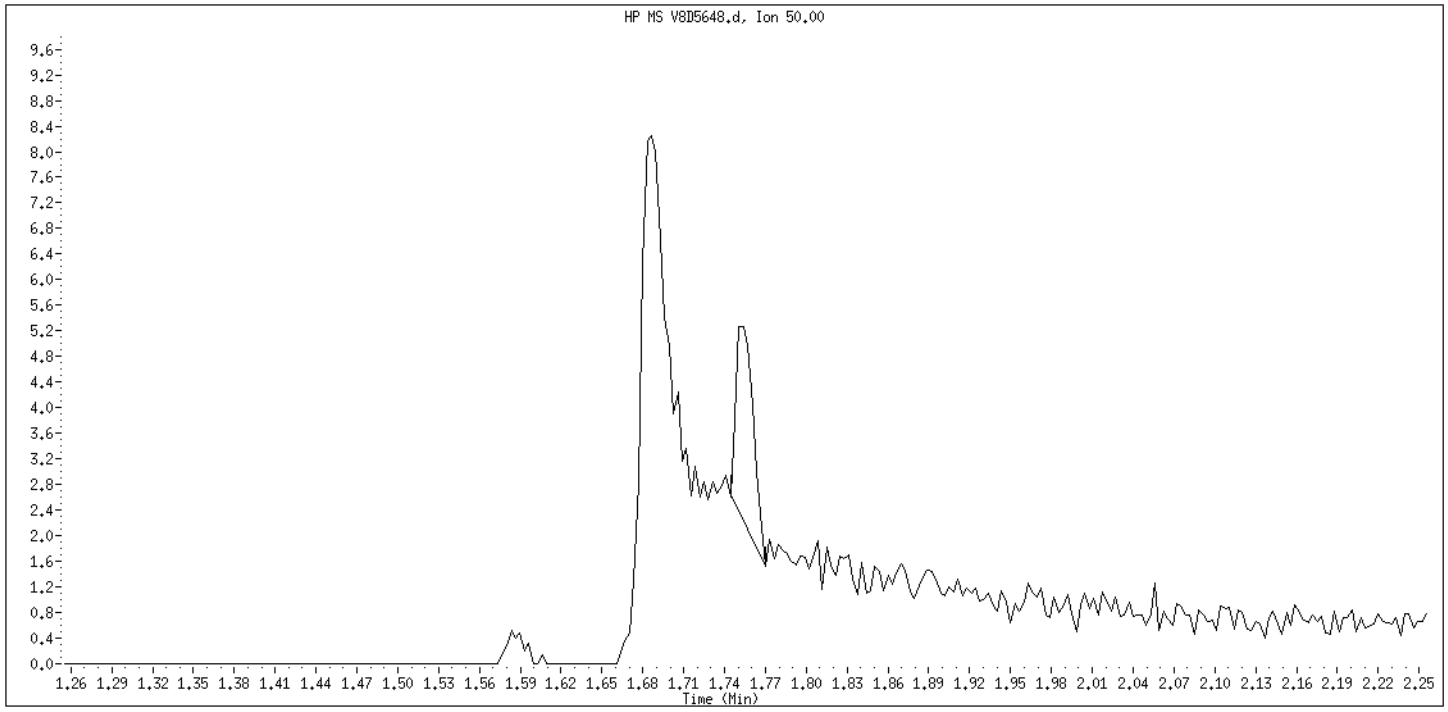
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Date : 23-JUN-2014 11:53
Client ID: VSTD00110W
Instrument: V10.i
Sample Info: 5ML,VSTD00110W,VSTD00110W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



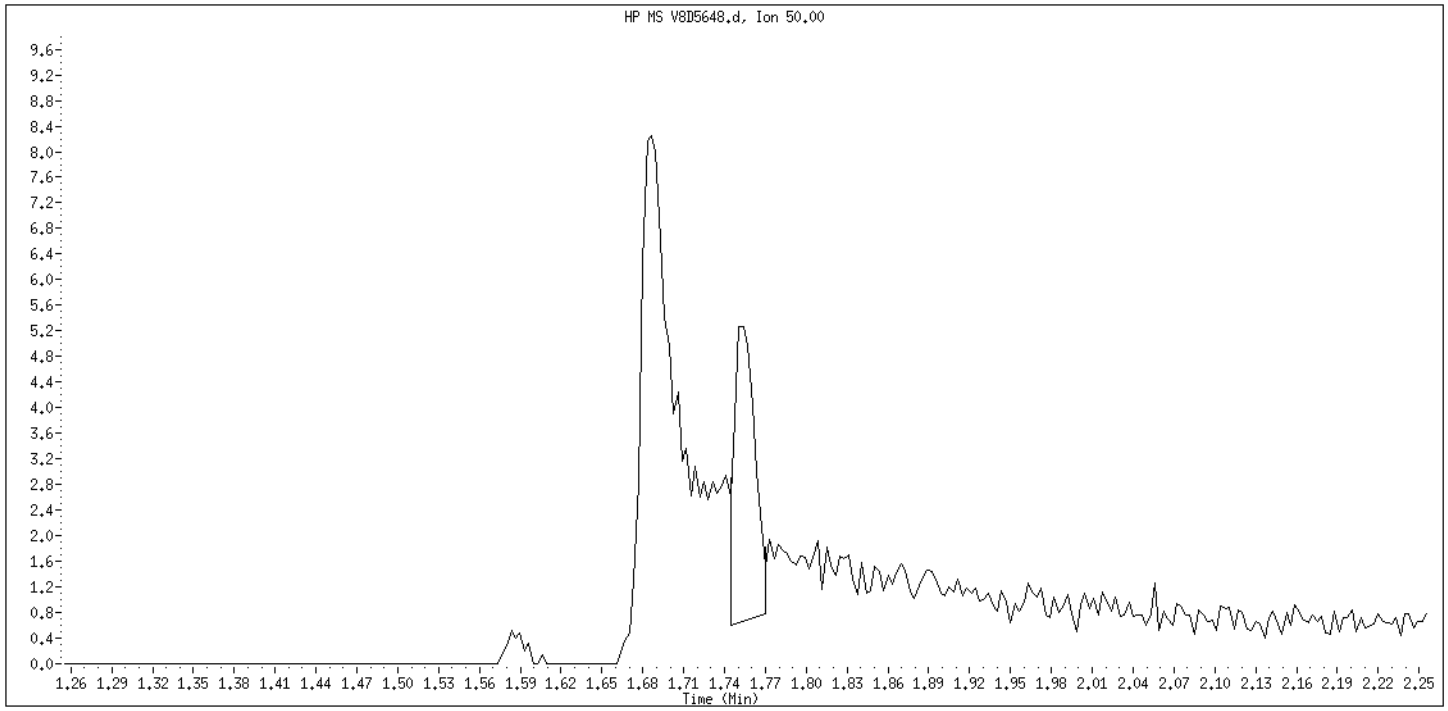
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Lab ID: VSTD00110W Client ID: VSTD00110W
Inj Date: 23-JUN-2014 11:53 Operator: WL SRC: WL

Manual Integration Chloromethane Ret Time: 1.751 min, Range: 1.744 to 1.770 min Response: 2725



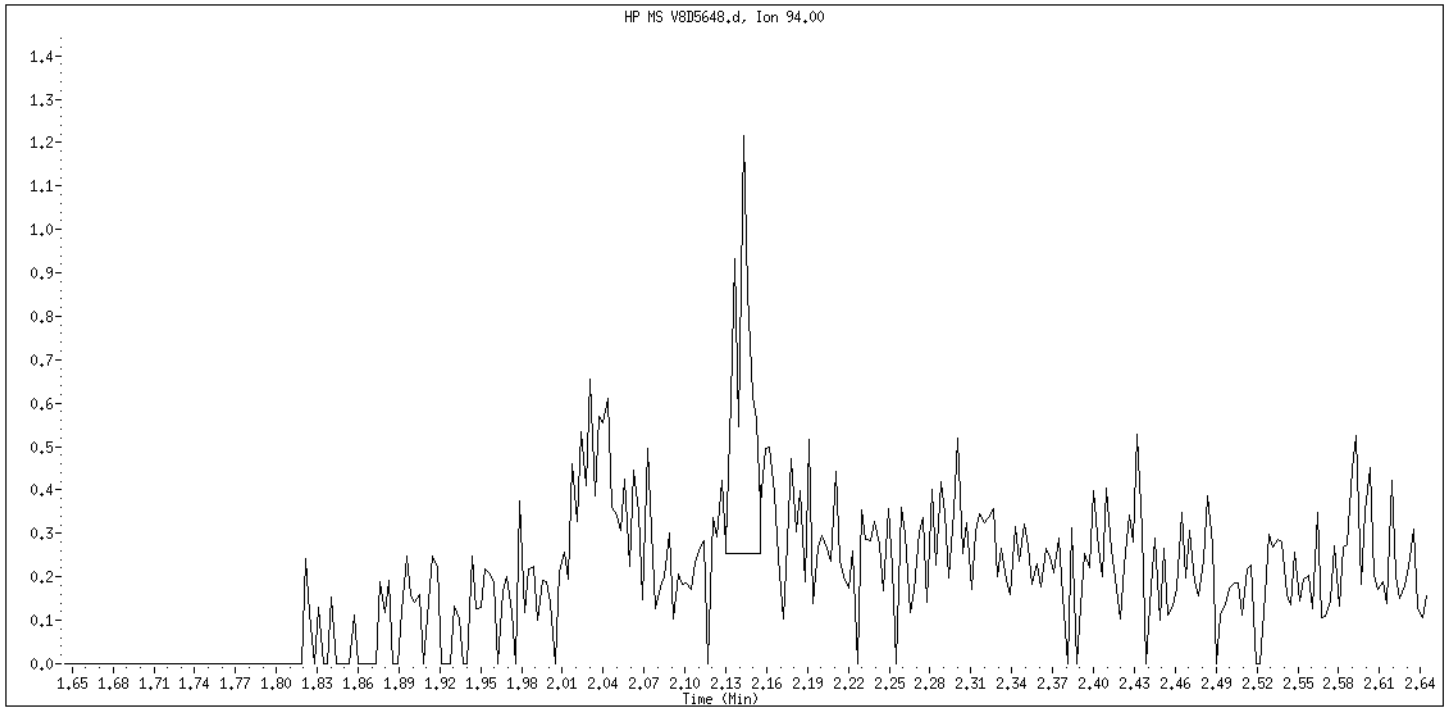
Original Integration Chloromethane Ret Time: 1.751 min, Range: 1.744 to 1.770 min Response: 5144



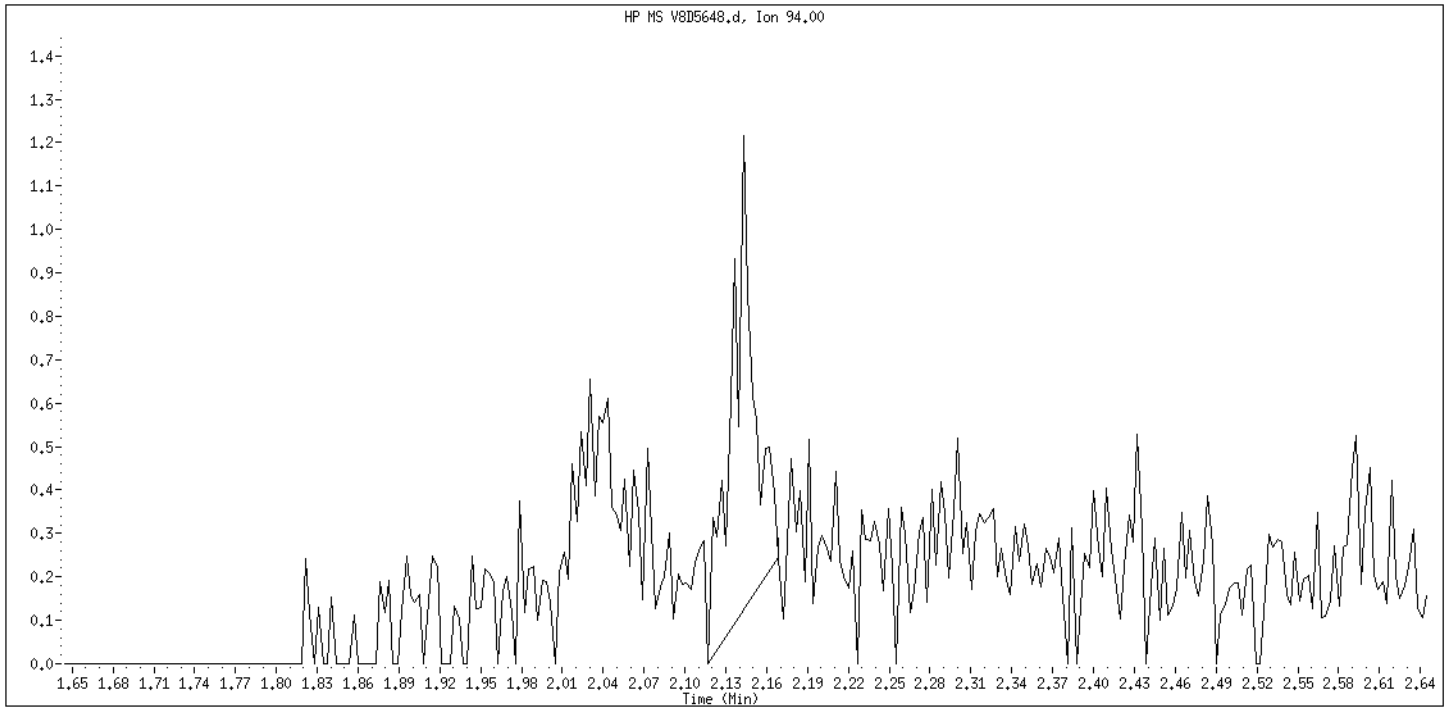
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5648.d

Lab ID: VSTD00110W Client ID: VSTD00110W
Inj Date: 23-JUN-2014 11:53 Operator: WL SRC: WL

Manual Integration Bromomethane Ret Time: 2.143 min, Range: 2.130 to 2.156 min Response: 710



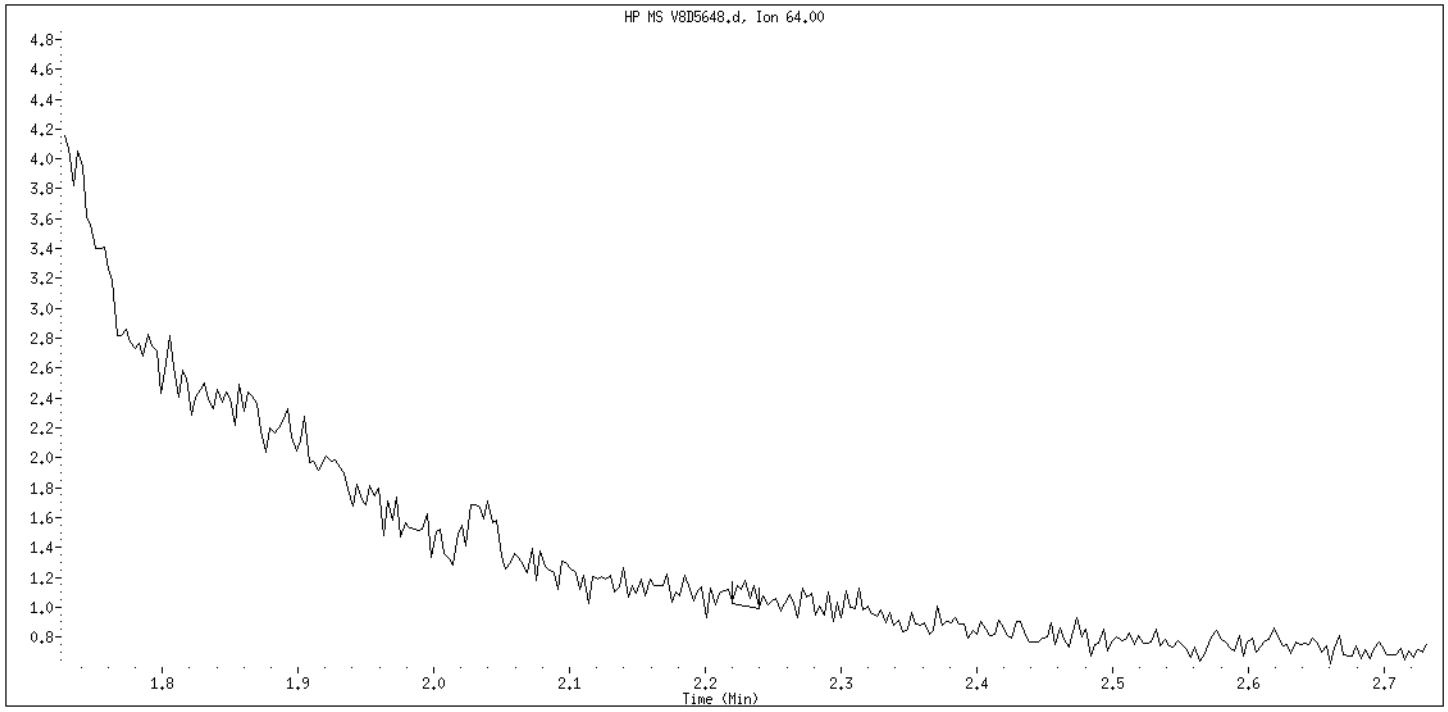
Original Integration Bromomethane Ret Time: 2.143 min, Range: 2.117 to 2.169 min Response: 1266



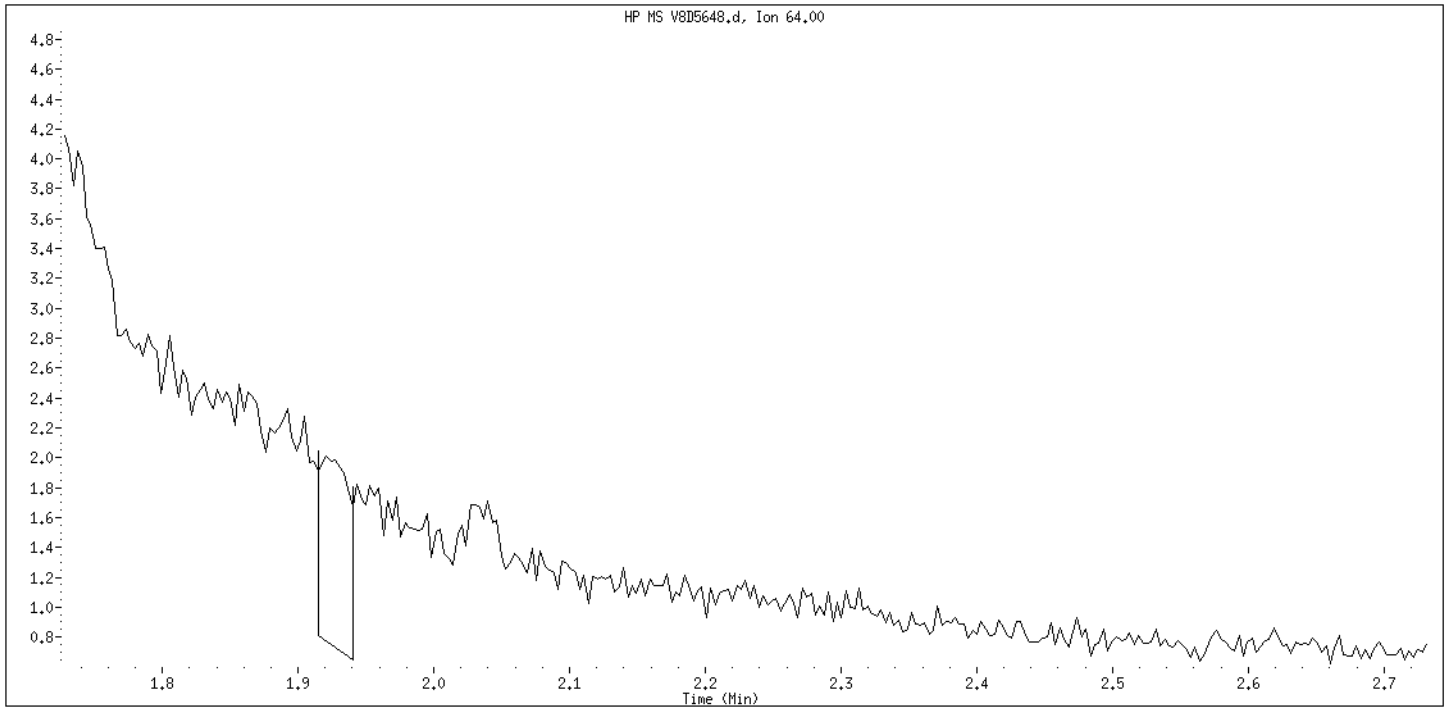
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5648.d

Lab ID: VSTD00110W Client ID: VSTD00110W
Inj Date: 23-JUN-2014 11:53 Operator: WL SRC: WL

Manual Integration Chloroethane Ret Time: 2.230 min, Range: 2.220 to 2.239 min Response: 1225



Original Integration Chloroethane Ret Time: 1.921 min, Range: 1.915 to 1.940 min Response: 20418



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5649.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5649.d
Lab Smp Id: VSTD20010W Client Smp ID: VSTD20010W
Inj Date : 23-JUN-2014 12:21
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD20010W,VSTD20010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:21 Cal File: V8D5649.d
Als bottle: 63 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	459148	200.000	190
2	Freon114	85	1.705	1.705	(0.326)	359269	200.000	190
3	Chloromethane	50	1.753	1.753	(0.335)	518655	200.000	160
4	Vinyl Chloride	62	1.853	1.853	(0.354)	507685	200.000	190(Q)
5	Bromomethane	94	2.136	2.142	(0.408)	144407	200.000	190
6	Chloroethane	64	2.226	2.229	(0.425)	298127	200.000	190
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	920767	200.000	200
126	Ethanol	46	2.570	2.570	(0.491)	302313	20000.0	18000(A)
8	Ether	59	2.666	2.667	(0.509)	436268	200.000	180
9	Acrolein	56	2.766	2.769	(0.528)	659551	1000.00	990
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	355232	200.000	190
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	459904	200.000	200
12	Acetone	58	2.888	2.885	(0.552)	85660	200.000	180
13	Iodomethane	142	2.982	2.985	(0.570)	246816	200.000	260(A)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	1211493	200.000	200
15	Acetonitrile	41	3.136	3.136	(0.599)	1032386	2000.00	1700(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	852588	200.000	180
17	Methyl Acetate	43	3.142	3.146	(0.600)	654254	200.000	180
18	Methylene Chloride	84	3.229	3.232	(0.617)	306066	200.000	180
19	tert-Butanol	59	3.300	3.297	(0.630)	149818	400.000	380(A)
20	Acrylonitrile	53	3.419	3.422	(0.653)	265717	200.000	190
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	322481	200.000	190
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	1233835	200.000	200

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	878100	200.000	190
	24 Vinyl acetate	43	3.814	3.818	(0.729)	2471001	200.000	210(A)
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	2277316	200.000	200
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	1197848	200.000	210(A)
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1613534	200.000	190
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	879799	200.000	210(A)
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	329128	200.000	200
	30 2-Butanone	72	4.258	4.265	(0.813)	50207	200.000	210(AQ)
	32 Propionitrile	54	4.303	4.303	(0.822)	936816	2000.00	1900(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	926908	400.000	410(A)
	34 Bromochloromethane	128	4.454	4.454	(0.851)	137961	200.000	180
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	84739	400.000	380(A)
	35 Chloroform	83	4.509	4.509	(0.861)	836312	200.000	190
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	70801	50.0000	50
	37 1,1,1-Trichloroethane	97	4.682	4.686	(0.894)	918155	200.000	200
	38 Cyclohexane	56	4.740	4.740	(0.905)	937861	200.000	210(A)
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	162147	200.000	210(A)
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	804935	200.000	200
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	665714	4000.00	3800(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	10412	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	1182153	200.000	200
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	1041130	200.000	190
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	960934	200.000	190
M	50 1,2-Dichloroethene (Total)	96				651609	400.000	390
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	161794	50.0000	
	47 Trichloroethene	130	5.563	5.564	(1.063)	345941	200.000	200
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	519889	200.000	210(A)
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	403826	200.000	200
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	280861	200.000	200(A)
	52 Dibromomethane	93	5.882	5.882	(1.123)	258844	200.000	190
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	77547	4000.00	3800(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	672842	200.000	200
	55 2-Chloroethyl vinyl ether	63	6.444	6.454	(1.231)	4926	200.000	200(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	566667	200.000	220(A)
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	687996	200.000	200
$	58 Toluene-d8	98	6.718	6.718	(0.817)	237201	50.0000	50
	59 Toluene	91	6.785	6.782	(1.296)	1281226	200.000	200
	60 trans-1,3-Dichloropropene	75	6.985	6.988	(1.334)	607216	200.000	200
	61 Ethyl Methacrylate	69	7.065	7.068	(1.349)	322376	200.000	210(A)
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	284089	200.000	190
	63 Tetrachloroethene	164	7.342	7.348	(0.893)	334090	200.000	200
	64 1,3-Dichloropropane	76	7.354	7.354	(0.894)	537719	200.000	200
	65 2-Hexanone	43	7.432	7.432	(0.904)	528028	200.000	190
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	445249	200.000	200
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	333266	200.000	190
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	454343	200.000	200(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	239856	50.0000	
	70 Chlorobenzene	112	8.251	8.255	(1.004)	829605	200.000	190
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	390056	200.000	190
	72 Ethylbenzene	106	8.367	8.367	(1.018)	450830	200.000	200
	73 m,p-Xylene	106	8.499	8.499	(1.034)	1127743	400.000	420(A)
	74 o-Xylene	106	8.943	8.943	(1.088)	531159	200.000	210(A)
	75 Styrene	104	8.959	8.959	(1.090)	852070	200.000	200(A)
	76 Bromoform	173	9.161	9.161	(1.114)	291365	200.000	210(A)

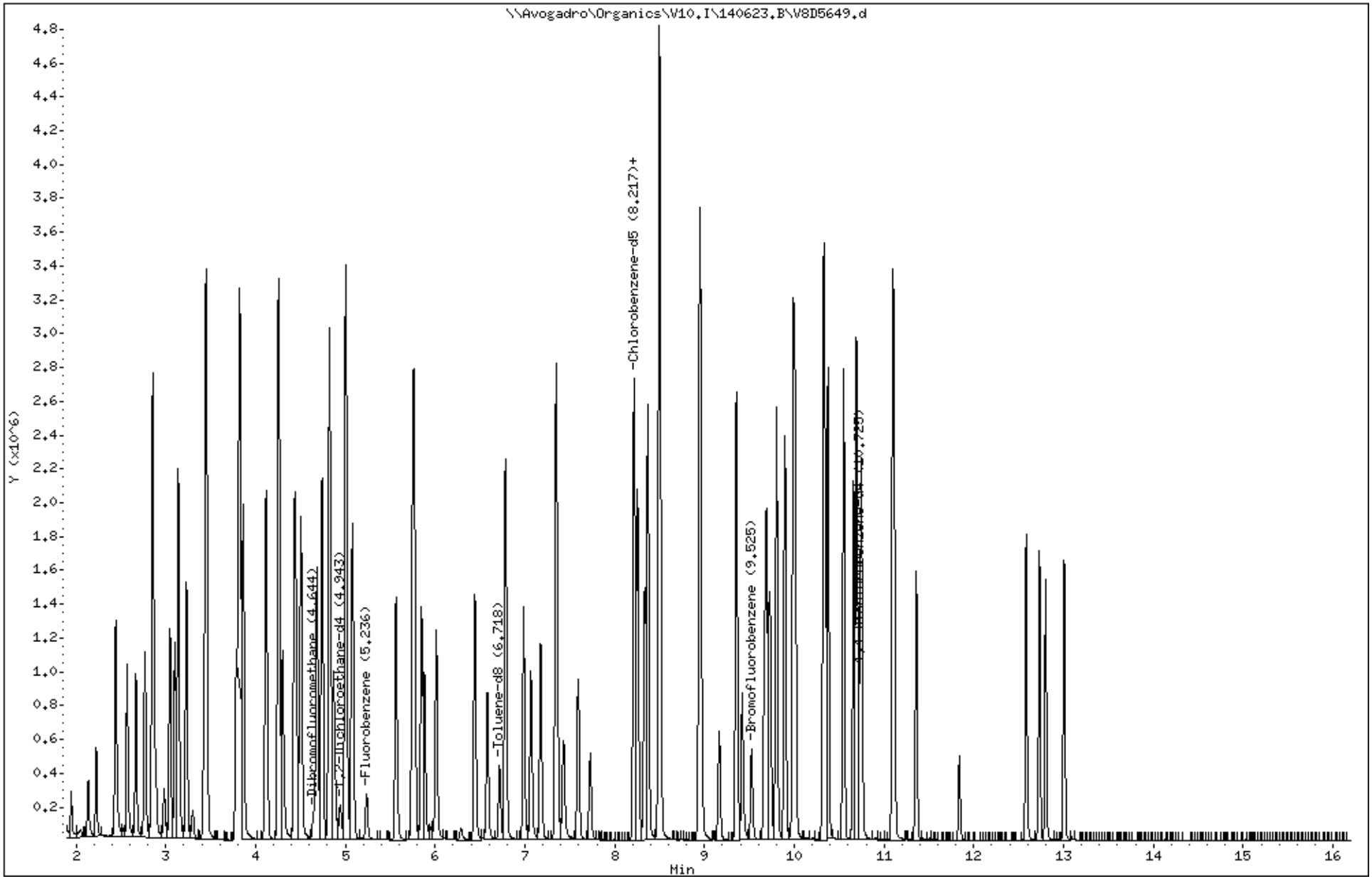
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5649.d
Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	1572657	200.000	200
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	114042	200.000	210(A)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	159210	50.0000	49
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.669	(0.901)	403915	200.000	180
	81 Bromobenzene	156	9.689	9.692	(0.903)	377001	200.000	190
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	567334	200.000	190
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	355261	200.000	200
	84 2-Chlorotoluene	126	9.898	9.895	(0.923)	324708	200.000	190
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	1373904	200.000	200
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	333283	200.000	190
M	94 Xylene (Total)	106				1658902	600.000	620
	87 tert-Butylbenzene	119	10.325	10.329	(0.963)	1443483	200.000	210(A)
	88 1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	1339289	200.000	210(A)
	89 sec-Butylbenzene	105	10.550	10.550	(0.984)	1586501	200.000	210(A)
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	659183	200.000	190
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	1373610	200.000	210(A)
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	148575	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	665861	200.000	180
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	1236705	200.000	200
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	626911	200.000	190
	97 Hexachloroethane	117	11.361	11.361	(1.059)	253920	200.000	200
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	115299	200.000	200
	99 1,2,4-Trichlorobenzene	180	12.582	12.586	(1.173)	416398	200.000	200
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	271915	200.000	180
	101 Naphthalene	128	12.798	12.801	(1.193)	881765	200.000	200
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	381618	200.000	200

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\V10.I\140623.B\V8D5649.d
Date : 23-JUN-2014 12:21
Client ID: VSTD20010W
Instrument: V10.i
Sample Info: 5ML,VSTD20010W,VSTD20010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5650.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5650.d
Lab Smp Id: VSTD10010W Client Smp ID: VSTD10010W
Inj Date : 23-JUN-2014 12:48
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD10010W,VSTD10010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 64 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	250901	100.000	98
2	Freon114	85	1.705	1.705	(0.326)	203688	100.000	99
3	Chloromethane	50	1.753	1.753	(0.335)	321030	100.000	94
4	Vinyl Chloride	62	1.853	1.853	(0.354)	294460	100.000	100
5	Bromomethane	94	2.139	2.142	(0.409)	92121	100.000	120
6	Chloroethane	64	2.226	2.229	(0.425)	175561	100.000	100
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	484350	100.000	96
126	Ethanol	46	2.567	2.570	(0.490)	163376	10000.0	8900(A)
8	Ether	59	2.667	2.667	(0.509)	258683	100.000	100
9	Acrolein	56	2.769	2.769	(0.529)	343041	500.000	480
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	194547	100.000	99
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	243500	100.000	98
12	Acetone	58	2.888	2.885	(0.552)	37599	100.000	73
13	Iodomethane	142	2.985	2.985	(0.570)	146504	100.000	140
14	Carbon Disulfide	76	3.046	3.046	(0.582)	641120	100.000	98
15	Acetonitrile	41	3.139	3.136	(0.600)	623261	1000.00	940(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	465525	100.000	92
17	Methyl Acetate	43	3.146	3.146	(0.601)	342722	100.000	88
18	Methylene Chloride	84	3.229	3.232	(0.617)	178175	100.000	98
19	tert-Butanol	59	3.300	3.297	(0.630)	72972	200.000	170
20	Acrylonitrile	53	3.419	3.422	(0.653)	142230	100.000	94
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	172215	100.000	96
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	703789	100.000	100

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.782	3.785	(0.722)	485576	100.000	100
	24 Vinyl acetate	43	3.814	3.818	(0.729)	1362034	100.000	110
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1293836	100.000	100
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	628913	100.000	100
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	948217	100.000	100
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	450446	100.000	99
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	182956	100.000	100
	30 2-Butanone	72	4.255	4.265	(0.813)	23189	100.000	89
	32 Propionitrile	54	4.303	4.303	(0.822)	478535	1000.00	910(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	477420	200.000	200
	34 Bromochloromethane	128	4.454	4.454	(0.851)	79660	100.000	95
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	45114	200.000	190
	35 Chloroform	83	4.509	4.509	(0.861)	459435	100.000	98
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	75492	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	482804	100.000	98
	38 Cyclohexane	56	4.740	4.740	(0.905)	491173	100.000	100
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	85699	100.000	100
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	434245	100.000	100
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	378781	2000.00	2000(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	11826	50.0000	52
	43 Benzene	78	5.004	5.004	(0.956)	634276	100.000	99
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	583076	100.000	100
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	559811	100.000	100
M	50 1,2-Dichloroethene (Total)	96				355171	200.000	200
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	173958	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	181203	100.000	96
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	271172	100.000	100
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	225848	100.000	100
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	152753	100.000	100
	52 Dibromomethane	93	5.879	5.882	(1.123)	145794	100.000	98
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	40471	2000.00	1900(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	365069	100.000	100
	55 2-Chloroethyl vinyl ether	63	6.435	6.454	(1.229)	2713	100.000	100(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	312657	100.000	110
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	357362	100.000	96
$	58 Toluene-d8	98	6.715	6.718	(0.817)	246433	50.0000	49
	59 Toluene	91	6.782	6.782	(1.295)	684177	100.000	100
	60 trans-1,3-Dichloropropene	75	6.985	6.988	(1.334)	336069	100.000	100
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	177274	100.000	110
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	159380	100.000	100
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	173098	100.000	97
	64 1,3-Dichloropropane	76	7.355	7.354	(0.894)	299581	100.000	100
	65 2-Hexanone	43	7.432	7.432	(0.904)	259824	100.000	89
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	248814	100.000	110
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	183168	100.000	100
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	233000	100.000	96
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	253400	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	450908	100.000	98
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	209495	100.000	98
	72 Ethylbenzene	106	8.371	8.367	(1.018)	237600	100.000	99
	73 m,p-Xylene	106	8.499	8.499	(1.034)	581771	200.000	200
	74 o-Xylene	106	8.943	8.943	(1.088)	283002	100.000	100
	75 Styrene	104	8.956	8.959	(1.089)	460477	100.000	100
	76 Bromoform	173	9.165	9.161	(1.115)	154138	100.000	100

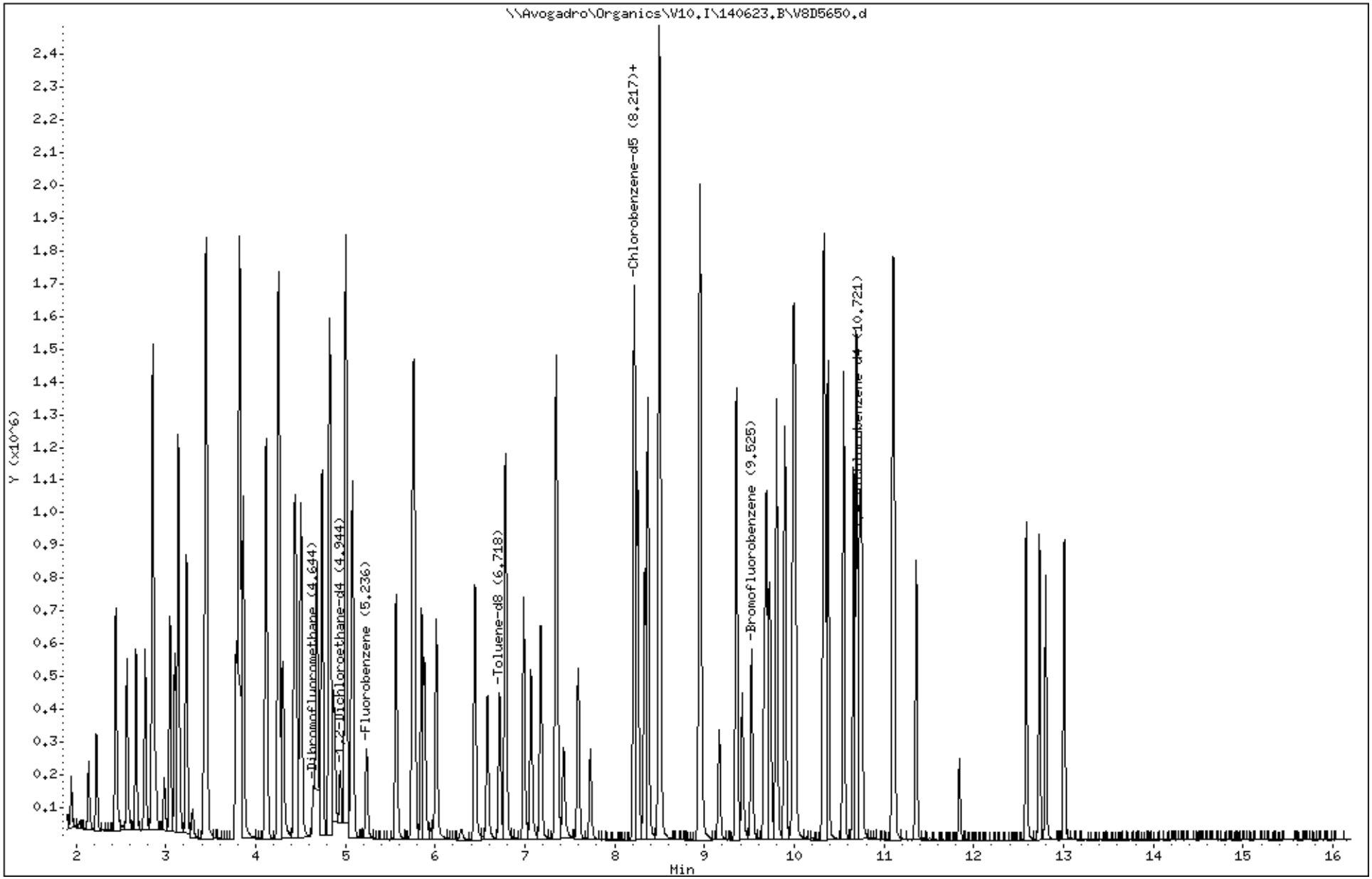
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5650.d
Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	814336	100.000	98
	78 trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	57928	100.000	100
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	173451	50.0000	51
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.669	(0.902)	215545	100.000	87
	81 Bromobenzene	156	9.692	9.692	(0.904)	206149	100.000	95
	82 1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	301033	100.000	93
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	182786	100.000	96
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	171694	100.000	94
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.932)	708476	100.000	95
	86 4-Chlorotoluene	126	10.010	10.014	(0.934)	177301	100.000	94
M	94 Xylene (Total)	106				864773	300.000	310
	87 tert-Butylbenzene	119	10.329	10.329	(0.963)	751548	100.000	100
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	705481	100.000	100
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	809917	100.000	98
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	349117	100.000	94
	91 4-Isopropyltoluene	119	10.695	10.695	(0.998)	708510	100.000	99
*	92 1,4-Dichlorobenzene-d4	152	10.721	10.724	(1.000)	159856	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	361989	100.000	90
	95 n-Butylbenzene	91	11.094	11.097	(1.035)	634973	100.000	95
	96 1,2-Dichlorobenzene	146	11.110	11.113	(1.036)	340996	100.000	96
	97 Hexachloroethane	117	11.358	11.361	(1.059)	132850	100.000	97
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	56163	100.000	92
	99 1,2,4-Trichlorobenzene	180	12.583	12.586	(1.174)	224150	100.000	100
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	146485	100.000	89
	101 Naphthalene	128	12.801	12.801	(1.194)	460724	100.000	98
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	208113	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\V10.I\140623.B\V8D5650.d
Date : 23-JUN-2014 12:48
Client ID: VSTD10010W
Instrument: V10.i
Sample Info: 5ML,VSTD10010W,VSTD10010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date: 06/19/2014 Time: 7:17

Lab File ID: V8D5511.D Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####) VSTD05010R Init. Calib. Time(s): 10:17 13:04

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	0.665	0.786	0.100	18.3	20.0
Chloromethane	1.098	0.958	0.100	-12.8	20.0
Vinyl chloride	0.721	0.830	0.100	15.1	20.0
Bromomethane	0.273	0.185	0.100	-32.1	20.0
Chloroethane	0.353	0.421	0.100	19.3	20.0
Trichlorofluoromethane	1.012	1.361	0.100	34.5	20.0
1,1-Dichloroethene	0.433	0.517	0.100	19.5	20.0
Acetone	0.069	0.076	0.100	10.5	20.0
Iodomethane	0.263	0.352	0.100	34.1	20.0
Carbon disulfide	1.345	1.730	0.100	28.6	20.0
Methylene chloride	0.436	0.445	0.100	2.3	20.0
trans-1,2-Dichloroethene	0.416	0.454	0.100	9.1	20.0
Methyl tert-butyl ether	1.434	1.578	0.100	10.1	20.0
1,1-Dichloroethane	1.112	1.242	0.200	11.7	20.0
Vinyl acetate	2.629	2.985	0.100	13.6	20.0
2-Butanone	0.049	0.055	0.100	11.7	20.0
cis-1,2-Dichloroethene	0.439	0.457	0.100	4.2	20.0
2,2-Dichloropropane	0.866	1.193	0.100	37.7	20.0
Bromochloromethane	0.206	0.204	0.100	-1.0	20.0
Chloroform	1.006	1.134	0.200	12.7	20.0
1,1,1-Trichloroethane	1.009	1.243	0.100	23.2	20.0
1,1-Dichloropropene	0.202	0.220	0.100	9.0	20.0
Carbon tetrachloride	0.892	1.035	0.100	16.1	20.0
1,2-Dichloroethane	1.181	1.376	0.100	16.6	20.0
Benzene	1.510	1.593	0.500	5.5	20.0
Trichloroethene	0.413	0.455	0.200	10.1	20.0
1,2-Dichloropropane	0.531	0.557	0.100	4.9	20.0
Dibromomethane	0.316	0.339	0.100	7.3	20.0
Bromodichloromethane	0.758	0.861	0.200	13.5	20.0
cis-1,3-Dichloropropene	0.650	0.726	0.200	11.6	20.0
4-Methyl-2-pentanone	0.795	0.884	0.100	11.2	20.0
Toluene	1.641	1.722	0.400	5.0	20.0
trans-1,3-Dichloropropene	0.627	0.744	0.100	18.7	20.0
1,1,2-Trichloroethane	0.366	0.379	0.100	3.5	20.0
1,3-Dichloropropane	0.633	0.598	0.100	-5.6	20.0
Tetrachloroethene	0.385	0.379	0.200	-1.7	20.0
2-Hexanone	0.517	0.486	0.100	-6.1	20.0
Dibromochloromethane	0.466	0.486	0.100	4.3	20.0
1,2-Dibromoethane	0.377	0.358	0.100	-4.8	20.0
Chlorobenzene	1.006	0.938	0.500	-6.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date: 06/19/2014 Time: 7:17

Lab File ID: V8D5511.D Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####) VSTD05010R Init. Calib. Time(s): 10:17 13:04

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	0.435	0.444	0.100	1.9	20.0
Ethylbenzene	0.508	0.492	0.100	-3.2	20.0
m,p-Xylene	0.624	0.604	0.100	-3.3	20.0
o-Xylene	0.587	0.582	0.300	-0.9	20.0
Xylene (Total)	0.612	0.596	0.100	-2.5	20.0
Styrene	0.899	0.916	0.300	1.9	20.0
Bromoform	0.268	0.308	0.100	14.6	20.0
Isopropylbenzene	1.662	1.672	0.100	0.6	20.0
1,1,2,2-Tetrachloroethane	0.938	0.808	0.300	-13.9	20.0
Bromobenzene	0.792	0.723	0.100	-8.8	20.0
1,2,3-Trichloropropane	1.090	1.051	0.100	-3.6	20.0
n-Propylbenzene	0.725	0.646	0.100	-10.9	20.0
2-Chlorotoluene	0.713	0.607	0.100	-15.0	20.0
1,3,5-Trimethylbenzene	2.691	2.475	0.100	-8.0	20.0
4-Chlorotoluene	0.706	0.625	0.100	-11.4	20.0
tert-Butylbenzene	2.726	2.407	0.100	-11.7	20.0
1,2,4-Trimethylbenzene	2.602	2.424	0.100	-6.9	20.0
sec-Butylbenzene	3.108	2.890	0.100	-7.0	20.0
4-Isopropyltoluene	2.618	2.491	0.100	-4.9	20.0
1,3-Dichlorobenzene	1.398	1.227	0.600	-12.2	20.0
1,4-Dichlorobenzene	1.463	1.239	0.500	-15.4	20.0
n-Butylbenzene	2.420	2.271	0.100	-6.2	20.0
1,2-Dichlorobenzene	1.354	1.176	0.400	-13.2	20.0
1,2-Dibromo-3-chloropropane	0.191	0.198	0.050	3.6	20.0
1,2,4-Trichlorobenzene	0.793	0.717	0.200	-9.6	20.0
Hexachlorobutadiene	0.561	0.535	0.100	-4.7	20.0
1,2,3-Trichlorobenzene	0.761	0.696	0.100	-8.6	20.0
Naphthalene	1.730	1.417	0.100	-18.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.496	0.624	0.100	25.8	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date: 06/19/2014 Time: 7:17

Lab File ID: V8D5511.D Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####) VSTD05010R Init. Calib. Time(s): 10:17 13:04

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	0.372	0.404	0.100	8.5	20.0
1,2-Dichloroethane-d4	0.063	0.062	0.100	-0.7	20.0
Toluene-d8	1.144	1.107	0.100	-3.3	20.0
Bromofluorobenzene	0.614	0.658	0.100	7.1	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date: 06/20/2014 Time: 15:24

Lab File ID: V8D5577.D Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####) VSTD05010T Init. Calib. Time(s): 10:17 13:04

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	0.665	0.690	0.100	3.8	20.0
Chloromethane	1.098	1.004	0.100	-8.6	20.0
Vinyl chloride	0.721	0.796	0.100	10.4	20.0
Bromomethane	0.273	0.243	0.100	-11.1	20.0
Chloroethane	0.353	0.489	0.100	38.4	20.0
Trichlorofluoromethane	1.012	1.136	0.100	12.3	20.0
1,1-Dichloroethene	0.433	0.491	0.100	13.4	20.0
Acetone	0.069	0.098	0.100	41.2	20.0
Iodomethane	0.263	0.393	0.100	49.6	20.0
Carbon disulfide	1.345	1.691	0.100	25.7	20.0
Methylene chloride	0.436	0.473	0.100	8.6	20.0
trans-1,2-Dichloroethene	0.416	0.461	0.100	10.9	20.0
Methyl tert-butyl ether	1.434	1.775	0.100	23.8	20.0
1,1-Dichloroethane	1.112	1.247	0.200	12.2	20.0
Vinyl acetate	2.629	3.481	0.100	32.4	20.0
2-Butanone	0.049	0.062	0.100	27.5	20.0
cis-1,2-Dichloroethene	0.439	0.471	0.100	7.5	20.0
2,2-Dichloropropane	0.866	1.064	0.100	22.8	20.0
Bromochloromethane	0.206	0.206	0.100	0.2	20.0
Chloroform	1.006	1.162	0.200	15.5	20.0
1,1,1-Trichloroethane	1.009	1.167	0.100	15.6	20.0
1,1-Dichloropropene	0.202	0.221	0.100	9.7	20.0
Carbon tetrachloride	0.892	1.033	0.100	15.9	20.0
1,2-Dichloroethane	1.181	1.423	0.100	20.5	20.0
Benzene	1.510	1.639	0.500	8.6	20.0
Trichloroethene	0.413	0.465	0.200	12.7	20.0
1,2-Dichloropropane	0.531	0.578	0.100	8.9	20.0
Dibromomethane	0.316	0.371	0.100	17.6	20.0
Bromodichloromethane	0.758	0.917	0.200	20.9	20.0
cis-1,3-Dichloropropene	0.650	0.784	0.200	20.6	20.0
4-Methyl-2-pentanone	0.795	0.942	0.100	18.5	20.0
Toluene	1.641	1.776	0.400	8.2	20.0
trans-1,3-Dichloropropene	0.627	0.863	0.100	37.5	20.0
1,1,2-Trichloroethane	0.366	0.415	0.100	13.3	20.0
1,3-Dichloropropane	0.633	0.601	0.100	-5.1	20.0
Tetrachloroethene	0.385	0.336	0.200	-12.8	20.0
2-Hexanone	0.517	0.526	0.100	1.8	20.0
Dibromochloromethane	0.466	0.478	0.100	2.5	20.0
1,2-Dibromoethane	0.377	0.363	0.100	-3.7	20.0
Chlorobenzene	1.006	0.910	0.500	-9.6	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date: 06/20/2014 Time: 15:24

Lab File ID: V8D5577.D Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####) VSTD05010T Init. Calib. Time(s): 10:17 13:04

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	0.435	0.419	0.100	-3.8	20.0
Ethylbenzene	0.508	0.471	0.100	-7.3	20.0
m,p-Xylene	0.624	0.570	0.100	-8.7	20.0
o-Xylene	0.587	0.554	0.300	-5.7	20.0
Xylene (Total)	0.612	0.565	0.100	-7.7	20.0
Styrene	0.899	0.906	0.300	0.8	20.0
Bromoform	0.268	0.300	0.100	11.8	20.0
Isopropylbenzene	1.662	1.576	0.100	-5.2	20.0
1,1,2,2-Tetrachloroethane	0.938	0.792	0.300	-15.6	20.0
Bromobenzene	0.792	0.706	0.100	-10.9	20.0
1,2,3-Trichloropropane	1.090	1.062	0.100	-2.6	20.0
n-Propylbenzene	0.725	0.607	0.100	-16.2	20.0
2-Chlorotoluene	0.713	0.587	0.100	-17.7	20.0
1,3,5-Trimethylbenzene	2.691	2.353	0.100	-12.6	20.0
4-Chlorotoluene	0.706	0.613	0.100	-13.2	20.0
tert-Butylbenzene	2.726	2.473	0.100	-9.3	20.0
1,2,4-Trimethylbenzene	2.602	2.320	0.100	-10.9	20.0
sec-Butylbenzene	3.108	2.628	0.100	-15.5	20.0
4-Isopropyltoluene	2.618	2.303	0.100	-12.0	20.0
1,3-Dichlorobenzene	1.398	1.190	0.600	-14.9	20.0
1,4-Dichlorobenzene	1.463	1.245	0.500	-14.9	20.0
n-Butylbenzene	2.420	2.108	0.100	-12.9	20.0
1,2-Dichlorobenzene	1.354	1.176	0.400	-13.1	20.0
1,2-Dibromo-3-chloropropane	0.191	0.195	0.050	2.2	20.0
1,2,4-Trichlorobenzene	0.793	0.735	0.200	-7.3	20.0
Hexachlorobutadiene	0.561	0.470	0.100	-16.3	20.0
1,2,3-Trichlorobenzene	0.761	0.716	0.100	-5.9	20.0
Naphthalene	1.730	1.559	0.100	-9.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.496	0.606	0.100	22.2	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Instrument ID: V10 Calibration Date: 06/20/2014 Time: 15:24

Lab File ID: V8D5577.D Init. Calib. Date(s): 06/16/2014 06/16/2014

EPA Sample No.(VSTD#####) VSTD05010T Init. Calib. Time(s): 10:17 13:04

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	0.372	0.413	0.100	11.1	20.0
1,2-Dichloroethane-d4	0.063	0.065	0.100	4.0	20.0
Toluene-d8	1.144	1.020	0.100	-10.9	20.0
Bromofluorobenzene	0.614	0.660	0.100	7.4	20.0

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5511.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5511.d
Lab Smp Id: VSTD05010R Client Smp ID: VSTD05010R
Inj Date : 19-JUN-2014 07:17
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010R,VSTD05010R
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.586	1.586	(0.303)	175791	50.0000	59
2	Freon114	85	1.705	1.705	(0.326)	97938	50.0000	56
3	Chloromethane	50	1.754	1.754	(0.335)	214151	50.0000	44
4	Vinyl Chloride	62	1.856	1.856	(0.355)	185573	50.0000	58
5	Bromomethane	94	2.143	2.143	(0.409)	41456	50.0000	34
6	Chloroethane	64	2.229	2.229	(0.426)	94205	50.0000	60
7	Trichlorofluoromethane	101	2.445	2.445	(0.467)	304242	50.0000	67
126	Ethanol	46	2.567	2.567	(0.490)	93327	5000.00	5700(AQ)
8	Ether	59	2.667	2.667	(0.509)	134637	50.0000	57
9	Acrolein	56	2.773	2.773	(0.530)	196136	250.000	300
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	115670	50.0000	60
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	139551	50.0000	63
12	Acetone	58	2.892	2.892	(0.552)	17083	50.0000	55
13	Iodomethane	142	2.985	2.985	(0.570)	78789	50.0000	67
14	Carbon Disulfide	76	3.046	3.046	(0.582)	386732	50.0000	68
15	Acetonitrile	41	3.139	3.139	(0.600)	388888	500.000	570(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	304085	50.0000	62
17	Methyl Acetate	43	3.146	3.146	(0.601)	219776	50.0000	54
18	Methylene Chloride	84	3.233	3.233	(0.617)	99576	50.0000	51
19	tert-Butanol	59	3.300	3.300	(0.630)	38805	100.000	110
20	Acrylonitrile	53	3.419	3.419	(0.653)	81135	50.0000	54
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	101461	50.0000	54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	352884	50.0000	55
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	277590	50.0000	56
	24 Vinyl acetate	43	3.821	3.821	(0.730)	667401	50.0000	57
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	704250	50.0000	54
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	335582	50.0000	58
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	489194	50.0000	56
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	266655	50.0000	64
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	102153	50.0000	52(Q)
	30 2-Butanone	72	4.262	4.262	(0.814)	12191	50.0000	56(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	269200	500.000	540(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	263953	100.000	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	45555	50.0000	49
	31 Tetrahydrofuran	72	4.503	4.503	(0.860)	30301	100.000	130
	35 Chloroform	83	4.509	4.509	(0.861)	253411	50.0000	56
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	90285	50.0000	54
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	277926	50.0000	62
	38 Cyclohexane	56	4.741	4.741	(0.905)	268613	50.0000	54
	39 1,1-Dichloropropene	110	4.824	4.824	(0.921)	49091	50.0000	54
	40 Carbon Tetrachloride	117	4.831	4.831	(0.923)	231418	50.0000	58
	41 Isobutyl Alcohol	43	5.075	5.075	(0.969)	206996	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13963	50.0000	50
	43 Benzene	78	5.004	5.004	(0.956)	356039	50.0000	53
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	307632	50.0000	58
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	288955	50.0000	54
M	50 1,2-Dichloroethene (Total)	96				203614	100.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	223561	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	101611	50.0000	55
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	144390	50.0000	54
	49 1,2-Dichloropropane	63	5.770	5.770	(1.102)	124468	50.0000	52
	51 Methyl Methacrylate	69	5.853	5.853	(1.118)	76434	50.0000	53
	52 Dibromomethane	93	5.879	5.879	(1.123)	75765	50.0000	54
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	20588	1000.00	1000(AQ)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	192422	50.0000	57
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.231)	1344	50.0000	53(TQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	162254	50.0000	50
	57 4-Methyl-2-pentanone	43	6.580	6.580	(1.257)	197720	50.0000	56(Q)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	284511	50.0000	48
	59 Toluene	91	6.782	6.782	(1.295)	385075	50.0000	52
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	166425	50.0000	51
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	85868	50.0000	52
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	84730	50.0000	52
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	97338	50.0000	49
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	153714	50.0000	47
	65 2-Hexanone	43	7.435	7.435	(0.904)	124939	50.0000	47
	66 Dibromochloromethane	129	7.593	7.593	(0.923)	125052	50.0000	47
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	92150	50.0000	48
	69 1-Chlorohexane	91	8.213	8.213	(0.999)	118200	50.0000	45
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	257112	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	241065	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	114045	50.0000	51
	72 Ethylbenzene	106	8.367	8.367	(1.018)	126389	50.0000	48
	73 m,p-Xylene	106	8.499	8.499	(1.034)	310408	100.000	97
	74 o-Xylene	106	8.946	8.946	(1.088)	149637	50.0000	50
	75 Styrene	104	8.956	8.956	(1.089)	235521	50.0000	48

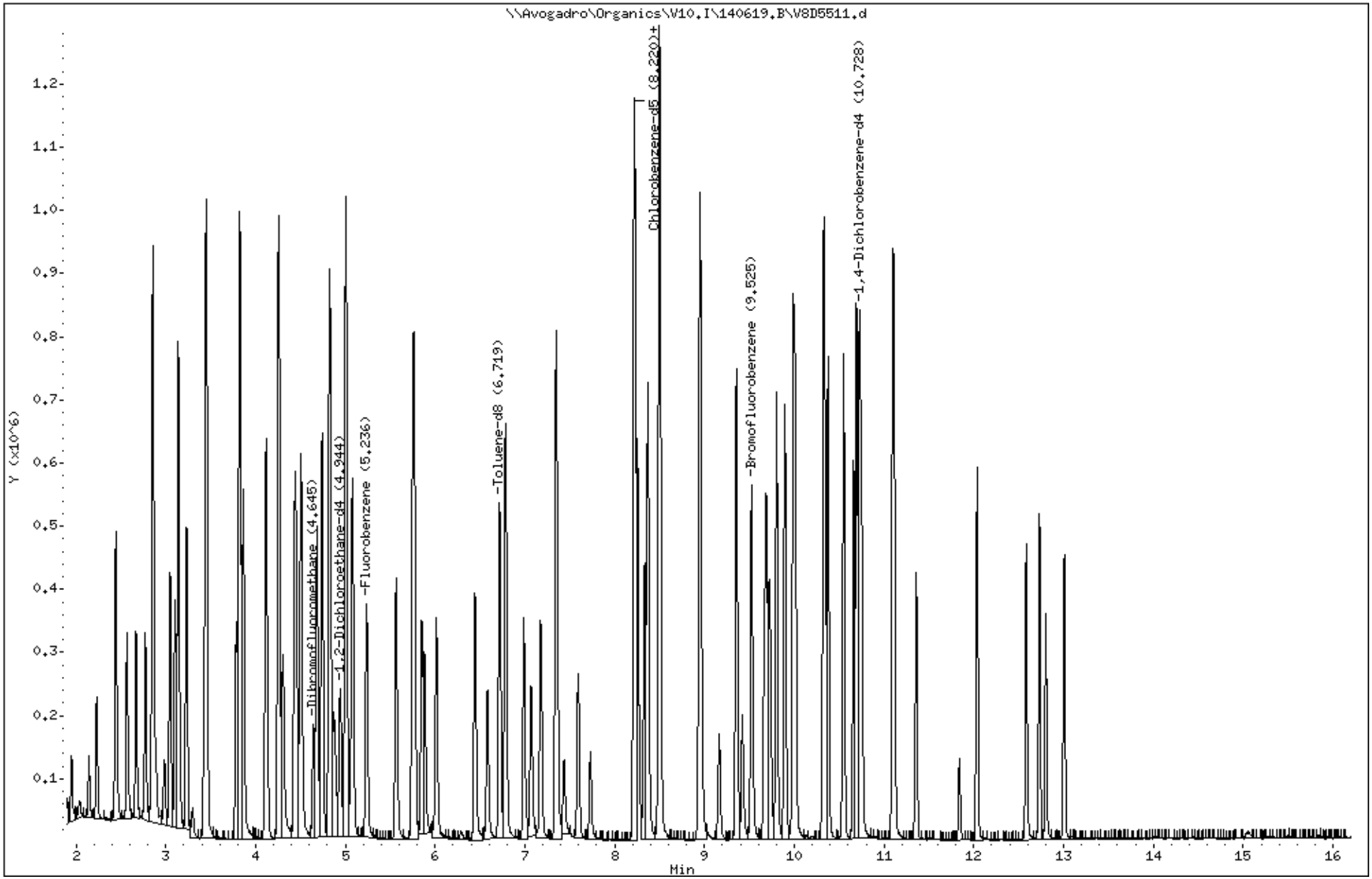
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Report Date: 27-Jun-2014 13:48

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76 Bromoform	173	9.165	9.165	(1.115)	79069	50.0000	49
	77 Isopropylbenzene	105	9.355	9.355	(1.138)	429800	50.0000	50
	78 trans-1,4-Dichloro-2-butene	75	9.419	9.419	(1.145)	26784	50.0000	54(Q)
$	79 Bromofluorobenzene	95	9.522	9.522	(1.158)	169096	50.0000	54
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	121208	50.0000	43
	81 Bromobenzene	156	9.689	9.689	(0.903)	108362	50.0000	46
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	157571	50.0000	48
	83 n-Propylbenzene	120	9.805	9.805	(0.914)	96876	50.0000	44
	84 2-Chlorotoluene	126	9.895	9.895	(0.922)	90971	50.0000	42
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	371162	50.0000	45
	86 4-Chlorotoluene	126	10.010	10.010	(0.933)	93786	50.0000	44
M	94 Xylene (Total)	106				460045	150.000	(a)
	87 tert-Butylbenzene	119	10.329	10.329	(0.963)	361042	50.0000	44
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.967)	363471	50.0000	46
	89 sec-Butylbenzene	105	10.551	10.551	(0.984)	433361	50.0000	46
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	183969	50.0000	44
	91 4-Isopropyltoluene	119	10.692	10.692	(0.997)	373627	50.0000	48
*	92 1,4-Dichlorobenzene-d4	152	10.728	10.728	(1.000)	149975	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	185762	50.0000	42
	95 n-Butylbenzene	91	11.097	11.097	(1.034)	340522	50.0000	47
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	176329	50.0000	43
	97 Hexachloroethane	117	11.358	11.358	(1.059)	64868	50.0000	44
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	29626	50.0000	52(Q)
	141 1,3,5-Trichlorobenzene	182	12.036	12.036	(2.299)	134046	50.0000	59(A)
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.173)	107522	50.0000	45
	100 Hexachlorobutadiene	225	12.731	12.731	(1.187)	80222	50.0000	54
	101 Naphthalene	128	12.801	12.801	(1.193)	212496	50.0000	41
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.212)	104337	50.0000	46

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\V10.I\140619.B\V8D5511.d
Date : 19-JUN-2014 07:17
Client ID: VSTD05010R
Instrument: V10.i
Sample Info: 5ML,VSTD05010R,VSTD05010R
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5577.d
Report Date: 25-Jun-2014 16:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5577.d
Lab Smp Id: VSTD05010T Client Smp ID: VSTD05010T
Inj Date : 20-JUN-2014 15:24
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010T,VSTD05010T
Misc Info :
Comment   :
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Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 68 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.586	1.586	(0.303)	160838	50.0000	52
2	Freon114	85	1.705	1.705	(0.326)	120934	50.0000	67
3	Chloromethane	50	1.754	1.754	(0.335)	233883	50.0000	46
4	Vinyl Chloride	62	1.853	1.853	(0.354)	185387	50.0000	55(Q)
5	Bromomethane	94	2.143	2.143	(0.409)	56564	50.0000	44
6	Chloroethane	64	2.226	2.226	(0.425)	113854	50.0000	69
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	264787	50.0000	56
126	Ethanol	46	2.567	2.567	(0.490)	100727	5000.00	5900(AQ)
8	Ether	59	2.667	2.667	(0.509)	152711	50.0000	62
9	Acrolein	56	2.770	2.770	(0.529)	207297	250.000	300
10	1,1-Dichloroethene	96	2.856	2.856	(0.545)	114343	50.0000	57
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	141306	50.0000	61
12	Acetone	58	2.885	2.885	(0.551)	22762	50.0000	71
13	Iodomethane	142	2.982	2.982	(0.569)	91556	50.0000	75
14	Carbon Disulfide	76	3.046	3.046	(0.581)	394130	50.0000	67
15	Acetonitrile	41	3.136	3.136	(0.599)	375967	500.000	530(A)
16	Allyl Chloride	39	3.139	3.139	(0.599)	287995	50.0000	57
17	Methyl Acetate	43	3.146	3.146	(0.601)	218392	50.0000	52
18	Methylene Chloride	84	3.229	3.229	(0.616)	110245	50.0000	54
19	tert-Butanol	59	3.300	3.300	(0.630)	43425	100.000	120
20	Acrylonitrile	53	3.419	3.419	(0.653)	88817	50.0000	57
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	107465	50.0000	55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	413573	50.0000	62
	23 1,1-Dichloroethane	63	3.782	3.782	(0.722)	290630	50.0000	56
	24 Vinyl acetate	43	3.818	3.818	(0.729)	811237	50.0000	66
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	776150	50.0000	58
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.737)	362907	50.0000	60
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	579342	50.0000	63
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	247953	50.0000	57
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	109868	50.0000	54
	30 2-Butanone	72	4.258	4.258	(0.813)	14495	50.0000	64(Q)
	32 Propionitrile	54	4.303	4.303	(0.821)	302274	500.000	580(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	292300	100.000	120
	34 Bromochloromethane	128	4.454	4.454	(0.850)	48075	50.0000	50
	31 Tetrahydrofuran	72	4.503	4.503	(0.859)	29188	100.000	120
	35 Chloroform	83	4.506	4.506	(0.860)	270763	50.0000	58
$	36 Dibromofluoromethane	113	4.641	4.641	(0.886)	96329	50.0000	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	271917	50.0000	58
	38 Cyclohexane	56	4.741	4.741	(0.905)	285034	50.0000	56
	39 1,1-Dichloropropene	110	4.821	4.821	(0.920)	51518	50.0000	55
	40 Carbon Tetrachloride	117	4.827	4.827	(0.921)	240821	50.0000	58
	41 Isobutyl Alcohol	43	5.078	5.078	(0.969)	230182	1000.00	1200(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	15246	50.0000	52
	43 Benzene	78	5.001	5.001	(0.955)	381897	50.0000	54
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	331584	50.0000	60
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.969)	340875	50.0000	62
M	50 1,2-Dichloroethene (Total)	96				217333	100.000	(a)
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	233020	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	108319	50.0000	56
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	151726	50.0000	55
	49 1,2-Dichloropropane	63	5.773	5.773	(1.102)	134581	50.0000	54
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	93836	50.0000	63
	52 Dibromomethane	93	5.879	5.879	(1.122)	86500	50.0000	59
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	26218	1000.00	1200(AQ)
	54 Bromodichloromethane	83	6.017	6.017	(1.149)	213681	50.0000	60
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.231)	1323	50.0000	50(TQ)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.230)	182759	50.0000	54
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	219608	50.0000	59(Q)
$	58 Toluene-d8	98	6.715	6.715	(0.817)	302881	50.0000	44
	59 Toluene	91	6.786	6.786	(1.295)	413924	50.0000	54
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	200996	50.0000	59
	61 Ethyl Methacrylate	69	7.069	7.069	(1.349)	103676	50.0000	60
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.369)	96691	50.0000	57
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	99732	50.0000	44
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	178550	50.0000	47
	65 2-Hexanone	43	7.435	7.435	(0.904)	156277	50.0000	51
	66 Dibromochloromethane	129	7.593	7.593	(0.923)	141910	50.0000	46
	67 1,2-Dibromoethane	107	7.731	7.731	(0.940)	107702	50.0000	48
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	133508	50.0000	44
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	296943	50.0000	
	70 Chlorobenzene	112	8.252	8.252	(1.004)	270215	50.0000	45
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.332	(1.013)	124424	50.0000	48
	72 Ethylbenzene	106	8.367	8.367	(1.018)	139754	50.0000	46
	73 m,p-Xylene	106	8.496	8.496	(1.033)	338620	100.000	91
	74 o-Xylene	106	8.943	8.943	(1.088)	164425	50.0000	47
	75 Styrene	104	8.959	8.959	(1.090)	269018	50.0000	47

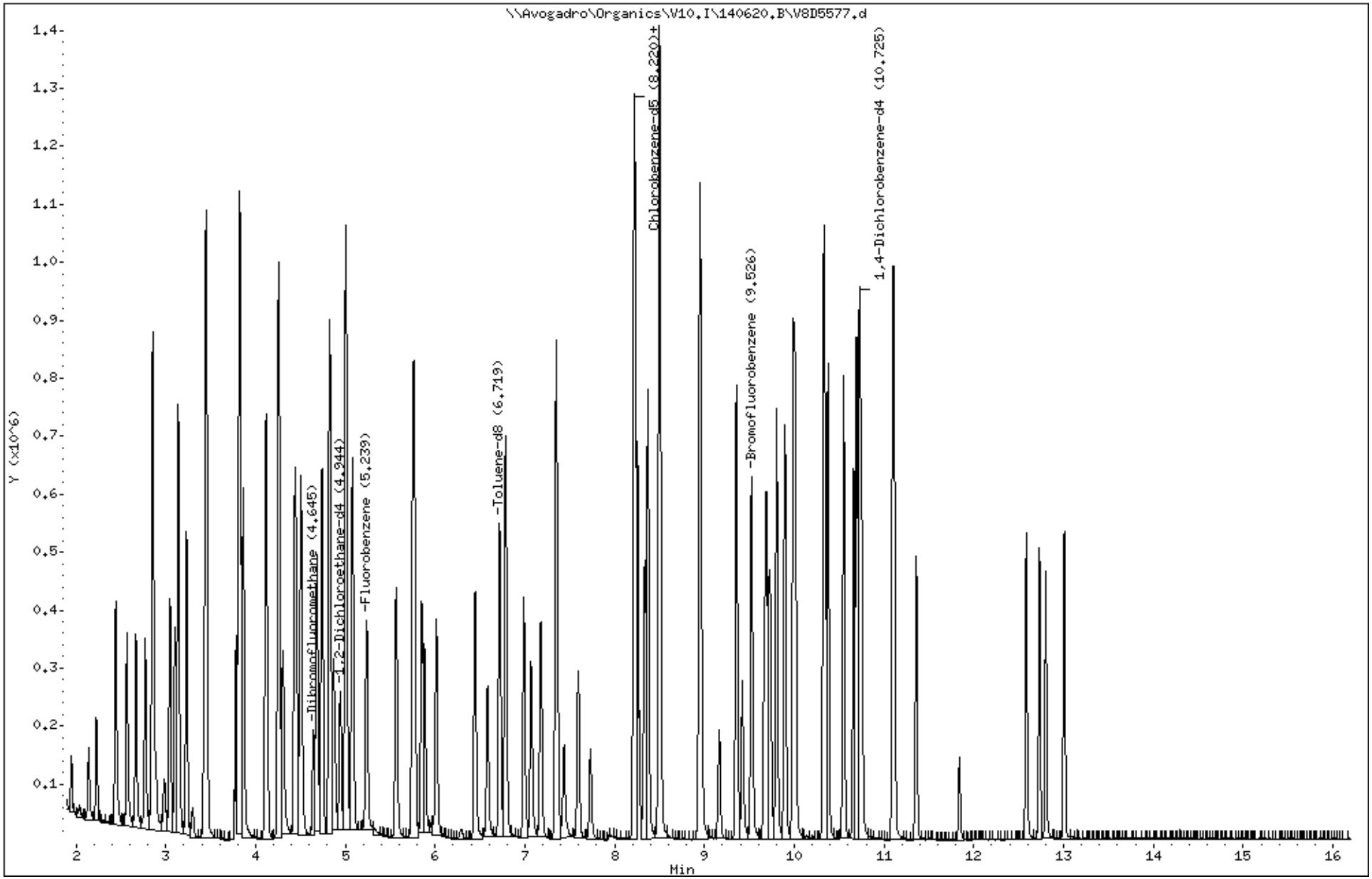
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		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	89118	50.0000	48
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	467849	50.0000	47
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.419	(1.145)	36737	50.0000	65(Q)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	195929	50.0000	54
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.670	(0.902)	135976	50.0000	42
	81	Bromobenzene	156	9.692	9.692	(0.904)	121173	50.0000	44
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	182204	50.0000	49
	83	n-Propylbenzene	120	9.805	9.805	(0.914)	104266	50.0000	42
	84	2-Chlorotoluene	126	9.898	9.898	(0.923)	100787	50.0000	41
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	403778	50.0000	43
	86	4-Chlorotoluene	126	10.011	10.011	(0.933)	105173	50.0000	43
M	94	Xylene (Total)	106				503045	150.000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	424455	50.0000	45
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	398167	50.0000	44
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	451040	50.0000	42
	90	1,3-Dichlorobenzene	146	10.663	10.663	(0.994)	204184	50.0000	42
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	395314	50.0000	44
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	171635	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	213660	50.0000	42
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	361787	50.0000	44
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	201901	50.0000	43
	97	Hexachloroethane	117	11.358	11.358	(1.059)	77212	50.0000	46
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	33462	50.0000	51(Q)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	126135	50.0000	46
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	80596	50.0000	47
	101	Naphthalene	128	12.801	12.801	(1.194)	267551	50.0000	45
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	122913	50.0000	47

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\V10.I\140620.B\V8D5577.d
Date : 20-JUN-2014 15:24
Client ID: VSTD05010T
Instrument: V10.i
Sample Info: 5ML,VSTD05010T,VSTD05010T
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140616.B\V8D5404.d
Lab Smp Id: BFB10N Client Smp ID: BFB10N
Inj Date : 16-JUN-2014 09:36
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10N,BFB10N
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140616.B\BFBSOM_V10.m
Meth Date : 13-Jun-2014 11:28 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 5 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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.438	4.800	(0.000)	95	122394			0.00- 100.00	100.00
4.438	4.800	(0.000)	50	46736			15.00- 40.00	38.18
4.438	4.800	(0.000)	75	77386			30.00- 80.00	63.23
4.438	4.800	(0.000)	96	8310			5.00- 9.00	6.79
4.438	4.800	(0.000)	173	428			0.00- 2.00	0.45
4.438	4.800	(0.000)	174	94852			50.00- 120.00	77.50
4.438	4.800	(0.000)	175	7170			5.00- 9.00	7.56
4.438	4.800	(0.000)	176	93648			95.00- 101.00	98.73
4.438	4.800	(0.000)	177	5775			5.00- 9.00	6.17

Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5404.d

Date : 16-JUN-2014 09:36

Client ID: BFB10N

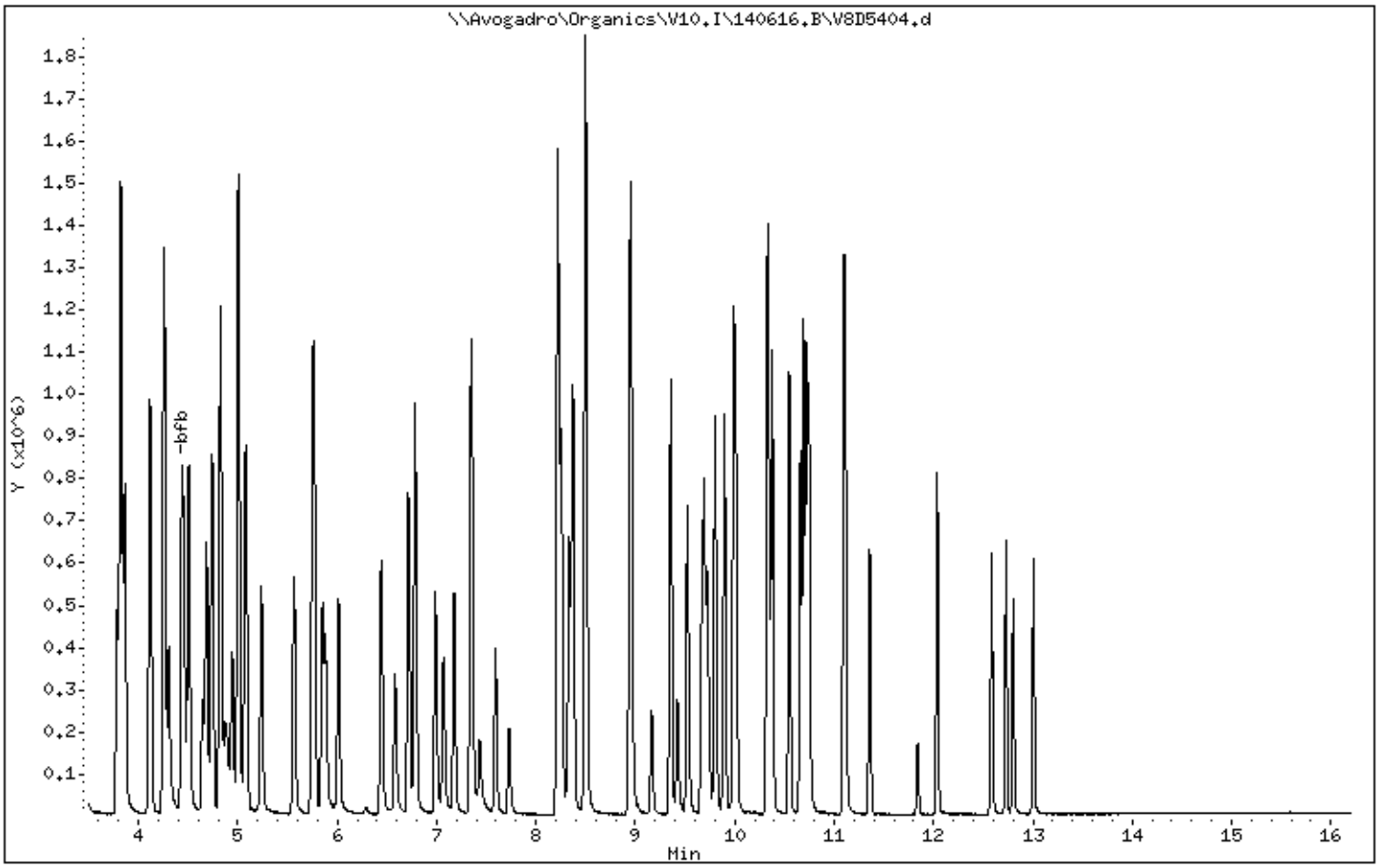
Instrument: V10.i

Sample Info: 5ML,BFB10N,BFB10N

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140616.B\V8D5404.d

Date : 16-JUN-2014 09:36

Client ID: BFB10N

Instrument: V10.i

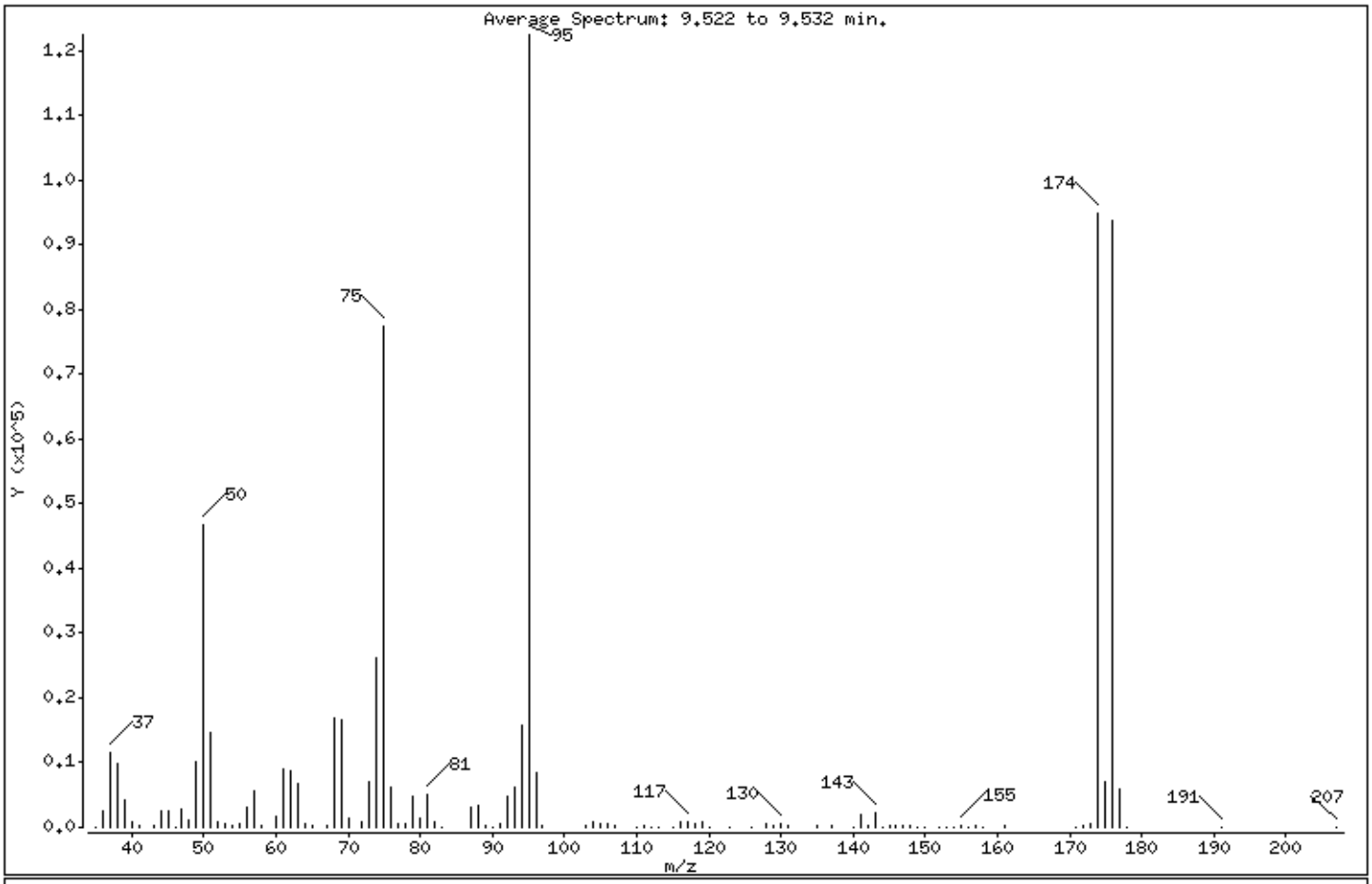
Sample Info: 5ML,BFB10N,BFB10N

Operator: WL SRC: WL

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	38.18
75	30.00 - 80.00% of mass 95	63.23
96	5.00 - 9.00% of mass 95	6.79
173	Less than 2.00% of mass 174	0.35 (0.45)
174	50.00 - 120.00% of mass 95	77.50
175	5.00 - 9.00% of mass 174	5.86 (7.56)
176	95.00 - 101.00% of mass 174	76.51 (98.73)
177	5.00 - 9.00% of mass 176	4.72 (6.17)

Date : 16-JUN-2014 09:36

Client ID: BFB10N Instrument: V10.i

Sample Info: 5ML,BFB10N,BFB10N

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5404.d
Spectrum: Average Spectrum: 9.522 to 9.532 min.
Location of Maximum: 95.00
Number of points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	55	65.00	293	103.00	278	145.00	290
36.00	2485	67.00	402	104.00	727	146.00	216
37.00	11472	68.00	16744	105.00	504	147.00	161
38.00	9919	69.00	16512	106.00	642	148.00	329
39.00	4199	70.00	1343	107.00	197	149.00	25
40.00	979	72.00	830	110.00	82	150.00	79
41.00	307	73.00	6943	111.00	173	152.00	72
43.00	317	74.00	26176	112.00	31	153.00	98
44.00	2587	75.00	77384	113.00	31	154.00	32
45.00	2435	76.00	6101	115.00	89	155.00	394
46.00	139	77.00	651	116.00	727	156.00	45
47.00	2788	78.00	561	117.00	972	157.00	302
48.00	1242	79.00	4740	118.00	473	158.00	52
49.00	10244	80.00	1325	119.00	722	161.00	222
50.00	46736	81.00	4959	120.00	99	171.00	112
51.00	14498	82.00	974	123.00	30	172.00	412
52.00	747	83.00	76	126.00	27	173.00	428
53.00	449	87.00	3045	128.00	522	174.00	94848
54.00	159	88.00	3316	129.00	287	175.00	7170
55.00	647	89.00	173	130.00	594	176.00	93648
56.00	3182	90.00	139	131.00	192	177.00	5775
57.00	5657	91.00	689	135.00	398	178.00	105
58.00	192	92.00	4696	137.00	325	191.00	27
60.00	1598	93.00	6215	140.00	73	207.00	36
61.00	8983	94.00	15752	141.00	1834		
62.00	8661	95.00	122392	142.00	249		
63.00	6851	96.00	8310	143.00	2370		
64.00	539	97.00	303	144.00	26		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5510.d
Lab Smp Id: BFB10R Client Smp ID: BFB10R
Inj Date : 19-JUN-2014 06:59
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10R,BFB10R
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140619.B\BFBSOM_V10.m
Meth Date : 27-Jun-2014 13:46 mscarpaci Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.835	4.800	(0.000)	95	152672			0.00- 100.00	100.00
4.835	4.800	(0.000)	50	56128			15.00- 40.00	36.76
4.835	4.800	(0.000)	75	93056			30.00- 80.00	60.95
4.835	4.800	(0.000)	96	8723			5.00- 9.00	5.71
4.835	4.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
4.835	4.800	(0.000)	174	126544			50.00- 120.00	82.89
4.835	4.800	(0.000)	175	9843			5.00- 9.00	7.78
4.835	4.800	(0.000)	176	123612			95.00- 101.00	97.68
4.835	4.800	(0.000)	177	8176			5.00- 9.00	6.61

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5510.d

Date : 19-JUN-2014 06:59

Client ID: BFB10R

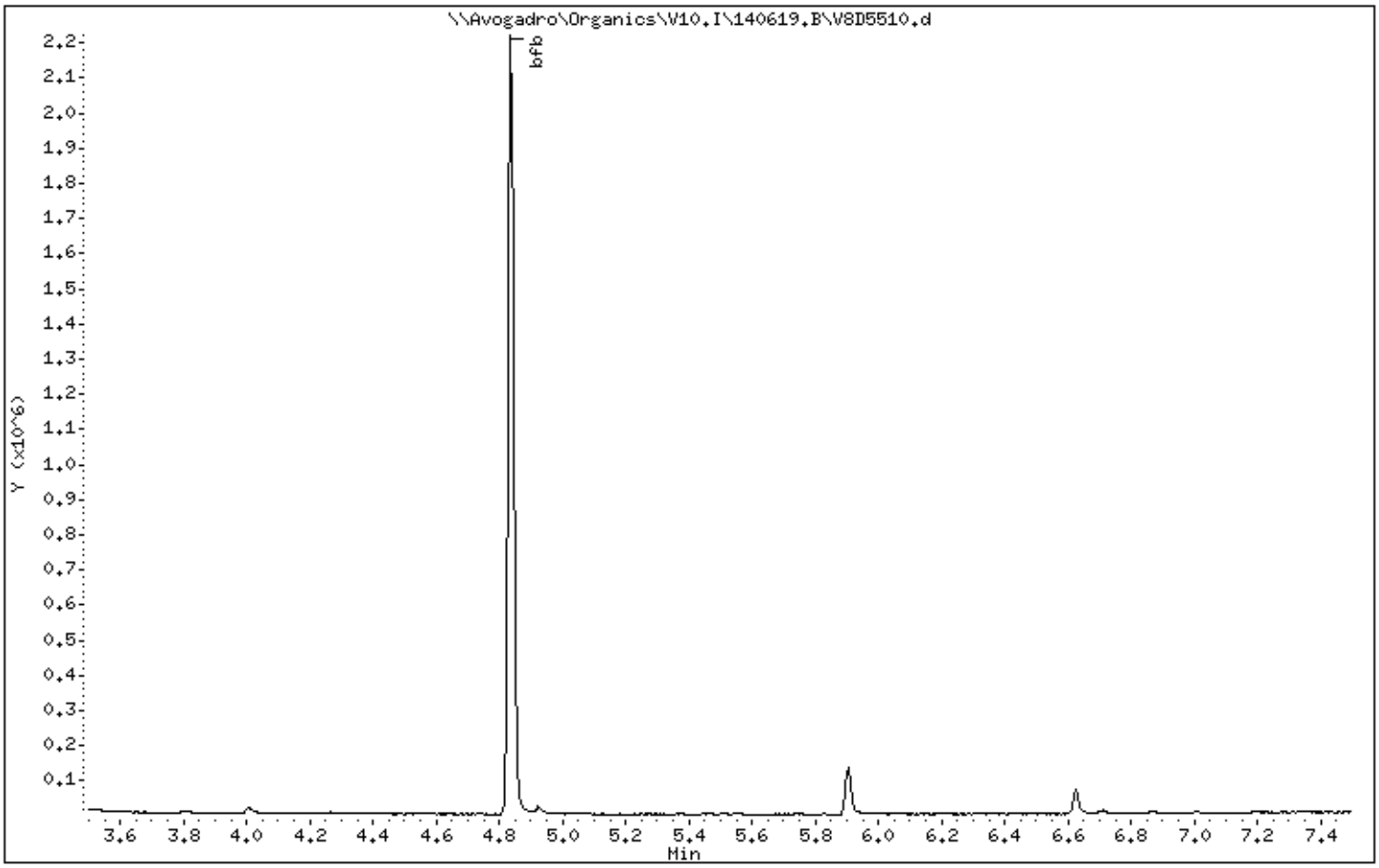
Instrument: V10.i

Sample Info: 5ML,BFB10R,BFB10R

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5510.d

Date : 19-JUN-2014 06:59

Client ID: BFB10R

Instrument: V10.i

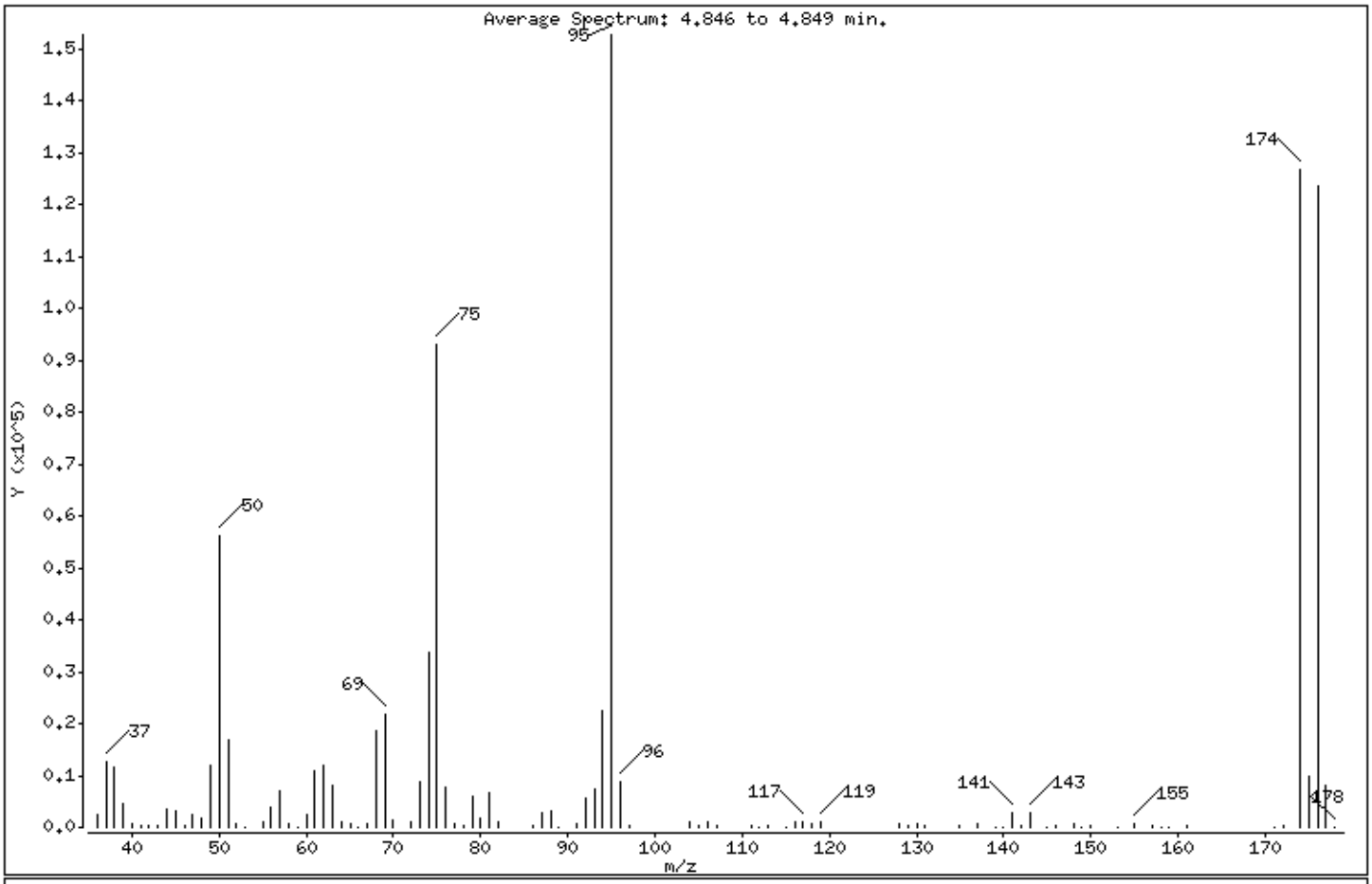
Sample Info: 5ML,BFB10R,BFB10R

Operator: WL SRC: WL

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	36.76
75	30.00 - 80.00% of mass 95	60.95
96	5.00 - 9.00% of mass 95	5.71
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	82.89
175	5.00 - 9.00% of mass 174	6.45 (7.78)
176	95.00 - 101.00% of mass 174	80.97 (97.68)
177	5.00 - 9.00% of mass 176	5.36 (6.61)

Date : 19-JUN-2014 06:59

Client ID: BFB10R Instrument: V10.i

Sample Info: 5ML,BFB10R,BFB10R

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5510.d
Spectrum: Average Spectrum: 4.846 to 4.849 min.
Location of Maximum: 95.00
Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2395	62.00	11777	92.00	5574	140.00	111
37.00	12559	63.00	8151	93.00	7454	141.00	2841
38.00	11681	64.00	950	94.00	22320	142.00	295
39.00	4647	65.00	633	95.00	152640	143.00	2697
40.00	798	66.00	81	96.00	8723	145.00	124
41.00	321	67.00	583	97.00	191	146.00	205
42.00	291	68.00	18424	104.00	931	148.00	557
43.00	316	69.00	21832	105.00	411	149.00	134
44.00	3347	70.00	1572	106.00	956	150.00	411
45.00	2985	72.00	966	107.00	231	153.00	103
46.00	217	73.00	8824	111.00	372	155.00	640
47.00	2506	74.00	33704	112.00	91	157.00	391
48.00	1731	75.00	93056	113.00	276	158.00	104
49.00	11849	76.00	7758	115.00	137	159.00	114
50.00	56128	77.00	786	116.00	965	161.00	385
51.00	16800	78.00	329	117.00	1212	171.00	115
52.00	706	79.00	5989	118.00	831	172.00	333
53.00	88	80.00	1601	119.00	1069	174.00	126544
55.00	1129	81.00	6710	128.00	552	175.00	9843
56.00	3938	82.00	936	129.00	378	176.00	123608
57.00	6935	86.00	249	130.00	794	177.00	8176
58.00	539	87.00	2944	131.00	290	178.00	107
59.00	104	88.00	3048	135.00	280		
60.00	2579	89.00	85	137.00	537		
61.00	10766	91.00	585	139.00	124		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5576.d
Lab Smp Id: BFB10T Client Smp ID: BFB10T
Inj Date : 20-JUN-2014 14:56
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10T,BFB10T
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140620.B\BFBSOM_V10.m
Meth Date : 25-Jun-2014 16:15 mscarpaci Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.d
Als bottle: 67 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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.525	9.600	(0.000)	95	91080			0.00- 100.00	100.00
9.525	9.600	(0.000)	50	34741			15.00- 40.00	38.14
9.525	9.600	(0.000)	75	57187			30.00- 80.00	62.79
9.525	9.600	(0.000)	96	5667			5.00- 9.00	6.22
9.525	9.600	(0.000)	173	545			0.00- 2.00	0.80
9.525	9.600	(0.000)	174	68443			50.00- 120.00	75.15
9.525	9.600	(0.000)	175	5390			5.00- 9.00	7.88
9.525	9.600	(0.000)	176	68932			95.00- 101.00	100.71
9.525	9.600	(0.000)	177	4473			5.00- 9.00	6.49

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5576.d

Date : 20-JUN-2014 14:56

Client ID: BFB10T

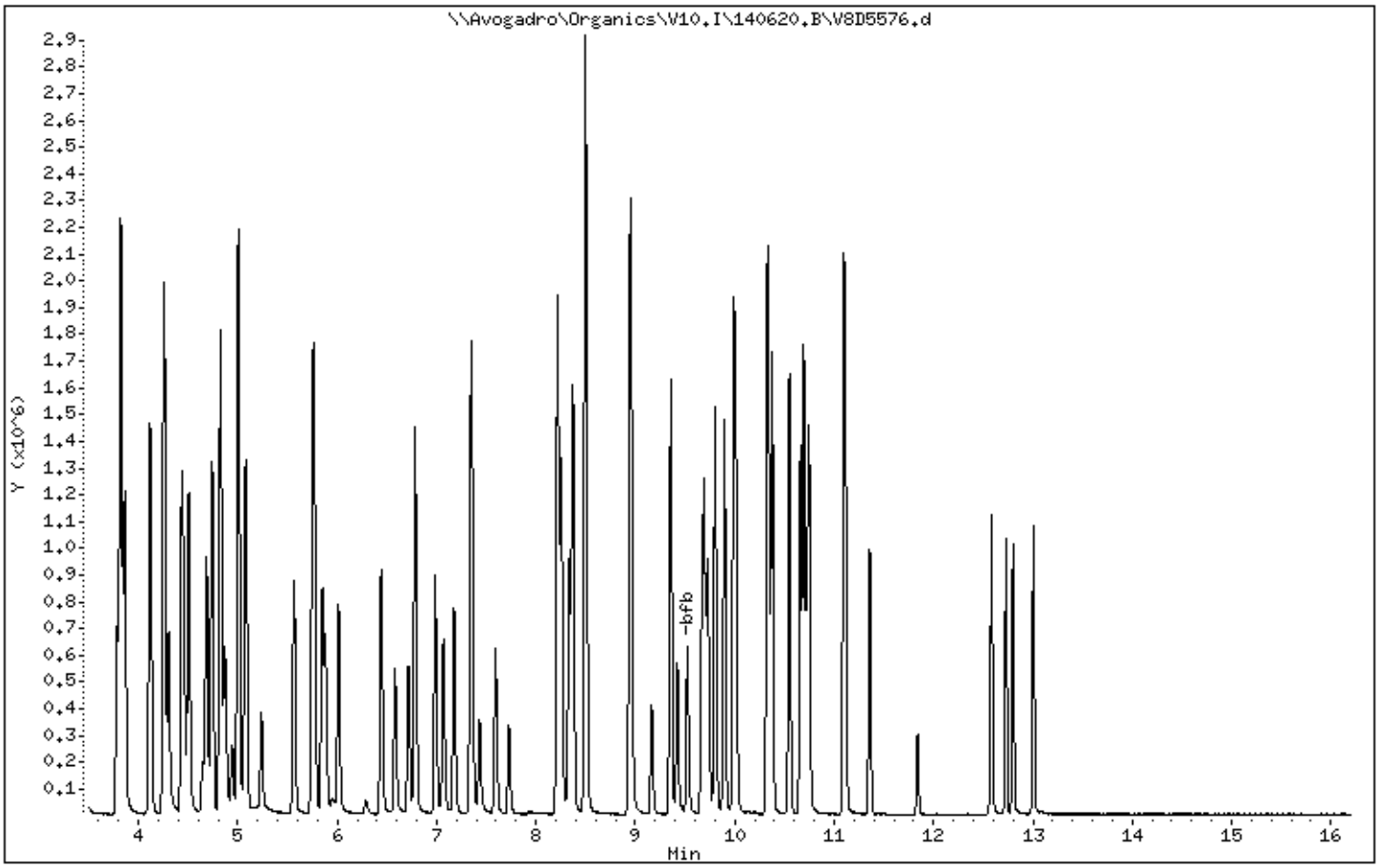
Instrument: V10.i

Sample Info: 5ML,BFB10T,BFB10T

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5576.d

Date : 20-JUN-2014 14:56

Client ID: BFB10T

Instrument: V10.i

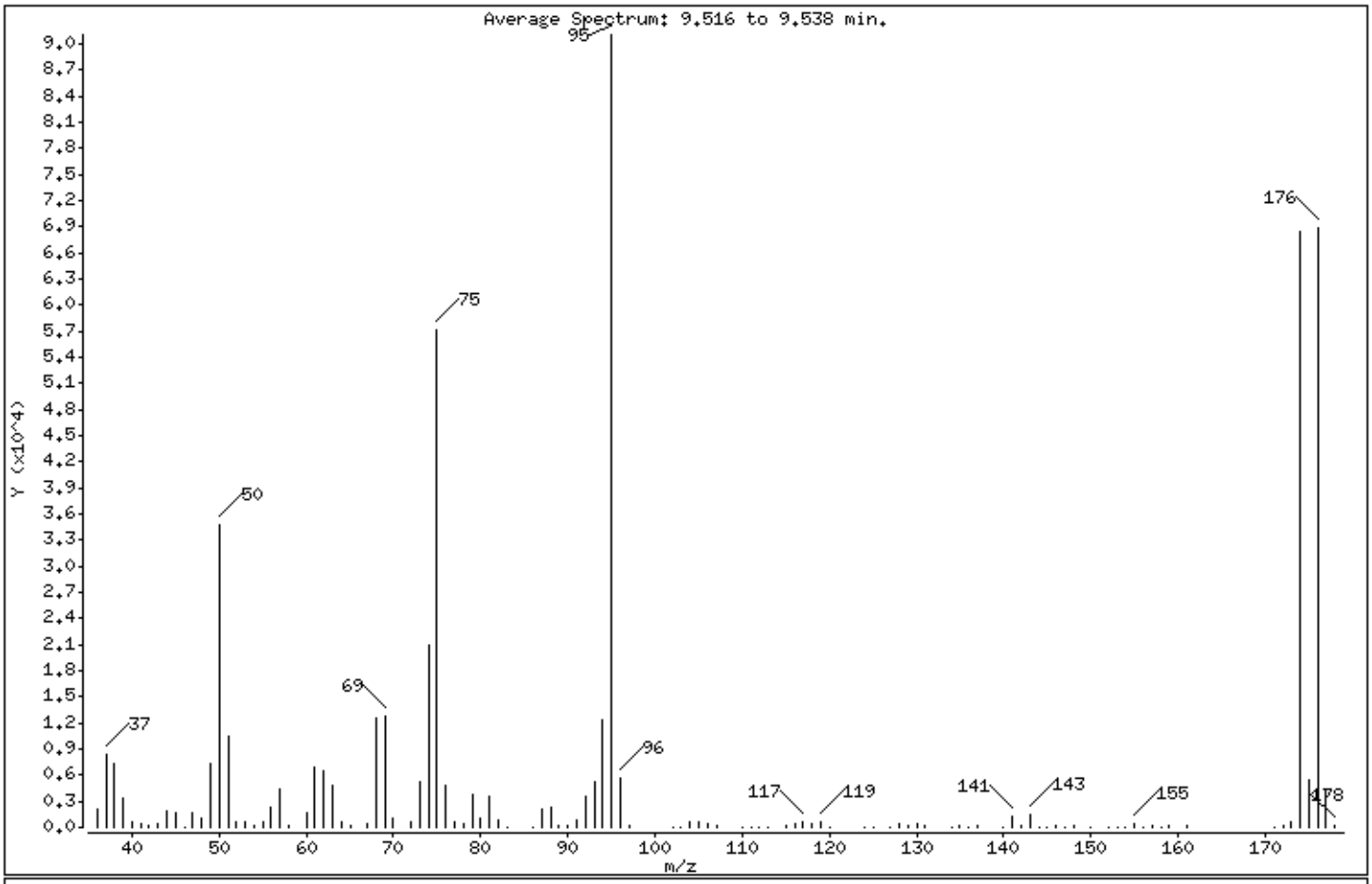
Sample Info: 5ML,BFB10T,BFB10T

Operator: WL SRC: WL

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	38.14
75	30.00 - 80.00% of mass 95	62.79
96	5.00 - 9.00% of mass 95	6.22
173	Less than 2.00% of mass 174	0.60 (0.80)
174	50.00 - 120.00% of mass 95	75.15
175	5.00 - 9.00% of mass 174	5.92 (7.88)
176	95.00 - 101.00% of mass 174	75.68 (100.71)
177	5.00 - 9.00% of mass 176	4.91 (6.49)

Date : 20-JUN-2014 14:56

Client ID: BFB10T Instrument: V10.i

Sample Info: 5ML,BFB10T,BFB10T

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5576.d
Spectrum: Average Spectrum: 9.516 to 9.538 min.
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2187	65.00	305	97.00	185	140.00	44
37.00	8407	67.00	353	102.00	19	141.00	1297
38.00	7233	68.00	12467	103.00	67	142.00	143
39.00	3390	69.00	12762	104.00	585	143.00	1475
40.00	561	70.00	985	105.00	658	144.00	14
41.00	343	72.00	580	106.00	512	145.00	63
42.00	170	73.00	5242	107.00	177	146.00	186
43.00	504	74.00	20856	110.00	36	147.00	15
44.00	1907	75.00	57184	111.00	56	148.00	296
45.00	1744	76.00	4843	112.00	68	150.00	73
46.00	85	77.00	526	113.00	100	152.00	13
47.00	1615	78.00	372	115.00	126	153.00	52
48.00	963	79.00	3732	116.00	486	154.00	92
49.00	7428	80.00	1023	117.00	643	155.00	336
50.00	34736	81.00	3614	118.00	466	156.00	31
51.00	10427	82.00	801	119.00	656	157.00	175
52.00	536	83.00	37	120.00	82	158.00	16
53.00	616	86.00	74	124.00	27	159.00	140
54.00	200	87.00	2034	125.00	25	161.00	216
55.00	614	88.00	2283	127.00	94	171.00	21
56.00	2279	89.00	196	128.00	477	172.00	280
57.00	4326	90.00	126	129.00	264	173.00	545
58.00	179	91.00	768	130.00	389	174.00	68440
60.00	1753	92.00	3519	131.00	155	175.00	5390
61.00	6932	93.00	5139	134.00	40	176.00	68928
62.00	6547	94.00	12327	135.00	153	177.00	4473
63.00	4723	95.00	91080	136.00	34	178.00	163
64.00	598	96.00	5667	137.00	209		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5642.d
Lab Smp Id: BFB10W Client Smp ID: BFB10W
Inj Date : 23-JUN-2014 08:37
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10W,BFB10W
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140623.B\BFBSOM_V10.m
Meth Date : 23-Jun-2014 08:15 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET104

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
0.000	9.600	(0.000)	95	125640			0.00- 100.00	100.00
0.000	9.600	(0.000)	50	50240			15.00- 40.00	39.99
0.000	9.600	(0.000)	75	83048			30.00- 80.00	66.10
0.000	9.600	(0.000)	96	8801			5.00- 9.00	7.00
0.000	9.600	(0.000)	173	912			0.00- 2.00	0.83
0.000	9.600	(0.000)	174	109488			50.00- 120.00	87.14
0.000	9.600	(0.000)	175	8262			5.00- 9.00	7.55
0.000	9.600	(0.000)	176	109936			95.00- 101.00	100.41
0.000	9.600	(0.000)	177	7399			5.00- 9.00	6.73

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5642.d

Date : 23-JUN-2014 08:37

Client ID: BFB10W

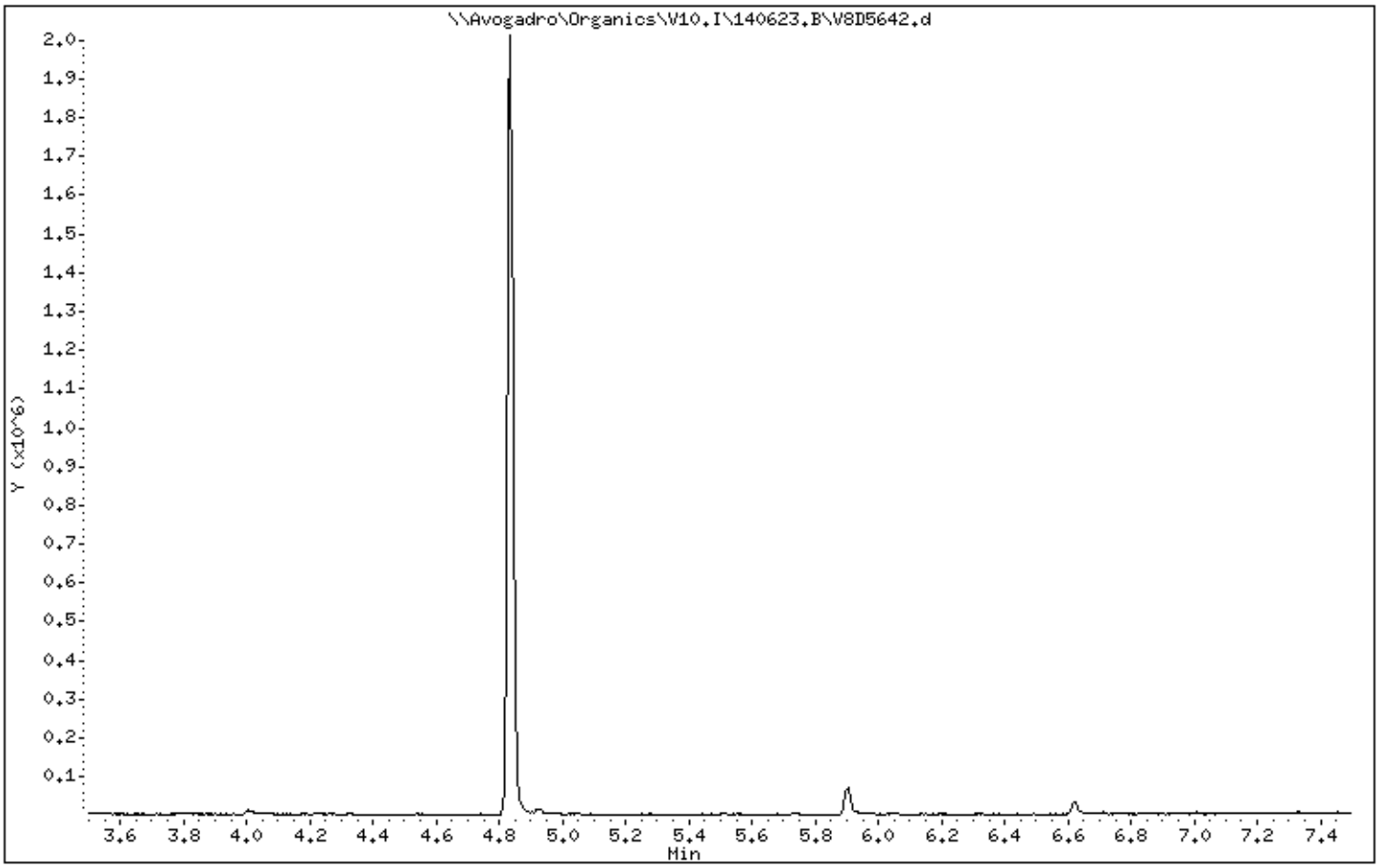
Instrument: V10.i

Sample Info: 5ML,BFB10W,BFB10W

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5642.d

Date : 23-JUN-2014 08:37

Client ID: BFB10W

Instrument: V10.i

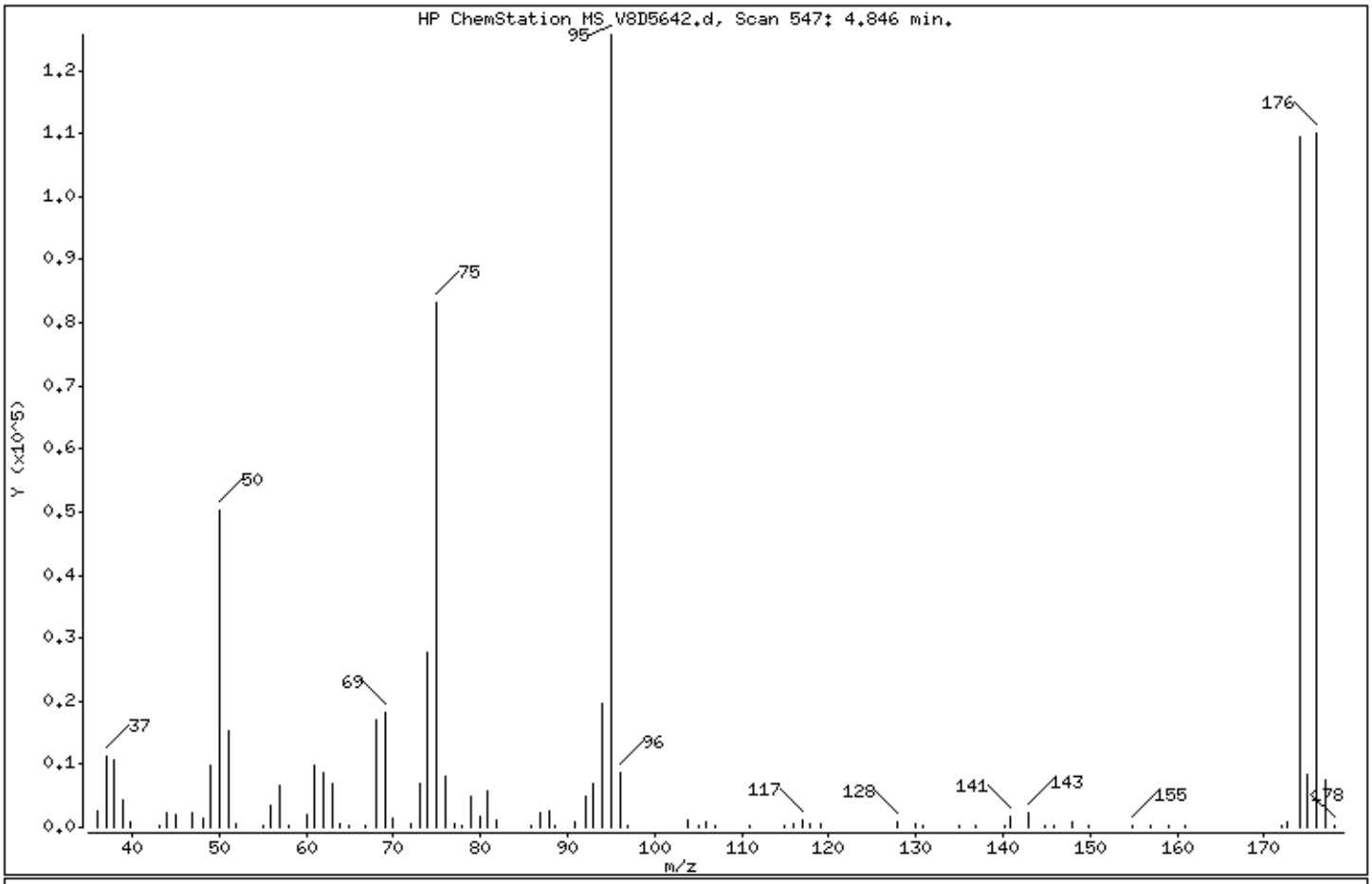
Sample Info: 5ML,BFB10W,BFB10W

Operator: WL SRC: WL

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	39.99
75	30.00 - 80.00% of mass 95	66.10
96	5.00 - 9.00% of mass 95	7.00
173	Less than 2.00% of mass 174	0.73 (0.83)
174	50.00 - 120.00% of mass 95	87.14
175	5.00 - 9.00% of mass 174	6.58 (7.55)
176	95.00 - 101.00% of mass 174	87.50 (100.41)
177	5.00 - 9.00% of mass 176	5.89 (6.73)

Date : 23-JUN-2014 08:37

Client ID: BFB10W Instrument: V10.i

Sample Info: 5ML,BFB10W,BFB10W

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5642.d
Spectrum: HP ChemStation MS V8D5642.d, Scan 547: 4.846 min.
Location of Maximum: 95.00
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2572	63.00	6815	88.60	157	135.00	382
37.00	11206	63.80	600	90.90	728	136.80	323
38.00	10575	64.90	332	92.00	5033	140.10	157
39.00	4393	66.80	287	93.00	6987	140.90	1869
39.90	810	68.00	16976	94.00	19584	143.00	2180
43.10	236	69.00	18192	95.00	125640	144.80	313
44.00	2403	70.00	1393	96.00	8801	145.90	395
45.00	1979	72.10	677	97.00	170	147.90	817
47.00	2432	73.00	6942	103.80	1056	149.80	227
48.10	1471	74.00	27760	105.00	398	154.80	423
49.00	9783	75.00	83048	105.90	814	157.00	343
50.00	50240	76.00	8057	106.90	185	159.00	290
51.00	15182	77.10	659	111.00	317	160.80	150
51.90	524	77.80	304	114.90	380	172.00	326
55.00	418	78.90	4836	116.00	488	172.70	912
56.00	3367	79.90	1825	117.00	1097	174.00	109488
57.00	6755	80.90	5855	117.90	569	175.00	8262
58.00	355	81.90	1291	119.00	633	176.00	109936
60.00	2021	85.80	320	127.90	762	177.00	7399
61.00	9819	86.90	2405	130.00	586	178.10	155
62.00	8695	88.00	2648	130.80	202		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77659

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5515.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/19/2014

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

EPA SAMPLE NO.

MB-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77659

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5515.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/19/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77659

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5515.D

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

% Moisture: not dec. Date Analyzed: 06/19/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5515.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5515.d
Lab Smp Id: MB-77659 Client Smp ID: MB-77659
Inj Date : 19-JUN-2014 09:45
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77659,MB-77659,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.641	4.644	(0.886)	104246	55.7744	56
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	16057	50.8139	51
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	251162	50.0000	
	55 2-Chloroethyl vinyl ether	63	6.721	6.448	(1.284)	613	22.4297	22(Q)
$	58 Toluene-d8	98	6.715	6.718	(0.817)	315529	48.4887	48
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	284360	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.522	(1.158)	166562	47.6808	48
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.728	(1.000)	139935	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5515.d
Report Date: 27-Jun-2014 13:48

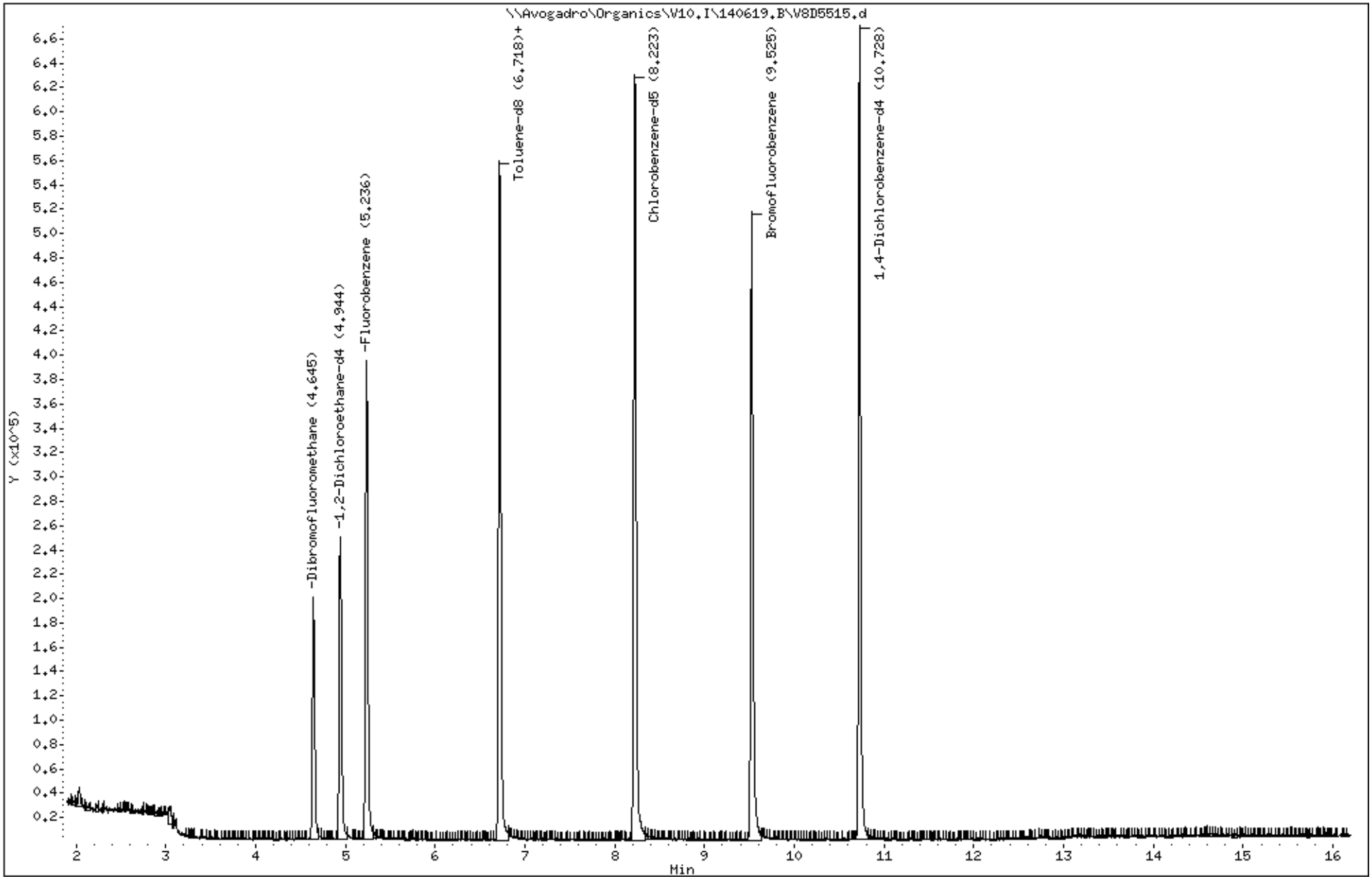
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5515.d
Lab Smp Id: MB-77659 Client Smp ID: MB-77659
Inj Date : 19-JUN-2014 09:45
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77659,MB-77659,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5515.d
Date : 19-JUN-2014 09:45
Client ID: MB-77659
Instrument: V10.i
Sample Info: 5ML,MB-77659,MB-77659,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5515.d

Date : 19-JUN-2014 09:45

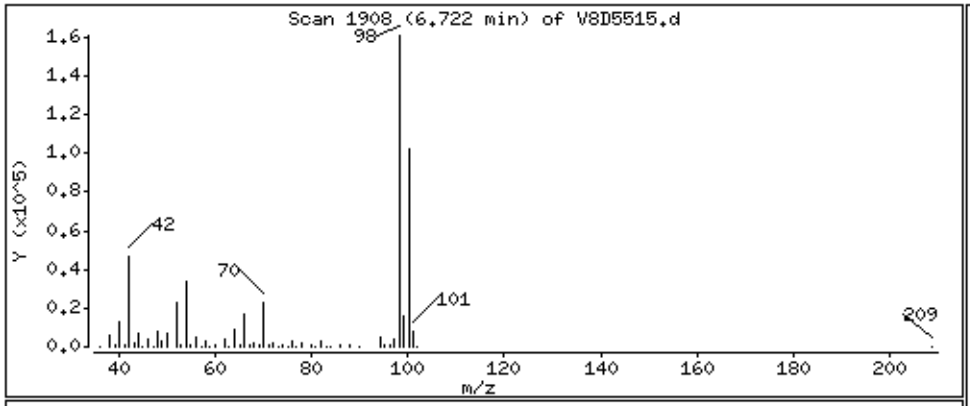
Client ID: MB-77659 Instrument: V10.i

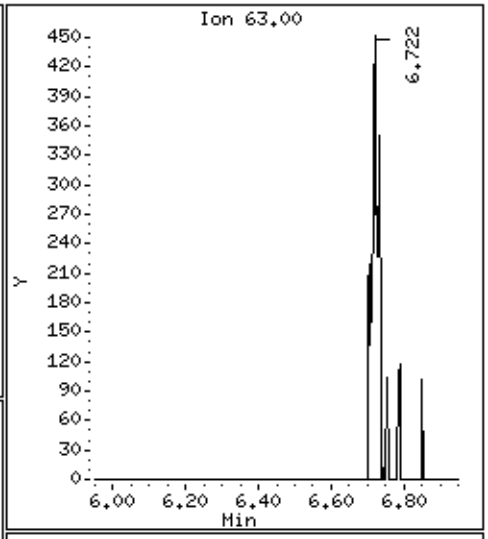
Sample Info: 5ML,MB-77659,MB-77659,77659

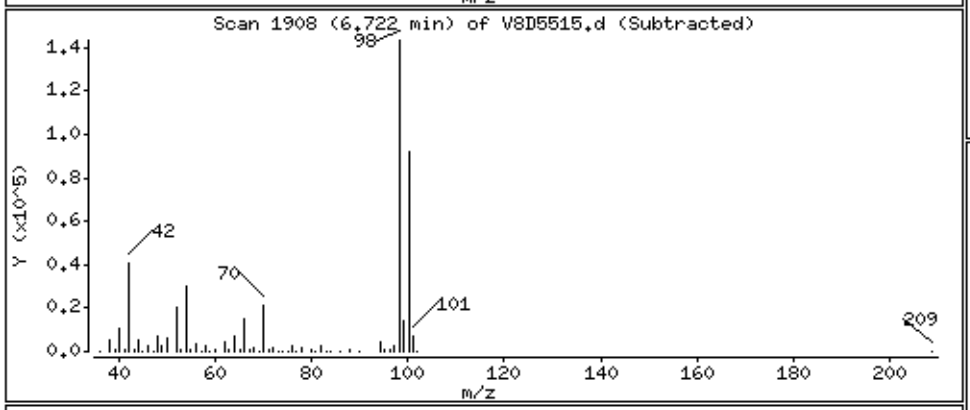
Purge Volume: 5.0 Operator: WL SRC: LIMS

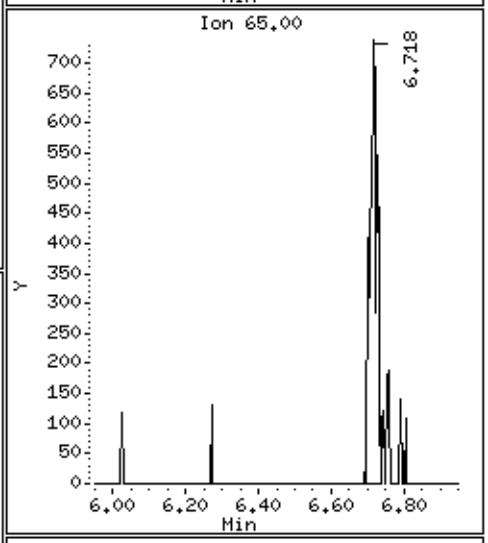
Column phase: DB-624 Column diameter: 0.25

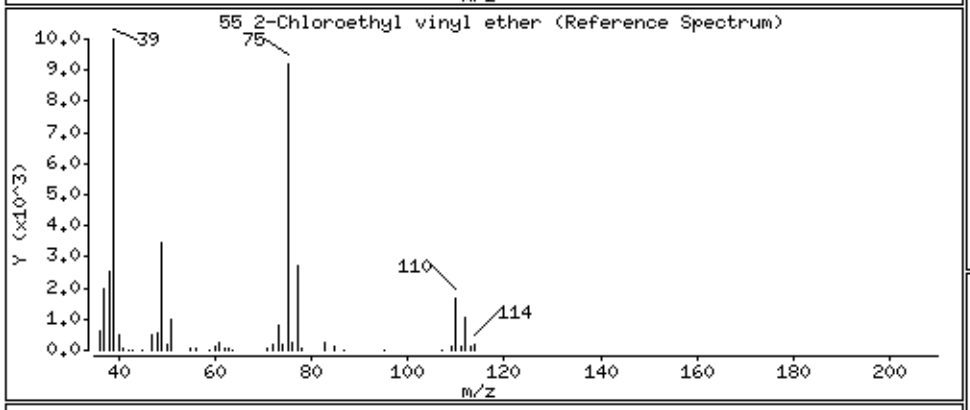
55 2-Chloroethyl vinyl ether Concentration: 22 ug/L

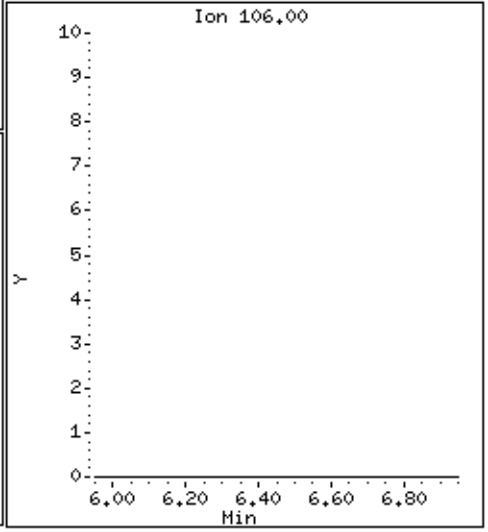


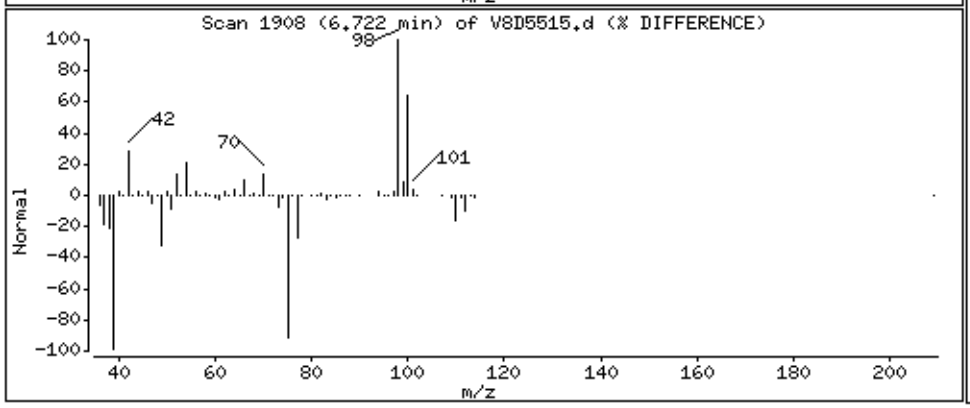












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5584.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2014

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

EPA SAMPLE NO.

MB-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5584.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5584.D

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

% Moisture: not dec. Date Analyzed: 06/20/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5584.d
Report Date: 25-Jun-2014 16:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5584.d
Lab Smp Id: MB-77692 Client Smp ID: MB-77692
Inj Date : 20-JUN-2014 18:37
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,MB-77692,MB-77692,77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 75 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.647	4.641	(0.887)	83313	53.8163	54
$ 42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13353	51.0179	51
* 46 Fluorobenzene	96	5.239	5.239	(1.000)	208031	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	274068	45.5690	46
* 68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	262820	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.522	(1.158)	161375	49.9820	50
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	138559	50.0000	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5584.d
Report Date: 25-Jun-2014 16:16

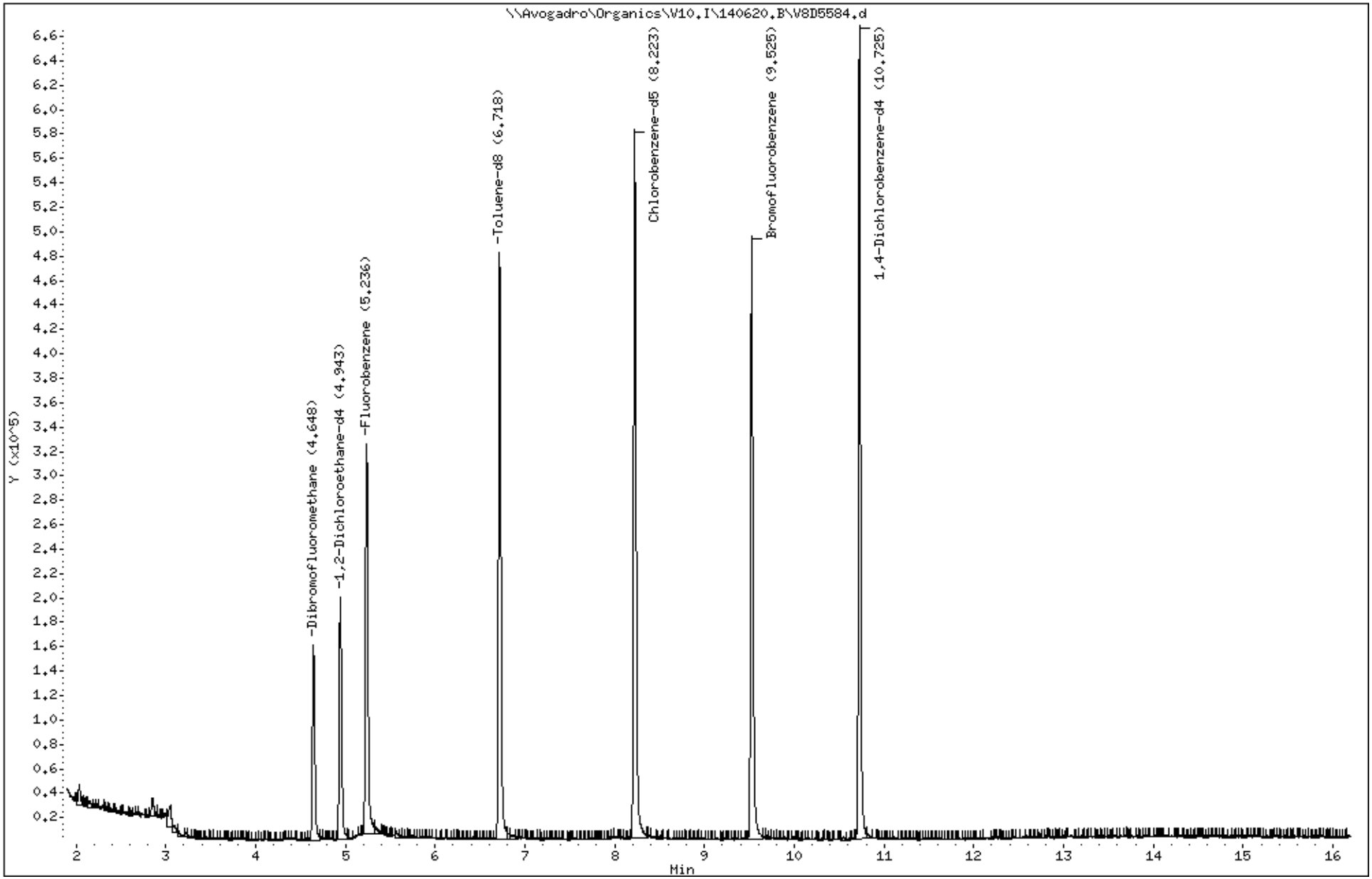
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5584.d
Lab Smp Id: MB-77692 Client Smp ID: MB-77692
Inj Date : 20-JUN-2014 18:37
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,MB-77692,MB-77692,77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 75 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5584.d
Date : 20-JUN-2014 18:37
Client ID: MB-77692
Instrument: V10.i
Sample Info: 5ML,MB-77692,MB-77692,77692
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5654.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5654.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5654.D

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

% Moisture: not dec. Date Analyzed: 06/23/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Lab Smp Id: MB-77721 Client Smp ID: MB-77721
Inj Date : 23-JUN-2014 14:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77721,MB-77721,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 68 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.641	4.641	(0.886)	72518	50.2920	50
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	11291	52.6415	53
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	164667	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	229933	49.1133	49
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	236331	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	154162	48.3080	48
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	128979	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Report Date: 27-Jun-2014 13:32

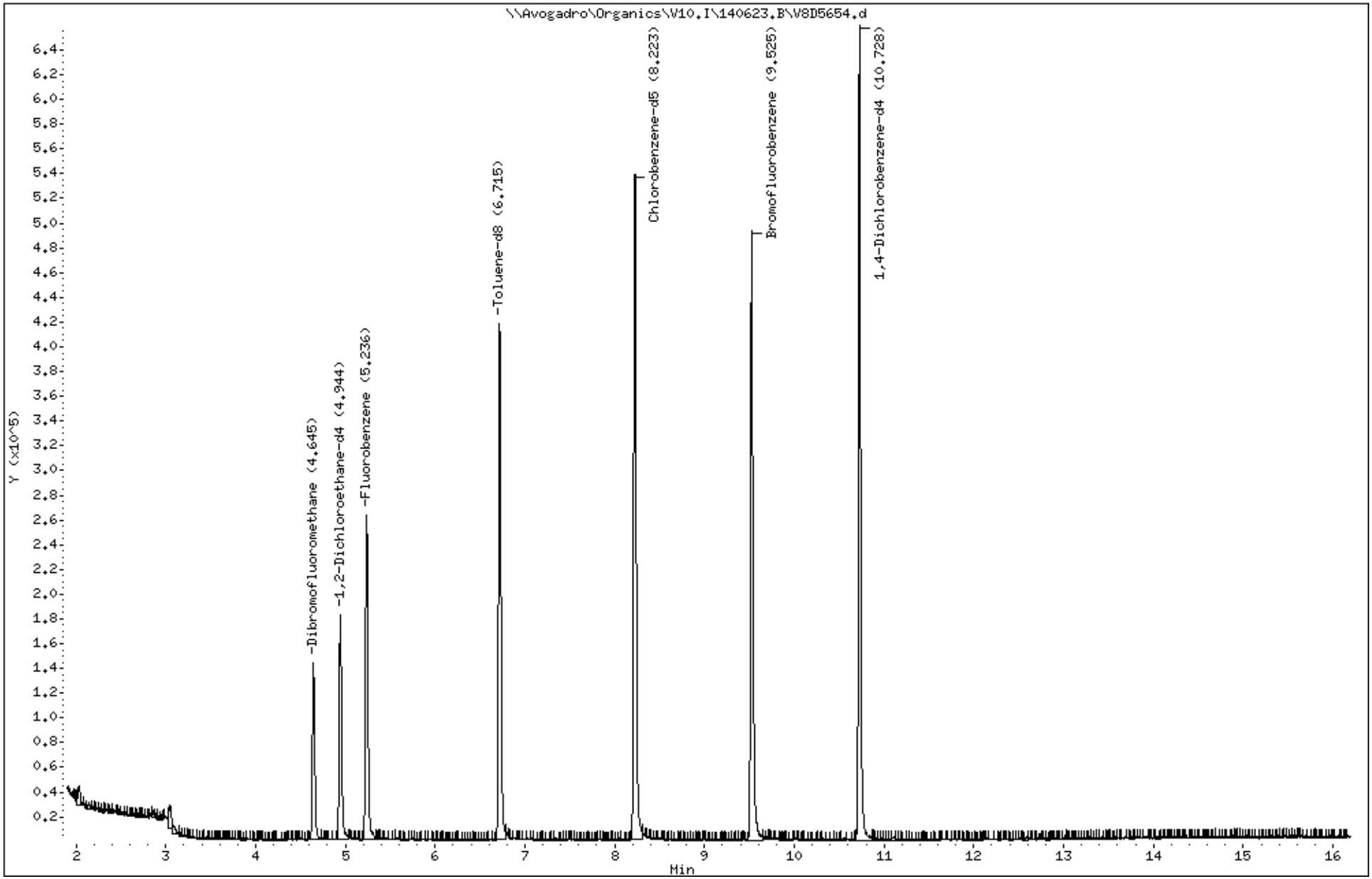
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Lab Smp Id: MB-77721 Client Smp ID: MB-77721
Inj Date : 23-JUN-2014 14:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77721,MB-77721,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 68 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Date : 23-JUN-2014 14:39
Client ID: MB-77721
Instrument: V10.i
Sample Info: 5ML,MB-77721,MB-77721,77721
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5534.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	51	
74-87-3	Chloromethane	61	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	22	
75-00-3	Chloroethane	57	
75-69-4	Trichlorofluoromethane	58	
75-35-4	1,1-Dichloroethene	180	
67-64-1	Acetone	36	
74-88-4	Iodomethane	35	
75-15-0	Carbon disulfide	57	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	52	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	140	
108-05-4	Vinyl acetate	57	
78-93-3	2-Butanone	58	
156-59-2	cis-1,2-Dichloroethene	58	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	56	
71-55-6	1,1,1-Trichloroethane	1000	E
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	58	
107-06-2	1,2-Dichloroethane	57	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	810	E
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	56	
75-27-4	Bromodichloromethane	57	
10061-01-5	cis-1,3-Dichloropropene	48	
108-10-1	4-Methyl-2-pentanone	62	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	49	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	47	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5534.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/19/2014

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	44	
591-78-6	2-Hexanone	50	
124-48-1	Dibromochloromethane	45	
106-93-4	1,2-Dibromoethane	47	
108-90-7	Chlorobenzene	44	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	45	
179601-23-1	m,p-Xylene	89	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	45	
75-25-2	Bromoform	48	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	44	
108-86-1	Bromobenzene	43	
96-18-4	1,2,3-Trichloropropane	48	
103-65-1	n-Propylbenzene	42	
95-49-8	2-Chlorotoluene	40	
108-67-8	1,3,5-Trimethylbenzene	42	
106-43-4	4-Chlorotoluene	42	
98-06-6	tert-Butylbenzene	41	
95-63-6	1,2,4-Trimethylbenzene	45	
135-98-8	sec-Butylbenzene	43	
99-87-6	4-Isopropyltoluene	44	
541-73-1	1,3-Dichlorobenzene	42	
106-46-7	1,4-Dichlorobenzene	40	
104-51-8	n-Butylbenzene	43	
95-50-1	1,2-Dichlorobenzene	42	
96-12-8	1,2-Dibromo-3-chloropropane	54	
120-82-1	1,2,4-Trichlorobenzene	42	
87-68-3	Hexachlorobutadiene	45	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	39	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2500	E

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5534.d
Report Date: 27-Jun-2014 13:51

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5534.d
Lab Smp Id: N1055-09AMS Client Smp ID: MW-27_6/17/14MS
Inj Date : 19-JUN-2014 18:37
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-09AMS,,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 25 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	155309	51.2719	51
2	Freon114	85	1.705	1.705	(0.326)	86386	48.9422	49
3	Chloromethane	50	1.753	1.754	(0.335)	306018	61.1751	61
4	Vinyl Chloride	62	1.853	1.856	(0.354)	168374	51.2692	51(Q)
5	Bromomethane	94	2.139	2.143	(0.409)	27867	22.4141	22
6	Chloroethane	64	2.226	2.229	(0.425)	91661	56.9727	57
7	Trichlorofluoromethane	101	2.441	2.445	(0.466)	268833	58.3080	58
126	Ethanol	46	2.567	2.567	(0.490)	109984	6581.58	6600(AQR)
8	Ether	59	2.667	2.667	(0.509)	136419	56.8861	57
9	Acrolein	56	2.769	2.773	(0.529)	207553	311.398	310
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	354187	179.608	180(QR)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	5672949	2509.13	2500(AR)
12	Acetone	58	2.888	2.892	(0.552)	11438	36.3037	36(Q)
13	Iodomethane	142	2.982	2.985	(0.570)	41359	34.5556	34(R)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	326085	56.5367	56
15	Acetonitrile	41	3.136	3.139	(0.599)	332009	476.113	480(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	259069	52.2077	52
17	Methyl Acetate	43	3.146	3.146	(0.601)	239316	57.7665	58
18	Methylene Chloride	84	3.232	3.233	(0.617)	104460	52.6432	53
19	tert-Butanol	59	3.297	3.300	(0.630)	43949	121.533	120
20	Acrylonitrile	53	3.422	3.419	(0.654)	84925	55.4506	55
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	98281	51.8668	52

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5534.d
Report Date: 27-Jun-2014 13:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.445	(0.659)	358034	54.7972	55
	23 1,1-Dichloroethane	63	3.785	3.786	(0.723)	711102	140.430	140(R)
	24 Vinyl acetate	43	3.821	3.821	(0.730)	685684	57.2522	57
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	719653	54.6960	55
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	324201	55.1536	55
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	494811	55.1231	55
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	208834	49.2054	49
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	115298	57.6934	58
	30 2-Butanone	72	4.258	4.262	(0.813)	12895	58.0059	58(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	300573	586.642	590(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	287729	119.685	120
	34 Bromochloromethane	128	4.454	4.454	(0.851)	44918	47.8918	48
	31 Tetrahydrofuran	72	4.503	4.503	(0.860)	25793	112.716	110
	35 Chloroform	83	4.509	4.509	(0.861)	254879	55.6241	56
$	36 Dibromofluoromethane	113	4.647	4.644	(0.888)	95033	56.0635	56
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	4806715	1045.35	1000(AR)
	38 Cyclohexane	56	4.740	4.741	(0.905)	263580	52.5614	52
	39 1,1-Dichloropropene	110	4.824	4.824	(0.921)	46666	50.8359	51
	40 Carbon Tetrachloride	117	4.827	4.831	(0.922)	236167	58.1333	58
	41 Isobutyl Alcohol	43	5.081	5.075	(0.971)	208888	1110.65	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.949	4.943	(0.945)	14303	49.9087	50
	43 Benzene	78	5.004	5.004	(0.956)	351037	51.0456	51
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	308348	57.3307	57
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	287976	53.3727	53
M	50 1,2-Dichloroethene (Total)	96				213579	109.560	110
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	227784	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	1518151	807.579	810(AR)
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	132082	48.7825	49
	49 1,2-Dichloropropane	63	5.769	5.770	(1.102)	123049	50.9485	51
	51 Methyl Methacrylate	69	5.850	5.853	(1.117)	82864	56.6397	57
	52 Dibromomethane	93	5.879	5.879	(1.123)	80419	55.9031	56
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	24966	1203.53	1200(AQ)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	197436	57.1543	57
	55 2-Chloroethyl vinyl ether	63	6.441	6.448	(1.230)	1326	51.0978	51(Q)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	157221	47.6907	48
	57 4-Methyl-2-pentanone	43	6.583	6.580	(1.257)	224443	61.9540	62(Q)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	293455	46.4535	46
	59 Toluene	91	6.785	6.782	(1.296)	376213	50.3206	50
	60 trans-1,3-Dichloropropene	75	6.991	6.988	(1.335)	161878	49.0163	49
	61 Ethyl Methacrylate	69	7.072	7.068	(1.351)	91596	54.6873	55
	62 1,1,2-Trichloroethane	97	7.178	7.175	(1.371)	86327	51.7626	52
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	93786	44.1156	44(Q)
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	162751	46.5358	46
	65 2-Hexanone	43	7.432	7.435	(0.904)	141474	49.5414	50
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	127249	44.9842	45
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	98601	47.4301	47
	69 1-Chlorohexane	91	8.216	8.213	(0.999)	112643	40.1278	40
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	276053	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	245691	44.2270	44
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	115263	47.9527	48
	72 Ethylbenzene	106	8.371	8.367	(1.018)	126841	45.2424	45
	73 m,p-Xylene	106	8.499	8.499	(1.034)	306491	88.9351	89
	74 o-Xylene	106	8.943	8.946	(1.088)	148598	45.8324	46
	75 Styrene	104	8.956	8.956	(1.089)	236918	44.6433	45

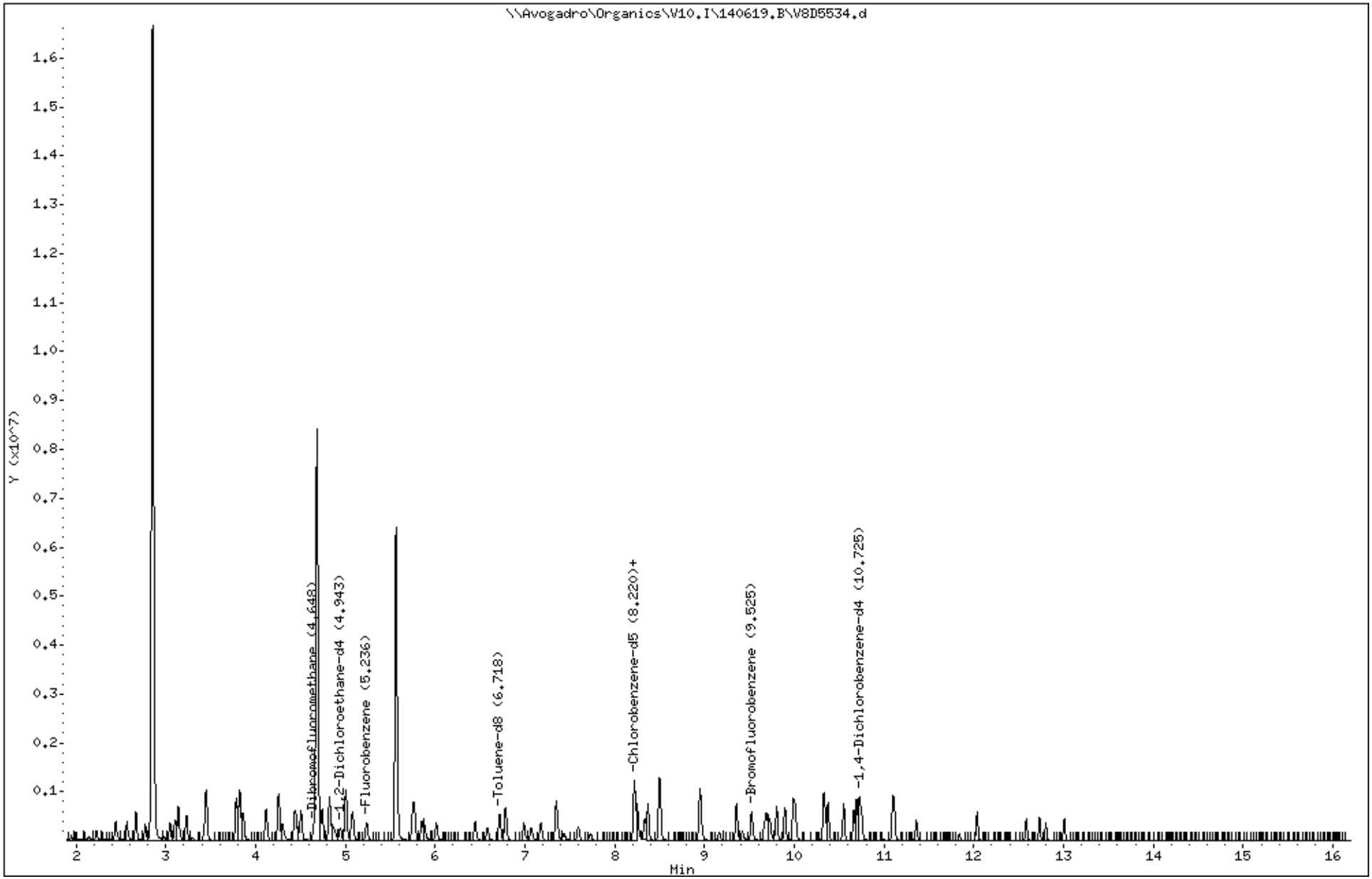
Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5534.d
Report Date: 27-Jun-2014 13:51

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	82313	47.6467	48
	77	Isopropylbenzene	105	9.358	9.355	(1.138)	428632	46.7127	47
	78	trans-1,4-Dichloro-2-butene	75	9.425	9.419	(1.146)	27140	51.4137	51(Q)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	183305	54.0528	54
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	132061	44.1027	44
	81	Bromobenzene	156	9.695	9.689	(0.904)	109254	43.2218	43
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	168615	48.4665	48
	83	n-Propylbenzene	120	9.805	9.805	(0.914)	97410	42.1115	42
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	92190	40.4841	40
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	372666	42.4385	42
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	93901	41.6811	42
M	94	Xylene (Total)	106				455089	134.768	130
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	356878	41.0203	41
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	370539	44.6097	45
	89	sec-Butylbenzene	105	10.550	10.551	(0.984)	426813	43.0217	43
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	188104	42.1651	42
	91	4-Isopropyltoluene	119	10.695	10.692	(0.997)	363984	43.5530	44
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	159596	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	188067	40.2660	40
	95	n-Butylbenzene	91	11.094	11.097	(1.034)	331835	42.9601	43
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	183193	42.3789	42
	97	Hexachloroethane	117	11.358	11.358	(1.059)	64796	41.1714	41
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	32616	53.5659	54
	141	1,3,5-Trichlorobenzene	182	12.036	12.036	(2.299)	136113	59.1440	59(A)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	105792	41.8000	42
	100	Hexachlorobutadiene	225	12.727	12.731	(1.187)	71586	44.5868	44
	101	Naphthalene	128	12.801	12.801	(1.194)	214942	38.9176	39
	102	1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	102563	42.2112	42

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5534.d
Date : 19-JUN-2014 18:37
Client ID: MW-27_6/17/14MS
Instrument: V10.i
Sample Info: 5ML,N1055-09AMS,,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5664.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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	45	
74-87-3	Chloromethane	36	
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	45	
75-00-3	Chloroethane	49	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	170	
67-64-1	Acetone	36	
74-88-4	Iodomethane	33	
75-15-0	Carbon disulfide	46	
75-09-2	Methylene chloride	49	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	130	
108-05-4	Vinyl acetate	52	
78-93-3	2-Butanone	46	
156-59-2	cis-1,2-Dichloroethene	57	
594-20-7	2,2-Dichloropropane	44	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	990	E
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	53	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	760	E
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	53	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	45	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-27_6/17/14MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1055-09AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5664.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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	50	
591-78-6	2-Hexanone	45	
124-48-1	Dibromochloromethane	49	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	47	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	96	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	48	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	47	
96-18-4	1,2,3-Trichloropropane	52	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	50	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	52	
120-82-1	1,2,4-Trichlorobenzene	42	
87-68-3	Hexachlorobutadiene	46	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	42	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2200	E

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5664.d
Report Date: 27-Jun-2014 13:42

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5664.d
Lab Smp Id: N1055-09AMSD Client Smp ID: MW-27_6/17/14MSD
Inj Date : 23-JUN-2014 19:17
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1055-09AMSD,,77721,
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 78 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	85642	44.9566	45
2	Freon114	85	1.705	1.705	(0.326)	62840	41.1202	41
3	Chloromethane	50	1.754	1.753	(0.335)	91040	35.9655	36
4	Vinyl Chloride	62	1.853	1.853	(0.354)	97933	45.0649	45
5	Bromomethane	94	2.143	2.142	(0.409)	26633	44.8214	45
6	Chloroethane	64	2.226	2.229	(0.425)	61582	49.4766	49
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	182180	48.4142	48
126	Ethanol	46	2.567	2.570	(0.490)	72539	5289.57	5300(A)
8	Ether	59	2.667	2.667	(0.509)	89695	47.1517	47
9	Acrolein	56	2.770	2.769	(0.529)	140679	263.955	260
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	254420	174.167	170(R)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	3992303	2182.06	2200(AR)
12	Acetone	58	2.889	2.885	(0.552)	13920	36.4820	36
13	Iodomethane	142	2.985	2.985	(0.570)	25638	33.1575	33(R)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	227957	45.7150	46
15	Acetonitrile	41	3.139	3.136	(0.600)	235803	479.832	480(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	173100	45.7575	46
17	Methyl Acetate	43	3.146	3.146	(0.601)	154367	53.4143	53
18	Methylene Chloride	84	3.229	3.232	(0.617)	65642	48.6491	49
19	tert-Butanol	59	3.297	3.297	(0.630)	32388	103.155	100
20	Acrylonitrile	53	3.422	3.422	(0.654)	58142	51.5230	52
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	66123	49.2628	49

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5664.d
Report Date: 27-Jun-2014 13:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.445	(0.659)	252020	49.7182	50
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	478942	131.817	130(R)
	24 Vinyl acetate	43	3.821	3.818	(0.730)	493130	51.7024	52
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	471390	50.5162	50
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	236380	51.4010	51
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	330320	48.9878	49
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	147950	43.7069	44
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	75856	56.5359	56
	30 2-Butanone	72	4.261	4.265	(0.814)	8967	46.2114	46(Q)
	32 Propionitrile	54	4.306	4.303	(0.823)	211387	538.765	540(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	198523	109.130	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	29622	47.5417	48
	31 Tetrahydrofuran	72	4.503	4.499	(0.860)	18561	105.138	100
	35 Chloroform	83	4.506	4.509	(0.861)	173241	49.7866	50
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	59240	52.1496	52
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	3635642	989.571	990(AR)
	38 Cyclohexane	56	4.741	4.740	(0.905)	180117	49.4841	49
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	30759	49.8579	50
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	169911	53.4462	53
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	139556	985.667	980(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	8038	47.5693	48
	43 Benzene	78	5.004	5.004	(0.956)	227807	47.7077	48
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	223781	51.2143	51
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	194097	48.6247	49
M	50 1,2-Dichloroethene (Total)	96				141979	105.799	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	129725	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	1069141	760.792	760(AR)
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	91761	47.0504	47
	49 1,2-Dichloropropane	63	5.766	5.766	(1.101)	78817	48.4939	48
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	54155	49.3339	49(Q)
	52 Dibromomethane	93	5.882	5.882	(1.123)	53851	48.7836	49
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	17877	1103.61	1100(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	137529	51.8355	52
	55 2-Chloroethyl vinyl ether	63	6.445	6.454	(1.231)	987	52.0338	52
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	102456	49.4921	49
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	148145	53.4170	53
$	58 Toluene-d8	98	6.715	6.718	(0.817)	186733	49.3338	49
	59 Toluene	91	6.782	6.782	(1.295)	245324	47.9583	48
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	108750	45.0629	45
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	63545	51.3485	51
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.370)	58981	49.7924	50
	63 Tetrachloroethene	164	7.348	7.348	(0.894)	67927	50.3306	50
	64 1,3-Dichloropropane	76	7.355	7.354	(0.894)	107939	49.7353	50
	65 2-Hexanone	43	7.432	7.432	(0.904)	99181	45.0249	45
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	86209	48.9679	49
	67 1,2-Dibromoethane	107	7.724	7.731	(0.939)	67889	49.6076	50
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	81072	44.5441	44(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	191071	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	163320	46.8529	47
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	78025	48.6804	49
	72 Ethylbenzene	106	8.371	8.367	(1.018)	84780	46.7763	47
	73 m,p-Xylene	106	8.496	8.499	(1.033)	206900	95.7801	96
	74 o-Xylene	106	8.943	8.943	(1.088)	99197	49.1176	49
	75 Styrene	104	8.956	8.959	(1.089)	159492	48.2627	48

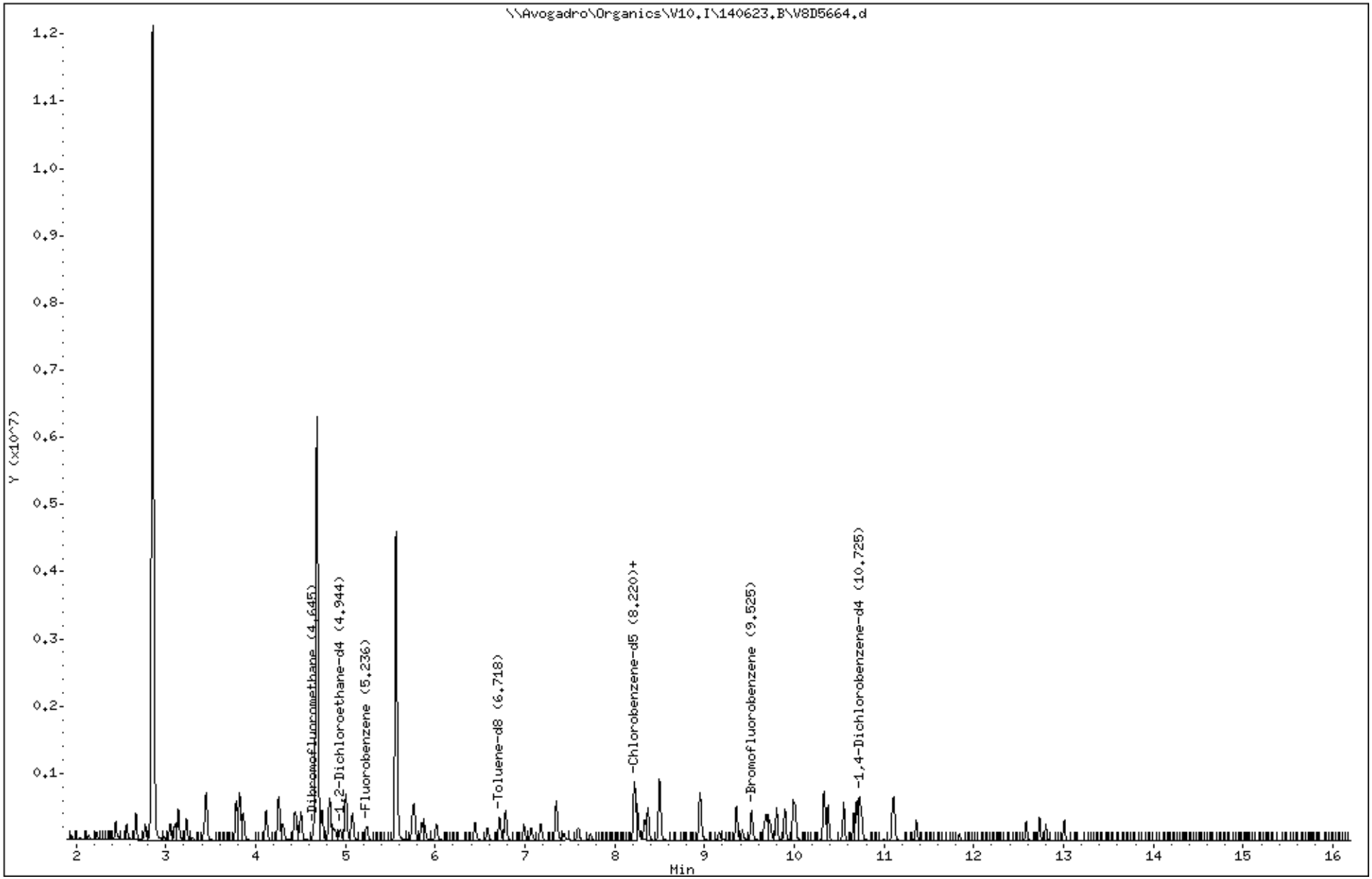
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Report Date: 27-Jun-2014 13:42

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.165	9.161	(1.115)	58053	52.2669	52
	77	Isopropylbenzene	105	9.358	9.354	(1.138)	294156	46.9314	47
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	19121	45.0727	45
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	131260	50.8744	51
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.902)	86544	48.7049	49
	81	Bromobenzene	156	9.689	9.692	(0.903)	73206	46.7715	47
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	120431	51.8201	52
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	65881	47.9771	48
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	61320	46.6102	47
	85	1,3,5-Trimethylbenzene	105	9.991	9.988	(0.932)	265322	49.6771	50
	86	4-Chlorotoluene	126	10.010	10.014	(0.933)	64178	47.3474	47
M	94	Xylene (Total)	106				306097	144.898	140
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	274481	50.8093	51
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	252735	50.5470	50
	89	sec-Butylbenzene	105	10.551	10.550	(0.984)	296299	49.8031	50
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	126600	47.3091	47
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	253746	49.5500	50
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	114895	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	129330	44.9086	45
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	229974	47.5809	48
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	124101	48.6018	49
	97	Hexachloroethane	117	11.358	11.361	(1.059)	46775	46.7138	47
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	22901	52.0408	52
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	68677	42.2045	42
	100	Hexachlorobutadiene	225	12.731	12.730	(1.187)	54081	45.8200	46
	101	Naphthalene	128	12.801	12.801	(1.194)	140320	42.3979	42
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	69302	46.7876	47

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5664.d
Date : 23-JUN-2014 19:17
Client ID: MW-27_6/17/14MSD
Instrument: V10.i
Sample Info: 5ML,N1055-09AMSD,,77721,
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77659

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5513.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/19/2014

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	56	
74-87-3	Chloromethane	47	
75-01-4	Vinyl chloride	58	
74-83-9	Bromomethane	39	
75-00-3	Chloroethane	59	
75-69-4	Trichlorofluoromethane	62	
75-35-4	1,1-Dichloroethene	58	
67-64-1	Acetone	54	
74-88-4	Iodomethane	76	
75-15-0	Carbon disulfide	64	
75-09-2	Methylene chloride	51	
156-60-5	trans-1,2-Dichloroethene	54	
1634-04-4	Methyl tert-butyl ether	54	
75-34-3	1,1-Dichloroethane	55	
108-05-4	Vinyl acetate	56	
78-93-3	2-Butanone	59	
156-59-2	cis-1,2-Dichloroethene	52	
594-20-7	2,2-Dichloropropane	61	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	55	
71-55-6	1,1,1-Trichloroethane	58	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	58	
107-06-2	1,2-Dichloroethane	57	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	54	
75-27-4	Bromodichloromethane	55	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	54	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	46	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77659

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77659

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5513.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/19/2014

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	46	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	45	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	45	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	43	
108-86-1	Bromobenzene	46	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	44	
95-49-8	2-Chlorotoluene	44	
108-67-8	1,3,5-Trimethylbenzene	45	
106-43-4	4-Chlorotoluene	45	
98-06-6	tert-Butylbenzene	45	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	44	
106-46-7	1,4-Dichlorobenzene	43	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	43	
96-12-8	1,2-Dibromo-3-chloropropane	51	
120-82-1	1,2,4-Trichlorobenzene	45	
87-68-3	Hexachlorobutadiene	56	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	58	

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5513.d
Report Date: 27-Jun-2014 13:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140619.B\V8D5513.d
Lab Smp Id: LCS-77659 Client Smp ID: LCS-77659
Inj Date : 19-JUN-2014 08:40
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-77659,LCS-77659,77659
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140619.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:48 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	176157	55.6532	56
2	Freon114	85	1.705	1.705	(0.326)	98369	53.3343	53
3	Chloromethane	50	1.754	1.754	(0.335)	244137	46.7056	47
4	Vinyl Chloride	62	1.856	1.856	(0.355)	200151	58.3240	58
5	Bromomethane	94	2.143	2.143	(0.409)	50603	38.9506	39
6	Chloroethane	64	2.229	2.229	(0.426)	99622	59.2578	59
7	Trichlorofluoromethane	101	2.442	2.445	(0.466)	296948	61.6360	62
126	Ethanol	46	2.567	2.567	(0.490)	98539	5643.08	5600(AQ)
8	Ether	59	2.667	2.667	(0.509)	143003	57.0669	57
9	Acrolein	56	2.770	2.773	(0.529)	197763	283.948	280
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	118940	57.7204	58
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	136891	57.9424	58
12	Acetone	58	2.889	2.892	(0.552)	17709	53.7901	54(Q)
13	Iodomethane	142	2.982	2.985	(0.570)	95645	76.4749	76(R)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	384426	63.8681	64
15	Acetonitrile	41	3.136	3.139	(0.599)	395072	542.181	540(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	306343	59.0793	59
17	Methyl Acetate	43	3.146	3.146	(0.601)	224727	51.9120	52
18	Methylene Chloride	84	3.229	3.233	(0.617)	105486	50.8739	51
19	tert-Butanol	59	3.297	3.300	(0.630)	40073	106.049	110
20	Acrylonitrile	53	3.419	3.419	(0.653)	81601	50.9887	51
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	106395	53.7339	54

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5513.d
Report Date: 27-Jun-2014 13:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	367785	53.8686	54
	23 1,1-Dichloroethane	63	3.782	3.786	(0.722)	289508	54.7138	55
	24 Vinyl acetate	43	3.818	3.821	(0.729)	697188	55.7091	56
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	717730	52.2037	52
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	354001	57.6331	58
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	515605	54.9692	55
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	271668	61.2218	61
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	108733	52.0683	52
	30 2-Butanone	72	4.265	4.262	(0.815)	13672	58.8560	59(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	280668	524.233	520(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	269452	107.262	110
	34 Bromochloromethane	128	4.458	4.454	(0.851)	46768	47.7197	48
	31 Tetrahydrofuran	72	4.496	4.503	(0.859)	24886	104.075	100
	35 Chloroform	83	4.509	4.509	(0.861)	264609	55.2639	55
$	36 Dibromofluoromethane	113	4.644	4.644	(0.887)	95165	53.7268	54
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	277012	57.6529	58
	38 Cyclohexane	56	4.737	4.741	(0.905)	269630	51.4554	51
	39 1,1-Dichloropropene	110	4.821	4.824	(0.921)	50106	52.2357	52
	40 Carbon Tetrachloride	117	4.827	4.831	(0.922)	244094	57.5004	58
	41 Isobutyl Alcohol	43	5.078	5.075	(0.970)	214801	1092.97	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	14562	48.6270	49
	43 Benzene	78	5.004	5.004	(0.956)	372396	51.8225	52
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	321751	57.2498	57
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	305193	54.1309	54
M	50 1,2-Dichloroethene (Total)	96				215128	105.802	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	238021	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	103961	52.9235	53
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	148383	52.4460	52
	49 1,2-Dichloropropane	63	5.773	5.770	(1.103)	128411	50.8820	51
	51 Methyl Methacrylate	69	5.850	5.853	(1.117)	81631	53.3971	53
	52 Dibromomethane	93	5.879	5.879	(1.123)	81121	53.9658	54
	53 1,4-Dioxane	88	5.879	5.885	(1.123)	21932	1002.18	1000(AQ)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	198727	55.0538	55
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.231)	1209	44.8063	45(Q)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	170651	49.4503	49
	57 4-Methyl-2-pentanone	43	6.586	6.580	(1.258)	205144	54.1914	54(Q)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	300476	47.6402	48
	59 Toluene	91	6.786	6.782	(1.296)	388318	49.7058	50
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	177412	51.2400	51
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	90119	51.4914	51
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	87857	50.4143	50
	63 Tetrachloroethene	164	7.342	7.345	(0.893)	97747	46.0516	46
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	161092	46.1343	46
	65 2-Hexanone	43	7.432	7.435	(0.904)	137474	48.2168	48
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	130994	46.3227	46
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	99868	48.1156	48
	69 1-Chlorohexane	91	8.216	8.213	(0.999)	124026	44.2527	44
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	275617	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	249459	44.9763	45
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	116203	48.4202	48
	72 Ethylbenzene	106	8.371	8.367	(1.018)	130628	46.6669	47
	73 m,p-Xylene	106	8.496	8.499	(1.033)	320291	93.0865	93
	74 o-Xylene	106	8.943	8.946	(1.088)	153789	47.5085	48
	75 Styrene	104	8.959	8.956	(1.090)	241071	45.4977	45

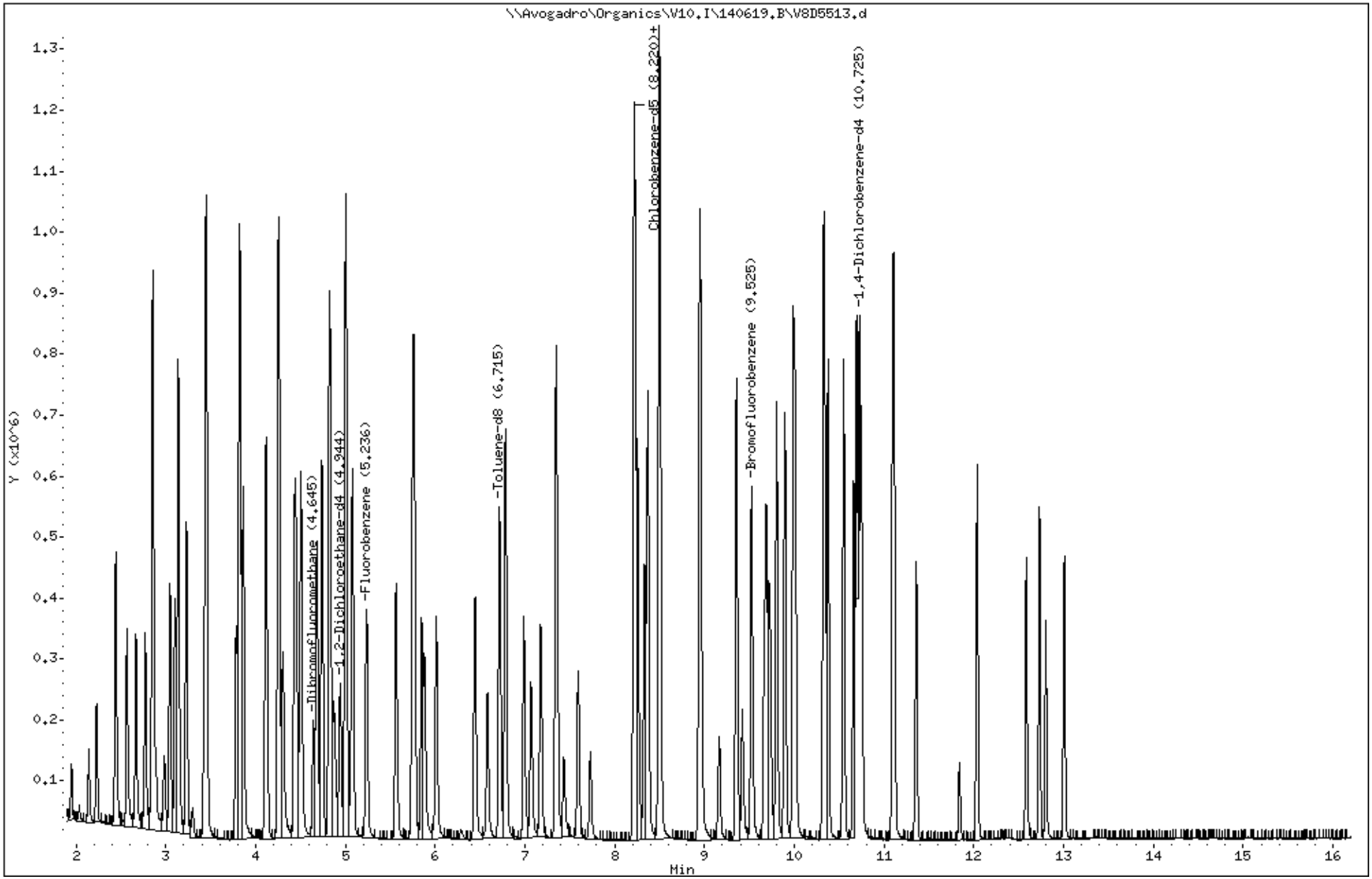
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Report Date: 27-Jun-2014 13:48

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.162	9.165	(1.114)	80093	46.4914	46
	77	Isopropylbenzene	105	9.358	9.355	(1.138)	445258	48.6014	49
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.419	(1.145)	27881	52.9010	53(Q)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	176277	52.0626	52
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.666	(0.902)	123479	42.7368	43
	81	Bromobenzene	156	9.692	9.689	(0.904)	111979	45.9113	46
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	163444	48.6892	49
	83	n-Propylbenzene	120	9.805	9.805	(0.914)	98772	44.2537	44
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	95728	43.5670	44
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	382065	45.0916	45
	86	4-Chlorotoluene	126	10.014	10.010	(0.934)	97086	44.6625	45
M	94	Xylene (Total)	106				474080	140.595	140
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	376875	44.8947	45
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	378368	47.2094	47
	89	sec-Butylbenzene	105	10.551	10.551	(0.984)	447000	46.6956	47
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	189150	43.9420	44
	91	4-Isopropyltoluene	119	10.695	10.692	(0.997)	386274	47.9015	48
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.728	(1.000)	153994	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	191607	42.5163	42
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	353571	47.4393	47
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	180362	43.2418	43
	97	Hexachloroethane	117	11.361	11.358	(1.059)	71461	47.0581	47
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	29681	50.5190	50
	141	1,3,5-Trichlorobenzene	182	12.039	12.036	(2.299)	138391	57.5475	58(A)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	110063	45.0695	45
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	85093	55.6279	56
	101	Naphthalene	128	12.801	12.801	(1.194)	211563	39.6993	40
	102	1,2,3-Trichlorobenzene	180	13.004	13.007	(1.213)	107416	45.8167	46

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140619.B\V8D5513.d
Date : 19-JUN-2014 08:40
Client ID: LCS-77659
Instrument: V10.i
Sample Info: 5ML,LCS-77659,LCS-77659,77659
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5579.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2014

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	47	
74-87-3	Chloromethane	39	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	36	
75-00-3	Chloroethane	59	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	60	
74-88-4	Iodomethane	54	
75-15-0	Carbon disulfide	59	
75-09-2	Methylene chloride	48	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	54	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	60	
78-93-3	2-Butanone	57	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	44	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	48	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	54	
71-43-2	Benzene	49	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	49	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	48	
108-10-1	4-Methyl-2-pentanone	55	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	42	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5579.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2014

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	41	
591-78-6	2-Hexanone	45	
124-48-1	Dibromochloromethane	42	
106-93-4	1,2-Dibromoethane	44	
108-90-7	Chlorobenzene	41	
630-20-6	1,1,1,2-Tetrachloroethane	43	
100-41-4	Ethylbenzene	42	
179601-23-1	m,p-Xylene	84	
95-47-6	o-Xylene	43	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	42	
75-25-2	Bromoform	43	
98-82-8	Isopropylbenzene	44	
79-34-5	1,1,2,2-Tetrachloroethane	37	
108-86-1	Bromobenzene	39	
96-18-4	1,2,3-Trichloropropane	39	
103-65-1	n-Propylbenzene	39	
95-49-8	2-Chlorotoluene	38	
108-67-8	1,3,5-Trimethylbenzene	39	
106-43-4	4-Chlorotoluene	38	
98-06-6	tert-Butylbenzene	41	
95-63-6	1,2,4-Trimethylbenzene	41	
135-98-8	sec-Butylbenzene	39	
99-87-6	4-Isopropyltoluene	40	
541-73-1	1,3-Dichlorobenzene	38	
106-46-7	1,4-Dichlorobenzene	37	
104-51-8	n-Butylbenzene	38	
95-50-1	1,2-Dichlorobenzene	39	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	39	
87-68-3	Hexachlorobutadiene	40	
87-61-6	1,2,3-Trichlorobenzene	38	
91-20-3	Naphthalene	36	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	56	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5579.d
Report Date: 25-Jun-2014 16:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5579.d
Lab Smp Id: LCS-77692 Client Smp ID: LCS-77692
Inj Date : 20-JUN-2014 16:19
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,LCS-77692,LCS-77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 70 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	140527	47.0397	47
2	Freon114	85	1.705	1.705	(0.326)	102302	58.7688	59
3	Chloromethane	50	1.753	1.754	(0.335)	192580	39.0356	39
4	Vinyl Chloride	62	1.853	1.853	(0.354)	151023	46.6281	47(Q)
5	Bromomethane	94	2.142	2.143	(0.409)	44638	36.4047	36
6	Chloroethane	64	2.229	2.226	(0.426)	93718	59.0647	59
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	238754	52.5072	52
126	Ethanol	46	2.570	2.567	(0.491)	89321	5419.72	5400(AQ)
8	Ether	59	2.667	2.667	(0.509)	128005	54.1228	54
9	Acrolein	56	2.773	2.770	(0.530)	185161	281.682	280
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	101398	52.1370	52
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	125781	56.4094	56
12	Acetone	58	2.888	2.885	(0.552)	18644	60.0015	60
13	Iodomethane	142	2.982	2.982	(0.570)	63223	53.5607	54
14	Carbon Disulfide	76	3.046	3.046	(0.582)	335335	58.9799	59
15	Acetonitrile	41	3.136	3.136	(0.599)	335339	487.603	490(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	255127	52.1313	52
17	Methyl Acetate	43	3.146	3.146	(0.601)	193232	47.2940	47
18	Methylene Chloride	84	3.229	3.229	(0.617)	94208	48.1396	48
19	tert-Butanol	59	3.300	3.300	(0.630)	38277	107.326	110
20	Acrylonitrile	53	3.422	3.419	(0.654)	76880	50.8987	51
21	trans-1,2-Dichloroethene	96	3.451	3.451	(0.659)	91425	48.9223	49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	345878	53.6759	54
	23 1,1-Dichloroethane	63	3.785	3.782	(0.723)	249043	49.8684	50
	24 Vinyl acetate	43	3.818	3.818	(0.729)	703954	59.5985	60
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	678348	52.2766	52
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	313644	54.1027	54
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	487833	55.1046	55
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	216449	51.7044	52
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	97238	49.3359	49
	30 2-Butanone	72	4.261	4.258	(0.814)	12484	56.9413	57(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	265752	525.924	520(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	253074	106.740	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	40731	44.0340	44
	31 Tetrahydrofuran	72	4.499	4.503	(0.859)	23922	105.999	100
	35 Chloroform	83	4.509	4.506	(0.861)	238085	52.6846	53
$	36 Dibromofluoromethane	113	4.641	4.641	(0.886)	92681	55.4395	55
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	241675	53.2928	53
	38 Cyclohexane	56	4.740	4.741	(0.905)	249470	50.4424	50
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	43802	48.3823	48
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	208153	51.9531	52
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	198969	1072.69	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	13935	49.3036	49
	43 Benzene	78	5.004	5.001	(0.956)	334443	49.3117	49
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	284571	53.6487	54
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	287583	54.0441	54
M	50 1,2-Dichloroethene (Total)	96				188663	98.2582	98
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	224647	50.0000	
	47 Trichloroethene	130	5.564	5.567	(1.063)	92318	49.7942	50
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	134275	50.2850	50
	49 1,2-Dichloropropane	63	5.769	5.773	(1.102)	115829	48.6288	49
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	78263	54.2418	54
	52 Dibromomethane	93	5.882	5.879	(1.123)	74953	52.8310	53
	53 1,4-Dioxane	88	5.879	5.882	(1.123)	22342	1086.48	1100(AQ)
	54 Bromodichloromethane	83	6.010	6.017	(1.148)	180716	53.0446	53
	55 2-Chloroethyl vinyl ether	63	6.438	6.448	(1.230)	1293	50.5415	50(Q)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	156760	48.1899	48
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	194935	54.5602	54(Q)
$	58 Toluene-d8	98	6.718	6.715	(0.817)	293776	45.5859	46
	59 Toluene	91	6.782	6.786	(1.295)	354143	48.0300	48
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	164559	50.4171	50
	61 Ethyl Methacrylate	69	7.068	7.069	(1.350)	87378	52.8975	53
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	80241	48.7853	49
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	88718	40.9075	41
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	148636	41.6604	42
	65 2-Hexanone	43	7.435	7.435	(0.904)	131174	45.0273	45
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	122148	42.4394	42
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	93882	44.2682	44
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	115593	40.3654	40
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	281615	50.0000	
	70 Chlorobenzene	112	8.255	8.252	(1.004)	229835	40.5556	40
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	106651	43.4935	43
	72 Ethylbenzene	106	8.371	8.367	(1.018)	119694	41.8500	42
	73 m,p-Xylene	106	8.499	8.496	(1.034)	294522	83.7741	84
	74 o-Xylene	106	8.946	8.943	(1.088)	143232	43.3048	43
	75 Styrene	104	8.959	8.959	(1.090)	227833	42.0835	42

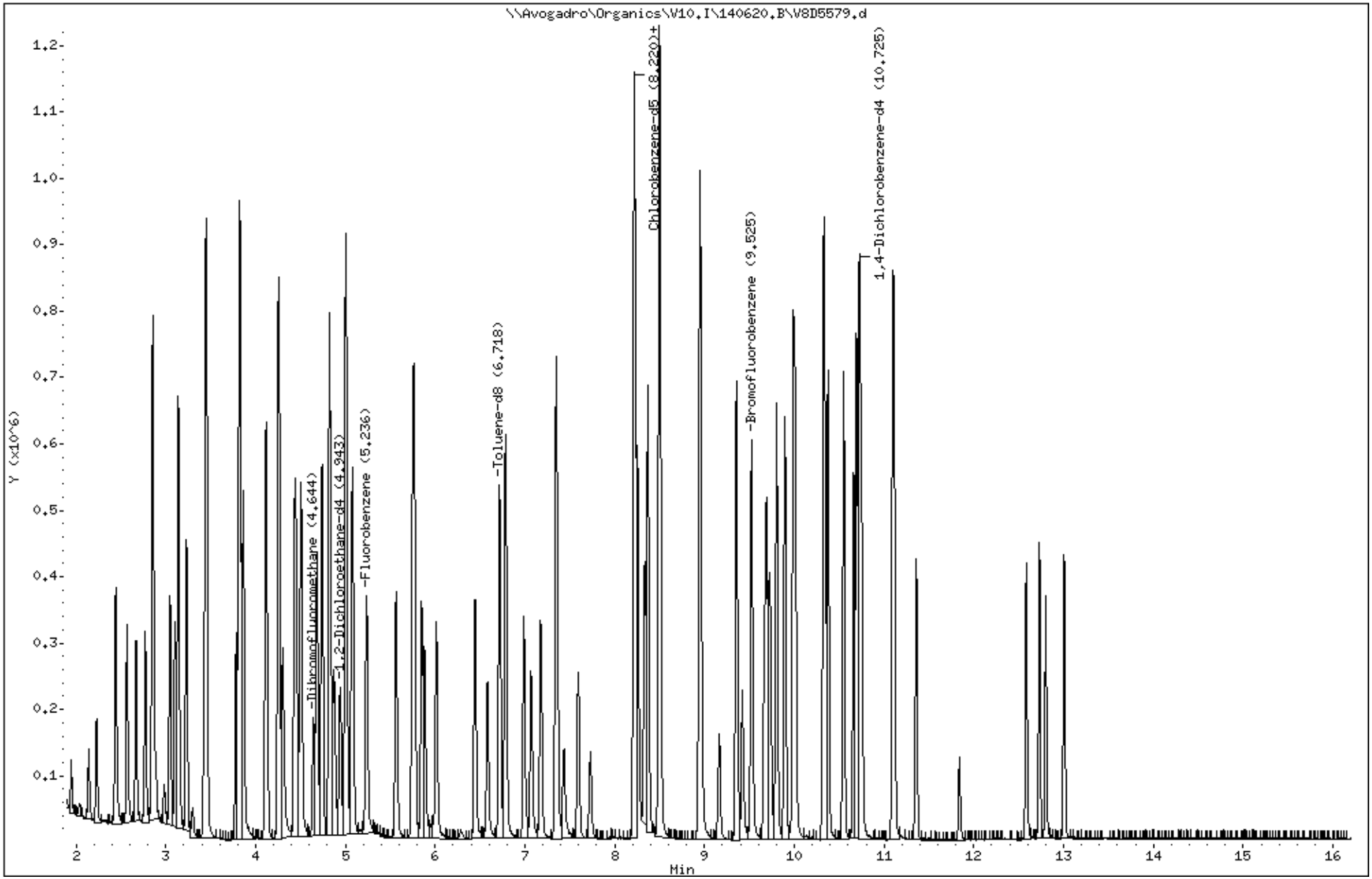
Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5579.d
Report Date: 25-Jun-2014 16:16

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	74533	42.5404	42
	77	Isopropylbenzene	105	9.354	9.358	(1.138)	410061	43.8062	44
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.419	(1.146)	29464	54.7138	55(Q)
$	79	Bromofluorobenzene	95	9.525	9.522	(1.158)	186971	54.0449	54
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.670	(0.901)	113856	36.8194	37
	81	Bromobenzene	156	9.689	9.692	(0.903)	102608	39.3076	39
	82	1,2,3-Trichloropropane	75	9.724	9.721	(0.906)	141719	39.4461	39
	83	n-Propylbenzene	120	9.805	9.805	(0.914)	92835	38.8633	39
	84	2-Chlorotoluene	126	9.895	9.898	(0.922)	88358	37.5731	38
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	350884	38.6932	39
	86	4-Chlorotoluene	126	10.010	10.011	(0.933)	89475	38.4593	38
M	94	Xylene (Total)	106				437754	127.079	130
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	370052	41.1882	41
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.967)	349835	40.7839	41
	89	sec-Butylbenzene	105	10.550	10.551	(0.984)	399170	38.9617	39
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	173096	37.5727	38
	91	4-Isopropyltoluene	119	10.695	10.692	(0.997)	341490	39.5680	40
*	92	1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	164813	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	180161	37.3523	37(R)
	95	n-Butylbenzene	91	11.097	11.097	(1.034)	306643	38.4421	38
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	172985	38.7507	39
	97	Hexachloroethane	117	11.358	11.358	(1.059)	66931	41.1818	41
	98	1,2-Dibromo-3-chloropropane	75	11.837	11.840	(1.103)	27948	44.4466	44(Q)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.173)	100685	38.5229	38
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	66969	40.1067	40
	101	Naphthalene	128	12.801	12.801	(1.193)	205425	36.0171	36
	102	1,2,3-Trichlorobenzene	180	13.004	13.007	(1.212)	96568	38.4858	38

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5579.d
Date : 20-JUN-2014 16:19
Client ID: LCS-77692
Instrument: V10.i
Sample Info: 5ML,LCS-77692,LCS-77692
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5651.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	46	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	57	
75-00-3	Chloroethane	53	
75-69-4	Trichlorofluoromethane	44	
75-35-4	1,1-Dichloroethene	48	
67-64-1	Acetone	39	
74-88-4	Iodomethane	64	
75-15-0	Carbon disulfide	47	
75-09-2	Methylene chloride	51	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	53	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	47	
156-59-2	cis-1,2-Dichloroethene	52	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	48	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	47	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	57	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	54	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5651.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	44	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	49	
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	51	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	50	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	47	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	46	
87-61-6	1,2,3-Trichlorobenzene	53	
91-20-3	Naphthalene	49	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	43	

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5651.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5651.d
Lab Smp Id: LCS-77721 Client Smp ID: LCS-77721
Inj Date : 23-JUN-2014 13:16
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-77721,LCS-77721,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 10:58 Cal File: V8D5646.d
Als bottle: 65 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	1.586	1.586	(0.303)	109275	50.0000	43
2	Freon114	85	1.705	1.705	(0.326)	87752	50.0000	43
3	Chloromethane	50	1.753	1.753	(0.335)	153630	50.0000	46
4	Vinyl Chloride	62	1.856	1.853	(0.355)	136583	50.0000	47(Q)
5	Bromomethane	94	2.142	2.142	(0.409)	45315	50.0000	57
6	Chloroethane	64	2.226	2.229	(0.425)	87672	50.0000	53
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	220146	50.0000	44
126	Ethanol	46	2.567	2.570	(0.490)	84053	5000.00	4600(A)
8	Ether	59	2.667	2.667	(0.509)	128897	50.0000	51
9	Acrolein	56	2.769	2.769	(0.529)	175123	250.000	250
10	1,1-Dichloroethene	96	2.859	2.859	(0.546)	93518	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	108573	50.0000	43
12	Acetone	58	2.888	2.885	(0.552)	19605	50.0000	39
13	Iodomethane	142	2.982	2.985	(0.570)	65538	50.0000	64
14	Carbon Disulfide	76	3.046	3.046	(0.582)	313363	50.0000	47
15	Acetonitrile	41	3.136	3.136	(0.599)	321423	500.000	490(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	254350	50.0000	51
17	Methyl Acetate	43	3.146	3.146	(0.601)	177345	50.0000	46
18	Methylene Chloride	84	3.232	3.232	(0.617)	90955	50.0000	51
19	tert-Butanol	59	3.297	3.297	(0.630)	36503	100.000	88
20	Acrylonitrile	53	3.422	3.422	(0.654)	73346	50.0000	49
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	87805	50.0000	49
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	354416	50.0000	53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	248023	50.0000	51
	24 Vinyl acetate	43	3.818	3.818	(0.729)	681033	50.0000	54
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	658781	50.0000	53
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	308618	50.0000	50
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	485602	50.0000	54
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	220602	50.0000	49
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	92710	50.0000	52
	30 2-Butanone	72	4.258	4.265	(0.813)	12076	50.0000	47
	32 Propionitrile	54	4.303	4.303	(0.822)	248136	500.000	480(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	241101	100.000	100
	34 Bromochloromethane	128	4.454	4.454	(0.851)	43535	50.0000	53
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	22801	100.000	97
	35 Chloroform	83	4.506	4.509	(0.861)	233896	50.0000	51
$	36 Dibromofluoromethane	113	4.647	4.641	(0.888)	76499	50.0000	51
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	236156	50.0000	48
	38 Cyclohexane	56	4.740	4.740	(0.905)	221381	50.0000	46
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	42444	50.0000	52
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	206426	50.0000	49
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	189728	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	11594	50.0000	52
	43 Benzene	78	5.001	5.004	(0.955)	318029	50.0000	50
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	293475	50.0000	51
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	285078	50.0000	54
M	50 1,2-Dichloroethene (Total)	96				180515	100.000	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	172098	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	87040	50.0000	47
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	121408	50.0000	47
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	113363	50.0000	52
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	77353	50.0000	53
	52 Dibromomethane	93	5.879	5.882	(1.123)	74574	50.0000	51
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	20820	1000.00	970(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	183573	50.0000	52
	55 2-Chloroethyl vinyl ether	63	6.441	6.454	(1.230)	1329	50.0000	53(T)
	56 cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	155463	50.0000	57
	57 4-Methyl-2-pentanone	43	6.580	6.583	(1.257)	176801	50.0000	48
$	58 Toluene-d8	98	6.718	6.718	(0.817)	245412	50.0000	49
	59 Toluene	91	6.785	6.782	(1.296)	344657	50.0000	51
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	165512	50.0000	52
	61 Ethyl Methacrylate	69	7.065	7.068	(1.349)	85345	50.0000	52
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	80213	50.0000	51
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	86236	50.0000	49
	64 1,3-Dichloropropane	76	7.354	7.354	(0.894)	153049	50.0000	54
	65 2-Hexanone	43	7.432	7.432	(0.904)	128498	50.0000	44
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	122792	50.0000	53
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	92279	50.0000	51
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	111591	50.0000	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	250924	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	227872	50.0000	50
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	106709	50.0000	51
	72 Ethylbenzene	106	8.367	8.367	(1.018)	117267	50.0000	49
	73 m,p-Xylene	106	8.499	8.499	(1.034)	285982	100.000	100
	74 o-Xylene	106	8.946	8.943	(1.088)	138776	50.0000	52
	75 Styrene	104	8.959	8.959	(1.090)	224567	50.0000	52
	76 Bromoform	173	9.165	9.161	(1.115)	74980	50.0000	51

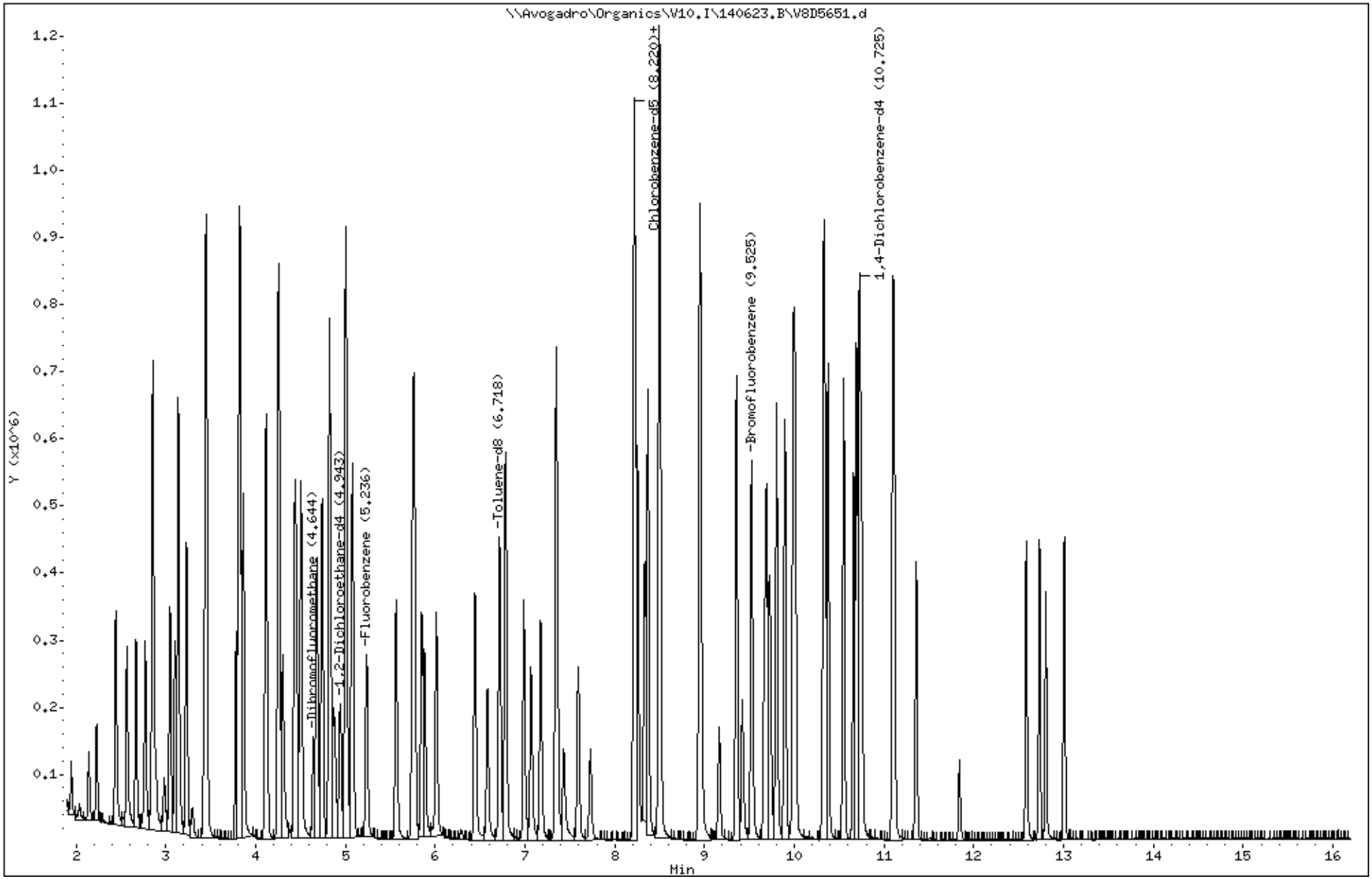
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5651.d
Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	397267	50.0000	48
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	27574	50.0000	49
$	79 Bromofluorobenzene	95	9.522	9.525	(1.158)	175841	50.0000	52
	80 1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	111112	50.0000	48
	81 Bromobenzene	156	9.689	9.692	(0.903)	104527	50.0000	51
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	151895	50.0000	50
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	88356	50.0000	49
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	84762	50.0000	49
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	348632	50.0000	50
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	88645	50.0000	50
M	94 Xylene (Total)	106				424758	150.000	150
	87 tert-Butylbenzene	119	10.329	10.329	(0.963)	366162	50.0000	52
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	343083	50.0000	52
	89 sec-Butylbenzene	105	10.550	10.550	(0.984)	384789	50.0000	50
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	174779	50.0000	50
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	334083	50.0000	50
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	150015	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	178494	50.0000	47
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	297336	50.0000	47
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	169516	50.0000	51
	97 Hexachloroethane	117	11.357	11.361	(1.059)	65253	50.0000	50
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	26839	50.0000	47
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	104701	50.0000	49
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	71645	50.0000	46
	101 Naphthalene	128	12.801	12.801	(1.194)	213053	50.0000	49
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	102379	50.0000	53

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\V10.I\140623.B\V8D5651.d
Date : 23-JUN-2014 13:16
Client ID: LCS-77721
Instrument: V10.i
Sample Info: 5ML,LCS-77721,LCS-77721,77721
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5582.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2014

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	50	
74-87-3	Chloromethane	43	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	45	
75-00-3	Chloroethane	69	
75-69-4	Trichlorofluoromethane	56	
75-35-4	1,1-Dichloroethene	57	
67-64-1	Acetone	53	
74-88-4	Iodomethane	61	
75-15-0	Carbon disulfide	66	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	56	
1634-04-4	Methyl tert-butyl ether	59	
75-34-3	1,1-Dichloroethane	57	
108-05-4	Vinyl acetate	65	
78-93-3	2-Butanone	56	
156-59-2	cis-1,2-Dichloroethene	56	
594-20-7	2,2-Dichloropropane	56	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	59	
71-55-6	1,1,1-Trichloroethane	59	
563-58-6	1,1-Dichloropropene	54	
56-23-5	Carbon tetrachloride	57	
107-06-2	1,2-Dichloroethane	60	
71-43-2	Benzene	55	
79-01-6	Trichloroethene	56	
78-87-5	1,2-Dichloropropane	54	
74-95-3	Dibromomethane	57	
75-27-4	Bromodichloromethane	59	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	57	
108-88-3	Toluene	55	
10061-02-6	trans-1,3-Dichloropropene	55	
79-00-5	1,1,2-Trichloroethane	55	
142-28-9	1,3-Dichloropropane	46	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-77692

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1055 Mod. Ref No.: SDG No.: SN1055

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-77692

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5582.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2014

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	45	
591-78-6	2-Hexanone	46	
124-48-1	Dibromochloromethane	45	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	45	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	47	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	41	
108-86-1	Bromobenzene	45	
96-18-4	1,2,3-Trichloropropane	47	
103-65-1	n-Propylbenzene	44	
95-49-8	2-Chlorotoluene	42	
108-67-8	1,3,5-Trimethylbenzene	44	
106-43-4	4-Chlorotoluene	43	
98-06-6	tert-Butylbenzene	42	
95-63-6	1,2,4-Trimethylbenzene	46	
135-98-8	sec-Butylbenzene	44	
99-87-6	4-Isopropyltoluene	45	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	42	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	43	
96-12-8	1,2-Dibromo-3-chloropropane	49	
120-82-1	1,2,4-Trichlorobenzene	44	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	44	
91-20-3	Naphthalene	41	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	59	

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5582.d
Report Date: 25-Jun-2014 16:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140620.B\V8D5582.d
Lab Smp Id: LCSD-77692 Client Smp ID: LCSD-77692
Inj Date : 20-JUN-2014 17:42
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,LCSD-77692,LCSD-77692,77692
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140620.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 16:16 V10.i Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 73 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	149282	50.1382	50
2	Freon114	85	1.705	1.705	(0.326)	110276	63.5624	64
3	Chloromethane	50	1.753	1.754	(0.335)	213553	43.4322	43
4	Vinyl Chloride	62	1.853	1.853	(0.354)	168913	52.3267	52(Q)
5	Bromomethane	94	2.142	2.143	(0.409)	55535	45.4439	45
6	Chloroethane	64	2.226	2.226	(0.425)	108458	68.5840	68(R)
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	253622	55.9644	56
126	Ethanol	46	2.567	2.567	(0.490)	89110	5425.07	5400(AQ)
8	Ether	59	2.670	2.667	(0.510)	140175	59.4676	59
9	Acrolein	56	2.769	2.770	(0.529)	193233	294.949	290
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	110443	56.9785	57
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	131407	59.1304	59
12	Acetone	58	2.888	2.885	(0.552)	16409	52.9860	53
13	Iodomethane	142	2.982	2.982	(0.570)	72218	61.3865	61(R)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	371797	65.6853	66
15	Acetonitrile	41	3.136	3.136	(0.599)	374002	545.648	540(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	282375	57.8928	58
17	Methyl Acetate	43	3.146	3.146	(0.601)	201769	49.5493	50
18	Methylene Chloride	84	3.229	3.229	(0.617)	102880	52.7475	53
19	tert-Butanol	59	3.300	3.300	(0.630)	38431	108.120	110
20	Acrylonitrile	53	3.422	3.419	(0.654)	82590	54.8627	55
21	trans-1,2-Dichloroethene	96	3.454	3.451	(0.660)	103579	55.6122	56

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5582.d
Report Date: 25-Jun-2014 16:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.445	(0.659)	381744	59.4408	59
	23 1,1-Dichloroethane	63	3.785	3.782	(0.723)	281549	56.5667	56
	24 Vinyl acetate	43	3.818	3.818	(0.729)	762282	64.7534	65
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	743332	57.4770	57
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	352539	61.0163	61
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	532278	60.3270	60
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	232198	55.6417	56
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	109216	55.5993	56
	30 2-Butanone	72	4.258	4.258	(0.813)	12175	55.7184	56(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	279430	554.850	550(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	269394	114.005	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	45822	49.7043	50
	31 Tetrahydrofuran	72	4.502	4.503	(0.860)	26010	115.639	120
	35 Chloroform	83	4.509	4.506	(0.861)	263587	58.5237	58
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	90820	54.5088	54
	37 1,1,1-Trichloroethane	97	4.682	4.683	(0.894)	267528	59.1919	59
	38 Cyclohexane	56	4.740	4.741	(0.905)	269355	54.6460	55
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	48944	54.2436	54
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	229002	57.3487	57
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	210784	1140.20	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	14432	51.2335	51
	43 Benzene	78	5.004	5.001	(0.956)	373882	55.3119	55
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	315177	59.6183	60
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.970)	315330	59.4575	59
M	50 1,2-Dichloroethene (Total)	96				212795	111.212	110
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	223895	50.0000	
	47 Trichloroethene	130	5.563	5.567	(1.063)	103935	56.2484	56
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	143723	54.0040	54
	49 1,2-Dichloropropane	63	5.772	5.773	(1.103)	128750	54.2350	54
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	85591	59.5198	60
	52 Dibromomethane	93	5.879	5.879	(1.123)	80459	56.9025	57
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	24360	1194.28	1200(AQ)
	54 Bromodichloromethane	83	6.014	6.017	(1.149)	199885	58.8683	59
	55 2-Chloroethyl vinyl ether	63	6.441	6.448	(1.230)	1381	54.0384	54(Q)
	56 cis-1,3-Dichloropropene	75	6.444	6.445	(1.231)	172727	53.0372	53
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	202300	56.8117	57(Q)
$	58 Toluene-d8	98	6.715	6.715	(0.817)	292065	44.7860	45
	59 Toluene	91	6.785	6.786	(1.296)	401258	54.6027	55
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	180184	55.0474	55
	61 Ethyl Methacrylate	69	7.068	7.069	(1.350)	97696	59.3425	59
	62 1,1,2-Trichloroethane	97	7.178	7.175	(1.371)	89703	54.7212	55
	63 Tetrachloroethene	164	7.342	7.345	(0.893)	99456	45.3180	45
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	167363	46.3563	46
	65 2-Hexanone	43	7.432	7.435	(0.904)	135238	45.8750	46
	66 Dibromochloromethane	129	7.592	7.593	(0.923)	132540	45.3708	45
	67 1,2-Dibromoethane	107	7.731	7.731	(0.940)	102756	47.8813	48
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	128042	44.1854	44
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	284975	50.0000	
	70 Chlorobenzene	112	8.255	8.252	(1.004)	259525	45.2546	45
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	119584	48.1927	48
	72 Ethylbenzene	106	8.374	8.367	(1.018)	137265	47.4276	47
	73 m,p-Xylene	106	8.499	8.496	(1.034)	332392	93.4312	93
	74 o-Xylene	106	8.946	8.943	(1.088)	159603	47.6855	48
	75 Styrene	104	8.956	8.959	(1.089)	257919	47.0790	47

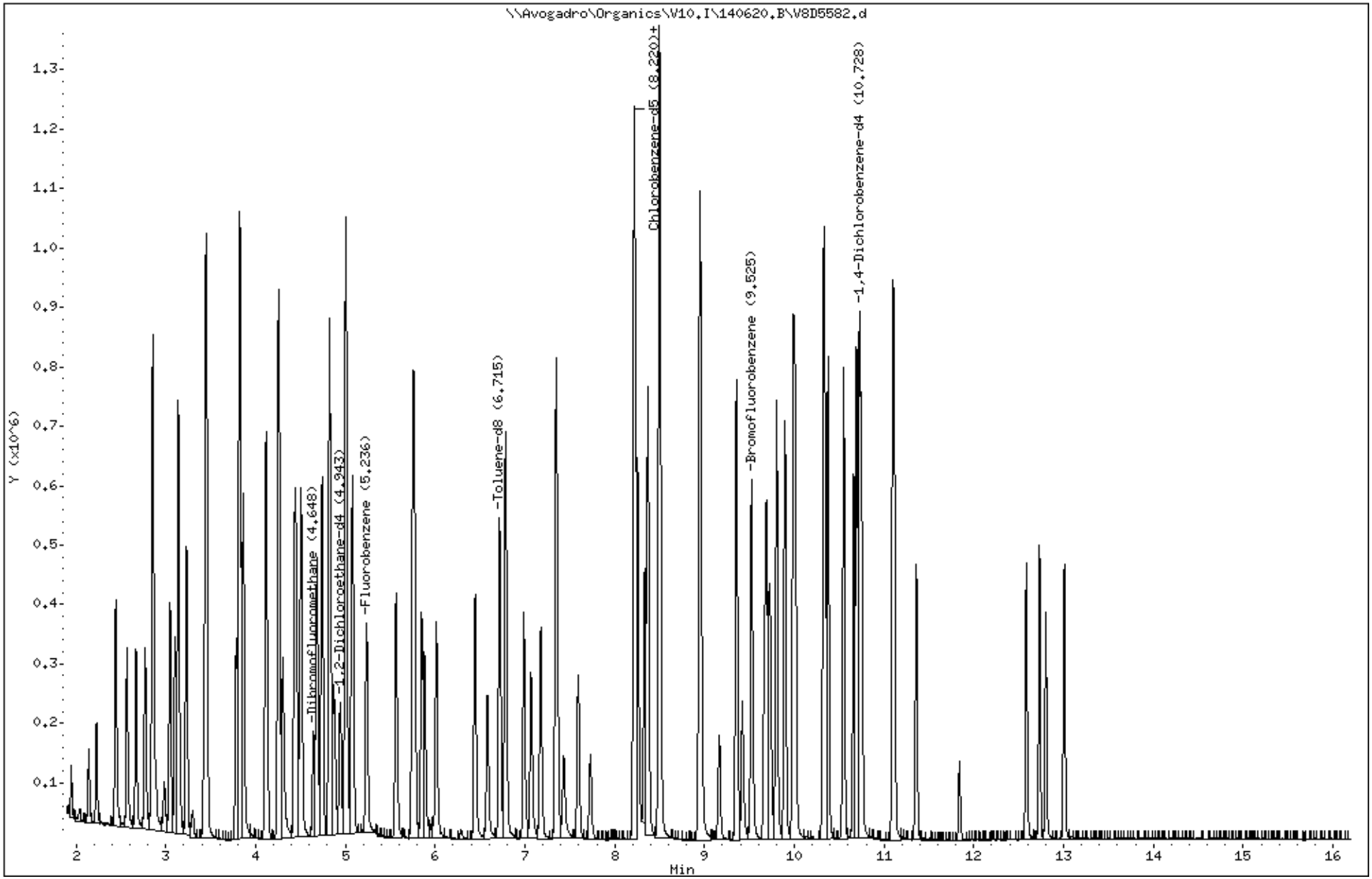
Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5582.d
Report Date: 25-Jun-2014 16:16

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	82427	46.2853	46
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	457745	48.3236	48
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.419	(1.145)	31714	58.1977	58(Q)
$	79	Bromofluorobenzene	95	9.522	9.522	(1.158)	186636	53.3120	53
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.670	(0.902)	125011	40.9352	41
	81	Bromobenzene	156	9.689	9.692	(0.903)	115155	44.6690	45
	82	1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	166582	46.9496	47
	83	n-Propylbenzene	120	9.801	9.805	(0.914)	103480	43.8644	44
	84	2-Chlorotoluene	126	9.894	9.898	(0.923)	97484	41.9752	42
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	396729	44.2989	44
	86	4-Chlorotoluene	126	10.010	10.011	(0.933)	99491	43.3023	43
M	94	Xylene (Total)	106				491995	141.117	140
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	375863	42.3611	42
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	391235	46.1840	46
	89	sec-Butylbenzene	105	10.550	10.551	(0.984)	447489	44.2273	44
	90	1,3-Dichlorobenzene	146	10.663	10.663	(0.994)	194211	42.6862	43
	91	4-Isopropyltoluene	119	10.695	10.692	(0.997)	383551	45.0004	45
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	162766	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	199057	41.7890	42
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	346246	43.9528	44
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	189732	43.0368	43
	97	Hexachloroethane	117	11.357	11.358	(1.059)	73916	46.0515	46
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	30281	48.7625	49(Q)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	114108	44.2077	44
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	76880	47.1117	47
	101	Naphthalene	128	12.801	12.801	(1.194)	230474	40.9171	41
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	109311	44.1122	44

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140620.B\V8D5582.d
Date : 20-JUN-2014 17:42
Client ID: LCSD-77692
Instrument: V10.i
Sample Info: 5ML,LCSD-77692,LCSD-77692,77692
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



N1055

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 061614

ANALYST: JLA

BATCH: 140616.B

Start: 16-JUN-14 09:36
End: 16-JUN-14 13:31

Comments:

Standards: DFTS VW140625A 2 uL
IS/DS VW140606A 400 uL
STD VW140610A ____ uL
_____ ____ uL

Reviewed By: ML 6/17/14

Manual Integration: _____

MI Review: _____

ICV: VW140610D

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V8D5404	09:36	BFB10N	BFB10N		AQ									1		OK	
V8D5405	10:17	VSTD05010N	VSTD05010N		AQ		100	100	100					1		OK	
V8D5406	10:45	VSTD02010N	VSTD02010N		AQ		96	91	85					1		OK	
V8D5407	11:13	VSTD00510N	VSTD00510N		AQ		95	88	77					1		OK MI_55	
V8D5408	11:41	VSTD00110N	VSTD00110N		AQ		99	94	78					1		OK	
V8D5410	12:36	VSTD20010N	VSTD20010N		AQ		101	102	103					1		OK	
V8D5411	13:04	VSTD10010N	VSTD10010N		AQ		102	101	102					1		OK	
V8D5412	13:31	VICV05010N	VICV05010N		AQ		99	96	90	98	99	101	98	1	E	OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6-17-14

N1055

Spectrum Analytical, Inc. RI Division V10 Injection Log METHOD: 8260W ANALYST: JH BATCH: 140619.B Start: 19-JUN-14 06:59
Volatiles Laboratory ICAL DATE: 6-16-14 End: 19-JUN-14 19:34

Comments:

Standards: DFTPP VM140226A 2 uL
ICC VM140606A 1 uL
STD VM140610A 20 uL
_____ ____ uL

Reviewed By: M 6/17/14 Manual Integration: _____ MI Review: _____ ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D5510	06:59	BFB10R	BFB10R		AQ									1		OK	
V8D5511	07:17	VSTD05010R	VSTD05010R		AQ		100	100	100					1		OK	
V8D5512	07:57	LCS-77659	LCS-77659	77659	AQ		112	116	115	113	107	93	106	1	ER	NOT USED	
V8D5513	08:40	LCS-77659	LCS-77659	77659	AQ		106	107	103	107	97	95	104	1	ER	OK	
V8D5514	09:17	MB-77659	MB-77659	77659	AQ		112	109	94	110	105	98	100	1	E	NOT USED	
V8D5515	09:45	MB-77659	MB-77659	77659	AQ		112	111	93	112	102	97	95	1		OK	
V8D5516	10:13	N1055-01A	TRIPBLANK_6/16/	77659	AQ	1	107	110	93	115	112	95	98	1		OK	7
V8D5517	10:41	N1055-02A	MW-10R_6/16/14	77659	AQ		110	110	93	113	103	93	100	1	E	1,1,2-TRICHLOROETHANE=3400 RUN@25X	
V8D5518	11:09	N1055-03A	MW-22R(1)_6/16/	77659	AQ		109	111	95	112	100	92	103	1	E	=17,400 RUN@250X	
V8D5519	11:37	N1055-04A	MW-22R(2)_6/16/	77659	AQ		107	109	93	113	105	91	101	1	E	=14,800 RUN@200X	
V8D5520	12:04	N1055-05A	MW-22R(3)_6/16/	77659	AQ		107	110	95	116*	105	92	101	1	E	=17,200 RUN@200X	
V8D5521	12:33	N1055-06A	MW-22S(1)_6/16/	77659	AQ		107	108	89	114	107	92	96	1	E	=2,500 RUN@25X	
V8D5522	13:01	N1055-07A	MW-22S(2)_6/16/	77659	AQ		98	95	77	110	101	96	99	1	E	=2,300 RUN@25X	
V8D5523	13:29	N1055-08A	MW-22S(3)_6/16/	77659	AQ		98	95	79	112	102	98	98	1	E	=2,300 RUN@25X	
V8D5524	13:56	N1055-09A	MW-27_6/17/14	77659	AQ		91	88	72	114	102	97	96	1	E	=2,800 RUN@25X	
V8D5525	14:24	N1055-10A	MW-21R(1)_6/17/	77659	AQ		96	98	84	108	104	92	104	1	E	=30,000 RUN@500X	
V8D5526	14:52	N1055-11A	MW-21R(2)_6/17/	77659	AQ		108	115	102	106	102	89	104	1	E	=38,700 RUN@500X	
V8D5527	15:20	N1055-12A	MW-21R(3)_6/17/	77659	AQ		111	120	112	110	104	91	110	1	E	=36,700 RUN@500X	
V8D5528	15:48	N1055-13A	MW-10S_6/16/14	77659	AQ		108	107	93	112	111	97	103	1	E	=453 RUN@4X	
V8D5529	16:16	N1055-14A	MW-10D_6/16/14	77659	AQ		104	104	89	109	101	95	96	1	E	=3400 RUN@25X	
V8D5530	16:44	N1055-15A	OC-17S_6/16/14	77659	AQ		104	105	91	114	108	93	99	1	E	=361 RUN@4X	
V8D5531	17:12	N1055-16A	OC-17D_6/16/14	77659	AQ		101	101	85	110	101	92	96	1	E	1,1,2-TRICHLOROETHANE=1200 RUN@10X	
V8D5532	17:41	N1055-17A	OC-19S_6/16/14	77659	AQ		99	101	86	114	114	95	98	1	E	RUN@1X	
V8D5533	18:09	N1055-18A	OC-19D_6/16/14	77659	AQ	1	100	101	90	114	110	95	102	1	E	1,1,2-TRICHLOROETHANE=2500 RUN@25X	
V8D5534	18:37	N1055-09AMS	MW-27_6/17/14MS	77659	AQ	2	102	107	106	112	100	93	108	1	ER	OK	
V8D5535	19:05	N1055-09AMS	MW-27_6/17/14MS	77659	AQ	3	101	102	100	108	98	94	106	1	ERT	RUN@1X	7
V8D5536	19:34	VBLK	VBLK		AQ		100	101	89	110	103	95	97	1	E T	NOT USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

JH 6-23-14

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W ANALYST: JK

ICAL DATE: 6/6/14

BATCH: 140620.B

Start: 20-JUN-14 14:56
End: 21-JUN-14 04:12

Comments:

Standards: DFTPP VM140622DB 2 uL
ISTD VM140606bA 100 uL
BFB VM140610A 20 uL
_____ ___ uL

Reviewed By: JK 6/23/14

Manual Integration: _____

MI Review: _____

ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V8D5576	14:56	BFB10T	BFB10T		AQ									1		OK	
V8D5577	15:24	VSTD05010T	VSTD05010T		AQ		100	100	100					1		OK	
V8D5579	16:19	LCS-77692	LCS-77692	77692	AQ		96	95	96	111	99	91	108	1	ER	OK	
V8D5582	17:42	LCSD-77692	LCSD-77692	77692	AQ		96	96	95	109	102	90	107	1	ER	OK	
V8D5583	18:09	MB-77692	MB-77692	77692	AQ		95	93	86	110	102	91	101	1	E	NOT USED	
V8D5584	18:37	MB-77692	MB-77692	77692	AQ		89	89	81	108	102	91	100	1	E	OK	
V8D5585	19:05	N1055-17A	OC-19S_6/16/14	77692	AQ	2	89	71	55	106	105	109	89	1		OK	7
V8D5586	19:33	N1055-19A	MW-20D_6/17/14	77692	AQ	2	91	90	86	113	105	91	105	1		OK	
V8D5587	20:01	N1055-02ADL	MW-10R_6/16/14D	77692	AQ	2	90	89	81	114	110	93	101	25		1,1,2-TRICHLORO = 67 OK	
V8D5588	20:28	N1055-03ADL	MW-22R(1)_6/16/	77692	AQ	2	79	79	71	113	104	91	100	200		= 89 OK	
V8D5589	20:56	N1055-04ADL	MW-22R(2)_6/16/	77692	AQ	2	82	80	72	114	105	93	100	200		= 93 OK	
V8D5590	21:24	N1055-05ADL	MW-22R(3)_6/16/	77692	AQ	2	85	86	80	114	106	92	102	200		= 101 OK	
V8D5591	21:51	N1055-06ADL	MW-22S(1)_6/16/	77692	AQ	2	83	82	74	111	106	92	99	20		= 100 OK	
V8D5592	22:18	N1055-07ADL	MW-22S(2)_6/16/	77692	AQ	2	82	84	78	112	111	89	100	20		= 105 OK	
V8D5593	22:46	N1055-08ADL	MW-22S(3)_6/16/	77692	AQ	2	82	84	76	113	111	88	101	20		= 92 OK	
V8D5594	23:13	N1055-09ADL	MW-27_6/17/14DL	77692	AQ	4	75	74	66	112	101	91	98	20		1,1,2-TRICHLORO = 112 OK	
V8D5595	23:40	N1055-10ADL	MW-21R(1)_6/17/	77692	AQ	2	74	74	65	111	102	91	101	500	E	RL @ 1000X	
V8D5596	00:08	N1055-11ADL	MW-21R(2)_6/17/	77692	AQ	2	79	78	71	110	104	92	101	500	E		
V8D5597	00:35	N1055-12ADL	MW-21R(3)_6/17/	77692	AQ	2	77	77	70	114	106	92	103	500	E		
V8D5598	01:02	N1055-13ADL	MW-10S_6/16/14D	77692	AQ	2	74	77	71	113	110	90	102	4		RL @ 1X	
V8D5599	01:29	N1055-14ADL	MW-10D_6/16/14D	77692	AQ	2	76	79	70	113	105	86	100	25		1,1,2-TRICHLORO = 120 OK	
V8D5600	01:56	N1055-15ADL	OC-17S_6/16/14D	77692	AQ	2	71	71	61	113	101	90	99	4		= 63 OK	
V8D5601	02:24	N1055-16ADL	OC-17D_6/16/14D	77692	AQ	2	74	76	69	115	112	87	101	10		= 111 OK	
V8D5602	02:51	N1055-18ADL	OC-19D_6/16/14D	77692	AQ	2	72	74	66	114	111	90	101	20		1,1,2-TRICHLORO = 104 OK	
V8D5603	03:18	N1055-09AMSD	MW-27_6/17/14MS	77692	AQ	1	67	49*	42*	101	88	113	93	1	ERT	RA @ 1X	7
V8D5604	03:45	VBLK	VBLK		AQ		64	65	58	122*	102	91	99	1	E T	SPIKE USED	
V8D5605	04:12	VBLK	VBLK		AQ		69	70	60	112	110	91	100	1	E T		

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence

R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6-23-14

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 6-23-14

ANALYST: [signature]

BATCH: 140623.B

Start: 23-JUN-14 08:37
End: 23-JUN-14 20:12

Comments:

Standards: DFTPP VW140622SA 2 uL
ISTD VW140606A AUTO uL
STD VW140619A ___ uL
___ ___ uL

Reviewed By: [signature] 6/25/14

Manual Integration: _____

MI Review: _____

ICV: VW140619B

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D5642	08:37	BFB10W	BFB10W		AQ	__								1		OK	
V8D5643	09:09	VSTD05010W	VSTD05010W		AQ	__	103	111	119					1		NOT USED	
V8D5644	09:51	VSTD05010W	VSTD05010W		AQ	__	100	100	100					1		OK	
V8D5645	10:29	VSTD02010W	VSTD02010W		AQ	__	101	100	99					1		OK	
V8D5646	10:58	VSTD00510W	VSTD00510W		AQ	__	106	107	102					1		OK MI 6_12_55	
V8D5647	11:26	VSTD00110W	VSTD00110W		AQ	__	98	97	88					1		NOT USED	
V8D5648	11:53	VSTD00110W	VSTD00110W		AQ	__	98	103	94					1		OK MI 3_5_6	
V8D5649	12:21	VSTD20010W	VSTD20010W		AQ	__	100	108	112					1		OK	
V8D5650	12:48	VSTD10010W	VSTD10010W		AQ	__	107	114	120					1		OK	
V8D5651	13:16	LCS-77721	LCS-77721	77721	AQ	__	106	112	113	102	103	99	104	1	ER	OK	
V8D5652	13:43	VICV050W10	VICV050W10	77721	AQ	__	103	104	101	96	94	101	99	1	ER	OK	
V8D5653	14:11	MB-77721	MB-77721	77721	AQ	__	105	107	100	100	110	100	98	1		NOT USED	
V8D5654	14:39	MB-77721	MB-77721	77721	AQ	__	102	106	97	100	105	98	97	1		OK	
V8D5655	15:07	N1055-13A	MW-10S_6/16/14	77721	AQ	2	99	104	92	106	105	96	96	1		OK	7
V8D5656	15:35	N1082-01A	TRIPBLANK_6/17/	77721	AQ	1	97	102	93	105	110	97	96	1		OK	7
V8D5657	16:02	N0991-23A	WGL-SW-TB01-061	77721	AQ	1	97	98	89	106	105	100	98	1		OK	2
V8D5658	16:30	N0991-21A	WGL-SW-SW03-061	77721	AQ	1	94	99	87	105	104	98	97	1		OK	2
V8D5659	16:57	N0991-22A	WGL-SW-SW04-061	77721	AQ	1	93	98	85	106	111	97	97	1		OK	2
V8D5660	17:25	N1055-10ADL	MW-21R(1)_6/17/	77721	AQ	2	93	98	89	104	111	95	94	1000		1,1,2-TRICHLORO=100 OK	7
V8D5661	17:53	N1055-11ADL	MW-21R(2)_6/17/	77721	AQ	2	91	98	89	107	102	97	97	1000		↓ =124 OK	7
V8D5662	18:21	N1055-12ADL	MW-21R(3)_6/17/	77721	AQ	2	90	98	86	108	112	95	94	1000		↓ =127 OK	7
V8D5663	18:49	N0971-18A	CELL 5-PHASE 7-	77721	AQ	2	85	92	83	108	113	95	96	200		ACETONE=47 OK	2
V8D5664	19:17	N1055-09AMSD	MW-27_6/17/14MS	77721	AQ	6	80	86	86	104	95	99	102	1	ER	OK	7
V8D5665	19:44	VBLK	VBLK		AQ	__	81	84	74	105	99	98	96	1		NOT USED	
V8D5666	20:12	VBLK	VBLK		AQ	__	77	81	71	107	113	98	96	1			

* - Internal Standard or Surrogate outside of control limits
B - One or more target compounds are above the calibration range
E - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6-24-14

N1055

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 R23
6/17/14	N1023	Tetra	15, 19	VEB	✓	H	R9	
6/18/14	N1033	EPA	03 - 05	WJL		H	R13	
	N1045	EPA	08-18			N	R13	
	N1045	EPA	08-18			M	R13	
	N1047	EPA	15-20			T	R4	
	N1051	EPA	01-06			T	R4	
	N1056	BEM	01-04			H	R8	
	N1055	DUIRKA	01-19			UA	R8	
↓	N1057	FSENG	01-08	↓		WJL ~~UA~~ H 6/18/14	R8	
6/18/14	S010644	RIRRC	01	WJL		H	R10	
6/19/14	N1045	EPA	19-25	KP		N	R13	
6/19/14	N1045	EPA	19-25	KP		M	R13	
6/19/14	N1064	EPA	01-04	KP		N	R8	
6/19/14	N1064	EPA	01-04	KP	✓	M	R8	

Logbook ID 90.0191-10/13

Reviewed By: ✓ 6/19/14

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

Last Page of Data Report

Report Date:
07-Jul-14 13:04

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Work Order: N1082
Project : Farrand Controls
Project #:

Attn: Robbin Petrella

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N1082-01	TRIPBLANK_6/17/14	Aqueous	17-Jun-14 00:00	20-Jun-14 13:15
N1082-02	MW-29S_6/17/14	Aqueous	17-Jun-14 16:50	20-Jun-14 13:15
N1082-03	MW-20S_6/17/14	Aqueous	17-Jun-14 14:58	20-Jun-14 13:15
N1082-04	MW-20R_6/17/14	Aqueous	17-Jun-14 18:00	20-Jun-14 13:15
N1082-05	MW-29D_6/18/14	Aqueous	18-Jun-14 10:00	20-Jun-14 13:15
N1082-06	MW-30D_6/18/14	Aqueous	18-Jun-14 11:10	20-Jun-14 13:15
N1082-07	MW-30S_6/18/14	Aqueous	18-Jun-14 13:15	20-Jun-14 13:15
N1082-08	MW-31D_6/18/14	Aqueous	18-Jun-14 12:00	20-Jun-14 13:15
N1082-09	MW-31S_6/18/14	Aqueous	18-Jun-14 13:10	20-Jun-14 13:15
N1082-10	MW-32D_6/18/14	Aqueous	18-Jun-14 15:25	20-Jun-14 13:15
N1082-11	MW-32S_6/18/14	Aqueous	18-Jun-14 15:10	20-Jun-14 13:15
N1082-12	MW-22R_6/19/14	Aqueous	19-Jun-14 09:15	20-Jun-14 13:15
N1082-13	MW-22S_6/19/14	Aqueous	19-Jun-14 09:30	20-Jun-14 13:15
N1082-14	MW-21S_6/19/14	Aqueous	19-Jun-14 11:25	20-Jun-14 13:15
N1082-15	MW-21R_6/19/14	Aqueous	19-Jun-14 12:30	20-Jun-14 13:15

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 requirments have been meet.

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
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1082

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
TRIPBLANK_6/17/14	N1082-01	SW8260_W				
MW-29S_6/17/14	N1082-02	SW8260_W				
MW-20S_6/17/14	N1082-03	SW8260_W				
MW-20R_6/17/14	N1082-04	SW8260_W				
MW-29D_6/18/14	N1082-05	SW8260_W				
MW-30D_6/18/14	N1082-06	SW8260_W				
MW-30S_6/18/14	N1082-07	SW8260_W				
MW-31D_6/18/14	N1082-08	SW8260_W				
MW-31S_6/18/14	N1082-09	SW8260_W				
MW-32D_6/18/14	N1082-10	SW8260_W				
MW-32S_6/18/14	N1082-11	SW8260_W				
MW-22R_6/19/14	N1082-12	SW8260_W				
MW-22S_6/19/14	N1082-13	SW8260_W				
MW-21S_6/19/14	N1082-14	SW8260_W				
MW-21R_6/19/14	N1082-15	SW8260_W				

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1082

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
N1082-01A	AQ	6/17/2014	6/20/2014	NA	6/23/2014
N1082-02A	AQ	6/17/2014	6/20/2014	NA	6/24/2014
N1082-03A	AQ	6/17/2014	6/20/2014	NA	6/24/2014
N1082-04A	AQ	6/17/2014	6/20/2014	NA	6/24/2014
N1082-05A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-06A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-07A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-08A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-09A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-10A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-11A	AQ	6/18/2014	6/20/2014	NA	6/24/2014
N1082-12A	AQ	6/19/2014	6/20/2014	NA	6/25/2014
N1082-12ADL	AQ	6/19/2014	6/20/2014	NA	6/26/2014
N1082-13A	AQ	6/19/2014	6/20/2014	NA	6/25/2014
N1082-13ADL	AQ	6/19/2014	6/20/2014	NA	6/26/2014
N1082-13AMS	AQ	6/19/2014	6/20/2014	NA	6/25/2014
N1082-13AMSD	AQ	6/19/2014	6/20/2014	NA	6/25/2014
N1082-14A	AQ	6/19/2014	6/20/2014	NA	6/25/2014
N1082-14ADL	AQ	6/19/2014	6/20/2014	NA	6/26/2014
N1082-15A	AQ	6/19/2014	6/20/2014	NA	6/26/2014

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1082

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
N1082-01A	AQ	SW8260_W	NA	LOW	1
N1082-02A	AQ	SW8260_W	NA	LOW	1
N1082-03A	AQ	SW8260_W	NA	LOW	1
N1082-04A	AQ	SW8260_W	NA	LOW	1
N1082-05A	AQ	SW8260_W	NA	LOW	1
N1082-06A	AQ	SW8260_W	NA	LOW	1
N1082-07A	AQ	SW8260_W	NA	LOW	1
N1082-08A	AQ	SW8260_W	NA	LOW	1
N1082-09A	AQ	SW8260_W	NA	LOW	1
N1082-10A	AQ	SW8260_W	NA	LOW	1
N1082-11A	AQ	SW8260_W	NA	LOW	1
N1082-12A	AQ	SW8260_W	NA	LOW	1
N1082-12ADL	AQ	SW8260_W	NA	LOW	500
N1082-13A	AQ	SW8260_W	NA	LOW	1
N1082-13ADL	AQ	SW8260_W	NA	LOW	20
N1082-13AMS	AQ	SW8260_W	NA	LOW	1
N1082-13AMSD	AQ	SW8260_W	NA	LOW	1
N1082-14A	AQ	SW8260_W	NA	LOW	1
N1082-14ADL	AQ	SW8260_W	NA	LOW	4
N1082-15A	AQ	SW8260_W	NA	LOW	1000

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N1082

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3150-16

HC Due: 07/04/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N1082-01A	TRIPBLANK_6/17/14	06/17/2014 00:00	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-02A	MW-29S_6/17/14	06/17/2014 16:50	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-03A	MW-20S_6/17/14	06/17/2014 14:58	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-04A	MW-20R_6/17/14	06/17/2014 18:00	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-05A	MW-29D_6/18/14	06/18/2014 10:00	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-06A	MW-30D_6/18/14	06/18/2014 11:10	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-07A	MW-30S_6/18/14	06/18/2014 13:15	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-08A	MW-31D_6/18/14	06/18/2014 12:00	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-09A	MW-31S_6/18/14	06/18/2014 13:10	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-10A	MW-32D_6/18/14	06/18/2014 15:25	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-11A	MW-32S_6/18/14	06/18/2014 15:10	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-12A	MW-22R_6/19/14	06/19/2014 09:15	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-13A	MW-22S_6/19/14	06/19/2014 09:30	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC			Y	Y	VOA

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

HT = Test logged in but has been placed on hold

06/24/2014 15:06

Lab Client Rep: Agnes R Huntley

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N1082

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: N/A

Case:
SDG:
PO: 3150-16

HC Due: 07/04/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N1082-14A	MW-21S_6/19/14	06/19/2014 11:25	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1082-15A	MW-21R_6/19/14	06/19/2014 12:30	06/20/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	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

N1082

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 2

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☒ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: STAndard
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. MATT DeVinney

Invoice To: Dvirka Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

P.O. No.: 3437 RQN:

Project No.: 3150-16
Site Name: Farrand Controls
Location: 99 Wall Street Valhalla State: NY
Sampler(s): Keith Robus / Emily

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11=_____ 12=_____

List preservative code below: Ice

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: VOCs 8260B	
N1082-01	Trip Blank-6/17/14	6/17/14	—	T	AQ	2	—	—	—	—	✓
-02	MW-29S-6/17/14	6/17/14	4:50 pm	G	GW	2	—	—	—	—	✓
-03	MW-20S-6/17/14	6/17/14	2:58 pm	G	GW	2	—	—	—	—	✓
-04	MW-20R-6/17/14	6/17/14	6:00 pm	G	GW	2	—	—	—	—	✓
-05	MW-29D-6/18/14	6/18/14	10:00 pm	G	GW	2	—	—	—	—	✓
-06	MW-30D-6/18/14	6/18/14	11:10 pm	G	GW	2	—	—	—	—	✓
-07	MW-30S-6/18/14	6/18/14	1:15 pm	G	GW	2	—	—	—	—	✓
-08	MW-31D-6/18/14	6/18/14	12:00 pm	G	GW	2	—	—	—	—	✓
N1082-09	MW-31S-6/18/14	6/18/14	1:10 pm	G	GW	2	—	—	—	—	✓

1.2/0/1.2 IR-01 SM 6/19/14 → iced

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other Category B and EQuIS
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robus	[signature]	6/19/14	1:25pm	
[signature]	[signature]	6/19/14	2:15pm	
[signature]	SM Sibbert	6/19/14	1830	1.2
Sibbert	[signature]	6/20/14	1310	
[signature]	[signature]	6/20/14	13:15	1.6

☒ EDD Format EQuIS
☒ E-mail to MDeVinney@dvirka-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

N1082

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 2 of 2

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001 (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634 (813) 888-9507
☒ 646 Camp Avenue, N Kingstown, RI 02852 (401) 732-3400

Special Handling:
TAT- Indicate Date Needed: Standard
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

Telephone #: 516 364-9890
Project Mgr. Matt DeVinney

Invoice To: Dvirka Bartilucci Engineers
330 Crossways Park Drive
Woodbury NY 11797

P.O. No.: 3150 RQN:

Project No.: 3150-16
Site Name: Ferrand Controls
Location: 99 Wallstreet, Valhalla State: NY
Sampler(s): Keith Robins / Emily

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= 12=

List preservative code below: 1c

QA/QC Reporting Notes:

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	8260B-VOCs	
N1082 -10	MW-32D_6/18/14	6/18/14	325pm	G	GW	2	—	—	—	—	✓
-11	MW-32S_6/18/14	6/18/14	310pm	G	GW	2	—	—	—	—	✓
-12	MW-22R_6/19/14	6/19/14	915am	G	GW	2	—	—	—	—	✓
-13	MW-22S_6/19/14	6/19/14	930am	G	GW	2	—	—	—	—	✓
-13	MW-22S_6/19/14 MS	6/19/14	930am	G	GW	2	—	—	—	—	✓
-13	MW-22S_6/19/14 MSD	6/19/14	930am	G	GW	2	—	—	—	—	✓
-14	MW-21S_6/19/14	6/19/14	1125am	G	GW	2	—	—	—	—	✓
N1082 -15	MW-21R_6/19/14	6/19/14	1230pm	G	GW	2	—	—	—	—	✓

Run MS
Run MSD

12/0/12 IR 01 JM
6/19/14 -> 12

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☒ Other CAT usage "B" and EQuIS
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp°C
Keith Robins	[signature]	6/19/14	1125pm	
[signature]	[signature]	6/19/14	2 15 pm	
[signature]	JM Subcont	6/17/14	1530	
Subcont	Bill Herring	6/20/14	1310	
Bill Herring	[signature]	6120/14	13:15	1.6°C

☒ EDD Format EQuIS
☒ E-mail to M.DeVinney@db-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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Revised Feb 2013

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

Received By: VBB	Page 01 of 00
Reviewed By: KP	Log-in Date 06/20/2014
Work Order: N1082	Client Name: Dvirka & Bartilucci
Project Name/Event: Farrand Controls	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

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. — Courier N/A
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	1.6 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	06/20/2014
12. Time Received	13:15

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-74

CoolantCondition: ICE

Preservative Name/Lot No:

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
N1082-01						UA	
N1082-02						UA	
N1082-03						UA	
N1082-04						UA	
N1082-05						UA	
N1082-06						UA	
N1082-07						UA	
N1082-08						UA	
N1082-09						UA	
N1082-10						UA	
N1082-11						UA	
N1082-12						UA	
N1082-13						UA	
N1082-14						UA	
N1082-15						UA	

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

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : Dvirka & Bartilucci

Project: Farrand Controls

Laboratory Workorder / SDG #: N1082

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: SW5030B

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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

MW-30D_6/18/14 (N1082-06A), recovery is above criteria for Dibromofluoromethane at 117% with criteria of (85-115).

MW-30S_6/18/14 (N1082-07A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

MW-32D_6/18/14 (N1082-10A), recovery is above criteria for Dibromofluoromethane at 122% with criteria of (85-115).

MW-22R_6/19/14 (N1082-12A), recovery is above criteria for 1,2-Dichloroethane-d4 at 121% with criteria of (70-120).

MW-22S_6/19/14 (N1082-13A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

MW-22S_6/19/14 (N1082-13AMSD), recovery is below criteria for Toluene-d8 at 85% with criteria of (85-120).

MW-21S_6/19/14 (N1082-14A), recovery is above criteria for Dibromofluoromethane at 116% with criteria of (85-115).

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-77721 in batch 77721, recovery is above criteria for Iodomethane at 128% with criteria of (72-121).

LCS-77738 in batch 77738, recovery is above criteria for Bromodichloromethane at 122% with criteria of (75-120).

LCS-77766 in batch 77766, recovery is above criteria for Iodomethane at 149% with criteria of (72-121).

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

Matrix spikes were performed on samples: MW-22S_6/19/14 (N1082-13AMS) and MW-22S_6/19/14 (N1082-13AMSD).

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

MW-22S_6/19/14 (N1082-13AMS), recovery is above criteria for 1,1-Dichloroethene at 380% with criteria of (70-130), recovery is below criteria for 1,1,1-Trichloroethane at 50% with criteria of (65-130), 1,1,2-Trichloro-1,2,2-trifluoroethane at 0% with criteria of (70-130), 1,2,3-Trichloropropane at 73% with criteria of (75-125), 1,2,4-Trichlorobenzene at 62% with criteria of (65-135), 1,2,4-Trimethylbenzene at 74% with criteria of (75-130), 1,3,5-Trimethylbenzene at 70% with criteria of (75-130), 1,3-Dichlorobenzene at 71% with criteria of (75-125), 1,4-Dichlorobenzene at 68% with criteria of (75-125), 2-Chlorotoluene at 72% with criteria of (75-125), 4-Chlorotoluene at 71% with criteria of (75-130), 4-Isopropyltoluene at 71% with criteria of (75-130), Bromobenzene at 73% with criteria of (75-125), Chlorobenzene at 79% with criteria of (80-120), Iodomethane at 62% with criteria of (72-121), n-Butylbenzene at 66% with criteria of (70-135), sec-Butylbenzene at 69% with criteria of (70-125) and

tert-Butylbenzene at 66% with criteria of (70-130).

MW-22S_6/19/14 (N1082-13AMSD), recovery is above criteria for 1,1-Dichloroethene at 405% with criteria of (70-130).

Replicate RPDs were within the advisory QC limits with the exception of the following:

MW-22S_6/19/14 (N1082-13AMSD), Relative Percent Difference is greater than RPD limit for Iodomethane.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

MW-22R_6/19/14 (N1082-12ADL) : Dilution Factor: 500
MW-22S_6/19/14 (N1082-13ADL) : Dilution Factor: 20
MW-21S_6/19/14 (N1082-14ADL) : Dilution Factor: 4
MW-21R_6/19/14 (N1082-15A) : Dilution Factor: 1000

G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

· M1 peak tailing or fronting
· M2 peak co-elution
· M3 rising or falling baseline
· M4 retention time shift
· M5 miscellaneous - under this category, the justification is explained
· M6 software did not integrate peak
· M7 partial peak integration

Manual integration was performed on the following:

MW-22R_6/19/14 (N1082-12A) 1,1,2-Trichloro-1,2,2-trifluoroethane due to M6

VSTD00110W Bromomethane , Chloroethane, Chloromethane due to M3

VSTD0011K 1,2,3-Trichloropropane , Acrylonitrile due to M7

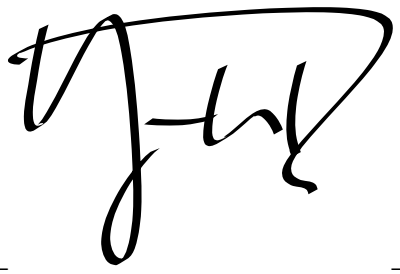
VSTD00510W Chloroethane due to M3

VSTD00510W 2-Chloroethyl vinyl ether due to M6

VSTD00510W Acetone due to M7

VSTD0051K Acetone due to M6

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:_____7/7/2014_____

Data Flag/Qualifiers (Page 1 of 2):

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 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 an aldol condensation by-product.

Data Flag/Qualifiers (Page 2 of 2):

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.

L NYSDEC qualifier: Result is biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

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.: N1082 Mod. Ref No.: SDG No.: SN1082

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-77721	102	103	99	104				0
02	MB-77721	101	105	98	97				0
03	TRIPBLANK_6/17/14	105	110	97	96				0
04	LCS-77722	104	101	97	103				0
05	LCSD-77722	102	99	97	101				0
06	MB-77722	107	106	94	97				0
07	MW-29S_6/17/14	113	109	94	95				0
08	MW-20S_6/17/14	114	114	95	97				0
09	MW-20R_6/17/14	115	105	94	96				0
10	MW-29D_6/18/14	111	110	94	94				0
11	MW-30D_6/18/14	117 *	115	95	99				1
12	MW-30S_6/18/14	116 *	114	94	96				1
13	MW-31D_6/18/14	113	104	96	94				0
14	MW-31S_6/18/14	109	103	93	95				0
15	MW-32D_6/18/14	122 *	114	95	99				1
16	LCS-77738	109	112	90	106				0
17	MB-77738	110	112	94	92				0
18	MW-32S_6/18/14	115	112	92	99				0
19	LCS-77766	106	105	91	105				0
20	MB-77766	110	106	90	96				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som14.07.01.1137

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
21	MW-22R_6/19/14	114	121 *	85	102				1
22	MW-22S_6/19/14	116 *	115	87	101				1
23	MW-21S_6/19/14	116 *	114	86	99				1
24	MW-22S_6/19/14MS	111	116	87	110				0
25	MW-22S_6/19/14MSD	111	103	85 *	103				1
26	LCS-77805	100	102	101	98				0
27	LCSD-77805	99	104	100	100				0
28	MB-77805	101	103	100	96				0
29	MW-22R_6/19/14DL	100	96	101	95				0
30	MW-21R_6/19/14DL	99	96	101	96				0
31	MW-22S_6/19/14DL	100	99	100	92				0
32	MW-21S_6/19/14DL	102	101	99	96				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som14.07.01.1137

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix Spike - EPA Sample No.: MW-22S_6/19/14 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	42.3572	85		30-155
Chloromethane	50.0000	0.0000	41.4204	83		40-125
Vinyl chloride	50.0000	0.7609	44.8503	88		50-145
Bromomethane	50.0000	0.0000	43.6119	87		30-145
Chloroethane	50.0000	0.0000	53.8329	108		60-135
Trichlorofluoromethane	50.0000	0.0000	47.7051	95		60-145
1,1-Dichloroethene	50.0000	0.0000	190.1021	380	*	70-130
Acetone	50.0000	0.0000	31.1134	62		40-140
Iodomethane	50.0000	0.0000	30.9291	62	*	72-121
Carbon disulfide	50.0000	0.0000	46.3704	93		35-160
Methylene chloride	50.0000	0.0000	52.5566	105		55-140
trans-1,2-Dichloroethen	50.0000	0.0000	51.4806	103		60-140
Methyl tert-butyl ether	50.0000	0.0000	52.3948	105		65-125
1,1-Dichloroethane	50.0000	147.8477	199.5330	103		70-135
Vinyl acetate	50.0000	0.0000	54.1127	108		38-163
2-Butanone	50.0000	0.0000	42.6873	85		30-150
cis-1,2-Dichloroethene	50.0000	7.4434	61.1462	107		70-125
2,2-Dichloropropane	50.0000	0.0000	47.4013	95		70-135
Bromochloromethane	50.0000	0.0000	53.8243	108		65-130
Chloroform	50.0000	0.0000	53.8826	108		65-135
1,1,1-Trichloroethane	50.0000	1107.8717	1132.7929	50	*	65-130
1,1-Dichloropropene	50.0000	0.0000	52.9747	106		75-130
Carbon tetrachloride	50.0000	0.0000	55.1970	110		65-140
1,2-Dichloroethane	50.0000	0.0000	54.5477	109		70-130
Benzene	50.0000	0.0000	52.0337	104		80-120
Trichloroethene	50.0000	781.7973	823.5324	83		70-125
1,2-Dichloropropane	50.0000	0.0000	53.0797	106		75-125
Dibromomethane	50.0000	0.0000	54.7081	109		75-125
Bromodichloromethane	50.0000	0.0000	54.7643	110		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	54.2524	109		70-130
4-Methyl-2-pentanone	50.0000	0.0000	50.3017	101		60-135
Toluene	50.0000	0.0000	51.8688	104		75-120
trans-1,3-Dichloroprope	50.0000	0.0000	49.0433	98		55-140
1,1,2-Trichloroethane	50.0000	0.0000	53.7007	107		75-125
1,3-Dichloropropane	50.0000	0.0000	42.1246	84		75-125
Tetrachloroethene	50.0000	0.0000	39.8959	80		45-150
2-Hexanone	50.0000	0.0000	33.1932	66		55-130
Dibromochloromethane	50.0000	0.0000	42.7015	85		60-135
1,2-Dibromoethane	50.0000	0.0000	40.8025	82		80-120
Chlorobenzene	50.0000	2.6756	42.0419	79	*	80-120
1,1,1,2-Tetrachloroetha	50.0000	0.0000	41.6538	83		80-130
Ethylbenzene	50.0000	0.0000	38.4181	77		75-125
m,p-Xylene	100.0000	0.0000	79.7755	80		75-130
o-Xylene	50.0000	0.0000	41.9207	84		80-120

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix Spike - EPA Sample No.: MW-22S_6/19/14 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	121.6961	81		81-121
Styrene	50.0000	0.0000	41.4097	83		65-135
Bromoform	50.0000	0.0000	42.1840	84		70-130
Isopropylbenzene	50.0000	0.0000	38.2416	76		75-125
1,1,2,2-Tetrachloroetha	50.0000	0.0000	35.9782	72		65-130
Bromobenzene	50.0000	0.0000	36.3954	73	*	75-125
1,2,3-Trichloropropane	50.0000	0.0000	36.2824	73	*	75-125
n-Propylbenzene	50.0000	0.0000	35.1731	70		70-130
2-Chlorotoluene	50.0000	0.0000	35.9688	72	*	75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	35.2304	70	*	75-130
4-Chlorotoluene	50.0000	0.0000	35.6360	71	*	75-130
tert-Butylbenzene	50.0000	0.0000	32.7741	66	*	70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	36.8880	74	*	75-130
sec-Butylbenzene	50.0000	0.0000	34.7356	69	*	70-125
4-Isopropyltoluene	50.0000	0.0000	35.4153	71	*	75-130
1,3-Dichlorobenzene	50.0000	0.0000	35.5673	71	*	75-125
1,4-Dichlorobenzene	50.0000	0.0000	33.9431	68	*	75-125
n-Butylbenzene	50.0000	0.0000	32.9337	66	*	70-135
1,2-Dichlorobenzene	50.0000	0.0000	37.1196	74		70-120
1,2-Dibromo-3-chloropro	50.0000	0.0000	34.4175	69		50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	30.9470	62	*	65-135
Hexachlorobutadiene	50.0000	0.0000	31.8858	64		50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	34.7282	69		55-140
Naphthalene	50.0000	0.0000	31.2090	62		55-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0000	2307.8790	2286.3907	-43	*	70-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	49.1377	98		15		0-40	30-155
Chloromethane	50.0000	49.6605	99		18		0-40	40-125
Vinyl chloride	50.0000	52.5880	104		16		0-40	50-145
Bromomethane	50.0000	53.2895	107		20		0-40	30-145
Chloroethane	50.0000	59.0978	118		9		0-40	60-135
Trichlorofluoromethane	50.0000	53.6470	107		12		0-40	60-145
1,1-Dichloroethene	50.0000	202.5817	405	*	6		0-40	70-130
Acetone	50.0000	33.5713	67		8		0-40	40-140
Iodomethane	50.0000	46.8679	94		41	*	0-40	72-121
Carbon disulfide	50.0000	53.7033	107		15		0-40	35-160
Methylene chloride	50.0000	54.3587	109		3		0-40	55-140
trans-1,2-Dichloroethen	50.0000	56.0536	112		9		0-40	60-140
Methyl tert-butyl ether	50.0000	53.8701	108		3		0-40	65-125
1,1-Dichloroethane	50.0000	205.3818	115		11		0-40	70-135
Vinyl acetate	50.0000	57.3573	115		6		0-40	38-163
2-Butanone	50.0000	54.0952	108		24		0-40	30-150
cis-1,2-Dichloroethene	50.0000	64.9068	115		7		0-40	70-125
2,2-Dichloropropane	50.0000	52.0371	104		9		0-40	70-135

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix Spike - EPA Sample No.: MW-22S_6/19/14 Level: (TRACE or LOW) LOW

Bromochloromethane	50.0000	52.7577	106		2		0-40	65-130
Chloroform	50.0000	57.2162	114		6		0-40	65-135
1,1,1-Trichloroethane	50.0000	1165.1195	114		79	*	0-40	65-130
1,1-Dichloropropene	50.0000	60.3305	121		13		0-40	75-130
Carbon tetrachloride	50.0000	60.8192	122		10		0-40	65-140
1,2-Dichloroethane	50.0000	54.3297	109		0		0-40	70-130
Benzene	50.0000	55.9644	112		7		0-40	80-120
Trichloroethene	50.0000	829.7005	96		14		0-40	70-125
1,2-Dichloropropane	50.0000	55.5029	111		4		0-40	75-125
Dibromomethane	50.0000	54.8693	110		0		0-40	75-125
Bromodichloromethane	50.0000	57.0296	114		4		0-40	75-120
cis-1,3-Dichloropropene	50.0000	56.7509	114		5		0-40	70-130
4-Methyl-2-pentanone	50.0000	57.9719	116		14		0-40	60-135
Toluene	50.0000	57.5390	115		10		0-40	75-120
trans-1,3-Dichloroprope	50.0000	50.4363	101		3		0-40	55-140
1,1,2-Trichloroethane	50.0000	56.3013	113		5		0-40	75-125
1,3-Dichloropropane	50.0000	42.2913	85		0		0-40	75-125
Tetrachloroethene	50.0000	45.1136	90		12		0-40	45-150
2-Hexanone	50.0000	39.1731	78		17		0-40	55-130
Dibromochloromethane	50.0000	43.0067	86		1		0-40	60-135
1,2-Dibromoethane	50.0000	42.5455	85		4		0-40	80-120
Chlorobenzene	50.0000	45.3952	85		8		0-40	80-120
1,1,1,2-Tetrachloroetha	50.0000	42.5497	85		2		0-40	80-130
Ethylbenzene	50.0000	42.8684	86		11		0-40	75-125
m,p-Xylene	100.0000	89.2022	89		11		0-40	75-130
o-Xylene	50.0000	44.9261	90		7		0-40	80-120
Xylene (Total)	150.0000	134.1283	89		10		0-40	81-121
Styrene	50.0000	43.0603	86		4		0-40	65-135
Bromoform	50.0000	43.9767	88		4		0-40	70-130
Isopropylbenzene	50.0000	42.5472	85		11		0-40	75-125
1,1,2,2-Tetrachloroetha	50.0000	41.4908	83		14		0-40	65-130
Bromobenzene	50.0000	40.6889	81		11		0-40	75-125
1,2,3-Trichloropropane	50.0000	42.0806	84		15		0-40	75-125
n-Propylbenzene	50.0000	42.5853	85		19		0-40	70-130
2-Chlorotoluene	50.0000	42.6222	85		17		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	42.0873	84		18		0-40	75-130
4-Chlorotoluene	50.0000	41.2827	83		15		0-40	75-130
tert-Butylbenzene	50.0000	43.5538	87		28		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	44.2796	89		18		0-40	75-130
sec-Butylbenzene	50.0000	42.9274	86		21		0-40	70-125
4-Isopropyltoluene	50.0000	42.6379	85		19		0-40	75-130
1,3-Dichlorobenzene	50.0000	39.5699	79		11		0-40	75-125
1,4-Dichlorobenzene	50.0000	38.2680	77		12		0-40	75-125
n-Butylbenzene	50.0000	40.3828	81		20		0-40	70-135
1,2-Dichlorobenzene	50.0000	41.1549	82		10		0-40	70-120
1,2-Dibromo-3-chloropro	50.0000	42.4298	85		21		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	37.0291	74		18		0-40	65-135

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix Spike - EPA Sample No.: MW-22S_6/19/14 Level: (TRACE or LOW) LOW

Hexachlorobutadiene	50.0000	37.7540	76		17		0-40	50-140
1,2,3-Trichlorobenzene	50.0000	40.5187	81		15		0-40	55-140
Naphthalene	50.0000	37.9430	76		19		0-40	55-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0000	2343.6072	71		804	*	0-40	70-130

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

* Values outside of QC limits

RPD: 3 out of 69 outside limits

Spike Recovery: 19 out of 138 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77721 LCS Lot No.:

Date Extracted: 06/23/2014 Date Analyzed (1): 06/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	43.2389	86		30 - 155
Chloromethane	50.0000	0.0000	45.7486	91		40 - 125
Vinyl chloride	50.0000	0.0000	47.3755	95		50 - 145
Bromomethane	50.0000	0.0000	57.4850	115		30 - 145
Chloroethane	50.0000	0.0000	53.0951	106		60 - 135
Trichlorofluoromethane	50.0000	0.0000	44.0992	88		60 - 145
1,1-Dichloroethene	50.0000	0.0000	48.2568	97		70 - 130
Acetone	50.0000	0.0000	38.7306	77		40 - 140
Iodomethane	50.0000	0.0000	63.8908	128	*	72 - 121
Carbon disulfide	50.0000	0.0000	47.4310	95		35 - 160
Methylene chloride	50.0000	0.0000	50.8122	102		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	49.3098	99		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.7038	105		65 - 125
1,1-Dichloroethane	50.0000	0.0000	51.4552	103		70 - 135
Vinyl acetate	50.0000	0.0000	53.8227	108		38 - 163
2-Butanone	50.0000	0.0000	46.9108	94		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	52.0846	104		70 - 125
2,2-Dichloropropane	50.0000	0.0000	49.1239	98		70 - 135
Bromochloromethane	50.0000	0.0000	52.6680	105		65 - 130
Chloroform	50.0000	0.0000	50.6678	101		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	48.4521	97		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.8592	104		75 - 130
Carbon tetrachloride	50.0000	0.0000	48.9449	98		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.6275	101		70 - 130
Benzene	50.0000	0.0000	50.2037	100		80 - 120
Trichloroethene	50.0000	0.0000	46.6872	93		70 - 125
1,2-Dichloropropane	50.0000	0.0000	52.5759	105		75 - 125
Dibromomethane	50.0000	0.0000	50.9231	102		75 - 125
Bromodichloromethane	50.0000	0.0000	52.1542	104		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	56.6074	113		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.0535	96		60 - 135
Toluene	50.0000	0.0000	50.7877	102		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	51.5829	103		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.0438	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	53.6994	107		75 - 125
Tetrachloroethene	50.0000	0.0000	48.6553	97		45 - 150
2-Hexanone	50.0000	0.0000	44.4194	89		55 - 130
Dibromochloromethane	50.0000	0.0000	53.1106	106		60 - 135
1,2-Dibromoethane	50.0000	0.0000	51.3457	103		80 - 120
Chlorobenzene	50.0000	0.0000	49.7784	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.6960	101		80 - 130
Ethylbenzene	50.0000	0.0000	49.2941	99		75 - 125
m,p-Xylene	100.0000	0.0000	100.8105	101		75 - 130
o-Xylene	50.0000	0.0000	52.3246	105		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77721 LCS Lot No.:

Date Extracted: 06/23/2014 Date Analyzed (1): 06/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	153.1351	102		81 - 121
Styrene	50.0000	0.0000	51.7454	103		65 - 135
Bromoform	50.0000	0.0000	51.4043	103		70 - 130
Isopropylbenzene	50.0000	0.0000	48.2664	97		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.8920	96		65 - 130
Bromobenzene	50.0000	0.0000	51.1481	102		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	50.0576	100		75 - 125
n-Propylbenzene	50.0000	0.0000	49.2806	99		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.3454	99		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	49.9938	100		75 - 130
4-Chlorotoluene	50.0000	0.0000	50.0877	100		75 - 130
tert-Butylbenzene	50.0000	0.0000	51.9123	104		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	52.5528	105		75 - 130
sec-Butylbenzene	50.0000	0.0000	49.5353	99		70 - 125
4-Isopropyltoluene	50.0000	0.0000	49.9649	100		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	50.0226	100		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.4701	95		75 - 125
n-Butylbenzene	50.0000	0.0000	47.1078	94		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	50.8457	102		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	46.7226	93		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	49.3429	99		65 - 135
Hexachlorobutadiene	50.0000	0.0000	46.4903	93		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	52.9373	106		55 - 140
Naphthalene	50.0000	0.0000	49.0747	98		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	43.4249	87		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77722 LCS Lot No.:

Date Extracted: 06/23/2014 Date Analyzed (1): 06/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	45.5882	91		30 - 155
Chloromethane	50.0000	0.0000	41.2701	83		40 - 125
Vinyl chloride	50.0000	0.0000	51.0690	102		50 - 145
Bromomethane	50.0000	0.0000	60.9159	122		30 - 145
Chloroethane	50.0000	0.0000	52.0669	104		60 - 135
Trichlorofluoromethane	50.0000	0.0000	48.8006	98		60 - 145
1,1-Dichloroethene	50.0000	0.0000	50.9229	102		70 - 130
Acetone	50.0000	0.0000	30.5532	61		40 - 140
Iodomethane	50.0000	0.0000	55.1193	110		72 - 121
Carbon disulfide	50.0000	0.0000	48.0102	96		35 - 160
Methylene chloride	50.0000	0.0000	52.0742	104		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	50.4369	101		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.8540	106		65 - 125
1,1-Dichloroethane	50.0000	0.0000	53.7609	108		70 - 135
Vinyl acetate	50.0000	0.0000	53.5655	107		38 - 163
2-Butanone	50.0000	0.0000	44.4193	89		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	53.6710	107		70 - 125
2,2-Dichloropropane	50.0000	0.0000	44.5984	89		70 - 135
Bromochloromethane	50.0000	0.0000	52.8860	106		65 - 130
Chloroform	50.0000	0.0000	54.0226	108		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	54.6096	109		65 - 130
1,1-Dichloropropene	50.0000	0.0000	52.8141	106		75 - 130
Carbon tetrachloride	50.0000	0.0000	56.0780	112		65 - 140
1,2-Dichloroethane	50.0000	0.0000	53.8727	108		70 - 130
Benzene	50.0000	0.0000	52.6075	105		80 - 120
Trichloroethene	50.0000	0.0000	50.1876	100		70 - 125
1,2-Dichloropropane	50.0000	0.0000	52.9476	106		75 - 125
Dibromomethane	50.0000	0.0000	53.0249	106		75 - 125
Bromodichloromethane	50.0000	0.0000	55.2134	110		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.4801	107		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	51.1507	102		60 - 135
Toluene	50.0000	0.0000	52.8899	106		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.5775	101		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	52.1260	104		75 - 125
1,3-Dichloropropane	50.0000	0.0000	53.1353	106		75 - 125
Tetrachloroethene	50.0000	0.0000	51.6814	103		45 - 150
2-Hexanone	50.0000	0.0000	42.2485	84		55 - 130
Dibromochloromethane	50.0000	0.0000	53.5470	107		60 - 135
1,2-Dibromoethane	50.0000	0.0000	51.4690	103		80 - 120
Chlorobenzene	50.0000	0.0000	49.8781	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.9798	104		80 - 130
Ethylbenzene	50.0000	0.0000	51.7181	103		75 - 125
m,p-Xylene	100.0000	0.0000	104.6107	105		75 - 130
o-Xylene	50.0000	0.0000	53.7714	108		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77722 LCS Lot No.:

Date Extracted: 06/23/2014 Date Analyzed (1): 06/23/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	158.3821	106		81 - 121
Styrene	50.0000	0.0000	51.2528	103		65 - 135
Bromoform	50.0000	0.0000	51.2646	103		70 - 130
Isopropylbenzene	50.0000	0.0000	50.7062	101		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	49.6522	99		65 - 130
Bromobenzene	50.0000	0.0000	51.0780	102		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	50.5656	101		75 - 125
n-Propylbenzene	50.0000	0.0000	51.7081	103		70 - 130
2-Chlorotoluene	50.0000	0.0000	50.8427	102		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	52.0569	104		75 - 130
4-Chlorotoluene	50.0000	0.0000	51.0921	102		75 - 130
tert-Butylbenzene	50.0000	0.0000	53.7195	107		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	54.6463	109		75 - 130
sec-Butylbenzene	50.0000	0.0000	51.7583	104		70 - 125
4-Isopropyltoluene	50.0000	0.0000	51.9003	104		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	49.6705	99		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.4440	95		75 - 125
n-Butylbenzene	50.0000	0.0000	49.2260	98		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	51.5505	103		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	46.3988	93		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	45.0524	90		65 - 135
Hexachlorobutadiene	50.0000	0.0000	48.1439	96		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.8981	98		55 - 140
Naphthalene	50.0000	0.0000	43.6412	87		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	45.1993	90		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77738 LCS Lot No.:

Date Extracted: 06/24/2014 Date Analyzed (1): 06/24/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	53.4229	107		30 - 155
Chloromethane	50.0000	0.0000	39.8484	80		40 - 125
Vinyl chloride	50.0000	0.0000	51.4918	103		50 - 145
Bromomethane	50.0000	0.0000	61.7614	124		30 - 145
Chloroethane	50.0000	0.0000	51.5269	103		60 - 135
Trichlorofluoromethane	50.0000	0.0000	57.5462	115		60 - 145
1,1-Dichloroethene	50.0000	0.0000	55.4589	111		70 - 130
Acetone	50.0000	0.0000	54.0940	108		40 - 140
Iodomethane	50.0000	0.0000	41.6441	83		72 - 121
Carbon disulfide	50.0000	0.0000	54.1325	108		35 - 160
Methylene chloride	50.0000	0.0000	54.1975	108		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	54.2932	109		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	56.4683	113		65 - 125
1,1-Dichloroethane	50.0000	0.0000	57.0839	114		70 - 135
Vinyl acetate	50.0000	0.0000	60.8589	122		38 - 163
2-Butanone	50.0000	0.0000	59.9772	120		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	56.1736	112		70 - 125
2,2-Dichloropropane	50.0000	0.0000	59.9843	120		70 - 135
Bromochloromethane	50.0000	0.0000	57.1288	114		65 - 130
Chloroform	50.0000	0.0000	58.5889	117		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	58.0514	116		65 - 130
1,1-Dichloropropene	50.0000	0.0000	56.5508	113		75 - 130
Carbon tetrachloride	50.0000	0.0000	59.8570	120		65 - 140
1,2-Dichloroethane	50.0000	0.0000	61.6430	123		70 - 130
Benzene	50.0000	0.0000	53.9610	108		80 - 120
Trichloroethene	50.0000	0.0000	52.1443	104		70 - 125
1,2-Dichloropropane	50.0000	0.0000	57.1643	114		75 - 125
Dibromomethane	50.0000	0.0000	58.2768	117		75 - 125
Bromodichloromethane	50.0000	0.0000	60.7857	122	*	75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	60.7025	121		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	53.1031	106		60 - 135
Toluene	50.0000	0.0000	55.4917	111		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	57.0768	114		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	56.6410	113		75 - 125
1,3-Dichloropropane	50.0000	0.0000	51.6815	103		75 - 125
Tetrachloroethene	50.0000	0.0000	49.4875	99		45 - 150
2-Hexanone	50.0000	0.0000	48.1806	96		55 - 130
Dibromochloromethane	50.0000	0.0000	51.8839	104		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.0217	100		80 - 120
Chlorobenzene	50.0000	0.0000	48.3258	97		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.0122	102		80 - 130
Ethylbenzene	50.0000	0.0000	47.9997	96		75 - 125
m,p-Xylene	100.0000	0.0000	97.8669	98		75 - 130
o-Xylene	50.0000	0.0000	50.1658	100		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77738 LCS Lot No.:

Date Extracted: 06/24/2014 Date Analyzed (1): 06/24/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	148.0327	99		81 - 121
Styrene	50.0000	0.0000	49.8588	100		65 - 135
Bromoform	50.0000	0.0000	50.4109	101		70 - 130
Isopropylbenzene	50.0000	0.0000	46.2319	92		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	44.4894	89		65 - 130
Bromobenzene	50.0000	0.0000	48.1409	96		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	47.5330	95		75 - 125
n-Propylbenzene	50.0000	0.0000	46.3618	93		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.4673	93		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.8359	94		75 - 130
4-Chlorotoluene	50.0000	0.0000	47.1462	94		75 - 130
tert-Butylbenzene	50.0000	0.0000	43.7963	88		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	49.4059	99		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.6666	93		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.3775	95		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.2123	94		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	44.8946	90		75 - 125
n-Butylbenzene	50.0000	0.0000	45.1332	90		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	49.0211	98		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	43.6813	87		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	43.1765	86		65 - 135
Hexachlorobutadiene	50.0000	0.0000	46.5670	93		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	46.1930	92		55 - 140
Naphthalene	50.0000	0.0000	40.2962	81		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	55.8766	112		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77766 LCS Lot No.:

Date Extracted: 06/25/2014 Date Analyzed (1): 06/25/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	47.6269	95		30 - 155
Chloromethane	50.0000	0.0000	46.5744	93		40 - 125
Vinyl chloride	50.0000	0.0000	50.0634	100		50 - 145
Bromomethane	50.0000	0.0000	50.7504	102		30 - 145
Chloroethane	50.0000	0.0000	52.2986	105		60 - 135
Trichlorofluoromethane	50.0000	0.0000	52.5927	105		60 - 145
1,1-Dichloroethene	50.0000	0.0000	54.5484	109		70 - 130
Acetone	50.0000	0.0000	52.1998	104		40 - 140
Iodomethane	50.0000	0.0000	74.5497	149	*	72 - 121
Carbon disulfide	50.0000	0.0000	57.8371	116		35 - 160
Methylene chloride	50.0000	0.0000	54.0357	108		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	57.4005	115		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	55.2853	111		65 - 125
1,1-Dichloroethane	50.0000	0.0000	57.2155	114		70 - 135
Vinyl acetate	50.0000	0.0000	57.5313	115		38 - 163
2-Butanone	50.0000	0.0000	56.3126	113		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	58.1521	116		70 - 125
2,2-Dichloropropane	50.0000	0.0000	59.5895	119		70 - 135
Bromochloromethane	50.0000	0.0000	52.6398	105		65 - 130
Chloroform	50.0000	0.0000	57.1329	114		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	57.4030	115		65 - 130
1,1-Dichloropropene	50.0000	0.0000	60.3182	121		75 - 130
Carbon tetrachloride	50.0000	0.0000	53.2459	106		65 - 140
1,2-Dichloroethane	50.0000	0.0000	55.2648	111		70 - 130
Benzene	50.0000	0.0000	56.7980	114		80 - 120
Trichloroethene	50.0000	0.0000	55.8278	112		70 - 125
1,2-Dichloropropane	50.0000	0.0000	57.2609	115		75 - 125
Dibromomethane	50.0000	0.0000	56.0198	112		75 - 125
Bromodichloromethane	50.0000	0.0000	56.7729	114		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	61.7181	123		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	53.1409	106		60 - 135
Toluene	50.0000	0.0000	57.9352	116		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	55.2569	111		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	55.3725	111		75 - 125
1,3-Dichloropropane	50.0000	0.0000	48.2236	96		75 - 125
Tetrachloroethene	50.0000	0.0000	48.9690	98		45 - 150
2-Hexanone	50.0000	0.0000	44.1442	88		55 - 130
Dibromochloromethane	50.0000	0.0000	48.9081	98		60 - 135
1,2-Dibromoethane	50.0000	0.0000	47.7126	95		80 - 120
Chlorobenzene	50.0000	0.0000	47.9288	96		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	48.9131	98		80 - 130
Ethylbenzene	50.0000	0.0000	47.8416	96		75 - 125
m,p-Xylene	100.0000	0.0000	98.3530	98		75 - 130
o-Xylene	50.0000	0.0000	49.9773	100		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77766 LCS Lot No.:

Date Extracted: 06/25/2014 Date Analyzed (1): 06/25/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	148.3303	99		81 - 121
Styrene	50.0000	0.0000	47.9024	96		65 - 135
Bromoform	50.0000	0.0000	48.7414	97		70 - 130
Isopropylbenzene	50.0000	0.0000	46.8031	94		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	40.6551	81		65 - 130
Bromobenzene	50.0000	0.0000	44.4483	89		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	44.5260	89		75 - 125
n-Propylbenzene	50.0000	0.0000	46.1271	92		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.0765	92		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	45.6903	91		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.2183	92		75 - 130
tert-Butylbenzene	50.0000	0.0000	47.4519	95		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.3975	95		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.8934	94		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.2850	95		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	44.8309	90		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	42.4685	85		75 - 125
n-Butylbenzene	50.0000	0.0000	44.4844	89		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	45.9372	92		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	42.7717	86		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	43.3476	87		65 - 135
Hexachlorobutadiene	50.0000	0.0000	45.6672	91		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	45.4049	91		55 - 140
Naphthalene	50.0000	0.0000	40.4844	81		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	53.7812	108		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77805 LCS Lot No.:

Date Extracted: 06/26/2014 Date Analyzed (1): 06/26/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	48.6699	97		30 - 155
Chloromethane	50.0000	0.0000	52.5934	105		40 - 125
Vinyl chloride	50.0000	0.0000	51.5553	103		50 - 145
Bromomethane	50.0000	0.0000	52.0143	104		30 - 145
Chloroethane	50.0000	0.0000	52.2837	105		60 - 135
Trichlorofluoromethane	50.0000	0.0000	49.8250	100		60 - 145
1,1-Dichloroethene	50.0000	0.0000	49.7205	99		70 - 130
Acetone	50.0000	0.0000	60.4488	121		40 - 140
Iodomethane	50.0000	0.0000	56.2248	112		72 - 121
Carbon disulfide	50.0000	0.0000	46.9793	94		35 - 160
Methylene chloride	50.0000	0.0000	52.2227	104		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	53.7095	107		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	55.4282	111		65 - 125
1,1-Dichloroethane	50.0000	0.0000	54.3811	109		70 - 135
Vinyl acetate	50.0000	0.0000	54.3713	109		38 - 163
2-Butanone	50.0000	0.0000	58.3786	117		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	54.4616	109		70 - 125
2,2-Dichloropropane	50.0000	0.0000	51.4705	103		70 - 135
Bromochloromethane	50.0000	0.0000	55.3881	111		65 - 130
Chloroform	50.0000	0.0000	52.1805	104		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	51.6328	103		65 - 130
1,1-Dichloropropene	50.0000	0.0000	49.6323	99		75 - 130
Carbon tetrachloride	50.0000	0.0000	48.7904	98		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.2062	104		70 - 130
Benzene	50.0000	0.0000	52.1784	104		80 - 120
Trichloroethene	50.0000	0.0000	49.7178	99		70 - 125
1,2-Dichloropropane	50.0000	0.0000	52.9876	106		75 - 125
Dibromomethane	50.0000	0.0000	54.7138	109		75 - 125
Bromodichloromethane	50.0000	0.0000	53.1166	106		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	54.1410	108		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	53.9501	108		60 - 135
Toluene	50.0000	0.0000	50.2665	101		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.8557	106		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.9860	104		75 - 125
1,3-Dichloropropane	50.0000	0.0000	52.8833	106		75 - 125
Tetrachloroethene	50.0000	0.0000	47.0146	94		45 - 150
2-Hexanone	50.0000	0.0000	58.9435	118		55 - 130
Dibromochloromethane	50.0000	0.0000	56.4163	113		60 - 135
1,2-Dibromoethane	50.0000	0.0000	52.9743	106		80 - 120
Chlorobenzene	50.0000	0.0000	51.0472	102		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.1750	102		80 - 130
Ethylbenzene	50.0000	0.0000	48.2025	96		75 - 125
m,p-Xylene	100.0000	0.0000	97.6683	98		75 - 130
o-Xylene	50.0000	0.0000	48.4957	97		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCS-77805 LCS Lot No.:

Date Extracted: 06/26/2014 Date Analyzed (1): 06/26/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	146.1640	97		81 - 121
Styrene	50.0000	0.0000	50.7042	101		65 - 135
Bromoform	50.0000	0.0000	50.6633	101		70 - 130
Isopropylbenzene	50.0000	0.0000	47.8009	96		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	52.6251	105		65 - 130
Bromobenzene	50.0000	0.0000	51.2210	102		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	53.2995	107		75 - 125
n-Propylbenzene	50.0000	0.0000	46.2477	92		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.0592	98		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	47.7319	95		75 - 130
4-Chlorotoluene	50.0000	0.0000	48.6956	97		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.8975	94		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.3911	97		75 - 130
sec-Butylbenzene	50.0000	0.0000	46.5567	93		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.4052	95		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	49.2877	99		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	48.4469	97		75 - 125
n-Butylbenzene	50.0000	0.0000	48.2835	97		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	49.0379	98		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	48.5447	97		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	50.2743	101		65 - 135
Hexachlorobutadiene	50.0000	0.0000	44.2702	89		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.7058	97		55 - 140
Naphthalene	50.0000	0.0000	49.8748	100		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	48.9809	98		70 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCSD-77722 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	43.4453	87		4		40	30 - 155
Chloromethane	50.0000	38.7098	77		8		40	40 - 125
Vinyl chloride	50.0000	46.9401	94		8		40	50 - 145
Bromomethane	50.0000	55.2645	111		9		40	30 - 145
Chloroethane	50.0000	45.9975	92		12		40	60 - 135
Trichlorofluoromethane	50.0000	47.6231	95		3		40	60 - 145
1,1-Dichloroethene	50.0000	46.9230	94		8		40	70 - 130
Acetone	50.0000	32.9649	66		8		40	40 - 140
Iodomethane	50.0000	53.2411	106		4		40	72 - 121
Carbon disulfide	50.0000	45.0220	90		6		40	35 - 160
Methylene chloride	50.0000	48.7777	98		6		40	55 - 140
trans-1,2-Dichloroethene	50.0000	48.3191	97		4		40	60 - 140
Methyl tert-butyl ether	50.0000	50.0844	100		6		40	65 - 125
1,1-Dichloroethane	50.0000	49.6462	99		9		40	70 - 135
Vinyl acetate	50.0000	49.1306	98		9		40	38 - 163
2-Butanone	50.0000	44.8118	90		1		40	30 - 150
cis-1,2-Dichloroethene	50.0000	49.5468	99		8		40	70 - 125
2,2-Dichloropropane	50.0000	40.3666	81		9		40	70 - 135
Bromochloromethane	50.0000	48.3977	97		9		40	65 - 130
Chloroform	50.0000	50.3643	101		7		40	65 - 135
1,1,1-Trichloroethane	50.0000	49.6402	99		10		40	65 - 130
1,1-Dichloropropene	50.0000	49.6014	99		7		40	75 - 130
Carbon tetrachloride	50.0000	50.5863	101		10		40	65 - 140
1,2-Dichloroethane	50.0000	50.3477	101		7		40	70 - 130
Benzene	50.0000	48.0961	96		9		40	80 - 120
Trichloroethene	50.0000	46.0325	92		8		40	70 - 125
1,2-Dichloropropane	50.0000	48.8261	98		8		40	75 - 125
Dibromomethane	50.0000	48.2457	96		10		40	75 - 125
Bromodichloromethane	50.0000	50.2450	100		10		40	75 - 120
cis-1,3-Dichloropropene	50.0000	49.2312	98		9		40	70 - 130
4-Methyl-2-pentanone	50.0000	51.7240	103		1		40	60 - 135
Toluene	50.0000	48.8799	98		8		40	75 - 120
trans-1,3-Dichloropropene	50.0000	44.5959	89		13		40	55 - 140
1,1,2-Trichloroethane	50.0000	48.5581	97		7		40	75 - 125
1,3-Dichloropropane	50.0000	48.6341	97		9		40	75 - 125
Tetrachloroethene	50.0000	46.6777	93		10		40	45 - 150
2-Hexanone	50.0000	41.8223	84		0		40	55 - 130
Dibromochloromethane	50.0000	48.5621	97		10		40	60 - 135
1,2-Dibromoethane	50.0000	47.7710	96		7		40	80 - 120
Chlorobenzene	50.0000	45.5977	91		9		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	46.6076	93		11		40	80 - 130
Ethylbenzene	50.0000	46.3091	93		10		40	75 - 125
m,p-Xylene	100.0000	93.2792	93		12		40	75 - 130
o-Xylene	50.0000	47.7489	95		13		40	80 - 120
Xylene (Total)	150.0000	141.0281	94		12		40	81 - 121
Styrene	50.0000	47.0223	94		9		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCSD-77722 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	49.1725	98		5		40	70 - 130
Isopropylbenzene	50.0000	45.8426	92		9		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	46.9974	94		5		40	65 - 130
Bromobenzene	50.0000	47.1184	94		8		40	75 - 125
1,2,3-Trichloropropane	50.0000	46.9443	94		7		40	75 - 125
n-Propylbenzene	50.0000	45.6866	91		12		40	70 - 130
2-Chlorotoluene	50.0000	45.9790	92		10		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	47.6300	95		9		40	75 - 130
4-Chlorotoluene	50.0000	45.9568	92		10		40	75 - 130
tert-Butylbenzene	50.0000	48.6120	97		10		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	49.3576	99		10		40	75 - 130
sec-Butylbenzene	50.0000	48.2470	96		8		40	70 - 125
4-Isopropyltoluene	50.0000	47.5890	95		9		40	75 - 130
1,3-Dichlorobenzene	50.0000	45.4419	91		8		40	75 - 125
1,4-Dichlorobenzene	50.0000	42.8887	86		10		40	75 - 125
n-Butylbenzene	50.0000	45.3336	91		7		40	70 - 135
1,2-Dichlorobenzene	50.0000	48.0101	96		7		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	46.4827	93		0		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	40.9461	82		9		40	65 - 135
Hexachlorobutadiene	50.0000	44.6279	89		8		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	45.4703	91		7		40	55 - 140
Naphthalene	50.0000	42.4597	85		2		40	55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	43.9486	88		2		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCSD-77805 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	43.5877	87		11		40	30 - 155
Chloromethane	50.0000	48.3253	97		8		40	40 - 125
Vinyl chloride	50.0000	51.7265	103		0		40	50 - 145
Bromomethane	50.0000	49.7994	100		4		40	30 - 145
Chloroethane	50.0000	48.5419	97		8		40	60 - 135
Trichlorofluoromethane	50.0000	48.1290	96		4		40	60 - 145
1,1-Dichloroethene	50.0000	48.0822	96		3		40	70 - 130
Acetone	50.0000	47.9550	96		23		40	40 - 140
Iodomethane	50.0000	52.2812	105		6		40	72 - 121
Carbon disulfide	50.0000	48.9083	98		4		40	35 - 160
Methylene chloride	50.0000	49.9739	100		4		40	55 - 140
trans-1,2-Dichloroethene	50.0000	49.7766	100		7		40	60 - 140
Methyl tert-butyl ether	50.0000	51.1108	102		8		40	65 - 125
1,1-Dichloroethane	50.0000	49.6031	99		10		40	70 - 135
Vinyl acetate	50.0000	51.4441	103		6		40	38 - 163
2-Butanone	50.0000	46.7341	93		23		40	30 - 150
cis-1,2-Dichloroethene	50.0000	50.6679	101		8		40	70 - 125
2,2-Dichloropropane	50.0000	49.5387	99		4		40	70 - 135
Bromochloromethane	50.0000	53.3949	107		4		40	65 - 130
Chloroform	50.0000	49.1634	98		6		40	65 - 135
1,1,1-Trichloroethane	50.0000	49.5241	99		4		40	65 - 130
1,1-Dichloropropene	50.0000	47.7746	96		3		40	75 - 130
Carbon tetrachloride	50.0000	47.4121	95		3		40	65 - 140
1,2-Dichloroethane	50.0000	49.5286	99		5		40	70 - 130
Benzene	50.0000	48.2752	97		7		40	80 - 120
Trichloroethene	50.0000	46.0808	92		7		40	70 - 125
1,2-Dichloropropane	50.0000	51.0285	102		4		40	75 - 125
Dibromomethane	50.0000	52.5200	105		4		40	75 - 125
Bromodichloromethane	50.0000	50.0144	100		6		40	75 - 120
cis-1,3-Dichloropropene	50.0000	50.3598	101		7		40	70 - 130
4-Methyl-2-pentanone	50.0000	50.4965	101		7		40	60 - 135
Toluene	50.0000	47.7557	96		5		40	75 - 120
trans-1,3-Dichloropropene	50.0000	50.4580	101		5		40	55 - 140
1,1,2-Trichloroethane	50.0000	48.9604	98		6		40	75 - 125
1,3-Dichloropropane	50.0000	49.8774	100		6		40	75 - 125
Tetrachloroethene	50.0000	45.9789	92		2		40	45 - 150
2-Hexanone	50.0000	52.2394	104		13		40	55 - 130
Dibromochloromethane	50.0000	52.7664	106		6		40	60 - 135
1,2-Dibromoethane	50.0000	50.2020	100		6		40	80 - 120
Chlorobenzene	50.0000	47.9691	96		6		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	48.4636	97		5		40	80 - 130
Ethylbenzene	50.0000	45.9702	92		4		40	75 - 125
m,p-Xylene	100.0000	94.2657	94		4		40	75 - 130
o-Xylene	50.0000	46.3355	93		4		40	80 - 120
Xylene (Total)	150.0000	140.6012	94		3		40	81 - 121
Styrene	50.0000	48.1050	96		5		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab Sample ID: LCSD-77805 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	48.0231	96		5		40	70 - 130
Isopropylbenzene	50.0000	47.0925	94		2		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	50.8444	102		3		40	65 - 130
Bromobenzene	50.0000	49.0223	98		4		40	75 - 125
1,2,3-Trichloropropane	50.0000	49.9780	100		7		40	75 - 125
n-Propylbenzene	50.0000	45.1038	90		2		40	70 - 130
2-Chlorotoluene	50.0000	47.3581	95		3		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	46.6353	93		2		40	75 - 130
4-Chlorotoluene	50.0000	48.3548	97		0		40	75 - 130
tert-Butylbenzene	50.0000	46.2863	93		1		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	47.7012	95		2		40	75 - 130
sec-Butylbenzene	50.0000	46.2060	92		1		40	70 - 125
4-Isopropyltoluene	50.0000	46.8774	94		1		40	75 - 130
1,3-Dichlorobenzene	50.0000	47.4816	95		4		40	75 - 125
1,4-Dichlorobenzene	50.0000	46.8895	94		3		40	75 - 125
n-Butylbenzene	50.0000	48.0904	96		1		40	70 - 135
1,2-Dichlorobenzene	50.0000	47.0515	94		4		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	46.6486	93		4		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	48.7186	97		4		40	65 - 135
Hexachlorobutadiene	50.0000	43.5193	87		2		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	46.1297	92		5		40	55 - 140
Naphthalene	50.0000	47.5171	95		5		40	55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	49.2599	99		1		40	70 - 130

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

* Values outside of QC limits

RPD: 0 out of 69 outside limits

Spike Recovery: 0 out of 69 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V1M9894.D Lab Sample ID: MB-77805

Instrument ID: V1

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/26/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:06

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-77805	LCS-77805	V1M9891.D	11:51
02	LCSD-77805	LCSD-77805	V1M9892.D	12:16
03	MW-22R_6/19/14DL	N1082-12ADL	V1M9895.D	13:31
04	MW-21R_6/19/14DL	N1082-15A	V1M9896.D	13:56
05	MW-22S_6/19/14DL	N1082-13ADL	V1M9897.D	14:21
06	MW-21S_6/19/14DL	N1082-14ADL	V1M9898.D	14:46

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5654.D Lab Sample ID: MB-77721

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/23/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 14:39

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-77721	LCS-77721	V8D5651.D	13:16
02	TRIPBLANK_6/17/14	N1082-01A	V8D5656.D	15:35

COMMENTS:

som14.07.01.1137

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5673.D Lab Sample ID: MB-77722

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/23/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 23:25

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-77722	LCS-77722	V8D5670.D	22:02
02	LCSD-77722	LCSD-77722	V8D5671.D	22:30
03	MW-29S_6/17/14	N1082-02A	V8D5682.D	3:30
04	MW-20S_6/17/14	N1082-03A	V8D5683.D	3:57
05	MW-20R_6/17/14	N1082-04A	V8D5684.D	4:24
06	MW-29D_6/18/14	N1082-05A	V8D5685.D	4:51
07	MW-30D_6/18/14	N1082-06A	V8D5686.D	5:18
08	MW-30S_6/18/14	N1082-07A	V8D5687.D	5:45
09	MW-31D_6/18/14	N1082-08A	V8D5688.D	6:12
10	MW-31S_6/18/14	N1082-09A	V8D5689.D	6:39
11	MW-32D_6/18/14	N1082-10A	V8D5690.D	7:06

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5704.D Lab Sample ID: MB-77738

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/24/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:48

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-77738	LCS-77738	V8D5702.D	9:43
02	MW-32S_6/18/14	N1082-11A	V8D5708.D	12:38

COMMENTS:

som14.07.01.1137

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5734.D Lab Sample ID: MB-77766

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/25/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 9:29

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-77766	LCS-77766	V8D5732.D	8:22
02	MW-22R_6/19/14	N1082-12A	V8D5750.D	16:53
03	MW-22S_6/19/14	N1082-13A	V8D5751.D	17:20
04	MW-21S_6/19/14	N1082-14A	V8D5752.D	17:48
05	MW-22S_6/19/14MS	N1082-13AMS	V8D5753.D	18:16
06	MW-22S_6/19/14MSD	N1082-13AMSD	V8D5754.D	18:44

COMMENTS:

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

EPA SAMPLE NO.
BFB1K

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V1M9880.D BFB Injection Date: 06/26/2014

Instrument ID: V1 BFB Injection Time: 7:10

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.7
75	30.0 - 80.0% of mass 95	48.9
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	50.0 -120% of mass 95	61.4
175	5.0 - 9.0% of mass 174	4.4 (7.1)1
176	95.0 - 101% of mass 174	59.5 (96.8)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	VSTD0201K	VSTD0201K	V1M9883.D	06/26/2014	8:16
02	VSTD0051K	VSTD0051K	V1M9884.D	06/26/2014	8:41
03	VSTD0011K	VSTD0011K	V1M9886.D	06/26/2014	9:31
04	VSTD0501K	VSTD0501K	V1M9887.D	06/26/2014	9:56
05	VSTD2001K	VSTD2001K	V1M9888.D	06/26/2014	10:21
06	VSTD1001K	VSTD1001K	V1M9889.D	06/26/2014	10:46
07	LCS-77805	LCS-77805	V1M9891.D	06/26/2014	11:51
08	LCSD-77805	LCSD-77805	V1M9892.D	06/26/2014	12:16
09	MB-77805	MB-77805	V1M9894.D	06/26/2014	13:06
10	MW-22R_6/19/14DL	N1082-12ADL	V1M9895.D	06/26/2014	13:31
11	MW-21R_6/19/14DL	N1082-15A	V1M9896.D	06/26/2014	13:56
12	MW-22S_6/19/14DL	N1082-13ADL	V1M9897.D	06/26/2014	14:21
13	MW-21S_6/19/14DL	N1082-14ADL	V1M9898.D	06/26/2014	14:46

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

EPA SAMPLE NO.
BFB10W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5642.D BFB Injection Date: 06/23/2014

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	40.0
75	30.0 - 80.0% of mass 95	66.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 -120% of mass 95	87.1
175	5.0 - 9.0% of mass 174	6.6 (7.5)1
176	95.0 - 101% of mass 174	87.5 (100.4)1
177	5.0 - 9.0% of mass 176	5.9 (6.7)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	VSTD05010W	VSTD05010W	V8D5644.D	06/23/2014	9:51
02	VSTD02010W	VSTD02010W	V8D5645.D	06/23/2014	10:29
03	VSTD00510W	VSTD00510W	V8D5646.D	06/23/2014	10:58
04	VSTD00110W	VSTD00110W	V8D5648.D	06/23/2014	11:53
05	VSTD20010W	VSTD20010W	V8D5649.D	06/23/2014	12:21
06	VSTD10010W	VSTD10010W	V8D5650.D	06/23/2014	12:48
07	LCS-77721	LCS-77721	V8D5651.D	06/23/2014	13:16
08	MB-77721	MB-77721	V8D5654.D	06/23/2014	14:39
09	TRIPBLANK_6/17/14	N1082-01A	V8D5656.D	06/23/2014	15:35

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

EPA SAMPLE NO.
BFB10X

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5667.D BFB Injection Date: 06/23/2014

Instrument ID: V10 BFB Injection Time: 20:40

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	38.0
75	30.0 - 80.0% of mass 95	67.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	77.8
175	5.0 - 9.0% of mass 174	6.5 (8.4)1
176	95.0 - 101% of mass 174	74.4 (95.6)1
177	5.0 - 9.0% of mass 176	4.6 (6.2)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	VSTD05010X	VSTD05010X	V8D5669.D	06/23/2014	21:35
02	LCS-77722	LCS-77722	V8D5670.D	06/23/2014	22:02
03	LCSD-77722	LCSD-77722	V8D5671.D	06/23/2014	22:30
04	MB-77722	MB-77722	V8D5673.D	06/23/2014	23:25
05	MW-29S_6/17/14	N1082-02A	V8D5682.D	06/24/2014	3:30
06	MW-20S_6/17/14	N1082-03A	V8D5683.D	06/24/2014	3:57
07	MW-20R_6/17/14	N1082-04A	V8D5684.D	06/24/2014	4:24
08	MW-29D_6/18/14	N1082-05A	V8D5685.D	06/24/2014	4:51
09	MW-30D_6/18/14	N1082-06A	V8D5686.D	06/24/2014	5:18
10	MW-30S_6/18/14	N1082-07A	V8D5687.D	06/24/2014	5:45
11	MW-31D_6/18/14	N1082-08A	V8D5688.D	06/24/2014	6:12
12	MW-31S_6/18/14	N1082-09A	V8D5689.D	06/24/2014	6:39
13	MW-32D_6/18/14	N1082-10A	V8D5690.D	06/24/2014	7:06

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

EPA SAMPLE NO.
BFB10Y

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5700.D BFB Injection Date: 06/24/2014

Instrument ID: V10 BFB Injection Time: 8:47

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	39.0
75	30.0 - 80.0% of mass 95	65.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 -120% of mass 95	89.4
175	5.0 - 9.0% of mass 174	7.1 (8.0)1
176	95.0 - 101% of mass 174	86.6 (96.8)1
177	5.0 - 9.0% of mass 176	6.0 (6.9)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	VSTD05010Y	VSTD05010Y	V8D5701.D	06/24/2014	9:05
02	LCS-77738	LCS-77738	V8D5702.D	06/24/2014	9:43
03	MB-77738	MB-77738	V8D5704.D	06/24/2014	10:48
04	MW-32S_6/18/14	N1082-11A	V8D5708.D	06/24/2014	12:38

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

EPA SAMPLE NO.
BFB10Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Lab File ID: V8D5730.D BFB Injection Date: 06/25/2014

Instrument ID: V10 BFB Injection Time: 7:20

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	39.0
75	30.0 - 80.0% of mass 95	69.6
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	50.0 -120% of mass 95	84.4
175	5.0 - 9.0% of mass 174	6.7 (7.9)1
176	95.0 - 101% of mass 174	80.9 (95.8)1
177	5.0 - 9.0% of mass 176	5.0 (6.2)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	VSTD05010Z	VSTD05010Z	V8D5731.D	06/25/2014	7:38
02	LCS-77766	LCS-77766	V8D5732.D	06/25/2014	8:22
03	MB-77766	MB-77766	V8D5734.D	06/25/2014	9:29
04	MW-22R_6/19/14	N1082-12A	V8D5750.D	06/25/2014	16:53
05	MW-22S_6/19/14	N1082-13A	V8D5751.D	06/25/2014	17:20
06	MW-21S_6/19/14	N1082-14A	V8D5752.D	06/25/2014	17:48
07	MW-22S_6/19/14MS	N1082-13AMS	V8D5753.D	06/25/2014	18:16
08	MW-22S_6/19/14MSD	N1082-13AMSD	V8D5754.D	06/25/2014	18:44

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/26/2014 06/26/2014

EPA Sample No.(VSTD#####): VSTD0501K Date Analyzed: 06/26/2014

Lab File ID (Standard): V1M9887.D Time Analyzed: 9:56

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	632137		4.403		446017		7.249		185375		9.819	
	UPPER LIMIT	1264274		4.903		892034		7.749		370750		10.319	
	LOWER LIMIT	316069		3.903		223009		6.749		92688		9.319	
	EPA SAMPLE NO.												
01	LCS-77805	611931		4.407		421673		7.252		171468		9.822	
02	LCSD-77805	649461		4.394		455021		7.250		186301		9.820	
03	MB-77805	595222		4.400		413257		7.245		156729		9.825	
04	MW-22R_6/19/14DL	625028		4.394		429191		7.249		158838		9.829	
05	MW-21R_6/19/14DL	640003		4.396		436267		7.252		164418		9.831	
06	MW-22S_6/19/14DL	684536		4.403		480405		7.259		165408		9.828	
07	MW-21S_6/19/14DL	629564		4.407		441372		7.262		163594		9.832	

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.: N1082 Mod. Ref No.: SDG No.: SN1082

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####): VSTD05010W Date Analyzed: 06/23/2014

Lab File ID (Standard): V8D5644.D Time Analyzed: 9:51

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	161852		5.236		223113		8.223		132933		10.725	
	UPPER LIMIT	323704		5.736		446226		8.723		265866		11.225	
	LOWER LIMIT	80926		4.736		111557		7.723		66467		10.225	
	EPA SAMPLE NO.												
01	LCS-77721	172098		5.236		250924		8.223		150015		10.725	
02	MB-77721	164667		5.239		236331		8.223		128979		10.728	
03	TRIPBLANK_6/17/14	156790		5.239		227304		8.223		123473		10.725	

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.: N1082 Mod. Ref No.: SDG No.: SN1082

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####): VSTD05010X Date Analyzed: 06/23/2014

Lab File ID (Standard): V8D5669.D Time Analyzed: 21:35

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA #	RT #	IS2 (S2) AREA #	RT #	IS3 (S3) AREA #	RT #
	12 HOUR STD	136876	5.236	216415	8.223	133047	10.722
	UPPER LIMIT	273752	5.736	432830	8.723	266094	11.222
	LOWER LIMIT	68438	4.736	108208	7.723	66524	10.222
	EPA SAMPLE NO.						
01	LCS-77722	133544	5.236	197659	8.223	118464	10.725
02	LCSD-77722	125228	5.236	189409	8.226	113401	10.725
03	MB-77722	136805	5.239	209124	8.223	111260	10.725
04	MW-29S_6/17/14	121287	5.236	188321	8.226	98092	10.725
05	MW-20S_6/17/14	118769	5.236	187147	8.223	96328	10.725
06	MW-20R_6/17/14	120224	5.239	187073	8.223	99360	10.725
07	MW-29D_6/18/14	116202	5.239	181053	8.223	93364	10.728
08	MW-30D_6/18/14	116051	5.239	184814	8.226	98994	10.728
09	MW-30S_6/18/14	113506	5.236	181708	8.220	93912	10.728
10	MW-31D_6/18/14	112051	5.239	173692	8.226	87437	10.728

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.: N1082 Mod. Ref No.: SDG No.: SN1082

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####): VSTD05010X Date Analyzed: 06/23/2014

Lab File ID (Standard): V8D5669.D Time Analyzed: 21:35

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	136876		5.236		216415		8.223		133047		10.722	
	UPPER LIMIT	273752		5.736		432830		8.723		266094		11.222	
	LOWER LIMIT	68438		4.736		108208		7.723		66524		10.222	
	EPA SAMPLE NO.												
11	MW-31S_6/18/14	113866		5.239		176155		8.226		88417		10.728	
12	MW-32D_6/18/14	110842		5.236		177007		8.223		94653		10.725	

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.: N1082 Mod. Ref No.: SDG No.: SN1082

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####): VSTD05010Y Date Analyzed: 06/24/2014

Lab File ID (Standard): V8D5701.D Time Analyzed: 9:05

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	114994		5.239		185715		8.223		115982		10.725	
	UPPER LIMIT	229988		5.739		371430		8.723		231964		11.225	
	LOWER LIMIT	57497		4.739		92858		7.723		57991		10.225	
	EPA SAMPLE NO.												
01	LCS-77738	122868		5.239		200880		8.223		125655		10.725	
02	MB-77738	110831		5.239		175347		8.226		91688		10.728	
03	MW-32S_6/18/14	111421		5.236		179604		8.223		96178		10.725	

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.: N1082 Mod. Ref No.: SDG No.: SN1082

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####): VSTD05010Z Date Analyzed: 06/25/2014

Lab File ID (Standard): V8D5731.D Time Analyzed: 7:38

Instrument ID: V10 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	118998		5.239		205945		8.226		130402		10.725	
	UPPER LIMIT	237996		5.739		411890		8.726		260804		11.225	
	LOWER LIMIT	59499		4.739		102973		7.726		65201		10.225	
	EPA SAMPLE NO.												
01	LCS-77766	127789		5.236		215945		8.223		136084		10.725	
02	MB-77766	109365		5.239		190140		8.223		104964		10.725	
03	MW-22R_6/19/14	115197		5.239		217246		8.223		124248		10.725	
04	MW-22S_6/19/14	116111		5.236		211667		8.223		121841		10.725	
05	MW-21S_6/19/14	112085		5.236		212313		8.223		122123		10.725	
06	MW-22S_6/19/14MS	118540		5.239		221159		8.223		147935		10.725	
07	MW-22S_6/19/14MSD	112302		5.239		212922		8.223		131735		10.725	

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

EPA SAMPLE NO.

TRIPBLANK_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5656.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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

EPA SAMPLE NO.

TRIPBLANK_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5656.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5656.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/23/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5656.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5656.d
Lab Smp Id: N1082-01A Client Smp ID: TRIPBLANK_6/17/14
Inj Date : 23-JUN-2014 15:35
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-01A,,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.644	4.641	(0.886)	72264	52.6336	53
$ 42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	11191	54.7965	55
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	156790	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	218230	48.4647	48
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	227304	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	146655	47.7806	48
* 92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	123473	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5656.d
Report Date: 27-Jun-2014 13:32

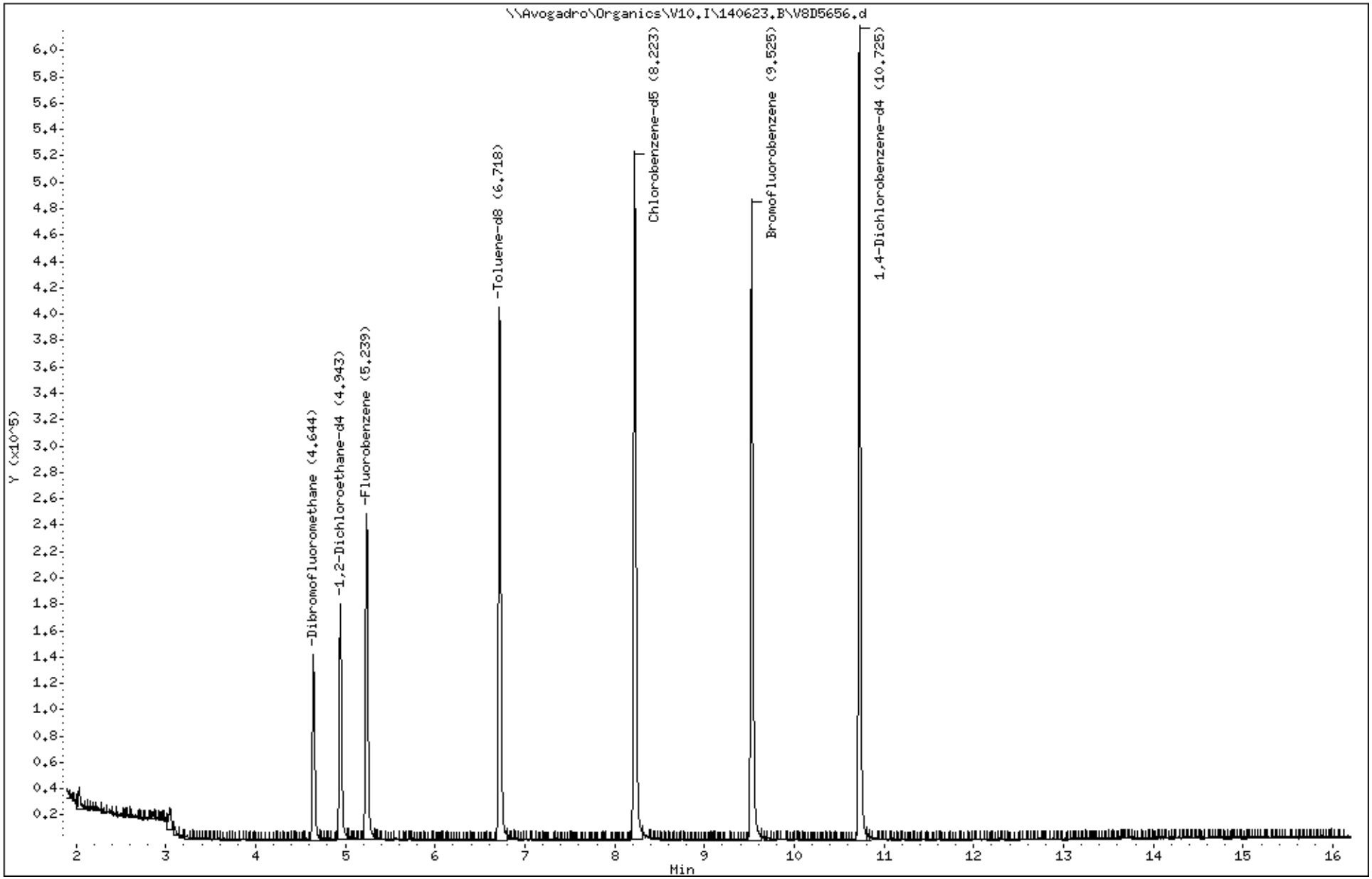
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5656.d
Lab Smp Id: N1082-01A Client Smp ID: TRIPBLANK_6/17/14
Inj Date : 23-JUN-2014 15:35
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-01A,,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 70
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5656.d
Date : 23-JUN-2014 15:35
Client ID: TRIPBLANK_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1082-01A,,77721
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-29S_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5682.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	8.0	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	10	
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	36	
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	91	
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

EPA SAMPLE NO.

MW-29S_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5682.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-29S_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5682.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	8.6	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d
Lab Smp Id: N1082-02A Client Smp ID: MW-29S_6/17/14
Inj Date : 24-JUN-2014 03:30
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-02A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 96
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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	178935	103.334	100
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	27327	8.04435	8.0
	28 cis-1,2-Dichloroethene	96	4.258	4.252	(0.813)	12857	10.2491	10(Q)
$	36 Dibromofluoromethane	113	4.644	4.647	(0.887)	60146	56.6307	57
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	123821	36.0470	36
$	42 1,2-Dichloroethane-d4	102	4.943	4.946	(0.944)	8629	54.6196	55
M	50 1,2-Dichloroethene (Total)	96				12857	10.2491	10
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	121287	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	119036	90.5980	90
$	58 Toluene-d8	98	6.718	6.715	(0.817)	174764	46.8459	47
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	188321	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	121130	47.6338	48
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.721	(1.000)	98092	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d
Lab Smp Id: N1082-02A Client Smp ID: MW-29S_6/17/14
Inj Date : 24-JUN-2014 03:30
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-02A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 96
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

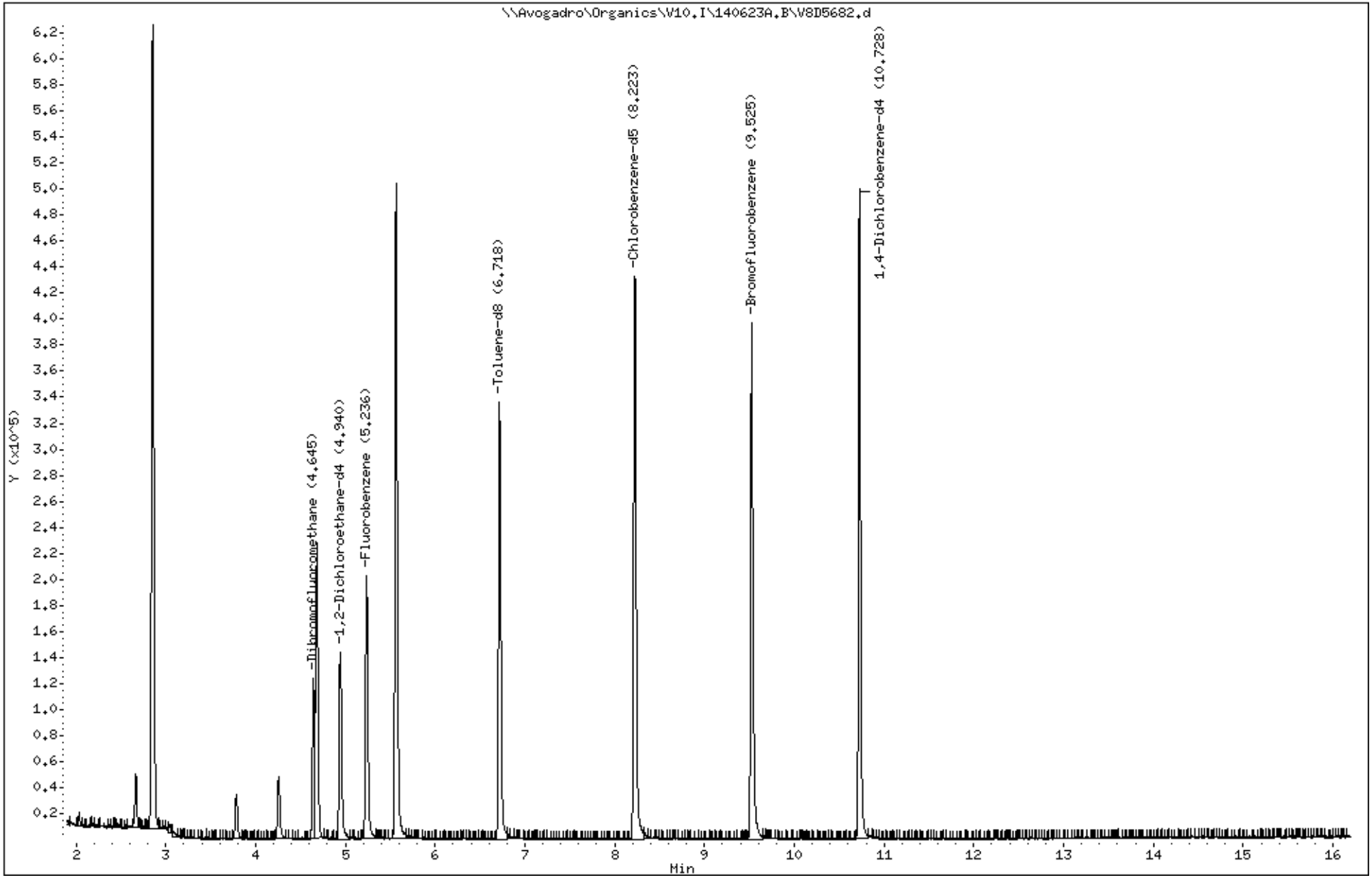
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	374108	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	64434	8.61172197	8.6	91	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d
Date : 24-JUN-2014 03:30
Client ID: MW-29S_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1082-02A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d

Date : 24-JUN-2014 03:30

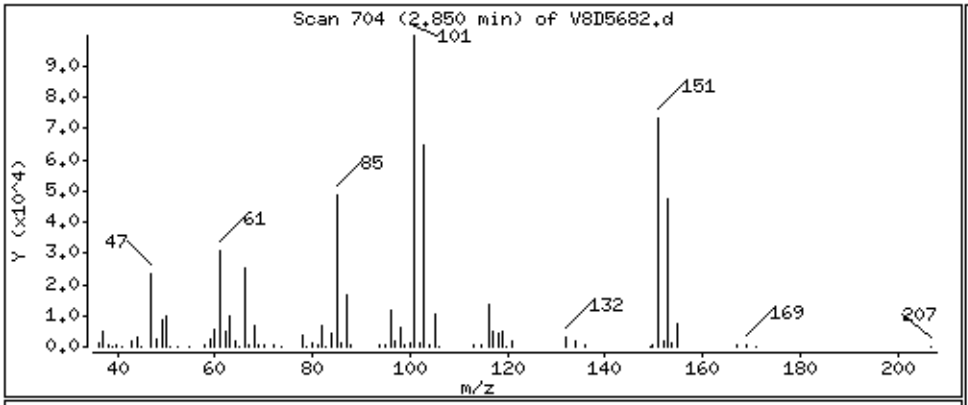
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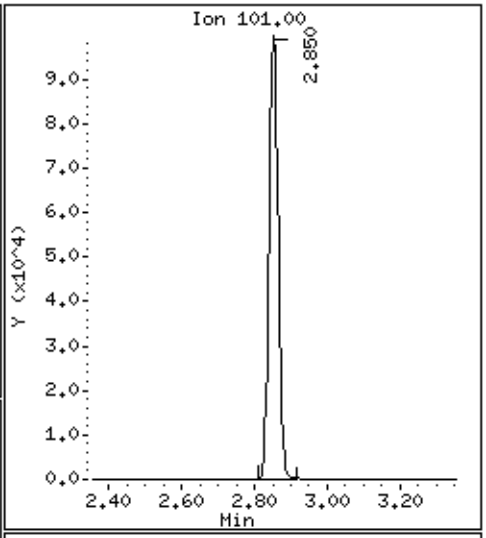
Sample Info: 5ML,N1082-02A,,77722

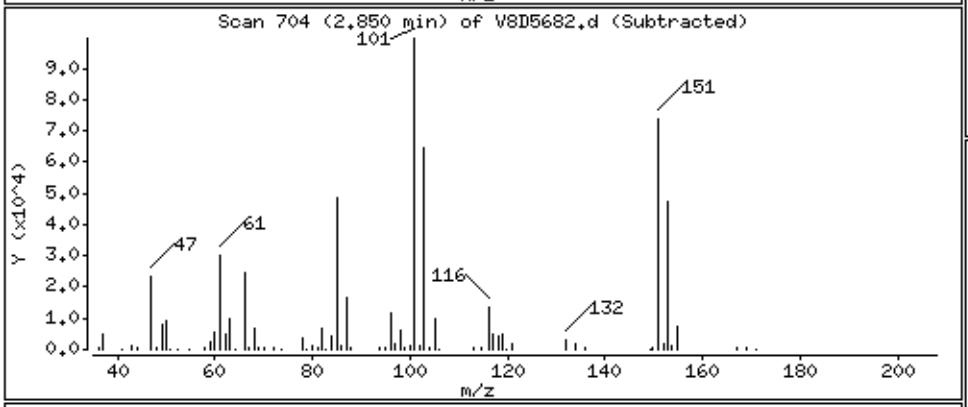
Purge Volume: 5.0 Operator: WL SRC: LIMS

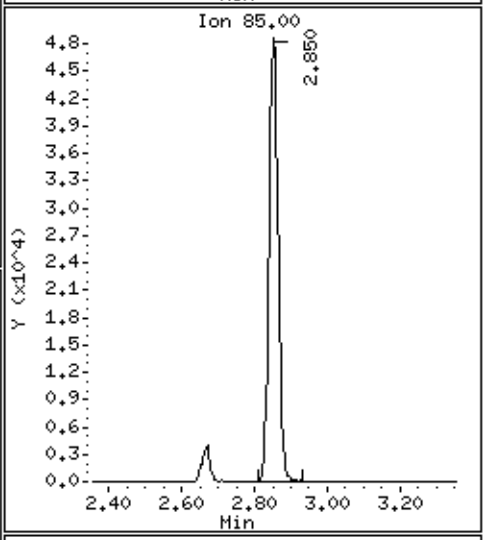
Column phase: DB-624 Column diameter: 0.25

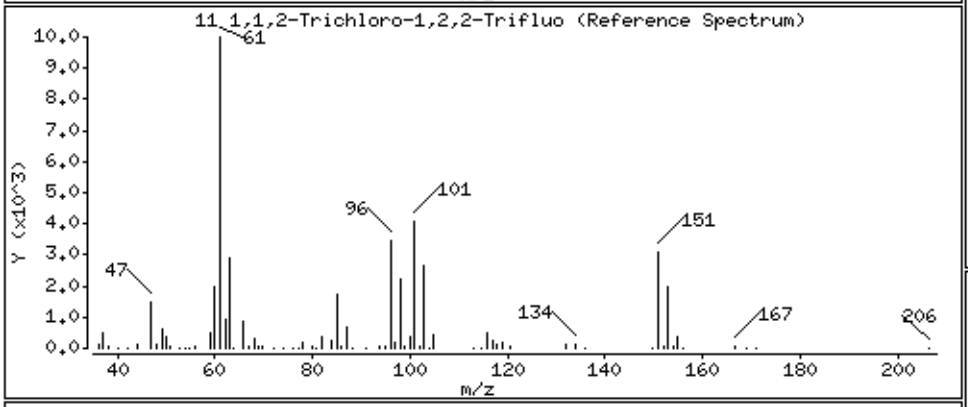
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 100 ug/L

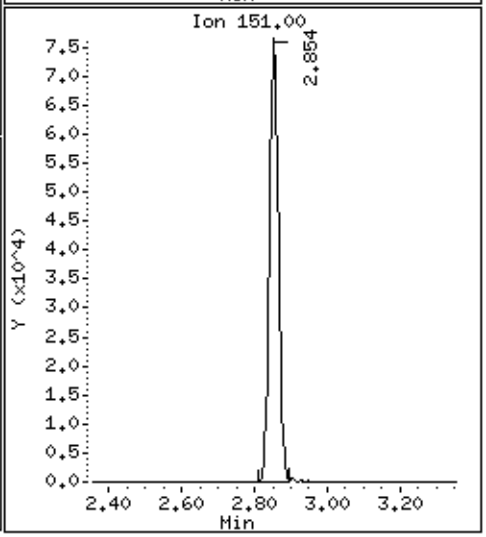


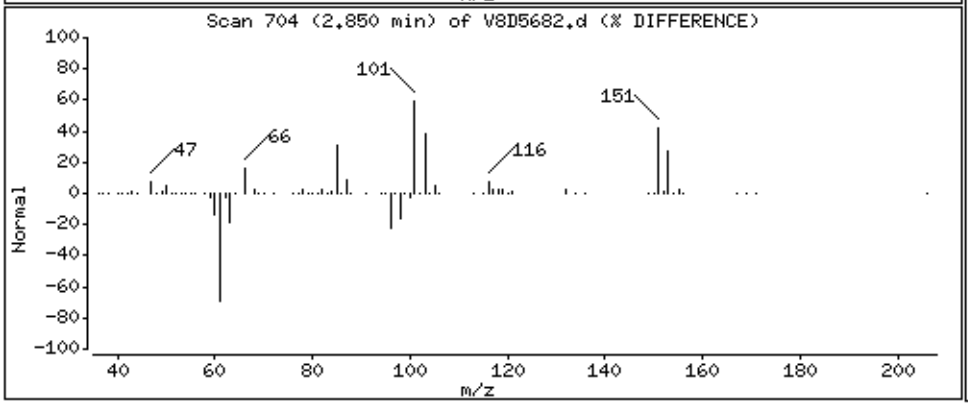












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d

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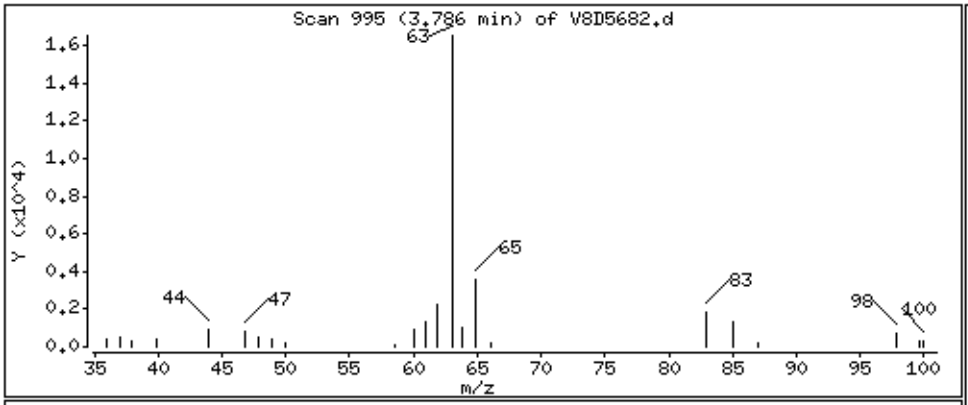
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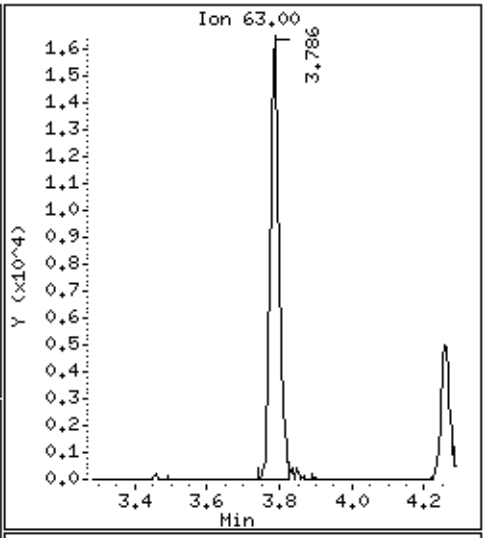
Sample Info: 5ML,N1082-02A,,77722

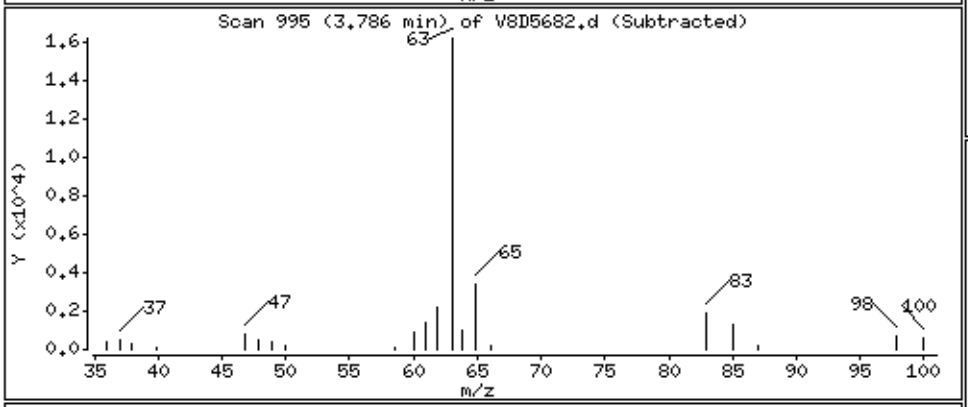
Purge Volume: 5.0 Operator: WL SRC: LIMS

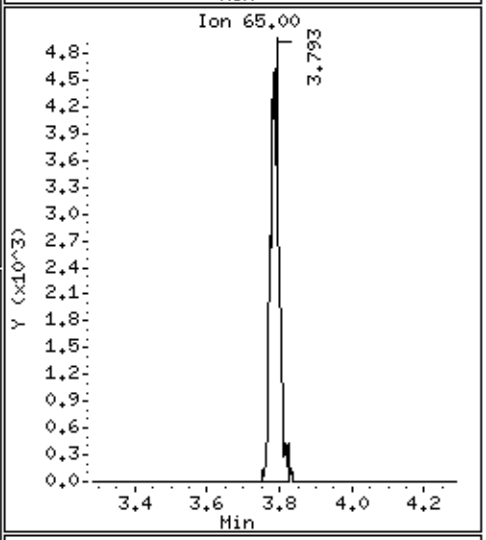
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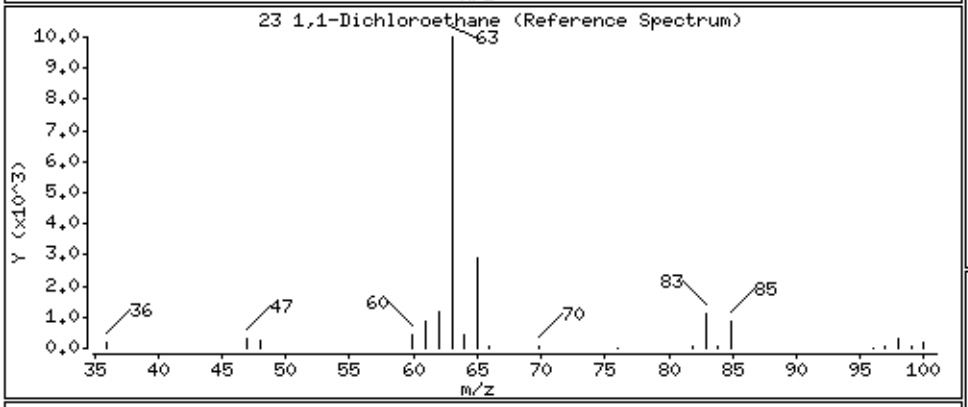
23 1,1-Dichloroethane Concentration: 8.0 ug/L

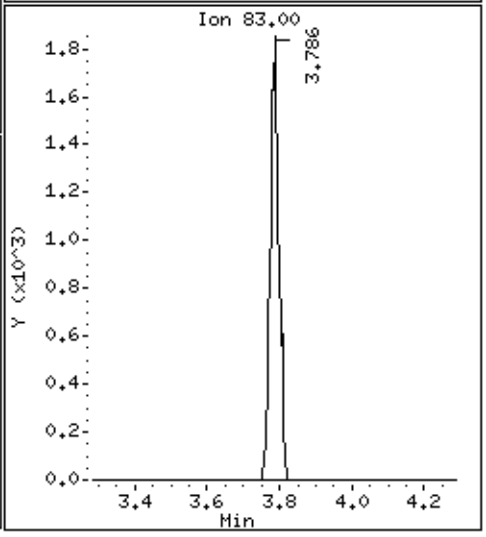


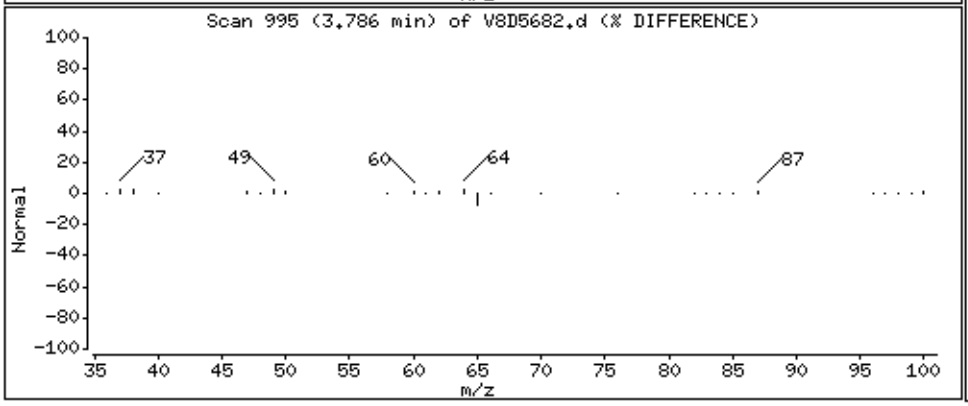












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d

Date : 24-JUN-2014 03:30

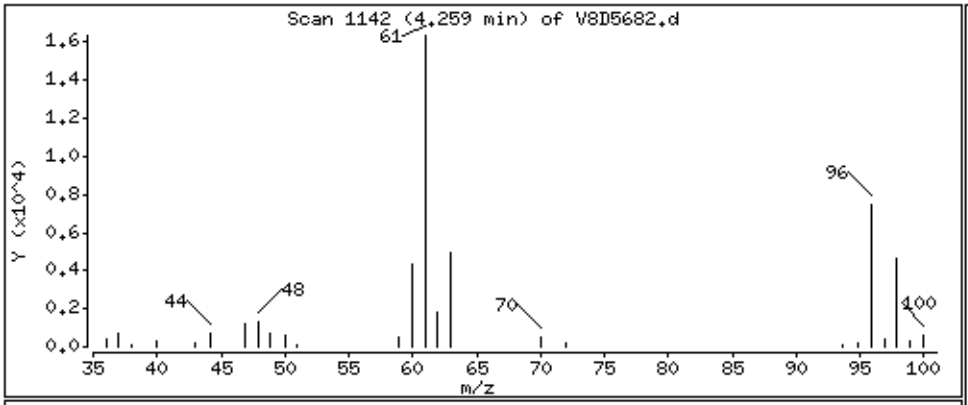
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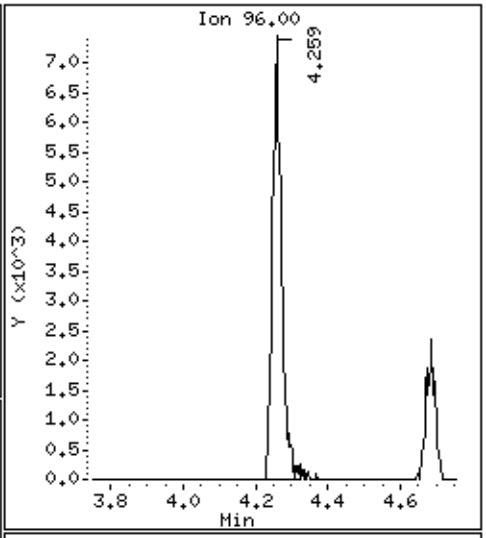
Sample Info: 5ML,N1082-02A,,77722

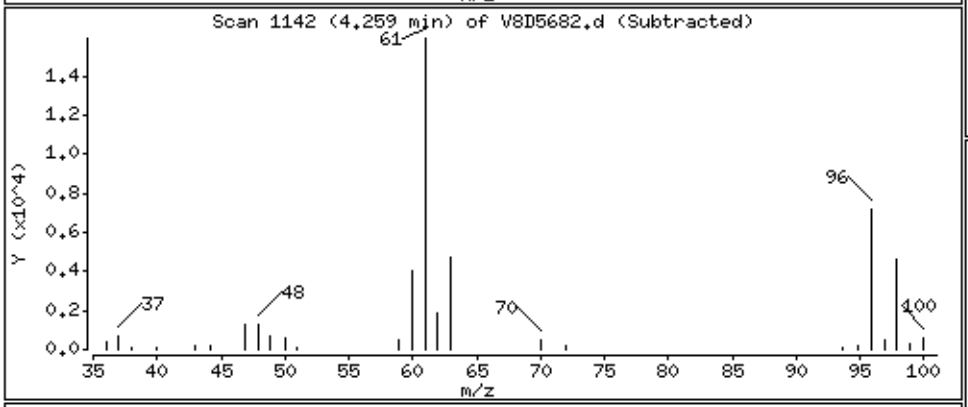
Purge Volume: 5.0 Operator: WL SRC: LIMS

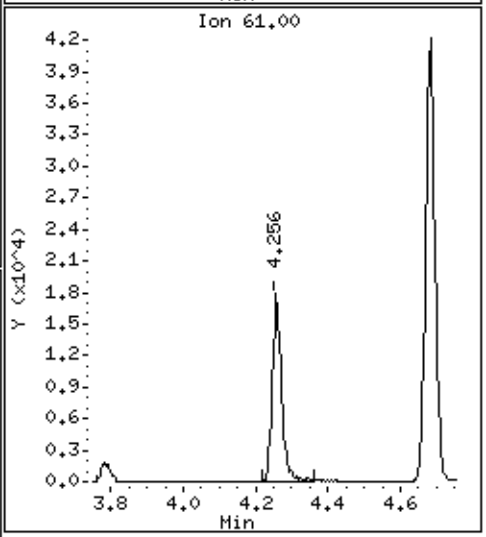
Column phase: DB-624 Column diameter: 0.25

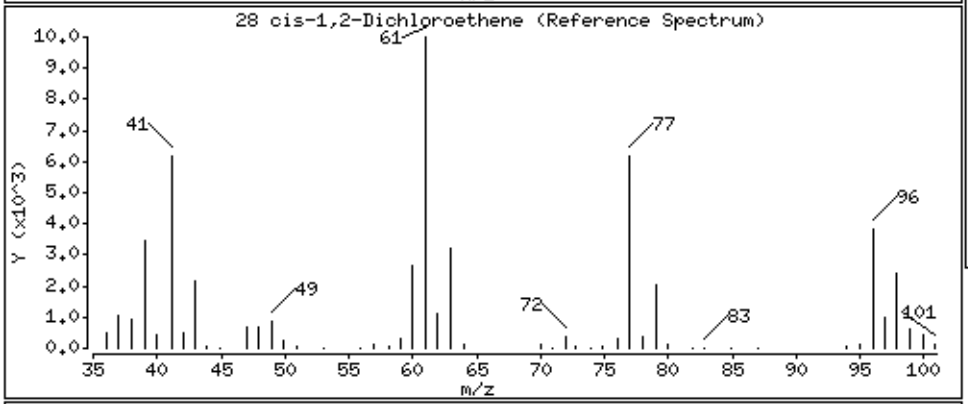
28 cis-1,2-Dichloroethene Concentration: 10 ug/L

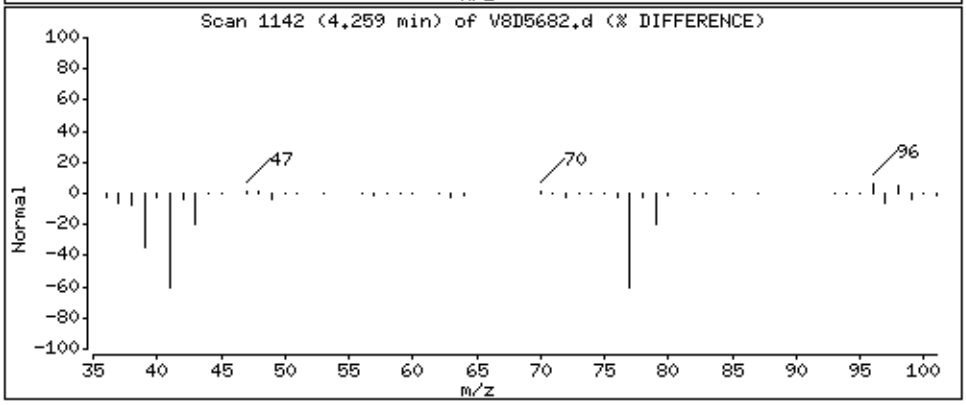












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d

Date : 24-JUN-2014 03:30

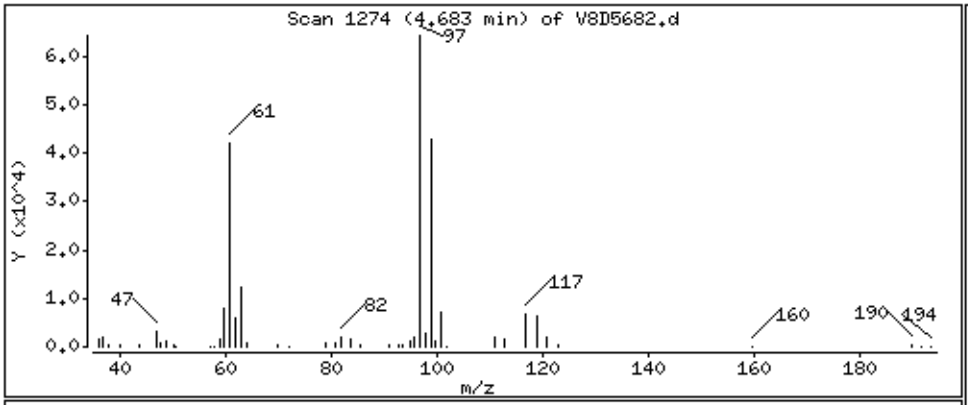
Client ID: MW-29S_6/17/14 Instrument: V10.i

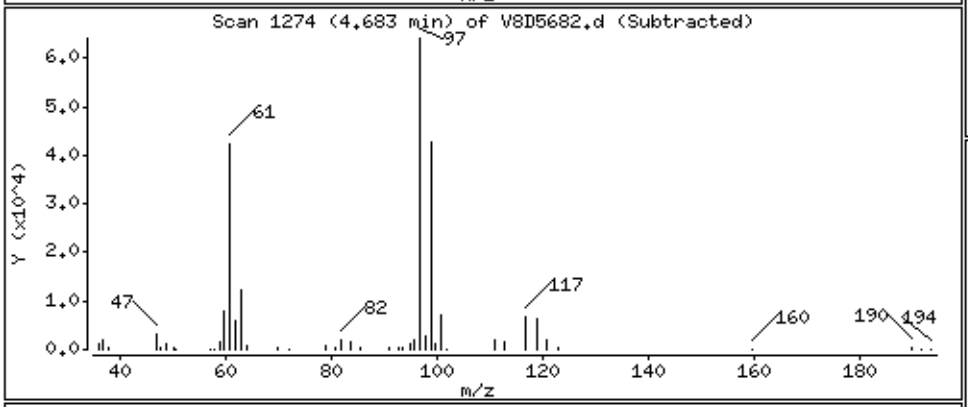
Sample Info: 5ML,N1082-02A,,77722

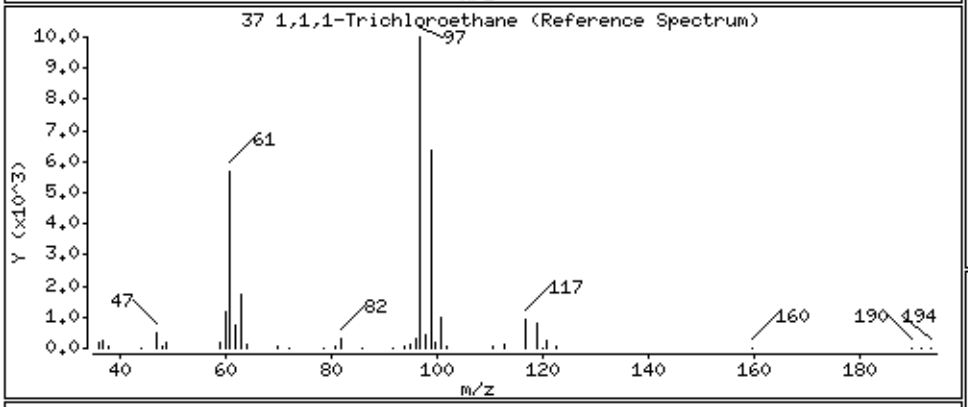
Purge Volume: 5.0 Operator: WL SRC: LIMS

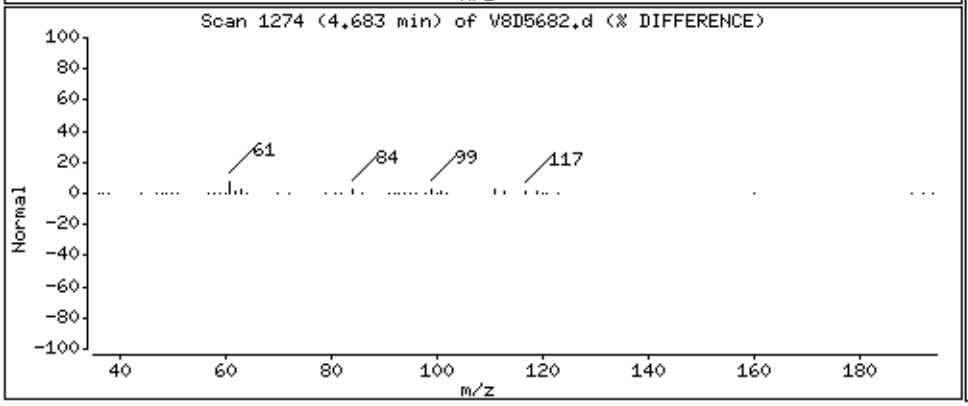
Column phase: DB-624 Column diameter: 0.25

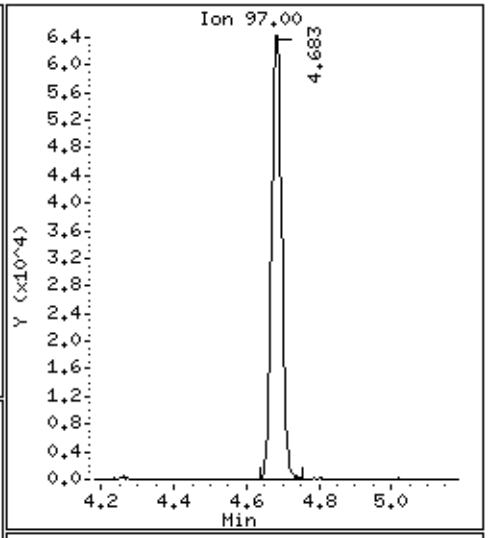
37 1,1,1-Trichloroethane Concentration: 36 ug/L

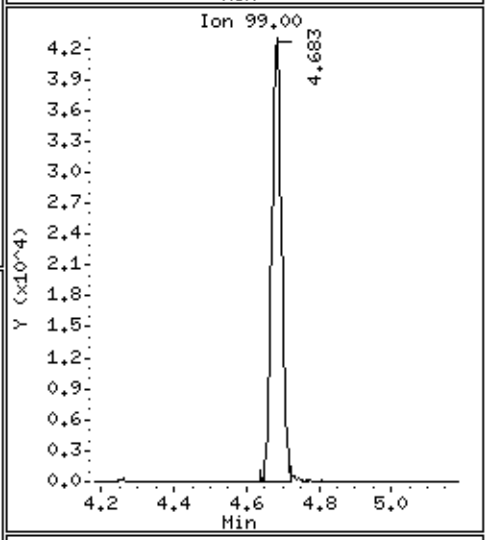


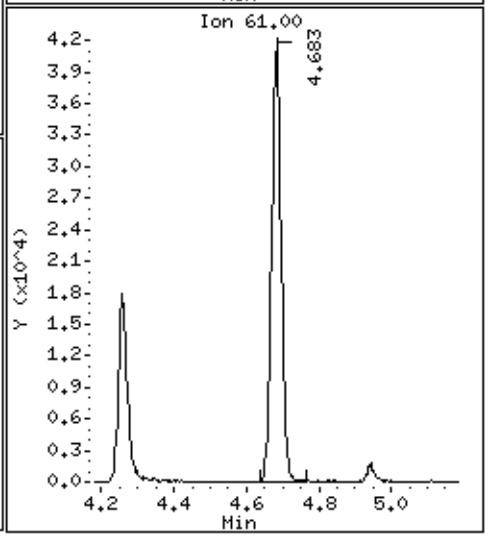












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d

Date : 24-JUN-2014 03:30

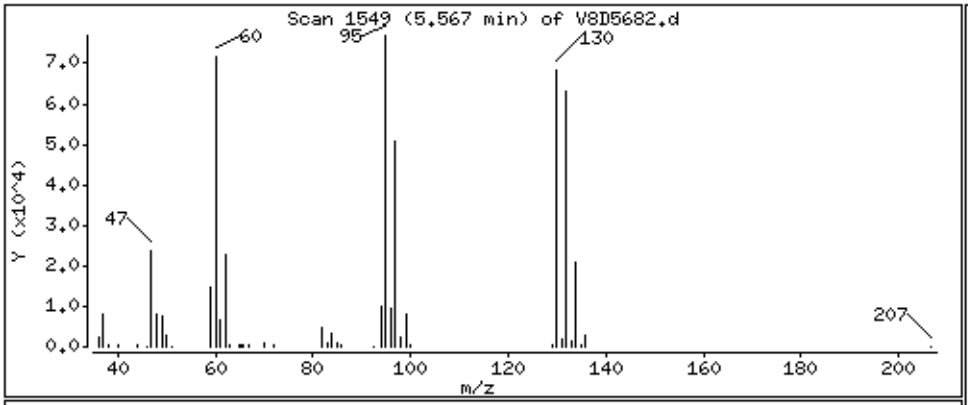
Client ID: MW-29S_6/17/14 Instrument: V10.i

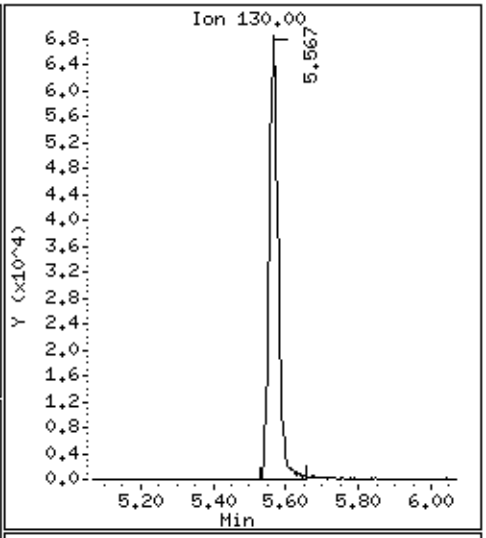
Sample Info: 5ML,N1082-02A,,77722

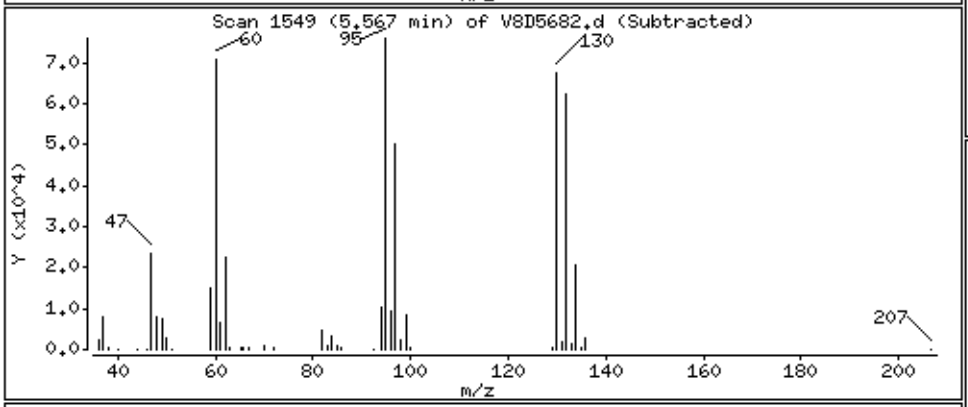
Purge Volume: 5.0 Operator: WL SRC: LIMS

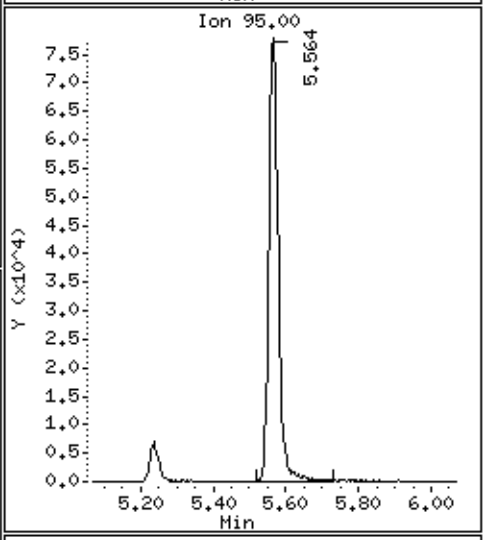
Column phase: DB-624 Column diameter: 0.25

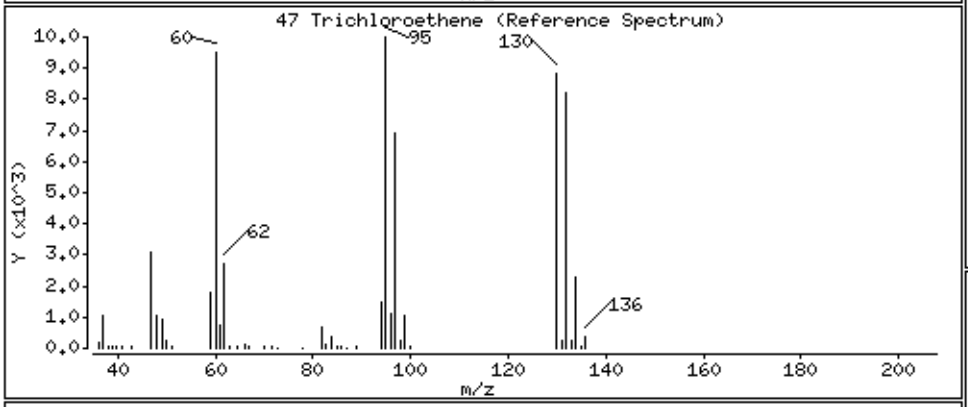
47 Trichloroethene Concentration: 90 ug/L

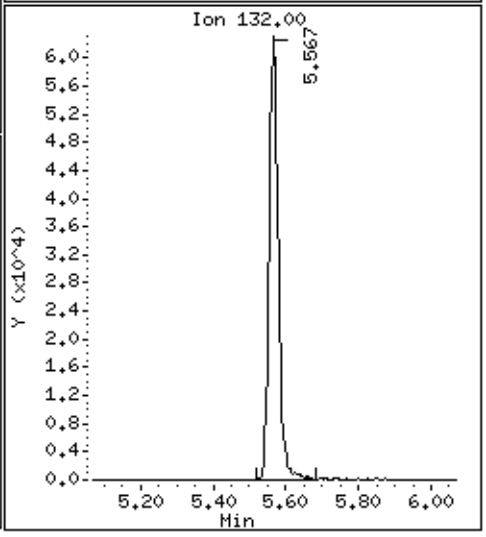


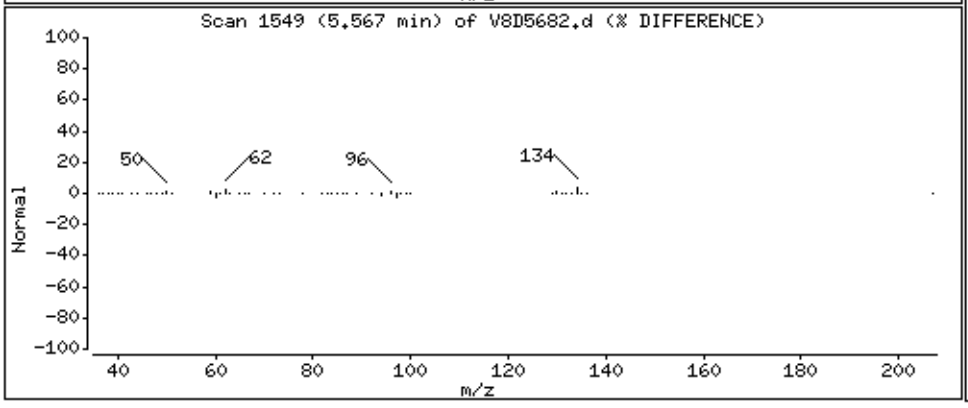












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5682.d

Date : 24-JUN-2014 03:30

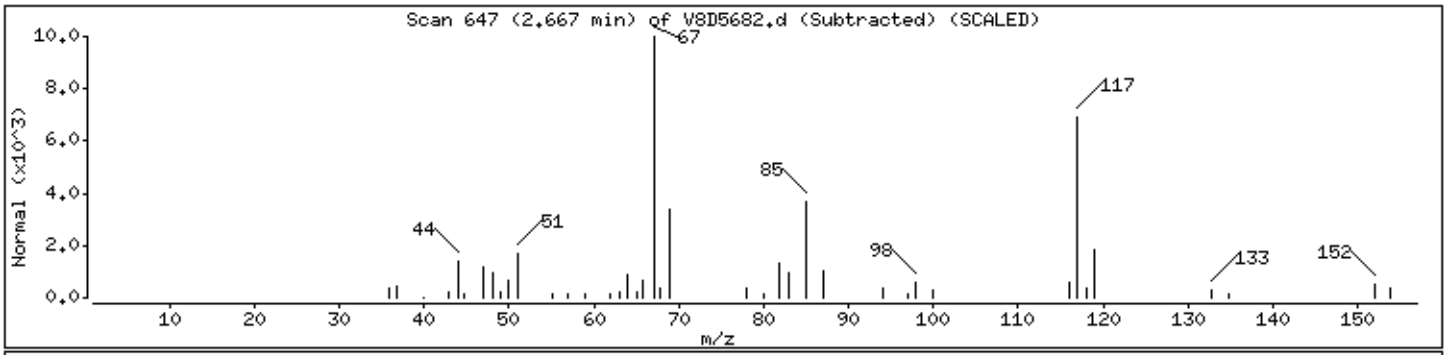
Client ID: MW-29S_6/17/14 Instrument: V10.i

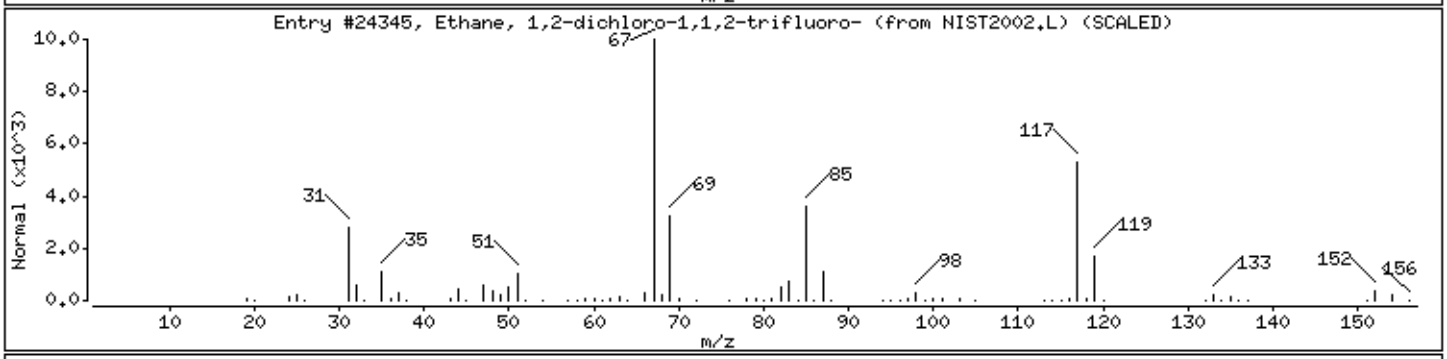
Sample Info: 5ML,N1082-02A,,77722

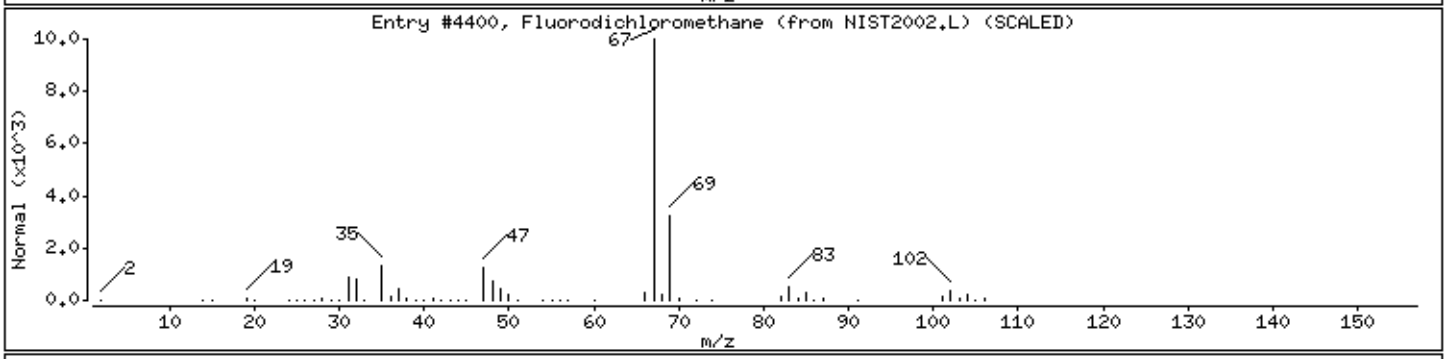
Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	91	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4400	23	CHCl2F	102







1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-20S_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5683.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	15	
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	5.5	
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	14	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	43	
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

EPA SAMPLE NO.

MW-20S_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5683.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-20S_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5683.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	9.3	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d
Lab Smp Id: N1082-03A Client Smp ID: MW-20S_6/17/14
Inj Date : 24-JUN-2014 03:57
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-03A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 97
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)
	4 Vinyl Chloride	62	1.856	1.853	(0.355)	29038	14.5947	14(Q)
	10 1,1-Dichloroethene	96	2.853	2.856	(0.545)	7358	5.50168	5.5
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	46752	14.0543	14
	28 cis-1,2-Dichloroethene	96	4.258	4.252	(0.813)	53319	43.4047	43(Q)
$	36 Dibromofluoromethane	113	4.647	4.647	(0.888)	59094	56.8199	57
$	42 1,2-Dichloroethane-d4	102	4.946	4.946	(0.945)	8810	56.9476	57
M	50 1,2-Dichloroethene (Total)	96				53319	43.4047	43
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	118769	50.0000	
$	58 Toluene-d8	98	6.718	6.715	(0.817)	176035	47.4826	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	187147	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	122965	48.6587	49
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.721	(1.000)	96328	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d
Lab Smp Id: N1082-03A Client Smp ID: MW-20S_6/17/14
Inj Date : 24-JUN-2014 03:57
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-03A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 97
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

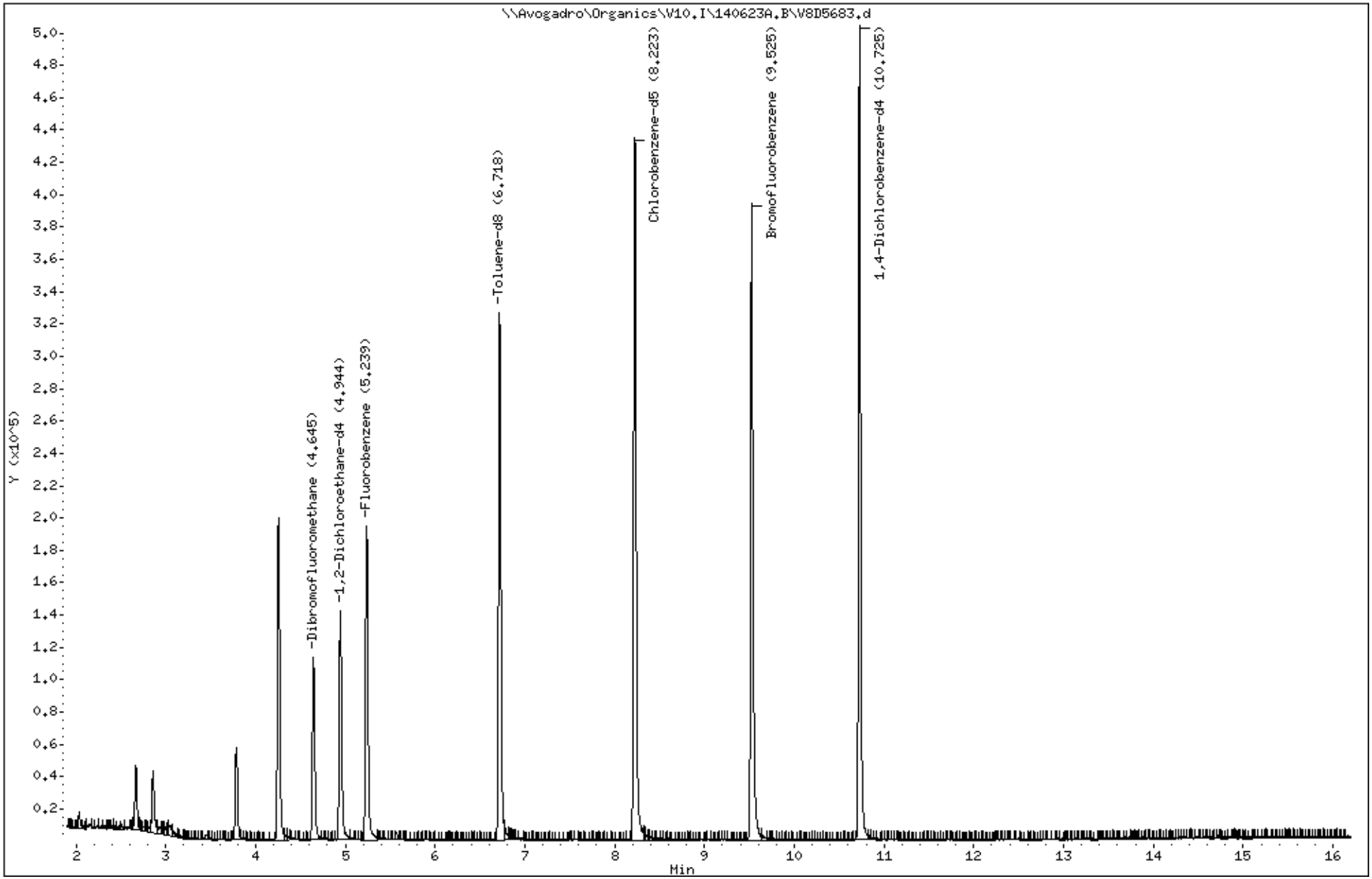
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	372187	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	69041	9.27499451	9.3	90	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d
Date : 24-JUN-2014 03:57
Client ID: MW-20S_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1082-03A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d

Date : 24-JUN-2014 03:57

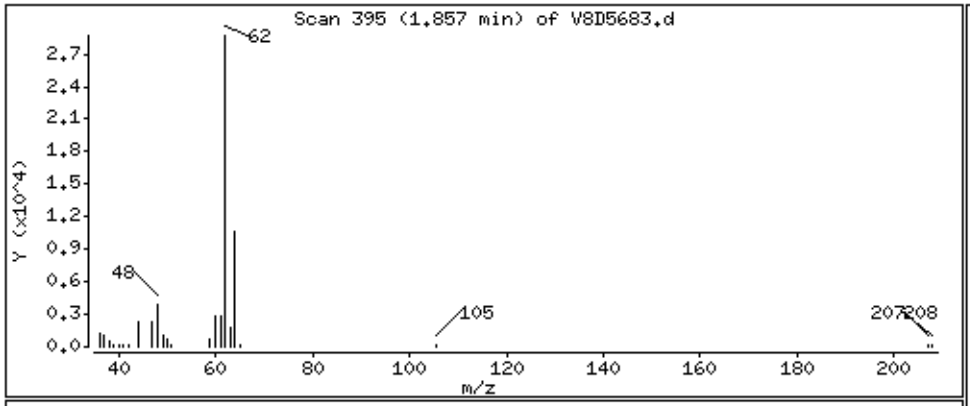
Client ID: MW-20S_6/17/14 Instrument: V10.i

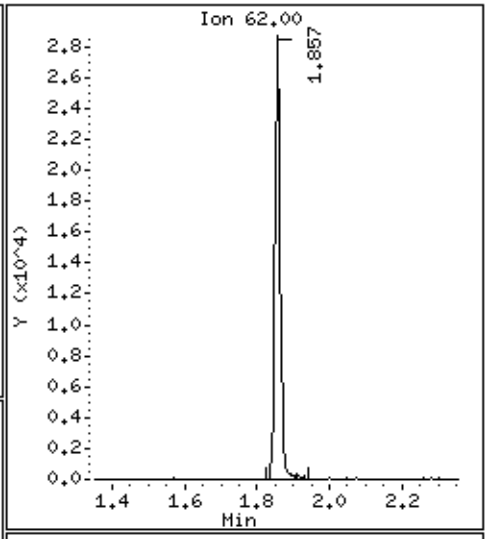
Sample Info: 5ML,N1082-03A,,77722

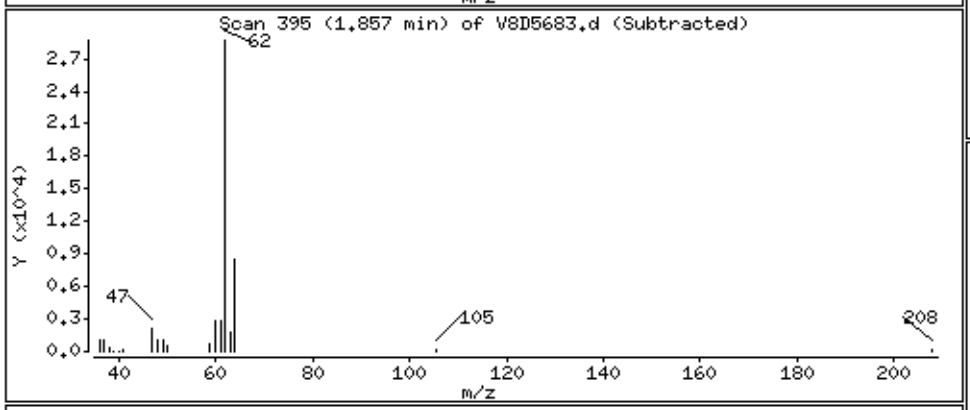
Purge Volume: 5.0 Operator: WL SRC: LIMS

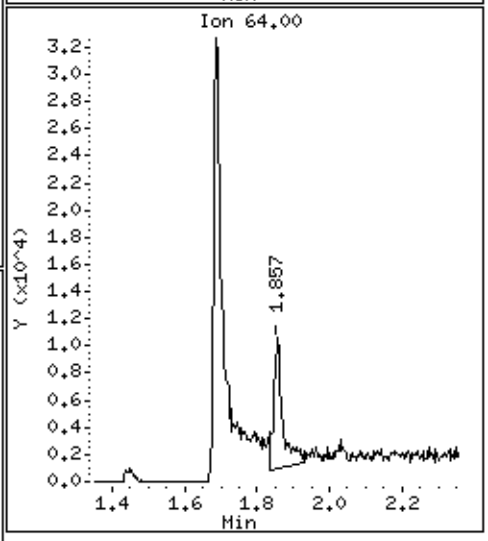
Column phase: DB-624 Column diameter: 0.25

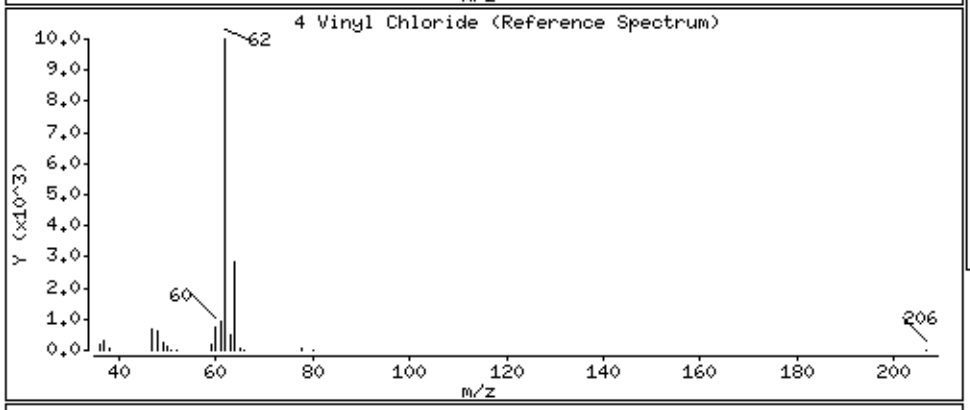
4 Vinyl Chloride Concentration: 14 ug/L

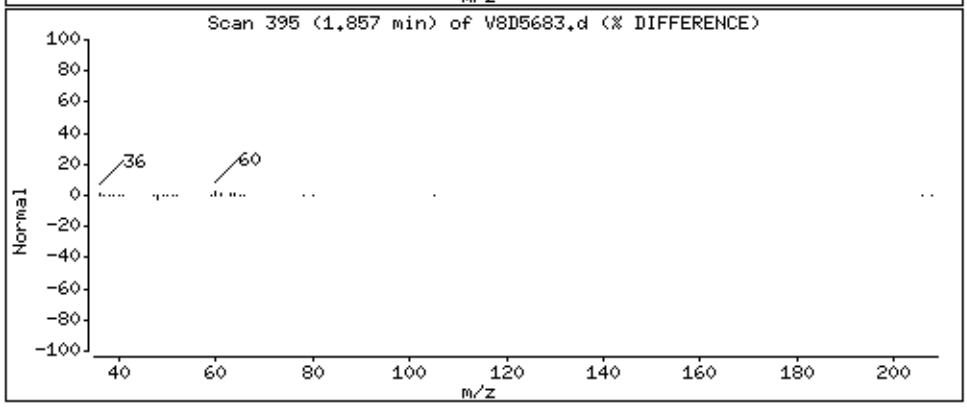












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d

Date : 24-JUN-2014 03:57

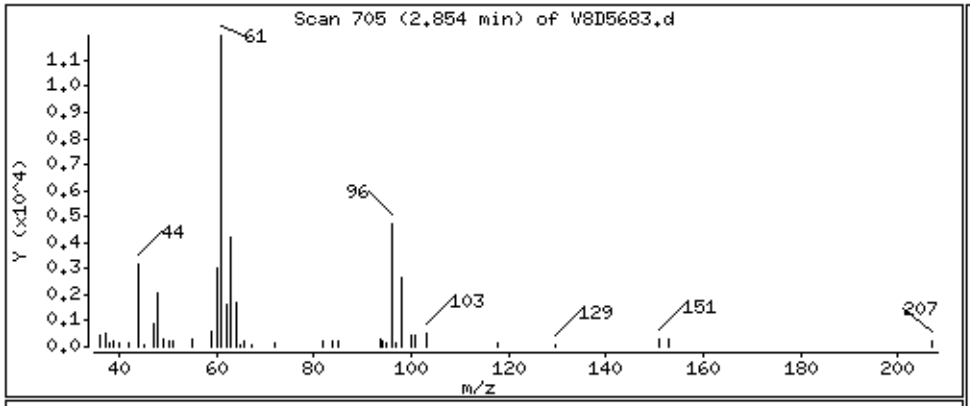
Client ID: MW-20S_6/17/14 Instrument: V10.i

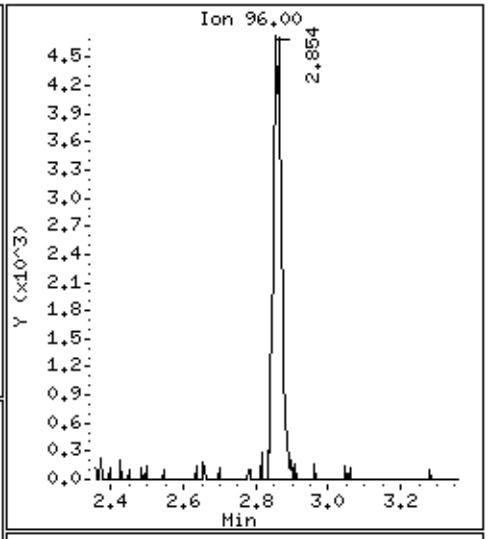
Sample Info: 5ML,N1082-03A,,77722

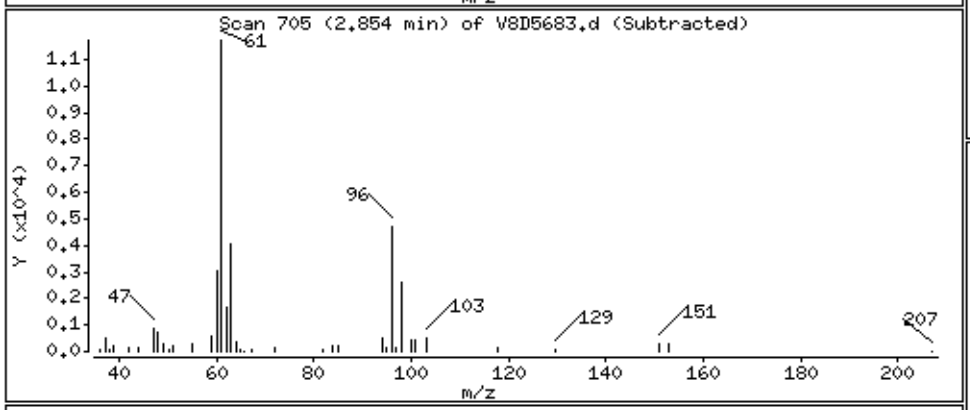
Purge Volume: 5.0 Operator: WL SRC: LIMS

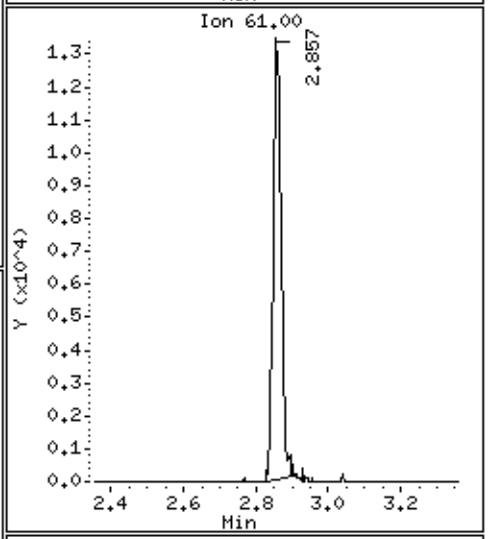
Column phase: DB-624 Column diameter: 0.25

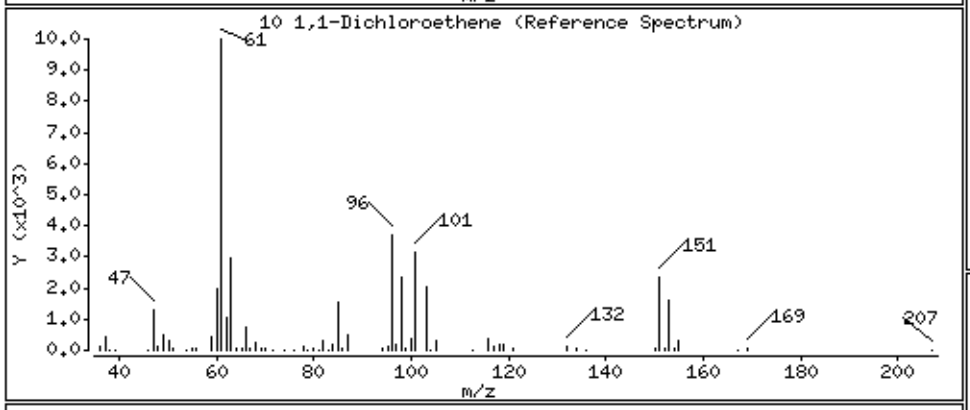
10 1,1-Dichloroethene Concentration: 5.5 ug/L

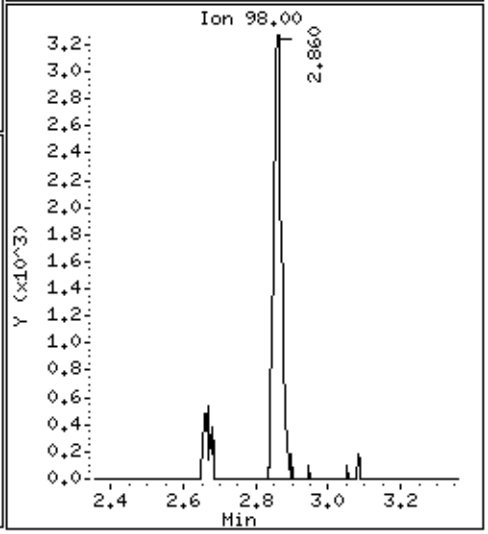


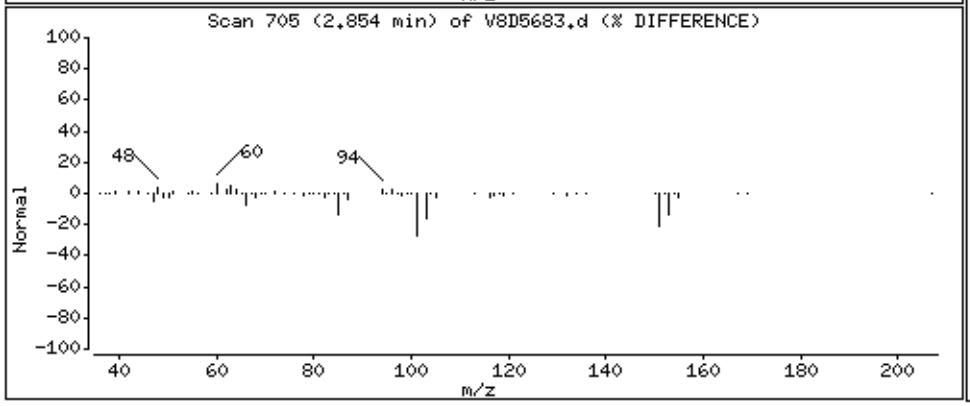












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d

Date : 24-JUN-2014 03:57

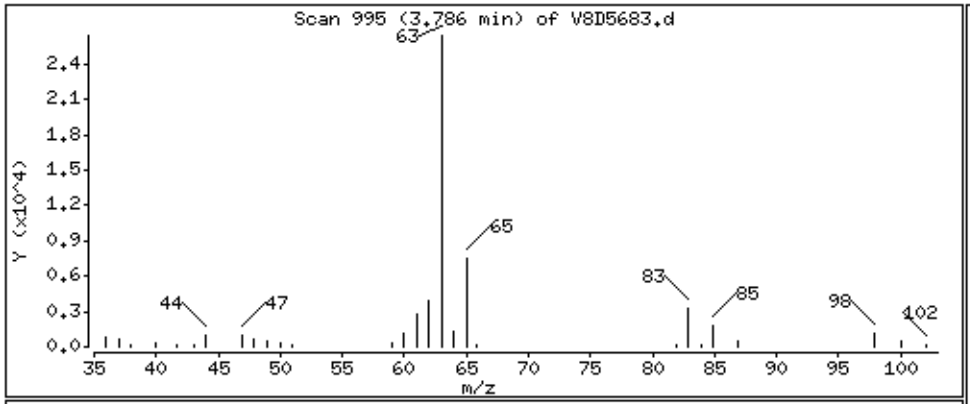
Client ID: MW-20S_6/17/14 Instrument: V10.i

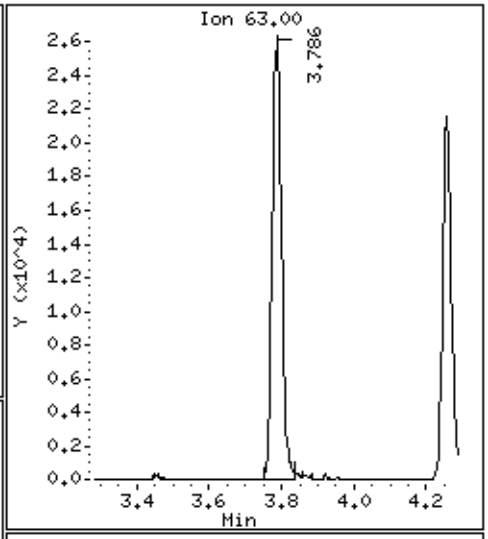
Sample Info: 5ML,N1082-03A,,77722

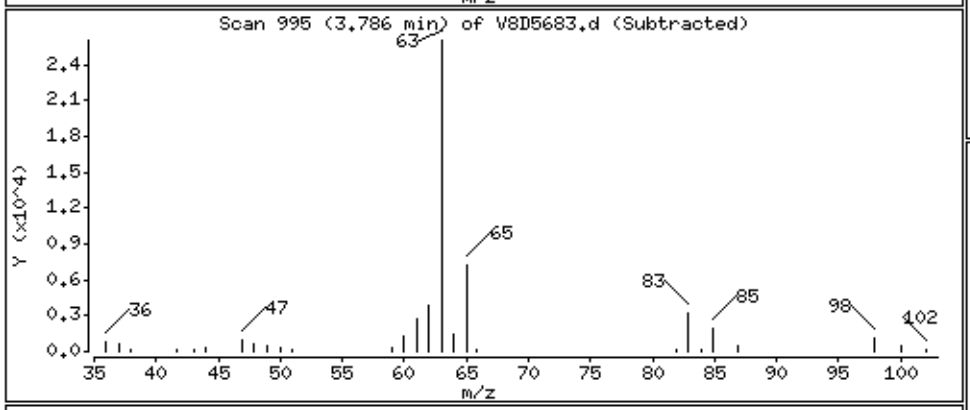
Purge Volume: 5.0 Operator: WL SRC: LIMS

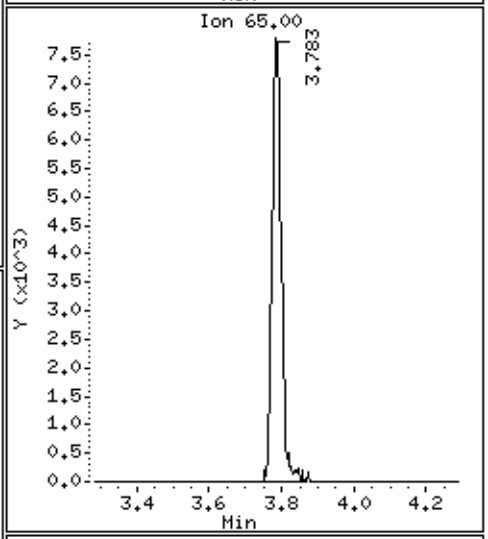
Column phase: DB-624 Column diameter: 0.25

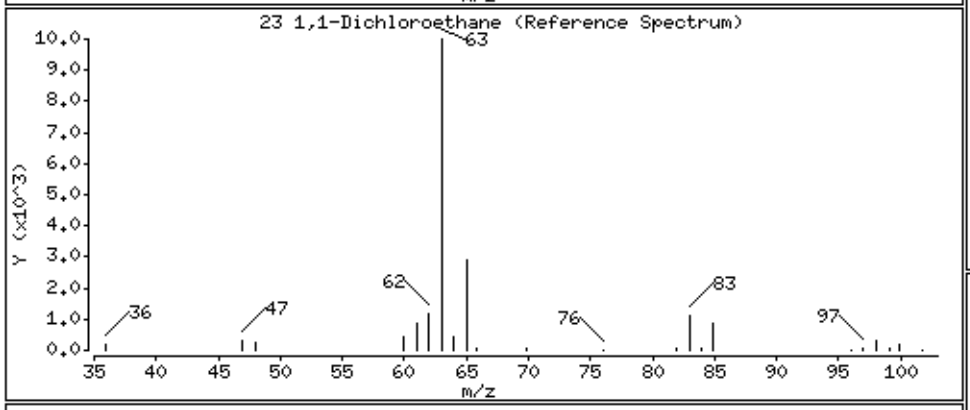
23 1,1-Dichloroethane Concentration: 14 ug/L

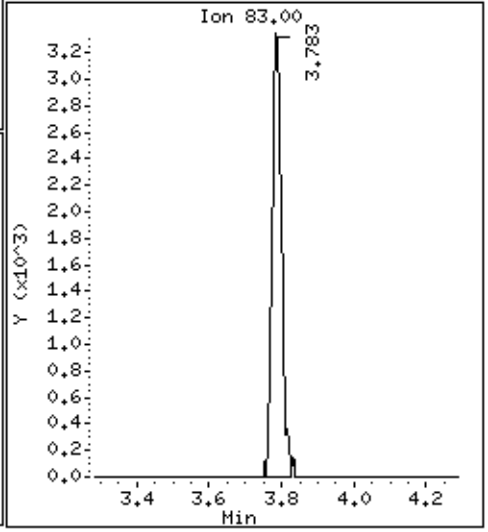


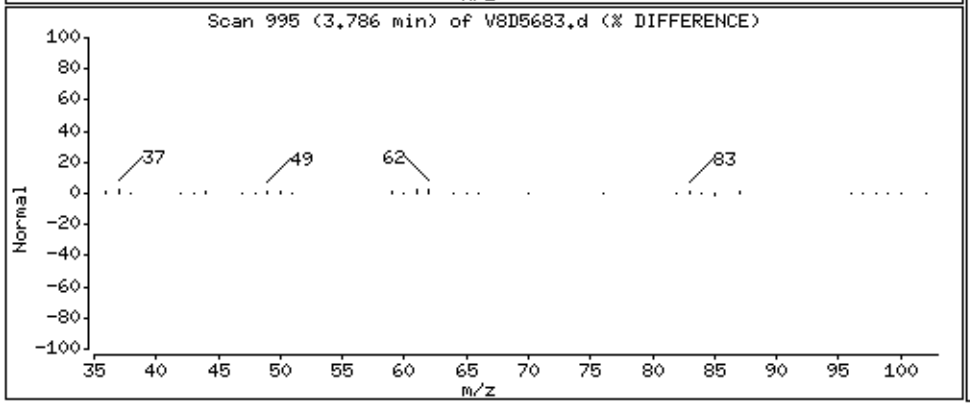












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d

Date : 24-JUN-2014 03:57

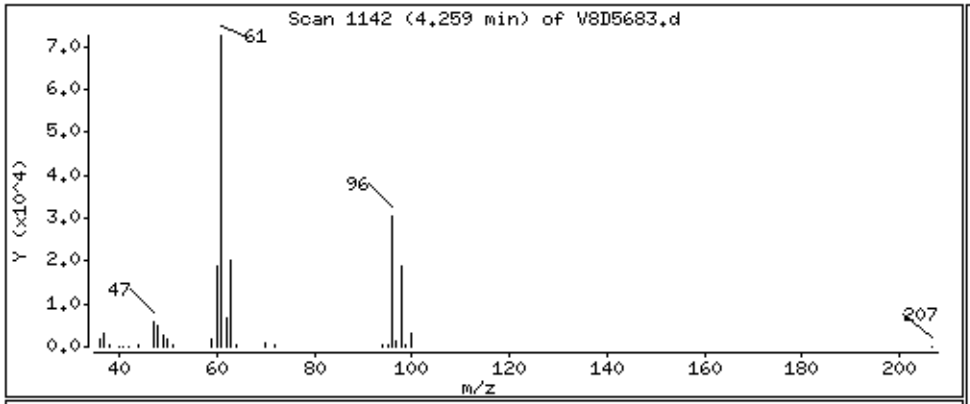
Client ID: MW-20S_6/17/14 Instrument: V10.i

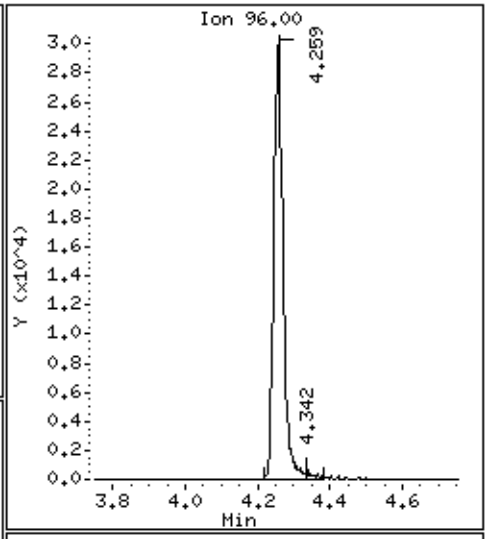
Sample Info: 5ML,N1082-03A,,77722

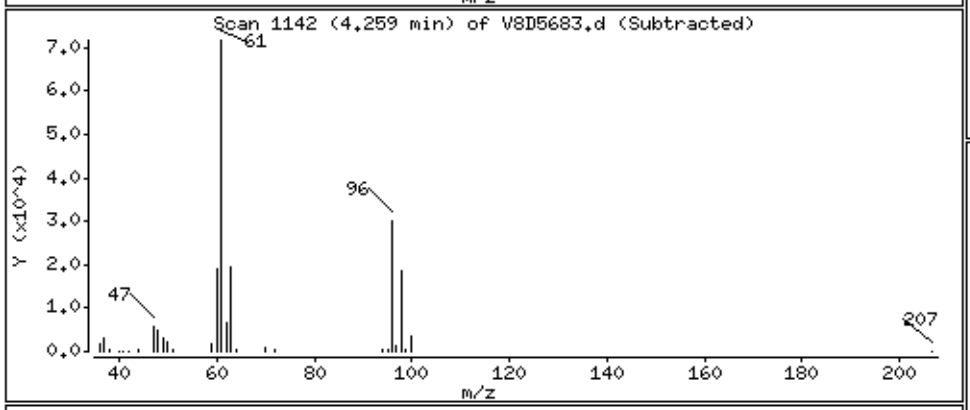
Purge Volume: 5.0 Operator: WL SRC: LIMS

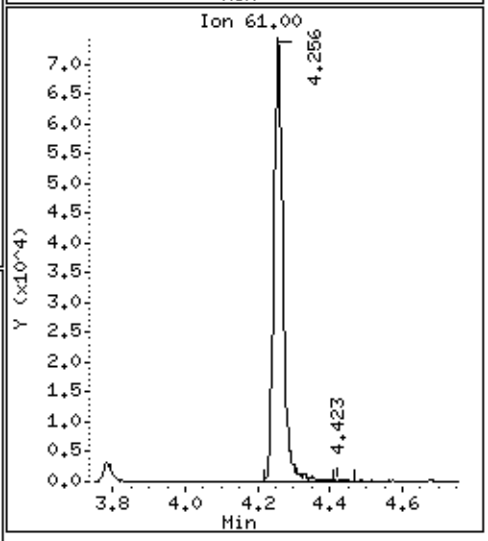
Column phase: DB-624 Column diameter: 0.25

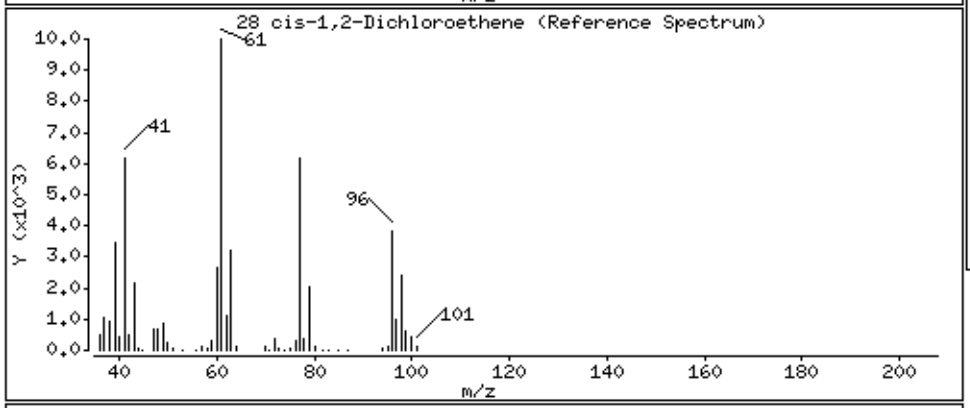
28 cis-1,2-Dichloroethene Concentration: 43 ug/L

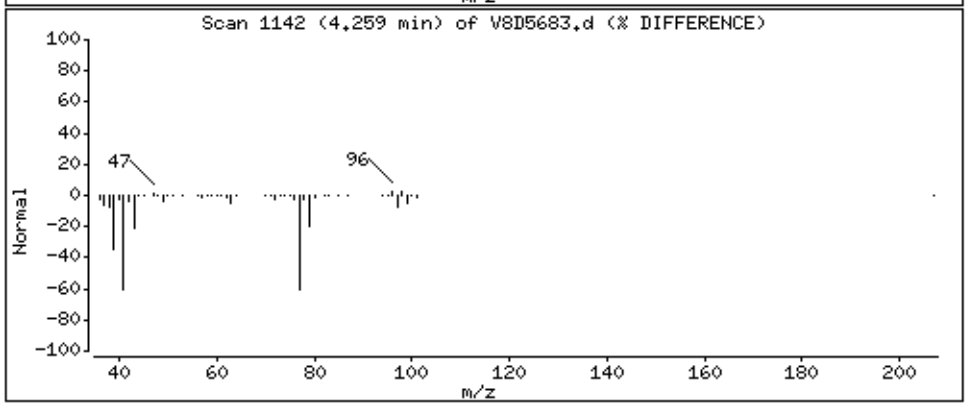












Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5683.d

Date : 24-JUN-2014 03:57

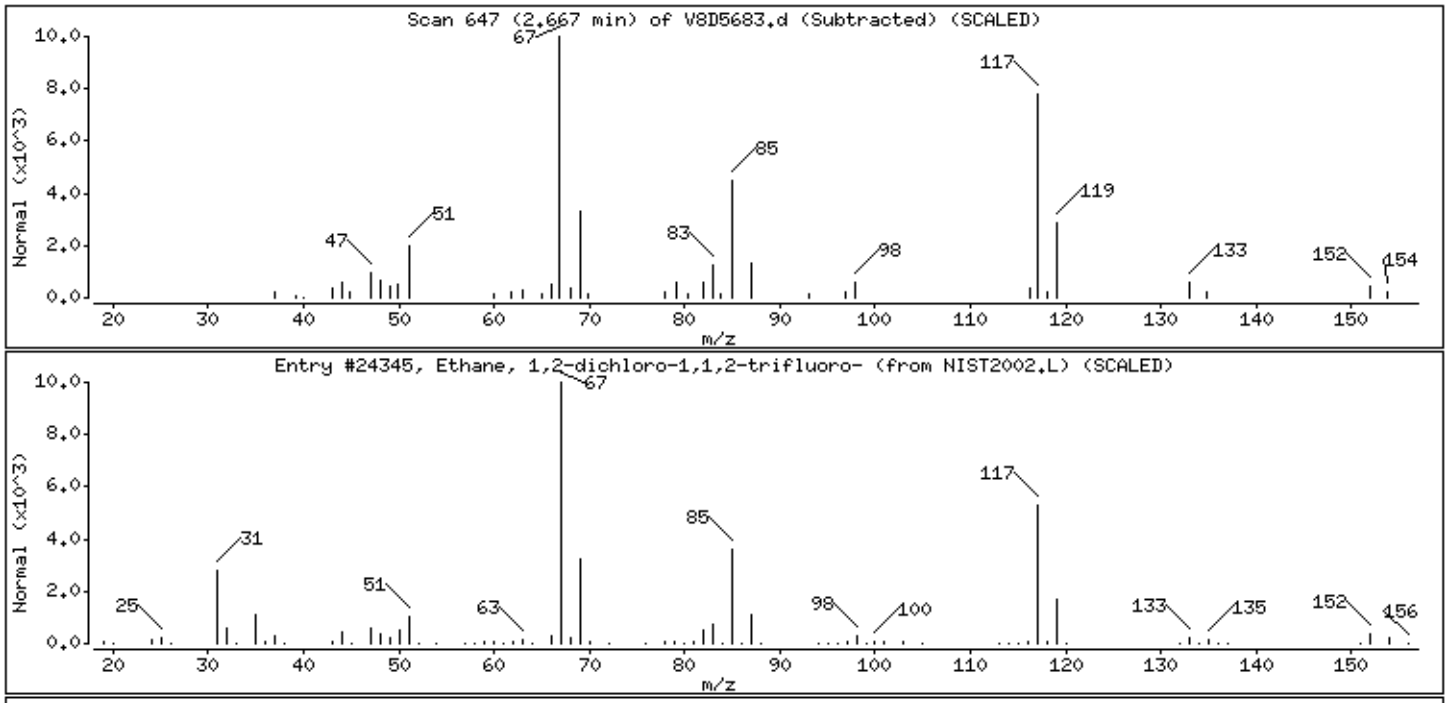
Client ID: MW-20S_6/17/14 Instrument: V10.i

Sample Info: 5ML,N1082-03A,,77722

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	90	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-20R_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5684.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

EPA SAMPLE NO.

MW-20R_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5684.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-20R_6/17/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5684.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5684.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5684.d
Lab Smp Id: N1082-04A Client Smp ID: MW-20R_6/17/14
Inj Date : 24-JUN-2014 04:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-04A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 98
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	4.647	4.647	(0.887)	60361	57.3357	57
$ 42 1,2-Dichloroethane-d4	102	4.943	4.946	(0.944)	8244	52.6440	53
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	120224	50.0000	
$ 58 Toluene-d8	98	6.721	6.715	(0.817)	173810	46.9010	47
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	187073	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.525	(1.159)	121295	48.0169	48
* 92 1,4-Dichlorobenzene-d4	152	10.724	10.721	(1.000)	99360	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5684.d
Report Date: 02-Jul-2014 14:16

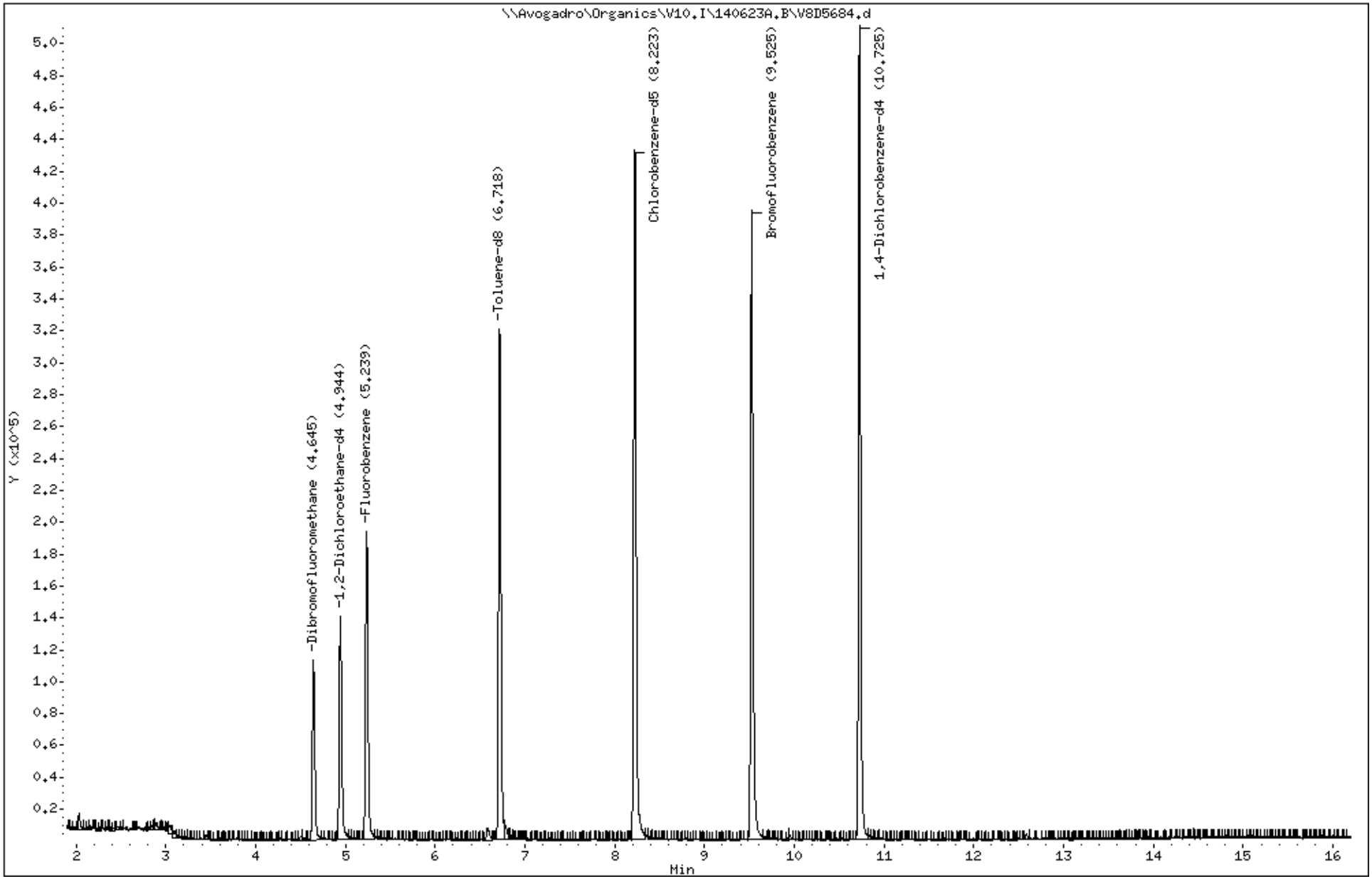
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5684.d
Lab Smp Id: N1082-04A Client Smp ID: MW-20R_6/17/14
Inj Date : 24-JUN-2014 04:24
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-04A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 98
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5684.d
Date : 24-JUN-2014 04:24
Client ID: MW-20R_6/17/14
Instrument: V10.i
Sample Info: 5ML,N1082-04A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-29D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5685.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	1.6	
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

EPA SAMPLE NO.

MW-29D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5685.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-29D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5685.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5685.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5685.d
Lab Smp Id: N1082-05A Client Smp ID: MW-29D_6/18/14
Inj Date : 24-JUN-2014 04:51
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-05A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 99
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	4.255	4.252	(0.812)	1982	1.64910	1.6(Q)
$	36 Dibromofluoromethane	113	4.644	4.647	(0.886)	56717	55.7390	56
$	42 1,2-Dichloroethane-d4	102	4.949	4.946	(0.945)	8361	55.2391	55
M	50 1,2-Dichloroethene (Total)	96				1982	1.64910	1.6
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	116202	50.0000	
$	58 Toluene-d8	98	6.718	6.715	(0.817)	168891	47.0889	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	181053	50.0000	
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	114793	46.9539	47
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.721	(1.000)	93364	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5685.d
Report Date: 02-Jul-2014 14:16

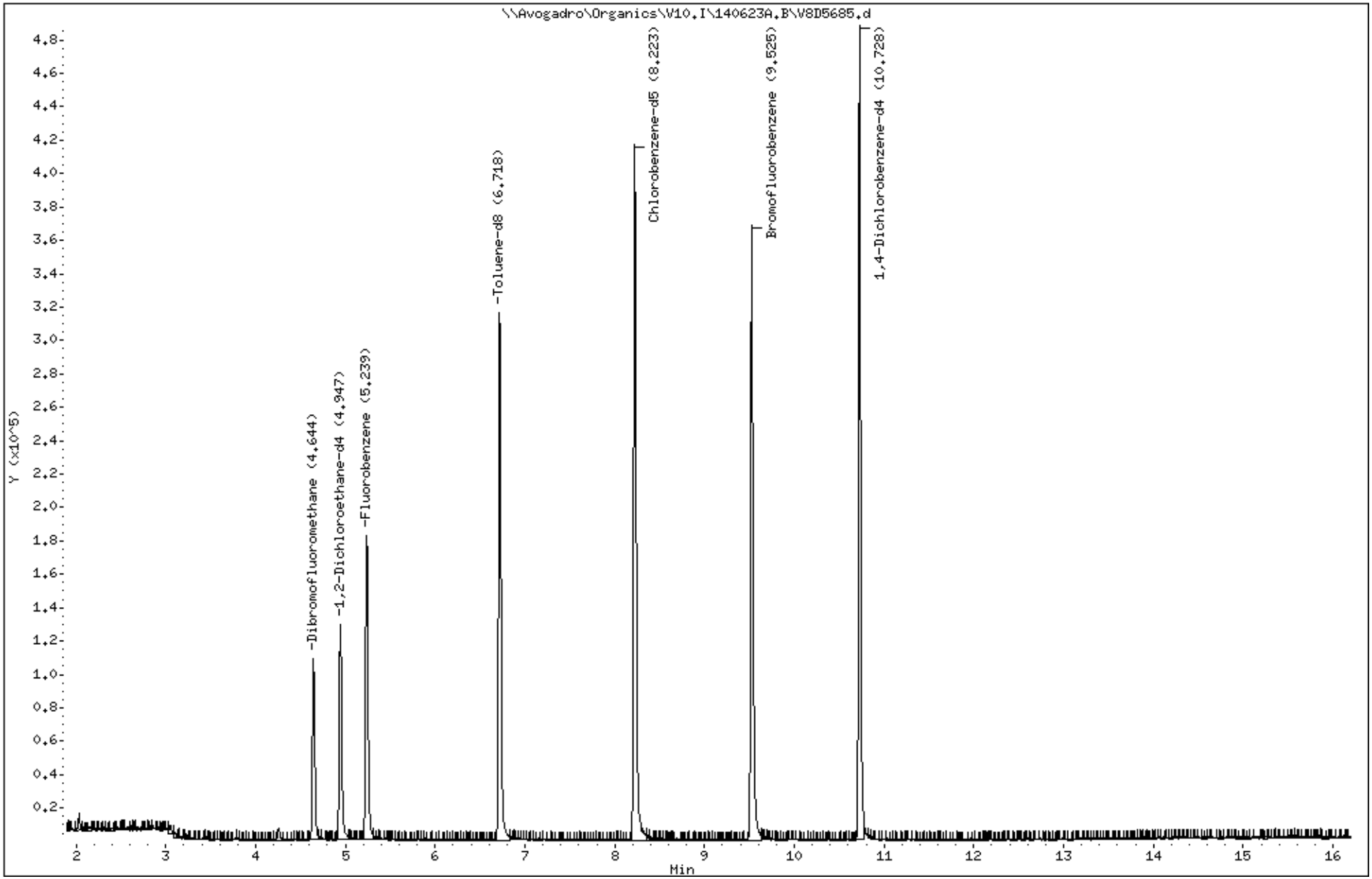
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5685.d
Lab Smp Id: N1082-05A Client Smp ID: MW-29D_6/18/14
Inj Date : 24-JUN-2014 04:51
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-05A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 99
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5685.d
Date : 24-JUN-2014 04:51
Client ID: MW-29D_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-05A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5685.d

Date : 24-JUN-2014 04:51

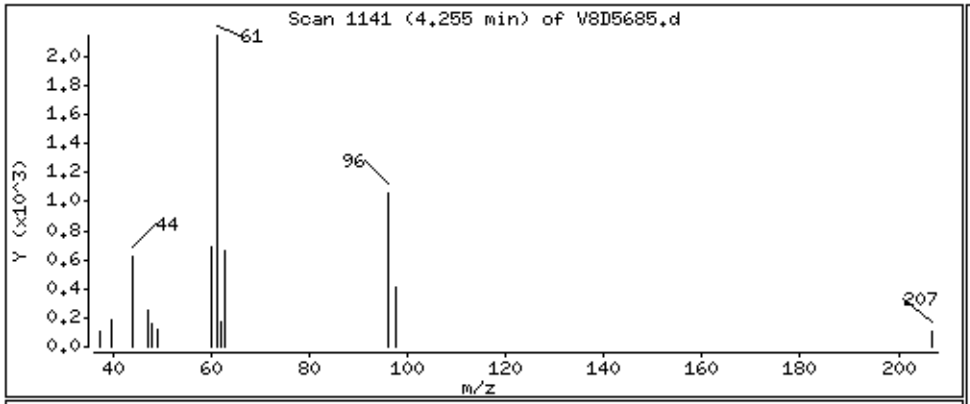
Client ID: MW-29D_6/18/14 Instrument: V10.i

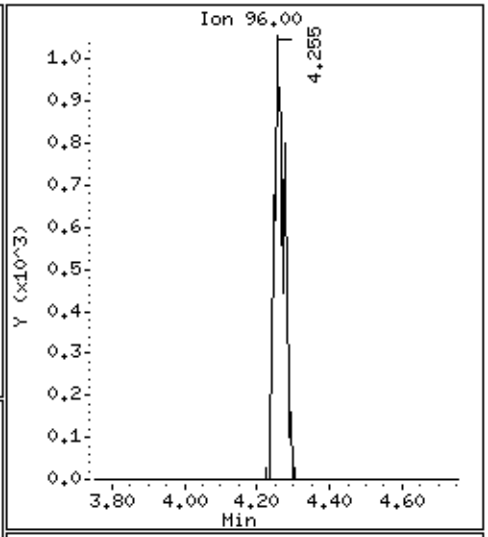
Sample Info: 5ML,N1082-05A,,77722

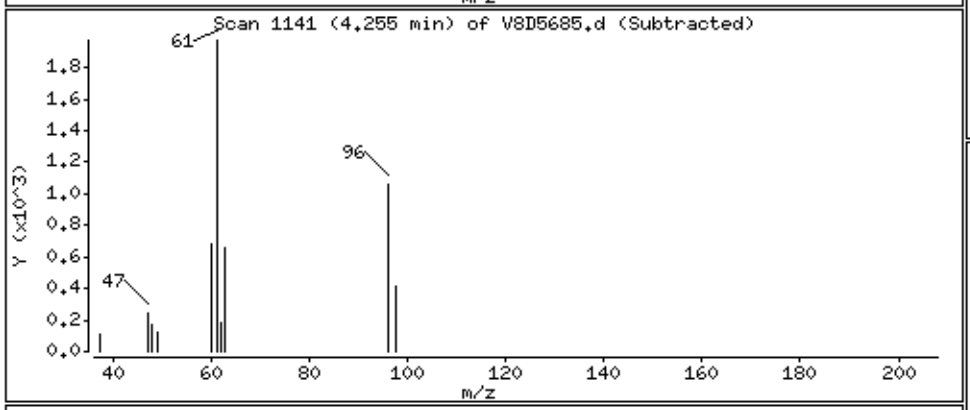
Purge Volume: 5.0 Operator: WL SRC: LIMS

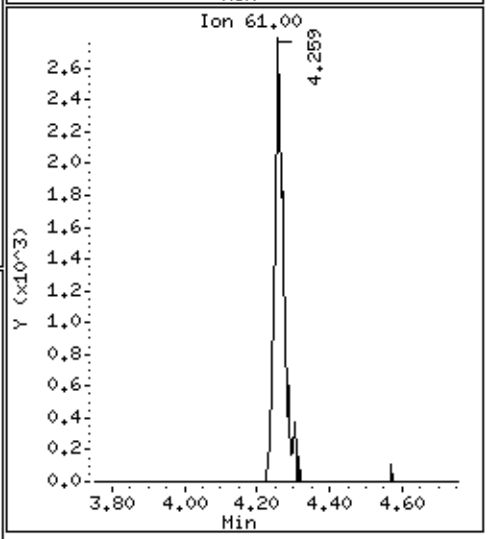
Column phase: DB-624 Column diameter: 0.25

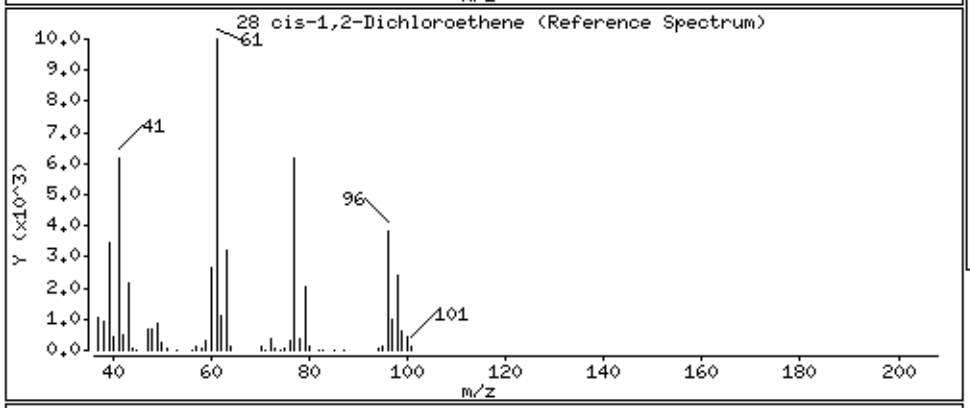
28 cis-1,2-Dichloroethene Concentration: 1.6 ug/L

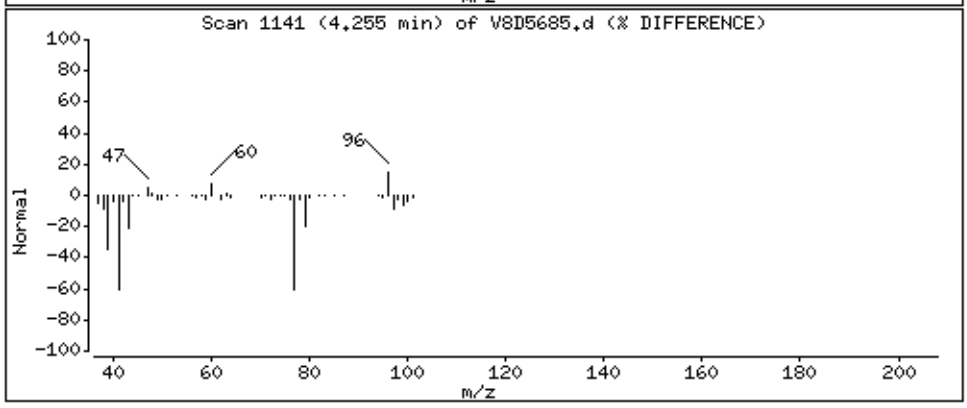












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-30D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5686.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

EPA SAMPLE NO.

MW-30D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5686.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-30D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5686.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5686.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5686.d
Lab Smp Id: N1082-06A Client Smp ID: MW-30D_6/18/14
Inj Date : 24-JUN-2014 05:18
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-06A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
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	4.644	4.647	(0.886)	59560	58.6092	59(R)
$ 42 1,2-Dichloroethane-d4	102	4.943	4.946	(0.944)	8703	57.5735	58
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	116051	50.0000	
$ 58 Toluene-d8	98	6.721	6.715	(0.817)	173313	47.3385	47
* 68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	184814	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	123650	49.5474	50
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.721	(1.000)	98994	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5686.d
Report Date: 02-Jul-2014 14:16

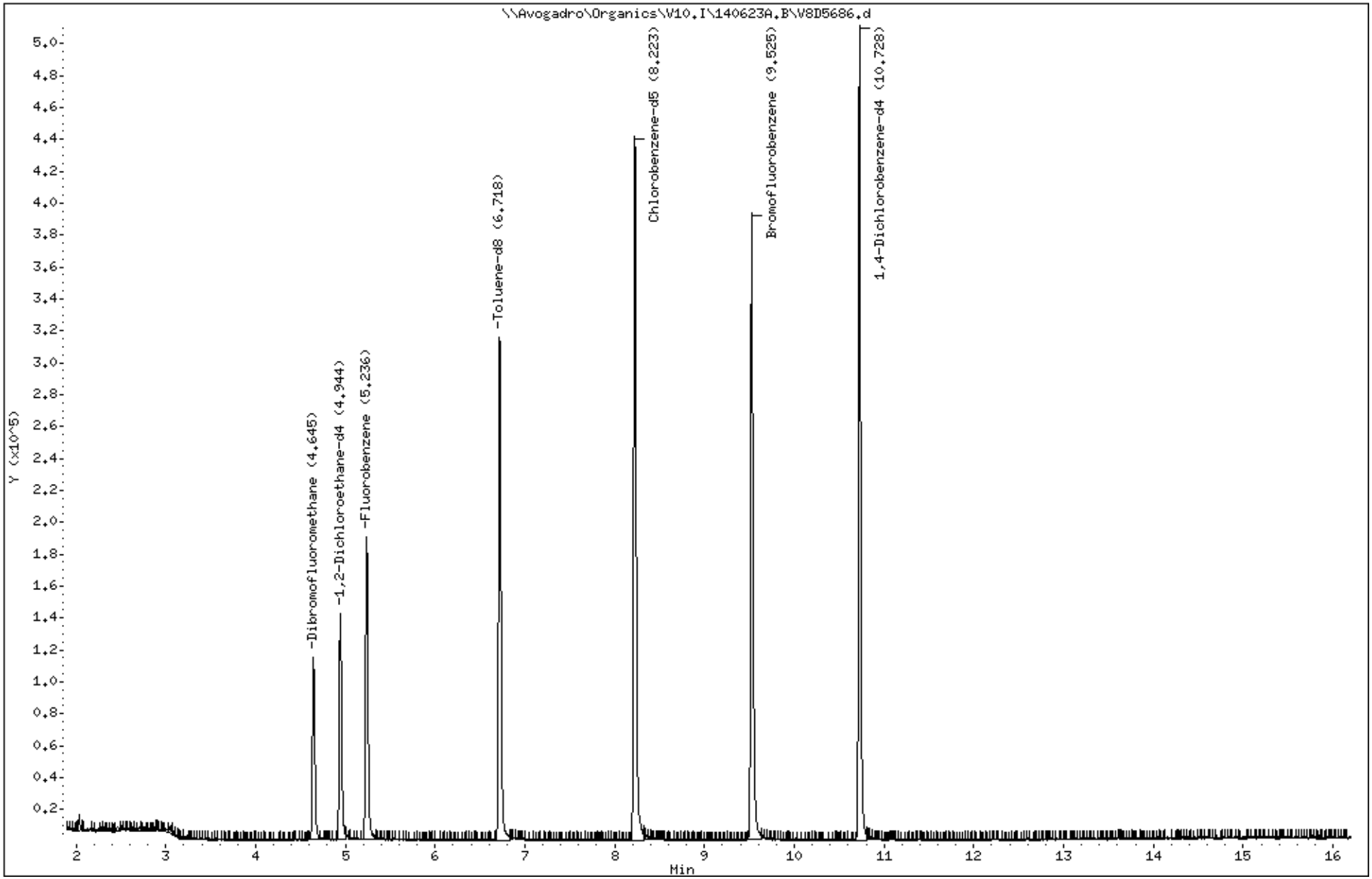
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5686.d
Lab Smp Id: N1082-06A Client Smp ID: MW-30D_6/18/14
Inj Date : 24-JUN-2014 05:18
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-06A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5686.d
Date : 24-JUN-2014 05:18
Client ID: MW-30D_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-06A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-30S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5687.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	1.3	
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

EPA SAMPLE NO.

MW-30S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5687.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-30S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5687.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5687.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5687.d
Lab Smp Id: N1082-07A Client Smp ID: MW-30S_6/18/14
Inj Date : 24-JUN-2014 05:45
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-07A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
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	4.644	4.647	(0.887)	57783	58.1355	58(R)
$ 42 1,2-Dichloroethane-d4	102	4.943	4.946	(0.944)	8391	56.7541	57
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	113506	50.0000	
47 Trichloroethene	130	5.570	5.567	(1.064)	1655	1.34596	1.3
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	169209	47.0075	47
* 68 Chlorobenzene-d5	117	8.219	8.223	(1.000)	181708	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.159)	118318	48.2213	48
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.721	(1.000)	93912	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5687.d
Report Date: 02-Jul-2014 14:16

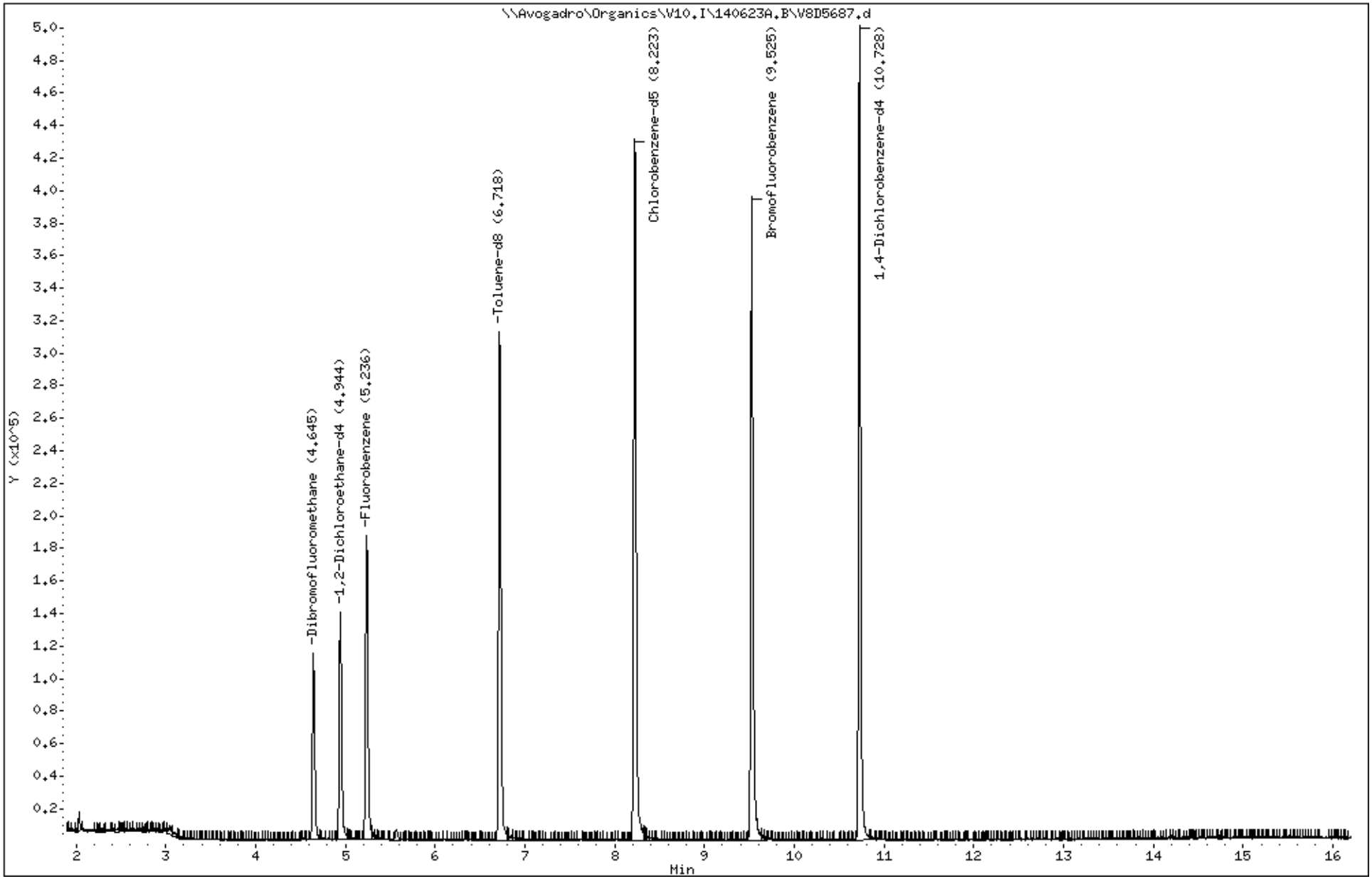
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5687.d
Lab Smp Id: N1082-07A Client Smp ID: MW-30S_6/18/14
Inj Date : 24-JUN-2014 05:45
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-07A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5687.d
Date : 24-JUN-2014 05:45
Client ID: MW-30S_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-07A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5687.d

Date : 24-JUN-2014 05:45

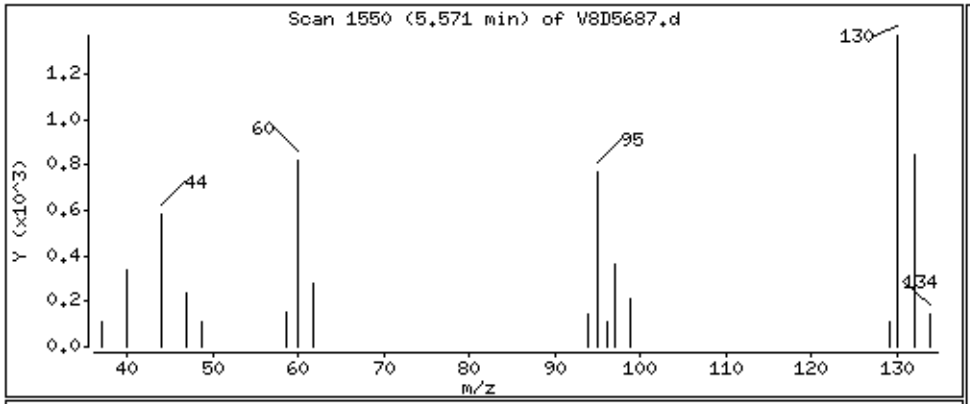
Client ID: MW-30S_6/18/14 Instrument: V10.i

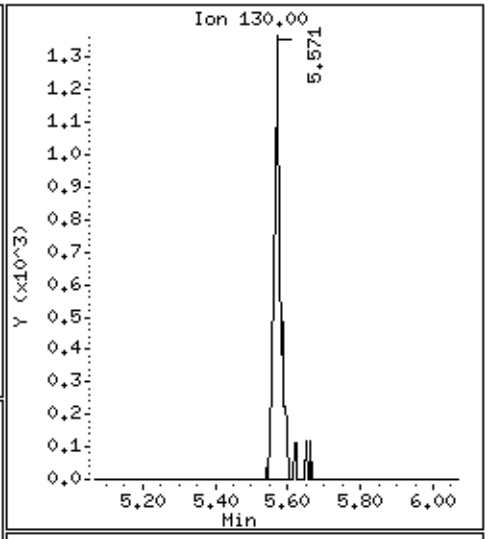
Sample Info: 5ML,N1082-07A,,77722

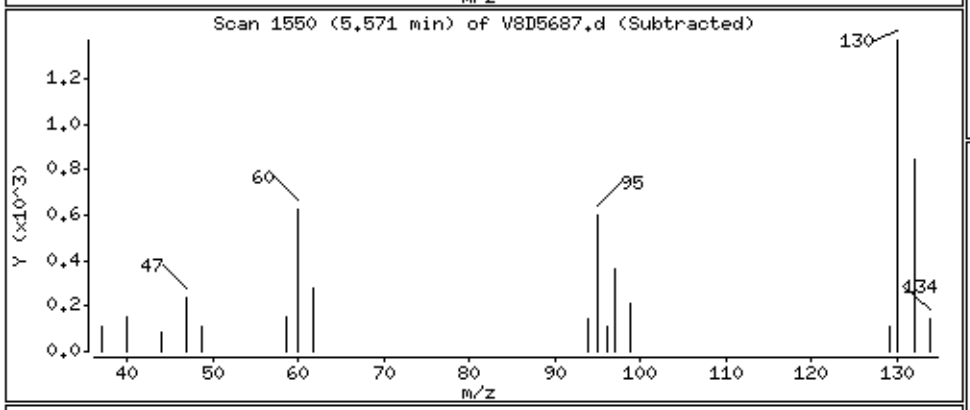
Purge Volume: 5.0 Operator: WL SRC: LIMS

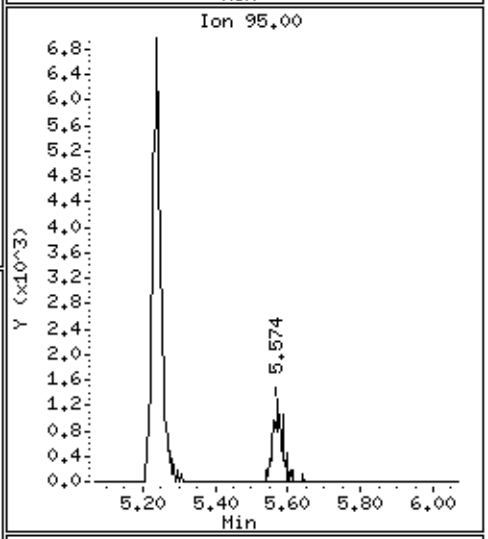
Column phase: DB-624 Column diameter: 0.25

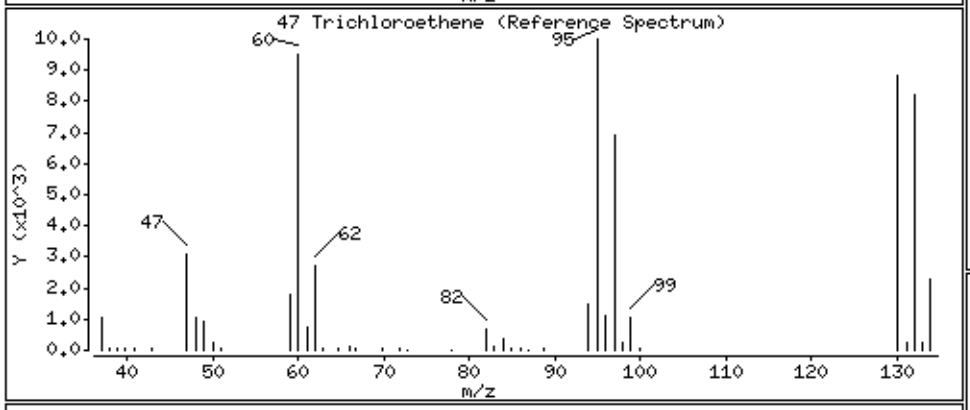
47 Trichloroethene Concentration: 1.3 ug/L

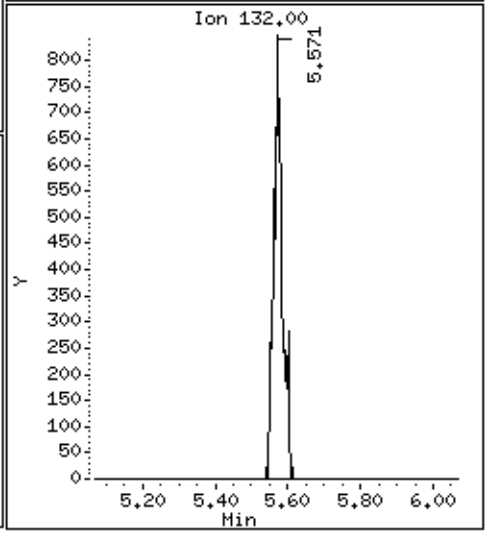


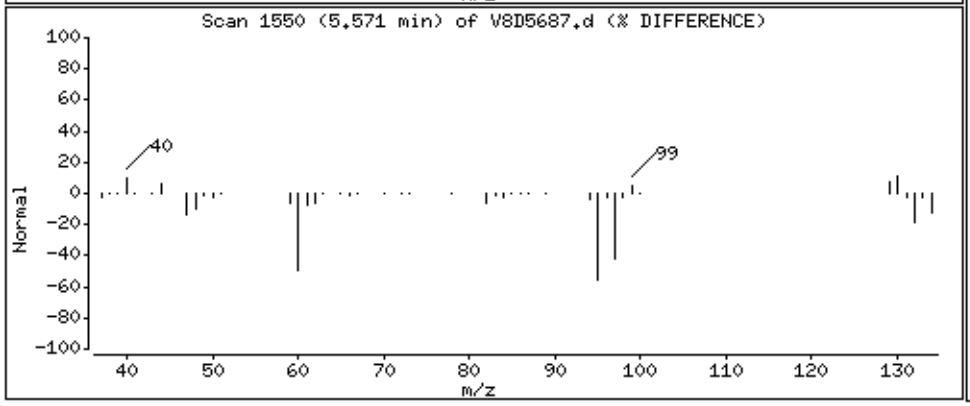












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-31D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5688.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

EPA SAMPLE NO.

MW-31D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5688.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-31D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5688.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5688.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5688.d
Lab Smp Id: N1082-08A Client Smp ID: MW-31D_6/18/14
Inj Date : 24-JUN-2014 06:12
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-08A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
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	4.644	4.647	(0.886)	55293	56.3526	56
$ 42 1,2-Dichloroethane-d4	102	4.946	4.946	(0.944)	7562	51.8112	52
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	112051	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	165688	48.1537	48
* 68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	173692	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	110498	47.1126	47
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.721	(1.000)	87437	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5688.d
Report Date: 02-Jul-2014 14:16

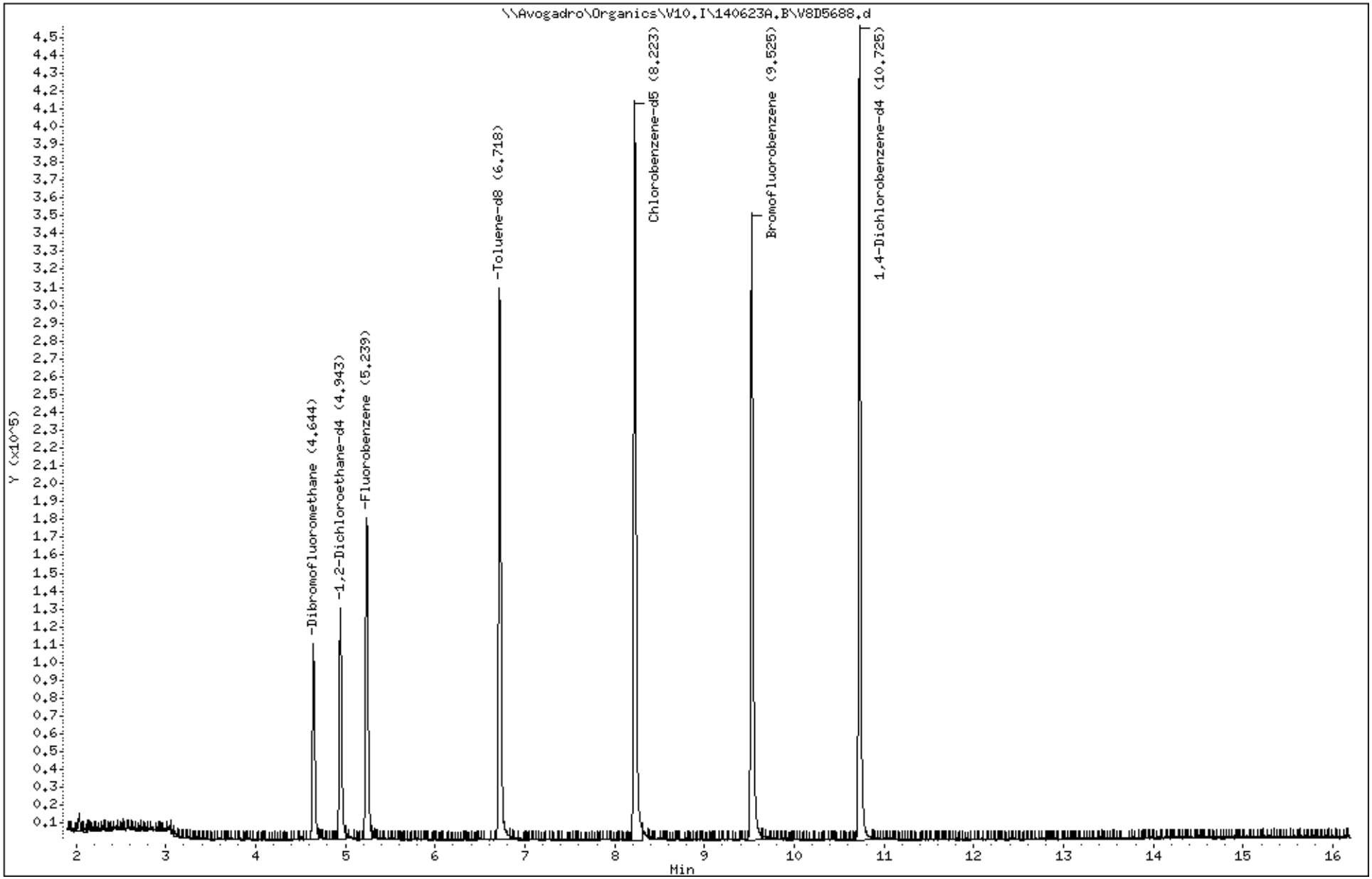
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5688.d
Lab Smp Id: N1082-08A Client Smp ID: MW-31D_6/18/14
Inj Date : 24-JUN-2014 06:12
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-08A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5688.d
Date : 24-JUN-2014 06:12
Client ID: MW-31D_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-08A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-31S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5689.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

EPA SAMPLE NO.

MW-31S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5689.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-31S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5689.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5689.d
Report Date: 02-Jul-2014 14:16

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5689.d
Lab Smp Id: N1082-09A Client Smp ID: MW-31S_6/18/14
Inj Date : 24-JUN-2014 06:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-09A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
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	4.644	4.647	(0.886)	54408	54.5668	54
$ 42 1,2-Dichloroethane-d4	102	4.946	4.946	(0.944)	7660	51.6460	52
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	113866	50.0000	
$ 58 Toluene-d8	98	6.718	6.715	(0.817)	162057	46.4399	46
* 68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	176155	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.525	(1.158)	112849	47.4422	47
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.721	(1.000)	88417	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5689.d
Report Date: 02-Jul-2014 14:16

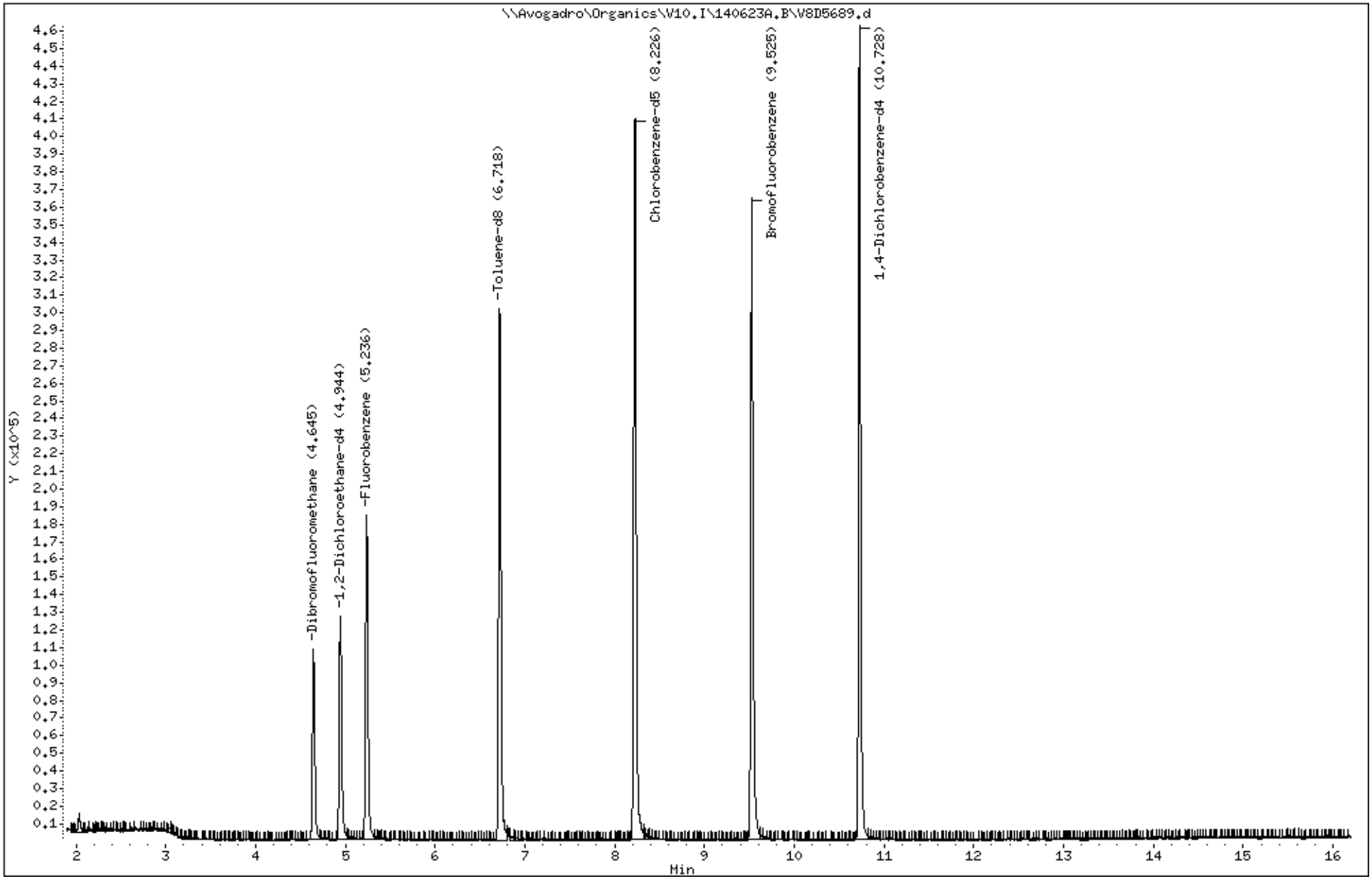
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5689.d
Lab Smp Id: N1082-09A Client Smp ID: MW-31S_6/18/14
Inj Date : 24-JUN-2014 06:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-09A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5689.d
Date : 24-JUN-2014 06:39
Client ID: MW-31S_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-09A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-32D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5690.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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	1.9	
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

EPA SAMPLE NO.

MW-32D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5690.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-32D_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-10A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5690.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5690.d
Report Date: 02-Jul-2014 14:17

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5690.d
Lab Smp Id: N1082-10A Client Smp ID: MW-32D_6/18/14
Inj Date : 24-JUN-2014 07:06
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-10A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
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)
	35 Chloroform	83	4.515	4.509	(0.862)	5662	1.90437	1.9
$	36 Dibromofluoromethane	113	4.644	4.647	(0.887)	59238	61.0318	61(R)
$	42 1,2-Dichloroethane-d4	102	4.949	4.946	(0.945)	8250	57.1415	57
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	110842	50.0000	
$	58 Toluene-d8	98	6.718	6.715	(0.817)	167433	47.7495	48
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	177007	50.0000	
$	79 Bromofluorobenzene	95	9.528	9.525	(1.159)	118028	49.3806	49
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.721	(1.000)	94653	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

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Report Date: 02-Jul-2014 14:17

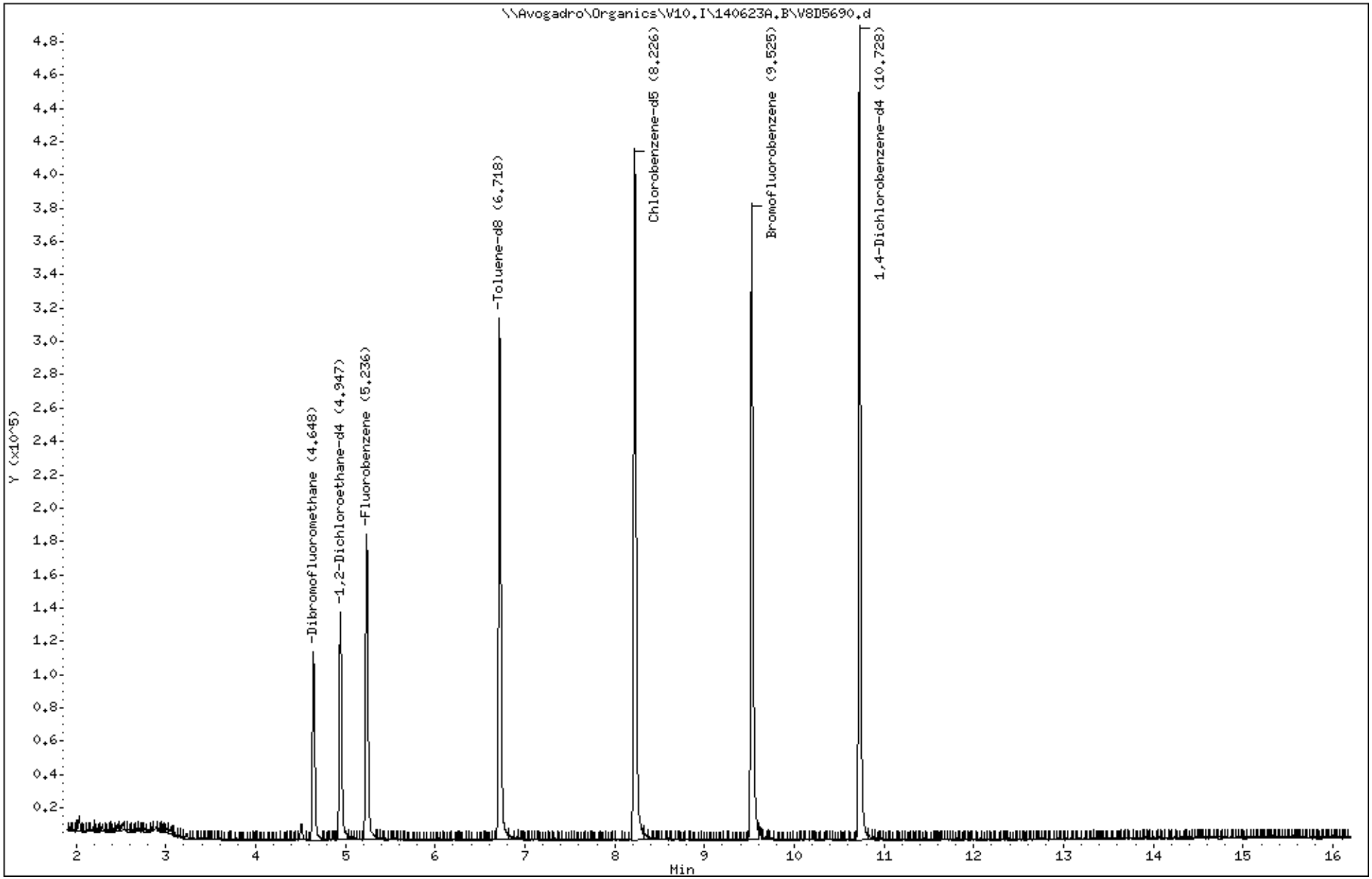
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5690.d
Lab Smp Id: N1082-10A Client Smp ID: MW-32D_6/18/14
Inj Date : 24-JUN-2014 07:06
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-10A,,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:15 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5690.d
Date : 24-JUN-2014 07:06
Client ID: MW-32D_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-10A,,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5690.d

Date : 24-JUN-2014 07:06

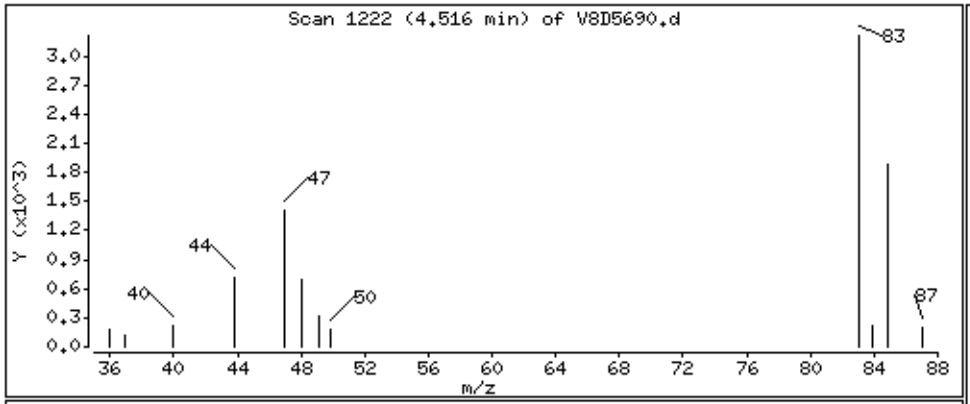
Client ID: MW-32D_6/18/14 Instrument: V10.i

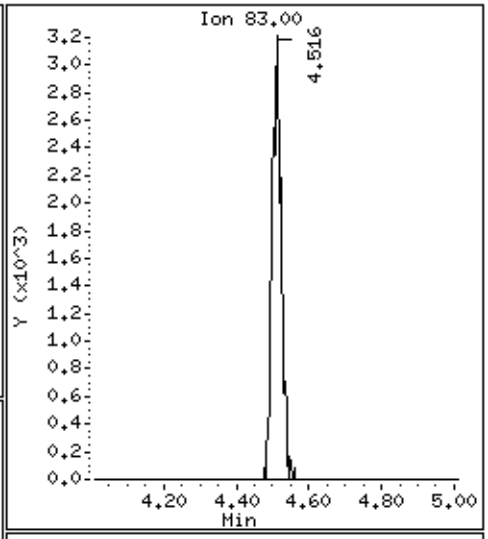
Sample Info: 5ML,N1082-10A,,77722

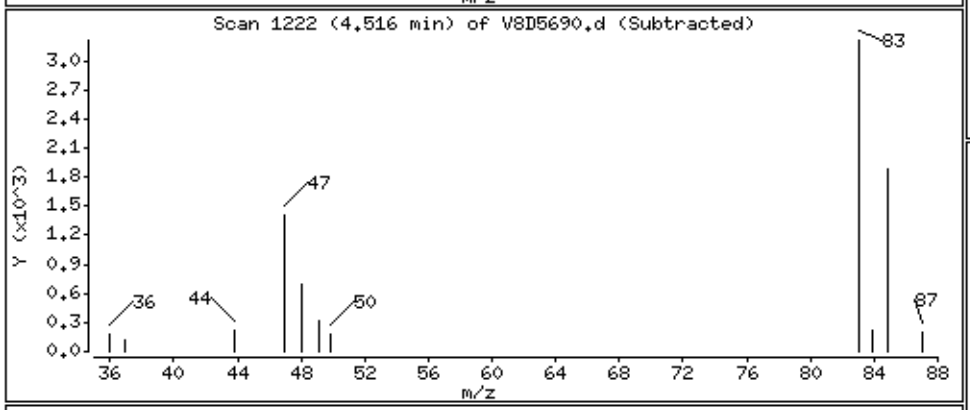
Purge Volume: 5.0 Operator: WL SRC: LIMS

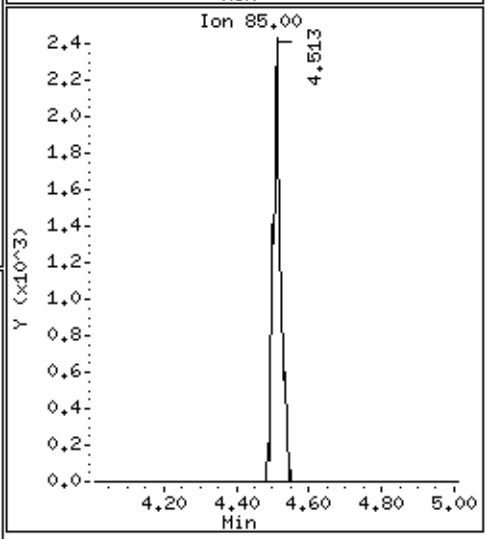
Column phase: DB-624 Column diameter: 0.25

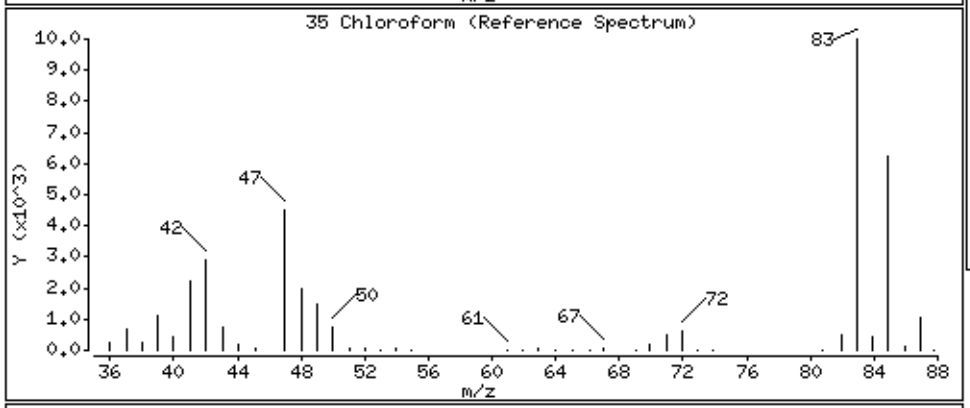
35 Chloroform Concentration: 1.9 ug/L

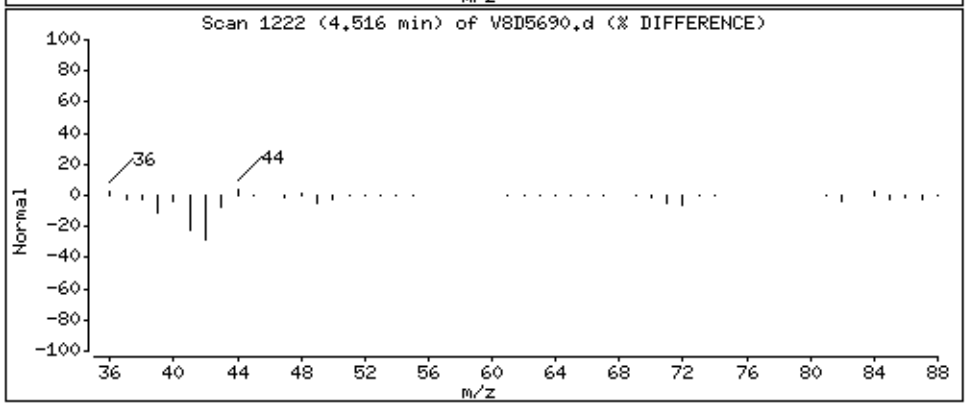












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-32S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5708.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

EPA SAMPLE NO.

MW-32S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5708.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-32S_6/18/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-11A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5708.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5708.d
Report Date: 26-Jun-2014 08:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5708.d
Lab Smp Id: N1082-11A Client Smp ID: MW-32S_6/18/14
Inj Date : 24-JUN-2014 12:38
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-11A,,77738
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140624.B\v108260Gadd-6lvl.m
Meth Date : 24-Jun-2014 09:18 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 64
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	4.647	4.644	(0.888)	55954	57.3487	57
$ 42 1,2-Dichloroethane-d4	102	4.937	4.946	(0.943)	8142	56.1005	56
* 46 Fluorobenzene	96	5.236	5.236	(1.000)	111421	50.0000	
$ 58 Toluene-d8	98	6.715	6.718	(0.817)	163719	46.0152	46
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	179604	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	119622	49.3239	49
* 92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	96178	50.0000	

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5708.d
Report Date: 26-Jun-2014 08:39

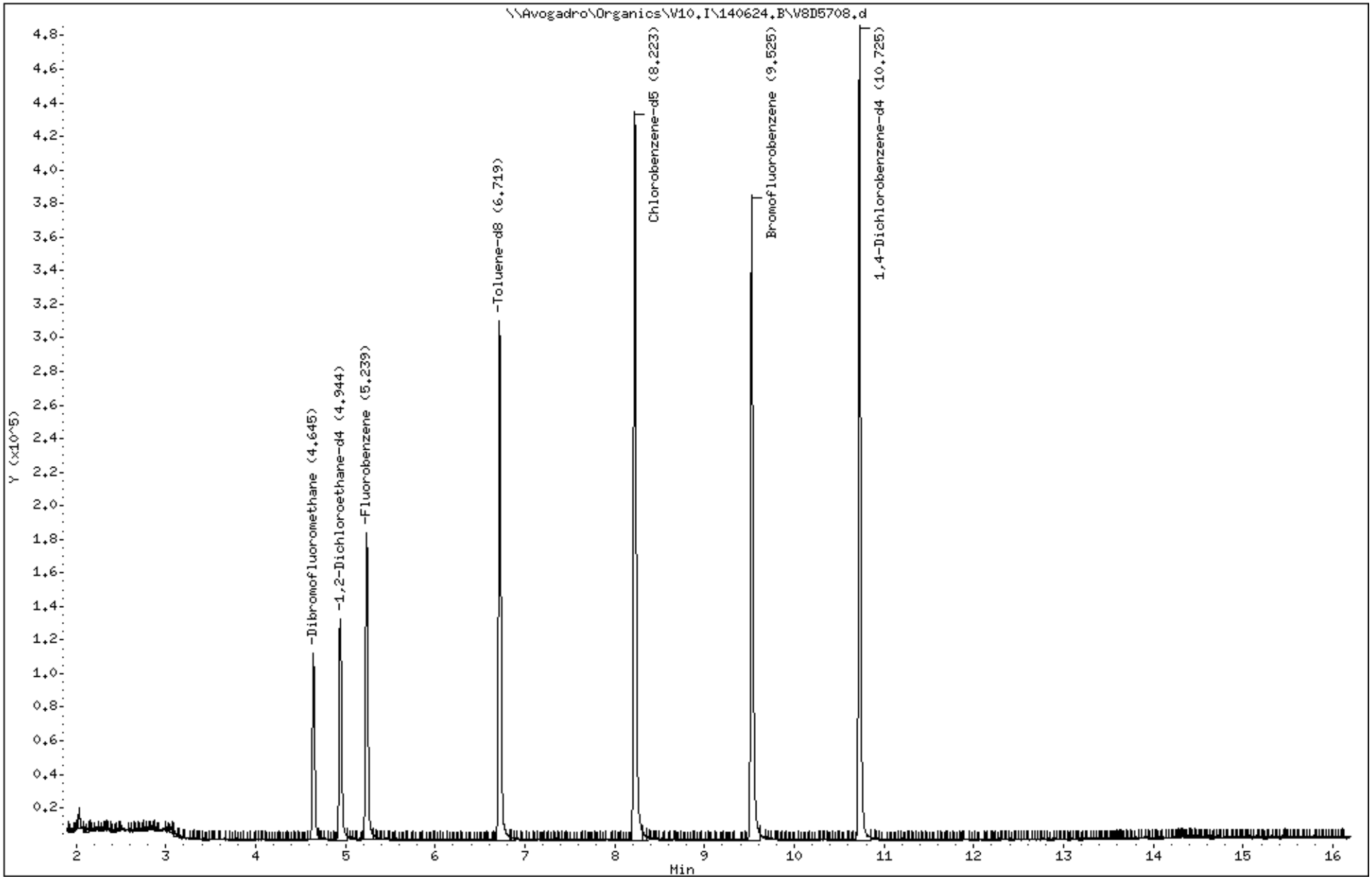
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5708.d
Lab Smp Id: N1082-11A Client Smp ID: MW-32S_6/18/14
Inj Date : 24-JUN-2014 12:38
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-11A,,77738
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140624.B\v108260Gadd-6lvl.m
Meth Date : 24-Jun-2014 09:18 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 64
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5708.d
Date : 24-JUN-2014 12:38
Client ID: MW-32S_6/18/14
Instrument: V10.i
Sample Info: 5ML,N1082-11A,,77738
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5750.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	3.7	
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	12	
156-60-5	trans-1,2-Dichloroethene	3.0	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	570	E
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	22	
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	0.64	J
71-55-6	1,1,1-Trichloroethane	6800	E
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	6900	E
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

EPA SAMPLE NO.

MW-22R_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5750.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	2.9	
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	40	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	16000	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-12A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5750.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.670	210	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d
Report Date: 02-Jul-2014 14:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5750.d
Lab Smp Id: N1082-12A Client Smp ID: MW-22R_6/19/14
Inj Date : 25-JUN-2014 16:53
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-12A,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:13 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 76
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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	4 Vinyl Chloride	62	1.856	1.856	(0.354)	7216	3.73928	3.7(Q)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	25842073	15914.1	16000(AQM)
	18 Methylene Chloride	84	3.232	3.232	(0.617)	13797	11.5149	12(Q)
	21 trans-1,2-Dichloroethene	96	3.454	3.454	(0.659)	3600	3.02031	3.0(Q)
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	1829037	566.885	570(A)
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	25753	21.6145	22(QH)
	35 Chloroform	83	4.519	4.509	(0.863)	1979	0.64046	0.64
$	36 Dibromofluoromethane	113	4.647	4.647	(0.887)	57369	56.8717	57
	37 1,1,1-Trichloroethane	97	4.673	4.682	(0.892)	22314091	6839.55	6800(A)
$	42 1,2-Dichloroethane-d4	102	4.943	4.949	(0.944)	9066	60.4195	60(R)
M	50 1,2-Dichloroethene (Total)	96				29353	24.6348	25
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	115197	50.0000	
	47 Trichloroethene	130	5.564	5.563	(1.062)	8601995	6893.07	6900(A)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	183275	42.5863	42
	63 Tetrachloroethene	164	7.348	7.345	(0.894)	4488	2.92473	2.9
*	68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	217246	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	158189	39.9132	40
$	79 Bromofluorobenzene	95	9.528	9.525	(1.159)	149714	51.0355	51
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	124248	50.0000	

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d
Report Date: 02-Jul-2014 14:14

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d
Report Date: 02-Jul-2014 14:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5750.d
Lab Smp Id: N1082-12A Client Smp ID: MW-22R_6/19/14
Inj Date : 25-JUN-2014 16:53
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-12A,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:13 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 76
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

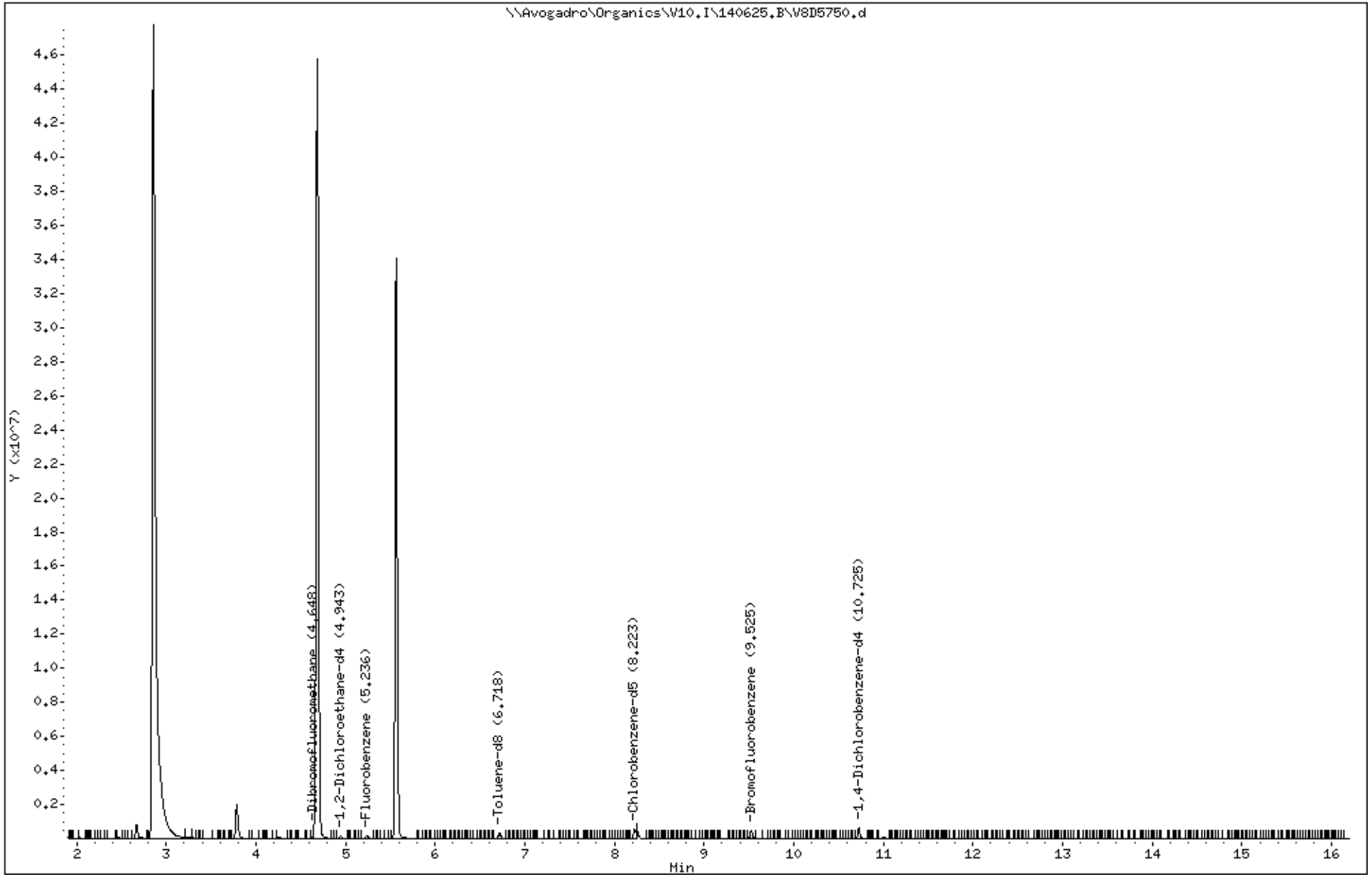
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.239	350626	50.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.670	1498147	213.638763	210	95	NIST2002.L	24345	46

Ethane, 1,2-dichloro-1,1,2-trifluoro- CAS #: 354-23-4

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d
Date : 25-JUN-2014 16:53
Client ID: MW-22R_6/19/14
Instrument: V10.i
Sample Info: 5ML,N1082-12A,,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

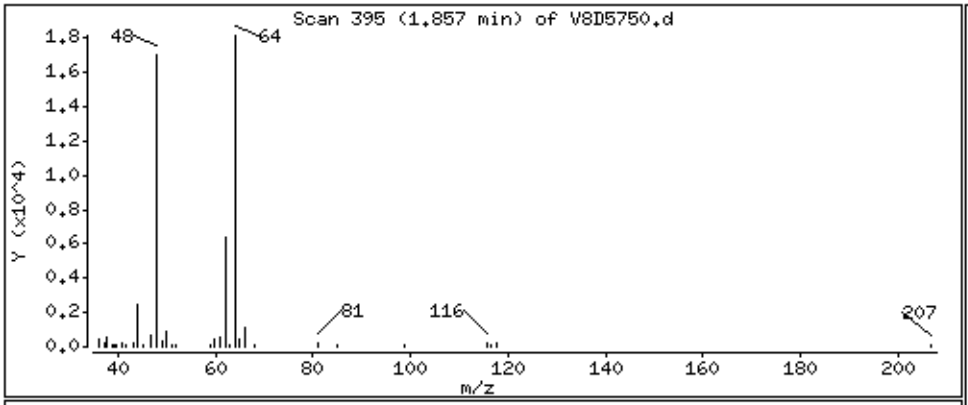
Client ID: MW-22R_6/19/14 Instrument: V10.i

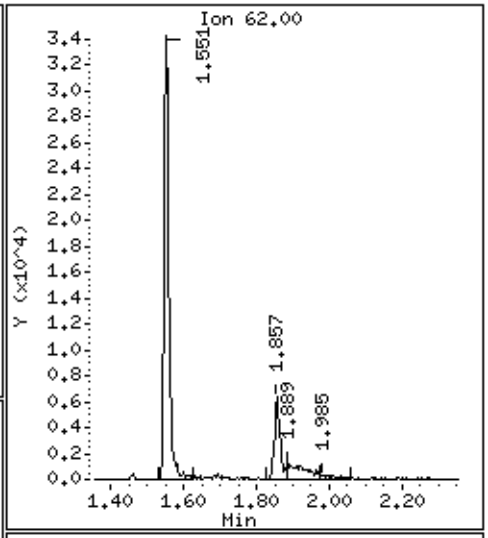
Sample Info: 5ML,N1082-12A,,77766

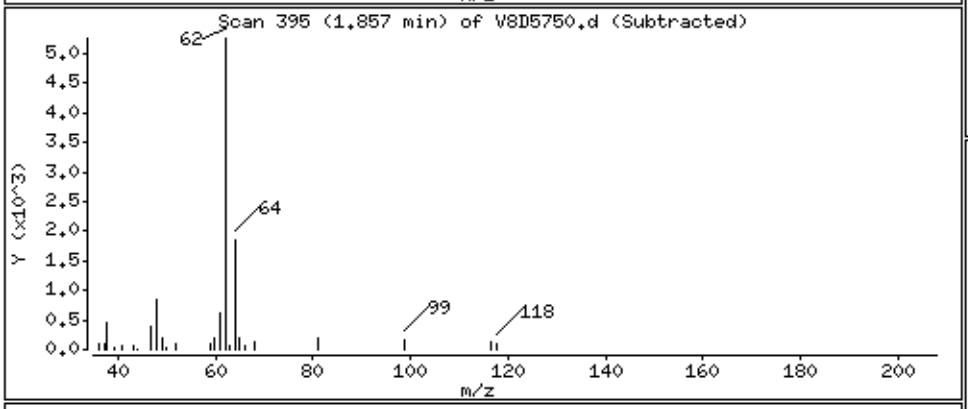
Purge Volume: 5.0 Operator: WL SRC: LIMS

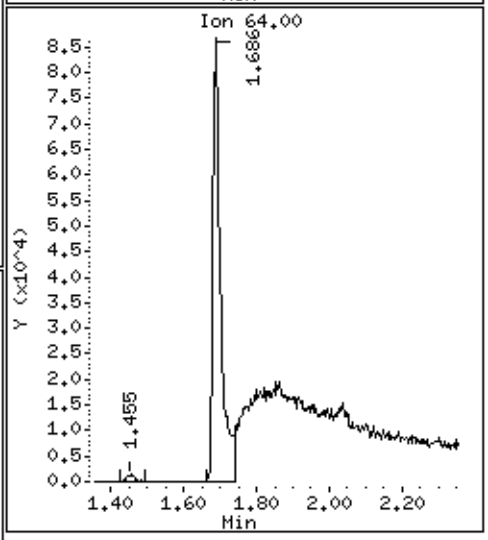
Column phase: DB-624 Column diameter: 0.25

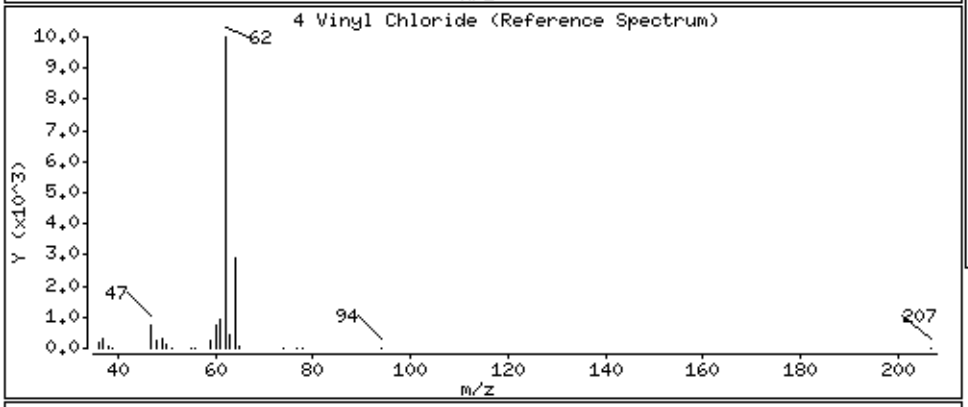
4 Vinyl Chloride Concentration: 3.7 ug/L

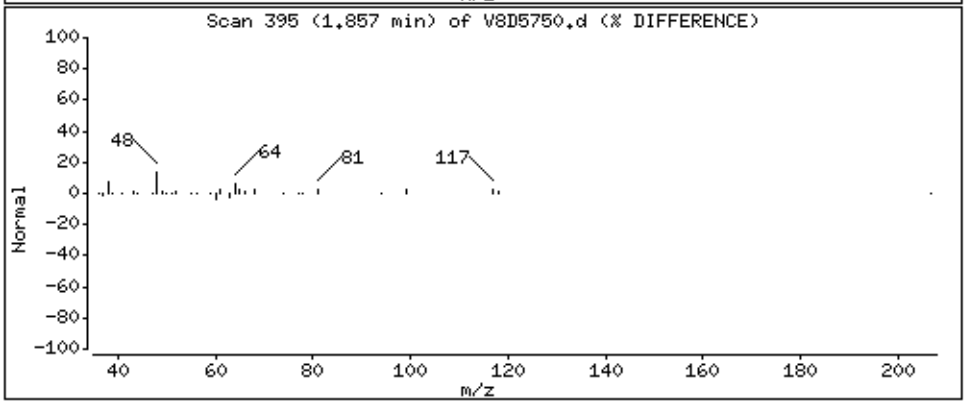












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

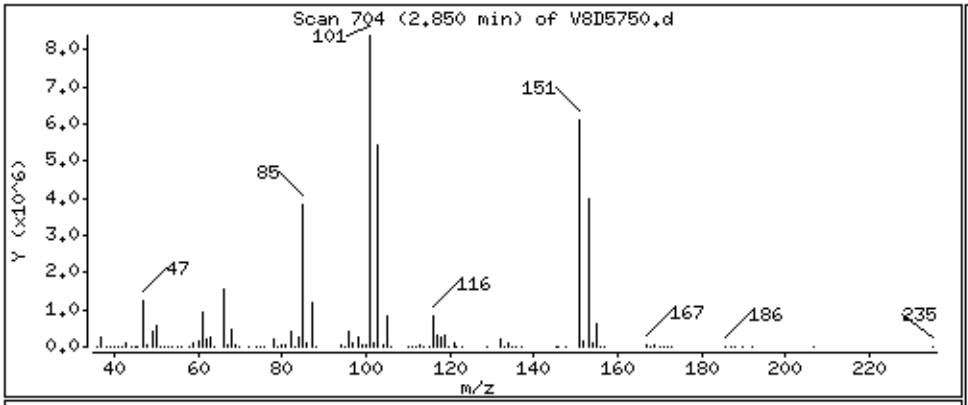
Client ID: MW-22R_6/19/14 Instrument: V10.i

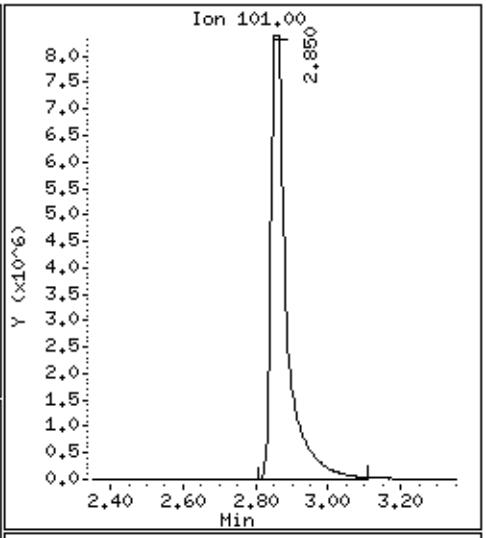
Sample Info: 5ML,N1082-12A,,77766

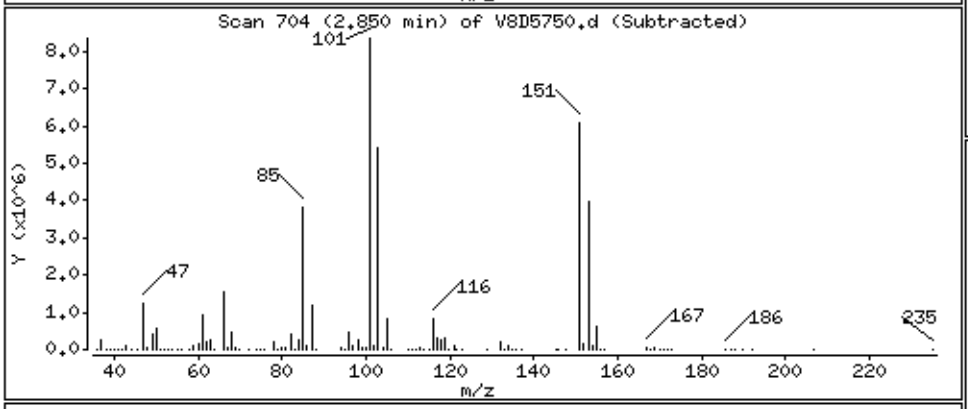
Purge Volume: 5.0 Operator: WL SRC: LIMS

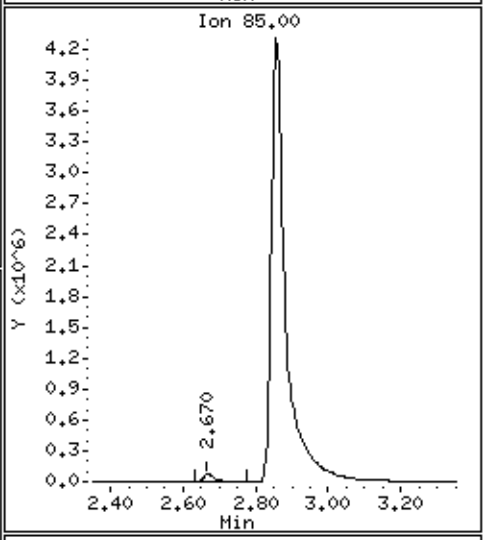
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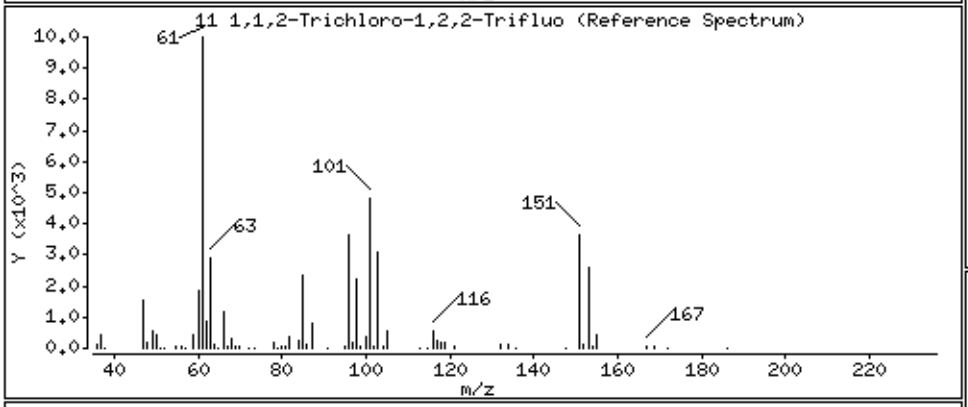
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 16000 ug/L

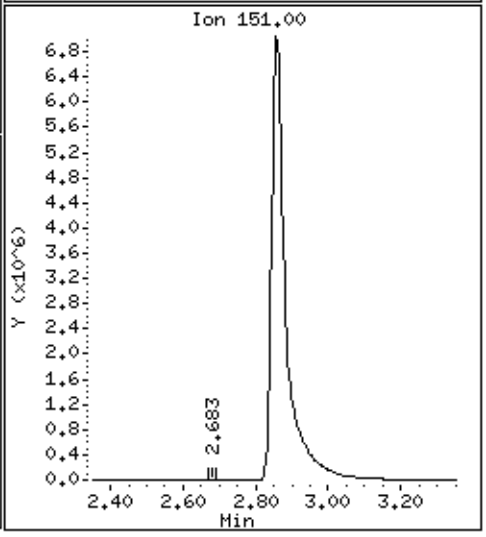


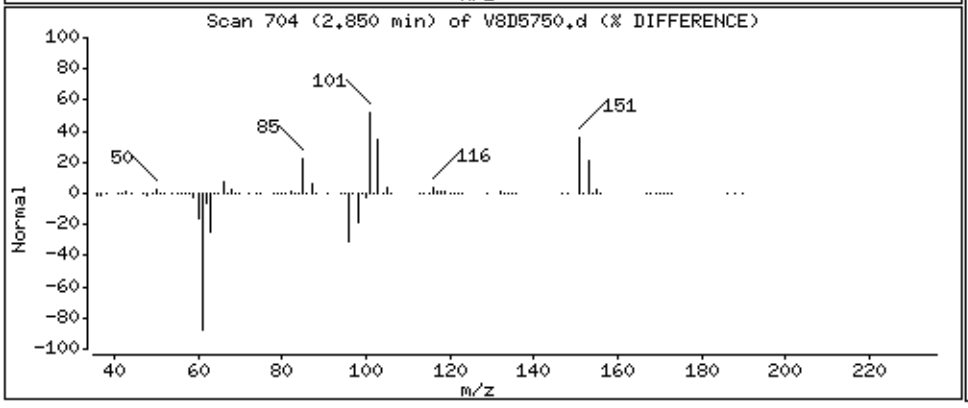












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

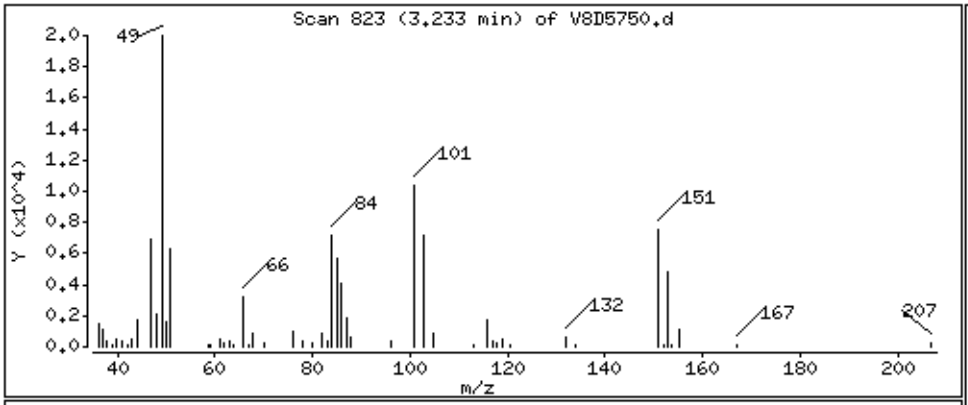
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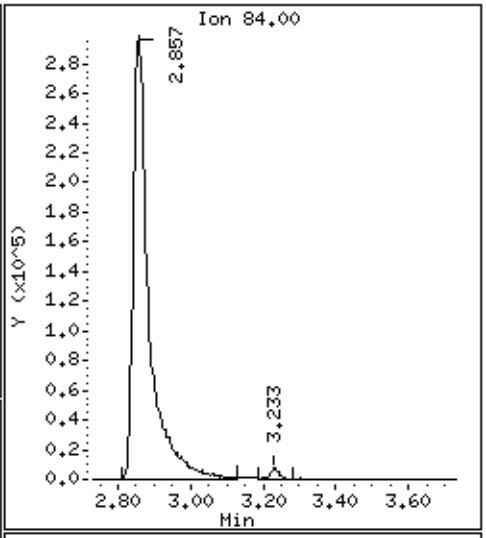
Sample Info: 5ML,N1082-12A,,77766

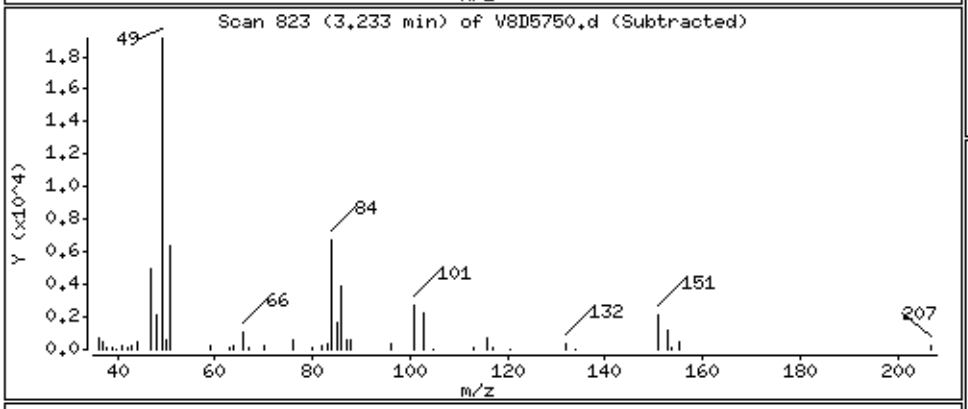
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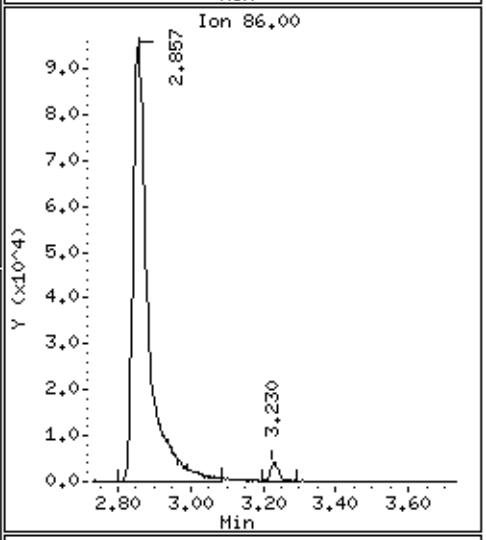
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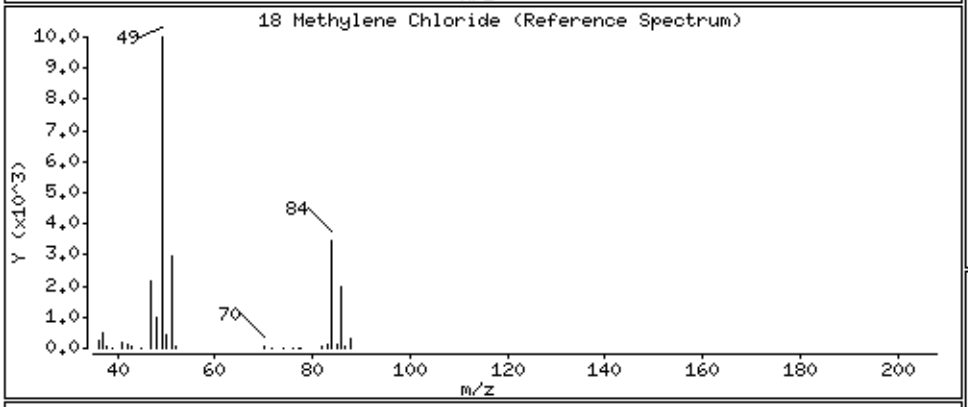
18 Methylene Chloride Concentration: 12 ug/L

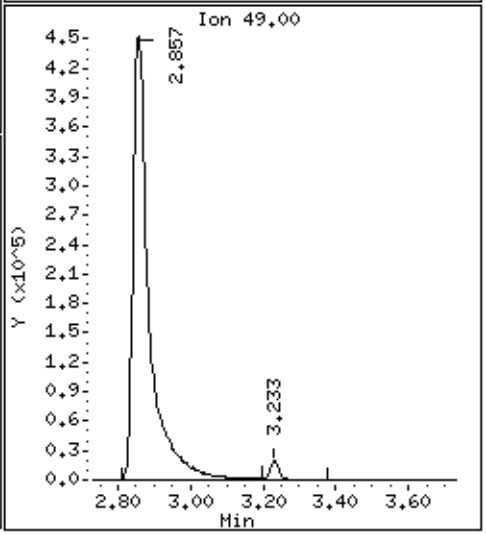


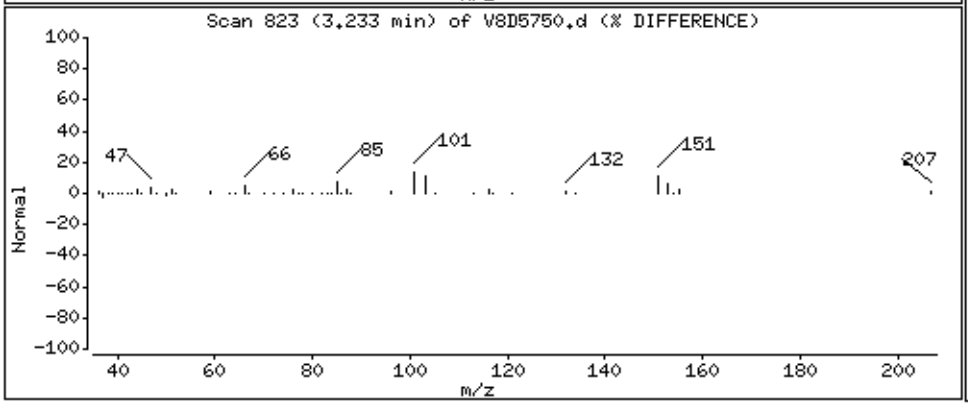












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

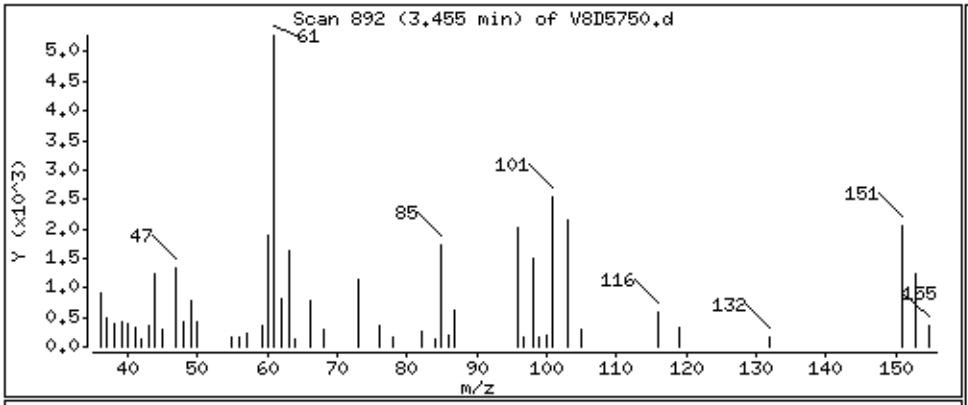
Client ID: MW-22R_6/19/14 Instrument: V10.i

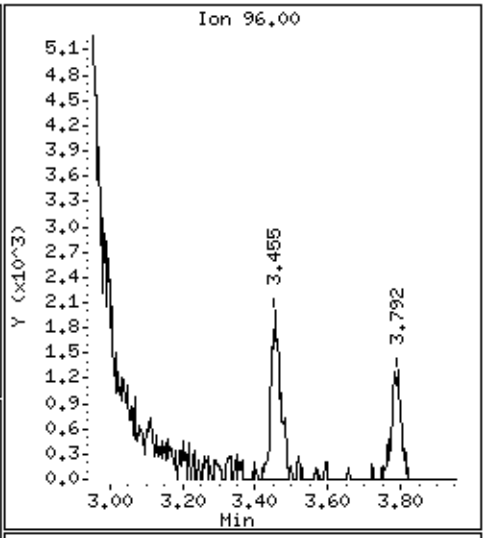
Sample Info: 5ML,N1082-12A,,77766

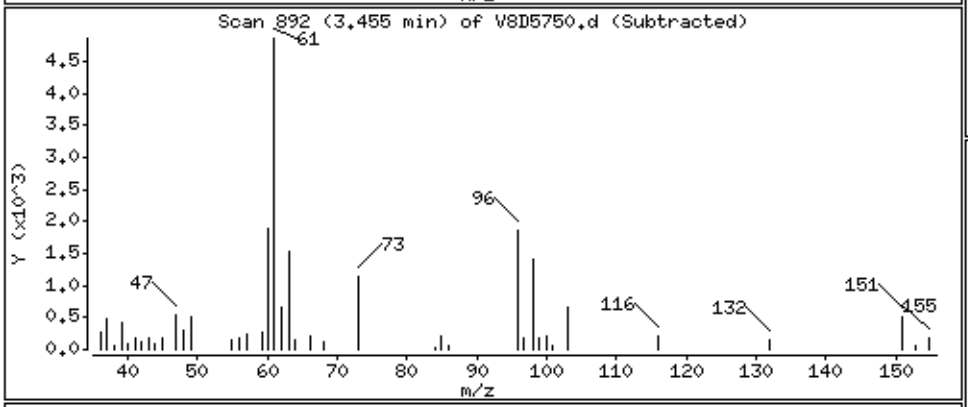
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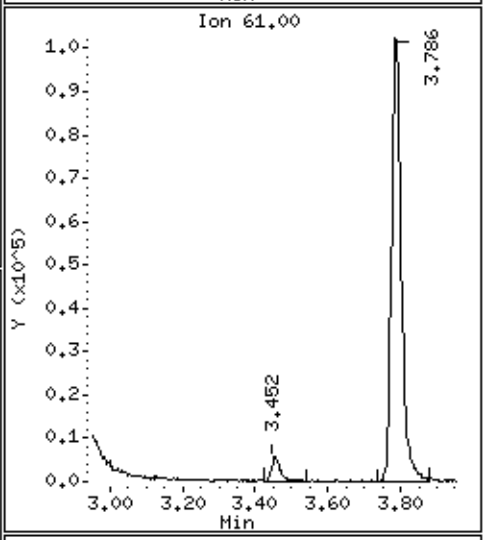
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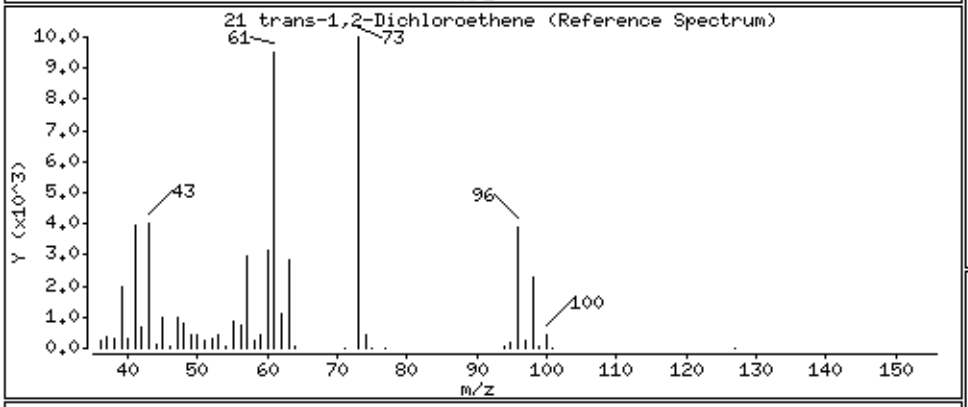
21 trans-1,2-Dichloroethene Concentration: 3.0 ug/L

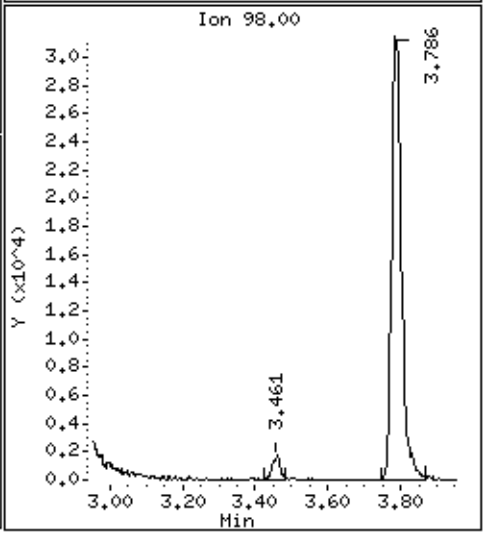


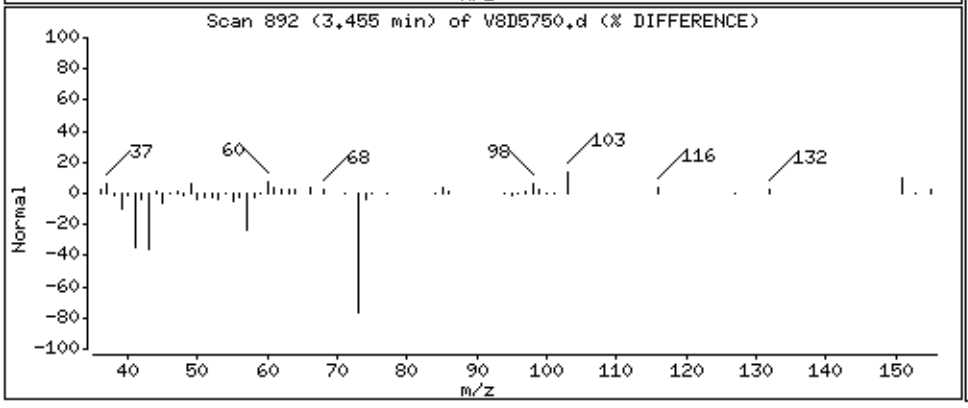












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

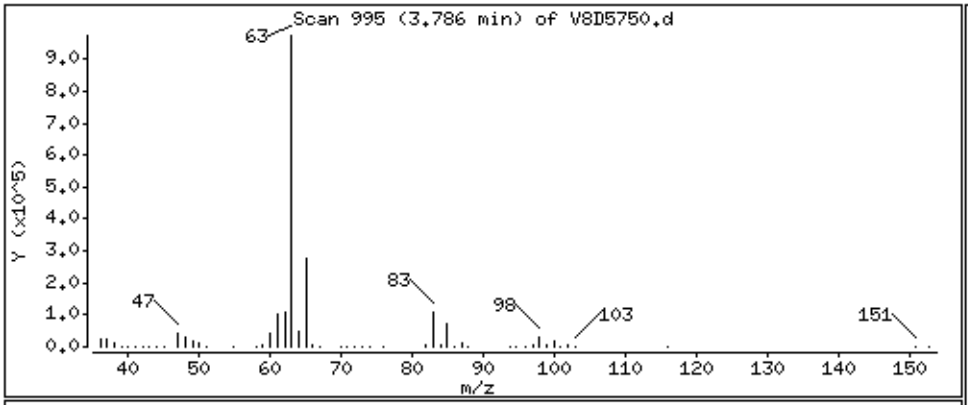
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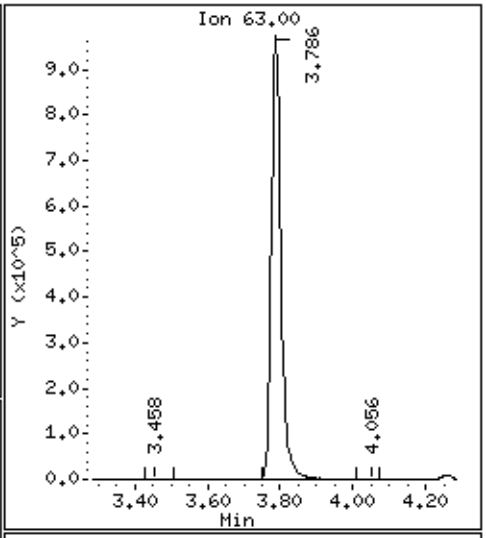
Sample Info: 5ML,N1082-12A,,77766

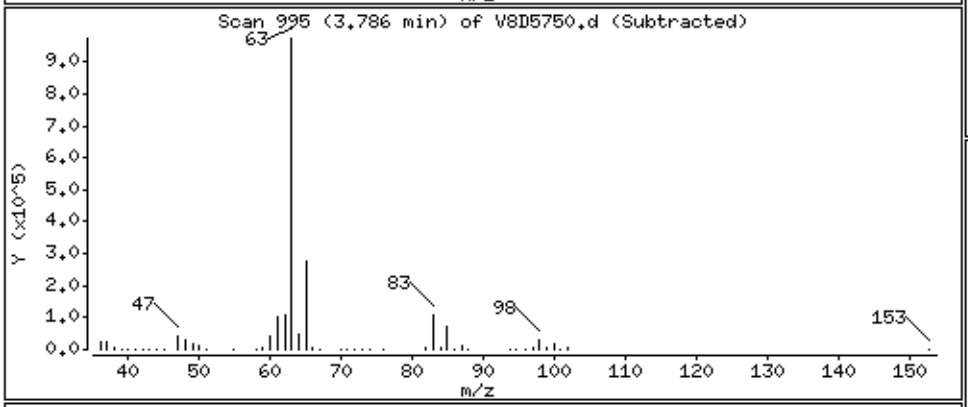
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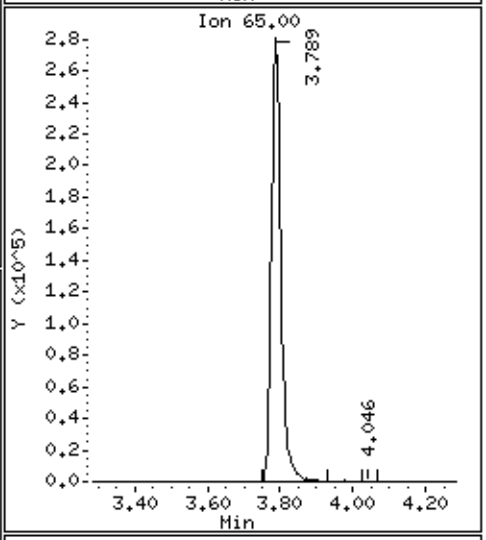
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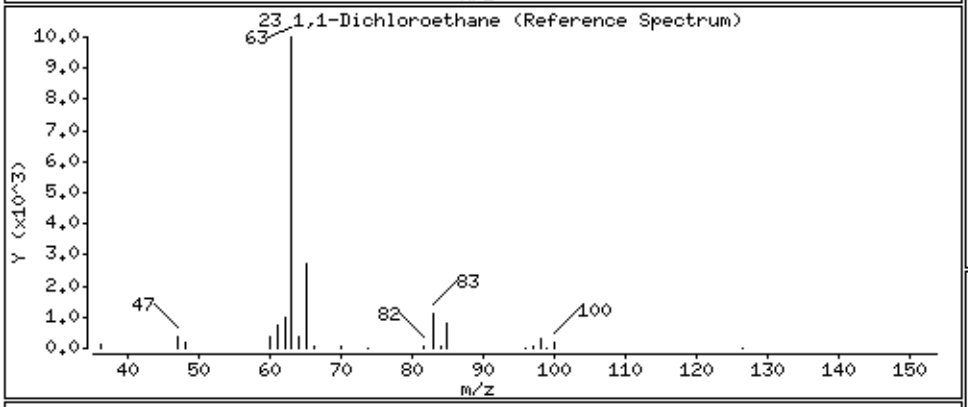
23 1,1-Dichloroethane Concentration: 570 ug/L

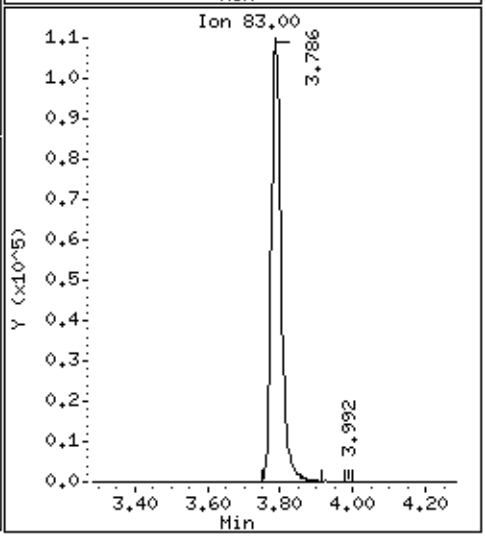


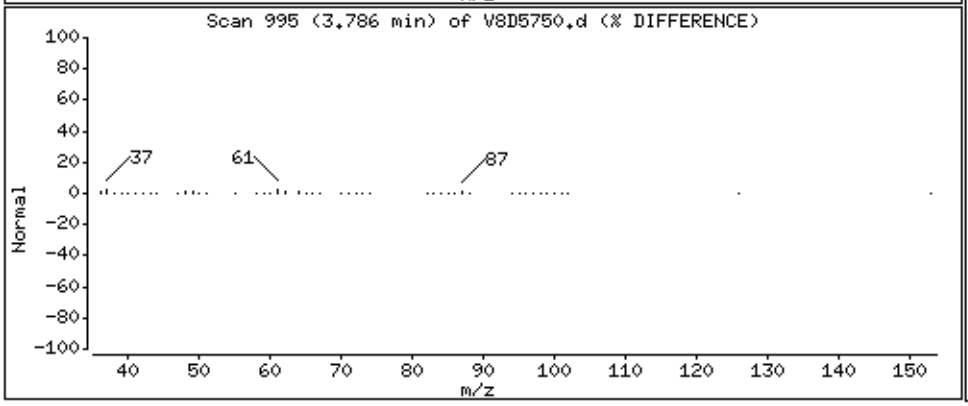












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

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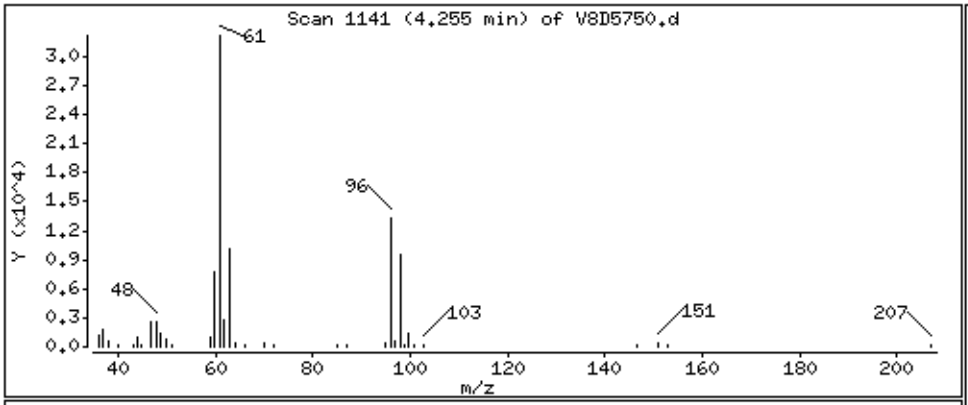
Client ID: MW-22R_6/19/14 Instrument: V10.i

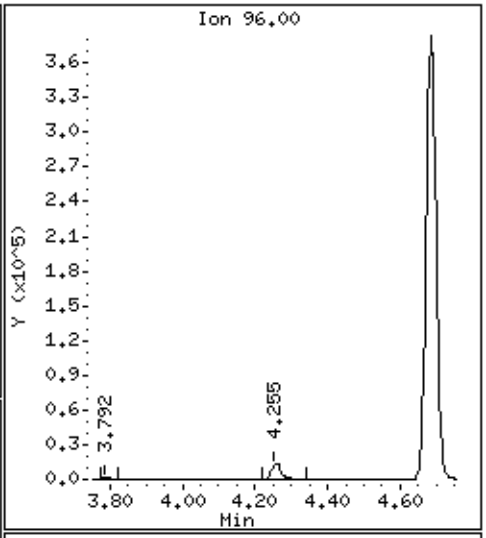
Sample Info: 5ML,N1082-12A,,77766

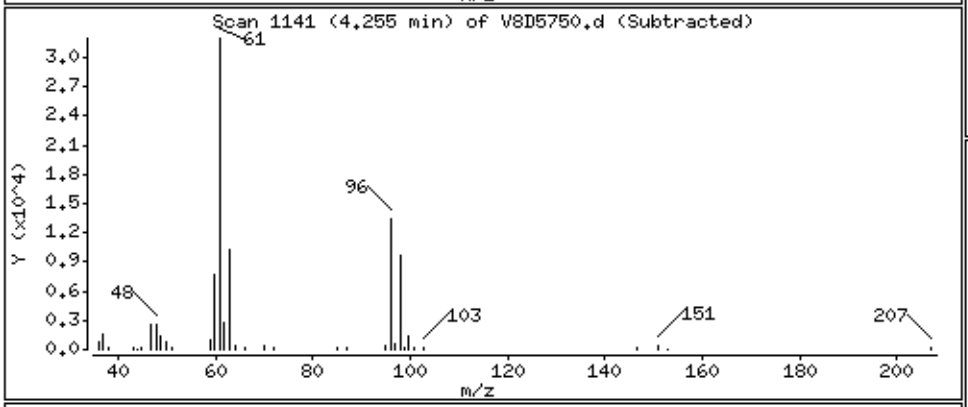
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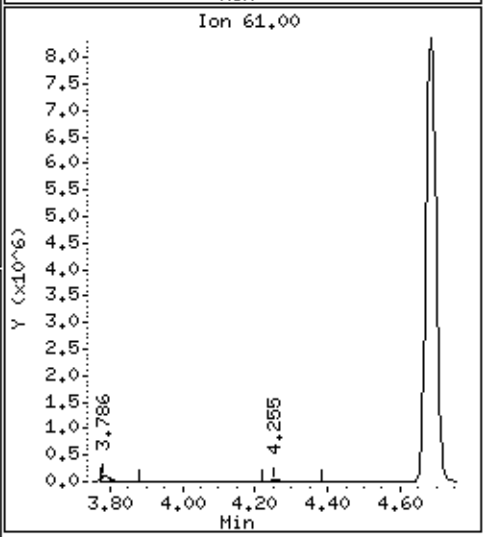
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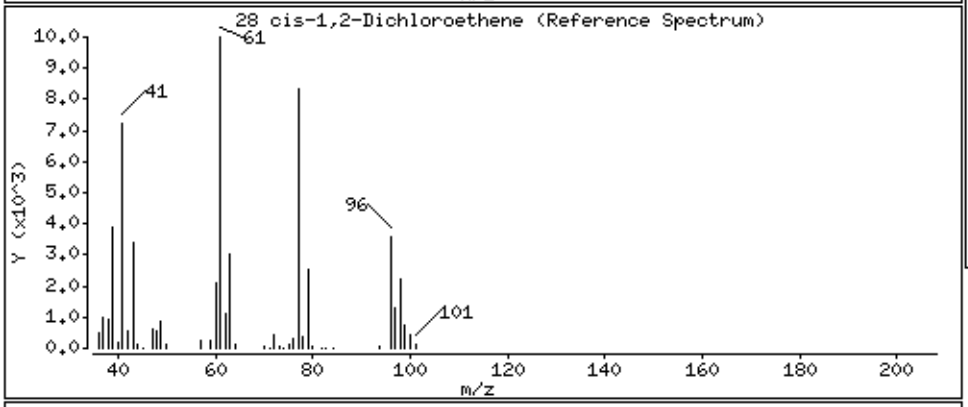
28 cis-1,2-Dichloroethene Concentration: 22 ug/L

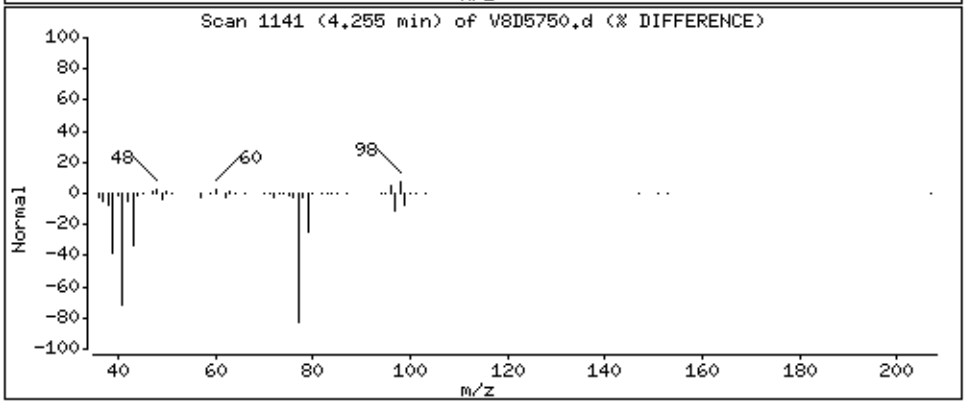












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

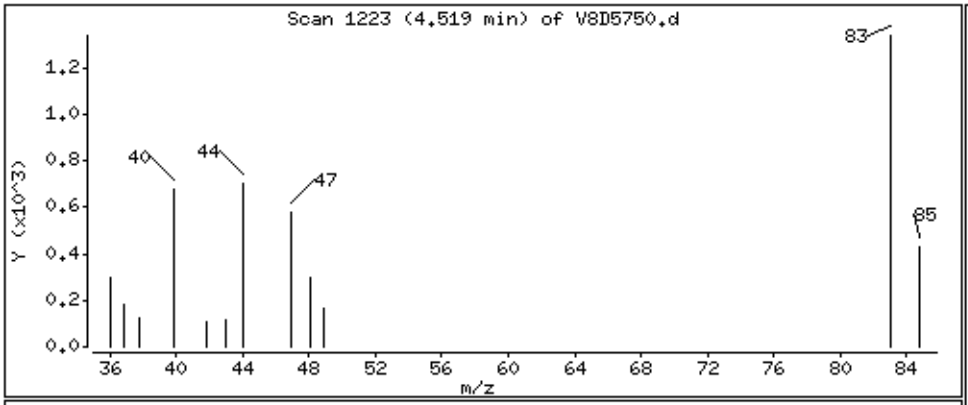
Client ID: MW-22R_6/19/14 Instrument: V10.i

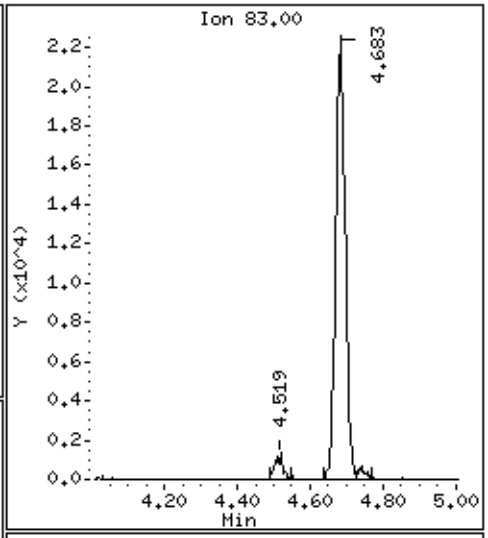
Sample Info: 5ML,N1082-12A,,77766

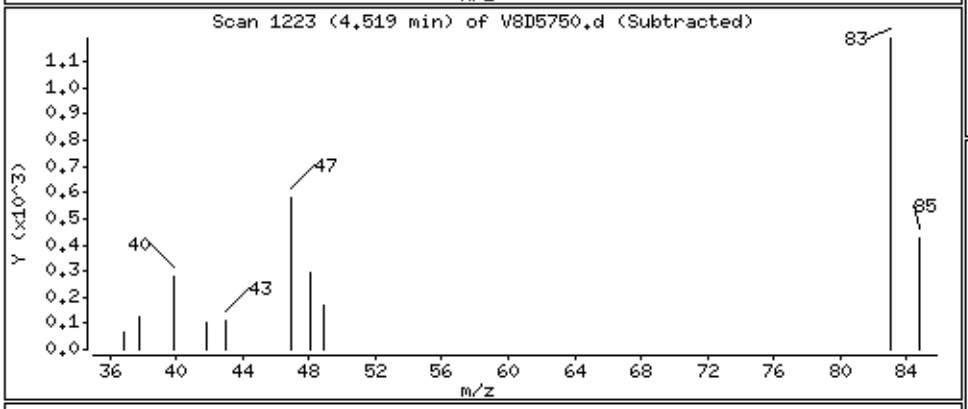
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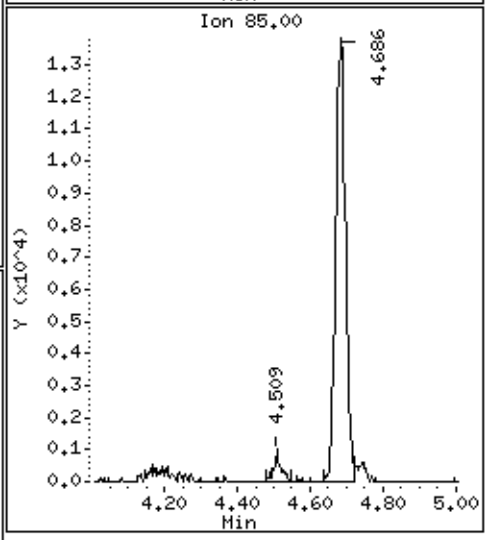
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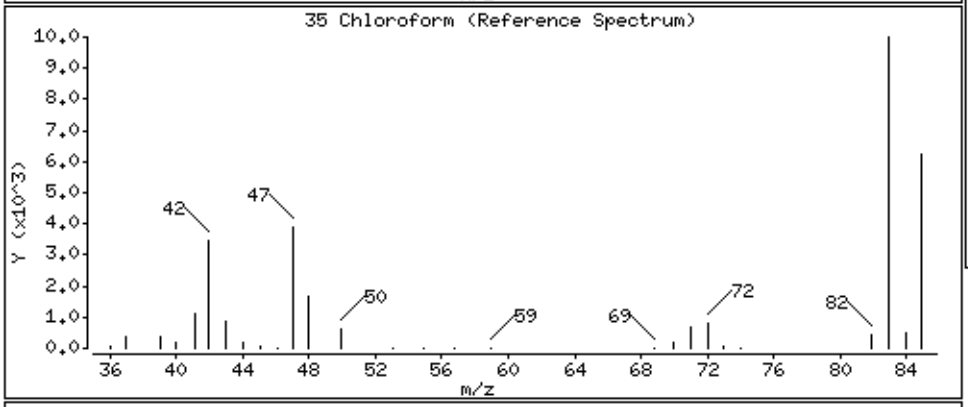
35 Chloroform Concentration: 0.64 ug/L

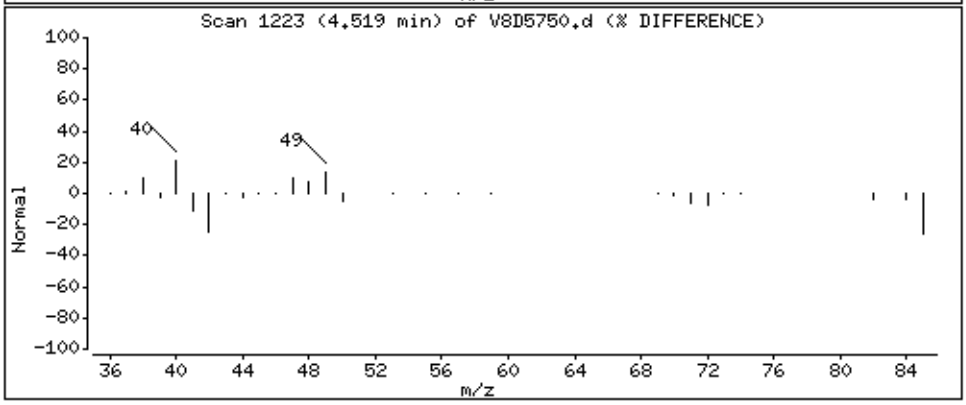












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Date : 25-JUN-2014 16:53

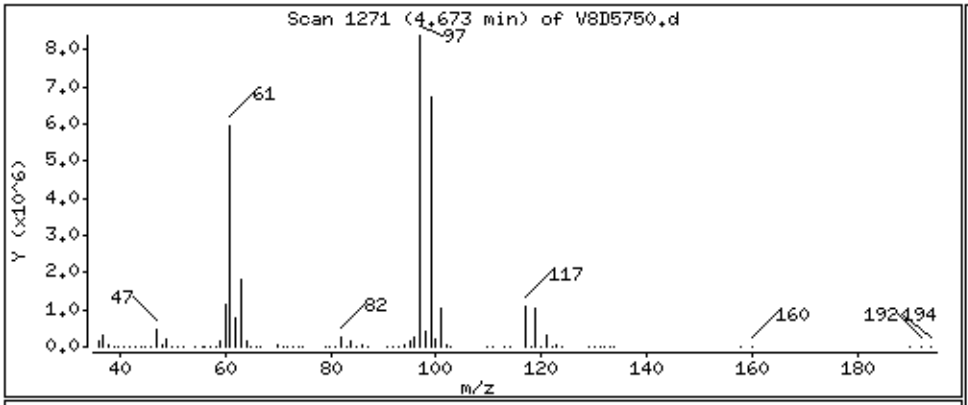
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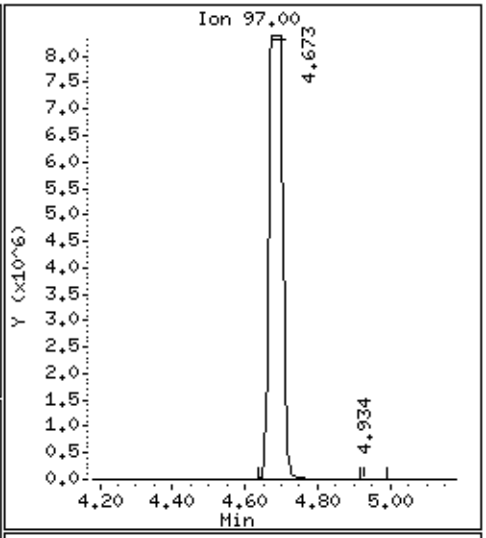
Sample Info: 5ML,N1082-12A,,77766

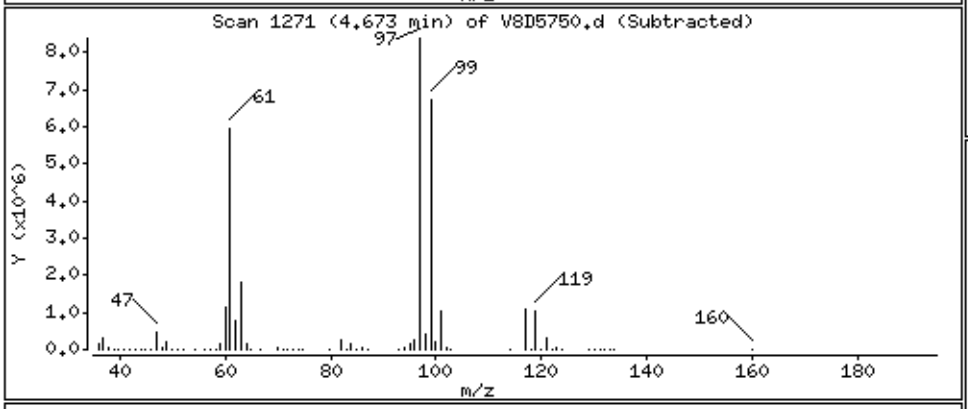
Purge Volume: 5.0 Operator: WL SRC: LIMS

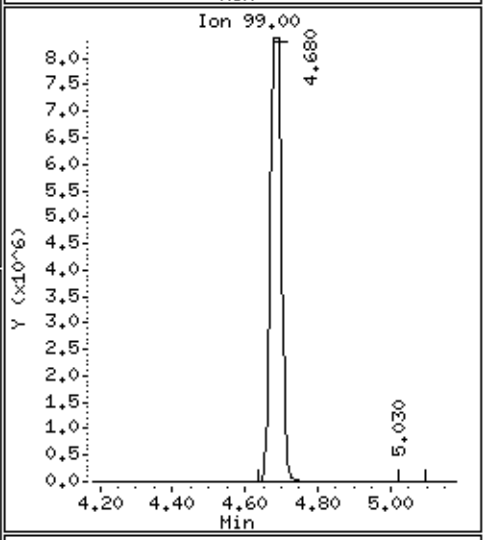
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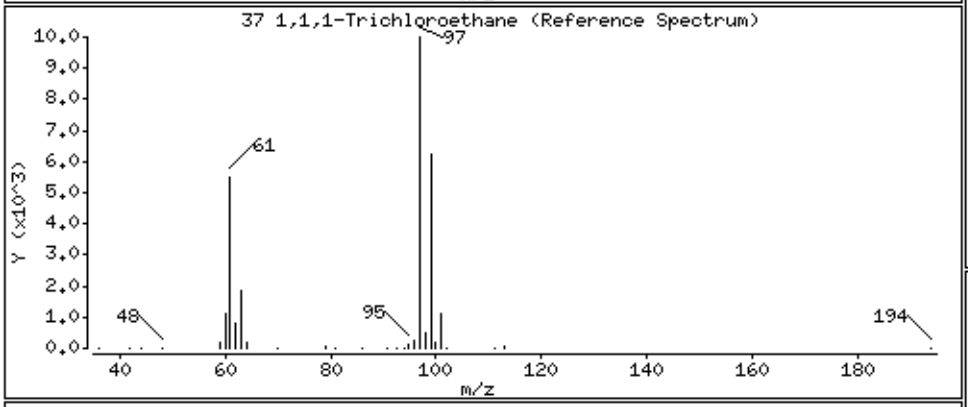
37 1,1,1-Trichloroethane Concentration: 6800 ug/L

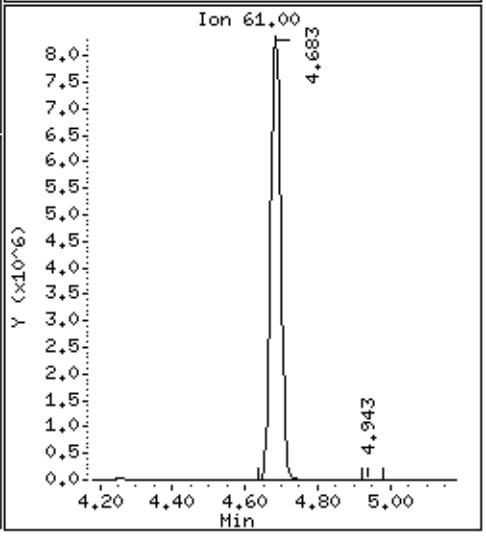


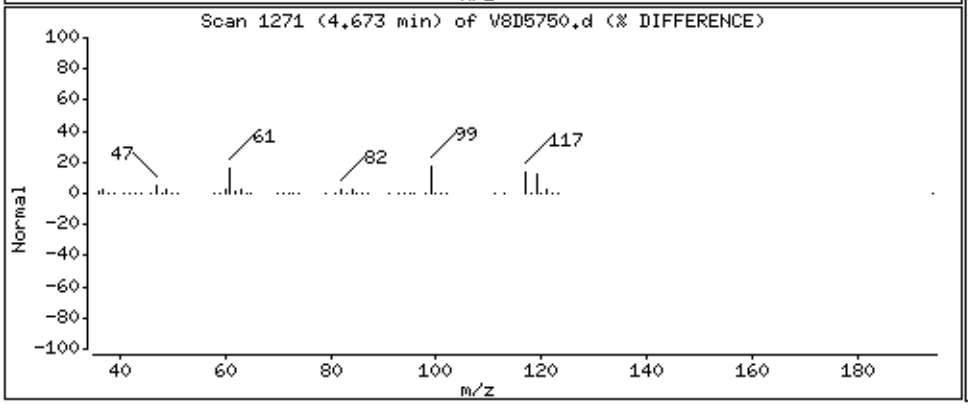












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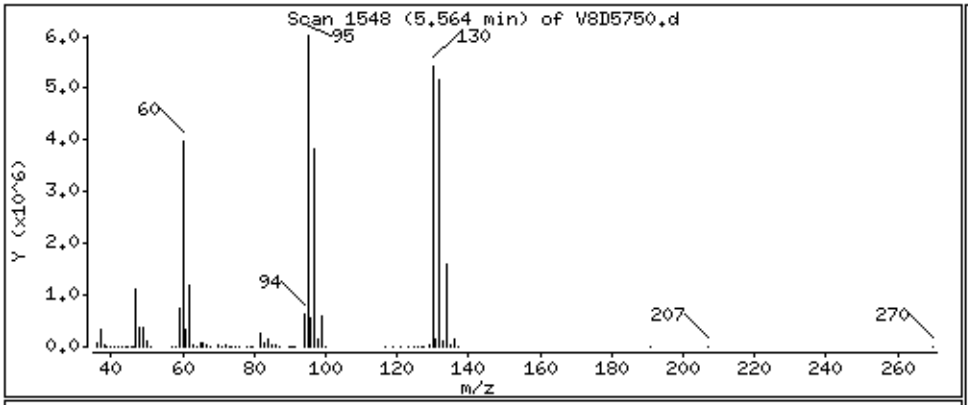
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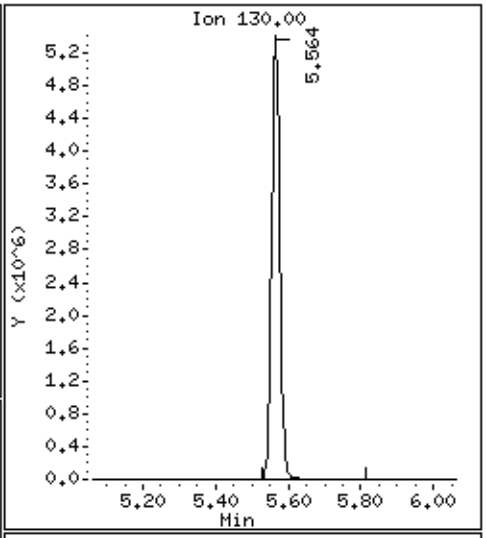
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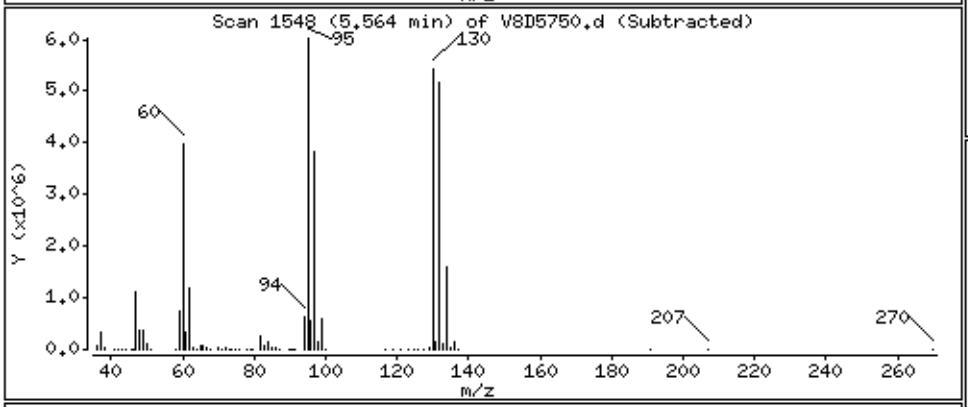
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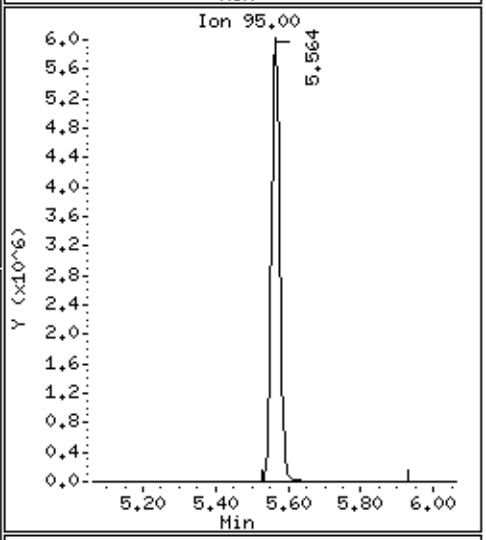
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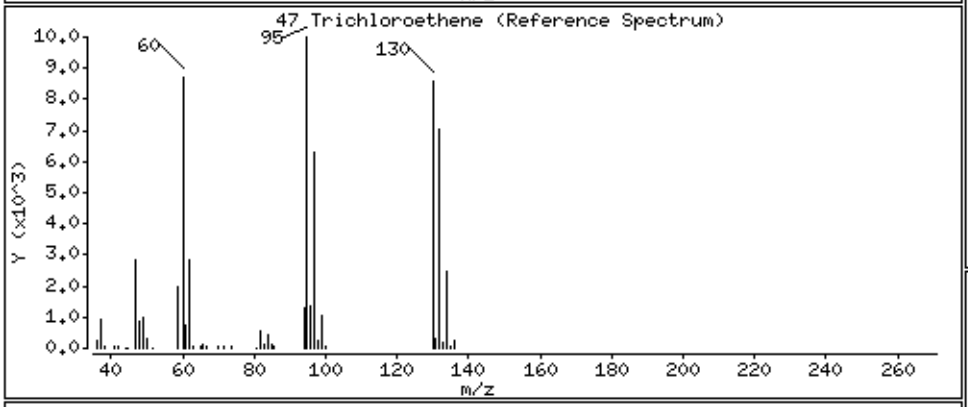
47 Trichloroethene Concentration: 6900 ug/L

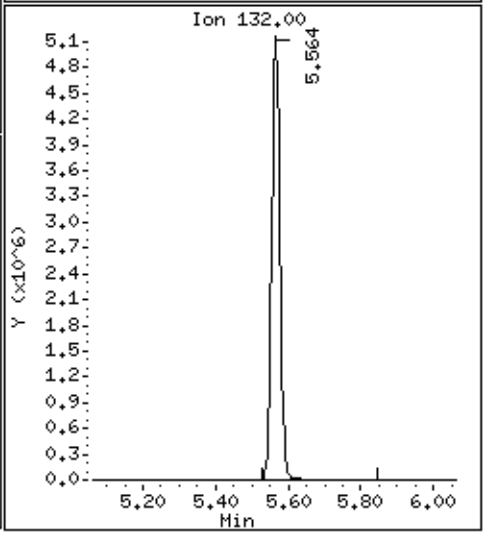


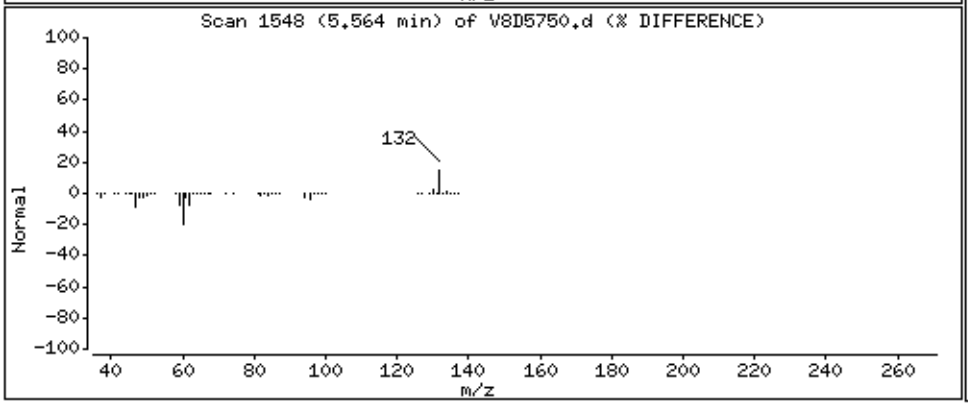












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

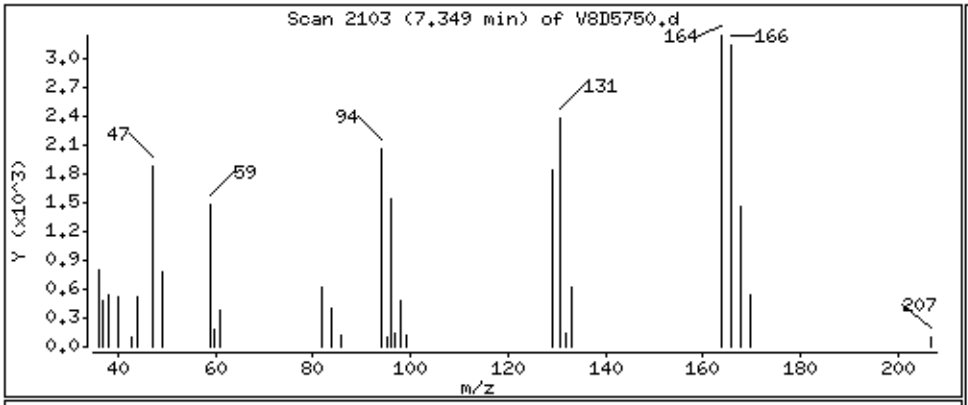
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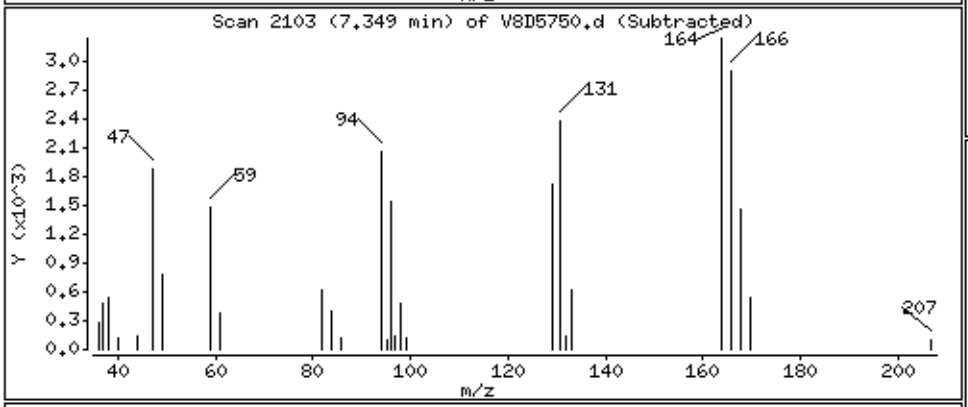
Sample Info: 5ML,N1082-12A,,77766

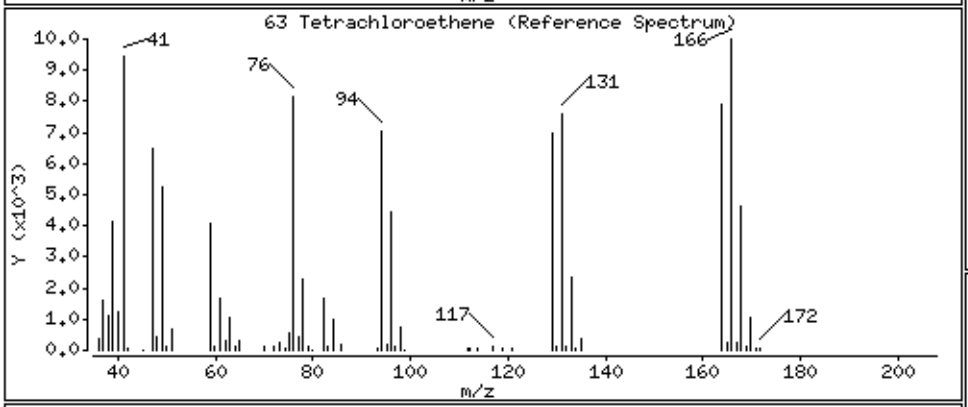
Purge Volume: 5.0 Operator: WL SRC: LIMS

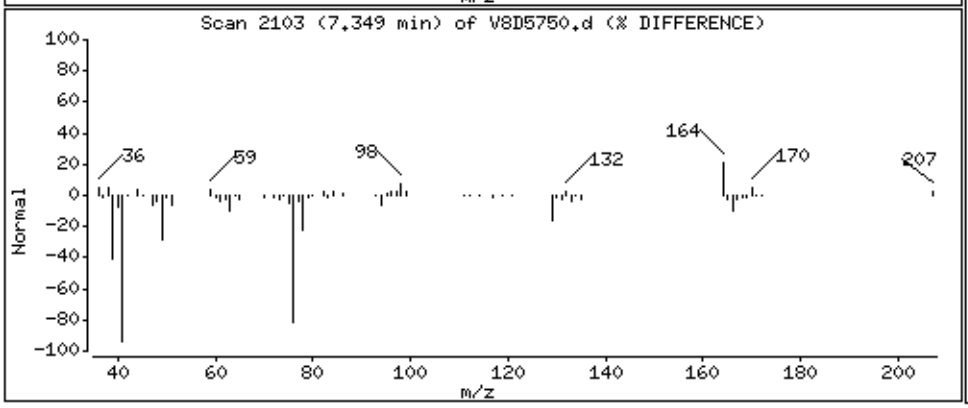
Column phase: DB-624 Column diameter: 0.25

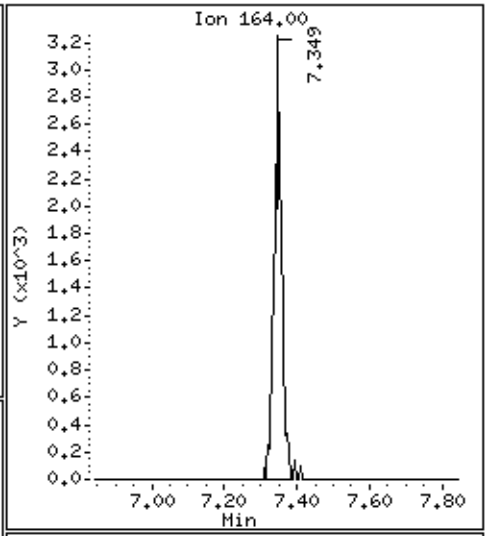
63 Tetrachloroethene Concentration: 2.9 ug/L

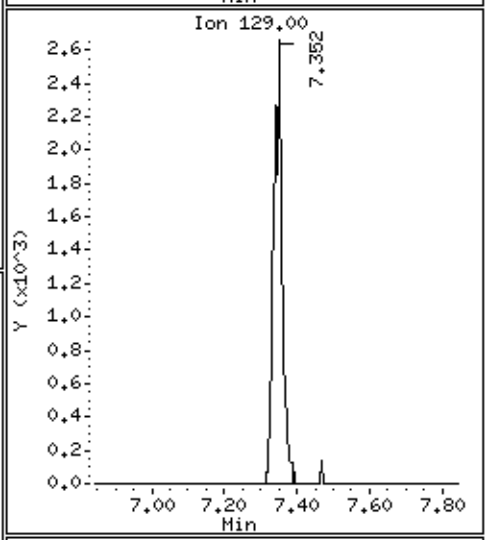


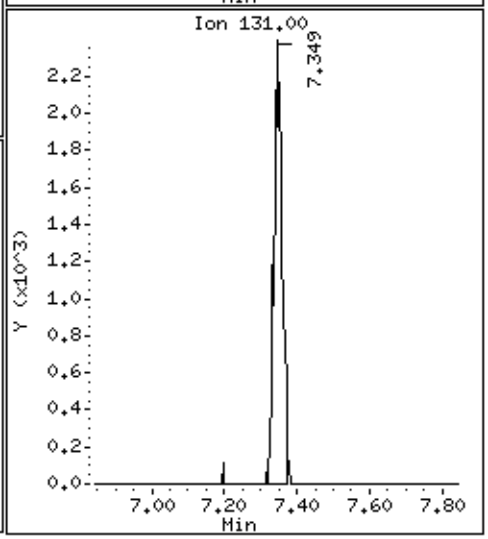












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

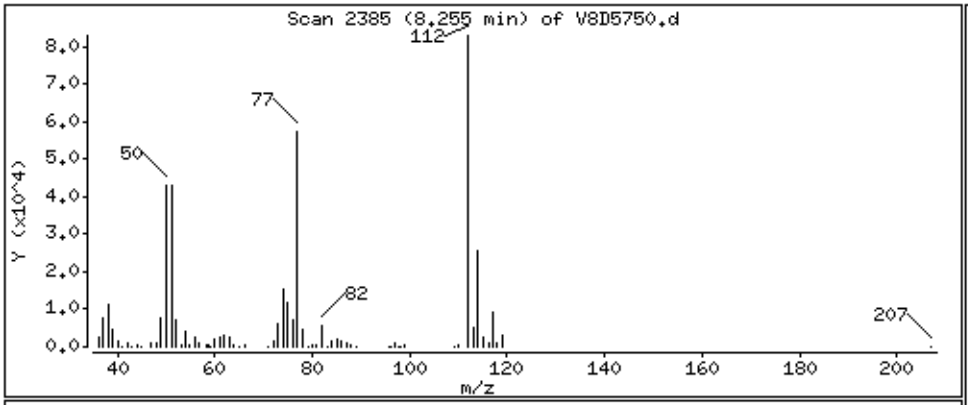
Client ID: MW-22R_6/19/14 Instrument: V10.i

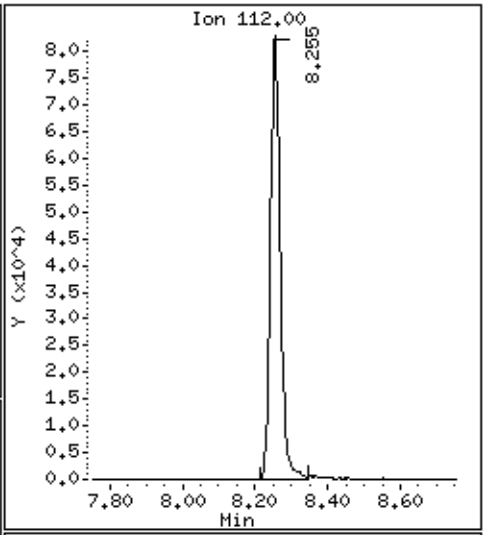
Sample Info: 5ML,N1082-12A,,77766

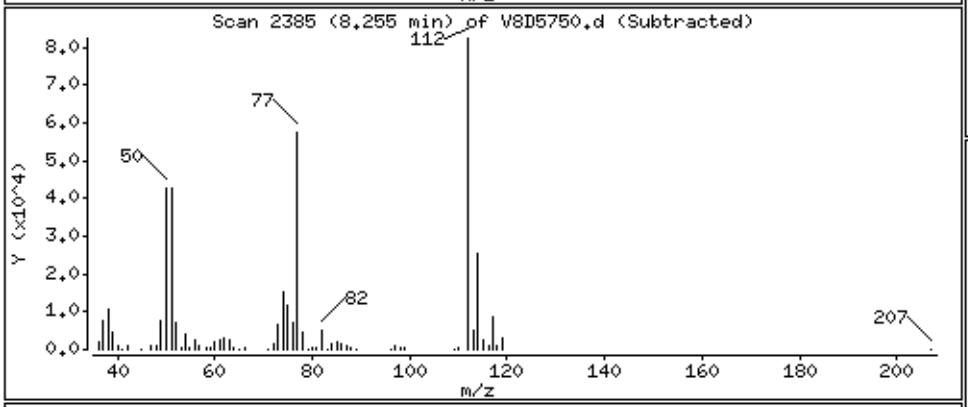
Purge Volume: 5.0 Operator: WL SRC: LIMS

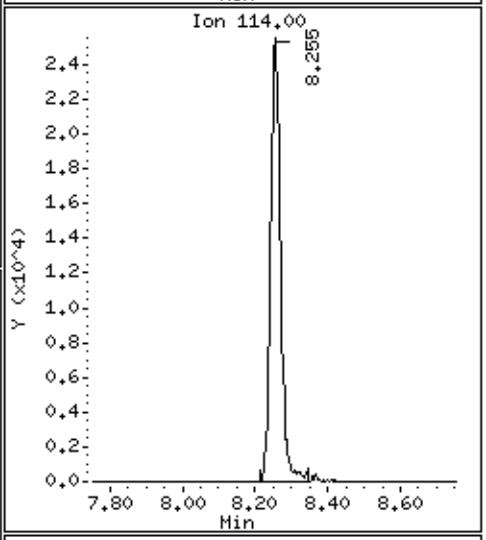
Column phase: DB-624 Column diameter: 0.25

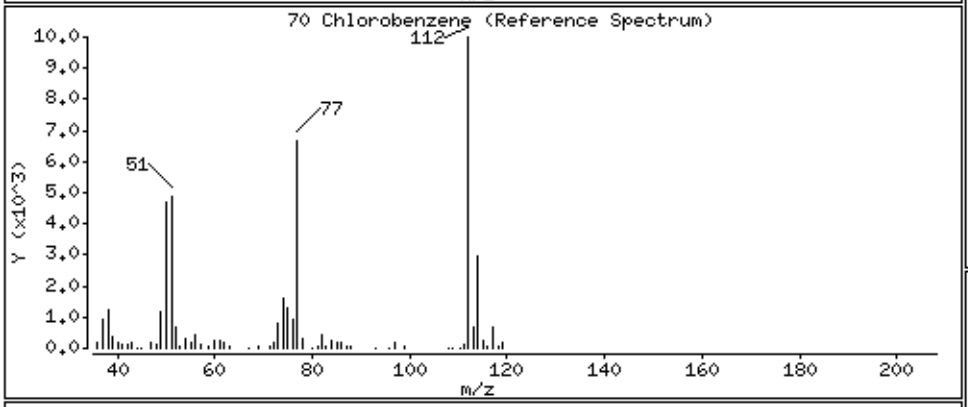
70 Chlorobenzene Concentration: 40 ug/L

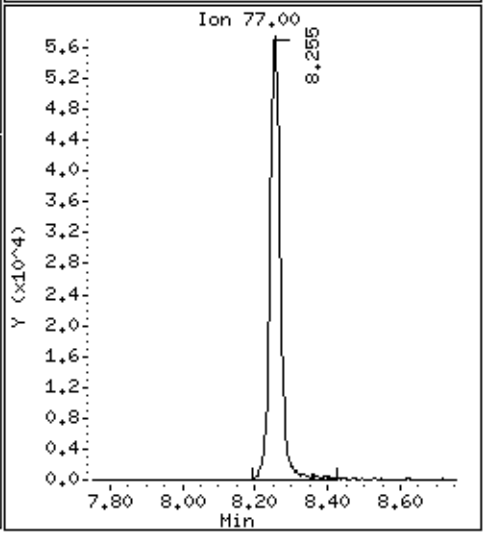


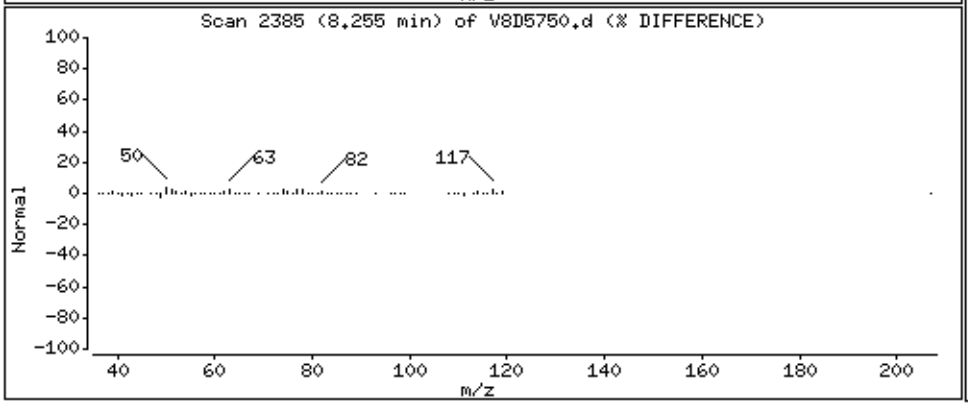












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Date : 25-JUN-2014 16:53

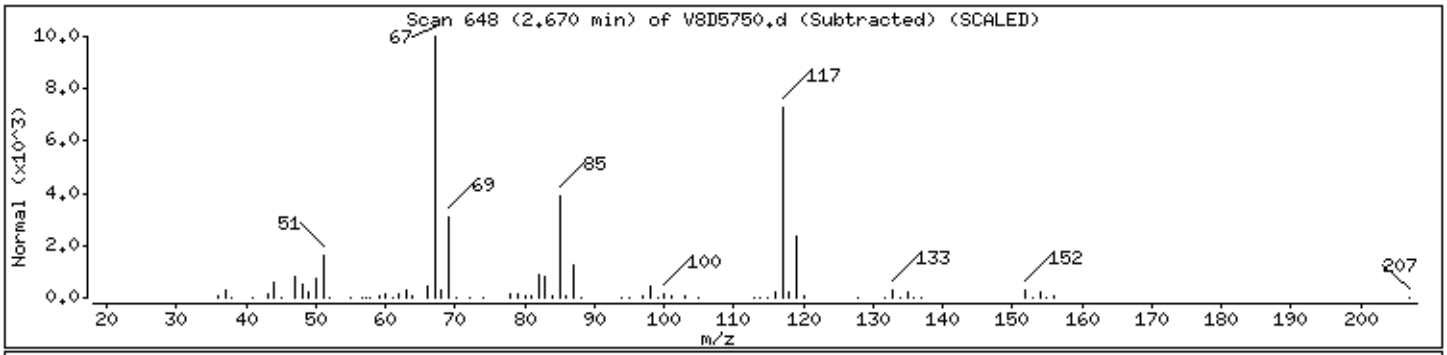
Client ID: MW-22R_6/19/14 Instrument: V10.i

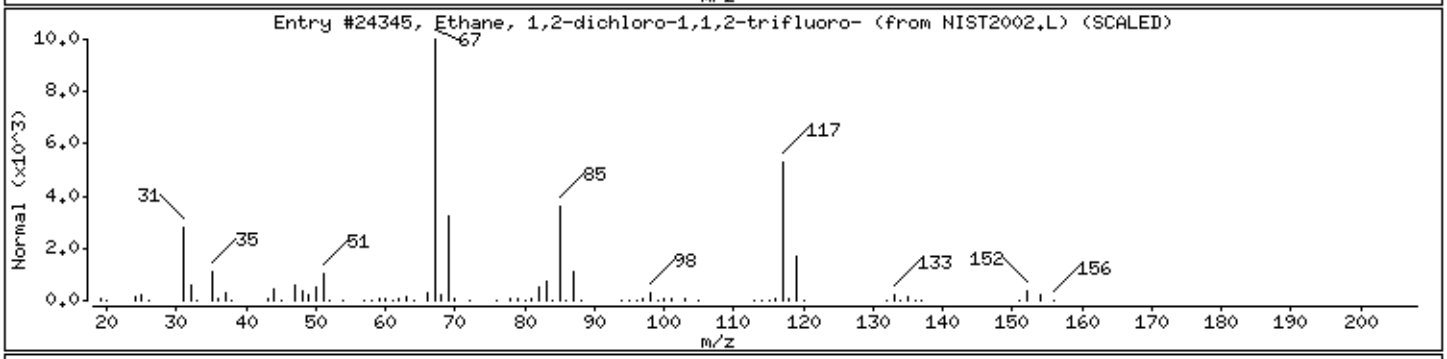
Sample Info: 5ML,N1082-12A,,77766

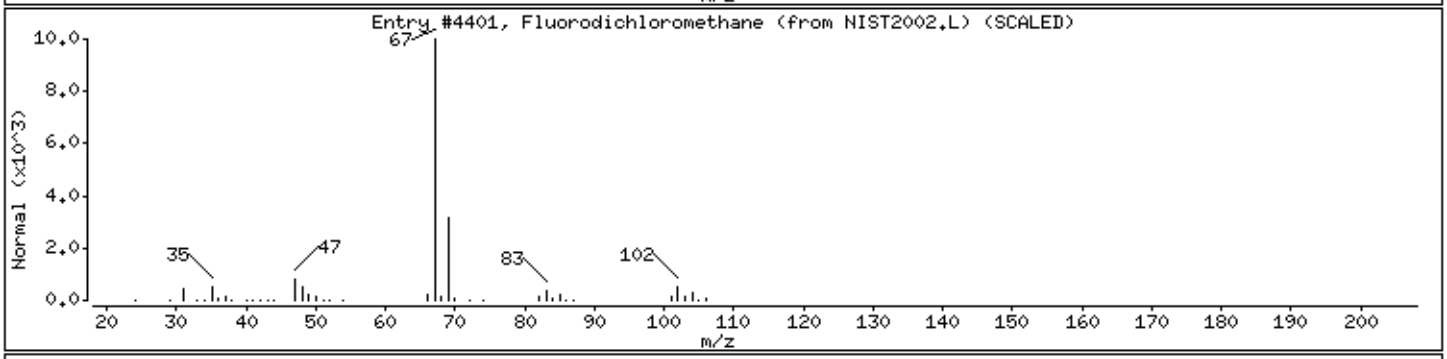
Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152
Fluorodichloromethane	75-43-4	NIST2002.L	4401	35	CHCl2F	102



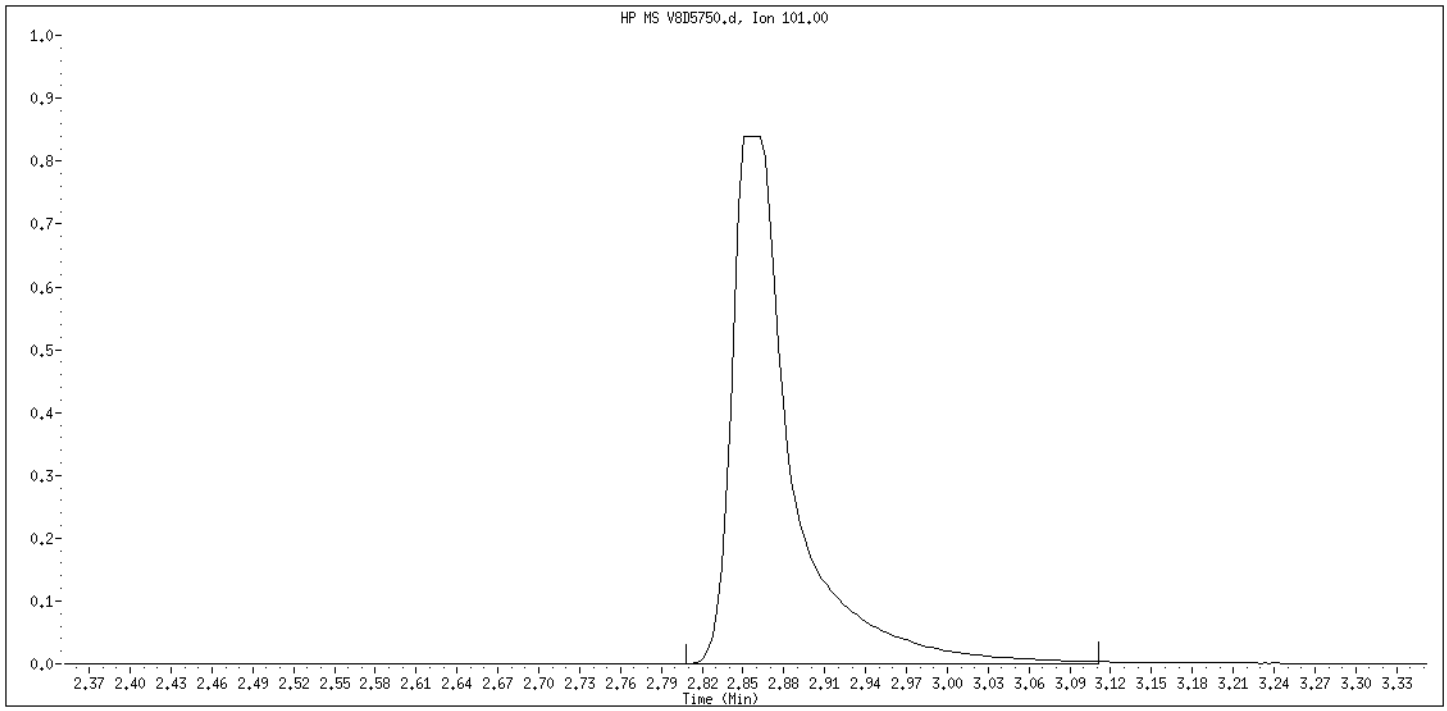




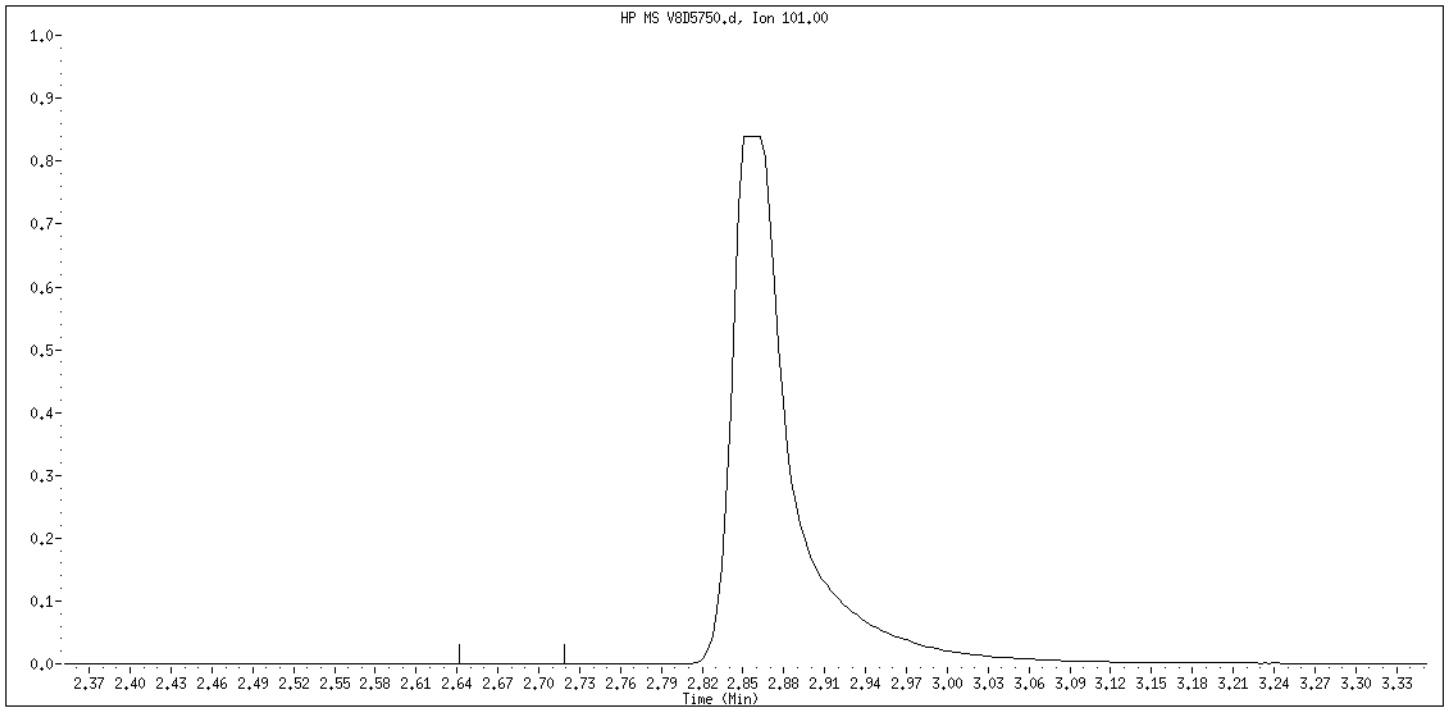
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5750.d

Lab ID: N1082-12A Client ID: MW-22R_6/19/14
Inj Date: 25-JUN-2014 16:53 Operator: WL SRC: LIMS

Manual Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 2.850 min, Range: 2.809 to 3.111 min Response: 2584207



Original Integration 1,1,2-Trichloro-1,2,2-Trifluo Ret Time: 2.673 min, Range: 2.641 to 2.718 min Response: 3279



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22R_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9895.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0

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	500	U
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	500	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	500	U
67-64-1	Acetone	2500	U
74-88-4	Iodomethane	500	U
75-15-0	Carbon disulfide	500	U
75-09-2	Methylene chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
1634-04-4	Methyl tert-butyl ether	500	U
75-34-3	1,1-Dichloroethane	500	U
108-05-4	Vinyl acetate	500	U
78-93-3	2-Butanone	2500	U
156-59-2	cis-1,2-Dichloroethene	500	U
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	6200	D
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	3400	D
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	2500	U
108-88-3	Toluene	500	U
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

EPA SAMPLE NO.

MW-22R_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9895.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0

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	500	U
591-78-6	2-Hexanone	2500	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	500	U
95-47-6	o-Xylene	500	U
1330-20-7	Xylene (Total)	500	U
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	500	U
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11000	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22R_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-12ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9895.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 500.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9895.D
Report Date: 02-Jul-2014 14:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9895.D
Lab Smp Id: N1082-12ADL Client Smp ID: MW-22R_6/19/14DL
Inj Date : 26-JUN-2014 13:31
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-12ADL,,77805,500
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 48
Dil Factor: 500.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

Name	Value	Description
DF	500.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.276	2.276	(0.518)	86609	22.4657	11000(H)
$	36 Dibromofluoromethane	113	3.842	3.841	(0.875)	206943	49.8484	50
	37 1,1,1-Trichloroethane	97	3.871	3.871	(0.881)	65117	12.3958	6200(H)
$	42 1,2-Dichloroethane-d4	102	4.108	4.107	(0.935)	40357	48.1950	48
*	46 Fluorobenzene	96	4.393	4.393	(1.000)	625028	50.0000	
	47 Trichloroethene	130	4.708	4.708	(1.072)	21161	6.81175	3400
$	58 Toluene-d8	98	5.801	5.801	(0.800)	581943	50.7045	51
*	68 Chlorobenzene-d5	117	7.249	7.248	(1.000)	429191	50.0000	
$	79 Bromofluorobenzene	95	8.538	8.538	(1.178)	244045	47.4887	47
*	92 1,4-Dichlorobenzene-d4	152	9.828	9.828	(1.000)	158838	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9895.D
Report Date: 02-Jul-2014 14:19

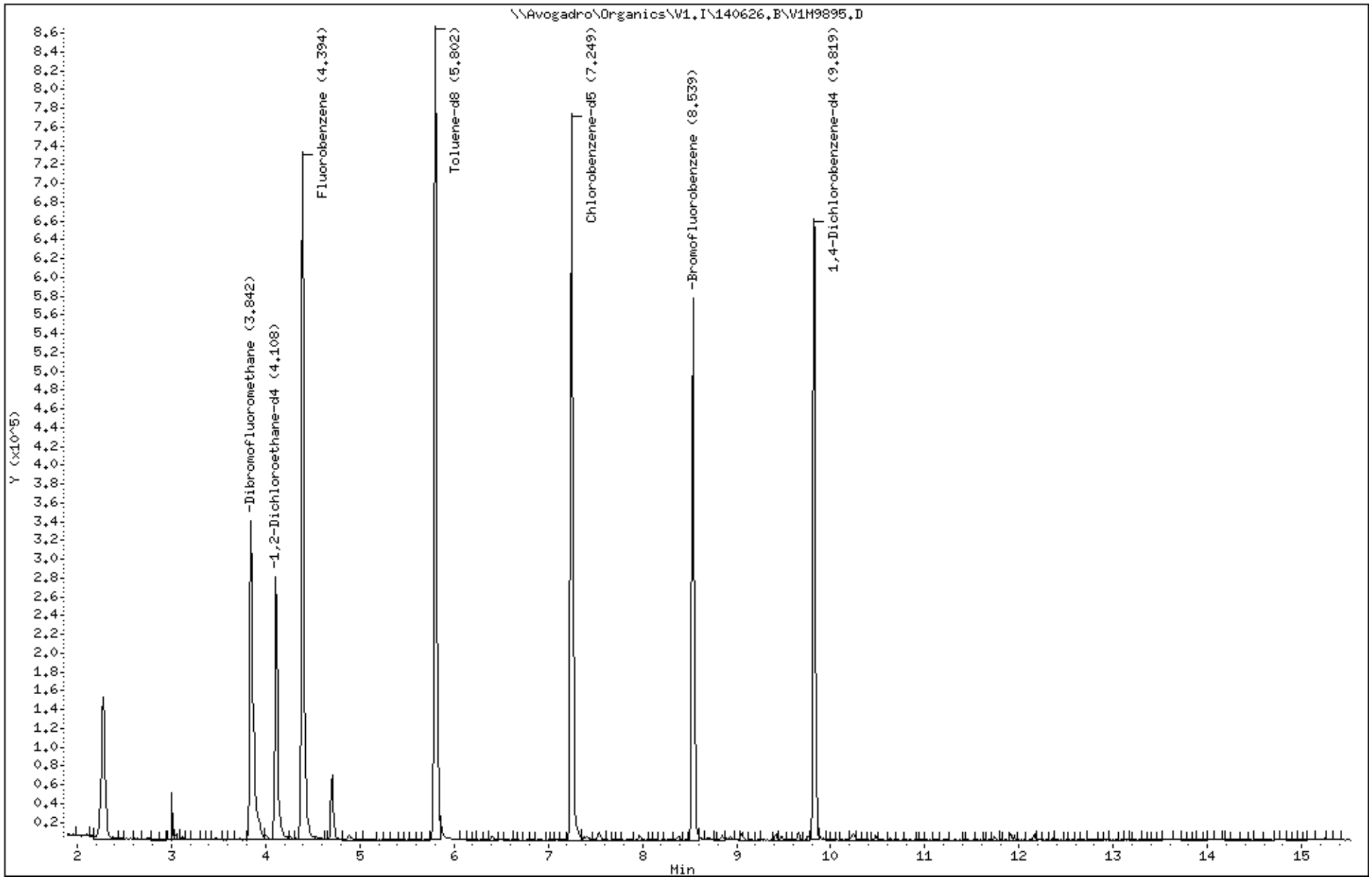
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9895.D
Lab Smp Id: N1082-12ADL Client Smp ID: MW-22R_6/19/14DL
Inj Date : 26-JUN-2014 13:31
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-12ADL,,77805,500
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 48
Dil Factor: 500.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9895.D
Date : 26-JUN-2014 13:31
Client ID: MW-22R_6/19/14DL
Instrument: V1.i
Sample Info: 5G,N1082-12ADL,,77805,500
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9895.D

Date : 26-JUN-2014 13:31

Client ID: MW-22R_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-12ADL,,77805,500

Purge Volume: 5.0

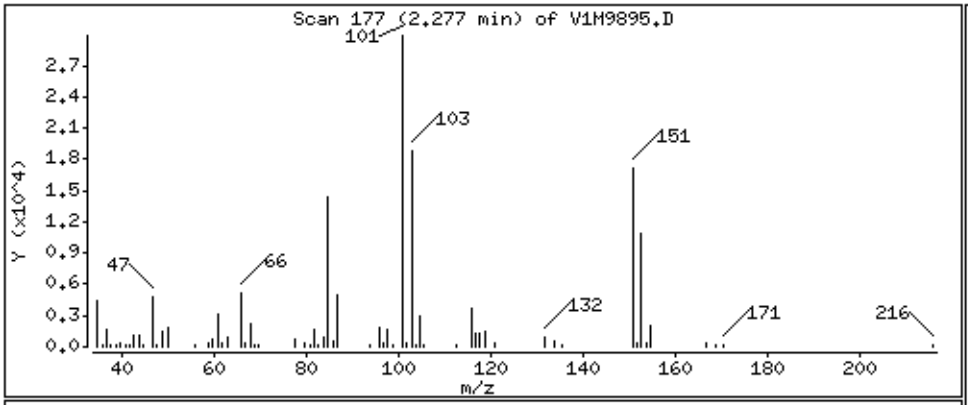
Operator: WL SRC: LIMS

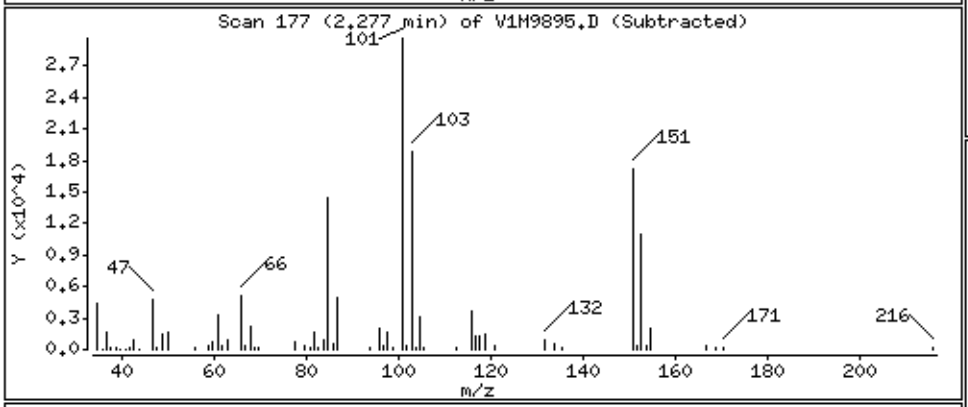
Column phase: DB-624

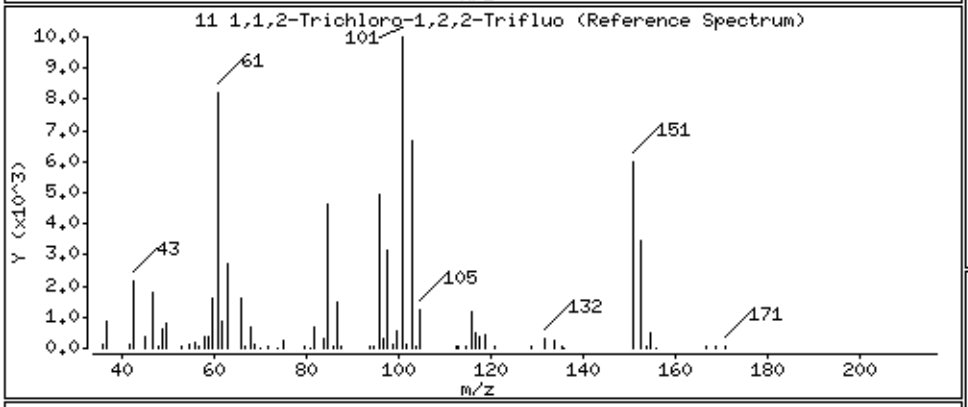
Column diameter: 0.25

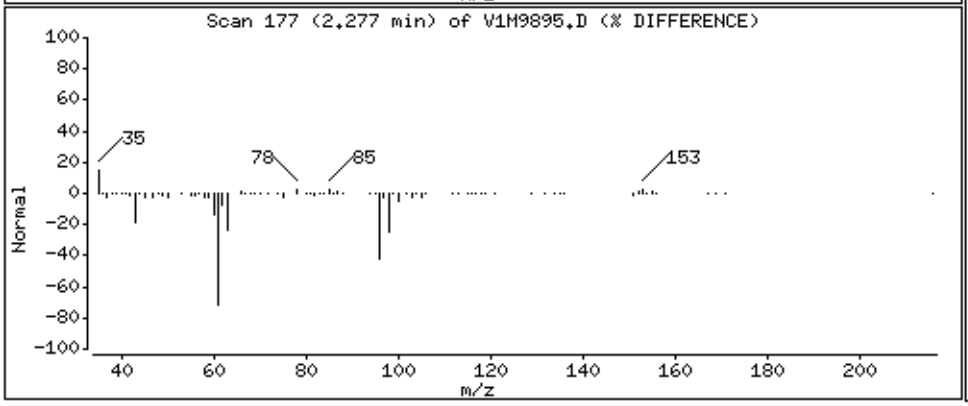
11 1,1,2-Trichloro-1,2,2-Trifluo

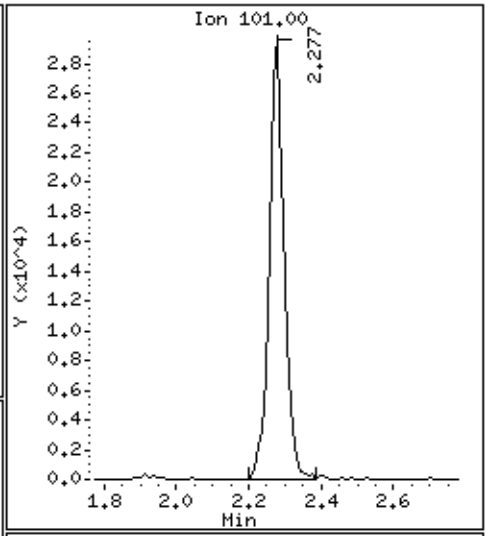
Concentration: 11000 ug/L

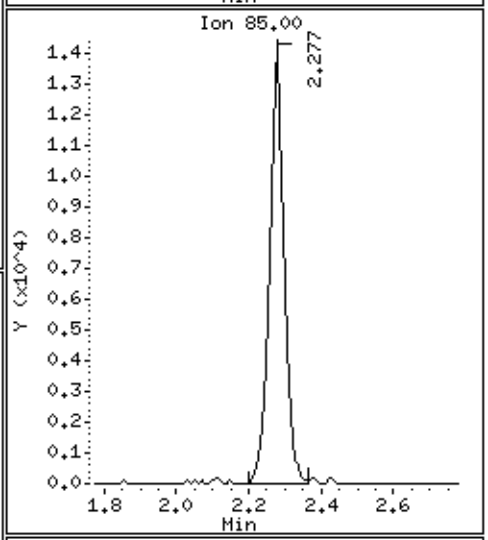


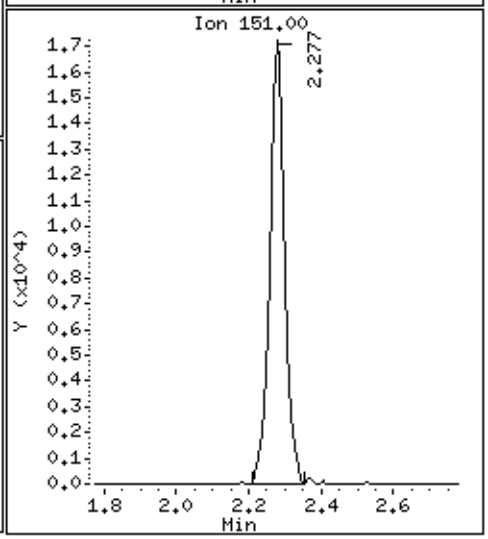












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9895.D

Date : 26-JUN-2014 13:31

Client ID: MW-22R_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-12ADL,,77805,500

Purge Volume: 5.0

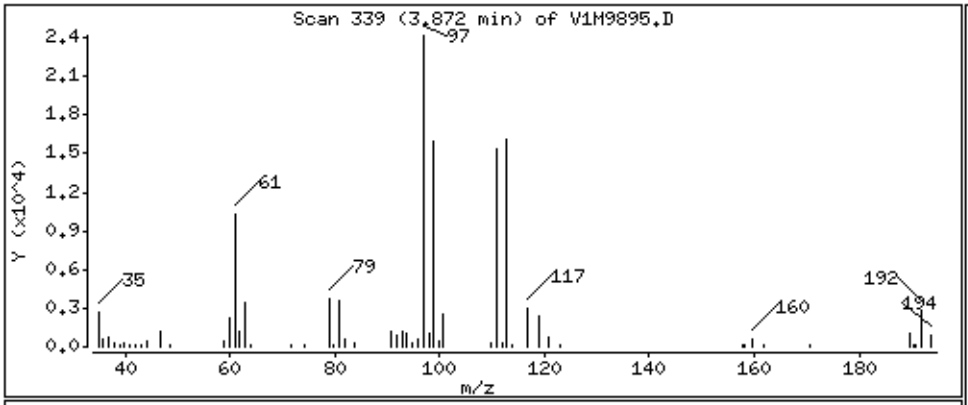
Operator: WL SRC: LIMS

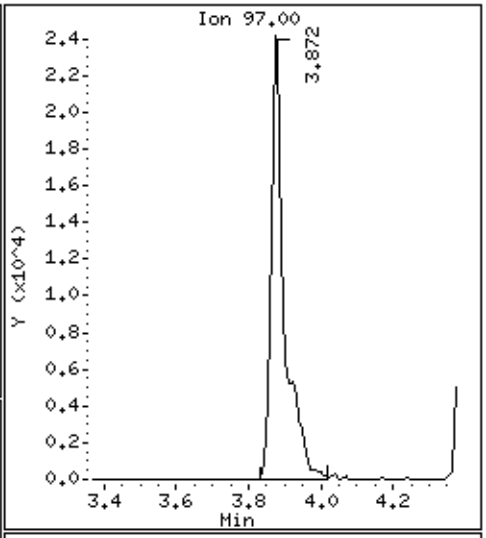
Column phase: DB-624

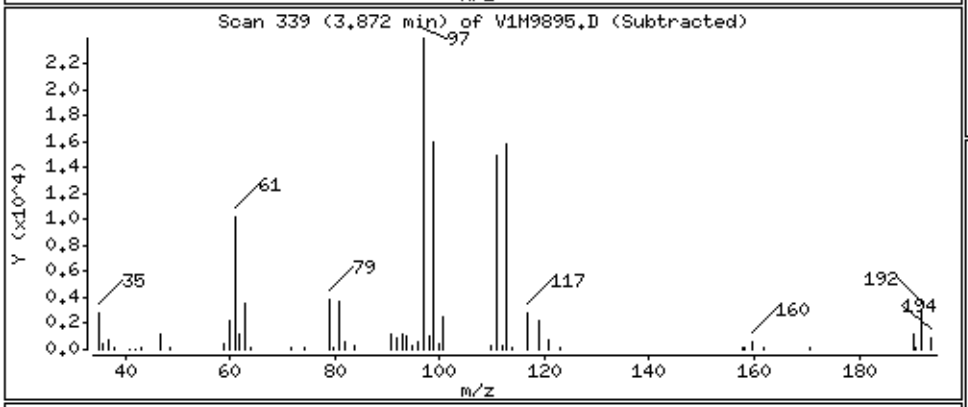
Column diameter: 0.25

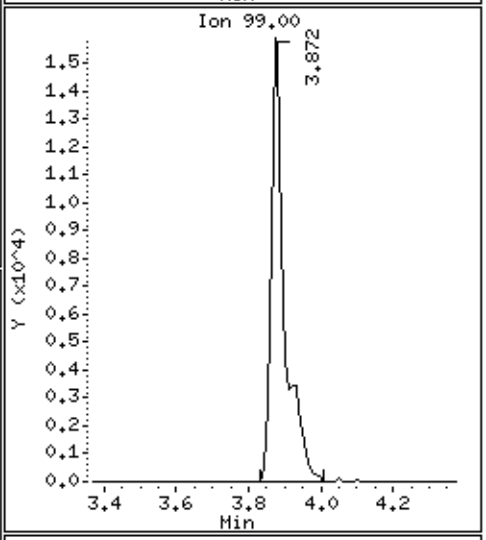
37 1,1,1-Trichloroethane

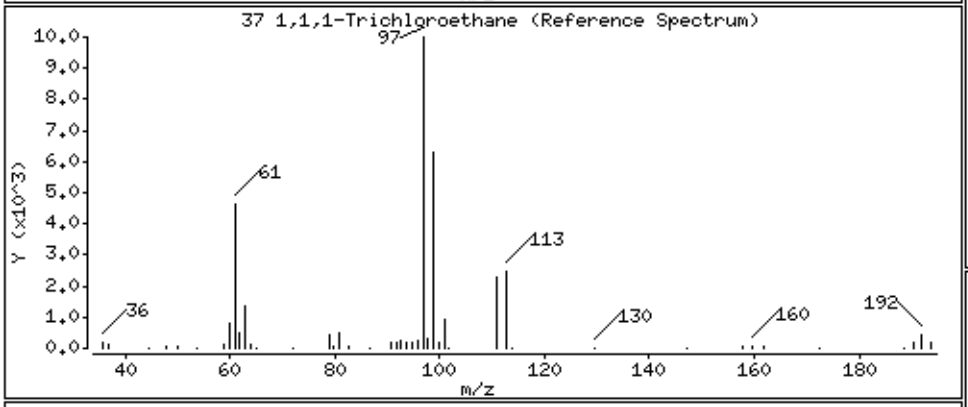
Concentration: 6200 ug/L

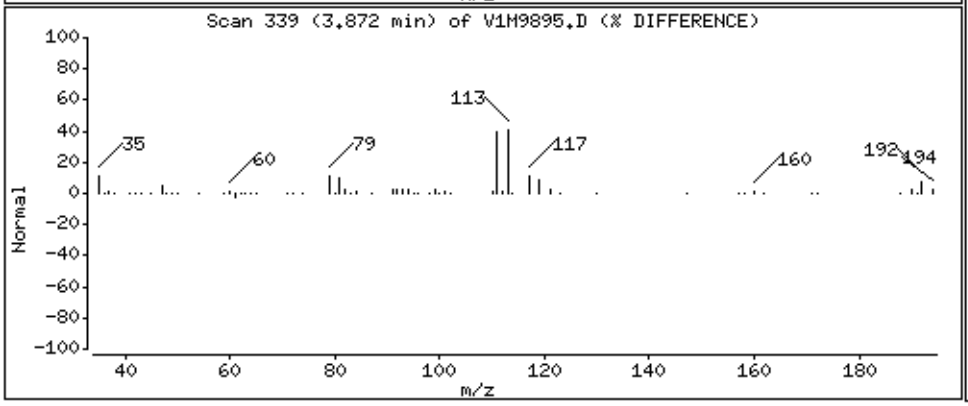


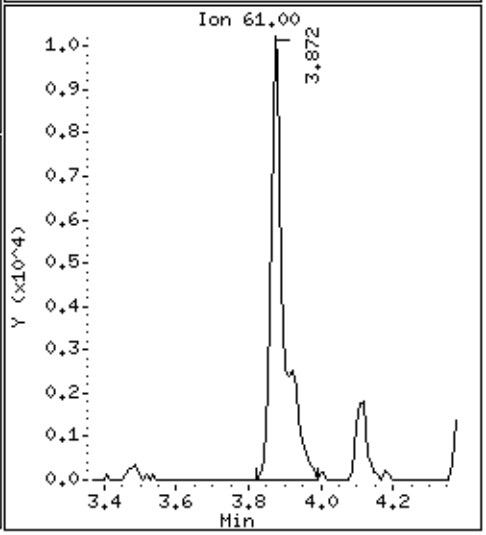












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9895.D

Date : 26-JUN-2014 13:31

Client ID: MW-22R_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-12ADL,,77805,500

Purge Volume: 5.0

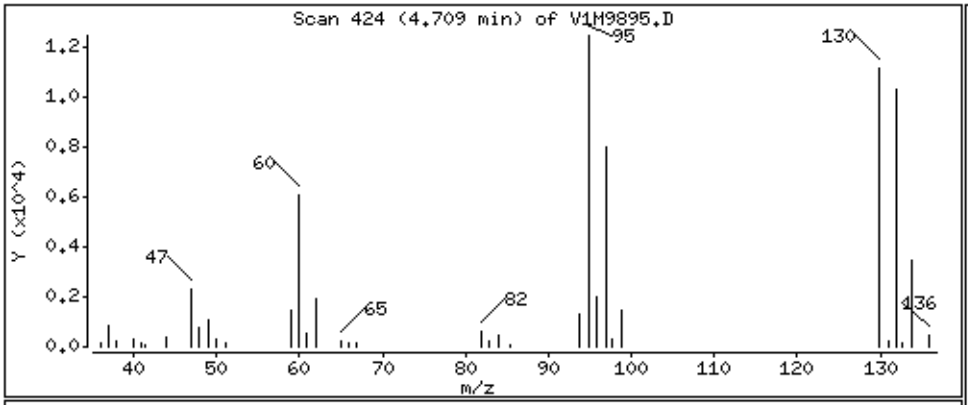
Operator: WL SRC: LIMS

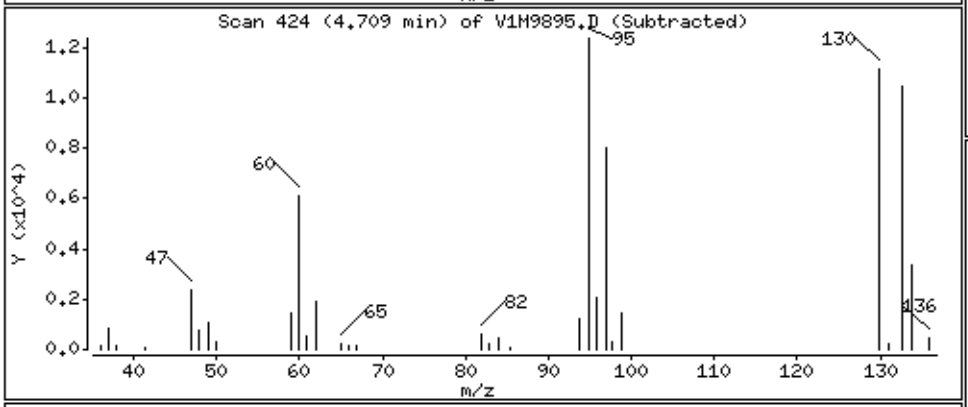
Column phase: DB-624

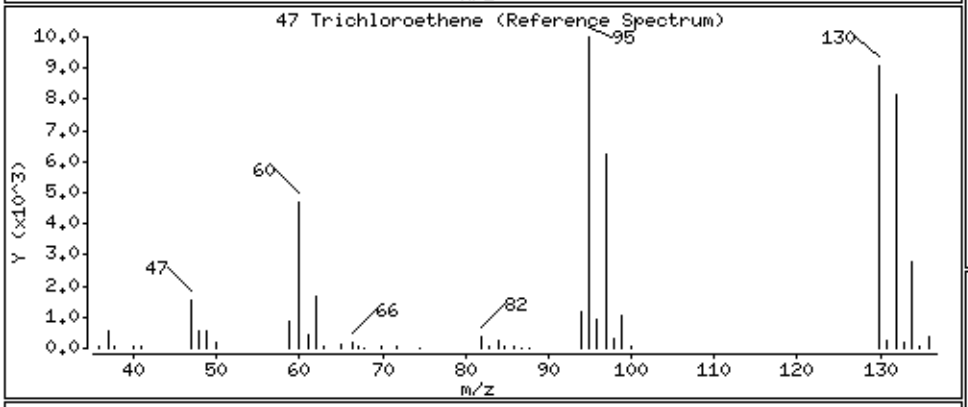
Column diameter: 0.25

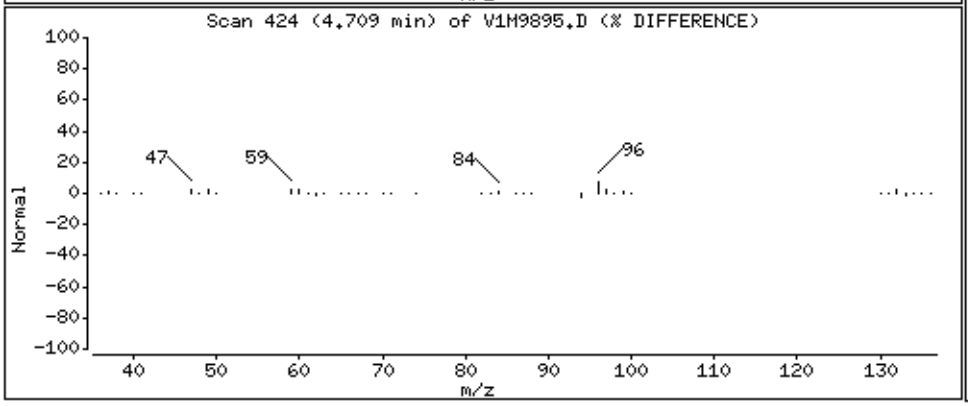
47 Trichloroethene

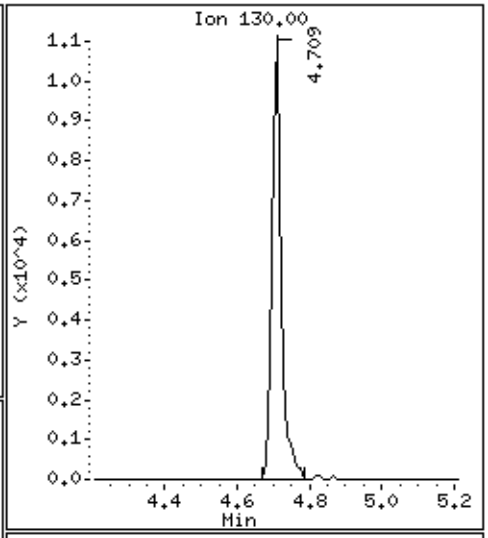
Concentration: 3400 ug/L

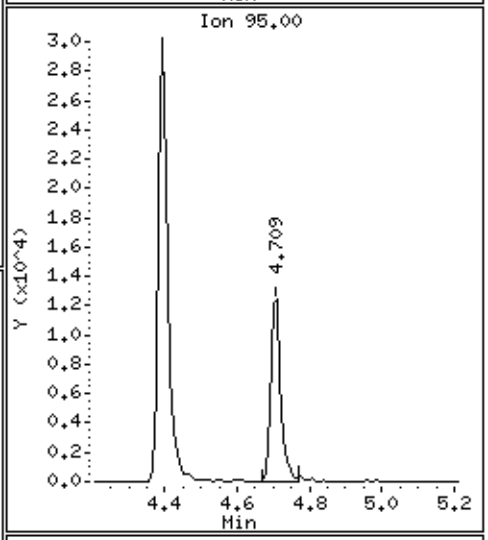


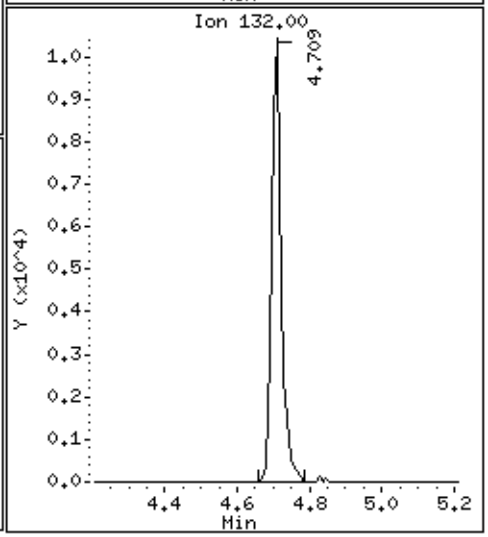












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5751.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	0.76	J
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	150	
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	7.4	
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	1100	E
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	780	E
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

EPA SAMPLE NO.

MW-22S_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5751.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	2.7	
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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2300	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5751.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	354-23-4	Ethane, 1,2-dichloro-1,1,2-t	2.667	120	NJ

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d
Report Date: 02-Jul-2014 14:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5751.d
Lab Smp Id: N1082-13A Client Smp ID: MW-22S_6/19/14
Inj Date : 25-JUN-2014 17:20
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-13A,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:13 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 77
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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
4	Vinyl Chloride	62	1.856	1.856	(0.355)	1480	0.76089	0.76(Q)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	3779239	2307.88	2300(A)
23	1,1-Dichloroethane	63	3.786	3.785	(0.723)	480811	147.848	150
28	cis-1,2-Dichloroethene	96	4.261	4.255	(0.814)	8939	7.44344	7.4(Q)
$ 36	Dibromofluoromethane	113	4.644	4.647	(0.887)	58948	57.9770	58(R)
37	1,1,1-Trichloroethane	97	4.683	4.682	(0.894)	3643119	1107.87	1100(A)
$ 42	1,2-Dichloroethane-d4	102	4.943	4.949	(0.944)	8665	57.2925	57
M 50	1,2-Dichloroethene (Total)	96				8939	7.44344	7.4
* 46	Fluorobenzene	96	5.236	5.239	(1.000)	116111	50.0000	
47	Trichloroethene	130	5.567	5.563	(1.063)	983361	781.797	780(A)
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	182154	43.4414	43
* 68	Chlorobenzene-d5	117	8.223	8.226	(1.000)	211667	50.0000	
70	Chlorobenzene	112	8.255	8.255	(1.004)	10332	2.67561	2.7(Q)
$ 79	Bromofluorobenzene	95	9.525	9.525	(1.158)	144447	50.5379	50
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	121841	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d
Report Date: 02-Jul-2014 14:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5751.d
Lab Smp Id: N1082-13A Client Smp ID: MW-22S_6/19/14
Inj Date : 25-JUN-2014 17:20
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-13A,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:13 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 77
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

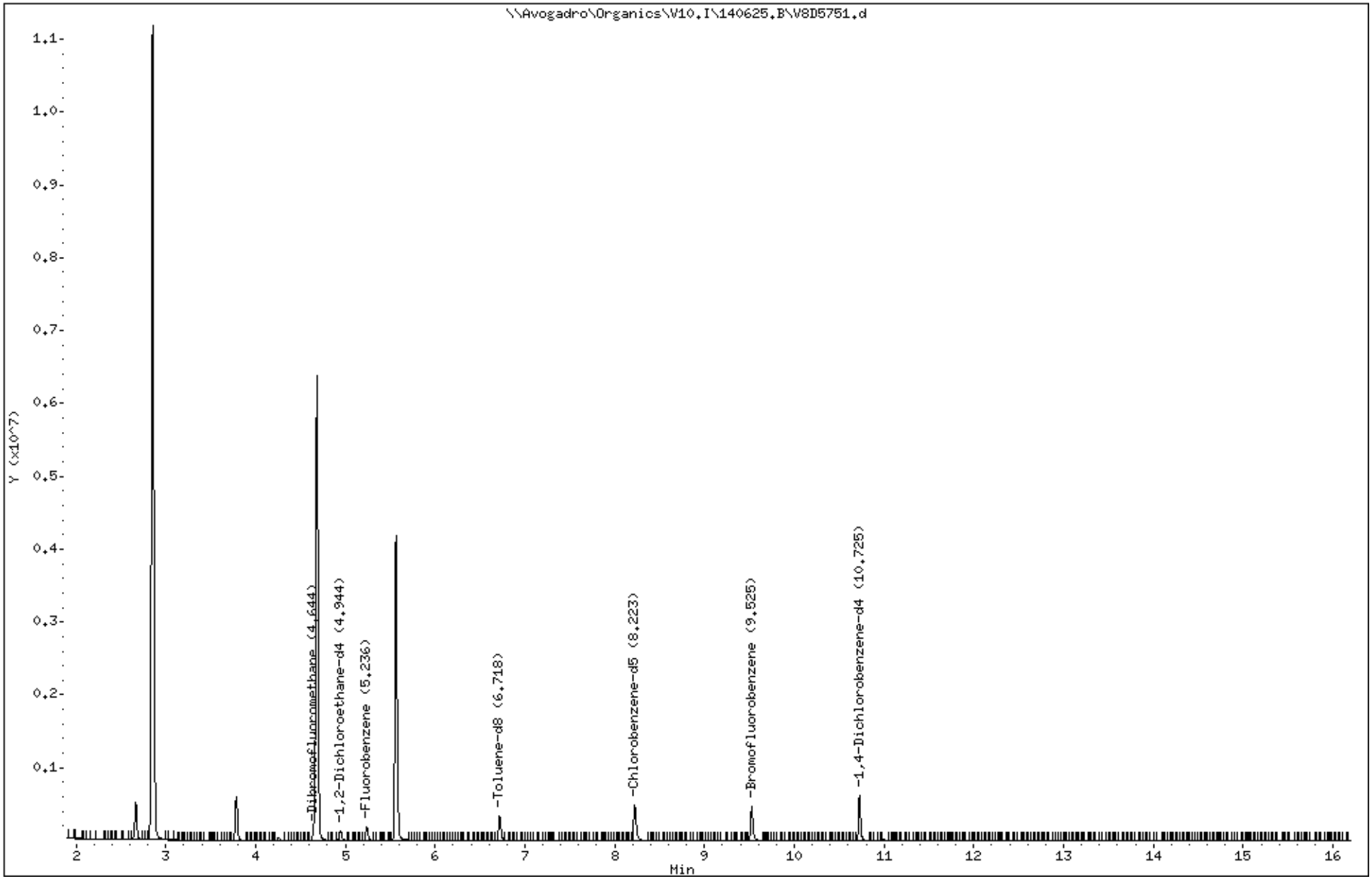
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

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

ISTD	RT	AREA	AMOUNT
* 46 Fluorobenzene	5.236	346825	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethane, 1,2-dichloro-1,1,2-trifluoro-			CAS #: 354-23-4				
2.667	853452	123.037723	120	95	NIST2002.L	24345	46

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d
Date : 25-JUN-2014 17:20
Client ID: MW-22S_6/19/14
Instrument: V10.i
Sample Info: 5ML,N1082-13A,,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

Date : 25-JUN-2014 17:20

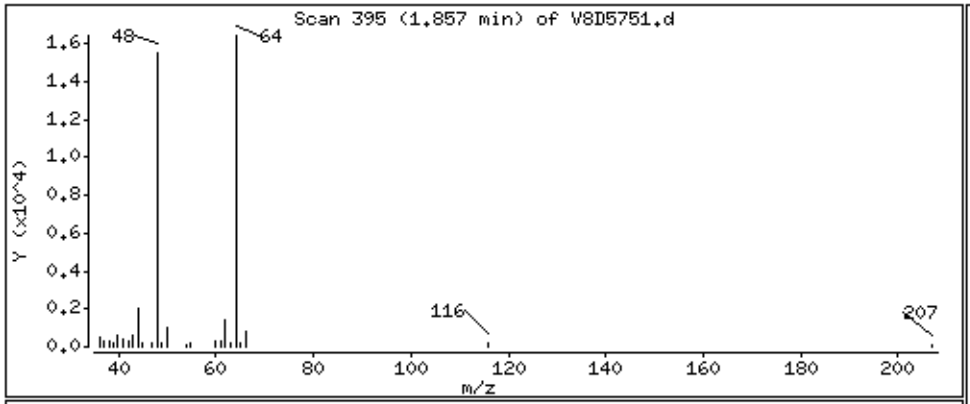
Client ID: MW-22S_6/19/14 Instrument: V10.i

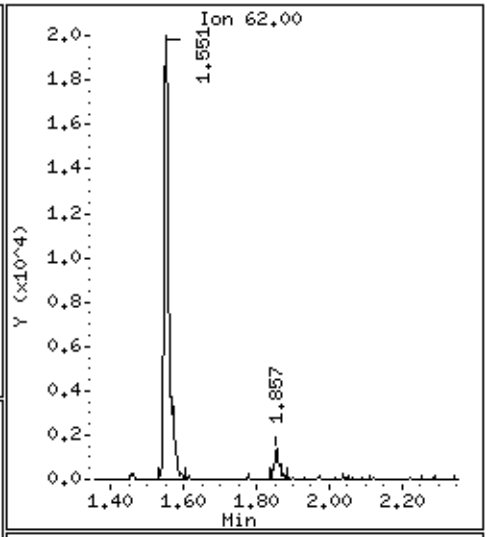
Sample Info: 5ML,N1082-13A,,77766

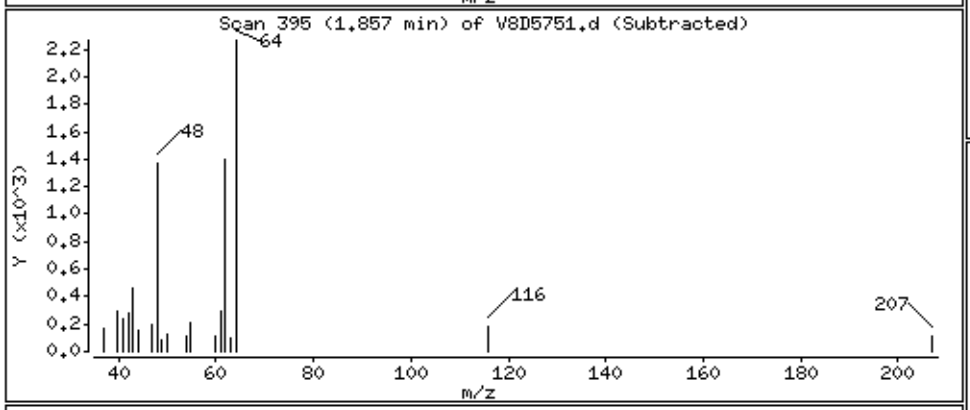
Purge Volume: 5.0 Operator: WL SRC: LIMS

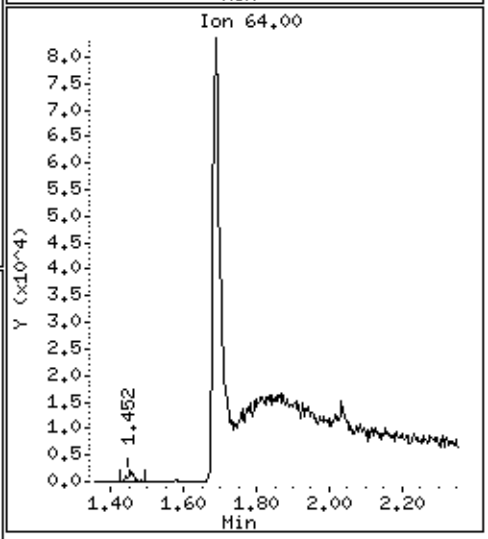
Column phase: DB-624 Column diameter: 0.25

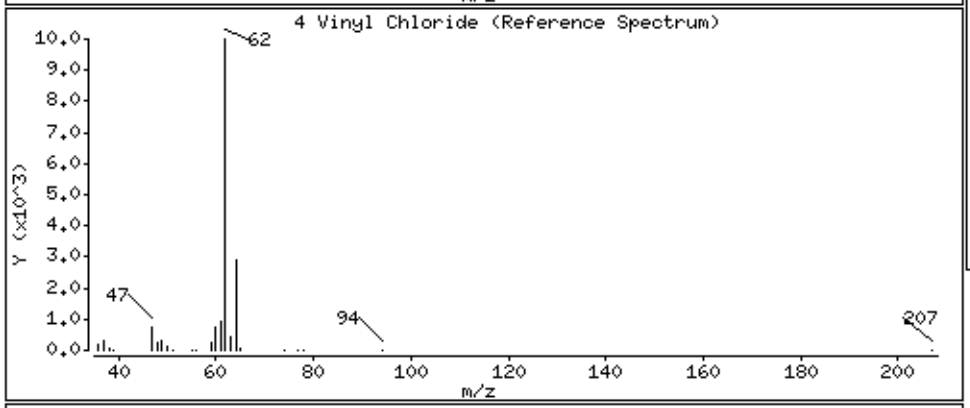
4 Vinyl Chloride Concentration: 0.76 ug/L

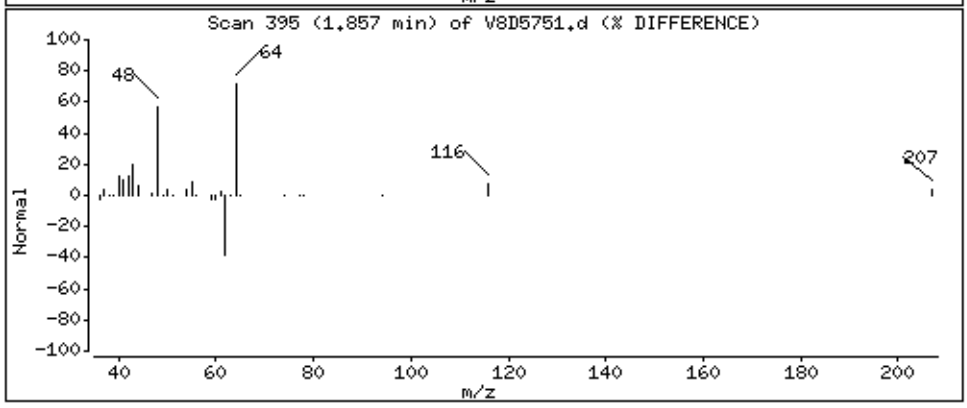












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

Date : 25-JUN-2014 17:20

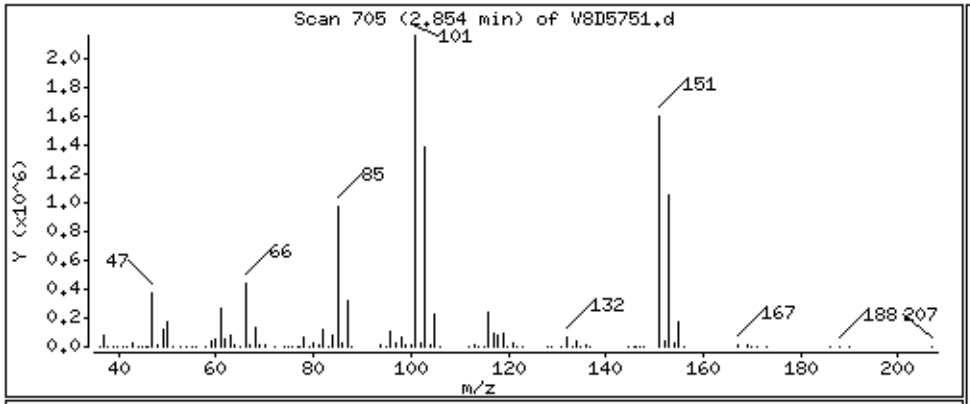
Client ID: MW-22S_6/19/14 Instrument: V10.i

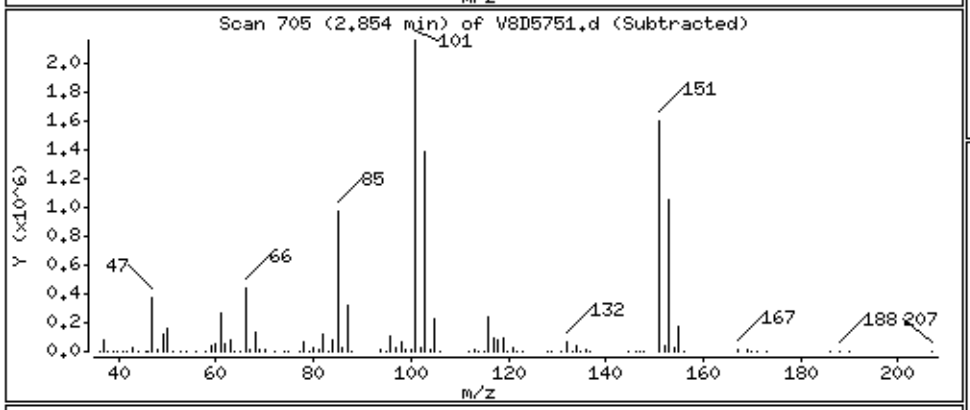
Sample Info: 5ML,N1082-13A,,77766

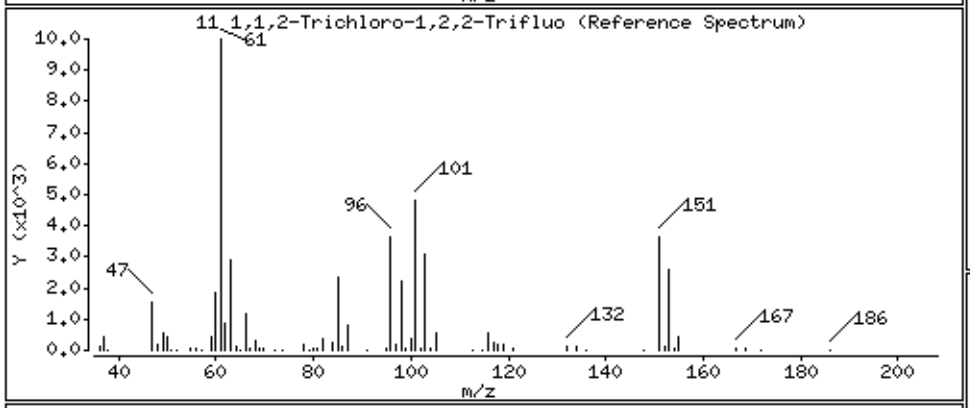
Purge Volume: 5.0 Operator: WL SRC: LIMS

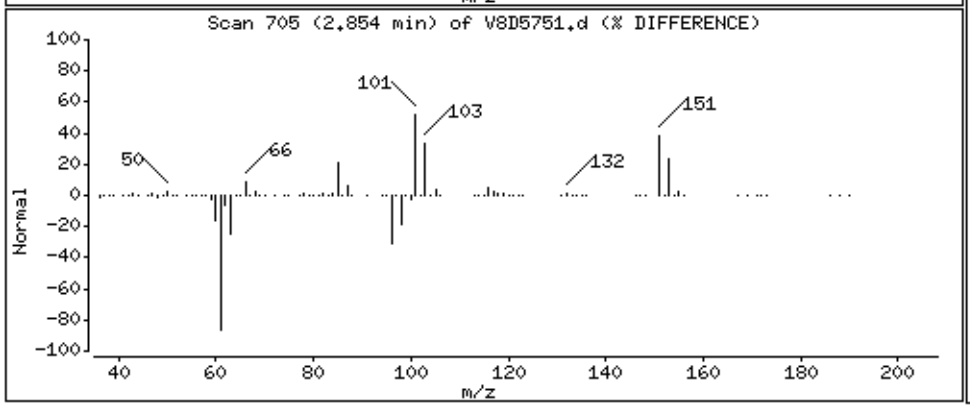
Column phase: DB-624 Column diameter: 0.25

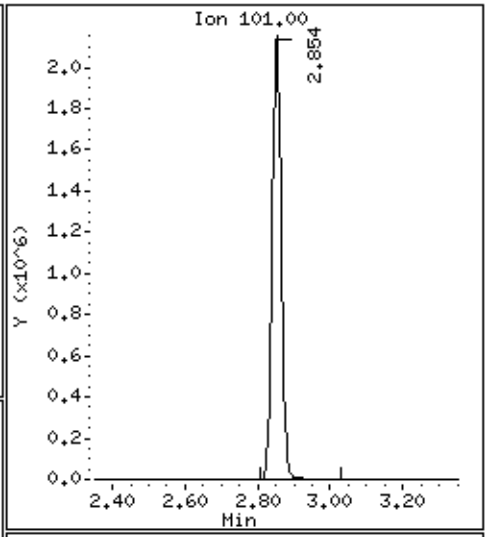
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 2300 ug/L

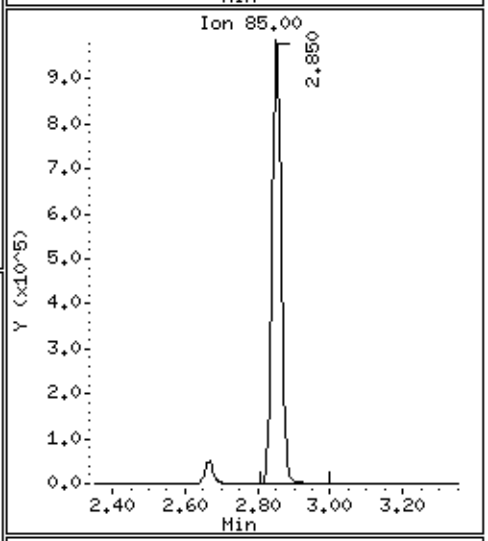


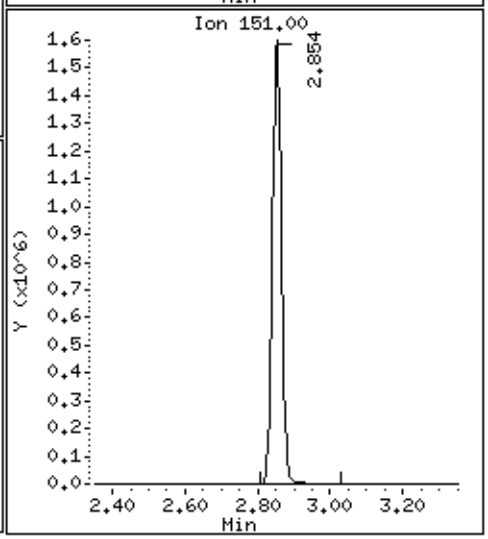












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

Date : 25-JUN-2014 17:20

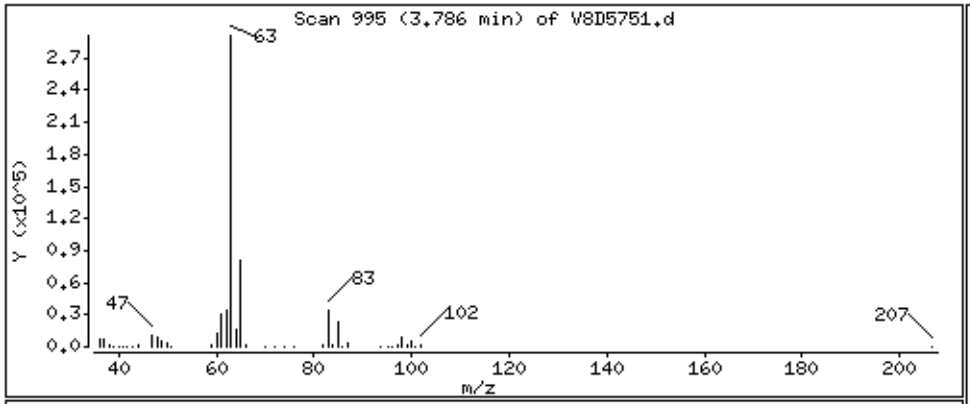
Client ID: MW-22S_6/19/14 Instrument: V10.i

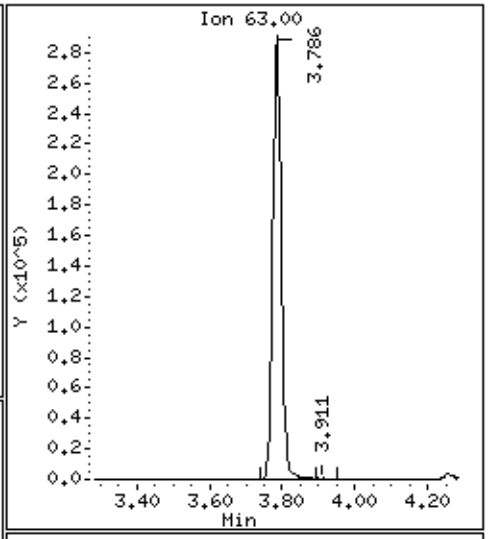
Sample Info: 5ML,N1082-13A,,77766

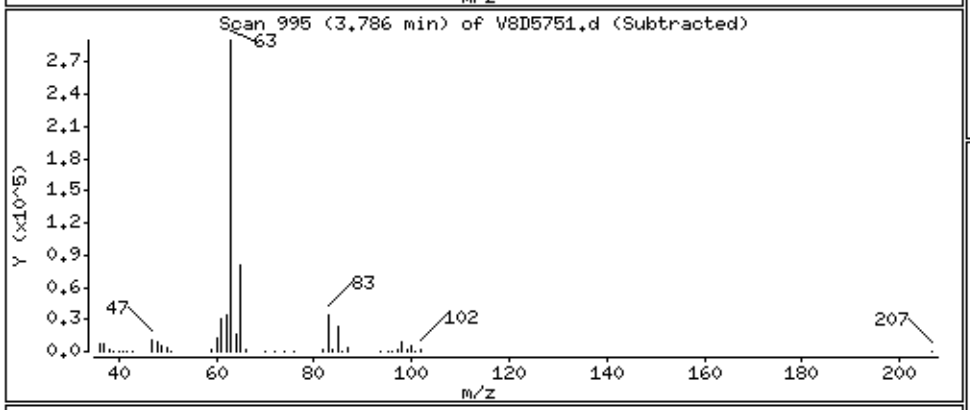
Purge Volume: 5.0 Operator: WL SRC: LIMS

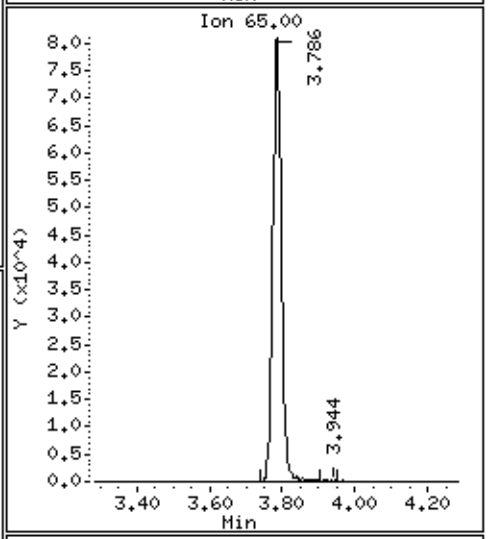
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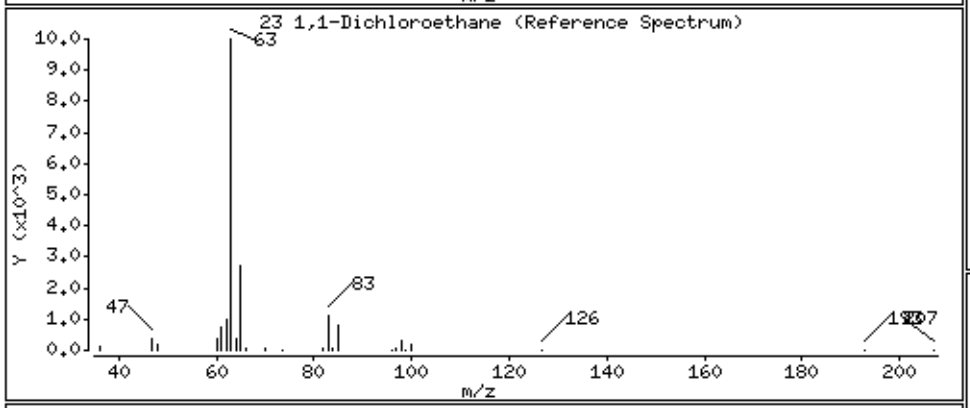
23 1,1-Dichloroethane Concentration: 150 ug/L

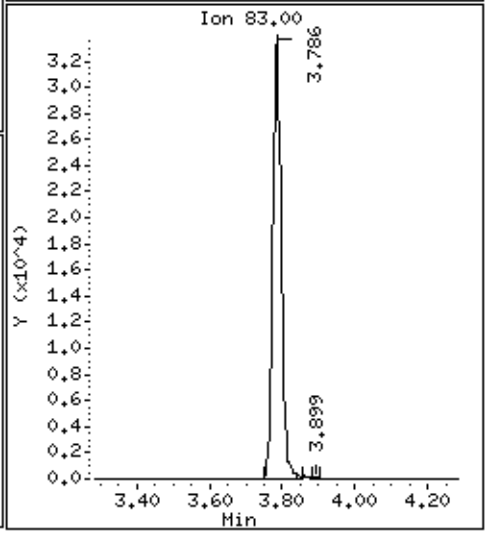


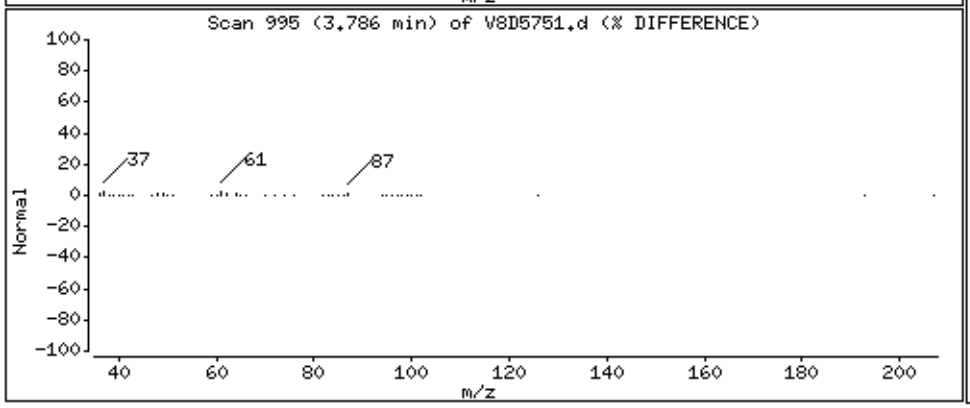












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

Date : 25-JUN-2014 17:20

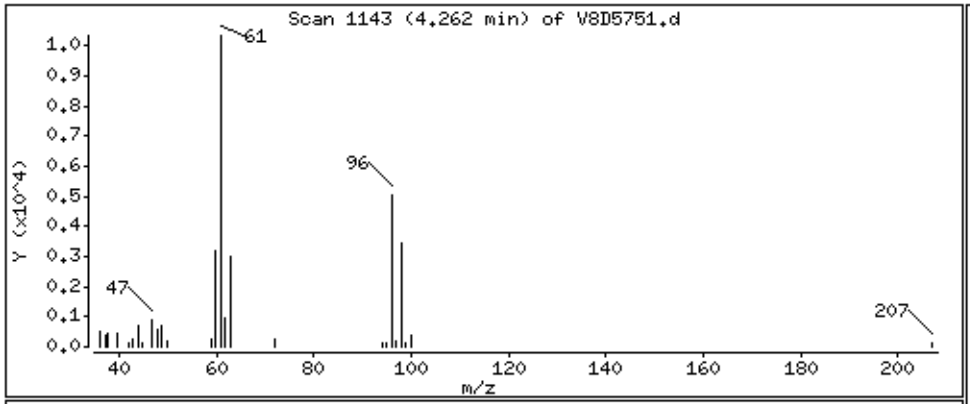
Client ID: MW-22S_6/19/14 Instrument: V10.i

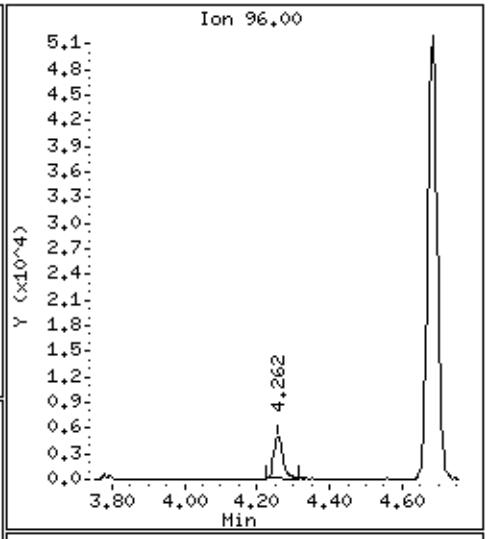
Sample Info: 5ML,N1082-13A,,77766

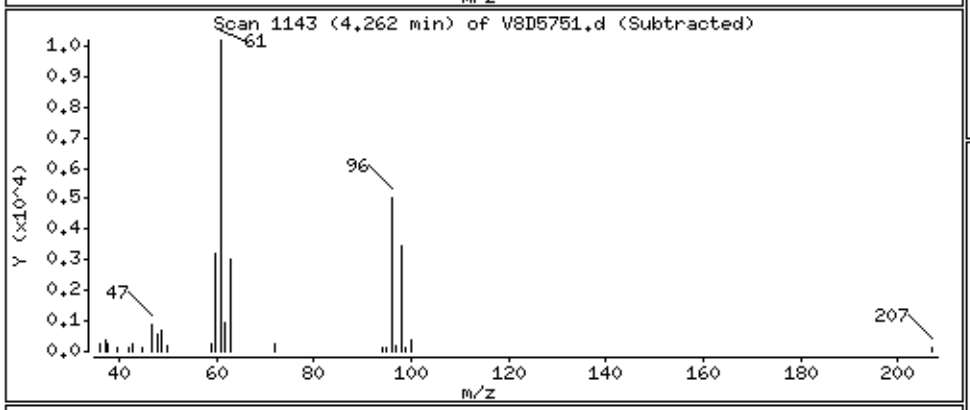
Purge Volume: 5.0 Operator: WL SRC: LIMS

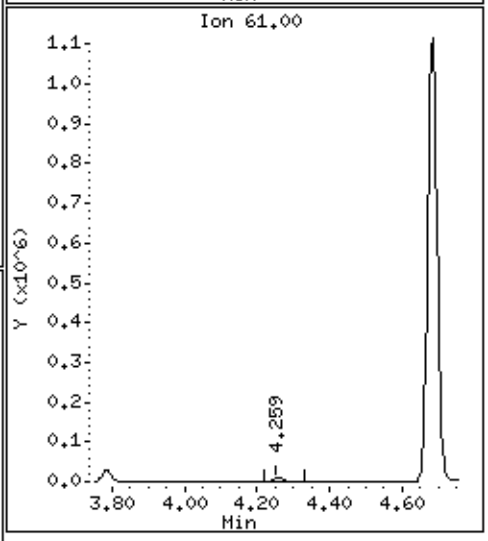
Column phase: DB-624 Column diameter: 0.25

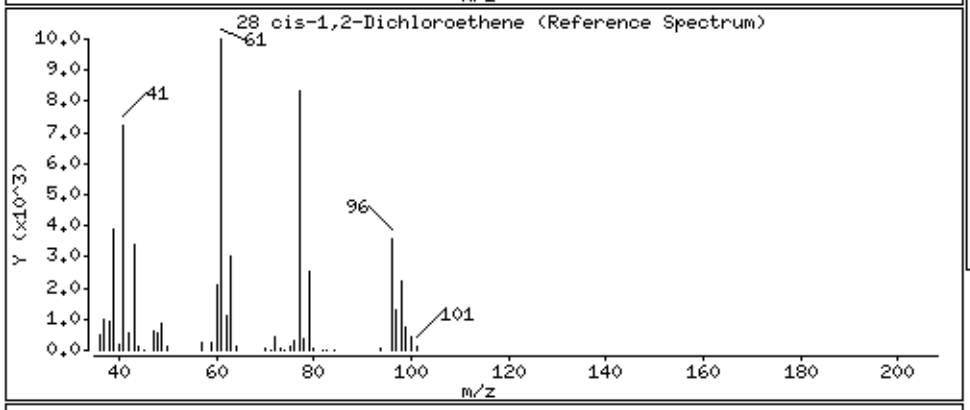
28 cis-1,2-Dichloroethene Concentration: 7.4 ug/L

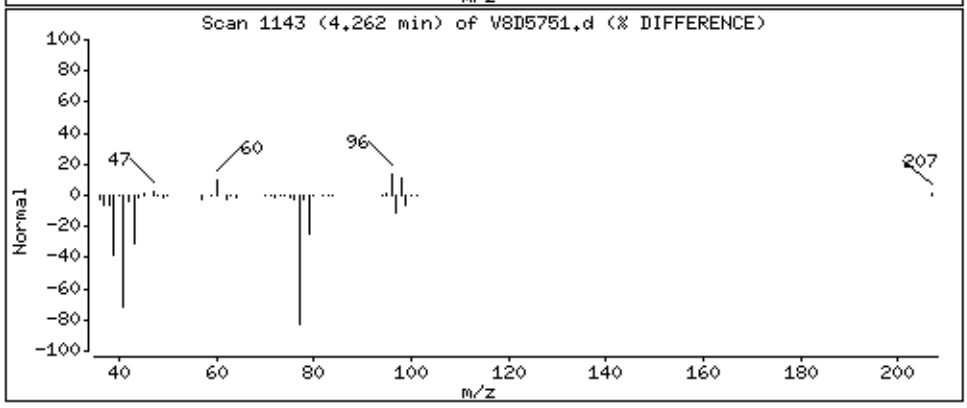












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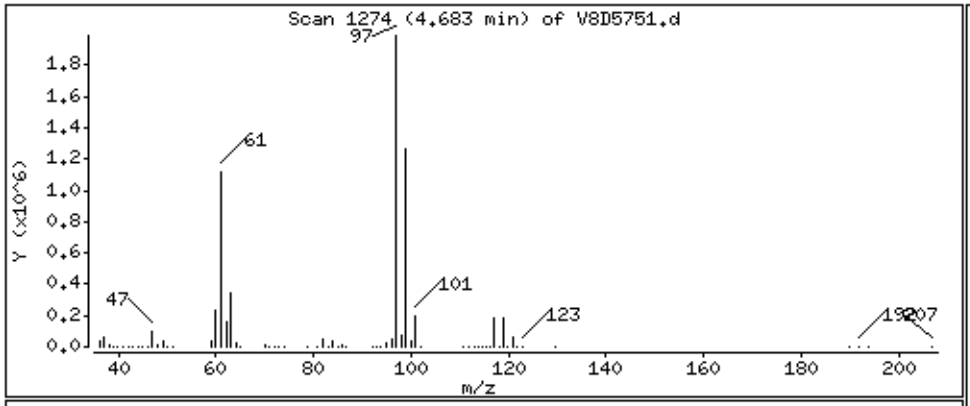
Client ID: MW-22S_6/19/14 Instrument: V10.i

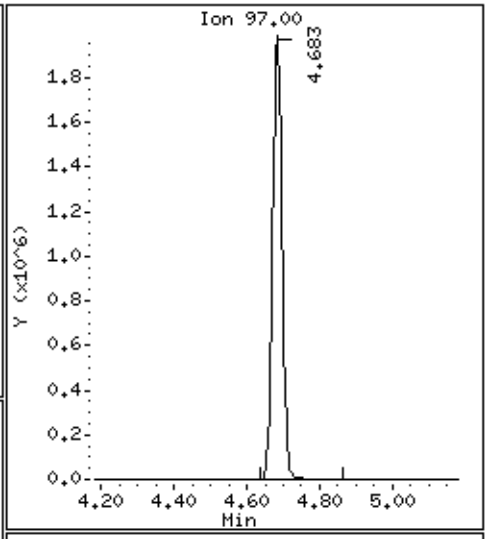
Sample Info: 5ML,N1082-13A,,77766

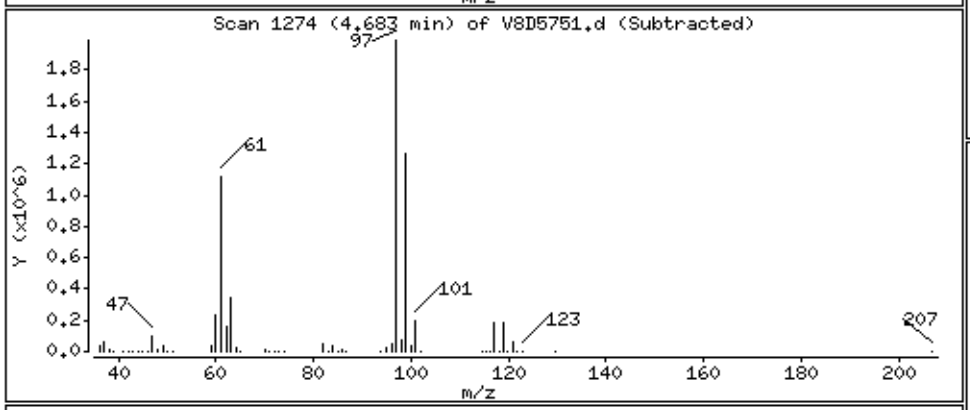
Purge Volume: 5.0 Operator: WL SRC: LIMS

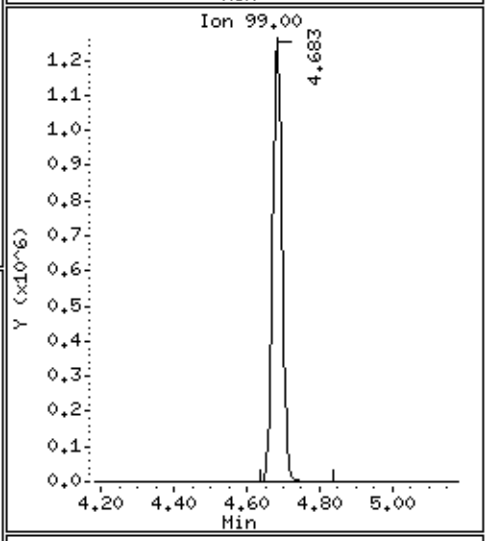
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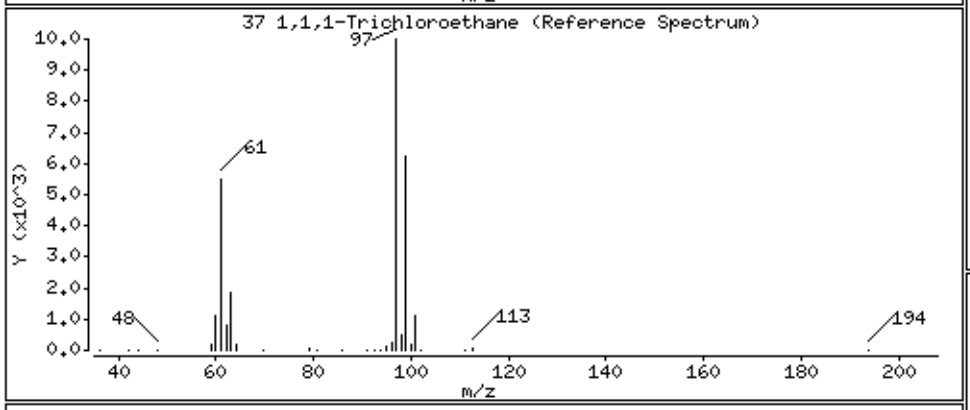
37 1,1,1-Trichloroethane Concentration: 1100 ug/L

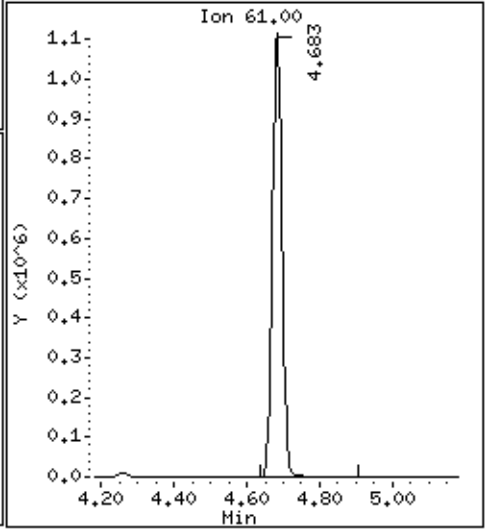


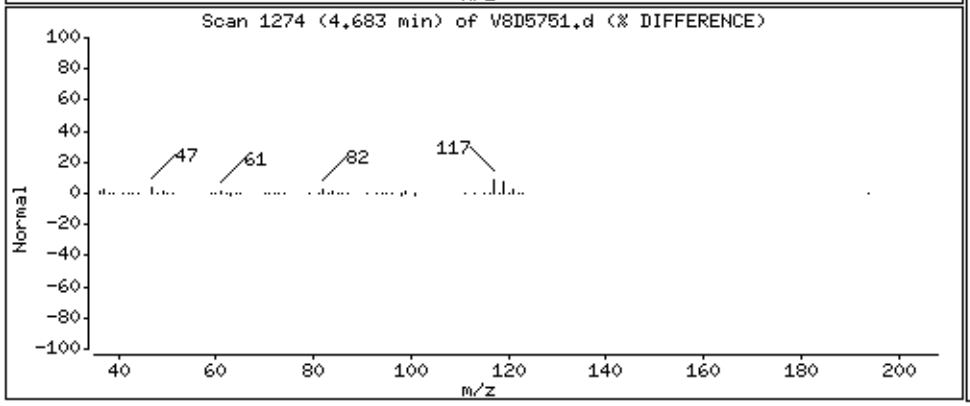












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

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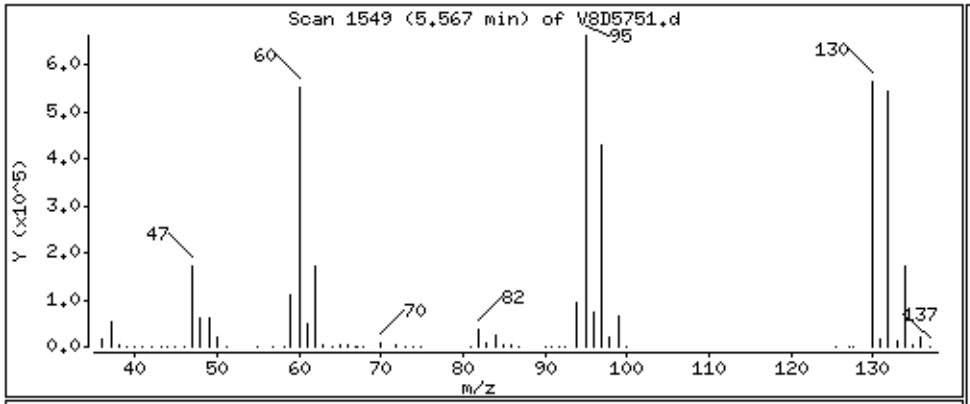
Client ID: MW-22S_6/19/14 Instrument: V10.i

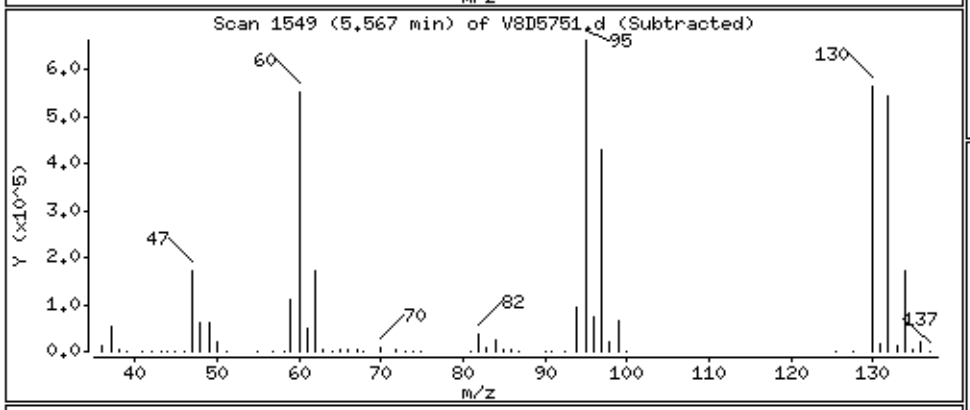
Sample Info: 5ML,N1082-13A,,77766

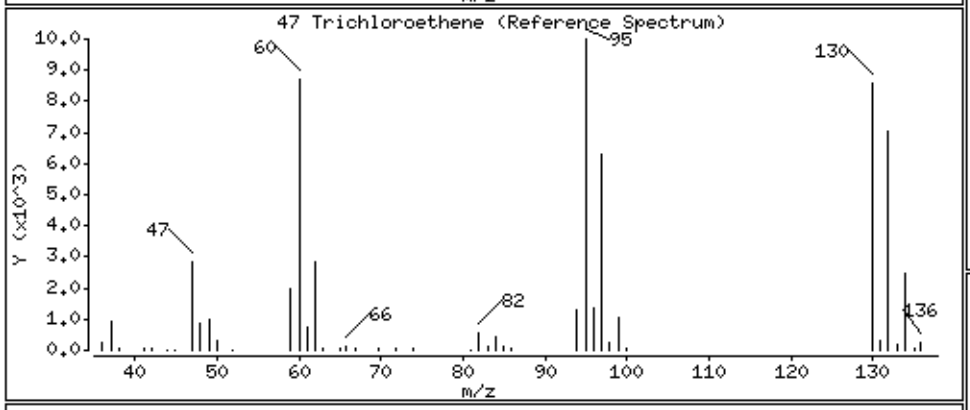
Purge Volume: 5.0 Operator: WL SRC: LIMS

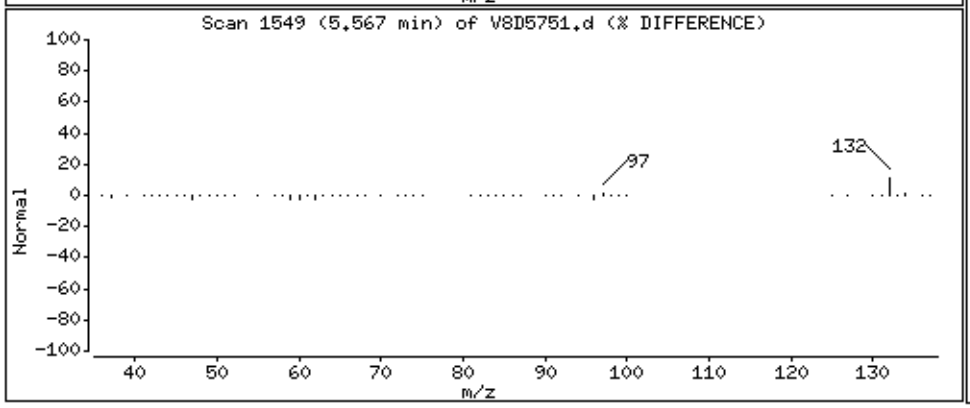
Column phase: DB-624 Column diameter: 0.25

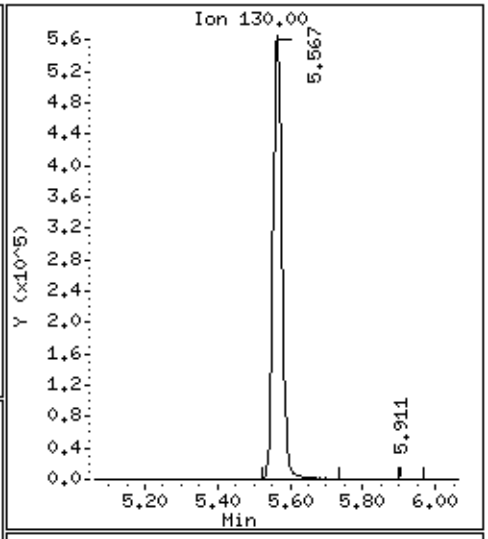
47 Trichloroethene Concentration: 780 ug/L

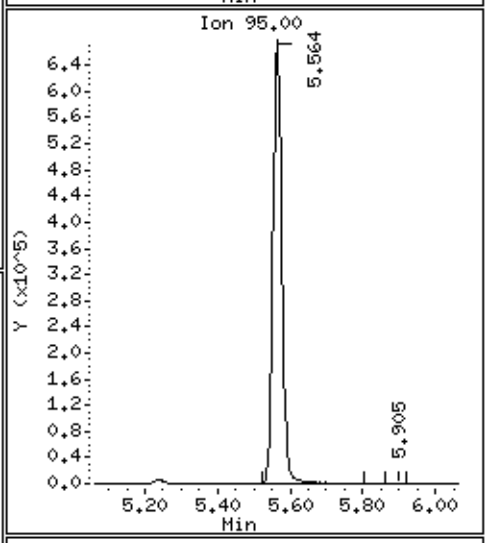


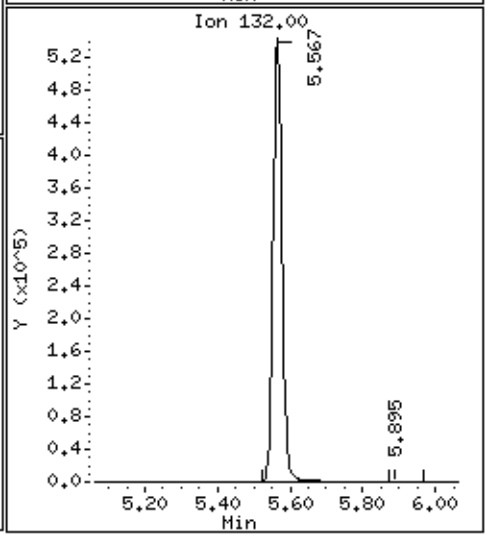












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

Date : 25-JUN-2014 17:20

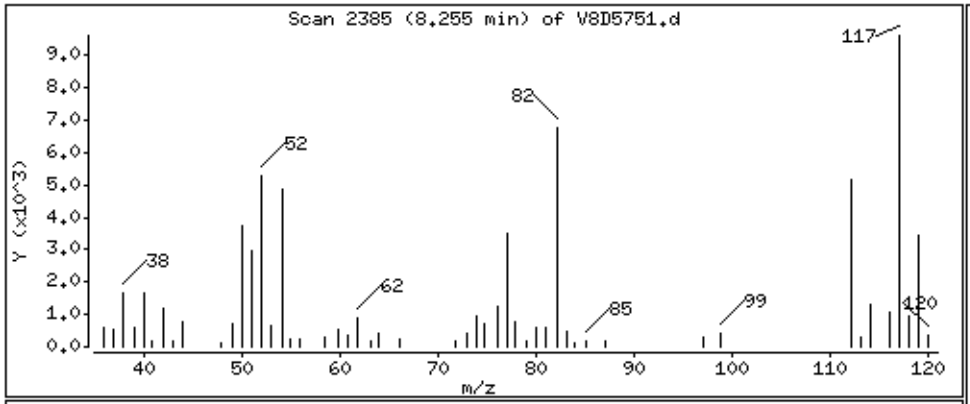
Client ID: MW-22S_6/19/14 Instrument: V10.i

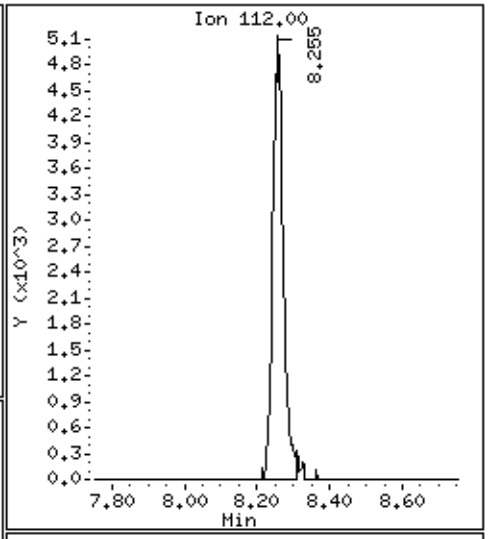
Sample Info: 5ML,N1082-13A,,77766

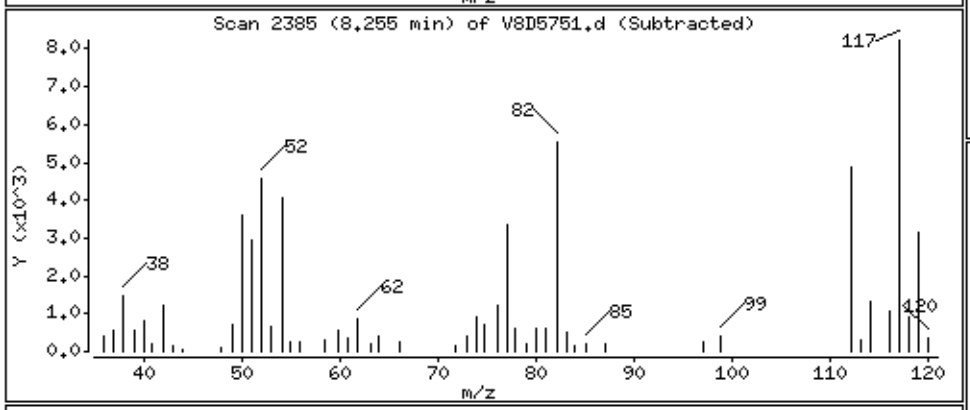
Purge Volume: 5.0 Operator: WL SRC: LIMS

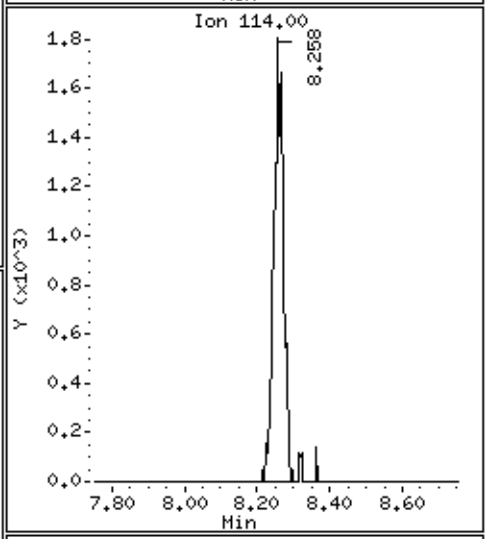
Column phase: DB-624 Column diameter: 0.25

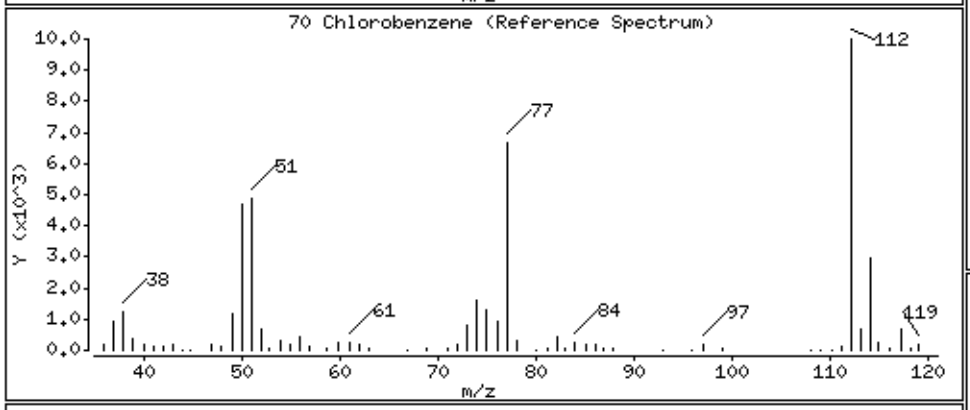
70 Chlorobenzene Concentration: 2.7 ug/L

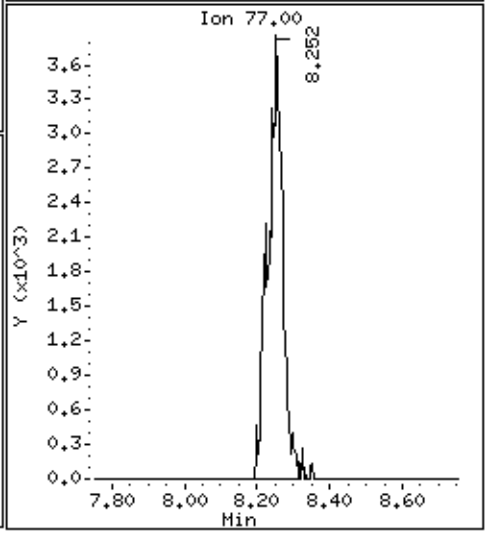


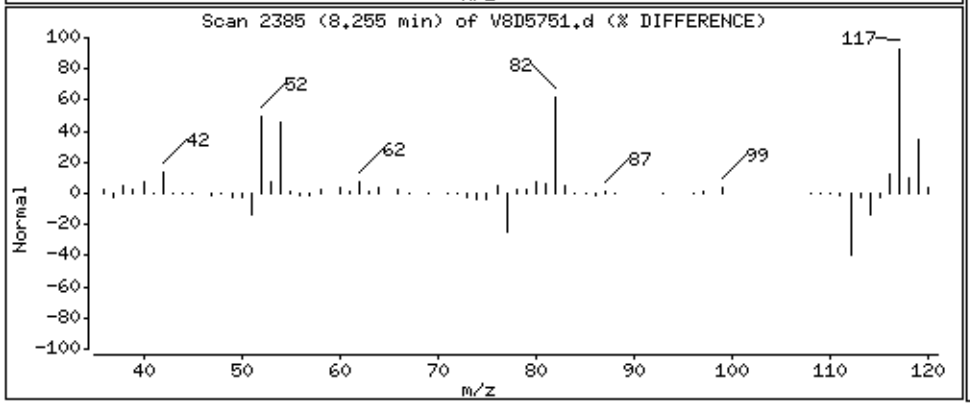












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5751.d

Date : 25-JUN-2014 17:20

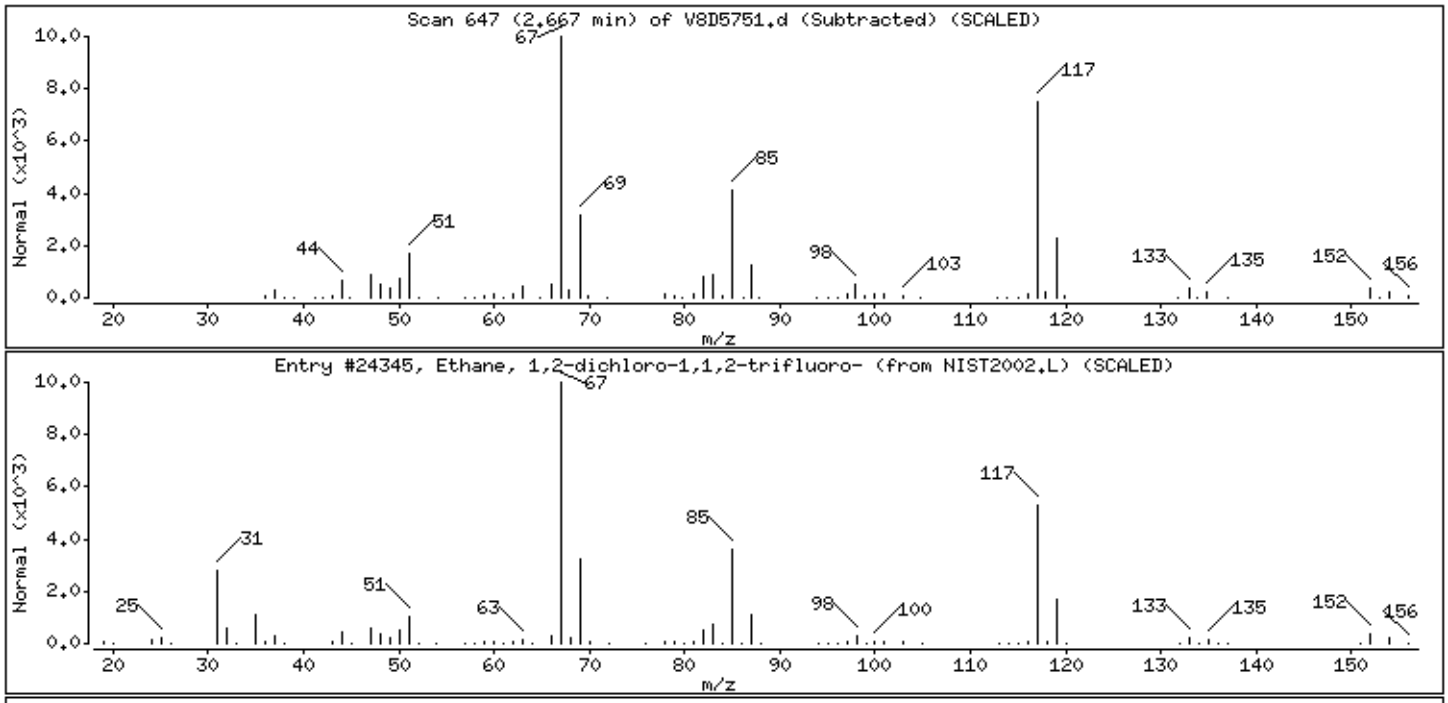
Client ID: MW-22S_6/19/14 Instrument: V10.i

Sample Info: 5ML,N1082-13A,,77766

Purge Volume: 5.0 Operator: WL SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,2-dichloro-1,1,2-trifluoro-	354-23-4	NIST2002.L	24345	95	C2HCl2F3	152



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9897.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	20	U
75-15-0	Carbon disulfide	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	110	D
108-05-4	Vinyl acetate	20	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	20	U
594-20-7	2,2-Dichloropropane	20	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	680	D
563-58-6	1,1-Dichloropropene	20	U
56-23-5	Carbon tetrachloride	20	U
107-06-2	1,2-Dichloroethane	20	U
71-43-2	Benzene	20	U
79-01-6	Trichloroethene	510	D
78-87-5	1,2-Dichloropropane	20	U
74-95-3	Dibromomethane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
142-28-9	1,3-Dichloropropane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9897.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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	20	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
630-20-6	1,1,1,2-Tetrachloroethane	20	U
100-41-4	Ethylbenzene	20	U
179601-23-1	m,p-Xylene	20	U
95-47-6	o-Xylene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-86-1	Bromobenzene	20	U
96-18-4	1,2,3-Trichloropropane	20	U
103-65-1	n-Propylbenzene	20	U
95-49-8	2-Chlorotoluene	20	U
108-67-8	1,3,5-Trimethylbenzene	20	U
106-43-4	4-Chlorotoluene	20	U
98-06-6	tert-Butylbenzene	20	U
95-63-6	1,2,4-Trimethylbenzene	20	U
135-98-8	sec-Butylbenzene	20	U
99-87-6	4-Isopropyltoluene	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
104-51-8	n-Butylbenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-68-3	Hexachlorobutadiene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1500	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-22S_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9897.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D
Report Date: 02-Jul-2014 14:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9897.D
Lab Smp Id: N1082-13ADL Client Smp ID: MW-22S_6/19/14DL
Inj Date : 26-JUN-2014 14:21
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-13ADL,,77805,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 50
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

Name	Value	Description
DF	20.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.296	2.276	(0.521)	309022	73.1895	1500
	23 1,1-Dichloroethane	63	3.054	3.054	(0.694)	36301	5.50314	110
$	36 Dibromofluoromethane	113	3.851	3.841	(0.875)	226661	49.8517	50
	37 1,1,1-Trichloroethane	97	3.881	3.871	(0.881)	194391	33.7877	680
$	42 1,2-Dichloroethane-d4	102	4.117	4.107	(0.935)	45302	49.3974	49
*	46 Fluorobenzene	96	4.403	4.393	(1.000)	684536	50.0000	
	47 Trichloroethene	130	4.708	4.708	(1.069)	87271	25.6505	510
$	58 Toluene-d8	98	5.811	5.801	(0.801)	639522	49.7811	50
*	68 Chlorobenzene-d5	117	7.258	7.248	(1.000)	480405	50.0000	
$	79 Bromofluorobenzene	95	8.548	8.538	(1.178)	265333	46.1270	46
*	92 1,4-Dichlorobenzene-d4	152	9.828	9.828	(1.000)	165408	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D
Report Date: 02-Jul-2014 14:19

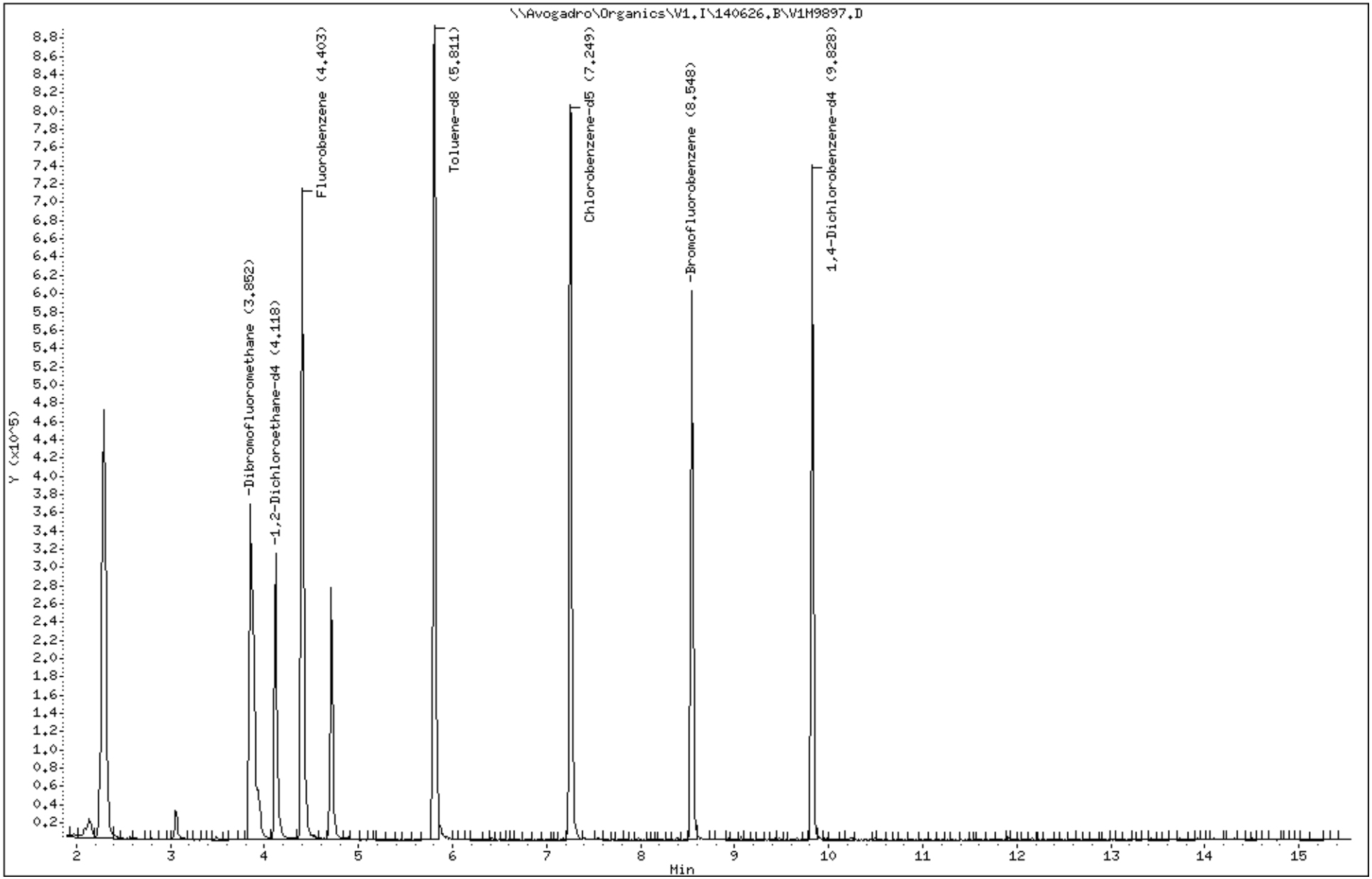
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9897.D
Lab Smp Id: N1082-13ADL Client Smp ID: MW-22S_6/19/14DL
Inj Date : 26-JUN-2014 14:21
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-13ADL,,77805,20
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 50
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D
Date : 26-JUN-2014 14:21
Client ID: MW-22S_6/19/14DL
Instrument: V1.i
Sample Info: 5G,N1082-13ADL,,77805,20
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D

Date : 26-JUN-2014 14:21

Client ID: MW-22S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-13ADL,,77805,20

Purge Volume: 5.0

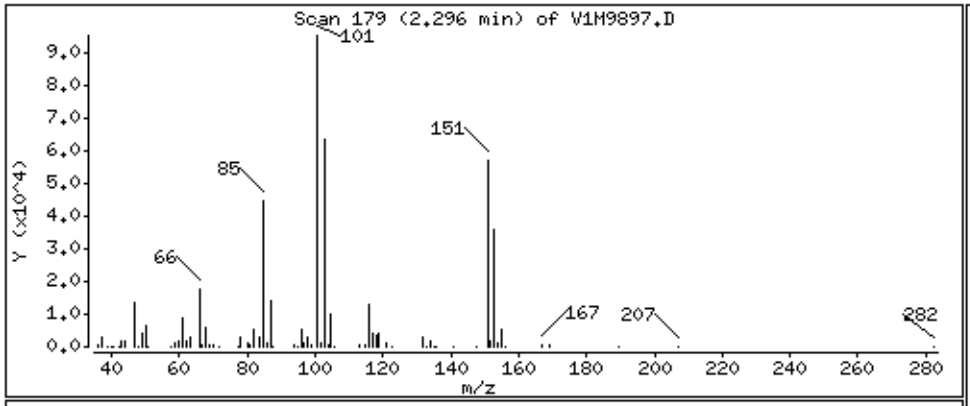
Operator: WL SRC: LIMS

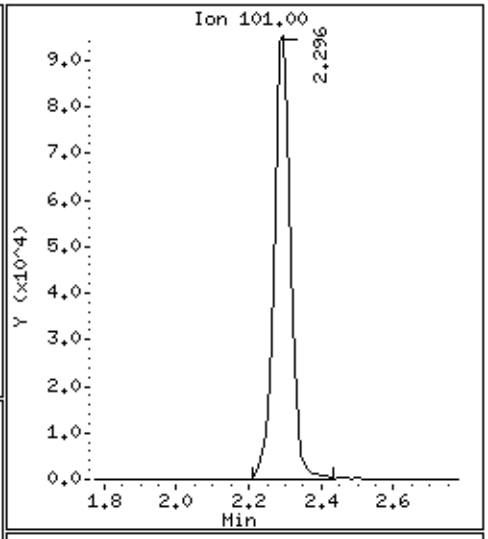
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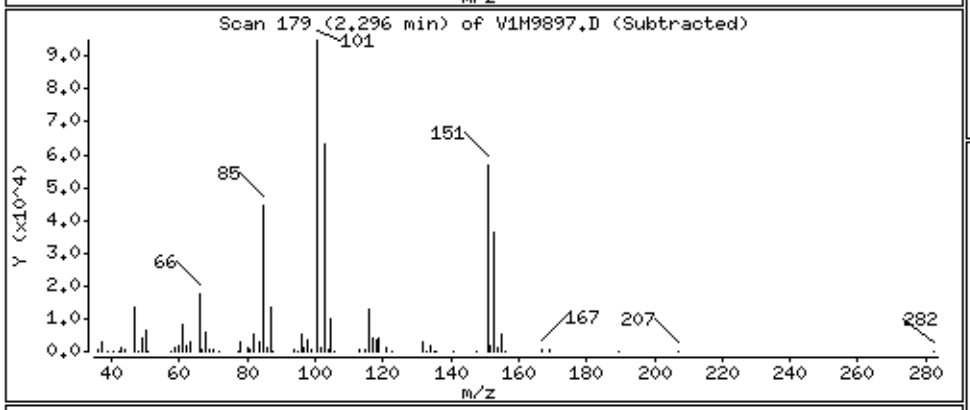
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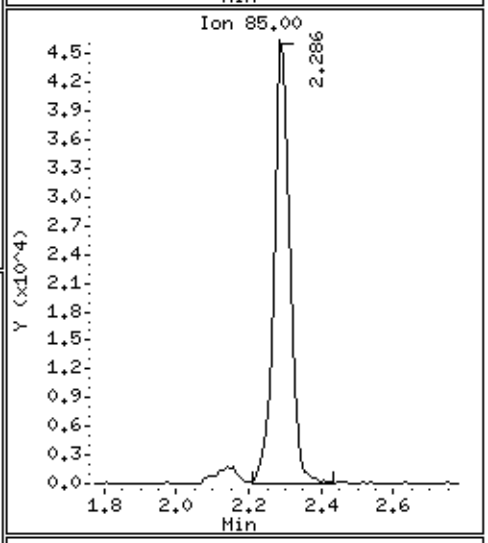
11 1,1,2-Trichloro-1,2,2-Trifluo

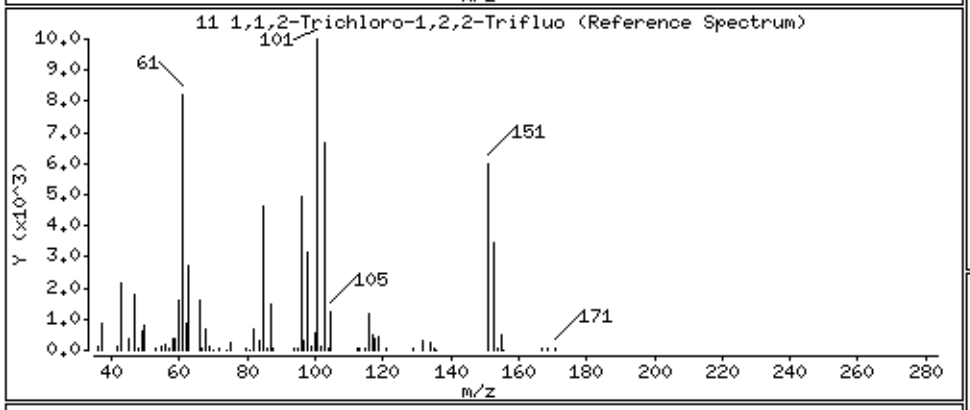
Concentration: 1500 ug/L

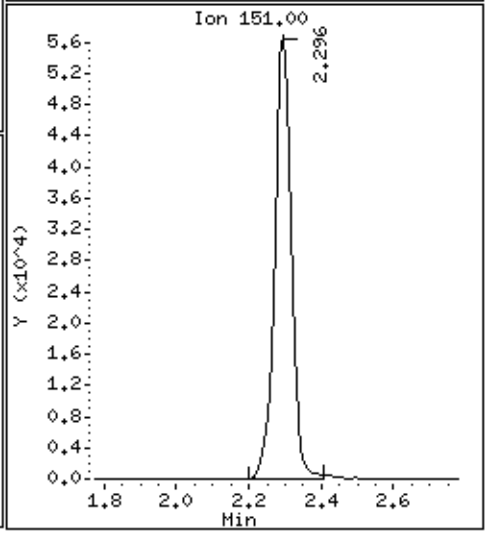


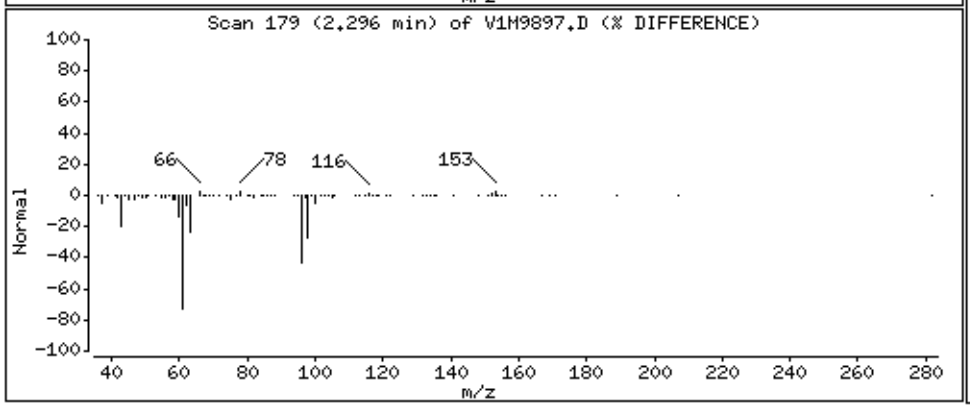












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D

Date : 26-JUN-2014 14:21

Client ID: MW-22S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-13ADL,,77805,20

Purge Volume: 5.0

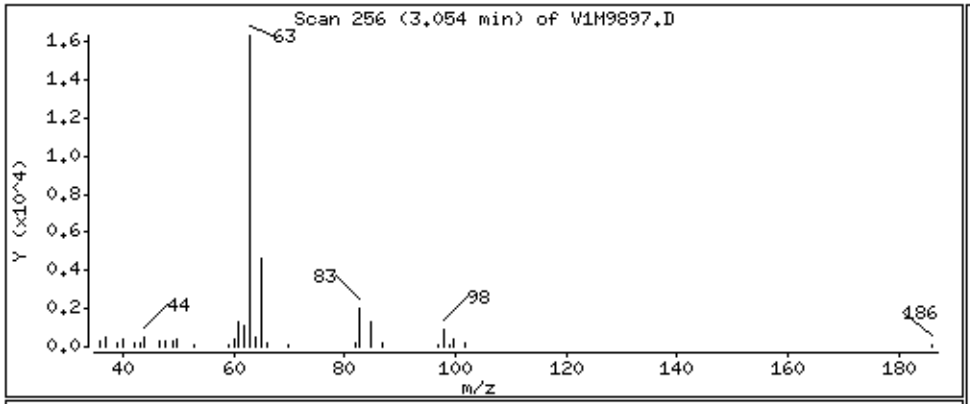
Operator: WL SRC: LIMS

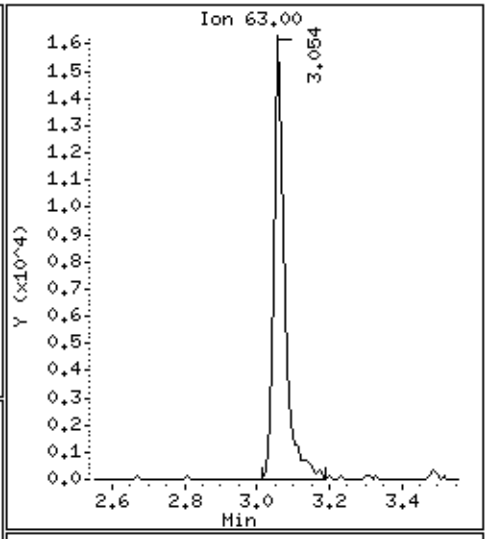
Column phase: DB-624

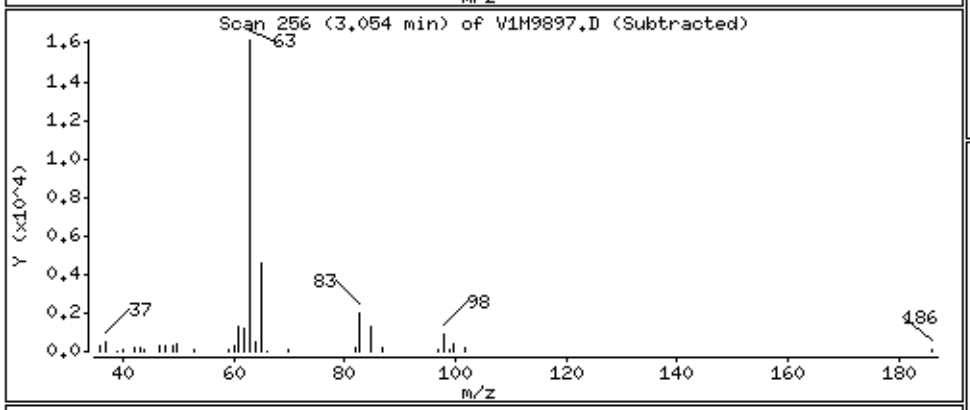
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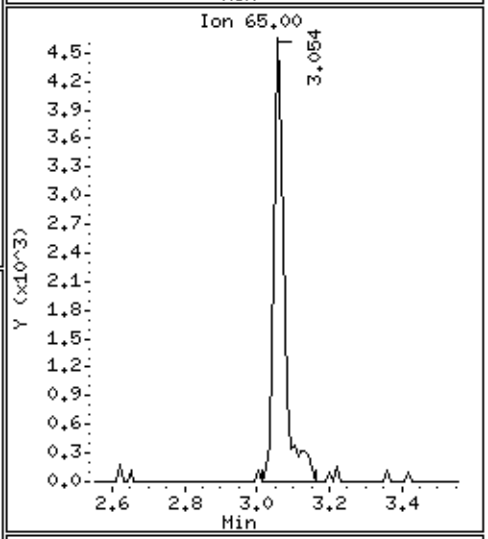
23 1,1-Dichloroethane

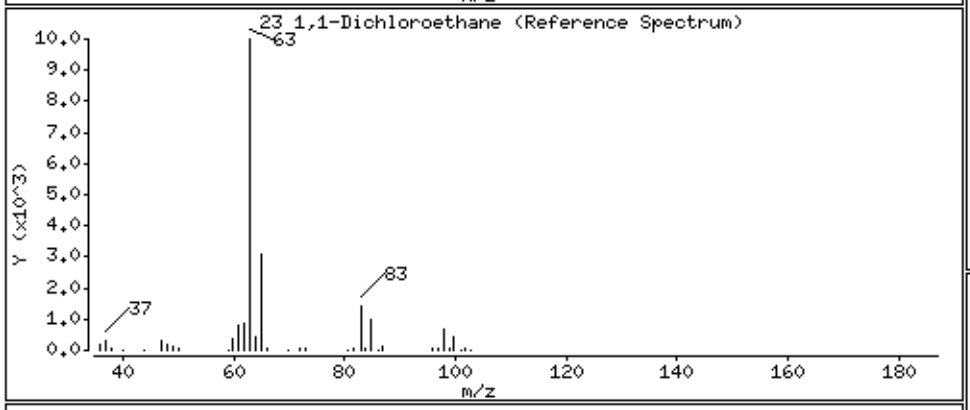
Concentration: 110 ug/L

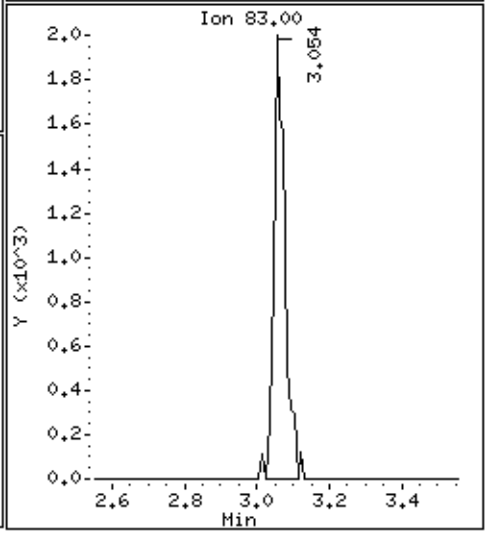


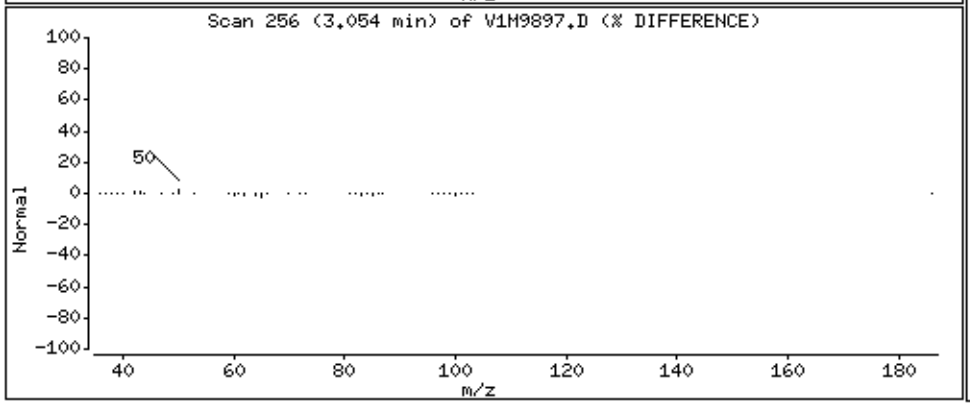












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D

Date : 26-JUN-2014 14:21

Client ID: MW-22S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-13ADL,,77805,20

Purge Volume: 5.0

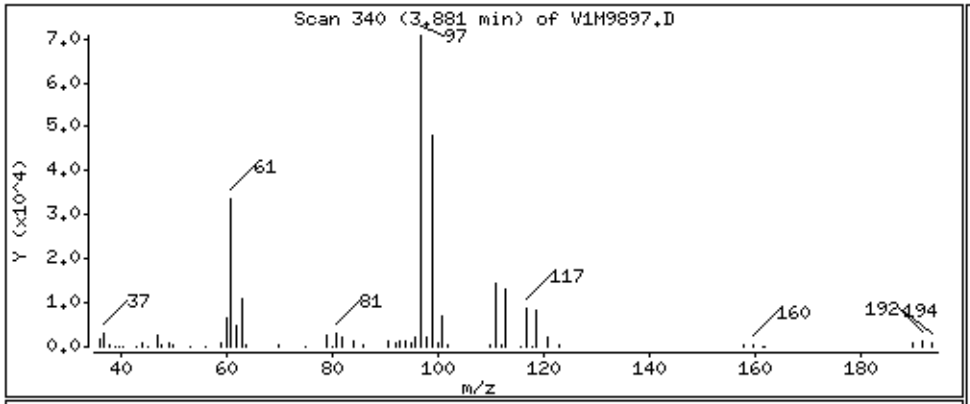
Operator: WL SRC: LIMS

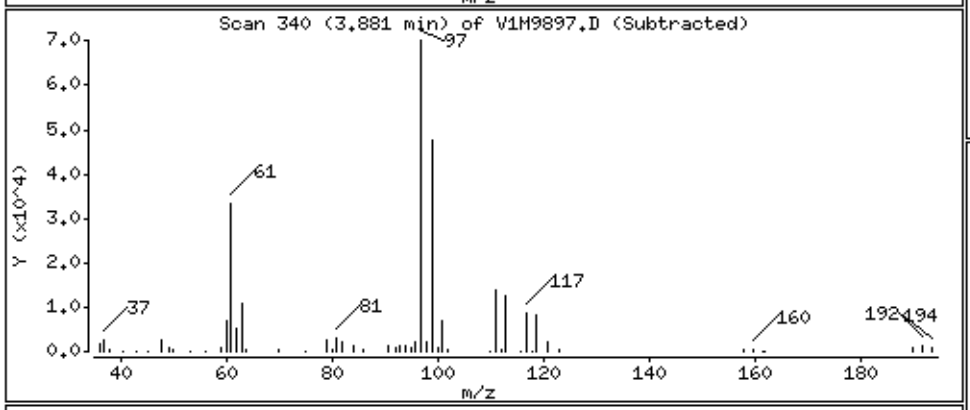
Column phase: DB-624

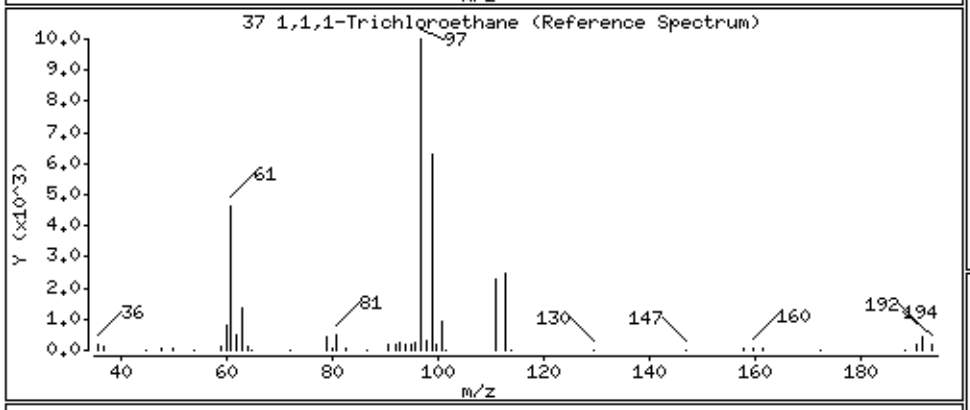
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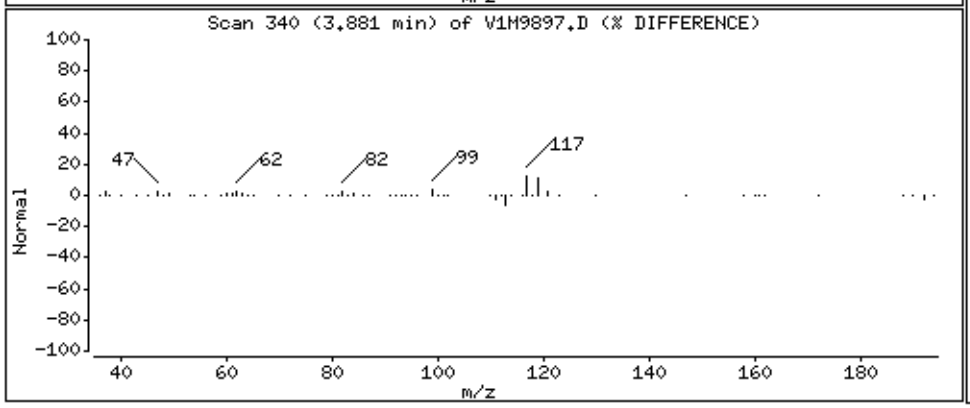
37 1,1,1-Trichloroethane

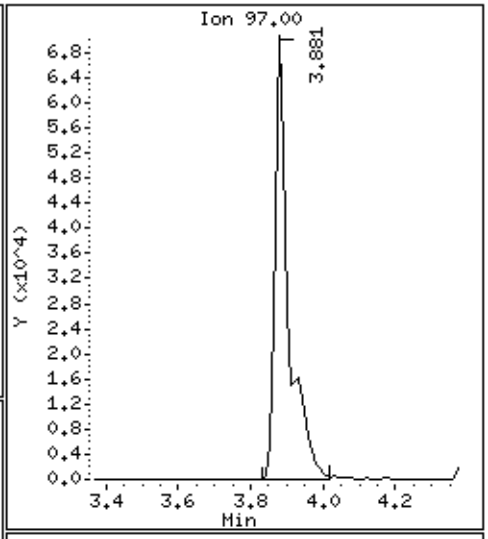
Concentration: 680 ug/L

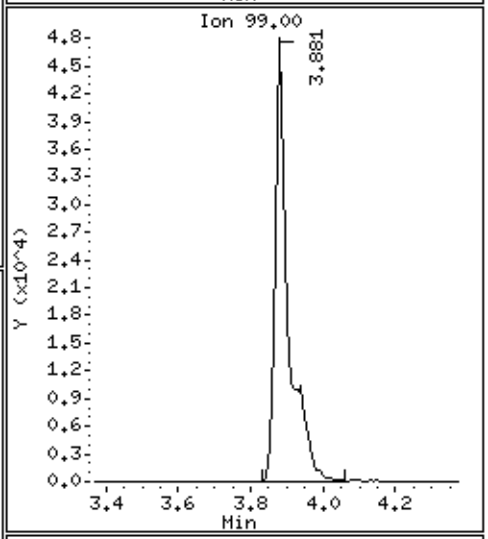


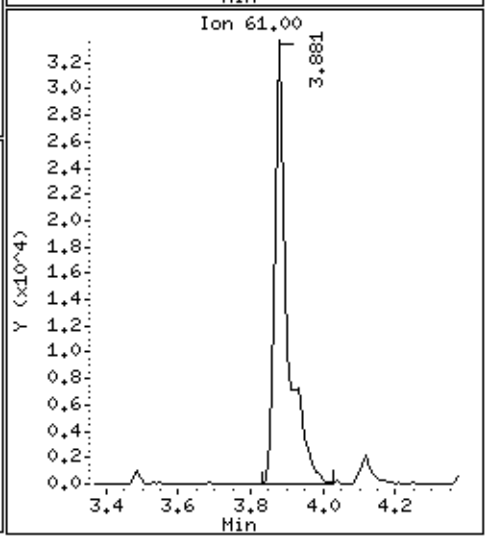












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9897.D

Date : 26-JUN-2014 14:21

Client ID: MW-22S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-13ADL,,77805,20

Purge Volume: 5.0

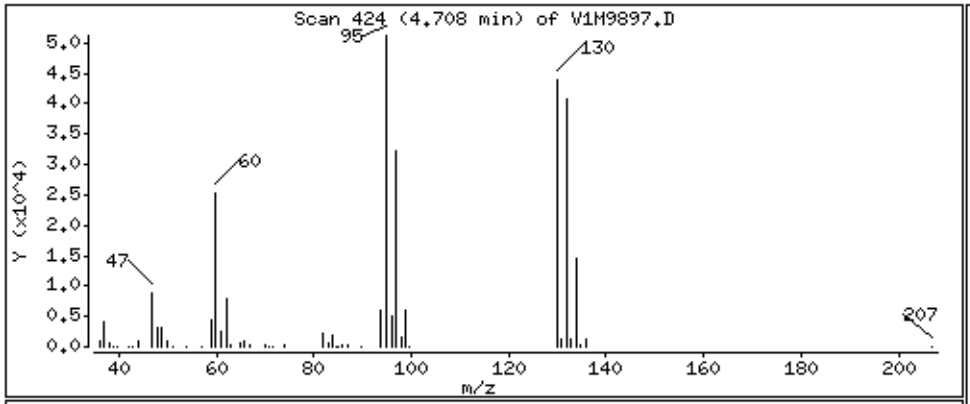
Operator: WL SRC: LIMS

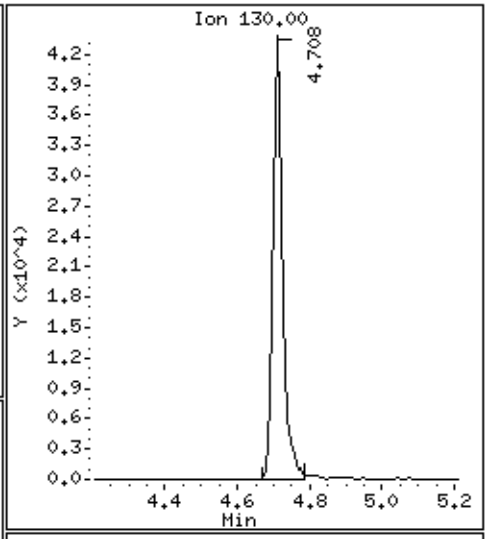
Column phase: DB-624

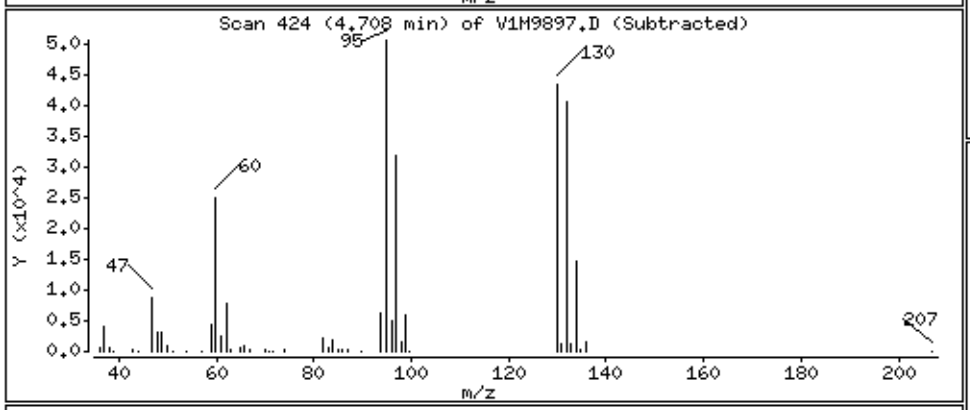
Column diameter: 0.25

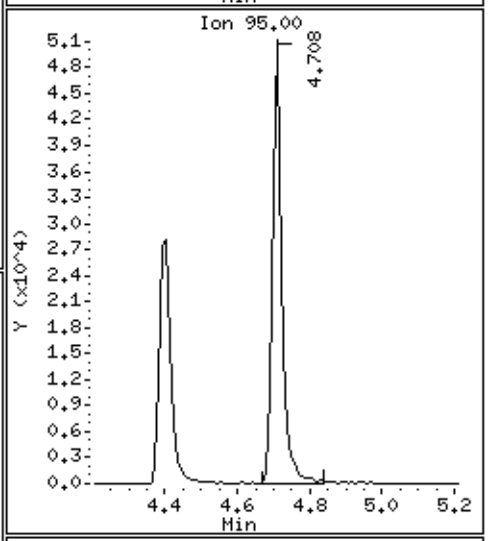
47 Trichloroethene

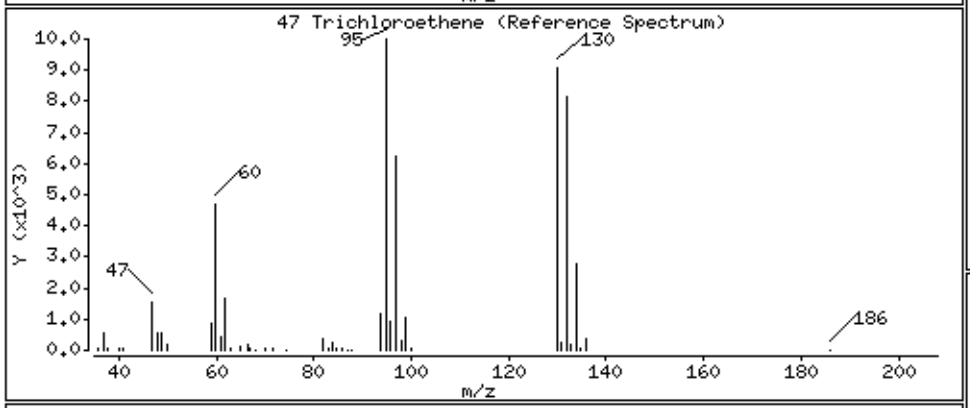
Concentration: 510 ug/L

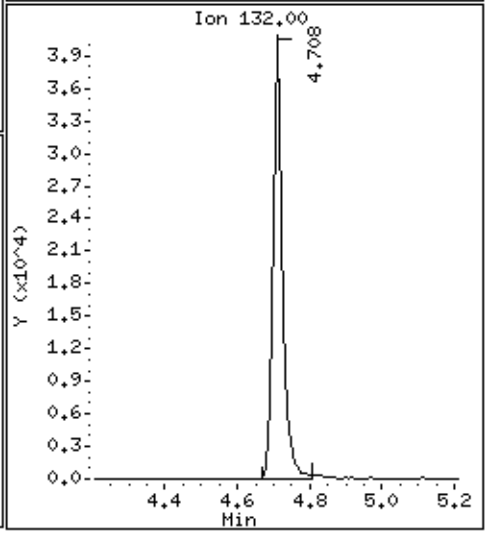


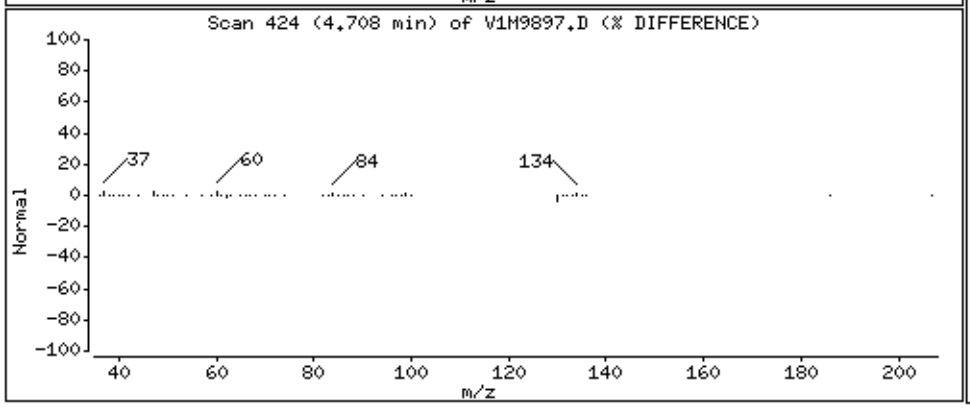












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21S_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5752.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	1.5	
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	66	
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	18	
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

EPA SAMPLE NO.

MW-21S_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5752.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	460	E

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21S_6/19/14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-14A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5752.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d
Report Date: 27-Jun-2014 14:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5752.d
Lab Smp Id: N1082-14A Client Smp ID: MW-21S_6/19/14
Inj Date : 25-JUN-2014 17:48
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-14A,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	724791	457.440	460(A)
23	1,1-Dichloroethane	63	3.789	3.785	(0.724)	4789	1.52550	1.5
$ 36	Dibromofluoromethane	113	4.647	4.647	(0.888)	56809	57.8801	58(R)
37	1,1,1-Trichloroethane	97	4.683	4.682	(0.894)	208026	65.5329	66
$ 42	1,2-Dichloroethane-d4	102	4.946	4.949	(0.945)	8347	57.1722	57
* 46	Fluorobenzene	96	5.236	5.239	(1.000)	112085	50.0000	
47	Trichloroethene	130	5.570	5.563	(1.064)	21305	17.5464	18
$ 58	Toluene-d8	98	6.718	6.718	(0.817)	180110	42.8232	43
* 68	Chlorobenzene-d5	117	8.223	8.226	(1.000)	212313	50.0000	
$ 79	Bromofluorobenzene	95	9.525	9.525	(1.158)	142278	49.6276	50
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	122123	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d
Report Date: 27-Jun-2014 14:01

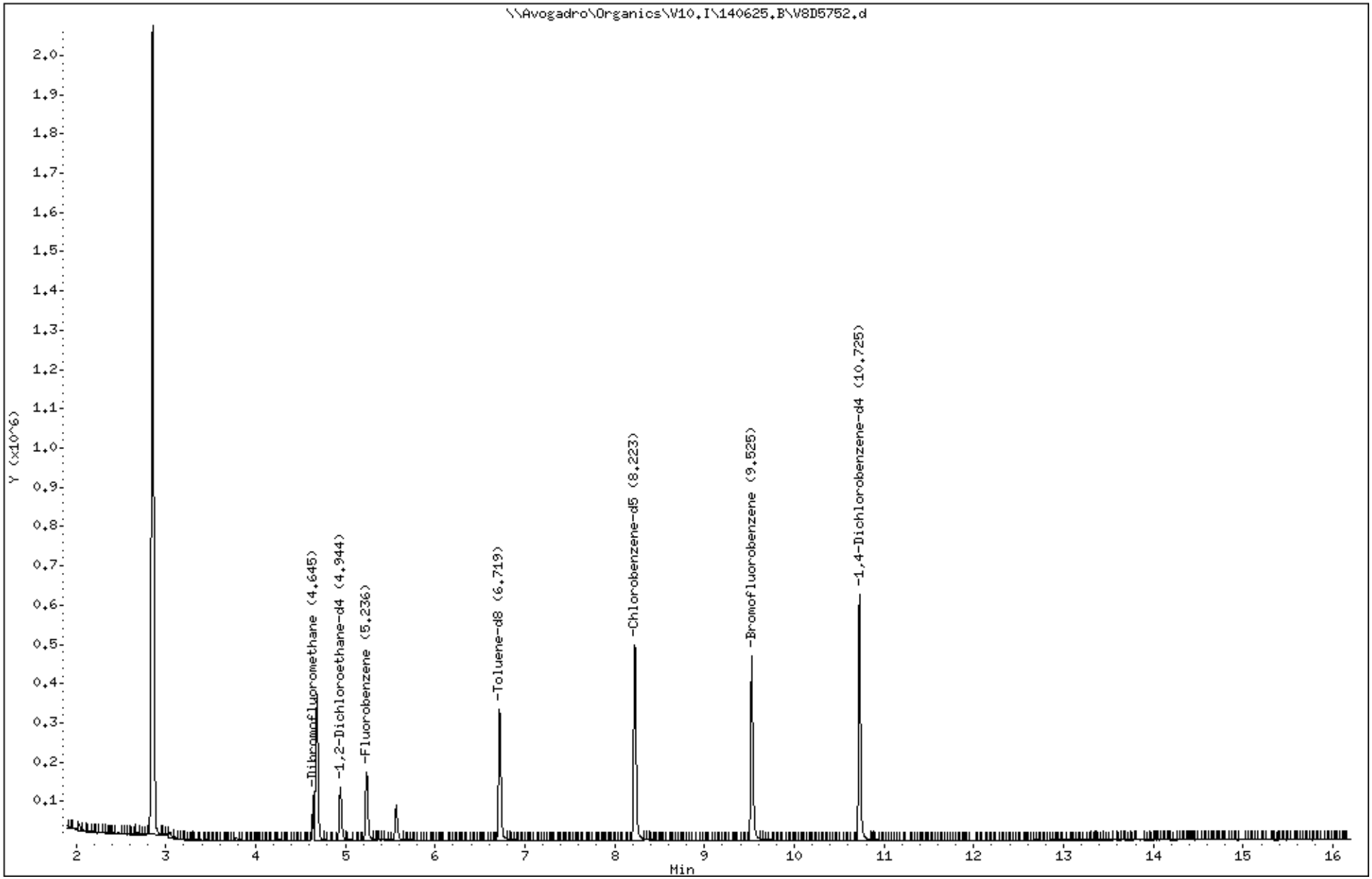
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5752.d
Lab Smp Id: N1082-14A Client Smp ID: MW-21S_6/19/14
Inj Date : 25-JUN-2014 17:48
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-14A,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 78
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d
Date : 25-JUN-2014 17:48
Client ID: MW-21S_6/19/14
Instrument: V10.i
Sample Info: 5ML,N1082-14A,,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d

Date : 25-JUN-2014 17:48

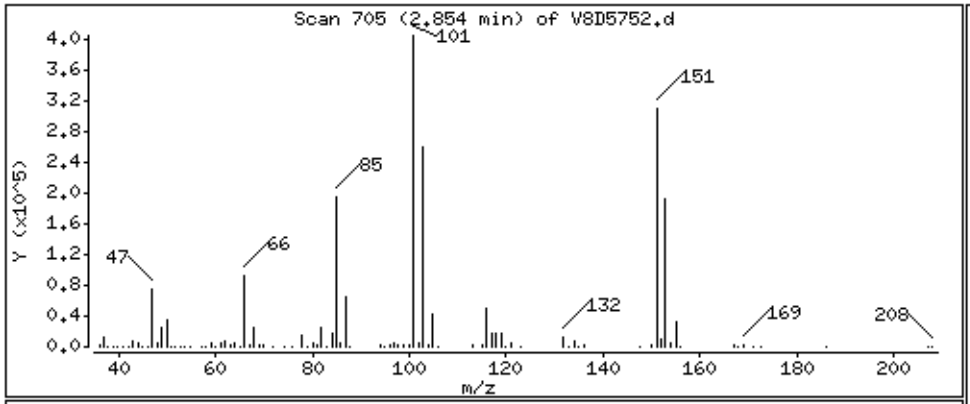
Client ID: MW-21S_6/19/14 Instrument: V10.i

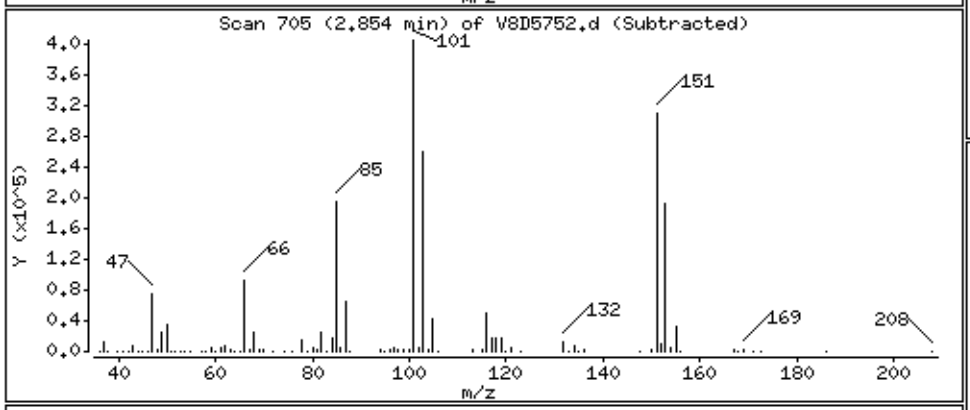
Sample Info: 5ML,N1082-14A,,77766

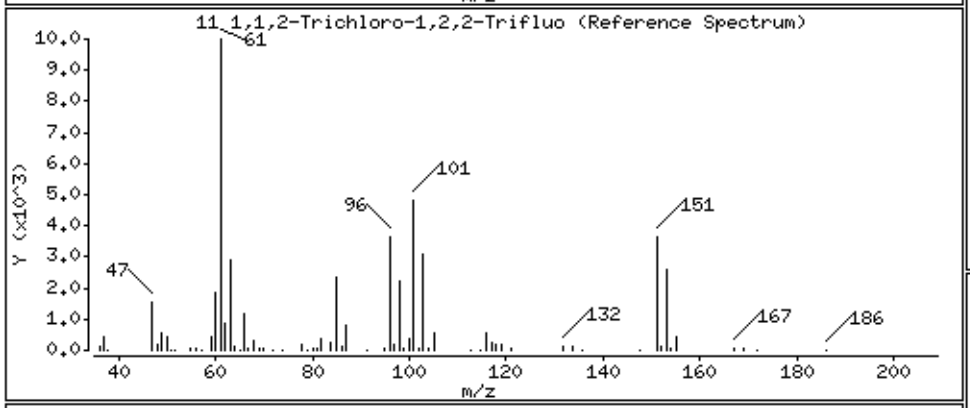
Purge Volume: 5.0 Operator: WL SRC: LIMS

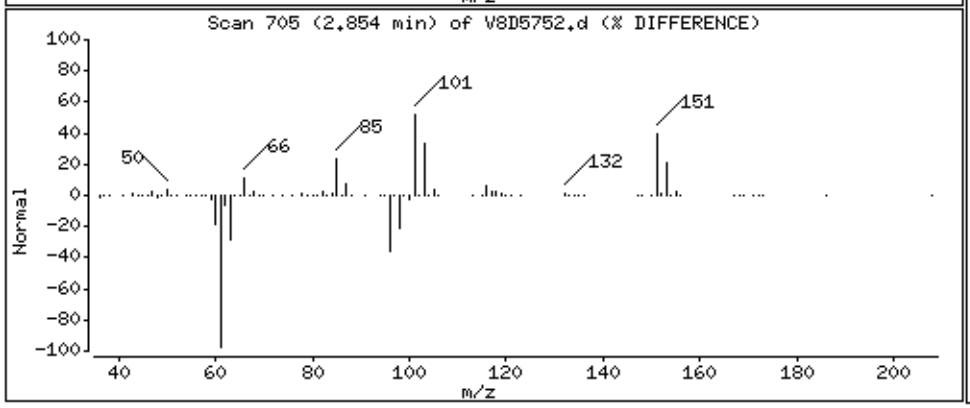
Column phase: DB-624 Column diameter: 0.25

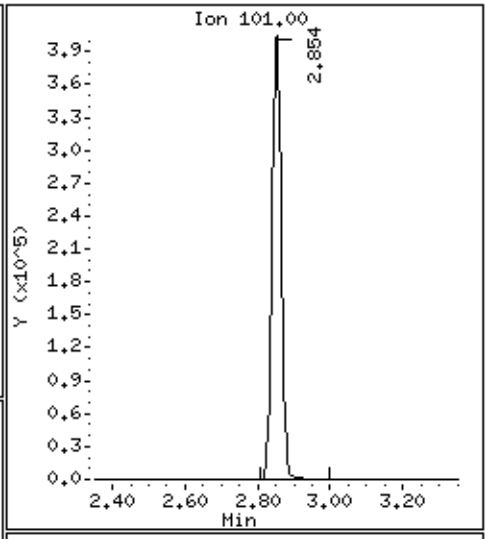
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 460 ug/L

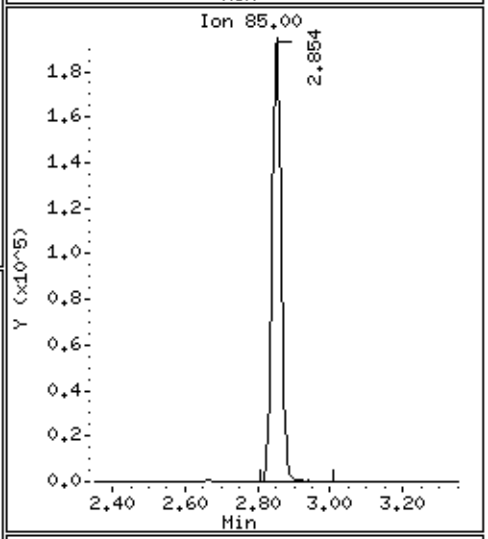


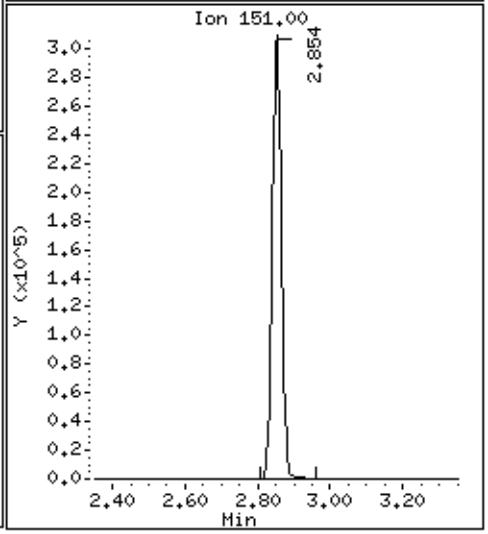












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d

Date : 25-JUN-2014 17:48

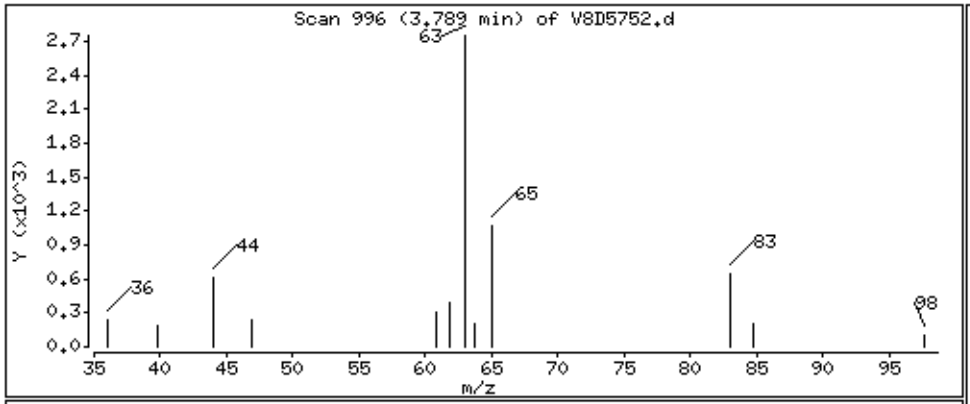
Client ID: MW-21S_6/19/14 Instrument: V10.i

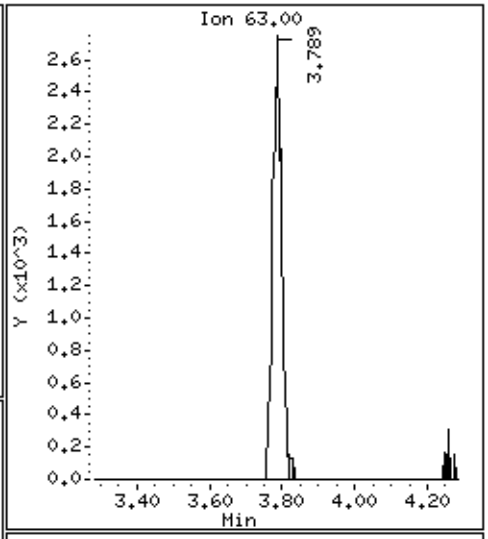
Sample Info: 5ML,N1082-14A,,77766

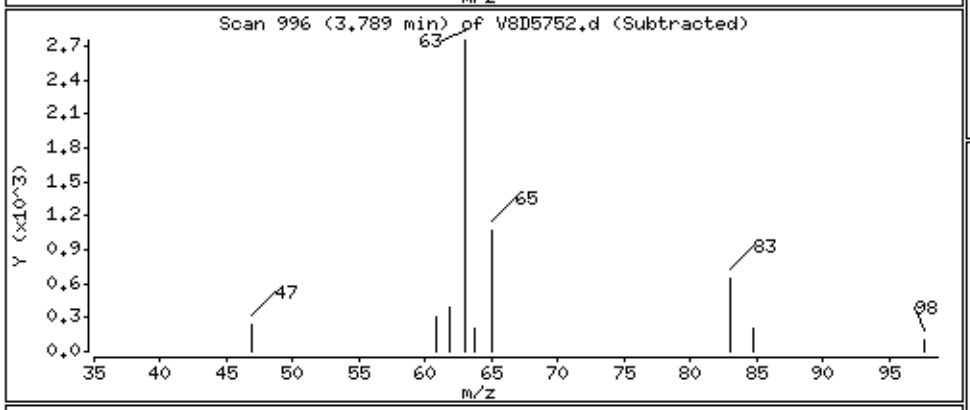
Purge Volume: 5.0 Operator: WL SRC: LIMS

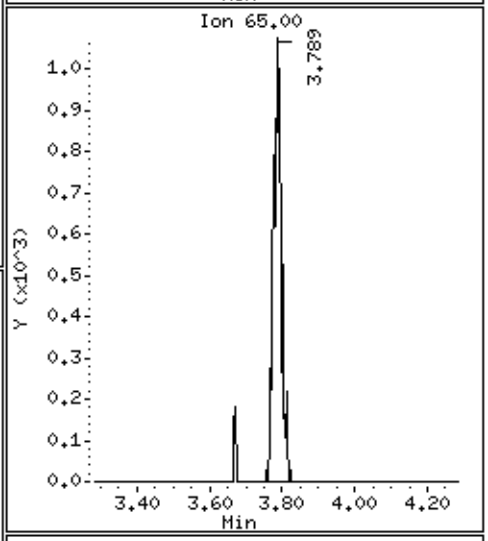
Column phase: DB-624 Column diameter: 0.25

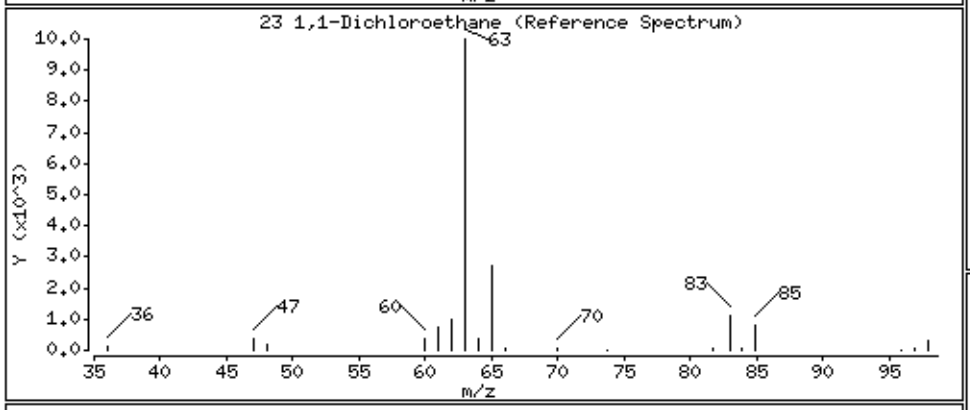
23 1,1-Dichloroethane Concentration: 1.5 ug/L

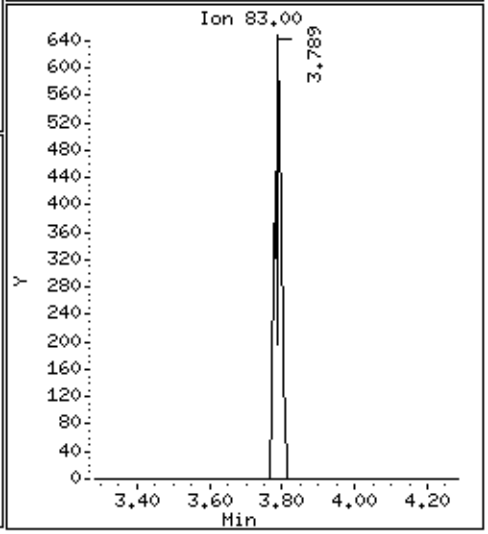


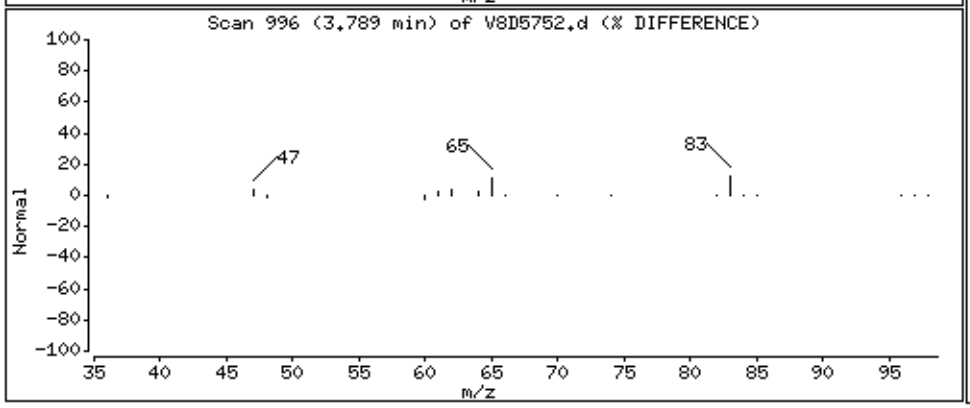












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d

Date : 25-JUN-2014 17:48

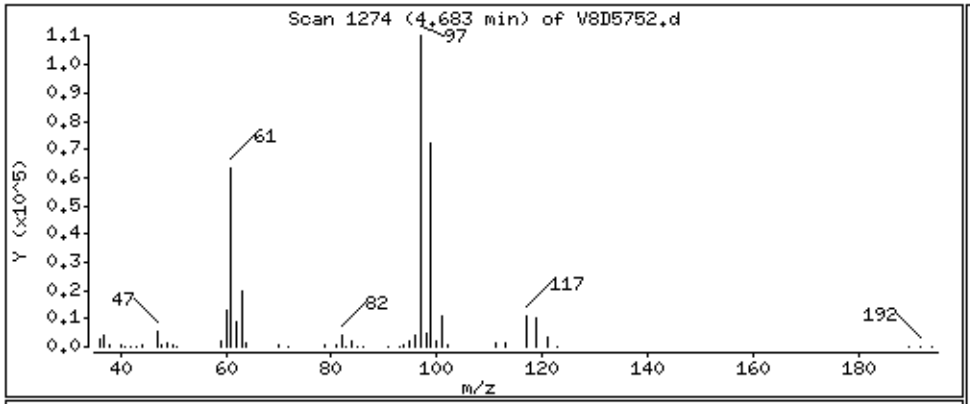
Client ID: MW-21S_6/19/14 Instrument: V10.i

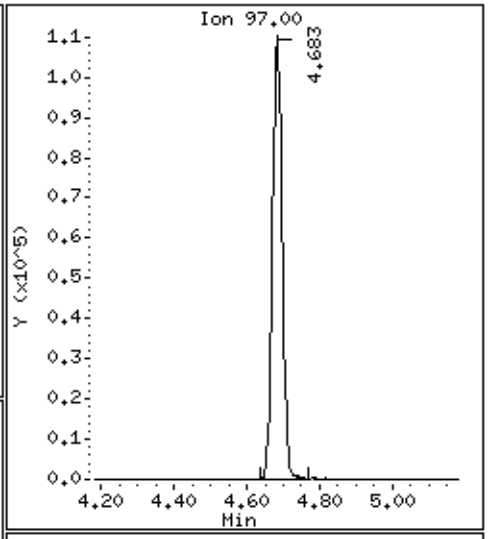
Sample Info: 5ML,N1082-14A,,77766

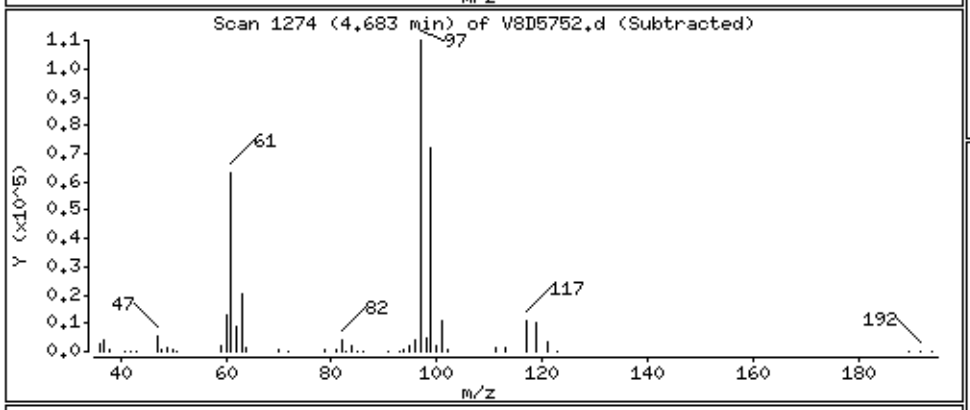
Purge Volume: 5.0 Operator: WL SRC: LIMS

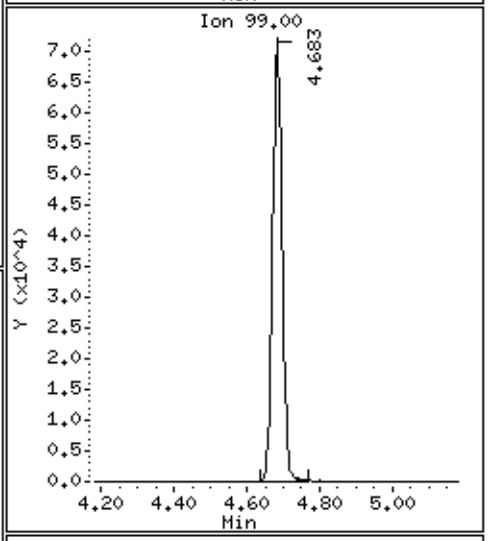
Column phase: DB-624 Column diameter: 0.25

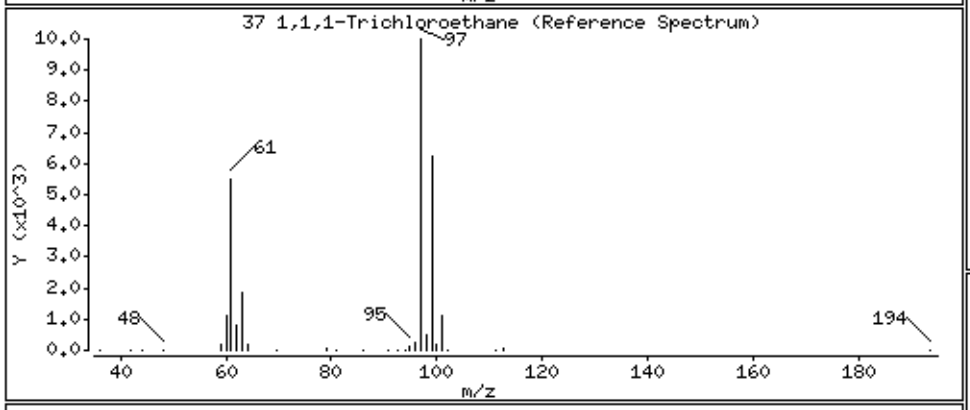
37 1,1,1-Trichloroethane Concentration: 66 ug/L

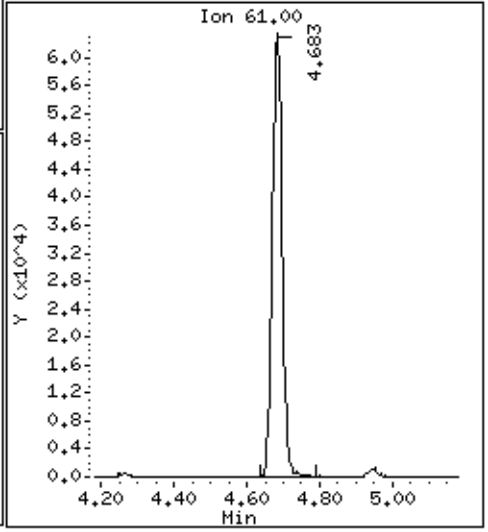


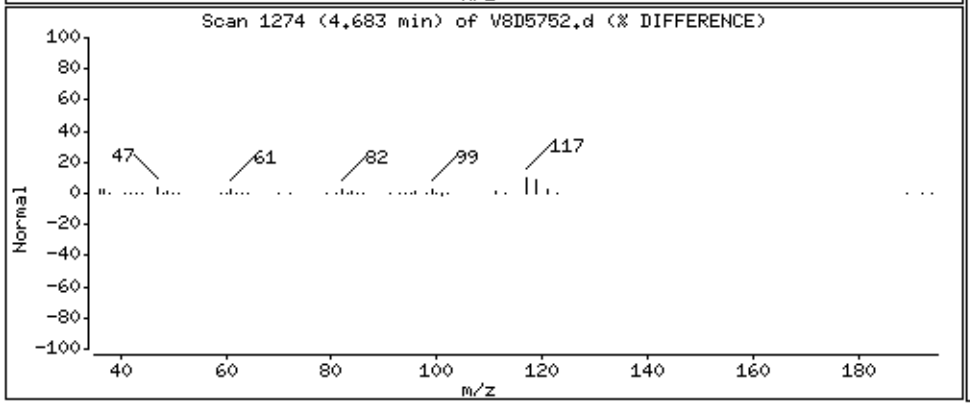












Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5752.d

Date : 25-JUN-2014 17:48

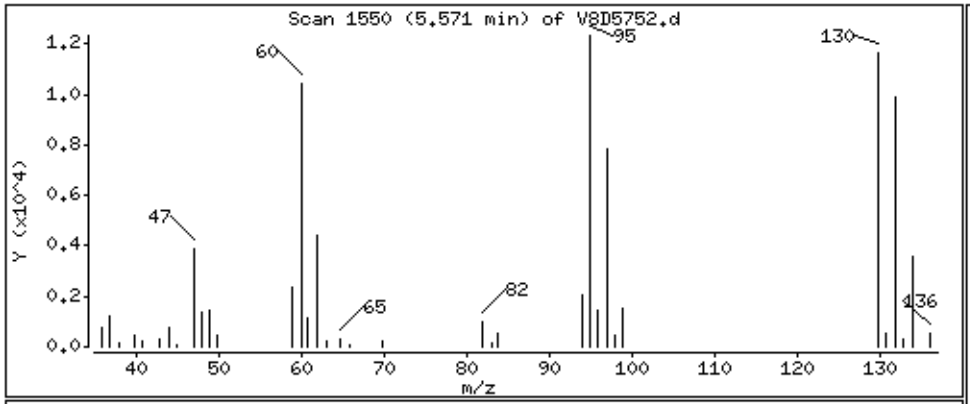
Client ID: MW-21S_6/19/14 Instrument: V10.i

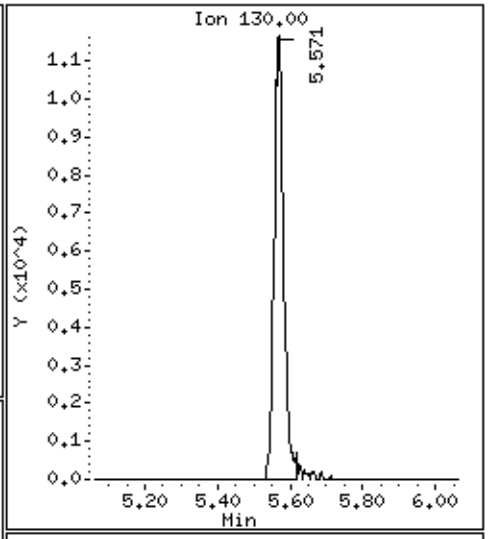
Sample Info: 5ML,N1082-14A,,77766

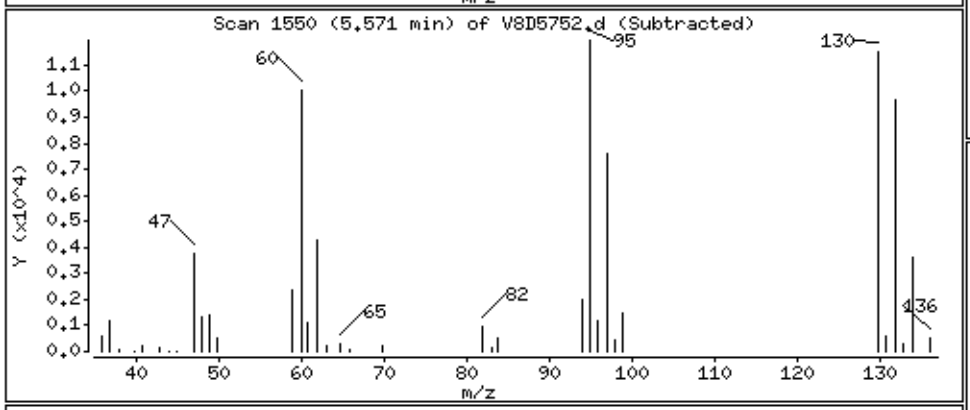
Purge Volume: 5.0 Operator: WL SRC: LIMS

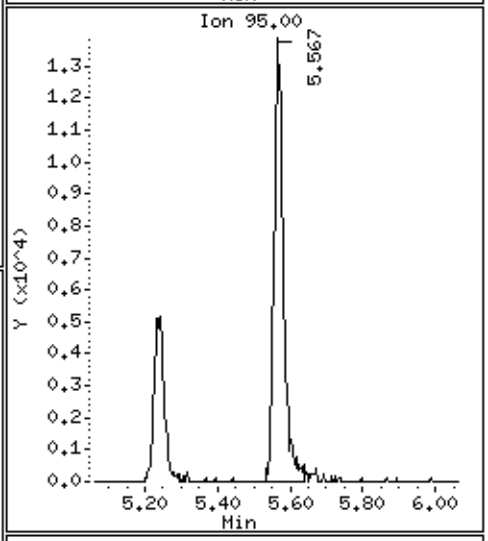
Column phase: DB-624 Column diameter: 0.25

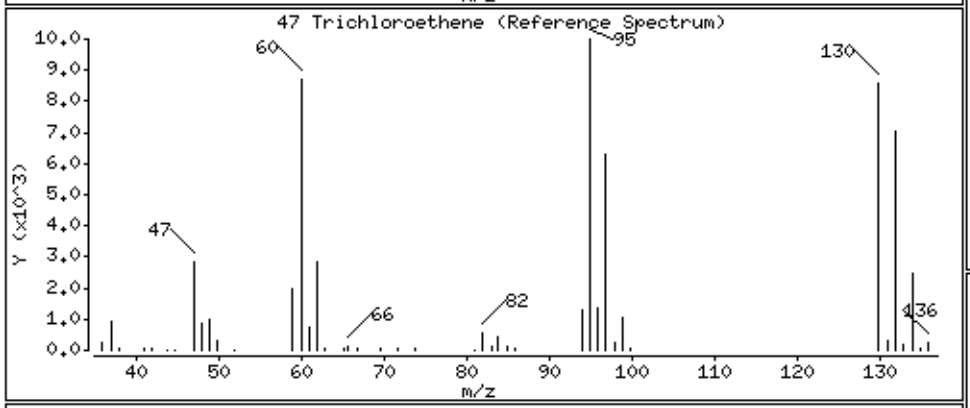
47 Trichloroethene Concentration: 18 ug/L

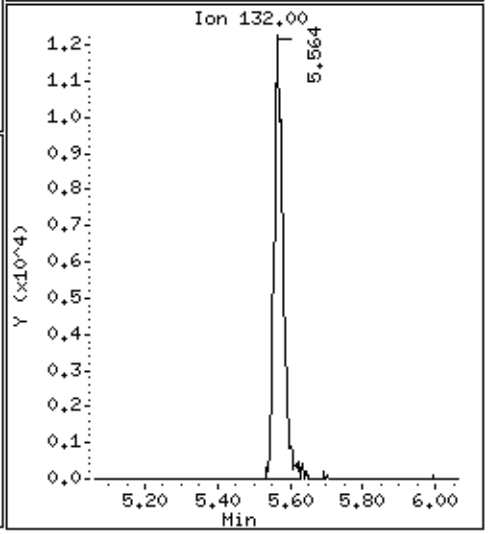


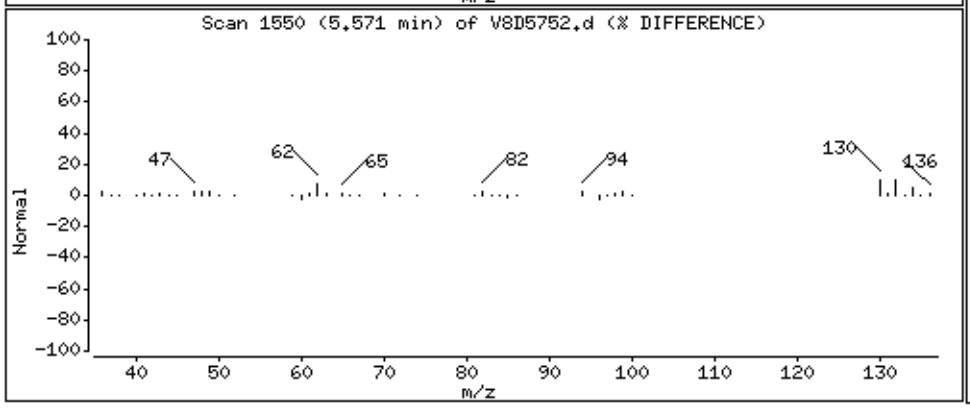












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21S_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-14ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9898.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	4.0	U
74-87-3	Chloromethane	4.0	U
75-01-4	Vinyl chloride	4.0	U
74-83-9	Bromomethane	4.0	U
75-00-3	Chloroethane	4.0	U
75-69-4	Trichlorofluoromethane	4.0	U
75-35-4	1,1-Dichloroethene	4.0	U
67-64-1	Acetone	20	U
74-88-4	Iodomethane	4.0	U
75-15-0	Carbon disulfide	4.0	U
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.0	U
75-34-3	1,1-Dichloroethane	4.0	U
108-05-4	Vinyl acetate	4.0	U
78-93-3	2-Butanone	20	U
156-59-2	cis-1,2-Dichloroethene	4.0	U
594-20-7	2,2-Dichloropropane	4.0	U
74-97-5	Bromochloromethane	4.0	U
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	43	D
563-58-6	1,1-Dichloropropene	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
71-43-2	Benzene	4.0	U
79-01-6	Trichloroethene	11	D
78-87-5	1,2-Dichloropropane	4.0	U
74-95-3	Dibromomethane	4.0	U
75-27-4	Bromodichloromethane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
142-28-9	1,3-Dichloropropane	4.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21S_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-14ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9898.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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	4.0	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	4.0	U
106-93-4	1,2-Dibromoethane	4.0	U
108-90-7	Chlorobenzene	4.0	U
630-20-6	1,1,1,2-Tetrachloroethane	4.0	U
100-41-4	Ethylbenzene	4.0	U
179601-23-1	m,p-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
1330-20-7	Xylene (Total)	4.0	U
100-42-5	Styrene	4.0	U
75-25-2	Bromoform	4.0	U
98-82-8	Isopropylbenzene	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
108-86-1	Bromobenzene	4.0	U
96-18-4	1,2,3-Trichloropropane	4.0	U
103-65-1	n-Propylbenzene	4.0	U
95-49-8	2-Chlorotoluene	4.0	U
108-67-8	1,3,5-Trimethylbenzene	4.0	U
106-43-4	4-Chlorotoluene	4.0	U
98-06-6	tert-Butylbenzene	4.0	U
95-63-6	1,2,4-Trimethylbenzene	4.0	U
135-98-8	sec-Butylbenzene	4.0	U
99-87-6	4-Isopropyltoluene	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
104-51-8	n-Butylbenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	4.0	U
120-82-1	1,2,4-Trichlorobenzene	4.0	U
87-68-3	Hexachlorobutadiene	4.0	U
87-61-6	1,2,3-Trichlorobenzene	4.0	U
91-20-3	Naphthalene	4.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	300	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21S_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-14ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9898.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9898.D
Report Date: 02-Jul-2014 14:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9898.D
Lab Smp Id: N1082-14ADL Client Smp ID: MW-21S_6/19/14DL
Inj Date : 26-JUN-2014 14:46
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-14ADL,,77805,4
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 51
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

Name	Value	Description
DF	4.000	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)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.280	2.276	(0.517)	291718	75.1241	300
$ 36	Dibromofluoromethane	113	3.855	3.841	(0.875)	213761	51.1197	51
37	1,1,1-Trichloroethane	97	3.885	3.871	(0.882)	57438	10.8552	43
$ 42	1,2-Dichloroethane-d4	102	4.121	4.107	(0.935)	42514	50.4051	50
* 46	Fluorobenzene	96	4.406	4.393	(1.000)	629564	50.0000	
47	Trichloroethene	130	4.721	4.708	(1.071)	8492	2.71389	11
$ 58	Toluene-d8	98	5.814	5.801	(0.801)	586376	49.6807	50
* 68	Chlorobenzene-d5	117	7.262	7.248	(1.000)	441372	50.0000	
$ 79	Bromofluorobenzene	95	8.542	8.538	(1.176)	254270	48.1129	48
* 92	1,4-Dichlorobenzene-d4	152	9.832	9.828	(1.000)	163594	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9898.D
Report Date: 02-Jul-2014 14:19

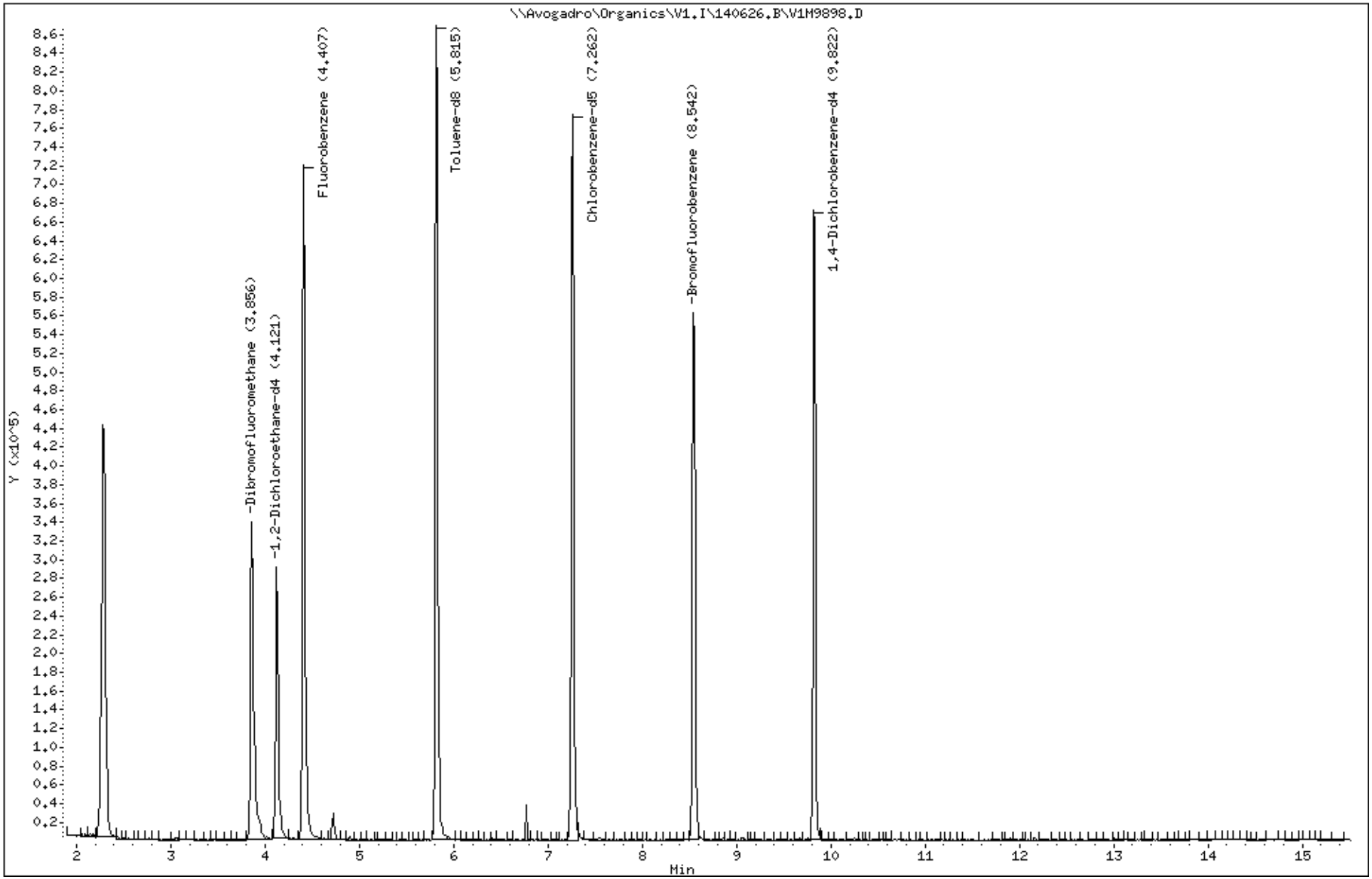
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9898.D
Lab Smp Id: N1082-14ADL Client Smp ID: MW-21S_6/19/14DL
Inj Date : 26-JUN-2014 14:46
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-14ADL,,77805,4
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 51
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9898.D
Date : 26-JUN-2014 14:46
Client ID: MW-21S_6/19/14DL
Instrument: V1.i
Sample Info: 5G,N1082-14ADL,,77805,4
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9898.D

Date : 26-JUN-2014 14:46

Client ID: MW-21S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-14ADL,,77805,4

Purge Volume: 5.0

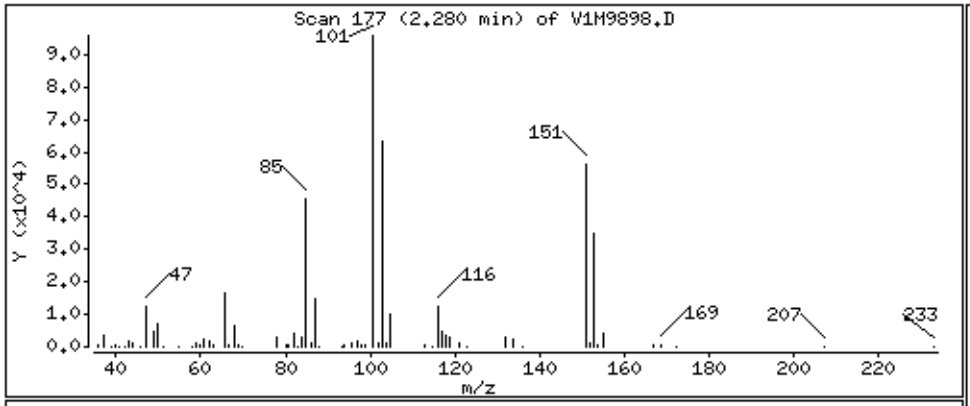
Operator: WL SRC: LIMS

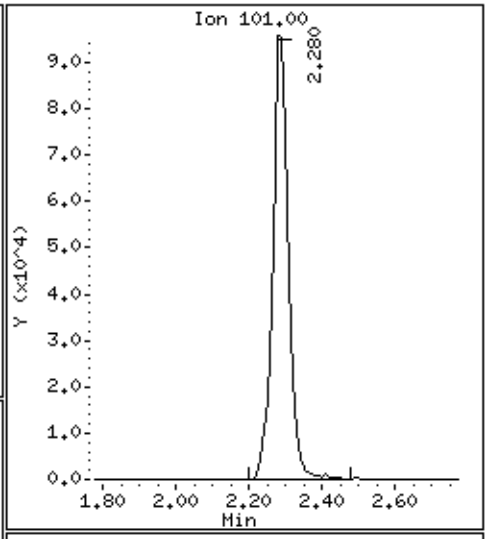
Column phase: DB-624

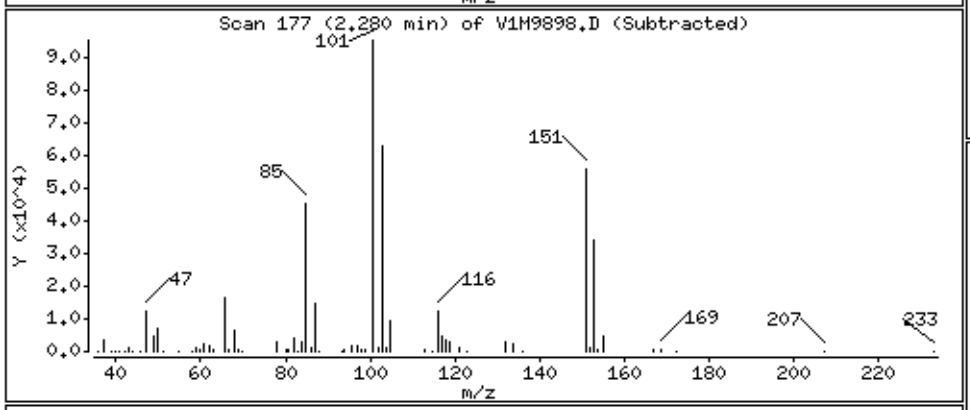
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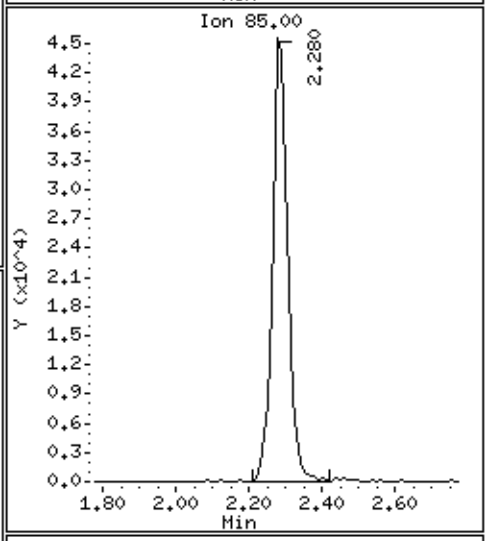
11 1,1,2-Trichloro-1,2,2-Trifluo

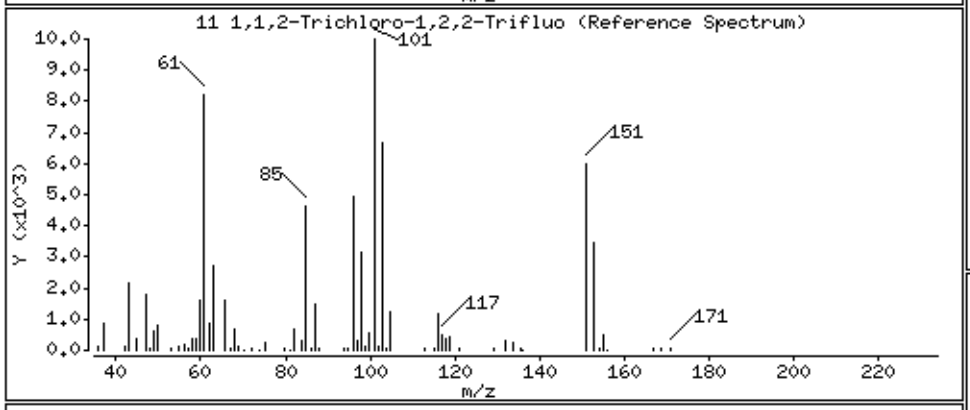
Concentration: 300 ug/L

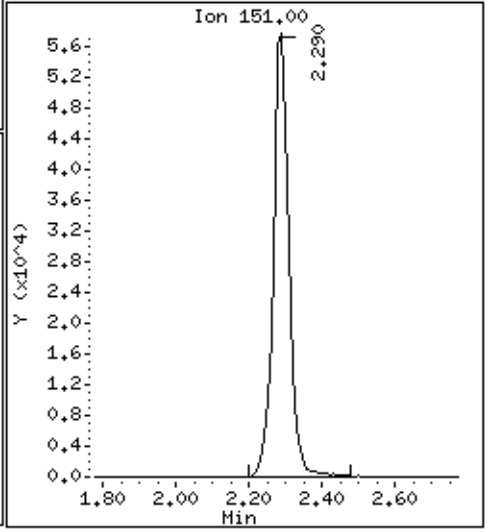


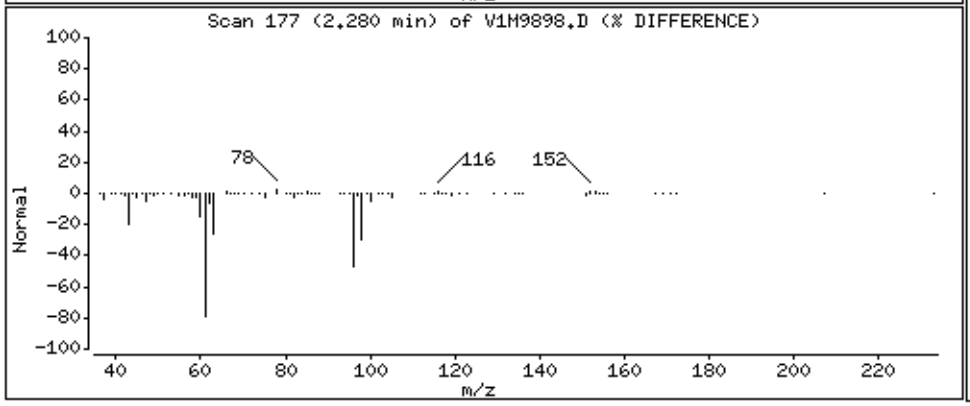












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9898.D

Date : 26-JUN-2014 14:46

Client ID: MW-21S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-14ADL,,77805,4

Purge Volume: 5.0

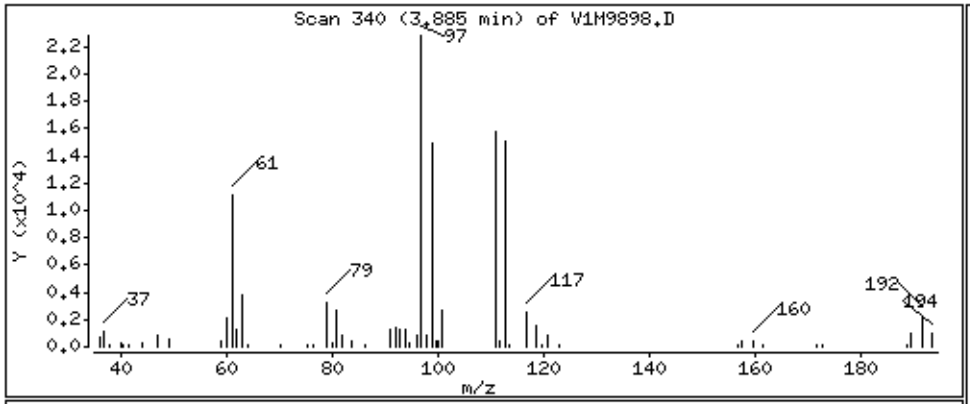
Operator: WL SRC: LIMS

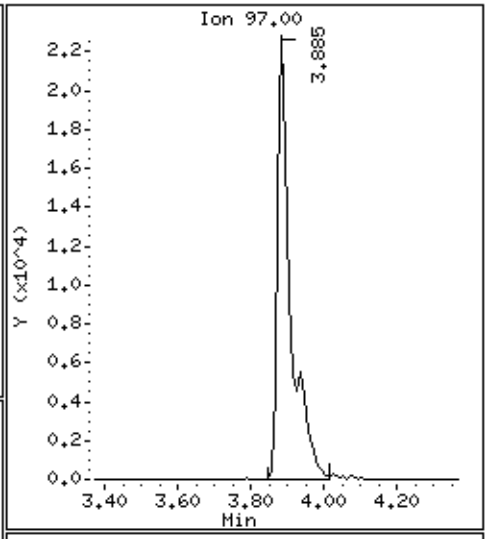
Column phase: DB-624

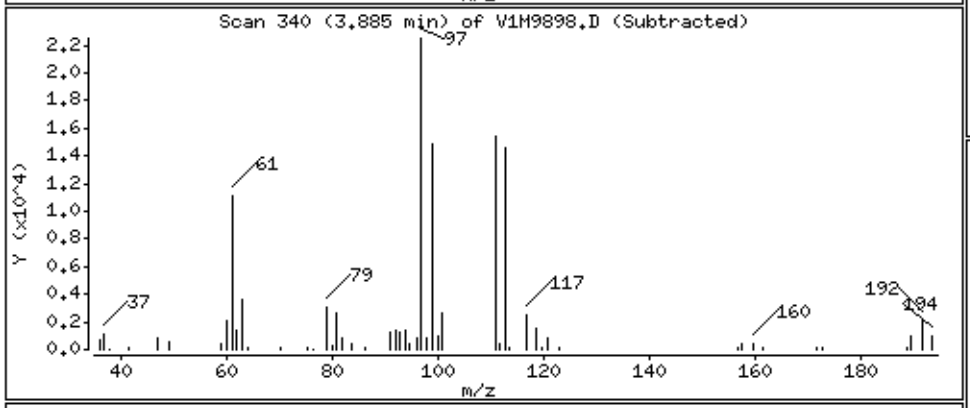
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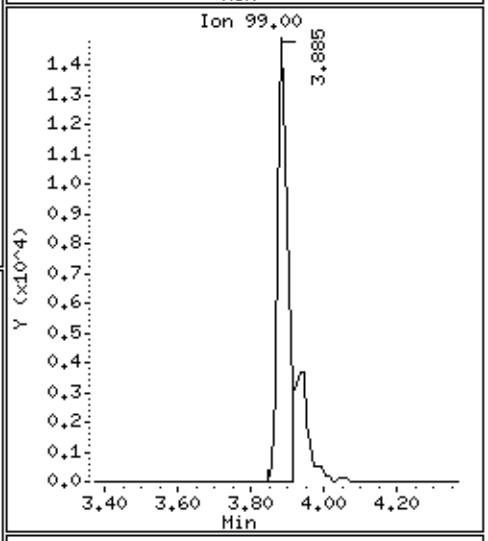
37 1,1,1-Trichloroethane

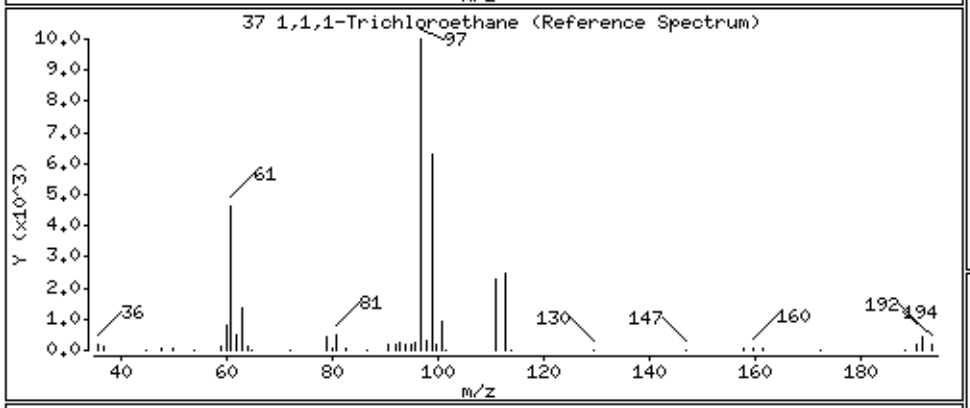
Concentration: 43 ug/L

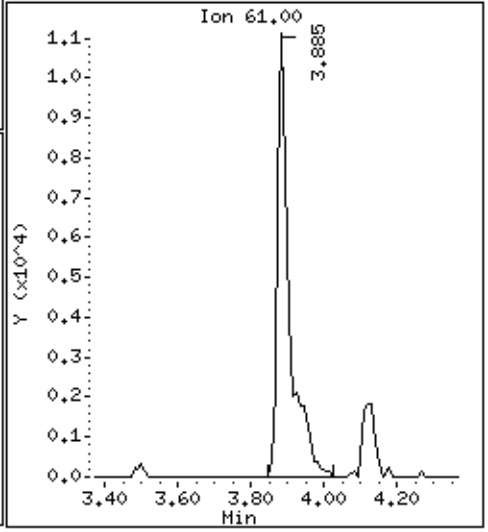


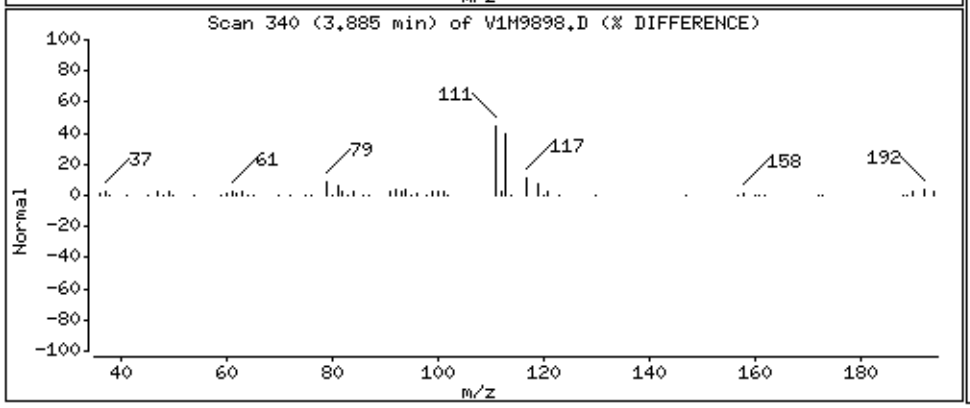












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9898.D

Date : 26-JUN-2014 14:46

Client ID: MW-21S_6/19/14DL

Instrument: V1.i

Sample Info: 5G,N1082-14ADL,,77805,4

Purge Volume: 5.0

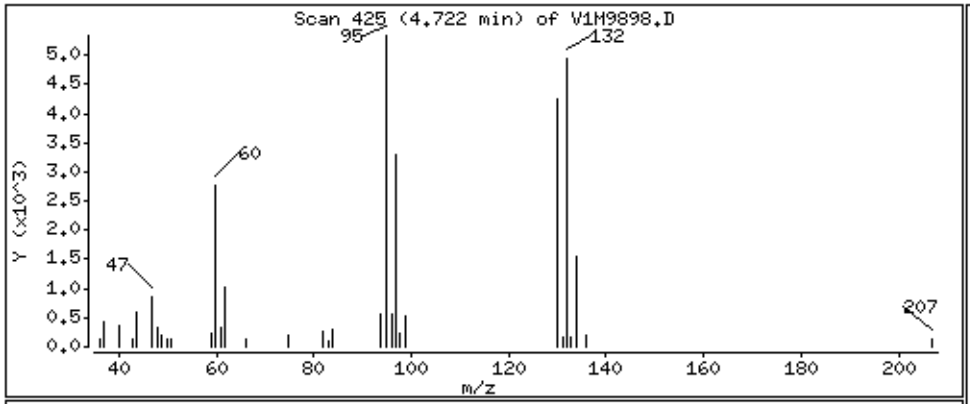
Operator: WL SRC: LIMS

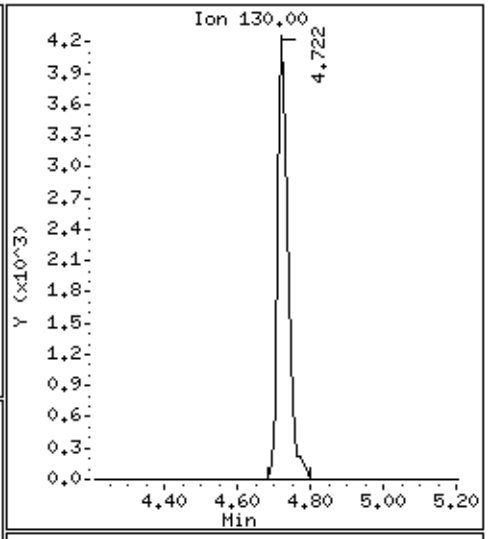
Column phase: DB-624

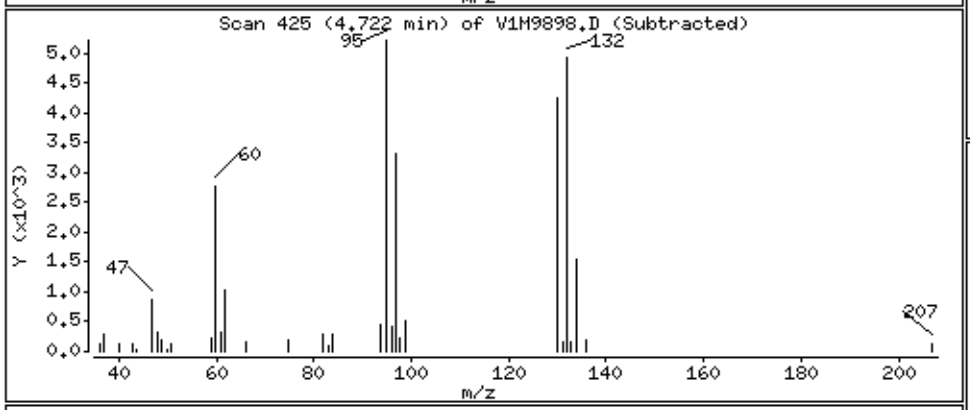
Column diameter: 0.25

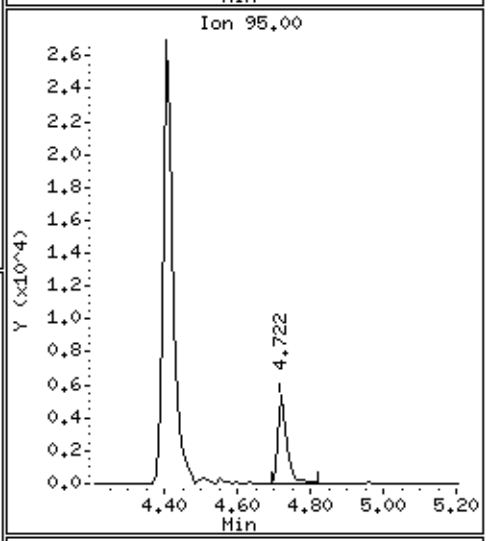
47 Trichloroethene

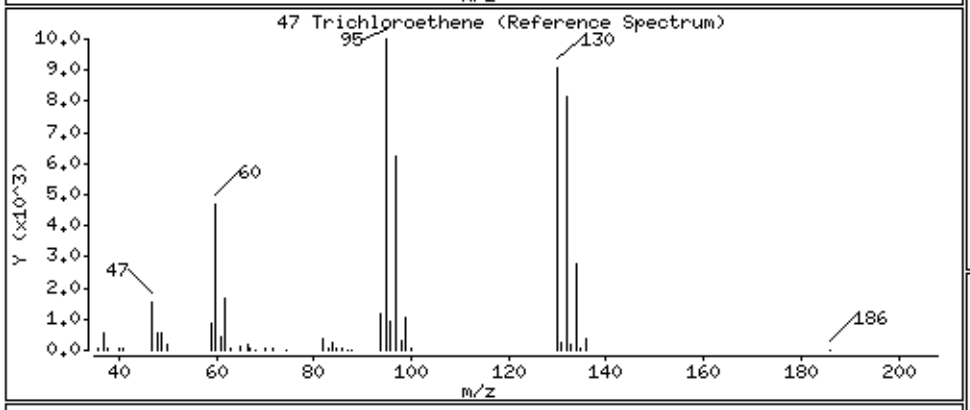
Concentration: 11 ug/L

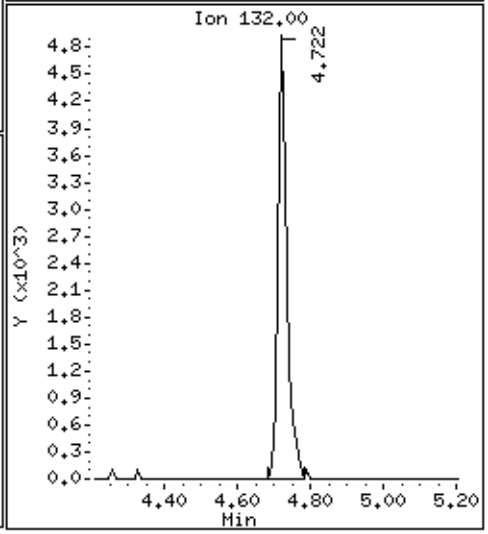


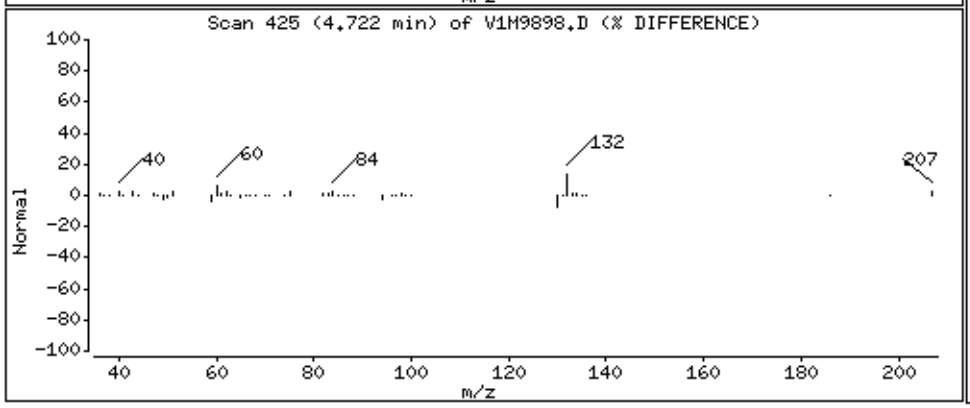












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-15A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9896.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
74-87-3	Chloromethane	1000	U
75-01-4	Vinyl chloride	1000	U
74-83-9	Bromomethane	1000	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	1000	U
75-35-4	1,1-Dichloroethene	1000	U
67-64-1	Acetone	5000	U
74-88-4	Iodomethane	1000	U
75-15-0	Carbon disulfide	1000	U
75-09-2	Methylene chloride	6400	
156-60-5	trans-1,2-Dichloroethene	1000	U
1634-04-4	Methyl tert-butyl ether	1000	U
75-34-3	1,1-Dichloroethane	1000	J
108-05-4	Vinyl acetate	1000	U
78-93-3	2-Butanone	5000	U
156-59-2	cis-1,2-Dichloroethene	1000	U
594-20-7	2,2-Dichloropropane	1000	U
74-97-5	Bromochloromethane	1000	U
67-66-3	Chloroform	1000	U
71-55-6	1,1,1-Trichloroethane	25000	
563-58-6	1,1-Dichloropropene	1000	U
56-23-5	Carbon tetrachloride	1000	U
107-06-2	1,2-Dichloroethane	1000	U
71-43-2	Benzene	1000	U
79-01-6	Trichloroethene	11000	
78-87-5	1,2-Dichloropropane	1000	U
74-95-3	Dibromomethane	1000	U
75-27-4	Bromodichloromethane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
108-10-1	4-Methyl-2-pentanone	5000	U
108-88-3	Toluene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
142-28-9	1,3-Dichloropropane	1000	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-21R_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-15A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9896.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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	1000	U
591-78-6	2-Hexanone	5000	U
124-48-1	Dibromochloromethane	1000	U
106-93-4	1,2-Dibromoethane	1000	U
108-90-7	Chlorobenzene	1000	U
630-20-6	1,1,1,2-Tetrachloroethane	1000	U
100-41-4	Ethylbenzene	1000	U
179601-23-1	m,p-Xylene	1000	U
95-47-6	o-Xylene	1000	U
1330-20-7	Xylene (Total)	1000	U
100-42-5	Styrene	1000	U
75-25-2	Bromoform	1000	U
98-82-8	Isopropylbenzene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-86-1	Bromobenzene	1000	U
96-18-4	1,2,3-Trichloropropane	1000	U
103-65-1	n-Propylbenzene	1000	U
95-49-8	2-Chlorotoluene	1000	U
108-67-8	1,3,5-Trimethylbenzene	1000	U
106-43-4	4-Chlorotoluene	1000	U
98-06-6	tert-Butylbenzene	1000	U
95-63-6	1,2,4-Trimethylbenzene	1000	U
135-98-8	sec-Butylbenzene	1000	U
99-87-6	4-Isopropyltoluene	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
104-51-8	n-Butylbenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
96-12-8	1,2-Dibromo-3-chloropropane	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
87-68-3	Hexachlorobutadiene	1000	U
87-61-6	1,2,3-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	48000	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-21R_6/19/14DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-15A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9896.D

Level: (TRACE or LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/26/2014

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1000.0

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D
Report Date: 02-Jul-2014 14:19

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9896.D
Lab Smp Id: N1082-15A Client Smp ID: MW-21R_6/19/14
Inj Date : 26-JUN-2014 13:56
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-15A,,77805,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 49
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

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

Name	Value	Description
DF	1000.000	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)
	11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.289	2.276	(0.521)	188314	47.7042	48000(H)
	18 Methylene Chloride	84	2.564	2.561	(0.583)	22031	6.40870	6400
	23 1,1-Dichloroethane	63	3.067	3.054	(0.698)	6143	0.99606	1000
$	36 Dibromofluoromethane	113	3.844	3.841	(0.875)	210789	49.5867	50
	37 1,1,1-Trichloroethane	97	3.884	3.871	(0.884)	136675	25.4089	25000
$	42 1,2-Dichloroethane-d4	102	4.120	4.107	(0.937)	41198	48.0482	48
*	46 Fluorobenzene	96	4.396	4.393	(1.000)	640003	50.0000	
	47 Trichloroethene	130	4.711	4.708	(1.072)	34762	10.9281	11000
$	58 Toluene-d8	98	5.804	5.801	(0.800)	589883	50.5627	50
*	68 Chlorobenzene-d5	117	7.251	7.248	(1.000)	436267	50.0000	
$	79 Bromofluorobenzene	95	8.541	8.538	(1.178)	249899	47.8391	48
*	92 1,4-Dichlorobenzene-d4	152	9.831	9.828	(1.000)	164418	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D
Report Date: 02-Jul-2014 14:19

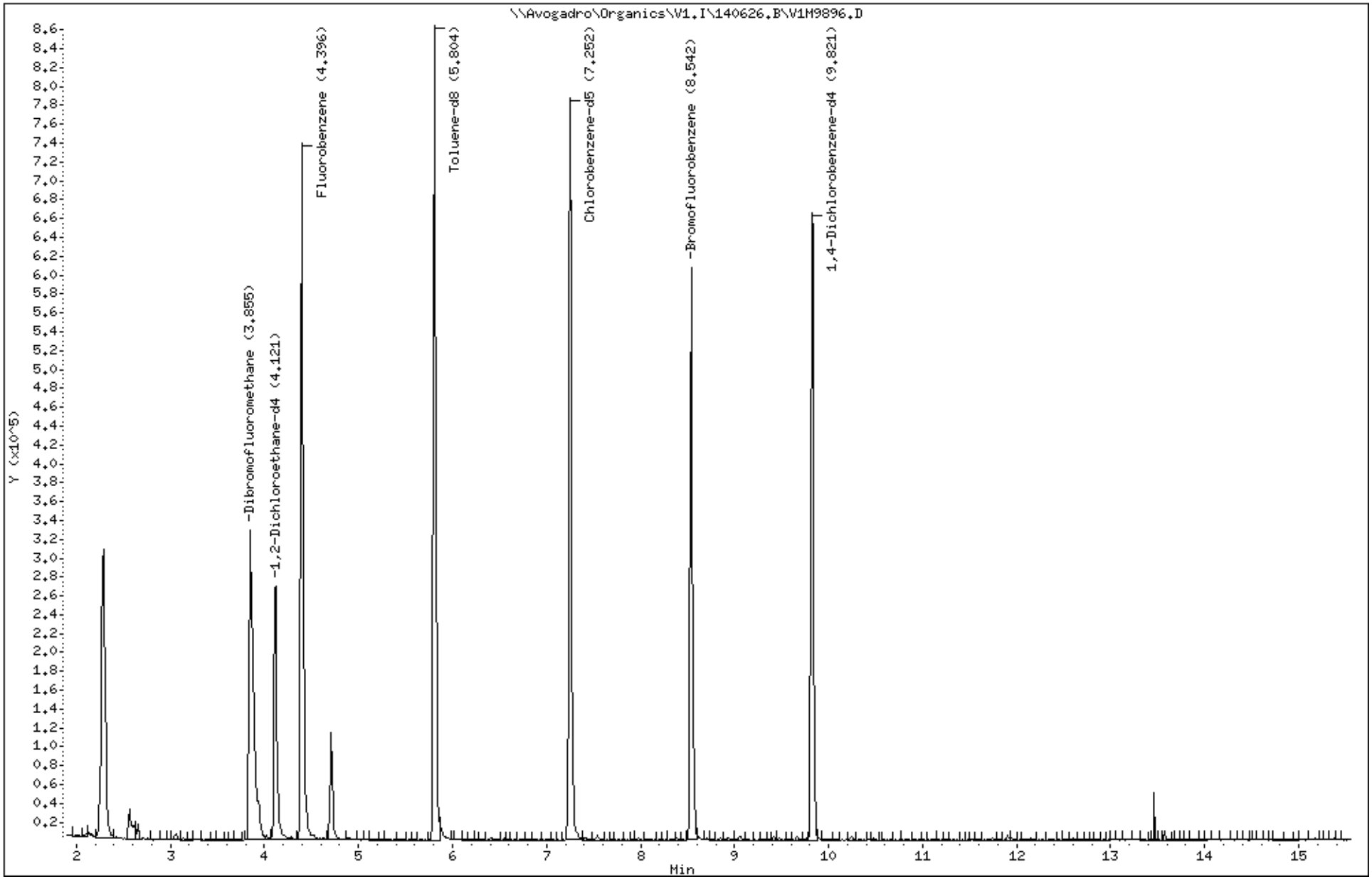
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9896.D
Lab Smp Id: N1082-15A Client Smp ID: MW-21R_6/19/14
Inj Date : 26-JUN-2014 13:56
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,N1082-15A,,77805,1000
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 02-Jul-2014 14:19 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 49
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D
Date : 26-JUN-2014 13:56
Client ID: MW-21R_6/19/14
Instrument: V1.i
Sample Info: 5G,N1082-15A,,77805,1000
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D

Date : 26-JUN-2014 13:56

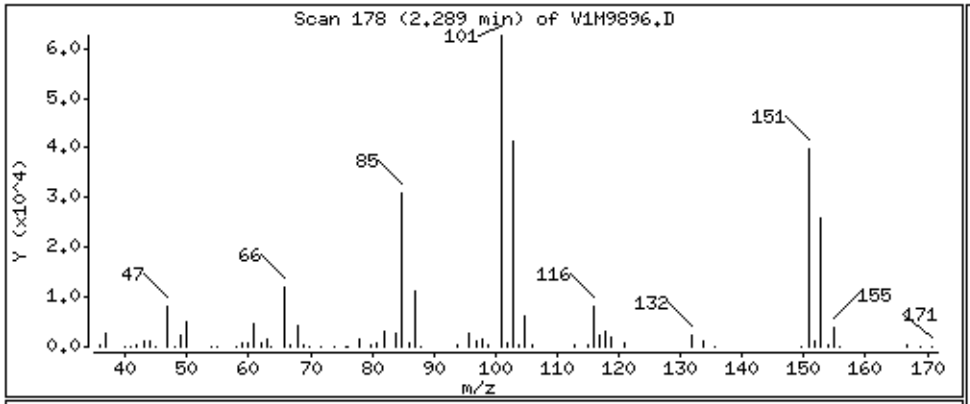
Client ID: MW-21R_6/19/14 Instrument: V1.i

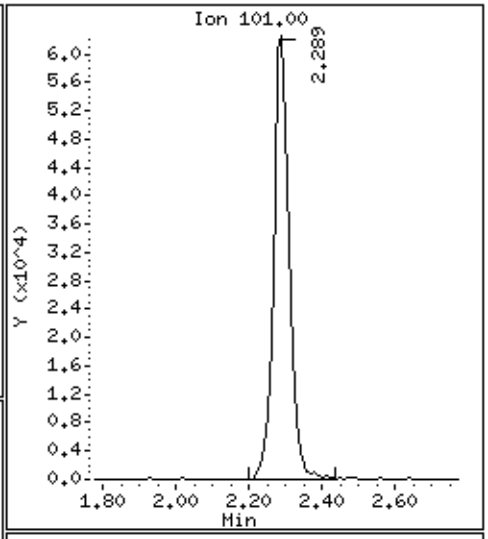
Sample Info: 5G,N1082-15A,,77805,1000

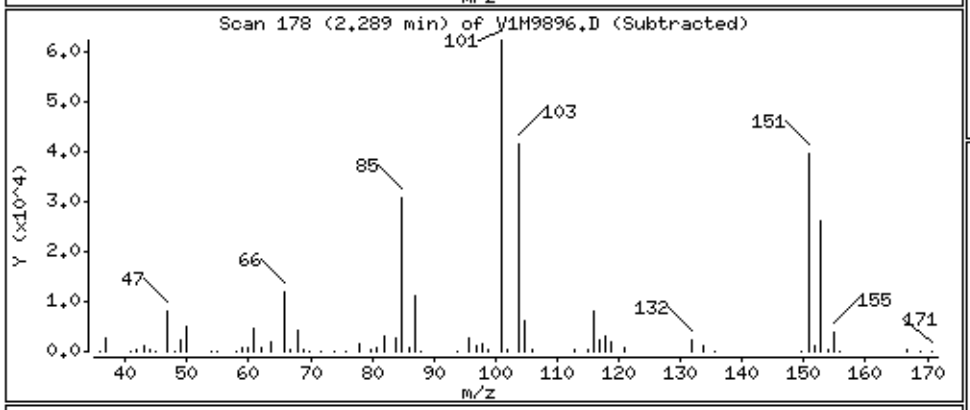
Purge Volume: 5.0 Operator: WL SRC: LIMS

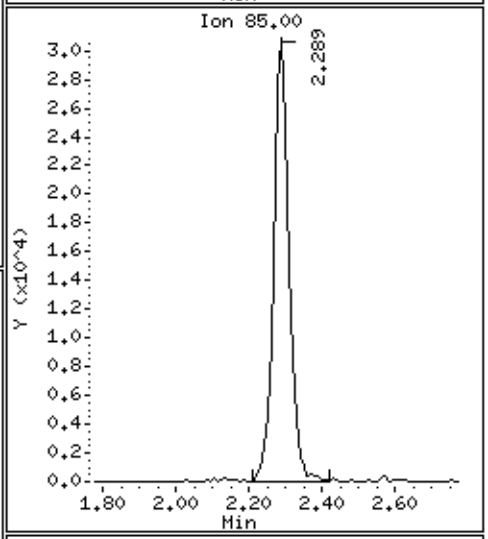
Column phase: DB-624 Column diameter: 0.25

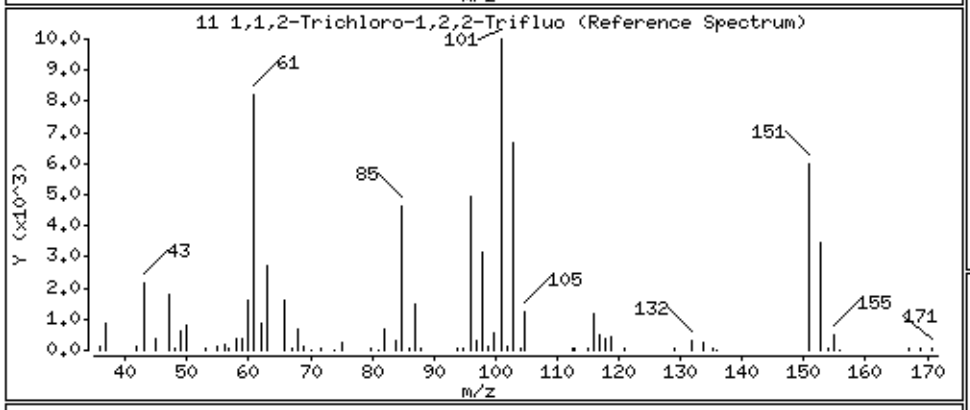
11 1,1,2-Trichloro-1,2,2-Trifluo Concentration: 48000 ug/L

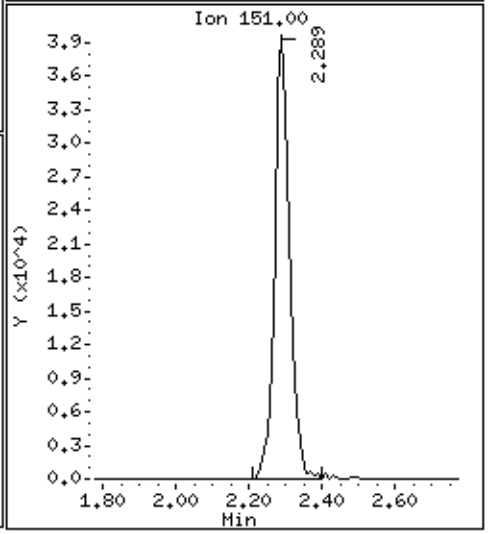


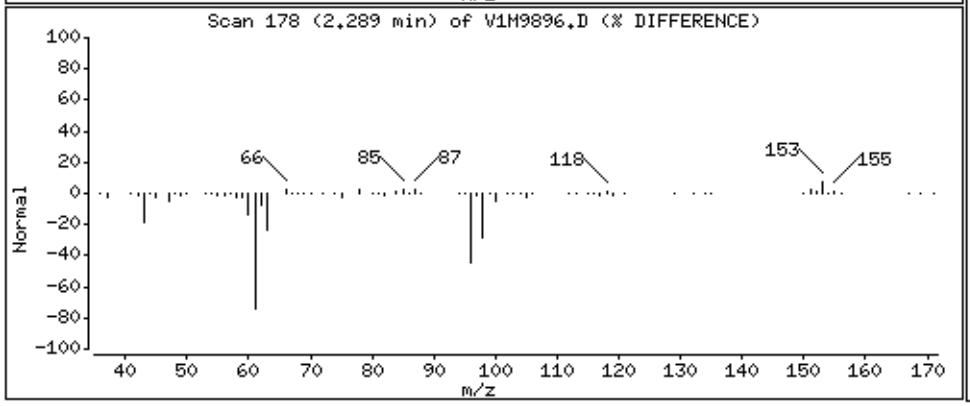












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D

Date : 26-JUN-2014 13:56

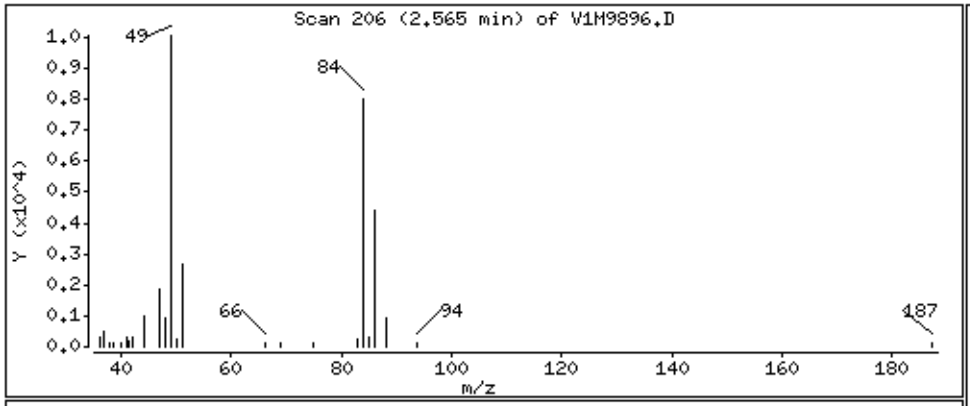
Client ID: MW-21R_6/19/14 Instrument: V1.i

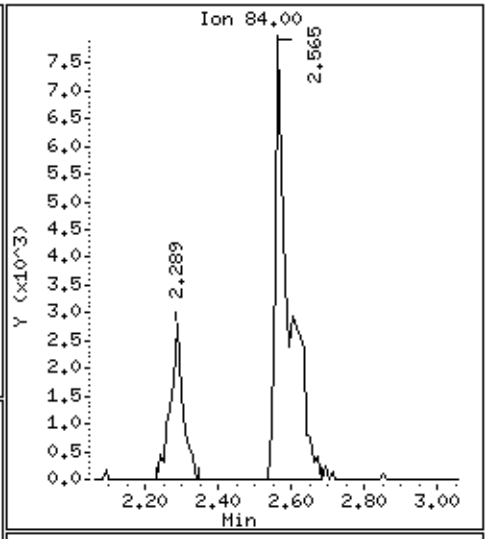
Sample Info: 5G,N1082-15A,,77805,1000

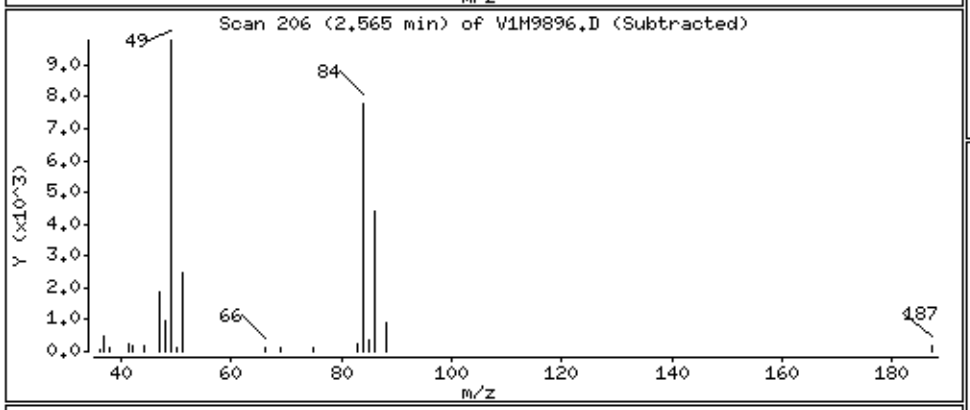
Purge Volume: 5.0 Operator: WL SRC: LIMS

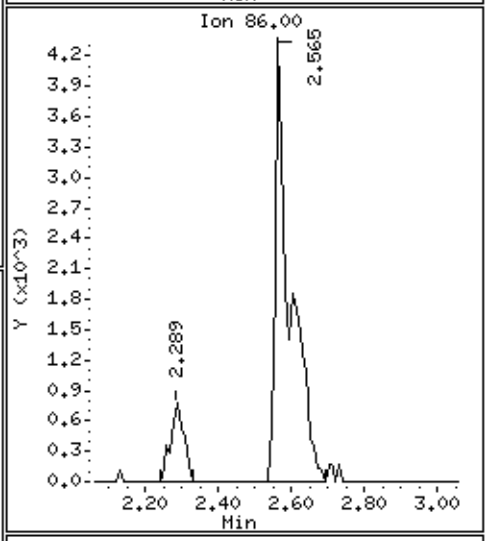
Column phase: DB-624 Column diameter: 0.25

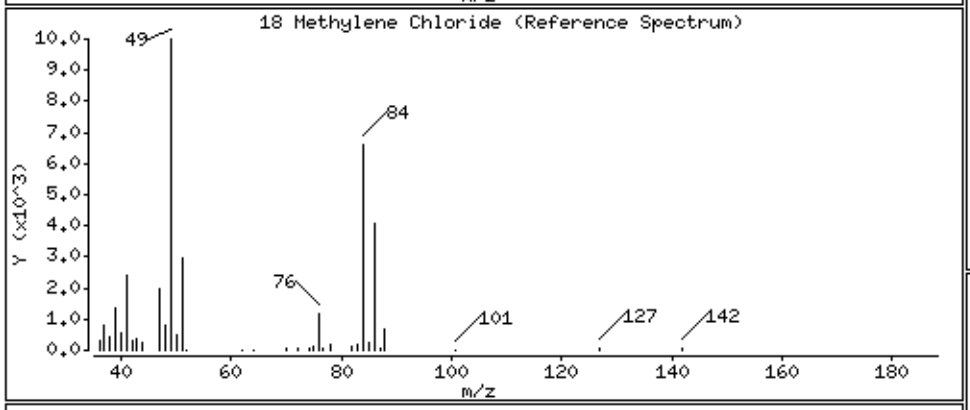
18 Methylene Chloride Concentration: 6400 ug/L

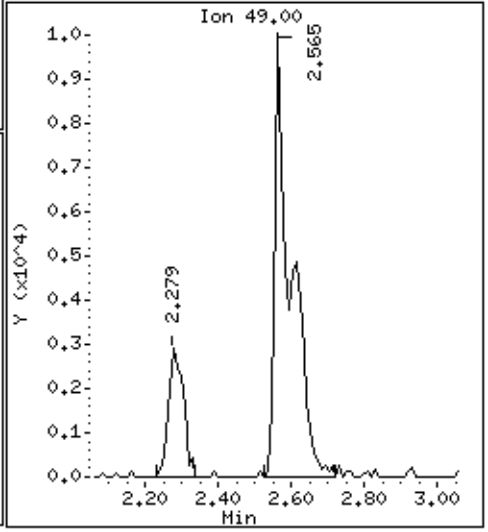


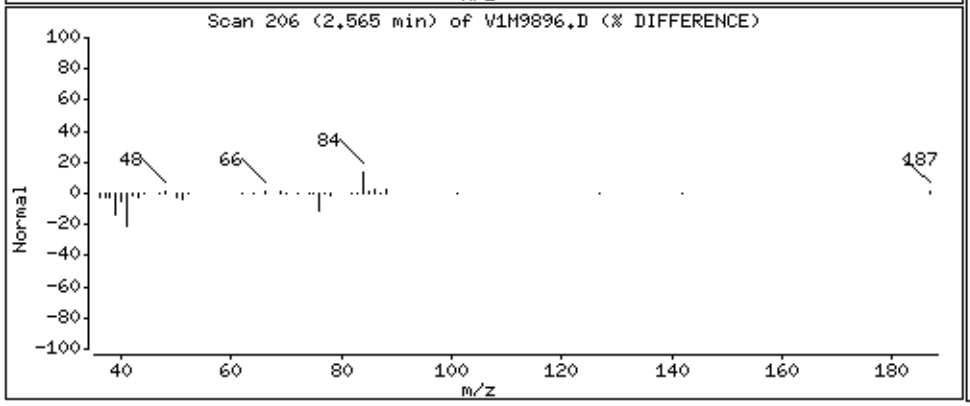












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D

Date : 26-JUN-2014 13:56

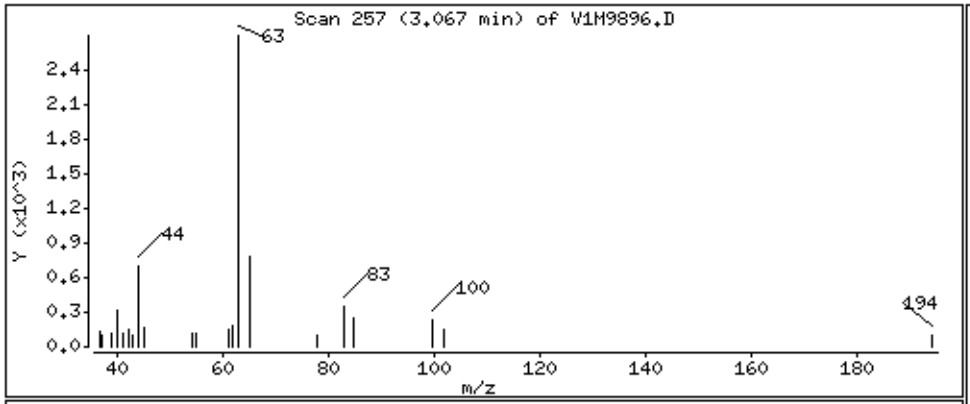
Client ID: MW-21R_6/19/14 Instrument: V1.i

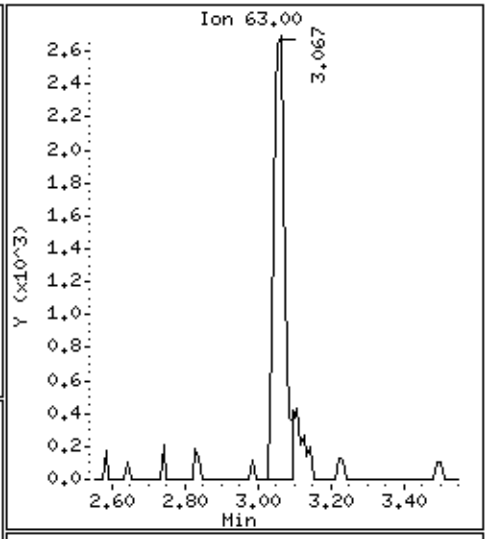
Sample Info: 5G,N1082-15A,,77805,1000

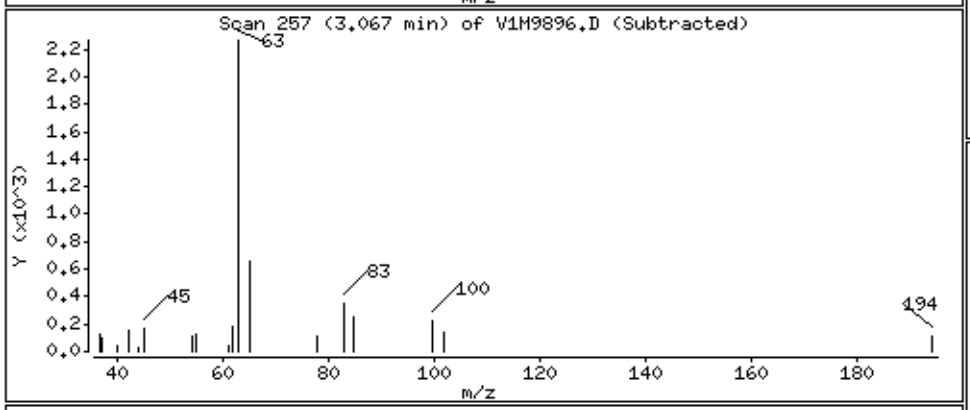
Purge Volume: 5.0 Operator: WL SRC: LIMS

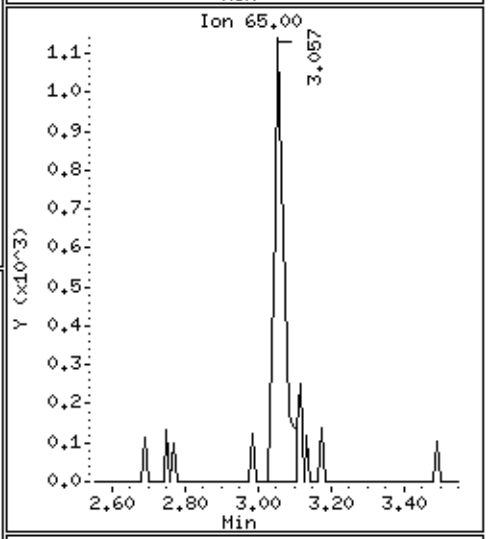
Column phase: DB-624 Column diameter: 0.25

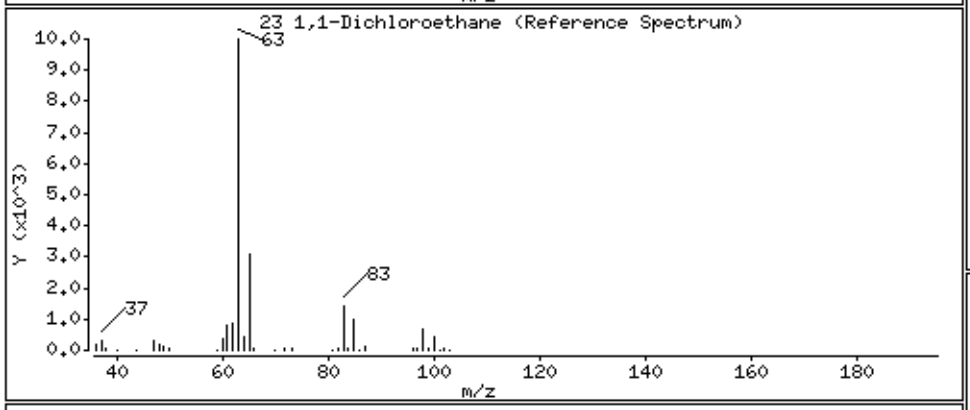
23 1,1-Dichloroethane Concentration: 1000 ug/L

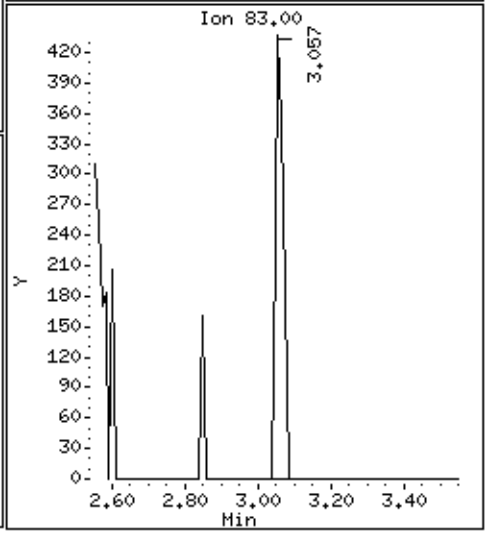


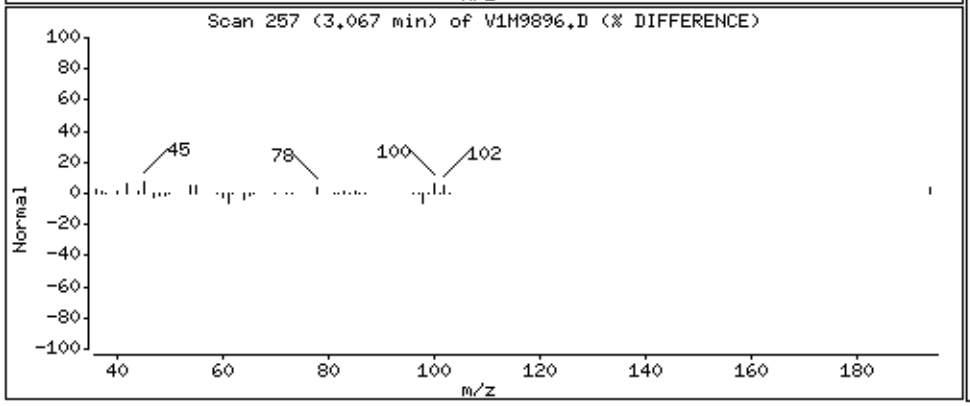












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D

Date : 26-JUN-2014 13:56

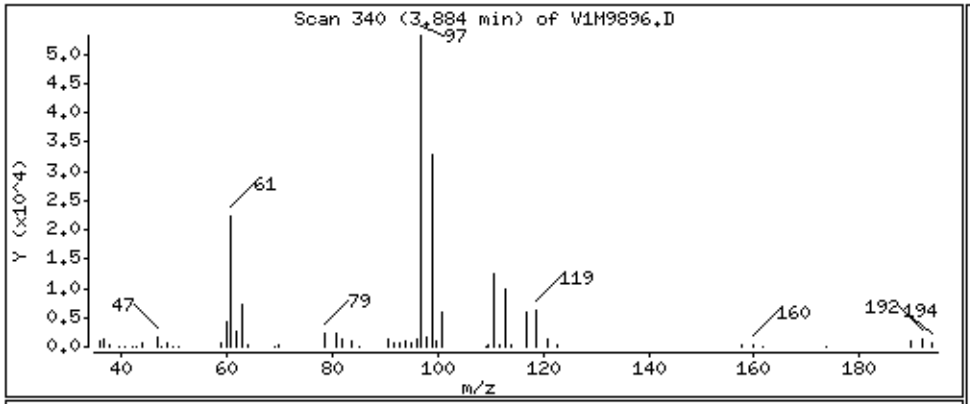
Client ID: MW-21R_6/19/14 Instrument: V1.i

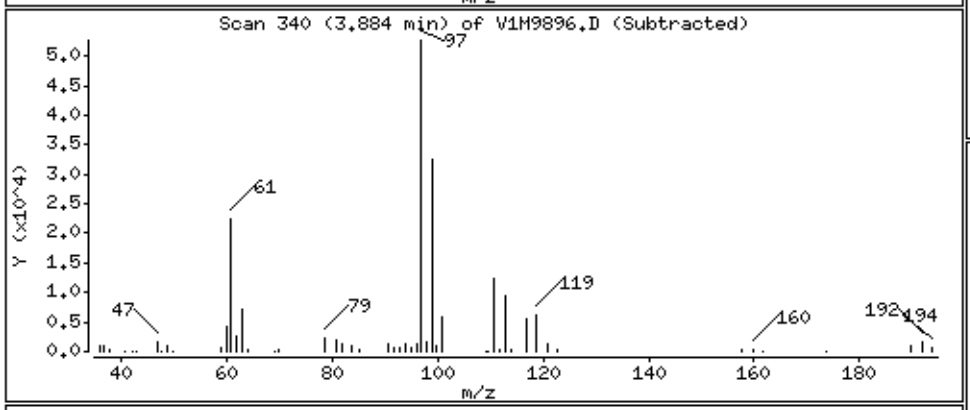
Sample Info: 5G,N1082-15A,,77805,1000

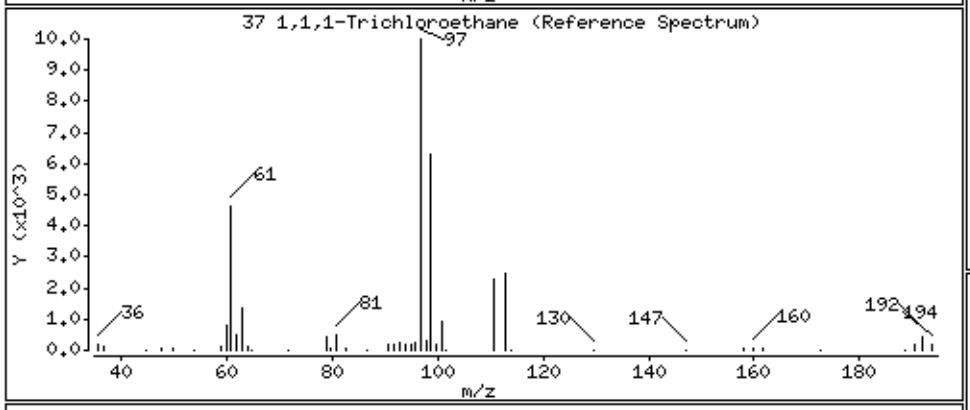
Purge Volume: 5.0 Operator: WL SRC: LIMS

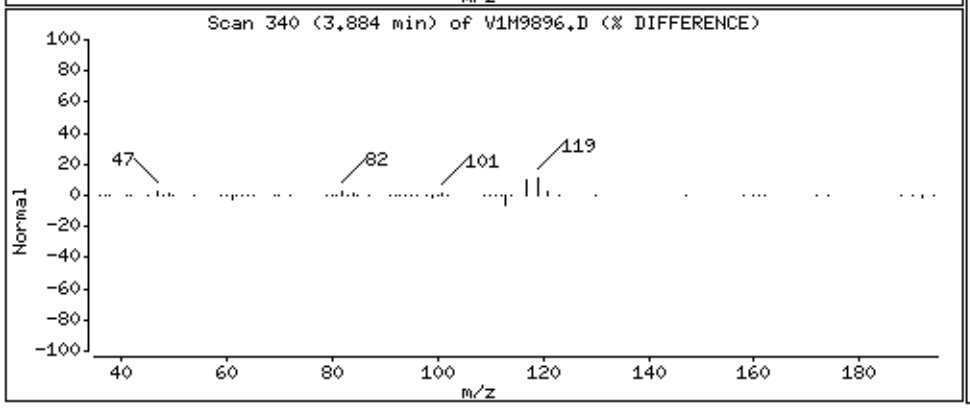
Column phase: DB-624 Column diameter: 0.25

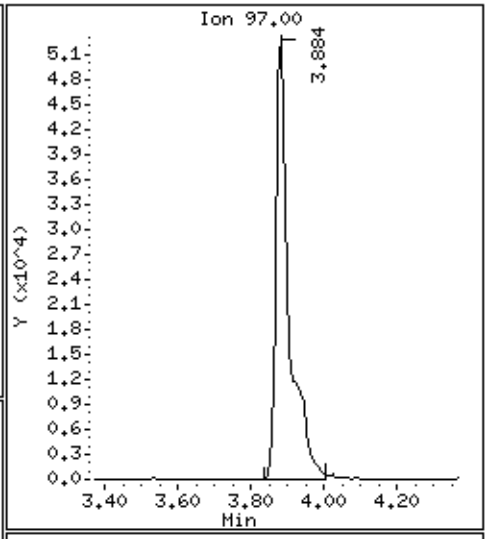
37 1,1,1-Trichloroethane Concentration: 25000 ug/L

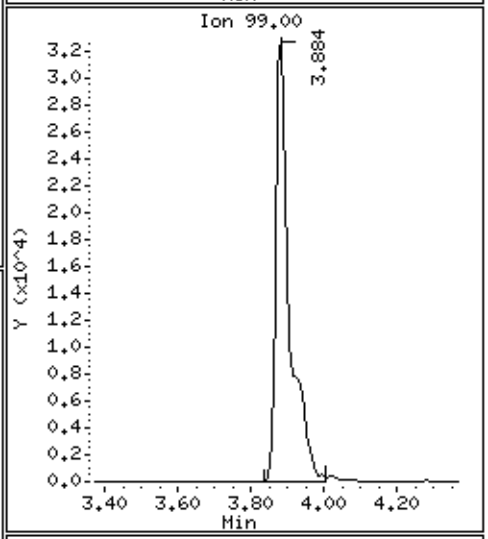


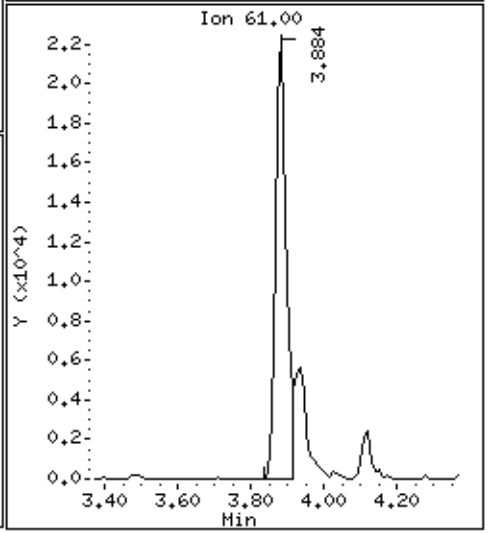












Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9896.D

Date : 26-JUN-2014 13:56

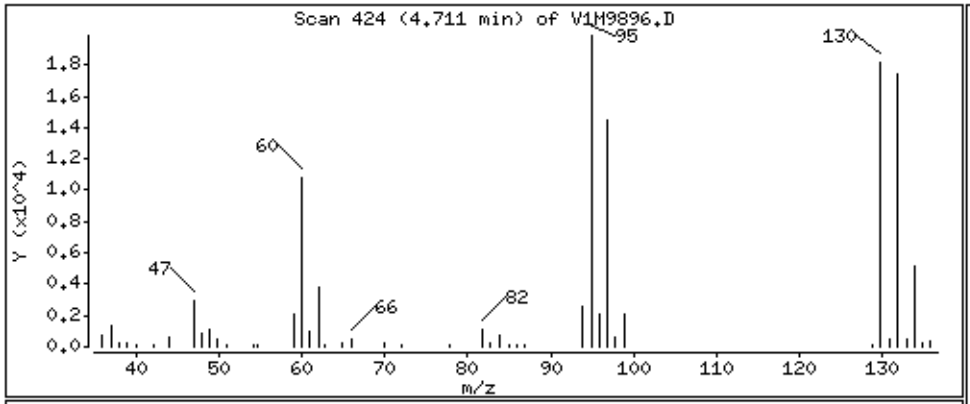
Client ID: MW-21R_6/19/14 Instrument: V1.i

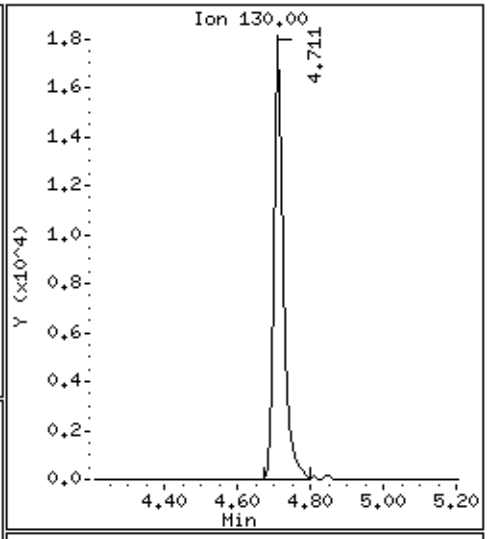
Sample Info: 5G,N1082-15A,,77805,1000

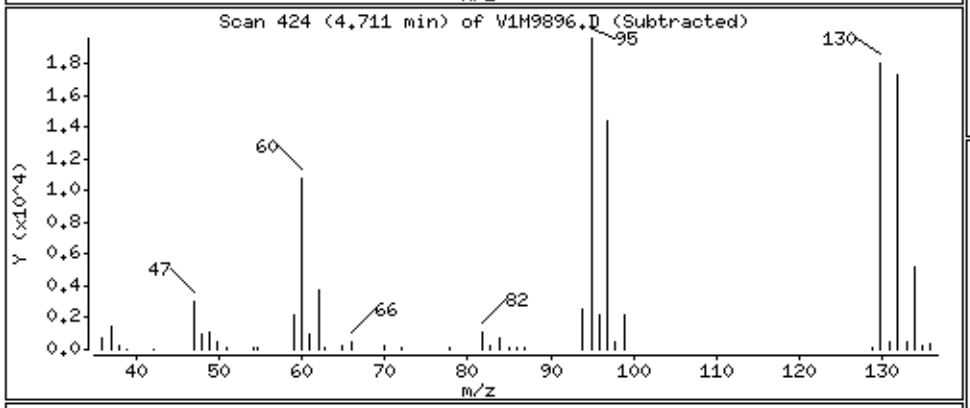
Purge Volume: 5.0 Operator: WL SRC: LIMS

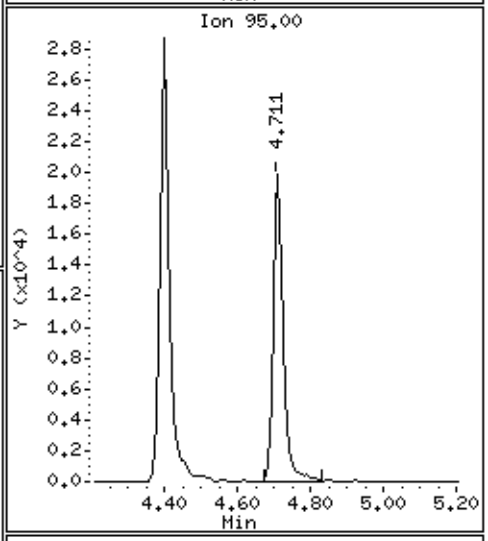
Column phase: DB-624 Column diameter: 0.25

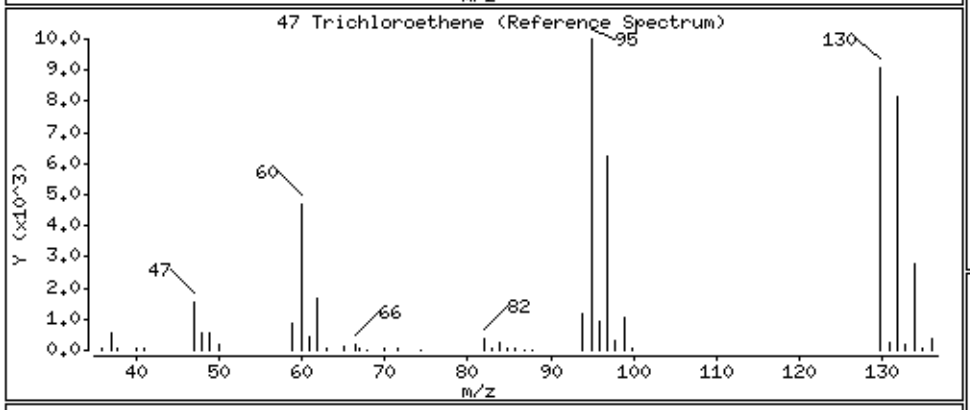
47 Trichloroethene Concentration: 11000 ug/L

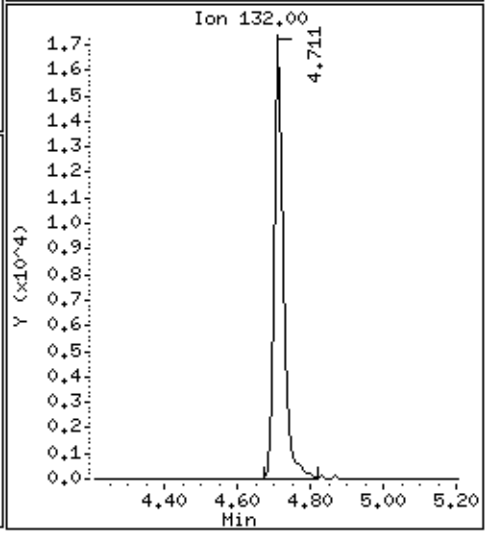


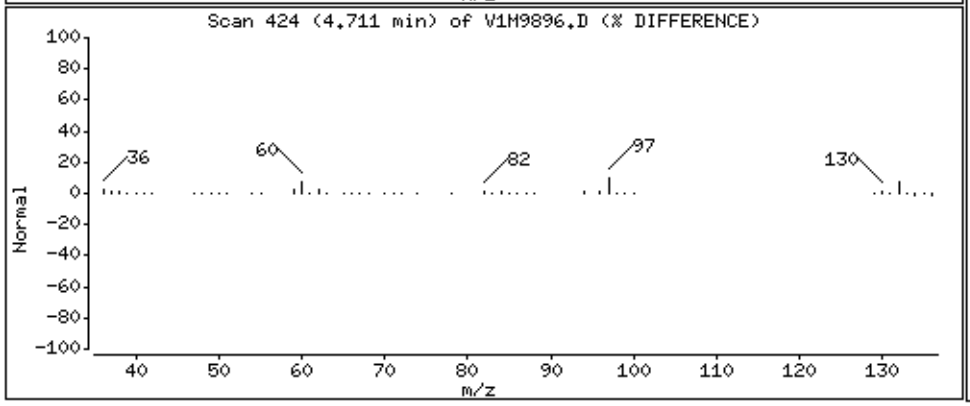












6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V1 Calibration Date(s): 06/26/2014 06/26/2014

Heated Purge: (Y/N) N Calibration Times: 8:16 10:46

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1M9884.D RRF020 = V1M9883.D RRF050 = V1M9887.D RRF100 = V1M9889.D RRF200 = V1M9888.D
RRF001 = V1M9886.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.142	0.157	0.135	0.147	0.147	0.168					0.149	7.9
Chloromethane	0.269	0.329	0.282	0.320	0.305	0.322					0.305	8.0
Vinyl chloride	0.232	0.279	0.257	0.278	0.261	0.211					0.253	10.6
Bromomethane	0.162	0.184	0.181	0.176	0.175	0.183					0.177	4.6
Chloroethane	0.159	0.195	0.175	0.180	0.178	0.171					0.177	6.6
Trichlorofluoromethane	0.442	0.491	0.443	0.433	0.440	0.412					0.443	5.8
1,1-Dichloroethene	0.234	0.278	0.250	0.253	0.258	0.283					0.259	7.0
Acetone	0.015	0.023	0.022	0.024	0.025						0.022	17.9
Iodomethane	0.387	0.453	0.415	0.408	0.418	0.283					0.394	14.8
Carbon disulfide	0.648	0.761	0.650	0.687	0.673	0.708					0.688	6.1
Methylene chloride	0.244	0.290	0.270	0.262	0.268	0.160					0.249	18.4
trans-1,2-Dichloroethene	0.258	0.307	0.283	0.262	0.265	0.248					0.270	7.9
Methyl tert-butyl ether	0.586	0.690	0.675	0.673	0.690	0.620					0.656	6.5
1,1-Dichloroethane	0.424	0.529	0.500	0.478	0.496	0.464					0.482	7.4
Vinyl acetate	0.979	1.254	1.163	1.160	1.191	1.097					1.141	8.2
2-Butanone	0.017	0.024	0.023	0.024	0.024						0.022	12.9
cis-1,2-Dichloroethene	0.262	0.306	0.287	0.277	0.282	0.263					0.279	5.8
2,2-Dichloropropane	0.183	0.224	0.204	0.190	0.184	0.224					0.202	9.4
Bromochloromethane	0.117	0.130	0.130	0.127	0.126	0.105					0.123	8.0
Chloroform	0.471	0.547	0.506	0.491	0.492	0.471					0.496	5.7
1,1,1-Trichloroethane	0.381	0.459	0.426	0.404	0.417	0.435					0.420	6.3
1,1-Dichloropropene	0.115	0.139	0.124	0.118	0.120	0.113					0.121	7.9
Carbon tetrachloride	0.411	0.480	0.444	0.442	0.449	0.454					0.447	5.0
1,2-Dichloroethane	0.367	0.444	0.406	0.391	0.397	0.419					0.404	6.5
Benzene	0.859	0.996	0.931	0.900	0.909	1.003					0.933	6.1
Trichloroethene	0.234	0.264	0.249	0.231	0.240	0.273					0.249	6.8
1,2-Dichloropropane	0.216	0.274	0.260	0.250	0.258	0.218					0.246	9.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

SW846

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V1 Calibration Date(s): 06/26/2014 06/26/2014

Heated Purge: (Y/N) N Calibration Times: 8:16 10:46

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1M9884.D RRF020 = V1M9883.D RRF050 = V1M9887.D RRF100 = V1M9889.D RRF200 = V1M9888.D
RRF001 = V1M9886.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.168	0.191	0.181	0.178	0.178	0.141					0.173	9.8
Bromodichloromethane	0.353	0.421	0.398	0.385	0.395	0.367					0.387	6.3
cis-1,3-Dichloropropene	0.360	0.437	0.422	0.412	0.424	0.391					0.408	6.9
4-Methyl-2-pentanone	0.225	0.247	0.236	0.236	0.242						0.237	3.6
Toluene	0.927	1.074	0.979	0.927	0.917	1.019					0.974	6.5
trans-1,3-Dichloropropene	0.312	0.403	0.385	0.375	0.386	0.339					0.367	9.3
1,1,2-Trichloroethane	0.178	0.205	0.199	0.194	0.195	0.208					0.196	5.5
1,3-Dichloropropane	0.442	0.525	0.496	0.488	0.497	0.500					0.491	5.6
Tetrachloroethene	0.231	0.262	0.240	0.230	0.238	0.270					0.245	6.9
2-Hexanone	0.191	0.242	0.231	0.249	0.248						0.232	10.4
Dibromochloromethane	0.316	0.393	0.392	0.384	0.387	0.265					0.356	15.0
1,2-Dibromoethane	0.293	0.326	0.315	0.311	0.311	0.320					0.313	3.6
Chlorobenzene	0.802	0.973	0.867	0.842	0.846	0.921					0.875	7.0
1,1,1,2-Tetrachloroethane	0.307	0.372	0.346	0.331	0.334	0.359					0.341	6.7
Ethylbenzene	0.443	0.516	0.472	0.456	0.452	0.498					0.473	6.1
m,p-Xylene	0.568	0.646	0.580	0.558	0.556	0.595					0.584	5.8
o-Xylene	0.559	0.638	0.566	0.550	0.552	0.562					0.571	5.8
Xylene (Total)	0.565	0.643	0.575	0.555	0.555	0.584					0.580	5.7
Styrene	0.881	1.064	0.968	0.944	0.939	0.992					0.965	6.3
Bromoform	0.152	0.210	0.198	0.203	0.204	0.147					0.186	15.2
Isopropylbenzene	1.388	1.649	1.410	1.436	1.418	1.531					1.472	6.8
1,1,2,2-Tetrachloroethane	0.781	0.804	0.780	0.772	0.728	0.882					0.791	6.5
Bromobenzene	0.800	0.809	0.754	0.735	0.707	0.755					0.760	5.1
1,2,3-Trichloropropane	0.831	0.909	0.839	0.852	0.818	0.868					0.853	3.8
n-Propylbenzene	0.834	0.881	0.832	0.771	0.736	1.014					0.845	11.5
2-Chlorotoluene	0.785	0.804	0.771	0.697	0.680	0.768					0.751	6.7
1,3,5-Trimethylbenzene	3.072	3.209	2.975	2.769	2.614	3.107					2.958	7.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V1 Calibration Date(s): 06/26/2014 06/26/2014

Heated Purge: (Y/N) N Calibration Times: 8:16 10:46

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1M9884.D RRF020 = V1M9883.D RRF050 = V1M9887.D RRF100 = V1M9889.D RRF200 = V1M9888.D
RRF001 = V1M9886.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.766	0.819	0.758	0.731	0.722	0.775					0.762	4.6
tert-Butylbenzene	3.002	3.063	2.801	2.670	2.534	3.221					2.882	9.0
1,2,4-Trimethylbenzene	3.019	3.093	2.843	2.714	2.513	2.972					2.859	7.6
sec-Butylbenzene	3.960	3.894	3.467	3.408	3.117	3.960					3.634	9.7
4-Isopropyltoluene	2.900	3.087	2.740	2.716	2.551	2.994					2.832	7.0
1,3-Dichlorobenzene	1.412	1.484	1.367	1.323	1.259	1.446					1.382	6.0
1,4-Dichlorobenzene	1.331	1.487	1.343	1.318	1.267	1.612					1.393	9.4
n-Butylbenzene	2.532	2.746	2.520	2.549	2.338	2.669					2.559	5.5
1,2-Dichlorobenzene	1.371	1.354	1.246	1.224	1.148	1.407					1.292	7.8
1,2-Dibromo-3-chloropropane	0.142	0.113	0.102	0.132	0.109	0.177					0.129	21.6
1,2,4-Trichlorobenzene	0.602	0.579	0.519	0.586	0.516	0.539					0.557	6.6
Hexachlorobutadiene	0.405	0.349	0.256	0.297	0.252	0.406					0.328	21.4
1,2,3-Trichlorobenzene	0.658	0.504	0.398	0.498	0.400	0.559					0.503	19.7
Naphthalene	1.687	1.301	1.048	1.379	1.081	1.534					1.338	18.7
1,1,2-Trichloro-1,2,2-trifluoroe	0.285	0.330	0.300	0.313	0.313	0.309					0.308	4.8

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V1 Calibration Date(s): 06/26/2014 06/26/2014

Heated Purge: (Y/N) N Calibration Times: 8:16 10:46

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1M9884.D RRF020 = V1M9883.D RRF050 = V1M9887.D RRF100 = V1M9889.D RRF200 = V1M9888.D
RRF001 = V1M9886.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.334	0.329	0.337	0.329	0.331						0.332	1.0
1,2-Dichloroethane-d4	0.064	0.071	0.069	0.065	0.066						0.067	4.5
Toluene-d8	1.342	1.360	1.341	1.325	1.317						1.337	1.3
Bromofluorobenzene	0.572	0.604	0.600	0.610	0.607						0.599	2.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.690	0.820	0.758	0.721	0.709	0.706					0.734	6.5
Chloromethane	1.063	1.201	1.008	0.923	0.801	0.858					0.976	14.9
Vinyl chloride	0.782	0.905	0.837	0.846	0.784	0.871					0.838	5.7
Bromomethane	0.215	0.227	0.220	0.265	0.223	0.224					0.229	7.9
Chloroethane	0.494	0.510	0.524	0.505	0.461	0.386					0.480	10.6
Trichlorofluoromethane	1.378	1.602	1.482	1.392	1.423	1.426					1.450	5.7
1,1-Dichloroethene	0.492	0.616	0.546	0.559	0.549	0.615					0.563	8.3
Acetone	0.151	0.185	0.159	0.108	0.132						0.147	19.7
Iodomethane	0.208	0.283	0.238	0.421	0.381	0.256					0.298	28.4
Carbon disulfide	1.984	2.163	2.005	1.843	1.872	3.561					2.238	29.4
Methylene chloride	0.538	0.547	0.493	0.512	0.473	0.558					0.520	6.4
trans-1,2-Dichloroethene	0.527	0.548	0.507	0.495	0.498	0.530					0.517	4.0
Methyl tert-butyl ether	1.914	2.037	1.944	2.023	1.906	1.898					1.954	3.1
1,1-Dichloroethane	1.388	1.513	1.392	1.396	1.357	1.357					1.400	4.1
Vinyl acetate	3.481	4.079	3.802	3.915	3.818	2.962					3.676	10.9
2-Butanone	0.065	0.086	0.079	0.067	0.078						0.075	11.7
cis-1,2-Dichloroethene	0.506	0.564	0.522	0.526	0.509	0.477					0.517	5.6
2,2-Dichloropropane	1.201	1.460	1.375	1.295	1.359	1.138					1.305	9.1
Bromochloromethane	0.264	0.230	0.224	0.229	0.213	0.280					0.240	10.8
Chloroform	1.301	1.412	1.327	1.321	1.292	1.394					1.341	3.7
1,1,1-Trichloroethane	1.340	1.542	1.432	1.388	1.419	1.375					1.416	4.9
1,1-Dichloropropene	0.230	0.270	0.241	0.246	0.251	0.189					0.238	11.4
Carbon tetrachloride	1.176	1.294	1.225	1.248	1.244	1.165					1.225	3.9
1,2-Dichloroethane	1.706	1.715	1.652	1.676	1.609	1.747					1.684	2.9
Benzene	1.863	1.951	1.813	1.823	1.827	1.766					1.840	3.4
Trichloroethene	0.512	0.553	0.526	0.521	0.535	0.603					0.542	6.1
1,2-Dichloropropane	0.589	0.657	0.614	0.649	0.624	0.587					0.620	4.7

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.428	0.432	0.415	0.419	0.400	0.459					0.425	4.7
Bromodichloromethane	0.972	1.061	1.016	1.049	1.040	0.998					1.023	3.3
cis-1,3-Dichloropropene	0.735	0.838	0.831	0.899	0.876	0.609					0.798	13.6
4-Methyl-2-pentanone	0.972	1.185	1.098	1.027	1.063						1.069	7.5
Toluene	1.912	2.099	1.964	1.967	1.980	1.909					1.972	3.5
trans-1,3-Dichloropropene	0.781	0.903	0.893	0.966	0.938	0.593					0.846	16.4
1,1,2-Trichloroethane	0.457	0.482	0.438	0.458	0.439	0.465					0.457	3.6
1,3-Dichloropropane	0.564	0.637	0.587	0.591	0.560	0.468					0.568	9.9
Tetrachloroethene	0.330	0.400	0.378	0.342	0.348	0.321					0.353	8.6
2-Hexanone	0.521	0.669	0.629	0.513	0.550						0.576	12.0
Dibromochloromethane	0.427	0.493	0.478	0.491	0.464	0.412					0.461	7.4
1,2-Dibromoethane	0.350	0.404	0.366	0.361	0.347	0.320					0.358	7.7
Chlorobenzene	0.912	0.999	0.935	0.890	0.865	0.872					0.912	5.5
1,1,1,2-Tetrachloroethane	0.412	0.460	0.428	0.413	0.407	0.397					0.419	5.3
Ethylbenzene	0.421	0.502	0.491	0.469	0.470	0.314					0.444	15.7
m,p-Xylene	0.524	0.624	0.602	0.574	0.588	0.481					0.565	9.5
o-Xylene	0.493	0.575	0.572	0.558	0.554	0.419					0.528	11.6
Xylene (Total)	0.514	0.608	0.592	0.569	0.576	0.460					0.553	10.1
Styrene	0.693	0.926	0.908	0.909	0.888	0.625					0.825	15.9
Bromoform	0.263	0.319	0.310	0.304	0.304	0.245					0.291	10.2
Isopropylbenzene	1.342	1.670	1.734	1.607	1.639	1.093					1.514	16.3
1,1,2,2-Tetrachloroethane	0.816	0.848	0.790	0.674	0.680	0.832					0.773	10.0
Bromobenzene	0.678	0.754	0.718	0.645	0.634	0.658					0.681	6.8
1,2,3-Trichloropropane	1.011	1.181	1.099	0.942	0.955	0.881					1.011	11.0
n-Propylbenzene	0.566	0.637	0.662	0.572	0.598	0.550					0.598	7.3
2-Chlorotoluene	0.596	0.623	0.594	0.537	0.546	0.538					0.573	6.4
1,3,5-Trimethylbenzene	2.056	2.508	2.530	2.216	2.312	1.901					2.254	11.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.583	0.639	0.620	0.555	0.561	0.583					0.590	5.6
tert-Butylbenzene	2.021	2.583	2.728	2.351	2.429	1.994					2.351	12.6
1,2,4-Trimethylbenzene	2.069	2.466	2.454	2.207	2.254	1.607					2.176	14.6
sec-Butylbenzene	2.468	2.862	2.969	2.533	2.670	2.032					2.589	12.8
4-Isopropyltoluene	2.067	2.493	2.585	2.216	2.311	1.699					2.229	14.3
1,3-Dichlorobenzene	1.142	1.276	1.214	1.092	1.109	1.155					1.165	5.9
1,4-Dichlorobenzene	1.303	1.305	1.245	1.132	1.120	1.413					1.253	9.0
n-Butylbenzene	1.844	2.220	2.355	1.986	2.081	1.392					1.980	17.1
1,2-Dichlorobenzene	1.121	1.203	1.199	1.067	1.055	1.024					1.111	6.8
1,2-Dibromo-3-chloropropane	0.173	0.210	0.210	0.176	0.194	0.117					0.180	19.1
1,2,4-Trichlorobenzene	0.616	0.678	0.763	0.701	0.701	0.452					0.652	16.7
Hexachlorobutadiene	0.517	0.577	0.590	0.458	0.458	0.482					0.514	11.3
1,2,3-Trichlorobenzene	0.652	0.682	0.729	0.651	0.642	0.511					0.645	11.3
Naphthalene	0.979	1.336	1.490	1.441	1.484	0.566					1.216	30.6
1,1,2-Trichloro-1,2,2-trifluoroe	0.747	0.804	0.752	0.700	0.711	1.110					0.804	19.2

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1082 SAS No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date(s): 06/23/2014 06/23/2014

Heated Purge: (Y/N) N Calibration Times: 9:51 12:48

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V8D5646.D RRF020 = V8D5645.D RRF050 = V8D5644.D RRF100 = V8D5650.D RRF200 = V8D5649.D
RRF001 = V8D5648.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.458	0.432	0.428	0.434	0.438						0.438	2.7
1,2-Dichloroethane-d4	0.068	0.062	0.064	0.068	0.064						0.065	4.2
Toluene-d8	0.982	1.012	0.997	0.973	0.989						0.990	1.5
Bromofluorobenzene	0.679	0.675	0.674	0.684	0.664						0.675	1.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9883.D
Report Date: 27-Jun-2014 10:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9883.D
Lab Smp Id: VSTD0201K Client Smp ID: VSTD0201K
Inj Date : 26-JUN-2014 08:16
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD0201K,VSTD0201K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 08:16 Cal File: V1M9883.D
Als bottle: 36 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	1.238	1.232	(0.282)	41948	20.0000	21
2	Freon114	85	1.238	1.232	(0.282)	41948	20.0000	22
3	Chloromethane	50	1.366	1.360	(0.311)	88083	20.0000	22
4	Vinyl Chloride	62	1.465	1.468	(0.334)	74636	20.0000	22
5	Bromomethane	94	1.671	1.665	(0.381)	49092	20.0000	21
6	Chloroethane	64	1.750	1.754	(0.399)	52165	20.0000	22
7	Trichlorofluoromethane	101	1.937	1.921	(0.441)	131237	20.0000	22
126	Ethanol	46	2.016	2.010	(0.459)	30334	2000.00	1900(A)
8	Ether	59	2.075	2.079	(0.473)	62223	20.0000	22
9	Acrolein	56	2.164	2.158	(0.493)	48967	100.000	110
10	1,1-Dichloroethene	96	2.262	2.266	(0.515)	74384	20.0000	21
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.282	2.276	(0.520)	88255	20.0000	21
12	Acetone	58	2.262	2.266	(0.515)	6156	20.0000	22
13	Iodomethane	142	2.380	2.384	(0.542)	121221	20.0000	23
14	Carbon Disulfide	76	2.400	2.404	(0.547)	203516	20.0000	22
15	Acetonitrile	41	2.479	2.483	(0.565)	265544	200.000	220(A)
16	Allyl Chloride	39	2.479	2.483	(0.565)	149547	20.0000	22
17	Methyl Acetate	43	2.489	2.492	(0.567)	53075	20.0000	17
18	Methylene Chloride	84	2.557	2.561	(0.583)	77441	20.0000	22
19	tert-Butanol	59	2.636	2.640	(0.601)	11092	40.0000	48
20	Acrylonitrile	53	2.725	2.729	(0.621)	22931	20.0000	22
21	trans-1,2-Dichloroethene	96	2.754	2.758	(0.628)	82107	20.0000	23
22	Methyl tert-butyl ether	73	2.764	2.768	(0.630)	184538	20.0000	21

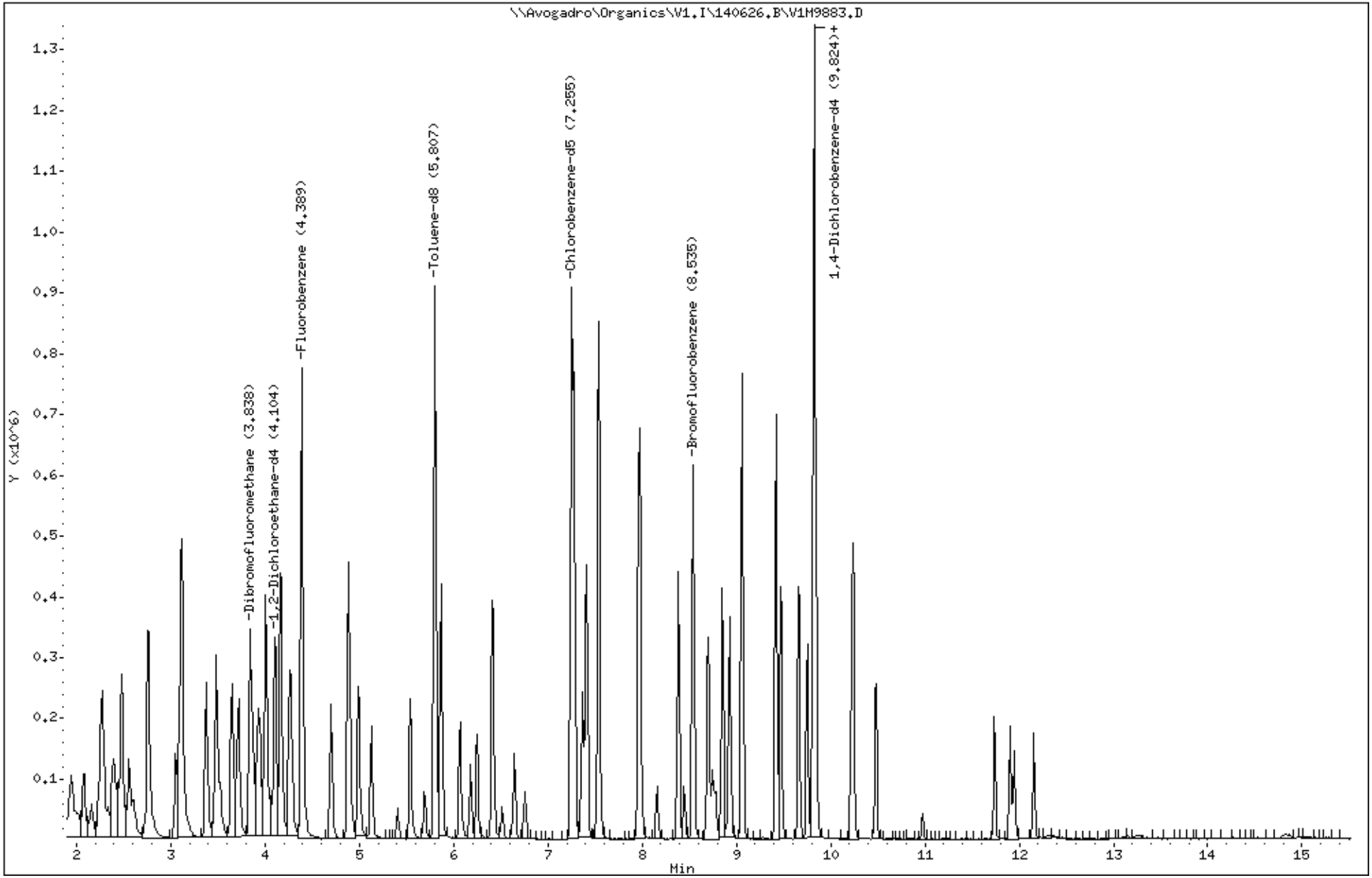
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.050	3.054	(0.695)	141445	20.0000	22
	24 Vinyl acetate	43	3.109	3.093	(0.708)	335413	20.0000	22
	25 Diisopropyl Ether	45	3.109	3.113	(0.708)	349272	20.0000	21
	26 2-Chloro-1,3-Butadiene	53	3.129	3.123	(0.713)	137593	20.0000	22
	27 Ethyl tert-butyl ether	59	3.375	3.379	(0.769)	257035	20.0000	22
	29 2,2-Dichloropropane	77	3.483	3.487	(0.794)	59855	20.0000	22
	28 cis-1,2-Dichloroethene	96	3.483	3.477	(0.794)	81752	20.0000	22
	30 2-Butanone	72	3.483	3.487	(0.794)	6417	20.0000	22
	32 Propionitrile	54	3.522	3.516	(0.803)	74067	200.000	220(A)
	33 Methacrylonitrile	41	3.641	3.644	(0.830)	92035	40.0000	42
	34 Bromochloromethane	128	3.660	3.654	(0.834)	34755	20.0000	21
	31 Tetrahydrofuran	72	3.700	3.704	(0.843)	10840	40.0000	39
	35 Chloroform	83	3.719	3.723	(0.847)	146260	20.0000	22
$	36 Dibromofluoromethane	113	3.837	3.841	(0.874)	220176	50.0000	50
	37 1,1,1-Trichloroethane	97	3.877	3.871	(0.883)	122705	20.0000	22
	38 Cyclohexane	56	3.936	3.930	(0.897)	133348	20.0000	22
	39 1,1-Dichloropropene	110	4.005	4.009	(0.913)	37251	20.0000	23
	40 Carbon Tetrachloride	117	4.015	4.009	(0.915)	128491	20.0000	22
	41 Isobutyl Alcohol	43	4.084	4.078	(0.930)	50303	400.000	430(A)
$	42 1,2-Dichloroethane-d4	102	4.113	4.107	(0.937)	47410	50.0000	53
	43 Benzene	78	4.162	4.166	(0.948)	266243	20.0000	21
	44 1,2-Dichloroethane	62	4.172	4.166	(0.951)	118740	20.0000	22
	45 tert-Amyl methyl ether	73	4.261	4.265	(0.971)	192945	20.0000	21
*	46 Fluorobenzene	96	4.389	4.393	(1.000)	668580	50.0000	
	47 Trichloroethene	130	4.704	4.708	(1.072)	70551	20.0000	21
	48 Methylcyclohexane	83	4.881	4.885	(1.112)	114074	20.0000	22
	49 1,2-Dichloropropane	63	4.891	4.895	(1.114)	73230	20.0000	22
	51 Methyl Methacrylate	69	4.989	5.003	(1.137)	44972	20.0000	21
	52 Dibromomethane	93	4.989	4.993	(1.137)	50962	20.0000	22
	53 1,4-Dioxane	88	5.009	5.013	(1.141)	8985	400.000	380(A)
	54 Bromodichloromethane	83	5.127	5.131	(1.168)	112720	20.0000	22
	55 2-Chloroethyl vinyl ether	63	5.403	5.407	(1.231)	20686	20.0000	20
	56 cis-1,3-Dichloropropene	75	5.541	5.545	(1.262)	116988	20.0000	21
	57 4-Methyl-2-pentanone	43	5.689	5.692	(1.296)	66150	20.0000	21
$	58 Toluene-d8	98	5.807	5.801	(0.800)	618974	50.0000	51
	59 Toluene	91	5.866	5.870	(1.336)	287284	20.0000	22
	60 trans-1,3-Dichloropropene	75	6.073	6.067	(1.384)	107752	20.0000	22
	61 Ethyl Methacrylate	69	6.181	6.175	(1.408)	56877	20.0000	21
	62 1,1,2-Trichloroethane	97	6.250	6.254	(1.424)	54940	20.0000	21
	63 Tetrachloroethene	164	6.407	6.411	(0.883)	47623	20.0000	21
	64 1,3-Dichloropropane	76	6.417	6.411	(0.885)	95636	20.0000	21
	65 2-Hexanone	43	6.516	6.510	(0.898)	44052	20.0000	21
	66 Dibromochloromethane	129	6.644	6.638	(0.916)	71567	20.0000	22
	67 1,2-Dibromoethane	107	6.752	6.756	(0.931)	59294	20.0000	21
	69 1-Chlorohexane	91	7.274	7.278	(1.003)	106763	20.0000	21
*	68 Chlorobenzene-d5	117	7.254	7.248	(1.000)	455039	50.0000	
	70 Chlorobenzene	112	7.284	7.278	(1.004)	177069	20.0000	22
	71 1,1,1,2-Tetrachloroethane	131	7.372	7.366	(1.016)	67709	20.0000	22
	72 Ethylbenzene	106	7.412	7.406	(1.022)	93965	20.0000	22
	73 m,p-Xylene	106	7.540	7.534	(1.039)	235099	40.0000	44
	74 o-Xylene	106	7.963	7.967	(1.098)	116064	20.0000	22
	75 Styrene	104	7.973	7.977	(1.099)	193635	20.0000	22
	76 Bromoform	173	8.160	8.154	(1.125)	38150	20.0000	21
	77 Isopropylbenzene	105	8.386	8.380	(1.156)	300093	20.0000	22

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.445	8.449	(1.164)	18282	20.0000	21
$	79	Bromofluorobenzene	95	8.534	8.538	(1.176)	275044	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	8.711	8.705	(0.887)	61928	20.0000	20
	81	Bromobenzene	156	8.701	8.696	(0.886)	62322	20.0000	21
	82	1,2,3-Trichloropropane	75	8.751	8.745	(0.891)	70009	20.0000	21
	83	n-Propylbenzene	120	8.849	8.853	(0.901)	67859	20.0000	21
	84	2-Chlorotoluene	126	8.928	8.932	(0.909)	61902	20.0000	21
	85	1,3,5-Trimethylbenzene	105	9.066	9.060	(0.923)	247089	20.0000	22
	86	4-Chlorotoluene	126	9.056	9.060	(0.922)	63100	20.0000	22
M	94	Xylene (Total)	106				351163	60.0000	66
	87	tert-Butylbenzene	119	9.420	9.424	(0.959)	235872	20.0000	21
	88	1,2,4-Trimethylbenzene	105	9.469	9.473	(0.964)	238194	20.0000	22
	89	sec-Butylbenzene	105	9.657	9.660	(0.983)	299892	20.0000	21
	90	1,3-Dichlorobenzene	146	9.755	9.749	(0.993)	114267	20.0000	21
	91	4-Isopropyltoluene	119	9.824	9.828	(1.000)	237749	20.0000	22
*	92	1,4-Dichlorobenzene-d4	152	9.824	9.828	(1.000)	192513	50.0000	
	93	1,4-Dichlorobenzene	146	9.844	9.848	(1.002)	114509	20.0000	21
	95	n-Butylbenzene	91	10.247	10.241	(1.043)	211439	20.0000	21
	96	1,2-Dichlorobenzene	146	10.228	10.222	(1.041)	104275	20.0000	21
	97	Hexachloroethane	117	10.484	10.478	(1.067)	60179	20.0000	22
	98	1,2-Dibromo-3-chloropropane	75	10.976	10.970	(1.117)	8673	20.0000	17
	99	1,2,4-Trichlorobenzene	180	11.734	11.738	(1.194)	44550	20.0000	21
	100	Hexachlorobutadiene	225	11.911	11.905	(1.212)	26845	20.0000	21
	101	Naphthalene	128	11.951	11.945	(1.216)	100204	20.0000	19
	102	1,2,3-Trichlorobenzene	180	12.157	12.161	(1.238)	38794	20.0000	20

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9883.D
Date : 26-JUN-2014 08:16
Client ID: VSTD0201K
Instrument: V1.i
Sample Info: 5G,VSTD0201K,VSTD0201K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9884.D
Report Date: 27-Jun-2014 10:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9884.D
Lab Smp Id: VSTD0051K Client Smp ID: VSTD0051K
Inj Date : 26-JUN-2014 08:41
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD0051K,VSTD0051K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 08:41 Cal File: V1M9884.D
Als bottle: 37 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)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.227	1.232	(0.279)	9471	5.00000	4.7
2	Freon114	85	1.227	1.232	(0.279)	9471	5.00000	4.9
3	Chloromethane	50	1.355	1.360	(0.308)	18012	5.00000	4.5
4	Vinyl Chloride	62	1.454	1.468	(0.331)	15506	5.00000	4.7
5	Bromomethane	94	1.670	1.665	(0.380)	10812	5.00000	4.6
6	Chloroethane	64	1.749	1.754	(0.398)	10660	5.00000	4.5
7	Trichlorofluoromethane	101	1.946	1.921	(0.443)	29598	5.00000	4.9
126	Ethanol	46	2.015	2.010	(0.458)	11205	500.000	780(A)
8	Ether	59	2.084	2.079	(0.474)	12288	5.00000	4.4(Q)
9	Acrolein	56	2.163	2.158	(0.492)	9981	25.0000	23
10	1,1-Dichloroethene	96	2.271	2.266	(0.516)	15690	5.00000	4.5
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.281	2.276	(0.519)	19076	5.00000	4.6
12	Acetone	58	2.261	2.266	(0.514)	1024	5.00000	3.8(QM)M6 AM 06/27
13	Iodomethane	142	2.389	2.384	(0.543)	25919	5.00000	5.0
14	Carbon Disulfide	76	2.409	2.404	(0.548)	43389	5.00000	4.7
15	Acetonitrile	41	2.478	2.483	(0.563)	57653	50.0000	47
16	Allyl Chloride	39	2.487	2.483	(0.566)	30613	5.00000	4.5
17	Methyl Acetate	43	2.497	2.492	(0.568)	15857	5.00000	5.0
18	Methylene Chloride	84	2.566	2.561	(0.584)	16340	5.00000	5.1(Q)
19	tert-Butanol	59	2.665	2.640	(0.606)	2714	10.0000	11
20	Acrylonitrile	53	2.734	2.729	(0.622)	4568	5.00000	5.1
21	trans-1,2-Dichloroethene	96	2.763	2.758	(0.628)	17246	5.00000	4.7
22	Methyl tert-butyl ether	73	2.773	2.768	(0.631)	39195	5.00000	4.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.059	3.054	(0.696)	28403	5.00000	4.4
	24 Vinyl acetate	43	3.118	3.093	(0.709)	65527	5.00000	4.4
	25 Diisopropyl Ether	45	3.118	3.113	(0.709)	74823	5.00000	4.6
	26 2-Chloro-1,3-Butadiene	53	3.137	3.123	(0.713)	29176	5.00000	4.6
	27 Ethyl tert-butyl ether	59	3.383	3.379	(0.769)	50905	5.00000	4.4
	29 2,2-Dichloropropane	77	3.492	3.487	(0.794)	12247	5.00000	4.4
	28 cis-1,2-Dichloroethene	96	3.492	3.477	(0.794)	17550	5.00000	4.7
	30 2-Butanone	72	3.502	3.487	(0.796)	1149	5.00000	4.0(Q)
	32 Propionitrile	54	3.531	3.516	(0.803)	15943	50.0000	47
	33 Methacrylonitrile	41	3.649	3.644	(0.830)	19603	10.0000	9.1
	34 Bromochloromethane	128	3.669	3.654	(0.834)	7834	5.00000	4.8
	31 Tetrahydrofuran	72	3.718	3.704	(0.846)	2206	10.0000	8.4
	35 Chloroform	83	3.728	3.723	(0.848)	31496	5.00000	4.7
$	36 Dibromofluoromethane	113	3.846	3.841	(0.875)	223430	50.0000	50
	37 1,1,1-Trichloroethane	97	3.886	3.871	(0.884)	25504	5.00000	4.5
	38 Cyclohexane	56	3.935	3.930	(0.895)	27833	5.00000	4.5
	39 1,1-Dichloropropene	110	4.014	4.009	(0.913)	7689	5.00000	4.7
	40 Carbon Tetrachloride	117	4.014	4.009	(0.913)	27487	5.00000	4.6
	41 Isobutyl Alcohol	43	4.102	4.078	(0.933)	15692	100.000	130
$	42 1,2-Dichloroethane-d4	102	4.122	4.107	(0.937)	42847	50.0000	47
	43 Benzene	78	4.171	4.166	(0.949)	57477	5.00000	4.5
	44 1,2-Dichloroethane	62	4.181	4.166	(0.951)	24586	5.00000	4.5
	45 tert-Amyl methyl ether	73	4.270	4.265	(0.971)	40663	5.00000	4.5
*	46 Fluorobenzene	96	4.398	4.393	(1.000)	669110	50.0000	
	47 Trichloroethene	130	4.713	4.708	(1.072)	15684	5.00000	4.6
	48 Methylcyclohexane	83	4.890	4.885	(1.112)	25016	5.00000	4.7
	49 1,2-Dichloropropane	63	4.900	4.895	(1.114)	14455	5.00000	4.5
	51 Methyl Methacrylate	69	5.008	5.003	(1.139)	9382	5.00000	4.4
	52 Dibromomethane	93	4.998	4.993	(1.137)	11209	5.00000	4.9
	53 1,4-Dioxane	88	5.018	5.013	(1.141)	4059	100.000	160
	54 Bromodichloromethane	83	5.136	5.131	(1.168)	23610	5.00000	4.6
	55 2-Chloroethyl vinyl ether	63	5.412	5.407	(1.231)	4341	5.00000	4.5
	56 cis-1,3-Dichloropropene	75	5.550	5.545	(1.262)	24096	5.00000	4.5
	57 4-Methyl-2-pentanone	43	5.697	5.692	(1.296)	15038	5.00000	4.8
$	58 Toluene-d8	98	5.806	5.801	(0.800)	616300	50.0000	50
	59 Toluene	91	5.875	5.870	(1.336)	62041	5.00000	4.6
	60 trans-1,3-Dichloropropene	75	6.081	6.067	(1.383)	20905	5.00000	4.2
	61 Ethyl Methacrylate	69	6.190	6.175	(1.407)	10886	5.00000	4.2
	62 1,1,2-Trichloroethane	97	6.259	6.254	(1.423)	11899	5.00000	4.5
	63 Tetrachloroethene	164	6.416	6.411	(0.885)	10597	5.00000	4.6
	64 1,3-Dichloropropane	76	6.416	6.411	(0.885)	20270	5.00000	4.5
	65 2-Hexanone	43	6.524	6.510	(0.900)	8760	5.00000	4.3
	66 Dibromochloromethane	129	6.643	6.638	(0.916)	14524	5.00000	4.6(T)
	67 1,2-Dibromoethane	107	6.761	6.756	(0.932)	13463	5.00000	4.7
	69 1-Chlorohexane	91	7.283	7.278	(1.004)	24581	5.00000	4.5(Q)
*	68 Chlorobenzene-d5	117	7.253	7.248	(1.000)	459111	50.0000	
	70 Chlorobenzene	112	7.283	7.278	(1.004)	36833	5.00000	4.5
	71 1,1,1,2-Tetrachloroethane	131	7.371	7.366	(1.016)	14072	5.00000	4.4
	72 Ethylbenzene	106	7.411	7.406	(1.022)	20326	5.00000	4.6
	73 m,p-Xylene	106	7.539	7.534	(1.039)	52134	10.0000	9.5
	74 o-Xylene	106	7.962	7.967	(1.098)	25687	5.00000	4.8
	75 Styrene	104	7.982	7.977	(1.100)	40465	5.00000	4.5
	76 Bromoform	173	8.159	8.154	(1.125)	6969	5.00000	4.3
	77 Isopropylbenzene	105	8.385	8.380	(1.156)	63741	5.00000	4.6

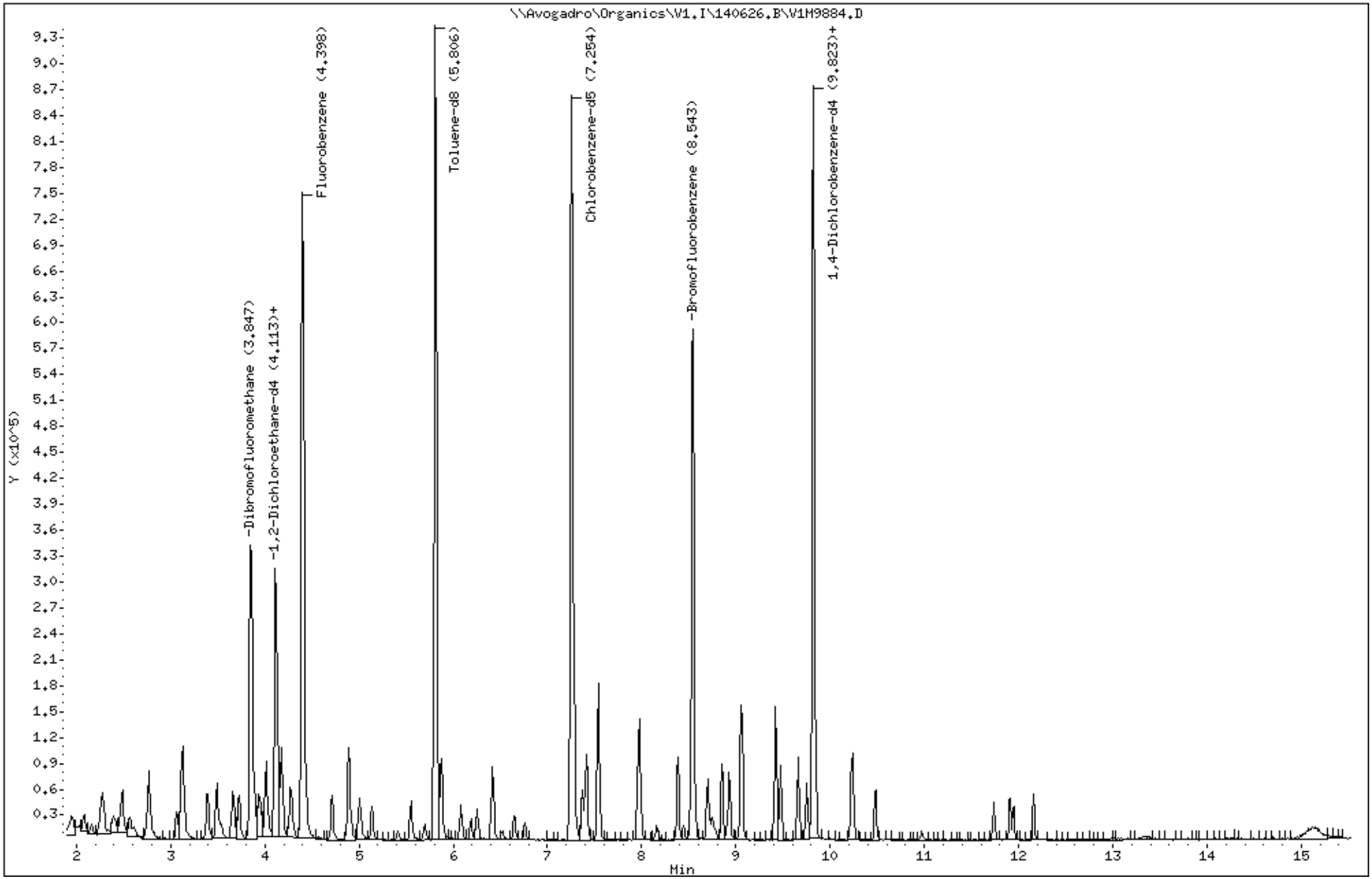
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Report Date: 27-Jun-2014 10:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
78	trans-1,4-Dichloro-2-butene	75	8.444	8.449	(1.164)	3146	5.00000	3.9
$ 79	Bromofluorobenzene	95	8.543	8.538	(1.178)	262565	50.0000	48
80	1,1,2,2-Tetrachloroethane	83	8.710	8.705	(0.887)	13487	5.00000	4.8
81	Bromobenzene	156	8.700	8.696	(0.886)	13823	5.00000	5.1(Q)
82	1,2,3-Trichloropropane	75	8.750	8.745	(0.891)	14361	5.00000	4.8
83	n-Propylbenzene	120	8.848	8.853	(0.901)	14414	5.00000	4.7
84	2-Chlorotoluene	126	8.927	8.932	(0.909)	13555	5.00000	5.0
85	1,3,5-Trimethylbenzene	105	9.065	9.060	(0.923)	53060	5.00000	5.0
86	4-Chlorotoluene	126	9.055	9.060	(0.922)	13231	5.00000	4.9
87	tert-Butylbenzene	119	9.419	9.424	(0.959)	51861	5.00000	5.0
88	1,2,4-Trimethylbenzene	105	9.478	9.473	(0.965)	52153	5.00000	5.1
89	sec-Butylbenzene	105	9.655	9.660	(0.983)	68406	5.00000	5.2
90	1,3-Dichlorobenzene	146	9.754	9.749	(0.993)	24400	5.00000	4.9
91	4-Isopropyltoluene	119	9.823	9.828	(1.000)	50096	5.00000	4.9
* 92	1,4-Dichlorobenzene-d4	152	9.823	9.828	(1.000)	172744	50.0000	
93	1,4-Dichlorobenzene	146	9.843	9.848	(1.002)	22992	5.00000	4.6
95	n-Butylbenzene	91	10.236	10.241	(1.042)	43740	5.00000	4.8
96	1,2-Dichlorobenzene	146	10.217	10.222	(1.040)	23676	5.00000	5.1
97	Hexachloroethane	117	10.483	10.478	(1.067)	12742	5.00000	5.0
98	1,2-Dibromo-3-chloropropane	75	10.975	10.970	(1.117)	2453	5.00000	5.3
99	1,2,4-Trichlorobenzene	180	11.743	11.738	(1.195)	10396	5.00000	5.4
100	Hexachlorobutadiene	225	11.910	11.905	(1.212)	7004	5.00000	5.7
101	Naphthalene	128	11.950	11.945	(1.217)	29136	5.00000	6.0
102	1,2,3-Trichlorobenzene	180	12.156	12.161	(1.238)	11374	5.00000	6.2

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.
M - Compound response manually integrated.

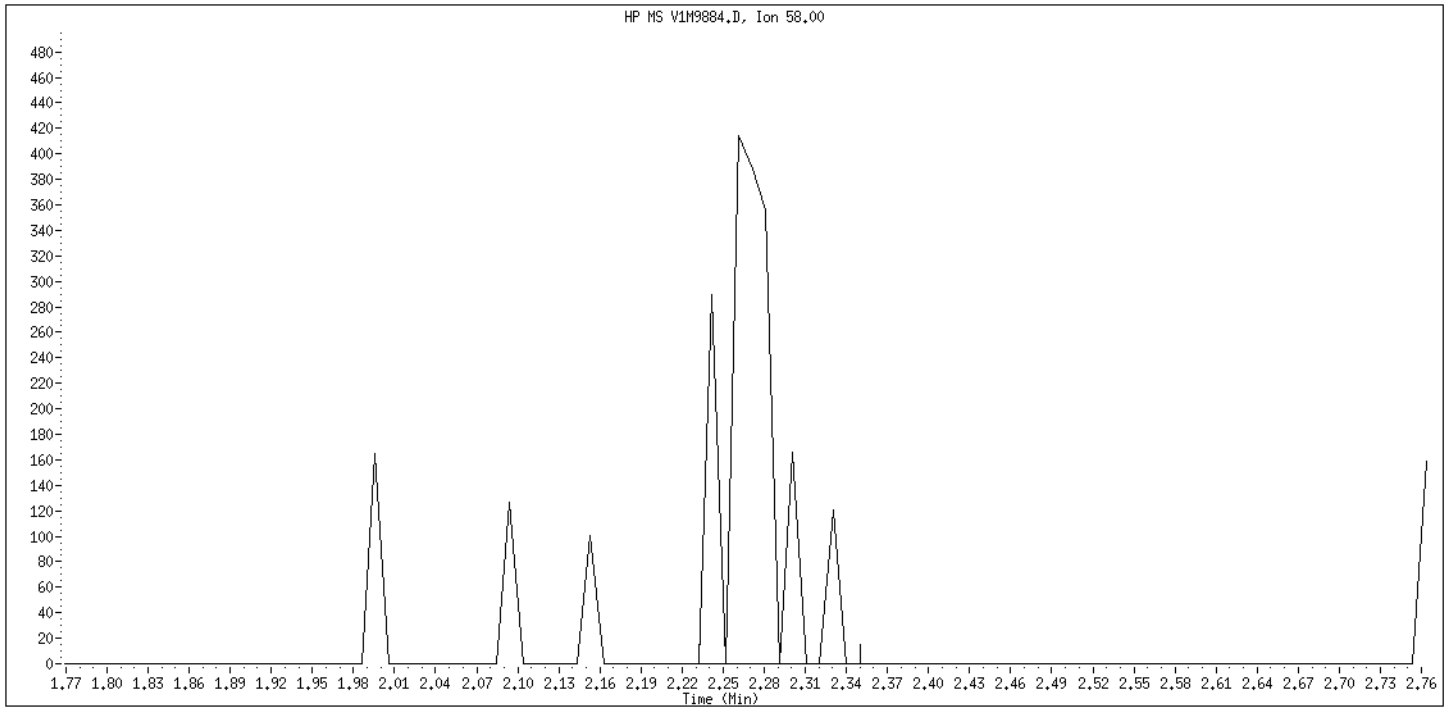
Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9884.D
Date : 26-JUN-2014 08:41
Client ID: VSTD0051K
Instrument: V1.i
Sample Info: 5G,VSTD0051K,VSTD0051K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



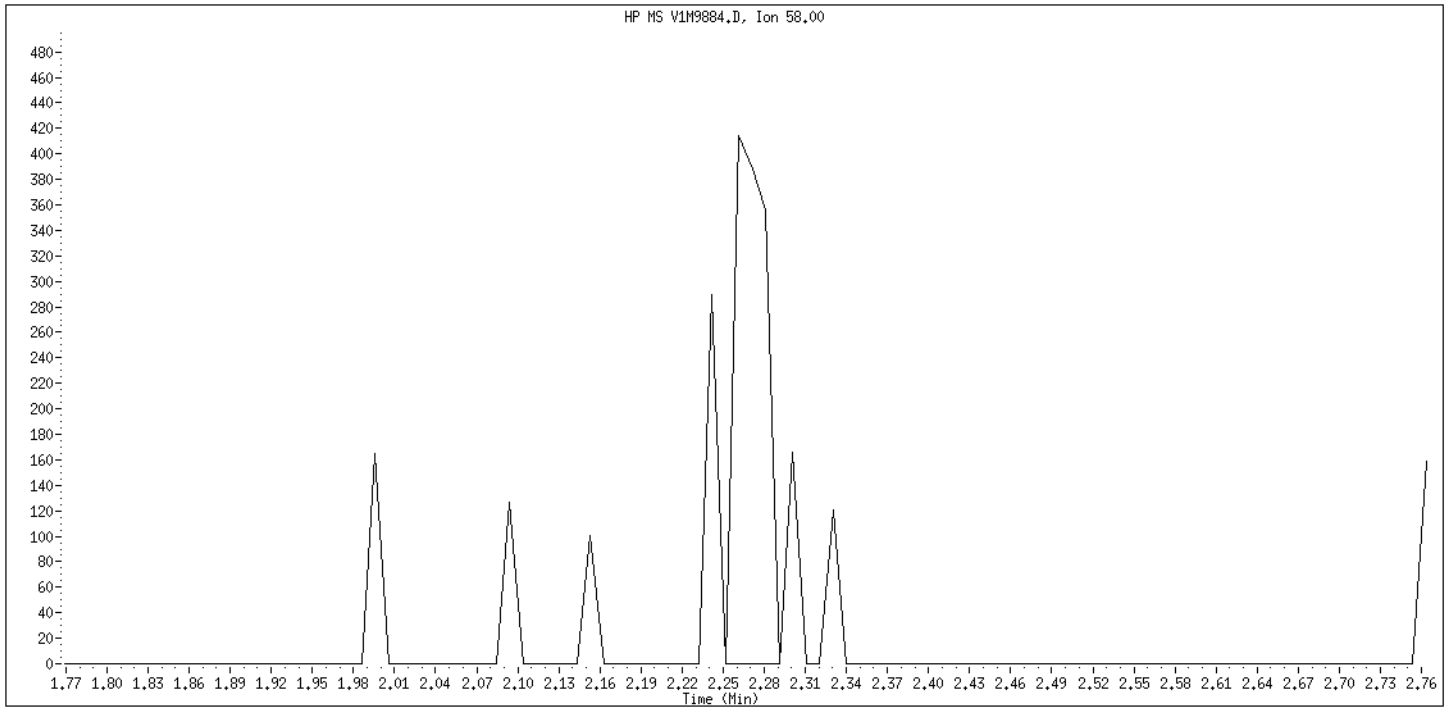
Manual Integration Report Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9884.D

Lab ID: VSTD0051K Client ID: VSTD0051K
Inj Date: 26-JUN-2014 08:41 Operator: WL SRC: WL

Manual Integration Acetone Ret Time: 2.262 min, Range: 2.232 to 2.350 min Response: 1024



Original Integration Acetone Ret Time: 2.262 min, Range: 2.252 to 2.291 min Response: 684



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9886.D
Report Date: 27-Jun-2014 10:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9886.D
Lab Smp Id: VSTD0011K Client Smp ID: VSTD0011K
Inj Date : 26-JUN-2014 09:31
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD0011K,VSTD0011K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 09:31 Cal File: V1M9886.D
Als bottle: 39 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	1.242	1.232	(0.282)	2098	1.00000	1.1
3	Chloromethane	50	1.351	1.360	(0.307)	4020	1.00000	1.1
4	Vinyl Chloride	62	1.449	1.468	(0.329)	2634	1.00000	0.86(a)
5	Bromomethane	94	1.675	1.665	(0.381)	2283	1.00000	1.0
6	Chloroethane	64	1.754	1.754	(0.398)	2137	1.00000	0.98(a)
7	Trichlorofluoromethane	101	1.931	1.921	(0.439)	5137	1.00000	0.92(a)
8	Ether	59	2.089	2.079	(0.475)	2577	1.00000	0.99(a)
9	Acrolein	56	2.178	2.158	(0.495)	1985	5.00000	4.9
10	1,1-Dichloroethene	96	2.276	2.266	(0.517)	3525	1.00000	1.1
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.276	2.276	(0.517)	3852	1.00000	1.0
12	Acetone	58	2.266	2.266	(0.515)	418	1.00000	1.7
13	Iodomethane	142	2.394	2.384	(0.544)	3528	1.00000	0.74(a)
14	Carbon Disulfide	76	2.404	2.404	(0.546)	8831	1.00000	1.0
15	Acetonitrile	41	2.483	2.483	(0.564)	10023	1.00000	8.8
16	Allyl Chloride	39	2.483	2.483	(0.564)	7194	1.00000	1.1
17	Methyl Acetate	43	2.512	2.492	(0.571)	3553	1.00000	1.2
18	Methylene Chloride	84	2.571	2.561	(0.584)	1998	1.00000	0.66(a)
20	Acrylonitrile	53	2.729	2.729	(0.620)	772	1.00000	0.84(aM)M7 AM 06/27
21	trans-1,2-Dichloroethene	96	2.768	2.758	(0.629)	3087	1.00000	0.90(a)
22	Methyl tert-butyl ether	73	2.768	2.768	(0.629)	7735	1.00000	0.96(a)
23	1,1-Dichloroethane	63	3.064	3.054	(0.696)	5786	1.00000	0.97(a)
24	Vinyl acetate	43	3.113	3.093	(0.707)	13675	1.00000	0.98(a)
25	Diisopropyl Ether	45	3.123	3.113	(0.709)	15262	1.00000	1.0

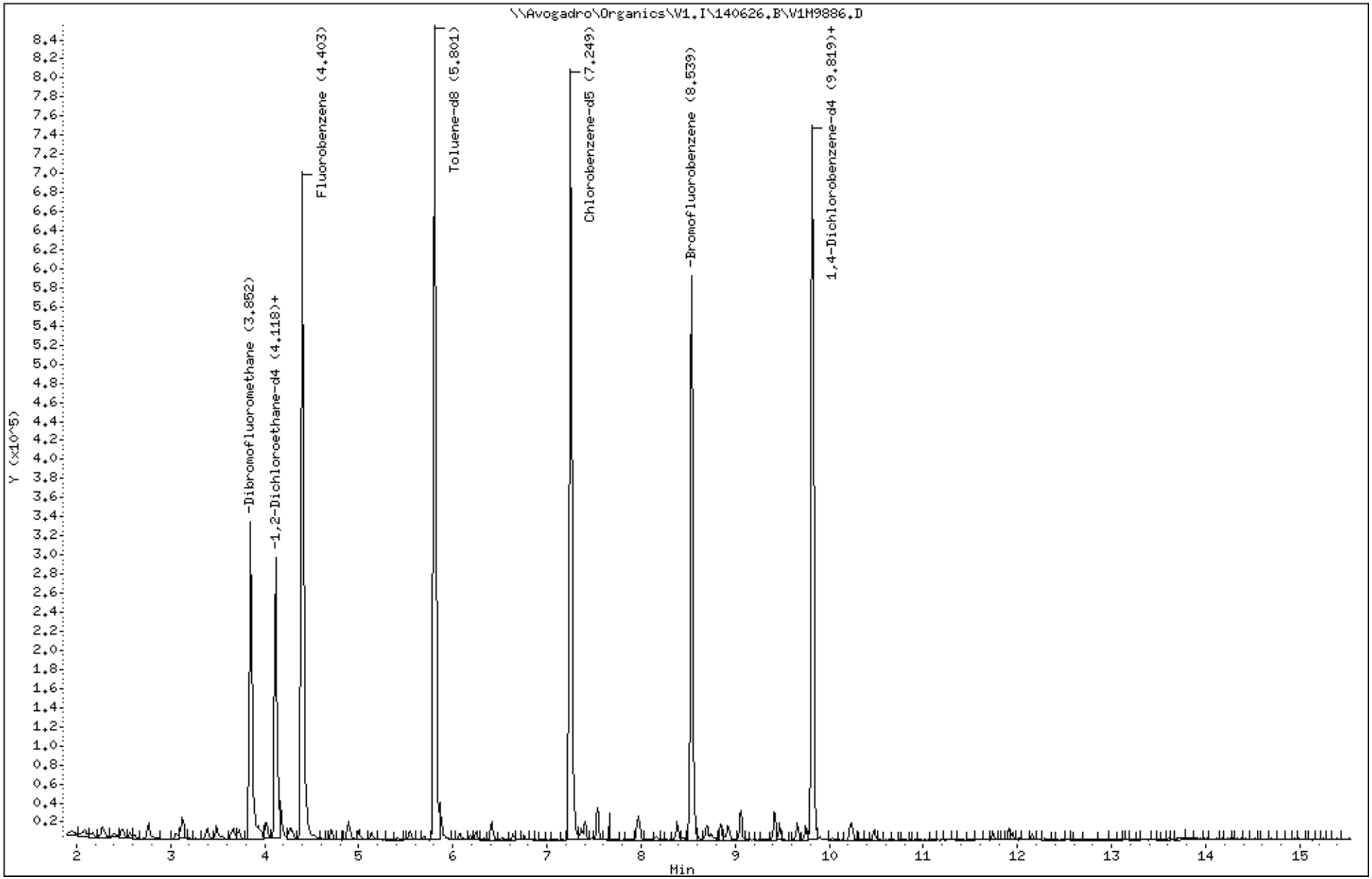
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	26 2-Chloro-1,3-Butadiene	53	3.133	3.123	(0.712)	5900	1.00000	1.00
	27 Ethyl tert-butyl ether	59	3.389	3.379	(0.770)	10734	1.00000	0.98(a)
	29 2,2-Dichloropropane	77	3.487	3.487	(0.792)	2798	1.00000	1.1
	28 cis-1,2-Dichloroethene	96	3.487	3.477	(0.792)	3279	1.00000	0.94(a)
	30 2-Butanone	72	3.497	3.487	(0.794)	197	1.00000	0.74(a)
	32 Propionitrile	54	3.536	3.516	(0.803)	2821	1.00000	9.0
	33 Methacrylonitrile	41	3.655	3.644	(0.830)	3967	1.00000	2.0
	34 Bromochloromethane	128	3.674	3.654	(0.835)	1309	1.00000	0.87(a)
	31 Tetrahydrofuran	72	3.733	3.704	(0.848)	545	1.00000	2.2
	35 Chloroform	83	3.723	3.723	(0.846)	5869	1.00000	0.94(a)
$	36 Dibromofluoromethane	113	3.851	3.841	(0.875)	209572	1.00000	50
	37 1,1,1-Trichloroethane	97	3.881	3.871	(0.881)	5419	1.00000	1.0
	38 Cyclohexane	56	3.930	3.930	(0.893)	5689	1.00000	0.99(a)
	39 1,1-Dichloropropene	110	4.009	4.009	(0.911)	1403	1.00000	0.92(a)
	40 Carbon Tetrachloride	117	4.019	4.009	(0.913)	5665	1.00000	1.0
	41 Isobutyl Alcohol	43	4.107	4.078	(0.933)	2723	1.00000	24
$	42 1,2-Dichloroethane-d4	102	4.117	4.107	(0.935)	42010	1.00000	49
	43 Benzene	78	4.176	4.166	(0.949)	12514	1.00000	1.0
	44 1,2-Dichloroethane	62	4.176	4.166	(0.949)	5229	1.00000	1.0
	45 tert-Amyl methyl ether	73	4.275	4.265	(0.971)	8291	1.00000	0.99(a)
*	46 Fluorobenzene	96	4.403	4.393	(1.000)	623522	50.0000	
	47 Trichloroethene	130	4.718	4.708	(1.072)	3409	1.00000	1.1
	48 Methylcyclohexane	83	4.885	4.885	(1.110)	4757	1.00000	0.96(a)
	49 1,2-Dichloropropane	63	4.895	4.895	(1.112)	2723	1.00000	0.90(a)
	51 Methyl Methacrylate	69	5.003	5.003	(1.136)	2519	1.00000	1.3
	52 Dibromomethane	93	4.994	4.993	(1.134)	1763	1.00000	0.83(a)
	54 Bromodichloromethane	83	5.131	5.131	(1.165)	4573	1.00000	0.95(a)
	55 2-Chloroethyl vinyl ether	63	5.417	5.407	(1.230)	656	1.00000	0.73(Ta)
	56 cis-1,3-Dichloropropene	75	5.545	5.545	(1.259)	4873	1.00000	0.97(a)
	57 4-Methyl-2-pentanone	43	5.693	5.692	(1.293)	2988	1.00000	1.0
$	58 Toluene-d8	98	5.801	5.801	(0.800)	585621	1.00000	50
	59 Toluene	91	5.870	5.870	(1.333)	12703	1.00000	1.0
	60 trans-1,3-Dichloropropene	75	6.067	6.067	(1.378)	4222	1.00000	0.92(a)
	61 Ethyl Methacrylate	69	6.185	6.175	(1.405)	1876	1.00000	0.78(a)
	62 1,1,2-Trichloroethane	97	6.254	6.254	(1.420)	2592	1.00000	1.0
	63 Tetrachloroethene	164	6.402	6.411	(0.883)	2337	1.00000	1.1
	64 1,3-Dichloropropane	76	6.411	6.411	(0.885)	4330	1.00000	1.0
	65 2-Hexanone	43	6.520	6.510	(0.899)	1970	1.00000	1.0
	66 Dibromochloromethane	129	6.638	6.638	(0.916)	2295	1.00000	0.78(Ta)
	67 1,2-Dibromoethane	107	6.756	6.756	(0.932)	2773	1.00000	1.0(T)
	69 1-Chlorohexane	91	7.268	7.278	(1.003)	6316	1.00000	1.2
*	68 Chlorobenzene-d5	117	7.248	7.248	(1.000)	432846	50.0000	
	70 Chlorobenzene	112	7.278	7.278	(1.004)	7976	1.00000	1.0
	71 1,1,1,2-Tetrachloroethane	131	7.366	7.366	(1.016)	3109	1.00000	1.0
	72 Ethylbenzene	106	7.406	7.406	(1.022)	4315	1.00000	1.0
	73 m,p-Xylene	106	7.534	7.534	(1.039)	10296	2.00000	2.0
	74 o-Xylene	106	7.967	7.967	(1.099)	4865	1.00000	0.97(a)
	75 Styrene	104	7.987	7.977	(1.102)	8586	1.00000	1.0
	76 Bromoform	173	8.164	8.154	(1.126)	1273	1.00000	0.83(Ta)
	77 Isopropylbenzene	105	8.381	8.380	(1.156)	13255	1.00000	1.0
	78 trans-1,4-Dichloro-2-butene	75	8.440	8.449	(1.164)	428	1.00000	0.56(a)
$	79 Bromofluorobenzene	95	8.538	8.538	(1.178)	250981	1.00000	49
	80 1,1,2,2-Tetrachloroethane	83	8.706	8.705	(0.887)	2874	1.00000	1.1
	81 Bromobenzene	156	8.696	8.696	(0.886)	2460	1.00000	0.97(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
82	1,2,3-Trichloropropane	75	8.755	8.745	(0.892)	2830	1.00000	1.0(M)M7 AM 06/27
83	n-Propylbenzene	120	8.843	8.853	(0.901)	3304	1.00000	1.1
84	2-Chlorotoluene	126	8.932	8.932	(0.910)	2503	1.00000	0.98(a)
85	1,3,5-Trimethylbenzene	105	9.060	9.060	(0.923)	10125	1.00000	1.0
86	4-Chlorotoluene	126	9.060	9.060	(0.923)	2527	1.00000	0.99(a)
87	tert-Butylbenzene	119	9.414	9.424	(0.959)	10496	1.00000	1.1
88	1,2,4-Trimethylbenzene	105	9.474	9.473	(0.965)	9685	1.00000	1.00
89	sec-Butylbenzene	105	9.661	9.660	(0.984)	12907	1.00000	1.0
90	1,3-Dichlorobenzene	146	9.749	9.749	(0.993)	4711	1.00000	1.0
91	4-Isopropyltoluene	119	9.818	9.828	(1.000)	9758	1.00000	1.0
* 92	1,4-Dichlorobenzene-d4	152	9.818	9.828	(1.000)	162952	50.0000	
93	1,4-Dichlorobenzene	146	9.848	9.848	(1.003)	5254	1.00000	1.1
95	n-Butylbenzene	91	10.242	10.241	(1.043)	8699	1.00000	1.0
96	1,2-Dichlorobenzene	146	10.222	10.222	(1.041)	4587	1.00000	1.0
97	Hexachloroethane	117	10.478	10.478	(1.067)	2444	1.00000	1.0
98	1,2-Dibromo-3-chloropropane	75	10.970	10.970	(1.117)	576	1.00000	1.3(T)
99	1,2,4-Trichlorobenzene	180	11.738	11.738	(1.196)	1756	1.00000	0.96(a)
100	Hexachlorobutadiene	225	11.906	11.905	(1.213)	1324	1.00000	1.1
101	Naphthalene	128	11.945	11.945	(1.217)	5000	1.00000	1.1
102	1,2,3-Trichlorobenzene	180	12.152	12.161	(1.238)	1821	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).
M - Compound response manually integrated.

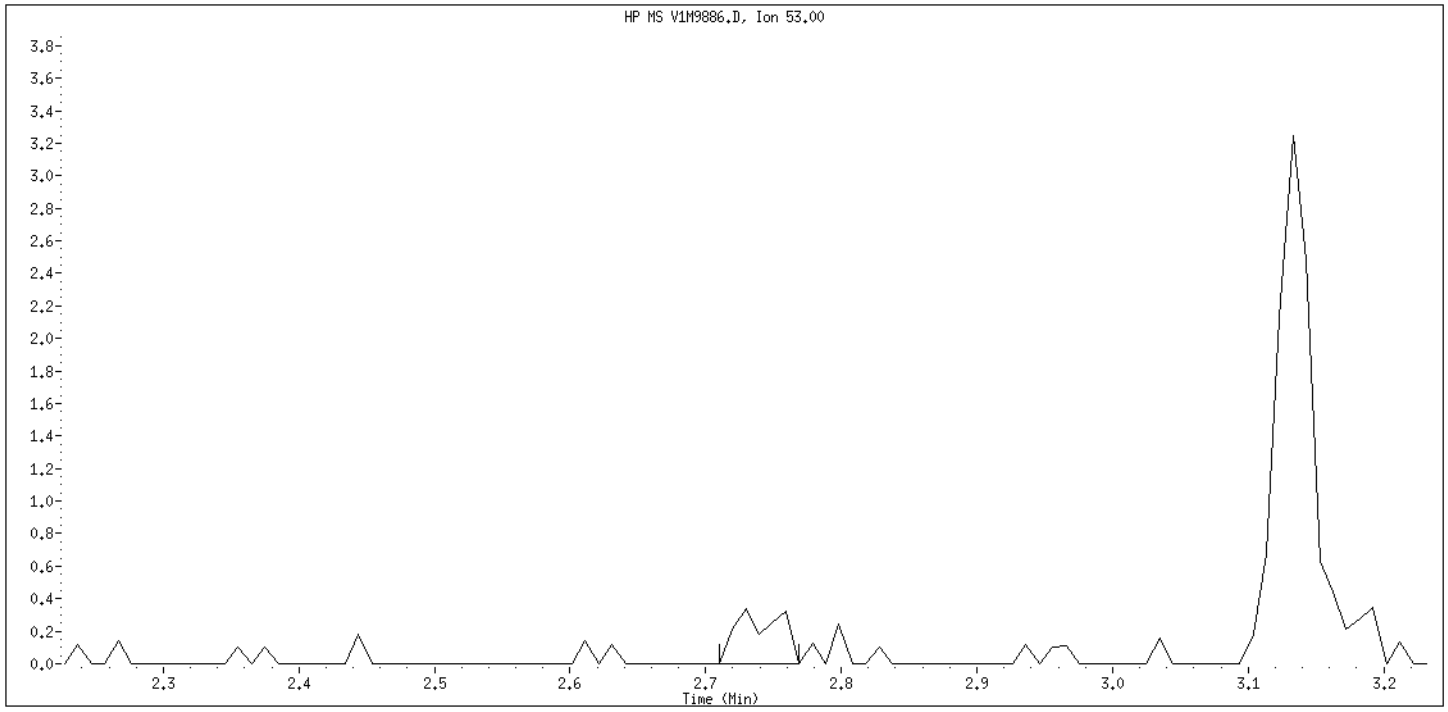
Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9886.D
Date : 26-JUN-2014 09:31
Client ID: VSTD0011K
Instrument: V1.i
Sample Info: 5G,VSTD0011K,VSTD0011K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



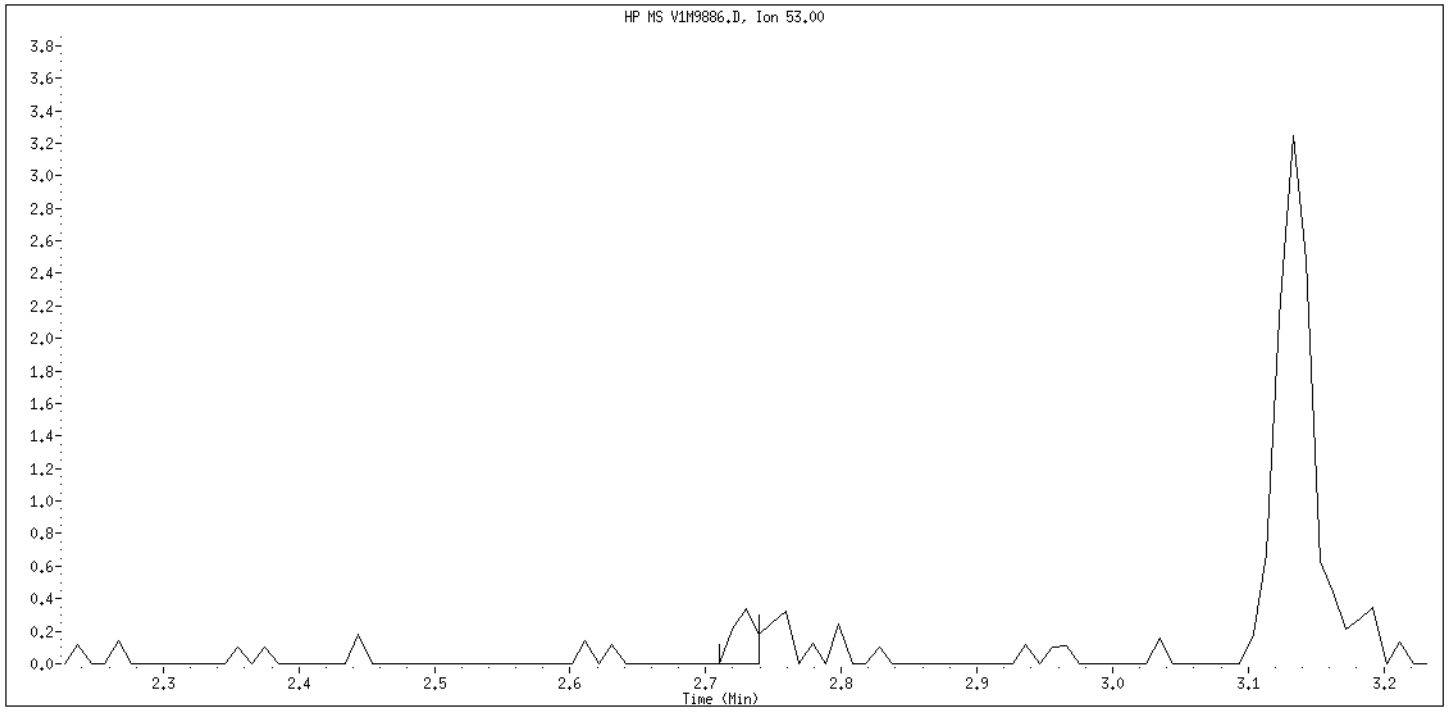
Manual Integration Report Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9886.D

Lab ID: VSTD0011K Client ID: VSTD0011K
Inj Date: 26-JUN-2014 09:31 Operator: WL SRC: WL

Manual Integration Acrylonitrile Ret Time: 2.729 min, Range: 2.710 to 2.769 min Response: 772



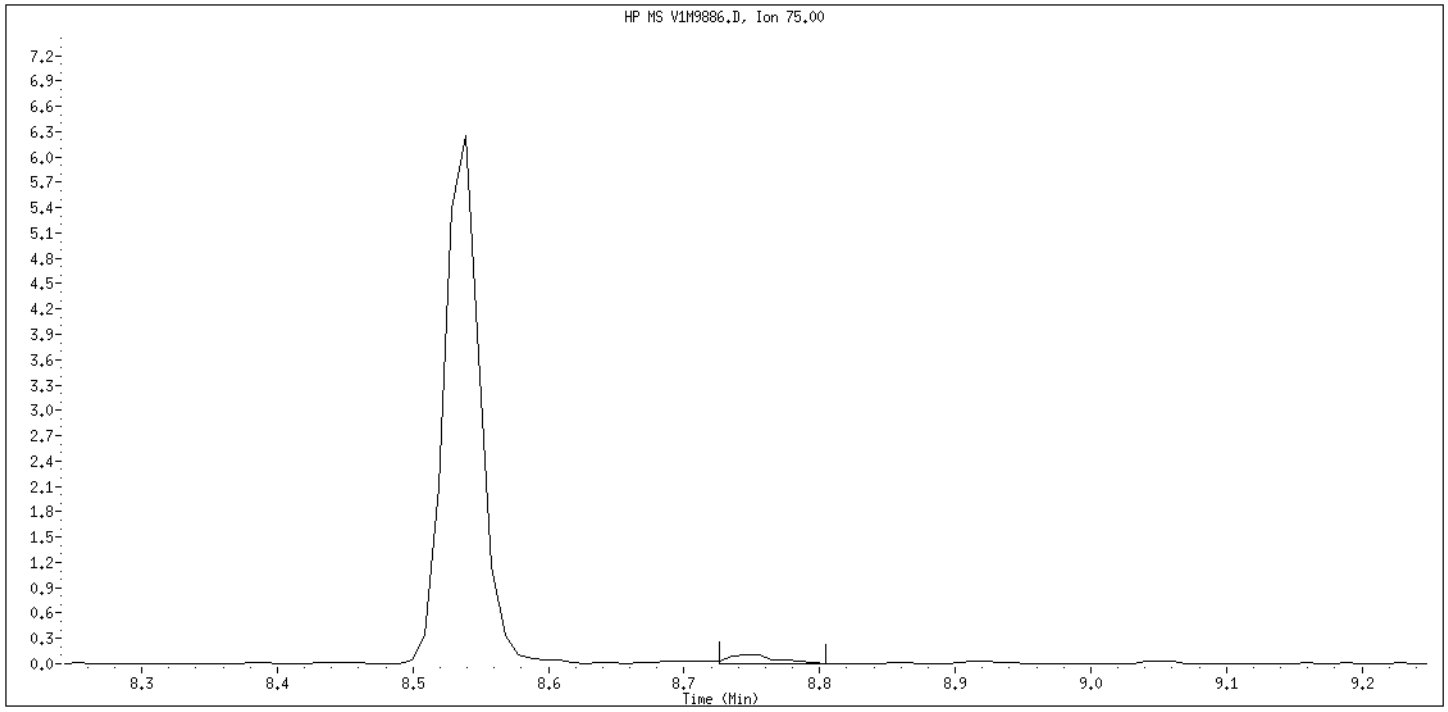
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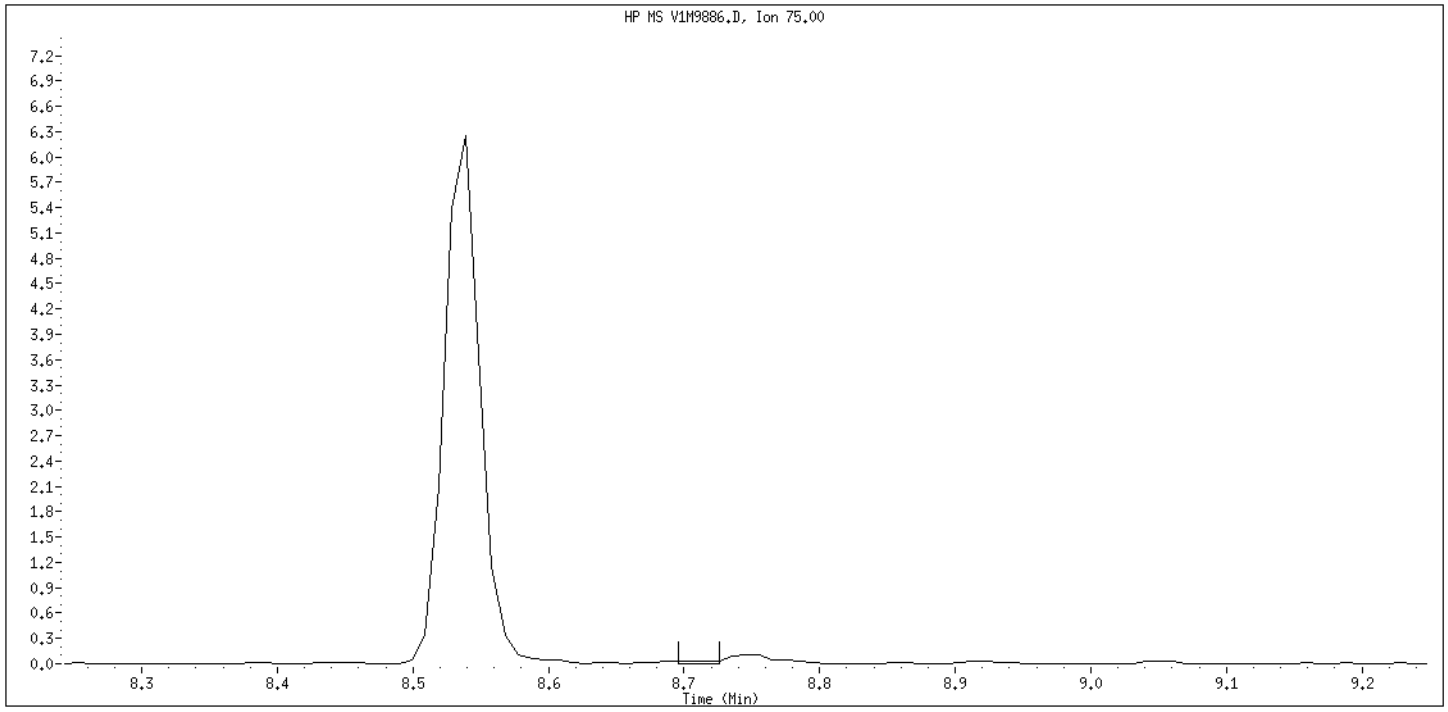
Manual Integration Report Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9886.D

Lab ID: VSTD0011K Client ID: VSTD0011K
Inj Date: 26-JUN-2014 09:31 Operator: WL SRC: WL

Manual Integration 1,2,3-Trichloropropane Ret Time: 8.755 min, Range: 8.726 to 8.805 min Response: 2830



Original Integration 1,2,3-Trichloropropane Ret Time: 8.716 min, Range: 8.696 to 8.726 min Response: 694



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9887.D
Report Date: 27-Jun-2014 10:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9887.D
Lab Smp Id: VSTD0501K Client Smp ID: VSTD0501K
Inj Date : 26-JUN-2014 09:56
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD0501K,VSTD0501K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 09:56 Cal File: V1M9887.D
Als bottle: 40 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	1.242	1.232	(0.282)	85092	50.0000	45
2	Freon114	85	1.242	1.232	(0.282)	85092	50.0000	47
3	Chloromethane	50	1.360	1.360	(0.309)	178045	50.0000	47
4	Vinyl Chloride	62	1.459	1.468	(0.331)	162293	50.0000	52
5	Bromomethane	94	1.676	1.665	(0.381)	114125	50.0000	51
6	Chloroethane	64	1.754	1.754	(0.399)	110926	50.0000	50
7	Trichlorofluoromethane	101	1.932	1.921	(0.439)	279982	50.0000	50
126	Ethanol	46	2.010	2.010	(0.457)	26659	5000.00	2000(A)
8	Ether	59	2.079	2.079	(0.472)	134687	50.0000	51(Q)
9	Acrolein	56	2.158	2.158	(0.490)	101247	250.000	240(A)
10	1,1-Dichloroethene	96	2.266	2.266	(0.515)	157781	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.276	2.276	(0.517)	189955	50.0000	49
12	Acetone	58	2.266	2.266	(0.515)	13965	50.0000	55(Q)
13	Iodomethane	142	2.384	2.384	(0.542)	262190	50.0000	54
14	Carbon Disulfide	76	2.394	2.404	(0.544)	411147	50.0000	47
15	Acetonitrile	41	2.483	2.483	(0.564)	555694	500.000	480(A)
16	Allyl Chloride	39	2.483	2.483	(0.564)	323218	50.0000	50
17	Methyl Acetate	43	2.493	2.492	(0.566)	144695	50.0000	48
18	Methylene Chloride	84	2.562	2.561	(0.582)	170587	50.0000	56(Q)
19	tert-Butanol	59	2.640	2.640	(0.600)	15098	100.000	68
20	Acrylonitrile	53	2.719	2.729	(0.618)	50163	50.0000	59
21	trans-1,2-Dichloroethene	96	2.759	2.758	(0.627)	178697	50.0000	52
22	Methyl tert-butyl ether	73	2.759	2.768	(0.627)	426732	50.0000	52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.054	3.054	(0.694)	315927	50.0000	52
	24 Vinyl acetate	43	3.093	3.093	(0.703)	734912	50.0000	52
	25 Diisopropyl Ether	45	3.113	3.113	(0.707)	777936	50.0000	50
	26 2-Chloro-1,3-Butadiene	53	3.123	3.123	(0.709)	296517	50.0000	50
	27 Ethyl tert-butyl ether	59	3.389	3.379	(0.770)	575940	50.0000	52
	29 2,2-Dichloropropane	77	3.487	3.487	(0.792)	128795	50.0000	49
	28 cis-1,2-Dichloroethene	96	3.487	3.477	(0.792)	181310	50.0000	51
	30 2-Butanone	72	3.487	3.487	(0.792)	14696	50.0000	54(Q)
	32 Propionitrile	54	3.527	3.516	(0.801)	152725	500.000	480(A)
	33 Methacrylonitrile	41	3.645	3.644	(0.828)	207559	100.000	100
	34 Bromochloromethane	128	3.664	3.654	(0.832)	82365	50.0000	54
	31 Tetrahydrofuran	72	3.704	3.704	(0.841)	28363	100.000	110(Q)
	35 Chloroform	83	3.724	3.723	(0.846)	319912	50.0000	51
$	36 Dibromofluoromethane	113	3.852	3.841	(0.875)	212912	50.0000	50
	37 1,1,1-Trichloroethane	97	3.881	3.871	(0.881)	269154	50.0000	50
	38 Cyclohexane	56	3.940	3.930	(0.895)	294529	50.0000	51
	39 1,1-Dichloropropene	110	4.009	4.009	(0.911)	78099	50.0000	50
	40 Carbon Tetrachloride	117	4.019	4.009	(0.913)	280740	50.0000	50
	41 Isobutyl Alcohol	43	4.088	4.078	(0.928)	76469	1000.00	670(A)
$	42 1,2-Dichloroethane-d4	102	4.117	4.107	(0.935)	43857	50.0000	51
	43 Benzene	78	4.176	4.166	(0.949)	588643	50.0000	49
	44 1,2-Dichloroethane	62	4.176	4.166	(0.949)	256719	50.0000	50
	45 tert-Amyl methyl ether	73	4.275	4.265	(0.971)	436601	50.0000	51
*	46 Fluorobenzene	96	4.403	4.393	(1.000)	632137	50.0000	
	47 Trichloroethene	130	4.708	4.708	(1.069)	157169	50.0000	49
	48 Methylcyclohexane	83	4.895	4.885	(1.112)	254779	50.0000	51
	49 1,2-Dichloropropane	63	4.895	4.895	(1.112)	164436	50.0000	54
	51 Methyl Methacrylate	69	5.004	5.003	(1.136)	105895	50.0000	53
	52 Dibromomethane	93	4.994	4.993	(1.134)	114330	50.0000	53
	53 1,4-Dioxane	88	5.013	5.013	(1.139)	10102	1000.00	430(A)
	54 Bromodichloromethane	83	5.141	5.131	(1.168)	251817	50.0000	52
	55 2-Chloroethyl vinyl ether	63	5.417	5.407	(1.230)	47267	50.0000	52
	56 cis-1,3-Dichloropropene	75	5.545	5.545	(1.259)	266976	50.0000	52
	57 4-Methyl-2-pentanone	43	5.703	5.692	(1.295)	149390	50.0000	50
$	58 Toluene-d8	98	5.811	5.801	(0.802)	598025	50.0000	50
	59 Toluene	91	5.870	5.870	(1.333)	618863	50.0000	49
	60 trans-1,3-Dichloropropene	75	6.077	6.067	(1.380)	243616	50.0000	52
	61 Ethyl Methacrylate	69	6.185	6.175	(1.405)	128875	50.0000	53
	62 1,1,2-Trichloroethane	97	6.254	6.254	(1.420)	125627	50.0000	50
	63 Tetrachloroethene	164	6.412	6.411	(0.885)	107011	50.0000	48
	64 1,3-Dichloropropane	76	6.421	6.411	(0.886)	221328	50.0000	50
	65 2-Hexanone	43	6.520	6.510	(0.899)	102863	50.0000	52
	66 Dibromochloromethane	129	6.648	6.638	(0.917)	174698	50.0000	57
	67 1,2-Dibromoethane	107	6.756	6.756	(0.932)	140397	50.0000	50
	69 1-Chlorohexane	91	7.278	7.278	(1.004)	235018	50.0000	44(Q)
*	68 Chlorobenzene-d5	117	7.248	7.248	(1.000)	446017	50.0000	
	70 Chlorobenzene	112	7.278	7.278	(1.004)	386497	50.0000	49
	71 1,1,1,2-Tetrachloroethane	131	7.367	7.366	(1.016)	154219	50.0000	50
	72 Ethylbenzene	106	7.406	7.406	(1.022)	210611	50.0000	49
	73 m,p-Xylene	106	7.534	7.534	(1.039)	517084	100.000	97
	74 o-Xylene	106	7.967	7.967	(1.099)	252335	50.0000	49
	75 Styrene	104	7.977	7.977	(1.101)	431844	50.0000	50
	76 Bromoform	173	8.154	8.154	(1.125)	88459	50.0000	56
	77 Isopropylbenzene	105	8.381	8.380	(1.156)	628985	50.0000	47

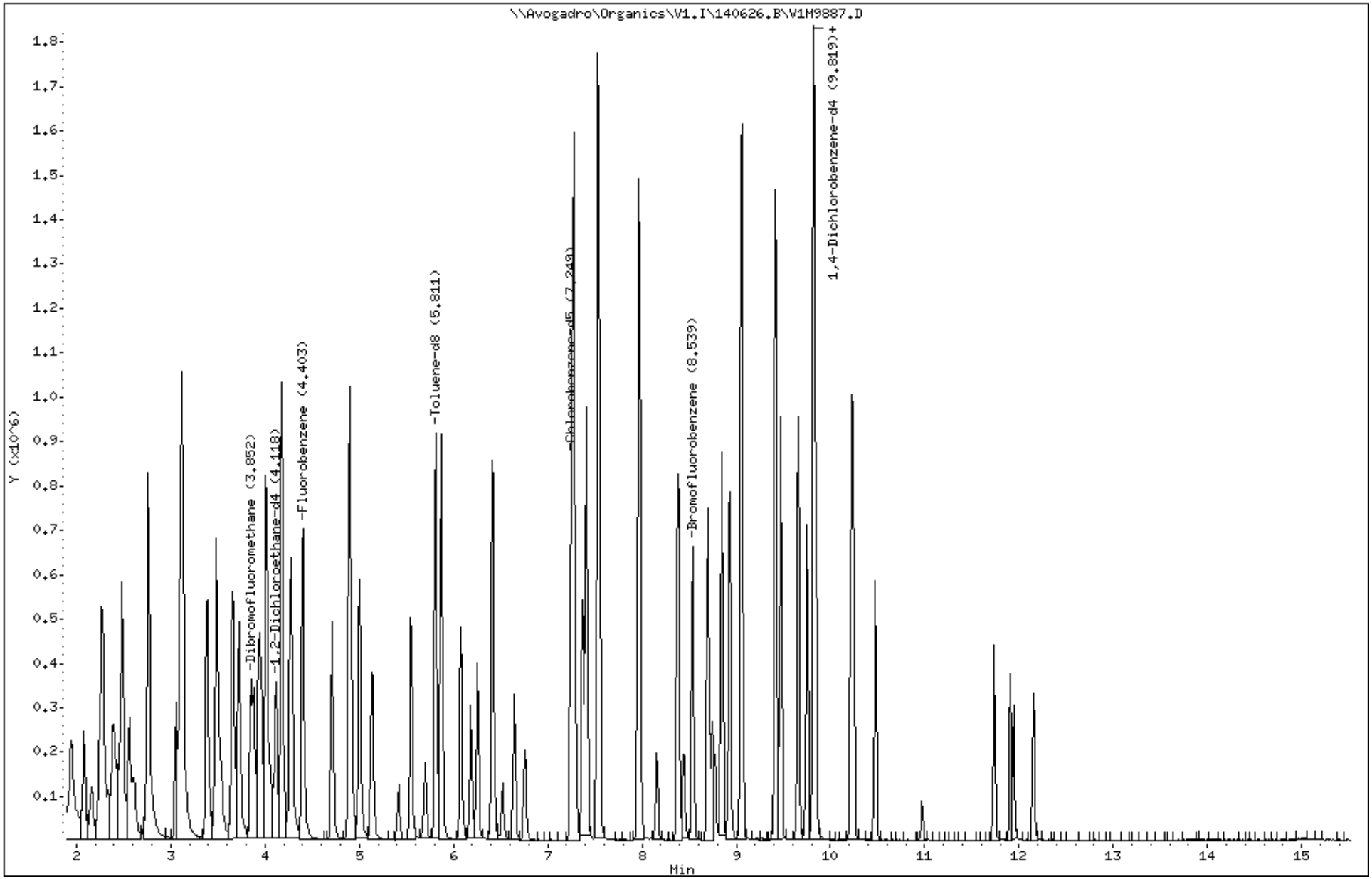
Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9887.D
Report Date: 27-Jun-2014 10:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
78	trans-1,4-Dichloro-2-butene	75	8.450	8.449	(1.166)	42262	50.0000	54
$ 79	Bromofluorobenzene	95	8.538	8.538	(1.178)	267674	50.0000	51
80	1,1,2,2-Tetrachloroethane	83	8.706	8.705	(0.887)	144518	50.0000	48
81	Bromobenzene	156	8.696	8.696	(0.886)	139849	50.0000	48
82	1,2,3-Trichloropropane	75	8.745	8.745	(0.891)	155510	50.0000	49
83	n-Propylbenzene	120	8.853	8.853	(0.902)	154248	50.0000	47
84	2-Chlorotoluene	126	8.932	8.932	(0.910)	142954	50.0000	49
85	1,3,5-Trimethylbenzene	105	9.060	9.060	(0.923)	551469	50.0000	48
86	4-Chlorotoluene	126	9.050	9.060	(0.922)	140592	50.0000	49
87	tert-Butylbenzene	119	9.415	9.424	(0.959)	519224	50.0000	46
88	1,2,4-Trimethylbenzene	105	9.474	9.473	(0.965)	527048	50.0000	48
89	sec-Butylbenzene	105	9.661	9.660	(0.984)	642744	50.0000	45
90	1,3-Dichlorobenzene	146	9.749	9.749	(0.993)	253390	50.0000	48
91	4-Isopropyltoluene	119	9.818	9.828	(1.000)	507999	50.0000	47
* 92	1,4-Dichlorobenzene-d4	152	9.818	9.828	(1.000)	185375	50.0000	
93	1,4-Dichlorobenzene	146	9.848	9.848	(1.003)	248908	50.0000	46
95	n-Butylbenzene	91	10.242	10.241	(1.043)	467182	50.0000	48
96	1,2-Dichlorobenzene	146	10.222	10.222	(1.041)	230984	50.0000	46
97	Hexachloroethane	117	10.478	10.478	(1.067)	129885	50.0000	47
98	1,2-Dibromo-3-chloropropane	75	10.970	10.970	(1.117)	18874	50.0000	38(Q)
99	1,2,4-Trichlorobenzene	180	11.738	11.738	(1.196)	96262	50.0000	46
100	Hexachlorobutadiene	225	11.906	11.905	(1.213)	47488	50.0000	36
101	Naphthalene	128	11.945	11.945	(1.217)	194360	50.0000	38
102	1,2,3-Trichlorobenzene	180	12.152	12.161	(1.238)	73789	50.0000	38

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\140626.B\V1M9887.D
Date : 26-JUN-2014 09:56
Client ID: VSTD0501K
Instrument: V1.i
Sample Info: 5G,VSTD0501K,VSTD0501K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9888.D
Report Date: 27-Jun-2014 10:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9888.D
Lab Smp Id: VSTD2001K Client Smp ID: VSTD2001K
Inj Date : 26-JUN-2014 10:21
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD2001K,VSTD2001K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:21 Cal File: V1M9888.D
Als bottle: 41 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.239	1.232	(0.282)	369093	200.000	200
2	Freon114	85	1.239	1.232	(0.282)	369093	200.000	200(A)
3	Chloromethane	50	1.367	1.360	(0.311)	766482	200.000	200(A)
4	Vinyl Chloride	62	1.455	1.468	(0.331)	655333	200.000	210(A)
5	Bromomethane	94	1.672	1.665	(0.380)	440263	200.000	200
6	Chloroethane	64	1.751	1.754	(0.398)	447325	200.000	200(A)
7	Trichlorofluoromethane	101	1.928	1.921	(0.438)	1106356	200.000	200
126	Ethanol	46	2.007	2.010	(0.456)	127642	8000.00	9000(A)
8	Ether	59	2.076	2.079	(0.472)	532459	200.000	200(A)
9	Acrolein	56	2.154	2.158	(0.490)	391020	1000.00	960(A)
10	1,1-Dichloroethene	96	2.263	2.266	(0.514)	649536	200.000	200
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.282	2.276	(0.519)	788059	200.000	200(A)
12	Acetone	58	2.263	2.266	(0.514)	63987	200.000	240(A)
13	Iodomethane	142	2.381	2.384	(0.541)	1051274	200.000	210(A)
14	Carbon Disulfide	76	2.410	2.404	(0.548)	1693648	200.000	200
15	Acetonitrile	41	2.479	2.483	(0.564)	2202555	2000.00	1900(A)
16	Allyl Chloride	39	2.479	2.483	(0.564)	1263895	200.000	200
17	Methyl Acetate	43	2.489	2.492	(0.566)	546272	200.000	190
18	Methylene Chloride	84	2.558	2.561	(0.582)	673074	200.000	220(A)
19	tert-Butanol	59	2.637	2.640	(0.599)	64086	400.000	310(A)
20	Acrylonitrile	53	2.725	2.729	(0.620)	203246	200.000	210(A)
21	trans-1,2-Dichloroethene	96	2.765	2.758	(0.629)	666960	200.000	190
22	Methyl tert-butyl ether	73	2.765	2.768	(0.629)	1734063	200.000	210(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.050	3.054	(0.693)	1247521	200.000	200(A)
	24 Vinyl acetate	43	3.090	3.093	(0.702)	2995254	200.000	210(A)
	25 Diisopropyl Ether	45	3.109	3.113	(0.707)	3118565	200.000	200(A)
	26 2-Chloro-1,3-Butadiene	53	3.129	3.123	(0.711)	1204500	200.000	200(A)
	27 Ethyl tert-butyl ether	59	3.385	3.379	(0.769)	2299455	200.000	210(A)
	29 2,2-Dichloropropane	77	3.484	3.487	(0.792)	462476	200.000	180
	28 cis-1,2-Dichloroethene	96	3.484	3.477	(0.792)	708902	200.000	200(A)
	30 2-Butanone	72	3.484	3.487	(0.792)	59096	200.000	210(A)
	32 Propionitrile	54	3.523	3.516	(0.801)	621895	2000.00	2000(A)
	33 Methacrylonitrile	41	3.641	3.644	(0.828)	852895	400.000	420(A)
	34 Bromochloromethane	128	3.661	3.654	(0.832)	317388	200.000	210(A)
	31 Tetrahydrofuran	72	3.700	3.704	(0.841)	107969	400.000	420(A)
	35 Chloroform	83	3.720	3.723	(0.846)	1236071	200.000	200
$	36 Dibromofluoromethane	113	3.848	3.841	(0.875)	208257	50.0000	50
	37 1,1,1-Trichloroethane	97	3.877	3.871	(0.881)	1047960	200.000	200
	38 Cyclohexane	56	3.946	3.930	(0.897)	1179028	200.000	200(A)
	39 1,1-Dichloropropene	110	4.005	4.009	(0.910)	300801	200.000	200
	40 Carbon Tetrachloride	117	4.015	4.009	(0.913)	1127977	200.000	200(A)
	41 Isobutyl Alcohol	43	4.084	4.078	(0.928)	317045	4000.00	3000(A)
$	42 1,2-Dichloroethane-d4	102	4.114	4.107	(0.935)	41243	50.0000	49
	43 Benzene	78	4.173	4.166	(0.949)	2286816	200.000	190
	44 1,2-Dichloroethane	62	4.173	4.166	(0.949)	997299	200.000	200
	45 tert-Amyl methyl ether	73	4.271	4.265	(0.971)	1773003	200.000	210(A)
*	46 Fluorobenzene	96	4.399	4.393	(1.000)	628679	50.0000	
	47 Trichloroethene	130	4.704	4.708	(1.069)	602449	200.000	190
	48 Methylcyclohexane	83	4.882	4.885	(1.110)	1006217	200.000	200(A)
	49 1,2-Dichloropropane	63	4.892	4.895	(1.112)	648819	200.000	210(A)
	51 Methyl Methacrylate	69	5.000	5.003	(1.137)	430769	200.000	210(A)
	52 Dibromomethane	93	4.990	4.993	(1.134)	446633	200.000	210(A)
	53 1,4-Dioxane	88	5.010	5.013	(1.139)	39457	4000.00	2000(A)
	54 Bromodichloromethane	83	5.128	5.131	(1.166)	994235	200.000	200(A)
	55 2-Chloroethyl vinyl ether	63	5.413	5.407	(1.231)	214686	200.000	220(A)
	56 cis-1,3-Dichloropropene	75	5.541	5.545	(1.260)	1066645	200.000	210(A)
	57 4-Methyl-2-pentanone	43	5.689	5.692	(1.293)	609540	200.000	200(A)
$	58 Toluene-d8	98	5.807	5.801	(0.802)	583038	50.0000	49
	59 Toluene	91	5.866	5.870	(1.333)	2305836	200.000	190
	60 trans-1,3-Dichloropropene	75	6.073	6.067	(1.380)	970183	200.000	210(A)
	61 Ethyl Methacrylate	69	6.181	6.175	(1.405)	529658	200.000	210(A)
	62 1,1,2-Trichloroethane	97	6.250	6.254	(1.421)	489404	200.000	200
	63 Tetrachloroethene	164	6.408	6.411	(0.884)	421056	200.000	190
	64 1,3-Dichloropropane	76	6.418	6.411	(0.886)	879937	200.000	200(A)
	65 2-Hexanone	43	6.506	6.510	(0.898)	438372	200.000	220(A)
	66 Dibromochloromethane	129	6.644	6.638	(0.917)	685989	200.000	220(A)
	67 1,2-Dibromoethane	107	6.752	6.756	(0.932)	550282	200.000	200
	69 1-Chlorohexane	91	7.274	7.278	(1.004)	907595	200.000	180
*	68 Chlorobenzene-d5	117	7.245	7.248	(1.000)	442767	50.0000	
	70 Chlorobenzene	112	7.274	7.278	(1.004)	1497498	200.000	190
	71 1,1,1,2-Tetrachloroethane	131	7.373	7.366	(1.018)	591002	200.000	190
	72 Ethylbenzene	106	7.412	7.406	(1.023)	800453	200.000	190
	73 m,p-Xylene	106	7.540	7.534	(1.041)	1970789	400.000	380(A)
	74 o-Xylene	106	7.964	7.967	(1.099)	978031	200.000	190
	75 Styrene	104	7.983	7.977	(1.102)	1662399	200.000	190
	76 Bromoform	173	8.160	8.154	(1.126)	361107	200.000	220(A)
	77 Isopropylbenzene	105	8.387	8.380	(1.158)	2511567	200.000	190

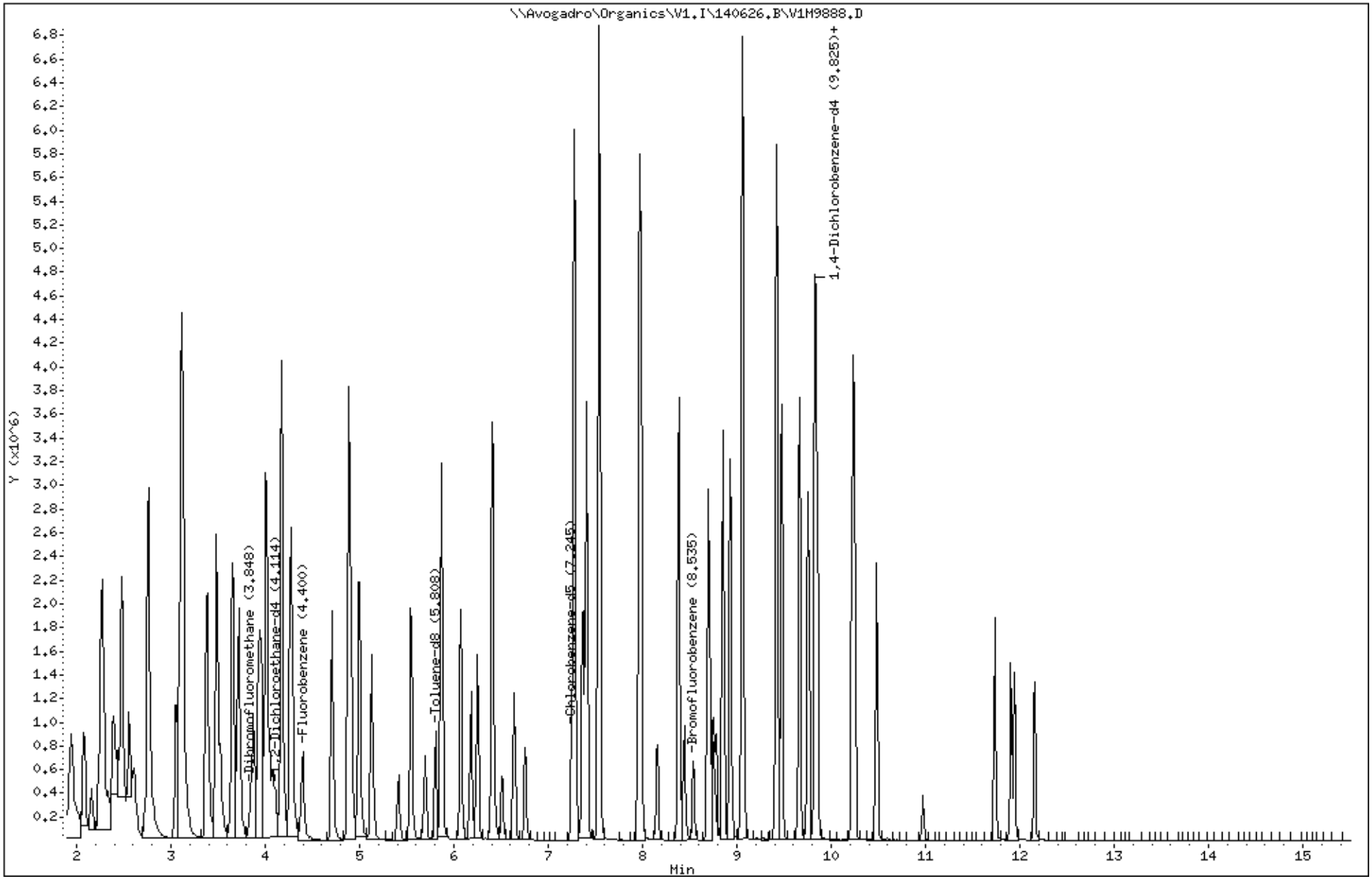
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Report Date: 27-Jun-2014 10:48

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.446	8.449	(1.166)	205347	200.000	240(A)
$	79	Bromofluorobenzene	95	8.535	8.538	(1.178)	268730	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	8.712	8.705	(0.887)	583604	200.000	180
	81	Bromobenzene	156	8.702	8.696	(0.886)	566965	200.000	180
	82	1,2,3-Trichloropropane	75	8.751	8.745	(0.891)	655996	200.000	190
	83	n-Propylbenzene	120	8.850	8.853	(0.901)	590385	200.000	170
	84	2-Chlorotoluene	126	8.928	8.932	(0.909)	545386	200.000	180
	85	1,3,5-Trimethylbenzene	105	9.066	9.060	(0.923)	2096366	200.000	170
	86	4-Chlorotoluene	126	9.056	9.060	(0.922)	578949	200.000	190
M	94	Xylene (Total)	106				2948820	600.000	570
	87	tert-Butylbenzene	119	9.421	9.424	(0.959)	2032038	200.000	170
	88	1,2,4-Trimethylbenzene	105	9.480	9.473	(0.965)	2015440	200.000	170
	89	sec-Butylbenzene	105	9.667	9.660	(0.984)	2499260	200.000	170
	90	1,3-Dichlorobenzene	146	9.756	9.749	(0.993)	1009540	200.000	180
	91	4-Isopropyltoluene	119	9.824	9.828	(1.000)	2045798	200.000	180
*	92	1,4-Dichlorobenzene-d4	152	9.824	9.828	(1.000)	200463	50.0000	
	93	1,4-Dichlorobenzene	146	9.854	9.848	(1.003)	1015782	200.000	180
	95	n-Butylbenzene	91	10.248	10.241	(1.043)	1874387	200.000	180
	96	1,2-Dichlorobenzene	146	10.228	10.222	(1.041)	920163	200.000	180
	97	Hexachloroethane	117	10.484	10.478	(1.067)	518464	200.000	180
	98	1,2-Dibromo-3-chloropropane	75	10.976	10.970	(1.117)	87310	200.000	170
	99	1,2,4-Trichlorobenzene	180	11.735	11.738	(1.194)	413847	200.000	190
	100	Hexachlorobutadiene	225	11.902	11.905	(1.211)	202032	200.000	150
	101	Naphthalene	128	11.941	11.945	(1.215)	866552	200.000	160
	102	1,2,3-Trichlorobenzene	180	12.158	12.161	(1.238)	320691	200.000	160

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9888.D
Date : 26-JUN-2014 10:21
Client ID: VSTD2001K
Instrument: V1.i
Sample Info: 5G,VSTD2001K,VSTD2001K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9889.D
Report Date: 27-Jun-2014 10:48

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9889.D
Lab Smp Id: VSTD1001K Client Smp ID: VSTD1001K
Inj Date : 26-JUN-2014 10:46
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5G,VSTD1001K,VSTD1001K
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 42 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.238	1.232	(0.282)	190044	100.000	99
2	Freon114	85	1.238	1.232	(0.282)	190044	100.000	100
3	Chloromethane	50	1.356	1.360	(0.308)	413638	100.000	100
4	Vinyl Chloride	62	1.455	1.468	(0.331)	358436	100.000	110
5	Bromomethane	94	1.671	1.665	(0.380)	227532	100.000	100
6	Chloroethane	64	1.750	1.754	(0.398)	232239	100.000	100
7	Trichlorofluoromethane	101	1.927	1.921	(0.438)	558996	100.000	98
126	Ethanol	46	2.006	2.010	(0.456)	176987	10000.0	12000(A)
8	Ether	59	2.075	2.079	(0.472)	266647	100.000	99
9	Acrolein	56	2.164	2.158	(0.492)	206959	500.000	500(A)
10	1,1-Dichloroethene	96	2.262	2.266	(0.514)	326453	100.000	98
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.282	2.276	(0.519)	403371	100.000	100
12	Acetone	58	2.262	2.266	(0.514)	30967	100.000	110
13	Iodomethane	142	2.380	2.384	(0.541)	526970	100.000	100
14	Carbon Disulfide	76	2.400	2.404	(0.546)	886509	100.000	100
15	Acetonitrile	41	2.479	2.483	(0.564)	1171676	1000.00	1000(A)
16	Allyl Chloride	39	2.479	2.483	(0.564)	654670	100.000	100
17	Methyl Acetate	43	2.489	2.492	(0.566)	268137	100.000	91
18	Methylene Chloride	84	2.558	2.561	(0.581)	337712	100.000	100
19	tert-Butanol	59	2.646	2.640	(0.602)	51297	200.000	230(A)
20	Acrylonitrile	53	2.725	2.729	(0.620)	102974	100.000	100
21	trans-1,2-Dichloroethene	96	2.764	2.758	(0.628)	338797	100.000	97
22	Methyl tert-butyl ether	73	2.764	2.768	(0.628)	869090	100.000	100

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.050	3.054	(0.693)	616512	100.000	99
	24 Vinyl acetate	43	3.089	3.093	(0.702)	1496560	100.000	100
	25 Diisopropyl Ether	45	3.109	3.113	(0.707)	1541043	100.000	98
	26 2-Chloro-1,3-Butadiene	53	3.129	3.123	(0.711)	602395	100.000	99
	27 Ethyl tert-butyl ether	59	3.385	3.379	(0.769)	1146971	100.000	100
	29 2,2-Dichloropropane	77	3.483	3.487	(0.792)	245766	100.000	94
	28 cis-1,2-Dichloroethene	96	3.483	3.477	(0.792)	356969	100.000	99
	30 2-Butanone	72	3.483	3.487	(0.792)	30334	100.000	100
	32 Propionitrile	54	3.522	3.516	(0.801)	343340	1000.00	1000(A)
	33 Methacrylonitrile	41	3.650	3.644	(0.830)	431220	200.000	200(A)
	34 Bromochloromethane	128	3.660	3.654	(0.832)	163540	100.000	100
	31 Tetrahydrofuran	72	3.710	3.704	(0.843)	57634	200.000	220(A)
	35 Chloroform	83	3.719	3.723	(0.846)	634063	100.000	99
$	36 Dibromofluoromethane	113	3.847	3.841	(0.875)	212438	50.0000	50
	37 1,1,1-Trichloroethane	97	3.877	3.871	(0.881)	521886	100.000	96
	38 Cyclohexane	56	3.936	3.930	(0.895)	581794	100.000	98
	39 1,1-Dichloropropene	110	4.005	4.009	(0.910)	151661	100.000	97
	40 Carbon Tetrachloride	117	4.015	4.009	(0.913)	570936	100.000	99
	41 Isobutyl Alcohol	43	4.084	4.078	(0.928)	273422	2000.00	2400(A)
$	42 1,2-Dichloroethane-d4	102	4.113	4.107	(0.935)	41949	50.0000	48
	43 Benzene	78	4.172	4.166	(0.949)	1162033	100.000	96
	44 1,2-Dichloroethane	62	4.172	4.166	(0.949)	504748	100.000	97
	45 tert-Amyl methyl ether	73	4.271	4.265	(0.971)	863941	100.000	99
*	46 Fluorobenzene	96	4.399	4.393	(1.000)	645333	50.0000	
	47 Trichloroethene	130	4.704	4.708	(1.069)	298527	100.000	93
	48 Methylcyclohexane	83	4.891	4.885	(1.112)	510671	100.000	100
	49 1,2-Dichloropropane	63	4.891	4.895	(1.112)	323242	100.000	100
	51 Methyl Methacrylate	69	4.999	5.003	(1.137)	216449	100.000	100
	52 Dibromomethane	93	4.990	4.993	(1.134)	229276	100.000	100
	53 1,4-Dioxane	88	5.019	5.013	(1.141)	63375	2000.00	2800(A)
	54 Bromodichloromethane	83	5.137	5.131	(1.168)	497203	100.000	100
	55 2-Chloroethyl vinyl ether	63	5.413	5.407	(1.231)	104377	100.000	100
	56 cis-1,3-Dichloropropene	75	5.551	5.545	(1.262)	531784	100.000	100
	57 4-Methyl-2-pentanone	43	5.698	5.692	(1.295)	304768	100.000	99
$	58 Toluene-d8	98	5.807	5.801	(0.800)	591354	50.0000	50
	59 Toluene	91	5.866	5.870	(1.333)	1196285	100.000	95
	60 trans-1,3-Dichloropropene	75	6.073	6.067	(1.380)	484560	100.000	100
	61 Ethyl Methacrylate	69	6.181	6.175	(1.405)	264767	100.000	100
	62 1,1,2-Trichloroethane	97	6.250	6.254	(1.421)	249861	100.000	98
	63 Tetrachloroethene	164	6.407	6.411	(0.883)	204925	100.000	94
	64 1,3-Dichloropropane	76	6.417	6.411	(0.885)	435795	100.000	99
	65 2-Hexanone	43	6.516	6.510	(0.898)	221926	100.000	110
	66 Dibromochloromethane	129	6.644	6.638	(0.916)	342930	100.000	110
	67 1,2-Dibromoethane	107	6.752	6.756	(0.931)	277418	100.000	99
	69 1-Chlorohexane	91	7.274	7.278	(1.003)	459809	100.000	91
*	68 Chlorobenzene-d5	117	7.254	7.248	(1.000)	446279	50.0000	
	70 Chlorobenzene	112	7.284	7.278	(1.004)	751875	100.000	96
	71 1,1,1,2-Tetrachloroethane	131	7.372	7.366	(1.016)	295450	100.000	97
	72 Ethylbenzene	106	7.412	7.406	(1.022)	406604	100.000	96
	73 m,p-Xylene	106	7.540	7.534	(1.039)	995734	200.000	190
	74 o-Xylene	106	7.963	7.967	(1.098)	490933	100.000	96
	75 Styrene	104	7.983	7.977	(1.100)	842985	100.000	98
	76 Bromoform	173	8.160	8.154	(1.125)	180882	100.000	110
	77 Isopropylbenzene	105	8.386	8.380	(1.156)	1281913	100.000	98

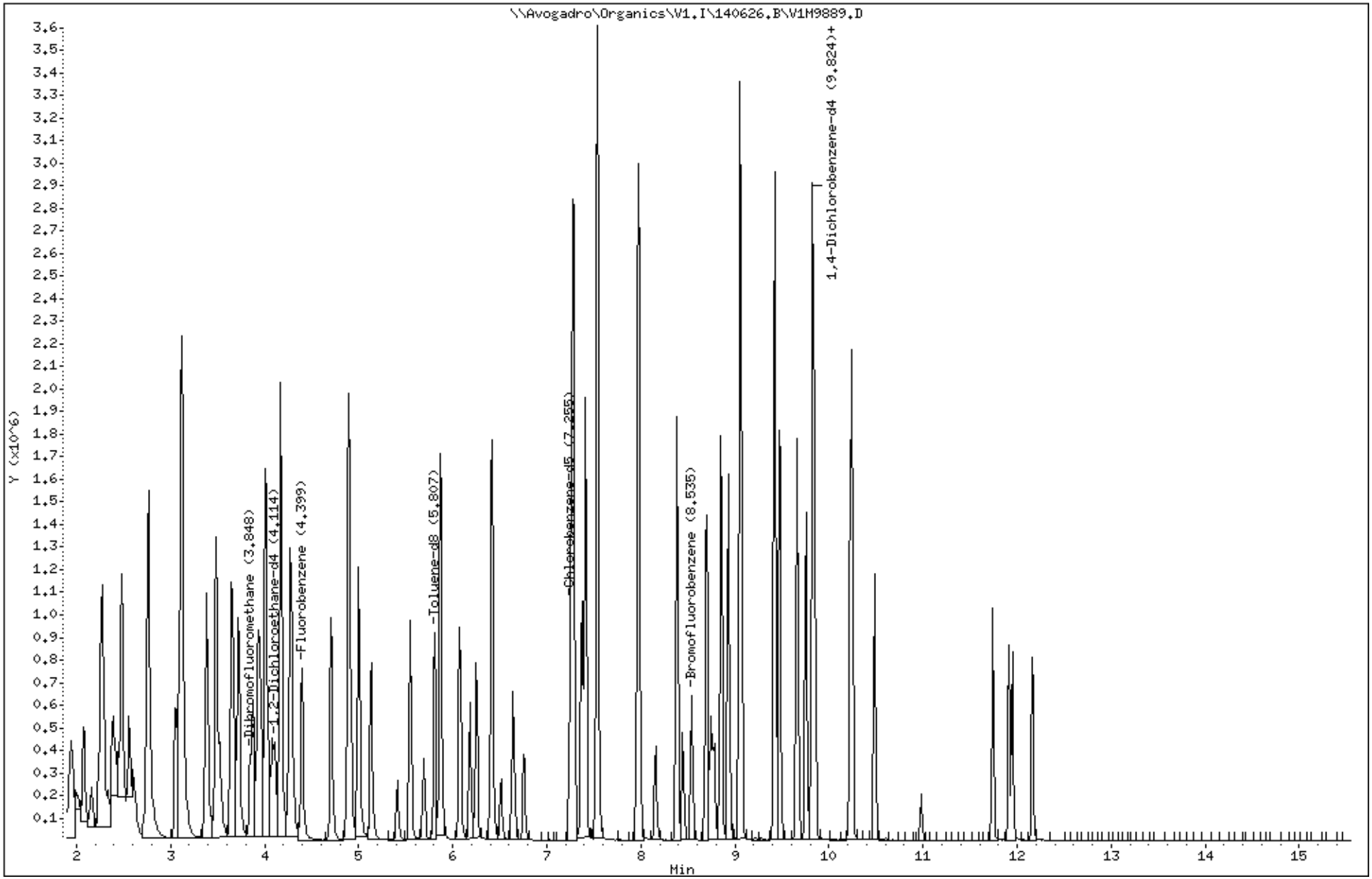
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Report Date: 27-Jun-2014 10:48

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.446	8.449	(1.164)	95932	100.000	110
$	79	Bromofluorobenzene	95	8.534	8.538	(1.176)	272236	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	8.711	8.705	(0.887)	293190	100.000	98
	81	Bromobenzene	156	8.702	8.696	(0.886)	279185	100.000	97
	82	1,2,3-Trichloropropane	75	8.751	8.745	(0.891)	323759	100.000	100
	83	n-Propylbenzene	120	8.849	8.853	(0.901)	292862	100.000	91
	84	2-Chlorotoluene	126	8.928	8.932	(0.909)	264901	100.000	93
	85	1,3,5-Trimethylbenzene	105	9.056	9.060	(0.922)	1051543	100.000	94
	86	4-Chlorotoluene	126	9.056	9.060	(0.922)	277510	100.000	96
M	94	Xylene (Total)	106				1486667	300.000	290
	87	tert-Butylbenzene	119	9.420	9.424	(0.959)	1014223	100.000	93
	88	1,2,4-Trimethylbenzene	105	9.470	9.473	(0.964)	1030930	100.000	95
	89	sec-Butylbenzene	105	9.666	9.660	(0.984)	1294248	100.000	94
	90	1,3-Dichlorobenzene	146	9.755	9.749	(0.993)	502371	100.000	96
	91	4-Isopropyltoluene	119	9.824	9.828	(1.000)	1031478	100.000	96
*	92	1,4-Dichlorobenzene-d4	152	9.824	9.828	(1.000)	189898	50.0000	
	93	1,4-Dichlorobenzene	146	9.854	9.848	(1.003)	500494	100.000	95
	95	n-Butylbenzene	91	10.247	10.241	(1.043)	968112	100.000	100
	96	1,2-Dichlorobenzene	146	10.228	10.222	(1.041)	464774	100.000	95
	97	Hexachloroethane	117	10.484	10.478	(1.067)	262075	100.000	96
	98	1,2-Dibromo-3-chloropropane	75	10.976	10.970	(1.117)	49989	100.000	100
	99	1,2,4-Trichlorobenzene	180	11.744	11.738	(1.195)	222454	100.000	100
	100	Hexachlorobutadiene	225	11.911	11.905	(1.212)	112664	100.000	90
	101	Naphthalene	128	11.951	11.945	(1.216)	523863	100.000	100
	102	1,2,3-Trichlorobenzene	180	12.167	12.161	(1.239)	189153	100.000	99

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9889.D
Date : 26-JUN-2014 10:46
Client ID: VSTD1001K
Instrument: V1.i
Sample Info: 5G,VSTD1001K,VSTD1001K
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5644.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5644.d
Lab Smp Id: VSTD05010W Client Smp ID: VSTD05010W
Inj Date : 23-JUN-2014 09:51
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010W,VSTD05010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 16-JUN-2014 11:41 Cal File: V8D5408.d
Als bottle: 58 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	1.586	1.586	(0.303)	122758	50.0000	50
2	Freon114	85	1.705	1.705	(0.326)	96920	50.0000	50
3	Chloromethane	50	1.753	1.753	(0.335)	163183	50.0000	38
4	Vinyl Chloride	62	1.856	1.853	(0.355)	135429	50.0000	50(Q)
5	Bromomethane	94	2.143	2.142	(0.409)	35666	50.0000	70(Q)
6	Chloroethane	64	2.226	2.229	(0.425)	84769	50.0000	39
7	Trichlorofluoromethane	101	2.445	2.441	(0.467)	239840	50.0000	50
126	Ethanol	46	2.567	2.570	(0.490)	87043	5000.00	4700(A)
8	Ether	59	2.667	2.667	(0.509)	111187	50.0000	47
9	Acrolein	56	2.770	2.769	(0.529)	173350	250.000	250
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	88450	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	121663	50.0000	49
12	Acetone	58	2.889	2.885	(0.552)	25667	50.0000	49(Q)
13	Iodomethane	142	2.985	2.985	(0.570)	38525	50.0000	49(Q)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	324568	50.0000	50
15	Acetonitrile	41	3.136	3.136	(0.599)	314329	500.000	480(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	234346	50.0000	47
17	Methyl Acetate	43	3.146	3.146	(0.601)	176268	50.0000	48
18	Methylene Chloride	84	3.229	3.232	(0.617)	79750	50.0000	47
19	tert-Butanol	59	3.297	3.297	(0.630)	40552	100.000	98
20	Acrylonitrile	53	3.422	3.422	(0.654)	69369	50.0000	46
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	81995	50.0000	48
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	314644	50.0000	49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	225342	50.0000	49
	24 Vinyl acetate	43	3.818	3.818	(0.729)	615348	50.0000	50
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	585681	50.0000	49
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	294828	50.0000	52
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	429945	50.0000	50
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	222525	50.0000	50
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	84423	50.0000	49
	30 2-Butanone	72	4.261	4.265	(0.814)	12747	50.0000	51(Q)
	32 Propionitrile	54	4.303	4.303	(0.822)	248969	500.000	490(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	236364	100.000	100
	34 Bromochloromethane	128	4.451	4.454	(0.850)	36271	50.0000	47
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	22856	100.000	100
	35 Chloroform	83	4.506	4.509	(0.861)	214739	50.0000	49
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	69210	50.0000	49
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	231814	50.0000	50
	38 Cyclohexane	56	4.737	4.740	(0.905)	239655	50.0000	52
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	39011	50.0000	49
	40 Carbon Tetrachloride	117	4.831	4.827	(0.923)	198226	50.0000	50
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	175682	1000.00	980(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	10305	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	293456	50.0000	48
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	267361	50.0000	49
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	248652	50.0000	50
M	50 1,2-Dichloroethene (Total)	96				166418	100.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	161852	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	85146	50.0000	50
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	131235	50.0000	53
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	99303	50.0000	50
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	68397	50.0000	51
	52 Dibromomethane	93	5.882	5.882	(1.123)	67169	50.0000	49
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	21322	1000.00	990(A)
	54 Bromodichloromethane	83	6.017	6.014	(1.149)	164409	50.0000	50
	55 2-Chloroethyl vinyl ether	63	6.445	6.454	(1.231)	1310	50.0000	48(TQ)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	134550	50.0000	50
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	177707	50.0000	51
$	58 Toluene-d8	98	6.718	6.718	(0.817)	222402	50.0000	50
	59 Toluene	91	6.785	6.782	(1.296)	317851	50.0000	49
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	144577	50.0000	50
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	77362	50.0000	52
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.370)	70931	50.0000	48
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	84369	50.0000	51
	64 1,3-Dichloropropane	76	7.355	7.354	(0.894)	131022	50.0000	49
	65 2-Hexanone	43	7.435	7.432	(0.904)	140256	50.0000	52
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	106616	50.0000	50
	67 1,2-Dibromoethane	107	7.728	7.731	(0.940)	81592	50.0000	49
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	115120	50.0000	55(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	223113	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	208564	50.0000	49
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	95483	50.0000	49
	72 Ethylbenzene	106	8.371	8.367	(1.018)	109474	50.0000	52
	73 m,p-Xylene	106	8.499	8.499	(1.034)	268439	100.000	100
	74 o-Xylene	106	8.943	8.943	(1.088)	127581	50.0000	52
	75 Styrene	104	8.959	8.959	(1.090)	202668	50.0000	54
	76 Bromoform	173	9.165	9.161	(1.115)	69078	50.0000	50

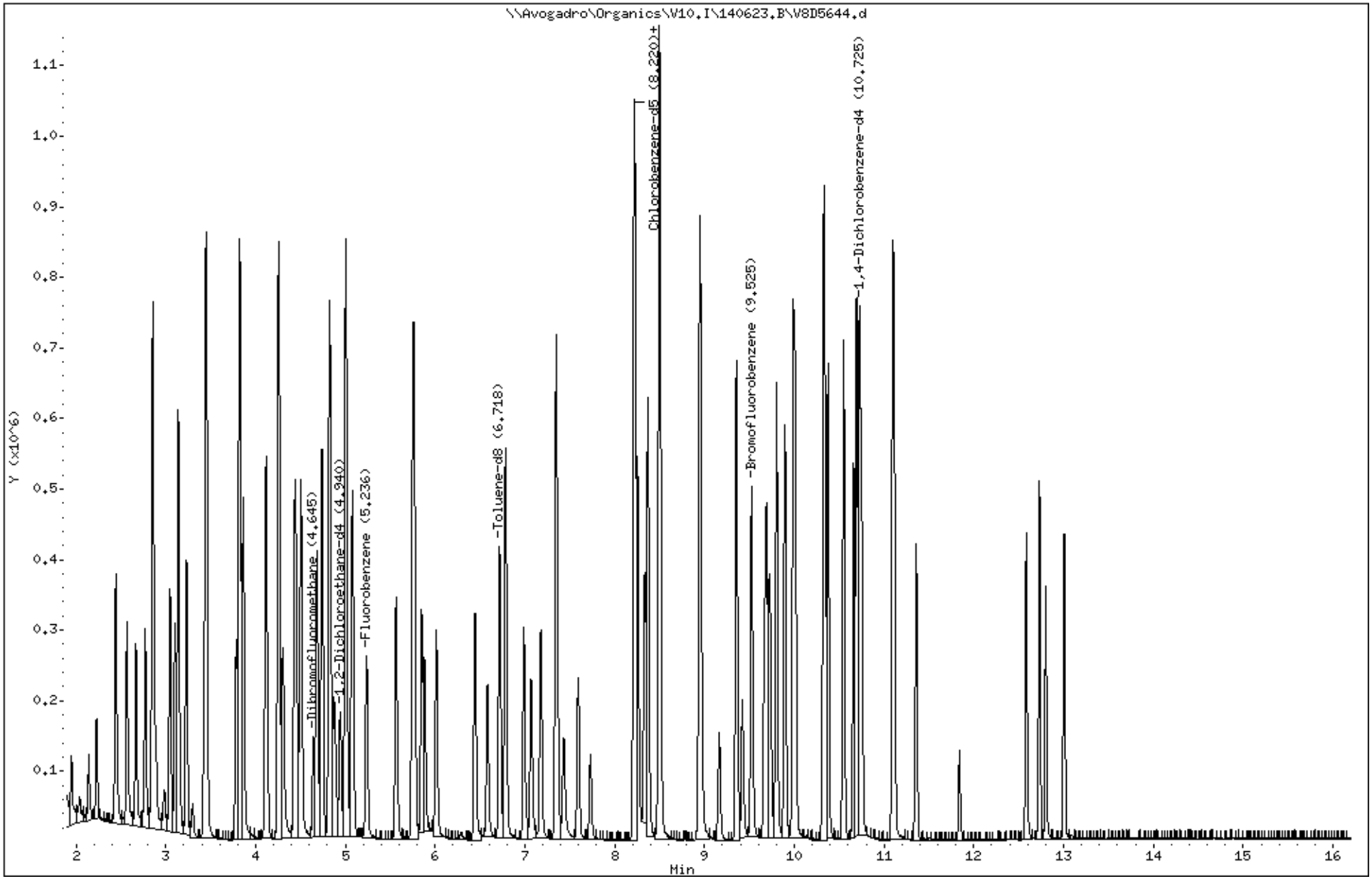
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5644.d
Report Date: 26-Jun-2014 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	Isopropylbenzene	105	9.354	9.354	(1.138)	386809	50.0000	55
78	trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	25567	50.0000	53
$ 79	Bromofluorobenzene	95	9.525	9.525	(1.158)	150356	50.0000	50
80	1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.902)	104997	50.0000	48
81	Bromobenzene	156	9.692	9.692	(0.904)	95481	50.0000	50
82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	146062	50.0000	50(Q)
83	n-Propylbenzene	120	9.805	9.801	(0.914)	88003	50.0000	53
84	2-Chlorotoluene	126	9.895	9.895	(0.923)	78961	50.0000	49
85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	336359	50.0000	54
86	4-Chlorotoluene	126	10.007	10.014	(0.933)	82376	50.0000	50
M 94	Xylene (Total)	106				396020	150.000	(a)
87	tert-Butylbenzene	119	10.326	10.329	(0.963)	362701	50.0000	56
88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	326239	50.0000	53
89	sec-Butylbenzene	105	10.551	10.550	(0.984)	394682	50.0000	54
90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	161364	50.0000	50
91	4-Isopropyltoluene	119	10.692	10.695	(0.997)	343597	50.0000	54
* 92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	132933	50.0000	
93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	165505	50.0000	48
95	n-Butylbenzene	91	11.097	11.097	(1.035)	313123	50.0000	55
96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	159335	50.0000	51
97	Hexachloroethane	117	11.358	11.361	(1.059)	64827	50.0000	53
98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	27878	50.0000	53
99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	101436	50.0000	56
100	Hexachlorobutadiene	225	12.731	12.730	(1.187)	78393	50.0000	50
101	Naphthalene	128	12.801	12.801	(1.194)	198099	50.0000	59
102	1,2,3-Trichlorobenzene	180	13.004	13.007	(1.213)	96916	50.0000	53

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\V10.I\140623.B\V8D5644.d
Date : 23-JUN-2014 09:51
Client ID: VSTD05010W
Instrument: V10.i
Sample Info: 5ML,VSTD05010W,VSTD05010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5645.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5645.d
Lab Smp Id: VSTD02010W Client Smp ID: VSTD02010W
Inj Date : 23-JUN-2014 10:29
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD02010W,VSTD02010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 10:29 Cal File: V8D5645.d
Als bottle: 59 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	1.586	1.586	(0.303)	53823	20.0000	22
2	Freon114	85	1.705	1.705	(0.326)	42733	20.0000	22
3	Chloromethane	50	1.754	1.753	(0.335)	78765	20.0000	25
4	Vinyl Chloride	62	1.856	1.853	(0.355)	59343	20.0000	22(Q)
5	Bromomethane	94	2.143	2.142	(0.409)	14912	20.0000	20
6	Chloroethane	64	2.229	2.229	(0.426)	33471	20.0000	21
7	Trichlorofluoromethane	101	2.445	2.441	(0.467)	105070	20.0000	22
126	Ethanol	46	2.567	2.570	(0.490)	39444	2000.00	2300(A)
8	Ether	59	2.670	2.667	(0.510)	51883	20.0000	22
9	Acrolein	56	2.770	2.769	(0.529)	78701	100.000	120
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	40430	20.0000	22
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	52751	20.0000	21
12	Acetone	58	2.892	2.885	(0.552)	12161	20.0000	25
13	Iodomethane	142	2.982	2.985	(0.570)	18565	20.0000	19
14	Carbon Disulfide	76	3.049	3.046	(0.582)	141879	20.0000	22
15	Acetonitrile	41	3.136	3.136	(0.599)	145233	200.000	230(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	106361	20.0000	22
17	Methyl Acetate	43	3.146	3.146	(0.601)	78380	20.0000	21
18	Methylene Chloride	84	3.233	3.232	(0.617)	35875	20.0000	21
19	tert-Butanol	59	3.297	3.297	(0.630)	17719	40.0000	45
20	Acrylonitrile	53	3.422	3.422	(0.654)	32454	20.0000	23
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	35942	20.0000	21
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	133644	20.0000	21

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	99235	20.0000	22
	24 Vinyl acetate	43	3.821	3.818	(0.730)	267602	20.0000	22
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	252983	20.0000	21
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	122556	20.0000	21
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	182180	20.0000	21
	29 2,2-Dichloropropane	77	4.261	4.258	(0.814)	95758	20.0000	22
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	37022	20.0000	22
	30 2-Butanone	72	4.261	4.265	(0.814)	5630	20.0000	23(Q)
	32 Propionitrile	54	4.307	4.303	(0.823)	114021	200.000	230(A)
	33 Methacrylonitrile	41	4.438	4.435	(0.848)	98895	40.0000	43
	34 Bromochloromethane	128	4.451	4.454	(0.850)	15122	20.0000	19(Q)
	31 Tetrahydrofuran	72	4.503	4.499	(0.860)	10052	40.0000	45
	35 Chloroform	83	4.506	4.509	(0.861)	92633	20.0000	21
$	36 Dibromofluoromethane	113	4.647	4.641	(0.888)	70842	50.0000	49
	37 1,1,1-Trichloroethane	97	4.686	4.686	(0.895)	101167	20.0000	22
	38 Cyclohexane	56	4.741	4.740	(0.905)	101276	20.0000	22
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	17693	20.0000	23
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	84907	20.0000	21
	41 Isobutyl Alcohol	43	5.075	5.078	(0.969)	75344	400.000	420(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.944)	10131	50.0000	47
	43 Benzene	78	5.004	5.004	(0.956)	128009	20.0000	21
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	112524	20.0000	20
	45 tert-Amyl methyl ether	73	5.081	5.081	(0.971)	104364	20.0000	21
M	50 1,2-Dichloroethene (Total)	96				72964	40.0000	43
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	164014	50.0000	
	47 Trichloroethene	130	5.567	5.564	(1.063)	36307	20.0000	20
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	52474	20.0000	21
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	43086	20.0000	21
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	29333	20.0000	21
	52 Dibromomethane	93	5.882	5.882	(1.123)	28339	20.0000	20
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	9513	400.000	460(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	69605	20.0000	21
	55 2-Chloroethyl vinyl ether	63	6.441	6.454	(1.230)	272	20.0000	14(TQ)
	56 cis-1,3-Dichloropropene	75	6.448	6.445	(1.231)	55004	20.0000	21
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	77740	20.0000	22
$	58 Toluene-d8	98	6.718	6.718	(0.817)	225897	50.0000	51
	59 Toluene	91	6.786	6.782	(1.296)	137719	20.0000	21
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	59223	20.0000	20
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	30861	20.0000	20
	62 1,1,2-Trichloroethane	97	7.175	7.174	(1.370)	31595	20.0000	21
	63 Tetrachloroethene	164	7.348	7.348	(0.894)	35728	20.0000	23
	64 1,3-Dichloropropane	76	7.358	7.354	(0.895)	56854	20.0000	22
	65 2-Hexanone	43	7.435	7.432	(0.904)	59755	20.0000	23
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	44026	20.0000	21
	67 1,2-Dibromoethane	107	7.731	7.731	(0.940)	36074	20.0000	22
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	42869	20.0000	20(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	223212	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	89226	20.0000	22
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	41035	20.0000	22
	72 Ethylbenzene	106	8.374	8.367	(1.018)	44839	20.0000	21
	73 m,p-Xylene	106	8.499	8.499	(1.034)	111451	40.0000	44
	74 o-Xylene	106	8.943	8.943	(1.088)	51308	20.0000	22
	75 Styrene	104	8.962	8.959	(1.090)	82680	20.0000	21
	76 Bromoform	173	9.165	9.161	(1.115)	28458	20.0000	22

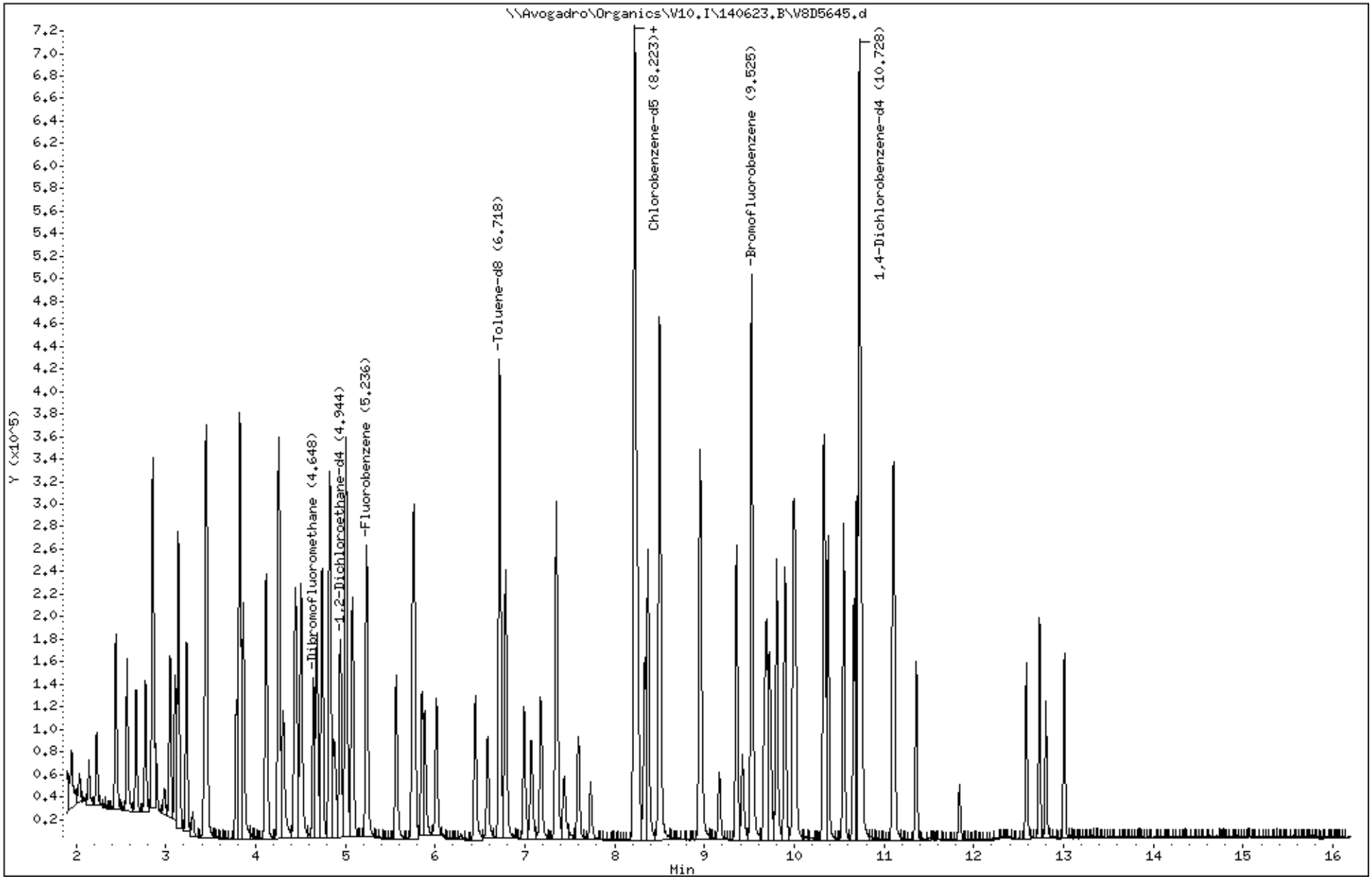
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5645.d
Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.358	9.354	(1.138)	149075	20.0000	20
	78 trans-1,4-Dichloro-2-butene	75	9.428	9.425	(1.147)	10712	20.0000	22
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	150569	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.901)	44729	20.0000	22
	81 Bromobenzene	156	9.689	9.692	(0.903)	39762	20.0000	22
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	62320	20.0000	23
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	33628	20.0000	21
	84 2-Chlorotoluene	126	9.898	9.895	(0.923)	32878	20.0000	22
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	132287	20.0000	22
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	33685	20.0000	22
M	94 Xylene (Total)	106				162759	60.0000	66
	87 tert-Butylbenzene	119	10.326	10.329	(0.963)	136282	20.0000	22
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.967)	130067	20.0000	23
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	150999	20.0000	22
	90 1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	67301	20.0000	22
	91 4-Isopropyltoluene	119	10.695	10.695	(0.997)	131508	20.0000	22
*	92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	131887	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	68852	20.0000	21
	95 n-Butylbenzene	91	11.097	11.097	(1.034)	117137	20.0000	21
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	63451	20.0000	22
	97 Hexachloroethane	117	11.358	11.361	(1.059)	23593	20.0000	20
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	11059	20.0000	22
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.173)	35769	20.0000	19
	100 Hexachlorobutadiene	225	12.727	12.730	(1.186)	30420	20.0000	22
	101 Naphthalene	128	12.805	12.801	(1.194)	70498	20.0000	19
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.212)	35983	20.0000	21

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\V10.I\140623.B\V8D5645.d
Date : 23-JUN-2014 10:29
Client ID: VSTD02010W
Instrument: V10.i
Sample Info: 5ML,VSTD02010W,VSTD02010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5646.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5646.d
Lab Smp Id: VSTD00510W Client Smp ID: VSTD00510W
Inj Date : 23-JUN-2014 10:58
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00510W,VSTD00510W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 10:58 Cal File: V8D5646.d
Als bottle: 60 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	1.586	1.586	(0.303)	11838	5.00000	4.7	
2	Freon114	85	1.705	1.705	(0.326)	9504	5.00000	4.7	
3	Chloromethane	50	1.757	1.753	(0.336)	18226	5.00000	5.4	
4	Vinyl Chloride	62	1.856	1.853	(0.355)	13414	5.00000	4.7(TQ)	
5	Bromomethane	94	2.139	2.142	(0.409)	3687	5.00000	4.7	
6	Chloroethane	64	2.226	2.229	(0.425)	8462	5.00000	5.1(M)M3 AM 06/26	
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	23626	5.00000	4.8	
126	Ethanol	46	2.567	2.570	(0.490)	9723	500.000	540(A)	
8	Ether	59	2.667	2.667	(0.509)	12368	5.00000	4.9	
9	Acrolein	56	2.773	2.769	(0.530)	16676	25.0000	24	
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	8444	5.00000	4.4	
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	12815	5.00000	4.0	
12	Acetone	58	2.882	2.885	(0.550)	2588	5.00000	5.1(M)M7 AM 06/26	
13	Iodomethane	142	2.982	2.985	(0.570)	3573	5.00000	3.5(Q)	
14	Carbon Disulfide	76	3.046	3.046	(0.582)	34021	5.00000	3.7	
15	Acetonitrile	41	3.136	3.136	(0.599)	33059	50.0000	51	
16	Allyl Chloride	39	3.136	3.139	(0.599)	26847	5.00000	5.4	
17	Methyl Acetate	43	3.149	3.146	(0.601)	19300	5.00000	5.0	
18	Methylene Chloride	84	3.226	3.232	(0.616)	9222	5.00000	5.2	
19	tert-Butanol	59	3.297	3.297	(0.630)	4257	10.0000	10	
20	Acrylonitrile	53	3.422	3.422	(0.654)	7902	5.00000	5.3	
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	9032	5.00000	5.1	
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	32808	5.00000	4.9	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	23 1,1-Dichloroethane	63	3.782	3.785	(0.722)	23796	5.00000	5.0	
	24 Vinyl acetate	43	3.821	3.818	(0.730)	59689	5.00000	4.7	
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	60489	5.00000	4.9	
	26 2-Chloro-1,3-Butadiene	53	3.859	3.863	(0.737)	25963	5.00000	4.3	
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	42844	5.00000	4.8	
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	20600	5.00000	4.6	
	28 cis-1,2-Dichloroethene	96	4.258	4.255	(0.813)	8668	5.00000	4.9	
	30 2-Butanone	72	4.274	4.265	(0.816)	1117	5.00000	4.4(Q)	
	32 Propionitrile	54	4.310	4.303	(0.823)	25068	50.0000	48	
	33 Methacrylonitrile	41	4.438	4.435	(0.848)	21248	10.0000	8.8	
	34 Bromochloromethane	128	4.458	4.454	(0.851)	4526	5.00000	5.5	
	31 Tetrahydrofuran	72	4.506	4.499	(0.861)	2150	10.0000	9.2	
	35 Chloroform	83	4.509	4.509	(0.861)	22314	5.00000	4.8	
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	78538	50.0000	52	
	37 1,1,1-Trichloroethane	97	4.689	4.686	(0.896)	22977	5.00000	4.7	
	38 Cyclohexane	56	4.744	4.740	(0.906)	21857	5.00000	4.5	
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	3942	5.00000	4.8	
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	20167	5.00000	4.8	
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	18961	100.000	100	
$	42 1,2-Dichloroethane-d4	102	4.949	4.943	(0.945)	11636	50.0000	52	
	43 Benzene	78	5.007	5.004	(0.956)	31939	5.00000	5.1	
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	29253	5.00000	5.1	
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	25676	5.00000	4.9	
M	50 1,2-Dichloroethene (Total)	96				17700	10.0000	10	
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	171455	50.0000		
	47 Trichloroethene	130	5.567	5.564	(1.063)	8786	5.00000	4.7	
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	11705	5.00000	4.5	
	49 1,2-Dichloropropane	63	5.773	5.766	(1.103)	10095	5.00000	4.7	
	51 Methyl Methacrylate	69	5.856	5.850	(1.119)	6391	5.00000	4.4	
	52 Dibromomethane	93	5.882	5.882	(1.123)	7335	5.00000	5.0	
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	1911	100.000	89	
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	16665	5.00000	4.8	
	55 2-Chloroethyl vinyl ether	63	6.538	6.454	(1.249)	48	5.00000	5.4(TQM)M6 AM 06/26	
	56 cis-1,3-Dichloropropene	75	6.448	6.445	(1.232)	12594	5.00000	4.6	
	57 4-Methyl-2-pentanone	43	6.589	6.583	(1.259)	16658	5.00000	4.5	
$	58 Toluene-d8	98	6.718	6.718	(0.817)	234953	50.0000	50	
	59 Toluene	91	6.785	6.782	(1.296)	32776	5.00000	4.8	
	60 trans-1,3-Dichloropropene	75	6.998	6.988	(1.337)	13393	5.00000	4.9	
	61 Ethyl Methacrylate	69	7.072	7.068	(1.351)	7353	5.00000	4.5	
	62 1,1,2-Trichloroethane	97	7.181	7.174	(1.372)	7843	5.00000	5.0	
	63 Tetrachloroethene	164	7.351	7.348	(0.894)	7893	5.00000	4.7	
	64 1,3-Dichloropropane	76	7.361	7.354	(0.895)	13486	5.00000	5.0	
	65 2-Hexanone	43	7.445	7.432	(0.905)	12469	5.00000	4.5	
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	10205	5.00000	4.6(T)	
	67 1,2-Dibromoethane	107	7.731	7.731	(0.940)	8374	5.00000	4.9	
	69 1-Chlorohexane	91	8.223	8.216	(1.000)	9994	5.00000	4.4(Q)	
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	239213	50.0000		
	70 Chlorobenzene	112	8.258	8.255	(1.004)	21824	5.00000	5.0	
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	9866	5.00000	4.9	
	72 Ethylbenzene	106	8.371	8.367	(1.018)	10059	5.00000	4.0	
	73 m,p-Xylene	106	8.502	8.499	(1.034)	25057	10.0000	9.3	
	74 o-Xylene	106	8.949	8.943	(1.088)	11799	5.00000	4.7	
	75 Styrene	104	8.962	8.959	(1.090)	16572	5.00000	4.0	
	76 Bromoform	173	9.161	9.161	(1.114)	6287	5.00000	4.5	

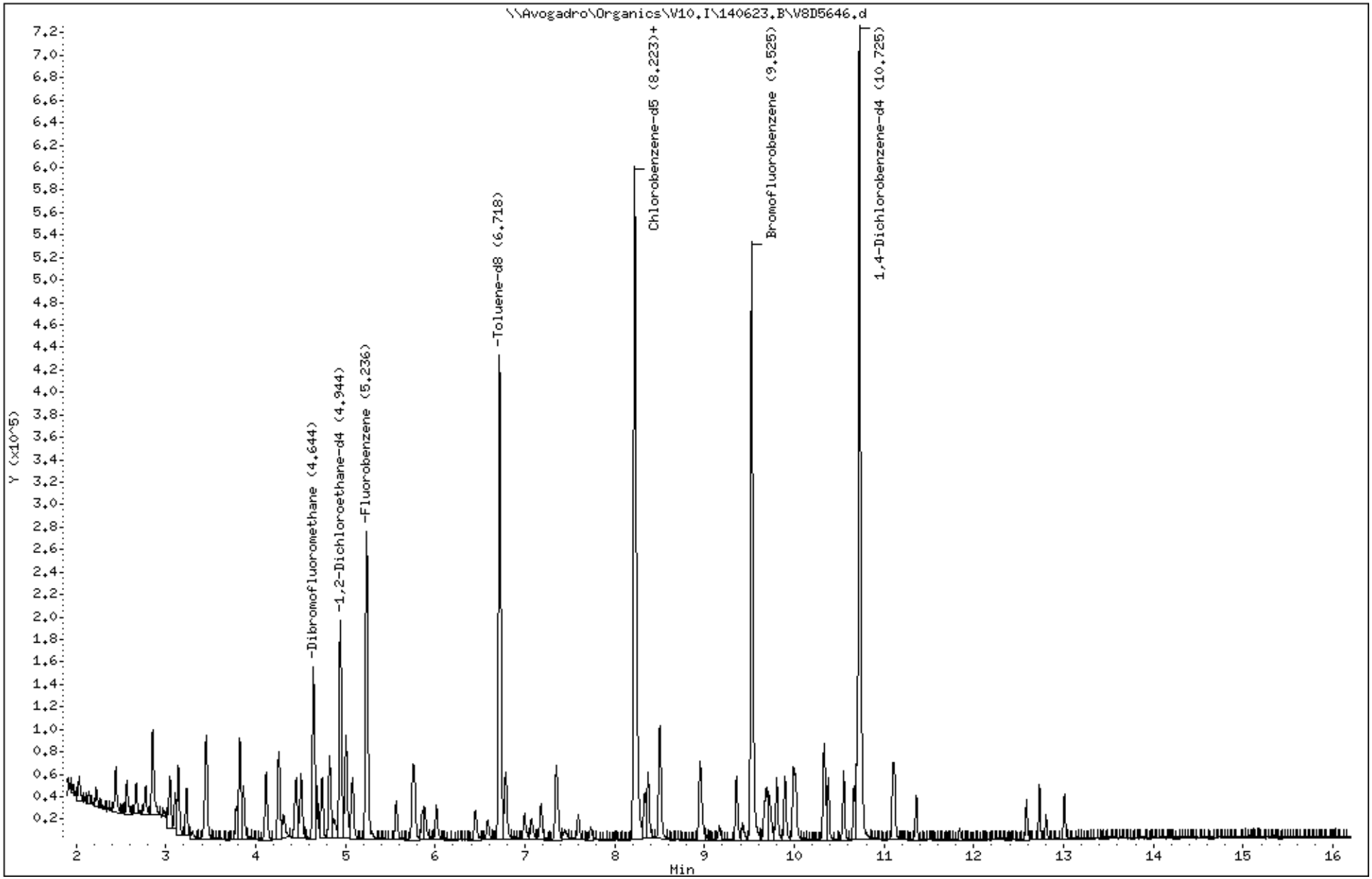
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Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.361	9.354	(1.138)	32113	5.00000	4.0
	78 trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	2089	5.00000	3.9
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	162446	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	9.670	9.669	(0.902)	11007	5.00000	5.3
	81 Bromobenzene	156	9.695	9.692	(0.904)	9145	5.00000	5.0
	82 1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	13648	5.00000	5.0(Q)
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	7643	5.00000	4.7
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	8048	5.00000	5.2
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	27740	5.00000	4.4
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	7868	5.00000	4.9
M	94 Xylene (Total)	106				36856	15.0000	14
	87 tert-Butylbenzene	119	10.325	10.329	(0.963)	27266	5.00000	4.3
	88 1,2,4-Trimethylbenzene	105	10.380	10.377	(0.968)	27918	5.00000	4.8
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	33306	5.00000	4.8
	90 1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	15407	5.00000	4.9
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	27894	5.00000	4.6
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	134943	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	17587	5.00000	5.2
	95 n-Butylbenzene	91	11.097	11.097	(1.035)	24885	5.00000	3.6
	96 1,2-Dichlorobenzene	146	11.116	11.113	(1.037)	15123	5.00000	5.0
	97 Hexachloroethane	117	11.361	11.361	(1.059)	5855	5.00000	3.9
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	2341	5.00000	4.6
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	8316	5.00000	4.0
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	6982	5.00000	5.0
	101 Naphthalene	128	12.804	12.801	(1.194)	13217	5.00000	4.7
	102 1,2,3-Trichlorobenzene	180	13.010	13.007	(1.213)	8805	5.00000	5.1

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.
M - Compound response manually integrated.

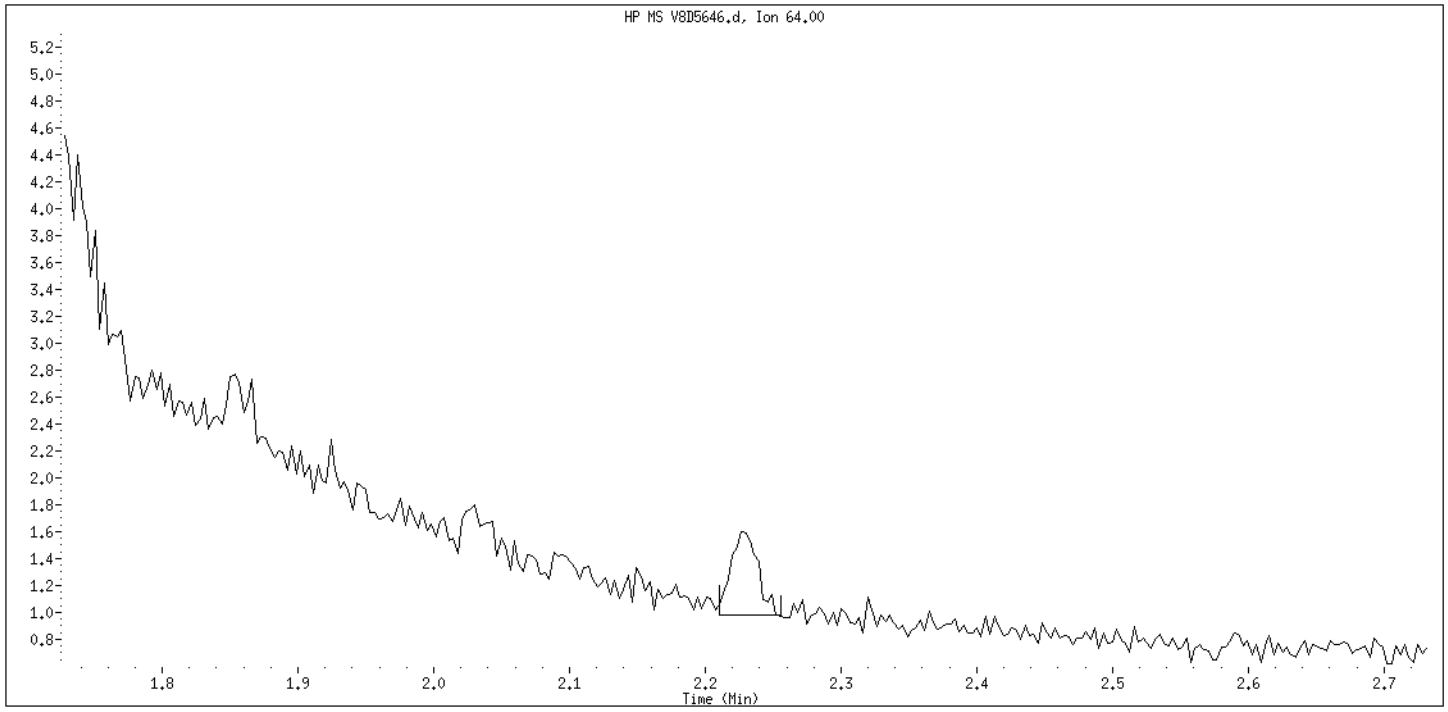
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Date : 23-JUN-2014 10:58
Client ID: VSTD00510W
Instrument: V10.i
Sample Info: 5ML,VSTD00510W,VSTD00510W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



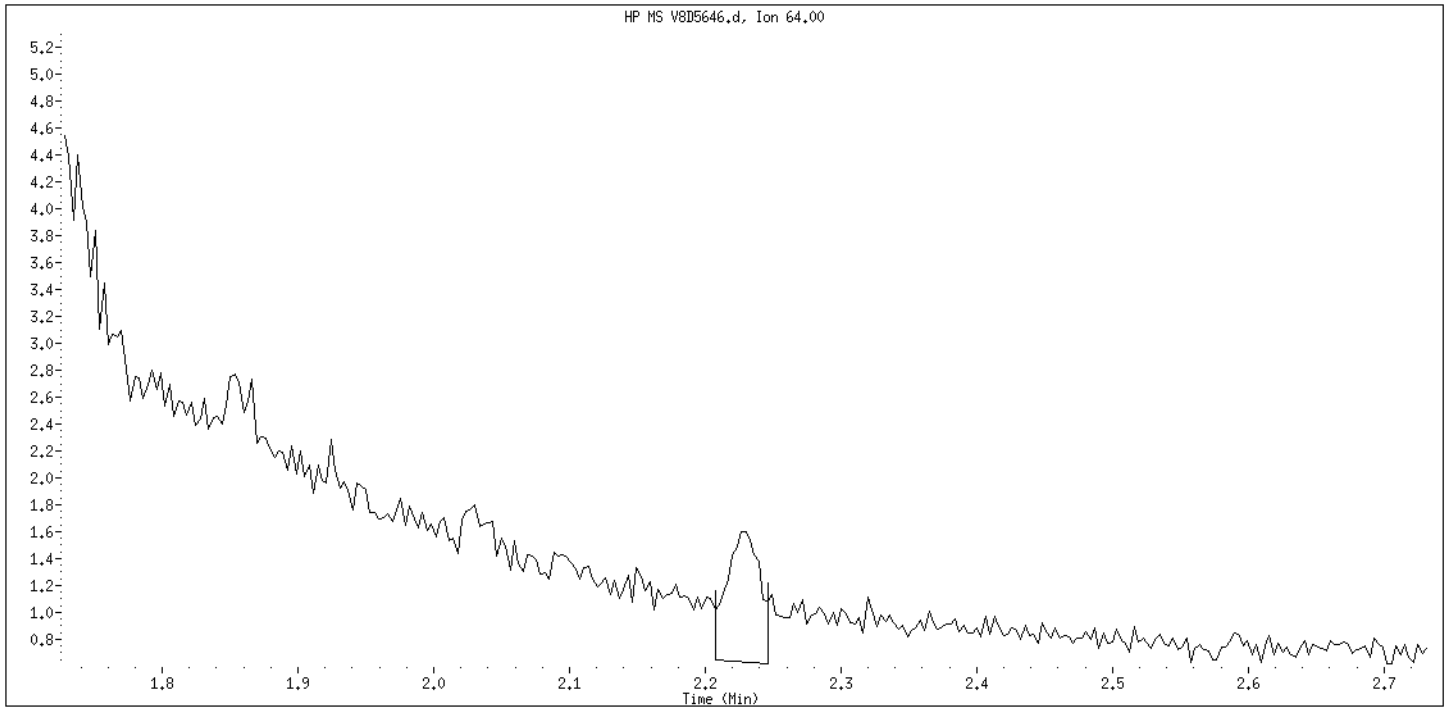
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Lab ID: VSTD00510W Client ID: VSTD00510W
Inj Date: 23-JUN-2014 10:58 Operator: WL SRC: WL

Manual Integration Chloroethane Ret Time: 2.227 min, Range: 2.211 to 2.256 min Response: 8462



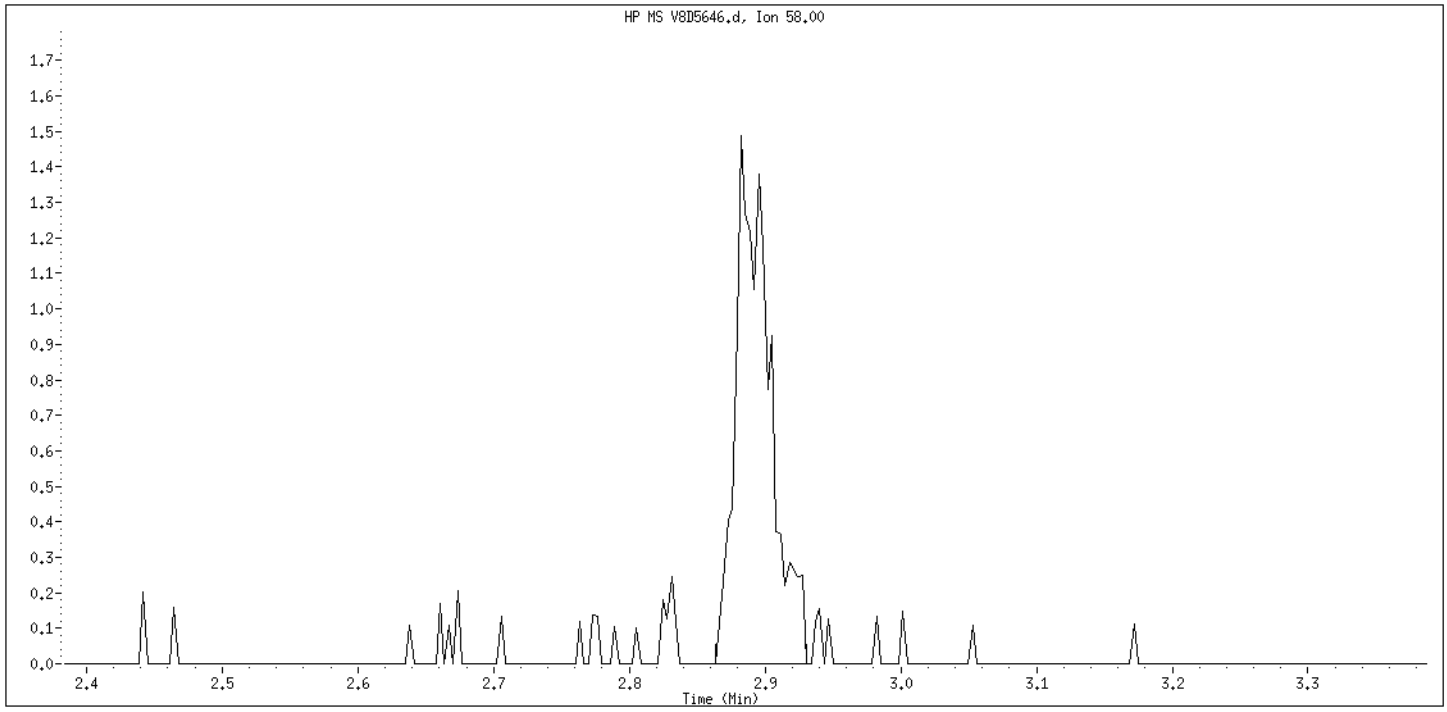
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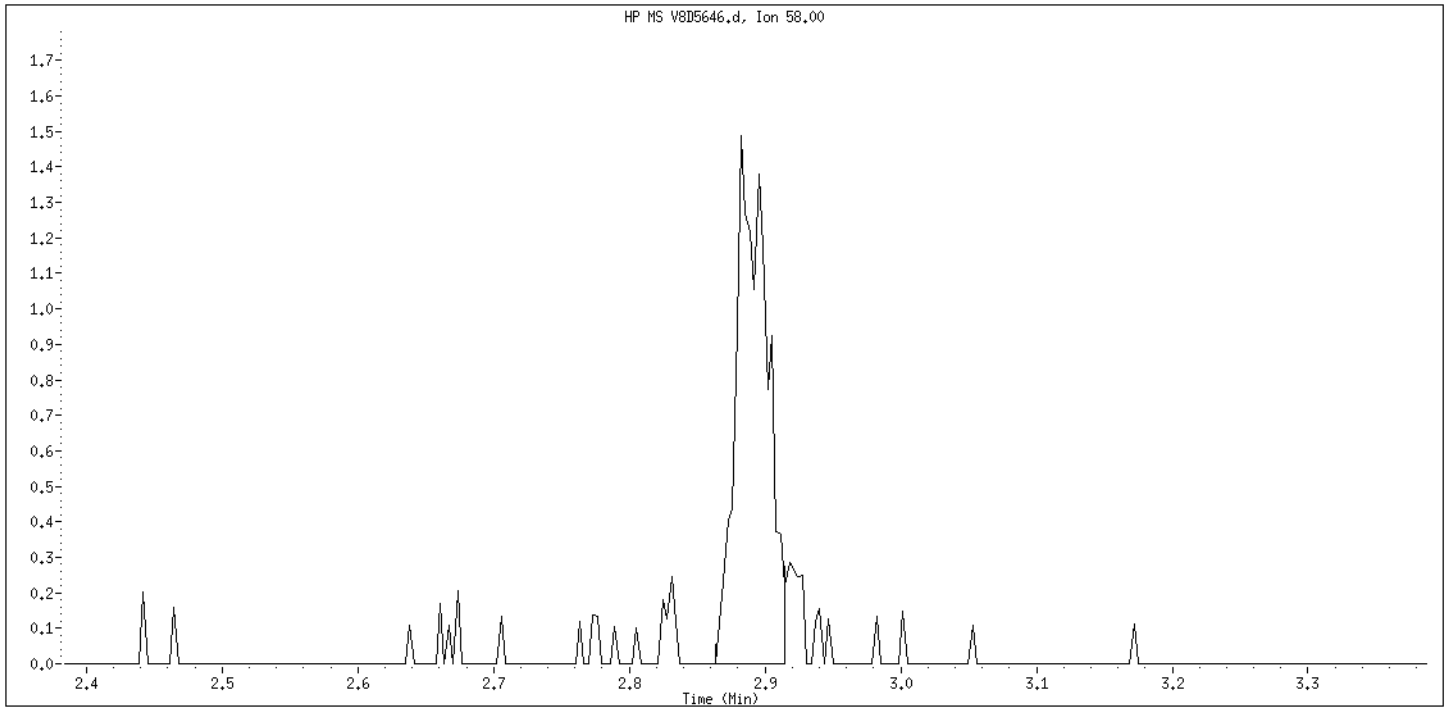
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Lab ID: VSTD00510W Client ID: VSTD00510W
Inj Date: 23-JUN-2014 10:58 Operator: WL SRC: WL

Manual Integration Acetone Ret Time: 2.883 min, Range: 2.863 to 2.931 min Response: 2588



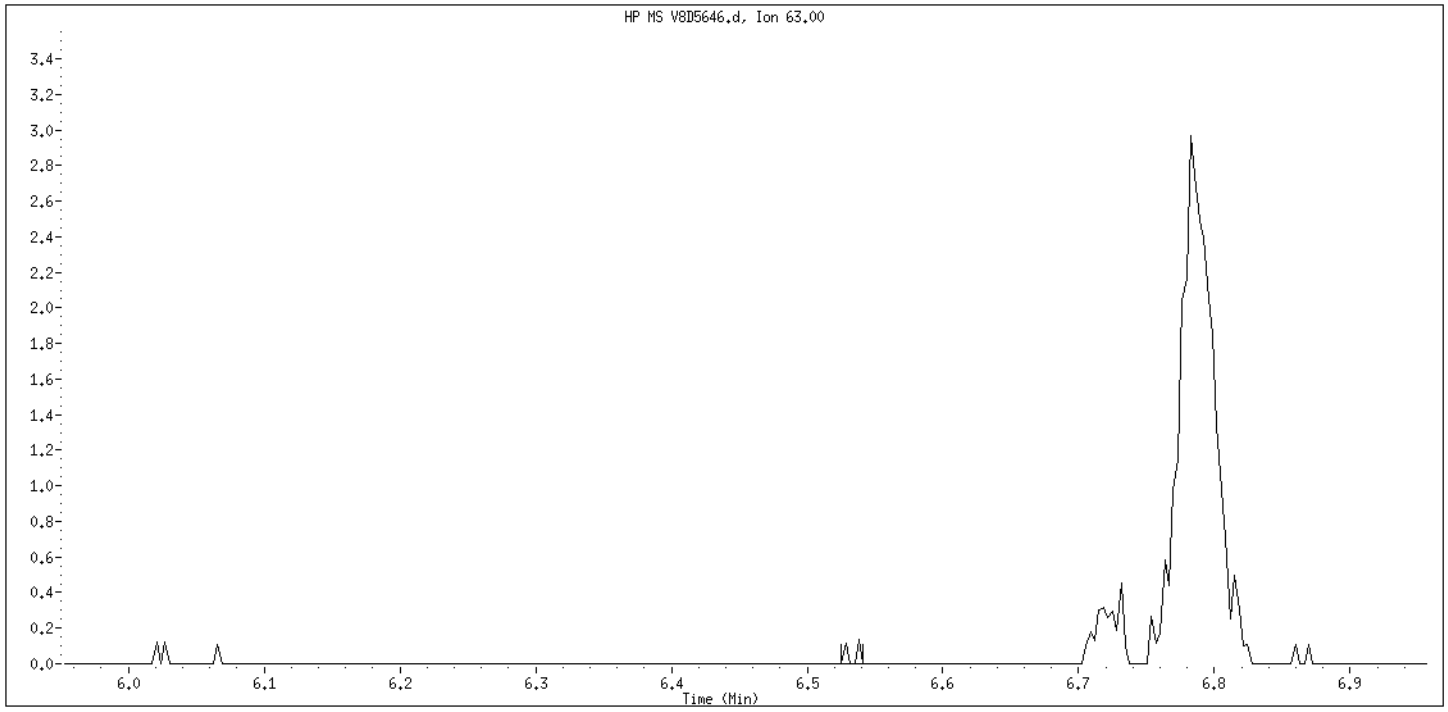
Original Integration Acetone Ret Time: 2.883 min, Range: 2.863 to 2.915 min Response: 2386



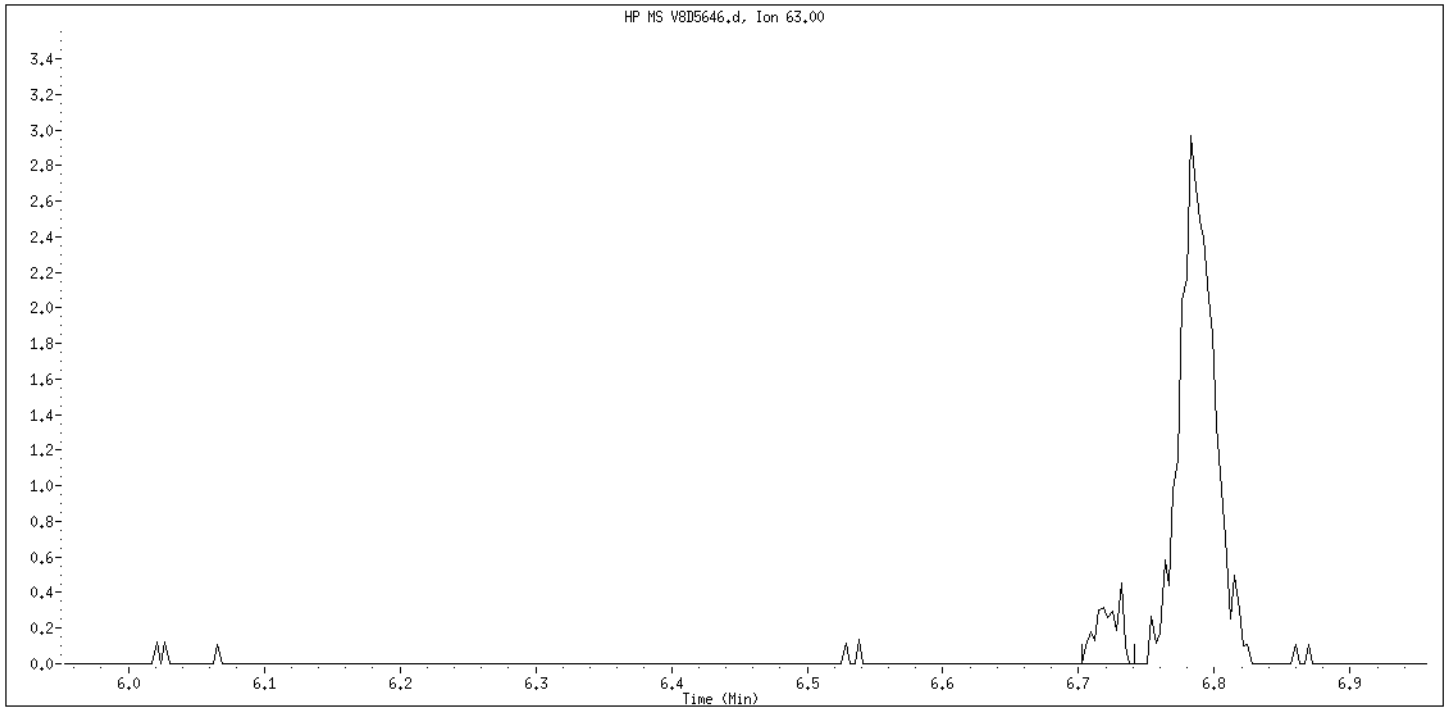
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5646.d

Lab ID: VSTD00510W Client ID: VSTD00510W
Inj Date: 23-JUN-2014 10:58 Operator: WL SRC: WL

Manual Integration 2-Chloroethyl vinyl ether Ret Time: 6.538 min, Range: 6.525 to 6.542 min Response: 48



Original Integration 2-Chloroethyl vinyl ether Ret Time: 6.731 min, Range: 6.702 to 6.741 min Response: 450



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5648.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5648.d
Lab Smp Id: VSTD00110W Client Smp ID: VSTD00110W
Inj Date : 23-JUN-2014 11:53
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD00110W,VSTD00110W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 11:53 Cal File: V8D5648.d
Als bottle: 62 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	1.583	1.586	(0.302)	2241	1.00000	0.96
2	Freon114	85	1.712	1.705	(0.327)	1982	1.00000	1.0
3	Chloromethane	50	1.750	1.753	(0.334)	2725	1.00000	0.88(M)M3 AM 06/26
4	Vinyl Chloride	62	1.856	1.853	(0.355)	2767	1.00000	1.0(TQ)
5	Bromomethane	94	2.142	2.142	(0.409)	710	1.00000	0.98(QM)M3 AM 06/26
6	Chloroethane	64	2.229	2.229	(0.426)	1225	1.00000	0.80(TQM)M3 AM 06/26
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	4529	1.00000	0.98
126	Ethanol	46	2.567	2.570	(0.490)	1631	500.000	97(Q)
8	Ether	59	2.676	2.667	(0.511)	2485	1.00000	1.1(Q)
9	Acrolein	56	2.776	2.769	(0.530)	2904	5.00000	4.4(Q)
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	1953	1.00000	1.1
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	3526	1.00000	0.24(a)
12	Acetone	58	2.908	2.885	(0.555)	452	1.00000	0.97(Q)
13	Iodomethane	142	2.991	2.985	(0.571)	814	1.00000	0.86
14	Carbon Disulfide	76	3.046	3.046	(0.582)	11310	1.00000	0.23(a)
15	Acetonitrile	41	3.136	3.136	(0.599)	6795	1.00000	11
16	Allyl Chloride	39	3.133	3.139	(0.598)	6589	1.00000	1.4(Q)
17	Methyl Acetate	43	3.146	3.146	(0.601)	4059	1.00000	1.1
18	Methylene Chloride	84	3.229	3.232	(0.617)	1772	1.00000	1.1
19	tert-Butanol	59	3.300	3.297	(0.630)	761	1.00000	2.0
20	Acrylonitrile	53	3.425	3.422	(0.654)	1290	1.00000	0.93
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	1682	1.00000	1.0
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	6030	1.00000	0.97

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23 1,1-Dichloroethane	63	3.792	3.785	(0.724)	4311	1.00000	0.97
	24 Vinyl acetate	43	3.827	3.818	(0.731)	9408	1.00000	0.80(T)
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	10607	1.00000	0.93
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	4407	1.00000	0.78
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	7759	1.00000	0.94
	29 2,2-Dichloropropane	77	4.261	4.258	(0.814)	3615	1.00000	0.87
	28 cis-1,2-Dichloroethene	96	4.261	4.255	(0.814)	1515	1.00000	0.92(Q)
	30 2-Butanone	72	4.502	4.265	(0.860)	118	1.00000	0.50(TQ)
	32 Propionitrile	54	4.319	4.303	(0.825)	3471	1.00000	7.2
	33 Methacrylonitrile	41	4.441	4.435	(0.848)	3166	1.00000	1.4
	34 Bromochloromethane	128	4.457	4.454	(0.851)	890	1.00000	1.2
	31 Tetrahydrofuran	72	4.502	4.499	(0.860)	140	1.00000	0.65
	35 Chloroform	83	4.512	4.509	(0.862)	4428	1.00000	1.0
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	73405	1.00000	53
	37 1,1,1-Trichloroethane	97	4.679	4.686	(0.894)	4369	1.00000	0.97
	38 Cyclohexane	56	4.740	4.740	(0.905)	3994	1.00000	0.90
	39 1,1-Dichloropropene	110	4.830	4.821	(0.923)	601	1.00000	0.80(Q)
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	3700	1.00000	0.95
	41 Isobutyl Alcohol	43	5.072	5.078	(0.969)	3352	1.00000	19
$	42 1,2-Dichloroethane-d4	102	4.943	4.943	(0.944)	11312	1.00000	55
	43 Benzene	78	5.001	5.004	(0.955)	5609	1.00000	0.96
	44 1,2-Dichloroethane	62	5.014	5.007	(0.958)	5549	1.00000	1.0
	45 tert-Amyl methyl ether	73	5.084	5.081	(0.971)	4805	1.00000	0.98
M	50 1,2-Dichloroethene (Total)	96				3197	2.00000	1.9
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	158815	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	1914	1.00000	1.1
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	2014	1.00000	0.84(Q)
	49 1,2-Dichloropropane	63	5.773	5.766	(1.103)	1866	1.00000	0.94
	51 Methyl Methacrylate	69	5.863	5.850	(1.120)	958	1.00000	0.71(Q)
	52 Dibromomethane	93	5.888	5.882	(1.125)	1458	1.00000	1.1
	54 Bromodichloromethane	83	6.017	6.014	(1.149)	3170	1.00000	0.98
	55 2-Chloroethyl vinyl ether	63	6.702	6.454	(1.280)	43	1.00000	5.3(TQ)
	56 cis-1,3-Dichloropropene	75	6.457	6.445	(1.233)	1934	1.00000	0.76
	57 4-Methyl-2-pentanone	43	6.586	6.583	(1.258)	2551	1.00000	0.75(TQ)
$	58 Toluene-d8	98	6.718	6.718	(0.817)	224508	1.00000	49
	59 Toluene	91	6.782	6.782	(1.295)	6063	1.00000	0.97
	60 trans-1,3-Dichloropropene	75	7.001	6.988	(1.337)	1885	1.00000	1.4
	61 Ethyl Methacrylate	69	6.721	7.068	(1.284)	769	1.00000	0.51(TQ)
	62 1,1,2-Trichloroethane	97	7.181	7.174	(1.372)	1477	1.00000	1.0
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	1481	1.00000	0.91
	64 1,3-Dichloropropane	76	7.364	7.354	(0.896)	2160	1.00000	0.82
	65 2-Hexanone	43	7.441	7.432	(0.905)	1703	1.00000	0.64(TQ)
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	1899	1.00000	0.89(T)
	67 1,2-Dibromoethane	107	7.734	7.731	(0.941)	1477	1.00000	0.89(T)
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	2355	1.00000	1.1(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	230685	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	4024	1.00000	0.96(Q)
	71 1,1,1,2-Tetrachloroethane	131	8.338	8.335	(1.014)	1830	1.00000	0.94(Q)
	72 Ethylbenzene	106	8.370	8.367	(1.018)	1448	1.00000	0.17(aQ)
	73 m,p-Xylene	106	8.502	8.499	(1.034)	4434	2.00000	1.7
	74 o-Xylene	106	8.949	8.943	(1.088)	1934	1.00000	0.79
	75 Styrene	104	8.962	8.959	(1.090)	2885	1.00000	0.72(Q)
	76 Bromoform	173	9.161	9.161	(1.114)	1130	1.00000	0.84(T)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	5043	1.00000	0.57

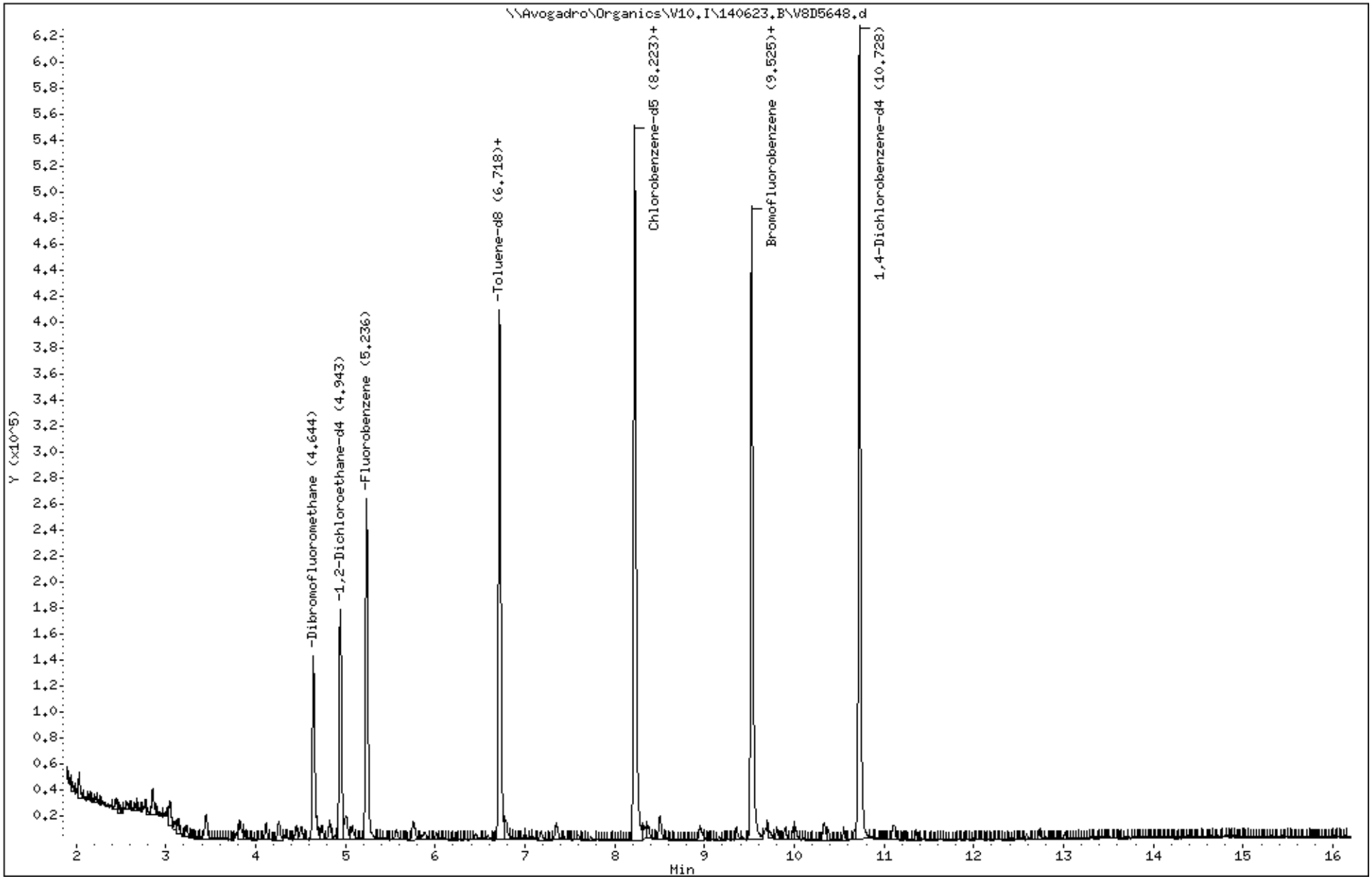
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Report Date: 26-Jun-2014 08:46

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78	trans-1,4-Dichloro-2-butene	75	9.522	9.425	(1.158)	100666	1.00000	200(TQ)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	149571	1.00000	48
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	2076	1.00000	1.1(T)
	81	Bromobenzene	156	9.702	9.692	(0.905)	1641	1.00000	0.97
	82	1,2,3-Trichloropropane	75	9.727	9.721	(0.907)	2196	1.00000	0.87
	83	n-Propylbenzene	120	9.805	9.801	(0.914)	1372	1.00000	0.92(Q)
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	1342	1.00000	0.94(Q)
	85	1,3,5-Trimethylbenzene	105	9.985	9.988	(0.931)	4742	1.00000	0.82
	86	4-Chlorotoluene	126	10.014	10.014	(0.934)	1453	1.00000	0.99(Q)
M	94	Xylene (Total)	106				6368	3.00000	2.5
	87	tert-Butylbenzene	119	10.322	10.329	(0.963)	4972	1.00000	0.85
	88	1,2,4-Trimethylbenzene	105	10.383	10.377	(0.968)	4007	1.00000	0.74
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	5068	1.00000	0.78
	90	1,3-Dichlorobenzene	146	10.676	10.660	(0.996)	2880	1.00000	0.99
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	4238	1.00000	0.76
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	124697	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	3525	1.00000	1.1(Q)
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	3472	1.00000	(a)
	96	1,2-Dichlorobenzene	146	11.116	11.113	(1.037)	2553	1.00000	0.92
	97	Hexachloroethane	117	11.361	11.361	(1.059)	743	1.00000	(aQ)
	98	1,2-Dibromo-3-chloropropane	75	11.846	11.840	(1.105)	293	1.00000	0.72(TQ)
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	1127	1.00000	0.26(a)
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	1203	1.00000	0.94(Q)
	101	Naphthalene	128	12.814	12.801	(1.195)	1412	1.00000	1.8
	102	1,2,3-Trichlorobenzene	180	13.013	13.007	(1.213)	1274	1.00000	0.79

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.
M - Compound response manually integrated.

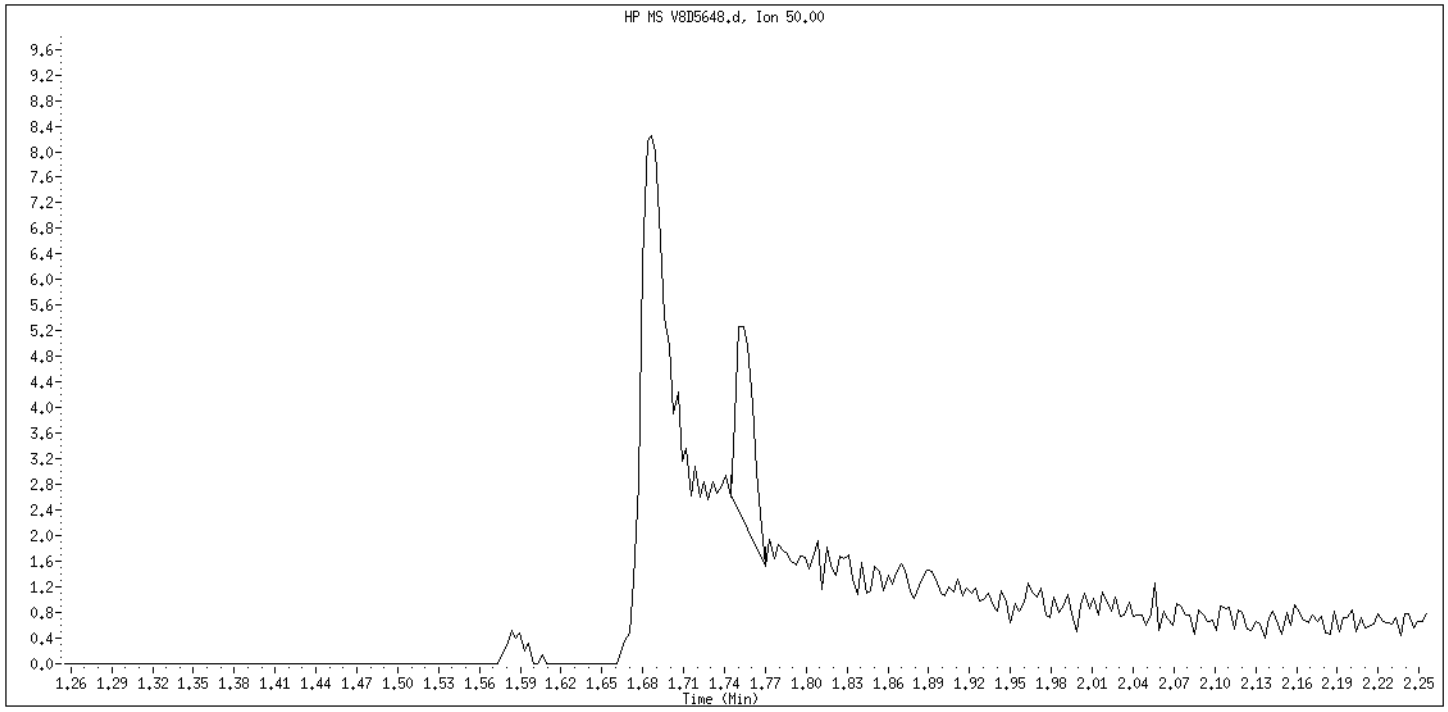
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Date : 23-JUN-2014 11:53
Client ID: VSTD00110W
Instrument: V10.i
Sample Info: 5ML,VSTD00110W,VSTD00110W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



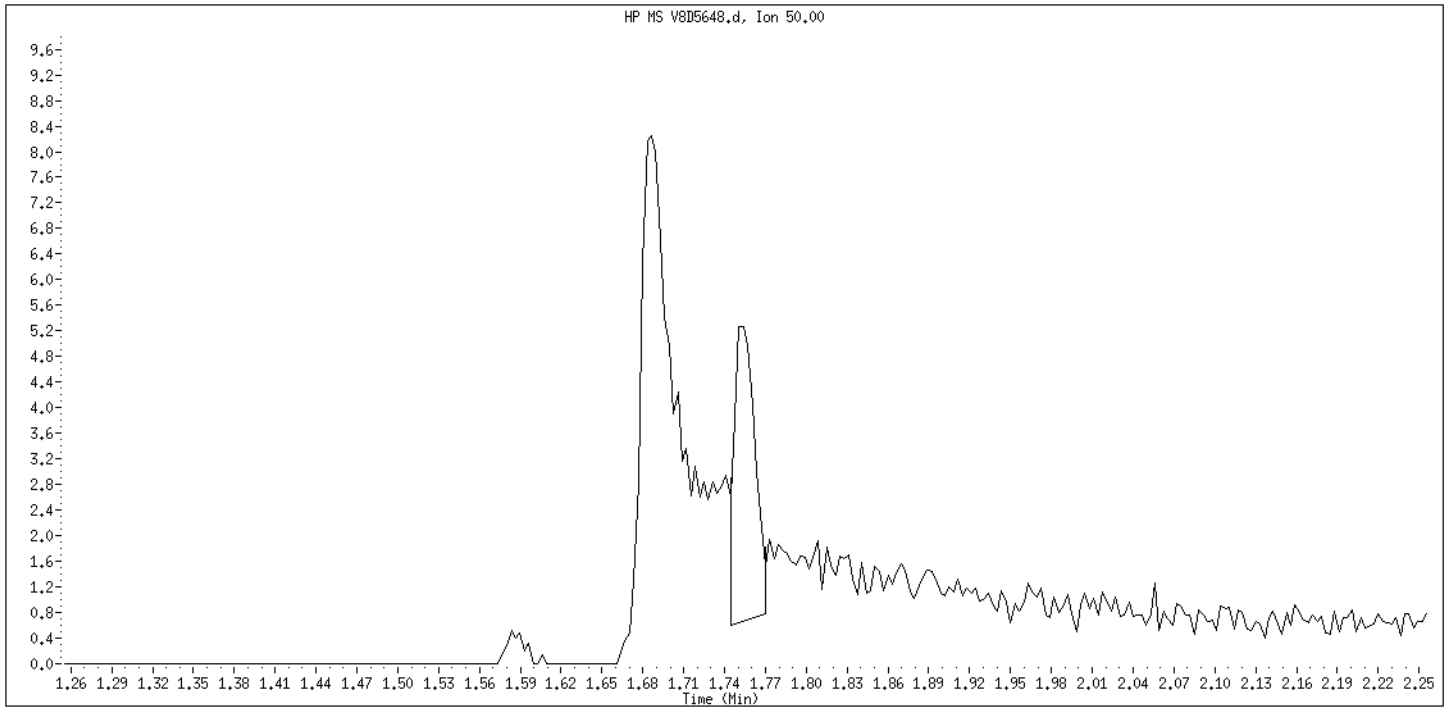
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5648.d

Lab ID: VSTD00110W Client ID: VSTD00110W
Inj Date: 23-JUN-2014 11:53 Operator: WL SRC: WL

Manual Integration Chloromethane Ret Time: 1.751 min, Range: 1.744 to 1.770 min Response: 2725



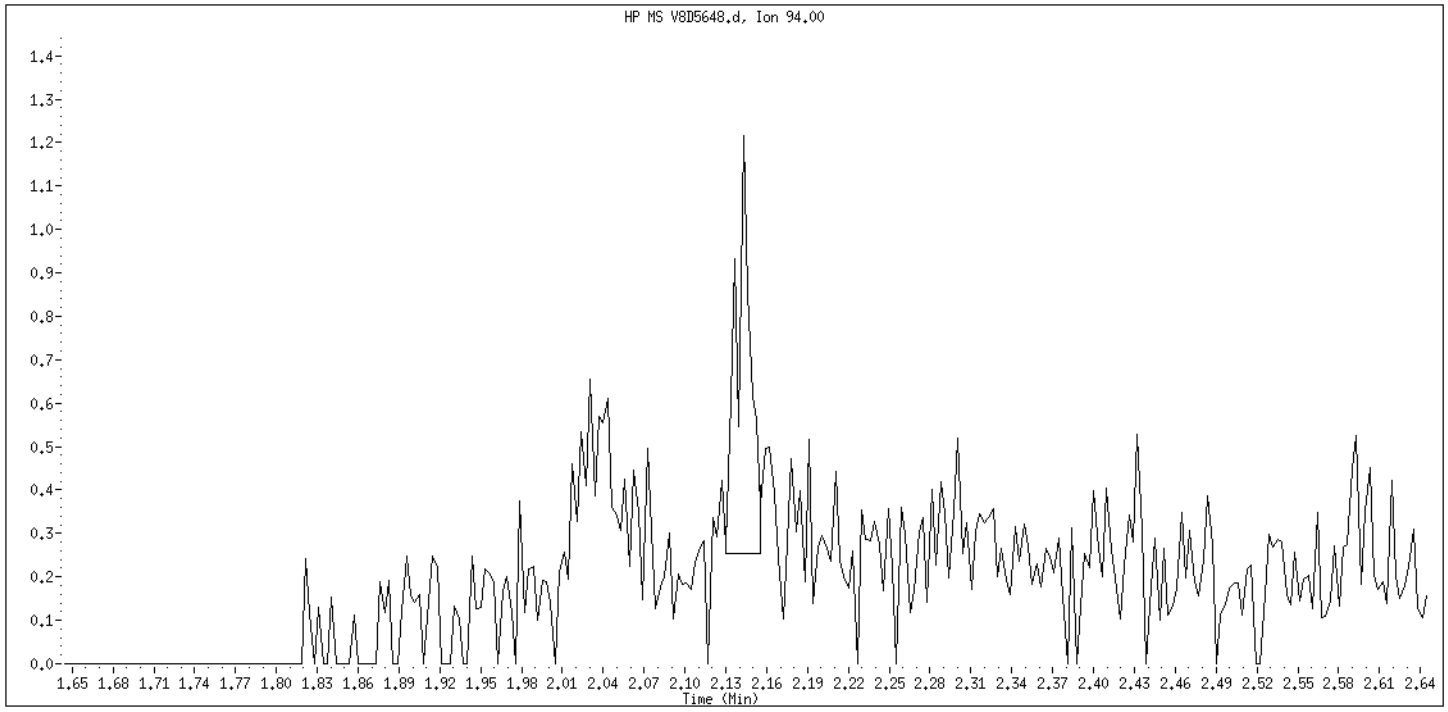
Original Integration Chloromethane Ret Time: 1.751 min, Range: 1.744 to 1.770 min Response: 5144



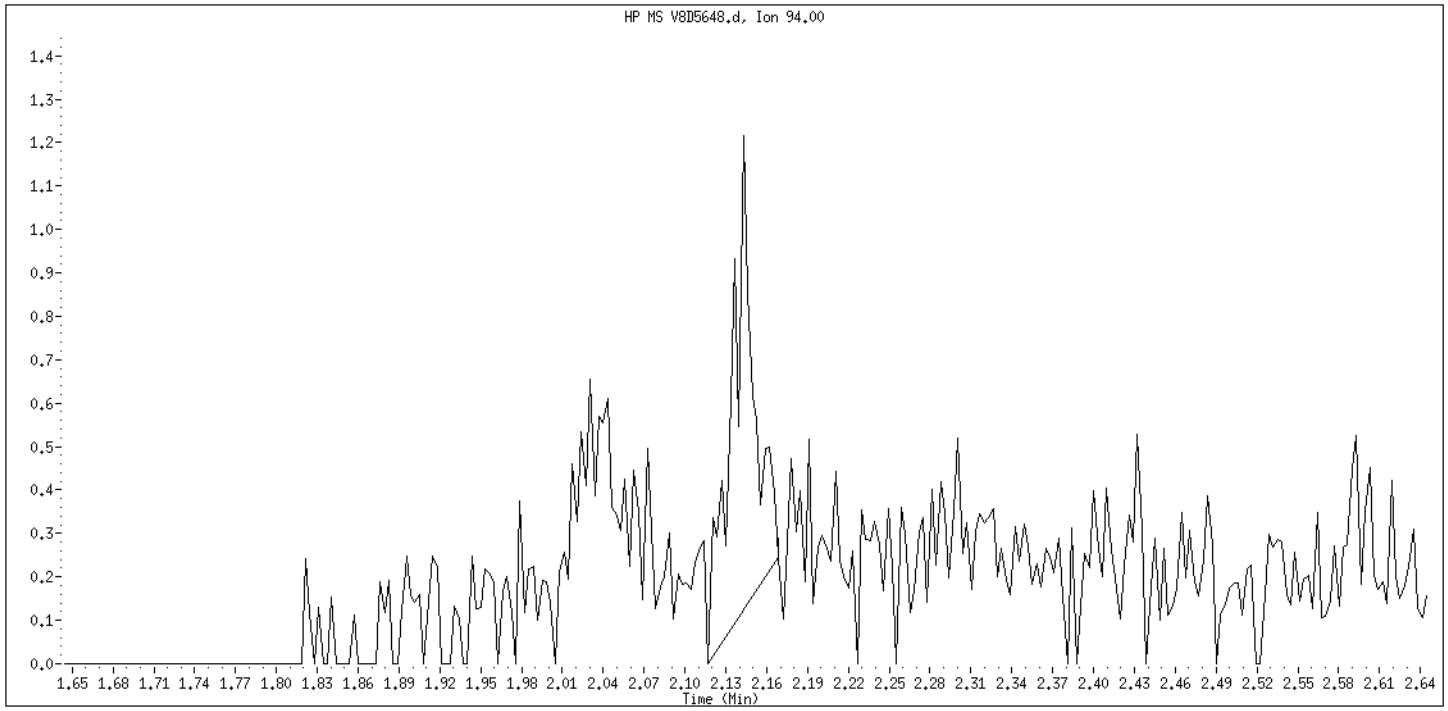
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Lab ID: VSTD00110W Client ID: VSTD00110W
Inj Date: 23-JUN-2014 11:53 Operator: WL SRC: WL

Manual Integration Bromomethane Ret Time: 2.143 min, Range: 2.130 to 2.156 min Response: 710



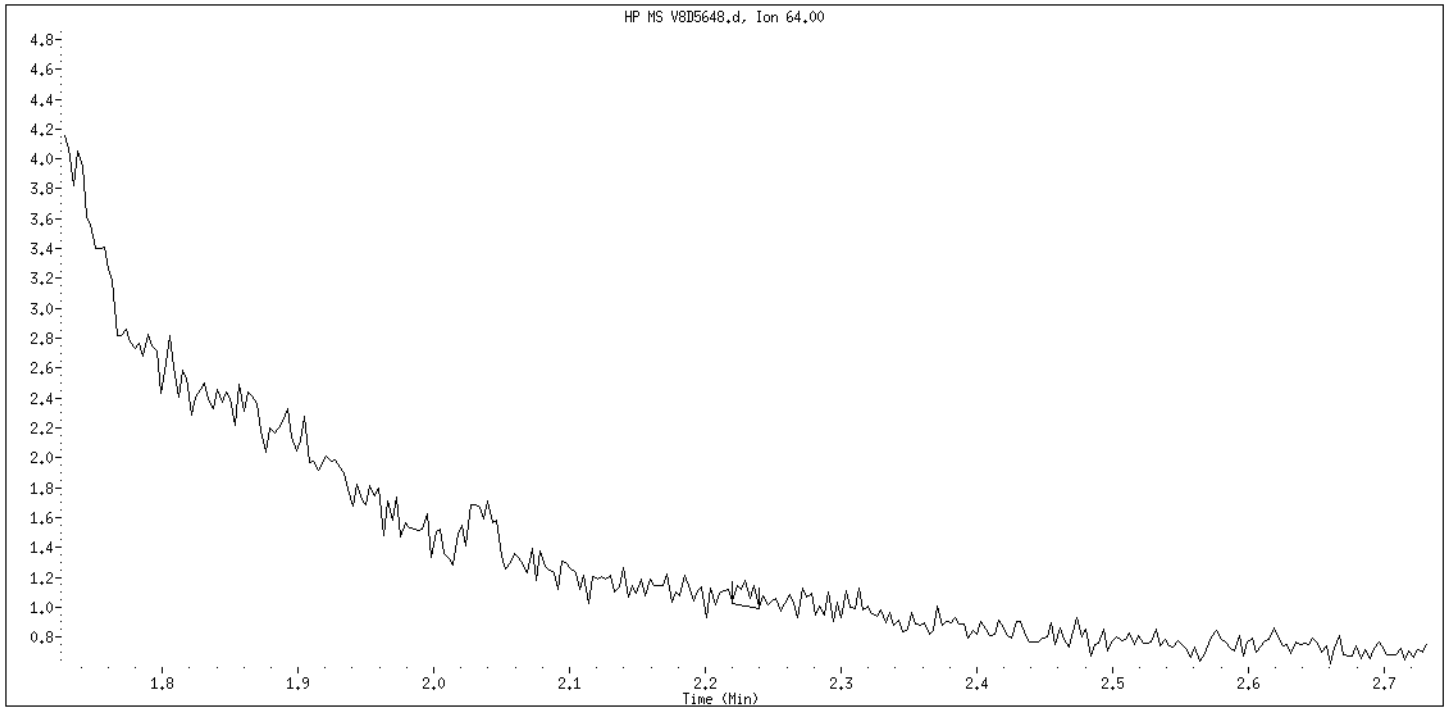
Original Integration Bromomethane Ret Time: 2.143 min, Range: 2.117 to 2.169 min Response: 1266



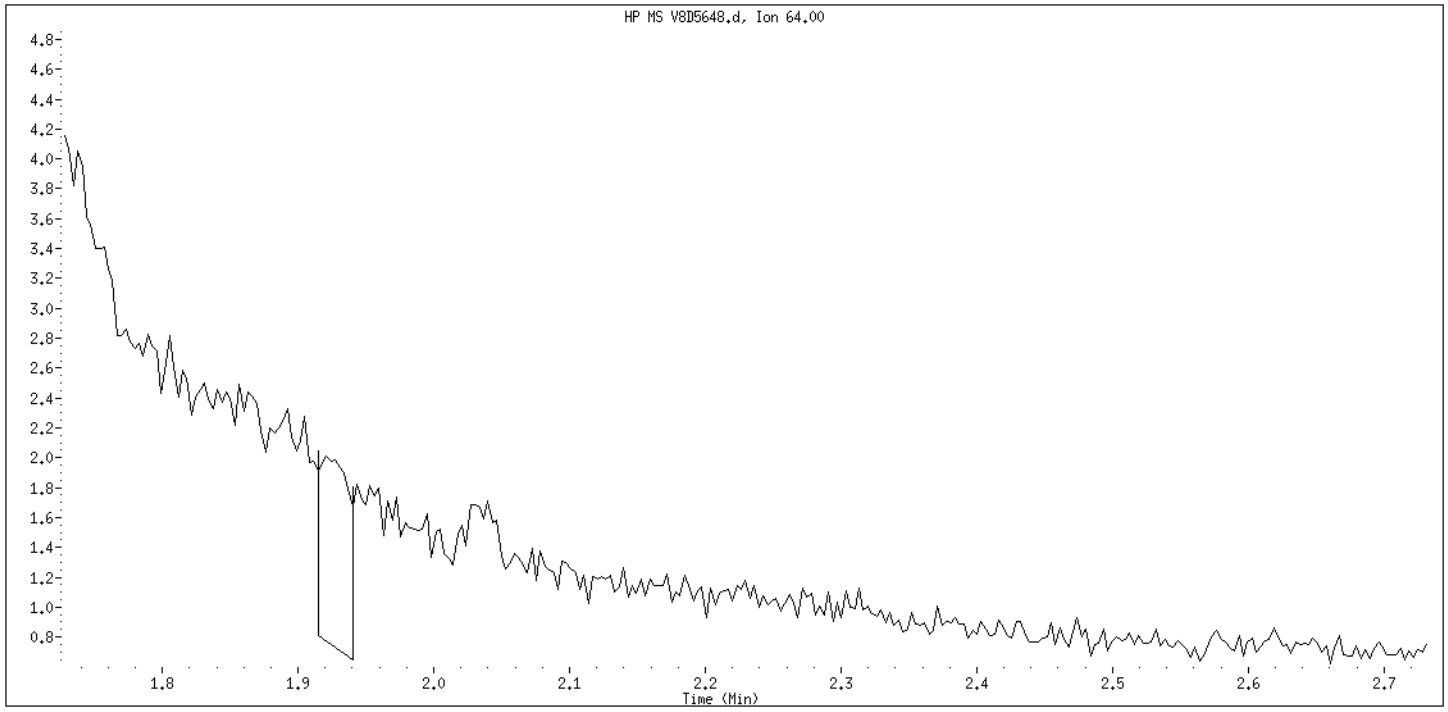
Manual Integration Report Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5648.d

Lab ID: VSTD00110W Client ID: VSTD00110W
Inj Date: 23-JUN-2014 11:53 Operator: WL SRC: WL

Manual Integration Chloroethane Ret Time: 2.230 min, Range: 2.220 to 2.239 min Response: 1225



Original Integration Chloroethane Ret Time: 1.921 min, Range: 1.915 to 1.940 min Response: 20418



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5649.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5649.d
Lab Smp Id: VSTD20010W Client Smp ID: VSTD20010W
Inj Date : 23-JUN-2014 12:21
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD20010W,VSTD20010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:21 Cal File: V8D5649.d
Als bottle: 63 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	459148	200.000	190
2	Freon114	85	1.705	1.705	(0.326)	359269	200.000	190
3	Chloromethane	50	1.753	1.753	(0.335)	518655	200.000	160
4	Vinyl Chloride	62	1.853	1.853	(0.354)	507685	200.000	190(Q)
5	Bromomethane	94	2.136	2.142	(0.408)	144407	200.000	190
6	Chloroethane	64	2.226	2.229	(0.425)	298127	200.000	190
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	920767	200.000	200
126	Ethanol	46	2.570	2.570	(0.491)	302313	20000.0	18000(A)
8	Ether	59	2.666	2.667	(0.509)	436268	200.000	180
9	Acrolein	56	2.766	2.769	(0.528)	659551	1000.00	990
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	355232	200.000	190
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	459904	200.000	200
12	Acetone	58	2.888	2.885	(0.552)	85660	200.000	180
13	Iodomethane	142	2.982	2.985	(0.570)	246816	200.000	260(A)
14	Carbon Disulfide	76	3.046	3.046	(0.582)	1211493	200.000	200
15	Acetonitrile	41	3.136	3.136	(0.599)	1032386	2000.00	1700(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	852588	200.000	180
17	Methyl Acetate	43	3.142	3.146	(0.600)	654254	200.000	180
18	Methylene Chloride	84	3.229	3.232	(0.617)	306066	200.000	180
19	tert-Butanol	59	3.300	3.297	(0.630)	149818	400.000	380(A)
20	Acrylonitrile	53	3.419	3.422	(0.653)	265717	200.000	190
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	322481	200.000	190
22	Methyl tert-butyl ether	73	3.448	3.445	(0.659)	1233835	200.000	200

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	878100	200.000	190
	24 Vinyl acetate	43	3.814	3.818	(0.729)	2471001	200.000	210(A)
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	2277316	200.000	200
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	1197848	200.000	210(A)
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	1613534	200.000	190
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	879799	200.000	210(A)
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	329128	200.000	200
	30 2-Butanone	72	4.258	4.265	(0.813)	50207	200.000	210(AQ)
	32 Propionitrile	54	4.303	4.303	(0.822)	936816	2000.00	1900(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	926908	400.000	410(A)
	34 Bromochloromethane	128	4.454	4.454	(0.851)	137961	200.000	180
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	84739	400.000	380(A)
	35 Chloroform	83	4.509	4.509	(0.861)	836312	200.000	190
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	70801	50.0000	50
	37 1,1,1-Trichloroethane	97	4.682	4.686	(0.894)	918155	200.000	200
	38 Cyclohexane	56	4.740	4.740	(0.905)	937861	200.000	210(A)
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	162147	200.000	210(A)
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	804935	200.000	200
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	665714	4000.00	3800(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	10412	50.0000	49
	43 Benzene	78	5.004	5.004	(0.956)	1182153	200.000	200
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	1041130	200.000	190
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	960934	200.000	190
M	50 1,2-Dichloroethene (Total)	96				651609	400.000	390
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	161794	50.0000	
	47 Trichloroethene	130	5.563	5.564	(1.063)	345941	200.000	200
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	519889	200.000	210(A)
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	403826	200.000	200
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	280861	200.000	200(A)
	52 Dibromomethane	93	5.882	5.882	(1.123)	258844	200.000	190
	53 1,4-Dioxane	88	5.882	5.885	(1.123)	77547	4000.00	3800(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	672842	200.000	200
	55 2-Chloroethyl vinyl ether	63	6.444	6.454	(1.231)	4926	200.000	200(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	566667	200.000	220(A)
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	687996	200.000	200
$	58 Toluene-d8	98	6.718	6.718	(0.817)	237201	50.0000	50
	59 Toluene	91	6.785	6.782	(1.296)	1281226	200.000	200
	60 trans-1,3-Dichloropropene	75	6.985	6.988	(1.334)	607216	200.000	200
	61 Ethyl Methacrylate	69	7.065	7.068	(1.349)	322376	200.000	210(A)
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	284089	200.000	190
	63 Tetrachloroethene	164	7.342	7.348	(0.893)	334090	200.000	200
	64 1,3-Dichloropropane	76	7.354	7.354	(0.894)	537719	200.000	200
	65 2-Hexanone	43	7.432	7.432	(0.904)	528028	200.000	190
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	445249	200.000	200
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	333266	200.000	190
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	454343	200.000	200(Q)
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	239856	50.0000	
	70 Chlorobenzene	112	8.251	8.255	(1.004)	829605	200.000	190
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	390056	200.000	190
	72 Ethylbenzene	106	8.367	8.367	(1.018)	450830	200.000	200
	73 m,p-Xylene	106	8.499	8.499	(1.034)	1127743	400.000	420(A)
	74 o-Xylene	106	8.943	8.943	(1.088)	531159	200.000	210(A)
	75 Styrene	104	8.959	8.959	(1.090)	852070	200.000	200(A)
	76 Bromoform	173	9.161	9.161	(1.114)	291365	200.000	210(A)

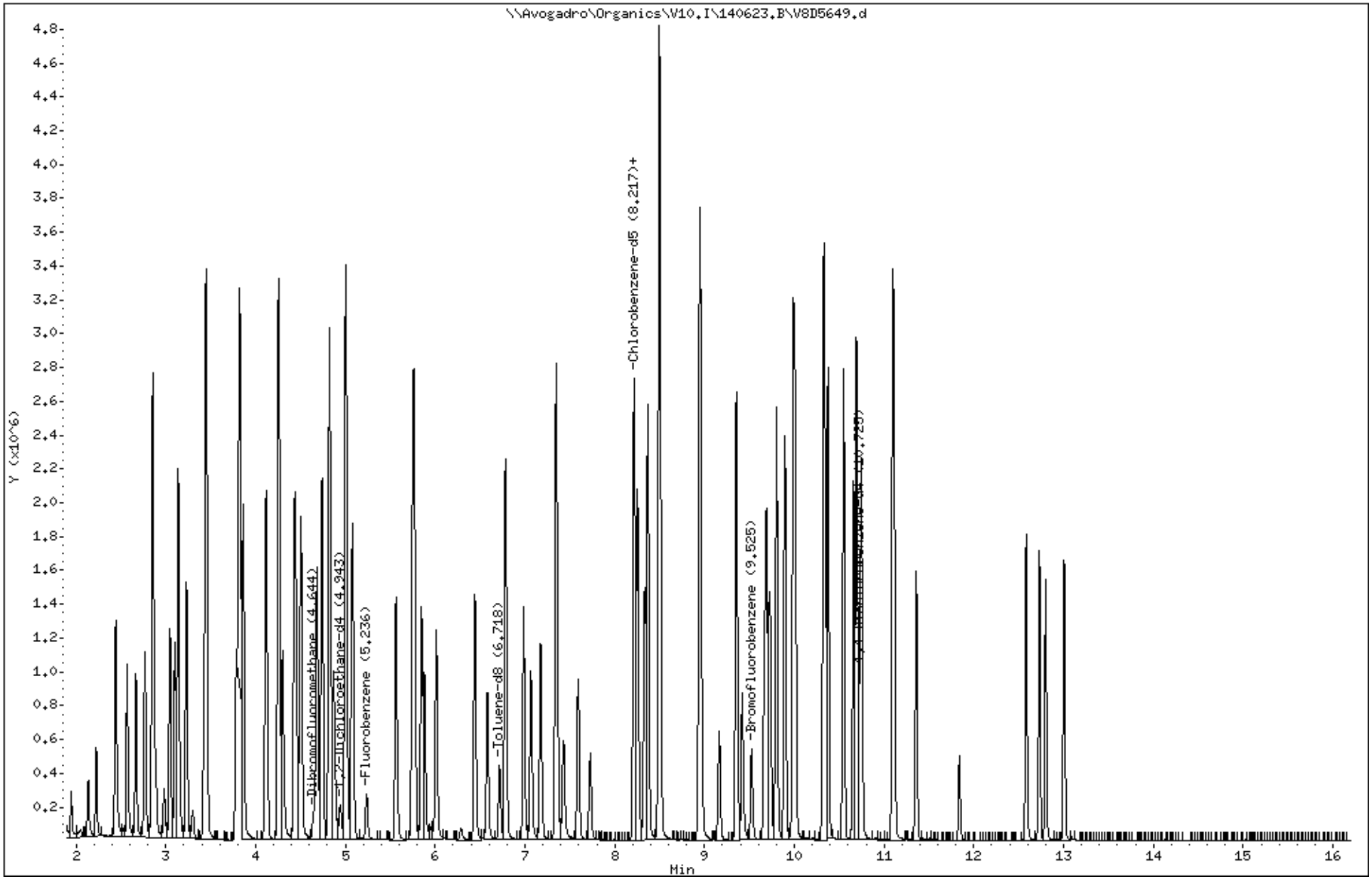
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5649.d
Report Date: 26-Jun-2014 08:46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	1572657	200.000	200
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	114042	200.000	210(A)
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	159210	50.0000	49
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.669	(0.901)	403915	200.000	180
	81 Bromobenzene	156	9.689	9.692	(0.903)	377001	200.000	190
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	567334	200.000	190
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	355261	200.000	200
	84 2-Chlorotoluene	126	9.898	9.895	(0.923)	324708	200.000	190
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	1373904	200.000	200
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	333283	200.000	190
M	94 Xylene (Total)	106				1658902	600.000	620
	87 tert-Butylbenzene	119	10.325	10.329	(0.963)	1443483	200.000	210(A)
	88 1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	1339289	200.000	210(A)
	89 sec-Butylbenzene	105	10.550	10.550	(0.984)	1586501	200.000	210(A)
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	659183	200.000	190
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	1373610	200.000	210(A)
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	148575	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	665861	200.000	180
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	1236705	200.000	200
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	626911	200.000	190
	97 Hexachloroethane	117	11.361	11.361	(1.059)	253920	200.000	200
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	115299	200.000	200
	99 1,2,4-Trichlorobenzene	180	12.582	12.586	(1.173)	416398	200.000	200
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	271915	200.000	180
	101 Naphthalene	128	12.798	12.801	(1.193)	881765	200.000	200
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	381618	200.000	200

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\V10.I\140623.B\V8D5649.d
Date : 23-JUN-2014 12:21
Client ID: VSTD20010W
Instrument: V10.i
Sample Info: 5ML,VSTD20010W,VSTD20010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5650.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5650.d
Lab Smp Id: VSTD10010W Client Smp ID: VSTD10010W
Inj Date : 23-JUN-2014 12:48
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD10010W,VSTD10010W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 64 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	250901	100.000	98
2	Freon114	85	1.705	1.705	(0.326)	203688	100.000	99
3	Chloromethane	50	1.753	1.753	(0.335)	321030	100.000	94
4	Vinyl Chloride	62	1.853	1.853	(0.354)	294460	100.000	100
5	Bromomethane	94	2.139	2.142	(0.409)	92121	100.000	120
6	Chloroethane	64	2.226	2.229	(0.425)	175561	100.000	100
7	Trichlorofluoromethane	101	2.442	2.441	(0.466)	484350	100.000	96
126	Ethanol	46	2.567	2.570	(0.490)	163376	10000.0	8900(A)
8	Ether	59	2.667	2.667	(0.509)	258683	100.000	100
9	Acrolein	56	2.769	2.769	(0.529)	343041	500.000	480
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	194547	100.000	99
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	243500	100.000	98
12	Acetone	58	2.888	2.885	(0.552)	37599	100.000	73
13	Iodomethane	142	2.985	2.985	(0.570)	146504	100.000	140
14	Carbon Disulfide	76	3.046	3.046	(0.582)	641120	100.000	98
15	Acetonitrile	41	3.139	3.136	(0.600)	623261	1000.00	940(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	465525	100.000	92
17	Methyl Acetate	43	3.146	3.146	(0.601)	342722	100.000	88
18	Methylene Chloride	84	3.229	3.232	(0.617)	178175	100.000	98
19	tert-Butanol	59	3.300	3.297	(0.630)	72972	200.000	170
20	Acrylonitrile	53	3.419	3.422	(0.653)	142230	100.000	94
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	172215	100.000	96
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	703789	100.000	100

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.782	3.785	(0.722)	485576	100.000	100
	24 Vinyl acetate	43	3.814	3.818	(0.729)	1362034	100.000	110
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	1293836	100.000	100
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	628913	100.000	100
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	948217	100.000	100
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	450446	100.000	99
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	182956	100.000	100
	30 2-Butanone	72	4.255	4.265	(0.813)	23189	100.000	89
	32 Propionitrile	54	4.303	4.303	(0.822)	478535	1000.00	910(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	477420	200.000	200
	34 Bromochloromethane	128	4.454	4.454	(0.851)	79660	100.000	95
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	45114	200.000	190
	35 Chloroform	83	4.509	4.509	(0.861)	459435	100.000	98
$	36 Dibromofluoromethane	113	4.644	4.641	(0.887)	75492	50.0000	50
	37 1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	482804	100.000	98
	38 Cyclohexane	56	4.740	4.740	(0.905)	491173	100.000	100
	39 1,1-Dichloropropene	110	4.824	4.821	(0.921)	85699	100.000	100
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	434245	100.000	100
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	378781	2000.00	2000(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	11826	50.0000	52
	43 Benzene	78	5.004	5.004	(0.956)	634276	100.000	99
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	583076	100.000	100
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.970)	559811	100.000	100
M	50 1,2-Dichloroethene (Total)	96				355171	200.000	200
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	173958	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.063)	181203	100.000	96
	48 Methylcyclohexane	83	5.750	5.753	(1.098)	271172	100.000	100
	49 1,2-Dichloropropane	63	5.769	5.766	(1.102)	225848	100.000	100
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	152753	100.000	100
	52 Dibromomethane	93	5.879	5.882	(1.123)	145794	100.000	98
	53 1,4-Dioxane	88	5.885	5.885	(1.124)	40471	2000.00	1900(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	365069	100.000	100
	55 2-Chloroethyl vinyl ether	63	6.435	6.454	(1.229)	2713	100.000	100(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	312657	100.000	110
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	357362	100.000	96
$	58 Toluene-d8	98	6.715	6.718	(0.817)	246433	50.0000	49
	59 Toluene	91	6.782	6.782	(1.295)	684177	100.000	100
	60 trans-1,3-Dichloropropene	75	6.985	6.988	(1.334)	336069	100.000	100
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	177274	100.000	110
	62 1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	159380	100.000	100
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	173098	100.000	97
	64 1,3-Dichloropropane	76	7.355	7.354	(0.894)	299581	100.000	100
	65 2-Hexanone	43	7.432	7.432	(0.904)	259824	100.000	89
	66 Dibromochloromethane	129	7.592	7.596	(0.923)	248814	100.000	110
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	183168	100.000	100
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	233000	100.000	96
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	253400	50.0000	
	70 Chlorobenzene	112	8.252	8.255	(1.004)	450908	100.000	98
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	209495	100.000	98
	72 Ethylbenzene	106	8.371	8.367	(1.018)	237600	100.000	99
	73 m,p-Xylene	106	8.499	8.499	(1.034)	581771	200.000	200
	74 o-Xylene	106	8.943	8.943	(1.088)	283002	100.000	100
	75 Styrene	104	8.956	8.959	(1.089)	460477	100.000	100
	76 Bromoform	173	9.165	9.161	(1.115)	154138	100.000	100

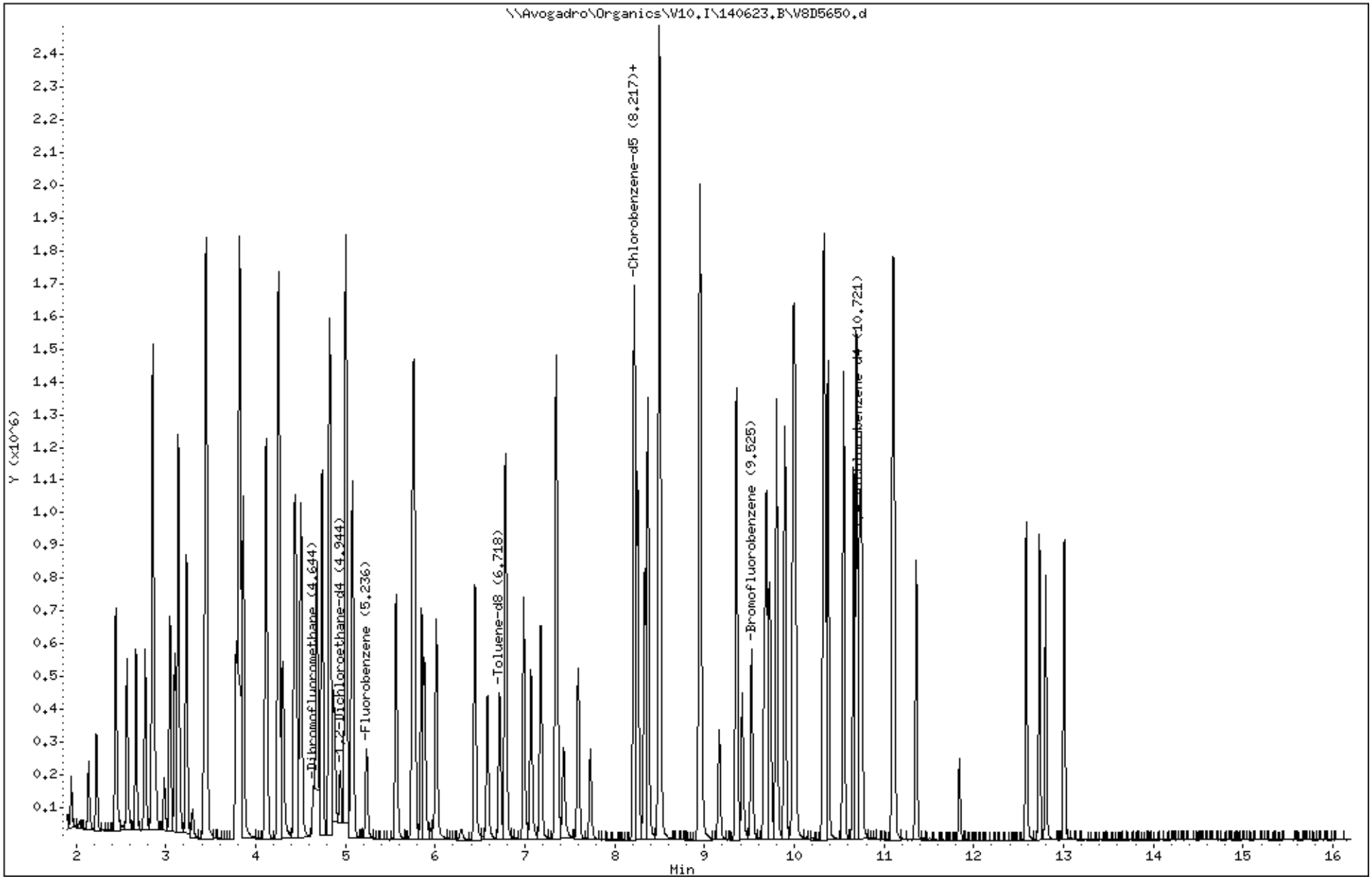
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5650.d
Report Date: 26-Jun-2014 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	814336	100.000	98
	78 trans-1,4-Dichloro-2-butene	75	9.419	9.425	(1.145)	57928	100.000	100
$	79 Bromofluorobenzene	95	9.525	9.525	(1.158)	173451	50.0000	51
	80 1,1,2,2-Tetrachloroethane	83	9.666	9.669	(0.902)	215545	100.000	87
	81 Bromobenzene	156	9.692	9.692	(0.904)	206149	100.000	95
	82 1,2,3-Trichloropropane	75	9.724	9.721	(0.907)	301033	100.000	93
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	182786	100.000	96
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	171694	100.000	94
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.932)	708476	100.000	95
	86 4-Chlorotoluene	126	10.010	10.014	(0.934)	177301	100.000	94
M	94 Xylene (Total)	106				864773	300.000	310
	87 tert-Butylbenzene	119	10.329	10.329	(0.963)	751548	100.000	100
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	705481	100.000	100
	89 sec-Butylbenzene	105	10.551	10.550	(0.984)	809917	100.000	98
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	349117	100.000	94
	91 4-Isopropyltoluene	119	10.695	10.695	(0.998)	708510	100.000	99
*	92 1,4-Dichlorobenzene-d4	152	10.721	10.724	(1.000)	159856	50.0000	
	93 1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	361989	100.000	90
	95 n-Butylbenzene	91	11.094	11.097	(1.035)	634973	100.000	95
	96 1,2-Dichlorobenzene	146	11.110	11.113	(1.036)	340996	100.000	96
	97 Hexachloroethane	117	11.358	11.361	(1.059)	132850	100.000	97
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	56163	100.000	92
	99 1,2,4-Trichlorobenzene	180	12.583	12.586	(1.174)	224150	100.000	100
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	146485	100.000	89
	101 Naphthalene	128	12.801	12.801	(1.194)	460724	100.000	98
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	208113	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\V10.I\140623.B\V8D5650.d
Date : 23-JUN-2014 12:48
Client ID: VSTD10010W
Instrument: V10.i
Sample Info: 5ML,VSTD10010W,VSTD10010W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/23/2014 Time: 21:35

Lab File ID: V8D5669.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010X Init. Calib. Time(s): 9:51 12:48

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	0.734	0.735	0.100	0.2	20.0
Chloromethane	0.976	0.884	0.100	-9.4	20.0
Vinyl chloride	0.838	0.884	0.100	5.6	20.0
Bromomethane	0.229	0.259	0.100	13.0	20.0
Chloroethane	0.480	0.530	0.100	10.4	20.0
Trichlorofluoromethane	1.450	1.592	0.100	9.8	20.0
1,1-Dichloroethene	0.563	0.603	0.100	7.1	20.0
Acetone	0.147	0.089	0.100	-39.6	20.0
Iodomethane	0.298	0.290	0.100	-2.7	20.0
Carbon disulfide	2.238	1.899	0.100	-15.1	20.0
Methylene chloride	0.520	0.605	0.100	16.4	20.0
trans-1,2-Dichloroethene	0.517	0.562	0.100	8.6	20.0
Methyl tert-butyl ether	1.954	2.327	0.100	19.1	20.0
1,1-Dichloroethane	1.400	1.667	0.200	19.0	20.0
Vinyl acetate	3.676	4.384	0.100	19.2	20.0
2-Butanone	0.075	0.070	0.100	-6.6	20.0
cis-1,2-Dichloroethene	0.517	0.624	0.100	20.7	20.0
2,2-Dichloropropane	1.305	1.250	0.100	-4.2	20.0
Bromochloromethane	0.240	0.290	0.100	20.8	20.0
Chloroform	1.341	1.630	0.200	21.5	20.0
1,1,1-Trichloroethane	1.416	1.659	0.100	17.2	20.0
1,1-Dichloropropene	0.238	0.271	0.100	13.9	20.0
Carbon tetrachloride	1.225	1.521	0.100	24.1	20.0
1,2-Dichloroethane	1.684	2.096	0.100	24.5	20.0
Benzene	1.840	2.114	0.500	14.9	20.0
Trichloroethene	0.542	0.574	0.200	6.1	20.0
1,2-Dichloropropane	0.620	0.740	0.100	19.4	20.0
Dibromomethane	0.425	0.505	0.100	18.6	20.0
Bromodichloromethane	1.023	1.278	0.200	24.9	20.0
cis-1,3-Dichloropropene	0.798	0.999	0.200	25.2	20.0
4-Methyl-2-pentanone	1.069	1.116	0.100	4.4	20.0
Toluene	1.972	2.271	0.400	15.2	20.0
trans-1,3-Dichloropropene	0.846	1.067	0.100	26.2	20.0
1,1,2-Trichloroethane	0.457	0.542	0.100	18.6	20.0
1,3-Dichloropropane	0.568	0.632	0.100	11.2	20.0
Tetrachloroethene	0.353	0.353	0.200	-0.1	20.0
2-Hexanone	0.576	0.460	0.100	-20.2	20.0
Dibromochloromethane	0.461	0.535	0.100	16.1	20.0
1,2-Dibromoethane	0.358	0.383	0.100	6.8	20.0
Chlorobenzene	0.912	0.947	0.500	3.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/23/2014 Time: 21:35

Lab File ID: V8D5669.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010X Init. Calib. Time(s): 9:51 12:48

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	0.419	0.468	0.100	11.5	20.0
Ethylbenzene	0.444	0.486	0.100	9.3	20.0
m,p-Xylene	0.565	0.586	0.100	3.8	20.0
o-Xylene	0.528	0.577	0.300	9.2	20.0
Xylene (Total)	0.553	0.583	0.100	5.5	20.0
Styrene	0.825	0.927	0.300	12.4	20.0
Bromoform	0.291	0.318	0.100	9.3	20.0
Isopropylbenzene	1.514	1.659	0.100	9.6	20.0
1,1,2,2-Tetrachloroethane	0.773	0.714	0.300	-7.7	20.0
Bromobenzene	0.681	0.711	0.100	4.4	20.0
1,2,3-Trichloropropane	1.011	0.990	0.100	-2.1	20.0
n-Propylbenzene	0.598	0.591	0.100	-1.1	20.0
2-Chlorotoluene	0.573	0.587	0.100	2.6	20.0
1,3,5-Trimethylbenzene	2.254	2.361	0.100	4.8	20.0
4-Chlorotoluene	0.590	0.595	0.100	1.0	20.0
tert-Butylbenzene	2.351	2.488	0.100	5.8	20.0
1,2,4-Trimethylbenzene	2.176	2.310	0.100	6.1	20.0
sec-Butylbenzene	2.589	2.598	0.100	0.4	20.0
4-Isopropyltoluene	2.229	2.272	0.100	1.9	20.0
1,3-Dichlorobenzene	1.165	1.172	0.600	0.6	20.0
1,4-Dichlorobenzene	1.253	1.214	0.500	-3.1	20.0
n-Butylbenzene	1.980	1.941	0.100	-2.0	20.0
1,2-Dichlorobenzene	1.111	1.192	0.400	7.3	20.0
1,2-Dibromo-3-chloropropane	0.180	0.176	0.050	-2.4	20.0
1,2,4-Trichlorobenzene	0.652	0.669	0.200	2.6	20.0
Hexachlorobutadiene	0.514	0.461	0.100	-10.3	20.0
1,2,3-Trichlorobenzene	0.645	0.646	0.100	0.2	20.0
Naphthalene	1.216	1.254	0.100	3.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.804	0.714	0.100	-11.2	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/23/2014 Time: 21:35

Lab File ID: V8D5669.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010X Init. Calib. Time(s): 9:51 12:48

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	0.438	0.469	0.100	7.2	20.0
1,2-Dichloroethane-d4	0.065	0.072	0.100	10.5	20.0
Toluene-d8	0.990	0.945	0.100	-4.6	20.0
Bromofluorobenzene	0.675	0.695	0.100	2.9	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/24/2014 Time: 9:05

Lab File ID: V8D5701.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010Y Init. Calib. Time(s): 9:51 12:48

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	0.734	0.837	0.100	13.9	20.0
Chloromethane	0.976	0.699	0.100	-28.4	20.0
Vinyl chloride	0.838	0.838	0.100	0.0	20.0
Bromomethane	0.229	0.261	0.100	13.9	20.0
Chloroethane	0.480	0.488	0.100	1.7	20.0
Trichlorofluoromethane	1.450	1.812	0.100	24.9	20.0
1,1-Dichloroethene	0.563	0.650	0.100	15.4	20.0
Acetone	0.147	0.163	0.100	11.1	20.0
Iodomethane	0.298	0.218	0.100	-26.8	20.0
Carbon disulfide	2.238	2.162	0.100	-3.4	20.0
Methylene chloride	0.520	0.553	0.100	6.3	20.0
trans-1,2-Dichloroethene	0.517	0.563	0.100	8.8	20.0
Methyl tert-butyl ether	1.954	2.024	0.100	3.6	20.0
1,1-Dichloroethane	1.400	1.598	0.200	14.1	20.0
Vinyl acetate	3.676	4.215	0.100	14.6	20.0
2-Butanone	0.075	0.082	0.100	9.3	20.0
cis-1,2-Dichloroethene	0.517	0.583	0.100	12.8	20.0
2,2-Dichloropropane	1.305	1.580	0.100	21.1	20.0
Bromochloromethane	0.240	0.260	0.100	8.2	20.0
Chloroform	1.341	1.556	0.200	16.0	20.0
1,1,1-Trichloroethane	1.416	1.705	0.100	20.4	20.0
1,1-Dichloropropene	0.238	0.279	0.100	17.5	20.0
Carbon tetrachloride	1.225	1.521	0.100	24.1	20.0
1,2-Dichloroethane	1.684	1.953	0.100	16.0	20.0
Benzene	1.840	2.010	0.500	9.2	20.0
Trichloroethene	0.542	0.586	0.200	8.2	20.0
1,2-Dichloropropane	0.620	0.686	0.100	10.7	20.0
Dibromomethane	0.425	0.469	0.100	10.2	20.0
Bromodichloromethane	1.023	1.203	0.200	17.7	20.0
cis-1,3-Dichloropropene	0.798	0.900	0.200	12.7	20.0
4-Methyl-2-pentanone	1.069	1.106	0.100	3.5	20.0
Toluene	1.972	2.228	0.400	13.0	20.0
trans-1,3-Dichloropropene	0.846	0.963	0.100	13.8	20.0
1,1,2-Trichloroethane	0.457	0.477	0.100	4.4	20.0
1,3-Dichloropropane	0.568	0.542	0.100	-4.6	20.0
Tetrachloroethene	0.353	0.374	0.200	6.0	20.0
2-Hexanone	0.576	0.518	0.100	-10.1	20.0
Dibromochloromethane	0.461	0.469	0.100	1.9	20.0
1,2-Dibromoethane	0.358	0.343	0.100	-4.3	20.0
Chlorobenzene	0.912	0.894	0.500	-2.0	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/24/2014 Time: 9:05

Lab File ID: V8D5701.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010Y Init. Calib. Time(s): 9:51 12:48

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	0.419	0.426	0.100	1.6	20.0
Ethylbenzene	0.444	0.474	0.100	6.8	20.0
m,p-Xylene	0.565	0.577	0.100	2.0	20.0
o-Xylene	0.528	0.551	0.300	4.3	20.0
Xylene (Total)	0.553	0.568	0.100	2.8	20.0
Styrene	0.825	0.873	0.300	5.8	20.0
Bromoform	0.291	0.288	0.100	-1.0	20.0
Isopropylbenzene	1.514	1.684	0.100	11.2	20.0
1,1,2,2-Tetrachloroethane	0.773	0.674	0.300	-12.9	20.0
Bromobenzene	0.681	0.640	0.100	-6.1	20.0
1,2,3-Trichloropropane	1.011	0.931	0.100	-8.0	20.0
n-Propylbenzene	0.598	0.614	0.100	2.7	20.0
2-Chlorotoluene	0.573	0.542	0.100	-5.4	20.0
1,3,5-Trimethylbenzene	2.254	2.406	0.100	6.8	20.0
4-Chlorotoluene	0.590	0.582	0.100	-1.3	20.0
tert-Butylbenzene	2.351	2.284	0.100	-2.8	20.0
1,2,4-Trimethylbenzene	2.176	2.348	0.100	7.9	20.0
sec-Butylbenzene	2.589	2.703	0.100	4.4	20.0
4-Isopropyltoluene	2.229	2.363	0.100	6.0	20.0
1,3-Dichlorobenzene	1.165	1.120	0.600	-3.8	20.0
1,4-Dichlorobenzene	1.253	1.146	0.500	-8.6	20.0
n-Butylbenzene	1.980	2.147	0.100	8.4	20.0
1,2-Dichlorobenzene	1.111	1.102	0.400	-0.8	20.0
1,2-Dibromo-3-chloropropane	0.180	0.171	0.050	-4.9	20.0
1,2,4-Trichlorobenzene	0.652	0.595	0.200	-8.8	20.0
Hexachlorobutadiene	0.514	0.523	0.100	1.8	20.0
1,2,3-Trichlorobenzene	0.645	0.582	0.100	-9.7	20.0
Naphthalene	1.216	1.068	0.100	-12.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.804	0.879	0.100	9.4	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/24/2014 Time: 9:05

Lab File ID: V8D5701.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010Y Init. Calib. Time(s): 9:51 12:48

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	0.438	0.480	0.100	9.6	20.0
1,2-Dichloroethane-d4	0.065	0.069	0.100	6.6	20.0
Toluene-d8	0.990	0.918	0.100	-7.3	20.0
Bromofluorobenzene	0.675	0.701	0.100	3.8	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/25/2014 Time: 7:38

Lab File ID: V8D5731.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010Z Init. Calib. Time(s): 9:51 12:48

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	0.734	0.728	0.100	-0.9	20.0
Chloromethane	0.976	1.084	0.100	11.1	20.0
Vinyl chloride	0.838	0.868	0.100	3.6	20.0
Bromomethane	0.229	0.178	0.100	-22.1	20.0
Chloroethane	0.480	0.520	0.100	8.3	20.0
Trichlorofluoromethane	1.450	1.598	0.100	10.2	20.0
1,1-Dichloroethene	0.563	0.638	0.100	13.4	20.0
Acetone	0.147	0.177	0.100	20.3	20.0
Iodomethane	0.298	0.239	0.100	-19.9	20.0
Carbon disulfide	2.238	2.251	0.100	0.6	20.0
Methylene chloride	0.520	0.591	0.100	13.6	20.0
trans-1,2-Dichloroethene	0.517	0.607	0.100	17.4	20.0
Methyl tert-butyl ether	1.954	2.225	0.100	13.9	20.0
1,1-Dichloroethane	1.400	1.639	0.200	17.1	20.0
Vinyl acetate	3.676	4.334	0.100	17.9	20.0
2-Butanone	0.075	0.095	0.100	27.2	20.0
cis-1,2-Dichloroethene	0.517	0.597	0.100	15.5	20.0
2,2-Dichloropropane	1.305	1.631	0.100	25.0	20.0
Bromochloromethane	0.240	0.258	0.100	7.3	20.0
Chloroform	1.341	1.576	0.200	17.5	20.0
1,1,1-Trichloroethane	1.416	1.701	0.100	20.1	20.0
1,1-Dichloropropene	0.238	0.299	0.100	25.6	20.0
Carbon tetrachloride	1.225	1.413	0.100	15.3	20.0
1,2-Dichloroethane	1.684	1.901	0.100	12.9	20.0
Benzene	1.840	2.112	0.500	14.7	20.0
Trichloroethene	0.542	0.624	0.200	15.1	20.0
1,2-Dichloropropane	0.620	0.709	0.100	14.4	20.0
Dibromomethane	0.425	0.480	0.100	12.7	20.0
Bromodichloromethane	1.023	1.197	0.200	17.1	20.0
cis-1,3-Dichloropropene	0.798	0.996	0.200	24.8	20.0
4-Methyl-2-pentanone	1.069	1.197	0.100	12.0	20.0
Toluene	1.972	2.304	0.400	16.9	20.0
trans-1,3-Dichloropropene	0.846	1.049	0.100	24.1	20.0
1,1,2-Trichloroethane	0.457	0.518	0.100	13.5	20.0
1,3-Dichloropropane	0.568	0.550	0.100	-3.1	20.0
Tetrachloroethene	0.353	0.345	0.200	-2.4	20.0
2-Hexanone	0.576	0.554	0.100	-3.8	20.0
Dibromochloromethane	0.461	0.450	0.100	-2.2	20.0
1,2-Dibromoethane	0.358	0.348	0.100	-2.8	20.0
Chlorobenzene	0.912	0.860	0.500	-5.7	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/25/2014 Time: 7:38

Lab File ID: V8D5731.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010Z Init. Calib. Time(s): 9:51 12:48

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	0.419	0.400	0.100	-4.6	20.0
Ethylbenzene	0.444	0.454	0.100	2.3	20.0
m,p-Xylene	0.565	0.559	0.100	-1.1	20.0
o-Xylene	0.528	0.525	0.300	-0.7	20.0
Xylene (Total)	0.553	0.548	0.100	-0.9	20.0
Styrene	0.825	0.846	0.300	2.5	20.0
Bromoform	0.291	0.290	0.100	-0.1	20.0
Isopropylbenzene	1.514	1.529	0.100	1.0	20.0
1,1,2,2-Tetrachloroethane	0.773	0.669	0.300	-13.5	20.0
Bromobenzene	0.681	0.605	0.100	-11.2	20.0
1,2,3-Trichloropropane	1.011	0.928	0.100	-8.3	20.0
n-Propylbenzene	0.598	0.532	0.100	-11.0	20.0
2-Chlorotoluene	0.573	0.523	0.100	-8.6	20.0
1,3,5-Trimethylbenzene	2.254	2.136	0.100	-5.2	20.0
4-Chlorotoluene	0.590	0.530	0.100	-10.1	20.0
tert-Butylbenzene	2.351	1.989	0.100	-15.4	20.0
1,2,4-Trimethylbenzene	2.176	2.077	0.100	-4.5	20.0
sec-Butylbenzene	2.589	2.377	0.100	-8.2	20.0
4-Isopropyltoluene	2.229	2.070	0.100	-7.1	20.0
1,3-Dichlorobenzene	1.165	1.027	0.600	-11.8	20.0
1,4-Dichlorobenzene	1.253	1.073	0.500	-14.4	20.0
n-Butylbenzene	1.980	1.885	0.100	-4.8	20.0
1,2-Dichlorobenzene	1.111	1.013	0.400	-8.8	20.0
1,2-Dibromo-3-chloropropane	0.180	0.172	0.050	-4.5	20.0
1,2,4-Trichlorobenzene	0.652	0.622	0.200	-4.6	20.0
Hexachlorobutadiene	0.514	0.467	0.100	-9.0	20.0
1,2,3-Trichlorobenzene	0.645	0.582	0.100	-9.7	20.0
Naphthalene	1.216	1.172	0.100	-3.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.804	0.790	0.100	-1.7	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Instrument ID: V10 Calibration Date: 06/25/2014 Time: 7:38

Lab File ID: V8D5731.D Init. Calib. Date(s): 06/23/2014 06/23/2014

EPA Sample No.(VSTD#####) VSTD05010Z Init. Calib. Time(s): 9:51 12:48

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	0.438	0.466	0.100	6.4	20.0
1,2-Dichloroethane-d4	0.065	0.071	0.100	9.2	20.0
Toluene-d8	0.990	0.906	0.100	-8.5	20.0
Bromofluorobenzene	0.675	0.710	0.100	5.2	20.0

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5669.d
Report Date: 25-Jun-2014 15:26

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5669.d
Lab Smp Id: VSTD05010X Client Smp ID: VSTD05010X
Inj Date : 23-JUN-2014 21:35
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010X,VSTD05010X
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 15:26 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 83 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.586	1.586	(0.303)	100661	50.0000	50
2	Freon114	85	1.705	1.705	(0.326)	75016	50.0000	46
3	Chloromethane	50	1.754	1.754	(0.335)	121008	50.0000	45
4	Vinyl Chloride	62	1.853	1.853	(0.354)	121037	50.0000	53(Q)
5	Bromomethane	94	2.143	2.143	(0.409)	35416	50.0000	56
6	Chloroethane	64	2.226	2.226	(0.425)	72509	50.0000	55
7	Trichlorofluoromethane	101	2.442	2.442	(0.466)	217910	50.0000	55
126	Ethanol	46	2.567	2.567	(0.490)	68991	5000.00	4800(A)
8	Ether	59	2.670	2.670	(0.510)	114474	50.0000	57
9	Acrolein	56	2.770	2.770	(0.529)	142429	250.000	250
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	82514	50.0000	54
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	97706	50.0000	49
12	Acetone	58	2.892	2.892	(0.552)	12156	50.0000	30
13	Iodomethane	142	2.982	2.982	(0.570)	39675	50.0000	49
14	Carbon Disulfide	76	3.046	3.046	(0.582)	259951	50.0000	50
15	Acetonitrile	41	3.136	3.136	(0.599)	273296	500.000	530(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	231125	50.0000	58
17	Methyl Acetate	43	3.143	3.143	(0.600)	154564	50.0000	51
18	Methylene Chloride	84	3.229	3.229	(0.617)	82848	50.0000	58
19	tert-Butanol	59	3.297	3.297	(0.630)	30744	100.000	93
20	Acrylonitrile	53	3.419	3.419	(0.653)	61618	50.0000	52
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	76895	50.0000	54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	318480	50.0000	60
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	228155	50.0000	60
	24 Vinyl acetate	43	3.818	3.818	(0.729)	600015	50.0000	60
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	617992	50.0000	63
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	287759	50.0000	59
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	439331	50.0000	62
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	171043	50.0000	48
	28 cis-1,2-Dichloroethene	96	4.252	4.252	(0.812)	85410	50.0000	60
	30 2-Butanone	72	4.255	4.255	(0.813)	9558	50.0000	47
	32 Propionitrile	54	4.303	4.303	(0.822)	208359	500.000	500(A)
	33 Methacrylonitrile	41	4.432	4.432	(0.846)	208175	100.000	110
	34 Bromochloromethane	128	4.451	4.451	(0.850)	39693	50.0000	60
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	18309	100.000	98
	35 Chloroform	83	4.509	4.509	(0.861)	223101	50.0000	61
$	36 Dibromofluoromethane	113	4.647	4.647	(0.888)	64221	50.0000	54
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	227125	50.0000	58
	38 Cyclohexane	56	4.741	4.741	(0.905)	202085	50.0000	53
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	37087	50.0000	57
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	208211	50.0000	62
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	178979	1000.00	1200(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.946	(0.945)	9849	50.0000	55
	43 Benzene	78	5.001	5.001	(0.955)	289423	50.0000	57
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	286943	50.0000	62
	45 tert-Amyl methyl ether	73	5.075	5.075	(0.969)	253548	50.0000	60
M	50 1,2-Dichloroethene (Total)	96				162305	100.000	(a)
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	136876	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	78632	50.0000	53
	48 Methylcyclohexane	83	5.750	5.750	(1.098)	104554	50.0000	51
	49 1,2-Dichloropropane	63	5.769	5.769	(1.102)	101341	50.0000	59
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	64227	50.0000	55
	52 Dibromomethane	93	5.882	5.882	(1.123)	69091	50.0000	59
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	17270	1000.00	1000(A)
	54 Bromodichloromethane	83	6.011	6.011	(1.148)	174888	50.0000	62
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.231)	1146	50.0000	57(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.441	(1.230)	136685	50.0000	62
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	152772	50.0000	52
$	58 Toluene-d8	98	6.715	6.715	(0.817)	204524	50.0000	48
	59 Toluene	91	6.782	6.782	(1.295)	310802	50.0000	58
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	146044	50.0000	57
	61 Ethyl Methacrylate	69	7.068	7.068	(1.350)	74685	50.0000	57
	62 1,1,2-Trichloroethane	97	7.175	7.175	(1.370)	74122	50.0000	59
	63 Tetrachloroethene	164	7.348	7.348	(0.894)	76353	50.0000	50
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	136699	50.0000	56
	65 2-Hexanone	43	7.432	7.432	(0.904)	99575	50.0000	40
	66 Dibromochloromethane	129	7.593	7.593	(0.923)	115769	50.0000	58
	67 1,2-Dibromoethane	107	7.728	7.728	(0.940)	82786	50.0000	53
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	96035	50.0000	46
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	216415	50.0000	
	70 Chlorobenzene	112	8.252	8.252	(1.004)	204851	50.0000	52
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	101223	50.0000	56
	72 Ethylbenzene	106	8.371	8.371	(1.018)	105073	50.0000	51
	73 m,p-Xylene	106	8.499	8.499	(1.034)	253854	100.000	100
	74 o-Xylene	106	8.943	8.943	(1.088)	124930	50.0000	55
	75 Styrene	104	8.959	8.959	(1.090)	200580	50.0000	54

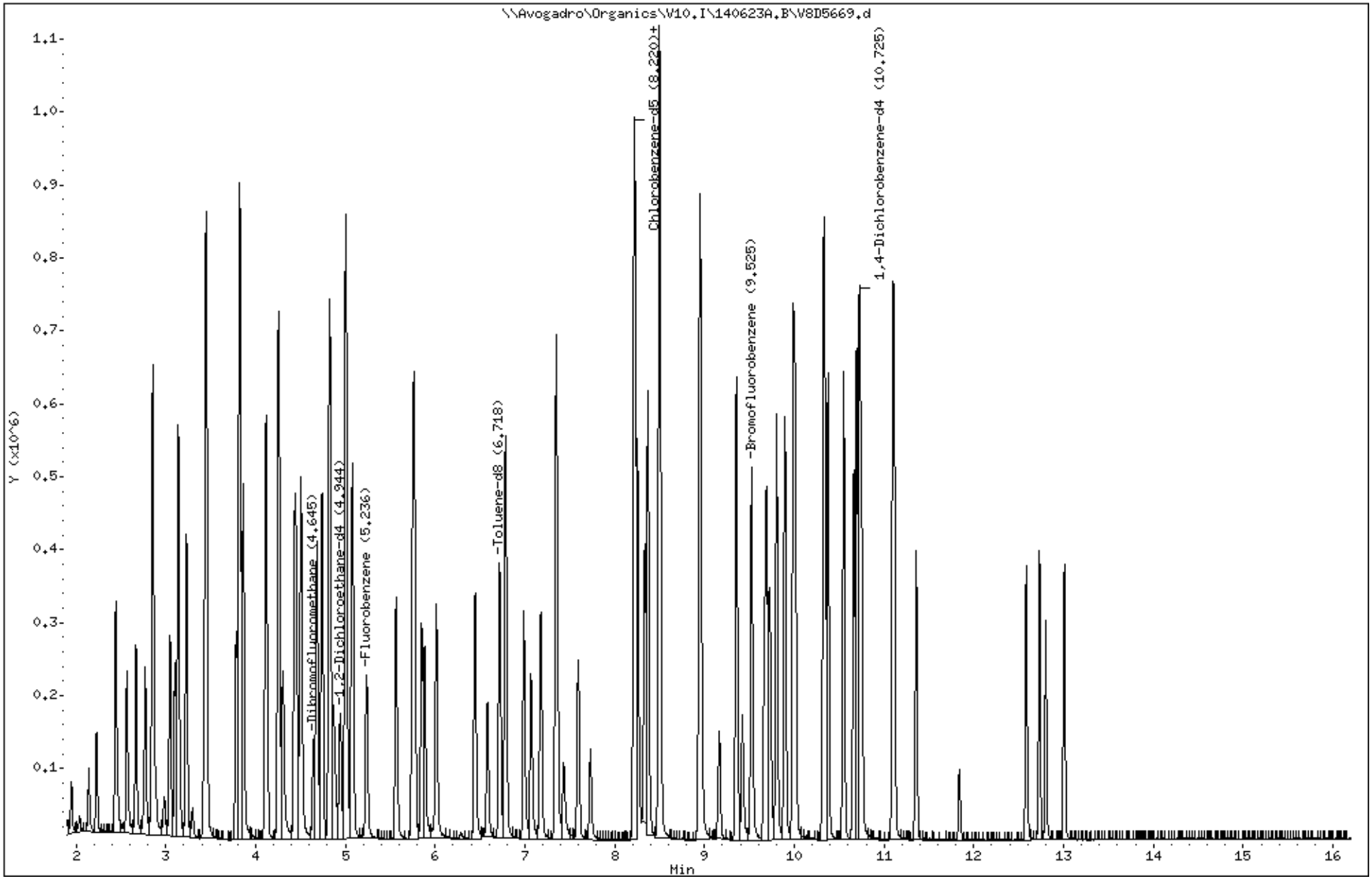
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Report Date: 25-Jun-2014 15:26

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	68735	50.0000	55
	77	Isopropylbenzene	105	9.355	9.355	(1.138)	359055	50.0000	50
	78	trans-1,4-Dichloro-2-butene	75	9.419	9.419	(1.145)	21239	50.0000	44(Q)
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	150384	50.0000	51
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.670	(0.902)	94939	50.0000	46
	81	Bromobenzene	156	9.689	9.689	(0.904)	94602	50.0000	52
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.907)	131677	50.0000	49
	83	n-Propylbenzene	120	9.805	9.805	(0.915)	78607	50.0000	49
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	78164	50.0000	51
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.932)	314170	50.0000	51
	86	4-Chlorotoluene	126	10.010	10.010	(0.934)	79228	50.0000	50
M	94	Xylene (Total)	106				378784	150.000	(a)
	87	tert-Butylbenzene	119	10.326	10.326	(0.963)	331004	50.0000	53
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	307288	50.0000	53
	89	sec-Butylbenzene	105	10.547	10.547	(0.984)	345700	50.0000	50
	90	1,3-Dichlorobenzene	146	10.663	10.663	(0.995)	155895	50.0000	50
	91	4-Isopropyltoluene	119	10.695	10.695	(0.998)	302225	50.0000	51
*	92	1,4-Dichlorobenzene-d4	152	10.721	10.721	(1.000)	133047	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.003)	161584	50.0000	48
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	258276	50.0000	46
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.037)	158569	50.0000	54
	97	Hexachloroethane	117	11.354	11.354	(1.059)	59313	50.0000	51
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	23381	50.0000	46
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	88998	50.0000	47
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	61313	50.0000	45
	101	Naphthalene	128	12.801	12.801	(1.194)	166878	50.0000	44
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	85965	50.0000	50

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\V10.I\140623A.B\V8D5669.d
Date : 23-JUN-2014 21:35
Client ID: VSTD05010X
Instrument: V10.i
Sample Info: 5ML,VSTD05010X,VSTD05010X
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5701.d
Report Date: 26-Jun-2014 08:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5701.d
Lab Smp Id: VSTD05010Y Client Smp ID: VSTD05010Y
Inj Date : 24-JUN-2014 09:05
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010Y,VSTD05010Y
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140624.B\v108260Gadd-6lvl.m
Meth Date : 24-Jun-2014 09:18 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 57 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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	1.586	1.586	(0.303)	96194	50.0000	57
2	Freon114	85	1.705	1.702	(0.326)	76019	50.0000	56
3	Chloromethane	50	1.753	1.750	(0.335)	80346	50.0000	36
4	Vinyl Chloride	62	1.856	1.853	(0.354)	96316	50.0000	50(Q)
5	Bromomethane	94	2.143	2.139	(0.409)	29985	50.0000	57
6	Chloroethane	64	2.229	2.226	(0.426)	56104	50.0000	51
7	Trichlorofluoromethane	101	2.445	2.438	(0.467)	208373	50.0000	62
126	Ethanol	46	2.567	2.580	(0.490)	58445	5000.00	4800(A)
8	Ether	59	2.667	2.667	(0.509)	86128	50.0000	51
9	Acrolein	56	2.773	2.769	(0.529)	118507	250.000	250
10	1,1-Dichloroethene	96	2.856	2.856	(0.545)	74692	50.0000	58
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.850	(0.545)	101116	50.0000	61
12	Acetone	58	2.888	2.885	(0.551)	18786	50.0000	56
13	Iodomethane	142	2.985	2.982	(0.570)	25070	50.0000	36
14	Carbon Disulfide	76	3.049	3.046	(0.582)	248656	50.0000	57
15	Acetonitrile	41	3.136	3.136	(0.599)	243720	500.000	560(A)
16	Allyl Chloride	39	3.139	3.136	(0.599)	208653	50.0000	62
17	Methyl Acetate	43	3.146	3.142	(0.600)	126561	50.0000	49
18	Methylene Chloride	84	3.229	3.229	(0.616)	63567	50.0000	53
19	tert-Butanol	59	3.297	3.306	(0.629)	26334	100.000	95
20	Acrylonitrile	53	3.425	3.425	(0.654)	52072	50.0000	52
21	trans-1,2-Dichloroethene	96	3.454	3.448	(0.659)	64715	50.0000	54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	232708	50.0000	52
	23 1,1-Dichloroethane	63	3.786	3.782	(0.723)	183817	50.0000	57
	24 Vinyl acetate	43	3.818	3.821	(0.729)	484666	50.0000	57
	25 Diisopropyl Ether	45	3.827	3.824	(0.731)	460304	50.0000	56
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.737)	251501	50.0000	62
	27 Ethyl tert-butyl ether	59	4.117	4.120	(0.786)	315656	50.0000	53
	29 2,2-Dichloropropane	77	4.261	4.255	(0.813)	181691	50.0000	60
	28 cis-1,2-Dichloroethene	96	4.258	4.252	(0.813)	67051	50.0000	56
	30 2-Butanone	72	4.258	4.262	(0.813)	9398	50.0000	55
	32 Propionitrile	54	4.306	4.306	(0.822)	175936	500.000	500(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	174905	100.000	110
	34 Bromochloromethane	128	4.454	4.451	(0.850)	29882	50.0000	54
	31 Tetrahydrofuran	72	4.503	4.502	(0.859)	15274	100.000	98
	35 Chloroform	83	4.512	4.509	(0.861)	178958	50.0000	58
$	36 Dibromofluoromethane	113	4.647	4.644	(0.887)	55202	50.0000	55
	37 1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	196073	50.0000	60
	38 Cyclohexane	56	4.740	4.737	(0.905)	191030	50.0000	59
	39 1,1-Dichloropropene	110	4.821	4.824	(0.920)	32125	50.0000	59
	40 Carbon Tetrachloride	117	4.827	4.827	(0.921)	174873	50.0000	62
	41 Isobutyl Alcohol	43	5.078	5.081	(0.969)	135878	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.946	(0.943)	7980	50.0000	53
	43 Benzene	78	5.004	5.004	(0.955)	231162	50.0000	55
	44 1,2-Dichloroethane	62	5.011	5.007	(0.956)	224624	50.0000	58
	45 tert-Amyl methyl ether	73	5.078	5.081	(0.969)	181195	50.0000	51
M	50 1,2-Dichloroethene (Total)	96				131766	100.000	110
*	46 Fluorobenzene	96	5.239	5.236	(1.000)	114994	50.0000	
	47 Trichloroethene	130	5.564	5.564	(1.062)	67385	50.0000	54
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	103968	50.0000	60
	49 1,2-Dichloropropane	63	5.773	5.769	(1.102)	78942	50.0000	55
	51 Methyl Methacrylate	69	5.853	5.853	(1.117)	47542	50.0000	49
	52 Dibromomethane	93	5.882	5.879	(1.123)	53929	50.0000	55
	53 1,4-Dioxane	88	5.882	5.888	(1.123)	14556	1000.00	1000(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.148)	138357	50.0000	59
	55 2-Chloroethyl vinyl ether	63	6.438	6.448	(1.229)	1033	50.0000	61(T)
	56 cis-1,3-Dichloropropene	75	6.441	6.445	(1.230)	103445	50.0000	56
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	127200	50.0000	52
$	58 Toluene-d8	98	6.718	6.718	(0.817)	170547	50.0000	46
	59 Toluene	91	6.782	6.785	(1.295)	256152	50.0000	56
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	110702	50.0000	52
	61 Ethyl Methacrylate	69	7.072	7.065	(1.350)	53594	50.0000	49
	62 1,1,2-Trichloroethane	97	7.174	7.174	(1.369)	54808	50.0000	52
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	69510	50.0000	53
	64 1,3-Dichloropropane	76	7.358	7.354	(0.895)	100571	50.0000	48
	65 2-Hexanone	43	7.432	7.432	(0.904)	96256	50.0000	45
	66 Dibromochloromethane	129	7.596	7.596	(0.924)	87149	50.0000	51
	67 1,2-Dibromoethane	107	7.727	7.731	(0.940)	63639	50.0000	48
	69 1-Chlorohexane	91	8.216	8.219	(0.999)	86087	50.0000	49
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	185715	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	166040	50.0000	49
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	79108	50.0000	51
	72 Ethylbenzene	106	8.371	8.370	(1.018)	88109	50.0000	50
	73 m,p-Xylene	106	8.499	8.496	(1.034)	214253	100.000	100
	74 o-Xylene	106	8.943	8.943	(1.088)	102339	50.0000	52
	75 Styrene	104	8.959	8.959	(1.090)	162126	50.0000	50

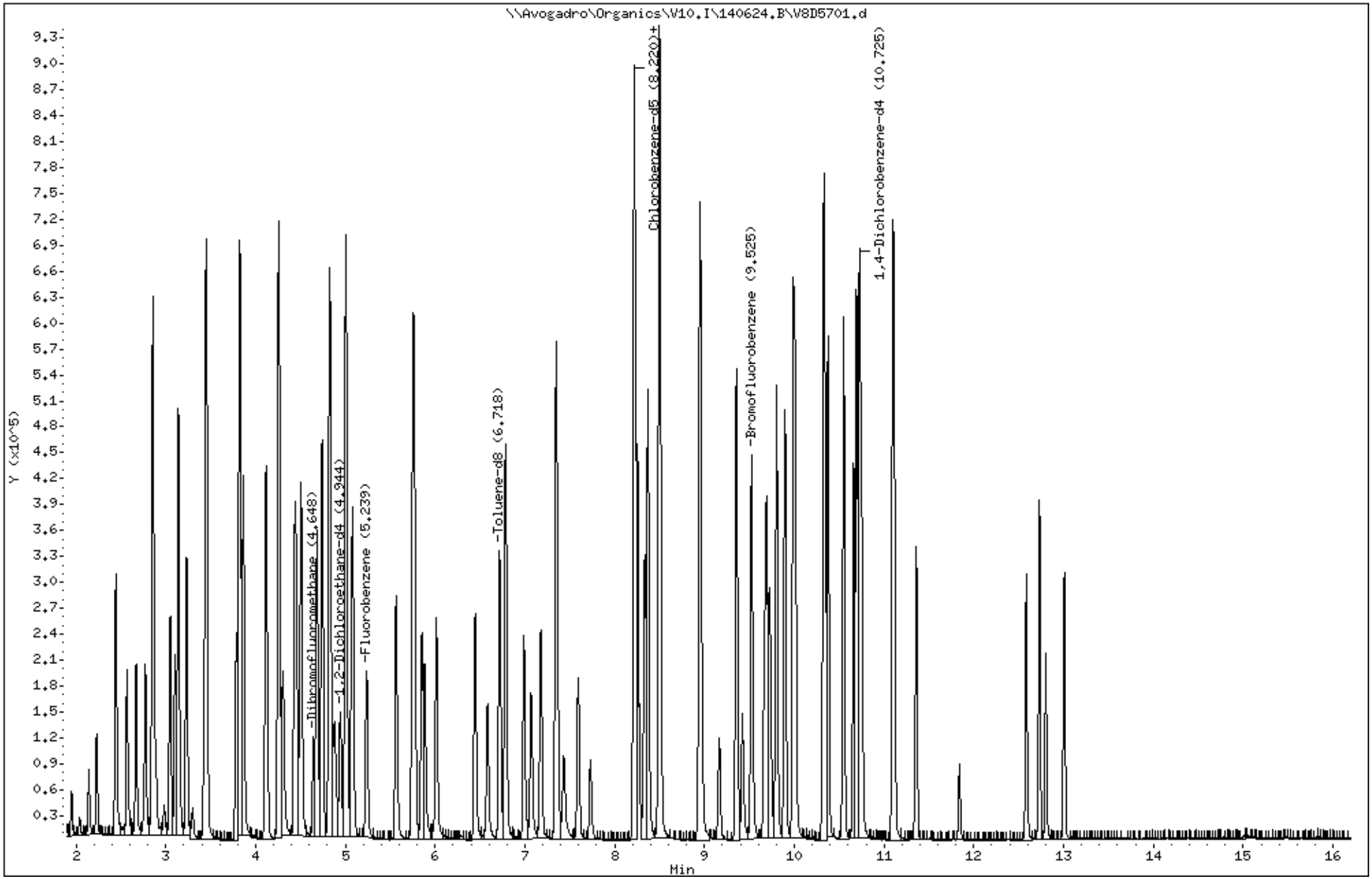
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Report Date: 26-Jun-2014 08:39

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	53416	50.0000	49
	77	Isopropylbenzene	105	9.354	9.354	(1.138)	312794	50.0000	51
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.419	(1.146)	18448	50.0000	45(Q)
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	130167	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	78127	50.0000	44
	81	Bromobenzene	156	9.689	9.689	(0.903)	74190	50.0000	47
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	107940	50.0000	46
	83	n-Propylbenzene	120	9.805	9.805	(0.914)	71205	50.0000	51
	84	2-Chlorotoluene	126	9.898	9.898	(0.923)	62819	50.0000	47
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	279050	50.0000	52
	86	4-Chlorotoluene	126	10.010	10.007	(0.933)	67495	50.0000	49
M	94	Xylene (Total)	106				316592	150.000	150
	87	tert-Butylbenzene	119	10.329	10.325	(0.963)	264894	50.0000	48
	88	1,2,4-Trimethylbenzene	105	10.377	10.374	(0.968)	272303	50.0000	54
	89	sec-Butylbenzene	105	10.551	10.550	(0.984)	313503	50.0000	52
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	129869	50.0000	48
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	274047	50.0000	53
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	115982	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.747	(1.002)	132887	50.0000	46
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	248965	50.0000	51
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	127827	50.0000	50
	97	Hexachloroethane	117	11.358	11.358	(1.059)	52105	50.0000	52
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	19863	50.0000	45
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	68958	50.0000	42
	100	Hexachlorobutadiene	225	12.731	12.730	(1.187)	60659	50.0000	51
	101	Naphthalene	128	12.801	12.801	(1.194)	123824	50.0000	37
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	67528	50.0000	45

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\V10.I\140624.B\V8D5701.d
Date : 24-JUN-2014 09:05
Client ID: VSTD05010Y
Instrument: V10.i
Sample Info: 5ML,VSTD05010Y,VSTD05010Y
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5731.d
Report Date: 27-Jun-2014 13:59

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5731.d
Lab Smp Id: VSTD05010Z Client Smp ID: VSTD05010Z
Inj Date : 25-JUN-2014 07:38
Operator : WL   SRC: WL Inst ID: V10.i
Smp Info : 5ML,VSTD05010Z,VSTD05010Z
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 57 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	1.586	1.586	(0.303)	86609	50.0000	50
2	Freon114	85	1.705	1.705	(0.326)	71922	50.0000	51
3	Chloromethane	50	1.753	1.753	(0.335)	128959	50.0000	56
4	Vinyl Chloride	62	1.856	1.856	(0.354)	103245	50.0000	52(Q)
5	Bromomethane	94	2.142	2.142	(0.409)	21231	50.0000	39
6	Chloroethane	64	2.229	2.229	(0.426)	61852	50.0000	54
7	Trichlorofluoromethane	101	2.445	2.445	(0.467)	190129	50.0000	55
126	Ethanol	46	2.567	2.567	(0.490)	53110	5000.00	4200(A)
8	Ether	59	2.670	2.670	(0.510)	90074	50.0000	52
9	Acrolein	56	2.769	2.769	(0.529)	127045	250.000	260
10	1,1-Dichloroethene	96	2.859	2.859	(0.546)	75948	50.0000	57
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	94029	50.0000	55
12	Acetone	58	2.892	2.892	(0.552)	21053	50.0000	60
13	Iodomethane	142	2.985	2.985	(0.570)	28421	50.0000	40
14	Carbon Disulfide	76	3.049	3.049	(0.582)	267862	50.0000	59
15	Acetonitrile	41	3.139	3.139	(0.599)	254650	500.000	560(A)
16	Allyl Chloride	39	3.139	3.139	(0.599)	204268	50.0000	59
17	Methyl Acetate	43	3.146	3.146	(0.600)	138661	50.0000	52
18	Methylene Chloride	84	3.232	3.232	(0.617)	70307	50.0000	57
19	tert-Butanol	59	3.300	3.300	(0.630)	29392	100.000	100
20	Acrylonitrile	53	3.422	3.422	(0.653)	56861	50.0000	55
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.659)	72282	50.0000	59

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5731.d
Report Date: 27-Jun-2014 13:59

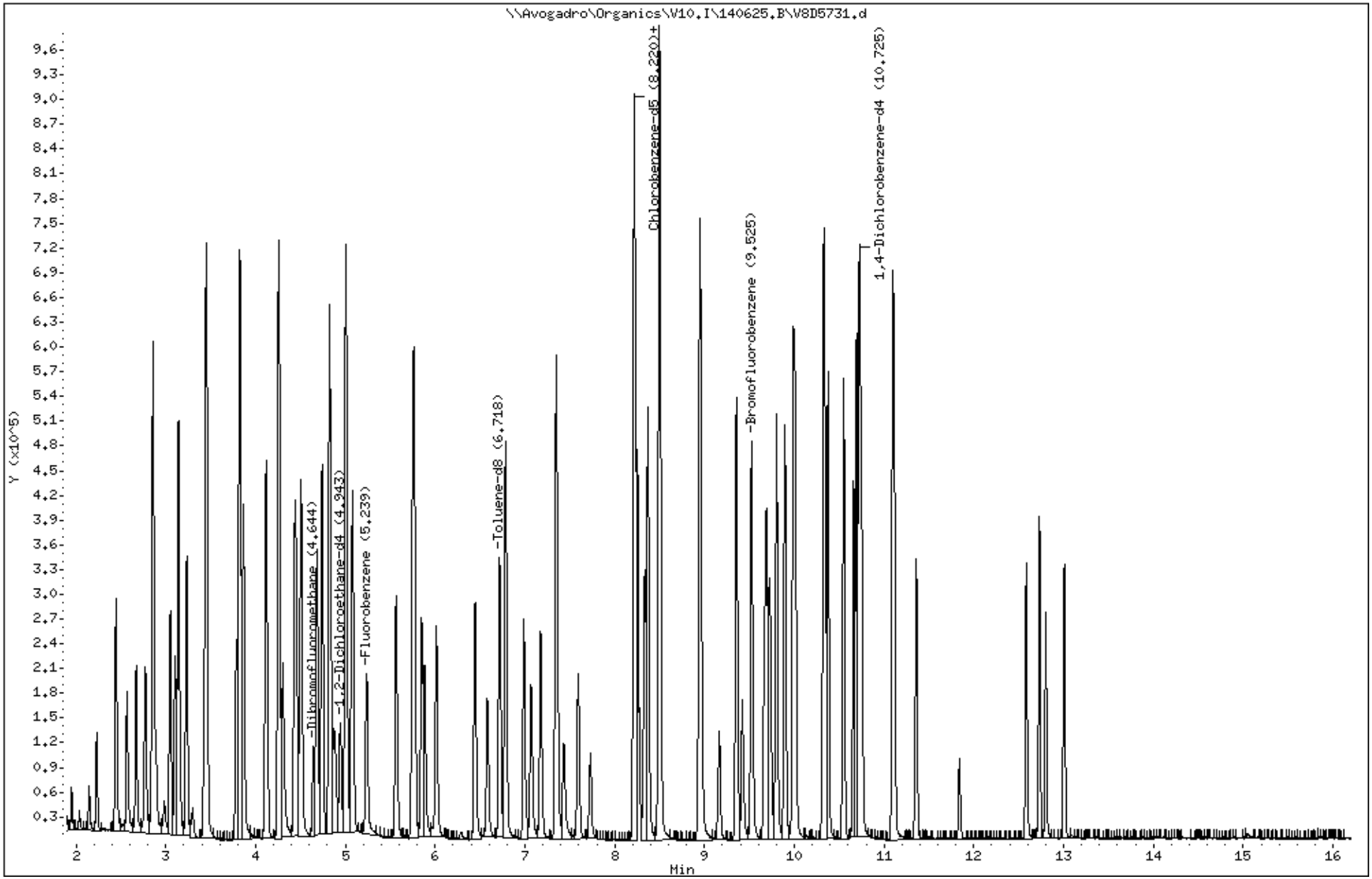
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.448	(0.658)	264776	50.0000	57
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	195063	50.0000	58
	24 Vinyl acetate	43	3.818	3.818	(0.729)	515718	50.0000	59
	25 Diisopropyl Ether	45	3.827	3.827	(0.731)	488488	50.0000	57
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.737)	248241	50.0000	59
	27 Ethyl tert-butyl ether	59	4.120	4.120	(0.786)	352692	50.0000	57
	29 2,2-Dichloropropane	77	4.261	4.261	(0.813)	194122	50.0000	62
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	71048	50.0000	58
	30 2-Butanone	72	4.258	4.258	(0.813)	11324	50.0000	64
	32 Propionitrile	54	4.306	4.306	(0.822)	192359	500.000	530(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	188845	100.000	110
	34 Bromochloromethane	128	4.454	4.454	(0.850)	30674	50.0000	54
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	19831	100.000	120
	35 Chloroform	83	4.509	4.509	(0.861)	187579	50.0000	59
$	36 Dibromofluoromethane	113	4.647	4.647	(0.887)	55438	50.0000	53
	37 1,1,1-Trichloroethane	97	4.682	4.682	(0.894)	202430	50.0000	60
	38 Cyclohexane	56	4.744	4.744	(0.905)	189539	50.0000	57
	39 1,1-Dichloropropene	110	4.824	4.824	(0.921)	35553	50.0000	63
	40 Carbon Tetrachloride	117	4.830	4.830	(0.922)	168157	50.0000	58
	41 Isobutyl Alcohol	43	5.078	5.078	(0.969)	148854	1000.00	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.949	4.949	(0.945)	8461	50.0000	54
	43 Benzene	78	5.004	5.004	(0.955)	251314	50.0000	57
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	226230	50.0000	56
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.969)	209438	50.0000	57
M	50 1,2-Dichloroethene (Total)	96				143330	100.000	(a)
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	118998	50.0000	
	47 Trichloroethene	130	5.563	5.563	(1.062)	74217	50.0000	58
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	106044	50.0000	59
	49 1,2-Dichloropropane	63	5.772	5.772	(1.102)	84391	50.0000	57
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	56795	50.0000	56
	52 Dibromomethane	93	5.882	5.882	(1.123)	57075	50.0000	56
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	13917	1000.00	940(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.148)	142444	50.0000	58
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.231)	1147	50.0000	65(T)
	56 cis-1,3-Dichloropropene	75	6.444	6.444	(1.230)	118490	50.0000	62
	57 4-Methyl-2-pentanone	43	6.586	6.586	(1.257)	142491	50.0000	56
$	58 Toluene-d8	98	6.718	6.718	(0.817)	186670	50.0000	46
	59 Toluene	91	6.785	6.785	(1.295)	274227	50.0000	58
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	124859	50.0000	56
	61 Ethyl Methacrylate	69	7.068	7.068	(1.349)	64422	50.0000	57
	62 1,1,2-Trichloroethane	97	7.178	7.178	(1.370)	61684	50.0000	57
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	70953	50.0000	49
	64 1,3-Dichloropropane	76	7.358	7.358	(0.894)	113336	50.0000	48
	65 2-Hexanone	43	7.432	7.432	(0.903)	114153	50.0000	48
	66 Dibromochloromethane	129	7.592	7.592	(0.923)	92756	50.0000	49
	67 1,2-Dibromoethane	107	7.727	7.727	(0.939)	71705	50.0000	49
	69 1-Chlorohexane	91	8.213	8.213	(0.998)	90279	50.0000	46
*	68 Chlorobenzene-d5	117	8.226	8.226	(1.000)	205945	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	177083	50.0000	47
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.013)	82399	50.0000	48
	72 Ethylbenzene	106	8.370	8.370	(1.018)	93597	50.0000	48
	73 m,p-Xylene	106	8.499	8.499	(1.033)	230317	100.000	99
	74 o-Xylene	106	8.946	8.946	(1.088)	108131	50.0000	50
	75 Styrene	104	8.959	8.959	(1.089)	174128	50.0000	49

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.114)	59797	50.0000	50
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	314866	50.0000	47
	78	trans-1,4-Dichloro-2-butene	75	9.425	9.425	(1.146)	21467	50.0000	47
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	146223	50.0000	52
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	87249	50.0000	43
	81	Bromobenzene	156	9.692	9.692	(0.904)	78904	50.0000	44
	82	1,2,3-Trichloropropane	75	9.724	9.724	(0.907)	120981	50.0000	46
	83	n-Propylbenzene	120	9.804	9.804	(0.914)	69386	50.0000	44
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	68221	50.0000	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	278491	50.0000	46
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	69148	50.0000	45
M	94	Xylene (Total)	106				338448	150.000	(a)
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	259386	50.0000	42
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	270879	50.0000	48
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	309938	50.0000	46
	90	1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	133985	50.0000	44
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	269921	50.0000	46
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	130402	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	139917	50.0000	43
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	245865	50.0000	45
	96	1,2-Dichlorobenzene	146	11.110	11.110	(1.036)	132100	50.0000	46
	97	Hexachloroethane	117	11.357	11.357	(1.059)	52706	50.0000	46
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	22426	50.0000	45
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	81086	50.0000	44
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	60926	50.0000	45
	101	Naphthalene	128	12.801	12.801	(1.194)	152832	50.0000	41
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	75897	50.0000	45

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\V10.I\140625.B\V8D5731.d
Date : 25-JUN-2014 07:38
Client ID: VSTD05010Z
Instrument: V10.i
Sample Info: 5ML,VSTD05010Z,VSTD05010Z
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9880.D
Lab Smp Id: BFB1K Client Smp ID: BFB1K
Inj Date : 26-JUN-2014 07:10
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 2UL,BFB1K,BFB1K
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140626.B\bfb8260.m
Meth Date : 27-Jun-2014 07:27 amarquis 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: TARGET115

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 ON-COL	FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.483	4.800	(0.000)	95	189824			0.00- 100.00	100.00
4.483	4.800	(0.000)	50	39208			15.00- 40.00	20.65
4.483	4.800	(0.000)	75	92872			30.00- 60.00	48.93
4.483	4.800	(0.000)	96	12670			5.00- 9.00	6.67
4.483	4.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
4.483	4.800	(0.000)	174	116640			50.00- 0.00	61.45
4.483	4.800	(0.000)	175	8305			5.00- 9.00	7.12
4.483	4.800	(0.000)	176	112888			95.00- 101.00	96.78
4.483	4.800	(0.000)	177	7291			5.00- 9.00	6.46

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9880.D

Date : 26-JUN-2014 07:10

Client ID: BFB1K

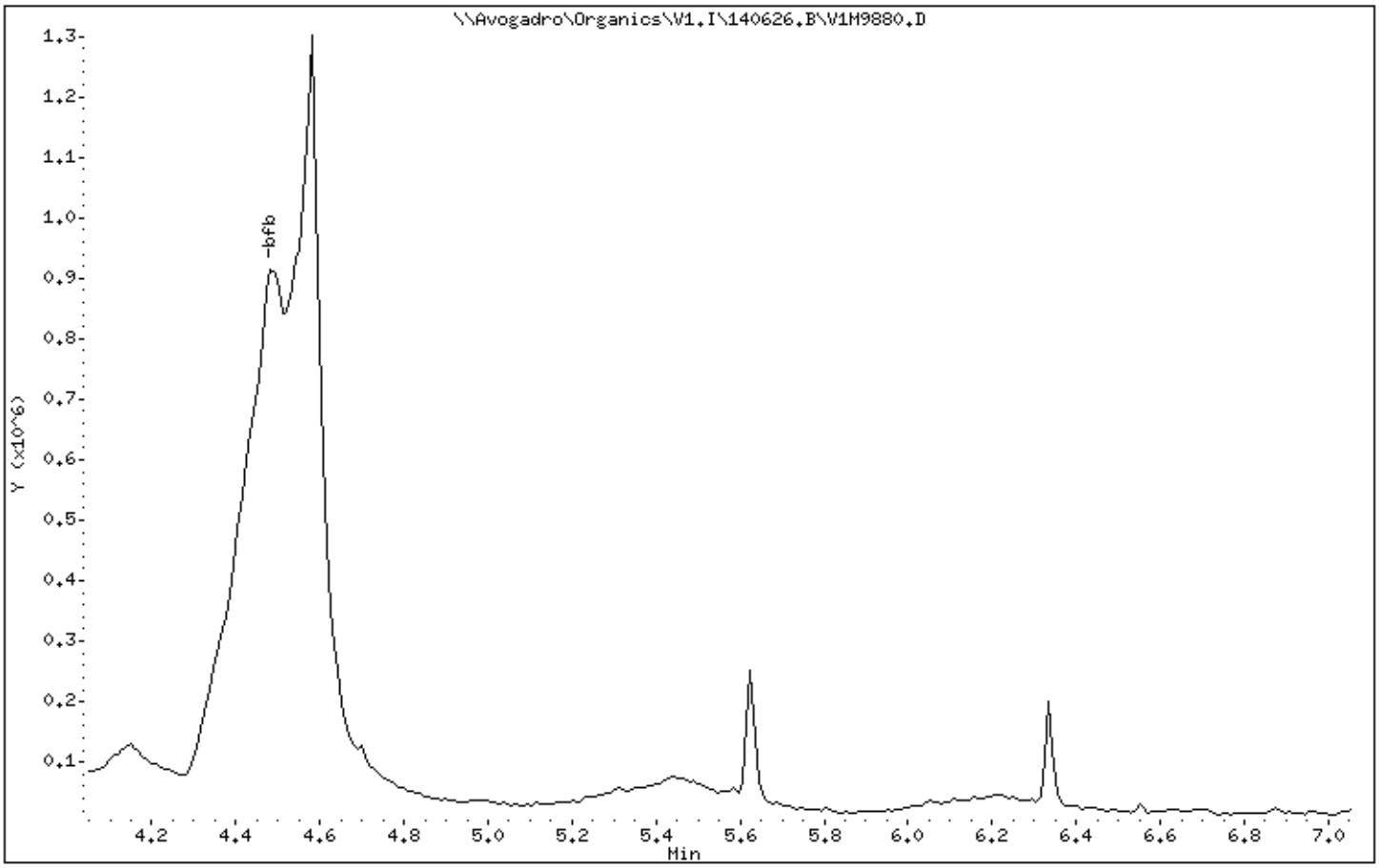
Instrument: V1.i

Sample Info: 2UL,BFB1K,BFB1K

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9880.D

Date : 26-JUN-2014 07:10

Client ID: BFB1K

Instrument: V1.i

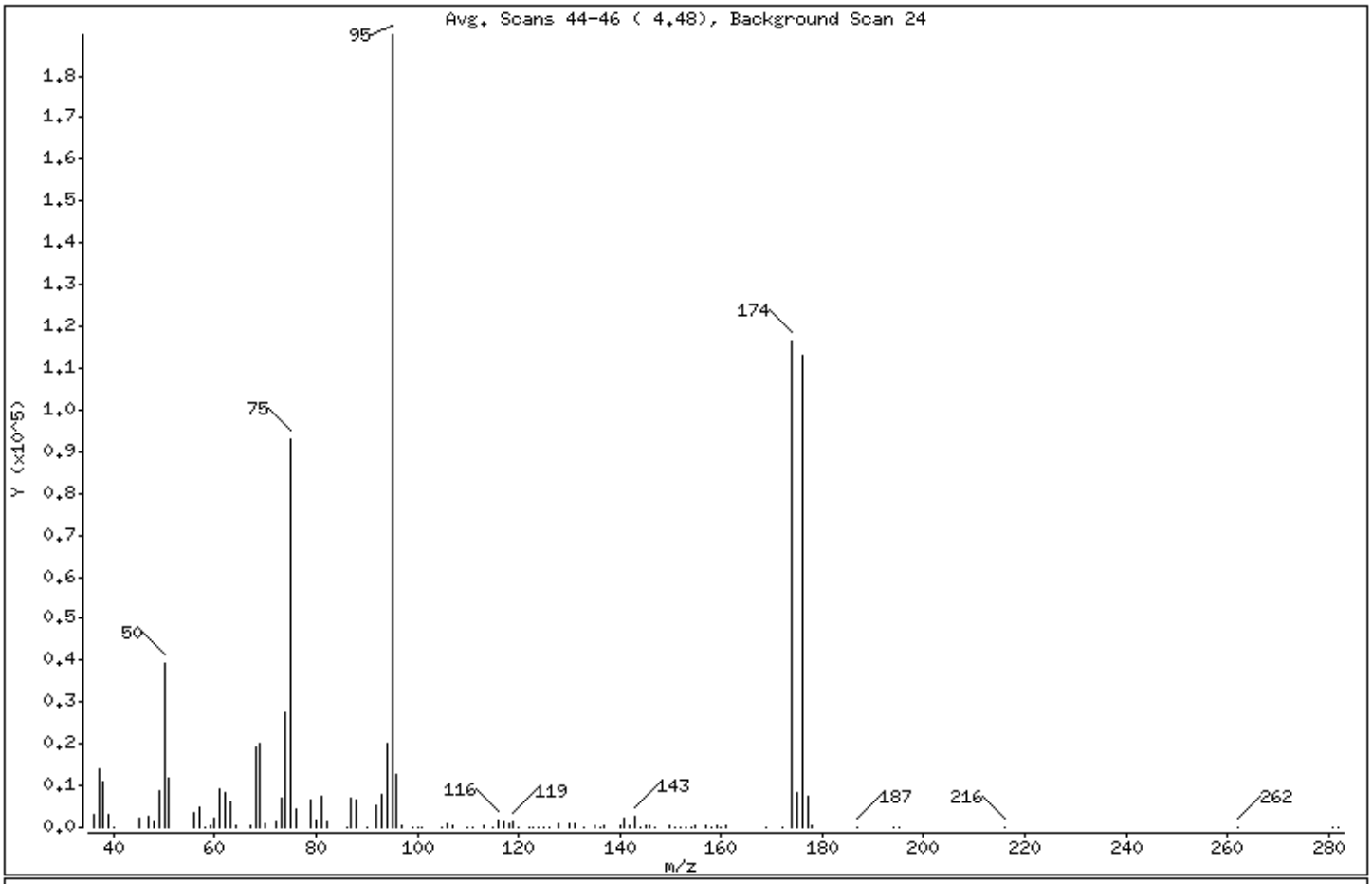
Sample Info: 2UL,BFB1K,BFB1K

Operator: WL SRC: WL

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	20.65
75	30.00 - 60.00% of mass 95	48.93
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	61.45
175	5.00 - 9.00% of mass 174	4.38 (7.12)
176	95.00 - 101.00% of mass 174	59.47 (96.78)
177	5.00 - 9.00% of mass 176	3.84 (6.46)

Date : 26-JUN-2014 07:10

Client ID: BFB1K Instrument: V1.i

Sample Info: 2UL,BFB1K,BFB1K

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1M9880.D
Spectrum: Avg. Scans 44-46 (4.48), Background Scan 24
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2981	74.00	27392	115.00	97	150.00	337
37.00	14037	75.00	92872	116.00	1760	151.00	38
38.00	11097	76.00	4185	117.00	1158	152.00	141
39.00	3048	79.00	6583	118.00	727	153.00	79
40.00	118	80.00	1843	119.00	1115	154.00	216
45.00	2181	81.00	7211	120.00	92	155.00	410
47.00	2486	82.00	1519	122.00	99	157.00	282
48.00	1267	86.00	134	123.00	23	158.00	49
49.00	8762	87.00	6811	124.00	72	159.00	243
50.00	39208	88.00	6434	125.00	95	160.00	43
51.00	11680	90.00	28	126.00	175	161.00	303
56.00	3439	92.00	5378	128.00	701	169.00	51
57.00	4739	93.00	7891	130.00	870	172.00	39
58.00	181	94.00	20248	131.00	681	174.00	116640
59.00	524	95.00	189824	133.00	152	175.00	8305
60.00	2018	96.00	12670	135.00	296	176.00	112888
61.00	9013	97.00	273	136.00	82	177.00	7291
62.00	8394	99.00	58	137.00	433	178.00	284
63.00	6084	100.00	159	140.00	249	187.00	35
64.00	495	101.00	29	141.00	2180	194.00	35
67.00	283	105.00	73	142.00	299	195.00	35
68.00	19208	106.00	761	143.00	2494	216.00	47
69.00	19944	107.00	340	144.00	134	262.00	48
70.00	817	110.00	113	145.00	294	281.00	37
72.00	1152	111.00	165	146.00	312	282.00	34
73.00	6855	113.00	243	147.00	97		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5642.d
Lab Smp Id: BFB10W Client Smp ID: BFB10W
Inj Date : 23-JUN-2014 08:37
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10W,BFB10W
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140623.B\BFBSOM_V10.m
Meth Date : 23-Jun-2014 08:15 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET104

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
0.000	9.600	(0.000)	95	125640			0.00- 100.00	100.00
0.000	9.600	(0.000)	50	50240			15.00- 40.00	39.99
0.000	9.600	(0.000)	75	83048			30.00- 80.00	66.10
0.000	9.600	(0.000)	96	8801			5.00- 9.00	7.00
0.000	9.600	(0.000)	173	912			0.00- 2.00	0.83
0.000	9.600	(0.000)	174	109488			50.00- 120.00	87.14
0.000	9.600	(0.000)	175	8262			5.00- 9.00	7.55
0.000	9.600	(0.000)	176	109936			95.00- 101.00	100.41
0.000	9.600	(0.000)	177	7399			5.00- 9.00	6.73

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5642.d

Date : 23-JUN-2014 08:37

Client ID: BFB10W

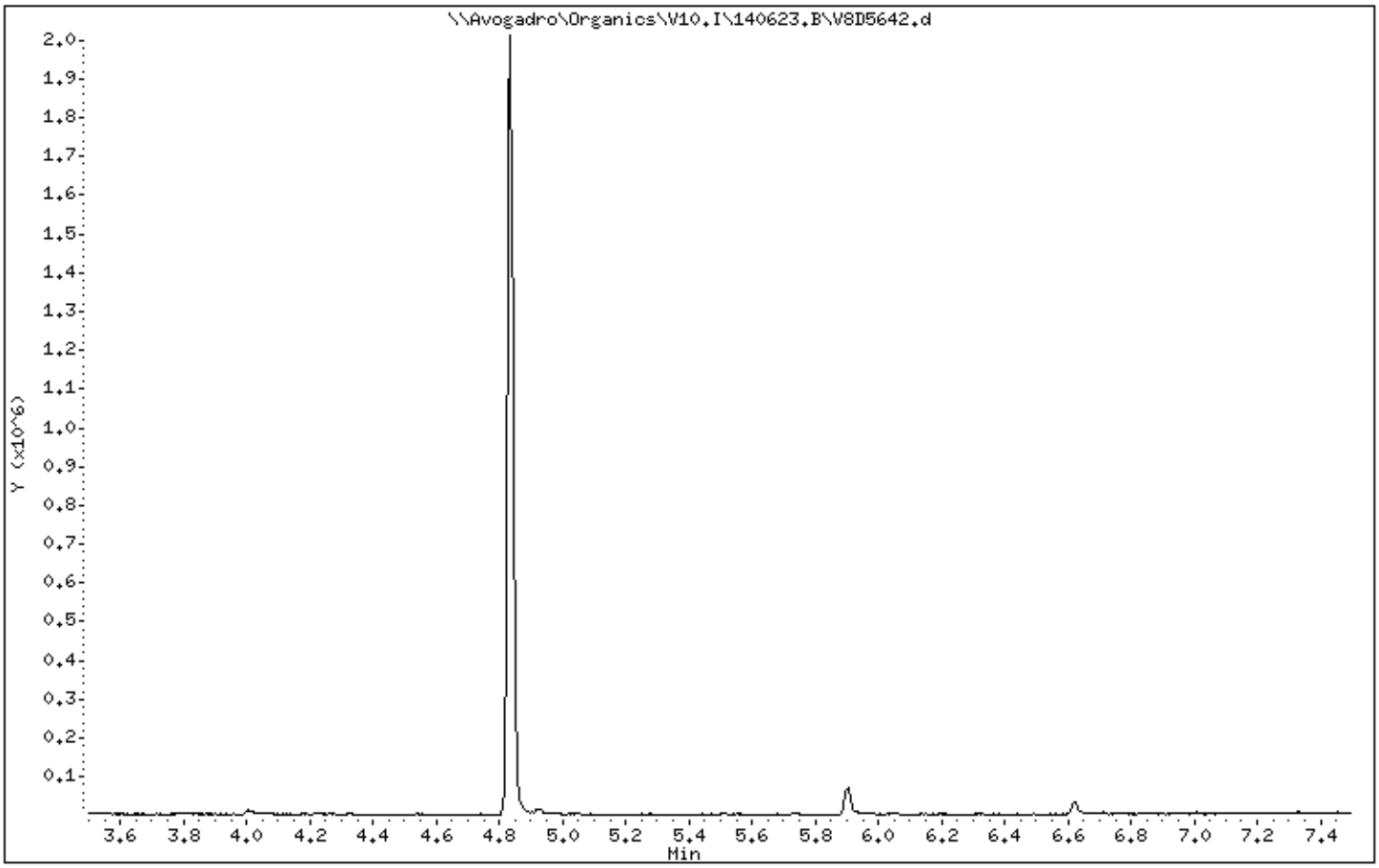
Instrument: V10.i

Sample Info: 5ML,BFB10W,BFB10W

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5642.d

Date : 23-JUN-2014 08:37

Client ID: BFB10W

Instrument: V10.i

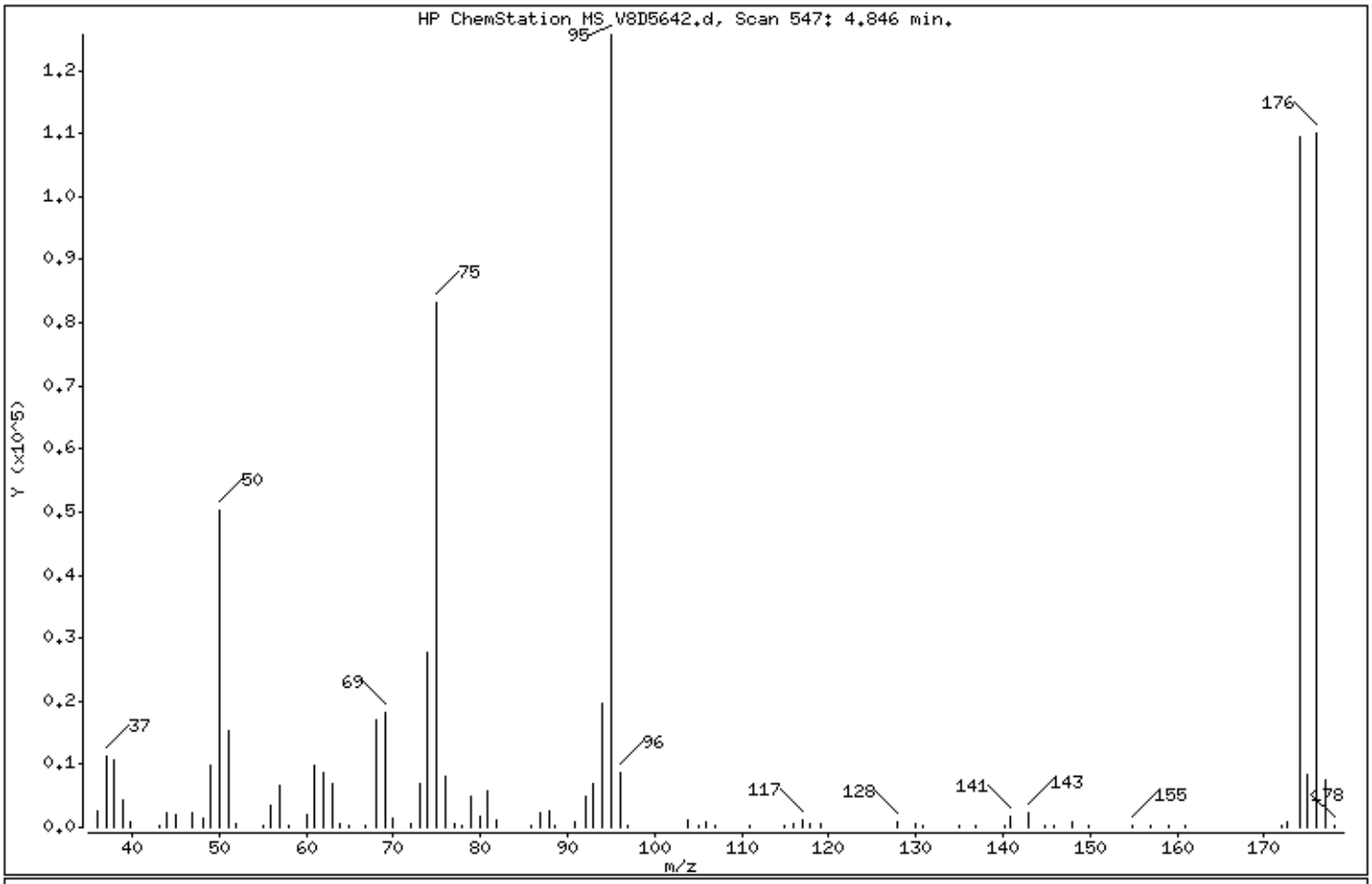
Sample Info: 5ML,BFB10W,BFB10W

Operator: WL SRC: WL

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	39.99
75	30.00 - 80.00% of mass 95	66.10
96	5.00 - 9.00% of mass 95	7.00
173	Less than 2.00% of mass 174	0.73 (0.83)
174	50.00 - 120.00% of mass 95	87.14
175	5.00 - 9.00% of mass 174	6.58 (7.55)
176	95.00 - 101.00% of mass 174	87.50 (100.41)
177	5.00 - 9.00% of mass 176	5.89 (6.73)

Date : 23-JUN-2014 08:37

Client ID: BFB10W Instrument: V10.i

Sample Info: 5ML,BFB10W,BFB10W

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5642.d
Spectrum: HP ChemStation MS V8D5642.d, Scan 547: 4.846 min.
Location of Maximum: 95.00
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2572	63.00	6815	88.60	157	135.00	382
37.00	11206	63.80	600	90.90	728	136.80	323
38.00	10575	64.90	332	92.00	5033	140.10	157
39.00	4393	66.80	287	93.00	6987	140.90	1869
39.90	810	68.00	16976	94.00	19584	143.00	2180
43.10	236	69.00	18192	95.00	125640	144.80	313
44.00	2403	70.00	1393	96.00	8801	145.90	395
45.00	1979	72.10	677	97.00	170	147.90	817
47.00	2432	73.00	6942	103.80	1056	149.80	227
48.10	1471	74.00	27760	105.00	398	154.80	423
49.00	9783	75.00	83048	105.90	814	157.00	343
50.00	50240	76.00	8057	106.90	185	159.00	290
51.00	15182	77.10	659	111.00	317	160.80	150
51.90	524	77.80	304	114.90	380	172.00	326
55.00	418	78.90	4836	116.00	488	172.70	912
56.00	3367	79.90	1825	117.00	1097	174.00	109488
57.00	6755	80.90	5855	117.90	569	175.00	8262
58.00	355	81.90	1291	119.00	633	176.00	109936
60.00	2021	85.80	320	127.90	762	177.00	7399
61.00	9819	86.90	2405	130.00	586	178.10	155
62.00	8695	88.00	2648	130.80	202		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5667.d
Lab Smp Id: BFB10X Client Smp ID: BFB10X
Inj Date : 23-JUN-2014 20:40
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10X,BFB10X
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140623A.B\BFBSOM_V10.m
Meth Date : 25-Jun-2014 15:18 mscarpaci Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET115

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	CONCENTRATIONS FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.528	9.600	(0.000)	95	45744			0.00- 100.00	100.00
9.528	9.600	(0.000)	50	17360			15.00- 40.00	37.95
9.528	9.600	(0.000)	75	30672			30.00- 80.00	67.05
9.528	9.600	(0.000)	96	2889			5.00- 9.00	6.32
9.528	9.600	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.528	9.600	(0.000)	174	35608			50.00- 120.00	77.84
9.528	9.600	(0.000)	175	2979			5.00- 9.00	8.37
9.528	9.600	(0.000)	176	34056			95.00- 101.00	95.64
9.528	9.600	(0.000)	177	2110			5.00- 9.00	6.20

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5667.d

Date : 23-JUN-2014 20:40

Client ID: BFB10X

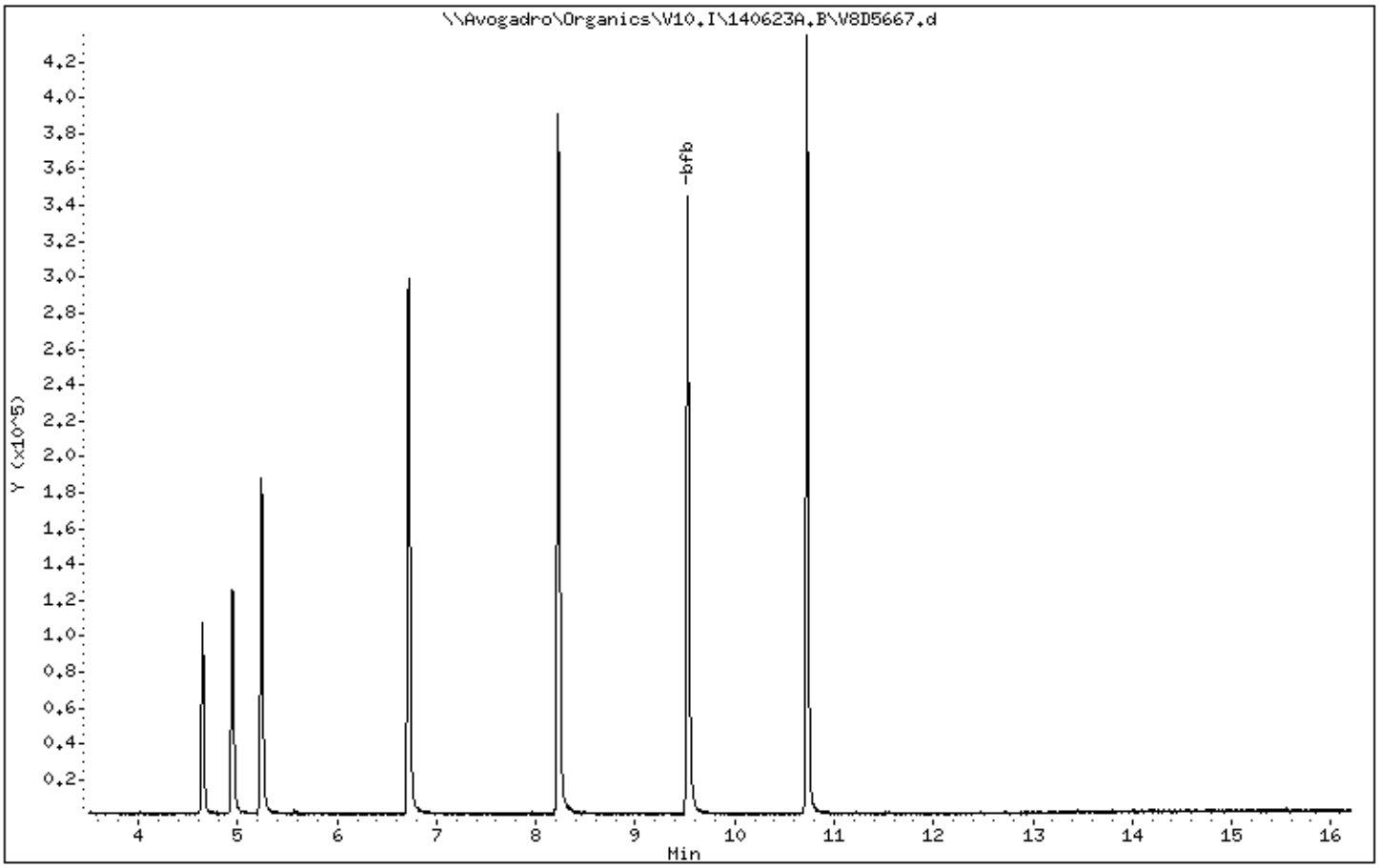
Instrument: V10.i

Sample Info: 5ML,BFB10X,BFB10X

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5667.d

Date : 23-JUN-2014 20:40

Client ID: BFB10X

Instrument: V10.i

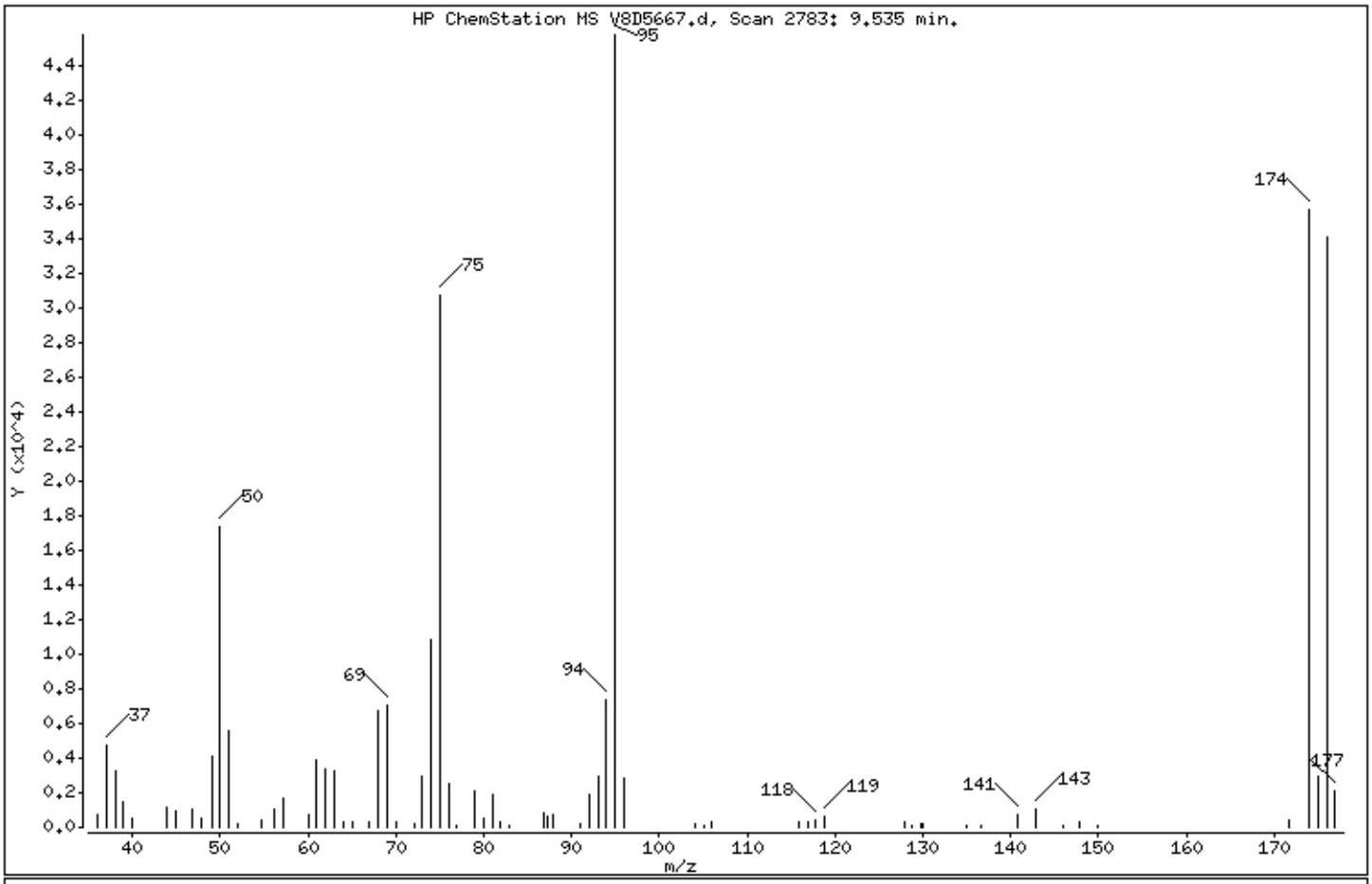
Sample Info: 5ML,BFB10X,BFB10X

Operator: WL SRC: WL

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	37.95
75	30.00 - 80.00% of mass 95	67.05
96	5.00 - 9.00% of mass 95	6.32
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	77.84
175	5.00 - 9.00% of mass 174	6.51 (8.37)
176	95.00 - 101.00% of mass 174	74.45 (95.64)
177	5.00 - 9.00% of mass 176	4.61 (6.20)

Date : 23-JUN-2014 20:40

Client ID: BFB10X Instrument: V10.i

Sample Info: 5ML,BFB10X,BFB10X

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5667.d
Spectrum: HP ChemStation MS V8D5667.d, Scan 2783: 9.535 min.
Location of Maximum: 95.00
Number of points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	690	62.00	3359	83.00	102	128.80	107
37.00	4693	63.10	3295	86.80	795	129.70	231
38.10	3239	64.10	295	87.20	644	130.00	229
39.00	1484	65.00	329	87.90	779	135.00	135
39.90	555	66.90	322	90.90	170	136.70	130
44.00	1189	68.00	6696	92.00	1901	140.80	718
45.00	983	69.00	7096	93.00	2899	142.80	1024
46.90	1009	70.10	310	94.00	7341	145.90	110
47.90	501	72.10	248	95.00	45744	147.80	263
49.00	4087	73.00	2903	96.00	2889	149.80	106
50.00	17360	74.00	10802	104.00	250	171.70	382
51.00	5536	75.00	30672	105.00	129	174.00	35608
52.00	255	76.00	2486	106.00	326	174.90	2979
54.80	383	76.90	107	115.90	351	176.00	34056
56.10	1012	78.90	2103	116.90	314	176.90	2110
57.10	1722	80.00	553	117.80	379		
60.00	717	81.00	1893	118.80	584		
61.00	3927	81.80	333	127.90	346		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5700.d
Lab Smp Id: BFB10Y Client Smp ID: BFB10Y
Inj Date : 24-JUN-2014 08:47
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10Y,BFB10Y
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140624.B\BFBSOM_V10.m
Meth Date : 24-Jun-2014 11:13 amarquis Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.832	4.800	(0.000)	95	24036			0.00- 100.00	100.00
4.832	4.800	(0.000)	50	9372			15.00- 40.00	38.99
4.832	4.800	(0.000)	75	15813			30.00- 80.00	65.79
4.832	4.800	(0.000)	96	1745			5.00- 9.00	7.26
4.832	4.800	(0.000)	173	173			0.00- 2.00	0.80
4.832	4.800	(0.000)	174	21494			50.00- 120.00	89.42
4.832	4.800	(0.000)	175	1709			5.00- 9.00	7.95
4.832	4.800	(0.000)	176	20805			95.00- 101.00	96.79
4.832	4.800	(0.000)	177	1432			5.00- 9.00	6.88

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5700.d

Date : 24-JUN-2014 08:47

Client ID: BFB10Y

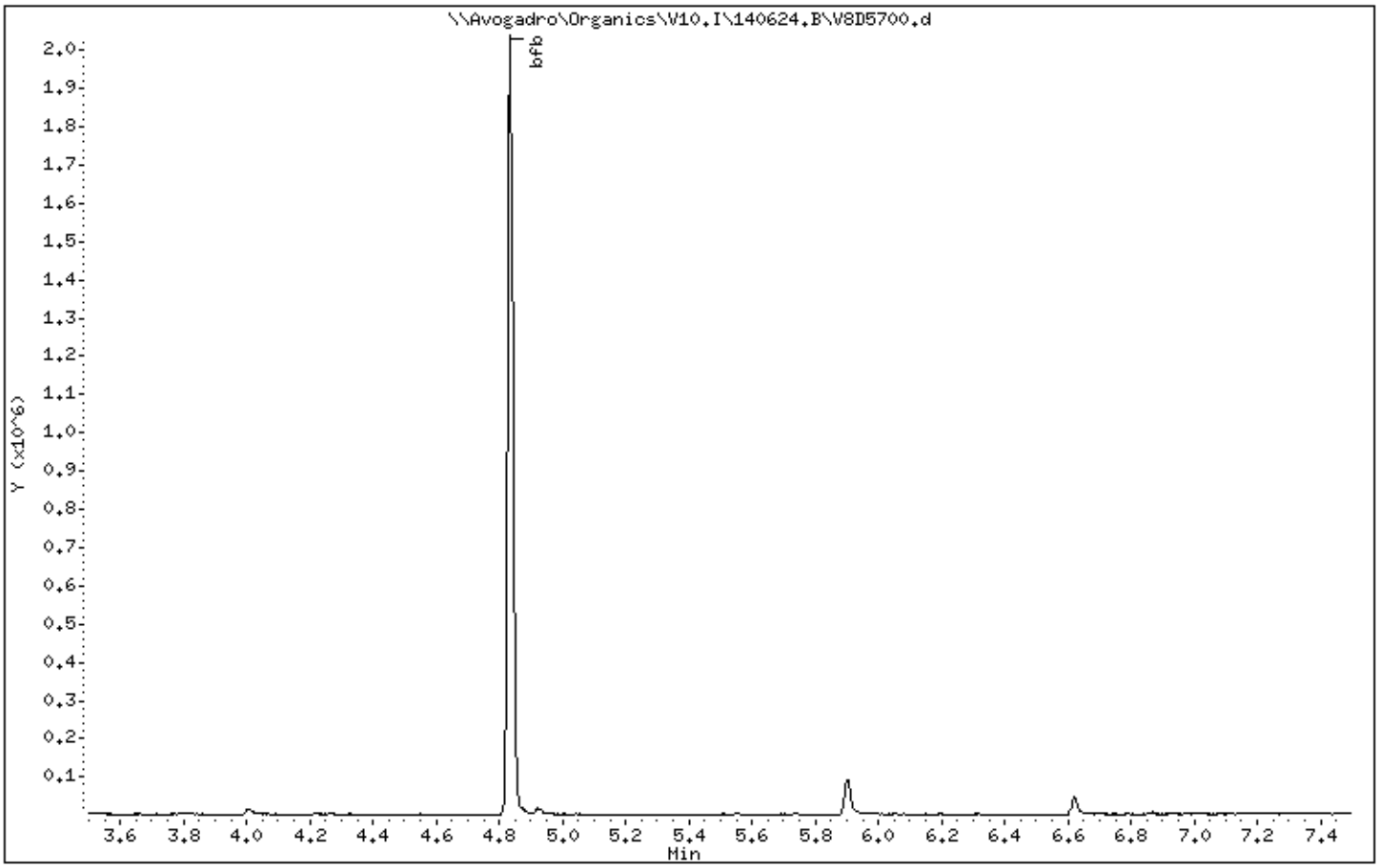
Instrument: V10.i

Sample Info: 5ML,BFB10Y,BFB10Y

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5700.d

Date : 24-JUN-2014 08:47

Client ID: BFB10Y

Instrument: V10.i

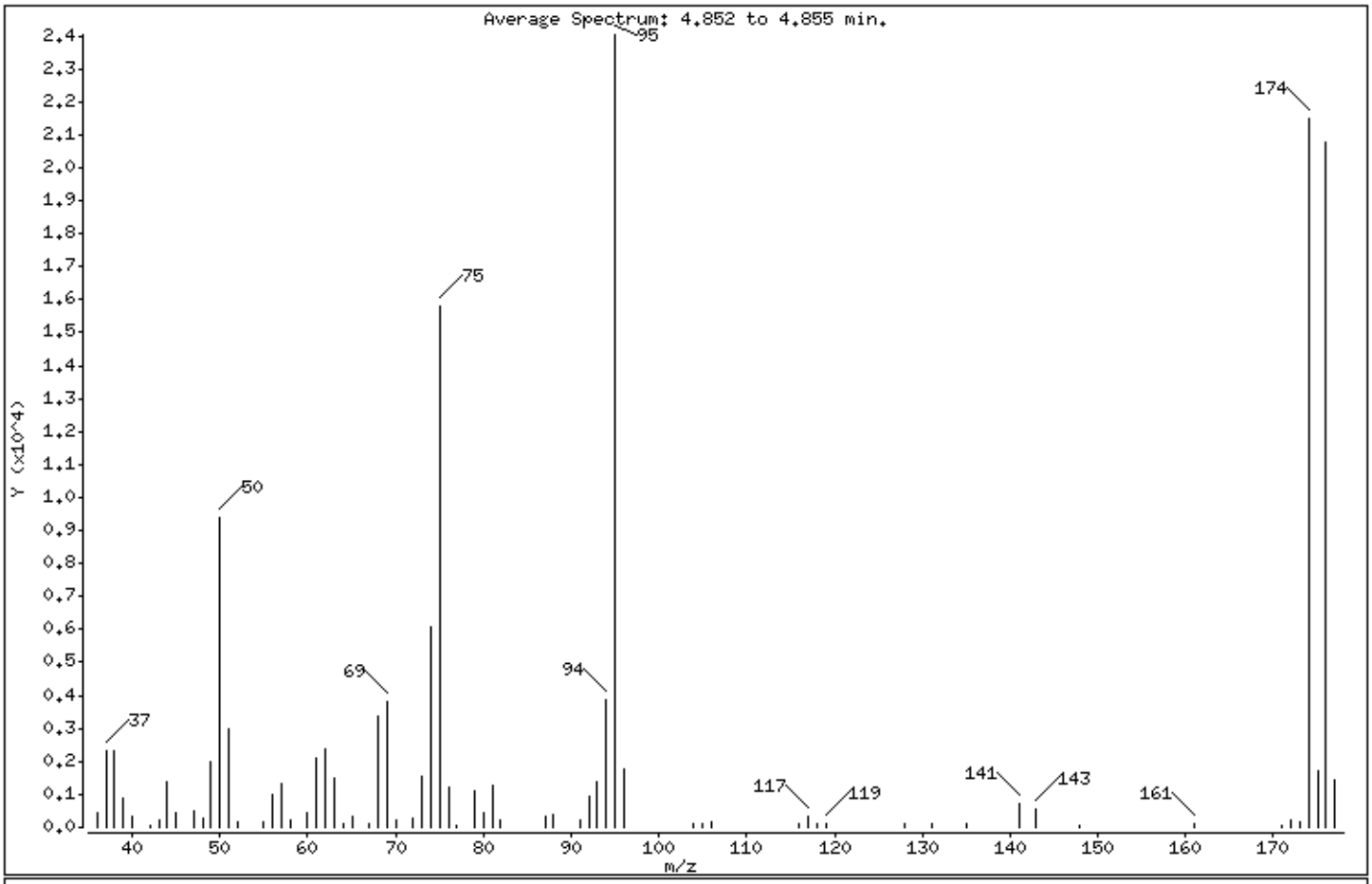
Sample Info: 5ML,BFB10Y,BFB10Y

Operator: WL SRC: WL

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	38.99
75	30.00 - 80.00% of mass 95	65.79
96	5.00 - 9.00% of mass 95	7.26
173	Less than 2.00% of mass 174	0.72 (0.80)
174	50.00 - 120.00% of mass 95	89.42
175	5.00 - 9.00% of mass 174	7.11 (7.95)
176	95.00 - 101.00% of mass 174	86.56 (96.79)
177	5.00 - 9.00% of mass 176	5.96 (6.88)

Date : 24-JUN-2014 08:47

Client ID: BFB10Y Instrument: V10.i

Sample Info: 5ML,BFB10Y,BFB10Y

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5700.d
Spectrum: Average Spectrum: 4.852 to 4.855 min.
Location of Maximum: 95.00
Number of points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	441	58.00	246	80.00	458	128.00	90
37.00	2330	60.00	459	81.00	1259	131.00	127
38.00	2296	61.00	2073	82.00	217	135.00	99
39.00	880	62.00	2393	87.00	310	141.00	722
40.00	338	63.00	1507	88.00	397	143.00	532
42.00	80	64.00	125	91.00	210	148.00	79
43.00	194	65.00	328	92.00	946	161.00	93
44.00	1370	67.00	101	93.00	1407	171.00	80
45.00	459	68.00	3361	94.00	3841	172.00	220
47.00	488	69.00	3828	95.00	24032	173.00	173
48.00	295	70.00	205	96.00	1745	174.00	21488
49.00	1990	72.00	299	104.00	84	175.00	1709
50.00	9372	73.00	1572	105.00	97	176.00	20800
51.00	2996	74.00	6055	106.00	145	177.00	1432
52.00	163	75.00	15813	116.00	106		
55.00	172	76.00	1220	117.00	331		
56.00	994	77.00	79	118.00	114		
57.00	1305	79.00	1102	119.00	114		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5730.d
Lab Smp Id: BFB10Z Client Smp ID: BFB10Z
Inj Date : 25-JUN-2014 07:20
Operator : WL SRC: WL Inst ID: V10.i
Smp Info : 5ML,BFB10Z,BFB10Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V10.I\140625.B\BFBSOM_V10.m
Meth Date : 27-Jun-2014 13:57 mscarpaci Quant Type: ISTD
Cal Date : 01-DEC-2012 00:40 Cal File: V8B5840.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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.835	4.800	(0.000)	95	135040			0.00- 100.00	100.00
4.835	4.800	(0.000)	50	52728			15.00- 40.00	39.05
4.835	4.800	(0.000)	75	93968			30.00- 80.00	69.59
4.835	4.800	(0.000)	96	9083			5.00- 9.00	6.73
4.835	4.800	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
4.835	4.800	(0.000)	174	113928			50.00- 120.00	84.37
4.835	4.800	(0.000)	175	9057			5.00- 9.00	7.95
4.835	4.800	(0.000)	176	109192			95.00- 101.00	95.84
4.835	4.800	(0.000)	177	6754			5.00- 9.00	6.19

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5730.d

Date : 25-JUN-2014 07:20

Client ID: BFB10Z

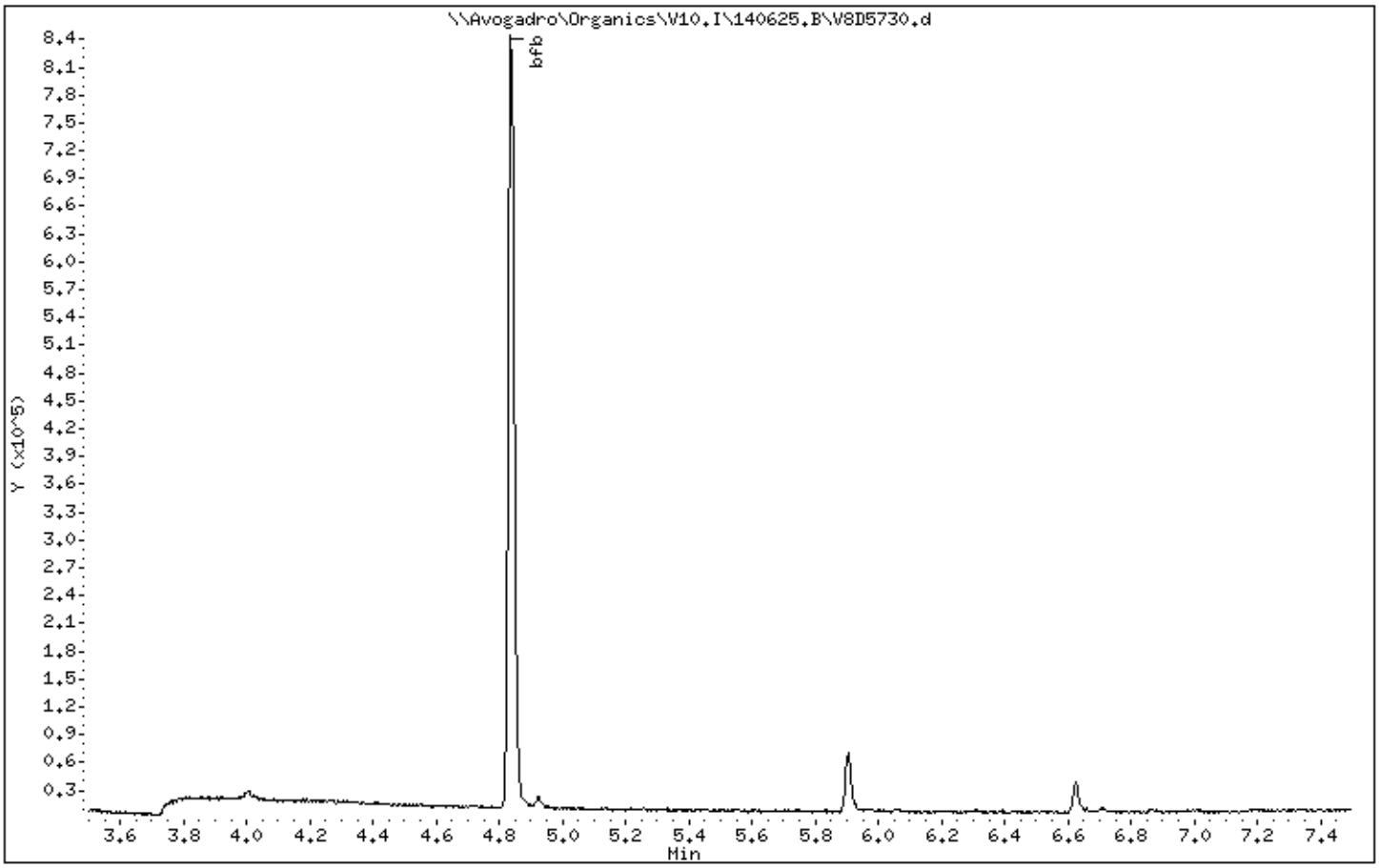
Instrument: V10.i

Sample Info: 5ML,BFB10Z,BFB10Z

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5730.d

Date : 25-JUN-2014 07:20

Client ID: BFB10Z

Instrument: V10.i

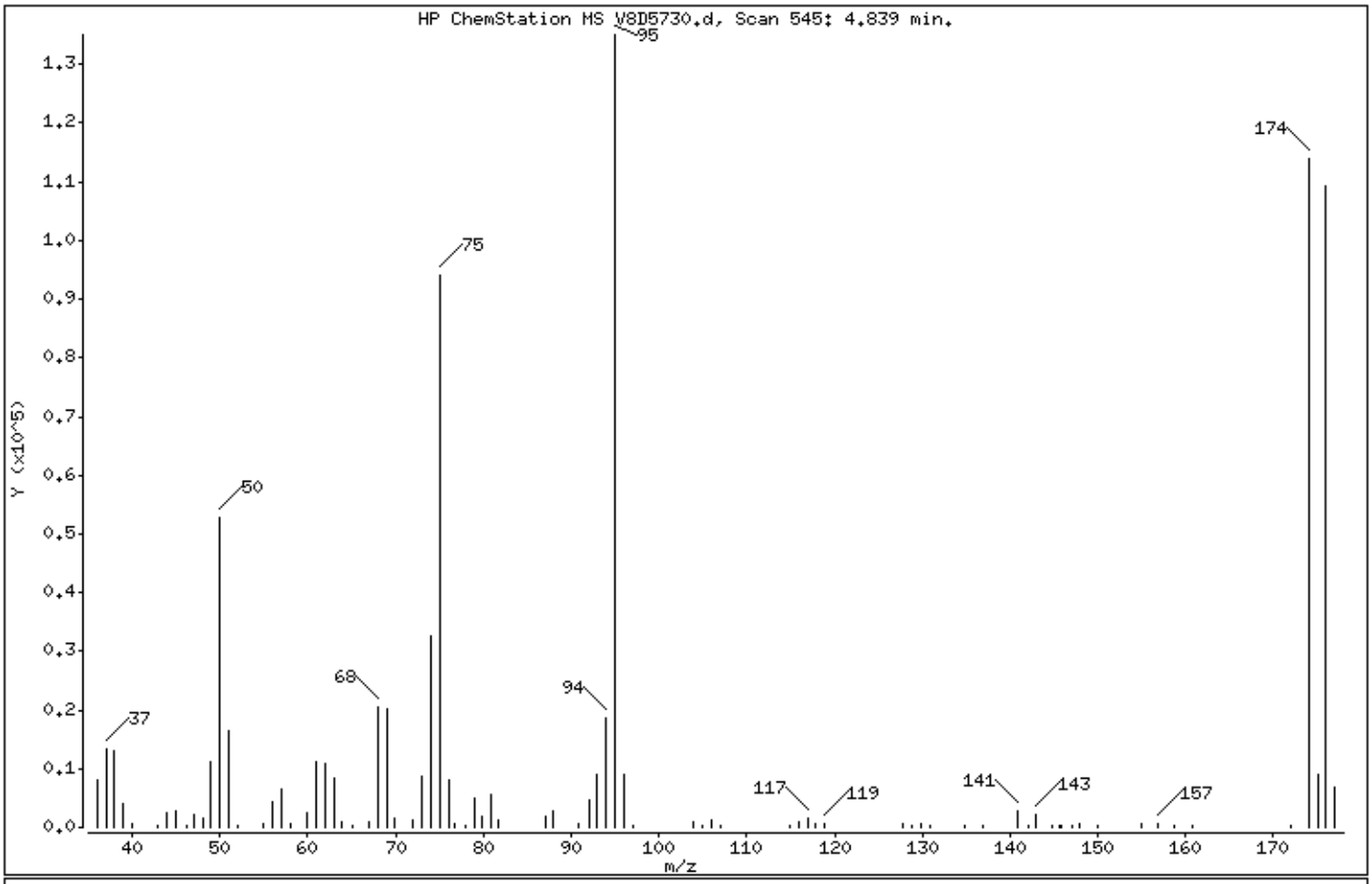
Sample Info: 5ML,BFB10Z,BFB10Z

Operator: WL SRC: WL

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	39.05
75	30.00 - 80.00% of mass 95	69.59
96	5.00 - 9.00% of mass 95	6.73
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	84.37
175	5.00 - 9.00% of mass 174	6.71 (7.95)
176	95.00 - 101.00% of mass 174	80.86 (95.84)
177	5.00 - 9.00% of mass 176	5.00 (6.19)

Date : 25-JUN-2014 07:20

Client ID: BFB10Z Instrument: V10.i

Sample Info: 5ML,BFB10Z,BFB10Z

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V8D5730.d
Spectrum: HP ChemStation MS V8D5730.d, Scan 545: 4.839 min.
Location of Maximum: 95.00
Number of points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7932	62.00	10775	90.90	775	137.00	236
37.10	13364	63.00	8525	92.00	4508	140.90	2859
38.00	12899	63.90	881	93.00	9032	142.00	303
39.00	4162	65.00	279	94.00	18496	143.00	2259
40.00	575	67.00	863	95.00	135040	144.80	249
42.90	432	68.00	20416	96.00	9083	145.60	288
44.00	2511	69.00	20096	97.10	331	145.90	272
45.00	2760	69.90	1415	103.90	966	147.00	254
46.20	221	72.00	1152	105.00	173	147.90	600
47.10	2095	73.00	8597	105.90	1125	150.00	344
48.00	1608	74.00	32616	107.00	186	155.00	576
49.00	11057	75.00	93968	114.90	294	156.80	596
50.00	52728	76.00	7919	115.90	827	158.80	325
51.00	16448	76.80	762	116.90	1577	160.80	318
52.00	332	77.90	301	117.90	544	172.00	452
54.90	593	79.00	5025	118.80	716	174.00	113928
56.00	4222	79.90	1908	127.80	576	175.00	9057
57.00	6625	80.90	5702	128.90	343	176.00	109192
58.00	628	81.80	1176	129.90	469	177.00	6754
60.00	2363	87.00	1793	130.80	346		
61.00	11070	87.90	2733	134.80	426		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5654.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5654.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5654.D

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

% Moisture: not dec. Date Analyzed: 06/23/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Report Date: 27-Jun-2014 13:32

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Lab Smp Id: MB-77721 Client Smp ID: MB-77721
Inj Date : 23-JUN-2014 14:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77721,MB-77721,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 68 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.641	4.641	(0.886)	72518	50.2920	50
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	11291	52.6415	53
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	164667	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	229933	49.1133	49
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	236331	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	154162	48.3080	48
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	128979	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Report Date: 27-Jun-2014 13:32

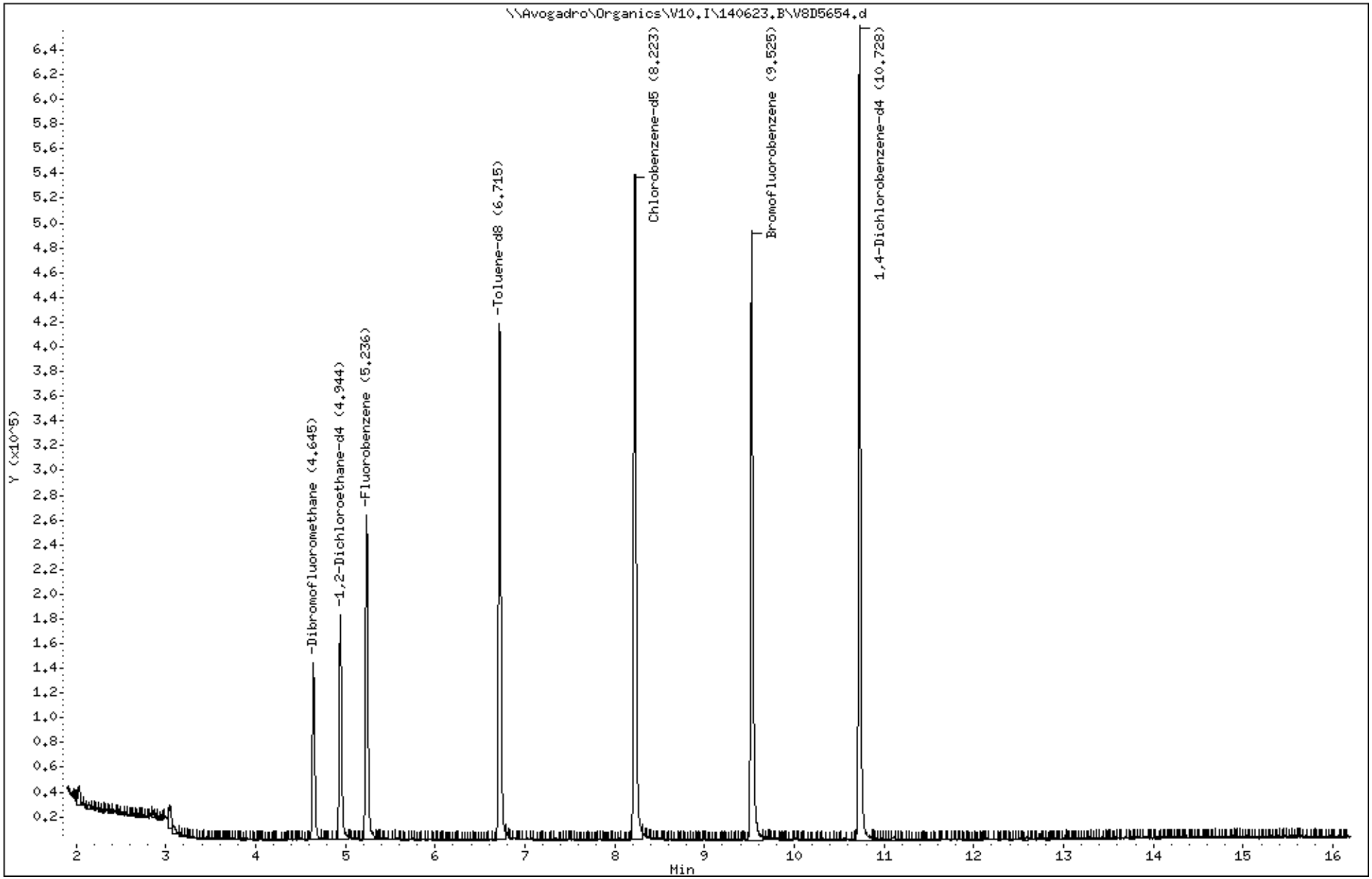
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Lab Smp Id: MB-77721 Client Smp ID: MB-77721
Inj Date : 23-JUN-2014 14:39
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77721,MB-77721,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:29 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 68 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5654.d
Date : 23-JUN-2014 14:39
Client ID: MB-77721
Instrument: V10.i
Sample Info: 5ML,MB-77721,MB-77721,77721
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5673.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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

EPA SAMPLE NO.

MB-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5673.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5673.D

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

% Moisture: not dec. Date Analyzed: 06/23/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5673.d
Report Date: 25-Jun-2014 15:22

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

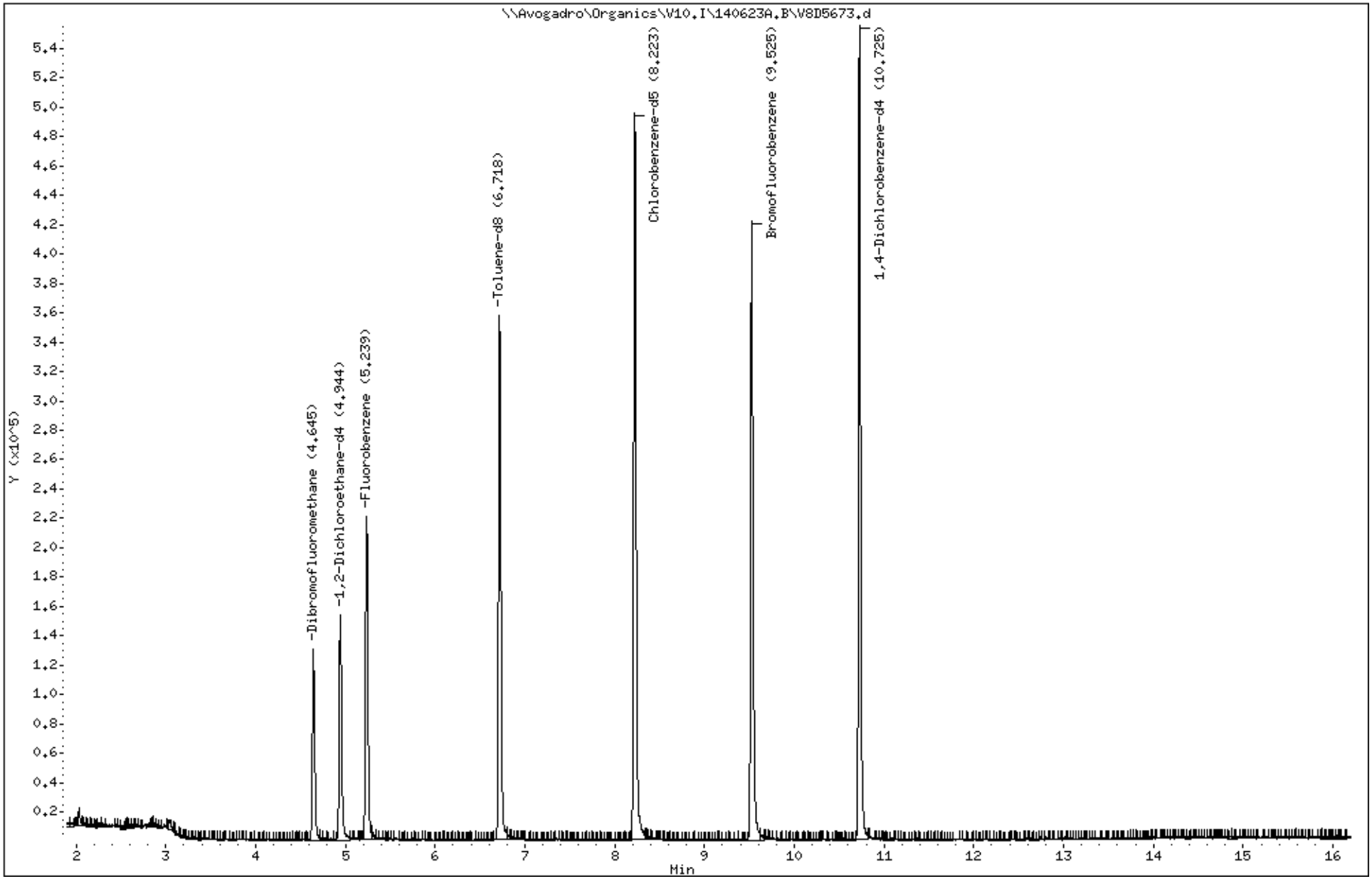
Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5673.d
Lab Smp Id: MB-77722 Client Smp ID: MB-77722
Inj Date : 23-JUN-2014 23:25
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77722,MB-77722,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 15:18 mscarpaci Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 87 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.641	4.644	(0.886)	64222	53.6095	54
$ 42 1,2-Dichloroethane-d4	102	4.940	4.943	(0.943)	9415	52.8349	53
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	136805	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	194465	46.9414	47
* 68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	209124	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	136346	48.2837	48
* 92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	111260	50.0000	

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5673.d
Date : 23-JUN-2014 23:25
Client ID: MB-77722
Instrument: V10.i
Sample Info: 5ML,MB-77722,MB-77722,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77738

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5704.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/24/2014

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

EPA SAMPLE NO.

MB-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77738

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5704.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/24/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77738

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5704.D

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

% Moisture: not dec. Date Analyzed: 06/24/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5704.d
Report Date: 26-Jun-2014 08:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5704.d
Lab Smp Id: MB-77738 Client Smp ID: MB-77738
Inj Date : 24-JUN-2014 10:48
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77738,MB-77738,77738
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140624.B\v108260Gadd-6lvl.m
Meth Date : 24-Jun-2014 09:18 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 60 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	4.644	4.644	(0.886)	53407	55.0296	55
$ 42 1,2-Dichloroethane-d4	102	4.943	4.946	(0.944)	8065	55.8657	56
* 46 Fluorobenzene	96	5.239	5.236	(1.000)	110831	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	162873	46.8888	47
* 68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	175347	50.0000	
$ 79 Bromofluorobenzene	95	9.528	9.525	(1.158)	109082	46.0698	46
* 92 1,4-Dichlorobenzene-d4	152	10.727	10.724	(1.000)	91688	50.0000	

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5704.d
Report Date: 26-Jun-2014 08:39

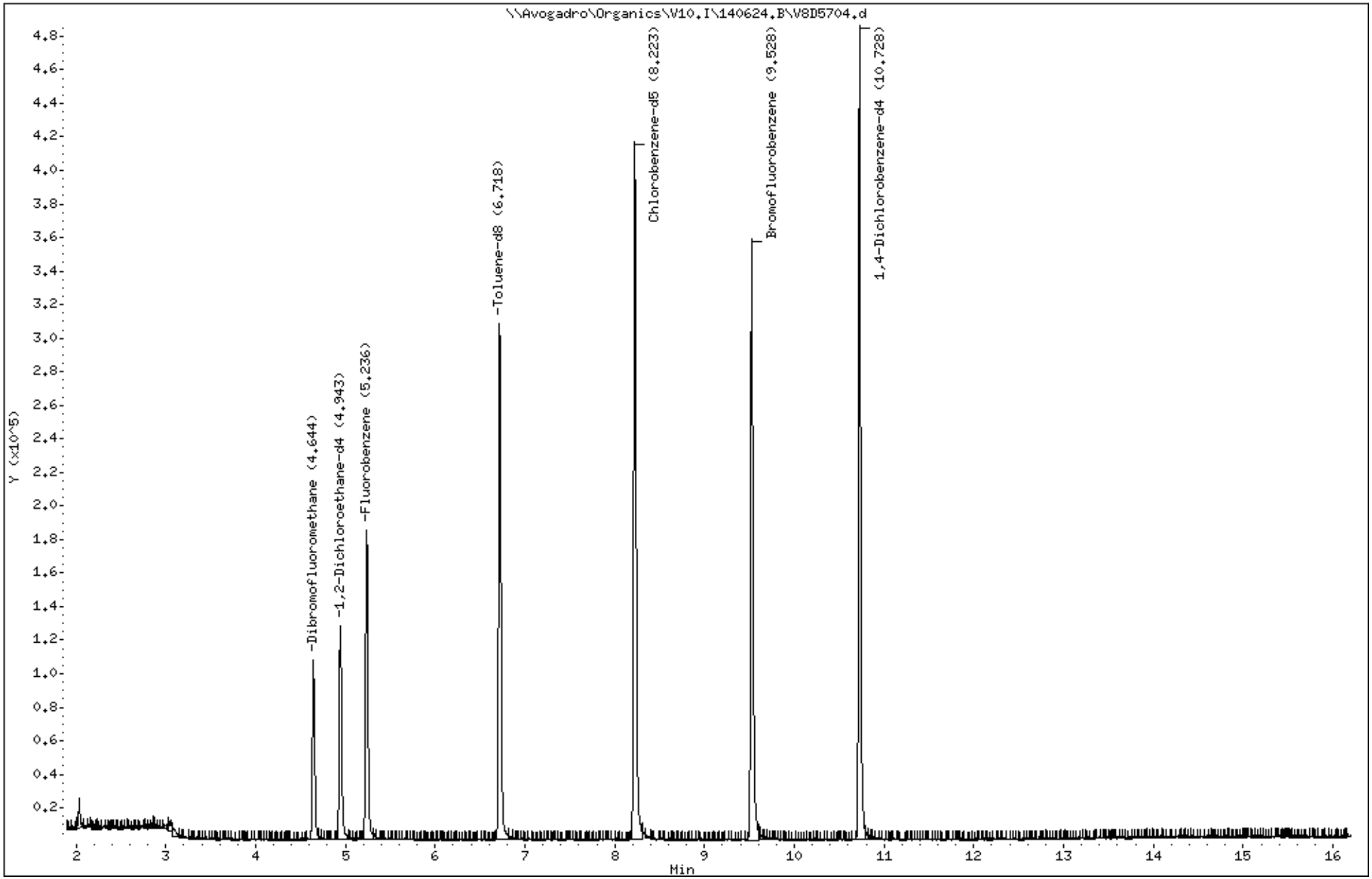
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5704.d
Lab Smp Id: MB-77738 Client Smp ID: MB-77738
Inj Date : 24-JUN-2014 10:48
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77738,MB-77738,77738
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140624.B\v108260Gadd-6lvl.m
Meth Date : 24-Jun-2014 09:18 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 60 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\V10.I\140624.B\V8D5704.d
Date : 24-JUN-2014 10:48
Client ID: MB-77738
Instrument: V10.i
Sample Info: 5ML,MB-77738,MB-77738,77738
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77766

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5734.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/25/2014

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

EPA SAMPLE NO.

MB-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77766

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5734.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/25/2014

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

EPA SAMPLE NO.

MB-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77766

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5734.D

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

% Moisture: not dec. Date Analyzed: 06/25/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5734.d
Report Date: 27-Jun-2014 14:00

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5734.d
Lab Smp Id: MB-77766 Client Smp ID: MB-77766
Inj Date : 25-JUN-2014 09:29
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77766,MB-77766,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 60 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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	4.647	4.647	(0.887)	52653	54.9800	55
$ 42 1,2-Dichloroethane-d4	102	4.943	4.949	(0.944)	7517	52.7677	53
* 46 Fluorobenzene	96	5.239	5.239	(1.000)	109365	50.0000	
$ 58 Toluene-d8	98	6.718	6.718	(0.817)	169928	45.1138	45
* 68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	190140	50.0000	
$ 79 Bromofluorobenzene	95	9.525	9.525	(1.158)	123298	48.0225	48
* 92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	104964	50.0000	

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5734.d
Report Date: 27-Jun-2014 14:00

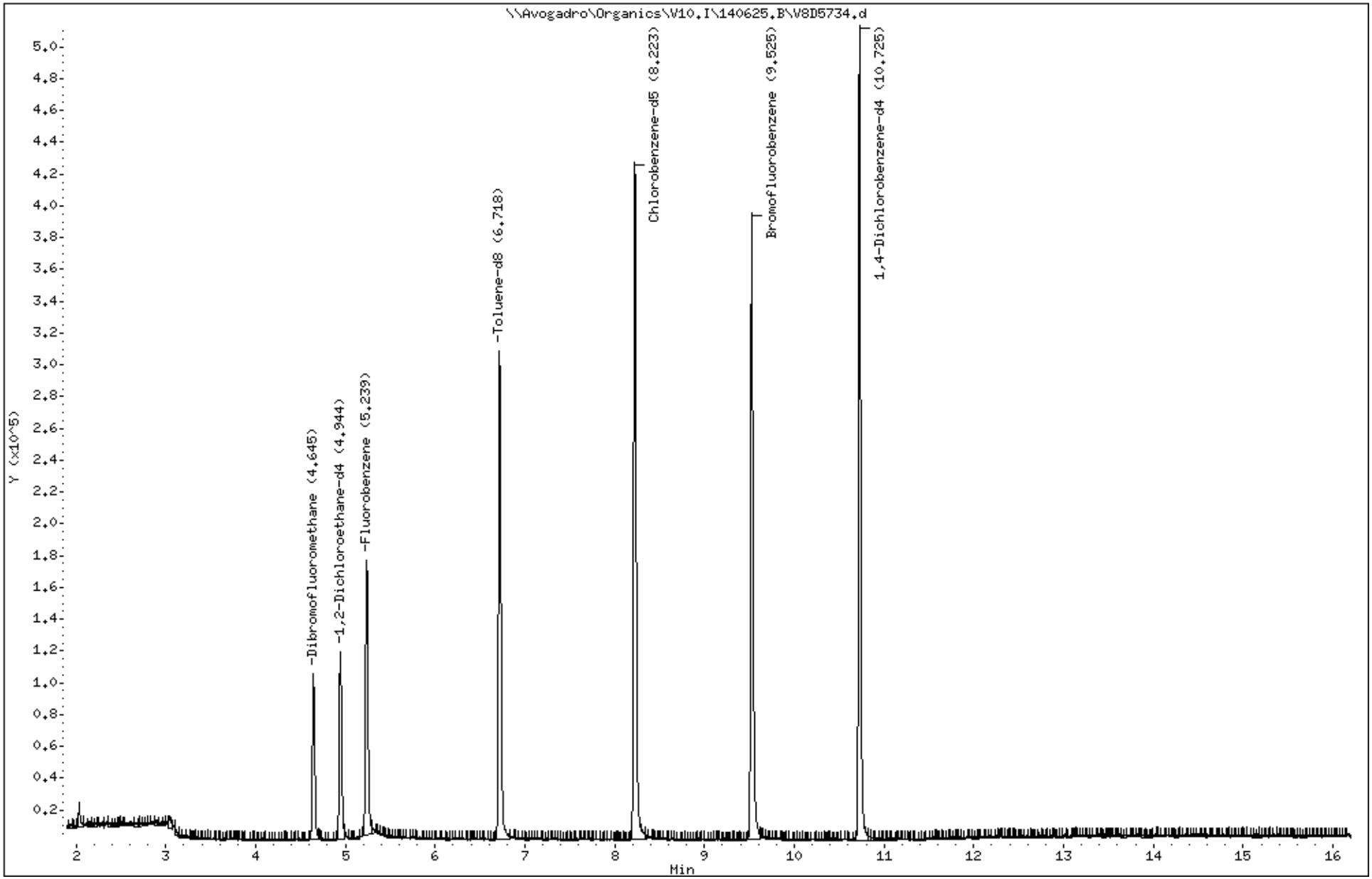
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5734.d
Lab Smp Id: MB-77766 Client Smp ID: MB-77766
Inj Date : 25-JUN-2014 09:29
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,MB-77766,MB-77766,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 60 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5734.d
Date : 25-JUN-2014 09:29
Client ID: MB-77766
Instrument: V10.i
Sample Info: 5ML,MB-77766,MB-77766,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9894.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/2014

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

EPA SAMPLE NO.

MB-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9894.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9894.D

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

% Moisture: not dec. Date Analyzed: 06/26/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9894.D
Report Date: 27-Jun-2014 10:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9894.D
Lab Smp Id: MB-77805 Client Smp ID: MB-77805
Inj Date : 26-JUN-2014 13:06
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5G,MB-77805,MB-77805,77805
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 47 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

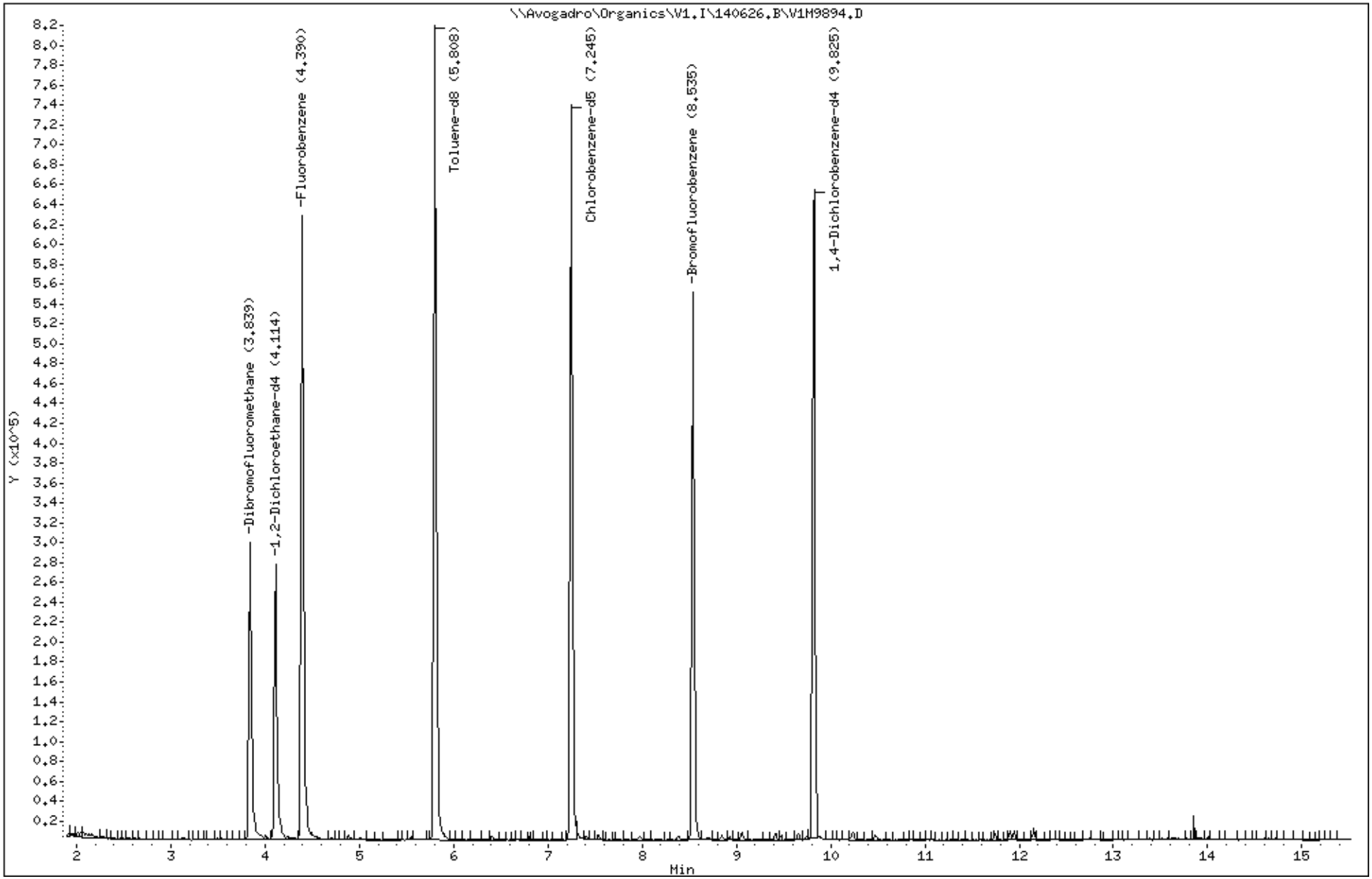
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 36 Dibromofluoromethane	113	3.838	3.841	(0.872)	200071	50.6063	51
$ 42 1,2-Dichloroethane-d4	102	4.114	4.107	(0.935)	41121	51.5665	52
* 46 Fluorobenzene	96	4.399	4.393	(1.000)	595222	50.0000	
$ 58 Toluene-d8	98	5.807	5.801	(0.802)	554313	50.1593	50
* 68 Chlorobenzene-d5	117	7.245	7.248	(1.000)	413257	50.0000	
$ 79 Bromofluorobenzene	95	8.535	8.538	(1.178)	237358	47.9683	48
* 92 1,4-Dichlorobenzene-d4	152	9.824	9.828	(1.000)	156729	50.0000	(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9894.D
Date : 26-JUN-2014 13:06
Client ID: MB-77805
Instrument: V1.i
Sample Info: 5G,MB-77805,MB-77805,77805
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5753.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	42	
74-87-3	Chloromethane	41	
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	190	
67-64-1	Acetone	31	
74-88-4	Iodomethane	31	
75-15-0	Carbon disulfide	46	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	200	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	43	
156-59-2	cis-1,2-Dichloroethene	61	
594-20-7	2,2-Dichloropropane	47	
74-97-5	Bromochloromethane	54	
67-66-3	Chloroform	54	
71-55-6	1,1,1-Trichloroethane	1100	E
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	55	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	820	E
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	55	
10061-01-5	cis-1,3-Dichloropropene	54	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	49	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	42	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5753.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	33	
124-48-1	Dibromochloromethane	43	
106-93-4	1,2-Dibromoethane	41	
108-90-7	Chlorobenzene	42	
630-20-6	1,1,1,2-Tetrachloroethane	42	
100-41-4	Ethylbenzene	38	
179601-23-1	m,p-Xylene	80	
95-47-6	o-Xylene	42	
1330-20-7	Xylene (Total)	120	
100-42-5	Styrene	41	
75-25-2	Bromoform	42	
98-82-8	Isopropylbenzene	38	
79-34-5	1,1,2,2-Tetrachloroethane	36	
108-86-1	Bromobenzene	36	
96-18-4	1,2,3-Trichloropropane	36	
103-65-1	n-Propylbenzene	35	
95-49-8	2-Chlorotoluene	36	
108-67-8	1,3,5-Trimethylbenzene	35	
106-43-4	4-Chlorotoluene	36	
98-06-6	tert-Butylbenzene	33	
95-63-6	1,2,4-Trimethylbenzene	37	
135-98-8	sec-Butylbenzene	35	
99-87-6	4-Isopropyltoluene	35	
541-73-1	1,3-Dichlorobenzene	36	
106-46-7	1,4-Dichlorobenzene	34	
104-51-8	n-Butylbenzene	33	
95-50-1	1,2-Dichlorobenzene	37	
96-12-8	1,2-Dibromo-3-chloropropane	34	
120-82-1	1,2,4-Trichlorobenzene	31	
87-68-3	Hexachlorobutadiene	32	
87-61-6	1,2,3-Trichlorobenzene	35	
91-20-3	Naphthalene	31	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2300	E

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5753.d
Report Date: 27-Jun-2014 14:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5753.d
Lab Smp Id: N1082-13AMS Client Smp ID: MW-22S_6/19/14MS
Inj Date : 25-JUN-2014 18:16
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-13AMS,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 79 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	73733	42.3572	42
2	Freon114	85	1.705	1.705	(0.326)	61626	44.1308	44
3	Chloromethane	50	1.753	1.753	(0.335)	95808	41.4204	41
4	Vinyl Chloride	62	1.856	1.856	(0.354)	89063	44.8503	45(Q)
5	Bromomethane	94	2.139	2.142	(0.408)	23680	43.6119	44
6	Chloroethane	64	2.229	2.229	(0.426)	61227	53.8329	54
7	Trichlorofluoromethane	101	2.445	2.445	(0.467)	164034	47.7051	48
126	Ethanol	46	2.567	2.567	(0.490)	58416	4661.64	4700(A)
8	Ether	59	2.670	2.670	(0.510)	85035	48.9199	49
9	Acrolein	56	2.769	2.769	(0.529)	115727	237.626	240
10	1,1-Dichloroethene	96	2.856	2.859	(0.545)	253754	190.102	190(R)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	3822396	2286.39	2300(AR)
12	Acetone	58	2.888	2.892	(0.551)	10848	31.1134	31
13	Iodomethane	142	2.985	2.985	(0.570)	21853	30.9291	31(R)
14	Carbon Disulfide	76	3.046	3.049	(0.581)	211182	46.3704	46
15	Acetonitrile	41	3.139	3.139	(0.599)	205234	457.033	460(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	166728	48.2317	48
17	Methyl Acetate	43	3.146	3.146	(0.600)	131787	49.9039	50
18	Methylene Chloride	84	3.229	3.232	(0.616)	64800	52.5566	52
19	tert-Butanol	59	3.300	3.300	(0.630)	24703	86.1021	86
20	Acrylonitrile	53	3.422	3.422	(0.653)	53975	52.3435	52
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	63142	51.4806	51

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5753.d
Report Date: 27-Jun-2014 14:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.448	(0.658)	242688	52.3948	52
	23 1,1-Dichloroethane	63	3.782	3.785	(0.722)	662470	199.533	200(R)
	24 Vinyl acetate	43	3.818	3.818	(0.729)	471619	54.1127	54
	25 Diisopropyl Ether	45	3.821	3.827	(0.729)	447187	52.4443	52
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.737)	224167	53.3447	53
	27 Ethyl tert-butyl ether	59	4.117	4.120	(0.786)	327617	53.1714	53
	29 2,2-Dichloropropane	77	4.258	4.261	(0.813)	146621	47.4013	47
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.812)	74968	61.1462	61
	30 2-Butanone	72	4.265	4.258	(0.814)	7569	42.6873	43(Q)
	32 Propionitrile	54	4.303	4.306	(0.821)	184151	513.634	510(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	175434	105.537	100
	34 Bromochloromethane	128	4.454	4.454	(0.850)	30645	53.8243	54
	31 Tetrahydrofuran	72	4.502	4.499	(0.859)	16685	103.429	100
	35 Chloroform	83	4.509	4.509	(0.861)	171328	53.8826	54
$	36 Dibromofluoromethane	113	4.644	4.647	(0.886)	57731	55.6165	56
	37 1,1,1-Trichloroethane	97	4.683	4.682	(0.894)	3802997	1132.79	1100(AR)
	38 Cyclohexane	56	4.740	4.744	(0.905)	176020	52.9215	53
	39 1,1-Dichloropropene	110	4.824	4.824	(0.921)	29864	52.9747	53
	40 Carbon Tetrachloride	117	4.827	4.830	(0.921)	160347	55.1970	55
	41 Isobutyl Alcohol	43	5.078	5.078	(0.969)	136079	1051.80	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.949	(0.943)	8957	58.0096	58
	43 Benzene	78	5.004	5.004	(0.955)	227041	52.0337	52
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	217796	54.5477	54
	45 tert-Amyl methyl ether	73	5.078	5.078	(0.969)	193126	52.9466	53
M	50 1,2-Dichloroethene (Total)	96				138110	112.627	110
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	118540	50.0000	
	47 Trichloroethene	130	5.563	5.563	(1.062)	1057526	823.532	820(AR)
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	93982	52.7361	53
	49 1,2-Dichloropropane	63	5.772	5.772	(1.102)	78832	53.0797	53
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	52571	52.4097	52
	52 Dibromomethane	93	5.882	5.882	(1.123)	55184	54.7081	55
	53 1,4-Dioxane	88	5.885	5.882	(1.123)	15323	1035.20	1000(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.148)	132772	54.7643	55
	55 2-Chloroethyl vinyl ether	63	6.438	6.448	(1.229)	922	53.1136	53
	56 cis-1,3-Dichloropropene	75	6.444	6.444	(1.230)	102627	54.2524	54
	57 4-Methyl-2-pentanone	43	6.583	6.586	(1.257)	127477	50.3017	50
$	58 Toluene-d8	98	6.718	6.718	(0.817)	190908	43.5750	44
	59 Toluene	91	6.785	6.785	(1.295)	242451	51.8688	52
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	108305	49.0433	49
	61 Ethyl Methacrylate	69	7.071	7.068	(1.350)	58390	51.6349	52
	62 1,1,2-Trichloroethane	97	7.178	7.178	(1.370)	58126	53.7007	54
	63 Tetrachloroethene	164	7.342	7.345	(0.893)	62323	39.8959	40
	64 1,3-Dichloropropane	76	7.354	7.358	(0.894)	105818	42.1246	42
	65 2-Hexanone	43	7.432	7.432	(0.904)	84632	33.1932	33
	66 Dibromochloromethane	129	7.596	7.592	(0.924)	87015	42.7015	43
	67 1,2-Dibromoethane	107	7.727	7.727	(0.940)	64632	40.8025	41
	69 1-Chlorohexane	91	8.216	8.213	(0.999)	76886	36.4970	36(Q)
*	68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	221159	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	169627	42.0419	42
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	77276	41.6538	42
	72 Ethylbenzene	106	8.370	8.370	(1.018)	80781	38.4181	38
	73 m,p-Xylene	106	8.496	8.499	(1.033)	199464	79.7755	80
	74 o-Xylene	106	8.946	8.946	(1.088)	97994	41.9207	42
	75 Styrene	104	8.962	8.959	(1.090)	158394	41.4097	41

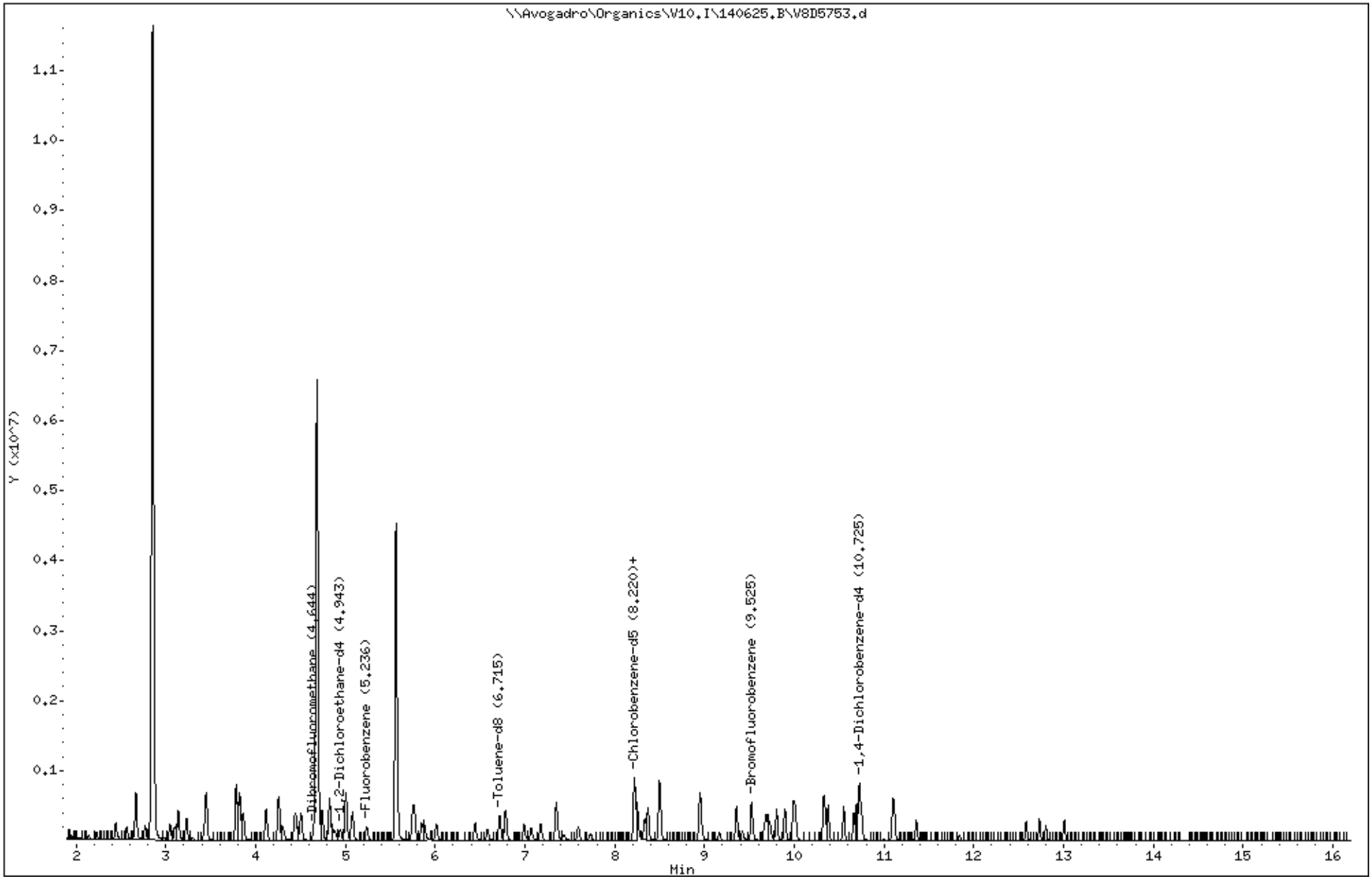
Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5753.d
Report Date: 27-Jun-2014 14:01

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.168	9.165	(1.115)	54232	42.1840	42
	77	Isopropylbenzene	105	9.354	9.358	(1.138)	277559	38.2416	38
	78	trans-1,4-Dichloro-2-butene	75	9.428	9.425	(1.147)	17636	35.9165	36
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	164920	55.2244	55
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	82314	35.9782	36
	81	Bromobenzene	156	9.692	9.692	(0.904)	73347	36.3954	36(R)
	82	1,2,3-Trichloropropane	75	9.718	9.724	(0.906)	108569	36.2824	36(R)
	83	n-Propylbenzene	120	9.804	9.804	(0.914)	62188	35.1731	35
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	60928	35.9688	36(R)
	85	1,3,5-Trimethylbenzene	105	9.991	9.988	(0.932)	242273	35.2304	35(R)
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	62194	35.6360	36(R)
M	94	Xylene (Total)	106				297458	121.696	120
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	227966	32.7741	33(R)
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	237479	36.8880	37(R)
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	266084	34.7356	35(R)
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	122549	35.5673	36(R)
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	233516	35.4153	35(R)
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	147935	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	125861	33.9431	34(R)
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	206521	32.9337	33(R)
	96	1,2-Dichlorobenzene	146	11.113	11.110	(1.036)	122038	37.1196	37
	97	Hexachloroethane	117	11.361	11.357	(1.059)	43948	33.7644	34
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	19480	34.4175	34
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	65050	30.9470	31(R)
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	48457	31.8858	32
	101	Naphthalene	128	12.804	12.801	(1.194)	131357	31.2090	31
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	66232	34.7282	35

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5753.d
Date : 25-JUN-2014 18:16
Client ID: MW-22S_6/19/14MS
Instrument: V10.i
Sample Info: 5ML,N1082-13AMS,,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5754.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	49	
74-87-3	Chloromethane	50	
75-01-4	Vinyl chloride	53	
74-83-9	Bromomethane	53	
75-00-3	Chloroethane	59	
75-69-4	Trichlorofluoromethane	54	
75-35-4	1,1-Dichloroethene	200	E
67-64-1	Acetone	34	
74-88-4	Iodomethane	47	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	54	
156-60-5	trans-1,2-Dichloroethene	56	
1634-04-4	Methyl tert-butyl ether	54	
75-34-3	1,1-Dichloroethane	210	E
108-05-4	Vinyl acetate	57	
78-93-3	2-Butanone	54	
156-59-2	cis-1,2-Dichloroethene	65	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	57	
71-55-6	1,1,1-Trichloroethane	1200	E
563-58-6	1,1-Dichloropropene	60	
56-23-5	Carbon tetrachloride	61	
107-06-2	1,2-Dichloroethane	54	
71-43-2	Benzene	56	
79-01-6	Trichloroethene	830	E
78-87-5	1,2-Dichloropropane	56	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	57	
10061-01-5	cis-1,3-Dichloropropene	57	
108-10-1	4-Methyl-2-pentanone	58	
108-88-3	Toluene	58	
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	56	
142-28-9	1,3-Dichloropropane	42	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-22S_6/19/14MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1082-13AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5754.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/20/2014

% Moisture: not dec. Date Analyzed: 06/25/2014

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	45	
591-78-6	2-Hexanone	39	
124-48-1	Dibromochloromethane	43	
106-93-4	1,2-Dibromoethane	43	
108-90-7	Chlorobenzene	45	
630-20-6	1,1,1,2-Tetrachloroethane	43	
100-41-4	Ethylbenzene	43	
179601-23-1	m,p-Xylene	89	
95-47-6	o-Xylene	45	
1330-20-7	Xylene (Total)	130	
100-42-5	Styrene	43	
75-25-2	Bromoform	44	
98-82-8	Isopropylbenzene	43	
79-34-5	1,1,2,2-Tetrachloroethane	41	
108-86-1	Bromobenzene	41	
96-18-4	1,2,3-Trichloropropane	42	
103-65-1	n-Propylbenzene	43	
95-49-8	2-Chlorotoluene	43	
108-67-8	1,3,5-Trimethylbenzene	42	
106-43-4	4-Chlorotoluene	41	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	44	
135-98-8	sec-Butylbenzene	43	
99-87-6	4-Isopropyltoluene	43	
541-73-1	1,3-Dichlorobenzene	40	
106-46-7	1,4-Dichlorobenzene	38	
104-51-8	n-Butylbenzene	40	
95-50-1	1,2-Dichlorobenzene	41	
96-12-8	1,2-Dibromo-3-chloropropane	42	
120-82-1	1,2,4-Trichlorobenzene	37	
87-68-3	Hexachlorobutadiene	38	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	38	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2300	E

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5754.d
Report Date: 27-Jun-2014 14:01

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5754.d
Lab Smp Id: N1082-13AMSD Client Smp ID: MW-22S_6/19/14MSD
Inj Date : 25-JUN-2014 18:44
Operator : WL   SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,N1082-13AMSD,,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 80 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	81035	49.1377	49
2	Freon114	85	1.705	1.705	(0.326)	64663	48.8778	49
3	Chloromethane	50	1.754	1.753	(0.335)	108823	49.6605	50
4	Vinyl Chloride	62	1.853	1.856	(0.354)	98933	52.5880	52(Q)
5	Bromomethane	94	2.139	2.142	(0.408)	27412	53.2895	53
6	Chloroethane	64	2.226	2.229	(0.425)	63678	59.0978	59
7	Trichlorofluoromethane	101	2.445	2.445	(0.467)	174758	53.6470	54
126	Ethanol	46	2.567	2.567	(0.490)	63393	5339.81	5300(A)
8	Ether	59	2.667	2.670	(0.509)	82484	50.0882	50
9	Acrolein	56	2.773	2.769	(0.529)	123506	267.685	270
10	1,1-Dichloroethene	96	2.856	2.859	(0.545)	256182	202.582	200(R)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	3711816	2343.61	2300(AR)
12	Acetone	58	2.889	2.892	(0.551)	11089	33.5713	34
13	Iodomethane	142	2.982	2.985	(0.569)	31372	46.8679	47
14	Carbon Disulfide	76	3.046	3.049	(0.581)	230593	53.7033	54
15	Acetonitrile	41	3.136	3.139	(0.599)	212133	498.637	500(A)
16	Allyl Chloride	39	3.136	3.139	(0.599)	171786	52.4553	52
17	Methyl Acetate	43	3.146	3.146	(0.600)	137259	54.8631	55
18	Methylene Chloride	84	3.229	3.232	(0.616)	63495	54.3587	54
19	tert-Butanol	59	3.297	3.300	(0.629)	31422	115.605	120
20	Acrylonitrile	53	3.422	3.422	(0.653)	56894	58.2390	58
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	65133	56.0536	56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.448	(0.658)	236391	53.8701	54
	23 1,1-Dichloroethane	63	3.786	3.785	(0.723)	646005	205.382	200(AR)
	24 Vinyl acetate	43	3.818	3.818	(0.729)	473591	57.3573	57
	25 Diisopropyl Ether	45	3.824	3.827	(0.730)	447915	55.4475	55
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.737)	235249	59.0915	59
	27 Ethyl tert-butyl ether	59	4.120	4.120	(0.786)	319768	54.7802	55
	29 2,2-Dichloropropane	77	4.258	4.261	(0.813)	152490	52.0371	52
	28 cis-1,2-Dichloroethene	96	4.252	4.255	(0.812)	75391	64.9068	65(R)
	30 2-Butanone	72	4.255	4.258	(0.812)	9087	54.0952	54(Q)
	32 Propionitrile	54	4.303	4.306	(0.821)	201691	593.805	590(A)
	33 Methacrylonitrile	41	4.435	4.435	(0.847)	184006	116.843	120
	34 Bromochloromethane	128	4.454	4.454	(0.850)	28457	52.7577	53
	31 Tetrahydrofuran	72	4.503	4.499	(0.859)	18061	118.178	120
	35 Chloroform	83	4.509	4.509	(0.861)	172354	57.2162	57
$	36 Dibromofluoromethane	113	4.644	4.647	(0.886)	54812	55.7376	56
	37 1,1,1-Trichloroethane	97	4.683	4.682	(0.894)	3705685	1165.12	1200(AR)
	38 Cyclohexane	56	4.737	4.744	(0.904)	194424	61.7017	62
	39 1,1-Dichloropropene	110	4.821	4.824	(0.920)	32221	60.3305	60
	40 Carbon Tetrachloride	117	4.831	4.830	(0.922)	167382	60.8192	61
	41 Isobutyl Alcohol	43	5.081	5.078	(0.970)	129329	1055.15	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.949	(0.944)	7519	51.4014	51
	43 Benzene	78	5.001	5.004	(0.955)	231342	55.9644	56
	44 1,2-Dichloroethane	62	5.011	5.007	(0.956)	205510	54.3297	54
	45 tert-Amyl methyl ether	73	5.081	5.078	(0.970)	186237	53.8940	54
M	50 1,2-Dichloroethene (Total)	96				140524	120.960	120
*	46 Fluorobenzene	96	5.239	5.239	(1.000)	112302	50.0000	
	47 Trichloroethene	130	5.564	5.563	(1.062)	1009379	829.700	830(AR)
	48 Methylcyclohexane	83	5.753	5.753	(1.098)	95809	56.7476	57
	49 1,2-Dichloropropane	63	5.769	5.772	(1.101)	78093	55.5029	56
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	55143	58.0274	58
	52 Dibromomethane	93	5.879	5.882	(1.122)	52434	54.8693	55
	53 1,4-Dioxane	88	5.882	5.882	(1.123)	17232	1228.83	1200(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.148)	130988	57.0296	57
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.230)	1019	61.3654	61
	56 cis-1,3-Dichloropropene	75	6.445	6.444	(1.230)	101704	56.7509	57
	57 4-Methyl-2-pentanone	43	6.583	6.586	(1.257)	139184	57.9719	58
$	58 Toluene-d8	98	6.718	6.718	(0.817)	179196	42.4840	42
	59 Toluene	91	6.785	6.785	(1.295)	254802	57.5390	58
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	105567	50.4363	50
	61 Ethyl Methacrylate	69	7.072	7.068	(1.350)	58023	54.1605	54
	62 1,1,2-Trichloroethane	97	7.178	7.178	(1.370)	57734	56.3013	56
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	67849	45.1136	45
	64 1,3-Dichloropropane	76	7.355	7.358	(0.894)	102280	42.2913	42
	65 2-Hexanone	43	7.435	7.432	(0.904)	96159	39.1731	39
	66 Dibromochloromethane	129	7.593	7.592	(0.923)	84373	43.0067	43
	67 1,2-Dibromoethane	107	7.731	7.727	(0.940)	64883	42.5455	42
	69 1-Chlorohexane	91	8.216	8.213	(0.999)	84012	41.4224	41
*	68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	212922	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	176335	45.3952	45
	71 1,1,1,2-Tetrachloroethane	131	8.332	8.335	(1.013)	75998	42.5497	42
	72 Ethylbenzene	106	8.367	8.370	(1.018)	86666	42.8684	43
	73 m,p-Xylene	106	8.499	8.499	(1.034)	214727	89.2022	89
	74 o-Xylene	106	8.943	8.946	(1.088)	101108	44.9261	45
	75 Styrene	104	8.959	8.959	(1.090)	158573	43.0603	43

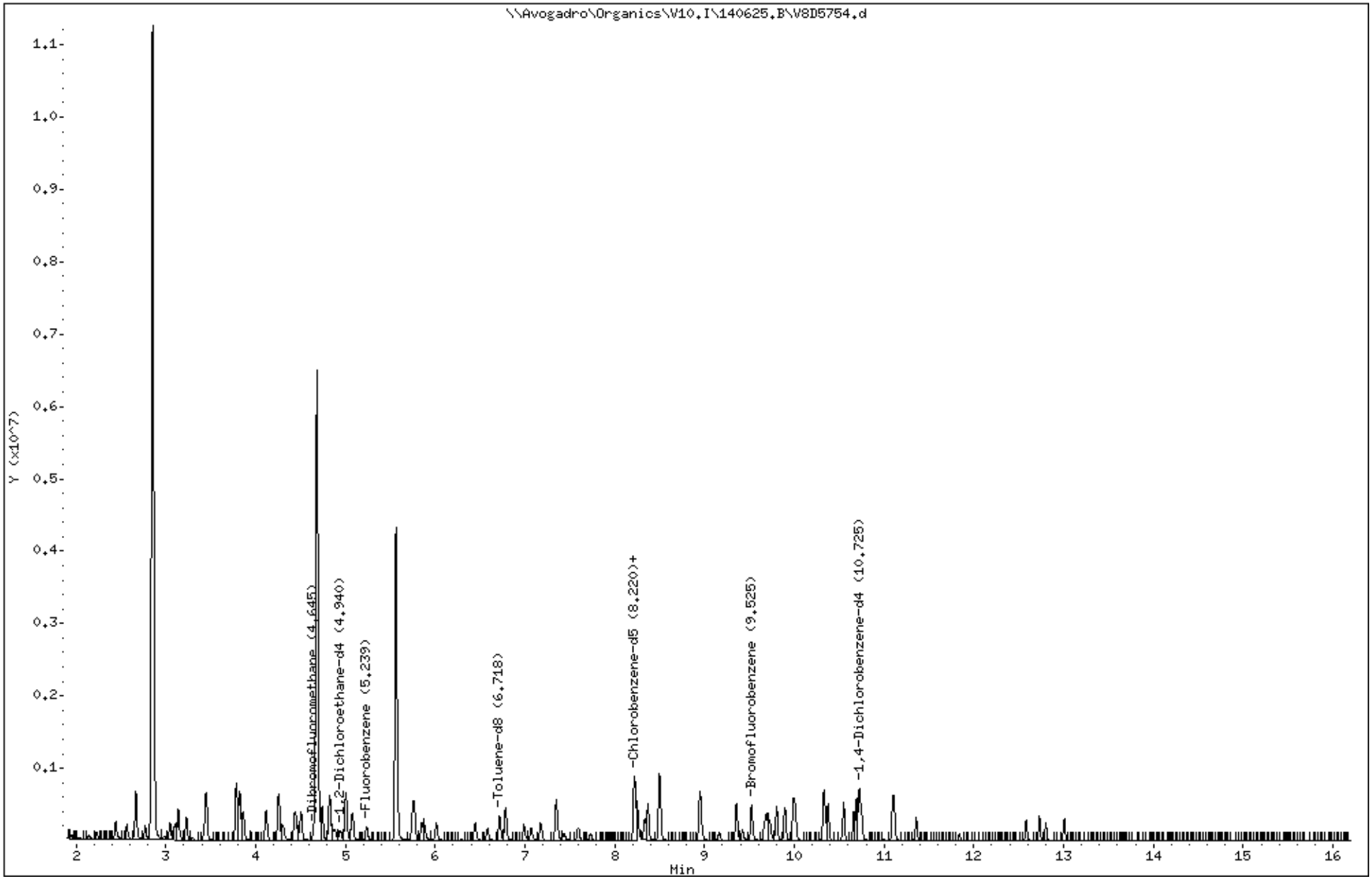
Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5754.d
Report Date: 27-Jun-2014 14:01

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	54431	43.9767	44
	77	Isopropylbenzene	105	9.358	9.358	(1.138)	297235	42.5472	42
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	17901	37.8665	38
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	147884	51.4355	51
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.669	(0.901)	84531	41.4908	41
	81	Bromobenzene	156	9.692	9.692	(0.904)	73020	40.6889	41
	82	1,2,3-Trichloropropane	75	9.721	9.724	(0.906)	112130	42.0806	42
	83	n-Propylbenzene	120	9.801	9.804	(0.914)	67048	42.5853	42
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	64292	42.6222	43
	85	1,3,5-Trimethylbenzene	105	9.991	9.988	(0.932)	257732	42.0873	42
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	64159	41.2827	41
M	94	Xylene (Total)	106				315835	134.128	130
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	269771	43.5538	44
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	253848	44.2796	44
	89	sec-Butylbenzene	105	10.551	10.550	(0.984)	292825	42.9274	43
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	121410	39.5699	40
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	250352	42.6379	43
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	131735	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	126359	38.2680	38
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	224477	40.3828	40
	96	1,2-Dichlorobenzene	146	11.113	11.110	(1.036)	120488	41.1549	41
	97	Hexachloroethane	117	11.354	11.357	(1.059)	46894	40.6956	41
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	21398	42.4298	42
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	69173	37.0291	37
	100	Hexachlorobutadiene	225	12.731	12.730	(1.187)	51092	37.7540	38
	101	Naphthalene	128	12.801	12.801	(1.194)	143402	37.9430	38
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	68813	40.5187	40

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5754.d
Date : 25-JUN-2014 18:44
Client ID: MW-22S_6/19/14MSD
Instrument: V10.i
Sample Info: 5ML,N1082-13AMSD,,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5651.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	46	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	57	
75-00-3	Chloroethane	53	
75-69-4	Trichlorofluoromethane	44	
75-35-4	1,1-Dichloroethene	48	
67-64-1	Acetone	39	
74-88-4	Iodomethane	64	
75-15-0	Carbon disulfide	47	
75-09-2	Methylene chloride	51	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	53	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	47	
156-59-2	cis-1,2-Dichloroethene	52	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	48	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	47	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	57	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	54	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77721

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77721

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5651.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	44	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	49	
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	51	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	50	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	50	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	47	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	46	
87-61-6	1,2,3-Trichlorobenzene	53	
91-20-3	Naphthalene	49	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	43	

Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5651.d
Report Date: 26-Jun-2014 08:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623.B\V8D5651.d
Lab Smp Id: LCS-77721 Client Smp ID: LCS-77721
Inj Date : 23-JUN-2014 13:16
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-77721,LCS-77721,77721
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623.B\v108260Gadd-6lvl.m
Meth Date : 23-Jun-2014 14:07 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 10:58 Cal File: V8D5646.d
Als bottle: 65 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	1.586	1.586	(0.303)	109275	50.0000	43
2	Freon114	85	1.705	1.705	(0.326)	87752	50.0000	43
3	Chloromethane	50	1.753	1.753	(0.335)	153630	50.0000	46
4	Vinyl Chloride	62	1.856	1.853	(0.355)	136583	50.0000	47(Q)
5	Bromomethane	94	2.142	2.142	(0.409)	45315	50.0000	57
6	Chloroethane	64	2.226	2.229	(0.425)	87672	50.0000	53
7	Trichlorofluoromethane	101	2.441	2.441	(0.466)	220146	50.0000	44
126	Ethanol	46	2.567	2.570	(0.490)	84053	5000.00	4600(A)
8	Ether	59	2.667	2.667	(0.509)	128897	50.0000	51
9	Acrolein	56	2.769	2.769	(0.529)	175123	250.000	250
10	1,1-Dichloroethene	96	2.859	2.859	(0.546)	93518	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.853	(0.544)	108573	50.0000	43
12	Acetone	58	2.888	2.885	(0.552)	19605	50.0000	39
13	Iodomethane	142	2.982	2.985	(0.570)	65538	50.0000	64
14	Carbon Disulfide	76	3.046	3.046	(0.582)	313363	50.0000	47
15	Acetonitrile	41	3.136	3.136	(0.599)	321423	500.000	490(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	254350	50.0000	51
17	Methyl Acetate	43	3.146	3.146	(0.601)	177345	50.0000	46
18	Methylene Chloride	84	3.232	3.232	(0.617)	90955	50.0000	51
19	tert-Butanol	59	3.297	3.297	(0.630)	36503	100.000	88
20	Acrylonitrile	53	3.422	3.422	(0.654)	73346	50.0000	49
21	trans-1,2-Dichloroethene	96	3.451	3.454	(0.659)	87805	50.0000	49
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	354416	50.0000	53

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.785	3.785	(0.723)	248023	50.0000	51
	24	Vinyl acetate	43	3.818	3.818	(0.729)	681033	50.0000	54
	25	Diisopropyl Ether	45	3.824	3.824	(0.730)	658781	50.0000	53
	26	2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	308618	50.0000	50
	27	Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	485602	50.0000	54
	29	2,2-Dichloropropane	77	4.258	4.258	(0.813)	220602	50.0000	49
	28	cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	92710	50.0000	52
	30	2-Butanone	72	4.258	4.265	(0.813)	12076	50.0000	47
	32	Propionitrile	54	4.303	4.303	(0.822)	248136	500.000	480(A)
	33	Methacrylonitrile	41	4.435	4.435	(0.847)	241101	100.000	100
	34	Bromochloromethane	128	4.454	4.454	(0.851)	43535	50.0000	53
	31	Tetrahydrofuran	72	4.499	4.499	(0.859)	22801	100.000	97
	35	Chloroform	83	4.506	4.509	(0.861)	233896	50.0000	51
$	36	Dibromofluoromethane	113	4.647	4.641	(0.888)	76499	50.0000	51
	37	1,1,1-Trichloroethane	97	4.683	4.686	(0.894)	236156	50.0000	48
	38	Cyclohexane	56	4.740	4.740	(0.905)	221381	50.0000	46
	39	1,1-Dichloropropene	110	4.821	4.821	(0.921)	42444	50.0000	52
	40	Carbon Tetrachloride	117	4.830	4.827	(0.923)	206426	50.0000	49
	41	Isobutyl Alcohol	43	5.078	5.078	(0.970)	189728	1000.00	1000(A)
$	42	1,2-Dichloroethane-d4	102	4.946	4.943	(0.945)	11594	50.0000	52
	43	Benzene	78	5.001	5.004	(0.955)	318029	50.0000	50
	44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	293475	50.0000	51
	45	tert-Amyl methyl ether	73	5.078	5.081	(0.970)	285078	50.0000	54
M	50	1,2-Dichloroethene (Total)	96				180515	100.000	100
*	46	Fluorobenzene	96	5.236	5.236	(1.000)	172098	50.0000	
	47	Trichloroethene	130	5.567	5.564	(1.063)	87040	50.0000	47
	48	Methylcyclohexane	83	5.753	5.753	(1.099)	121408	50.0000	47
	49	1,2-Dichloropropane	63	5.769	5.766	(1.102)	113363	50.0000	52
	51	Methyl Methacrylate	69	5.853	5.850	(1.118)	77353	50.0000	53
	52	Dibromomethane	93	5.879	5.882	(1.123)	74574	50.0000	51
	53	1,4-Dioxane	88	5.885	5.885	(1.124)	20820	1000.00	970(A)
	54	Bromodichloromethane	83	6.014	6.014	(1.149)	183573	50.0000	52
	55	2-Chloroethyl vinyl ether	63	6.441	6.454	(1.230)	1329	50.0000	53(T)
	56	cis-1,3-Dichloropropene	75	6.445	6.445	(1.231)	155463	50.0000	57
	57	4-Methyl-2-pentanone	43	6.580	6.583	(1.257)	176801	50.0000	48
$	58	Toluene-d8	98	6.718	6.718	(0.817)	245412	50.0000	49
	59	Toluene	91	6.785	6.782	(1.296)	344657	50.0000	51
	60	trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	165512	50.0000	52
	61	Ethyl Methacrylate	69	7.065	7.068	(1.349)	85345	50.0000	52
	62	1,1,2-Trichloroethane	97	7.178	7.174	(1.371)	80213	50.0000	51
	63	Tetrachloroethene	164	7.345	7.348	(0.893)	86236	50.0000	49
	64	1,3-Dichloropropane	76	7.354	7.354	(0.894)	153049	50.0000	54
	65	2-Hexanone	43	7.432	7.432	(0.904)	128498	50.0000	44
	66	Dibromochloromethane	129	7.592	7.596	(0.923)	122792	50.0000	53
	67	1,2-Dibromoethane	107	7.727	7.731	(0.940)	92279	50.0000	51
	69	1-Chlorohexane	91	8.216	8.216	(0.999)	111591	50.0000	47
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	250924	50.0000	
	70	Chlorobenzene	112	8.255	8.255	(1.004)	227872	50.0000	50
	71	1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	106709	50.0000	51
	72	Ethylbenzene	106	8.367	8.367	(1.018)	117267	50.0000	49
	73	m,p-Xylene	106	8.499	8.499	(1.034)	285982	100.000	100
	74	o-Xylene	106	8.946	8.943	(1.088)	138776	50.0000	52
	75	Styrene	104	8.959	8.959	(1.090)	224567	50.0000	52
	76	Bromoform	173	9.165	9.161	(1.115)	74980	50.0000	51

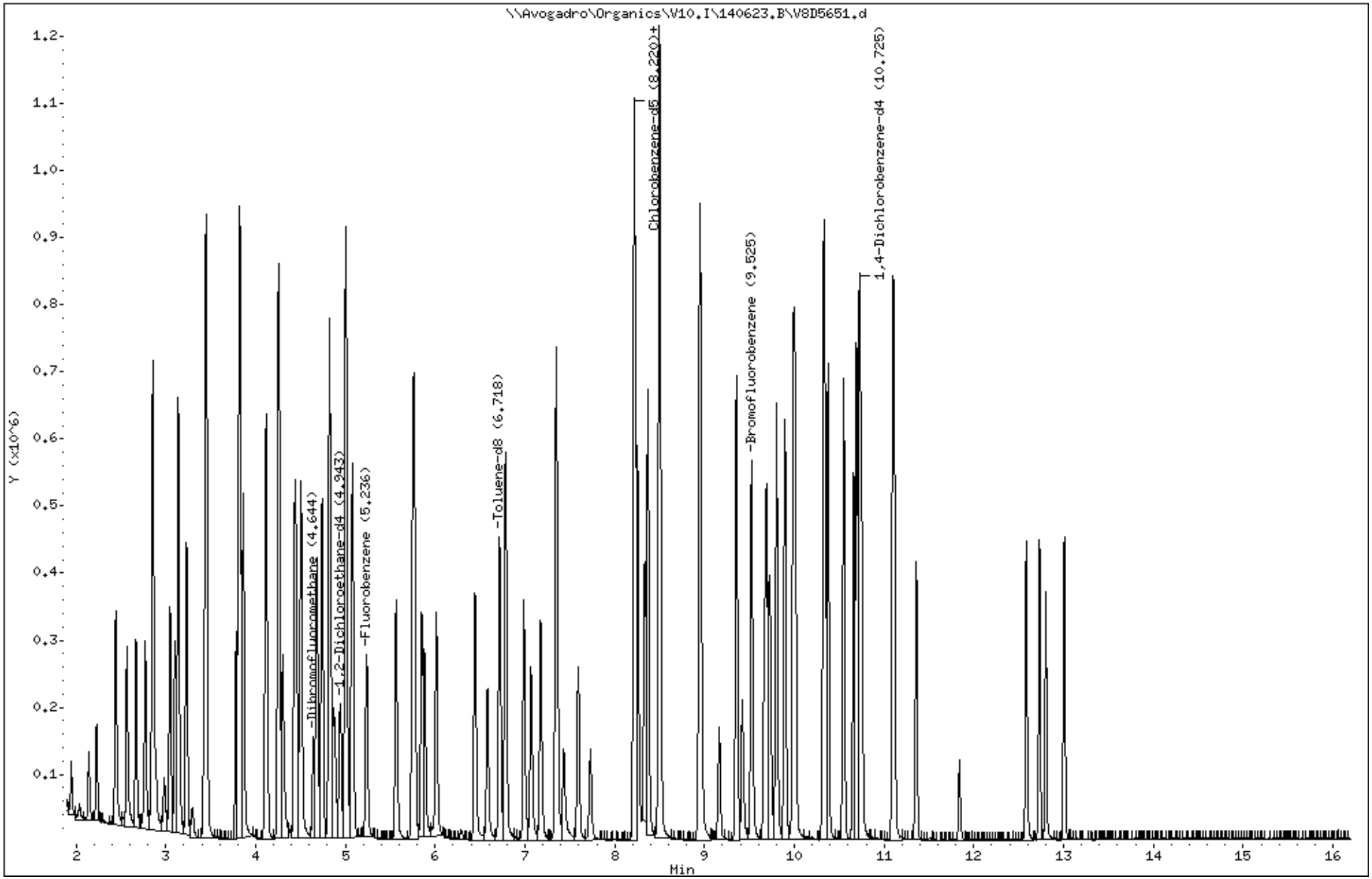
Data File: \\Avogadro\Organics\V10.I\140623.B\V8D5651.d
Report Date: 26-Jun-2014 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 Isopropylbenzene	105	9.354	9.354	(1.138)	397267	50.0000	48
	78 trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	27574	50.0000	49
$	79 Bromofluorobenzene	95	9.522	9.525	(1.158)	175841	50.0000	52
	80 1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	111112	50.0000	48
	81 Bromobenzene	156	9.689	9.692	(0.903)	104527	50.0000	51
	82 1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	151895	50.0000	50
	83 n-Propylbenzene	120	9.801	9.801	(0.914)	88356	50.0000	49
	84 2-Chlorotoluene	126	9.895	9.895	(0.923)	84762	50.0000	49
	85 1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	348632	50.0000	50
	86 4-Chlorotoluene	126	10.010	10.014	(0.933)	88645	50.0000	50
M	94 Xylene (Total)	106				424758	150.000	150
	87 tert-Butylbenzene	119	10.329	10.329	(0.963)	366162	50.0000	52
	88 1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	343083	50.0000	52
	89 sec-Butylbenzene	105	10.550	10.550	(0.984)	384789	50.0000	50
	90 1,3-Dichlorobenzene	146	10.660	10.660	(0.994)	174779	50.0000	50
	91 4-Isopropyltoluene	119	10.692	10.695	(0.997)	334083	50.0000	50
*	92 1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	150015	50.0000	
	93 1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	178494	50.0000	47
	95 n-Butylbenzene	91	11.094	11.097	(1.034)	297336	50.0000	47
	96 1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	169516	50.0000	51
	97 Hexachloroethane	117	11.357	11.361	(1.059)	65253	50.0000	50
	98 1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	26839	50.0000	47
	99 1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	104701	50.0000	49
	100 Hexachlorobutadiene	225	12.730	12.730	(1.187)	71645	50.0000	46
	101 Naphthalene	128	12.801	12.801	(1.194)	213053	50.0000	49
	102 1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	102379	50.0000	53

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\V10.I\140623.B\V8D5651.d
Date : 23-JUN-2014 13:16
Client ID: LCS-77721
Instrument: V10.i
Sample Info: 5ML,LCS-77721,LCS-77721,77721
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5670.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	46	
74-87-3	Chloromethane	41	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	61	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	49	
75-35-4	1,1-Dichloroethene	51	
67-64-1	Acetone	31	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	48	
75-09-2	Methylene chloride	52	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	53	
75-34-3	1,1-Dichloroethane	54	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	44	
156-59-2	cis-1,2-Dichloroethene	54	
594-20-7	2,2-Dichloropropane	45	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	54	
71-55-6	1,1,1-Trichloroethane	55	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	56	
107-06-2	1,2-Dichloroethane	54	
71-43-2	Benzene	53	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	55	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	51	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5670.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	42	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	52	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	54	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	51	
75-25-2	Bromoform	51	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	51	
103-65-1	n-Propylbenzene	52	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	52	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	54	
95-63-6	1,2,4-Trimethylbenzene	55	
135-98-8	sec-Butylbenzene	52	
99-87-6	4-Isopropyltoluene	52	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	52	
96-12-8	1,2-Dibromo-3-chloropropane	46	
120-82-1	1,2,4-Trichlorobenzene	45	
87-68-3	Hexachlorobutadiene	48	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	44	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	45	

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5670.d
Report Date: 25-Jun-2014 15:26

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5670.d
Lab Smp Id: LCS-77722 Client Smp ID: LCS-77722
Inj Date : 23-JUN-2014 22:02
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-77722,LCS-77722,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 15:26 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 84 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	89402	45.5882	46
2	Freon114	85	1.705	1.705	(0.326)	69446	44.1434	44
3	Chloromethane	50	1.753	1.754	(0.335)	107543	41.2701	41
4	Vinyl Chloride	62	1.856	1.853	(0.355)	114248	51.0690	51(Q)
5	Bromomethane	94	2.142	2.143	(0.409)	37262	60.9159	61
6	Chloroethane	64	2.229	2.226	(0.426)	66714	52.0669	52
7	Trichlorofluoromethane	101	2.441	2.442	(0.466)	189040	48.8006	49
126	Ethanol	46	2.567	2.567	(0.490)	65611	4647.55	4600(A)
8	Ether	59	2.670	2.670	(0.510)	100526	51.3342	51
9	Acrolein	56	2.769	2.770	(0.529)	136675	249.109	250
10	1,1-Dichloroethene	96	2.859	2.856	(0.546)	76577	50.9229	51
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	87590	45.1993	45
12	Acetone	58	2.888	2.892	(0.552)	12001	30.5532	30
13	Iodomethane	142	2.982	2.982	(0.570)	43874	55.1193	55
14	Carbon Disulfide	76	3.046	3.046	(0.582)	246029	48.0102	48
15	Acetonitrile	41	3.139	3.136	(0.600)	259296	512.548	510(A)
16	Allyl Chloride	39	3.139	3.136	(0.600)	212086	54.4599	54
17	Methyl Acetate	43	3.146	3.143	(0.601)	154240	51.8441	52
18	Methylene Chloride	84	3.232	3.229	(0.617)	72332	52.0742	52
19	tert-Butanol	59	3.297	3.297	(0.630)	30748	95.1308	95
20	Acrylonitrile	53	3.422	3.419	(0.654)	59653	51.3503	51
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	69692	50.4369	50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.445	(0.659)	275802	52.8540	53
	23 1,1-Dichloroethane	63	3.785	3.786	(0.723)	201084	53.7609	54
	24 Vinyl acetate	43	3.818	3.818	(0.729)	525940	53.5655	54
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	528663	55.0336	55
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	266133	56.2159	56
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	371673	53.5443	54
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	155412	44.5984	44
	28 cis-1,2-Dichloroethene	96	4.255	4.252	(0.813)	74132	53.6710	54
	30 2-Butanone	72	4.255	4.255	(0.813)	8873	44.4193	44(Q)
	32 Propionitrile	54	4.306	4.303	(0.823)	202614	501.637	500(A)
	33 Methacrylonitrile	41	4.435	4.432	(0.847)	200503	107.067	110
	34 Bromochloromethane	128	4.451	4.451	(0.850)	33922	52.8860	53
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	18023	99.1710	99
	35 Chloroform	83	4.506	4.509	(0.861)	193515	54.0226	54
$	36 Dibromofluoromethane	113	4.644	4.647	(0.887)	60733	51.9350	52
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	206540	54.6096	55
	38 Cyclohexane	56	4.740	4.741	(0.905)	181174	48.3511	48
	39 1,1-Dichloropropene	110	4.827	4.821	(0.922)	33542	52.8141	53
	40 Carbon Tetrachloride	117	4.830	4.827	(0.923)	183526	56.0780	56
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	151463	1039.17	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.946	(0.944)	8823	50.7217	51
	43 Benzene	78	5.004	5.001	(0.956)	258599	52.6075	53
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	242327	53.8727	54
	45 tert-Amyl methyl ether	73	5.078	5.075	(0.970)	215380	52.4135	52
M	50 1,2-Dichloroethene (Total)	96				143824	104.108	100
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	133544	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	72605	50.1876	50
	48 Methylcyclohexane	83	5.750	5.750	(1.098)	93086	46.3648	46
	49 1,2-Dichloropropane	63	5.772	5.769	(1.103)	88589	52.9476	53
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	58507	51.7743	52
	52 Dibromomethane	93	5.882	5.882	(1.123)	60256	53.0249	53
	53 1,4-Dioxane	88	5.888	5.882	(1.125)	15900	953.493	950(A)
	54 Bromodichloromethane	83	6.014	6.011	(1.149)	150804	55.2134	55
	55 2-Chloroethyl vinyl ether	63	6.448	6.448	(1.232)	940	48.4070	48(Q)
	56 cis-1,3-Dichloropropene	75	6.444	6.441	(1.231)	113971	53.4801	53
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	146036	51.1507	51
$	58 Toluene-d8	98	6.718	6.715	(0.817)	190777	48.7223	49
	59 Toluene	91	6.782	6.782	(1.295)	278516	52.8899	53
	60 trans-1,3-Dichloropropene	75	6.991	6.988	(1.335)	125892	50.5775	50
	61 Ethyl Methacrylate	69	7.065	7.068	(1.349)	66848	52.4728	52
	62 1,1,2-Trichloroethane	97	7.178	7.175	(1.371)	63563	52.1260	52
	63 Tetrachloroethene	164	7.342	7.348	(0.893)	72155	51.6814	52
	64 1,3-Dichloropropane	76	7.354	7.355	(0.894)	119294	53.1353	53
	65 2-Hexanone	43	7.432	7.432	(0.904)	96274	42.2485	42
	66 Dibromochloromethane	129	7.596	7.593	(0.924)	97521	53.5470	54
	67 1,2-Dibromoethane	107	7.727	7.728	(0.940)	72865	51.4690	51
	69 1-Chlorohexane	91	8.219	8.216	(1.000)	88182	46.8357	47
*	68 Chlorobenzene-d5	117	8.223	8.223	(1.000)	197659	50.0000	
	70 Chlorobenzene	112	8.255	8.252	(1.004)	179860	49.8781	50
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	86186	51.9798	52
	72 Ethylbenzene	106	8.370	8.371	(1.018)	96871	51.7181	52
	73 m,p-Xylene	106	8.496	8.499	(1.033)	233767	104.611	100
	74 o-Xylene	106	8.943	8.943	(1.088)	112340	53.7714	54
	75 Styrene	104	8.959	8.959	(1.090)	175213	51.2528	51

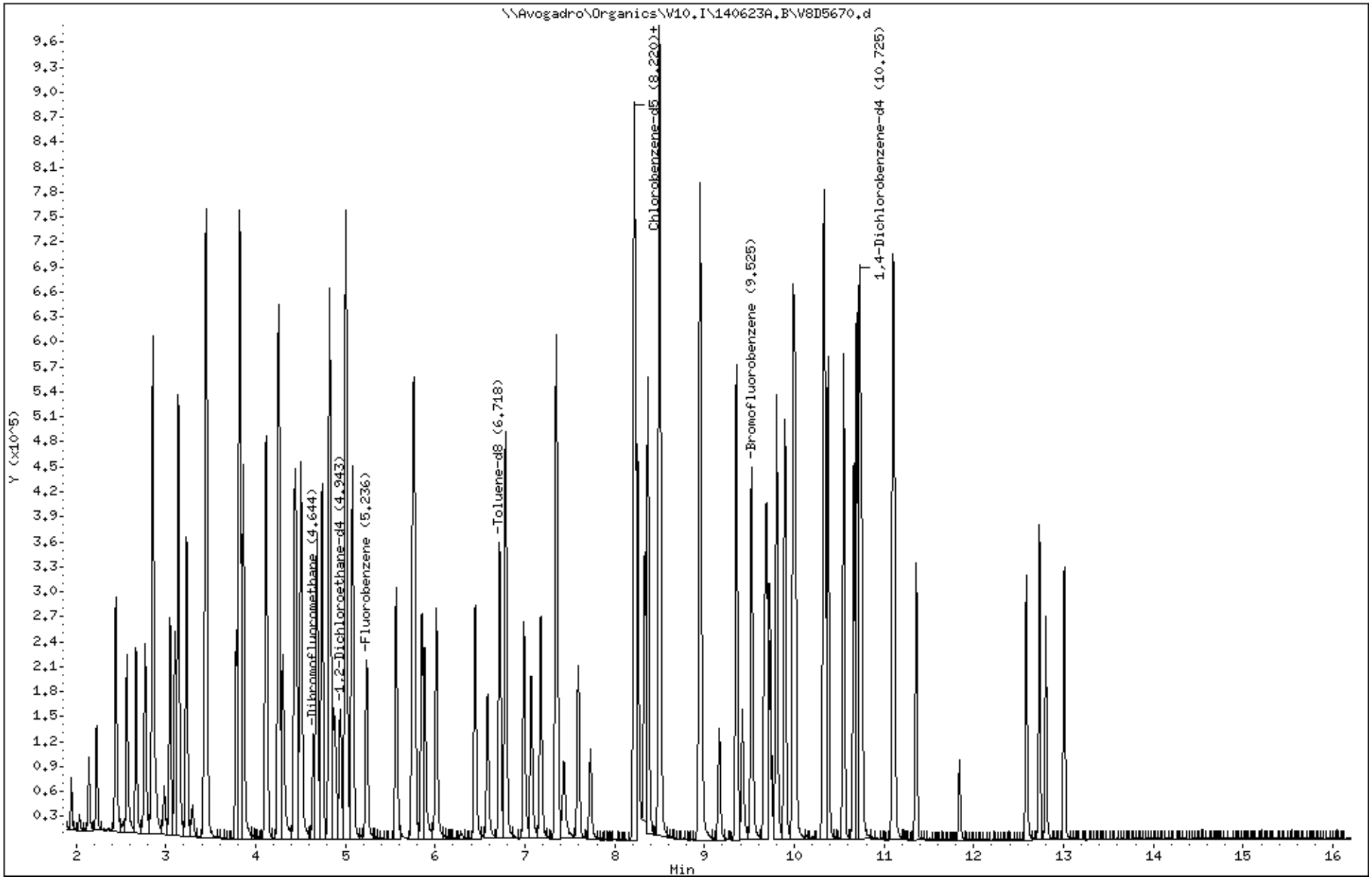
Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5670.d
Report Date: 25-Jun-2014 15:26

			QUANT SIG					CONCENTRATIONS	
								ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	58903	51.2646	51
	77	Isopropylbenzene	105	9.358	9.355	(1.138)	328725	50.7062	51
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.419	(1.146)	18890	43.0441	43
$	79	Bromofluorobenzene	95	9.522	9.525	(1.158)	138016	51.7100	52
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.670	(0.901)	90968	49.6522	50
	81	Bromobenzene	156	9.692	9.689	(0.904)	82430	51.0780	51
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	121166	50.5656	50
	83	n-Propylbenzene	120	9.801	9.805	(0.914)	73210	51.7081	52
	84	2-Chlorotoluene	126	9.898	9.895	(0.923)	68966	50.8427	51
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	286669	52.0569	52
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	71405	51.0921	51
M	94	Xylene (Total)	106				346107	158.382	160
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	299217	53.7195	54
	88	1,2,4-Trimethylbenzene	105	10.377	10.377	(0.968)	281719	54.6463	55
	89	sec-Butylbenzene	105	10.550	10.547	(0.984)	317497	51.7583	52
	90	1,3-Dichlorobenzene	146	10.663	10.663	(0.994)	137048	49.6705	50
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	274038	51.9003	52
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.721	(1.000)	118464	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	140876	47.4440	47
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	245175	49.2260	49
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	135719	51.5505	52
	97	Hexachloroethane	117	11.357	11.354	(1.059)	49575	48.0520	48
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	21047	46.3988	46
	99	1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	75546	45.0524	45
	100	Hexachlorobutadiene	225	12.730	12.731	(1.187)	58589	48.1439	48
	101	Naphthalene	128	12.801	12.801	(1.194)	149067	43.6412	44
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	74678	48.8981	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\V10.I\140623A.B\V8D5670.d
Date : 23-JUN-2014 22:02
Client ID: LCS-77722
Instrument: V10.i
Sample Info: 5ML,LCS-77722,LCS-77722,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77738

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5702.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/24/2014

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	53	
74-87-3	Chloromethane	40	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	62	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	58	
75-35-4	1,1-Dichloroethene	55	
67-64-1	Acetone	54	
74-88-4	Iodomethane	42	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	54	
156-60-5	trans-1,2-Dichloroethene	54	
1634-04-4	Methyl tert-butyl ether	56	
75-34-3	1,1-Dichloroethane	57	
108-05-4	Vinyl acetate	61	
78-93-3	2-Butanone	60	
156-59-2	cis-1,2-Dichloroethene	56	
594-20-7	2,2-Dichloropropane	60	
74-97-5	Bromochloromethane	57	
67-66-3	Chloroform	59	
71-55-6	1,1,1-Trichloroethane	58	
563-58-6	1,1-Dichloropropene	57	
56-23-5	Carbon tetrachloride	60	
107-06-2	1,2-Dichloroethane	62	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	57	
74-95-3	Dibromomethane	58	
75-27-4	Bromodichloromethane	61	
10061-01-5	cis-1,3-Dichloropropene	61	
108-10-1	4-Methyl-2-pentanone	53	
108-88-3	Toluene	55	
10061-02-6	trans-1,3-Dichloropropene	57	
79-00-5	1,1,2-Trichloroethane	57	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77738

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77738

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5702.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/24/2014

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	48	
124-48-1	Dibromochloromethane	52	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	98	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	46	
79-34-5	1,1,2,2-Tetrachloroethane	44	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	48	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	45	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	43	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	56	

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5702.d
Report Date: 26-Jun-2014 08:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140624.B\V8D5702.d
Lab Smp Id: LCS-77738 Client Smp ID: LCS-77738
Inj Date : 24-JUN-2014 09:43
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-77738,LCS-77738,77738
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140624.B\v108260Gadd-6lvl.m
Meth Date : 24-Jun-2014 09:18 amarquis Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 58 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	1.586	1.586	(0.303)	96391	50.0000	53
2	Freon114	85	1.705	1.702	(0.326)	77297	50.0000	53
3	Chloromethane	50	1.754	1.750	(0.335)	95537	50.0000	40
4	Vinyl Chloride	62	1.856	1.853	(0.354)	105985	50.0000	51(Q)
5	Bromomethane	94	2.139	2.139	(0.408)	34759	50.0000	62
6	Chloroethane	64	2.229	2.226	(0.426)	60744	50.0000	52
7	Trichlorofluoromethane	101	2.442	2.438	(0.466)	205097	50.0000	58
126	Ethanol	46	2.564	2.580	(0.489)	65222	5000.00	5000(A)
8	Ether	59	2.667	2.667	(0.509)	101962	50.0000	56
9	Acrolein	56	2.770	2.769	(0.529)	135322	250.000	270
10	1,1-Dichloroethene	96	2.856	2.856	(0.545)	76731	50.0000	55
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.850	2.850	(0.544)	99079	50.0000	56
12	Acetone	58	2.885	2.885	(0.551)	19549	50.0000	54
13	Iodomethane	142	2.982	2.982	(0.569)	30498	50.0000	42
14	Carbon Disulfide	76	3.046	3.046	(0.581)	254243	50.0000	54
15	Acetonitrile	41	3.139	3.136	(0.599)	252419	500.000	540(A)
16	Allyl Chloride	39	3.136	3.136	(0.599)	207351	50.0000	58
17	Methyl Acetate	43	3.143	3.142	(0.600)	139760	50.0000	51
18	Methylene Chloride	84	3.229	3.229	(0.616)	69263	50.0000	54
19	tert-Butanol	59	3.300	3.306	(0.630)	28755	100.000	97
20	Acrylonitrile	53	3.422	3.425	(0.653)	56754	50.0000	53
21	trans-1,2-Dichloroethene	96	3.454	3.448	(0.659)	69023	50.0000	54
22	Methyl tert-butyl ether	73	3.445	3.445	(0.658)	271106	50.0000	56

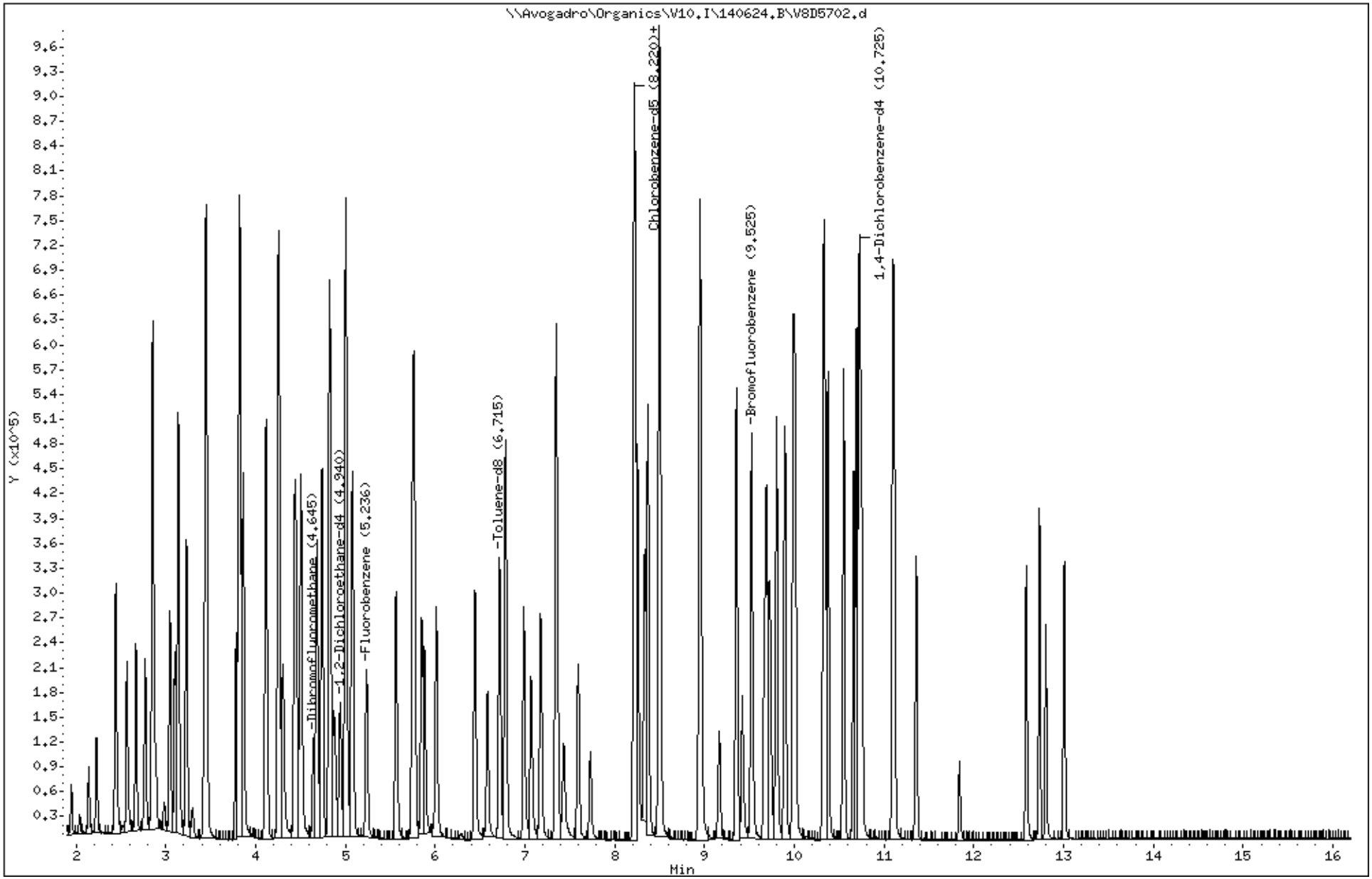
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	23	1,1-Dichloroethane	63	3.786	3.782	(0.723)	196444	50.0000	57
	24	Vinyl acetate	43	3.818	3.821	(0.729)	549781	50.0000	61
	25	Diisopropyl Ether	45	3.824	3.824	(0.730)	517235	50.0000	58
	26	2-Chloro-1,3-Butadiene	53	3.860	3.863	(0.737)	261841	50.0000	60
	27	Ethyl tert-butyl ether	59	4.117	4.120	(0.786)	371686	50.0000	58
	29	2,2-Dichloropropane	77	4.261	4.255	(0.813)	192317	50.0000	60
	28	cis-1,2-Dichloroethene	96	4.258	4.252	(0.813)	71386	50.0000	56
	30	2-Butanone	72	4.252	4.262	(0.812)	11023	50.0000	60
	32	Propionitrile	54	4.303	4.306	(0.821)	191458	500.000	520(A)
	33	Methacrylonitrile	41	4.432	4.435	(0.846)	195855	100.000	110
	34	Bromochloromethane	128	4.451	4.451	(0.850)	33714	50.0000	57
	31	Tetrahydrofuran	72	4.503	4.502	(0.859)	17196	100.000	100
	35	Chloroform	83	4.506	4.509	(0.860)	193094	50.0000	58
$	36	Dibromofluoromethane	113	4.641	4.644	(0.886)	58816	50.0000	55
	37	1,1,1-Trichloroethane	97	4.683	4.683	(0.894)	202005	50.0000	58
	38	Cyclohexane	56	4.741	4.737	(0.905)	184178	50.0000	53
	39	1,1-Dichloropropene	110	4.821	4.824	(0.920)	33044	50.0000	56
	40	Carbon Tetrachloride	117	4.827	4.827	(0.921)	180233	50.0000	60
	41	Isobutyl Alcohol	43	5.078	5.081	(0.969)	156364	1000.00	1200(A)
$	42	1,2-Dichloroethane-d4	102	4.943	4.946	(0.944)	8993	50.0000	56
	43	Benzene	78	5.004	5.004	(0.955)	244047	50.0000	54
	44	1,2-Dichloroethane	62	5.007	5.007	(0.956)	255112	50.0000	62
	45	tert-Amyl methyl ether	73	5.078	5.081	(0.969)	213730	50.0000	56
M	50	1,2-Dichloroethene (Total)	96				140409	100.000	110
*	46	Fluorobenzene	96	5.239	5.236	(1.000)	122868	50.0000	
	47	Trichloroethene	130	5.567	5.564	(1.063)	69405	50.0000	52
	48	Methylcyclohexane	83	5.750	5.753	(1.098)	98190	50.0000	53
	49	1,2-Dichloropropane	63	5.769	5.769	(1.101)	87998	50.0000	57
	51	Methyl Methacrylate	69	5.850	5.853	(1.117)	56725	50.0000	54
	52	Dibromomethane	93	5.882	5.879	(1.123)	60930	50.0000	58
	53	1,4-Dioxane	88	5.888	5.888	(1.124)	15210	1000.00	990(A)
	54	Bromodichloromethane	83	6.011	6.014	(1.147)	152751	50.0000	61
	55	2-Chloroethyl vinyl ether	63	6.441	6.448	(1.230)	1028	50.0000	57(T)
	56	cis-1,3-Dichloropropene	75	6.445	6.445	(1.230)	119021	50.0000	61
	57	4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	139490	50.0000	53
$	58	Toluene-d8	98	6.718	6.718	(0.817)	179896	50.0000	45
	59	Toluene	91	6.786	6.785	(1.295)	268856	50.0000	55
	60	trans-1,3-Dichloropropene	75	6.988	6.988	(1.334)	130944	50.0000	57
	61	Ethyl Methacrylate	69	7.065	7.065	(1.349)	63241	50.0000	54
	62	1,1,2-Trichloroethane	97	7.175	7.174	(1.369)	63547	50.0000	57
	63	Tetrachloroethene	164	7.345	7.348	(0.893)	70218	50.0000	49
	64	1,3-Dichloropropane	76	7.351	7.354	(0.894)	117921	50.0000	52
	65	2-Hexanone	43	7.432	7.432	(0.904)	111581	50.0000	48
	66	Dibromochloromethane	129	7.593	7.596	(0.923)	96032	50.0000	52
	67	1,2-Dibromoethane	107	7.728	7.731	(0.940)	71970	50.0000	50
	69	1-Chlorohexane	91	8.216	8.219	(0.999)	82167	50.0000	43
*	68	Chlorobenzene-d5	117	8.223	8.223	(1.000)	200880	50.0000	
	70	Chlorobenzene	112	8.255	8.255	(1.004)	177102	50.0000	48
	71	1,1,1,2-Tetrachloroethane	131	8.335	8.332	(1.014)	85960	50.0000	51
	72	Ethylbenzene	106	8.367	8.370	(1.018)	91439	50.0000	48
	73	m,p-Xylene	106	8.496	8.496	(1.033)	222261	100.000	98
	74	o-Xylene	106	8.946	8.943	(1.088)	106515	50.0000	50
	75	Styrene	104	8.962	8.959	(1.090)	173225	50.0000	50
	76	Bromoform	173	9.162	9.165	(1.114)	58866	50.0000	50

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	77	Isopropylbenzene	105	9.358	9.354	(1.138)	304657	50.0000	46
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.419	(1.146)	21277	50.0000	48
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	143439	50.0000	53
	80	1,1,2,2-Tetrachloroethane	83	9.666	9.666	(0.901)	86457	50.0000	44
	81	Bromobenzene	156	9.692	9.689	(0.904)	82406	50.0000	48
	82	1,2,3-Trichloropropane	75	9.718	9.721	(0.906)	120813	50.0000	48
	83	n-Propylbenzene	120	9.801	9.805	(0.914)	69625	50.0000	46
	84	2-Chlorotoluene	126	9.895	9.898	(0.923)	66857	50.0000	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	273574	50.0000	47
	86	4-Chlorotoluene	126	10.007	10.007	(0.933)	69890	50.0000	47
M	94	Xylene (Total)	106				328776	150.000	150
	87	tert-Butylbenzene	119	10.329	10.325	(0.963)	258753	50.0000	44
	88	1,2,4-Trimethylbenzene	105	10.377	10.374	(0.968)	270164	50.0000	49
	89	sec-Butylbenzene	105	10.551	10.550	(0.984)	303640	50.0000	47
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	138173	50.0000	47
	91	4-Isopropyltoluene	119	10.692	10.692	(0.997)	265342	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	125655	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.747	(1.002)	141398	50.0000	45
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	238795	50.0000	45
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	136894	50.0000	49
	97	Hexachloroethane	117	11.361	11.358	(1.059)	51027	50.0000	46
	98	1,2-Dibromo-3-chloropropane	75	11.840	11.840	(1.104)	21014	50.0000	44
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	76823	50.0000	43
	100	Hexachlorobutadiene	225	12.731	12.730	(1.187)	60110	50.0000	46
	101	Naphthalene	128	12.801	12.801	(1.194)	145593	50.0000	40
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	74829	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.

Data File: \\Avogadro\Organics\V10.I\140624.B\V8D5702.d
Date : 24-JUN-2014 09:43
Client ID: LCS-77738
Instrument: V10.i
Sample Info: 5ML,LCS-77738,LCS-77738,77738
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77766

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5732.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/25/2014

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	48	
74-87-3	Chloromethane	47	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	55	
67-64-1	Acetone	52	
74-88-4	Iodomethane	75	
75-15-0	Carbon disulfide	58	
75-09-2	Methylene chloride	54	
156-60-5	trans-1,2-Dichloroethene	57	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	57	
108-05-4	Vinyl acetate	58	
78-93-3	2-Butanone	56	
156-59-2	cis-1,2-Dichloroethene	58	
594-20-7	2,2-Dichloropropane	60	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	57	
71-55-6	1,1,1-Trichloroethane	57	
563-58-6	1,1-Dichloropropene	60	
56-23-5	Carbon tetrachloride	53	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	57	
79-01-6	Trichloroethene	56	
78-87-5	1,2-Dichloropropane	57	
74-95-3	Dibromomethane	56	
75-27-4	Bromodichloromethane	57	
10061-01-5	cis-1,3-Dichloropropene	62	
108-10-1	4-Methyl-2-pentanone	53	
108-88-3	Toluene	58	
10061-02-6	trans-1,3-Dichloropropene	55	
79-00-5	1,1,2-Trichloroethane	55	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77766

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77766

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5732.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/25/2014

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	44	
124-48-1	Dibromochloromethane	49	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	98	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	48	
75-25-2	Bromoform	49	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	41	
108-86-1	Bromobenzene	44	
96-18-4	1,2,3-Trichloropropane	45	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	45	
106-46-7	1,4-Dichlorobenzene	42	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	43	
120-82-1	1,2,4-Trichlorobenzene	43	
87-68-3	Hexachlorobutadiene	46	
87-61-6	1,2,3-Trichlorobenzene	45	
91-20-3	Naphthalene	40	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	54	

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5732.d
Report Date: 27-Jun-2014 13:59

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140625.B\V8D5732.d
Lab Smp Id: LCS-77766 Client Smp ID: LCS-77766
Inj Date : 25-JUN-2014 08:22
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCS-77766,LCS-77766,77766
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140625.B\v108260Gadd-6lvl.m
Meth Date : 27-Jun-2014 13:59 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 58 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	89375	47.6269	48
2	Freon114	85	1.705	1.705	(0.326)	76467	50.7953	51
3	Chloromethane	50	1.753	1.753	(0.335)	116135	46.5744	46
4	Vinyl Chloride	62	1.856	1.856	(0.355)	107172	50.0634	50(Q)
5	Bromomethane	94	2.142	2.142	(0.409)	29706	50.7504	51
6	Chloroethane	64	2.229	2.229	(0.426)	64123	52.2986	52
7	Trichlorofluoromethane	101	2.445	2.445	(0.467)	194950	52.5927	52
126	Ethanol	46	2.567	2.567	(0.490)	57197	4234.01	4200(A)
8	Ether	59	2.667	2.670	(0.509)	94128	50.2318	50
9	Acrolein	56	2.773	2.769	(0.530)	130798	249.133	250
10	1,1-Dichloroethene	96	2.856	2.859	(0.546)	78494	54.5484	54
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.856	2.853	(0.546)	99273	53.7812	54
12	Acetone	58	2.892	2.892	(0.552)	19620	52.1998	52
13	Iodomethane	142	2.985	2.985	(0.570)	56783	74.5497	74(R)
14	Carbon Disulfide	76	3.046	3.049	(0.582)	281973	57.8371	58
15	Acetonitrile	41	3.136	3.139	(0.599)	260783	538.703	540(A)
16	Allyl Chloride	39	3.139	3.139	(0.600)	215276	57.7685	58
17	Methyl Acetate	43	3.146	3.146	(0.601)	138965	48.8134	49
18	Methylene Chloride	84	3.229	3.232	(0.617)	71822	54.0357	54
19	tert-Butanol	59	3.297	3.300	(0.630)	30048	97.1518	97
20	Acrylonitrile	53	3.419	3.422	(0.653)	57978	52.1560	52
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	75896	57.4005	57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.448	3.448	(0.659)	276057	55.2853	55
	23 1,1-Dichloroethane	63	3.785	3.785	(0.723)	204783	57.2155	57
	24 Vinyl acetate	43	3.818	3.818	(0.729)	540536	57.5313	58
	25 Diisopropyl Ether	45	3.824	3.827	(0.730)	506538	55.1052	55
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	256096	56.5320	56
	27 Ethyl tert-butyl ether	59	4.117	4.120	(0.786)	376528	56.6866	57
	29 2,2-Dichloropropane	77	4.258	4.261	(0.813)	198703	59.5895	60
	28 cis-1,2-Dichloroethene	96	4.255	4.255	(0.813)	76860	58.1521	58
	30 2-Butanone	72	4.258	4.258	(0.813)	10764	56.3126	56(Q)
	32 Propionitrile	54	4.303	4.306	(0.822)	198280	513.015	510(A)
	33 Methacrylonitrile	41	4.432	4.435	(0.846)	190174	106.124	110
	34 Bromochloromethane	128	4.454	4.454	(0.851)	32309	52.6398	53
	31 Tetrahydrofuran	72	4.499	4.499	(0.859)	18747	107.800	110
	35 Chloroform	83	4.506	4.509	(0.861)	195837	57.1329	57
$	36 Dibromofluoromethane	113	4.644	4.647	(0.887)	59245	52.9442	53
	37 1,1,1-Trichloroethane	97	4.683	4.682	(0.894)	207749	57.4030	57
	38 Cyclohexane	56	4.740	4.744	(0.905)	196484	54.7985	55
	39 1,1-Dichloropropene	110	4.821	4.824	(0.921)	36657	60.3182	60
	40 Carbon Tetrachloride	117	4.827	4.830	(0.922)	166748	53.2459	53
	41 Isobutyl Alcohol	43	5.078	5.078	(0.970)	150623	1079.95	1100(A)
$	42 1,2-Dichloroethane-d4	102	4.946	4.949	(0.945)	8733	52.4653	52
	43 Benzene	78	5.004	5.004	(0.956)	267166	56.7980	57
	44 1,2-Dichloroethane	62	5.011	5.007	(0.957)	237876	55.2648	55
	45 tert-Amyl methyl ether	73	5.081	5.078	(0.971)	219040	55.7047	56
M	50 1,2-Dichloroethene (Total)	96				152756	115.553	120
*	46 Fluorobenzene	96	5.236	5.239	(1.000)	127789	50.0000	
	47 Trichloroethene	130	5.564	5.563	(1.063)	77284	55.8278	56
	48 Methylcyclohexane	83	5.753	5.753	(1.099)	109780	57.1424	57
	49 1,2-Dichloropropane	63	5.769	5.772	(1.102)	91677	57.2609	57
	51 Methyl Methacrylate	69	5.850	5.850	(1.117)	59955	55.4450	55
	52 Dibromomethane	93	5.882	5.882	(1.123)	60916	56.0198	56
	53 1,4-Dioxane	88	5.885	5.882	(1.124)	15295	958.519	960(A)
	54 Bromodichloromethane	83	6.014	6.014	(1.149)	148381	56.7729	57
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.231)	943	50.5752	50
	56 cis-1,3-Dichloropropene	75	6.441	6.444	(1.230)	125859	61.7181	62
	57 4-Methyl-2-pentanone	43	6.583	6.586	(1.257)	145180	53.1409	53
$	58 Toluene-d8	98	6.718	6.718	(0.817)	194511	45.4694	45
	59 Toluene	91	6.782	6.785	(1.295)	291937	57.9352	58
	60 trans-1,3-Dichloropropene	75	6.988	6.988	(1.335)	131786	55.2569	55
	61 Ethyl Methacrylate	69	7.065	7.068	(1.349)	67884	55.6857	56
	62 1,1,2-Trichloroethane	97	7.174	7.178	(1.370)	64612	55.3725	55
	63 Tetrachloroethene	164	7.345	7.345	(0.893)	74693	48.9690	49
	64 1,3-Dichloropropane	76	7.354	7.358	(0.894)	118283	48.2236	48
	65 2-Hexanone	43	7.435	7.432	(0.904)	109900	44.1442	44
	66 Dibromochloromethane	129	7.592	7.592	(0.923)	97313	48.9081	49
	67 1,2-Dibromoethane	107	7.727	7.727	(0.940)	73796	47.7126	48
	69 1-Chlorohexane	91	8.216	8.213	(0.999)	93835	45.6179	46
*	68 Chlorobenzene-d5	117	8.223	8.226	(1.000)	215945	50.0000	
	70 Chlorobenzene	112	8.255	8.255	(1.004)	188820	47.9288	48
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.014)	88604	48.9131	49
	72 Ethylbenzene	106	8.367	8.370	(1.018)	97976	47.8416	48
	73 m,p-Xylene	106	8.499	8.499	(1.034)	240116	98.3530	98
	74 o-Xylene	106	8.946	8.946	(1.088)	114073	49.9773	50
	75 Styrene	104	8.959	8.959	(1.090)	178909	47.9024	48

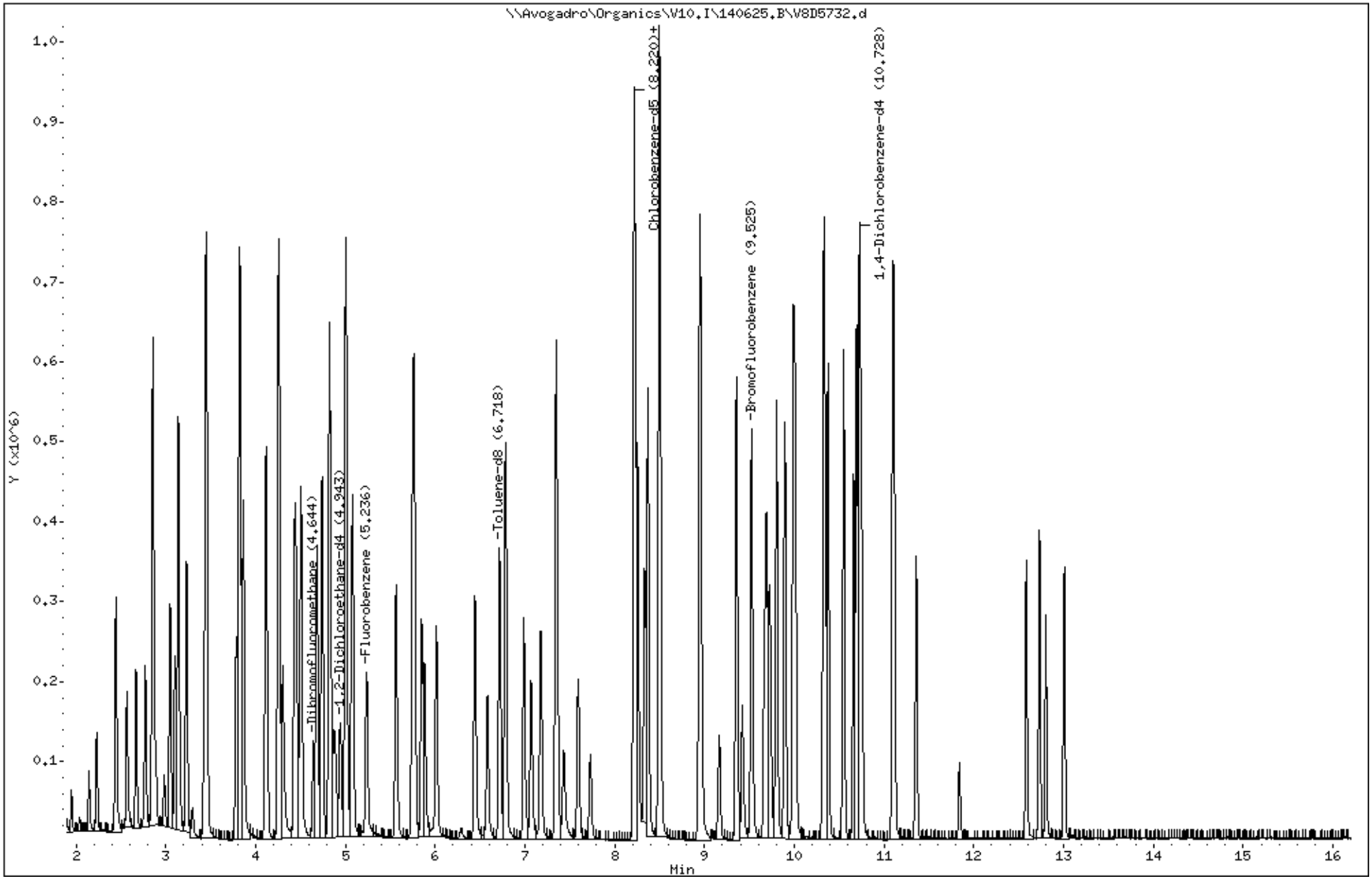
Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5732.d
Report Date: 27-Jun-2014 13:59

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
	76	Bromoform	173	9.165	9.165	(1.115)	61185	48.7414	49
	77	Isopropylbenzene	105	9.354	9.358	(1.138)	331543	46.8031	47
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.425	(1.146)	21876	45.6271	46
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	153226	52.5474	52
	80	1,1,2,2-Tetrachloroethane	83	9.669	9.669	(0.902)	85563	40.6551	41
	81	Bromobenzene	156	9.692	9.692	(0.904)	82400	44.4483	44
	82	1,2,3-Trichloropropane	75	9.721	9.724	(0.906)	122563	44.5260	44
	83	n-Propylbenzene	120	9.801	9.804	(0.914)	75022	46.1271	46
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	71797	46.0765	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	289033	45.6903	46
	86	4-Chlorotoluene	126	10.010	10.010	(0.933)	74201	46.2183	46
M	94	Xylene (Total)	106				354189	148.330	150
	87	tert-Butylbenzene	119	10.329	10.329	(0.963)	303619	47.4519	47
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	280693	47.3975	47
	89	sec-Butylbenzene	105	10.550	10.550	(0.984)	330439	46.8934	47
	90	1,3-Dichlorobenzene	146	10.663	10.660	(0.994)	142093	44.8309	45
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	286804	47.2850	47
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.724	(1.000)	136084	50.0000	
	93	1,4-Dichlorobenzene	146	10.747	10.750	(1.002)	144858	42.4685	42
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	254964	44.4844	44
	96	1,2-Dichlorobenzene	146	11.113	11.110	(1.036)	138929	45.9372	46
	97	Hexachloroethane	117	11.358	11.357	(1.059)	54066	45.5591	46
	98	1,2-Dibromo-3-chloropropane	75	11.837	11.840	(1.104)	22283	42.7717	43
	99	1,2,4-Trichlorobenzene	180	12.583	12.586	(1.173)	83526	43.3476	43
	100	Hexachlorobutadiene	225	12.730	12.730	(1.187)	63841	45.6672	46
	101	Naphthalene	128	12.801	12.801	(1.194)	158440	40.4844	40
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	79657	45.4049	45

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V10.I\140625.B\V8D5732.d
Date : 25-JUN-2014 08:22
Client ID: LCS-77766
Instrument: V10.i
Sample Info: 5ML,LCS-77766,LCS-77766,77766
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9891.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/2014

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	49	
74-87-3	Chloromethane	53	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	52	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	50	
75-35-4	1,1-Dichloroethene	50	
67-64-1	Acetone	60	
74-88-4	Iodomethane	56	
75-15-0	Carbon disulfide	47	
75-09-2	Methylene chloride	52	
156-60-5	trans-1,2-Dichloroethene	54	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	54	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	58	
156-59-2	cis-1,2-Dichloroethene	54	
594-20-7	2,2-Dichloropropane	51	
74-97-5	Bromochloromethane	55	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	52	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	54	
108-10-1	4-Methyl-2-pentanone	54	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9891.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/2014

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	47	
591-78-6	2-Hexanone	59	
124-48-1	Dibromochloromethane	56	
106-93-4	1,2-Dibromoethane	53	
108-90-7	Chlorobenzene	51	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	98	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	51	
75-25-2	Bromoform	51	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	53	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	53	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	49	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	44	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	50	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	49	

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9891.D
Report Date: 27-Jun-2014 10:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9891.D
Lab Smp Id: LCS-77805 Client Smp ID: LCS-77805
Inj Date : 26-JUN-2014 11:51
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5G,LCS-77805,LCS-77805,77805
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 44 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	1.265	1.232	(0.287)	88878	50.0000	49
2	Freon114	85	1.265	1.232	(0.287)	88878	50.0000	50
3	Chloromethane	50	1.383	1.360	(0.314)	196090	50.0000	52
4	Vinyl Chloride	62	1.472	1.468	(0.334)	159539	50.0000	52
5	Bromomethane	94	1.679	1.665	(0.381)	112477	50.0000	52
6	Chloroethane	64	1.758	1.754	(0.399)	112943	50.0000	52
7	Trichlorofluoromethane	101	1.945	1.921	(0.441)	270440	50.0000	50
126	Ethanol	46	2.023	2.010	(0.459)	71731	5000.00	5000(A)
8	Ether	59	2.092	2.079	(0.475)	139508	50.0000	54
9	Acrolein	56	2.171	2.158	(0.493)	102809	250.000	260(A)
10	1,1-Dichloroethene	96	2.279	2.266	(0.517)	157820	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.289	2.276	(0.520)	184873	50.0000	49
12	Acetone	58	2.279	2.266	(0.517)	17762	50.0000	60(Q)
13	Iodomethane	142	2.398	2.384	(0.544)	271193	50.0000	56
14	Carbon Disulfide	76	2.427	2.404	(0.551)	395610	50.0000	47
15	Acetonitrile	41	2.486	2.483	(0.564)	583893	500.000	530(A)
16	Allyl Chloride	39	2.486	2.483	(0.564)	331859	50.0000	53
17	Methyl Acetate	43	2.506	2.492	(0.569)	142536	50.0000	51
18	Methylene Chloride	84	2.575	2.561	(0.584)	170622	50.0000	52
19	tert-Butanol	59	2.654	2.640	(0.602)	23014	100.000	110
20	Acrylonitrile	53	2.742	2.729	(0.622)	53391	50.0000	57
21	trans-1,2-Dichloroethene	96	2.772	2.758	(0.629)	177777	50.0000	54
22	Methyl tert-butyl ether	73	2.772	2.768	(0.629)	444790	50.0000	55

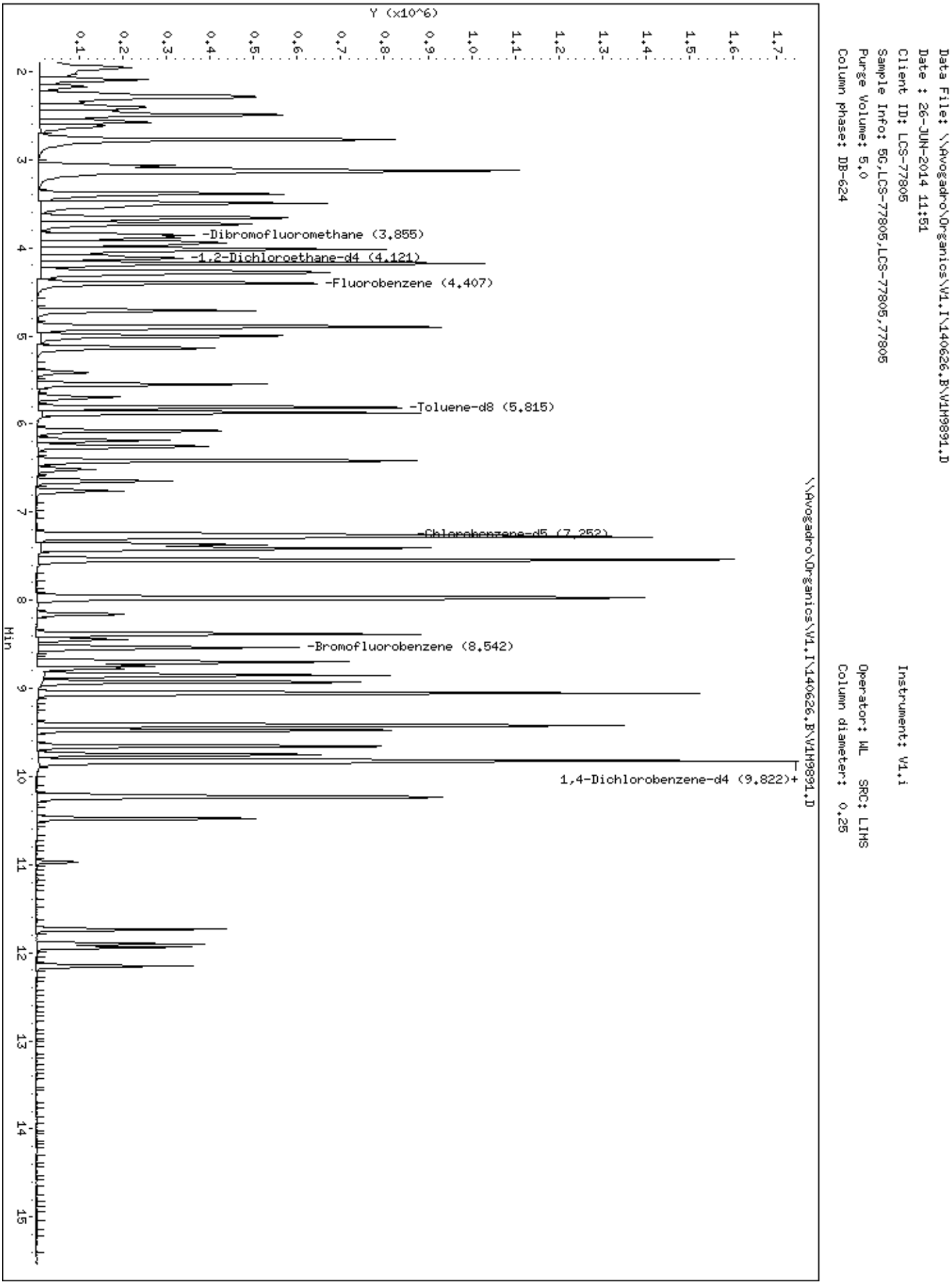
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.067	3.054	(0.696)	320673	50.0000	54
	24 Vinyl acetate	43	3.106	3.093	(0.705)	758957	50.0000	54
	25 Diisopropyl Ether	45	3.126	3.113	(0.710)	795222	50.0000	53
	26 2-Chloro-1,3-Butadiene	53	3.136	3.123	(0.712)	302549	50.0000	52
	27 Ethyl tert-butyl ether	59	3.392	3.379	(0.770)	574222	50.0000	53
	29 2,2-Dichloropropane	77	3.500	3.487	(0.794)	126961	50.0000	51
	28 cis-1,2-Dichloroethene	96	3.490	3.477	(0.792)	186210	50.0000	54
	30 2-Butanone	72	3.500	3.487	(0.794)	15921	50.0000	58(Q)
	32 Propionitrile	54	3.530	3.516	(0.801)	167615	500.000	540(A)
	33 Methacrylonitrile	41	3.658	3.644	(0.830)	217681	100.000	110
	34 Bromochloromethane	128	3.668	3.654	(0.832)	83065	50.0000	55
	31 Tetrahydrofuran	72	3.717	3.704	(0.844)	28695	100.000	110
	35 Chloroform	83	3.727	3.723	(0.846)	316875	50.0000	52
$	36 Dibromofluoromethane	113	3.855	3.841	(0.875)	204098	50.0000	50
	37 1,1,1-Trichloroethane	97	3.884	3.871	(0.882)	265552	50.0000	52
	38 Cyclohexane	56	3.943	3.930	(0.895)	260682	50.0000	46
	39 1,1-Dichloropropene	110	4.012	4.009	(0.911)	73639	50.0000	50
	40 Carbon Tetrachloride	117	4.022	4.009	(0.913)	266772	50.0000	49
	41 Isobutyl Alcohol	43	4.091	4.078	(0.928)	109772	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.121	4.107	(0.935)	41653	50.0000	51
	43 Benzene	78	4.180	4.166	(0.949)	595908	50.0000	52
	44 1,2-Dichloroethane	62	4.180	4.166	(0.949)	258185	50.0000	52
	45 tert-Amyl methyl ether	73	4.278	4.265	(0.971)	445952	50.0000	54
*	46 Fluorobenzene	96	4.406	4.393	(1.000)	611931	50.0000	
	47 Trichloroethene	130	4.711	4.708	(1.069)	151214	50.0000	50
	48 Methylcyclohexane	83	4.889	4.885	(1.109)	224714	50.0000	46
	49 1,2-Dichloropropane	63	4.898	4.895	(1.112)	159616	50.0000	53
	51 Methyl Methacrylate	69	5.007	5.003	(1.136)	108653	50.0000	54
	52 Dibromomethane	93	4.997	4.993	(1.134)	115573	50.0000	55
	53 1,4-Dioxane	88	5.017	5.013	(1.139)	24451	1000.00	1100(A)
	54 Bromodichloromethane	83	5.135	5.131	(1.165)	251363	50.0000	53
	55 2-Chloroethyl vinyl ether	63	5.410	5.407	(1.228)	49021	50.0000	52
	56 cis-1,3-Dichloropropene	75	5.548	5.545	(1.259)	270219	50.0000	54
	57 4-Methyl-2-pentanone	43	5.696	5.692	(1.293)	156742	50.0000	54
$	58 Toluene-d8	98	5.814	5.801	(0.802)	569504	50.0000	50
	59 Toluene	91	5.873	5.870	(1.333)	599086	50.0000	50
	60 trans-1,3-Dichloropropene	75	6.080	6.067	(1.380)	240894	50.0000	53
	61 Ethyl Methacrylate	69	6.188	6.175	(1.404)	134225	50.0000	55
	62 1,1,2-Trichloroethane	97	6.257	6.254	(1.420)	124921	50.0000	52
	63 Tetrachloroethene	164	6.415	6.411	(0.885)	97120	50.0000	47
	64 1,3-Dichloropropane	76	6.425	6.411	(0.886)	219162	50.0000	53
	65 2-Hexanone	43	6.513	6.510	(0.898)	115288	50.0000	59
	66 Dibromochloromethane	129	6.641	6.638	(0.916)	169528	50.0000	56
	67 1,2-Dibromoethane	107	6.759	6.756	(0.932)	139658	50.0000	53
	69 1-Chlorohexane	91	7.281	7.278	(1.004)	211966	50.0000	44(Q)
*	68 Chlorobenzene-d5	117	7.252	7.248	(1.000)	421673	50.0000	
	70 Chlorobenzene	112	7.281	7.278	(1.004)	376756	50.0000	51
	71 1,1,1,2-Tetrachloroethane	131	7.370	7.366	(1.016)	147322	50.0000	51
	72 Ethylbenzene	106	7.409	7.406	(1.022)	192222	50.0000	48
	73 m,p-Xylene	106	7.537	7.534	(1.039)	480771	100.000	98
	74 o-Xylene	106	7.970	7.967	(1.099)	233609	50.0000	48
	75 Styrene	104	7.980	7.977	(1.100)	412528	50.0000	51
	76 Bromoform	173	8.158	8.154	(1.125)	86221	50.0000	51
	77 Isopropylbenzene	105	8.384	8.380	(1.156)	593456	50.0000	48

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9891.D
Report Date: 27-Jun-2014 10:49

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.443	8.449	(1.164)	44489	50.0000	54
$	79	Bromofluorobenzene	95	8.542	8.538	(1.178)	246879	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	8.709	8.705	(0.887)	142758	50.0000	53
	81	Bromobenzene	156	8.699	8.696	(0.886)	133525	50.0000	51
	82	1,2,3-Trichloropropane	75	8.748	8.745	(0.891)	155923	50.0000	53
	83	n-Propylbenzene	120	8.847	8.853	(0.901)	133988	50.0000	46
	84	2-Chlorotoluene	126	8.926	8.932	(0.909)	126332	50.0000	49
	85	1,3,5-Trimethylbenzene	105	9.063	9.060	(0.923)	484115	50.0000	48
	86	4-Chlorotoluene	126	9.054	9.060	(0.922)	127246	50.0000	49
M	94	Xylene (Total)	106				714380	150.000	150
	87	tert-Butylbenzene	119	9.418	9.424	(0.959)	463491	50.0000	47
	88	1,2,4-Trimethylbenzene	105	9.477	9.473	(0.965)	474483	50.0000	48
	89	sec-Butylbenzene	105	9.664	9.660	(0.984)	580274	50.0000	46
	90	1,3-Dichlorobenzene	146	9.753	9.749	(0.993)	233552	50.0000	49
	91	4-Isopropyltoluene	119	9.822	9.828	(1.000)	460321	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	9.822	9.828	(1.000)	171468	50.0000	
	93	1,4-Dichlorobenzene	146	9.841	9.848	(1.002)	231421	50.0000	48
	95	n-Butylbenzene	91	10.245	10.241	(1.043)	423719	50.0000	48
	96	1,2-Dichlorobenzene	146	10.225	10.222	(1.041)	217204	50.0000	49
	97	Hexachloroethane	117	10.481	10.478	(1.067)	115135	50.0000	47
	98	1,2-Dibromo-3-chloropropane	75	10.974	10.970	(1.117)	21467	50.0000	48
	99	1,2,4-Trichlorobenzene	180	11.732	11.738	(1.194)	95982	50.0000	50
	100	Hexachlorobutadiene	225	11.899	11.905	(1.212)	49723	50.0000	44
	101	Naphthalene	128	11.938	11.945	(1.216)	228924	50.0000	50
	102	1,2,3-Trichlorobenzene	180	12.155	12.161	(1.238)	83988	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\W1.i\140626.B\W1N9891.D
Date : 26-JUN-2014 11:51
Client ID: LCS-77805
Sample Info: 5G,LCS-77805,LCS-77805,77805
Purge Volume: 5.0
Column phase: DB-624
Instrument: W1.i
Operator: WL SRC: LIMS
Column diameter: 0.25
Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
15
-Dibromofluoromethane (3.855)
-1,2-Dichloroethane-d4 (4.121)
-Fluorobenzene (4.407)
-Toluene-d8 (5.815)
-Chlorobenzene-d5 (7.252)
-Bromofluorobenzene (8.542)
1,4-Dichlorobenzene-d4 (9.822)+
\\Avogadro\Organics\W1.i\140626.B\W1N9891.D

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5671.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	39	
75-01-4	Vinyl chloride	47	
74-83-9	Bromomethane	55	
75-00-3	Chloroethane	46	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	33	
74-88-4	Iodomethane	53	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	49	
156-60-5	trans-1,2-Dichloroethene	48	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	45	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	40	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	49	
74-95-3	Dibromomethane	48	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	52	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	45	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	49	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-77722

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-77722

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D5671.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/23/2014

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	47	
591-78-6	2-Hexanone	42	
124-48-1	Dibromochloromethane	49	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	47	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	47	
75-25-2	Bromoform	49	
98-82-8	Isopropylbenzene	46	
79-34-5	1,1,2,2-Tetrachloroethane	47	
108-86-1	Bromobenzene	47	
96-18-4	1,2,3-Trichloropropane	47	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	45	
106-46-7	1,4-Dichlorobenzene	43	
104-51-8	n-Butylbenzene	45	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	46	
120-82-1	1,2,4-Trichlorobenzene	41	
87-68-3	Hexachlorobutadiene	45	
87-61-6	1,2,3-Trichlorobenzene	45	
91-20-3	Naphthalene	42	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	44	

Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5671.d
Report Date: 25-Jun-2014 15:26

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V10.I\140623A.B\V8D5671.d
Lab Smp Id: LCSD-77722 Client Smp ID: LCSD-77722
Inj Date : 23-JUN-2014 22:30
Operator : WL SRC: LIMS Inst ID: V10.i
Smp Info : 5ML,LCSD-77722,LCSD-77722,77722
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V10.I\140623A.B\v108260Gadd-6lvl.m
Meth Date : 25-Jun-2014 15:26 V10.i Quant Type: ISTD
Cal Date : 23-JUN-2014 12:48 Cal File: V8D5650.d
Als bottle: 85 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET104

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)
1	Dichlorodifluoromethane	85	1.586	1.586	(0.303)	79894	43.4453	43
2	Freon114	85	1.705	1.705	(0.326)	59895	40.6006	41
3	Chloromethane	50	1.753	1.754	(0.335)	94590	38.7098	39
4	Vinyl Chloride	62	1.856	1.853	(0.355)	98472	46.9401	47(Q)
5	Bromomethane	94	2.143	2.143	(0.409)	31700	55.2645	55
6	Chloroethane	64	2.229	2.226	(0.426)	55267	45.9975	46
7	Trichlorofluoromethane	101	2.445	2.442	(0.467)	172991	47.6231	48
126	Ethanol	46	2.567	2.567	(0.490)	63638	4807.15	4800(A)
8	Ether	59	2.667	2.670	(0.509)	86338	47.0169	47
9	Acrolein	56	2.773	2.770	(0.530)	130566	253.777	250
10	1,1-Dichloroethene	96	2.856	2.856	(0.546)	66168	46.9230	47
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.853	2.853	(0.545)	79928	43.9486	44
12	Acetone	58	2.885	2.892	(0.551)	12142	32.9649	33(Q)
13	Iodomethane	142	2.982	2.982	(0.570)	39740	53.2411	53
14	Carbon Disulfide	76	3.046	3.046	(0.582)	216838	45.0220	45
15	Acetonitrile	41	3.136	3.136	(0.599)	229486	483.747	480(A)
16	Allyl Chloride	39	3.139	3.136	(0.600)	187329	51.2971	51
17	Methyl Acetate	43	3.146	3.143	(0.601)	141442	50.6995	51
18	Methylene Chloride	84	3.232	3.229	(0.617)	63534	48.7777	49
19	tert-Butanol	59	3.297	3.297	(0.630)	29485	97.2811	97
20	Acrylonitrile	53	3.422	3.419	(0.654)	56522	51.8861	52
21	trans-1,2-Dichloroethene	96	3.454	3.454	(0.660)	62608	48.3191	48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	22 Methyl tert-butyl ether	73	3.445	3.445	(0.658)	245075	50.0844	50
	23 1,1-Dichloroethane	63	3.786	3.786	(0.723)	174130	49.6462	50
	24 Vinyl acetate	43	3.818	3.818	(0.729)	452356	49.1306	49
	25 Diisopropyl Ether	45	3.824	3.824	(0.730)	451286	50.0984	50
	26 2-Chloro-1,3-Butadiene	53	3.863	3.863	(0.738)	228474	51.4660	51
	27 Ethyl tert-butyl ether	59	4.117	4.117	(0.786)	313572	48.1739	48
	29 2,2-Dichloropropane	77	4.258	4.258	(0.813)	131906	40.3666	40
	28 cis-1,2-Dichloroethene	96	4.258	4.252	(0.813)	64174	49.5468	50
	30 2-Butanone	72	4.258	4.255	(0.813)	8394	44.8118	45(Q)
	32 Propionitrile	54	4.306	4.303	(0.823)	197583	521.666	520(A)
	33 Methacrylonitrile	41	4.435	4.432	(0.847)	181279	103.229	100
	34 Bromochloromethane	128	4.451	4.451	(0.850)	29110	48.3977	48
	31 Tetrahydrofuran	72	4.496	4.499	(0.859)	17099	100.335	100
	35 Chloroform	83	4.509	4.509	(0.861)	169176	50.3643	50
$	36 Dibromofluoromethane	113	4.641	4.647	(0.886)	56176	51.2282	51
	37 1,1,1-Trichloroethane	97	4.686	4.683	(0.895)	176054	49.6402	50
	38 Cyclohexane	56	4.740	4.741	(0.905)	163800	46.6173	47
	39 1,1-Dichloropropene	110	4.821	4.821	(0.921)	29540	49.6014	50
	40 Carbon Tetrachloride	117	4.827	4.827	(0.922)	155244	50.5863	50
	41 Isobutyl Alcohol	43	5.081	5.078	(0.971)	132447	969.050	970(A)
$	42 1,2-Dichloroethane-d4	102	4.940	4.946	(0.944)	8088	49.5841	50
	43 Benzene	78	5.004	5.001	(0.956)	221700	48.0961	48
	44 1,2-Dichloroethane	62	5.007	5.007	(0.956)	212368	50.3477	50
	45 tert-Amyl methyl ether	73	5.078	5.075	(0.970)	187698	48.7102	49
M	50 1,2-Dichloroethene (Total)	96				126782	97.8659	98
*	46 Fluorobenzene	96	5.236	5.236	(1.000)	125228	50.0000	
	47 Trichloroethene	130	5.567	5.567	(1.063)	62447	46.0325	46
	48 Methylcyclohexane	83	5.753	5.750	(1.099)	85139	45.2226	45
	49 1,2-Dichloropropane	63	5.773	5.769	(1.103)	76606	48.8261	49
	51 Methyl Methacrylate	69	5.853	5.850	(1.118)	52208	49.2681	49
	52 Dibromomethane	93	5.882	5.882	(1.123)	51411	48.2457	48
	53 1,4-Dioxane	88	5.892	5.882	(1.125)	15444	987.650	990(A)
	54 Bromodichloromethane	83	6.014	6.011	(1.149)	128688	50.2450	50
	55 2-Chloroethyl vinyl ether	63	6.445	6.448	(1.231)	647	36.4838	36
	56 cis-1,3-Dichloropropene	75	6.445	6.441	(1.231)	98383	49.2312	49
	57 4-Methyl-2-pentanone	43	6.583	6.583	(1.257)	138477	51.7240	52
$	58 Toluene-d8	98	6.715	6.715	(0.816)	182586	48.6614	49
	59 Toluene	91	6.785	6.782	(1.296)	241371	48.8799	49
	60 trans-1,3-Dichloropropene	75	6.991	6.988	(1.335)	103873	44.5959	44
	61 Ethyl Methacrylate	69	7.072	7.068	(1.351)	59883	50.1270	50
	62 1,1,2-Trichloroethane	97	7.174	7.175	(1.370)	55525	48.5581	48
	63 Tetrachloroethene	164	7.345	7.348	(0.893)	62449	46.6777	47
	64 1,3-Dichloropropane	76	7.355	7.355	(0.894)	104631	48.6341	49
	65 2-Hexanone	43	7.438	7.432	(0.904)	91325	41.8223	42
	66 Dibromochloromethane	129	7.592	7.593	(0.923)	84751	48.5621	48
	67 1,2-Dibromoethane	107	7.727	7.728	(0.939)	64807	47.7710	48
	69 1-Chlorohexane	91	8.216	8.216	(0.999)	78359	43.4312	43
*	68 Chlorobenzene-d5	117	8.226	8.223	(1.000)	189409	50.0000	
	70 Chlorobenzene	112	8.252	8.252	(1.003)	157562	45.5977	46
	71 1,1,1,2-Tetrachloroethane	131	8.335	8.335	(1.013)	74053	46.6076	47
	72 Ethylbenzene	106	8.374	8.371	(1.018)	83212	46.3091	46
	73 m,p-Xylene	106	8.499	8.499	(1.033)	199745	93.2792	93
	74 o-Xylene	106	8.946	8.943	(1.088)	95594	47.7489	48
	75 Styrene	104	8.959	8.959	(1.089)	154041	47.0223	47

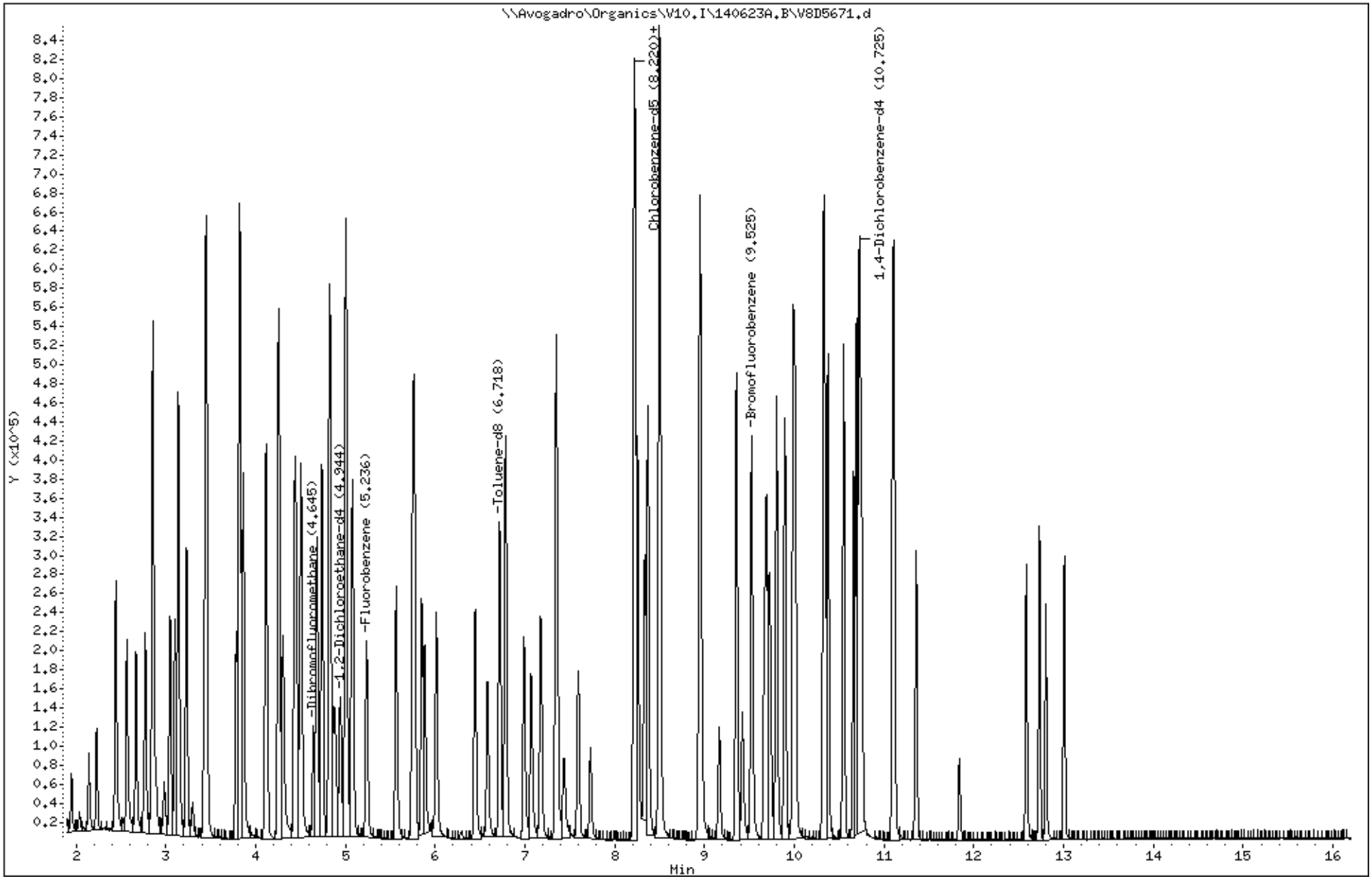
Data File: \\Avogadro\Organics\V10.I\140623A.B\V8D5671.d
Report Date: 25-Jun-2014 15:26

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	76	Bromoform	173	9.162	9.165	(1.114)	54141	49.1725	49
	77	Isopropylbenzene	105	9.358	9.355	(1.138)	284846	45.8426	46
	78	trans-1,4-Dichloro-2-butene	75	9.422	9.419	(1.145)	17796	42.3175	42
$	79	Bromofluorobenzene	95	9.525	9.525	(1.158)	129207	50.5182	50
	80	1,1,2,2-Tetrachloroethane	83	9.670	9.670	(0.902)	82424	46.9974	47
	81	Bromobenzene	156	9.692	9.689	(0.904)	72790	47.1184	47
	82	1,2,3-Trichloropropane	75	9.721	9.721	(0.906)	107681	46.9443	47
	83	n-Propylbenzene	120	9.805	9.805	(0.914)	61920	45.6866	46
	84	2-Chlorotoluene	126	9.895	9.895	(0.923)	59703	45.9790	46
	85	1,3,5-Trimethylbenzene	105	9.988	9.988	(0.931)	251081	47.6300	48
	86	4-Chlorotoluene	126	10.007	10.010	(0.933)	61483	45.9568	46
M	94	Xylene (Total)	106				295339	141.028	140
	87	tert-Butylbenzene	119	10.329	10.326	(0.963)	259196	48.6120	49
	88	1,2,4-Trimethylbenzene	105	10.374	10.377	(0.967)	243579	49.3576	49
	89	sec-Butylbenzene	105	10.551	10.547	(0.984)	283309	48.2470	48
	90	1,3-Dichlorobenzene	146	10.660	10.663	(0.994)	120022	45.4419	45
	91	4-Isopropyltoluene	119	10.695	10.695	(0.997)	240535	47.5890	48
*	92	1,4-Dichlorobenzene-d4	152	10.724	10.721	(1.000)	113401	50.0000	
	93	1,4-Dichlorobenzene	146	10.750	10.750	(1.002)	121907	42.8887	43
	95	n-Butylbenzene	91	11.097	11.097	(1.035)	216447	45.3336	45
	96	1,2-Dichlorobenzene	146	11.113	11.113	(1.036)	120996	48.0101	48
	97	Hexachloroethane	117	11.358	11.354	(1.059)	43761	44.2172	44
	98	1,2-Dibromo-3-chloropropane	75	11.843	11.840	(1.104)	20184	46.4827	46
	99	1,2,4-Trichlorobenzene	180	12.586	12.586	(1.174)	65781	40.9461	41
	100	Hexachlorobutadiene	225	12.731	12.731	(1.187)	51989	44.6279	45
	101	Naphthalene	128	12.801	12.801	(1.194)	138704	42.4597	42
	102	1,2,3-Trichlorobenzene	180	13.007	13.007	(1.213)	66475	45.4703	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\V10.I\140623A.B\V8D5671.d
Date : 23-JUN-2014 22:30
Client ID: LCSD-77722
Instrument: V10.i
Sample Info: 5ML,LCSD-77722,LCSD-77722,77722
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9892.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/2014

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	48	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	49	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	48	
67-64-1	Acetone	48	
74-88-4	Iodomethane	52	
75-15-0	Carbon disulfide	49	
75-09-2	Methylene chloride	50	
156-60-5	trans-1,2-Dichloroethene	50	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	51	
78-93-3	2-Butanone	47	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	50	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	49	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	48	
56-23-5	Carbon tetrachloride	47	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	50	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	50	
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

EPA SAMPLE NO.

LCSD-77805

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1082 Mod. Ref No.: SDG No.: SN1082

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-77805

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1M9892.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/26/2014

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	46	
591-78-6	2-Hexanone	52	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	94	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	48	
75-25-2	Bromoform	48	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	51	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	45	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	46	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	47	
96-12-8	1,2-Dibromo-3-chloropropane	47	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	44	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	48	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	49	

Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9892.D
Report Date: 27-Jun-2014 10:49

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140626.B\V1M9892.D
Lab Smp Id: LCSD-77805 Client Smp ID: LCSD-77805
Inj Date : 26-JUN-2014 12:16
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5G,LCSD-77805,LCSD-77805,77805
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140626.B\v18260Gadd-6lvl.m
Meth Date : 27-Jun-2014 10:47 amarquis Quant Type: ISTD
Cal Date : 26-JUN-2014 10:46 Cal File: V1M9889.D
Als bottle: 45 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	1.243	1.232	(0.283)	84479	50.0000	44
2	Freon114	85	1.243	1.232	(0.283)	84479	50.0000	45
3	Chloromethane	50	1.371	1.360	(0.312)	191227	50.0000	48
4	Vinyl Chloride	62	1.470	1.468	(0.335)	169886	50.0000	52
5	Bromomethane	94	1.676	1.665	(0.382)	114292	50.0000	50
6	Chloroethane	64	1.755	1.754	(0.400)	111291	50.0000	48
7	Trichlorofluoromethane	101	1.932	1.921	(0.440)	277256	50.0000	48
126	Ethanol	46	2.021	2.010	(0.460)	64336	5000.00	4200(A)
8	Ether	59	2.090	2.079	(0.476)	139680	50.0000	51
9	Acrolein	56	2.159	2.158	(0.491)	103276	250.000	250(A)
10	1,1-Dichloroethene	96	2.267	2.266	(0.516)	161980	50.0000	48
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.287	2.276	(0.521)	197329	50.0000	49
12	Acetone	58	2.267	2.266	(0.516)	14673	50.0000	48
13	Iodomethane	142	2.385	2.384	(0.543)	267637	50.0000	52
14	Carbon Disulfide	76	2.395	2.404	(0.545)	437113	50.0000	49
15	Acetonitrile	41	2.484	2.483	(0.565)	576647	500.000	490(A)
16	Allyl Chloride	39	2.484	2.483	(0.565)	332444	50.0000	50
17	Methyl Acetate	43	2.494	2.492	(0.568)	134420	50.0000	45
18	Methylene Chloride	84	2.563	2.561	(0.583)	173295	50.0000	50
19	tert-Butanol	59	2.651	2.640	(0.603)	22349	100.000	100
20	Acrylonitrile	53	2.730	2.729	(0.621)	51333	50.0000	52
21	trans-1,2-Dichloroethene	96	2.759	2.758	(0.628)	174864	50.0000	50
22	Methyl tert-butyl ether	73	2.769	2.768	(0.630)	435299	50.0000	51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.055	3.054	(0.695)	310437	50.0000	50
	24 Vinyl acetate	43	3.094	3.093	(0.704)	762138	50.0000	51
	25 Diisopropyl Ether	45	3.114	3.113	(0.709)	784605	50.0000	50
	26 2-Chloro-1,3-Butadiene	53	3.124	3.123	(0.711)	290235	50.0000	47
	27 Ethyl tert-butyl ether	59	3.380	3.379	(0.769)	583405	50.0000	51
	29 2,2-Dichloropropane	77	3.488	3.487	(0.794)	129690	50.0000	50
	28 cis-1,2-Dichloroethene	96	3.488	3.477	(0.794)	183864	50.0000	51
	30 2-Butanone	72	3.488	3.487	(0.794)	13527	50.0000	47(Q)
	32 Propionitrile	54	3.527	3.516	(0.803)	170156	500.000	520(A)
	33 Methacrylonitrile	41	3.646	3.644	(0.830)	215402	100.000	100
	34 Bromochloromethane	128	3.665	3.654	(0.834)	84987	50.0000	53
	31 Tetrahydrofuran	72	3.715	3.704	(0.845)	27845	100.000	100
	35 Chloroform	83	3.724	3.723	(0.848)	316864	50.0000	49
$	36 Dibromofluoromethane	113	3.852	3.841	(0.877)	213423	50.0000	49
	37 1,1,1-Trichloroethane	97	3.882	3.871	(0.883)	270328	50.0000	50
	38 Cyclohexane	56	3.941	3.930	(0.897)	282196	50.0000	47
	39 1,1-Dichloropropene	110	4.010	4.009	(0.913)	75230	50.0000	48
	40 Carbon Tetrachloride	117	4.020	4.009	(0.915)	275135	50.0000	47
	41 Isobutyl Alcohol	43	4.089	4.078	(0.931)	117811	1000.00	1000(A)
$	42 1,2-Dichloroethane-d4	102	4.118	4.107	(0.937)	45409	50.0000	52
	43 Benzene	78	4.177	4.166	(0.951)	585145	50.0000	48
	44 1,2-Dichloroethane	62	4.177	4.166	(0.951)	259965	50.0000	50
	45 tert-Amyl methyl ether	73	4.266	4.265	(0.971)	442463	50.0000	50
*	46 Fluorobenzene	96	4.394	4.393	(1.000)	649461	50.0000	
	47 Trichloroethene	130	4.709	4.708	(1.072)	148748	50.0000	46
	48 Methylcyclohexane	83	4.886	4.885	(1.112)	240135	50.0000	46
	49 1,2-Dichloropropane	63	4.896	4.895	(1.114)	163142	50.0000	51
	51 Methyl Methacrylate	69	5.004	5.003	(1.139)	106293	50.0000	50
	52 Dibromomethane	93	4.995	4.993	(1.137)	117743	50.0000	52
	53 1,4-Dioxane	88	5.014	5.013	(1.141)	26083	1000.00	1100(A)
	54 Bromodichloromethane	83	5.132	5.131	(1.168)	251198	50.0000	50
	55 2-Chloroethyl vinyl ether	63	5.408	5.407	(1.231)	48069	50.0000	48
	56 cis-1,3-Dichloropropene	75	5.546	5.545	(1.262)	266762	50.0000	50
	57 4-Methyl-2-pentanone	43	5.694	5.692	(1.296)	155706	50.0000	50
$	58 Toluene-d8	98	5.802	5.801	(0.800)	608552	50.0000	50
	59 Toluene	91	5.871	5.870	(1.336)	604069	50.0000	48
	60 trans-1,3-Dichloropropene	75	6.068	6.067	(1.381)	244070	50.0000	50
	61 Ethyl Methacrylate	69	6.176	6.175	(1.406)	136268	50.0000	53
	62 1,1,2-Trichloroethane	97	6.245	6.254	(1.421)	124866	50.0000	49
	63 Tetrachloroethene	164	6.403	6.411	(0.883)	102492	50.0000	46
	64 1,3-Dichloropropane	76	6.412	6.411	(0.885)	223052	50.0000	50
	65 2-Hexanone	43	6.511	6.510	(0.898)	110256	50.0000	52
	66 Dibromochloromethane	129	6.639	6.638	(0.916)	171100	50.0000	53
	67 1,2-Dibromoethane	107	6.757	6.756	(0.932)	142816	50.0000	50
	69 1-Chlorohexane	91	7.269	7.278	(1.003)	226645	50.0000	44(Q)
*	68 Chlorobenzene-d5	117	7.249	7.248	(1.000)	455021	50.0000	
	70 Chlorobenzene	112	7.279	7.278	(1.004)	382037	50.0000	48
	71 1,1,1,2-Tetrachloroethane	131	7.367	7.366	(1.016)	150550	50.0000	48
	72 Ethylbenzene	106	7.407	7.406	(1.022)	197818	50.0000	46
	73 m,p-Xylene	106	7.535	7.534	(1.039)	500719	100.000	94
	74 o-Xylene	106	7.968	7.967	(1.099)	240855	50.0000	46
	75 Styrene	104	7.978	7.977	(1.101)	422333	50.0000	48
	76 Bromoform	173	8.165	8.154	(1.126)	88130	50.0000	48
	77 Isopropylbenzene	105	8.382	8.380	(1.156)	630898	50.0000	47

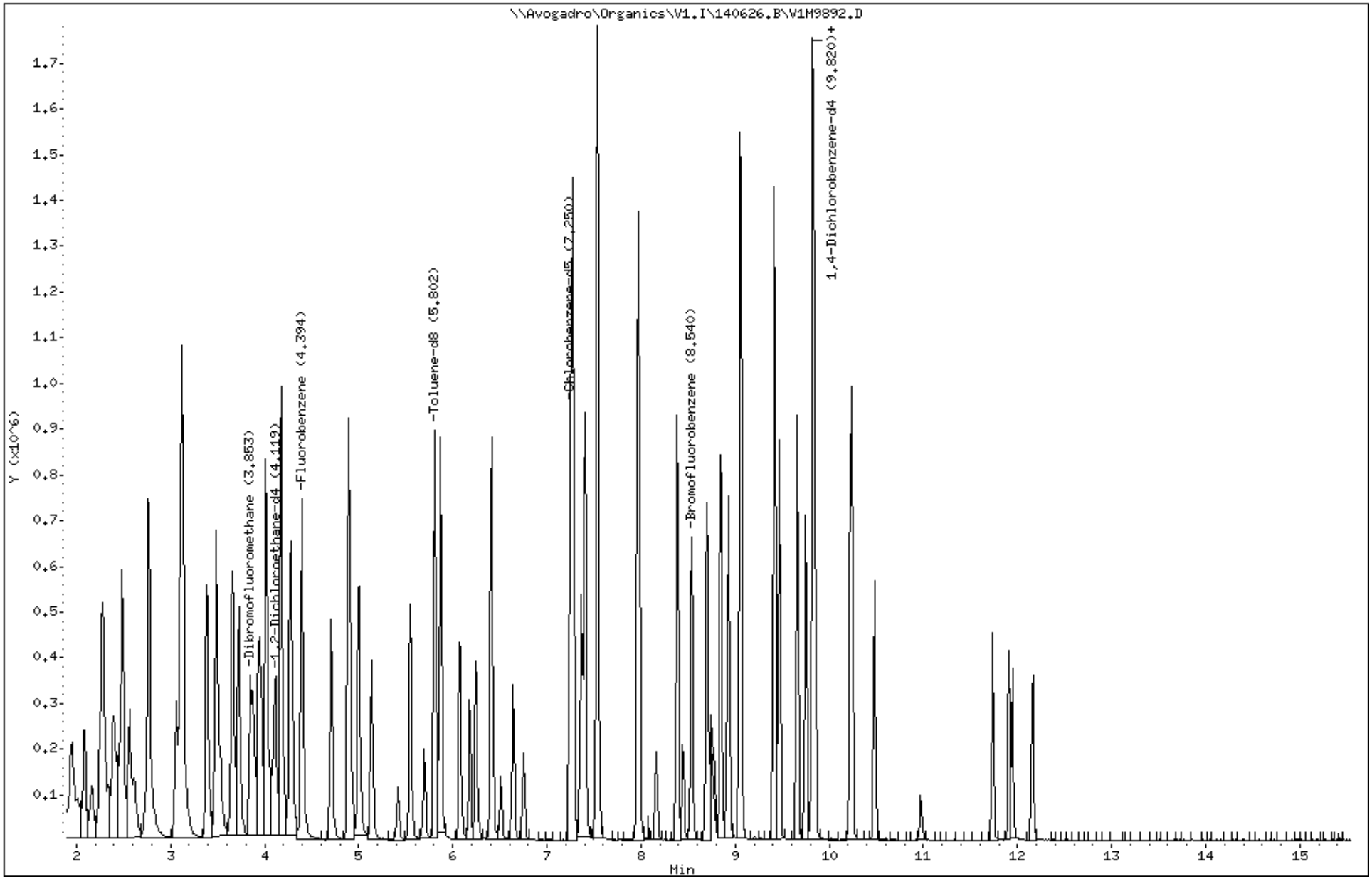
Data File: \\Avogadro\Organics\V1.I\140626.B\V1M9892.D
Report Date: 27-Jun-2014 10:49

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.441	8.449	(1.164)	42261	50.0000	48
$	79	Bromofluorobenzene	95	8.539	8.538	(1.178)	271274	50.0000	50
	80	1,1,2,2-Tetrachloroethane	83	8.706	8.705	(0.887)	149859	50.0000	51
	81	Bromobenzene	156	8.697	8.696	(0.886)	138848	50.0000	49
	82	1,2,3-Trichloropropane	75	8.746	8.745	(0.891)	158854	50.0000	50
	83	n-Propylbenzene	120	8.854	8.853	(0.902)	141978	50.0000	45
	84	2-Chlorotoluene	126	8.923	8.932	(0.909)	132501	50.0000	47
	85	1,3,5-Trimethylbenzene	105	9.061	9.060	(0.923)	513909	50.0000	47
	86	4-Chlorotoluene	126	9.051	9.060	(0.922)	137286	50.0000	48
M	94	Xylene (Total)	106				741574	150.000	140
	87	tert-Butylbenzene	119	9.415	9.424	(0.959)	497023	50.0000	46
	88	1,2,4-Trimethylbenzene	105	9.474	9.473	(0.965)	508179	50.0000	48
	89	sec-Butylbenzene	105	9.662	9.660	(0.984)	625721	50.0000	46
	90	1,3-Dichlorobenzene	146	9.750	9.749	(0.993)	244457	50.0000	47
	91	4-Isopropyltoluene	119	9.819	9.828	(1.000)	494573	50.0000	47
*	92	1,4-Dichlorobenzene-d4	152	9.819	9.828	(1.000)	186301	50.0000	
	93	1,4-Dichlorobenzene	146	9.849	9.848	(1.003)	243357	50.0000	47
	95	n-Butylbenzene	91	10.242	10.241	(1.043)	458532	50.0000	48
	96	1,2-Dichlorobenzene	146	10.223	10.222	(1.041)	226434	50.0000	47
	97	Hexachloroethane	117	10.479	10.478	(1.067)	125803	50.0000	47
	98	1,2-Dibromo-3-chloropropane	75	10.971	10.970	(1.117)	22413	50.0000	47
	99	1,2,4-Trichlorobenzene	180	11.739	11.738	(1.196)	101058	50.0000	49
	100	Hexachlorobutadiene	225	11.906	11.905	(1.213)	53108	50.0000	44
	101	Naphthalene	128	11.946	11.945	(1.217)	236969	50.0000	48
	102	1,2,3-Trichlorobenzene	180	12.162	12.161	(1.239)	86427	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\140626.B\V1M9892.D
Date : 26-JUN-2014 12:16
Client ID: LCSD-77805
Instrument: V1.i
Sample Info: 5G,LCSD-77805,LCSD-77805,77805
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



INJECTION LOG

VOLATILES LABORATORY

N1082

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260W ANALYST: MW
ICAL DATE: 6/26/14

BATCH: 140626.B

Start: 26-JUN-14 07:10
End: 26-JUN-14 19:21

Comments:

Standards: IPA VM140227A 1 uL
SSS VMHCX116A 400 uL
STD VM140619A 20 uL
_____ _____ uL

Reviewed By: 6/27/14 Manual Integration: MS 6/27 MI Review: _____ ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V1M9880	07:10	BFB1K	BFB1K		SL									1		OK	
V1M9881	07:26	VSTD0501K	VSTD0501K		AQ		100	100	100					1		Do not use	
V1M9882	07:51	VSTD0501K	VSTD0501K		AQ		98	96	97					1		Do not use	
V1M9883	08:16	VSTD0201K	VSTD0201K		AQ		102	101	101					1		OK L2	
V1M9884	08:41	VSTD0051K	VSTD0051K		AQ		102	102	91					1		OK MI_12 ~~L2~~ L1	
V1M9885	09:06	VSTD0011K	VSTD0011K		AQ		91	91	81	101	101	100	96	1		Do not use	
V1M9886	09:31	VSTD0011K	VSTD0011K		AQ		95	96	85					1		OK MI_20_82 L6	
V1M9887	09:56	VSTD0501K	VSTD0501K		AQ		96	99	97					1		OK L3	
V1M9888	10:21	VSTD2001K	VSTD2001K		AQ		96	98	105					1		OK L5	
V1M9889	10:46	VSTD1001K	VSTD1001K		AQ		98	99	100					1		OK L4	
V1M9890	11:18	VICV0501K	VICV0501K		AQ		95	98	95	102	110	100	99	1	ER	OK ICV	
V1M9891	11:51	LCS-77805	LCS-77805	77805	AQ		93	93	90	100	102	101	98	1	E	OK	
V1M9892	12:16	LCSD-77805	LCSD-77805	77805	AQ		99	101	98	99	104	100	100	1	E	OK	
V1M9893	12:41	MB-77805	MB-77805	77805	AQ		94	94	85	98	99	102	96	1		OK MW	
V1M9894	13:06	MB-77805	MB-77805	77805	AQ		90	91	82	101	103	100	96	1		OK	
V1M9895	13:31	N1082-12ADL	MW-22R_6/19/14D	77805	AQ	/	95	95	83	100	96	101	95	500		~~1,1,2-TRICHLORO~~ 1,1,2-TRICHLORO = 22 OK	2
V1M9896	13:56	N1082-15A~~DL~~	MW-21R_6/19/14D	77805	AQ	/	97	97	86	99	96	101	96	1000		1,1,2-TRICHLORO = 48 OK	2
V1M9897	14:21	N1082-13ADL	MW-22S_6/19/14D	77805	AQ	/	104	106	87	100	99	100	92	20		OK 1,1,2,1,2,2 = 73	2
V1M9898	14:46	N1082-14ADL	MW-21S_6/19/14D	77805	AQ	/	96	98	86	102	101	99	96	4		OK 1,1,2,1,2,2 = 75	2
V1M9899	15:11	N1023-20A	DSY-TB04-062014	77805	AQ	/	90	91	82	102	102	100	94	1		OK	2
V1M9900	15:36	N1023-21A	DSY-MW104A-0614	77805	AQ	/	93	95	85	103	104	100	95	1		OK	2
V1M9901	16:01	N1023-22A	DSY-MW11B-0614	77805	AQ	/	92	93	81	102	96	102	95	1		OK	2
V1M9902	16:26	N1023-23A	DSY-MW-DUP02-06	77805	AQ	/	93	95	83	101	102	99	92	1		OK	2
V1M9903	16:51	N0971-32A	TRIP BLANK-6/13	77805	AQ	/	88	89	71	101	99	100	92	1		OK	2
V1M9904	17:16	N0971-33A	CELL 6-PHASE 6-	77805	AQ	/	97	99	87	100	97	101	94	4		OK ACETONE=70 FOAMING	2
V1M9905	17:41	N0971-34A	CELL 5-PHASE 9-	77805	AQ	/	99	100	89	104	104	100	94	10		OK ACETONE=94	2
V1M9906	18:07	N1088-04A	TRIP BLANK	77813	AQ	/	101	102	84	103	94	101	94	1		OK	2
V1M9907	18:31	N1088-01A	EFFLUENT 062014	77813	AQ	/	100	101	86	100	100	102	96	1		OK	2
V1M9908	18:56	N1088-02A	POSTSTRIPPER 06	77813	AQ	/	97	97	83	98	97	101	93	1		OK	2
V1M9909	19:21	N1088-03A	EQ TANK 062014	77813	AQ	/	95	96	85	98	98	101	94	50		OK PCE-67 OK	2

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
f - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

MS 6/26/14

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 6-23-14

ANALYST:

BATCH: 140623.B

Start: 23-JUN-14 08:37
End: 23-JUN-14 20:12

Comments:

Standards: DFTPP VW140622SA 2 uL
ISTD VW140616A AUTO uL
SURR VW140619A ___ uL
_____ ___ uL

Reviewed By: 6/25/14

Manual Integration: _____

MI Review: _____

ICV: VW140619B

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D5642	08:37	BFB10W	BFB10W		AQ									1		OK	
V8D5643	09:09	VSTD05010W	VSTD05010W		AQ		103	111	119					1		NOT USED	
V8D5644	09:51	VSTD05010W	VSTD05010W		AQ		100	100	100					1		OK	
V8D5645	10:29	VSTD02010W	VSTD02010W		AQ		101	100	99					1		OK	
V8D5646	10:58	VSTD00510W	VSTD00510W		AQ		106	107	102					1		OK MI_6_12_55	
V8D5647	11:26	VSTD00110W	VSTD00110W		AQ		98	97	88					1		NOT USED	
V8D5648	11:53	VSTD00110W	VSTD00110W		AQ		98	103	94					1		OK MI_3_5_6	
V8D5649	12:21	VSTD20010W	VSTD20010W		AQ		100	108	112					1		OK	
V8D5650	12:48	VSTD10010W	VSTD10010W		AQ		107	114	120					1		OK	
V8D5651	13:16	LCS-77721	LCS-77721	77721	AQ		106	112	113	102	103	99	104	1	ER	OK	
V8D5652	13:43	VICV050W10	VICV050W10	77721	AQ		103	104	101	96	94	101	99	1	ER	OK	
V8D5653	14:11	MB-77721	MB-77721	77721	AQ		105	107	100	100	110	100	98	1		NOT USED	
V8D5654	14:39	MB-77721	MB-77721	77721	AQ		102	106	97	100	105	98	97	1		OK	
V8D5655	15:07	N1055-13A	MW-10S_6/16/14	77721	AQ	2	99	104	92	106	105	96	96	1		OK	7
V8D5656	15:35	N1082-01A	TRIPBLANK_6/17/	77721	AQ	1	97	102	93	105	110	97	96	1		OK	7
V8D5657	16:02	N0991-23A	WGL-SW-TB01-061	77721	AQ	1	97	98	89	106	105	100	98	1		OK	2
V8D5658	16:30	N0991-21A	WGL-SW-SW03-061	77721	AQ	1	94	99	87	105	104	98	97	1		OK	2
V8D5659	16:57	N0991-22A	WGL-SW-SW04-061	77721	AQ	1	93	98	85	106	111	97	97	1		OK	2
V8D5660	17:25	N1055-10ADL	MW-21R(1)_6/17/	77721	AQ	2	93	98	89	104	111	95	94	1000		1,1,2-TRICHLORO=100 OK	7
V8D5661	17:53	N1055-11ADL	MW-21R(2)_6/17/	77721	AQ	2	91	98	89	107	102	97	97	1000		↓ =124 OK	7
V8D5662	18:21	N1055-12ADL	MW-21R(3)_6/17/	77721	AQ	2	90	98	86	108	112	95	94	1000		↓ =127 OK	7
V8D5663	18:49	N0971-18A	CELL 5-PHASE 7-	77721	AQ	2	85	92	83	108	113	95	96	200		ACETONE = 47 OK	2
V8D5664	19:17	N1055-09AMSD	MW-27_6/17/14MS	77721	AQ	6	80	86	86	104	95	99	102	1	ER	OK	7
V8D5665	19:44	VBLK	VBLK		AQ		81	84	74	105	99	98	96	1		NOT USED	
V8D5666	20:12	VBLK	VBLK		AQ		77	81	71	107	113	98	96	1			

* - Internal Standard or Surrogate outside of control limits
B - One or more target compounds are above the calibration range
E - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6-24-14

INJECTION LOG

VOLATILES LABORATORY

N1082

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 6-23-14

ANALYST: [signature]

BATCH: 140623A.B

Start: 23-JUN-14 20:40
End: 24-JUN-14 08:28

Comments:

Standards: IS/S VW140276B 2 uL
IS/S VW140616A 10 uL
SID VW140619A 10 uL
_____ ___ uL

Reviewed By: [signature] 6/24/14

Manual Integration: _____

MI Review: _____

ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V8D5667	20:40	BFB10X	BFB10X		AQ									1		OK	
V8D5668	21:07	VSTD05010X	VSTD05010X		AQ		100	100	100					1		OK	
V8D5669	21:35	VSTD05010X	VSTD05010X		AQ		101	102	99	107	110	95	103	1	ER	NJS UNSAT	
V8D5670	22:02	LCS-77722	LCS-77722	77722	AQ		98	93	88	104	101	97	103	1	E	OK	
V8D5671	22:30	LCSD-77722	LCSD-77722	77722	AQ		92	89	84	102	99	97	101	1	E	OK	
V8D5672	22:57	MB-77722	MB-77722	77722	AQ		104	100	83	109	105	95	97	1		NJS UNSAT	
V8D5673	23:25	MB-77722	MB-77722	77722	AQ		101	98	83	107	106	94	96	1		OK	
V8D5674	23:52	N1001-08A	MCK-2S	77722	AQ	1	97	95	80	110	111	96	96	1	E	OK	2
V8D5675	00:19	N1001-06A	MCK-3S	77722	AQ	1	100	95	84	106	106	98	99	1	E	OK	
V8D5676	00:47	N1001-07A	MCK-2D	77722	AQ	1	97	93	83	108	110	94	100	1	E	OK	
V8D5677	01:14	N1001-09A	MCK-3D	77722	AQ	1	33*	14*	4*	67*	36*	169*	54*	1		RA	
V8D5678	01:41	N1001-10A	MCK-4S	77722	AQ	1	91	93	77	113	110	93	96	1		OK	
V8D5679	02:08	N1001-11A	MCK-4D	77722	AQ	1	89	86	70	109	101	96	94	1	E	OK	
V8D5680	02:35	N1001-12A	TB-061114	77722	AQ	1	90	86	70	108	96	97	96	1		OK	
V8D5681	03:03	N0971-31A	CELL 5-PHASE 1-	77722	AQ	1	90	90	75	111	99	94	98	1		OK	2
V8D5682	03:30	N1082-02A	MW-29S_6/17/14	77722	AQ	1	89	89	73	113	109	94	95	1		OK	7
V8D5683	03:57	N1082-03A	MW-20S_6/17/14	77722	AQ	1	87	88	72	114	114	95	97	1		OK	
V8D5684	04:24	N1082-04A	MW-20R_6/17/14	77722	AQ	1	89	88	74	115	105	94	96	1		OK	
V8D5685	04:51	N1082-05A	MW-29D_6/18/14	77722	AQ	1	86	85	70	111	110	94	94	1		OK	
V8D5686	05:18	N1082-06A	MW-30D_6/18/14	77722	AQ	1	85	87	74	117*	115	95	99	1	E	OK	
V8D5687	05:45	N1082-07A	MW-30S_6/18/14	77722	AQ	1	84	86	70	116*	114	94	96	1	E	OK	
V8D5688	06:12	N1082-08A	MW-31D_6/18/14	77722	AQ	1	83	82	65	113	104	96	94	1		OK	
V8D5689	06:39	N1082-09A	MW-31S_6/18/14	77722	AQ	1	84	83	66	109	103	93	95	1		OK	
V8D5690	07:06	N1082-10A	MW-32D_6/18/14	77722	AQ	1	82	83	71	122*	114	95	99	1		OK	7
V8D5691	07:34	N1018-01A	1406-12638-001	77734		1	76	77	62	115	110	94	93	1		OK	
V8D5692	08:01	N1018-02A	1406-12638-002	77734		1	82	81	68	113	114	94	95	1	F	OK	
V8D5693	08:28	N1018-03A	1406-12638-003	77734		1	81	81	67	115	108	94	96	1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
F - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6-24-14

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 6-23-14

ANALYST: JM

BATCH: 140624.B

Start: 24-JUN-14 08:47
End: 24-JUN-14 22:06

Comments:

Standards: BFB VM140622A 2 uL
IVSS VM140606A AUTO uL
STD VM140619A 20 uL
_____ ____ uL

Reviewed By: JM 6/25/14

Manual Integration: _____

MI Review: _____

ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V8D5700	08:47	BFB10Y	BFB10Y		AQ	1								1		OK	
V8D5701	09:05	VSTD05010Y	VSTD05010Y		AQ	1	100	100	100					1		OK	
V8D5702	09:43	LCS-77738	LCS-77738	77738	AQ	1	107	108	108	109	112	90	106	1	ER	OK	
V8D5703	10:20	MB-77738	MB-77738	77738	AQ	1	92	87	73*	111	101	95	94	1		MAT USED	
V8D5704	10:48	MB-77738	MB-77738	77738	AQ	1	96	94	79	110	112	94	92	1		OK	
V8D5705	11:16	N1074-02A	EFFLUENT	77738	AQ	1	101	101	85	113	109	91	99	1		OK	2
V8D5706	11:43	N1074-01A	INFLUENT	77738	AQ	1	98	101	85	112	112	92	98	5		PCE=51 OK	2
V8D5708	12:38	N1082-11A	MW-32S_6/18/14	77738	AQ	2	97	97	83	115	112	92	99	1	E	OK	7
V8D5709	13:06	N0971-24A	CELL 5-PHASE 4-	77738	AQ	2	96	100	93	114	110	91	103	4	E	OK- FOAMING	2
V8D5710	13:47	N0971-29A	CELL 5-PHASE 2-	77738	AQ	2	94	94	79	109	102	94	94	4		OK- FOAMING	2
V8D5711	14:14	N1001-09A	MCK-3D	77738	AQ	2	91	86	76	106	105	97	99	1	E	OK	7
V8D5712	14:41	N0971-29A	CELL 5-PHASE 2-	77738	AQ	1	96	102	91	118*	118	92	100	4	E	MAT USED	2
V8D5713	15:09	N0971-26A	CELL 5-PHASE 3-	77738	AQ	2	100	103	105	107	106	92	106	1	E	ACETONE=978 RUN @ 10X	
V8D5714	15:36	N0971-30A	CELL 5-PHASE 1-	77738	AQ	2	109	111	108	108	105	93	105	1	E	RUN @ 10X	
V8D5715	16:04	N0971-25A	CELL 5-PHASE 4-	77738	AQ	2	113	114	110	106	114	92	104	1	E	ACETONE=320 RUN @ 4X	
V8D5716	16:32	N0971-27A	CELL 5-PHASE 3-	77738	AQ	2	114	116	111	105	121*	92	103	1	E	ACETONE=944 RUN @ 10X	
V8D5717	17:00	N0971-28A	CELL 5-PHASE 2-	77738	AQ	2	112	121	112	111	112	89	100	5	E	RUN @ 10X	2
V8D5718	17:28	MB-77723	VTBLK10Y	77738	AQ	1	115	118	110	108	118	91	99	1		OK	
V8D5719	17:56	N1075-01B	WC-RSL-01	77738	AQ	1	110	117	107	108	112	90	98	1		OK	
V8D5720	18:24	N1075-02B	WC-RSL-02	77738	AQ	1	113	115	108	105	103	92	101	1		OK	
V8D5721	18:52	N1076-01C	SP-01-061914	77738	AQ	1	114	115	106	107	110	92	100	1		OK	
V8D5722	19:20	N0971-31AMS	CELL 5-PHASE 1-	77738	AQ	2	109	117	120	110	114	88	106	1	E	OK	2
V8D5723	19:48	N0971-31AMSD	CELL 5-PHASE 1-	77738	AQ	2	111	119	122	110	121*	90	103	1	E	OK	2
V8D5724	20:16	N1075-01BMS	WC-RSL-01MS	77738	AQ	2	113	122	124	108	110	90	104	1		OK	
V8D5725	20:44	VBLK	VBLK		AQ	1	113	119	108	106	105	90	101	1	E	MAT USED	
V8D5726	21:11	N1070-01A	PRE	77767	AQ	1	111	117	103	110	111	89	99	10	E	OK	2
V8D5727	21:39	N1070-02A	POST	77767	AQ	1	111	113	103	108	103	91	100	10		OK	2
V8D5728	22:06	VBLK	VBLK		AQ	1	104	108	1*	113	113	94	101	1	E T	MAT USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence

R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6/27/14

N1082

Spectrum Analytical, Inc. RI Division V10 Injection Log
Volatiles Laboratory

METHOD: 8260W
ICAL DATE: 6/25/14
ANALYST: JKM
BATCH: 140625.B
Start: 25-JUN-14 07:20
End: 25-JUN-14 19:12

Comments:

Standards: ISTD VW140522A 2 uL
ISTD VW140606A 100 uL
STD VW140619A 20 uL
___ uL

Reviewed By: MS 6/26/14
Manual Integration: N/A
MI Review: M/A
ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V8D5730	07:20	BFB10Z	BFB10Z		AQ									1		OK	
V8D5731	07:38	VSTD05010Z	VSTD05010Z		AQ		100	100	100					1		OK	
V8D5732	08:22	LCS-77766	LCS-77766	77766	AQ		107	105	104	106	105	91	105	1	ER	OK	
V8D5733	09:01	MB-77766	MB-77766	77766	AQ		107	109	99	114	117	89	100	1		NOT USED	
V8D5734	09:29	MB-77766	MB-77766	77766	AQ		92	92	80	110	106	90	96	1		OK	
V8D5735	09:57	N1001-22A	TB-061214	77766	AQ	1	105	107	94	110	112	88	99	1		OK	2
V8D5736	10:24	N1001-13A	MCK-1S	77766	AQ	1	100	104	93	114	116	88	97	1		OK	
V8D5737	10:52	N1001-14A	MCK-1D	77766	AQ	1	102	104	92	113	111	87	98	1		OK	
V8D5738	11:20	N1001-15A	PZ-2	77766	AQ	1	90	87	80	108	106	92	102	1	*	OK	
V8D5739	11:47	N1001-16A	RI-1TR	77766	AQ	1	98	103	92	115	115	86	98	1		OK	
V8D5740	12:15	N1001-17A	RI-1S	77766	AQ	1	97	102	89	110	114	86	98	1		OK	
V8D5741	12:43	N0971-30A	CELL 5-PHASE 1-	77766	AQ	2	101	104	102	106	114	89	106	1	*	OK	
V8D5742	13:10	N0971-25ADL	CELL 5-PHASE 4-	77766	AQ	2	95	94	87	105	107	91	101	4	E	ACETONE=89 OK	
V8D5743	13:38	N0971-26ADL	CELL 5-PHASE 3-	77766	AQ	2	99	104	97	111	110	87	102	10	*	=93 OK	
V8D5744	14:06	N0971-27ADL	CELL 5-PHASE 3-	77766	AQ	2	101	104	98	114	112	88	104	10		=73 OK	
V8D5745	14:34	N0971-28A	CELL 5-PHASE 2-	77766	AQ	2	96	101	94	112	107	89	103	10		ACETONE =109 OK	
V8D5746	15:02	N1001-18A	RI-2TR	77766	AQ	1	96	102	92	111	112	88	99	1		OK	
V8D5747	15:30	N1001-19A	RI-2S	77766	AQ	1	94	97	85	109	99	89	98	1		OK	
V8D5748	15:57	N1001-20A	RI-3TR	77766	AQ	1	96	105	95	115	117	84	100	1		OK	
V8D5749	16:25	N1001-21A	RI-3S	77766	AQ	1	93	98	86	111	101	87	96	1		OK	2
V8D5750	16:53	N1082-12A	MW-22R_6/19/14	77766	AQ	1	97	105	95	114	121*	85	102	1	E	1,1,2-TRICHLORO=15,900	7
V8D5751	17:20	N1082-13A	MW-22S_6/19/14	77766	AQ	1	98	103	93	116*	114	87	101	1	E	=2760	
V8D5752	17:48	N1082-14A	MW-21S_6/19/14	77766	AQ	1	94	103	94	116*	114	86	99	1	E	=450	
V8D5753	18:16	N1082-13AMS	MW-22S_6/19/14M	77766	AQ	2	100	107	113	111	116	87	110	1	ER	OK	
V8D5754	18:44	N1082-13AMSD	MW-22S_6/19/14M	77766	AQ	1	94	103	101	111	103	85	103	1	ER	OK	7
V8D5755	19:12	BLK		BLK	AQ		97	104	95	113	109	86	99	1		NOT USED	

* - Internal Standard or Surrogate outside of control limits
- One or more target compounds are above the calibration range
- Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

6-26-14

N1082

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 R23
6/20/14	N1064	EPA	10-25	VEB	✱	N	R8	
	N1064	EPA	10-25			M	R8	
	N1078		01-03			N	R8	
	N1078		01-03			M	R8	
	N1078	EPA	08			PE	R8	
	N1033	EPA	07			H	R13	
	N1023	Tetra	10-23			H	R9	
	N1081	Tetra	07			H	R9	
	N1082	Dirka	01-15			UA	R8	
	N1080	DAY	01-11, 13-15			F	F10	
6/20/14	N1080	DAY	01-11, 13-15	VEB		M	R10	
6/23/14	N1078	EPA	09-25	KP		N	R8	
6/23/14	N1078	EPA	09-25	KP		M	R8	
6/23/14	N1087	EPA	01-03	KP	✱	N	R8	

Logbook ID 90.0191-10/13

Reviewed By: ✱ 6-24-14

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

Last Page of Data Report

Report Date:
25-Aug-14 13:44

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Work Order: N1402
Project : Farrand Controls
Project #:

Attn: Robbin Petrella

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
N1402-01	TRIP BLANK	Aqueous	08-Aug-14 08:45	09-Aug-14 09:20
N1402-02	PRESBREY LELAND	Aqueous	08-Aug-14 09:30	09-Aug-14 09:20
N1402-03	CASSIDY EXCAVATING	Aqueous	08-Aug-14 09:50	09-Aug-14 09:20
N1402-04	HAWK SHAW	Aqueous	08-Aug-14 10:16	09-Aug-14 09:20
N1402-05	KENSICO	Aqueous	08-Aug-14 10:30	09-Aug-14 09:20
N1402-06	PEACOCK MEMORIALS	Aqueous	08-Aug-14 10:45	09-Aug-14 09:20
N1402-07	DADYSHAN	Aqueous	08-Aug-14 10:55	09-Aug-14 09:20
N1402-08	ZIMMERMAN'S	Aqueous	08-Aug-14 11:10	09-Aug-14 09:20
N1402-09	VALHALLA MEMORIALS	Aqueous	08-Aug-14 12:05	09-Aug-14 09:20

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 requirments have been meet.

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
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1402

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
TRIP BLANK	N1402-01	SW8260_W				
PRESBREY LELAND	N1402-02	SW8260_W				
CASSIDY EXCAVATING	N1402-03	SW8260_W				
HAWK SHAW	N1402-04	SW8260_W				
KENSICO	N1402-05	SW8260_W				
PEACOCK MEMORIALS	N1402-06	SW8260_W				
DADYSHAN	N1402-07	SW8260_W				
ZIMMERMAN'S	N1402-08	SW8260_W				
VALHALLA MEMORIALS	N1402-09	SW8260_W				

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1402

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
N1402-01A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-02A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-03A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-04A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-05A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-06A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-07A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-08A	AQ	8/8/2014	8/9/2014	NA	8/14/2014
N1402-09A	AQ	8/8/2014	8/9/2014	NA	8/14/2014

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

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

Project Name : Farrand Controls **SDG :** N1402

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
N1402-01A	AQ	SW8260_W	NA	LOW	1
N1402-02A	AQ	SW8260_W	NA	LOW	1
N1402-03A	AQ	SW8260_W	NA	LOW	1
N1402-04A	AQ	SW8260_W	NA	LOW	1
N1402-05A	AQ	SW8260_W	NA	LOW	1
N1402-06A	AQ	SW8260_W	NA	LOW	1
N1402-07A	AQ	SW8260_W	NA	LOW	1
N1402-08A	AQ	SW8260_W	NA	LOW	1
N1402-09A	AQ	SW8260_W	NA	LOW	1

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: N1402

Client ID: DVIRKA_WOODBURY
Project: Farrand Controls
WO Name: Farrand Controls
Location: FARRAND,
Comments: Preservative changed from HCL to UA

Case:
SDG:
PO: 3150-16

HC Due: 08/25/14
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQuIS_4_NYSDEC_v3

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
N1402-01A	TRIP BLANK	08/08/2014 08:45	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-02A	PRESBREY LELAND	08/08/2014 09:30	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-03A	CASSIDY EXCAVATING	08/08/2014 09:50	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-04A	HAWK SHAW	08/08/2014 10:16	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-05A	KENSICO	08/08/2014 10:30	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-06A	PEACOCK MEMORIALS	08/08/2014 10:45	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-07A	DADYSHAN	08/08/2014 10:55	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-08A	ZIMMERMAN'S	08/08/2014 11:10	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA
N1402-09A	VALHALLA MEMORIALS	08/08/2014 12:05	08/09/2014	Aqueous	SW8260_W	/ 1ppb ICAL,1,2-Dichloro-1,1,2-trifluroethane as TIC				Y	VOA

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

HT = Test logged in but has been placed on hold

08/13/2014 09:50

Lab Client Rep: Agnes R Huntley

Sample Transmittal Documentation

N1402

SPECTRUM ANALYTICAL, INC.
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Page 1 of 1

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive
Agawam, MA 01001
(413) 789-9018

☐ 8405 Benjamin Road, Ste A
Tampa, FL 33634
(813) 888-9507

☒ 646 Camp Avenue
N Kingstown, RI 02852
(401) 732-3400

Special Handling:

TAT- Indicate Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: Dvirka + Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Telephone #: (516) 364-9890
Project Mgr. Matt DeVinney

Invoice To: Robbin Petrella
rpetrella@db-eng.com

P.O. No.: _____ RQN: _____

Project No.: 3150-16
Site Name: Farrand Controls
Location: Valhalla State: NY
Sampler(s): Emily Hepding

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below:

QA/QC Reporting Notes:

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

G=Grab C=Composite

N1402 Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: TCL VOCs
01	Trip Blank	8/8/14	8:45	G	GW	2				X
02	Presbrey Leland	8/8/14	9:30	G	GW	2				X
03	Cassidy Excavating	8/8/14	9:50	G	GW	2				X
04	Hawk Shaw	8/8/14	10:16	G	GW	2				X
05	Kensico	8/8/14	10:30	G	GW	2				X
06	Peacock Memorials	8/8/14	10:45	G	GW	2				X
07	Dadyshan	8/8/14	10:55	G	GW	2				X
08	Zimmerman's	8/8/14	11:10	G	GW	2				X
09	Valhalla Memorials	8/8/14	12:05	G	GW	2				X

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State-specific reporting standards: Category B

Relinquished by:	Received by:	Date:	Time:	Temp°C
Emily Hepding	FedEx	8/8/14	1:00	
FedEx		08/09/14	09:20	4.3°C IR

☐ EDD Format _____
☒ E-mail to rpetrella@db-eng.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

Received By: VRS	Page 01 of 00
Reviewed By: KP	Log-in Date 08/09/2014
Work Order: N1402	Client Name: Dvirka & Bartilucci
Project Name/Event: Farrand Controls	

Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.

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 8015 5877 9879
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	4.3 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	08/09/2014
12. Time Received	09:20

Lab Sample ID	Preservation (pH) HNO3	H2SO4	HCl	NaOH	H3PO4	VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
N1402-01						UA	
N1402-02						UA	
N1402-03						UA	
N1402-04						UA	
N1402-05						UA	
N1402-06						UA	
N1402-07						UA	
N1402-08						UA	
N1402-09						UA	

Sample Transfer

Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID:MT-74

CoolantCondition: 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

Rad OK Yes / No

* Volatiles *

REPORT NARRATIVE

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

Client : Dvirka & Bartilucci

Project: Farrand Controls

Laboratory Workorder / SDG #: N1402

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: SW5030B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V1
Instrument Type: GCMS-VOA

Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972

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-78548 in batch 78548, recovery is above criteria for Iodomethane at 124% with criteria of (72-121).

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.

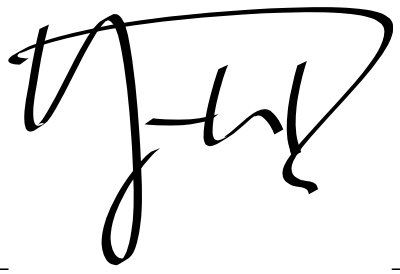
G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

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:_____8/25/2014_____

Data Flag/Qualifiers (Page 1 of 2):

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 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 an aldol condensation by-product.

Data Flag/Qualifiers (Page 2 of 2):

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.

L NYSDEC qualifier: Result is biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

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.: N1402 Mod. Ref No.: SDG No.: SN1402

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-78548	100	107	111	106				0
02	MB-78548	108	104	99	96				0
03	TRIP BLANK	108	103	101	96				0
04	PRESBREY LELAND	109	104	100	99				0
05	CASSIDY EXCAVATING	108	101	101	99				0
06	HAWK SHAW	107	103	101	97				0
07	KENSICO	108	102	103	99				0
08	PEACOCK MEMORIALS	108	100	100	98				0
09	DADYSHAN	109	104	101	101				0
10	ZIMMERMAN'S	108	103	103	100				0
11	VALHALLA MEMORIALS	108	105	102	101				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som14.07.15.0901

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Lab Sample ID: LCS-78548 LCS Lot No.:

Date Extracted: 08/14/2014 Date Analyzed (1): 08/14/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	56.1624	112		30 - 155
Chloromethane	50.0000	0.0000	48.9883	98		40 - 125
Vinyl chloride	50.0000	0.0000	44.7802	90		50 - 145
Bromomethane	50.0000	0.0000	45.6311	91		30 - 145
Chloroethane	50.0000	0.0000	44.8615	90		60 - 135
Trichlorofluoromethane	50.0000	0.0000	48.6992	97		60 - 145
1,1-Dichloroethene	50.0000	0.0000	47.3038	95		70 - 130
Acetone	50.0000	0.0000	68.8215	138		40 - 140
Iodomethane	50.0000	0.0000	61.9870	124	*	72 - 121
Carbon disulfide	50.0000	0.0000	52.2592	105		35 - 160
Methylene chloride	50.0000	0.0000	53.9397	108		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	48.3355	97		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.1514	100		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.3080	99		70 - 135
Vinyl acetate	50.0000	0.0000	53.4449	107		38 - 163
2-Butanone	50.0000	0.0000	60.1792	120		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	47.7343	95		70 - 125
2,2-Dichloropropane	50.0000	0.0000	47.8912	96		70 - 135
Bromochloromethane	50.0000	0.0000	49.6349	99		65 - 130
Chloroform	50.0000	0.0000	51.1113	102		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	50.3497	101		65 - 130
1,1-Dichloropropene	50.0000	0.0000	47.8957	96		75 - 130
Carbon tetrachloride	50.0000	0.0000	50.0592	100		65 - 140
1,2-Dichloroethane	50.0000	0.0000	53.3868	107		70 - 130
Benzene	50.0000	0.0000	48.2792	97		80 - 120
Trichloroethene	50.0000	0.0000	46.3782	93		70 - 125
1,2-Dichloropropane	50.0000	0.0000	49.7135	99		75 - 125
Dibromomethane	50.0000	0.0000	53.3551	107		75 - 125
Bromodichloromethane	50.0000	0.0000	50.1618	100		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	51.4006	103		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	54.4509	109		60 - 135
Toluene	50.0000	0.0000	47.2299	94		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.5132	101		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	52.9120	106		75 - 125
1,3-Dichloropropane	50.0000	0.0000	56.1128	112		75 - 125
Tetrachloroethene	50.0000	0.0000	47.8070	96		45 - 150
2-Hexanone	50.0000	0.0000	62.3005	125		55 - 130
Dibromochloromethane	50.0000	0.0000	54.8496	110		60 - 135
1,2-Dibromoethane	50.0000	0.0000	55.7885	112		80 - 120
Chlorobenzene	50.0000	0.0000	46.8142	94		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	46.6858	93		80 - 130
Ethylbenzene	50.0000	0.0000	46.6713	93		75 - 125
m,p-Xylene	100.0000	0.0000	90.1956	90		75 - 130
o-Xylene	50.0000	0.0000	46.7940	94		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Lab Sample ID: LCS-78548 LCS Lot No.:

Date Extracted: 08/14/2014 Date Analyzed (1): 08/14/2014

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	136.9896	91		81 - 121
Styrene	50.0000	0.0000	49.1637	98		65 - 135
Bromoform	50.0000	0.0000	47.0223	94		70 - 130
Isopropylbenzene	50.0000	0.0000	45.4697	91		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.6860	101		65 - 130
Bromobenzene	50.0000	0.0000	47.8634	96		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	52.7245	105		75 - 125
n-Propylbenzene	50.0000	0.0000	48.1404	96		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.7359	93		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	47.2030	94		75 - 130
4-Chlorotoluene	50.0000	0.0000	45.2088	90		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.5593	93		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	49.1314	98		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.2469	96		70 - 125
4-Isopropyltoluene	50.0000	0.0000	45.4849	91		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	45.6220	91		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	44.9964	90		75 - 125
n-Butylbenzene	50.0000	0.0000	49.6814	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	45.6094	91		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	53.8817	108		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	42.9191	86		65 - 135
Hexachlorobutadiene	50.0000	0.0000	34.2996	69		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	42.1024	84		55 - 140
Naphthalene	50.0000	0.0000	49.1998	98		55 - 140
1,1,2-Trichloro-1,2,2-trif	50.0000	0.0000	48.4816	97		70 - 130

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

* Values outside of QC limits

Spike Recovery: 1 out of 69 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Lab File ID: V1N0758.D Lab Sample ID: MB-78548

Instrument ID: V1

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/14/2014

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:14

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-78548	LCS-78548	V1N0754.D	9:34
02	TRIP BLANK	N1402-01A	V1N0759.D	11:39
03	PRESBREY LELAND	N1402-02A	V1N0760.D	12:04
04	CASSIDY EXCAVATING	N1402-03A	V1N0761.D	12:28
05	HAWK SHAW	N1402-04A	V1N0762.D	12:54
06	KENSICO	N1402-05A	V1N0763.D	13:19
07	PEACOCK MEMORIALS	N1402-06A	V1N0764.D	13:44
08	DADYSHAN	N1402-07A	V1N0765.D	14:09
09	ZIMMERMAN'S	N1402-08A	V1N0766.D	14:34
10	VALHALLA MEMORIALS	N1402-09A	V1N0767.D	14:58

COMMENTS:

5A - FORM V VOA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB1W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Lab File ID: V1N0693.D BFB Injection Date: 08/12/2014

Instrument ID: V1 BFB Injection Time: 14:27

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 80.0% of mass 95	46.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	50.0 -120% of mass 95	59.5
175	5.0 - 9.0% of mass 174	4.4 (7.4)1
176	95.0 - 101% of mass 174	57.1 (96.0)1
177	5.0 - 9.0% of mass 176	3.7 (6.6)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	VSTD0501W	VSTD0501W	V1N0695.D	08/12/2014	15:17
02	VSTD0201W	VSTD0201W	V1N0696.D	08/12/2014	15:42
03	VSTD0051W	VSTD0051W	V1N0697.D	08/12/2014	16:07
04	VSTD0011W	VSTD0011W	V1N0699.D	08/12/2014	16:57
05	VSTD2001W	VSTD2001W	V1N0700.D	08/12/2014	17:22
06	VSTD1001W	VSTD1001W	V1N0701.D	08/12/2014	17:47

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

EPA SAMPLE NO.
BFB1Y

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Lab File ID: V1N0750.D BFB Injection Date: 08/14/2014

Instrument ID: V1 BFB Injection Time: 7:50

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
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	0.4 (0.6)1
174	Greater than 50.0% of mass 95	62.6
175	5.0 - 9.0% of mass 174	5.2 (8.3)1
176	95.0 - 101.0% of mass 174	59.6 (95.2)1
177	5.0 - 9.0% of mass 176	4.2 (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	VSTD0501Y	VSTD0501Y	V1N0752.D	08/14/2014	8:58
02	LCS-78548	LCS-78548	V1N0754.D	08/14/2014	9:34
03	MB-78548	MB-78548	V1N0758.D	08/14/2014	11:14
04	TRIP BLANK	N1402-01A	V1N0759.D	08/14/2014	11:39
05	PRESBREY LELAND	N1402-02A	V1N0760.D	08/14/2014	12:04
06	CASSIDY EXCAVATING	N1402-03A	V1N0761.D	08/14/2014	12:28
07	HAWK SHAW	N1402-04A	V1N0762.D	08/14/2014	12:54
08	KENSICO	N1402-05A	V1N0763.D	08/14/2014	13:19
09	PEACOCK MEMORIALS	N1402-06A	V1N0764.D	08/14/2014	13:44
10	DADYSHAN	N1402-07A	V1N0765.D	08/14/2014	14:09
11	ZIMMERMAN'S	N1402-08A	V1N0766.D	08/14/2014	14:34
12	VALHALLA MEMORIALS	N1402-09A	V1N0767.D	08/14/2014	14:58

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/12/2014 08/12/2014

EPA Sample No.(VSTD#####): VSTD0501Y Date Analyzed: 08/14/2014

Lab File ID (Standard): V1N0752.D Time Analyzed: 8:58

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	845495		4.389		537758		7.234		225692		9.804	
	UPPER LIMIT	1690990		4.889		1075516		7.734		451384		10.304	
	LOWER LIMIT	422748		3.889		268879		6.734		112846		9.304	
	EPA SAMPLE NO.												
01	LCS-78548	845336		4.389		501226		7.234		202152		9.814	
02	MB-78548	643293		4.390		438260		7.246		168756		9.816	
03	TRIP BLANK	727021		4.405		487154		7.240		183164		9.810	
04	PRESBREY LELAND	666497		4.390		451760		7.236		169263		9.805	
05	CASSIDY EXCAVATING	693920		4.396		458215		7.241		175731		9.811	
06	HAWK SHAW	709117		4.409		469211		7.244		177036		9.824	
07	KENSICO	686799		4.394		455726		7.240		171635		9.809	
08	PEACOCK MEMORIALS	710571		4.399		480971		7.245		180702		9.815	
09	DADYSHAN	691570		4.389		464306		7.244		182886		9.814	
10	ZIMMERMAN'S	726472		4.389		477526		7.234		182043		9.804	
11	VALHALLA MEMORIALS	709442		4.389		468295		7.244		178279		9.814	

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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0759.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0759.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0759.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0759.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0759.D
Lab Smp Id: N1402-01A Client Smp ID: TRIP BLANK
Inj Date : 14-AUG-2014 11:39
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-01A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 20
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	3.853	3.846	(0.875)	243233	53.8404	54
$ 42 1,2-Dichloroethane-d4	102	4.119	4.112	(0.935)	48892	51.7122	52
* 46 Fluorobenzene	96	4.404	4.398	(1.000)	727021	50.0000	
$ 58 Toluene-d8	98	5.802	5.796	(0.801)	659146	50.3188	50
* 68 Chlorobenzene-d5	117	7.240	7.243	(1.000)	487154	50.0000	
$ 79 Bromofluorobenzene	95	8.530	8.523	(1.178)	270167	48.1852	48
* 92 1,4-Dichlorobenzene-d4	152	9.810	9.813	(1.000)	183164	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0759.D
Report Date: 25-Aug-2014 09:46

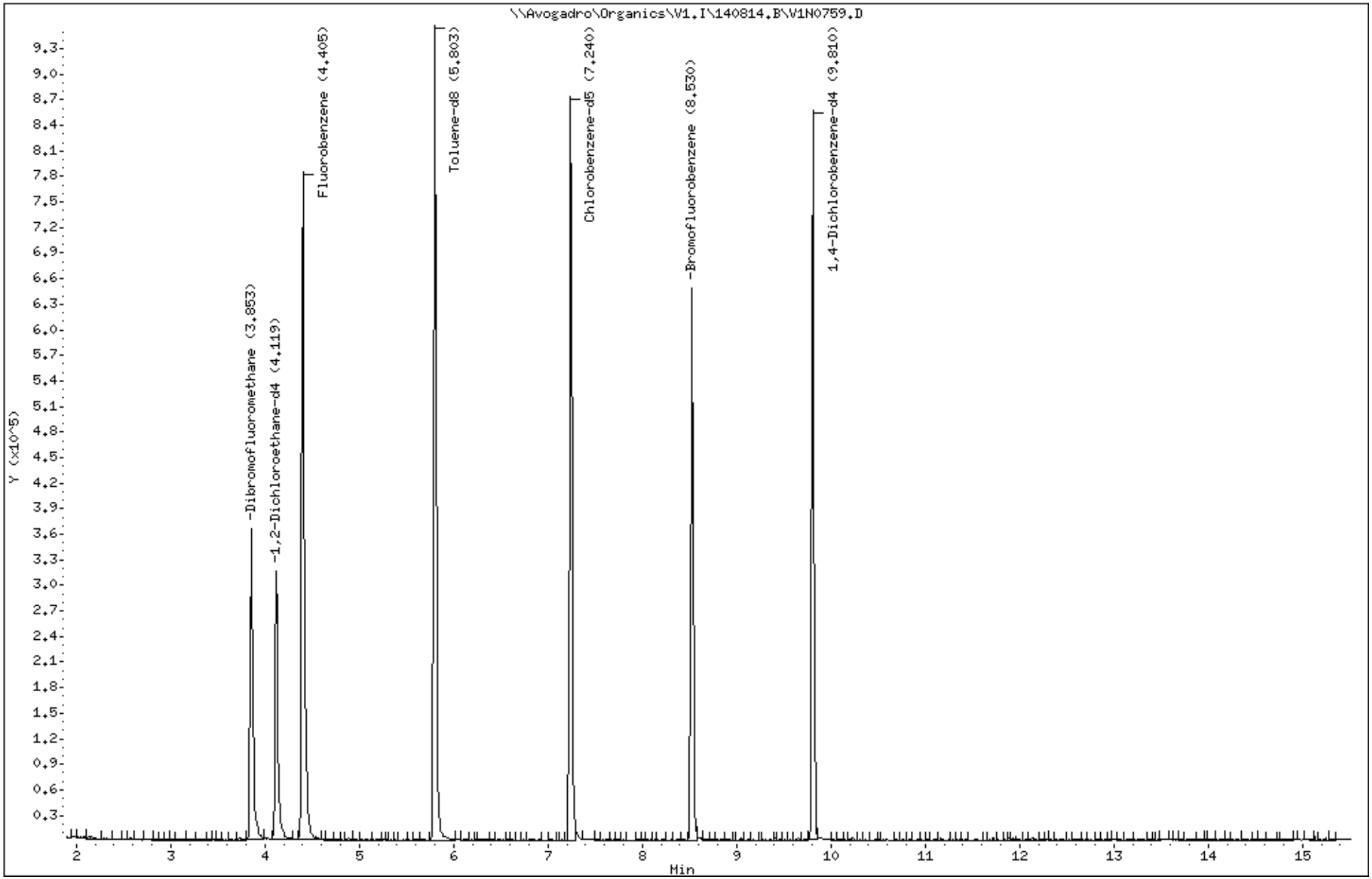
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0759.D
Lab Smp Id: N1402-01A Client Smp ID: TRIP BLANK
Inj Date : 14-AUG-2014 11:39
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-01A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0759.D
Date : 14-AUG-2014 11:39
Client ID: TRIP BLANK
Instrument: V1.i
Sample Info: 5ML,N1402-01A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRESBREY LELAND

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0760.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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	1.3	
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

EPA SAMPLE NO.

PRESBREY LELAND

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0760.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

PRESBREY LELAND

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0760.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0760.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0760.D
Lab Smp Id: N1402-02A Client Smp ID: PRESBREY LELAND
Inj Date : 14-AUG-2014 12:04
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-02A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 21
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)
	35 Chloroform	83	3.720	3.728	(0.847)	7881	1.30615	1.3
$	36 Dibromofluoromethane	113	3.838	3.846	(0.874)	225232	54.3831	54
$	42 1,2-Dichloroethane-d4	102	4.104	4.112	(0.935)	45055	51.9813	52
*	46 Fluorobenzene	96	4.390	4.398	(1.000)	666497	50.0000	
$	58 Toluene-d8	98	5.798	5.796	(0.801)	609178	50.1477	50
*	68 Chlorobenzene-d5	117	7.235	7.243	(1.000)	451760	50.0000	
$	79 Bromofluorobenzene	95	8.525	8.523	(1.178)	256695	49.3693	49
*	92 1,4-Dichlorobenzene-d4	152	9.805	9.813	(1.000)	169263	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0760.D
Report Date: 25-Aug-2014 09:46

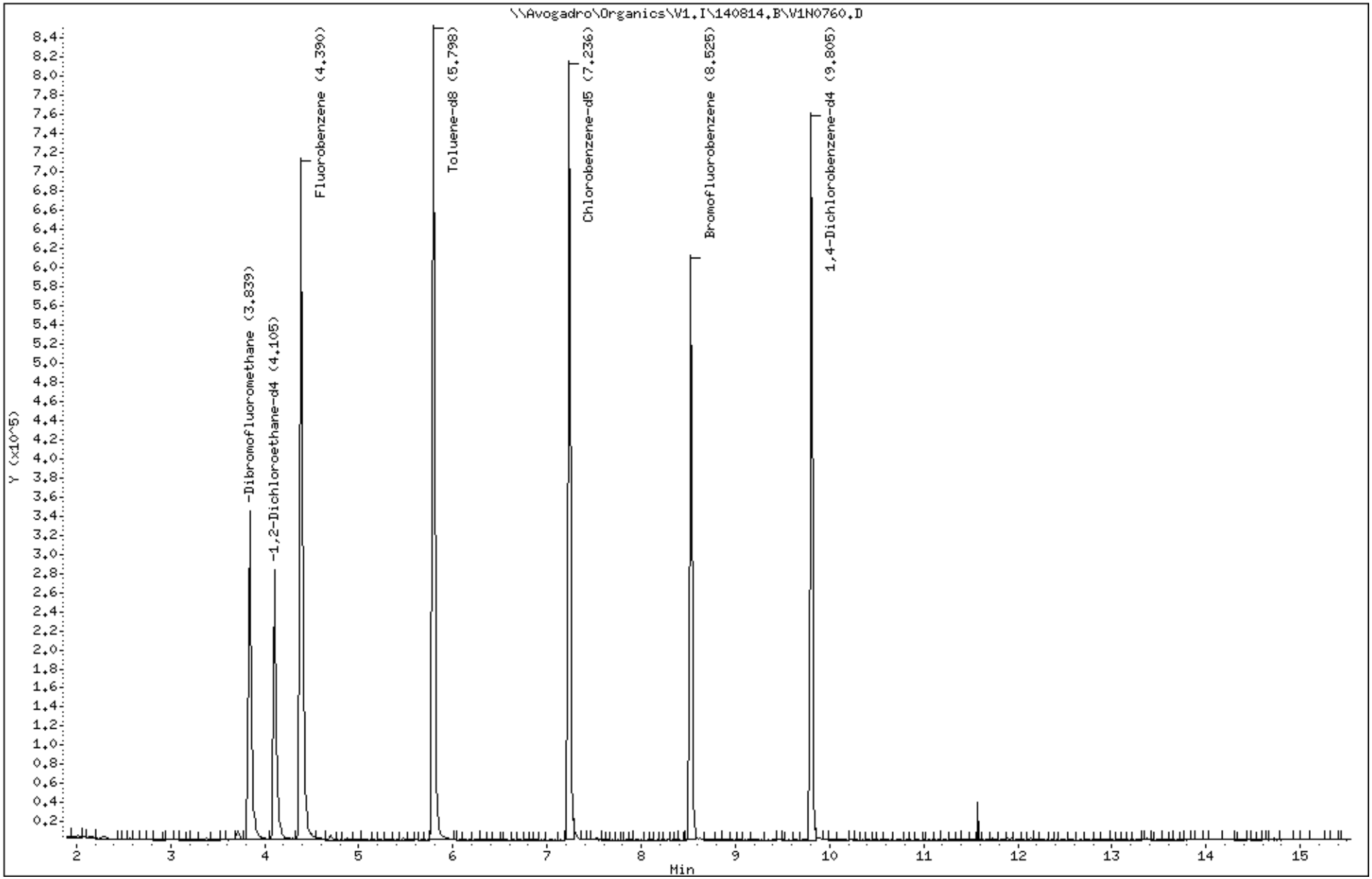
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0760.D
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Inj Date : 14-AUG-2014 12:04
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-02A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0760.D
Date : 14-AUG-2014 12:04
Client ID: PRESBREY LELAND
Instrument: V1.i
Sample Info: 5ML,N1402-02A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0760.D

Date : 14-AUG-2014 12:04

Client ID: PRESBREY LELAND

Instrument: V1.i

Sample Info: 5ML,N1402-02A,,78548

Purge Volume: 5.0

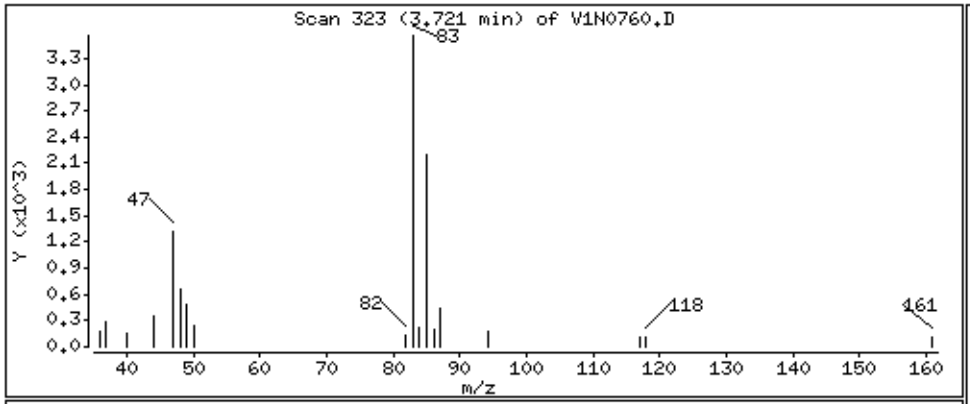
Operator: WL SRC: LIMS

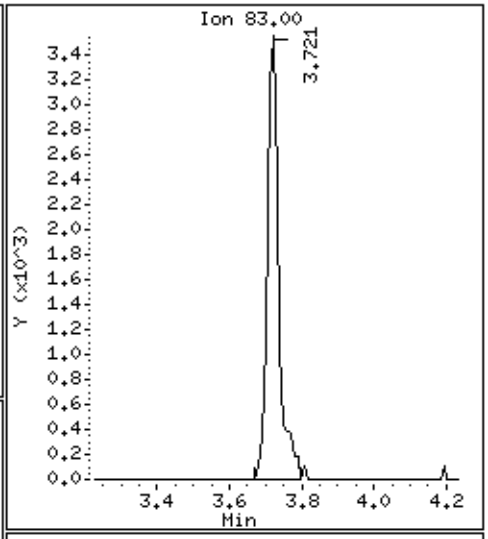
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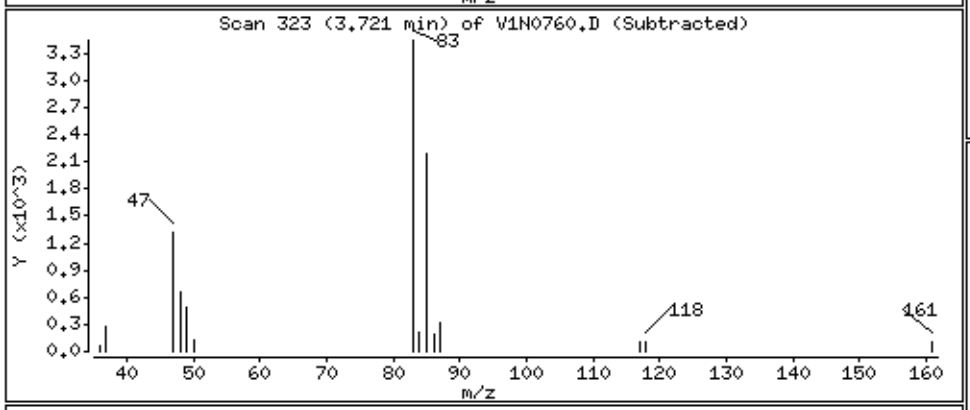
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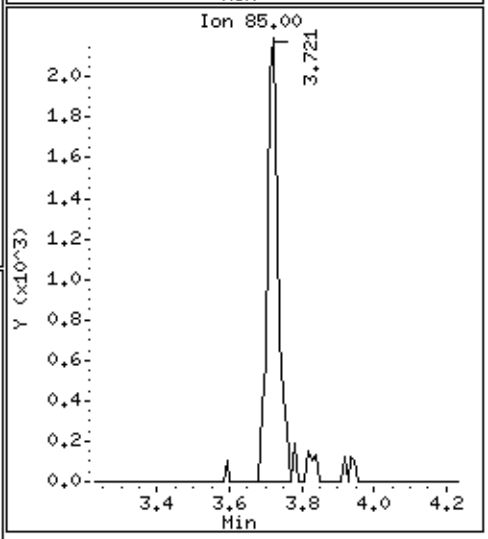
35 Chloroform

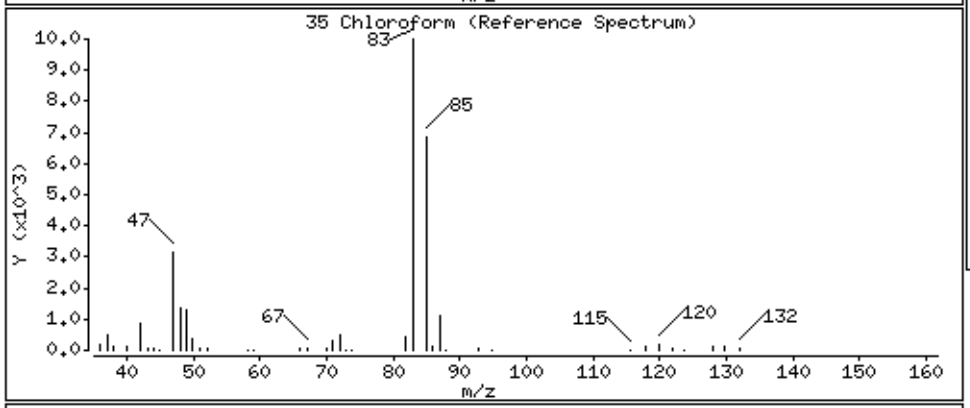
Concentration: 1.3 ug/L

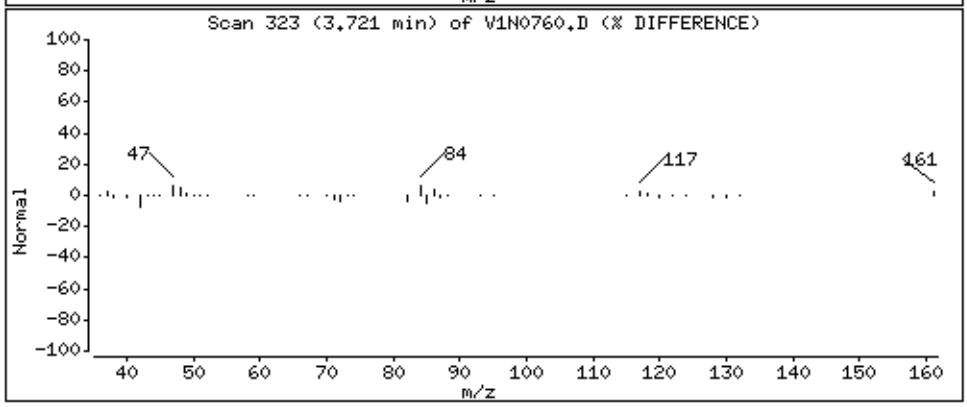












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CASSIDY EXCAVATING

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0761.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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	3.4	
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

EPA SAMPLE NO.

CASSIDY EXCAVATING

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0761.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

CASSIDY EXCAVATING

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0761.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0761.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0761.D
Lab Smp Id: N1402-03A Client Smp ID: CASSIDY EXCAVATING
Inj Date : 14-AUG-2014 12:28
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-03A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 22
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)
	35 Chloroform	83	3.726	3.728	(0.848)	21591	3.43694	3.4
$	36 Dibromofluoromethane	113	3.854	3.846	(0.877)	233096	54.0577	54
$	42 1,2-Dichloroethane-d4	102	4.120	4.112	(0.937)	45530	50.4534	50
*	46 Fluorobenzene	96	4.395	4.398	(1.000)	693920	50.0000	
$	58 Toluene-d8	98	5.803	5.796	(0.801)	621509	50.4421	50
*	68 Chlorobenzene-d5	117	7.241	7.243	(1.000)	458215	50.0000	
$	79 Bromofluorobenzene	95	8.531	8.523	(1.178)	260494	49.3942	49
*	92 1,4-Dichlorobenzene-d4	152	9.811	9.813	(1.000)	175731	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0761.D
Report Date: 25-Aug-2014 09:46

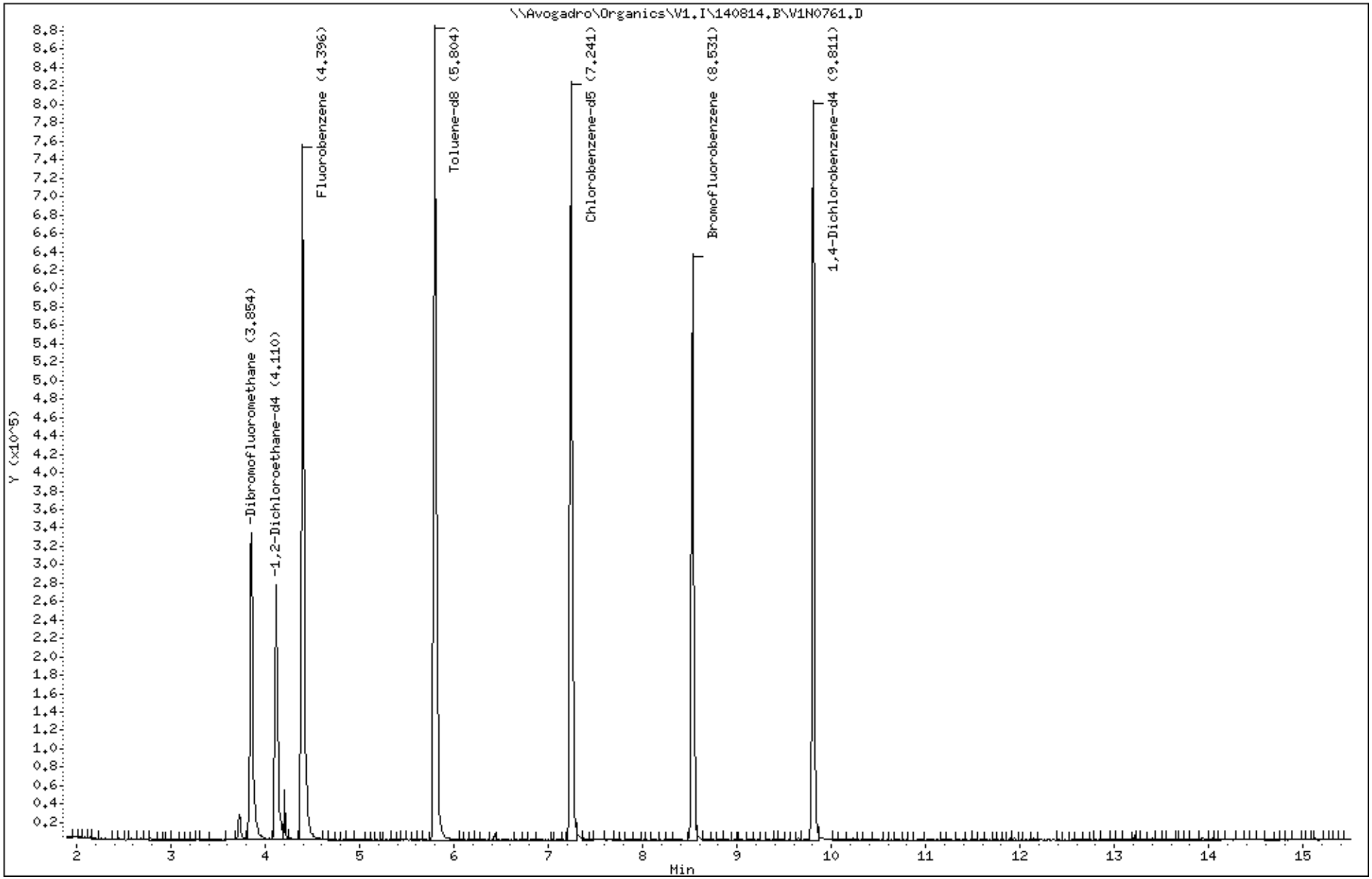
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0761.D
Lab Smp Id: N1402-03A Client Smp ID: CASSIDY EXCAVATING
Inj Date : 14-AUG-2014 12:28
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-03A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0761.D
Date : 14-AUG-2014 12:28
Client ID: CASSIDY EXCAVATING
Instrument: V1.i
Sample Info: 5ML,N1402-03A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0761.D

Date : 14-AUG-2014 12:28

Client ID: CASSIDY EXCAVATING

Instrument: V1.i

Sample Info: 5ML,N1402-03A,,78548

Purge Volume: 5.0

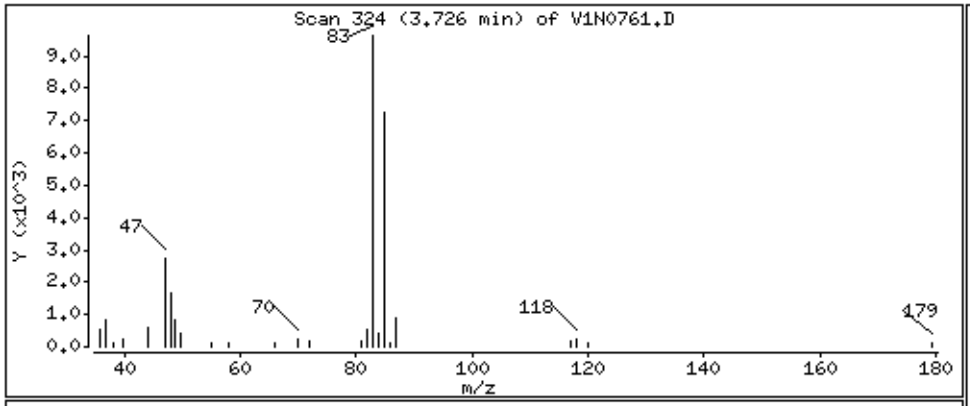
Operator: WL SRC: LIMS

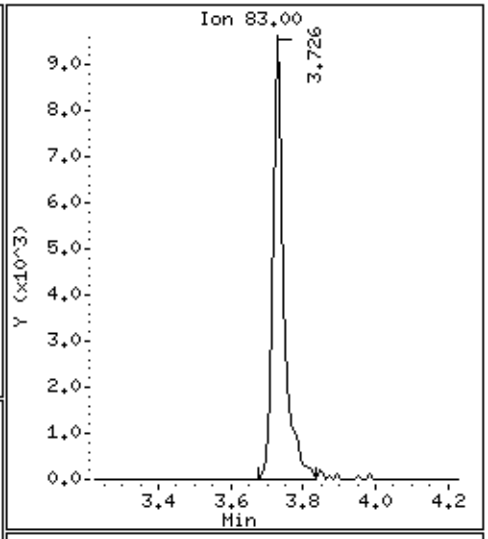
Column phase: DB-624

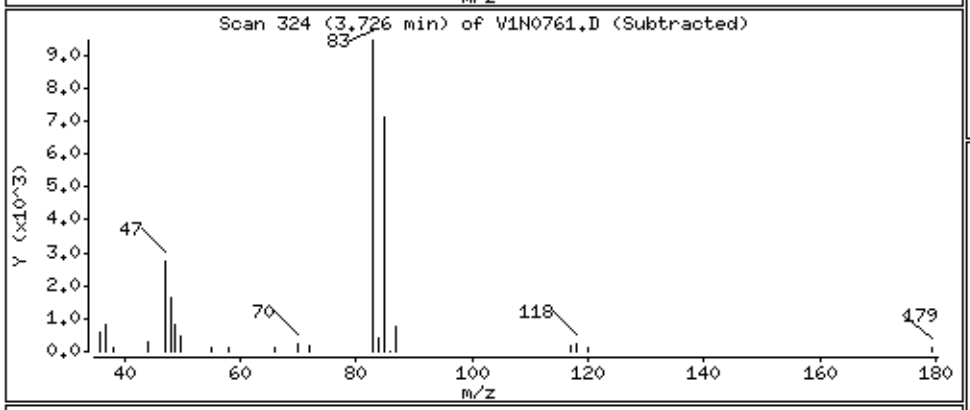
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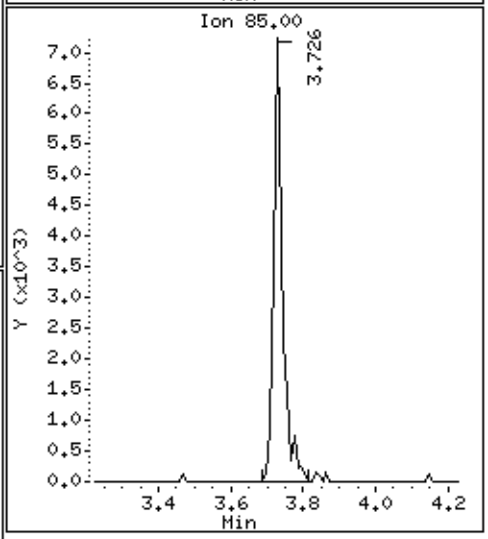
35 Chloroform

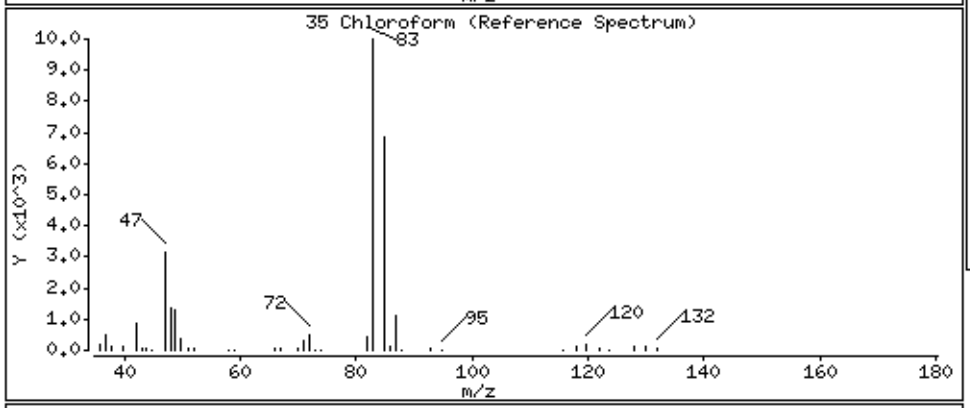
Concentration: 3.4 ug/L

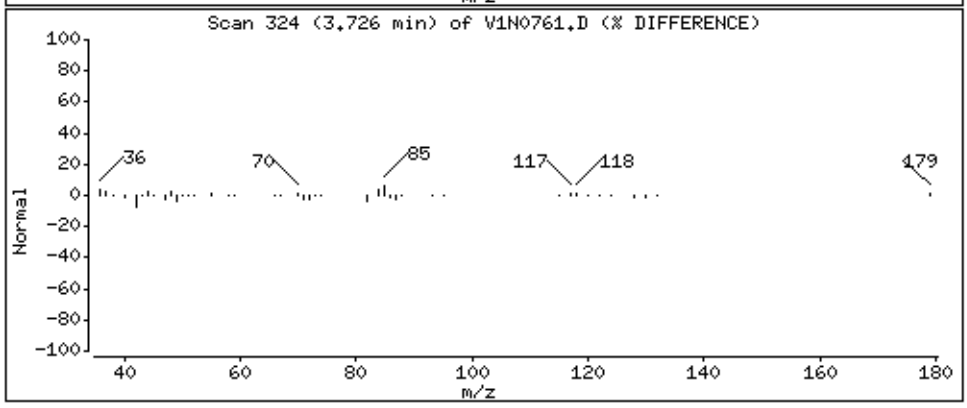












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HAWK SHAW

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0762.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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	2.1	
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

EPA SAMPLE NO.

HAWK SHAW

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0762.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

HAWK SHAW

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0762.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0762.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0762.D
Lab Smp Id: N1402-04A Client Smp ID: HAWK SHAW
Inj Date : 14-AUG-2014 12:54
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-04A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 23
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)
	35 Chloroform	83	3.739	3.728	(0.848)	13307	2.07287	2.1
$	36 Dibromofluoromethane	113	3.857	3.846	(0.875)	235492	53.4430	53
$	42 1,2-Dichloroethane-d4	102	4.123	4.112	(0.935)	47409	51.4097	51
*	46 Fluorobenzene	96	4.408	4.398	(1.000)	709117	50.0000	
$	58 Toluene-d8	98	5.806	5.796	(0.802)	637267	50.5089	50
*	68 Chlorobenzene-d5	117	7.244	7.243	(1.000)	469211	50.0000	
$	79 Bromofluorobenzene	95	8.543	8.523	(1.179)	261329	48.3912	48
*	92 1,4-Dichlorobenzene-d4	152	9.823	9.813	(1.000)	177036	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0762.D
Report Date: 25-Aug-2014 09:46

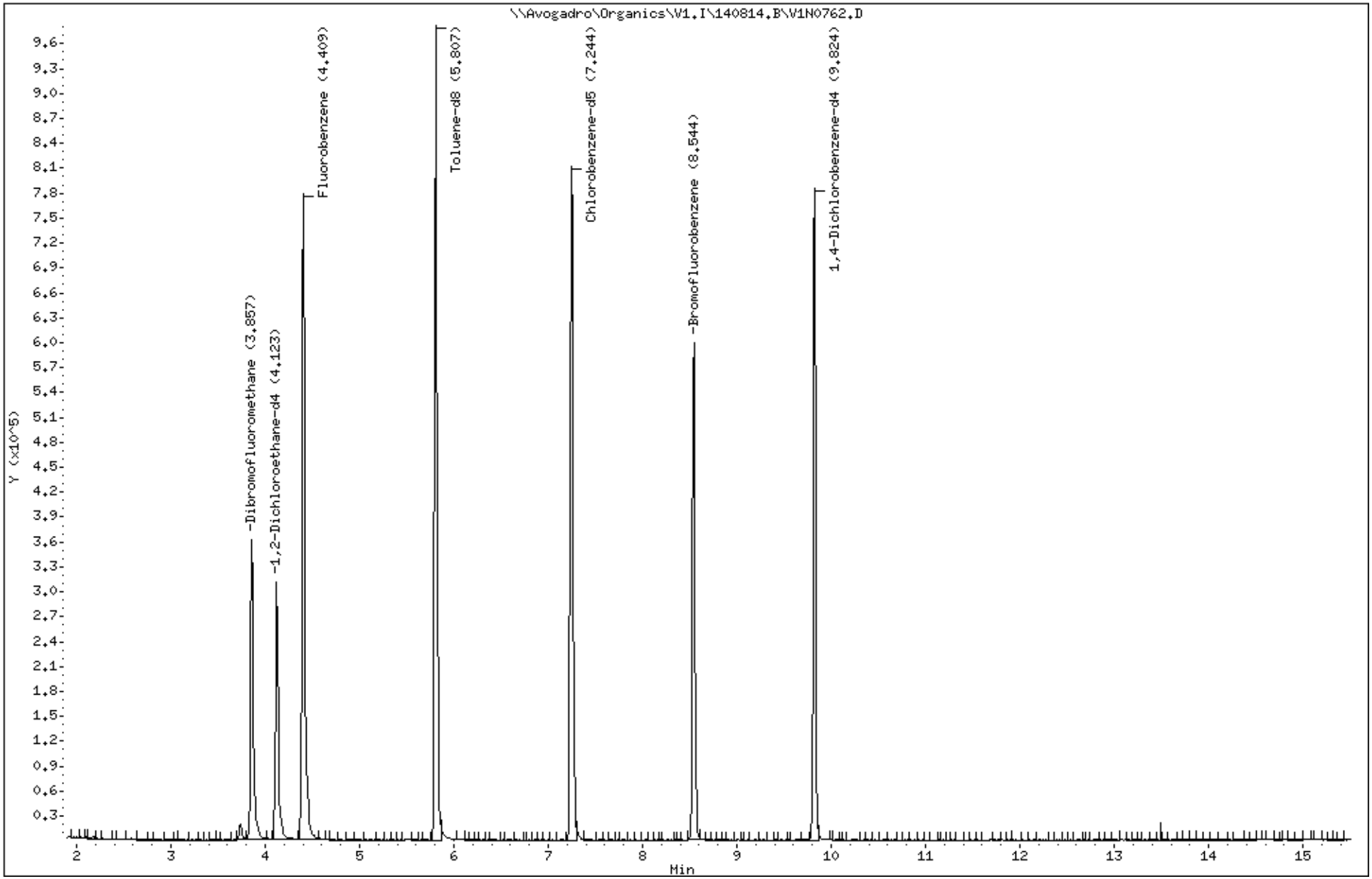
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0762.D
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Inj Date : 14-AUG-2014 12:54
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-04A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0762.D
Date : 14-AUG-2014 12:54
Client ID: HAWK SHAW
Instrument: V1.i
Sample Info: 5ML,N1402-04A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0762.D

Date : 14-AUG-2014 12:54

Client ID: HAWK SHAW

Instrument: V1.i

Sample Info: 5ML,N1402-04A,,78548

Purge Volume: 5.0

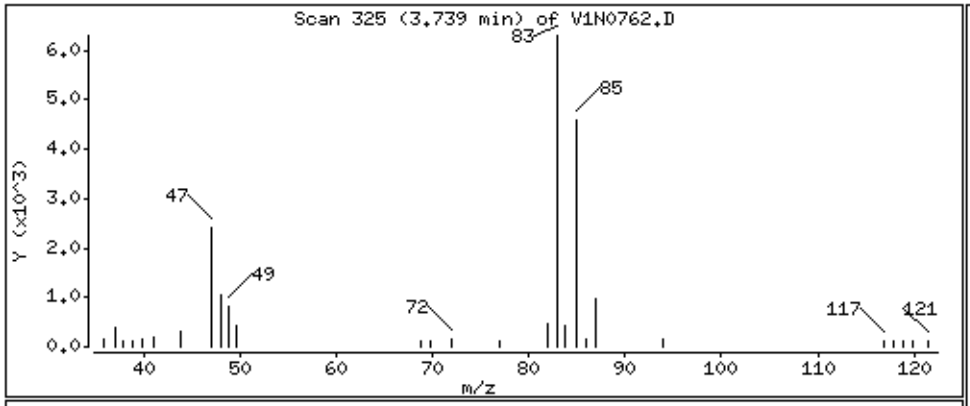
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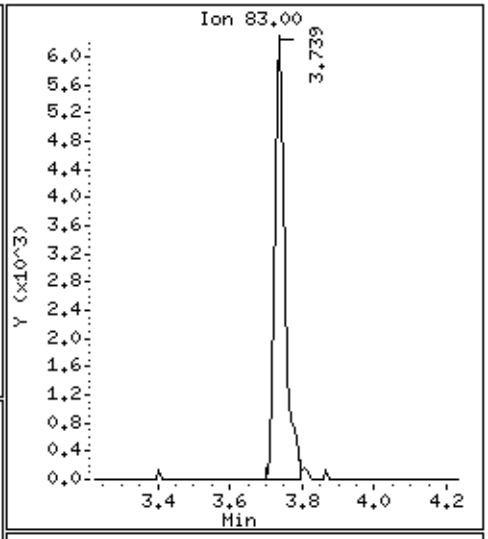
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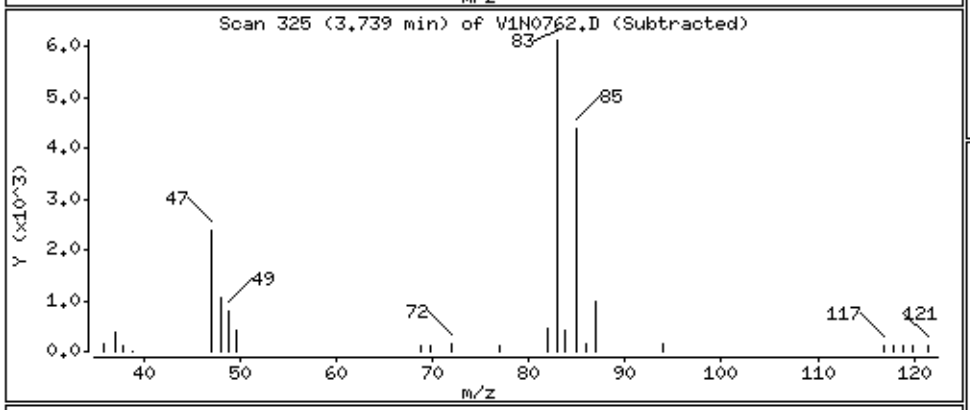
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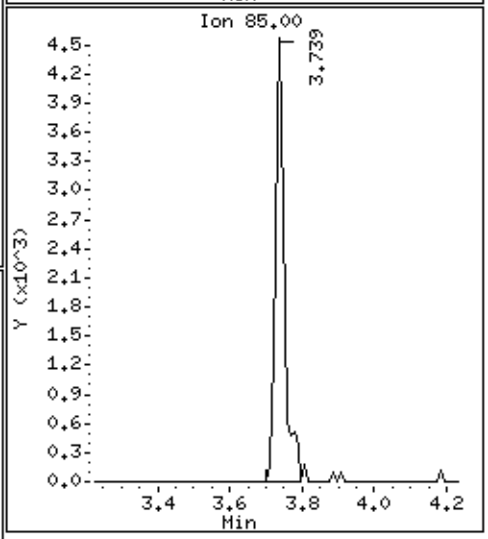
35 Chloroform

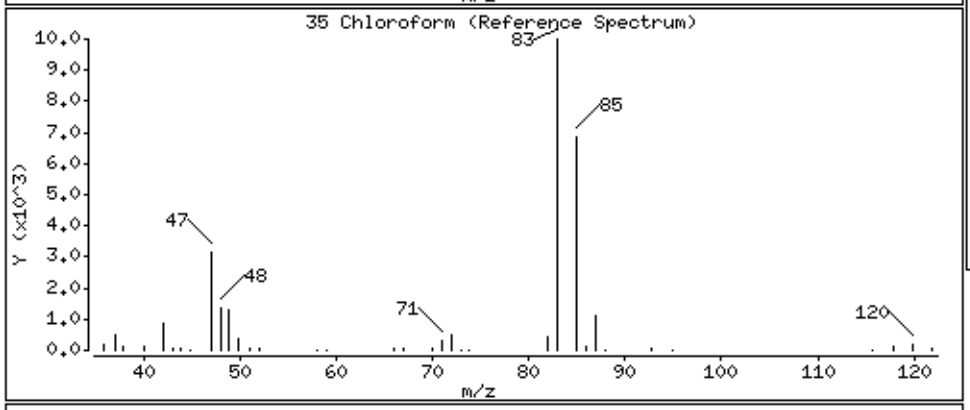
Concentration: 2.1 ug/L

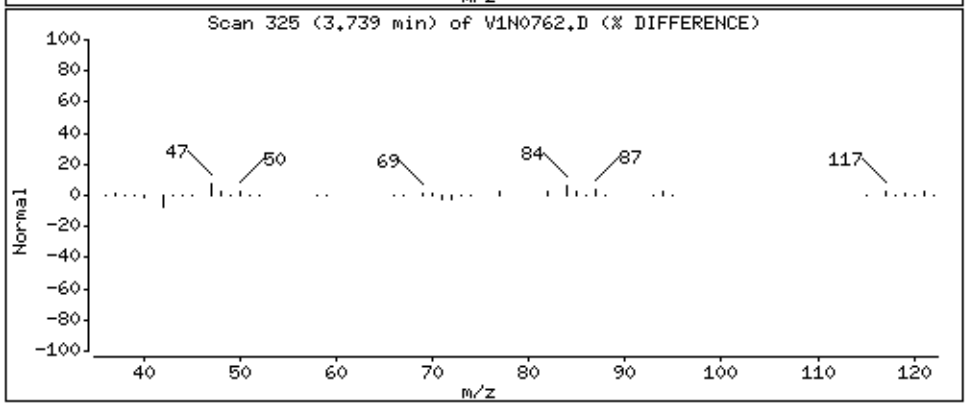












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KENSICO

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0763.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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	1.7	
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

EPA SAMPLE NO.

KENSICO

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0763.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

KENSICO

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0763.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0763.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0763.D
Lab Smp Id: N1402-05A Client Smp ID: KENSICO
Inj Date : 14-AUG-2014 13:19
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-05A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 24
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)
	35 Chloroform	83	3.724	3.728	(0.848)	10507	1.68989	1.7
$	36 Dibromofluoromethane	113	3.842	3.846	(0.875)	230347	53.9741	54
$	42 1,2-Dichloroethane-d4	102	4.118	4.112	(0.937)	45736	51.2072	51
*	46 Fluorobenzene	96	4.393	4.398	(1.000)	686799	50.0000	
$	58 Toluene-d8	98	5.801	5.796	(0.801)	630779	51.4741	51
*	68 Chlorobenzene-d5	117	7.239	7.243	(1.000)	455726	50.0000	
$	79 Bromofluorobenzene	95	8.529	8.523	(1.178)	259885	49.5478	50
*	92 1,4-Dichlorobenzene-d4	152	9.809	9.813	(1.000)	171635	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0763.D
Report Date: 25-Aug-2014 09:46

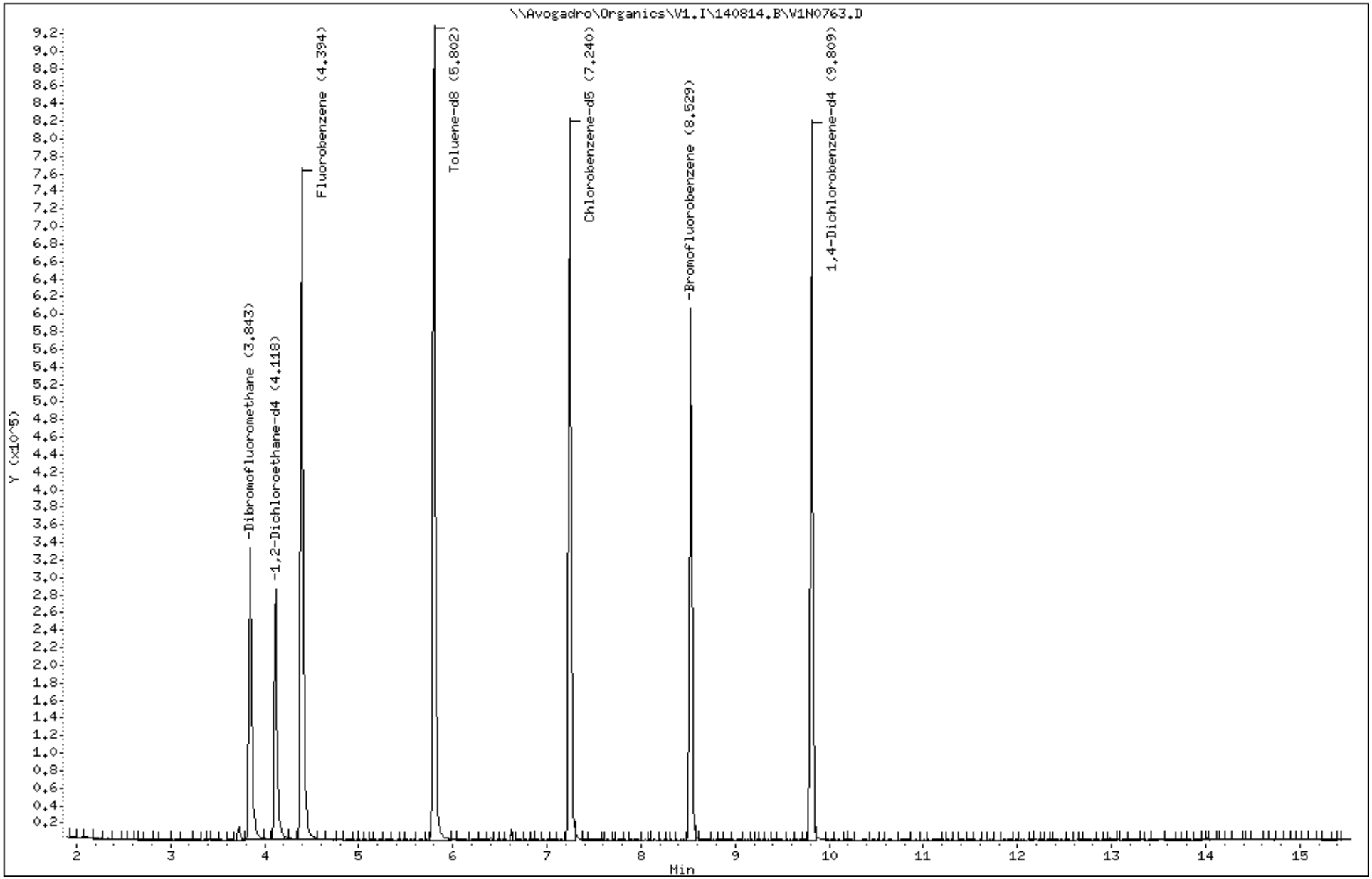
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0763.D
Lab Smp Id: N1402-05A Client Smp ID: KENSICO
Inj Date : 14-AUG-2014 13:19
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-05A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0763.D
Date : 14-AUG-2014 13:19
Client ID: KENSICO
Instrument: V1.i
Sample Info: 5ML,N1402-05A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0763.D

Date : 14-AUG-2014 13:19

Client ID: KENSICO

Instrument: V1.i

Sample Info: 5ML,N1402-05A,,78548

Purge Volume: 5.0

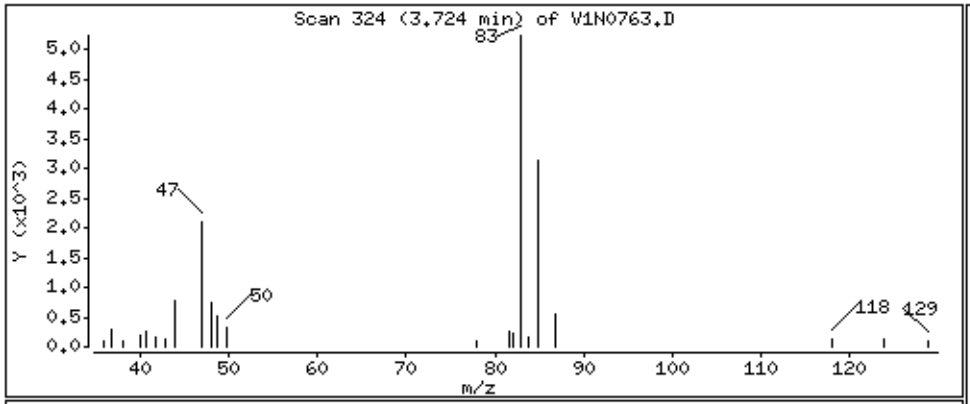
Operator: WL SRC: LIMS

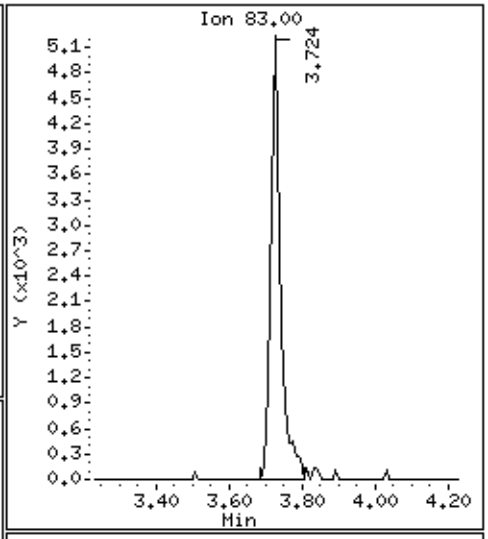
Column phase: DB-624

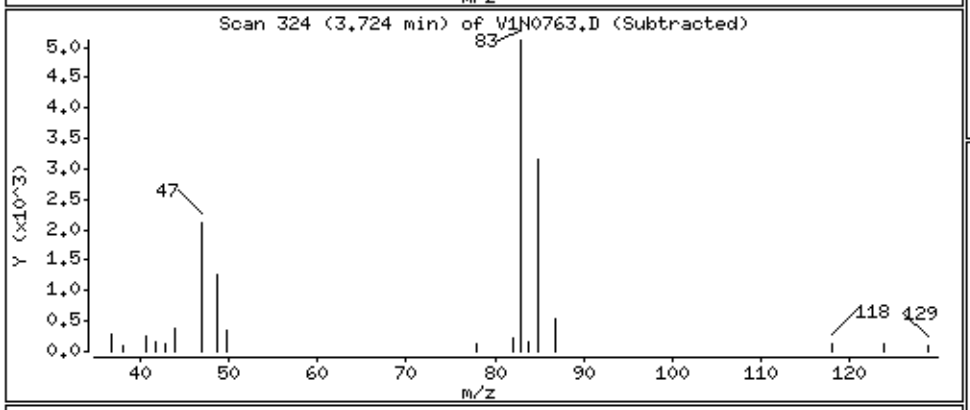
Column diameter: 0.25

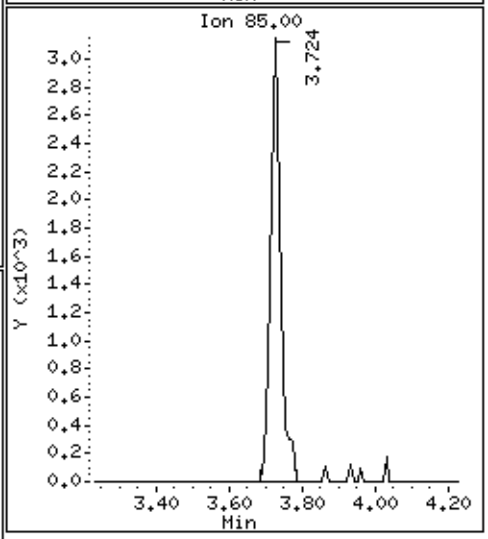
35 Chloroform

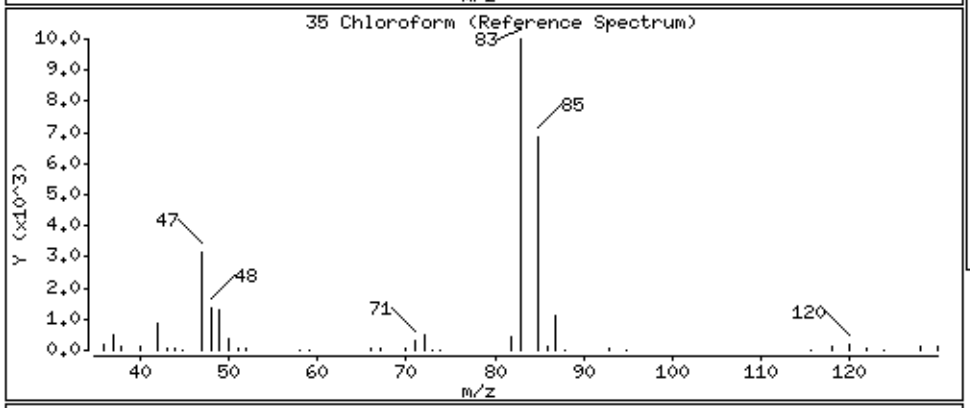
Concentration: 1.7 ug/L

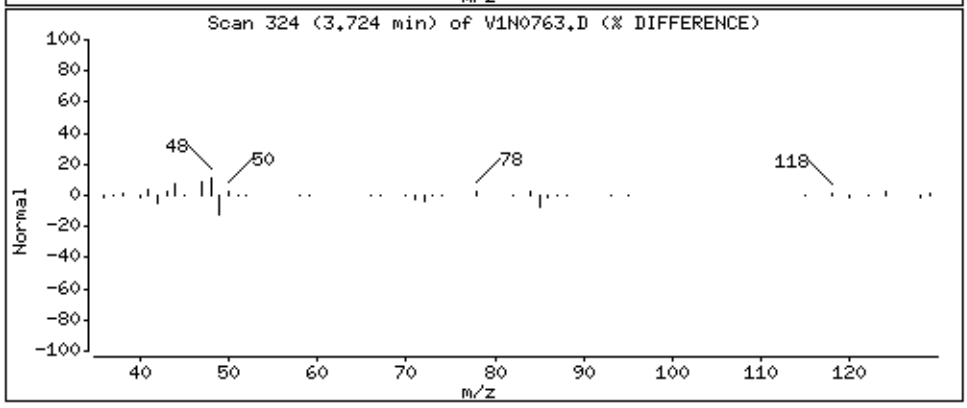












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEACOCK MEMORIALS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0764.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

PEACOCK MEMORIALS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0764.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PEACOCK MEMORIALS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0764.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0764.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0764.D
Lab Smp Id: N1402-06A Client Smp ID: PEACOCK MEMORIALS
Inj Date : 14-AUG-2014 13:44
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-06A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.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)
$ 36 Dibromofluoromethane	113	3.848	3.846	(0.875)	238615	54.0409	54
$ 42 1,2-Dichloroethane-d4	102	4.113	4.112	(0.935)	46361	50.1704	50
* 46 Fluorobenzene	96	4.399	4.398	(1.000)	710571	50.0000	
$ 58 Toluene-d8	98	5.807	5.796	(0.802)	648053	50.1079	50
* 68 Chlorobenzene-d5	117	7.245	7.243	(1.000)	480971	50.0000	
$ 79 Bromofluorobenzene	95	8.524	8.523	(1.177)	270747	48.9094	49
* 92 1,4-Dichlorobenzene-d4	152	9.814	9.813	(1.000)	180702	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0764.D
Report Date: 25-Aug-2014 09:46

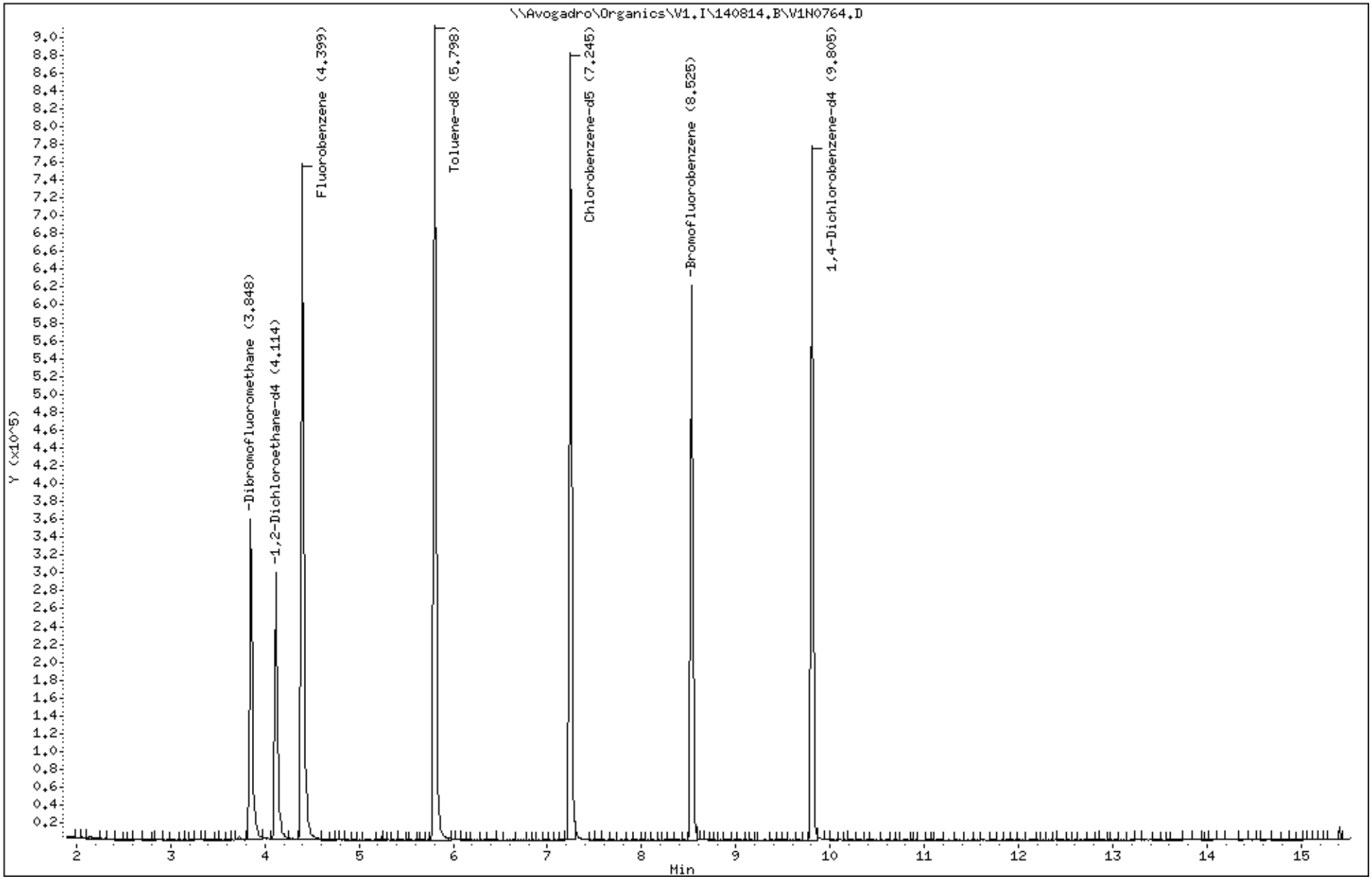
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0764.D
Lab Smp Id: N1402-06A Client Smp ID: PEACOCK MEMORIALS
Inj Date : 14-AUG-2014 13:44
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-06A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.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\V1.I\140814.B\V1N0764.D
Date : 14-AUG-2014 13:44
Client ID: PEACOCK MEMORIALS
Instrument: V1.i
Sample Info: 5ML,N1402-06A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DADYSHAN

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0765.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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	0.63	J
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

EPA SAMPLE NO.

DADYSHAN

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0765.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DADYSHAN

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0765.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0765.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0765.D
Lab Smp Id: N1402-07A Client Smp ID: DADYSHAN
Inj Date : 14-AUG-2014 14:09
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-07A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 26
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)
	35 Chloroform	83	3.719	3.728	(0.847)	3962	0.63283	0.63(a)
$	36 Dibromofluoromethane	113	3.847	3.846	(0.877)	233219	54.2700	54
$	42 1,2-Dichloroethane-d4	102	4.112	4.112	(0.937)	46770	52.0036	52
*	46 Fluorobenzene	96	4.388	4.398	(1.000)	691570	50.0000	
$	58 Toluene-d8	98	5.806	5.796	(0.802)	628573	50.3462	50
*	68 Chlorobenzene-d5	117	7.244	7.243	(1.000)	464306	50.0000	
$	79 Bromofluorobenzene	95	8.524	8.523	(1.177)	269778	50.4835	50
*	92 1,4-Dichlorobenzene-d4	152	9.813	9.813	(1.000)	182886	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0765.D
Report Date: 25-Aug-2014 09:46

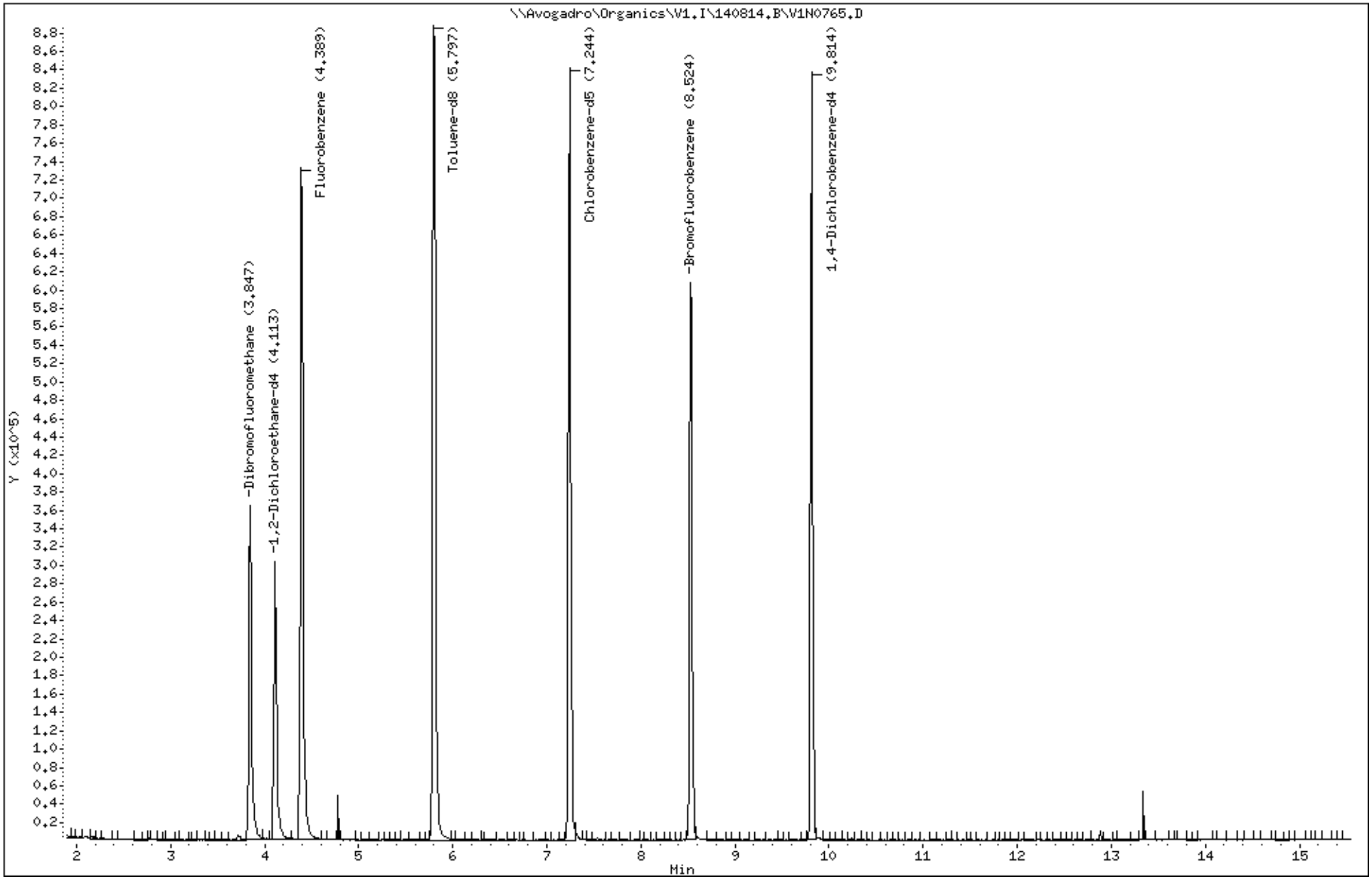
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0765.D
Lab Smp Id: N1402-07A Client Smp ID: DADYSHAN
Inj Date : 14-AUG-2014 14:09
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-07A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0765.D
Date : 14-AUG-2014 14:09
Client ID: DADYSHAN
Instrument: V1.i
Sample Info: 5ML,N1402-07A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0765.D

Date : 14-AUG-2014 14:09

Client ID: DADYSHAN

Instrument: V1.i

Sample Info: 5ML,N1402-07A,,78548

Purge Volume: 5.0

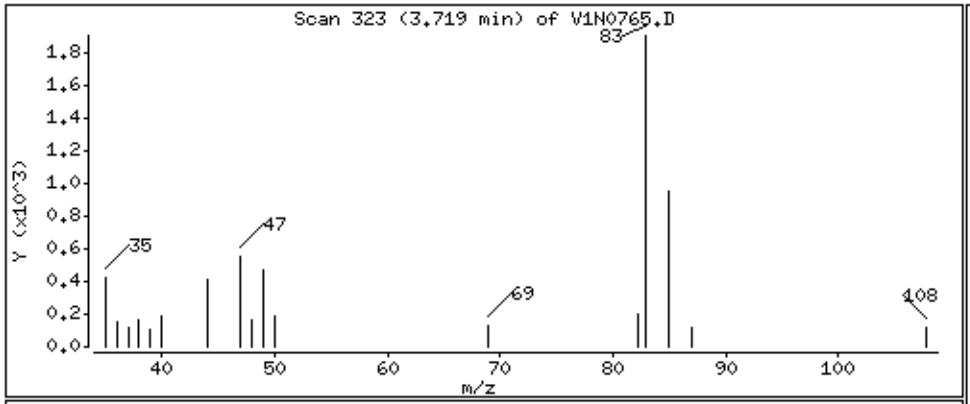
Operator: WL SRC: LIMS

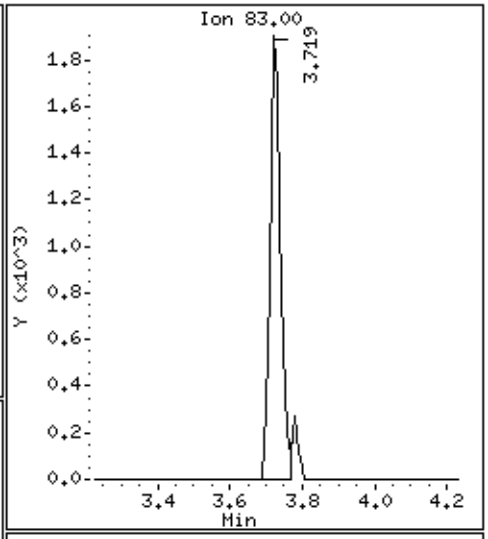
Column phase: DB-624

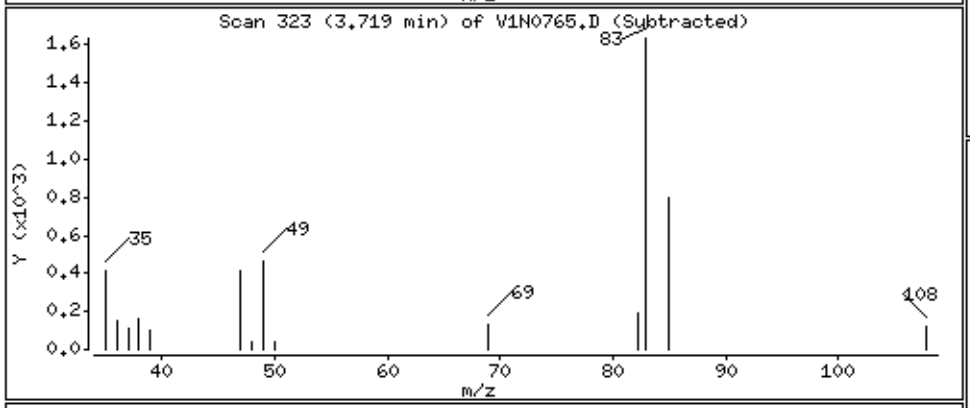
Column diameter: 0.25

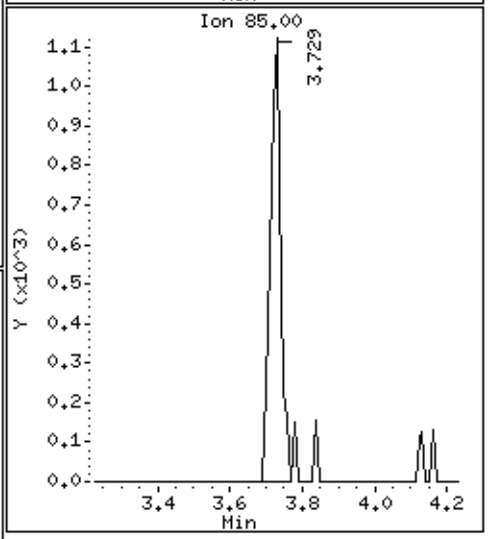
35 Chloroform

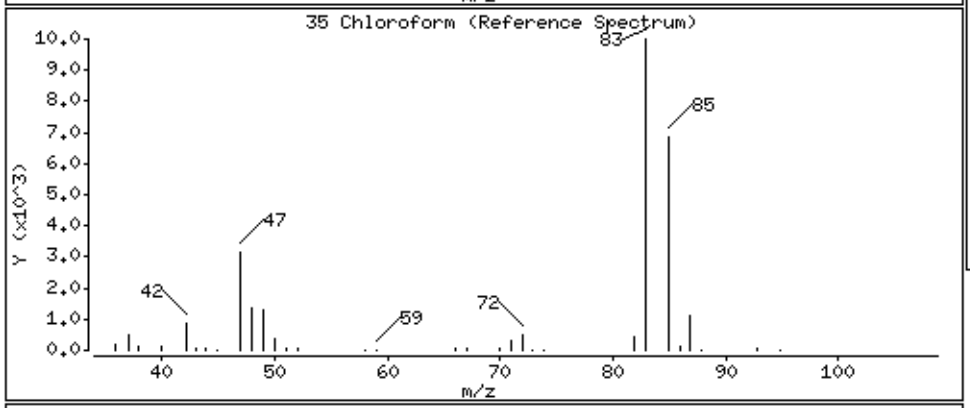
Concentration: 0.63 ug/L

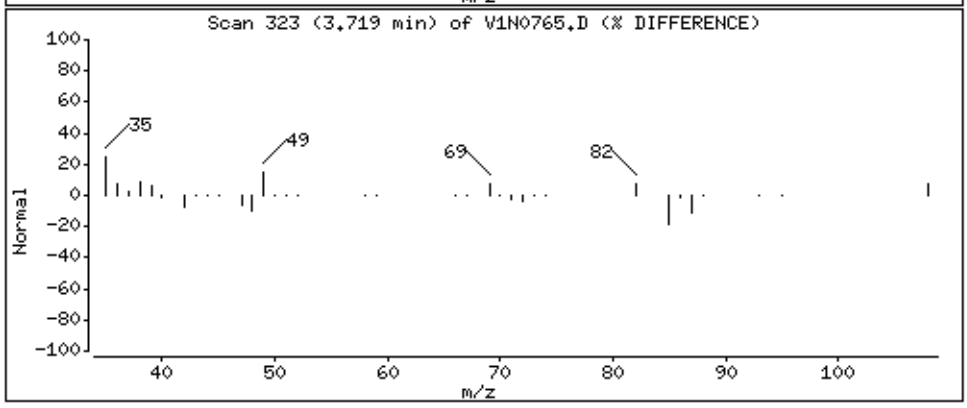












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ZIMMERMAN'S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0766.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

ZIMMERMAN'S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0766.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ZIMMERMAN'S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0766.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0766.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0766.D
Lab Smp Id: N1402-08A Client Smp ID: ZIMMERMANS
Inj Date : 14-AUG-2014 14:34
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-08A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 27
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	3.847	3.846	(0.877)	243832	54.0137	54
$ 42 1,2-Dichloroethane-d4	102	4.113	4.112	(0.937)	48890	51.7492	52
* 46 Fluorobenzene	96	4.388	4.398	(1.000)	726472	50.0000	
$ 58 Toluene-d8	98	5.796	5.796	(0.801)	659172	51.3354	51
* 68 Chlorobenzene-d5	117	7.234	7.243	(1.000)	477526	50.0000	
$ 79 Bromofluorobenzene	95	8.514	8.523	(1.177)	275286	50.0881	50
* 92 1,4-Dichlorobenzene-d4	152	9.804	9.813	(1.000)	182043	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0766.D
Report Date: 25-Aug-2014 09:46

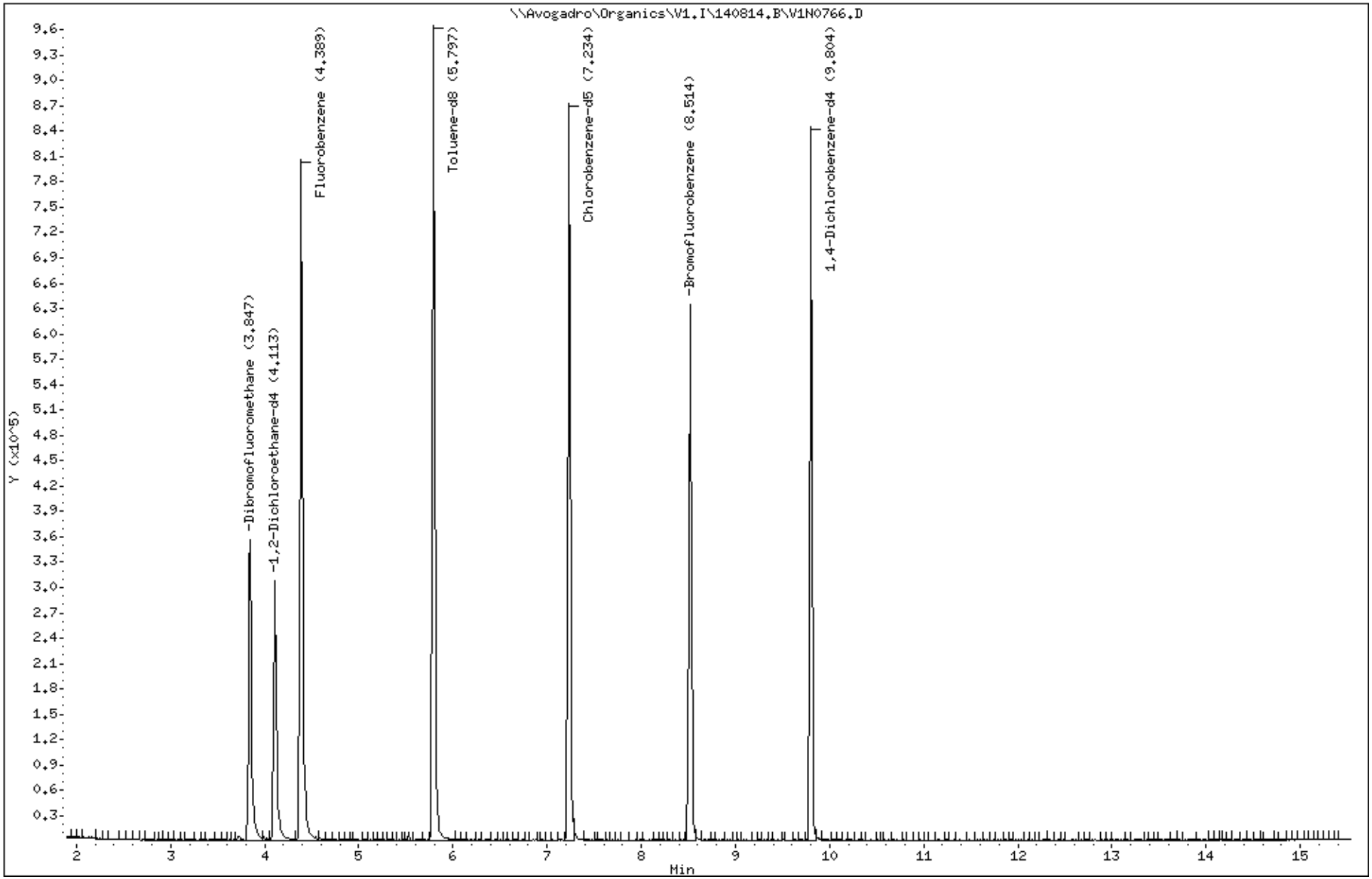
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0766.D
Lab Smp Id: N1402-08A Client Smp ID: ZIMMERMANS
Inj Date : 14-AUG-2014 14:34
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-08A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0766.D
Date : 14-AUG-2014 14:34
Client ID: ZIMMERMANS
Instrument: V1.i
Sample Info: 5ML,N1402-08A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VALHALLA MEMORIALS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0767.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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	0.71	J
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

EPA SAMPLE NO.

VALHALLA MEMORIALS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0767.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VALHALLA MEMORIALS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N1402-09A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0767.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/09/2014

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0767.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0767.D
Lab Smp Id: N1402-09A Client Smp ID: VALHALLA MEMORIALS
Inj Date : 14-AUG-2014 14:58
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-09A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 28
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)
	35 Chloroform	83	3.719	3.728	(0.847)	4570	0.71155	0.71(a)
$	36 Dibromofluoromethane	113	3.847	3.846	(0.877)	238270	54.0486	54
$	42 1,2-Dichloroethane-d4	102	4.113	4.112	(0.937)	48540	52.6120	53
*	46 Fluorobenzene	96	4.388	4.398	(1.000)	709442	50.0000	
$	58 Toluene-d8	98	5.796	5.796	(0.800)	643194	51.0784	51
*	68 Chlorobenzene-d5	117	7.244	7.243	(1.000)	468295	50.0000	
$	79 Bromofluorobenzene	95	8.534	8.523	(1.178)	271289	50.3338	50
*	92 1,4-Dichlorobenzene-d4	152	9.814	9.813	(1.000)	178279	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0767.D
Report Date: 25-Aug-2014 09:46

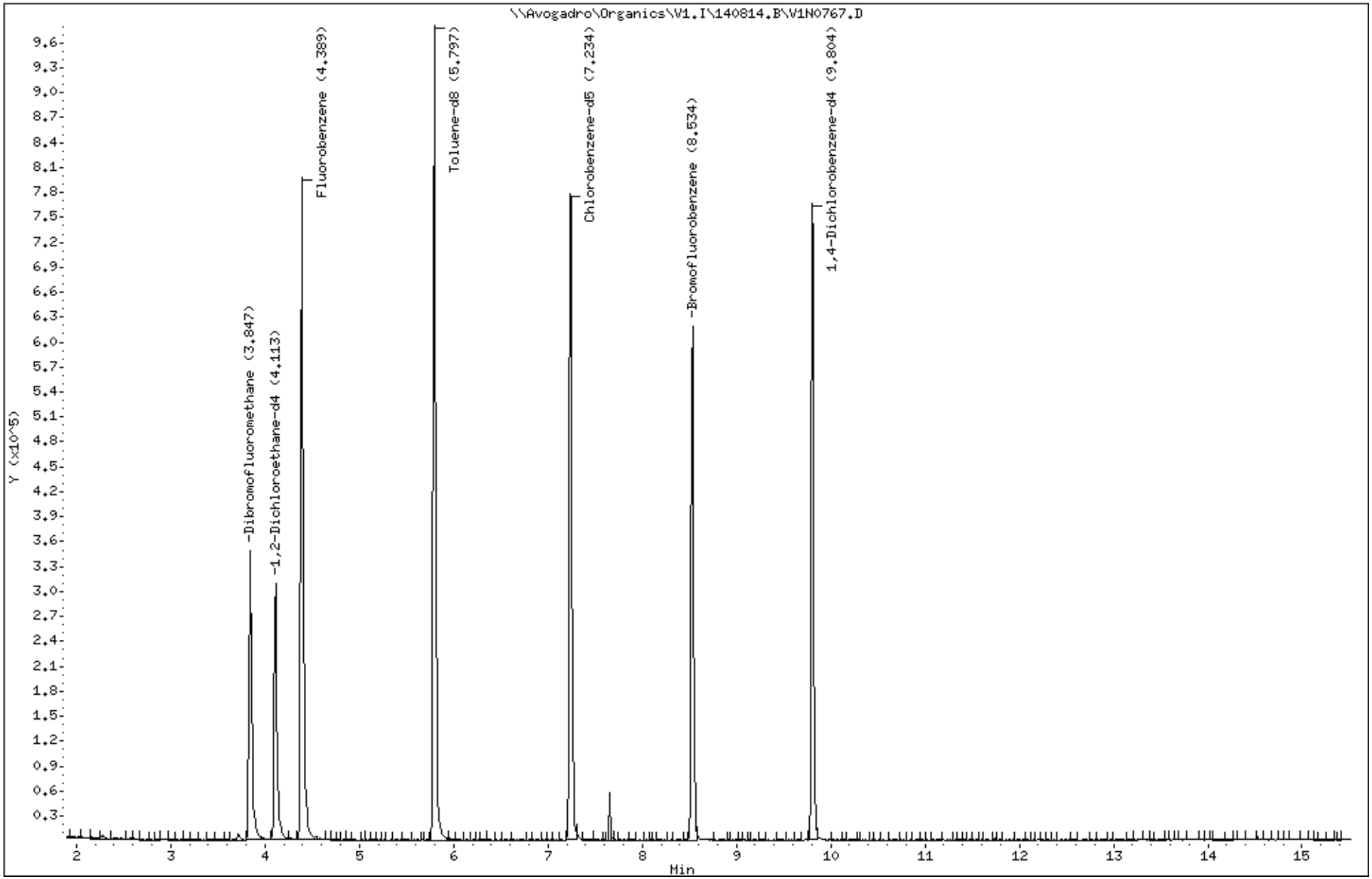
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0767.D
Lab Smp Id: N1402-09A Client Smp ID: VALHALLA MEMORIALS
Inj Date : 14-AUG-2014 14:58
Operator : WL   SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,N1402-09A,,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0767.D
Date : 14-AUG-2014 14:58
Client ID: VALHALLA MEMORIALS
Instrument: V1.i
Sample Info: 5ML,N1402-09A,,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0767.D

Date : 14-AUG-2014 14:58

Client ID: VALHALLA MEMORIALS

Instrument: V1.i

Sample Info: 5ML,N1402-09A,,78548

Purge Volume: 5.0

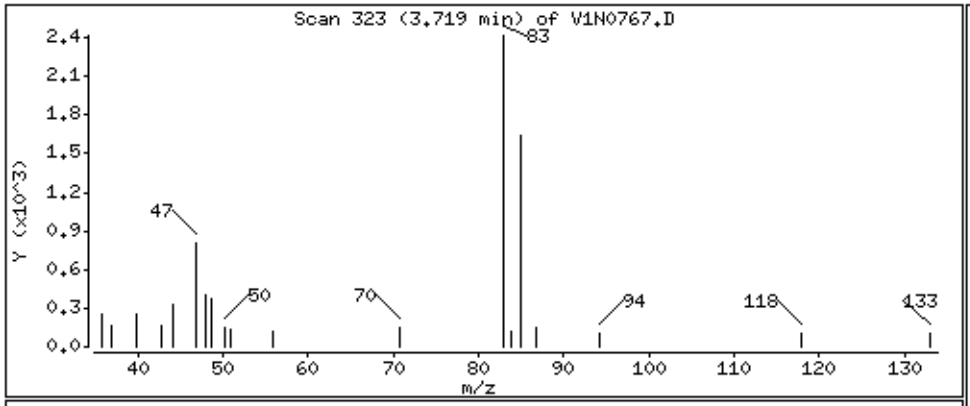
Operator: WL SRC: LIMS

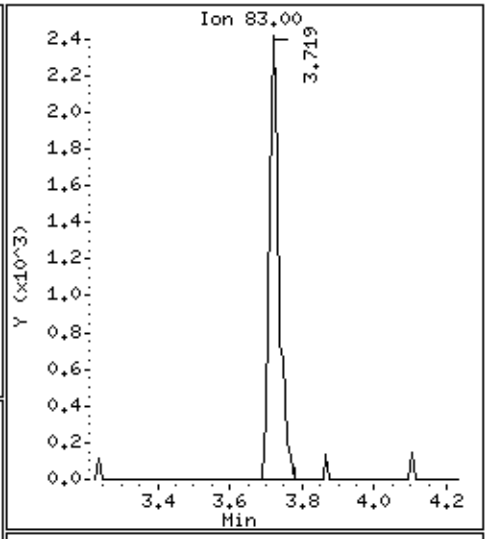
Column phase: DB-624

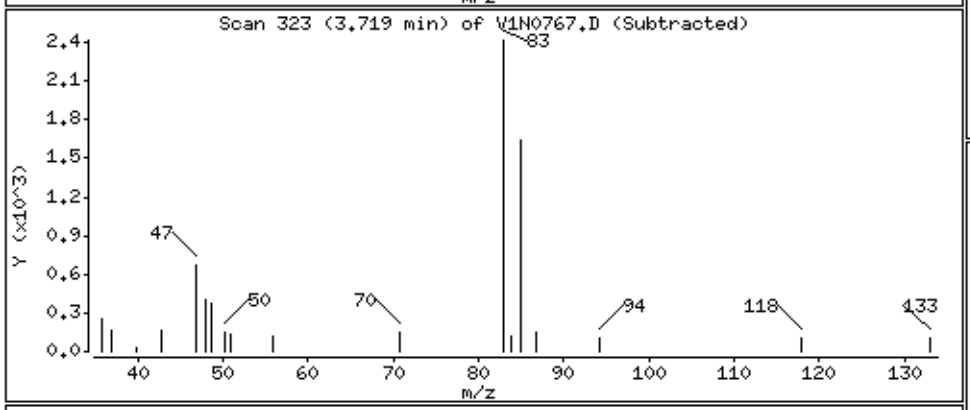
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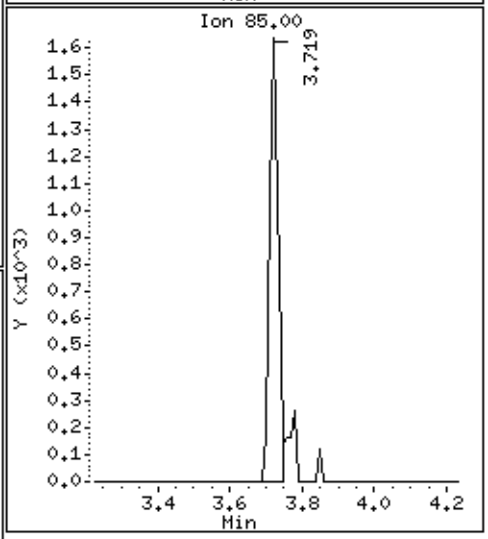
35 Chloroform

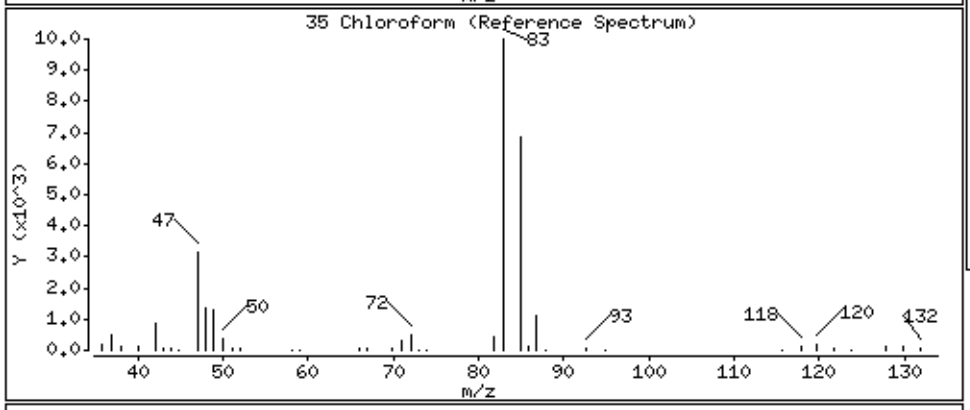
Concentration: 0.71 ug/L

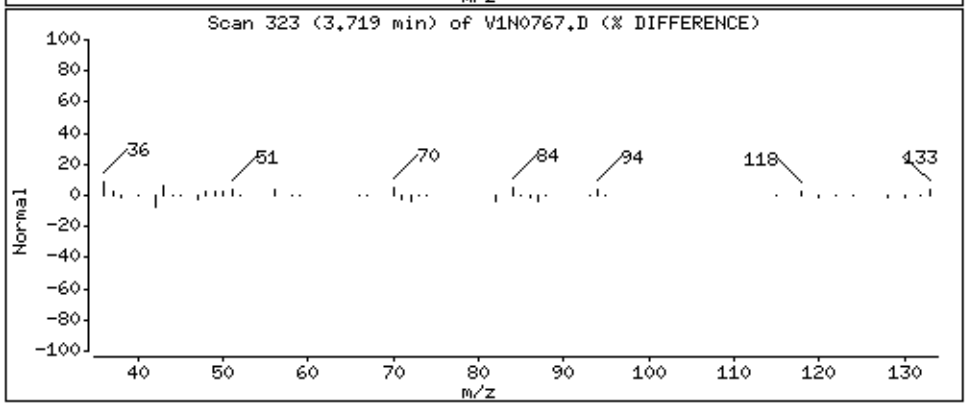












6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1402 SAS No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date(s): 08/12/2014 08/12/2014

Heated Purge: (Y/N) N Calibration Times: 15:17 17:47

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1N0697.D RRF020 = V1N0696.D RRF050 = V1N0695.D RRF100 = V1N0701.D RRF200 = V1N0700.D
RRF001 = V1N0699.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dichlorodifluoromethane	0.154	0.150	0.128	0.178	0.169	0.162					0.157	11.1
Chloromethane	0.377	0.342	0.335	0.451	0.378	0.427					0.385	11.9
Vinyl chloride	0.272	0.275	0.242	0.327	0.277	0.298					0.282	10.0
Bromomethane	0.148	0.154	0.140	0.181	0.161	0.152					0.156	9.1
Chloroethane	0.160	0.163	0.149	0.183	0.168	0.203					0.171	11.1
Trichlorofluoromethane	0.374	0.366	0.339	0.420	0.379	0.358					0.373	7.2
1,1-Dichloroethene	0.224	0.219	0.204	0.257	0.240	0.237					0.230	8.0
Acetone	0.018	0.014	0.013	0.019	0.015						0.016	15.6
Iodomethane	0.277	0.254	0.248	0.298	0.314	0.292					0.280	9.2
Carbon disulfide	0.963	0.933	0.593	1.063	0.983	0.832					0.894	18.5
Methylene chloride	0.268	0.238	0.229	0.274	0.254	0.165					0.238	16.7
trans-1,2-Dichloroethene	0.234	0.230	0.223	0.258	0.243	0.258					0.241	6.1
Methyl tert-butyl ether	0.635	0.618	0.588	0.695	0.634	0.607					0.630	5.8
1,1-Dichloroethane	0.494	0.454	0.433	0.518	0.484	0.464					0.475	6.4
Vinyl acetate	1.008	0.992	0.972	1.167	1.062	1.036					1.039	6.8
2-Butanone	0.022	0.018	0.018	0.021	0.019						0.020	9.5
cis-1,2-Dichloroethene	0.277	0.246	0.228	0.268	0.252	0.295					0.261	9.1
2,2-Dichloropropane	0.197	0.174	0.165	0.182	0.161	0.200					0.180	9.1
Bromochloromethane	0.105	0.112	0.105	0.122	0.117	0.115					0.113	5.9
Chloroform	0.457	0.431	0.409	0.488	0.452	0.479					0.453	6.5
1,1,1-Trichloroethane	0.356	0.335	0.335	0.385	0.361	0.369					0.357	5.5
1,1-Dichloropropene	0.103	0.103	0.098	0.116	0.108	0.089					0.103	9.1
Carbon tetrachloride	0.364	0.353	0.354	0.431	0.398	0.359					0.377	8.4
1,2-Dichloroethane	0.349	0.332	0.313	0.376	0.336	0.355					0.343	6.3
Benzene	0.879	0.856	0.795	0.935	0.862	0.955					0.880	6.6
Trichloroethene	0.233	0.206	0.197	0.238	0.223	0.238					0.223	7.8
1,2-Dichloropropane	0.251	0.245	0.227	0.274	0.249	0.249					0.249	5.9

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1402 SAS No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date(s): 08/12/2014 08/12/2014

Heated Purge: (Y/N) N Calibration Times: 15:17 17:47

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1N0697.D RRF020 = V1N0696.D RRF050 = V1N0695.D RRF100 = V1N0701.D RRF200 = V1N0700.D
RRF001 = V1N0699.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.162	0.151	0.138	0.166	0.151	0.164					0.155	6.9
Bromodichloromethane	0.361	0.342	0.321	0.386	0.357	0.361					0.355	6.1
cis-1,3-Dichloropropene	0.370	0.367	0.356	0.422	0.400	0.373					0.381	6.5
4-Methyl-2-pentanone	0.247	0.237	0.223	0.265	0.241						0.243	6.3
Toluene	0.888	0.828	0.772	0.904	0.832	0.994					0.870	8.9
trans-1,3-Dichloropropene	0.321	0.331	0.323	0.390	0.357	0.300					0.337	9.4
1,1,2-Trichloroethane	0.170	0.160	0.158	0.183	0.169	0.167					0.168	5.3
1,3-Dichloropropane	0.545	0.490	0.459	0.526	0.476	0.551					0.508	7.5
Tetrachloroethene	0.235	0.245	0.214	0.257	0.246	0.249					0.241	6.2
2-Hexanone	0.266	0.239	0.226	0.259	0.230						0.244	7.3
Dibromochloromethane	0.354	0.343	0.343	0.395	0.372	0.366					0.362	5.4
1,2-Dibromoethane	0.291	0.282	0.263	0.309	0.284	0.327					0.292	7.7
Chlorobenzene	0.894	0.804	0.764	0.886	0.838	0.947					0.855	7.8
1,1,1,2-Tetrachloroethane	0.336	0.319	0.305	0.350	0.332	0.324					0.328	4.7
Ethylbenzene	0.447	0.437	0.404	0.471	0.438	0.471					0.445	5.7
m,p-Xylene	0.568	0.542	0.505	0.592	0.556	0.604					0.561	6.4
o-Xylene	0.564	0.512	0.494	0.579	0.539	0.521					0.535	6.1
Xylene (Total)	0.567	0.532	0.501	0.588	0.550	0.577					0.553	5.8
Styrene	0.924	0.890	0.832	0.983	0.903	0.919					0.908	5.4
Bromoform	0.179	0.181	0.184	0.214	0.198	0.172					0.188	8.1
Isopropylbenzene	1.451	1.371	1.295	1.523	1.351	1.531					1.420	6.8
1,1,2,2-Tetrachloroethane	0.872	0.763	0.695	0.767	0.644	0.936					0.780	13.9
Bromobenzene	0.776	0.697	0.646	0.755	0.673	0.771					0.720	7.6
1,2,3-Trichloropropane	0.863	0.816	0.768	0.892	0.505	0.761					0.768	18.1
n-Propylbenzene	0.798	0.707	0.683	0.810	0.696	0.833					0.755	8.8
2-Chlorotoluene	0.802	0.686	0.619	0.734	0.645	0.846					0.722	12.3
1,3,5-Trimethylbenzene	3.025	2.679	2.400	2.874	2.379	2.998					2.726	10.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1402 SAS No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date(s): 08/12/2014 08/12/2014

Heated Purge: (Y/N) N Calibration Times: 15:17 17:47

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1N0697.D RRF020 = V1N0696.D RRF050 = V1N0695.D RRF100 = V1N0701.D RRF200 = V1N0700.D
RRF001 = V1N0699.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
4-Chlorotoluene	0.808	0.710	0.650	0.787	0.704	0.916					0.763	12.4
tert-Butylbenzene	2.848	2.642	2.347	2.840	2.330	2.977					2.664	10.3
1,2,4-Trimethylbenzene	2.952	2.610	2.368	2.797	2.279	2.868					2.646	10.4
sec-Butylbenzene	3.604	3.238	2.911	3.437	2.805	3.938					3.322	12.9
4-Isopropyltoluene	3.005	2.698	2.427	2.931	2.359	2.907					2.721	10.1
1,3-Dichlorobenzene	1.425	1.302	1.174	1.414	1.179	1.611					1.351	12.4
1,4-Dichlorobenzene	1.545	1.338	1.176	1.406	1.207	1.580					1.375	12.2
n-Butylbenzene	2.700	2.502	2.179	2.627	2.052	2.616					2.446	10.9
1,2-Dichlorobenzene	1.427	1.177	1.089	1.295	1.081	1.487					1.259	13.7
1,2-Dibromo-3-chloropropane	0.129	0.126	0.105	0.125	0.095	0.153					0.122	16.5
1,2,4-Trichlorobenzene	0.814	0.667	0.535	0.666	0.468	0.701					0.642	19.2
Hexachlorobutadiene	0.461	0.360	0.273	0.328	0.233	0.444					0.350	26.0
1,2,3-Trichlorobenzene	0.750	0.575	0.441	0.536	0.348	0.636					0.548	26.0
Naphthalene	1.862	1.471	1.113	1.393	0.907	1.601					1.391	24.6
1,1,2-Trichloro-1,2,2-trifluoroe	0.295	0.252	0.256	0.312	0.289	0.253					0.276	9.4

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: N1402 SAS No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date(s): 08/12/2014 08/12/2014

Heated Purge: (Y/N) N Calibration Times: 15:17 17:47

Purge Volume: 5 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (mm)

LAB FILE ID: RRF005 = V1N0697.D RRF020 = V1N0696.D RRF050 = V1N0695.D RRF100 = V1N0701.D RRF200 = V1N0700.D
RRF001 = V1N0699.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromofluoromethane	0.311	0.308	0.311	0.313	0.311						0.311	0.7
1,2-Dichloroethane-d4	0.066	0.067	0.068	0.063	0.062						0.065	4.0
Toluene-d8	1.250	1.411	1.390	1.344	1.327						1.344	4.7
Bromofluorobenzene	0.564	0.575	0.572	0.587	0.579						0.575	1.4

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0695.D
Report Date: 18-Aug-2014 11:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0695.D
Lab Smp Id: VSTD0501W Client Smp ID: VSTD0501W
Inj Date : 12-AUG-2014 15:17
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501W,VSTD0501W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140812A.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:43 amarquis Quant Type: ISTD
Cal Date : 07-AUG-2014 17:02 Cal File: V1N0571.D
Als bottle: 25 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	1.263	1.268	(0.288)	114189	50.0000	41
2	Freon114	85	1.352	1.346	(0.308)	230594	50.0000	41
3	Chloromethane	50	1.391	1.396	(0.317)	298977	50.0000	44
4	Vinyl Chloride	62	1.470	1.494	(0.335)	215993	50.0000	43
5	Bromomethane	94	1.686	1.691	(0.385)	124491	50.0000	45
6	Chloroethane	64	1.775	1.780	(0.405)	133116	50.0000	44
7	Trichlorofluoromethane	101	1.942	1.947	(0.443)	302633	50.0000	46
126	Ethanol	46	2.021	2.036	(0.461)	74167	5000.00	3300(AQ)
8	Ether	59	2.090	2.095	(0.477)	158240	50.0000	46(Q)
9	Acrolein	56	2.169	2.173	(0.495)	140196	250.000	230(A)
10	1,1-Dichloroethene	96	2.277	2.282	(0.519)	182232	50.0000	44
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.297	2.301	(0.524)	227830	50.0000	46
12	Acetone	58	2.267	2.272	(0.517)	11848	50.0000	41(Q)
13	Iodomethane	142	2.395	2.400	(0.546)	221470	50.0000	44(Q)
14	Carbon Disulfide	76	2.415	2.420	(0.551)	528408	50.0000	33
15	Acetonitrile	41	2.484	2.488	(0.567)	769998	500.000	460(A)
16	Allyl Chloride	39	2.484	2.488	(0.567)	376980	50.0000	46(Q)
17	Methyl Acetate	43	2.504	2.498	(0.571)	194336	50.0000	45
18	Methylene Chloride	84	2.563	2.567	(0.585)	204340	50.0000	48
19	tert-Butanol	59	2.651	2.646	(0.605)	25851	100.000	87
20	Acrylonitrile	53	2.730	2.725	(0.623)	69108	50.0000	49
21	trans-1,2-Dichloroethene	96	2.760	2.764	(0.629)	199147	50.0000	46
22	Methyl tert-butyl ether	73	2.769	2.764	(0.632)	524480	50.0000	47

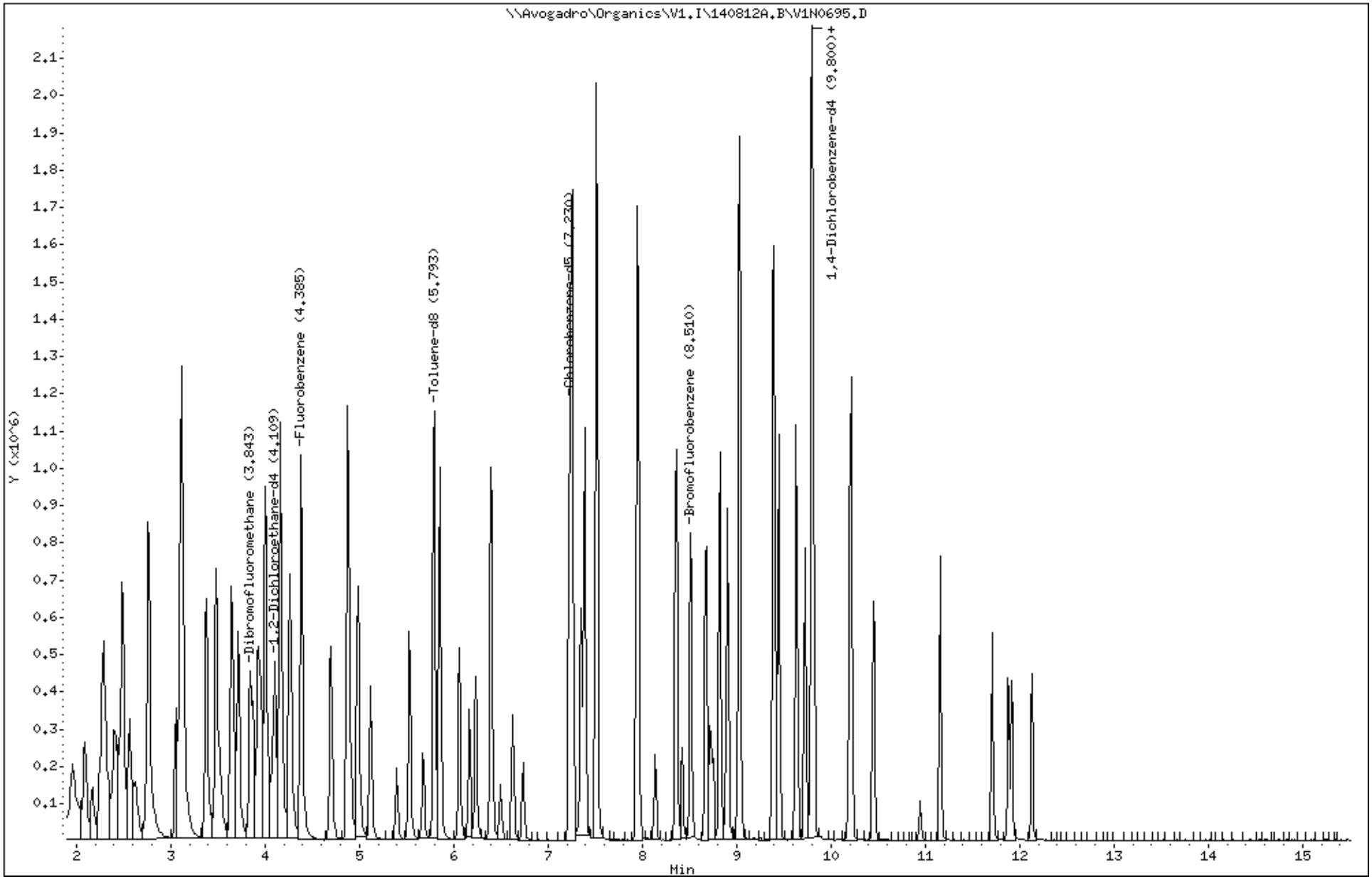
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.055	3.060	(0.697)	386129	50.0000	46
	24 Vinyl acetate	43	3.104	3.109	(0.708)	866558	50.0000	47
	25 Diisopropyl Ether	45	3.114	3.109	(0.710)	1008862	50.0000	46
	26 2-Chloro-1,3-Butadiene	53	3.124	3.128	(0.713)	366360	50.0000	45
	27 Ethyl tert-butyl ether	59	3.380	3.384	(0.771)	682090	50.0000	44
	29 2,2-Dichloropropane	77	3.478	3.483	(0.793)	147072	50.0000	46
	28 cis-1,2-Dichloroethene	96	3.478	3.483	(0.793)	203673	50.0000	44
	30 2-Butanone	72	3.478	3.483	(0.793)	16052	50.0000	46
	32 Propionitrile	54	3.518	3.522	(0.802)	217733	500.000	470(A)
	33 Methacrylonitrile	41	3.636	3.640	(0.829)	273036	100.000	92
	34 Bromochloromethane	128	3.656	3.660	(0.834)	93495	50.0000	46
	31 Tetrahydrofuran	72	3.705	3.700	(0.845)	35129	100.000	93
	35 Chloroform	83	3.715	3.719	(0.847)	364184	50.0000	45
$	36 Dibromofluoromethane	113	3.843	3.837	(0.876)	277382	50.0000	50
	37 1,1,1-Trichloroethane	97	3.872	3.877	(0.883)	298603	50.0000	47
	38 Cyclohexane	56	3.931	3.926	(0.897)	389657	50.0000	45
	39 1,1-Dichloropropene	110	4.000	4.005	(0.912)	87009	50.0000	47
	40 Carbon Tetrachloride	117	4.010	4.005	(0.915)	315999	50.0000	47
	41 Isobutyl Alcohol	43	4.079	4.084	(0.930)	143621	1000.00	870(A)
$	42 1,2-Dichloroethane-d4	102	4.109	4.103	(0.937)	60480	50.0000	52
	43 Benzene	78	4.168	4.162	(0.951)	708401	50.0000	45
	44 1,2-Dichloroethane	62	4.168	4.172	(0.951)	278756	50.0000	46
	45 tert-Amyl methyl ether	73	4.256	4.261	(0.971)	530666	50.0000	46
*	46 Fluorobenzene	96	4.384	4.389	(1.000)	891422	50.0000	
	47 Trichloroethene	130	4.699	4.704	(1.072)	175743	50.0000	44
	48 Methylcyclohexane	83	4.877	4.881	(1.112)	300272	50.0000	44
	49 1,2-Dichloropropane	63	4.877	4.881	(1.112)	202621	50.0000	46
	51 Methyl Methacrylate	69	4.985	4.989	(1.137)	140195	50.0000	46
	52 Dibromomethane	93	4.975	4.979	(1.135)	123306	50.0000	44
	53 1,4-Dioxane	88	4.995	5.009	(1.139)	25637	1000.00	750(A)
	54 Bromodichloromethane	83	5.123	5.127	(1.168)	286221	50.0000	45
	55 2-Chloroethyl vinyl ether	63	5.398	5.403	(1.231)	83787	50.0000	47
	56 cis-1,3-Dichloropropene	75	5.526	5.531	(1.260)	317705	50.0000	47
	57 4-Methyl-2-pentanone	43	5.674	5.688	(1.294)	198836	50.0000	46
$	58 Toluene-d8	98	5.792	5.797	(0.801)	799746	50.0000	52
	59 Toluene	91	5.851	5.856	(1.335)	688283	50.0000	44
	60 trans-1,3-Dichloropropene	75	6.058	6.063	(1.382)	288009	50.0000	47
	61 Ethyl Methacrylate	69	6.166	6.171	(1.406)	164789	50.0000	47
	62 1,1,2-Trichloroethane	97	6.235	6.240	(1.422)	141002	50.0000	47
	63 Tetrachloroethene	164	6.393	6.397	(0.884)	123344	50.0000	44
	64 1,3-Dichloropropane	76	6.403	6.397	(0.886)	263770	50.0000	45
	65 2-Hexanone	43	6.491	6.496	(0.898)	130086	50.0000	46
	66 Dibromochloromethane	129	6.629	6.624	(0.917)	197212	50.0000	47
	67 1,2-Dibromoethane	107	6.737	6.742	(0.932)	151145	50.0000	45
	69 1-Chlorohexane	91	7.259	7.264	(1.004)	271882	50.0000	42(Q)
*	68 Chlorobenzene-d5	117	7.230	7.234	(1.000)	575219	50.0000	
	70 Chlorobenzene	112	7.259	7.264	(1.004)	439293	50.0000	45
	71 1,1,1,2-Tetrachloroethane	131	7.348	7.352	(1.016)	175424	50.0000	46
	72 Ethylbenzene	106	7.387	7.392	(1.022)	232115	50.0000	45
	73 m,p-Xylene	106	7.515	7.520	(1.039)	581399	100.000	90
	74 o-Xylene	106	7.939	7.943	(1.098)	283985	50.0000	46
	75 Styrene	104	7.958	7.963	(1.101)	478322	50.0000	46
	76 Bromoform	173	8.136	8.140	(1.125)	105911	50.0000	49
	77 Isopropylbenzene	105	8.362	8.367	(1.157)	744805	50.0000	46

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 trans-1,4-Dichloro-2-butene	75	8.421	8.426	(1.165)	56773	50.0000	49
$	79 Bromofluorobenzene	95	8.510	8.514	(1.177)	329263	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	8.677	8.691	(0.885)	174619	50.0000	45
	81 Bromobenzene	156	8.667	8.682	(0.884)	162280	50.0000	45
	82 1,2,3-Trichloropropane	75	8.717	8.731	(0.889)	192932	50.0000	50
	83 n-Propylbenzene	120	8.825	8.829	(0.901)	171447	50.0000	45
	84 2-Chlorotoluene	126	8.904	8.908	(0.909)	155337	50.0000	43
	85 1,3,5-Trimethylbenzene	105	9.032	9.036	(0.922)	602667	50.0000	44
	86 4-Chlorotoluene	126	9.032	9.036	(0.922)	163307	50.0000	43
	87 tert-Butylbenzene	119	9.396	9.400	(0.959)	589317	50.0000	44
	88 1,2,4-Trimethylbenzene	105	9.445	9.450	(0.964)	594678	50.0000	45
	89 sec-Butylbenzene	105	9.632	9.637	(0.983)	730790	50.0000	44
	90 1,3-Dichlorobenzene	146	9.721	9.725	(0.992)	294873	50.0000	43
	91 4-Isopropyltoluene	119	9.800	9.794	(1.000)	609358	50.0000	44
*	92 1,4-Dichlorobenzene-d4	152	9.800	9.794	(1.000)	251079	50.0000	(Q)
	93 1,4-Dichlorobenzene	146	9.819	9.824	(1.002)	295291	50.0000	43
	95 n-Butylbenzene	91	10.213	10.218	(1.042)	547057	50.0000	44
	96 1,2-Dichlorobenzene	146	10.193	10.198	(1.040)	273511	50.0000	43
	97 Hexachloroethane	117	10.449	10.454	(1.066)	148751	50.0000	44
	98 1,2-Dibromo-3-chloropropane	75	10.952	10.946	(1.118)	26422	50.0000	43
	141 1,3,5-Trichlorobenzene	182	11.158	11.163	(1.139)	174859	50.0000	45
	99 1,2,4-Trichlorobenzene	180	11.710	11.714	(1.195)	134365	50.0000	42
	100 Hexachlorobutadiene	225	11.887	11.882	(1.213)	68555	50.0000	39
	101 Naphthalene	128	11.917	11.921	(1.216)	279389	50.0000	40
	102 1,2,3-Trichlorobenzene	180	12.133	12.138	(1.238)	110731	50.0000	40

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\140812A.B\V1N0695.D
Date : 12-AUG-2014 15:17
Client ID: VSTD0501W
Instrument: V1.i
Sample Info: 5ML,VSTD0501W,VSTD0501W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0696.D
Report Date: 18-Aug-2014 11:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0696.D
Lab Smp Id: VSTD0201W Client Smp ID: VSTD0201W
Inj Date : 12-AUG-2014 15:42
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0201W,VSTD0201W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140812A.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:43 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 15:42 Cal File: V1N0696.D
Als bottle: 26 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	1.267	1.268	(0.289)	52592	20.0000	19
2	Freon114	85	1.346	1.346	(0.307)	97226	20.0000	17
3	Chloromethane	50	1.385	1.396	(0.316)	120030	20.0000	18
4	Vinyl Chloride	62	1.474	1.494	(0.336)	96621	20.0000	20
5	Bromomethane	94	1.700	1.691	(0.388)	54051	20.0000	20
6	Chloroethane	64	1.769	1.780	(0.403)	57256	20.0000	19
7	Trichlorofluoromethane	101	1.937	1.947	(0.441)	128582	20.0000	20
126	Ethanol	46	2.015	2.036	(0.459)	44375	2000.00	2000(AQ)
8	Ether	59	2.094	2.095	(0.477)	65588	20.0000	19(Q)
9	Acrolein	56	2.173	2.173	(0.495)	59367	100.000	100
10	1,1-Dichloroethene	96	2.291	2.282	(0.522)	77088	20.0000	19
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.301	2.301	(0.524)	88606	20.0000	18
12	Acetone	58	2.281	2.272	(0.520)	4985	20.0000	18
13	Iodomethane	142	2.409	2.400	(0.549)	89236	20.0000	18(Q)
14	Carbon Disulfide	76	2.399	2.420	(0.547)	327922	20.0000	21
15	Acetonitrile	41	2.488	2.488	(0.567)	318803	200.000	190
16	Allyl Chloride	39	2.488	2.488	(0.567)	154923	20.0000	19(Q)
17	Methyl Acetate	43	2.498	2.498	(0.569)	85182	20.0000	20
18	Methylene Chloride	84	2.567	2.567	(0.585)	83641	20.0000	20
19	tert-Butanol	59	2.655	2.646	(0.605)	11906	40.0000	41
20	Acrylonitrile	53	2.734	2.725	(0.623)	29285	20.0000	21
21	trans-1,2-Dichloroethene	96	2.764	2.764	(0.630)	80789	20.0000	19
22	Methyl tert-butyl ether	73	2.773	2.764	(0.632)	217149	20.0000	20

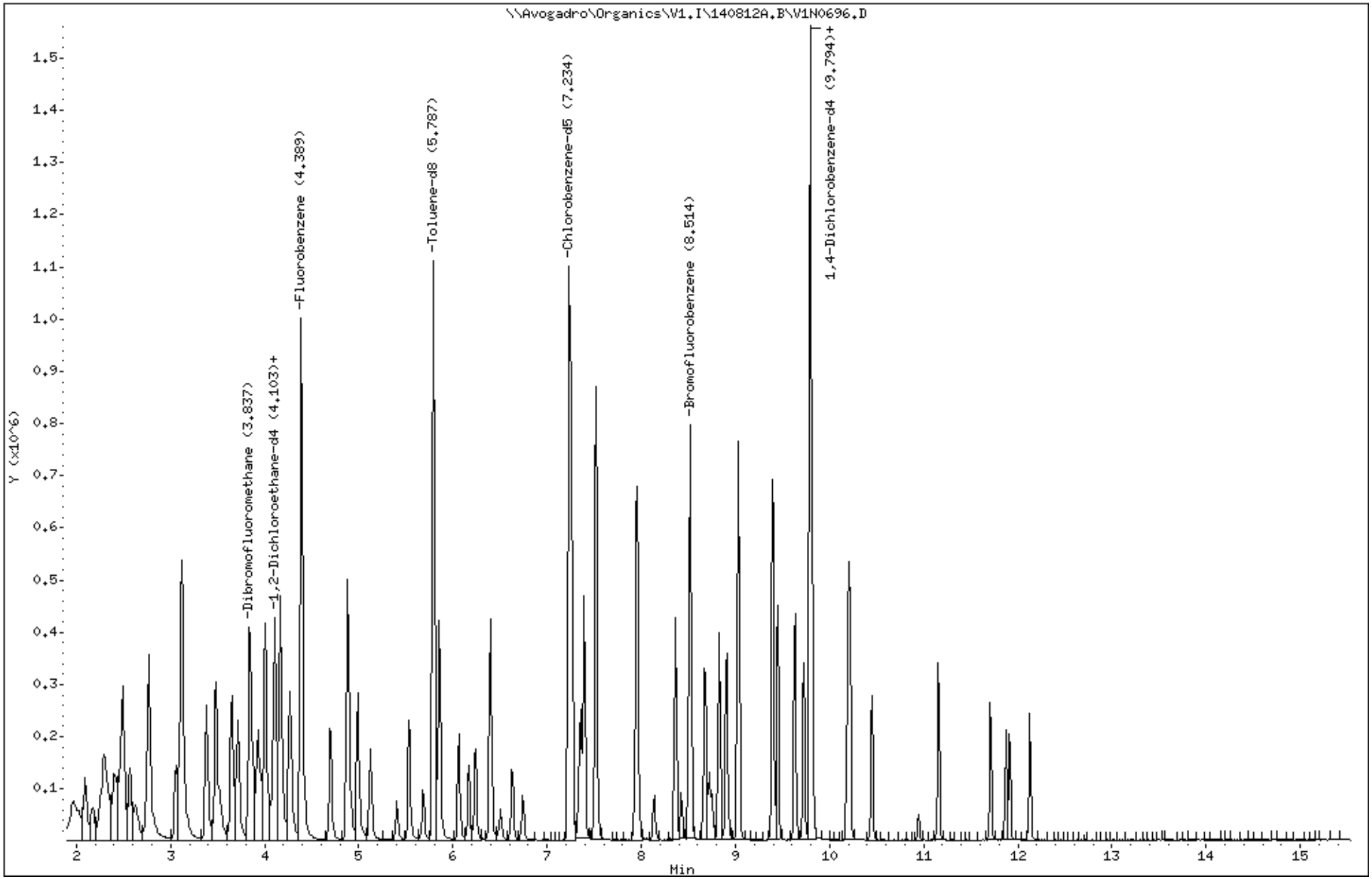
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.059	3.060	(0.697)	159373	20.0000	19
24	Vinyl acetate	43	3.108	3.109	(0.708)	348369	20.0000	19
25	Diisopropyl Ether	45	3.118	3.109	(0.711)	414256	20.0000	19
26	2-Chloro-1,3-Butadiene	53	3.128	3.128	(0.713)	154092	20.0000	19
27	Ethyl tert-butyl ether	59	3.374	3.384	(0.769)	289228	20.0000	19
29	2,2-Dichloropropane	77	3.482	3.483	(0.794)	61003	20.0000	19
28	cis-1,2-Dichloroethene	96	3.482	3.483	(0.794)	86472	20.0000	19
30	2-Butanone	72	3.482	3.483	(0.794)	6398	20.0000	18(Q)
32	Propionitrile	54	3.522	3.522	(0.803)	88114	200.000	190
33	Methacrylonitrile	41	3.640	3.640	(0.829)	109995	40.0000	38
34	Bromochloromethane	128	3.660	3.660	(0.834)	39418	20.0000	20
31	Tetrahydrofuran	72	3.699	3.700	(0.843)	14801	40.0000	40
35	Chloroform	83	3.719	3.719	(0.847)	151532	20.0000	19
$ 36	Dibromofluoromethane	113	3.837	3.837	(0.874)	270141	50.0000	49
37	1,1,1-Trichloroethane	97	3.876	3.877	(0.883)	117646	20.0000	19
38	Cyclohexane	56	3.925	3.926	(0.895)	166163	20.0000	20
39	1,1-Dichloropropene	110	4.004	4.005	(0.913)	36318	20.0000	20
40	Carbon Tetrachloride	117	4.004	4.005	(0.913)	123850	20.0000	19
41	Isobutyl Alcohol	43	4.093	4.084	(0.933)	68329	400.000	420(A)
$ 42	1,2-Dichloroethane-d4	102	4.113	4.103	(0.937)	58480	50.0000	51
43	Benzene	78	4.172	4.162	(0.951)	300910	20.0000	19
44	1,2-Dichloroethane	62	4.172	4.172	(0.951)	116599	20.0000	19
45	tert-Amyl methyl ether	73	4.260	4.261	(0.971)	218804	20.0000	19
* 46	Fluorobenzene	96	4.388	4.389	(1.000)	878354	50.0000	
47	Trichloroethene	130	4.703	4.704	(1.072)	72518	20.0000	18
48	Methylcyclohexane	83	4.881	4.881	(1.112)	125036	20.0000	19
49	1,2-Dichloropropane	63	4.881	4.881	(1.112)	86252	20.0000	20
51	Methyl Methacrylate	69	4.989	4.989	(1.137)	58996	20.0000	20
52	Dibromomethane	93	4.979	4.979	(1.135)	52997	20.0000	19
53	1,4-Dioxane	88	4.999	5.009	(1.139)	15081	400.000	450(A)
54	Bromodichloromethane	83	5.127	5.127	(1.168)	120221	20.0000	19
55	2-Chloroethyl vinyl ether	63	5.402	5.403	(1.231)	32231	20.0000	18
56	cis-1,3-Dichloropropene	75	5.530	5.531	(1.260)	128827	20.0000	19
57	4-Methyl-2-pentanone	43	5.678	5.688	(1.294)	83390	20.0000	20
$ 58	Toluene-d8	98	5.796	5.797	(0.801)	791669	50.0000	52
59	Toluene	91	5.855	5.856	(1.334)	290828	20.0000	19
60	trans-1,3-Dichloropropene	75	6.062	6.063	(1.381)	116271	20.0000	19
61	Ethyl Methacrylate	69	6.170	6.171	(1.406)	65865	20.0000	19
62	1,1,2-Trichloroethane	97	6.239	6.240	(1.422)	56293	20.0000	19
63	Tetrachloroethene	164	6.397	6.397	(0.884)	54965	20.0000	20
64	1,3-Dichloropropane	76	6.407	6.397	(0.886)	110039	20.0000	19
65	2-Hexanone	43	6.505	6.496	(0.899)	53625	20.0000	20
66	Dibromochloromethane	129	6.623	6.624	(0.916)	77042	20.0000	19
67	1,2-Dibromoethane	107	6.741	6.742	(0.932)	63237	20.0000	19
69	1-Chlorohexane	91	7.253	7.264	(1.003)	117149	20.0000	19(Q)
* 68	Chlorobenzene-d5	117	7.234	7.234	(1.000)	560912	50.0000	
70	Chlorobenzene	112	7.263	7.264	(1.004)	180418	20.0000	19
71	1,1,1,2-Tetrachloroethane	131	7.352	7.352	(1.016)	71667	20.0000	20
72	Ethylbenzene	106	7.391	7.392	(1.022)	97938	20.0000	20
73	m,p-Xylene	106	7.519	7.520	(1.039)	243160	40.0000	39
74	o-Xylene	106	7.943	7.943	(1.098)	114841	20.0000	19
75	Styrene	104	7.962	7.963	(1.101)	199644	20.0000	20
76	Bromoform	173	8.140	8.140	(1.125)	40695	20.0000	19
77	Isopropylbenzene	105	8.366	8.367	(1.157)	307689	20.0000	19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
78	trans-1,4-Dichloro-2-butene	75	8.425	8.426	(1.165)	19989	20.0000	18
$ 79	Bromofluorobenzene	95	8.514	8.514	(1.177)	322804	50.0000	50
80	1,1,2,2-Tetrachloroethane	83	8.681	8.691	(0.886)	73338	20.0000	20
81	Bromobenzene	156	8.671	8.682	(0.885)	67051	20.0000	19
82	1,2,3-Trichloropropane	75	8.720	8.731	(0.890)	78433	20.0000	21
83	n-Propylbenzene	120	8.829	8.829	(0.901)	68013	20.0000	19(Q)
84	2-Chlorotoluene	126	8.908	8.908	(0.910)	65956	20.0000	19
85	1,3,5-Trimethylbenzene	105	9.036	9.036	(0.923)	257531	20.0000	20
86	4-Chlorotoluene	126	9.026	9.036	(0.922)	68296	20.0000	19
87	tert-Butylbenzene	119	9.390	9.400	(0.959)	253974	20.0000	20
88	1,2,4-Trimethylbenzene	105	9.449	9.450	(0.965)	250950	20.0000	20
89	sec-Butylbenzene	105	9.636	9.637	(0.984)	311336	20.0000	19
90	1,3-Dichlorobenzene	146	9.725	9.725	(0.993)	125186	20.0000	19
91	4-Isopropyltoluene	119	9.794	9.794	(1.000)	259409	20.0000	20
* 92	1,4-Dichlorobenzene-d4	152	9.794	9.794	(1.000)	240350	50.0000	
93	1,4-Dichlorobenzene	146	9.823	9.824	(1.003)	128660	20.0000	19
95	n-Butylbenzene	91	10.217	10.218	(1.043)	240521	20.0000	20
96	1,2-Dichlorobenzene	146	10.197	10.198	(1.041)	113203	20.0000	19
97	Hexachloroethane	117	10.453	10.454	(1.067)	60525	20.0000	19
98	1,2-Dibromo-3-chloropropane	75	10.946	10.946	(1.118)	12083	20.0000	20
141	1,3,5-Trichlorobenzene	182	11.152	11.163	(1.139)	79371	20.0000	21
99	1,2,4-Trichlorobenzene	180	11.704	11.714	(1.195)	64097	20.0000	21
100	Hexachlorobutadiene	225	11.881	11.882	(1.213)	34637	20.0000	20
101	Naphthalene	128	11.920	11.921	(1.217)	141381	20.0000	21
102	1,2,3-Trichlorobenzene	180	12.127	12.138	(1.238)	55316	20.0000	21

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\140812A.B\V1N0696.D
Date : 12-AUG-2014 15:42
Client ID: VSTD0201W
Instrument: V1.i
Sample Info: 5ML,VSTD0201W,VSTD0201W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0697.D
Report Date: 18-Aug-2014 11:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0697.D
Lab Smp Id: VSTD0051W Client Smp ID: VSTD0051W
Inj Date : 12-AUG-2014 16:07
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0051W,VSTD0051W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140812A.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:43 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 16:07 Cal File: V1N0697.D
Als bottle: 27 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	1.265	1.268	(0.289)	13352	5.00000	4.9
2	Freon114	85	1.344	1.346	(0.306)	30215	5.00000	5.5
3	Chloromethane	50	1.393	1.396	(0.318)	32727	5.00000	4.9
4	Vinyl Chloride	62	1.482	1.494	(0.338)	23586	5.00000	4.8
5	Bromomethane	94	1.699	1.691	(0.387)	12810	5.00000	4.7
6	Chloroethane	64	1.787	1.780	(0.407)	13876	5.00000	4.7
7	Trichlorofluoromethane	101	1.935	1.947	(0.441)	32435	5.00000	5.0
126	Ethanol	46	2.053	2.036	(0.468)	18583	500.000	850(AQ)
8	Ether	59	2.092	2.095	(0.477)	17843	5.00000	5.3
9	Acrolein	56	2.171	2.173	(0.495)	15754	25.0000	27
10	1,1-Dichloroethene	96	2.279	2.282	(0.520)	19408	5.00000	4.8
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.309	2.301	(0.526)	25574	5.00000	5.3
12	Acetone	58	2.270	2.272	(0.517)	1583	5.00000	5.7(Q)
13	Iodomethane	142	2.398	2.400	(0.547)	24013	5.00000	4.9
14	Carbon Disulfide	76	2.398	2.420	(0.547)	83612	5.00000	5.4
15	Acetonitrile	41	2.486	2.488	(0.567)	85446	50.0000	52
16	Allyl Chloride	39	2.476	2.488	(0.565)	39025	5.00000	4.9
17	Methyl Acetate	43	2.506	2.498	(0.571)	20931	5.00000	4.9
18	Methylene Chloride	84	2.565	2.567	(0.585)	23293	5.00000	5.6(Q)
19	tert-Butanol	59	2.673	2.646	(0.609)	4080	10.0000	14
20	Acrylonitrile	53	2.732	2.725	(0.623)	7491	5.00000	5.4
21	trans-1,2-Dichloroethene	96	2.762	2.764	(0.630)	20297	5.00000	4.8
22	Methyl tert-butyl ether	73	2.772	2.764	(0.632)	55149	5.00000	5.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.057	3.060	(0.697)	42874	5.00000	5.2
24	Vinyl acetate	43	3.107	3.109	(0.708)	87480	5.00000	4.8
25	Diisopropyl Ether	45	3.116	3.109	(0.710)	109966	5.00000	5.1
26	2-Chloro-1,3-Butadiene	53	3.126	3.128	(0.713)	40997	5.00000	5.2
27	Ethyl tert-butyl ether	59	3.372	3.384	(0.769)	77412	5.00000	5.2
29	2,2-Dichloropropane	77	3.481	3.483	(0.793)	17062	5.00000	5.5
28	cis-1,2-Dichloroethene	96	3.481	3.483	(0.793)	24046	5.00000	5.3
30	2-Butanone	72	3.491	3.483	(0.796)	1896	5.00000	5.6(Q)
32	Propionitrile	54	3.530	3.522	(0.805)	23841	50.0000	53
33	Methacrylonitrile	41	3.638	3.640	(0.829)	28585	10.0000	9.9
34	Bromochloromethane	128	3.658	3.660	(0.834)	9124	5.00000	4.7
31	Tetrahydrofuran	72	3.697	3.700	(0.843)	3711	10.0000	10
35	Chloroform	83	3.717	3.719	(0.847)	39639	5.00000	5.0
$ 36	Dibromofluoromethane	113	3.835	3.837	(0.874)	269619	50.0000	50
37	1,1,1-Trichloroethane	97	3.875	3.877	(0.883)	30917	5.00000	5.0
38	Cyclohexane	56	3.924	3.926	(0.895)	42806	5.00000	5.1
39	1,1-Dichloropropene	110	4.003	4.005	(0.912)	8956	5.00000	5.0(Q)
40	Carbon Tetrachloride	117	4.003	4.005	(0.912)	31617	5.00000	4.8
41	Isobutyl Alcohol	43	4.091	4.084	(0.933)	21535	100.000	130
$ 42	1,2-Dichloroethane-d4	102	4.101	4.103	(0.935)	57252	50.0000	51
43	Benzene	78	4.160	4.162	(0.948)	76277	5.00000	5.0
44	1,2-Dichloroethane	62	4.170	4.172	(0.951)	30281	5.00000	5.1
45	tert-Amyl methyl ether	73	4.259	4.261	(0.971)	56213	5.00000	5.0
* 46	Fluorobenzene	96	4.387	4.389	(1.000)	868263	50.0000	
47	Trichloroethene	130	4.692	4.704	(1.070)	20190	5.00000	5.2
48	Methylcyclohexane	83	4.869	4.881	(1.110)	33514	5.00000	5.0
49	1,2-Dichloropropane	63	4.879	4.881	(1.112)	21824	5.00000	5.0
51	Methyl Methacrylate	69	4.987	4.989	(1.137)	15199	5.00000	5.1
52	Dibromomethane	93	4.977	4.979	(1.135)	14053	5.00000	5.2
53	1,4-Dioxane	88	5.017	5.009	(1.144)	6510	100.000	200
54	Bromodichloromethane	83	5.125	5.127	(1.168)	31356	5.00000	5.1
55	2-Chloroethyl vinyl ether	63	5.401	5.403	(1.231)	7321	5.00000	4.2
56	cis-1,3-Dichloropropene	75	5.529	5.531	(1.260)	32137	5.00000	4.8
57	4-Methyl-2-pentanone	43	5.686	5.688	(1.296)	21416	5.00000	5.1
$ 58	Toluene-d8	98	5.785	5.797	(0.800)	701133	50.0000	46
59	Toluene	91	5.854	5.856	(1.334)	77134	5.00000	5.1
60	trans-1,3-Dichloropropene	75	6.060	6.063	(1.382)	27845	5.00000	4.6
61	Ethyl Methacrylate	69	6.169	6.171	(1.406)	15633	5.00000	4.6
62	1,1,2-Trichloroethane	97	6.238	6.240	(1.422)	14748	5.00000	5.0
63	Tetrachloroethene	164	6.395	6.397	(0.884)	13185	5.00000	4.9
64	1,3-Dichloropropane	76	6.405	6.397	(0.886)	30602	5.00000	5.4
65	2-Hexanone	43	6.503	6.496	(0.899)	14928	5.00000	5.4
66	Dibromochloromethane	129	6.631	6.624	(0.917)	19886	5.00000	4.9(T)
67	1,2-Dibromoethane	107	6.740	6.742	(0.932)	16317	5.00000	5.0
69	1-Chlorohexane	91	7.262	7.264	(1.004)	32027	5.00000	5.1(Q)
* 68	Chlorobenzene-d5	117	7.232	7.234	(1.000)	561115	50.0000	
70	Chlorobenzene	112	7.262	7.264	(1.004)	50157	5.00000	5.2
71	1,1,1,2-Tetrachloroethane	131	7.350	7.352	(1.016)	18858	5.00000	5.1
72	Ethylbenzene	106	7.390	7.392	(1.022)	25076	5.00000	5.0
73	m,p-Xylene	106	7.518	7.520	(1.039)	63727	10.0000	10
74	o-Xylene	106	7.941	7.943	(1.098)	31662	5.00000	5.3
75	Styrene	104	7.961	7.963	(1.101)	51860	5.00000	5.1
76	Bromoform	173	8.138	8.140	(1.125)	10053	5.00000	4.8(Q)
77	Isopropylbenzene	105	8.364	8.367	(1.157)	81393	5.00000	5.1

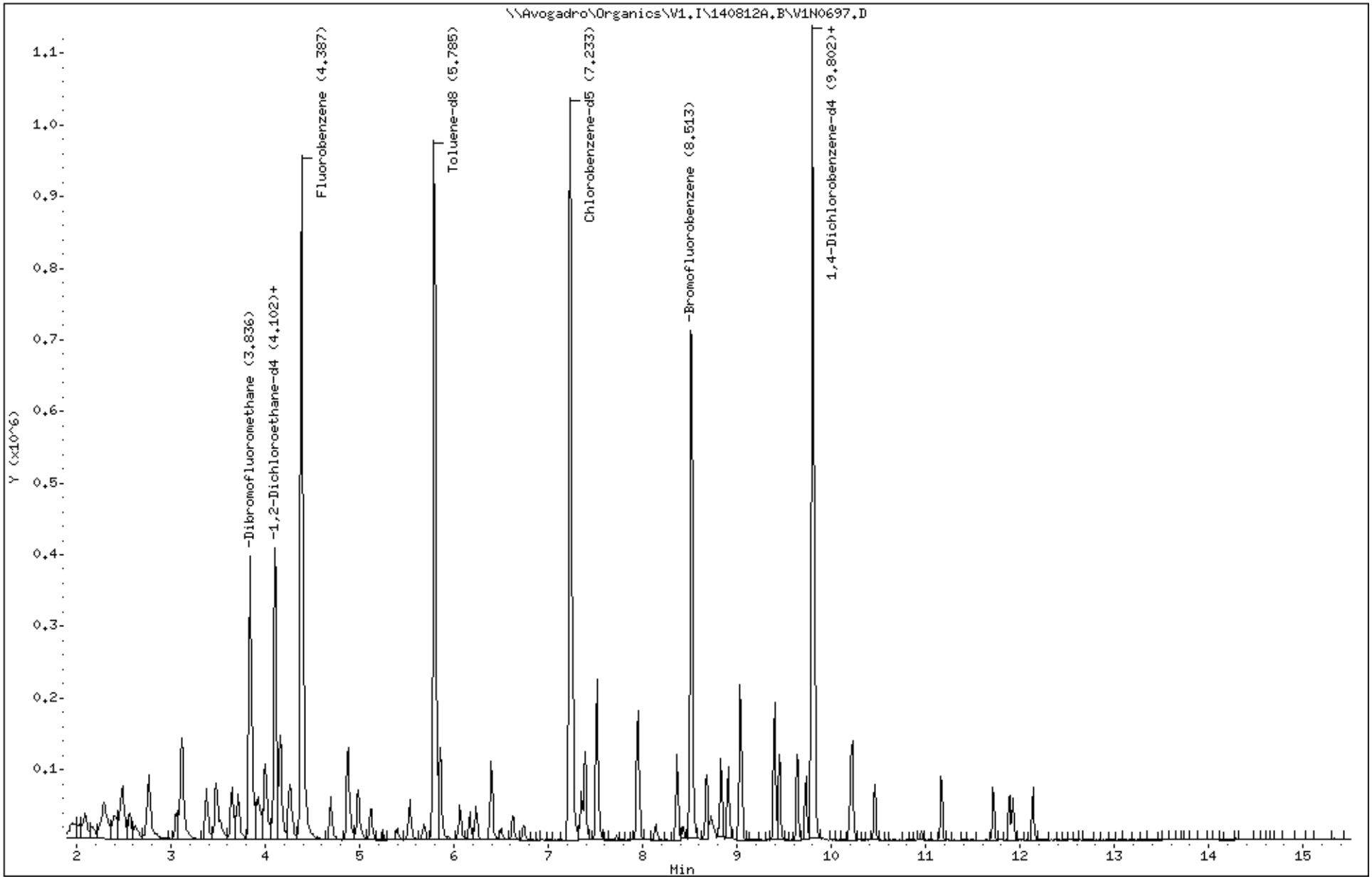
Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0697.D
Report Date: 18-Aug-2014 11:46

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.423	8.426	(1.165)	4906	5.00000	4.3
$	79	Bromofluorobenzene	95	8.512	8.514	(1.177)	316441	50.0000	49
	80	1,1,2,2-Tetrachloroethane	83	8.689	8.691	(0.886)	20117	5.00000	5.6
	81	Bromobenzene	156	8.670	8.682	(0.884)	17905	5.00000	5.4
	82	1,2,3-Trichloropropane	75	8.729	8.731	(0.891)	19919	5.00000	5.6
	83	n-Propylbenzene	120	8.827	8.829	(0.901)	18420	5.00000	5.3
	84	2-Chlorotoluene	126	8.906	8.908	(0.909)	18508	5.00000	5.6
	85	1,3,5-Trimethylbenzene	105	9.044	9.036	(0.923)	69804	5.00000	5.5
	86	4-Chlorotoluene	126	9.034	9.036	(0.922)	18635	5.00000	5.3
	87	tert-Butylbenzene	119	9.398	9.400	(0.959)	65719	5.00000	5.3
	88	1,2,4-Trimethylbenzene	105	9.447	9.450	(0.964)	68115	5.00000	5.6
	89	sec-Butylbenzene	105	9.635	9.637	(0.983)	83154	5.00000	5.4
	90	1,3-Dichlorobenzene	146	9.733	9.725	(0.993)	32879	5.00000	5.3
	91	4-Isopropyltoluene	119	9.802	9.794	(1.000)	69333	5.00000	5.5
*	92	1,4-Dichlorobenzene-d4	152	9.802	9.794	(1.000)	230744	50.0000	
	93	1,4-Dichlorobenzene	146	9.831	9.824	(1.003)	35647	5.00000	5.6
	95	n-Butylbenzene	91	10.225	10.218	(1.043)	62290	5.00000	5.5
	96	1,2-Dichlorobenzene	146	10.206	10.198	(1.041)	32934	5.00000	5.7
	97	Hexachloroethane	117	10.462	10.454	(1.067)	15928	5.00000	5.2
	98	1,2-Dibromo-3-chloropropane	75	10.954	10.946	(1.118)	2979	5.00000	5.3
	141	1,3,5-Trichlorobenzene	182	11.171	11.163	(1.140)	21154	5.00000	5.9
	99	1,2,4-Trichlorobenzene	180	11.722	11.714	(1.196)	18790	5.00000	6.3
	100	Hexachlorobutadiene	225	11.889	11.882	(1.213)	10638	5.00000	6.6
	101	Naphthalene	128	11.929	11.921	(1.217)	42955	5.00000	6.7
	102	1,2,3-Trichlorobenzene	180	12.135	12.138	(1.238)	17309	5.00000	6.8

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\V1.I\140812A.B\V1N0697.D
Date : 12-AUG-2014 16:07
Client ID: VSTD0051W
Instrument: V1.i
Sample Info: 5ML,VSTD0051W,VSTD0051W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



N1402

Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0699.D
Report Date: 18-Aug-2014 11:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0699.D
Lab Smp Id: VSTD0011W Client Smp ID: VSTD0011W
Inj Date : 12-AUG-2014 16:57
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0011W,VSTD0011W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140812A.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:43 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 16:57 Cal File: V1N0699.D
Als bottle: 29 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	1.252	1.268	(0.286)	2834	1.00000	1.0
2	Freon114	85	1.340	1.346	(0.306)	5686	1.00000	1.0
3	Chloromethane	50	1.380	1.396	(0.315)	7466	1.00000	1.1
4	Vinyl Chloride	62	1.478	1.494	(0.337)	5218	1.00000	1.0
5	Bromomethane	94	1.695	1.691	(0.387)	2665	1.00000	0.98(a)
6	Chloroethane	64	1.774	1.780	(0.405)	3546	1.00000	1.2
7	Trichlorofluoromethane	101	1.961	1.947	(0.447)	6269	1.00000	0.96(a)
126	Ethanol	46	2.020	2.036	(0.461)	520	500.000	24(Q)
8	Ether	59	2.089	2.095	(0.477)	3403	1.00000	1.00(Q)
9	Acrolein	56	2.167	2.173	(0.495)	2891	5.00000	4.9
10	1,1-Dichloroethene	96	2.276	2.282	(0.519)	4143	1.00000	1.0
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.305	2.301	(0.526)	4428	1.00000	0.92(a)
12	Acetone	58	2.266	2.272	(0.517)	194	1.00000	0.69(aQ)
13	Iodomethane	142	2.394	2.400	(0.546)	5101	1.00000	1.0
14	Carbon Disulfide	76	2.404	2.420	(0.548)	14551	1.00000	0.93(a)
15	Acetonitrile	41	2.483	2.488	(0.566)	14920	1.00000	9.1
16	Allyl Chloride	39	2.483	2.488	(0.566)	8515	1.00000	1.1(Q)
17	Methyl Acetate	43	2.502	2.498	(0.571)	4671	1.00000	1.1
18	Methylene Chloride	84	2.571	2.567	(0.587)	2885	1.00000	0.69(aQ)
19	tert-Butanol	59	2.670	2.646	(0.609)	854	1.00000	2.9
20	Acrylonitrile	53	2.729	2.725	(0.623)	965	1.00000	0.70(aQ)
21	trans-1,2-Dichloroethene	96	2.758	2.764	(0.629)	4523	1.00000	1.1
22	Methyl tert-butyl ether	73	2.758	2.764	(0.629)	10619	1.00000	0.96(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	3.054	3.060	(0.697)	8126	1.00000	0.98(a)
	24 Vinyl acetate	43	3.103	3.109	(0.708)	18122	1.00000	1.00
	25 Diisopropyl Ether	45	3.113	3.109	(0.710)	22683	1.00000	1.0
	26 2-Chloro-1,3-Butadiene	53	3.123	3.128	(0.712)	7806	1.00000	0.98(a)
	27 Ethyl tert-butyl ether	59	3.379	3.384	(0.771)	15045	1.00000	1.0
	29 2,2-Dichloropropane	77	3.487	3.483	(0.796)	3508	1.00000	1.1
	28 cis-1,2-Dichloroethene	96	3.477	3.483	(0.793)	5164	1.00000	1.1
	30 2-Butanone	72	3.713	3.483	(0.847)	826	1.00000	2.4(TQ)
	32 Propionitrile	54	3.536	3.522	(0.807)	5062	1.00000	11
	33 Methacrylonitrile	41	3.644	3.640	(0.832)	7097	1.00000	2.4
	34 Bromochloromethane	128	3.654	3.660	(0.834)	2010	1.00000	1.0(Q)
	31 Tetrahydrofuran	72	3.713	3.700	(0.847)	826	1.00000	2.2
	35 Chloroform	83	3.713	3.719	(0.847)	8388	1.00000	1.0
$	36 Dibromofluoromethane	113	3.841	3.837	(0.876)	272254	1.00000	50
	37 1,1,1-Trichloroethane	97	3.871	3.877	(0.883)	6463	1.00000	1.0
	38 Cyclohexane	56	3.920	3.926	(0.894)	8188	1.00000	0.97(a)
	39 1,1-Dichloropropene	110	3.999	4.005	(0.912)	1555	1.00000	0.86(aQ)
	40 Carbon Tetrachloride	117	4.009	4.005	(0.915)	6281	1.00000	0.95(a)
	41 Isobutyl Alcohol	43	4.097	4.084	(0.935)	5118	1.00000	32
$	42 1,2-Dichloroethane-d4	102	4.107	4.103	(0.937)	56077	1.00000	49
	43 Benzene	78	4.156	4.162	(0.948)	16710	1.00000	1.1
	44 1,2-Dichloroethane	62	4.156	4.172	(0.948)	6205	1.00000	1.0
	45 tert-Amyl methyl ether	73	4.255	4.261	(0.971)	11513	1.00000	1.0
*	46 Fluorobenzene	96	4.383	4.389	(1.000)	874866	50.0000	
	47 Trichloroethene	130	4.688	4.704	(1.070)	4169	1.00000	1.1
	48 Methylcyclohexane	83	4.865	4.881	(1.110)	7235	1.00000	1.1
	49 1,2-Dichloropropane	63	4.865	4.881	(1.110)	4349	1.00000	1.00
	51 Methyl Methacrylate	69	4.983	4.989	(1.137)	3355	1.00000	1.1
	52 Dibromomethane	93	4.974	4.979	(1.135)	2878	1.00000	1.0
	53 1,4-Dioxane	88	5.013	5.009	(1.144)	765	20.0000	23(Q)
	54 Bromodichloromethane	83	5.111	5.127	(1.166)	6311	1.00000	1.0
	55 2-Chloroethyl vinyl ether	63	5.397	5.403	(1.231)	1577	1.00000	0.91(a)
	56 cis-1,3-Dichloropropene	75	5.525	5.531	(1.261)	6526	1.00000	0.98(a)
	57 4-Methyl-2-pentanone	43	5.683	5.688	(1.297)	4990	1.00000	1.2
$	58 Toluene-d8	98	5.781	5.797	(0.800)	776892	1.00000	51
	59 Toluene	91	5.850	5.856	(1.335)	17390	1.00000	1.1
	60 trans-1,3-Dichloropropene	75	6.057	6.063	(1.382)	5248	1.00000	0.87(a)
	61 Ethyl Methacrylate	69	6.155	6.171	(1.404)	3052	1.00000	0.89(a)
	62 1,1,2-Trichloroethane	97	6.224	6.240	(1.420)	2924	1.00000	0.99(a)
	63 Tetrachloroethene	164	6.391	6.397	(0.884)	2807	1.00000	1.0
	64 1,3-Dichloropropane	76	6.391	6.397	(0.884)	6221	1.00000	1.1
	65 2-Hexanone	43	6.500	6.496	(0.899)	3207	1.00000	1.2
	66 Dibromochloromethane	129	6.618	6.624	(0.916)	4128	1.00000	1.0(T)
	67 1,2-Dibromoethane	107	6.736	6.742	(0.932)	3691	1.00000	1.1(T)
	69 1-Chlorohexane	91	7.258	7.264	(1.004)	7933	1.00000	1.3(Q)
*	68 Chlorobenzene-d5	117	7.228	7.234	(1.000)	564452	50.0000	
	70 Chlorobenzene	112	7.258	7.264	(1.004)	10686	1.00000	1.1
	71 1,1,1,2-Tetrachloroethane	131	7.347	7.352	(1.016)	3653	1.00000	0.99(a)
	72 Ethylbenzene	106	7.386	7.392	(1.022)	5320	1.00000	1.0(Q)
	73 m,p-Xylene	106	7.514	7.520	(1.039)	13644	2.00000	2.2
	74 o-Xylene	106	7.947	7.943	(1.099)	5886	1.00000	0.97(a)
	75 Styrene	104	7.957	7.963	(1.101)	10379	1.00000	1.0
	76 Bromoform	173	8.134	8.140	(1.125)	1947	1.00000	0.92(TaQ)
	77 Isopropylbenzene	105	8.361	8.367	(1.157)	17286	1.00000	1.1

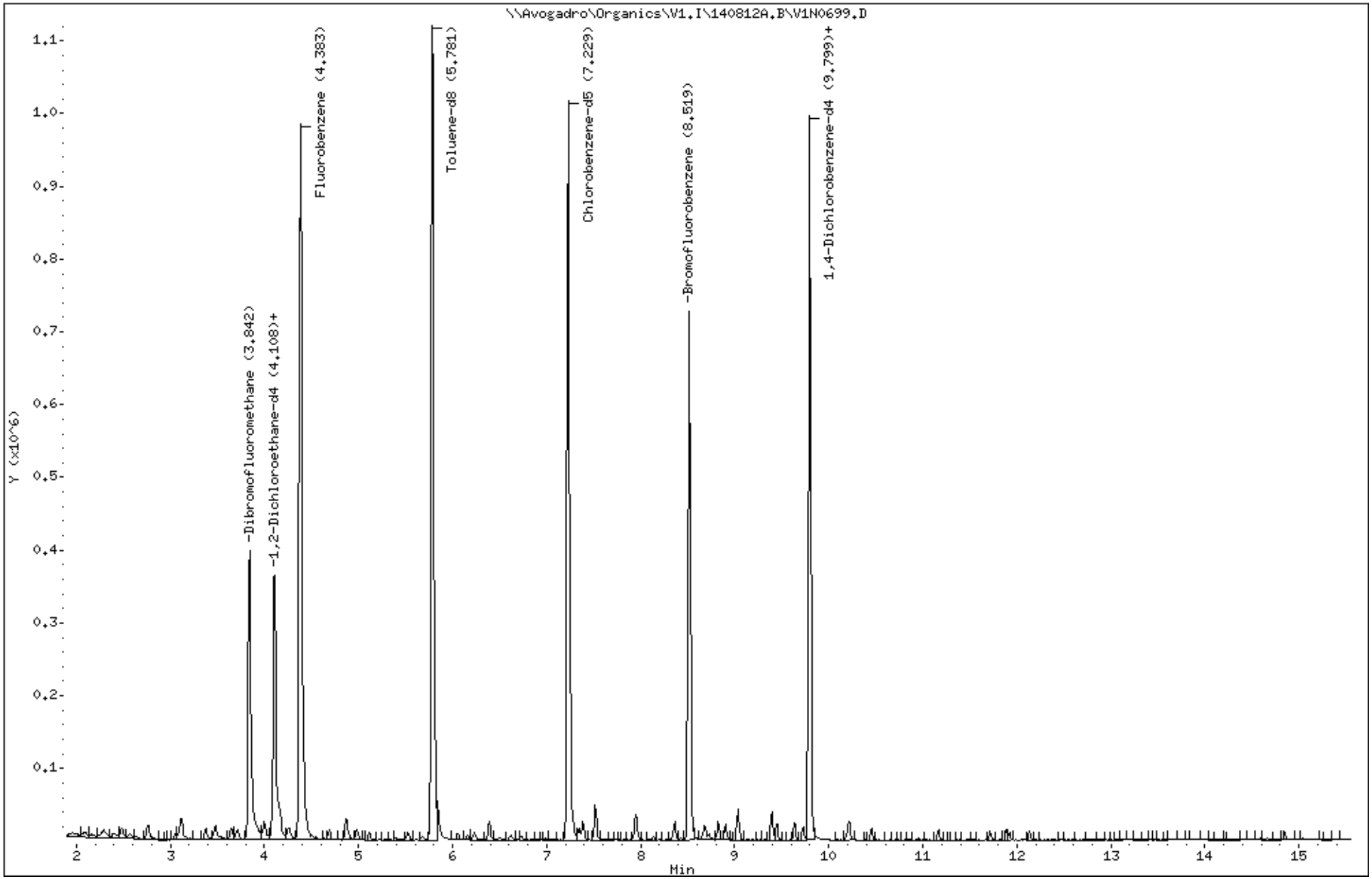
Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0699.D
Report Date: 18-Aug-2014 11:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
78	trans-1,4-Dichloro-2-butene	75	8.410	8.426	(1.163)	633	1.00000	0.56(aQ)
$ 79	Bromofluorobenzene	95	8.518	8.514	(1.178)	313783	1.00000	48
80	1,1,2,2-Tetrachloroethane	83	8.686	8.691	(0.886)	4204	1.00000	1.2
81	Bromobenzene	156	8.676	8.682	(0.885)	3463	1.00000	1.1
82	1,2,3-Trichloropropane	75	8.725	8.731	(0.890)	3416	1.00000	0.99(a)
83	n-Propylbenzene	120	8.823	8.829	(0.901)	3739	1.00000	1.1(Q)
84	2-Chlorotoluene	126	8.902	8.908	(0.909)	3798	1.00000	1.2
85	1,3,5-Trimethylbenzene	105	9.040	9.036	(0.923)	13462	1.00000	1.1
86	4-Chlorotoluene	126	9.030	9.036	(0.922)	4114	1.00000	1.2(Q)
87	tert-Butylbenzene	119	9.395	9.400	(0.959)	13366	1.00000	1.1
88	1,2,4-Trimethylbenzene	105	9.454	9.450	(0.965)	12877	1.00000	1.1
89	sec-Butylbenzene	105	9.641	9.637	(0.984)	17683	1.00000	1.2
90	1,3-Dichlorobenzene	146	9.729	9.725	(0.993)	7233	1.00000	1.2
91	4-Isopropyltoluene	119	9.798	9.794	(1.000)	13054	1.00000	1.1
* 92	1,4-Dichlorobenzene-d4	152	9.798	9.794	(1.000)	224503	50.0000	
93	1,4-Dichlorobenzene	146	9.818	9.824	(1.002)	7094	1.00000	1.1(Q)
95	n-Butylbenzene	91	10.222	10.218	(1.043)	11747	1.00000	1.1
96	1,2-Dichlorobenzene	146	10.202	10.198	(1.041)	6676	1.00000	1.2
97	Hexachloroethane	117	10.458	10.454	(1.067)	3535	1.00000	1.2
98	1,2-Dibromo-3-chloropropane	75	10.950	10.946	(1.118)	687	1.00000	1.2
141	1,3,5-Trichlorobenzene	182	11.167	11.163	(1.140)	3423	1.00000	0.98(a)
99	1,2,4-Trichlorobenzene	180	11.718	11.714	(1.196)	3147	1.00000	1.1
100	Hexachlorobutadiene	225	11.886	11.882	(1.213)	1992	1.00000	1.3
101	Naphthalene	128	11.925	11.921	(1.217)	7189	1.00000	1.2
102	1,2,3-Trichlorobenzene	180	12.132	12.138	(1.238)	2856	1.00000	1.2

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\V1.I\140812A.B\V1N0699.D
Date : 12-AUG-2014 16:57
Client ID: VSTD0011W
Instrument: V1.i
Sample Info: 5ML,VSTD0011W,VSTD0011W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0700.D
Report Date: 18-Aug-2014 11:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0700.D
Lab Smp Id: VSTD2001W Client Smp ID: VSTD2001W
Inj Date : 12-AUG-2014 17:22
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD2001W,VSTD2001W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140812A.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:43 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:22 Cal File: V1N0700.D
Als bottle: 30 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.262	1.268	(0.287)	598635	200.000	220(A)
2	Freon114	85	1.341	1.346	(0.305)	1160884	200.000	210(A)
3	Chloromethane	50	1.400	1.396	(0.319)	1338602	200.000	200
4	Vinyl Chloride	62	1.479	1.494	(0.337)	983449	200.000	200
5	Bromomethane	94	1.686	1.691	(0.384)	572119	200.000	210(A)
6	Chloroethane	64	1.774	1.780	(0.404)	596537	200.000	200
7	Trichlorofluoromethane	101	1.942	1.947	(0.442)	1343419	200.000	200(A)
126	Ethanol	46	2.030	2.036	(0.462)	124524	8000.00	5600(AQ)
8	Ether	59	2.089	2.095	(0.476)	686655	200.000	200(Q)
9	Acrolein	56	2.168	2.173	(0.494)	563660	1000.00	940(A)
10	1,1-Dichloroethene	96	2.277	2.282	(0.518)	849955	200.000	210(A)
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.296	2.301	(0.523)	1024384	200.000	210(A)
12	Acetone	58	2.267	2.272	(0.516)	54712	200.000	190(Q)
13	Iodomethane	142	2.395	2.400	(0.545)	1114188	200.000	220(A)
14	Carbon Disulfide	76	2.414	2.420	(0.550)	3483193	200.000	220(A)
15	Acetonitrile	41	2.483	2.488	(0.565)	3197364	2000.00	1900(A)
16	Allyl Chloride	39	2.483	2.488	(0.565)	1630480	200.000	200(AQ)
17	Methyl Acetate	43	2.503	2.498	(0.570)	828574	200.000	190
18	Methylene Chloride	84	2.562	2.567	(0.583)	899608	200.000	210(AQ)
19	tert-Butanol	59	2.651	2.646	(0.603)	74435	400.000	250(A)
20	Acrylonitrile	53	2.729	2.725	(0.621)	297981	200.000	210(AQ)
21	trans-1,2-Dichloroethene	96	2.769	2.764	(0.630)	861168	200.000	200(A)
22	Methyl tert-butyl ether	73	2.769	2.764	(0.630)	2247709	200.000	200(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.054	3.060	(0.695)	1716743	200.000	200(A)
24	Vinyl acetate	43	3.104	3.109	(0.706)	3763572	200.000	200(A)
25	Diisopropyl Ether	45	3.113	3.109	(0.709)	4348325	200.000	200
26	2-Chloro-1,3-Butadiene	53	3.133	3.128	(0.713)	1596029	200.000	200
27	Ethyl tert-butyl ether	59	3.379	3.384	(0.769)	3067475	200.000	200(A)
29	2,2-Dichloropropane	77	3.488	3.483	(0.794)	570017	200.000	180
28	cis-1,2-Dichloroethene	96	3.478	3.483	(0.792)	893211	200.000	190
30	2-Butanone	72	3.488	3.483	(0.794)	65625	200.000	190(Q)
32	Propionitrile	54	3.527	3.522	(0.803)	859338	2000.00	1900(A)
33	Methacrylonitrile	41	3.645	3.640	(0.830)	1212522	400.000	410(A)
34	Bromochloromethane	128	3.665	3.660	(0.834)	415998	200.000	210(AQ)
31	Tetrahydrofuran	72	3.704	3.700	(0.843)	141764	400.000	380(A)
35	Chloroform	83	3.724	3.719	(0.848)	1602373	200.000	200
$ 36	Dibromofluoromethane	113	3.842	3.837	(0.875)	275511	50.0000	50
37	1,1,1-Trichloroethane	97	3.872	3.877	(0.881)	1279188	200.000	200(A)
38	Cyclohexane	56	3.950	3.926	(0.899)	1718648	200.000	200(A)
39	1,1-Dichloropropene	110	4.009	4.005	(0.913)	383312	200.000	210(AQ)
40	Carbon Tetrachloride	117	4.009	4.005	(0.913)	1410095	200.000	210(A)
41	Isobutyl Alcohol	43	4.078	4.084	(0.928)	408432	4000.00	2500(A)
$ 42	1,2-Dichloroethane-d4	102	4.108	4.103	(0.935)	54592	50.0000	47
43	Benzene	78	4.167	4.162	(0.948)	3053461	200.000	200
44	1,2-Dichloroethane	62	4.167	4.172	(0.948)	1190422	200.000	200
45	tert-Amyl methyl ether	73	4.265	4.261	(0.971)	2349725	200.000	200(A)
* 46	Fluorobenzene	96	4.393	4.389	(1.000)	886016	50.0000	
47	Trichloroethene	130	4.699	4.704	(1.069)	791294	200.000	200(A)
48	Methylcyclohexane	83	4.876	4.881	(1.110)	1349171	200.000	200
49	1,2-Dichloropropane	63	4.886	4.881	(1.112)	882893	200.000	200
51	Methyl Methacrylate	69	4.994	4.989	(1.137)	612651	200.000	200(A)
52	Dibromomethane	93	4.984	4.979	(1.134)	533445	200.000	190
53	1,4-Dioxane	88	5.004	5.009	(1.139)	38919	4000.00	1100(AQ)
54	Bromodichloromethane	83	5.122	5.127	(1.166)	1265183	200.000	200(A)
55	2-Chloroethyl vinyl ether	63	5.398	5.403	(1.229)	392225	200.000	220(A)
56	cis-1,3-Dichloropropene	75	5.536	5.531	(1.260)	1418122	200.000	210(A)
57	4-Methyl-2-pentanone	43	5.683	5.688	(1.294)	853495	200.000	200
$ 58	Toluene-d8	98	5.792	5.797	(0.800)	792040	50.0000	49
59	Toluene	91	5.861	5.856	(1.334)	2947226	200.000	190
60	trans-1,3-Dichloropropene	75	6.057	6.063	(1.379)	1263922	200.000	210(A)
61	Ethyl Methacrylate	69	6.166	6.171	(1.403)	737823	200.000	210(AQ)
62	1,1,2-Trichloroethane	97	6.235	6.240	(1.419)	600411	200.000	200(A)
63	Tetrachloroethene	164	6.402	6.397	(0.884)	587656	200.000	200(A)
64	1,3-Dichloropropane	76	6.402	6.397	(0.884)	1137272	200.000	190
65	2-Hexanone	43	6.501	6.496	(0.898)	547894	200.000	190
66	Dibromochloromethane	129	6.629	6.624	(0.916)	887239	200.000	200(A)
67	1,2-Dibromoethane	107	6.747	6.742	(0.932)	677150	200.000	190
69	1-Chlorohexane	91	7.259	7.264	(1.003)	1206001	200.000	180(Q)
* 68	Chlorobenzene-d5	117	7.239	7.234	(1.000)	596815	50.0000	
70	Chlorobenzene	112	7.269	7.264	(1.004)	2001093	200.000	200(Q)
71	1,1,1,2-Tetrachloroethane	131	7.357	7.352	(1.016)	791588	200.000	200(A)
72	Ethylbenzene	106	7.397	7.392	(1.022)	1045740	200.000	200
73	m,p-Xylene	106	7.525	7.520	(1.039)	2655424	400.000	400(A)
74	o-Xylene	106	7.948	7.943	(1.098)	1286105	200.000	200(AQ)
75	Styrene	104	7.958	7.963	(1.099)	2155792	200.000	200
76	Bromoform	173	8.135	8.140	(1.124)	473223	200.000	210(A)
77	Isopropylbenzene	105	8.361	8.367	(1.155)	3226372	200.000	190

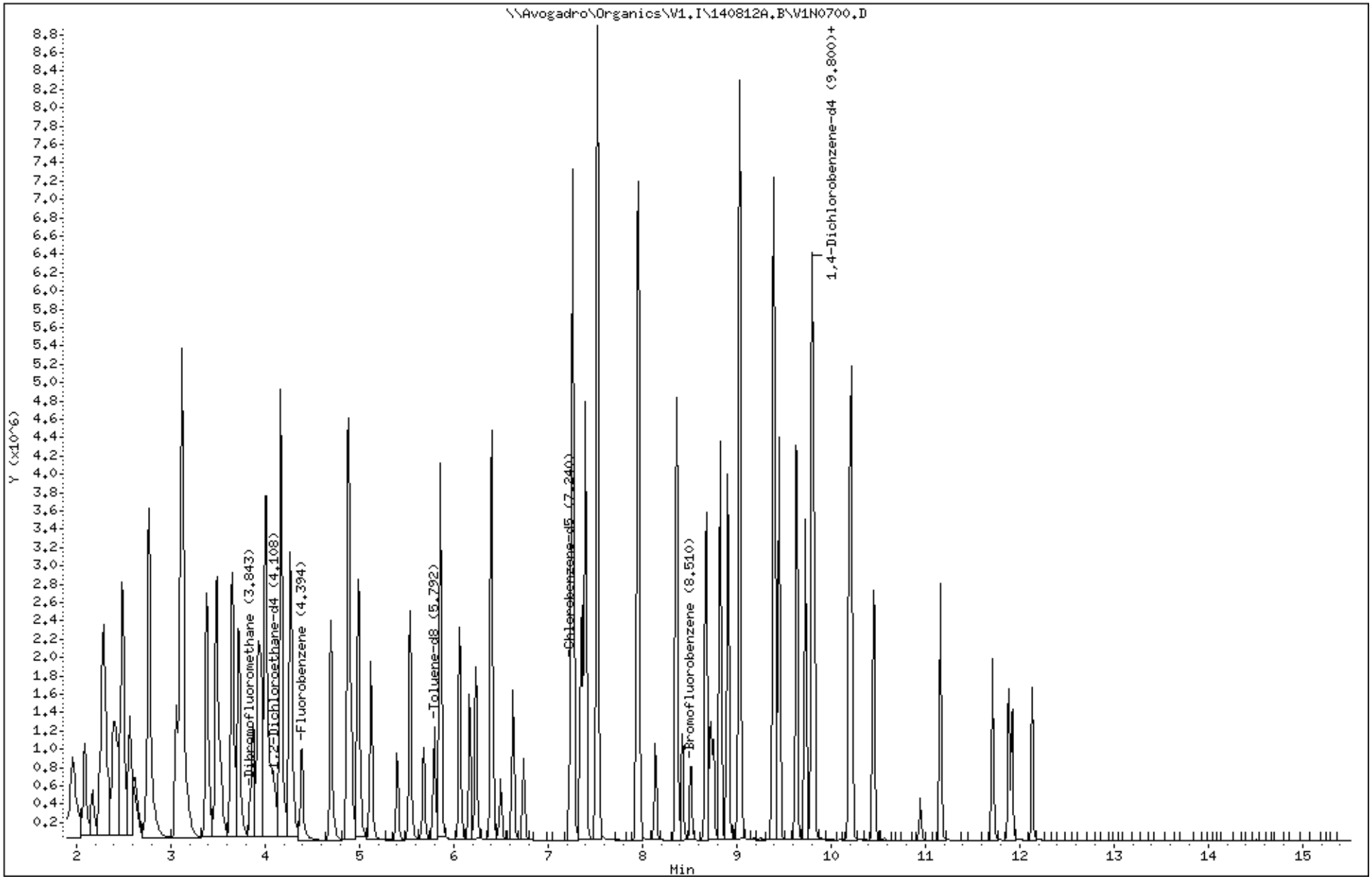
Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0700.D
Report Date: 18-Aug-2014 11:47

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 trans-1,4-Dichloro-2-butene	75	8.421	8.426	(1.163)	260036	200.000	220(A)
$	79 Bromofluorobenzene	95	8.509	8.514	(1.175)	345492	50.0000	50
	80 1,1,2,2-Tetrachloroethane	83	8.686	8.691	(0.886)	721026	200.000	160
	81 Bromobenzene	156	8.677	8.682	(0.885)	752990	200.000	190
	82 1,2,3-Trichloropropane	75	8.726	8.731	(0.890)	565096	200.000	130
	83 n-Propylbenzene	120	8.824	8.829	(0.901)	778533	200.000	180(Q)
	84 2-Chlorotoluene	126	8.903	8.908	(0.909)	722313	200.000	180(Q)
	85 1,3,5-Trimethylbenzene	105	9.031	9.036	(0.922)	2662924	200.000	170
	86 4-Chlorotoluene	126	9.031	9.036	(0.922)	788347	200.000	180
	87 tert-Butylbenzene	119	9.395	9.400	(0.959)	2608096	200.000	170
	88 1,2,4-Trimethylbenzene	105	9.445	9.450	(0.964)	2550914	200.000	170
	89 sec-Butylbenzene	105	9.632	9.637	(0.983)	3140134	200.000	170
	90 1,3-Dichlorobenzene	146	9.730	9.725	(0.993)	1319495	200.000	170
	91 4-Isopropyltoluene	119	9.799	9.794	(1.000)	2640283	200.000	170
*	92 1,4-Dichlorobenzene-d4	152	9.799	9.794	(1.000)	279825	50.0000	(Q)
	93 1,4-Dichlorobenzene	146	9.819	9.824	(1.002)	1350949	200.000	180(Q)
	95 n-Butylbenzene	91	10.213	10.218	(1.042)	2296496	200.000	170
	96 1,2-Dichlorobenzene	146	10.193	10.198	(1.040)	1209878	200.000	170
	97 Hexachloroethane	117	10.449	10.454	(1.066)	645802	200.000	170
	98 1,2-Dibromo-3-chloropropane	75	10.951	10.946	(1.118)	106717	200.000	160
	141 1,3,5-Trichlorobenzene	182	11.168	11.163	(1.140)	716684	200.000	160
	99 1,2,4-Trichlorobenzene	180	11.719	11.714	(1.196)	523385	200.000	140
	100 Hexachlorobutadiene	225	11.886	11.882	(1.213)	260634	200.000	130
	101 Naphthalene	128	11.926	11.921	(1.217)	1015110	200.000	130
	102 1,2,3-Trichlorobenzene	180	12.133	12.138	(1.238)	389119	200.000	130

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\140812A.B\V1N0700.D
Date : 12-AUG-2014 17:22
Client ID: VSTD2001W
Instrument: V1.i
Sample Info: 5ML,VSTD2001W,VSTD2001W
Purge Volume: 5.0
Operator: WL SRC: WL
Column phase: DB-624
Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0701.D
Report Date: 18-Aug-2014 11:47

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0701.D
Lab Smp Id: VSTD1001W Client Smp ID: VSTD1001W
Inj Date : 12-AUG-2014 17:47
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD1001W,VSTD1001W
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140812A.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:43 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 31 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	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.262	1.268	(0.287)	300012	100.000	110
2	Freon114	85	1.340	1.346	(0.305)	635524	100.000	120
3	Chloromethane	50	1.390	1.396	(0.316)	758828	100.000	120
4	Vinyl Chloride	62	1.478	1.494	(0.337)	549852	100.000	120
5	Bromomethane	94	1.695	1.691	(0.386)	304870	100.000	120
6	Chloroethane	64	1.774	1.780	(0.404)	307445	100.000	110
7	Trichlorofluoromethane	101	1.951	1.947	(0.444)	706840	100.000	110
126	Ethanol	46	2.020	2.036	(0.460)	196378	10000.0	9300(A)
8	Ether	59	2.089	2.095	(0.476)	352846	100.000	110(Q)
9	Acrolein	56	2.168	2.173	(0.493)	298682	500.000	530(A)
10	1,1-Dichloroethene	96	2.286	2.282	(0.520)	433339	100.000	110
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.296	2.301	(0.523)	526211	100.000	110
12	Acetone	58	2.276	2.272	(0.518)	32050	100.000	120(Q)
13	Iodomethane	142	2.404	2.400	(0.547)	500998	100.000	110
14	Carbon Disulfide	76	2.424	2.420	(0.552)	1789745	100.000	120
15	Acetonitrile	41	2.483	2.488	(0.565)	1738458	1000.00	1100(A)
16	Allyl Chloride	39	2.483	2.488	(0.565)	865630	100.000	110
17	Methyl Acetate	43	2.502	2.498	(0.570)	442287	100.000	110
18	Methylene Chloride	84	2.571	2.567	(0.585)	461780	100.000	120
19	tert-Butanol	59	2.650	2.646	(0.603)	59863	200.000	210(A)
20	Acrylonitrile	53	2.729	2.725	(0.621)	148662	100.000	110
21	trans-1,2-Dichloroethene	96	2.768	2.764	(0.630)	434339	100.000	110
22	Methyl tert-butyl ether	73	2.768	2.764	(0.630)	1171179	100.000	110

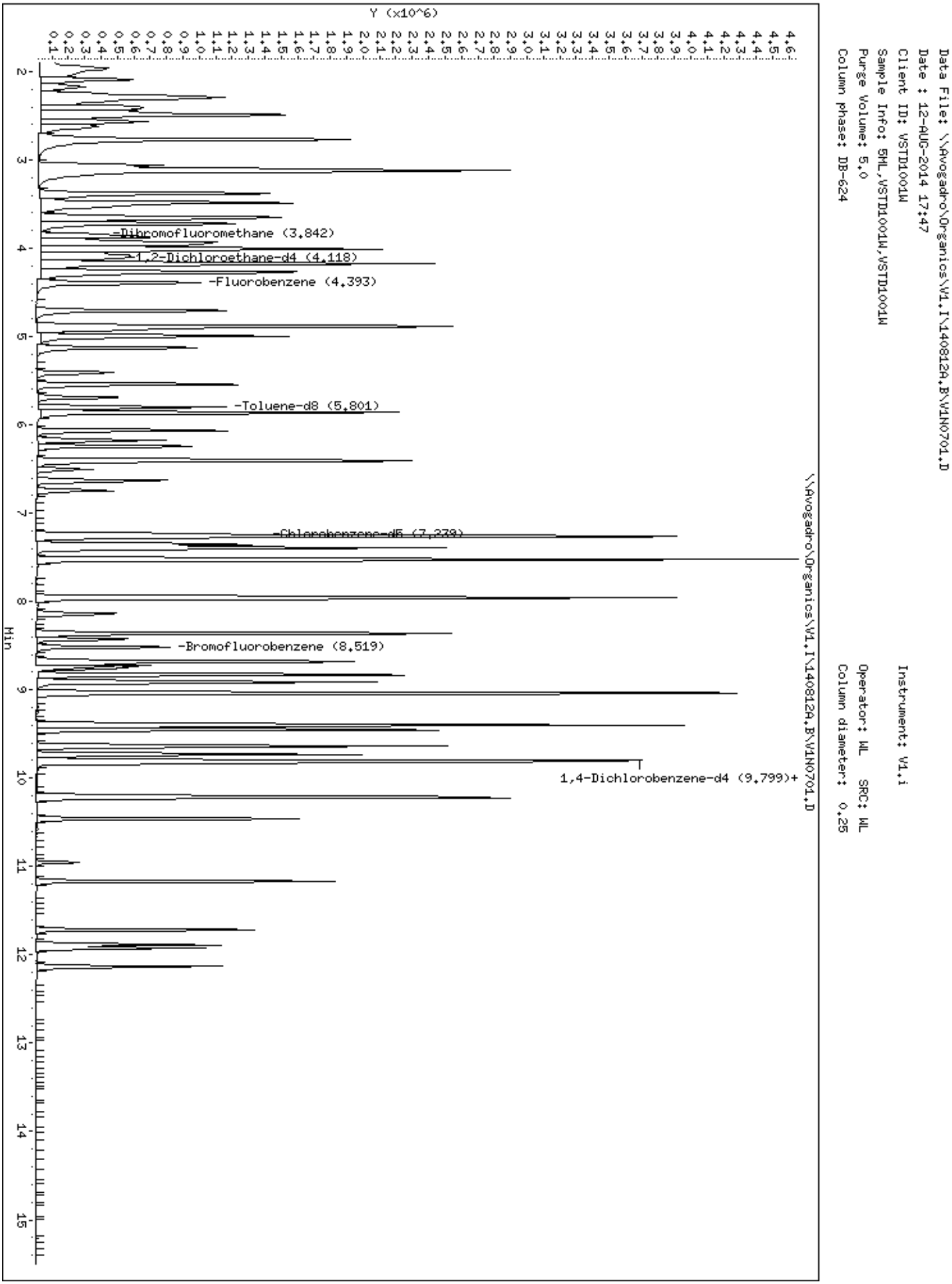
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.064	3.060	(0.697)	872629	100.000	110
24	Vinyl acetate	43	3.103	3.109	(0.706)	1965457	100.000	110
25	Diisopropyl Ether	45	3.113	3.109	(0.709)	2254303	100.000	110
26	2-Chloro-1,3-Butadiene	53	3.132	3.128	(0.713)	829891	100.000	110
27	Ethyl tert-butyl ether	59	3.379	3.384	(0.769)	1594684	100.000	110
29	2,2-Dichloropropane	77	3.487	3.483	(0.794)	306935	100.000	100
28	cis-1,2-Dichloroethene	96	3.487	3.483	(0.794)	451299	100.000	100
30	2-Butanone	72	3.487	3.483	(0.794)	36030	100.000	110(Q)
32	Propionitrile	54	3.526	3.522	(0.803)	464114	1000.00	1100(A)
33	Methacrylonitrile	41	3.644	3.640	(0.830)	622838	200.000	220(A)
34	Bromochloromethane	128	3.664	3.660	(0.834)	204618	100.000	110
31	Tetrahydrofuran	72	3.704	3.700	(0.843)	79183	200.000	220(A)
35	Chloroform	83	3.723	3.719	(0.848)	821775	100.000	110
$ 36	Dibromofluoromethane	113	3.841	3.837	(0.874)	263777	50.0000	50
37	1,1,1-Trichloroethane	97	3.881	3.877	(0.883)	648995	100.000	110
38	Cyclohexane	56	3.930	3.926	(0.895)	923490	100.000	110
39	1,1-Dichloropropene	110	4.009	4.005	(0.913)	196065	100.000	110
40	Carbon Tetrachloride	117	4.009	4.005	(0.913)	725962	100.000	110
41	Isobutyl Alcohol	43	4.088	4.084	(0.931)	347734	2000.00	2200(A)
$ 42	1,2-Dichloroethane-d4	102	4.117	4.103	(0.937)	53159	50.0000	48
43	Benzene	78	4.176	4.162	(0.951)	1574439	100.000	110
44	1,2-Dichloroethane	62	4.176	4.172	(0.951)	633260	100.000	110
45	tert-Amyl methyl ether	73	4.265	4.261	(0.971)	1179501	100.000	110
* 46	Fluorobenzene	96	4.393	4.389	(1.000)	841975	50.0000	
47	Trichloroethene	130	4.708	4.704	(1.072)	400759	100.000	110
48	Methylcyclohexane	83	4.885	4.881	(1.112)	702541	100.000	110
49	1,2-Dichloropropane	63	4.895	4.881	(1.114)	460823	100.000	110
51	Methyl Methacrylate	69	4.993	4.989	(1.137)	312591	100.000	110
52	Dibromomethane	93	4.984	4.979	(1.134)	279817	100.000	110
53	1,4-Dioxane	88	5.013	5.009	(1.141)	57301	2000.00	1800(A)
54	Bromodichloromethane	83	5.131	5.127	(1.168)	650151	100.000	110
55	2-Chloroethyl vinyl ether	63	5.407	5.403	(1.231)	194327	100.000	120
56	cis-1,3-Dichloropropene	75	5.545	5.531	(1.262)	711090	100.000	110
57	4-Methyl-2-pentanone	43	5.683	5.688	(1.294)	446174	100.000	110
$ 58	Toluene-d8	98	5.801	5.797	(0.801)	750336	50.0000	50
59	Toluene	91	5.860	5.856	(1.334)	1522250	100.000	100
60	trans-1,3-Dichloropropene	75	6.067	6.063	(1.381)	656362	100.000	110
61	Ethyl Methacrylate	69	6.175	6.171	(1.406)	375935	100.000	110
62	1,1,2-Trichloroethane	97	6.244	6.240	(1.421)	308718	100.000	110
63	Tetrachloroethene	164	6.401	6.397	(0.884)	287169	100.000	110
64	1,3-Dichloropropane	76	6.411	6.397	(0.886)	586968	100.000	100
65	2-Hexanone	43	6.500	6.496	(0.898)	289529	100.000	110
66	Dibromochloromethane	129	6.628	6.624	(0.916)	440692	100.000	110
67	1,2-Dibromoethane	107	6.746	6.742	(0.932)	344512	100.000	100
69	1-Chlorohexane	91	7.258	7.264	(1.003)	624323	100.000	100
* 68	Chlorobenzene-d5	117	7.238	7.234	(1.000)	558271	50.0000	
70	Chlorobenzene	112	7.268	7.264	(1.004)	988892	100.000	100
71	1,1,1,2-Tetrachloroethane	131	7.356	7.352	(1.016)	390466	100.000	110
72	Ethylbenzene	106	7.396	7.392	(1.022)	526377	100.000	110
73	m,p-Xylene	106	7.524	7.520	(1.039)	1322873	200.000	210(A)
74	o-Xylene	106	7.947	7.943	(1.098)	646702	100.000	110
75	Styrene	104	7.957	7.963	(1.099)	1097486	100.000	110
76	Bromoform	173	8.144	8.140	(1.125)	238861	100.000	110
77	Isopropylbenzene	105	8.361	8.367	(1.155)	1701022	100.000	110

Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0701.D
Report Date: 18-Aug-2014 11:47

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	78 trans-1,4-Dichloro-2-butene	75	8.420	8.426	(1.163)	132944	100.000	120
$	79 Bromofluorobenzene	95	8.518	8.514	(1.177)	327479	50.0000	51
	80 1,1,2,2-Tetrachloroethane	83	8.686	8.691	(0.886)	384190	100.000	98
	81 Bromobenzene	156	8.676	8.682	(0.885)	378195	100.000	100
	82 1,2,3-Trichloropropane	75	8.725	8.731	(0.890)	446809	100.000	120
	83 n-Propylbenzene	120	8.833	8.829	(0.902)	405850	100.000	110
	84 2-Chlorotoluene	126	8.912	8.908	(0.910)	367814	100.000	100
	85 1,3,5-Trimethylbenzene	105	9.040	9.036	(0.923)	1439603	100.000	100
	86 4-Chlorotoluene	126	9.030	9.036	(0.922)	394300	100.000	100(Q)
	87 tert-Butylbenzene	119	9.395	9.400	(0.959)	1422804	100.000	110
	88 1,2,4-Trimethylbenzene	105	9.454	9.450	(0.965)	1401266	100.000	100
	89 sec-Butylbenzene	105	9.641	9.637	(0.984)	1721537	100.000	100
	90 1,3-Dichlorobenzene	146	9.729	9.725	(0.993)	708196	100.000	100
	91 4-Isopropyltoluene	119	9.798	9.794	(1.000)	1468147	100.000	110
*	92 1,4-Dichlorobenzene-d4	152	9.798	9.794	(1.000)	250467	50.0000	
	93 1,4-Dichlorobenzene	146	9.828	9.824	(1.003)	704539	100.000	100
	95 n-Butylbenzene	91	10.222	10.218	(1.043)	1315882	100.000	110
	96 1,2-Dichlorobenzene	146	10.202	10.198	(1.041)	648756	100.000	100
	97 Hexachloroethane	117	10.458	10.454	(1.067)	356488	100.000	110
	98 1,2-Dibromo-3-chloropropane	75	10.950	10.946	(1.118)	62509	100.000	100
	141 1,3,5-Trichlorobenzene	182	11.167	11.163	(1.140)	420371	100.000	110
	99 1,2,4-Trichlorobenzene	180	11.718	11.714	(1.196)	333513	100.000	100
	100 Hexachlorobutadiene	225	11.886	11.882	(1.213)	164555	100.000	94
	101 Naphthalene	128	11.925	11.921	(1.217)	697672	100.000	100
	102 1,2,3-Trichlorobenzene	180	12.132	12.138	(1.238)	268487	100.000	98

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\140812A.B\V1N0701.D
Date : 12-AUG-2014 17:47
Client ID: VSTD1001W
Sample Info: 5ML,VSTD1001W,VSTD1001W
Purge Volume: 5.0
Column phase: DB-624
Instrument: V1.i
Operator: WL SRC: WL
Column diameter: 0.25
Y (x10^6)
-Dibromofluoromethane (3.842)
-1,2-Dichloroethane-d4 (4.118)
-Fluorobenzene (4.393)
-Toluene-d8 (5.801)
-Chlorobenzene-d5 (7.279)
-Bromofluorobenzene (8.519)
1,4-Dichlorobenzene-d4 (9.799)+
\\Avogadro\Organics\V1.I\140812A.B\V1N0701.D
Min

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date: 08/14/2014 Time: 8:58

Lab File ID: V1N0752.D Init. Calib. Date(s): 08/12/2014 08/12/2014

EPA Sample No.(VSTD#####) VSTD0501Y Init. Calib. Time(s): 15:17 17:47

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	0.157	0.165	0.100	5.1	20.0
Chloromethane	0.385	0.398	0.100	3.3	20.0
Vinyl chloride	0.282	0.270	0.100	-4.2	20.0
Bromomethane	0.156	0.154	0.100	-1.3	20.0
Chloroethane	0.171	0.171	0.100	0.2	20.0
Trichlorofluoromethane	0.373	0.383	0.100	2.7	20.0
1,1-Dichloroethene	0.230	0.231	0.100	0.4	20.0
Acetone	0.016	0.022	0.100	40.3	20.0
Iodomethane	0.280	0.366	0.100	30.5	20.0
Carbon disulfide	0.894	0.978	0.100	9.4	20.0
Methylene chloride	0.238	0.262	0.100	10.1	20.0
trans-1,2-Dichloroethene	0.241	0.247	0.100	2.3	20.0
Methyl tert-butyl ether	0.630	0.675	0.100	7.2	20.0
1,1-Dichloroethane	0.475	0.492	0.200	3.6	20.0
Vinyl acetate	1.039	1.164	0.100	12.0	20.0
2-Butanone	0.020	0.024	0.100	20.3	20.0
cis-1,2-Dichloroethene	0.261	0.274	0.100	4.7	20.0
2,2-Dichloropropane	0.180	0.185	0.100	3.1	20.0
Bromochloromethane	0.113	0.122	0.100	8.0	20.0
Chloroform	0.453	0.496	0.200	9.6	20.0
1,1,1-Trichloroethane	0.357	0.375	0.100	4.9	20.0
1,1-Dichloropropene	0.103	0.105	0.100	2.3	20.0
Carbon tetrachloride	0.377	0.395	0.100	4.8	20.0
1,2-Dichloroethane	0.343	0.371	0.100	8.0	20.0
Benzene	0.880	0.812	0.500	-7.7	20.0
Trichloroethene	0.223	0.204	0.200	-8.5	20.0
1,2-Dichloropropane	0.249	0.222	0.100	-11.0	20.0
Dibromomethane	0.155	0.161	0.100	3.4	20.0
Bromodichloromethane	0.355	0.354	0.200	-0.3	20.0
cis-1,3-Dichloropropene	0.381	0.368	0.200	-3.5	20.0
4-Methyl-2-pentanone	0.243	0.232	0.100	-4.2	20.0
Toluene	0.870	0.815	0.400	-6.3	20.0
trans-1,3-Dichloropropene	0.337	0.340	0.100	0.9	20.0
1,1,2-Trichloroethane	0.168	0.179	0.100	6.7	20.0
1,3-Dichloropropane	0.508	0.504	0.100	-0.8	20.0
Tetrachloroethene	0.241	0.208	0.200	-13.6	20.0
2-Hexanone	0.244	0.257	0.100	5.3	20.0
Dibromochloromethane	0.362	0.370	0.100	2.1	20.0
1,2-Dibromoethane	0.292	0.307	0.100	5.0	20.0
Chlorobenzene	0.855	0.782	0.500	-8.6	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date: 08/14/2014 Time: 8:58

Lab File ID: V1N0752.D Init. Calib. Date(s): 08/12/2014 08/12/2014

EPA Sample No.(VSTD#####) VSTD0501Y Init. Calib. Time(s): 15:17 17:47

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	0.328	0.319	0.100	-2.5	20.0
Ethylbenzene	0.445	0.409	0.100	-8.0	20.0
m,p-Xylene	0.561	0.498	0.100	-11.3	20.0
o-Xylene	0.535	0.502	0.300	-6.1	20.0
Xylene (Total)	0.553	0.499	0.100	-9.6	20.0
Styrene	0.908	0.879	0.300	-3.3	20.0
Bromoform	0.188	0.180	0.100	-4.3	20.0
Isopropylbenzene	1.420	1.292	0.100	-9.0	20.0
1,1,2,2-Tetrachloroethane	0.780	0.789	0.300	1.2	20.0
Bromobenzene	0.720	0.683	0.100	-5.0	20.0
1,2,3-Trichloropropane	0.768	0.826	0.100	7.6	20.0
n-Propylbenzene	0.755	0.688	0.100	-8.8	20.0
2-Chlorotoluene	0.722	0.621	0.100	-13.9	20.0
1,3,5-Trimethylbenzene	2.726	2.533	0.100	-7.1	20.0
4-Chlorotoluene	0.763	0.655	0.100	-14.1	20.0
tert-Butylbenzene	2.664	2.376	0.100	-10.8	20.0
1,2,4-Trimethylbenzene	2.646	2.525	0.100	-4.6	20.0
sec-Butylbenzene	3.322	3.076	0.100	-7.4	20.0
4-Isopropyltoluene	2.721	2.361	0.100	-13.2	20.0
1,3-Dichlorobenzene	1.351	1.206	0.600	-10.7	20.0
1,4-Dichlorobenzene	1.375	1.184	0.500	-13.9	20.0
n-Butylbenzene	2.446	2.329	0.100	-4.8	20.0
1,2-Dichlorobenzene	1.259	1.102	0.400	-12.5	20.0
1,2-Dibromo-3-chloropropane	0.122	0.124	0.050	1.9	20.0
1,2,4-Trichlorobenzene	0.642	0.546	0.200	-14.9	20.0
Hexachlorobutadiene	0.350	0.256	0.100	-26.7	20.0
1,2,3-Trichlorobenzene	0.548	0.450	0.100	-17.8	20.0
Naphthalene	1.391	1.261	0.100	-9.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.276	0.277	0.100	0.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Instrument ID: V1 Calibration Date: 08/14/2014 Time: 8:58

Lab File ID: V1N0752.D Init. Calib. Date(s): 08/12/2014 08/12/2014

EPA Sample No.(VSTD#####) VSTD0501Y Init. Calib. Time(s): 15:17 17:47

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	0.311	0.337	0.100	8.5	20.0
1,2-Dichloroethane-d4	0.065	0.073	0.100	12.0	20.0
Toluene-d8	1.344	1.388	0.100	3.3	20.0
Bromofluorobenzene	0.575	0.616	0.100	7.1	20.0

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0752.D
Report Date: 18-Aug-2014 11:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0752.D
Lab Smp Id: VSTD0501Y Client Smp ID: VSTD0501Y
Inj Date : 14-AUG-2014 08:58
Operator : WL   SRC: WL Inst ID: V1.i
Smp Info : 5ML,VSTD0501Y,VSTD0501Y
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:48 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET115

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

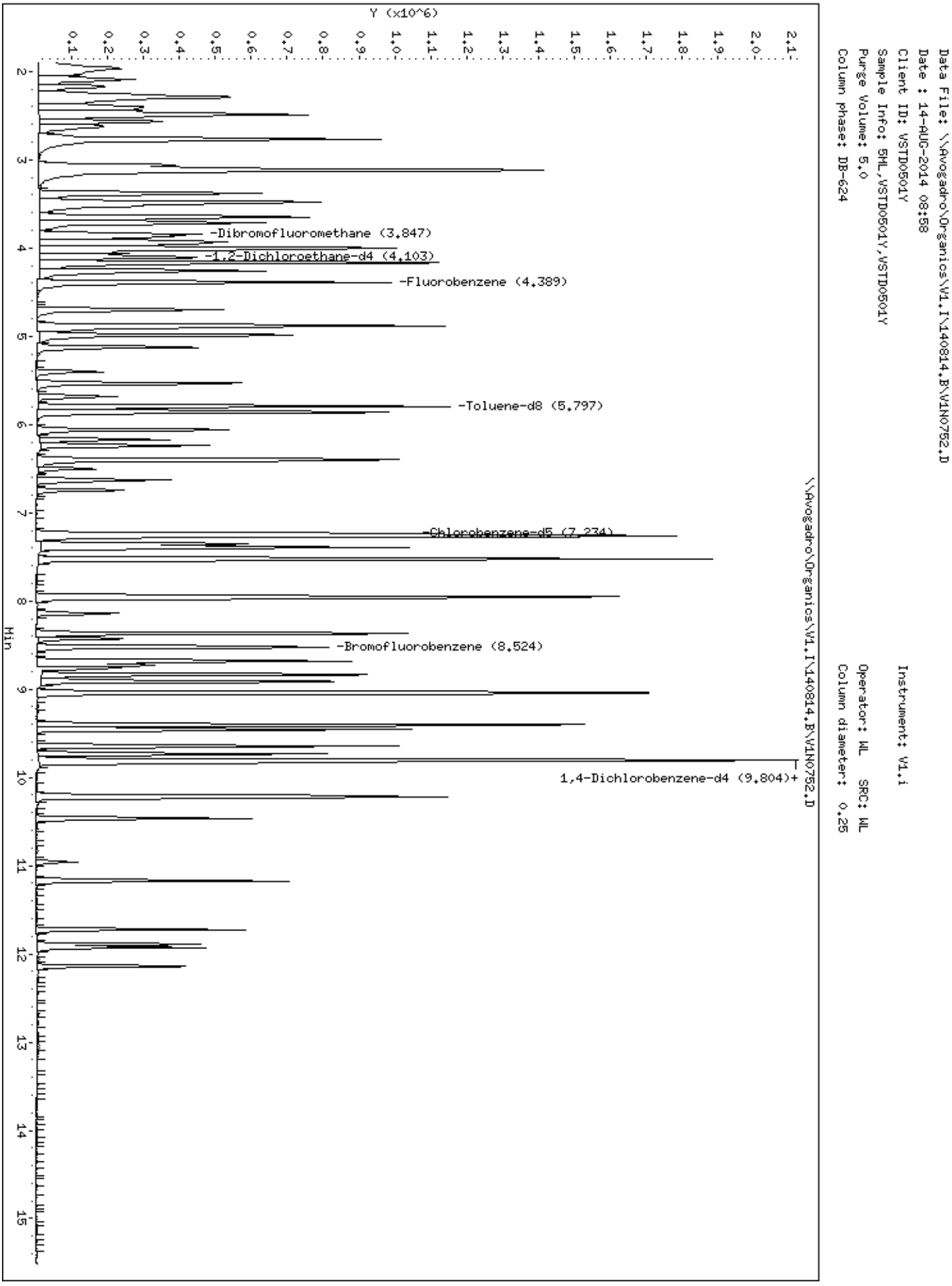
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.287	1.266	(0.293)	139279	50.0000	52
2	Freon114	85	1.356	1.345	(0.309)	264455	50.0000	49
3	Chloromethane	50	1.405	1.414	(0.320)	336201	50.0000	52
4	Vinyl Chloride	62	1.493	1.483	(0.340)	228374	50.0000	48
5	Bromomethane	94	1.700	1.700	(0.388)	130161	50.0000	49
6	Chloroethane	64	1.769	1.778	(0.403)	144825	50.0000	50
7	Trichlorofluoromethane	101	1.946	1.956	(0.444)	323458	50.0000	51
126	Ethanol	46	2.015	2.034	(0.459)	99927	5000.00	4700(A)
8	Ether	59	2.094	2.103	(0.477)	169452	50.0000	52(Q)
9	Acrolein	56	2.173	2.172	(0.495)	170774	250.000	300(A)
10	1,1-Dichloroethene	96	2.281	2.281	(0.520)	195506	50.0000	50
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.301	2.310	(0.524)	234263	50.0000	50
12	Acetone	58	2.271	2.281	(0.518)	19020	50.0000	70
13	Iodomethane	142	2.399	2.409	(0.547)	309377	50.0000	65
14	Carbon Disulfide	76	2.419	2.418	(0.551)	827151	50.0000	55
15	Acetonitrile	41	2.488	2.497	(0.567)	842956	500.000	530(A)
16	Allyl Chloride	39	2.488	2.497	(0.567)	431134	50.0000	56
17	Methyl Acetate	43	2.498	2.507	(0.569)	218490	50.0000	53
18	Methylene Chloride	84	2.567	2.576	(0.585)	221682	50.0000	55
19	tert-Butanol	59	2.645	2.665	(0.603)	44324	100.000	160
20	Acrylonitrile	53	2.734	2.743	(0.623)	78626	50.0000	59
21	trans-1,2-Dichloroethene	96	2.764	2.773	(0.630)	208484	50.0000	51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 Methyl tert-butyl ether	73	2.764	2.783	(0.630)	570930	50.0000	54
	23 1,1-Dichloroethane	63	3.059	3.068	(0.697)	415824	50.0000	52
	24 Vinyl acetate	43	3.098	3.118	(0.706)	984353	50.0000	56
	25 Diisopropyl Ether	45	3.118	3.127	(0.711)	1098102	50.0000	52
	26 2-Chloro-1,3-Butadiene	53	3.128	3.137	(0.713)	389504	50.0000	51
	27 Ethyl tert-butyl ether	59	3.374	3.393	(0.769)	706635	50.0000	49
	29 2,2-Dichloropropane	77	3.482	3.492	(0.794)	156694	50.0000	52
	28 cis-1,2-Dichloroethene	96	3.482	3.492	(0.794)	231253	50.0000	52
	30 2-Butanone	72	3.482	3.502	(0.794)	19926	50.0000	60
	32 Propionitrile	54	3.522	3.531	(0.803)	256874	500.000	590(A)
	33 Methacrylonitrile	41	3.640	3.649	(0.829)	318903	100.000	110
	34 Bromochloromethane	128	3.660	3.669	(0.834)	102878	50.0000	54
	31 Tetrahydrofuran	72	3.699	3.708	(0.843)	44289	100.000	120
	35 Chloroform	83	3.719	3.728	(0.847)	419590	50.0000	55
$	36 Dibromofluoromethane	113	3.847	3.846	(0.877)	284976	50.0000	54
	37 1,1,1-Trichloroethane	97	3.876	3.886	(0.883)	316675	50.0000	52
	38 Cyclohexane	56	3.925	3.935	(0.895)	381888	50.0000	47
	39 1,1-Dichloropropene	110	4.004	4.014	(0.913)	89064	50.0000	51
	40 Carbon Tetrachloride	117	4.004	4.014	(0.913)	333722	50.0000	52
	41 Isobutyl Alcohol	43	4.083	4.082	(0.930)	134037	1000.00	860(A)
$	42 1,2-Dichloroethane-d4	102	4.112	4.112	(0.937)	61556	50.0000	56
	43 Benzene	78	4.162	4.171	(0.948)	686634	50.0000	46
	44 1,2-Dichloroethane	62	4.172	4.171	(0.951)	313620	50.0000	54
	45 tert-Amyl methyl ether	73	4.260	4.270	(0.971)	484054	50.0000	44
*	46 Fluorobenzene	96	4.388	4.398	(1.000)	845495	50.0000	
	47 Trichloroethene	130	4.703	4.703	(1.072)	172130	50.0000	46
	48 Methylcyclohexane	83	4.880	4.880	(1.112)	274018	50.0000	42
	49 1,2-Dichloropropane	63	4.880	4.890	(1.112)	187648	50.0000	44
	51 Methyl Methacrylate	69	4.989	4.998	(1.137)	139246	50.0000	48
	52 Dibromomethane	93	4.979	4.988	(1.135)	135775	50.0000	52
	53 1,4-Dioxane	88	5.008	5.008	(1.141)	28122	1000.00	740(A)
	54 Bromodichloromethane	83	5.127	5.126	(1.168)	299137	50.0000	50
	55 2-Chloroethyl vinyl ether	63	5.402	5.412	(1.231)	75933	50.0000	45
	56 cis-1,3-Dichloropropene	75	5.530	5.540	(1.260)	311208	50.0000	48
	57 4-Methyl-2-pentanone	43	5.678	5.687	(1.294)	196532	50.0000	48
$	58 Toluene-d8	98	5.796	5.796	(0.801)	746614	50.0000	52
	59 Toluene	91	5.855	5.865	(1.334)	689245	50.0000	47
	60 trans-1,3-Dichloropropene	75	6.062	6.061	(1.381)	287393	50.0000	49
	61 Ethyl Methacrylate	69	6.170	6.170	(1.406)	164487	50.0000	49
	62 1,1,2-Trichloroethane	97	6.239	6.239	(1.422)	151532	50.0000	53
	63 Tetrachloroethene	164	6.397	6.406	(0.884)	111960	50.0000	43
	64 1,3-Dichloropropane	76	6.407	6.406	(0.886)	270930	50.0000	50
	65 2-Hexanone	43	6.505	6.505	(0.899)	138211	50.0000	53
	66 Dibromochloromethane	129	6.633	6.633	(0.917)	198827	50.0000	51
	67 1,2-Dibromoethane	107	6.741	6.751	(0.932)	165121	50.0000	52
	69 1-Chlorohexane	91	7.263	7.263	(1.004)	263304	50.0000	44
*	68 Chlorobenzene-d5	117	7.234	7.243	(1.000)	537758	50.0000	
	70 Chlorobenzene	112	7.263	7.273	(1.004)	420282	50.0000	46
	71 1,1,1,2-Tetrachloroethane	131	7.352	7.361	(1.016)	171736	50.0000	49
	72 Ethylbenzene	106	7.391	7.401	(1.022)	220027	50.0000	46
	73 m,p-Xylene	106	7.519	7.529	(1.039)	535465	100.000	89
	74 o-Xylene	106	7.952	7.952	(1.099)	270086	50.0000	47
	75 Styrene	104	7.962	7.972	(1.101)	472443	50.0000	48
	76 Bromoform	173	8.139	8.149	(1.125)	96888	50.0000	48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	Isopropylbenzene	105	8.366	8.375	(1.157)	694823	50.0000	45
78	trans-1,4-Dichloro-2-butene	75	8.425	8.434	(1.165)	48873	50.0000	45(Q)
$ 79	Bromofluorobenzene	95	8.523	8.523	(1.178)	331407	50.0000	54
80	1,1,2,2-Tetrachloroethane	83	8.691	8.700	(0.887)	178114	50.0000	51
81	Bromobenzene	156	8.681	8.690	(0.886)	154248	50.0000	47
82	1,2,3-Trichloropropane	75	8.730	8.740	(0.891)	186445	50.0000	54
83	n-Propylbenzene	120	8.839	8.838	(0.902)	155316	50.0000	46
84	2-Chlorotoluene	126	8.917	8.917	(0.910)	140256	50.0000	43
85	1,3,5-Trimethylbenzene	105	9.045	9.045	(0.923)	571713	50.0000	46
86	4-Chlorotoluene	126	9.035	9.045	(0.922)	147903	50.0000	43
M 94	Xylene (Total)	106				805551	150.000	140
87	tert-Butylbenzene	119	9.410	9.409	(0.960)	536171	50.0000	44
88	1,2,4-Trimethylbenzene	105	9.459	9.458	(0.965)	569912	50.0000	48
89	sec-Butylbenzene	105	9.646	9.645	(0.984)	694312	50.0000	46
90	1,3-Dichlorobenzene	146	9.735	9.744	(0.993)	272266	50.0000	45
91	4-Isopropyltoluene	119	9.803	9.813	(1.000)	532834	50.0000	43
* 92	1,4-Dichlorobenzene-d4	152	9.803	9.813	(1.000)	225692	50.0000	
93	1,4-Dichlorobenzene	146	9.833	9.833	(1.003)	267151	50.0000	43
95	n-Butylbenzene	91	10.227	10.226	(1.043)	525585	50.0000	48
96	1,2-Dichlorobenzene	146	10.207	10.207	(1.041)	248609	50.0000	44
97	Hexachloroethane	117	10.463	10.463	(1.067)	136928	50.0000	46
98	1,2-Dibromo-3-chloropropane	75	10.955	10.965	(1.118)	28095	50.0000	51
141	1,3,5-Trichlorobenzene	182	11.172	11.172	(1.140)	152326	50.0000	43
99	1,2,4-Trichlorobenzene	180	11.723	11.723	(1.196)	123215	50.0000	42
100	Hexachlorobutadiene	225	11.891	11.890	(1.213)	57852	50.0000	37
101	Naphthalene	128	11.930	11.930	(1.217)	284519	50.0000	45
102	1,2,3-Trichlorobenzene	180	12.147	12.146	(1.239)	101552	50.0000	41

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\140814.B\VIN0752.D
Date : 14-AUG-2014 08:58
Client ID: VSTD0501Y
Sample Info: 5ML,VSTD0501Y,VSTD0501Y
Purge Volume: 5.0
Column phase: DB-624
Instrument: V1.i
Operator: WL SRC: WL
Column diameter: 0.25
Y (x10^6)
-Dibromofluoromethane (3.847)
-1,2-Dichloroethane-d4 (4.103)
-Fluorobenzene (4.389)
-Toluene-d8 (5.797)
-Chlorobenzene-d5 (7.234)
-Bromofluorobenzene (8.524)
1,4-Dichlorobenzene-d4 (9.804)+
\\Avogadro\Organics\V1.i\140814.B\VIN0752.D
Min

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140812A.B\V1N0693.D
Lab Smp Id: BFB1W Client Smp ID: BFB1W
Inj Date : 12-AUG-2014 14:27
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 5ML,BFB1W,BFB1W
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140812A.B\bfb8260.m
Meth Date : 13-Aug-2014 08:20 amarquis 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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.518	8.600 (0.000)		95	125552			0.00- 100.00	100.00
8.518	8.600 (0.000)		50	26672			15.00- 40.00	21.24
8.518	8.600 (0.000)		75	58408			30.00- 60.00	46.52
8.518	8.600 (0.000)		96	7926			5.00- 9.00	6.31
8.518	8.600 (0.000)		173	114			0.00- 2.00	0.15
8.518	8.600 (0.000)		174	74712			50.00- 0.00	59.51
8.518	8.600 (0.000)		175	5496			5.00- 9.00	7.36
8.518	8.600 (0.000)		176	71736			95.00- 101.00	96.02
8.518	8.600 (0.000)		177	4708			5.00- 9.00	6.56

Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0693.D

Date : 12-AUG-2014 14:27

Client ID: BFB1W

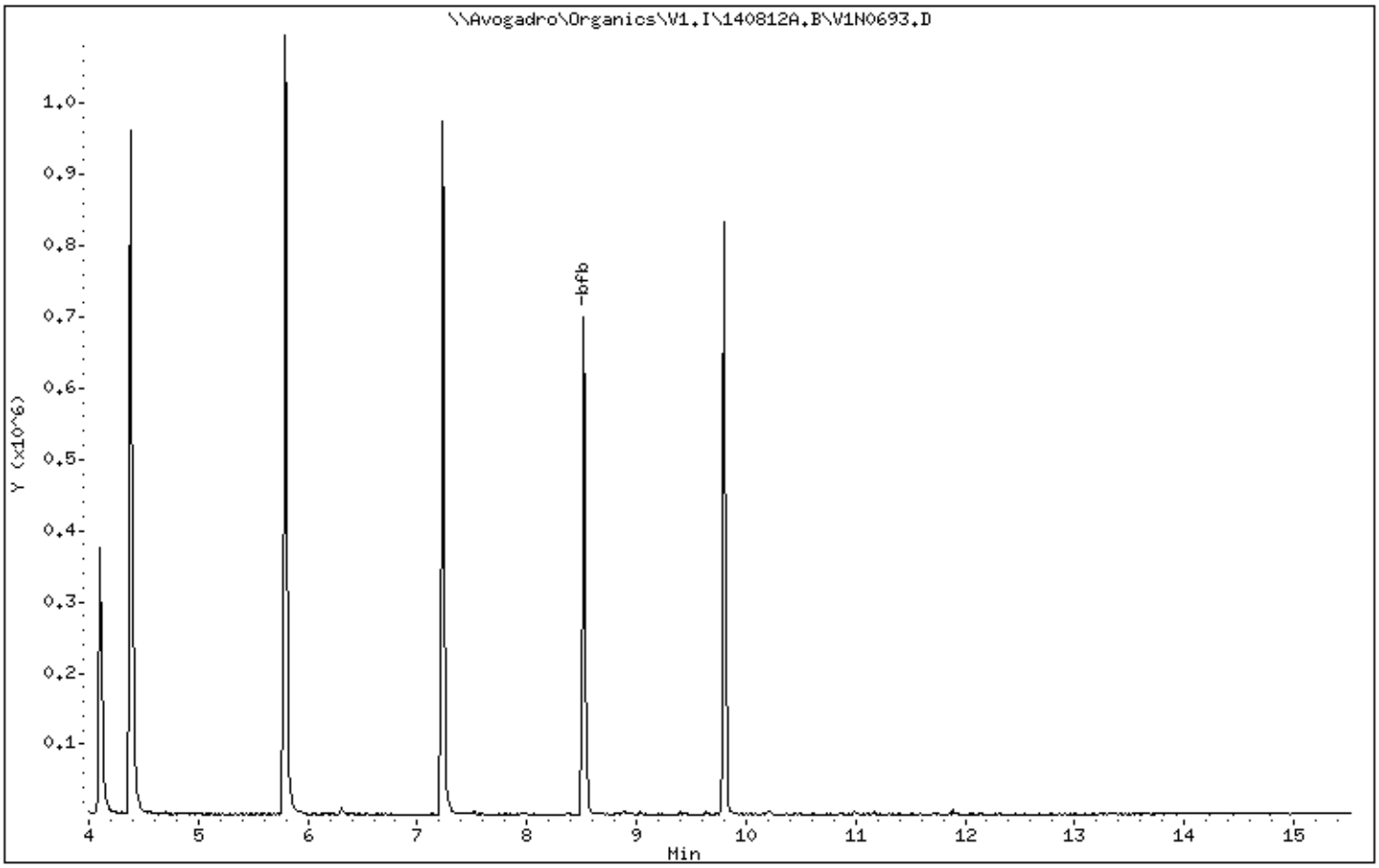
Instrument: V1.i

Sample Info: 5ML,BFB1W,BFB1W

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140812A.B\V1N0693.D

Date : 12-AUG-2014 14:27

Client ID: BFB1W

Instrument: V1.i

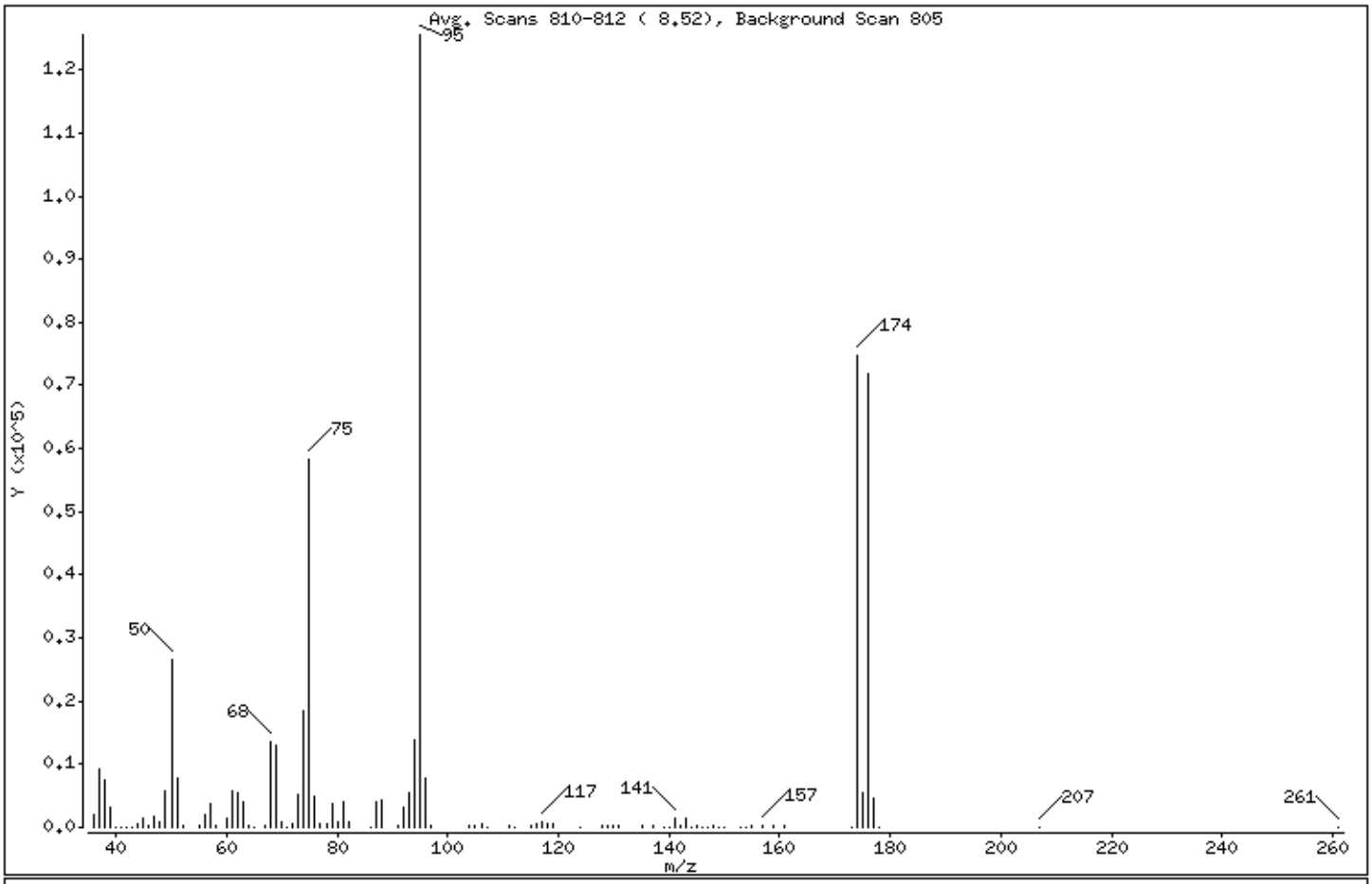
Sample Info: 5ML,BFB1W,BFB1W

Operator: WL SRC: WL

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	21.24
75	30.00 - 60.00% of mass 95	46.52
96	5.00 - 9.00% of mass 95	6.31
173	Less than 2.00% of mass 174	0.09 (0.15)
174	Greater than 50.00% of mass 95	59.51
175	5.00 - 9.00% of mass 174	4.38 (7.36)
176	95.00 - 101.00% of mass 174	57.14 (96.02)
177	5.00 - 9.00% of mass 176	3.75 (6.56)

Date : 12-AUG-2014 14:27

Client ID: BFB1W Instrument: V1.i

Sample Info: 5ML,BFB1W,BFB1W

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1N0693.D
Spectrum: Avg. Scans 810-812 (8.52), Background Scan 805
Location of Maximum: 95.00
Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1904	64.00	373	95.00	125552	143.00	1366
37.00	9274	65.00	48	96.00	7926	144.00	47
38.00	7607	67.00	420	97.00	238	145.00	193
39.00	3149	68.00	13550	104.00	400	146.00	87
40.00	40	69.00	12990	105.00	225	147.00	35
41.00	71	70.00	961	106.00	499	148.00	316
42.00	80	71.00	41	107.00	54	149.00	104
43.00	66	72.00	623	111.00	182	150.00	139
44.00	702	73.00	5099	112.00	65	153.00	75
45.00	1531	74.00	18608	115.00	219	154.00	88
46.00	180	75.00	58408	116.00	478	155.00	251
47.00	1865	76.00	4921	117.00	831	157.00	259
48.00	974	77.00	602	118.00	685	159.00	158
49.00	5689	78.00	435	119.00	649	161.00	153
50.00	26672	79.00	3718	124.00	92	173.00	114
51.00	7755	80.00	928	128.00	393	174.00	74712
52.00	231	81.00	3900	129.00	327	175.00	5496
55.00	327	82.00	745	130.00	385	176.00	71736
56.00	1992	86.00	80	131.00	190	177.00	4708
57.00	3649	87.00	4163	135.00	228	178.00	91
58.00	204	88.00	4439	137.00	156	207.00	41
60.00	1319	91.00	415	139.00	38	261.00	37
61.00	5651	92.00	3265	140.00	120		
62.00	5393	93.00	5472	141.00	1440		
63.00	4122	94.00	13932	142.00	192		

Spectrum Analytical, Inc. RI Division

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0750.D
Lab Smp Id: BFB1Y Client Smp ID: BFB1Y
Inj Date : 14-AUG-2014 07:50
Operator : WL SRC: WL Inst ID: V1.i
Smp Info : 2UL,BFB1Y,BFB1Y
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140814.B\bfb8260.m
Meth Date : 14-Aug-2014 11:42 amarquis 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: TARGET115

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
4.466	4.400	(0.000)	95	154112			0.00- 100.00	100.00
4.466	4.400	(0.000)	50	32360			15.00- 40.00	21.00
4.466	4.400	(0.000)	75	68384			30.00- 60.00	44.37
4.466	4.400	(0.000)	96	9797			5.00- 9.00	6.36
4.466	4.400	(0.000)	173	543			0.00- 2.00	0.56
4.466	4.400	(0.000)	174	96496			50.00- 0.00	62.61
4.466	4.400	(0.000)	175	7973			5.00- 9.00	8.26
4.466	4.400	(0.000)	176	91848			95.00- 101.00	95.18
4.466	4.400	(0.000)	177	6463			5.00- 9.00	7.04

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0750.D

Date : 14-AUG-2014 07:50

Client ID: BFB1Y

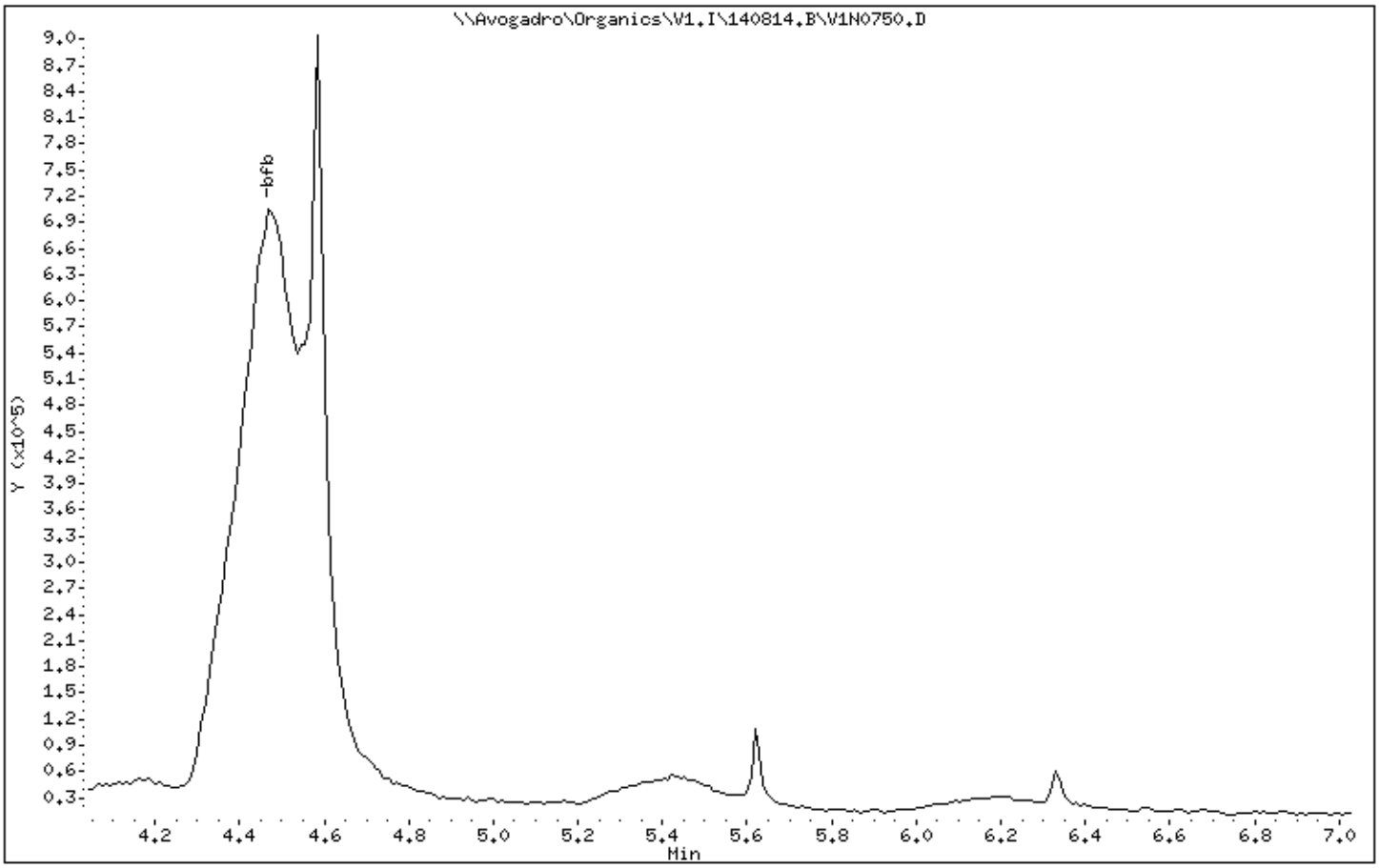
Instrument: V1.i

Sample Info: 2UL,BFB1Y,BFB1Y

Operator: WL SRC: WL

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0750.D

Date : 14-AUG-2014 07:50

Client ID: BFB1Y

Instrument: V1.i

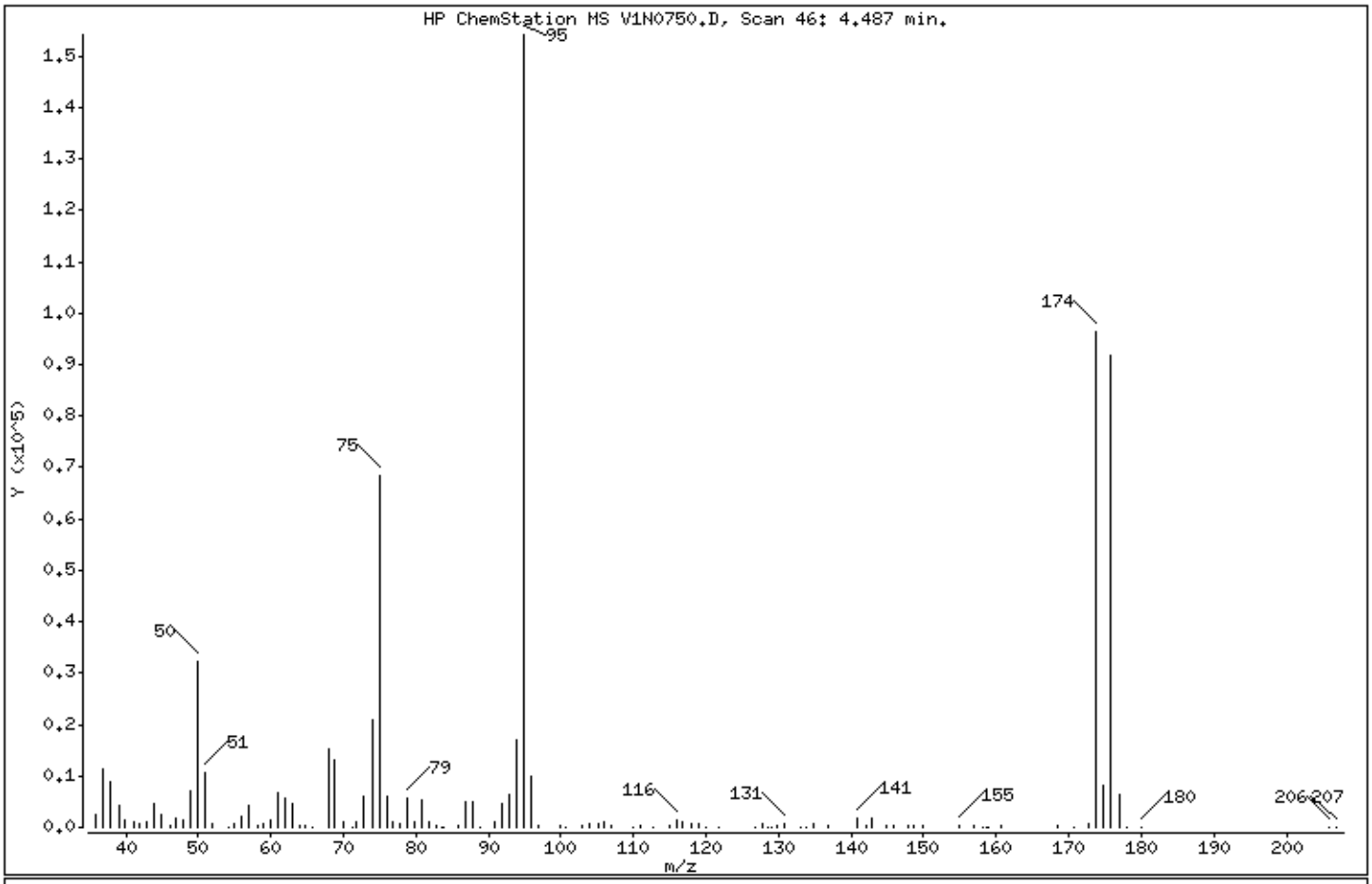
Sample Info: 2UL,BFB1Y,BFB1Y

Operator: WL SRC: WL

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	21.00
75	30.00 - 60.00% of mass 95	44.37
96	5.00 - 9.00% of mass 95	6.36
173	Less than 2.00% of mass 174	0.35 (0.56)
174	Greater than 50.00% of mass 95	62.61
175	5.00 - 9.00% of mass 174	5.17 (8.26)
176	95.00 - 101.00% of mass 174	59.60 (95.18)
177	5.00 - 9.00% of mass 176	4.19 (7.04)

Date : 14-AUG-2014 07:50

Client ID: BFB1Y Instrument: V1.i

Sample Info: 2UL,BFB1Y,BFB1Y

Operator: WL SRC: WL

Column phase: DB-624 Column diameter: 0.25

Data File: V1N0750.D
Spectrum: HP ChemStation MS V1N0750.D, Scan 46: 4.487 min.
Location of Maximum: 94.90
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.85	2452	64.85	306	94.90	154112	134.85	534
36.95	11390	65.75	149	96.00	9797	136.90	406
37.90	8725	68.00	15133	97.00	527	140.85	1930
39.00	4220	68.85	13021	99.95	195	142.00	253
39.90	1482	69.95	1236	100.60	123	142.90	1882
41.05	923	71.15	136	103.00	329	144.75	305
41.95	737	71.80	1194	103.95	813	145.75	255
42.80	1224	72.90	5882	105.05	605	147.90	412
43.90	4516	74.00	20992	105.95	973	148.70	277
45.00	2405	74.95	68384	106.90	253	149.85	289
46.05	271	75.95	6162	109.85	145	154.80	267
46.95	1727	76.85	906	110.95	278	156.85	199
47.95	1273	77.90	756	112.60	174	158.05	114
48.90	7122	78.80	5552	115.05	251	158.60	147
49.90	32360	79.90	1145	115.95	1435	159.00	146
51.00	10782	80.85	5151	116.85	1163	160.70	224
51.85	710	81.85	1051	117.90	659	168.45	220
54.25	130	82.75	257	118.90	763	170.80	107
55.00	672	83.50	156	120.10	140	172.85	543
55.90	2238	83.90	105	121.75	153	173.85	96496
57.00	4366	85.90	291	126.65	109	174.85	7973
58.15	510	86.95	4981	127.85	663	175.80	91848
58.95	668	87.95	5120	128.65	133	176.90	6463
59.95	1389	88.95	139	129.05	166	178.00	117
61.00	6605	90.90	1226	129.80	351	180.05	102
62.00	5726	91.90	4663	130.90	665	205.90	110
63.00	4458	92.95	6293	132.95	128	206.90	159
63.95	329	93.95	16896	133.85	100		

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-78548

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0758.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 08/14/2014

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

EPA SAMPLE NO.

MB-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-78548

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0758.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 08/14/2014

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
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-78548

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0758.D

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

% Moisture: not dec. Date Analyzed: 08/14/2014

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

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0758.D
Report Date: 25-Aug-2014 09:46

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0758.D
Lab Smp Id: MB-78548 Client Smp ID: MB-78548
Inj Date : 14-AUG-2014 11:14
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-78548,MB-78548,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 19 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	3.848	3.846	(0.877)	215617	53.9395	54
$ 42 1,2-Dichloroethane-d4	102	4.114	4.112	(0.937)	43392	51.8684	52
* 46 Fluorobenzene	96	4.390	4.398	(1.000)	643293	50.0000	
$ 58 Toluene-d8	98	5.798	5.796	(0.800)	583320	49.4983	49
* 68 Chlorobenzene-d5	117	7.245	7.243	(1.000)	438260	50.0000	
$ 79 Bromofluorobenzene	95	8.525	8.523	(1.177)	243083	48.1915	48
* 92 1,4-Dichlorobenzene-d4	152	9.815	9.813	(1.000)	168756	50.0000	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0758.D
Report Date: 25-Aug-2014 09:46

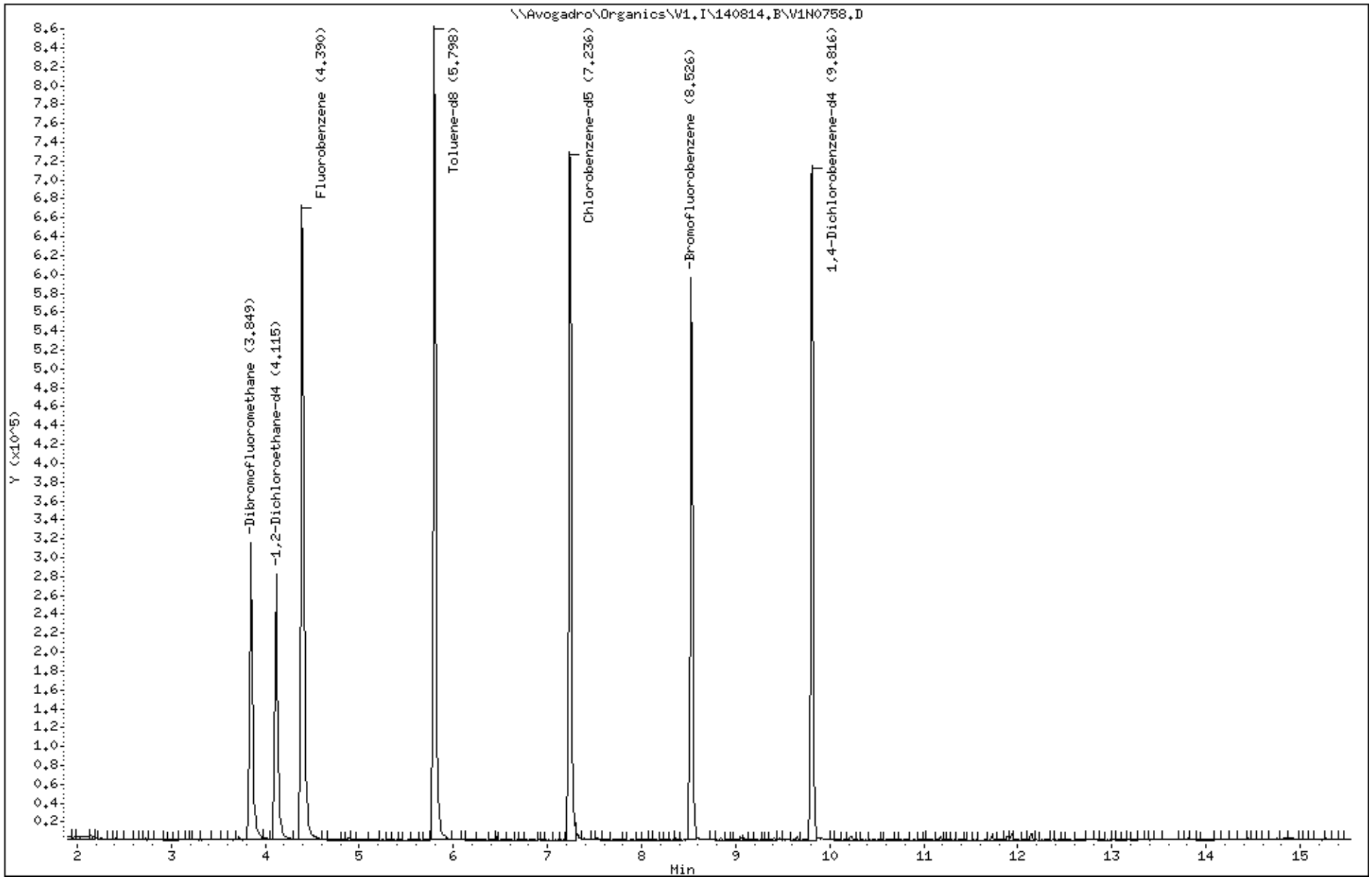
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0758.D
Lab Smp Id: MB-78548 Client Smp ID: MB-78548
Inj Date : 14-AUG-2014 11:14
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,MB-78548,MB-78548,78548
Misc Info :
Comment :
Method : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 25-Aug-2014 09:46 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.D
Als bottle: 19 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\V1.I\140814.B\V1N0758.D
Date : 14-AUG-2014 11:14
Client ID: MB-78548
Instrument: V1.i
Sample Info: 5ML,MB-78548,MB-78548,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-78548

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0754.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 08/14/2014

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	56	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	45	
74-83-9	Bromomethane	46	
75-00-3	Chloroethane	45	
75-69-4	Trichlorofluoromethane	49	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	69	
74-88-4	Iodomethane	62	
75-15-0	Carbon disulfide	52	
75-09-2	Methylene chloride	54	
156-60-5	trans-1,2-Dichloroethene	48	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	53	
78-93-3	2-Butanone	60	
156-59-2	cis-1,2-Dichloroethene	48	
594-20-7	2,2-Dichloropropane	48	
74-97-5	Bromochloromethane	50	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	48	
56-23-5	Carbon tetrachloride	50	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	46	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	50	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	54	
108-88-3	Toluene	47	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	53	
142-28-9	1,3-Dichloropropane	56	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-78548

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: N1402 Mod. Ref No.: SDG No.: SN1402

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-78548

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0754.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 08/14/2014

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	48	
591-78-6	2-Hexanone	62	
124-48-1	Dibromochloromethane	55	
106-93-4	1,2-Dibromoethane	56	
108-90-7	Chlorobenzene	47	
630-20-6	1,1,1,2-Tetrachloroethane	47	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	90	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	49	
75-25-2	Bromoform	47	
98-82-8	Isopropylbenzene	45	
79-34-5	1,1,2,2-Tetrachloroethane	51	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	53	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	45	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	45	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	54	
120-82-1	1,2,4-Trichlorobenzene	43	
87-68-3	Hexachlorobutadiene	34	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	49	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	48	

Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0754.D
Report Date: 18-Aug-2014 11:50

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil

Data file : \\Avogadro\Organics\V1.I\140814.B\V1N0754.D
Lab Smp Id: LCS-78548 Client Smp ID: LCS-78548
Inj Date : 14-AUG-2014 09:34
Operator : WL SRC: LIMS Inst ID: V1.i
Smp Info : 5ML,LCS-78548,LCS-78548,78548
Misc Info :
Comment   :
Method   : \\Avogadro\Organics\V1.I\140814.B\v18260Gadd-6lvl.m
Meth Date : 18-Aug-2014 11:48 amarquis Quant Type: ISTD
Cal Date : 12-AUG-2014 17:47 Cal File: V1N0701.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: 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	1.267	1.266	(0.289)	148854	50.0000	56
2	Freon114	85	1.346	1.345	(0.307)	273735	50.0000	51
3	Chloromethane	50	1.405	1.414	(0.320)	318727	50.0000	49
4	Vinyl Chloride	62	1.474	1.483	(0.336)	213396	50.0000	45
5	Bromomethane	94	1.700	1.700	(0.388)	120326	50.0000	46
6	Chloroethane	64	1.779	1.778	(0.405)	129654	50.0000	45
7	Trichlorofluoromethane	101	1.946	1.956	(0.444)	306850	50.0000	49
126	Ethanol	46	2.025	2.034	(0.462)	88859	5000.00	4200(A)
8	Ether	59	2.094	2.103	(0.477)	163642	50.0000	50(Q)
9	Acrolein	56	2.173	2.172	(0.495)	173166	250.000	300(A)
10	1,1-Dichloroethene	96	2.281	2.281	(0.520)	184117	50.0000	47
11	1,1,2-Trichloro-1,2,2-Trifluo	101	2.291	2.310	(0.522)	226352	50.0000	48
12	Acetone	58	2.281	2.281	(0.520)	18659	50.0000	69
13	Iodomethane	142	2.399	2.409	(0.547)	293862	50.0000	62
14	Carbon Disulfide	76	2.419	2.418	(0.551)	790224	50.0000	52
15	Acetonitrile	41	2.488	2.497	(0.567)	805840	500.000	510(A)
16	Allyl Chloride	39	2.488	2.497	(0.567)	404308	50.0000	52
17	Methyl Acetate	43	2.498	2.507	(0.569)	207171	50.0000	50
18	Methylene Chloride	84	2.567	2.576	(0.585)	217119	50.0000	54
19	tert-Butanol	59	2.645	2.665	(0.603)	40113	100.000	140
20	Acrylonitrile	53	2.734	2.743	(0.623)	77731	50.0000	58
21	trans-1,2-Dichloroethene	96	2.763	2.773	(0.630)	197016	50.0000	48
22	Methyl tert-butyl ether	73	2.763	2.783	(0.630)	533919	50.0000	50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	1,1-Dichloroethane	63	3.059	3.068	(0.697)	395641	50.0000	49
24	Vinyl acetate	43	3.098	3.118	(0.706)	939117	50.0000	53
25	Diisopropyl Ether	45	3.108	3.127	(0.708)	1053119	50.0000	50
26	2-Chloro-1,3-Butadiene	53	3.128	3.137	(0.713)	370415	50.0000	48
27	Ethyl tert-butyl ether	59	3.384	3.393	(0.771)	669354	50.0000	46
29	2,2-Dichloropropane	77	3.482	3.492	(0.794)	145570	50.0000	48
28	cis-1,2-Dichloroethene	96	3.482	3.492	(0.794)	210730	50.0000	48
30	2-Butanone	72	3.482	3.502	(0.794)	19935	50.0000	60
32	Propionitrile	54	3.522	3.531	(0.803)	248074	500.000	570(A)
33	Methacrylonitrile	41	3.640	3.649	(0.829)	311834	100.000	110
34	Bromochloromethane	128	3.659	3.669	(0.834)	94535	50.0000	50
31	Tetrahydrofuran	72	3.699	3.708	(0.843)	42221	100.000	120
35	Chloroform	83	3.719	3.728	(0.847)	391145	50.0000	51
$ 36	Dibromofluoromethane	113	3.837	3.846	(0.874)	261606	50.0000	50
37	1,1,1-Trichloroethane	97	3.876	3.886	(0.883)	303840	50.0000	50
38	Cyclohexane	56	3.925	3.935	(0.895)	374439	50.0000	46
39	1,1-Dichloropropene	110	4.004	4.014	(0.912)	83349	50.0000	48
40	Carbon Tetrachloride	117	4.014	4.014	(0.915)	318658	50.0000	50
41	Isobutyl Alcohol	43	4.083	4.082	(0.930)	171066	1000.00	1100(A)
$ 42	1,2-Dichloroethane-d4	102	4.112	4.112	(0.937)	58603	50.0000	53
43	Benzene	78	4.162	4.171	(0.948)	718455	50.0000	48
44	1,2-Dichloroethane	62	4.171	4.171	(0.951)	309877	50.0000	53
45	tert-Amyl methyl ether	73	4.260	4.270	(0.971)	520403	50.0000	48
* 46	Fluorobenzene	96	4.388	4.398	(1.000)	845336	50.0000	
47	Trichloroethene	130	4.703	4.703	(1.072)	174543	50.0000	46
48	Methylcyclohexane	83	4.880	4.880	(1.112)	291743	50.0000	45
49	1,2-Dichloropropane	63	4.880	4.890	(1.112)	209489	50.0000	50
51	Methyl Methacrylate	69	4.989	4.998	(1.137)	158566	50.0000	55
52	Dibromomethane	93	4.979	4.988	(1.135)	140148	50.0000	53
53	1,4-Dioxane	88	4.999	5.008	(1.139)	29619	1000.00	780(A)
54	Bromodichloromethane	83	5.127	5.126	(1.168)	300804	50.0000	50
55	2-Chloroethyl vinyl ether	63	5.402	5.412	(1.231)	85566	50.0000	51
56	cis-1,3-Dichloropropene	75	5.530	5.540	(1.260)	331470	50.0000	51
57	4-Methyl-2-pentanone	43	5.678	5.687	(1.294)	223304	50.0000	54
$ 58	Toluene-d8	98	5.796	5.796	(0.801)	748966	50.0000	56
59	Toluene	91	5.855	5.865	(1.334)	694390	50.0000	47
60	trans-1,3-Dichloropropene	75	6.062	6.061	(1.381)	293973	50.0000	50
61	Ethyl Methacrylate	69	6.170	6.170	(1.406)	188147	50.0000	56
62	1,1,2-Trichloroethane	97	6.239	6.239	(1.422)	150304	50.0000	53
63	Tetrachloroethene	164	6.397	6.406	(0.884)	115529	50.0000	48
64	1,3-Dichloropropane	76	6.407	6.406	(0.886)	285709	50.0000	56
65	2-Hexanone	43	6.495	6.505	(0.898)	152388	50.0000	62
66	Dibromochloromethane	129	6.633	6.633	(0.917)	199101	50.0000	55
67	1,2-Dibromoethane	107	6.741	6.751	(0.932)	163541	50.0000	56
69	1-Chlorohexane	91	7.263	7.263	(1.004)	233275	50.0000	42
* 68	Chlorobenzene-d5	117	7.234	7.243	(1.000)	501226	50.0000	
70	Chlorobenzene	112	7.263	7.273	(1.004)	401415	50.0000	47
71	1,1,1,2-Tetrachloroethane	131	7.362	7.361	(1.018)	153299	50.0000	47
72	Ethylbenzene	106	7.401	7.401	(1.023)	208015	50.0000	47
73	m,p-Xylene	106	7.529	7.529	(1.041)	507537	100.000	90
74	o-Xylene	106	7.952	7.952	(1.099)	250895	50.0000	47
75	Styrene	104	7.962	7.972	(1.101)	447744	50.0000	49
76	Bromoform	173	8.149	8.149	(1.127)	88720	50.0000	47
77	Isopropylbenzene	105	8.366	8.375	(1.157)	647477	50.0000	45

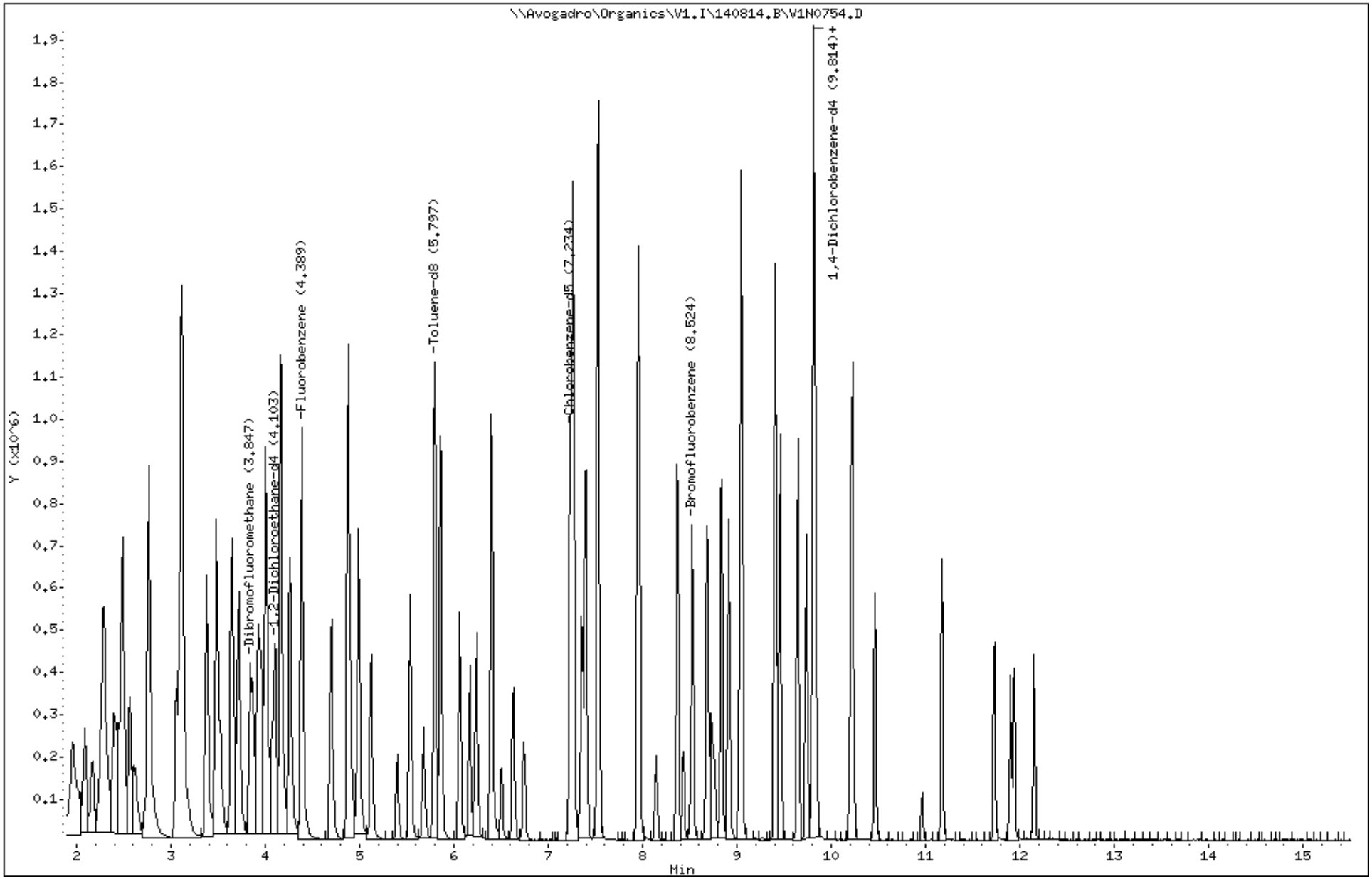
Data File: \\Avogadro\Organics\V1.I\140814.B\V1N0754.D
Report Date: 18-Aug-2014 11:50

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	78	trans-1,4-Dichloro-2-butene	75	8.435	8.434	(1.166)	44223	50.0000	44
$	79	Bromofluorobenzene	95	8.523	8.523	(1.178)	305004	50.0000	53
	80	1,1,2,2-Tetrachloroethane	83	8.691	8.700	(0.886)	159758	50.0000	51
	81	Bromobenzene	156	8.681	8.690	(0.885)	139288	50.0000	48
	82	1,2,3-Trichloropropane	75	8.730	8.740	(0.890)	163609	50.0000	53
	83	n-Propylbenzene	120	8.839	8.838	(0.901)	146852	50.0000	48
	84	2-Chlorotoluene	126	8.917	8.917	(0.909)	136434	50.0000	47
	85	1,3,5-Trimethylbenzene	105	9.045	9.045	(0.922)	520218	50.0000	47
	86	4-Chlorotoluene	126	9.045	9.045	(0.922)	139404	50.0000	45
M	94	Xylene (Total)	106				758432	150.000	140
	87	tert-Butylbenzene	119	9.410	9.409	(0.959)	501480	50.0000	46
	88	1,2,4-Trimethylbenzene	105	9.459	9.458	(0.964)	525567	50.0000	49
	89	sec-Butylbenzene	105	9.646	9.645	(0.983)	648037	50.0000	48
	90	1,3-Dichlorobenzene	146	9.735	9.744	(0.992)	249162	50.0000	46
	91	4-Isopropyltoluene	119	9.813	9.813	(1.000)	500414	50.0000	45
*	92	1,4-Dichlorobenzene-d4	152	9.813	9.813	(1.000)	202152	50.0000	
	93	1,4-Dichlorobenzene	146	9.833	9.833	(1.002)	250221	50.0000	45
	95	n-Butylbenzene	91	10.227	10.226	(1.042)	491277	50.0000	50
	96	1,2-Dichlorobenzene	146	10.207	10.207	(1.040)	232252	50.0000	46
	97	Hexachloroethane	117	10.463	10.463	(1.066)	132039	50.0000	49
	98	1,2-Dibromo-3-chloropropane	75	10.965	10.965	(1.117)	26619	50.0000	54
	141	1,3,5-Trichlorobenzene	182	11.172	11.172	(1.138)	136845	50.0000	43
	99	1,2,4-Trichlorobenzene	180	11.733	11.723	(1.196)	111357	50.0000	43
	100	Hexachlorobutadiene	225	11.901	11.890	(1.213)	48521	50.0000	34
	101	Naphthalene	128	11.940	11.930	(1.217)	276682	50.0000	49
	102	1,2,3-Trichlorobenzene	180	12.147	12.146	(1.238)	93231	50.0000	42

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\140814.B\V1N0754.D
Date : 14-AUG-2014 09:34
Client ID: LCS-78548
Instrument: V1.i
Sample Info: 5ML,LCS-78548,LCS-78548,78548
Purge Volume: 5.0
Operator: WL SRC: LIMS
Column phase: DB-624
Column diameter: 0.25



INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260W/MS ANALYST: [signature]
ICAL DATE: 8/7/14

BATCH: 140812A.B

Start: 12-AUG-14 14:27
End: 13-AUG-14 01:13

Comments:

Standards: BFB VM140725B 2 uL
IS/SS VM140715B AND uL
STD VM140725B 20 uL
_____ ____ uL

Reviewed By: [signature] 8/13/14 Manual Integration: _____ MI Review: _____ ICV: VM140725B

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	INTERNAL STDS CBZ	INTERNAL STDS DCB	SURROGATES DFM	SURROGATES DCE	SURROGATES TOL	SURROGATES BFB	DILN	FLG	COMMENTS	pH
V1N0693	14:27	BFB1W	BFB1W		SL	1								1		OK	
V1N0695	15:17	VSTD0501W	VSTD0501W		AQ	1	100	100	100					1		OK	
V1N0696	15:42	VSTD0201W	VSTD0201W		AQ	1	99	98	96					1		OK	
V1N0697	16:07	VSTD0051W	VSTD0051W		AQ	1	97	98	92					1		OK	
V1N0699	16:57	VSTD0011W	VSTD0011W		AQ	1	98	98	89					1		OK	
V1N0700	17:22	VSTD2001W	VSTD2001W		AQ	1	99	104	111					1		OK	
V1N0701	17:47	VSTD1001W	VSTD1001W		AQ	1	94	97	100					1		OK	
V1N0702	18:12	VICV0501W	VICV0501W		AQ	1	96	95	84	100	105	105	104	1	ER	OK	
V1N0703	18:37	LCS-78527	LCS-78527	78527	AQ	1	83	91	90	111	111	104	101	1	E	OK	
V1N0704	19:02	LCS-78528	LCS-78528	78528	SL	1	88	88	77	99	104	102	104	1	ER	OK	
V1N0705	19:26	MB-78528	MB-78528	78528	SL	1	85	84	75	100	101	106	101	1		NOT USED	
V1N0706	19:51	MB-78528	MB-78528	78528	SL	1	83	82	72	102	102	107	103	1		OK	
V1N0707	20:16	MB-78527	MB-78527	78527	AQ	1	81	78	69	104	107	106	101	1		OK	
V1N0708	20:41	N1385-01B	(211) BASEMENT	78528	SL	1	73	70	64	103	100	106	101	500		NOT USED	
V1N0709	21:05	N1385-01BDL	(211) BASEMENT	78528	SL	1	86	85	75	103	98	104	102	50		CCV 1,2 = 115 OK	
V1N0710	21:30	N1385-01B	(211) BASEMENT	78528	SL	1	87	85	76	104	103	105	100	10	E	CCV 1,2 = 537	
V1N0711	21:55	VBLK	VBLK		AQ	1	89	87	76	101	98	106	102	1		NOT USED	
V1N0712	22:20	N1385-33B	TB-080114 (SOIL	78528	SL	1	87	87	83	101	99	104	102	1		OK	
V1N0713	22:45	N1346-01A	WSP-601-0814	78527	AQ	1	87	83	73	101	97	106	101	1		OK	2
V1N0714	23:10	N1380-03A	TRIP BLANK 8/5/	78527	AQ	1	91	88	78	99	103	106	102	1		OK	
V1N0715	23:35	N1380-02A	ET-01-080514-GR	78527	AQ	1	91	88	77	102	104	106	99	1		OK	
V1N0716	23:59	N1324-01A	PTMT	78527	AQ	1	89	88	86	101	104	72*	98	1	E	OK	
V1N0717	00:24	N1324-02A	BET	78527	AQ	1	86	86	84	103	100	68*	90	1	E	OK	
V1N0718	00:48	N1324-03A	POST	78527	AQ	1	87	87	83	102	103	104	102	1		OK	2
V1N0719	01:13	VBLK	VBLK		AQ	1	84	84	79	103	102	104	99	1		NOT USED	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

[signature] 8-13-14

[redacted] INJECTION LOG [redacted] VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V1 Injection Log
Volatiles Laboratory

METHOD: 8260W/MJ ANALYST: JH
ICAL DATE: 31214

BATCH: 140814.B

Start: 14-AUG-14 07:50
End: 14-AUG-14 17:28

Comments:

Standards: BFB VM140228A 2 uL
IS/SS VM140711A AUTO uL
SS VM140728A 20 uL
_____ ___ uL

Reviewed By: WL 8/18/14 Manual Integration: _____ MI Review: _____ ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES DFM	DCE	TOL	BFB	DILN	FLG	COMMENTS	pH
V1N0750	07:50	BFB1Y	BFB1Y		SL									1		OK	
V1N0751	08:06	VSTD0501Y	VSTD0501Y		AQ		100	100	100					1		MT UPDM	
V1N0752	08:58	VSTD0501Y	VSTD0501Y		AQ		100	100	100					1		OK	
V1N0754	09:34	LCS-78548	LCS-78548	78548	AQ		100	93	90	100	107	111	106	1	ER	OK	
V1N0755	09:58	LCS-78549	LCS-78549	78549	SL		85	88	84	106	108	101	105	1	E	OK	
V1N0756	10:23	MB-78549	MB-78549	78549	SL		85	90	81	108	103	101	101	1		MT UPDM	
V1N0757	10:49	MB-78549	MB-78549	78549	SL		82	86	76	106	102	100	97	1		OK	
V1N0758	11:14	MB-78548	MB-78548	78548	AQ		76	81	75	108	104	99	96	1		OK	
V1N0759	11:39	N1402-01A	TRIP BLANK	78548	AQ	1	86	91	81	108	103	101	96	1		OK	7
V1N0760	12:04	N1402-02A	PRESBREY LELAND	78548	AQ	1	79	84	75	109	104	100	99	1		OK	
V1N0761	12:28	N1402-03A	CASSIDY EXCAVAT	78548	AQ	1	82	85	78	108	101	101	99	1		OK	
V1N0762	12:54	N1402-04A	HAWK SHAW	78548	AQ	1	84	87	78	107	103	101	97	1		OK	
V1N0763	13:19	N1402-05A	KENSICO	78548	AQ	1	81	85	76	108	102	103	99	1		OK	
V1N0764	13:44	N1402-06A	PEACOCK MEMORIA	78548	AQ	1	84	89	80	108	100	100	98	1		OK	
V1N0765	14:09	N1402-07A	DADYSHAN	78548	AQ	1	82	86	81	108	104	101	101	1		OK	
V1N0766	14:34	N1402-08A	ZIMMERMAN'S	78548	AQ	1	86	89	81	108	103	103	100	1		OK	
V1N0767	14:58	N1402-09A	VALHALLA MEMORI	78548	AQ	1	84	87	79	108	105	102	101	1		OK	7
V1N0768	15:23	N1319-20C	EB-109(10-11)08	78549	SL	1	82	85	81	104	107	103	102	10	E	CHLOROETHANE=226	
V1N0769	15:48	N1319-21C	EB-109(19-20)08	78549	SL	1	88	90	85	105	98	103	100	10		RPD 1x	
V1N0770	16:13	N1382-04A	(202) UST CONTE	78549	SL	1	83	84	77	106	103	105	101	10	E	ACETONE=511	
V1N0771	16:38	N1319-20CMS	EB-109(10-11)08	78549	SL	1	91	93	92	104	105	103	106	10	ER	OK	
V1N0772	17:03	N1319-20CMSD	EB-109(10-11)08	78549	SL	1	90	89	89	104	106	105	108	10	ER	OK	
V1N0773	17:28	VBLK	VBLK		AQ		85	88	81	104	101	101	100	1		MT UPDM	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
T - Sample was injected outside of the 12 hour sequence
R - One or more spike compounds are outside of control limits
D - Surrogates are diluted

JH 8-18-14

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 R23
8/8/14	N1400	GZA	12, 14	KP	8/14/14 WL	F	F9	
8/8/14	N1400	GZA	01-11, 13, 14-17	KP		H	R9	
8/8/14	N1395	EPA	1-12	KP		H	R8	
8/8/14	N1392	URS	01-10	KP		H	R8	
8/8/14	N1394	EPA	01-07	KP		T	R4	
8/8/14	N1396	EPA	01-03	KP		H	R13	
8/8/14	N1362	Arcadis	16, 17	KP		E	F3	
8/8/14	N1362	Arcadis	18	KP		H	R9	
8/9/14	N1392	URS	11-17	WJL		H	R8	
↓	N1362	ARCADIS	19-20	↓		E	~~F8~~ WJL 8/9/14	F10
8/9/14	N1362	ARCADIS	21	WJL		H	~~R8~~ 8/9/14	R10
8/11/14	N1373	RIRRP	24-28	KP		H	R9	
8/11/14	N1402	Dvirka	01-09	KP		UA	R10	
8/11/14	N1401	EPA	06-14	KP	↓ WL	T	R4	

Logbook ID 90.0191-10/13

Reviewed By: WL 8/14/14

"Preservative Used" Key

UA = Unpreserved Aqueous; **H** = HCL; **A** = Air; **M** = MeOH; **E** = Encore

US = Unpreserved Soil; **N** = $NaHSO_4$; **F** = Freeze; **T** = Trace, HCL

Last Page of Data Report